EXPERIMENTAL ANALYSIS OF THE EFFECT OF VIBRATIONAL NON-EQUILIBRIUM ON THE DECAY OF GRID-GENERATED TURBULENCE

A Dissertation

by

T.J. FULLER

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2009

Major Subject: Aerospace Engineering

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Approved by:

Chair of Committee,	Rodney Bowersox
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ABSTRACT

Experimental Analysis of the Effect of Vibrational Non-Equilibrium
on the Decay of Grid-Generated Turbulence. (August 2009)
T.J. Fuller, B.S., Texas A&M University
Chair of Advisory Committee: Dr. Rodney Bowersox

The technical feasibility of hypersonic flight (i.e., re-entry, hypersonic flight vehicles, cruise missiles, etc.) hinges on our ability to understand, predict, and control the transport of turbulence in the presence of non-equilibrium effects. A theoretical analysis of the governing equations suggests a mechanism by which fluctuations in internal energy are coupled to the transport of turbulence. Numerical studies of these flows have been conducted, but limited computational power results in reduced fidelity. Experimental studies are exceedingly rare and, consequently, experimental data available to build and evaluate turbulence models is nearly non-existent.

The Decaying Mesh Turbulence (DMT) facility was designed and constructed to generate a fundamental decaying mesh turbulent flow field with passive grids. Vibrational non-equilibrium was achieved via a capacitively-coupled radio-frequency (RF) plasma discharge which required an operating pressure of 30 Torr. The flow velocity was 30 m/s. Data was recorded with each grid at multiple plasma powers (Off, 150 W, and 300 W). Over two terabytes of highly resolved (3,450 image pairs) two-

dimensional particle image velocimetry (PIV) was acquired and archived. Temperature measurements were carried out using coherent anti-Stokes Raman spectroscopy (CARS).

The primary objective of this study was to answer the fundamental scientific question: “Does thermal non-equilibrium alter the decay rate of turbulence?” The results of this study show that the answer is “Yes.” The results demonstrate a clear coupling between thermal non-equilibrium and turbulence transport. The trends observed agree with those expected based on an analysis of the Reynolds stress transport equations, which provides confidence in transport equation-based modeling. A non-trivial reduction (~30%) in the decay rate downstream of the 300 W plasma discharge was observed. The data also show that the decay of TKE downstream of the plasma discharge was delayed (~20% downstream shift). In addition, the thermal non-equilbrium was observed to have no effect on the transverse stress. This suggests that, for this flow, the energy dilatation terms are small and unaffected by the plasma discharge, which simplifies modeling.

DEDICATION

This work is dedicated to my grandfather Charles G. Scruggs.

He is my hero and inspiration.

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I would like to extend my deepest appreciation and gratitude to my advisor, Dr. Bowersox, whose enthusiasm, knowledge, and guidance made this work possible. I would also like to thank my committee members, Dr. North, Dr. Rediniotis, and Dr. Girimaji. I thank Dr. Schmisseur from the Air Force Office of Scientific Research (AFOSR) for financially supporting the project. Thanks also to Dr. Larry Goss from Innovative Scientific Solutions, Inc. for his technical assistance.

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NOMENCLATURE

C_p	Specific Heat at Constant Pressure
C_v	Specific Heat at Constant Volume
D	Turbulence Diffusion
$D_{(n)(m)}$	Diffusion Coefficient
$D[\bar{\rho}(\,)]/Dt$	$\equiv [\bar{\rho}(\,)]_{,t} + [\bar{\rho}(\,)\tilde{u}_k]_{,k}$
$D[\overline{\rho(\,)}]/Dt$	$\equiv [\overline{\rho(\,)}]_{,t} + [\overline{\rho(\,)}\tilde{u}_k]_{,k}$
e	Internal Energy
$E_{(h)ij}$	Energy Strain ($= \overline{\rho e''^{(ex)}_{(h)} u''_{i,j}} + \overline{\rho e''^{(ex)}_{(h)} u''_{j,i}}$)
$E_{(h)}$	$= \sum_{n\neq e} Y''_{(n)}\, e''^{(ex)} \left(R_{(n)}/\tilde{R} - C^{(ex)}_{v(n)}/\tilde{C}^{(ex)}_v\right)$
$\overline{\rho e'' u''_{k,k}}$	Energy Dilatation
F_{Bi}	Body Force Vector
h	Enthalpy
$H_{(h)ij}$	$\rho\tilde{e}^{(ex)}_{(h)}\left[\overline{\left(R''_{(h)}/\tilde{R}_{(h)} - C''^{(ex)}_{v(h)}/\tilde{C}^{(ex)}_{v(h)}\right)\left(u''_{i,j} + u''_{j,i}\right)}\right]$
$I_{(n)}$	Ionization Energy of Species n
$J_{(n)i}$	Mass Diffusion Vector of Species n
$J^T_{(n)i}$	Turbulent Mass Diffusion of Species n
$J^T_{(h)i}$	$= \sum_{n\neq e} J^T_{(n)i} \left(R_{(n)}/\tilde{R} - C^{(ex)}_{v(n)}/\tilde{C}^{(ex)}_v\right)$
q_i	Molecular Heat Flux Vector $\left(= -kT_{,i}\right)$
q^T_i	Turbulent Heat Flux Vector $\left(\equiv \overline{\rho h'' u''_i}\right)$
$q^{(\,)-(\,)}_{(\,)}$	Energy Exchange Mechanism per Unit Mass
$Q^{(\,)}_{(\,)}$	Total Energy Exchange ($= \sum_m \rho_{(n)} q^{(m)-(\,)}_{(n)} + Q^{(\,)}_{rad(n)}$)
Q_{rad}	Energy Exchange Due to Radiation
k^T	Turbulent Kinetic Energy ($\equiv \overline{\rho u''_k u''_k} / 2\bar{\rho}$)

p	Pressure
R	Gas Constant
S	Third Order Source/Sink Correlation Terms
t	Time
T	Temperature
u_i	Velocity Component or Vector
$\overline{u_i''}$	Mean Favre Velocity Fluctuation $(= -\overline{\rho' u_i'}/\bar{\rho})$
$\overline{u_i'' u_{k,k}''}$	Velocity Dilatation
V	Turbulence Moments Involving Molecular Transport
x_i	Cartesian Coordinates in Indicial Notation
x, y, z	Cartesian Coordinates
$\dot{W}$	Rate of Energy Exchange
Y	Mass Fraction

Greek

χ	Energy Variance Dissipation
δ_{ij}	Kronecker Delta Function
ε	Turbulent Kinetic Energy Dissipation
ε_{ij}	Turbulent Shear Stress Dissipation
E_{ij}^T	Energy Strain ($= \overline{\rho e'' u_{i,j}''} + \overline{\rho e'' u_{j,i}''}$)
γ	Ratio of Mean Specific Heats ($= \bar{C}_p / \bar{C}_v$)
μ	Molecular Viscosity
μ_T	Turbulent (Eddy) Viscosity
ϑ_i^T	Turbulence Energy Flux ($\equiv \overline{\rho e'' u_i''}$)
ρ	Density
$\overline{\rho' u_{k,k}''}$	Density Dilatation
$\sqrt{\bar{\rho}\overline{\overline{e'' e''}}}$	Energy Variance

τ_{ij}^T	Turbulent Shear Stress $\left(\equiv \overline{\rho u_i'' u_j''}\right)$
τ_e	Energy Variance Time Scale $\left(= \sigma_{\tau_2}\tau_u\right)$
τ_u	Turbulent Kinetic Energy Time Scale $(= k/\varepsilon)$
τ_{vib}	Vibration-to-Translation Relaxation Time Scale
τ_ϑ	Energy Flux Time Scale $\left(= \sigma_{\tau_1}\tau_u\right)$
σ_{ij}	$= -p\delta_{ij} + \tau_{ij}$
σ_{τ_1}	Algebraic Energy Flux Model Constant
σ_{τ_2}	Algebraic Energy Variance Model Constant
$\dot{\omega}_{(n)}$	Mass Source Term for Species n
ξ_i	Energy Flux Dissipation
Υ_{ij}^T	Density Strain $\left(= \overline{\rho' u_{i,j}''} + \overline{\rho' u_{j,i}''}\right)$

Superscripts

(ex)	External Energy Mode
(in)	Internal Energy Mode
$(\ )'$	Reynolds (Time-Averaged) Fluctuation
$(\ )''$	Favre (Mass-Weighted Time Averaged) Fluctuation
$\bar{\ }$	Reynolds Mean Flow Property
$\tilde{\ }$	Favre Mean Flow Property

Subscripts

(h)	Heavy Particles
$i, j, k, \ldots$	Indicial Notation
$, i$	Gradient in the x_i Direction
(n)	Species n
∞	Free-stream Mean Flow Value

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CHAPTER I

INTRODUCTION

1.1 Motivation

The technical feasibility of hypersonic flight, to an important degree, depends on our ability to understand, predict, and control turbulence in hypersonic flows with non-equilibrium thermo-chemistry. Accurate prediction of these high-speed, high Reynolds number turbulent gaseous flows is an essential step in the design of future aerospace flight systems.[1] As fundamental scientific understanding and technologies continue to advance, aerospace vehicles are being designed to push previously established performance limits. Hypersonic (Mach>5) flight vehicles have been and will continue to be a long-term focus of research and development, and an increasing number of future aerospace vehicles will be operating in this regime. According to the Air Force Office of Scientific Research in their Broad Agency Announcement (AFOSR BAA) 2006-11 in the Unsteady Aerodynamics and Hypersonics section, hypersonic aerodynamics research is critical to the Air Force's renewed interest in long-range and space operations. However, it is not yet possible to design any airplane, let alone a hypersonic vehicle, by using computational fluid dynamics alone. Fundamental knowledge of hypersonic flows is required, and generic hypersonic research is needed.[2]

This dissertation follows the style of the *American Institute of Aeronautics and Astronautics Journal*.

The presence of strong shock waves on a hypersonic vehicle results in excitation of the internal energy modes and can cause dissociation and even ionization within the gas. The relaxation timescales of the internal modes can be of the same order, or even larger, than the timescale of the flow. As a consequence, the energy budget of the system is altered, which will in turn have an effect on other flow characteristics. As air passes through these strong shock waves, the translational and rotational temperatures of the fluid increase rapidly up to several thousands of degrees Kelvin, while the vibrational temperature lags behind. This is due to the fact that vibrational energy transfer requires orders of magnitude more collisions (typically 10^2 to 10^4) than translational and rotational energy transfers, which only require on the order of 10-100 collisions. Because of this, immediately behind the shock, the translational and rotational temperatures are much higher than the vibrational temperatures. As the translational and rotational temperatures begin to decay downstream, the vibrational temperature increases slightly; then all three modes equilibrate on a timescale which is significant compared to the transient flow timescale. A representative graphic showing these trends in temperature downstream of a strong shock can be seen in Figure 1.1.

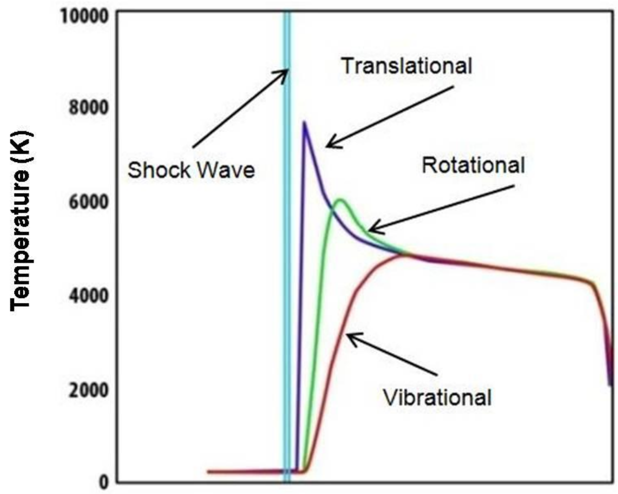


Fig. 1.1 Hypersonic temperatures

Turbulence is a chaotic, macroscopic state of flow in which the instantaneous flow variables exhibit a seemingly random variation in time and in the three spatial coordinates. An image of a turbulent boundary layer can be seen in Figure 1.2.

Fig. 1.2 Turbulence

Turbulence is known for its ability to transport and mix fluid and this property is of prime importance in many applications.[3] Turbulent flow is very complicated and structures span a wide range of spatial and temporal scales. These characteristics –

along with three dimensional dynamics, strong vortical motions, and large intermittent behavior – quickly make solving the turbulence equations intractable. Furthermore, thermo-chemical relaxation timescales can be of the same order, or even larger, than the characteristic turbulence timescales. Hence, coupling between the non-equilibrium thermo-chemistry effects and the turbulence can be expected.

For example, a current thrust of hypersonic flight vehicle research has been in scramjets (supersonic-combustion ram-jet), which are flight vehicles that use atmospheric air as the oxidizer. An artist's rendering of a recent scramjet vehicle, NASA's X-43, is shown in Figure 1.3.

Fig. 1.3 X-43

Scramjets have the advantages of increased payload capacity, reusability, and lower operating cost versus conventional rockets; however, significant engineering challenges are involved. Combustor design is an issue because the oxidizer enters at very high speeds. Therefore, transient mixing time is on the order of a microsecond. The ability to produce a combustor that has adequate turbulent mixing of injected fuel, while maintaining reasonable heat transfer rates to the vehicle, is important. In order to effectively design systems like this, comprehensive knowledge of hypersonic flow characteristics including turbulence and high temperature effects is essential.

As previously mentioned, the basic flow processes in this regime are poorly understood, and direct numerical simulations are beyond the capability of even the most advanced computational tools. To predict high Reynolds number complex geometry problems, simulations are limited to either the Reynolds Averaged Navier-Stokes (RANS) or Large-Eddy Simulation (LES) equations. However, turbulence modeling is a key limiting factor in solution accuracy. The development of working models represents one of the fundamental aims of turbulence research. Turbulence models vary in complexity, and the extensive research on the development of these models is well documented.[4-7] In the past, the majority of the second order transport models that have been developed for compressible flow regimes are largely extensions of incompressible models.[8-10] In some cases this approach yields positive results; however, compressible flow inherently contains phenomena that are not present in incompressible flow. Therefore, these effects are not accounted for in models without empirical corrections.

In order to accurately predict complex hypersonic flows, numerical tools need to be further refined and improved. This is accomplished through an amalgamation of theoretical, computational, and experimental studies. Logically, research should be focused to simpler subsets of modeled flow phenomena in order to target and isolate important physical mechanisms. This study is focused on exploring the effect of thermal non-equilibrium on the transport of turbulence in a decaying mesh turbulent flow field.

1.2 Theoretical Framework

The following discussion follows that in Bowersox et al.[1], which was developed as part of the overarching research project. One of the key challenges in developing and validating turbulence models for high-speed flow is the lack of experimental data that includes both mean and turbulence statistics. Research has been done on non-equilibrium hypersonic laminar flows, especially in the context of aero-braking of re-entry vehicles using continuum computational fluid dynamics (CFD) and molecular-dynamics methods such as direct-simulation Monte Carlo (DSMC). The study of non-equilibrium gases relevant to high-speed aerodynamics and combustion has also received considerable theoretical attention.[17-21] Modern computational methods have provided valuable tools for the prediction of both internal and external flows over high-speed aerospace vehicles.[22-26] However, important computational limitations exist, which ultimately lead to reduced fidelity modeling in both turbulence as well as the molecular internal degrees of freedom.

In general, the energy pools for the internal degrees-of-freedom may be separated into equations for rotation, vibration, electronic, and nuclear motion.[20] In the present dissertation, the internal energy is denoted by $e_{(n)}^{(in)}$, where the superscript indicates internal mode and the subscript (n) indexes the internal mode "energy pool." The definition of this index depends on the problem under consideration. For example, *n* could represent each species in the mixture; three separate energy equations could be utilized for the vibrational relaxation of N_2, O_2, and NO in high temperature air.[27] A particular internal mode can also be assumed to be in equilibrium between species. For example, if the vibration-vibration coupling between species is fast compared to the vibration-translation coupling, then it may be acceptable to represent the vibration energy pool with a single energy equation. Also considered was the case where all of the diatomic species share the same vibrational temperature, and a single vibration energy equation was solved.[22,24] Similar research also presented a model where the electron-electronic and vibration share a common temperature, requiring only one internal energy equation to be solved. It is also possible to utilize *n* to index each quantum level of internal mode (*in*) for each atom or molecule. Additionally, each species could represent one of the levels in a coarse grain distribution of pooled quantum levels for the internal mode under consideration.[28] Ultimately, the final conservation-law equation-set depends on the choice of model fidelity and the functional forms of the energy exchange mechanisms (the coupling terms) between internal and external energy modes.

Studies focused on characterizing and modeling the interaction processes between molecular relaxation and turbulence transport are exceedingly scarce. However, recent numerical work provides evidence that vibrational non-equilibrium can affect the fluid dynamic structure of vorticity within a Karman vortex sheet.[29] Since the dissipation of turbulent kinetic energy is a collision driven process, it is logical to expect that the presence of thermal non-equilibrium may alter the basic turbulent energy budget dynamics in the system. Although anecdotal, these arguments suggest that this coupling requires quantification.[30]

The initial step in the study was to build a mathematical modeling framework for the transport mechanisms that would be suitable for both experimental quantification and numerical implementation. After much iteration, internal energy was chosen as the primary coupling mechanism between thermodynamic and kinematic fluctuations.[31] The advantages of the internal energy are (1) the internal energy is a natural property for characterizing thermodynamic non-equilibrium; (2) experimental techniques are available to quantify important transport mechanisms; (3) transport equations are readily derived for the redistribution terms; and (4) unsteady pressure terms are not present in the final transport equations. Once the internal energy was chosen as the primary coupling mechanism, the feasibility of the mathematical framework was assessed by developing and validating simplified models based on the transport equations. To accomplish this, the transport equations for the energy flux vectors and the energy variances were truncated assuming structural equilibrium in the turbulence statistics, which limits the models to high Reynolds number flows with mild gradients.[32]

The conservation law equations were derived from Boltzmann's equation and have been expressed in many forms.[20-23] The Favre averaged equation set that encompasses all possibilities for chemically reacting weakly ionized flow is summarized below.[1,33,34]

$$\left(\bar{\rho}\right)_{,t}+\left(\bar{\rho}\tilde{u}_k\right)_{,k}=0$$

$$\left(\bar{\rho}\tilde{u}_i\right)_{,t}+\left(\bar{\rho}\tilde{u}_i\tilde{u}_k\right)_{,k}=\left(\bar{\sigma}_{ik}+\tau_{ik}^T\right)_{,k}+\bar{F}_{bi}$$

$$\left(\bar{\rho}\tilde{e}\right)_{,t}+\left(\bar{\rho}\tilde{e}\tilde{u}_k\right)_{,k}=-\left(\bar{q}_k+\vartheta_k^T\right)_{,k}+\bar{\sigma}_{kl}\tilde{u}_{l,k}+\bar{\sigma}_{kl}\overline{u''_{l,k}}+\overline{\sigma'_{kl}u''_{l,k}}+\overline{\dot{W}_{F_b}}-\overline{Q_{rad}}$$

$$\left(\bar{\rho}_{(n)}\tilde{e}_{(h)}^{(ex)}\right)_{,t}+\left(\bar{\rho}_{(h)}\tilde{e}_{(h)}^{(ex)}\tilde{u}_k\right)_{,k}=-\left(\bar{q}_{(h)k}^{(ex)}+\vartheta_{(h)k}^{T(ex)}\right)_{,k}+\bar{\sigma}_{(h)kl}\tilde{u}_{l,k}+\bar{\sigma}_{(h)kl}\overline{u''_{l,k}}+\overline{\sigma'_{kl}u''_{l,k}}$$
$$+\overline{\dot{W}_{(h)F_b}^{(ex)}}+\overline{Q_{(h)}^{(ex)}}$$

$$\left(\bar{\rho}_{(e)}\tilde{e}_{(e)}^{(ex)}\right)_{,t}+\left(\bar{\rho}_{(e)}\tilde{e}_{(e)}^{(ex)}\tilde{u}_k\right)_{,k}=-\left(\bar{q}_{(e)k}^{(ex)}+\vartheta_{(e)k}^{T(ex)}\right)_{,k}+\bar{\sigma}_{(e)kl}\tilde{u}_{l,k}+\bar{\sigma}_{(e)kl}\overline{u''_{l,k}}+\overline{\sigma'_{(e)kl}u''_{l,k}}$$
$$+\overline{\dot{W}_{(e)F_b}^{(ex)}}+\overline{Q_{(e)}^{(ex)}}-\sum_{(n=ions)}I_{(n)}\bar{\dot{\omega}}_{(n)}+\overline{\dot{W}_{d(e)}^{(ex)}}$$

$$\left(\bar{\rho}_{(n)}\tilde{e}_{(n)}^{(in)}\right)_{,t}+\left(\bar{\rho}_{(n)}\tilde{e}_{(n)}^{(in)}\tilde{u}_k\right)_{,k}=-\left(\bar{q}_{(n)k}^{(in)}+\vartheta_{(n)k}^{T(in)}\right)_{,k}+e_{(n)}^{(in)}\bar{\dot{\omega}}_{(n)}+\overline{Q_{(n)}^{(in)}}$$

To derive the above equations, the Favre averaged values of the energy pools were defined in terms of the associated partial density, i.e. $\tilde{e}_{(n)}^{(in)}\equiv\overline{e_{(n)}^{(in)}\rho_{(n)}}\Big/\bar{\rho}_{(n)}$. With this definition, the usual advantages of Favre averaging remain prevalent. The first three equations represent the global conservation of mass, momentum, and energy. The next equation represents species conservation followed by the heavy particle external energy mode (translation) equation. The subsequent equation represents the electron translation energy conservation followed by evolution equation for the internal energy associated with the internal molecular degrees-of-freedom.

In deriving the equations of state, it was assumed that each species within the flow acts as a thermally perfect gas. Therefore, the corresponding equations of state for each individual species are given by:

$$p_{(n)} = \rho_{(n)} R_{(n)} T_{(n)} = \frac{R_{(n)}}{C_{v(n)}^{(ex)}} \rho_{(n)} e_{(n)}^{(ex)}$$

$$\bar{p}_{(n)} = \frac{R}{C_{v(n)}^{(ex)}} \bar{\rho}_{(n)} \tilde{e}_{(n)}^{(ex)}$$

$$p'_{(n)} = \frac{\bar{p}_{(n)}}{\bar{\rho}} \rho'_{(n)} + \frac{R_{(n)}}{C_{v(n)}^{(ex)}} \rho_{(n)} e''^{(ex)}_{(n)}$$

The transport equation for the Reynolds shear stress tensor for the heavy particle flow is derived by taking moments of the momentum equation. Following previously established procedures[32] and including thermo-chemical non-equilibrium, the Reynolds stress transport equation was written as:

$$\frac{D\tau^T_{(h)ij}}{Dt} = -\tau^T_{(h)ik}\tilde{u}_{j,k} - \tau^T_{(h)jk}\tilde{u}_{i,k} + \frac{\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\left(J^T_{(h)i}\tilde{e}^{(ex)}_{(h),j} + J^T_{(h)j}\tilde{e}^{(ex)}_{(h),i}\right)$$
$$+\frac{\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\left[\left(\vartheta^T_{(h)i} + \tilde{e}^{(ex)}_{(h)}J^T_{(h)i}\right)\left(\frac{\tilde{R}_{(h),j}}{\tilde{R}_{(h)}} - \frac{\tilde{C}^{(ex)}_{v(h),j}}{\tilde{C}^{(tr)}_{v(h)}}\right) + \left(\vartheta^T_{(h)j} + \tilde{e}^{(ex)}_{(h)}J^T_{(h)j}\right)\left(\frac{\tilde{R}_{(h).i}}{\tilde{R}_{(h)}} - \frac{\tilde{C}^{(ex)}_{v(h),i}}{\tilde{C}^{(ex)}_{v(h)}}\right)\right]$$
$$-\frac{\bar{p}_{(h)}}{\bar{\rho}}\Upsilon^T_{(h)ij} - \frac{\tilde{R}_{(h)}}{\tilde{C}^{(tr)}_{v(h)}}\left(E^T_{(h)ij} + H^T_{(h)ij}\right) - \bar{p}_{(h)}\left(\overline{u''_{i,j}} + \overline{u''_{j,i}}\right)$$
$$+\frac{\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\left[\vartheta^T_{(h)i,j} + \vartheta^T_{(h)j,i} + \tilde{e}^{(ex)}_{(h)}\left(J^T_{(h)i,j} + J^T_{(h)j,i}\right)\right]$$
$$+\left[\left(\overline{u_i F_{(h)bj}} - \tilde{u}_i\overline{F_{(h)bj}}\right) + \left(\overline{u_j F_{(h)bi}} - \tilde{u}_j\overline{F_{(h)bi}}\right)\right] + D^{\tau^T_{ij}}_{ij} + V^{\tau^T_{ij}}_{ij} + \bar{\rho}\varepsilon_{ij}$$

where

$$E^T_{(h)ij} = \overline{\rho e''^{(ex)}_{(h)}u''_{i,j}} + \overline{\rho e''^{(ex)}_{(h)}u''_{j,i}}$$

$$\Upsilon^T_{(h)ij} = \left(\overline{\rho' u''_{i,j}} + \overline{\rho' u''_{j,i}}\right)$$

$$H^T_{(h)ij} = \rho\tilde{e}^{(ex)}_{(h)}\left[\overline{\left(\frac{R''_{(h)}}{\tilde{R}_{(h)}} - \frac{C''^{(ex)}_{v(h)}}{\tilde{C}^{(ex)}_{v(h)}}\right)\left(u''_{i,j} + u''_{j,i}\right)}\right]$$

$$J^T_{(h)i} = \sum_{n\neq e} J^T_{(n)i}\left(\frac{R_{(n)}}{\tilde{R}} - \frac{C^{(ex)}_{v(n)}}{\tilde{C}^{(ex)}_{v}}\right)$$

The production terms are given on the first two lines of the equation. The redistribution and the second order diffusion terms are shown on the next two lines. On the fifth line, the body forces, third order and molecular diffusion $\left(D^{\tau^T_{ij}}_{ij} = \overline{\rho u''_i u''_j u''_k} + \overline{\tau'_{(h)ik}u''_j + \tau'_{(h)jk}u''_i}\right)$, viscous work $\left(V^{\tau^T_{ij}}_{ij} = -\overline{u''_i\tau_{(h)jk,k}} - \overline{u''_j\tau_{(h)ik,k}}\right)$, and dissipation $\left(\bar{\rho}\varepsilon_{ij} = \overline{\tau'_{(h)ik}u''_{j,k} + \tau'_{(h)jk}u''_{i,k}}\right)$ terms are listed. In this form, the coupling mechanisms between the internal energy and the kinematic turbulence are readily identified. In particular, the Reynolds shear stress is coupled to the internal energy through the external mode directly, which is in turn coupled to the internal modes through the exchange term ($Q^{(ex)}$). Also, in this form, many of the key moments can be directly quantified by experimental methods that are currently available.

A transport equation for external energy flux $\vartheta_{(h)i}^{T(ex)} \left(\equiv \overline{\rho_{(h)} e_{(h)}^{\prime\prime(ex)} u_i^{\prime\prime}} \approx \overline{\rho e_{(h)}^{\prime\prime(ex)} u_i^{\prime\prime}} \right)$ was derived by taking moments between the energy and momentum equations. The resulting equation is:

$$\frac{D\vartheta_i^{T(ex)}}{Dt} = \tau_{ik}^T \tilde{e}_{,k}^{(ex)} - \vartheta_k^T \tilde{u}_{i,k} - \left[\frac{\tilde{R}}{\tilde{C}_v^{(tr)}} \left(\vartheta_i^{T(ex)} \right) \right] \tilde{u}_{k,k} - \bar{p} \left(\overline{u_i^{\prime\prime} u_{k,k}^{\prime\prime}} \right) + \left(\overline{u_i Q^{(ex)}} - \tilde{u}_i \overline{Q^{(ex)}} \right)$$
$$+ \frac{\bar{p}}{\bar{\rho}} \overline{\rho e_{,i}^{\prime\prime(ex)}} - \frac{1}{2} \frac{\tilde{R}}{\tilde{C}_v^{(tr)}} \bar{\rho} \left(\overline{e^{\prime\prime(ex)2}} \right)_{,i} - \frac{\tilde{R}}{\tilde{C}_v^{(tr)}} \left(\bar{\rho} \overline{e^{\prime\prime(ex)2}} \right) \frac{\bar{\rho}_{,i}}{\bar{\rho}} + V_i^{\vartheta_i^T} + S_i^{\vartheta_i^T} + D_i^{\vartheta_i^T} + \bar{\rho} \xi_i$$

The meaning of the various terms in this transport equation is less established than those in the turbulent shear stress, but strong analogies between the two equations can easily be seen.

The above transport equations, along with the energy variance transport equations, form the foundation upon which turbulence models are developed. However, for molecular non-equilibrium, the number of equations necessary becomes very large as target fidelity increases. Therefore, modeling simplifications are required to achieve a reasonable solution.

New algebraic truncation models were derived for the internal energy flux and energy variance transport equations. Using the weak equilibrium procedures developed in previous work[32], the algebraic truncations for species *n* for the general case of chemical and molecular non-equilibrium are given by:

$$
\begin{aligned}
\left(\frac{\delta_{ik}}{\tau_{\vartheta^{T(in)}_{(n)}}}-\delta_{ik}\frac{\bar{\dot{\omega}}_{(n)}}{\bar{\rho}_{(n)}}+\tilde{u}_{i,k}\right)\vartheta^{T(in)}_{(n)k} = {} & \tilde{Y}_{(n)}\tau^{T}_{ik}\tilde{e}^{(in)}_{(n),k}+\overline{\rho_{(n)}q''^{(in)}_{(n)}u''_{i}} \\
& -\tilde{Y}_{(n)}\left[-\frac{\bar{p}_{(h)}}{\bar{\rho}_{(h)}}\overline{\rho'_{(n)}e''^{(in)}_{(n),i}}+\frac{\tilde{R}_{(h)}}{\tilde{C}^{(tr)}_{v(h)}}\overline{\rho e''^{(ex)}_{(h)}e''^{(in)}_{(n),i}}\right]+\bar{\rho}_{(n)}\bar{q}^{(in)}_{(n)}\overline{u''_{i}} \\
& +\tilde{Y}_{(n)}\left[\overline{e''^{(in)}_{(n)}}\bar{F}_{bi}+\overline{e''^{(in)}_{(n)}F'_{bi}}\right]-\bar{\rho}_{(n)}\bar{q}^{(in)}_{(n)}\frac{\overline{Y''_{(n)}u''_{i}}}{\tilde{Y}_{(n)}} \\
& -\tilde{Y}_{(n)}\frac{\tilde{R}_{(h)}}{\tilde{C}^{(tr)}_{v(h)}}\left\{\begin{array}{l}
\left[\left(\dfrac{\tilde{R}_{(h),i}}{\tilde{R}_{(h)}}-\dfrac{\tilde{C}^{(tr)}_{v(h),i}}{\tilde{C}^{(tr)}_{v(h)}}\right)\overline{\rho e''^{(ex)}_{(h)}e''^{(in)}_{(n)}}\right] \\
+E_{(n)}\left[\bar{\rho}\tilde{e}^{(ex)}_{(h)}\left(\dfrac{\tilde{R}_{(h),i}}{\tilde{R}_{(h)}}-\dfrac{\tilde{C}^{(ex)}_{v(h),i}}{\tilde{C}^{(ex)}_{v(h)}}\right)+\left(\bar{\rho}\tilde{e}^{(ex)}_{(h)}\right)_{,i}\right] \\
-\bar{\rho}\tilde{e}^{(ex)}_{(h)}\displaystyle\sum_{n\neq e}\overline{Y''_{n}e''^{(in)}_{(n),i}}\left(\dfrac{\tilde{R}_{(h),i}}{\tilde{R}_{(h)}}-\dfrac{\tilde{C}^{(ex)}_{v(h),i}}{\tilde{C}^{(ex)}_{v(h)}}\right)
\end{array}\right\}
\end{aligned}
$$

$$
\bar{\rho}_{(n)}\overline{e''^{(in)2}_{(n)}}\approx\left(\bar{\rho}_{(n)}\overline{e''^{(in)2}_{(n)}}\right)_{0}-2\tau^{(in)}_{e}\left[\vartheta^{T(in)}_{(n)k}\tilde{\psi}_{,k}+\left\{\rho_{(n)}e''^{(in)}_{(n)}q''^{(in)}_{(n)}\right\}\right]
$$

The molecular non-equilibrium terms are given on the first line, while the chemical non-equilibrium terms are shown on the remaining lines. In the algebraic truncation model for the energy flux, there are four important time-scales to note. The turbulent time-scale $\tau_{\vartheta_{(n)}^{T(in)}}$, the chemical time-scale $\bar{\rho}_{(n)} / \bar{\dot{\omega}}_{(n)}$, the mean flow (shear) time-scale $\tilde{u}_{i,k}^{-1}$, and the molecular exchange time-scale, which is included in the exchange terms.

In order to better see how the molecular time-scale enters into the equation, the energy flux truncation model is written for chemical equilibrium and vibrational non-equilibrium.

$$\left(\frac{\delta_{ik}}{\bar{\tau}_{(n)}^{(vib)}} + \frac{\delta_{ik}}{\tau_{\vartheta_{(n)}^{T(ex)}}} + \tilde{u}_{i,k} \right) \vartheta_{(n)k}^{T(vib)} \approx \tilde{Y}_{(n)} \tau_{(n)ik}^{T} \tilde{e}_{(n),k}^{(vib)} + \frac{\vartheta_{(n)i,eq}^{T(vib)}}{\bar{\tau}_{(n)}^{(vib)}}$$

where $$\tau_{(n)}^{(vib)} \approx C_{(n)1} e^{\left(C_{(n)2}/T_1\right)^{1/3}} / p \, .$$

The relaxation in the above equation follows a Landau-Teller relaxation model and assumes weak non-equilibrium.[35-37] It can clearly be seen from this form that the molecular non-equilibrium couples into the internal energy flux, which in-turn couples into the external energy flux through the exchange terms, and finally into the Reynolds shear stress.

Although these modeling ideas are promising and have previously been validated using experimental and DNS data for equilibrium flows, there is a significant lack of molecular non-equilibrium experimental data for comparison.[31] Hence, a primary focus of this study is to design and develop experiments guided by the above equation that can be used to build a molecular non-equilibrium experimental database for future model validation.

In order to provide a more focused mathematical framework for the DMT experiments, the turbulence transport equations were reduced for the specific case of low speed, decaying mesh turbulent flow with relaxation of the internal excitation in the axial flow direction. The resulting equations are given by:

$$\frac{D\tau^{T}_{(h)xx}}{Dt} = -\frac{2\tilde{R}_{(h)}}{\tilde{C}^{(tr)}_{v(h)}}\overline{\rho e''^{(ex)}_{(h)}u''_{,x}} + \frac{2\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\vartheta^{T(ex)}_{(h)x,x} + \bar{\rho}\varepsilon_{xx} \tag{1.1}$$

$$\frac{D\tau^{T}_{(h)yy}}{Dt} = -\frac{2\tilde{R}_{(h)}}{\tilde{C}^{(tr)}_{v(h)}}\overline{\rho e''^{(ex)}_{(h)}v''_{,y}} + \frac{2\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\vartheta^{T(ex)}_{(h)y,y} + \bar{\rho}\varepsilon_{yy} \tag{1.2}$$

$$\frac{D\bar{\rho}k^{T}}{Dt} \approx -\rho\varepsilon - \frac{\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\frac{\partial\vartheta^{T}_{(h)x}}{\partial x} \tag{1.3}$$

$$\frac{D\vartheta^{T(ex)}_{(h)x}}{Dt} \approx -\frac{1}{2}\frac{\tilde{R}}{\tilde{C}^{(tr)}_{v}}\rho_{(h)}(\overline{e''^{(ex)2}_{(h)}})_{,x} + \rho_{(h)}\overline{q''^{(ex)}_{(h)}u''_{x}} \tag{1.4}$$

$$\frac{D\frac{1}{2}\bar{\rho}_{(h)}\overline{e''^{(ex)2}_{(h)}}}{Dt} = \rho_{(h)}\overline{q''^{(ex)}_{(h)}e''^{(in)}_{(h)}} + \rho_{(h)}\chi_{(h)} \tag{1.5}$$

$$\frac{D\vartheta^{T(in)}_{(n)x}}{Dt} = \tilde{Y}_{(n)}\tau^{T}_{xx}\tilde{e}^{(in)}_{(n),x} + \rho_{(n)}\overline{q''^{(in)}_{(n)}u''_{x}} - \frac{\tilde{Y}_{(n)}\tilde{R}_{(h)}}{\tilde{C}^{(tr)}_{v(h)}}\rho_{(n)}\overline{e''^{(ex)}_{(h)}e''^{(in)}_{(n),x}} \tag{1.6}$$

$$\frac{D\frac{1}{2}\bar{\rho}_{(h)}\overline{e''^{(in)2}_{(n)}}}{Dt} = -\vartheta^{(in)T}_{(n)k}\tilde{e}^{(in)}_{(n),k} + \rho_{(n)}\overline{q''^{(in)}_{(n)}e''^{(in)}_{(n)}} + \rho_{(n)}\chi_{(n)} \tag{1.7}$$

The equations are: axial turbulent normal stress (Eq. 1.1), transverse turbulent normal stress (Eq. 1.2), turbulent kinetic energy (Eq. 1.3), external turbulent energy flux (Eq. 1.4), external turbulent energy variance (Eq. 1.5), internal turbulent energy flux (Eq. 1.5), and internal turbulent energy variance (Eq. 1.7). This set of equations provides the connection between the internal and external fluctuating moments. Based on these equations, the following mechanism was postulated. The vibrational excitation creates a strong mean vibrational energy gradient in the axial direction. Boltzmann temperatures for NO, O_2, and N_2 of 1080K, 500K, and 700K (respectively) were predicted by using electron collision cross-sections from the literature.[38-42] This results in the production of internal energy fluctuations via Equations 1.6 and 1.7. This, in turn, results in an increase in the energy exchange terms ($q''^{(in)}_{(n)}$ and $q''^{(ex)}_{(h)}$)[*]. The internal energy fluctuations alter the external (translational) energy fluctuations via the energy exchange term in Equations 1.4 and 1.5. Finally, the internal energy fluctuations couple to the turbulent kinetic energy through the last term in Equation 1.3. It is also possible that the vibration excitation will have an impact on the molecular viscosity and, hence, the dissipation in Eq. 1.3. However, it is expected that populations of vibrationally excited molecules were small enough that this effect is negligible.

[*] The energy exchange terms are the functional relationships between the various energy pools. For the present study, the Landau-Teller (1936) formulation is reasonable.

1.3 Research Approach

The overarching objective of this study was to provide improved understanding of the coupling between thermal non-equilibrium and the transport of turbulence. The primary fundamental scientific question this study set out to address was: "Does thermal non-equilibrium alter the basic decay rate of turbulence?" The answer to this question is essential, because improved understanding, modeling, and control of turbulence with molecular non-equilibrium effects are considered enabling technologies by the US Air Force for efficient hypersonic flight vehicles. The approach employed by the MURI team involves a combination of theoretical, experimental, and computational methods. These contributions are diagramed in Fig. 1.4.

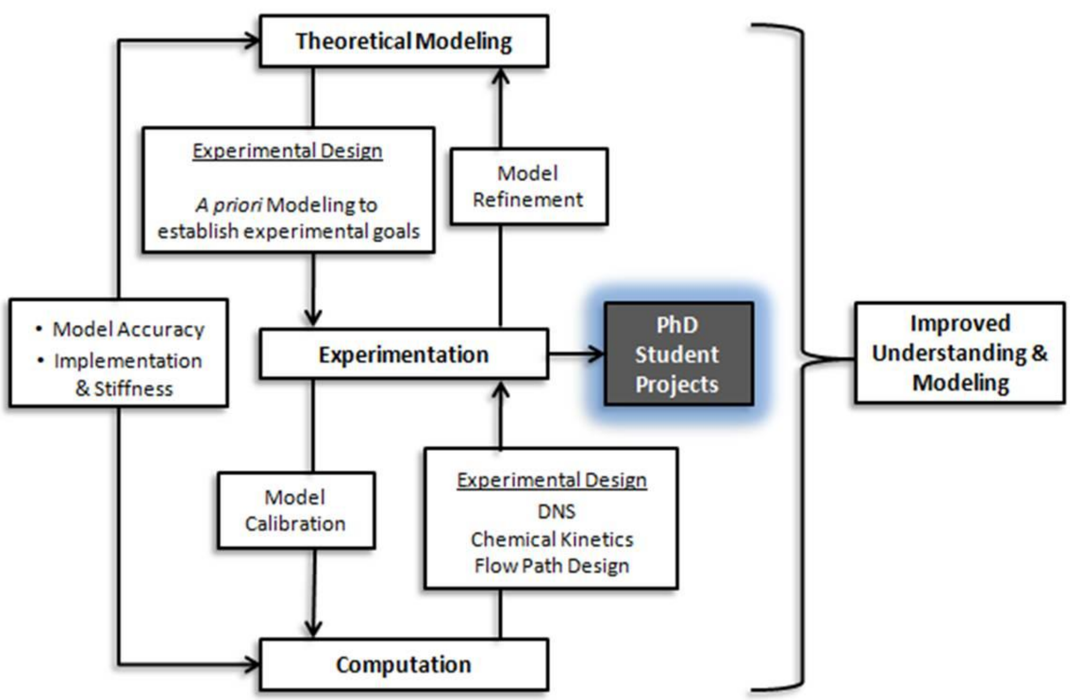


Fig. 1.4 Overall Research Approach

The experiments were designed to explore the specific moments identified by the theoretical modeling. Emphasis was placed on generating flows that are well suited for model development; therefore, the following requirements were imposed on the experiments: (1) simple geometries, (2) well defined boundary conditions, (3) controllable non-equilibrium, and (4) statistically converged turbulence measurements. An overall synergistic approach to this study allows for each area – theory, experimentation, and computation – to aide in the development and progression of the others to successfully achieve the overarching goals of the project. The primary goal of this specific study was to quantify the effects of thermal non-equilibrium on the decay of grid-generated turbulence. The research approach employed to reach this goal was (1) to establish a theoretical framework to determine target moments to be explored, and (2) to design and construct a wind-tunnel facility to make measurements in a decaying mesh turbulent flow field with and without vibrational non-equilibrium.

1.4 Contributions

The main research contribution for this study is to improve the basic understanding of the fundamental mechanisms coupling the transport of turbulence and thermal non-equilibrium. This study answers the fundamental scientific question: “Does thermal non-equilibrium alter the decay rate of turbulence?” A continuous-flow subsonic wind-tunnel facility was designed and constructed to perform quantitative measurements of second order moments in a decaying mesh turbulent flow field with and without thermal non-equilibrium. This facility also served as a test-bed for diagnostic equipment and the RF plasma system to be utilized in future experimental studies. Additionally, an extensive experimental database (over two terabytes) of high-resolution particle image velocimetry data was acquired and archived. This database will prove valuable for future turbulence model validation as well as well as provide opportunity for further scientific investigation.

1.5 Overview of Dissertation

Brief descriptions of the research motivation, theoretical background and framework, objectives and approach, and contributions are presented above. In Chapter II the experimental facilities are described in detail, while the experimental techniques are described in Chapter III. In Chapter IV the experimental results are presented and discussed. Finally, in Chapter V conclusions and recommendations for future research are presented.

CHAPTER II

EXPERIMENTAL FACILITY

The Decaying Mesh Turbulence (DMT) wind tunnel was constructed to introduce vibrational non-equilibrium in a decaying mesh turbulent flow field. The general wind tunnel configuration was designed using *Low-Speed Wind Tunnel Testing*[43] as a foundational engineering reference along with the computer-aided design software SolidWorks. A model of the basic wind-tunnel circuit design can be seen in Figure 2.1.

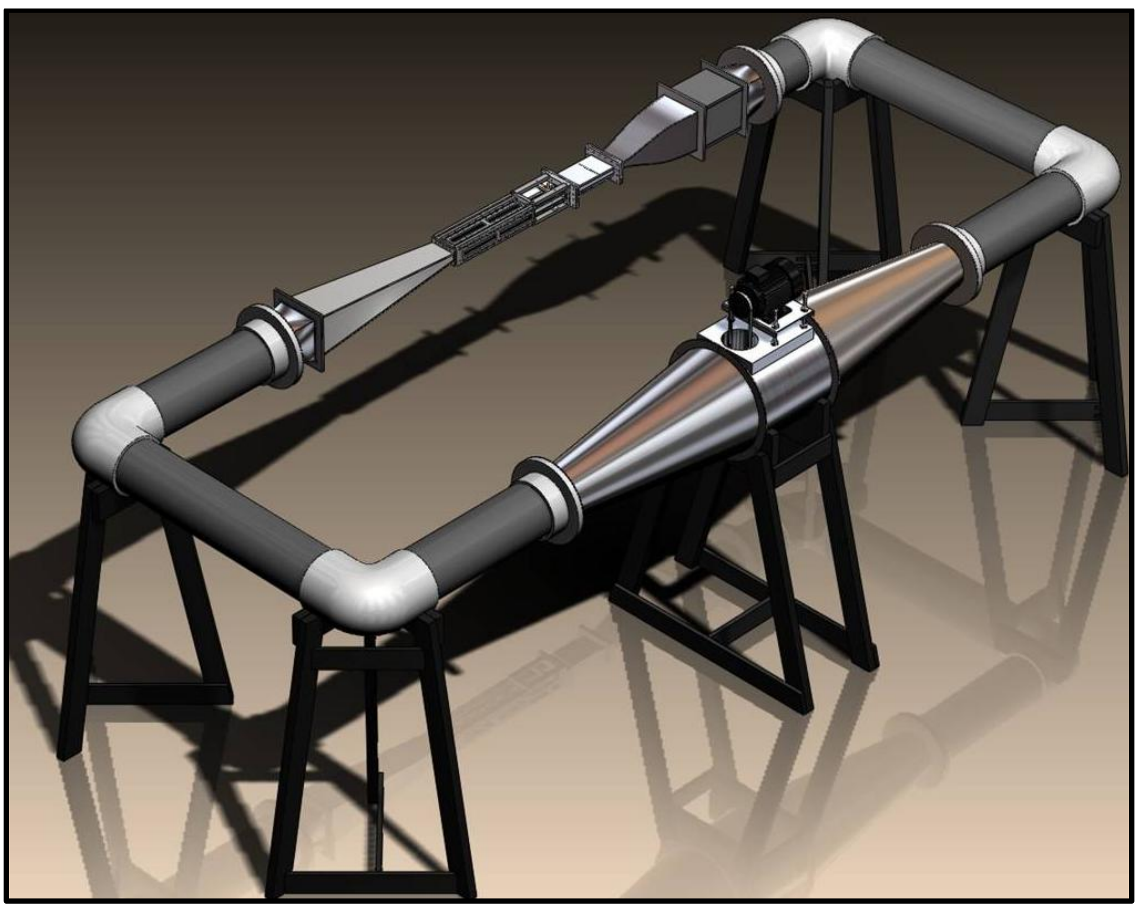


Fig. 2.1 DMT SolidWorks model

The continuous, closed-circuit configuration was chosen due to the nature of the new, untested systems being employed in the facility. This mode of operation allowed for more efficient implementation and testing of these systems. The DMT facility is shown in Figure 2.2. The measurement of the wind-tunnel circuit is 14’-2” x 5’-8” and the centerline is 43” above laboratory floor.

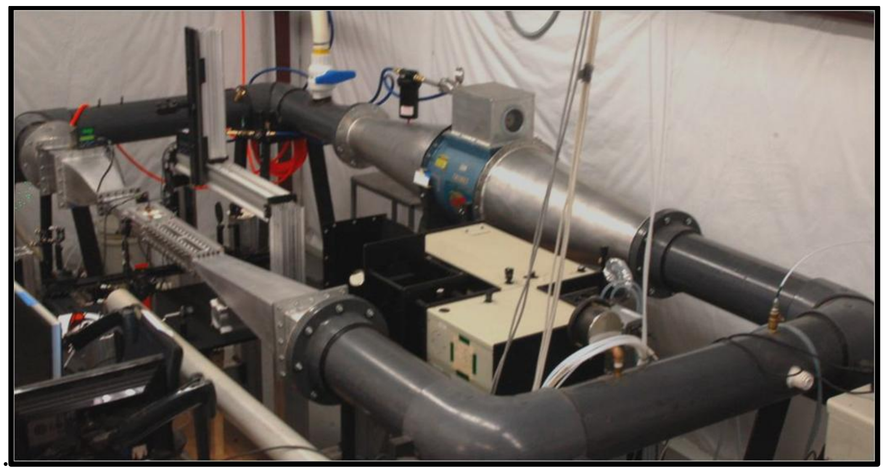


Fig. 2.2 DMT facility

A majority of the miscellaneous standard parts used in the DMT facility were acquired from McMaster-Carr. The tunnel is comprised, in part, of standard 8” schedule 80 PVC (polyvinyl chloride) pipe sections, schedule 80 PVC 90° elbows, and 8” schedule 80 PVC flanges (CorrTech, Inc). These parts are the dark gray segments of the circuit seen in Figure 2.2. The socket joints were dry fit and sealed with silicone to allow flexibility. The thick walls in the pipe sections readily accept connections from other systems without sacrificing structural integrity. Every interface was sealed using

0.125” rubber sheeting to fabricate gaskets. The four corner elbow fittings contain turning vanes (Fig 2.3). The center plate (0.125” 6061 aluminum) was cut to fit tight across the center horizontal plane inside the PVC elbow. The vertical vanes (0.0625” 6061 aluminum) were cut to size, bent by hand and welded to the top and bottom surfaces of the center plate. The vane assembly was then slid into place and secured on each side by contact with the mating pipe sections in the elbow sockets.

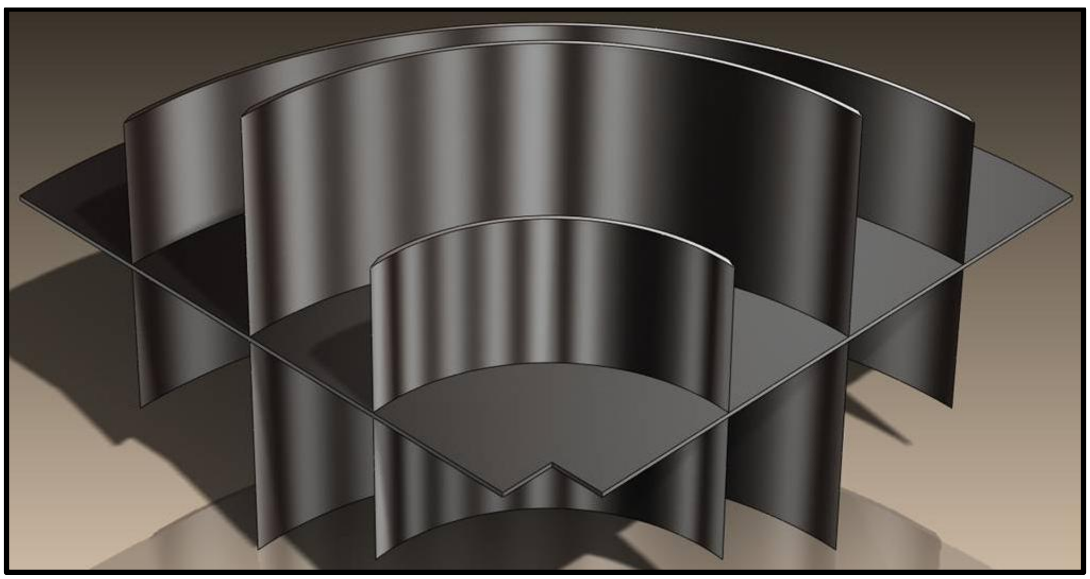


Fig. 2.3 Turning vanes

The corner and fan stands were custom made wood constructions. SolidWorks models of the stands can be seen in Figure 2.4. The fan stand is on the left, and a corner stand is on the right.

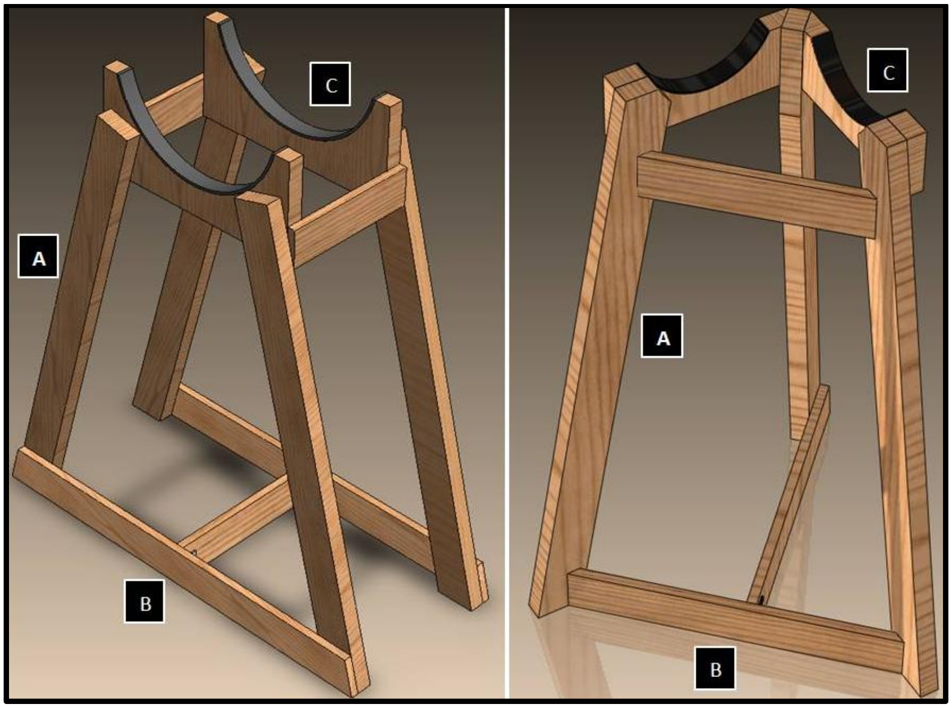


Fig 2.4 Stands

The load was held in saddles (C) made from 2” x 6” boards lined with rubber strips. The saddles were secured to the main support legs (A, 2” x 4” boards) by 0.5” bolts. Structural rigidity was added with 1” x 4” boards (B) throughout, attached by screws and metal 90° brackets. The load was secured to the stand by straps connected to each stand by eye hooks. The stands were roughly sanded and painted.

The test section was supported by a test-stand constructed from XT95 railing (Thorlabs) connected by XT95 slider clamps. A 4’ x 2’ x 0.5” bread-board (Thorlabs) was secured to the XT95 rails and positioned under the test section. Each of the remaining major systems will be explained in detail in the following sections.

2.1 Infrastructure

Operation of the DMT facility was reliant on three major systems: fan, compressed air, and vacuum. The DMT flow was driven by a duct-axial fan. The fan operation was powered by a pneumatic motor which was driven by the compressed air system. Finally, the entire tunnel was pumped down to a low pressure (~30 Torr) in order to facilitate plasma ignition. This required constant operation of the backing pump (vacuum system) in order to offset the mass flow into the tunnel through the seeding system. Each of these major systems is described in detail in the subsections below.

2.1.1 Fan System

The DMT flow was driven by a Hartzell 4616DH3 duct-axial fan (Fig. 2.5). The fan case was mounted directly into the tunnel circuit via flanges at each end. The case is comprised of 0.125” steel. The propeller is solid cast aluminum and has a diameter of 16”.

Fig. 2.5 Duct-axial fan

The propeller is secured to the shaft with a bushing, and the shaft rotates in two thrust bearings mounted to the underside of the internal cross plate. This plate is welded to the outer casing and a circular conduit extending from the upper side of the back portion of the center plate to the upper casing. This conduit serves as access to the pulley secured on the back of the drive shaft. The internal fan hardware is shown in Figure 2.6.

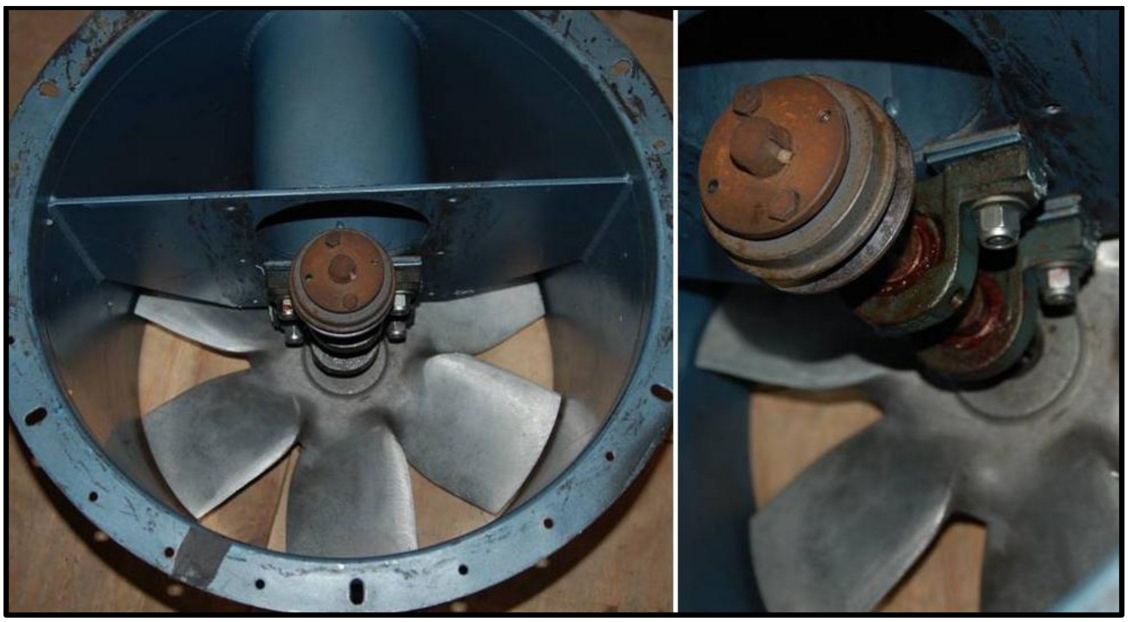


Fig. 2.6 Internal duct-axial fan hardware

Grease was applied to each bearing through standard 0.25” grease fittings connected by 0.25” tubing and standard brass compression tube fittings. The grease lines can be seen in Figure 2.7.

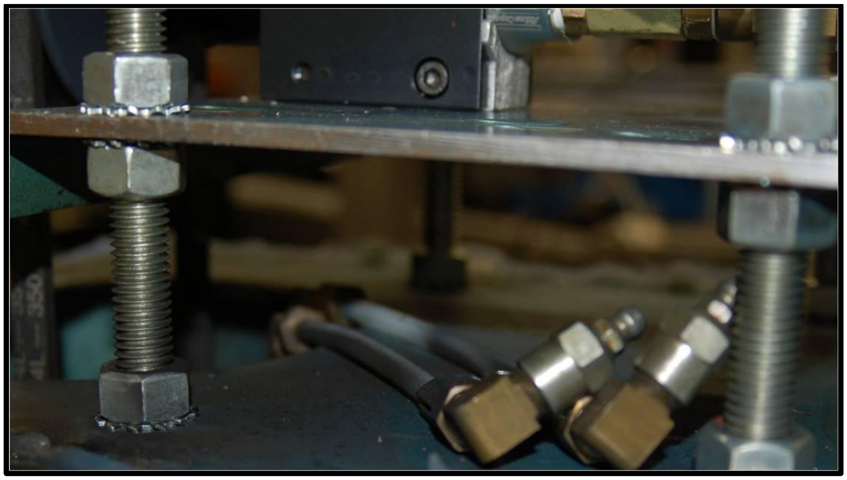


Fig. 2.7   Fan-shaft bearing grease lines

The motor is mounted externally on top of the fan casing and provides power to the propeller through a standard v-belt. The belt is tensioned by adjusting a set of nuts and lock washers securing the motor mounting plate to four all-thread posts bolted to the fan casing. The motor mounting plate and v-belt can be seen below (Fig. 2.8).

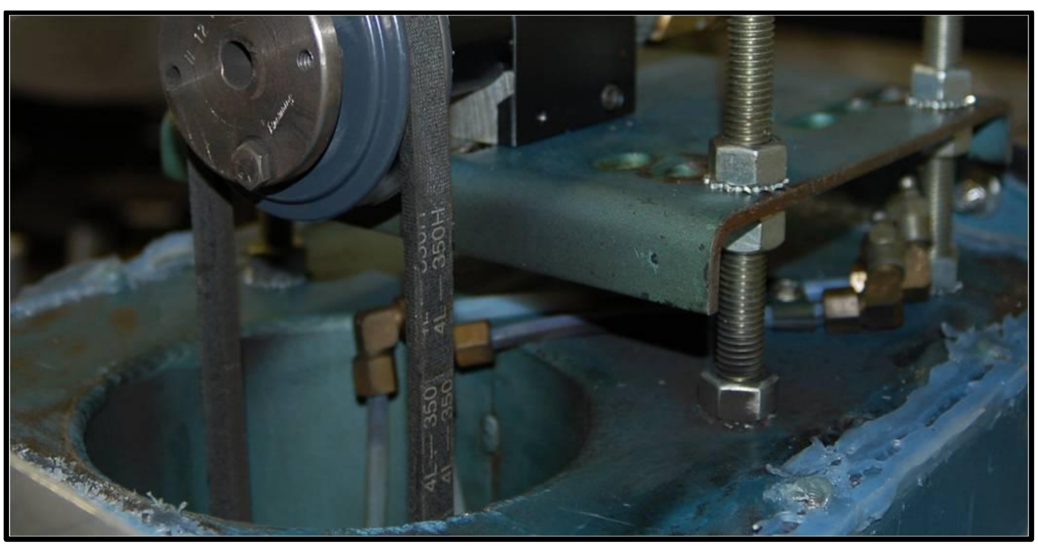


Fig. 2.8   Motor mounting plate and v-belt

Several iterations were necessary to converge on the most effective motor choice to drive the fan system. A 3 HP electric motor was originally installed but was soon replaced with a 5 HP electric motor due to lack of power. The DMT facility operates at near full-vacuum pressure. Thus, the fan casing had to be sealed from the ambient air. A silicone gasket was applied to the metal hull that covers the shaft and bearing assemblies. However, there was still an opening around the shaft itself. A steel plate was welded to the front face of the internal case in order to decrease the clearance around the shaft. This plate was drilled and tapped to secure the Teflon sheet and aluminum plate shaft seal. The modified internal cover with rubber gasket and silicone sealant can be seen below (Fig. 2.9).

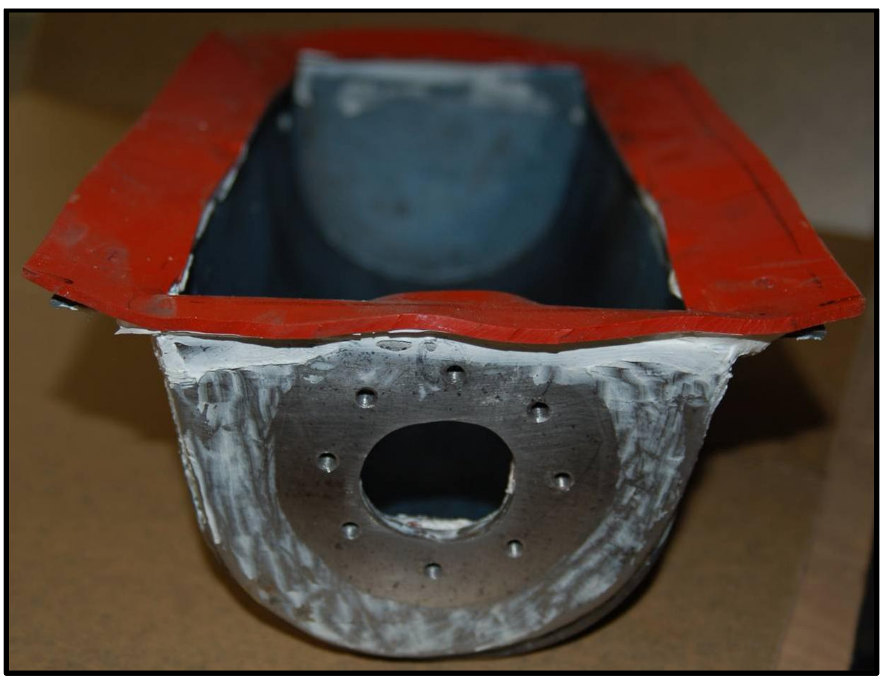


Fig. 2.9 Internal fan-shaft cover

Multiple shaft-seal designs were tested – a single, thick rubber sheet; two rubber sheets separated by vacuum grease; and finally, a metal plate welded to the internal case (decreasing the clearance around the shaft) along with a Teflon sheet held in place by an aluminum plate secured to the internal casing by screws. The metal plate and Teflon sheet proved to be the best seal, but not 100% effective (especially after extended use). Magnetic zero-friction shaft seals are available but were both cost-prohibitive and too large to install in the target area. Therefore, instead of attempting to seal the shaft internally, the belt conduit and the motor had to be sealed externally from ambient room pressure. This was accomplished by fitting a polycarbonate box over the motor and fan casing. Electric motors are cooled by the flow of air over the outer shell created by a small internal fan. However, the motor-cooling fan was ineffective at low pressures and the motor quickly overheated. A water-jacket could have been installed, but this option was both cost prohibitive and would have overcomplicated the system. The solution was to use a pneumatic motor. This type of motor works entirely on compressed air passing over internal vanes, which rotate the shaft and provide power. The largest advantage with this choice was that the drive air would also serve to cool the motor. The pneumatic motor chosen was the LZB 33L A060-11 from Atlas Copco Tools. A standard foot mount was also acquired to secure the motor to the motor mounting plate. An image of the pneumatic motor can be seen in Figure 2.10.

Fig. 2.10 Pneumatic motor

The specs for the pneumatic motor can be seen below (Table 2.1).

Table 2.1 Pneumatic motor specs

Max. Power	0.39 kW
Speed at Max Power	2,600 rpm
Torque at Max Power	1.4 N-m
Min. Starting Torque	2.7 N-m
Free Speed	5,000 rpm
Air Consumption at Max Power	8.3 L/s (17.6 cfm)
Maximum Input Pressure	100 psi

This model provided the appropriate free speed (within prop speed safety limits), along with an acceptably low maximum consumption mass flow in order not to overload the compressed air system. Note that the propeller is largely unloaded due the low DMT pressures, which results in the motor operating at, or near, free speed. The motor required only input and exhaust air lines, simplifying the box design required to seal the shaft area. The fan box was constructed out of 0.25” 6061 aluminum plates and welded. The box dimensions were 11.5” x 9” x 8” with a 13.5” x 11” flange. Holes were drilled and tapped in the steel motor mount base. A silicone gasket was applied, allowed to set, and compressed between the base and the flange of the fan box with screws to form the seal. The connections were made by drilling and tapping the wall, then installing 0.5" NPT nipples. A 4" diameter hole was cut into the front wall, and a 4.5" diameter plate of 0.5" thick polycarbonate was installed with silicone in order to facilitate motor and belt visual inspection. The fan box can be seen below (Fig. 2.11).

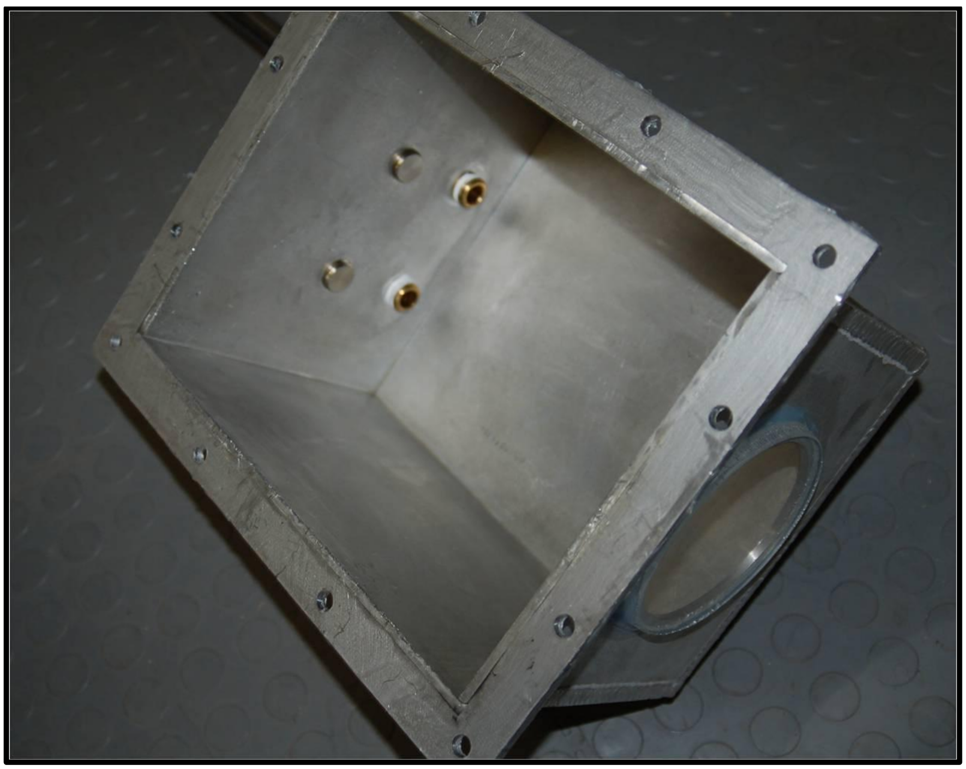


Fig. 2.11 Fan box

The "L" in "33L" for the pneumatic motor model number denotes a lubrication free model. This means that the internal vanes were covered in oil-doped Teflon, effectively removing the need to manually supply lubricant. However, after many hours of operation, an inline air lubricator (0.5” pipe size, 30 maximum SCFM, 1.4 oz oil capacity) was installed in order to ensure efficient motor operation. Standard air tool oil (ISO 22, SAE 10W) was used in the air lubricator. The oil injection rate screw was turned to the lowest setting. The air lubricator can be seen below (Fig. 2.12).

Fig. 2.12 Inline air lubricator

The input and exhaust air connections were made from the 0.5” pipe nipples at the fan box wall interface to the pneumatic motor by 0.5” diameter, 18” long smooth-bore hoses with 304 stainless steel braid and male/female fittings. Multiple brass pipe fittings were used to both step-up to the 0.5” NPT size from the 0.125” NPT size at the motor and direct the hoses at a 45° angle away from the fan box wall. This allowed the hoses to bend back to the wall (within bend radius limits) and connect to the interface fittings while still allowing enough flexibility to remove the fan box if needed. The pneumatic motor foot-mounted to the mounting plate including v-belt and hoses can be seen below (Fig. 2.13).

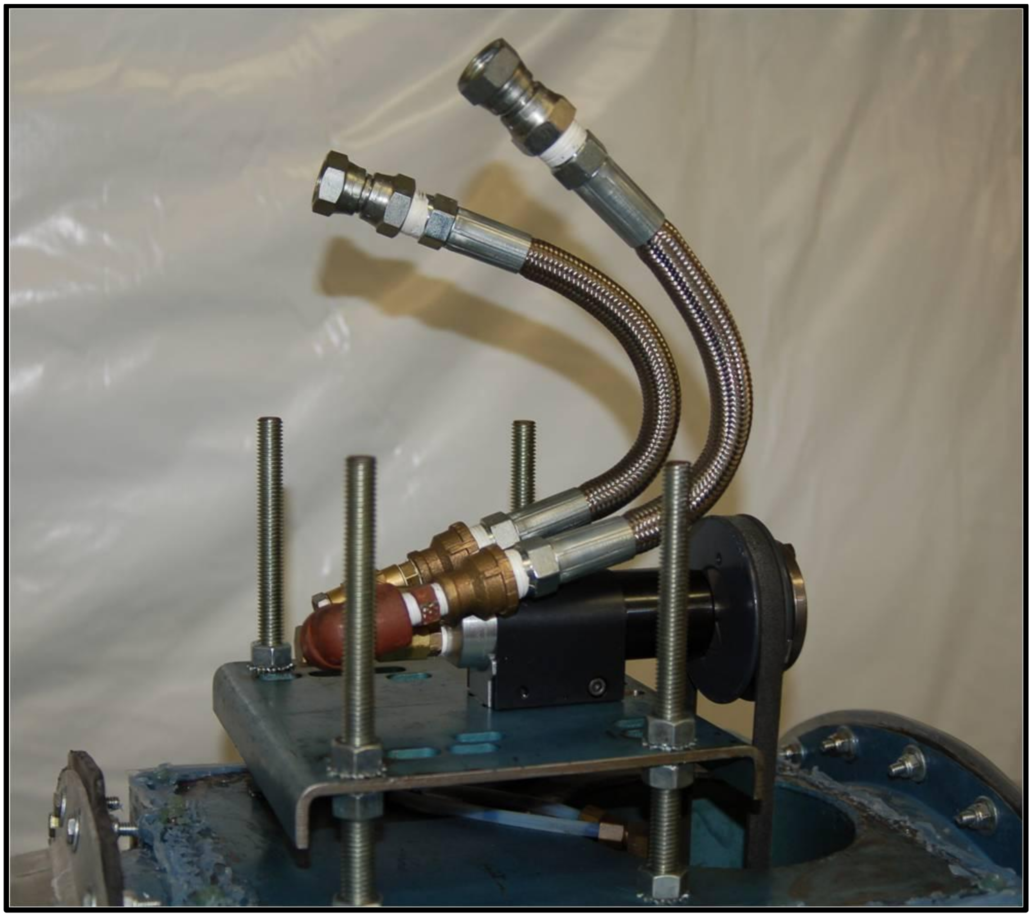


Fig. 2.13   Pneumatic motor and hardware

The input air line also includes a 0-160 psi pressure gauge (glycerin-filled, 2.5” diameter dial, stainless steel-case) just prior to entering the fan box in order to monitor pneumatic motor input pressure. This gauge can be seen in Figure 2.14 mounted in a 0.5” brass T-fitting.

Fig. 2.14 Pneumatic motor input air pressure gauge

A moisture separator (100 scfm capacity, 0.75”) was also installed in line (Fig. 2.15) to protect the pneumatic motor in the event of a dryer system malfunction.

Fig. 2.15 Moisture separator

The drive air was supplied by the compressed air system (see the next section for details) and regulated to maximum input pressure (100 psi) by an aluminum 0.5” NPT regulator (75 max sfcm) with a stacked 5-micron filter and polycarbonate bowl. A 0.5” brass ball valve was installed at the regulator input port and used to activate and deactivate the pneumatic motor and fan system. The regulator/filter assembly was mounted to the corner stand using a standard mounting bracket (Fig. 2.16).

Fig. 2.16 Pneumatic motor regulator/filter assembly

The exhaust line was initially left open to the room at the fan box wall fitting. However, the excessive noise this produced prompted installation of a hose that extended the exhaust line to the wall of the lab. The hose was attached to a pipe secured to the purlin, which was then capped with a 1”, 154 max scfm exhaust muffler (Fig. 2.17).

Fig. 2.17 Muffler

The contraction sections upwind and downwind of the duct-axial fan were designed to connect the 8” PVC piping to the 16” fan with minimal pressure losses. The total length was 36” and the half angle was 7.5°. The contractions were constructed by first fabricating the flanges out of 0.125” 6061 aluminum. A two-dimensional unfolded projection of the main contraction surface was used to cut the material to size out of 0.060” 6061 aluminum. The material was then rolled into rough shape by hand and with the help of a mechanical sheet metal roller. The flanges were then hammered into place over the contraction and clamped. The downwind flange was seated 0.5” upstream of the edge of the cone. This lip extended into the PVC flange opening to mate with the pipe segment, resulting in a clean transition. The contraction was held in shape by straps while the seams were welded. Upon running a fan system test, the flow exiting the contraction was found to be highly rotational, resulting in a central core of reverse flow. This was resolved by installing and welding two perpendicular 0.125” aluminum plates

30” long in the downwind contraction. The contraction (Fig. 2.18) and a SolidWorks model of the stationary contraction vanes inside of a cut-out contraction (Fig. 2.19) can be seen below.

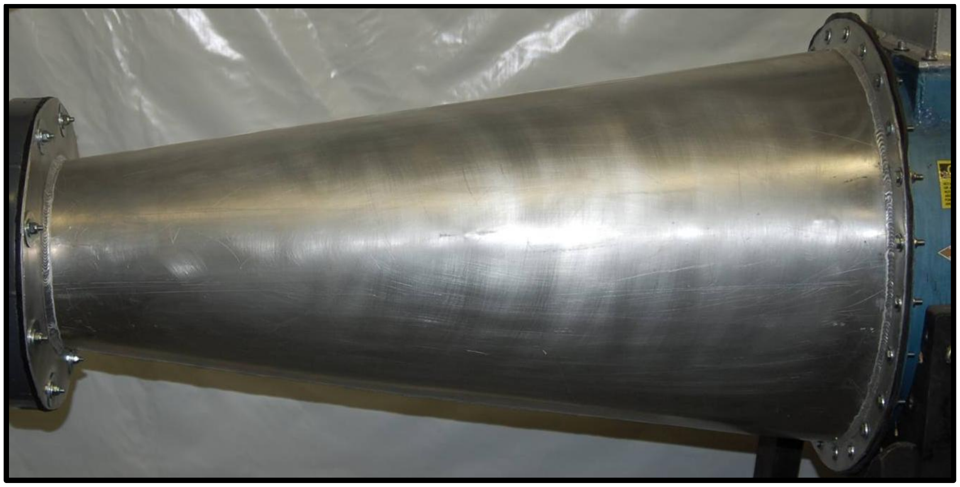


Fig. 2.18 Fan contraction

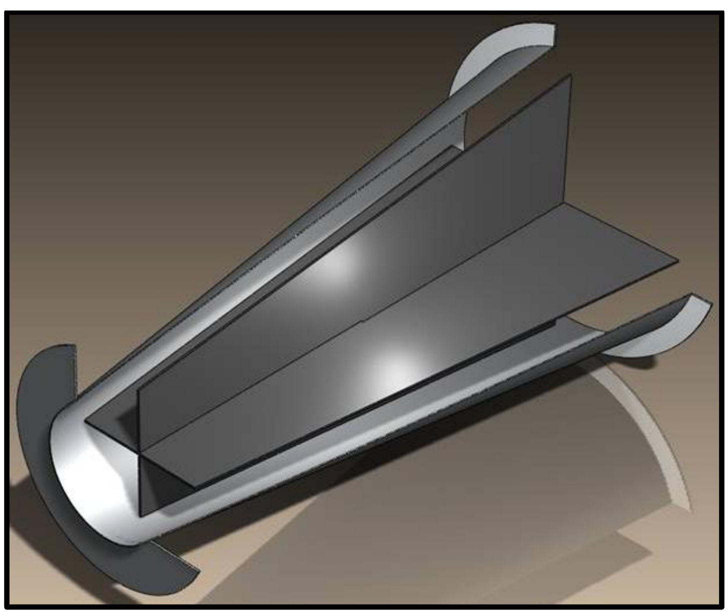


Fig. 2.19 Fan contraction vanes

2.1.2 Compressed Air System

The compressed air system was used to run the pneumatic motor to drive the fan system as well as the atomizer for seed injection. The system was pressurized with a BelAire model 5312D air compressor. The compressor modules were powered by two 10 HP electric motors (208-230/3 phase) and were capable of a mass flow of 74.5 cfm at 100 psi. The tank had a capacity of 120 gallons. The compressor can be seen below (Fig. 2.20) located outside the laboratory in the adjoining equipment building.

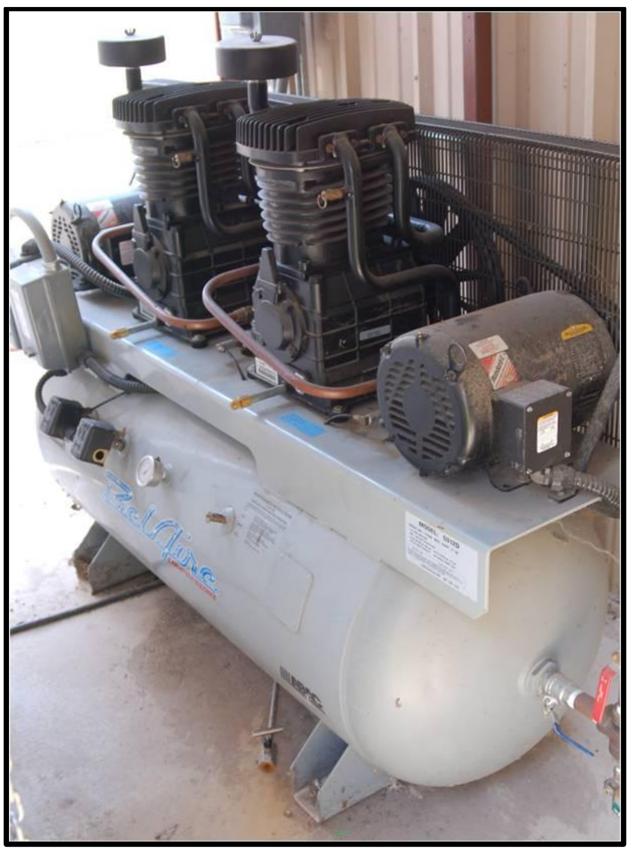


Fig. 2.20 Air compressor

The compressed air (150 psi) exiting the compressor tank was then directed through a filter into a Van Air Systems model RD-100 refrigerated compressed air dryer (Fig. 2.21). The dryer has a standard capacity of 100 sfcm with 1.5" NPT inlet and outlet. There was a 5 psi pressure drop across the dryer. A series of ball valves, pipe fittings, and piping was used to direct a compressed air line from the compressor into the laboratory around the perimeter walls with intermittent drops ending in quick-connect fittings to facilitate air-line installation.

Fig. 2.21 Refrigerated compressed air dryer

The fan system was operated continuously for a prolonged period of time during testing. This, in turn, required the compressor to be operating almost continuously as well to maintain pressure. As a result, a large amount of water was being condensed out of the air due to the extremely high average humidity in the area. The suction pressure, which is displayed in a gauge on the upper surface of the dryer, was kept at 35 psi (max). If the dryer suction pressure was set any lower, water would build up in the heat exchanger coils and freeze. This resulted in an ever increasing pressure drop through the dryer, finally causing complete blockage. In the event of a large pressure drop, operation had to be halted to let the dryer coils thaw and drain.

Standard 0.5” air lines were connected to the compressed air line located near the DMT facility. These lines were used to supply the six-jet atomizer seed injection system as well as the pneumatic motor driving the duct-axial fan.

2.1.3 Vacuum System

The DMT facility utilized a Leybold vacuum system comprised of an E250 backing pump and a RUVAC WAU 1001 Roots blower. The two pumps work in tandem with the backing pump first, pulling a “rough vacuum” of at least 20-30 Torr. The blower can then be activated, which will pull an extremely hard vacuum (~0.004 Torr) in an ideal system. During DMT operation, the backing pump alone was required to maintain a system pressure of 30 Torr. Backing pump oils levels were checked prior to activation and frequently during operation. Cold ambient temperatures caused the oil inside the pump to thicken, resulting in motor overloads at startup. This problem was alleviated by positioning a space heater directly adjacent to the backing pump to heat the oil. The vacuum system was initially placed inside the laboratory adjacent to the DMT facility and connected to the tunnel with a 1.5” smooth bore vacuum hose (Fig. 2.22). Even though the exhaust line was routed outside the laboratory, excessive noise as well as some escaping exhaust-vapor prompted relocation.

Fig. 2.22 Vacuum system in laboratory

A system of 3” PVC pipe was installed around the perimeter of the laboratory secured to the purlin. Lines of 1.5” vacuum hose (isolated by ball valves) 10’ long were installed intermittently to serve other experimental stations around the lab. The DMT facility was connected directly to the 3” vacuum line through a 3” steel-wire reinforced vacuum hose and a 3” PVC ball valve (Fig. 2.23).

Fig. 2.23 Vacuum hose

The vacuum system can be seen in Figure 2.24 secured to a slab in the equipment room adjacent to the laboratory.

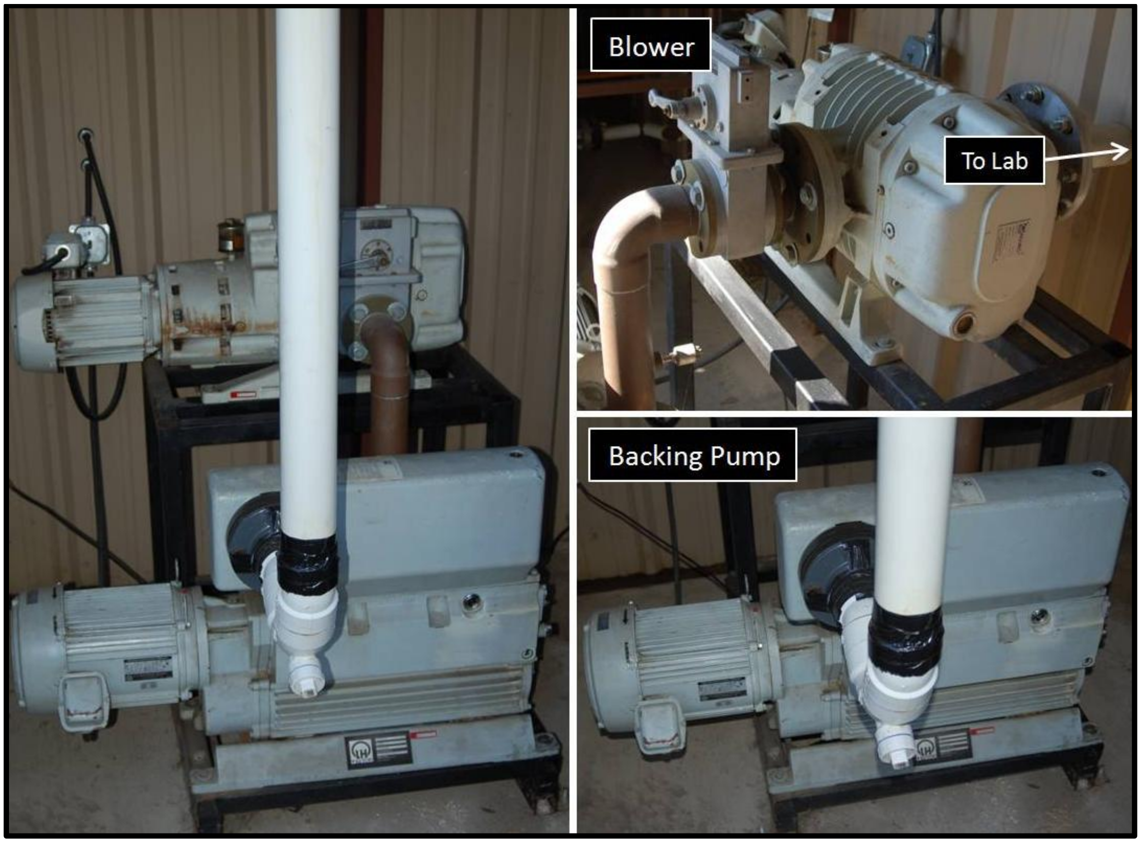


Fig. 2.24 Vacuum system

The exhaust line (vertical pipe in the left image of Fig. 2.24) is constructed of 3" PVC pipe and is connected to the backing pump with a standard PVC flange. The line directly after the exit consists of a 22.5° fitting and a 90° wye followed by another 22.5° fitting to turn the line vertical. This was done to ensure that no condensate flowed back into the pump. The 1.5" threaded socket was plugged and used to drain any collected liquid. The exit line was directed outside and terminated with a down-turned elbow (to avoid rain entering the exhaust line) covered with a screen (to prevent wildlife incursions).

2.2 Upwind and Downwind

The upwind section of the DMT facility was the leg of the wind tunnel circuit (opposite the fan system) upwind of the test section. This segment was comprised of a short segment of PVC pipe containing flow conditioners, the converter, the settling chamber, the contraction, and the grid-box. Parts fabricated early on in the process were sealed with gaskets. However, due to flexibility in the 0.125” aluminum flanges under load that resulted in minor leaks, interfaces comprised of these thin flanges were also taped to ensure the seal. All mates were secured using ¼-20 bolts, flat washers (rubber bonded if compressing a gasket) and nylon lock-nuts. More recent parts were designed with thicker (0.375”) flanges and sealed with o-rings. The test leg of the DMT facility went through three main design iterations revolving around test section modifications. This resulted in multiple versions of the contraction, grid-box, and diffuser which will be detailed in the corresponding descriptions that follow. An image of the upwind section can be seen in Figure 2.25.

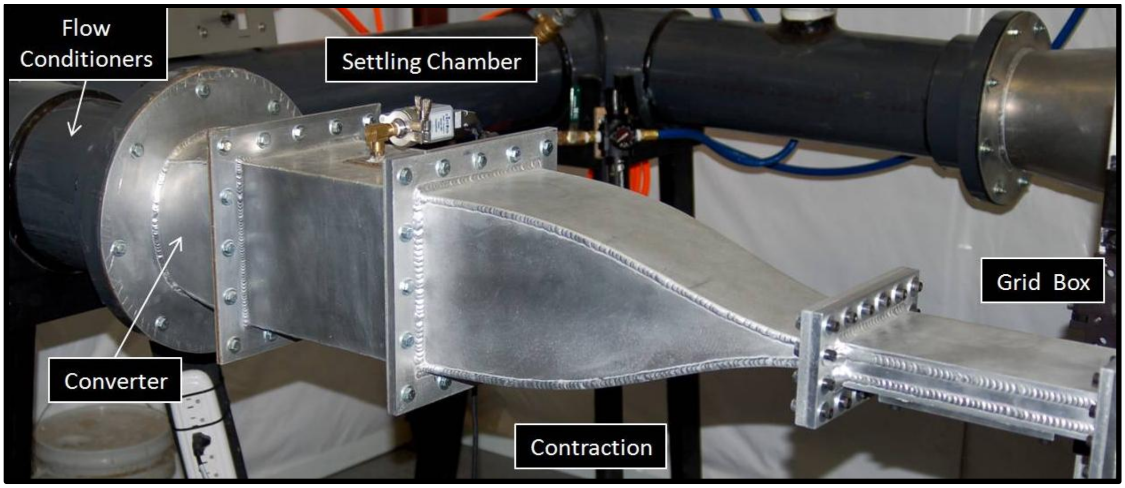


Fig. 2.25 Upwind section

The flow first encountered two aluminum honeycomb sheets cut to fit securely within the 8” PVC pipe section between the elbow and the flange. Each sheet was 2” thick, and each cell had an effective diameter of 0.5”. The honeycomb straightened the fluid, resulting in a uniform exit flow. The cells also served to dampen fluctuating velocities, lowering background turbulence. This section along with the honeycomb sheeting can be seen below (Fig. 2.26).

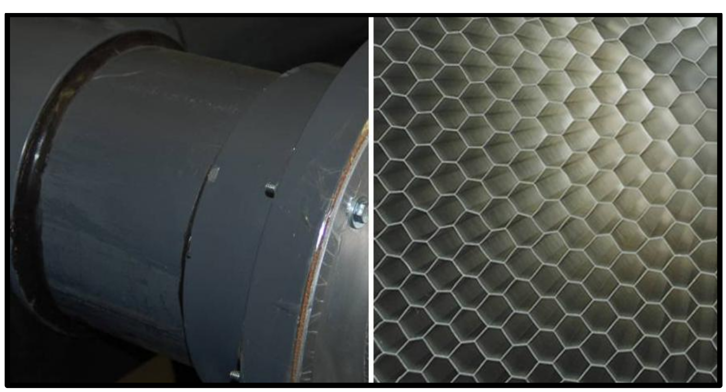


Fig. 2.26 Flow conditioning

The transition from a circular 8" diameter cross-section to a square 7" x 7" cross-section was accomplished with a conversion segment. The part was 6" long, and each component was fabricated from 0.125" 6061 aluminum sheet metal. The walls were cut to size and hand-formed to shape before being positioned together and tack welded. The upwind flange was 13.5" in diameter, and the inner cross-section was sized to slide onto the outside of the part. This left 0.5" of wall to fit inside the PVC flange, forming a smooth seam with inner surface of the PVC pipe segment. The downwind flange was 10.25" x 10.25" with an inner cross-section fit to the outer dimensions of the part. The entire assembly was welded. The converter and a SolidWorks exploded view of the part can be seen below (Fig. 2.27).

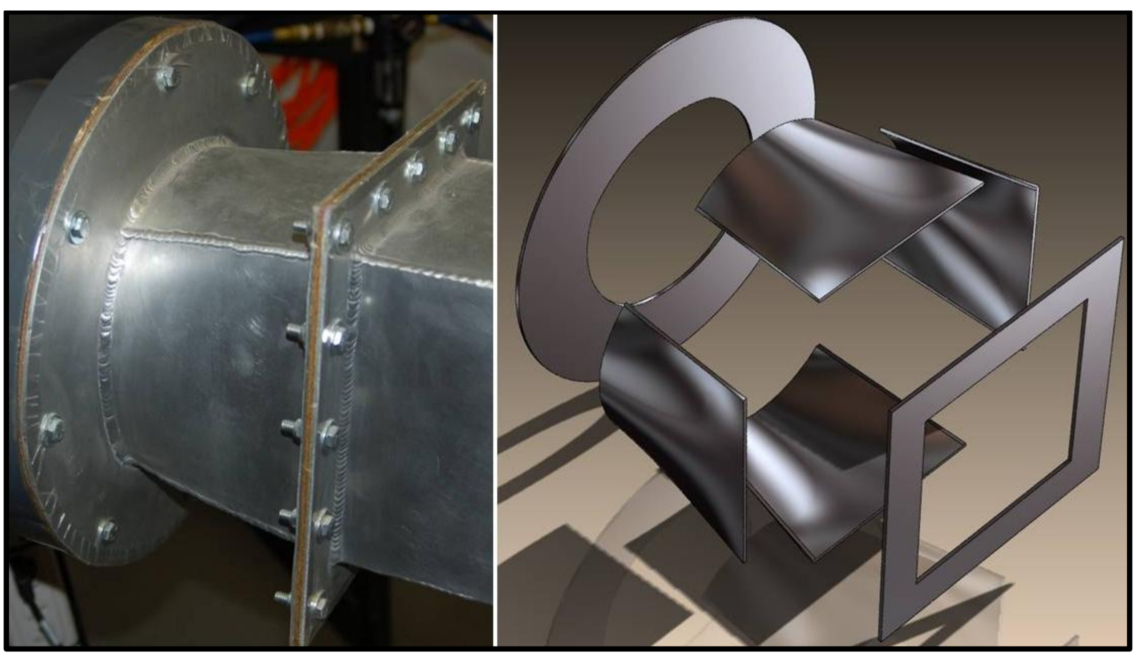


Fig. 2.27 Converter

Following the converter was the settling chamber. This was simply a box with an internal 7” x 7” cross-section that was designed to allow flexibility in installing any future required hardware upstream of the test section (an active grid, for example, if necessary). Each component of the settling chamber structure was cut to size from 0.125” 6061 aluminum sheet metal. The total length was 10”. Each flange was 10.25” x 10.25” with inner cross-sections sized to fit the outer-dimensions of the settling chamber. The parts were assembled, clamped in place and welded. The settling chamber can be seen below with an exploded SolidWorks model view (Fig. 2.28).

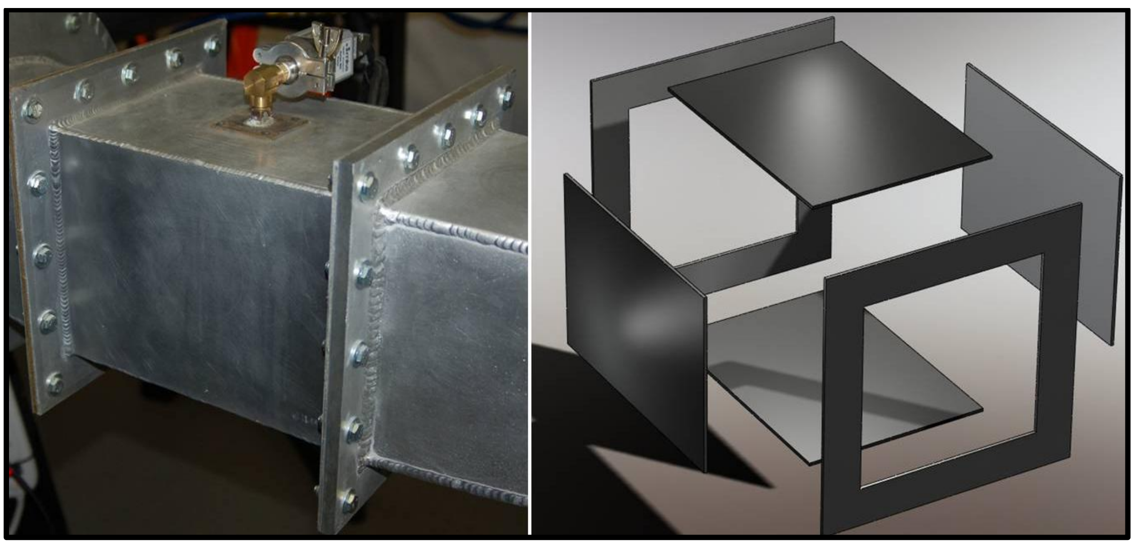


Fig. 2.28 Settling chamber

A pitot tube was installed in the settling chamber to measure and monitor DMT total pressure. The 0.03125” tubing was locked by compression into a 0.25” NPT fitting adapter. This fitting was then soldered to a 2” x 2” x 1/16” brass plate. A hole was drilled into the top wall of the settling chamber, and the pitot assembly was installed (with the tube oriented directly upstream) with screws and sealed with silicone. A series 902 piezo vacuum (~0 - 1000 Torr) pressure transducer was connected to the pitot system using a brass 0.25" NPT elbow along with a KF-25 flange to 0.25" NPT adapter and clamp assembly. The pressure transducer and a SolidWorks model of the pitot assembly can be seen below (Fig. 2.29).

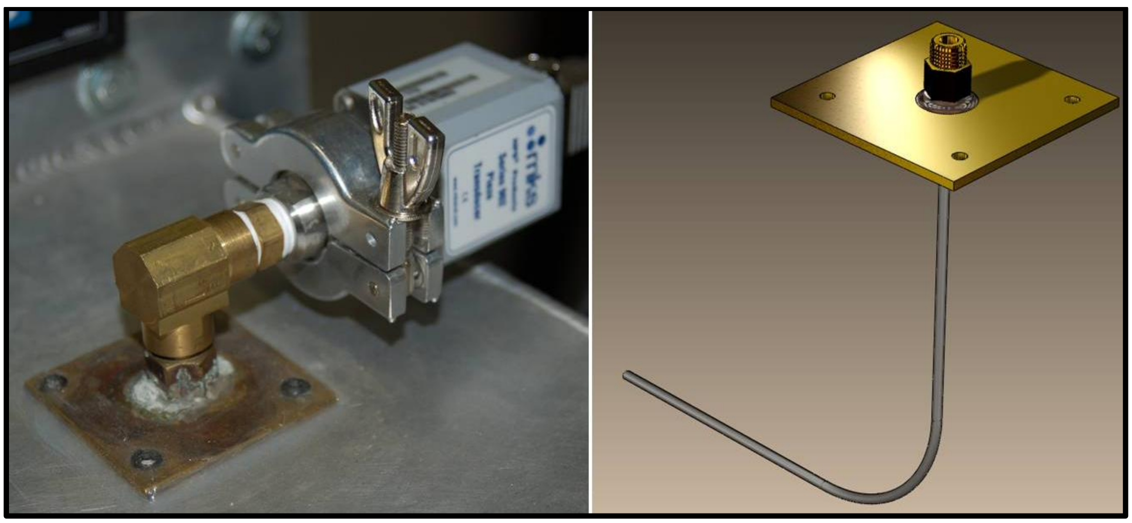


Fig. 2.29 Pitot assembly and pressure transducer

Downwind of the settling chamber was the contraction. The initial version transitioned from a square 7" x 7" cross-section at the entrance to a 4" x 1.5" cross-section at the exit, resulting in a contraction ratio of 8.17 to 1. The total length was 18". The top and bottom walls, along with the upwind (10.25" x 10.25") and downwind (4.625" x 7.375") flanges, were fabricated from 0.125" 6061 aluminum sheet metal. The side walls were fabricated from 0.1875" 6061 aluminum. The side walls were straight with a half-angle of 4.76°. The contoured walls were hand shaped, and the entire part was assembled and welded. The initial contraction with an exploded SolidWorks view can be seen below (Fig. 2.30).

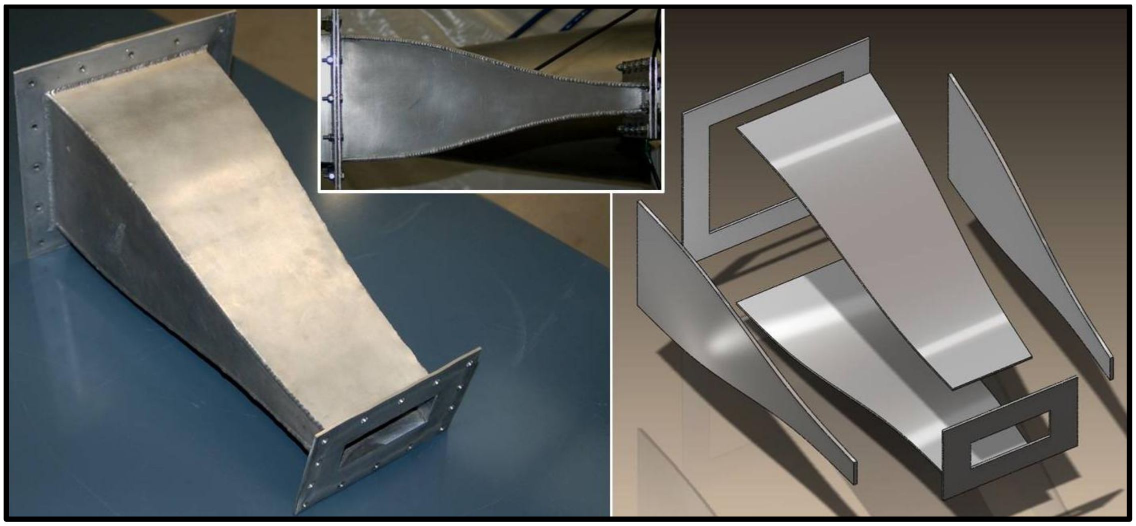


Fig. 2.30 Contraction (version one)

When designing the contour dimensions, there are two effects that must be balanced. The first is boundary layer growth. A long contraction results in a large radius of curvature and a more gradual transition at the inflection points. This also results in faster boundary layer growth. The second effect is boundary layer separation. A short contraction has a smaller radius of curvature, causing a severe transition at the inflection points and stronger pressure gradients. This has the beneficial effect of keeping the boundary layers attached to the surface at the first inflection point, but the opposite effect at the second inflection point. Due to the low pressures, and thus low Reynolds numbers, the boundary layers in DMT were laminar. These boundary layers are much less energetic than turbulent boundary layers and are prone to separation with the slightest perturbation. Because of this, the design was weighted towards a longer contraction design to ensure that boundary layers remain attached. The dimensions of the contour curve can be seen below (Fig. 2.31, dimensions in inches).

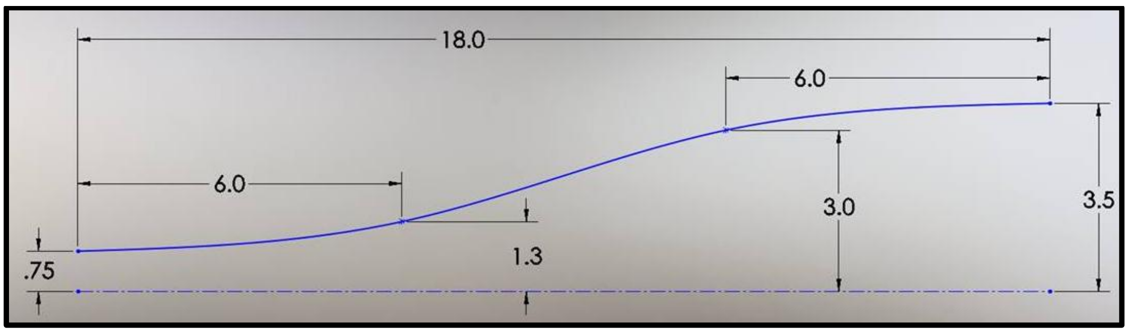


Fig. 2.31 Contour dimensions (version one)

The second, and final, contraction version transitioned from a square 7” x 7” cross-section to a 4” x 0.75” cross-section, resulting in a contraction ratio of 16.3 to 1. The total length was 18”. The side walls were straight at half angles of 4.76° and fabricated from 0.25” 6061 aluminum sheet metal. The top and bottom controured walls were fabricated from 0.125” 6061 aluminum sheet metal and hand shaped. The upwind (10.25” x 10.25”) and downwind (4” x 7.25”) flanges were fabricated from 0.375” 6061 aluminum plates. A groove (0.095” wide x 0.051” deep) for a 0.0625” o-ring was cut into the upwind flange to form a static seal with the face of the settling chamber. The final version of the contraction with an exploded SolidWorks view can be seen in Figure 2.32, and the dimensions (in inches) of the contour curve can are shown in Figure 2.33.

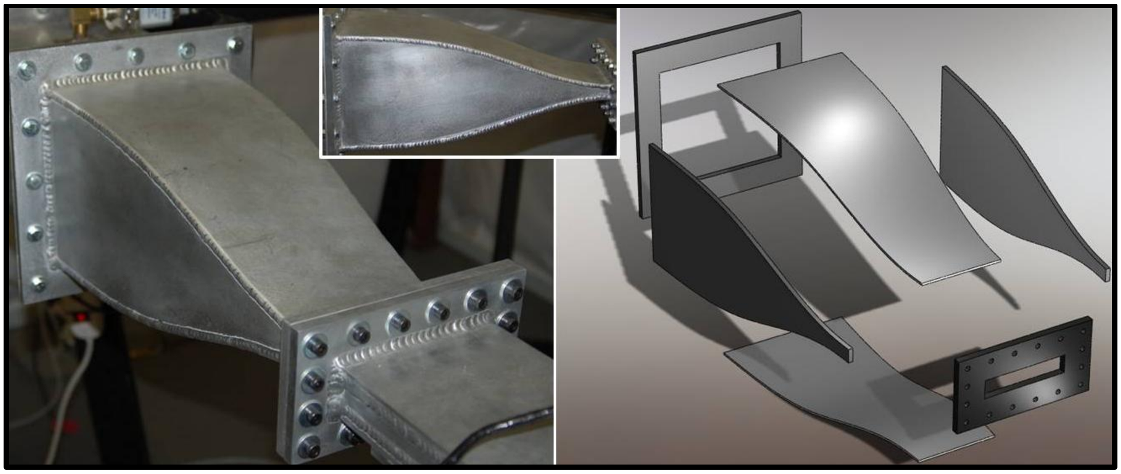


Fig. 2.32   Contraction (version two)

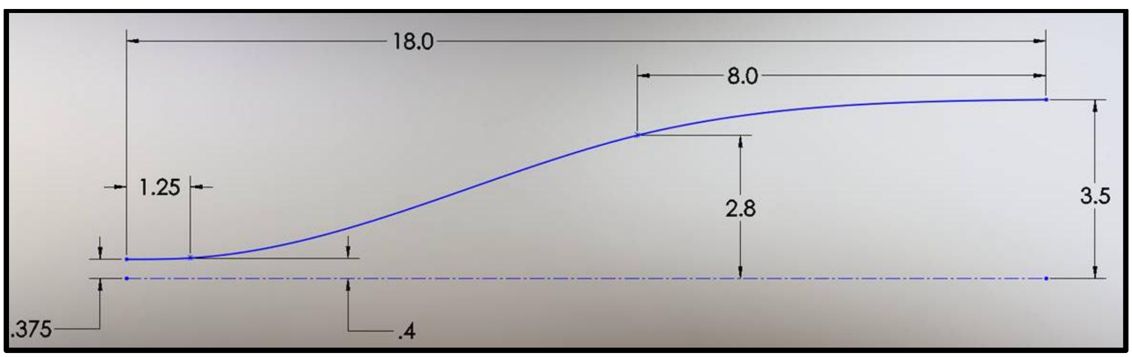


Fig. 2.33   Contour dimensions (version two)

Downwind of the contraction was the grid-box. The original version of this part was a simple straight box designed to modify the flow field prior to entering the test section (should any modification be required). Preliminary plans included creating a homogenous sheer-flow using a series of increasingly fine passive mesh segments from top wall to bottom wall. The initial passive grid (see Section 2.3) was located between the upwind flange of this part and the downwind flange of the original contraction compressed between two 0.0625” thick rubber gaskets. The box had a flow cross-section of 4” x 1.5”, upwind and downwind flange dimensions of 4.625” x 7.375” and 4.75” x 7.25”, respectively, and a total length of 10”. A second iteration was required when the test section cross-section size was changed from 4” x 1.5” to 4” x 1”. In order to negate the 0.25” steps at the entrance to the test-section, a small secondary contraction was created within the part to transition to the new cross-section with minimal pressure loss or separation. This was accomplished by installing an assembly consisting of a 0.1875” x 1” 6061 aluminum block and a 0.0625” steel contoured plate on the top and bottom walls. The edges of the steel plate were filed to form a continuous interface with the wall. The assembly was secured with counter-sunk screws and external lock nuts. The modified (version two) part can be seen below, along with a SolidWorks model of the countoured inserts and an image of the internal contraction (Fig. 2.34).

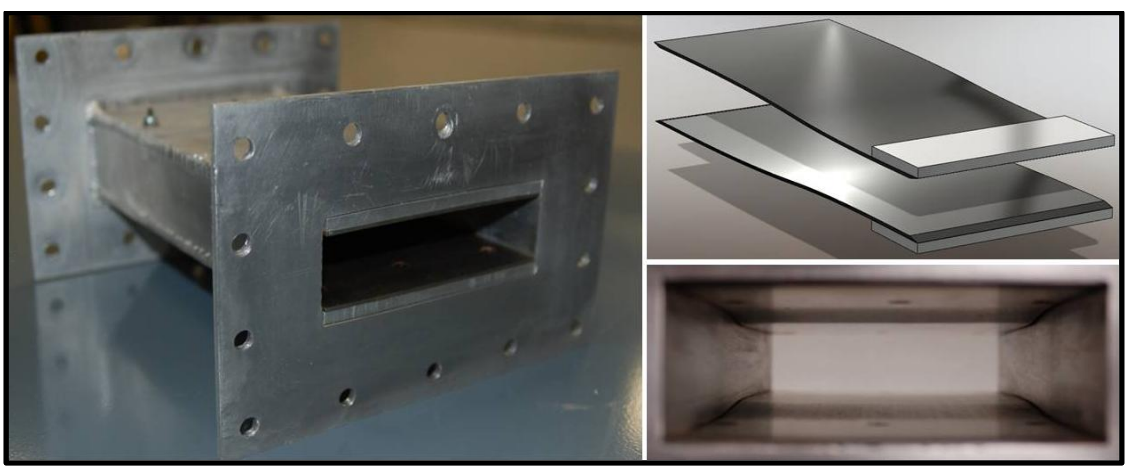


Fig. 2.34 Grid-box (version two)

The third grid-box version was designed in concert with the final iterations of the contraction and test-section. The flow cross-section transitions from 4” x 0.75” at the entrance to 4” x 0.8125” at the exit, and the total length of the part is 10”. The divergence of the top and bottom walls was designed to counteract the effects of displacement thickness growth. In viscous flow, the fluid at the wall has zero velocity, which impedes the motion of the fluid above it, resulting in a boundary layer. The thickness of the boundary layer increases with downstream distance. The fluid very near the wall behaves as if it were a fluid boundary, and the bulk flow reacts accordingly. This is known as the displacement thickness. This thickness can be thought of as the distance a real wall would need to be raised in an ideal flow in order to recover an equal mass-flow. The growth of this displacement thickness resulted in a contraction effect. This was undesireable, due to the additional mechanical effects (pressure gradients) which prevent isolation of the effects of the vibrational non-equilibrium. Thererefore, the top and bottom walls of the final iteration tunnel parts, beginning at the grid-box entrance, were set to diverge at an angle of 0.18° from horizontal. This divergence was based on flat-plate laminar boundary layer theory with the goal of negating the effects of displacement thickness growth along the test-section walls. The boundary layer thickness (δ) and the displacement thickenss (δ^*) were computed using the following equations:

$$\delta = 5.83 \frac{x}{\sqrt{\mathrm{Re}_x}}$$

$$\delta^* = 1.72 \frac{x}{\sqrt{\mathrm{Re}_x}}$$

The displacement thickness and wall location can be seen plotted below (exagerated aspect-ratio) as a function of axial distance (Fig. 2.35).

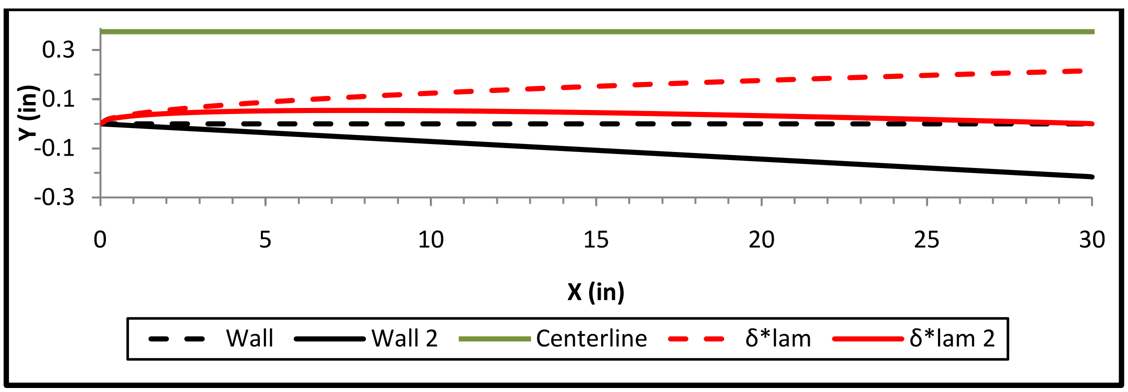


Fig. 2.35 Displacement thickness

The modified displacement thickness (δ*lam 2, Fig. 2.35) levels out, then begins to trend downward with respect to the original, fully-horizontal wall (Wall, Fig. 2.35). The displacement thickness growth was purposefully overcorrected, because the side walls were left parellel and at a distance of 4” from eachother from the contraction exit to the diffuser entrance. Therefore, there remained some raw displacement thickness growth along the side walls, but this effect was minimal when compared to the effect of the top and bottom wall displacement thickness growth and was dampened by the overcorrection.

The top and bottom walls, along with the flanges, were milled to size from 0.375” 6061 aluminum stock. Both upwind and downwind flanges were 4” x 7.5”. A groove (0.095” wide x 0.051” deep) for a 1/16 inch o-ring was cut into each flange to form a static seal with the mating faces of the contraction and the test-section, respectively . A 4” x 4” access hole was milled into the top wall, and an acces panel (6” x 5” x 0.25” lip; 4” x 4” x 0.375” extrusion) was fabricated from 6061 aluminum stock. Through-holes were drilled to accept ¼-20 screws to secure the access panel to tapped holes in the top wall. The side walls were milled to size, including the 0.18° divergence angle on top and bottom, from 0.5” 6061 aluminum stock. A channel to hold the grids (see Section 2.3) was milled (0.25” wide x 0.125” deep) into each part located 3.5” downwind from the entrance of the grid-box. The side walls were positioned between the top and bottom walls. Each flange was then slid into place over the wall assembly, and the entire part was welded together. The grid-box and a SolidWorks exploded view can be seen in Figure 2.36.

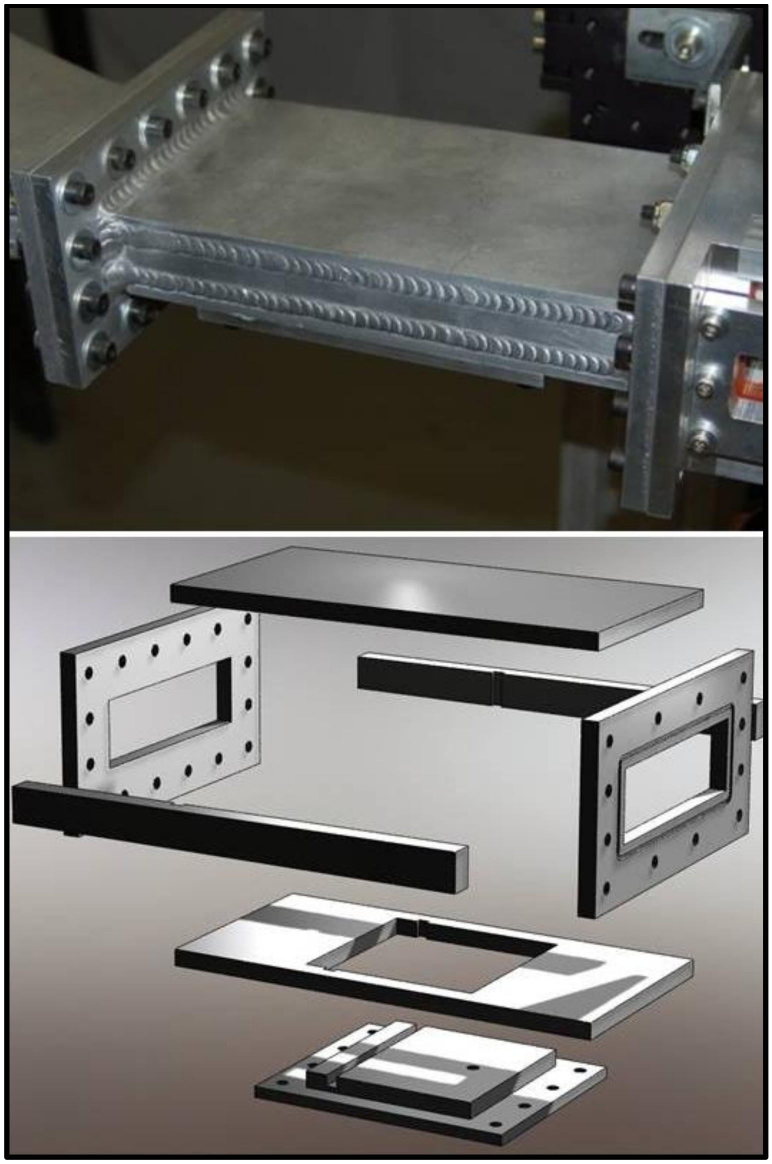


Fig. 2.36   Grid-box (version three)

Next in the flow path was the test-section, which will be described in detail in Section 2.4. Downwind of the test-section was the diffuser. The diffuser was designed to decelerate the flow and recover pressure as efficiently as possible. The optimal half-angle, as a rule, is generally 5° or less. Like the grid-box, there were three different iterations of the diffuser.

The first version had a cross-section of 4.25" x 1.75" at the entrance and 7" x 7" at the exit, and the total length was 30", resulting in a half-angle of 5.0° for the top and bottom walls and 2.62° for the side walls. The entrance cross-section was designed to accept test-section wall divergence of 0.125" on each wall from an original 4" x 1.5" cross-section. The walls and the flanges were fabricated from 0.125" 6061 aluminum sheet metal, assembled, and then welded. The original diffuser can be seen below along with a SolidWorks exploded view (Fig. 2.37).

Fig. 2.37 Diffuser (version one)

The next iteration required an entrance cross-section of 4" x 1". Instead of fabricating a new diffuser, an insert was constructed to modify the inner walls of the existing part, similar to installing inserts into the orignal grid-box. The modified half-angles were 5.48° for the top and bottom walls and 2.88° for the side walls. Each insert part was fabricated from 0.125” 6061 aluminum sheet metal. The insert side walls were positioned flush with the diffuser side walls, because the thickness alone was enough to correctly modify the spanwise dimension at the diffuser entrance. The top and bottom walls were centered between the side walls and set 1” apart at the diffuser entrance. The plates merged with the diffuser walls at the diffuser exit. Once the four plates were positioned, the assembly was welded, inserted into the diffuser, and tack-welded. The modified diffuser entrance and SolidWorks views of the insert plates can be seen below (Fig. 2.38).

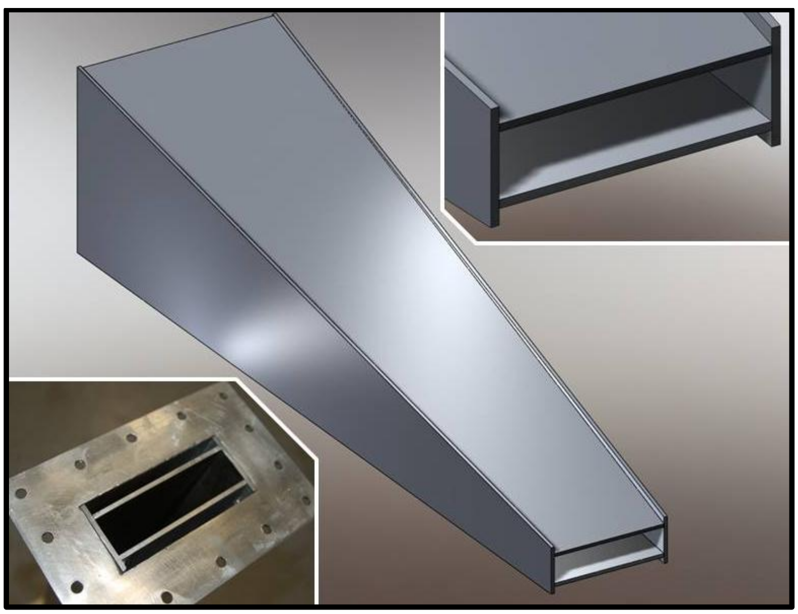


Fig. 2.38 Diffuser (version two) insert

The final iteration of the diffuser was designed in tandem with the final test-section (version three). The walls and flanges were fabricated from 0.25” and 0.375” 6061 aluminum stock, respectively. The cross-section was 4” x 0.962” at the entrance, 7” x 7” at the exit, and the total length was 31”. The half-angles were 5.56° for the top and bottom walls and 2.77° for the side walls. The downstream flange was 10.25” x 10.25” x 0.375” with the the inner cross-section sized to slide over the main core walls when assembled. The upwind flange was 5” x 3” x 0.375”. Because the face of the mating part to this flange contained an o-ring groove, the inner cross-section was milled to the entrance size (4” x 0.962”) to ensure a smooth face. A larger pocket (4.51” x 1.472”) was then milled 0.25” deep into the downwind face to accept the walls for assembly and welding. The corners of the pocket were relieved with a 0.03125” radius for wall-corner clearance. The final version of the diffuser, a SolidWorks exploded view, and a SolidWorks view of the upwind flange (downwind face) can be seen below (Fig. 2.39).

Fig. 2.39 Diffuser (version three)

Downwind of the diffuser was another converter identical to the upwind part (Fig. 2.27) to transition from the diffuser exit to the 8” diameter PVC pipe circuit.

2.3 Turbulence Grids

The simplest and most convenient method of generating turbulence is by means of grids of relatively large dimensions placed normal to a uniform upstream flow.[44] There are two main processes involved in the interaction of a fluid flow and a grid. The first involves the characteristics of the background turbulence in the experimental facility. There is a complex interaction between the existing turbulent flow structures and the grid elements, resulting in varying downstream flow field characteristics dependant on initial turbulence intensity, frequency and eddy size. It is this complex interaction that makes it difficult to perform heads-up comparisons of experimental results under equivalent grid geometries without knowledge of the background flow properties. The second effect is a result of the fluid impinging on the grid elements, creating wakes which contribute turbulent energy to the flow. The background turbulence and wake effects interact in a complex manner. These complex interactions take place within a development region that spans a downstream distance approximately equal to 10 mesh sizes. The turbulence energy then decays rapidly, has been found to be directly dependent on the pressure drop across the grid (grid solidity), and scales with grid bar size.

An alternate active-grid design was generated initially in tandem with fabrication of the first passive grid. This was done in the event that a more aggressive turbulence generation technique be required due to the extremely low Reynolds numbers of the DMT flow. The active grid would have been comprised of horizontal and vertical arrays of rods with triangular fins attached. These rods would have been connected to small, independent drive-motors which would have been operated at randomized speeds and directions. A conceptual Solidworks model design for the active grid can be seen below (Fig. 2.40).

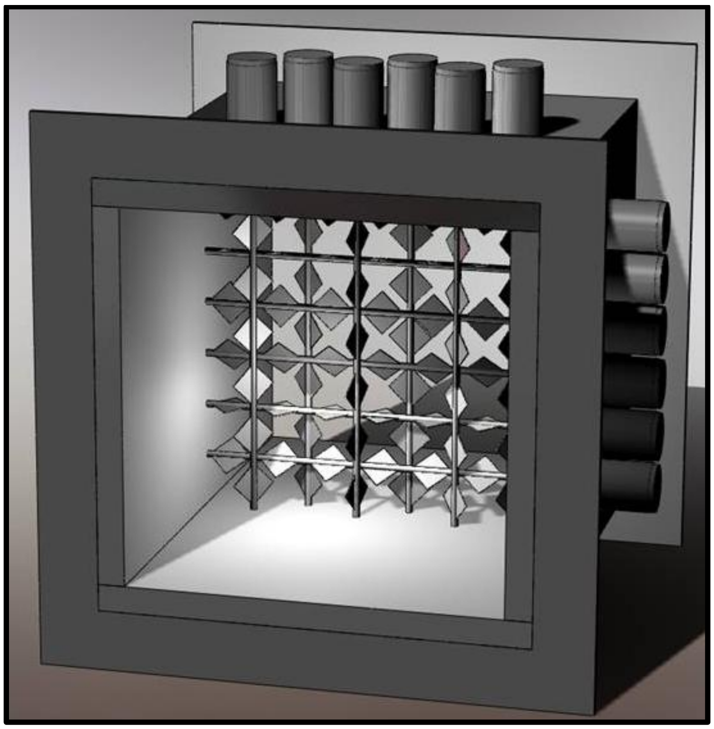


Fig. 2.40 Active grid

Turbulence in the DMT facility was generated by passive grids located upwind of the test-section directly downstream of the contraction exit. The most effective approach for turbulence generation was to utilize a square grid comprised of square elements. The iteration process for grid design will be detailed below.

The initial grid (Grid #0) was constructed entirely of brass and designed to be compressed between two rubber sheets located between the downwind contraction flange and the upwind grid-box flange. A brass plate 7.375" x 4.625" x 0.030" with an inner cross-section of 4.5" x 2.0" served as the base for square 0.75" x 0.75" brass bars 2.5" long for the vertical elements and 4.5" long for the horizontal elements. The horizontal bars were soldered to the downwind face of the plate at each end as well as spot-soldered at the contact points with each intersecting vertical bar. The vertical bars were soldered on the upwind face in the same manner. The brass grid can be seen below along with a SolidWorks top view (Fig. 2.41).

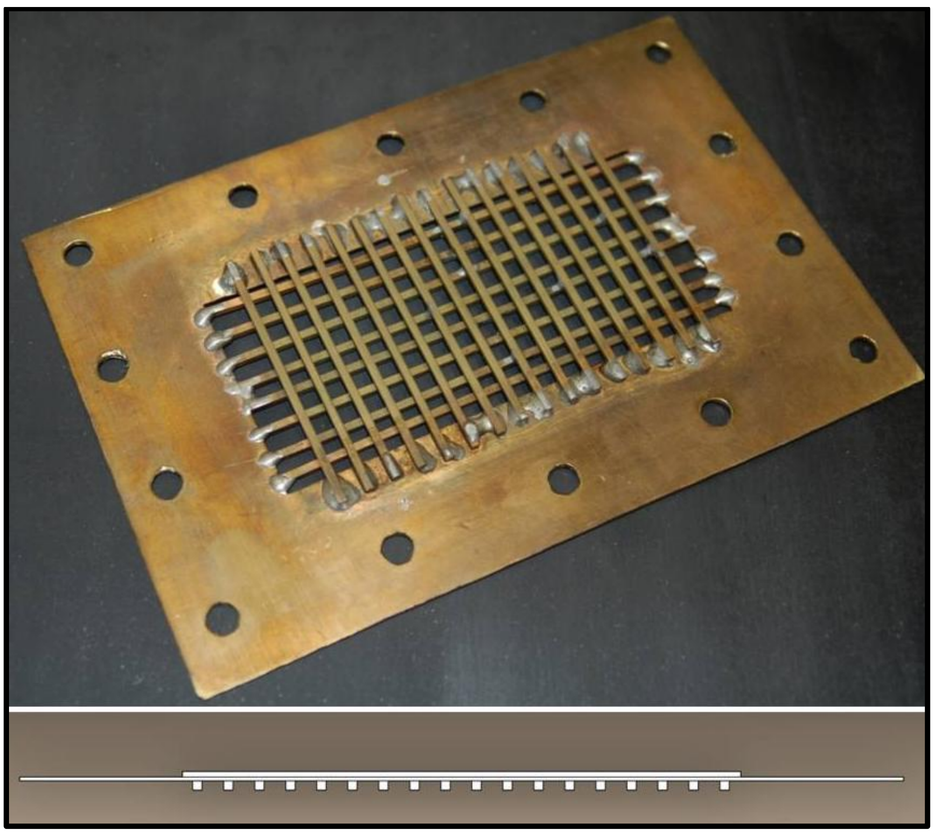


Fig. 2.41 Grid #0

The brass grid was positioned relative to the flow cross-section (4" x 1.5", grey area in Fig. 2.42) with the perimeter element edges offset from the walls by 0.0825" (sides) and 0.091" (top/bottom).

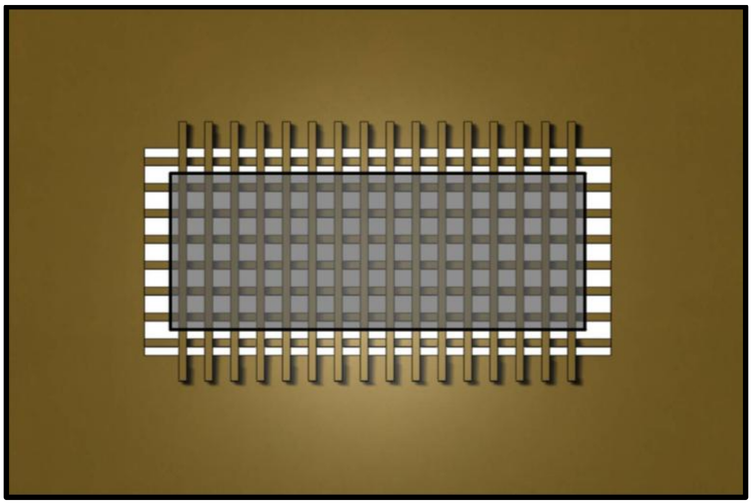


Fig. 2.42 Grid #0 position

The dimensions for Grid #0 can be seen below (Fig. 2.43).

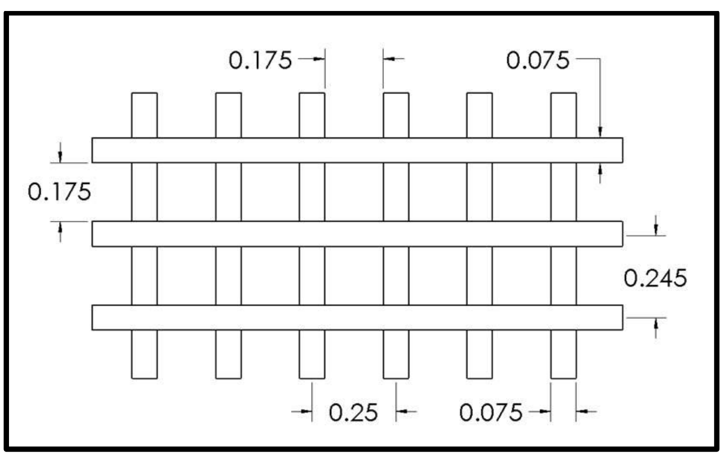


Fig. 2.43 Grid #0 Dimensions (inches)

The turbulence generated by Grid #0 was found to be extremely low ($\overline{u'}$ on the order of 0.3-0.5%). This was primarily due to the secondary contraction located downstream. Grid geometry (bar size) also played a role, therefore the following grids were designed for more aggressive turbulence generation.

The second and third versions of the turbulence grids were designed in tandem with the grid-box (version three). Instead of installing the grids between two flanges, the grids were secured in a slot within the grid-box. An access panel in the grid-box allowed for easy rotation of different grids. Each grid was milled from 6061 aluminum stock to a size of 4.245” x 1.27” x 0.245”. The grid elements were generated by milling vertical slots 0.125” deep into the upwind face and horizontal slots 0.125” deep into the downwind face. Therefore, each grid element (regardless of bar size) was 0.125” thick (wind axis). The outer edges of the inner cross-section formed by the pockets (4” x 0.7725”) were sized to form a smooth transition with the wall surfaces. All bar edges were left as sharp as possible. The small radii left in the corners in each slot from the end-mill were then filed square. This construction method was time effective and produced a square mesh array that was structurally rigid, consistent and very accurate to within a small tolerance. The following figures show upwind and downwind views of Grid #1 (Fig 2.44 and 2.45), Grid #1 dimensions (Fig. 2.46), upwind and downwind views of Grid #2 (Fig. 2.47 and Fig. 2.48), and Grid #2 dimensions (Fig. 2.49).

Fig. 2.44 Grid #1 upwind face view

Fig. 2.45 Grid #1 downwind face view

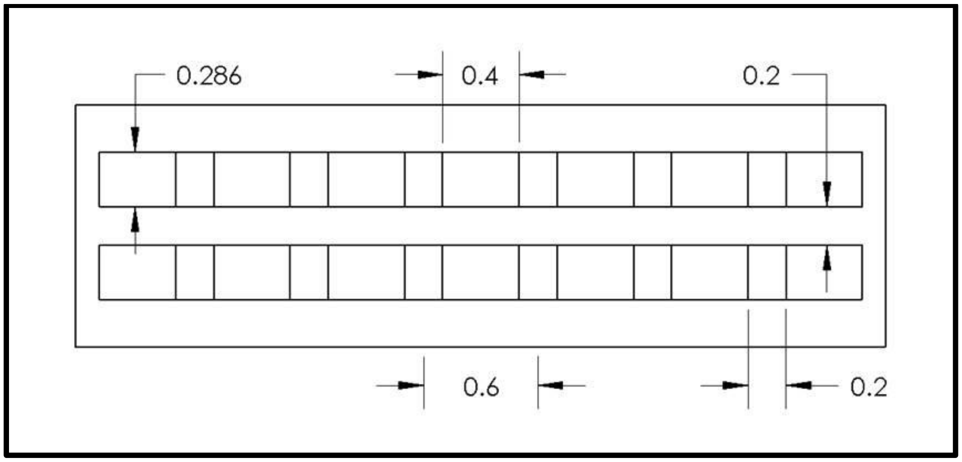


Fig. 2.46 Grid #1 dimensions (inches)

Fig. 2.47 Grid #2 upwind face view

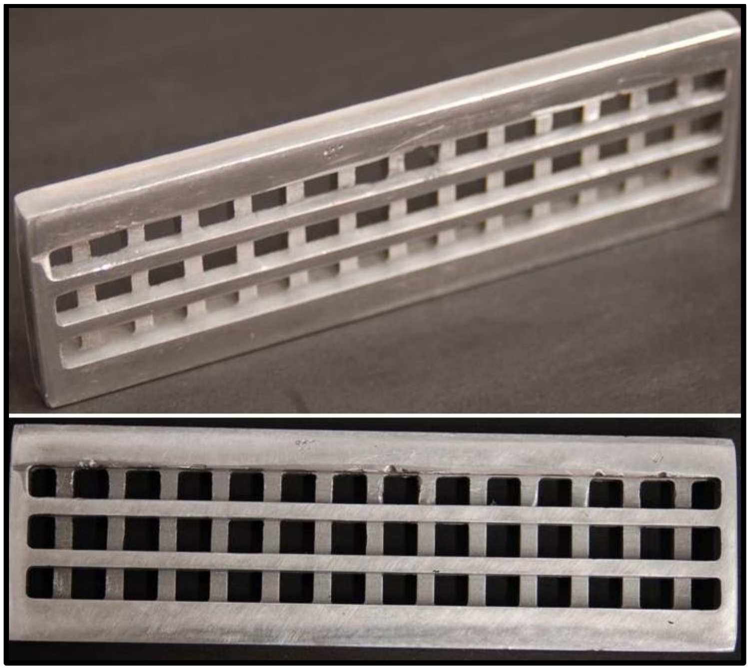


Fig. 2.48 Grid #2 downwind face view

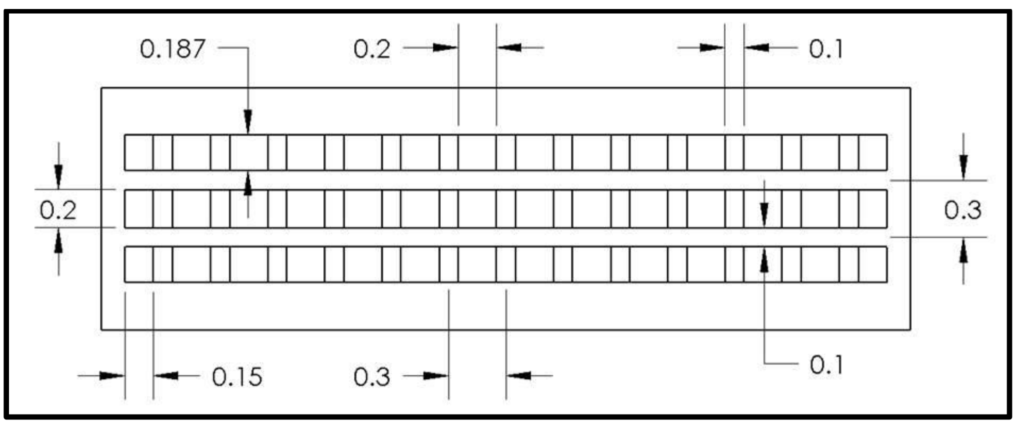


Fig. 2.49 Grid #2 dimensions (inches)

A compilation of relevant grid dimensions and characteristics for all three grids can be seen below (Table 2.2).

Table 2.2 Grid properties

	M (in)	d (in)	β (%)
0	0.245	0.075	49.2
1	0.60	0.200	51.8
2	0.30	0.100	50.3

The mesh size (M) is the distance between the center-lines of two adjacent parallel grid elements. The bar size (d) is the width of a grid bar (perpendicular to the wind axis). The porosity (β) is the ratio of open flow area to blocked area for the given grid cross-section.

2.4 Test Section

The test-section was located downstream of the grid-box. Three main versions were constructed throughout the study as improvements were made through multiple design iterations. The first configuration was a simple channel constructed from plexiglass (with limited optical access) designed to implement and test the RF plasma system. The second version was constructed from Lexan and designed for data acquisition as well as final design iterations on the RF plasma system. These first two iterations were constructed from plastic to ensure electrical isolation from the RF-electrodes. However, as we became more familiar with the system, this was deemed unnecessary. The final configuration was constructed from 6061 aluminum and Macor ceramic and was a compilation of all design improvements ascertained from earlier testing configurations.

2.4.1 Plexiglass

The initial test section was designed as a test-bed for the RF plasma system and constructed from Poly(methyl methacrylate), an acrylic glass known commercially as “plexiglass”, due to its availability at the time and electrical insulation properties. The walls were fabricated from 0.5” stock plexiglass sheeting, which had an actual thickness of 0.47 inches. The side walls (1.5” x 30”) were secured between the top and bottom walls (5” x 30”) using 0.125” diameter steel pins 2.5” long installed every 4” along the entire length. Flange assemblies were constructed from 0.125” 6061 aluminum sheet metal by welding a flange (7.25” x 4.75” outer size with 5.25” x 2.75” inner area) to a 5.125” x 2.5” sleeve 2” in length. The assemblies were then slid over each end and secured to the plexiglass with screws. All seams were sealed with silicone. The plexiglass test section can be seen in Figure 2.50, and a view of the flange assembly is shown in Figure 2.51.

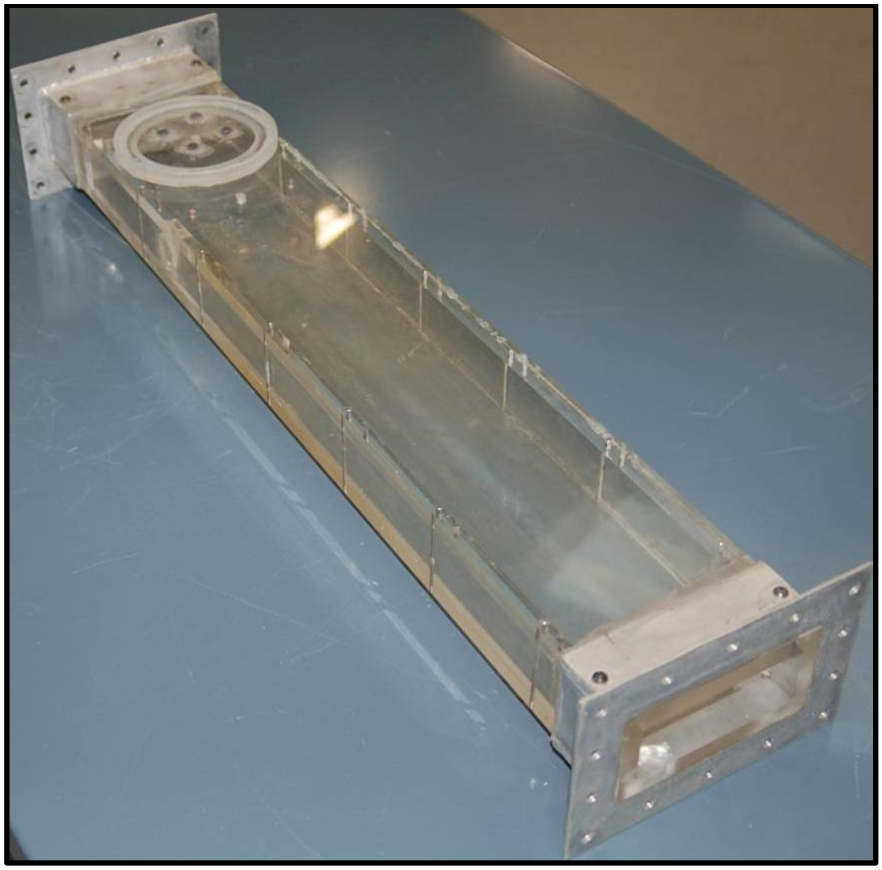


Fig. 2.50 Plexiglass test section

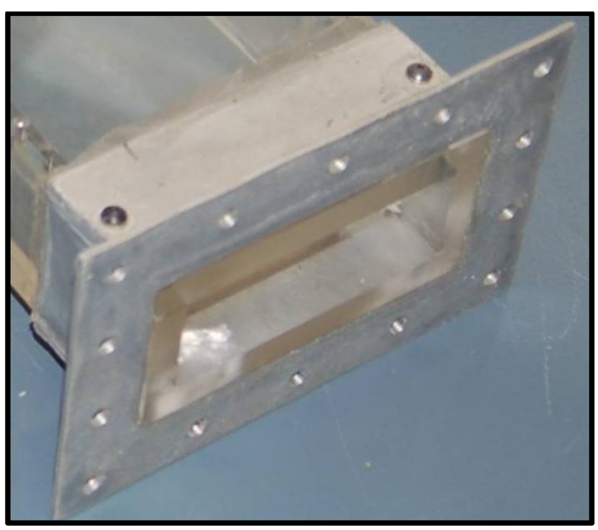


Fig. 2.51 Plexiglass test section flange assembly

Internal access was achieved by drilling a hole into the top wall using a 3.75" hole-saw. The access panel was fabricated by concentrically securing a 3.75" diameter plexiglass disc to a 5" diameter plexiglass disc with screws and applying a ring of silicone to the underside of the upper disc to seal against the top wall surface (Fig. 2.52).

Fig. 2.52 Plexiglass test section internal access

The test electrodes for the RF system were installed by securing them to the inner wall surface. A threaded rod soldered to the electrode was passed through a hole and secured with a nut. Two threaded holes located in the walls near each electrode end were used to modify the orientation of each electrode to control parallelism. The electrode installation (bottom electrode only) area can be seen below (Fig. 2.53).

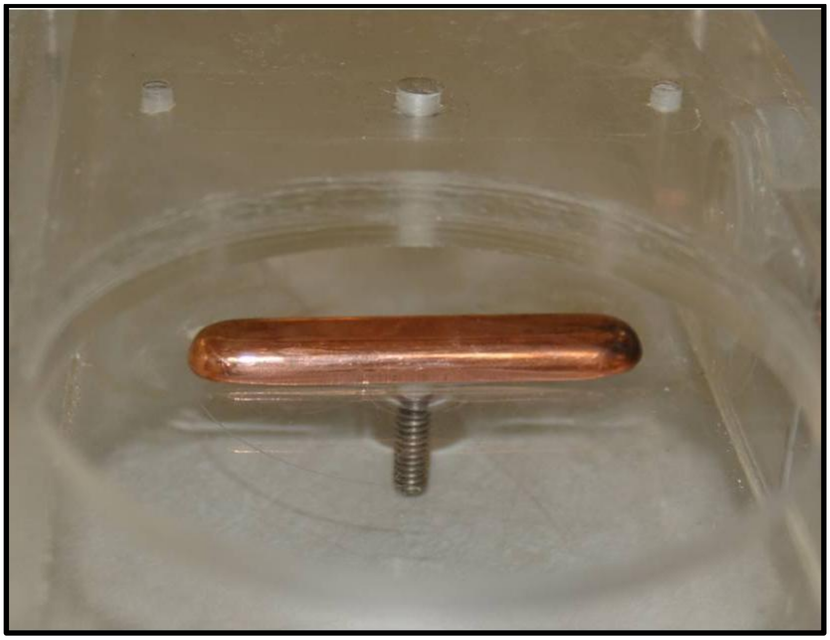


Fig. 2.53   Plexiglass test section electrode installation

A fused-silica window (1” diameter, ¼” thick) was installed in the side wall to allow collection of signal with a broadband emission spectrometer. Nitric-oxide was seeded into the flow to conduct species identification in the plasma discharge. An image of the window is shown in Figure 2.54.

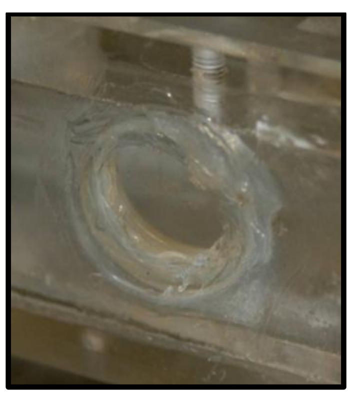


Fig. 2.54   Plexiglass test section window

2.4.2 Lexan

The second test section was designed for data acquisition as well RF plasma system testing. It was equipped with UV fused silica windows on all four sides for laser and optical access. The windows were 2” x 2” x 0.25” with a 60° bevel (measured from the outer face) to support the windows under vacuum. The location of each window center relative to the test-section entrance was 5”, 10”, 13”, 16”, 19” and 22”. Lexan was chosen for the material because it was machinable, had high temperature tolerance, and was impact resistant. General internal access was facilitated through a large access port in the top wall. Through RF plasma system testing in the plexiglass test section, it was learned that care must be taken when operating the plasma discharge near an unstable operating condition boundary (high pressure or high forward power). In the event that the plasma discharge destabilized, plasma flares of immense heat would form from the lower electrode. The electrodes themselves would also heat up very quickly. Because of the possibility of heat damage, the electrode region of the Lexan test section was designed to be modular. This was done so that parts could be replaced easily, in the event of any heat damage. The modular design also allowed substitution of custom electrode blocks during the electrode design and testing phase (see Section 2.5). The Lexan test section went through multiple configuration iterations, which are detailed below.

The initial Lexan test section was designed for a 4” x 1.5” cross-section at the entrance and exit. Boundary layer effects (see Fig. 2.35) were expected with no wall divergence, but all fabrication was performed by hand due to lack of access to a computer-controlled mill; therefore, machining the angles accurately and to the required precision was impossible at the time. The design cross-section changed to 4” x 1” entrance to exit due to a change in the design of a sister hypersonic experiment, for which the DMT facility was acting as a test-bed for diagnostic and RF systems. This change resulted in the windows on-hand (that had already been purchased) not being of ideal size, but the design was modified to incorporate them. The following figure shows the Lexan test section during an early RF plasma system test (Fig. 2.55).

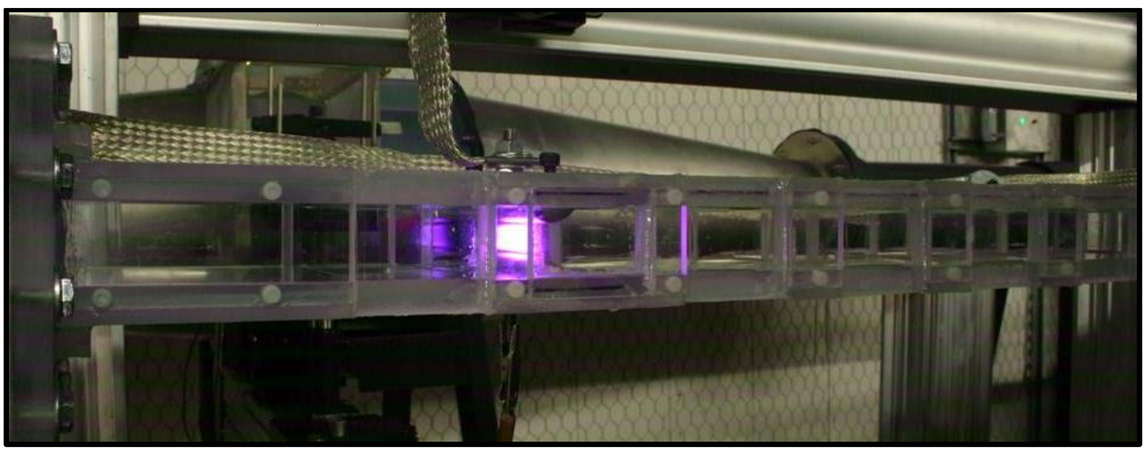


Fig. 2.55 Lexan test section and plasma discharge

Each part of the test section was fabricated from 0.5” stock Lexan sheets. The actual thickness was 0.445” to 0.485”. Therefore, the wind face was used as a datum for all part fabrication. This was done so that all flow cross-section dimensions would be accurate and to ensure smooth walls. SolidWorks views (windows excluded) of the test section assembled and exploded are shown in Figure 2.56 and Figure 2.57, respectively.

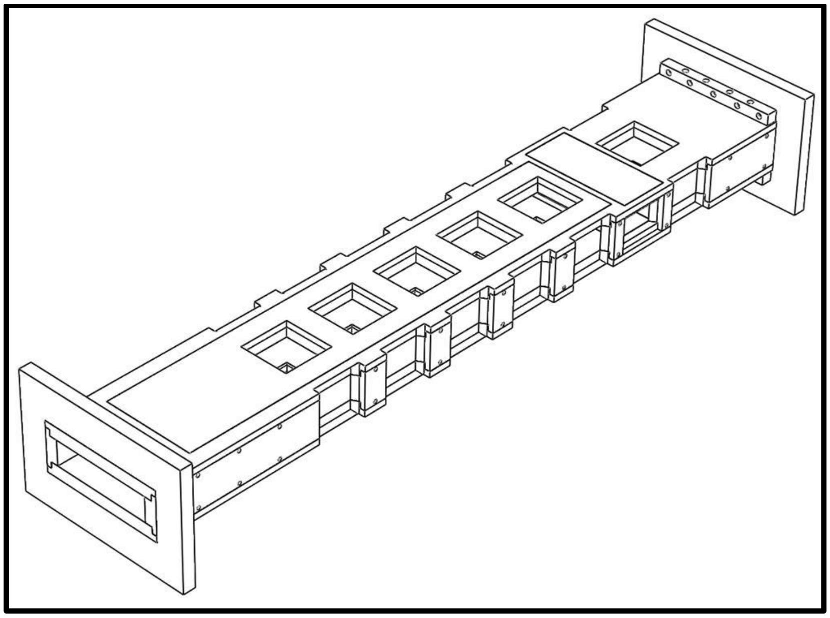


Fig. 2.56 Lexan test section

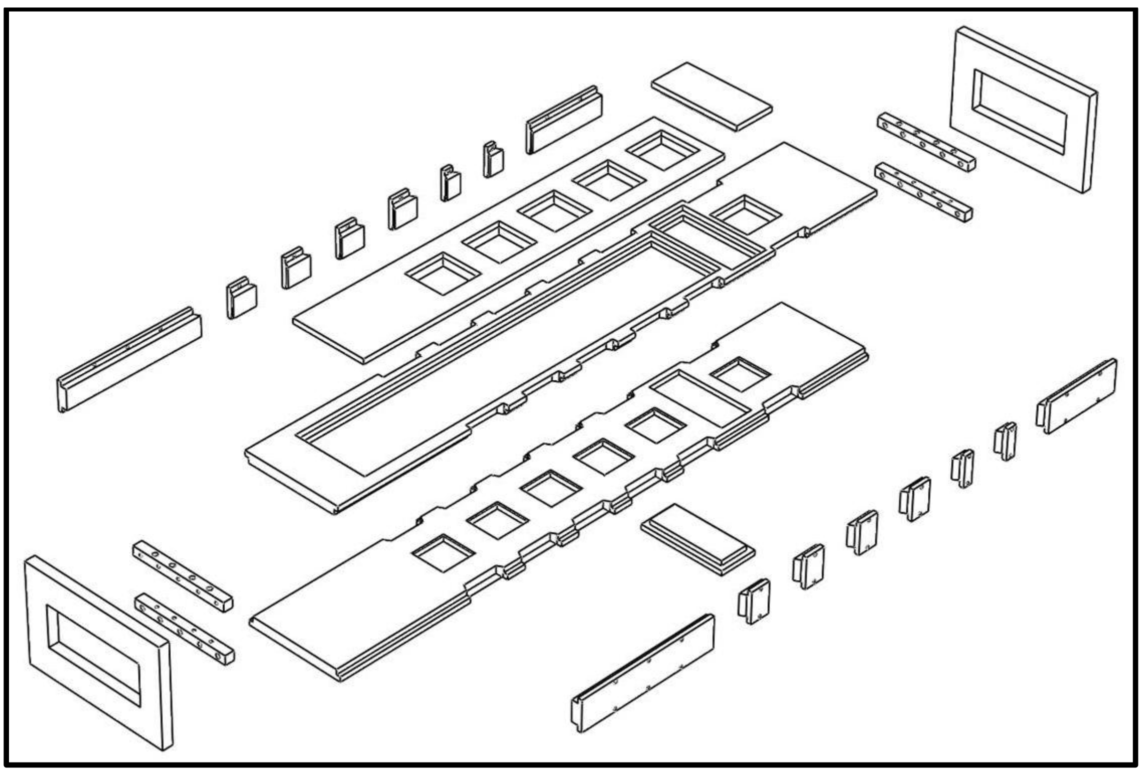


Fig. 2.57 Lexan test section exploded

The flanges were milled to a size of 7.25” x 5.75” (outer) by 4.875” x 2.0” (inner) designed to slip over the core walls. A 0.125” ball end-mill was used to cut a shallow channel inside of the bolt-pattern to accept a silicone gasket bead. The flanges were secured to the top and bottom walls using 4.875” x 0.45” x 0.45” Lexan columns. Through-holes were drilled and counter-bored every 0.5” alternating between being directed to the wall and the flange. The parts were then locked in with 6-32 screws, and all seams were sealed with silicone. The flange and flange-block can be seen below (Fig. 2.58).

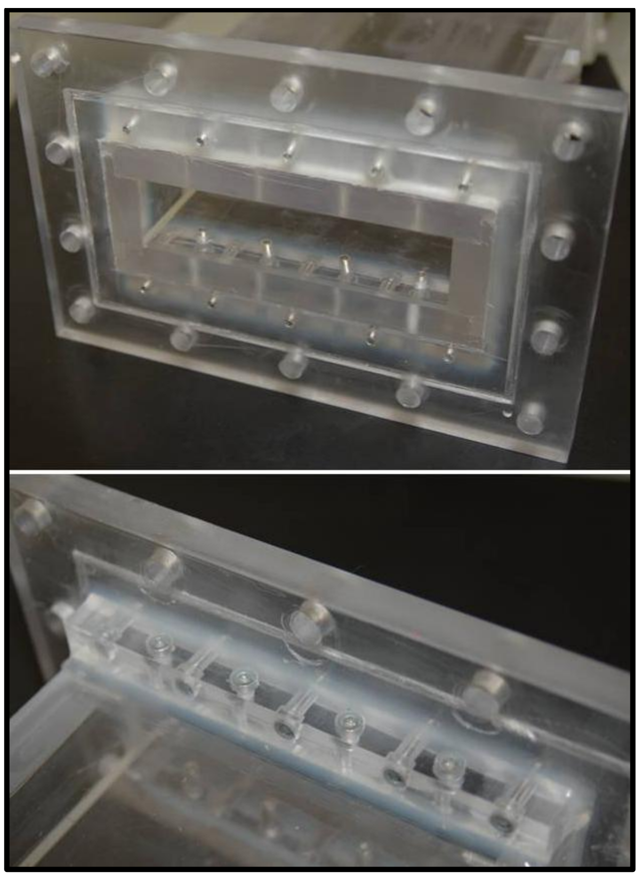


Fig. 2.58 Lexan flange and flange-block

The side wall was originally designed to be fabricated as one long section. However, having to use the oversized windows on-hand resulted in the side wall being split into eight separate parts. Unfinished side wall parts can be seen in Figure 2.59 along with a SolidWorks view of the final parts. The total width (wind axis) of each part from left to right (Fig. 2.60) is 7.125”, 1.25” (x4), 0.75” (x2) and 4.125”.

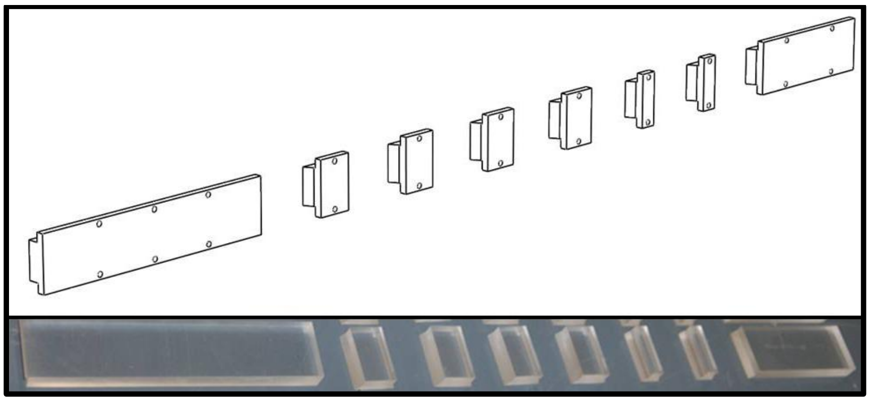


Fig. 2.59 Lexan side wall parts

The dimensions common for each side wall part are shown in Fig. 2.60.

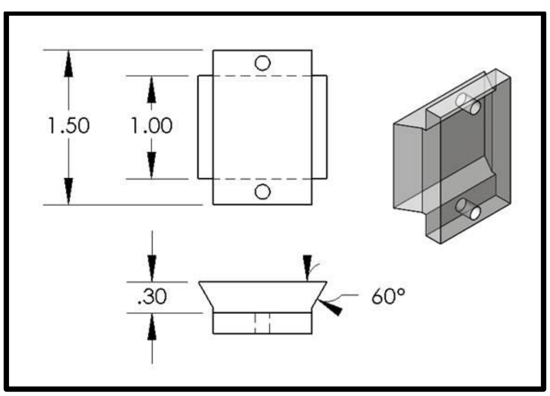


Fig. 2.60 Lexan side wall dimensions (inches)

The 0.30” thick extrusion (beveled) extended between the top and bottom walls, and supported them under vacuum load. The side walls were secured to the top and bottom walls using 6-32 screws and the holes in the steps (which fit into matching steps in the top and bottom walls). The windows were then positioned and held in place with silicone. The vacuum load on the windows was taken by the beveled edges (on the sides) and by the flat edges of the top and bottom walls. The side window installation can be seen below (Fig. 2.61).

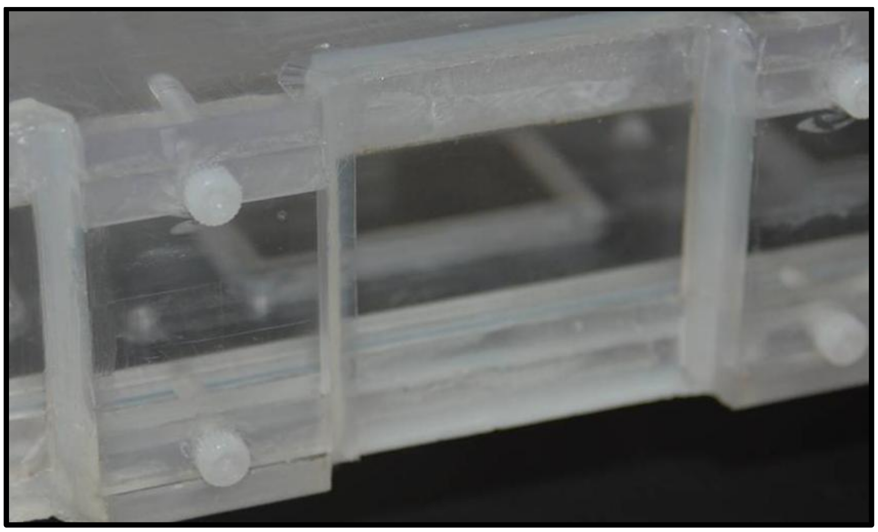


Fig. 2.61 Lexan test section side window

Due to the configuration of the slot for the electrode blocks, there was no room for a standard side window at the plasma discharge location. For the initial design, a standard window was cut down to a height of 1” to fit between the top and bottom walls and was supported by the beveled edges at each side. However, in order to collect data in the activity-rich area (with respect to vibrational non-equilibrium) directly after the plasma discharge, the Lexan side-wall part blocking this area was removed and a custom window was put in its place and sealed with silicone. This window was comprised of a 1.5” x 1.9” section with an additional area (1” x 2.64”) stretching to the upwind Lexan side wall part (each end was beveled). A SolidWorks view of the custom window is shown in Figure 2.62.

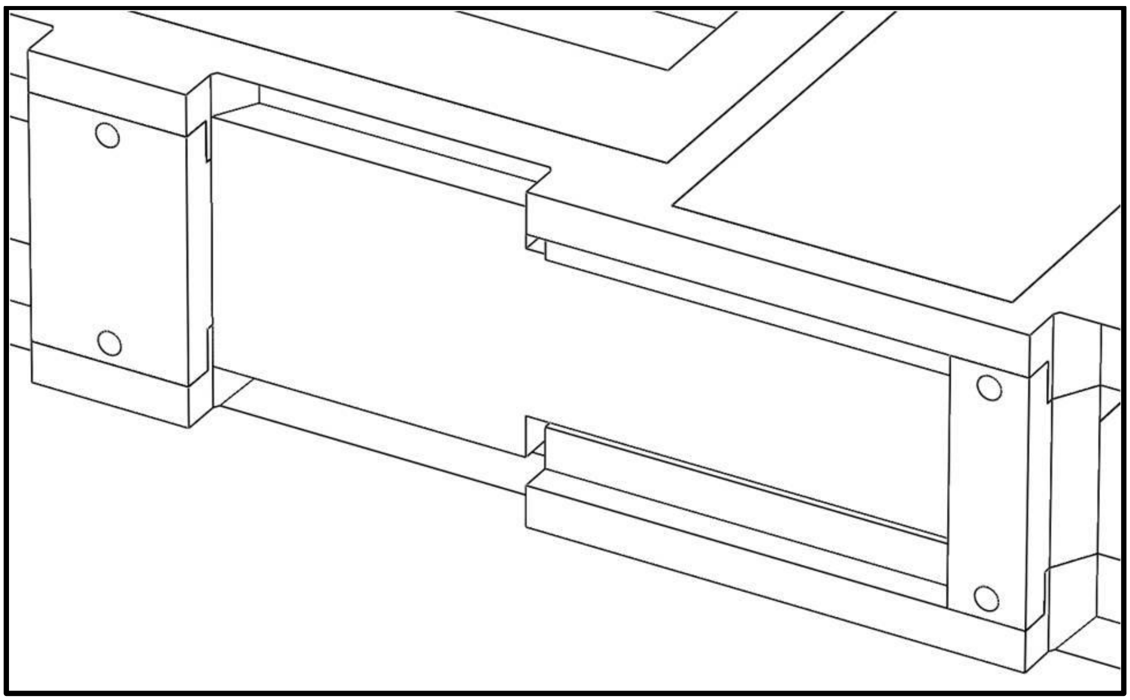


Fig. 2.62 Lexan test section plasma discharge side window

The top and bottom walls were each fabricated as one part. The total length was 30”. A step 0.25” tall and 0.20” deep was milled into each side edge to mate with the steps in the side wall parts. A 60° end-mill was used to create pockets at each window location to merge with the side-wall beveled surfaces and to create the flat seat for the side window face. Window slots were cut into the bottom walls with the 60° end mill. The slot for the electrode block was created by milling a 4” x 1.5” hole through the part, centered 7.26” from the entrance. A step was then created by milling out a 4.5” x 2” pocket 0.25” deep centered at the same location. An identical slot for the electrode block was cut into the top wall. The top was also equipped with an access panel. The access panel cavity was 19” x 3.25” with a step created by milling a pocket 19.5” x 3.75” x 0.25” deep. The access panel itself was fabricated to fit tightly within this pocket. Window slots were cut into the top wall and the access panel, where appropriate. SolidWorks views of the top and bottom walls, along with the access panel can be seen below (Fig. 2.63).

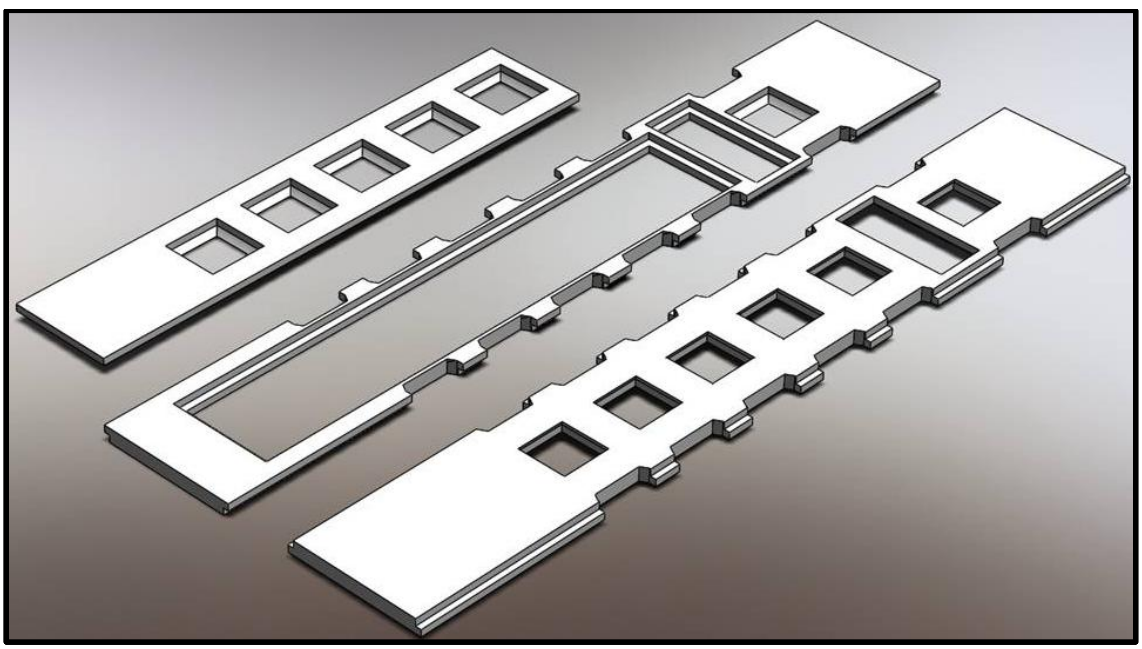


Fig. 2.63 Lexan top and bottom walls

The electrode block and the adjacent area went through multiple configuration changes: the initial configuration, followed by a minor modification to probe the area directly downstream (and even within) the plasma discharge, and finally a full re-design of the area to restore structural integrity. Each of these configurations will be detailed below.

The original electrode block was created by milling 0.5” Lexan stock to a size of 4.5” x 2”. The edges were then milled to create a 4” x 1.5” x 0.25” extrusion . Multiple identical parts were created with a 3.5” x 1” x 0.125” slot in the wind face to inset different electrode prototypes to facilitate electrode design and testing (see Section 2.5). Versions were also created with a deeper 0.25” slot sized to fit the electrode being tested, located at the center of the block or toward downwind edge (Fig. 2.64).

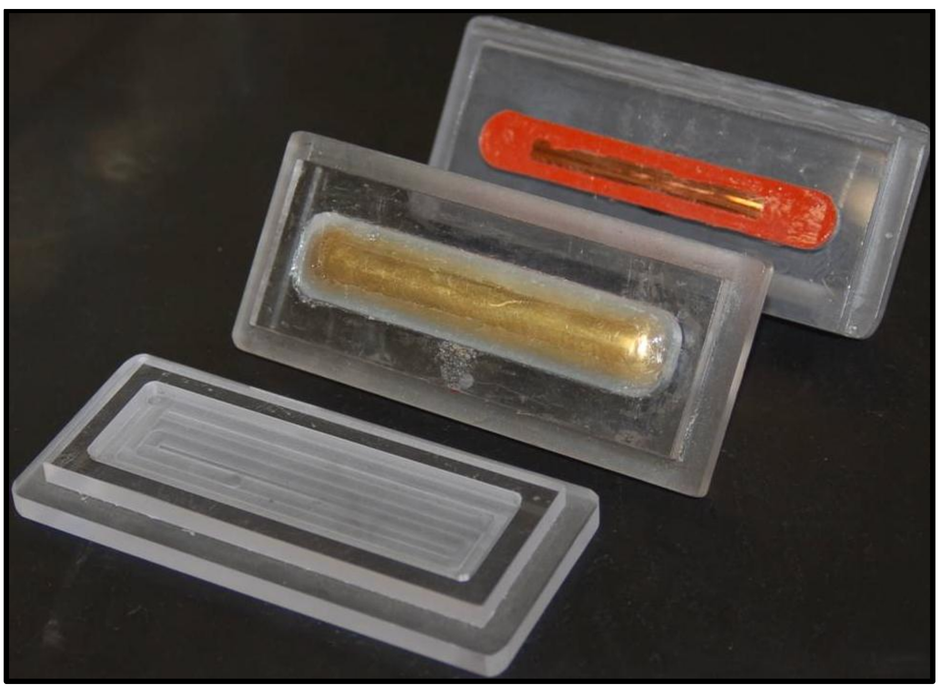


Fig. 2.64 Standard Lexan electrode blocks

The electrodes were held in place by threaded rods secured on the upper surface with a nut. Spacers were used to set the edge of the electrode flush with the internal test section surface. High-temperature silicone was used to “pot” the electrodes (because the surfaces were curved) to form a continuous flat surface.

The standard block design was modified by leaving the downwind face intact (omitting the step) and moving the electrode slot to the forward edge of the block. The downwind step in the electrode block slot was also removed. Thin (0.0625”) ceramic covers cut to fit the slot were installed (held from the underside with silicone) between the electrode surface and the flow. This increased the electrode-to-electrode spacing, but resulted in a more stable plasma discharge. An image of the modified electrode block with a ceramic cover is shown in Figure 2.65.

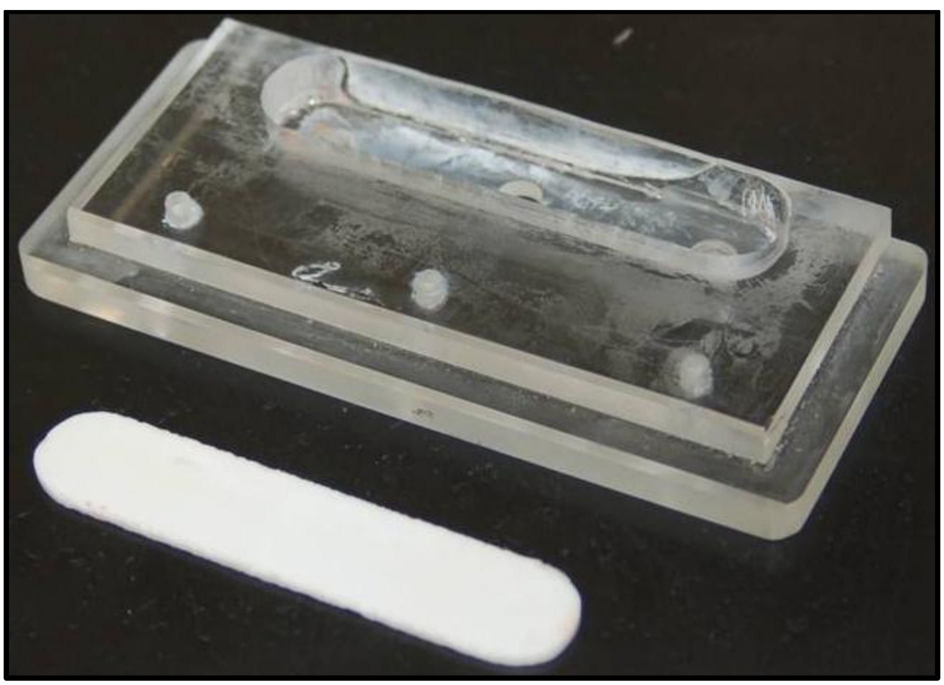


Fig. 2.65 Modified Lexan electrode block

The top wall was then further modified in an attempt to probe directly into the downwind edge of the plasma discharge. The top wall structure (center 0.5” separating the window and the electrode block) was removed with a 60° end mill. The top and bottom widows were replaced with 2.75” x 0.5” x 0.25” windows. These windows had 60° bevels on all sides except the upwind face, which was flat in order to directly contact the downwind face of the electrode block. Lexan inserts were made to fit on either side of the small window (taking up the void left by the larger window) to support it on the sides. Seams were sealed with silicone. This modification allowed data acquisition in the downwind edge of the plasma discharge, but the loss in structural integrity prompted a redesign of the area.

The redesigned electrode block was expanded to include the area previously taken up by the first downwind window after the plasma discharge, which was located in the access panel. The outer dimensions of the block were the same as the standard size with an extension 3” downwind and a width of 3.75” (matching the access panel dimensions), ending in a flat face designed to mate to the face of the access panel. A ceramic insert was installed into a matching slot milled into the block. The slot was centered at the same location as the previous slot in the top wall for the standard electrode block. The insert had two levels. The first measured 3.375” x 1” x 0.170” with the second (facing the flow) measuring 3.175” x 0.8” x 0.125”. A 0.125” deep pocked was then milled into the upper face of the ceramic to accept the electrode. A pocket 3.875” x 1.5” and 0.15” deep was cut into the top surface of the electrode block. A small extrusion on the downwind edge along the centerline was left intact so that the slot for the 2.75” x 0.5” x 0.25” window would be continuous, facilitating a better seal. Holes tapped into the ledge formed by this pocket were used along with nylon screws to secure a Lexan cover over the electrode seated inside the ceramic insert. All structure separating the electrode block and access panel slot was removed, resulting in one large opening in the top wall. The access panel was modified by simply shortening the total length to 16.5” by cutting then milling the upwind face flat. Due to the cyclic loading and unloading of the test section structure caused by repeated pressurization and evacuation of the DMT facility during testing, the Lexan lost rigidity and began to bow slightly along the centerline of the top and bottom walls. In order to strengthen the structure, 0.375” x 0.375” steel square tubes 4.25” long were installed across the top surface of the top and bottom walls every 3”, attached at three points with 6-32 screws. The following figures show: SolidWorks views of the modified top wall, access panel, redesigned electrode block, ceramic insert and Lexan cover (Fig. 2.66); images of the redesigned electrode block, ceramic insert and Lexan cover (Fig. 2.67); and the fully assembled Lexan test section in final configuration installed in the DMT facility (Fig. 2.68).

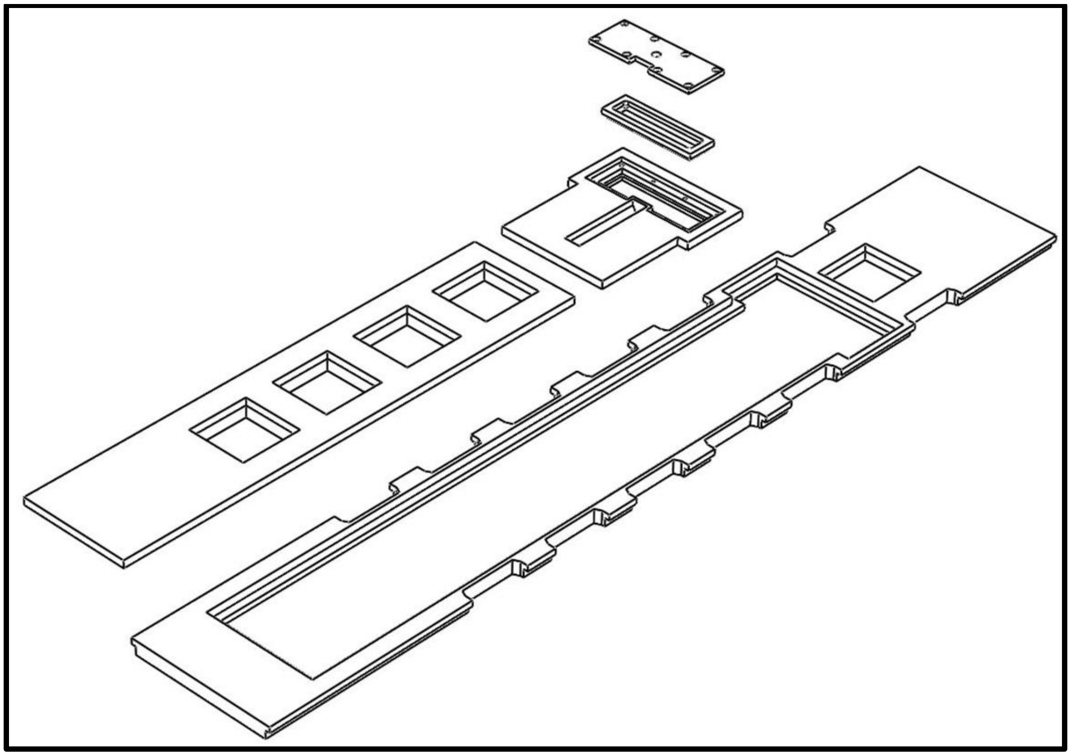


Fig. 2.66 Modified Lexan parts

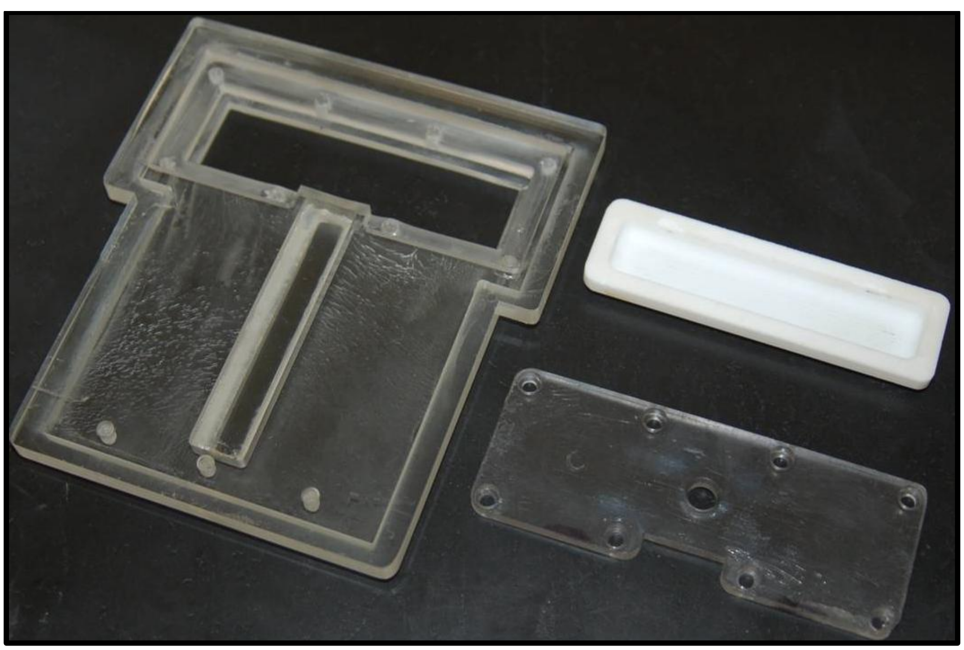


Fig. 2.67 Redesigned Lexan electrode block assembly

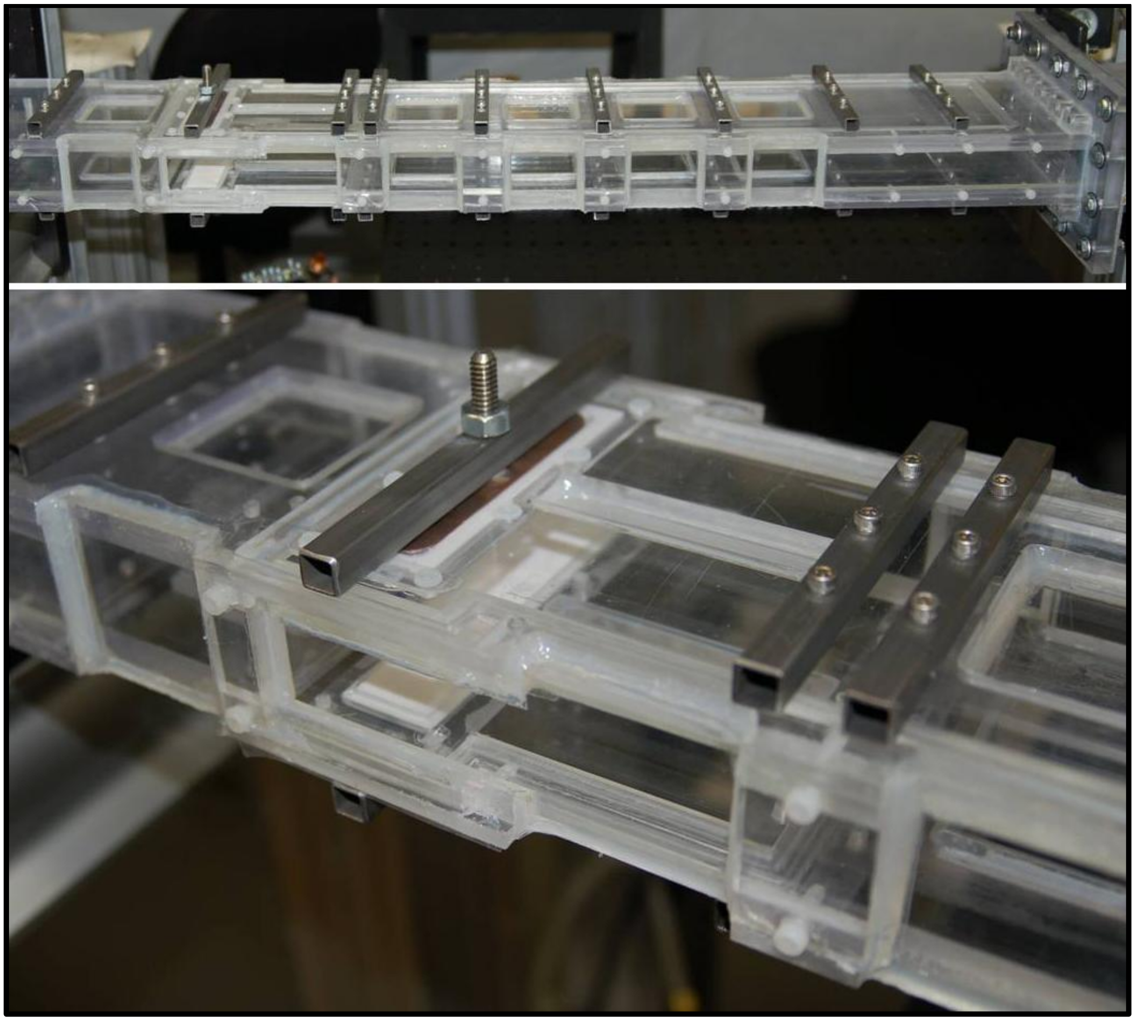


Fig. 2.68 Lexan test section (final configuration)

2.4.3 Macor-Aluminum

The third and final test section was built taking into account a compilation of improvements from testing with previous test section configurations. The design was a joint effort carried out with Andrea Hsu. Stress analyses of the components were carried out on all components to ensure structural integrity under near-vacuum.[45] The majority of the test section components were fabricated from aluminum to ensure structural rigidity. Ceramic (Macor) slabs were used to form the structure around the plasma discharge to remove any chance of heat damage. Long windows were used on all four sides for laser and optical access, which resulted in increased flexibility in choosing measurement locations. The top and bottom walls were positioned to diverge at 0.18° (matching the grid box divergence) for the entire length to allow for displacement thickness growth. All interfaces (where appropriate) were sealed using 1/16" o-rings, eliminating leaks. The Macor-aluminum test section can be seen in Figure 2.69, and a SolidWorks exploded view in shown in Figure 2.70 (excluding windows). Each component will be explained in detail below.

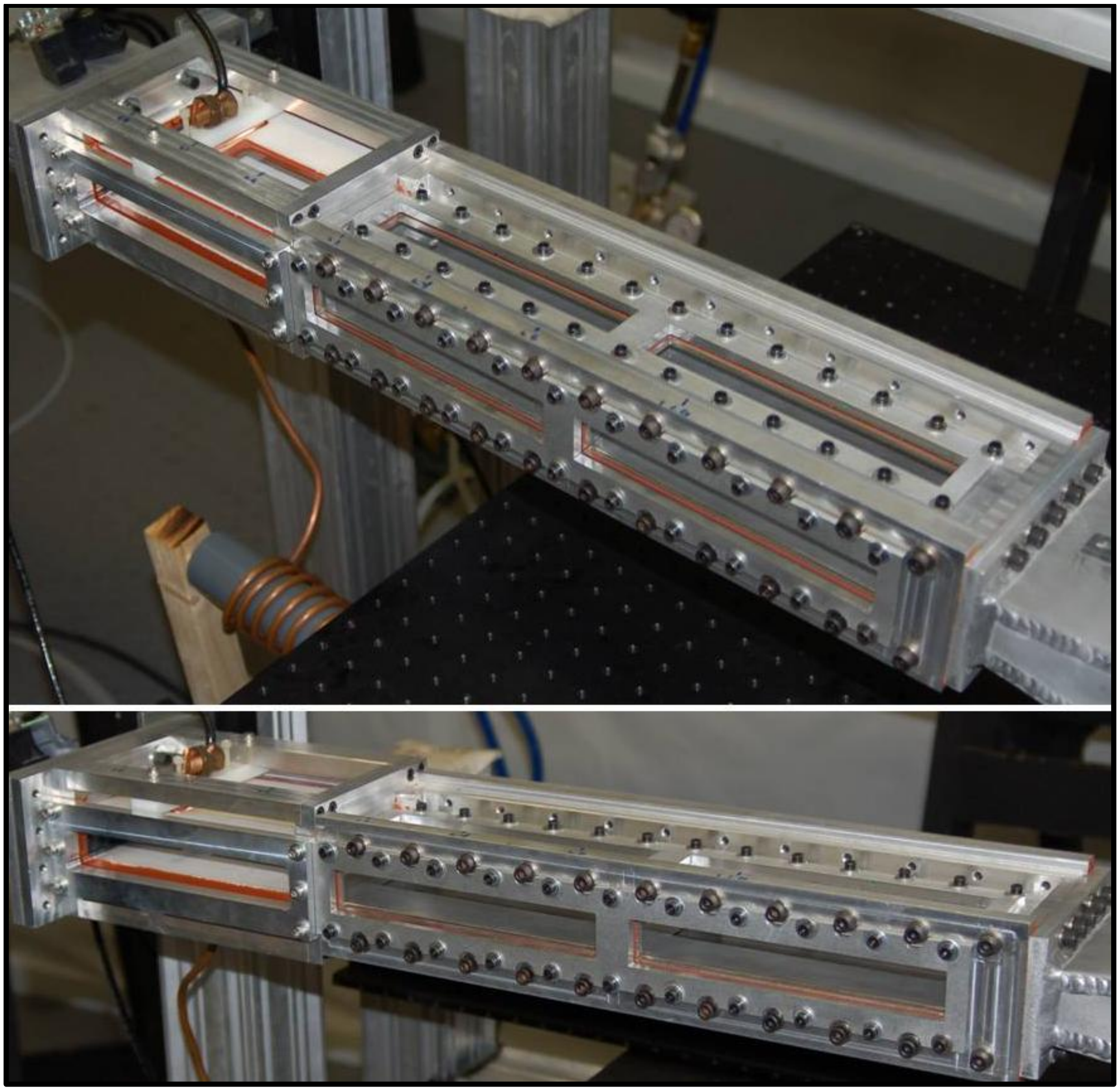


Fig. 2.69 Macor-aluminum test section

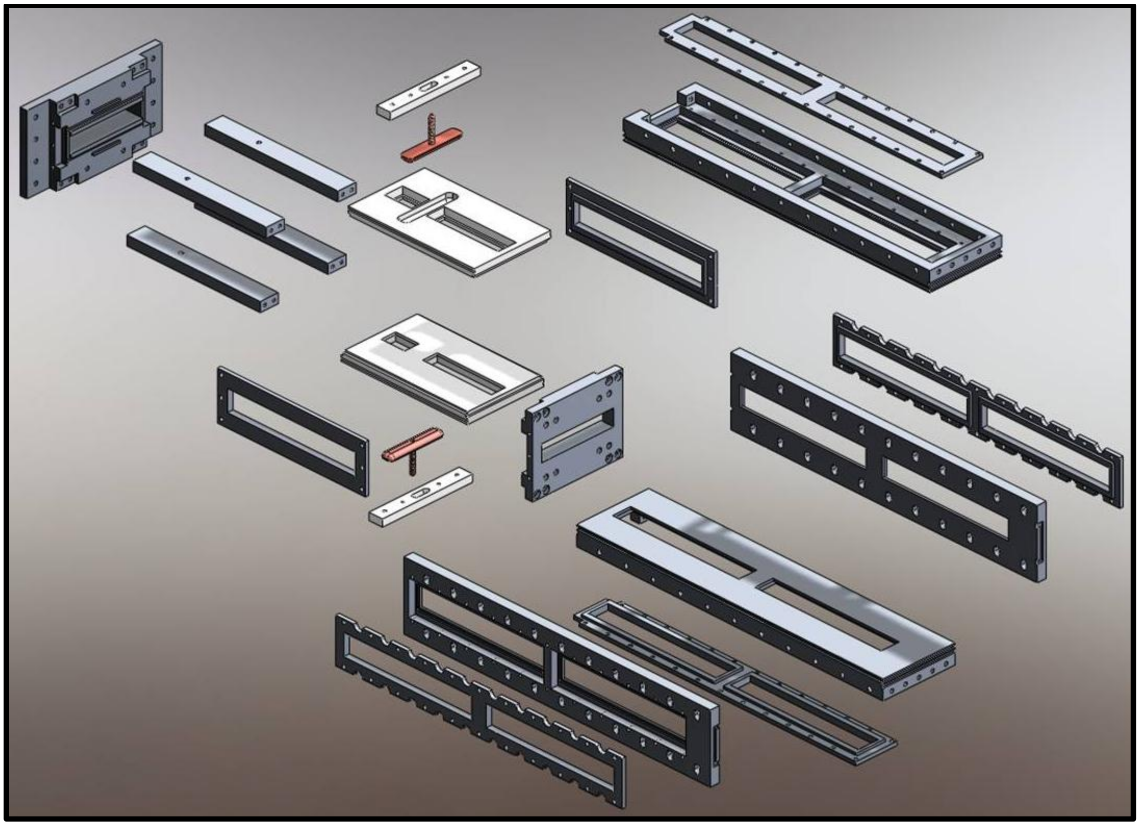


Fig. 2.70   Macor-aluminum test section (exploded view)

The upwind flange was machined from 6061 aluminum stock and consisted of two main sectors on the upwind and downwind sides. The upwind sector was designed to mate to the downwind flange of the grid-box. It measured 7.5” x 4” x 0.375”. Holes were counter-bored to inset the heads of the bolts used to secure the aluminum frame rails designed to strengthen the Macor section. The face was finished to accept the o-ring seal from the downwind flange of the grid-box. The inner-cross section was 4” x 0.8125”. SolidWorks views of the upwind and downwind faces can be seen in Figure 2.71.

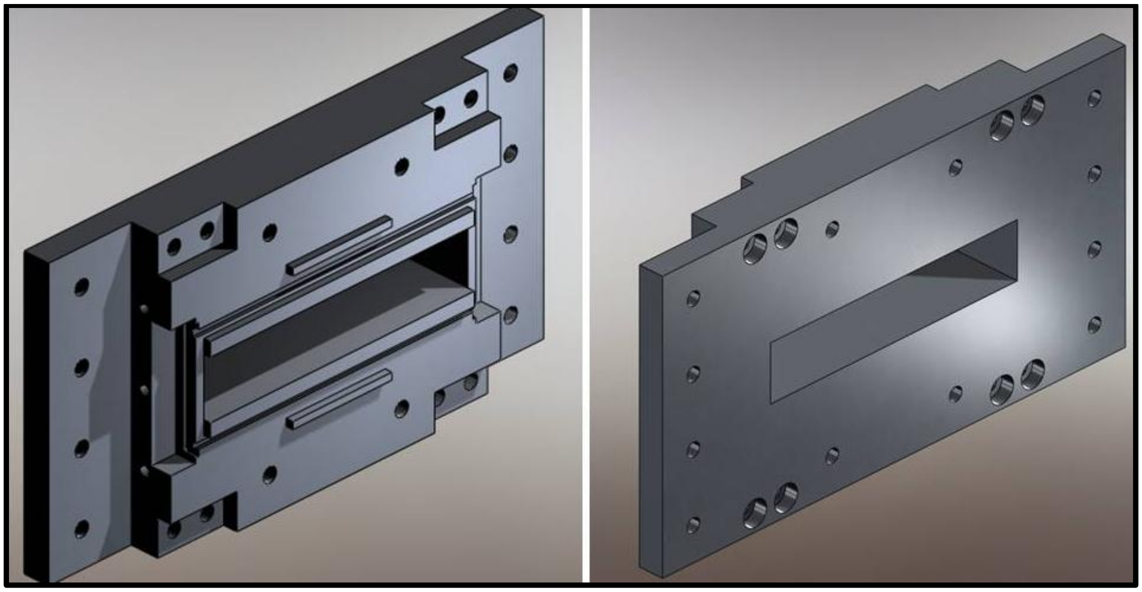


Fig. 2.71 Upwind flange

The downwind sector was designed to support the Macor slabs and accept the ends of the side windows. This extrusion measured 5” x 4” x 0.6”. An inset measuring 1” x 0.5” x 0.2” was milled into each corner to seat and secure one end of each aluminum frame rail. Pockets measuring 1.8” x 0.3” x 0.375” were milled at each side along with o-ring grooves milled to merge with the o-ring grooves on each side of the Macor slabs to accept and seal the side windows. A 4” x 0.194” x 0.1” step on either side of the exit cross-section was designed to support the Macor slab. A smaller 1.5” x 0.1” x 0.1” step held the Macor slab in position from above. A 0.0625” o-ring groove was milled between the two steps to seal against the mating face of each Macor slab.

The ceramic slabs were machined from 7” x 4.25” x 0.5” Macor stock. A step 0.1” x 0.1” was milled into the bottom edge on the upwind and downwind faces to seat on the aluminum step in the flanges on either side. A 0.0625” o-ring groove was machined on each side face at an angle of 0.18°. This was done because the material was too brittle to attempt machining such a small angle onto either face. Instead, the entire part was inclined at this angle (resulting in the o-ring groove being horizontal) during installation before being locked in place. A slot for the electrode was milled with a 0.25” ball end-mill into the outer face centered 2.305” from the upwind edge. The slot measured 3” x 0.61” wide x 0.44” deep. Pockets for windows were milled 0.1” (edge to edge) upwind and downwind of the electrode slot. The upwind and downwind pockets measured 1.5” x 1” x 0.375” and 4” x 1” x 0.375” with steps 1.3” x 8” x 0.125” and 3.8” x 0.8” x 0.125” supporting the windows. Each fused silica window (0.125” thick) was placed in the pocket and sealed in place with high-temperature silicone. An image of a Macor slab can be seen in Figure 2.72.

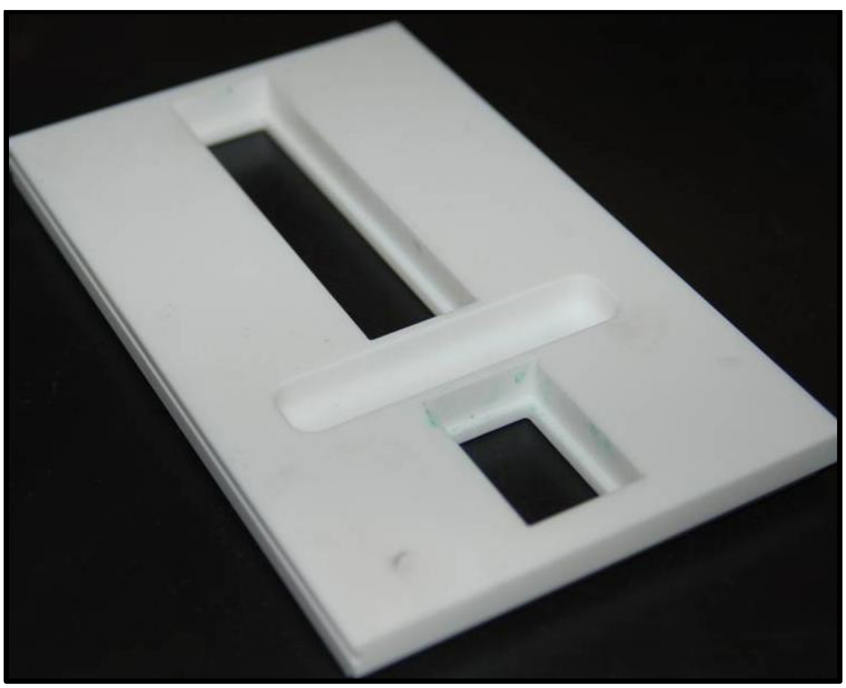


Fig. 2.72 Macor slab

The side windows were fabricated from fused silica and comprised of two tiers. The supporting, outer tier measured 7.5” x 1.8” x 0.25”, and the inner tier (exposed to the wind) measured 7” x 1” x 0.125”. The face between tiers was sealed with a 0.0625” o-ring inset into the respective mating parts. All other window locations were designed to accept the same window, allowing relocation of intact windows in the event of window fracture.

The windows were held in place and compressed into the o-ring (gently) by an 8.2” x 2.5” x .188” aluminum frame with a 7.1” x 1.1” socket. A step extruding 0.125” on the inner surface (0.25” wide on top/bottom, 0.15” wide on each side) around the inner socket was lined with felt to avoid window damage.

The downwind flange was identical to the upwind flange except that it lacked the 0.375” thick section designed to mate with the grid-box (upwind sector). Holes were also added and counter-bored to secure the top and bottom downwind walls to the flange. The Macor slabs were then positioned and locked in place by connecting the upwind and downwind flanges with four 7.4” x 1” x 0.5” aluminum frame columns at each corner. PVC blocks measuring 5” x 0.75” x 0.375” were designed to fasten to the underside of the frame columns, spanning the area directly above the electrode. A slot was machined to allow clearance for the electrode threaded rod. Two holes were tapped on either side of this slot and nylon screws were installed. These were utilized to both secure the electrodes within the slots as well as control the tilt of each electrode. In practice, the top electrode was locked in place, and the bottom electrode tilt was adjusted due to gravity. The plasma discharge section can be seen below (Fig. 2.73) and, a SolidWorks exploded view is shown in Figure 2.74.

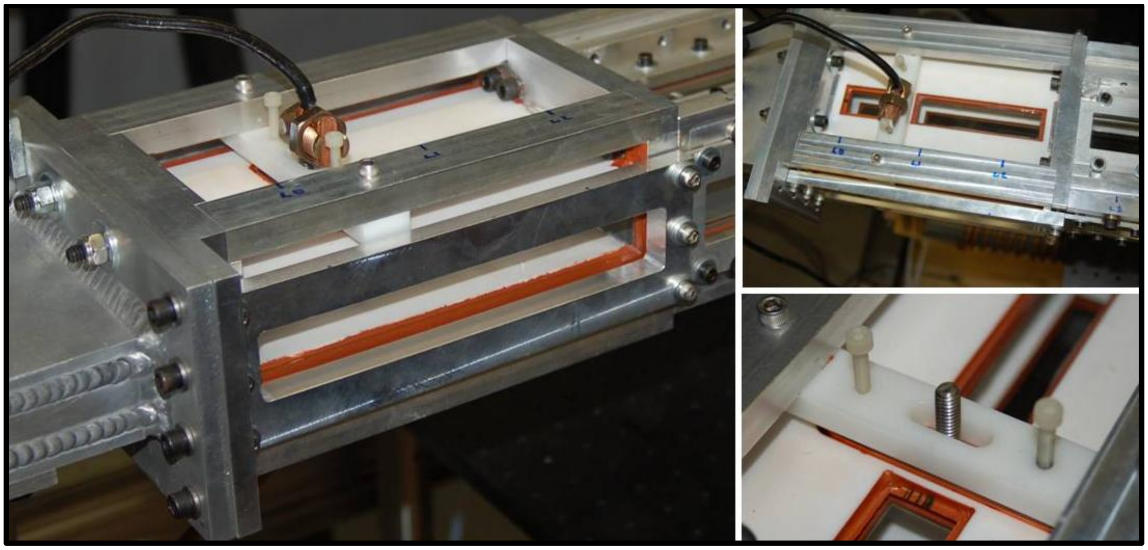


Fig. 2.73 Plasma discharge section

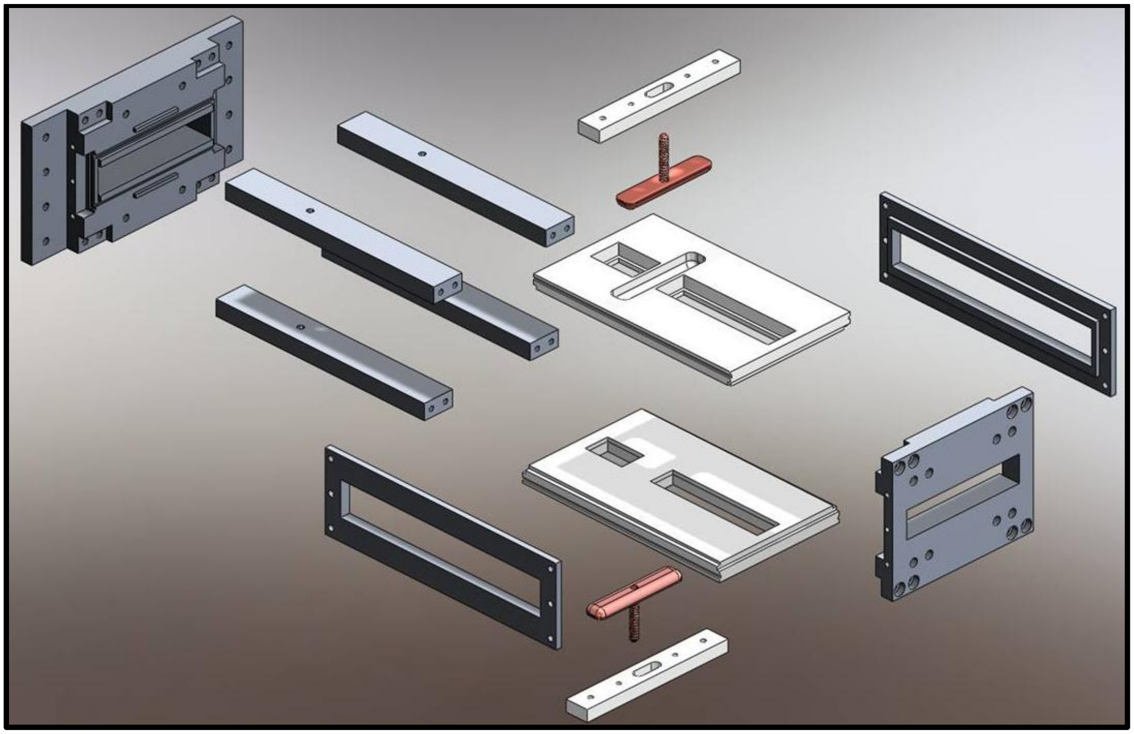


Fig. 2.74 Plasma discharge section (exploded)

The remainder of the test section was comprised of two top walls and two side walls, each containing two windows secured by frames. A groove for a 0.0625” o-ring was cut into the upwind and downwind faces of each part (forming a continuous channel when assembled) that completed the seal with the downwind face of the plasma discharge section flange and the upwind diffuser flange, respectively. This section can be seen below in Figure 2.75, and a SolidWorks exploded view is shown in Figure 2.76.

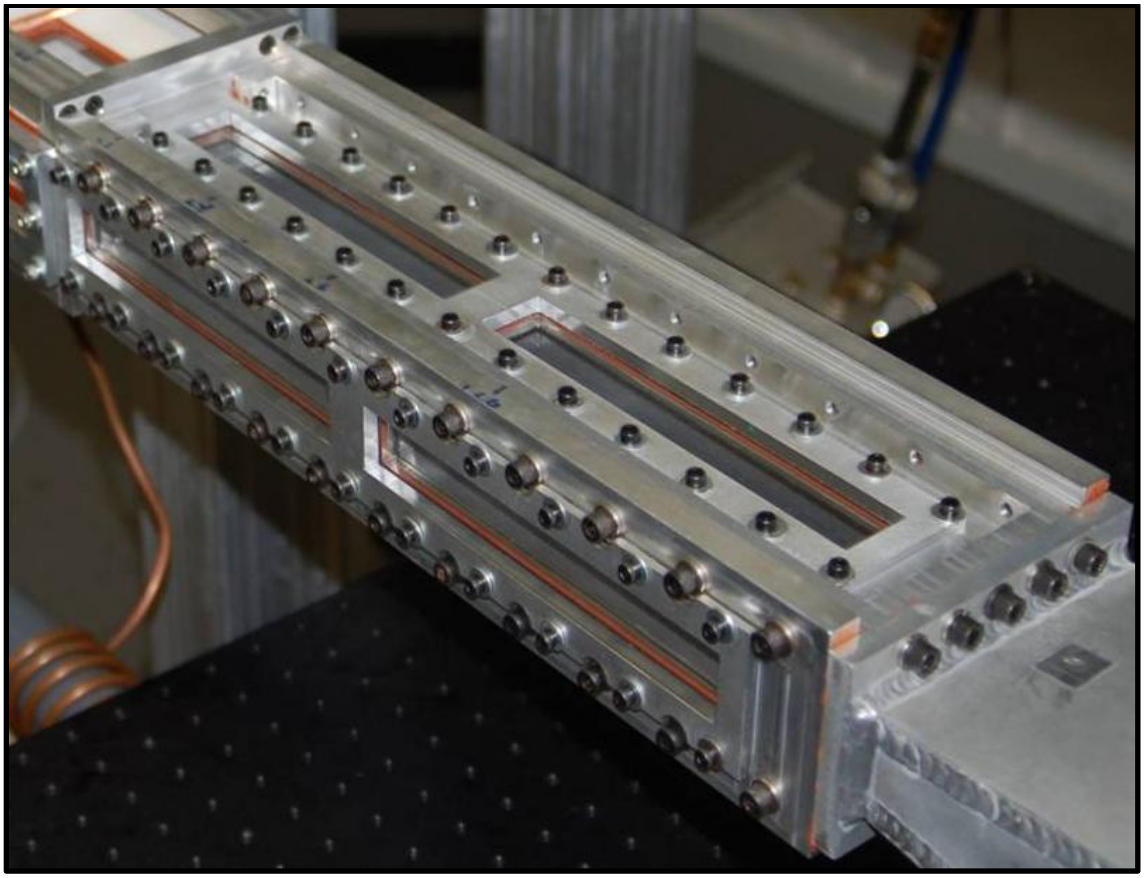


Fig. 2.75 Downwind section

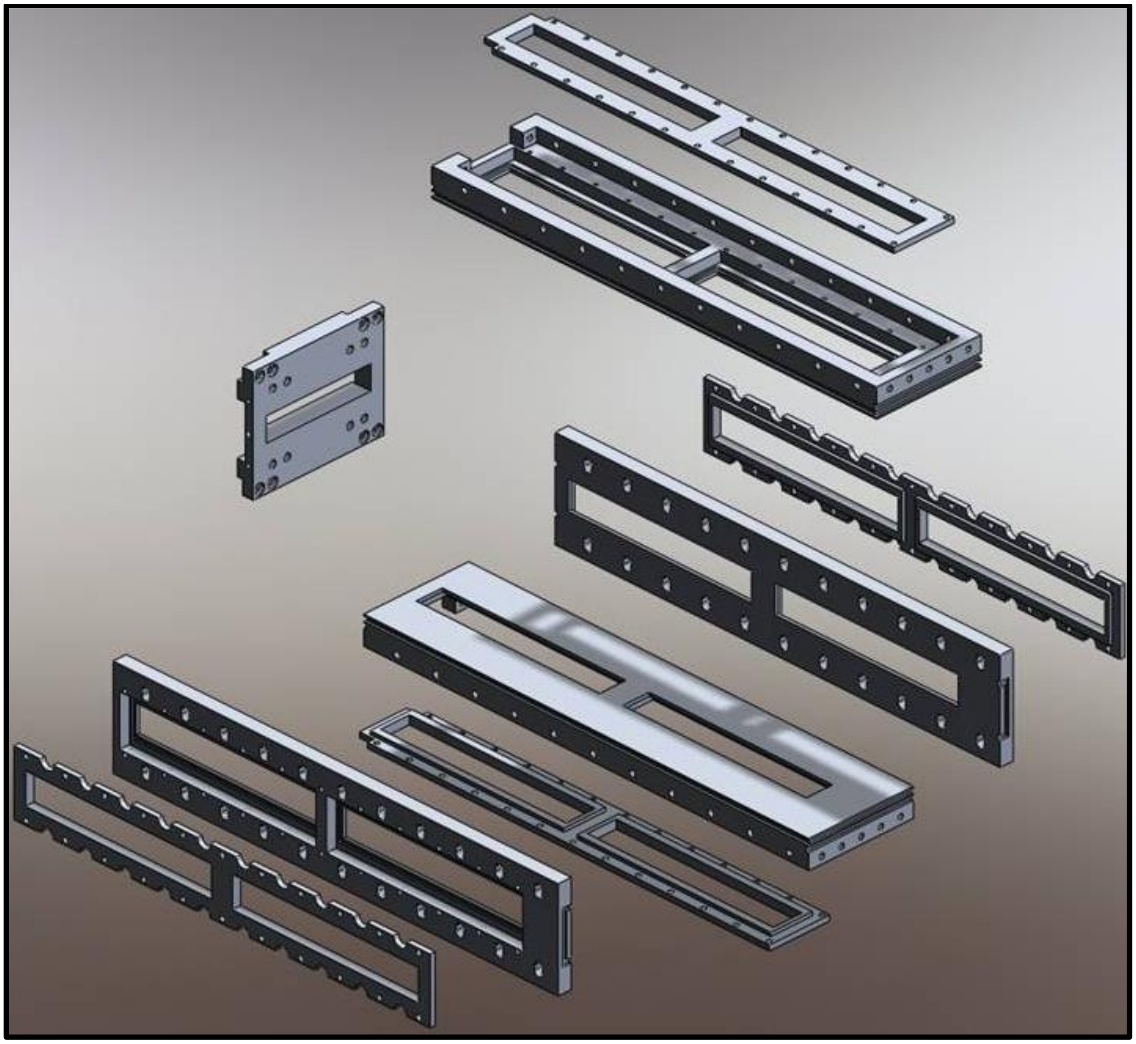


Fig. 2.76 Downwind section (exploded view)

The top wall (identical to the bottom wall) was machined from 6061 aluminum stock and had total outer dimensions of 17” x 4” x 1”. A continuous groove for a 0.0625” o-ring was machined 0.060” up from the wind surface on all four sides of the part. Channels for 0.0625” o-rings were also machined 0.046” up from the continuous groove on the upwind and downwind faces. The top and bottom walls are designed to be clamped between the side walls. These partial channels form a full o-ring groove with the side wall channels when fully assembled. A 16.125" x 3" pocket was milled 0.5" deep into the outer surface; the front edge of the pocket being 0.5" downwind of the upwind edge. A 2" section of the upwind rim formed by this depression was removed to make room for the window channel. Two pockets were then milled for window installation. The top/bottom wall part can be seen in Figure 2.77.

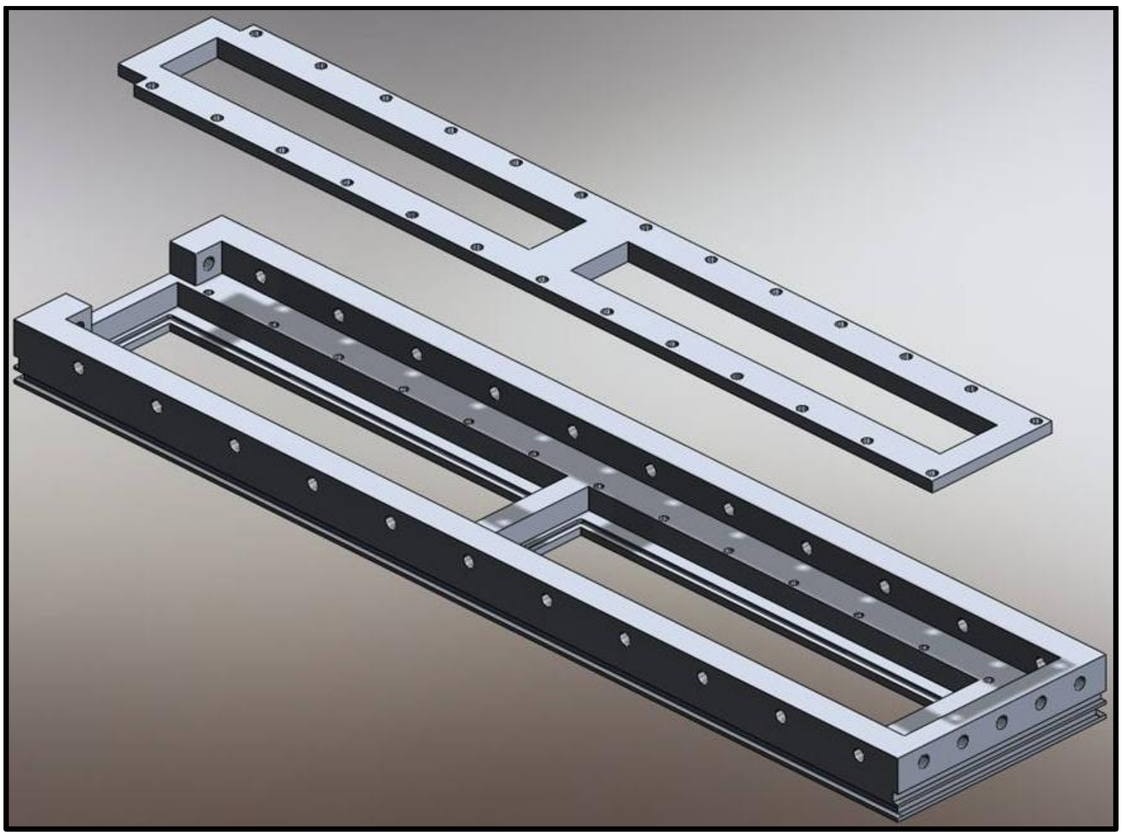


Fig. 2.77 Top wall

The edge of the first pocket was 0.25" from the upwind face, and the second pocket was 0.4" downwind from the first. Each pocket was 7.5" x 1" x 0.375" with a second pocket (through) 7” x 1” forming a ledge 0.125” thick to support each window. A groove for a 1/16” o-ring was cut into this face to seal the windows. An aluminum frame was used to lock the windows in place and compress the o-ring, very similar to the frame utilized on the side windows in the plasma discharge section above. The frame was 15.35” x 2.3” with a 1.8” x 0.5” tab that extended into the open area removed from the outer rim. Two slots measuring 7.1” x 1.1” were milled through the frame for visual access. A step around the perimeter of each slot on the inner surface (0.25” wide on top and bottom, 0.125” wide on the sides) made contact with each window and was padded with felt to avoid fracture. The o-ring groove formed by the partial channels in each part can be seen in Figure 2.78.

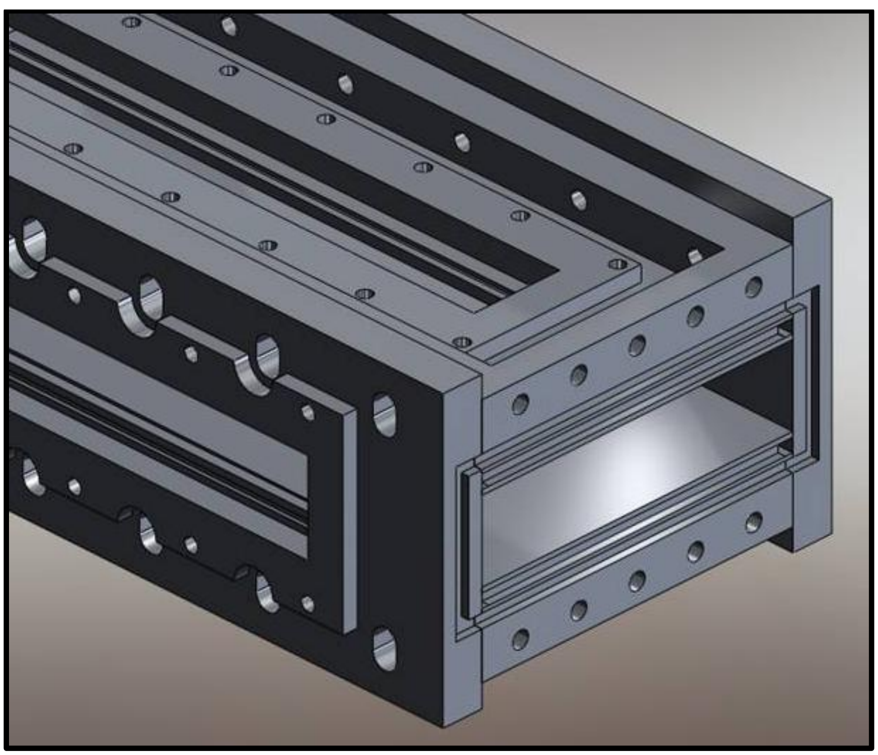


Fig. 2.78 Downwind section o-ring groove

The side wall was machined from 6061 aluminum stock to an overall size of 17" x 3.5" x 0.5". Two window slots (identical to those in the top and bottom walls) were machined into the outer face, including a groove for a 1/16" o-ring in each slot. Small slots were machined in place of the holes used to secure the side walls to the top and bottom walls. These slots (0.45" long instead of a simple 0.30" diameter hole) were included to allow the divergence angle of the top and bottom walls to be precisely set. The side window frames were identical to the top and bottom frames except that removing material at the upwind corners (to create the tab for clearance) was not required, resulting in overall dimensions of 15.9" x 2.3". Due to interference between the frame and the heads of the bolts in each small slot, small arcs of material were removed from the frame at each location to ensure clearance. A SolidWorks view of the side wall is shown in Figure 2.79.

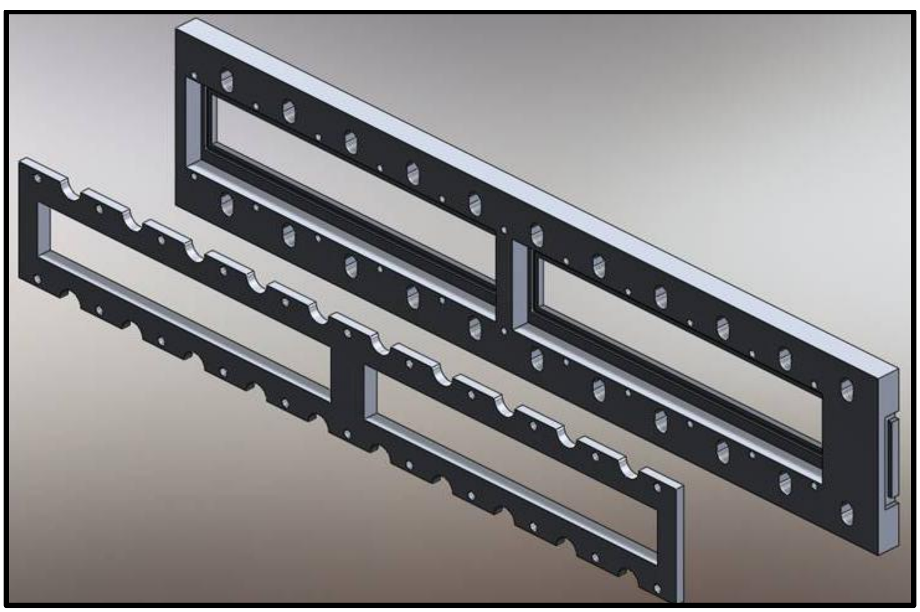


Fig. 2.79 Side wall

2.5 RF Plasma System

Vibrational non-equilibrium was incited in the DMT flow field utilizing a capacitively-coupled radio-frequency plasma generation system. Advice on setting up the RF system was provided by Dr. Roger Kimmel (Wright-Patterson AFB, OH). The source of the plasma discharge was a Cesar Model 1325 200V Generator (Dressler) (Fig. 2.80).

Fig. 2.80 RF generator

Internally, a driver/exciter module generated power at the designated output frequency (13.56 MHz in this case) to drive the main RF sections. RF amplifiers then generated the RF power. The generator was connected through a heavily shield coaxial cable to a Variomatch matching network (2-27 MHz, 700-1500W). The generator and matching network were water-cooled through a re-circulating system of plastic tubing driven by a small water pump and a reservoir. Due to the limited impedance range within the matching network, the output power was passed through a second heavily shielded coaxial cable to an external inductor coil to add additional impedance. The inductor was constructed by coiling 0.25" copper tubing around a dielectric core. The connection from the output coaxial cable to the inductor coil was made using a heavy-duty toothless alligator clip whose jaws gripped the entire circumference of the copper tubing. The location of the connection was adjusted along the length of the coil to maximize forward RF power. The matching network and external inductor coil can be seen below (Fig. 2.81).

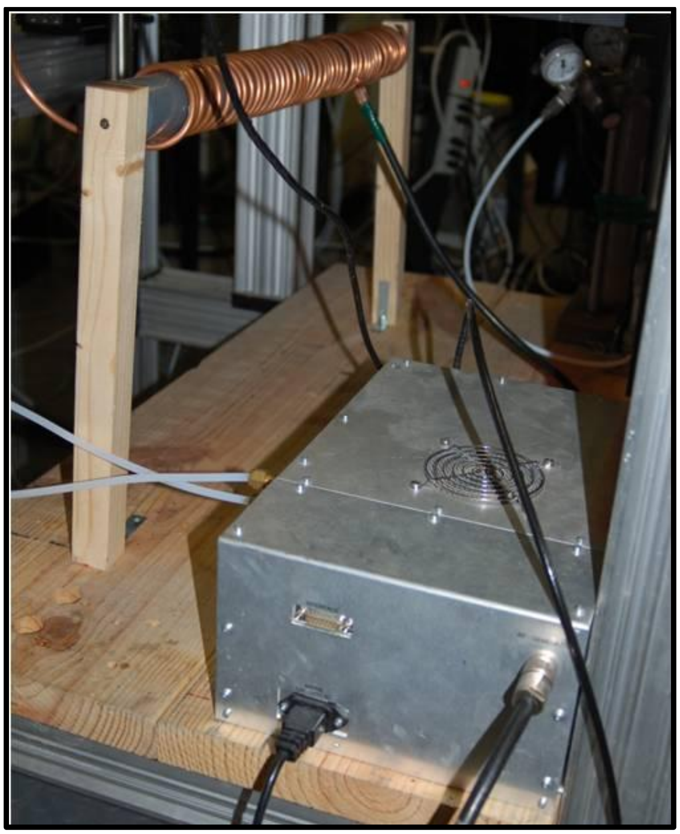


Fig. 2.81 Matching network and inductor coil

The terminus of the coil was connected to the bottom electrode post using a ground-rod clamp. This electrode was denoted the “hot” electrode due to its location on the power source side of the current flow. The top electrode was denoted the ground-electrode. The surface of the electrode slot was coated with a thin layer of high-temperature silicone. This resulted in the electrode fitting securely within the slot, but allowed tilt adjustments using the nylon screws positioned at both ends. For details on electrode design, see Section 2.5.1. The connection between the coil and the bottom electrode is shown in Figure 2.82.

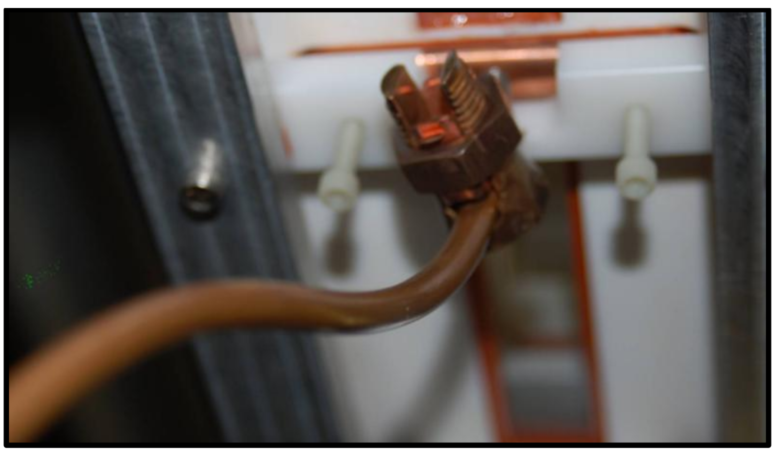


Fig. 2.82 Hot electrode connection

The top electrode was connected to the grounding system (also using a ground-rod clamp). Insulated, 6-gauge, braided copper wire was used throughout the grounding system. This main ground lead connected the top electrode directly to a ground-bus. All other components in the system were also grounded to the bus, which terminated in a

6’ long 0.5” diameter ground-rod driven through the laboratory slab directly below the plasma-discharge location. The grounding system can be seen below (Fig. 2.83).

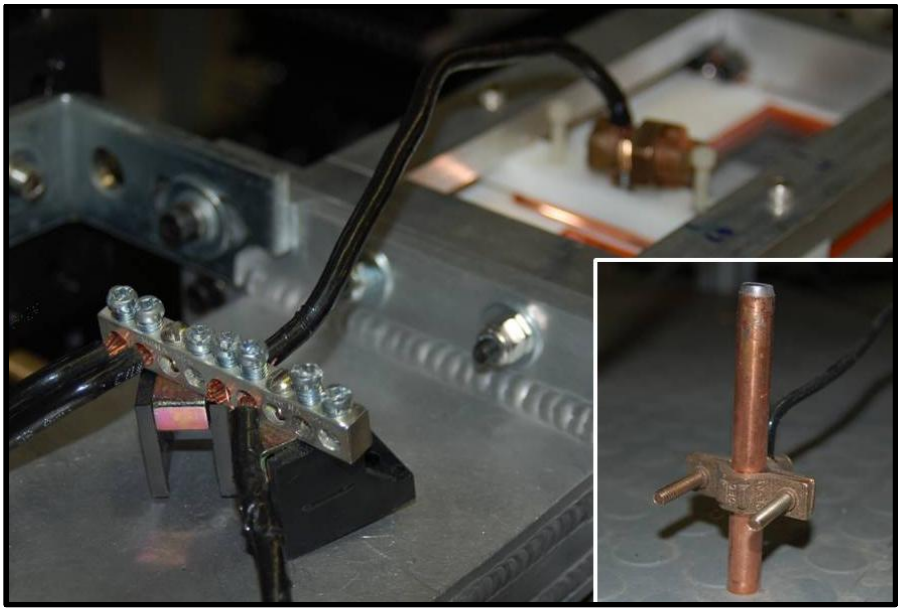


Fig. 2.83 Grounding system

Properly grounding the RF system was vital to reduce radio-frequency interference (RFI) emission into the room. The CCD cameras and YAG lasers utilized in the PLIF studies, along with nearby PCs, were especially susceptible to the interference. Fortunately, the PIV system (including the laser and the camera system) were not affected by the RFI. A large amount of time was spent diagnosing and isolating issues in an attempt to eliminate RFI. Many, many system iterations were carried out to eliminate, redirect, block, and shield the RFI utilizing a range of techniques. For example, at one point the matching-network and external inductor coil were shielded within a large copper box (Fig. 2.84).

Fig. 2.84   Copper box

RF current travels under what is known as the "skin effect", where only the surface and material a very small distance into the surface of a conductor serves as an electrical path. It was postulated that the RF was grounding through the XT95 test stand and the concrete slab through a "counterpoise" effect. A system was built to attempt to replicate this effect (Fig. 2.85) by stretching metal flashing back and forth around wooden dowels.

Fig. 2.85   Flashing switch-back

However, in the end, the system (especially the metal case of the matching network) had to be connected to the slab through the XT95 test stand in order to both ignite the plasma discharge and minimize RFI. It was determined that a majority of the RFI was affecting the system through the digital delay generator, which controlled timing for the affected systems. RFI originating directly from the plasma-discharge was being collected by signal cables (BNC). A day-to-day solution was reached by adjusting the position of the delay-generator (far from the discharge), isolating signal cables from any metallic objects (off floors), isolating YAG control boxes, and installing in-line ground-loop isolators in signal lines. A reliable, consistent, targeted solution was never found.

2.5.1 Electrodes

The RF plasma was discharged between two electrodes mounted parallel to one another on either side of the test section. There were no sources located with experimental setups comparible to the target configuration for the electrodes in the DMT facility. Because of this, an iterative experimental process was employed to test and evaluate many different electrode prototypes with a range of shapes, materials and configurations. The goal was to discharge a stable, uniform, full-field plasma at as high a forward power as possible. An example group of electrode prototypes can be seen in Figure 2.86.

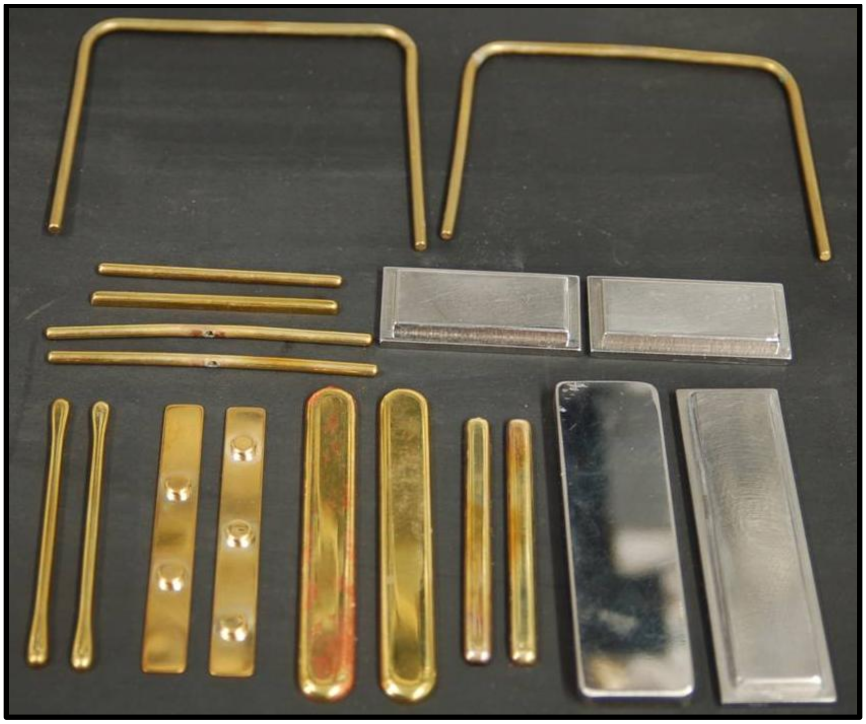


Fig. 2.86 Electrode prototypes

Many of these prototypes were tested in the Lexan test section. The modular electrode-block design was invaluable, as some prototypes resulted in unstable plasma discharges that reached extreme temperatures. These flares would severely damage the Lexan (Fig. 2.87), practically boiling the material.

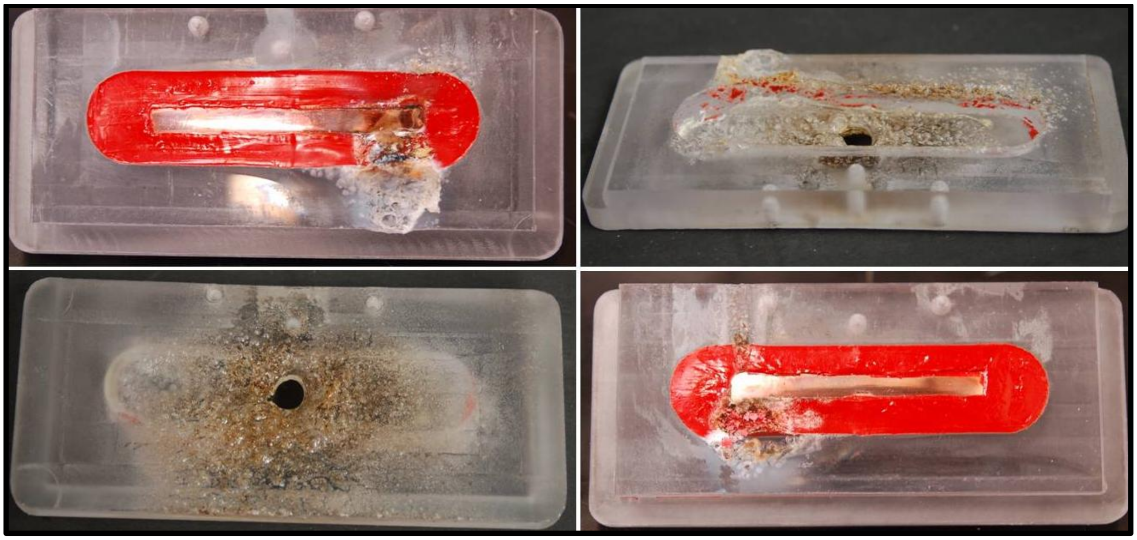


Fig 2.87 Plasma damage (1)

These unstable plasma-flares could be avoided through proper operation, but were still possible. A dielectric (Macor ceramic) was positioned between the electrode and the flow (see Section 2.4.2), but Lexan downstream was still succeptible to flare damage (Fig. 2.88).

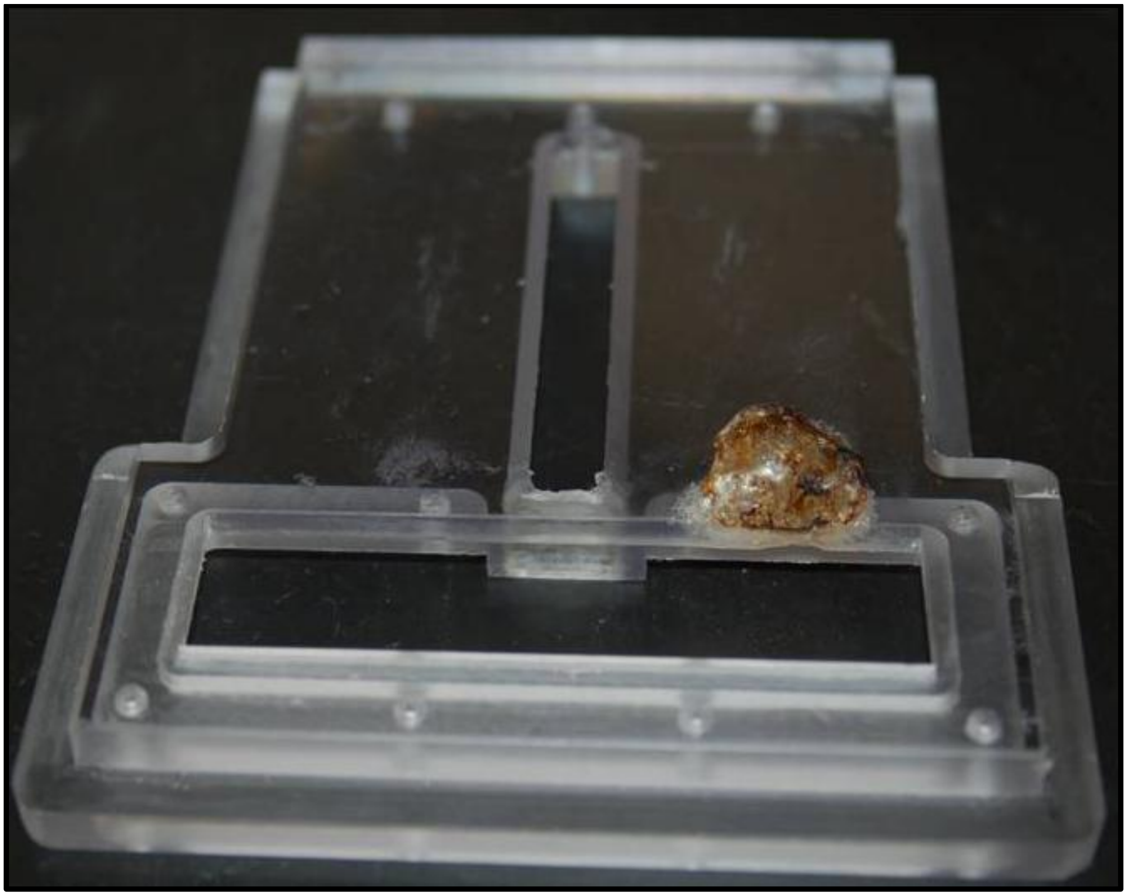


Fig. 2.88 Plasma damage (2)

For the final configuration, the entire plasma discharge section was constructed out of Macor, removing any possibility of heat damage (see Section 2.4.3).

Through testing with electrode prototypes, it was determined that the ideal electrode material was electronic-grade copper with a polished surface. Any scratches could destabalize the discharge. A large radius of curvature was required to avoid flaring (very important). The plasma discharge would arc from any sharp corner or region with a small radius of curvature, even if the electrode spacing in that region was greater than other regions. The final electrode for the Lexan test section was machined from copper bar stock to a size of 3” x 0.625” x 0.25”. All edges were rounded, leaving a 0.25” wide flat contact surface. The hemispherical cross-section was a result of installation interference constraints (namely the lexan cover designed to secure the electrode in place). A hole was tapped on the upper surface, and a segment of nickel-copper alloy ¼-20 all-thread was secured and soldered into place for electrical connections. The surface was then polished. This electrode along with a SolidWorks model view can be seen below (Fig. 2.89).

Fig. 2.89 Hemispherical electrode

Because there were no installation interference constraints in the plasma discharge area of the final test section configuration, the final electrode was designed with a circular cross-section. It was machined from copper round stock to a diameter of 0.6” and a length of 3”. Each end was then rounded (0.3” radius), and a hole was tapped to secure a segment of nickel-copper alloy ¼-20 threaded rod. The entire surface was then polished using a buffing wheel and a standard metal polishing chemical compound. The plasma discharge resulting from this design was uniform and stable. This electrode along with a SolidWorks model view can be seen below (Fig. 2.90).

Fig. 2.90 Cylindrical electrode

The plasma discharge ignition and stability was highly dependant on both test section pressure as well as electrode spacing. The optimal configuration in the DMT facility consisted of an electrode spacing of 1.2” and a pressure of 30 Torr. Several images of the plasma discharge in action can be seen below (Fig. 2.91).

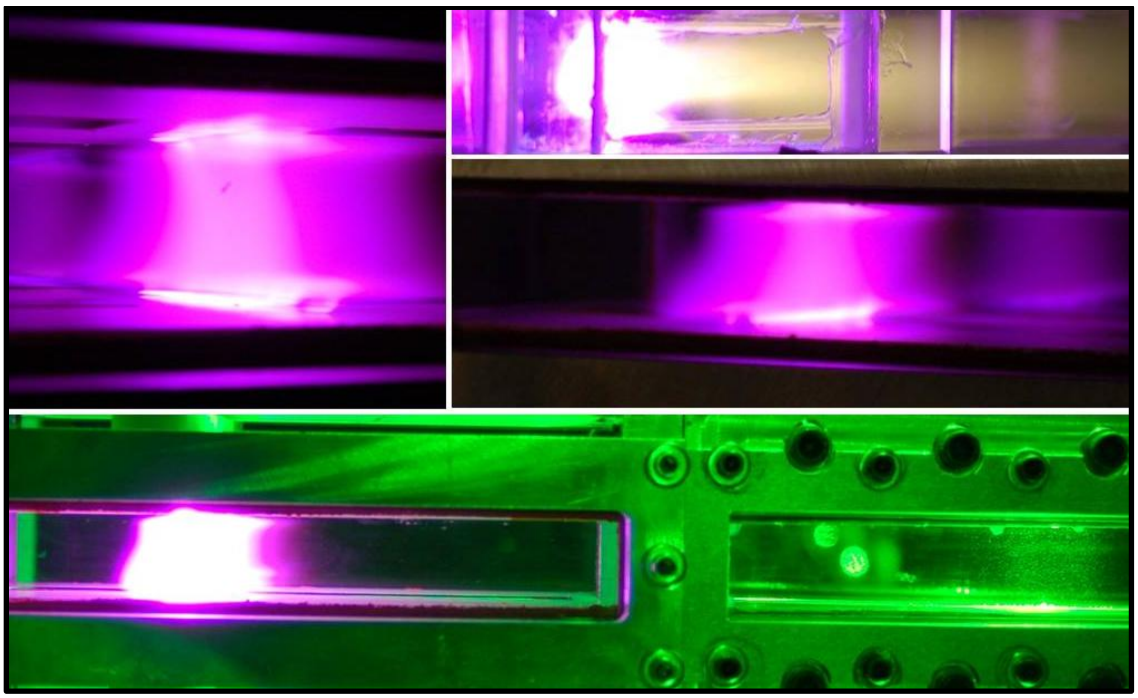


Fig. 2.91 RF plasma

CHAPTER III

EXPERIMENTAL TECHNIQUES

3.1 Particle Image Velocimetry

Particle image velocimetry (PIV) is an extremely powerful non-intrusive diagnostic tool used to measure instantaneous velocity fields. Acquiring PIV data in the DMT facility was the main focus of this study. Two-dimensional PIV was utilized in because the flow field under observation did not necessitate the increased complication of stereoscopic PIV to resolve the third velocity vector. The basic process involves the use of a double-pulsed laser light source to illuminate seed particles in the flow. Scattered light from these particles is collected and recorded, usually on a digital camera equipped with a charge-coupled device (CCD) array. A correlation process is then carried out on each image pair. A small area (interrogation window) of the primary image is analyzed by computing an intensity map. Another interrogation window then sweeps the second image, and intensity peaks are matched to determine the displacement of the particles from the first to the second image. With the known displacement and the time between laser pulses, velocities can then be calculated. Subtracting averaged velocity from the instantaneous velocity results in the instantaneous fluctuating velocity. A large number of image pairs are typically recorded to reach statistical convergence in the fluctuating velocities. Application of PIV in the DMT experiment will be detailed in the following sections.

3.1.1 Hardware and Operation

The PIV measurements were taken utilizing a dual port/dual head variable frequency New-Wave Solo 120XT PIV laser system. The system provided a stable, high-energy light pulse at 532 nm. The maximum energy output was 120 mJ per head with a pulse width of 4 ns (± 1 ns). The two pulses from each head (laser-one and laser-two) were combined by introducing a half-wave plate made of crystal quartz in the path of laser-one, which induced perpendicular polarization. Each pulse then passed through a high-energy polarizing cube beam-splitter which passed the perpendicularly polarized pulse from laser-one and turned the unmodified pulse from laser-two, combining the beam paths of each laser pulse. The beam combination optics setup can be seen in Figure 3.1.

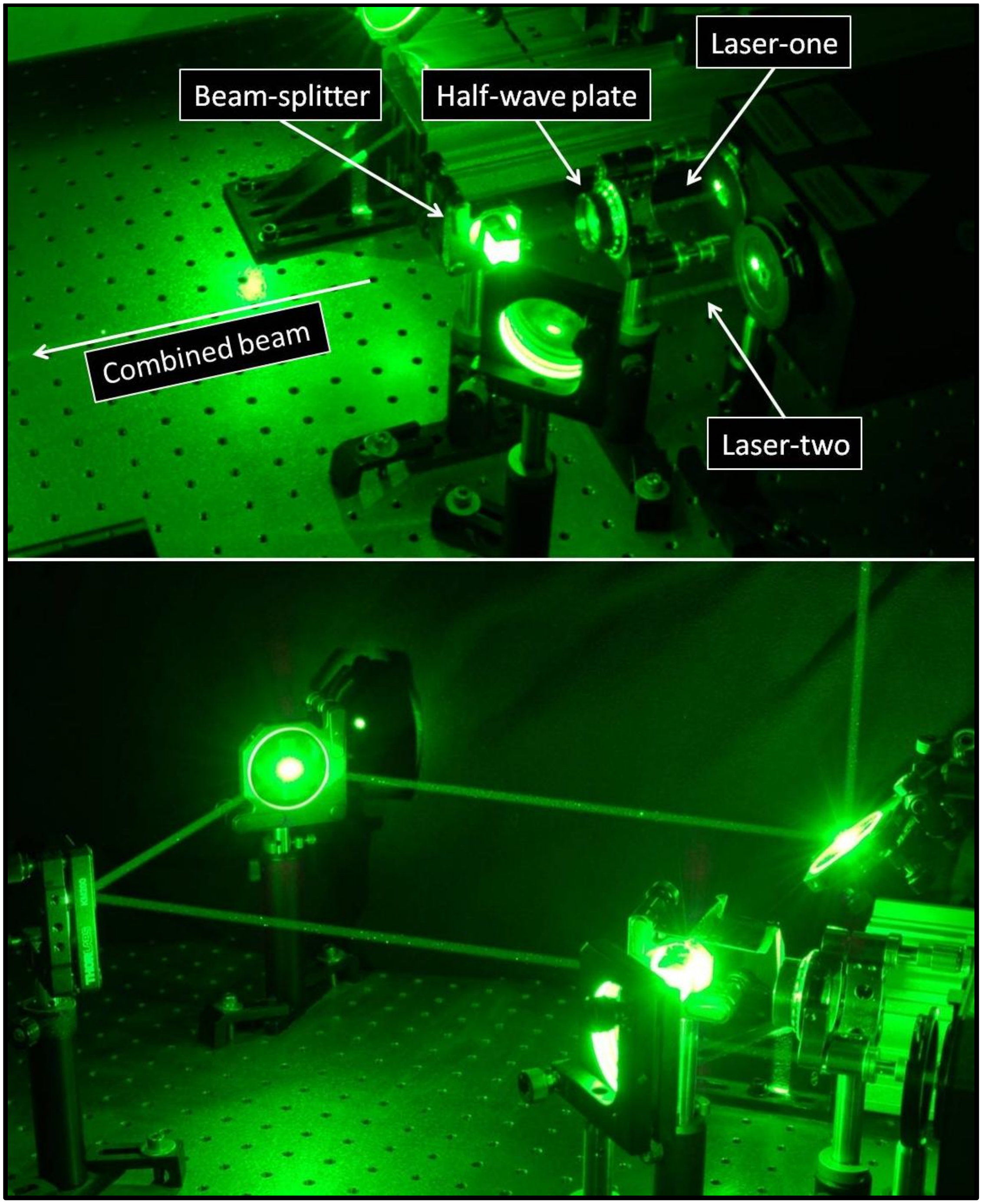


Fig. 3.1 PIV beam combination optics

The half-wave plate must be rotated to the correct orientation in order for the maximum amount of energy to be passed through the beam-splitting cube. Note that only laser-one has adjustable power output and it is optimal for the intensity of each image to be approximately equal. It is possible to modify the power output by adjusting the timing between the flash-lap and q-switch. However, if the user is unable to attain equivalent image intensity, then it is advisable to modify the above setup by passing laser-two through the half-wave plate instead of laser-one. In this way, the user can rotate the optic to adjust the amount of energy passing through the beam-splitter, thereby tailoring the intensity of the image illuminated by laser-two. The first mirror in the path of laser-two and the beam-splitting cube were square with one another. However they were rotated slightly with respect to the exit beam axes. This was done so that reflected light did not re-enter the laser system and harm any internal optics or other hardware. The iris located at the exit port of laser-two was used as both an alignment tool (to be explained later) as well as a beam block for the reflected light. The reflections can be seen below (Fig. 3.2).

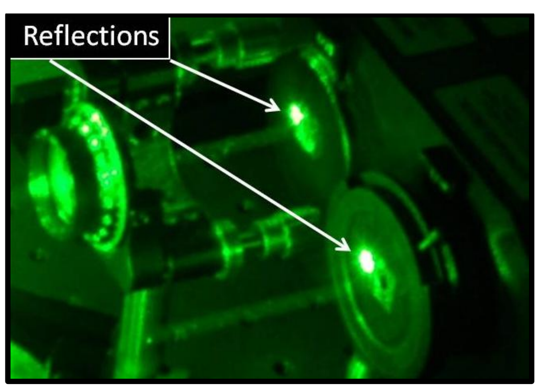


Fig. 3.2 PIV beam combination optics reflections

The combined beam was directed to the test section through a series of 532 nm mirrors (2”, 45°). A rail (Fig. 3.3 and Fig. 3.4) was mounted on the laser table equipped with mirrors that directed the beam up and over to an optics rail (Fig. 3.5) mounted on the test stand.

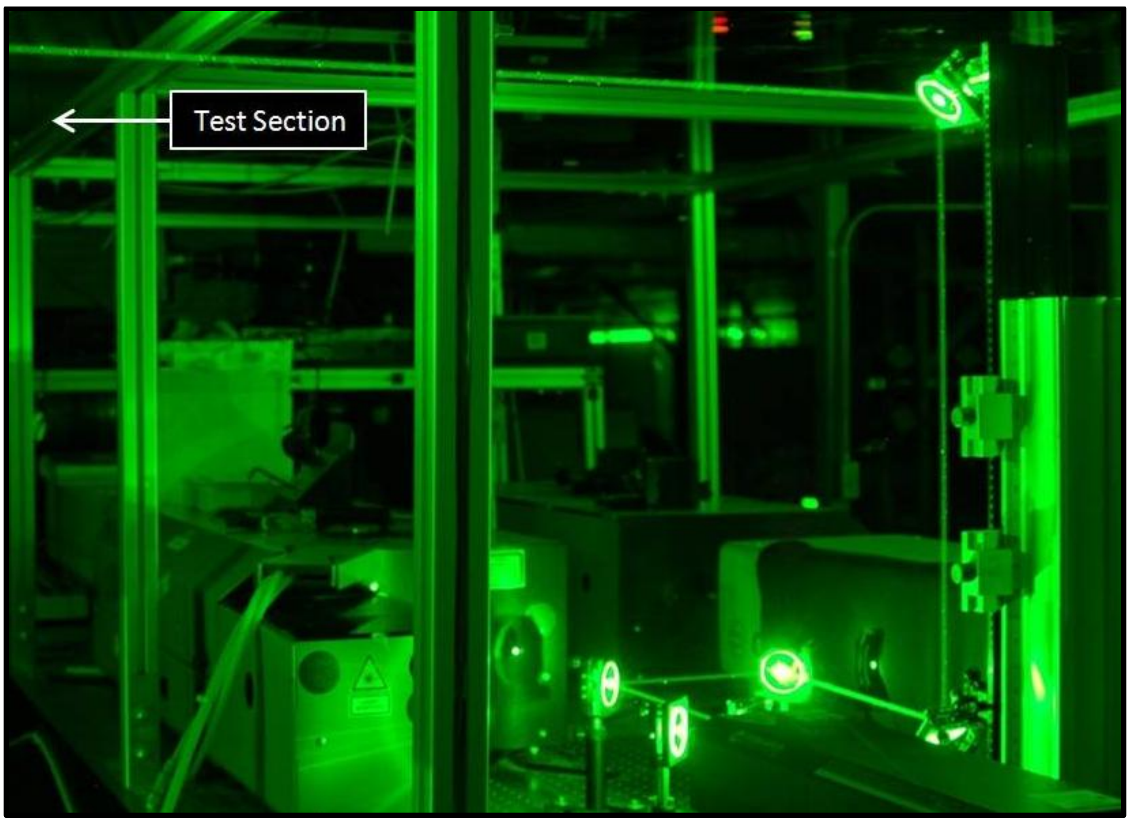


Fig. 3.3 Laser table PIV optics rail (1)

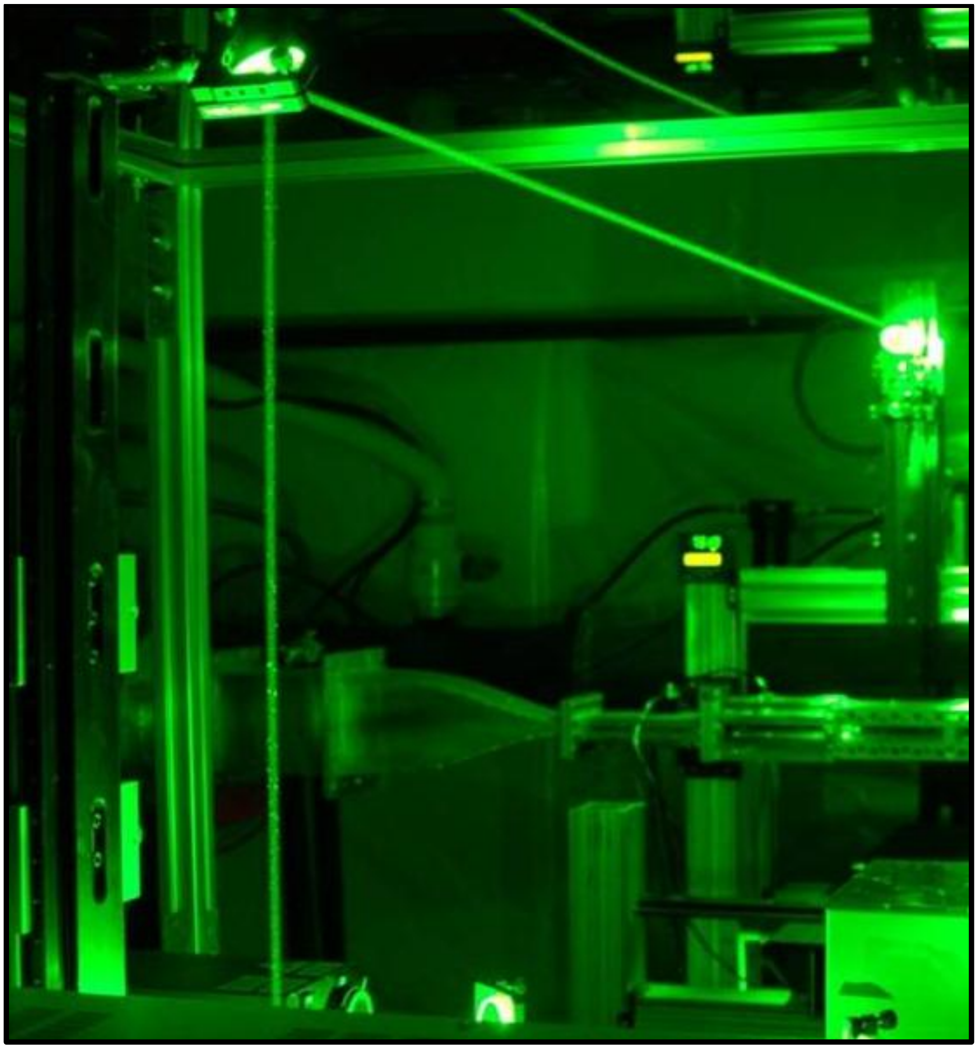


Fig. 3.4   Laser table PIV optics rail (2)

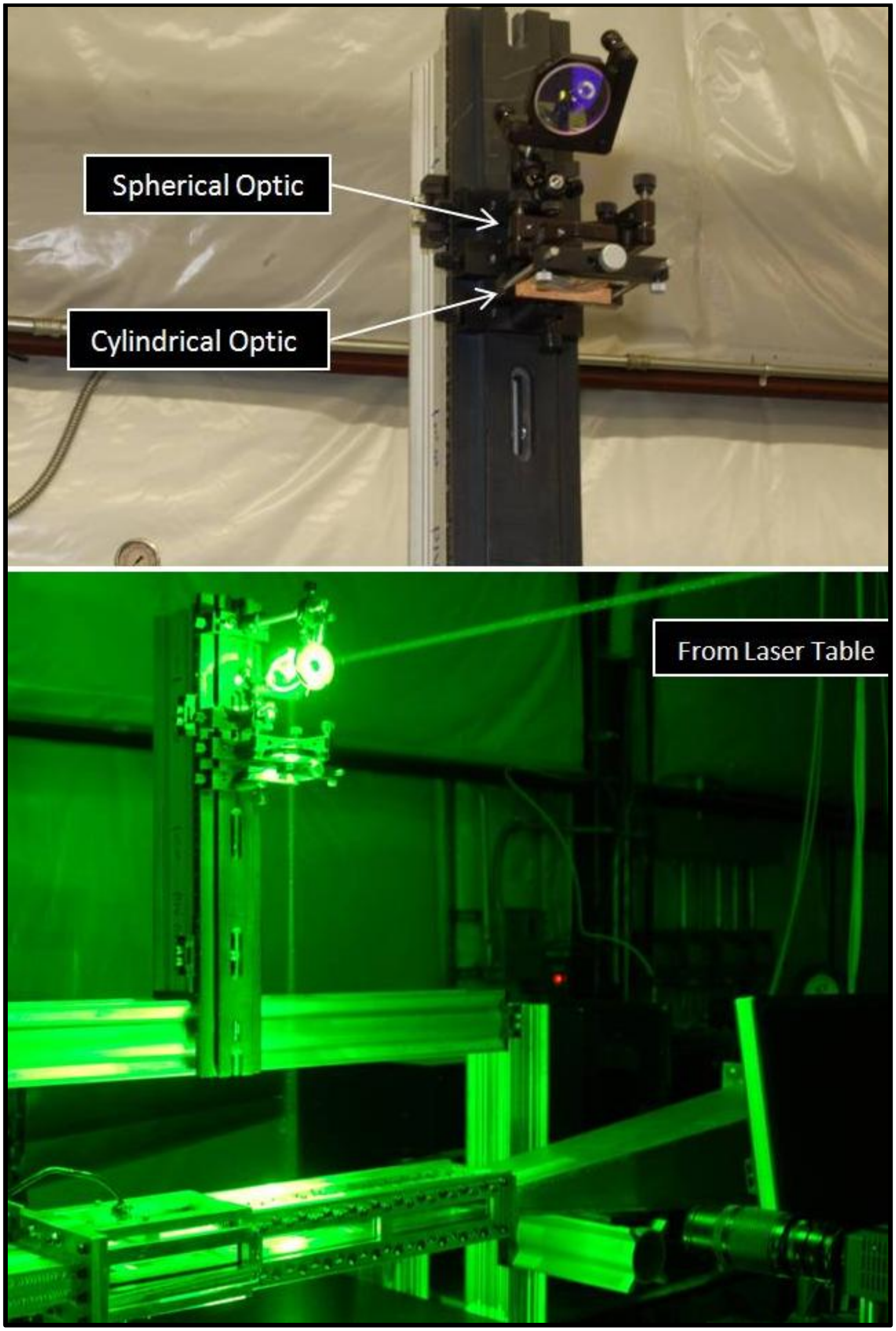


Fig. 3.5 Test stand PIV optics rail

The rails were comprised of PRL-24 sections mounted on XT95 sliders riding on XT95 sections. Each optic was mounted in a post holder attached to a PRC-1 slider mounted on the PRL-24 section. The bottom of each vertical XT95 optics rail was in turn secured to a XT95 slider riding along a horizontal XT95 rail hard-mounted to the laser table (laser table optics rail) and the XT95 test stand (test stand optics rail) which allowed the optical system to be translated in order to probe different measurement locations along the test section. A convex spherical lens (500 mm focal length) was used to control the location of the beam waist, and a convex cylindrical lens (150 mm focal length) was used to form a laser sheet approximately 35 mm wide and 1 mm thick. Setting the waist at the center of the test section to maximize the scattering intensity proved to produce too much signal. Therefore, the waist was set two inches above the top wall of the test section, which resulted in the best signal level. The test section is equipped with bottom wall windows to pass the laser sheet, reducing reflections. Any remaining weak reflections were eliminated by subtracting the background from each image. The strongest reflections were the result of scattering from the aluminum edge (which faces the camera and is parallel to the CCD array) that supports the top and bottom wall windows. Should a similar window installation configuration be utilized in the future, it is advisable to coat the edge with an anti-glare product to reduce these strong reflections.

The most important step in the operation of the New-Wave Solo 120XT PIV laser system is optical setup and laser alignment. The dual-head configuration requires diligence in alignment of laser-one and laser-two to ensure that the sheets are both parallel and coincident at the measurement location. First, it is important to be certain that laser-one and laser-two are exiting the exit ports parallel to one another. This was checked by measuring the distance between the two beams at the exit ports, and then measuring that distance again at a location relatively far away (across the room). If they are not parallel, the internal optic (last mirror before the laser exits) of laser-two should be modified until the two lasers are parallel. The next step was to make certain that all optics were square when initially setting up the system. The optics will also change as they absorb energy from the laser, so it is advisable to allow the optical system to reach an equilibrium temperature before carrying out the final alignment step. This was done by running the system on high power for 10 minutes. The final step was to ensure sheet alignment by carrying out near-field/far-field calibration. The system was operated in internal mode at a rep-rate of two to three hertz. Slowing the rep-rate allows the user to isolate the beams and visually amplifies any misalignment (jitter) between the two lasers. The beams were compared at a location just after they are combined through the beam-splitter. The beam-splitter orientation was then modified until the two lasers were exactly aligned. The iris in the path of laser-two located at its exit port was then contracted to be able to better distinguish between each laser. Once the beams were aligned at the near-field location, the beams were then compared at the far-field location. The mirror located at the top of the laser table optics rail was rotated slightly to steer the beams around the test section optics rail to strike the far wall. The farther away the far-field location (within reason), the more accurate the alignment will be. At that point, the orientation of the mirror located in the beam path of laser-two directly after it exits the laser was modified until laser-one and laser-two were aligned. The process was then repeated until no changes were required.

The seed particle compound used was Bis(2-ethylhexyl) sebacate procured from Sigma-Aldrich. This compound was chosen as a cleaner alternative to olive oil and for its theoretical characteristic of evaporation, which would simplify wind tunnel cleaning and maintenance. However, in practice, the evaporative quality was unsatisfactory. The liquid was atomized in a TSI model 9306 six-jet atomizer which created DEHS particles with an average diameter of 250 nm. The seed injection system can be seen below (Fig. 3.6).

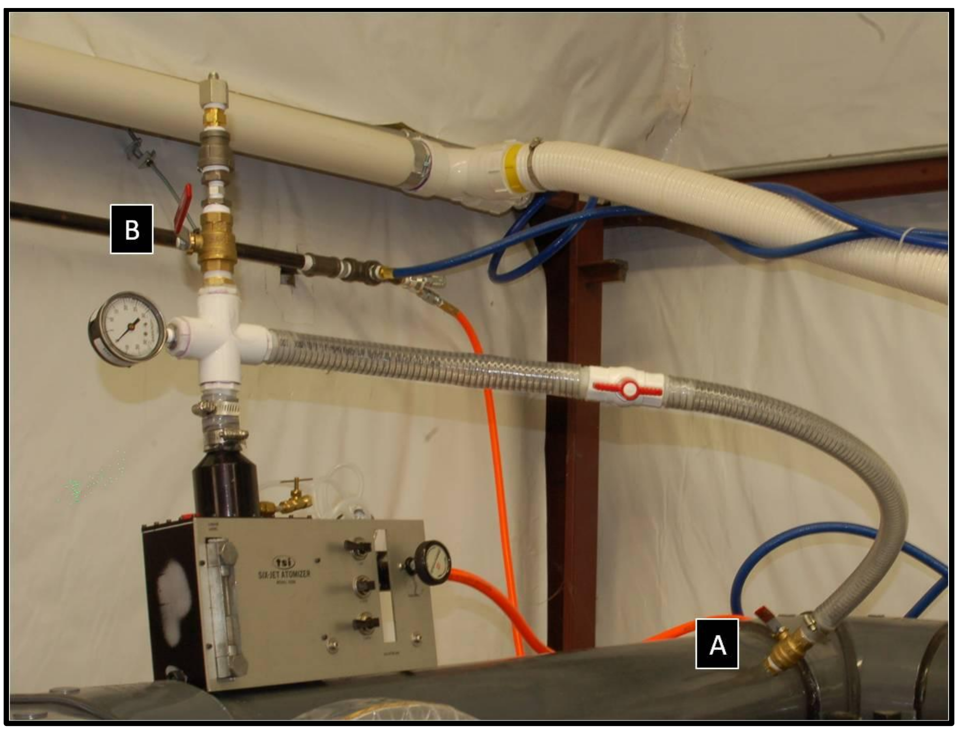


Fig. 3.6 Seed particle injection system

Normal operating conditions for the atomizer were atmospheric exit pressure and an input pressure of ~25 psi. However, the DMT pressure was near vacuum. In order to properly atomize the particles, a series of valves was installed between the atomizer exit and the tunnel. The atmospheric ball valve (B in Fig. 3.6) was barely opened to allow a small amount of atmospheric air in at the atomizer exit. The tunnel ball valve (A in Fig. 3.6) was opened just enough to reach an optimal exit pressure of 10-15” of Mercury. This allowed proper atomization without outpacing the mass flow rate of air into the vacuum system, thereby keeping a steady tunnel pressure. Input air was supplied by a shop air line (orange hose in Fig. 3.6) and the input pressure was set at 5 psi. The seed particles were injected through ball valve A directly into the bulk flow. A direct localized injection system located just upwind of the test section entrance was attempted. The system consisted of a 0.25” aluminum tube partially flattened to increase aerodynamic efficiency. This tube was slotted at small intervals to evenly distribute the seed particles. The tube was mounted at the centerline (span-wise) and extended from top to bottom wall. However, due to the low pressures and the required small diameter tubing, this system was not effective at seed injection and often resulted in liquification of the DEHS. Under favorable conditions (atmospheric or higher ambient pressure), this type of injection system is ideal as it allows the user to accurately control the injection points to tailor the seed dispersion. The injection hardware can be seen in Figure 3.7.

Fig. 3.7 Direct seed injection hardware

Mie scattering from the particles was captured by a Cooke Corporation PCO 1600 high dynamic 14-bit cooled interline-transfer CCD camera system with 1600x1200 pixel resolution operating in double-shutter mode at 160 MB/s. A Nikon 30-700 mm lens was used along with one 20 mm and one 12 mm extension ring. An F-number of 11 was optimal to maximize signal as well as depth of field. The camera was mounted to a rotation stage by a large diameter (1.5") post. The rotation stage was mounted to two sliders (Newport PRC-1) attached to a black rail section (Newport PRL-24), which was, in turn, attached to an elevating scissor jack. The jack was mounted by two PRC-1 sliders to a PRL-24 rail section oriented parallel to the test section wind axis. This allowed the camera to be rotated as well as translated along all three coordinate axes. The camera system can be seen below (Fig. 3.8).

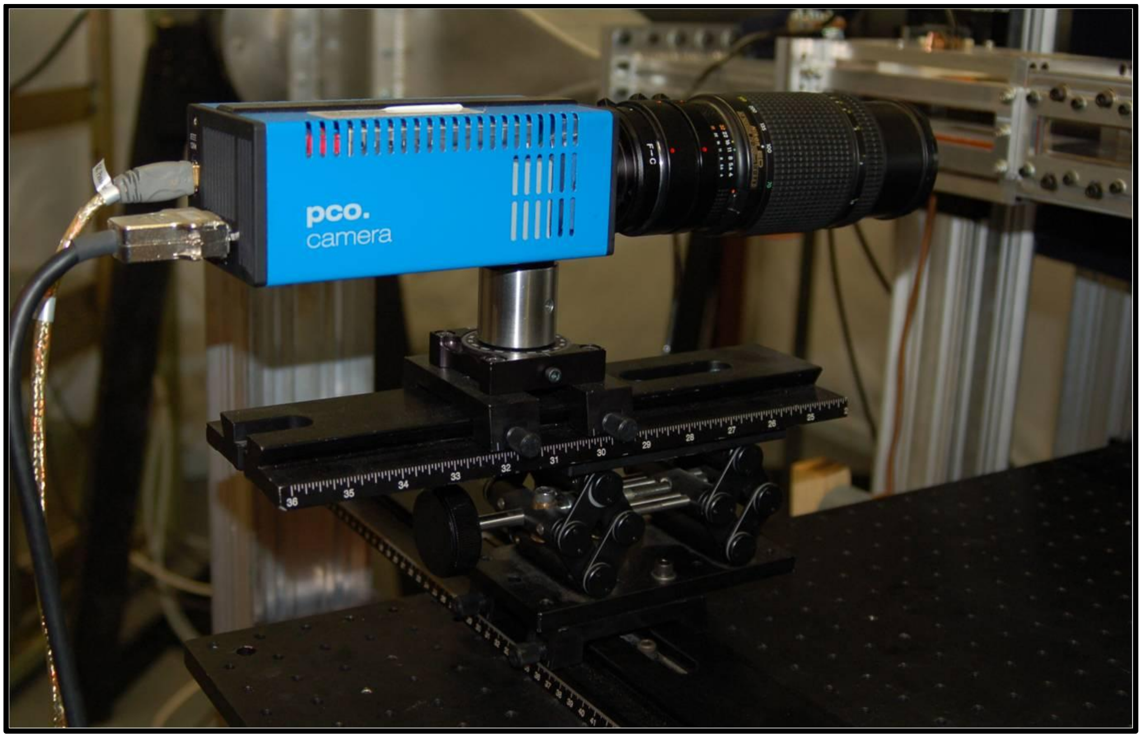


Fig. 3.8 Cooke camera system

The camera was controlled using Cooke CamWare software (v. 2.19, build 0141). Screen captures of all settings used in CamWare are located in Appendix A. The most important setting is the exposure time which must be set just prior to the second laser pulse. The camera system operates by saving the images to onboard RAM as they are recorded. Therefore, recording times were limited by onboard memory capacity (2 GB) and recording frequency. At 10 Hz, each data acquisition sequence took 30 seconds, followed by transfer of images to the computer hard-drive (which took 3.5 minutes).

A reference length must also be recorded in order to calculate the magnification of the image and calibrate the vector data correctly. In many cases, this is done by placing the face of a dot-card or grid with known dimensions in each measurement plane and recording the image. This image is then analyzed by measuring the number of pixels across a known dimension and computing the number of pixels per length. It is recommended that this step be carried out after the set of data has been taken at a location. It is best to set-up the dot card with translation-stages to facilitate micro-adjustments in order to place the face of the dot-card in-focus in the measurement plane. This calibration was done in DMT without the use of a dot-card. Inserting a dot-card at a measurement location would have required shutting down operation, allowing the tunnel to re-pressurize and removing window frames and windows in order gain access. Instead, the magnification was set to capture the top and bottom walls in each image. By using the walls to calibrate magnification, DMT operation was continuous for the duration of data collection for each data set (per grid), resulting in constant and consistent flow conditions. This wall-to-wall distance was known and used along with the pixel measurement from the image to compute the magnification. In many cases, locating the wall was trivial. However, it was helpful to look closely for identical particle clusters mirrored above and below the wall-line in order to focus in on the wall location. Due to test-section wall divergence in the downstream direction, this measurement was taken exactly at the center of each image.

3.1.2 System Timing

The timing of each laser pulse and the camera was driven by a Quantum Composers, Inc. Model 9618 Digital Delay-Pulse Generator (Fig. 3.9).

Fig. 3.9 Pulse generator

Each laser pulse was triggered by two separate signal pulses. The first pulse signals the flash-lamp to fire which produces the initial laser pulse. This light is then amplified internally until the q-switch signal is received, releasing the final laser pulse to the exit port. The power of the final laser pulse when plotted versus internal delay time follows a bell-curve. Once the lasers were properly warmed up, a power meter was used to tweak this internal delay to achieve maximum power output. This delay for each laser was set to 195.5 μs. The channels were allocated to system signals as follows (Table 3.1):

Table 3.1 Pulse generator channel allocation

Channel	Signal
1	-
2	Flash-lamp 1 (FL 1)
3	Flash-lamp 2 (FL 2)
4	Q-Switch 1 (QS 1)
5	Q-Switch 2 (QS 2)
6	Camera Trigger
7	*not enabled*
8	*not enabled*

The settings for each channel are listed below (Table 3.2).

Table 3.2 Pulse generator settings

Settings									
Ch	*Sync*	*Delay (μs)*	*Width (μs)*	*Mode*	*Wait*	*Polarity*	*Amplitude (V)*	*MUX*	*Gate*
T1	T0	9	120	Normal	0 Pulses	Active High	5.00	T8-0000 0001-T1	Disabled
T2	T0	0	120	Normal	0 Pulses	Active High	5.00	T8-0000 0010-T1	Disabled
T3	T1	0	120	Normal	0 Pulses	Active High	5.00	T8-0000 0100-T1	Disabled
T4	T2	195.5	120	Normal	0 Pulses	Active High	5.00	T8-0000 1000-T1	Disabled
T5	T3	195.5	120	Normal	0 Pulses	Active High	5.00	T8-0001 0000-T1	Disabled
T6	T0	190	120	Normal	0 Pulses	Active High	5.00	T8-0010 0000-T1	Disabled

The timing was set up in this way – utilizing channel one as a dummy – in order to be able to change the time delay (Δt) for each laser by modifying only one channel setting.

It is important to be able to change this delay easily during a PIV experiment as it directly controls the pixel displacement between image pairs. The optimal pixel displacement to maximize accuracy is 12-20 pixels. The time delay (Δt) was modified by changing the delay on T1 (9 μs in Table 3.2). The internal laser pulse delay was set at 195.5 μs (T4 and T5). The camera delay was set at 190 μs. Below is a schematic of the timing setup (Fig. 3.10).

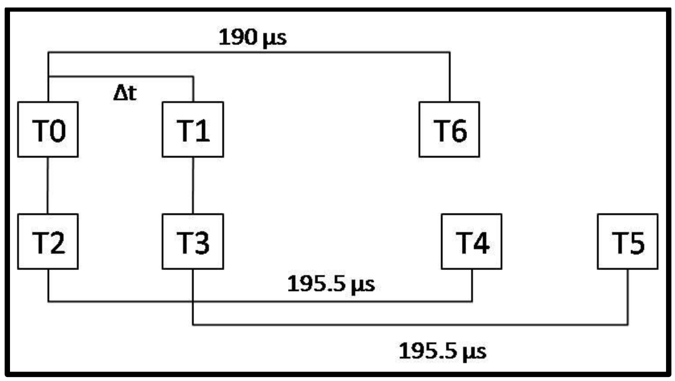
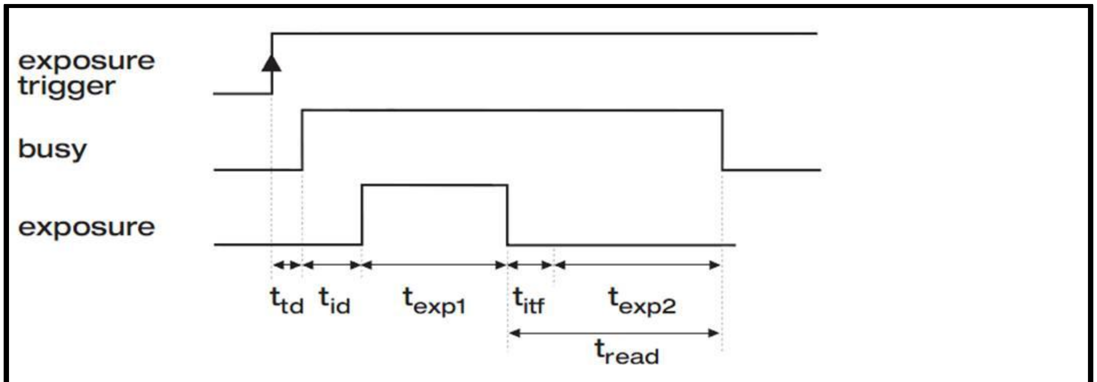


Fig. 3.10 PIV timing schematic

The 5.5 μs difference between the camera delay (T6) and the first laser pulse (T4) was a result of an intrinsic 5.3 μs internal delay between the time the Cooke camera receives the trigger signal and the time the shutter actually opens. When operating in double-shutter mode (as was done for PIV), the shutter stays open for the length of the exposure time, closes (saving the first image), and then re-opens for the entire remaining read time (saving the second image). The full read time at a pixel clock of 40 MHz with two ADC was 208 ms. A timing schematic for the Cooke PCO.1600 camera operating in double-shutter mode is shown in Figure 3.11.



time	description	pco.1600	pco.2000	pco.4000	pco.1200hs
t_{td}	trigger ackn. delay	200±13ns	200±13ns	200±13ns	220±16ns/ 200±13ns (66MHz/86MHz)
t_{id}	intrinsic delay	5.3µs	5.3µs	6.4µs	4.8µs/3.7µs (66MHz/86MHz)
t_{exp}	exposure time	0.5µs..49d	0.5µs..49d	5µs..49d	0.05µs..5s
t_{read}	readout time (full frame)	33ms..208ms (10MHz/1ADC.. 40MHz/2ADC)	68ms..452ms (10MHz/1ADC.. 40MHz/2ADC)	199ms..1390ms (8MHz/1ADC.. 32MHz/2ADC)	2.1ms/1.6ms (66MHz/86MHz)
t_{itf}	interframing time	180ns	180ns	180ns	75ns

Fig. 3.11 Cooke camera double-shutter timing

3.1.3 Data Processing

The first step in reconstructing velocity fields was to carry out background subtraction of all images. This process increased the number of vectors by eliminating weak reflections and a portion of the strong reflections very near the walls, leaving the particle scattering to be correlated. Seed injection was turned off while the tunnel was in operation resulting in the majority of the seed particles being removed from the system. At each location, 100 background image pairs were recorded. For locations near the plasma (L0 and L1), background images were taken for each of the three plasma settings because light from the plasma discharge was detected by the camera. Each of the background codes were written in MatLab vR2008a. The first code (bgavg.m) read in and averaged the 100 background image pairs. These background images were then used by the second code (bgsub.m) and subtracted from corresponding 3,450 PIV image pairs. An example image (second exposure) taken at location L1 can be seen before (Fig. 3.12) and after (Fig 3.13) background subtraction (equal display properties).

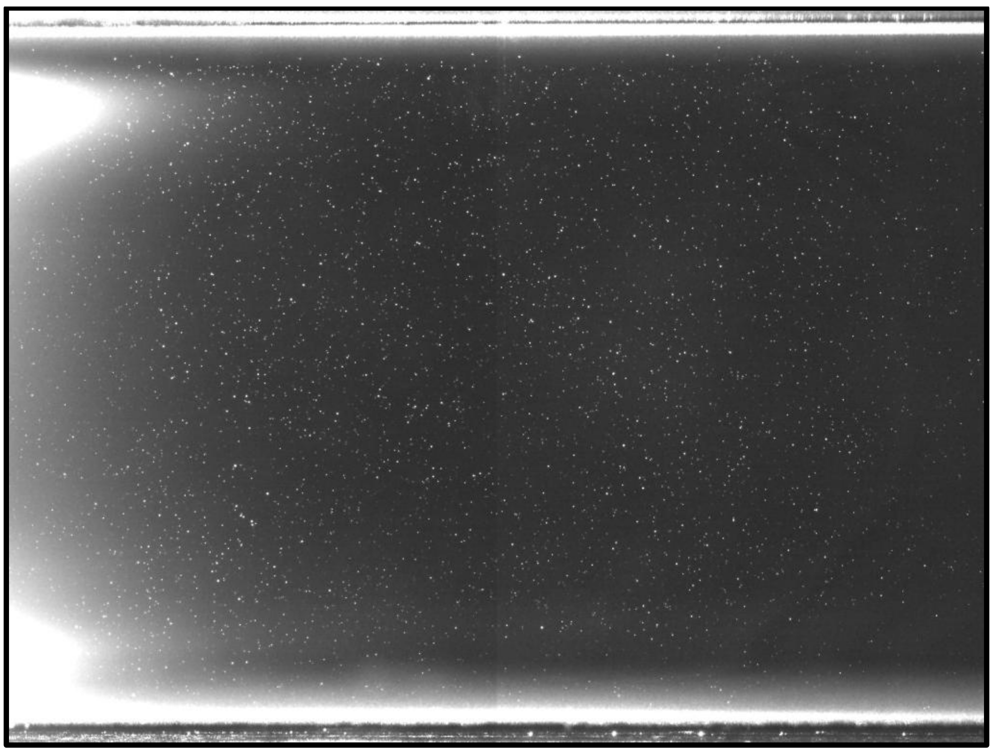


Fig. 3.12 Raw PIV image

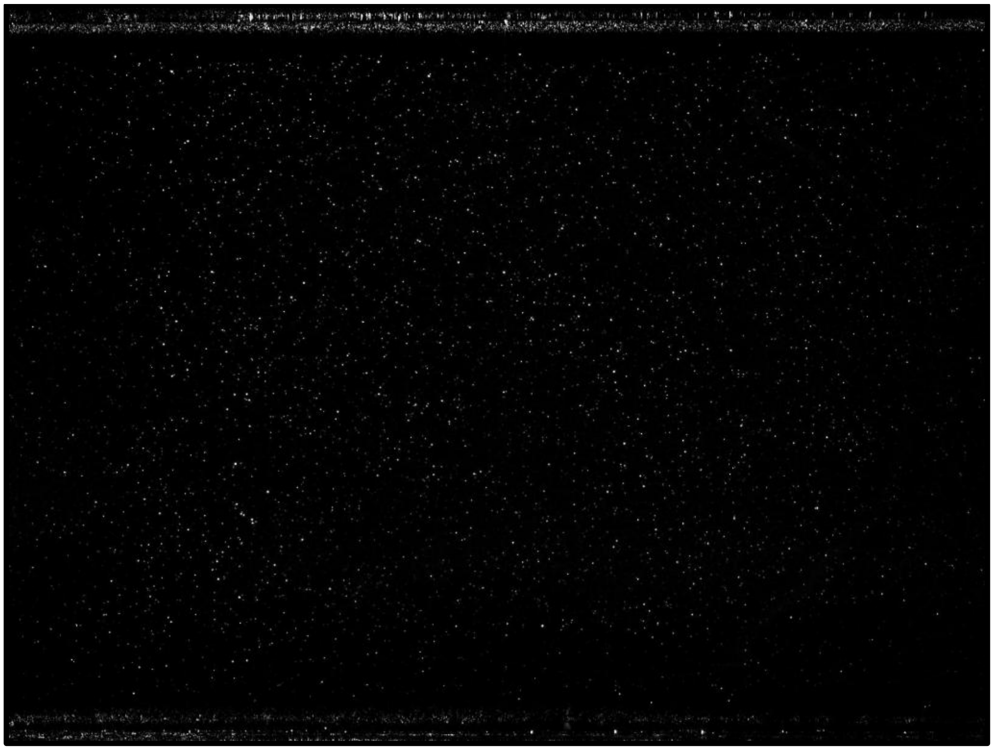


Fig. 3.13 PIV image after background subtraction

Light from the plasma discharge can be seen at the left of Fig. 3.12. No vectors were recoverable in this area prior to background subtraction. These features are gone in the subtracted image (Fig. 3.13). The only reflections that remain are the extremely strong regions near the top and bottom walls. More aggressive background subtraction was successful at fully removing these features, but all particle signal was removed along with them. Therefore the less aggressive method was applied to all images to remove the majority of the weaker reflections. The background averaging and subtraction algorithms can be found in full in Appendix B. The commands “mcc -em bgavg.m” and “mcc -em bgsub.m” were used at the MatLab command line to compile each of the codes. This resulted in the creation of executable files bgavg.exe and bgsub.exe. These executables were easily placed in the appropriate directories spread out across seven different computers used to process the PIV data. The file MCRInstaller.exe had to be run on each of the processing computers in order to run the codes. This file was located at "Root\MATLAB\R2008a\toolbox\compiler\deploy\win32\."

Once the averaged background images were subtracted from the raw PIV image pairs, velocity fields were computed. This was done by cross-correlation analysis of each image pair. The basic process is as follows. A small interrogation window is fixed at a point in image one. An intensity map is then calculated for this small area. Centered on that same coordinate location in image two, an interrogation window of the same size sweeps the area, calculating intensity maps. A cross-correlation function of the intensities is computed for each interrogation paring. A peak in this array of cross-correlation data corresponds to the interrogation window pair that is the most similar. Hence, the location of the interrogation window in image two is the location that the particles have traveled. This distance, along with a known time delay, results in a velocity vector. Below is a simple graphic showing this process (Fig. 3.14).

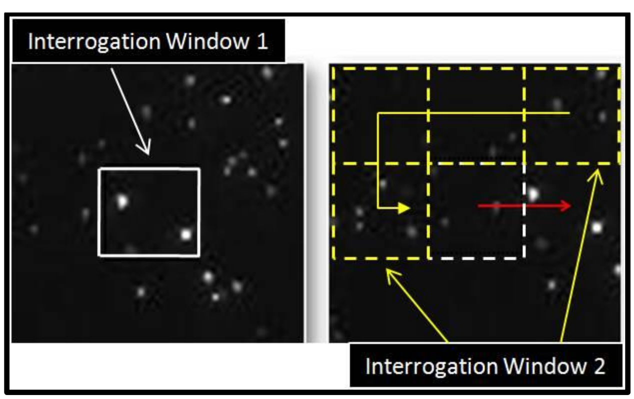


Fig 3.14 PIV correlation process

Velocity field reconstruction was accomplished using Innovative Scientific Solutions, Inc. (ISSI) dPIV 32-bit analysis code (v2.1). A three-step adaptive correlation calculation using successive interrogation window sizes of 128x128, 64x64, and 32x32 pixels with 50% overlap was used. Correlation multiplication was activated on all four maps adjacent to the center map. When this option was turned on, the target correlation map was multiplied by the center correlation map prior to determining peak location (and hence, pixel location). This had the effect of smoothing the data similar to what a Gaussian filter would do. The consistency filter was also turned on with Min. (minimum number of vectors) set to 2 and Radius (absolute distance) set to 2. This filter operated by computing the absolute distance between the current center vector and its surrounding eight neighbors. If the absolute distance was less than the user selected radius, a counter was incremented. If the counter value was greater than the user selected minimum once all eight neighbors were checked, then the current vector was good and would not be filtered. The filtered locations were then populated using interpolation. The dPIV parameters used to process the PIV data are fully documented in Appendix A.

Averages and turbulent quantities were computed using an in-house computer code written in FORTRAN. This code read in the csv files generated by dPIV and computed average and fluctuating velocities. This code also carried out a simple outlier based filter with a threshold of 2-sigma. A second in-house code was used to average columns (per user selection) of the averaged data in order to generate well resolved profile plots. The PIV averaging codes are fully documented in Appendix B. The following images show the scattering from seed particles (Fig. 3.15) and PIV in operation with the RF plasma discharge (Fig. 3.16).

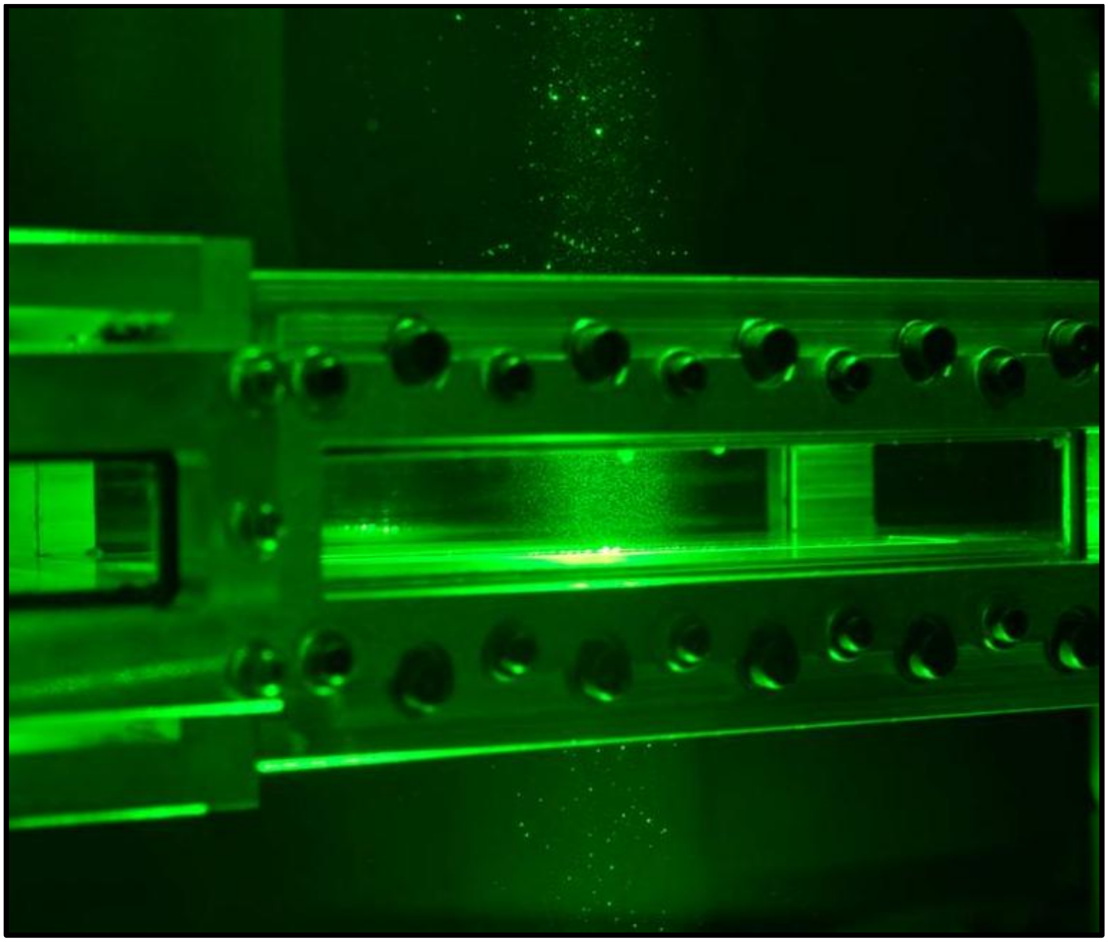


Fig. 3.15 PIV particles

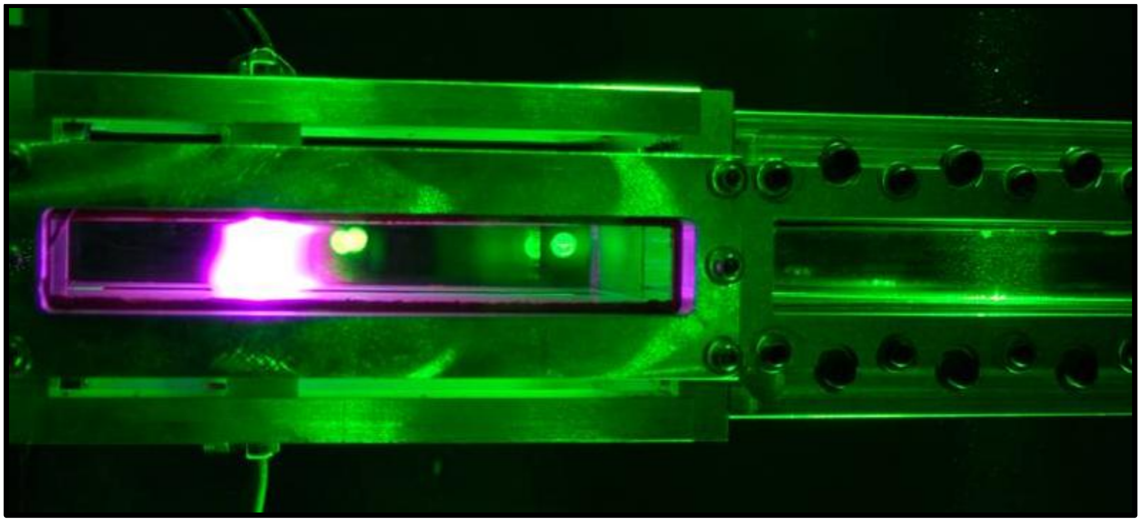


Fig. 3.16 PIV with RF plasma

3.2 Temperature Measurements

This study was focused on PIV measurements, but temperature measurements were required to fully explore the processes and energy exchanges that occur in a flow undergoing thermo-chemical non-equilibrium. For a detailed description of the temperature measurement techniques and experimental setups, the reader is directed to dissertations written by Andrea Hsu[45] and Rodrigo Sanches-Gonzalez (2012). Following are brief summaries of the temperature measurements and other diagnostic techniques utilized in the DMT facility.

Nitric-oxide (NO) two-line planar laser induced fluorescence (PLIF) was performed with colleagues to measure NO rotational and vibrational temperature fields. This was accomplished by relating the temperature to the ratio of the two fluorescence signals generated by two dye-laser pulses tuned to different rotational (or vibrational) bands. This data, along with known calibration (from a reference temperature) and rate constants, allowed the temperature to be computed. The PLIF system consisted of two Nd:Yag pumped dye lasers (Sirah Cobrastretch). Each laser was formed into a sheet and directed into the DMT test section. The fluorescence signal was recorded on two 16-bit Andor iStar ICCD cooled cameras (model DH734) fitted with UG5 Schott filters and Nikon 105mm F/4.0 UV lenses. The images were binned on-chip negating the blurring caused by fluid movement between probe laser pulses. NO concentrations were typically 0.15%.[45] A representative PLIF setup can be seen below (Fig. 3.17).

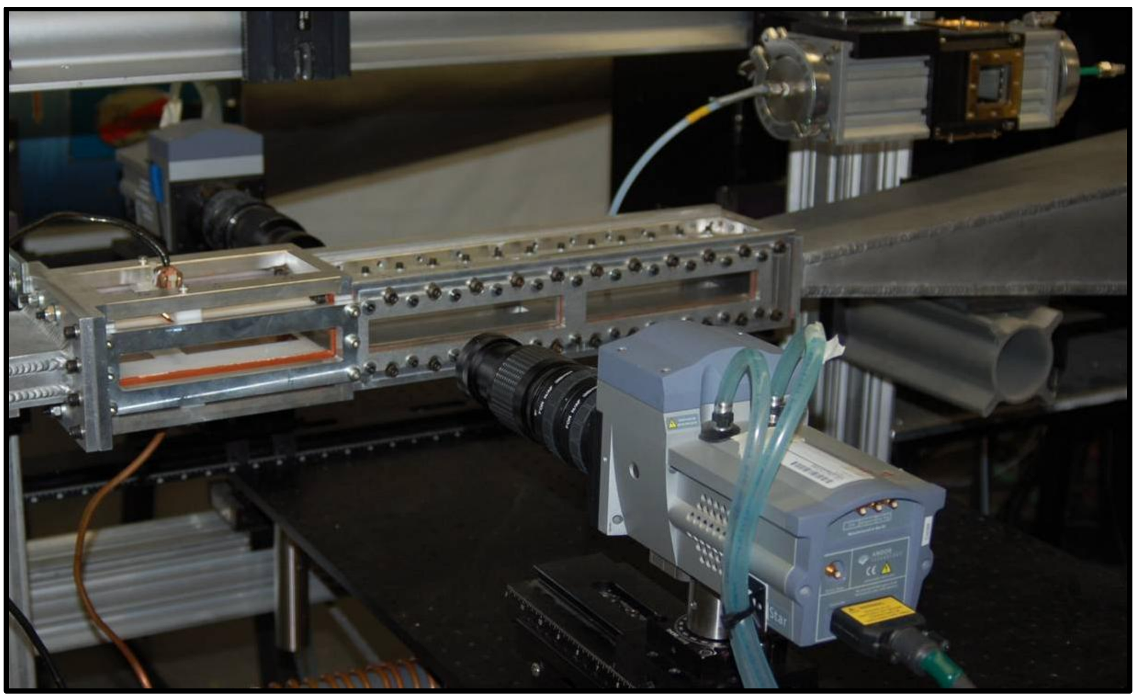


Fig. 3.17 PLIF setup

Broadband emission spectroscopy was used for species identification within the plasma discharge. The spectra were recorded using a fiber-optically coupled Oriel spectrometer (600 line/mm grating, 200-1100 nm range) directed towards the central region of the plasma discharge. The spectra showed an absence of NO and OH in flow, verifying that the plasma was not causing dissociation.[45]

Coherent anti-Stokes Raman spectroscopy (CARS) was performed with colleagues to measure point-wise N_2 and O_2 vibrational temperatures at the plasma discharge, and at multiple locations downstream. CARS is based on the mixing of two high-powered laser beams, resulting in a coherent beam at a new frequency. This coherent signal is recorded as the two pump beam frequencies are varied, resulting in a CARS spectrum, which is then compared to a theoretical spectrum. Normal Raman spectroscopy relies on collecting spontaneous emission where signal strength is limited by collection optics (solid angle). Due to its coherent nature, CARS signal is often many orders of magnitude greater than normal Raman scattering.[46] The CARS setup (including laser-beam paths) can be seen in Figure 3.18.

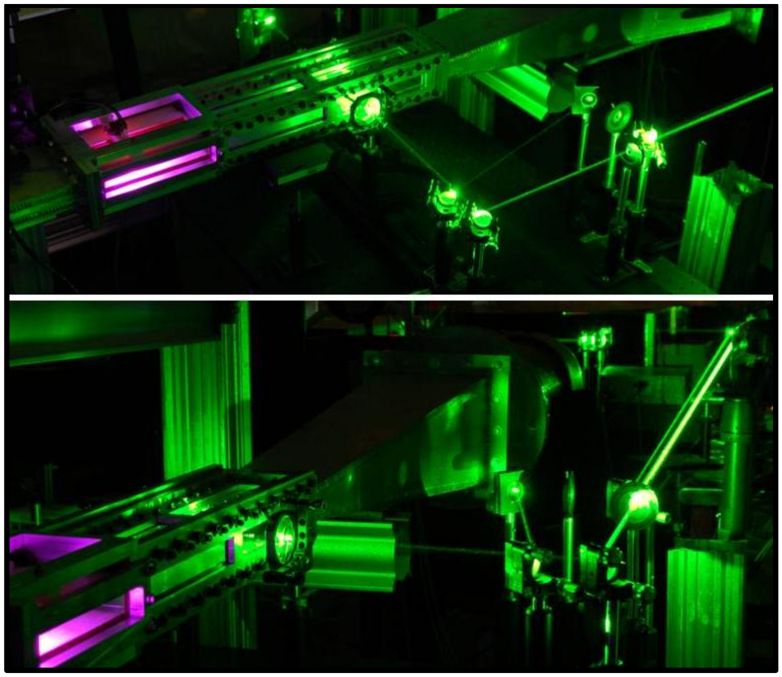


Fig. 3.18 CARS setup

CHAPTER IV

RESULTS AND DISCUSSION

The primary objective of this study was to provide improved understanding of the coupling between thermal non-equilibrium and the transport of turbulence. The fundamental scientific question this study set out to address was: “Does thermal non-equilibrium alter the basic decay rate of turbulence?” Other objectives of this study were: (1) construct a continuous-flow facility for experimentation, including implementation and testing of new technology and experimental systems for use in future research, and (2) build a high-resolution, statistically converged experimental database to facilitate model creation and validation.

In order to meet these objectives, the DMT wind-tunnel facility was designed and constructed. Novel technologies were successfully implemented and tested for use in the present study as well as future systems. Vibrational non-equilibrium was introduced utilizing an RF plasma system. A series of experiments was performed to investigate the effects of this non-equilibrium on the transport of turbulence. Over two terabytes of highly-resolved, statistically converged PIV data was recorded and archived which will facilitate model creation and validation, as well as spark further scientific examination. Section 4.1 presents DMT operating conditions and experimental parameters. Section 4.2 presents contour and profile plots of mean-flow measurements acquired with PIV. Section 4.3 presents contour and profile plots of turbulent statistics, also acquired with PIV. Section 4.4 presents temperature measurements collected using CARS. The results presented in the first four sections will be consolidated in Section 4.5 to provide a comprehensive analysis of the DMT flow field.

4.1 DMT Experiment

Preliminary PIV data (1,020 image pairs) was recorded in the Lexan test section (Section 2.4.2). Turbulence was generated with Grid #0 (Section 2.3, M = 0.245”, d = 0.075”). A schematic of the Lexan test section can be seen in Figure 4.1.

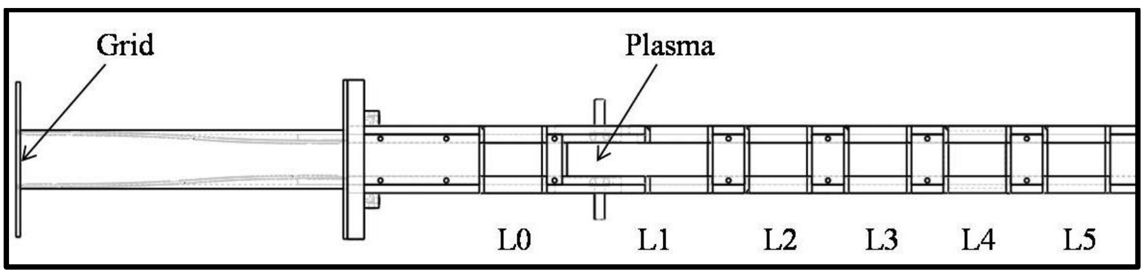


Fig. 4.1 Lexan test section schematic

Test section stagnation pressure was 30 Torr, and a flow velocity of 40 m/s was achieved at the test section entrance. These conditions resulted in a mesh Reynolds number of Re_M = 630. Preliminary data is presented in Appendix O. The origin of the axial measurements was the downwind face of each grid. The coordinates of the PIV measurement locations can be seen in Table 4.1.

Table 4.1 Lexan test section PIV measurement locations

	L0	L1	L2	L3	L4	L5
$x\ (in)$	15.0	20.0	23.0	26.0	29.0	32.0
x/M	61.22	81.63	93.88	106.12	118.37	130.61

The final measurements were taken in the Macor-aluminum test section (Section 2.4.3). Turbulence was generated using two different grids (see Section 2.3): Grid #1 (M = 0.60”, d = 0.2”) and Grid #2 (M = 0.30”, d = 0.1”). A schematic of the Macor-aluminum test section can be seen in Figure 4.2.

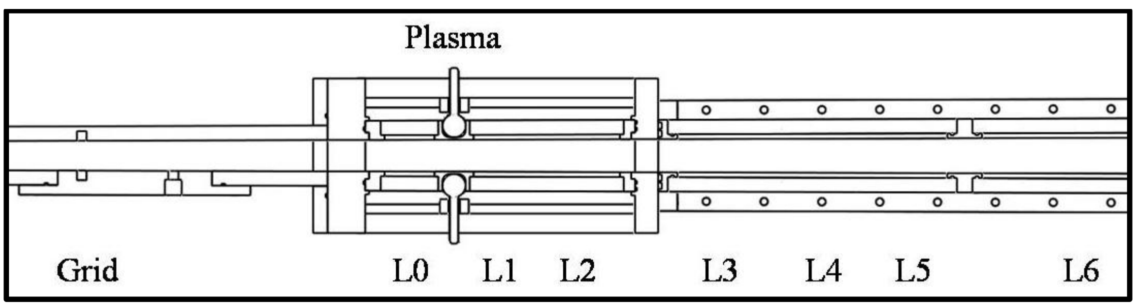


Fig. 4.2 Macor-aluminum test section schematic

The axial distance to the center of each PIV measurement location can be seen in Table 4.2.

Table 4.2 PIV measurement locations (center)

			L0	L1	L2	L3	L4	L5	L6
Grid	**M (in)**	$x\ (in)$	8.38	10.63	12.88	16.13	18.88	21.75	25.63
1	**0.60**	x/M	13.96	17.71	21.46	26.88	31.46	36.25	42.71
2	**0.30**	x/M	27.92	35.42	42.92	53.75	62.92	72.50	85.42

The axial coordinates to the center of each left and right PIV profile measurement location can be seen in Table 4.3 and Table 4.4, respectively.

Table 4.3 PIV measurement locations (left)

			L0	L1	L2	L3	L4	L5	L6
Grid	**M (in)**	$x\ (in)$	7.87	10.11	12.35	15.59	18.33	21.19	25.05
1	**0.60**	x/M	13.11	16.85	20.58	25.99	30.54	35.32	41.75
2	**0.30**	x/M	26.22	33.69	41.15	51.98	61.09	70.63	83.50

Table 4.4 PIV measurement locations (right)

			L0	L1	L2	L3	L4	L5	L6
Grid	**M (in)**	$x\ (in)$	8.88	11.14	13.40	16.66	19.42	22.31	26.20
1	**0.60**	x/M	14.81	18.57	22.34	27.76	32.37	37.18	43.67
2	**0.30**	x/M	29.61	37.14	44.68	55.52	64.74	74.37	87.34

The plasma discharge was located between L0 and L1 at an axial distance of 9.5" downwind of the grid. Test section stagnation pressure was 30 Torr. Velocities at the test section entrance were 26.6 m/s (Grid #1), 29.0 m/s (Grid #2), and 55.0 m/s (No Grid). These conditions resulted in mesh Reynolds numbers of Re_{M1} = 1,000 and Re_{M2} = 550. A large number of PIV image pairs (3,450) were recorded at each location with the exception of the equilibrated data sets, which consisted of 1,035 image pairs. A final correlation window size of 32x32 pixels resulted in a 99 x 74 vector field (7,326 total vectors). The spatial resolution ranged from one velocity-vector every 0.011" at L0 to one every 0.013" at L6. This range was due to wall divergence and the gradual decrease in magnification required downstream to capture both wall edges in the images. Profile plots of final data presented in the following sections will be denoted by their location in the data field (left, center, or right) along with the corresponding columns of the data (1-99) that were averaged to generate the profiles. The coordinate system origin was vertically shifted to the centerline for all profile data. This modified coordinate is denoted as Y^*. Note that the raw data origin is located at the upper left corner of each data field. The operating conditions for each case can be seen in Table 4.5.

Table 4.5: Operating conditions

Grid	U (m/s)	Re_M
0	40	630
1	27	1000
2	29	550
No Grid	55	-

4.2 Mean Flow Data

Measurements were made in the Macor-aluminum test section utilizing PIV. A contour plot and profile plot (40-60) of axial velocity ($\bar{u}$) and transverse velocity ($\bar{v}$) taken with no grid can be seen in Figures 4.3 and 4.4

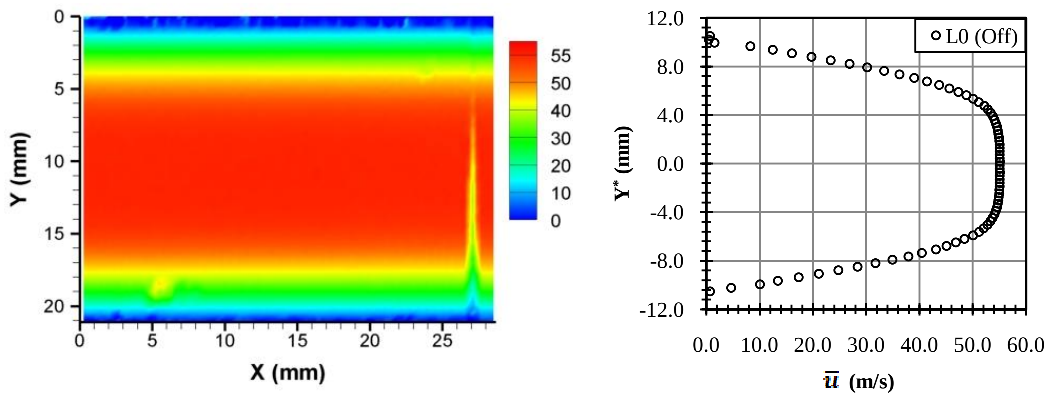


Fig. 4.3 L0 $\bar{u}$ contour (left) and profile plot (right); no grid

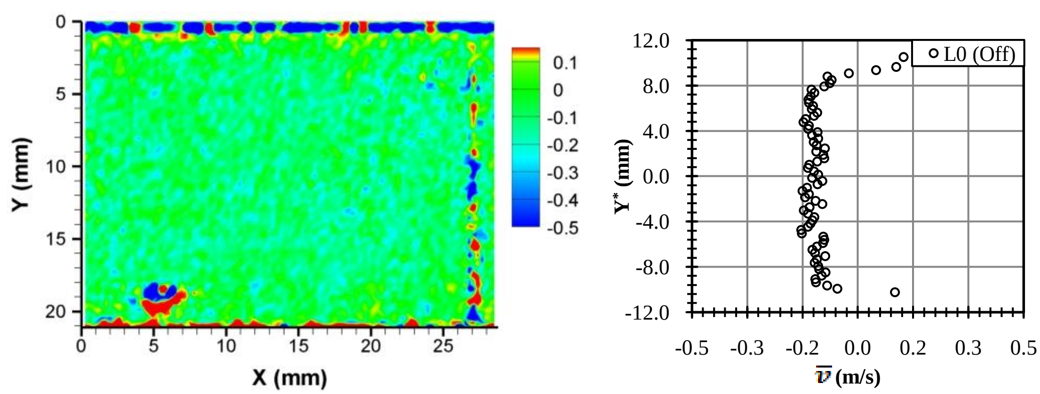


Fig. 4.4 L0 $\bar{v}$ contour (left) and profile plot (right); no grid

The no-grid measurements were taken to quantify background flow characteristics. The background turbulence levels can be seen in Section 4.3. As is evident in the profile plots above, the incoming flow is very uniform (symmetric). The vertical strip of erroneous data on the right side of the contour is a result of an array indexing error inherent in the processing, and is present in all data. The columns in this region were avoided when "right" profile averages were computed.

Data was recorded with each grid at all seven measurement locations with no plasma and plasma discharge powers of 150 and 300 Watts. The complete set of $\bar{u}$ and $\bar{v}$ contour plots can be seen in Appendices D and E, respectively. The complete set of $\bar{u}$ and $\bar{v}$ profile plots can be seen in Appendices I and J, respectively. The $\bar{v}$ data shows that the plasma has no effect on transverse velocities. However, a non-trivial effect on the axial mean velocities was observed. Grid #1 profile plots (center) of $\bar{u}$ at L0, L1 and L5 can be seen in Figures 4.5, 4.6, and 4.7.

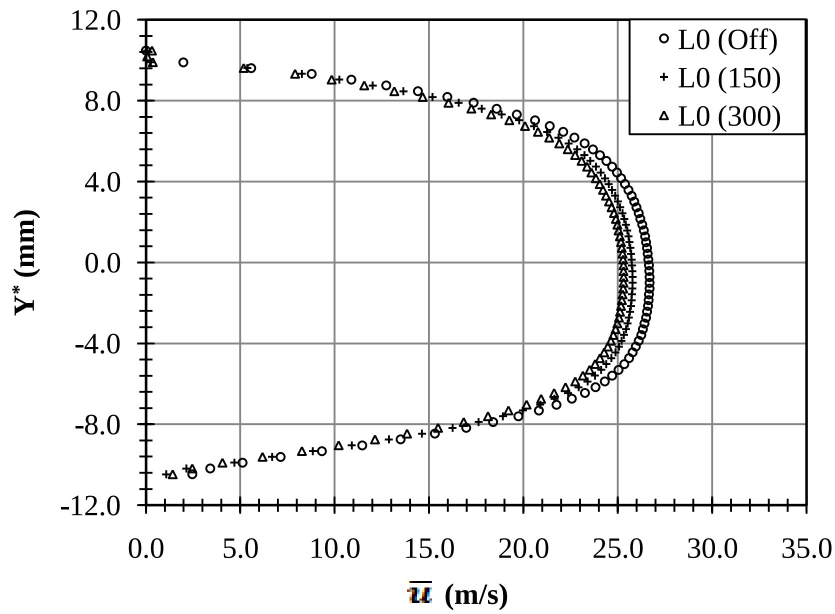


Fig. 4.5 $\overline{u}$, Grid #1, L0, Center (46-55)

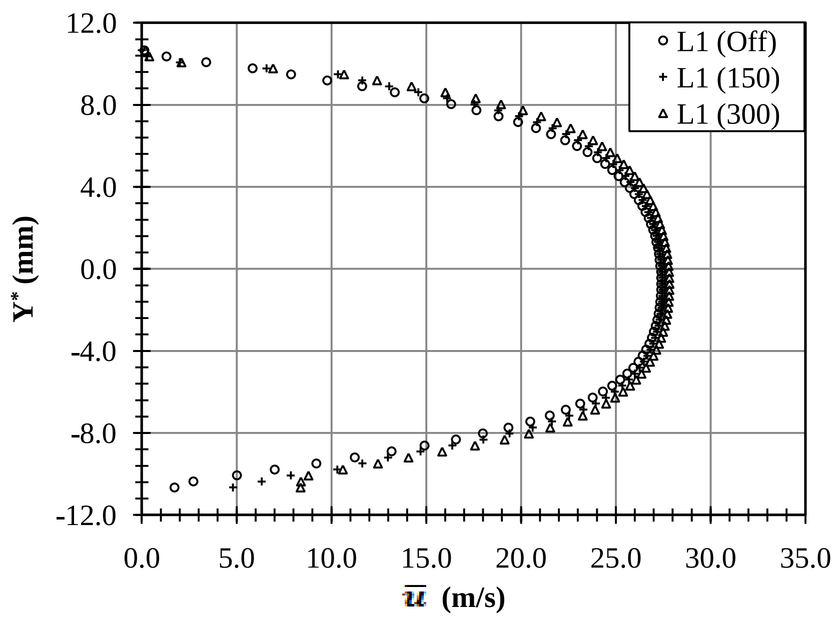


Fig. 4.6 $\overline{u}$, Grid #1, L1, Center (46-55)

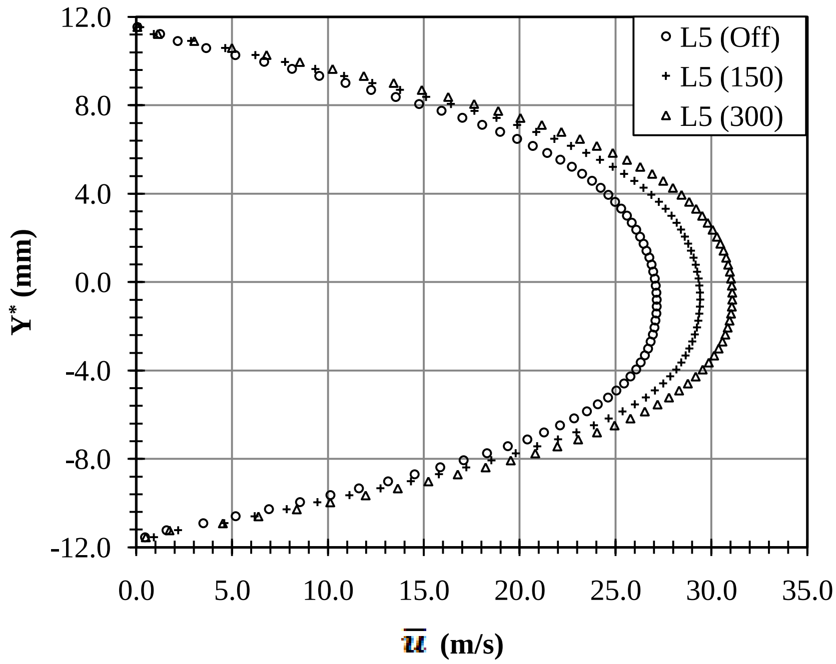


Fig. 4.7 $\overline{u}$, Grid #1, L5, Center (46-55)

The difference in axial velocity (plasma-off) at the first and last measurement locations is small compared to the acceleration seen in the Lexan test section (Appendix O). This can be directly attributed to the wall divergence designed to account for displacement thickness growth. The plasma-150 and plasma-300 cases, however, show acceleration with downstream distance. The data for all three cases collapse at L1-left. This acceleration can be attributed to a temperature increase from vibrational energy cascading into the translational modes, resulting in thicker boundary layers. The working fluid was re-generated via the seed injection air as it traveled around the circuit, with a non-trivial amount exiting the tunnel through the vacuum system. Therefore, the temperature increase cannot be attributed to raw bulk heating of the fluid from the plasma discharge alone. The main cause of the temperature rise was the transfer and storage of heat into the aluminum walls. This is the reason that these effects were observed initially in the boundary layers and not the free-stream (see Section 4.3). The data taken with Grid #2 shows the same trend, but the axial data is skewed across the centerline. This is a direct result of grid geometry and its effect on the wake-formation region just downstream of the grid. Grid #2 profile plots of $\bar{u}$ at L0, L1 and L5 can be seen in Figures 4.8, 4.9, and 4.10.

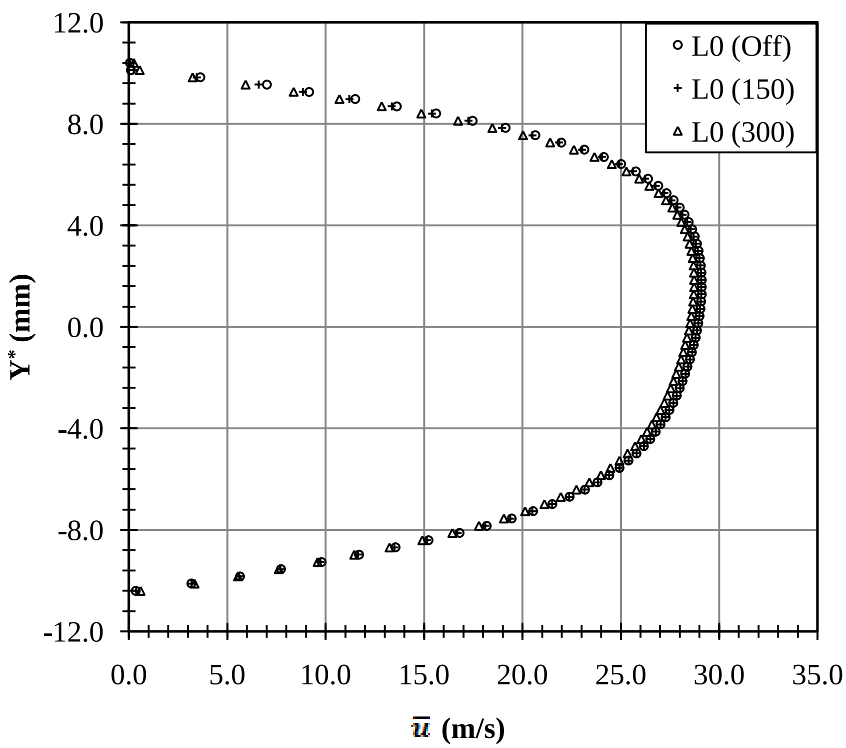


Fig. 4.8 $\bar{u}$, Grid #2, L0, Center (46-55)

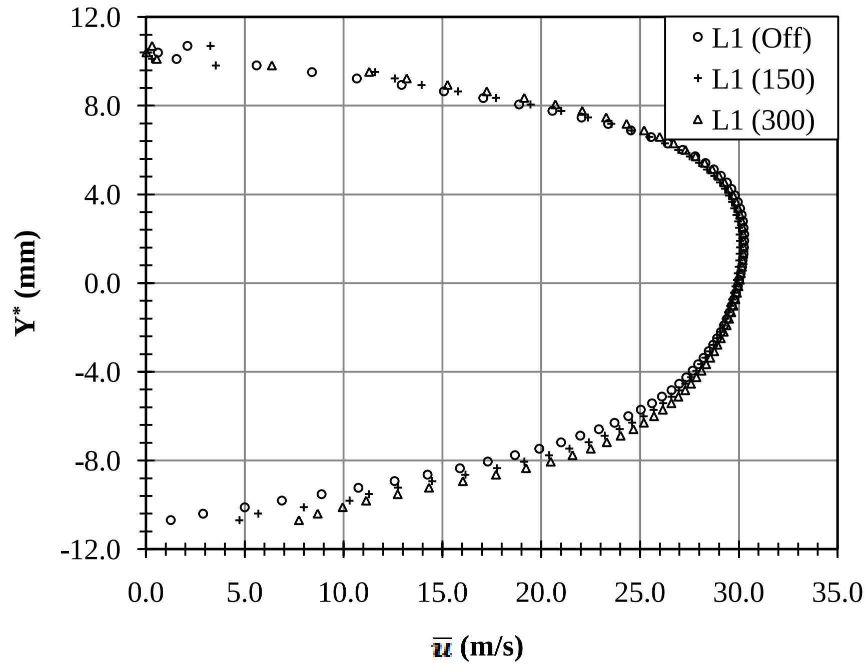


Fig. 4.9 $\overline{u}$, Grid #2, L1, Center (46-55)

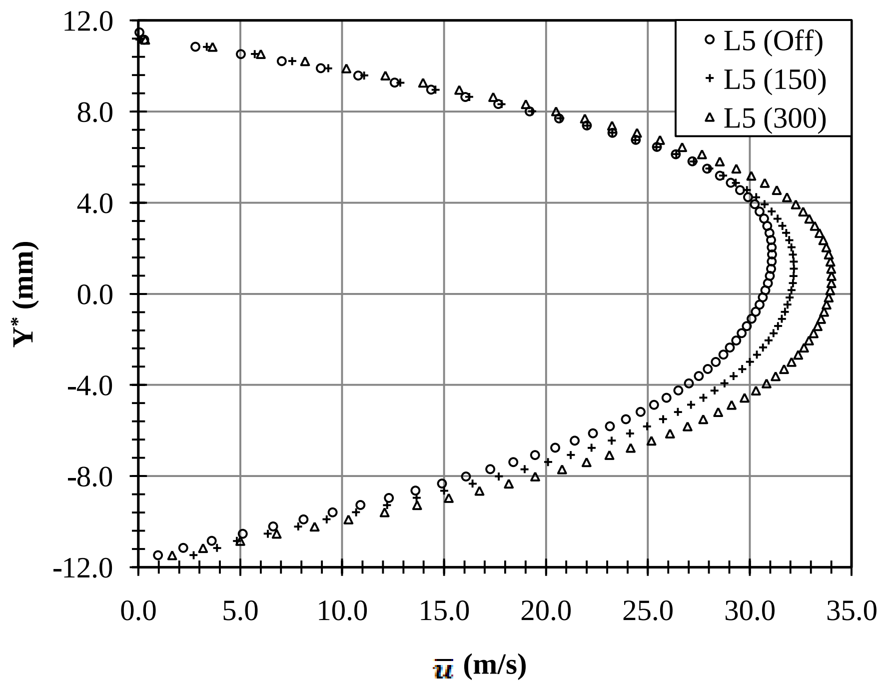


Fig. 4.10 $\overline{u}$, Grid #2, L5, Center (46-55)

The difference in axial velocity (plasma-off) at the first and last measurement locations is larger than the acceleration seen with Grid #1. The velocity magnitudes, in general, are also larger. This can be attributed to the smaller bar size (smaller pressure drop), which leads to lower turbulence energy levels and higher mean flow energy (velocity).

A trend plot was generated using the maximum Grid #1 axial velocities (U_∞) at each measurement location for each plasma setting. This plot can be seen in Figure 4.11.

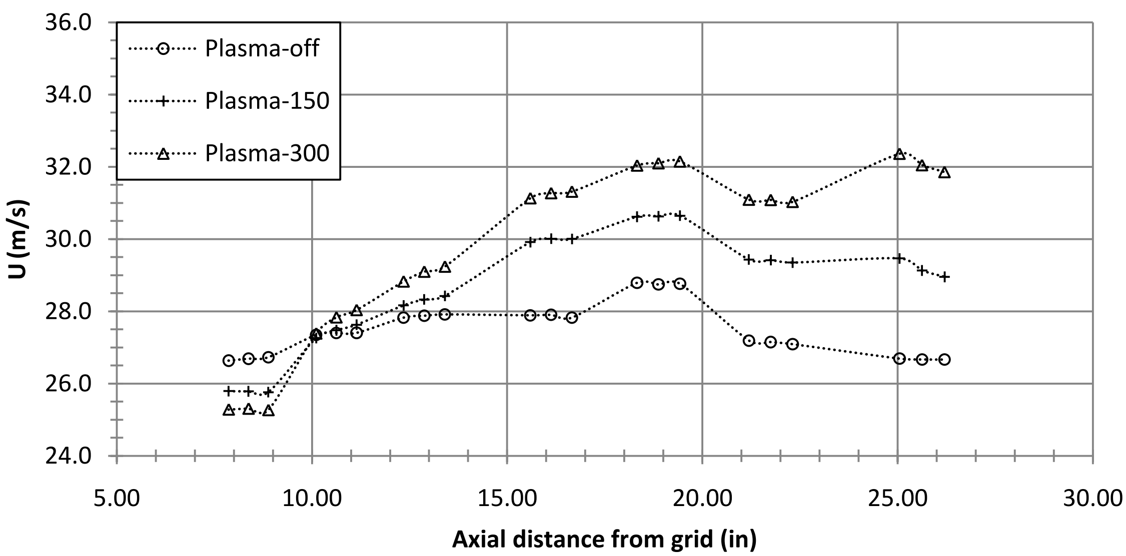


Fig. 4.11 Axial velocity trend plot

The accelerations for each case can clearly be seen. The offset in the trend at L4 can be attributed to a minor error in calibration, as the shift is consistent for all three cases.

The trend between measurement locations remains steady, with the axial velocity in plasma-150 and plasma-300 cases gradually accelerating, up until the end of L5 and especially L6. The data at this location cannot be properly compared to the upstream locations due to a large mean-flow structure. The structure can be seen in the transverse velocity contours shown in Figure 4.12.

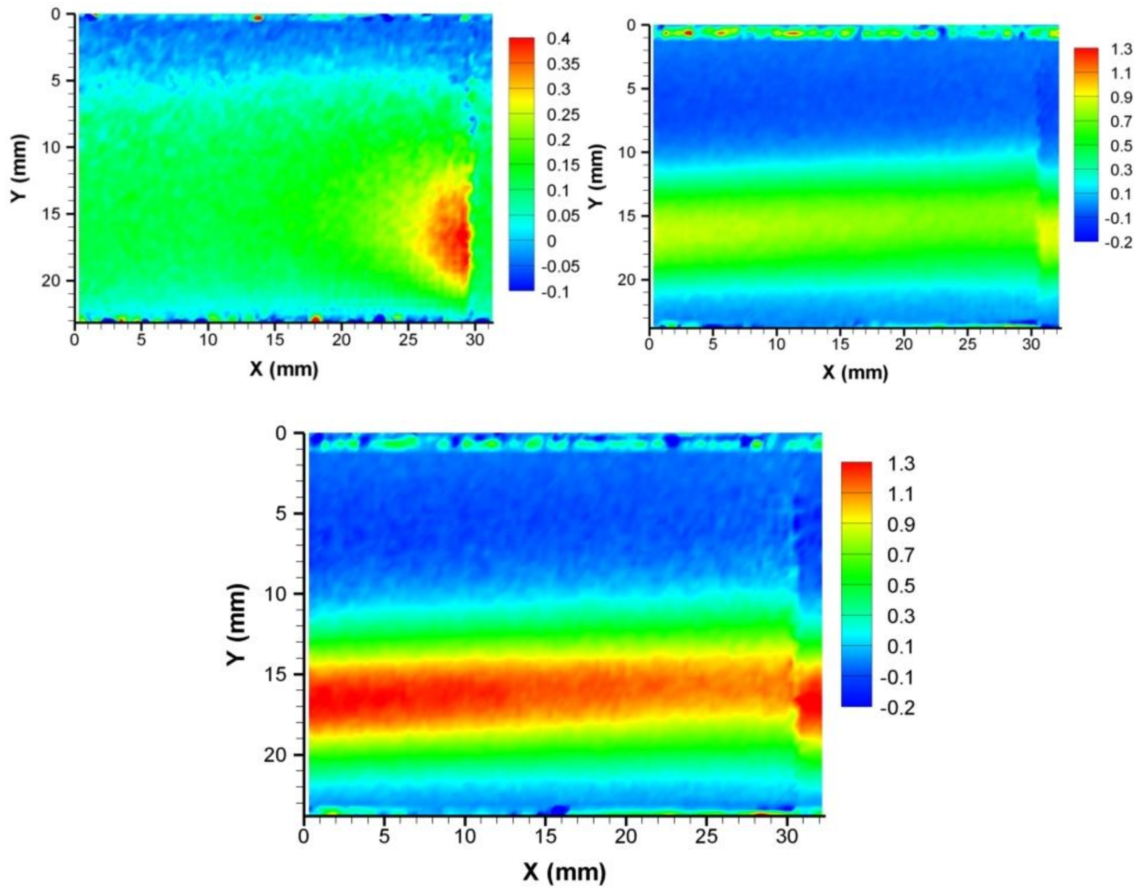


Fig. 4.12 $\bar{v}$ contours, Grid #1, L6

The structure is not present in the plasma-off case (top-left), begins to appear in the plasma-150 case (top-right), and is fully developed in the plasma-300 case. The structure is most likely an interaction between a small leak in the lower wall and the de-energized boundary layer. A profile plot of $\bar{v}$ at L6 is shown in Figure 4.13.

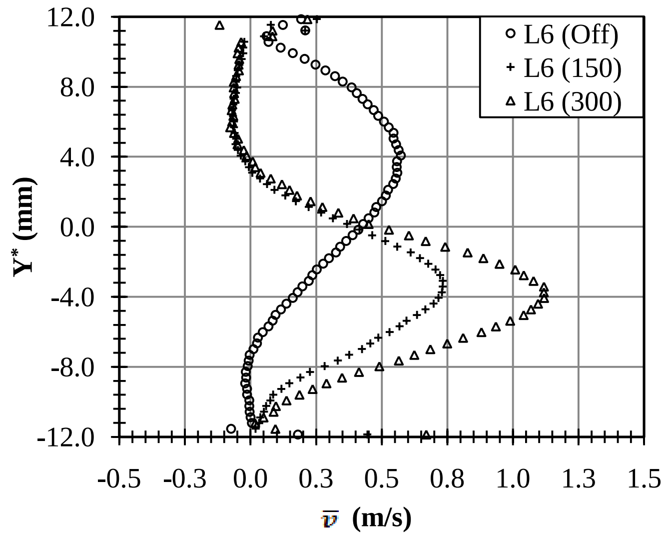


Fig. 4.13 $\overline{v}$ profile plot, Grid #1, L6, Right (71-80)

The minor effects of the leak can be seen in the L6 (Off) data. The turbulence intensities in the boundary layers at this downstream location are much lower for the plasma-on cases than at locations farther upstream (see Section 4.3). These weak boundary layers are very susceptible to separation. A minor leak from the bottom wall most likely provided enough perturbation to push the boundary layer off the wall. This effect was not as pronounced in the Grid #2 flow.

4.3 Turbulence Data

Turbulence measurements were made in the Macor-aluminum test section utilizing PIV. A profile plot (40-60) of fluctuating velocities ($\sqrt{\overline{u'u'}}/U_\infty$ and $\sqrt{\overline{v'v'}}/U_\infty$) taken with no grid can be seen in Figure 4.14.

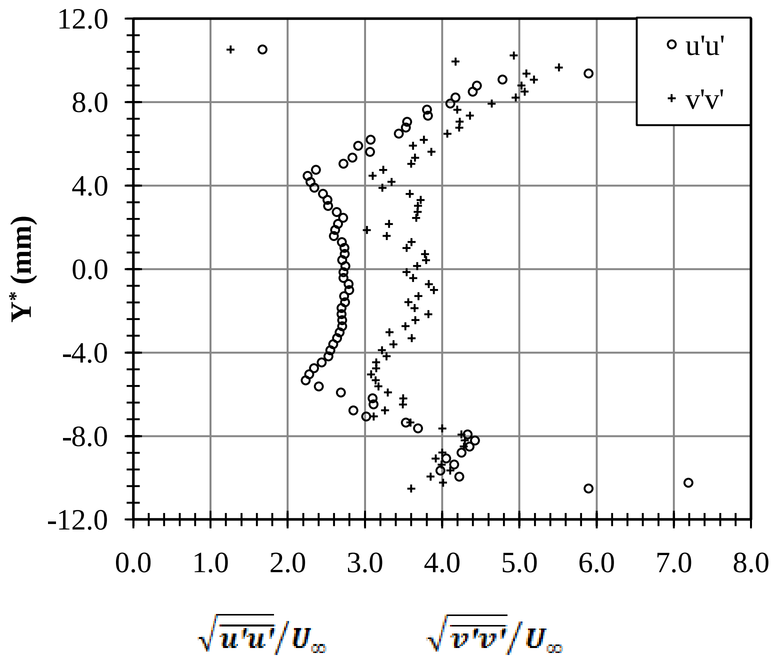


Fig. 4.14 Fluctuating velocity profiles, No Grid, L0, Center (40-60)

The no-grid measurements were taken to quantify background flow characteristics. The background turbulence levels were not trivial due to the absence of screens located upstream.

The flow entering the test section is nearly isotropic. The comparison between the axial and transverse fluctuating velocities can be seen in Figure 4.15.

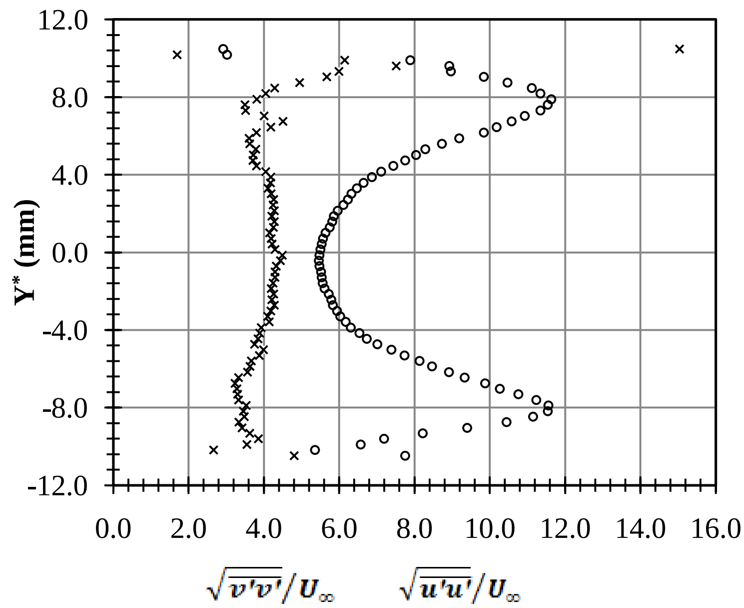


Fig. 4.15 Isotropy

Data was recorded with each grid at all seven measurement locations with plasma-off, plasma-150, and plasma-300. The complete set of $\overline{u'u'}$, $\overline{v'v'}$, and $\overline{u'v'}$ contour plots can be seen in Appendices F, G, and H, respectively. The complete set of $\sqrt{\overline{u'u'}}/U_\infty$, $\sqrt{\overline{v'v'}}/U_\infty$, and $\overline{u'v'}/{U_\infty}^2$ profile plots can be seen in Appendices K, L, and M, respectively.

The data shows that the plasma has no effect on transverse fluctuating velocities, which was expected based on the theory (no gradient of internal excitation in the transverse direction). On the other hand, the axial fluctuating velocities are affected. Grid #1 profile plots (center) of fluctuating velocities at L0, L1 and L5 can be seen in Figures 4.16, 4.17, and 4.18.

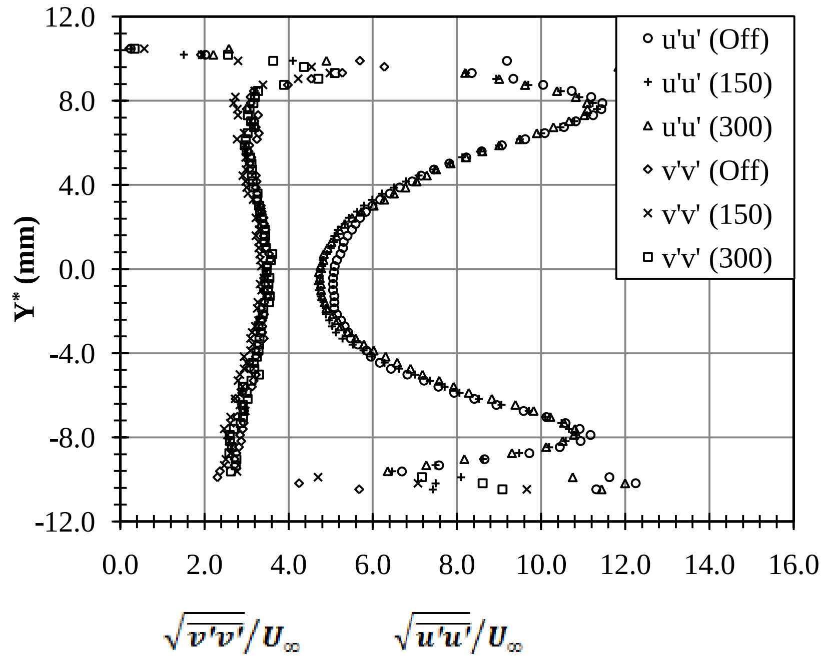


Fig. 4.16 Fluctuating velocity profiles, Grid #1, L0, Center (46-55)

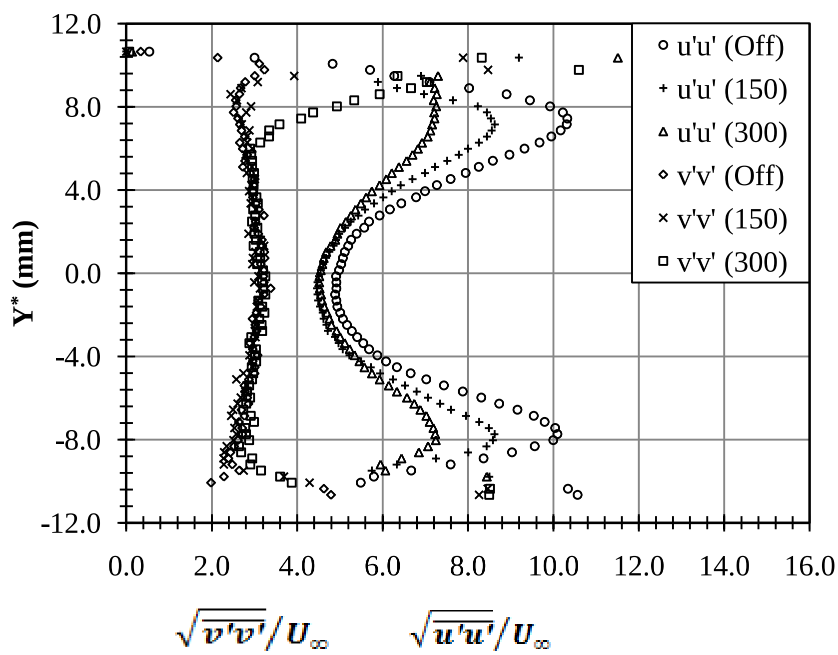


Fig. 4.17 Fluctuating velocity profiles, Grid #1, L1, Center (46-55)

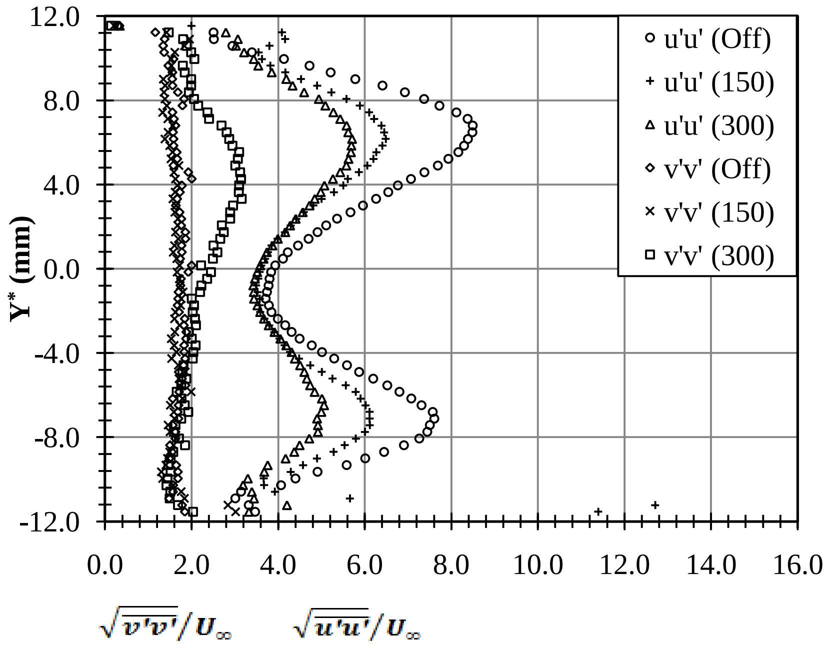


Fig. 4.18 Fluctuating velocity profiles, Grid #1, L5, Center (46-55)

The effect of the plasma on the axial turbulence intensity can clearly be seen. The increase in transverse fluctuating velocity (centered at Y^* = 4.0 mm) for the Plasma-300 case at L5 (Fig. 4.18) is a result of the separation structure (see Section 4.2). The turbulence in the boundary layers was reduced by an increasingly large amount for Plasma-150 and Plasma-300. The free-stream turbulence intensity was not affected, in general, for the non-equilibrated cases. However, the free-stream turbulence intensity is also reduced (along with further reduction in the boundary layer intensity) in the equilibrated case. A profile plot (center) of fluctuating velocities at L5 with Grid #1 under equilibrated conditions can be seen in Figure 4.19.

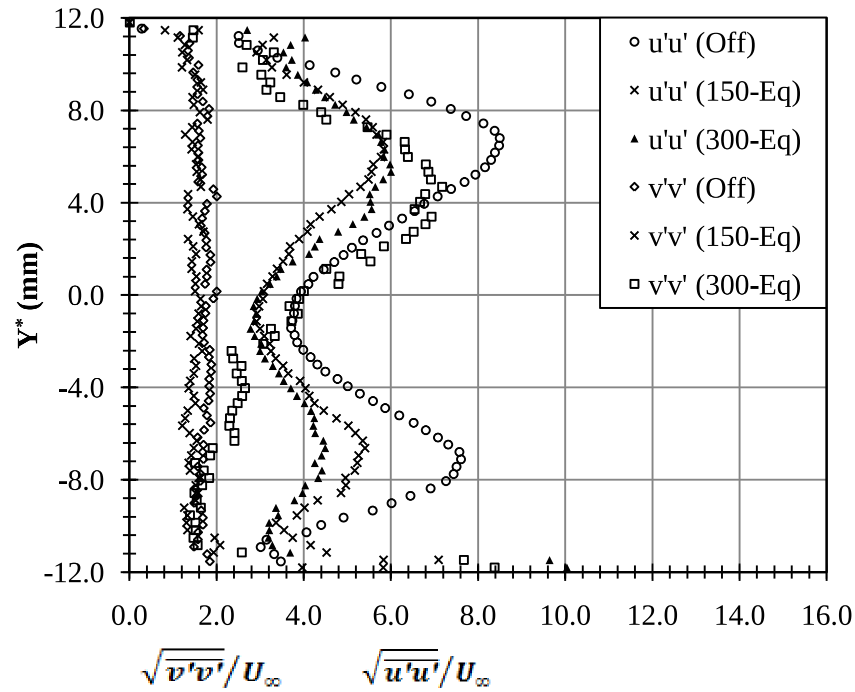


Fig. 4.19 Fluctuating velocity profiles, Grid #1, L5, Center (46-55), Equilibrated

As was mentioned in the previous section, this disparity between equilibrated and non-equilibrated results is due to heat transfer from the walls. The bulk of the PIV data was recorded during 30 second bursts of plasma operation. The plasma was then turned off (while the fan continued to run) for roughly 3 minutes while the recorded images were transferred to the computer hard drive from camera RAM. The equilibrated data was recorded to explore the effects of this timing on the flow by continuously operating the plasma discharge, allowing the flow translational temperatures to reach equilibrium. It is clear from the data that the aluminum walls were absorbing heat generated by the plasma discharge. In turn, this heat was then being absorbed by the relatively cold flow until equilibrium was reached. This is reflected in the non-equilibrated L5 profile plot

(Figure 4.18), where the free-stream turbulence is not reduced for the plasma-150 and plasma-300 cases; but there is reduction in the equilibrated case (Figure 4.19). The effect from the separated structure on the transverse fluctuating velocity (Plasma-300) is also enhanced.

The presence of thermal effects serves to mask the relaxation effects. Trend plots for axial fluctuating velocities were generated. Figure 4.20 presents the trend for the maximum value in the boundary layer. Figure 4.21 presents the trend for the minimum value in the free-stream.

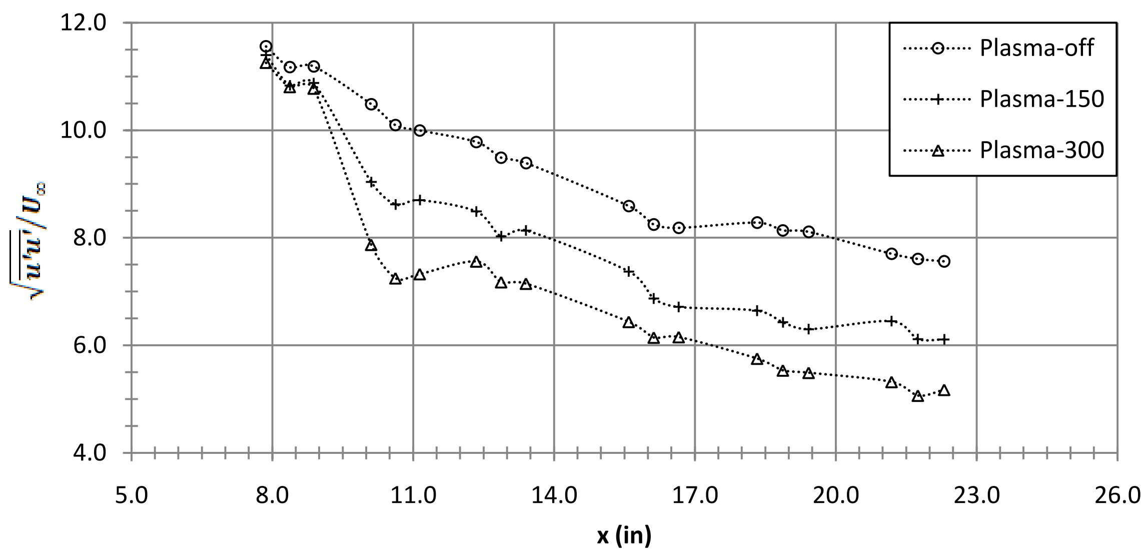


Fig. 4.20 Grid #1 boundary-layer axial fluctuating velocity trend plot

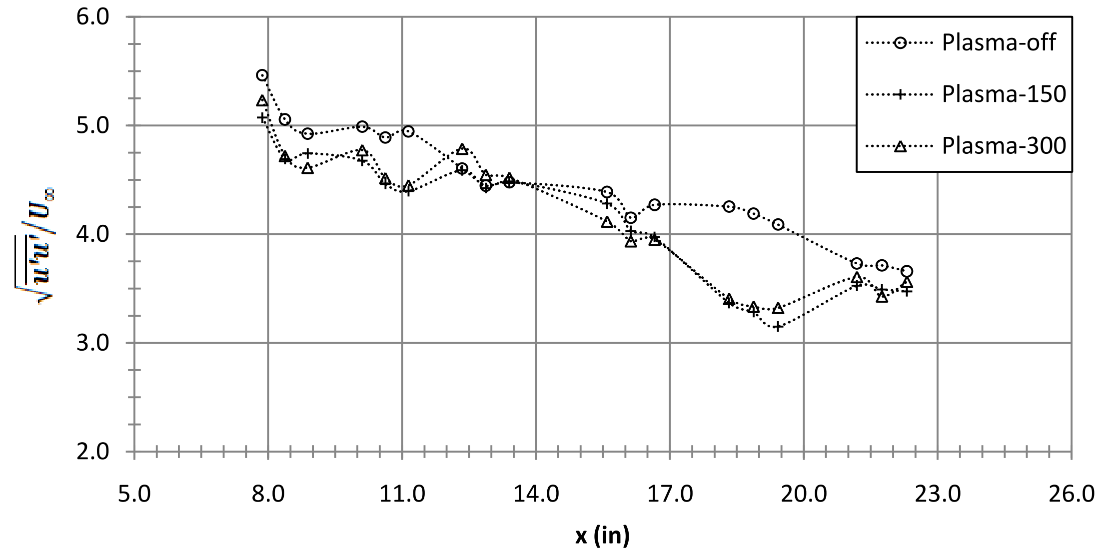


Fig. 4.21 Grid #1 free-stream axial fluctuating velocity trend plot

These trend plots show the resulting reduction in turbulence intensity caused by the convergence effect from displacement thickness growth due to translational temperature rise.

4.4 Temperature Data

Temperature measurements are important in order to definitively separate internal (vibrational) non-equilibrium effects from external (translational) effects. The CARS measurements were carried out and post-processed by Rodrigo Sanches-Gonzalez and Jacob Dean. The original goal was to employ simultaneous combined PIV-PLIF in order to acquire correlated velocity and temperature fields. However, ignition of the plasma discharge rendered the PLIF hardware inoperable (see Section 2.5) at the time. Temperature measurements were taken not directly correlated to the PIV measurements.

The PIV measurements were recorded during a 30 second span, after which the plasma would be turned off for roughly 3 minutes during data transfer from the camera to the computer. The CARS measurements, on the other hand, were recorded over a longer plasma operation time span. Figure 4.22 presents CARS vibrational temperature measurements.

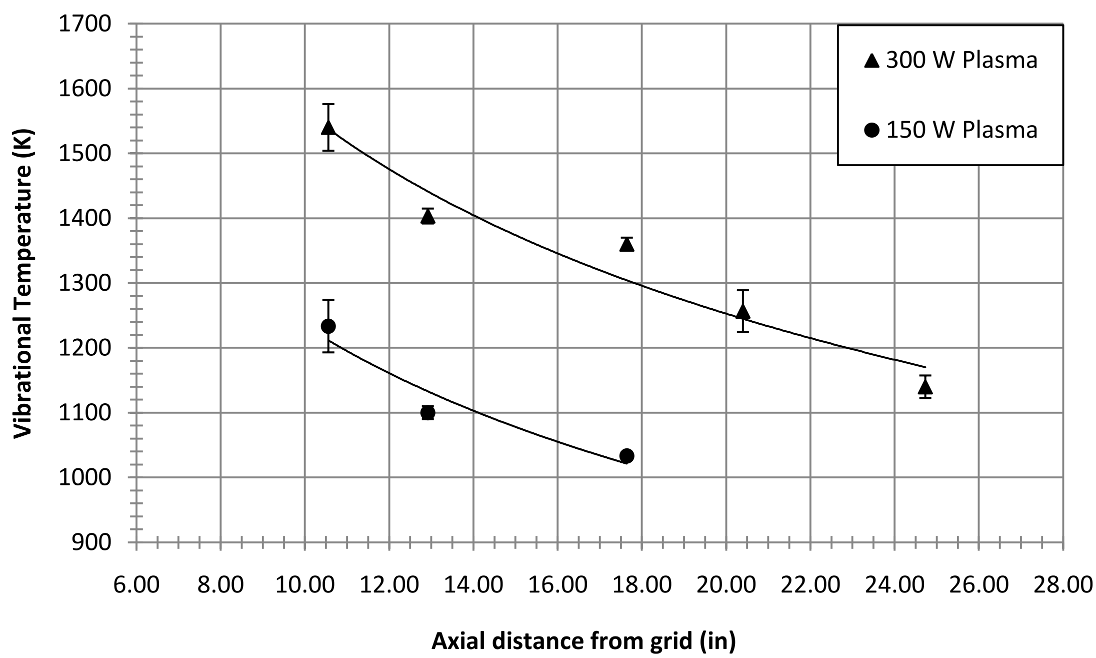


Fig. 4.22 CARS measurements (vibrational temperatures)

The decay of vibrational excitation can be seen in Figure 4.22. As the vibrational temperature decays, the energy cascades into translational modes, increasing the temperature of the fluid. PLIF measurements are currently under way by colleagues. Preliminary data reveal a translational temperature rise of ~40 K for the Plasma-300 case.

4.5 Discussion

The primary objective was to gain insight into the turbulent transport processes of a decaying mesh turbulent flow field with vibrational non-equilibrium. The scientific question this study was intended to answer is "Does thermal non-equilibrium alter the decay rate of turbulence?" When combining all results presented above, it is clear that the answer is "Yes."

The transport equations listed in Section 1.2 provide an explanation for the observed coupling between the axial turbulence and the plasma-induced vibrational non-equilibrium. To reiterate, the rise and decay of the vibrational energy through and downstream of the plasma results in an increase in internal energy variance and internal energy flux through the production terms (boxed) in the following equations:

$$\frac{D\vartheta_{(n)x}^{T(in)}}{Dt}=\boxed{\tilde{Y}_{(n)}\tau_{xx}^{T}\tilde{e}_{(n),x}^{(in)}}+\rho_{(n)}\overline{q_{(n)}^{\prime\prime(in)}u_x^{\prime\prime}}-\frac{\tilde{Y}_{(n)}\tilde{R}_{(h)}}{\tilde{C}_{v(h)}^{(tr)}}\rho_{(n)}\overline{e_{(h)}^{\prime\prime(ex)}e_{(n),x}^{\prime\prime(in)}}$$

$$\frac{D\frac{1}{2}\bar{\rho}_{(h)}\overline{e_{(n)}^{\prime\prime(in)2}}}{Dt}=\boxed{-\vartheta_{(n)k}^{(in)T}\tilde{e}_{(n),k}^{(in)}}+\rho_{(n)}\overline{q_{(n)}^{\prime\prime(in)}e_{(n)}^{\prime\prime(in)}}+\rho_{(n)}\chi_{(n)}$$

This energy cascades into the heavy particle translational energy variance and energy flux through the molecular exchange terms (boxed) in the following equations:

$$\frac{D\vartheta_{(h)x}^{T(ex)}}{Dt}\approx-\frac{1}{2}\frac{\tilde{R}}{\tilde{C}_{v}^{(tr)}}\rho_{(h)}(\overline{e_{(h)}^{\prime\prime(ex)2}})_{,x}+\boxed{\rho_{(h)}\overline{q_{(h)}^{\prime\prime(ex)}u_x^{\prime\prime}}}$$

$$\frac{D\frac{1}{2}\bar{\rho}_{(h)}\overline{e''^{(ex)2}_{(h)}}}{Dt} = \boxed{\rho_{(h)}\overline{q''^{(ex)}_{(h)}e''^{(in)}_{(h)}}} + \rho_{(h)}\chi_{(h)}$$

Finally, the turbulent kinetic energy is coupled via the last term (boxed) in the following equation:

$$\frac{D\bar{\rho}k^{T}}{Dt} \approx -\rho\varepsilon - \boxed{\frac{\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\frac{\partial\vartheta^{T}_{(h)x}}{\partial x}}$$

The axial gradient in axial heavy particle energy flux (boxed below) acts as a source for the axial turbulence normal stress:

$$\frac{D\tau^{T}_{(h)xx}}{Dt} = -\frac{2\tilde{R}_{(h)}}{\tilde{C}^{(tr)}_{v(h)}}\overline{\rho e''^{(ex)}_{(h)}u''_{,x}} + \frac{2\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\boxed{\vartheta^{T(ex)}_{(h)x,x}} + \bar{\rho}\varepsilon_{xx}$$

On the other hand, there is no transverse gradient in transverse heavy particle energy flux (crossed below); i.e., the plasma discharge is uniform across the flow between the upper and lower walls.

$$\frac{D\tau^{T}_{(h)yy}}{Dt} = -\frac{2\tilde{R}_{(h)}}{\tilde{C}^{(tr)}_{v(h)}}\overline{\rho e''^{(ex)}_{(h)} v''_{,y}} + \frac{2\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\cancel{\vartheta^{T(ex)}_{(h)y,y}} + \bar{\rho}\varepsilon_{yy}$$

The above mechanism would suggest minimal changes in the transverse stress as the transverse gradients were minimal. This is verified in the preliminary data (Appendix O) as well as the turbulent statistical data recorded with Grids #1 and #2. Figure 4.23 presents fluctuating velocities at L1 for Grid #1.

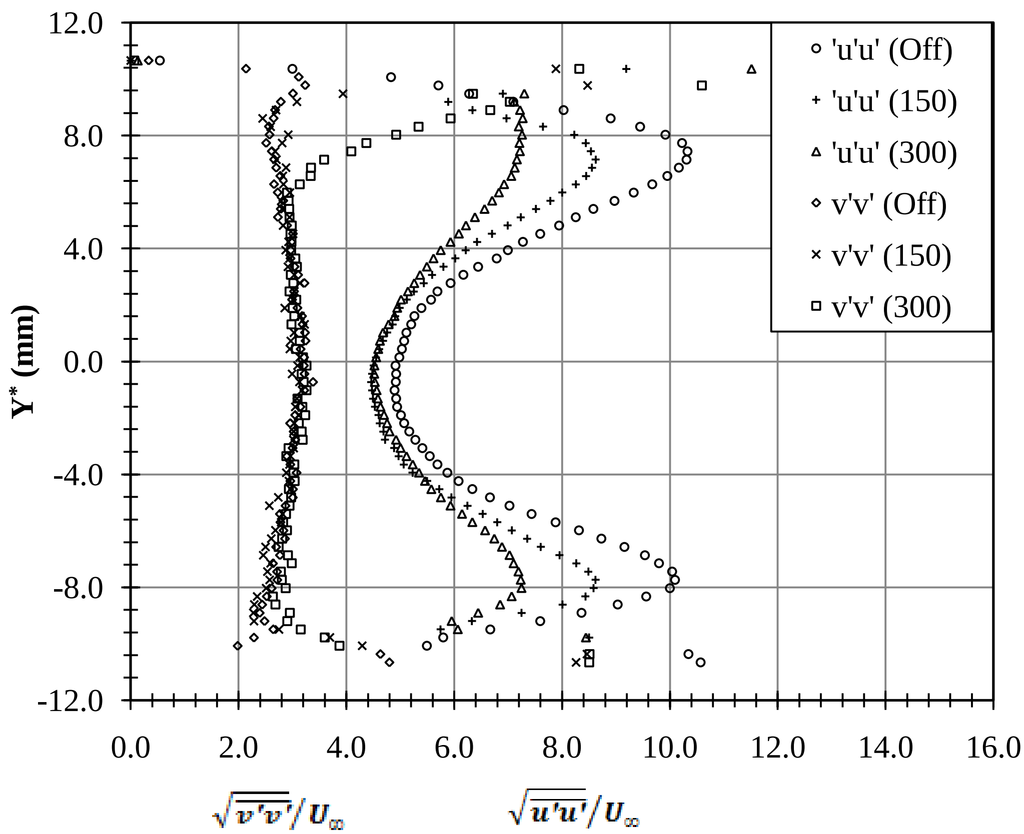


Fig. 4.23 Fluctuating velocities, Grid #1, L1

In addition, the minimal changes also suggest that the energy scrambling term was small and unaffected by the plasma. Furthermore, it is logical to assume that the fluctuating energy dilatation ($\overline{e''^{(ex)}_{(h)} u''_{i,i}}$) is zero, which is the case for incompressible flow. It is also logical to assume that the span-wise energy scrambling term is small and unaffected by the plasma for the same reasons as for the transverse term. Therefore, it is reasonable to assume that the scrambling term in the axial equation is also very small. This suggests then, that for the present flows, these first terms on the right-hand-side of the equations below (Equations 1.1 and 1.2) are negligible, which simplifies modeling:

$$\frac{D\tau^{T}_{(h)xx}}{Dt} = -\cancel{\frac{2\tilde{R}_{(h)}}{\tilde{C}^{(tr)}_{v(h)}}\overline{\rho e''^{(ex)}_{(h)} u''_{,x}}} + \frac{2\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\vartheta^{T(ex)}_{(h)x,x} + \bar{\rho}\varepsilon_{xx}$$

$$\frac{D\tau^{T}_{(h)yy}}{Dt} = -\cancel{\frac{2\tilde{R}_{(h)}}{\tilde{C}^{(tr)}_{v(h)}}\overline{\rho e''^{(ex)}_{(h)} v''_{,y}}} + \frac{2\tilde{R}_{(h)}}{\tilde{C}^{(ex)}_{v(h)}}\vartheta^{T(ex)}_{(h)y,y} + \bar{\rho}\varepsilon_{yy}$$

In order to properly assess the effect of thermal non-equilibrium on the decay of grid-generated turbulence, the turbulent kinetic energy (TKE or k^T) must be analyzed. This value was computed using the following equation:

$$k^T = \left(\frac{1}{2}\right)\left(\overline{u'u'} + \overline{v'v'}\right)$$

A trend plot was generated for Grid #1 using the centerline free-stream values of k^T for each case. The values at L0 (upstream of the plasma discharge) were not included, as they incorrectly weight the plasma-on cases. Locations L4 and L6 were not included due to consistent scatter of the data at these locations for all cases. The values were normalized by the initial TKE value for each case (k_o^T). The resulting trend plot is presented in Figure 4.24.

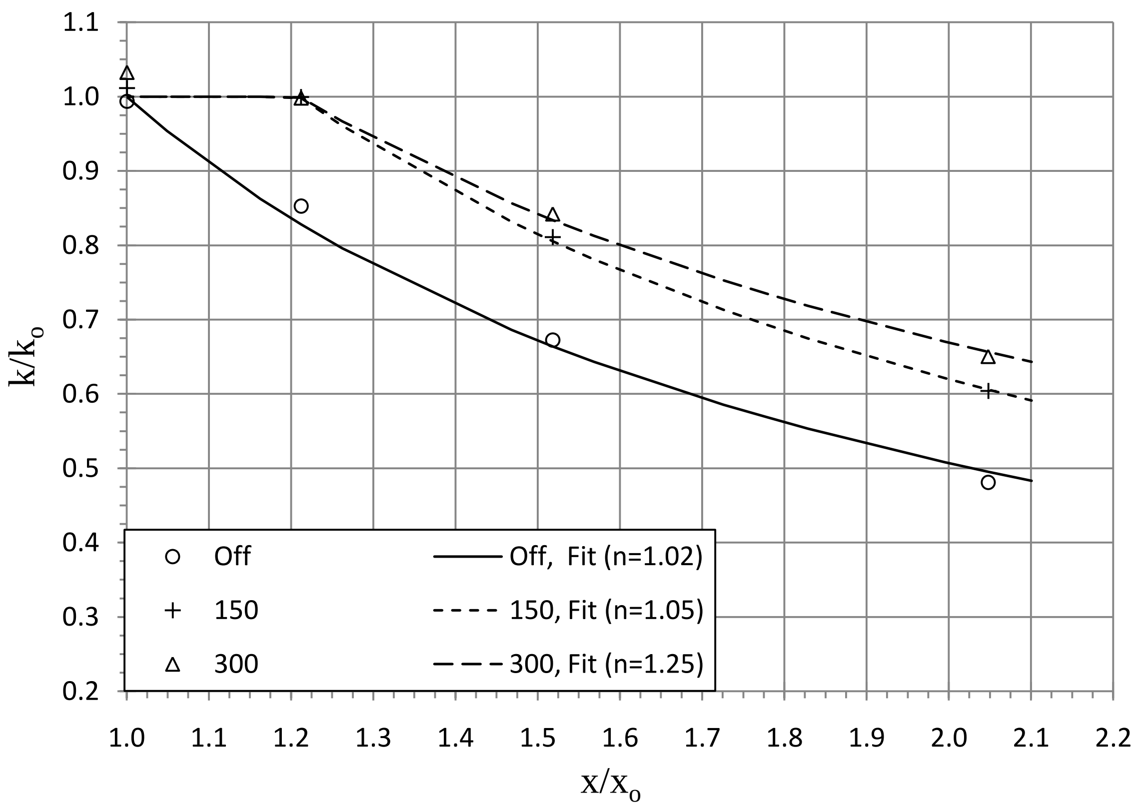


Fig. 4.24 TKE decay

In general, the decay of grid-generated TKE follows a power law. Because of this, power-law curves were fit to the data, resulting in the following relation:

$$\frac{k}{k_o} = \left(\frac{x}{x_o}\right)^{\left(\frac{-1}{n}\right)}$$

The decay of for each plasma-on case is delayed, as is evident by the ~20% spatial shift of the Plasma-150 and Plasma-300 curves downstream. The value of the exponent (*n*) is an indication of the decay rate. The decay rate for the plasma-150 case was not noticeably affected. On the other hand, a non-trivial reduction in the decay rate for the plasma-300 case was observed. This can be seen by the increase in *n* by roughly 30% (Figure 4.24) for this case. This was the expected result based on the theoretical framework presented in Section 1.2. The proposed energy cascade mechanism facilitates the conversion of stored vibrational energy into translational energy, thus delaying dissipation of translational energy into heat.

CHAPTER V

CONCLUSIONS

5.1 Summary

The technical feasibility of hypersonic flight (i.e., re-entry, hypersonic flight vehicles, cruise missiles, etc.) hinges on our ability to understand, predict, and control the transport of turbulence in the presence of non-equilibrium effects. A theoretical analysis of the governing equations suggests a mechanism by which fluctuations in internal energy are coupled to the transport of turbulence. Numerical studies of these flows have been conducted, but limited computational power results in reduced fidelity. Experimental studies are exceedingly rare and, consequently, experimental data available to build and evaluate turbulence models is nearly non-existent. The primary objective of this study was to answer the fundamental scientific question: "Does thermal non-equilibrium alter the decay rate of turbulence?"

In order to meet this objective, a mathematical framework (including low-order models) to predict the interactions was developed. The Decaying Mesh Turbulence (DMT) facility was designed and constructed to generate a fundamental decaying mesh turbulent flow field with passive grids. Vibrational non-equilibrium was achieved via a capacitively-coupled radio-frequency (RF) plasma discharge which required an operating pressure of 30 Torr. The flow velocity was ~30 m/s. Data was recorded with each grid at multiple plasma powers (Off, 150 W, and 300 W). High-resolution, statistically converged (3,450 image pairs) two-dimensional particle image velocimetry

(PIV) was utilized to resolve velocity fields. Temperature measurements were carried out using coherent anti-Stokes Raman spectroscopy (CARS).

The results of this study show that the answer to the fundamental question is "Yes." The following basic turbulence transport conclusions were drawn:

- Thermal non-equilibrium coupled strongly to the rate of the turbulence decay. The trends observed agree with those expected based on an analysis of the Reynolds stress transport equations, which provides confidence in transport equation-based modeling.

- A non-trivial reduction in the decay rate downstream of the 300 W plasma discharge was observed. The Townsend exponent[48,49] was found to increase by over 30%.

- An axial shift (~20% of x/x_o) of the onset of the decay for both the 150 W and 300 W cases was observed.

- The thermal coupling was confined to the axial turbulent stress component, which agreed with the expected trend from theory.

- The data indicated that the energy dilatation terms were negligible, which simplifies model formulations.

Another objective of this work was the implementation and testing of novel technologies and experimental systems for use in future research. The RF system was successful designed and deployed in the DMT facility and plans are in place to transplant the entire system into a sister hypersonic experiment.

The third objective of this work was to build an experimental database to facilitate model creation and validation. This objective was accomplished as over two terabytes of highly-resolved, statistically converged PIV data was acquired and archived. The comprehensive set of profile-averaged data is presented in full in Appendix N.

5.2 Recommendations

The results of this study show a clear coupling between thermal non-equilibrium and turbulence transport. However, there is room to further improve our understanding of the coupling mechanisms involved. First and foremost, there is opportunity to explore the effects of thermal non-equilibrium on the decay of turbulence within the boundary-layer. The data recorded in this study is readily available to perform such an analysis.

Also, it is very important to supplement these results with instantaneous, non-intrusive temperature measurements. A dedicated area should be designed and constructed with the sole purpose of RF plasma ignition. Proper grounding of the RF system should be employed to correctly isolate the system and diminish RFI. Diagnostic equipment should be designed to shield RFI, or should be manually shielded and placed at locations sufficient to reduce RFI. PLIF and combined PLIF-PIV should be employed to measure velocity-temperature correlation moments to definitively separate the effects of thermal non-equilibrium from mechanical effects.

The plasma discharge spanned 75% of the DMT test section. It is recommended that future users attempt to ignite a full-span plasma discharge. This could possibly be accomplished by extending the ends of the electrodes outside of the test chamber, effectively removing end-effects from the discharge area.

Variable ratios of turbulence energy to plasma power should be explored. It is essential to be able to more accurately select turbulence intensity levels via different grid sizes. For example, this could be accomplished in the DMT by installing a series of fine-mesh grids which would largely reduce all background turbulence generated upstream. It is possible that as the turbulence levels are decreased, the effects of vibrational non-equilibrium will begin to play a larger role. On the other hand, higher plasma powers should also be coupled with high turbulence levels.

It would also be valuable to explore the effects of thermal non-equilibrium in different turbulent flow-fields. The geometries involved in the DMT facility test section result in mechanical wall-effects (boundary-layer growth) that accelerate the reduction of turbulence intensities downstream. These factors complicate isolation of the effects of thermal non-equilibrium on the transport of turbulence.

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APPENDIX A

SOFTWARE PARAMETERS

CamWare Settings

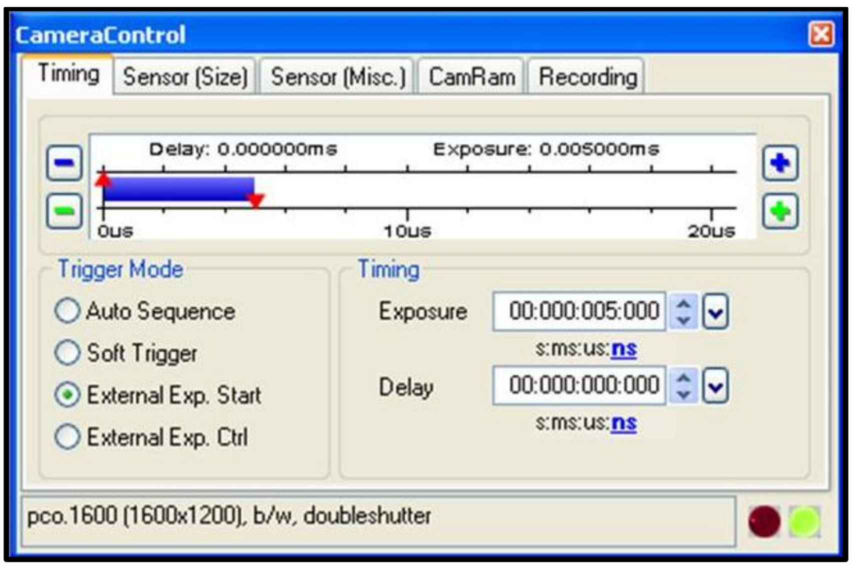

Fig. A-1 CamWare camera control timing

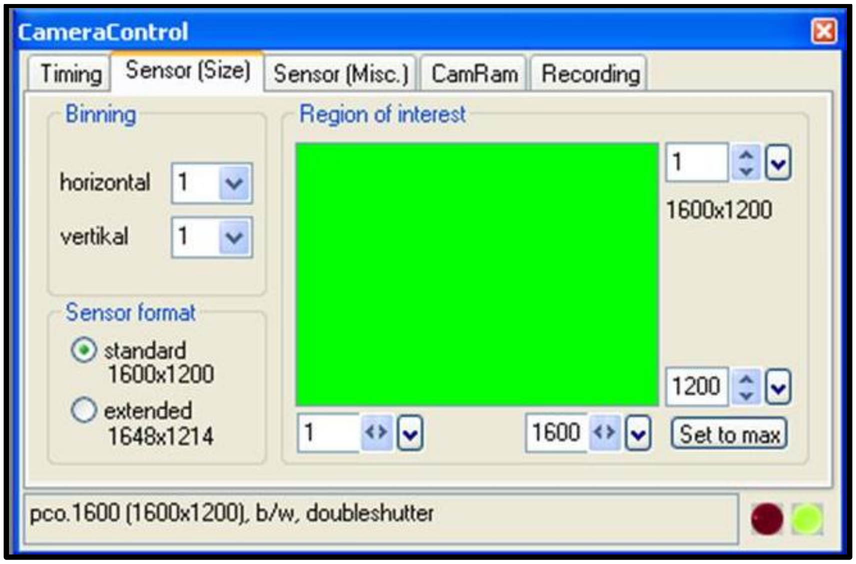

Fig. A-2 CamWare camera control sensor (size) settings

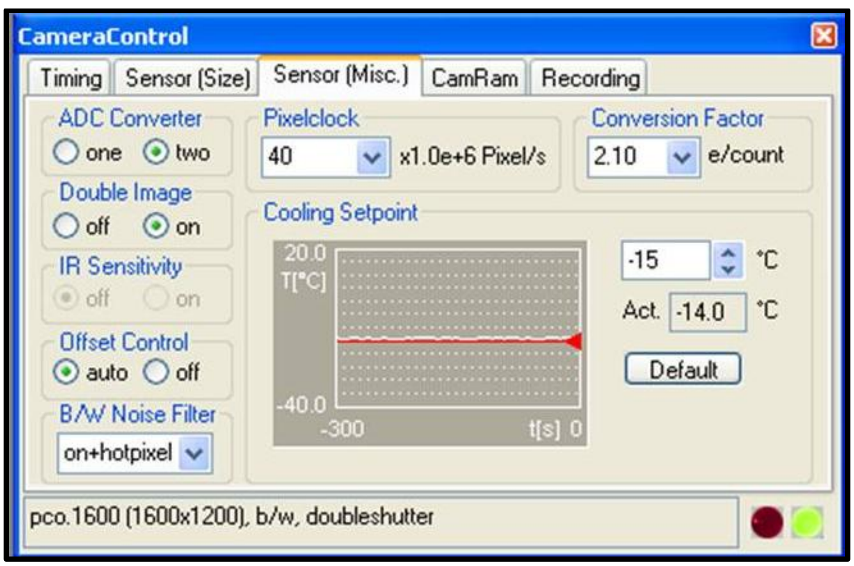

Fig. A-3 CamWare camera control sensor (misc.) settings

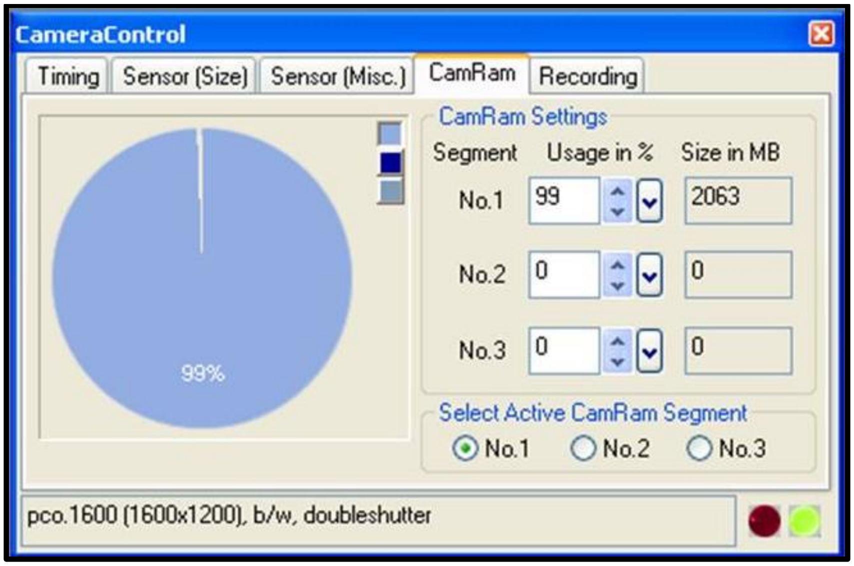

Fig. A-4 CamWare camera control CamRam settings

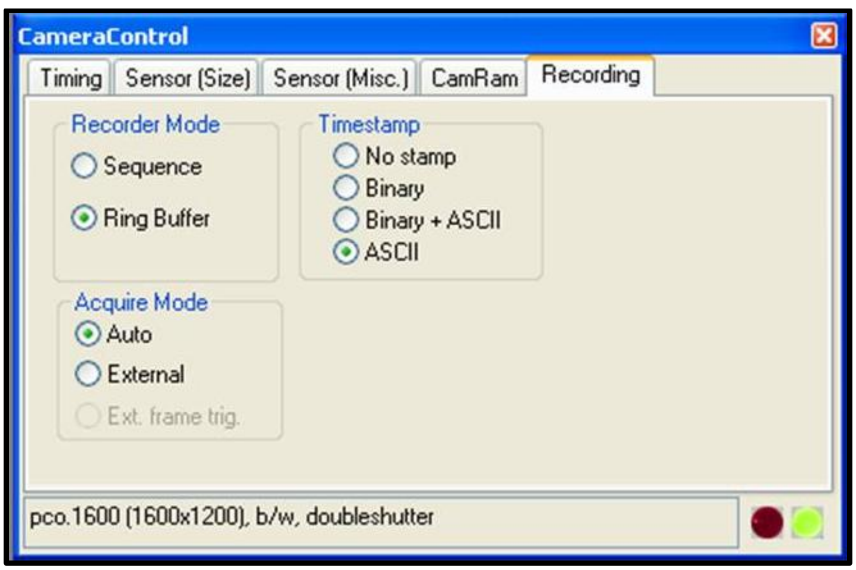

Fig. A-5 CamWare camera control recording settings

dPIV Parameters

A pair of PIV images was loaded (Fig. A-6) and processed to ensure proper pixel displacement and check for any major issues in the data.

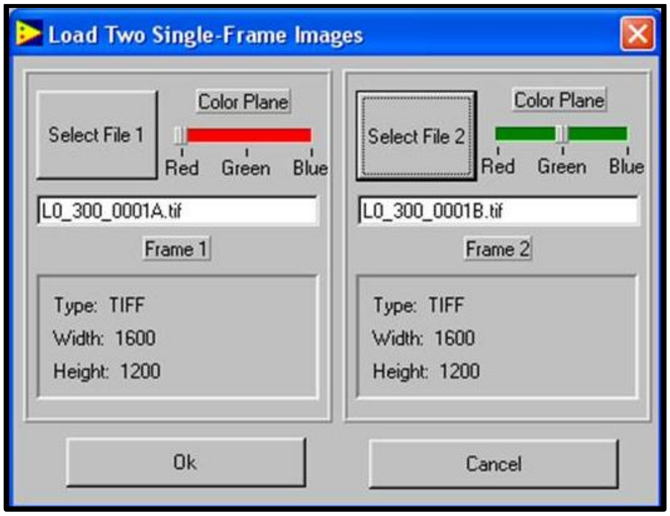

Fig. A-6 dPIV image loading

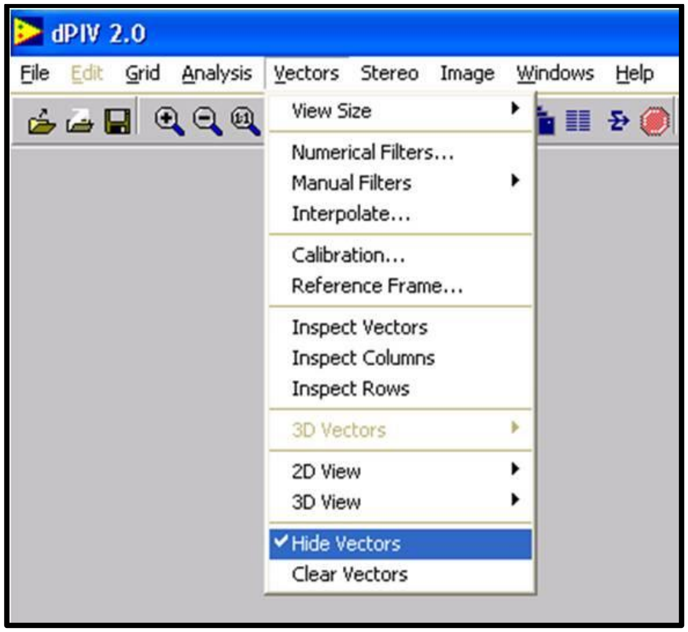

Fig. A-7 dPIV hide vectors

Once the first pair of images was processed, the vector fields were hidden (Fig. A-7). This was done to stop dPIV from drawing the vector field at the completion of each processing step in order to accelerate the batch processing completion. The correlation parameters utilized in dPIV are shown below (Fig. A-8). The options outlined in red are those that were modified from default. Similar to the "Hide Vectors" option used before, setting "Display Vectors" to "off" halts dPIV from drawing the vectors as they are calculated, speeding up the process.

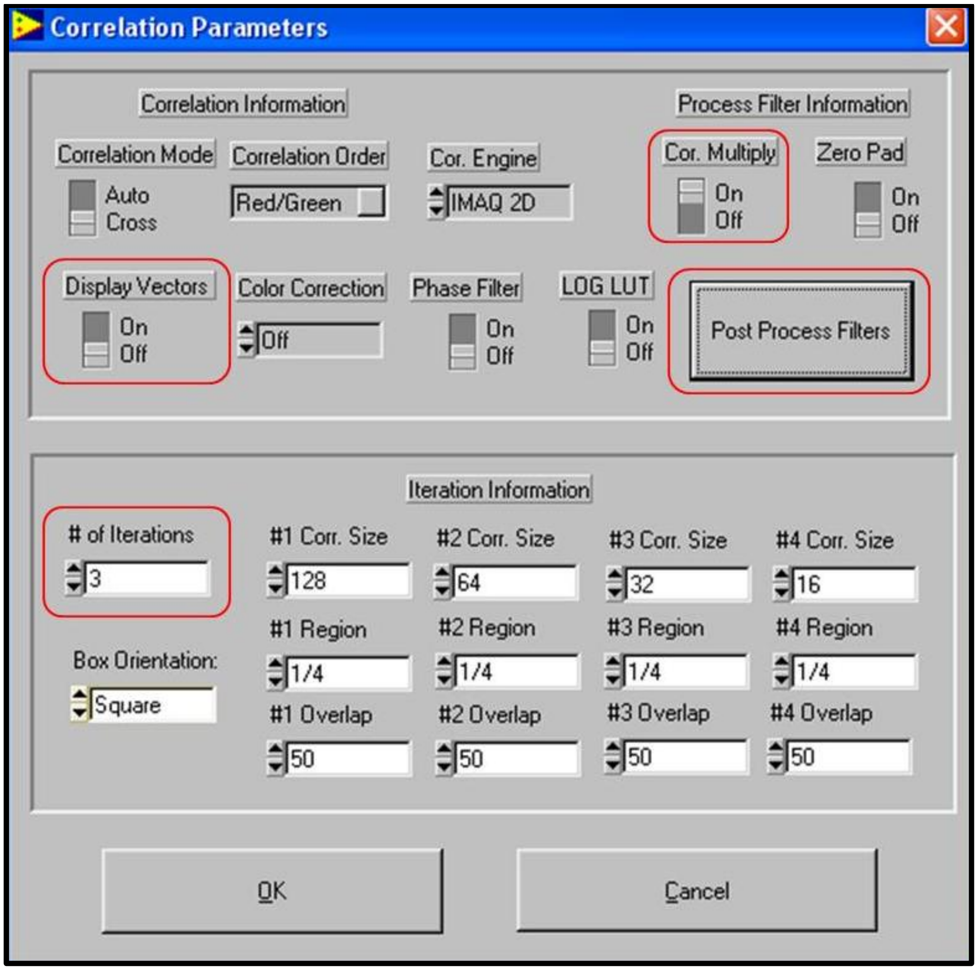

Fig. A-8 dPIV correlation parameters

"Cor. Multiply" is set to "On" (Fig. A-8) and "Upper", "Right" and "Lower" are activated (Fig. A-9).

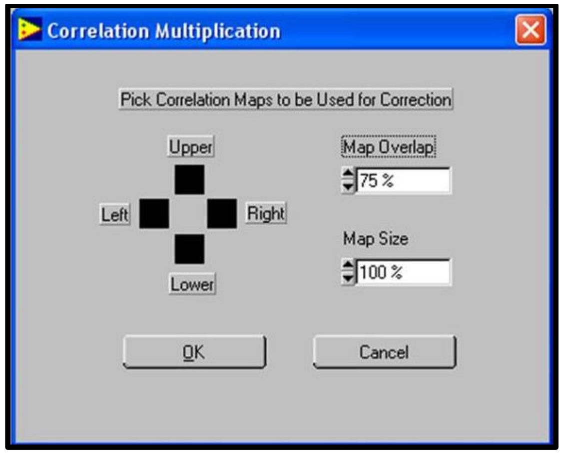

Fig. A-9 dPIV correlation multiplication

Clicking "Post Process Filters" (Fig. A-8) brings up the filter options (Fig. A-10). "Consistency Filter" is set to "On" with default "Min. Num." of 2 and "Radius" of 2.

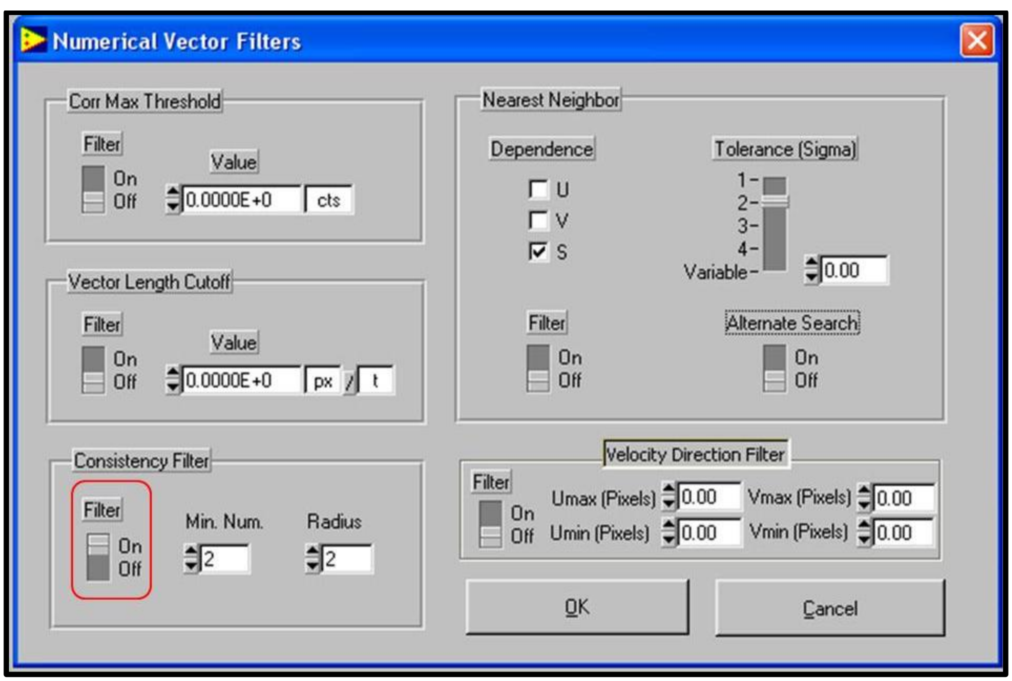

Fig. A-10 dPIV post processing filters

APENDIX B

PIV CODES

The purpose of bgavg.m is to average all background images. The purpose of bgsub.m is to read in the background file generated in bgavg.m and subtract it from all raw PIV images.

TAMU_PIV.f90 is a compilation of the efforts of multiple generations of graduate students. The purpose of this code is to read in the output files (*.csv) generated by dPIV and perform velocity averaging calculations as well as compute fluctuating velocites. The code also performs sigma filtering to remove spurious vectors.

Profile.f90 was written to generate profiles by averaging columns of the final data set together into one well-resolved profile. The input file allows the user to specify the files from which to generate profiles as well as the left and right columns bounding the desired region to be averaged in the corresponding file.

**All codes must be executed from the same directory as their target files*

PIV Background Averaging Code (bgavg.m)

```
% Background Averaging

% T.J. Fuller (4/15/2009)

% The purpose of this code is to create averaged PIV background
% images for use in bgsub.m

% Background images and code
% must be in the same directory


clc

format long

% Read background file name and
% number of images from user input.
% File name is the string of character prior to the
% string "A_####" or "B_####" in the image file name.
% ie... L1_300A_0001 --> L1_300

FileName = input('Enter the file name: ', 's');
Num = input('Enter the number of images: ');

FileNameA = strcat(FileName,'_0001A.tif');
FileNameB = strcat(FileName,'_0001B.tif');

A1 = imread(FileNameA);
BGA = im2double(A1);

B1 = imread(FileNameB);
BGB = im2double(B1);

for i=2:Num

    Y = num2str(i);

    if i < 10 X = '000';
    elseif i < 100 X = '00';
    elseif i < 1000 X = '0';
    elseif i < 10000 X = '';
    end

FileNameA = strcat(FileName,'_',X,Y,'A.tif');
FileNameB = strcat(FileName,'_',X,Y,'B.tif');

A1 = imread(FileNameA);
A = im2double(A1);
```

```
B1 = imread(FileNameB);
B = im2double(B1);

BGA = BGA + A;
BGB = BGB + B;

clc
Progress = strcat(num2str((i/Num)*100),'%')

end

BGA = BGA*65535/Num;
BGB = BGB*65535/Num;

BGA = uint16(BGA);
BGB = uint16(BGB);

OutputFileA = strcat(FileName,'_A.tif');
OutputFileB = strcat(FileName,'_B.tif');

% Write averaged background image.
% Setting 'Compression' to 'none' is important to
% ensure averaged image compatibility with PIV images
imwrite(BGA,OutputFileA,'tif','Compression','none', 'RowsPerStrip', 1);
imwrite(BGB,OutputFileB,'tif','Compression','none', 'RowsPerStrip', 1);
```

PIV Background Subtraction Code (bgsub.m)

```
% Image Background Subtraction
% T.J. Fuller (4/15/2009)

% The purpose of this code is to subtract averaged background
% images from the raw PIV images

% Background images, target images and codes
% must be in the same directory

clc

% Read file names (PIV images and background image) and
% number of images from user input.
% File name is the string of character prior to the
% string "A_####" in the image file name.
% ie... L1_300A_0001 --> Filename = L1_300

FileName = input('Enter the file name: ', 's');
BGFileName = input('Enter the name of the background file: ', 's');
Num = input('Enter the number of images: ');

BGFileNameA = strcat(BGFileName,'_A.tif');
BGFileNameB = strcat(BGFileName,'_B.tif');

tavg = 0;
t_total = 0;

for i=1:Num

    tic

    Y = num2str(i);
    j = i;

    if j < 10 X = '000';
        elseif j < 100 X = '00';
        elseif j < 1000 X = '0';
        elseif j < 10000 X = '';
    end

    FileNameA = strcat(FileName,'_',X,Y,'A.tif');
    FileNameB = strcat(FileName,'_',X,Y,'B.tif');

    A = imread(FileNameA);     % Read images
    B = imread(FileNameB);
    BGA = imread(BGFileNameA);
    BGB = imread(BGFileNameB);
```

```
    A2 = imsubtract(A,BGA);   % Subtract background
    B2 = imsubtract(B,BGB);

    % Write averaged background image.
    % Setting 'Compression' to 'none' is important to
    % ensure image compatibility with dPIV
    imwrite(A2,FileNameA,'compression','none','RowsPerStrip', 1)
    imwrite(B2,FileNameB,'compression','none','RowsPerStrip', 1)

    clc

    a = num2str(j);
    b = '/';
    c = num2str(Num);   % Display progress
    d = ' : ';
    e = strcat(num2str(uint8((j/Num)*100)),'%');

    Progres = [a b c d e]

    % Compute average time for first 100 loops
    % and display estimated time remaining
    time = toc;

    if i < 101
        tavg = tavg + time;
    end

    if i == 100
        tavg = tavg/100;
    end

    TR_min = num2str(tavg*(Num-j)/60,'%2.2f');

    if i < 100
        Time_Remaining = 'Calculating...'
    end

    if i > 99
        Time_Remaining = strcat(TR_min,' minutes')
    end

    t_total = t_total + toc;
end

t_total = num2str(t_total/60,'%2.2f');  % Display total elapsed time
Time_Elapsed = strcat(t_total, ' minutes')

pause
```

TAMU_PIV_INPUT.dat

```
**********************************************************
*******     TAMU PIV Input File (PIV_INPUT.DAT)     *******
**********************************************************

File Name (15 Char. Max.)   L2_Off
Number of Images            25
Pixels / mm                 31.88976
Delta T (uS)                1.0
Sigma                       2.5
Reference Velocity (m/s)    70.00
Reference Length (m)        0.0254


PROGRAM UNITS (1 = on, 0 = off)
---------------------------------
Unit 1 - Mean Velocities                          1
Unit 2 - Fluctuating Velocities                   1
Unit 3 - Filtered Mean Velocities                 1
Unit 4 - Filtered Flucuating Velocities           1
Unit 5 - Velocity Gradients                       0
Unit 6 - Normilzation Unit                        0
```

**Be sure that at least one decimal place is included in all variable inputs above (excluding File name and Number of Images)*

TAMU_PIV.f90

```
PROGRAM TAMU_PIV

        ! INITIALIZE VARIABLES
        !*********************************************************************************

        CHARACTER(20) :: current_file, filename, file_number_char, first_filename*25, full_filename*25, save_filename*27
        CHARACTER(10) :: dum*52, extension_1, extension_2, extension_3, extension, end_stop, grad_save_filename*30
        INTEGER :: num_images, start_file, vectors, file_number, InputStatus, counter_X, counter_total, normal
        INTEGER :: num_X, num_Y, num_vectors, num_units,  seconds, X_temp, Y_temp, first_Y, ios, z, prg
        REAL(8) :: pix_mm, pix_m, dt, sigma, U_ref, delta_ref, sign, Y_max, test1, test2, dx, dy
        INTEGER, DIMENSION(3) :: start_time, end_time, elapsed_time
        INTEGER, DIMENSION(:), ALLOCATABLE :: unit, unit_temp
        INTEGER, DIMENSION(:,:), ALLOCATABLE :: Xi, Yi
        REAL(8), DIMENSION(:,:,:), ALLOCATABLE :: num_good, filter
        REAL(8), DIMENSION(:,:), ALLOCATABLE :: X, Y, U, V, Ubar, Vbar, uubar, vvbar, Uavg, Vavg, &
                                                & uuavg, vvavg, uvavg
        REAL(8), DIMENSION(:,:), ALLOCATABLE :: Unorm, Vnorm, uunorm, vvnorm, uvnorm

        REAL(8), DIMENSION(:,:), ALLOCATABLE :: dUdX, dUdY, dVdX, dVdY, duudX, duudY, dvvdX
        REAL(8), DIMENSION(:,:), ALLOCATABLE :: dvvdY, duvdX, duvdY, vorticity


        !*** Changed to REAL(8) from REAL *** TJ



        ! READ INPUT VARIABLES FROM PIV_INPUT.DAT
```

```
!**********************************************************************************

CALL itime(start_time)

WRITE(*,*) "************************************************"
WRITE(*,*) "***         TAMU PIV AVERAGING CODE          ***"
WRITE(*,*) "************************************************"

WRITE(*,*)
WRITE(*,*)

WRITE(*,*) "READING INPUT VARIABLES FROM TAMU_PIV_INPUT.DAT"
WRITE(*,*)

OPEN(UNIT=15, FILE='TAMU_PIV_INPUT.DAT', STATUS='OLD', IOSTAT =  ios)

IF (ios /= 0) THEN

        WRITE(*,*) 'ERROR opening file TAMU_PIV_INPUT.DAT'
        WRITE(*,*) 'To continue, press any key, then [ENTER].'
        READ(*,*) end_stop

        STOP

END IF

READ(15,*)
READ(15,*)
READ(15,*)
READ(15,*)

READ(15,'(A27, A20)') dum, filename
!WRITE(*,*) filename

READ(15,'(A27, I8)') dum, num_images
!WRITE(*,*) num_images

READ(15,'(A27, F6.2)') dum, pix_mm
!WRITE(*,*) pix_mm

READ(15,'(A27, E9.1)') dum, dt
dt = dt*0.000001;

! *** Modified input file to take micro-seconds *** TJ

!WRITE(*,*) dt

READ(15,'(A27, F5.2)') dum, sigma
!WRITE(*,*) sigma

READ(15,'(A27, F6.2)') dum, U_ref
!WRITE(*,*) U_ref

READ(15,'(A27, F10.7)') dum, delta_ref
!WRITE(*,*) delta_ref

!READ(15,'(A26 , F4.0)') dum, sign
!WRITE(*,*) sign

sign = -1

!READ(15,'(A26, I4)') dum, num_units
!WRITE(*,*) num_units

num_units = 6
```

```
        READ(15,*)
        READ(15,*)
        READ(15,*)
        READ(15,*)

        ALLOCATE(unit(num_units), unit_temp(num_units))

        DO i = 1, num_units

                READ(15,'(A51, I4)') dum, unit(i)
                !WRITE(*,*) unit(i)

        END DO

        normal = unit(6)                                    !Set last unit as normalization unit

        CLOSE(15)


        ! DETERMINE FILE TYPE
        !**************************************************************************

        extension_1 = "A.csv"
        extension_2 = "A.dat"
        extension_3 = "A.tif.dat"

!*** Added extension_3 (A.tif.dat) to read PPIV files *** TJ



        first_filename = trim(adjustl(filename)) // '_0001' // trim(adjustl(extension_1))

        first_filename = trim(adjustl(first_filename))

        OPEN(UNIT = 11, FILE = first_filename, STATUS = 'OLD', IOSTAT =  ios)          !Try to open first .CSV data file

        IF (ios /= 0) THEN

                GOTO 55

                WRITE(*,*) 'To continue, press any key, then [ENTER].'
                READ(*,*) end_stop

                STOP

        END IF

        WRITE(*,*) 'USING .CSV FILE TYPE'
        WRITE(*,*)

        extension = extension_1

        CLOSE(11)

        GOTO 65



55      first_filename = trim(adjustl(filename)) // '_0001' // trim(adjustl(extension_2))

        first_filename = trim(adjustl(first_filename))
```

```
!WRITE(*,*) first_filename

!WRITE(*,*) extension_2

OPEN(UNIT = 11, FILE = first_filename, STATUS = 'OLD', IOSTAT =  ios)        !Try to open first .DAT data file

IF (ios /= 0) THEN

        GOTO 60

        WRITE(*,*)
        WRITE(*,*) 'ERROR cannot open data files. Ensure the file name is correct.'
        WRITE(*,*)
        WRITE(*,*) 'To continue, press any key, then [ENTER].'
        READ(*,*) end_stop

        STOP

END IF

WRITE(*,*) 'USING .DAT FILE TYPE'
WRITE(*,*)

extension = extension_2

CLOSE(11)

GOTO 65


60      first_filename = trim(adjustl(filename)) // '_0001' // trim(adjustl(extension_3))

first_filename = trim(adjustl(first_filename))

!WRITE(*,*) first_filename

!WRITE(*,*) extension_3

!Try to open first .TIF.DAT data file
OPEN(UNIT = 11, FILE = first_filename, STATUS = 'OLD', IOSTAT =  ios)

IF (ios /= 0) THEN

        WRITE(*,*)
        WRITE(*,*) 'ERROR cannot open data files. Ensure the file name is correct.'
        WRITE(*,*)
        WRITE(*,*) 'To continue, press any key, then [ENTER].'
        READ(*,*) end_stop

        STOP

END IF

WRITE(*,*) 'USING .DAT FILE TYPE'
WRITE(*,*)

extension = extension_3

CLOSE(11)




! CALCULATE MATRIX SIZE
```

```
!*******************************************************************************

65      WRITE(*,*) "CALCULATING MATRIX SIZE"
        WRITE(*,*)

        !WRITE(*,*) first_filename

        counter_X = 0
        counter_total = 0

        OPEN(UNIT = 11, FILE = first_filename, STATUS = 'OLD')

        READ(11,*)

        IF (extension == extension_2) THEN

                READ(11,*)
                READ(11,*)

        END IF

        i = 1

        DO

                READ(11,*, IOSTAT = InputStatus) X_temp, Y_temp

                IF (i == 1) THEN

                        first_Y = Y_temp                !Determine first Y value (in pixels)

                        i = 2

                END IF

                IF (InputStatus < 0) EXIT

                IF (Y_temp == first_Y) THEN

                        counter_X = counter_X + 1       !Counts number of vectors per row

                ELSE

                first_Y = -1

                END IF

                counter_total = counter_total + 1       !Counts total number of vectors

        END DO

        CLOSE(11)

        num_X = counter_X
        num_vectors = counter_total
        num_Y = num_vectors / num_X                     !Calculates number of vectors per column

        pix_m = pix_mm * 1000

        !WRITE(*,*) num_X
        !WRITE(*,*) num_Y
        !WRITE(*,*) num_vectors


        ! ALLOCATE ARRAYS
        !*******************************************************************************
```

```
WRITE(*,*) "ALLOCATING ARRAYS"
WRITE(*,*)

ALLOCATE(Xi(num_X, num_Y), Yi(num_X, num_Y), X(num_X, num_Y), Y(num_X, num_Y), &
        &       U(num_X, num_Y), V(num_X, num_Y),Ubar(num_X, num_Y), Vbar(num_X, num_Y), &
        &       Uavg(num_X, num_Y), Vavg(num_X, num_Y), uubar(num_X, num_Y), &
        &       vvbar(num_X, num_Y), uuavg(num_X, num_Y), vvavg(num_X, num_Y), &
        &       uvavg(num_X, num_Y), Unorm(num_X, num_Y), Vnorm(num_X, num_Y), &
        &       uunorm(num_X, num_Y), vvnorm(num_X, num_Y), uvnorm(num_X, num_Y))

ALLOCATE(num_good(num_X, num_Y,4), filter(num_X, num_Y,4))

ALLOCATE(dUdX(num_X, num_Y), dUdY(num_X, num_Y), dVdX(num_X, num_Y), dVdY(num_X, num_Y), &
        &       duudX(num_X, num_Y), duudY(num_X, num_Y), dvvdX(num_X, num_Y), &
        &       dvvdY(num_X, num_Y), duvdX(num_X, num_Y), duvdY(num_X, num_Y), &
        &       vorticity(num_X, num_Y))


! CONVERT TO PHYSICAL COORDINATES
!*********************************************************************************




! CALL SUBROUTINES
!*********************************************************************************

DO m = 1, num_units - 1

        unit_temp(m) = 0

        DO i = m, num_units - 1

                unit_temp(m) = unit_temp(m) + unit(i)

        END DO

END DO

DO i = 1, num_X

        DO j = 1, num_Y

                num_good(i,j,1) = 0.0
                Ubar(i,j) = 0.0
                Vbar(i,j) = 0.0

                num_good(i,j,2) = 0.0
                uubar(i,j) = 0.0
                vvbar(i,j) = 0.0

                num_good(i,j,3) = 0.0
                Uavg(i,j) = 0.0
                Vavg(i,j) = 0.0

                num_good(i,j,4) = 0.0
                uuavg(i,j) = 0.0
                vvavg(i,j) = 0.0
                uvavg(i,j) = 0.0

        END DO

END DO
```

```
IF (unit_temp(1) > 0) THEN                    !CALCULATE MEAN VELOCITIES

        WRITE(*,*) "CALCULATING MEAN VELOCITIES"
        WRITE(*,*)

        !WRITE(*,*) num_images

        DO n = 1, num_images

                prg = (REAL(n)/REAL(num_images))*100

                DO z = 1,300
                        WRITE (*,*)
                END DO

                WRITE(*,'(A45,I4,A1)') "          CALCULATING MEAN VELOCITES: ",prg,"%"


                file_number = n

                CALL Determine_filename (file_number, filename, extension, full_filename)


                CALL Read_file (full_filename, end_stop, extension, extension_2, &
                & num_X, num_Y, Xi, Yi, U, V, sign, pix_m, dt)

                CALL Mean_Velocities (U, V, Ubar, Vbar, num_good, num_images, &
                & num_X, num_Y, sign, pix_m, dt)


        END DO

        DO i = 1, num_X

                DO j = 1, num_Y

                        IF (num_good(i,j,1) == 0.0) THEN

                                Ubar(i,j)   = 0
                                Vbar(i,j)   = 0

                        ELSE

                                Ubar(i,j) = Ubar(i,j) / num_good(i,j,1)
                                Vbar(i,j) = Vbar(i,j) / num_good(i,j,1)

                        END IF

                END DO

        END DO

END IF


IF (unit_temp(2) > 0) THEN                    !CALCULATE FLUCTUATING VELOCITIES

        WRITE(*,*) "CALCULATING FLUCTUATING VELOCITIES"
        WRITE(*,*)

        DO n = 1, num_images

                prg = (REAL(n)/REAL(num_images))*100

                DO z = 1,300
```

```
                    WRITE (*,*)
                END DO

                WRITE(*,*) "            CALCULATING MEAN VELOCITIES:  100%"
                WRITE(*,*)
                WRITE(*,'(A45,I4,A1)') "        CALCULATING FLUCTUATING VELOCITES: ",prg,"%"

                file_number = n

                CALL Determine_filename (file_number, filename, extension, full_filename)

                CALL Read_file (full_filename, end_stop, extension, extension_2, &
                & num_X, num_Y, Xi, Yi, U, V, sign, pix_m, dt)

                CALL Fluct_Velocities (U, V, Ubar, Vbar, uubar, vvbar, num_good, num_images, num_X,
num_Y)

            END DO

            DO i = 1, num_X

                DO j = 1, num_Y

                    IF (num_good(i,j,2) == 0.0) THEN

                        uubar(i,j)   = 0
                        vvbar(i,j)   = 0

                    ELSE

                        uubar(i,j) = uubar(i,j) / num_good(i,j,2)
                        vvbar(i,j) = vvbar(i,j) / num_good(i,j,2)

                    END IF

                END DO

            END DO

        END IF

        !WRITE(*,*) uubar(37,1)
        !WRITE(*,*) vvbar(37,1)


        IF (unit_temp(3) > 0) THEN                          !CALCULATE FILTERED MEAN VELOCITIES

            WRITE(*,*) "CALCULATING FILTERED MEAN VELOCITIES"
            WRITE(*,*)

            DO j = 1, num_Y

                DO i = 1, num_X

                    filter(i,j,1) =  Ubar(i,j) + sigma * sqrt(uubar(i,j))
                    filter(i,j,2) =  Ubar(i,j) - sigma * sqrt(uubar(i,j))
                    filter(i,j,3) =  Vbar(i,j) + sigma * sqrt(vvbar(i,j))
                    filter(i,j,4) =  Vbar(i,j) - sigma * sqrt(vvbar(i,j))

                END DO

            END DO

            DO n = 1, num_images

                prg = (REAL(n)/REAL(num_images))*100
```

```
                    DO z = 1,300
                            WRITE (*,*)
                    END DO

                    WRITE(*,*) "            CALCULATING MEAN VELOCITIES:  100%"
                    WRITE(*,*)
                    WRITE(*,*) "      CALCULATING FLUCTUATING VELOCITIES:  100%"
                    WRITE(*,*)
                    WRITE(*,'(A45,I4,A1)') "      CALCULATING FILTERED MEAN VELOCITES: ",prg,"%"


                    file_number = n

                    CALL Determine_filename (file_number, filename, extension, full_filename)

                    CALL Read_file (full_filename, end_stop, extension, extension_2, num_X, &
                     & num_Y, Xi, Yi, U, V, sign, pix_m, dt)

                    CALL Mean_Velocities_Filtered (U, V, Ubar, Vbar, uubar, vvbar, &
                    & Uavg, Vavg, num_good, num_images, num_X, num_Y, filter)

            END DO

            DO i = 1, num_X

                    DO j = 1, num_Y

                            IF (num_good(i,j,3) == 0.0) THEN

                                    Uavg(i,j)   = 0
                                    Vavg(i,j)   = 0

                            ELSE

                                    Uavg(i,j) = Uavg(i,j) / num_good(i,j,3)
                                    Vavg(i,j) = Vavg(i,j) / num_good(i,j,3)

                            END IF

                    END DO

            END DO

    ELSE

            DO i = 1, num_X

                    DO j = 1, num_Y

                            Uavg(i,j) = Ubar(i,j)
                            Vavg(i,j) = Vbar(i,j)

                    END DO

            END DO

    END IF


    IF (unit_temp(4) > 0) THEN                      !CALCULATE FILTERED FLUCTUATING VELOCITIES

            WRITE(*,*) "CALCULATING FILTERED FLUCTUATING VELOCITIES"
            WRITE(*,*)

            DO n = 1, num_images
```

```
                    prg = (REAL(n)/REAL(num_images))*100

                    DO z = 1,300
                              WRITE (*,*)
                    END DO

                    WRITE(*,*) "              CALCULATING MEAN VELOCITIES:  100%"
                    WRITE(*,*)
                    WRITE(*,*) "        CALCULATING FLUCTUATING VELOCITIES:  100%"
                    WRITE(*,*)
                    WRITE(*,*) "      CALCULATING FILTERED MEAN VELOCITIES:  100%"
                    WRITE(*,*)
                    WRITE(*,'(A45,I4,A1)') "CALCULATING FILTERED FLUCTUATING VELOCITES: ",prg,"%"

                    file_number = n

                    CALL Determine_filename (file_number, filename, extension, full_filename)

                    CALL Read_file (full_filename, end_stop, extension, extension_2, &
                              & num_X, num_Y, Xi, Yi, U, V, sign, pix_m, dt)

                    CALL Fluct_Velocities_Filtered (U, V, Ubar, Vbar, uubar, vvbar, &
                     & Uavg, Vavg, uuavg, vvavg, uvavg, num_good, num_images, num_X, num_Y, filter)

          END DO

          DO i = 1, num_X

                    DO j = 1, num_Y

                              IF (num_good(i,j,4) == 0.0) THEN

                                        uuavg(i,j)  = 0
                                        vvavg(i,j)  = 0
                                        uvavg(i,j)  = 0

                              ELSE

                                        uuavg(i,j) = uuavg(i,j) / (num_good(i,j,4))
                                        vvavg(i,j) = vvavg(i,j) / (num_good(i,j,4))
                                        uvavg(i,j) = uvavg(i,j) / (num_good(i,j,4))

                              END IF

                    END DO

          END DO

ELSE

          DO i = 1, num_X

                    DO j = 1, num_Y

                              uuavg(i,j) = uubar(i,j)
                              vvavg(i,j) = vvbar(i,j)
                              uvavg(i,j) = 0

                    END DO

          END DO

END IF

Y_max = MAXVAL (Yi)                     !Determine maximum Y value (in pixels)
```

```
DO i =1, num_X

        DO j =1, num_Y

        Yi(i,j) = Y_max - Yi(i,j)        !Flip Y coordinates from PIV coord. system to physical coord. system

        !WRITE(*,*) X(i,j,1)

        END DO

END DO


DO i =1, num_X                 !Convert integer coordinates into real physical coordinates

        DO j =1, num_Y

        X(i,j) = FLOAT(Xi(i,j)) / pix_mm
        Y(i,j) = FLOAT(Yi(i,j)) / pix_mm

        !WRITE(*,*) X(i,j,1)

        END DO

END DO


IF (unit_temp(5) > 0) THEN                      !CALCULATE VELOCITY GRADIENTS

        WRITE(*,*) "CALCULATING VELOCITY GRADIENTS"
        WRITE(*,*)

        dx = ABS(X(2,1) - X(1,1))
        dy = ABS(Y(1,2) - Y(1,1))

        CALL Gradients (Uavg, num_X, num_Y, dUdX, dUdY, dx, dy)
        CALL Gradients (Vavg, num_X, num_Y, dVdX, dVdY, dx, dy)
        !CALL Gradients (uuavg, num_X, num_Y, duudX, duudY, dx, dy)
        !CALL Gradients (vvavg, num_X, num_Y, dvvdX, dvvdY, dx, dy)
        !CALL Gradients (uvavg, num_X, num_Y, duvdX, duvdY, dx, dy)

        DO i = 1, num_X

                DO j = 1, num_Y

                        duudX(i,j) = 0
                        duudY(i,j) = 0
                        dvvdX(i,j) = 0
                        dvvdY(i,j) = 0
                        duvdX(i,j) = 0
                        duvdY(i,j) = 0

                        vorticity(i,j) = dUdY(i,j) - dVdX(i,j)

                END DO

        END DO

ELSE

        DO i = 1, num_X

                DO j = 1, num_Y
```

```
                        dUdX(i,j) = 0
                        dUdY(i,j) = 0
                        dVdX(i,j) = 0
                        dVdY(i,j) = 0
                        duudX(i,j) = 0
                        duudY(i,j) = 0
                        dvvdX(i,j) = 0
                        dvvdY(i,j) = 0
                        duvdX(i,j) = 0
                        duvdY(i,j) = 0
                        vorticity(i,j) = 0

                END DO

        END DO

END IF


IF (normal == 1) THEN                           !NORMALIZE QUANTITIES

        CALL Normalization (Unorm, Vnorm, uunorm, vvnorm, uvnorm, Ubar, Vbar, &
                        & uubar, vvbar, Uavg, Vavg, uuavg, vvavg, &
                        & uvavg, num_good, num_images, num_X, num_Y, U_ref, unit)

ELSE

        DO i = 1, num_X

                DO j = 1, num_Y

                        Unorm(i,j) = Uavg(i,j)
                        Vnorm(i,j) = Vavg(i,j)
                        uunorm(i,j) = uuavg(i,j)
                        vvnorm(i,j) = vvavg(i,j)
                        uvnorm(i,j) = uvavg(i,j)

                END DO

        END DO

END IF

!WRITE(*,*) X(37,1)
!WRITE(*,*) Y(37,1)
!WRITE(*,*) Unorm(37,1)

!WRITE(*,*) dx
!WRITE(*,*) dy

!STOP


! OUTPUT
!*********************************************************************************

DO z=1,300
        WRITE(*,*)
END DO

WRITE(*,*) "            CALCULATING MEAN VELOCITIES:  100%"
WRITE(*,*)
WRITE(*,*) "      CALCULATING FLUCTUATING VELOCITIES:  100%"
WRITE(*,*)
WRITE(*,*) "     CALCULATING FILTERED MEAN VELOCITIES:  100%"
WRITE(*,*)
```

```
WRITE(*,*) "CALCULATING FILTERED FLUCTUATING VELOCITES:  100%"
WRITE(*,*)

save_filename = trim(adjustl(filename)) // '_OUTPUT.dat'
save_filename = trim(adjustl(save_filename))

grad_save_filename = trim(adjustl(filename)) // '_GRADIENT.dat'
grad_save_filename = trim(adjustl(grad_save_filename))

20 FORMAT (1X, A9, A20, A1)

!22 FORMAT (1X, A215)

22 FORMAT (1X, A107)

!24 FORMAT (1X, I4, 2X, I4, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, &
& 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6)

25 FORMAT (1X, A7, I5, A5, I5, A43)
27 FORMAT (1X, A12, 2X, A12, 2X, A12, 2X, A12, 2X, A12, 2X, A12, 2X, A12, 2X, A12, 2X, A12)
!30 FORMAT (1X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, &
& 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, &
& 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6)

30 FORMAT (1X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6)

WRITE(*,*) "SAVING TO ", adjustl(save_filename)
WRITE(*,*)

!WRITE(*,*) save_filename

OPEN(UNIT = 23, FILE = save_filename)
!OPEN(UNIT = 25, FILE = grad_save_filename)

WRITE(23,20) 'TITLE = "', save_filename, '"'

!WRITE(23,22) 'Variables = "X (mm)" , "Y (mm)" , "U_avg" , "V_avg" , "U_norm" , "V_norm" , &
                    & "u"u"" , "v"v"" , "u"v"", "dUdX" , "dUdY" , "dVdX" , "dVdY" , "duudX" , &
                    & "duudY" , "dvvdX" , "dvvdY" , "duvdX" , "duvdY" , "vorticity"'

WRITE(23,22) 'Variables = "X (mm)" , "Y (mm)" , "U_avg" , "V_avg" , "U_norm" , "V_norm" , "u"u"" , "v"v"" , "u"v""'

WRITE(23,25) 'ZONE I=', num_X, ', J=', num_Y, ', F=POINT, DT=(SINGLE,SINGLE,DOUBLE,DOUBLE)'
WRITE(23,*)

DO j = 1, num_Y

        DO i = 1, num_X

                !WRITE(25,24) i, j, X(i,j), Y(i,j), dUdX(i,j), dUdY(i,j), dVdX(i,j), dVdY(i,j), &
                & duudX(i,j), duudY(i,j), dvvdX(i,j), dvvdY(i,j), duvdX(i,j), duvdY(i,j), vorticity(i,j)

                !WRITE(23,30) X(i,j), Y(i,j), Uavg(i,j), Vavg(i,j), Unorm(i,j), Vnorm(i,j), &
                & uunorm(i,j), vvnorm(i,j), uvnorm(i,j), dUdX(i,j), dUdY(i,j), dVdX(i,j), &
                & dVdY(i,j), duudX(i,j), duudY(i,j), dvvdX(i,j), dvvdY(i,j), duvdX(i,j), duvdY(i,j), vorticity(i,j)

                WRITE(23,30) X(i,j), Y(i,j), Uavg(i,j), Vavg(i,j), Unorm(i,j), Vnorm(i,j), &
                & uunorm(i,j), vvnorm(i,j), uvnorm(i,j)

        END DO

END DO

CLOSE(23)

CALL itime(end_time)
```

```
elapsed_time(1) = end_time(1) - start_time(1)              !Calculate elapsed time
elapsed_time(2) = end_time(2) - start_time(2)
elapsed_time(3) = ABS(end_time(3) - start_time(3))

seconds = elapsed_time(1)*3600 + elapsed_time(2)*60 + elapsed_time(3)


1000 FORMAT (1X, A21, I2.2, ':', I2.2, ':', I2.2 )
1002 FORMAT         (1X, A21, A25)
1001 FORMAT (1X, A21, I8)
!1005 FORMAT (1X, A21, I4, A4)
1005 FORMAT (1X, A21, I3, A6, I3, A8, I3, A8)

WRITE(*,*) 'PROCESSING DONE !!'
WRITE(*,*)
WRITE(*,*)
WRITE(*,*) 'SUMMARY'
WRITE(*,*) '----------------------------'
WRITE(*,1002) 'First file name   = ', first_filename
WRITE(*,1002) 'Output file name  = ', save_filename
WRITE(*,*)
WRITE(*,1001) 'Number of Images  = ', num_images
WRITE(*,1001) 'Number of Columns = ', num_X
WRITE(*,1001) 'Number of Rows    = ', num_Y
WRITE(*,1001) 'Number of Vectors = ', num_vectors
WRITE(*,*)
!WRITE(*,1000) 'Start time = ', start_time(1), start_time(2), start_time(3)
!WRITE(*,1000) 'End time = ', end_time(1), end_time(2), end_time(3)
!WRITE(*,1005) 'Processing time   = ', seconds, ' sec'
WRITE(*,1005) 'Processing time   = ', elapsed_time(1), 'hours', elapsed_time(2), 'minutes', elapsed_time(3), 'seconds'
WRITE(*,*)

!WRITE(*,*) X(1,1)
!WRITE(*,*) X(2,1)
!WRITE(*,*) Y(1,1)
!WRITE(*,*) Y(1,2)


!WRITE(*,*) dx
!WRITE(*,*) dy
WRITE(*,*)
WRITE(*,*)
WRITE(*,*) 'To continue, press any key, then [ENTER].'
READ(*,*) end_stop


! SUBROUTINES
!*************************************************************************************

CONTAINS


        ! DETERMINE CURRENT FILE NAME
        !*******************************************

SUBROUTINE Determine_filename (file_number, filename, extension, full_filename)

        ! INPUT = file_number, filename, extension
        !OUTPUT = full_filename

        INTEGER :: file_number
        CHARACTER(20) :: filename, file_number_char, full_filename*25
        CHARACTER(10) :: extension
```

```
        !CHARACTER :: file_number_char, filename, extension, full_filename

        !WRITE(*,*) "DETERMINING FILE NAMES AND READING FILES"
        !WRITE(*,*)


        !WRITE(*,*) file_number

        WRITE(file_number_char , '( I6 )' ) file_number

        IF (file_number < 10) THEN

          full_filename = trim(adjustl(filename)) // '_000' // trim(adjustl(file_number_char)) // trim(adjustl(extension))

          full_filename = trim(adjustl(full_filename))

          !PRINT '(A20)', full_filename

        END IF

        IF ((file_number >= 10) .AND. (file_number < 100)) THEN

          full_filename = trim(adjustl(filename)) // '_00' // trim(adjustl(file_number_char)) // trim(adjustl(extension))

          full_filename = trim(adjustl(full_filename))

          !PRINT '(A20)', full_filename

        END IF

        IF ((file_number >= 100) .AND. (file_number < 1000)) THEN

          full_filename = trim(adjustl(filename)) // '_0' // trim(adjustl(file_number_char)) // trim(adjustl(extension))

          full_filename = trim(adjustl(full_filename))

          !PRINT '(A20)', full_filename

        END IF

        IF ((file_number >= 1000) .AND. (file_number < 10000)) THEN

          full_filename = trim(adjustl(filename)) // '_' // trim(adjustl(file_number_char)) // trim(adjustl(extension))

          full_filename = trim(adjustl(full_filename))

          !PRINT '(A20)', full_filename

        END IF


END SUBROUTINE Determine_filename


                ! READ CURRENT DATA FILE

!********************************************************************************

SUBROUTINE Read_file (full_filename, end_stop, extension, extension_2, num_X, num_Y, Xi, Yi, &
                    & U, V, sign, pix_m, dt)

        ! INPUT = full_filename, end_stop, extension, extension_2, num_X, num_Y
        !OUTPUT = Xi, Yi, U, V

        CHARACTER(20) :: full_filename*25
        CHARACTER(10) :: extension_2, extension, end_stop
```

```
    INTEGER :: IOSTAT, num_X, num_Y, ios
    REAL(8) :: pix_m, dt, sign
    INTEGER, DIMENSION(:,:) :: Xi, Yi
    REAL(8), DIMENSION(:,:) :: U, V


        !n = file_number

    OPEN(UNIT=11, FILE = full_filename, STATUS = 'OLD', IOSTAT = ios)

    IF (ios /= 0) THEN

        WRITE(*,*) 'Error opening file, ', adjustl(full_filename)
        WRITE(*,*)
        WRITE(*,*) 'To continue, press any key, then [ENTER].'
        READ(*,*) end_stop

        STOP

    END IF


    READ(11,*)

    IF (extension == extension_2) THEN     !Account for two additional header lines in Tecplot .DAT files

        READ(11,*)
        READ(11,*)

    END IF

    DO j = 1, num_Y

        DO i = 1, num_X

            READ(11,*,IOSTAT=ios) Xi(i,j), Yi(i,j), U(i,j), V(i,j)
            !WRITE(*,*) Xi(i,j,1), Yi(i,j,1), U(i,j,1), V(i,j,1)

            IF (ios /= 0) THEN

                WRITE(*,*) 'ERROR in reading from file...'  !File reading error message
                WRITE(*,*) 'i= ', i, 'j= ', j

                STOP

            END IF


            U(i,j) = U(i,j) / pix_m / dt
            V(i,j) = V(i,j) / pix_m / dt * (sign)

        END DO

    END DO

    CLOSE(11)

END SUBROUTINE Read_file


    !CALCULATE MEAN VELOCITIES
    !**************************************************

SUBROUTINE Mean_Velocities (U, V, Ubar, Vbar, num_good, num_images, num_X, num_Y, sign, pix_m, dt)

    ! INPUT = U, V, num_images, num_X, num_Y, sign, pix_m, dt
```

```
        !OUTPUT = Ubar, Vbar, num_good

        INTEGER :: num_images, num_X, num_Y
        REAL(8) :: pix_m, dt, U_ref, sign
        REAL(8), DIMENSION(:,:) :: U, V, Ubar, Vbar
        REAL(8), DIMENSION(:,:,:) :: num_good

        DO j = 1, num_Y

                DO i = 1, num_X

                        IF (U(i,j) /= 0.0) THEN

                                num_good(i,j,1) = num_good(i,j,1) + 1

                                Ubar(i,j) = Ubar(i,j) + U(i,j)
                                Vbar(i,j) = Vbar(i,j) + V(i,j)

                        END IF

                END DO

        END DO

END SUBROUTINE Mean_Velocities


        !CALCULATE FLUCTUATING VELOCITIES
        !**************************************************

SUBROUTINE Fluct_Velocities (U, V, Ubar, Vbar, uubar, vvbar, num_good, num_images, num_X, num_Y)

        ! INPUT = U, V, Ubar, Vbar, num_good, num_images, num_X, num_Y
        !OUTPUT = uubar, vvbar

        INTEGER :: num_images, num_X, num_Y
        REAL(8) :: test1, test2
        REAL(8), DIMENSION(:,:) :: U, V, Ubar, Vbar, uubar, vvbar
        REAL(8), DIMENSION(:,:,:) :: num_good

        DO j = 1, num_Y

                DO i = 1, num_X

                        IF (U(i,j) /= 0.0) THEN

                                num_good(i,j,2) = num_good(i,j,2) + 1

                                up = U(i,j) - Ubar(i,j)
                                vp = V(i,j) - Vbar(i,j)

                                uubar(i,j) = uubar(i,j) + (up * up)
                                vvbar(i,j) = vvbar(i,j) + (vp * vp)

                        END IF

                END DO

        END DO

END SUBROUTINE Fluct_Velocities


        !CALCULATE FILTERED MEAN VELOCITIES
        !**************************************************
```

```
        SUBROUTINE Mean_Velocities_Filtered (U, V, Ubar, Vbar, uubar, vvbar, Uavg, Vavg, num_good, &
                                            &  num_images, num_X, num_Y, filter)

        ! INPUT = U, V, Ubar, Vbar, uubar, vvbar, num_good, num_images, num_X, num_Y, filter
        !OUTPUT = Uavg, Vavg

        INTEGER :: num_images, num_X, num_Y
        REAL(8), DIMENSION(:,:) :: U, V, Ubar, Vbar, uubar, vvbar, Uavg, Vavg
        REAL(8), DIMENSION(:,:,:) :: num_good, filter

        DO j = 1, num_Y

                DO i = 1, num_X

                        IF (  U(i,j) /= 0.0 .AND. &
                                & U(i,j) <= filter(i,j,1) .AND. &
                                & U(i,j) >= filter(i,j,2) ) THEN

                                num_good(i,j,3) = num_good(i,j,3) + 1

                                Uavg(i,j) = Uavg(i,j) + U(i,j)
                                Vavg(i,j) = Vavg(i,j) + V(i,j)

                        END IF

                END DO

        END DO

END SUBROUTINE Mean_Velocities_Filtered


        !CALCULATE FILTERED FLUCTUATING VELOCITIES
        !****************************************************

SUBROUTINE Fluct_Velocities_Filtered (U, V, Ubar, Vbar, uubar, vvbar, Uavg, Vavg, uuavg, vvavg, &
                                    & uvavg, num_good, num_images, num_X, num_Y, filter)

! INPUT = U, V, Ubar, Vbar, uubar, vvbar, Uavg, Vavg, num_good, num_images, num_X, num_Y, filter
!OUTPUT = uuavg, vvavg, uvavg

        INTEGER :: num_images, num_X, num_Y
        REAL(8) :: cond_1, cond_2, cond_3, cond_4
        REAL(8), DIMENSION(:,:) :: U, V, Ubar, Vbar, uubar, vvbar, Uavg, Vavg, uuavg, vvavg, uvavg
        REAL(8), DIMENSION(:,:,:) :: num_good, filter

        DO j = 1, num_Y

                DO i = 1, num_X

                        IF (  U(i,j) /= 0.0 .AND. &
                                & U(i,j) <= filter(i,j,1) .AND. &
                                & U(i,j) >= filter(i,j,2) ) THEN

                                num_good(i,j,4) = num_good(i,j,4) + 1

                                up = U(i,j) - Uavg(i,j)
                                vp = V(i,j) - Vavg(i,j)

                                uuavg(i,j) = uuavg(i,j) + (up * up)
                                vvavg(i,j) = vvavg(i,j) + (vp * vp)
                                uvavg(i,j) = uvavg(i,j) + (up * vp)

                        END IF

                END DO
```

```
        END DO

END SUBROUTINE Fluct_Velocities_Filtered



        !CALCULATE VELOCITY GRADIENTS
        !**************************************************

SUBROUTINE Gradients (vel, num_X, num_Y, dUdX, dUdY, dx, dy)

        ! INPUT = U, num_X, num_Y, dx
        !OUTPUT = dUdx, dUdy

        INTEGER :: num_X, num_Y
        REAL(8) :: dx, dy
        REAL(8), DIMENSION(:,:) :: vel, dUdX, dUdY


        DO j = 1, num_Y

                DO i = 1, num_X - 1

                        IF (vel(i,j) == 0 .OR. vel(i+1,j) == 0) THEN

                                dUdX(i,j) = 0

                        ELSE

                                dUdX(i,j) = (vel(i+1,j) - vel(i,j)) / dx

                        END IF



                END DO

        END DO

        DO j = 1, num_Y

                dUdX(num_X,j) = dUdX(num_X-1,j)

        END DO

        DO i = 1, num_X

                DO j = 1, num_Y - 1

                        IF (vel(i,j) == 0 .OR. vel(i,j+1) == 0) THEN

                                dUdY(i,j) = 0

                        ELSE

                                dUdY(i,j) = (vel(i,j+1) - vel(i,j)) / dy

                        END IF

                END DO

        END DO

        DO i = 1, num_X
```

```
                dUdY(i,num_Y) = dUdY(i,num_Y-1)

        END DO

END SUBROUTINE Gradients


!CALCULATE NORMALIZED VALUES
!***************************************************

SUBROUTINE Normalization (Unorm, Vnorm, uunorm, vvnorm, uvnorm, Ubar, Vbar, uubar, vvbar, &
                     & Uavg, Vavg, uuavg, vvavg, uvavg, num_good, num_images, num_X, &
                     & num_Y, U_ref, unit)

        INTEGER :: num_images, num_X, num_Y
        REAL(8) :: U_ref
        INTEGER, DIMENSION(:) :: unit
        REAL(8), DIMENSION(:,:) :: Ubar, Vbar, uubar, vvbar, Uavg, Vavg, uuavg, vvavg, uvavg, &
                             & Unorm, Vnorm, uunorm, vvnorm, uvnorm
        REAL(8), DIMENSION(:,:,:) :: num_good

        WRITE(*,*) "NORMALIZING VALUES"
        WRITE(*,*)


        IF (unit(3) == 1) THEN

                DO j = 1, num_Y

                        DO i = 1, num_X

                                Unorm(i,j) = Uavg(i,j) / U_ref
                                Vnorm(i,j) = Vavg(i,j) / U_ref

                        END DO

                END DO

                ELSE

                DO j = 1, num_Y

                        DO i = 1, num_X

                                Unorm(i,j) = Ubar(i,j) / U_ref
                                Vnorm(i,j) = Vbar(i,j) / U_ref

                        END DO

                END DO

        END IF

        IF (unit(4) == 1) THEN

                DO j = 1, num_Y

                        DO i = 1, num_X

                                uunorm(i,j) = sqrt(uuavg(i,j)) / U_ref
                                vvnorm(i,j) = sqrt(vvavg(i,j)) / U_ref
                                uvnorm(i,j) = uvavg(i,j) / (U_ref**2)

                        END DO
```

```
                END DO

        ELSE

                DO j = 1, num_Y

                        DO i = 1, num_X

                                uunorm(i,j) = sqrt(uubar(i,j)) / U_ref
                                vvnorm(i,j) = sqrt(vvbar(i,j)) / U_ref
                                uvnorm(i,j) = 0

                        END DO

                END DO

        END IF

END SUBROUTINE Normalization


END PROGRAM TAMU_PIV
```

Profile_Input.dat

```
Number of Files: 4

File1          1          20
File2          25         42
File3          45         65
File4          70         99
```

Filename *Left Column* *Right Column*

Profile.f90

```
PROGRAM Profile

IMPLICIT NONE

!-----------------------------------
!       Initialize Variables
!-----------------------------------


CHARACTER(50) :: input, output, skip, end_stop

INTEGER :: i, j, k, m, num_X, num_Xc, L, R, num_Y, num_files, ios, test
   REAL :: Lx, Rx

REAL(8), DIMENSION(:,:), ALLOCATABLE :: X, Y, U, V, Un, Vn, uu, vv, uv
REAL(8), DIMENSION(:),   ALLOCATABLE :: Xp, Yp, Up, Vp, Unp, Vnp, uup, vvp, uvp



!-----------------------------------
!     Read Profile_Input.dat
!-----------------------------------


WRITE(*,*) "---------------------------------------"
WRITE(*,*) "      TAMU PIV PROFILE GENERATION      "
WRITE(*,*) "---------------------------------------"
WRITE(*,*)
WRITE(*,*)
WRITE(*,*) "Saving profile data to:"
WRITE(*,*)

OPEN(UNIT=100, FILE='Profile_Input.dat', STATUS='OLD')

READ(100,*) skip, skip, skip, num_files

m = 51
DO k = 1, num_files ! Beginning of main DO loop

READ(100,*) input, L, R
input = trim(input)

output = 'Profile_' // trim(input) // '.dat'
input = trim(input) // '.dat'
```

```
OPEN(UNIT=k, FILE=input, STATUS='OLD')

READ(k,*)
READ(k,*)
READ(k,*) skip, skip, num_X, skip, num_Y


!-----------------------------------
!         Initialize Arrays
!-----------------------------------

ALLOCATE(X(num_X, num_Y), Y(num_X, num_Y))
ALLOCATE(U(num_X, num_Y), V(num_X, num_Y))
ALLOCATE(Un(num_X, num_Y), Vn(num_X, num_Y))
ALLOCATE(uu(num_X, num_Y), vv(num_X, num_Y), uv(num_X, num_Y))

ALLOCATE(Xp(num_Y), Yp(num_Y))
ALLOCATE(Up(num_Y), Vp(num_Y))
ALLOCATE(Unp(num_Y), Vnp(num_Y))
ALLOCATE(uup(num_Y), vvp(num_Y), uvp(num_Y))


  X = 0;
  Y = 0;
  U = 0;
  V = 0;
 Un = 0;
 Vn = 0;
 uu = 0;
 vv = 0;
 uv = 0;

 Xp = 0;
 Yp = 0;
 Up = 0;
 Vp = 0;
Unp = 0;
Vnp = 0;
uup = 0;
vvp = 0;
uvp = 0;



!-----------------------------------
!          Populate Arrays
!-----------------------------------


DO j = 1, num_Y

       num_Xc = 0;

       DO i = 1, num_X

              IF (i .GE. L .AND. i .LE. R) THEN

                     num_Xc = num_Xc + 1;

                     READ(k,*,IOSTAT=ios)
              X(i,j),Y(i,j),U(i,j),V(i,j),Un(i,j),Vn(i,j),uu(i,j),vv(i,j),uv(i,j)

                     IF (ios /= 0) THEN
                     WRITE(*,*) 'Error populating array at:'
                     WRITE(*,*) 'i=', i
                     WRITE(*,*) 'j=', j
```

```
                        STOP

                END IF

                ELSE

                        READ(k,*)

                END IF

        END DO

END DO

!-----------------------------------
!     Generate Profile Averages
!-----------------------------------


DO j = 1, num_Y         ! Sum data across rows

        DO i = 1, num_X

                 Xp(j) =  Xp(j) + X(i,j);
                 Yp(j) =  Yp(j) + Y(i,j);
                 Up(j) =  Up(j) + U(i,j);
                 Vp(j) =  Vp(j) + V(i,j);
                Unp(j) = Unp(j) + Un(i,j);
                Vnp(j) = Vnp(j) + Vn(i,j);
                uup(j) = uup(j) + uu(i,j);
                vvp(j) = vvp(j) + vv(i,j);
                uvp(j) = uvp(j) + uv(i,j);

        END DO

END DO

WRITE(*,*)


 Xp = Xp/num_Xc;
 Yp = Yp/num_Xc;
 Up = Up/num_Xc;
 Vp = Vp/num_Xc;
Unp = Unp/num_Xc;
Vnp = Vnp/num_Xc;
uup = uup/num_Xc;
vvp = vvp/num_Xc;
uvp = uvp/num_Xc;



!-----------------------------------
!              Output
!-----------------------------------


61 FORMAT (3X, A6, 8X, A6, 8X, A6, 10X, A6, 8X, A6, 8X, A6, 8X, A6, 8X, A6)
62 FORMAT (1X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6, 2X, F12.6,
2X, F12.6)

WRITE(*,*) output

OPEN(UNIT=m, FILE=output, STATUS='REPLACE')
```

```
WRITE(m,61) "Y", "U", "V", "Unorm", "Vnorm", "u'u'", "v'v'", "u'v'"
WRITE(m,61)

DO i = 1, num_Y

       WRITE(m,62) Yp(i), Up(i), Vp(i), Unp(i), Vnp(i), uup(i), vvp(i), uvp(i)

END DO

m = m+1;

DEALLOCATE(X,Y,U,V,Un,Vn,uu,vv,uv)              ! Deallocate arrays to allow for multiple
profile generations per execution
DEALLOCATE(Xp,Yp,Up,Vp,Unp,Vnp,uup,vvp,uvp)

CLOSE (k)

END DO ! End of main DO loop

WRITE(*,*)
WRITE(*,*)

WRITE(*,*) 'To continue, press any key, then [ENTER].'
READ(*,*) end_stop


END PROGRAM Profile
```

APPENDIX C

PIV UNCERTAINTY ANALYSIS

Uncertainties were accumulated via an L_2 (Euclidean)-norm[47]. There are two distinct areas where errors manifest in PIV. The first is experimental error, which include errors during correlation calculations as well as calibration. An example of calibration error is slight misalignment of laser sheets or error when computing the magnification constant for use in converting from pixel units to a real dimensional measurement. Error of this type is conservatively estimated at 1%. The second area is associated with flaws in the data sets. These include variable seed density (voids), laser reflections, or accumulation on windows. These errors produce irregular correlations and are filtered during the correlation calculations. In the present experiment, use of the filter reduced the number of vectors by at most 10%. The error was calculated using the sample size according to the number of image pairs recorded (taking into account any vectors lost due to filtering) resulting in a sample size of 3,000. PIV uncertainty estimates are tabulated in Table C-1.

Table C-1 PIV uncertainty estimates

Statistic	Error
$\bar{u}$	0.5 %
$\bar{v}$	0.5 %
$\overline{u'u'}$	2.0 %
$\overline{v'v'}$	2.0 %
$\overline{u'v'}$	5.0 %

APPENDIX D

CONTOUR PLOTS

$\bar{u}$

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FIGURE Page

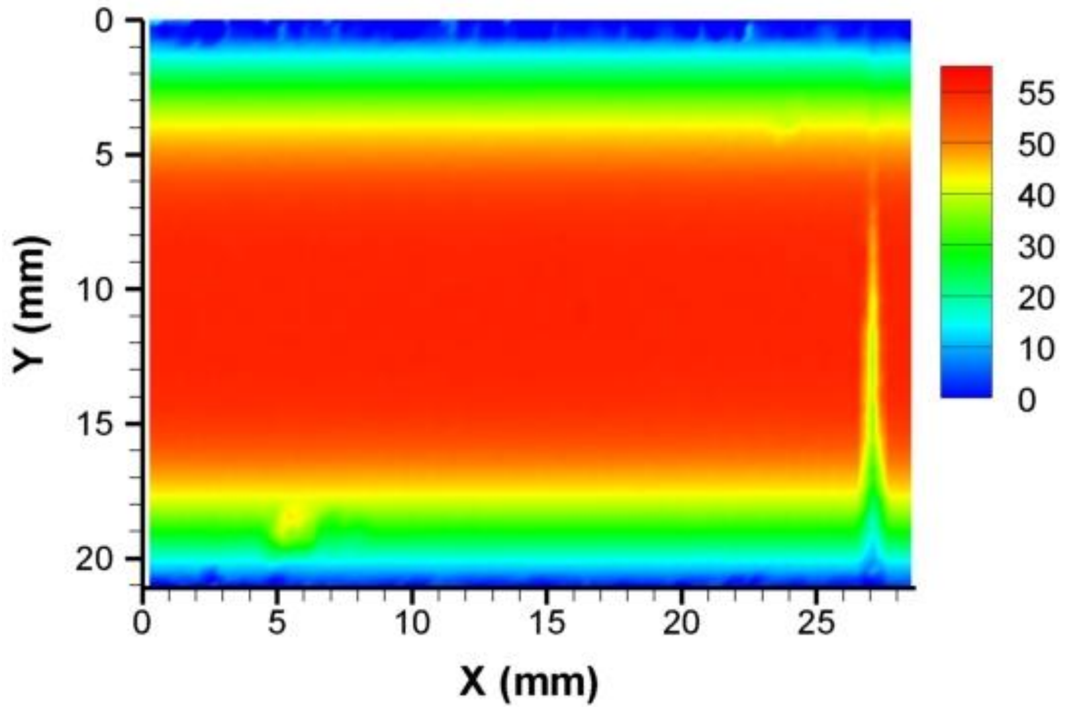

Fig. D-1 $\bar{u}$, No Grid, L0, Plasma-Off

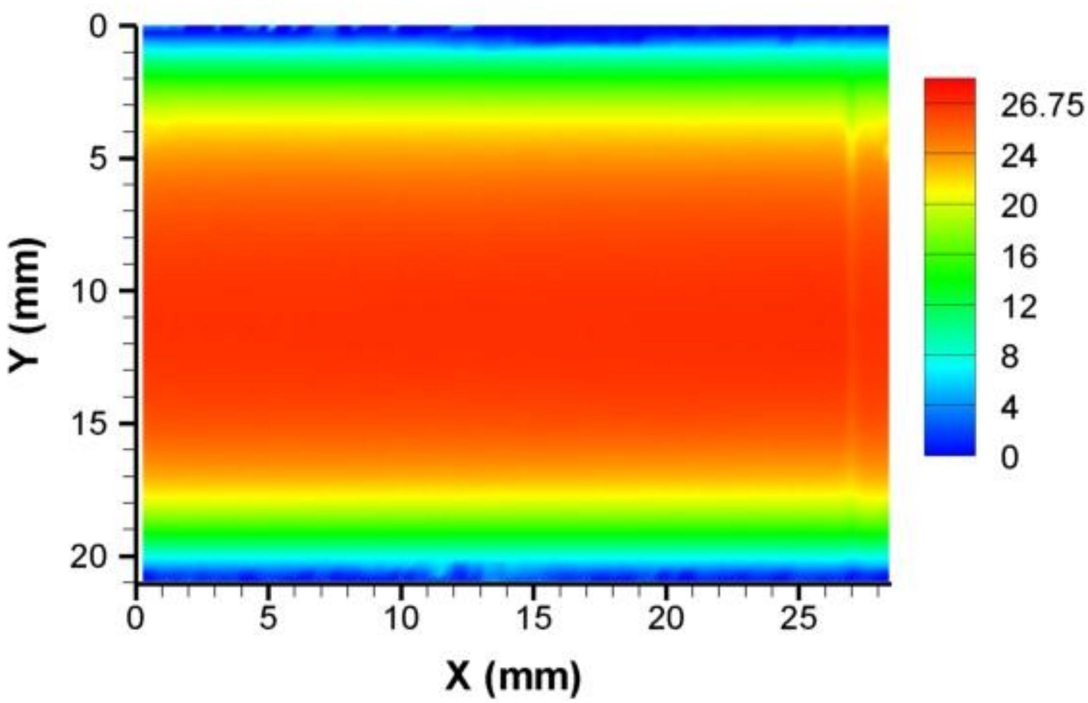

Fig. D-2 $\bar{u}$, Grid #1, L0, Plasma-Off

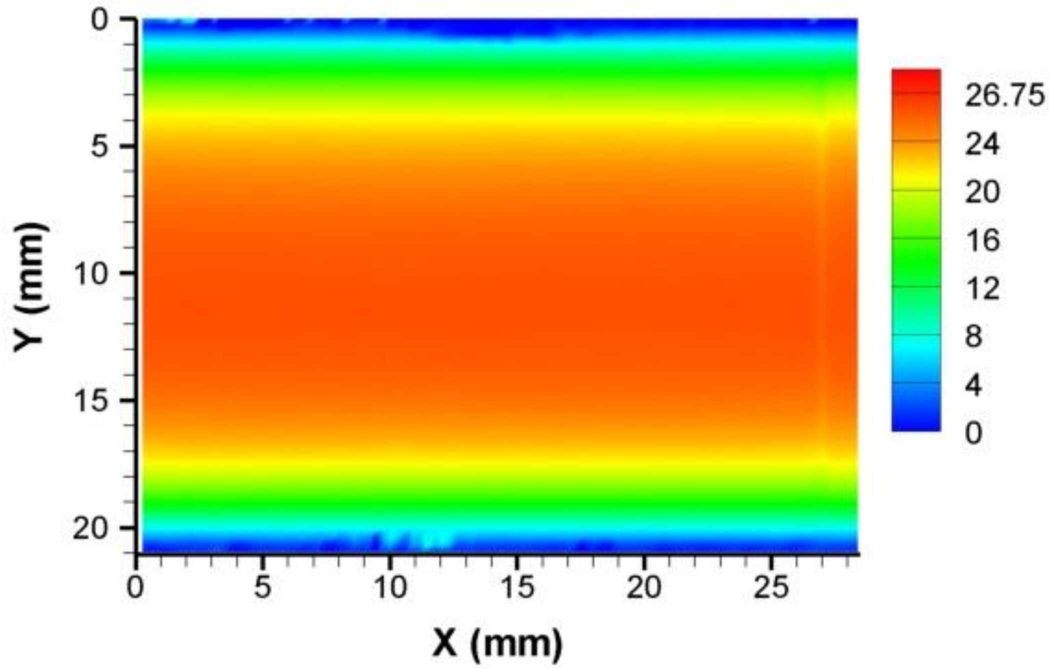

Fig. D-3 $\overline{u}$, Grid #1, L0, Plasma-150

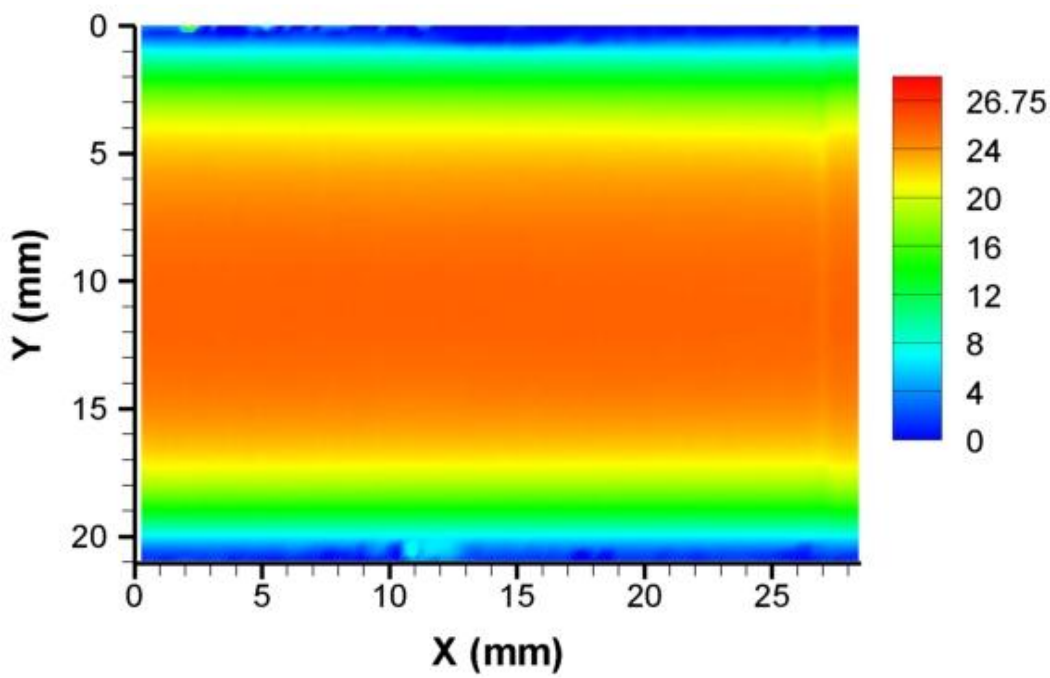

Fig. D-4 $\overline{u}$, Grid #1, L0, Plasma-300

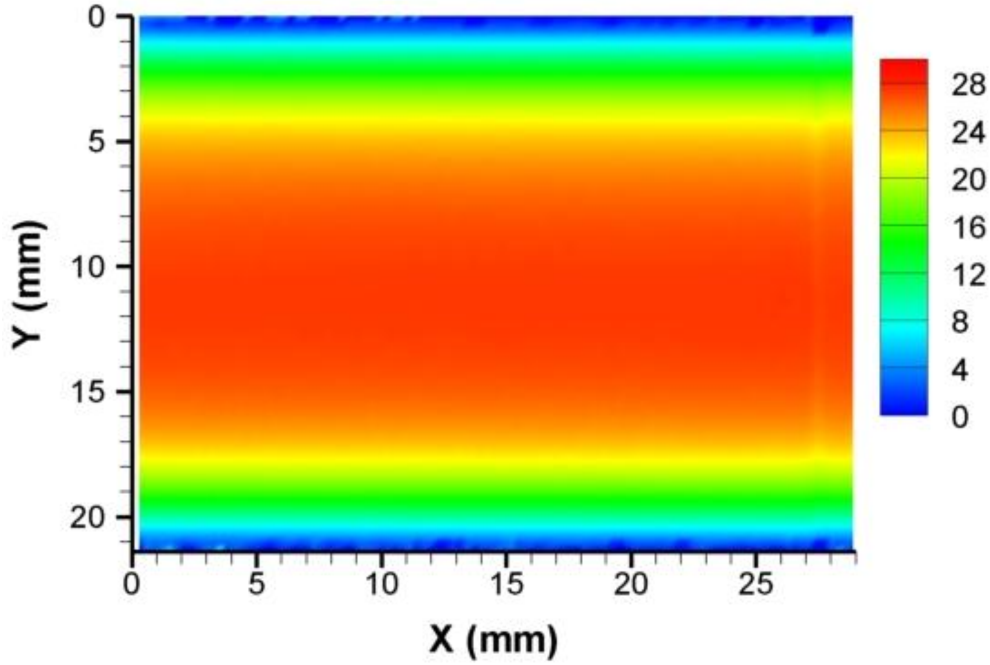

Fig. D-5 $\overline{u}$, Grid #1, L1, Plasma-Off

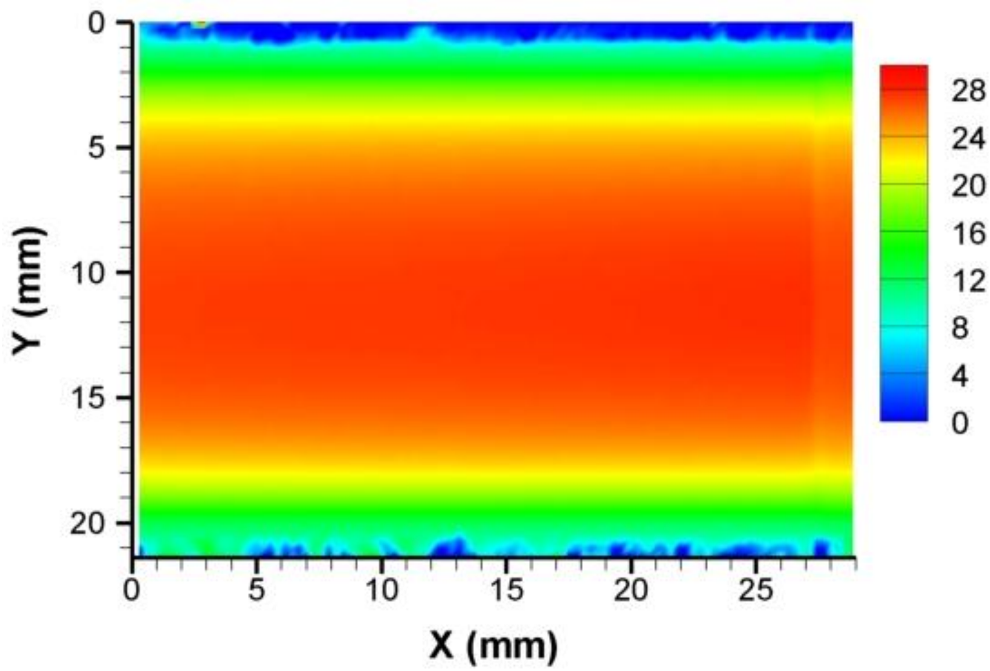

Fig. D-6 $\overline{u}$, Grid #1, L1, Plasma-150

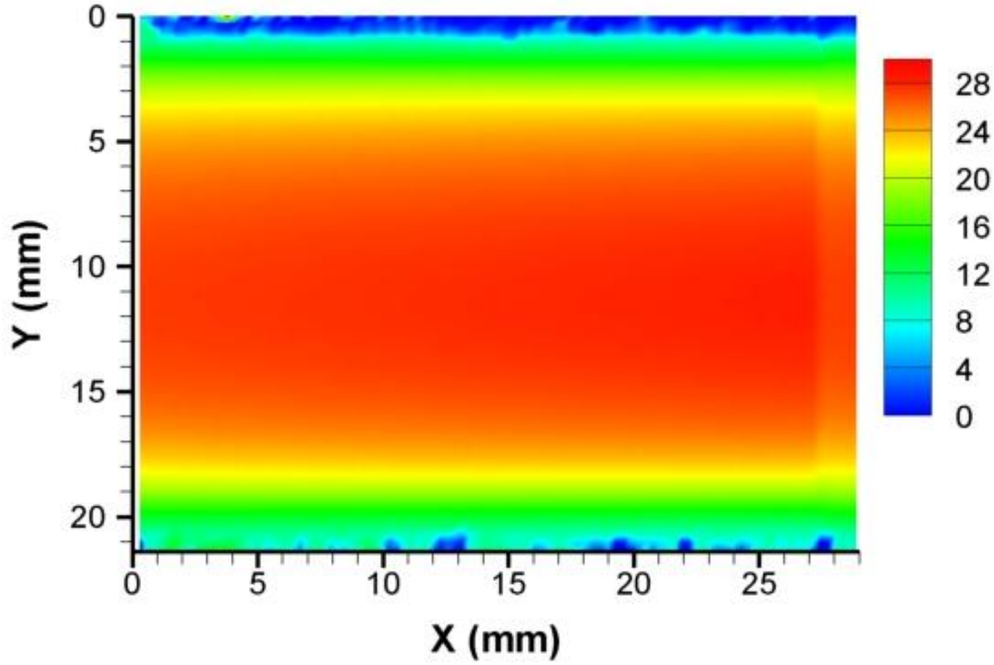

Fig. D-7 $\bar{u}$, Grid #1, L1, Plasma-300

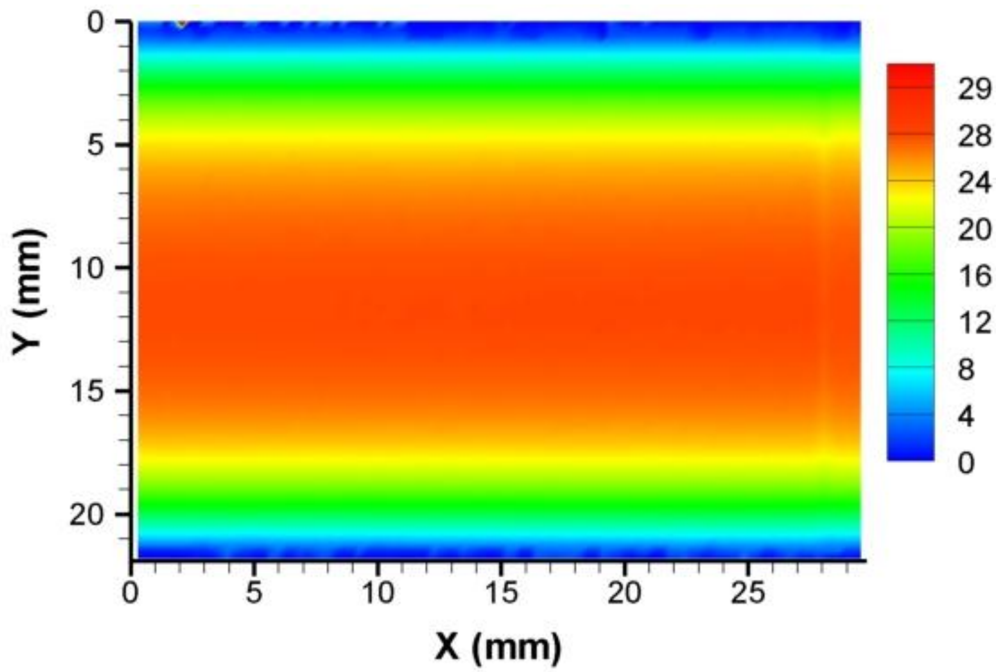

Fig. D-8 $\bar{u}$, Grid #1, L2, Plasma-Off

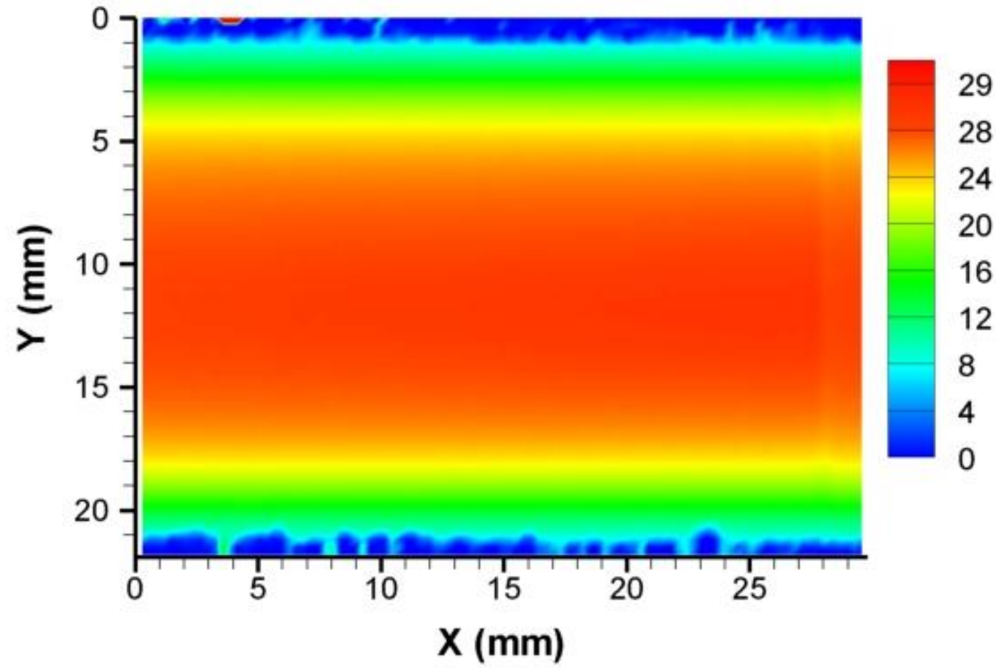

Fig. D-9 $\overline{u}$, Grid #1, L2, Plasma-150

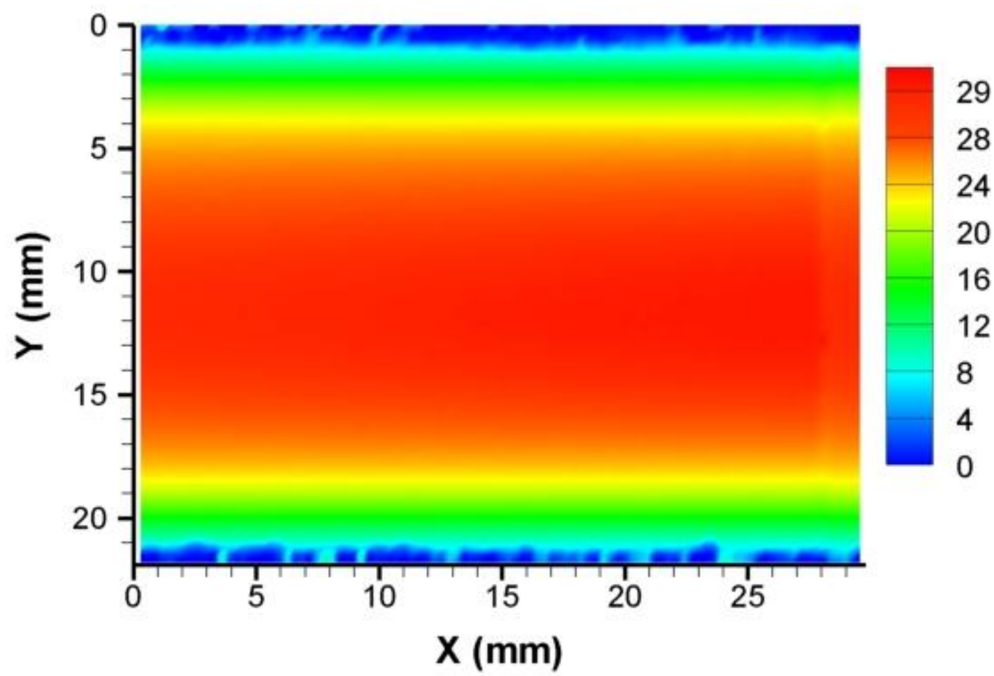

Fig. D-10 $\overline{u}$, Grid #1, L2, Plasma-300

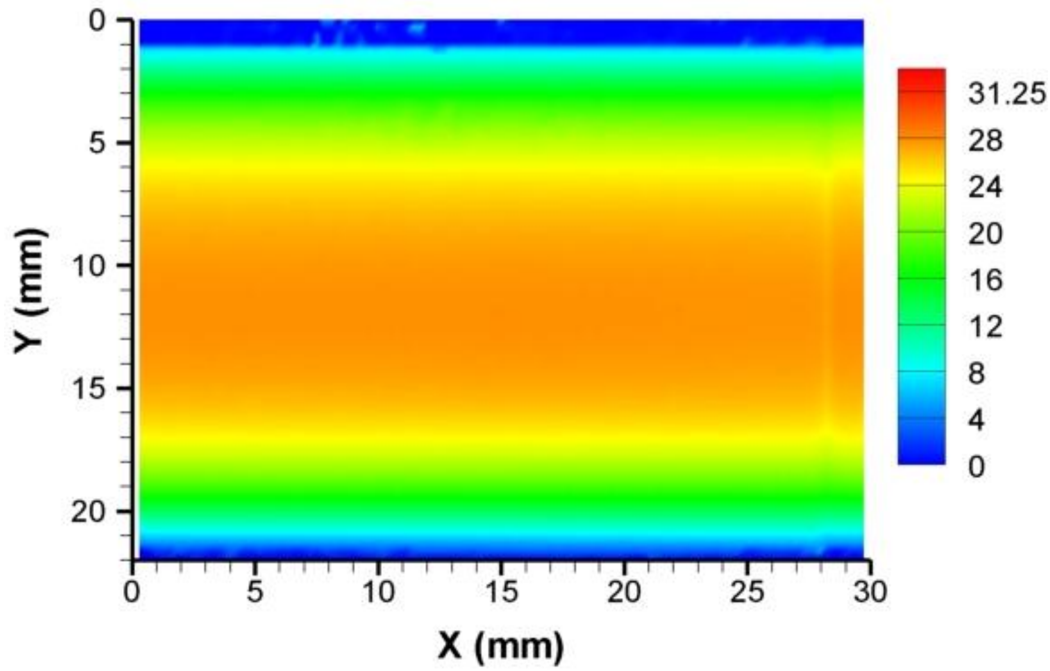

Fig. D-11 $\overline{u}$, Grid #1, L3, Plasma-Off

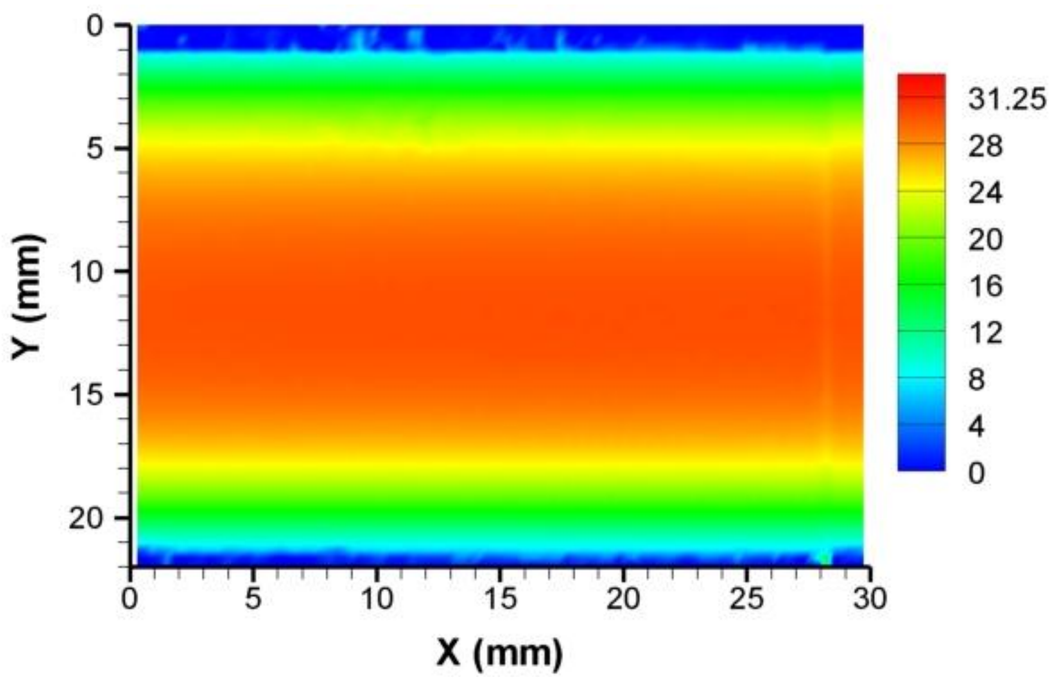

Fig. D-12 $\overline{u}$, Grid #1, L3, Plasma-150

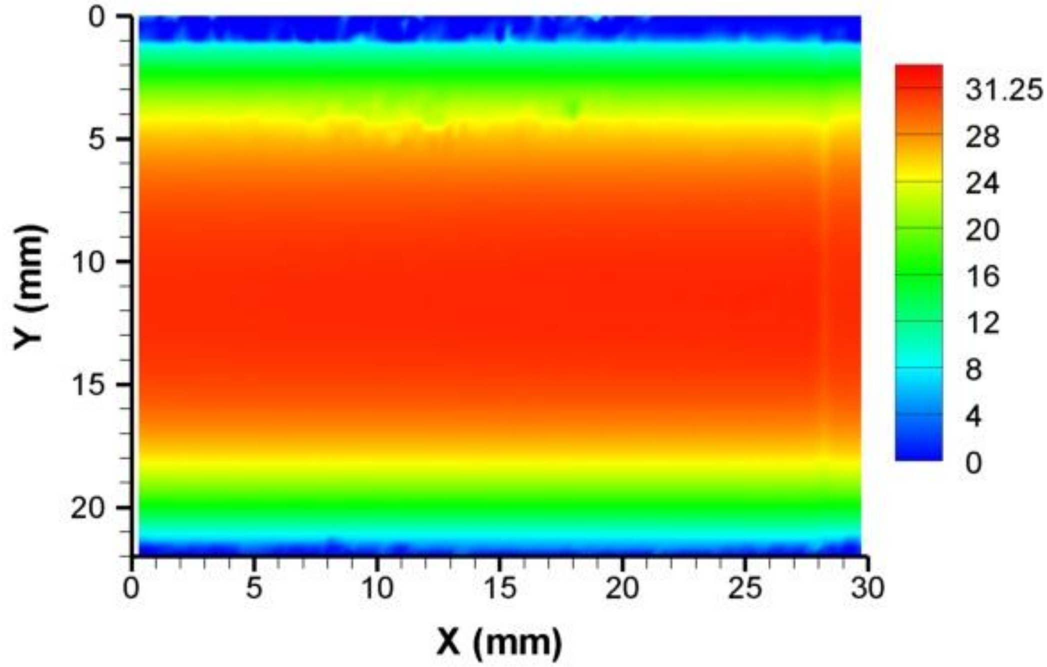

Fig. D-13 $\overline{u}$**, Grid #1, L3, Plasma-300**

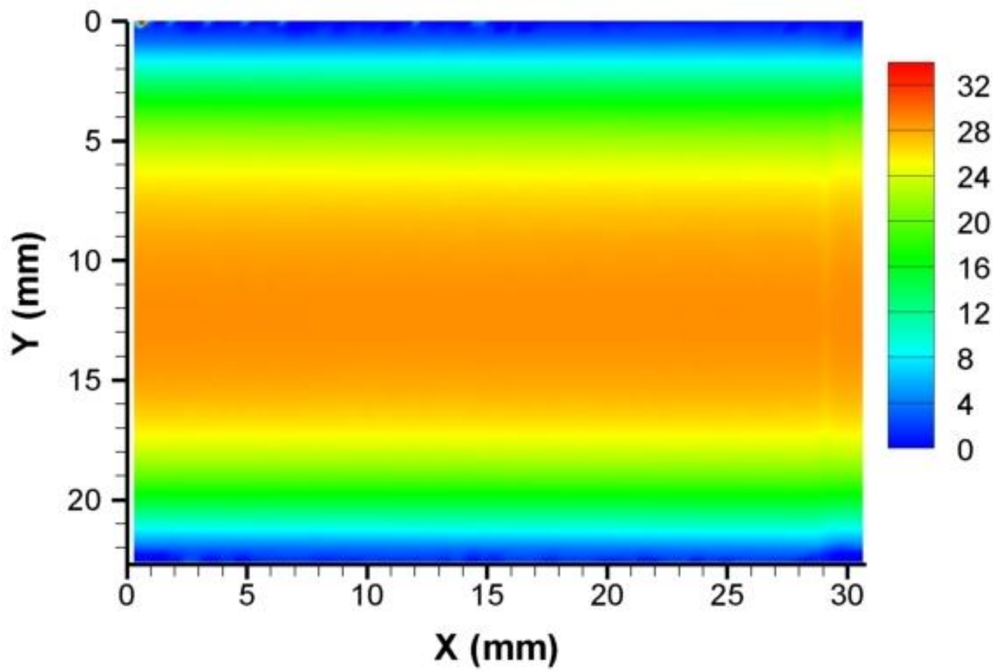

Fig. D-14 $\overline{u}$**, Grid #1, L4, Plasma-Off**

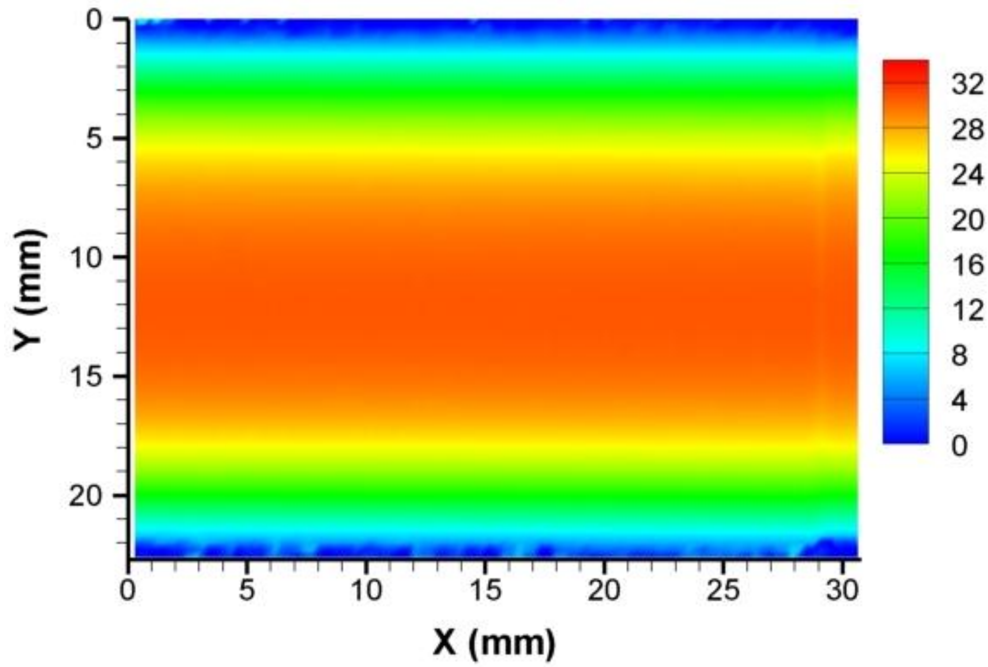

Fig. D-15 $\overline{u}$, Grid #1, L4, Plasma-150

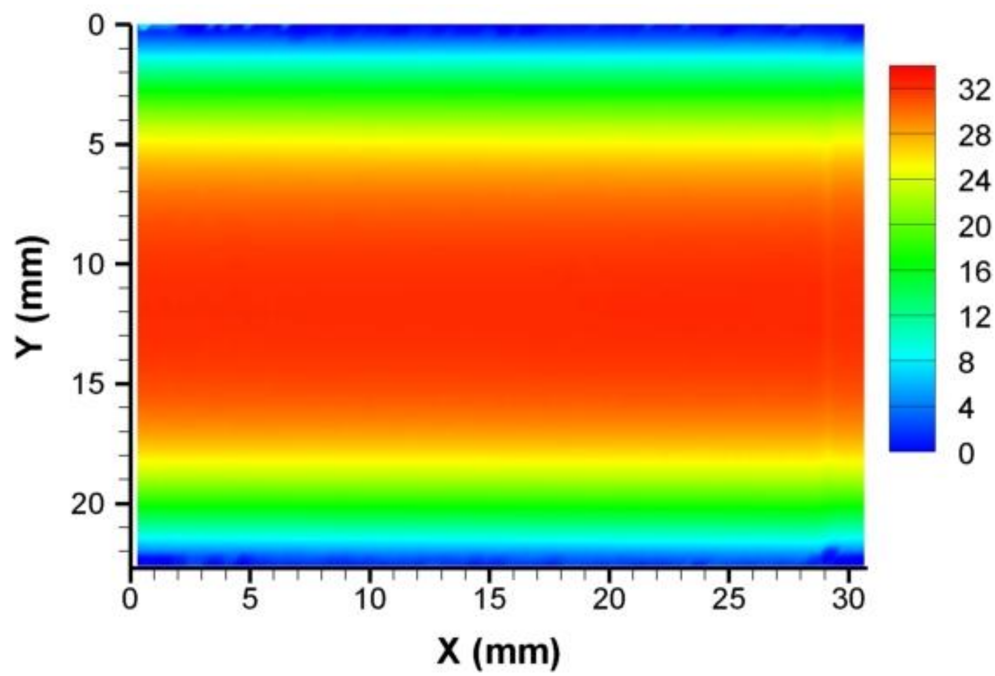

Fig. D-16 $\overline{u}$, Grid #1, L4, Plasma-300

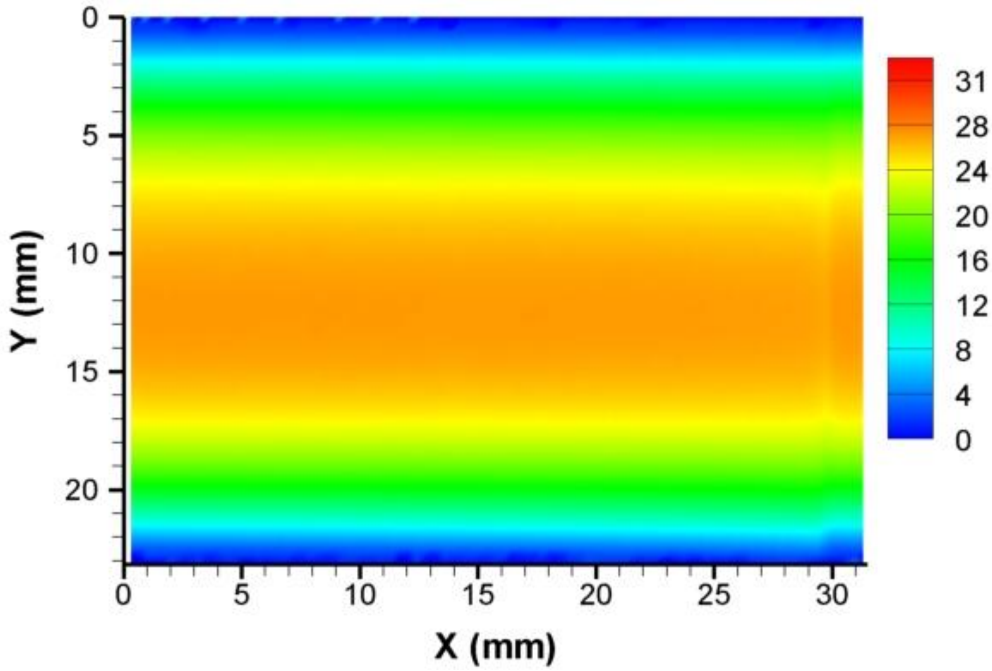

Fig. D-17 $\overline{u}$, Grid #1, L5, Plasma-Off

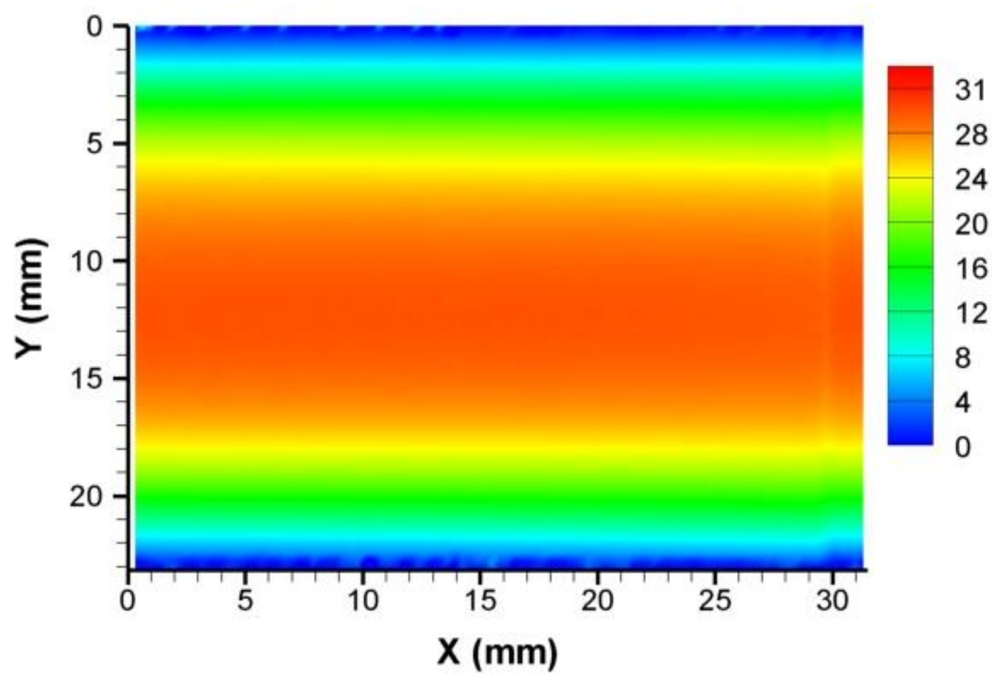

Fig. D-18 $\overline{u}$, Grid #1, L5, Plasma-150

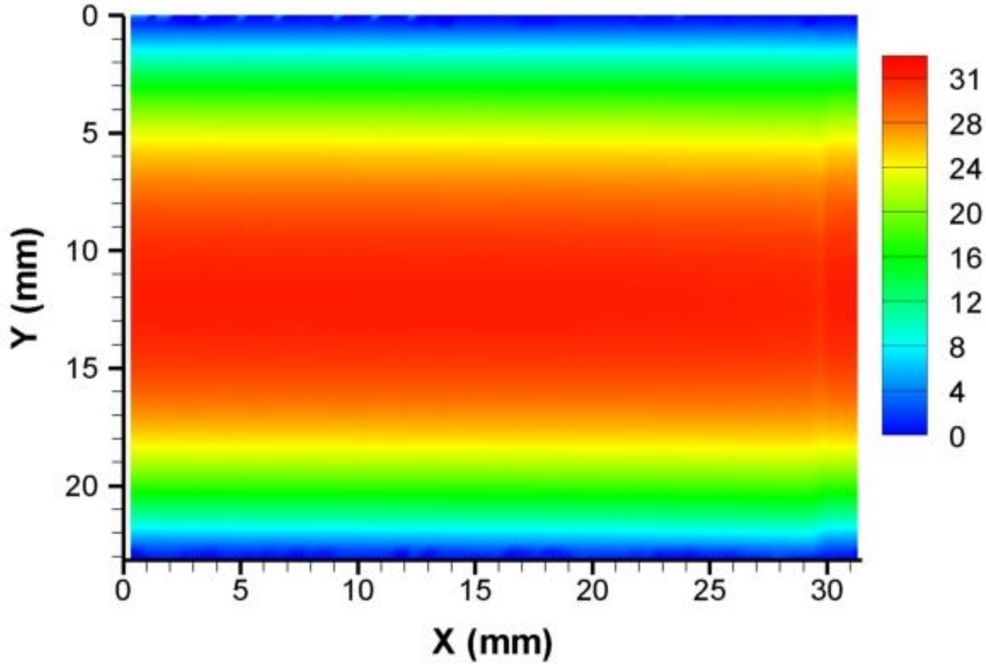

Fig. D-19 $\bar{u}$, **Grid #1, L5, Plasma-300**

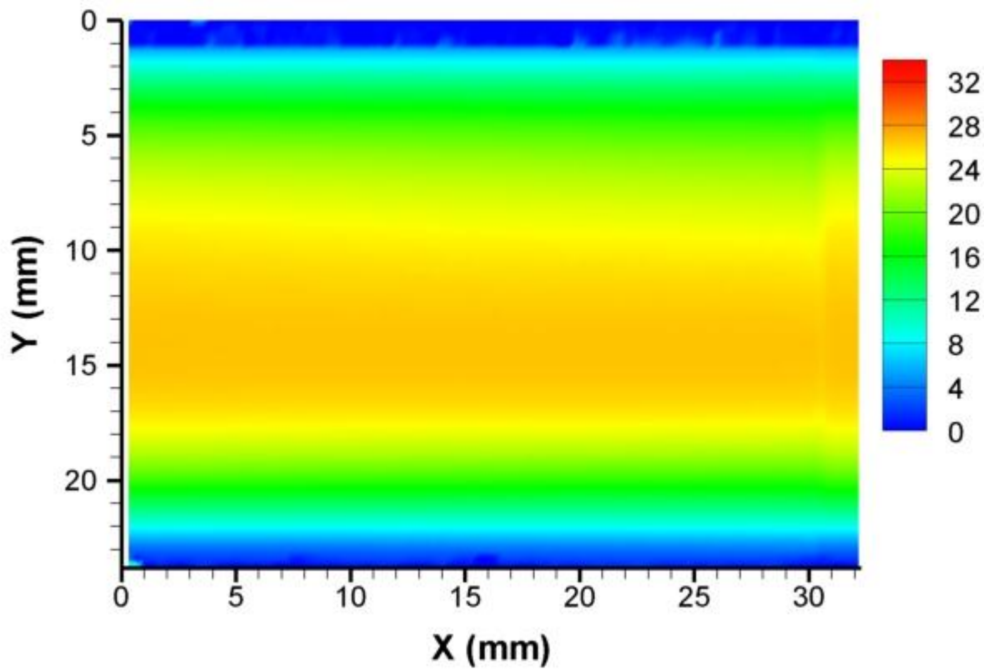

Fig. D-20 $\bar{u}$, **Grid #1, L6, Plasma-Off**

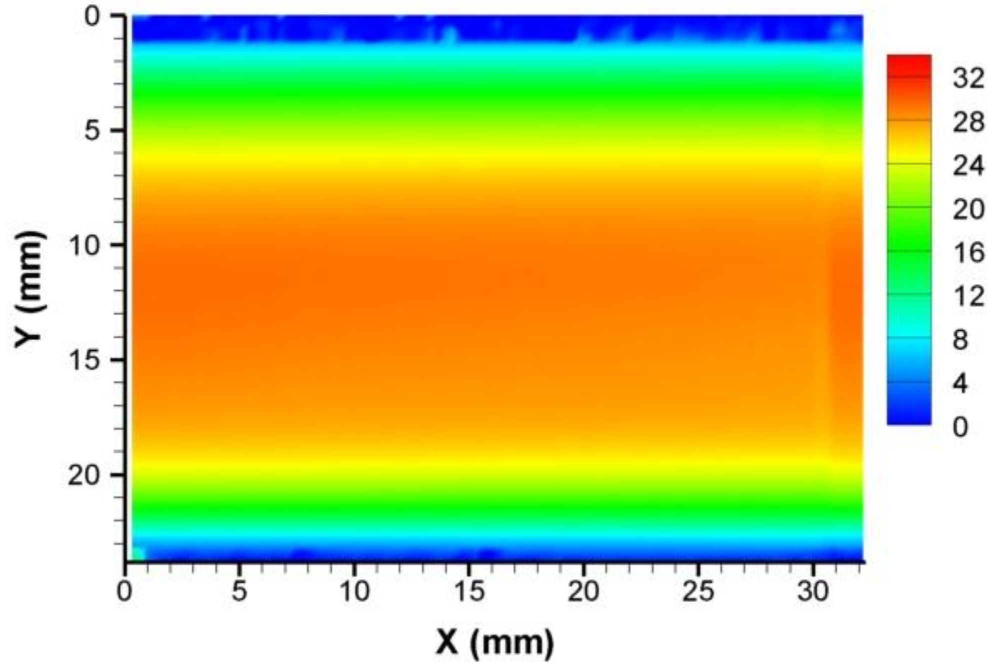

Fig. D-21 $\overline{u}$, Grid #1, L6, Plasma-150

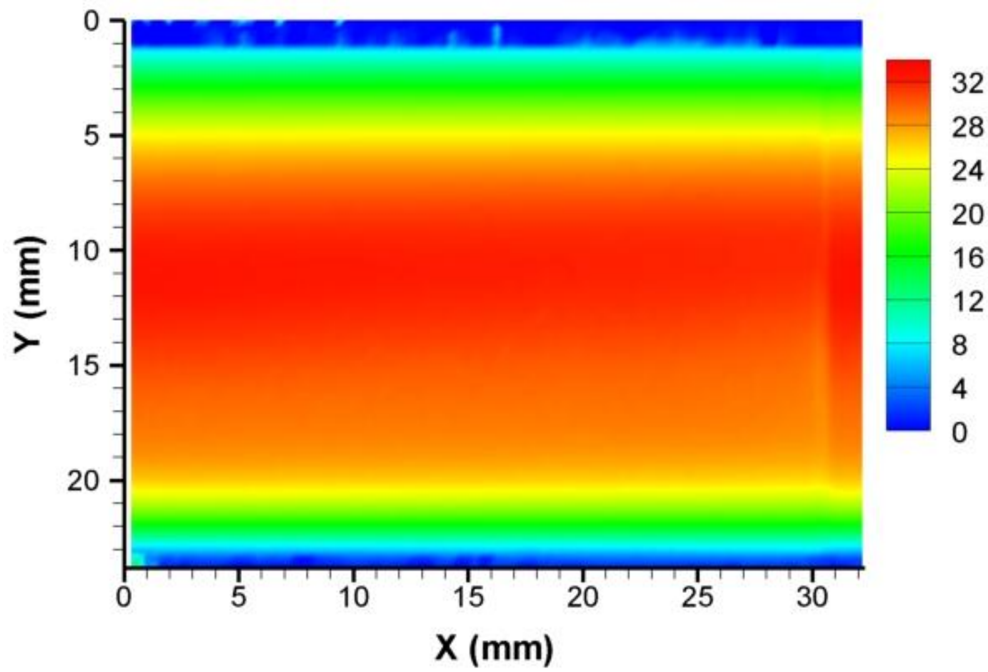

Fig. D-22 $\overline{u}$, Grid #1, L6, Plasma-300

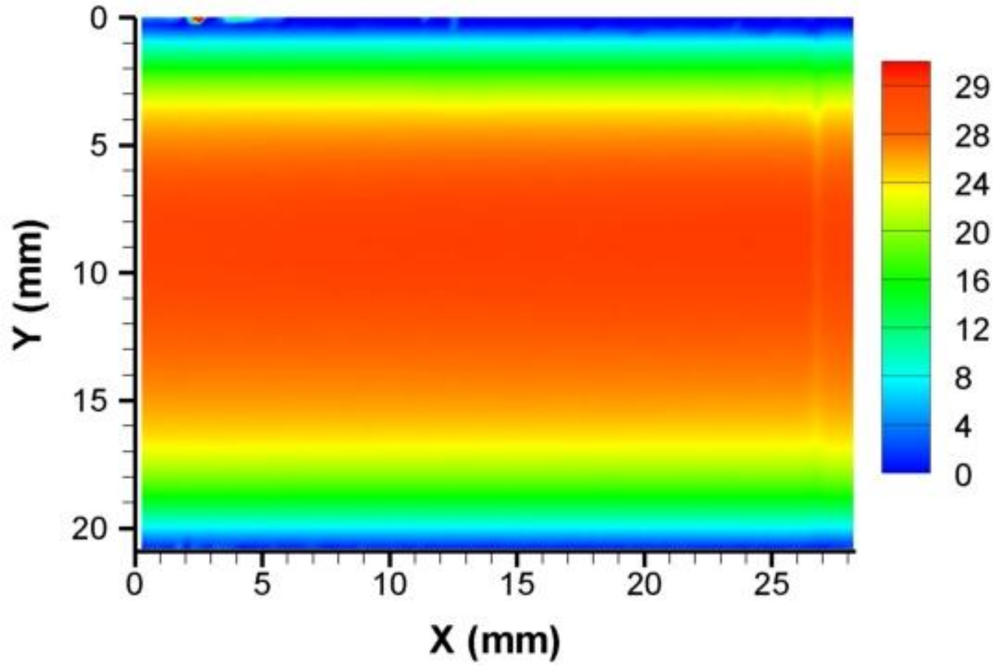

Fig. D-23 $\bar{u}$, Grid #2, L0, Plasma-Off

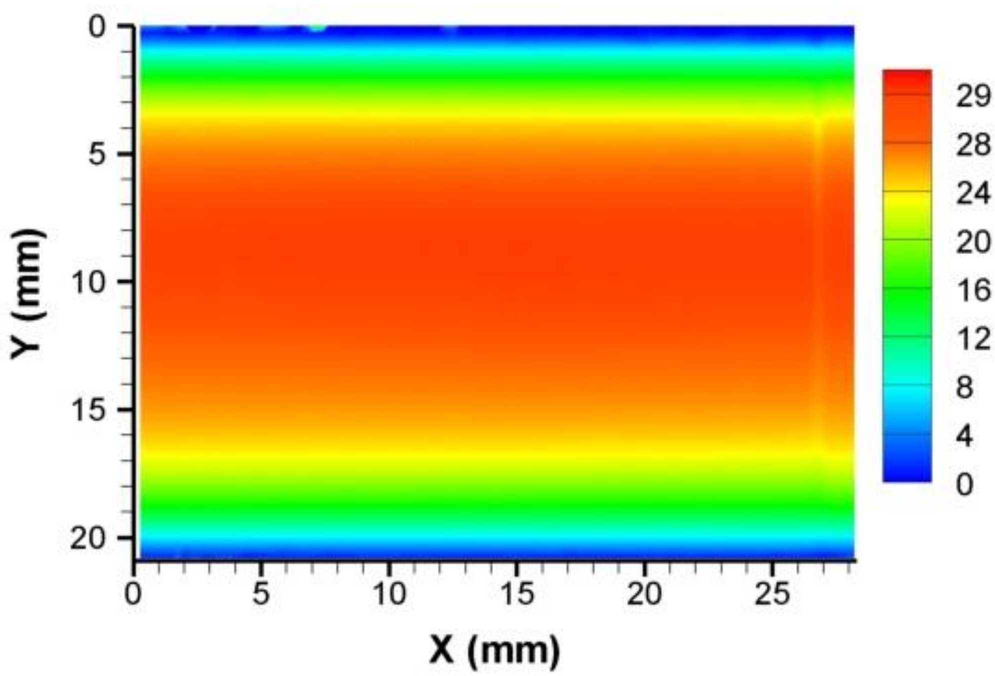

Fig. D-24 $\bar{u}$, Grid #2, L0, Plasma-150

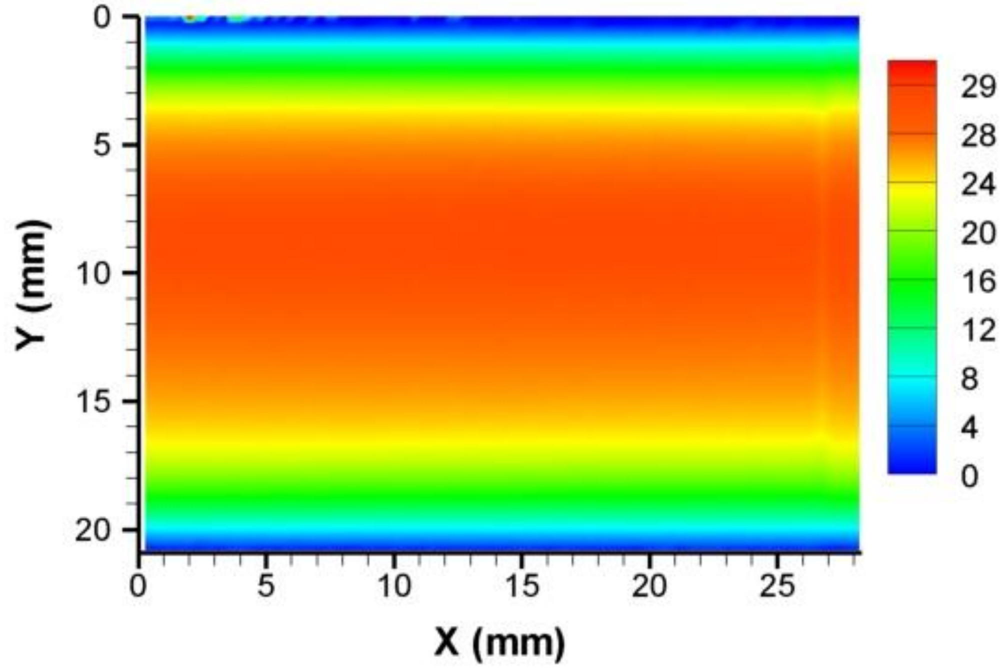

Fig. D-25 $\overline{u}$, Grid #2, L0, Plasma-300

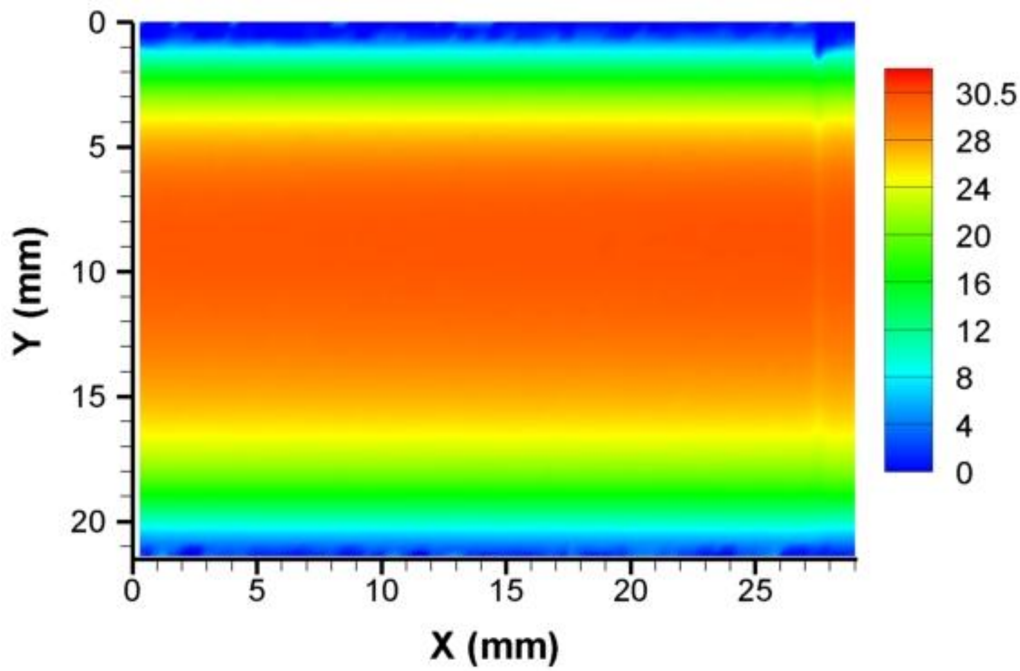

Fig. D-26 $\overline{u}$, Grid #2, L1, Plasma-Off

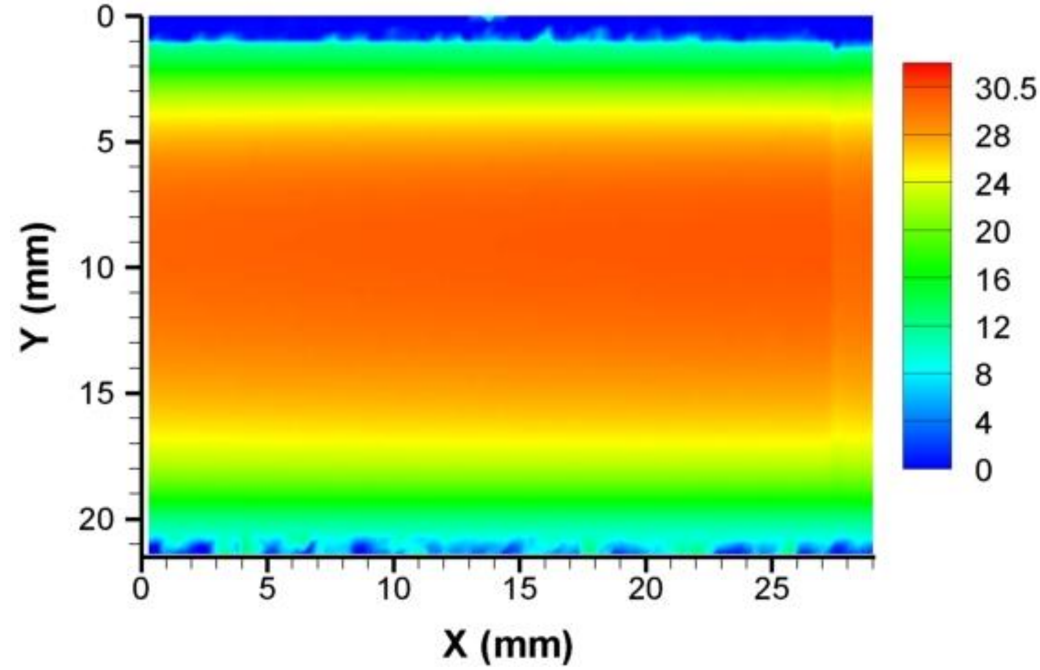

Fig. D-27 $\overline{u}$, Grid #2, L1, Plasma-150

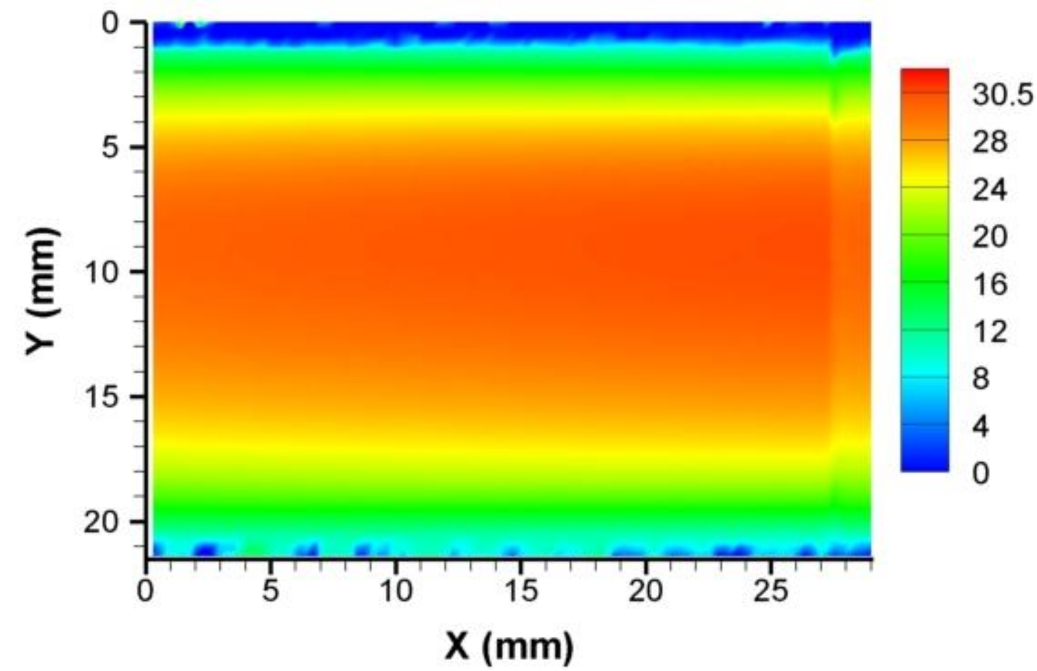

Fig. D-28 $\overline{u}$, Grid #2, L1, Plasma-300

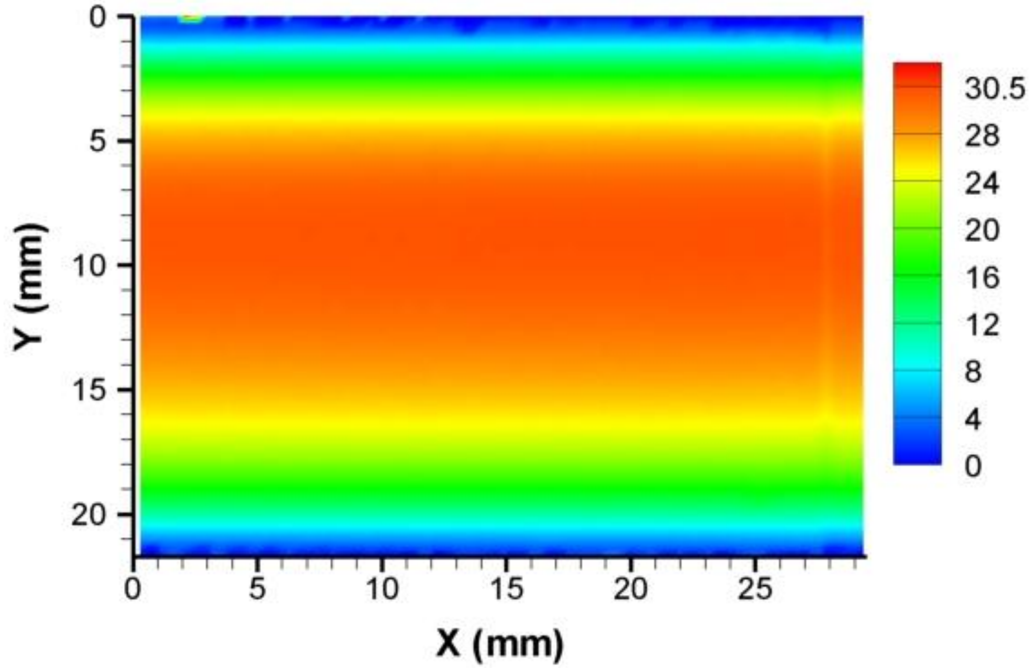

Fig. D-29 $\overline{u}$, Grid #2, L2, Plasma-Off

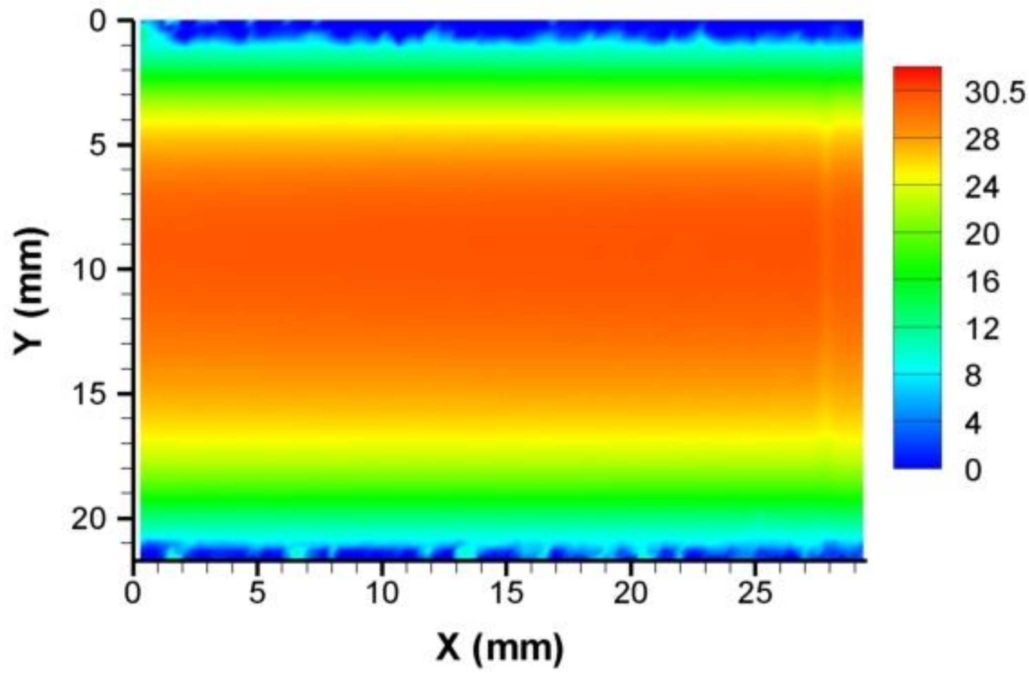

Fig. D-30 $\overline{u}$, Grid #2, L2, Plasma-150

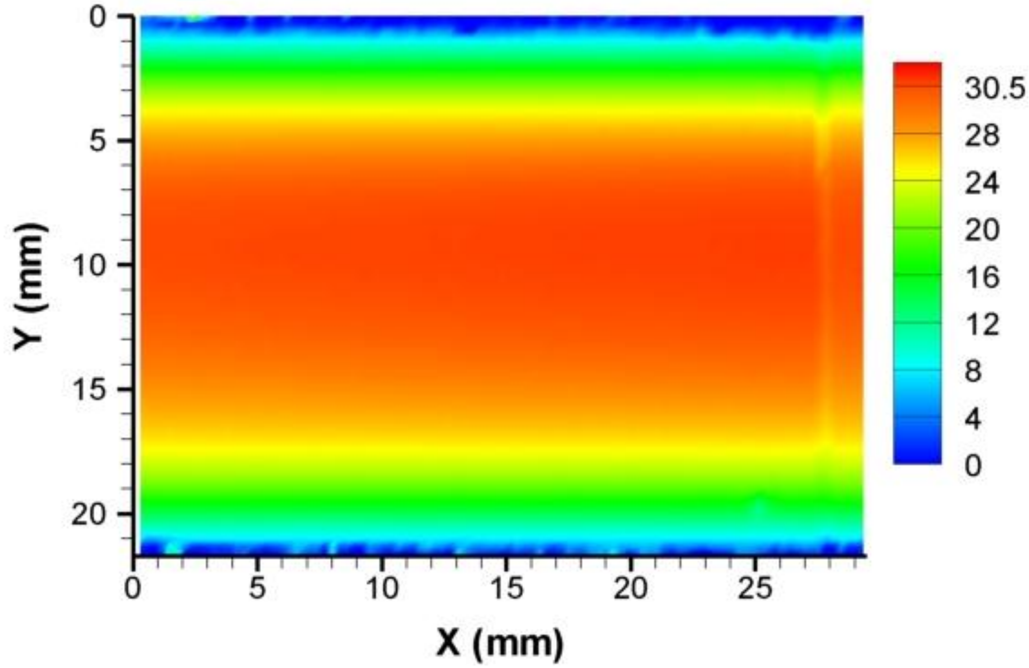

Fig. D-31 $\overline{u}$, Grid #2, L2, Plasma-300

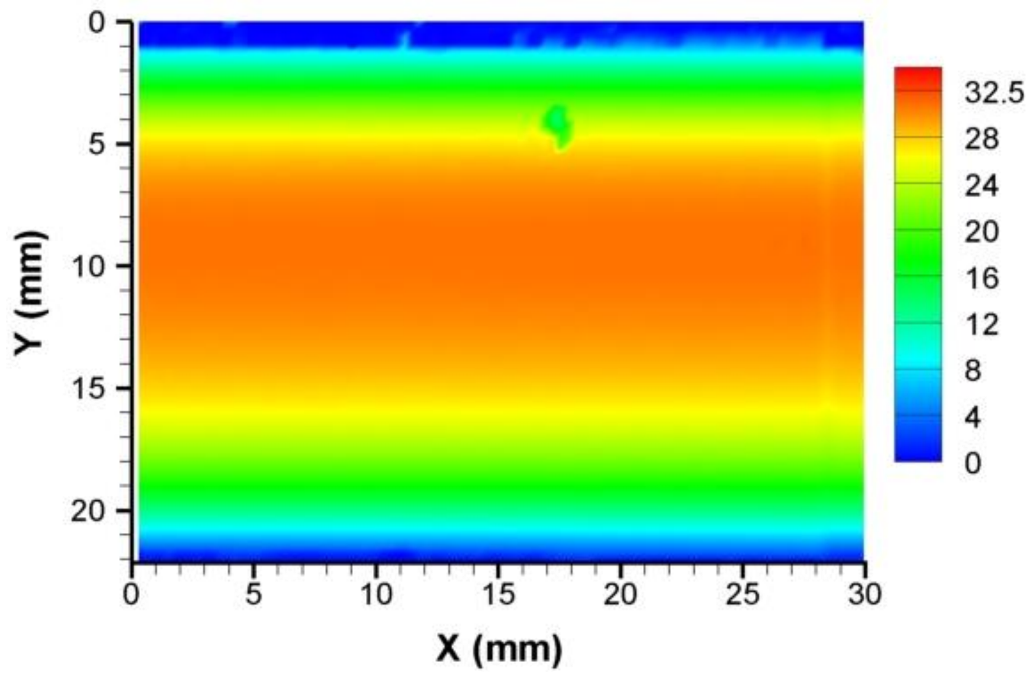

Fig. D-32 $\overline{u}$, Grid #2, L3, Plasma-Off

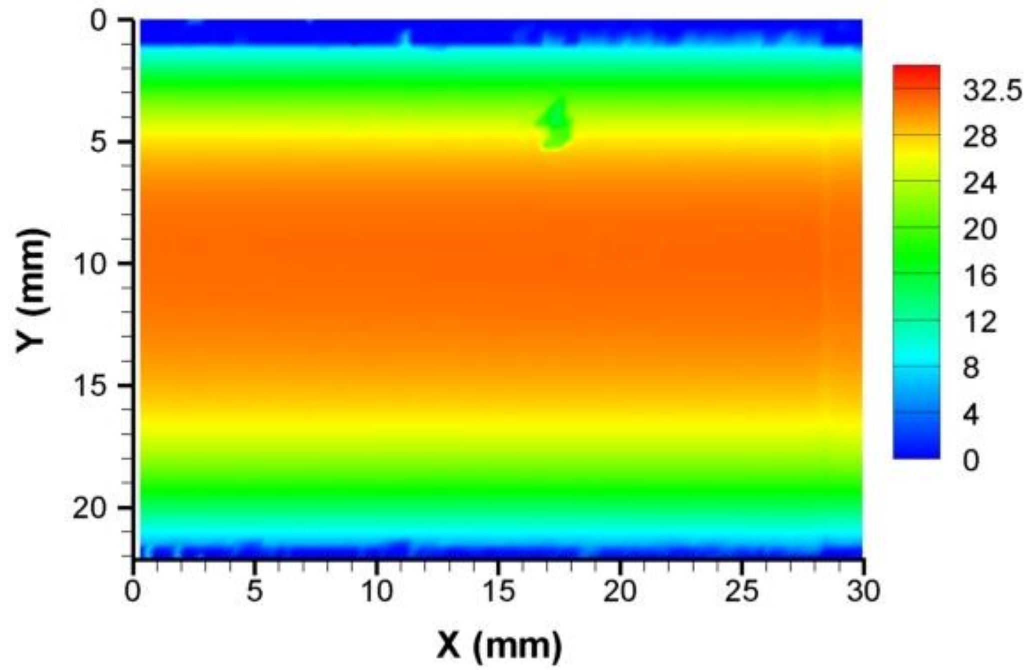

Fig. D-33 $\overline{u}$, Grid #2, L3, Plasma-150

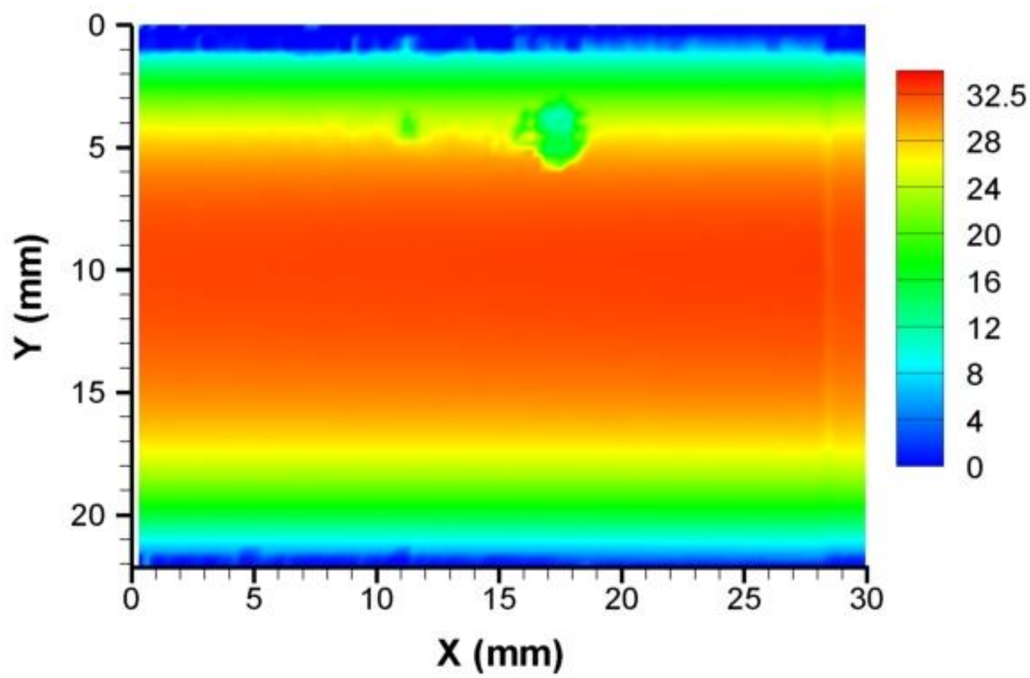

Fig. D-34 $\overline{u}$, Grid #2, L3, Plasma-300

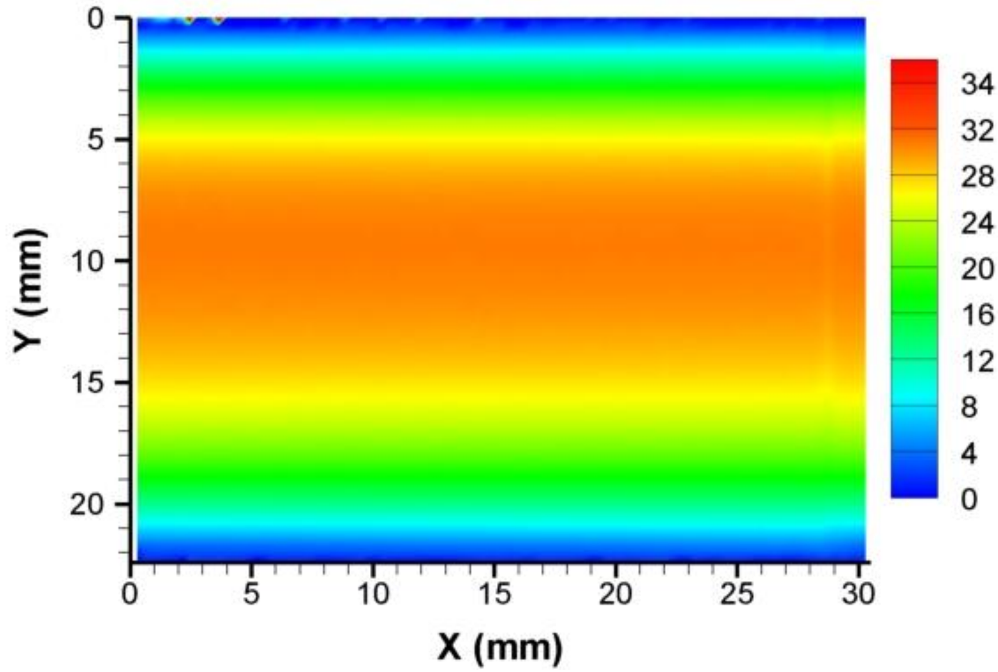

Fig. D-35 $\overline{u}$, Grid #2, L4, Plasma-Off

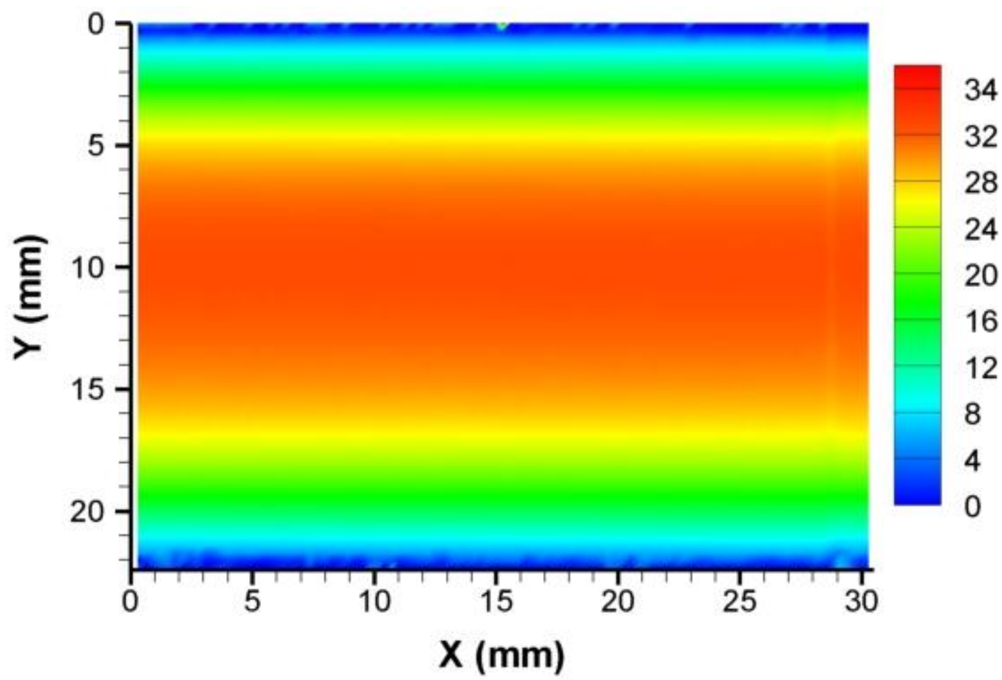

Fig. D-36 $\overline{u}$, Grid #2, L4, Plasma-150

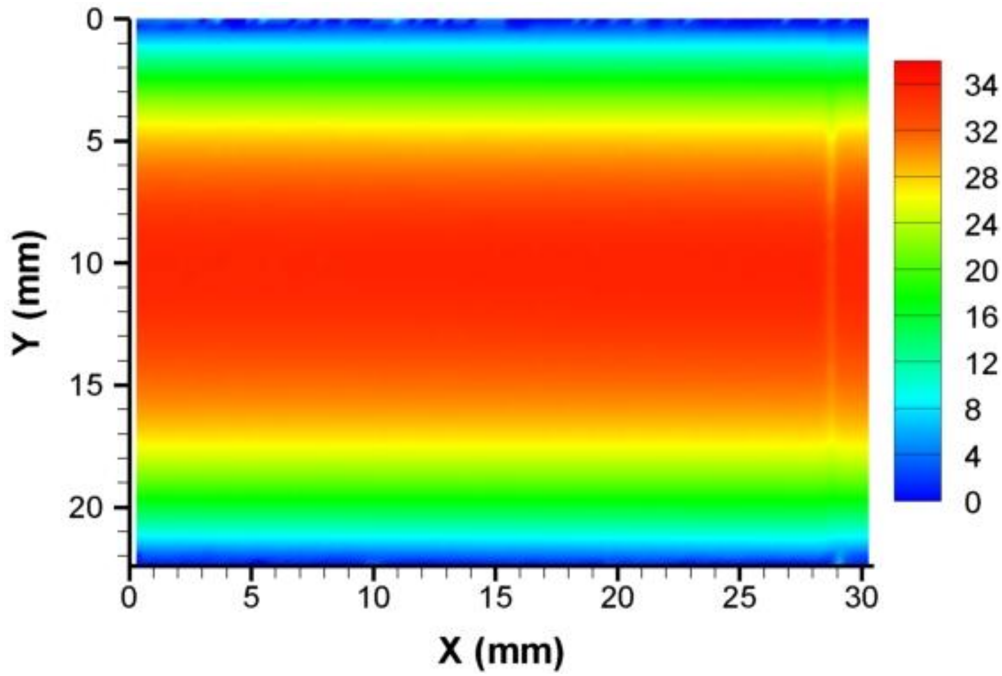

Fig. D-37 $\overline{u}$, Grid #2, L4, Plasma-300

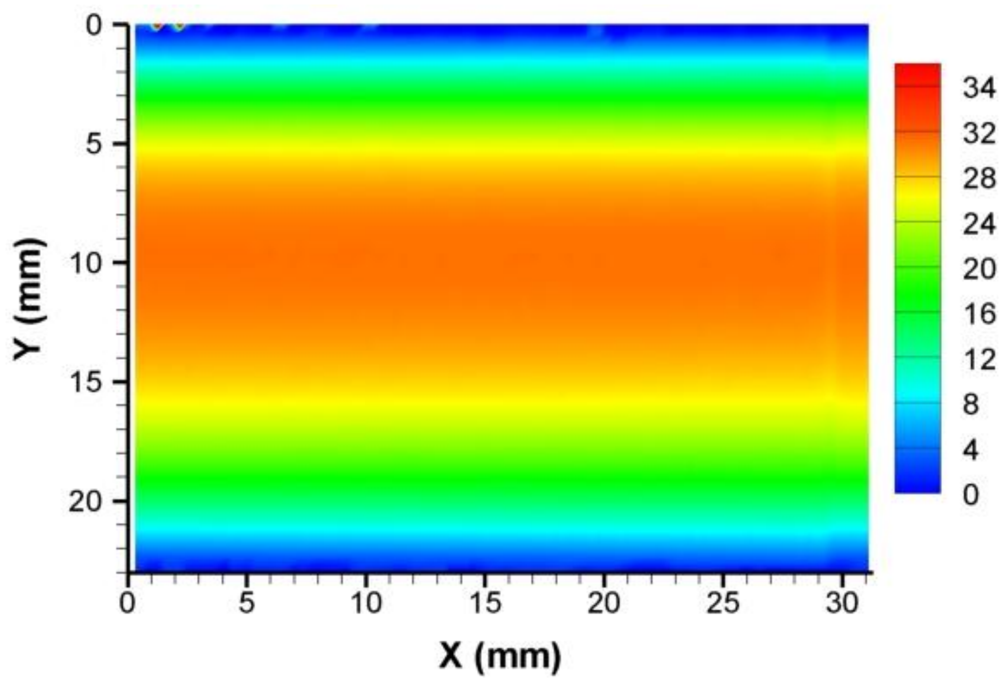

Fig. D-38 $\overline{u}$, Grid #2, L5, Plasma-Off

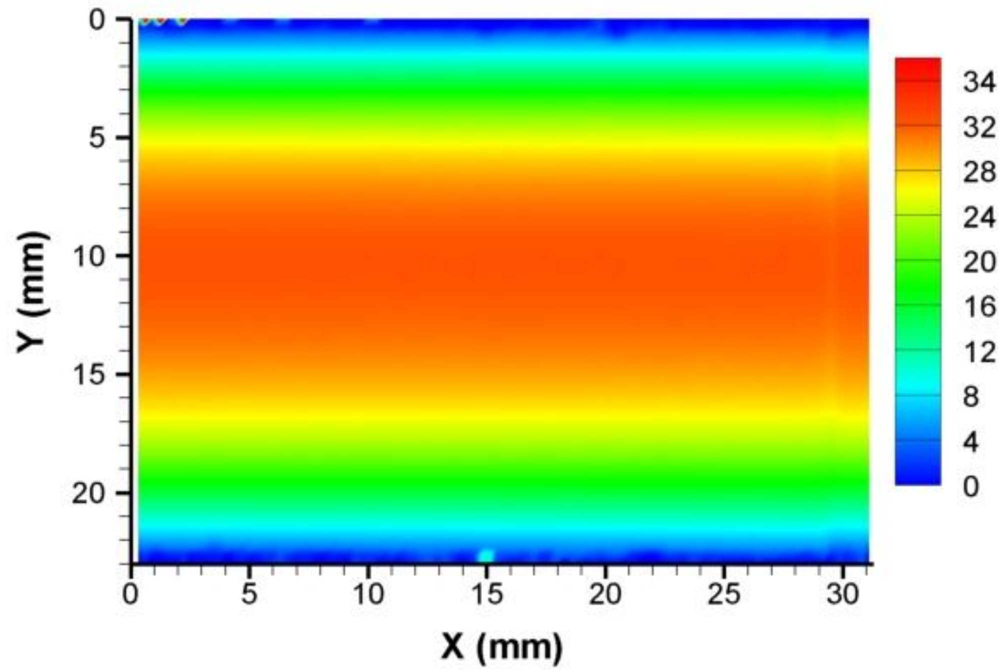

Fig. D-39 $\overline{u}$, Grid #2, L5, Plasma-150

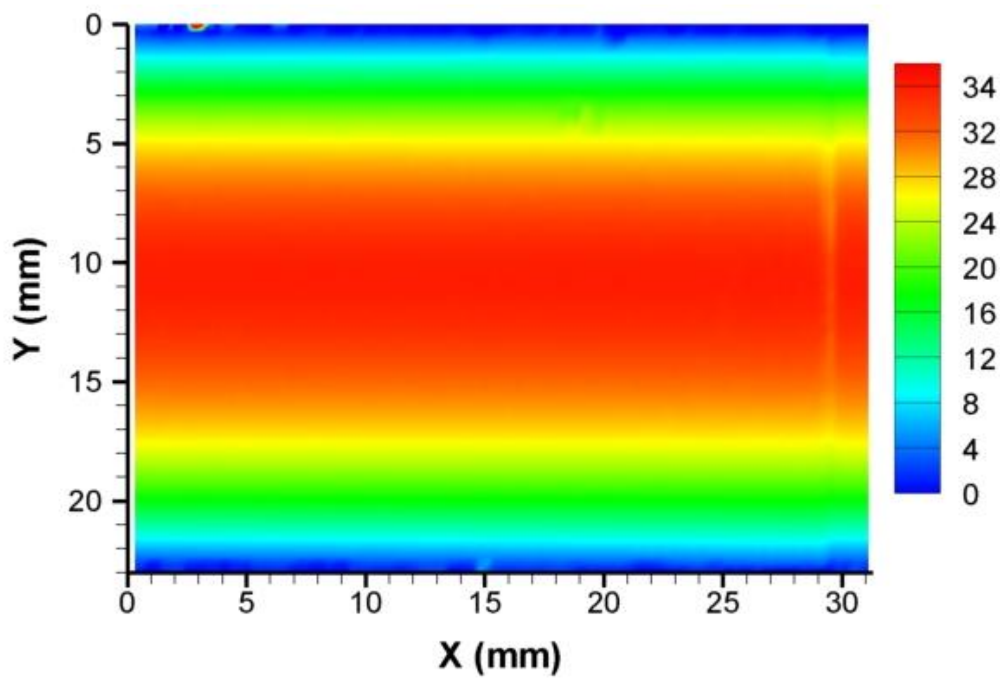

Fig. D-40 $\overline{u}$, Grid #2, L5, Plasma-300

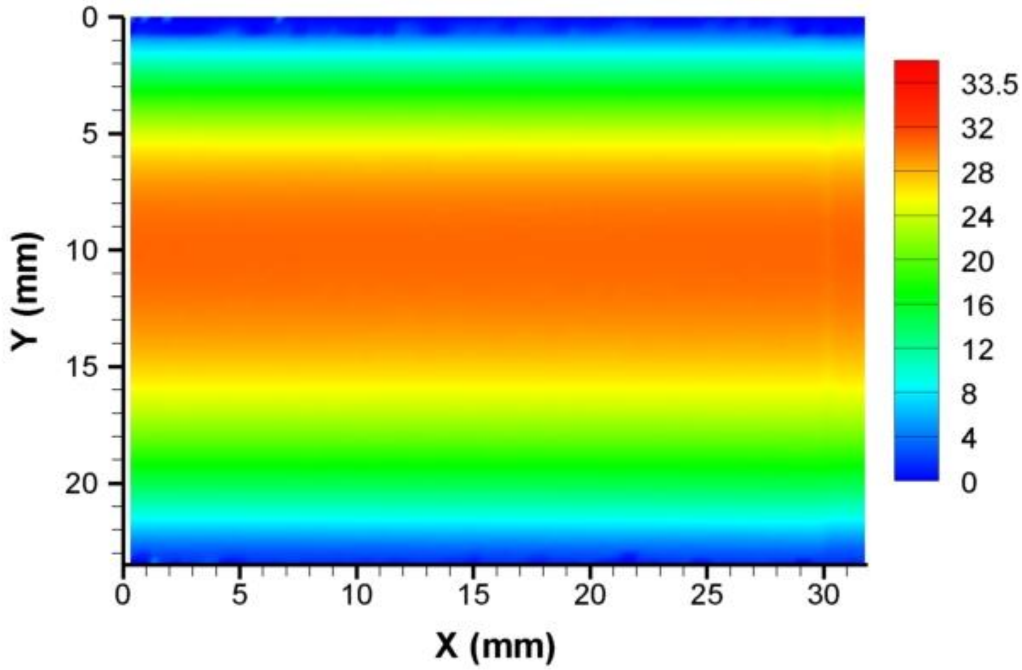

Fig. D-41 $\overline{u}$, Grid #2, L6, Plasma-Off

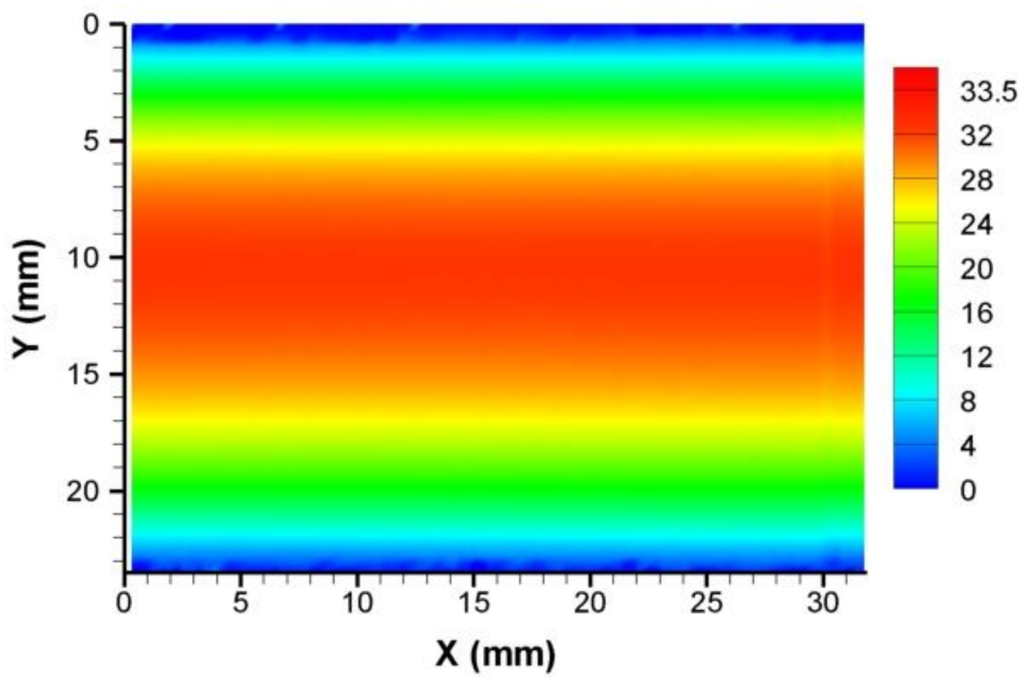

Fig. D-42 $\overline{u}$, Grid #2, L6, Plasma-150

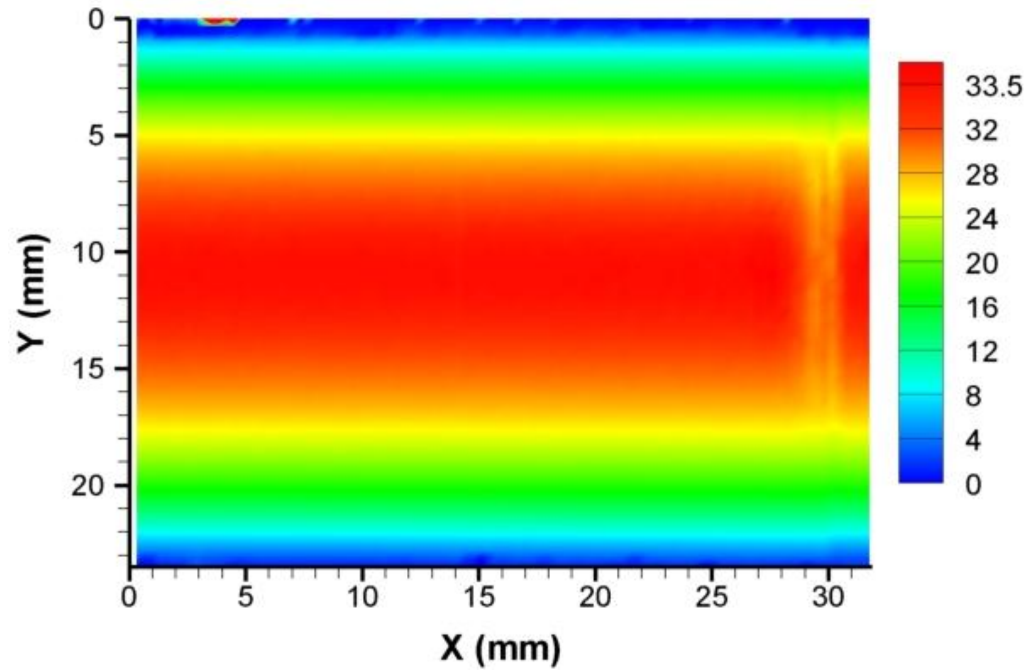

Fig. D-43 $\overline{u}$, Grid #2, L6, Plasma-300

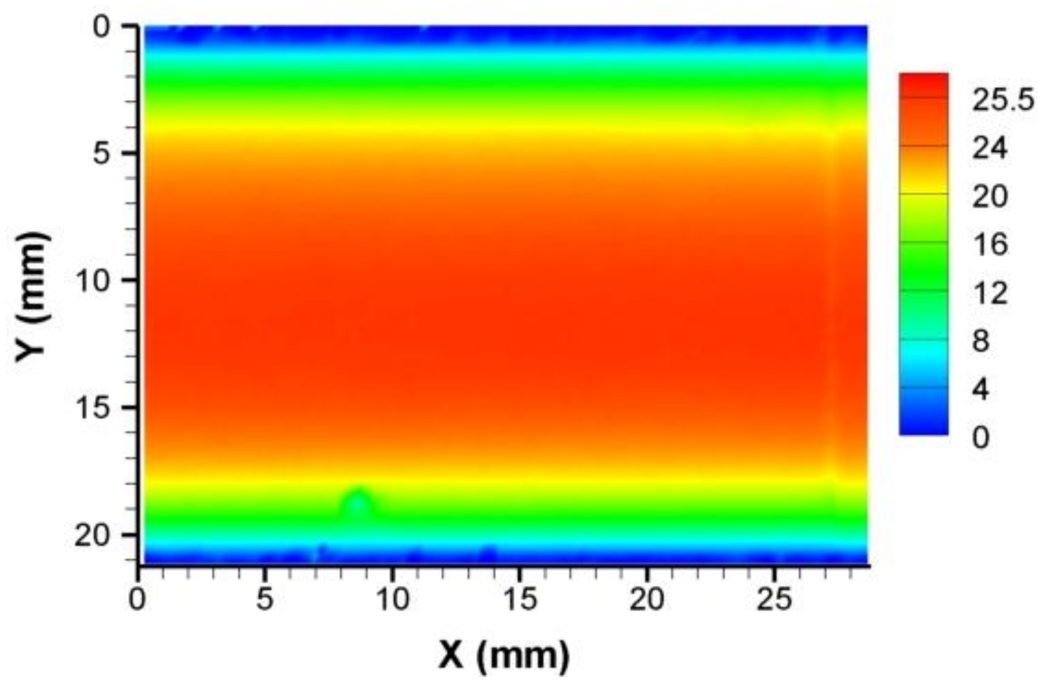

Fig. D-44 $\overline{u}$, Grid #1, L0, Plasma-150, Equilibrated

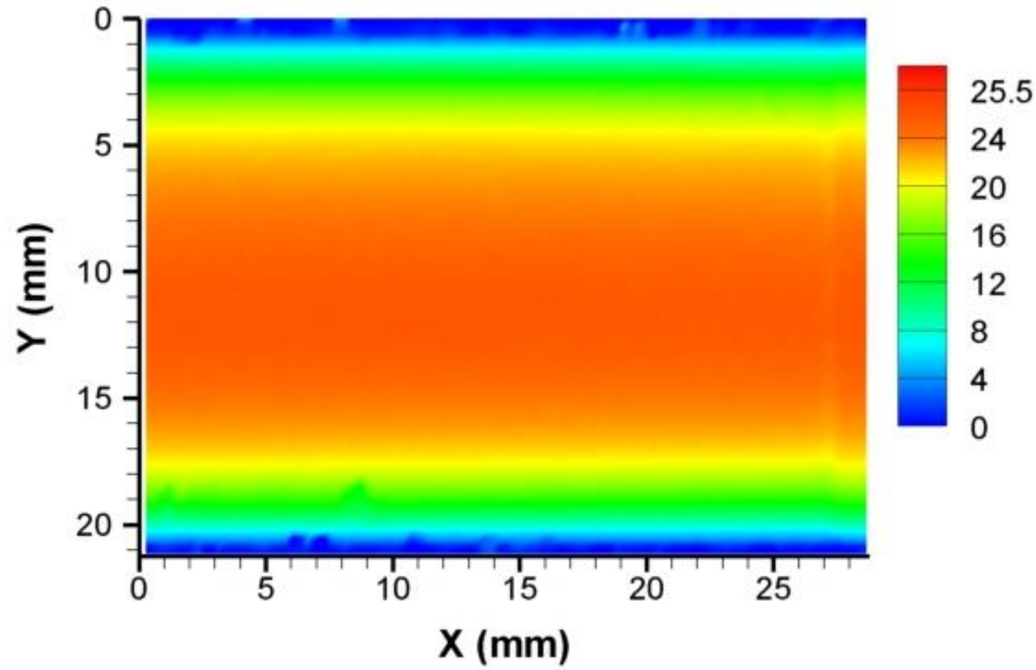

Fig. D-45 $\bar{u}$**, Grid #1, L0, Plasma-300, Equilibrated**

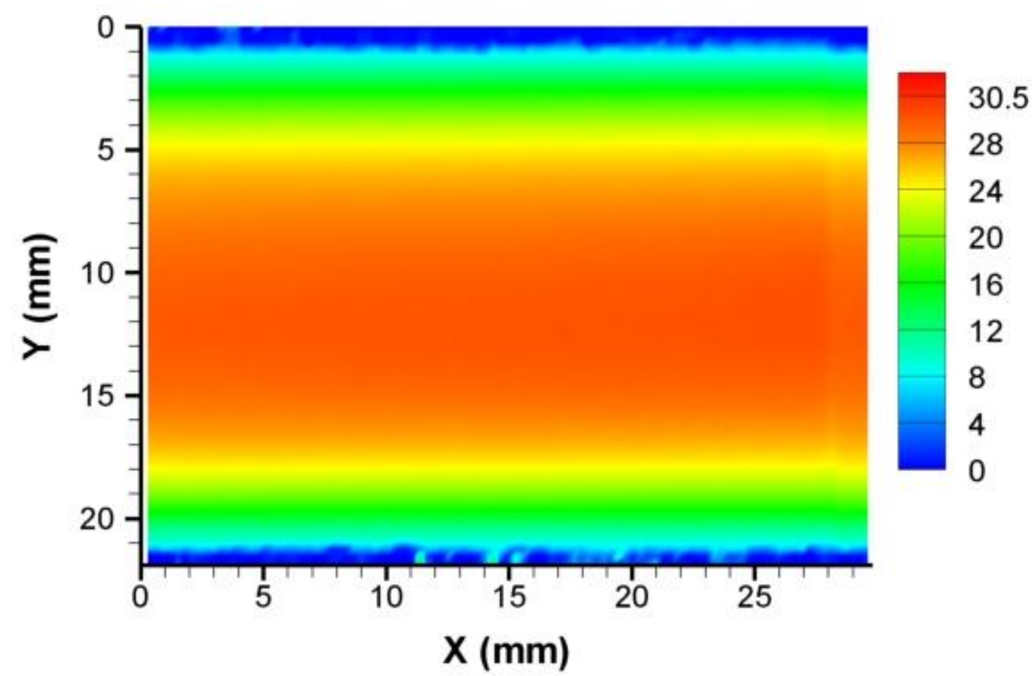

Fig. D-46 $\bar{u}$**, Grid #1, L2, Plasma-150, Equilibrated**

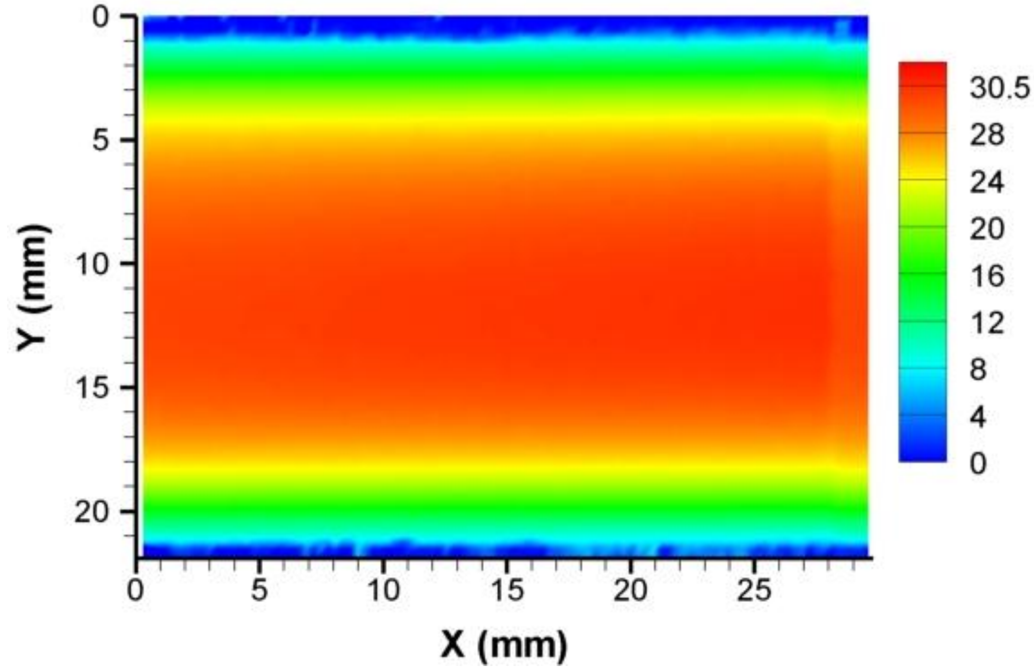

Fig. D-47 $\bar{u}$, Grid #1, L2, Plasma-300, Equilibrated

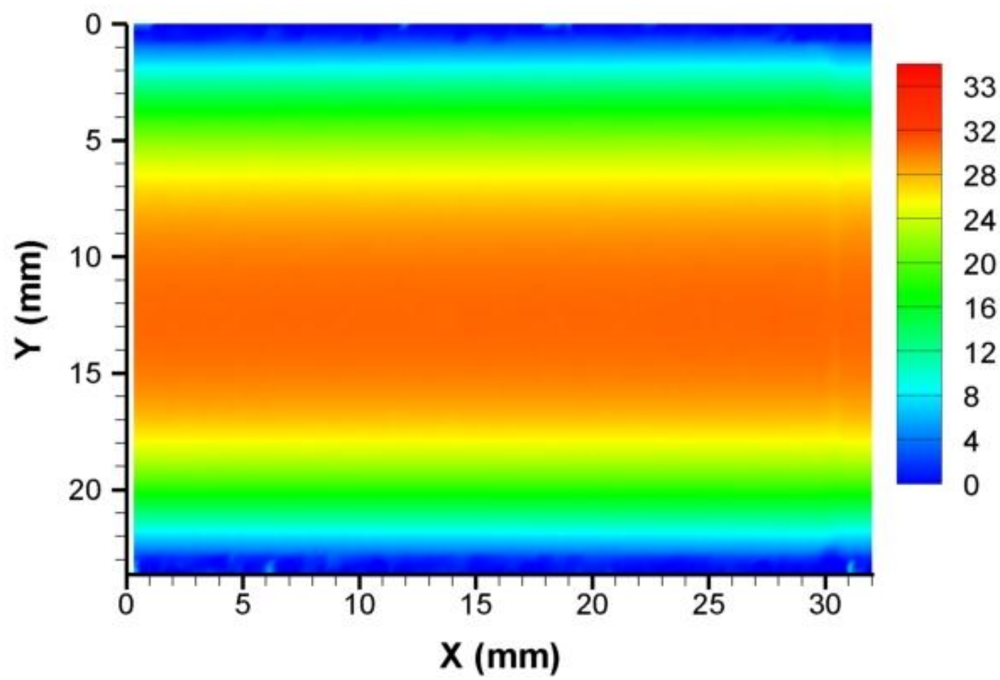

Fig. D-48 $\bar{u}$, Grid #1, L5, Plasma-150, Equilibrated

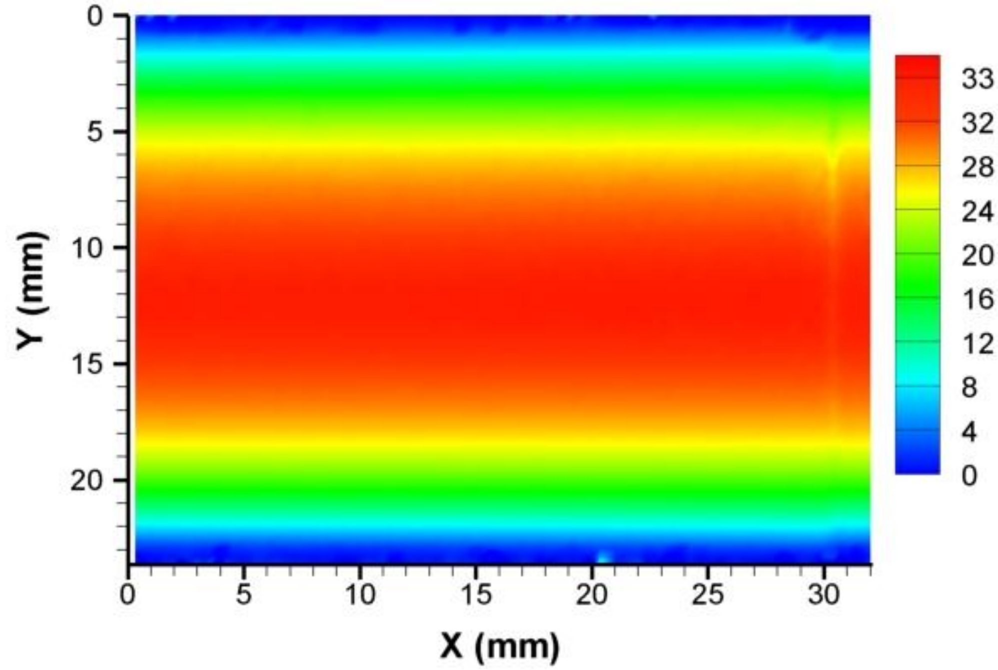

Fig. D-49 $\bar{u}$, Grid #1, L5, Plasma-300, Equilibrated

APPENDIX E

CONTOUR PLOTS

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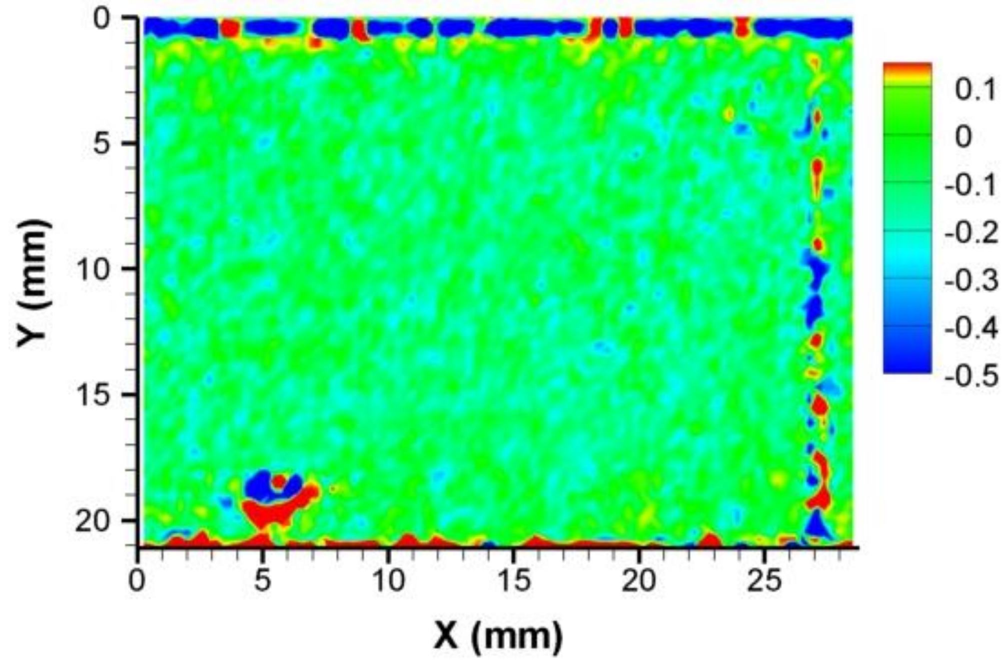

Fig. E-1 $\overline{v}$, No Grid, L0, Plasma-Off

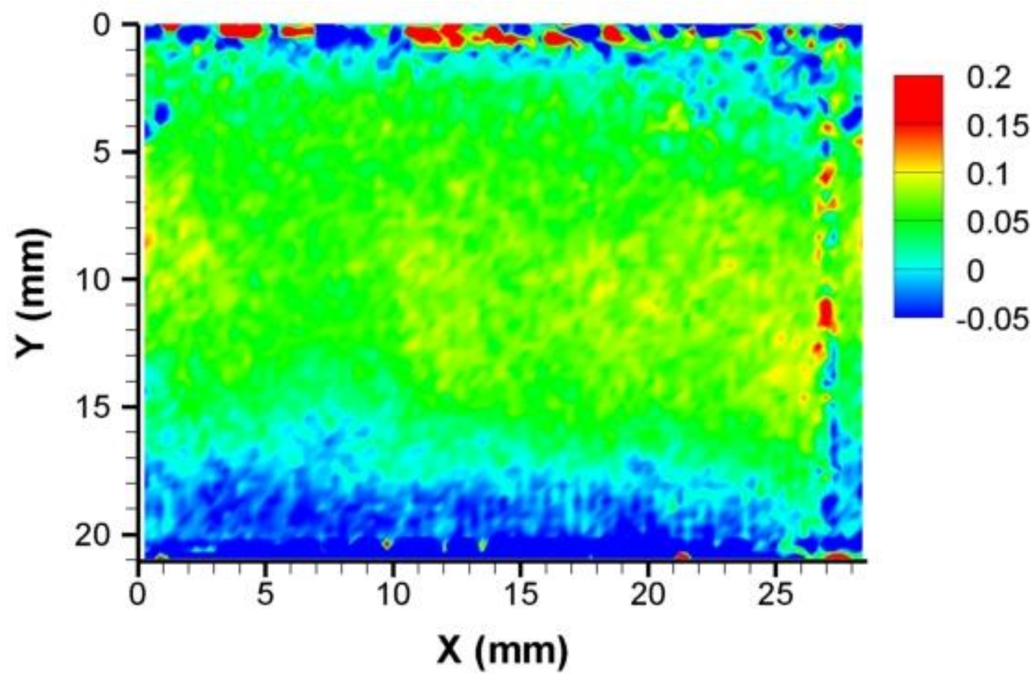

Fig. E-2 $\overline{v}$, Grid #1, L0, Plasma-Off

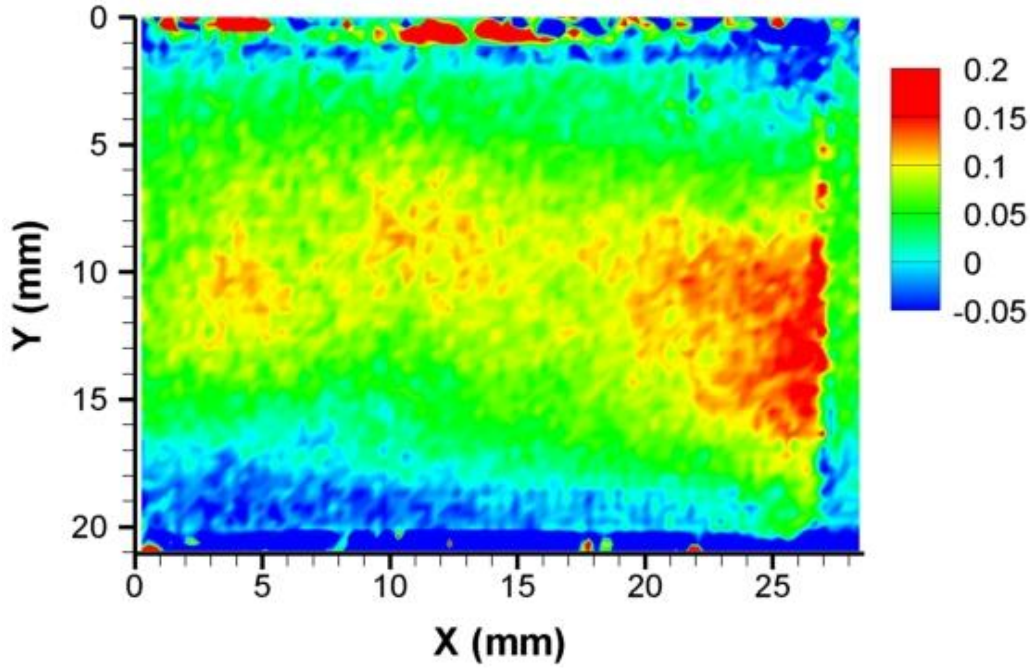

Fig. E-3 $\overline{v}$, Grid #1, L0, Plasma-150

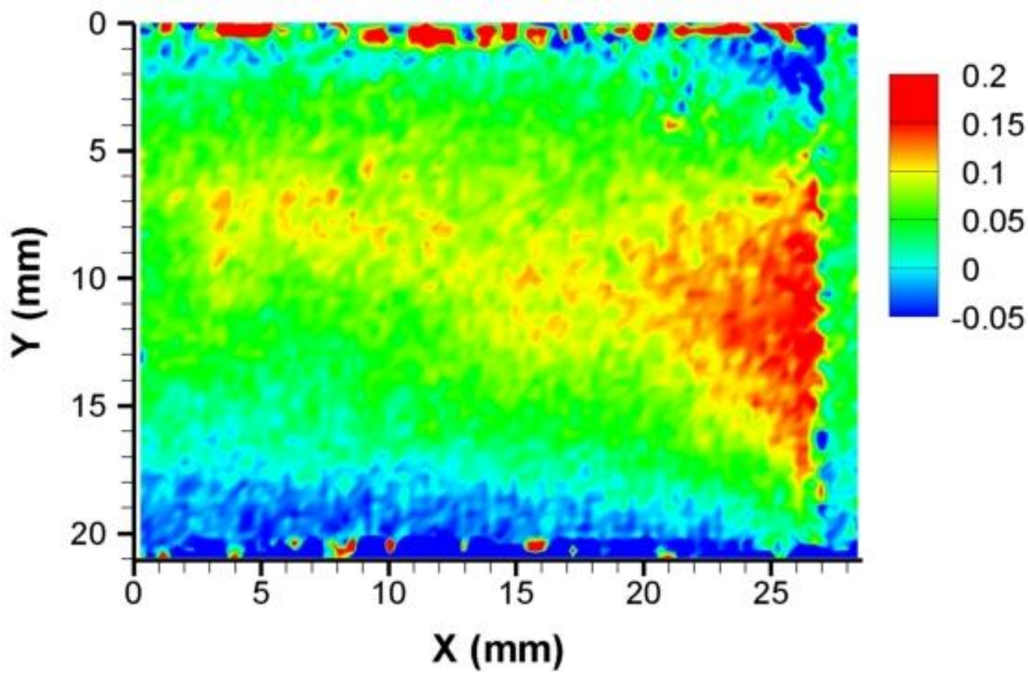

Fig. E-4 $\overline{v}$, Grid #1, L0, Plasma-300

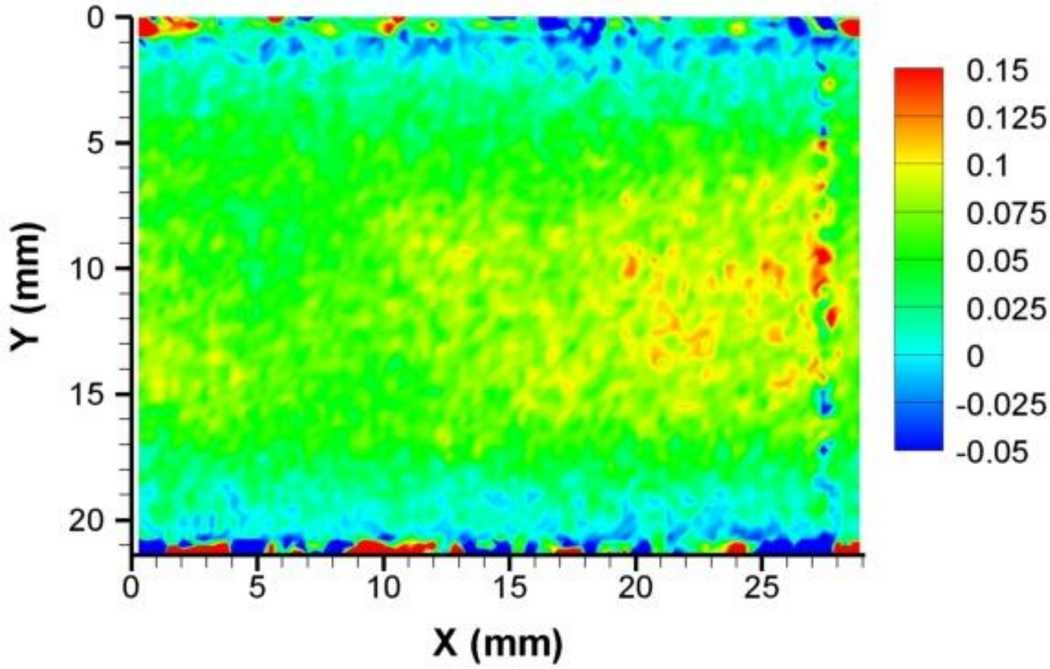

Fig. E-5 $\overline{v}$**, Grid #1, L1, Plasma-Off**

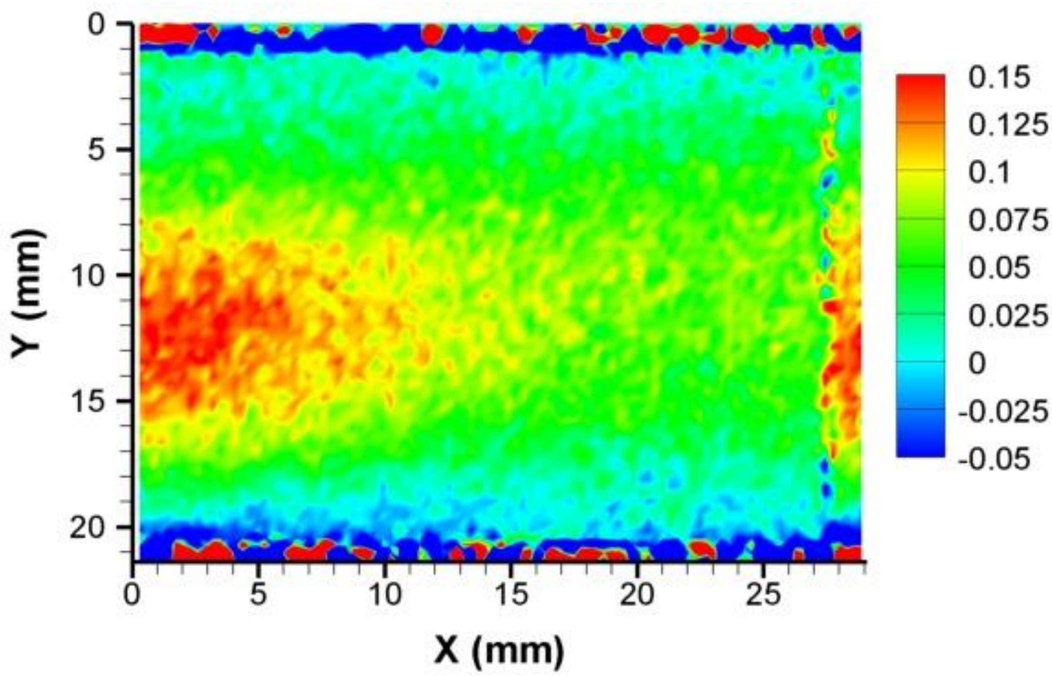

Fig. E-6 $\overline{v}$**, Grid #1, L1, Plasma-150**

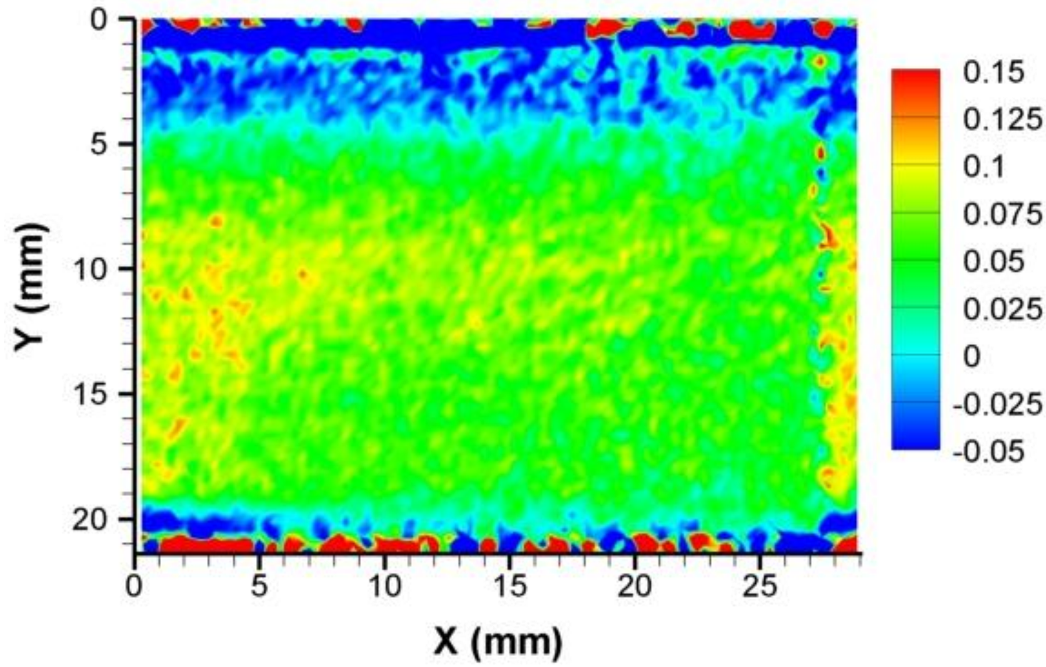

Fig. E-7 $\overline{v}$, Grid #1, L1, Plasma-300

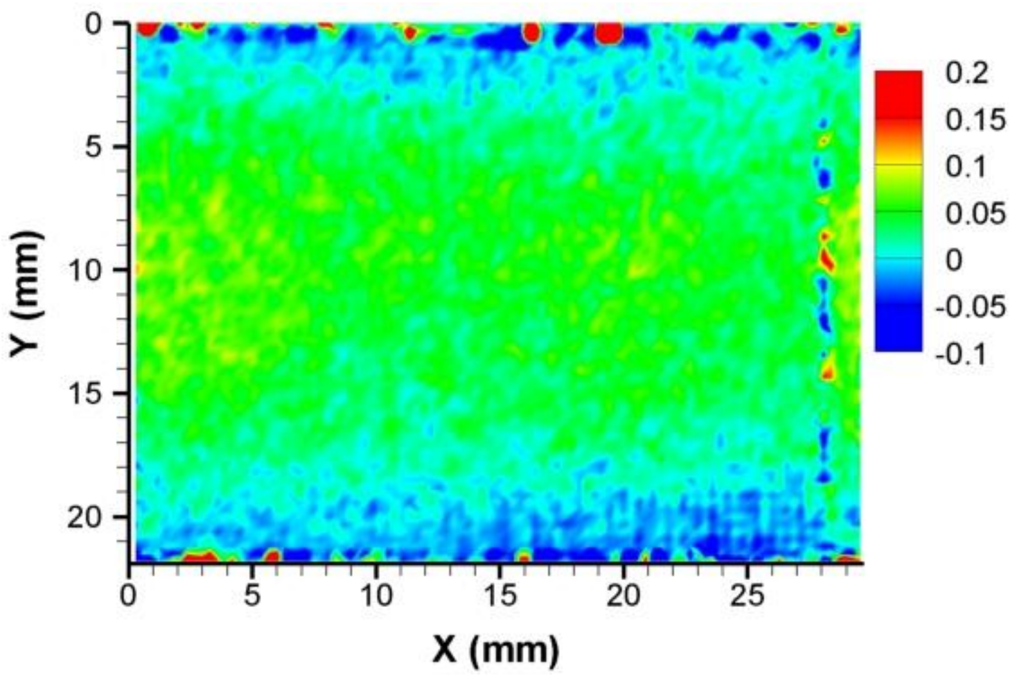

Fig. E-8 $\overline{v}$, Grid #1, L2, Plasma-Off

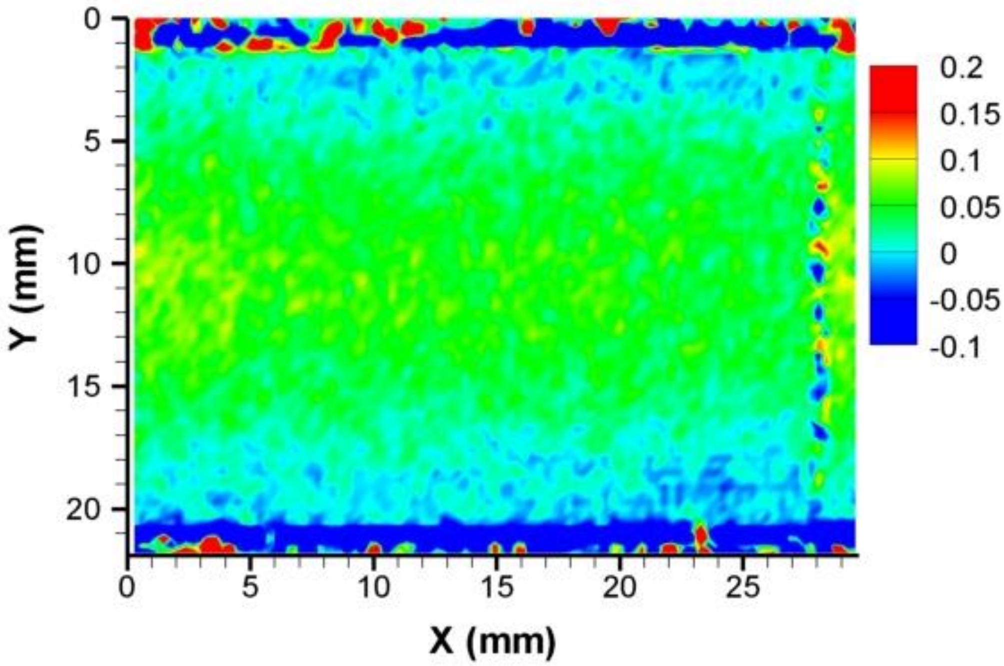

Fig. E-9 $\overline{v}$, Grid #1, L2, Plasma-150

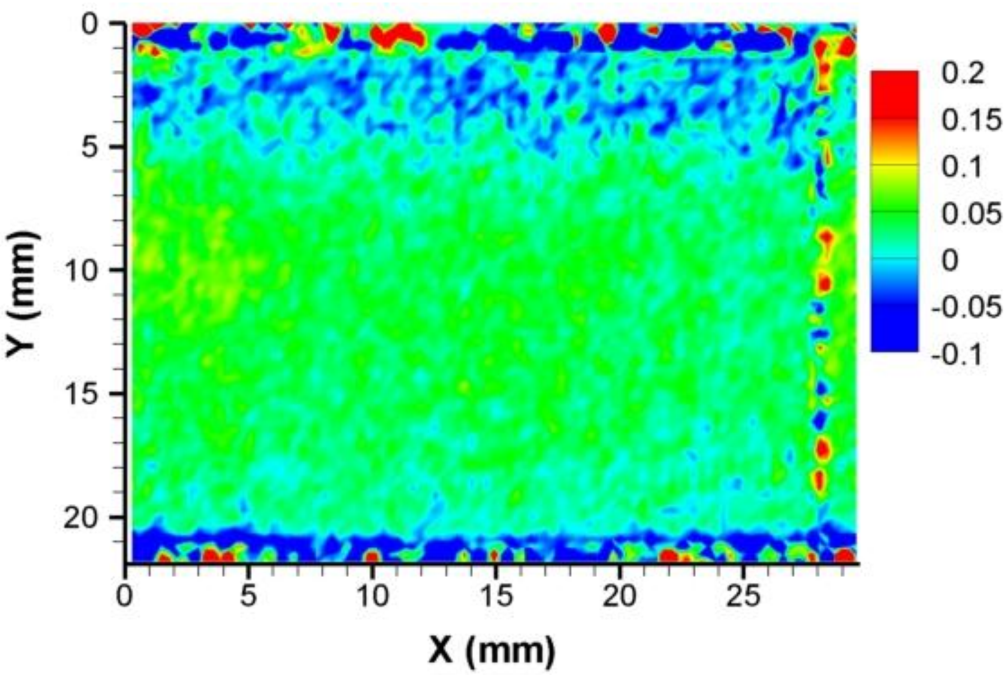

Fig. E-10 $\overline{v}$, Grid #1, L2, Plasma-300

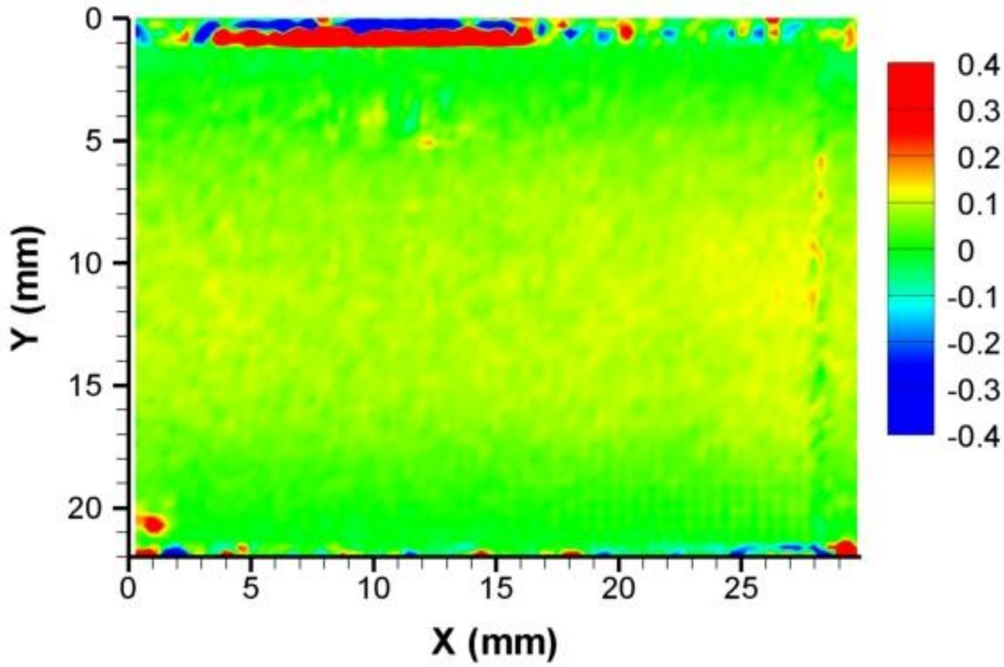

Fig. E-11 $\overline{v}$, Grid #1, L3, Plasma-Off

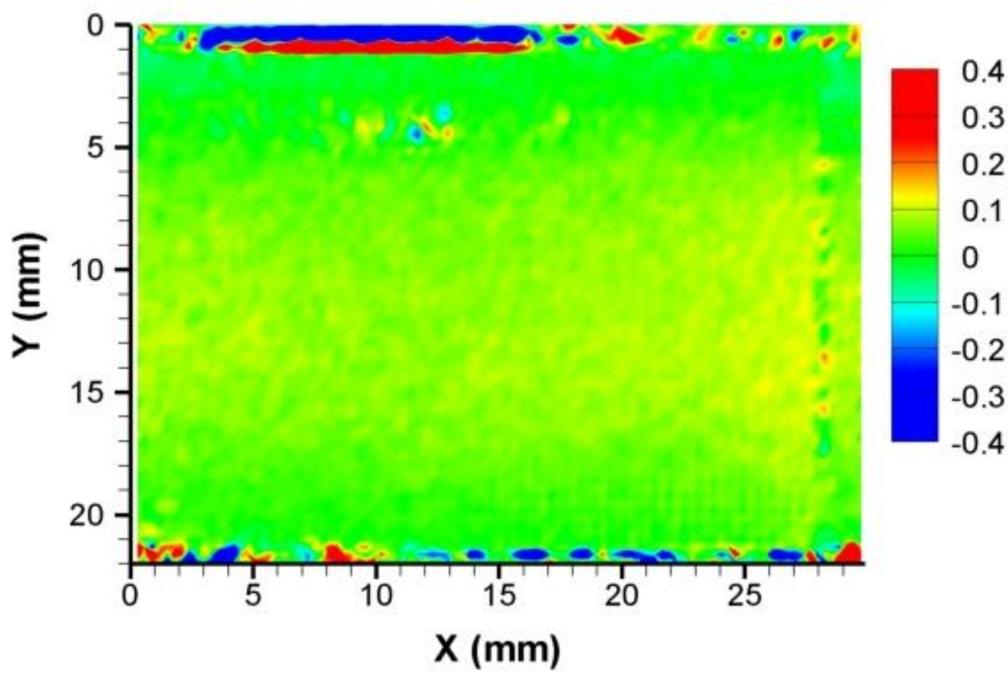

Fig. E-12 $\overline{v}$, Grid #1, L3, Plasma-150

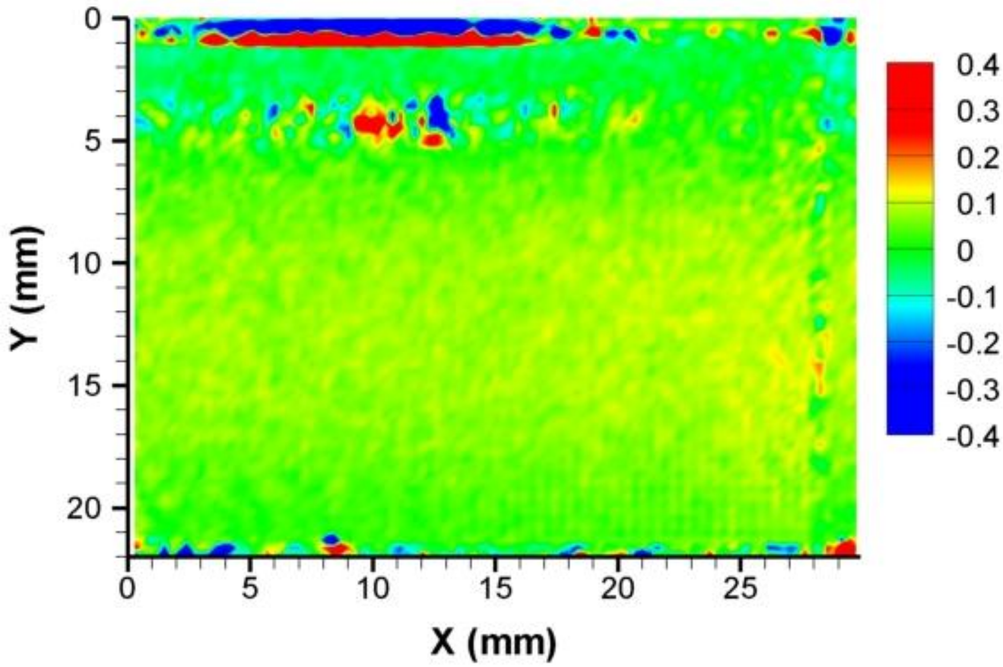

Fig. E-13 $\overline{v}$, Grid #1, L3, Plasma-300

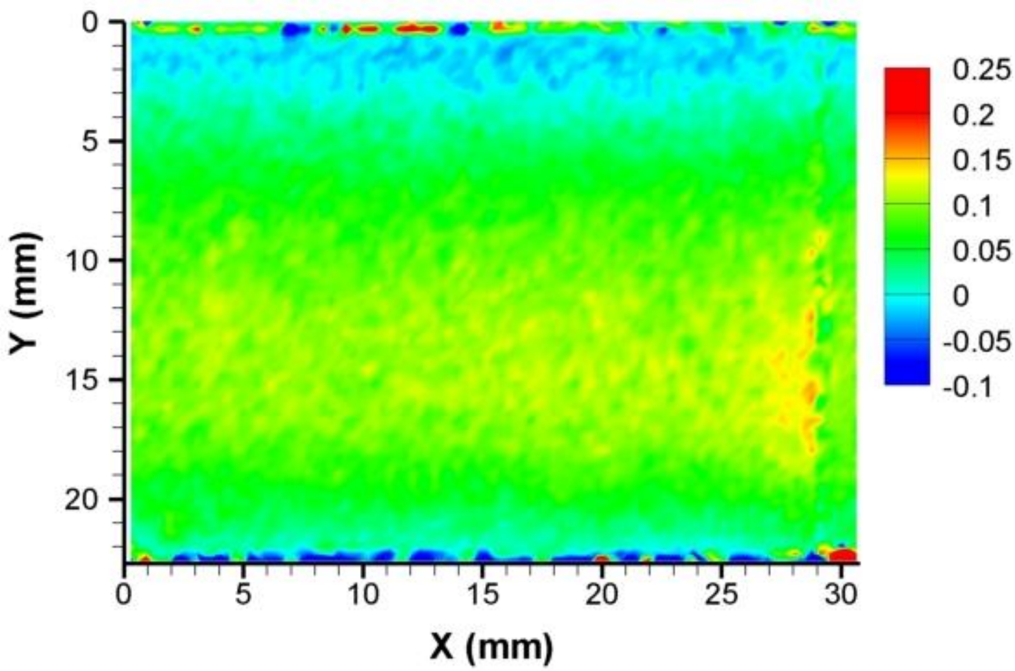

Fig. E-14 $\overline{v}$, Grid #1, L4, Plasma-Off

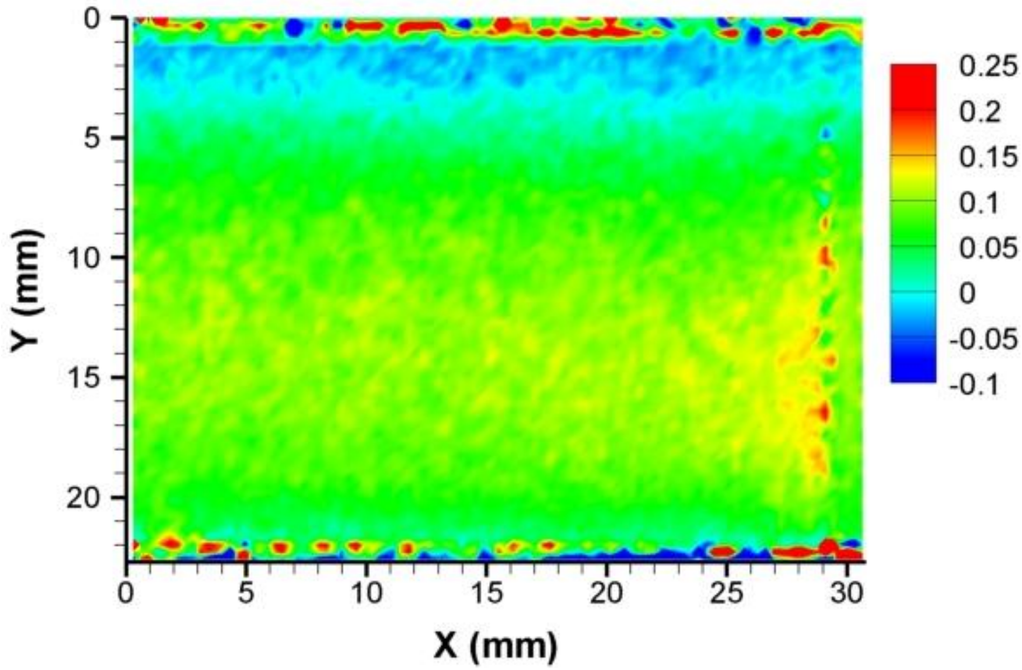

Fig. E-15 $\overline{v}$, Grid #1, L4, Plasma-150

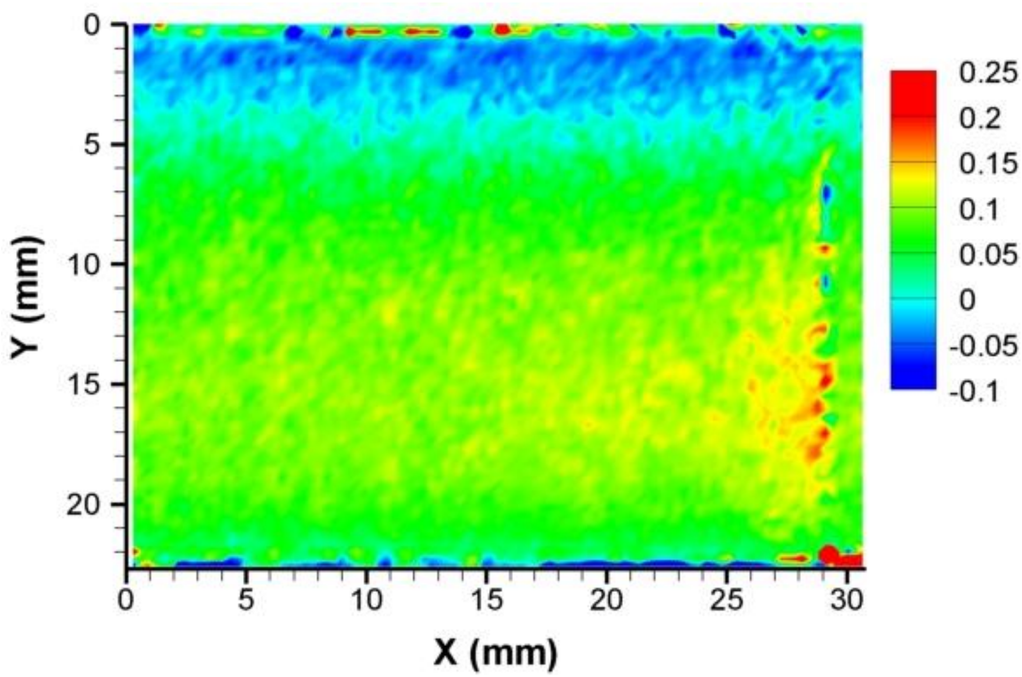

Fig. E-16 $\overline{v}$, Grid #1, L4, Plasma-300

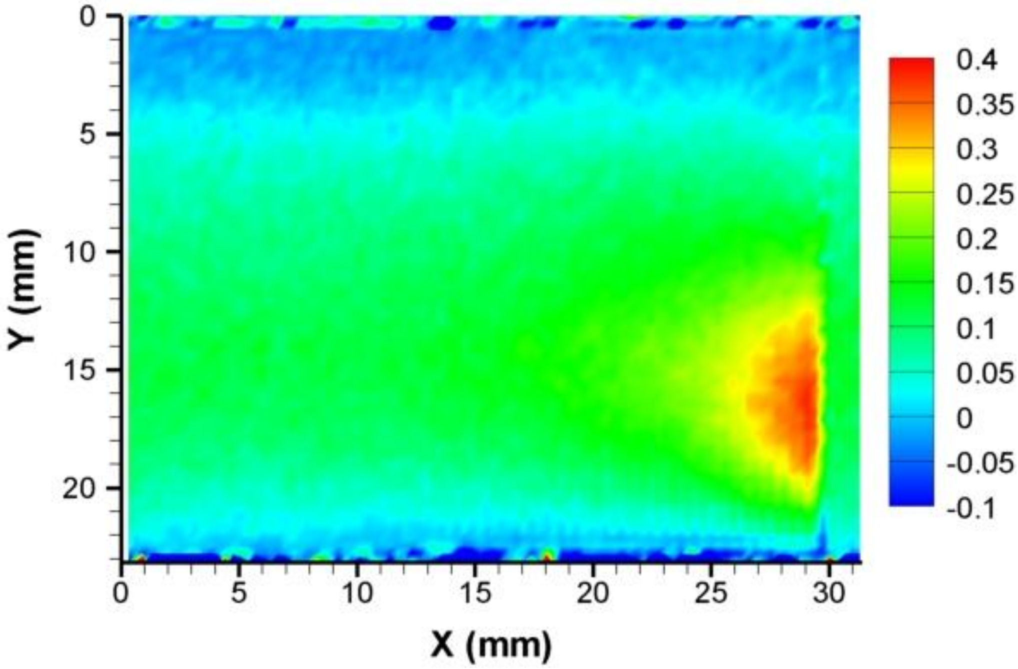

Fig. E-17 $\overline{v}$, Grid #1, L5, Plasma-Off

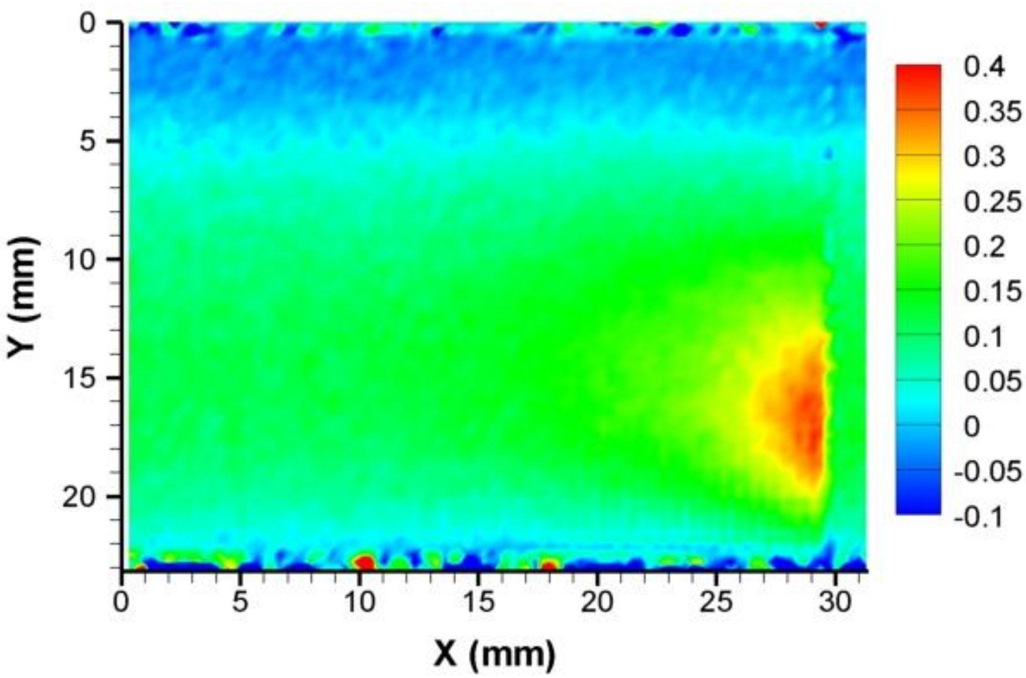

Fig. E-18 $\overline{v}$, Grid #1, L5, Plasma-150

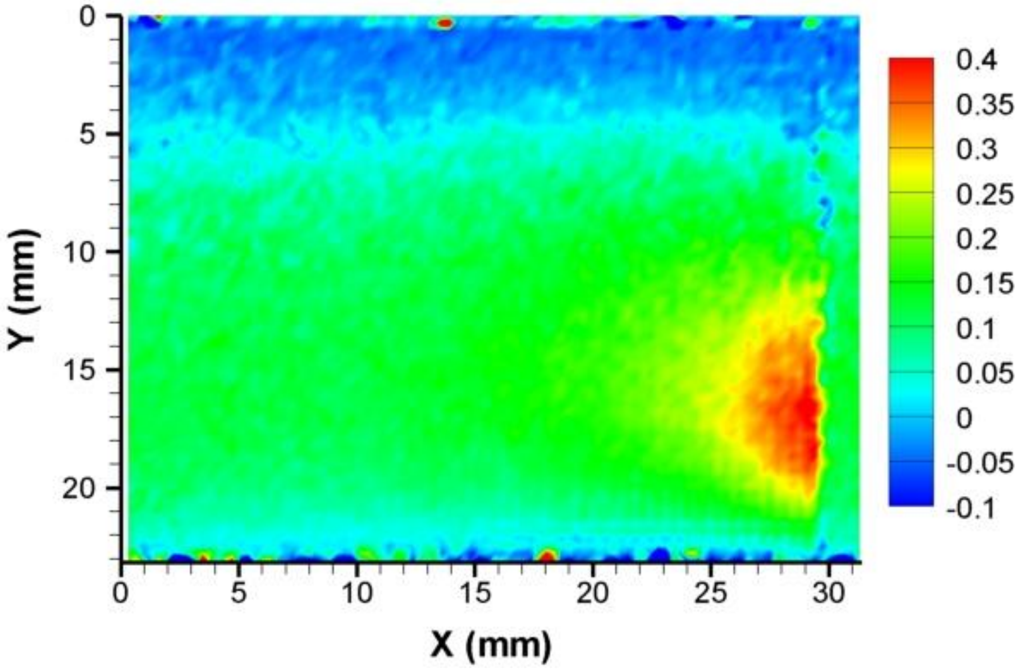

Fig. E-19 $\overline{v}$, Grid #1, L5, Plasma-300

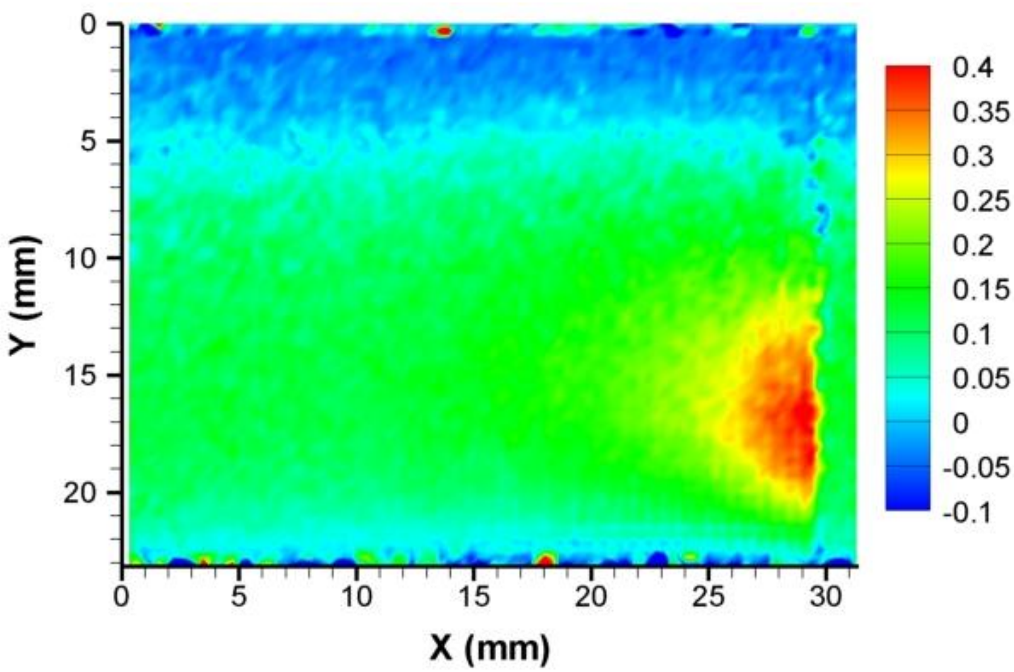

Fig. E-20 $\overline{v}$, Grid #1, L6, Plasma-Off

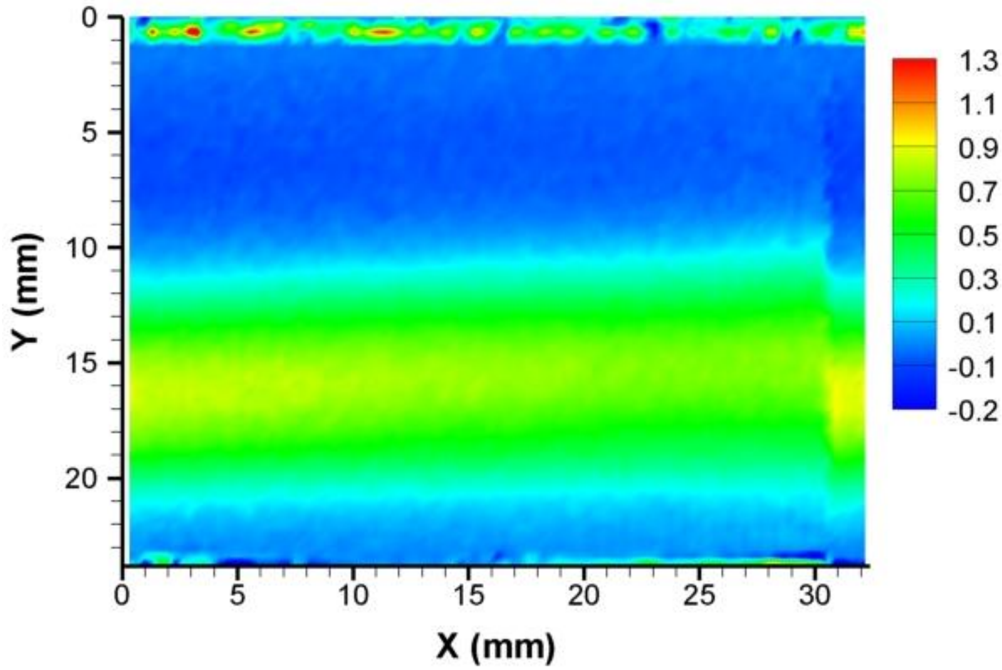

Fig. E-21 $\overline{v}$, Grid #1, L6, Plasma-150

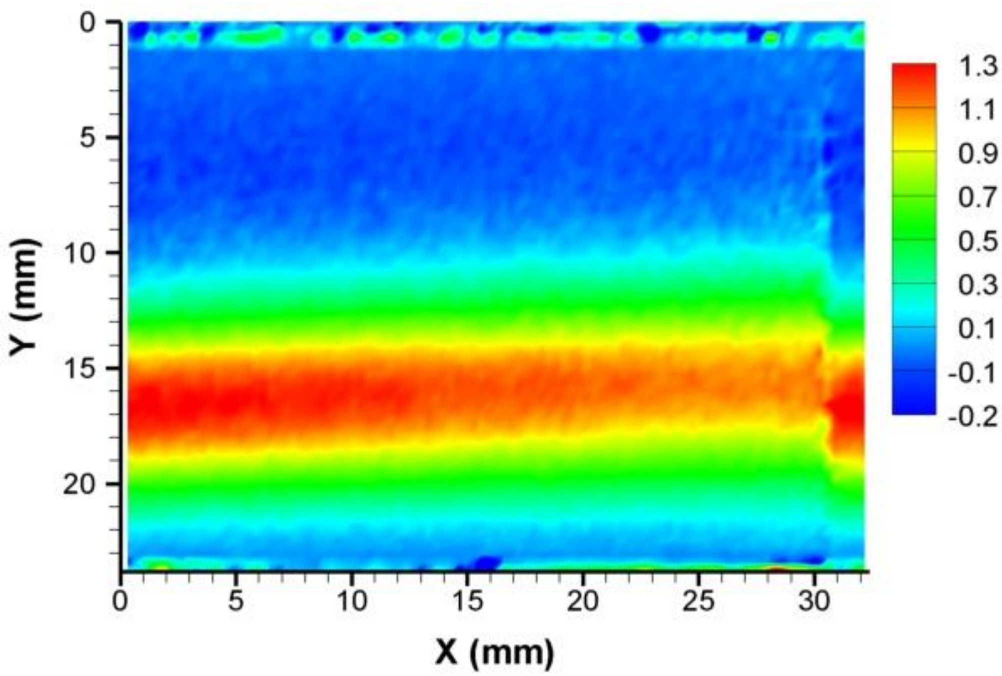

Fig. E-22 $\overline{v}$, Grid #1, L6, Plasma-300

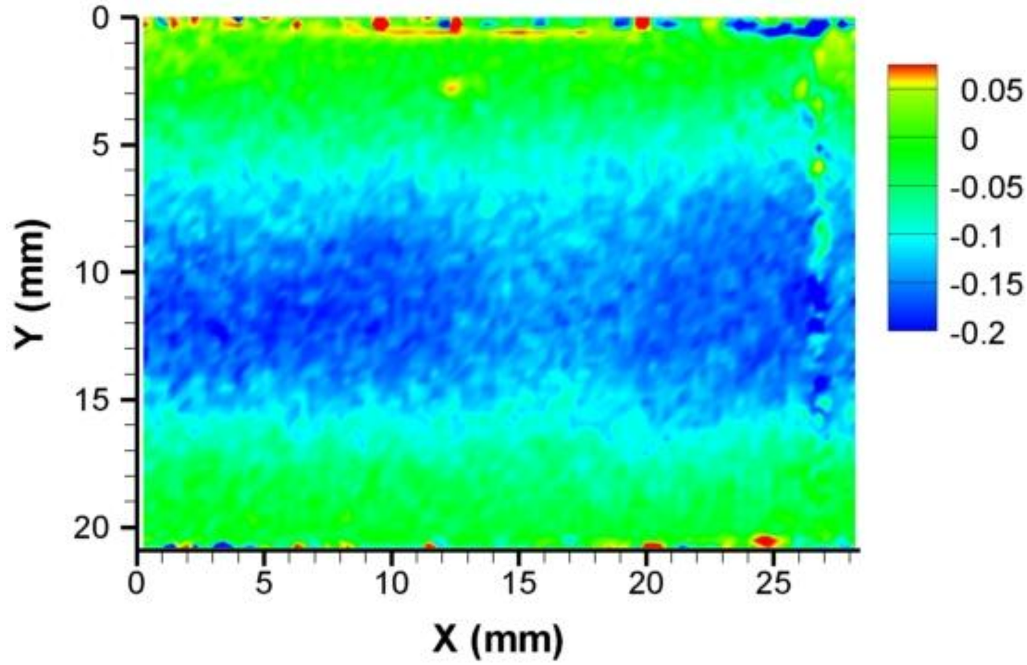

Fig. E-23 $\overline{v}$, Grid #2, L0, Plasma-Off

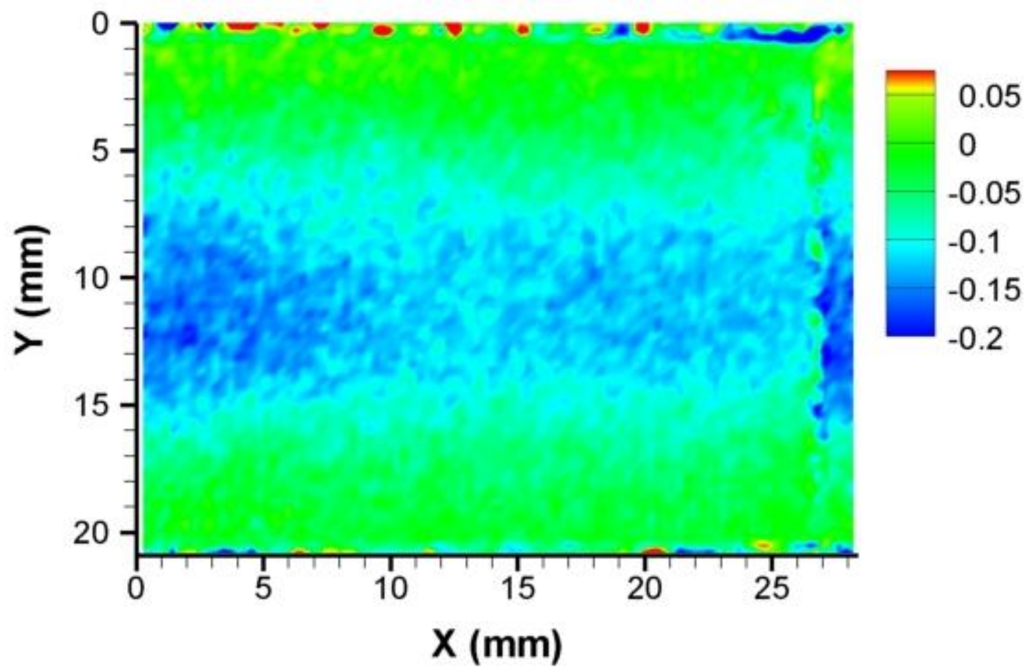

Fig. E-24 $\overline{v}$, Grid #2, L0, Plasma-150

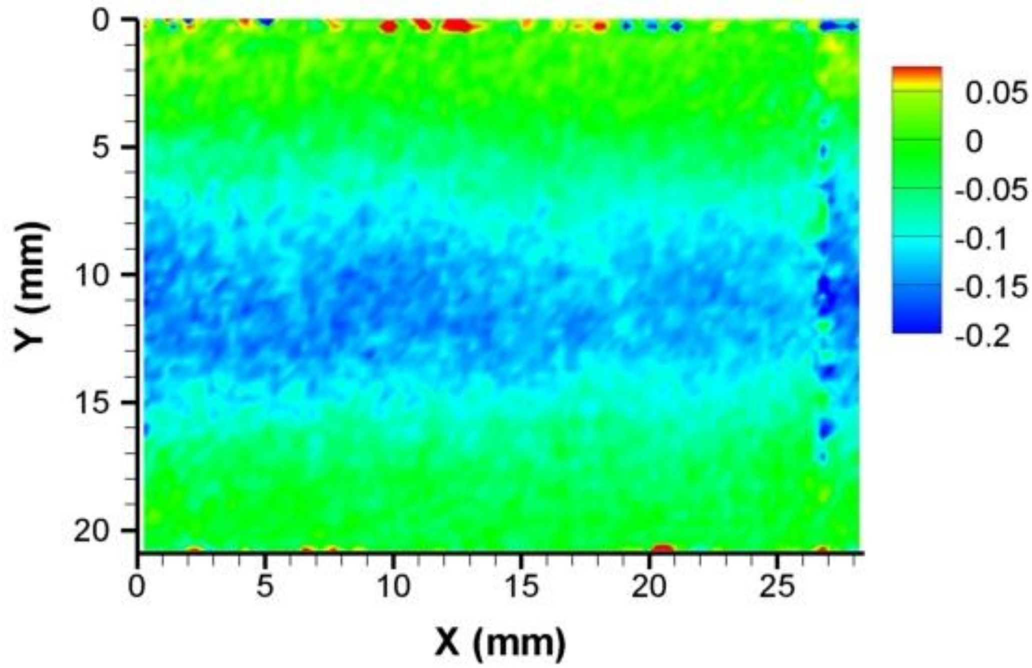

Fig. E-25 $\overline{v}$, Grid #2, L0, Plasma-300

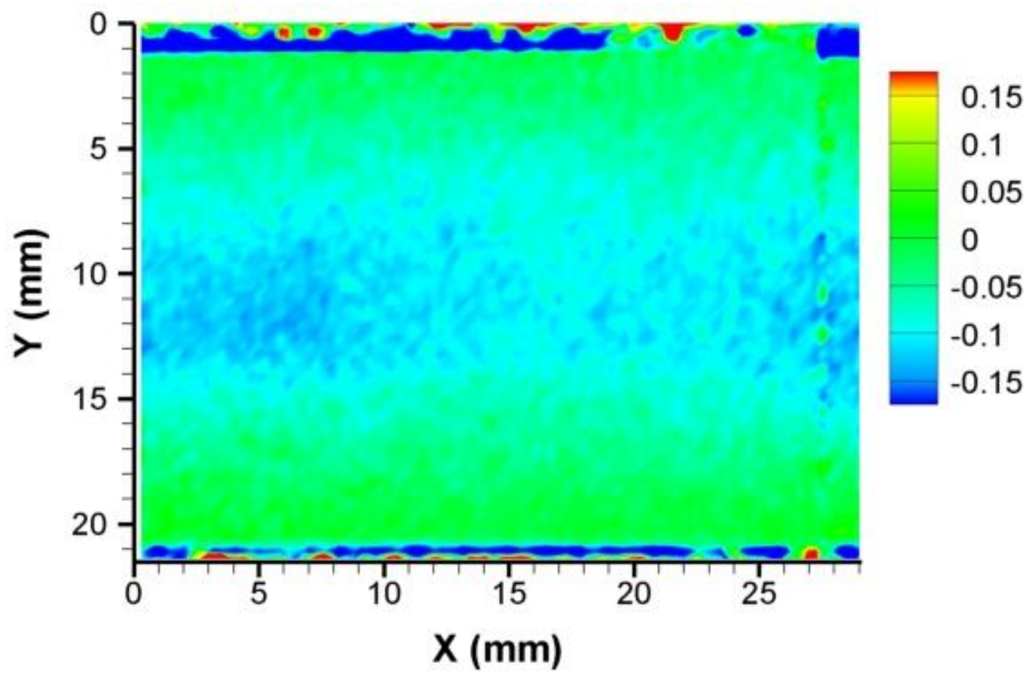

Fig. E-26 $\overline{v}$, Grid #2, L1, Plasma-Off

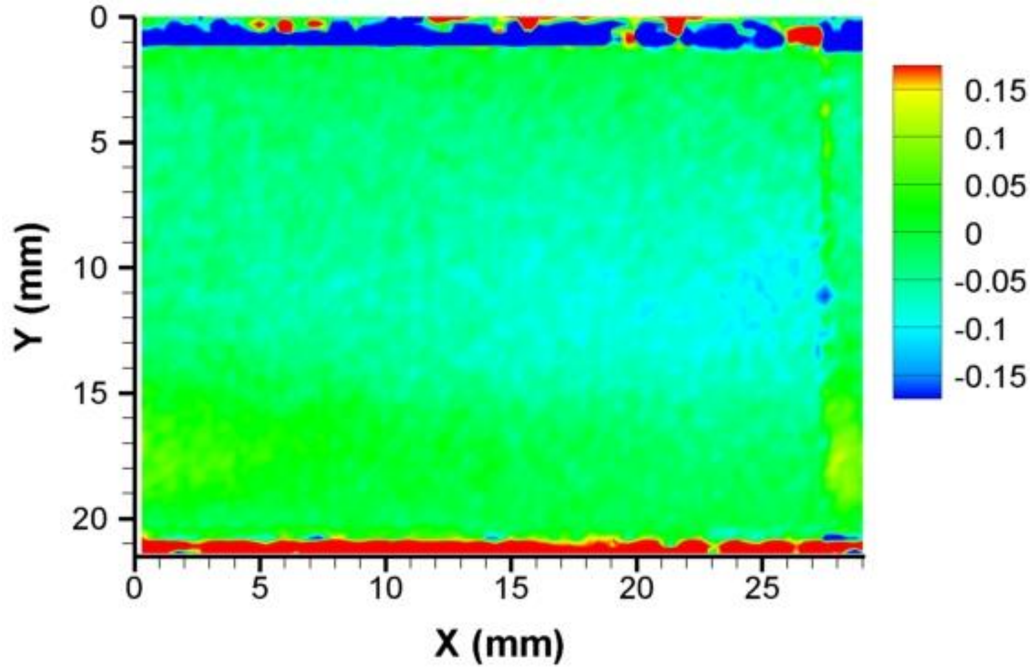

Fig. E-27 $\overline{v}$**, Grid #2, L1, Plasma-150**

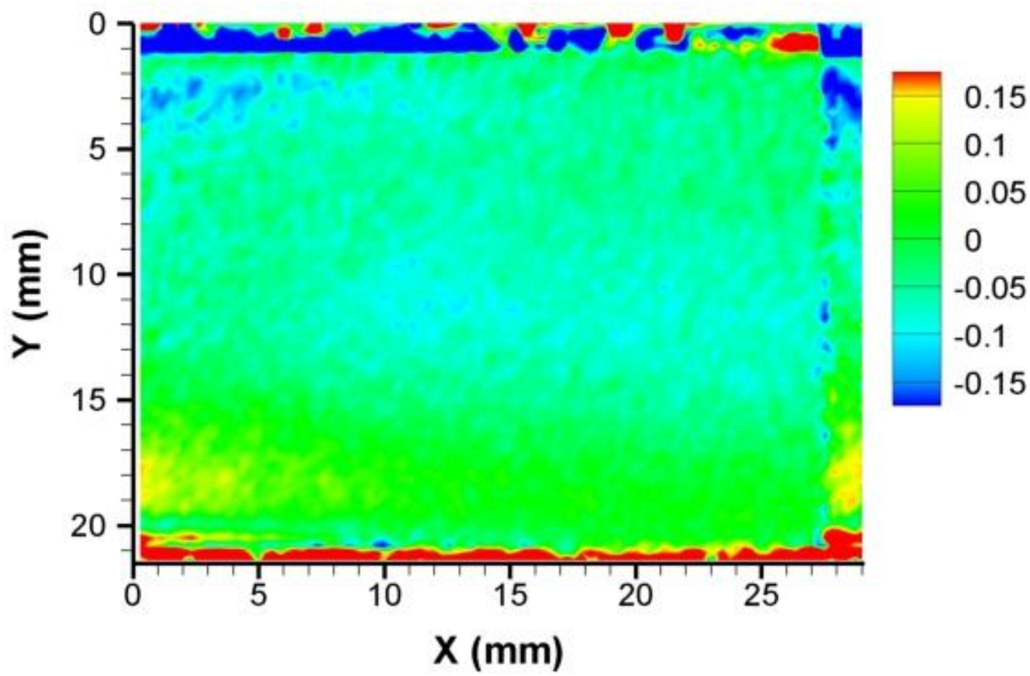

Fig. E-28 $\overline{v}$**, Grid #2, L1, Plasma-300**

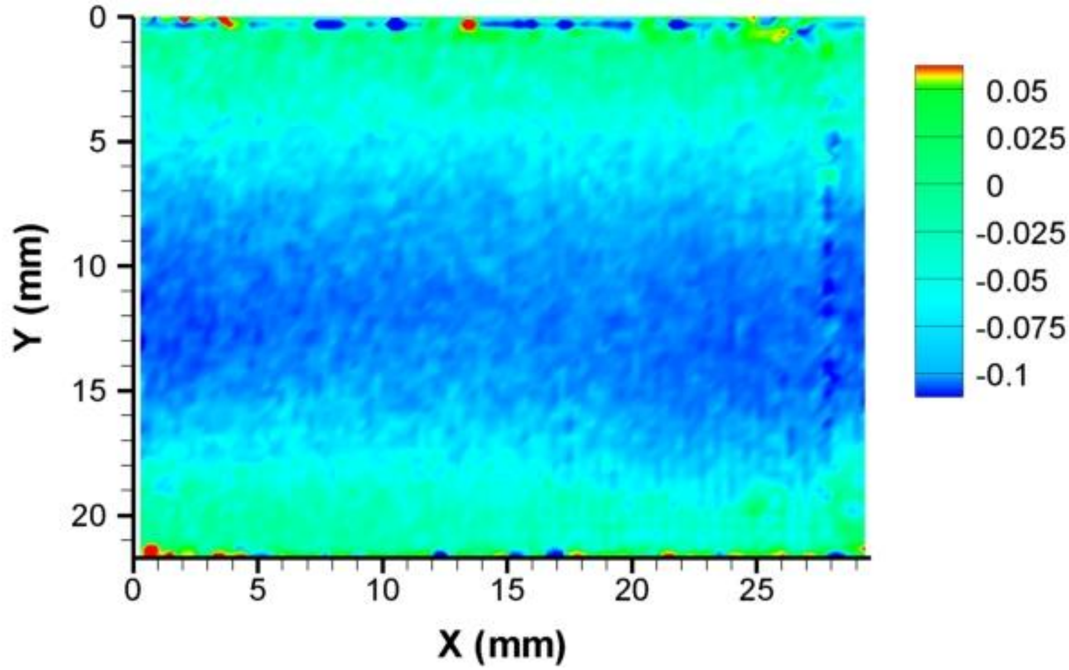

Fig. E-29 $\overline{v}$, Grid #2, L2, Plasma-Off

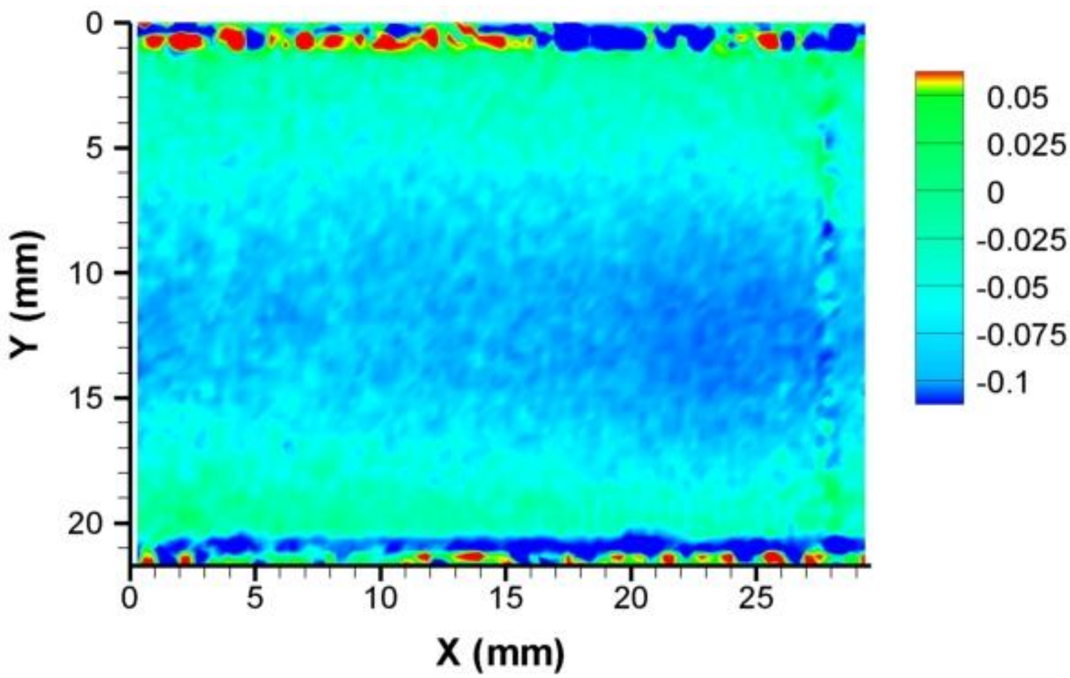

Fig. E-30 $\overline{v}$, Grid #2, L2, Plasma-150

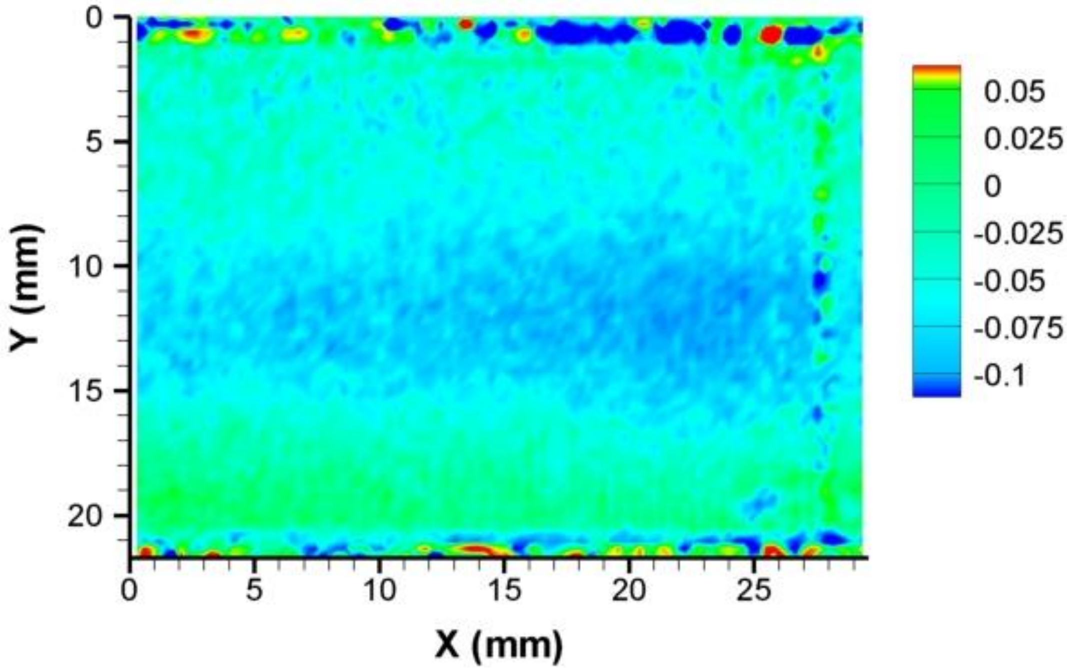

Fig. E-31 $\overline{v}$, Grid #2, L2, Plasma-300

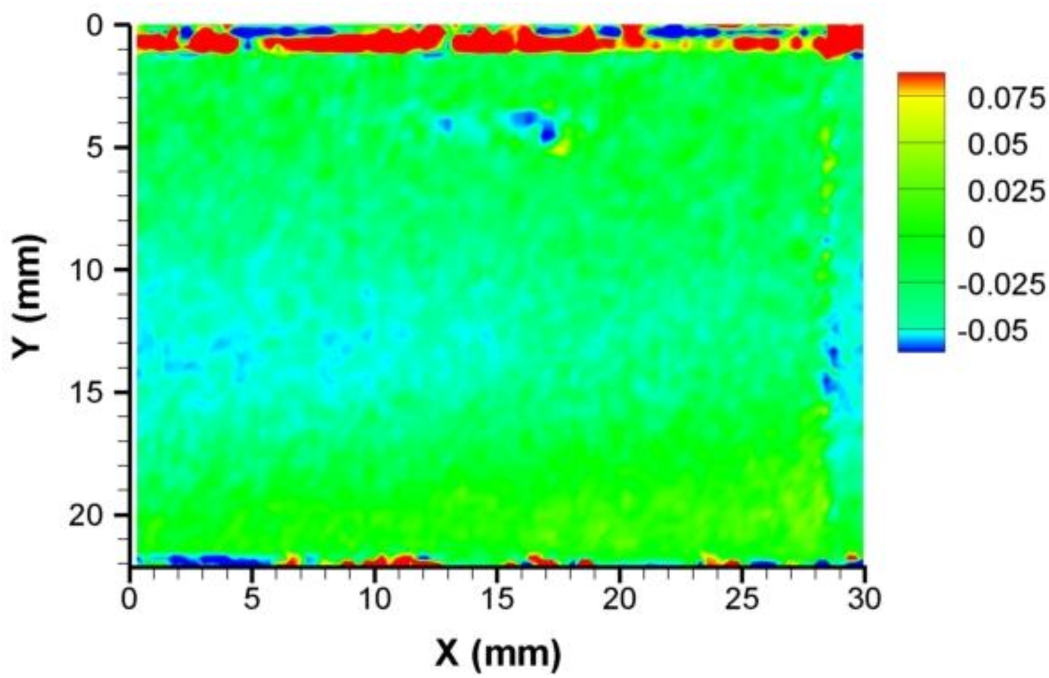

Fig. E-32 $\overline{v}$, Grid #2, L3, Plasma-Off

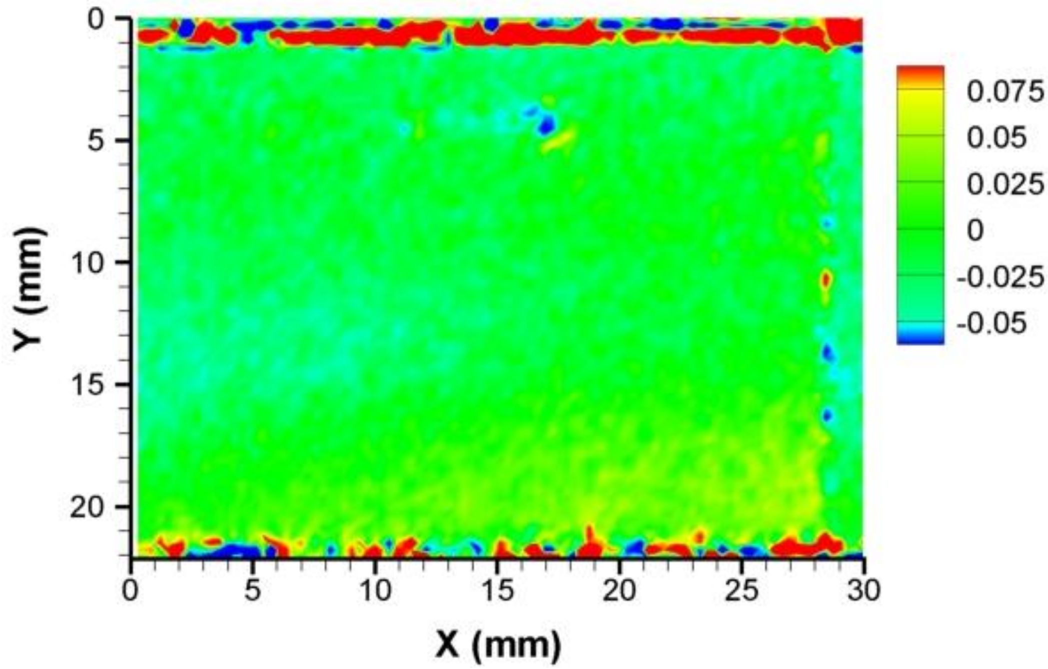

Fig. E-33 $\overline{v}$, Grid #2, L3, Plasma-150

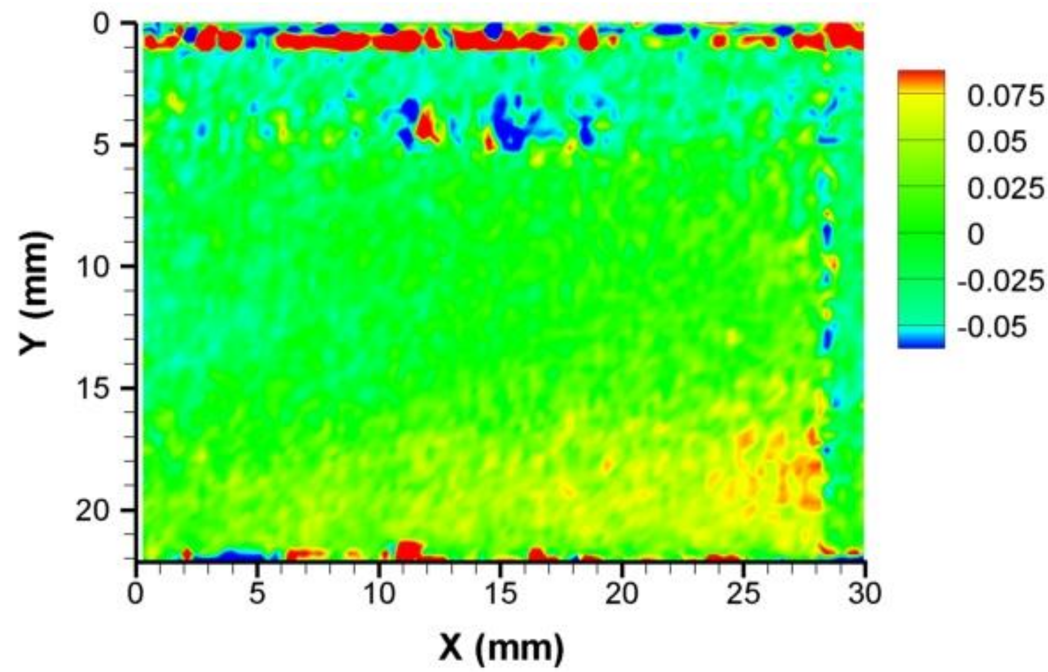

Fig. E-34 $\overline{v}$, Grid #2, L3, Plasma-300

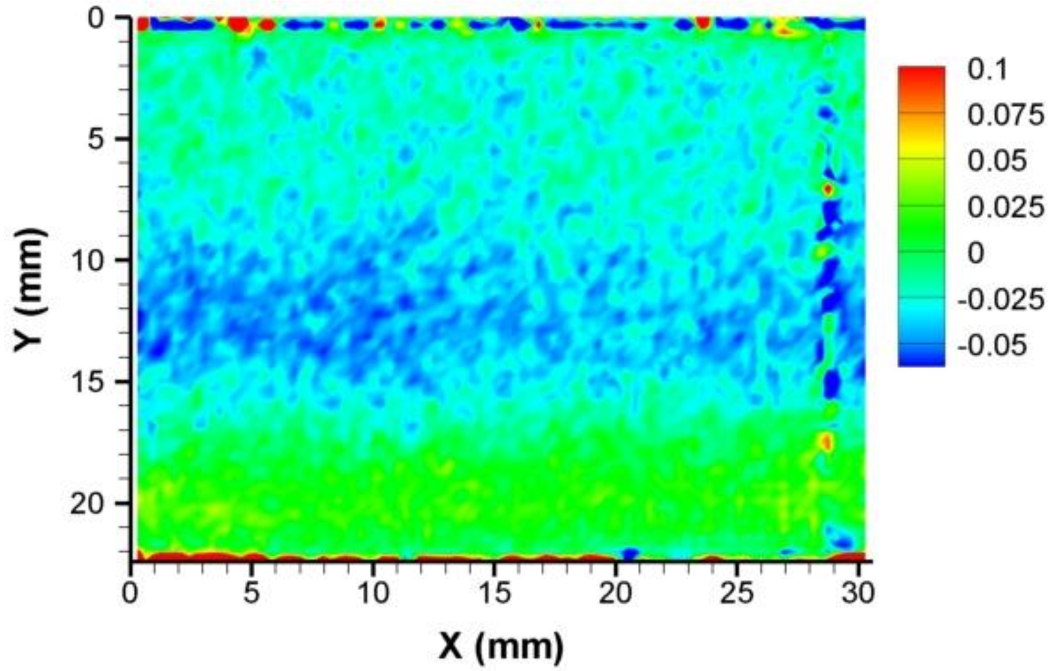

Fig. E-35 $\overline{v}$, Grid #2, L4, Plasma-Off

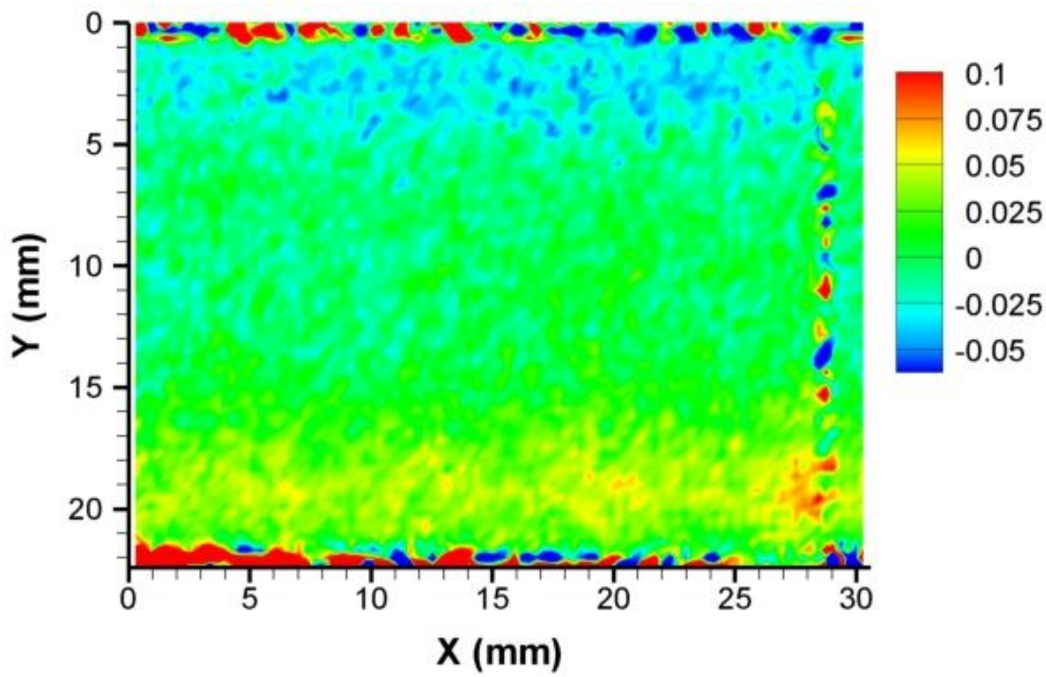

Fig. E-36 $\overline{v}$, Grid #2, L4, Plasma-150

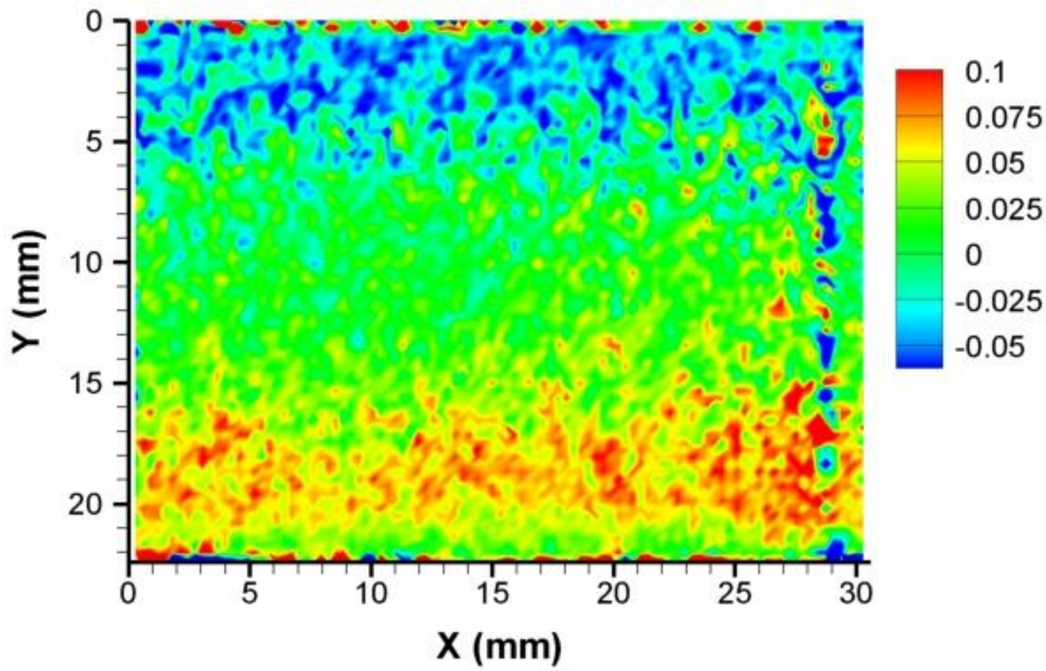

Fig. E-37 $\overline{v}$, Grid #2, L4, Plasma-300

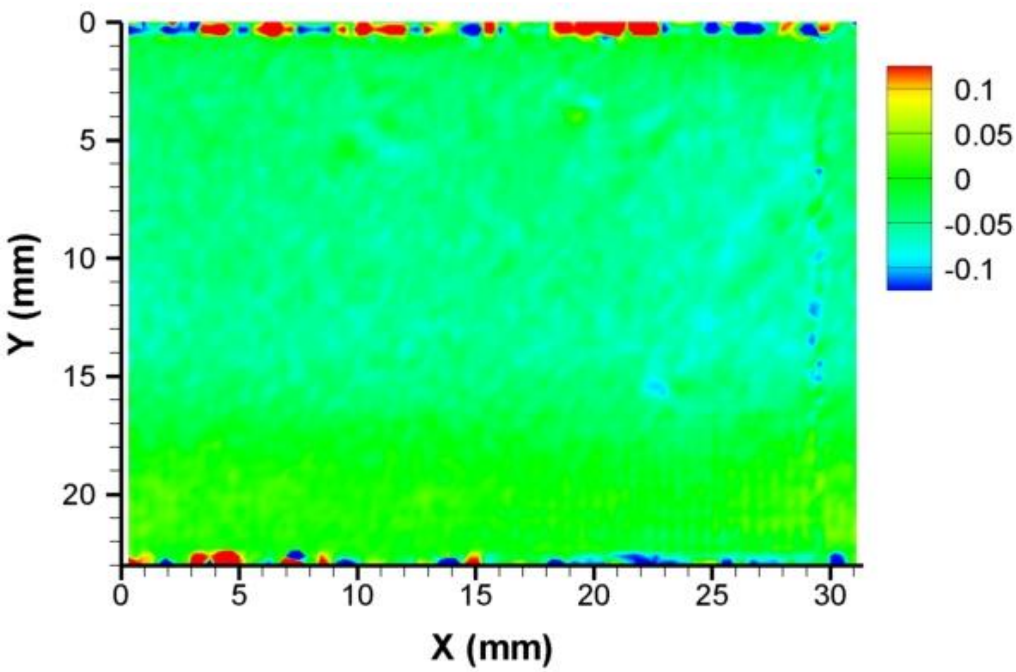

Fig. E-38 $\overline{v}$, Grid #2, L5, Plasma-Off

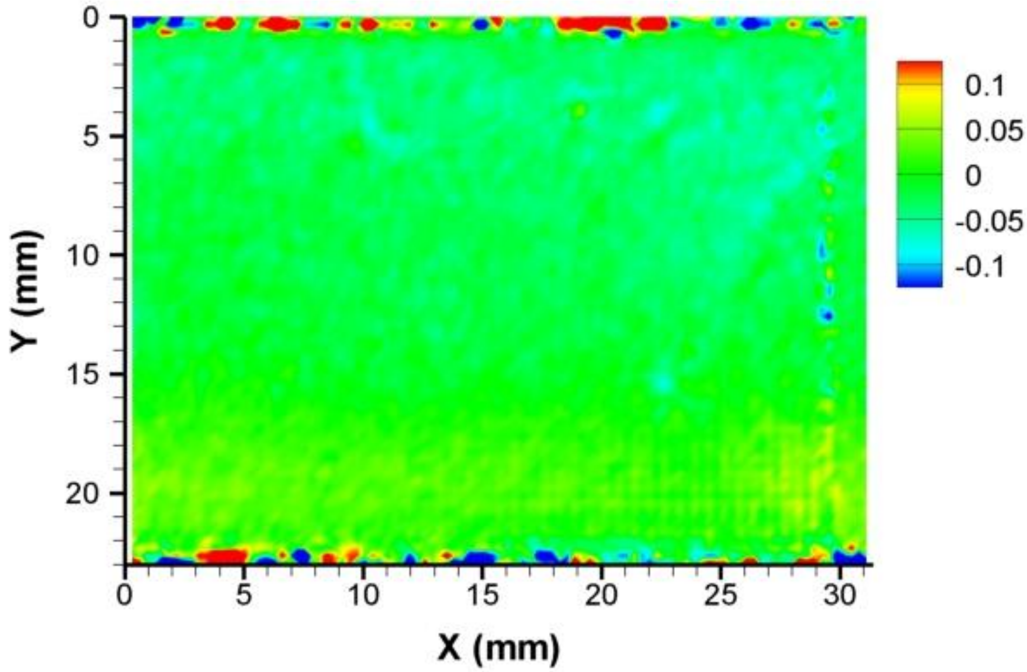

Fig. E-39 $\overline{v}$, Grid #2, L5, Plasma-150

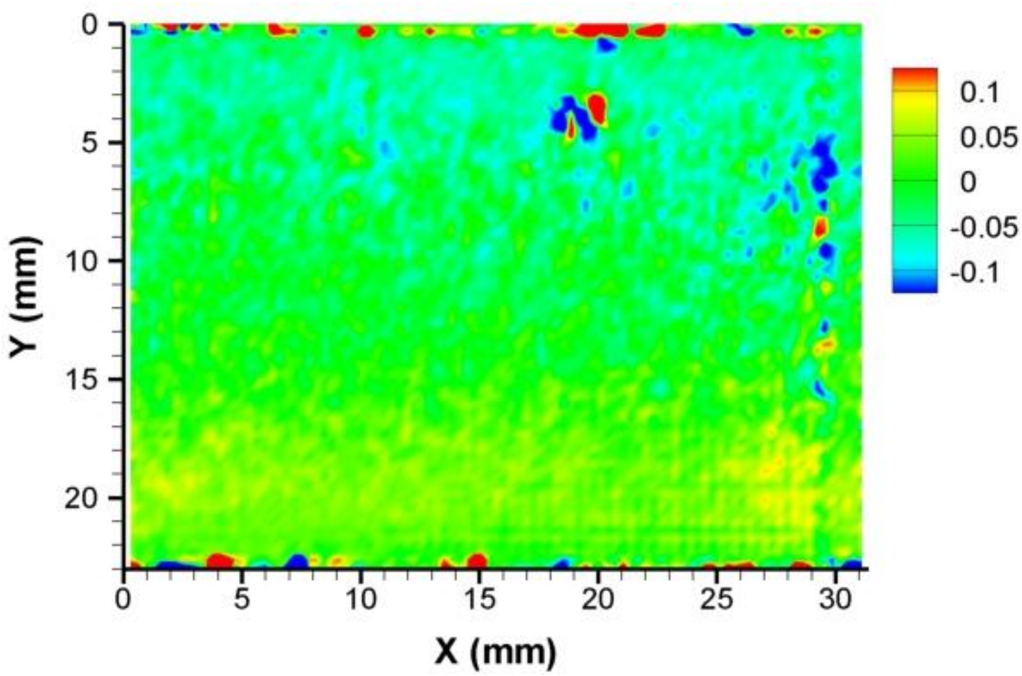

Fig. E-40 $\overline{v}$, Grid #2, L5, Plasma-300

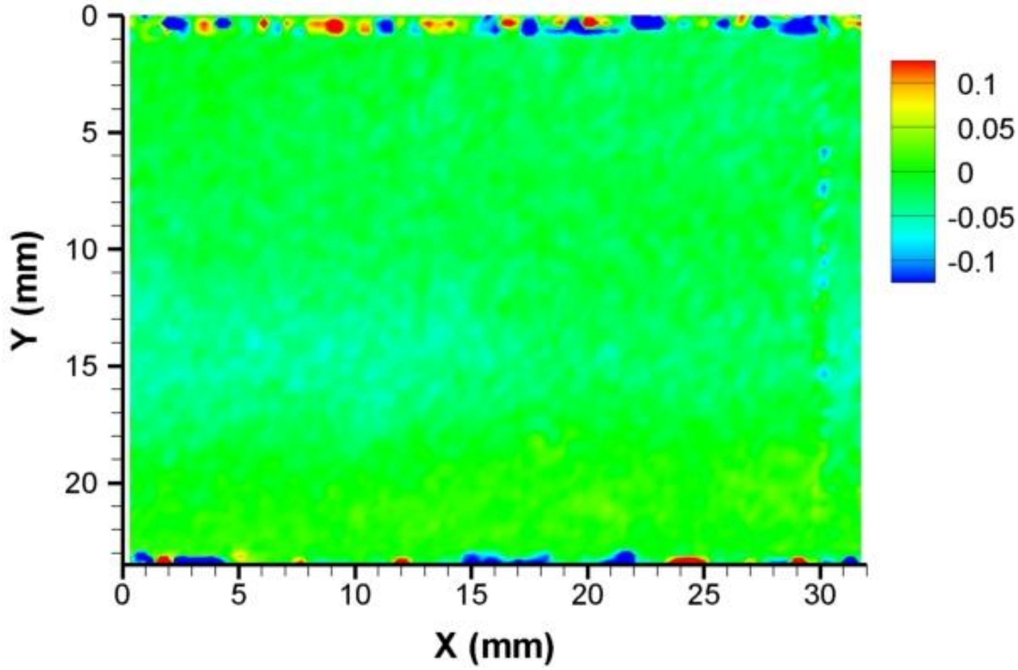

Fig. E-41 $\overline{v}$, Grid #2, L6, Plasma-Off

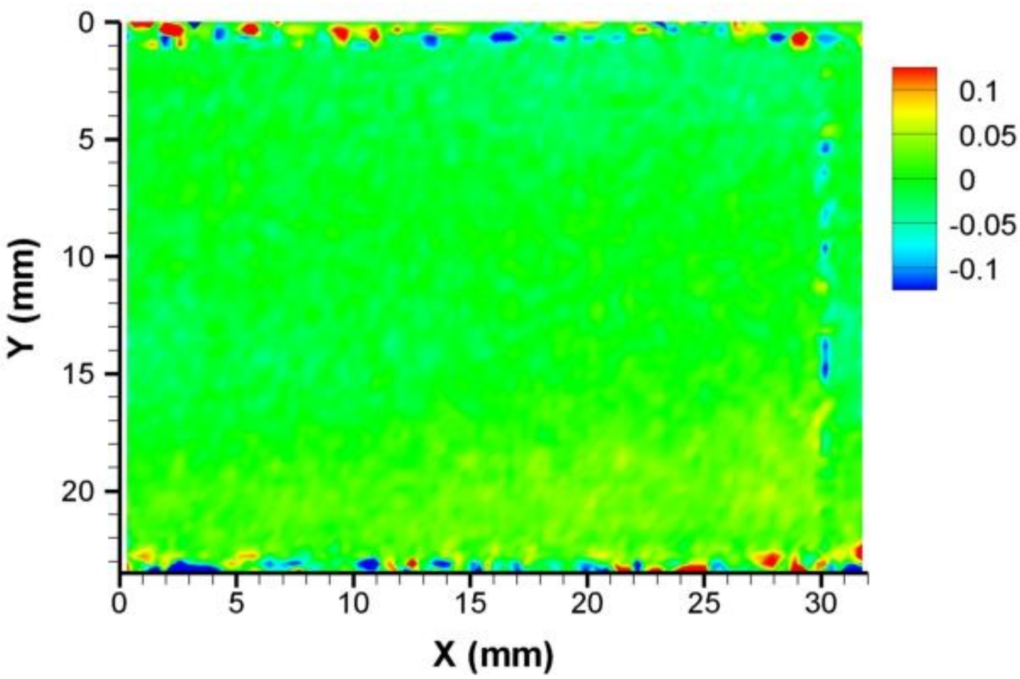

Fig. E-42 $\overline{v}$, Grid #2, L6, Plasma-150

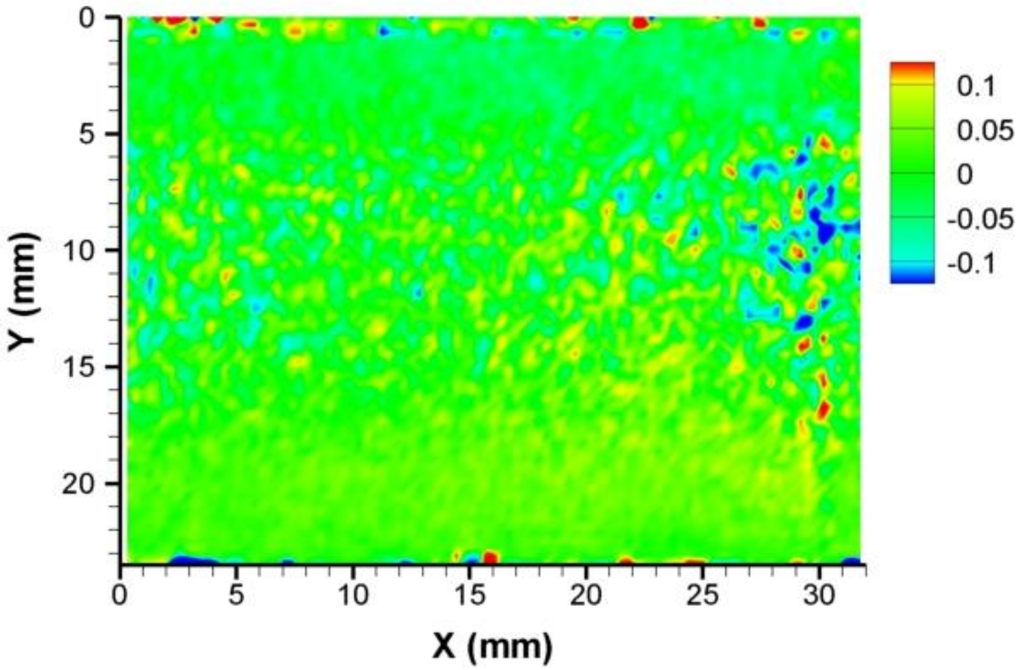

Fig. E-43 $\overline{v}$**, Grid #2, L6, Plasma-300**

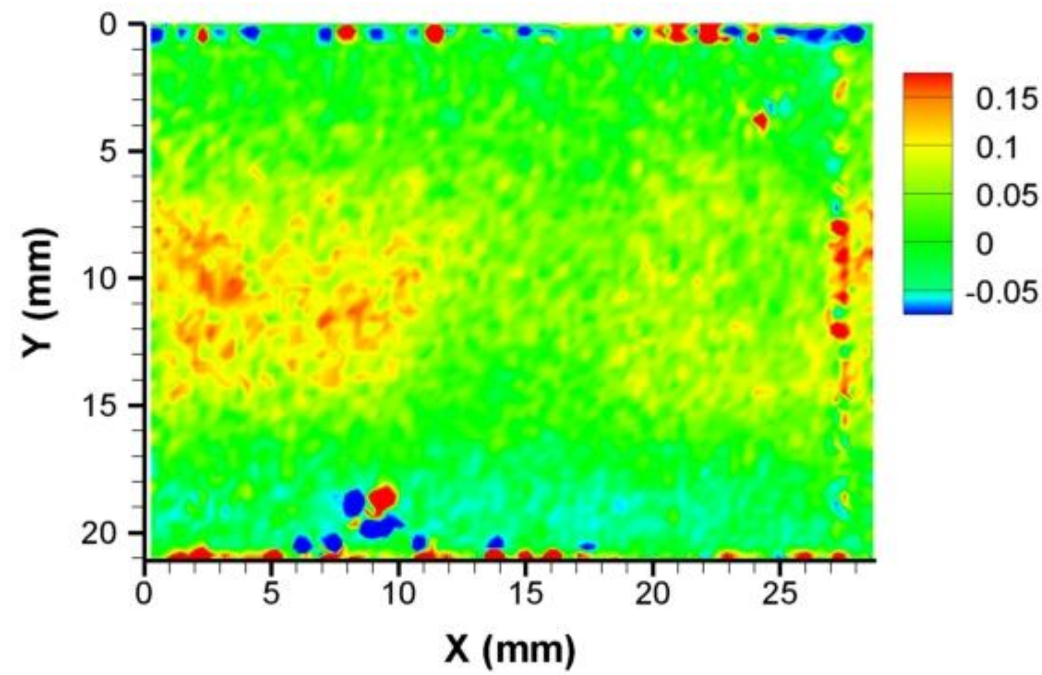

Fig. E-44 $\overline{v}$**, Grid #1, L0, Plasma-150, Equilibrated**

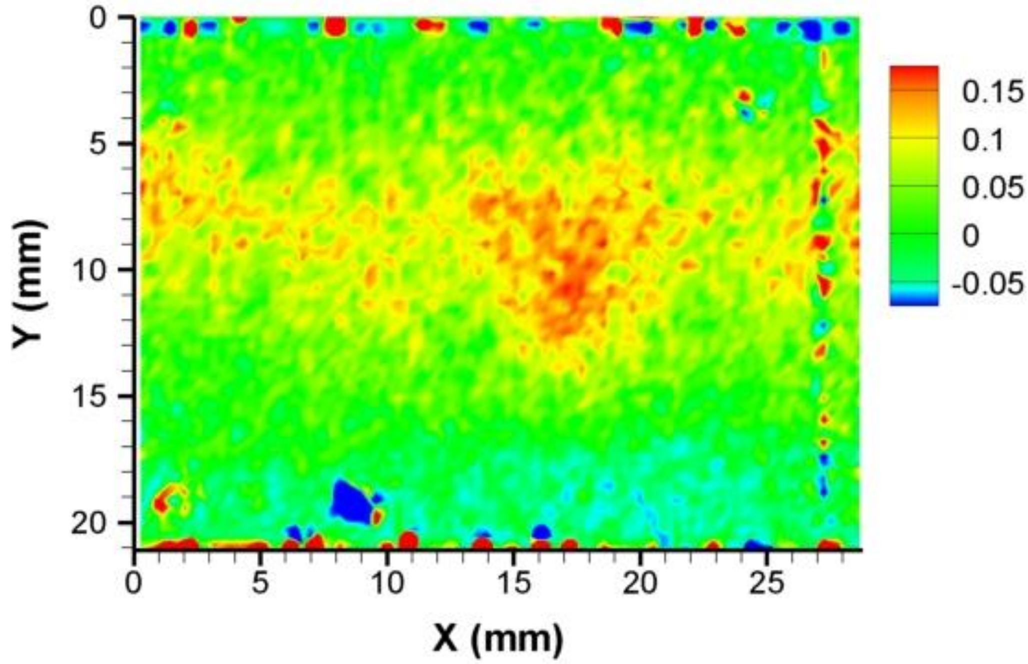

Fig. E-45 $\overline{v}$, Grid #1, L0, Plasma-300, Equilibrated

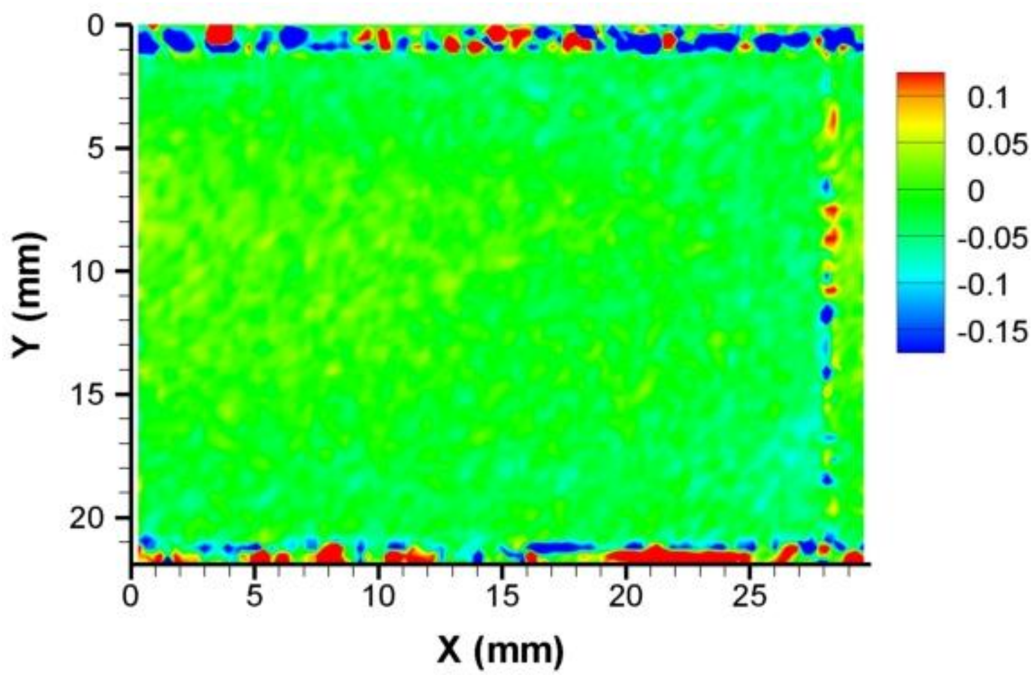

Fig. E-46 $\overline{v}$, Grid #1, L2, Plasma-150, Equilibrated

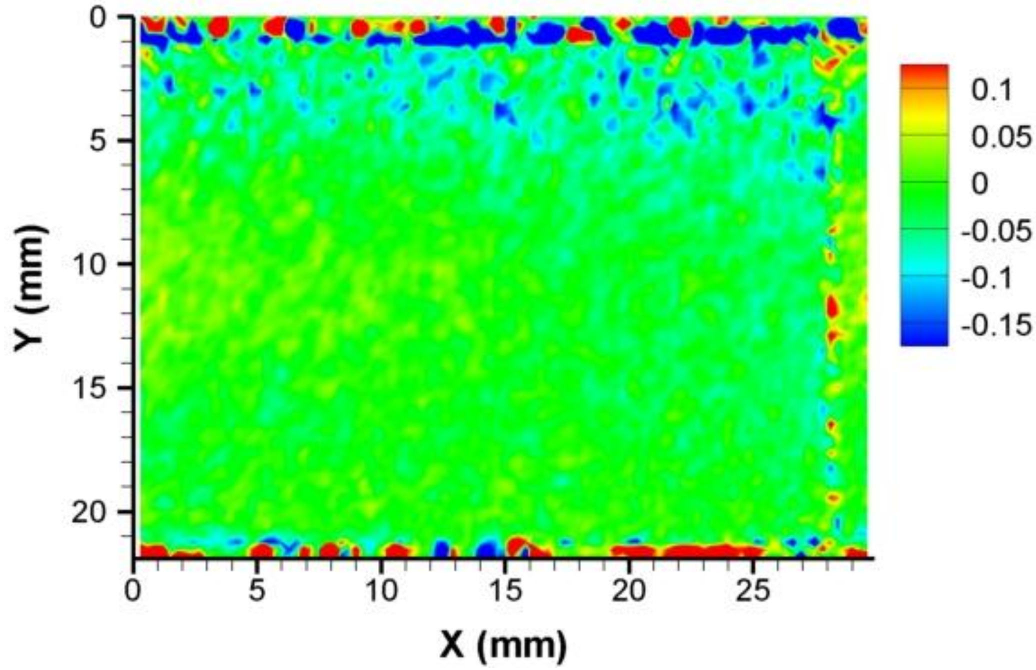

Fig. E-47 $\overline{v}$**, Grid #1, L2, Plasma-300, Equilibrated**

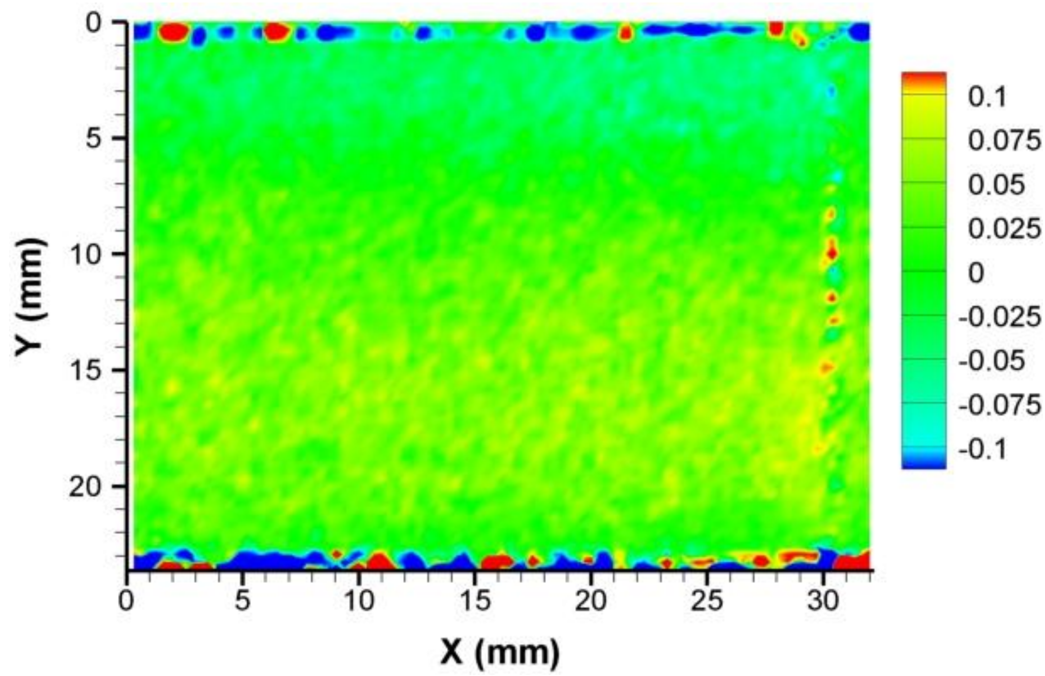

Fig. E-48 $\overline{v}$**, Grid #1, L5, Plasma-150, Equilibrated**

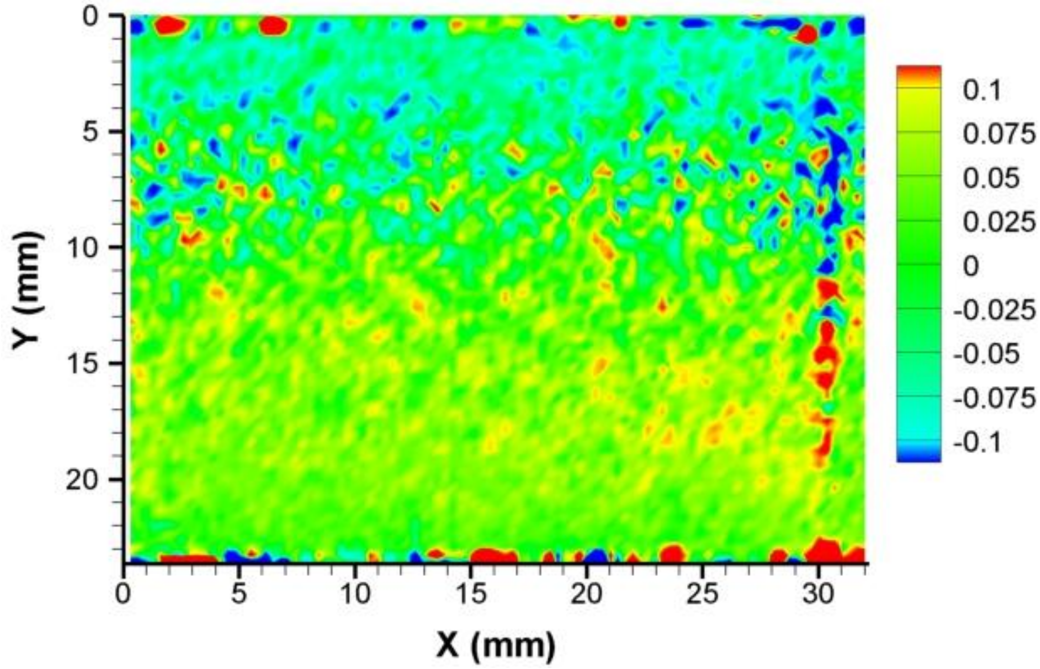

Fig. E-49 $\overline{v}$, Grid #1, L5, Plasma-300, Equilibrated

APPENDIX F

CONTOUR PLOTS

$\overline{u'u'}$

FIGURE Page

FIGURE Page

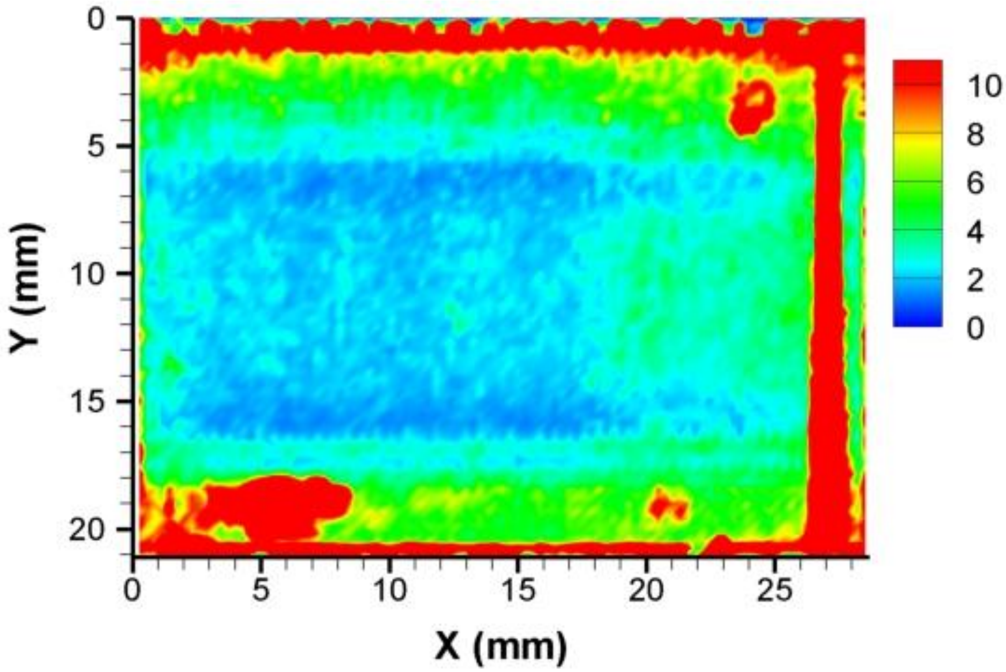

Fig. F-1 $\overline{u'u'}$**, No Grid, L0, Plasma-Off**

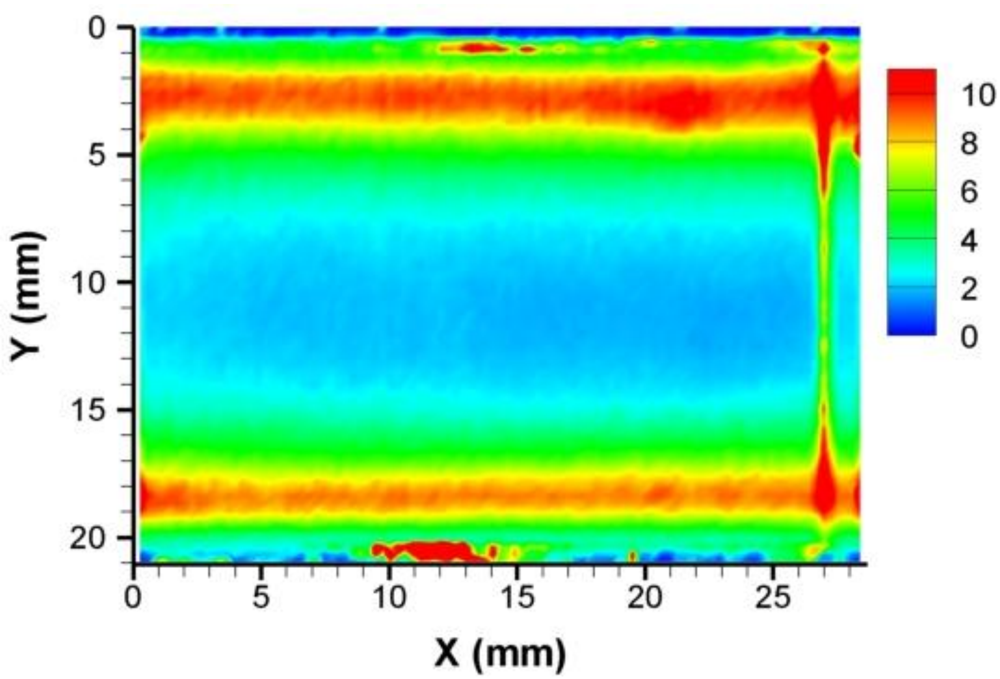

Fig. F-2 $\overline{u'u'}$**, Grid #1, L0, Plasma-Off**

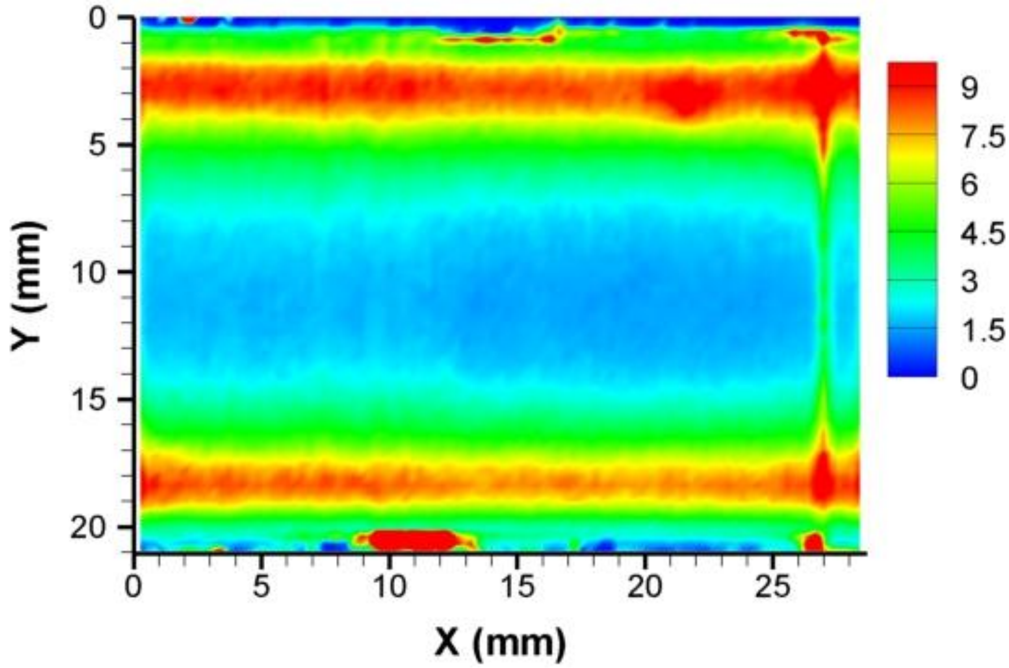

Fig. F-3 $\overline{u'u'}$**, Grid #1, L0, Plasma-150**

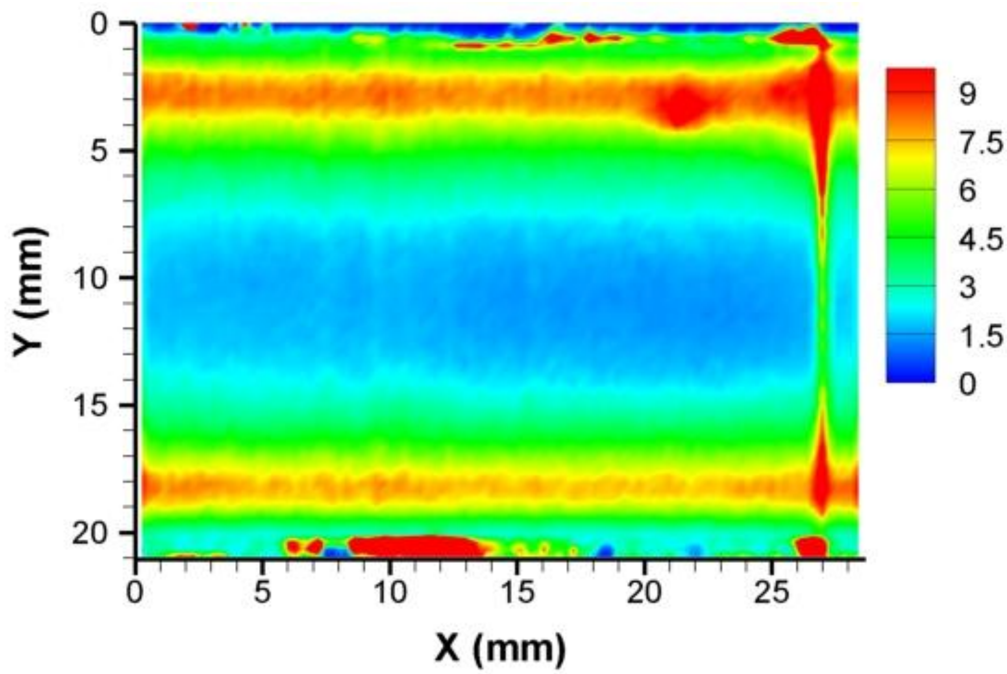

Fig. F-4 $\overline{u'u'}$**, Grid #1, L0, Plasma-300**

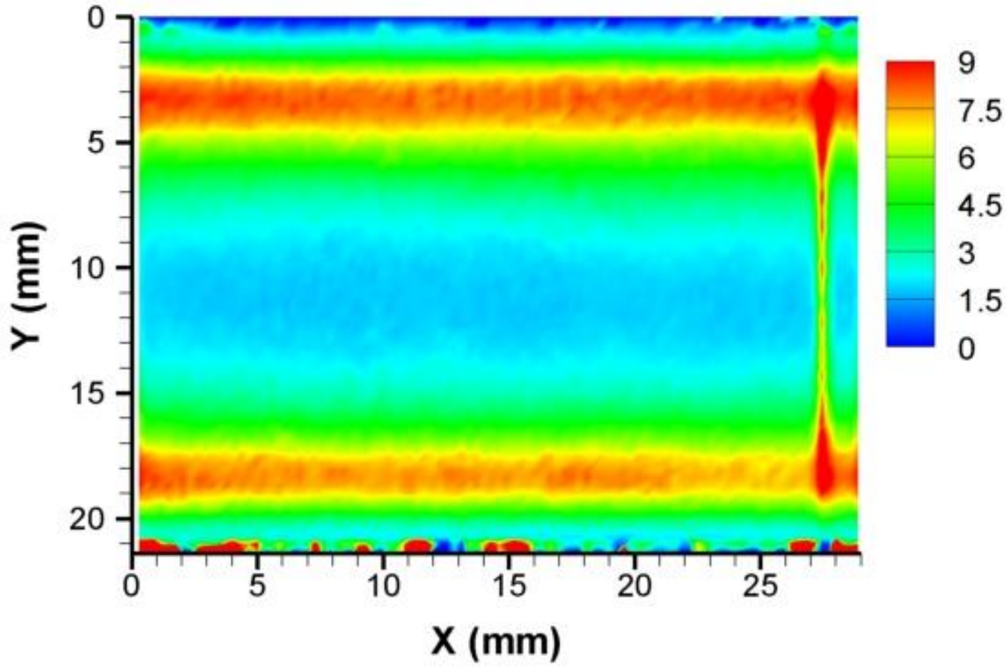

Fig. F-5 $\overline{u'u'}$, **Grid #1, L1, Plasma-Off**

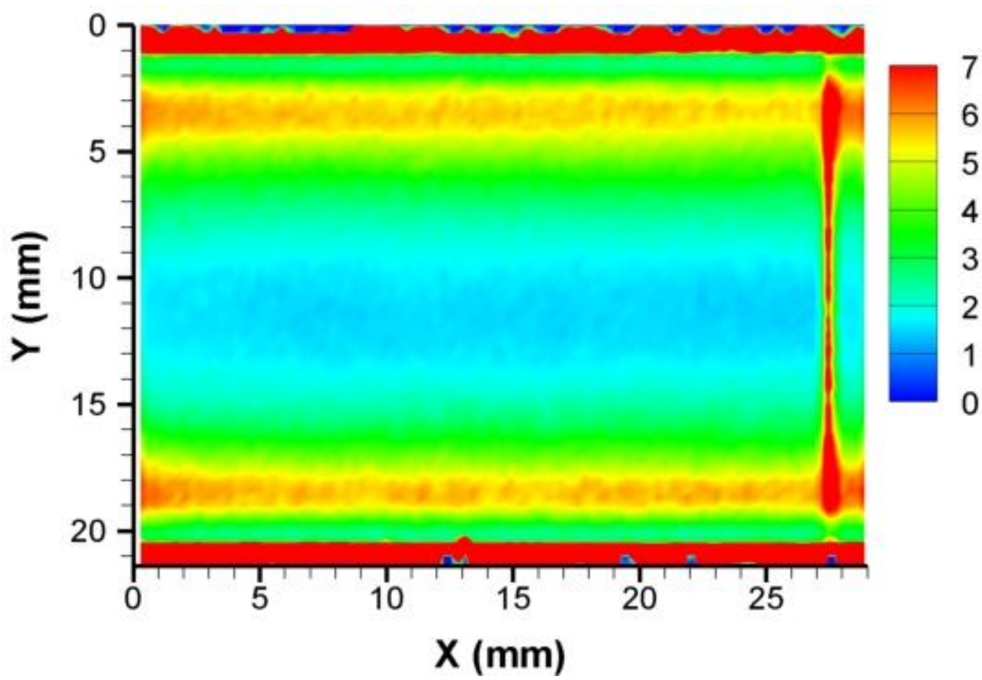

Fig. F-6 $\overline{u'u'}$, **Grid #1, L1, Plasma-150**

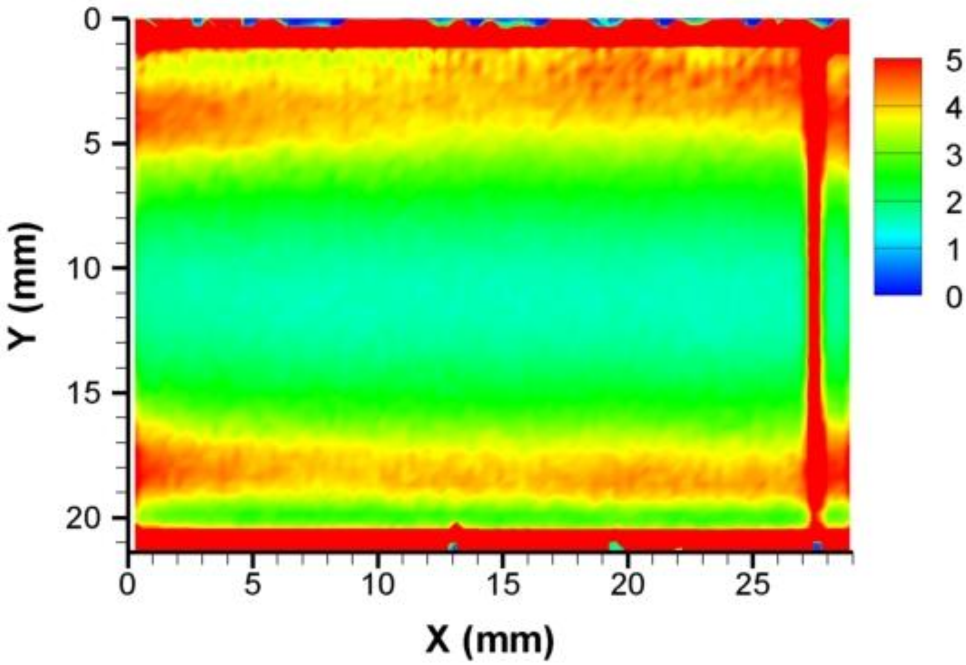

Fig. F-7 $\overline{u'u'}$**, Grid #1, L1, Plasma-300**

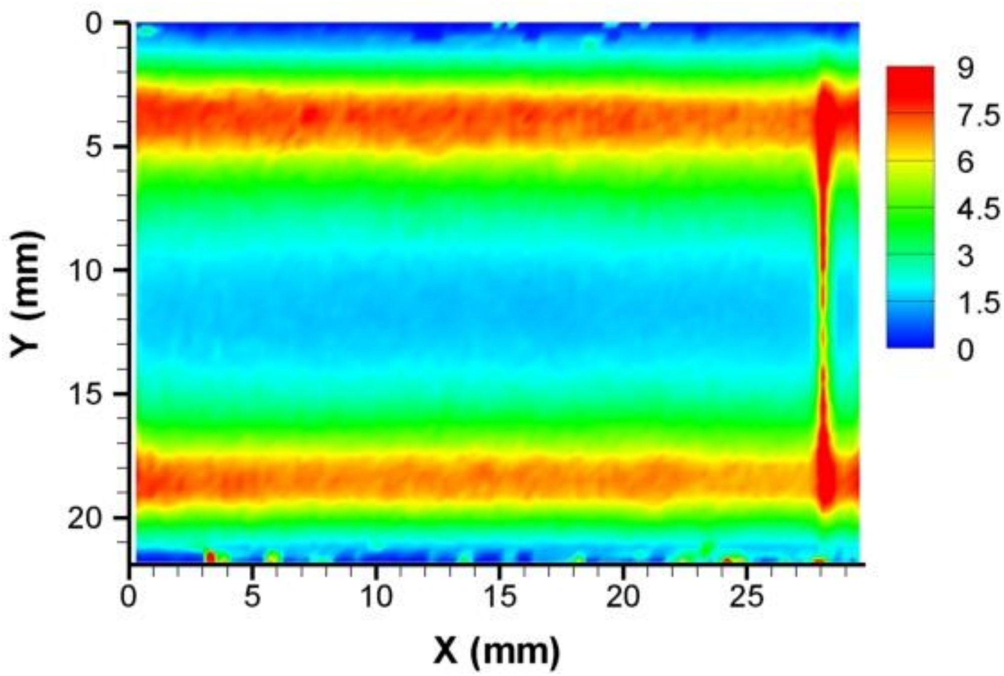

Fig. F-8 $\overline{u'u'}$**, Grid #1, L2, Plasma-Off**

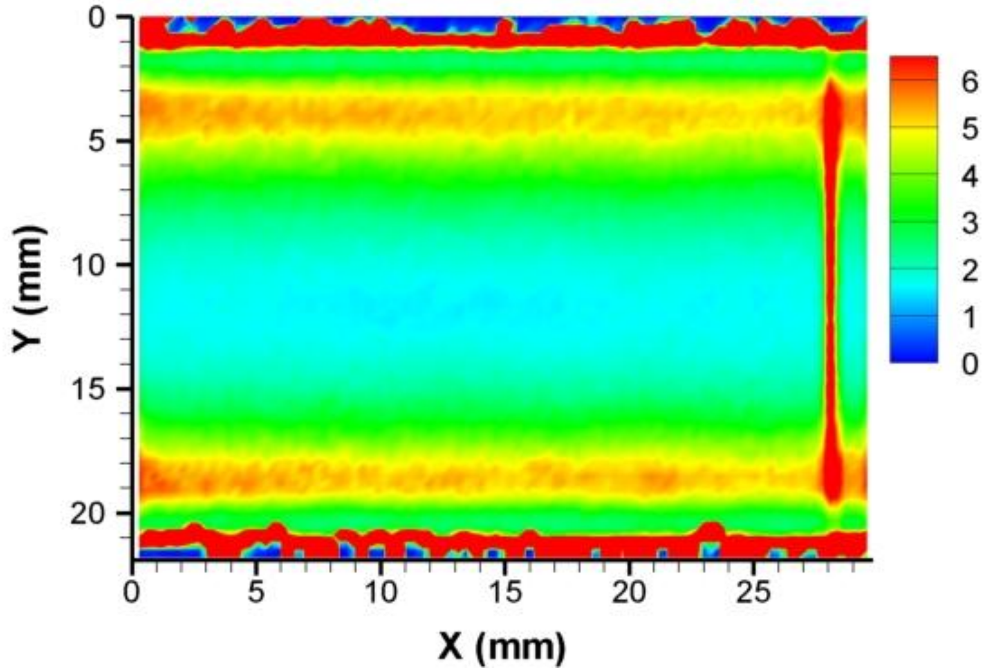

Fig. F-9 $\overline{u'u'}$**, Grid #1, L2, Plasma-150**

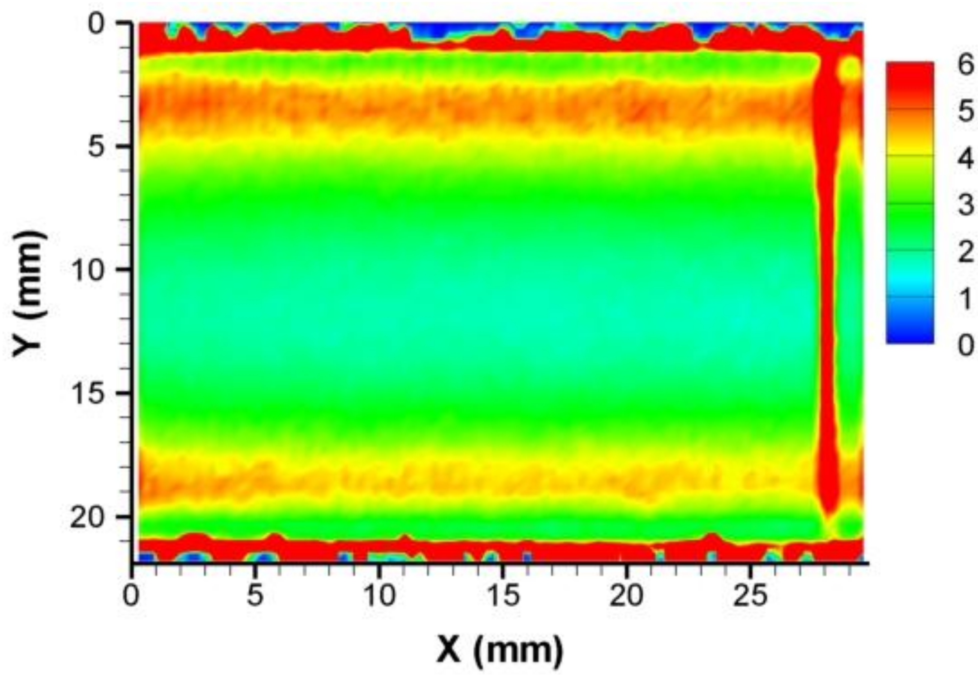

Fig. F-10 $\overline{u'u'}$**, Grid #1, L2, Plasma-300**

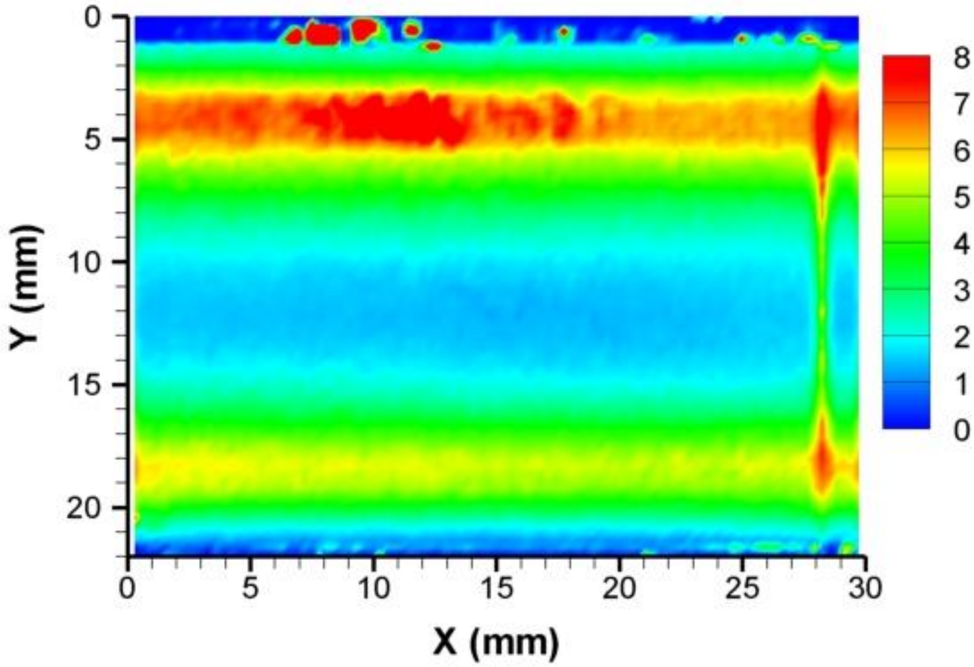

Fig. F-11 $\overline{u'u'}$**, Grid #1, L3, Plasma-Off**

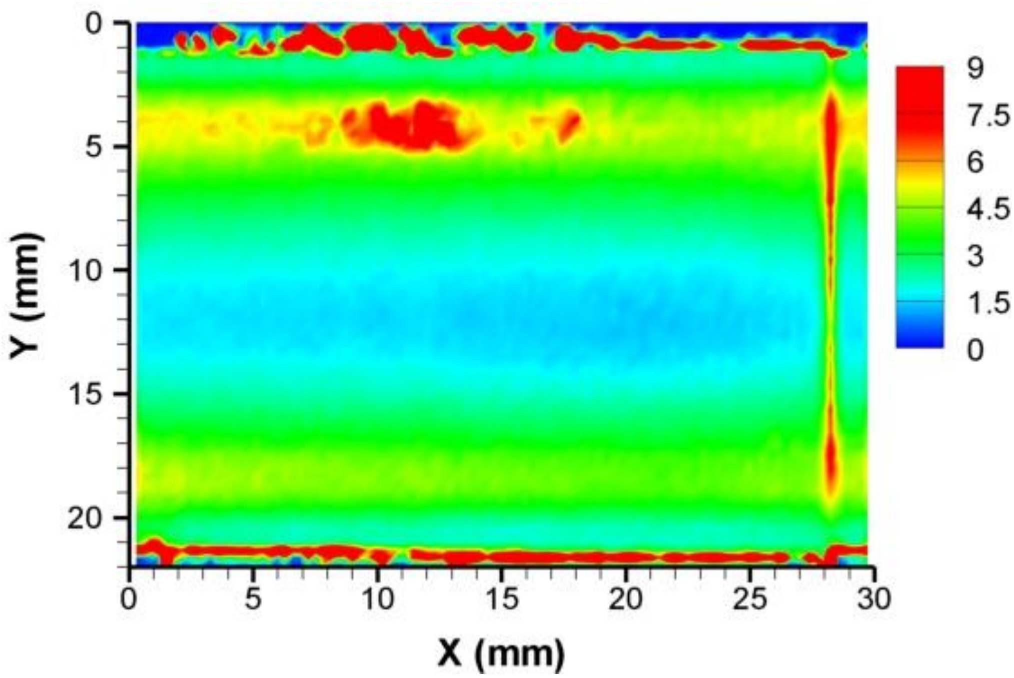

Fig. F-12 $\overline{u'u'}$**, Grid #1, L3, Plasma-150**

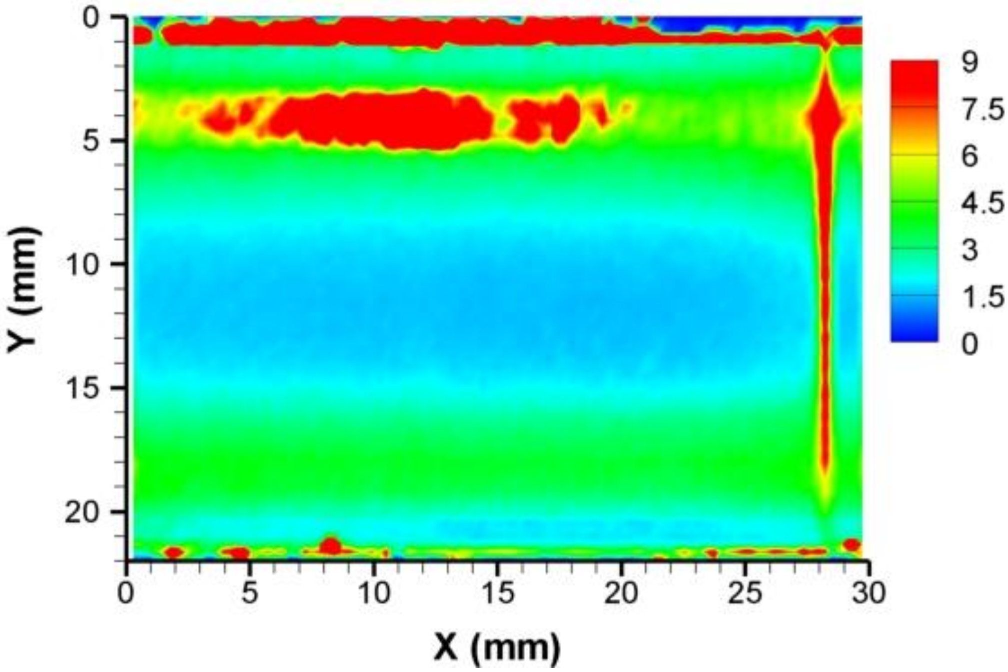

Fig. F-13 $\overline{u'u'}$**, Grid #1, L3, Plasma-300**

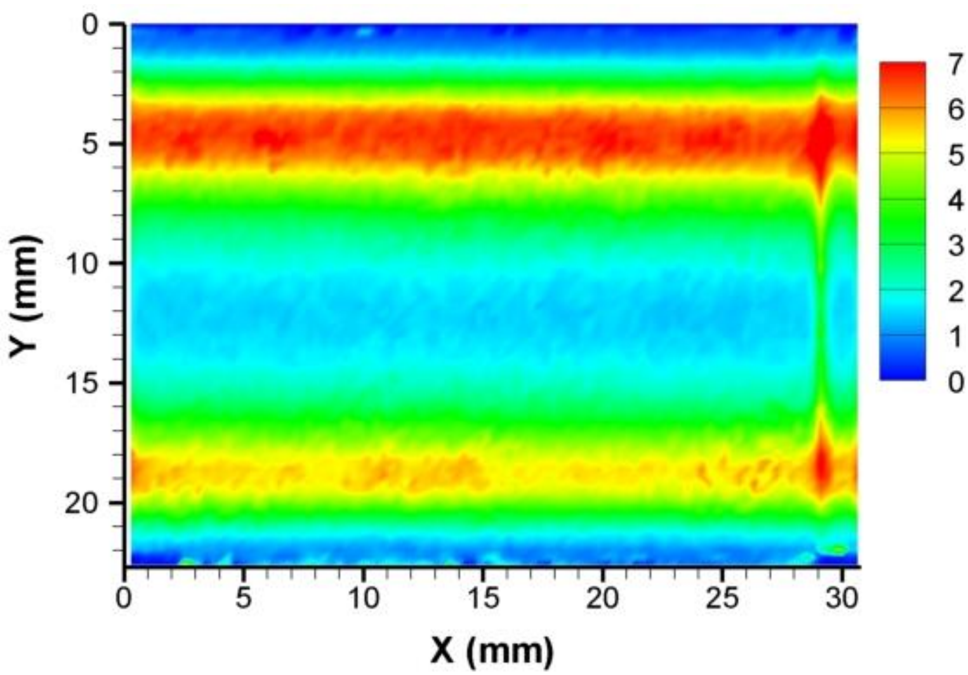

Fig. F-14 $\overline{u'u'}$**, Grid #1, L4, Plasma-Off**

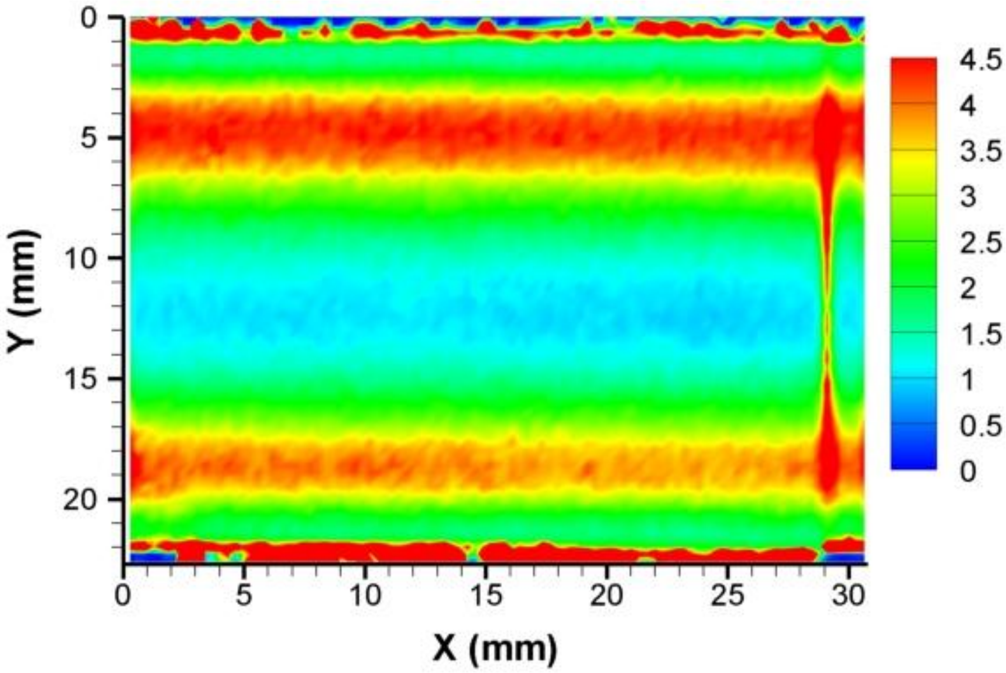

Fig. F-15 $\overline{u'u'}$**, Grid #1, L4, Plasma-150**

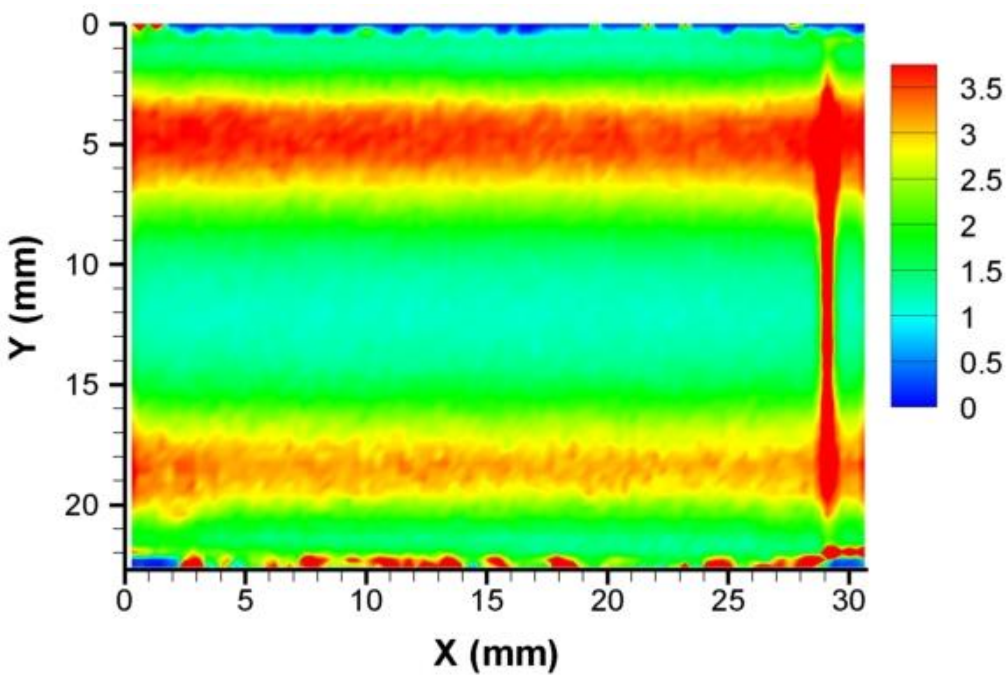

Fig. F-16 $\overline{u'u'}$**, Grid #1, L4, Plasma-300**

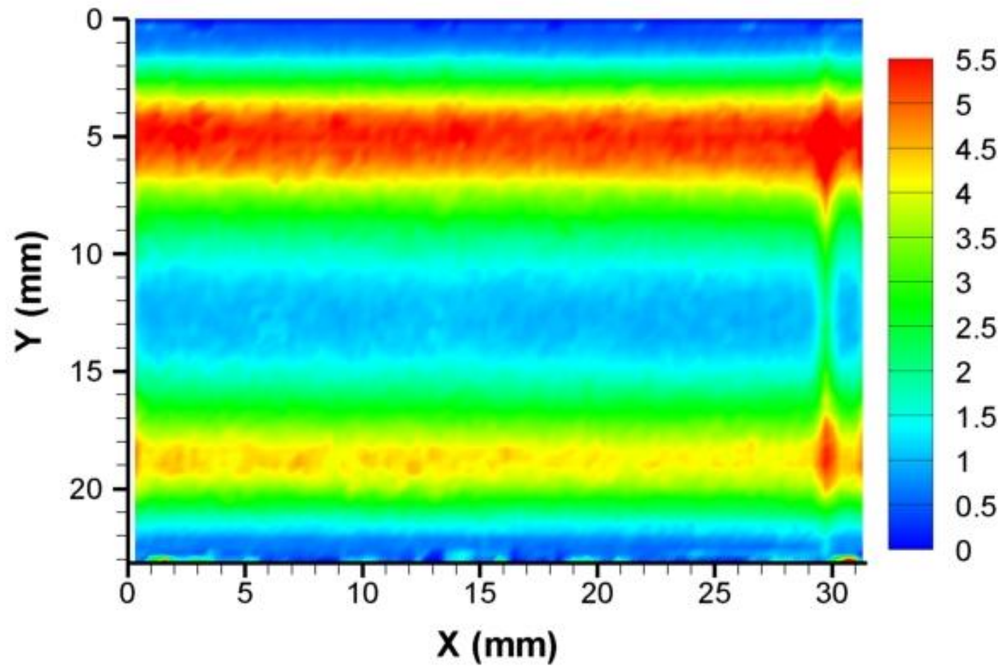

Fig. F-17 $\overline{u'u'}$**, Grid #1, L5, Plasma-Off**

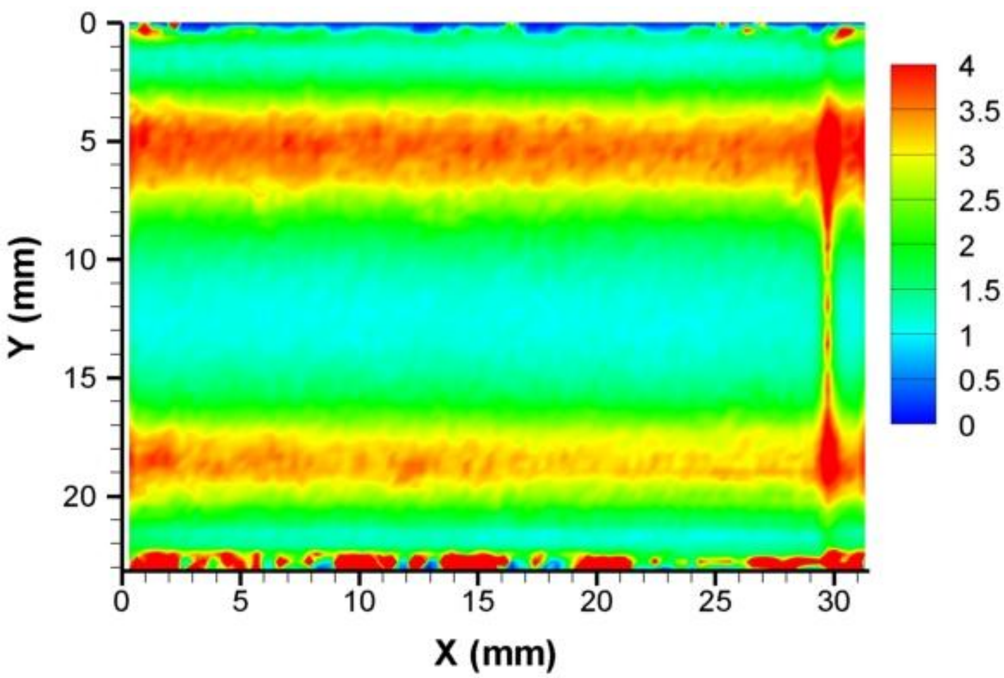

Fig. F-18 $\overline{u'u'}$**, Grid #1, L5, Plasma-150**

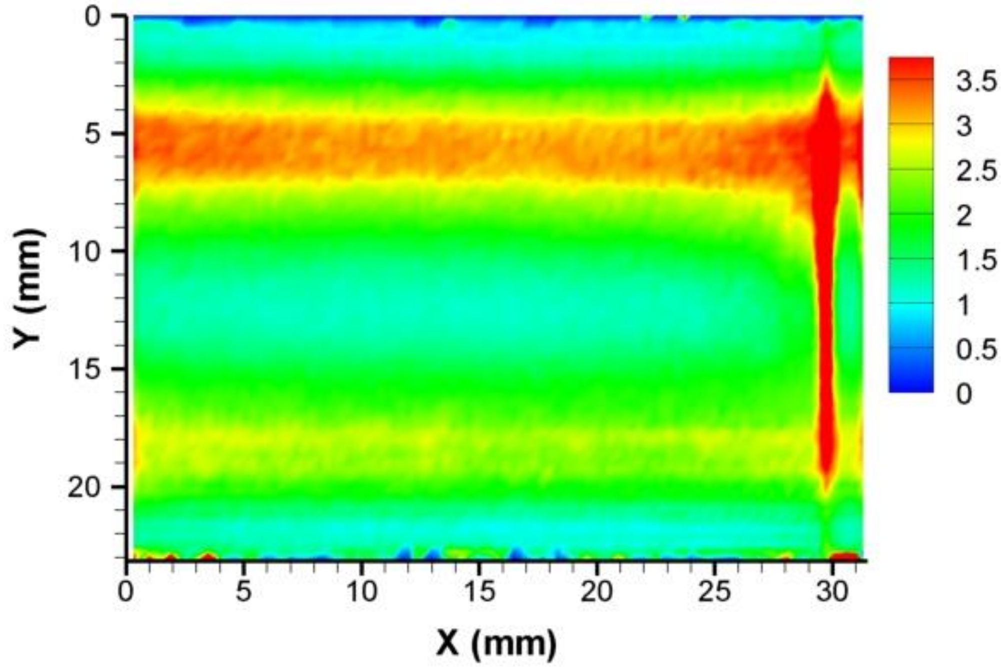

Fig. F-19 $\overline{u'u'}$**, Grid #1, L5, Plasma-300**

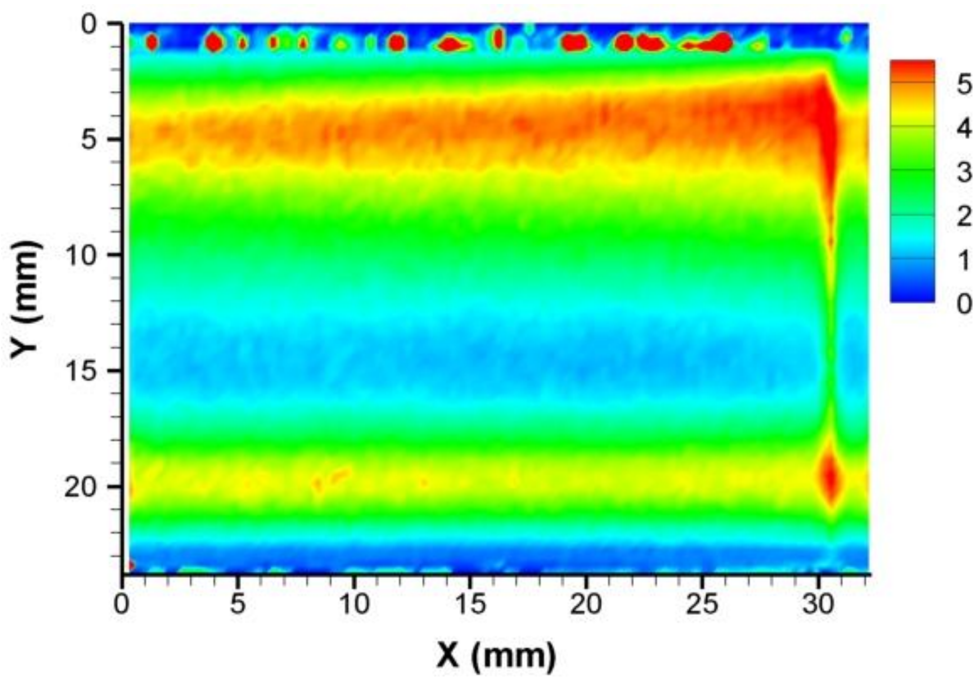

Fig. F-20 $\overline{u'u'}$**, Grid #1, L6, Plasma-Off**

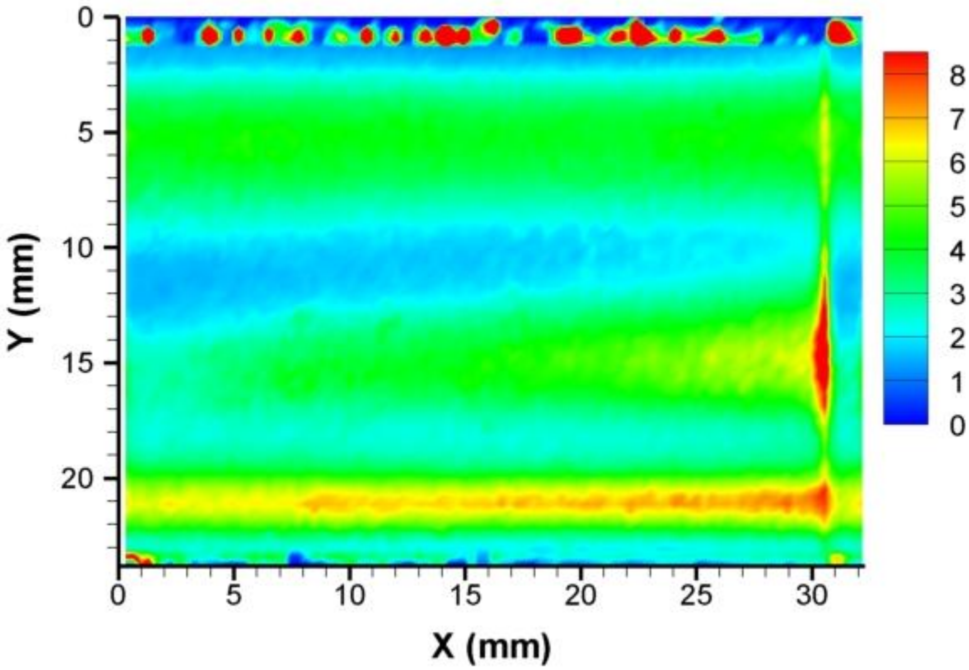

Fig. F-21 $\overline{u'u'}$**, Grid #1, L6, Plasma-150**

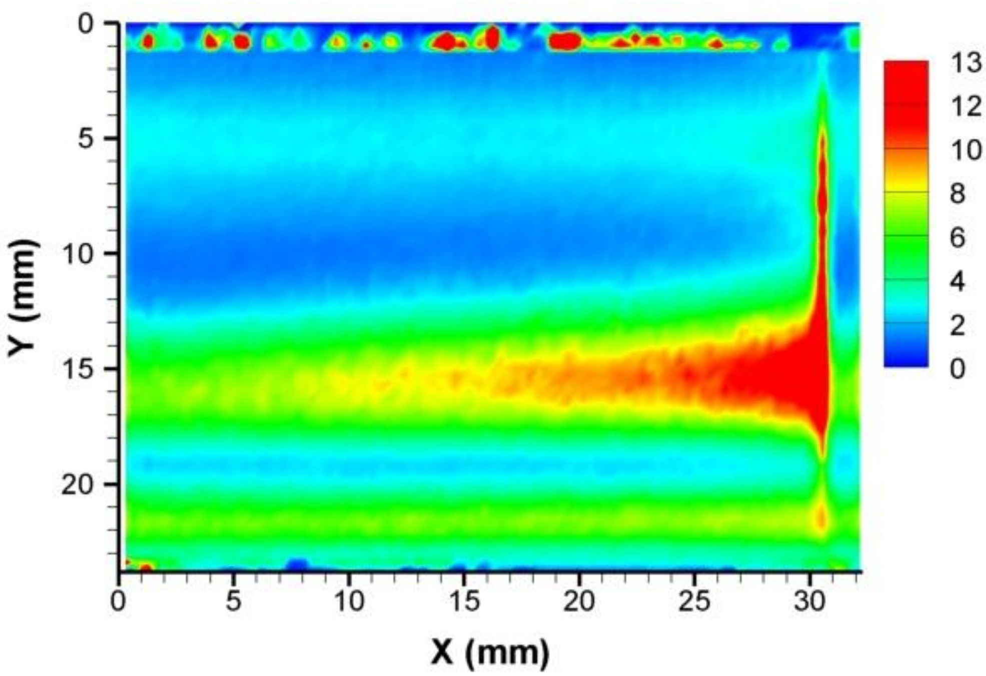

Fig. F-22 $\overline{u'u'}$**, Grid #1, L6, Plasma-300**

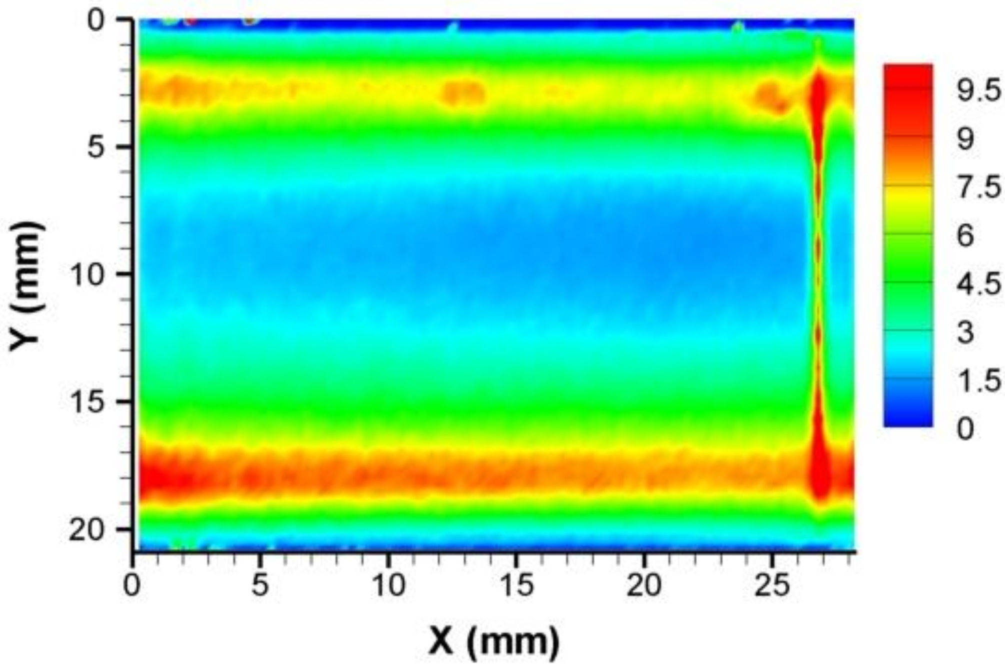

Fig. F-23 $\overline{u'u'}$**, Grid #2, L0, Plasma-Off**

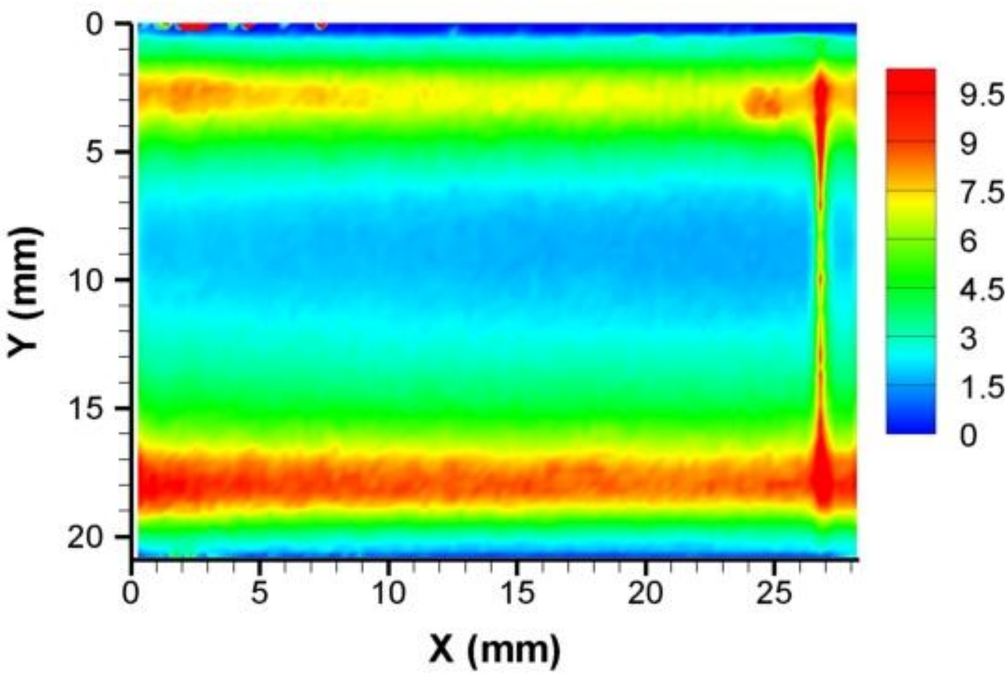

Fig. F-24 $\overline{u'u'}$**, Grid #2, L0, Plasma-150**

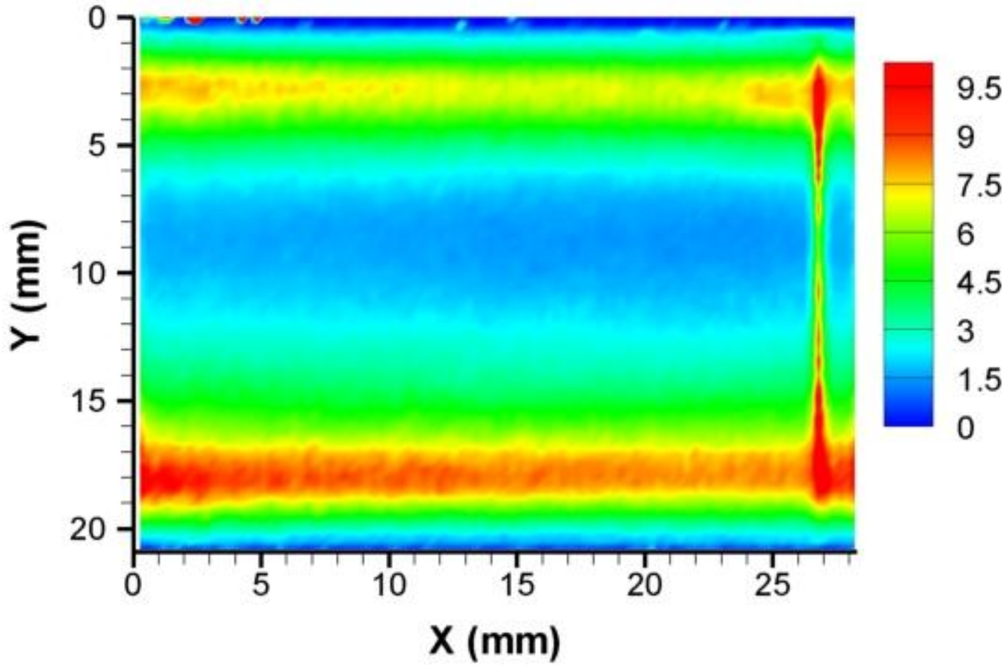

Fig. F-25 $\overline{u'u'}$**, Grid #2, L0, Plasma-300**

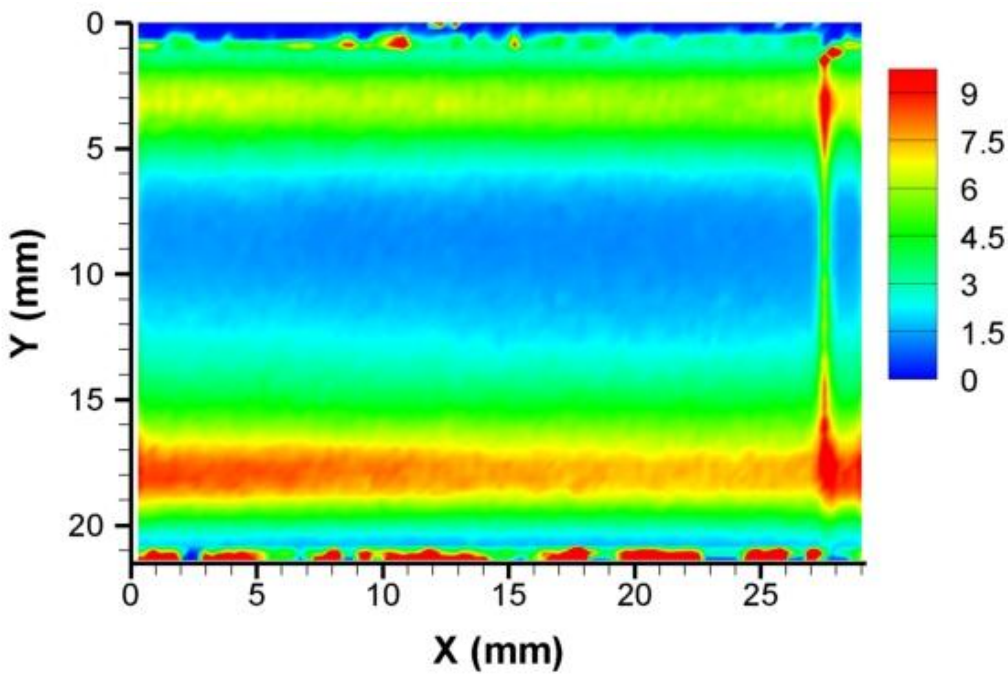

Fig. F-26 $\overline{u'u'}$**, Grid #2, L1, Plasma-Off**

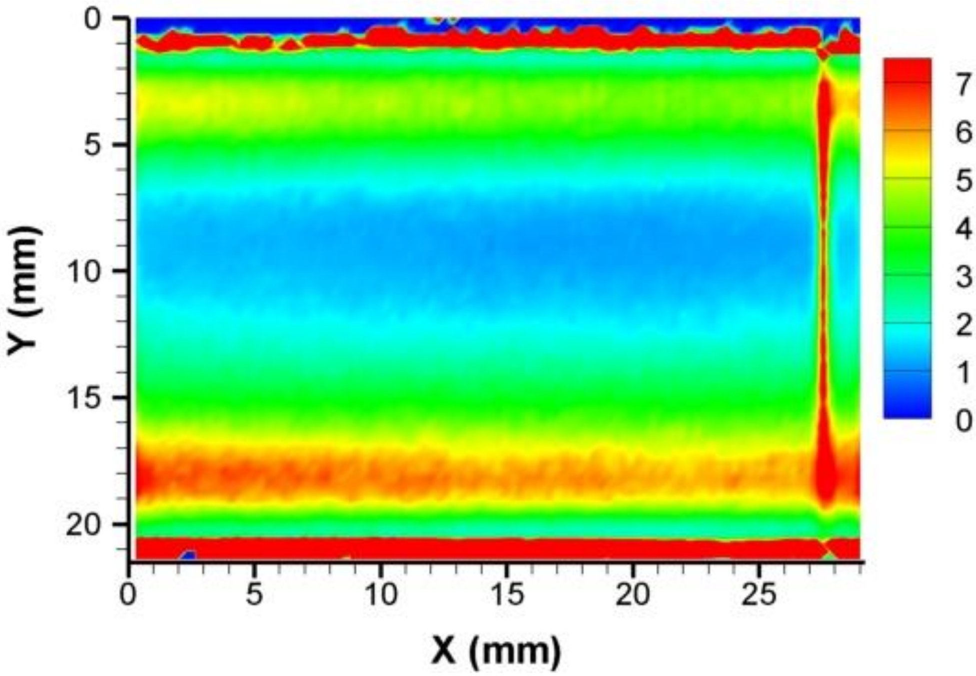

Fig. F-27 $\overline{u'u'}$**, Grid #2, L1, Plasma-150**

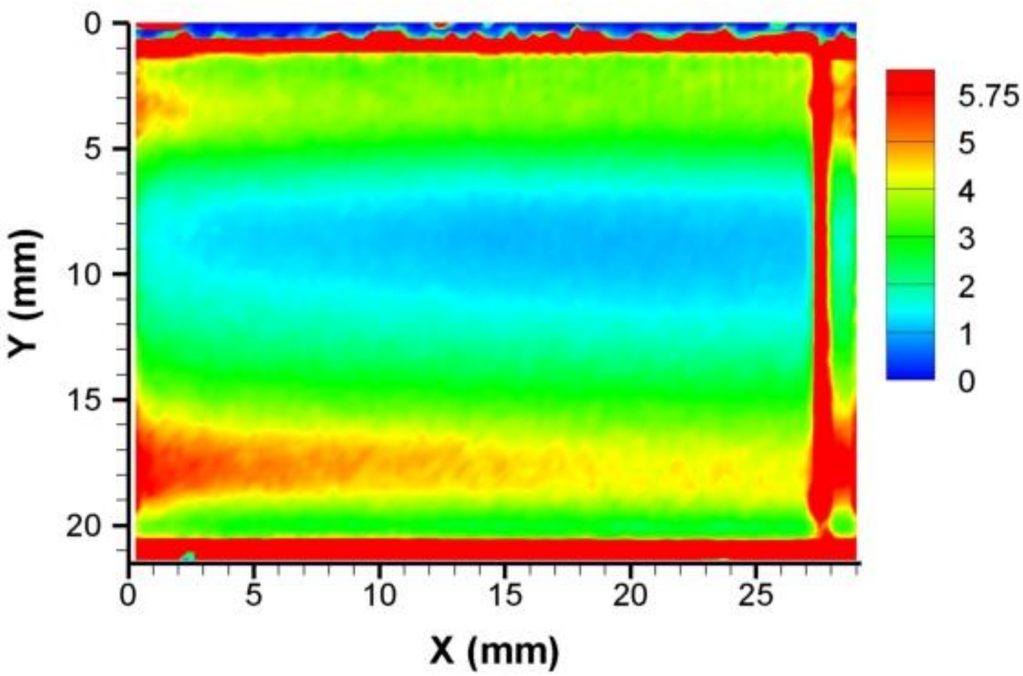

Fig. F-28 $\overline{u'u'}$**, Grid #2, L1, Plasma-300**

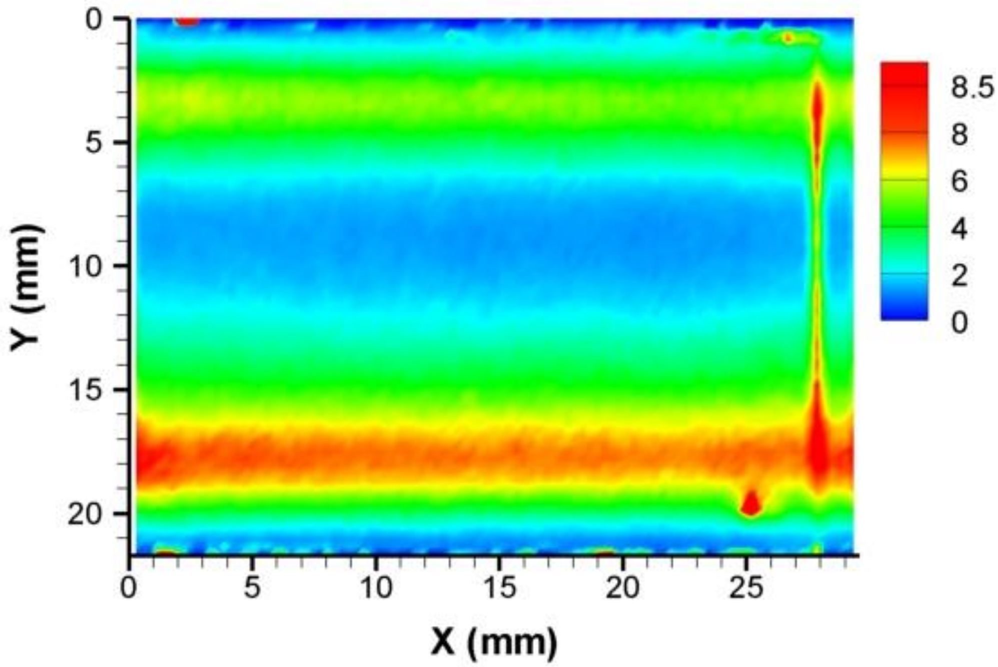

Fig. F-29 $\overline{u'u'}$**, Grid #2, L2, Plasma-Off**

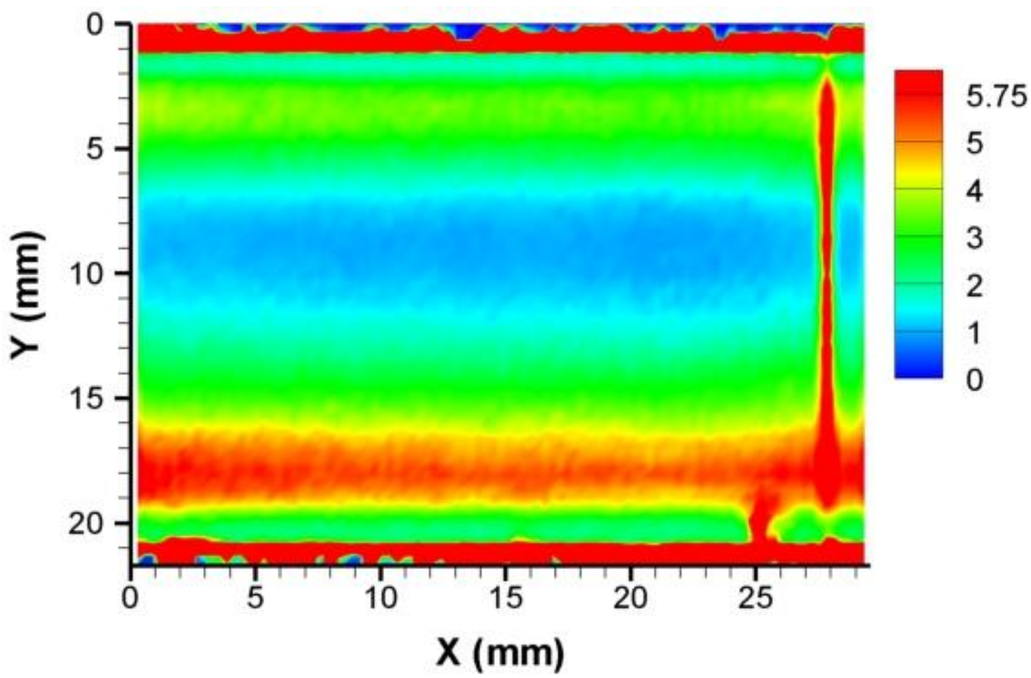

Fig. F-30 $\overline{u'u'}$**, Grid #2, L2, Plasma-150**

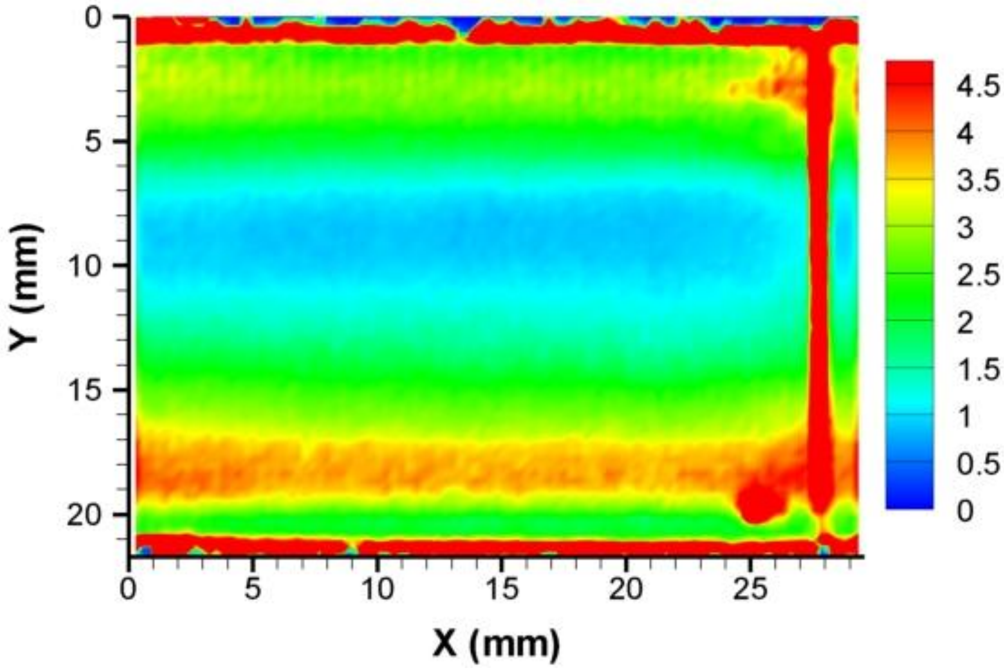

Fig. F-31 $\overline{u'u'}$**, Grid #2, L2, Plasma-300**

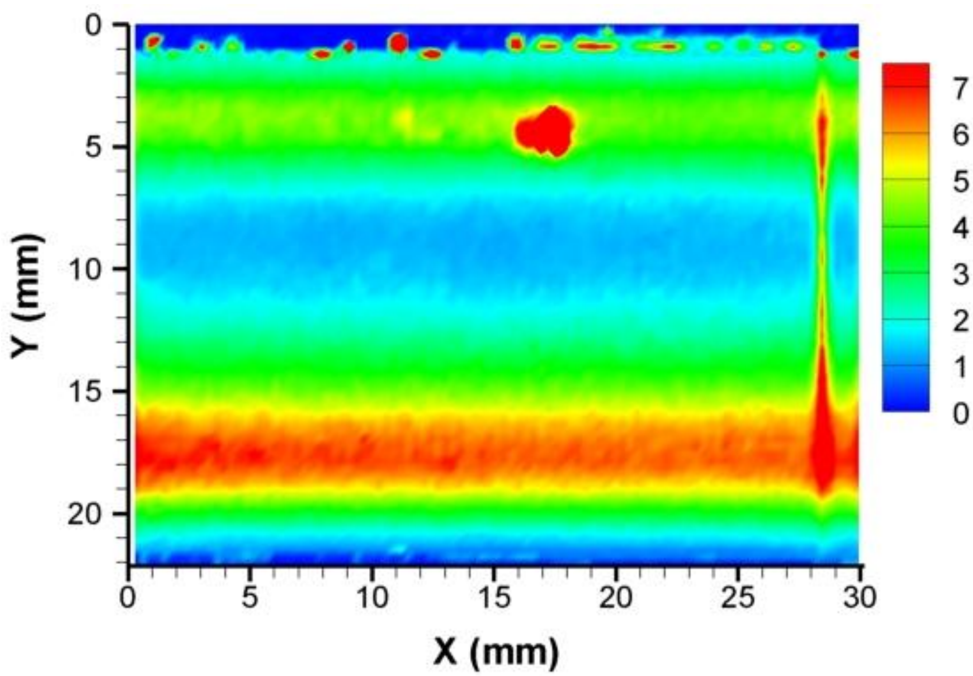

Fig. F-32 $\overline{u'u'}$**, Grid #2, L3, Plasma-Off**

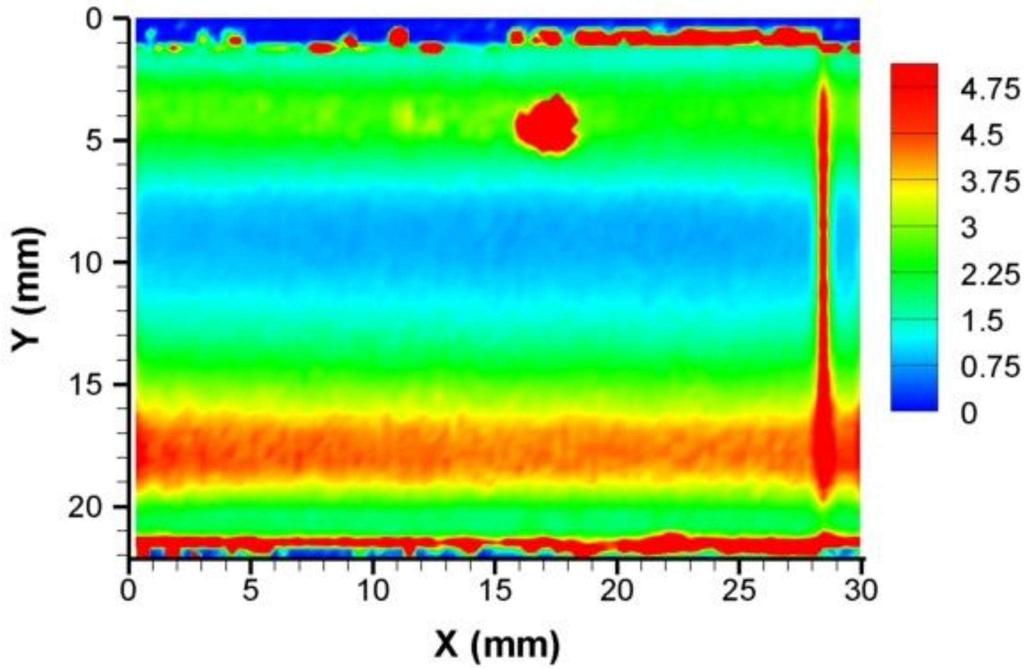

Fig. F-33 $\overline{u'u'}$**, Grid #2, L3, Plasma-150**

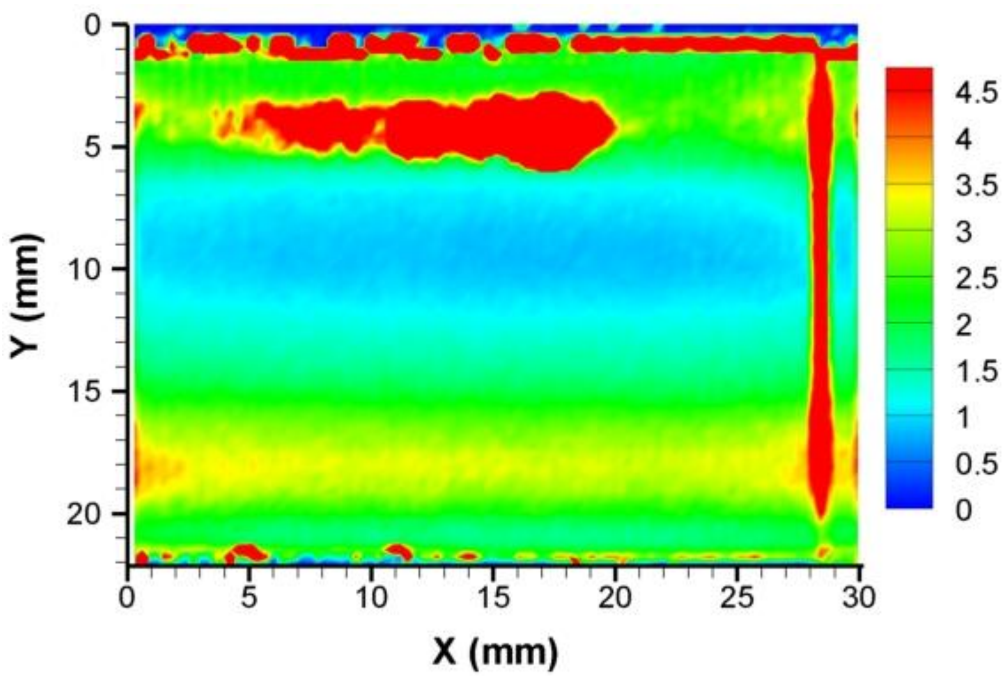

Fig. F-34 $\overline{u'u'}$**, Grid #2, L3, Plasma-300**

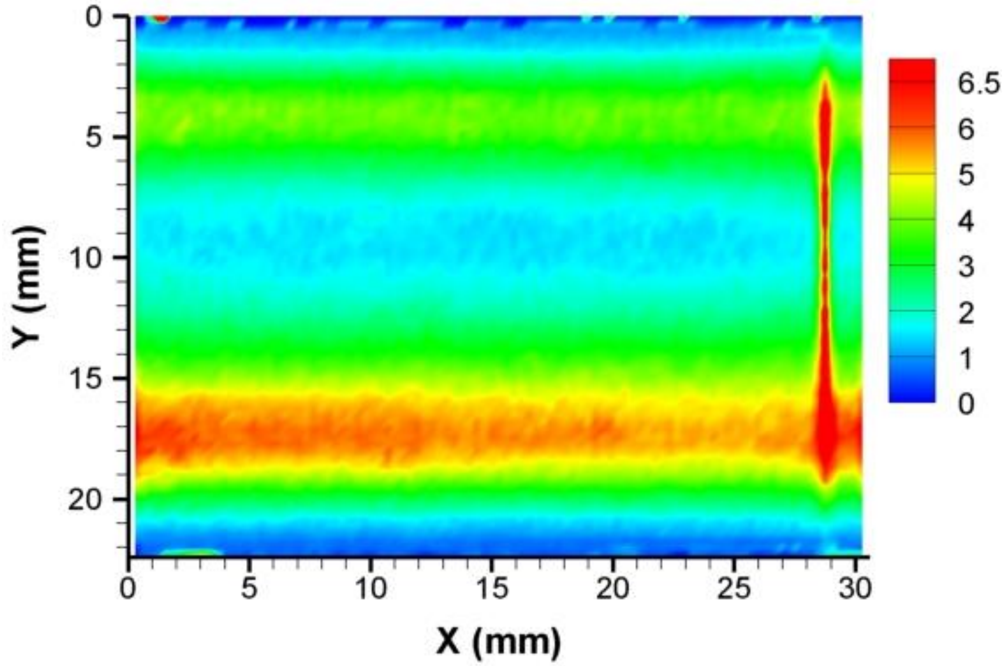

Fig. F-35 $\overline{u'u'}$**, Grid #2, L4, Plasma-Off**

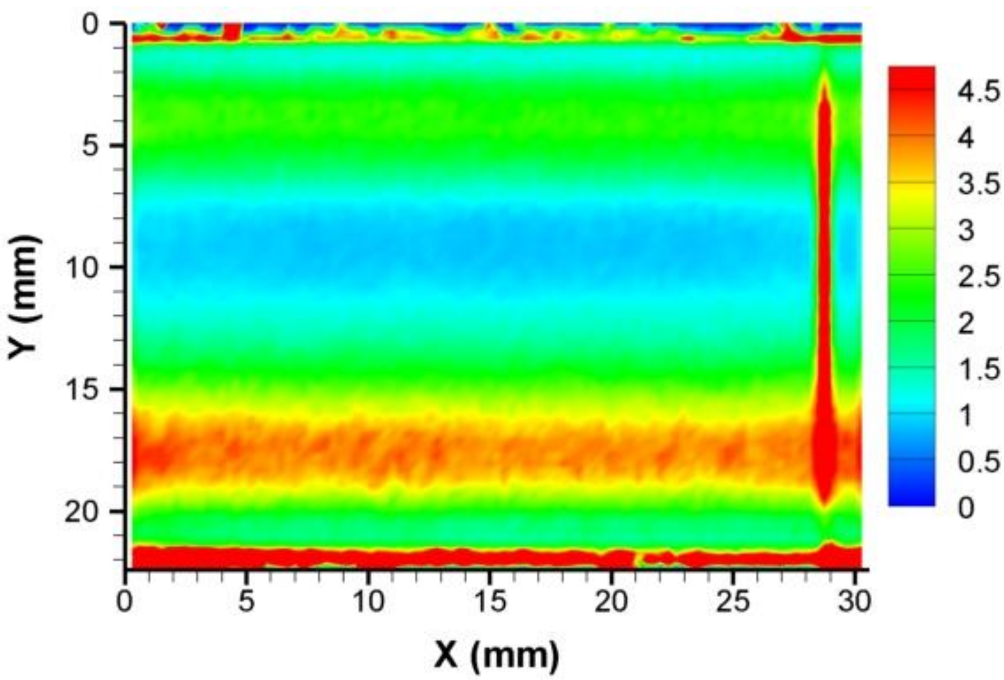

Fig. F-36 $\overline{u'u'}$**, Grid #2, L4, Plasma-150**

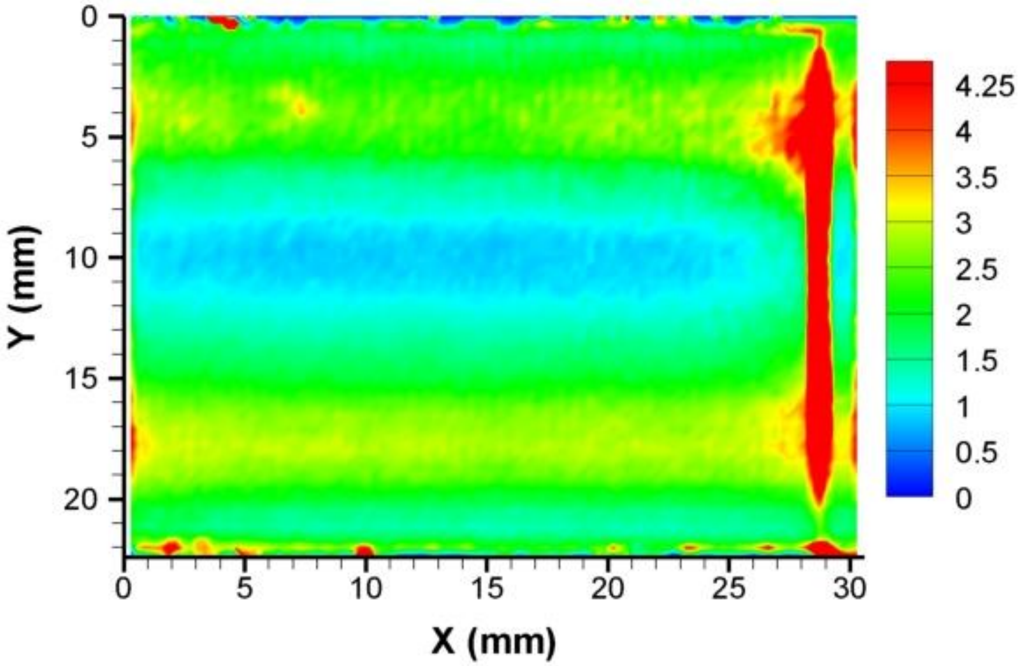

Fig. F-37 $\overline{u'u'}$, Grid #2, L4, Plasma-300

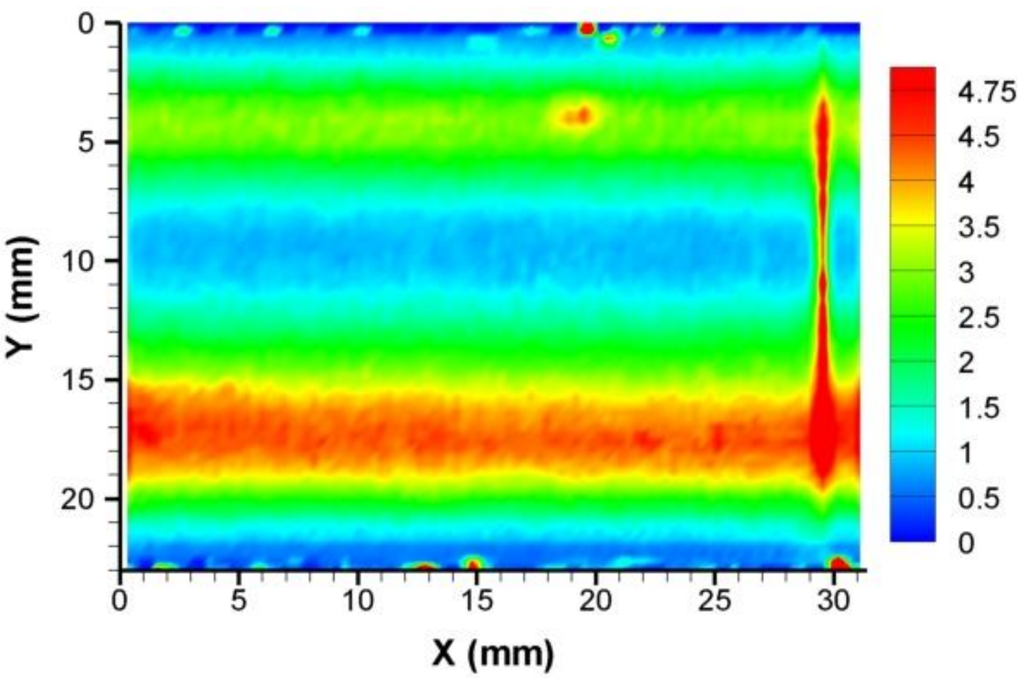

Fig. F-38 $\overline{u'u'}$, Grid #2, L5, Plasma-Off

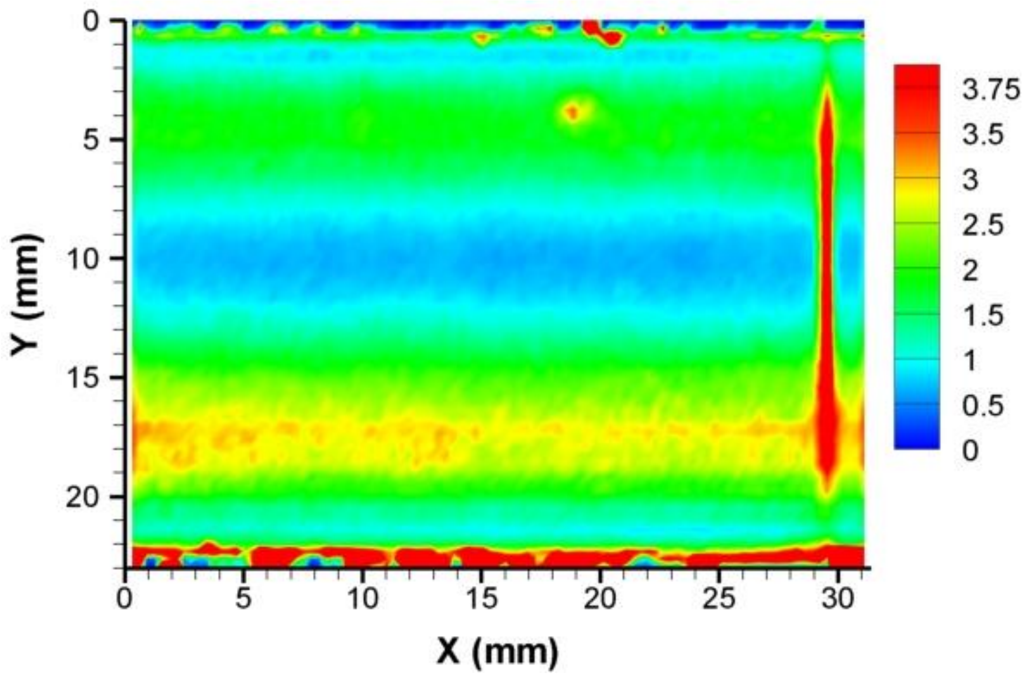

Fig. F-39 $\overline{u'u'}$**, Grid #2, L5, Plasma-150**

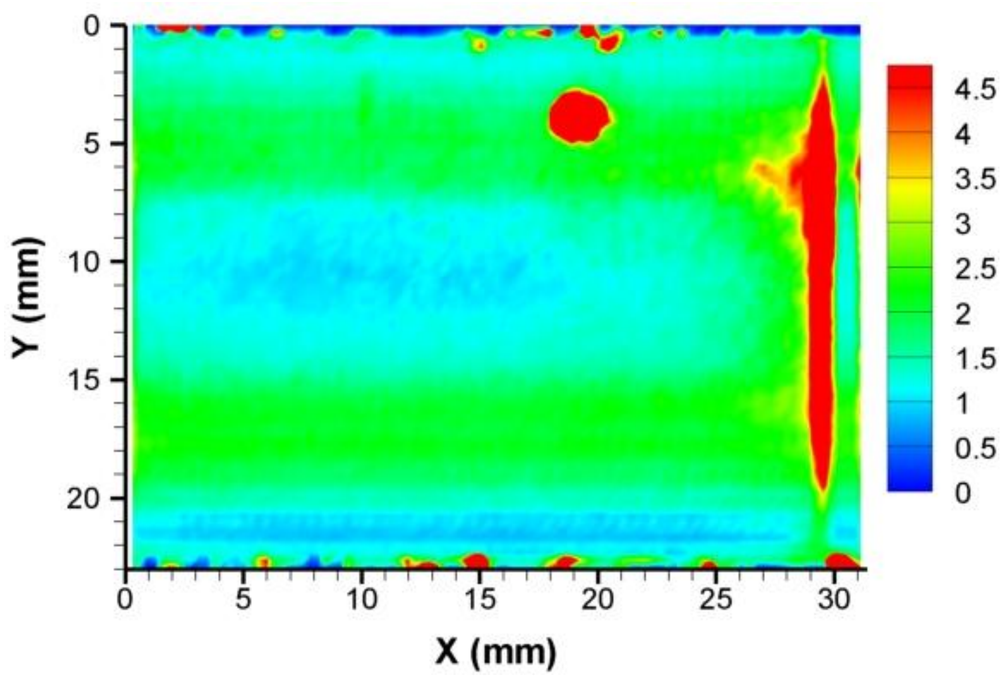

Fig. F-40 $\overline{u'u'}$**, Grid #2, L5, Plasma-300**

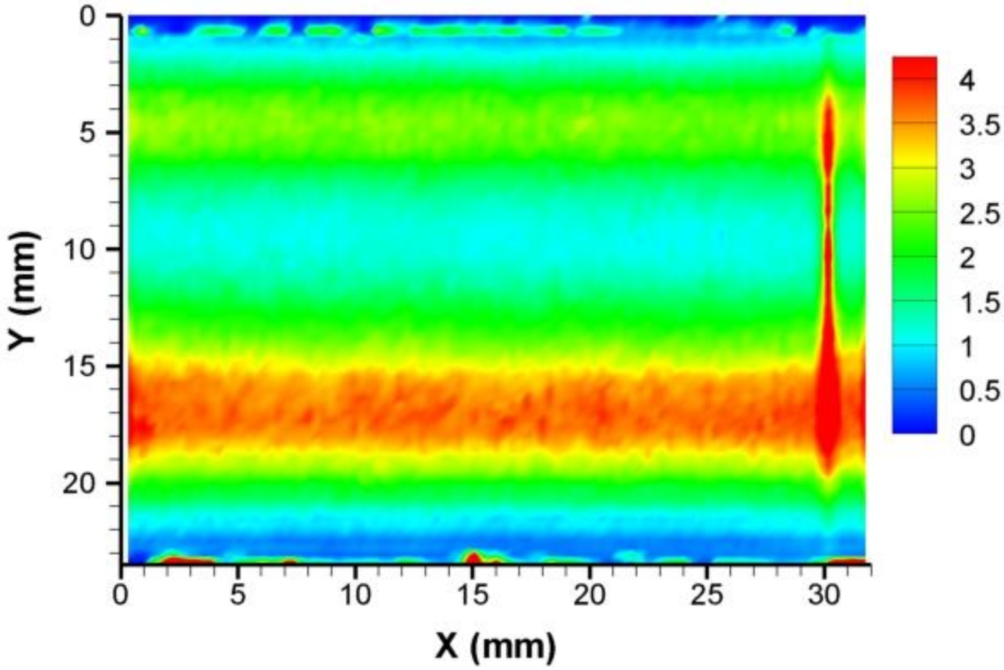

Fig. F-41 $\overline{u'u'}$**, Grid #2, L6, Plasma-Off**

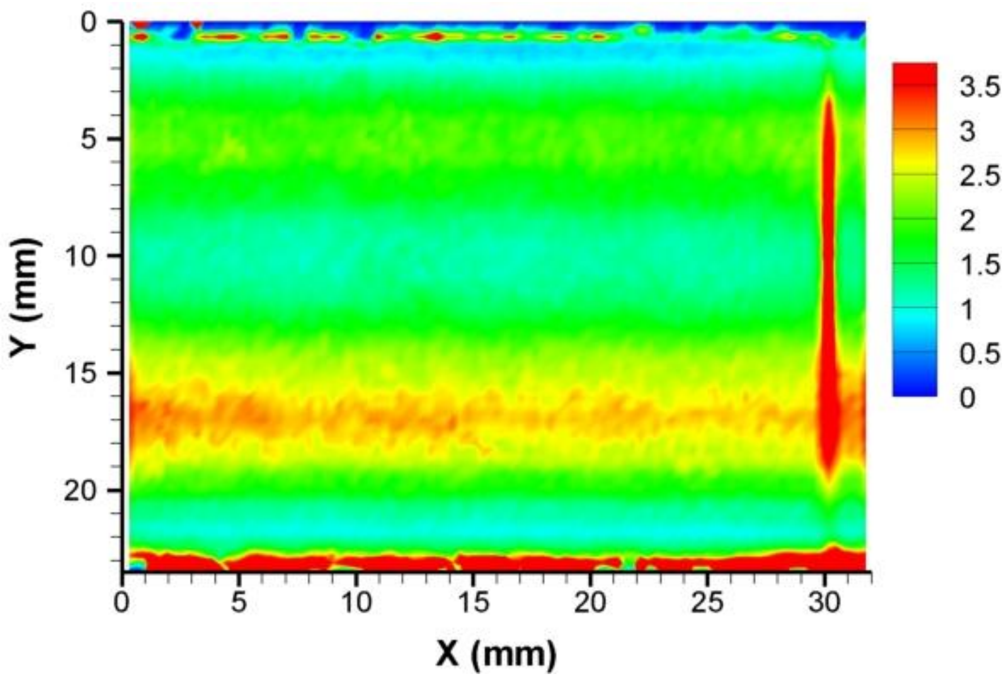

Fig. F-42 $\overline{u'u'}$**, Grid #2, L6, Plasma-150**

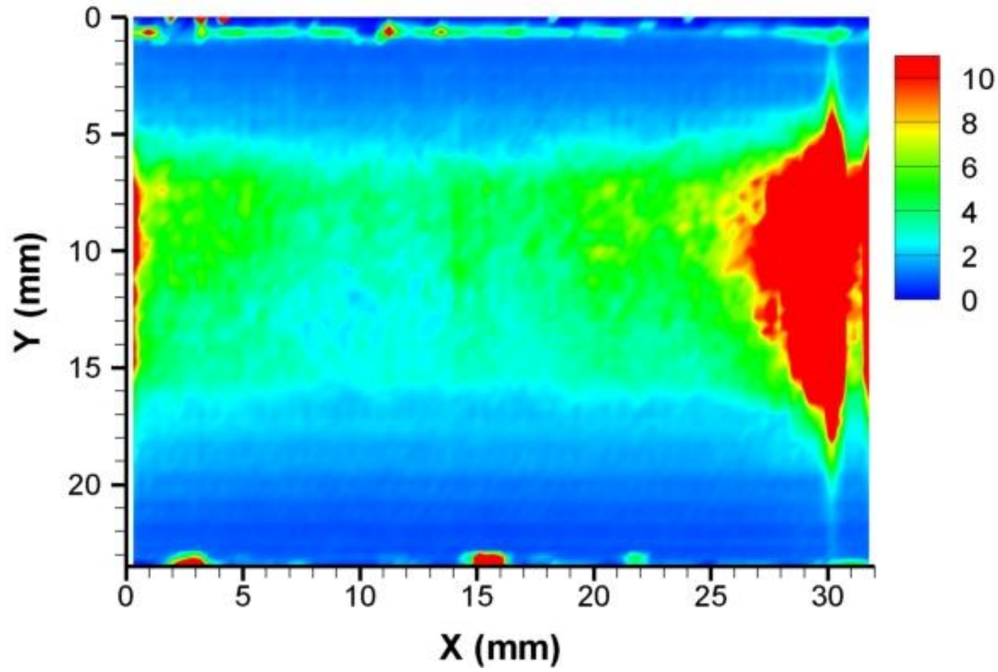

Fig. F-43 $\overline{u'u'}$**, Grid #2, L6, Plasma-300**

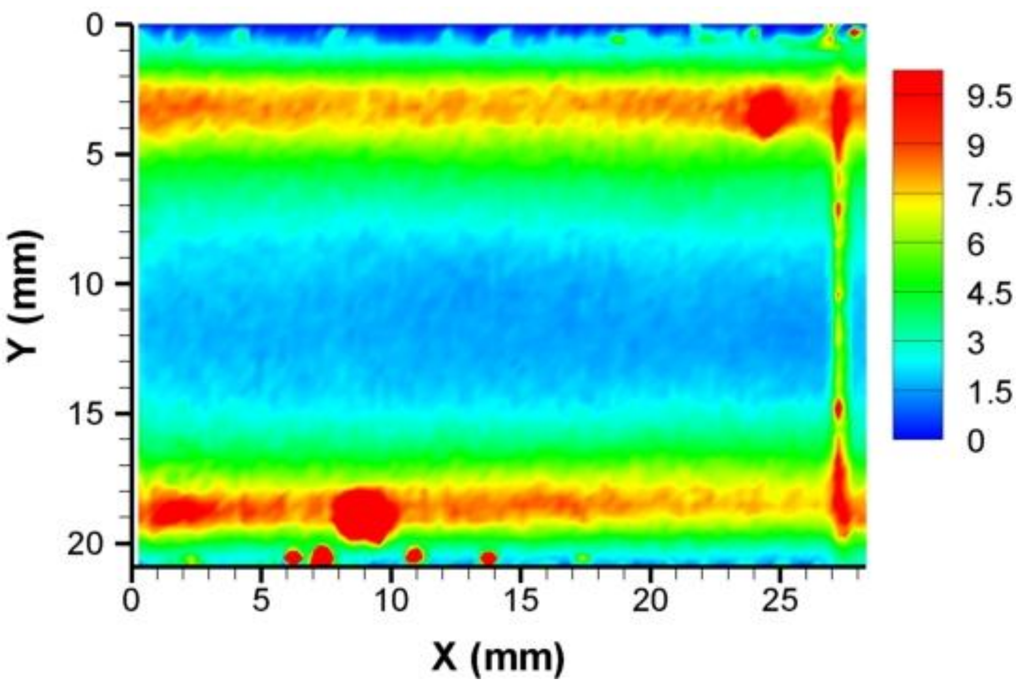

Fig. F-44 $\overline{u'u'}$**, Grid #1, L0, Plasma-150, Equilibrated**

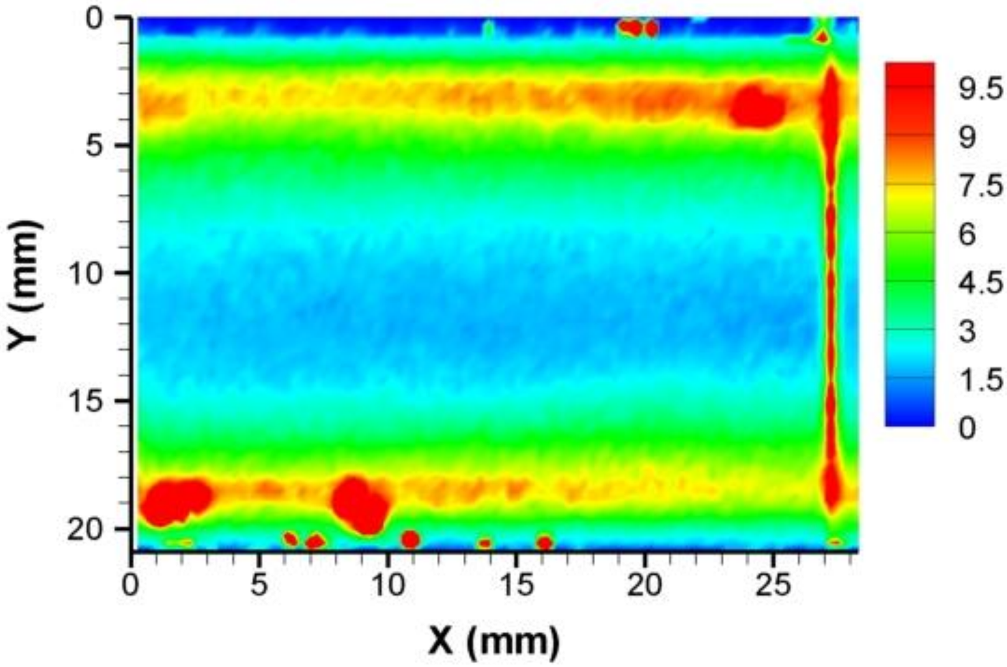

Fig. F-45 $\overline{u'u'}$, Grid #1, L0, Plasma-300, Equilibrated

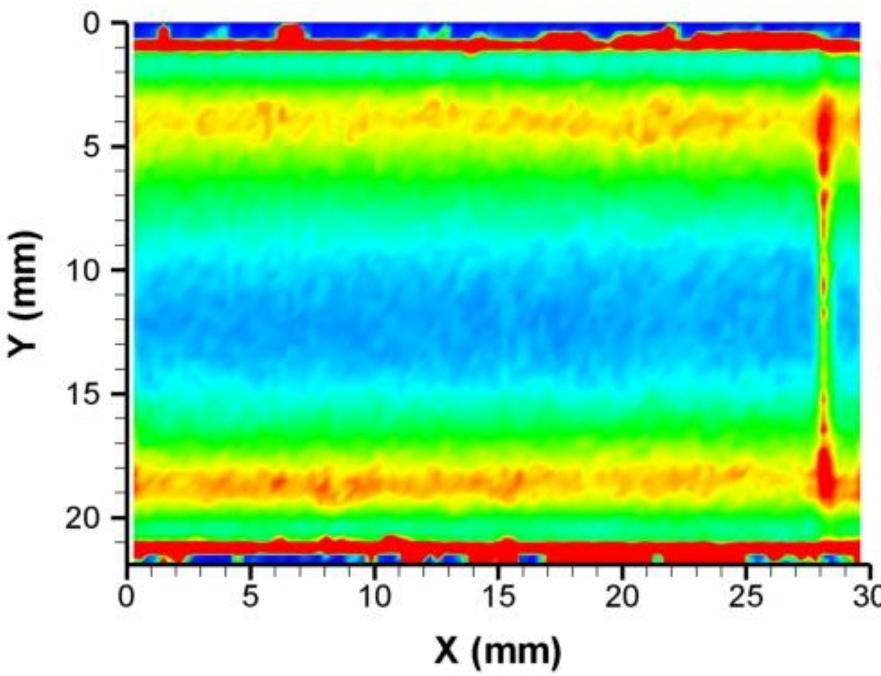

Fig. F-46 $\overline{u'u'}$, Grid #1, L2, Plasma-150, Equilibrated

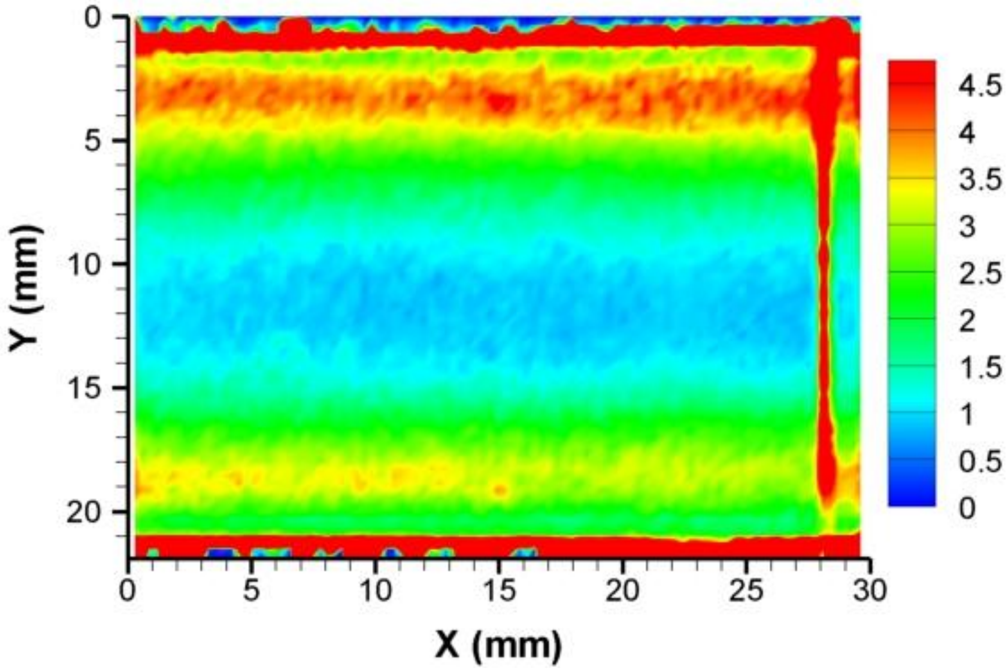

Fig. F-47 $\overline{u'u'}$**, Grid #1, L2, Plasma-300, Equilibrated**

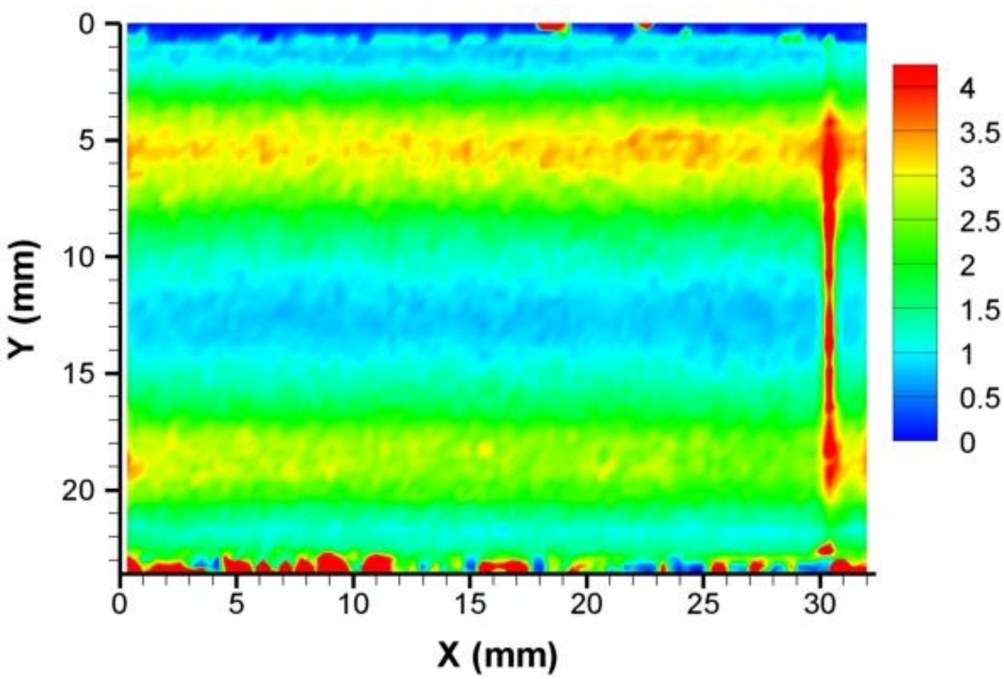

Fig. F-48 $\overline{u'u'}$**, Grid #1, L5, Plasma-150, Equilibrated**

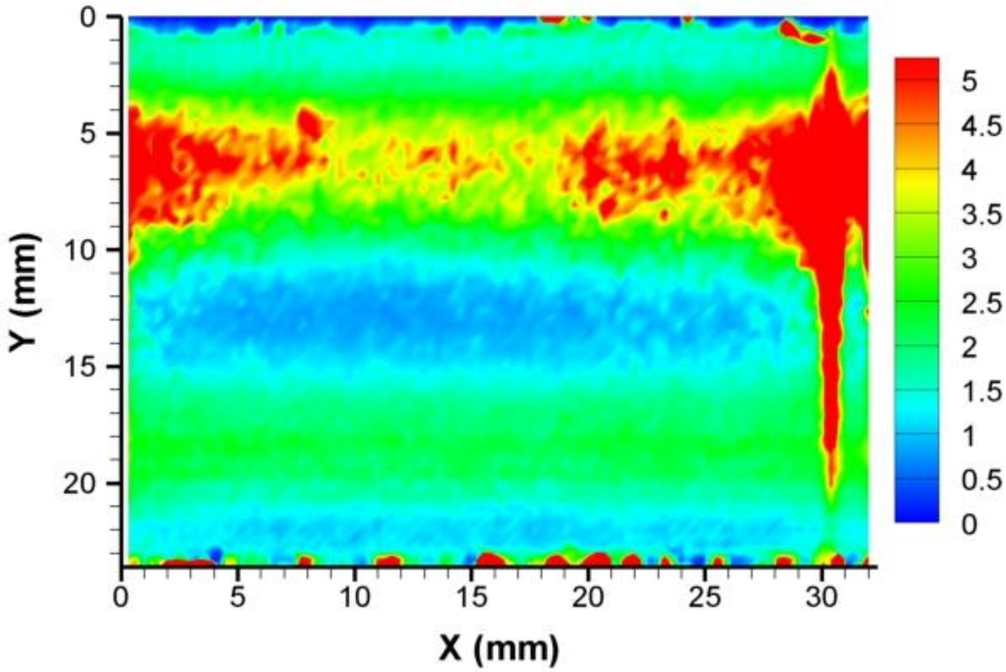

Fig. F-49 $\overline{u'u'}$**, Grid #1, L5, Plasma-300, Equilibrated**

APPENDIX G

CONTOUR PLOTS

$\overline{v'v'}$

FIGURE Page

FIGURE Page

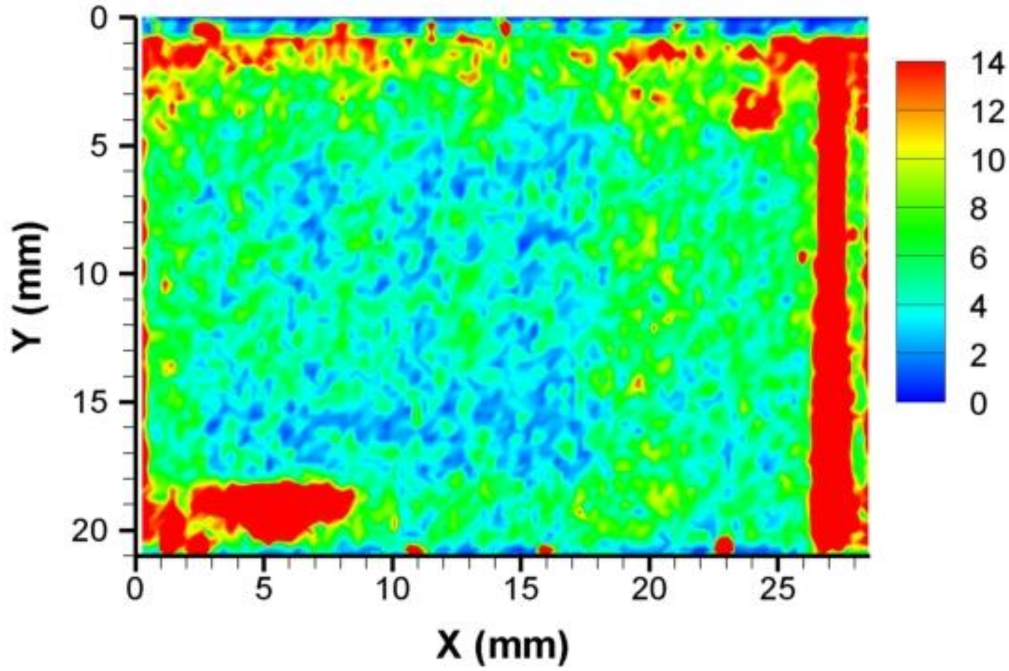

Fig. G-1 $\overline{v'v'}$**, No Grid, L0, Plasma-Off**

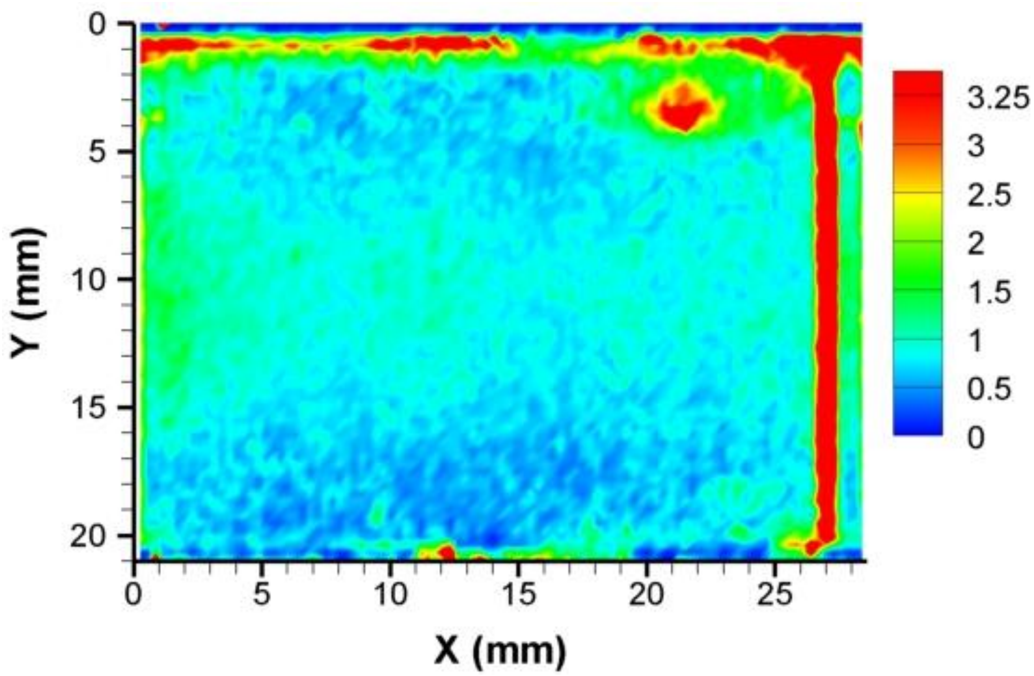

Fig. G-2 $\overline{v'v'}$**, Grid #1, L0, Plasma-Off**

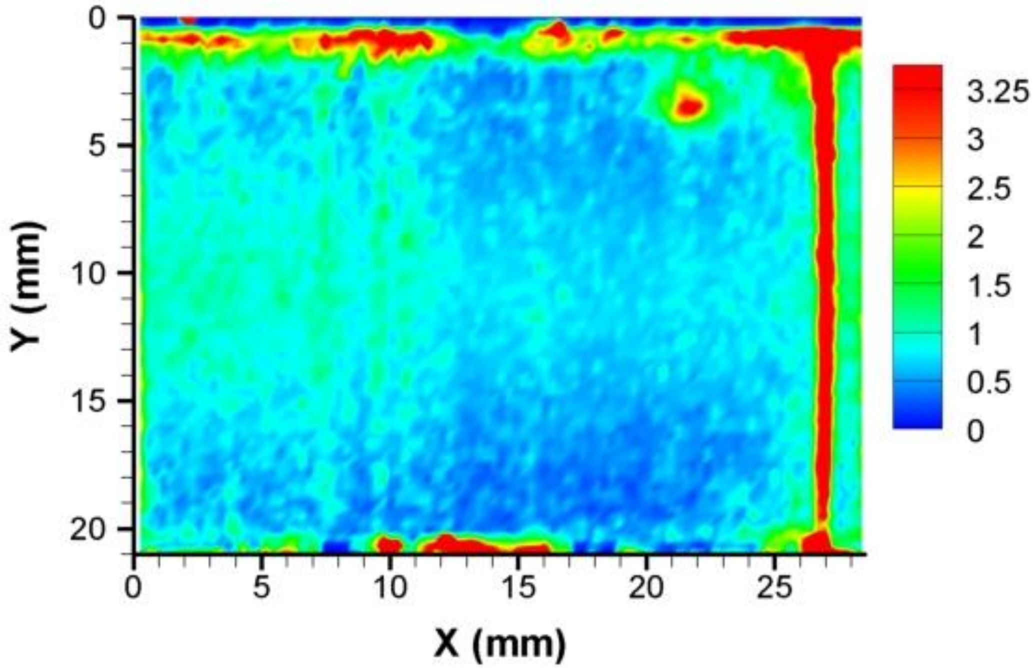

Fig. G-3 $\overline{v'v'}$**, Grid #1, L0, Plasma-150**

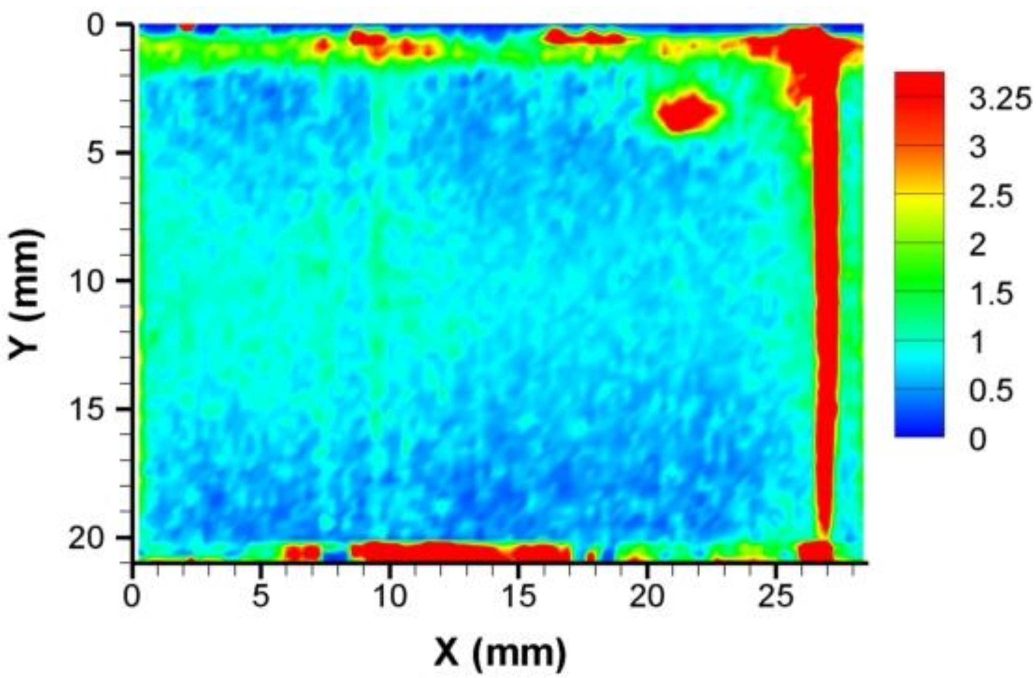

Fig. G-4 $\overline{v'v'}$**, Grid #1, L0, Plasma-300**

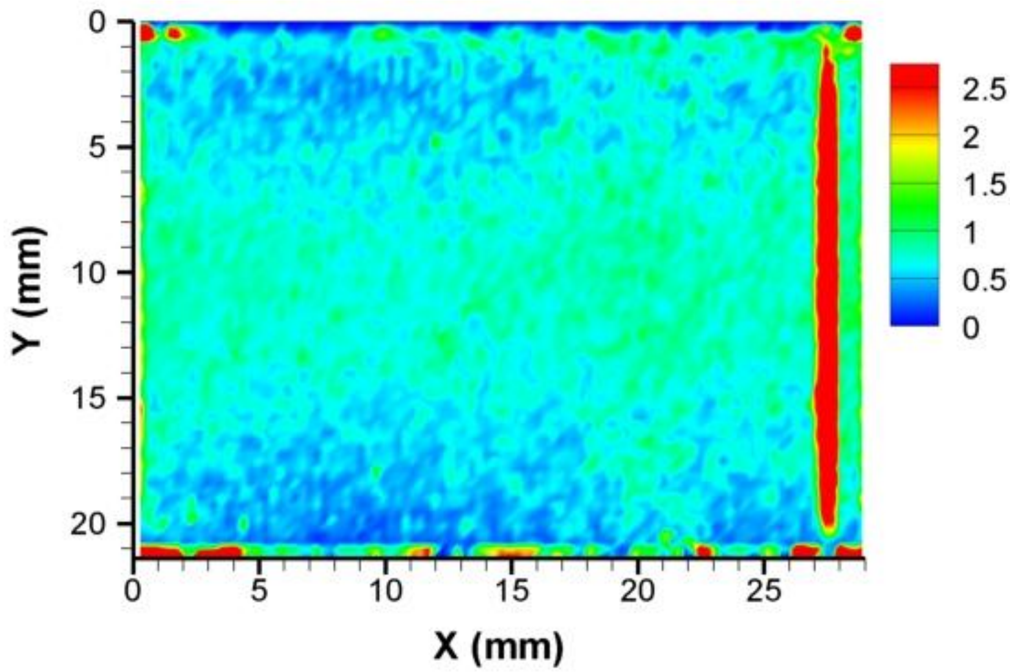

Fig. G-5 $\overline{v'v'}$**, Grid #1, L1, Plasma-Off**

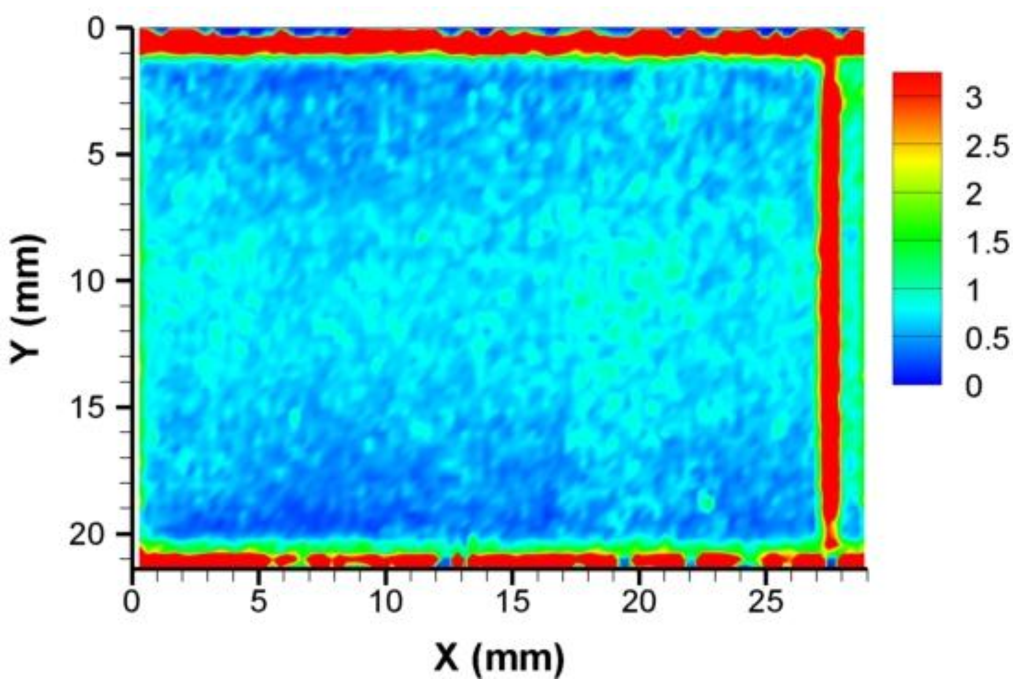

Fig. G-6 $\overline{v'v'}$**, Grid #1, L1, Plasma-150**

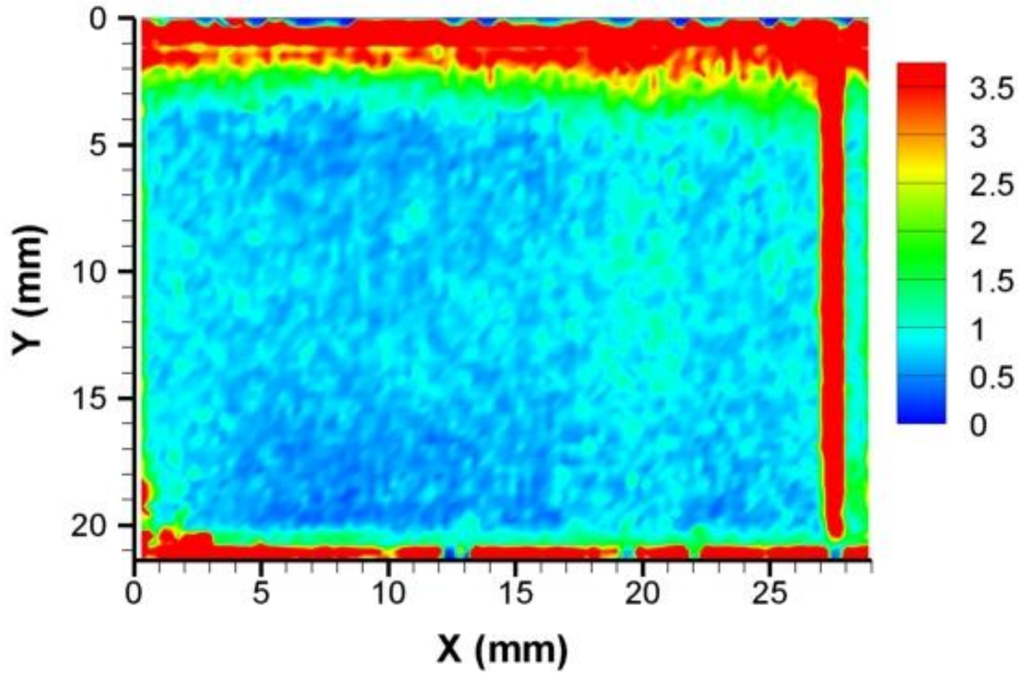

Fig. G-7 $\overline{v'v'}$, Grid #1, L1, Plasma-300

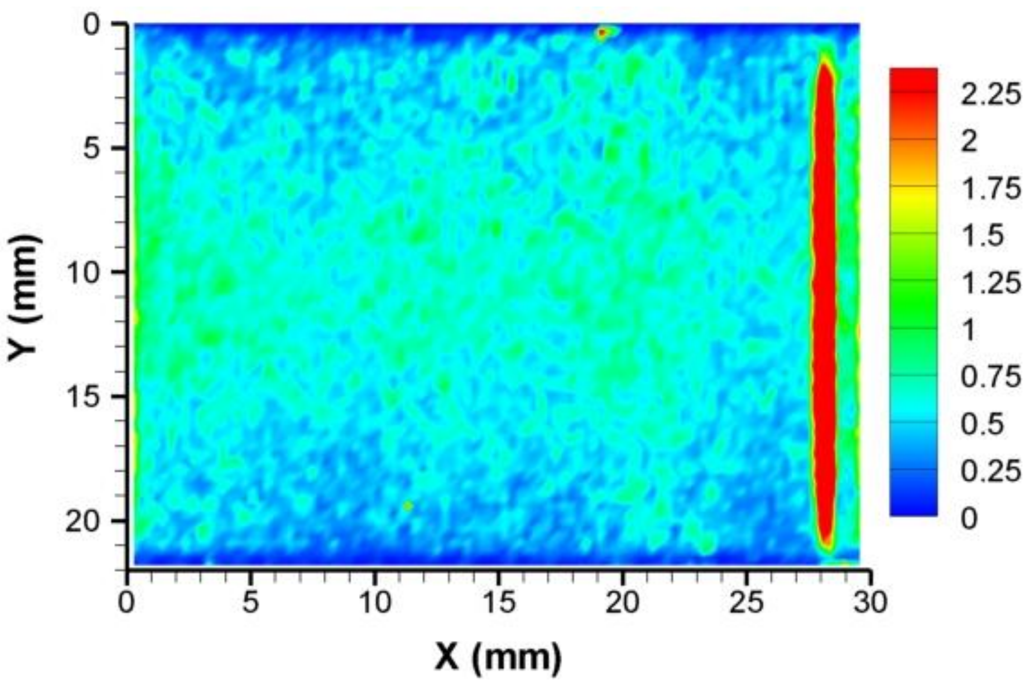

Fig. G-8 $\overline{v'v'}$, Grid #1, L2, Plasma-Off

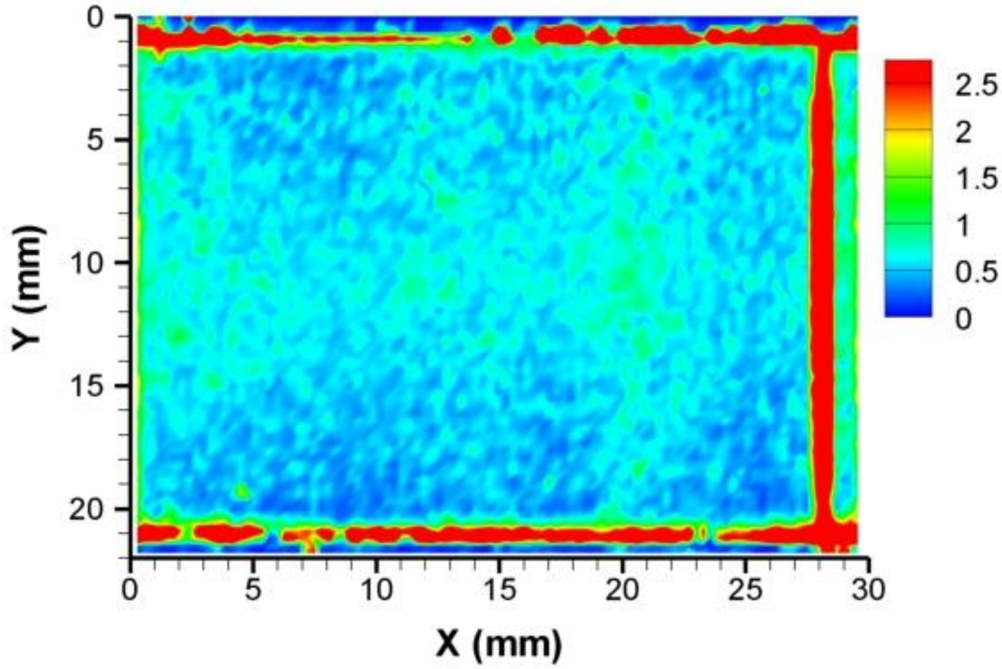

Fig. G-9 $\overline{v'v'}$**, Grid #1, L2, Plasma-150**

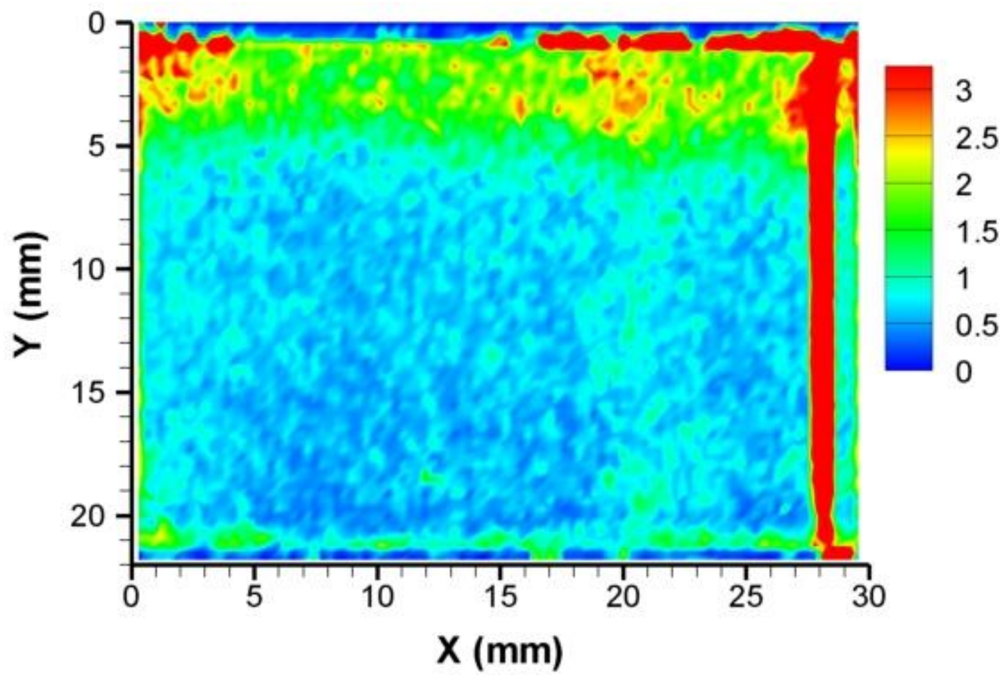

Fig. G-10 $\overline{v'v'}$**, Grid #1, L2, Plasma-300**

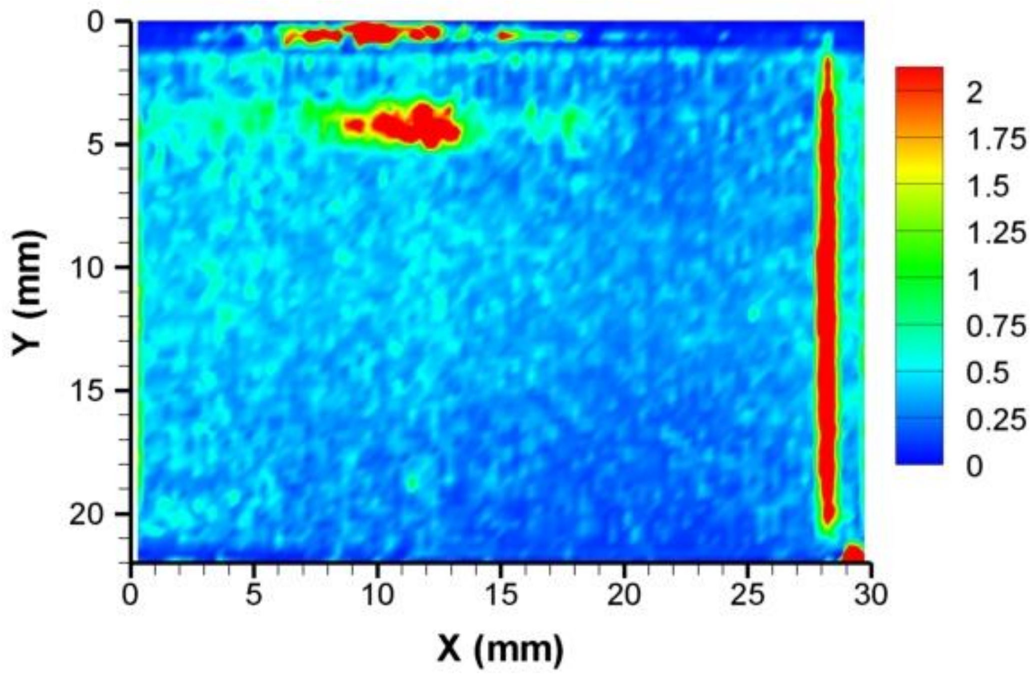

Fig. G-11 $\overline{v'v'}$**, Grid #1, L3, Plasma-Off**

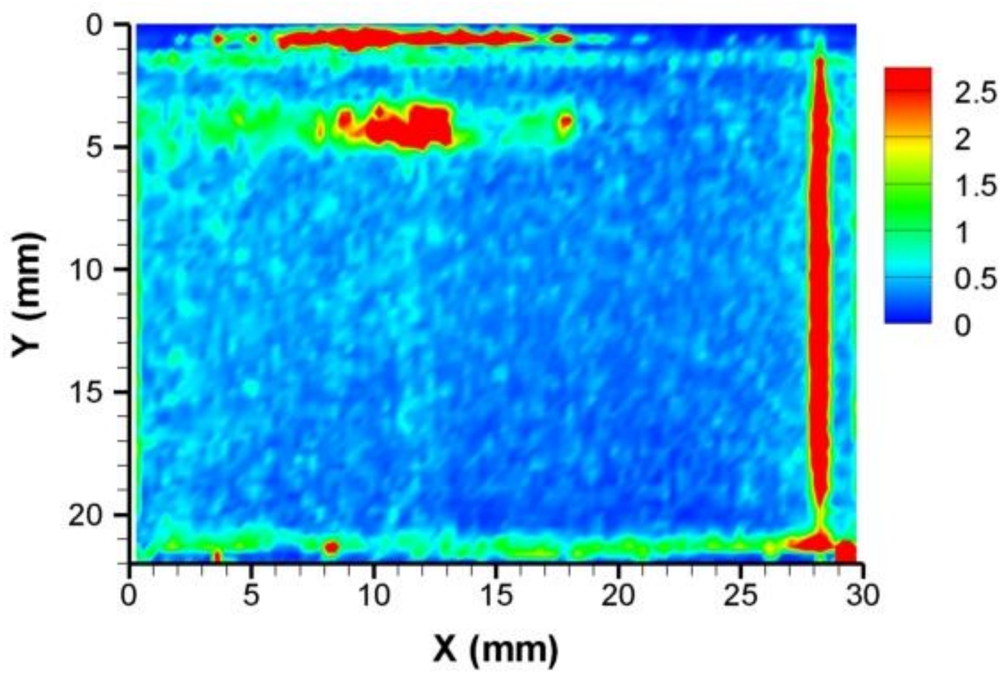

Fig. G-12 $\overline{v'v'}$**, Grid #1, L3, Plasma-150**

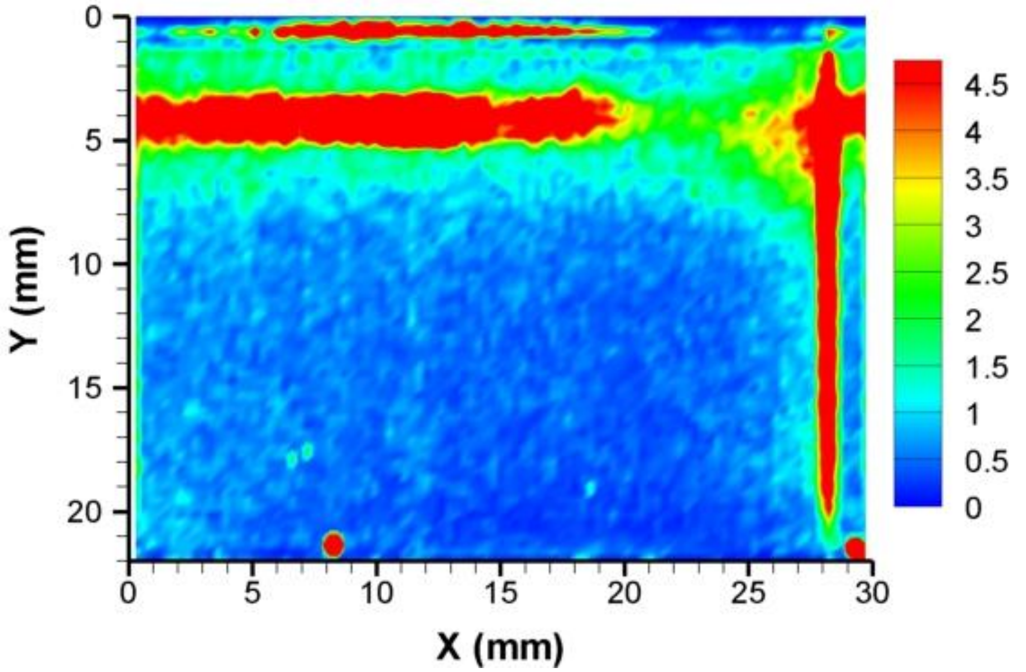

Fig. G-13 $\overline{v'v'}$**, Grid #1, L3, Plasma-300**

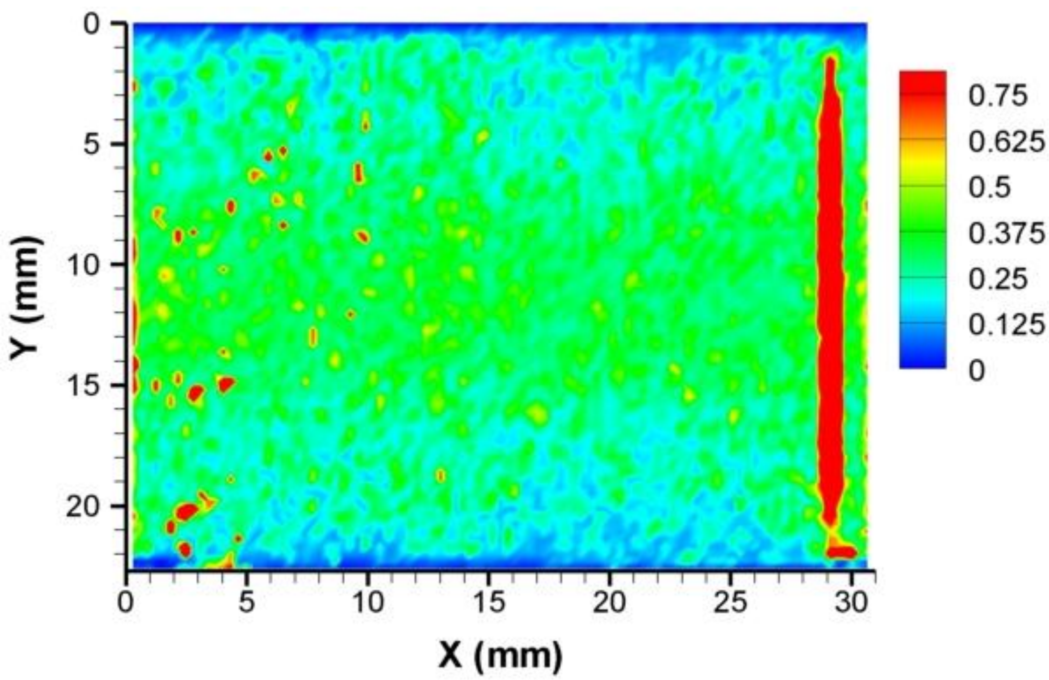

Fig. G-14 $\overline{v'v'}$**, Grid #1, L4, Plasma-Off**

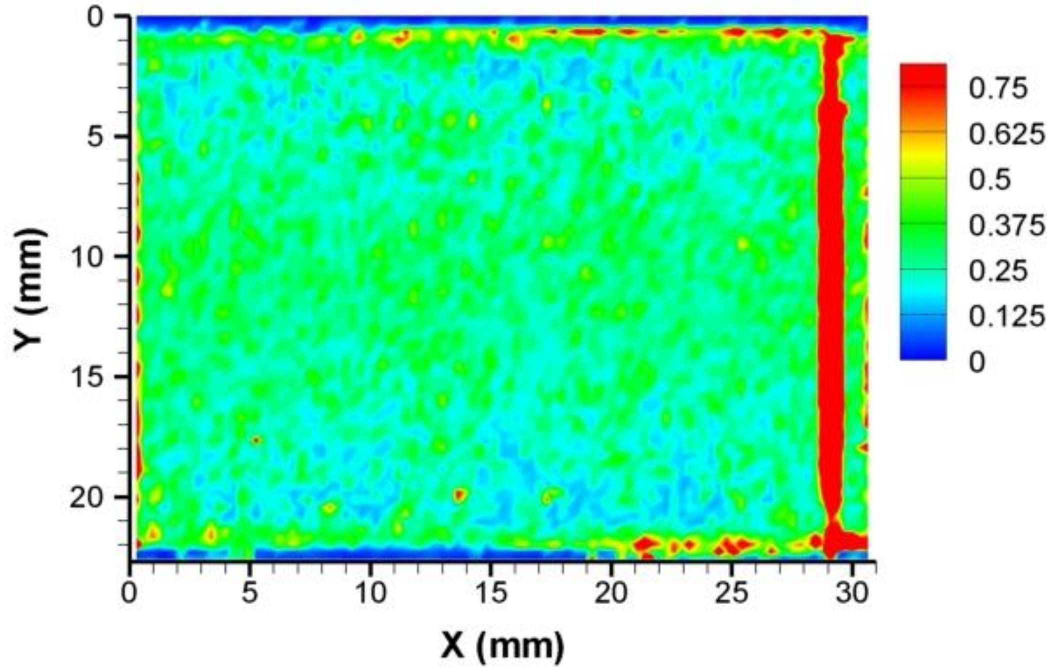

Fig. G-15 $\overline{v'v'}$, Grid #1, L4, Plasma-150

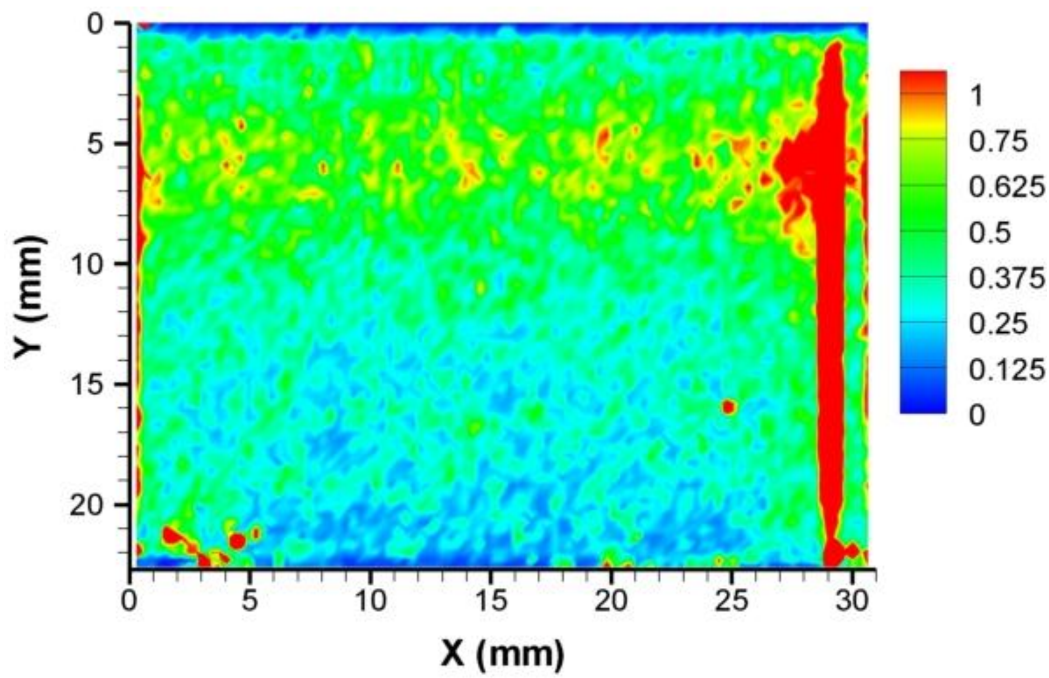

Fig. G-16 $\overline{v'v'}$, Grid #1, L4, Plasma-300

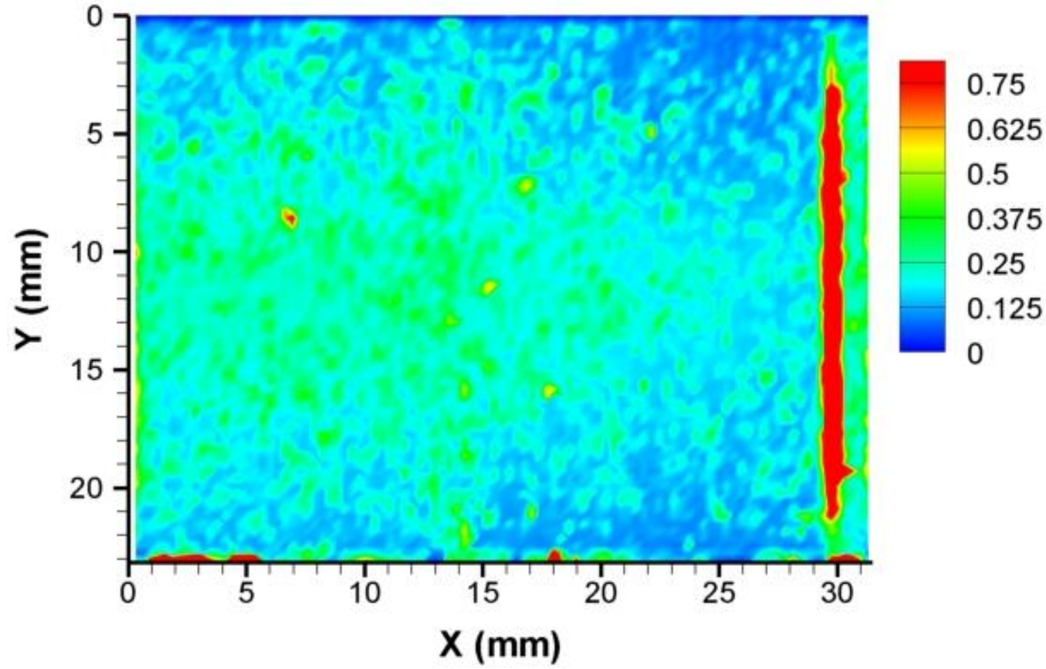

Fig. G-17 $\overline{v'v'}$, **Grid #1, L5, Plasma-Off**

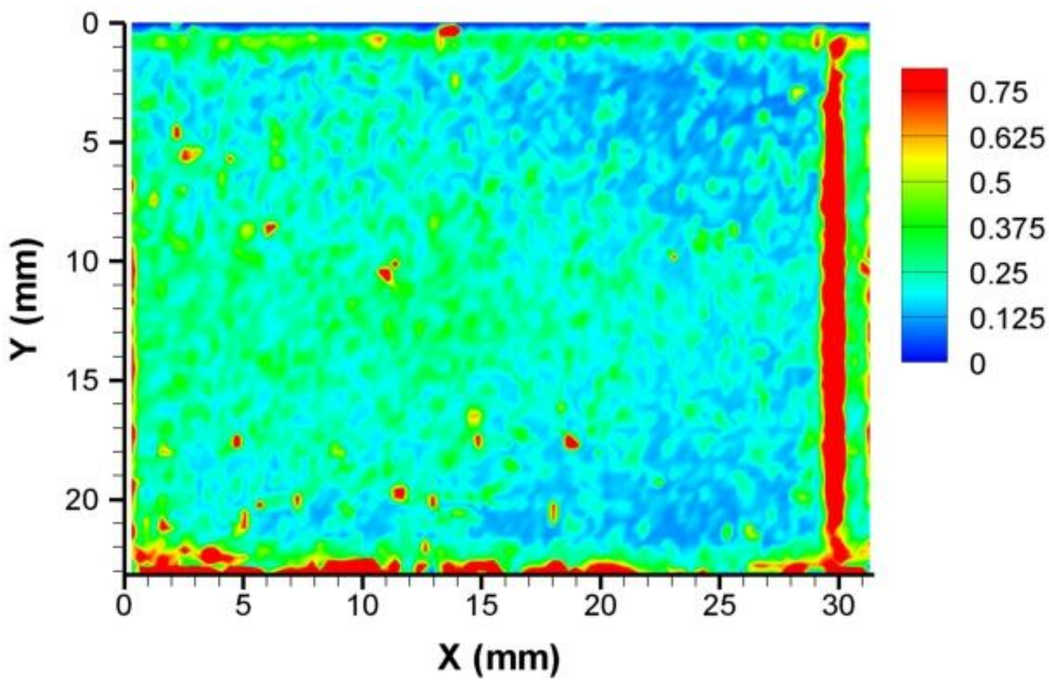

Fig. G-18 $\overline{v'v'}$, **Grid #1, L5, Plasma-150**

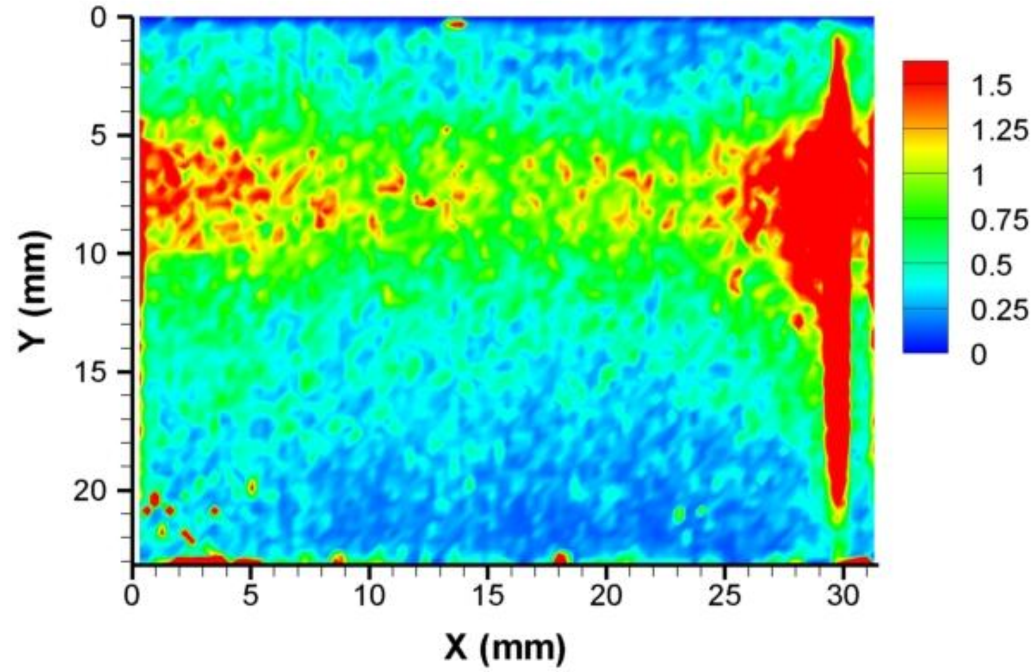

Fig. G-19 $\overline{v'v'}$**, Grid #1, L5, Plasma-300**

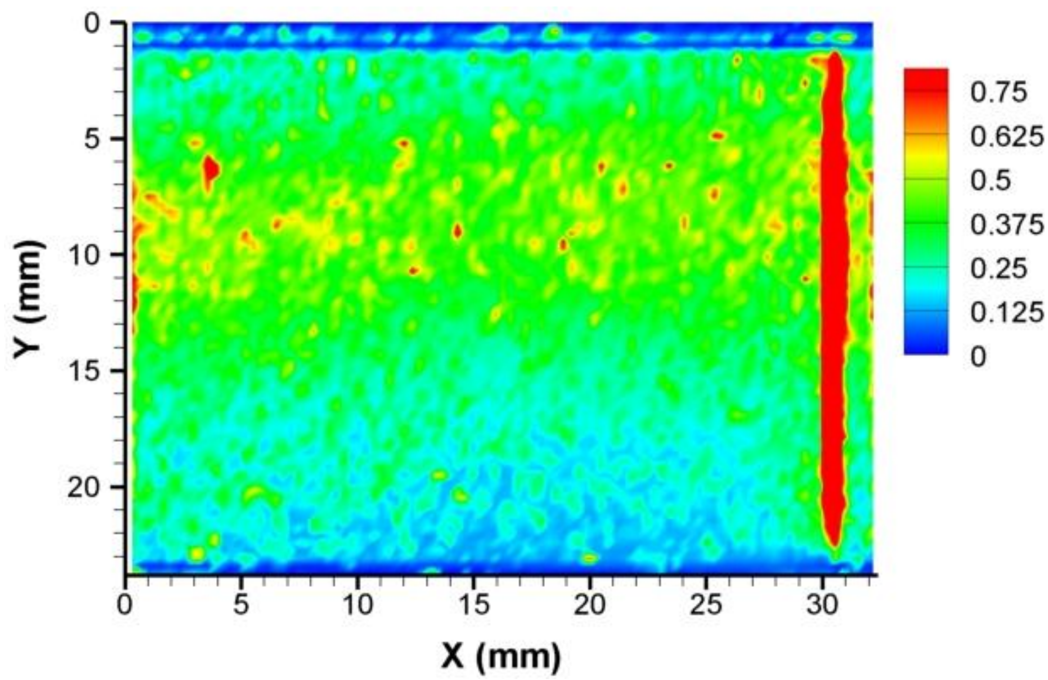

Fig. G-20 $\overline{v'v'}$**, Grid #1, L6, Plasma-Off**

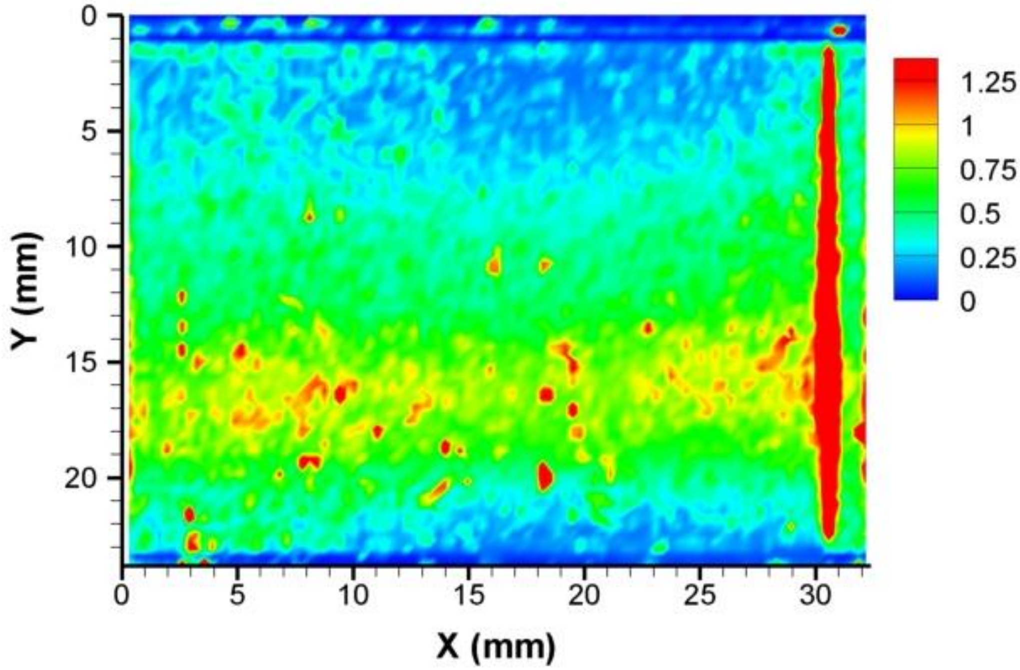

Fig. G-21 $\overline{v'v'}$**, Grid #1, L6, Plasma-150**

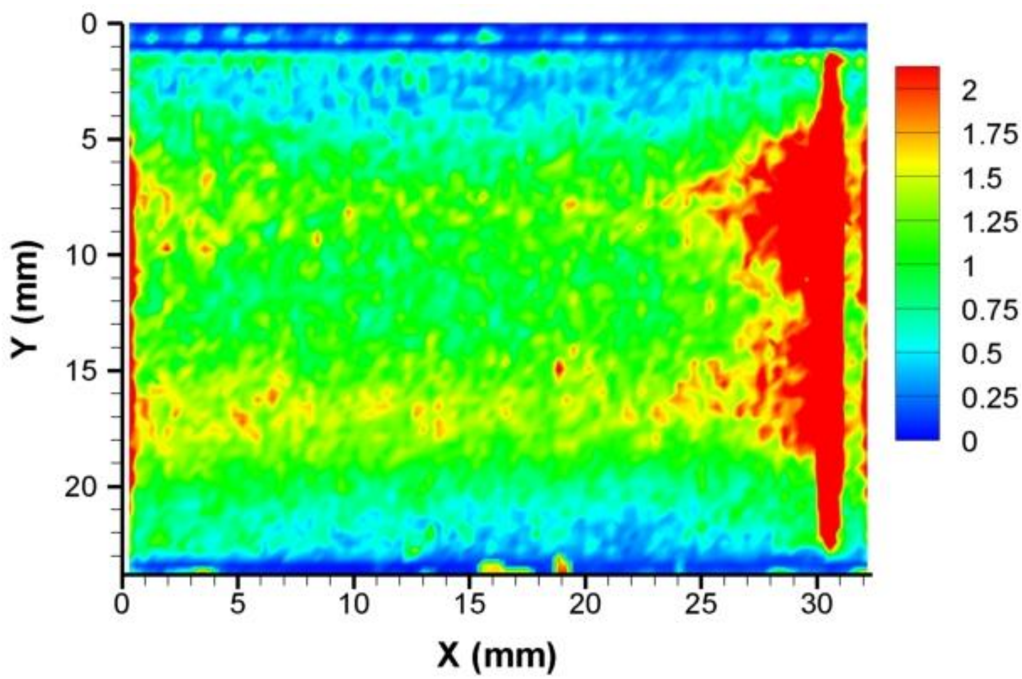

Fig. G-22 $\overline{v'v'}$**, Grid #1, L6, Plasma-300**

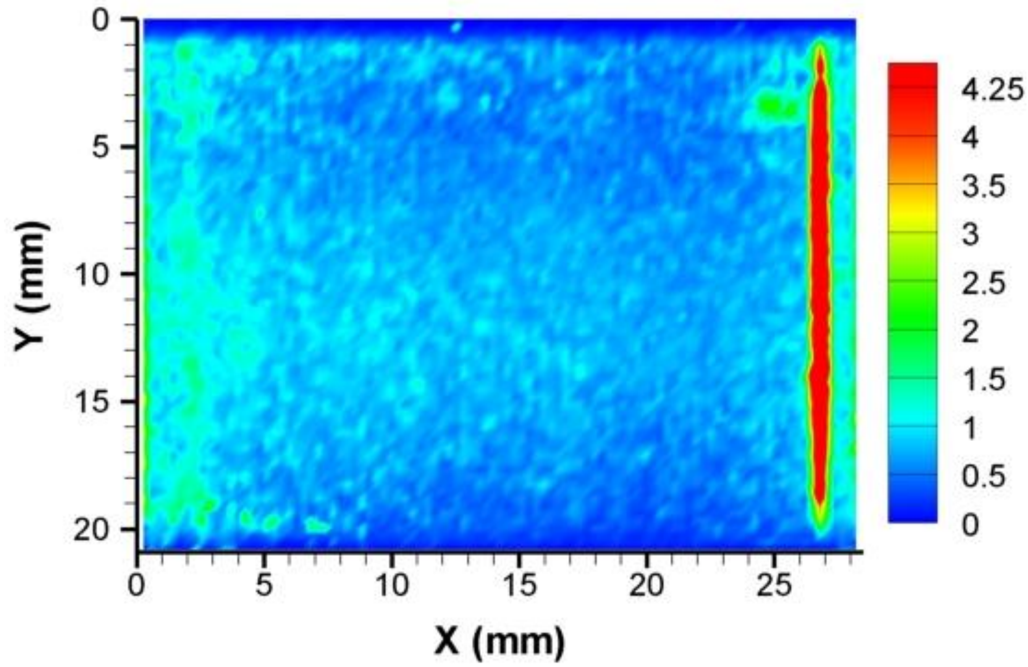

Fig. G-23 $\overline{v'v'}$**, Grid #2, L0, Plasma-Off**

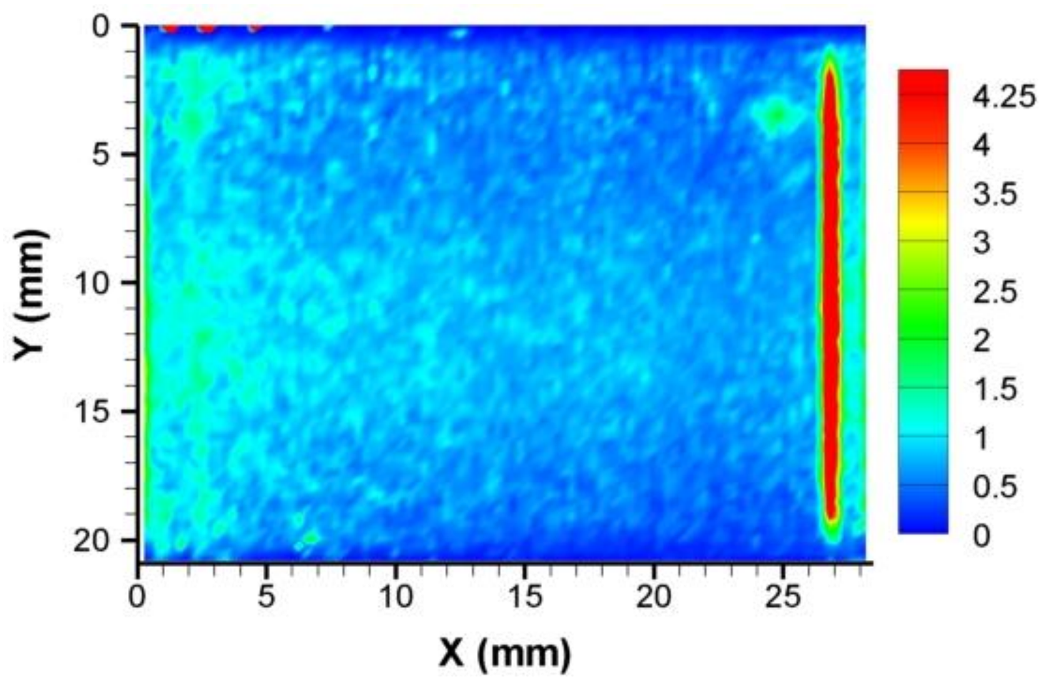

Fig. G-24 $\overline{v'v'}$**, Grid #2, L0, Plasma-150**

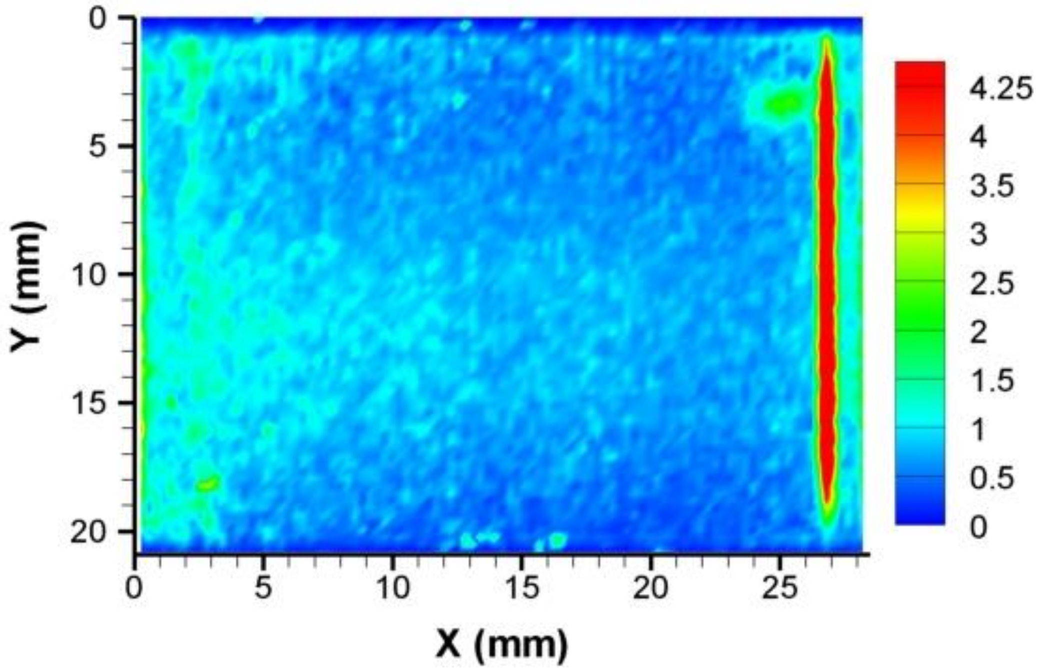

Fig. G-25 $\overline{v'v'}$**, Grid #2, L0, Plasma-300**

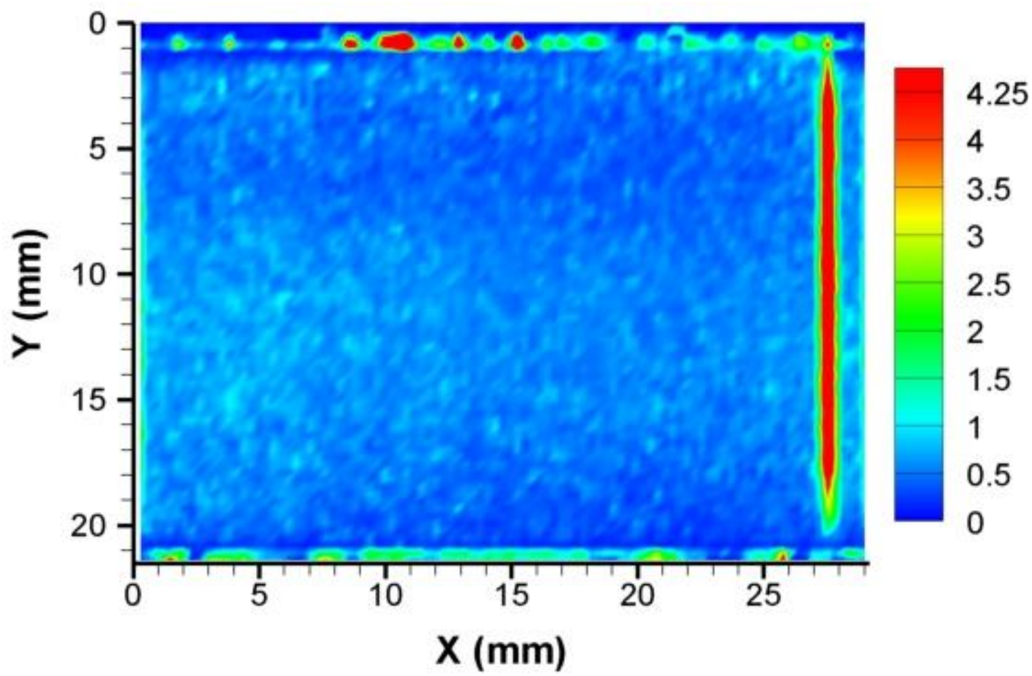

Fig. G-26 $\overline{v'v'}$**, Grid #2, L1, Plasma-Off**

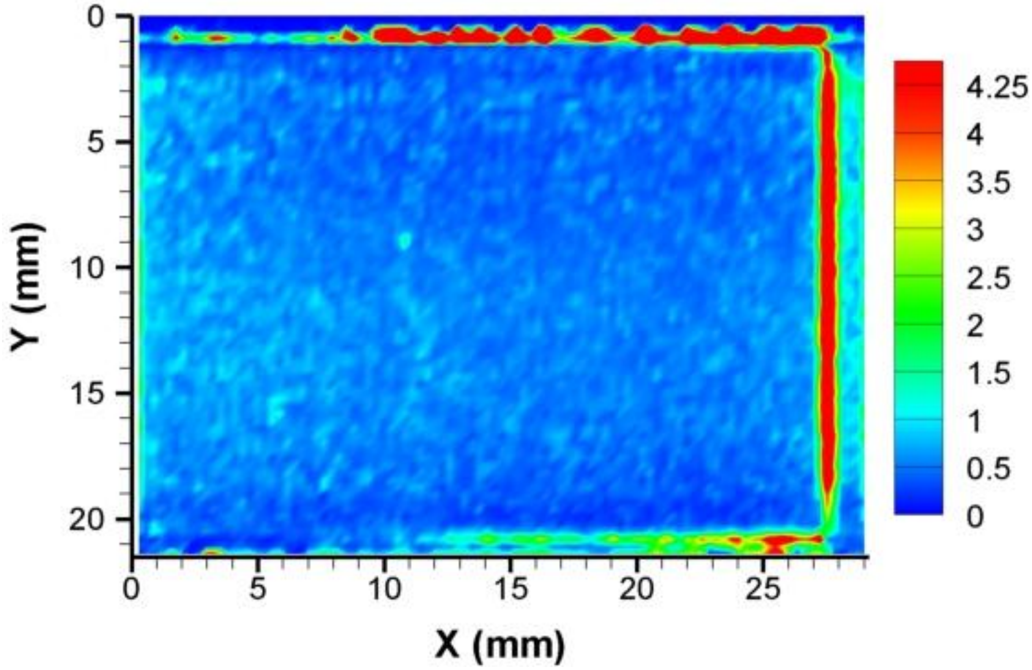

Fig. G-27 $\overline{v'v'}$**, Grid #2, L1, Plasma-150**

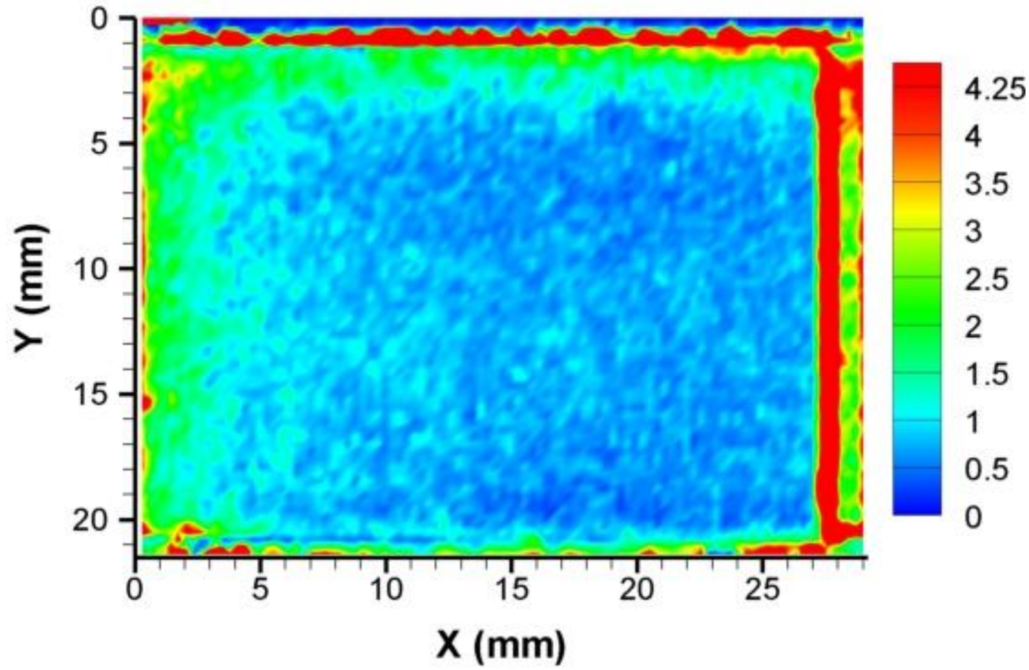

Fig. G-28 $\overline{v'v'}$**, Grid #2, L1, Plasma-300**

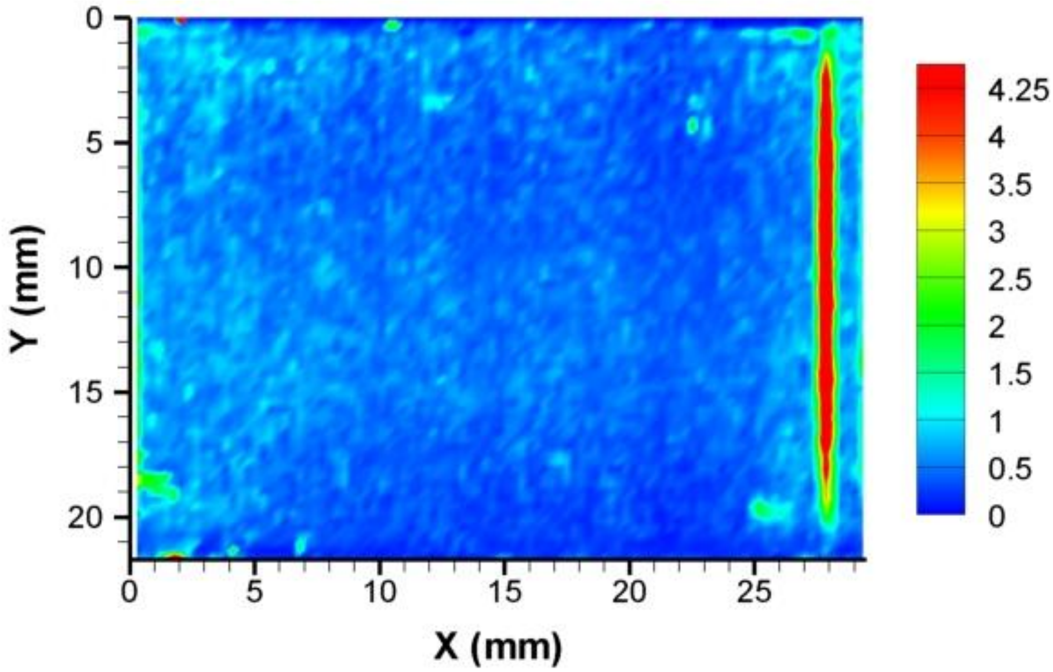

Fig. G-29 $\overline{v'v'}$, **Grid #2, L2, Plasma-Off**

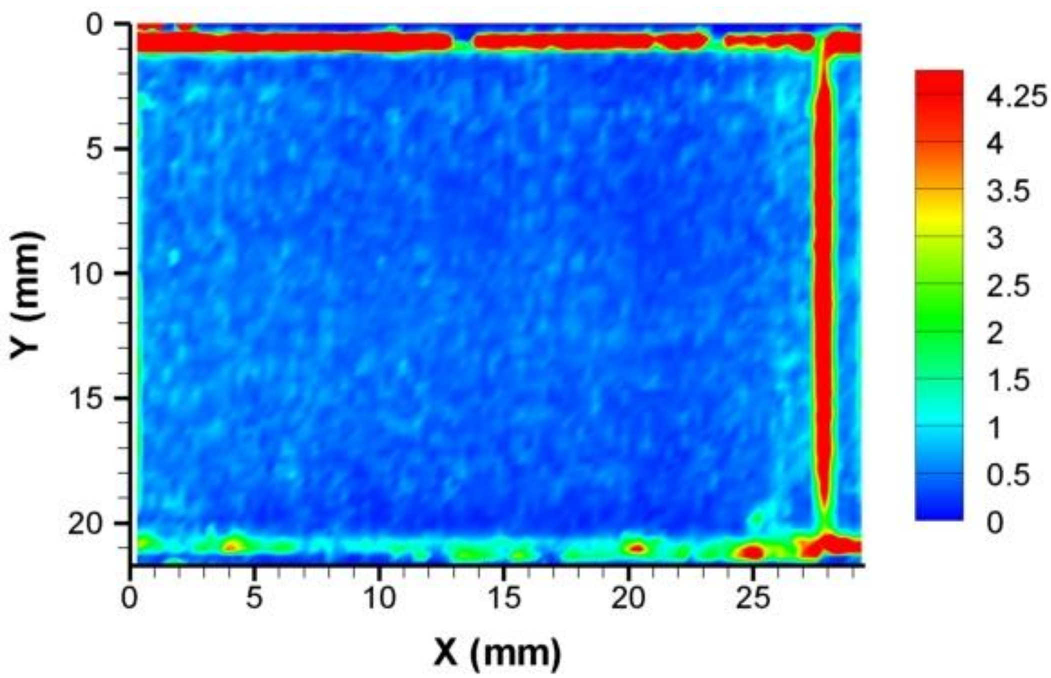

Fig. G-30 $\overline{v'v'}$, **Grid #2, L2, Plasma-150**

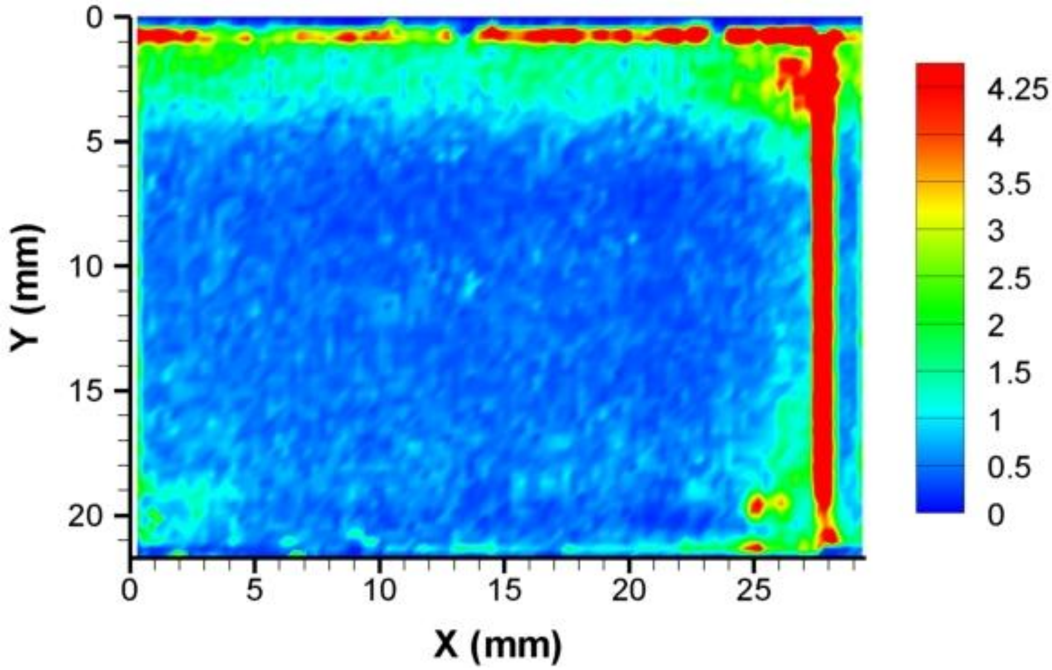

Fig. G-31 $\overline{v'v'}$**, Grid #2, L2, Plasma-300**

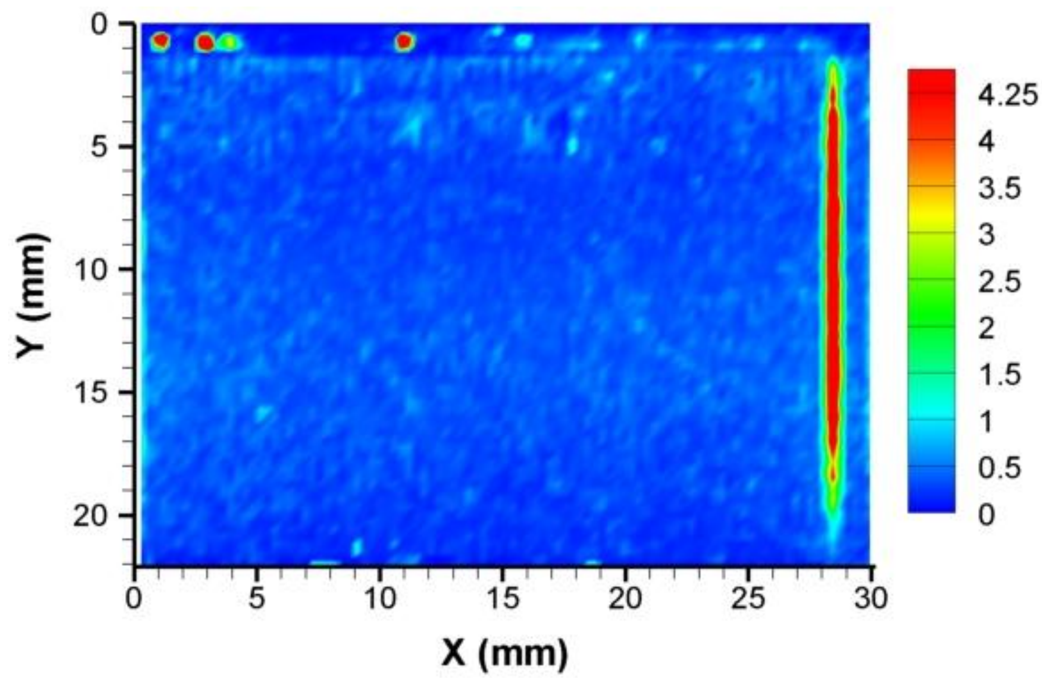

Fig. G-32 $\overline{v'v'}$**, Grid #2, L3, Plasma-Off**

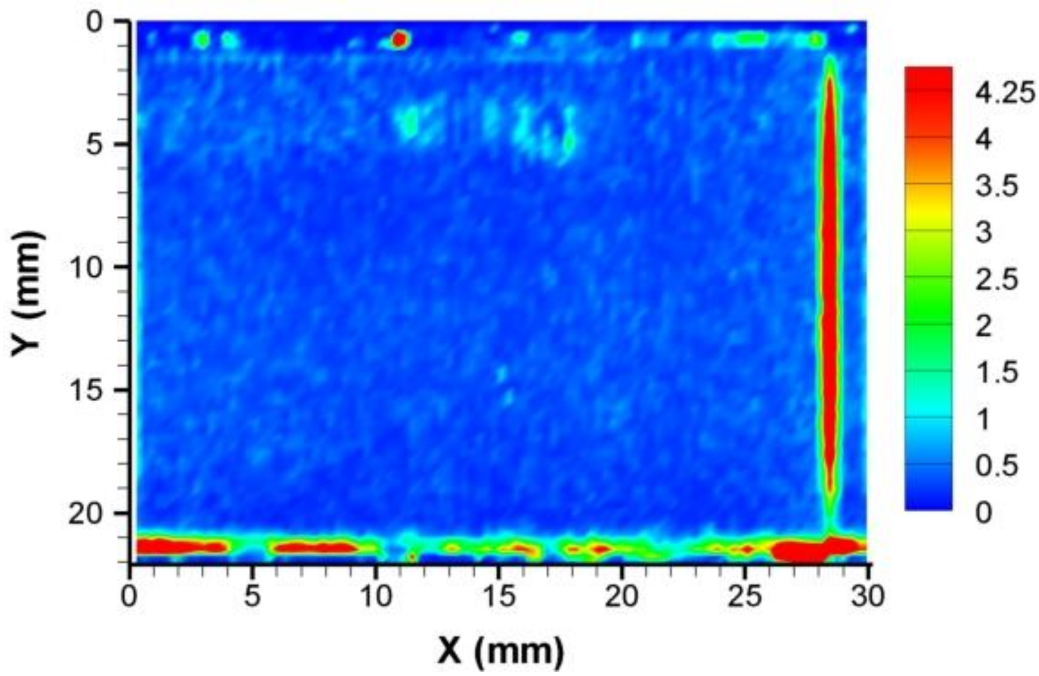

Fig. G-33 $\overline{v'v'}$**, Grid #2, L3, Plasma-150**

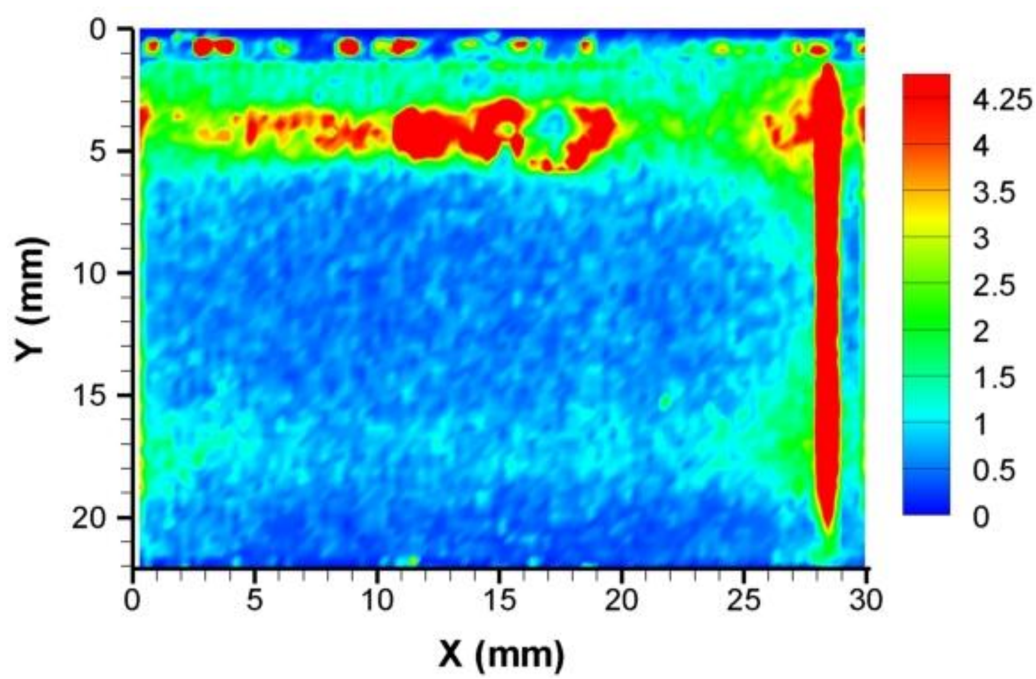

Fig. G-34 $\overline{v'v'}$**, Grid #2, L3, Plasma-300**

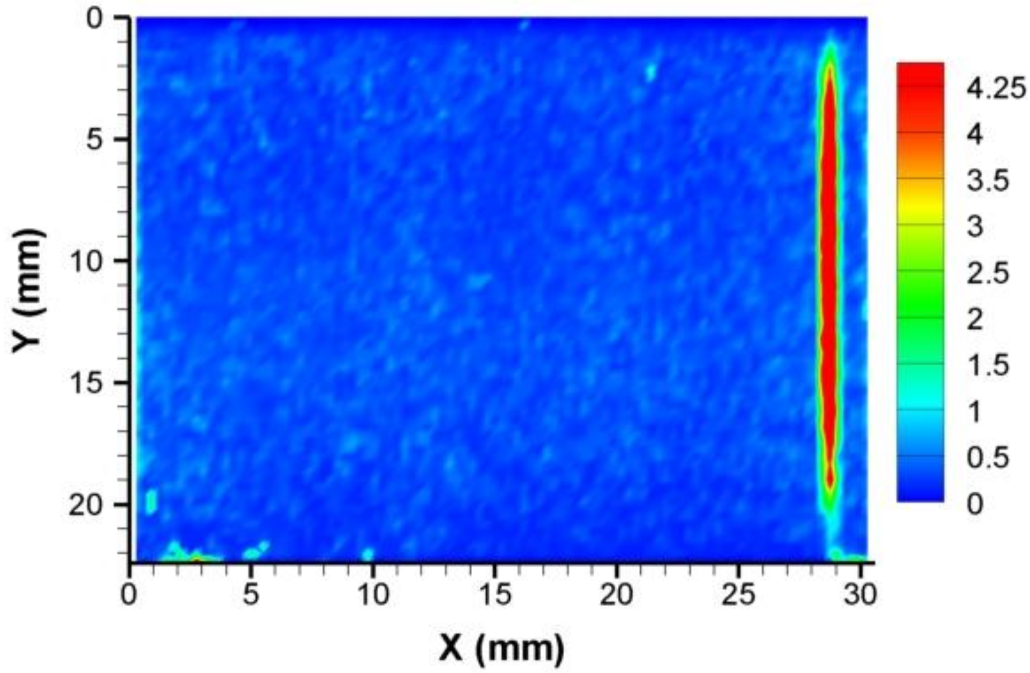

Fig. G-35 $\overline{v'v'}$**, Grid #2, L4, Plasma-Off**

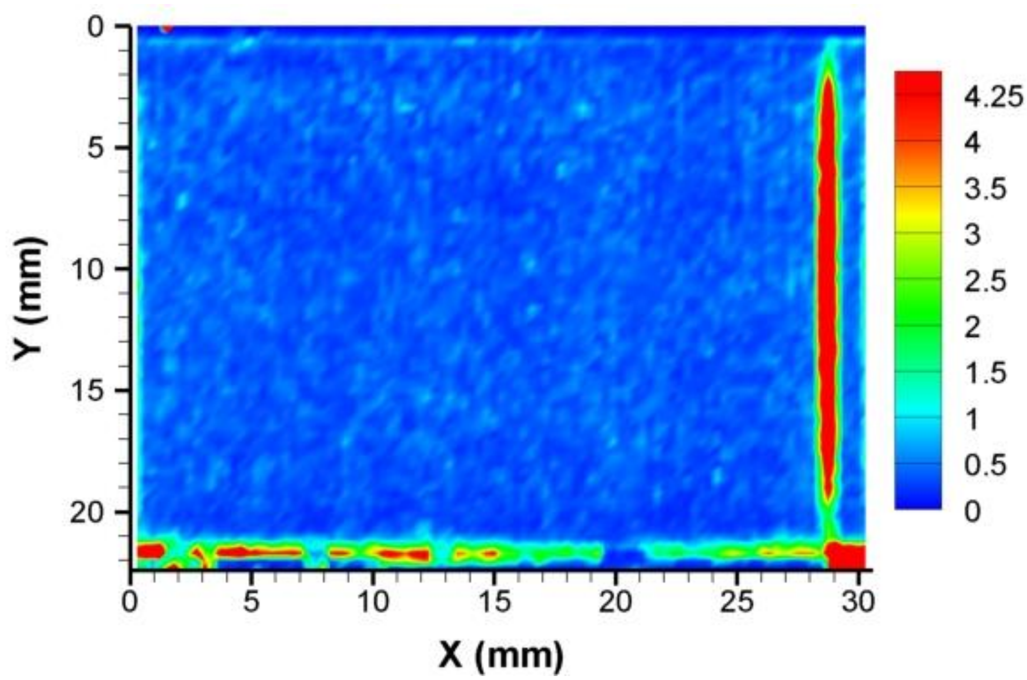

Fig. G-36 $\overline{v'v'}$**, Grid #2, L4, Plasma-150**

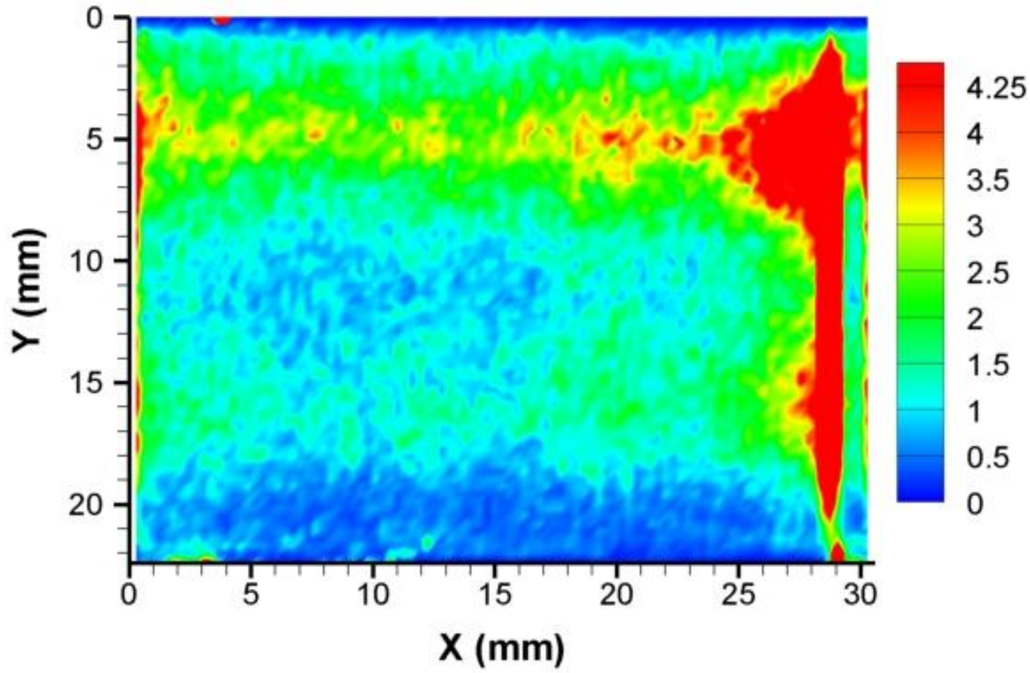

Fig. G-37 $\overline{v'v'}$**, Grid #2, L4, Plasma-300**

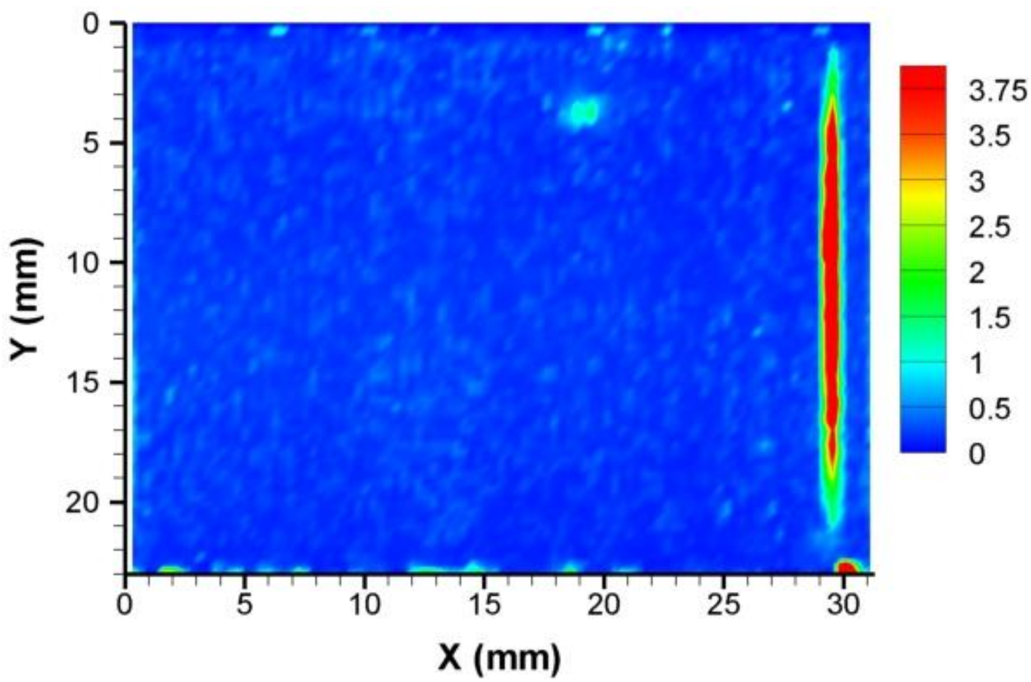

Fig. G-38 $\overline{v'v'}$**, Grid #2, L5, Plasma-Off**

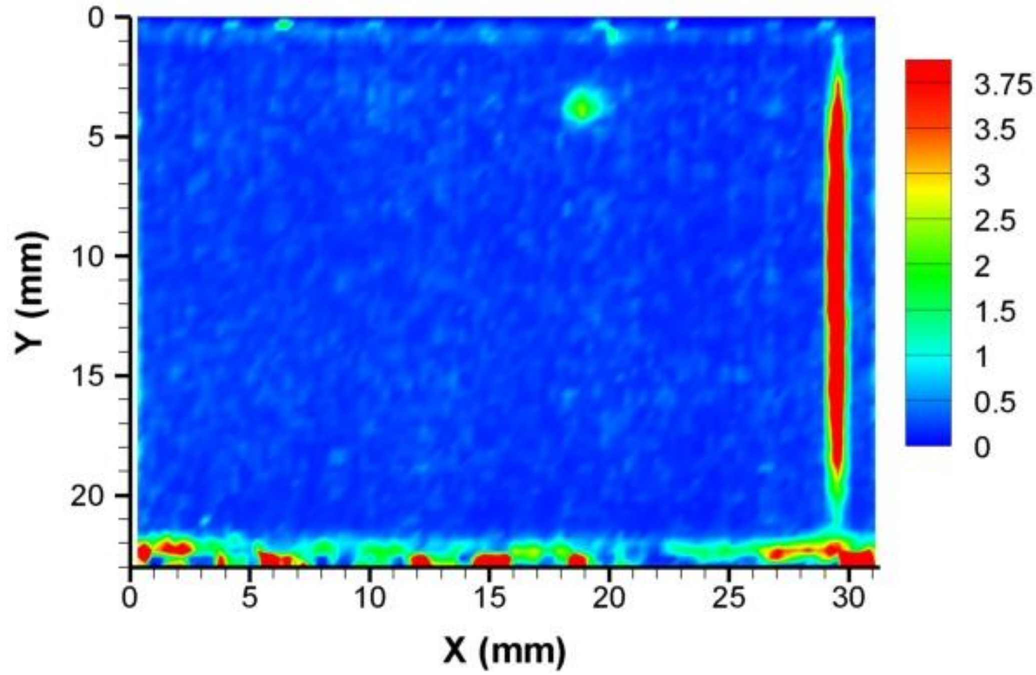

Fig. G-39 $\overline{v'v'}$**, Grid #2, L5, Plasma-150**

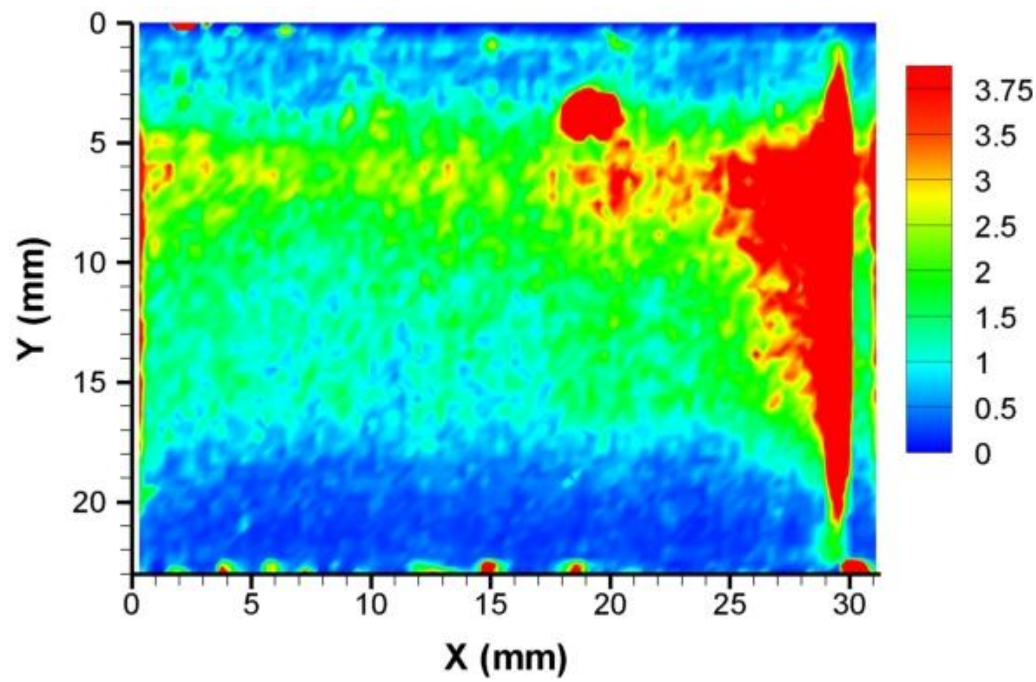

Fig. G-40 $\overline{v'v'}$**, Grid #2, L5, Plasma-300**

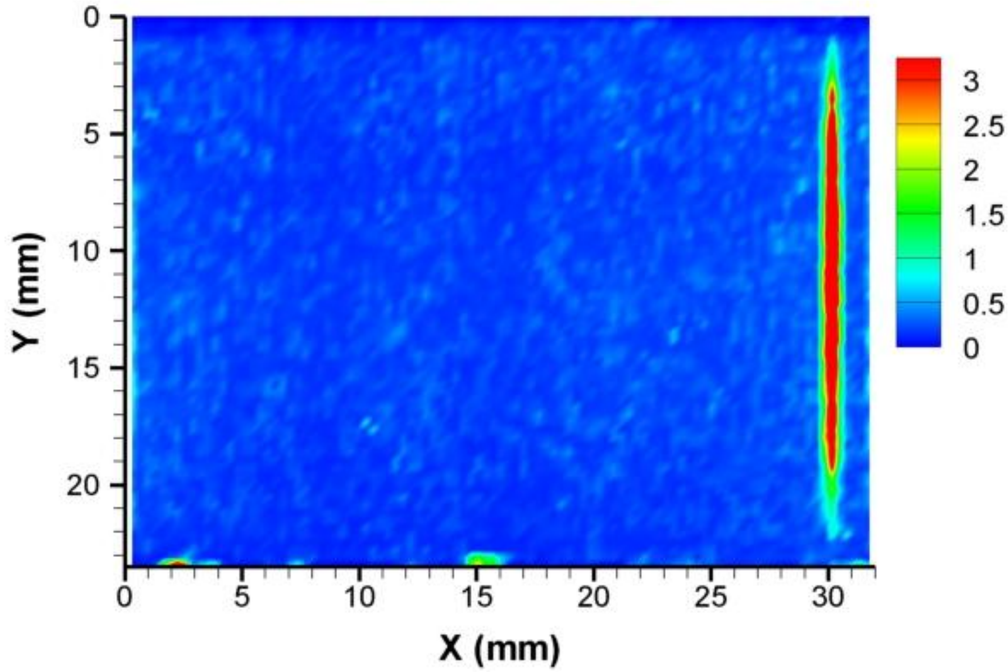

Fig. G-41 $\overline{v'v'}$**, Grid #2, L6, Plasma-Off**

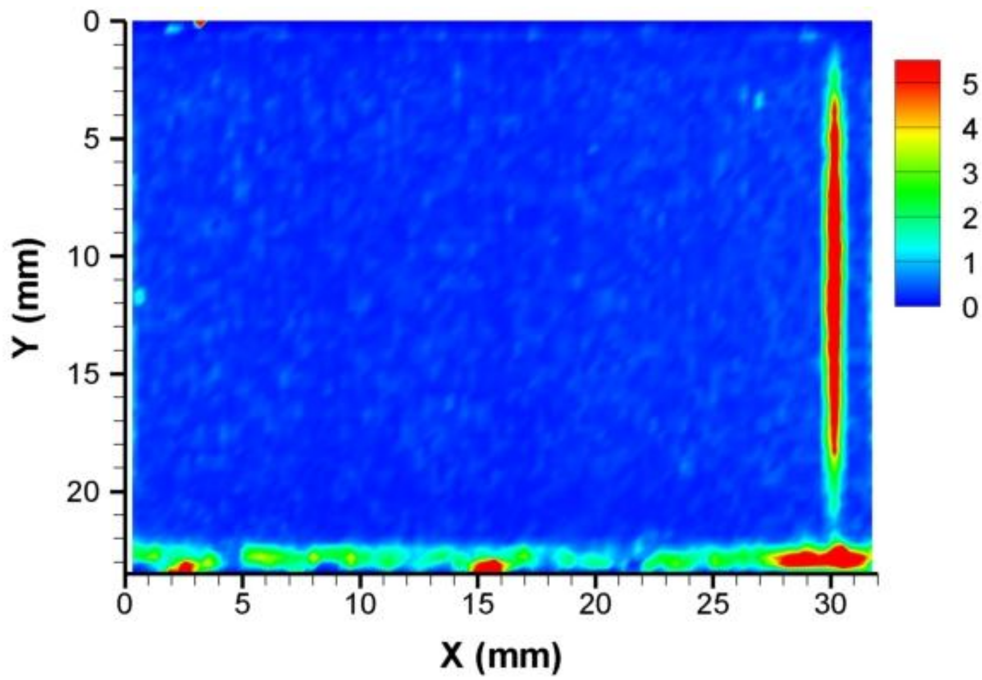

Fig. G-42 $\overline{v'v'}$**, Grid #2, L6, Plasma-150**

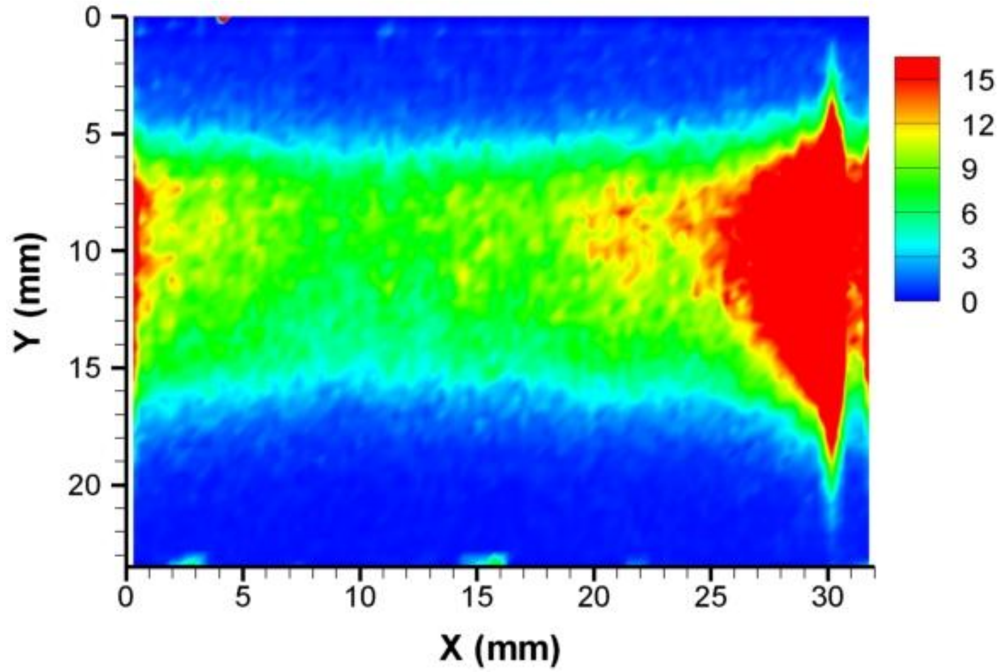

Fig. G-43 $\overline{v'v'}$**, Grid #2, L6, Plasma-300**

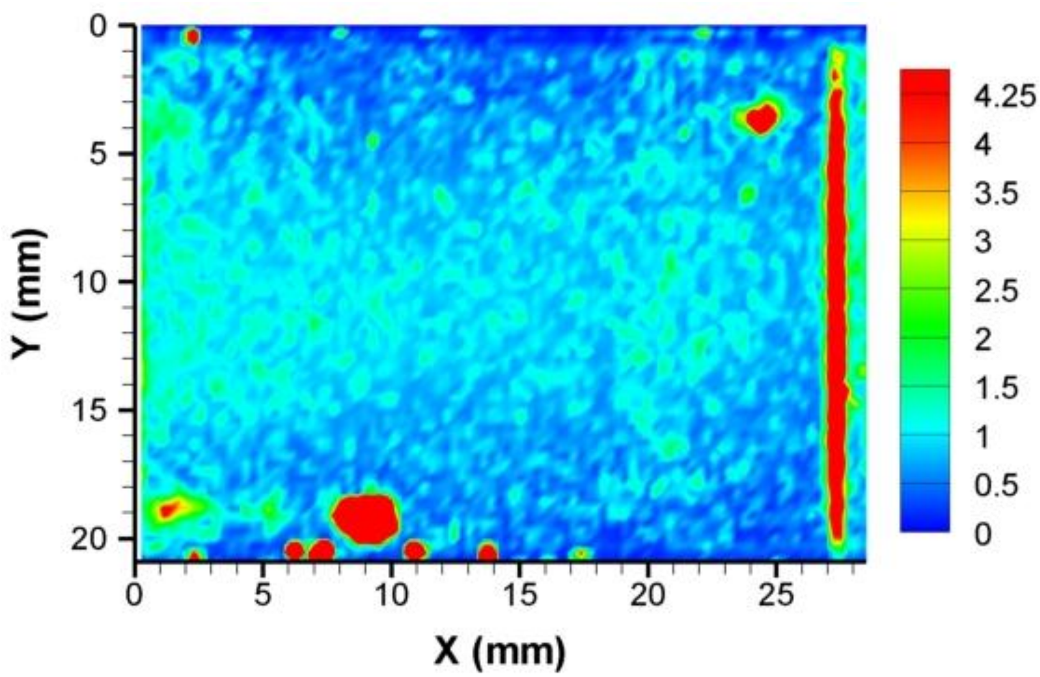

Fig. G-44 $\overline{v'v'}$**, Grid #1, L0, Plasma-150, Equilibrated**

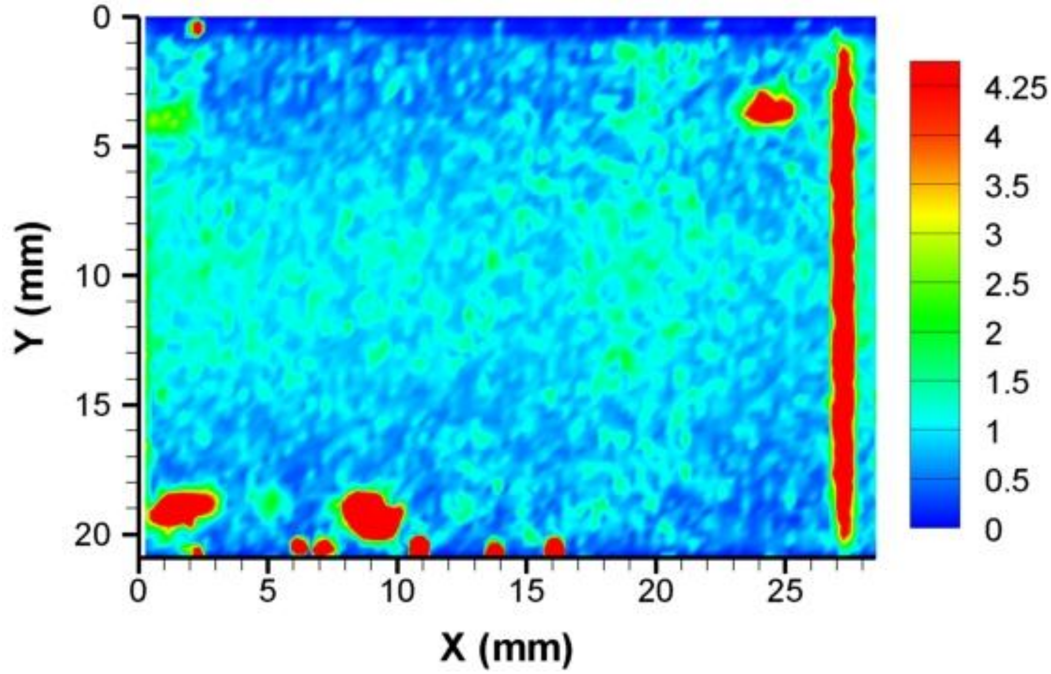

Fig. G-45 $\overline{v'v'}$**, Grid #1, L0, Plasma-300, Equilibrated**

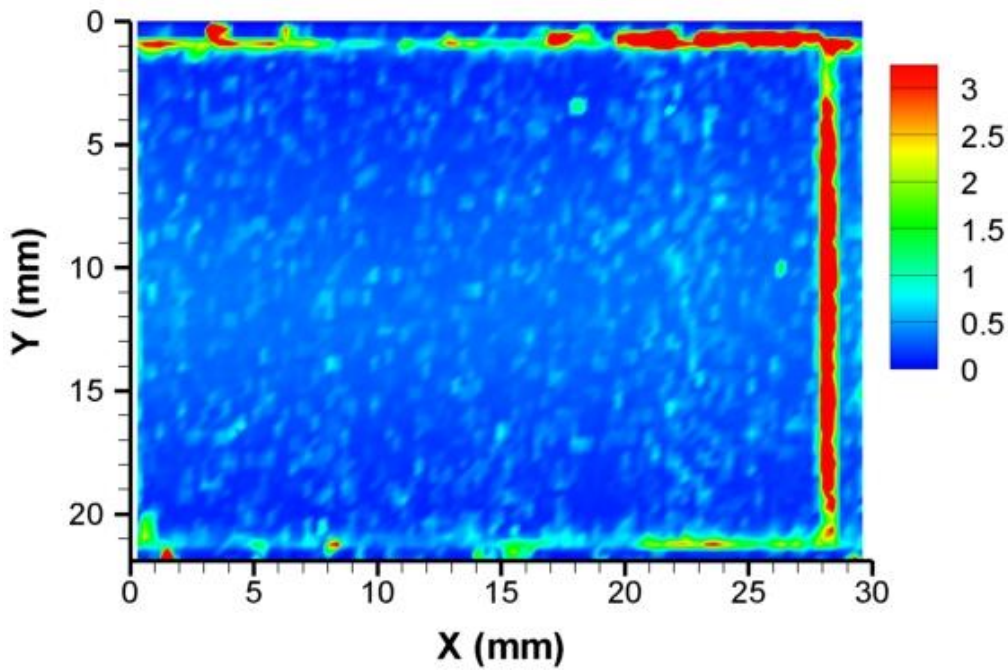

Fig. G-46 $\overline{v'v'}$**, Grid #1, L2, Plasma-150, Equilibrated**

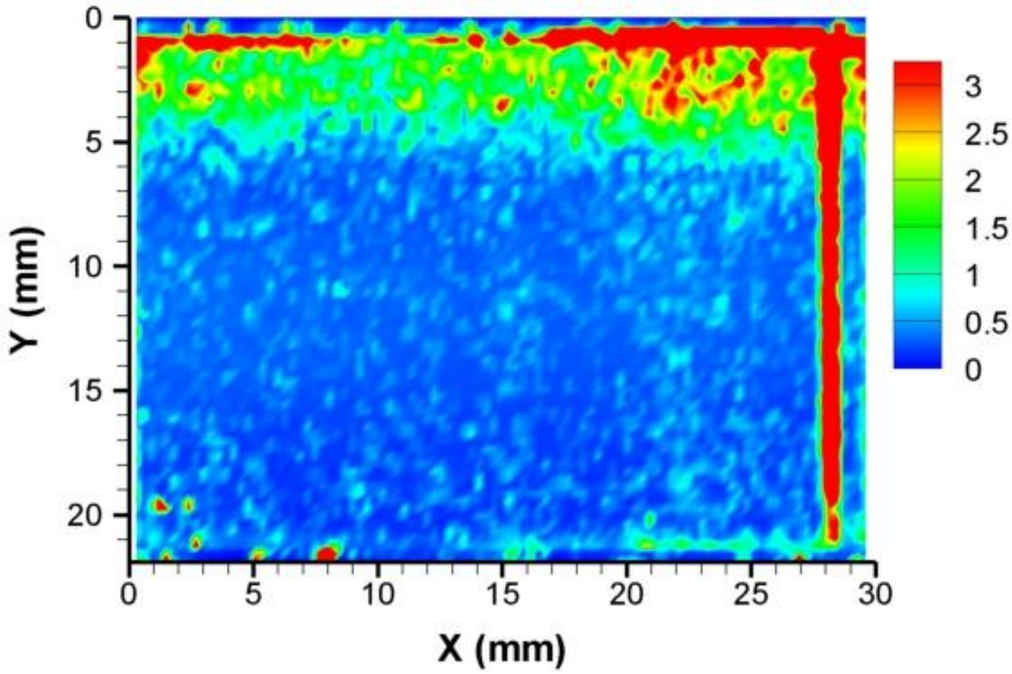

Fig. G-47 $\overline{v'v'}$**, Grid #1, L2, Plasma-300, Equilibrated**

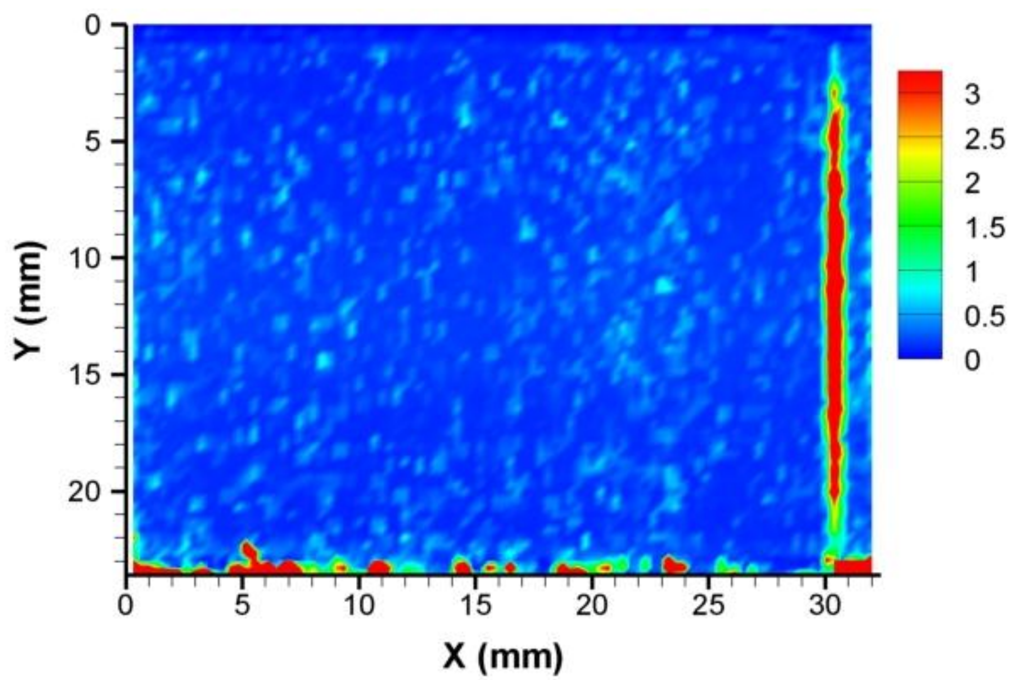

Fig. G-48 $\overline{v'v'}$**, Grid #1, L5, Plasma-150, Equilibrated**

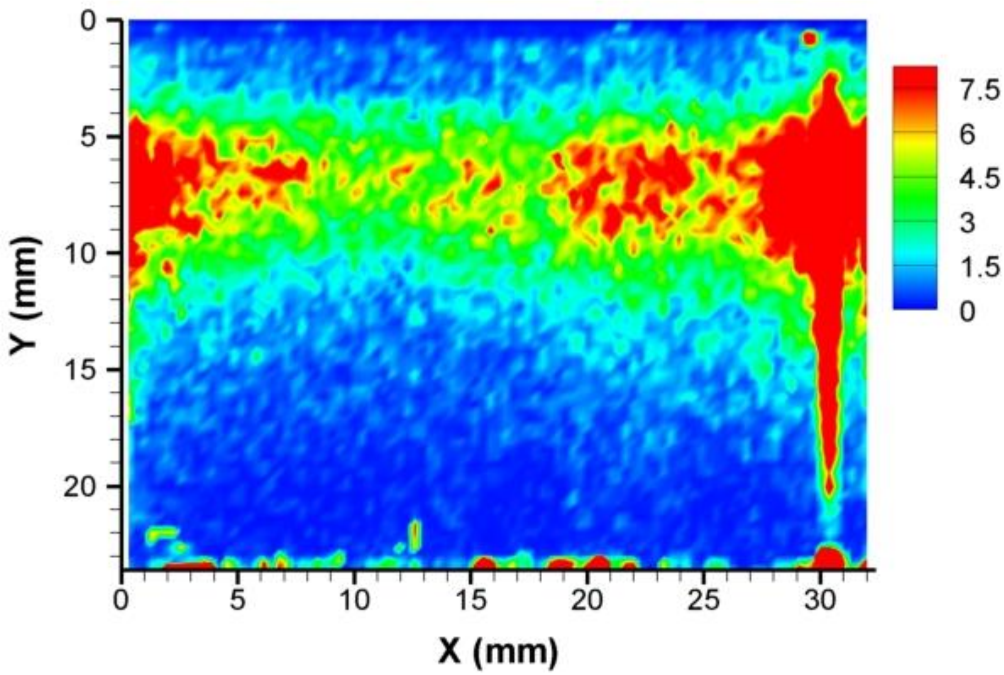

Fig. G-49 $\overline{v'v'}$, Grid #1, L5, Plasma-300, Equilibrated

APPENDIX H

CONTOUR PLOTS

$\overline{u'v'}$

FIGURE Page

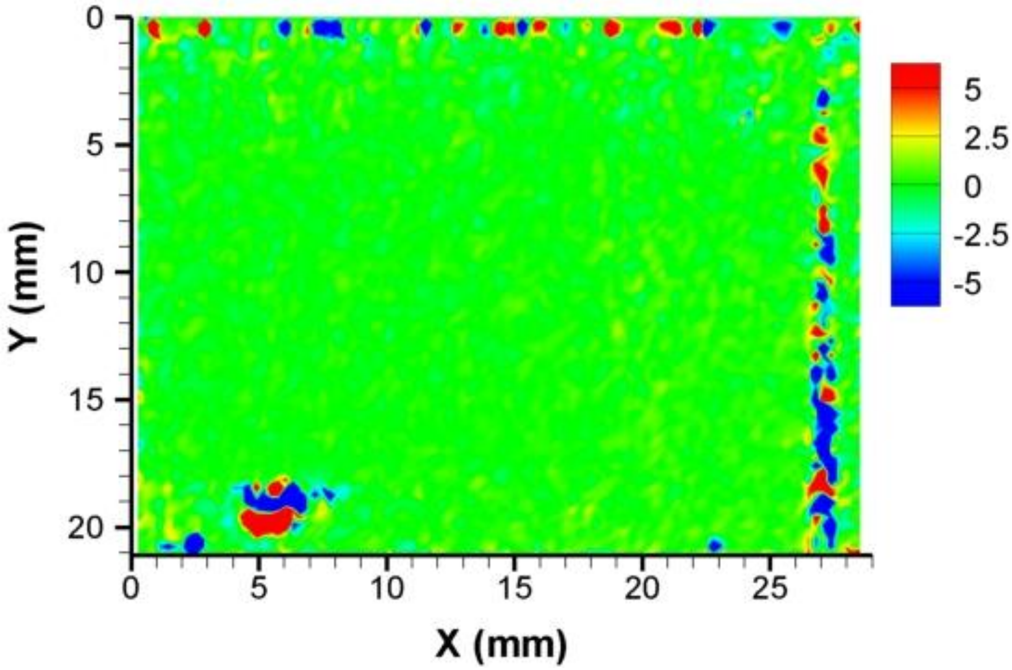

Fig. H-1 $\overline{u'v'}$**, No Grid, L0, Plasma-Off**

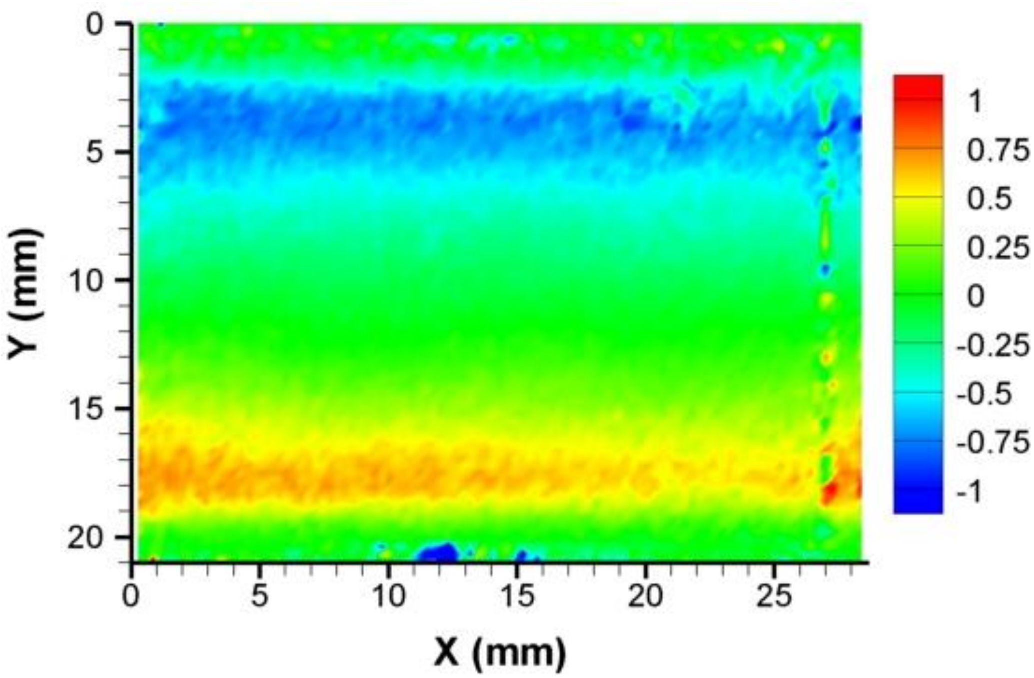

Fig. H-2 $\overline{u'v'}$**, Grid #1, L0, Plasma-Off**

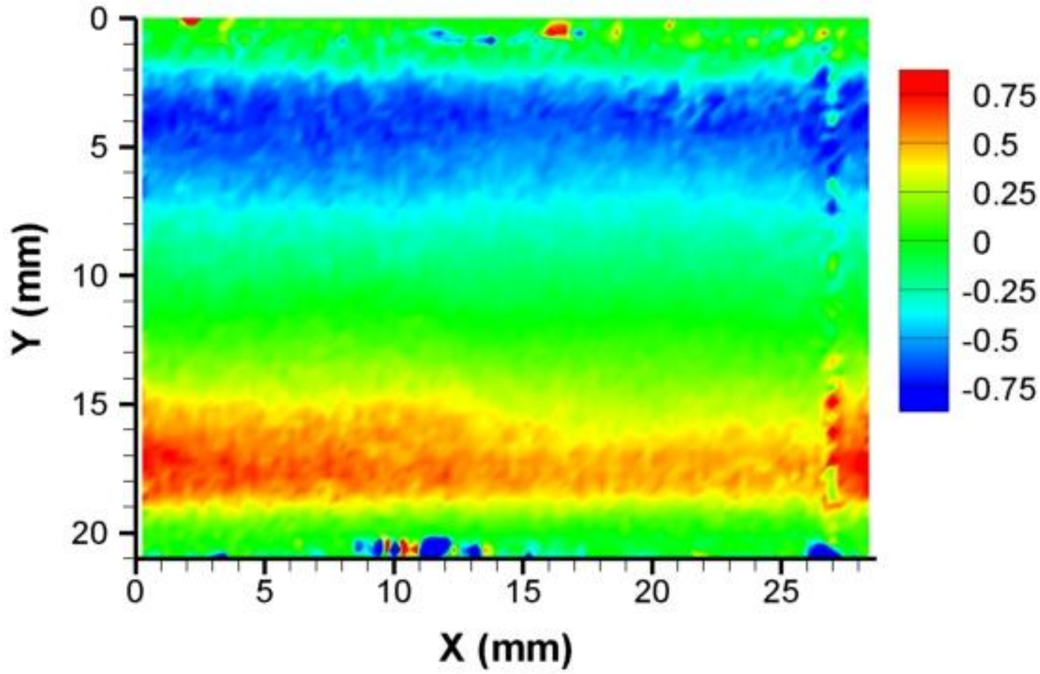

Fig. H-3 $\overline{u'v'}$**, Grid #1, L0, Plasma-150**

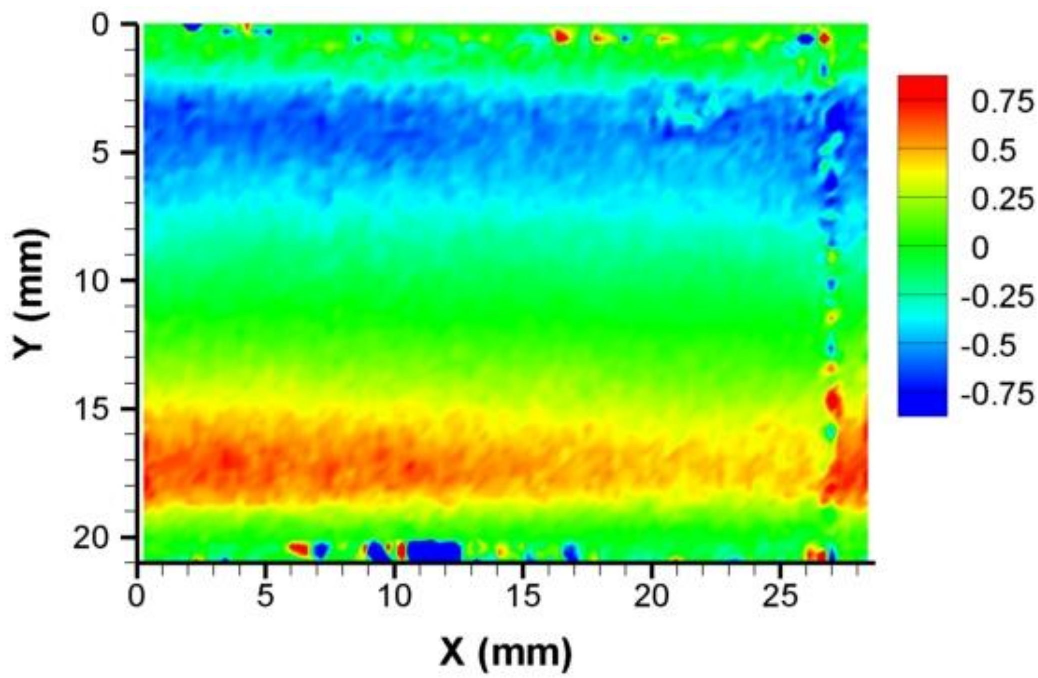

Fig. H-4 $\overline{u'v'}$**, Grid #1, L0, Plasma-300**

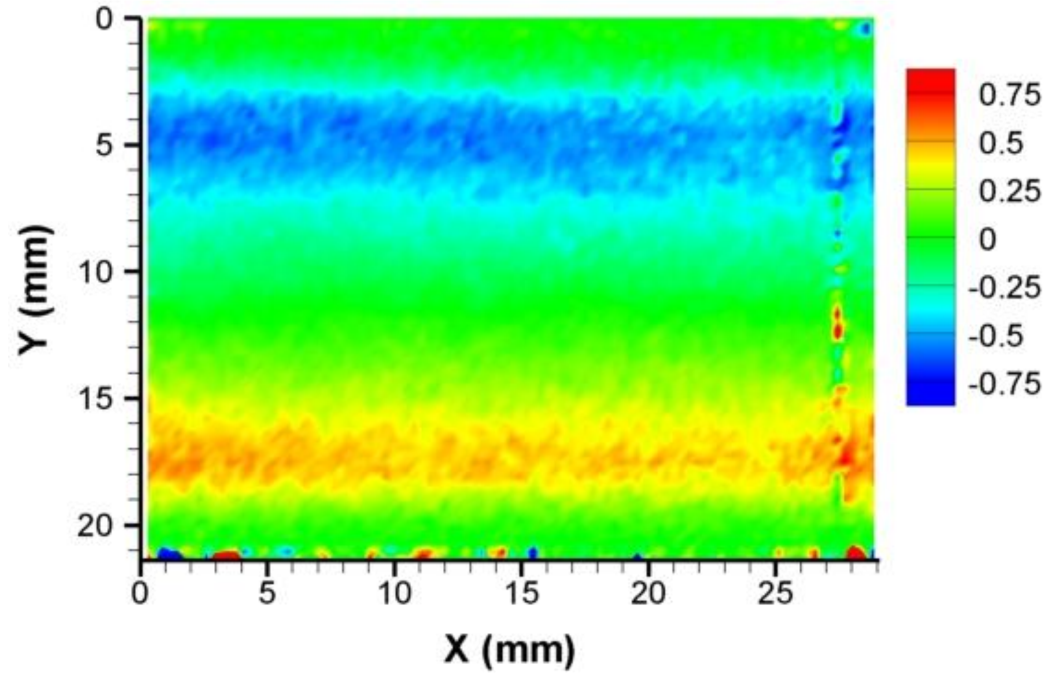

Fig. H-5 $\overline{u'v'}$**, Grid #1, L1, Plasma-Off**

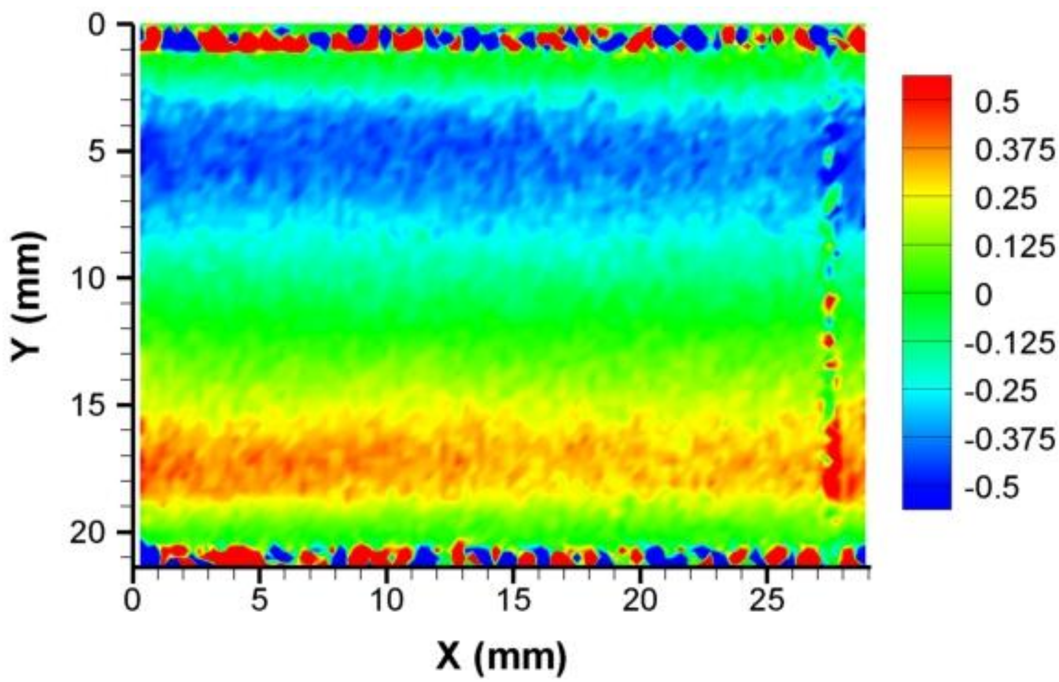

Fig. H-6 $\overline{u'v'}$**, Grid #1, L1, Plasma-150**

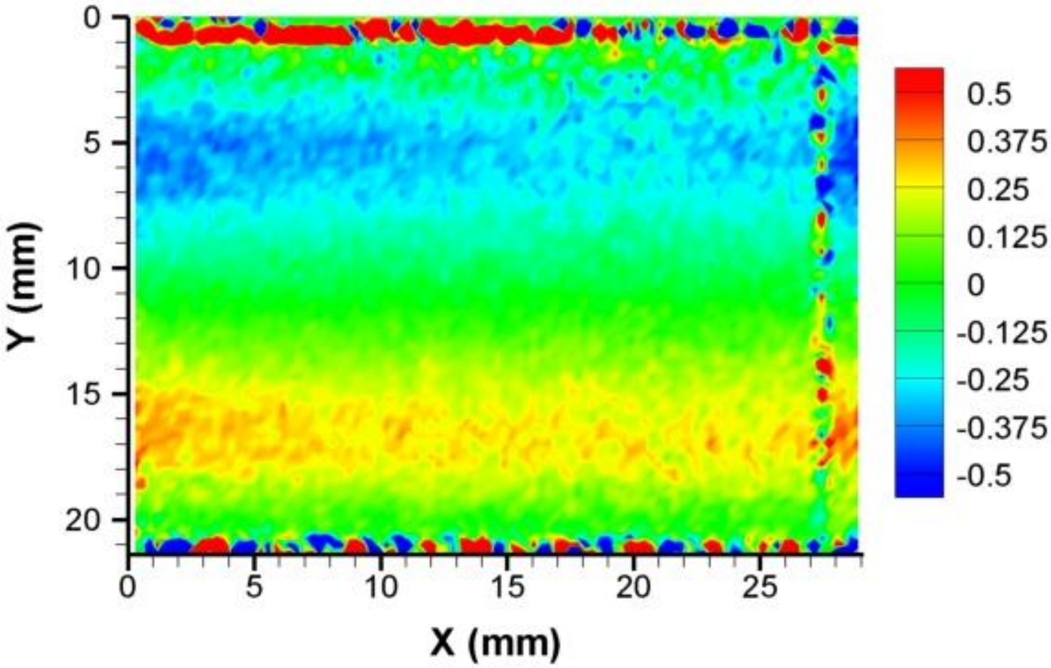

Fig. H-7 $\overline{u'v'}$**, Grid #1, L1, Plasma-300**

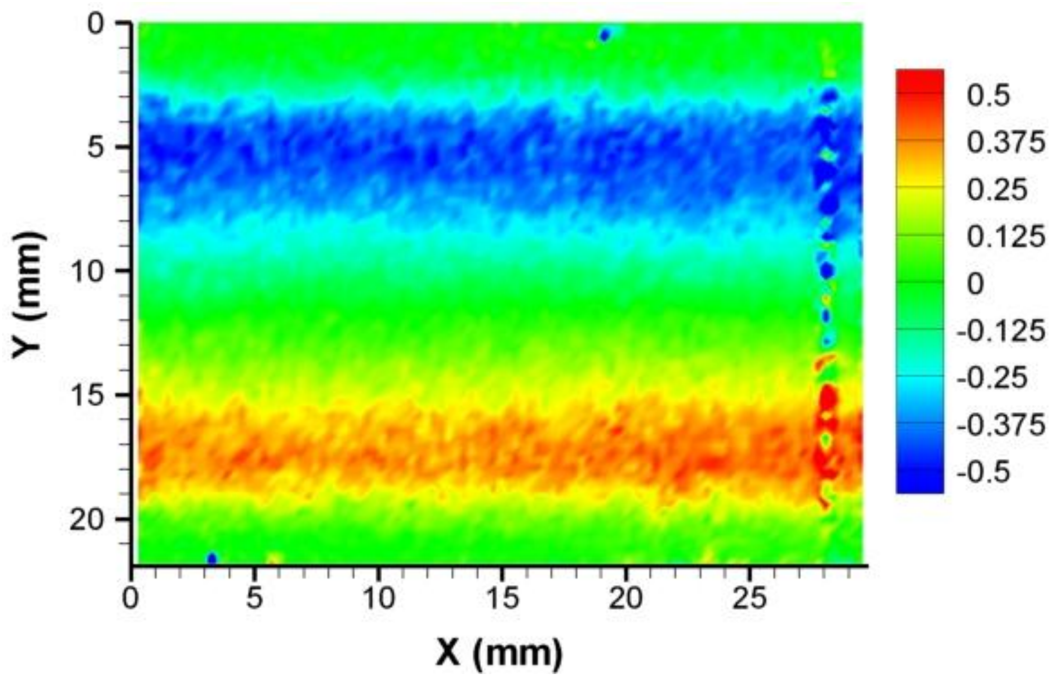

Fig. H-8 $\overline{u'v'}$**, Grid #1, L2, Plasma-Off**

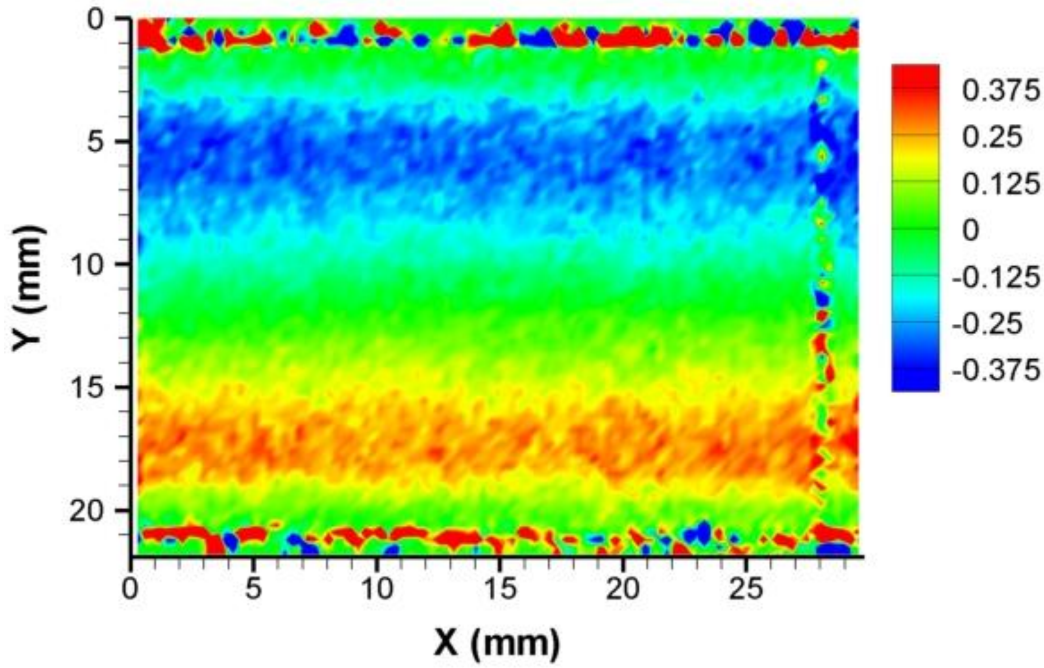

Fig. H-9 $\overline{u'v'}$**, Grid #1, L2, Plasma-150**

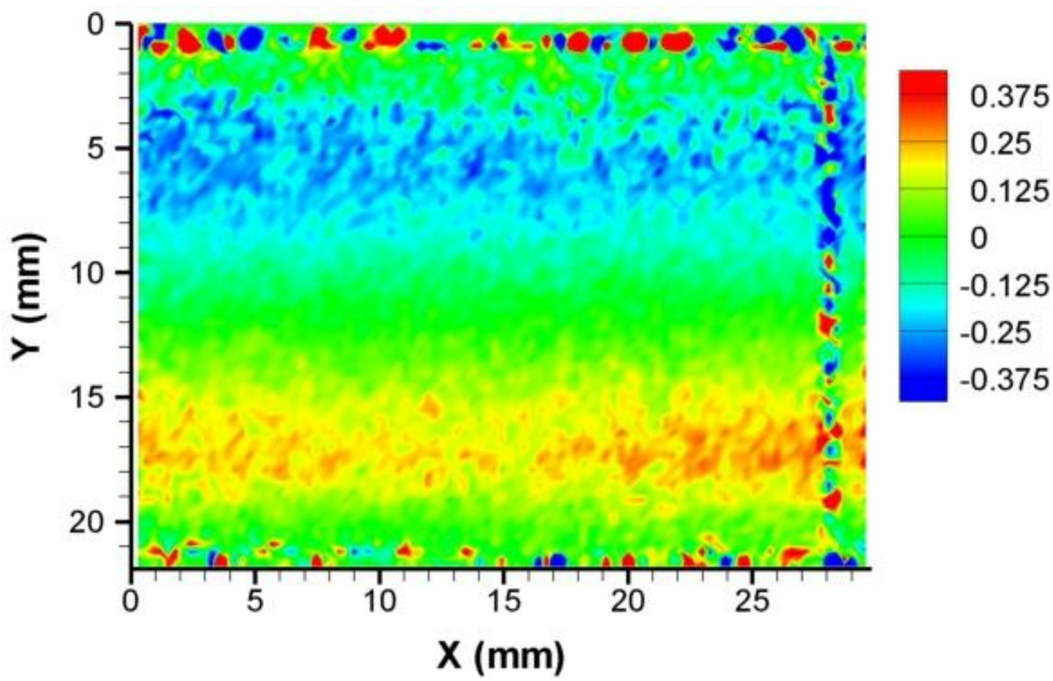

Fig. H-10 $\overline{u'v'}$**, Grid #1, L2, Plasma-300**

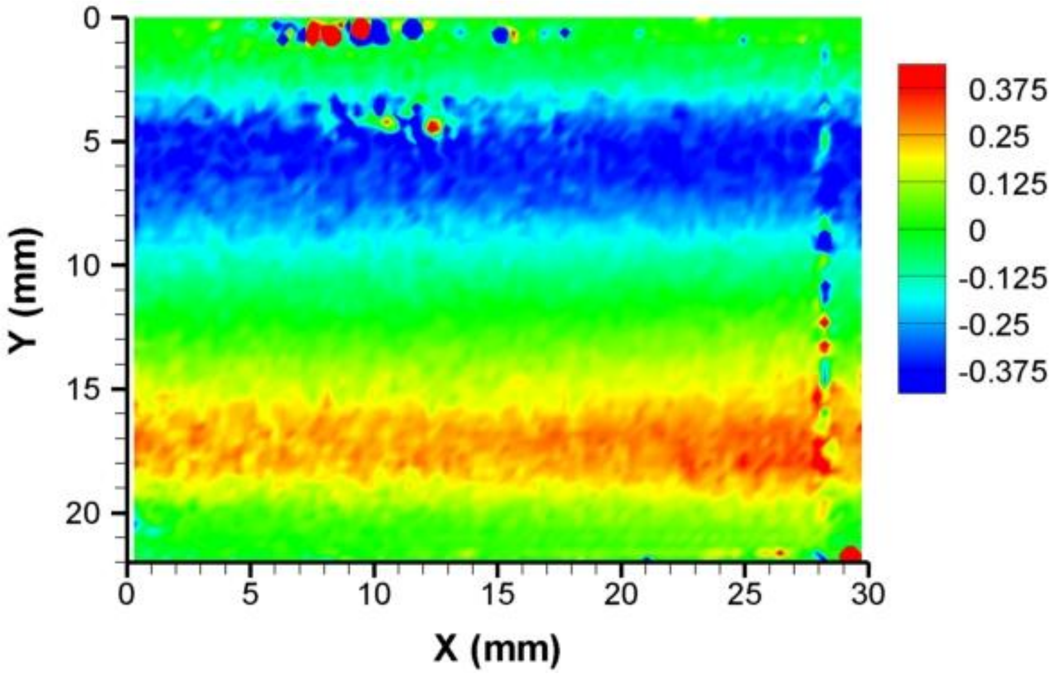

Fig. H-11 $\overline{u'v'}$**, Grid #1, L3, Plasma-Off**

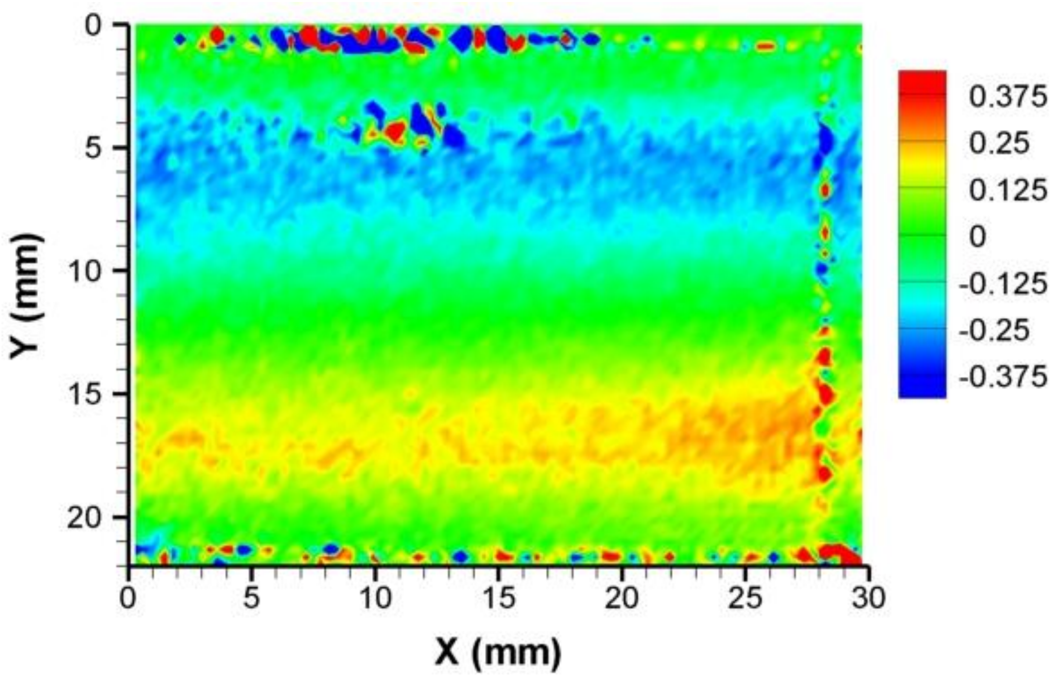

Fig. H-12 $\overline{u'v'}$**, Grid #1, L3, Plasma-150**

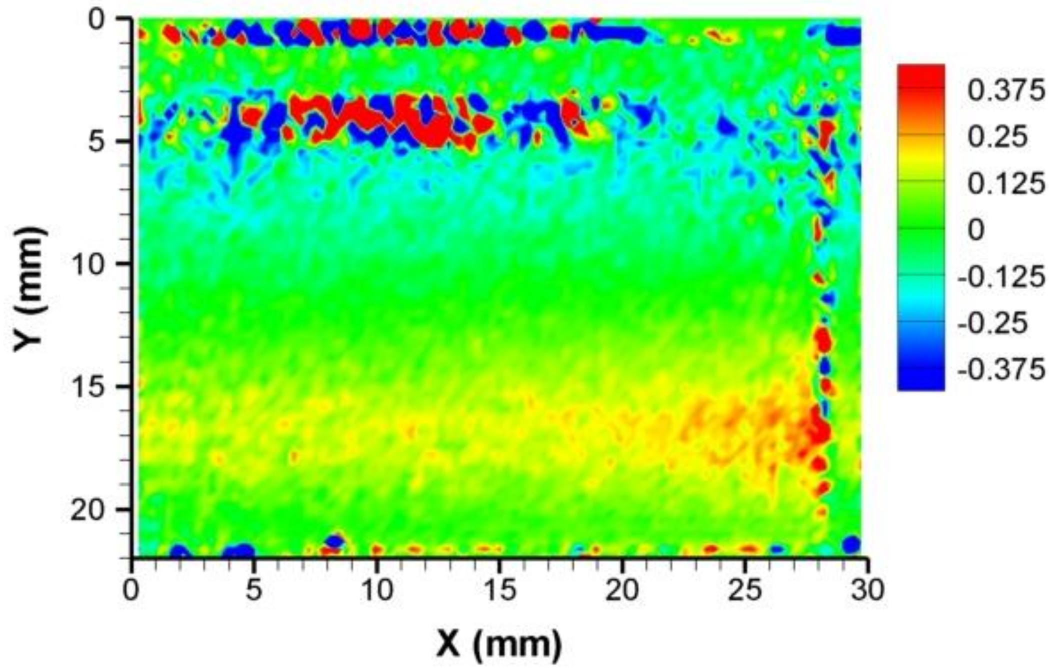

Fig. H-13 $\overline{u'v'}$**, Grid #1, L3, Plasma-300**

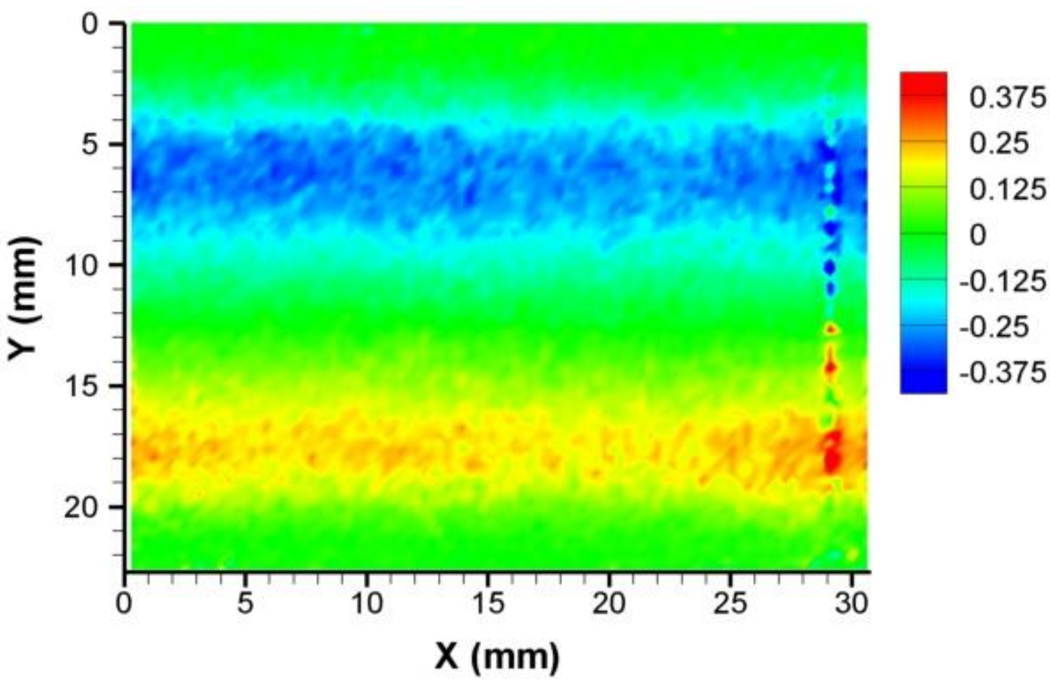

Fig. H-14 $\overline{u'v'}$**, Grid #1, L4, Plasma-Off**

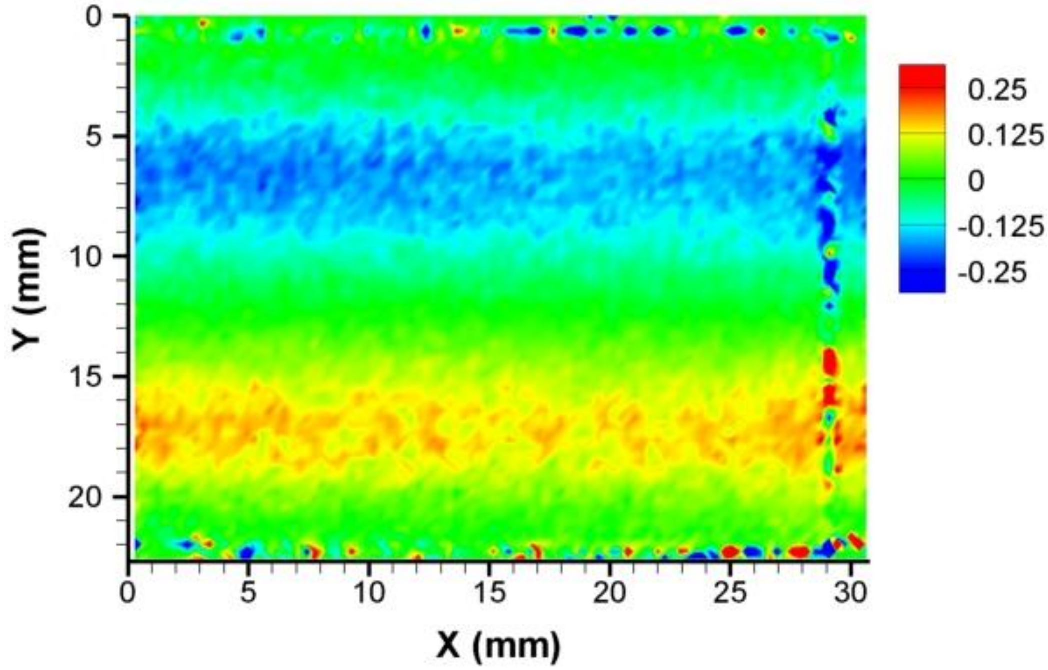

Fig. H-15 $\overline{u'v'}$**, Grid #1, L4, Plasma-150**

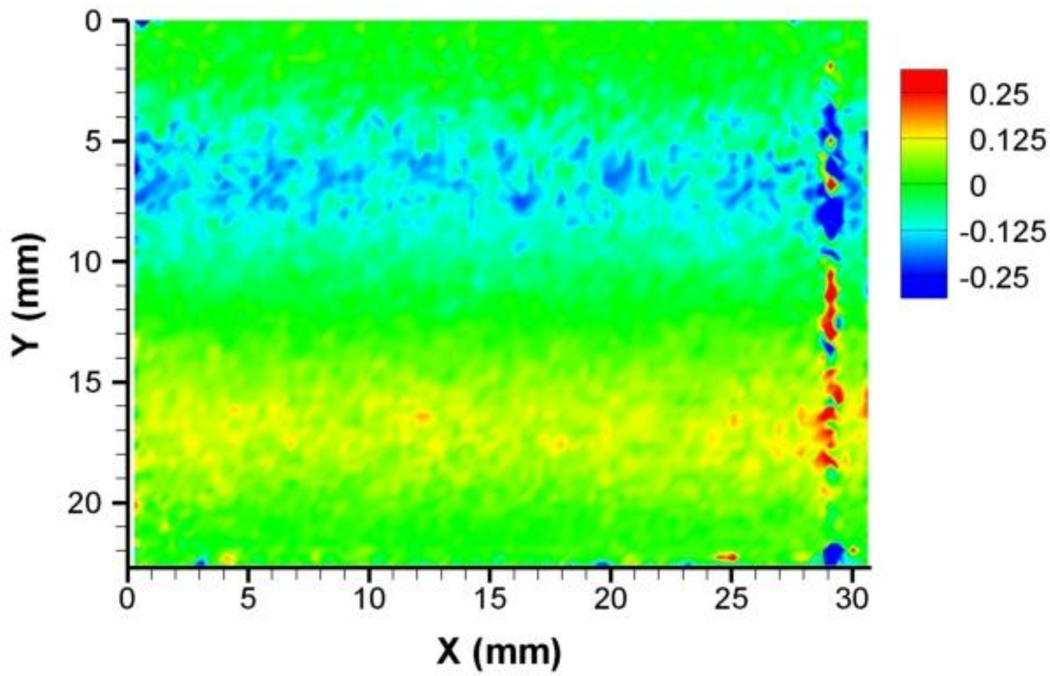

Fig. H-16 $\overline{u'v'}$**, Grid #1, L4, Plasma-300**

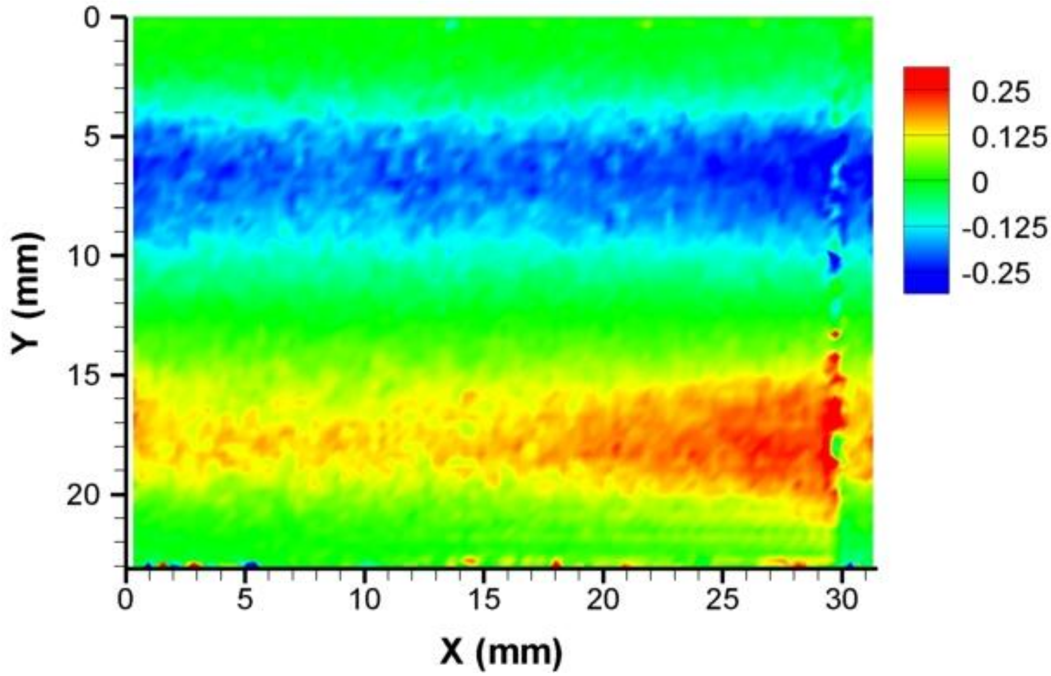

Fig. H-17 $\overline{u'v'}$**, Grid #1, L5, Plasma-Off**

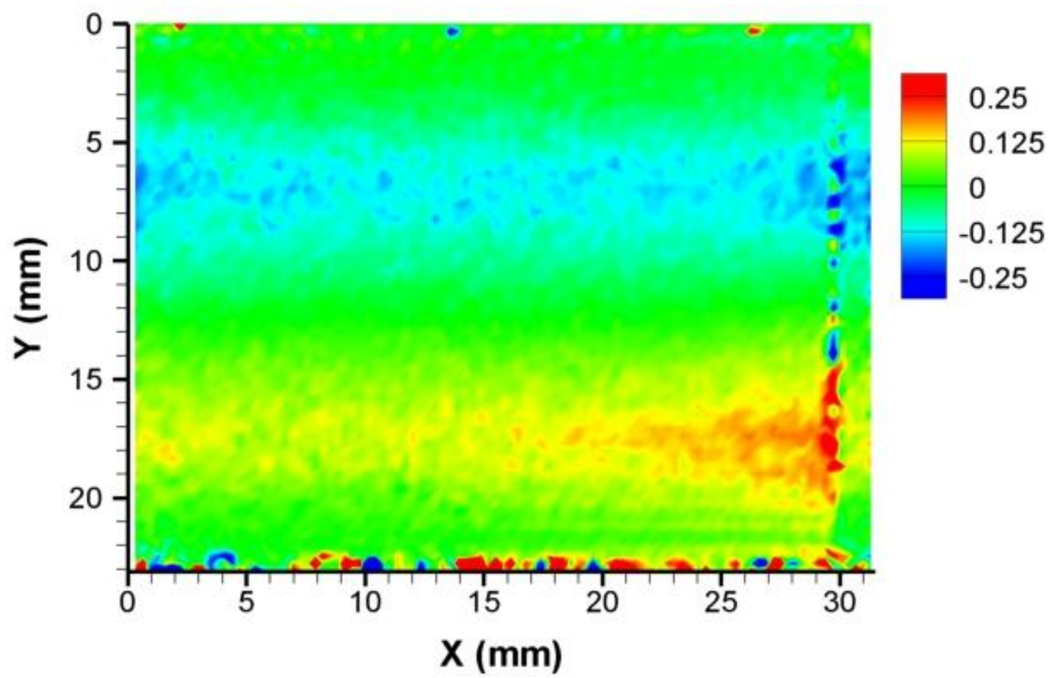

Fig. H-18 $\overline{u'v'}$**, Grid #1, L5, Plasma-150**

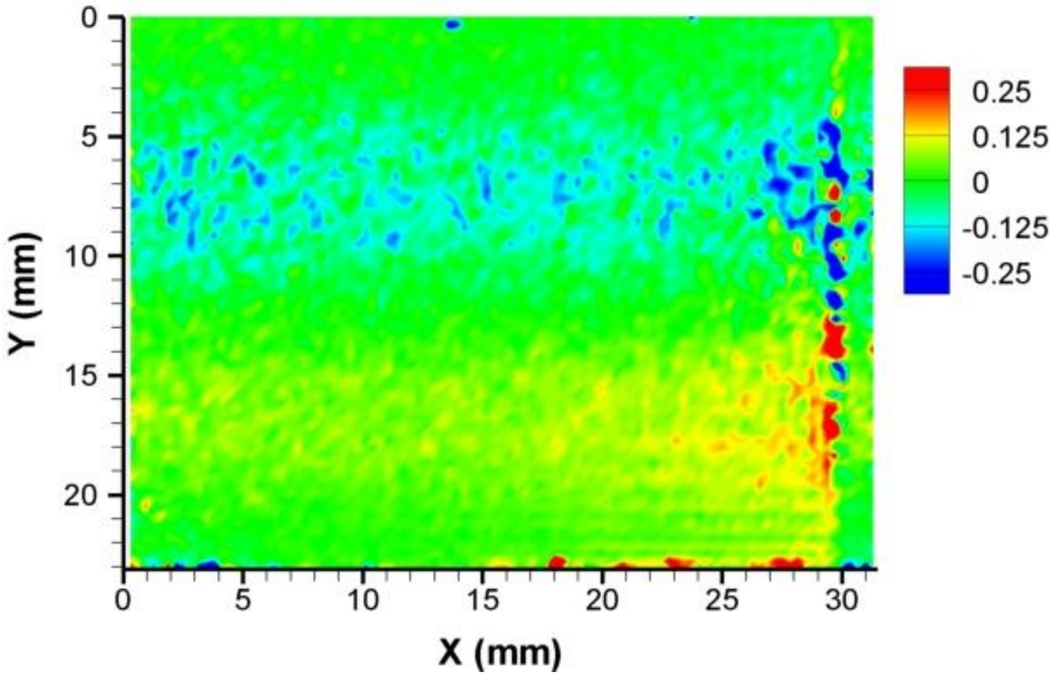

Fig. H-19 $\overline{u'v'}$**, Grid #1, L5, Plasma-300**

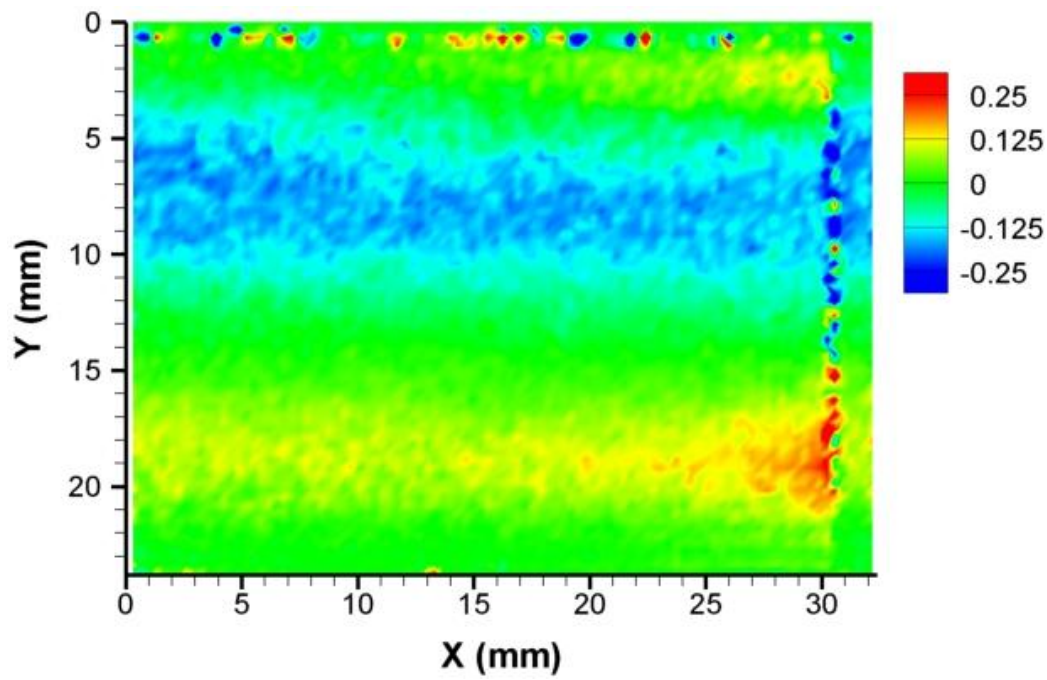

Fig. H-20 $\overline{u'v'}$**, Grid #1, L6, Plasma-Off**

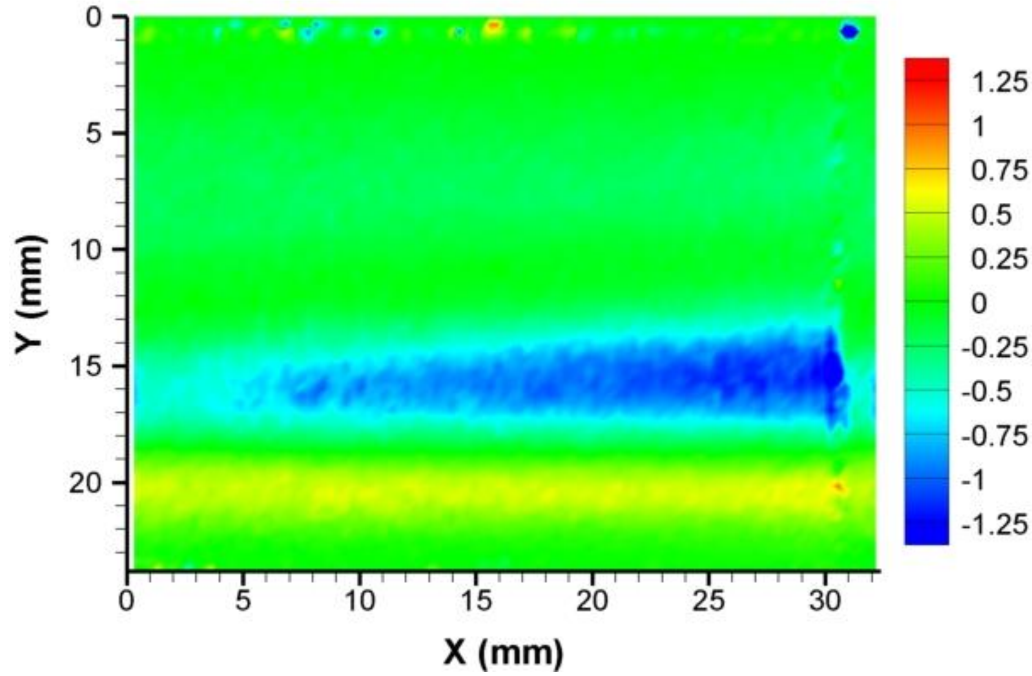

Fig. H-21 $\overline{u'v'}$**, Grid #1, L6, Plasma-150**

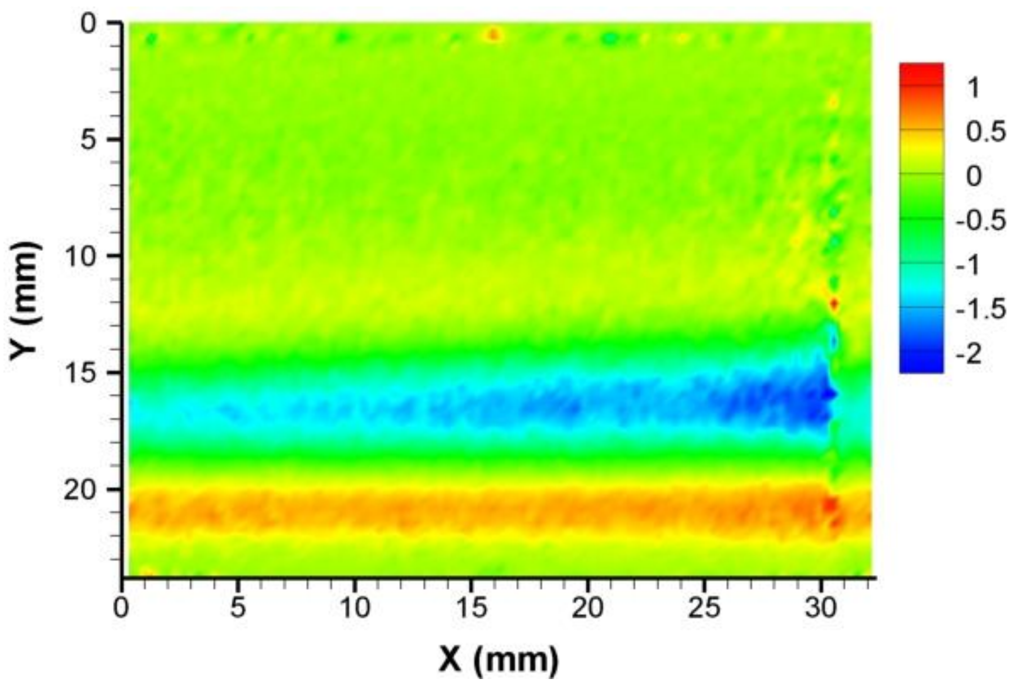

Fig. H-22 $\overline{u'v'}$**, Grid #1, L6, Plasma-300**

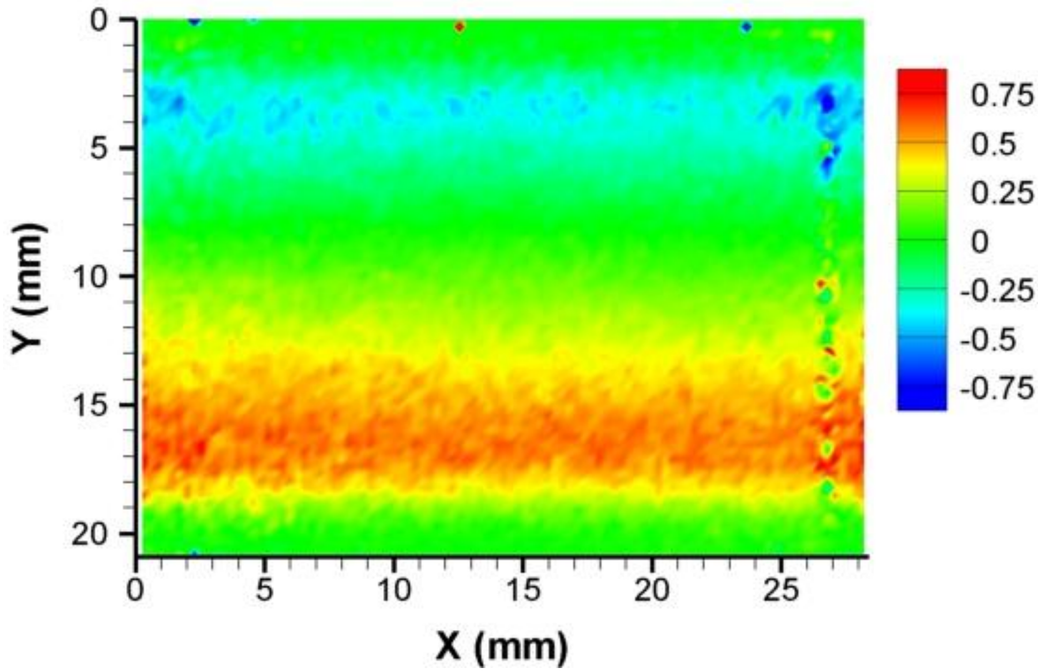

Fig. H-23 $\overline{u'v'}$**, Grid #2, L0, Plasma-Off**

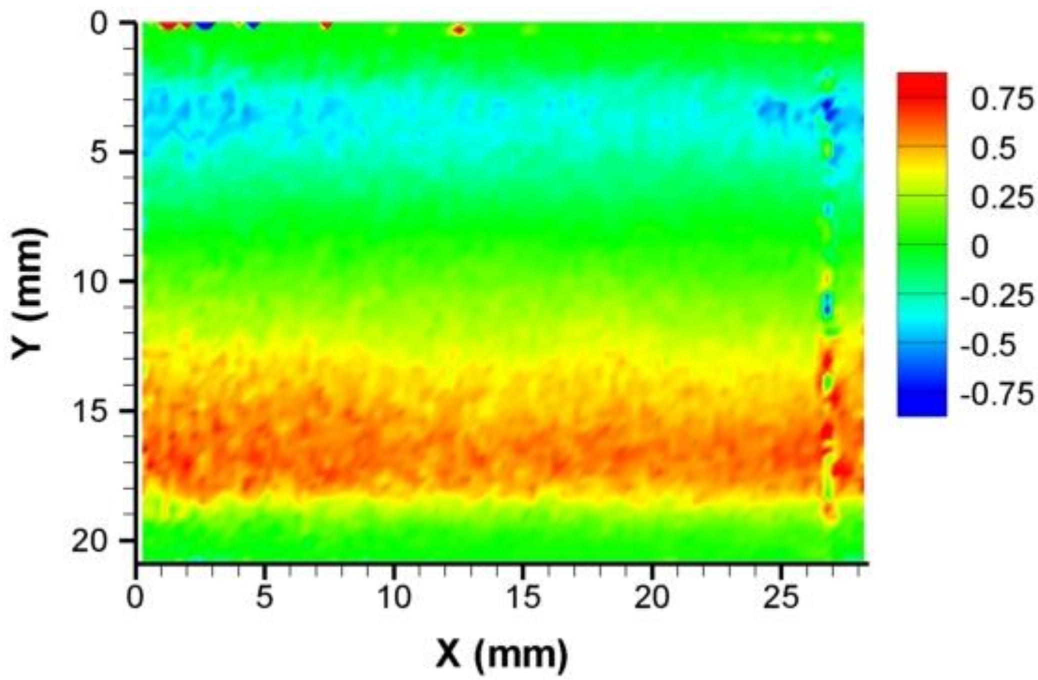

Fig. H-24 $\overline{u'v'}$**, Grid #2, L0, Plasma-150**

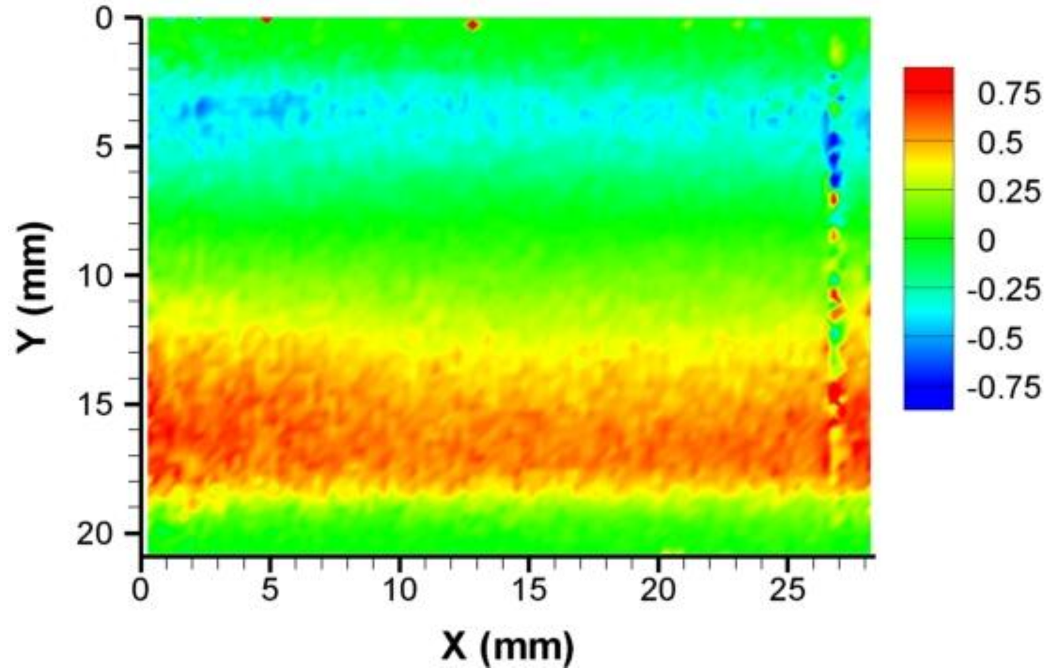

Fig. H-25 $\overline{u'v'}$**, Grid #2, L0, Plasma-300**

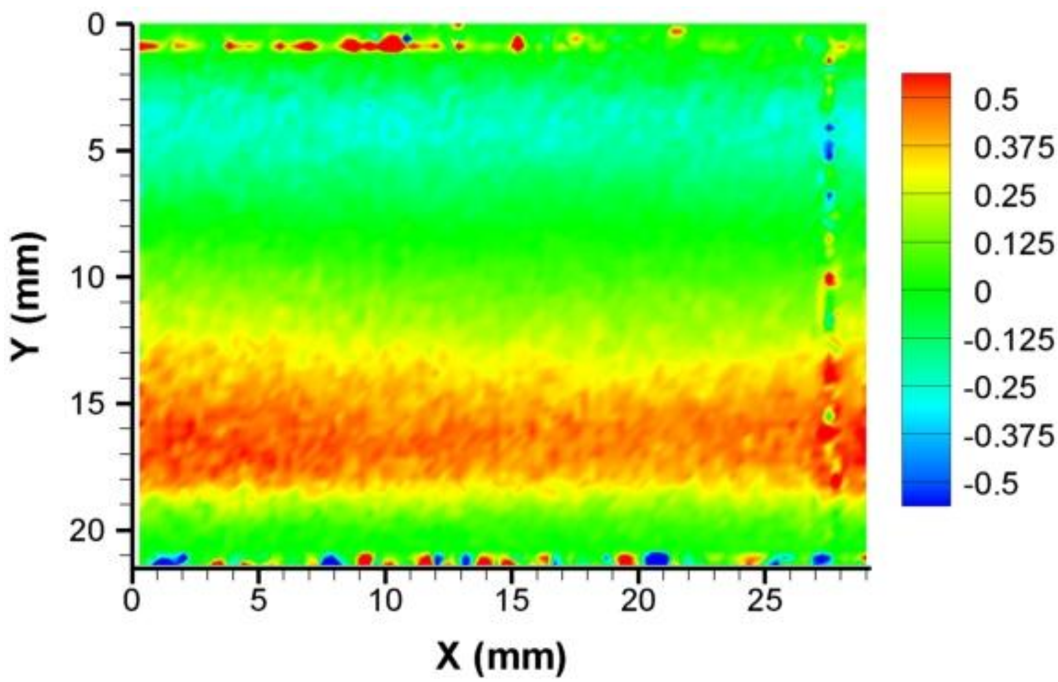

Fig. H-26 $\overline{u'v'}$**, Grid #2, L1, Plasma-Off**

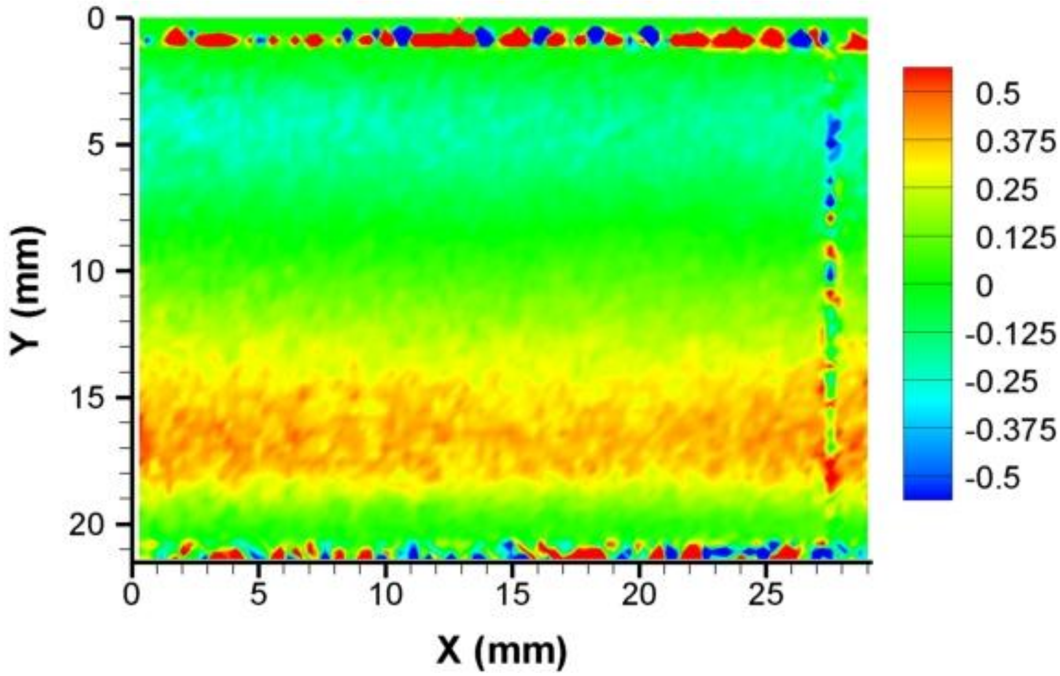

Fig. H-27 $\overline{u'v'}$, Grid #2, L1, Plasma-150

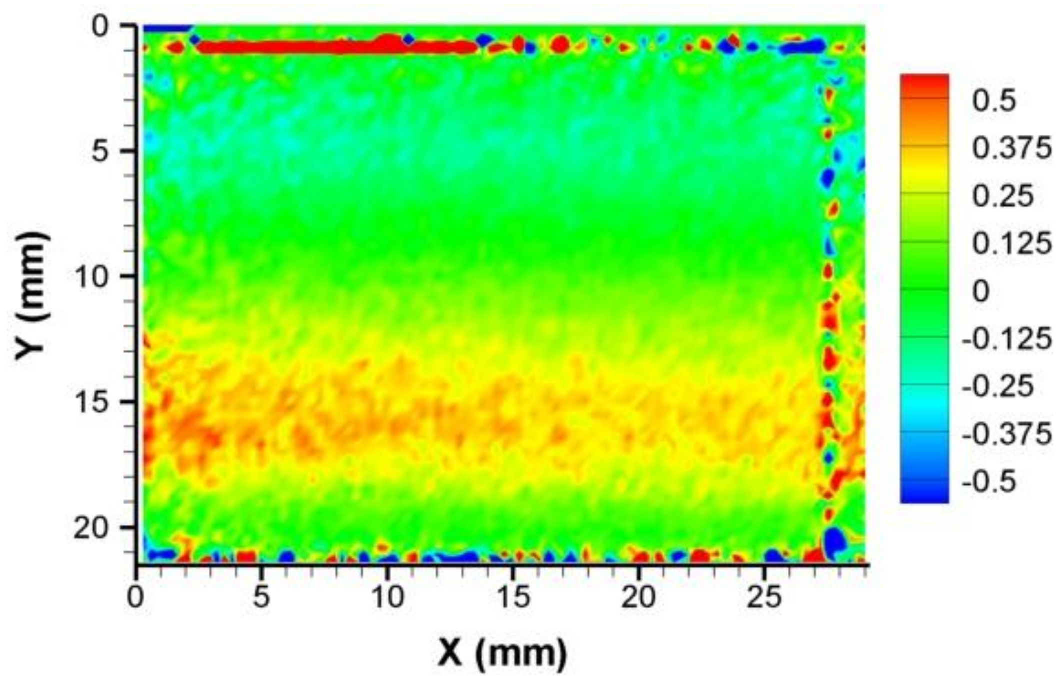

Fig. H-28 $\overline{u'v'}$, Grid #2, L1, Plasma-300

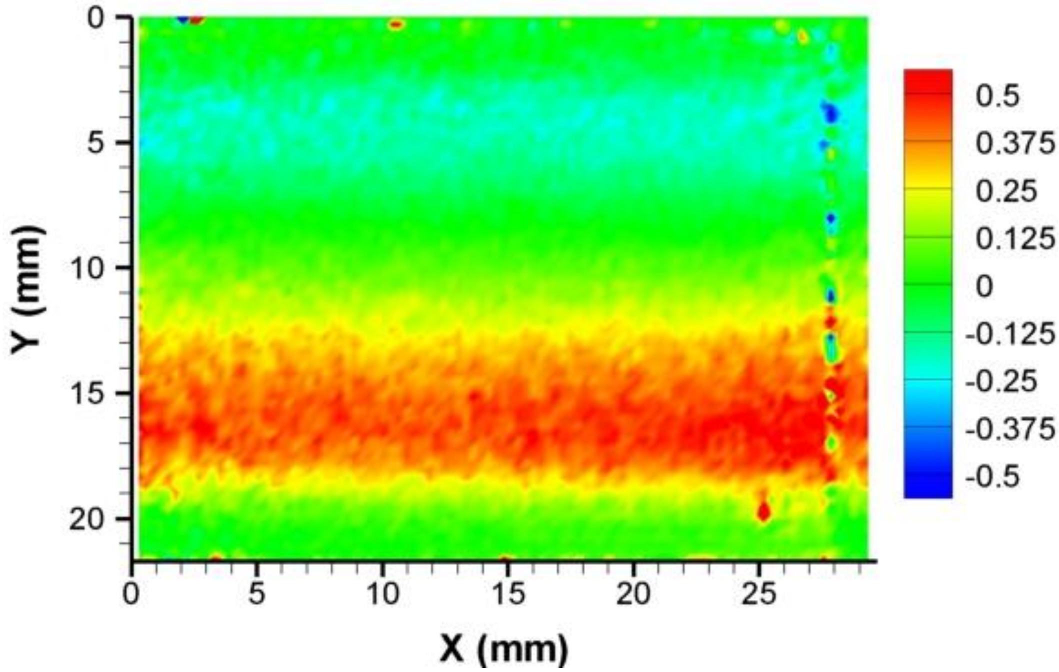

Fig. H-29 $\overline{u'v'}$**, Grid #2, L2, Plasma-Off**

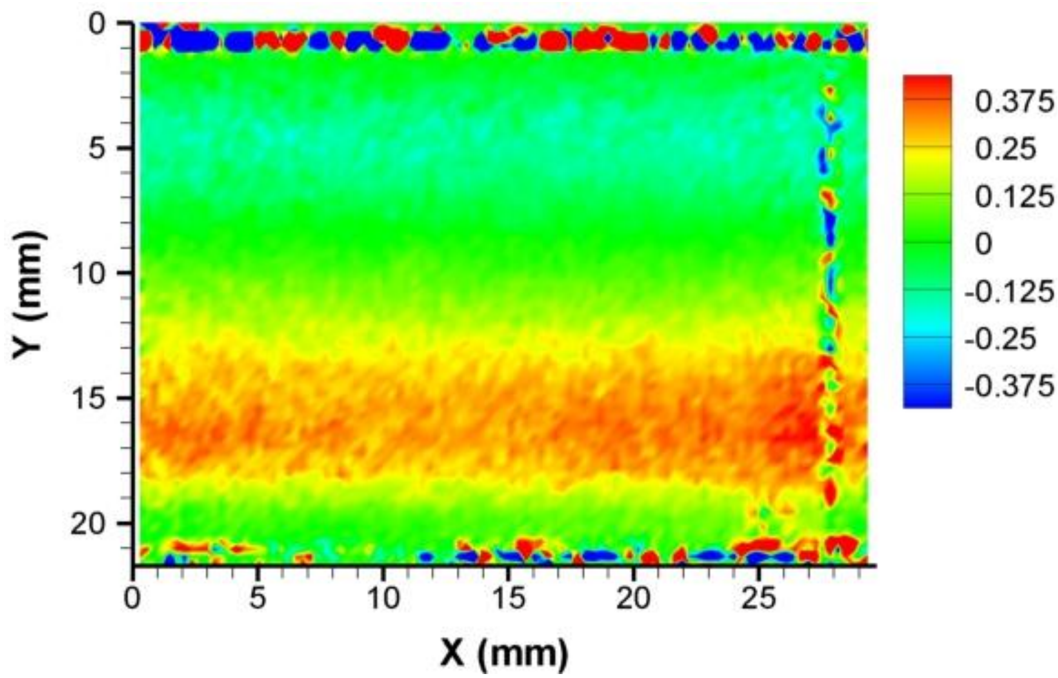

Fig. H-30 $\overline{u'v'}$**, Grid #2, L2, Plasma-150**

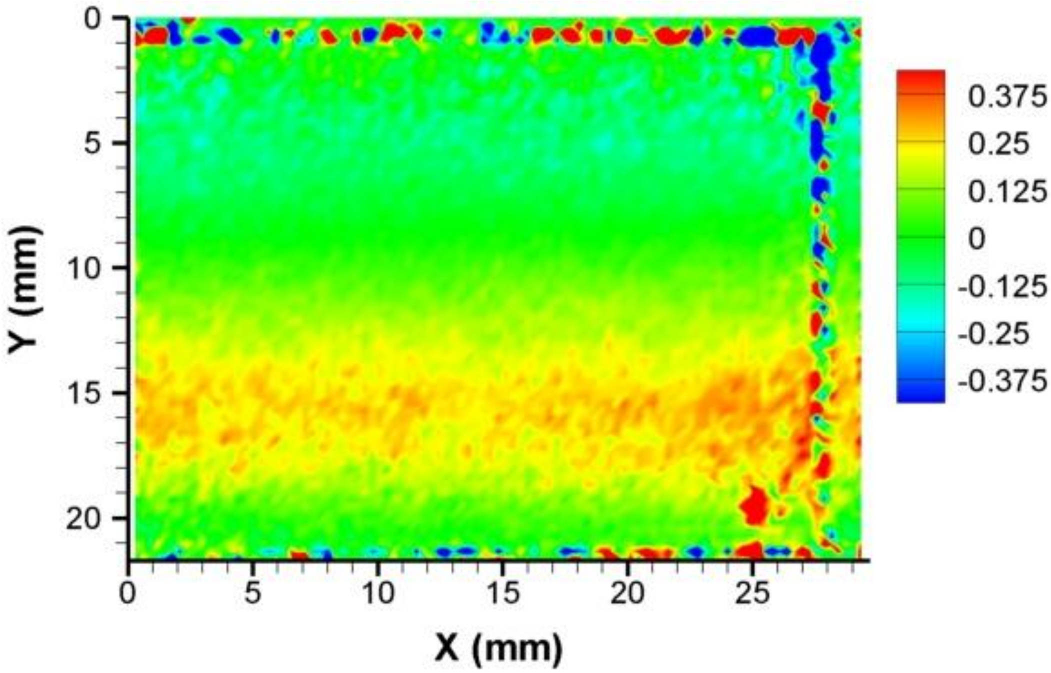

Fig. H-31 $\overline{u'v'}$**, Grid #2, L2, Plasma-300**

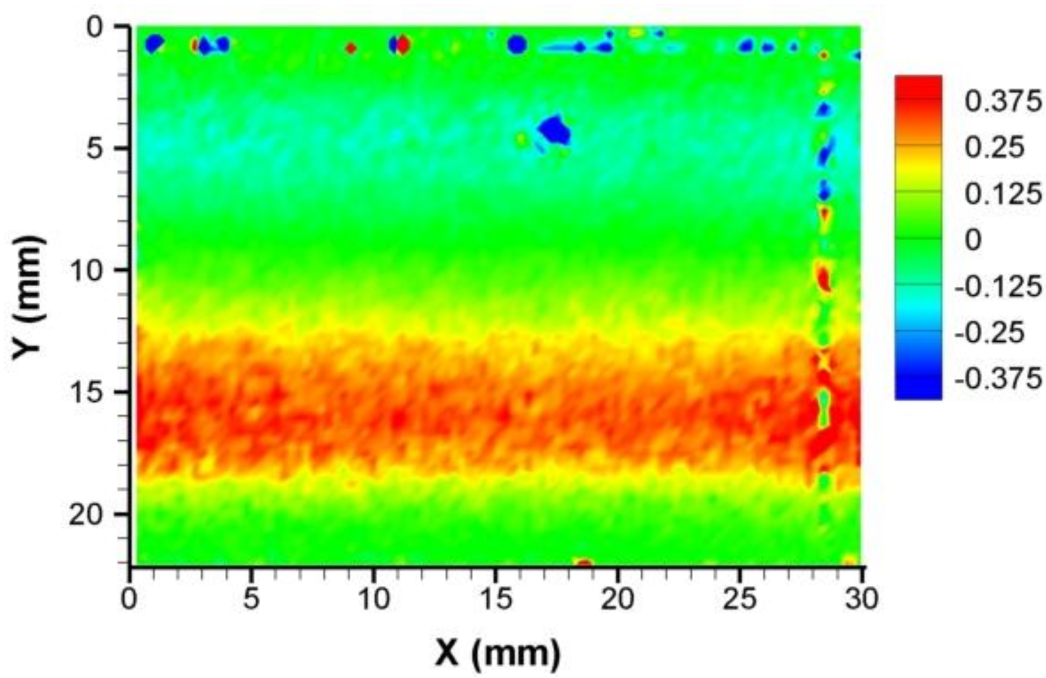

Fig. H-32 $\overline{u'v'}$**, Grid #2, L3, Plasma-Off**

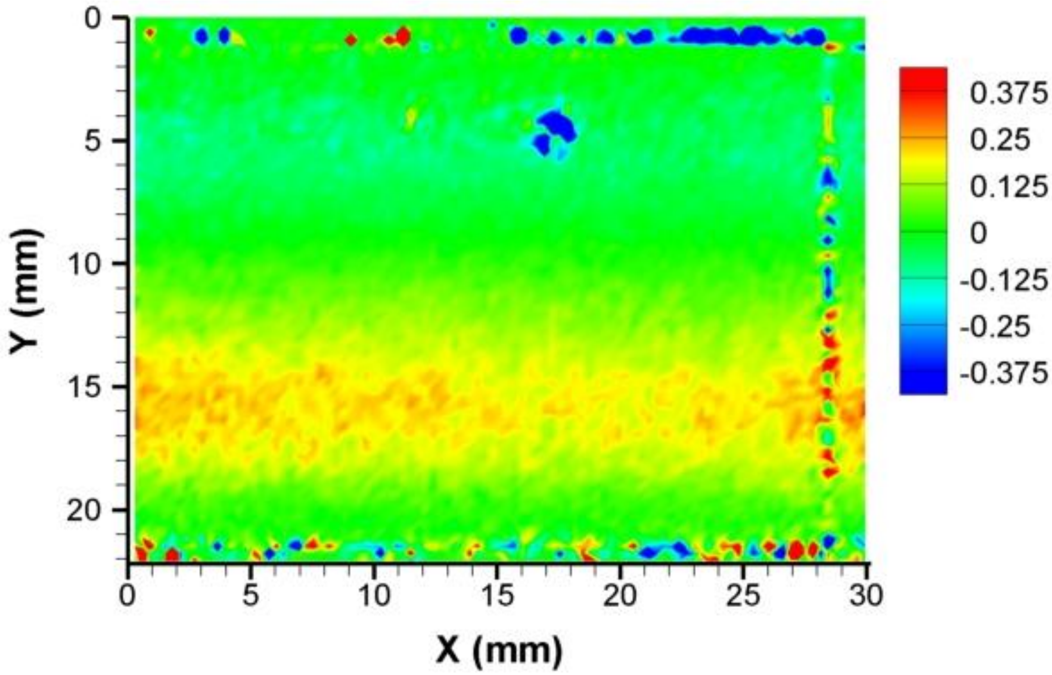

Fig. H-33 $\overline{u'v'}$**, Grid #2, L3, Plasma-150**

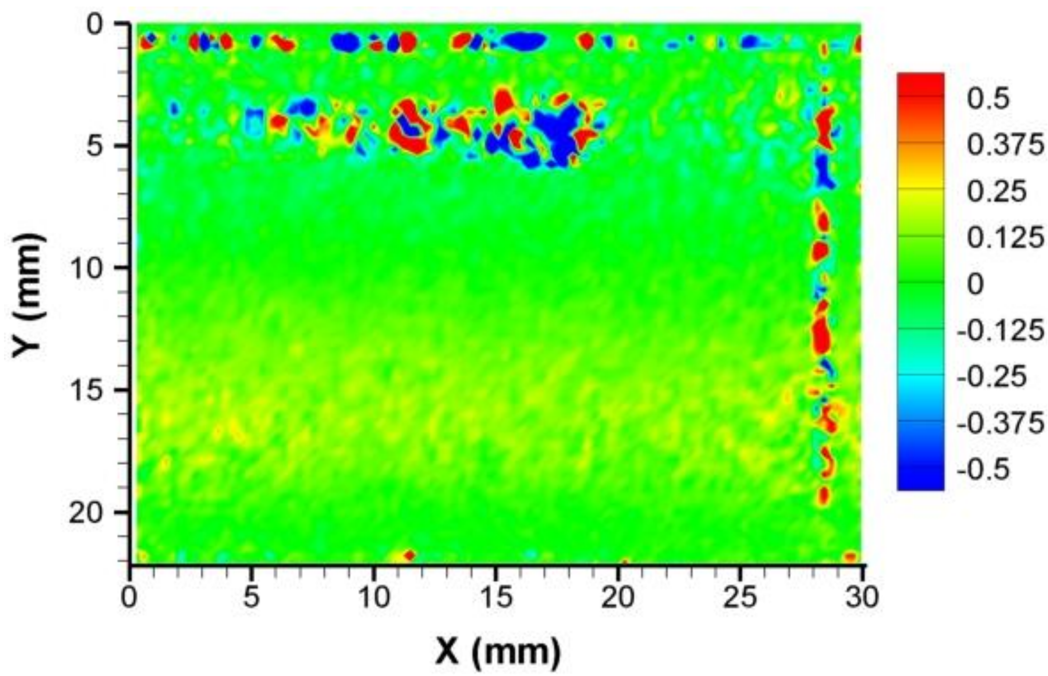

Fig. H-34 $\overline{u'v'}$**, Grid #2, L3, Plasma-300**

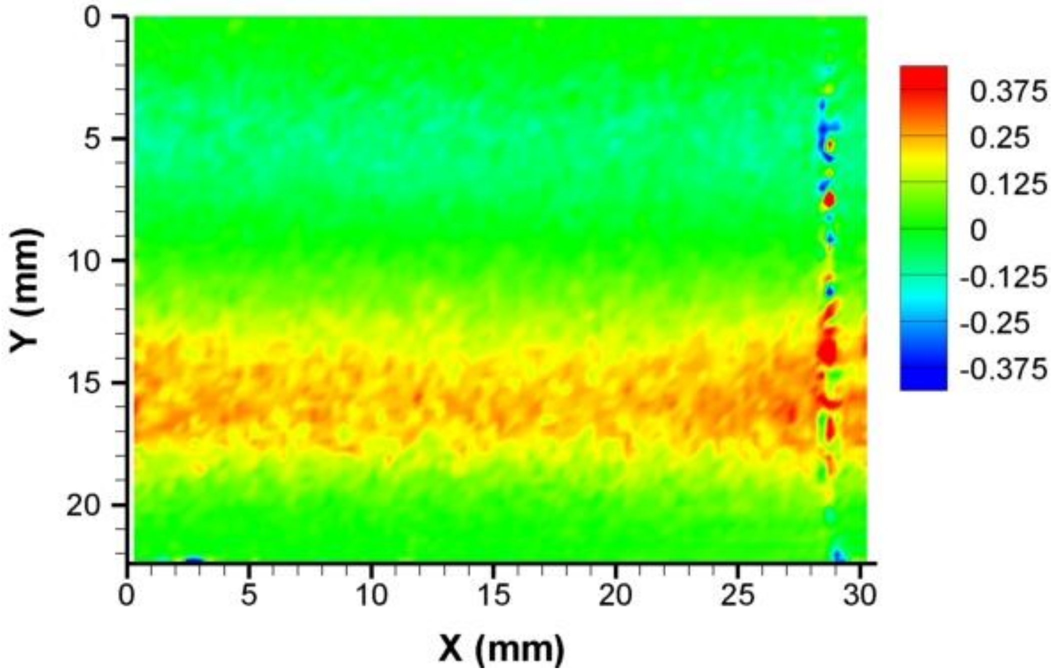

Fig. H-35 $\overline{u'v'}$**, Grid #2, L4, Plasma-Off**

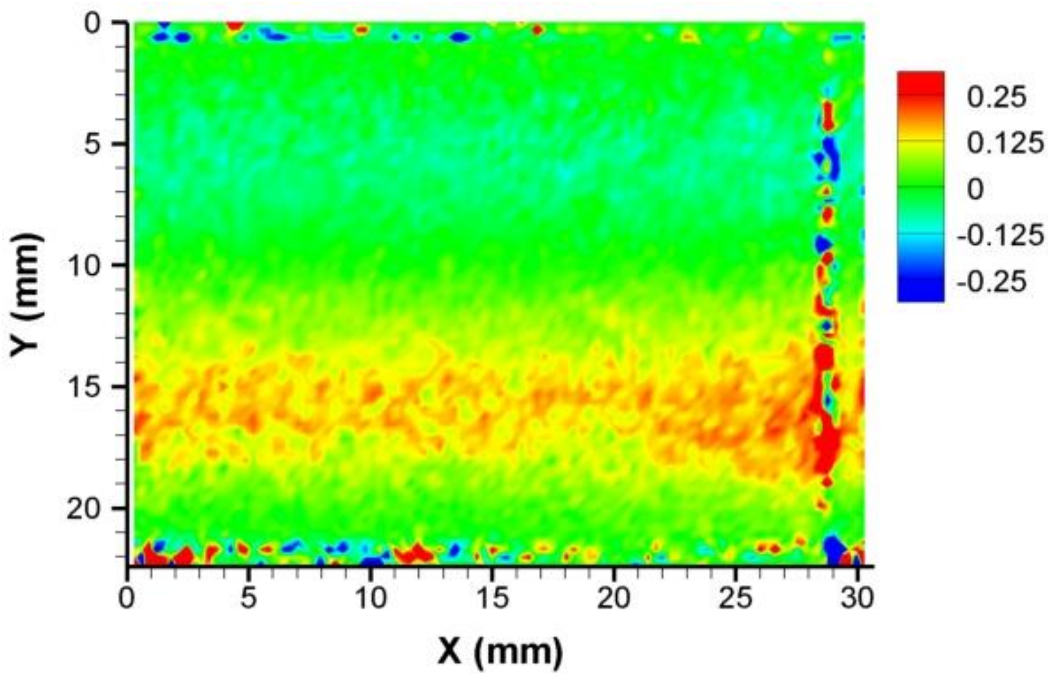

Fig. H-36 $\overline{u'v'}$**, Grid #2, L4, Plasma-150**

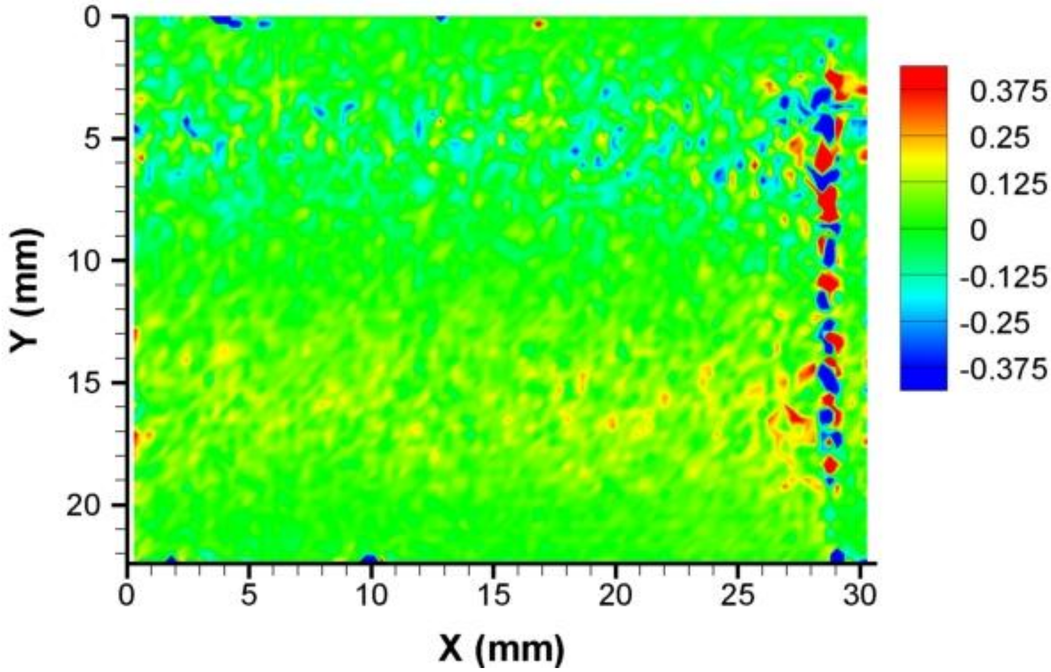

Fig. H-37 $\overline{u'v'}$**, Grid #2, L4, Plasma-300**

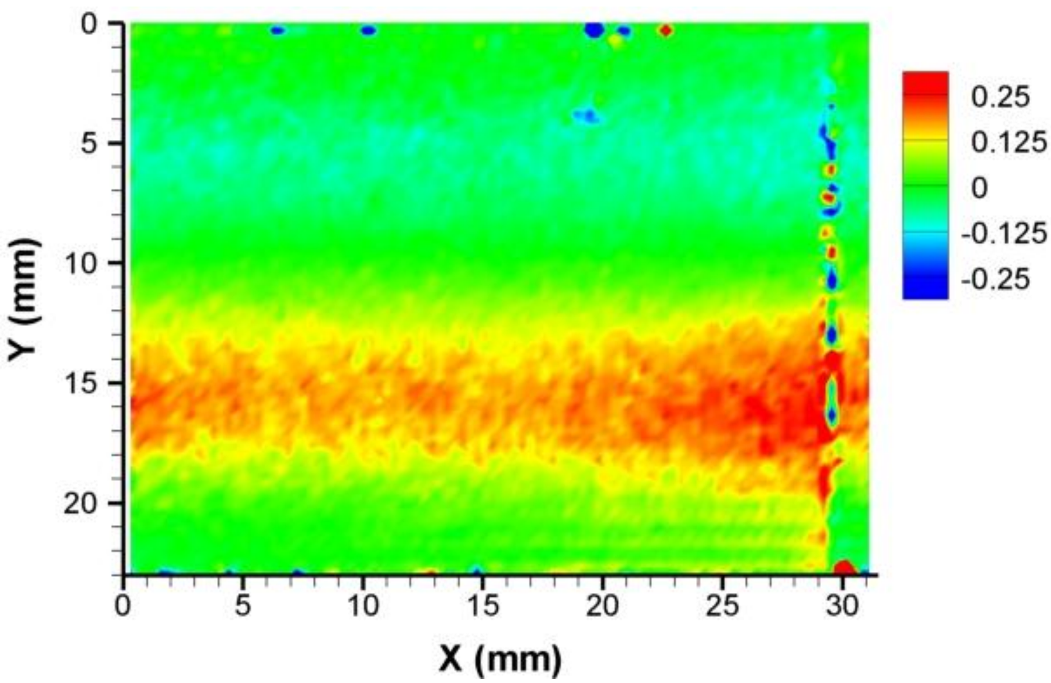

Fig. H-38 $\overline{u'v'}$**, Grid #2, L5, Plasma-Off**

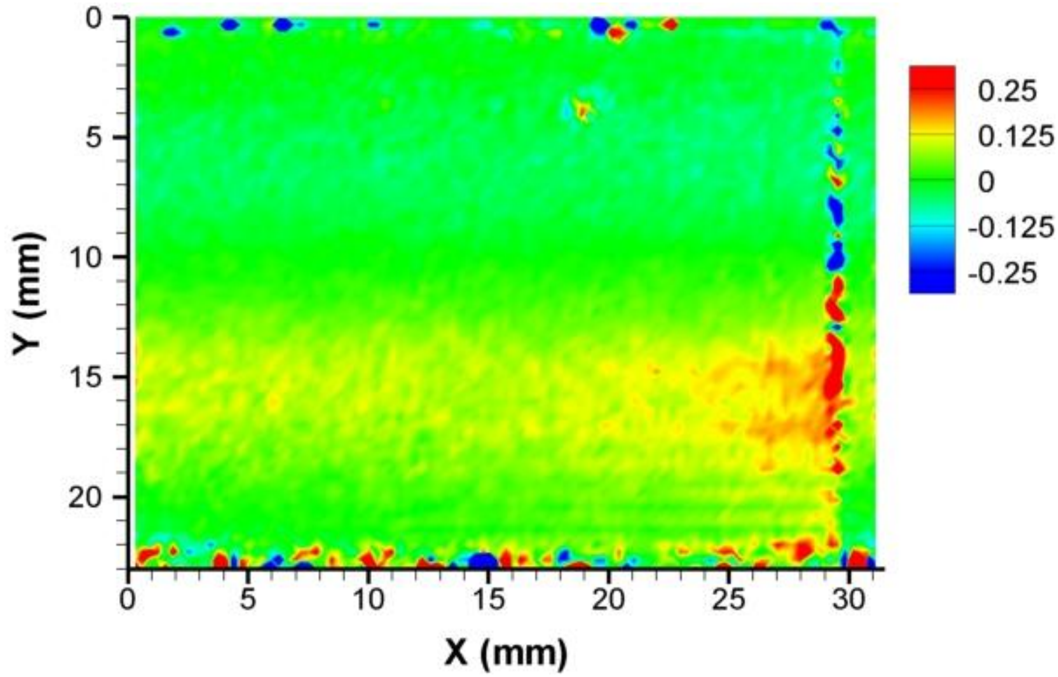

Fig. H-39 $\overline{u'v'}$**, Grid #2, L5, Plasma-150**

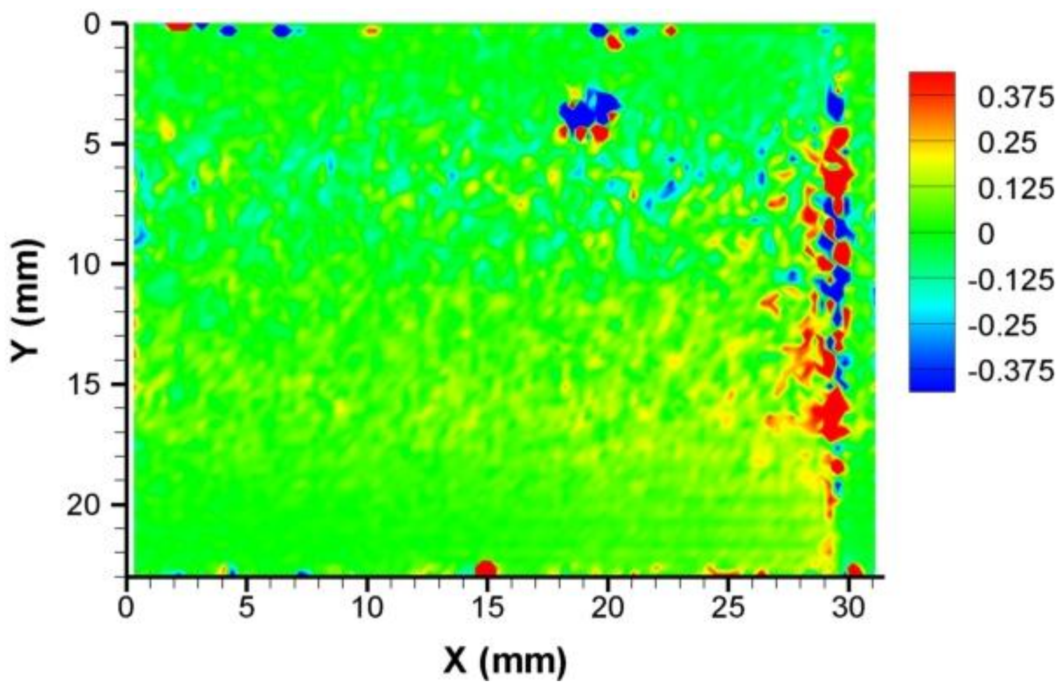

Fig. H-40 $\overline{u'v'}$**, Grid #2, L5, Plasma-300**

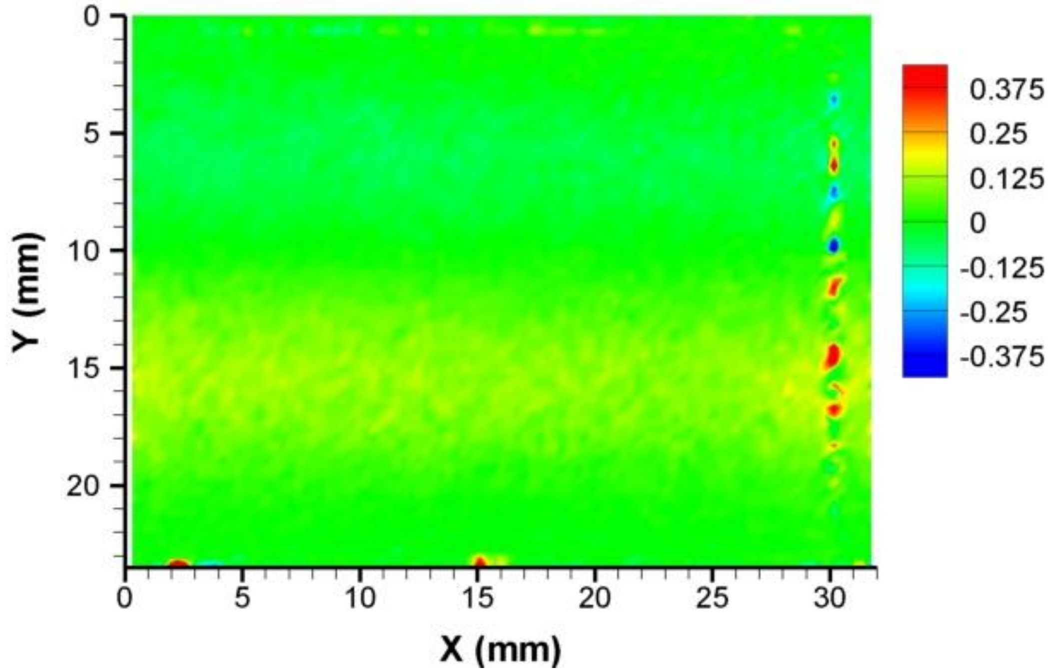

Fig. H-41 $\overline{u'v'}$**, Grid #2, L6, Plasma-Off**

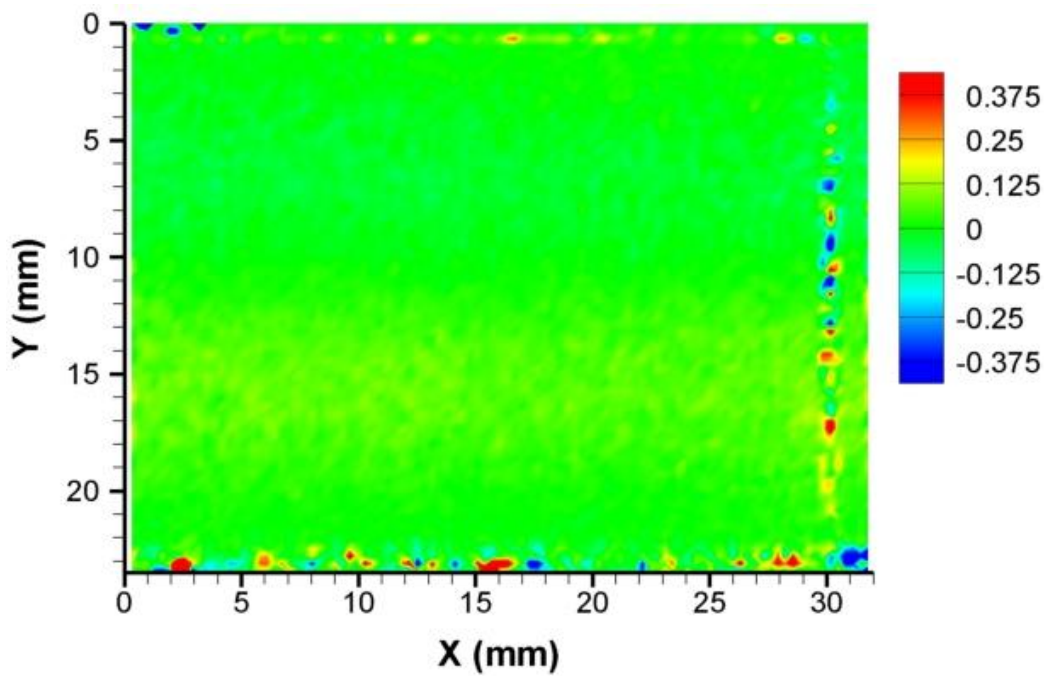

Fig. H-42 $\overline{u'v'}$**, Grid #2, L6, Plasma-150**

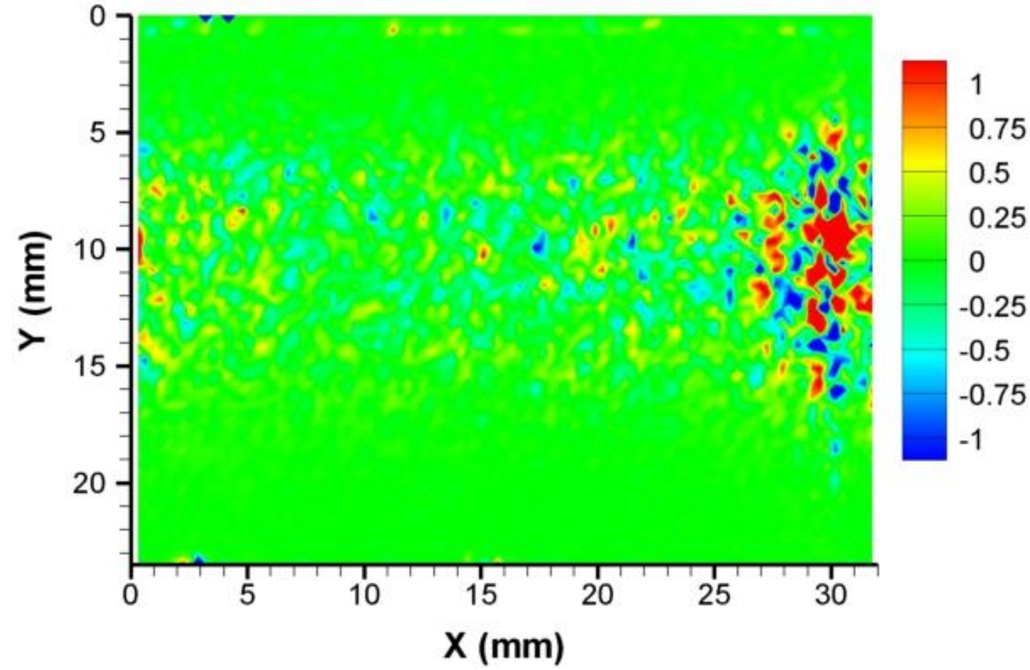

Fig. H-43 $\overline{u'v'}$**, Grid #2, L6, Plasma-300**

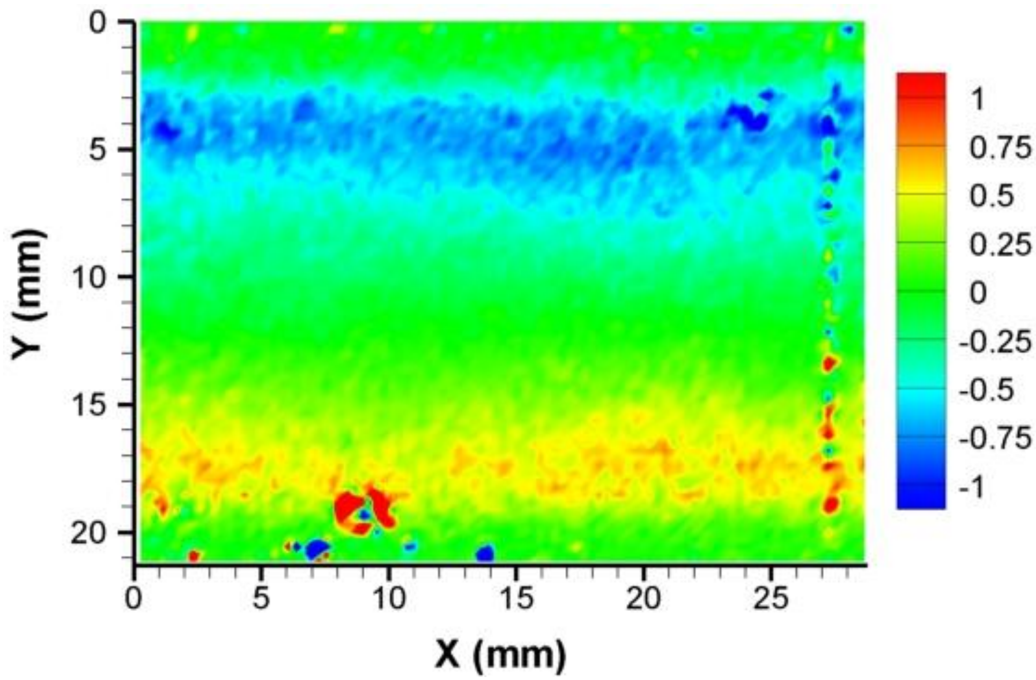

Fig. H-44 $\overline{u'v'}$**, Grid #1, L0, Plasma-150, Equilibrated**

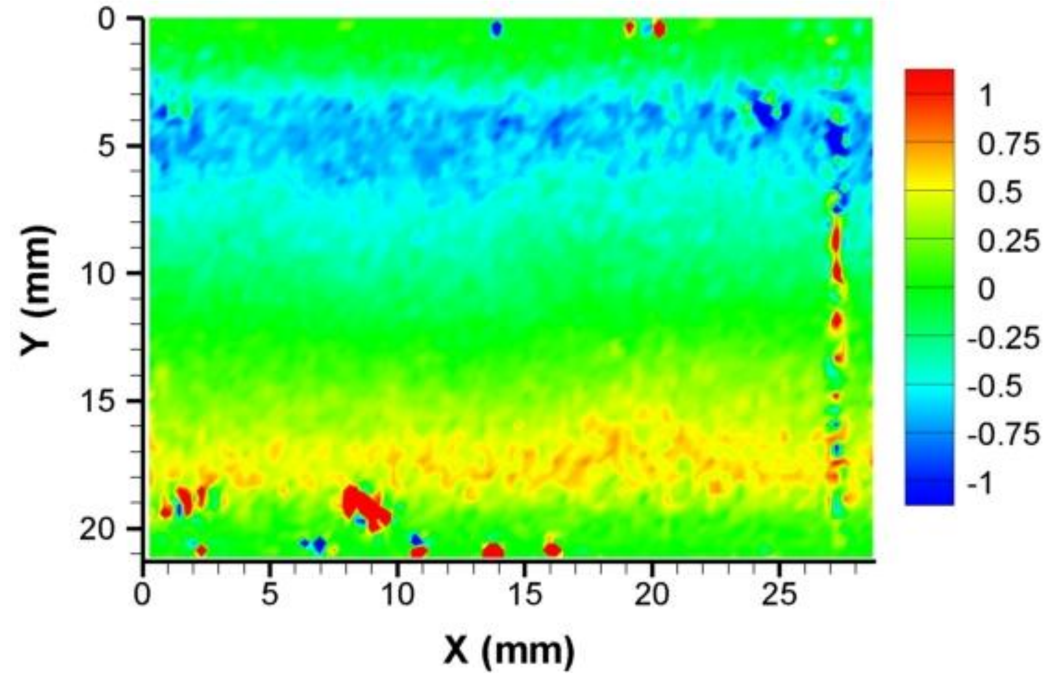

Fig. H-45 $\overline{u'v'}$**, Grid #1, L0, Plasma-300, Equilibrated**

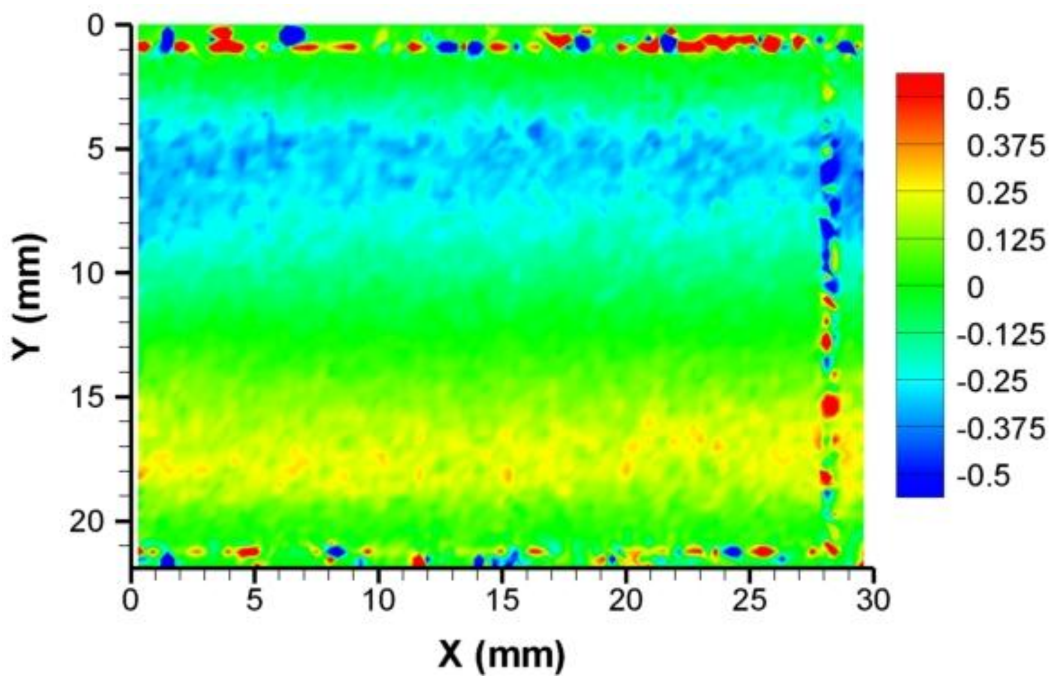

Fig. H-46 $\overline{u'v'}$**, Grid #1, L2, Plasma-150, Equilibrated**

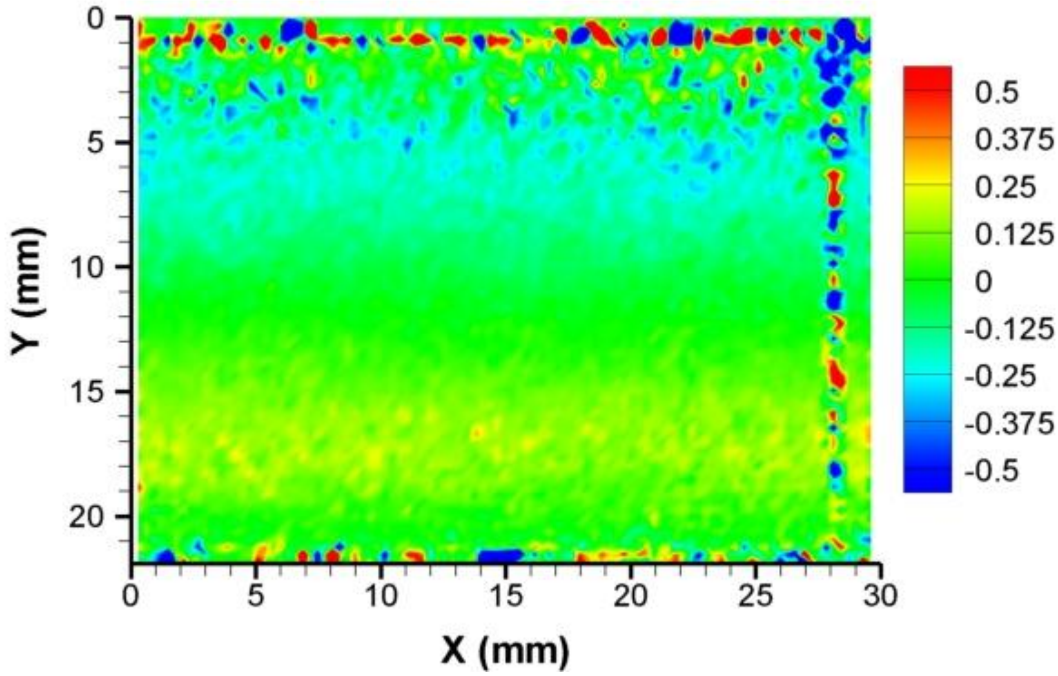

Fig. H-47 $\overline{u'v'}$, Grid #1, L2, Plasma-300, Equilibrated

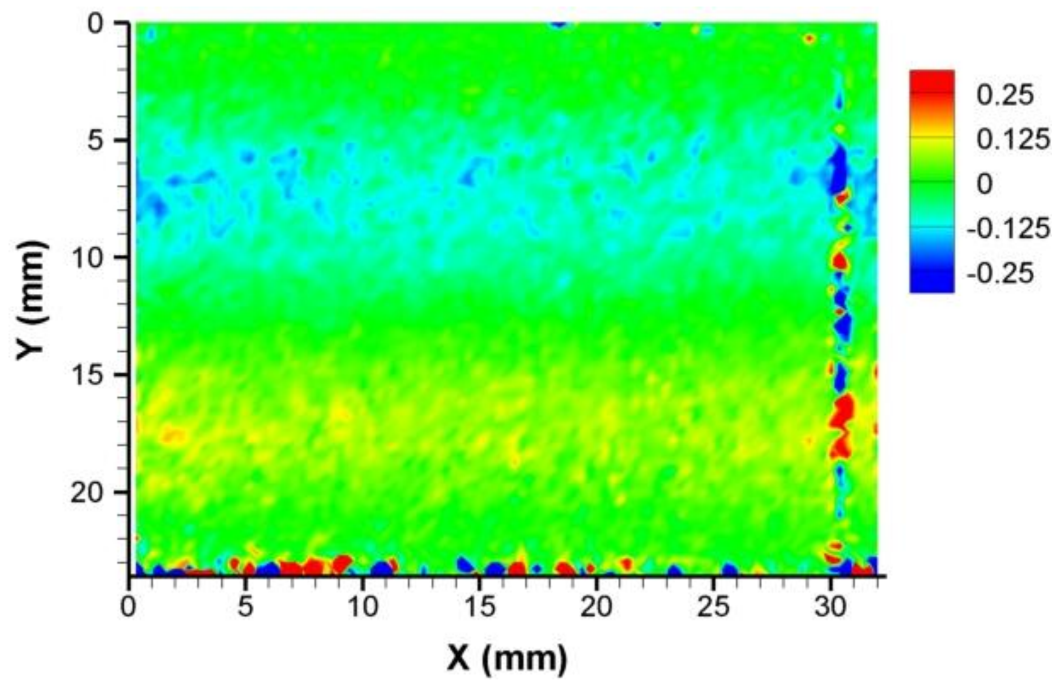

Fig. H-48 $\overline{u'v'}$, Grid #1, L5, Plasma-150, Equilibrated

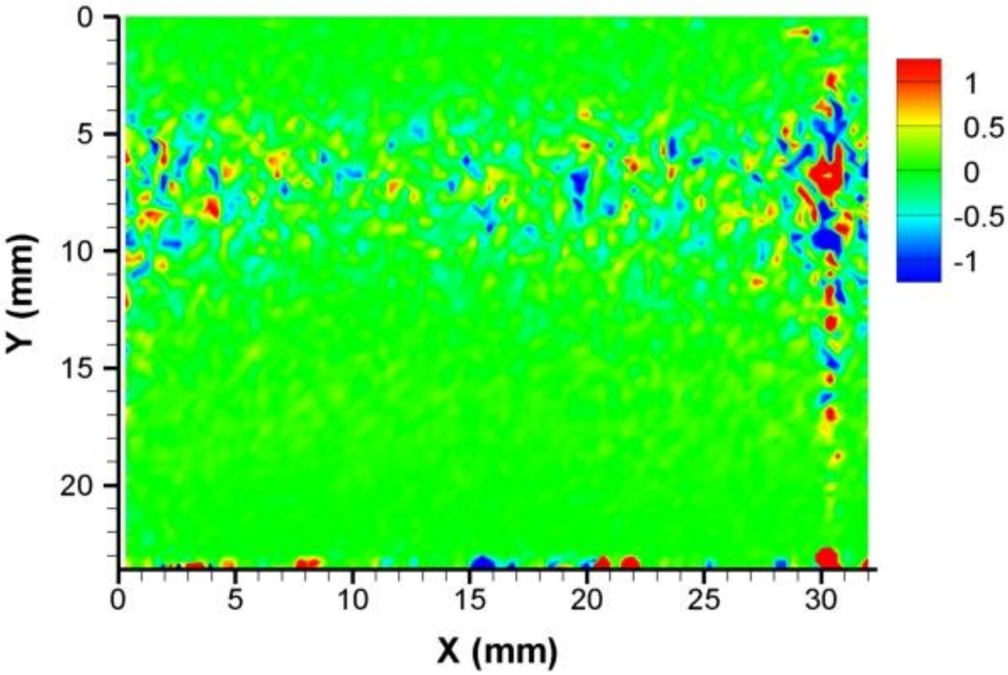

Fig. H-49 $\overline{u'v'}$**, Grid #1, L5, Plasma-300, Equilibrated**

APPENDIX I

PROFILE PLOTS

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FIGURE Page

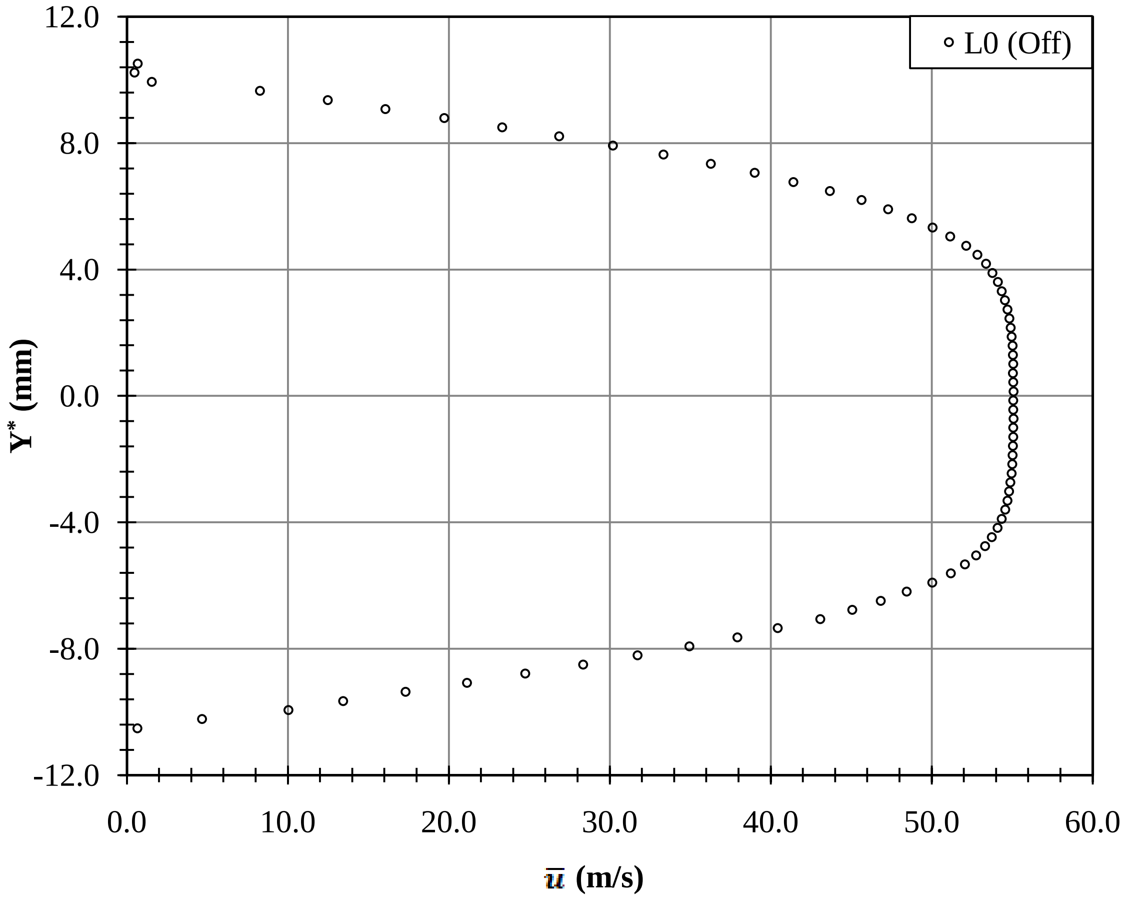

Fig. I-1 $\overline{u}$, No Grid, L0, Center (40-60)

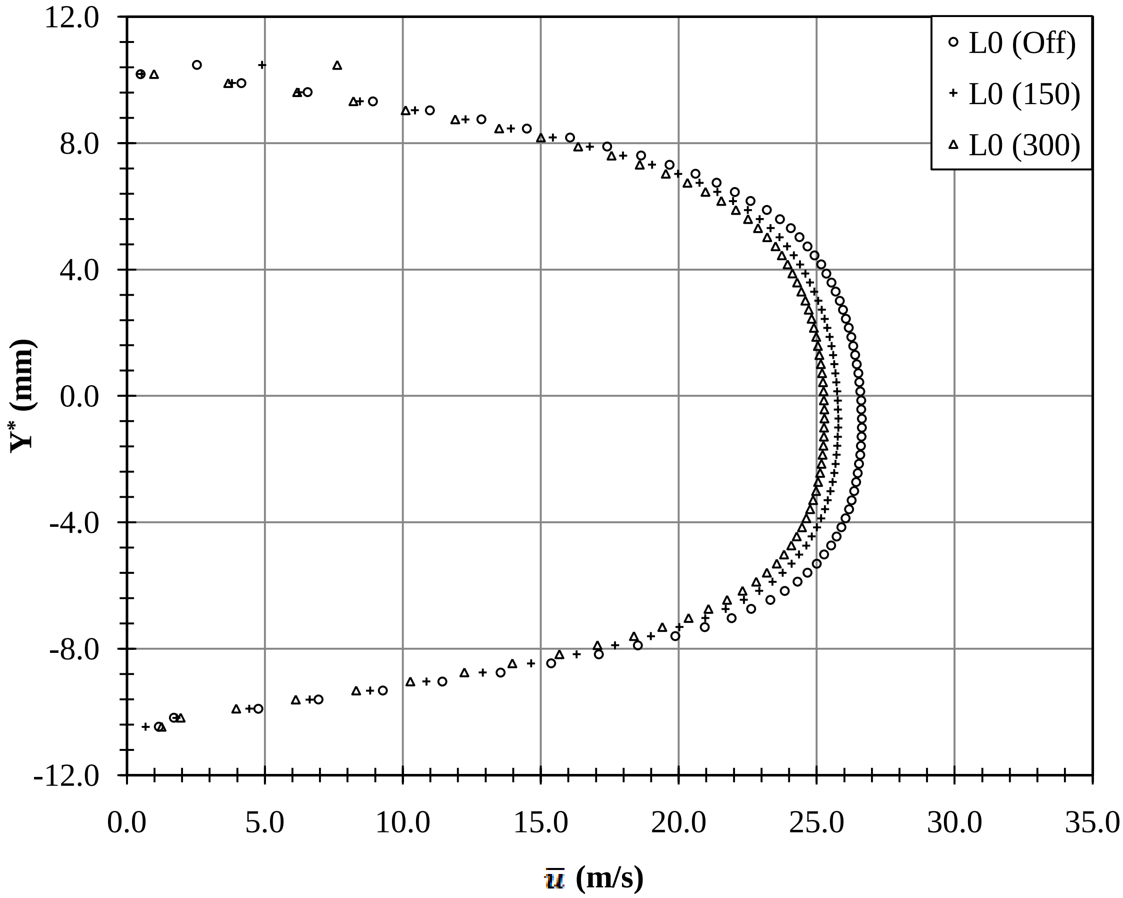

Fig. I-2 $\overline{u}$, Grid #1, L0, Left (1-10)

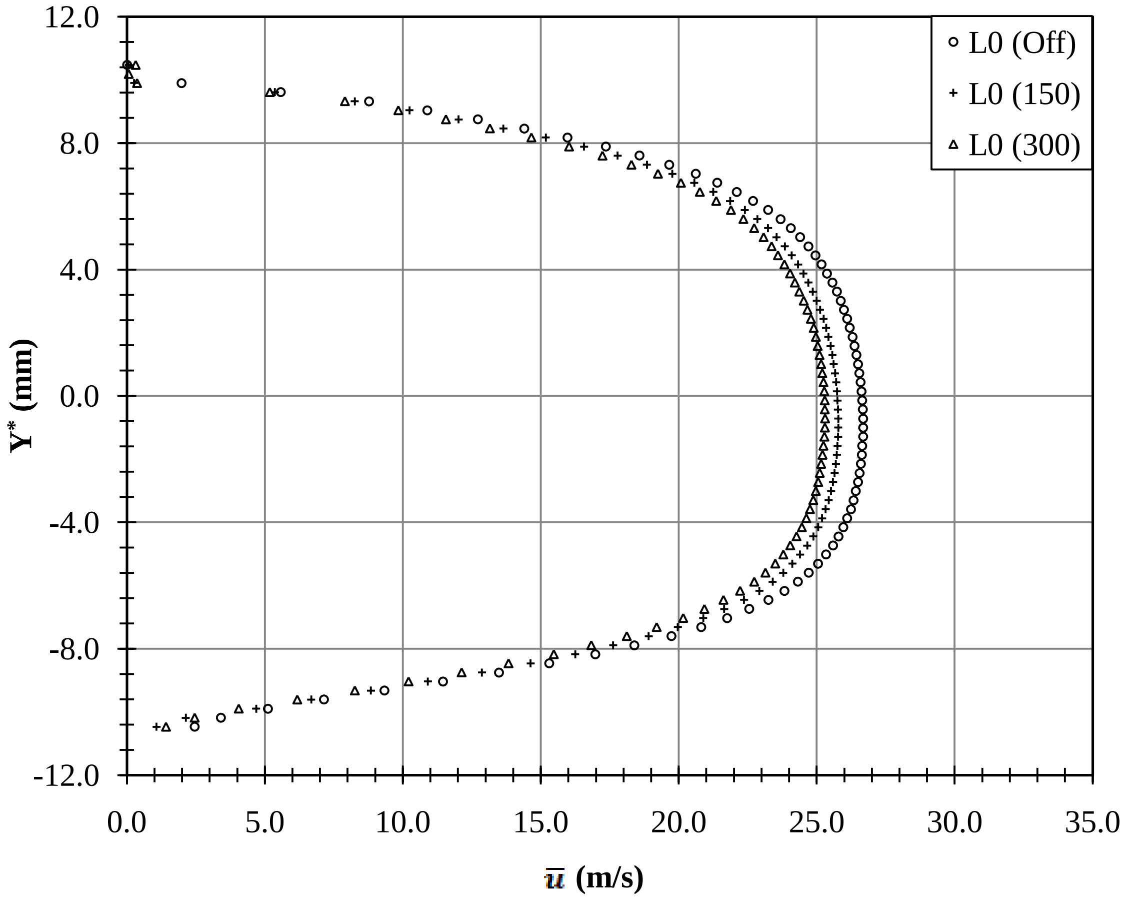

Fig. I-3 $\overline{u}$, Grid #1, L0, Center (46-55)

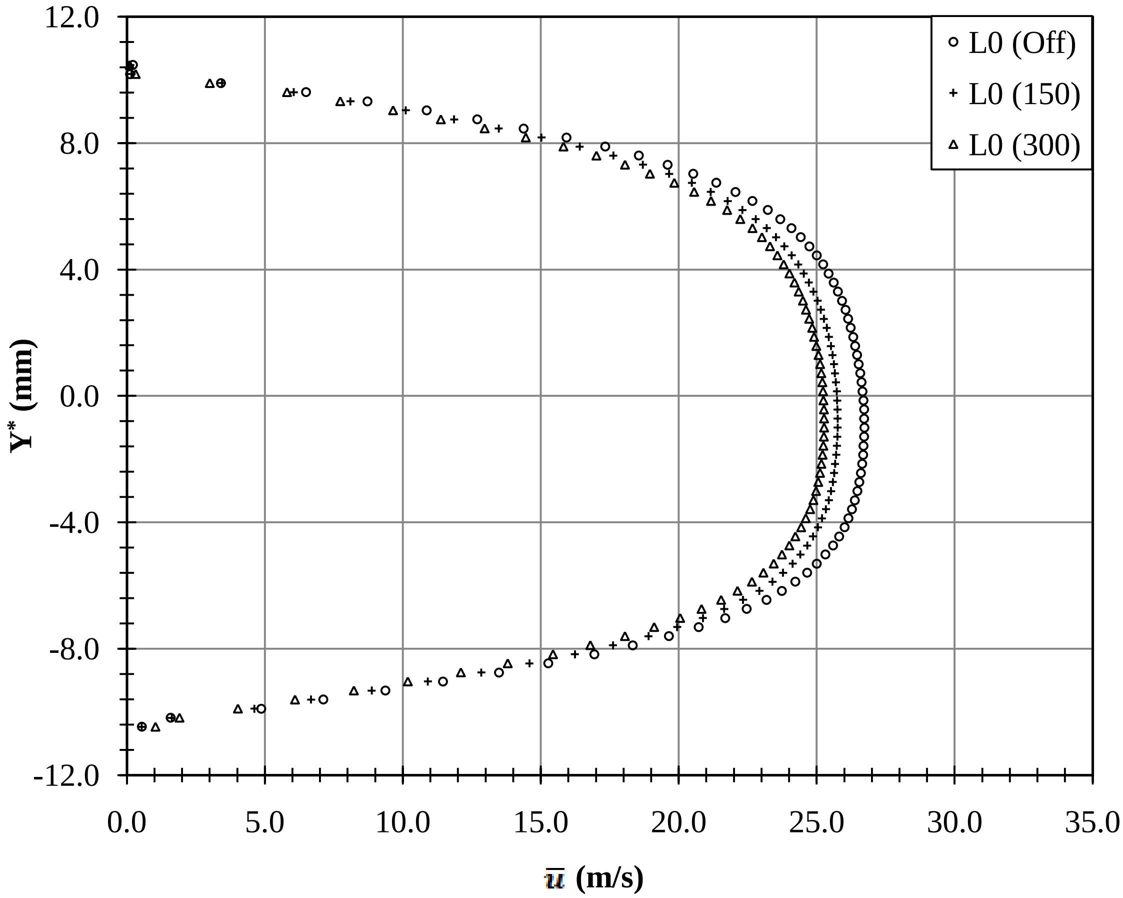

Fig. I-4 $\overline{u}$, Grid #1, L0, Right (71-80)

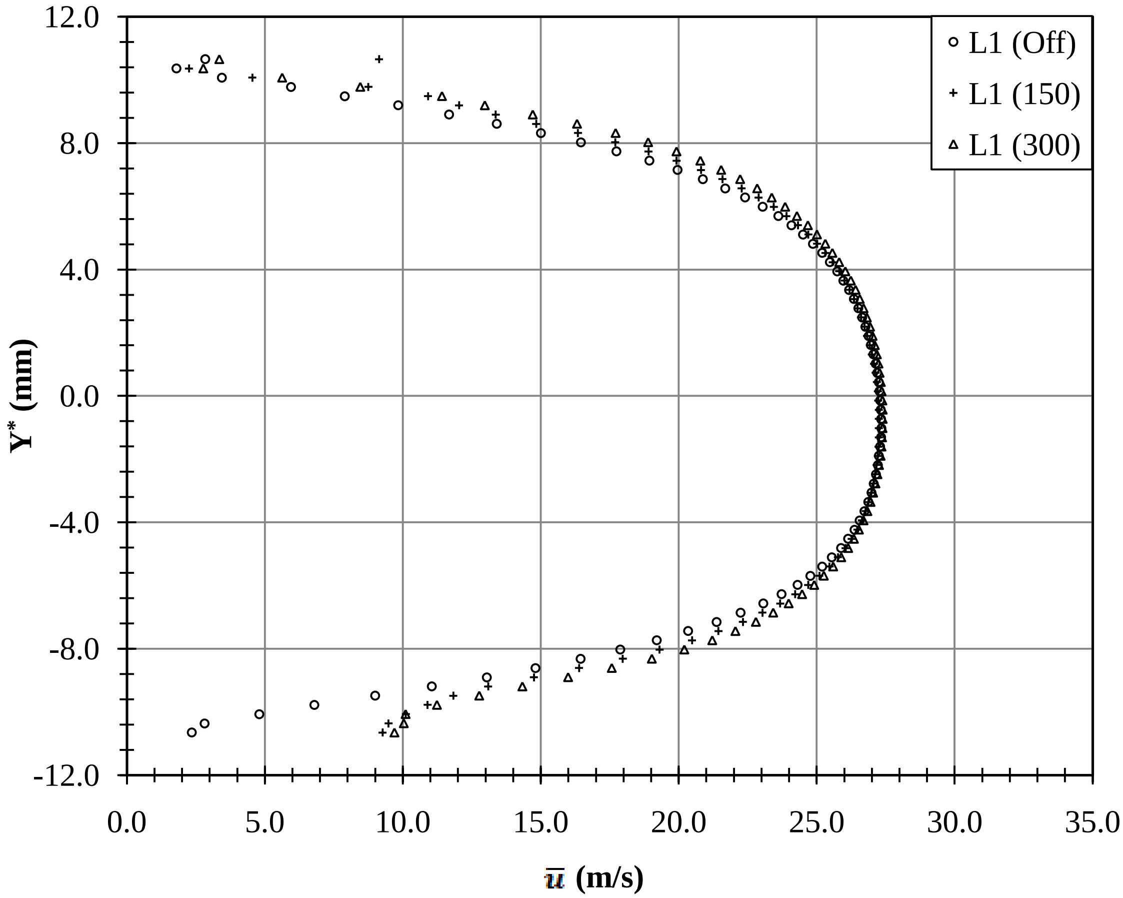

Fig. I-5 $\overline{u}$, Grid #1, L1, Left (1-10)

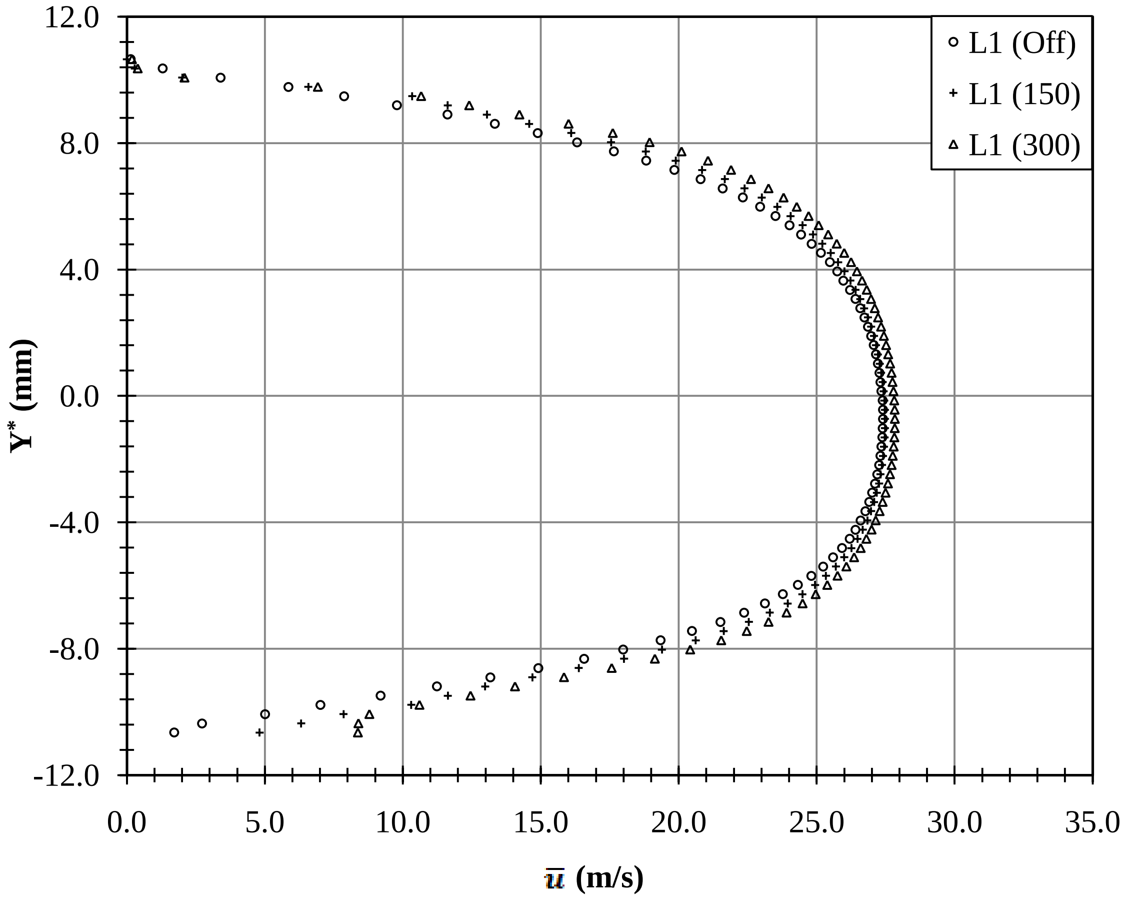

Fig. I-6 $\overline{u}$, Grid #1, L1, Center (46-55)

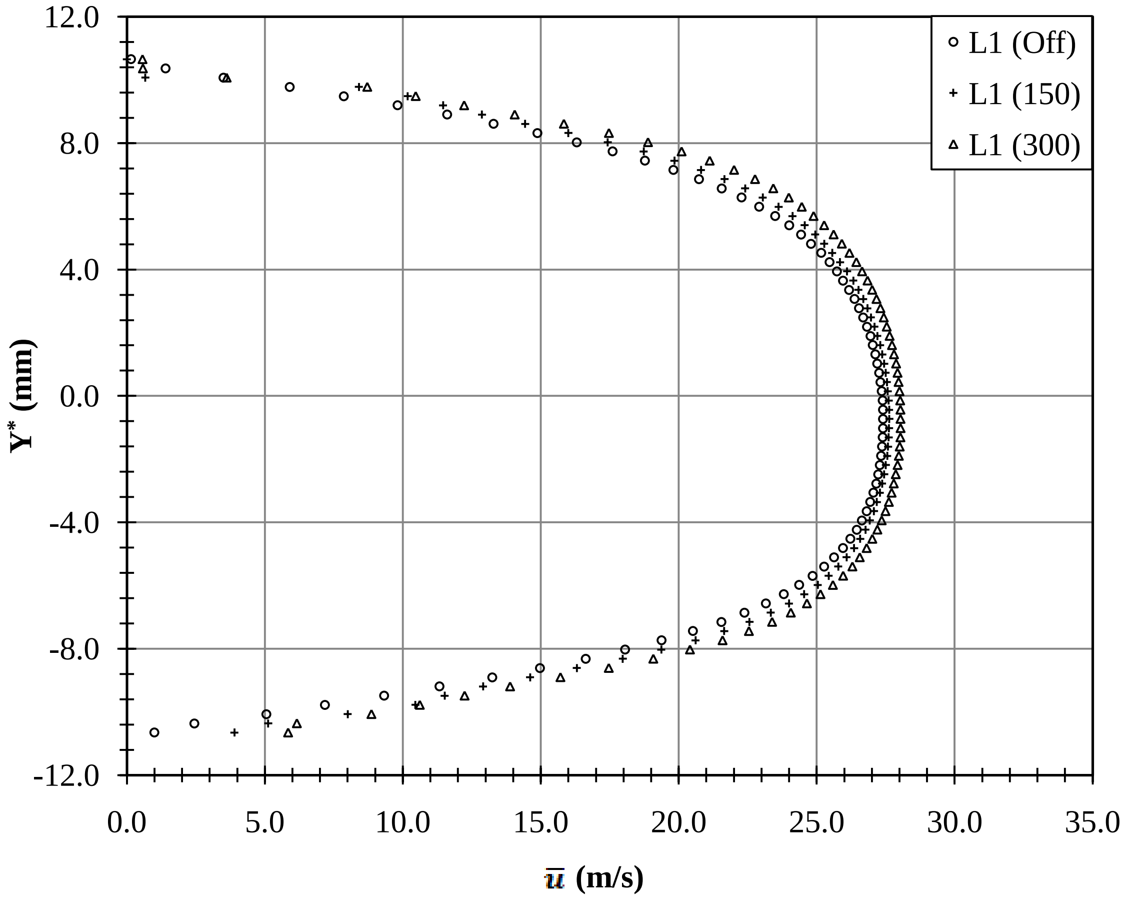

Fig. I-7 $\overline{u}$, Grid #1, L1, Right (71-80)

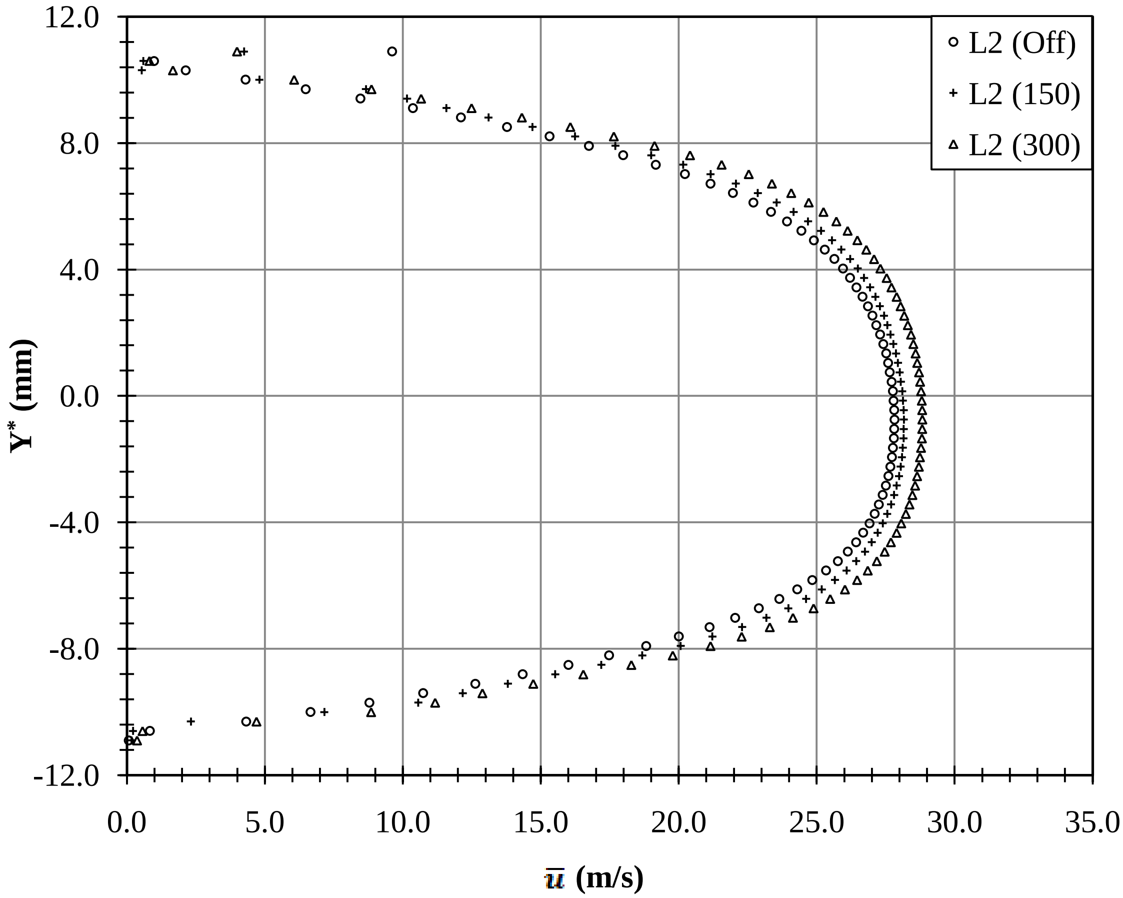

Fig. I-8 $\overline{u}$, Grid #1, L2, Left (1-10)

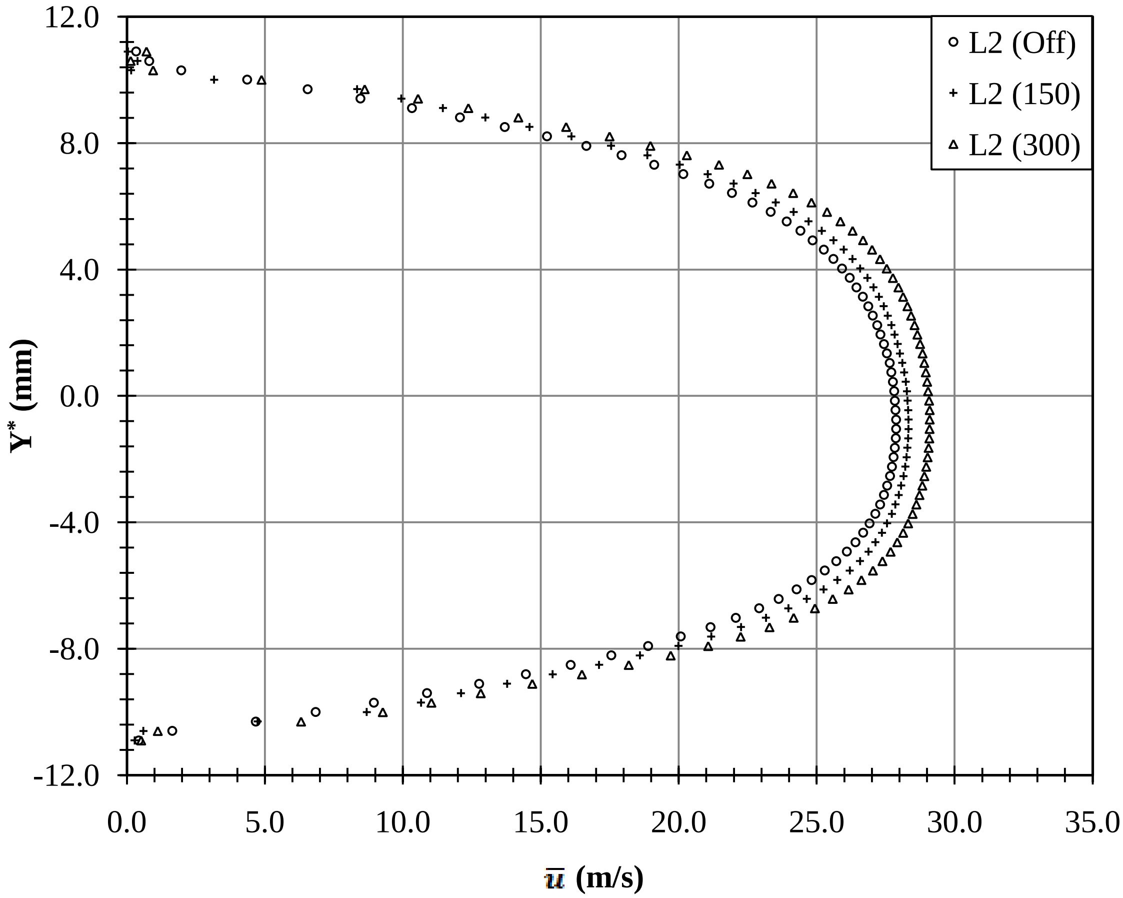

Fig. I-9 $\bar{u}$, Grid #1, L2, Center (46-55)

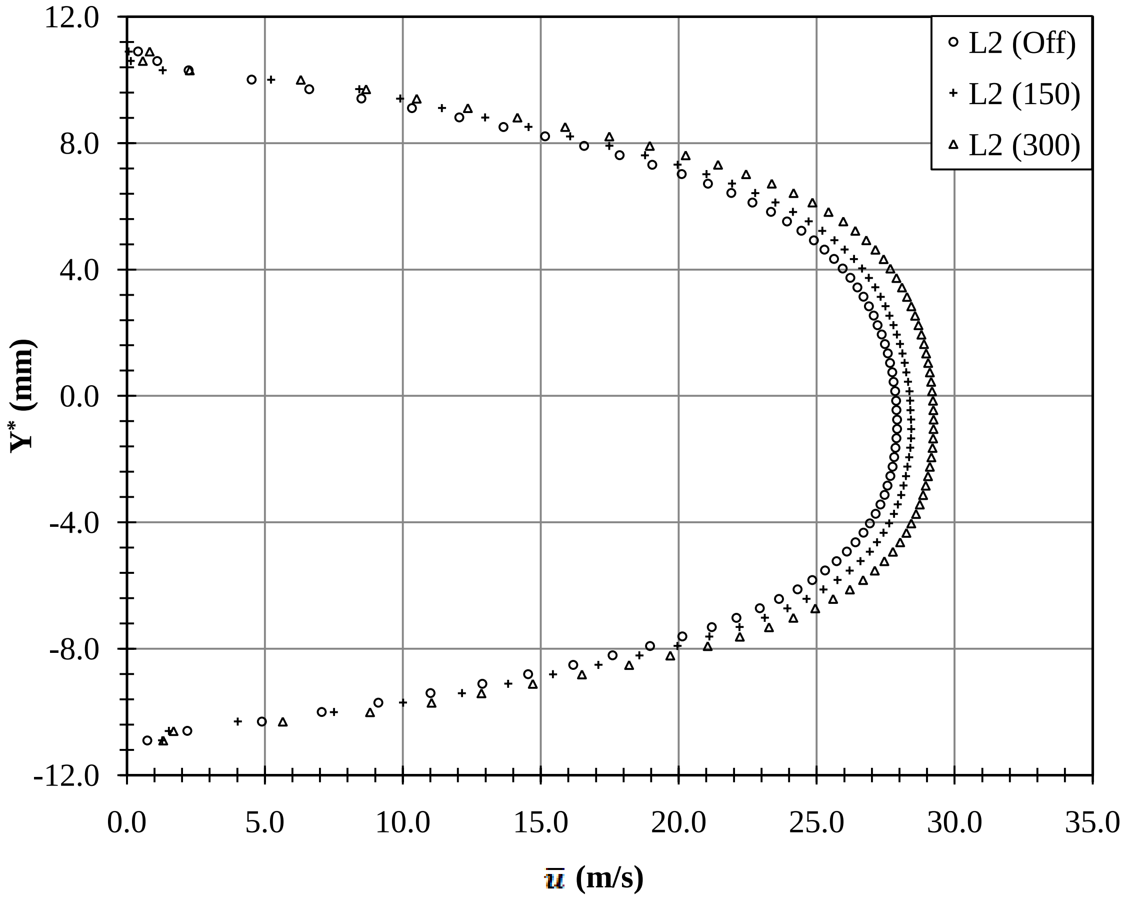

Fig. I-10 $\overline{u}$, Grid #1, L2, Right (71-80)

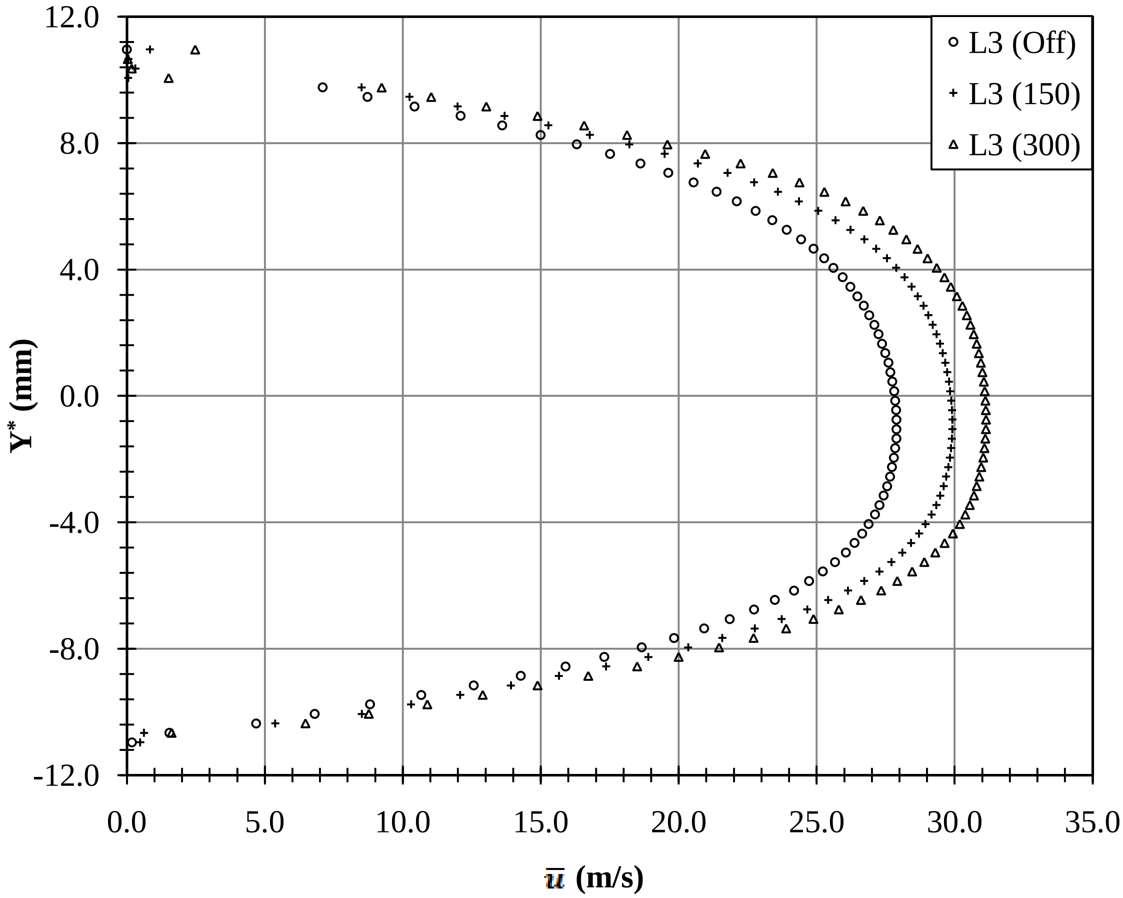

Fig. I-11 $\overline{u}$, Grid #1, L3, Left (1-10)

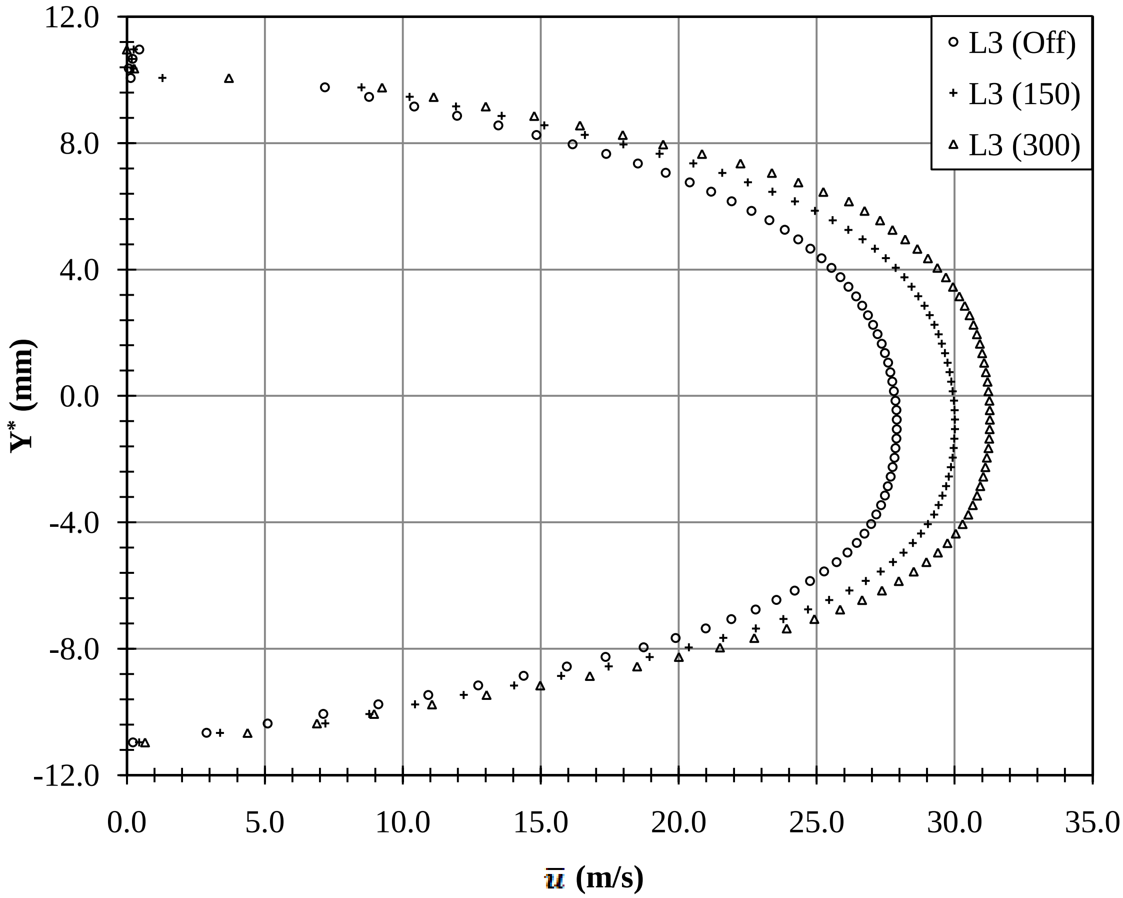

Fig. I-12 $\overline{u}$, Grid #1, L3, Center (46-55)

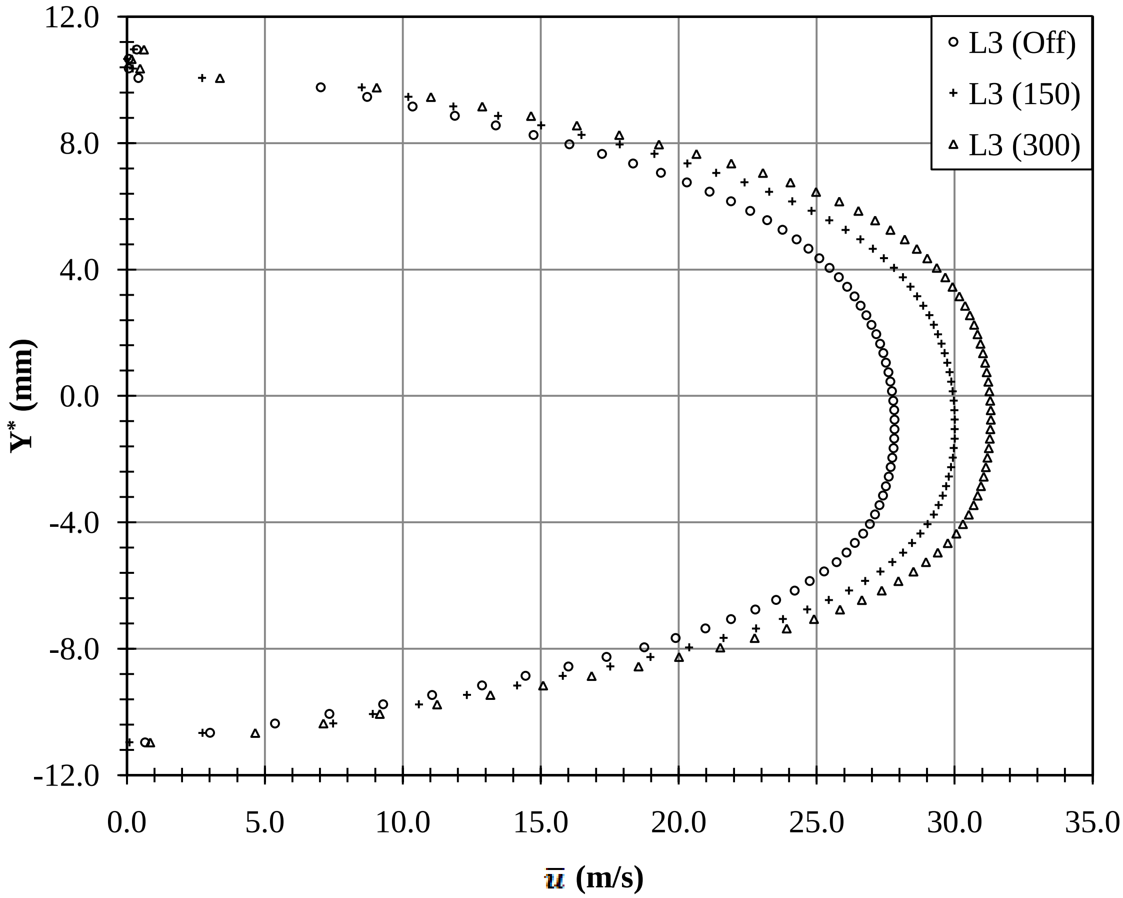

Fig. I-13 $\bar{u}$, Grid #1, L3, Right (71-80)

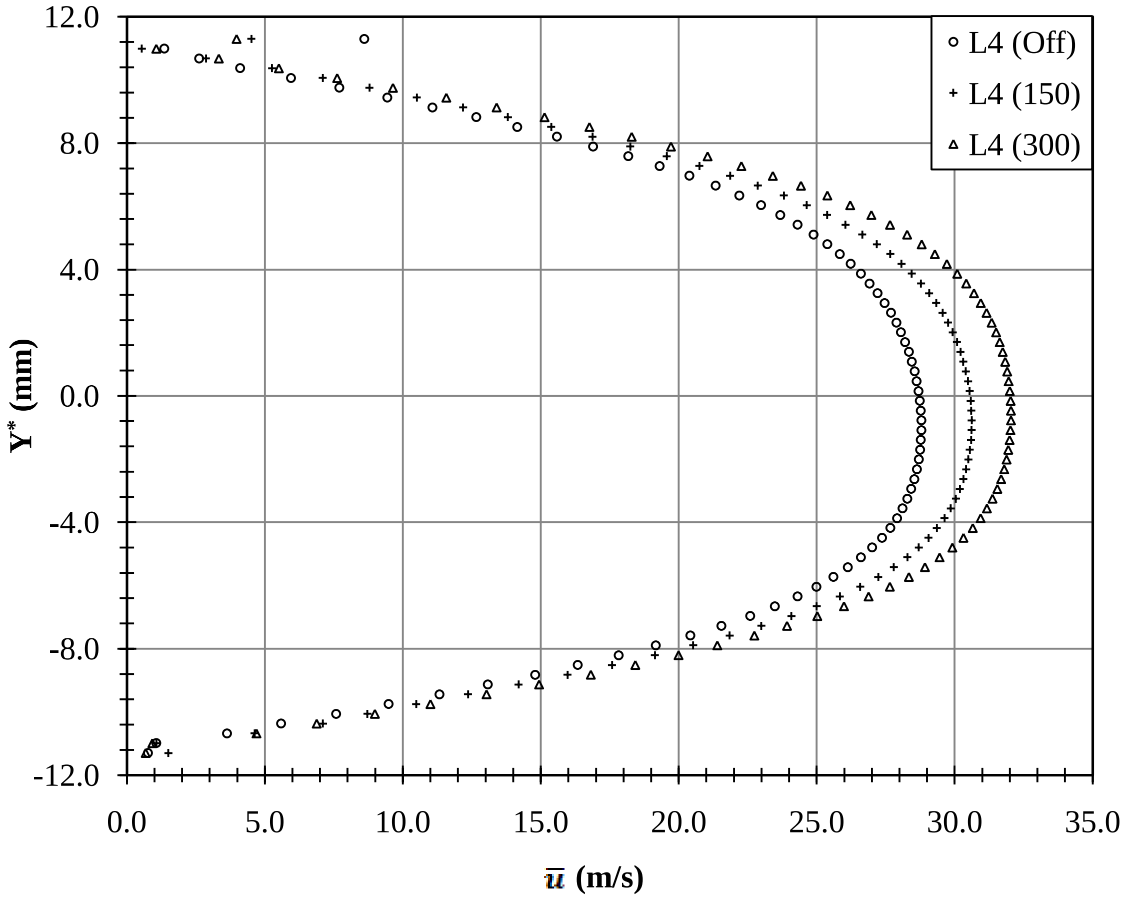

Fig. I-14 $\overline{u}$, Grid #1, L4, Left (1-10)

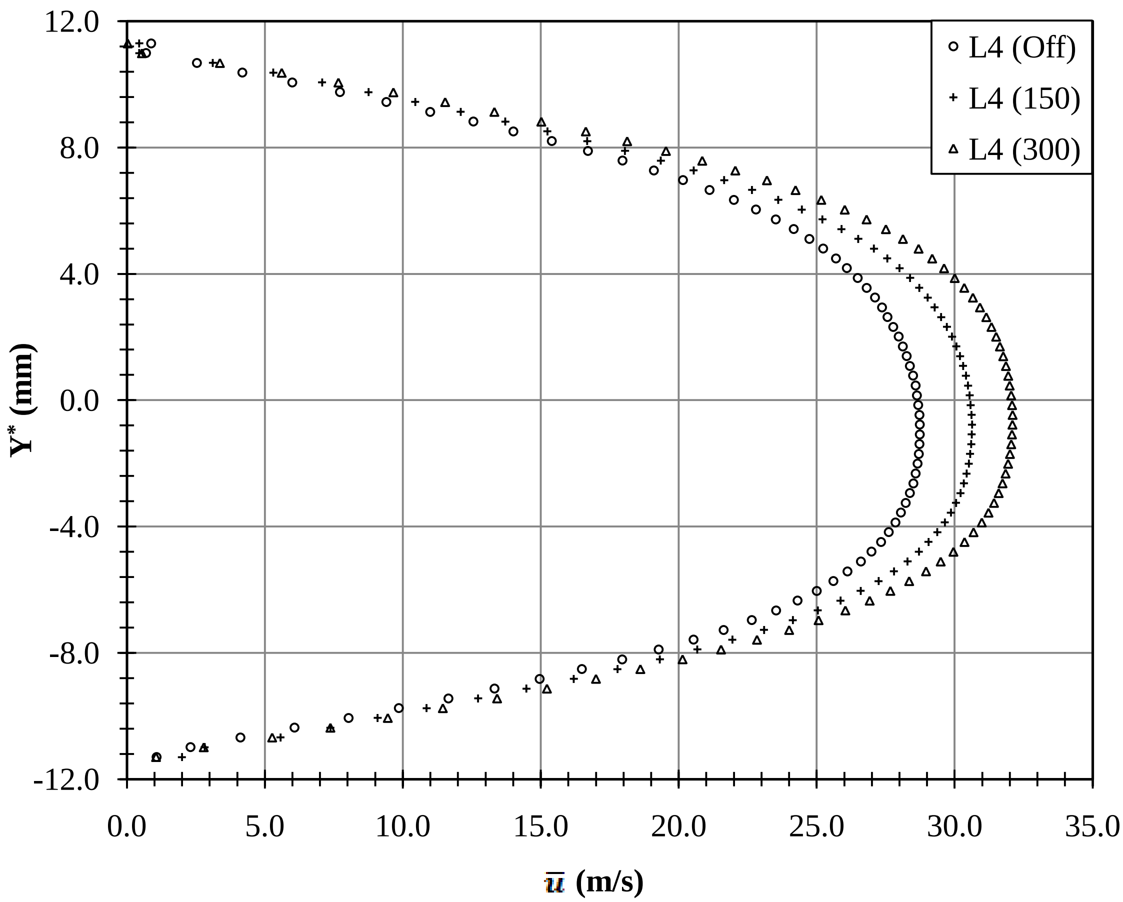

Fig. I-15 $\overline{u}$, Grid #1, L4, Center (46-55)

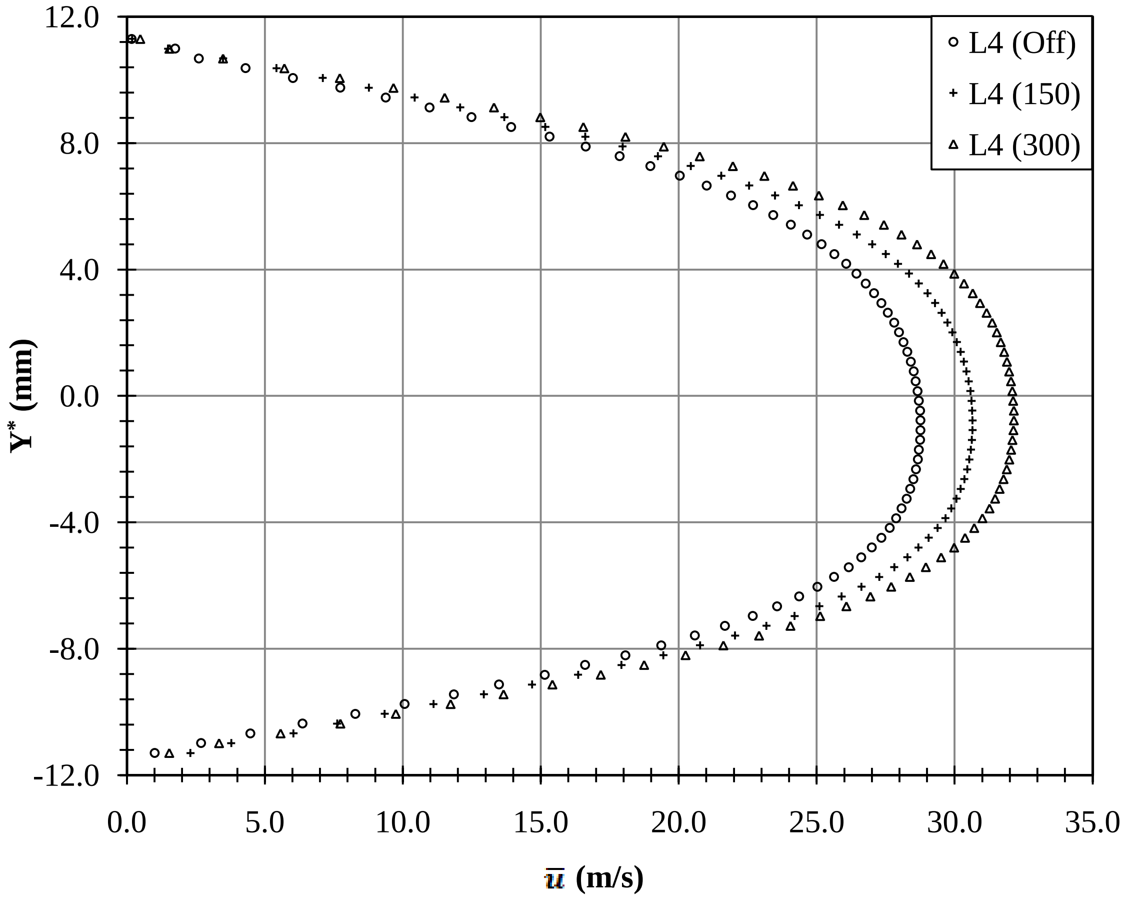

Fig. I-16 $\overline{u}$, Grid #1, L4, Right (71-80)

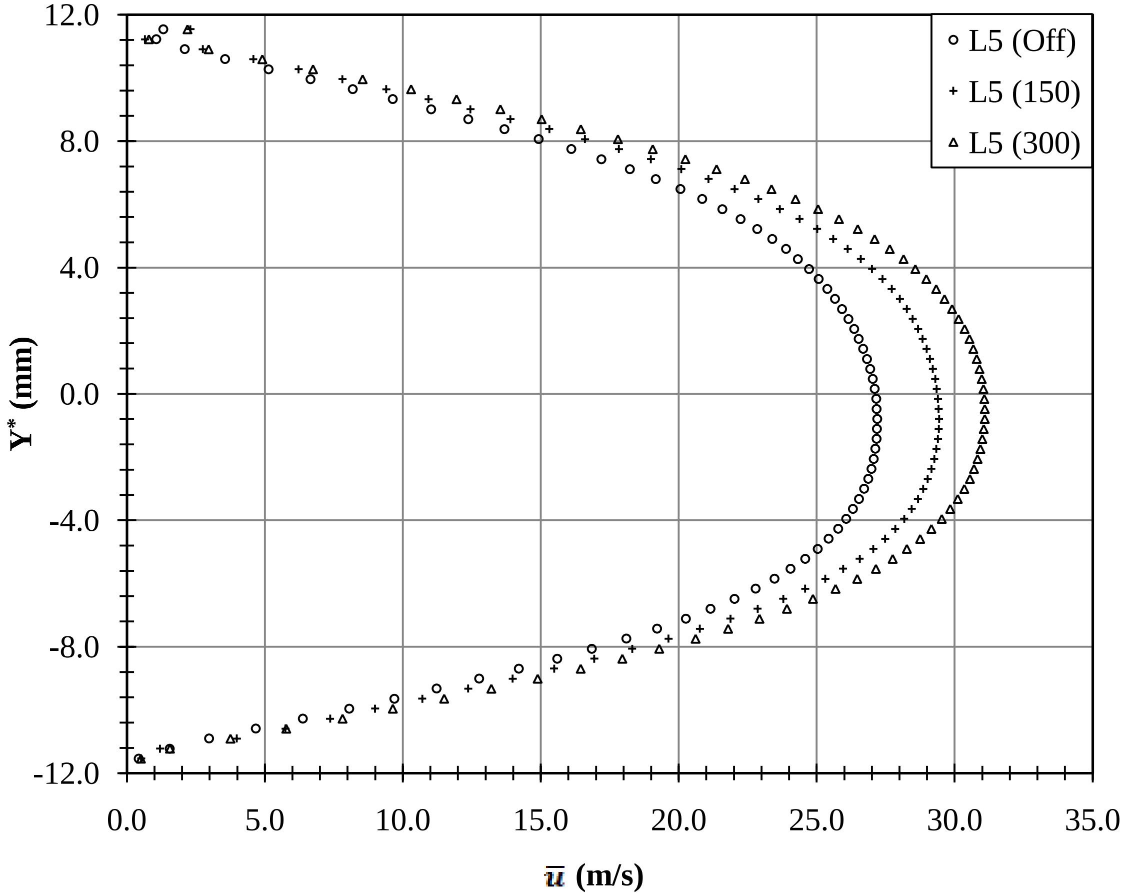

Fig. I-17 $\overline{u}$, Grid #1, L5, Left (1-10)

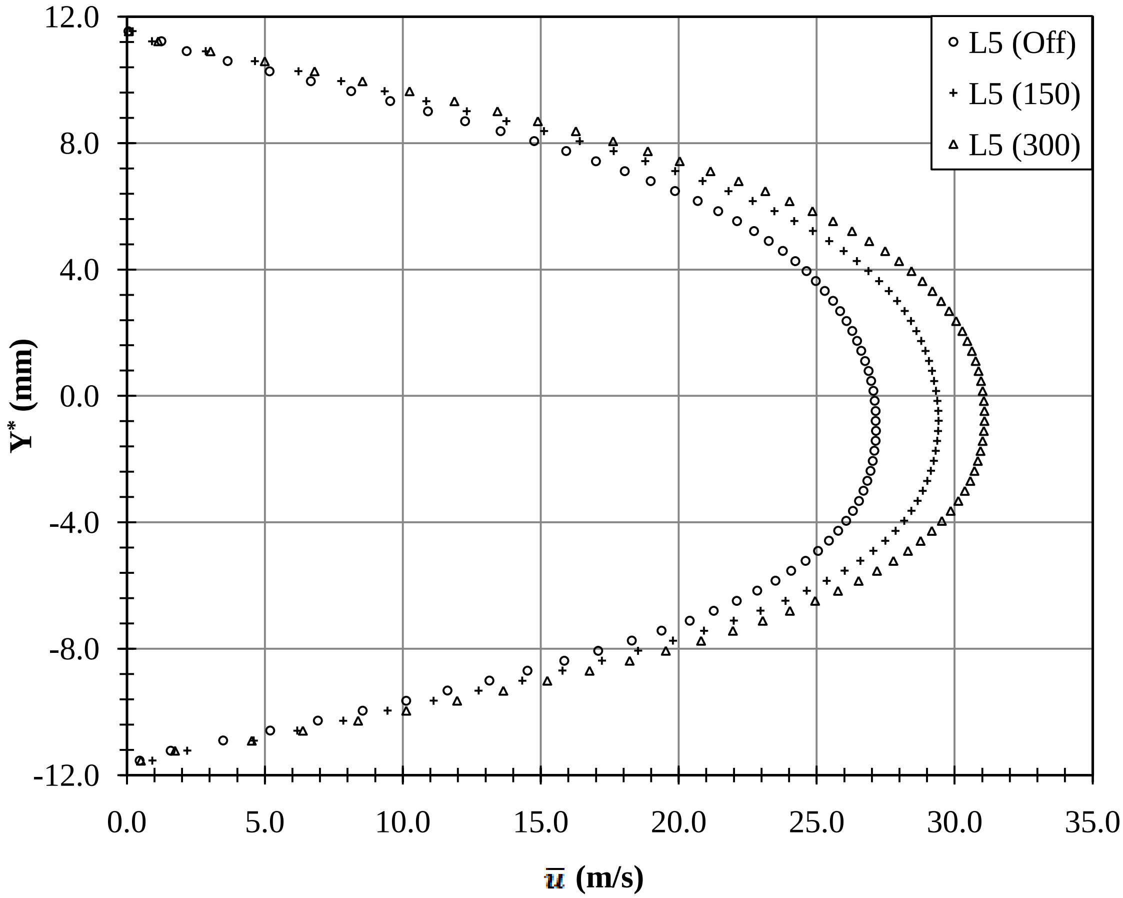

Fig. I-18 $\overline{u}$, Grid #1, L5, Center (46-55)

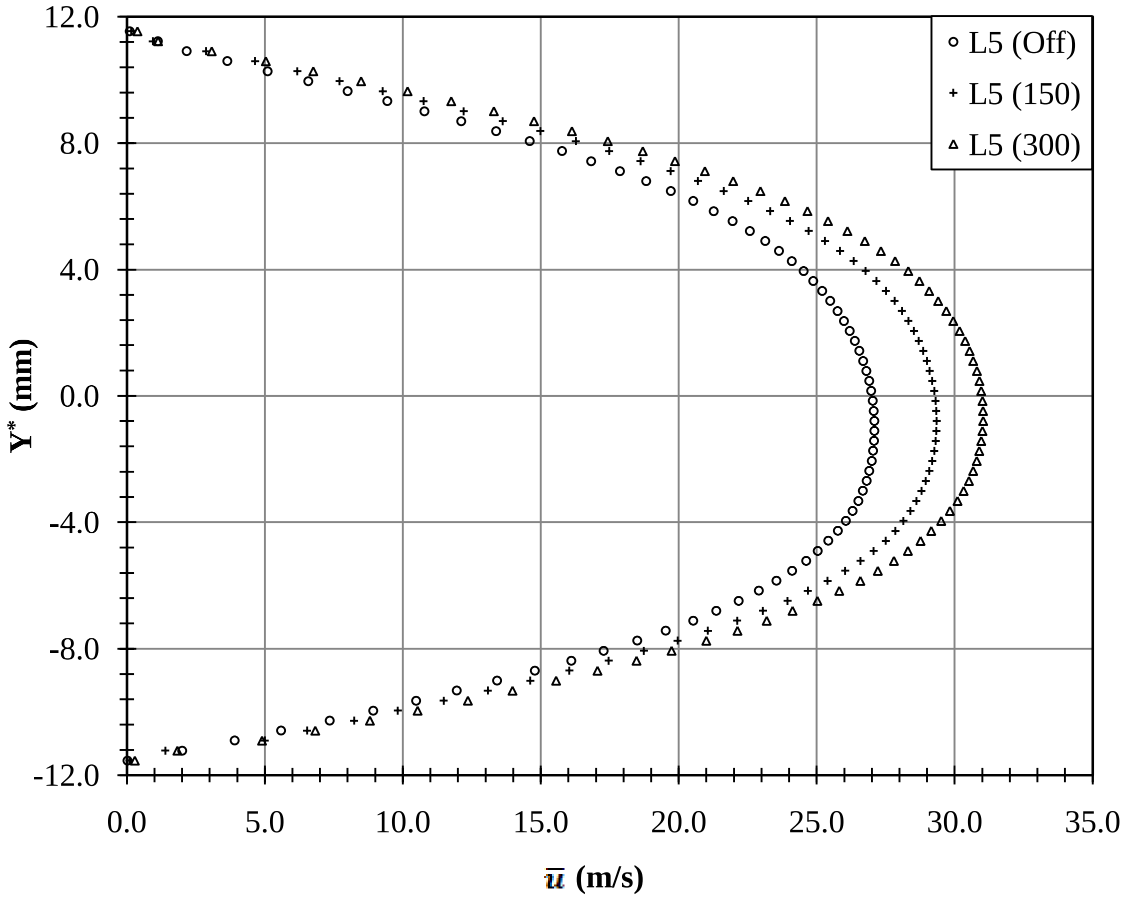

Fig. I-19 $\bar{u}$, Grid #1, L5, Right (71-80)

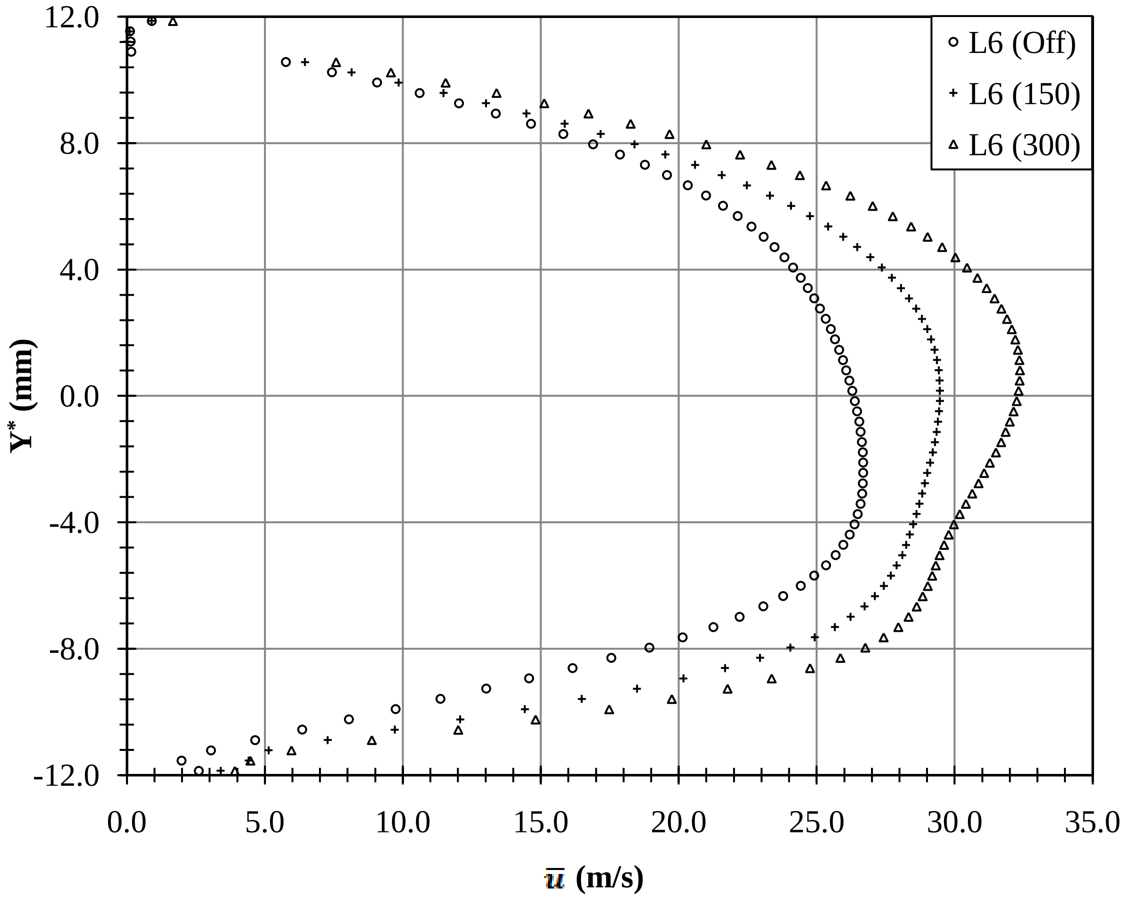

Fig. I-20 $\bar{u}$, Grid #1, L6, Left (1-10)

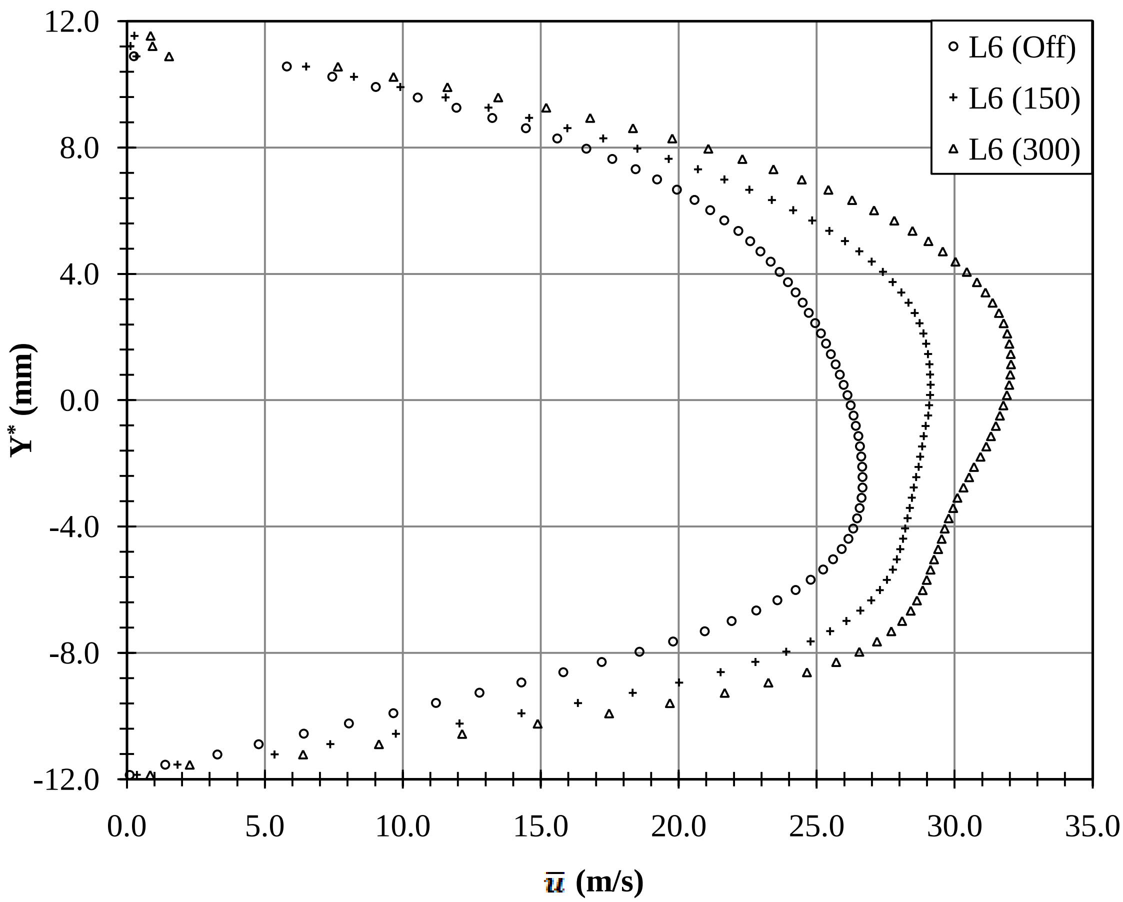

Fig. I-21 $\overline{u}$, Grid #1, L6, Center (46-55)

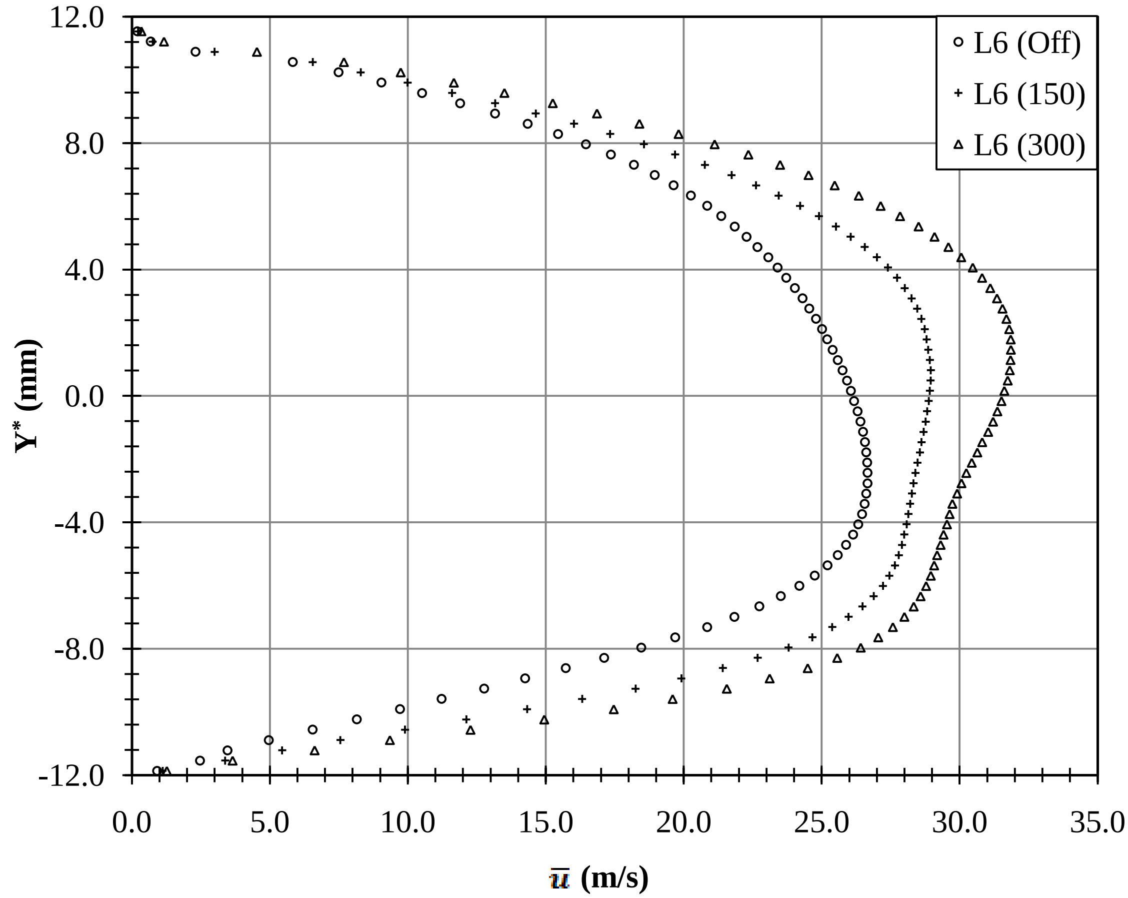

Fig. I-22 $\overline{u}$, Grid #1, L6, Right (71-80)

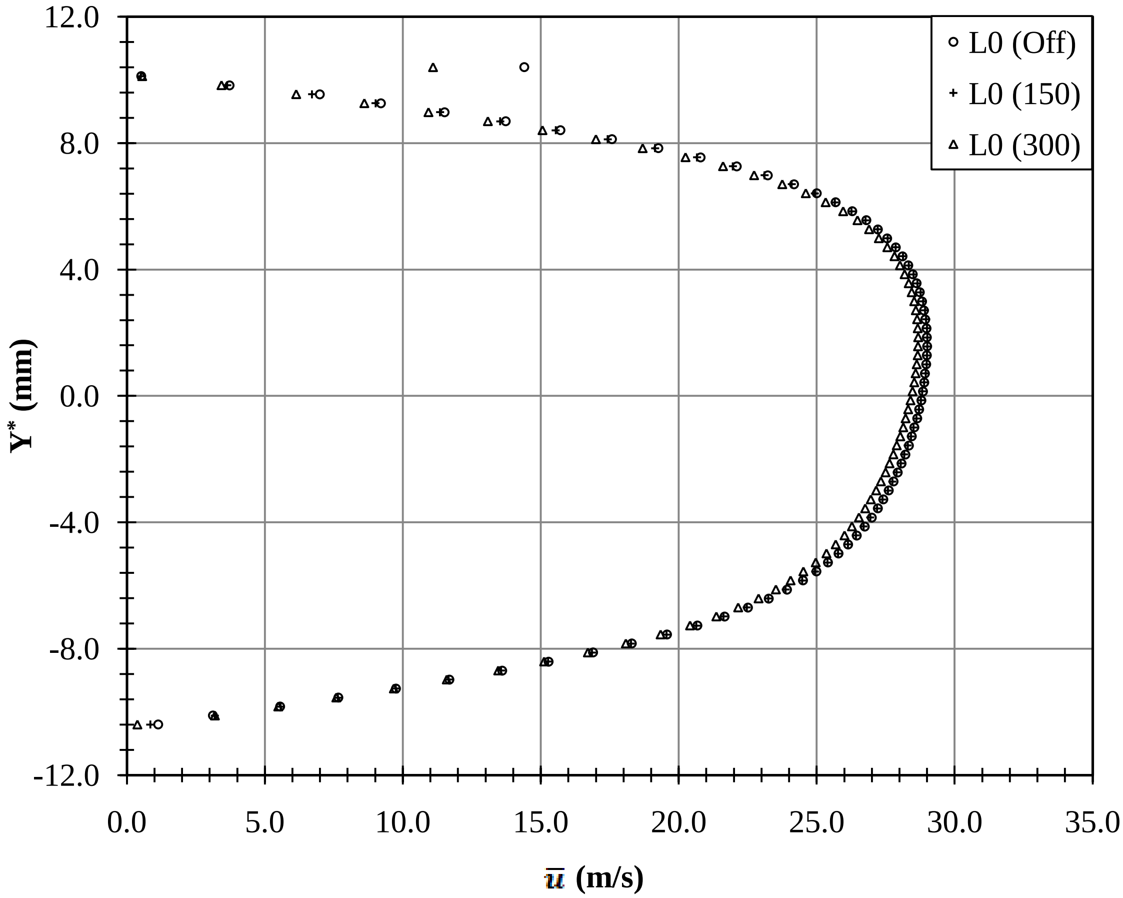

Fig. I-23 $\overline{u}$, Grid #2, L0, Left (1-10)

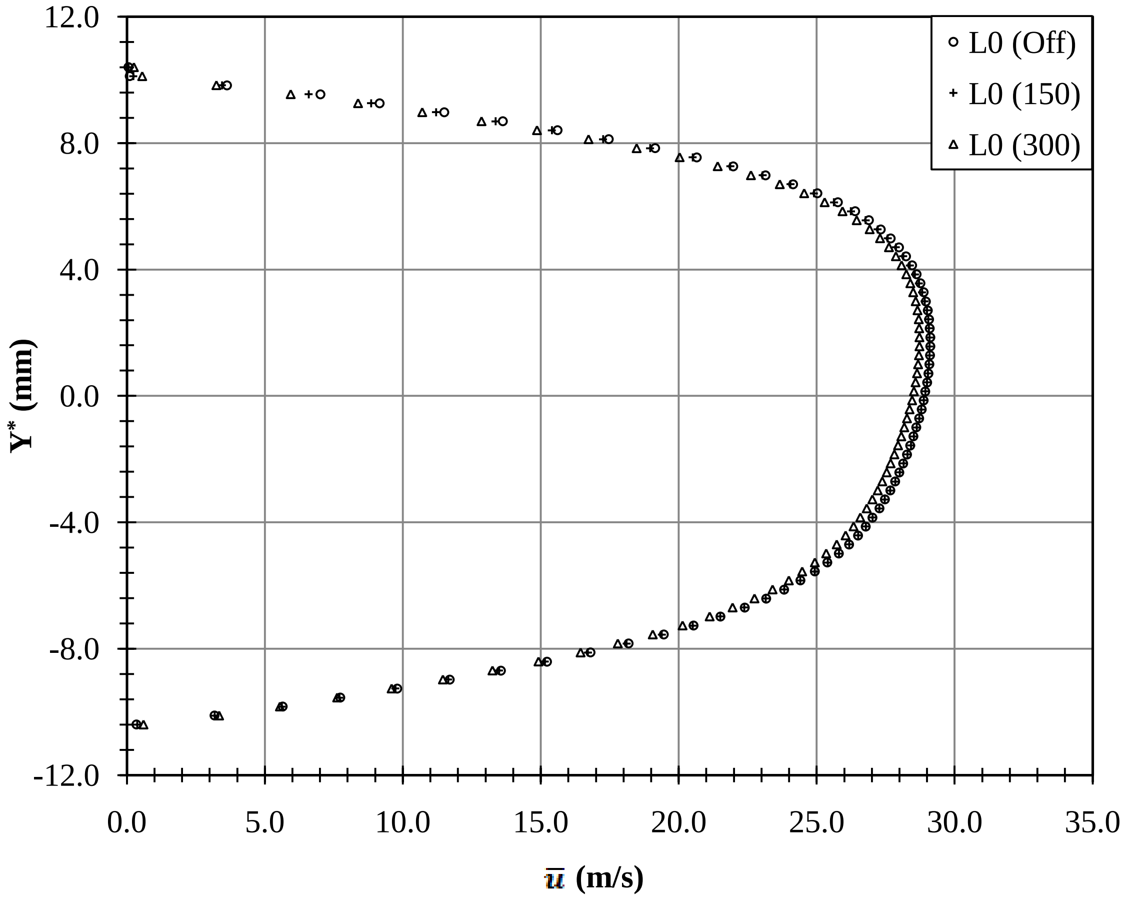

Fig. I-24 $\overline{u}$, Grid #2, L0, Center (46-55)

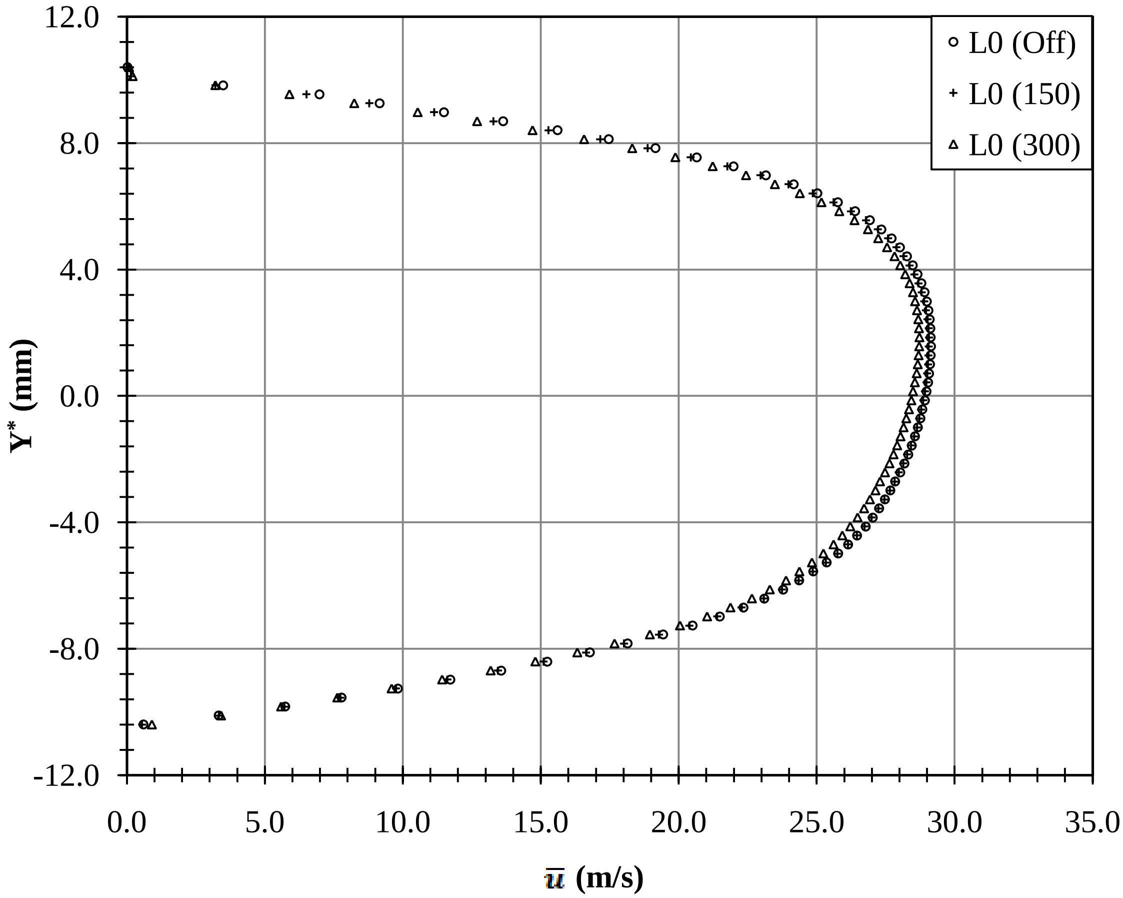

Fig. I-25 $\overline{u}$, Grid #2, L0, Right (71-80)

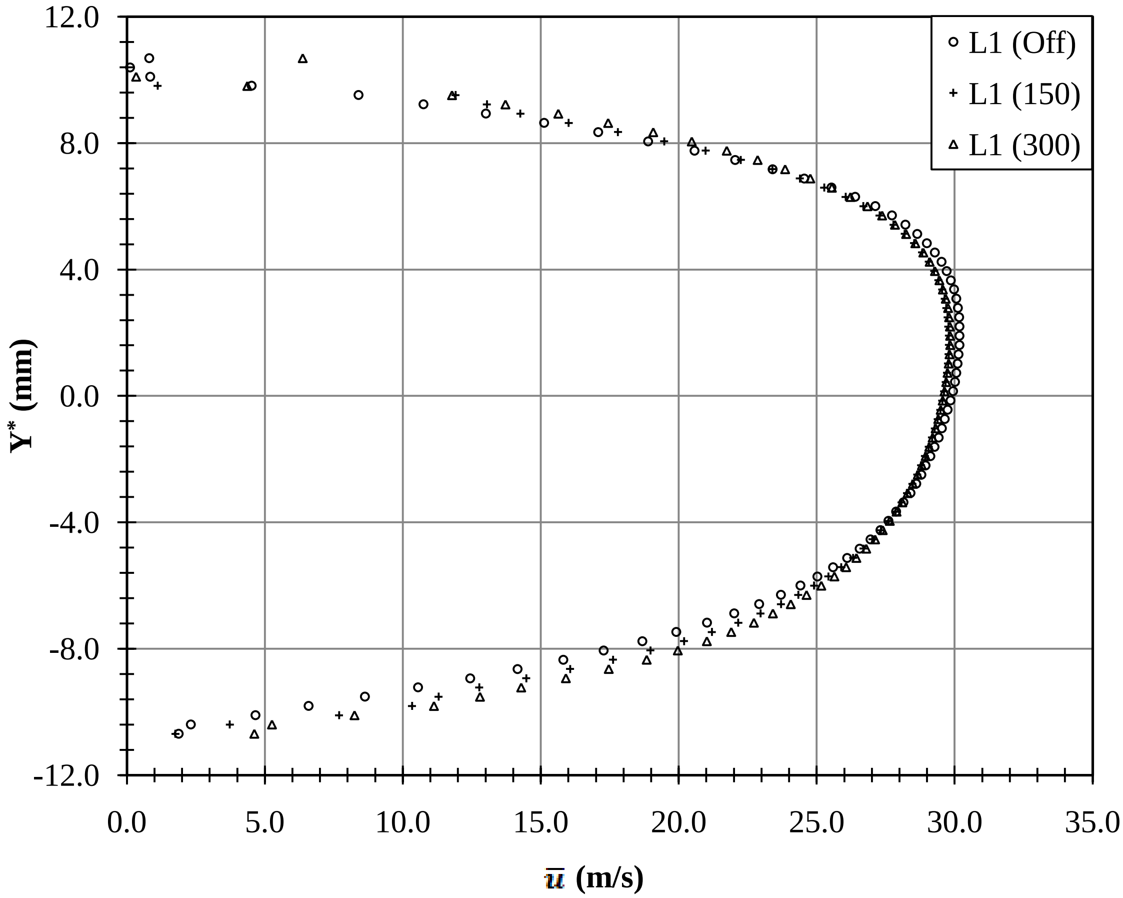

Fig. I-26 $\overline{u}$, Grid #2, L1, Left (1-10)

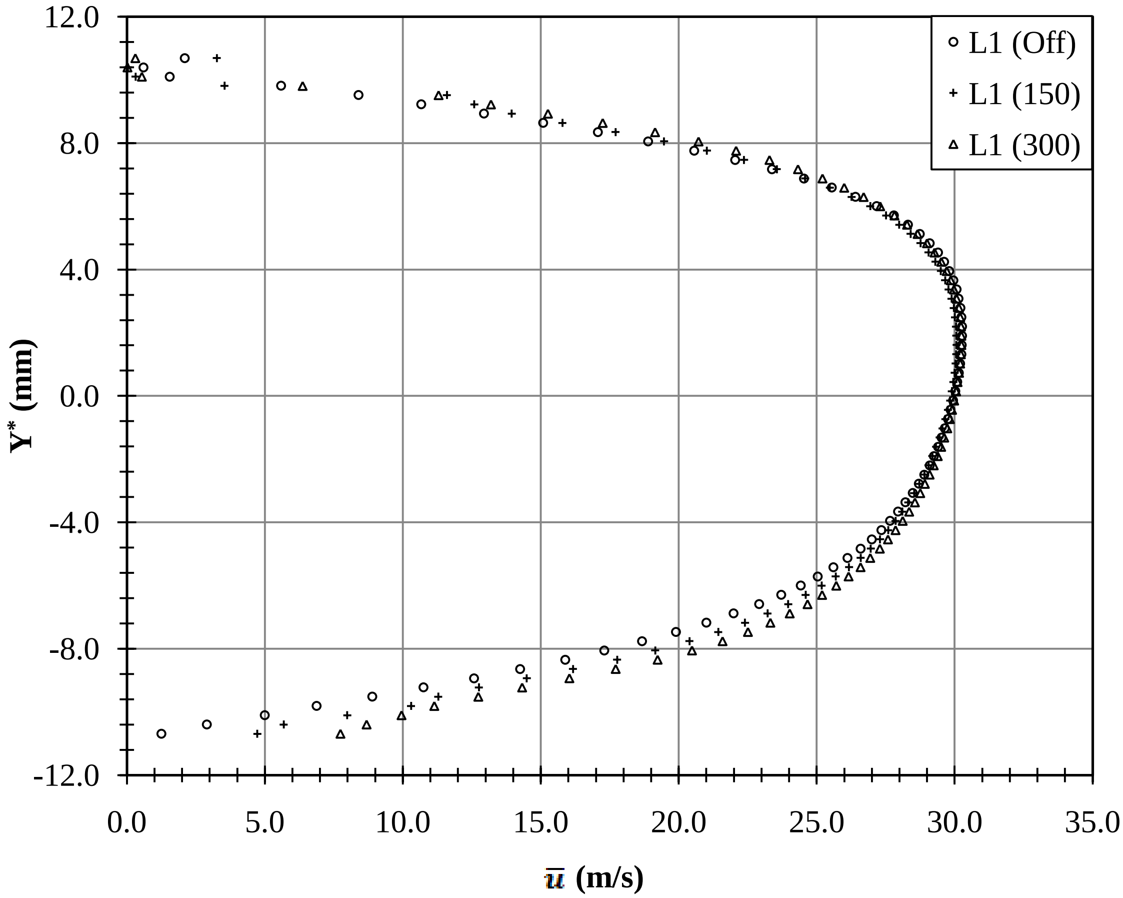

Fig. I-27 $\overline{u}$, Grid #2, L1, Center (46-55)

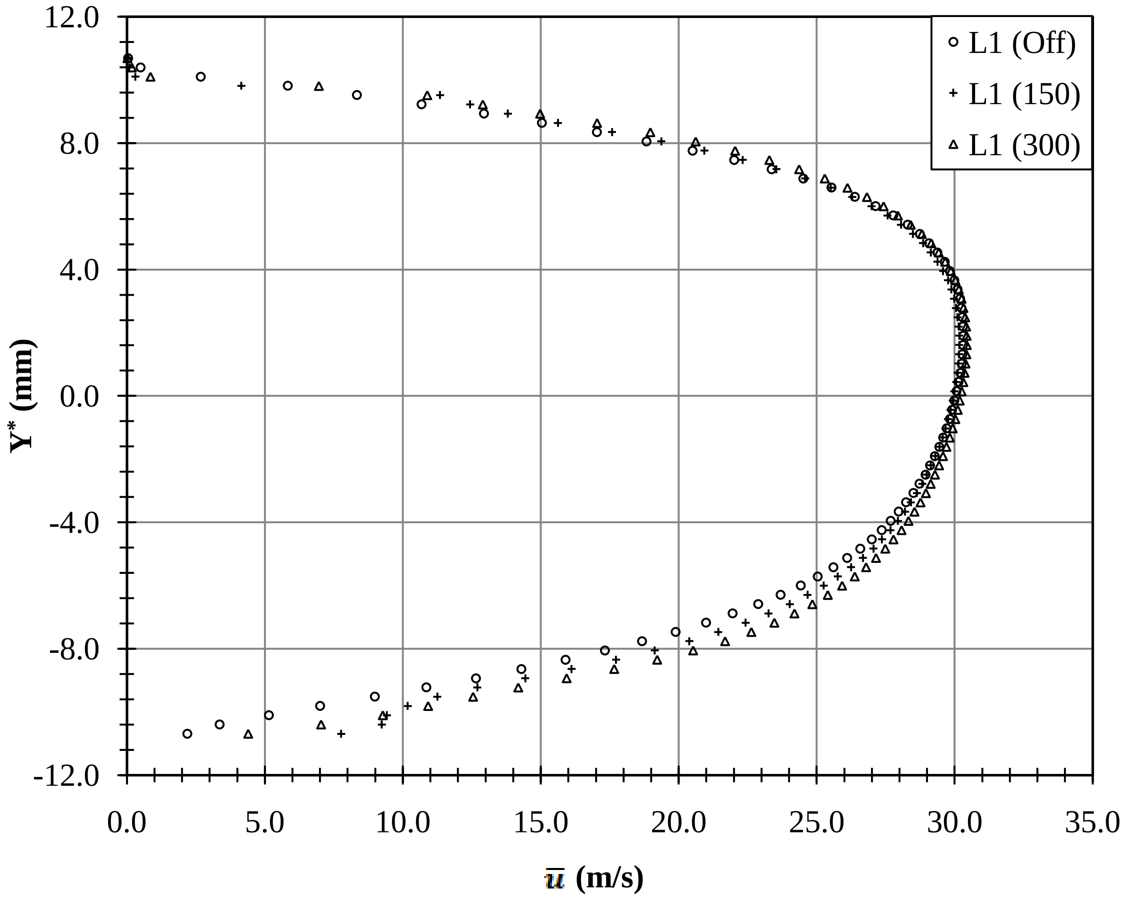

Fig. I-28 $\overline{u}$, Grid #2, L1, Right (71-80)

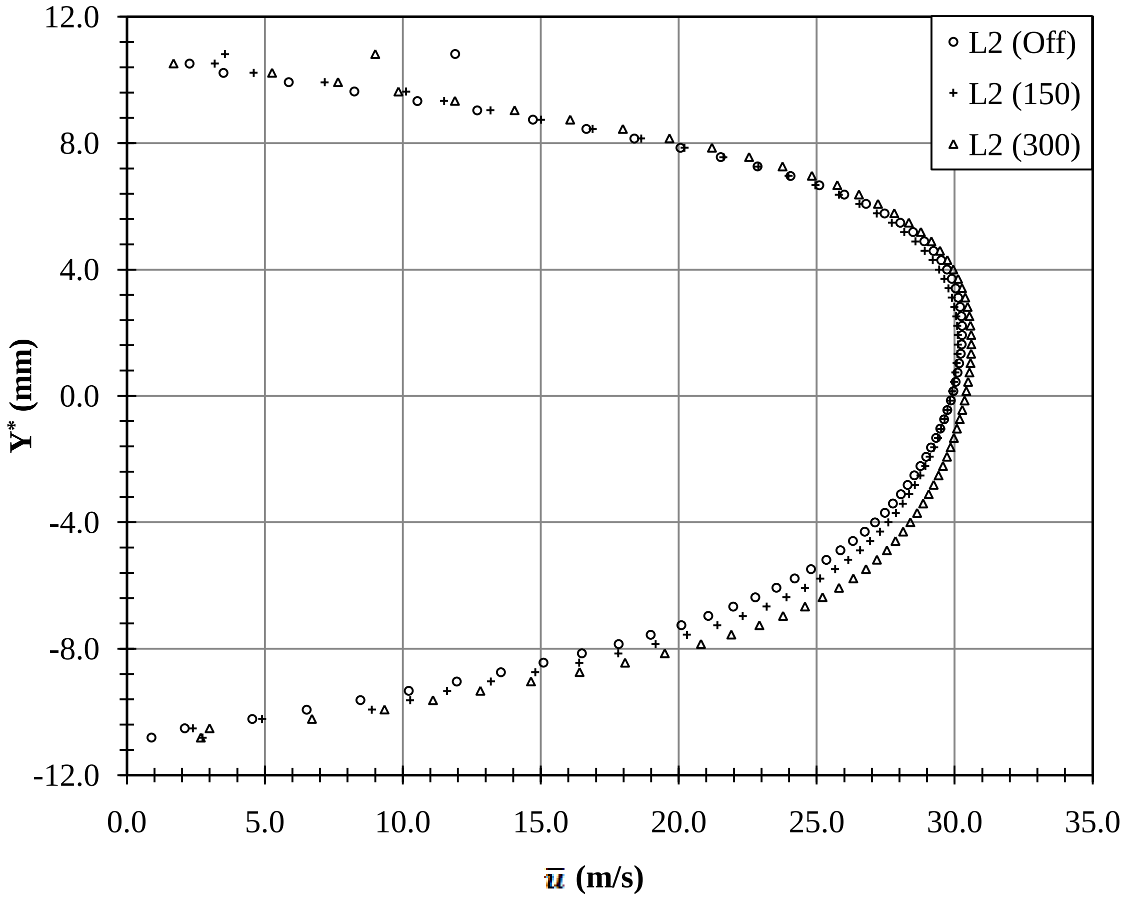

Fig. I-29 $\overline{u}$, Grid #2, L2, Left (1-10)

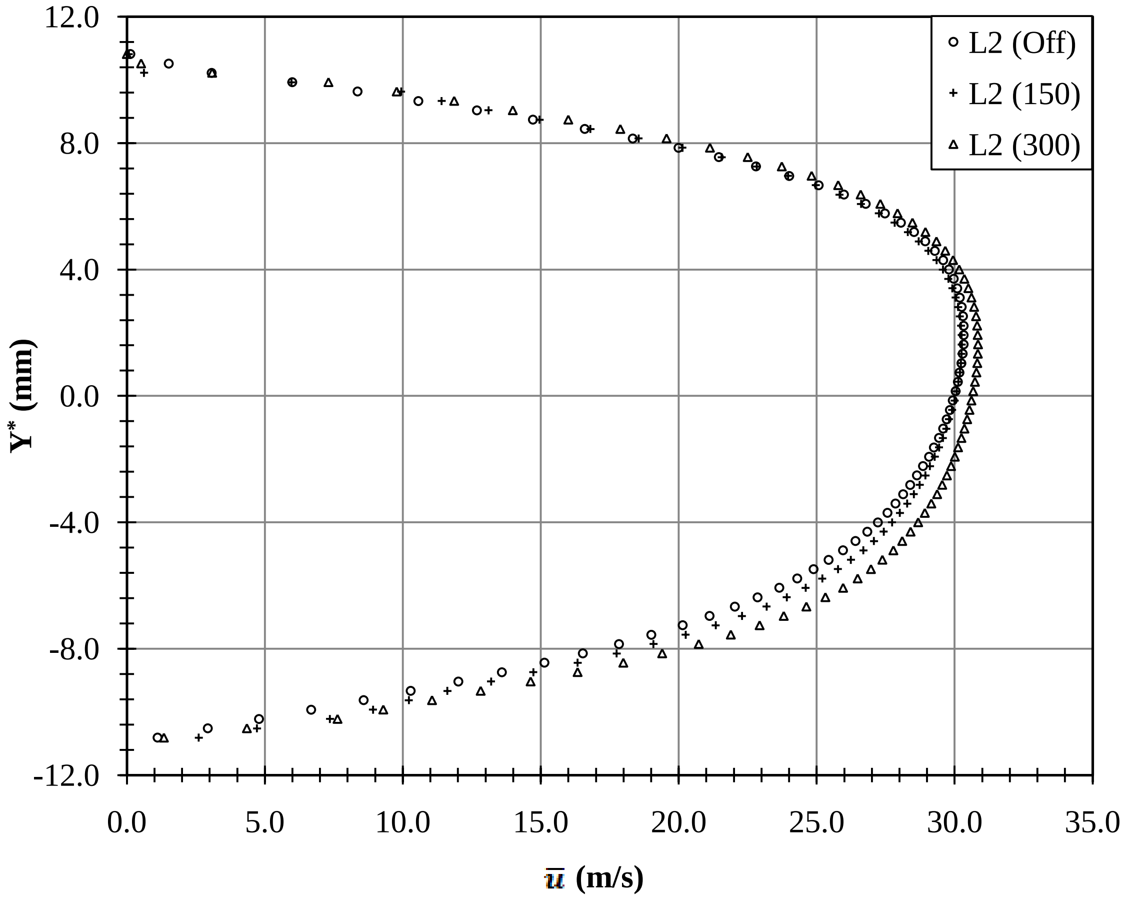

Fig. I-30 $\bar{u}$, Grid #2, L2, Center (46-55)

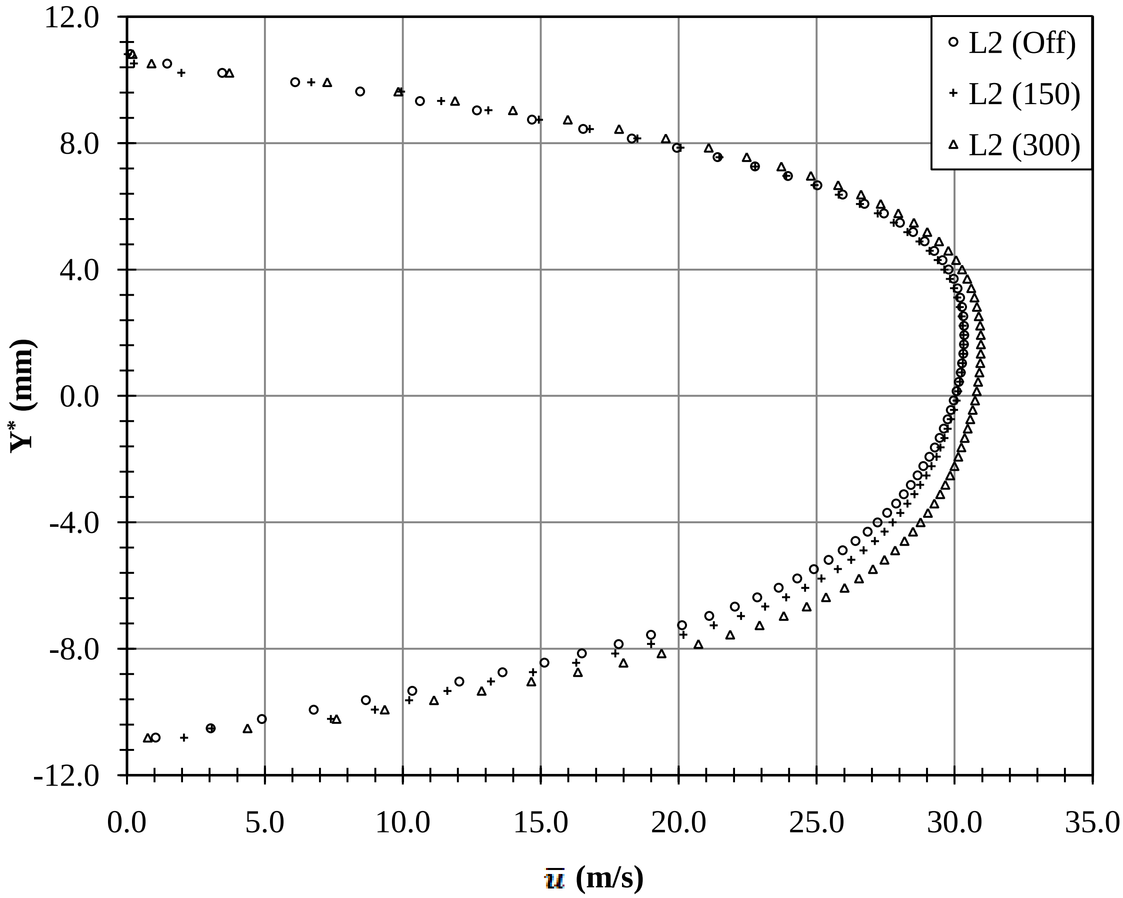

Fig. I-31 $\overline{u}$, Grid #2, L2, Right (71-80)

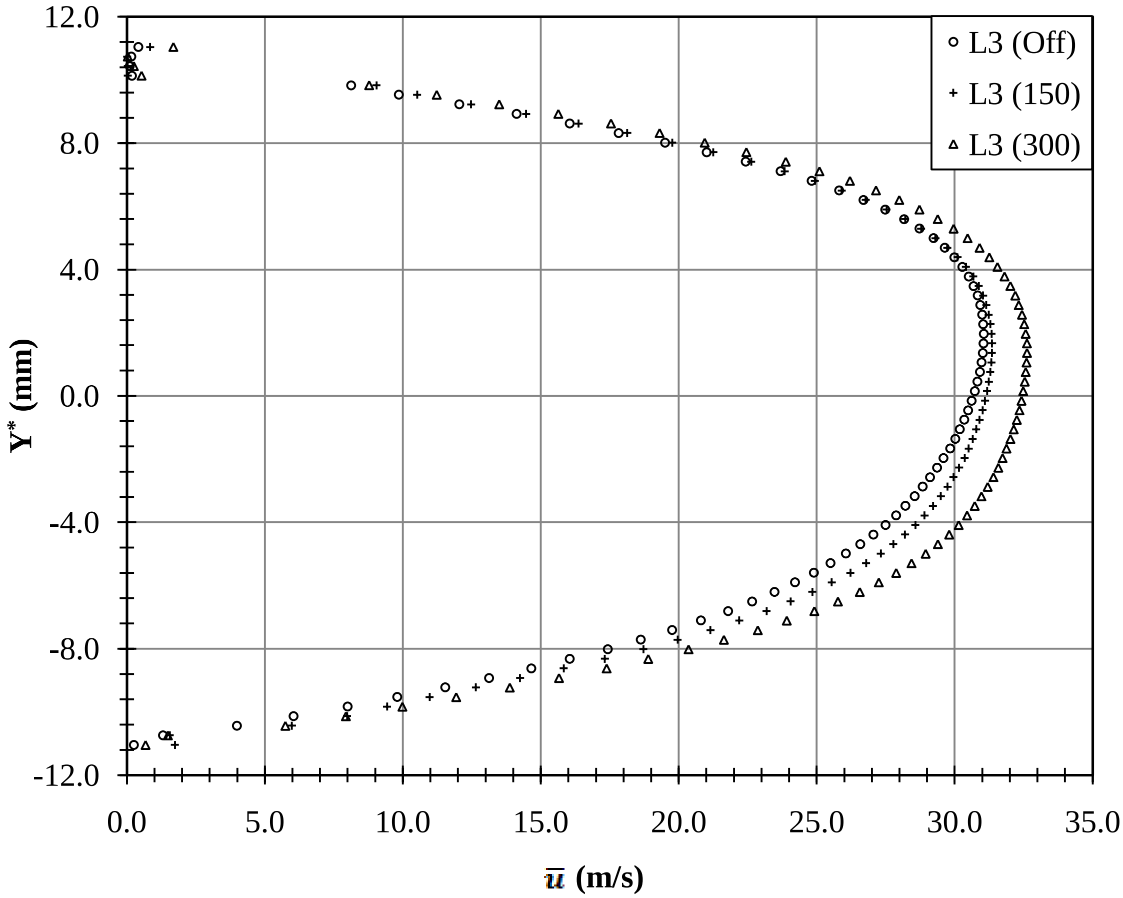

Fig. I-32 $\overline{u}$, Grid #2, L3, Left (1-10)

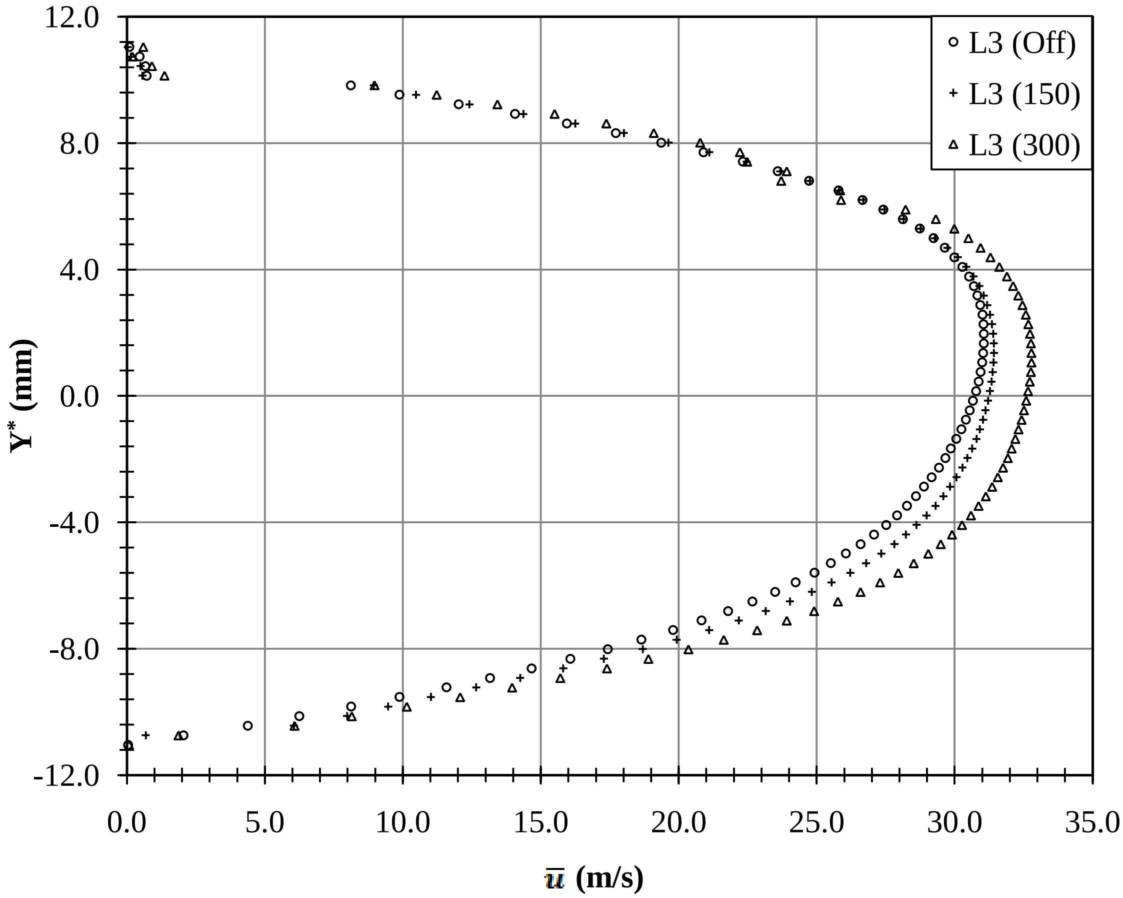

Fig. I-33 $\overline{u}$, Grid #2, L3, Center (46-55)

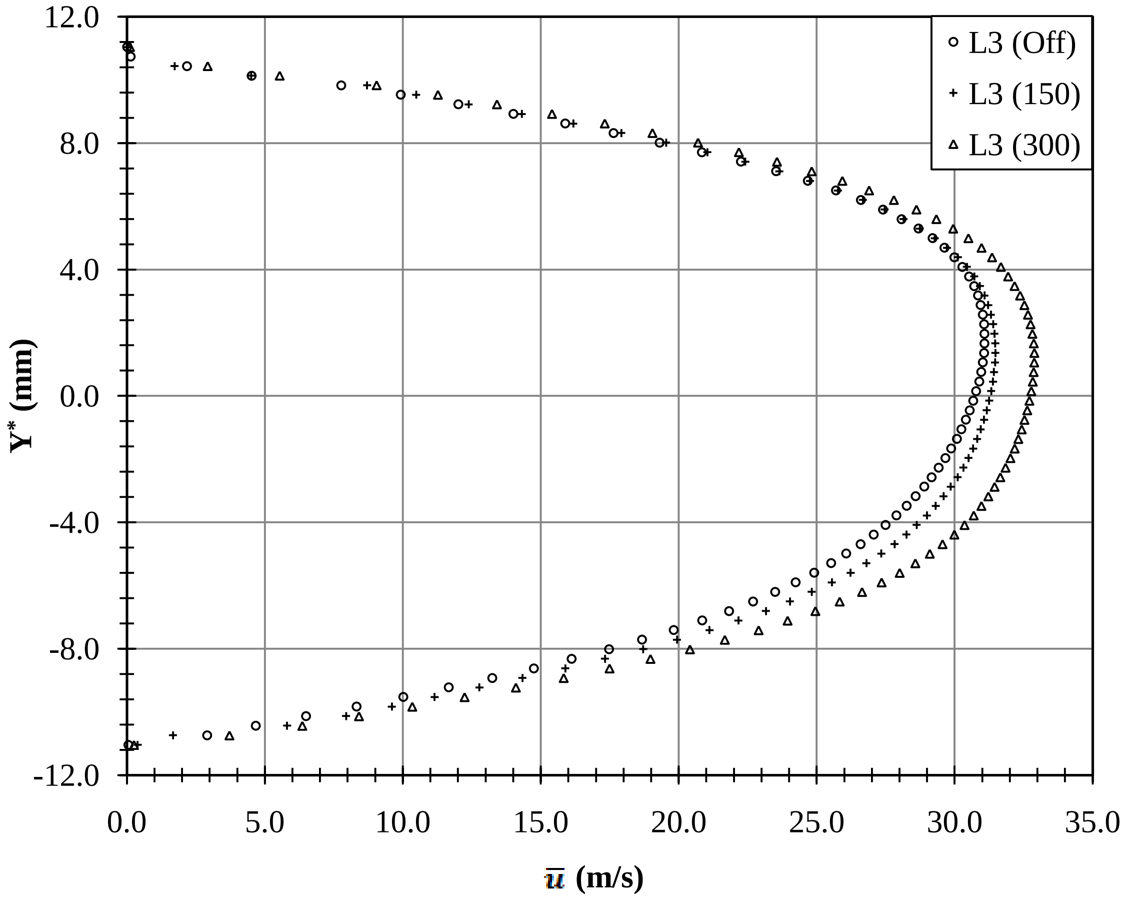

Fig. I-34 $\bar{u}$, Grid #2, L3, Right (71-80)

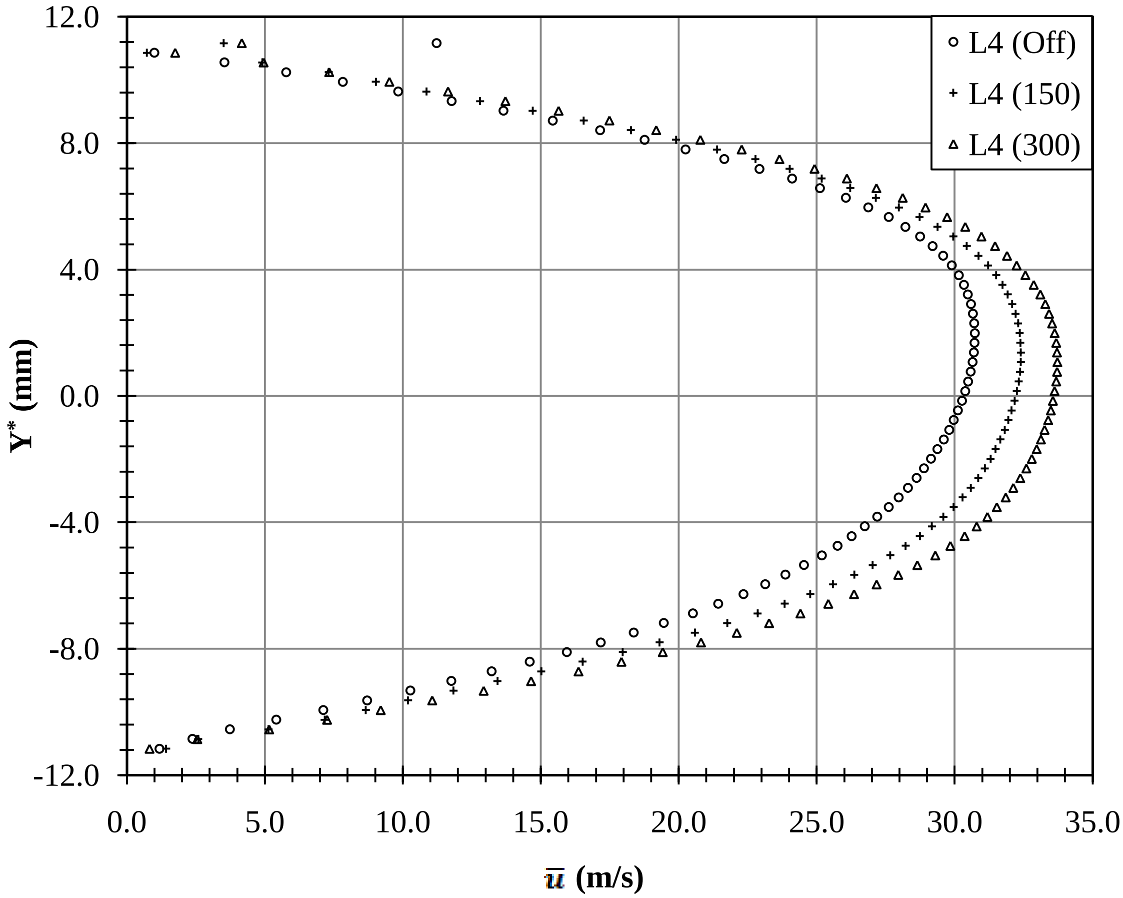

Fig. I-35 $\bar{u}$, Grid #2, L4, Left (1-10)

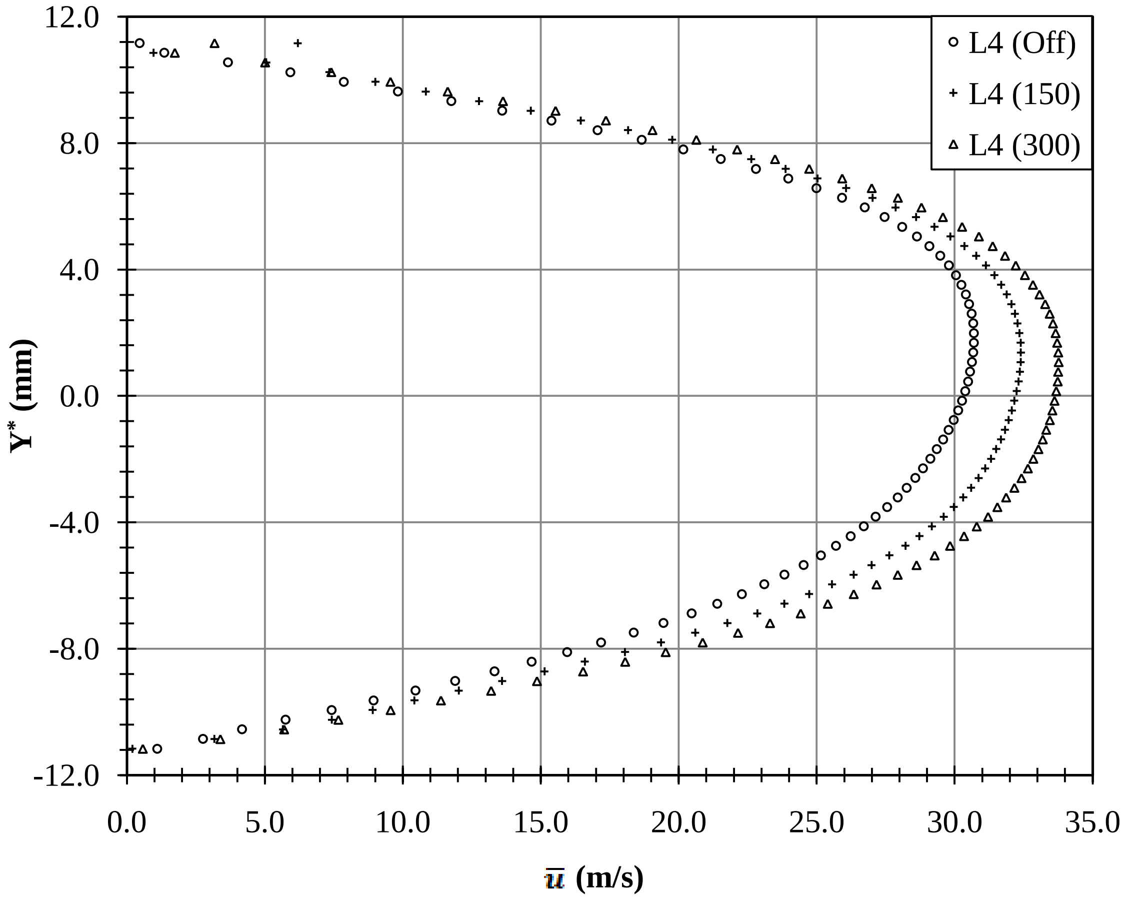

Fig. I-36 $\overline{u}$, Grid #2, L4, Center (42-51)

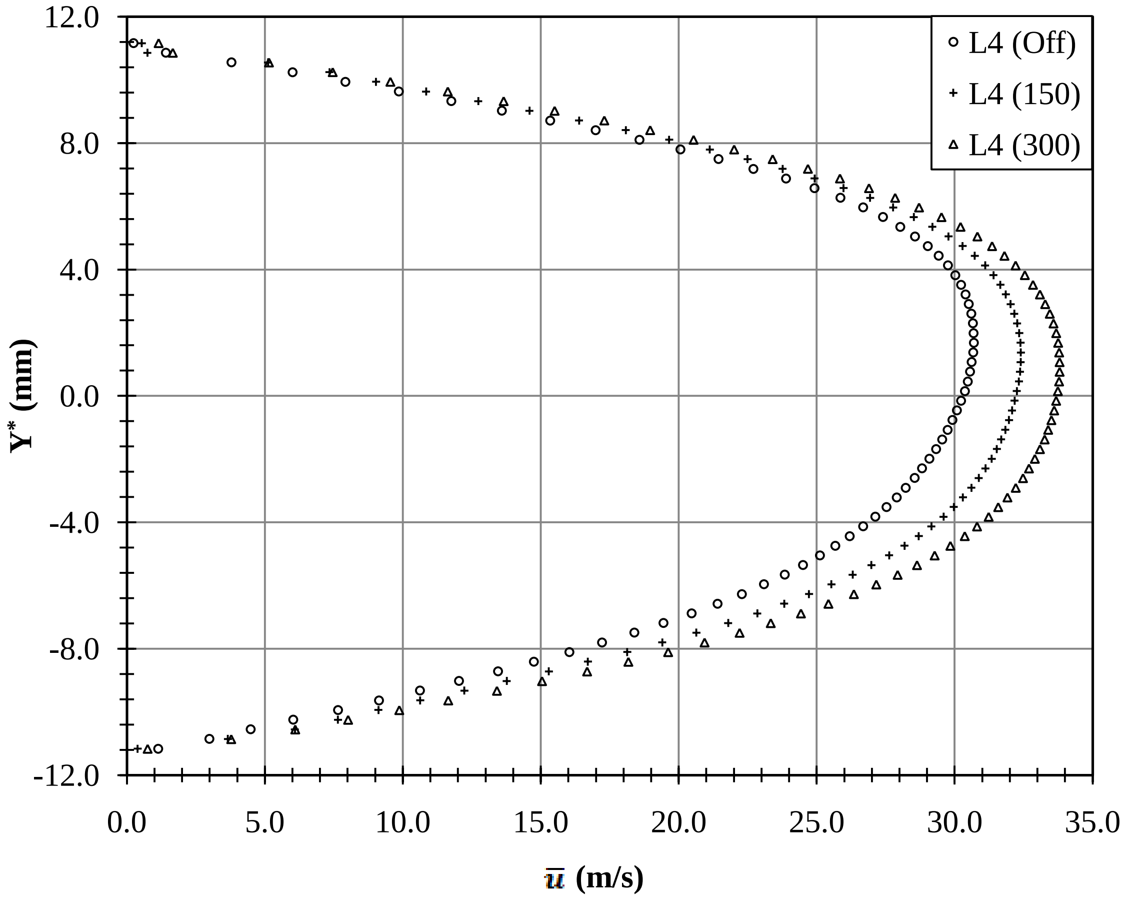

Fig. I-37 $\bar{u}$, Grid #2, L4, Right (46-55)

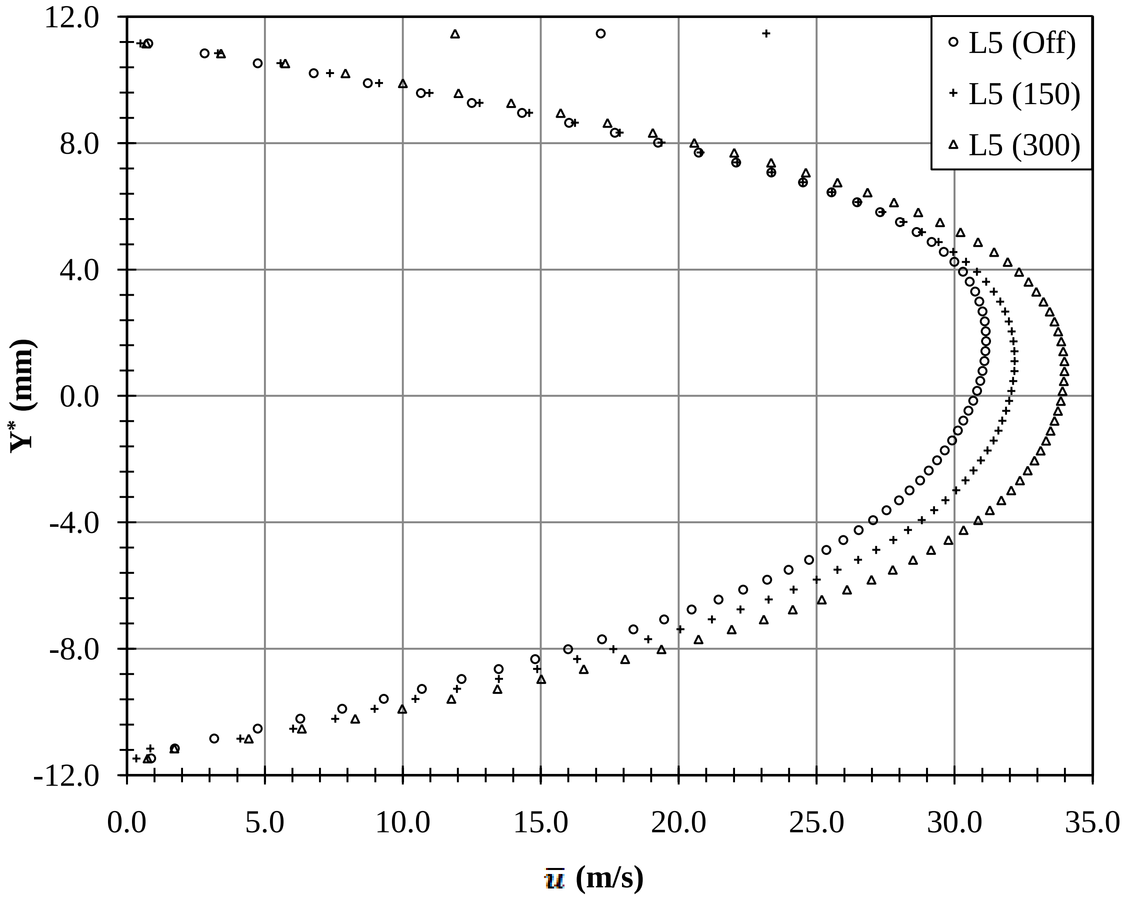

Fig. I-38 $\overline{u}$, Grid #2, L5, Left (1-10)

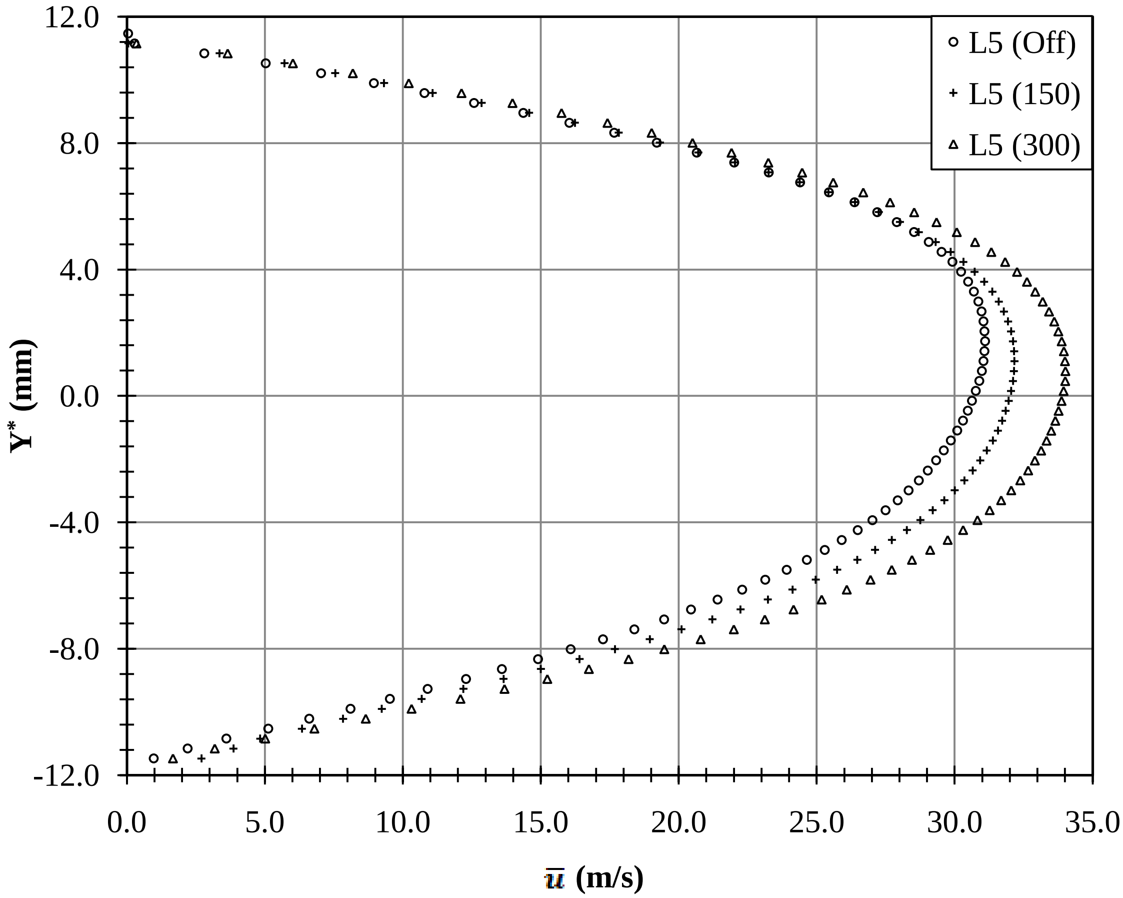

Fig. I-39 $\overline{u}$, Grid #2, L5, Center (42-51)

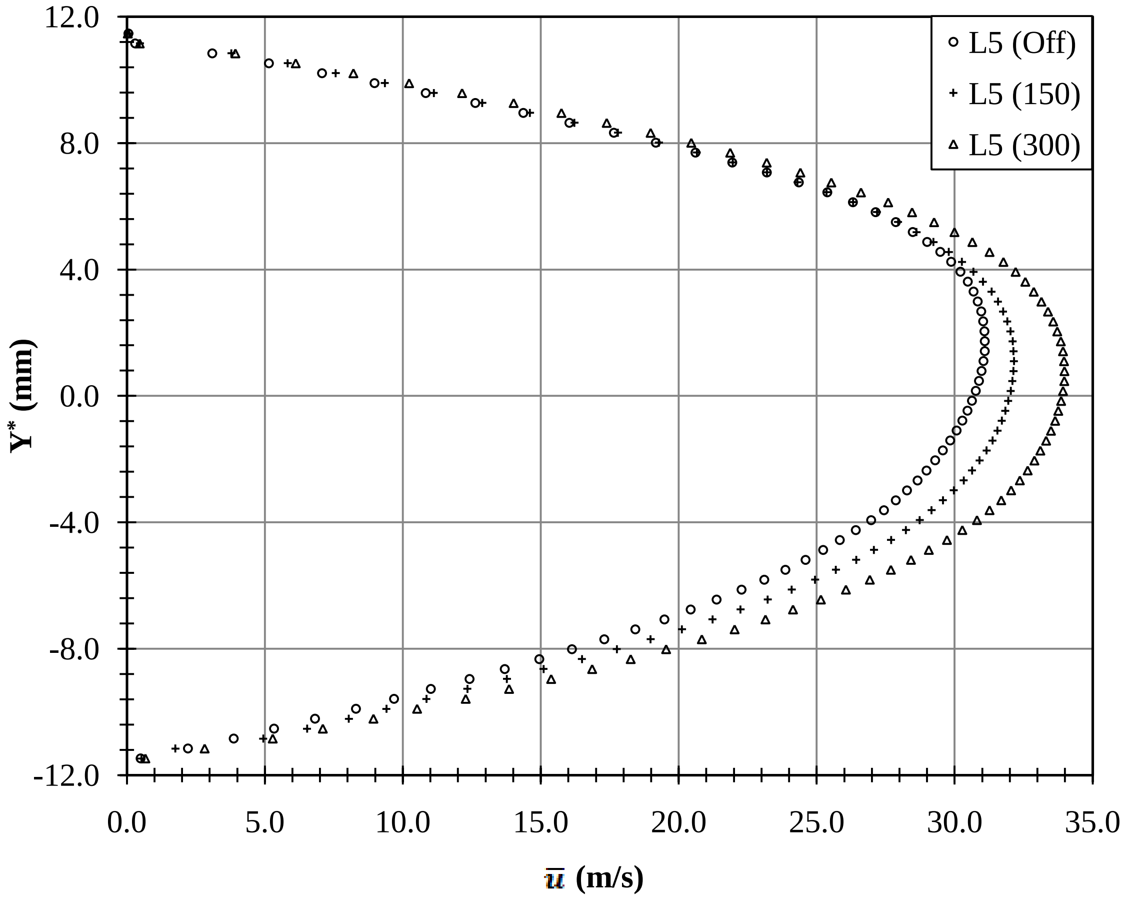

Fig. I-40 $\overline{u}$, Grid #2, L5, Right (71-80)

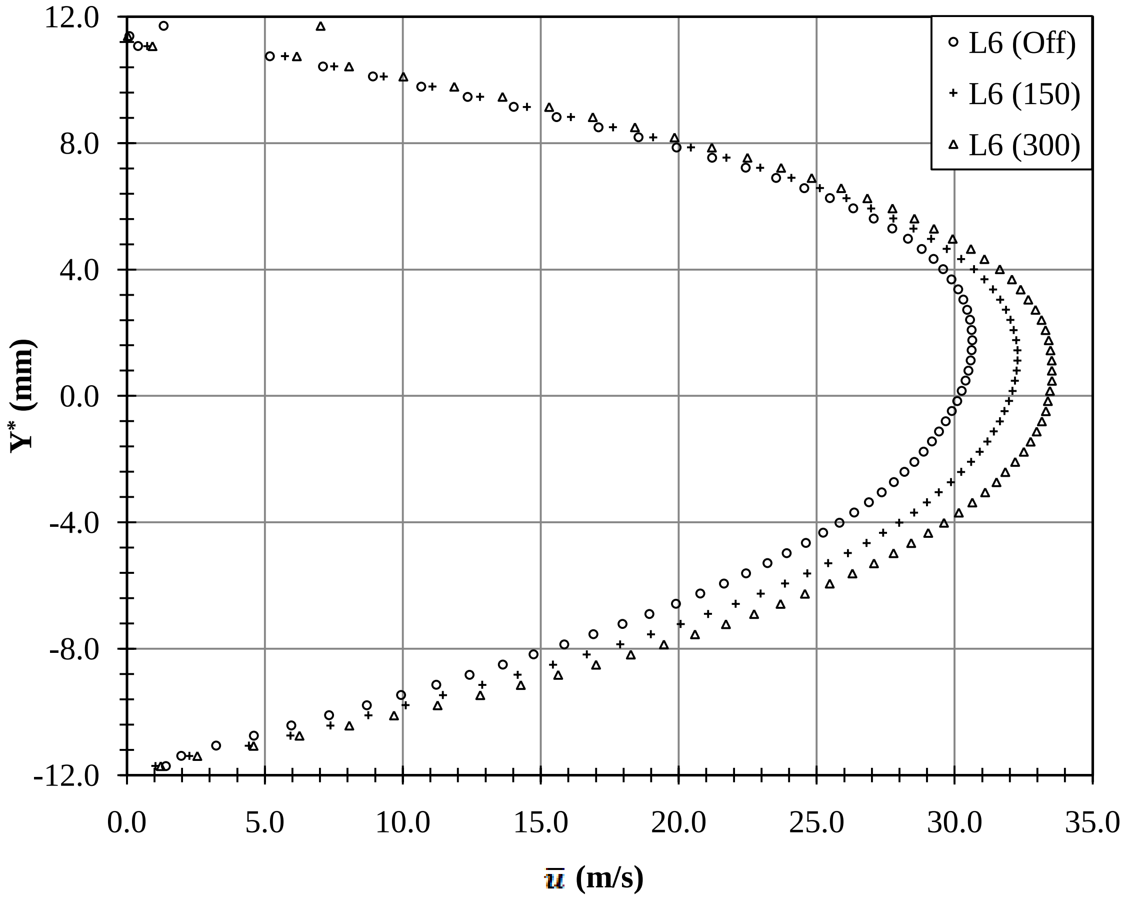

Fig. I-41 $\overline{u}$, Grid #2, L6, Left (1-10)

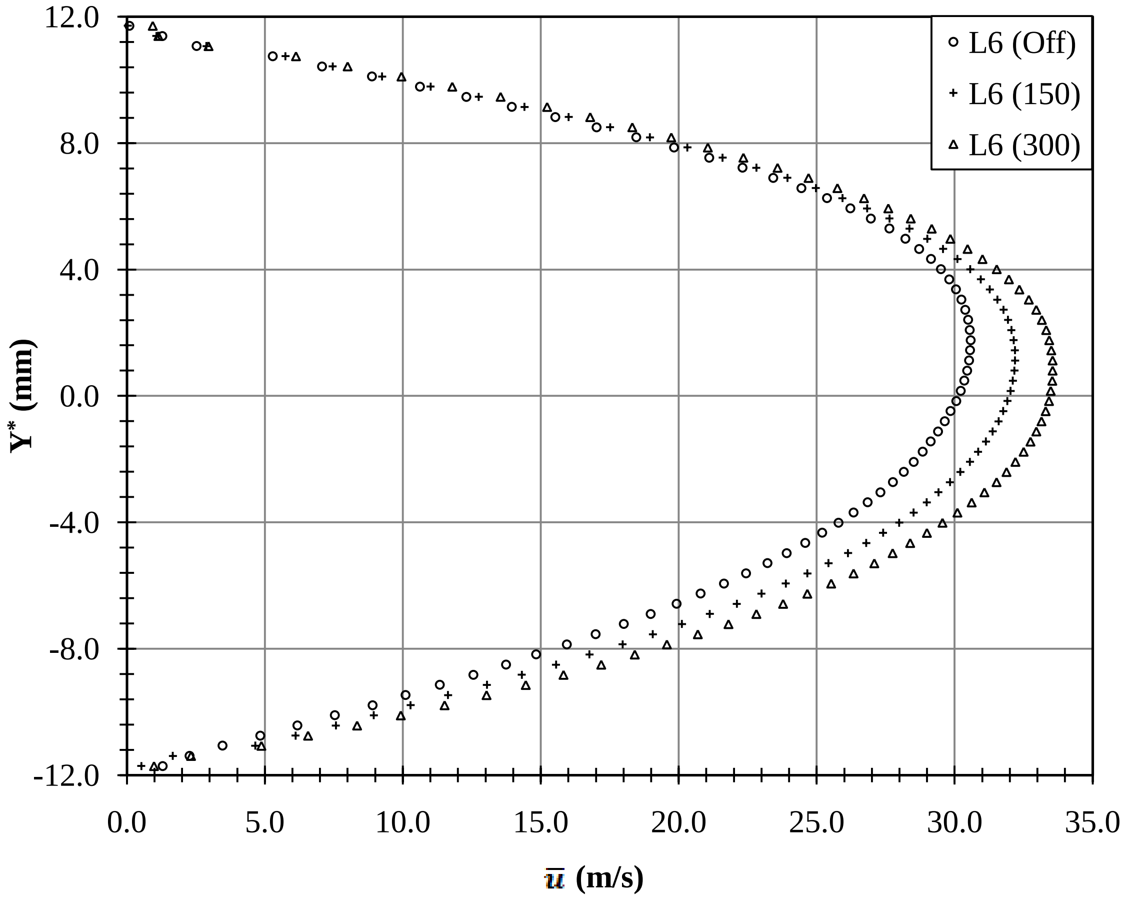

Fig. I-42 $\overline{u}$, Grid #2, L6, Center (46-55)

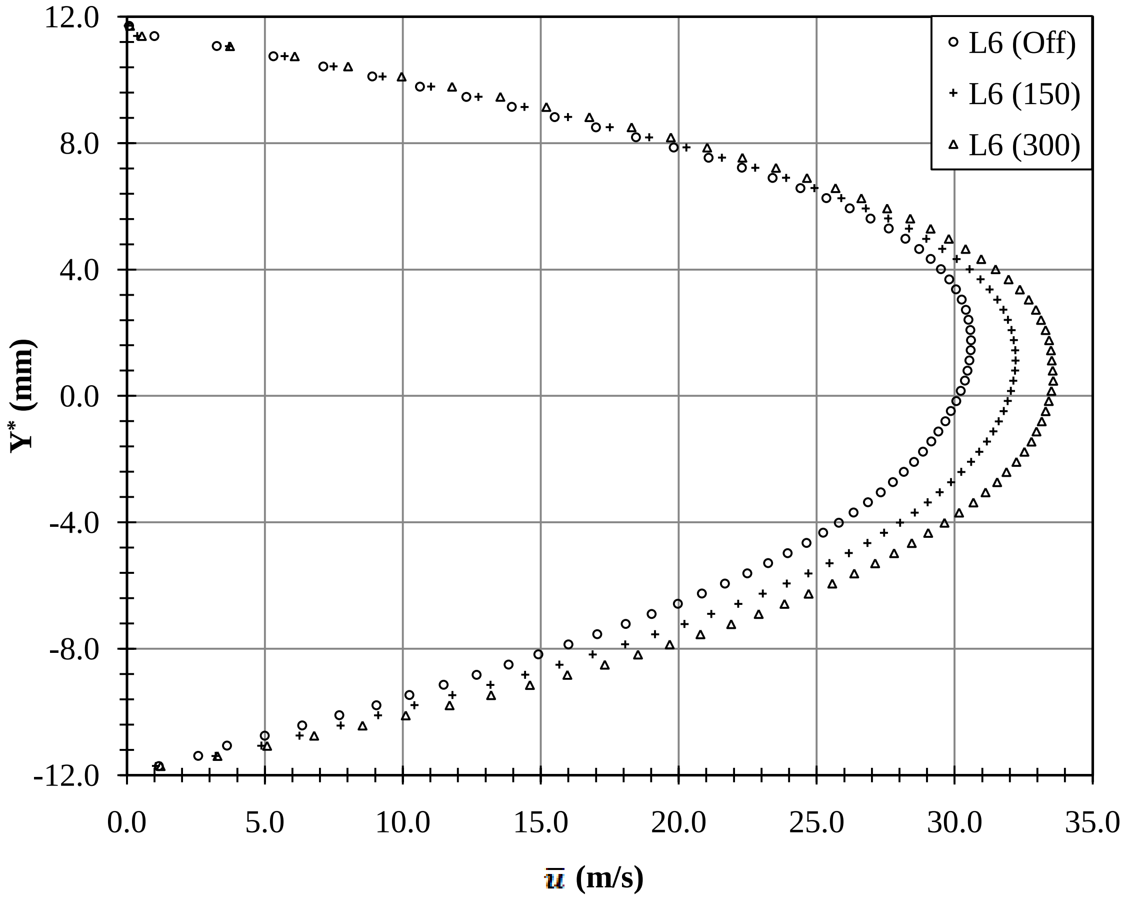

Fig. I-43 $\bar{u}$, Grid #2, L6, Right (71-80)

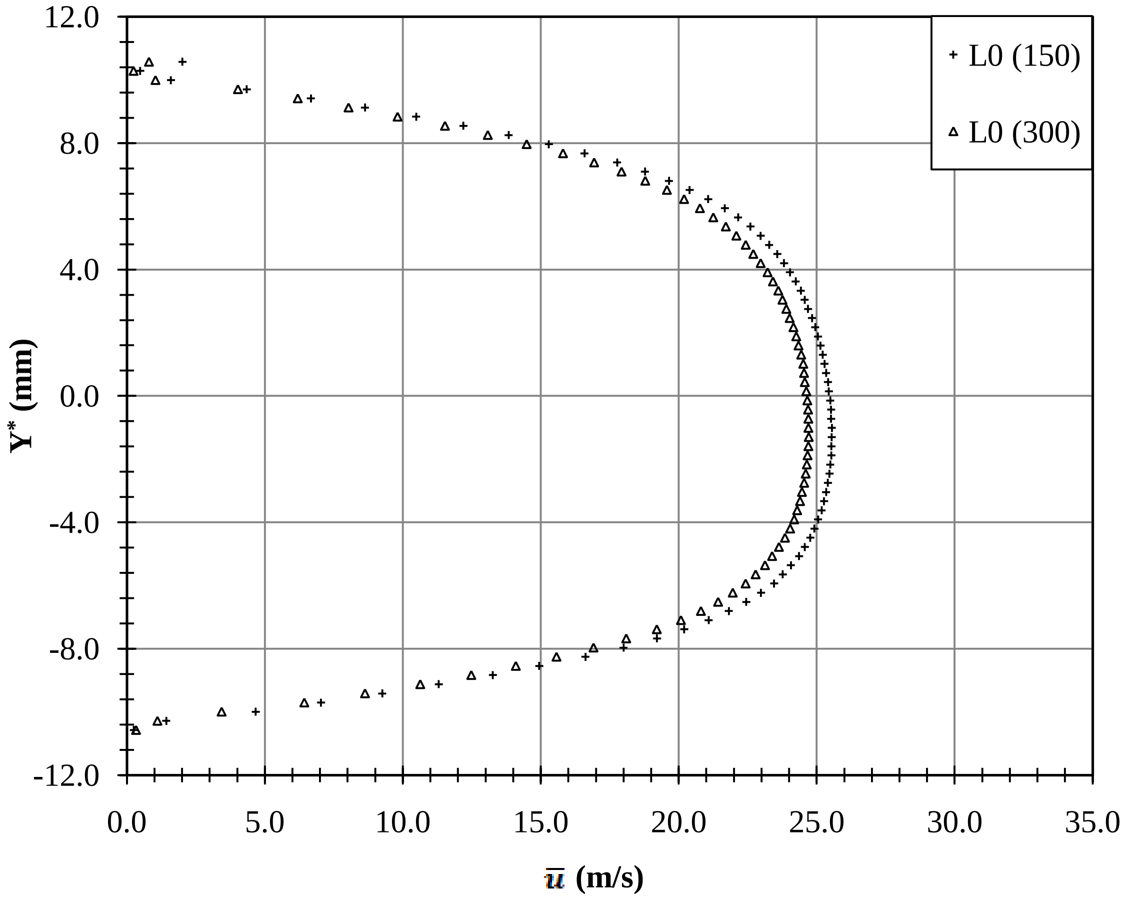

Fig. I-44 $\overline{u}$, Grid #1, L0, Left (1-10), Equilibrated

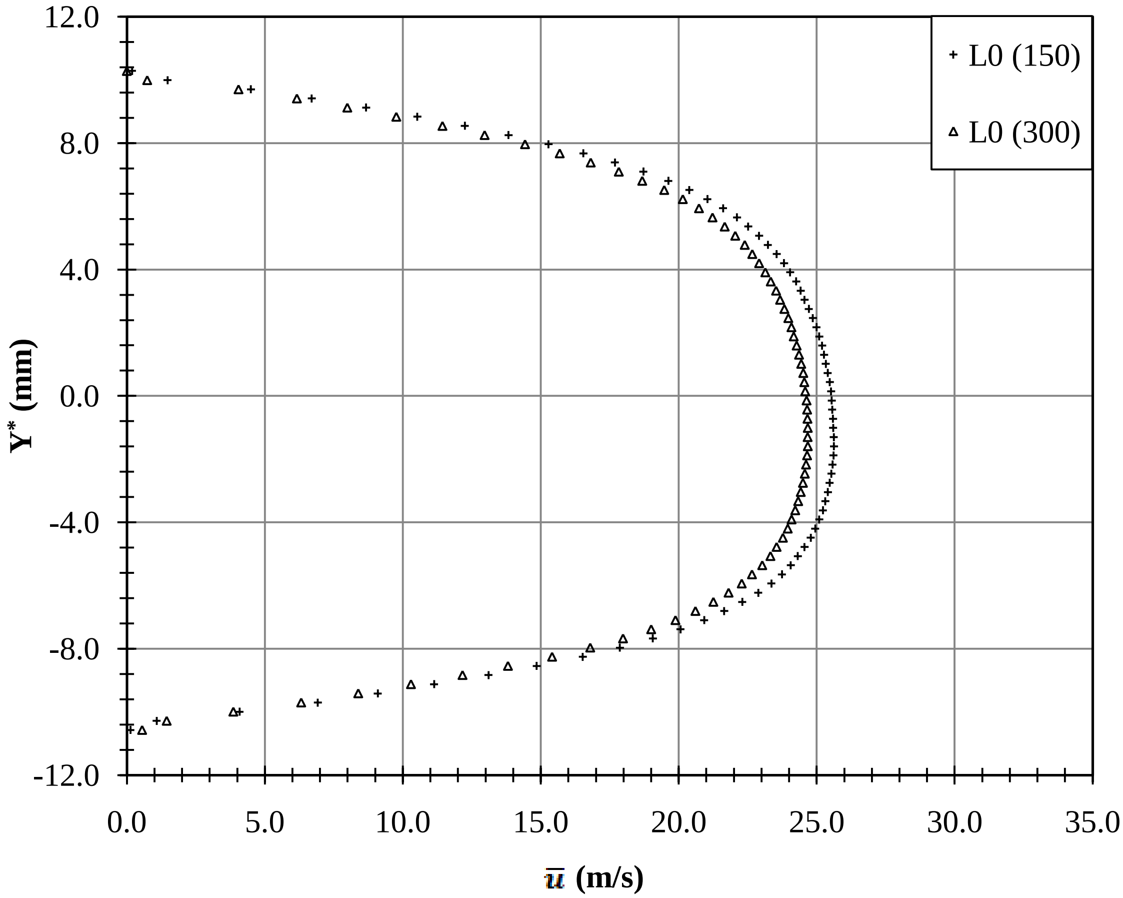

Fig. I-45 $\overline{u}$, Grid #1, L0, Center (46-55), Equilibrated

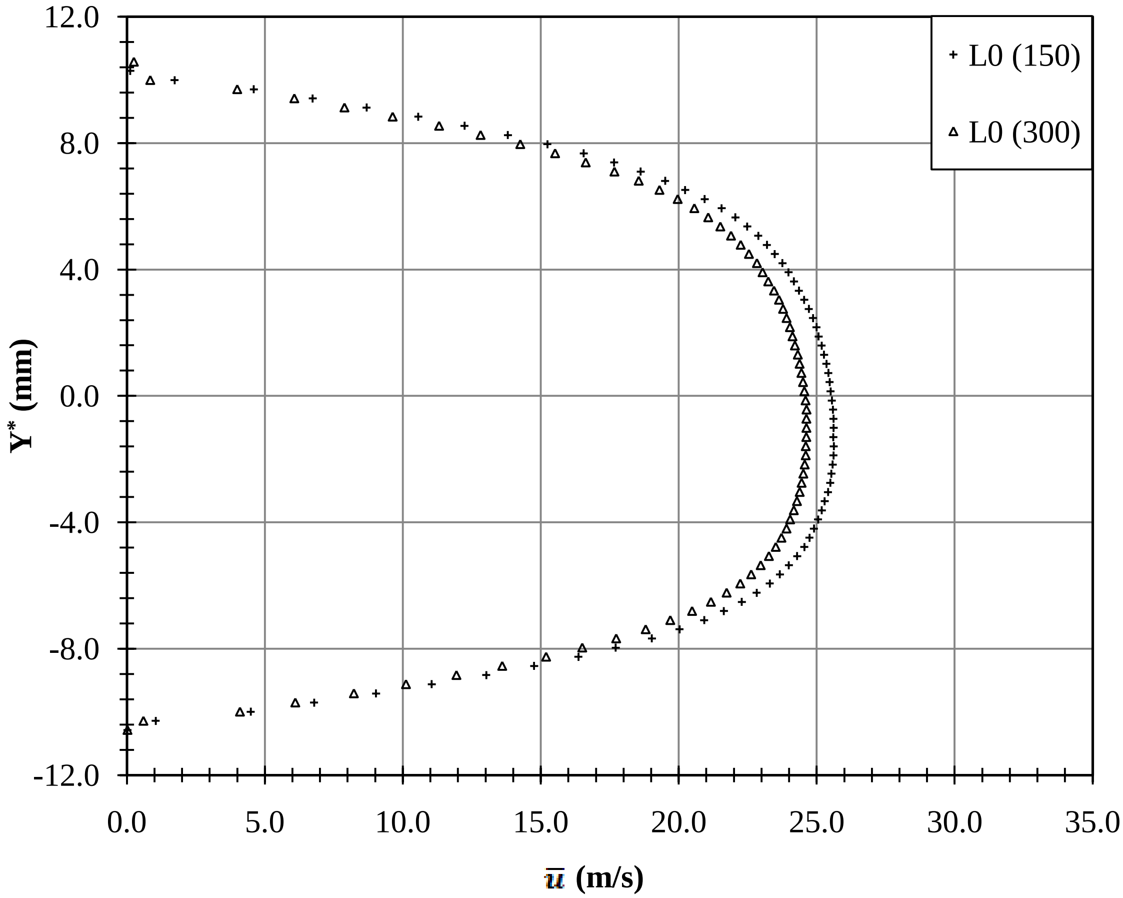

Fig. I-46 $\overline{u}$, Grid #1, L0, Right (71-80), Equilibrated

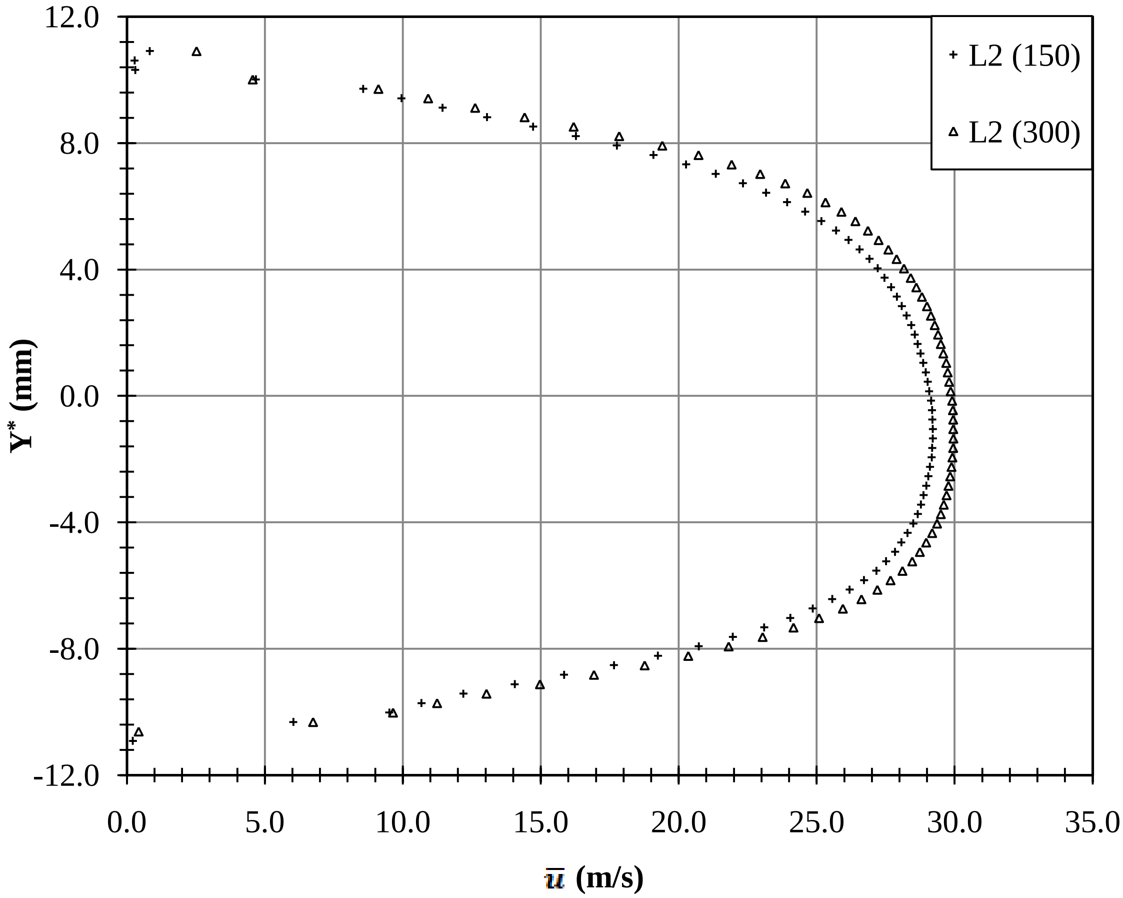

Fig. I-47 $\overline{u}$, Grid #1, L2, Left (1-10), Equilibrated

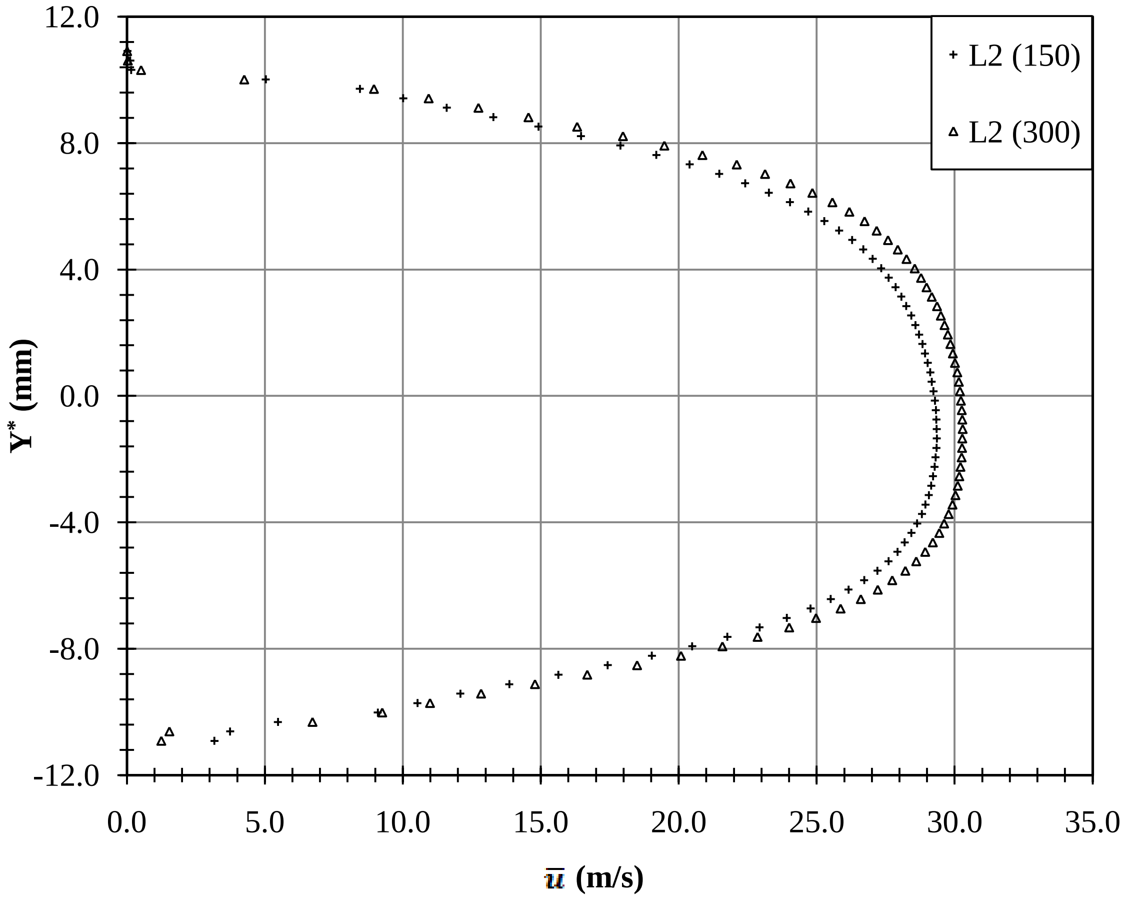

Fig. I-48 $\bar{u}$, Grid #1, L2, Center (46-55), Equilibrated

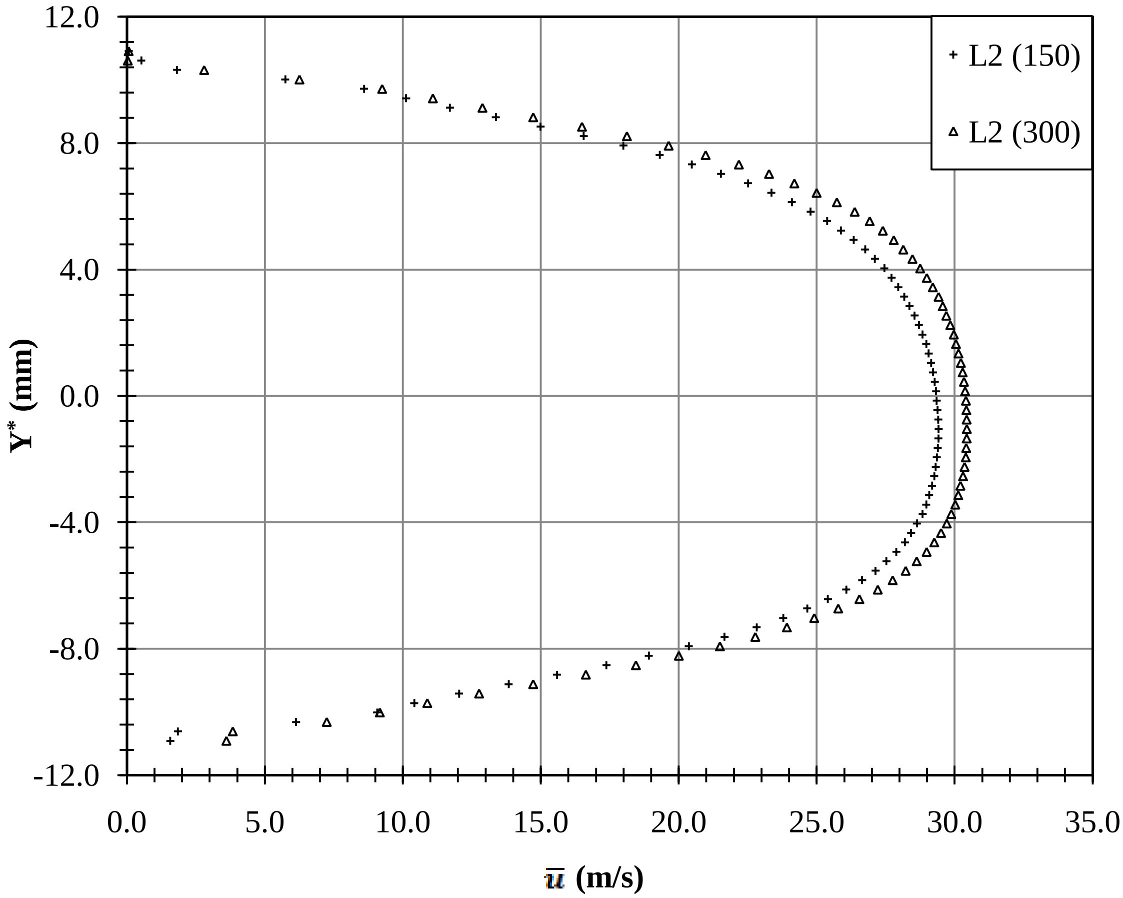

Fig. I-49 $\bar{u}$, Grid #1, L2, Right (71-80), Equilibrated

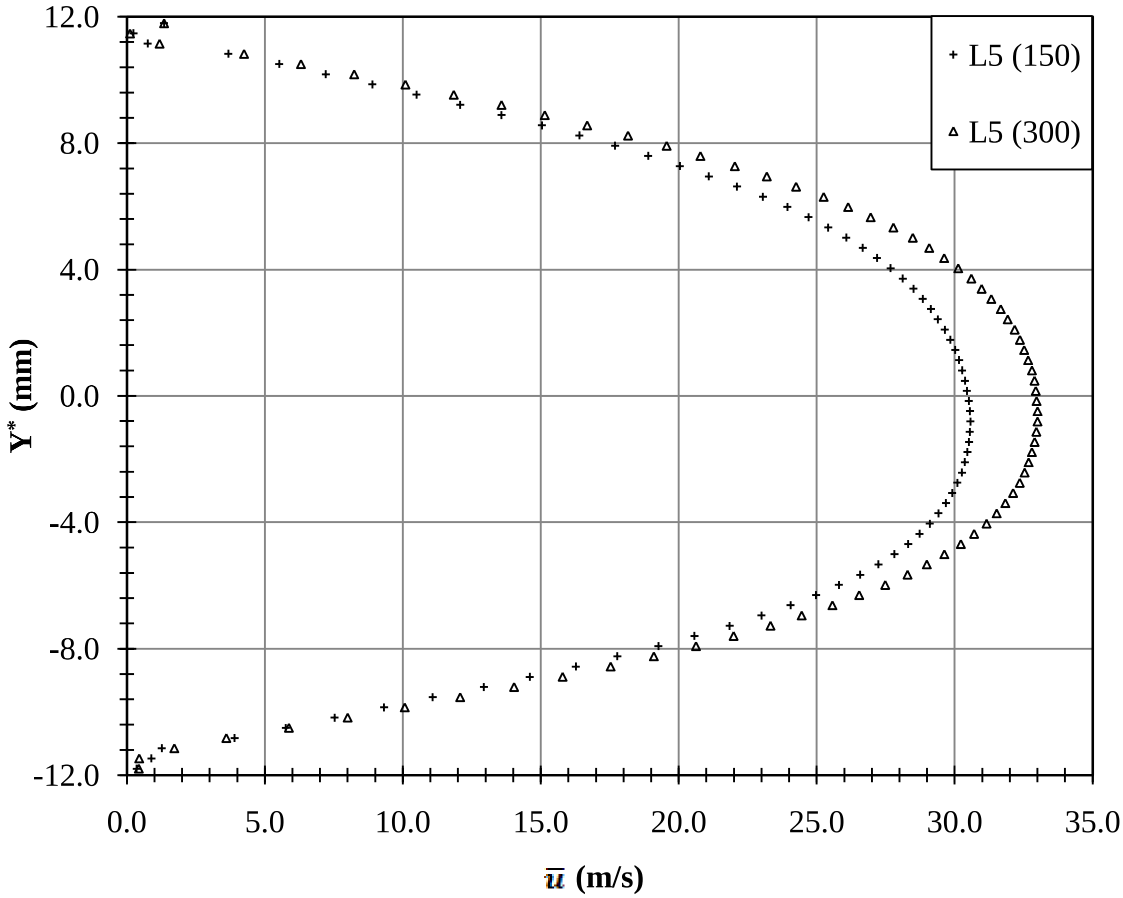

Fig. I-50 $\overline{u}$, Grid #1, L5, Left (1-10), Equilibrated

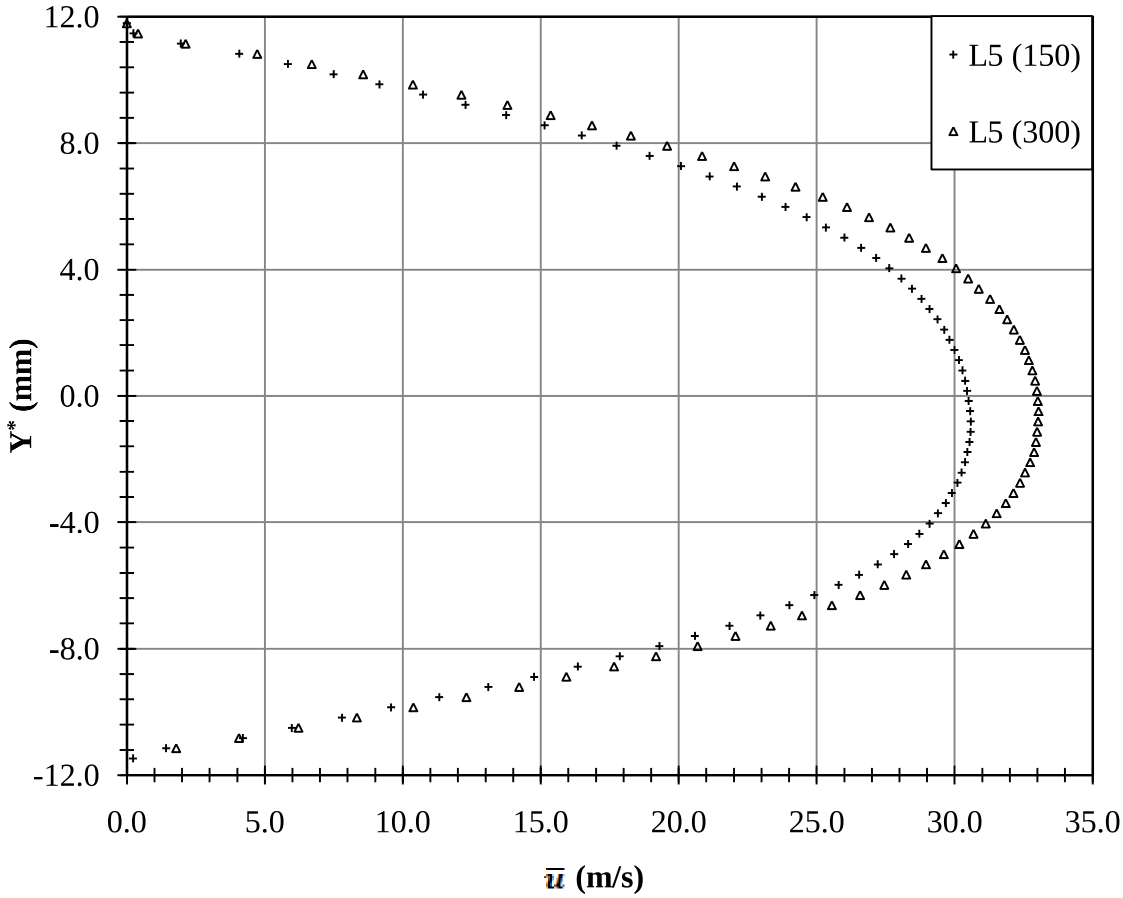

Fig. I-51 $\overline{u}$, Grid #1, L5, Center (46-55), Equilibrated

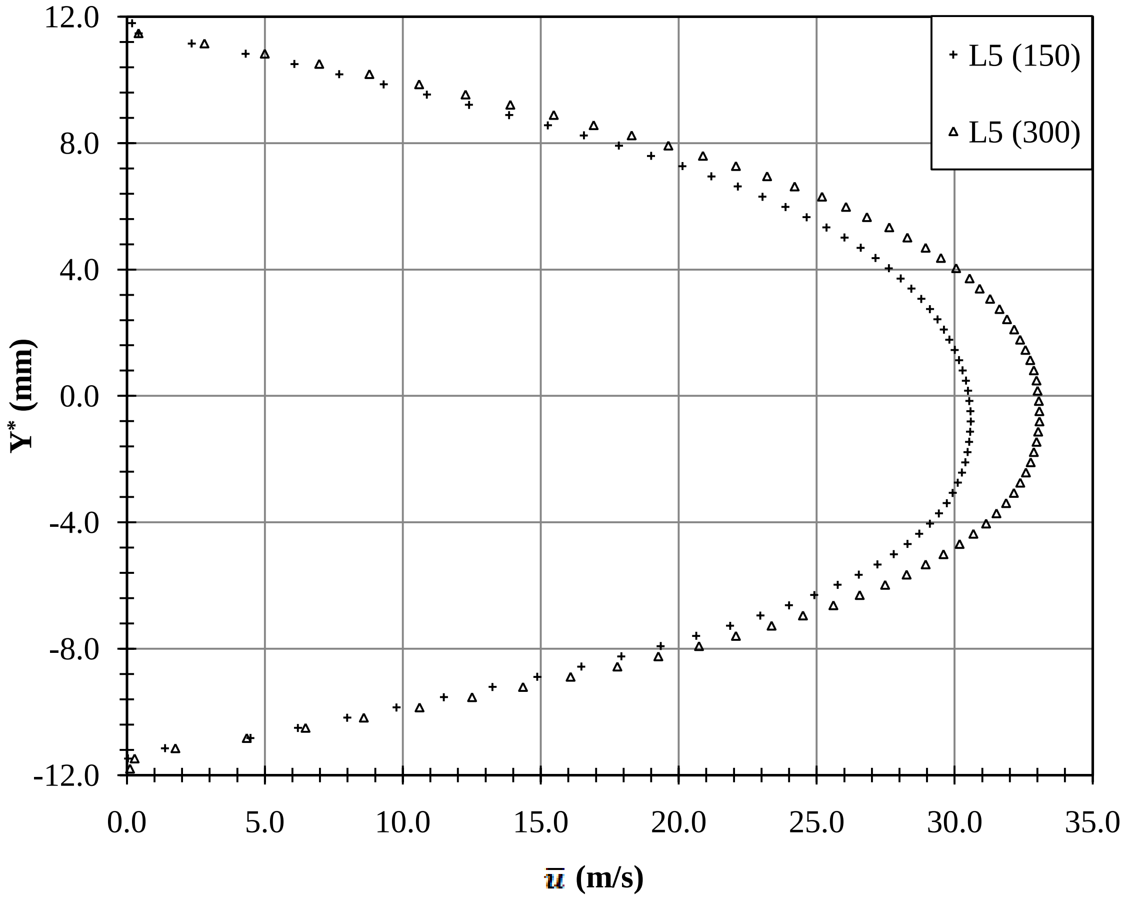

Fig. I-52 $\overline{u}$, Grid #1, L5, Right (71-80), Equilibrated

APPENDIX J

PROFILE PLOTS

$\bar{v}$

FIGURE Page

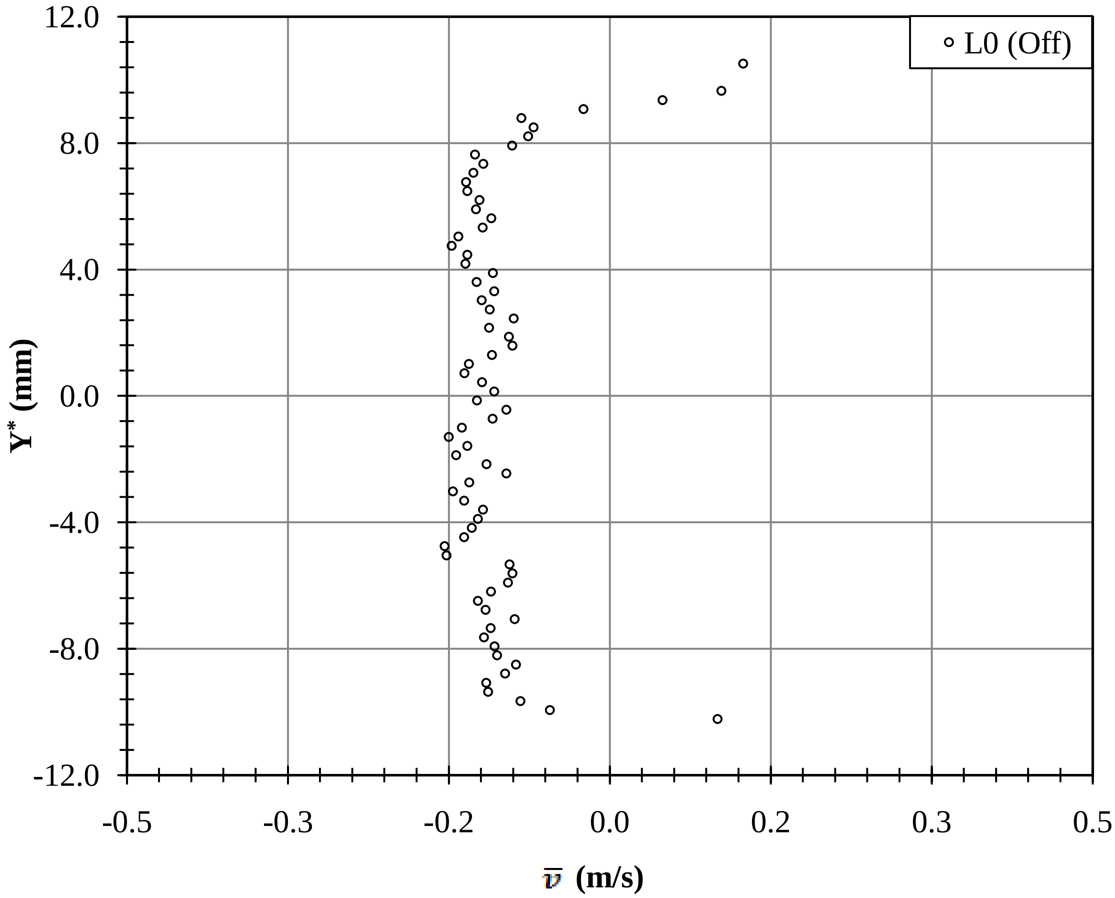

Fig. J-1 $\overline{v}$, No Grid, L0, Center (40-60)

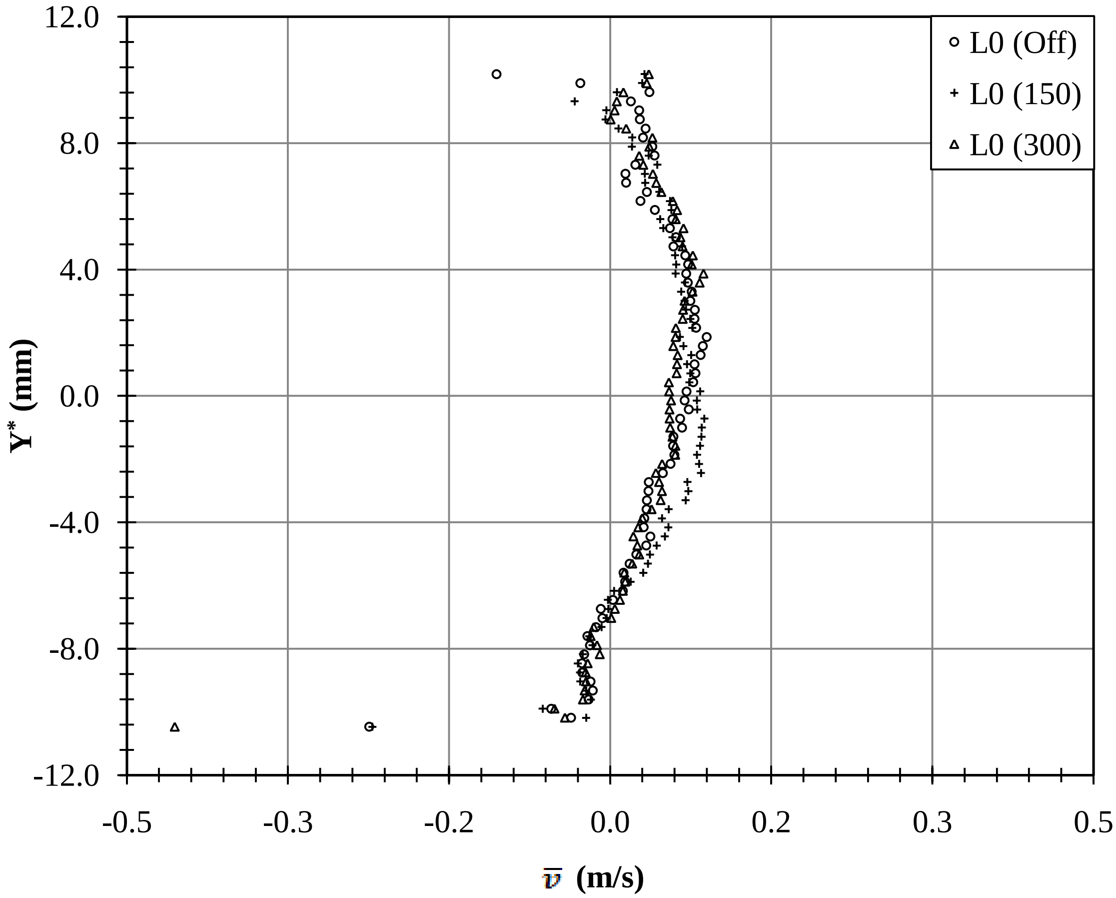

Fig. J-2 $\overline{v}$, Grid #1, L0, Left (1-10)

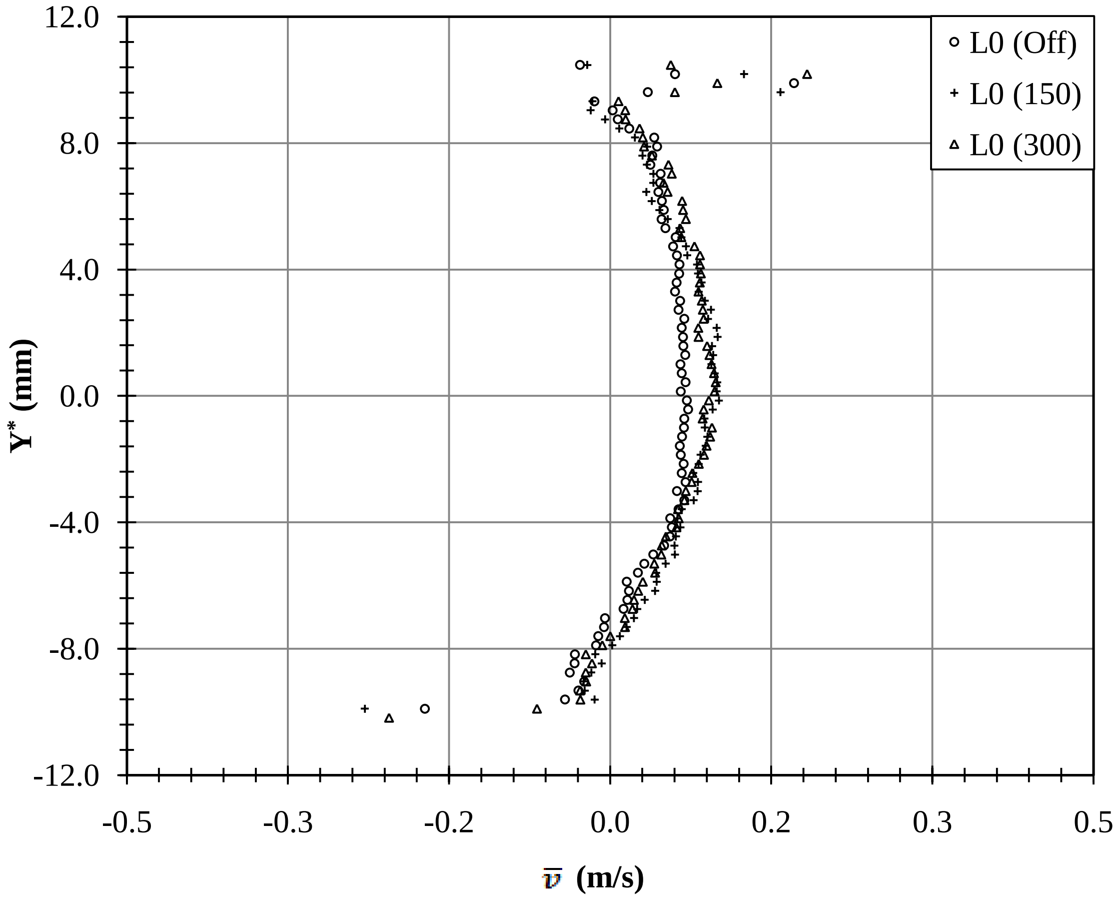

Fig. J-3 $\overline{v}$, Grid #1, L0, Center (46-55)

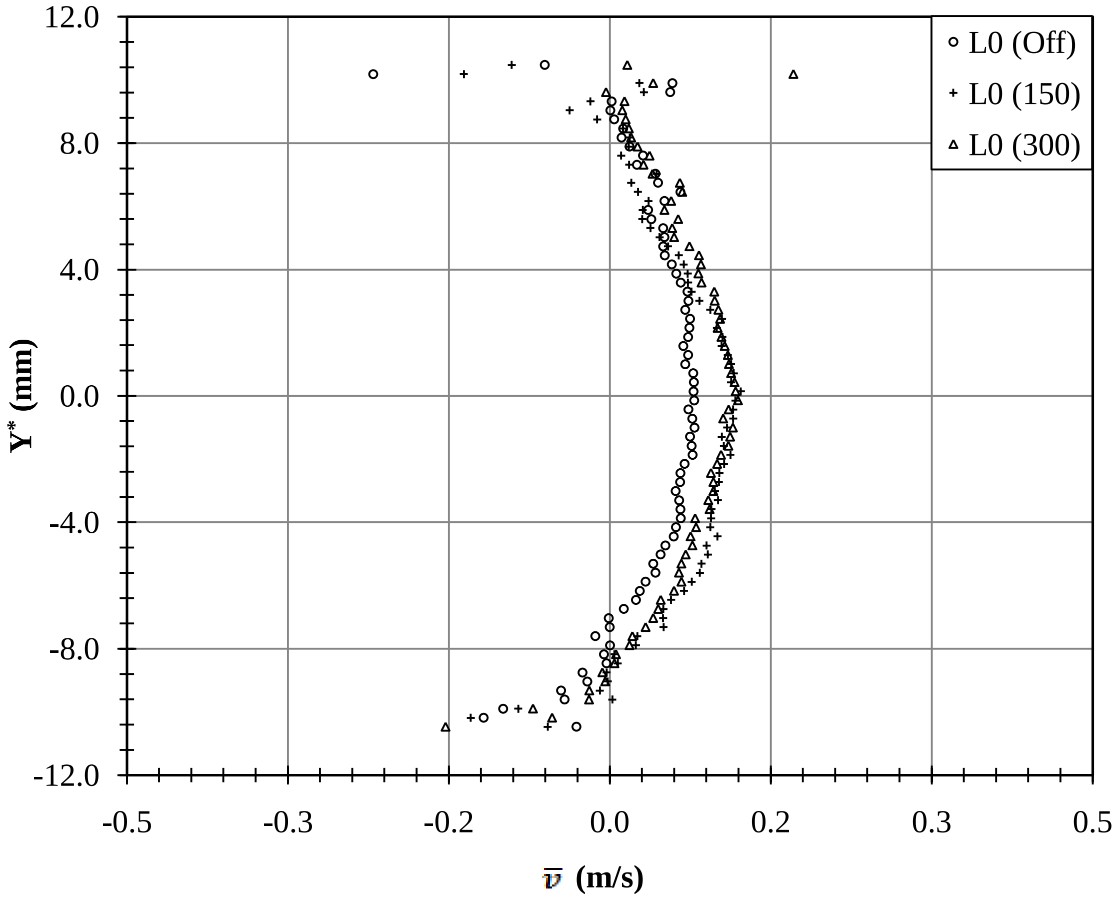

Fig. J-4 $\overline{v}$, Grid #1, L0, Right (71-80)

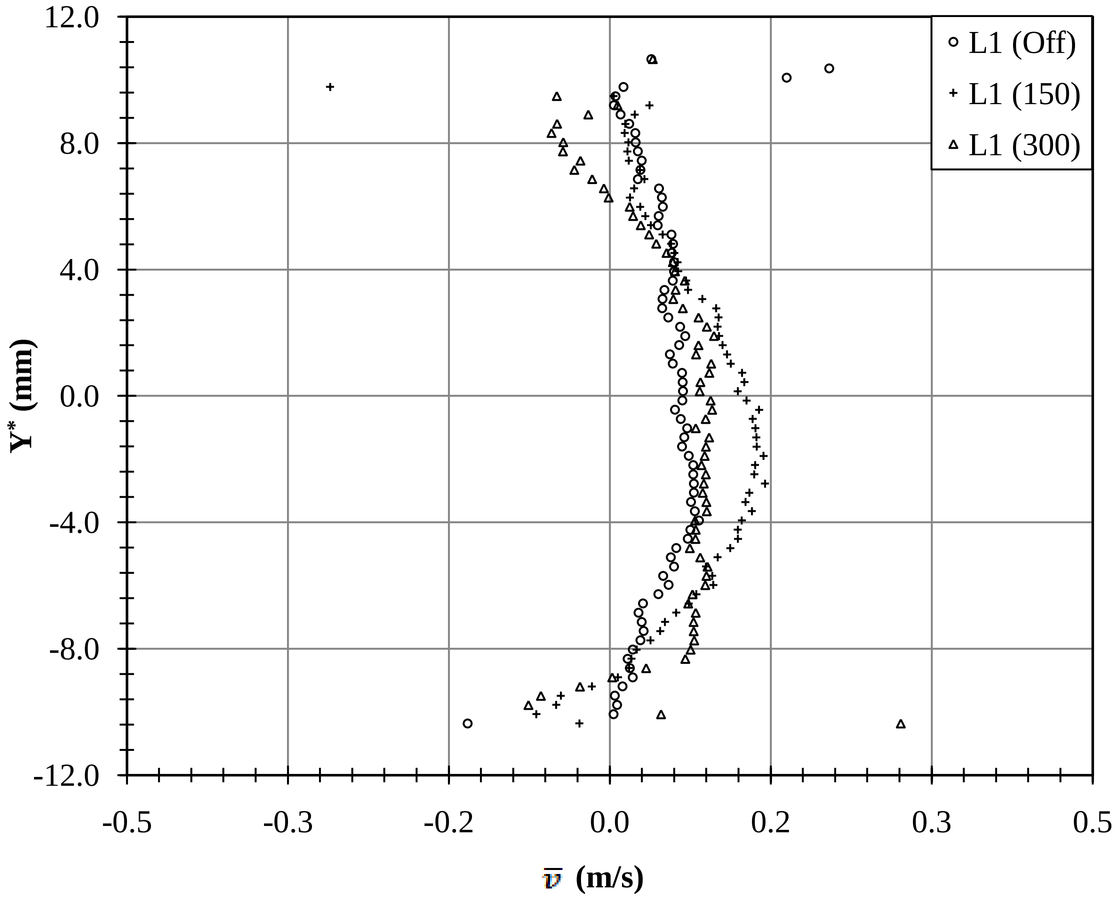

Fig. J-5 $\overline{v}$, Grid #1, L1, Left (1-10)

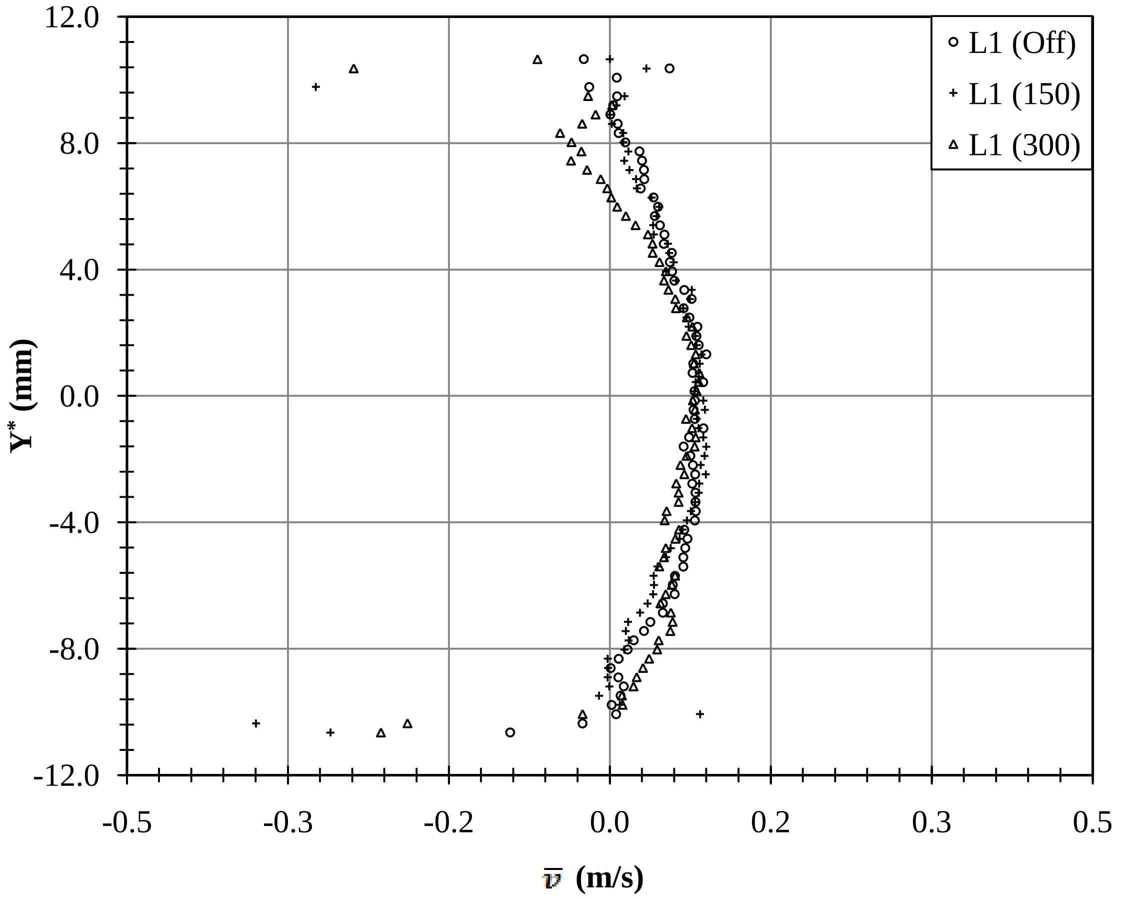

Fig. J-6 $\overline{v}$, Grid #1, L1, Center (46-55)

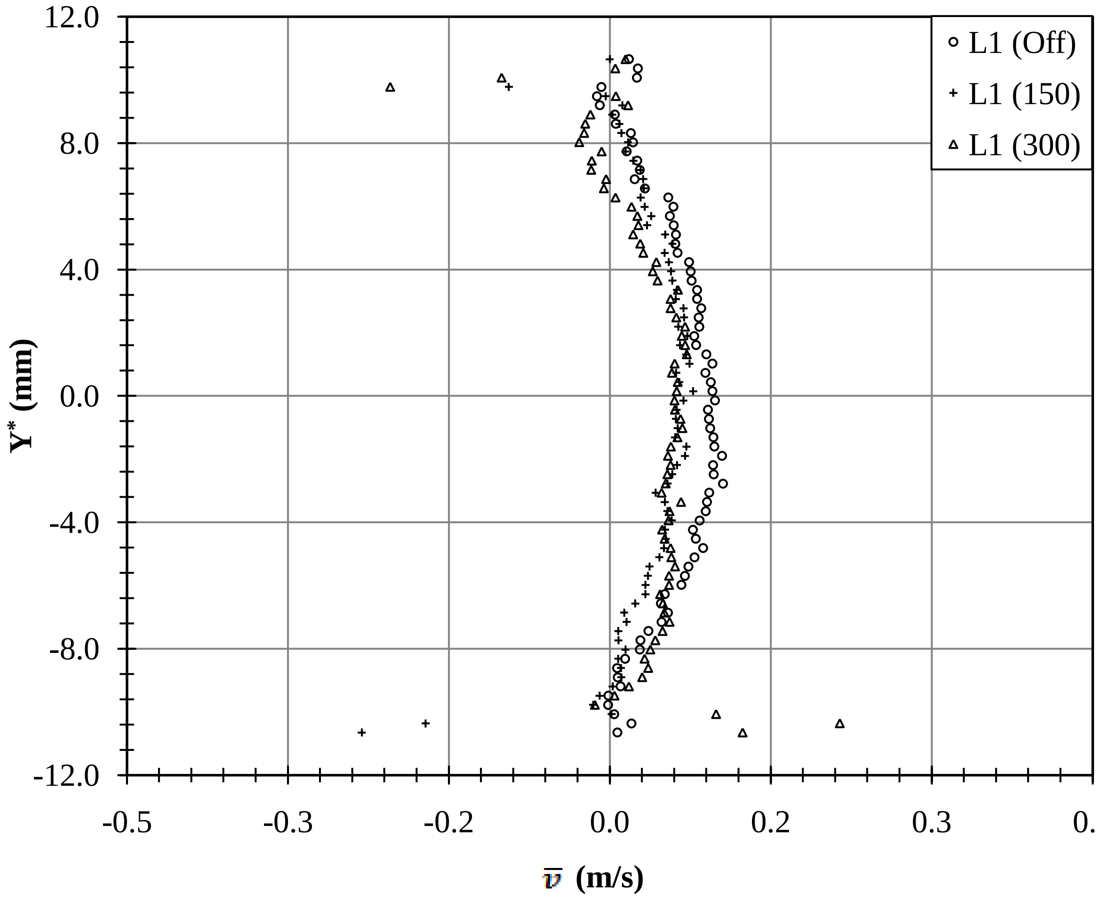

Fig. J-7 $\overline{v}$, Grid #1, L1, Right (71-80)

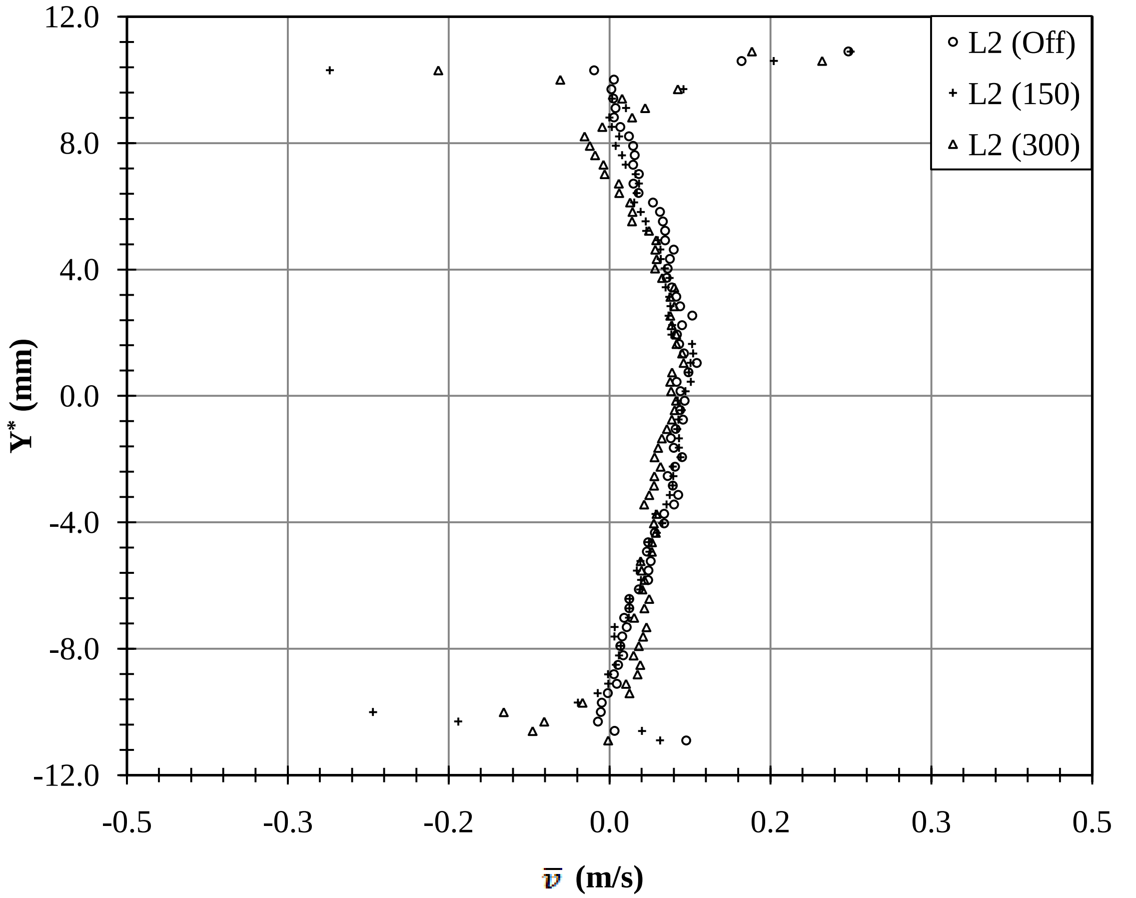

Fig. J-8 $\overline{v}$, Grid #1, L2, Left (1-10)

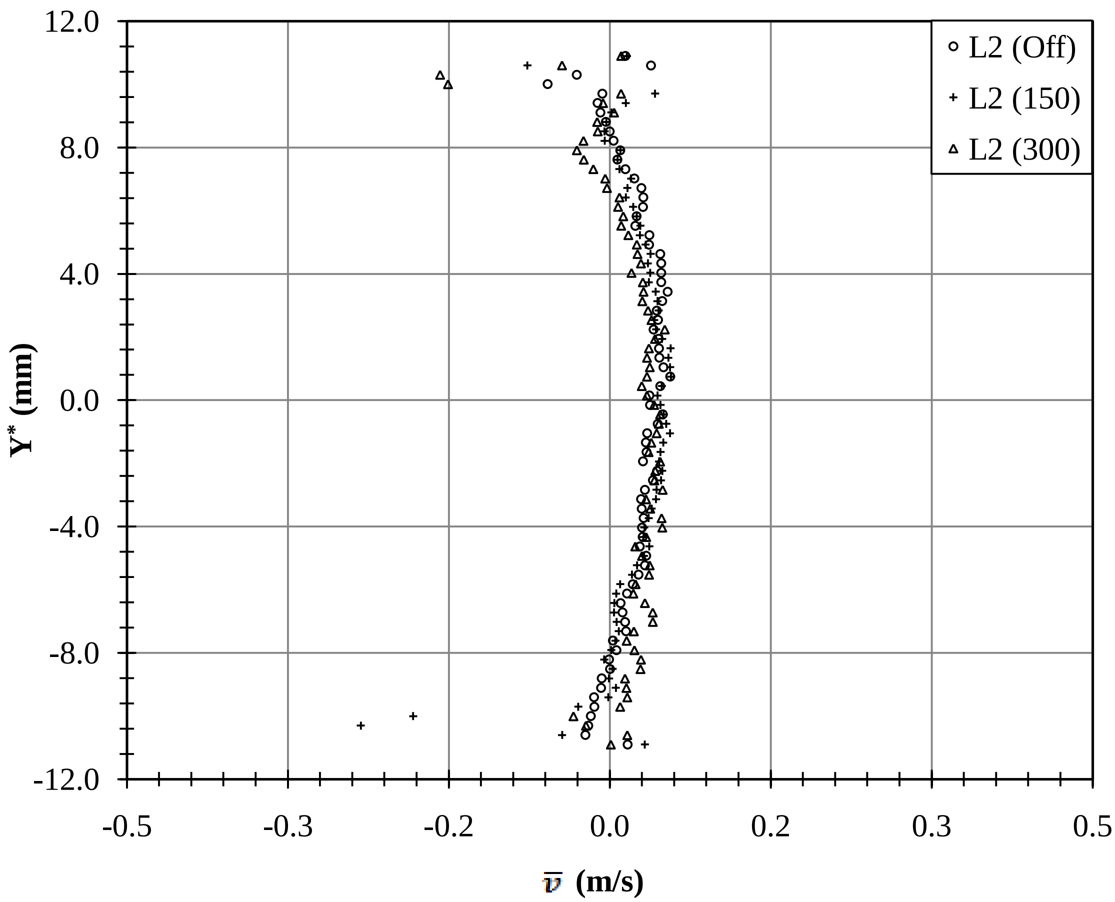

Fig. J-9 $\overline{v}$, Grid #1, L2, Center (46-55)

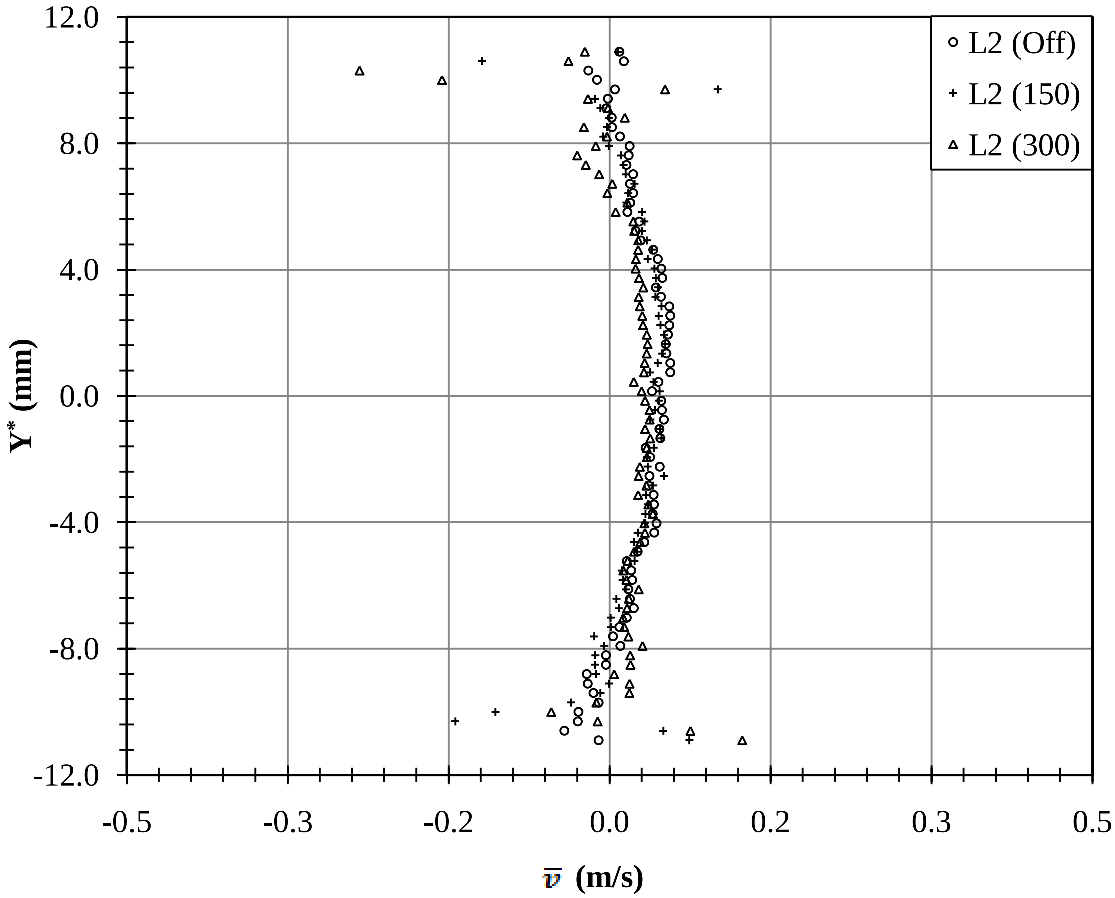

Fig. J-10 $\overline{v}$, Grid #1, L2, Right (71-80)

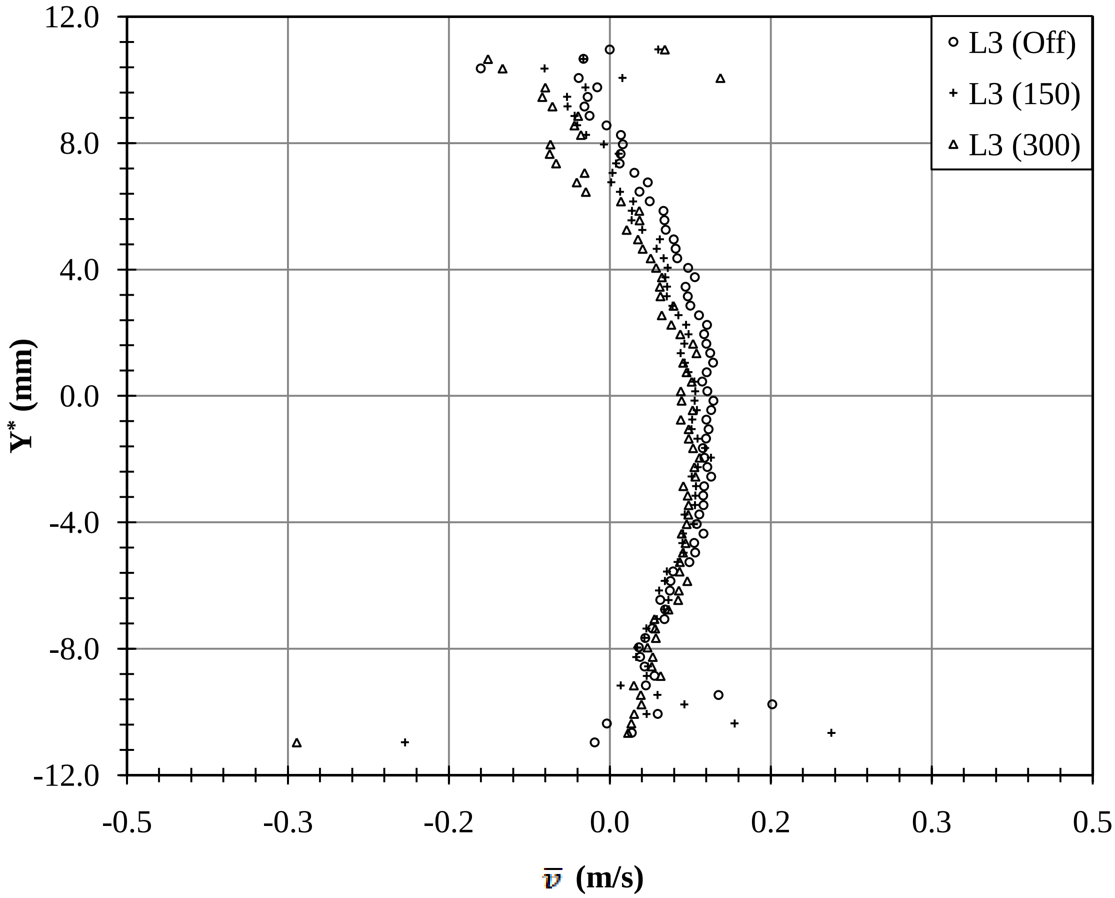

Fig. J-11 $\overline{v}$, Grid #1, L3, Left (1-10)

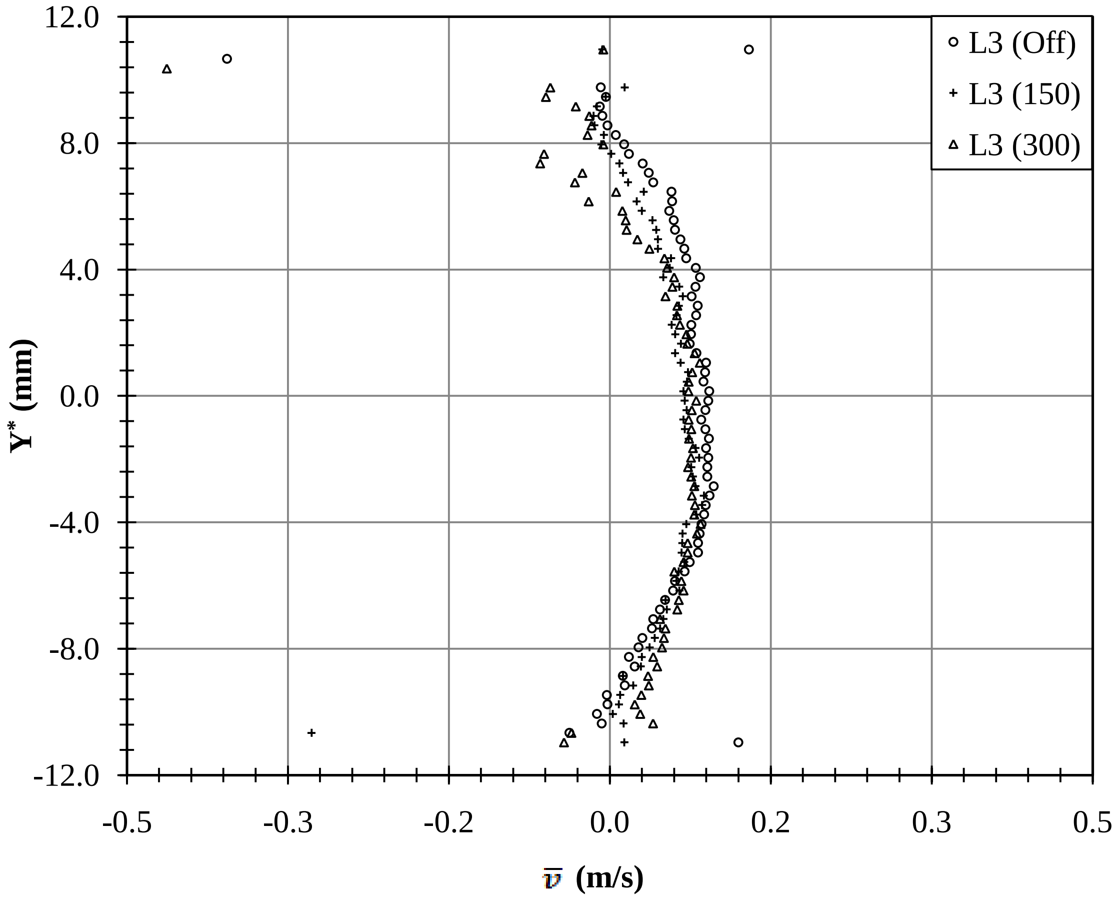

Fig. J-12 $\overline{v}$, Grid #1, L3, Center (46-55)

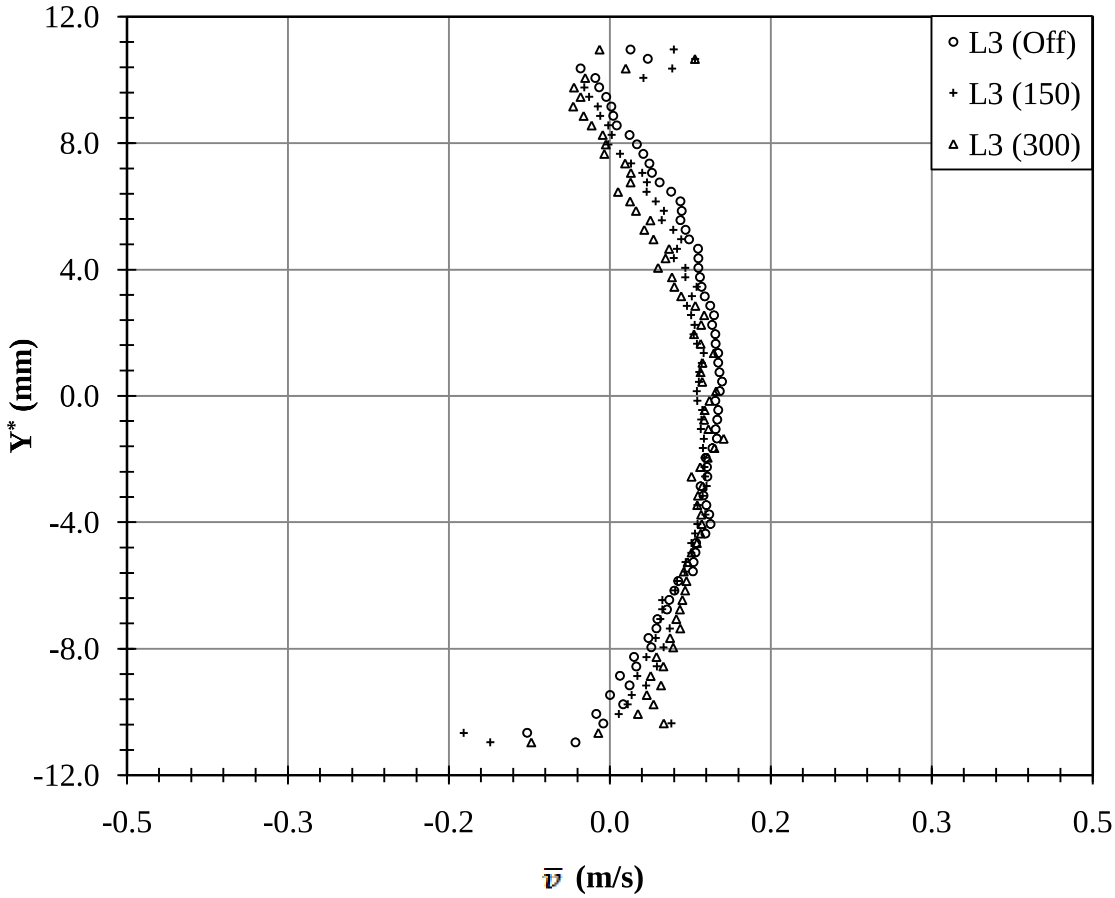

Fig. J-13 $\overline{v}$, Grid #1, L3, Right (71-80)

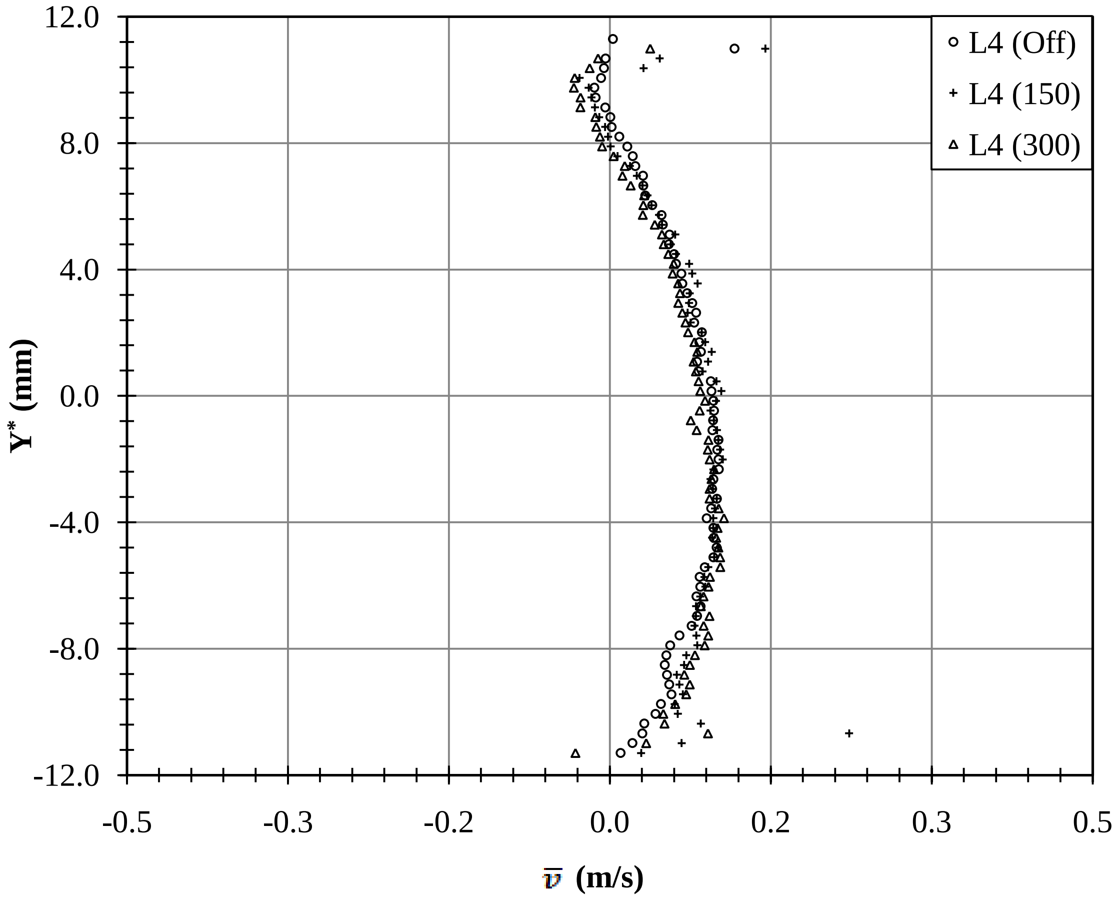

Fig. J-14 $\overline{v}$, Grid #1, L4, Left (1-10)

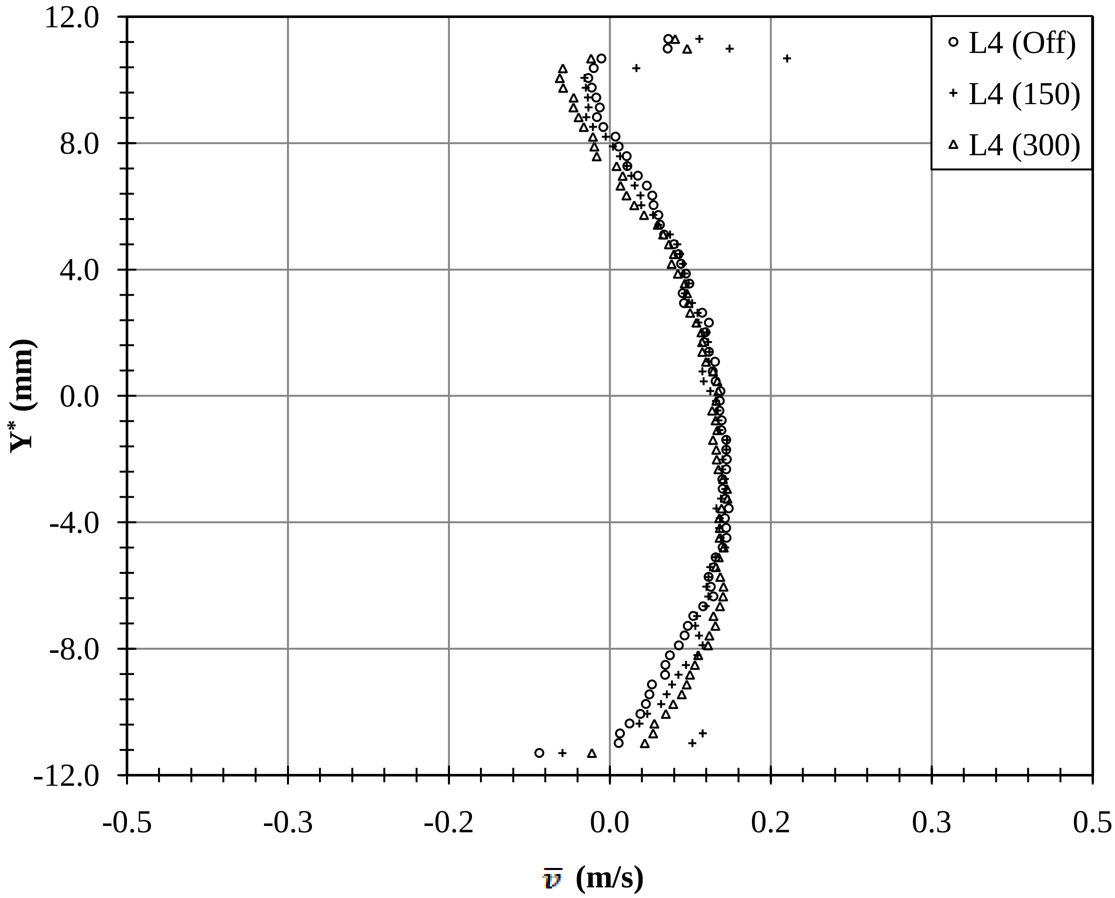

Fig. J-15 $\overline{v}$, Grid #1, L4, Center (46-55)

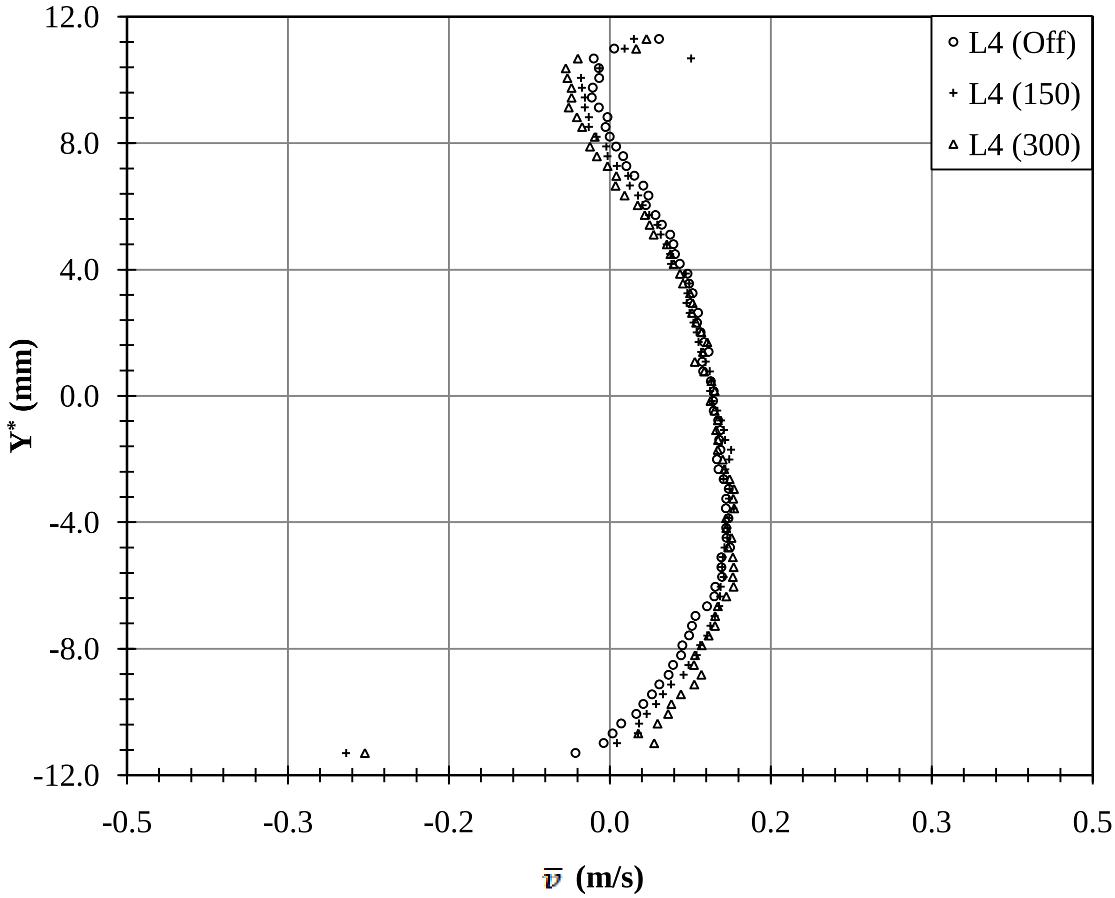

Fig. J-16 $\overline{v}$, Grid #1, L4, Right (71-80)

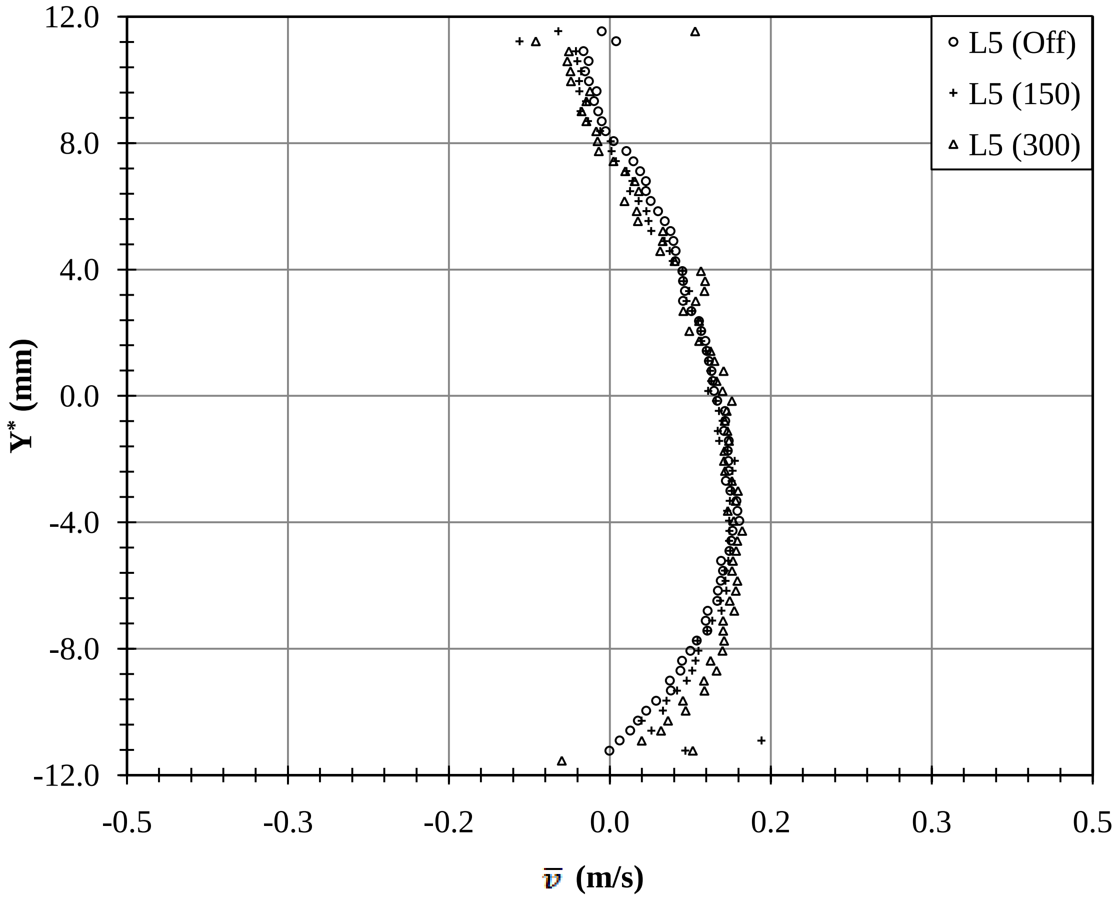

Fig. J-17 $\overline{v}$, Grid #1, L5, Left (1-10)

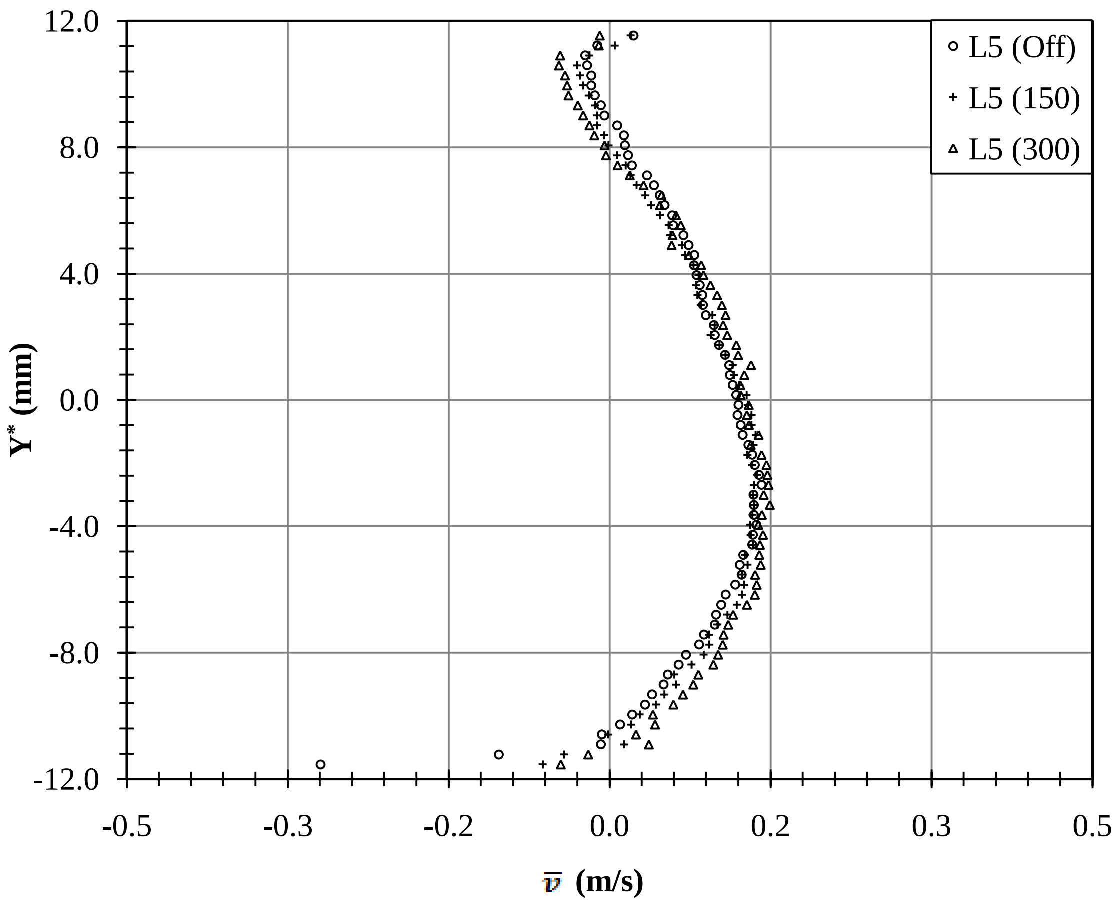

Fig. J-18 $\overline{v}$, Grid #1, L5, Center (46-55)

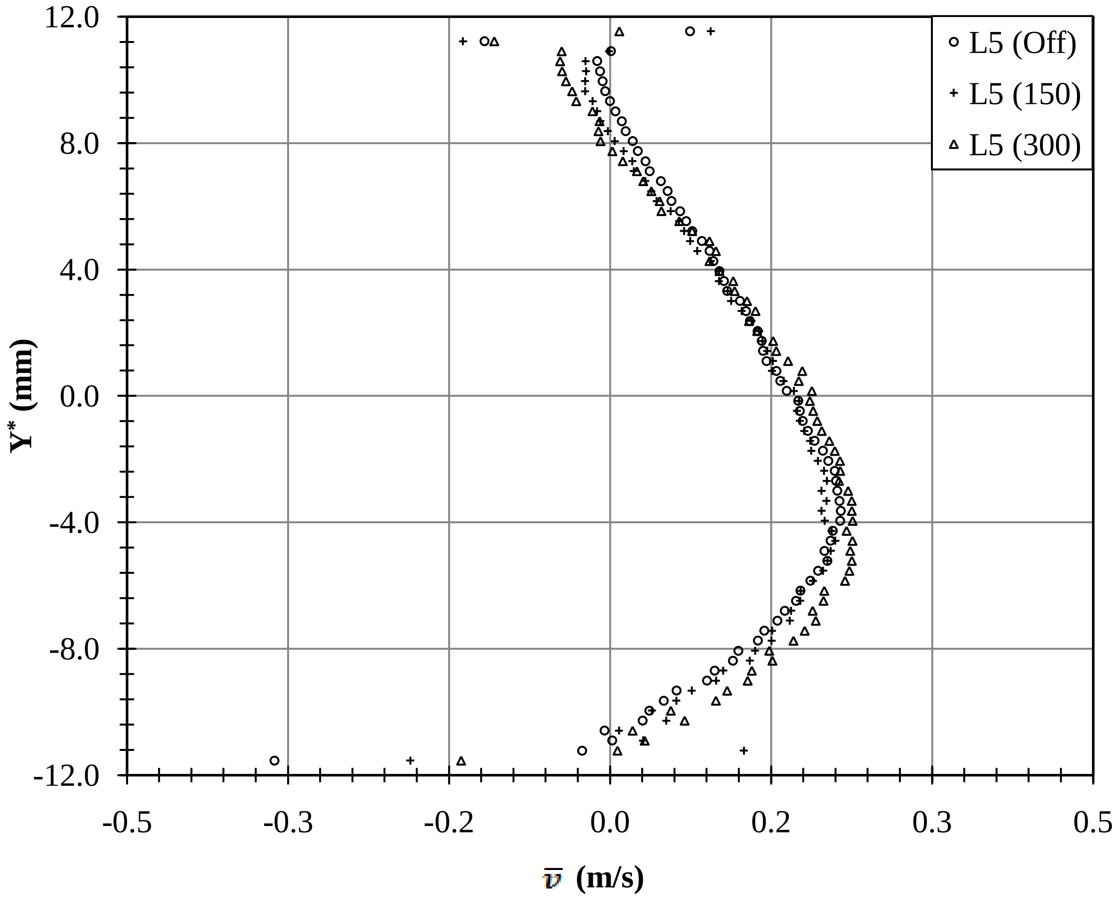

Fig. J-19 $\overline{v}$, Grid #1, L5, Right (71-80)

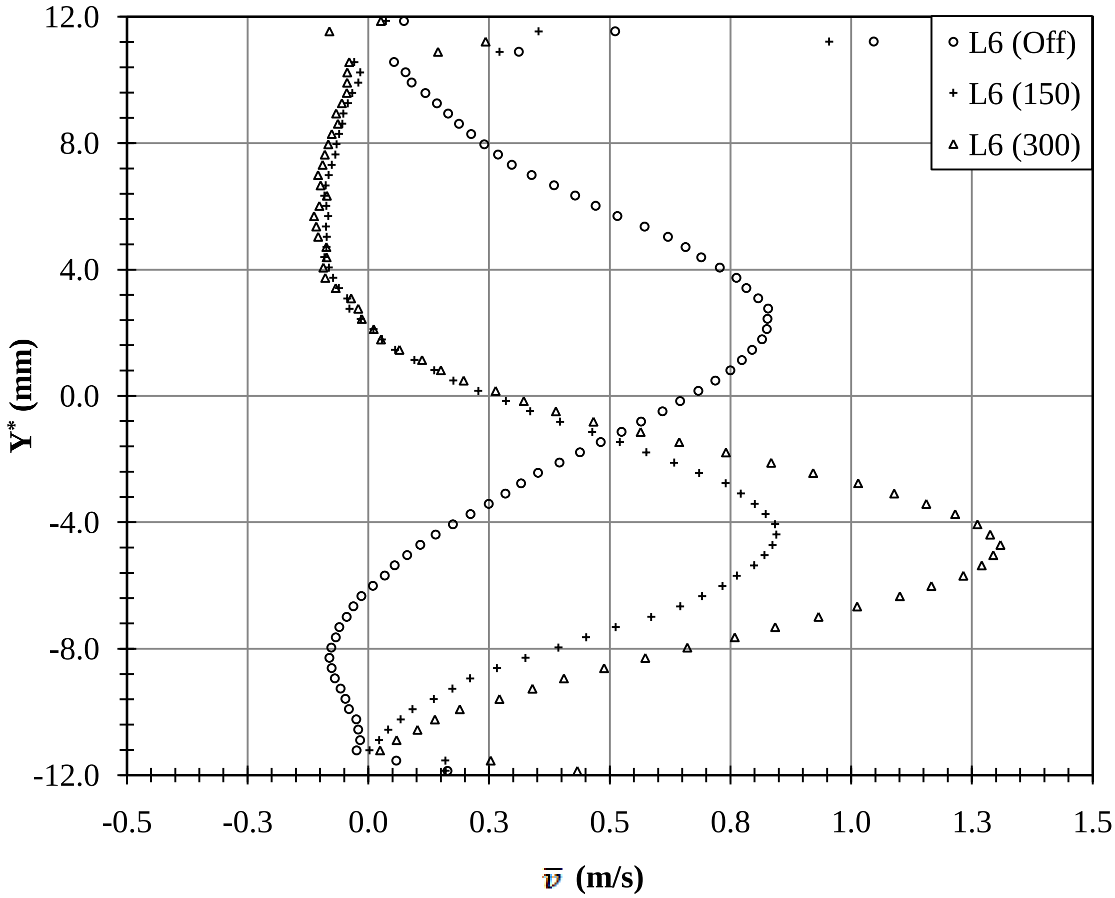

Fig. J-20 $\overline{v}$, Grid #1, L6, Left (1-10)

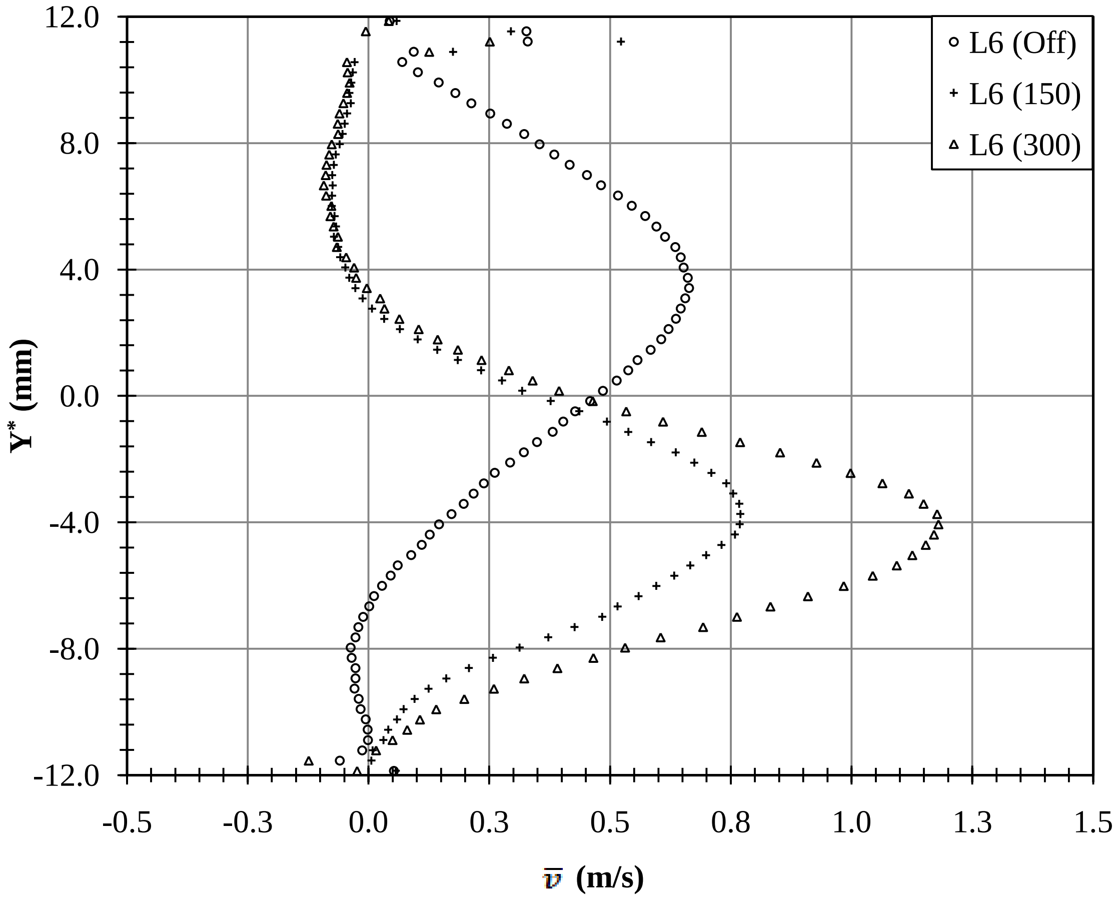

Fig. J-21 $\overline{v}$, Grid #1, L6, Center (46-55)

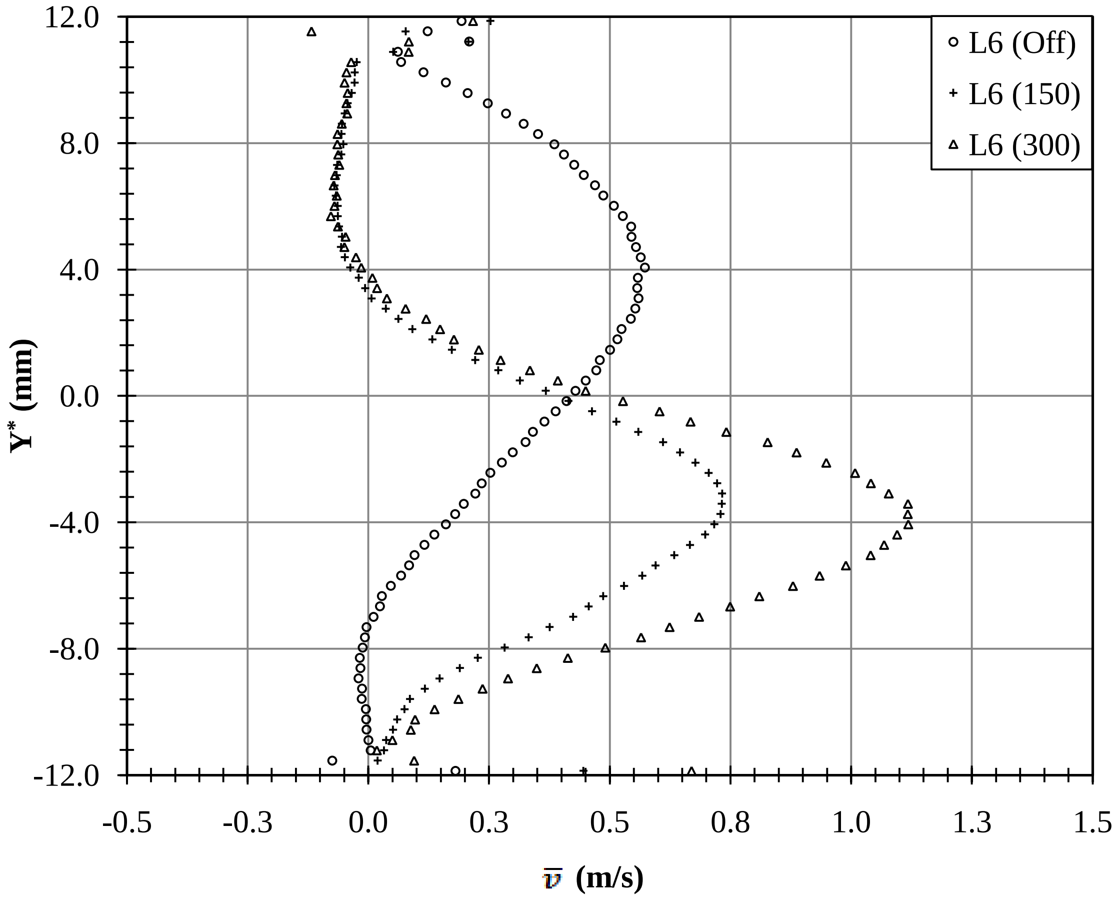

Fig. J-22 $\overline{v}$, Grid #1, L6, Right (71-80)

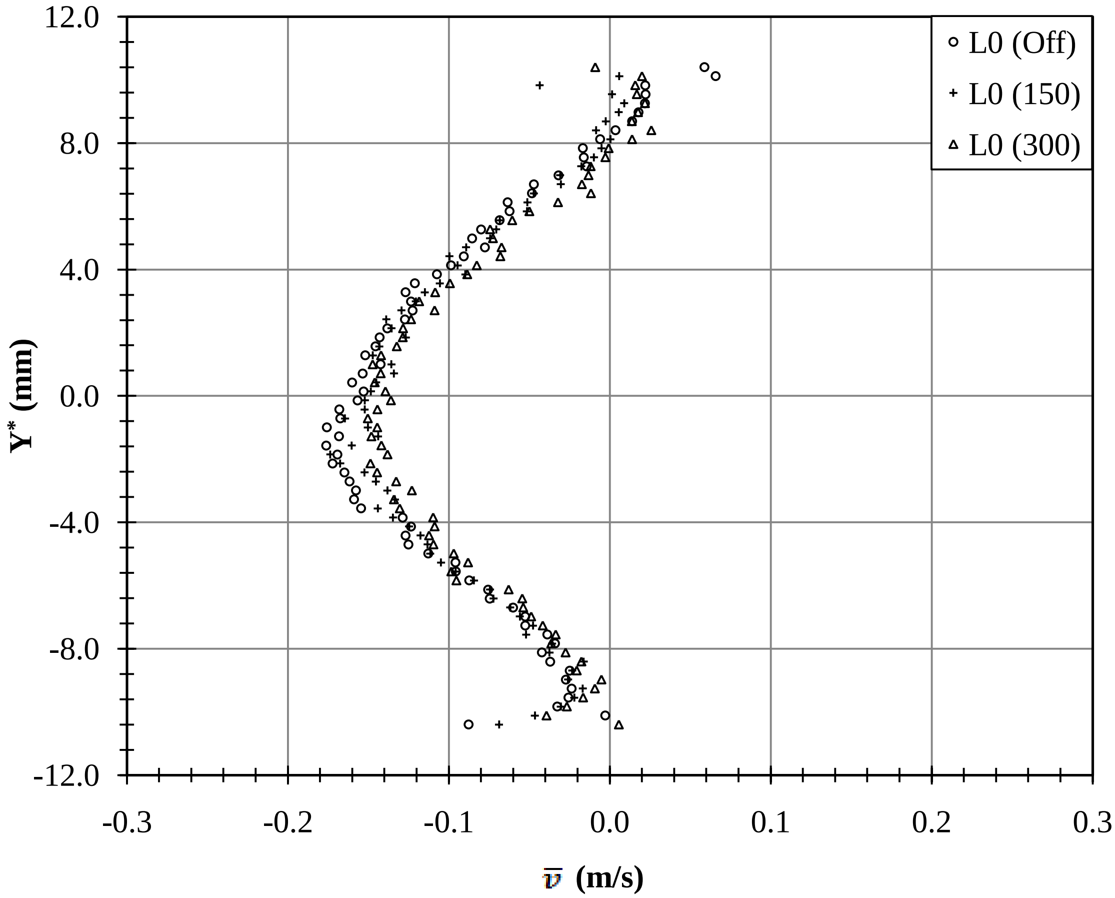

Fig. J-23 $\overline{v}$, Grid #2, L0, Left (1-10)

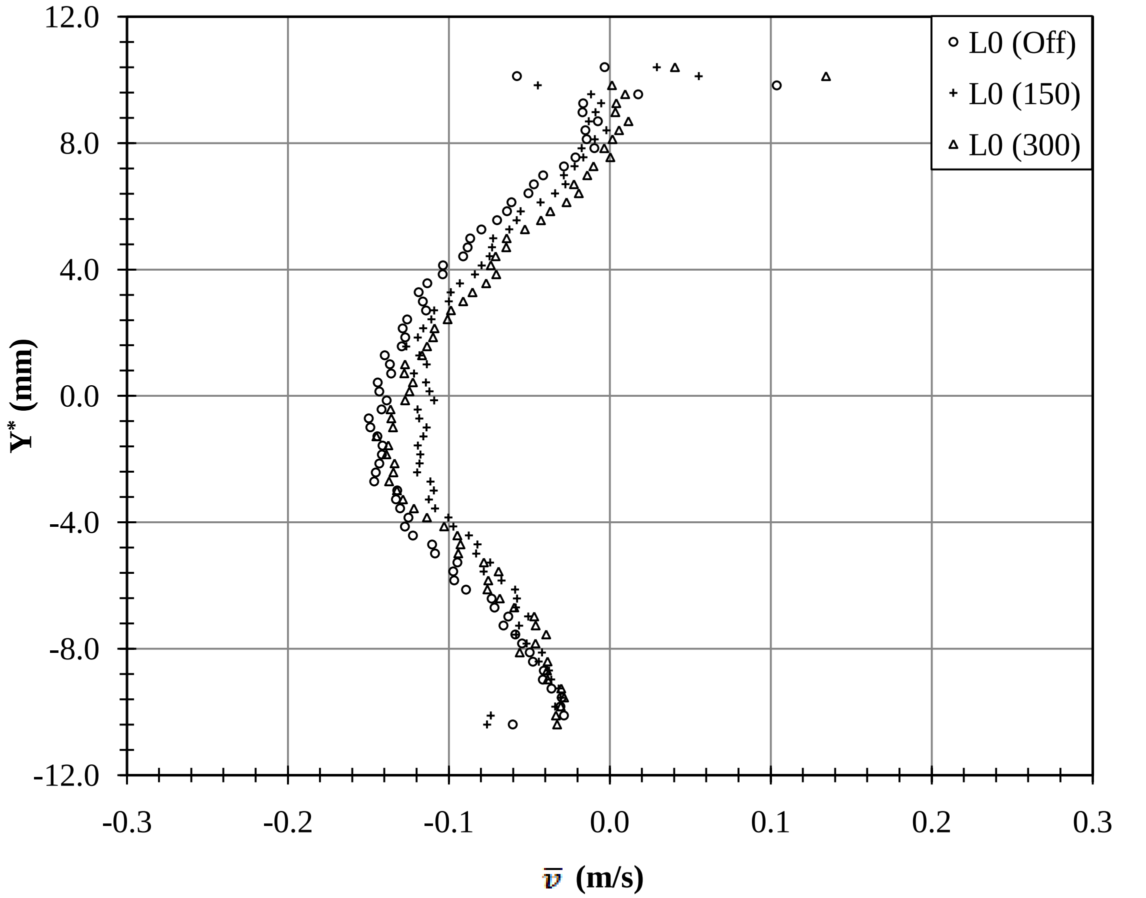

Fig. J-24 $\overline{v}$, Grid #2, L0, Center (46-55)

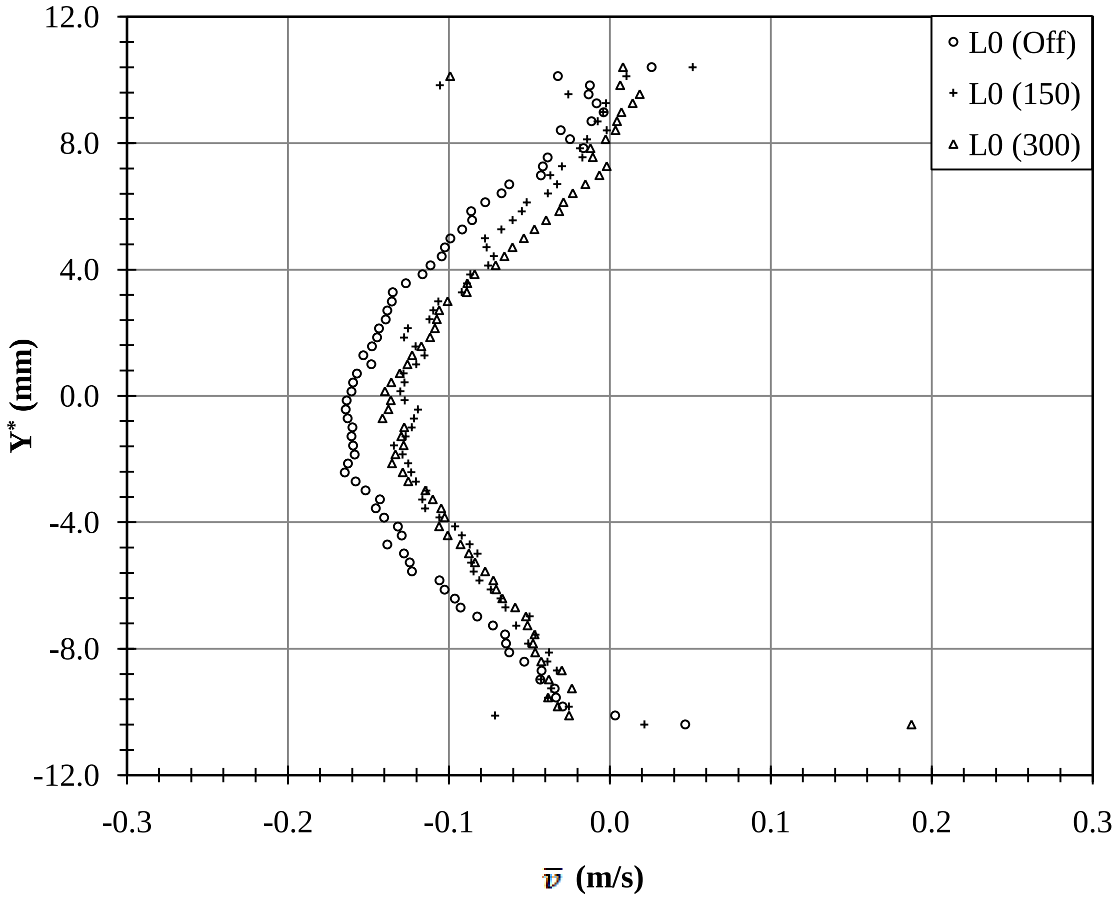

Fig. J-25 $\overline{v}$, Grid #2, L0, Right (71-80)

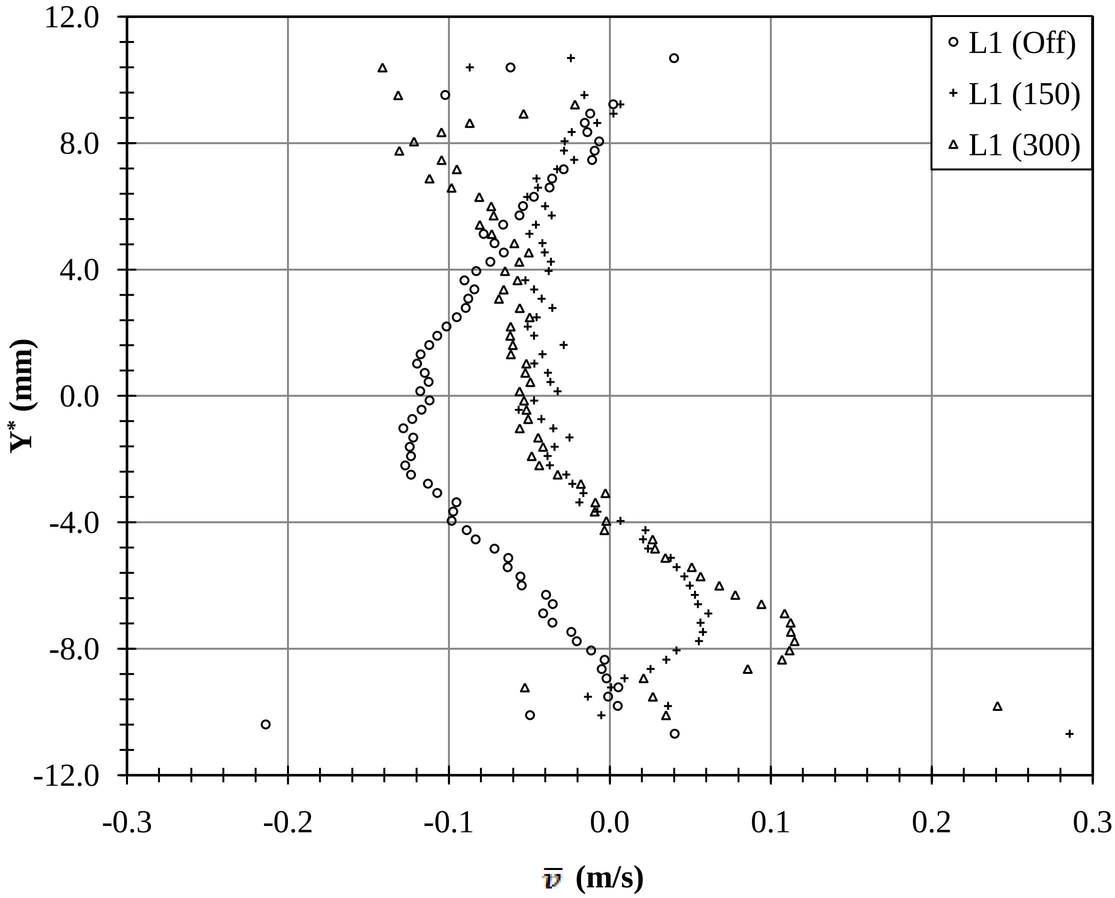

Fig. J-26 $\overline{v}$, Grid #2, L1, Left (1-10)

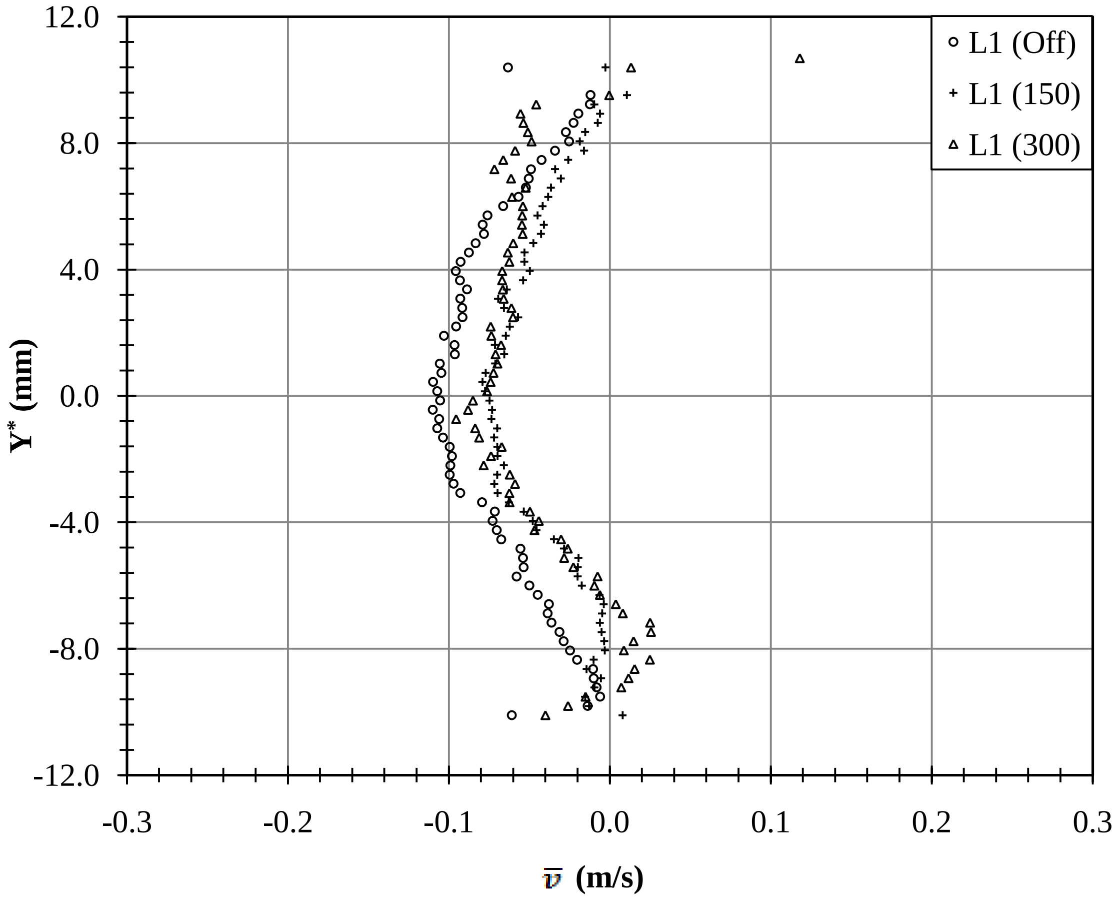

Fig. J-27 $\overline{v}$, Grid #2, L1, Center (46-55)

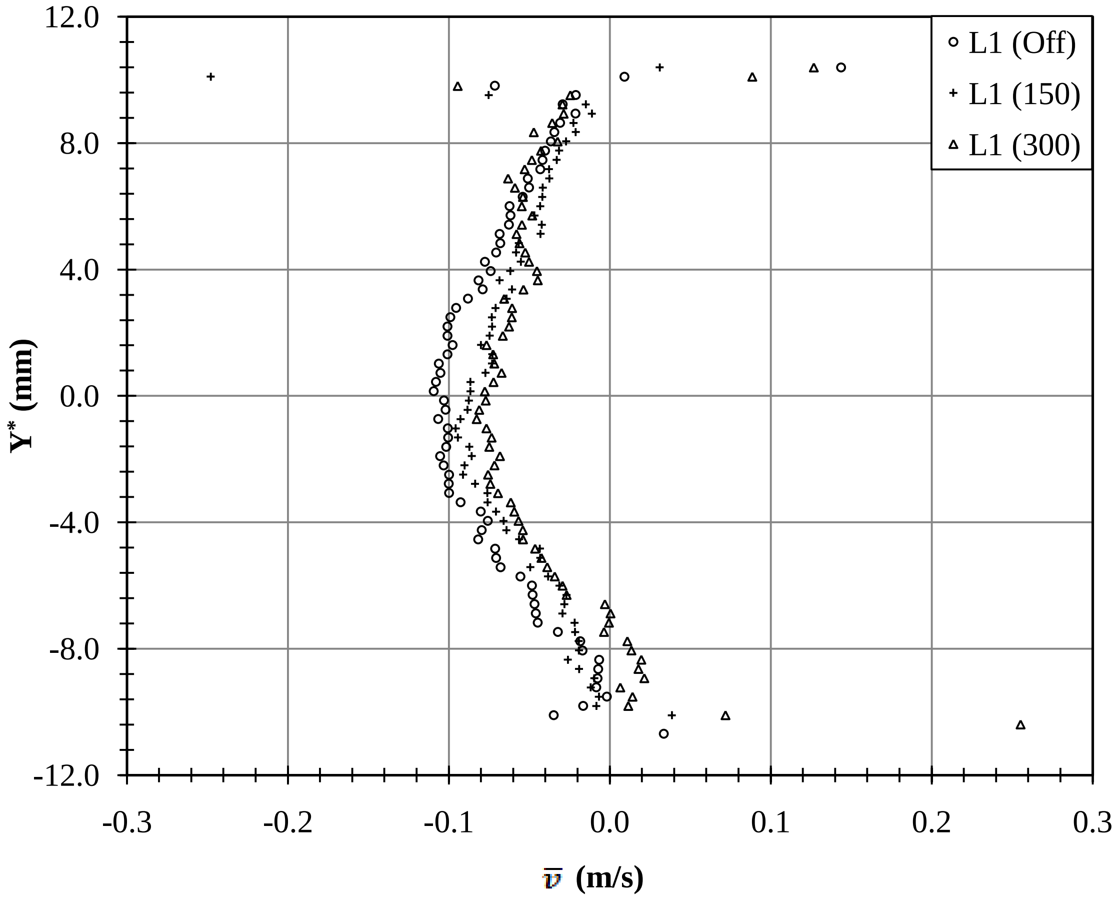

Fig. J-28 $\overline{v}$, Grid #2, L1, Right (71-80)

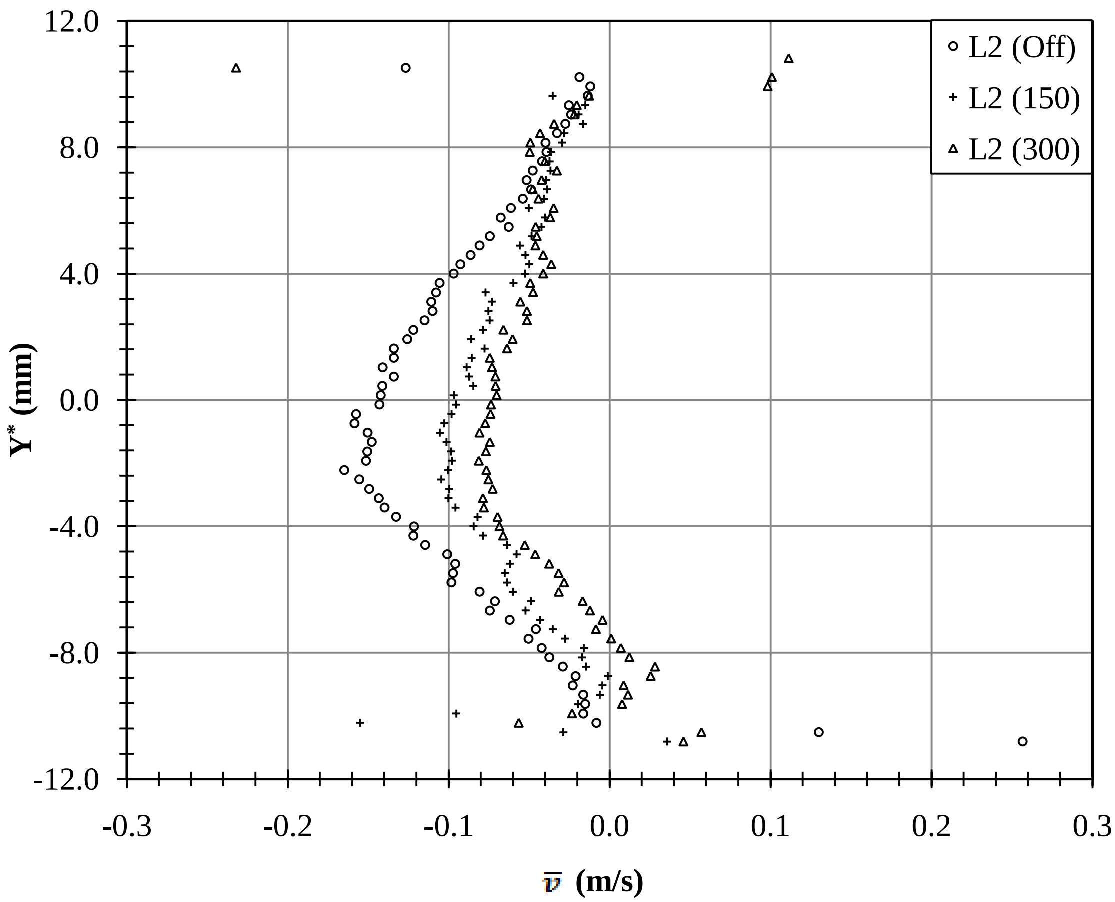

Fig. J-29 $\overline{v}$, Grid #2, L2, Left (1-10)

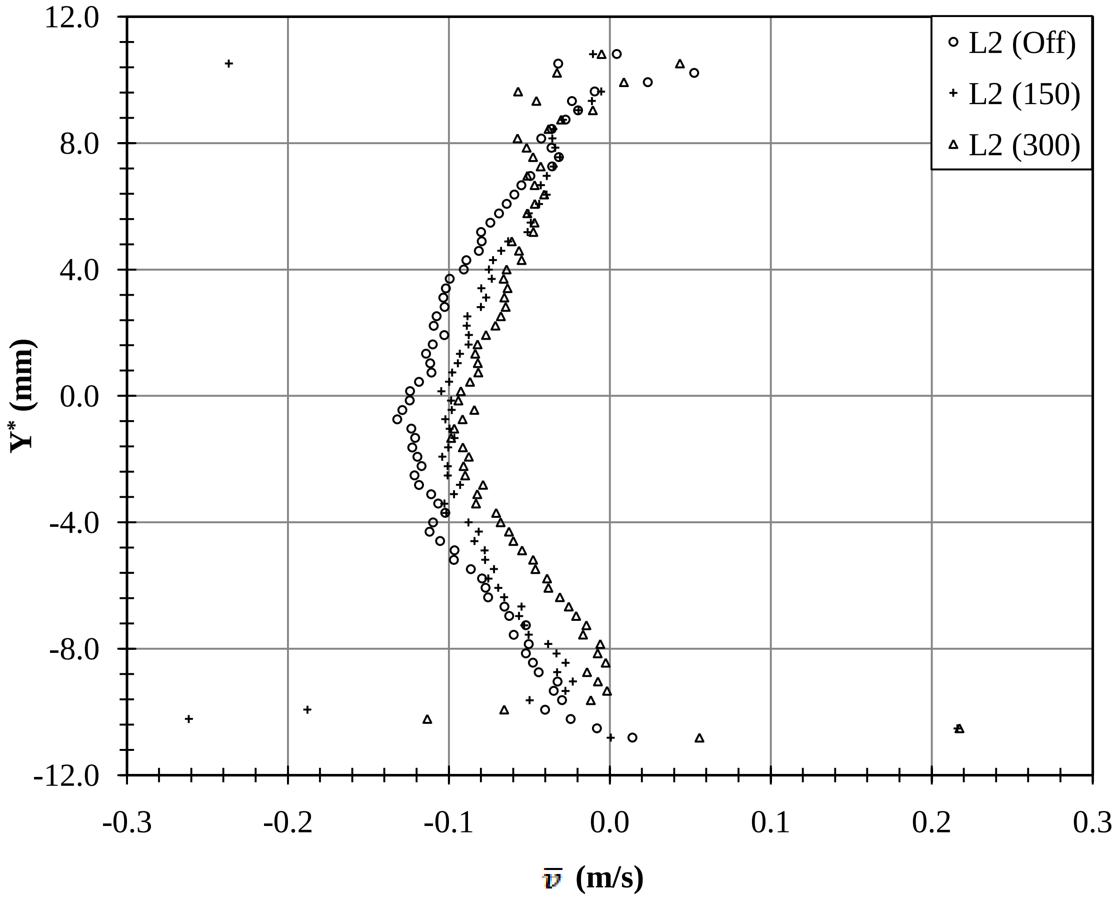

Fig. J-30 $\overline{v}$, Grid #2, L2, Center (46-55)

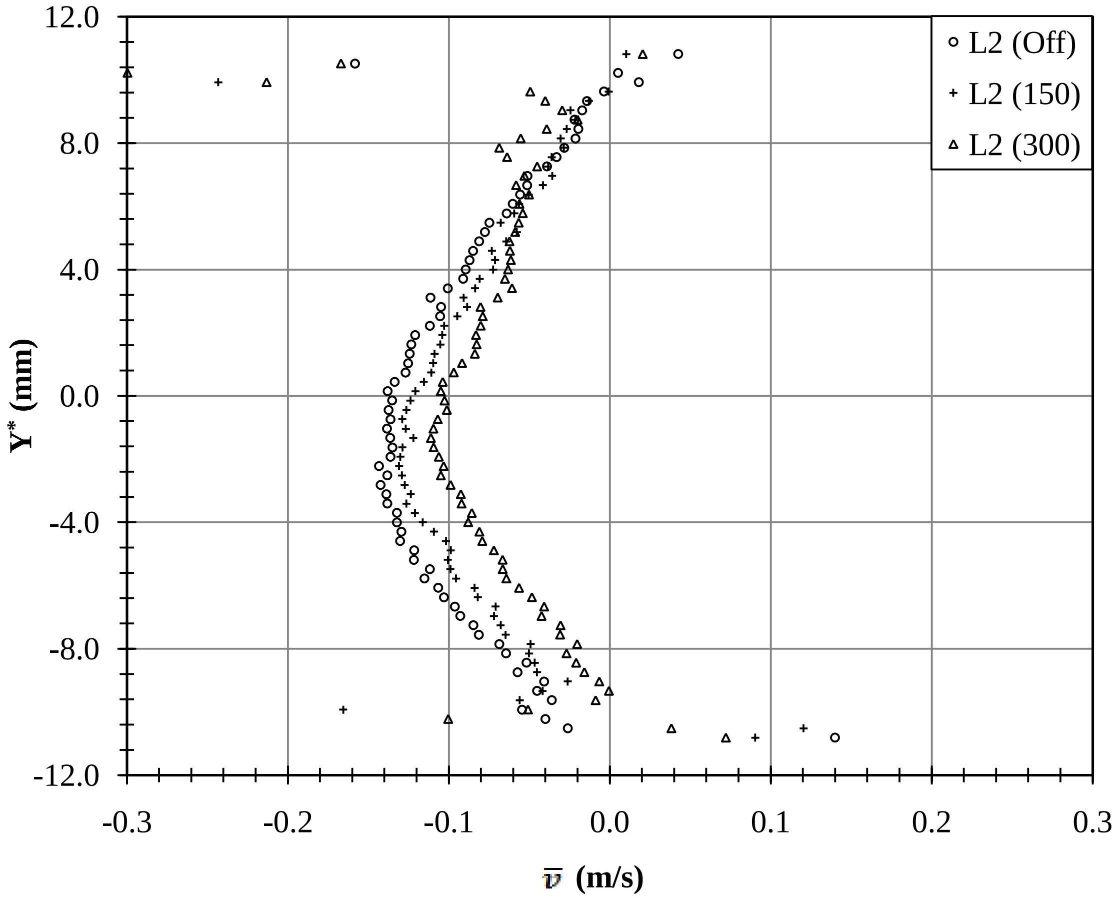

Fig. J-31 $\overline{v}$, Grid #2, L2, Right (71-80)

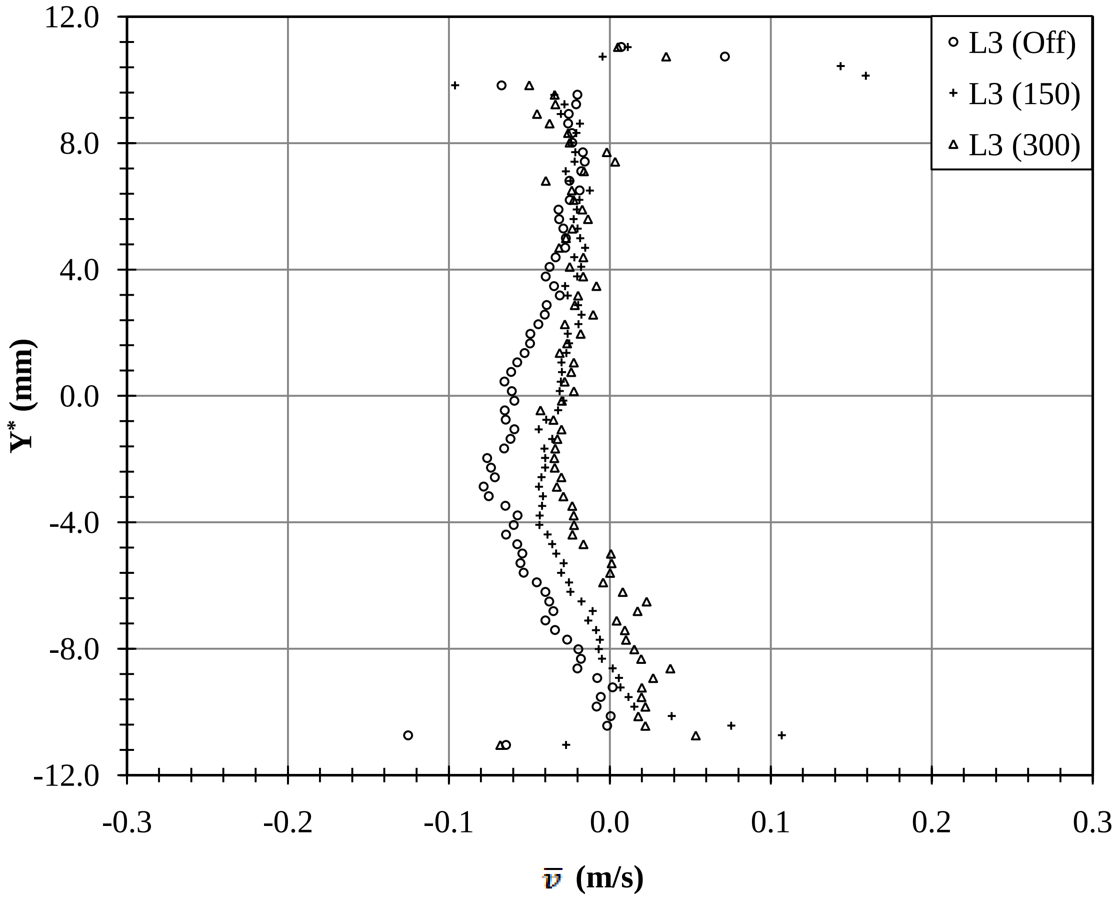

Fig. J-32 $\overline{v}$, Grid #2, L3, Left (1-10)

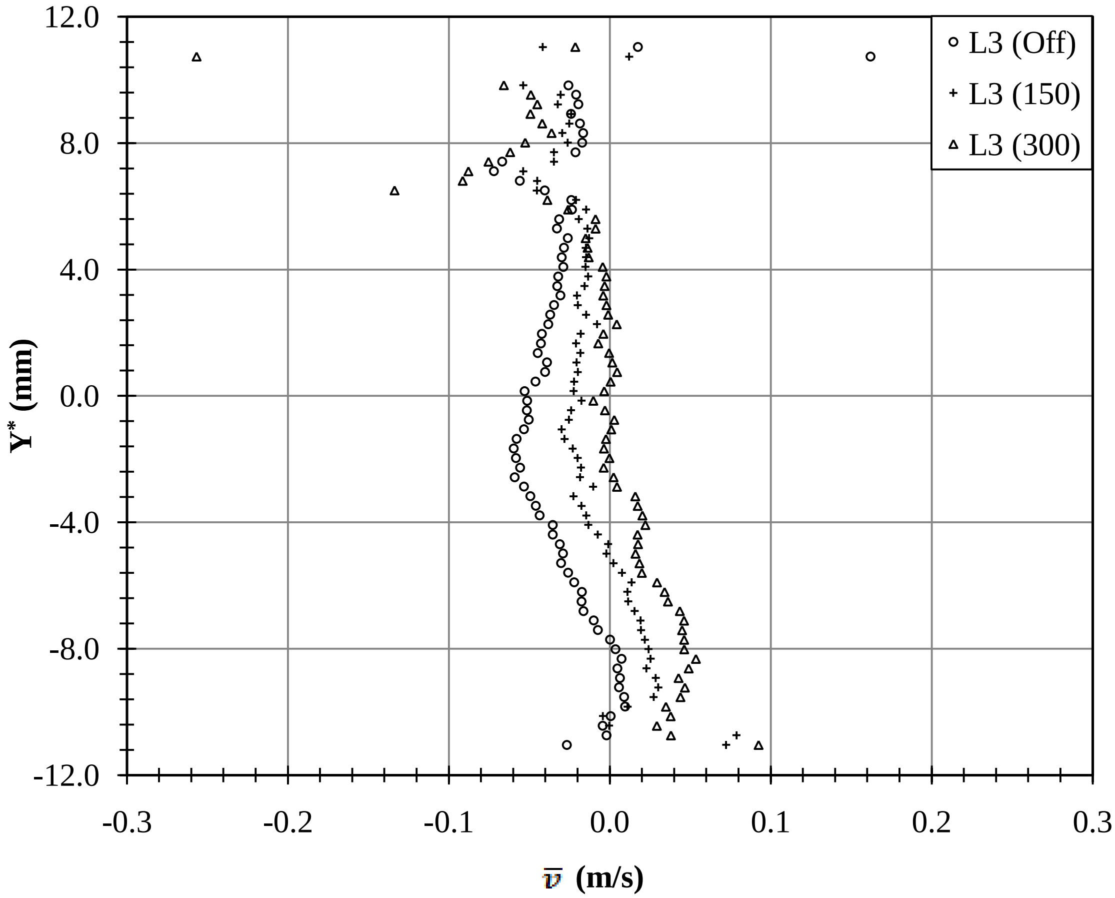

Fig. J-33 $\overline{v}$, Grid #2, L3, Center (46-55)

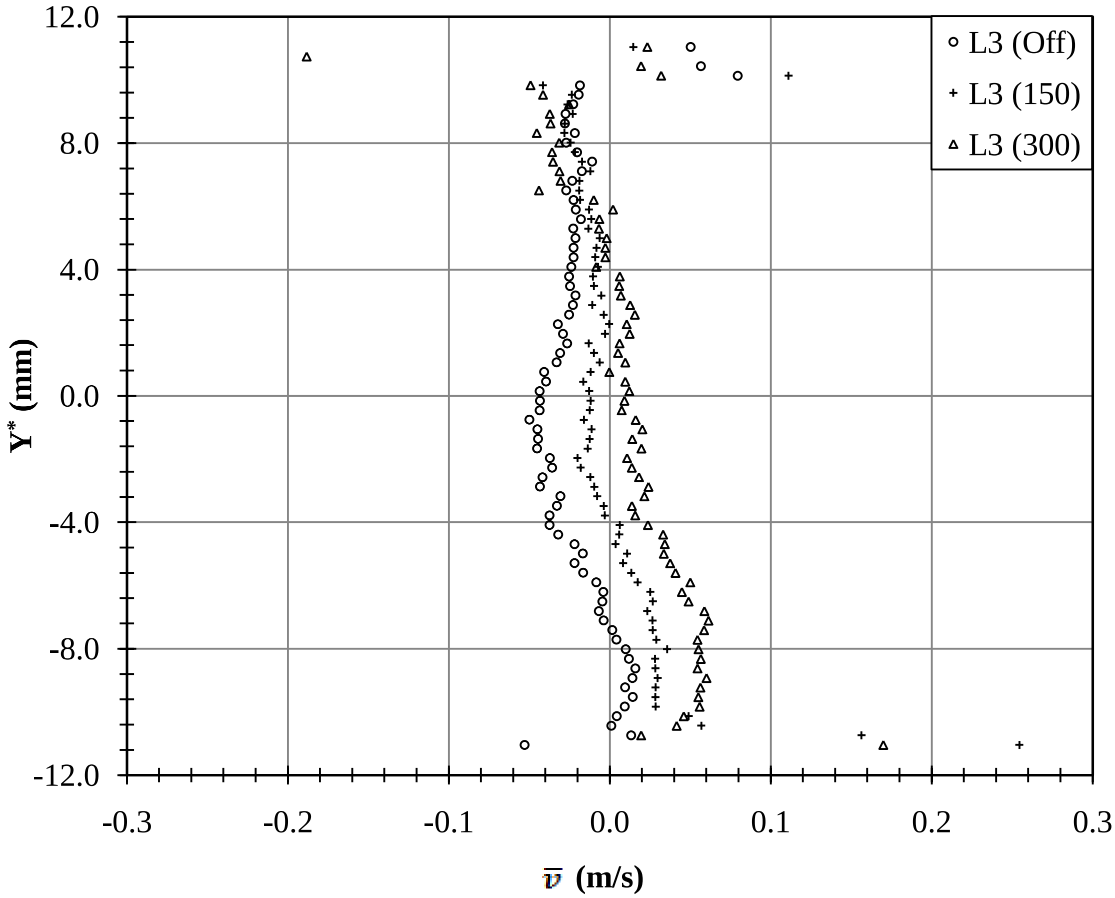

Fig. J-34 $\overline{v}$, Grid #2, L3, Right (71-80)

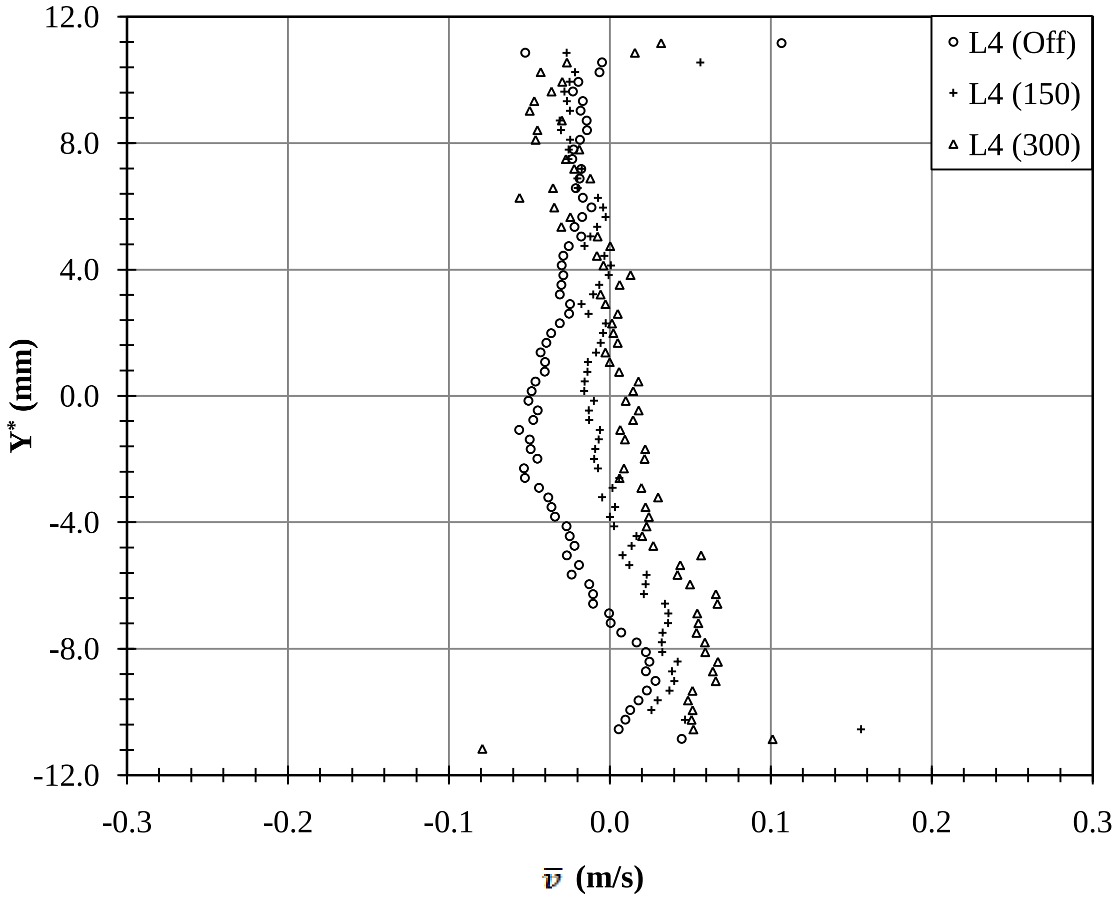

Fig. J-35 $\overline{v}$, Grid #2, L4, Left (1-10)

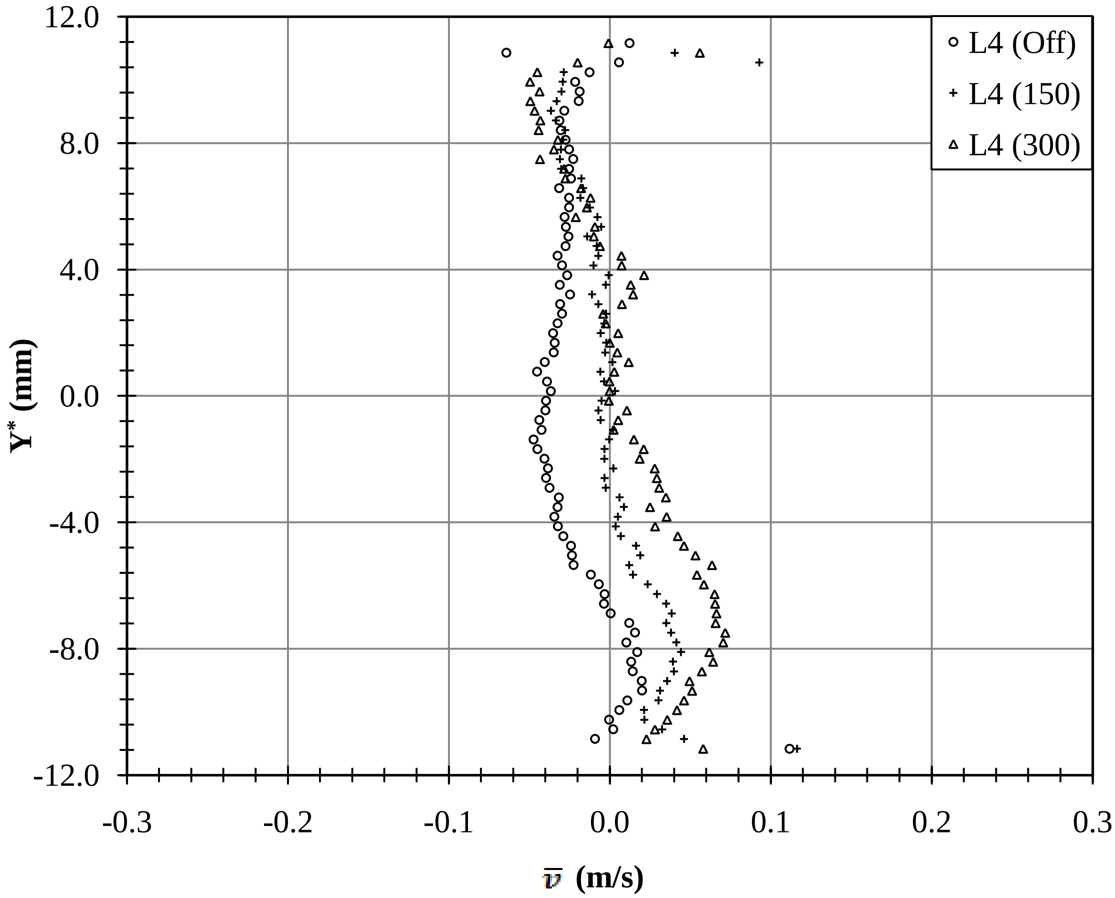

Fig. J-36 $\overline{v}$, Grid #2, L4, Center (42-51)

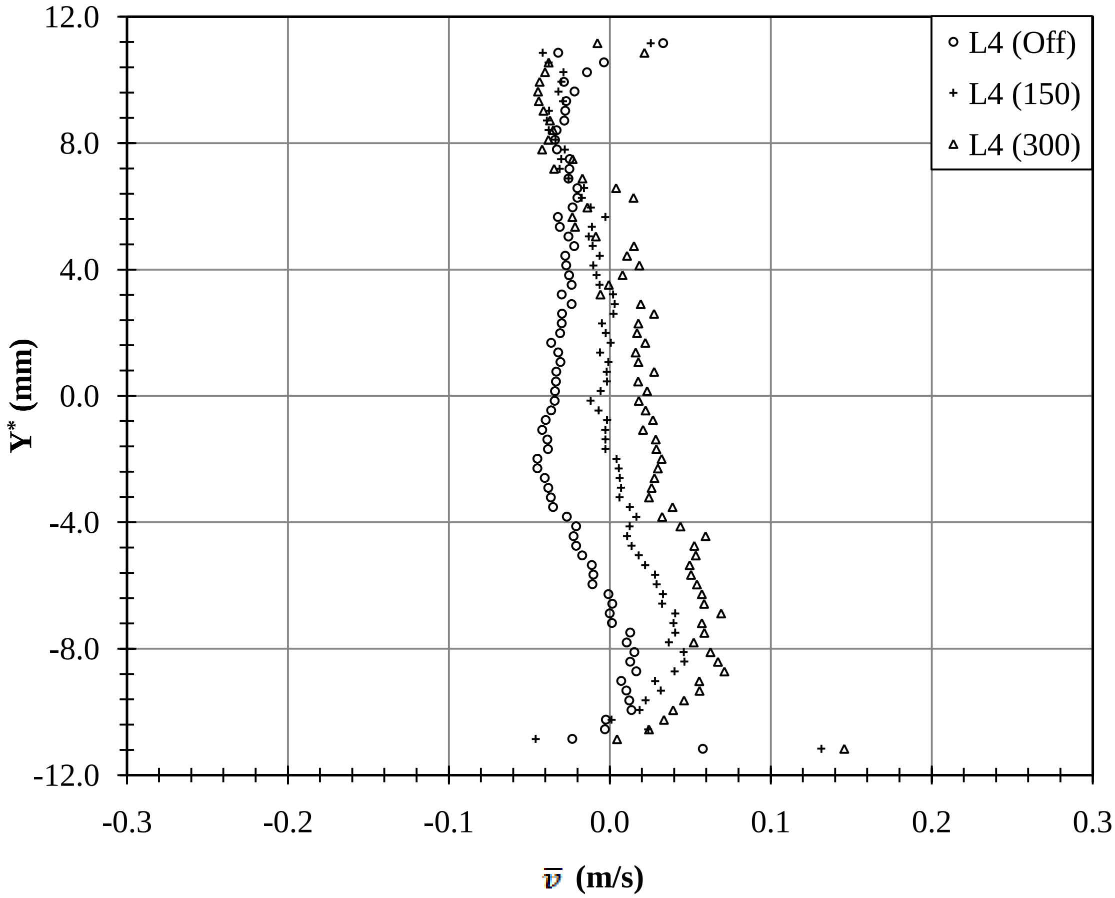

Fig. J-37 $\overline{v}$, Grid #2, L4, Right (71-80)

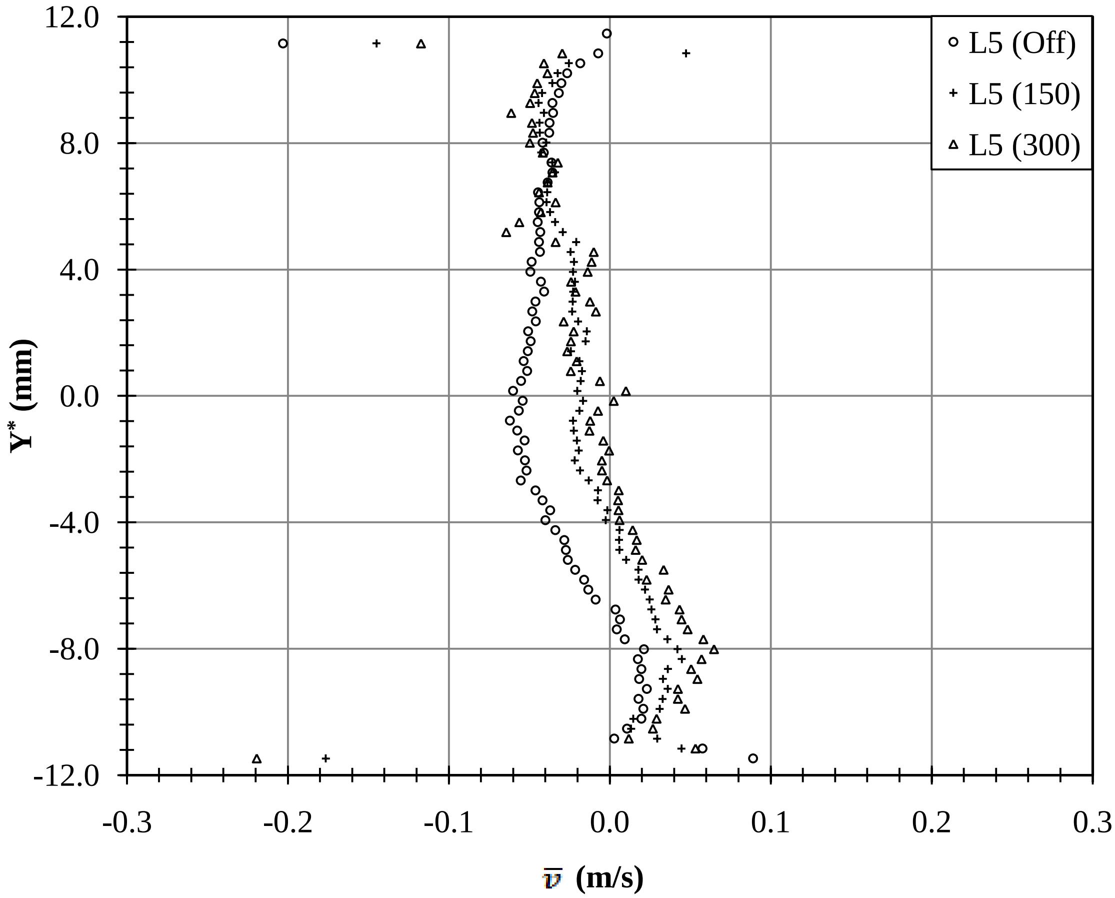

Fig. J-38 $\overline{v}$, Grid #2, L5, Left (1-10)

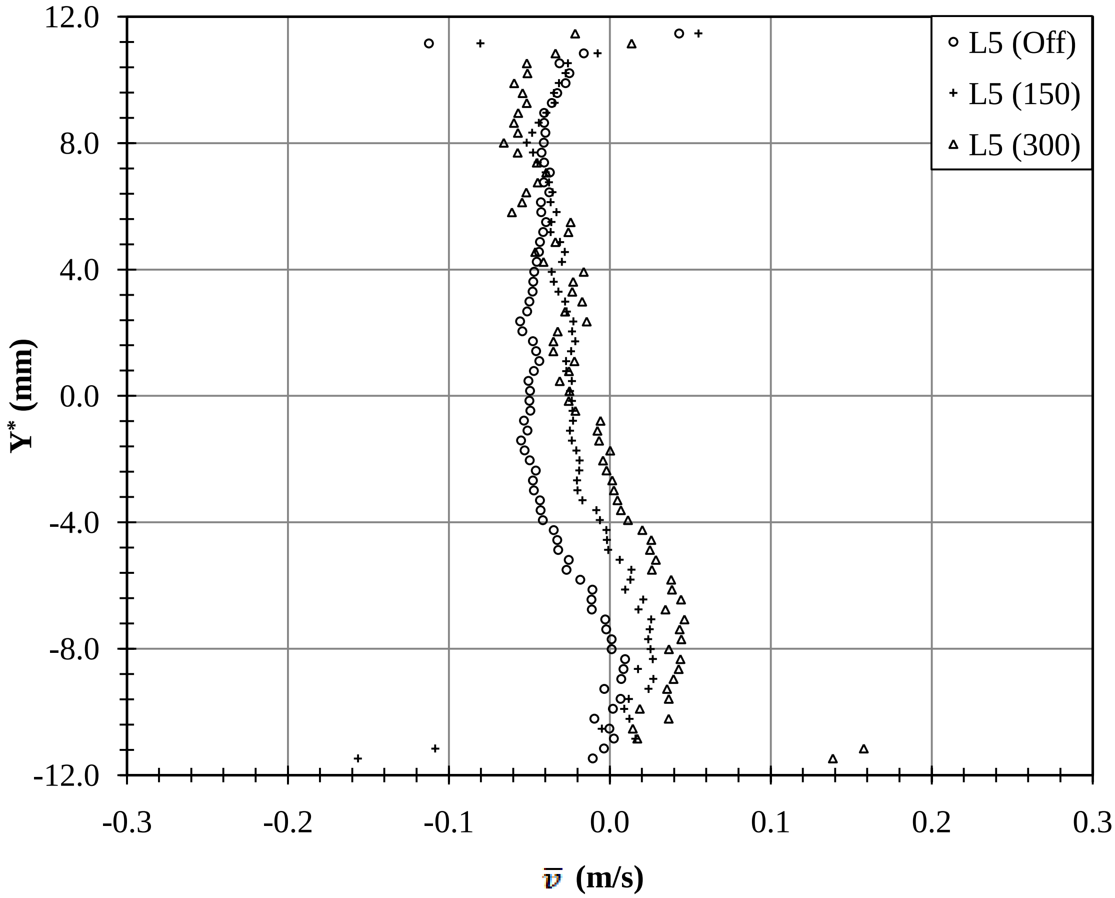

Fig. J-39 $\overline{v}$, Grid #2, L5, Center (46-55)

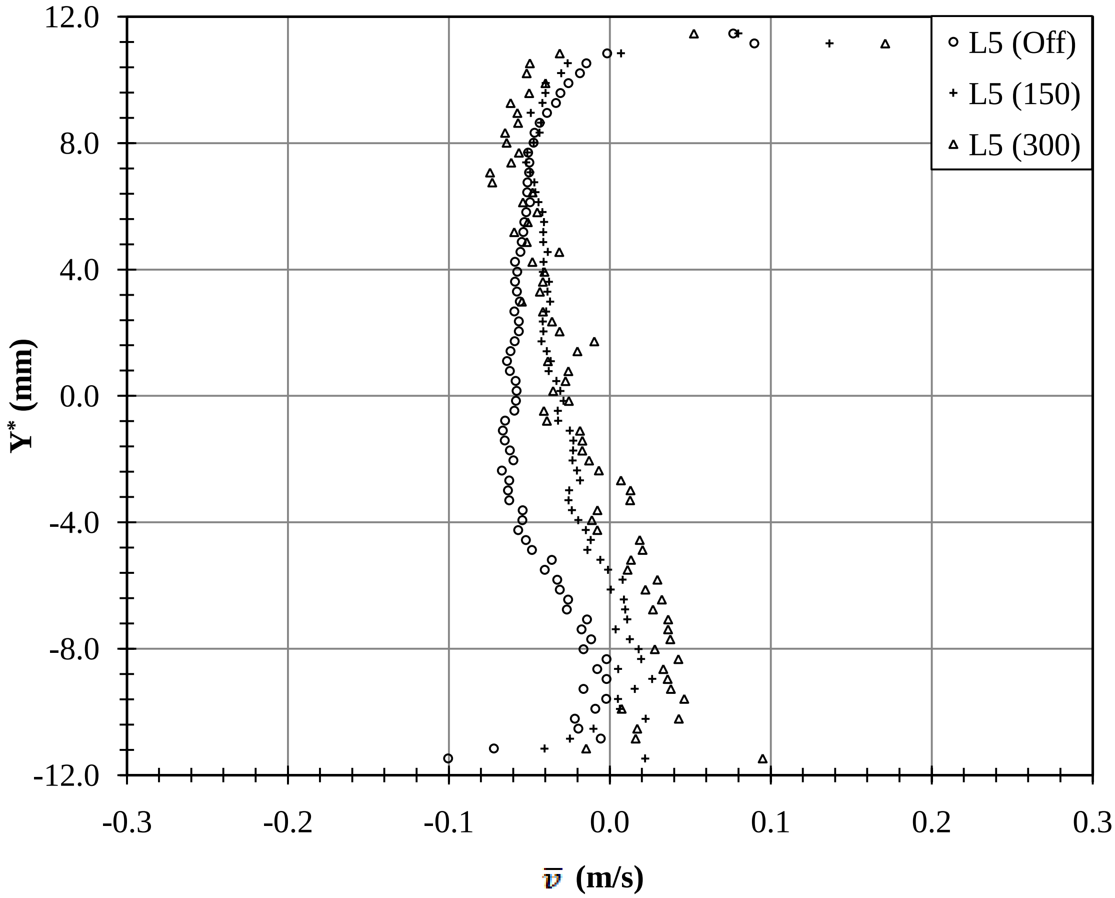

Fig. J-40 $\overline{v}$, Grid #2, L5, Right (71-80)

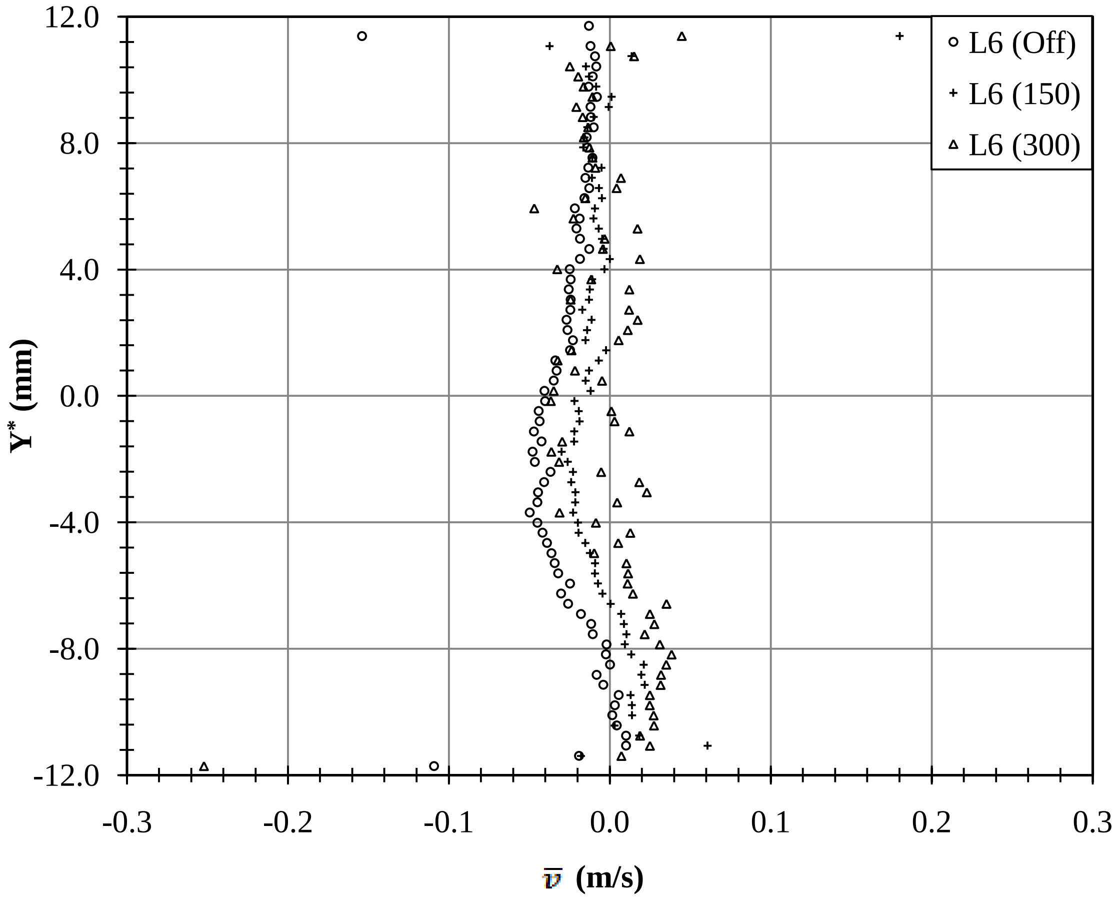

Fig. J-41 $\overline{v}$, Grid #2, L6, Left (1-10)

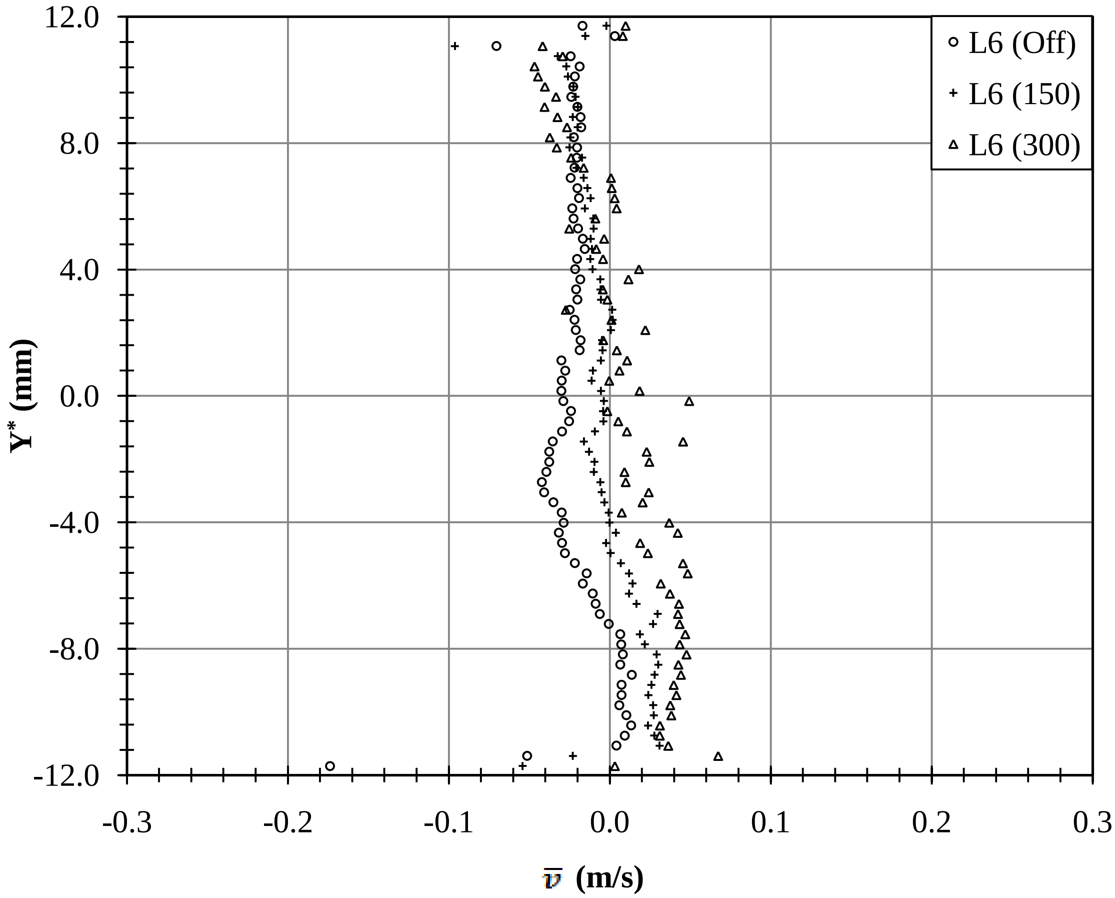

Fig. J-42 $\overline{v}$, Grid #2, L6, Center (46-55)

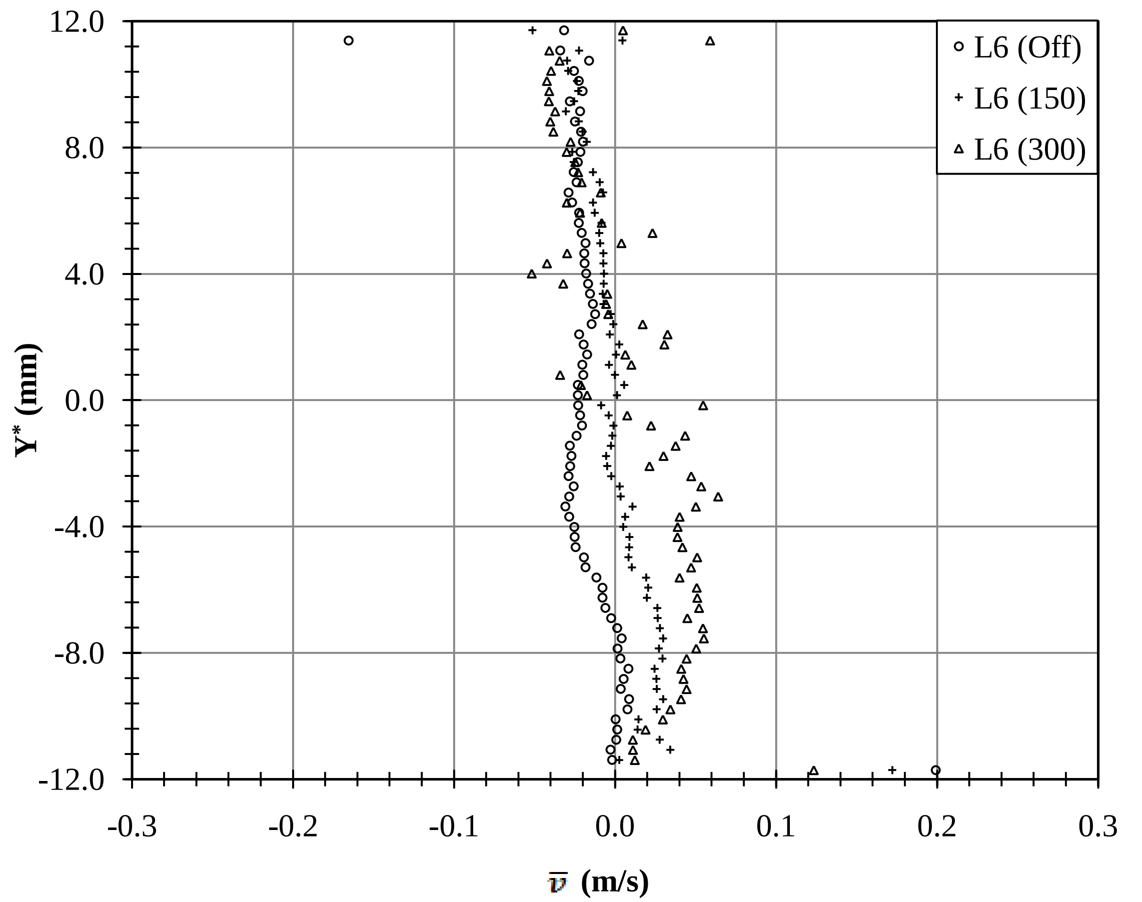

Fig. J-43 $\overline{v}$, Grid #2, L6, Right (71-80)

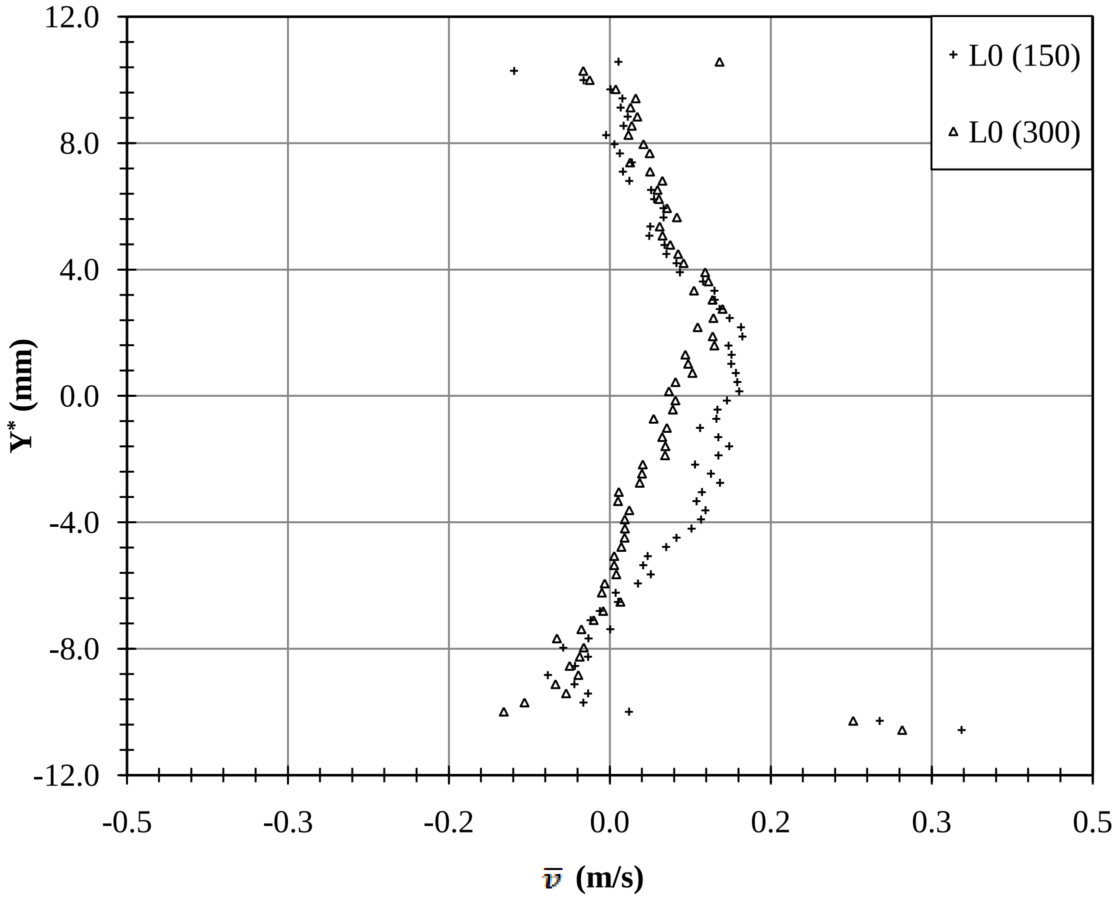

Fig. J-44 $\overline{v}$, Grid #1, L0, Left (1-10), Equilibrated

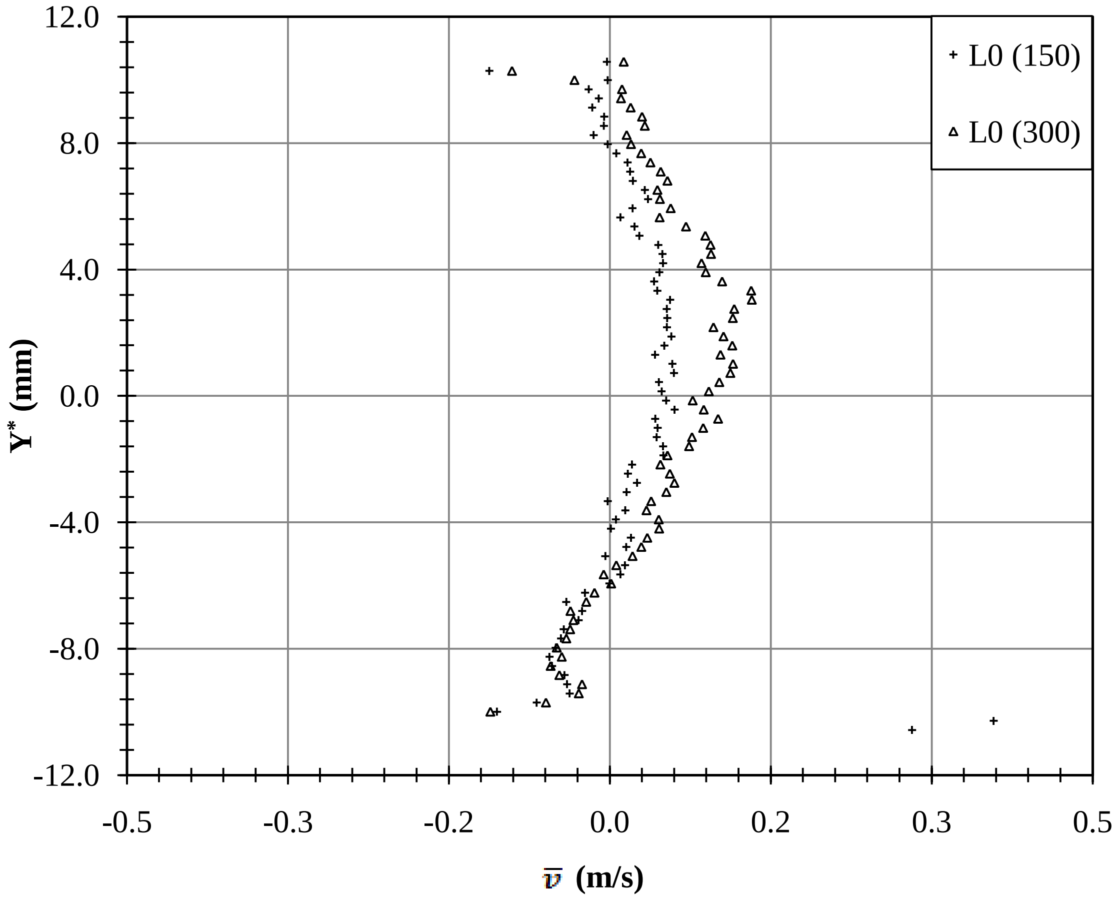

Fig. J-45 $\overline{v}$, Grid #1, L0, Center (46-55), Equilibrated

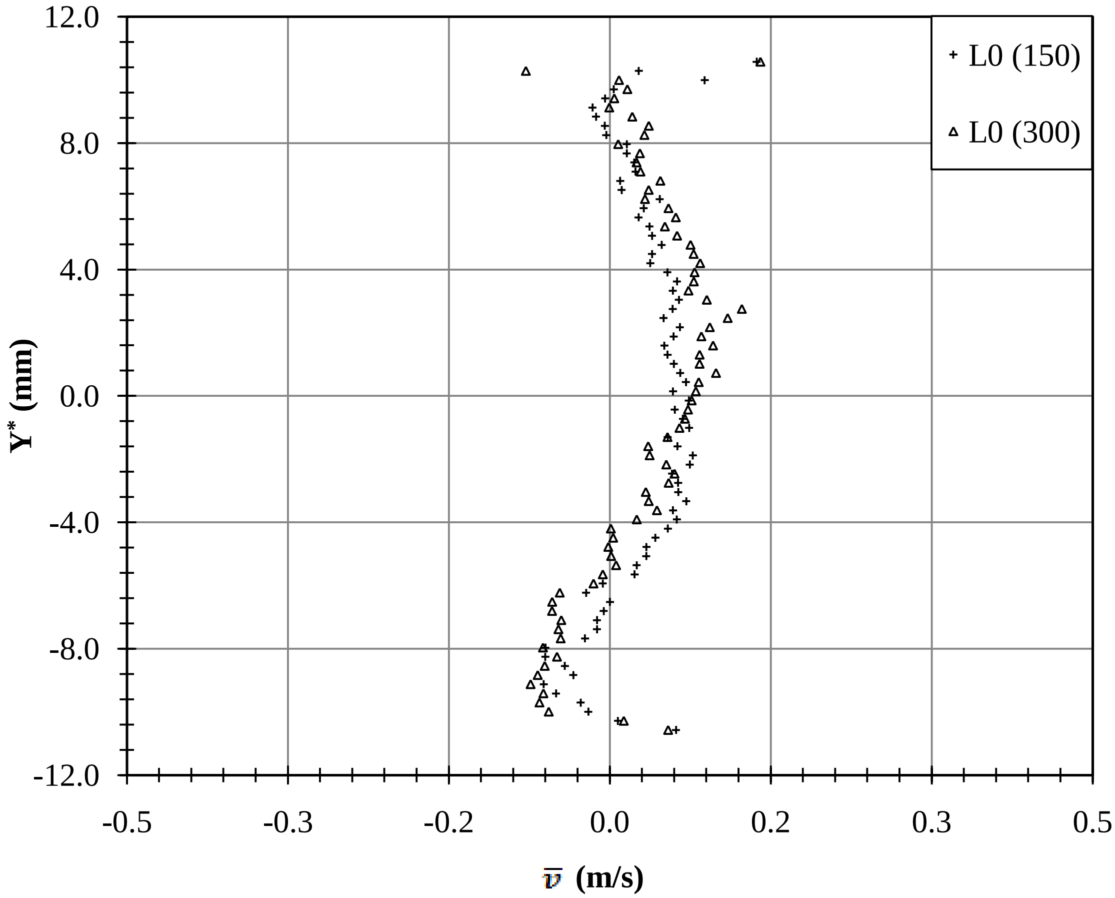

Fig. J-46 $\overline{v}$, Grid #1, L0, Right (71-80), Equilibrated

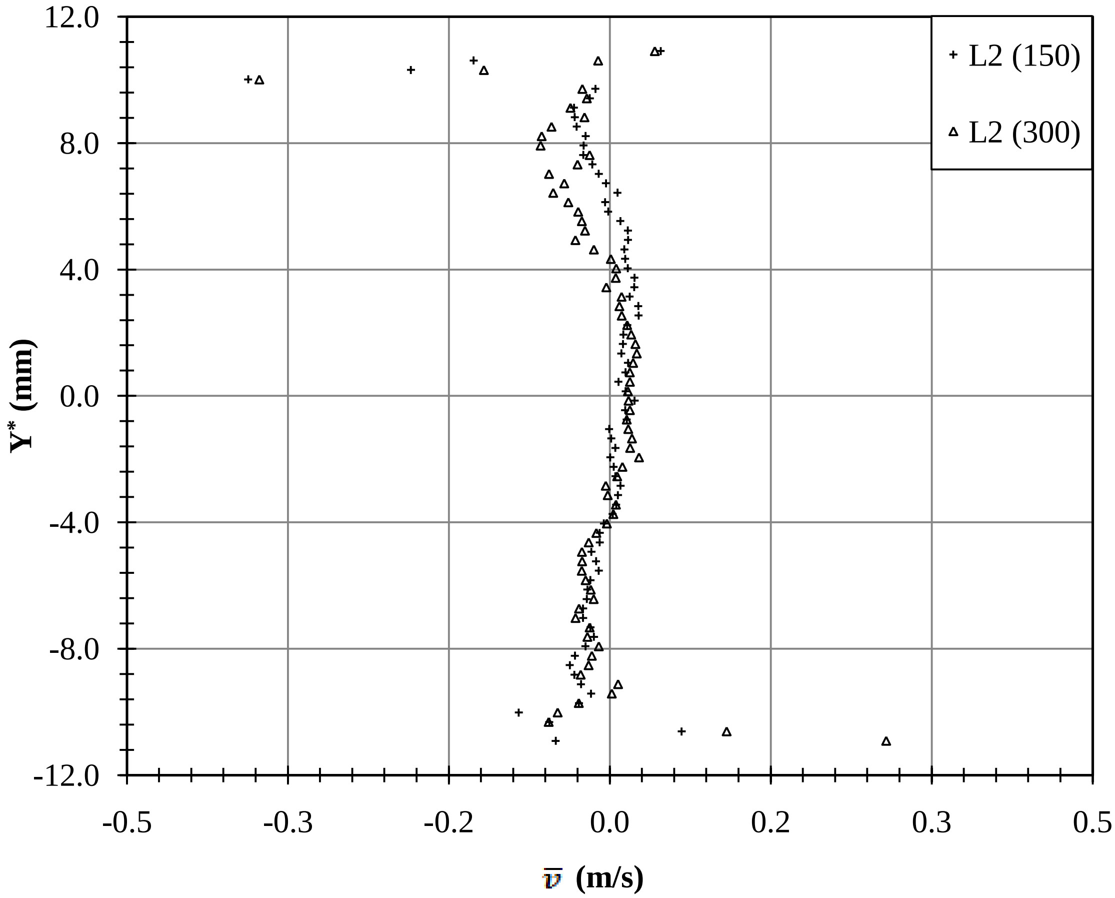

Fig. J-47 $\overline{v}$, Grid #1, L2, Left (1-10), Equilibrated

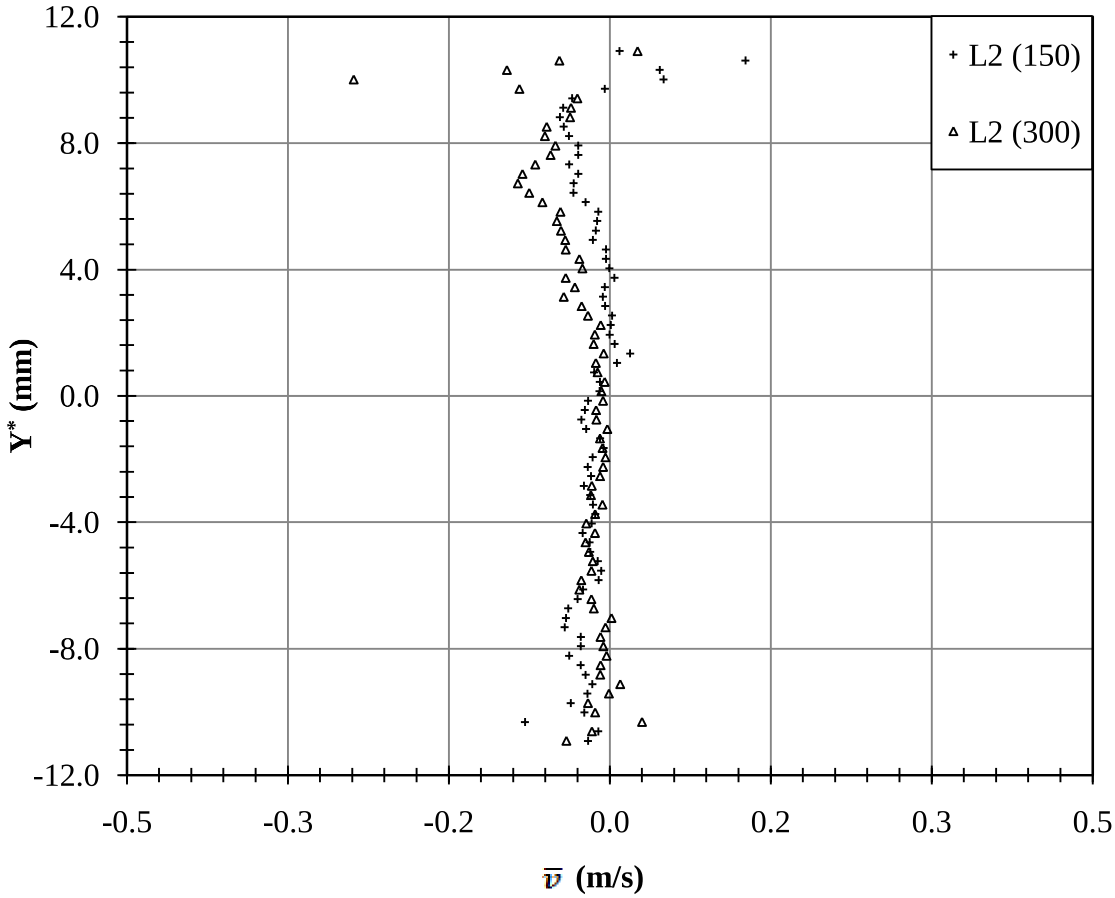

Fig. J-48 $\overline{v}$, Grid #1, L2, Center (46-55), Equilibrated

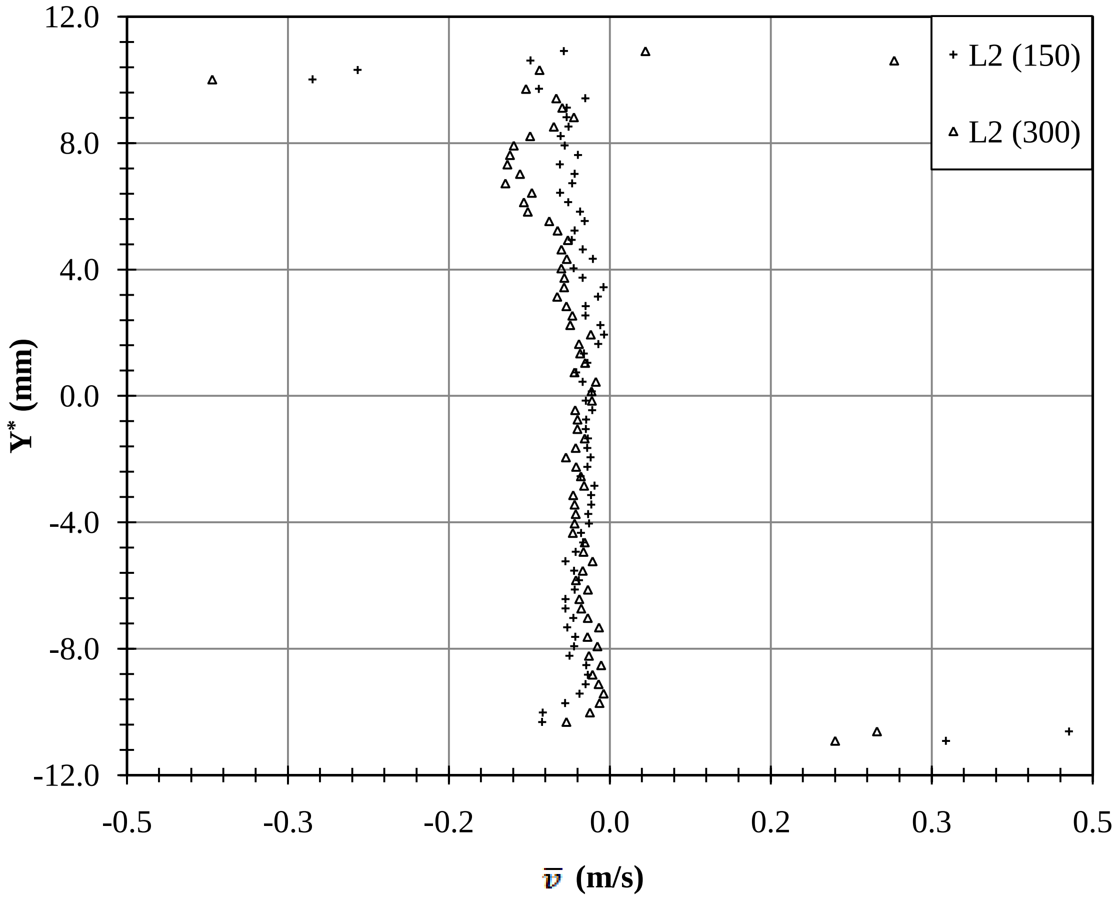

Fig. J-49 $\overline{v}$, Grid #1, L2, Right (71-80), Equilibrated

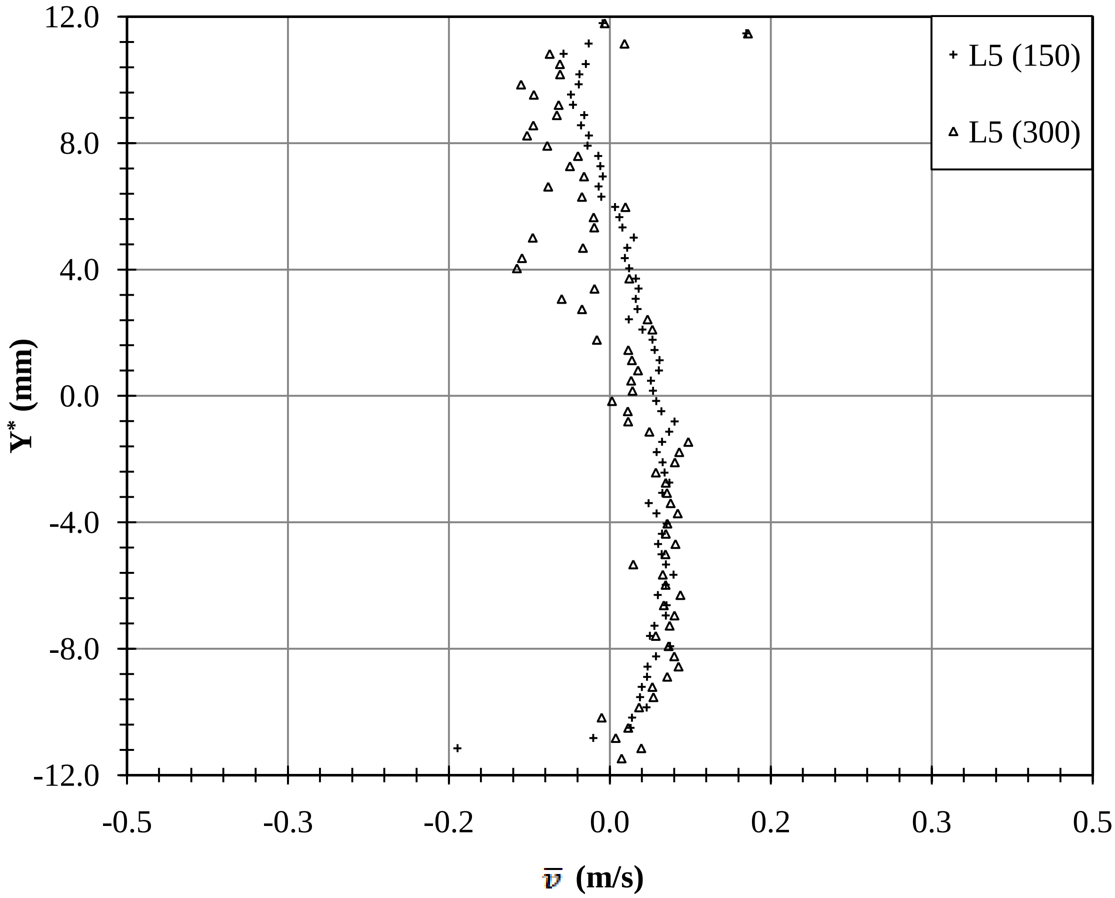

Fig. J-50 $\overline{v}$, Grid #1, L5, Left (1-10), Equilibrated

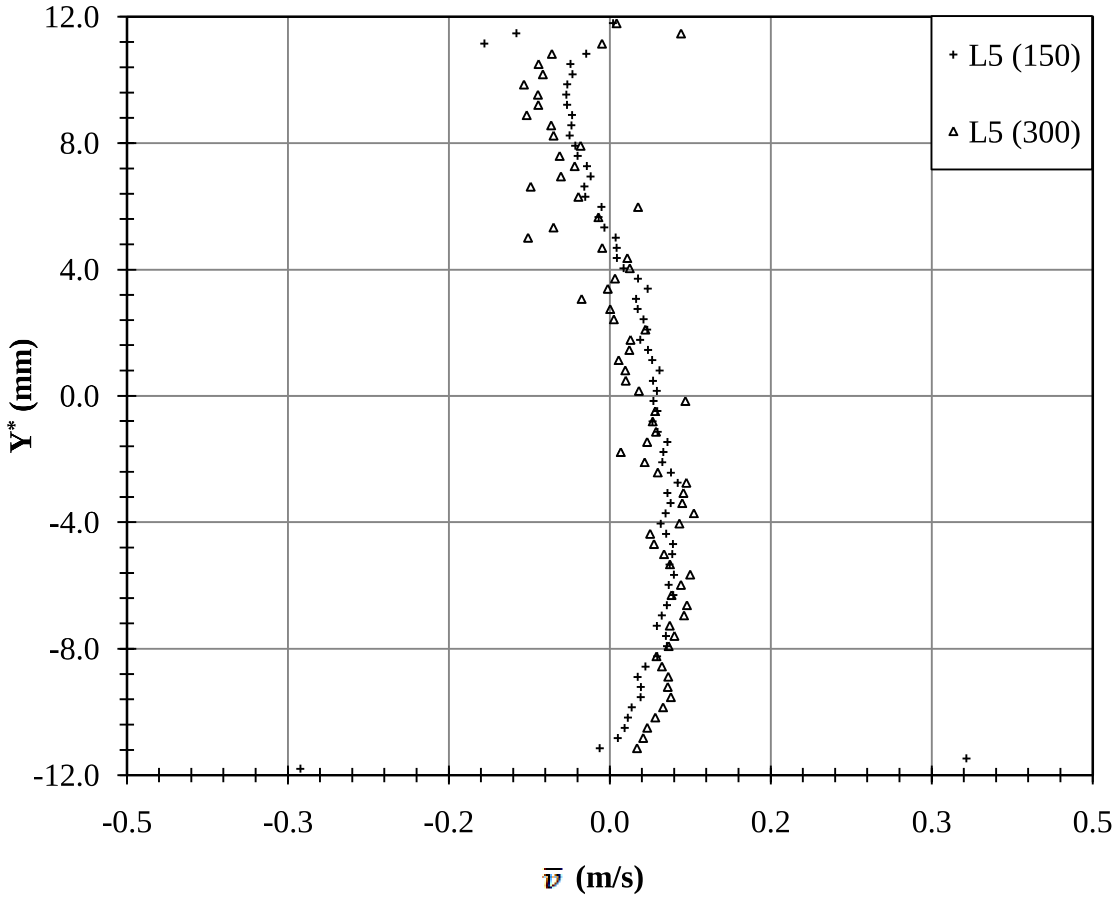

Fig. J-51 $\overline{v}$, Grid #1, L5, Center (46-55), Equilibrated

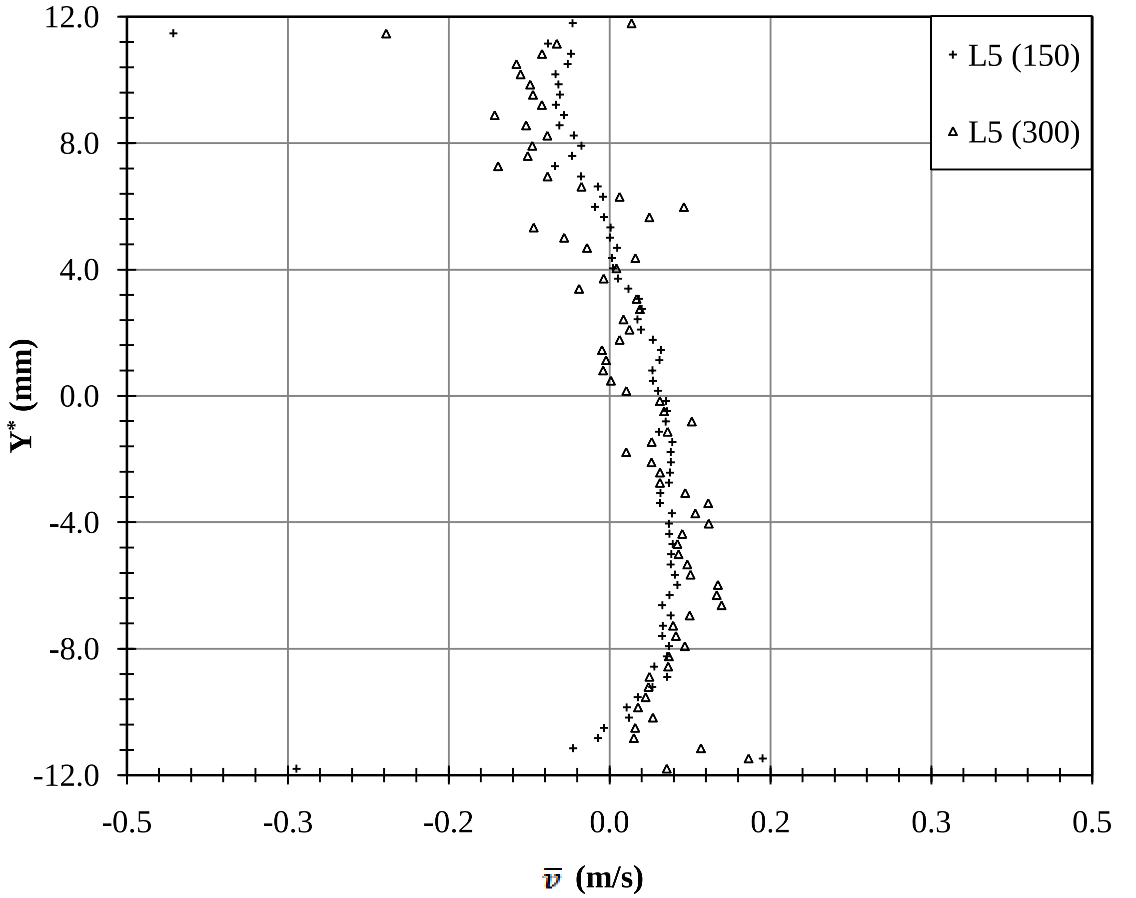

Fig. J-52 $\overline{v}$, Grid #1, L5, Right (71-80), Equilibrated

APPENDIX K

PROFILE PLOTS

$\sqrt{\overline{u'u'}}/U_\infty$

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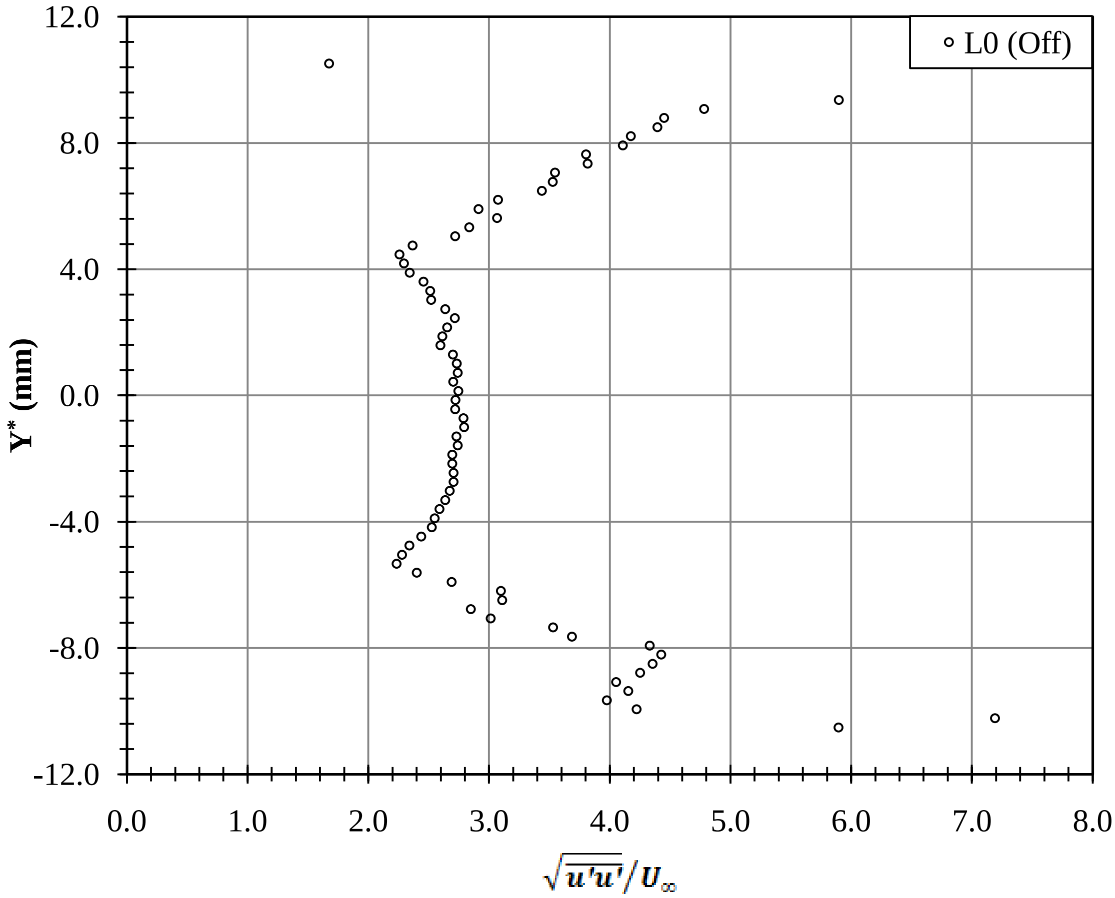

Fig. K-1 $\sqrt{\overline{u'u'}}/U_\infty$**, No Grid, L0, Center (40-60)**

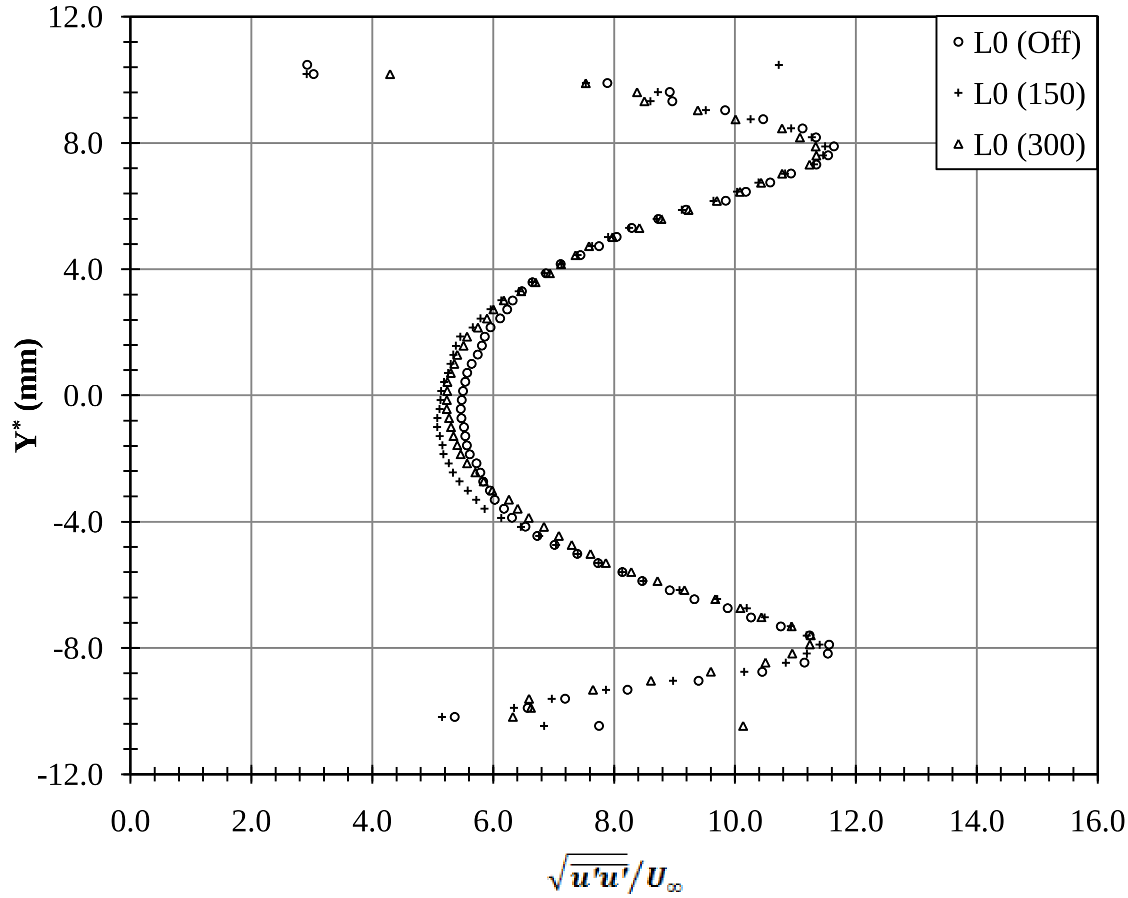

Fig. K-2 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L0, Left (1-10)**

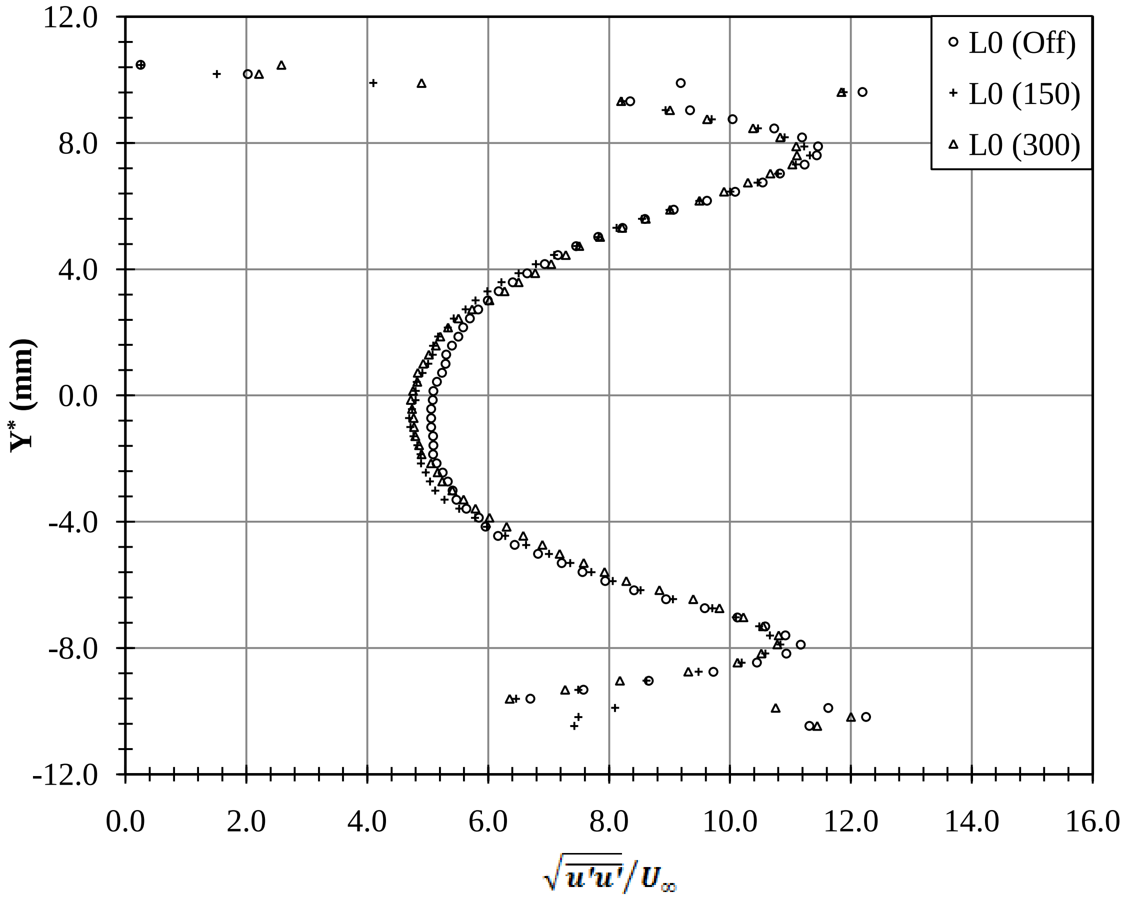

Fig. K-3 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L0, Center (46-55)**

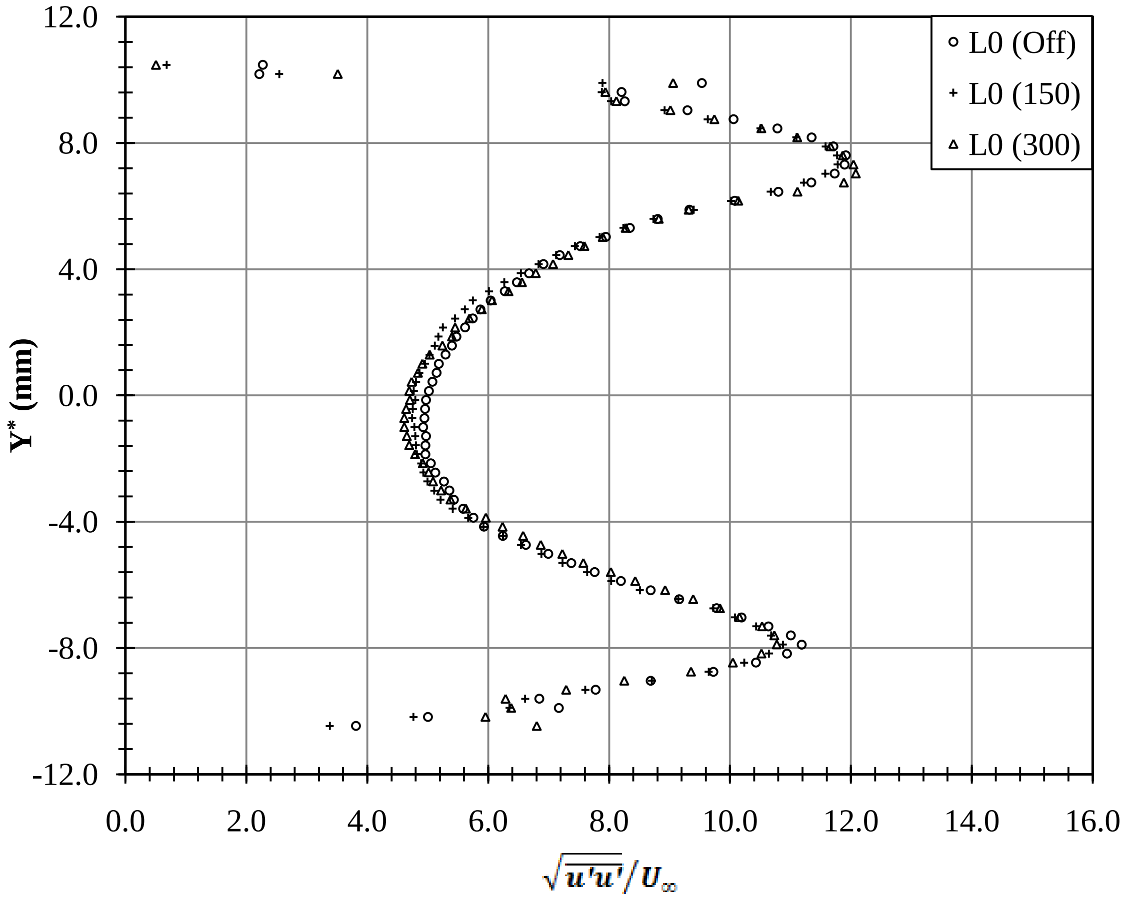

Fig. K-4 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L0, Right (71-80)**

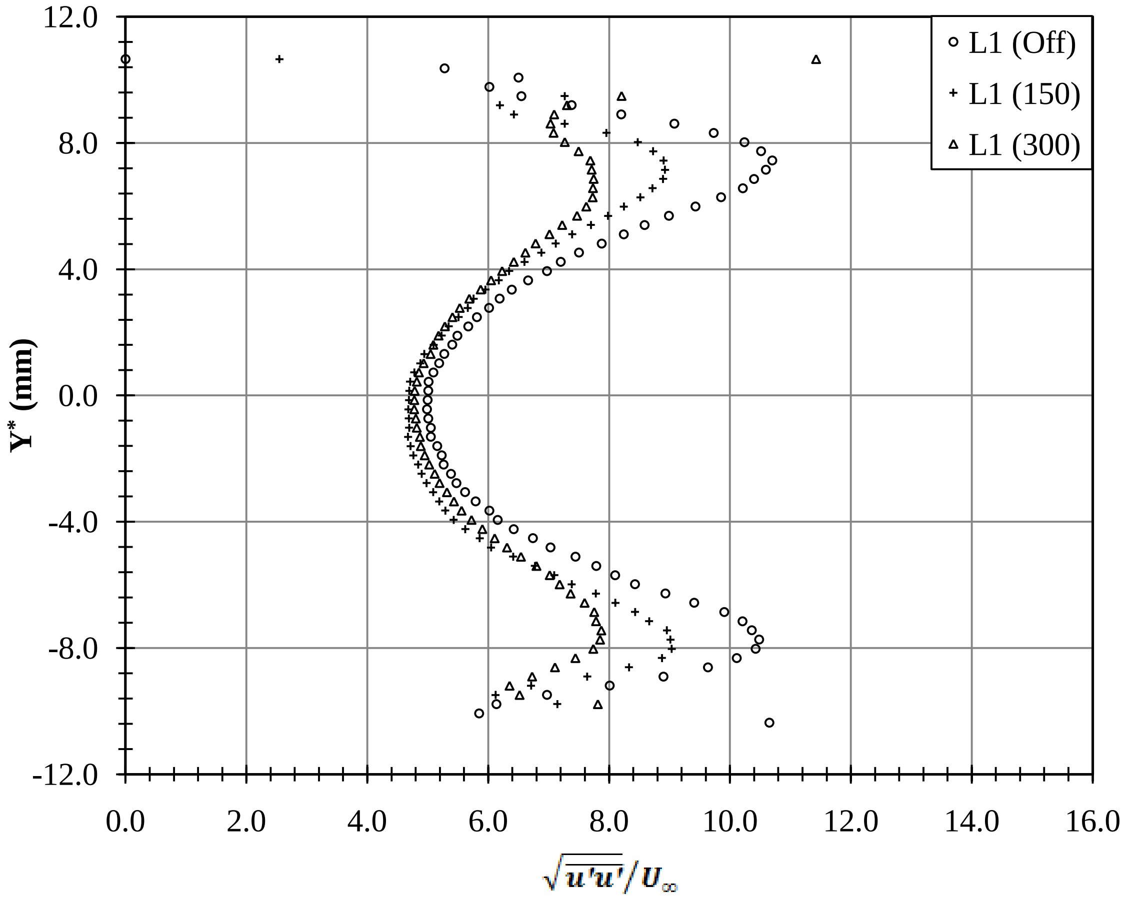

Fig. K-5 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L1, Left (1-10)**

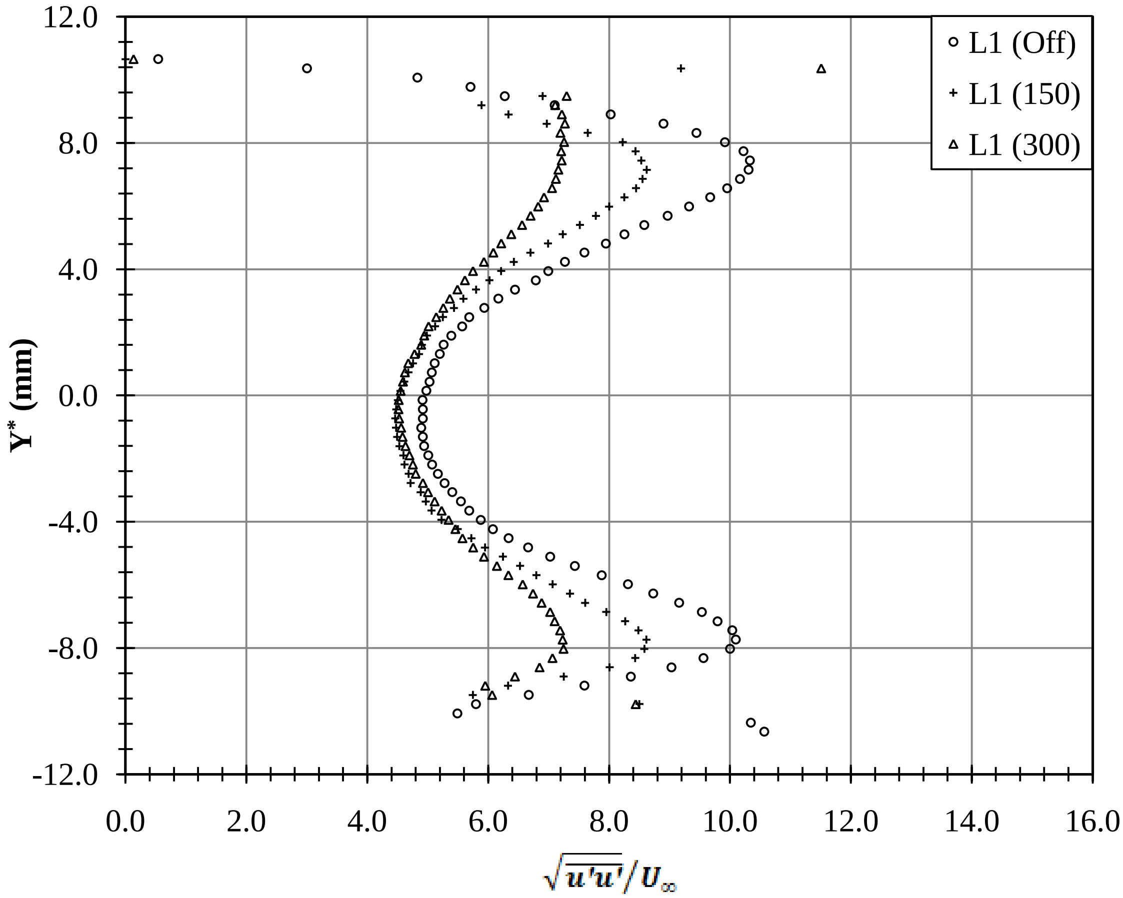

Fig. K-6 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L1, Center (46-55)**

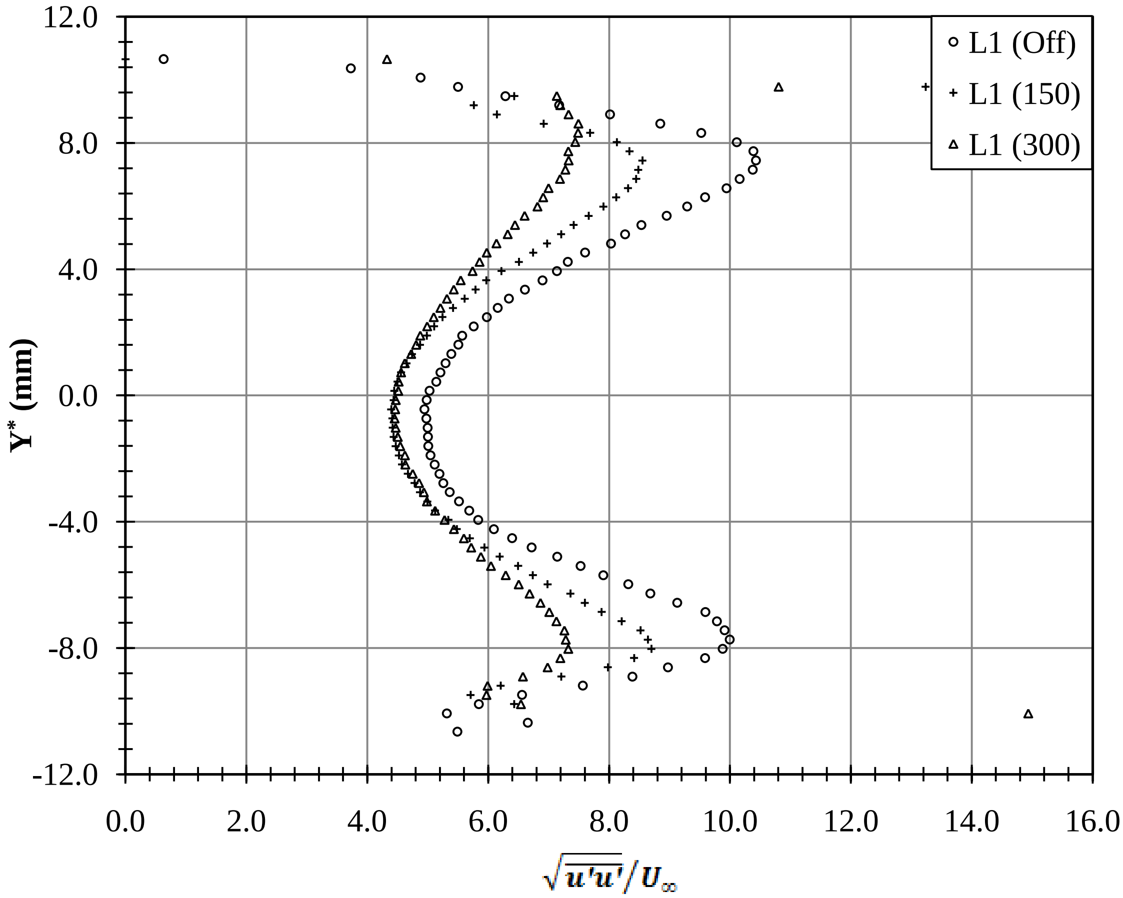

Fig. K-7 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L1, Right (71-80)**

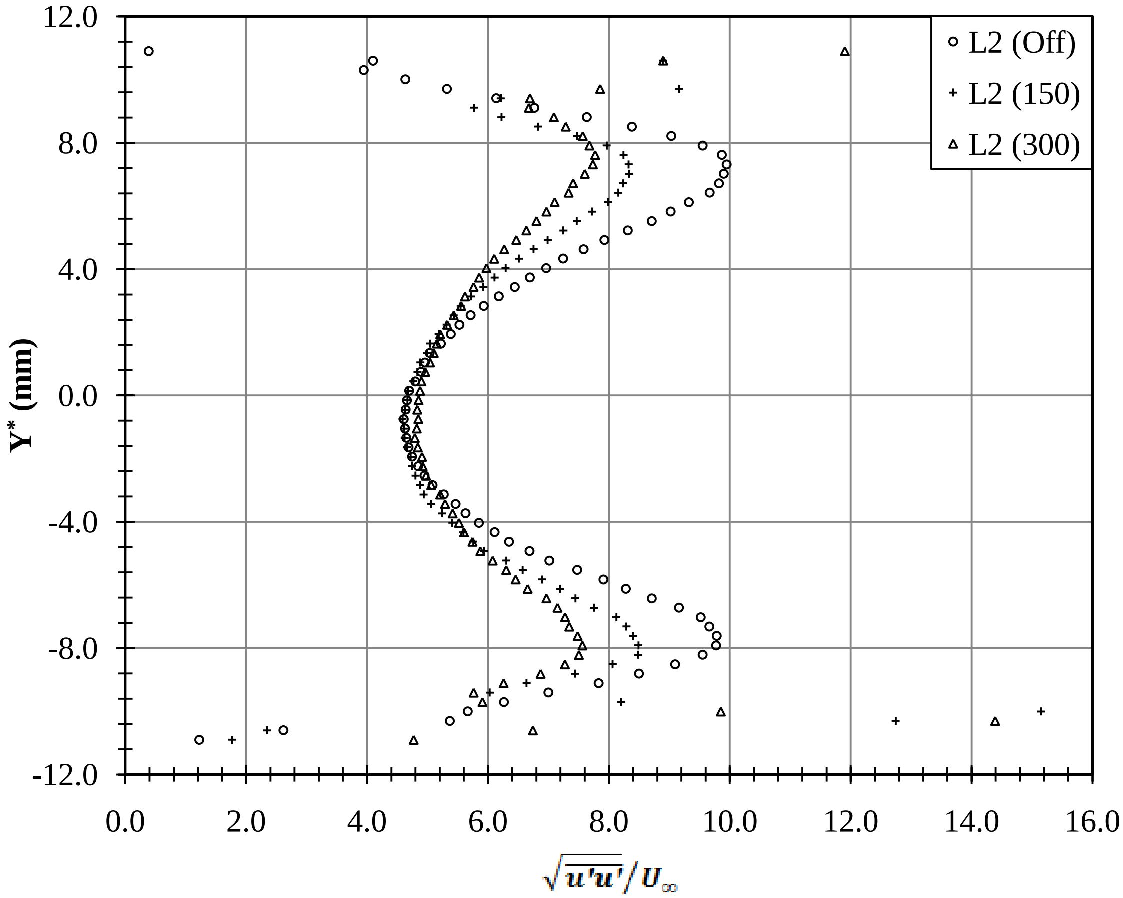

Fig. K-8 $\sqrt{\overline{u'u'}}/U_\infty$, Grid #1, L2, Left (1-10)

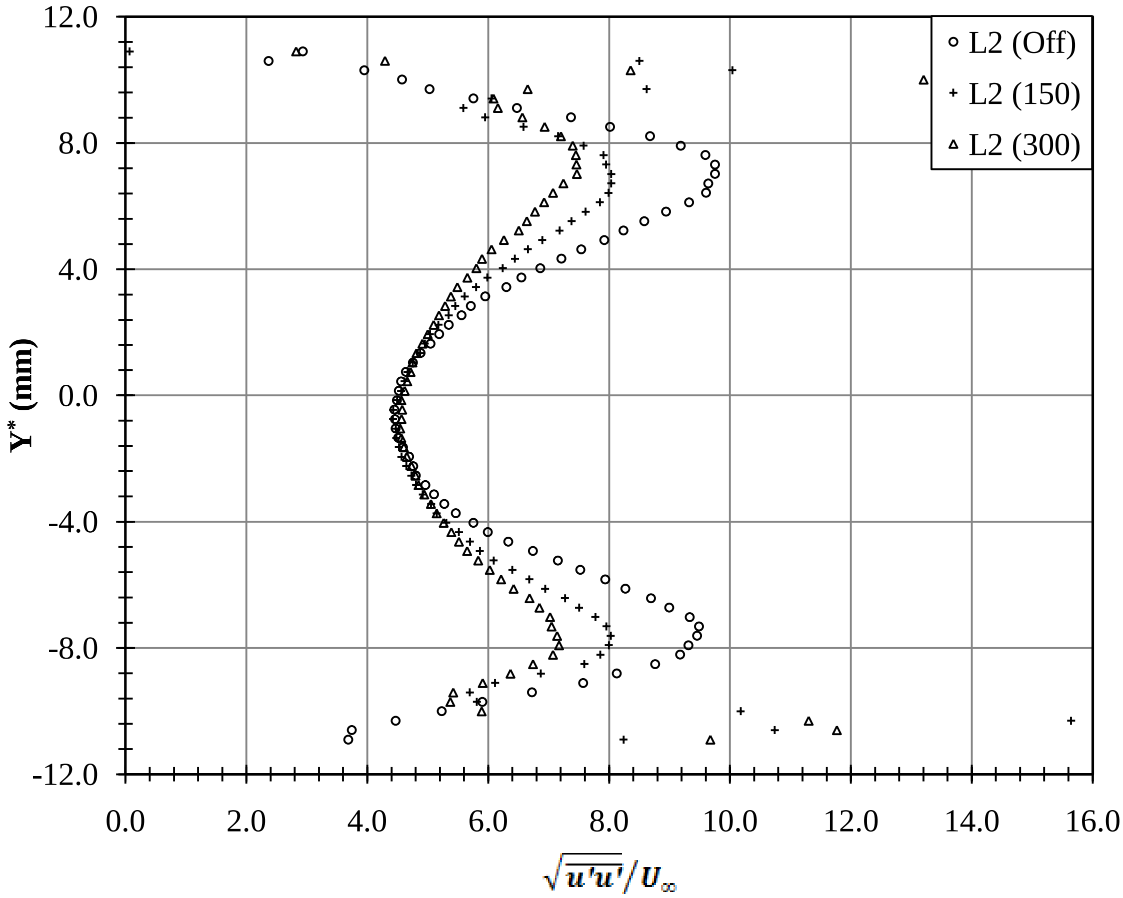

Fig. K-9 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L2, Center (46-55)**

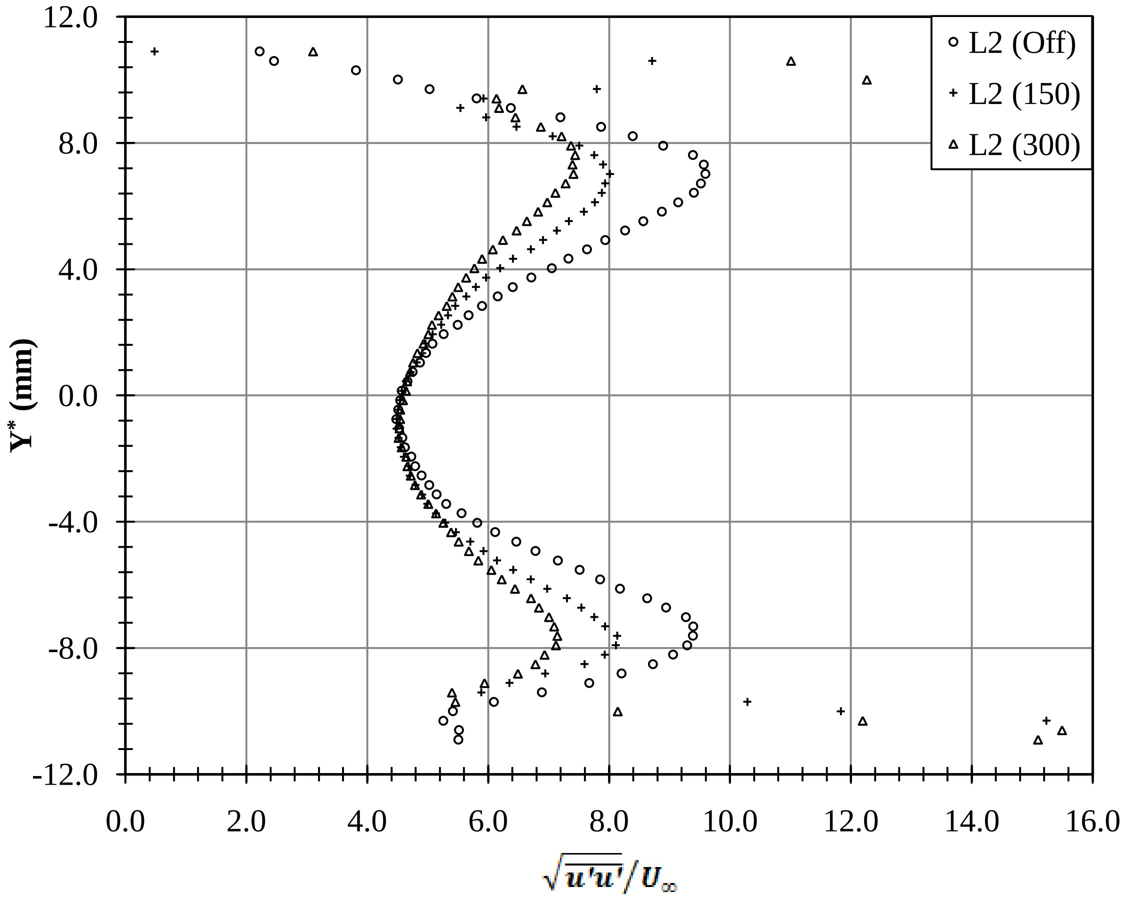

Fig. K-10 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L2, Right (71-80)**

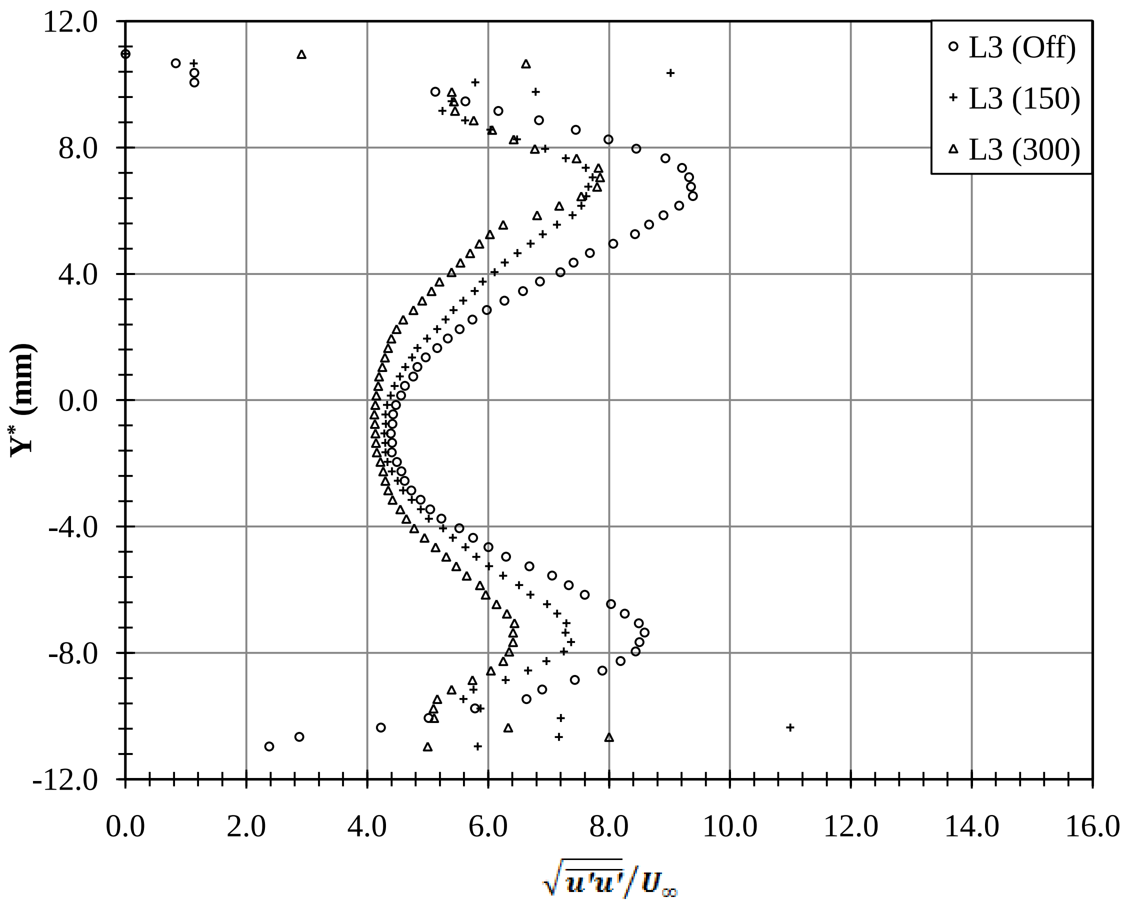

Fig. K-11 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L3, Left (1-10)**

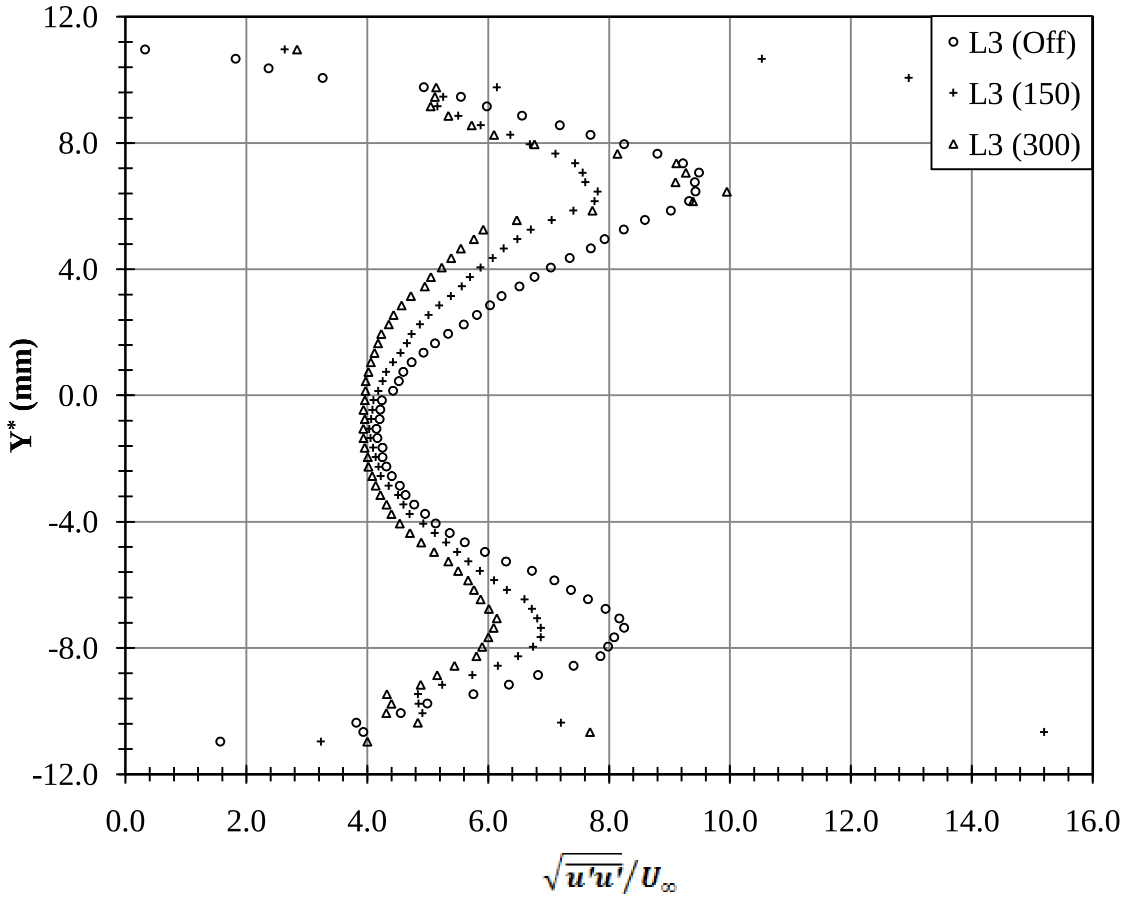

Fig. K-12 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L3, Center (46-55)**

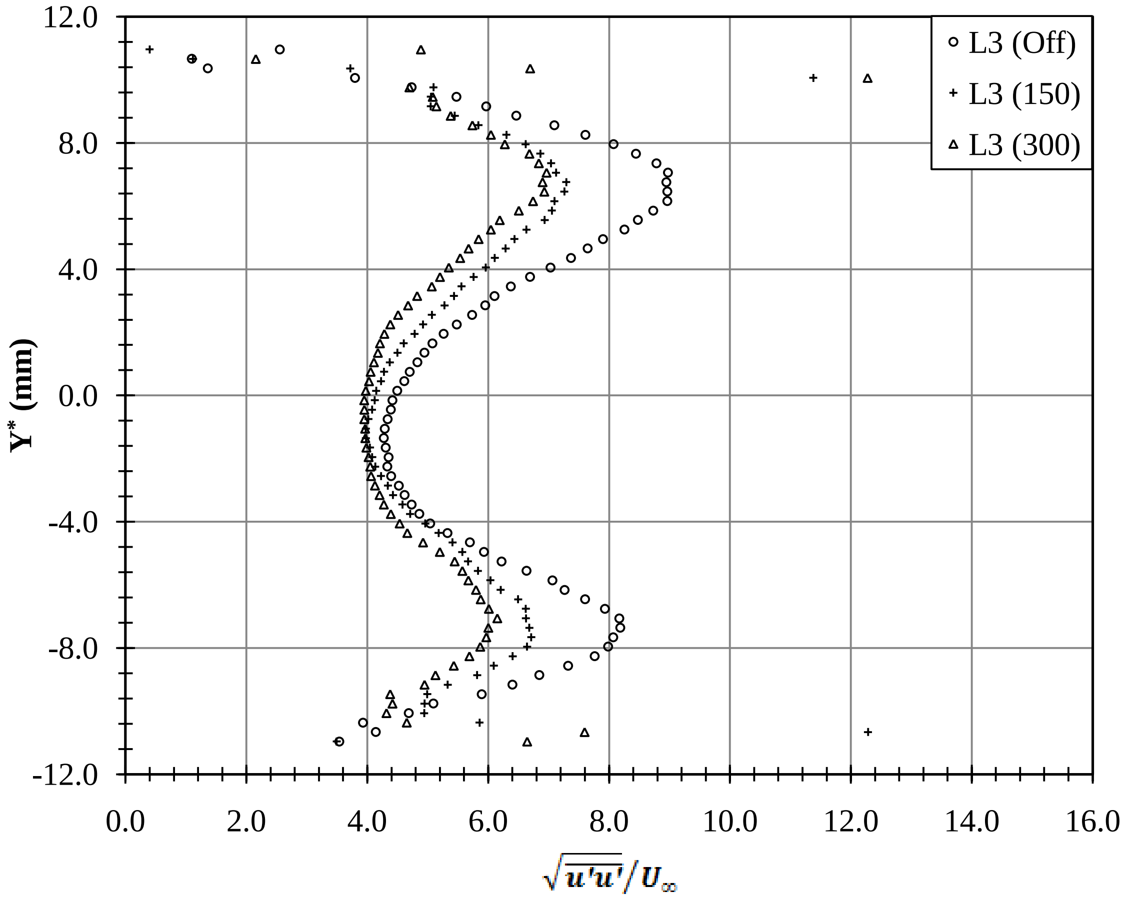

Fig. K-13 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L3, Right (71-80)**

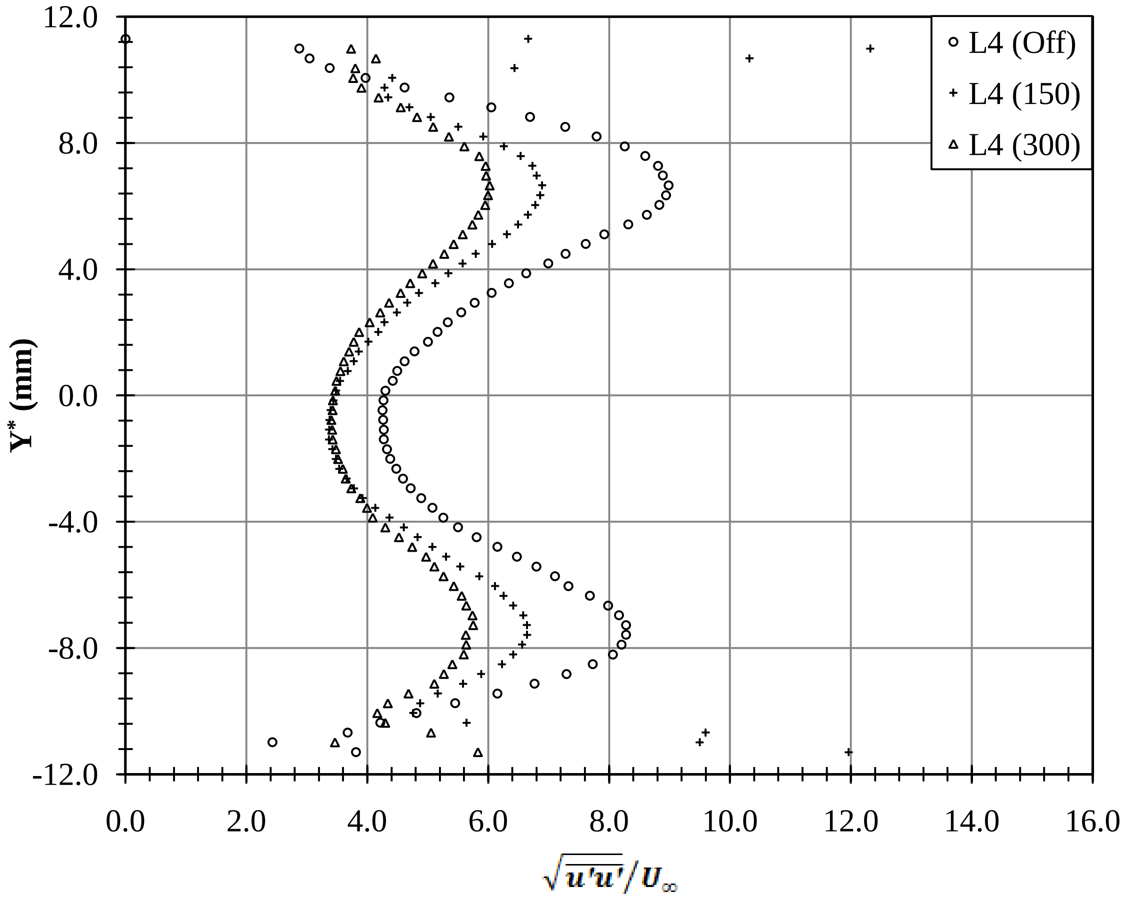

Fig. K-14 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L4, Left (1-10)**

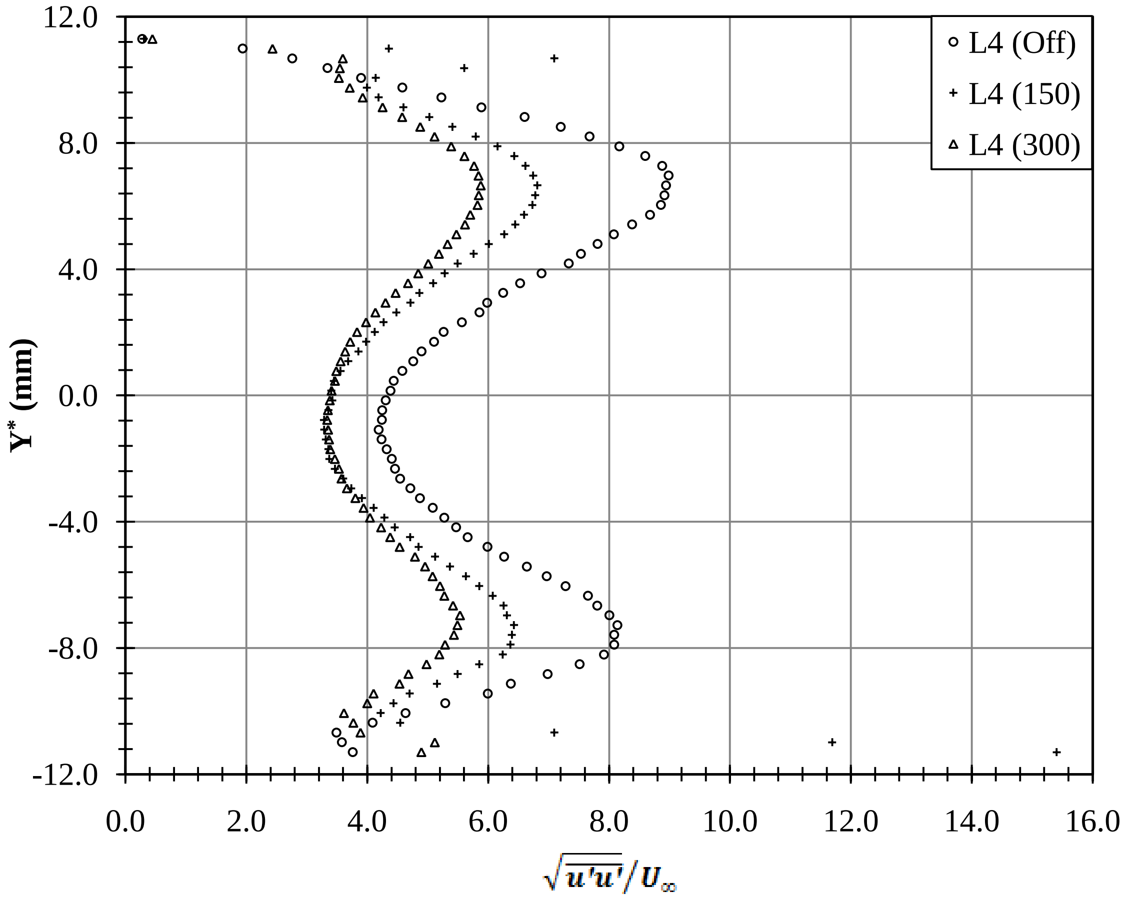

Fig. K-15 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L4, Center (46-55)**

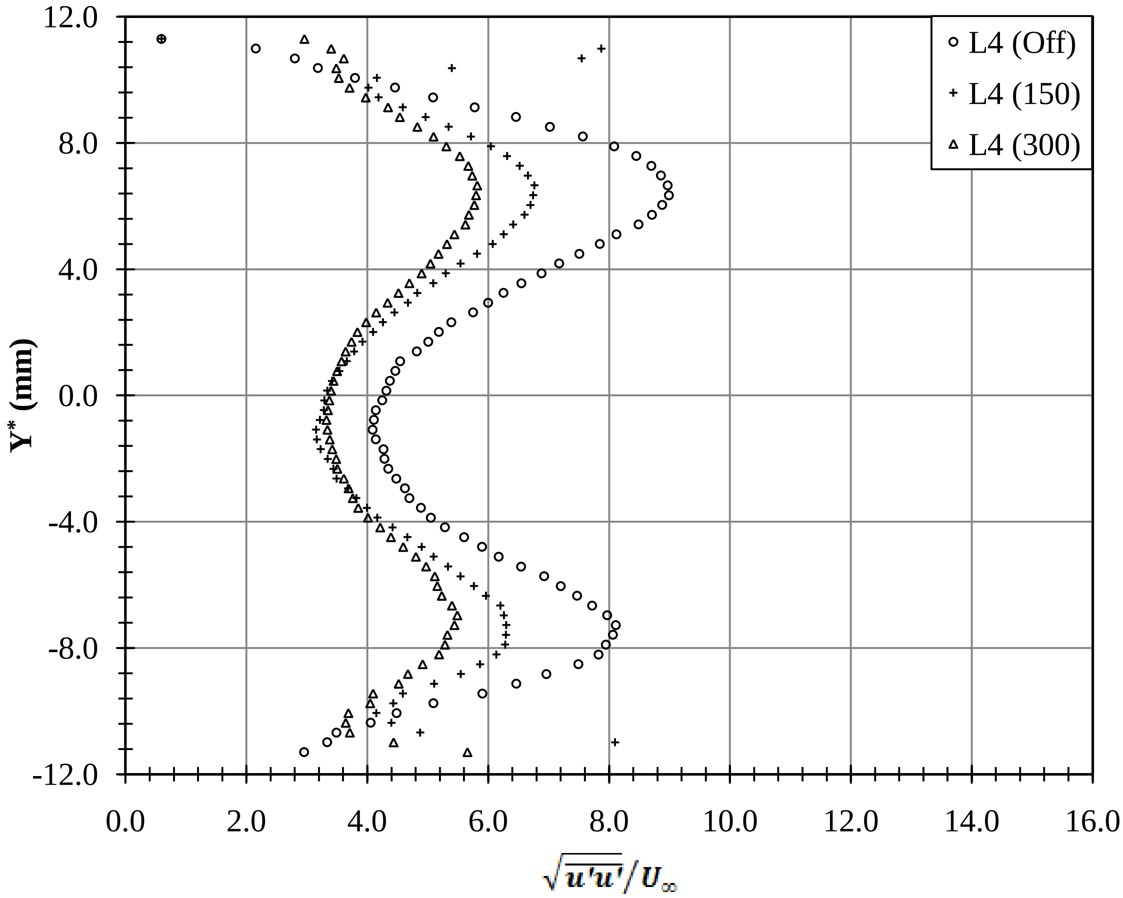

Fig. K-16 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L4, Right (71-80)**

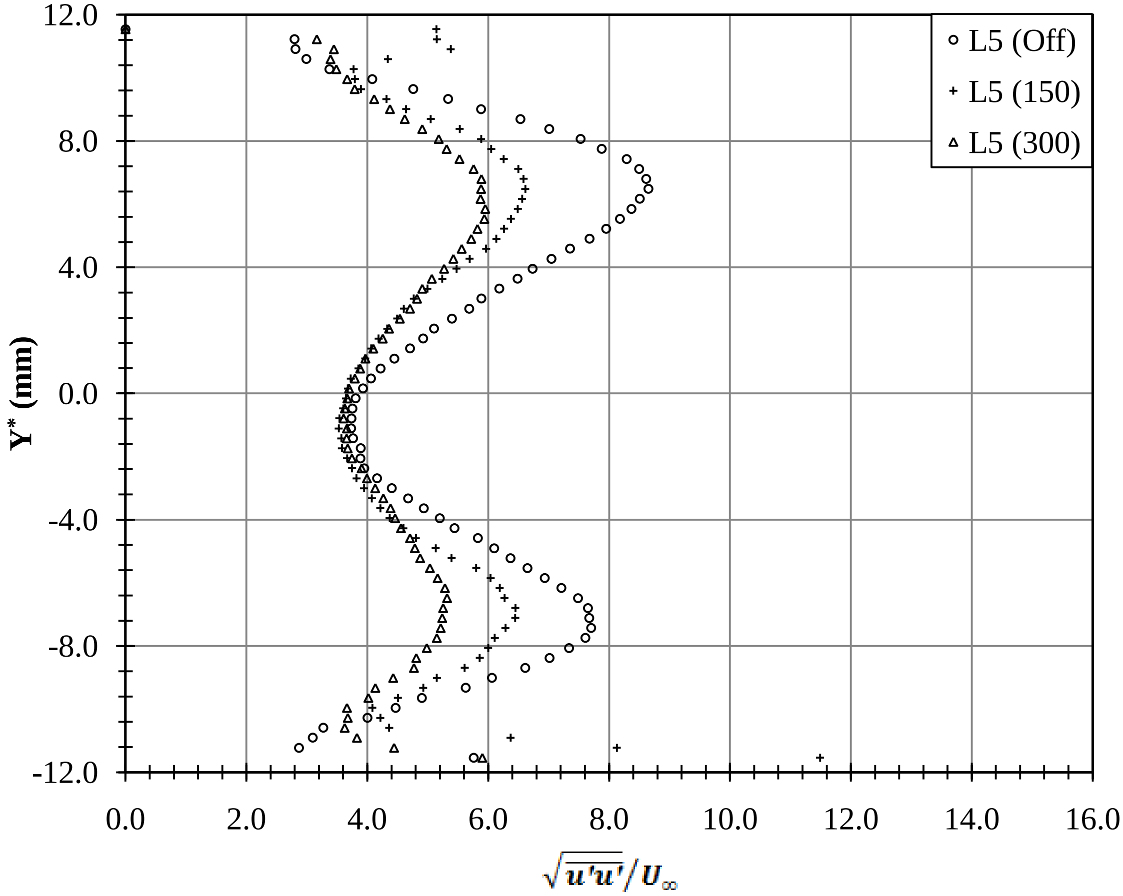

Fig. K-17 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L5, Left (1-10)**

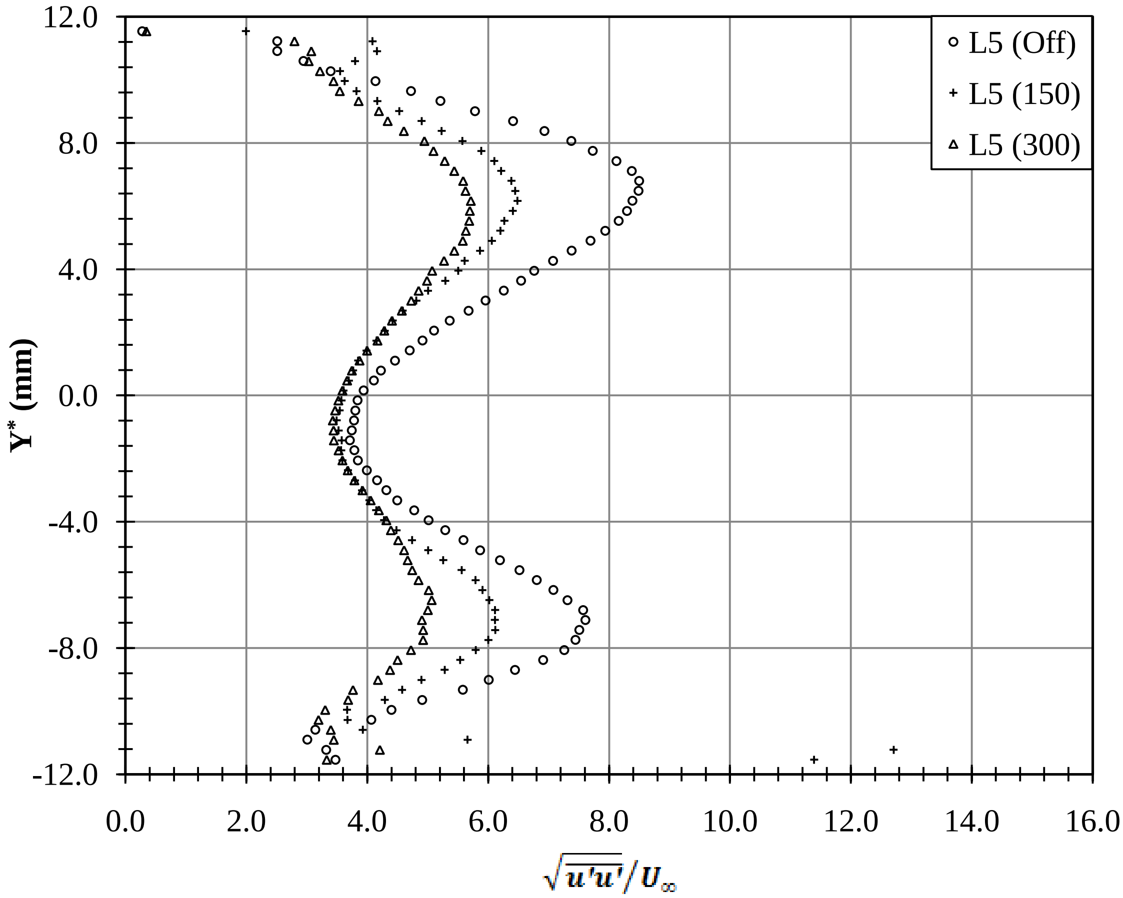

Fig. K-18 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L5, Center (46-55)**

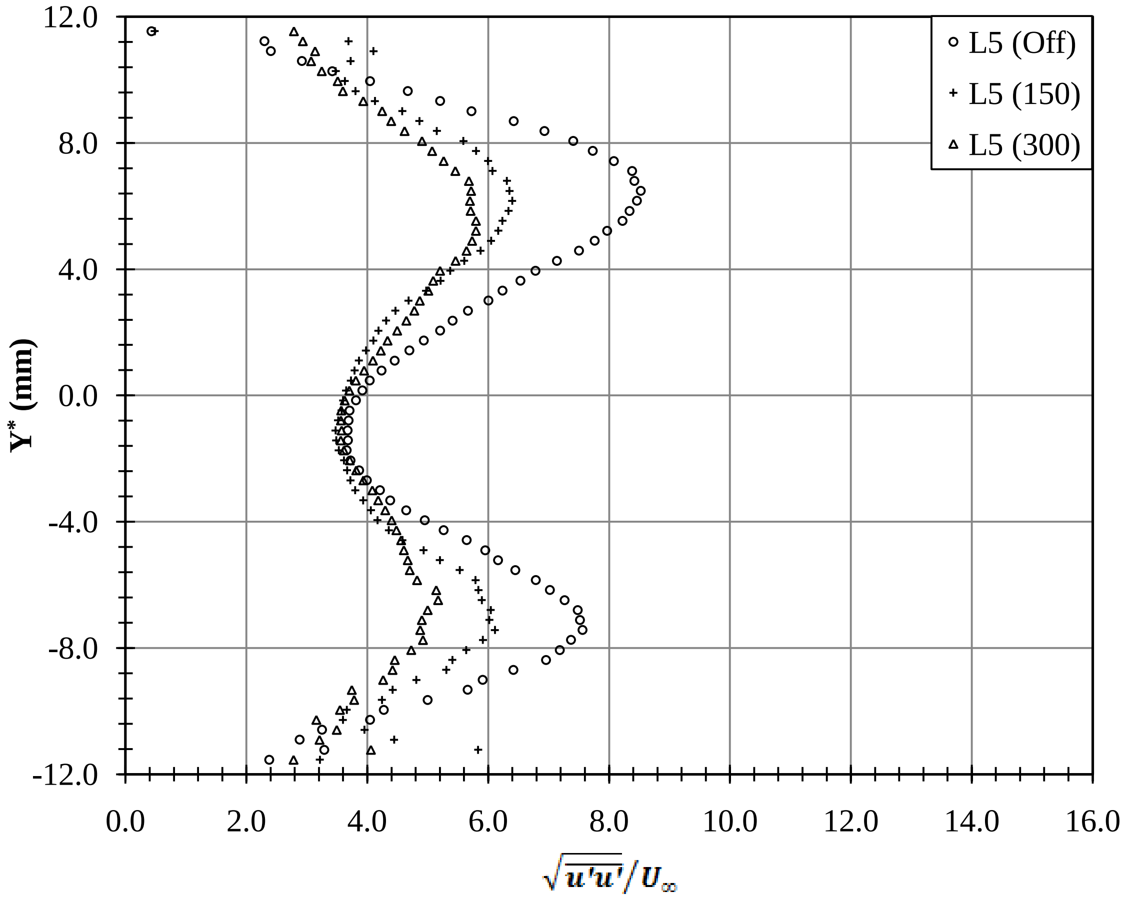

Fig. K-19 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L5, Right (71-80)**

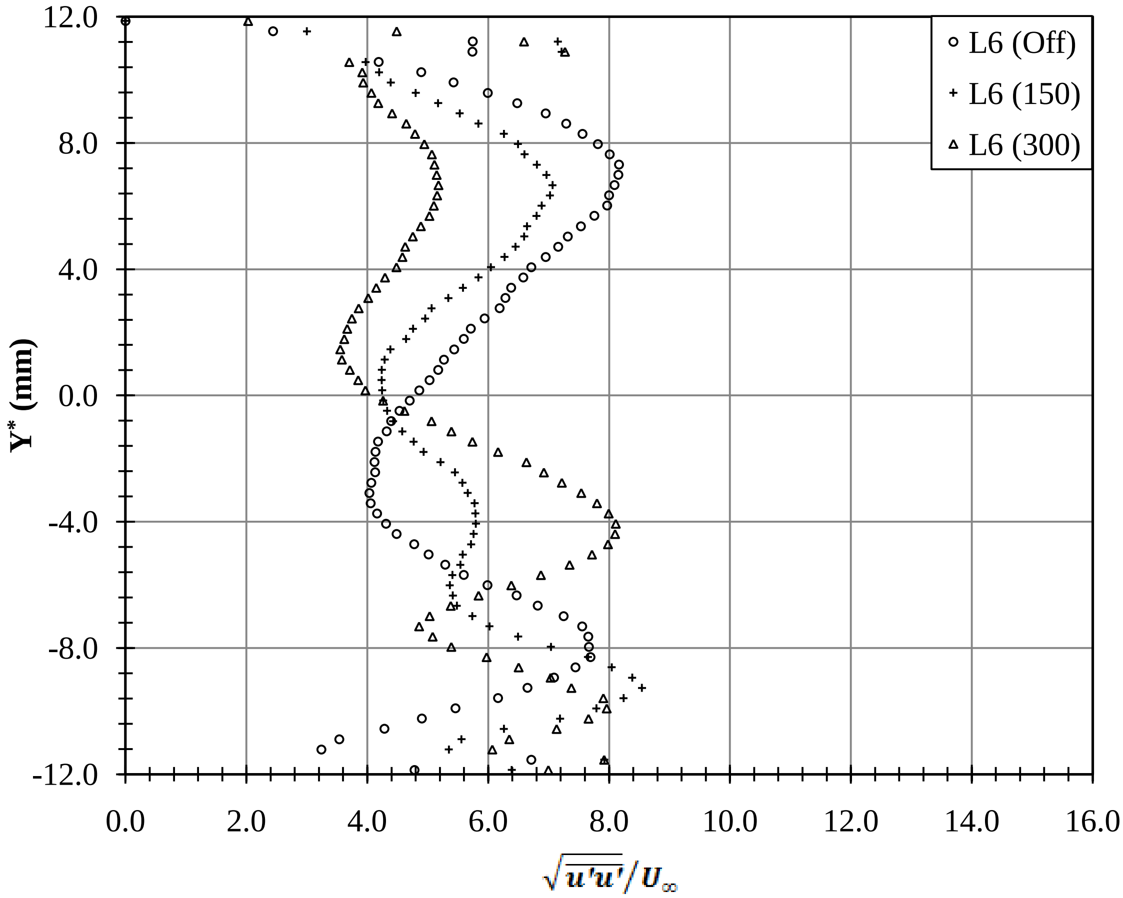

Fig. K-20 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L6, Left (1-10)**

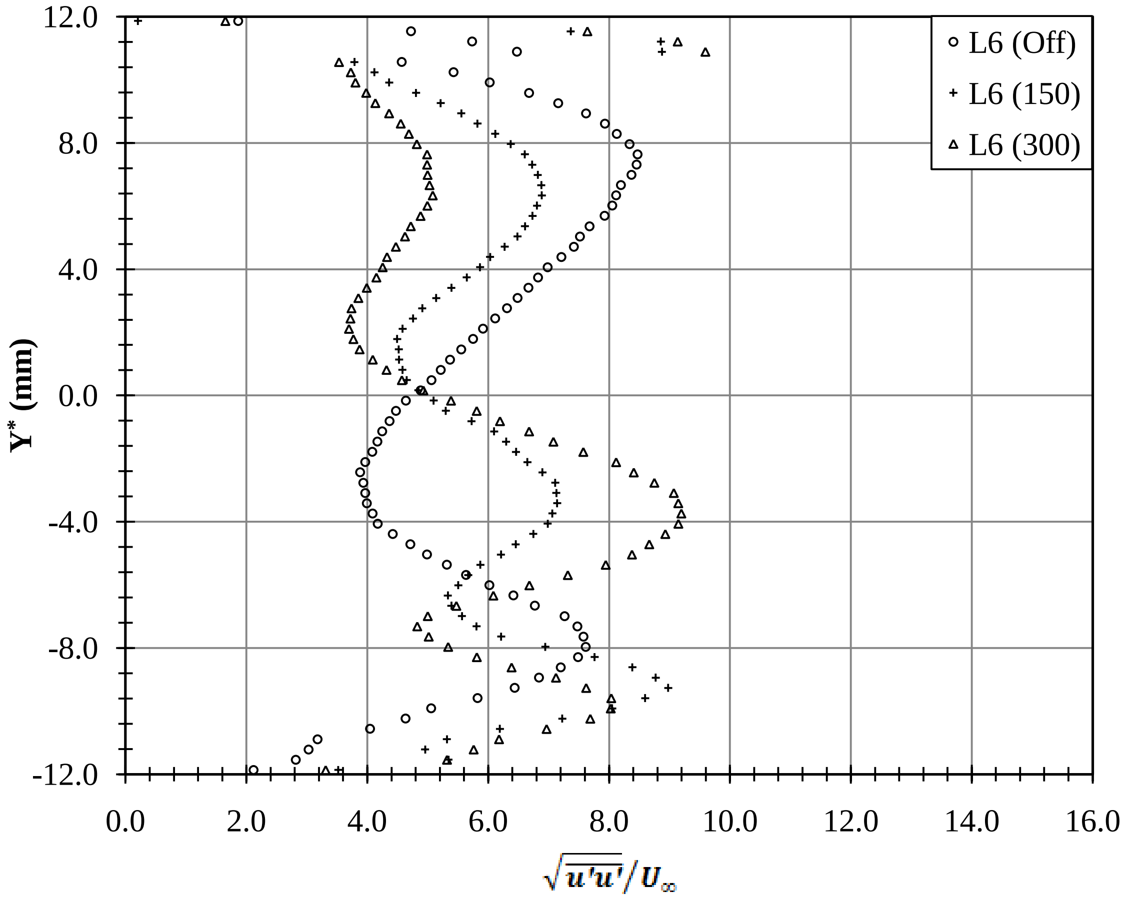

Fig. K-21 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L6, Center (46-55)**

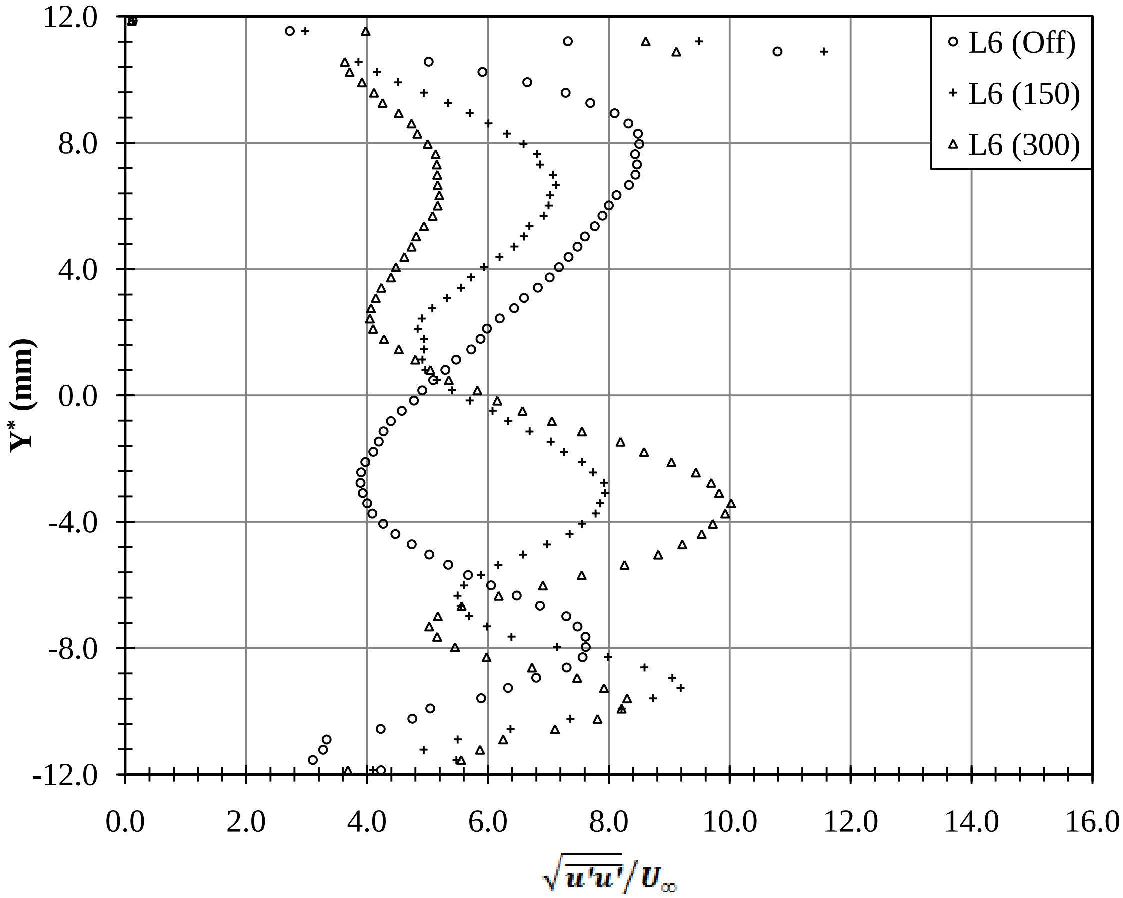

Fig. K-22 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L6, Right (71-80)**

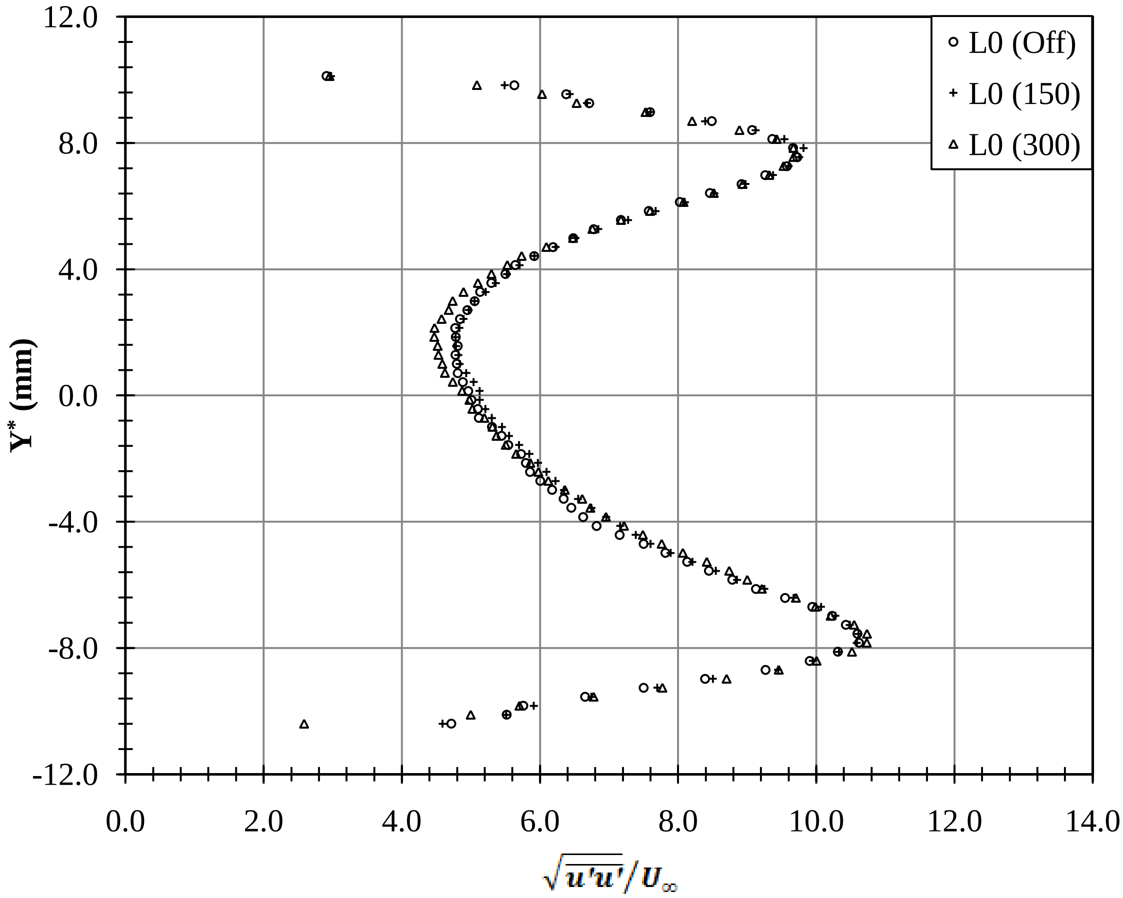

Fig. K-23 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L0, Left (1-10)**

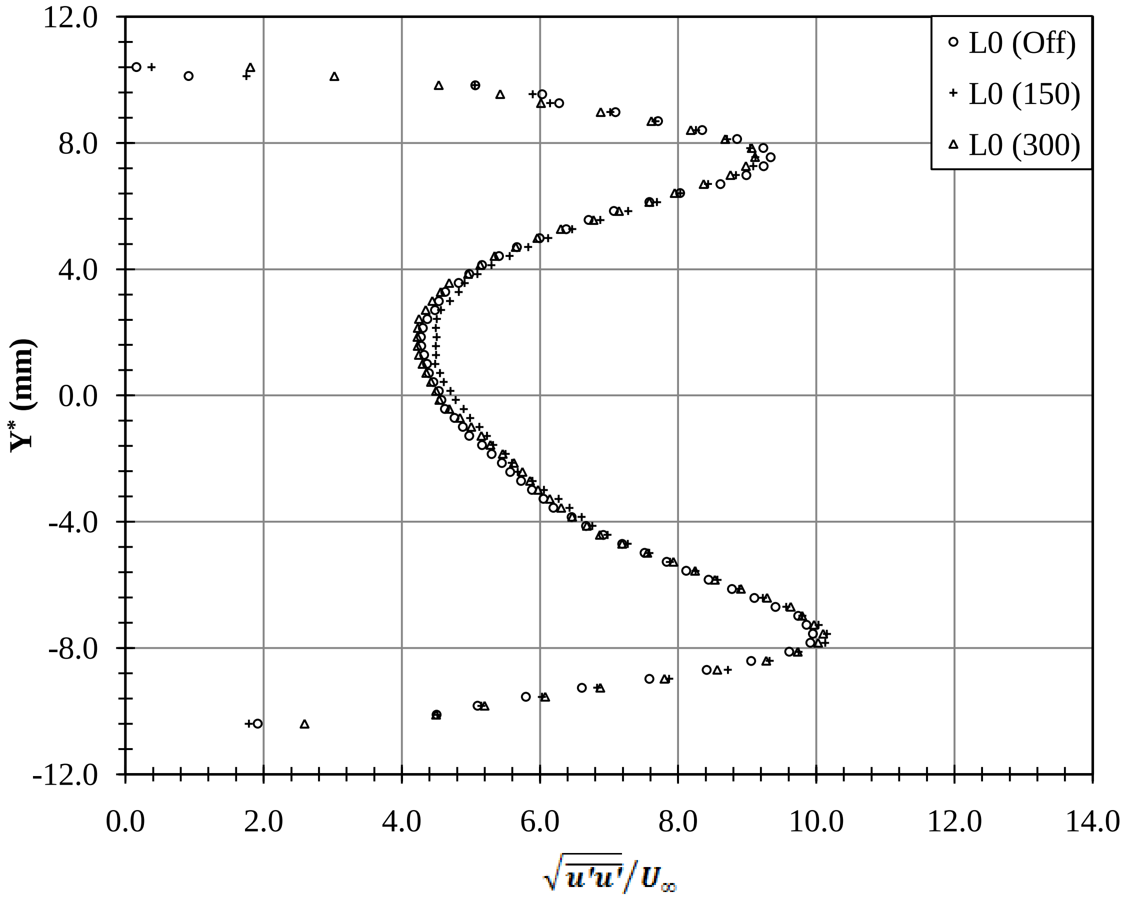

Fig. K-24 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L0, Center (46-55)**

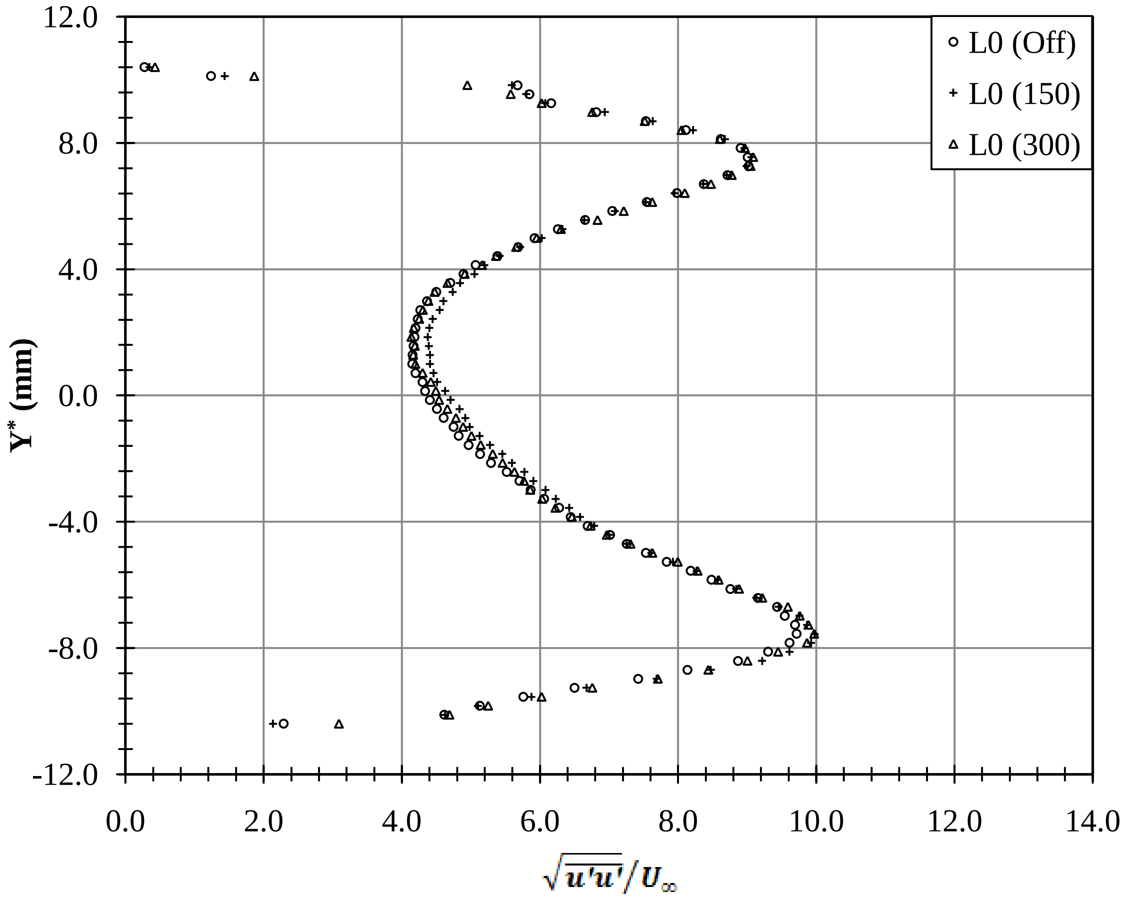

Fig. K-25 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L0, Right (71-80)**

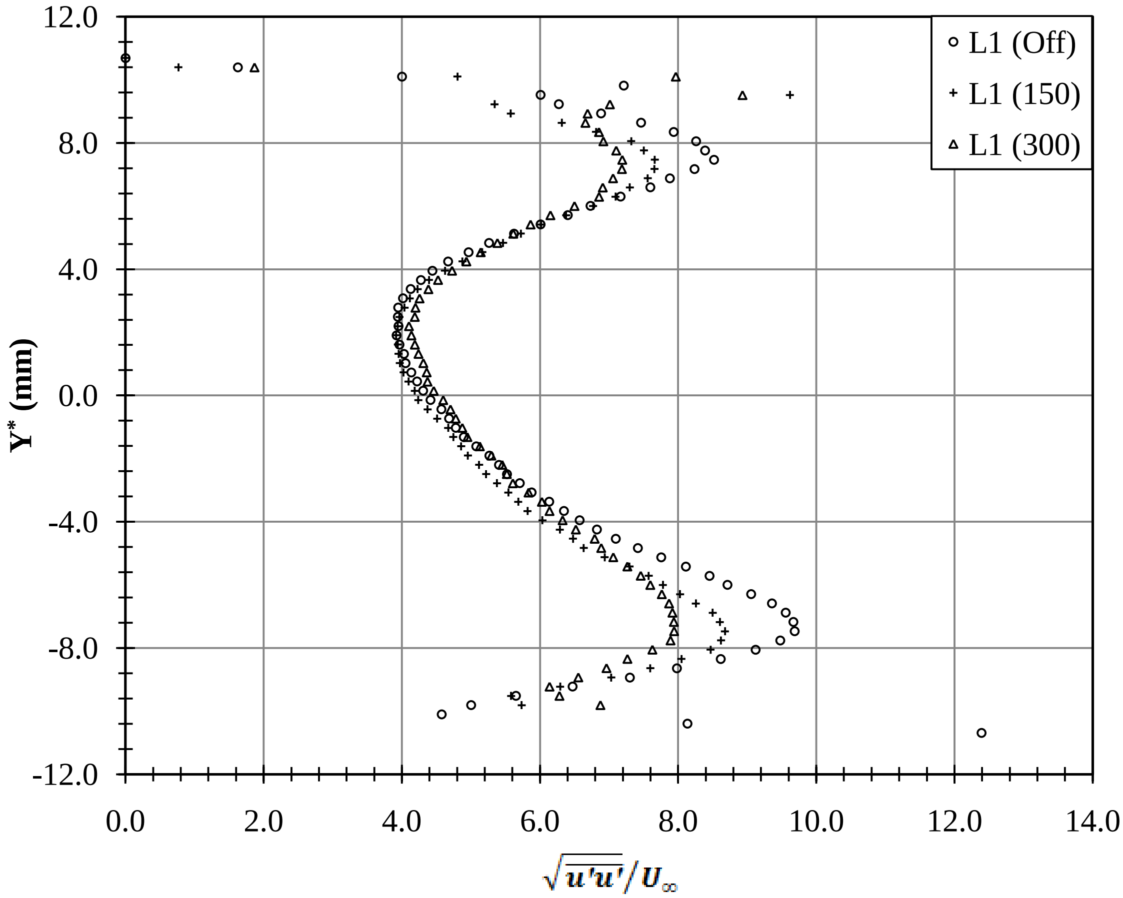

Fig. K-26 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L1, Left (1-10)**

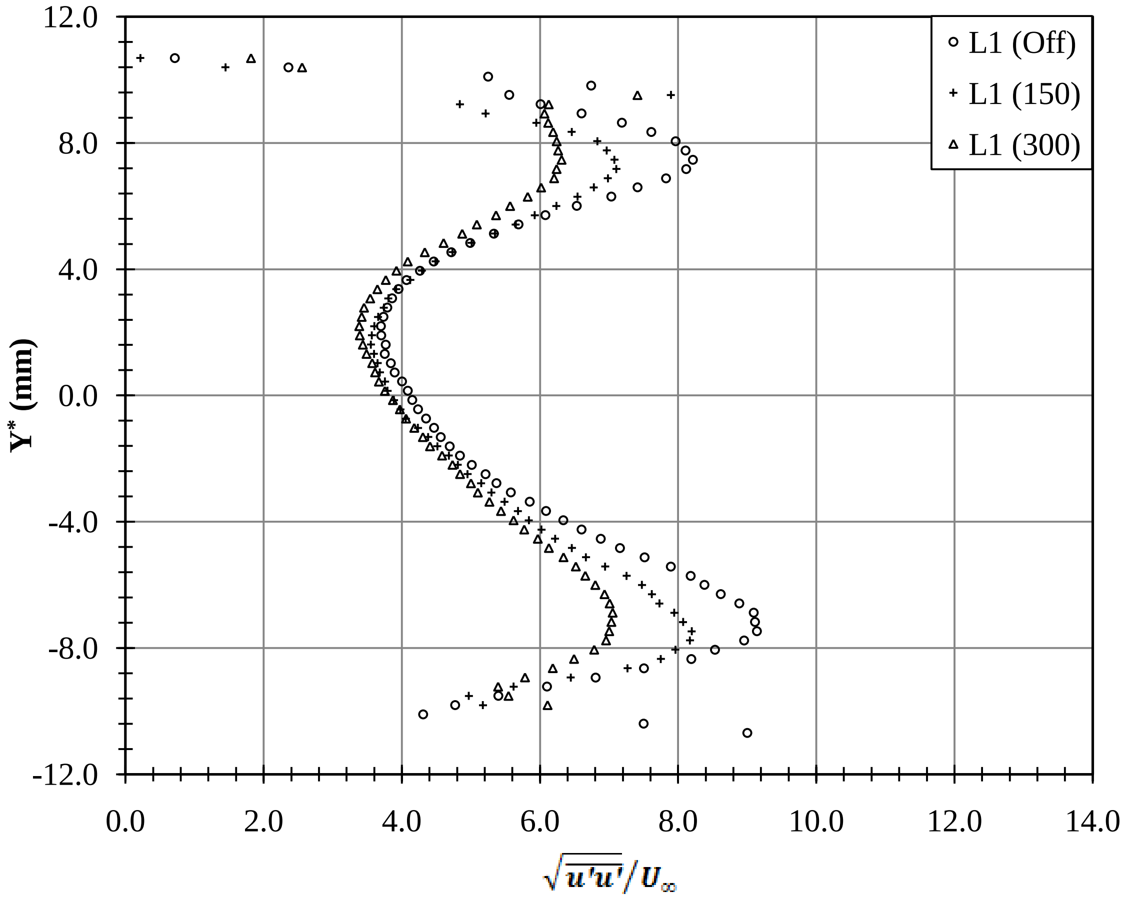

Fig. K-27 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L1, Center (46-55)**

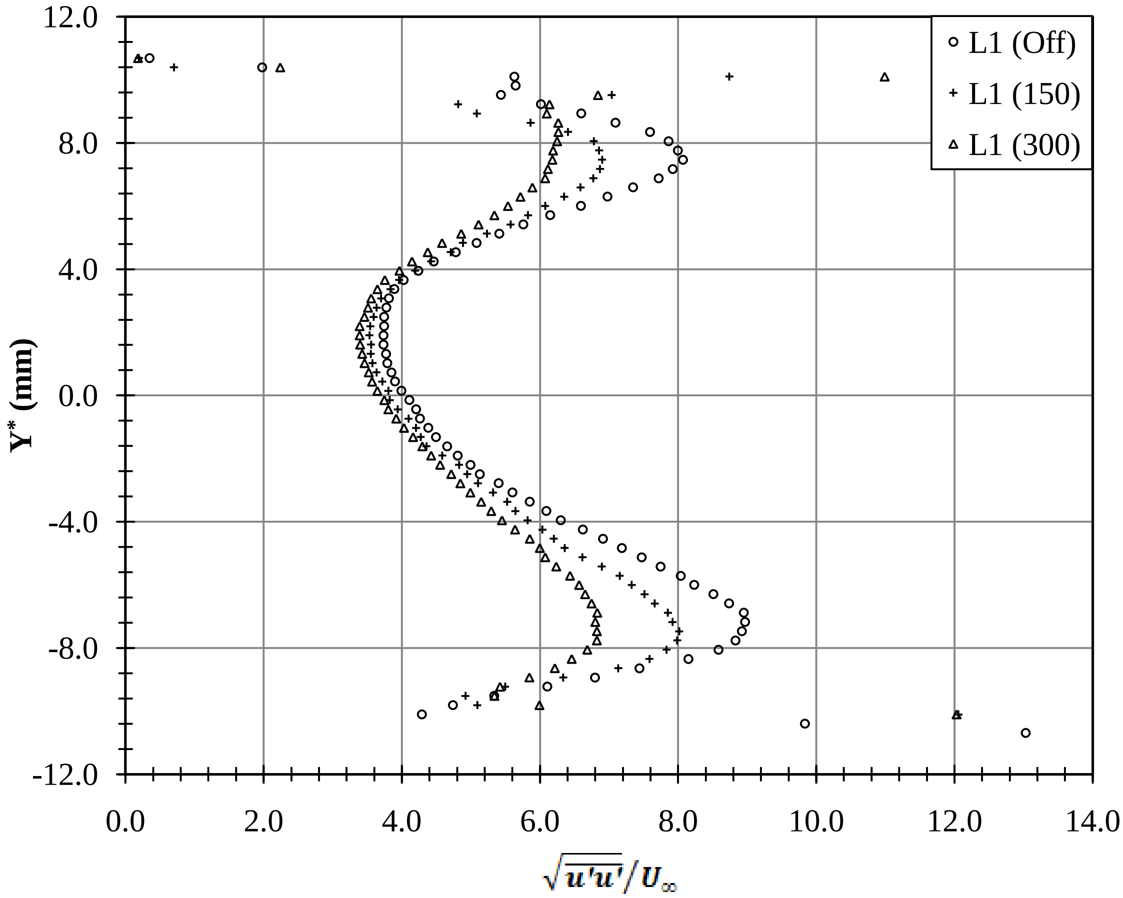

Fig. K-28 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L1, Right (71-80)**

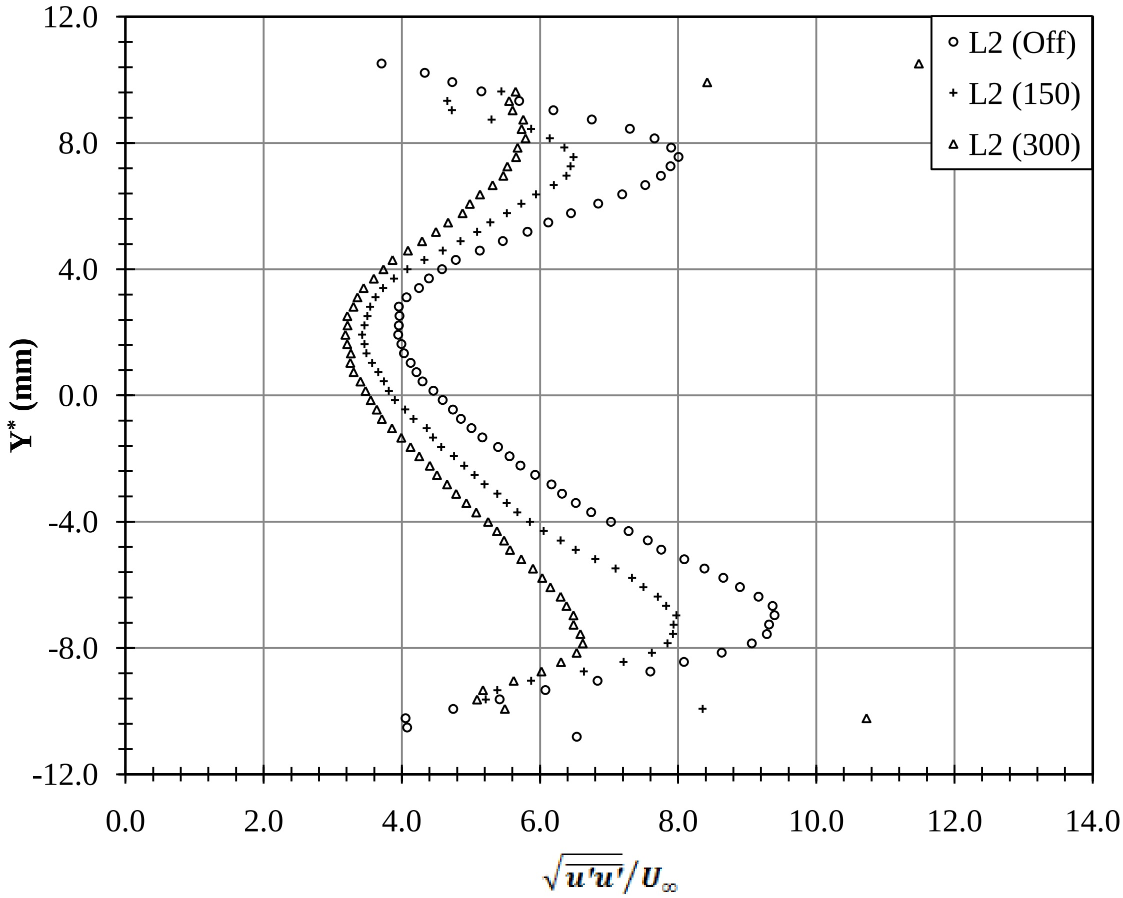

Fig. K-29 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L2, Left (1-10)**

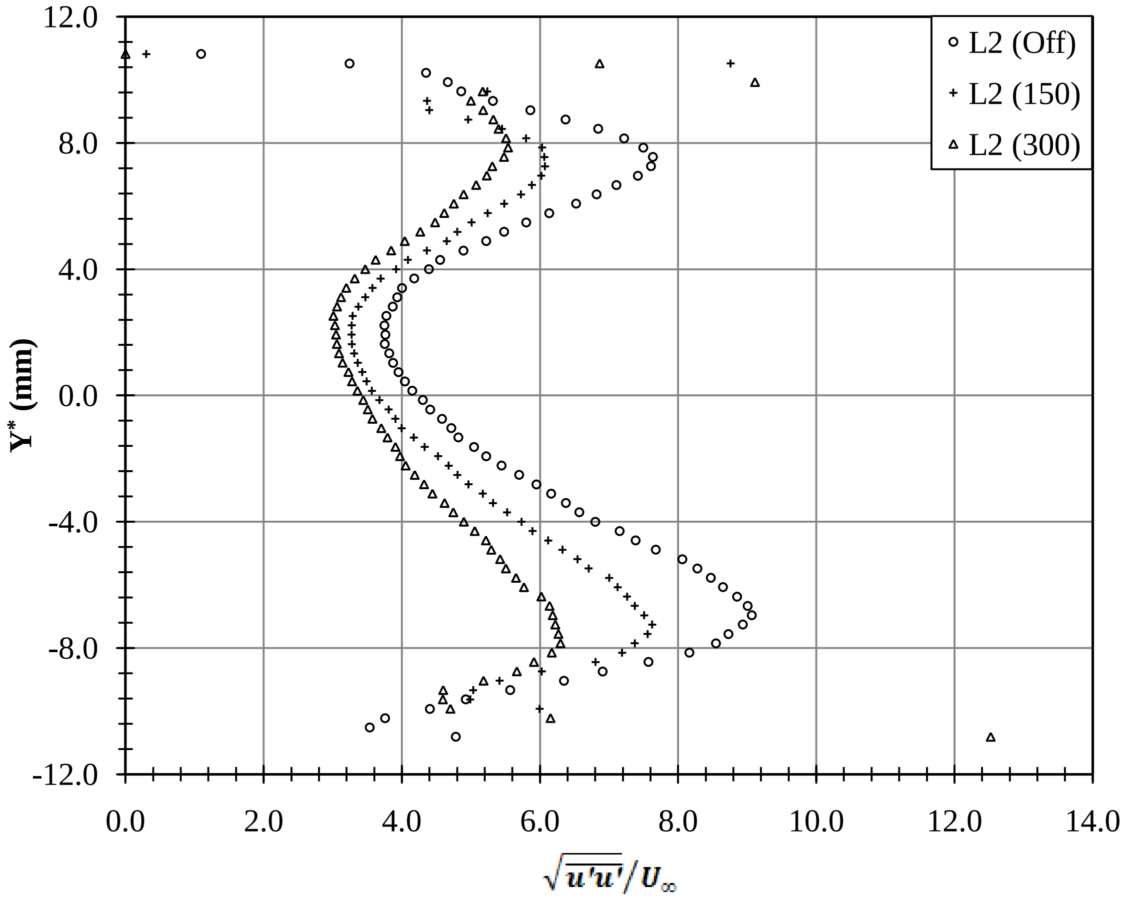

Fig. K-30 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L2, Center (46-55)**

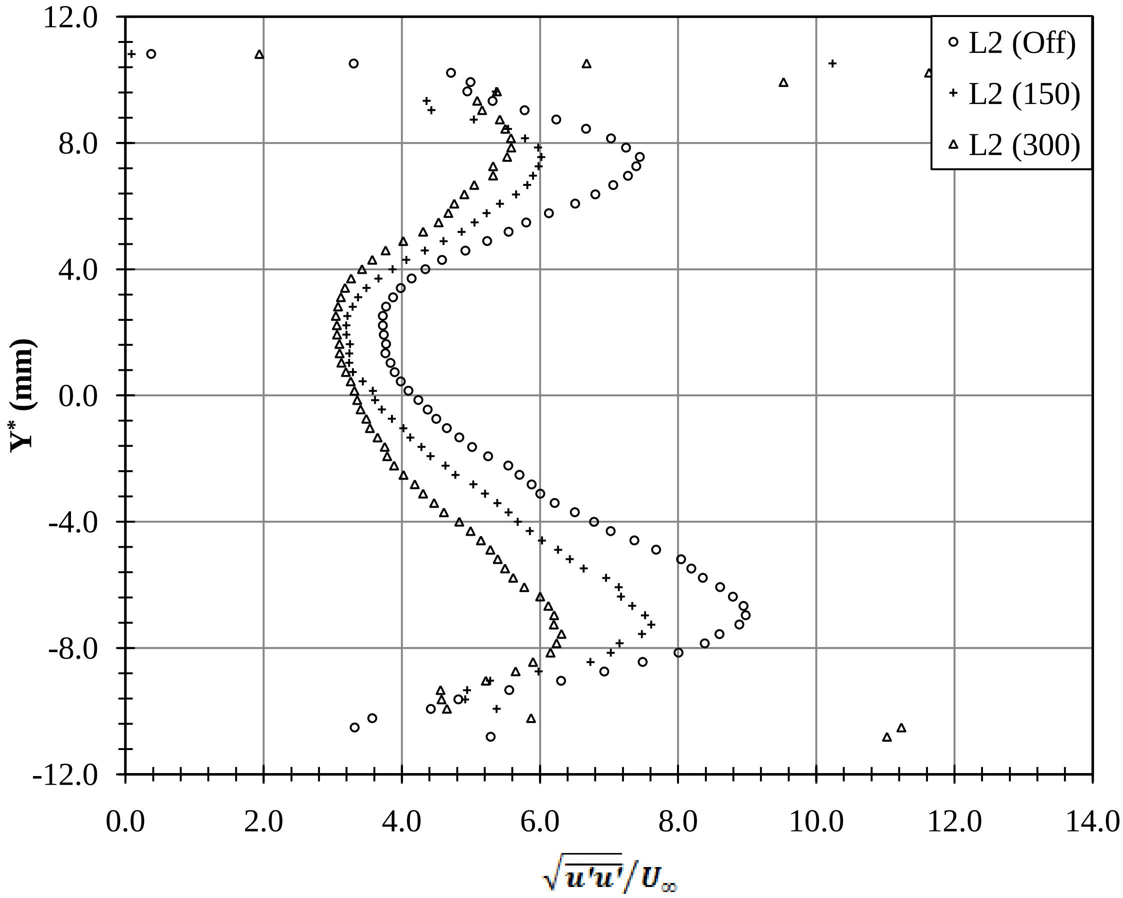

Fig. K-31 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L2, Right (71-80)**

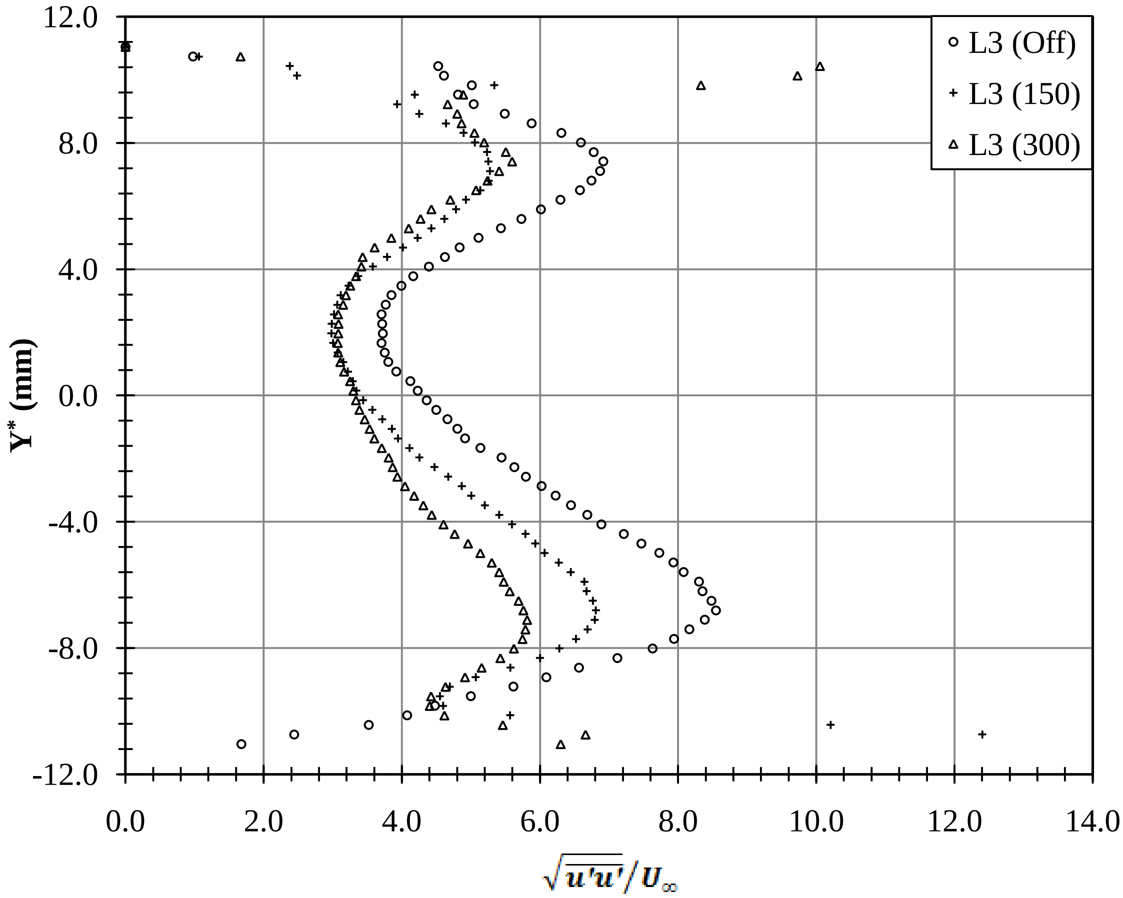

Fig. K-32 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L3, Left (1-10)**

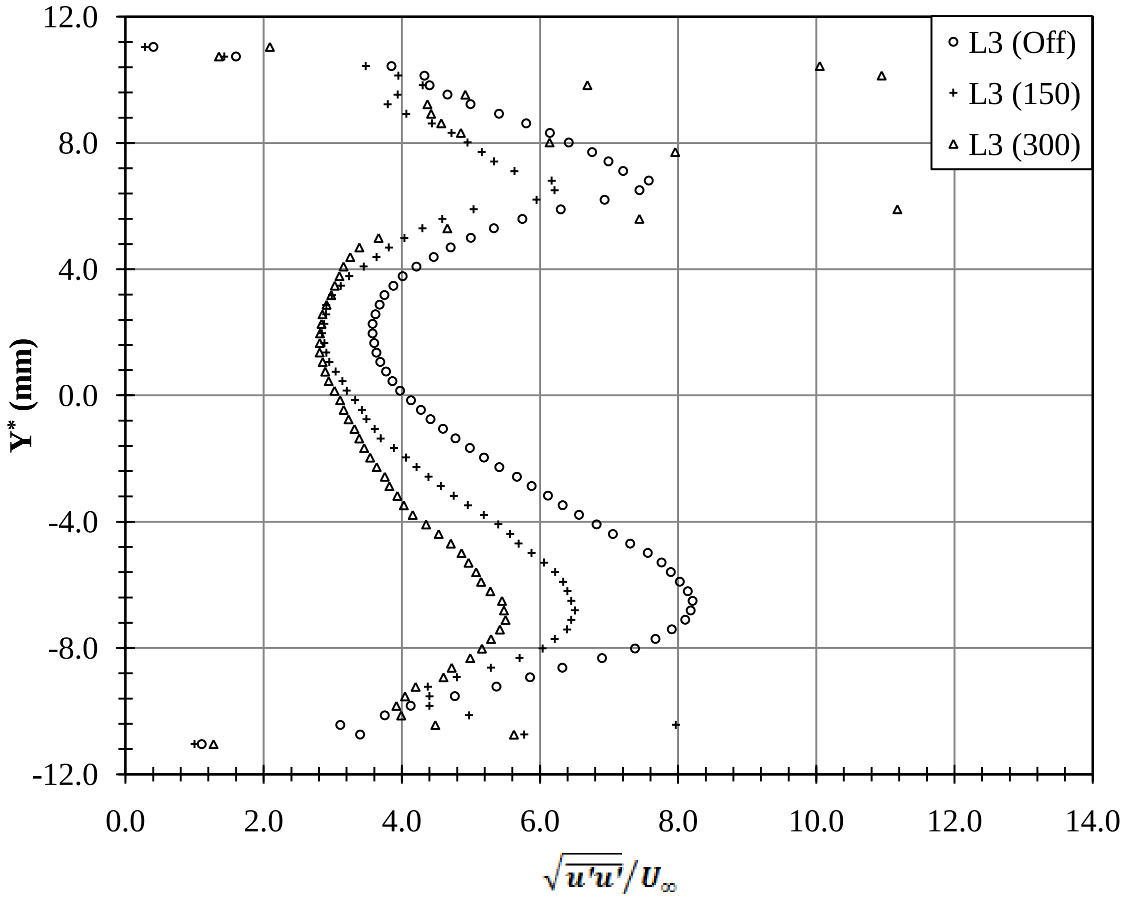

Fig. K-33 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L3, Center (46-55)**

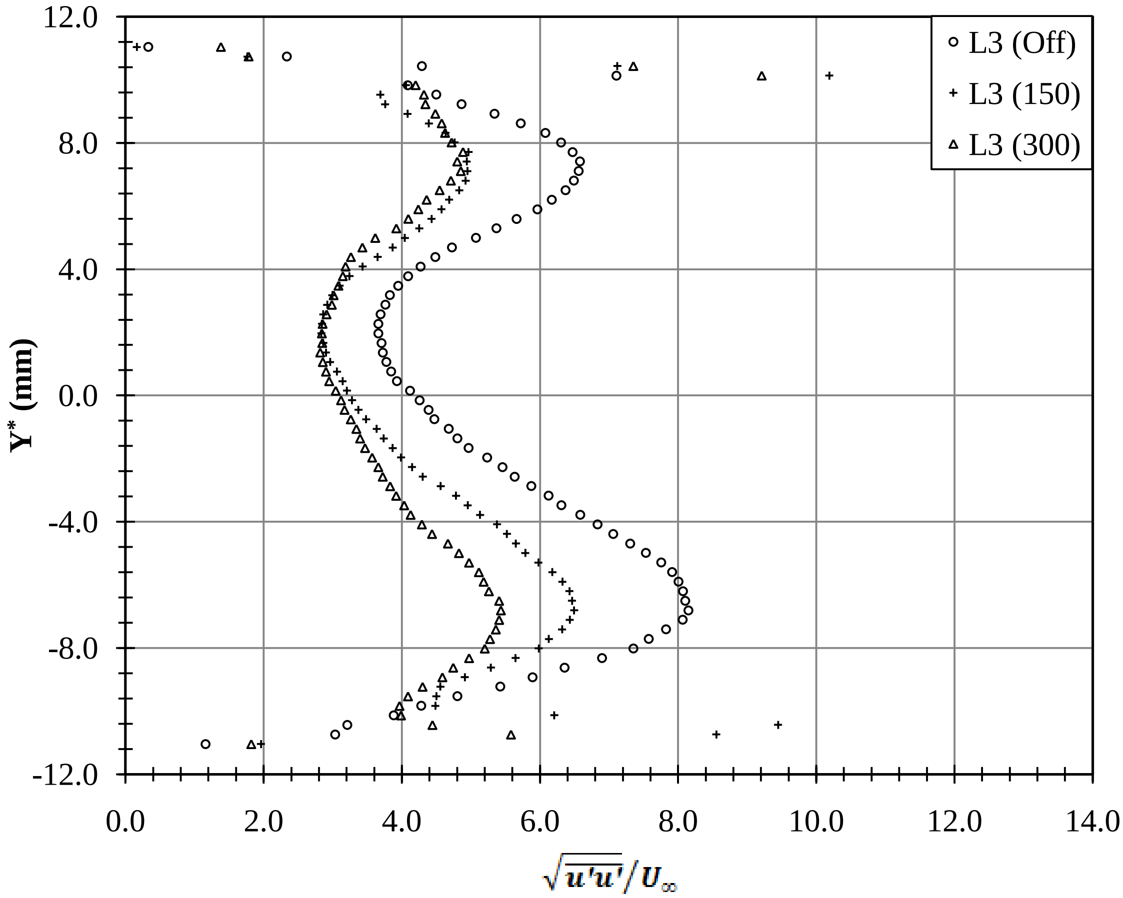

Fig. K-34 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L3, Right (71-80)**

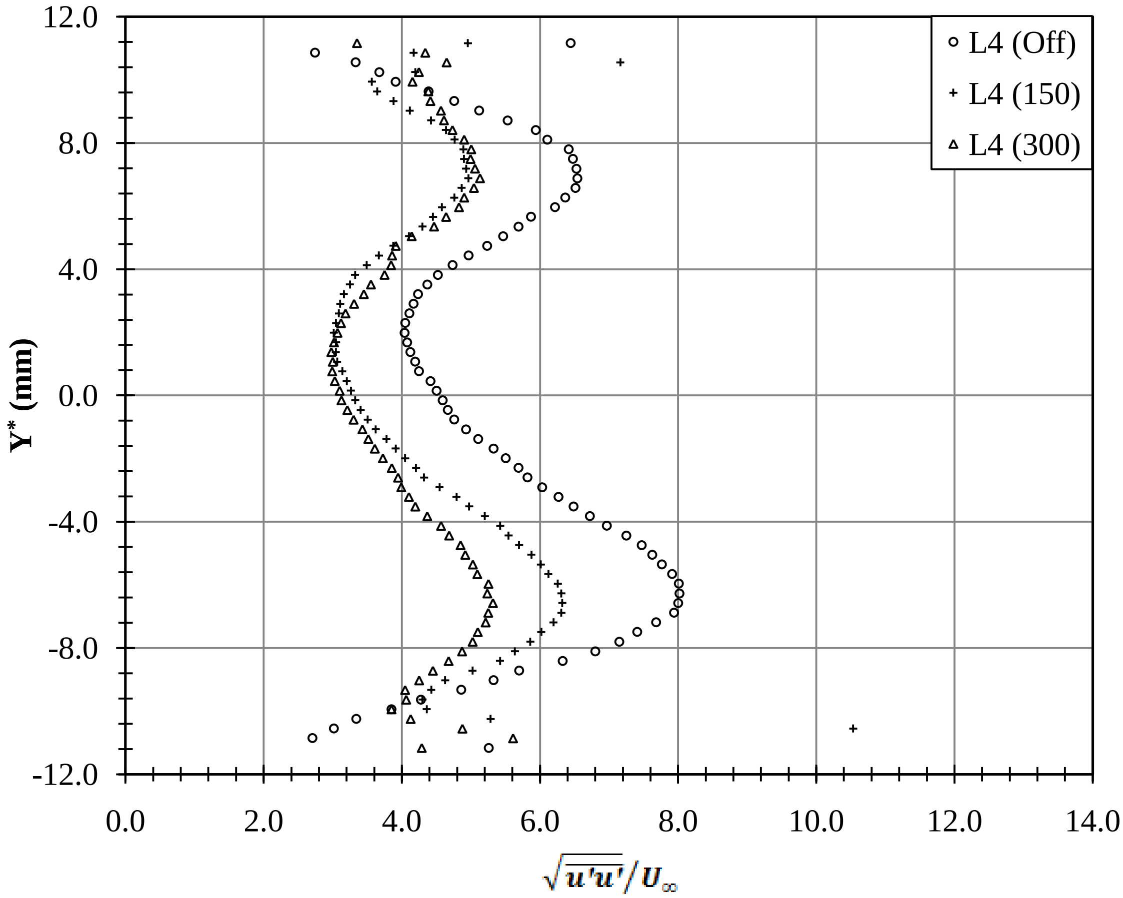

Fig. K-35 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L4, Left (1-10)**

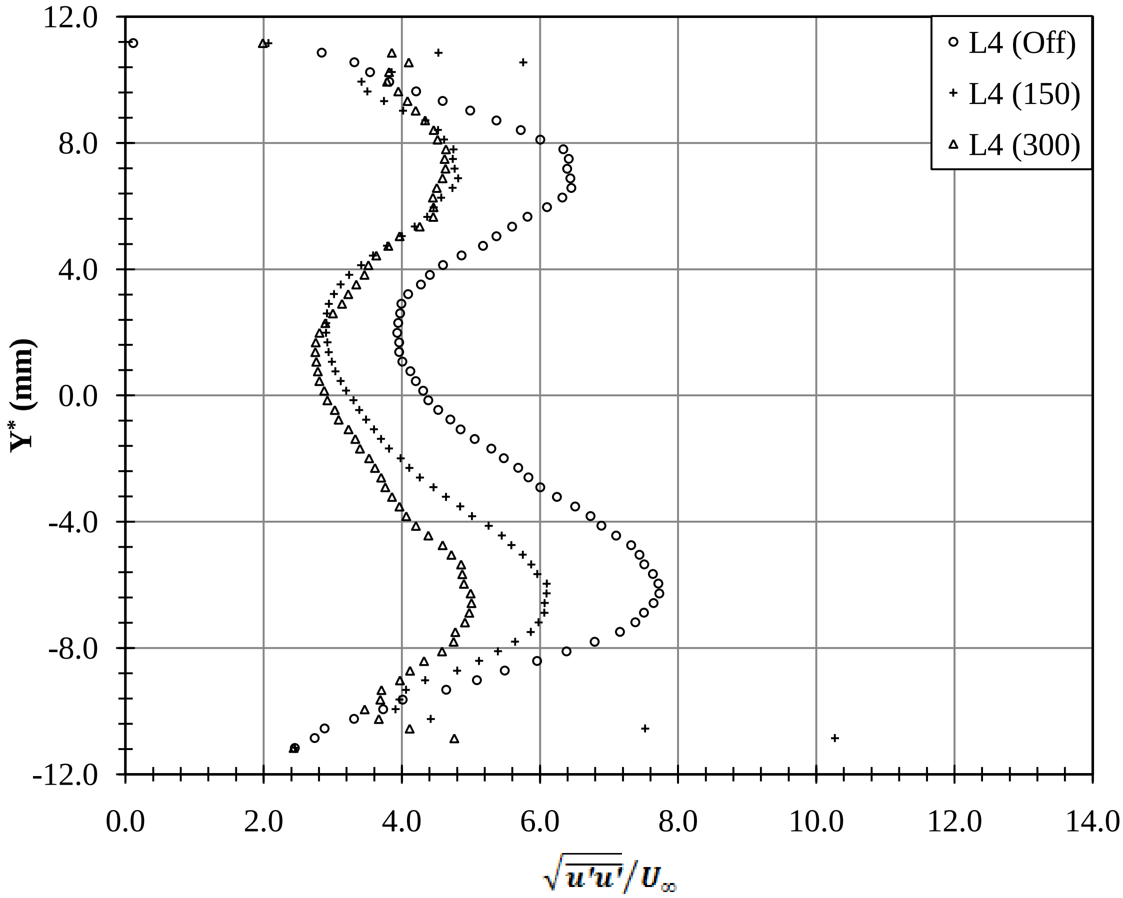

Fig. K-36 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L4, Center (42-51)**

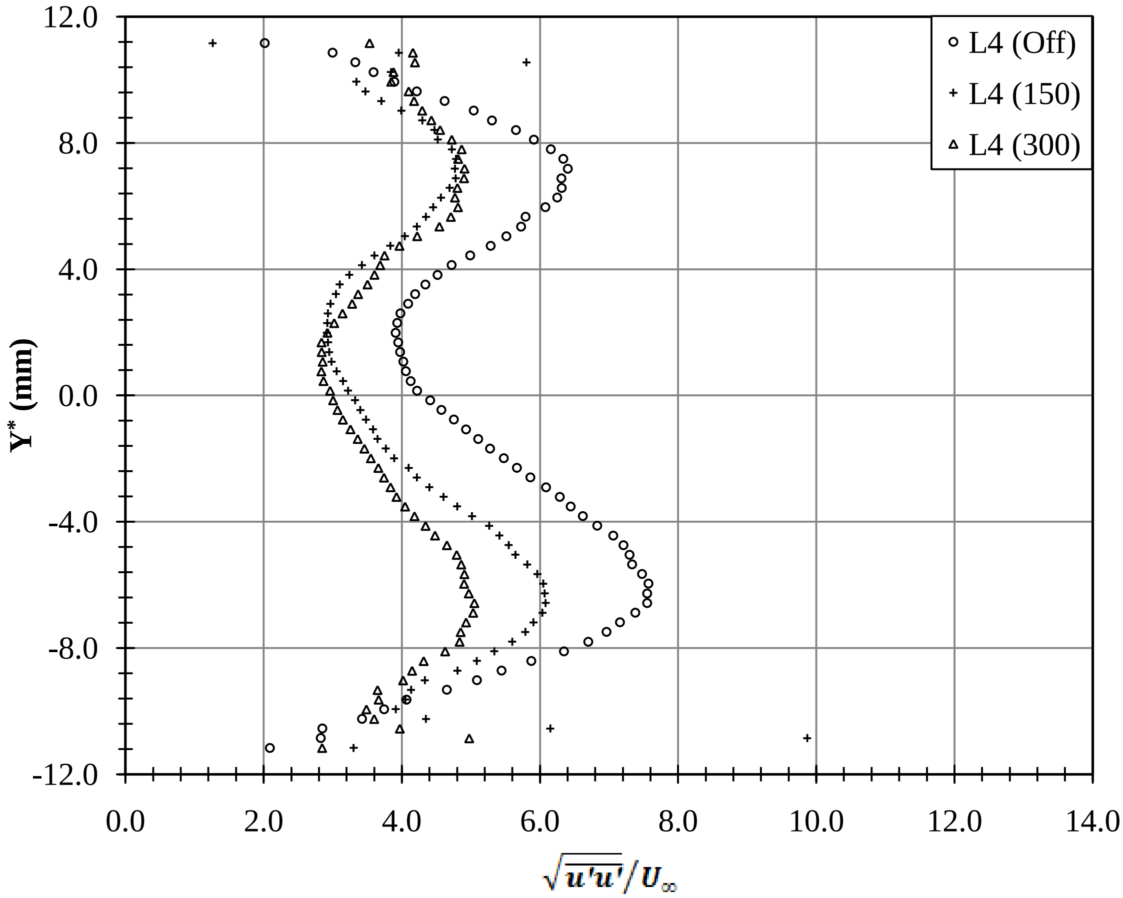

Fig. K-37 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L4, Right (71-80)**

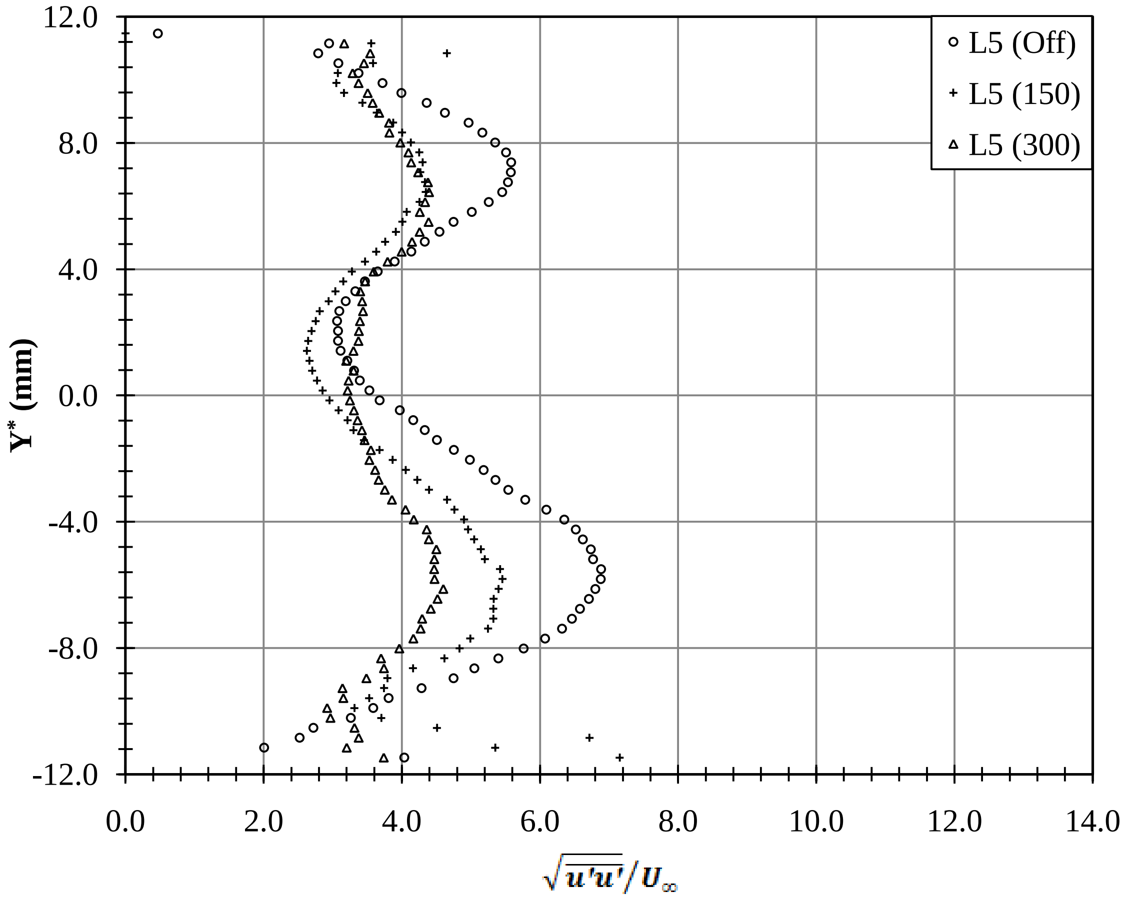

Fig. K-38 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L5, Left (1-10)**

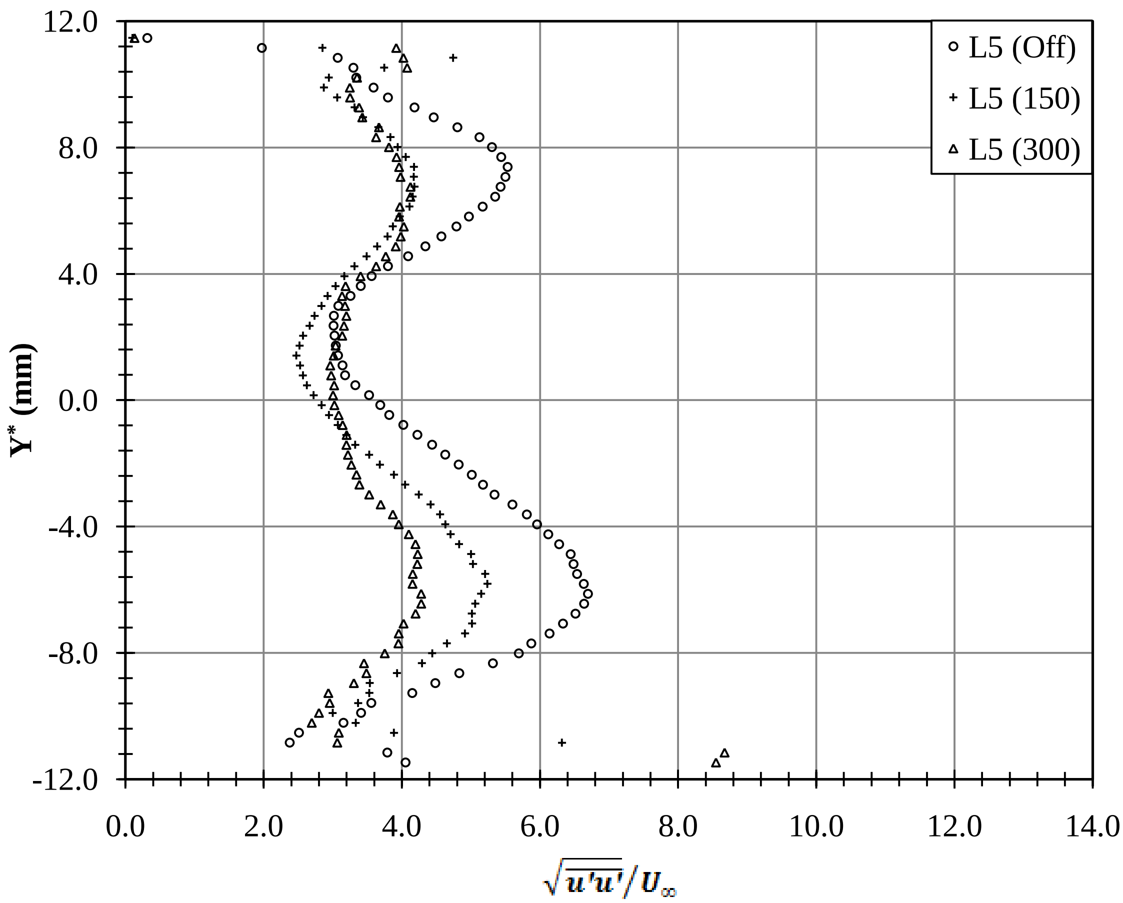

Fig. K-39 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L5, Center (46-55)**

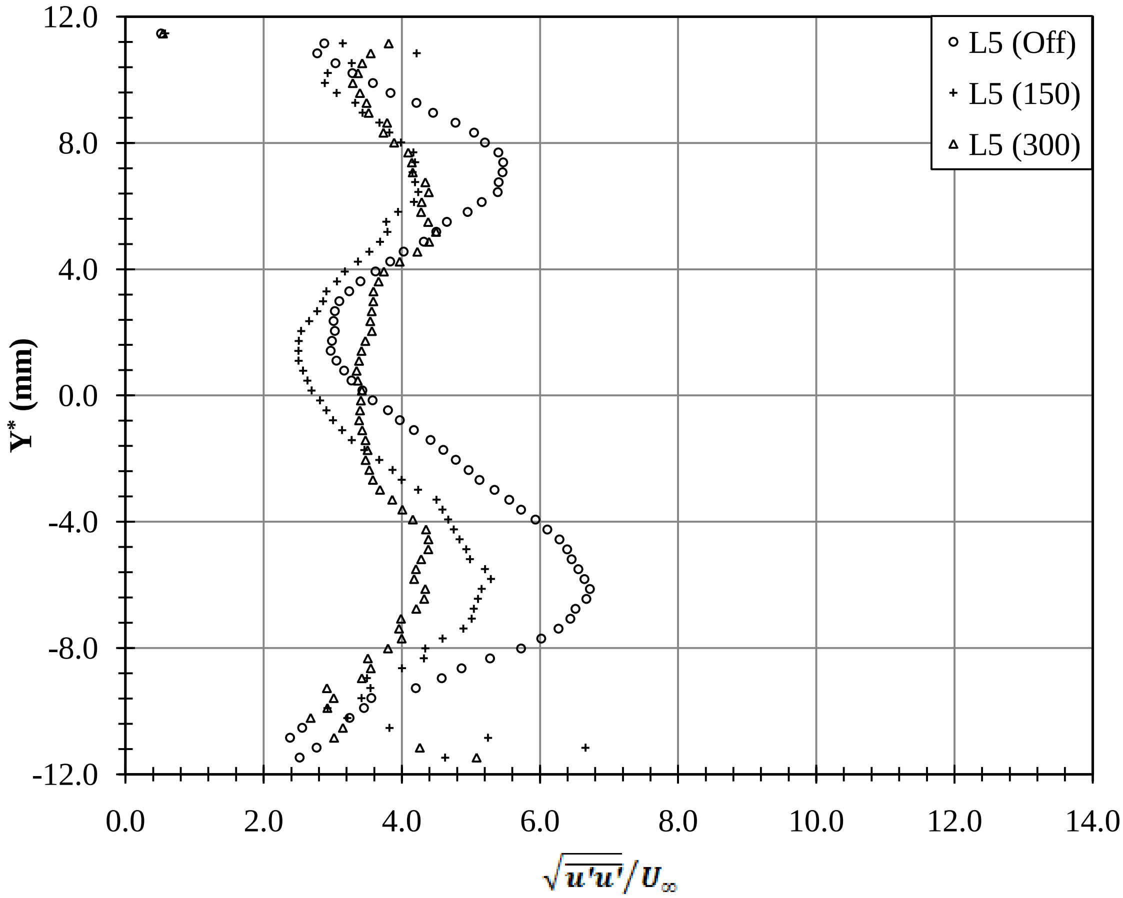

Fig. K-40 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L5, Right (71-80)**

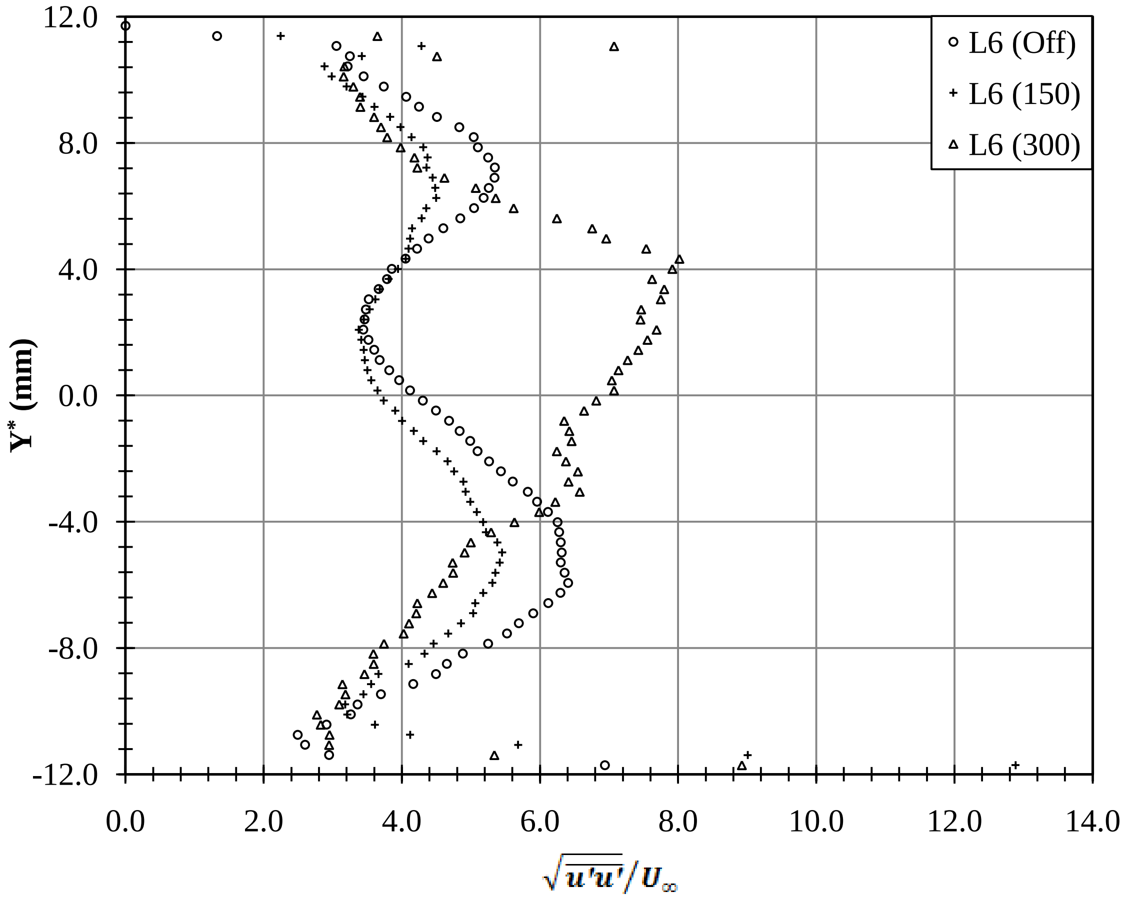

Fig. K-41 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L6, Left (1-10)**

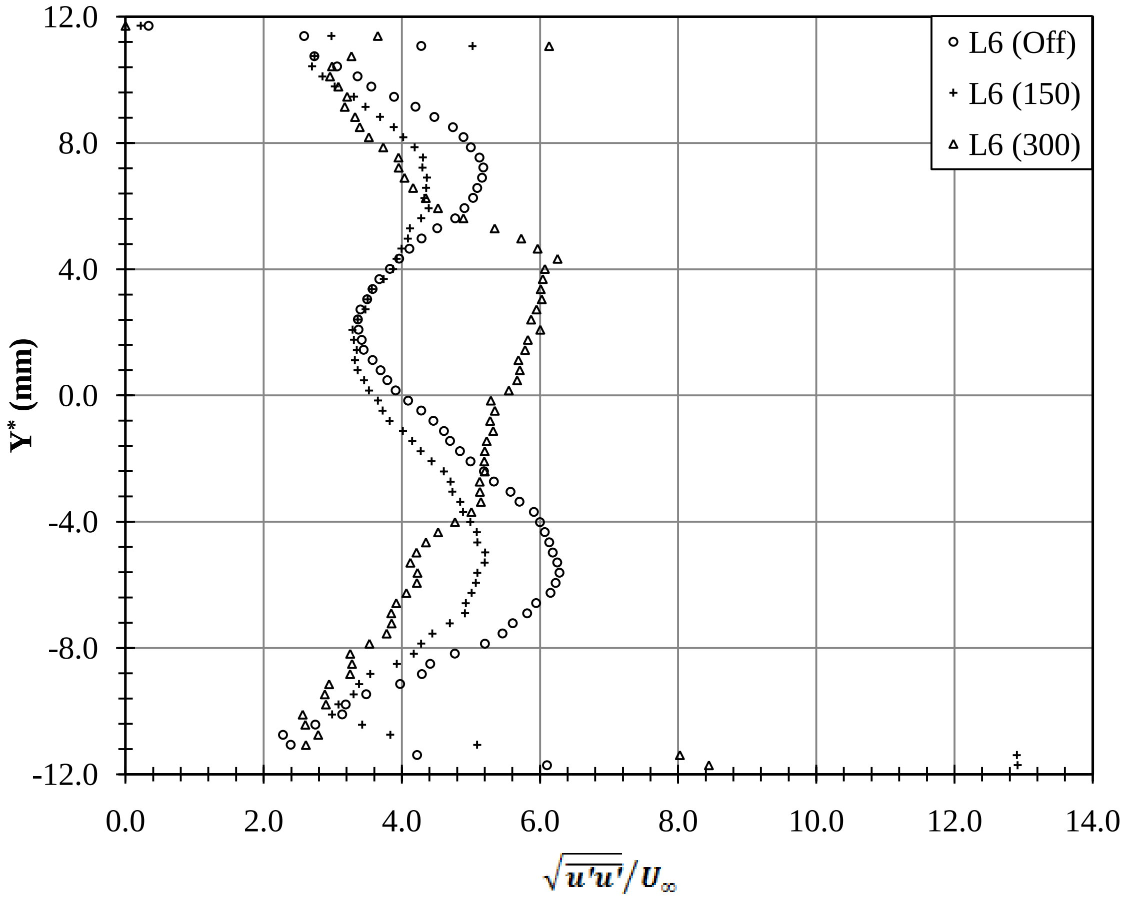

Fig. K-42 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L6, Center (46-55)**

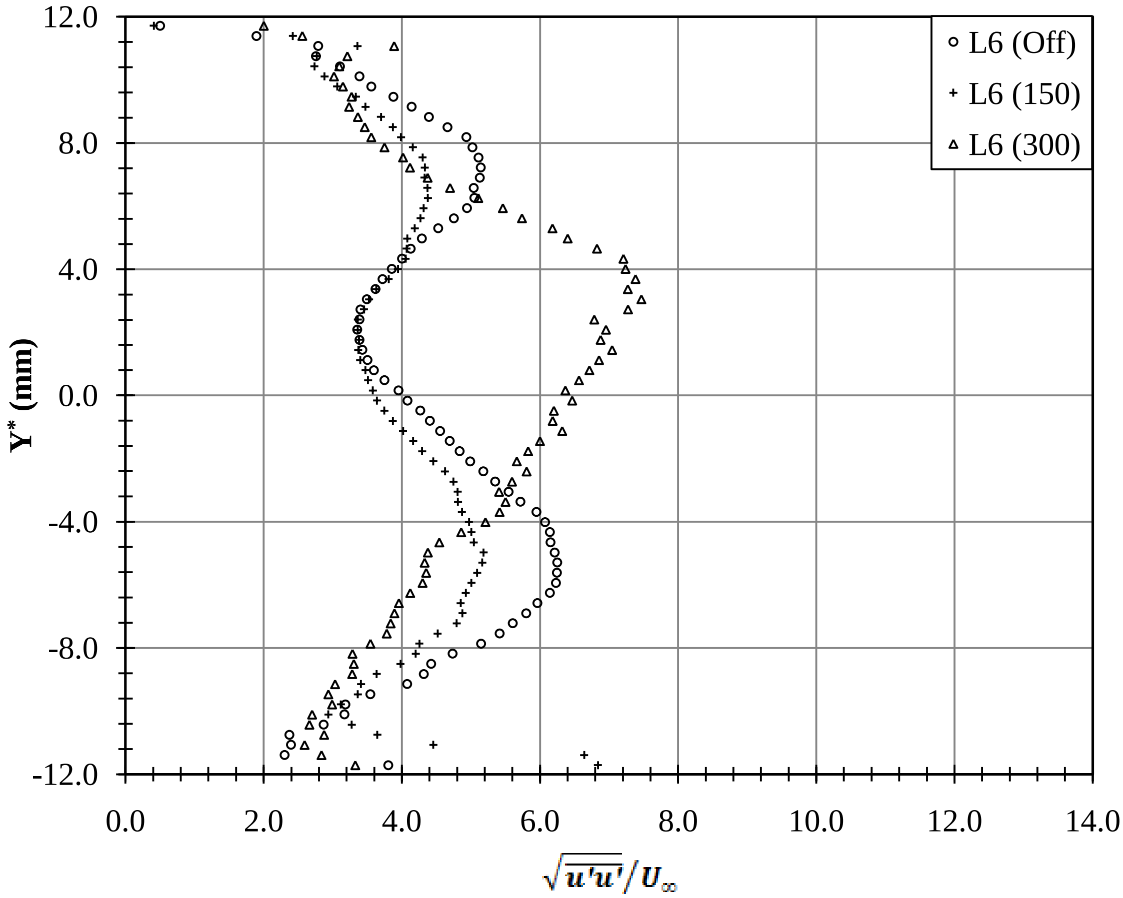

Fig. K-43 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #2, L6, Right (71-80)**

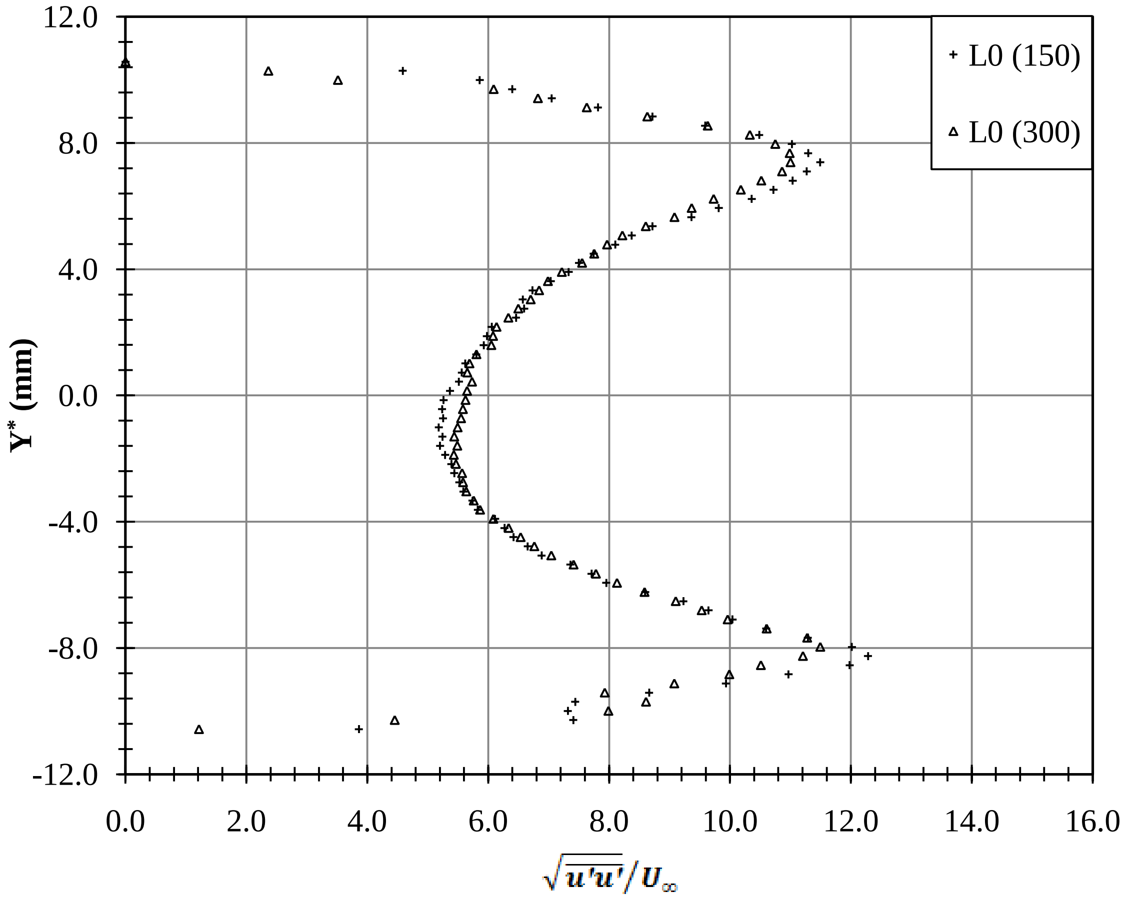

Fig. K-44 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L0, Left (1-10), Equilibrated**

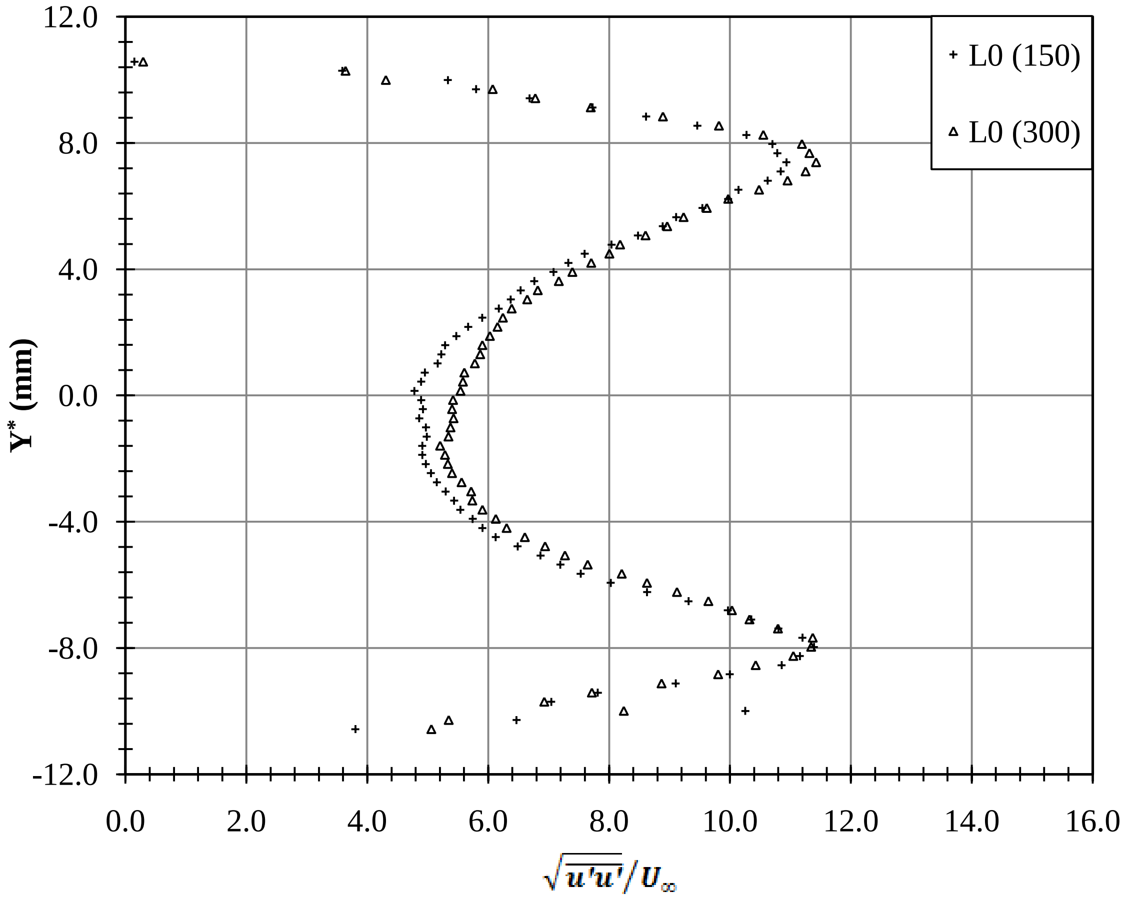

Fig. K-45 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L0, Center (46-55), Equilibrated**

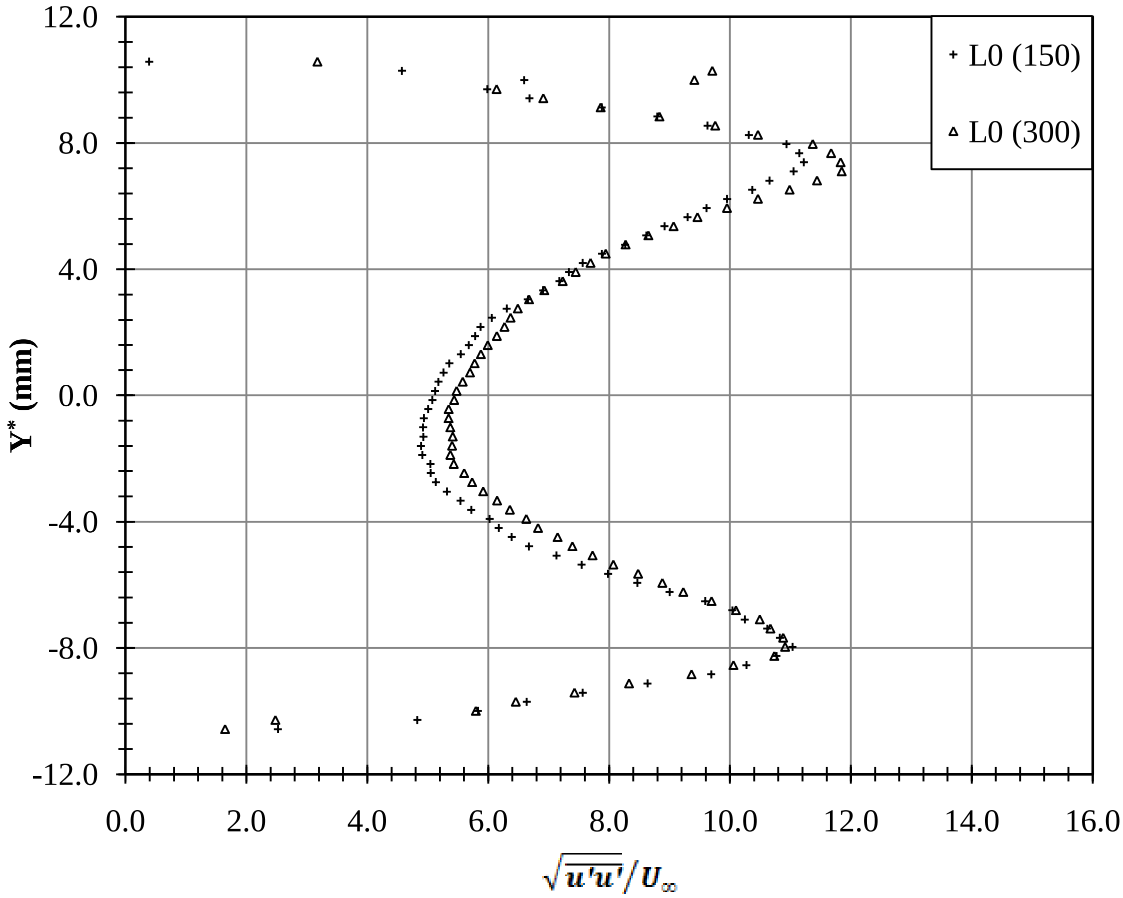

Fig. K-46 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L0, Right (71-80), Equilibrated**

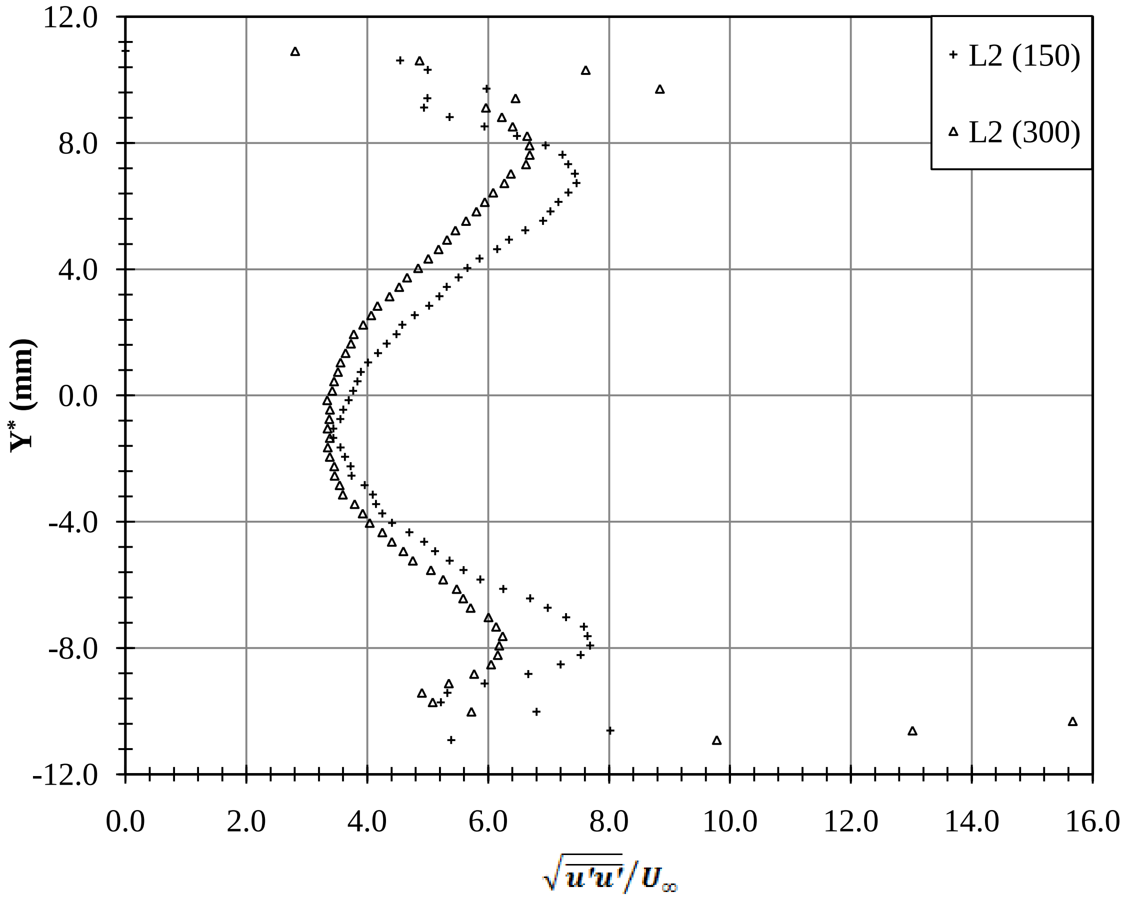

Fig. K-47 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L2, Left (1-10), Equilibrated**

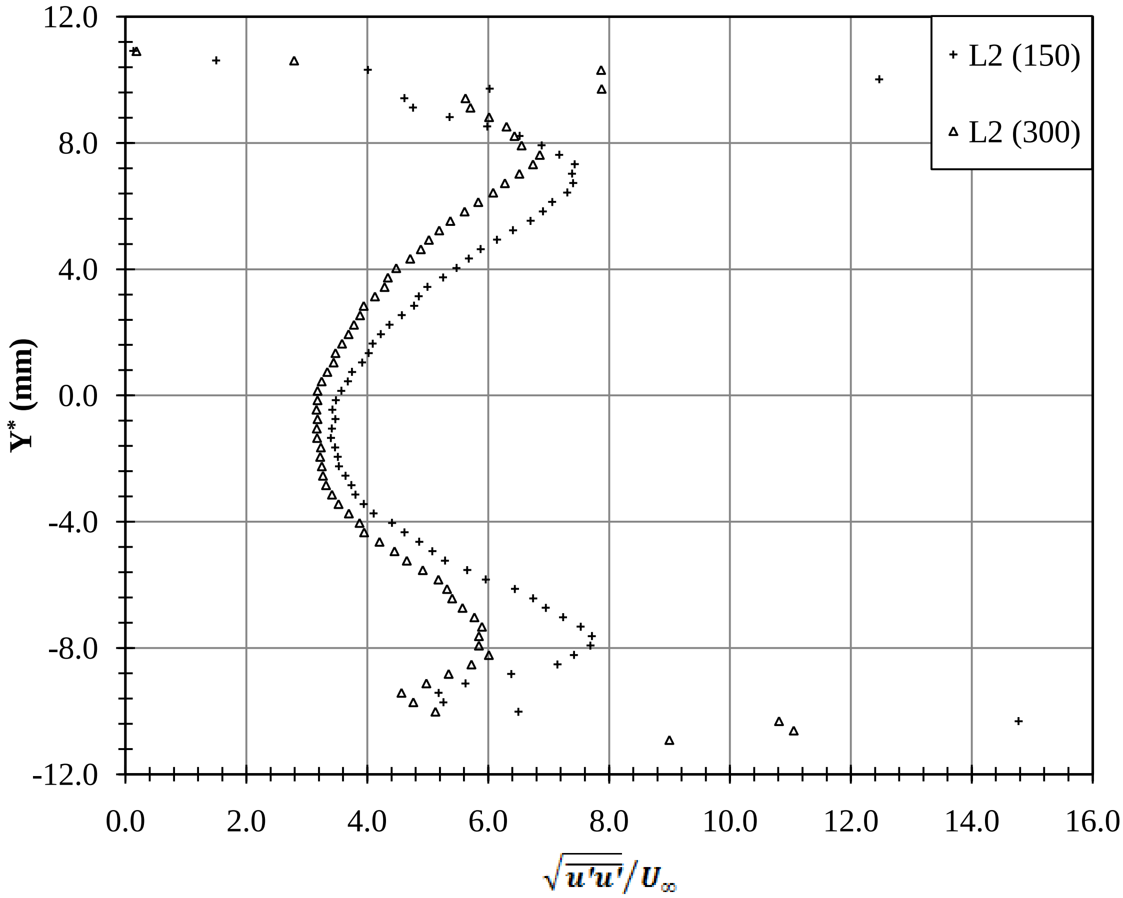

Fig. K-48 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L2, Center (46-55), Equilibrated**

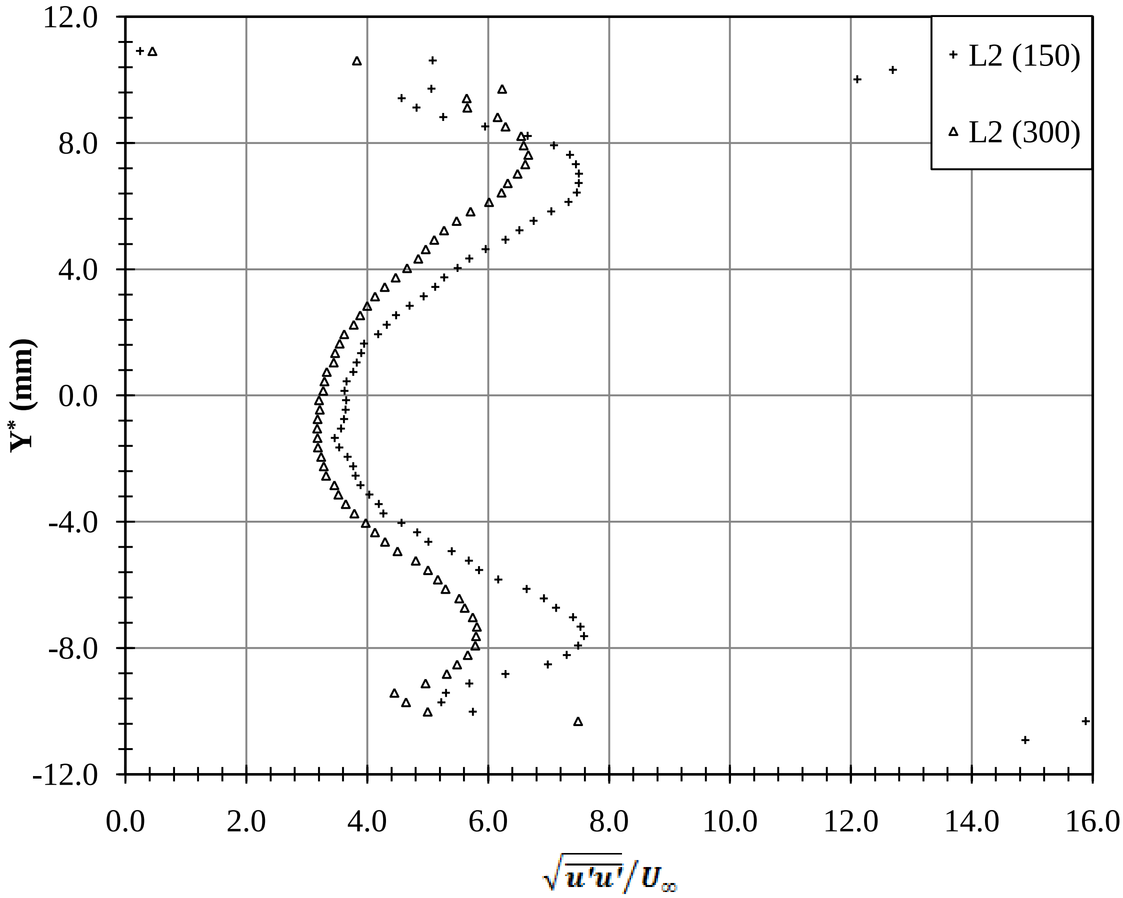

Fig. K-49 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L2, Right (71-80), Equilibrated**

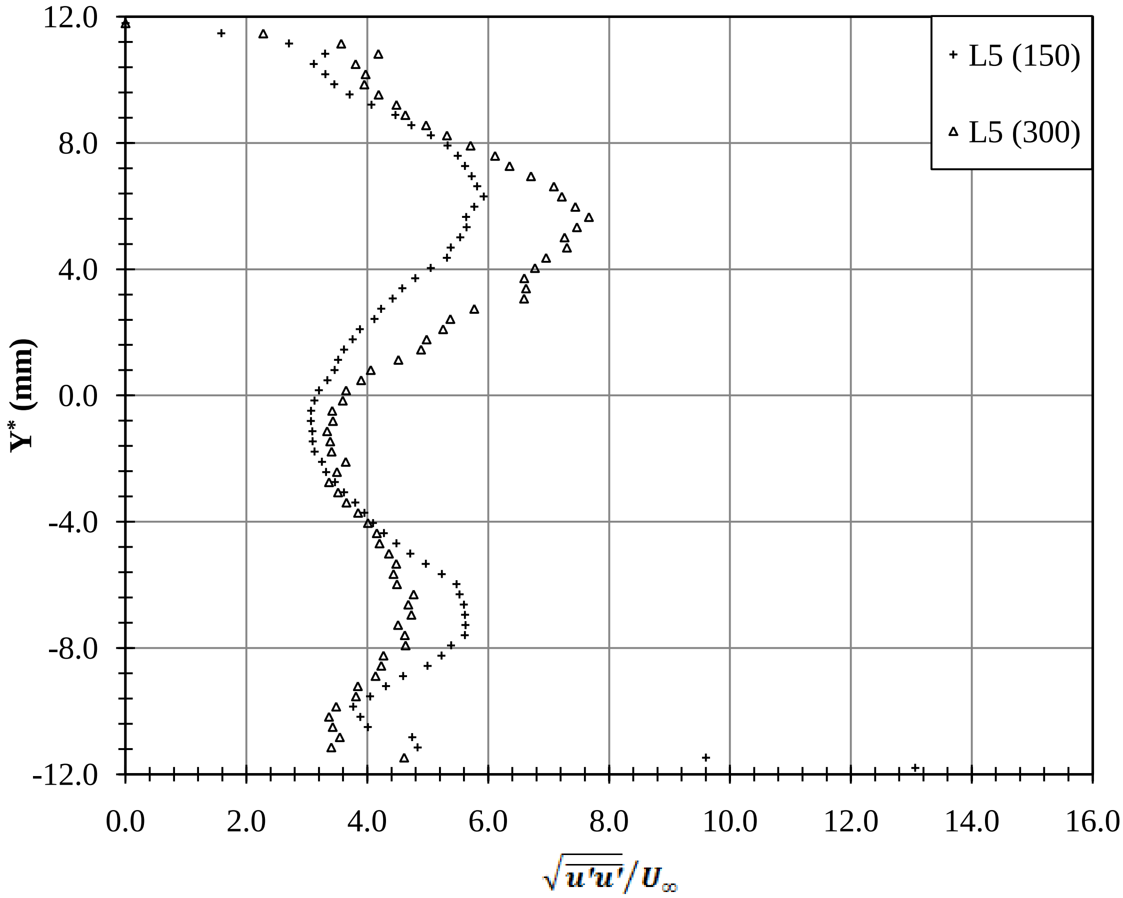

Fig. K-50 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L5, Left (1-10), Equilibrated**

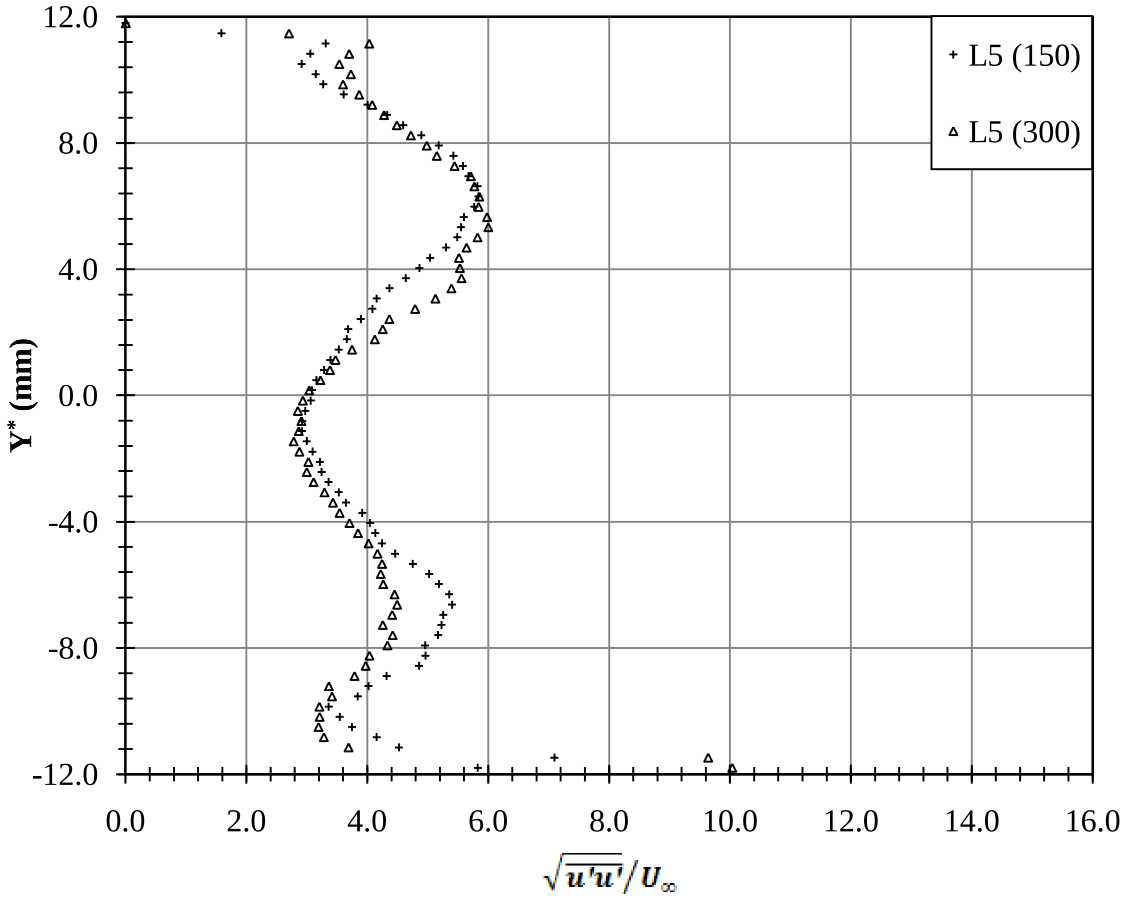

Fig. K-51 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L5, Center (46-55), Equilibrated**

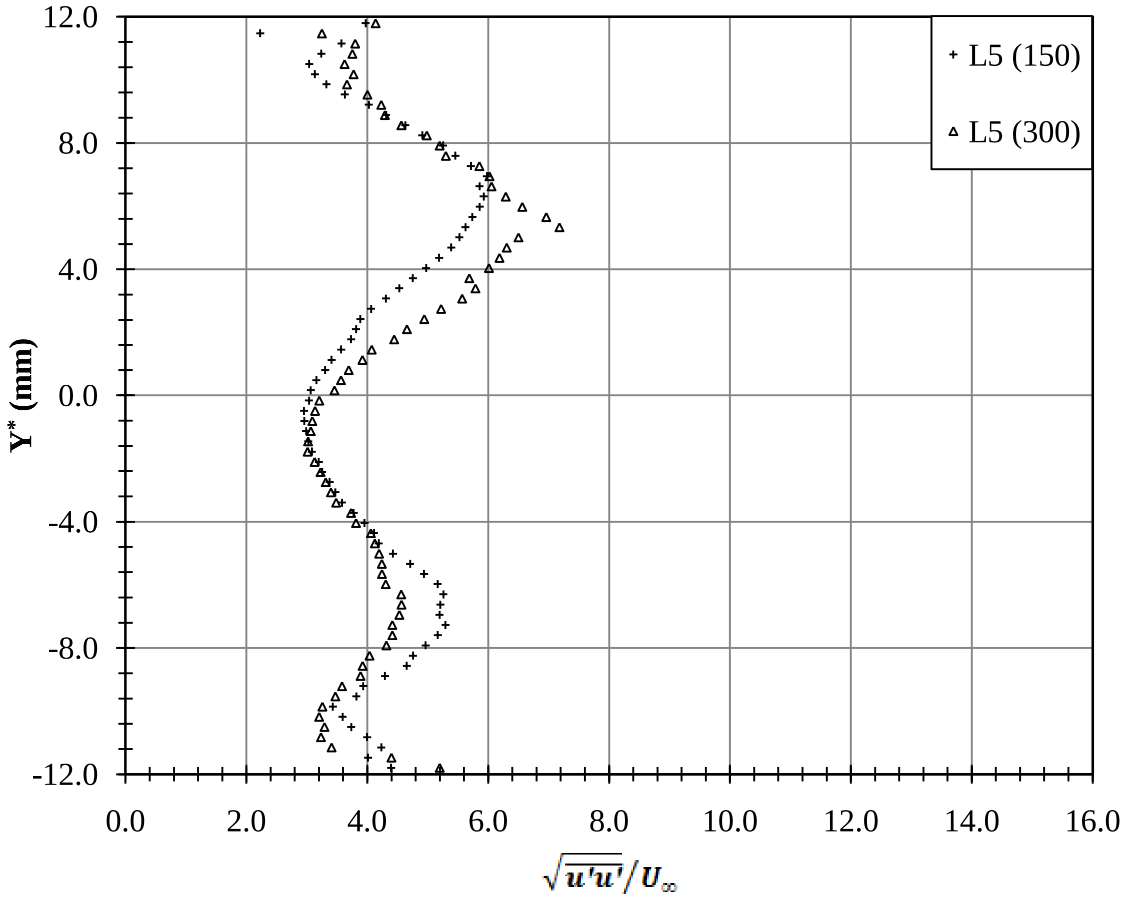

Fig. K-52 $\sqrt{\overline{u'u'}}/U_\infty$ **, Grid #1, L5, Right (71-80), Equilibrated**

APPENDIX L

PROFILE PLOTS

$\sqrt{\overline{v'v'}}/U_\infty$

FIGURE Page

FIGURE Page

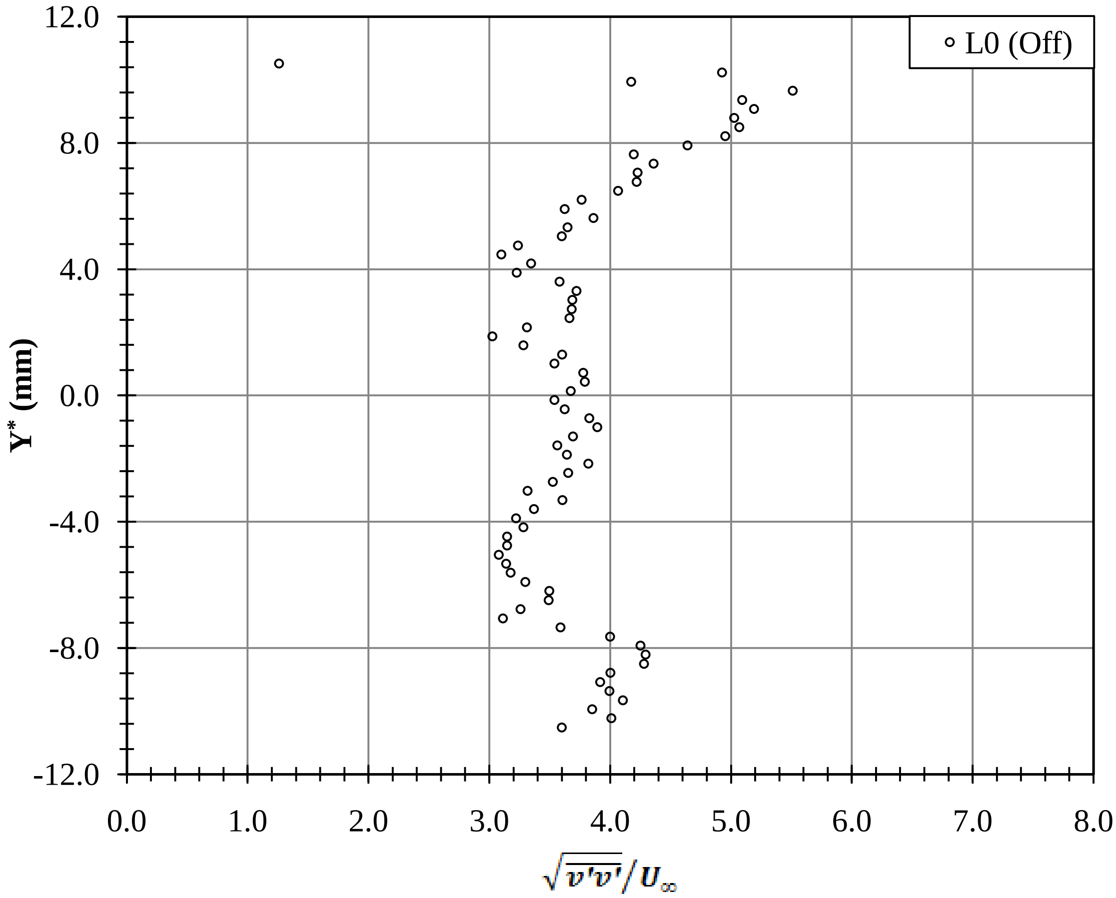

Fig. L-1 $\sqrt{\overline{v'v'}}/U_\infty$**, No Grid, L0, Center (40-60)**

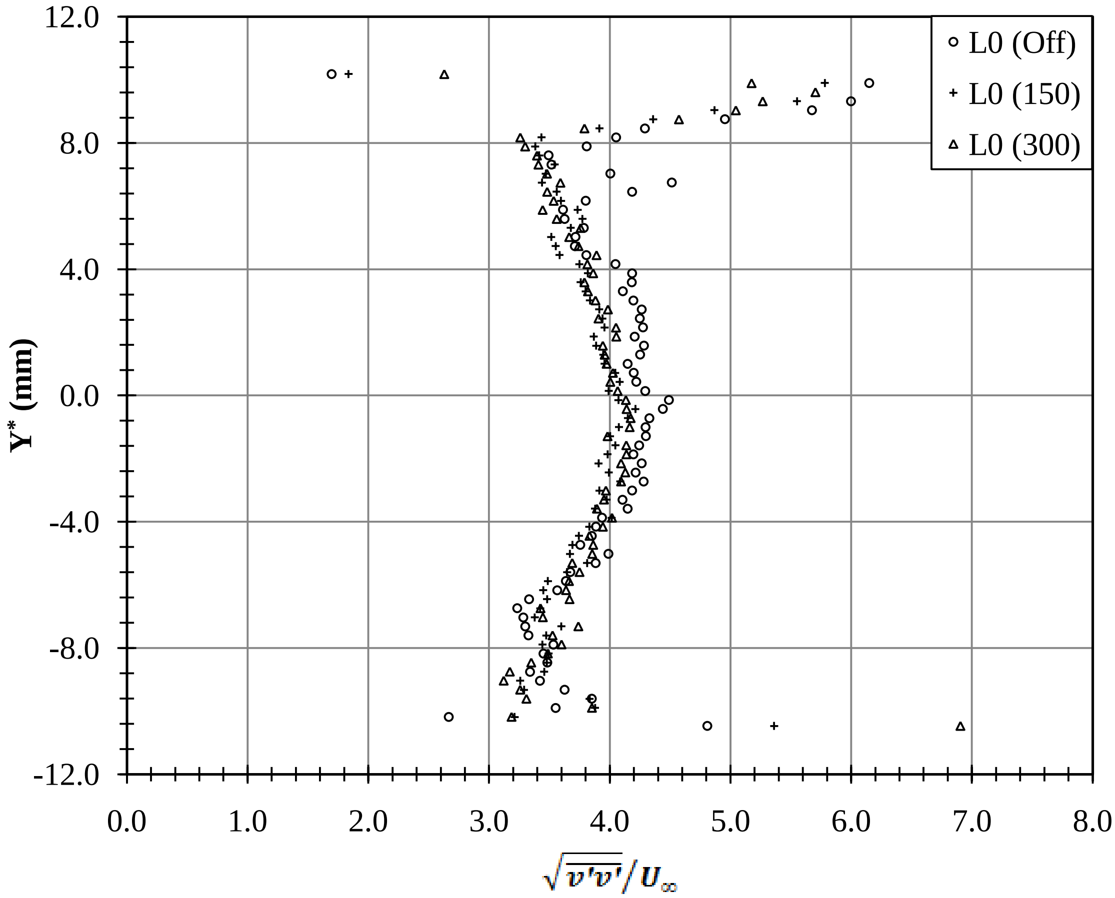

Fig. L-2 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L0, Left (1-10)**

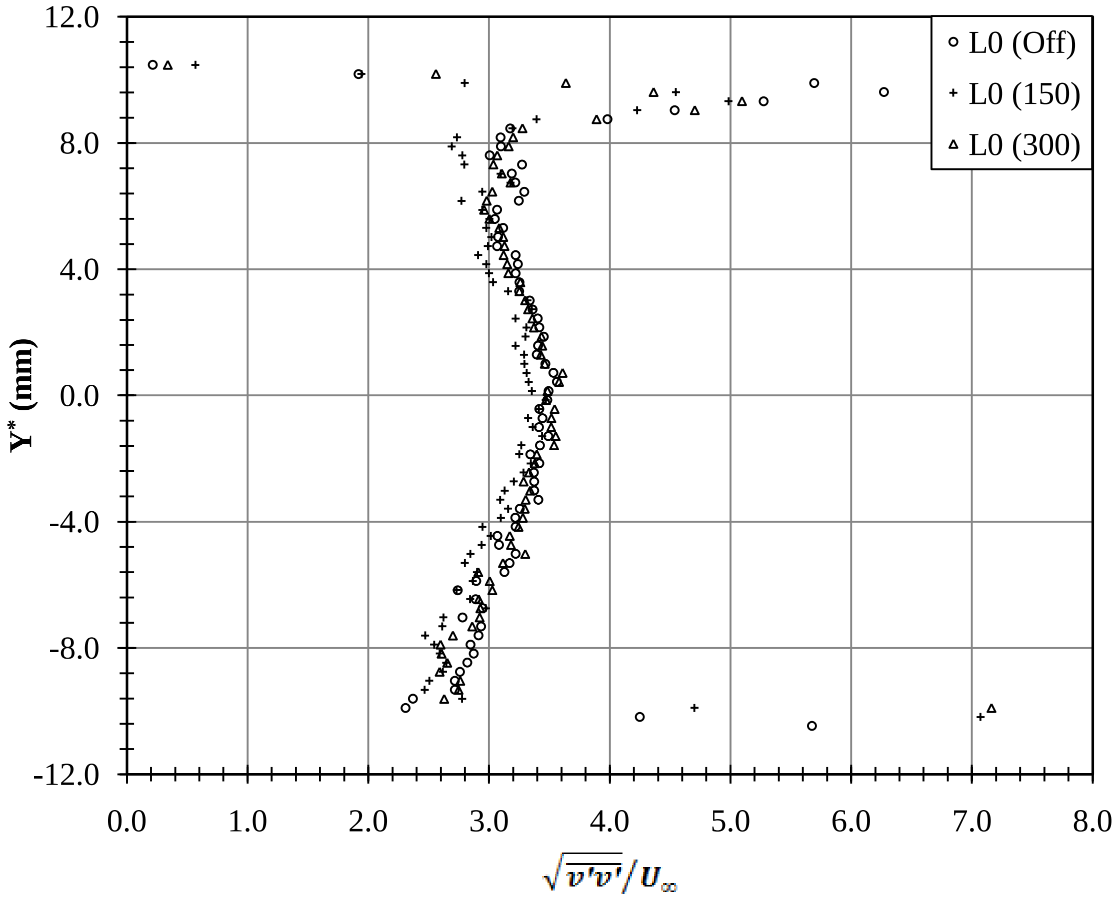

Fig. L-3 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L0, Center (46-55)**

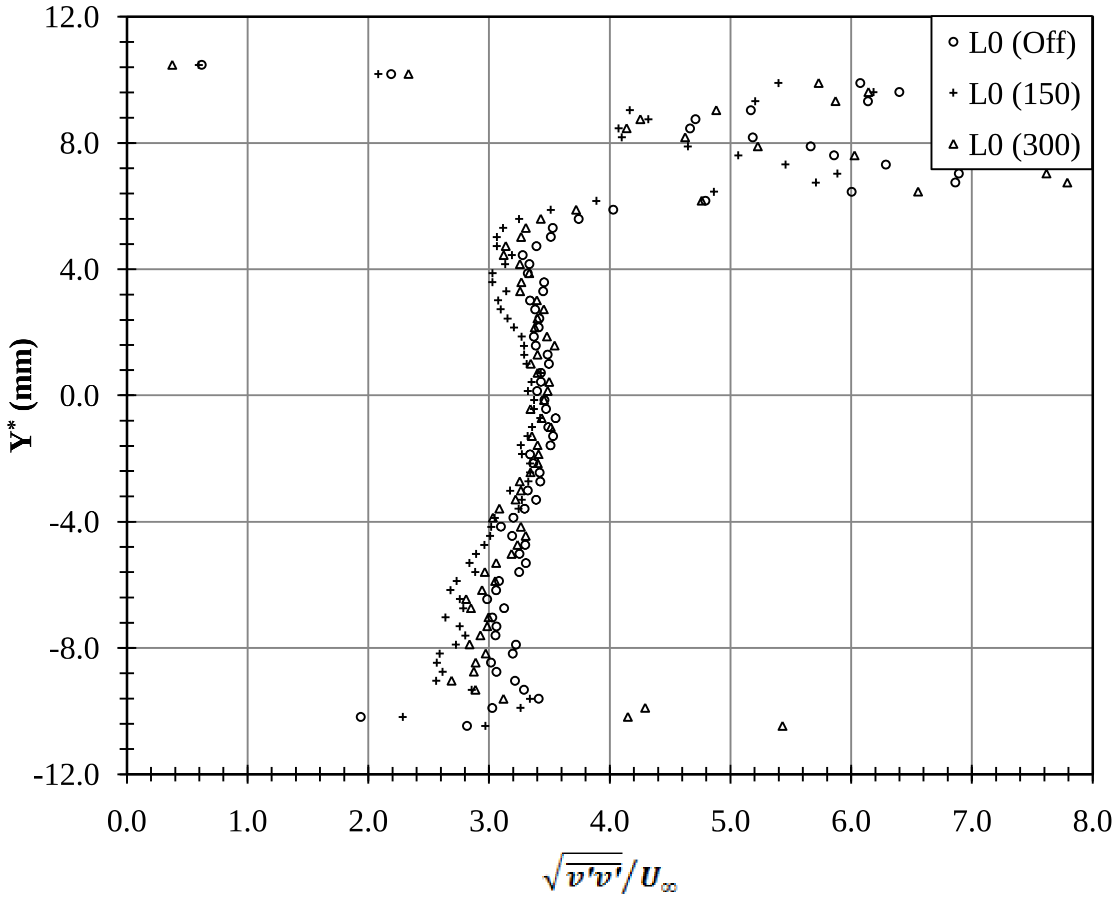

Fig. L-4 $\sqrt{\overline{v'v'}}/U_\infty$, Grid #1, L0, Right (71-80)

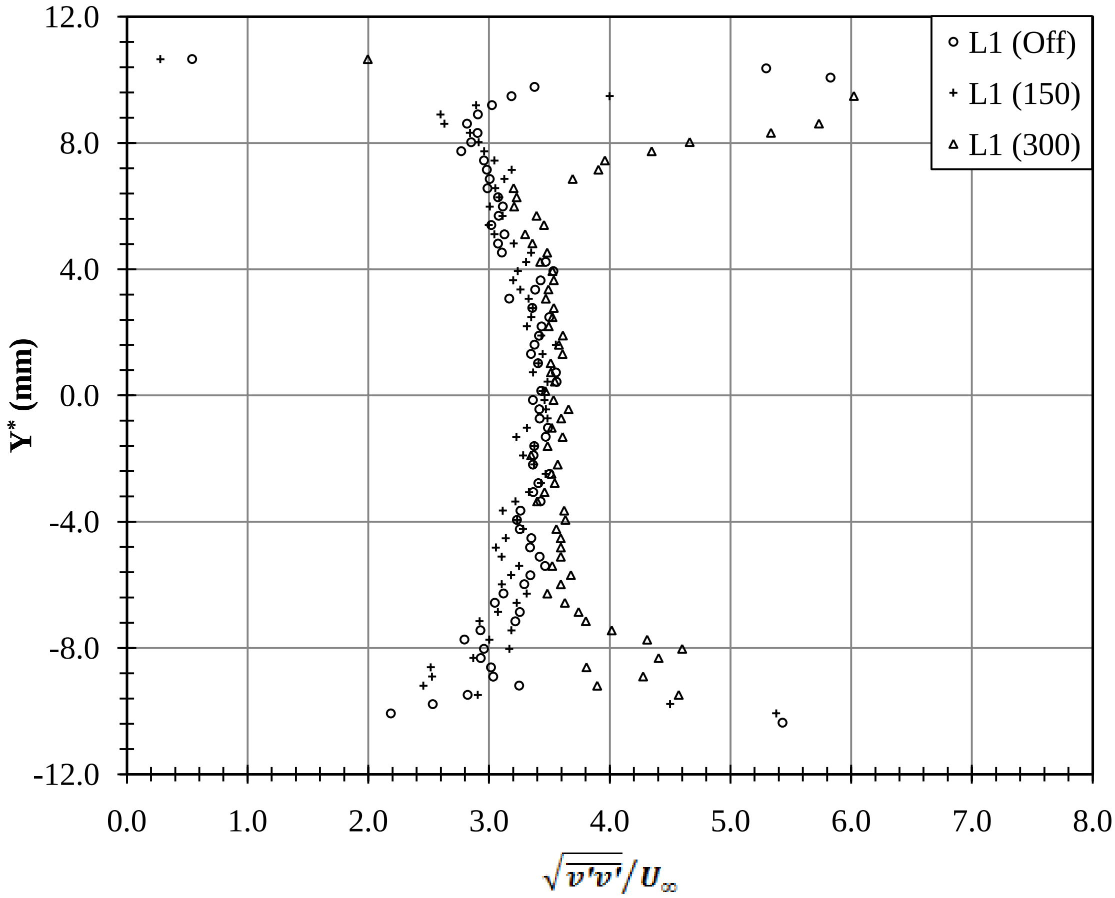

Fig. L-5 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L1, Left (1-10)**

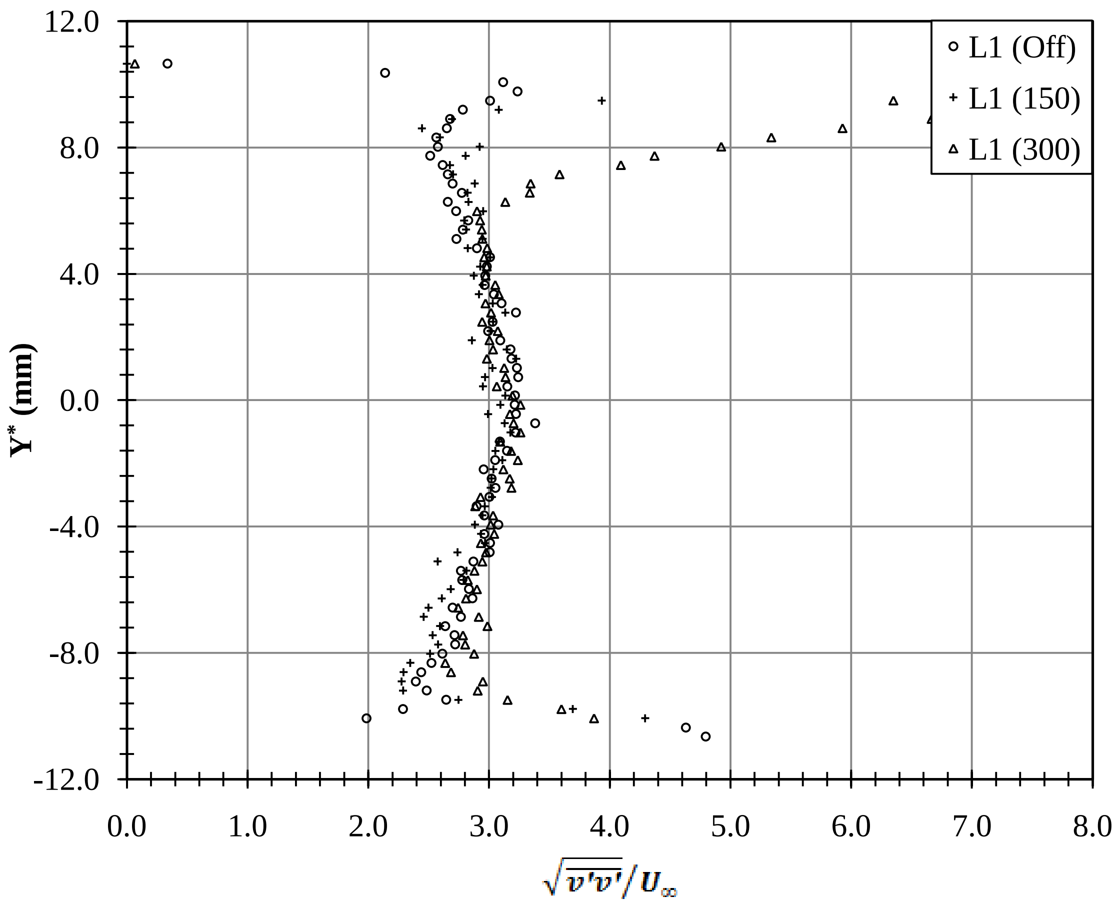

Fig. L-6 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L1, Center (46-55)**

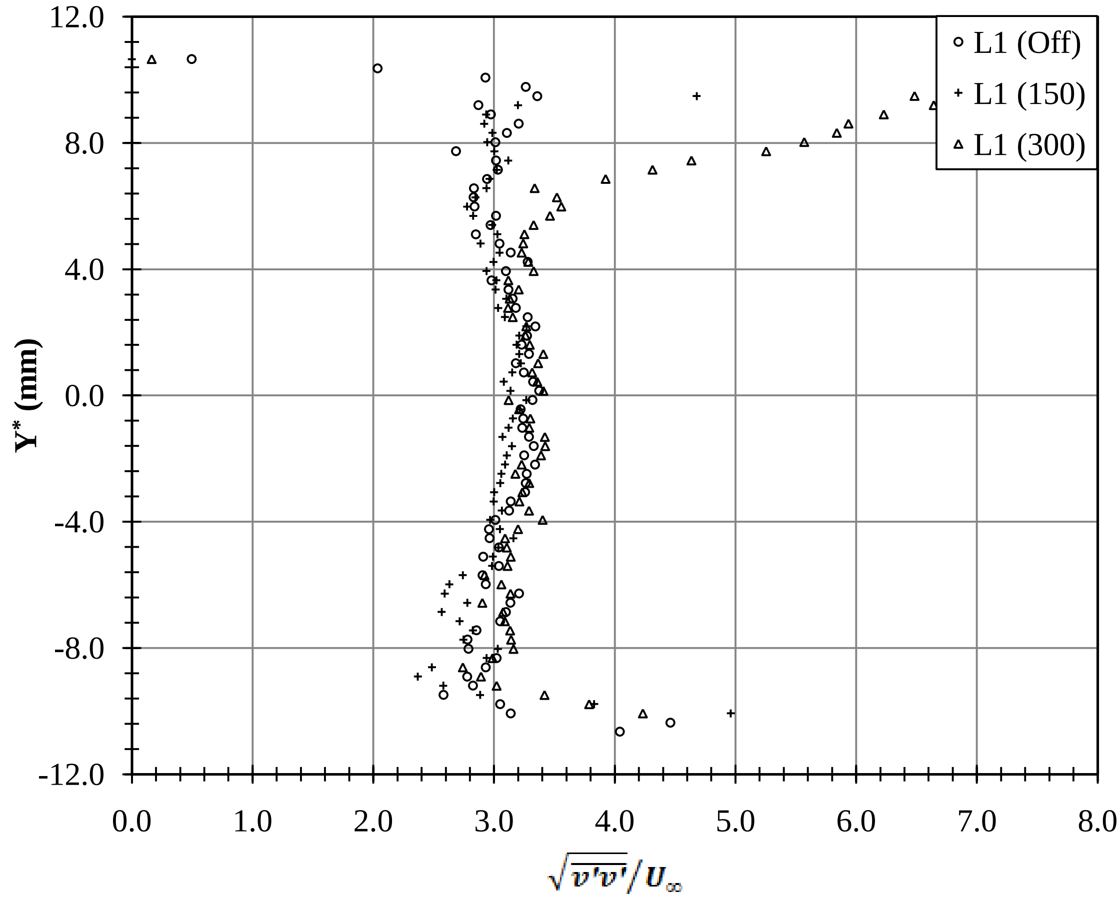

Fig. L-7 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L1, Right (71-80)**

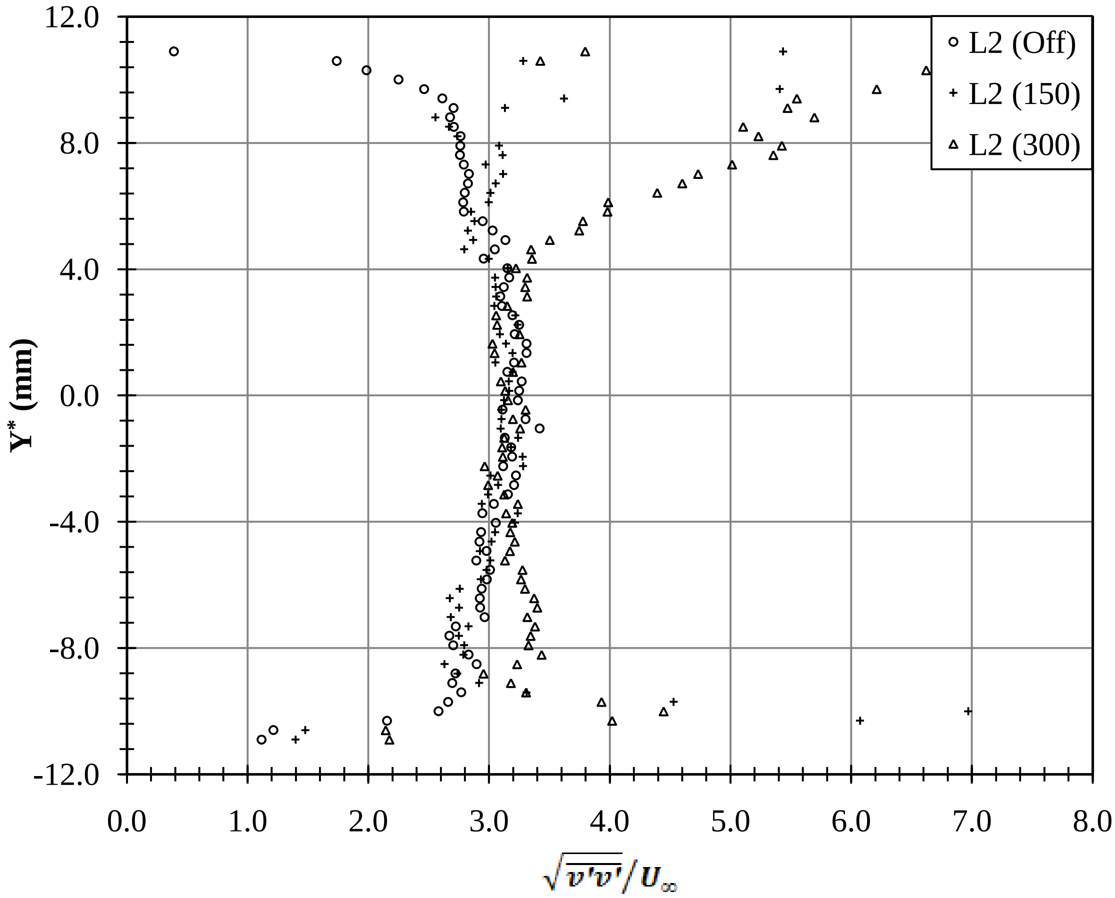

Fig. L-8 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L2, Left (1-10)**

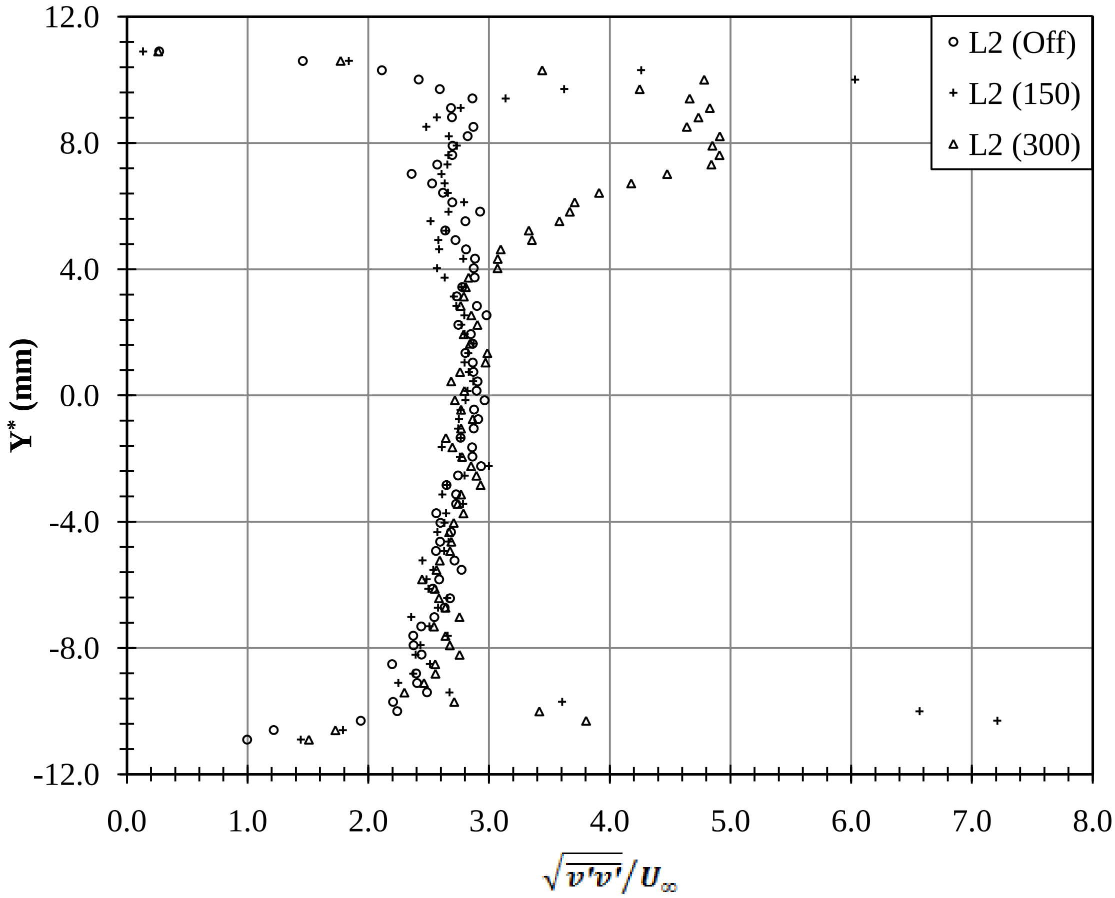

Fig. L-9 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L2, Center (46-55)**

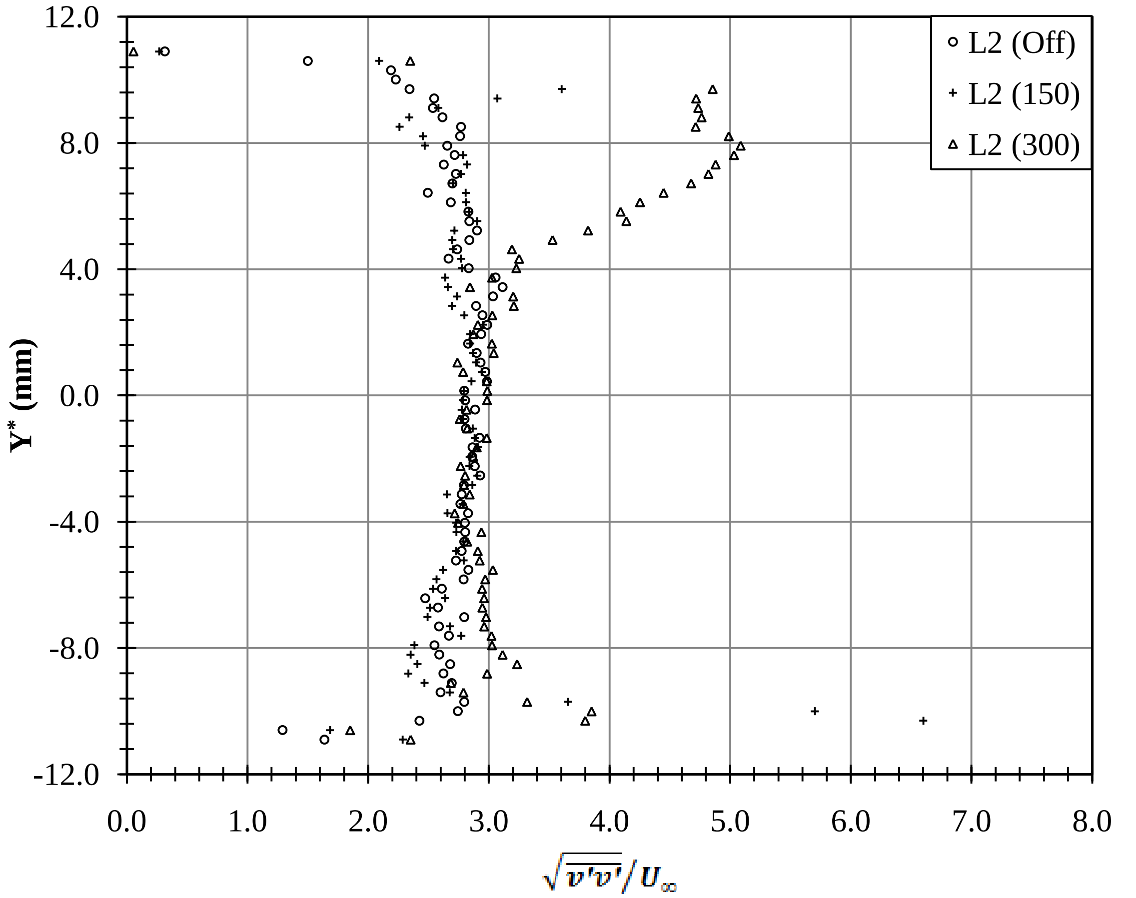

Fig. L-10 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L2, Right (71-80)**

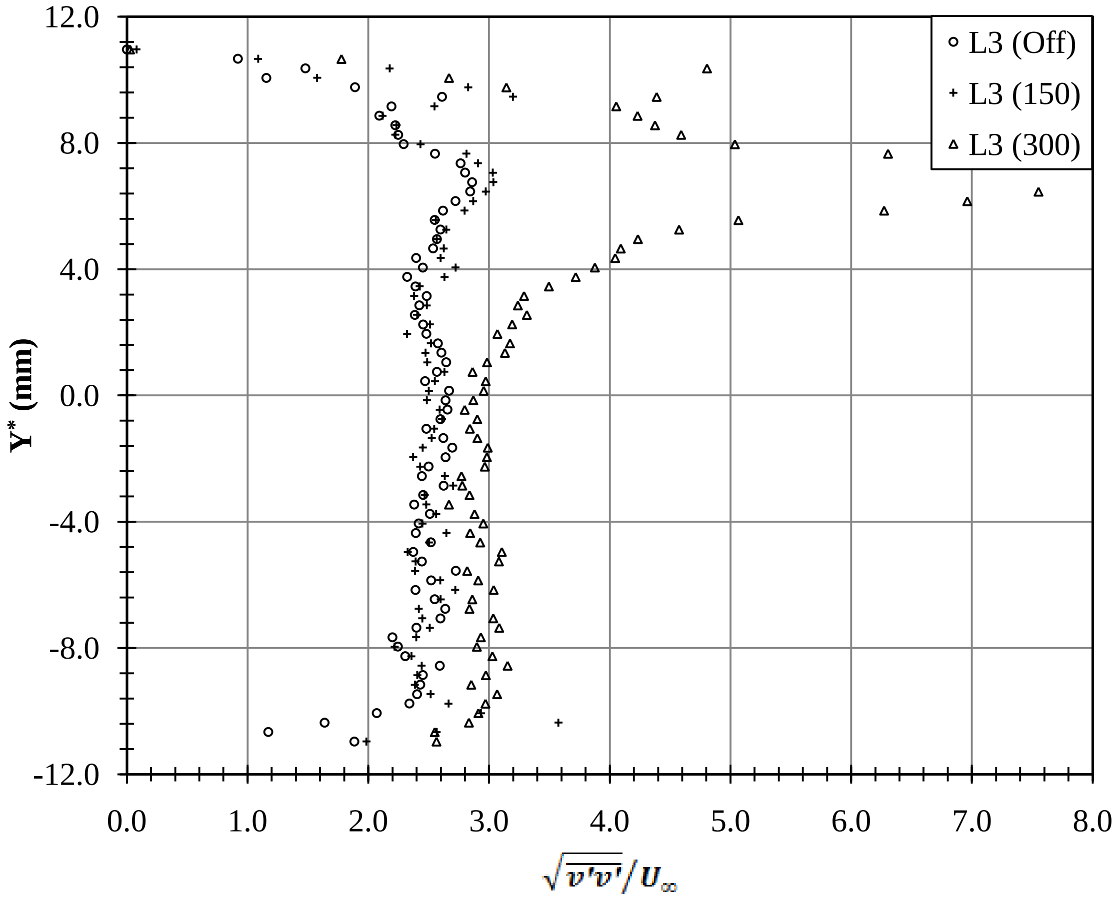

Fig. L-11 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L3, Left (1-10)**

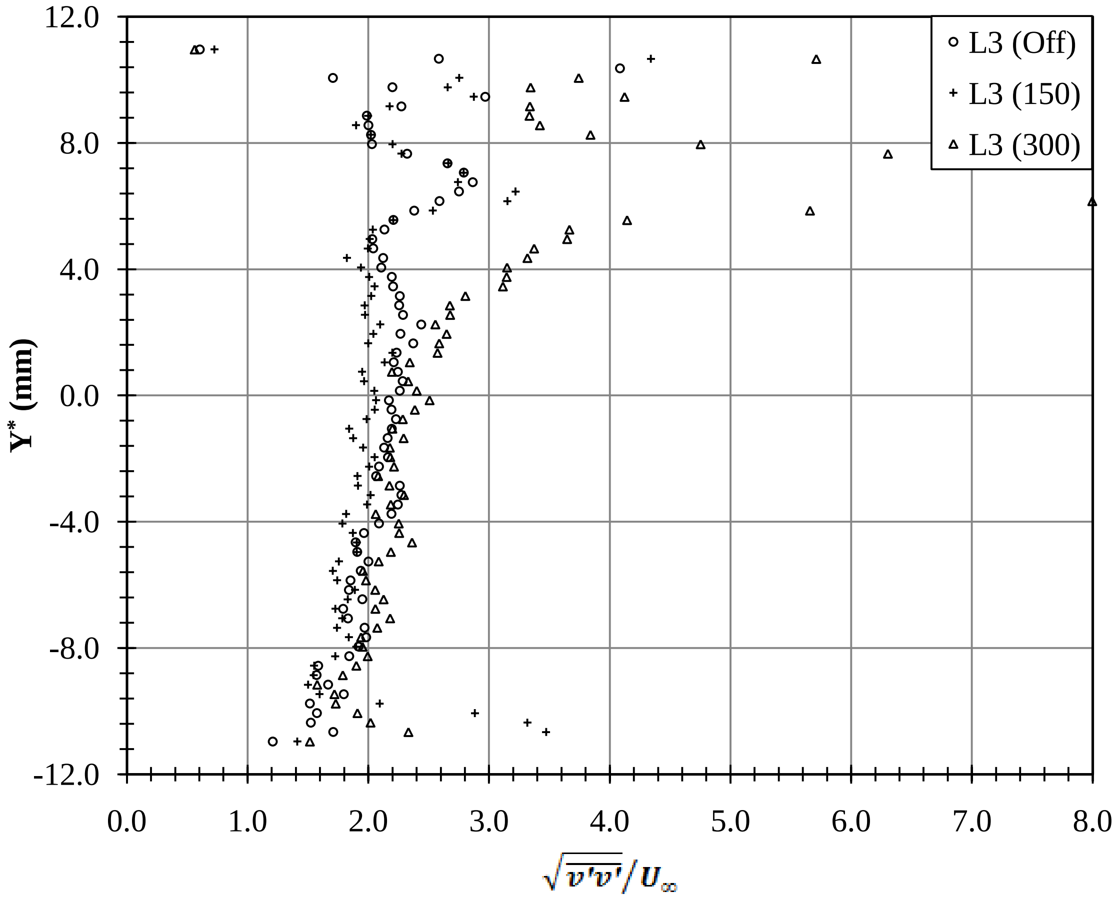

Fig. L-12 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L3, Center (46-55)**

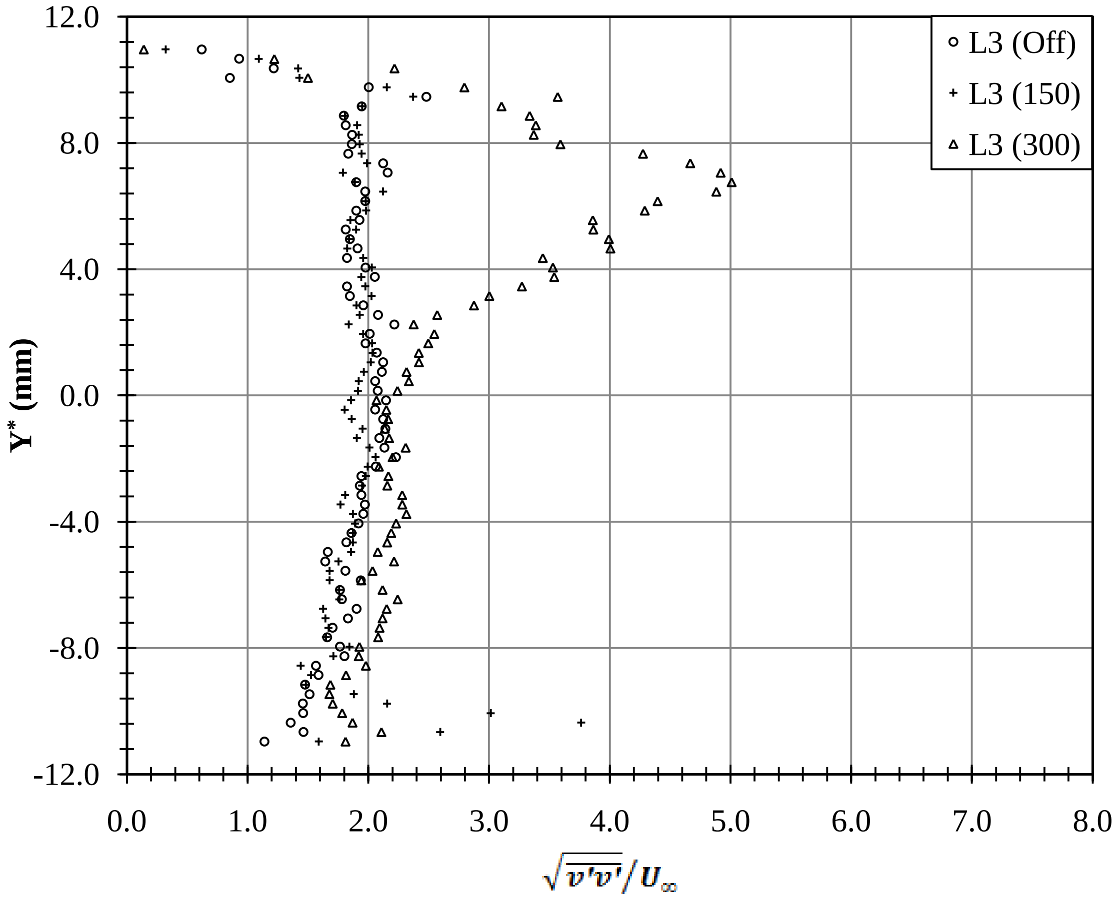

Fig. L-13 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L3, Right (71-80)**

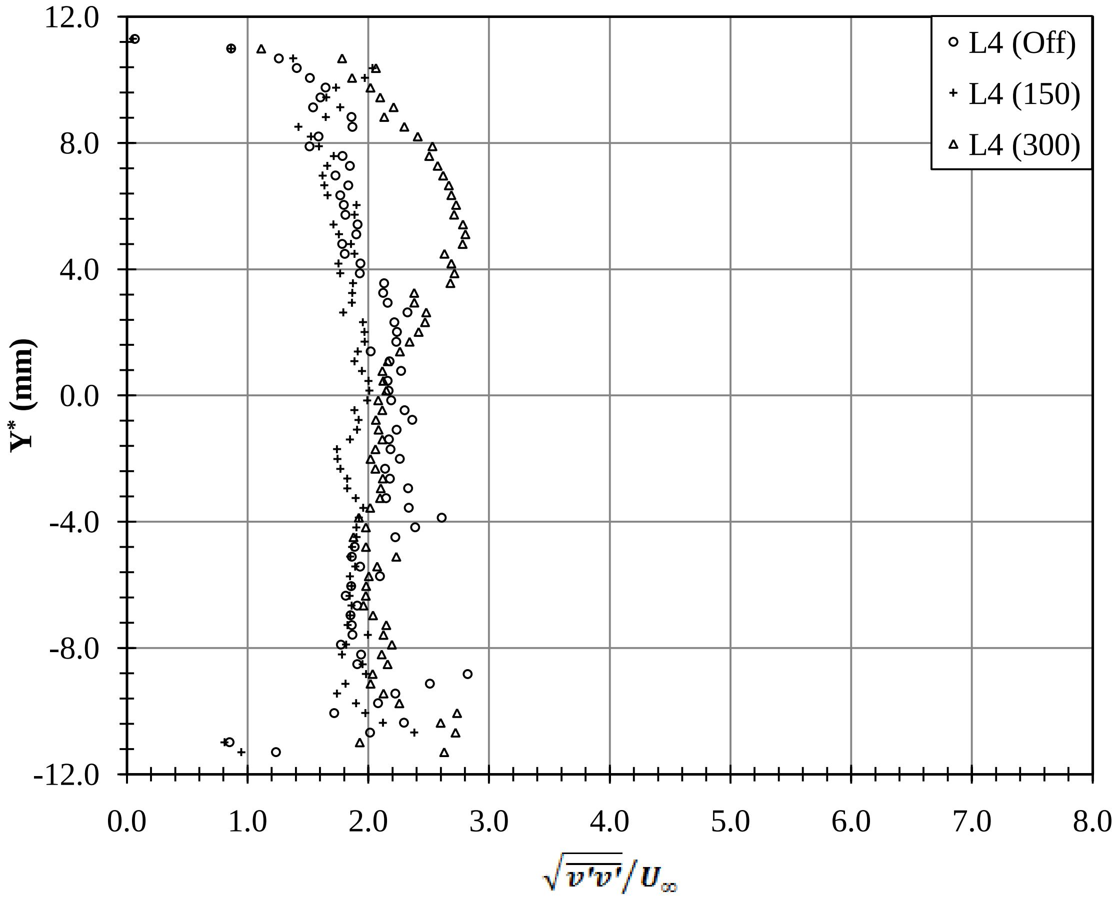

Fig. L-14 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L4, Left (1-10)**

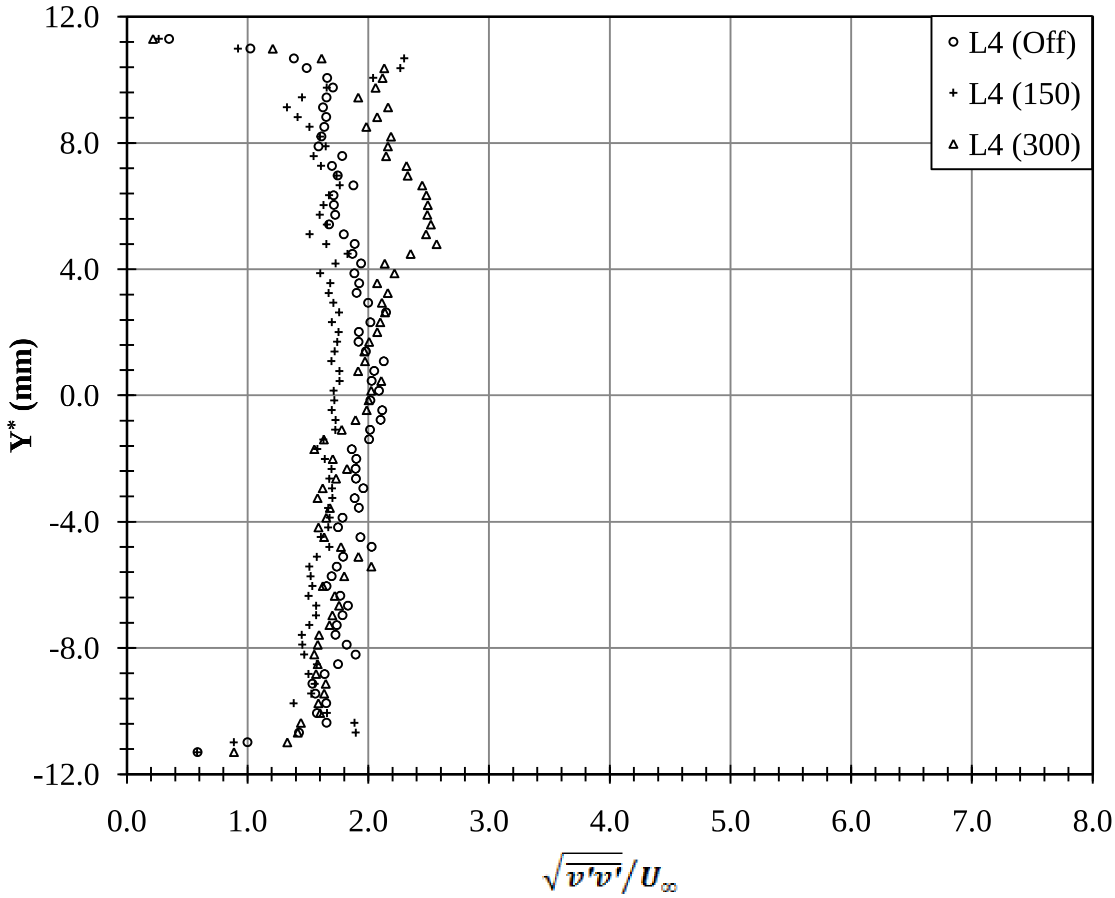

Fig. L-15 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L4, Center (46-55)**

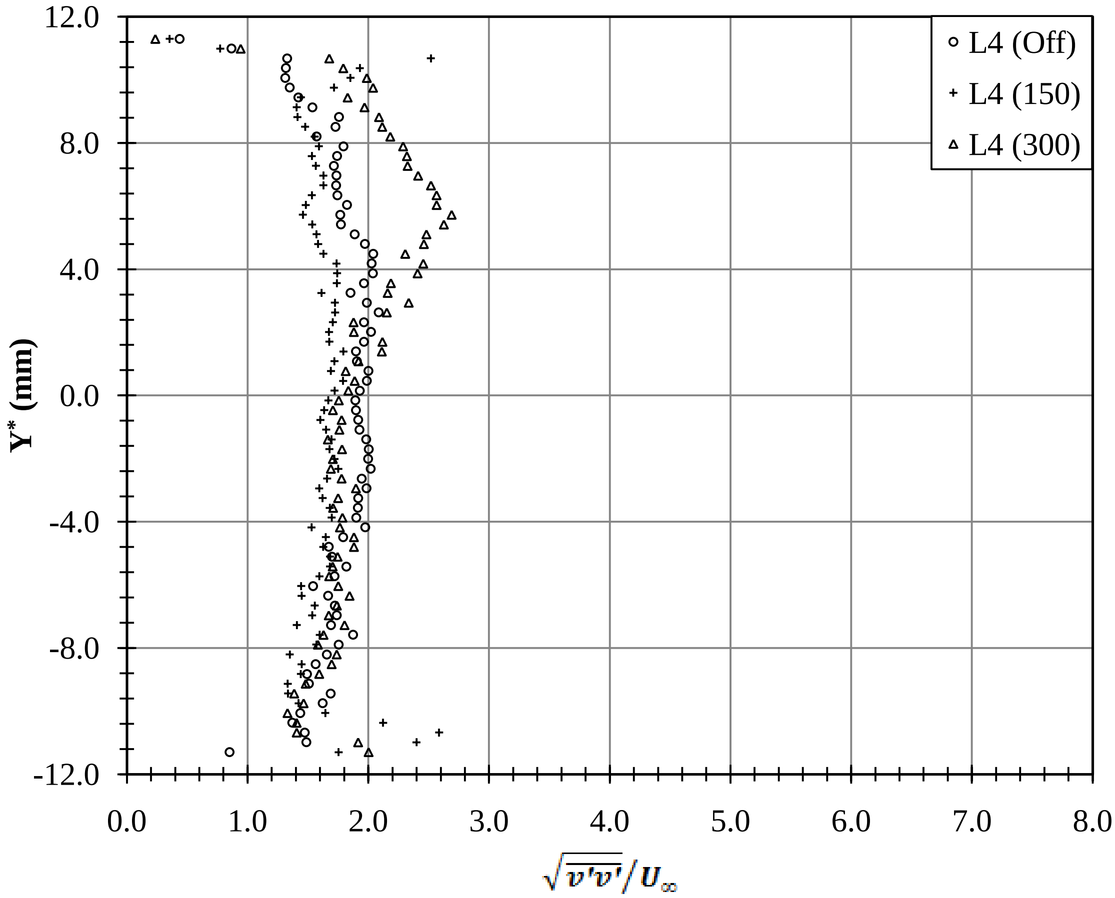

Fig. L-16 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L4, Right (71-80)**

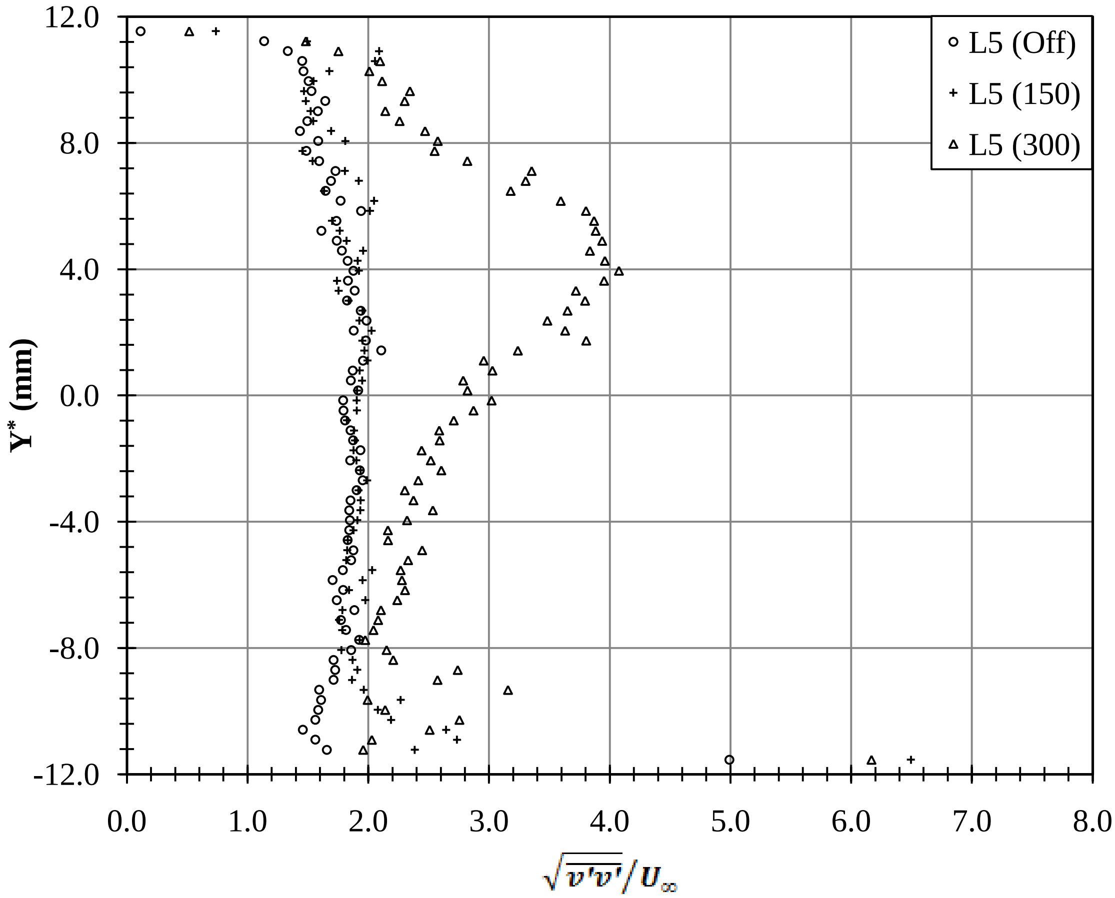

Fig. L-17 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L5, Left (1-10)**

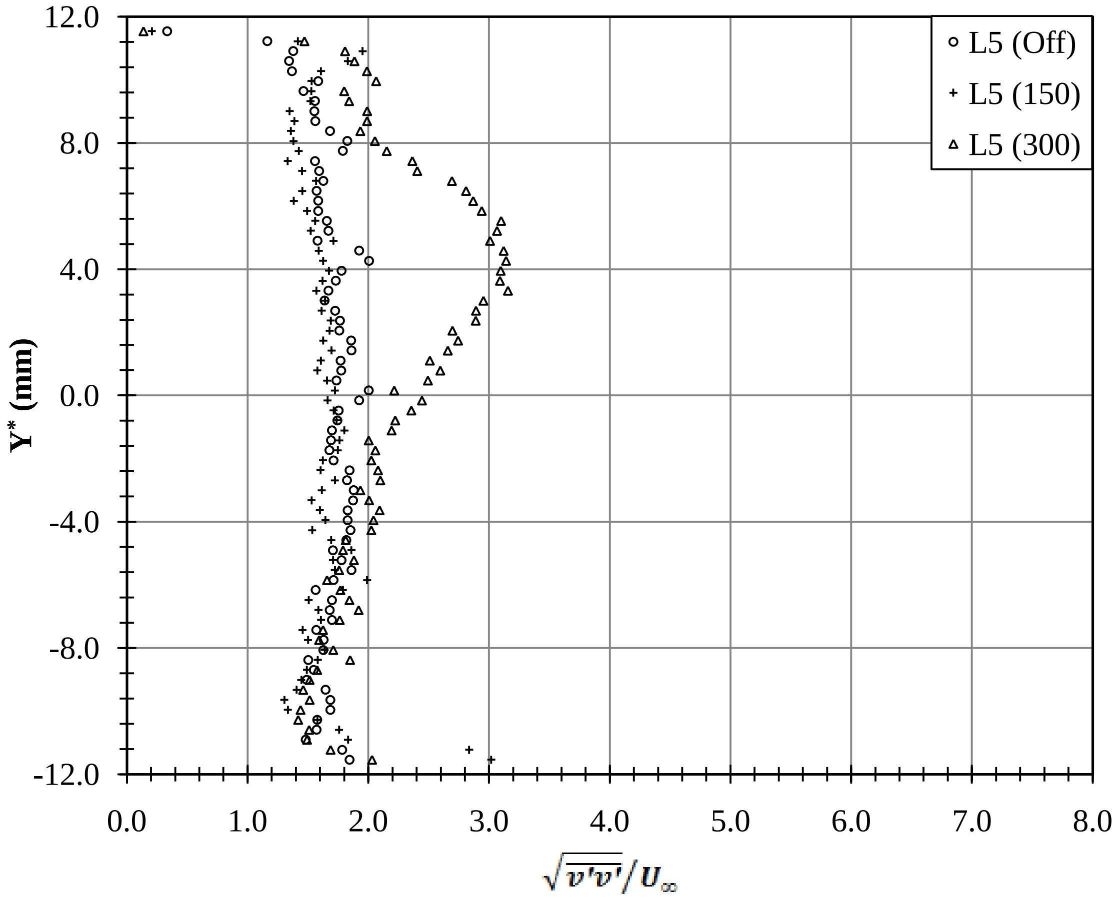

Fig. L-18 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L5, Center (46-55)**

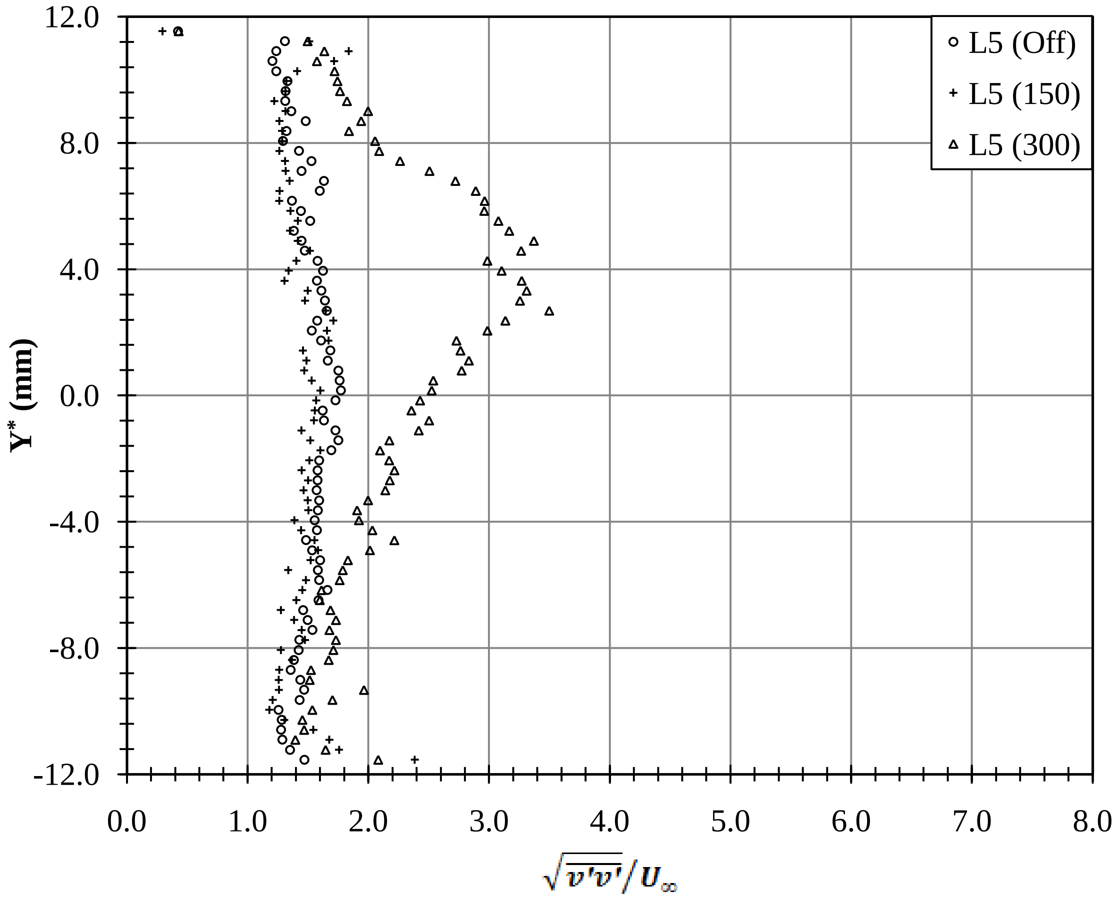

Fig. L-19 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L5, Right (71-80)**

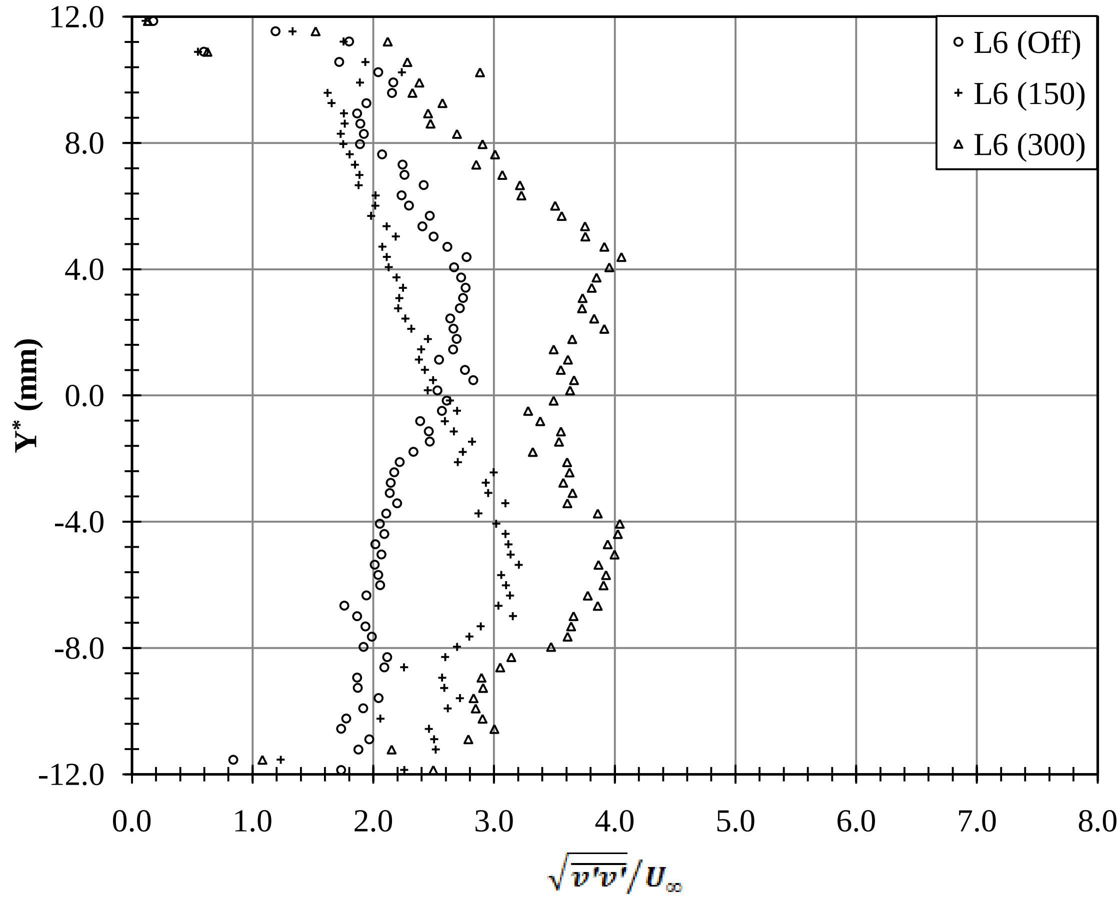

Fig. L-20 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L6, Left (1-10)**

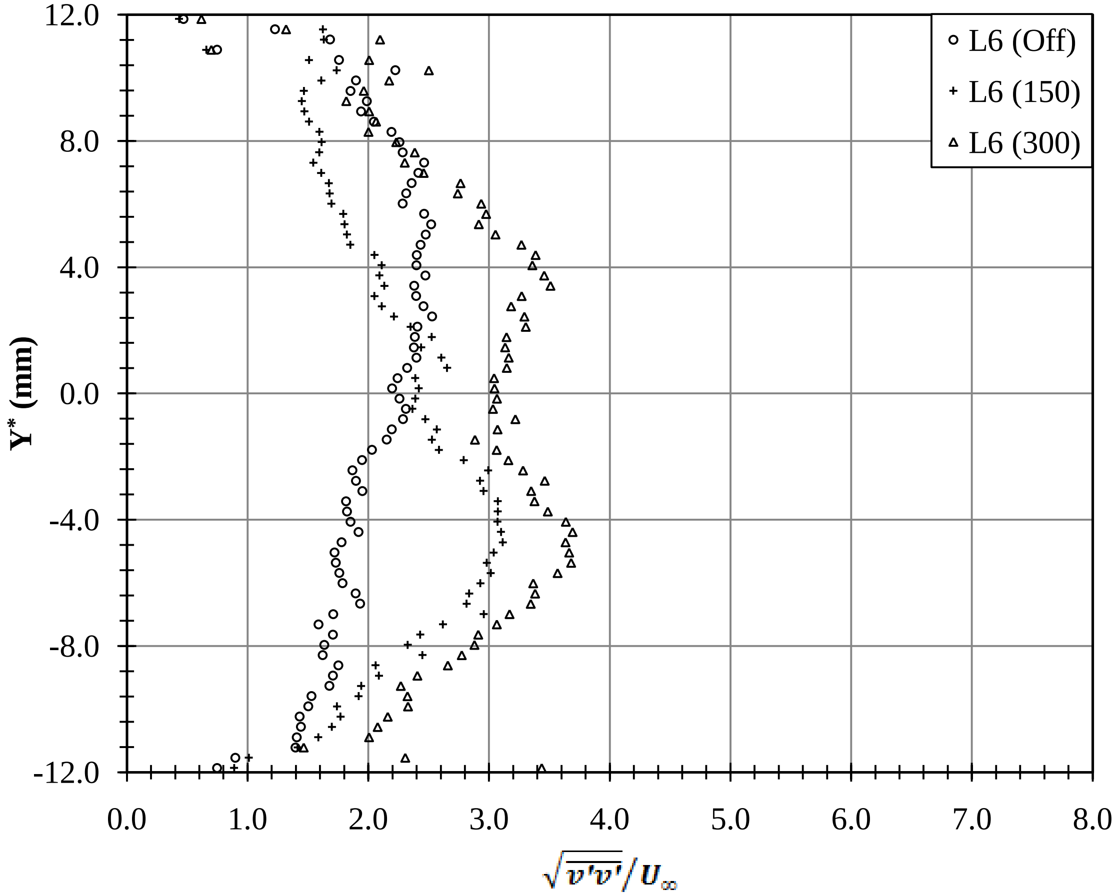

Fig. L-21 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L6, Center (46-55)**

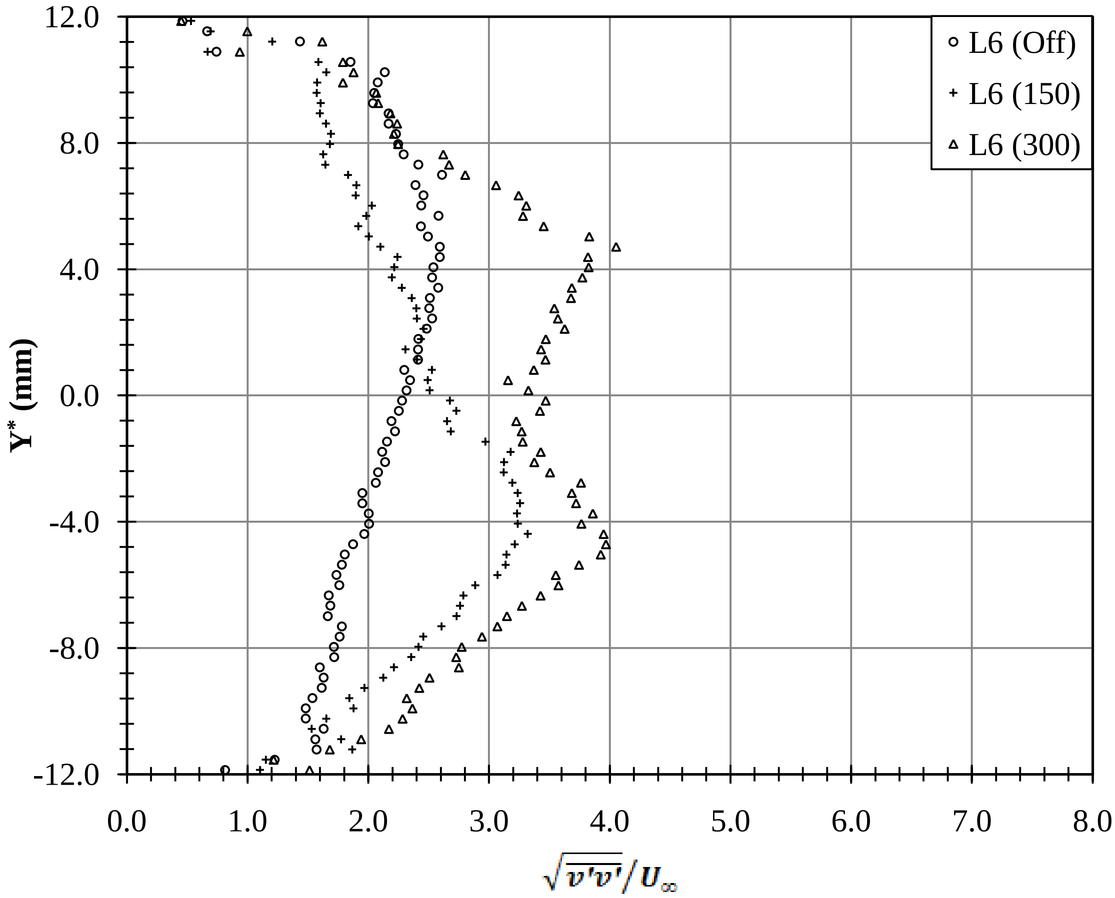

Fig. L-22 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L6, Right (71-80)**

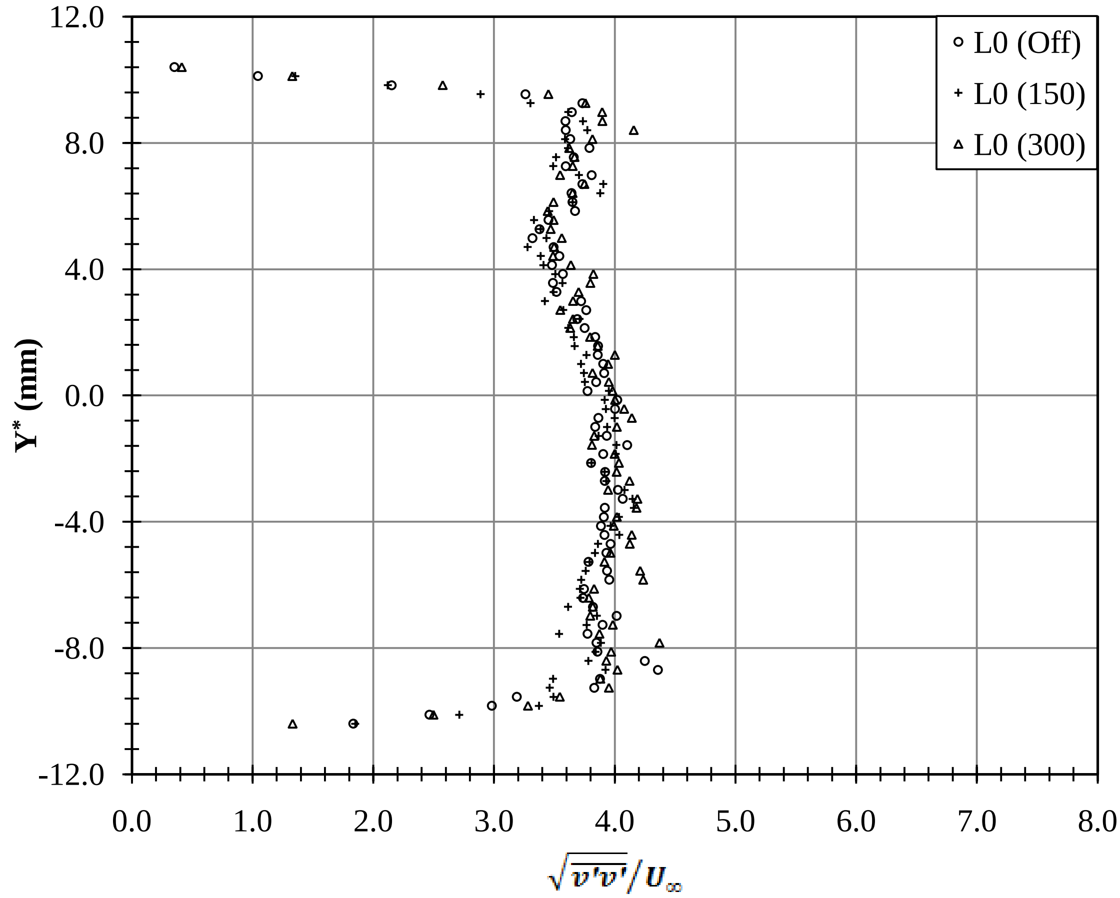

Fig. L-23 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L0, Left (1-10)**

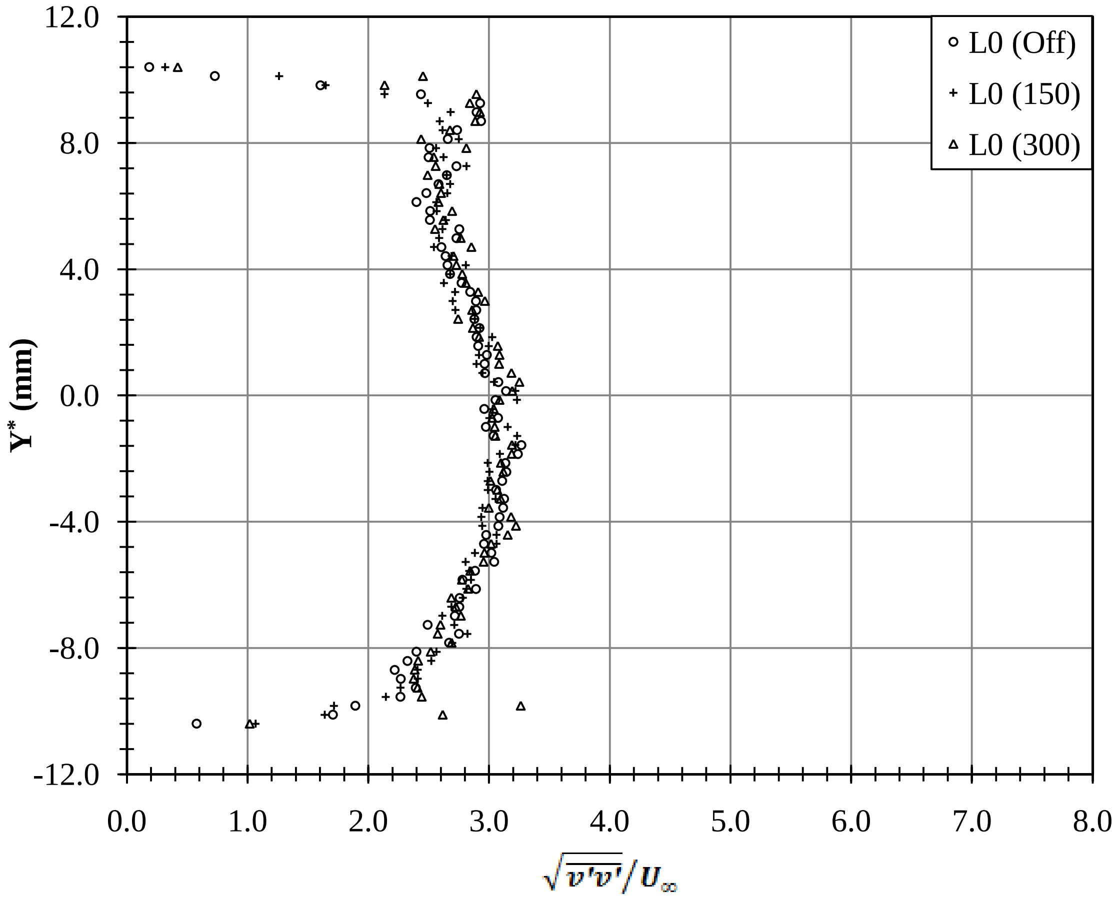

Fig. L-24 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L0, Center (46-55)**

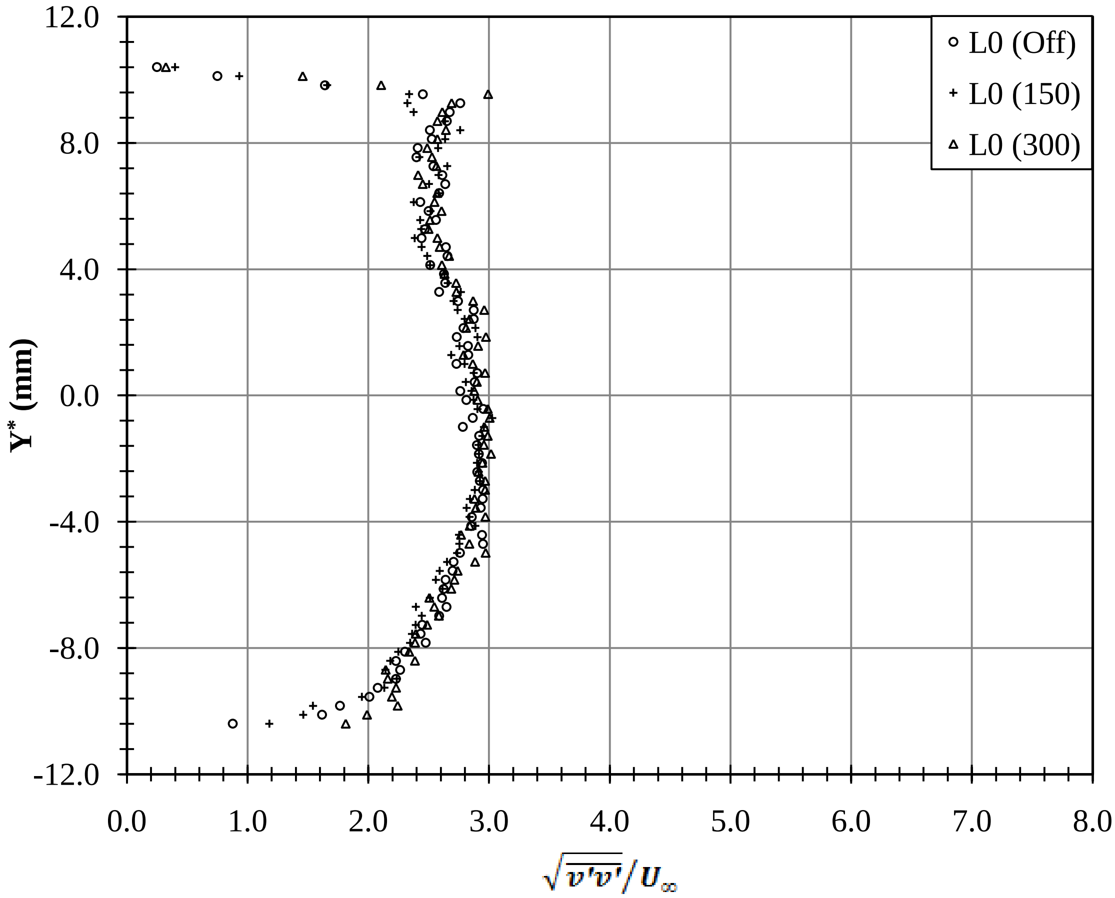

Fig. L-25 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L0, Right (71-80)**

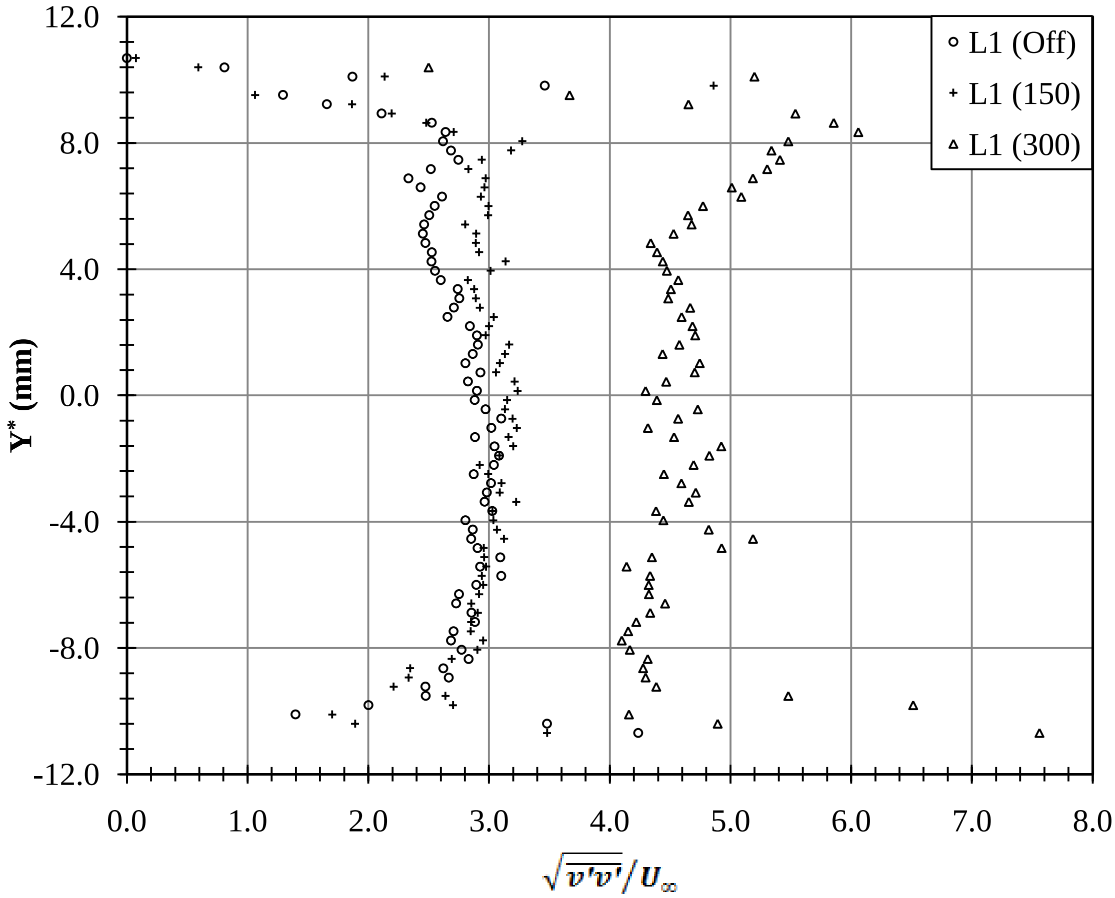

Fig. L-26 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L1, Left (1-10)**

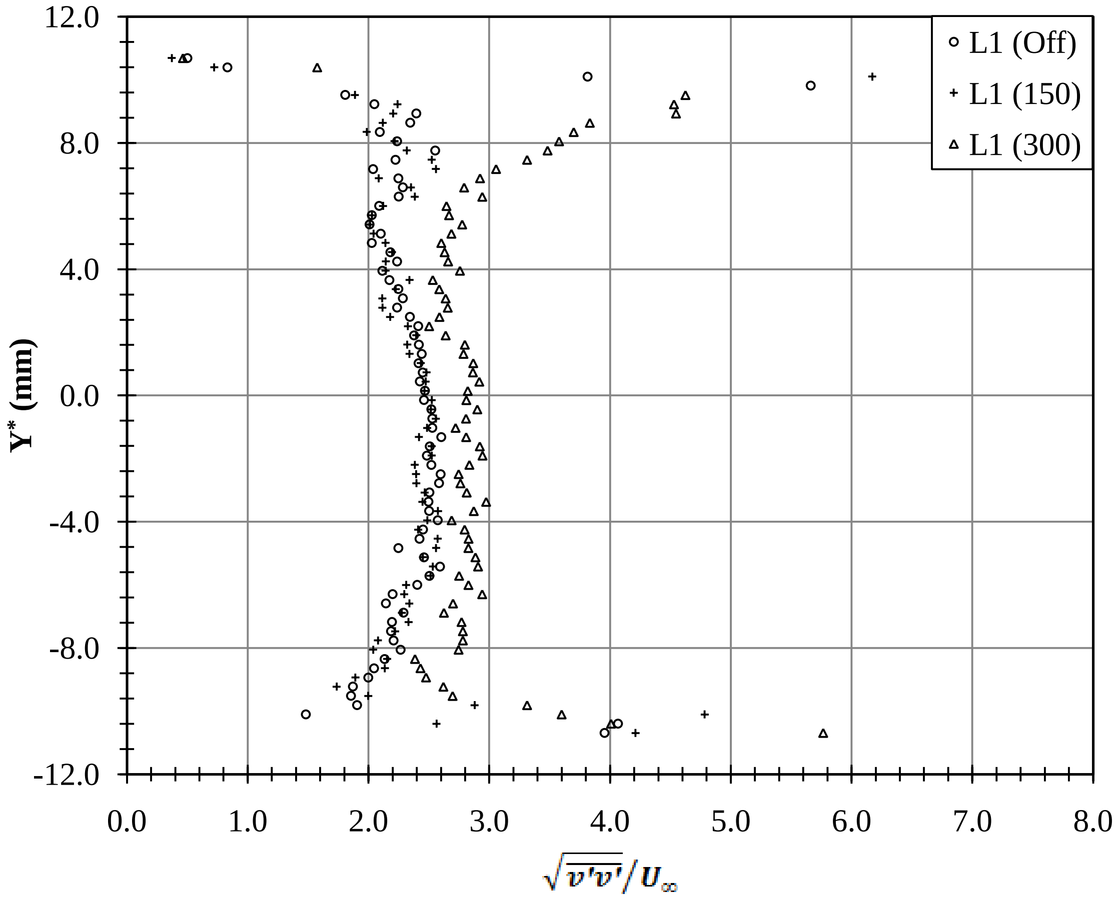

Fig. L-27 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L1, Center (46-55)**

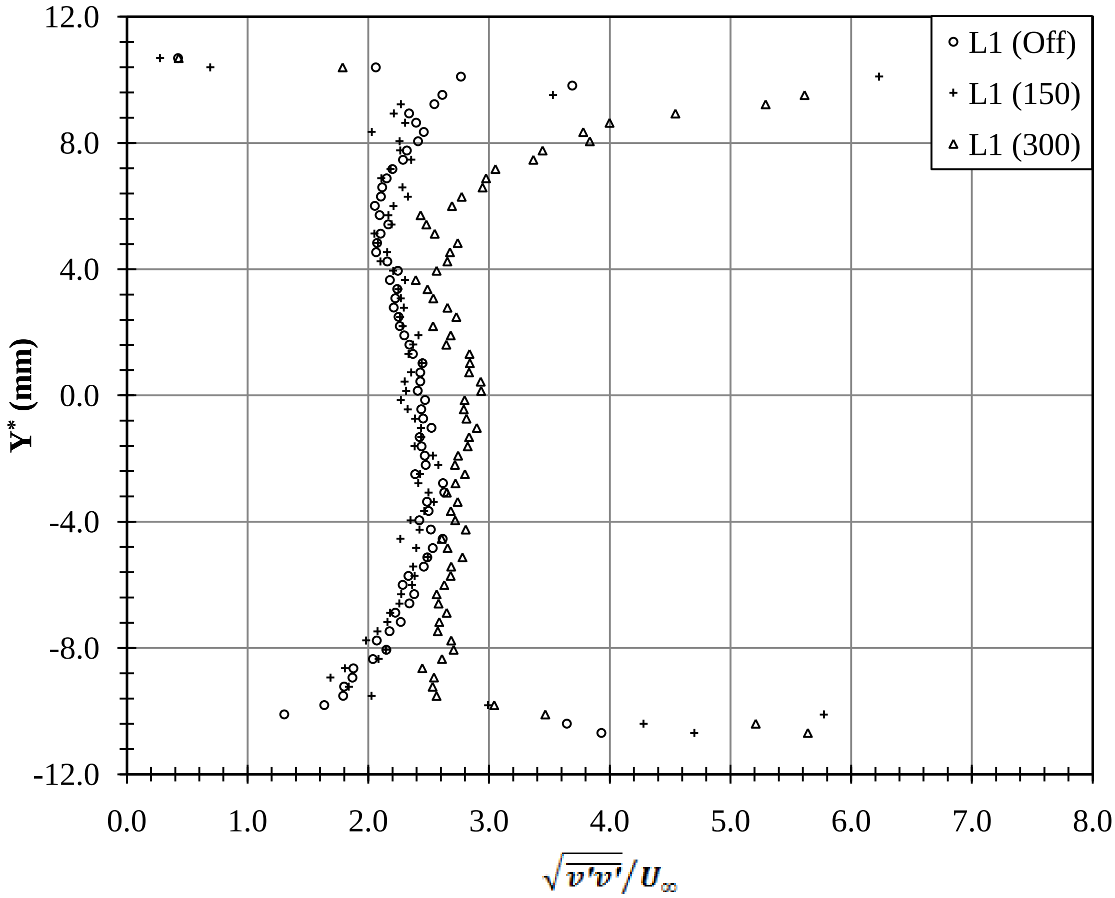

Fig. L-28 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L1, Right (71-80)**

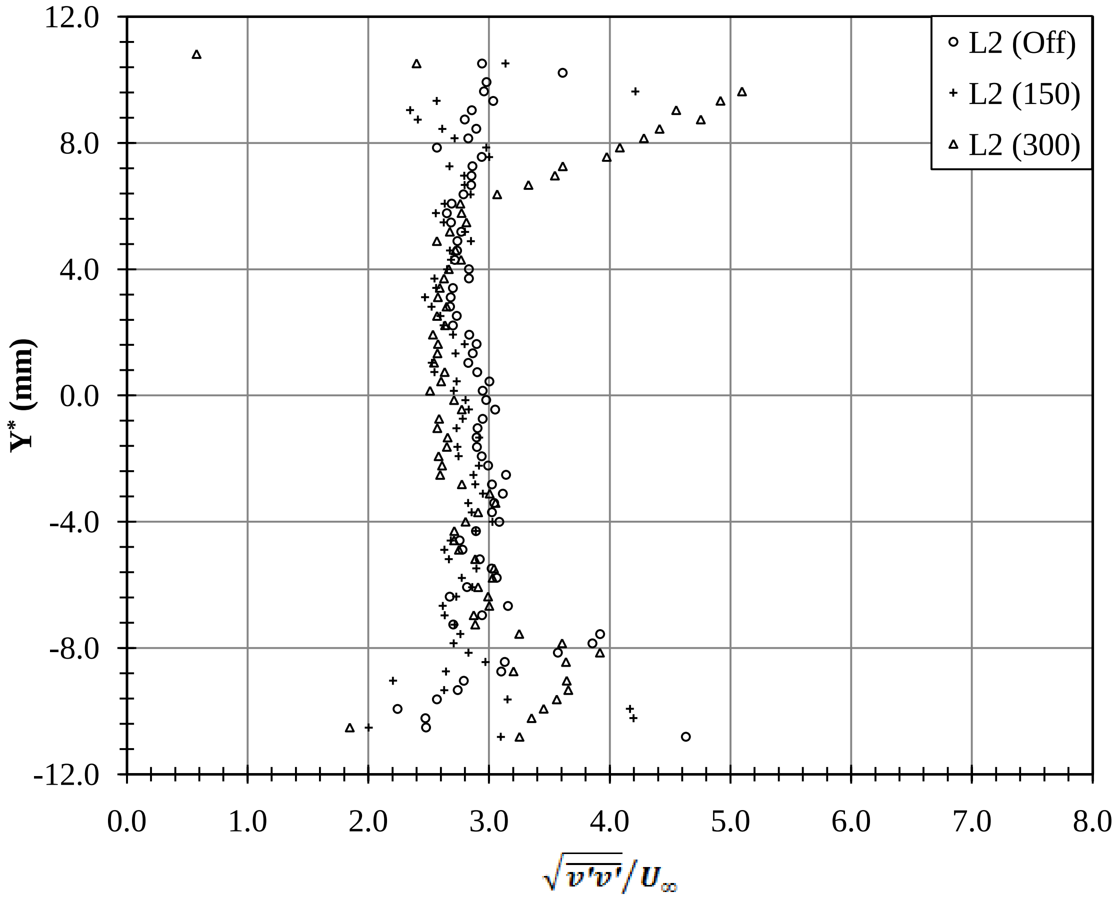

Fig. L-29 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L2, Left (1-10)**

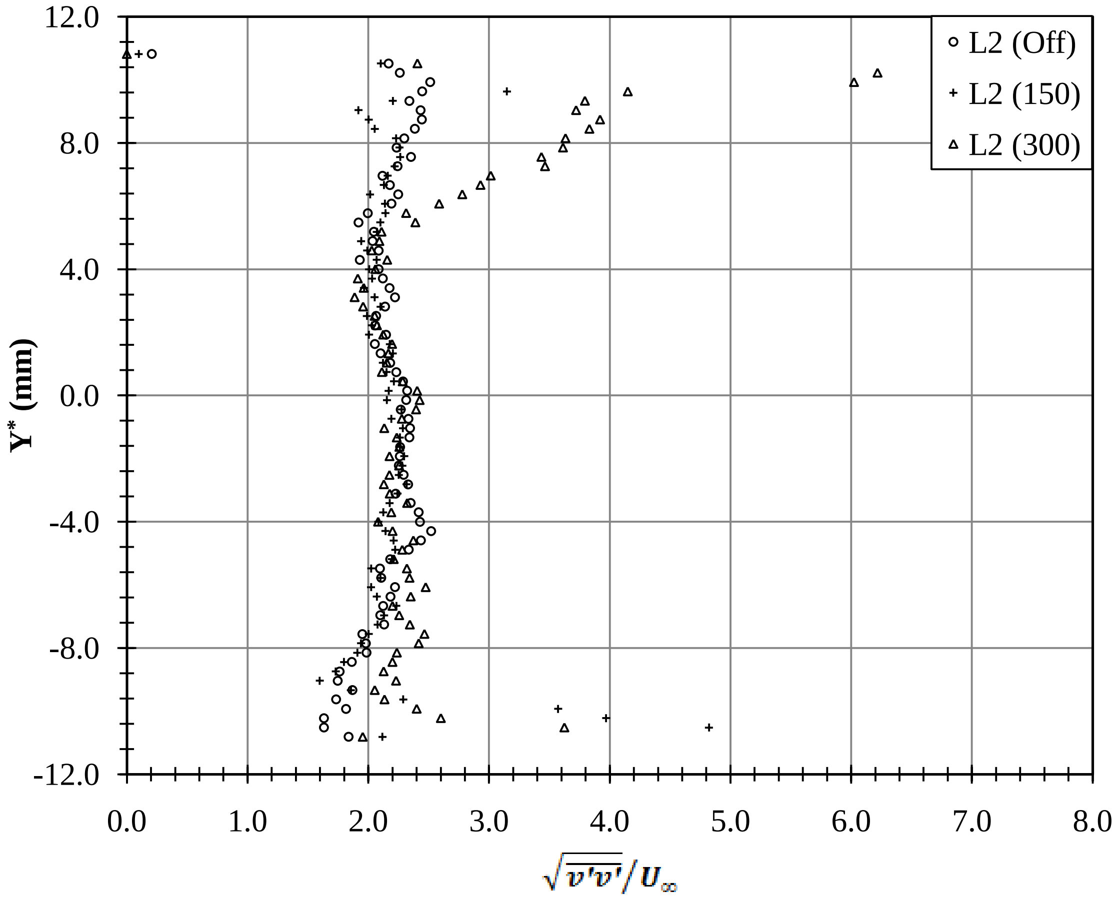

Fig. L-30 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L2, Center (46-55)**

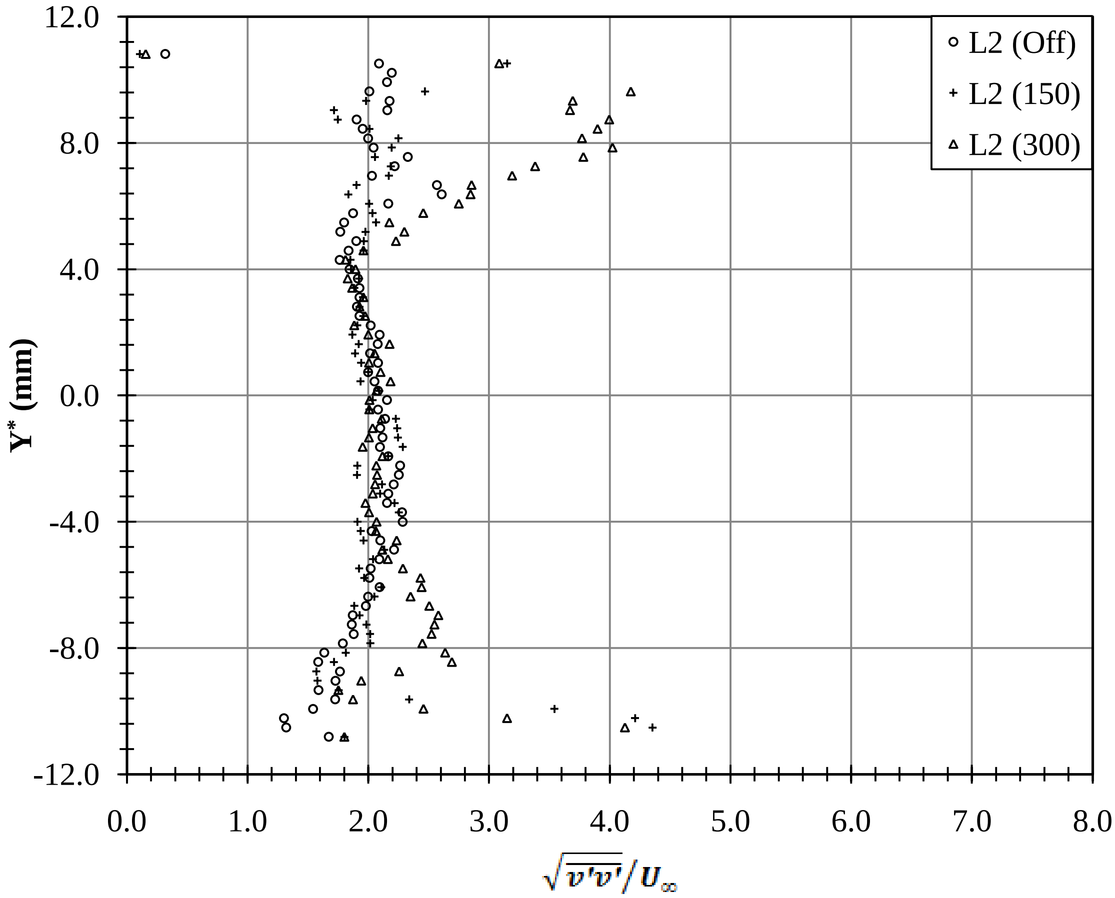

Fig. L-31 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L2, Right (71-80)**

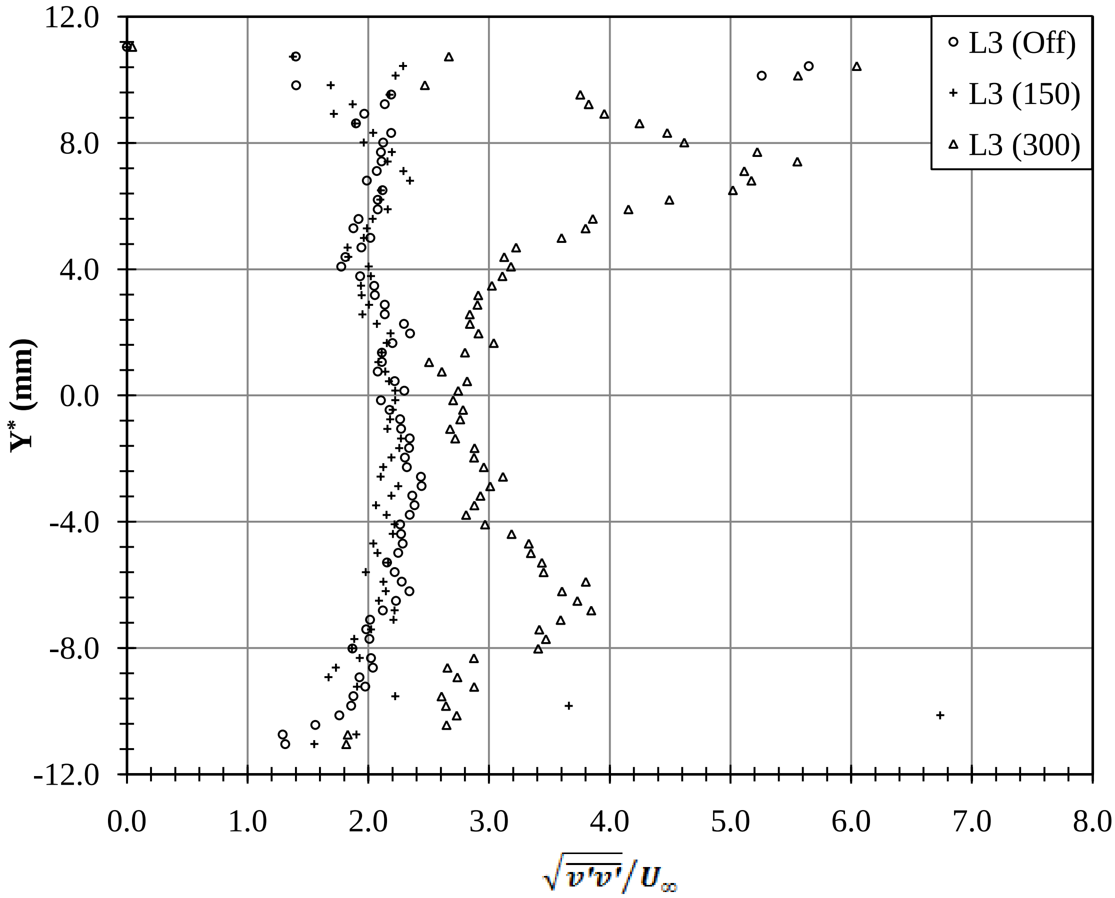

Fig. L-32 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L3, Left (1-10)**

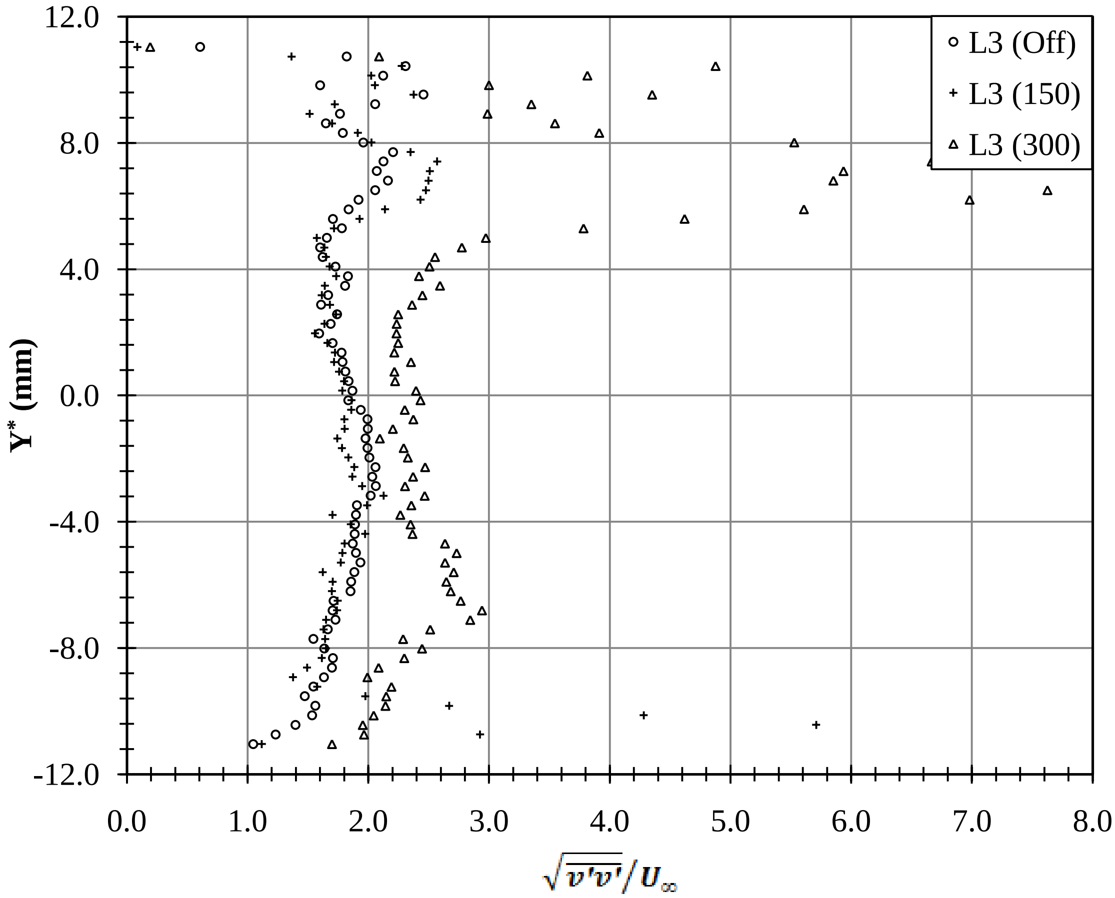

Fig. L-33 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L3, Center (46-55)**

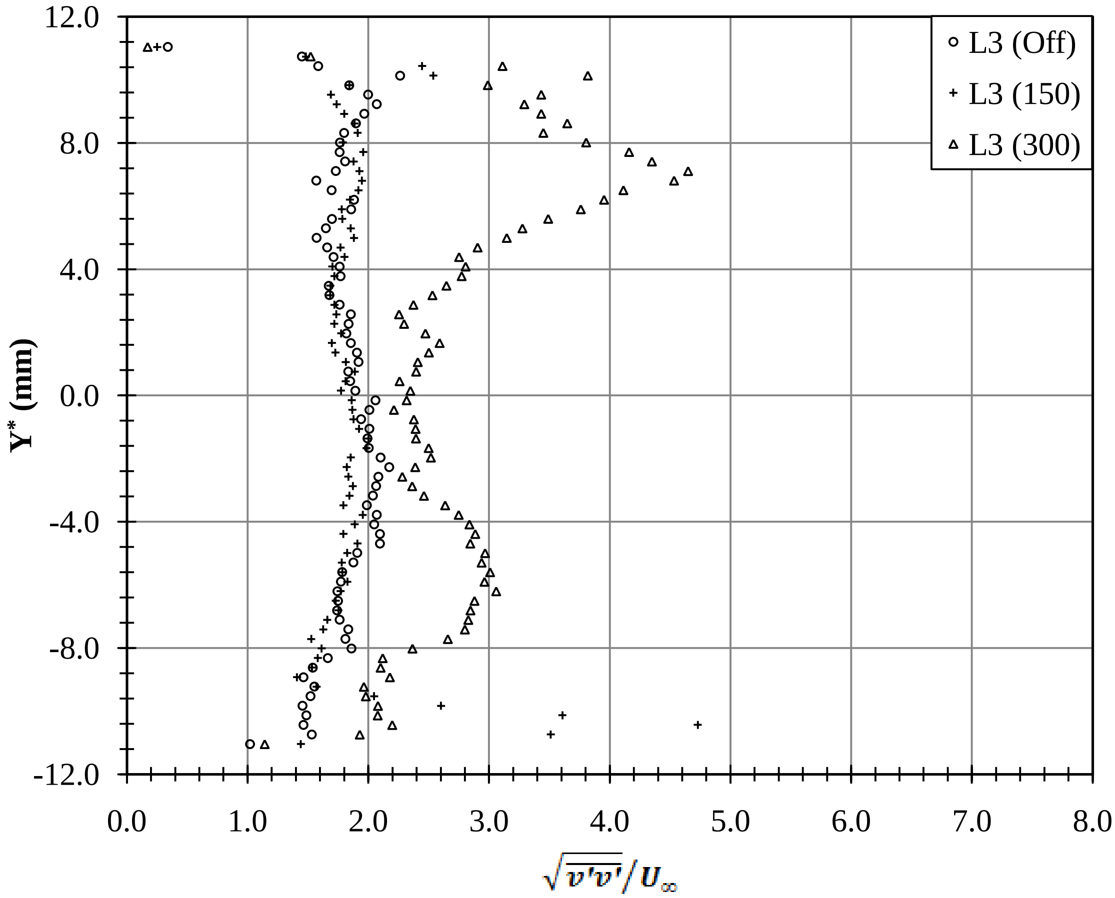

Fig. L-34 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L3, Right (71-80)**

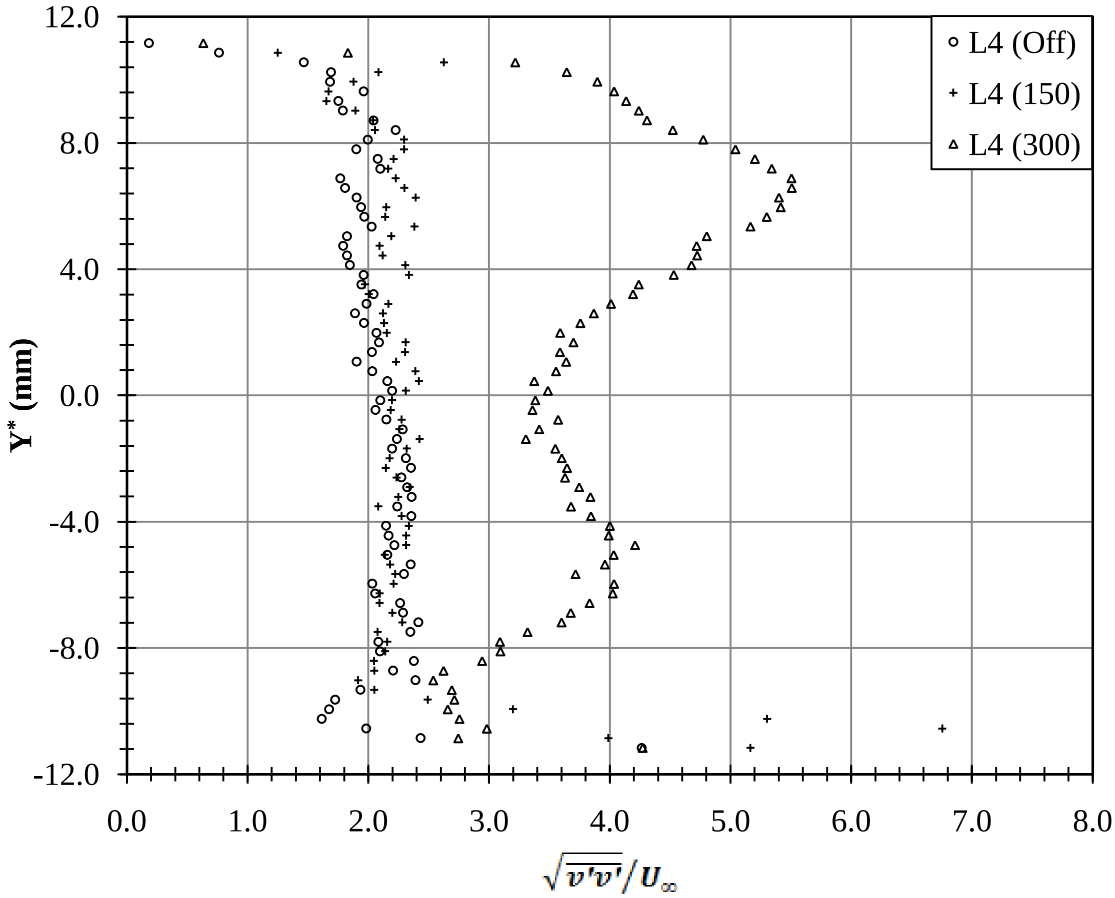

Fig. L-35 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L4, Left (1-10)**

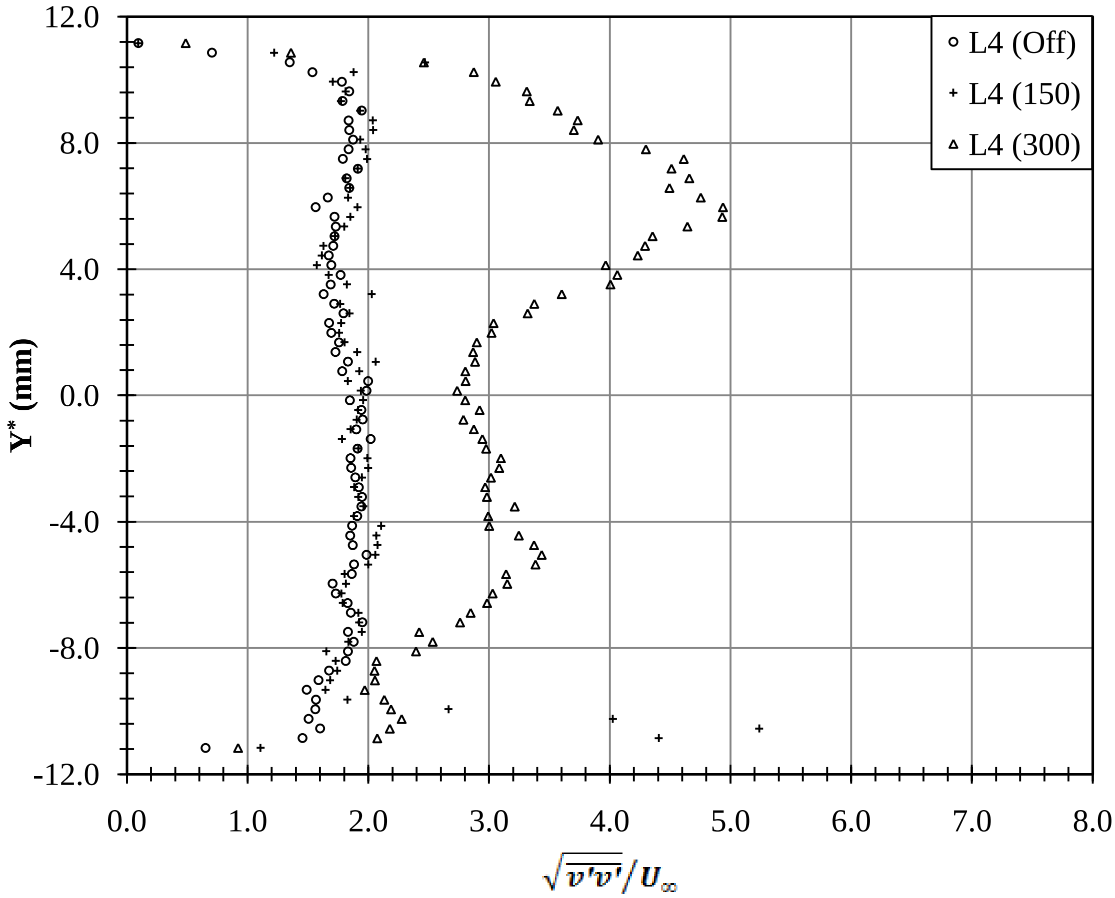

Fig. L-36 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L4, Center (42-51)**

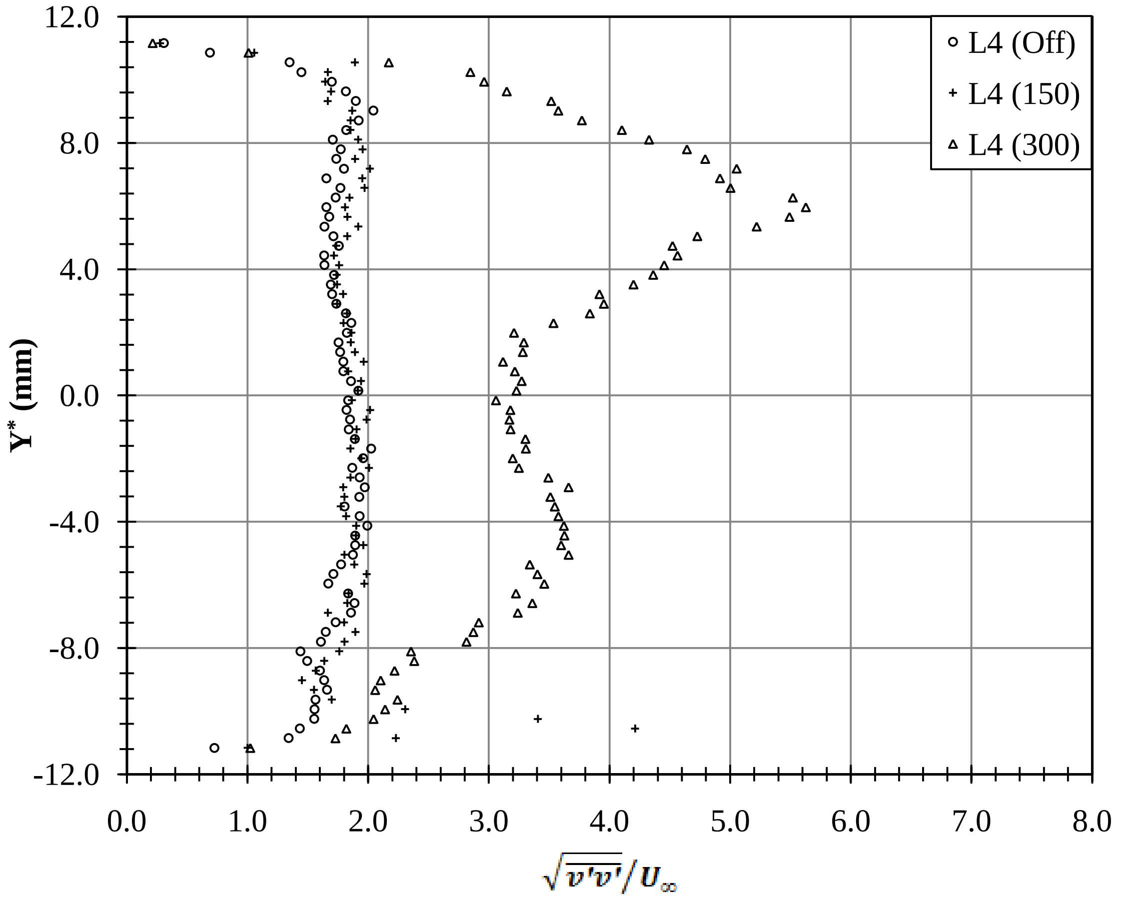

Fig. L-37 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L4, Right (71-80)**

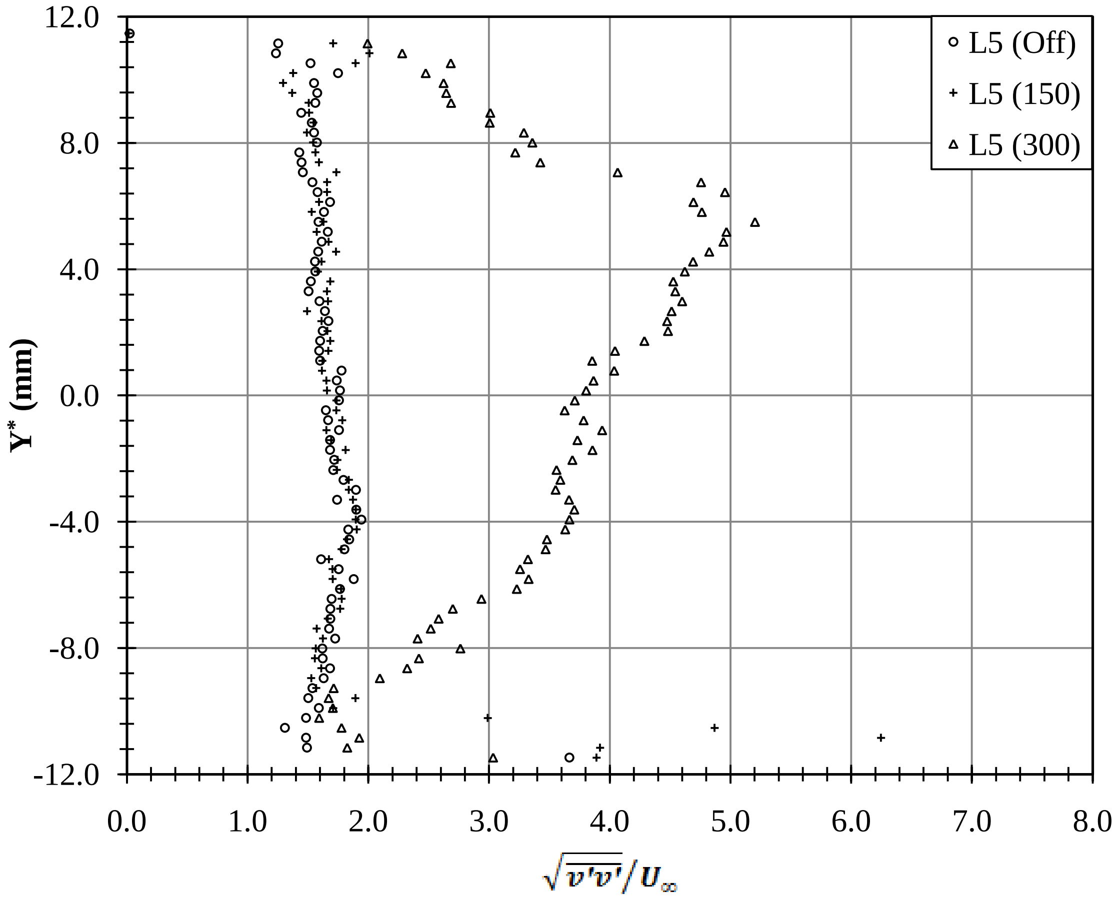

Fig. L-38 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L5, Left (1-10)**

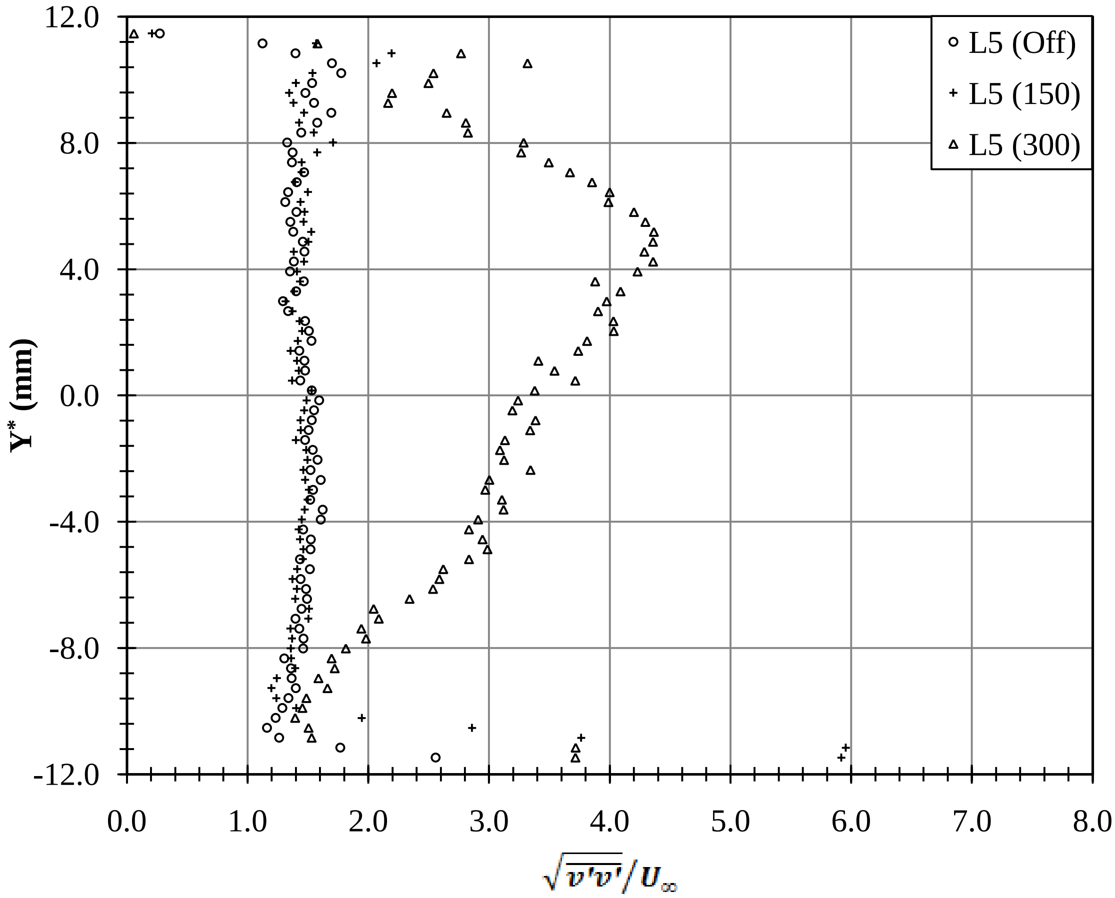

Fig. L-39 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L5, Center (46-55)**

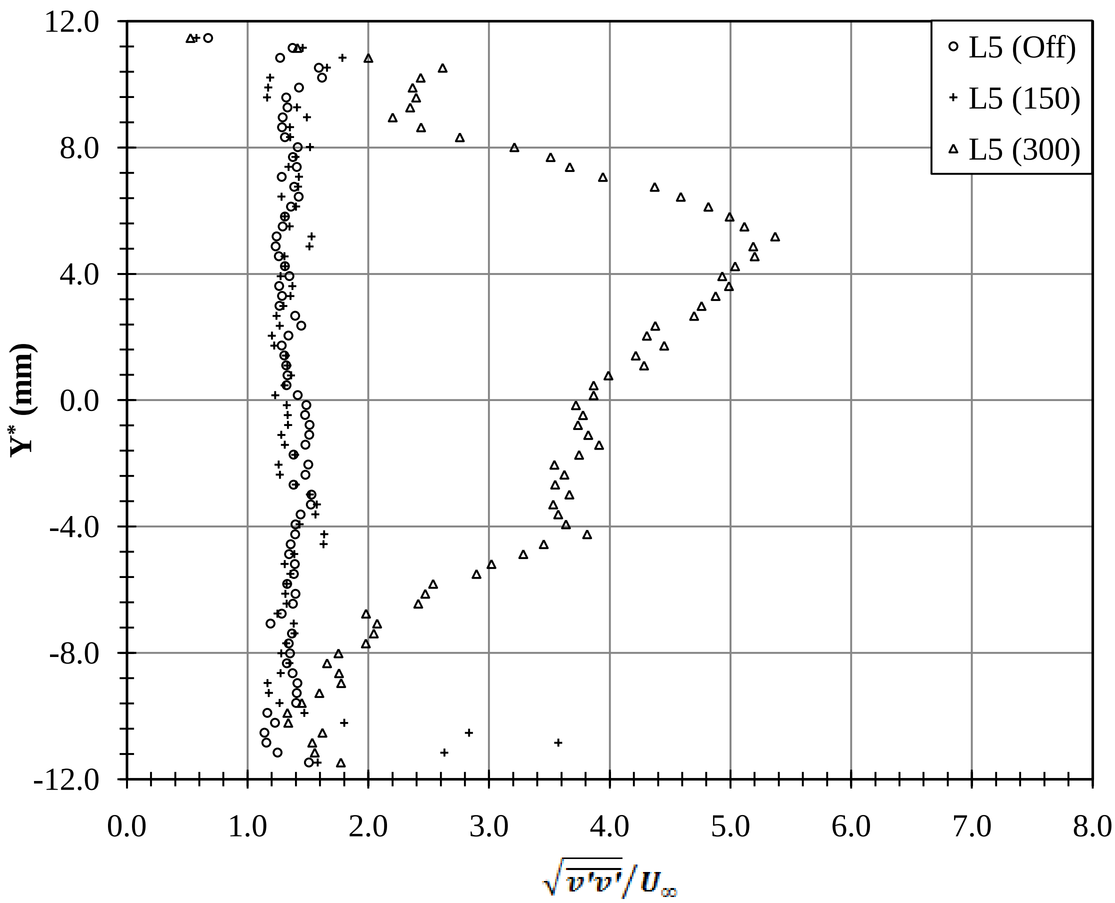

Fig. L-40 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L5, Right (71-80)**

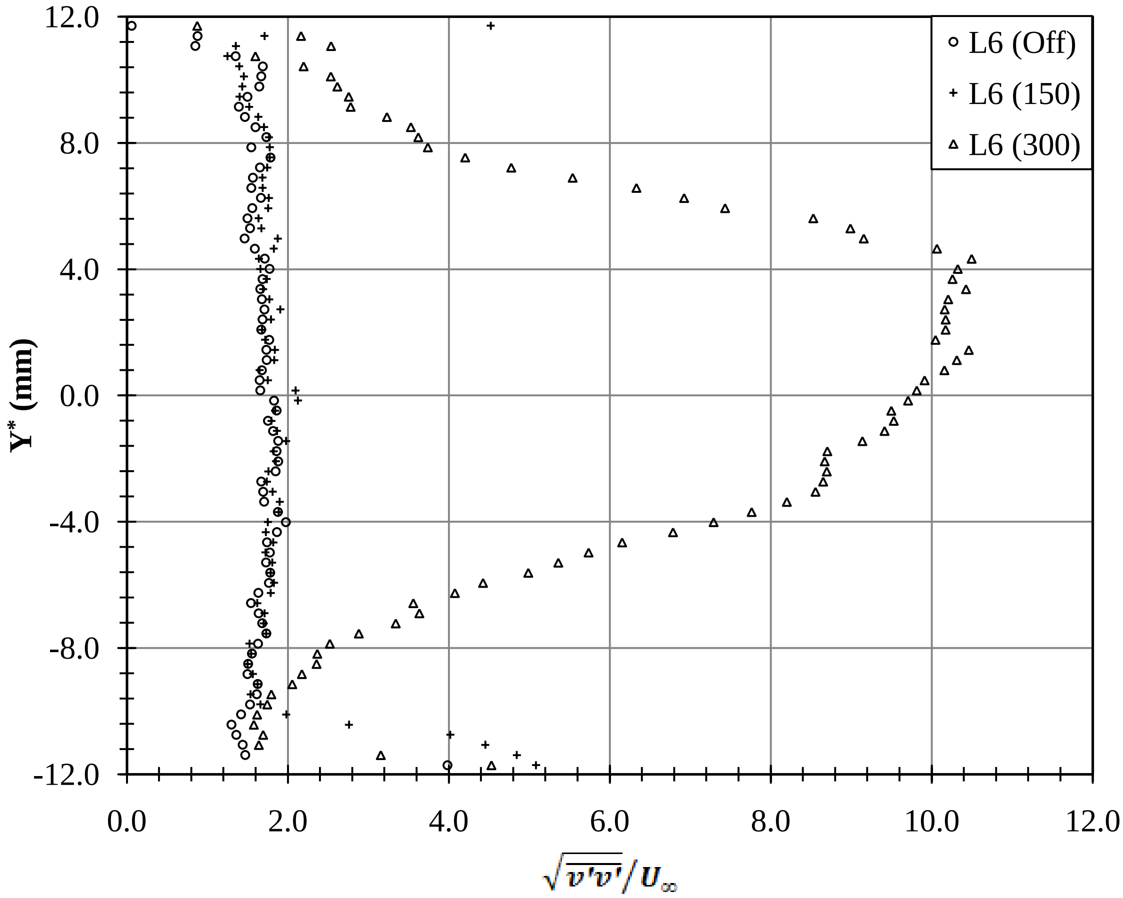

Fig. L-41 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L6, Left (1-10)**

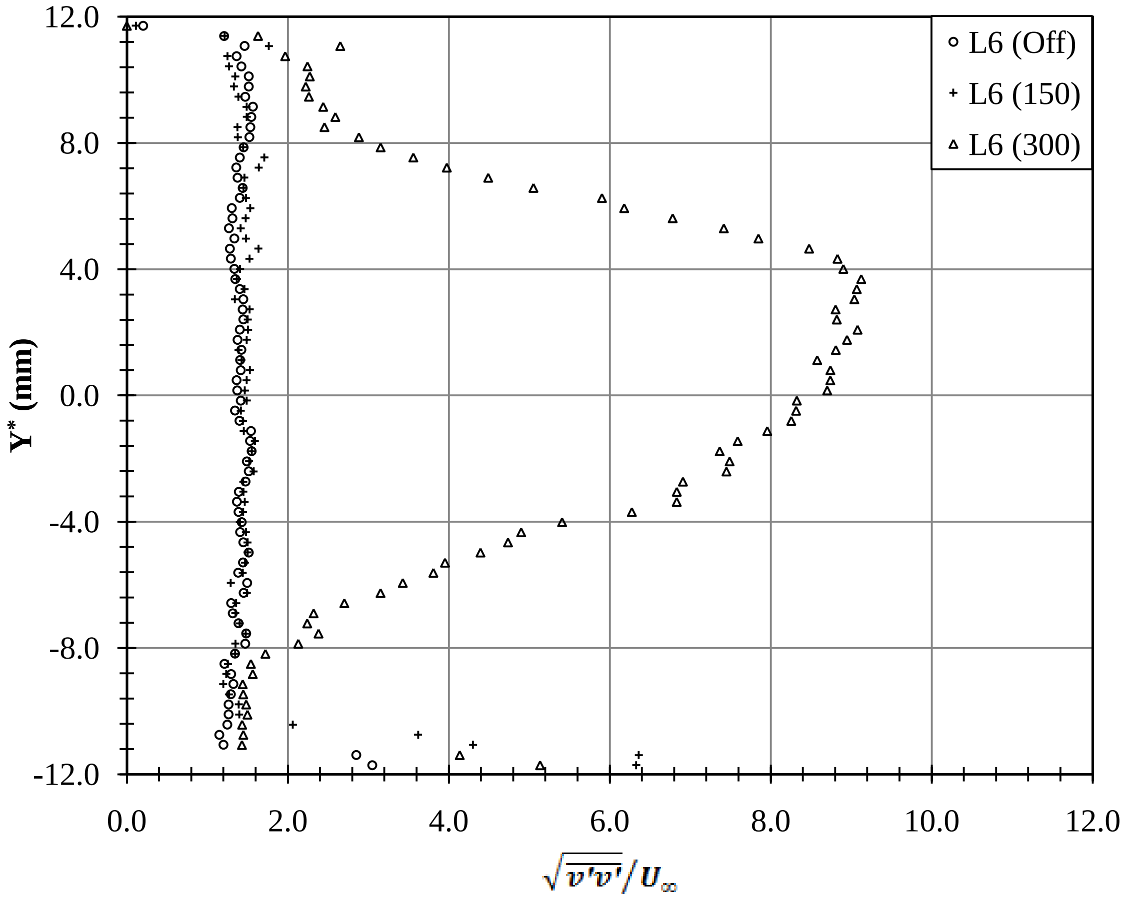

Fig. L-42 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L6, Center (46-55)**

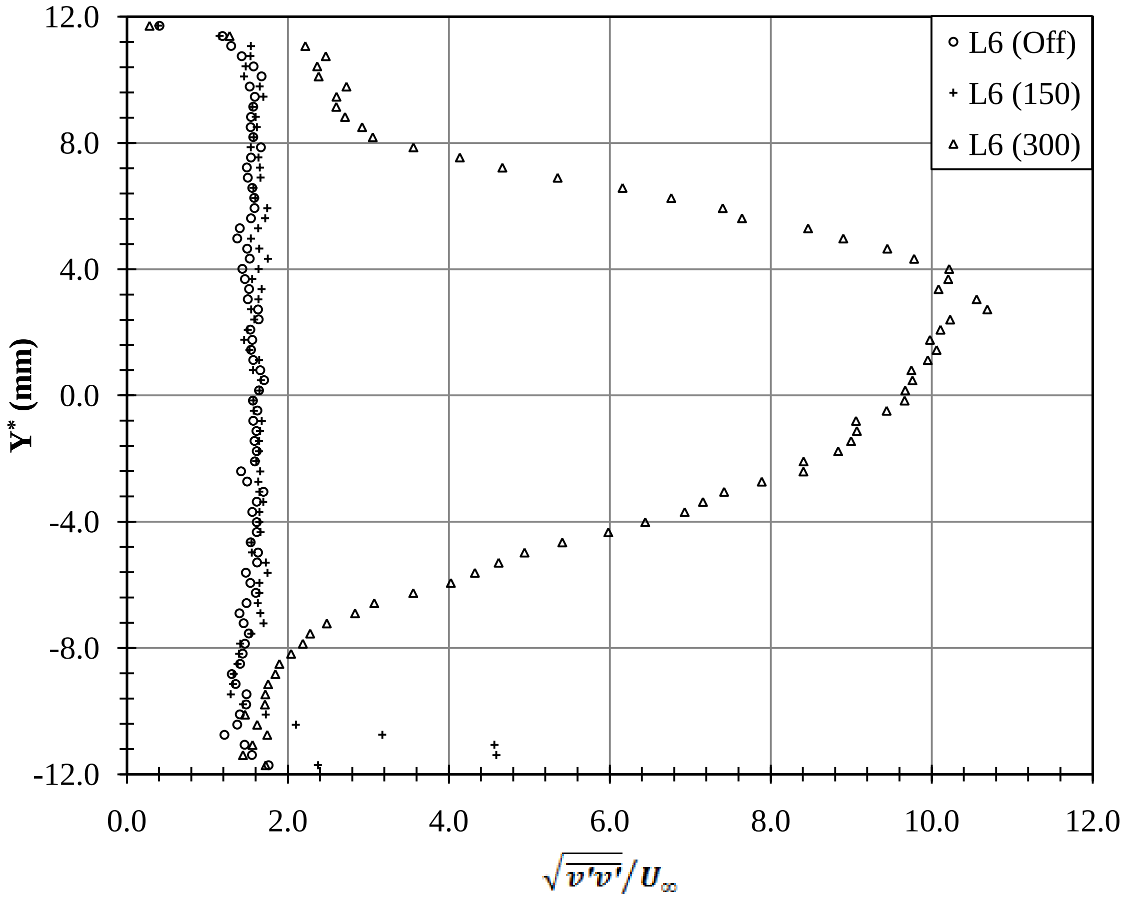

Fig. L-43 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #2, L6, Right (71-80)**

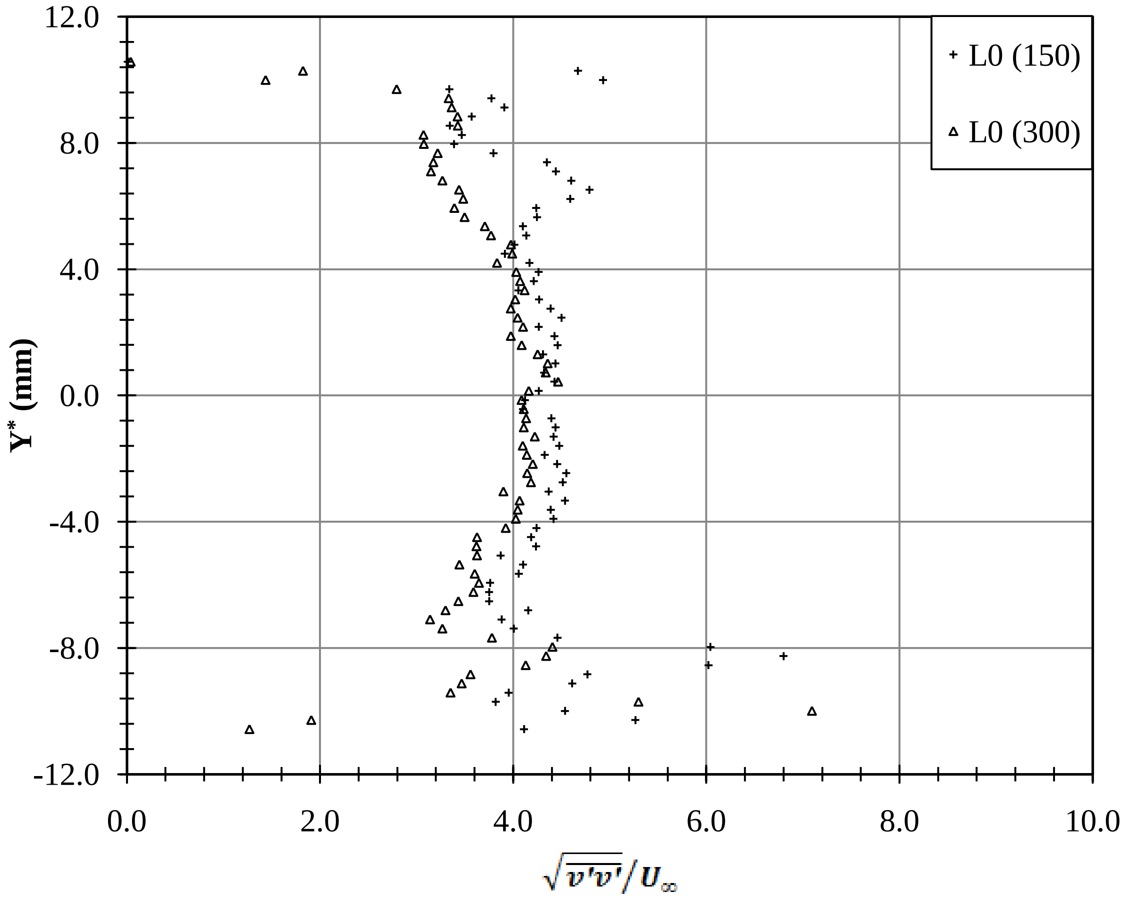

Fig. L-44 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L0, Left (1-10), Equilibrated**

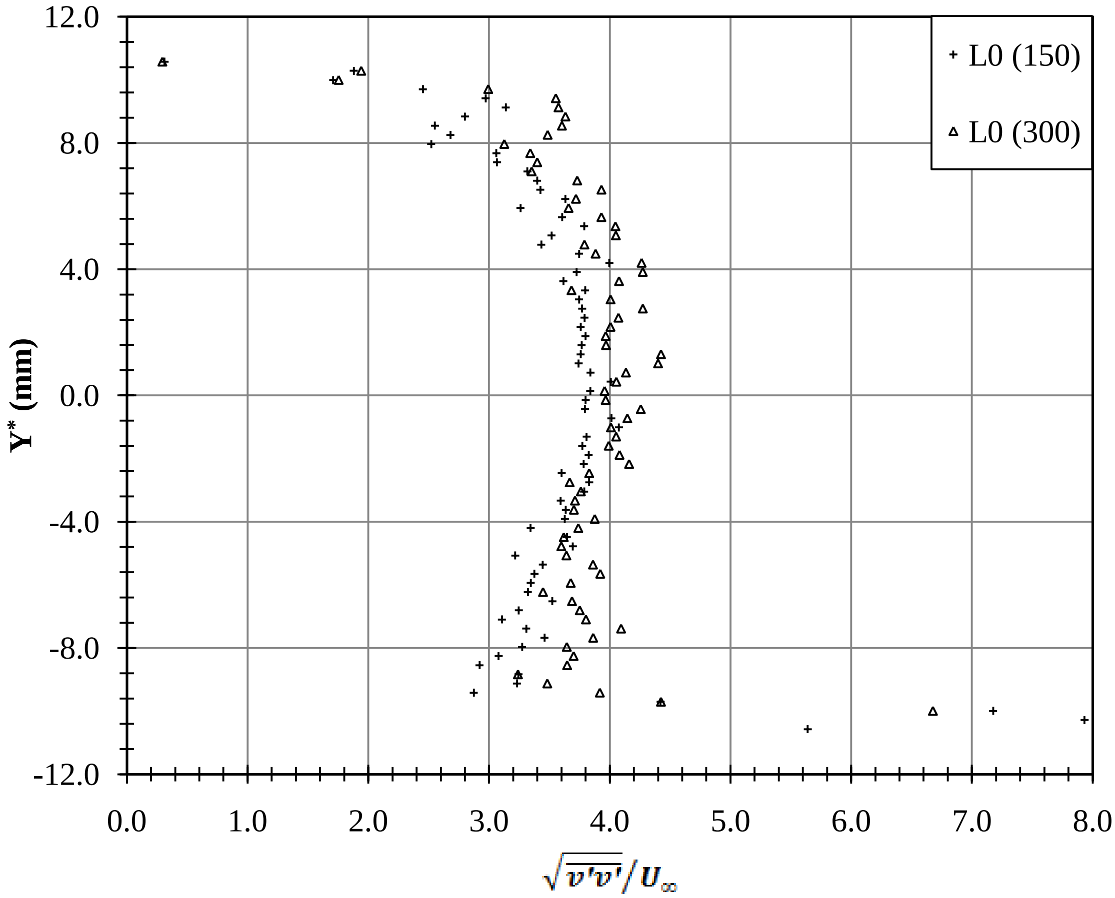

Fig. L-45 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L0, Center (46-55), Equilibrated**

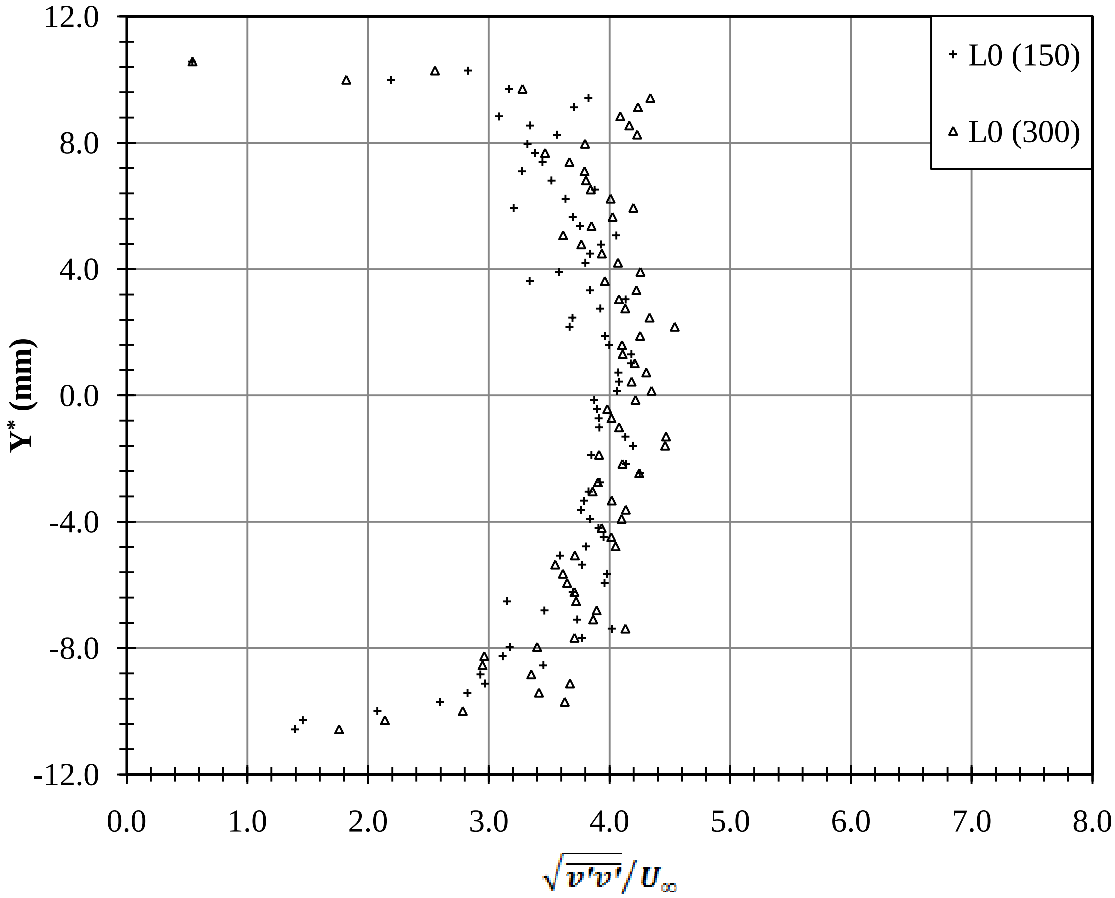

Fig. L-46 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L0, Right (71-80), Equilibrated**

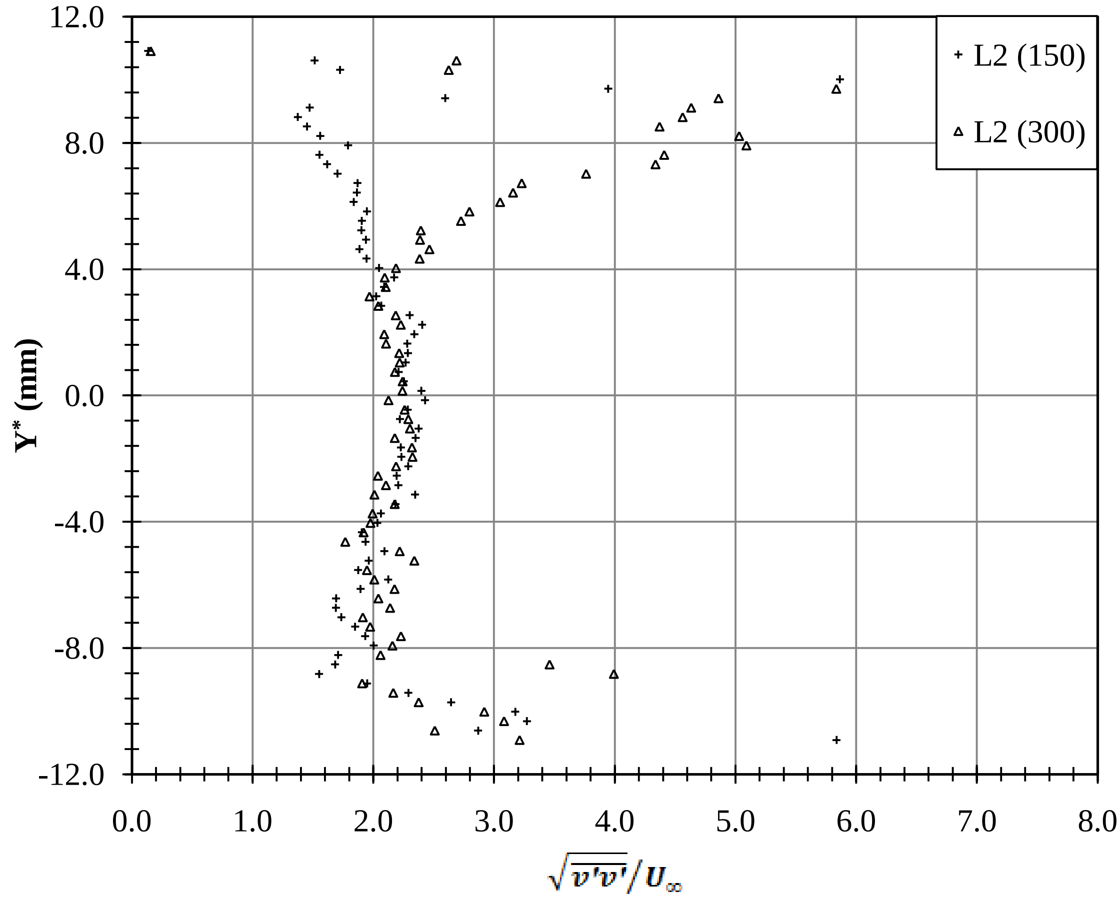

Fig. L-47 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L2, Left (1-10), Equilibrated**

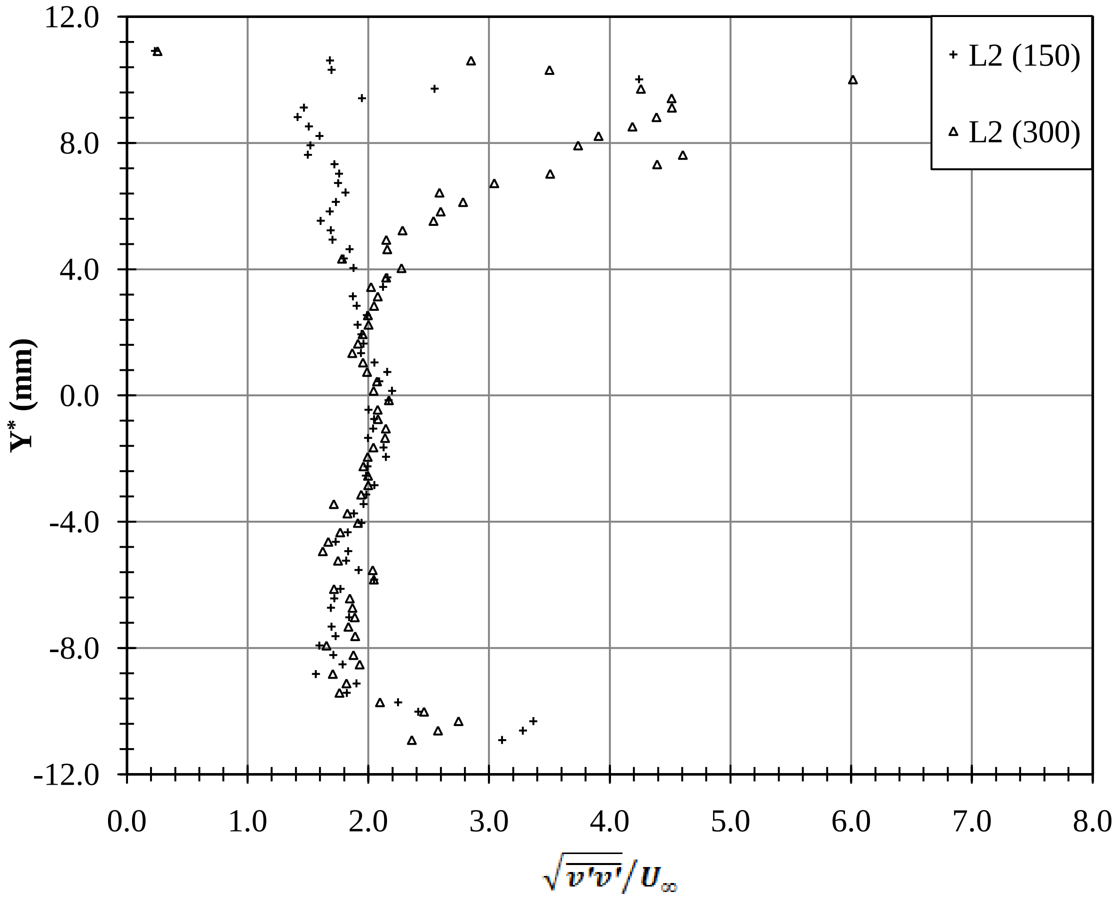

Fig. L-48 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L2, Center (46-55), Equilibrated**

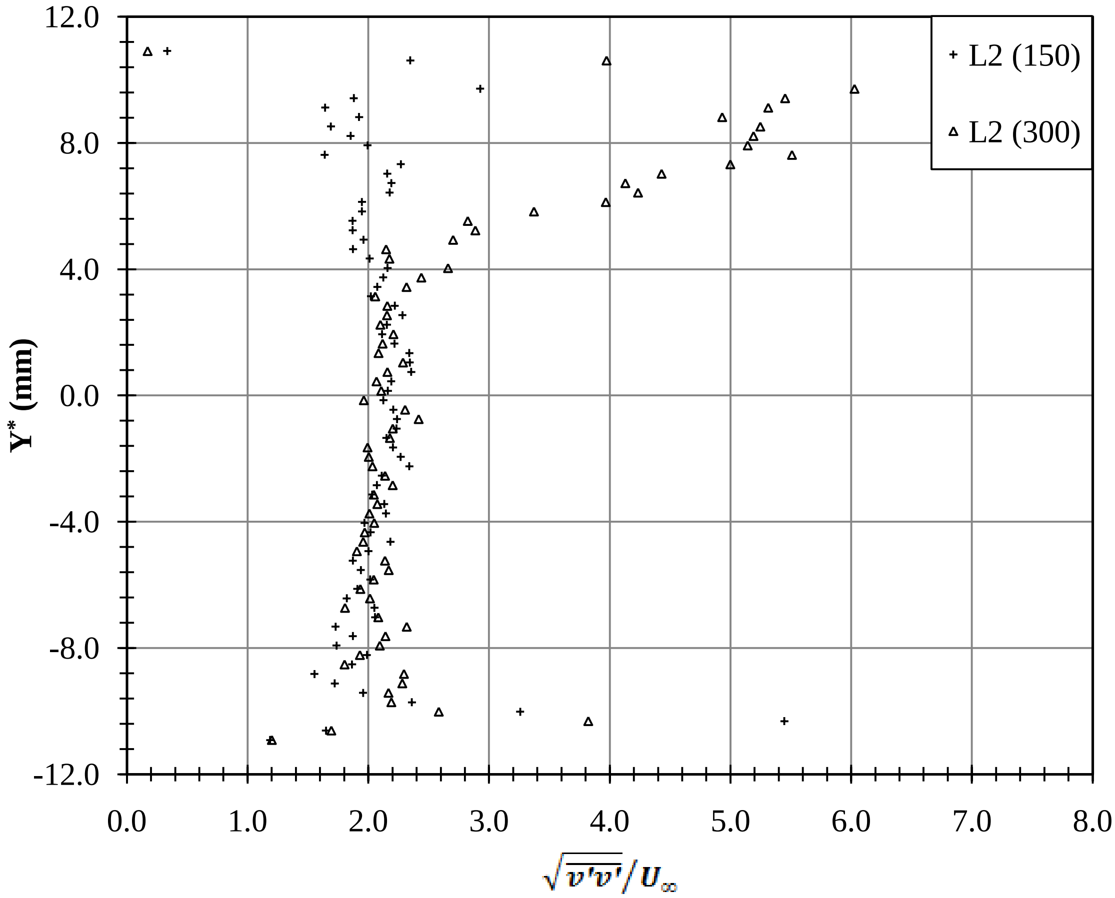

Fig. L-49 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L2, Right (71-80), Equilibrated**

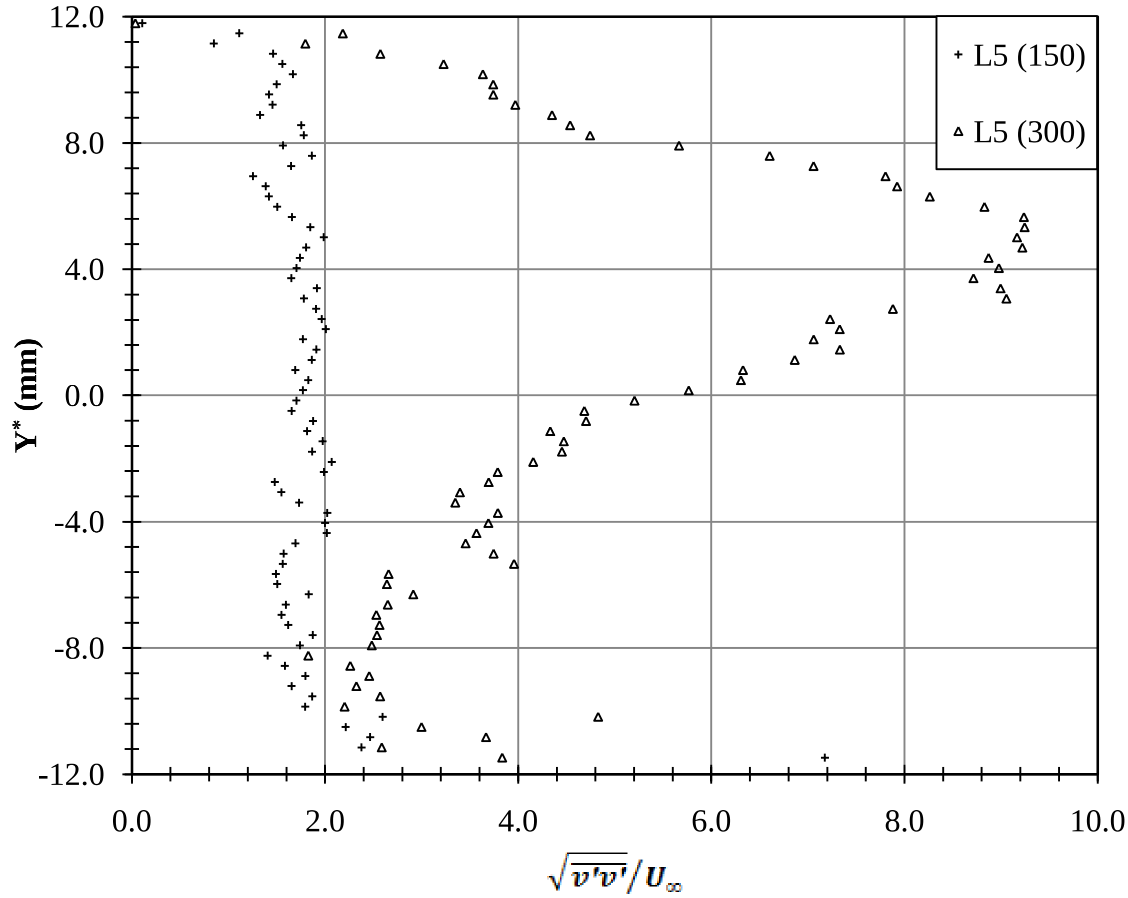

Fig. L-50 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L5, Left (1-10), Equilibrated**

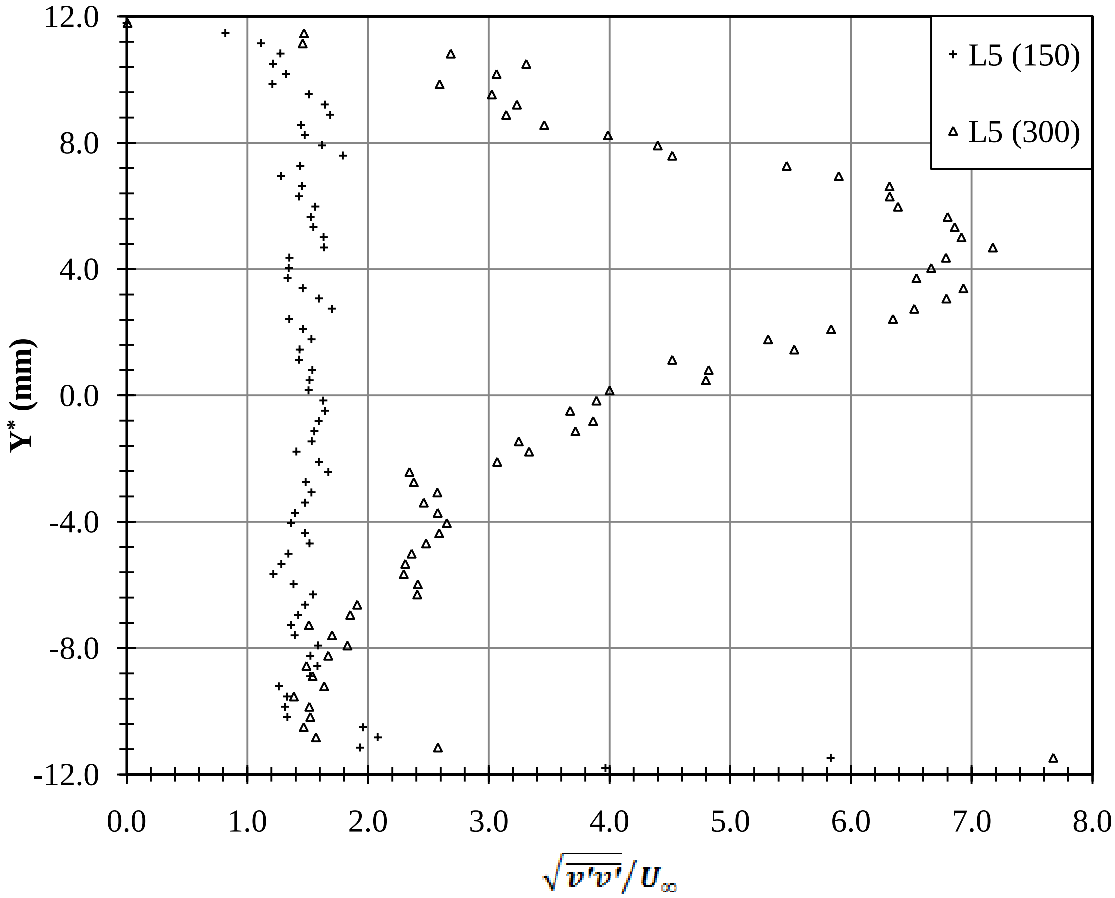

Fig. L-51 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L5, Center (46-55), Equilibrated**

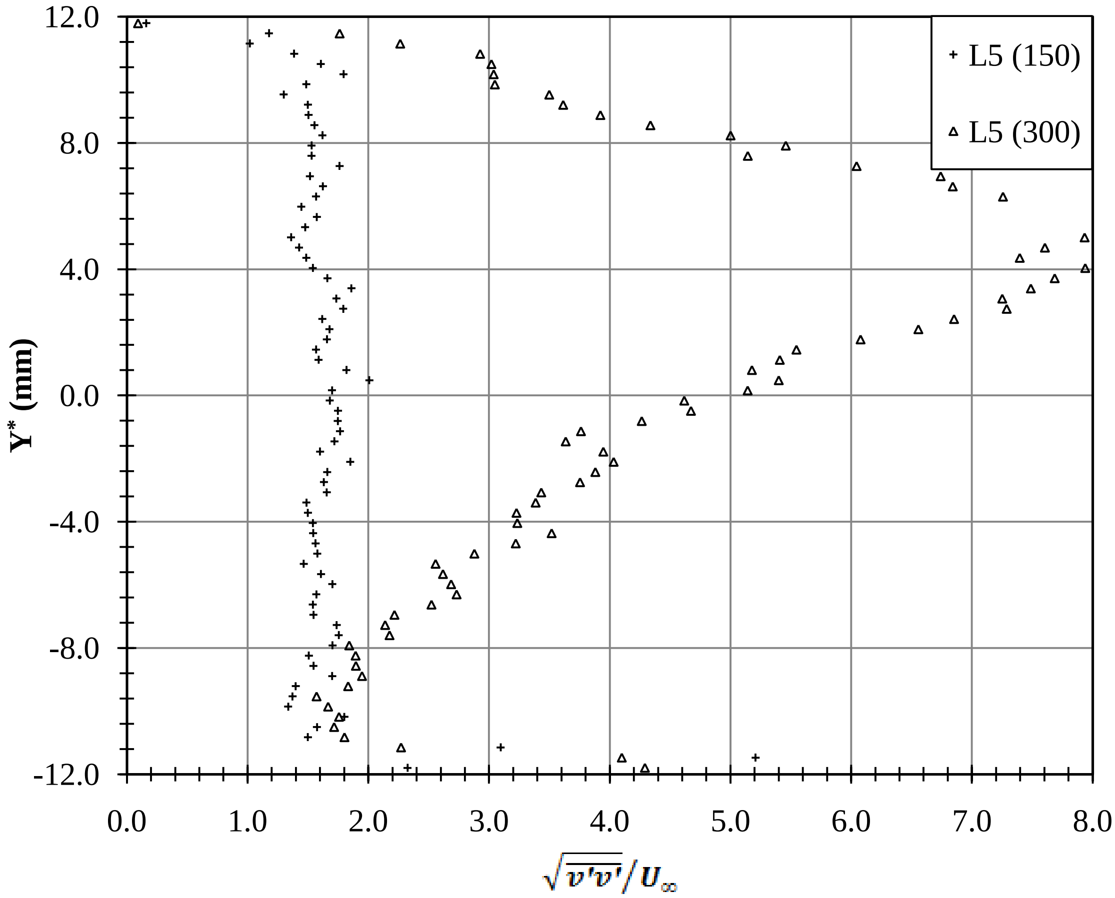

Fig. L-52 $\sqrt{\overline{v'v'}}/U_\infty$**, Grid #1, L5, Right (71-80), Equilibrated**

APPENDIX M

PROFILE PLOTS

$\overline{u'v'}/U_\infty{}^2$

FIGURE Page

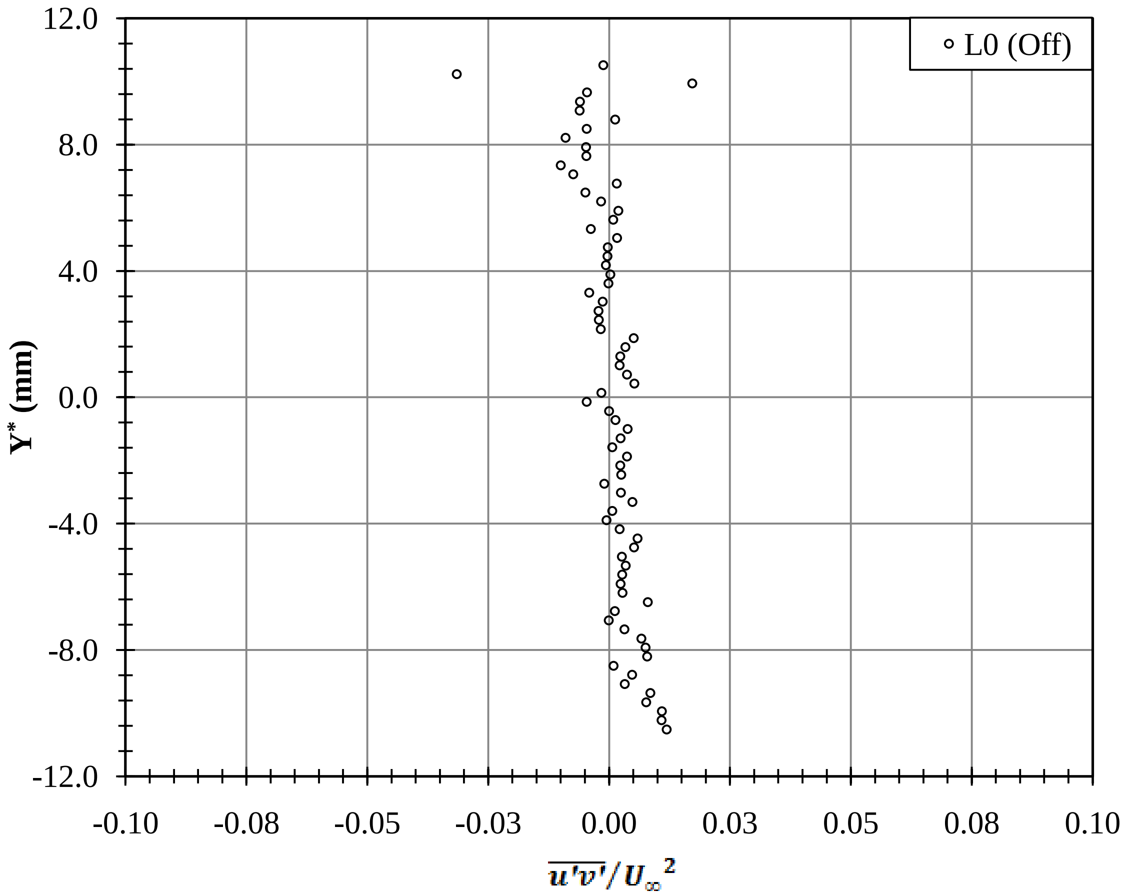

Fig. M-1 $\overline{u'v'}/U_{\infty}{}^{2}$**, No Grid, L0, Center (40-60)**

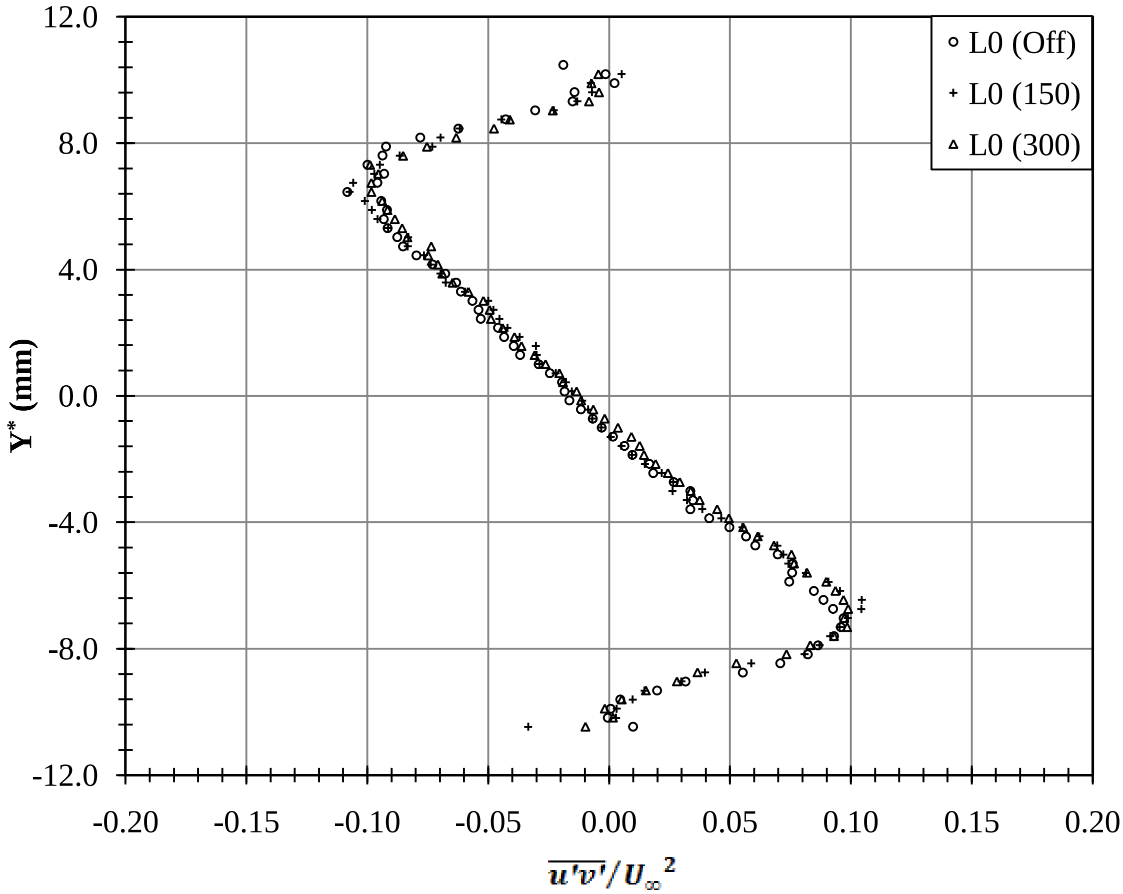

Fig. M-2 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L0, Left (1-10)**

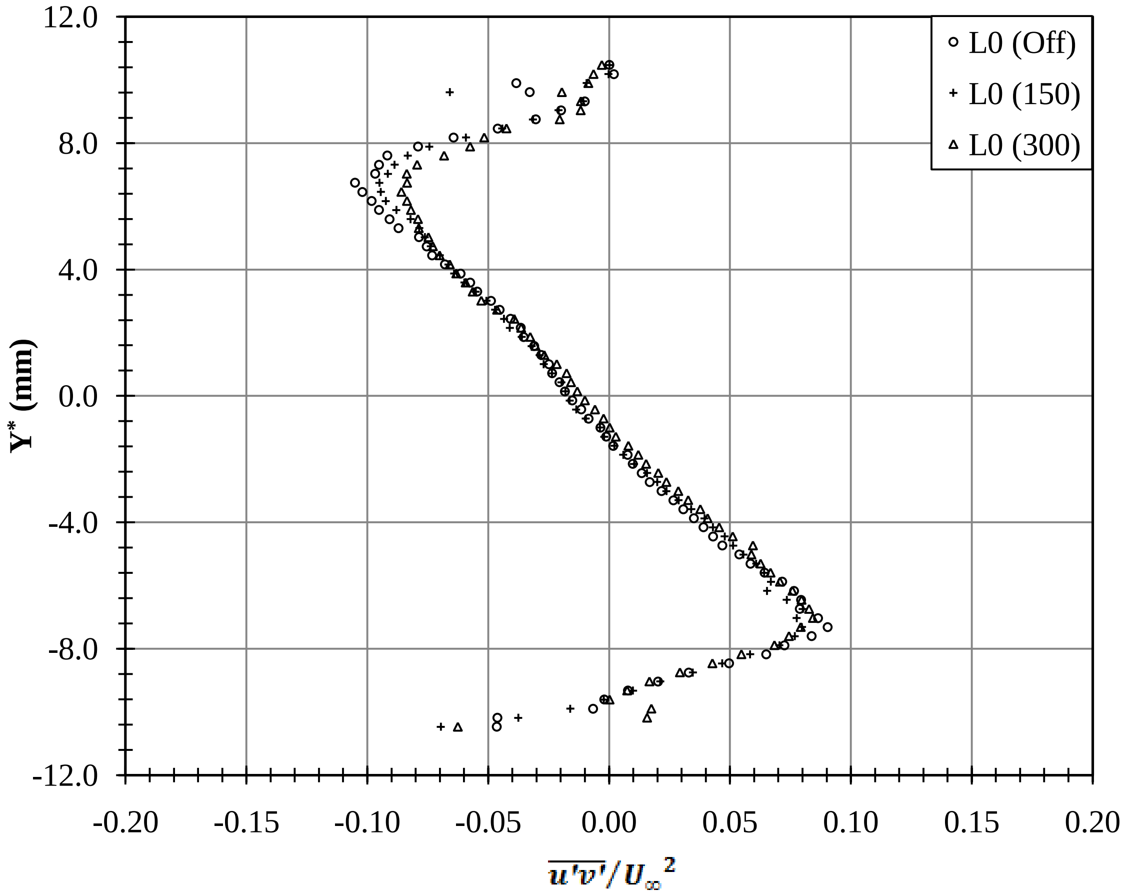

Fig. M-3 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L0, Center (46-55)**

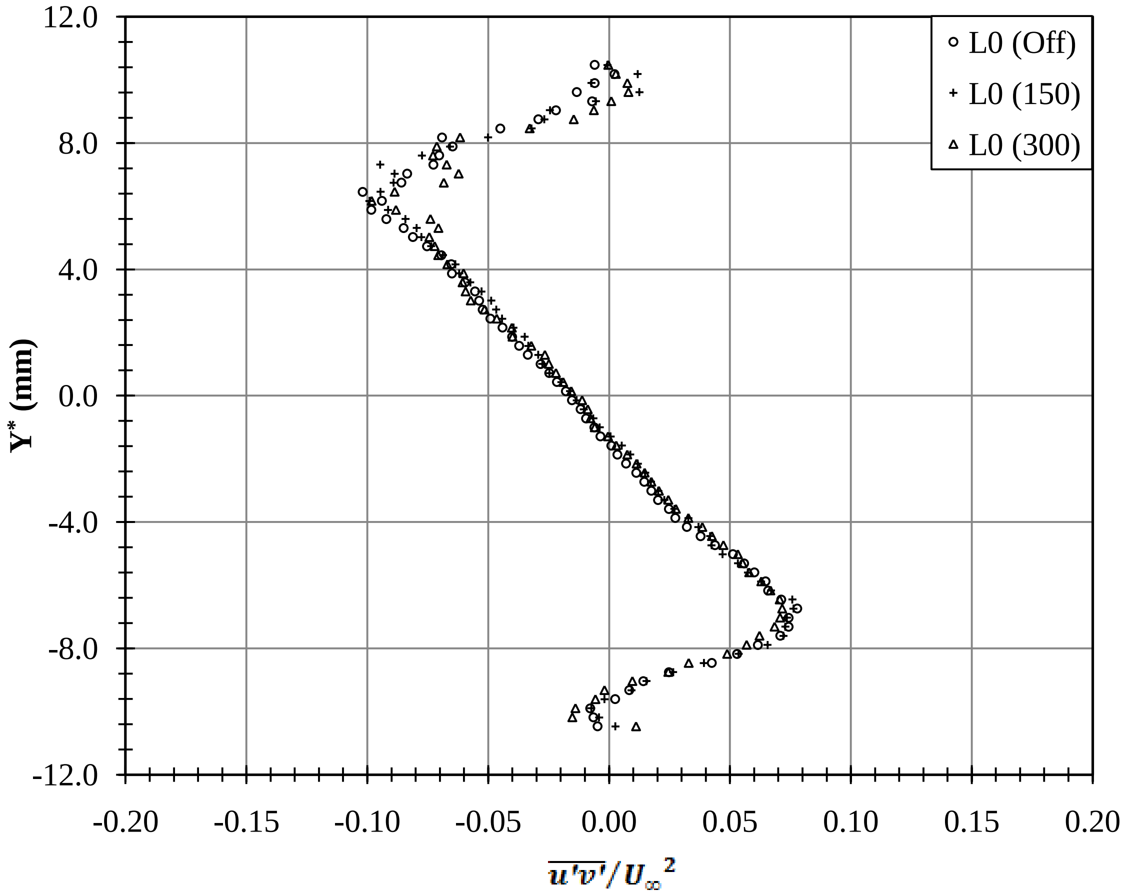

Fig. M-4 $\overline{u'v'}/U_\infty^{\ 2}$**, Grid #1, L0, Right (71-80)**

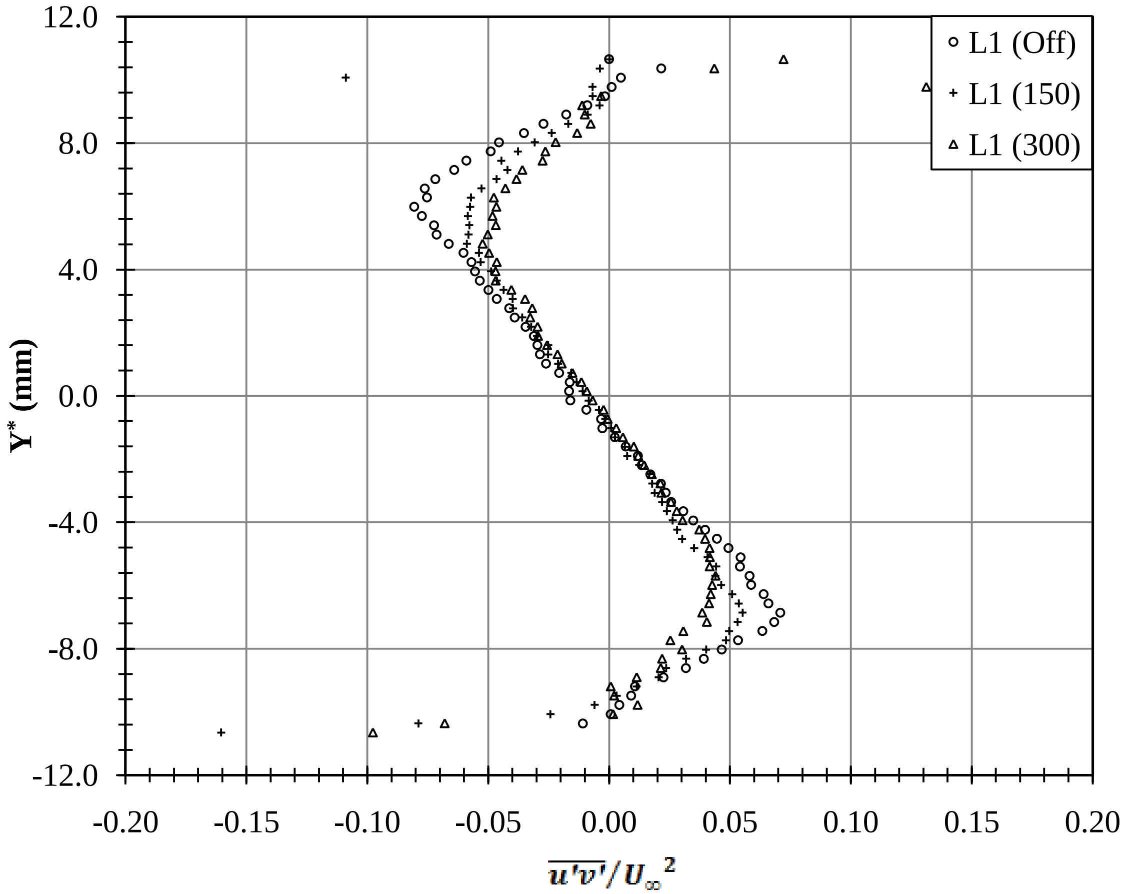

Fig. M-5 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L1, Left (1-10)**

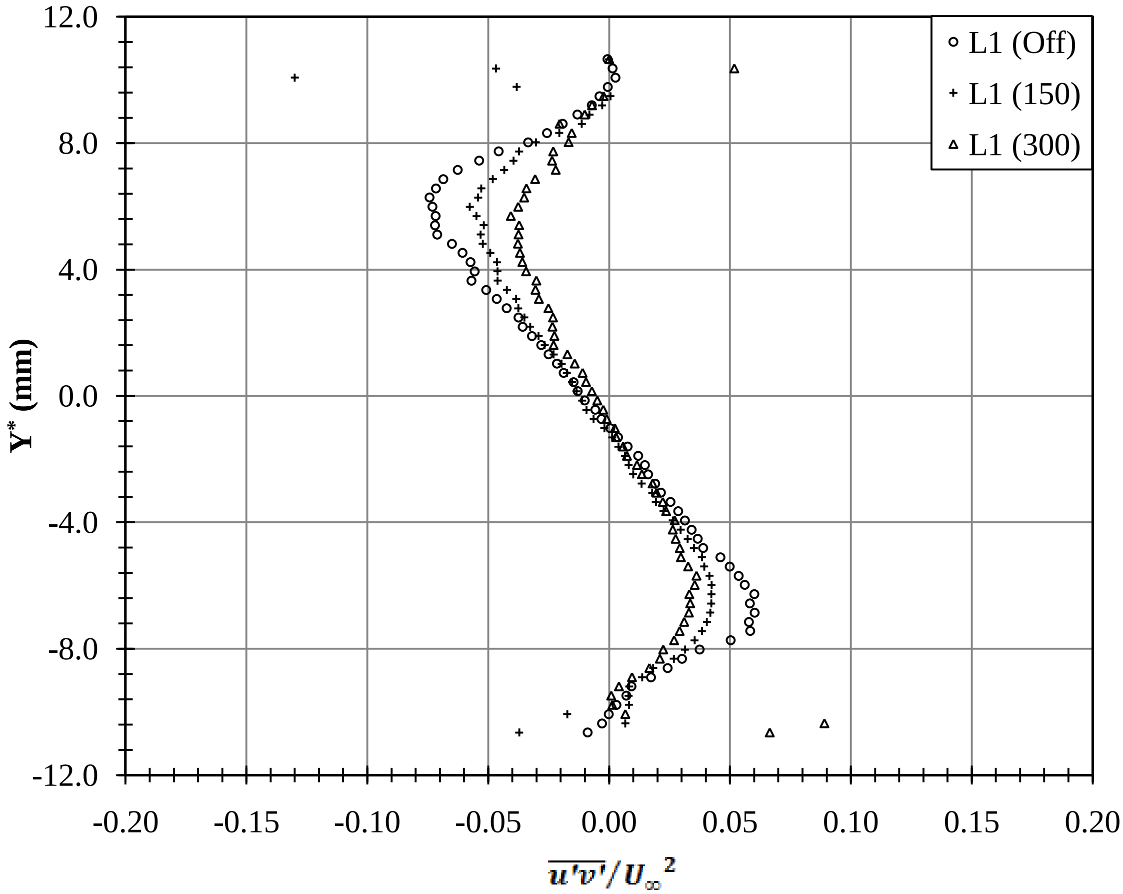

Fig. M-6 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L1, Center (46-55)**

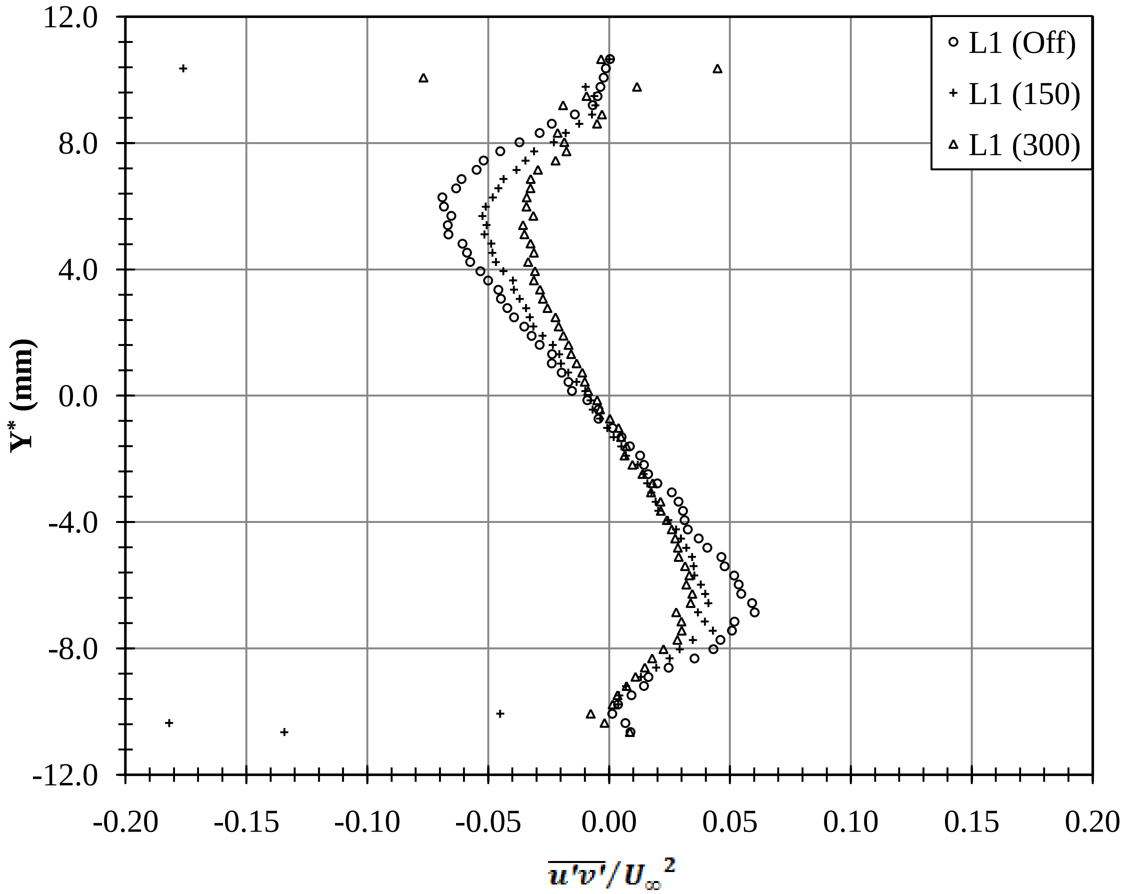

Fig. M-7 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L1, Right (71-80)**

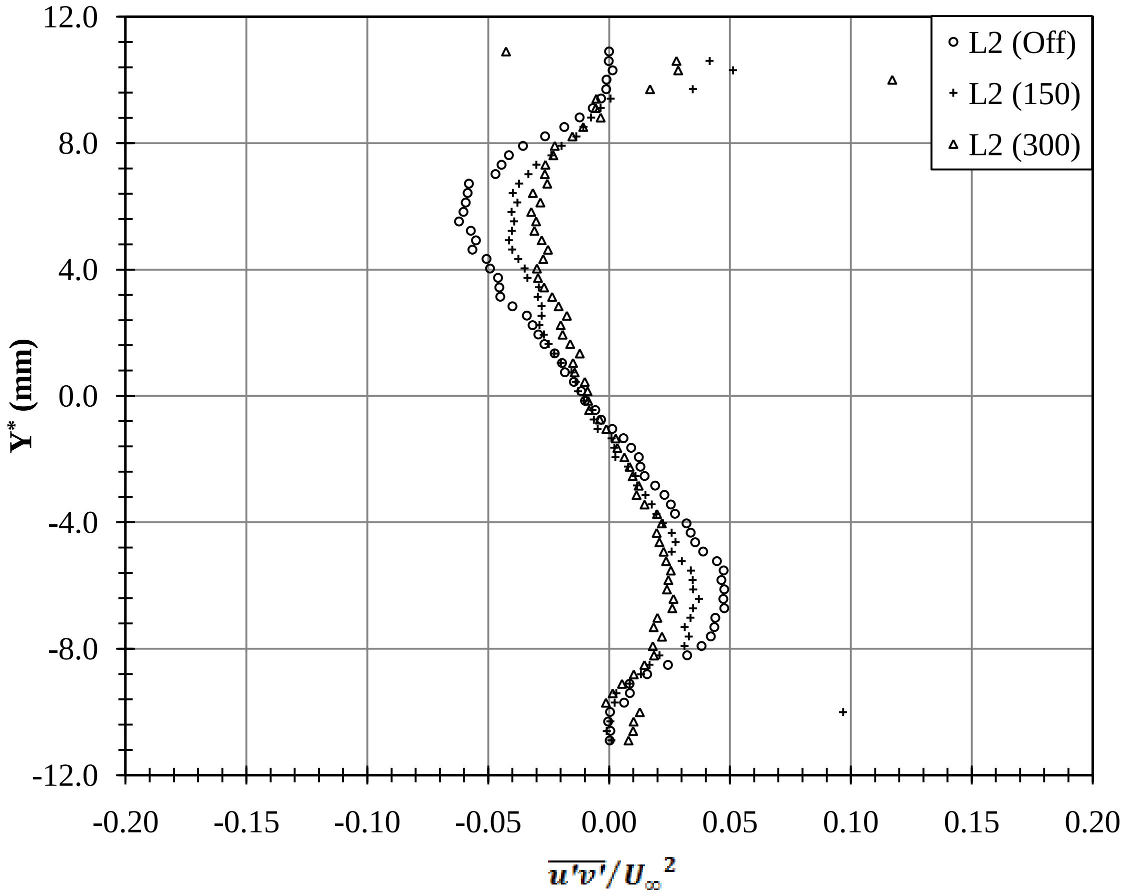

Fig. M-8 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L2, Left (1-10)**

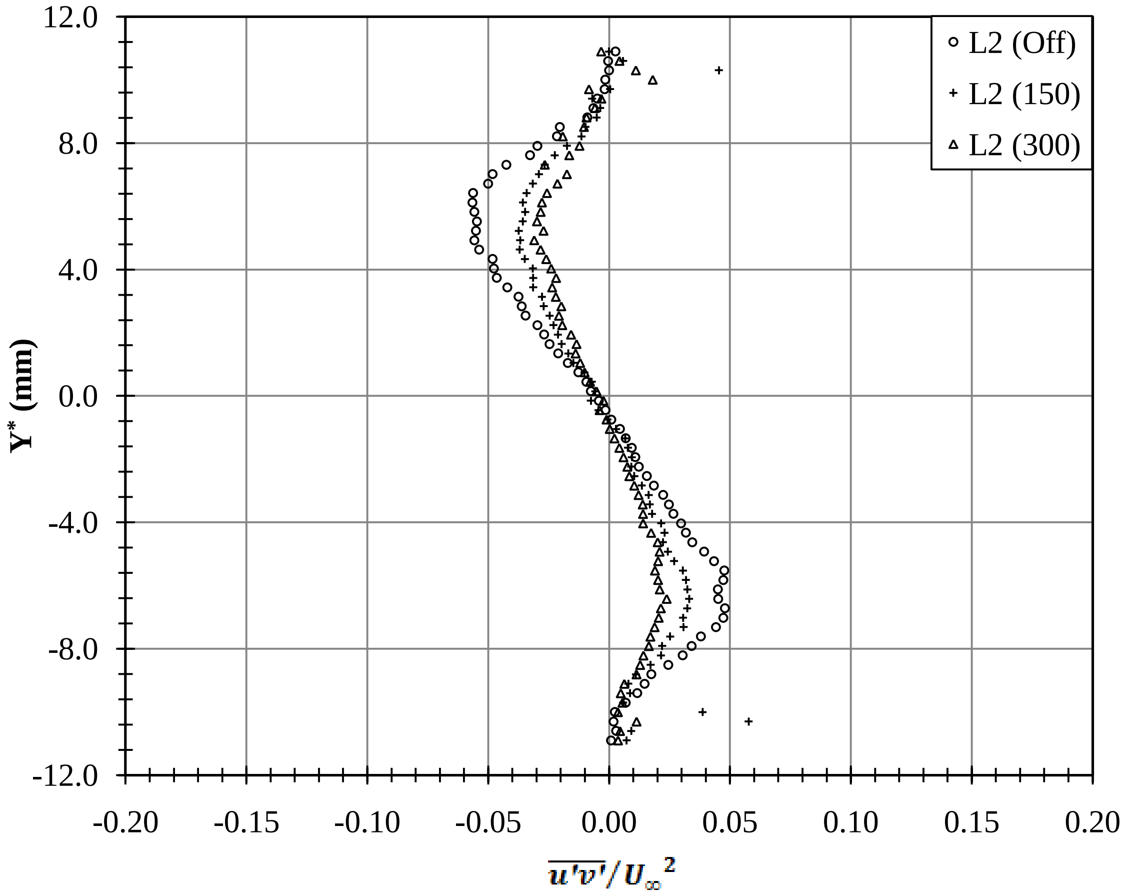

Fig. M-9 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L2, Center (46-55)**

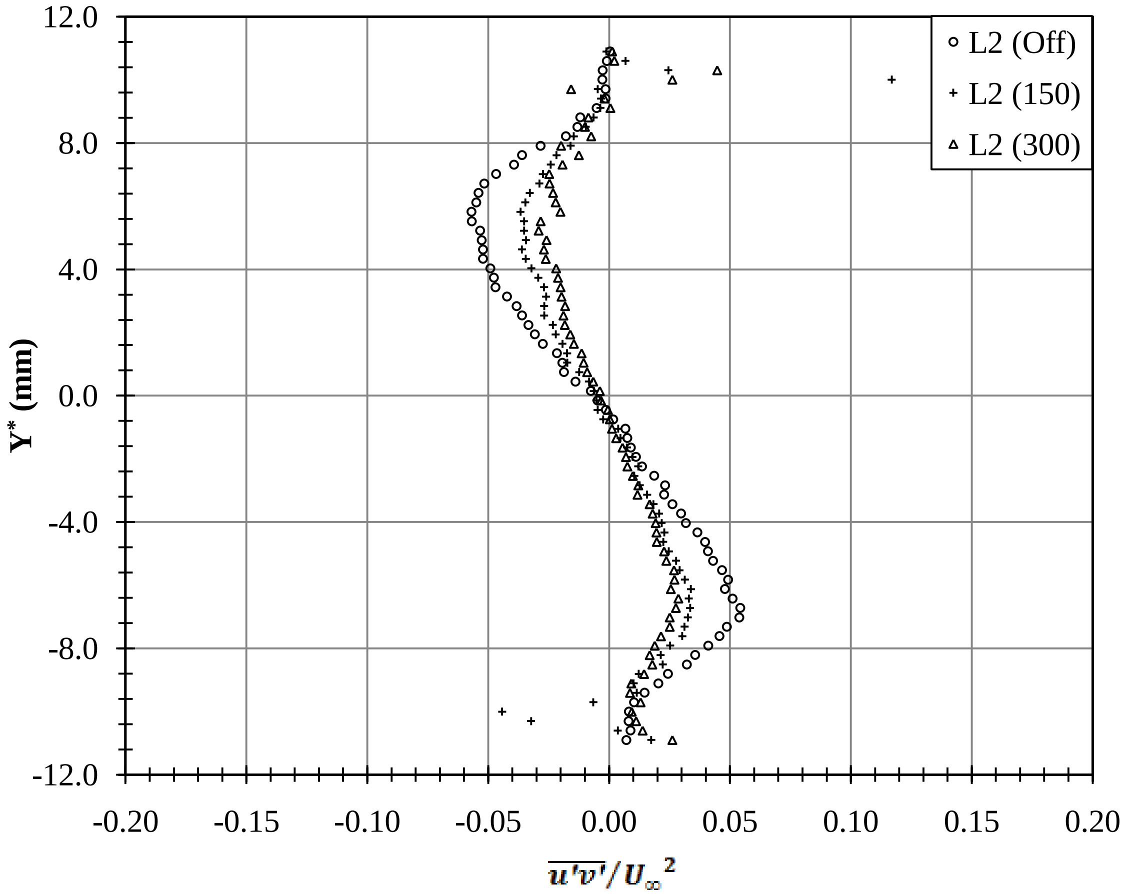

Fig. M-10 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L2, Right (71-80)**

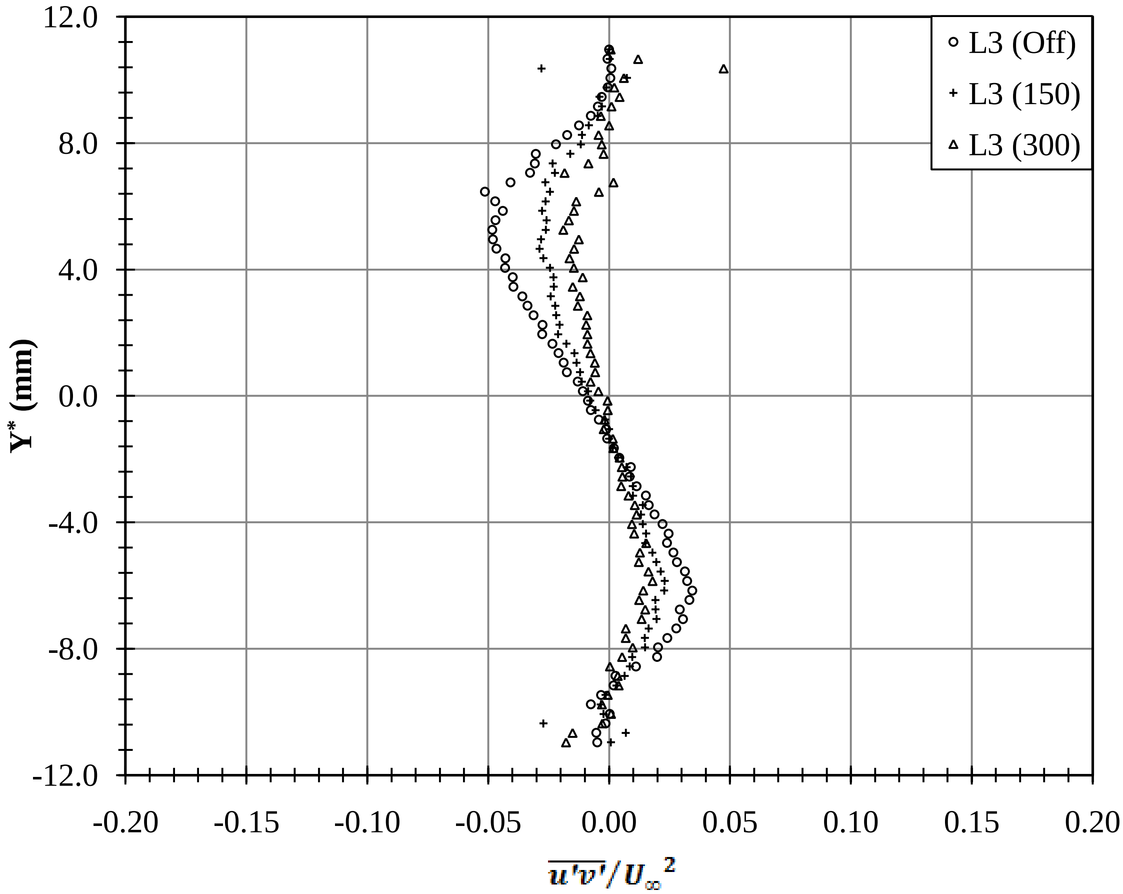

Fig. M-11 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L3, Left (1-10)**

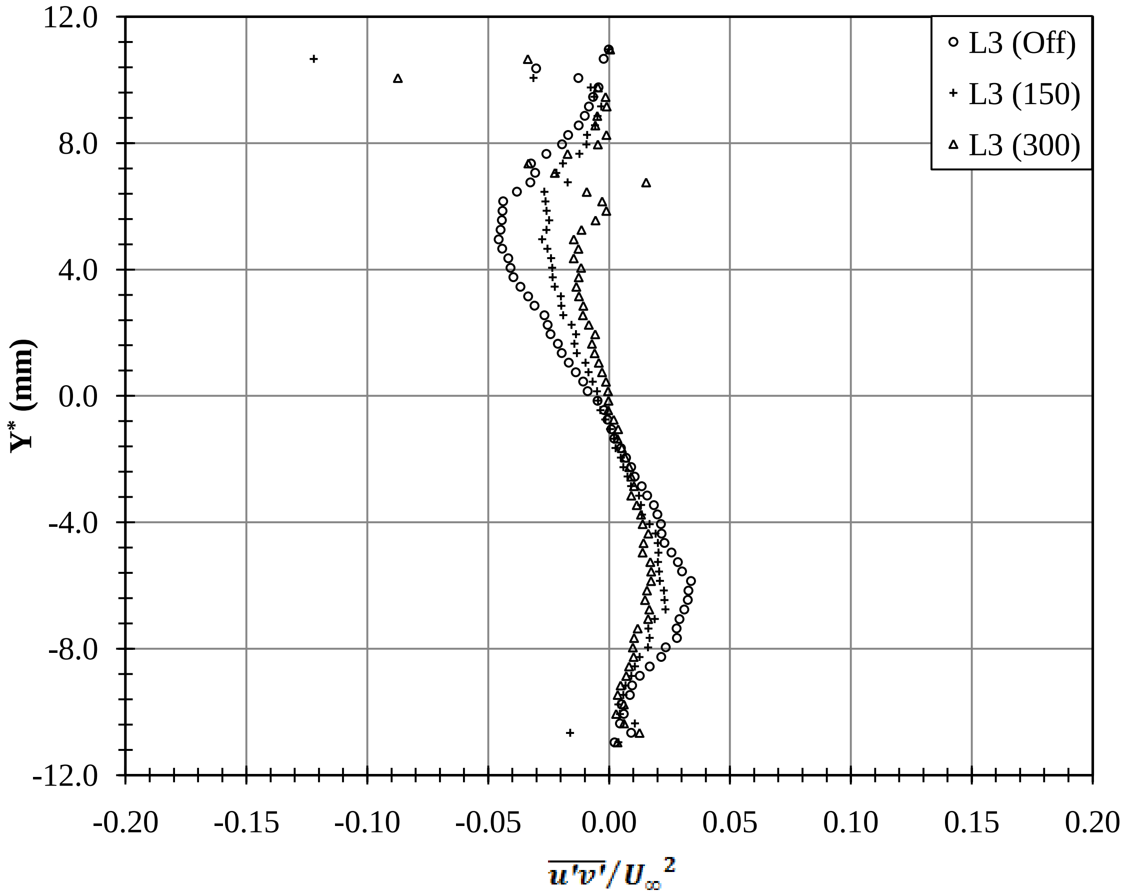

Fig. M-12 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L3, Center (46-55)**

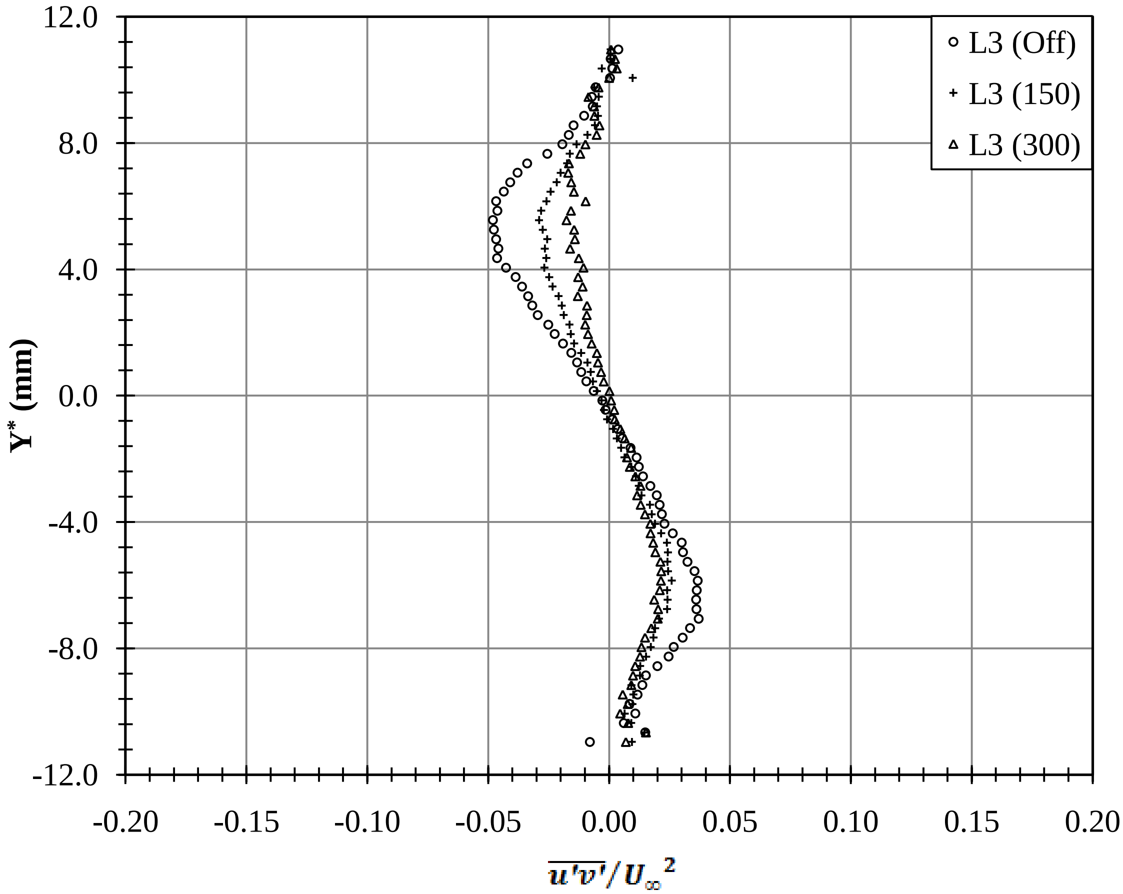

Fig. M-13 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L3, Right (71-80)**

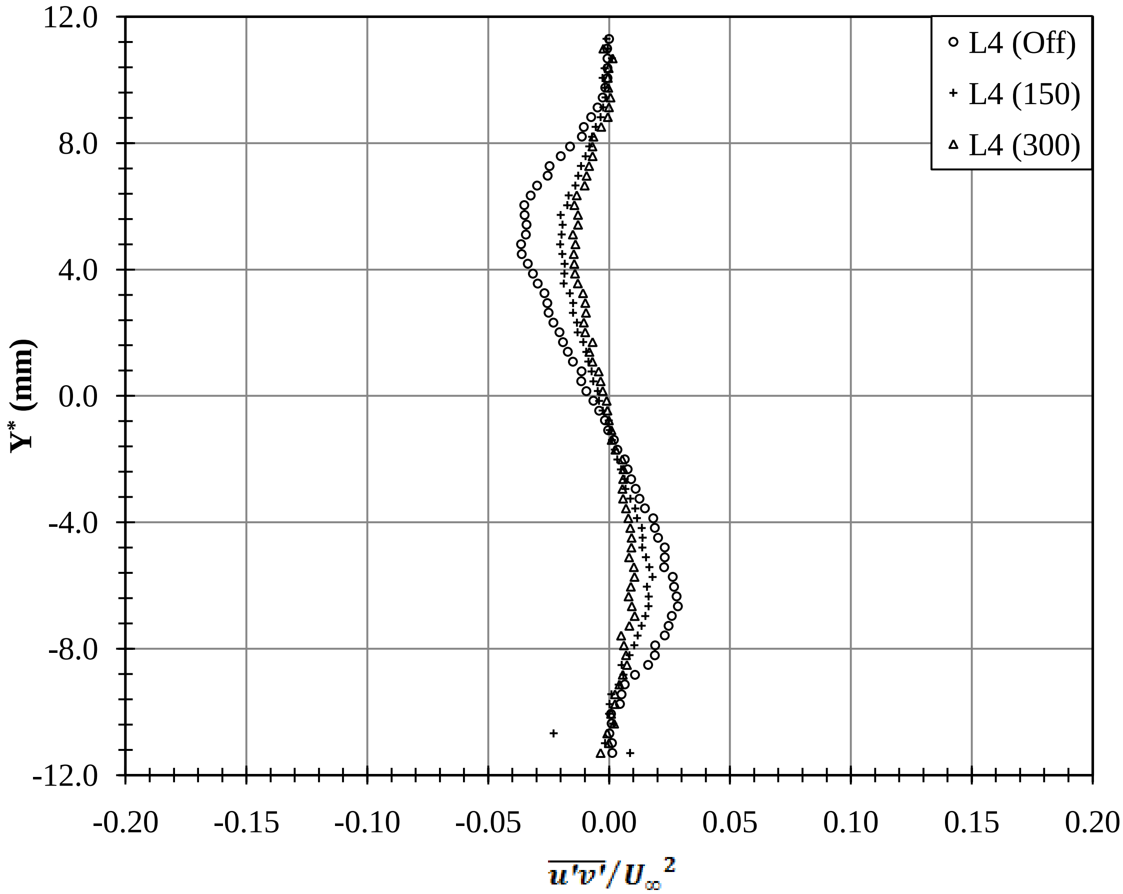

Fig. M-14 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L4, Left (1-10)**

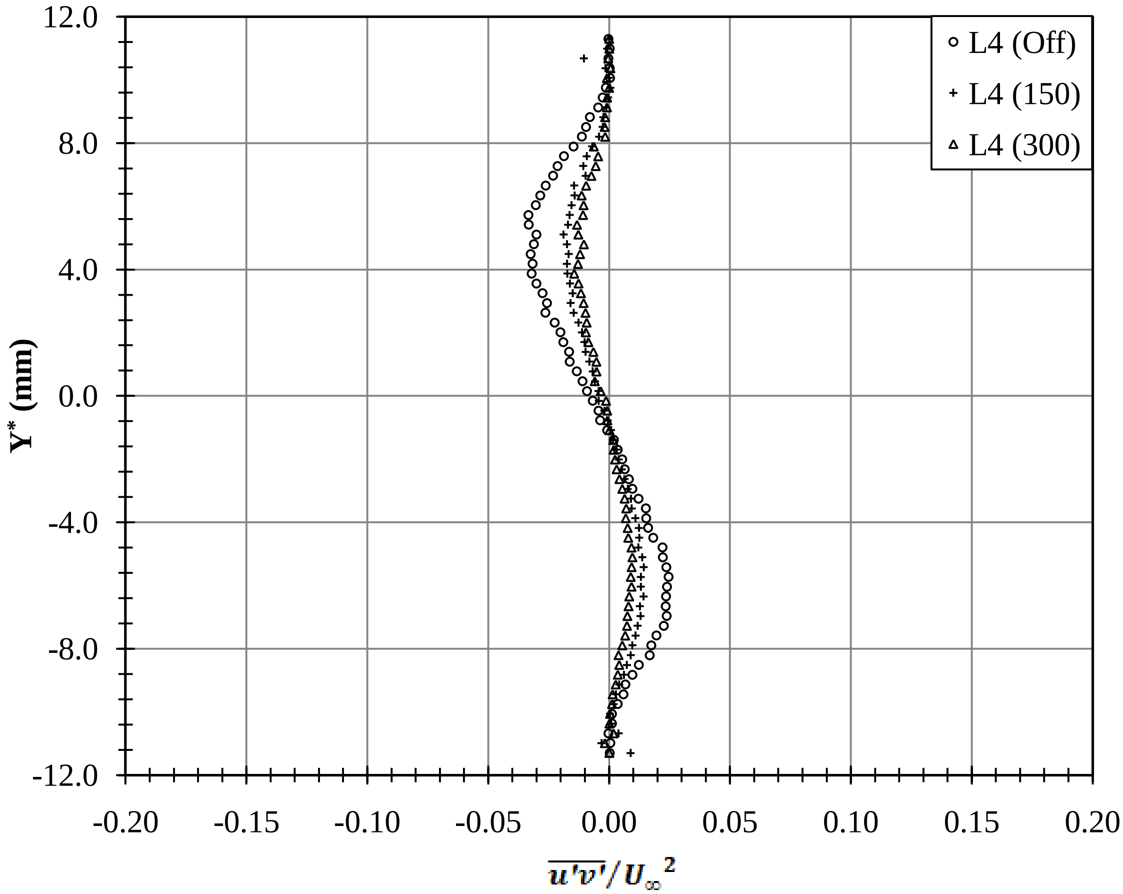

Fig. M-15 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L4, Center (46-55)**

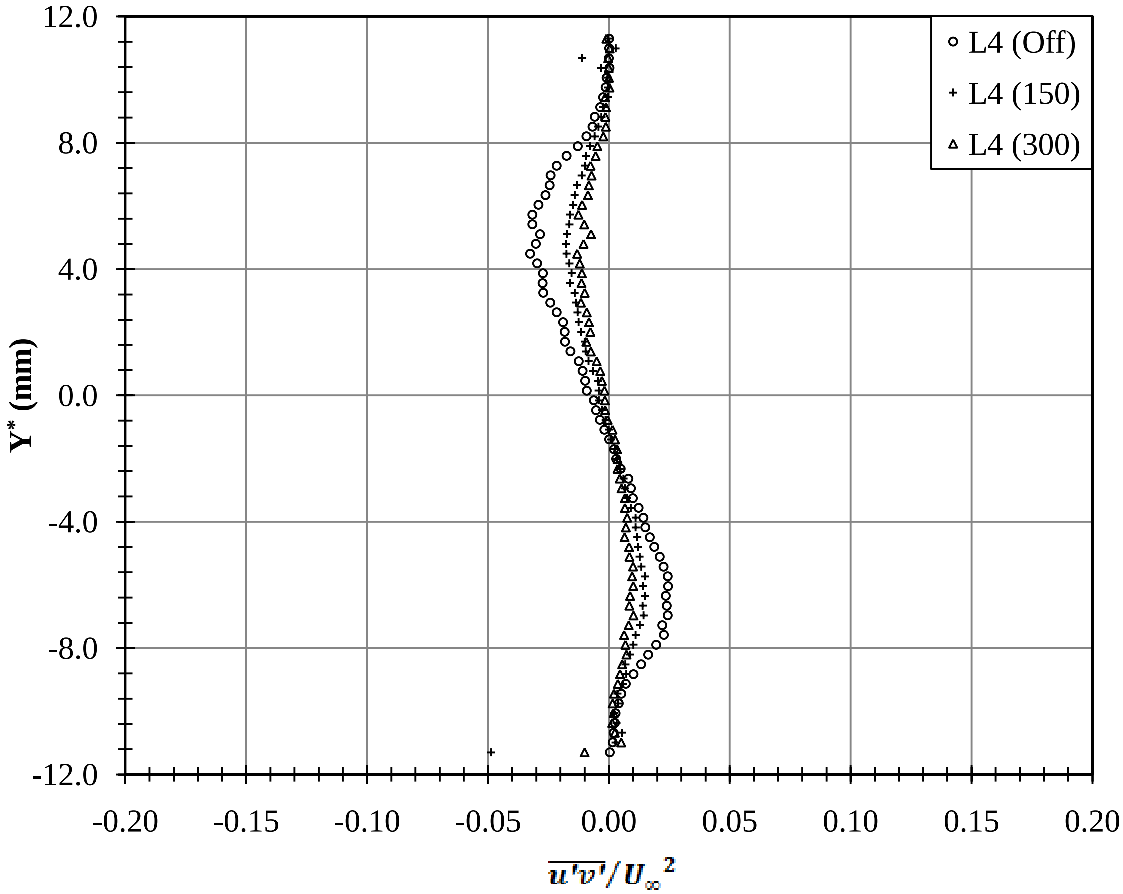

Fig. M-16 $\overline{u'v'}/U_\infty{}^2$, Grid #1, L4, Right (71-80)

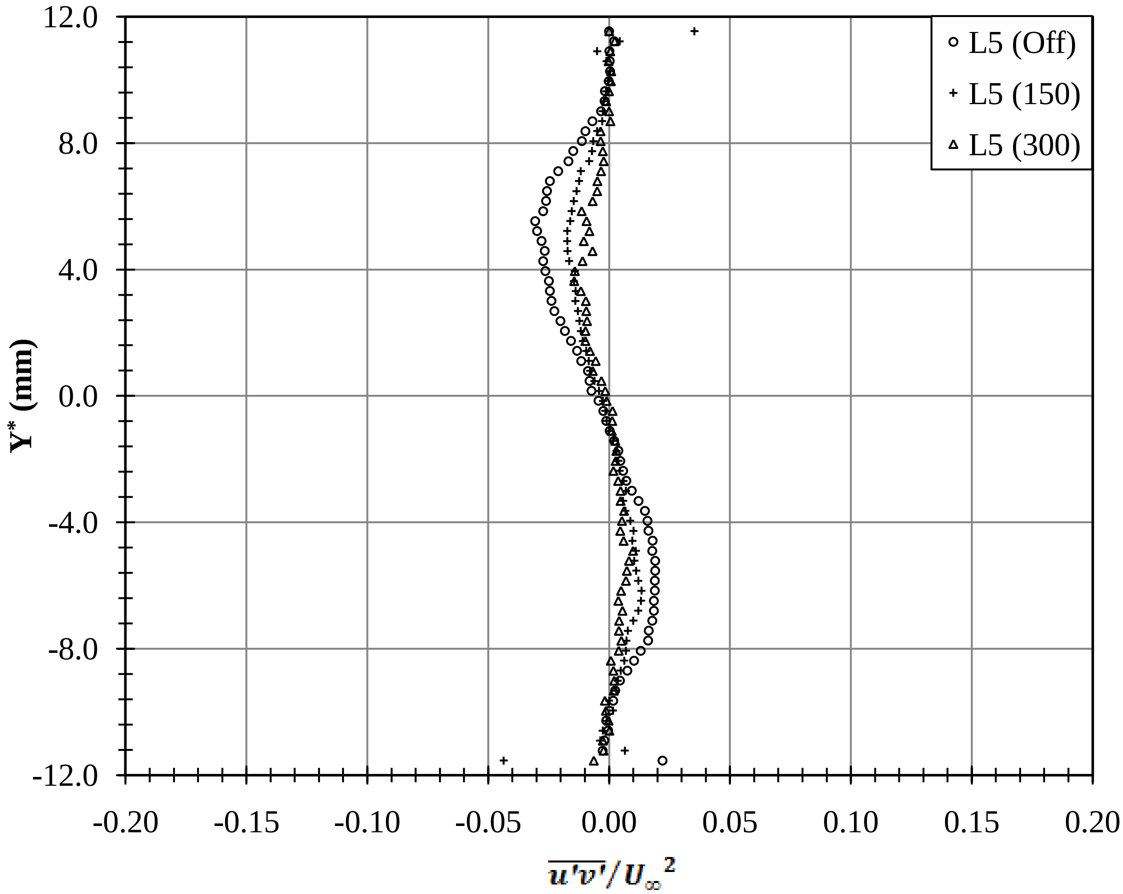

Fig. M-17 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L5, Left (1-10)**

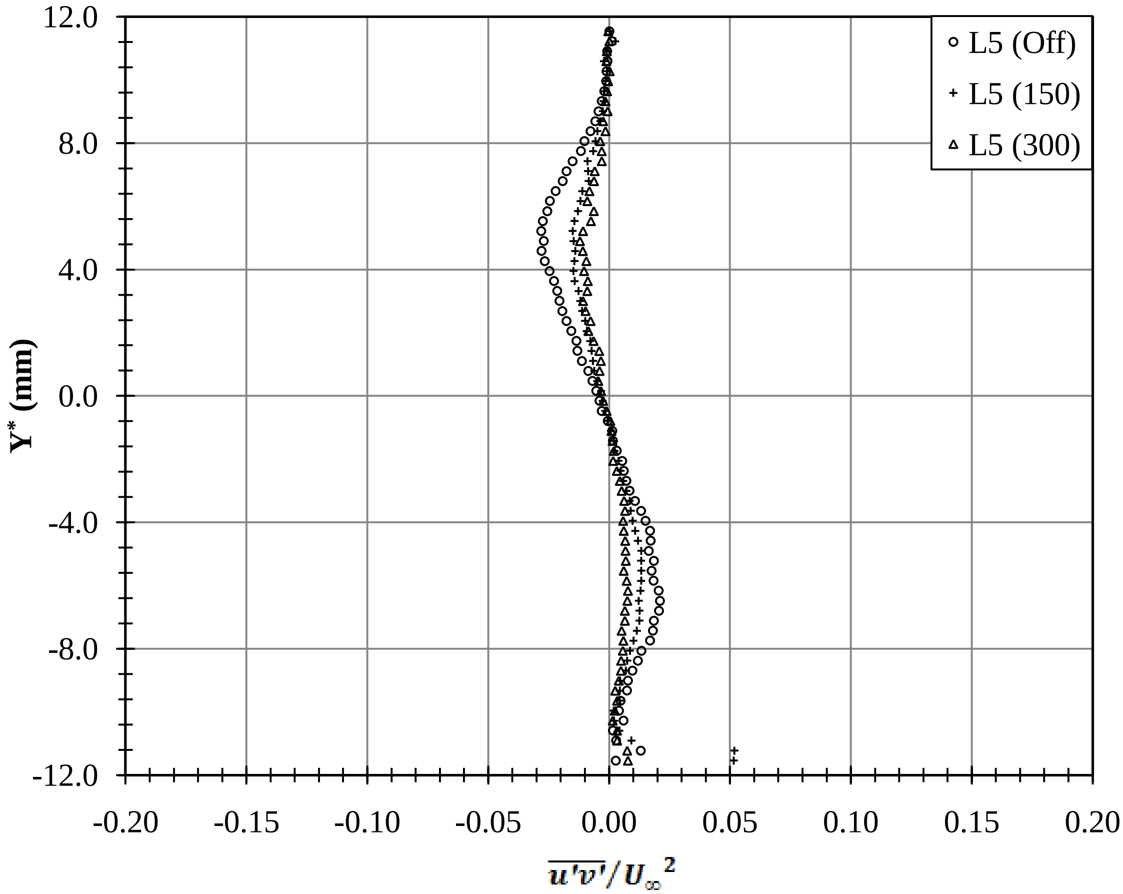

Fig. M-18 $\overline{u'v'}/U_\infty^2$**, Grid #1, L5, Center (46-55)**

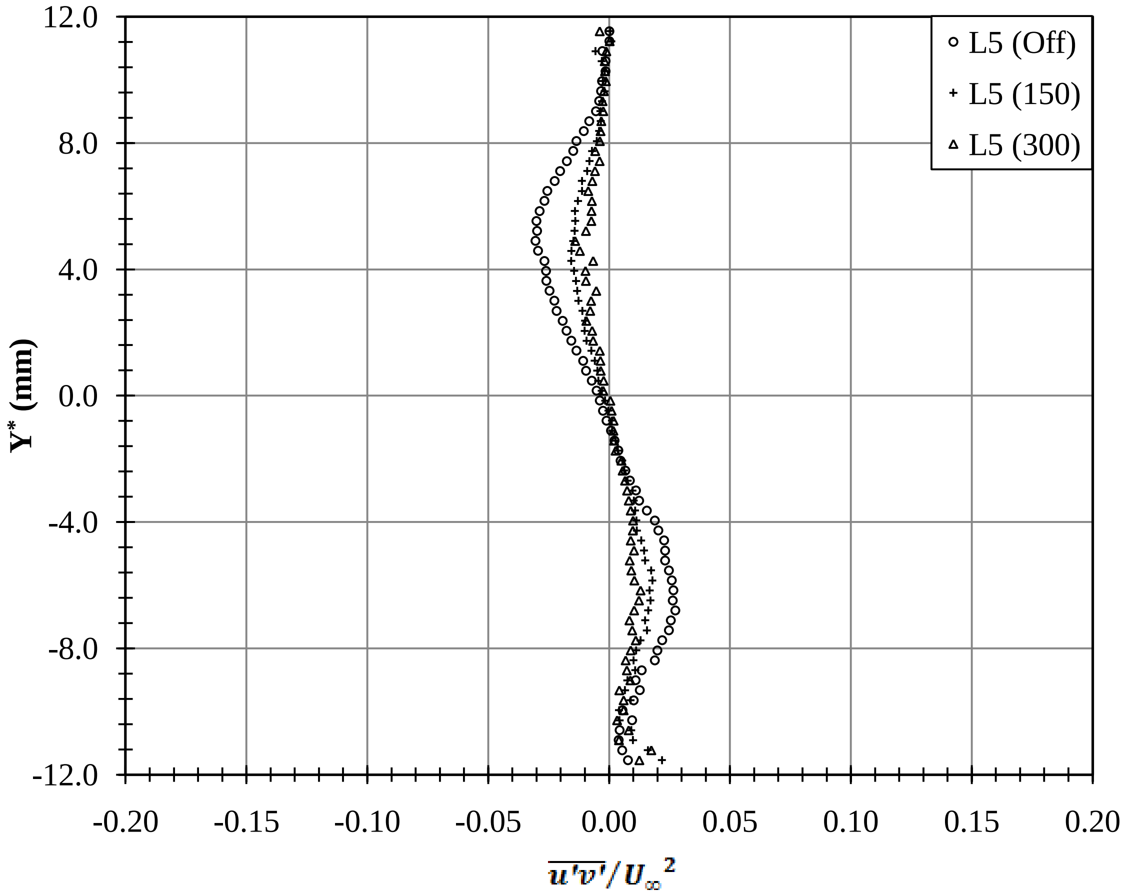

Fig. M-19 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L5, Right (71-80)**

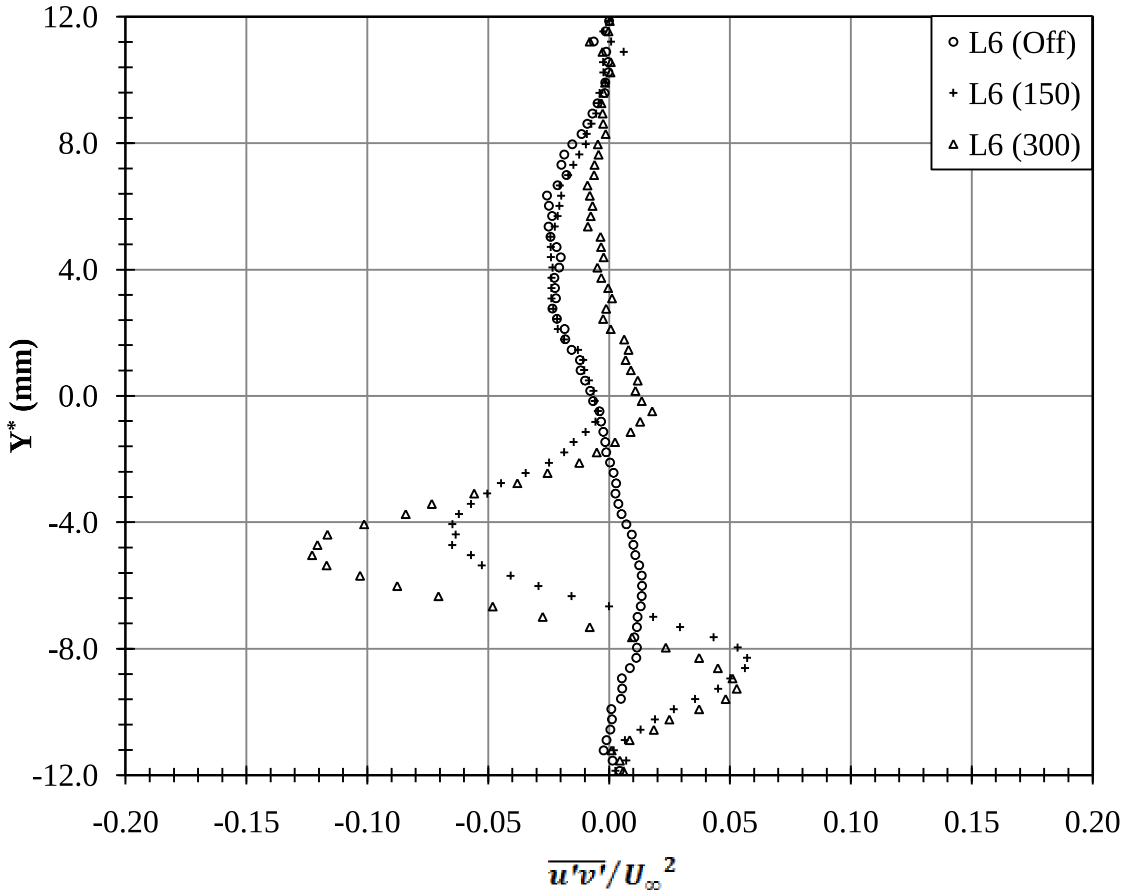

Fig. M-20 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L6, Left (1-10)**

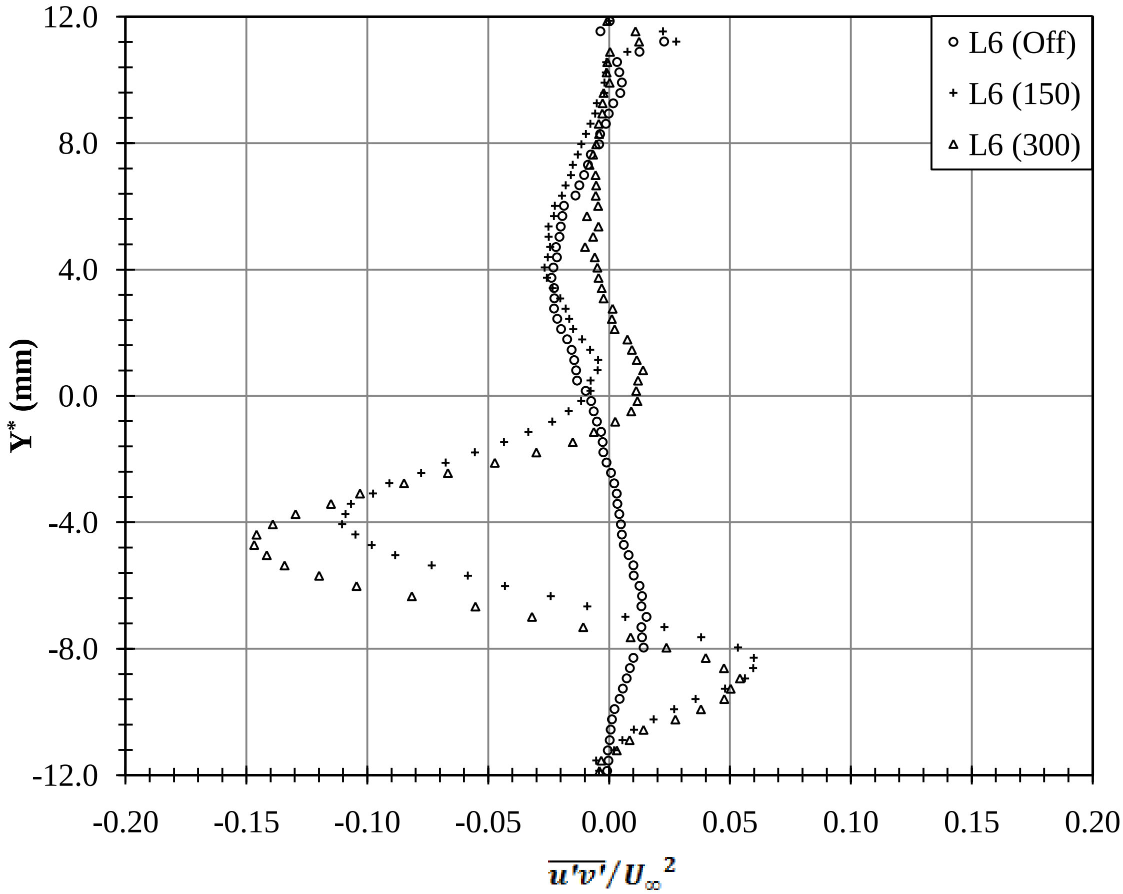

Fig. M-21 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L6, Center (46-55)**

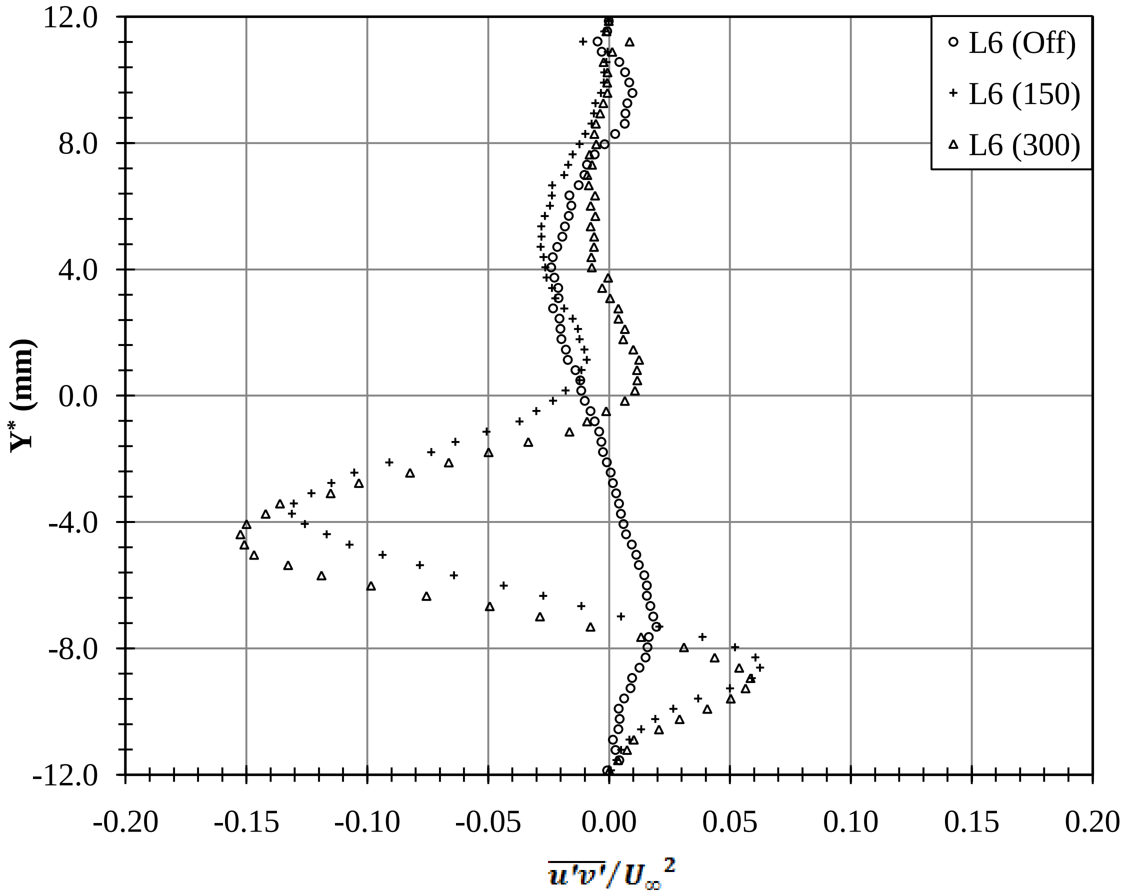

Fig. M-22 $\overline{u'v'}/U_\infty{}^2$, Grid #1, L6, Right (71-80)

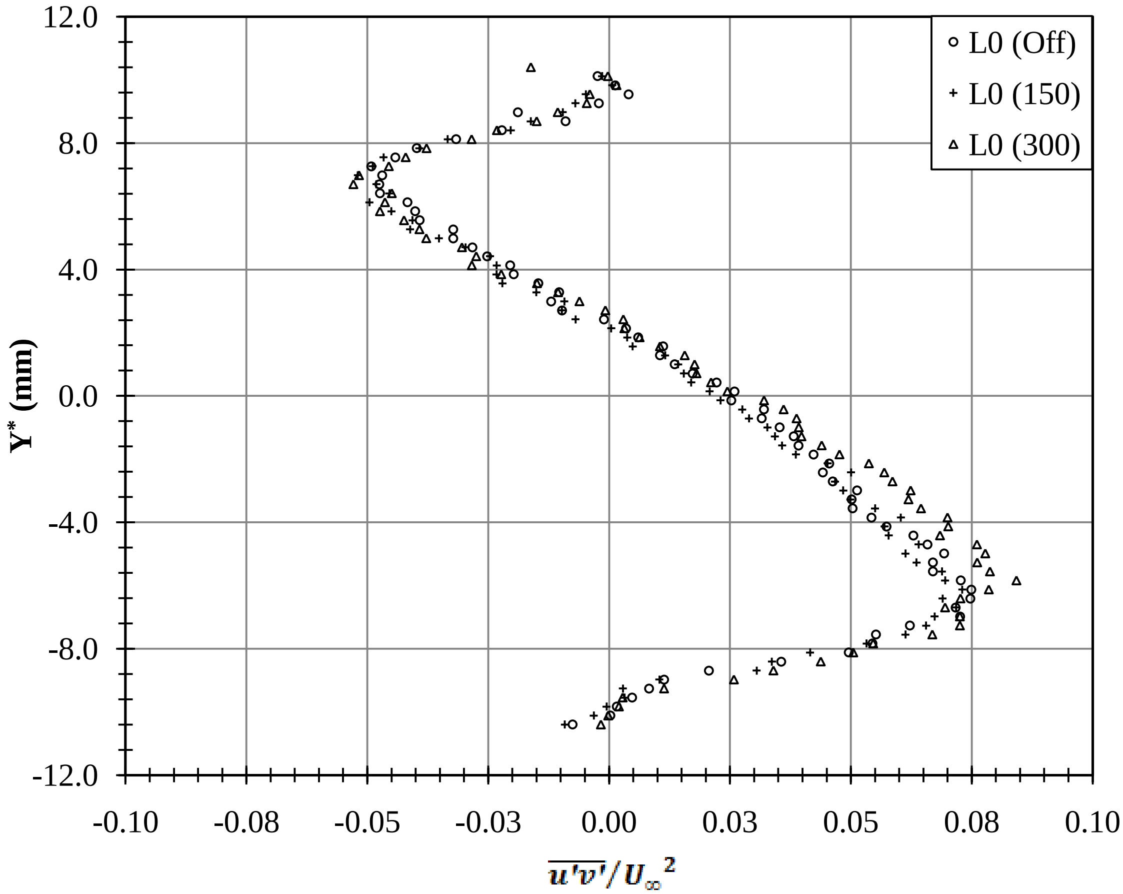

Fig. M-23 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L0, Left (1-10)**

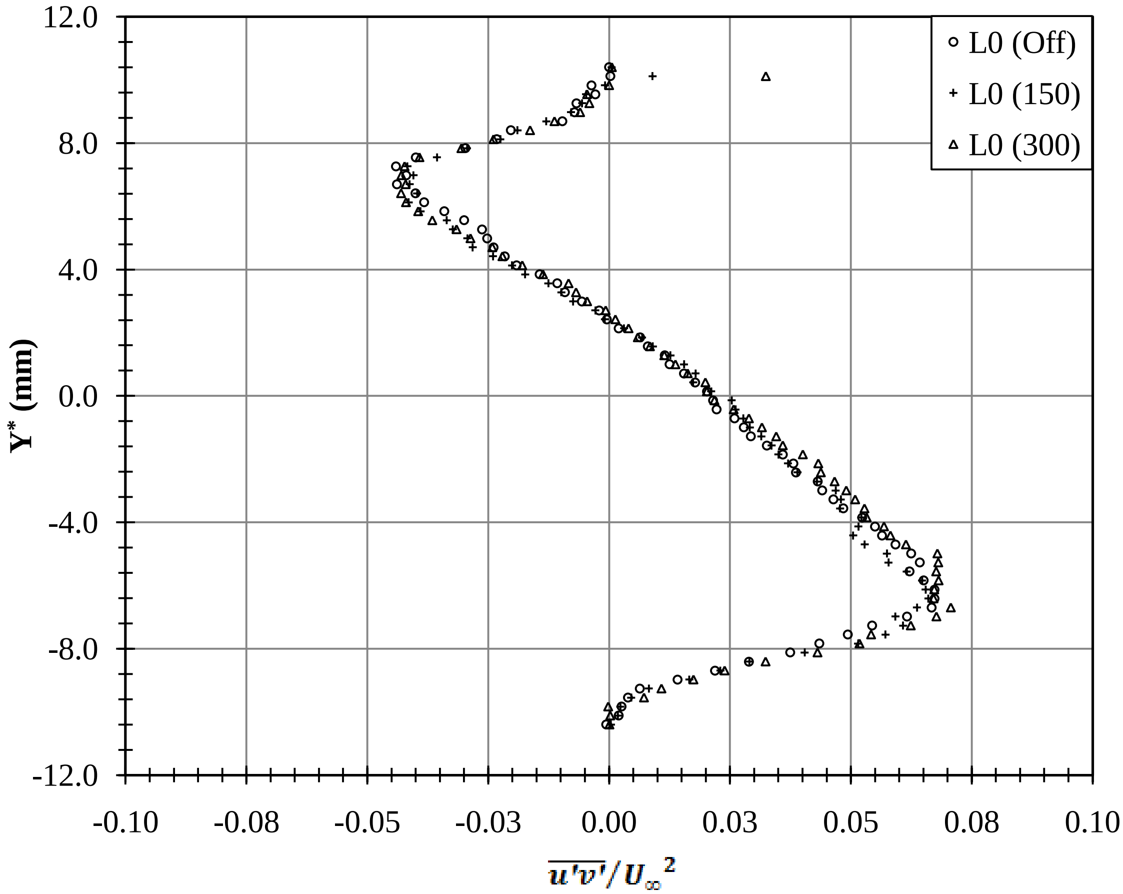

Fig. M-24 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L0, Center (46-55)**

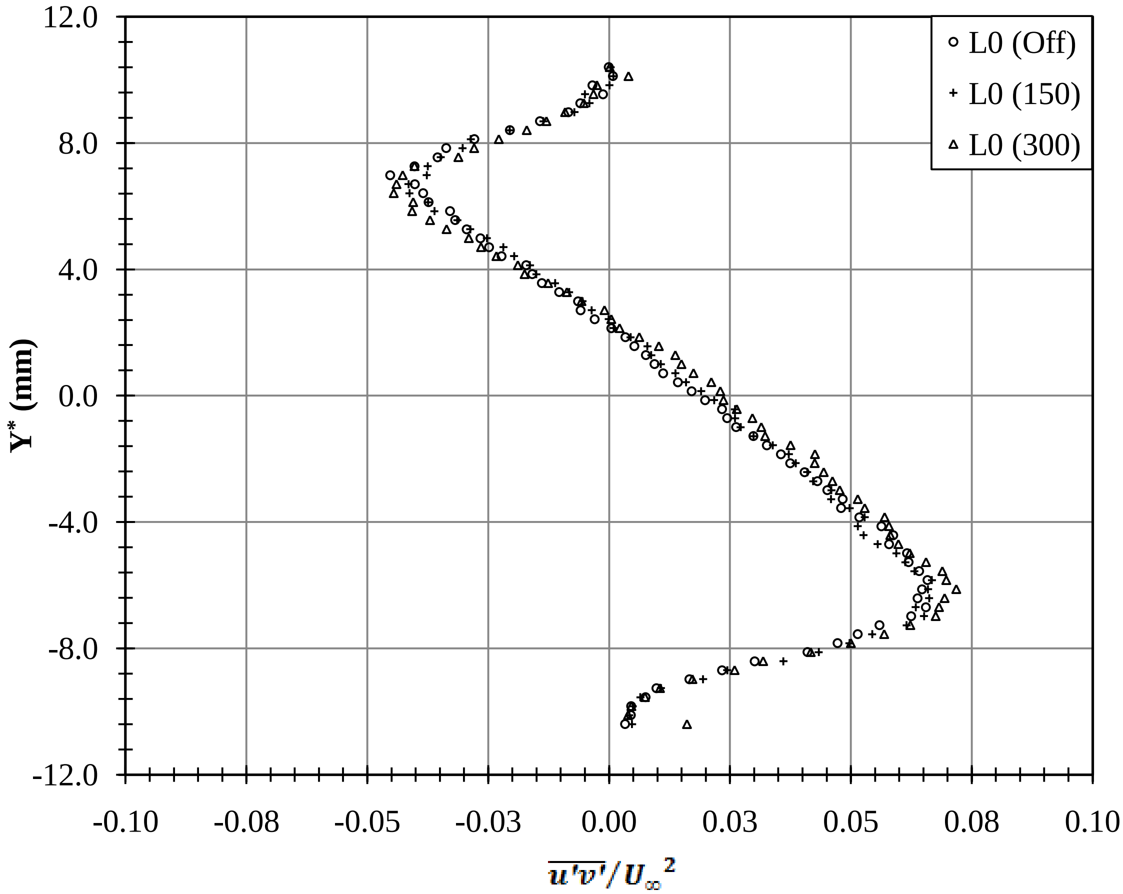

Fig. M-25 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L0, Right (71-80)**

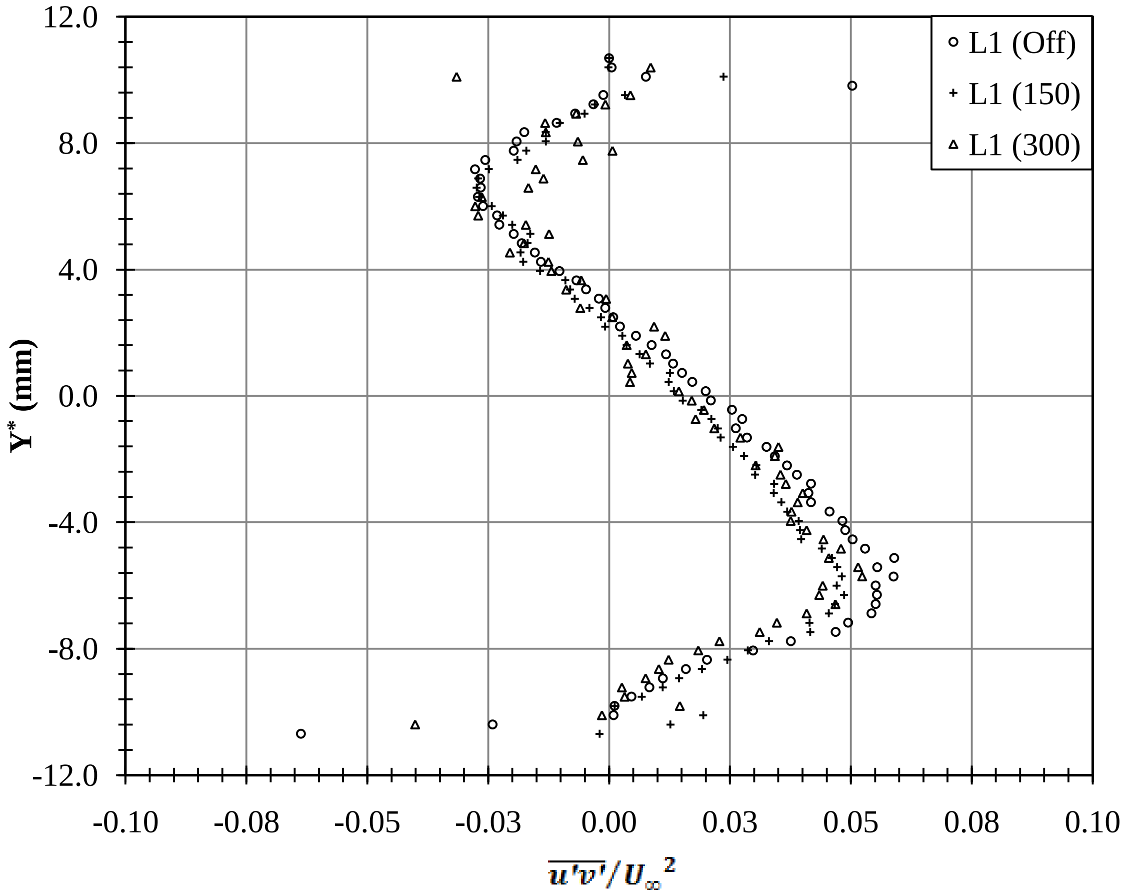

Fig. M-26 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L1, Left (1-10)**

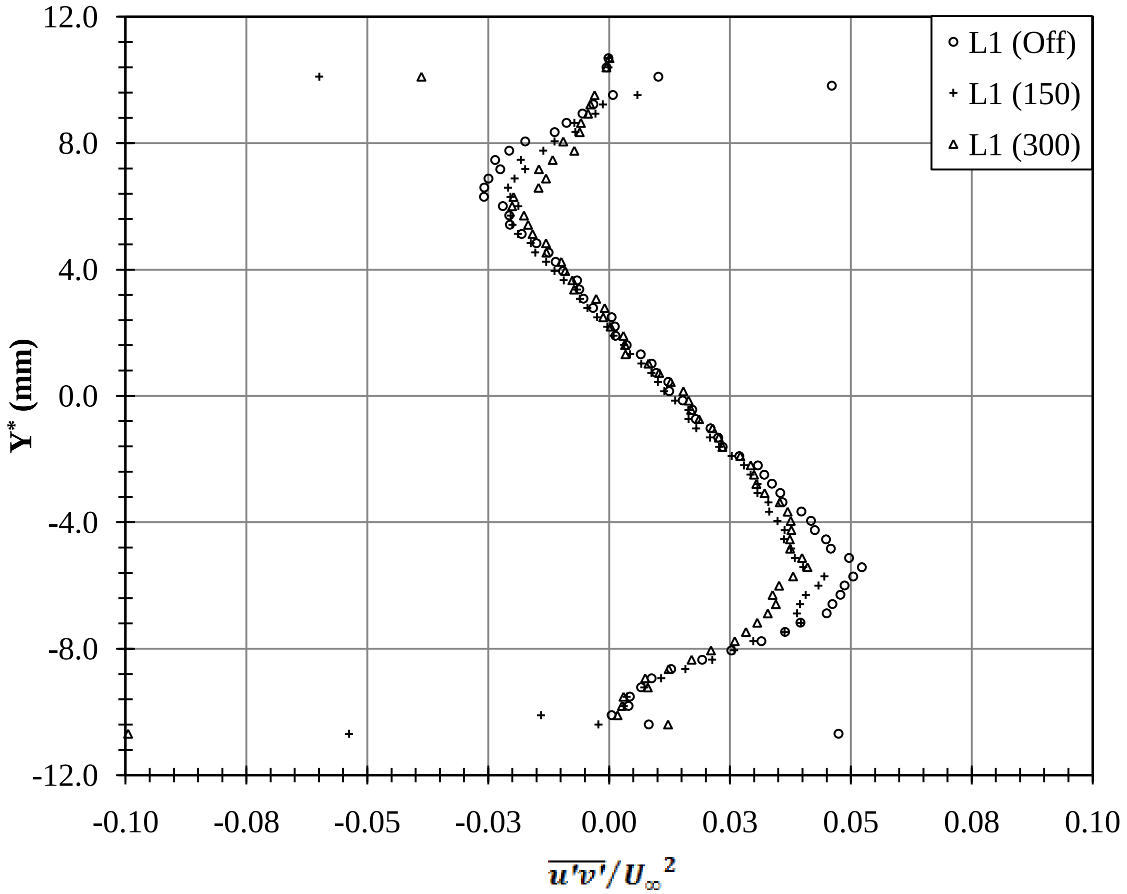

Fig. M-27 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L1, Center (46-55)**

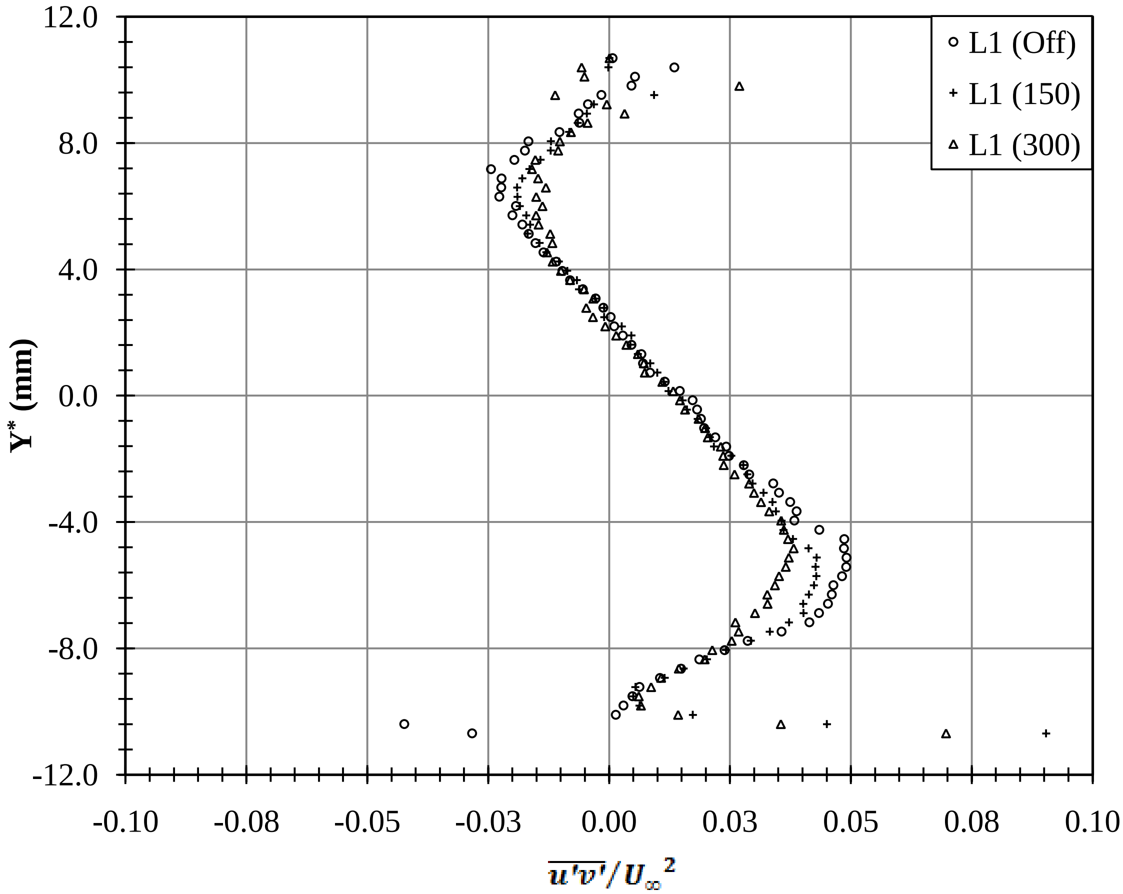

Fig. M-28 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L1, Right (71-80)**

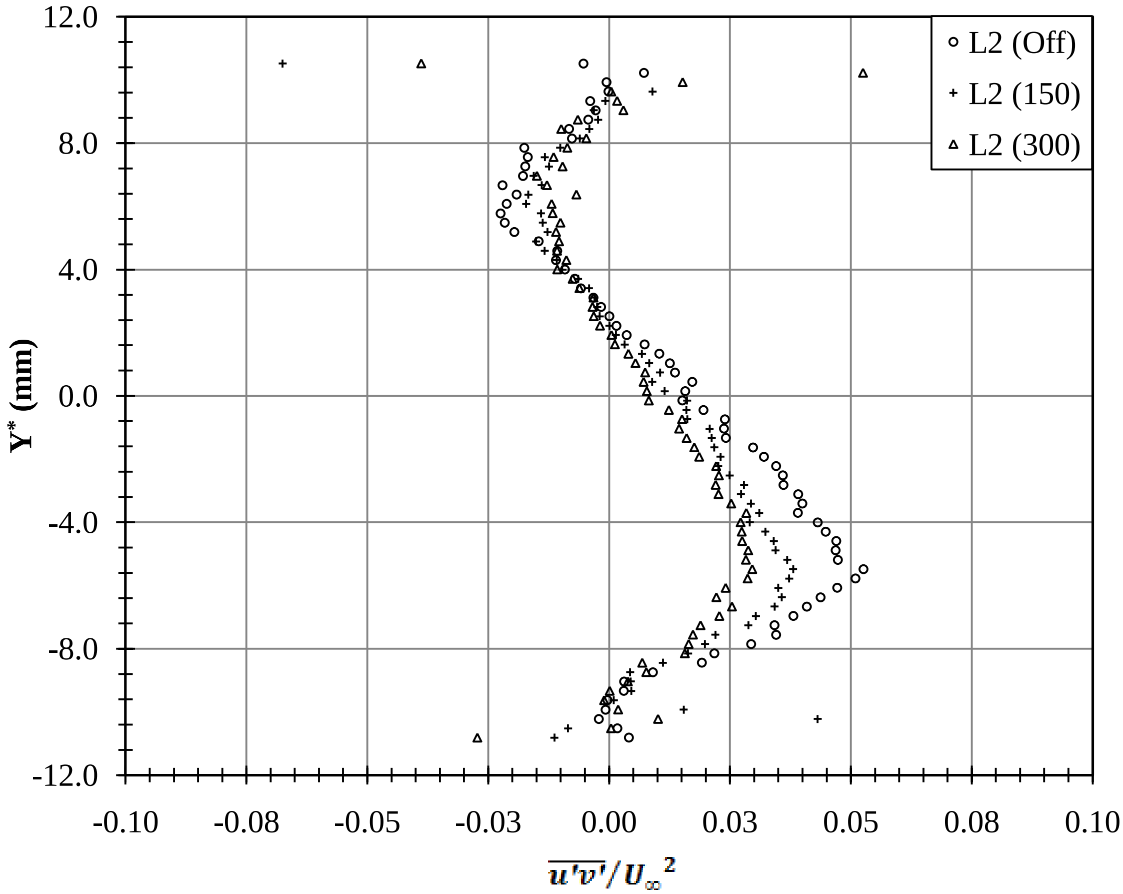

Fig. M-29 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L2, Left (1-10)**

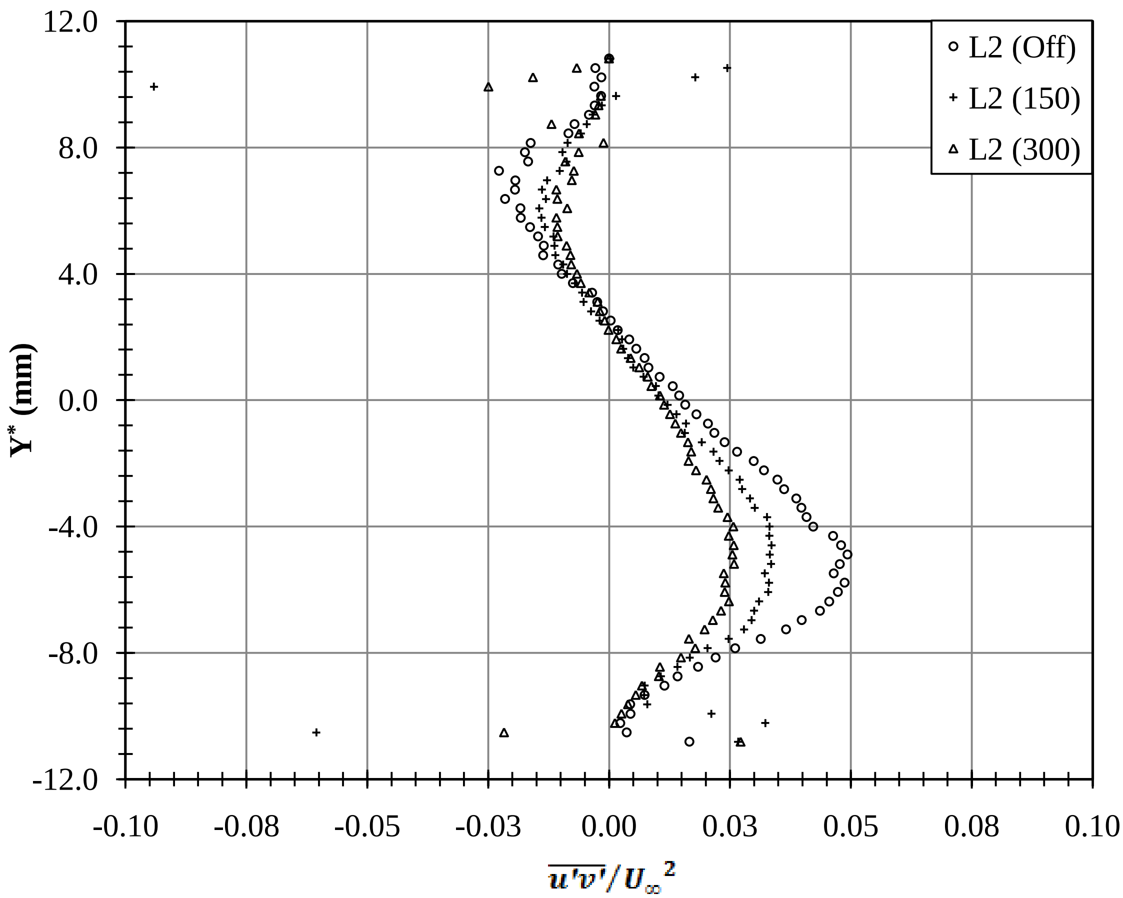

Fig. M-30 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L2, Center (46-55)**

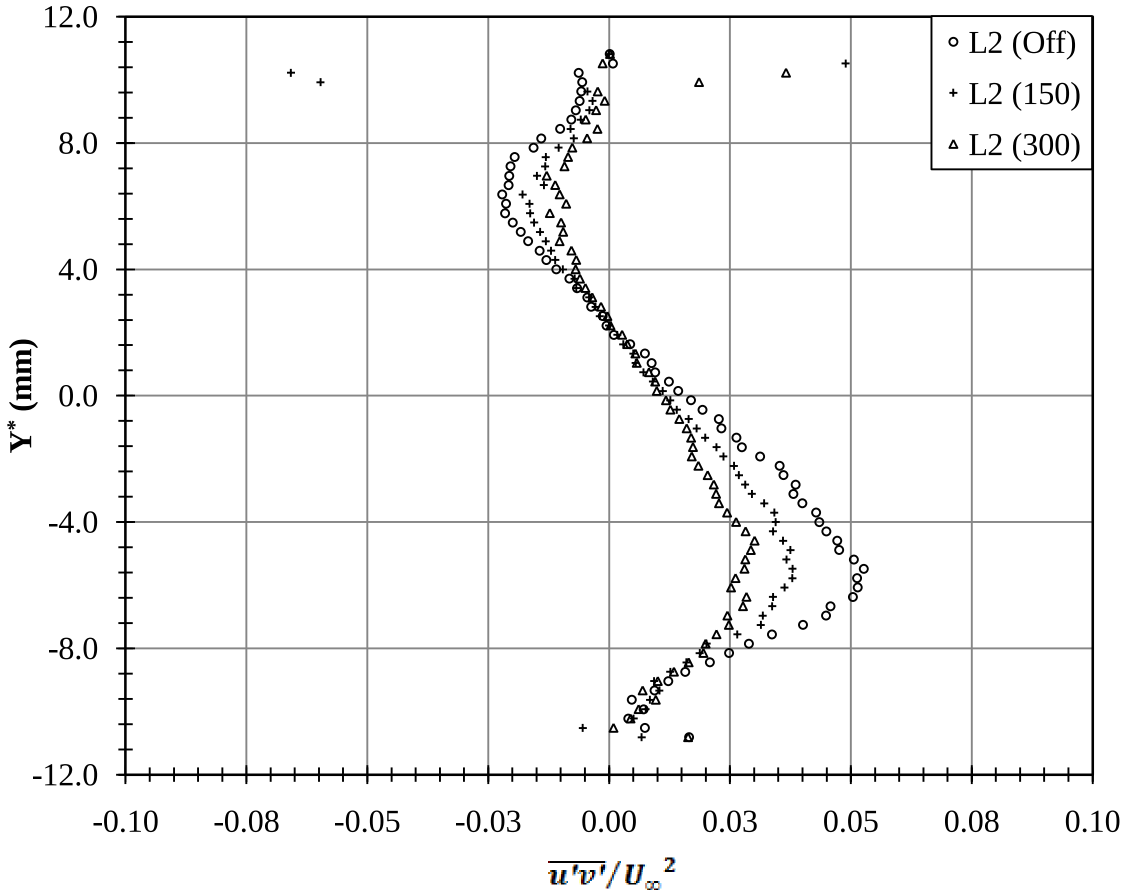

Fig. M-31 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L2, Right (71-80)**

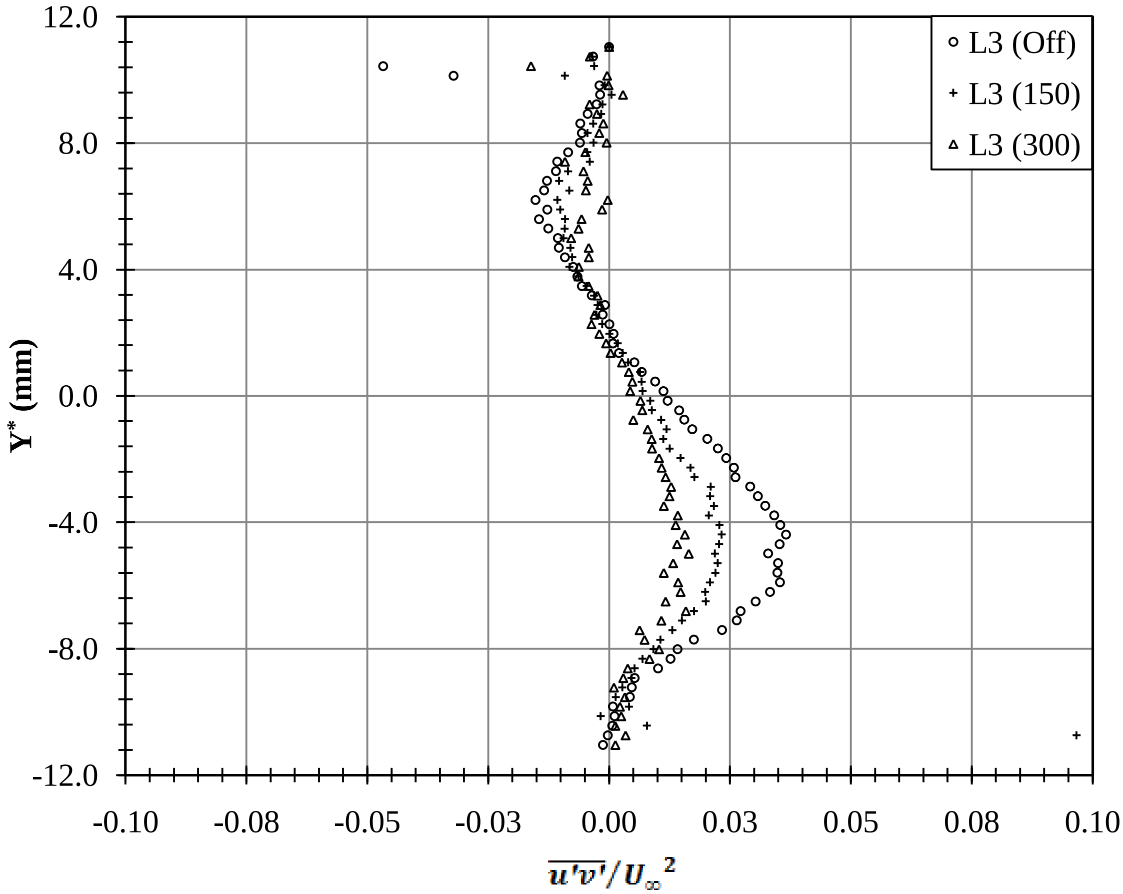

Fig. M-32 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L3, Left (1-10)**

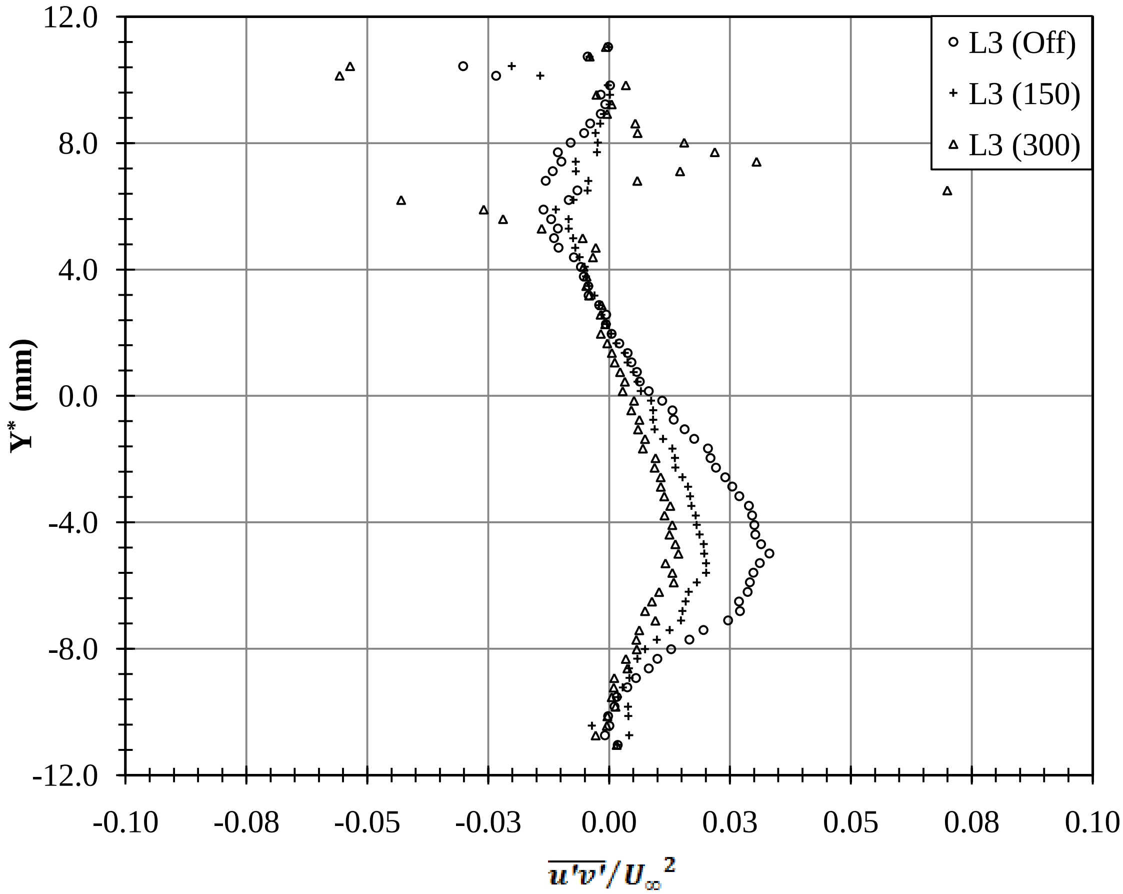

Fig. M-33 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L3, Center (46-55)**

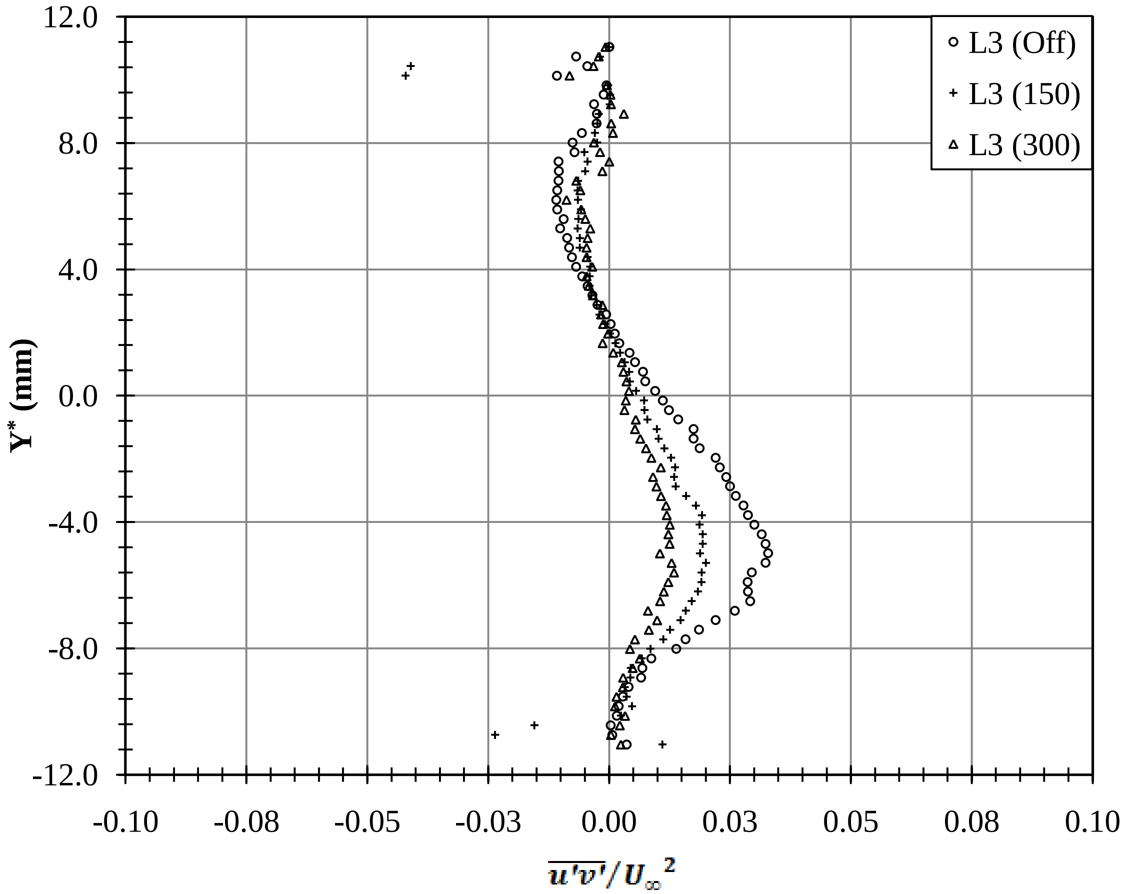

Fig. M-34 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L3, Right (71-80)**

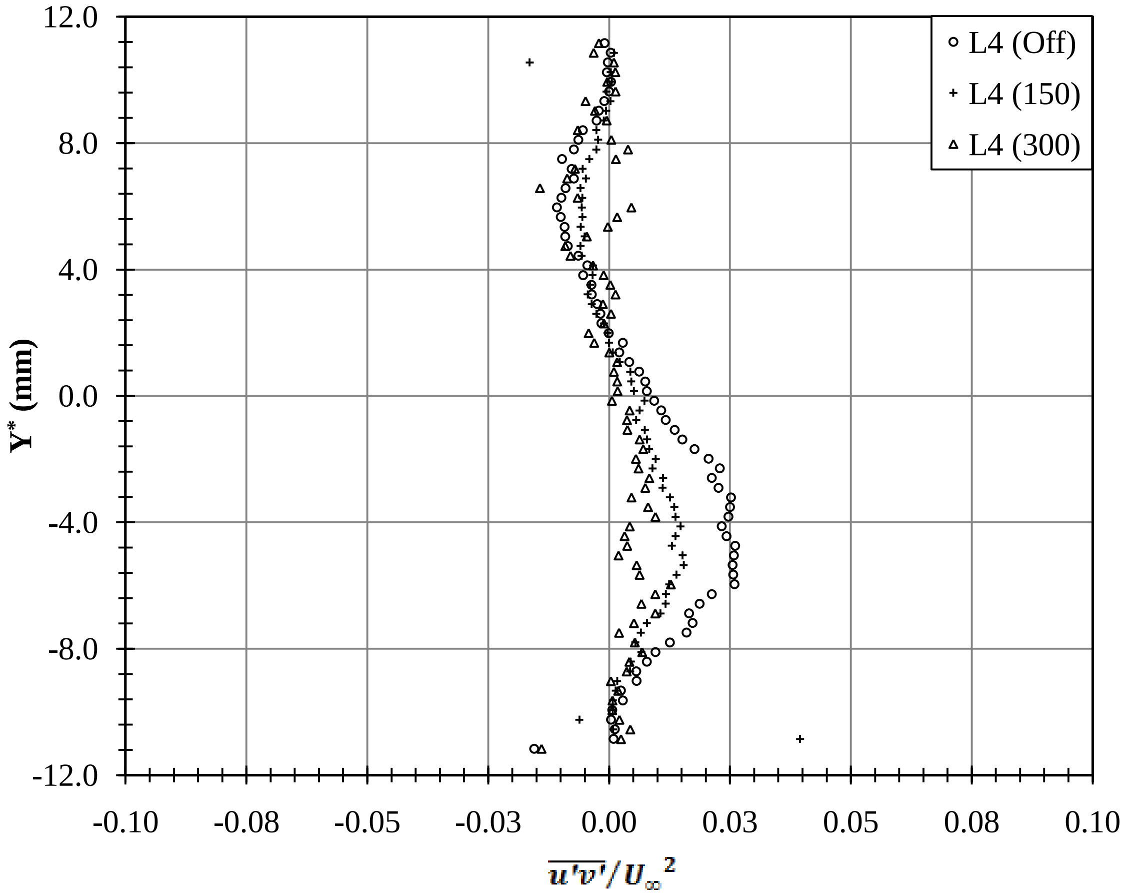

Fig. M-35 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L4, Left (1-10)**

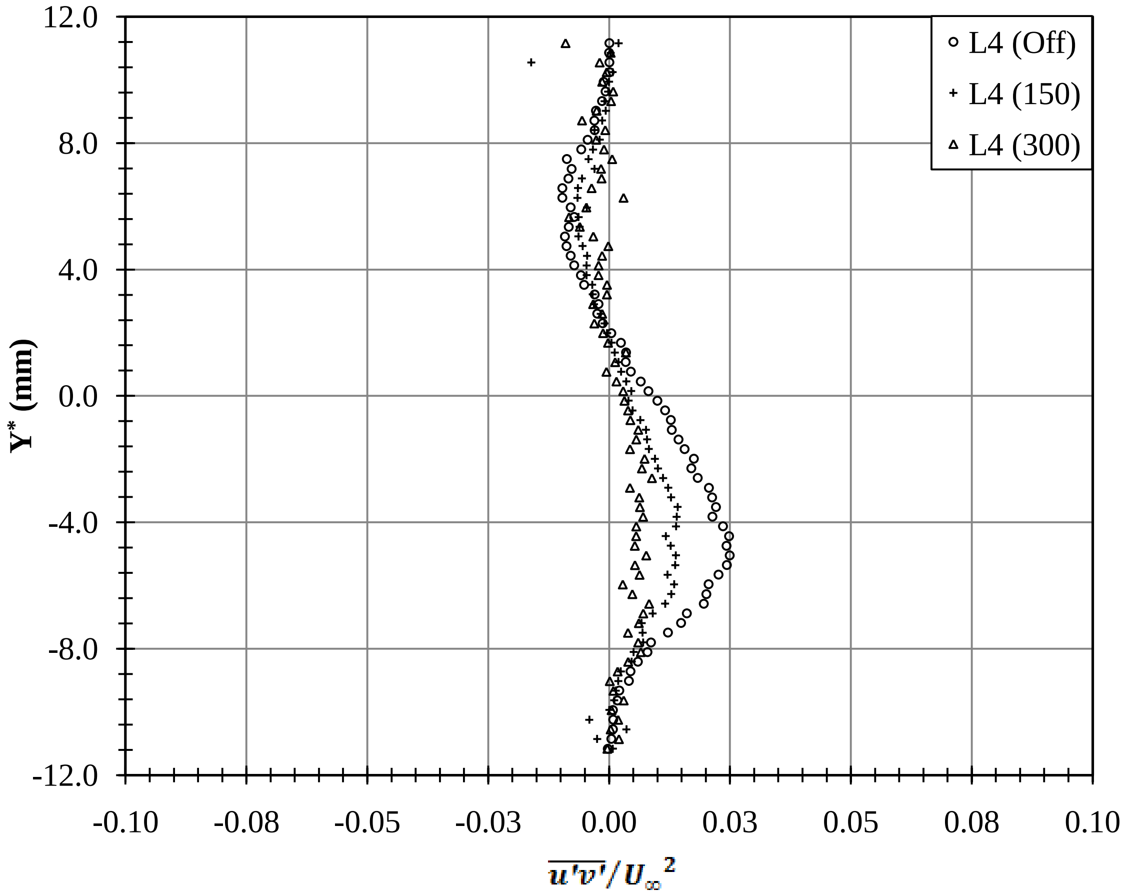

Fig. M-36 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L4, Center (42-51)**

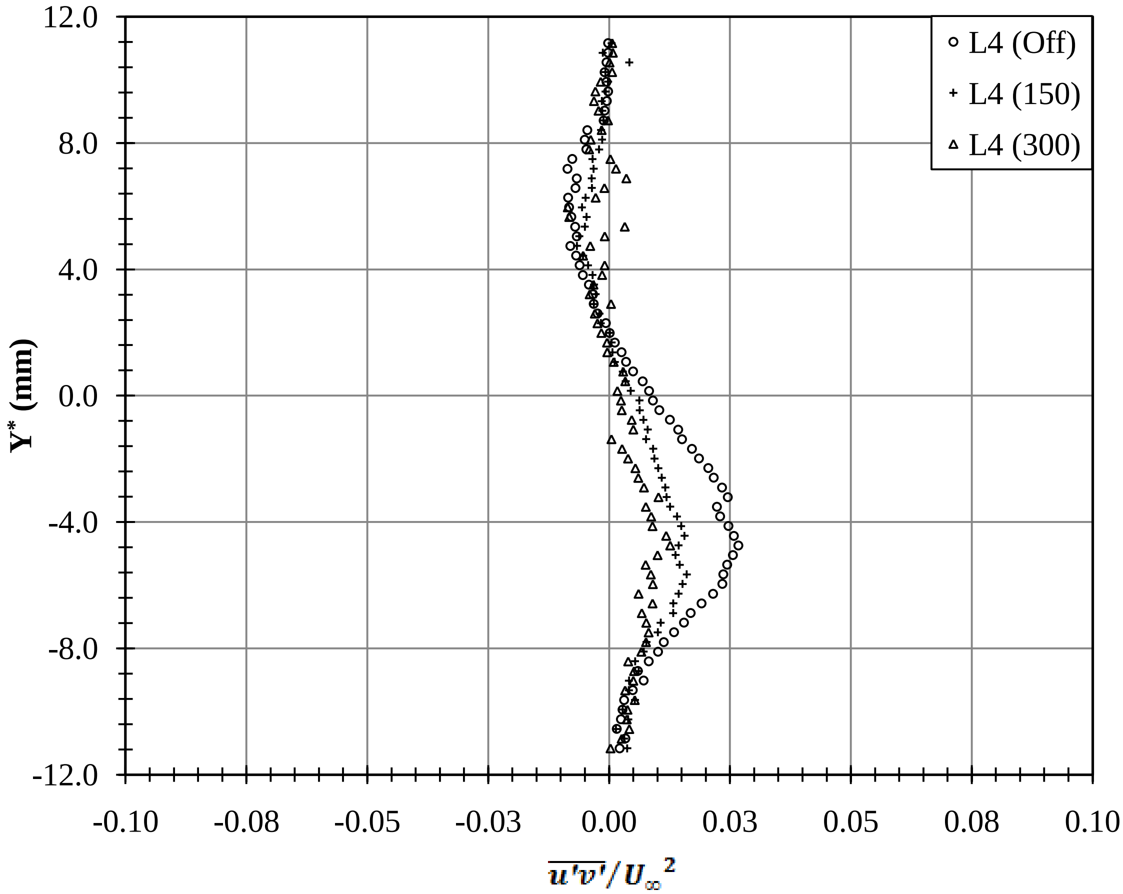

Fig. M-37 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L4, Right (71-80)**

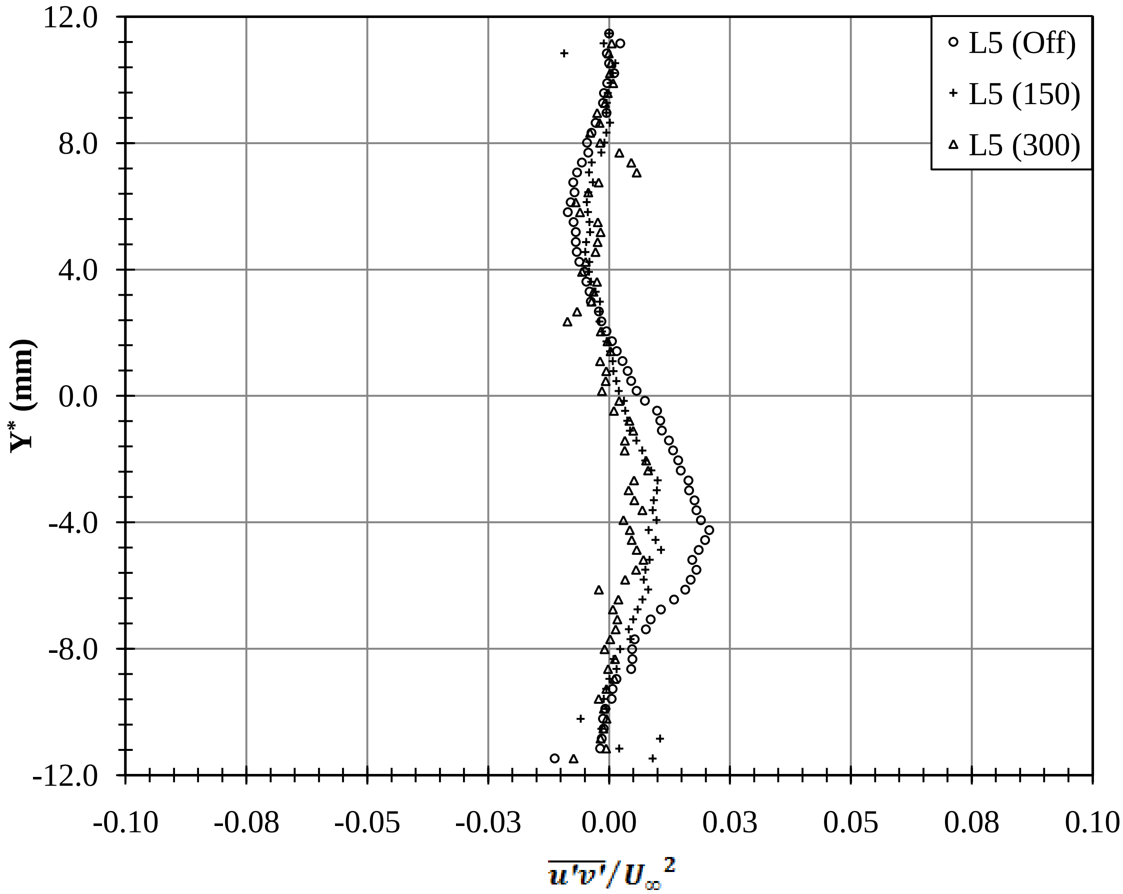

Fig. M-38 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L5, Left (1-10)**

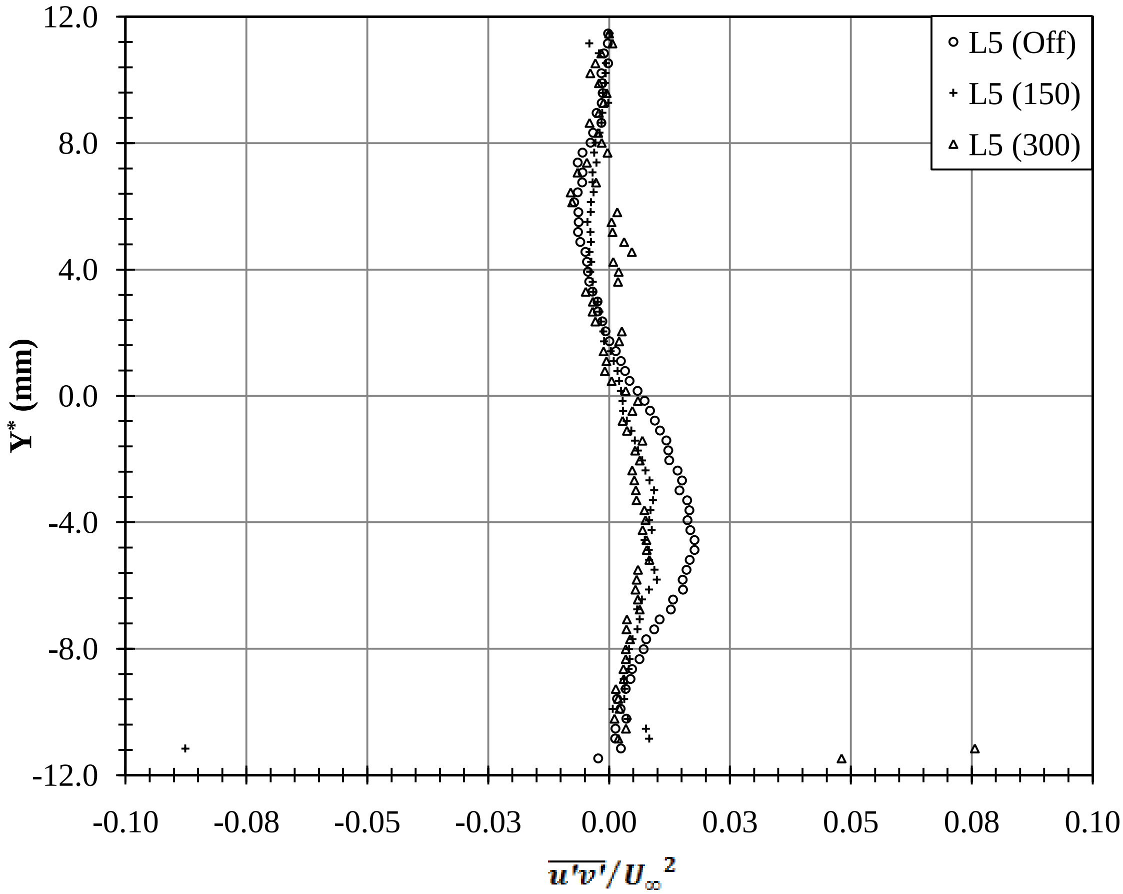

Fig. M-39 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L5, Center (46-55)**

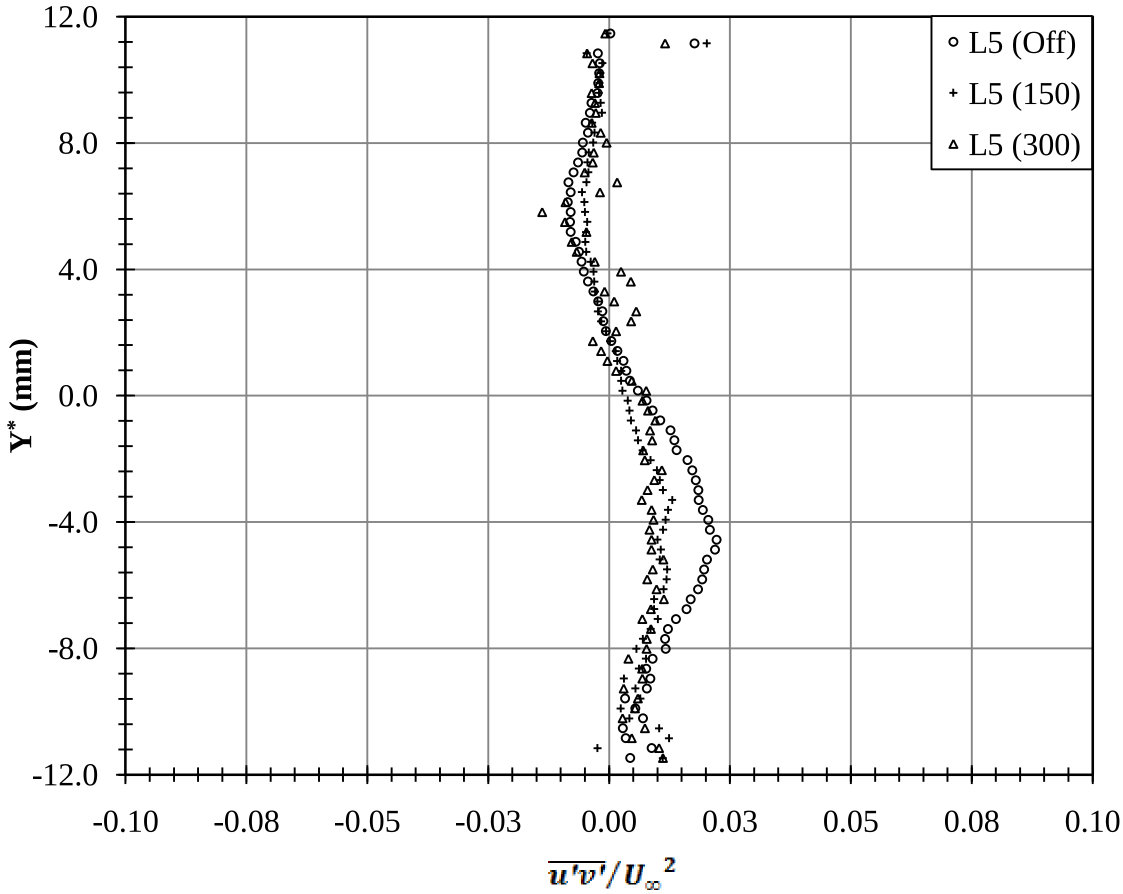

Fig. M-40 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L5, Right (71-80)**

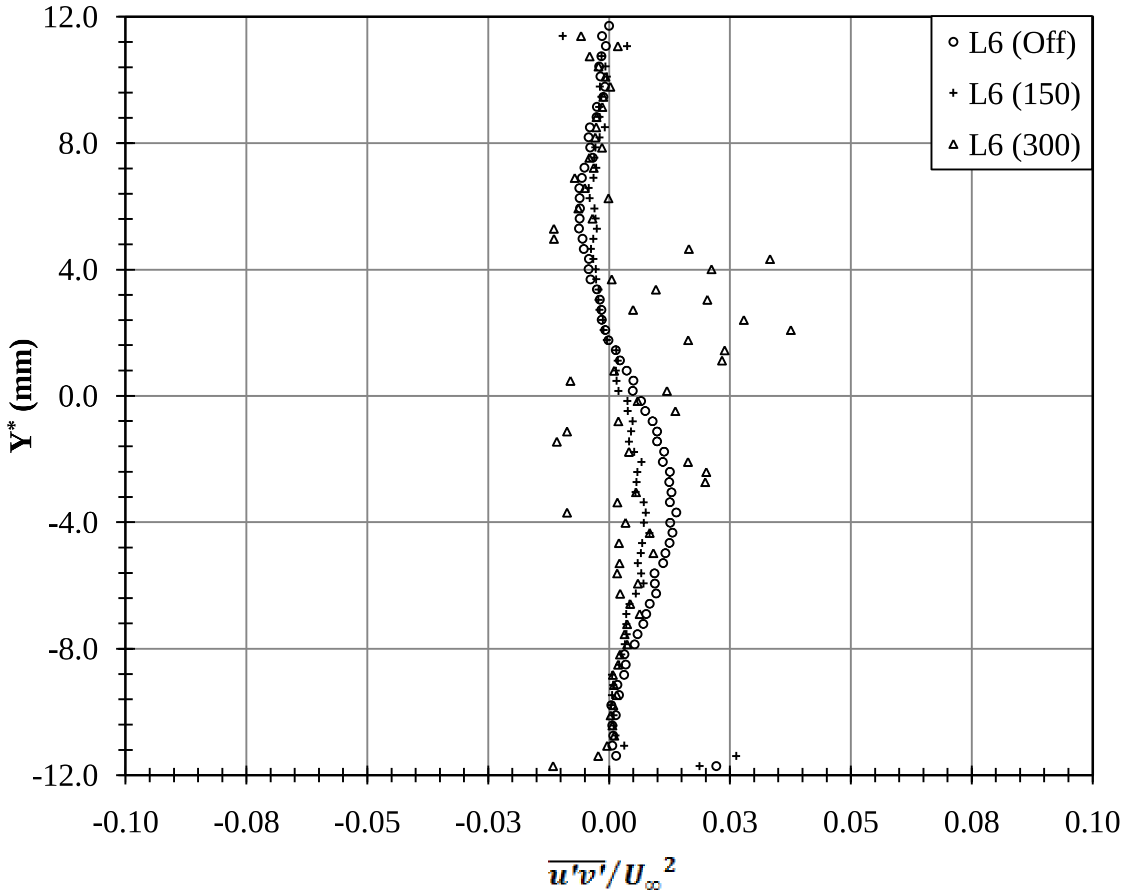

Fig. M-41 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L6, Left (1-10)**

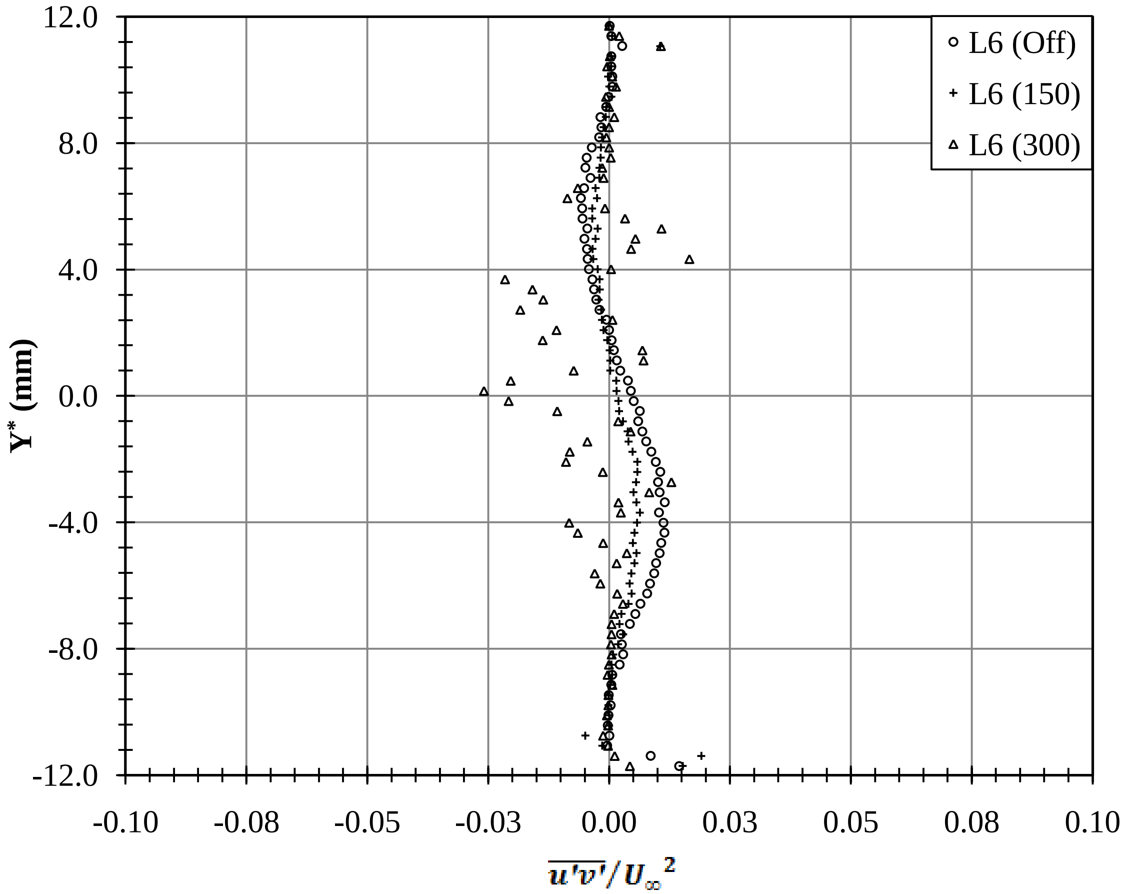

Fig. M-42 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L6, Center (46-55)**

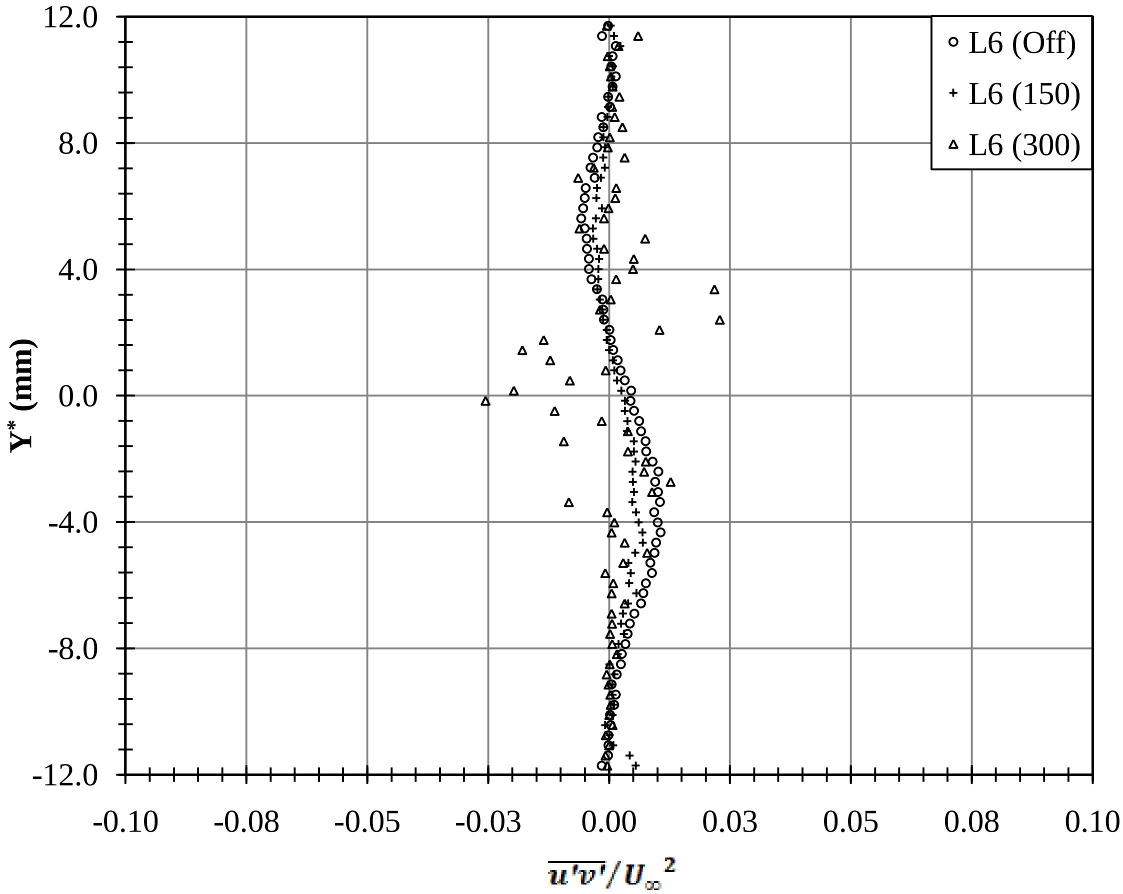

Fig. M-43 $\overline{u'v'}/U_\infty{}^2$**, Grid #2, L6, Right (71-80)**

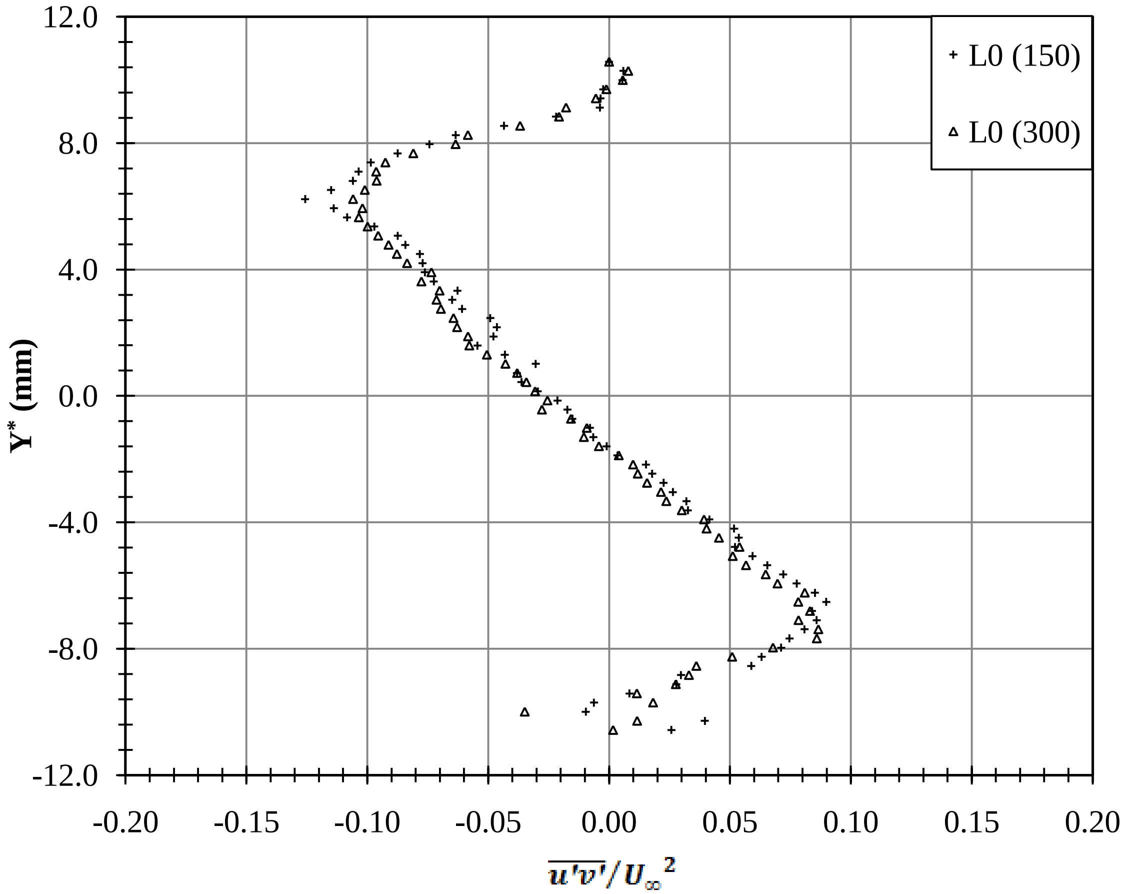

Fig. M-44 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L0, Left (1-10), Equilibrated**

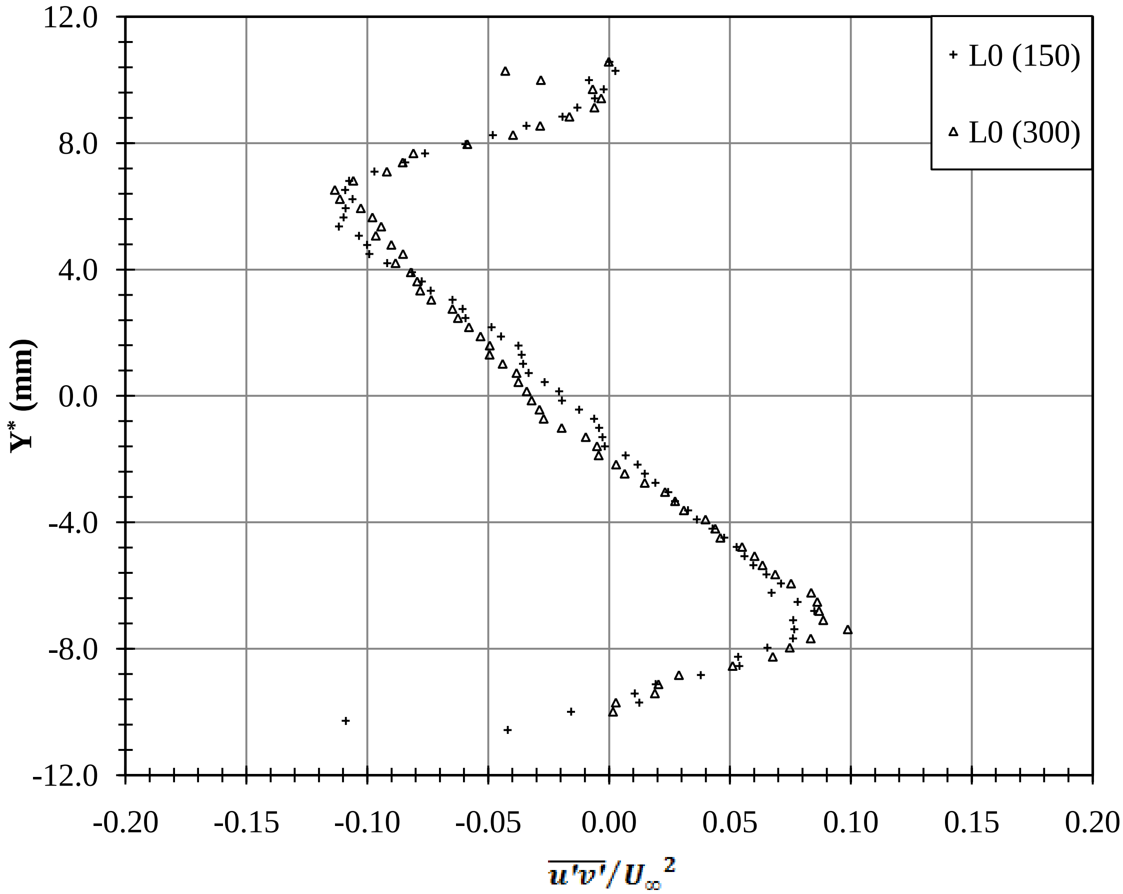

Fig. M-45 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L0, Center (46-55), Equilibrated**

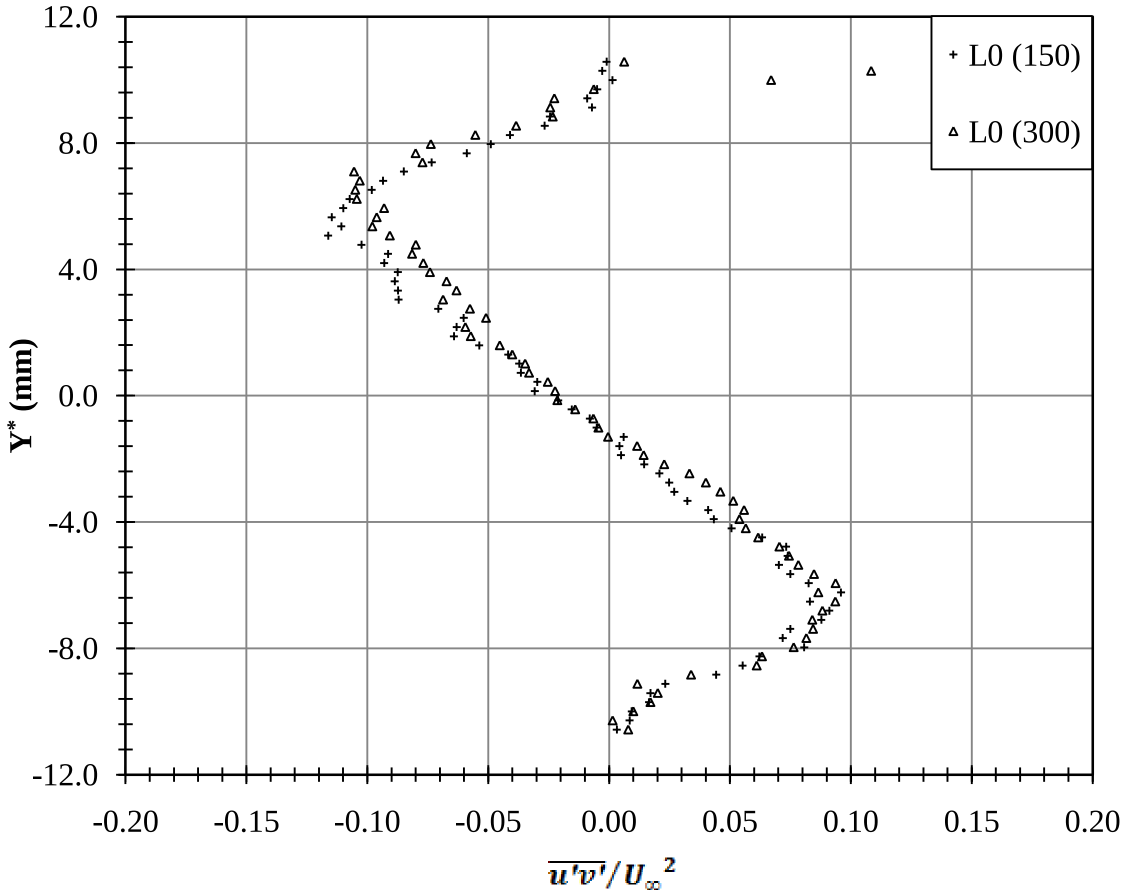

Fig. M-46 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L0, Right (71-80), Equilibrated**

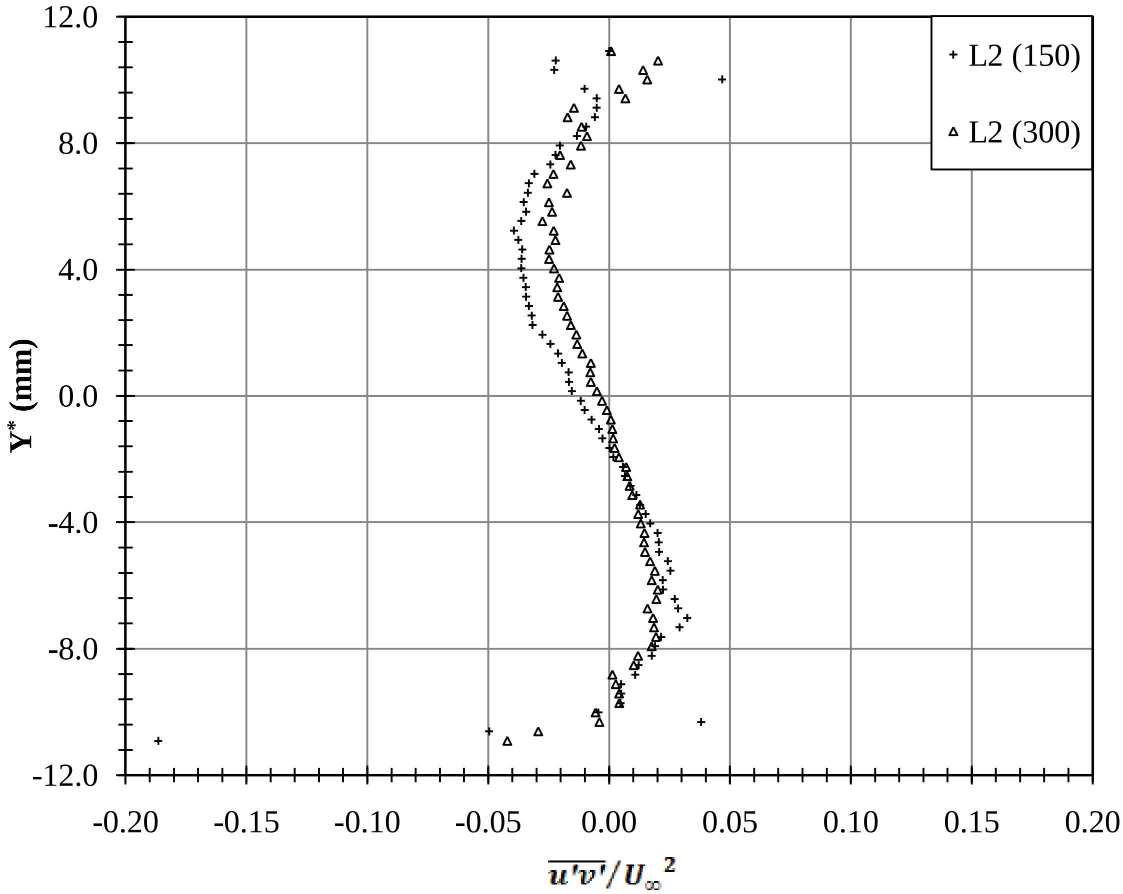

Fig. M-47 $\overline{u'v'}/U_\infty^{\;2}$, Grid #1, L2, Left (1-10), Equilibrated

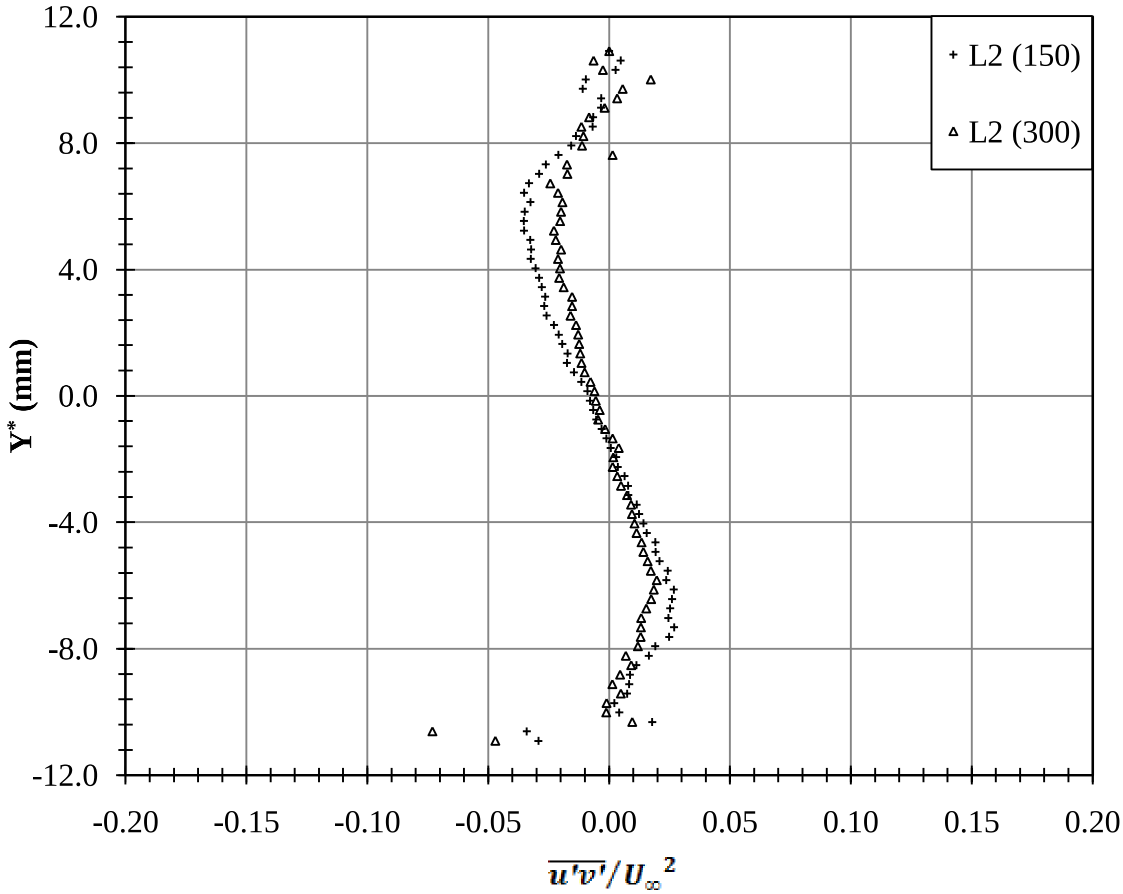

Fig. M-48 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L2, Center (46-55), Equilibrated**

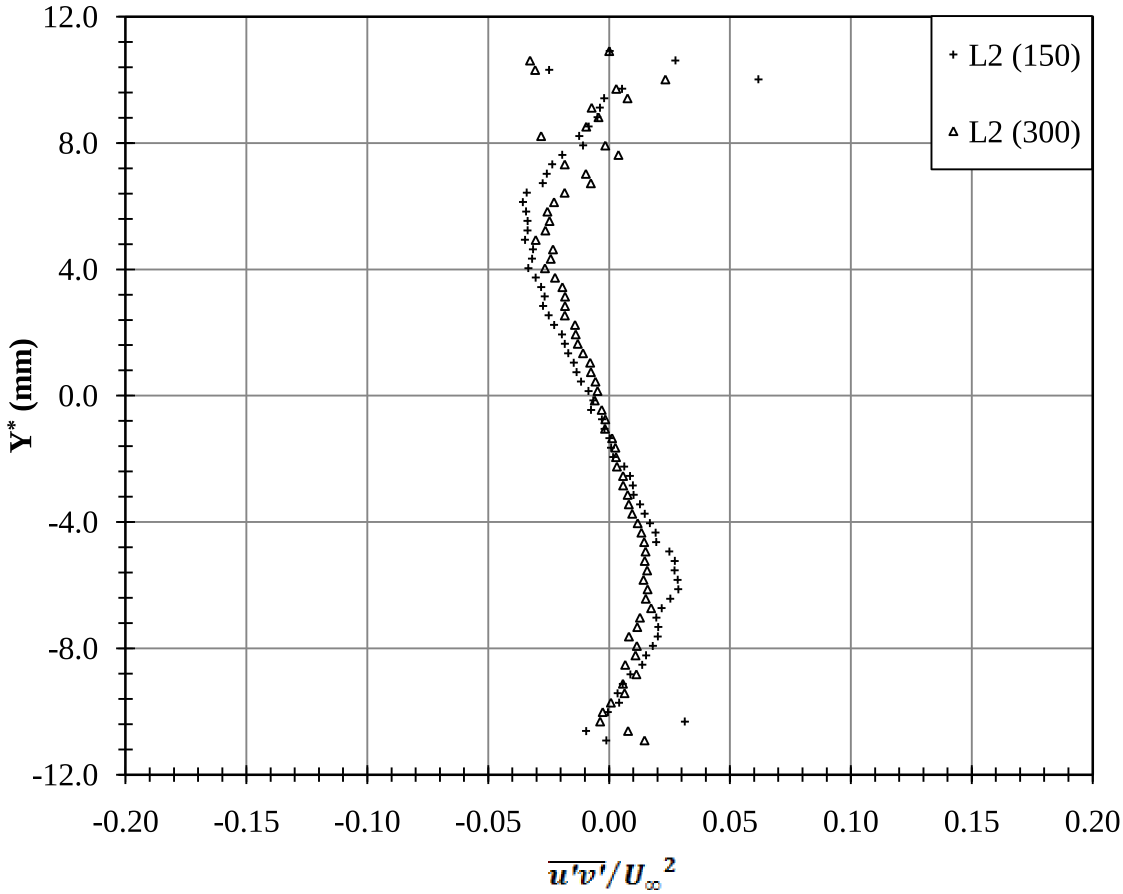

Fig. M-49 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L2, Right (71-80), Equilibrated**

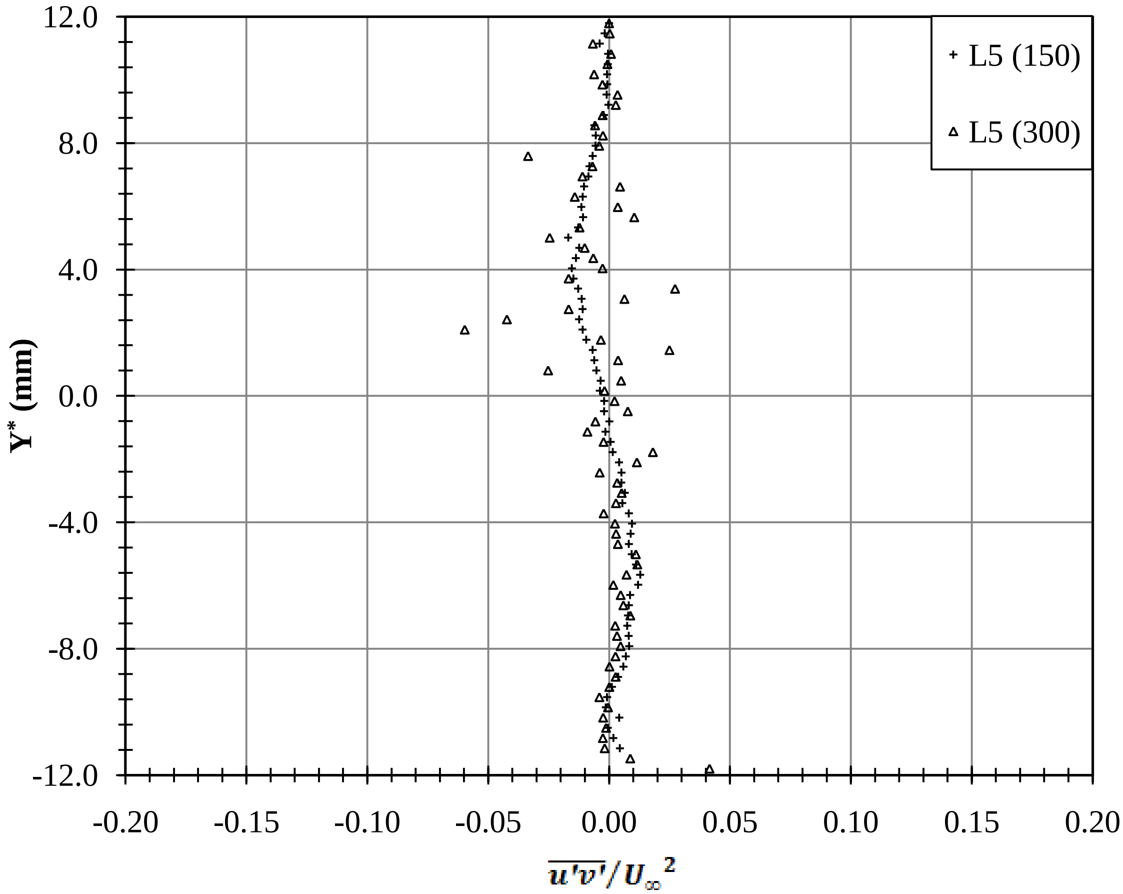

Fig. M-50 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L5, Left (1-10), Equilibrated**

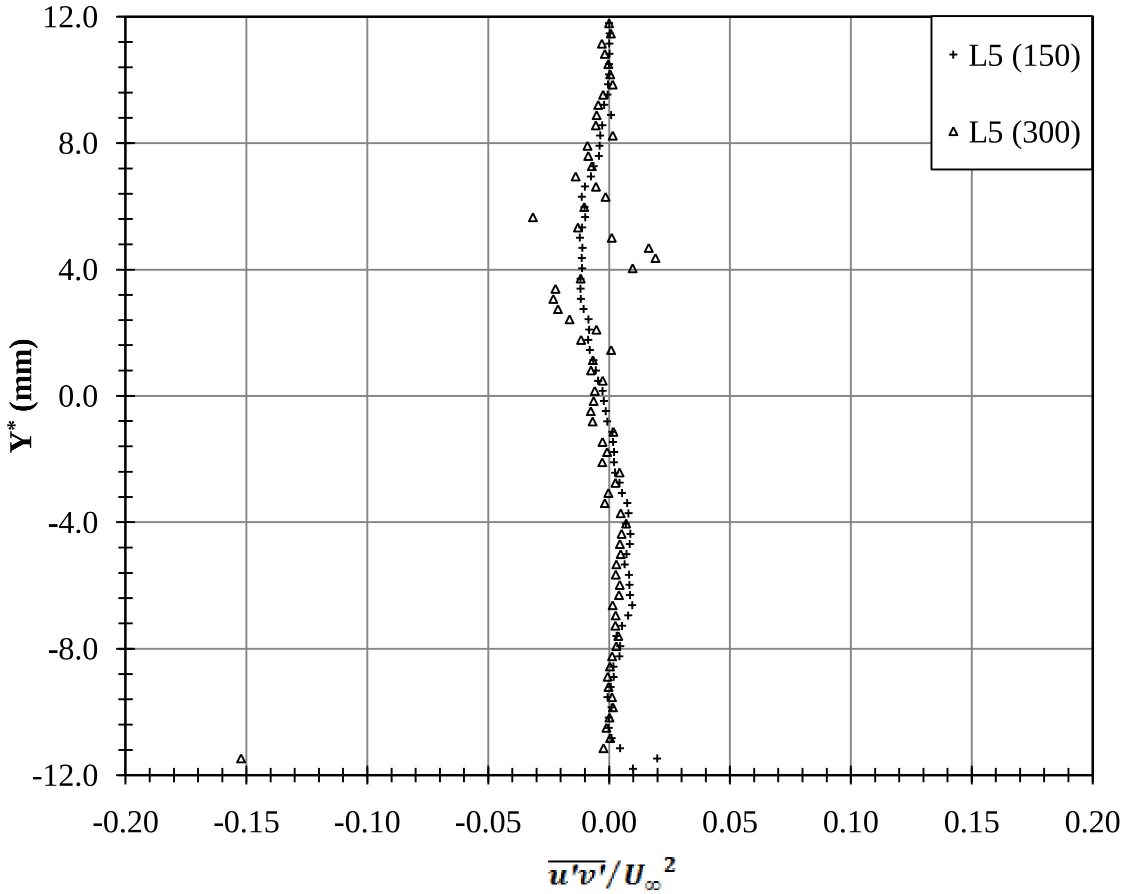

Fig. M-51 $\overline{u'v'}/U_\infty{}^2$**, Grid #1, L5, Center (46-55), Equilibrated**

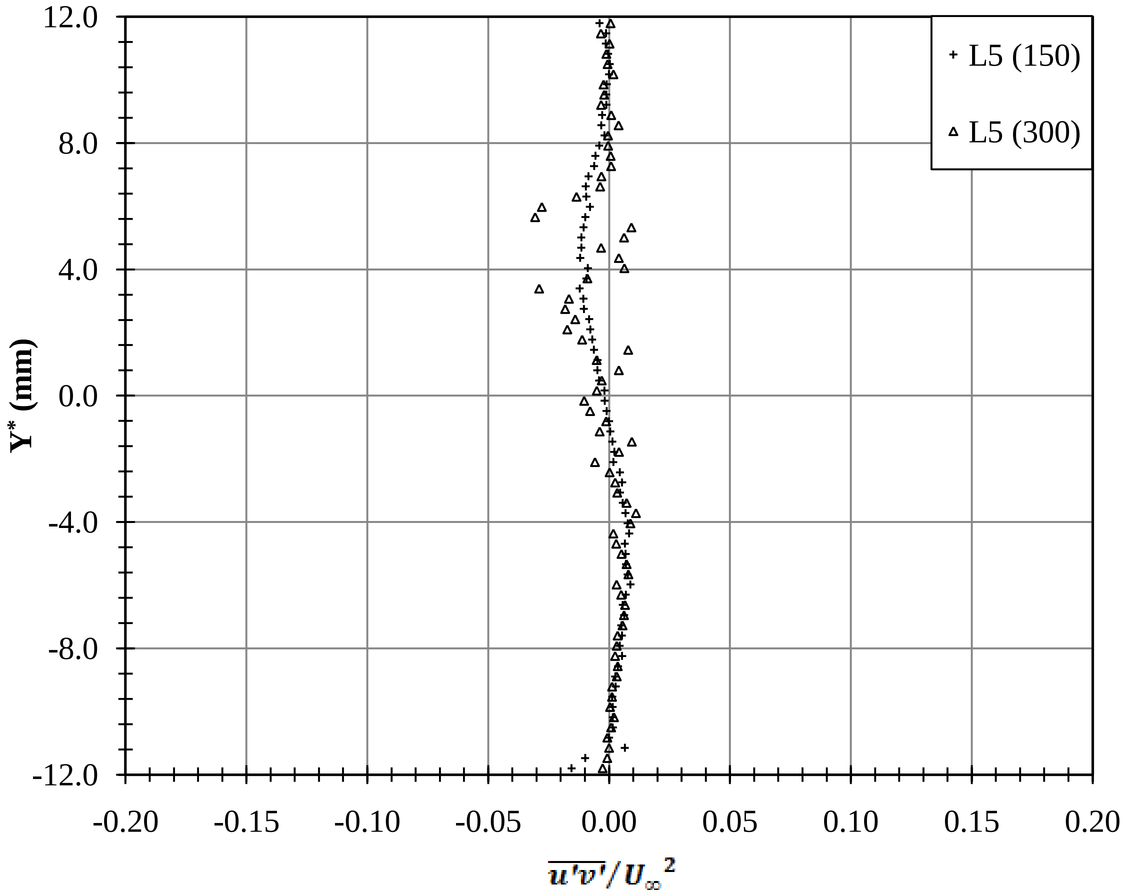

Fig. M-52 $\overline{u'v'}/U_\infty^{\,2}$**, Grid #1, L5, Right (71-80), Equilibrated**

APPENDIX N

TABULATED PROFILE DATA

Mean Velocities, Fluctuating Velocities, TKE, and Temperatures

Units

$Y^{*}(mm),\ Y\ (mm),\ \overline{u}\ (m/s),\ \overline{v}\ (m/s)$

$\overline{u'u'}\ (m^2/s^2),\ \overline{v'v'}\ (m^2/s^2),\ \overline{u'v'}\ (m^2/s^2)$

TABLE Page

TABLE Page

Table N-1 No Grid, L0, Plasma-Off, Center (40-60)

L0 (Off)							$U_\infty =$	55.08	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.52	21.04	0.66	0.99	10.54	3.93	0.36	5.89	3.60	0.012
-10.23	20.75	4.66	0.10	15.69	4.88	0.33	7.19	4.01	0.011
-9.94	20.46	10.04	-0.06	5.41	4.50	0.33	4.22	3.85	0.011
-9.65	20.17	13.43	-0.08	4.80	5.11	0.23	3.98	4.10	0.008
-9.37	19.88	17.31	-0.11	5.24	4.84	0.26	4.15	3.99	0.009
-9.08	19.60	21.13	-0.12	4.98	4.66	0.10	4.05	3.92	0.003
-8.79	19.31	24.75	-0.10	5.48	4.86	0.15	4.25	4.00	0.005
-8.50	19.02	28.35	-0.09	5.75	5.56	0.03	4.35	4.28	0.001
-8.21	18.73	31.72	-0.10	5.94	5.59	0.24	4.43	4.29	0.008
-7.93	18.44	34.94	-0.11	5.69	5.48	0.23	4.33	4.25	0.008
-7.64	18.16	37.94	-0.12	4.13	4.86	0.20	3.69	4.00	0.007
-7.35	17.87	40.44	-0.11	3.78	3.91	0.10	3.53	3.59	0.003
-7.06	17.58	43.08	-0.09	2.76	2.94	0.00	3.01	3.11	0.000
-6.77	17.29	45.06	-0.12	2.46	3.22	0.04	2.85	3.26	0.001
-6.48	17.00	46.83	-0.12	2.93	3.70	0.24	3.11	3.49	0.008
-6.20	16.71	48.45	-0.11	2.91	3.71	0.08	3.10	3.50	0.003
-5.91	16.43	50.04	-0.09	2.19	3.30	0.07	2.69	3.30	0.002
-5.62	16.14	51.18	-0.09	1.75	3.06	0.08	2.40	3.17	0.003
-5.33	15.85	52.07	-0.09	1.51	2.99	0.10	2.23	3.14	0.003
-5.04	15.56	52.76	-0.15	1.58	2.88	0.08	2.28	3.08	0.003
-4.76	15.27	53.31	-0.15	1.66	3.00	0.16	2.34	3.15	0.005
-4.47	14.99	53.75	-0.14	1.80	3.00	0.18	2.44	3.15	0.006
-4.18	14.70	54.10	-0.13	1.94	3.27	0.07	2.53	3.28	0.002
-3.89	14.41	54.35	-0.12	1.97	3.15	-0.02	2.55	3.22	-0.001
-3.60	14.12	54.56	-0.12	2.03	3.44	0.02	2.59	3.37	0.001
-3.31	13.83	54.70	-0.14	2.11	3.94	0.15	2.64	3.61	0.005
-3.03	13.54	54.81	-0.15	2.17	3.34	0.07	2.67	3.32	0.002
-2.74	13.26	54.89	-0.13	2.22	3.77	-0.03	2.71	3.53	-0.001
-2.45	12.97	54.97	-0.10	2.22	4.05	0.08	2.71	3.65	0.002
-2.16	12.68	55.01	-0.11	2.21	4.43	0.07	2.70	3.82	0.002
-1.87	12.39	55.02	-0.14	2.21	4.03	0.11	2.70	3.64	0.004
-1.59	12.10	55.04	-0.13	2.28	3.85	0.02	2.74	3.56	0.001
-1.30	11.82	55.06	-0.15	2.26	4.14	0.07	2.73	3.69	0.002
-1.01	11.53	55.07	-0.14	2.37	4.60	0.12	2.79	3.89	0.004
-0.72	11.24	55.08	-0.11	2.36	4.44	0.04	2.79	3.83	0.001
-0.43	10.95	55.06	-0.10	2.24	3.98	0.00	2.72	3.62	0.000
-0.14	10.66	55.08	-0.12	2.25	3.80	-0.14	2.72	3.54	-0.005
0.14	10.37	55.08	-0.11	2.29	4.10	-0.05	2.74	3.67	-0.002
0.43	10.09	55.07	-0.12	2.22	4.36	0.16	2.70	3.79	0.005
0.72	9.80	55.05	-0.14	2.28	4.33	0.11	2.74	3.78	0.004
1.01	9.51	55.06	-0.13	2.27	3.80	0.07	2.73	3.54	0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
1.30	9.22	55.05	-0.11	2.21	3.94	0.07	2.70	3.60	0.002
1.59	8.93	55.02	-0.09	2.05	3.27	0.10	2.60	3.28	0.003
1.87	8.65	54.96	-0.09	2.07	2.78	0.15	2.61	3.02	0.005
2.16	8.36	54.90	-0.11	2.13	3.33	-0.05	2.65	3.31	-0.002
2.45	8.07	54.83	-0.09	2.24	4.07	-0.06	2.72	3.66	-0.002
2.74	7.78	54.71	-0.11	2.11	4.11	-0.07	2.64	3.68	-0.002
3.03	7.49	54.56	-0.12	1.93	4.12	-0.04	2.52	3.69	-0.001
3.31	7.20	54.36	-0.11	1.92	4.20	-0.12	2.51	3.72	-0.004
3.60	6.92	54.10	-0.12	1.83	3.89	0.00	2.46	3.58	0.000
3.89	6.63	53.78	-0.11	1.66	3.16	0.01	2.34	3.23	0.000
4.18	6.34	53.38	-0.13	1.60	3.39	-0.02	2.30	3.34	-0.001
4.47	6.05	52.85	-0.13	1.55	2.92	-0.01	2.26	3.10	0.000
4.76	5.76	52.14	-0.15	1.70	3.18	-0.01	2.37	3.24	0.000
5.04	5.48	51.15	-0.14	2.24	3.93	0.05	2.72	3.60	0.002
5.33	5.19	50.06	-0.12	2.44	4.04	-0.11	2.84	3.65	-0.004
5.62	4.90	48.77	-0.11	2.85	4.52	0.03	3.07	3.86	0.001
5.91	4.61	47.29	-0.12	2.57	3.98	0.06	2.91	3.62	0.002
6.20	4.32	45.64	-0.12	2.87	4.30	-0.05	3.08	3.76	-0.002
6.48	4.03	43.67	-0.13	3.58	5.02	-0.15	3.44	4.07	-0.005
6.77	3.75	41.40	-0.13	3.78	5.40	0.05	3.53	4.22	0.002
7.06	3.46	39.00	-0.13	3.82	5.42	-0.22	3.55	4.23	-0.007
7.35	3.17	36.27	-0.12	4.42	5.76	-0.30	3.82	4.36	-0.010
7.64	2.88	33.35	-0.13	4.39	5.34	-0.14	3.80	4.20	-0.005
7.93	2.59	30.21	-0.09	5.12	6.53	-0.14	4.11	4.64	-0.005
8.21	2.31	26.86	-0.08	5.29	7.44	-0.27	4.17	4.95	-0.009
8.50	2.02	23.32	-0.07	5.86	7.79	-0.14	4.40	5.07	-0.005
8.79	1.73	19.72	-0.08	6.01	7.66	0.04	4.45	5.03	0.001
9.08	1.44	16.05	-0.02	6.93	8.17	-0.18	4.78	5.19	-0.006
9.37	1.15	12.48	0.05	10.55	7.86	-0.18	5.90	5.09	-0.006
9.65	0.86	8.26	0.10	21.22	9.22	-0.14	8.36	5.51	-0.005
9.94	0.58	1.55	-1.03	21.66	5.28	0.52	8.45	4.17	0.017
10.23	0.29	0.48	-1.64	25.79	7.36	-0.96	9.22	4.93	-0.032
10.52	0.00	0.68	0.12	0.85	0.48	-0.04	1.67	1.26	-0.001

Table N-2 Grid #1, L0, Plasma-Off, Left (1-10)

L0 (Off)							U_∞ =	26.63	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.47	20.95	1.16	-0.22	4.26	1.64	0.07	7.75	4.81	0.010
-10.19	20.66	1.70	-0.04	2.04	0.50	0.00	5.36	2.67	-0.001
-9.90	20.37	4.76	-0.05	3.06	0.89	0.00	6.57	3.55	0.001
-9.61	20.09	6.95	-0.02	3.67	1.05	0.03	7.19	3.85	0.005

-9.33	19.80	9.28	-0.02	4.79	0.93	0.14	8.22	3.62	0.020
-9.04	19.51	11.43	-0.02	6.27	0.83	0.22	9.40	3.42	0.032
-8.75	19.23	13.54	-0.03	7.74	0.79	0.39	10.45	3.34	0.055
-8.46	18.94	15.37	-0.03	8.82	0.86	0.50	11.15	3.48	0.071
-8.18	18.65	17.11	-0.02	9.44	0.85	0.58	11.54	3.45	0.082
-7.89	18.36	18.52	-0.02	9.48	0.89	0.61	11.56	3.53	0.086
-7.60	18.08	19.88	-0.02	8.95	0.78	0.66	11.23	3.33	0.093
-7.32	17.79	20.94	-0.01	8.21	0.77	0.68	10.76	3.30	0.096
-7.03	17.50	21.91	-0.01	7.48	0.77	0.69	10.27	3.28	0.097
-6.74	17.22	22.63	-0.01	6.92	0.74	0.66	9.88	3.23	0.093
-6.46	16.93	23.32	0.00	6.17	0.79	0.63	9.33	3.33	0.089
-6.17	16.64	23.84	0.01	5.64	0.90	0.60	8.92	3.57	0.085
-5.88	16.36	24.31	0.01	5.08	0.94	0.53	8.46	3.64	0.075
-5.60	16.07	24.66	0.01	4.70	0.96	0.54	8.14	3.67	0.076
-5.31	15.78	25.00	0.02	4.25	1.07	0.54	7.74	3.88	0.076
-5.02	15.49	25.27	0.02	3.88	1.13	0.50	7.39	3.99	0.070
-4.73	15.21	25.53	0.03	3.49	1.00	0.43	7.02	3.76	0.061
-4.45	14.92	25.73	0.04	3.21	1.05	0.40	6.73	3.85	0.057
-4.16	14.63	25.90	0.03	3.03	1.07	0.35	6.54	3.89	0.050
-3.87	14.35	26.04	0.03	2.83	1.10	0.29	6.31	3.94	0.041
-3.59	14.06	26.17	0.03	2.71	1.22	0.24	6.18	4.15	0.034
-3.30	13.77	26.26	0.03	2.58	1.20	0.25	6.03	4.10	0.035
-3.01	13.49	26.35	0.04	2.51	1.24	0.24	5.94	4.19	0.034
-2.73	13.20	26.43	0.04	2.41	1.30	0.19	5.83	4.28	0.027
-2.44	12.91	26.49	0.05	2.38	1.26	0.13	5.79	4.21	0.018
-2.15	12.63	26.54	0.06	2.32	1.29	0.12	5.72	4.27	0.017
-1.87	12.34	26.58	0.06	2.23	1.25	0.07	5.61	4.20	0.010
-1.58	12.05	26.61	0.06	2.20	1.28	0.04	5.56	4.24	0.006
-1.29	11.76	26.62	0.06	2.17	1.31	0.01	5.54	4.30	0.002
-1.00	11.48	26.63	0.07	2.16	1.31	-0.02	5.52	4.30	-0.003
-0.72	11.19	26.63	0.07	2.13	1.33	-0.05	5.48	4.33	-0.007
-0.43	10.90	26.62	0.07	2.12	1.40	-0.08	5.46	4.44	-0.012
-0.14	10.62	26.61	0.07	2.13	1.43	-0.12	5.48	4.49	-0.016
0.14	10.33	26.58	0.07	2.15	1.31	-0.13	5.50	4.29	-0.018
0.43	10.04	26.55	0.08	2.18	1.26	-0.14	5.54	4.22	-0.019
0.72	9.76	26.51	0.08	2.20	1.25	-0.17	5.57	4.20	-0.025
1.00	9.47	26.45	0.08	2.26	1.22	-0.21	5.64	4.15	-0.029
1.29	9.18	26.39	0.08	2.34	1.28	-0.26	5.75	4.25	-0.037
1.58	8.90	26.33	0.09	2.40	1.30	-0.28	5.81	4.28	-0.039

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.87	8.61	26.25	0.09	2.44	1.26	-0.31	5.86	4.21	-0.043
2.15	8.32	26.16	0.08	2.52	1.30	-0.33	5.96	4.28	-0.046
2.44	8.03	26.06	0.08	2.65	1.28	-0.38	6.11	4.25	-0.053
2.73	7.75	25.95	0.08	2.75	1.29	-0.38	6.23	4.27	-0.054
3.01	7.46	25.83	0.07	2.84	1.25	-0.40	6.32	4.20	-0.057
3.30	7.17	25.69	0.08	2.97	1.20	-0.43	6.47	4.11	-0.061
3.59	6.89	25.53	0.07	3.14	1.24	-0.45	6.65	4.18	-0.063
3.87	6.60	25.35	0.07	3.35	1.24	-0.48	6.87	4.18	-0.068
4.16	6.31	25.16	0.07	3.59	1.16	-0.52	7.12	4.05	-0.073
4.45	6.03	24.92	0.07	3.93	1.03	-0.56	7.44	3.81	-0.080
4.73	5.74	24.67	0.06	4.26	0.98	-0.60	7.75	3.71	-0.085
5.02	5.45	24.37	0.06	4.59	0.98	-0.62	8.04	3.71	-0.088
5.31	5.16	24.07	0.06	4.87	1.02	-0.65	8.29	3.78	-0.092
5.60	4.88	23.67	0.06	5.41	0.93	-0.66	8.73	3.62	-0.093
5.88	4.59	23.19	0.04	5.99	0.93	-0.65	9.19	3.61	-0.092
6.17	4.30	22.60	0.03	6.88	1.03	-0.67	9.85	3.80	-0.094
6.46	4.02	22.03	0.03	7.35	1.24	-0.77	10.18	4.18	-0.108
6.74	3.73	21.37	0.01	7.95	1.44	-0.68	10.58	4.51	-0.096
7.03	3.44	20.60	0.01	8.47	1.14	-0.66	10.93	4.00	-0.093
7.32	3.16	19.67	0.02	9.13	0.88	-0.71	11.34	3.52	-0.100
7.60	2.87	18.64	0.04	9.45	0.87	-0.67	11.54	3.49	-0.094
7.89	2.58	17.41	0.04	9.61	1.03	-0.65	11.64	3.81	-0.092
8.18	2.30	16.06	0.03	9.13	1.16	-0.55	11.34	4.05	-0.078
8.46	2.01	14.49	0.03	8.77	1.31	-0.44	11.12	4.29	-0.062
8.75	1.72	12.85	0.03	7.77	1.74	-0.30	10.47	4.95	-0.043
9.04	1.43	10.99	0.03	6.87	2.29	-0.22	9.84	5.68	-0.031
9.33	1.15	8.92	0.02	5.70	2.55	-0.11	8.97	6.00	-0.015
9.61	0.86	6.55	0.04	5.65	4.01	-0.10	8.92	7.52	-0.014
9.90	0.57	4.15	-0.03	4.41	2.68	0.02	7.89	6.15	0.002
10.19	0.29	0.49	-0.11	0.65	0.20	-0.01	3.03	1.70	-0.001
10.47	0.00	2.54	3.79	0.60	16.04	-0.13	2.92	15.04	-0.019

Table N-3 Grid #1, L0, Plasma-Off, Center (46-55)

L0 (Off)							U_∞ =	26.69	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.47	20.95	2.46	-0.74	9.11	2.29	-0.33	11.31	5.67	-0.047
-10.19	20.66	3.41	-0.55	10.69	1.28	-0.33	12.25	4.25	-0.046
-9.90	20.37	5.11	-0.17	9.63	0.38	-0.05	11.63	2.31	-0.007
-9.61	20.09	7.14	-0.04	3.19	0.40	-0.01	6.70	2.37	-0.002
-9.33	19.80	9.33	-0.03	4.09	0.53	0.06	7.58	2.72	0.008
-9.04	19.51	11.46	-0.02	5.34	0.53	0.14	8.66	2.72	0.020
-8.75	19.23	13.49	-0.04	6.73	0.54	0.23	9.72	2.76	0.033
-8.46	18.94	15.31	-0.03	7.77	0.57	0.35	10.44	2.82	0.050
-8.18	18.65	16.97	-0.03	8.52	0.59	0.46	10.94	2.87	0.065
-7.89	18.36	18.39	-0.01	8.89	0.58	0.52	11.17	2.85	0.073
-7.60	18.08	19.74	-0.01	8.48	0.60	0.60	10.91	2.91	0.084
-7.32	17.79	20.81	-0.01	7.97	0.61	0.64	10.58	2.93	0.090
-7.03	17.50	21.76	0.00	7.30	0.55	0.62	10.12	2.78	0.086
-6.74	17.22	22.56	0.01	6.54	0.62	0.56	9.59	2.95	0.079
-6.46	16.93	23.25	0.02	5.69	0.59	0.57	8.94	2.89	0.079
-6.17	16.64	23.83	0.02	5.04	0.53	0.55	8.41	2.74	0.077
-5.88	16.36	24.32	0.02	4.49	0.60	0.51	7.94	2.90	0.072
-5.60	16.07	24.71	0.03	4.07	0.70	0.46	7.56	3.13	0.064
-5.31	15.78	25.05	0.03	3.71	0.72	0.42	7.22	3.17	0.058
-5.02	15.49	25.34	0.04	3.31	0.74	0.38	6.82	3.22	0.054
-4.73	15.21	25.59	0.05	2.95	0.68	0.33	6.44	3.08	0.047
-4.45	14.92	25.79	0.06	2.71	0.67	0.31	6.17	3.07	0.043
-4.16	14.63	25.96	0.06	2.53	0.74	0.28	5.96	3.22	0.039
-3.87	14.35	26.10	0.06	2.43	0.74	0.25	5.85	3.22	0.035
-3.59	14.06	26.24	0.06	2.26	0.75	0.22	5.64	3.26	0.031
-3.30	13.77	26.34	0.07	2.14	0.83	0.19	5.48	3.41	0.027
-3.01	13.49	26.42	0.06	2.09	0.81	0.15	5.41	3.37	0.022
-2.73	13.20	26.49	0.07	2.02	0.81	0.12	5.33	3.37	0.017
-2.44	12.91	26.55	0.07	1.96	0.81	0.10	5.25	3.37	0.013
-2.15	12.63	26.60	0.07	1.89	0.83	0.07	5.15	3.42	0.010
-1.87	12.34	26.64	0.07	1.84	0.80	0.05	5.09	3.34	0.008
-1.58	12.05	26.65	0.06	1.85	0.83	0.01	5.09	3.42	0.002
-1.29	11.76	26.68	0.07	1.84	0.87	-0.01	5.09	3.49	-0.001
-1.00	11.48	26.69	0.07	1.82	0.83	-0.03	5.06	3.41	-0.004
-0.72	11.19	26.68	0.07	1.82	0.84	-0.06	5.06	3.44	-0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-0.43	10.90	26.67	0.07	1.82	0.83	-0.08	5.06	3.42	-0.011
-0.14	10.62	26.65	0.07	1.84	0.86	-0.11	5.08	3.48	-0.015
0.14	10.33	26.62	0.07	1.85	0.87	-0.13	5.09	3.49	-0.018
0.43	10.04	26.59	0.07	1.89	0.90	-0.15	5.15	3.56	-0.021
0.72	9.76	26.55	0.07	1.95	0.89	-0.17	5.23	3.53	-0.024
1.00	9.47	26.50	0.07	1.99	0.86	-0.18	5.29	3.47	-0.025
1.29	9.18	26.44	0.07	2.00	0.82	-0.20	5.30	3.40	-0.028
1.58	8.90	26.37	0.07	2.08	0.83	-0.22	5.40	3.40	-0.031
1.87	8.61	26.30	0.07	2.16	0.85	-0.25	5.50	3.45	-0.035
2.15	8.32	26.20	0.07	2.22	0.83	-0.26	5.59	3.42	-0.036
2.44	8.03	26.11	0.07	2.31	0.83	-0.29	5.70	3.40	-0.041
2.73	7.75	25.99	0.06	2.42	0.80	-0.32	5.83	3.36	-0.045
3.01	7.46	25.87	0.07	2.56	0.79	-0.35	5.99	3.34	-0.049
3.30	7.17	25.73	0.06	2.71	0.75	-0.39	6.17	3.25	-0.055
3.59	6.89	25.57	0.06	2.92	0.75	-0.41	6.41	3.25	-0.058
3.87	6.60	25.38	0.06	3.14	0.74	-0.44	6.64	3.22	-0.061
4.16	6.31	25.18	0.06	3.43	0.75	-0.48	6.94	3.24	-0.068
4.45	6.03	24.96	0.06	3.64	0.74	-0.52	7.15	3.22	-0.073
4.73	5.74	24.70	0.06	3.96	0.67	-0.54	7.45	3.07	-0.075
5.02	5.45	24.40	0.06	4.36	0.67	-0.56	7.82	3.07	-0.079
5.31	5.16	24.06	0.05	4.81	0.69	-0.62	8.22	3.12	-0.087
5.60	4.88	23.69	0.05	5.25	0.66	-0.65	8.59	3.05	-0.091
5.88	4.59	23.23	0.05	5.86	0.67	-0.68	9.07	3.07	-0.095
6.17	4.30	22.70	0.05	6.59	0.75	-0.70	9.62	3.25	-0.098
6.46	4.02	22.11	0.04	7.24	0.77	-0.73	10.09	3.29	-0.102
6.74	3.73	21.40	0.05	7.91	0.74	-0.75	10.54	3.22	-0.105
7.03	3.44	20.62	0.05	8.35	0.72	-0.69	10.83	3.19	-0.097
7.32	3.16	19.66	0.04	8.99	0.76	-0.68	11.24	3.27	-0.095
7.60	2.87	18.58	0.04	9.31	0.64	-0.65	11.44	3.01	-0.092
7.89	2.58	17.36	0.04	9.35	0.68	-0.56	11.46	3.10	-0.079
8.18	2.30	15.97	0.04	8.92	0.68	-0.46	11.19	3.10	-0.064
8.46	2.01	14.41	0.02	8.20	0.72	-0.33	10.73	3.17	-0.046
8.75	1.72	12.73	0.01	7.19	1.13	-0.22	10.05	3.98	-0.030
9.04	1.43	10.88	0.00	6.21	1.47	-0.14	9.34	4.54	-0.020
9.33	1.15	8.78	-0.01	4.96	1.98	-0.07	8.35	5.28	-0.010
9.61	0.86	5.57	0.03	10.59	2.80	-0.23	12.19	6.27	-0.033
9.90	0.57	1.99	0.17	6.01	2.31	-0.27	9.19	5.69	-0.038
10.19	0.29	-0.01	0.06	0.29	0.26	0.01	2.02	1.92	0.002
10.47	0.00	0.01	-0.03	0.00	0.00	0.00	0.25	0.21	0.000

Table N-4 Grid #1, L0, Plasma-Off, Right (71-80)

L0 (Off)							U_∞ =	26.73	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.47	20.95	0.55	-0.03	1.04	0.57	-0.03	3.81	2.82	-0.005
-10.19	20.66	1.59	-0.12	1.79	0.27	-0.05	5.00	1.94	-0.007
-9.90	20.37	4.86	-0.10	3.67	0.65	-0.06	7.17	3.03	-0.008
-9.61	20.09	7.11	-0.04	3.35	0.83	0.02	6.84	3.41	0.003
-9.33	19.80	9.37	-0.05	4.32	0.77	0.06	7.78	3.29	0.008
-9.04	19.51	11.45	-0.02	5.39	0.74	0.10	8.69	3.21	0.014
-8.75	19.23	13.48	-0.03	6.76	0.67	0.18	9.73	3.06	0.025
-8.46	18.94	15.27	0.00	7.77	0.65	0.30	10.43	3.02	0.042
-8.18	18.65	16.94	-0.01	8.55	0.73	0.38	10.94	3.20	0.053
-7.89	18.36	18.33	0.00	8.94	0.74	0.44	11.19	3.22	0.062
-7.60	18.08	19.64	-0.01	8.65	0.67	0.51	11.01	3.05	0.071
-7.32	17.79	20.72	0.00	8.08	0.67	0.53	10.64	3.06	0.074
-7.03	17.50	21.68	0.00	7.42	0.65	0.53	10.19	3.03	0.074
-6.74	17.22	22.46	0.01	6.83	0.70	0.56	9.78	3.12	0.078
-6.46	16.93	23.18	0.02	5.99	0.64	0.51	9.16	2.98	0.071
-6.17	16.64	23.74	0.03	5.39	0.67	0.47	8.69	3.06	0.066
-5.88	16.36	24.23	0.03	4.80	0.68	0.46	8.19	3.08	0.065
-5.60	16.07	24.65	0.04	4.31	0.75	0.43	7.76	3.25	0.060
-5.31	15.78	25.00	0.04	3.89	0.78	0.40	7.38	3.30	0.056
-5.02	15.49	25.31	0.05	3.50	0.76	0.37	7.00	3.25	0.051
-4.73	15.21	25.59	0.05	3.13	0.78	0.31	6.62	3.30	0.044
-4.45	14.92	25.81	0.06	2.78	0.73	0.27	6.24	3.19	0.038
-4.16	14.63	26.01	0.06	2.51	0.69	0.23	5.93	3.10	0.032
-3.87	14.35	26.15	0.07	2.37	0.73	0.20	5.75	3.20	0.027
-3.59	14.06	26.28	0.07	2.23	0.78	0.18	5.58	3.30	0.025
-3.30	13.77	26.39	0.06	2.11	0.82	0.14	5.43	3.39	0.020
-3.01	13.49	26.47	0.06	2.05	0.79	0.12	5.36	3.32	0.017
-2.73	13.20	26.54	0.07	1.98	0.84	0.10	5.27	3.42	0.015
-2.44	12.91	26.60	0.07	1.88	0.84	0.08	5.13	3.42	0.011
-2.15	12.63	26.65	0.07	1.82	0.81	0.05	5.05	3.37	0.007
-1.87	12.34	26.68	0.08	1.76	0.80	0.02	4.96	3.34	0.003
-1.58	12.05	26.70	0.08	1.76	0.88	0.01	4.96	3.51	0.001
-1.29	11.76	26.72	0.07	1.76	0.89	-0.03	4.97	3.53	-0.004
-1.00	11.48	26.73	0.08	1.73	0.87	-0.04	4.92	3.49	-0.006
-0.72	11.19	26.72	0.08	1.75	0.90	-0.07	4.95	3.55	-0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.43	10.90	26.71	0.07	1.75	0.86	-0.08	4.95	3.47	-0.012
-0.14	10.62	26.69	0.08	1.77	0.85	-0.11	4.97	3.46	-0.015
0.14	10.33	26.67	0.08	1.80	0.83	-0.13	5.02	3.40	-0.018
0.43	10.04	26.63	0.08	1.84	0.84	-0.15	5.08	3.43	-0.022
0.72	9.76	26.58	0.08	1.89	0.84	-0.18	5.14	3.43	-0.025
1.00	9.47	26.52	0.07	1.92	0.87	-0.20	5.19	3.49	-0.028
1.29	9.18	26.46	0.07	2.00	0.87	-0.24	5.29	3.49	-0.034
1.58	8.90	26.39	0.07	2.08	0.82	-0.27	5.40	3.39	-0.037
1.87	8.61	26.32	0.07	2.14	0.81	-0.29	5.48	3.37	-0.040
2.15	8.32	26.23	0.07	2.25	0.83	-0.32	5.62	3.41	-0.044
2.44	8.03	26.14	0.07	2.36	0.83	-0.35	5.74	3.42	-0.049
2.73	7.75	26.04	0.07	2.46	0.82	-0.37	5.87	3.38	-0.052
3.01	7.46	25.92	0.07	2.61	0.80	-0.38	6.04	3.34	-0.054
3.30	7.17	25.77	0.07	2.81	0.85	-0.40	6.27	3.45	-0.056
3.59	6.89	25.61	0.07	3.00	0.85	-0.43	6.48	3.46	-0.060
3.87	6.60	25.43	0.06	3.18	0.79	-0.46	6.68	3.32	-0.065
4.16	6.31	25.23	0.06	3.41	0.79	-0.47	6.91	3.33	-0.065
4.45	6.03	25.01	0.05	3.69	0.77	-0.50	7.19	3.28	-0.069
4.73	5.74	24.73	0.05	4.04	0.82	-0.54	7.52	3.39	-0.075
5.02	5.45	24.42	0.05	4.51	0.88	-0.58	7.95	3.51	-0.081
5.31	5.16	24.08	0.05	4.97	0.89	-0.61	8.34	3.53	-0.085
5.60	4.88	23.68	0.04	5.54	1.00	-0.66	8.81	3.74	-0.092
5.88	4.59	23.23	0.04	6.22	1.16	-0.70	9.33	4.03	-0.098
6.17	4.30	22.67	0.05	7.26	1.64	-0.67	10.08	4.79	-0.094
6.46	4.02	22.06	0.07	8.33	2.58	-0.73	10.80	6.00	-0.102
6.74	3.73	21.36	0.04	9.19	3.36	-0.61	11.34	6.86	-0.086
7.03	3.44	20.52	0.04	9.83	3.39	-0.60	11.73	6.89	-0.083
7.32	3.16	19.60	0.03	10.11	2.82	-0.52	11.89	6.29	-0.073
7.60	2.87	18.56	0.03	10.15	2.45	-0.50	11.92	5.86	-0.070
7.89	2.58	17.34	0.02	9.80	2.29	-0.46	11.71	5.67	-0.065
8.18	2.30	15.93	0.01	9.20	1.92	-0.49	11.35	5.18	-0.069
8.46	2.01	14.38	0.01	8.31	1.56	-0.32	10.78	4.67	-0.045
8.75	1.72	12.70	0.00	7.23	1.58	-0.21	10.06	4.71	-0.029
9.04	1.43	10.87	0.00	6.18	1.91	-0.16	9.30	5.17	-0.022
9.33	1.15	8.72	0.00	4.87	2.69	-0.05	8.26	6.14	-0.007
9.61	0.86	6.49	0.06	4.81	2.92	-0.10	8.21	6.40	-0.013
9.90	0.57	3.41	0.06	6.49	2.64	-0.04	9.53	6.08	-0.006
10.19	0.29	0.11	-0.22	0.35	0.34	0.02	2.21	2.19	0.002
10.47	0.00	0.22	-0.06	0.37	0.03	-0.04	2.27	0.62	-0.006

Table N-5 Grid #1, L0, Plasma-150, Left (1-10)

L0 (150)							U_∞ =	25.79	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.47	20.95	0.68	-0.22	3.11	1.91	-0.22	6.84	5.36	-0.033
-10.19	20.66	1.80	-0.02	1.77	0.69	0.02	5.15	3.21	0.003
-9.90	20.37	4.44	-0.06	2.68	1.00	0.02	6.34	3.88	0.003
-9.61	20.09	6.62	-0.02	3.23	0.98	0.06	6.97	3.83	0.010
-9.33	19.80	8.81	-0.02	4.12	0.72	0.10	7.87	3.29	0.015
-9.04	19.51	10.86	-0.03	5.36	0.71	0.20	8.97	3.26	0.030
-8.75	19.23	12.90	-0.03	6.86	0.79	0.26	10.15	3.46	0.040
-8.46	18.94	14.65	-0.03	7.82	0.80	0.39	10.84	3.48	0.059
-8.18	18.65	16.30	-0.03	8.32	0.81	0.54	11.19	3.49	0.081
-7.89	18.36	17.69	-0.02	8.64	0.79	0.58	11.40	3.44	0.087
-7.60	18.08	18.99	-0.02	8.32	0.80	0.61	11.18	3.47	0.092
-7.32	17.79	20.02	-0.01	7.93	0.86	0.63	10.92	3.60	0.095
-7.03	17.50	20.97	0.00	7.32	0.76	0.66	10.49	3.38	0.099
-6.74	17.22	21.70	0.00	6.91	0.78	0.69	10.19	3.42	0.104
-6.46	16.93	22.36	0.00	6.26	0.81	0.70	9.70	3.48	0.105
-6.17	16.64	22.92	0.00	5.49	0.79	0.64	9.08	3.45	0.096
-5.88	16.36	23.40	0.02	4.79	0.81	0.60	8.49	3.49	0.091
-5.60	16.07	23.77	0.03	4.40	0.88	0.54	8.13	3.65	0.081
-5.31	15.78	24.09	0.04	3.99	0.97	0.49	7.74	3.81	0.074
-5.02	15.49	24.36	0.04	3.64	0.90	0.48	7.40	3.67	0.072
-4.73	15.21	24.62	0.04	3.30	0.91	0.46	7.04	3.69	0.070
-4.45	14.92	24.82	0.05	3.04	0.93	0.41	6.76	3.74	0.062
-4.16	14.63	25.01	0.05	2.77	0.98	0.37	6.46	3.83	0.055
-3.87	14.35	25.16	0.05	2.50	1.07	0.31	6.13	4.02	0.046
-3.59	14.06	25.30	0.05	2.28	1.00	0.26	5.86	3.88	0.039
-3.30	13.77	25.40	0.07	2.18	1.05	0.21	5.72	3.97	0.032
-3.01	13.49	25.50	0.07	2.07	1.02	0.17	5.58	3.91	0.026
-2.73	13.20	25.58	0.07	1.97	1.11	0.18	5.44	4.09	0.027
-2.44	12.91	25.64	0.08	1.89	1.06	0.14	5.33	3.99	0.022
-2.15	12.63	25.68	0.08	1.84	1.02	0.10	5.27	3.91	0.015
-1.87	12.34	25.72	0.08	1.78	1.05	0.06	5.18	3.98	0.009
-1.58	12.05	25.75	0.08	1.77	1.09	0.03	5.16	4.05	0.005
-1.29	11.76	25.77	0.09	1.74	1.07	0.00	5.11	4.00	0.001
-1.00	11.48	25.78	0.09	1.71	1.10	-0.02	5.07	4.08	-0.003
-0.72	11.19	25.79	0.09	1.71	1.15	-0.05	5.08	4.15	-0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-0.43	10.90	25.77	0.08	1.74	1.18	-0.06	5.11	4.21	-0.009
-0.14	10.62	25.76	0.08	1.75	1.10	-0.07	5.13	4.07	-0.011
0.14	10.33	25.74	0.08	1.76	1.06	-0.10	5.14	3.99	-0.015
0.43	10.04	25.71	0.07	1.79	1.11	-0.12	5.19	4.08	-0.018
0.72	9.76	25.68	0.07	1.84	1.09	-0.15	5.25	4.05	-0.022
1.00	9.47	25.64	0.07	1.86	1.04	-0.19	5.29	3.96	-0.029
1.29	9.18	25.60	0.08	1.90	1.04	-0.20	5.34	3.95	-0.030
1.58	8.90	25.54	0.07	1.93	1.00	-0.20	5.38	3.89	-0.030
1.87	8.61	25.47	0.06	1.98	0.99	-0.25	5.45	3.87	-0.037
2.15	8.32	25.38	0.08	2.13	1.04	-0.28	5.66	3.96	-0.042
2.44	8.03	25.29	0.07	2.23	1.03	-0.30	5.79	3.94	-0.045
2.73	7.75	25.18	0.07	2.36	1.02	-0.32	5.96	3.91	-0.048
3.01	7.46	25.06	0.07	2.50	0.98	-0.33	6.14	3.84	-0.050
3.30	7.17	24.91	0.07	2.74	0.96	-0.40	6.42	3.80	-0.060
3.59	6.89	24.76	0.07	2.94	0.94	-0.45	6.64	3.76	-0.068
3.87	6.60	24.59	0.06	3.12	0.97	-0.46	6.85	3.82	-0.070
4.16	6.31	24.40	0.06	3.38	0.93	-0.49	7.13	3.75	-0.074
4.45	6.03	24.17	0.06	3.64	0.85	-0.51	7.40	3.58	-0.077
4.73	5.74	23.93	0.07	3.88	0.84	-0.55	7.64	3.55	-0.083
5.02	5.45	23.65	0.06	4.15	0.82	-0.55	7.90	3.52	-0.083
5.31	5.16	23.33	0.05	4.53	0.90	-0.61	8.25	3.68	-0.091
5.60	4.88	22.93	0.05	5.04	0.95	-0.64	8.70	3.77	-0.096
5.88	4.59	22.51	0.06	5.53	0.93	-0.65	9.12	3.73	-0.098
6.17	4.30	21.97	0.06	6.19	0.86	-0.67	9.65	3.60	-0.101
6.46	4.02	21.40	0.05	6.69	0.84	-0.71	10.03	3.56	-0.107
6.74	3.73	20.75	0.03	7.18	0.79	-0.70	10.39	3.44	-0.106
7.03	3.44	19.98	0.03	7.80	0.80	-0.65	10.83	3.47	-0.097
7.32	3.16	19.03	0.04	8.50	0.84	-0.63	11.31	3.54	-0.095
7.60	2.87	17.98	0.04	8.73	0.78	-0.58	11.46	3.42	-0.087
7.89	2.58	16.78	0.02	8.78	0.76	-0.49	11.49	3.38	-0.073
8.18	2.30	15.44	0.02	8.45	0.78	-0.46	11.27	3.43	-0.070
8.46	2.01	13.92	0.01	7.94	1.02	-0.41	10.93	3.91	-0.062
8.75	1.72	12.27	0.00	7.00	1.26	-0.30	10.26	4.36	-0.045
9.04	1.43	10.44	0.00	6.02	1.58	-0.15	9.52	4.87	-0.023
9.33	1.15	8.44	-0.03	4.92	2.05	-0.09	8.60	5.55	-0.013
9.61	0.86	6.23	0.01	5.06	3.13	-0.05	8.72	6.86	-0.007
9.90	0.57	3.81	0.03	3.77	2.22	-0.05	7.53	5.78	-0.008
10.19	0.29	0.54	0.03	0.56	0.22	0.03	2.91	1.84	0.005
10.47	0.00	4.90	3.07	7.65	46.46	18.48	10.73	26.43	2.779

Table N-6 Grid #1, L0, Plasma-150, Center (46-55)

L0 (150)							$U_\infty =$	25.78	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.47	20.95	1.07	-0.96	3.66	6.20	-0.46	7.42	9.66	-0.070
-10.19	20.66	2.14	-0.53	3.73	3.32	-0.25	7.49	7.07	-0.038
-9.90	20.37	4.68	-0.23	4.36	1.47	-0.11	8.10	4.70	-0.016
-9.61	20.09	6.68	-0.01	2.78	0.51	-0.01	6.46	2.78	-0.002
-9.33	19.80	8.84	-0.02	3.73	0.40	0.07	7.49	2.47	0.010
-9.04	19.51	10.91	-0.02	4.94	0.42	0.14	8.62	2.50	0.021
-8.75	19.23	12.87	-0.02	5.97	0.46	0.23	9.48	2.62	0.035
-8.46	18.94	14.63	-0.01	6.91	0.47	0.31	10.19	2.65	0.047
-8.18	18.65	16.25	-0.01	7.45	0.45	0.39	10.58	2.59	0.058
-7.89	18.36	17.62	0.00	7.80	0.43	0.47	10.83	2.54	0.070
-7.60	18.08	18.91	0.01	7.56	0.41	0.51	10.66	2.47	0.077
-7.32	17.79	19.97	0.02	7.31	0.45	0.53	10.48	2.61	0.080
-7.03	17.50	20.89	0.02	6.78	0.46	0.52	10.10	2.62	0.078
-6.74	17.22	21.65	0.03	6.27	0.59	0.53	9.71	2.97	0.080
-6.46	16.93	22.37	0.03	5.45	0.54	0.49	9.06	2.84	0.073
-6.17	16.64	22.92	0.04	4.83	0.50	0.43	8.52	2.73	0.065
-5.88	16.36	23.40	0.04	4.32	0.55	0.44	8.06	2.87	0.067
-5.60	16.07	23.79	0.04	3.95	0.56	0.43	7.71	2.90	0.064
-5.31	15.78	24.12	0.05	3.60	0.52	0.40	7.36	2.80	0.061
-5.02	15.49	24.40	0.06	3.26	0.54	0.37	7.01	2.85	0.056
-4.73	15.21	24.66	0.06	2.92	0.57	0.34	6.63	2.94	0.051
-4.45	14.92	24.88	0.06	2.62	0.60	0.32	6.28	3.01	0.048
-4.16	14.63	25.06	0.07	2.38	0.58	0.29	5.98	2.94	0.043
-3.87	14.35	25.20	0.06	2.22	0.64	0.26	5.78	3.10	0.039
-3.59	14.06	25.32	0.07	2.03	0.66	0.23	5.52	3.16	0.034
-3.30	13.77	25.43	0.08	1.85	0.64	0.19	5.28	3.09	0.029
-3.01	13.49	25.52	0.08	1.75	0.65	0.16	5.12	3.13	0.024
-2.73	13.20	25.59	0.08	1.69	0.68	0.13	5.04	3.20	0.020
-2.44	12.91	25.65	0.08	1.64	0.72	0.10	4.97	3.29	0.016
-2.15	12.63	25.69	0.08	1.59	0.74	0.07	4.89	3.35	0.010
-1.87	12.34	25.73	0.08	1.58	0.70	0.04	4.88	3.25	0.006
-1.58	12.05	25.75	0.09	1.55	0.71	0.01	4.83	3.27	0.002
-1.29	11.76	25.77	0.09	1.51	0.79	-0.01	4.76	3.44	-0.002
-1.00	11.48	25.78	0.09	1.48	0.75	-0.03	4.71	3.36	-0.004
-0.72	11.19	25.78	0.09	1.46	0.73	-0.06	4.69	3.32	-0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.43	10.90	25.77	0.10	1.49	0.77	-0.09	4.74	3.41	-0.014
-0.14	10.62	25.75	0.10	1.53	0.80	-0.11	4.80	3.47	-0.016
0.14	10.33	25.73	0.10	1.53	0.75	-0.12	4.80	3.35	-0.018
0.43	10.04	25.70	0.10	1.54	0.74	-0.13	4.82	3.33	-0.020
0.72	9.76	25.67	0.10	1.60	0.73	-0.16	4.91	3.31	-0.024
1.00	9.47	25.61	0.09	1.67	0.72	-0.18	5.01	3.29	-0.027
1.29	9.18	25.57	0.10	1.72	0.72	-0.19	5.08	3.29	-0.029
1.58	8.90	25.50	0.09	1.72	0.69	-0.21	5.09	3.22	-0.032
1.87	8.61	25.42	0.10	1.78	0.72	-0.24	5.17	3.30	-0.036
2.15	8.32	25.34	0.10	1.89	0.73	-0.27	5.33	3.31	-0.041
2.44	8.03	25.25	0.09	1.96	0.69	-0.29	5.43	3.22	-0.043
2.73	7.75	25.12	0.09	2.11	0.75	-0.31	5.63	3.35	-0.047
3.01	7.46	25.00	0.09	2.23	0.73	-0.34	5.79	3.32	-0.051
3.30	7.17	24.86	0.08	2.38	0.66	-0.37	5.99	3.16	-0.055
3.59	6.89	24.70	0.09	2.57	0.61	-0.40	6.22	3.03	-0.060
3.87	6.60	24.52	0.08	2.81	0.60	-0.43	6.50	3.00	-0.064
4.16	6.31	24.33	0.08	3.06	0.59	-0.44	6.79	2.98	-0.066
4.45	6.03	24.10	0.07	3.34	0.56	-0.47	7.09	2.91	-0.070
4.73	5.74	23.84	0.07	3.71	0.59	-0.49	7.47	2.99	-0.074
5.02	5.45	23.55	0.07	4.08	0.61	-0.51	7.83	3.02	-0.076
5.31	5.16	23.23	0.06	4.39	0.59	-0.52	8.12	2.98	-0.079
5.60	4.88	22.85	0.05	4.85	0.60	-0.55	8.54	3.00	-0.082
5.88	4.59	22.40	0.05	5.39	0.58	-0.58	9.00	2.94	-0.088
6.17	4.30	21.86	0.04	5.99	0.51	-0.61	9.49	2.77	-0.092
6.46	4.02	21.25	0.03	6.66	0.58	-0.63	10.01	2.94	-0.094
6.74	3.73	20.56	0.04	7.27	0.67	-0.63	10.46	3.18	-0.095
7.03	3.44	19.77	0.04	7.74	0.64	-0.61	10.79	3.10	-0.091
7.32	3.16	18.85	0.03	8.18	0.52	-0.59	11.09	2.80	-0.089
7.60	2.87	17.79	0.03	8.52	0.51	-0.55	11.32	2.78	-0.083
7.89	2.58	16.57	0.03	8.38	0.48	-0.49	11.23	2.69	-0.074
8.18	2.30	15.18	0.02	7.91	0.50	-0.39	10.91	2.73	-0.059
8.46	2.01	13.65	0.01	7.28	0.68	-0.29	10.46	3.19	-0.044
8.75	1.72	12.02	0.00	6.25	0.77	-0.21	9.70	3.39	-0.031
9.04	1.43	10.24	-0.02	5.31	1.19	-0.14	8.94	4.23	-0.021
9.33	1.15	8.26	-0.02	4.49	1.65	-0.07	8.22	4.98	-0.011
9.61	0.86	5.37	0.16	9.39	1.37	-0.44	11.88	4.55	-0.066
9.90	0.57	0.26	0.33	1.12	0.52	-0.06	4.10	2.80	-0.009
10.19	0.29	-0.05	0.12	0.15	0.25	0.00	1.51	1.94	0.000
10.47	0.00	0.06	-0.02	0.00	0.02	0.00	0.26	0.57	0.000

Table N-7 Grid #1, L0, Plasma-150, Right (71-80)

L0 (150)							U_∞ =	25.76	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.47	20.95	0.54	-0.06	0.76	0.58	0.02	3.38	2.97	0.003
-10.19	20.66	1.63	-0.13	1.51	0.35	-0.03	4.76	2.29	-0.004
-9.90	20.37	4.62	-0.09	2.68	0.71	-0.05	6.35	3.26	-0.007
-9.61	20.09	6.67	0.00	2.90	0.74	-0.01	6.61	3.34	-0.002
-9.33	19.80	8.87	-0.01	3.84	0.54	0.06	7.61	2.86	0.009
-9.04	19.51	10.91	0.00	5.03	0.44	0.10	8.71	2.56	0.015
-8.75	19.23	12.85	0.00	6.18	0.45	0.18	9.65	2.61	0.026
-8.46	18.94	14.59	0.01	6.95	0.44	0.26	10.24	2.57	0.039
-8.18	18.65	16.24	0.00	7.52	0.45	0.36	10.65	2.59	0.054
-7.89	18.36	17.62	0.02	7.85	0.49	0.44	10.88	2.73	0.066
-7.60	18.08	18.90	0.03	7.57	0.52	0.48	10.68	2.80	0.072
-7.32	17.79	19.94	0.05	7.22	0.50	0.48	10.43	2.76	0.073
-7.03	17.50	20.88	0.05	6.75	0.46	0.49	10.08	2.64	0.074
-6.74	17.22	21.64	0.05	6.28	0.52	0.51	9.73	2.79	0.076
-6.46	16.93	22.33	0.06	5.55	0.50	0.50	9.14	2.76	0.076
-6.17	16.64	22.92	0.07	4.81	0.48	0.44	8.51	2.68	0.067
-5.88	16.36	23.40	0.08	4.29	0.50	0.42	8.04	2.73	0.063
-5.60	16.07	23.78	0.08	3.87	0.55	0.38	7.64	2.89	0.057
-5.31	15.78	24.13	0.09	3.47	0.53	0.35	7.23	2.84	0.053
-5.02	15.49	24.41	0.09	3.14	0.56	0.31	6.88	2.89	0.047
-4.73	15.21	24.66	0.09	2.84	0.58	0.28	6.54	2.96	0.042
-4.45	14.92	24.87	0.10	2.59	0.60	0.28	6.25	3.01	0.042
-4.16	14.63	25.04	0.09	2.33	0.60	0.25	5.92	3.02	0.037
-3.87	14.35	25.19	0.09	2.13	0.62	0.22	5.67	3.05	0.033
-3.59	14.06	25.33	0.09	1.94	0.70	0.18	5.41	3.25	0.027
-3.30	13.77	25.44	0.10	1.80	0.71	0.15	5.21	3.27	0.023
-3.01	13.49	25.52	0.10	1.73	0.67	0.13	5.11	3.17	0.020
-2.73	13.20	25.58	0.10	1.65	0.73	0.11	4.99	3.33	0.017
-2.44	12.91	25.63	0.10	1.61	0.74	0.10	4.93	3.34	0.015
-2.15	12.63	25.67	0.11	1.59	0.74	0.08	4.89	3.34	0.012
-1.87	12.34	25.71	0.11	1.54	0.71	0.06	4.82	3.27	0.009
-1.58	12.05	25.73	0.11	1.53	0.71	0.03	4.80	3.26	0.005
-1.29	11.76	25.75	0.10	1.53	0.73	0.00	4.79	3.32	0.001
-1.00	11.48	25.76	0.11	1.52	0.75	-0.03	4.78	3.36	-0.004
-0.72	11.19	25.76	0.12	1.49	0.78	-0.04	4.74	3.42	-0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.43	10.90	25.75	0.12	1.50	0.75	-0.07	4.75	3.37	-0.010
-0.14	10.62	25.74	0.12	1.52	0.76	-0.09	4.79	3.37	-0.013
0.14	10.33	25.73	0.12	1.51	0.73	-0.11	4.77	3.32	-0.016
0.43	10.04	25.70	0.11	1.53	0.75	-0.13	4.81	3.35	-0.020
0.72	9.76	25.66	0.12	1.57	0.78	-0.16	4.86	3.43	-0.025
1.00	9.47	25.62	0.11	1.63	0.73	-0.18	4.95	3.31	-0.028
1.29	9.18	25.58	0.11	1.68	0.72	-0.19	5.03	3.29	-0.029
1.58	8.90	25.51	0.10	1.74	0.72	-0.22	5.12	3.29	-0.033
1.87	8.61	25.44	0.11	1.78	0.71	-0.23	5.18	3.27	-0.035
2.15	8.32	25.37	0.10	1.83	0.68	-0.26	5.25	3.21	-0.040
2.44	8.03	25.26	0.10	1.97	0.66	-0.29	5.45	3.15	-0.044
2.73	7.75	25.15	0.09	2.09	0.64	-0.31	5.61	3.10	-0.047
3.01	7.46	25.04	0.08	2.19	0.63	-0.32	5.75	3.07	-0.049
3.30	7.17	24.88	0.08	2.40	0.66	-0.35	6.01	3.14	-0.053
3.59	6.89	24.72	0.07	2.61	0.61	-0.38	6.27	3.03	-0.057
3.87	6.60	24.53	0.07	2.84	0.61	-0.41	6.54	3.03	-0.062
4.16	6.31	24.33	0.07	3.10	0.65	-0.42	6.83	3.13	-0.064
4.45	6.03	24.10	0.06	3.37	0.68	-0.46	7.12	3.19	-0.069
4.73	5.74	23.83	0.05	3.67	0.62	-0.49	7.44	3.06	-0.074
5.02	5.45	23.53	0.05	4.08	0.62	-0.52	7.84	3.06	-0.078
5.31	5.16	23.19	0.04	4.50	0.64	-0.53	8.24	3.12	-0.080
5.60	4.88	22.79	0.03	5.06	0.70	-0.56	8.73	3.25	-0.084
5.88	4.59	22.31	0.03	5.87	0.82	-0.61	9.40	3.51	-0.091
6.17	4.30	21.77	0.04	6.66	1.00	-0.66	10.02	3.89	-0.099
6.46	4.02	21.16	0.03	7.56	1.57	-0.63	10.68	4.86	-0.095
6.74	3.73	20.48	0.02	8.36	2.16	-0.59	11.22	5.71	-0.089
7.03	3.44	19.65	0.04	8.90	2.30	-0.59	11.58	5.89	-0.089
7.32	3.16	18.70	0.02	9.21	1.98	-0.63	11.78	5.46	-0.095
7.60	2.87	17.63	0.01	9.19	1.70	-0.51	11.77	5.06	-0.077
7.89	2.58	16.41	0.02	8.90	1.43	-0.44	11.58	4.65	-0.066
8.18	2.30	15.03	0.02	8.18	1.12	-0.33	11.10	4.10	-0.050
8.46	2.01	13.48	0.01	7.32	1.10	-0.21	10.50	4.07	-0.032
8.75	1.72	11.86	-0.01	6.16	1.24	-0.18	9.63	4.32	-0.027
9.04	1.43	10.11	-0.04	5.28	1.15	-0.16	8.92	4.17	-0.024
9.33	1.15	8.10	-0.02	4.28	1.80	-0.04	8.03	5.21	-0.005
9.61	0.86	6.05	0.03	4.12	2.54	0.08	7.88	6.19	0.013
9.90	0.57	3.45	0.03	4.13	1.93	-0.05	7.89	5.40	-0.007
10.19	0.29	0.17	-0.14	0.43	0.29	0.08	2.54	2.08	0.012
10.47	0.00	0.12	-0.09	0.03	0.02	0.00	0.68	0.60	-0.001

Table N-8 Grid #1, L0, Plasma-300, Left (1-10)

L0 (300)							U_∞ =	25.28	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.47	20.95	1.25	-0.41	6.57	3.05	-0.06	10.14	6.91	-0.010
-10.19	20.66	1.95	-0.04	2.56	0.65	0.01	6.33	3.19	0.002
-9.90	20.37	3.96	-0.05	2.81	0.95	-0.01	6.63	3.85	-0.002
-9.61	20.09	6.12	-0.03	2.78	0.70	0.03	6.59	3.31	0.005
-9.33	19.80	8.31	-0.02	3.74	0.68	0.10	7.65	3.26	0.015
-9.04	19.51	10.27	-0.02	4.74	0.62	0.18	8.61	3.12	0.028
-8.75	19.23	12.23	-0.02	5.89	0.64	0.23	9.60	3.17	0.037
-8.46	18.94	13.97	-0.02	7.06	0.72	0.34	10.51	3.35	0.053
-8.18	18.65	15.68	-0.01	7.66	0.78	0.47	10.95	3.49	0.073
-7.89	18.36	17.05	-0.01	8.08	0.83	0.53	11.24	3.60	0.083
-7.60	18.08	18.38	-0.02	8.10	0.80	0.59	11.26	3.53	0.093
-7.32	17.79	19.41	-0.02	7.65	0.89	0.63	10.94	3.74	0.098
-7.03	17.50	20.36	0.00	6.97	0.76	0.62	10.44	3.45	0.097
-6.74	17.22	21.08	0.00	6.51	0.75	0.63	10.09	3.43	0.099
-6.46	16.93	21.75	0.01	5.98	0.86	0.62	9.68	3.67	0.097
-6.17	16.64	22.31	0.01	5.37	0.85	0.60	9.17	3.64	0.094
-5.88	16.36	22.81	0.01	4.86	0.86	0.57	8.72	3.66	0.090
-5.60	16.07	23.19	0.01	4.39	0.90	0.52	8.29	3.75	0.082
-5.31	15.78	23.55	0.02	3.95	0.87	0.49	7.87	3.69	0.076
-5.02	15.49	23.82	0.03	3.70	0.95	0.48	7.61	3.86	0.075
-4.73	15.21	24.08	0.03	3.41	0.95	0.44	7.30	3.86	0.068
-4.45	14.92	24.28	0.02	3.21	0.94	0.39	7.09	3.83	0.061
-4.16	14.63	24.47	0.03	2.99	0.99	0.35	6.84	3.94	0.055
-3.87	14.35	24.62	0.03	2.78	1.03	0.32	6.59	4.02	0.050
-3.59	14.06	24.76	0.04	2.62	0.97	0.29	6.41	3.89	0.045
-3.30	13.77	24.87	0.05	2.51	1.00	0.24	6.26	3.95	0.037
-3.01	13.49	24.98	0.05	2.29	1.01	0.22	5.99	3.97	0.034
-2.73	13.20	25.05	0.05	2.18	1.07	0.19	5.84	4.09	0.029
-2.44	12.91	25.13	0.04	2.08	1.09	0.16	5.71	4.13	0.024
-2.15	12.63	25.17	0.05	1.98	1.07	0.12	5.57	4.09	0.019
-1.87	12.34	25.21	0.06	1.91	1.09	0.09	5.46	4.14	0.014
-1.58	12.05	25.24	0.06	1.87	1.09	0.08	5.41	4.14	0.013
-1.29	11.76	25.26	0.06	1.83	1.01	0.06	5.34	3.98	0.009
-1.00	11.48	25.27	0.06	1.80	1.11	0.02	5.30	4.17	0.004
-0.72	11.19	25.28	0.06	1.78	1.11	-0.01	5.27	4.17	-0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.43	10.90	25.28	0.06	1.75	1.10	-0.04	5.23	4.14	-0.007
-0.14	10.62	25.26	0.06	1.75	1.09	-0.07	5.23	4.13	-0.012
0.14	10.33	25.25	0.05	1.76	1.06	-0.09	5.24	4.07	-0.013
0.43	10.04	25.23	0.05	1.76	1.03	-0.12	5.24	4.01	-0.019
0.72	9.76	25.20	0.06	1.80	1.04	-0.13	5.30	4.03	-0.021
1.00	9.47	25.15	0.06	1.84	1.01	-0.17	5.36	3.97	-0.026
1.29	9.18	25.10	0.06	1.87	1.00	-0.20	5.41	3.96	-0.031
1.58	8.90	25.04	0.06	1.94	0.99	-0.23	5.51	3.94	-0.036
1.87	8.61	24.98	0.06	1.98	1.05	-0.25	5.57	4.05	-0.039
2.15	8.32	24.90	0.06	2.11	1.05	-0.28	5.75	4.05	-0.044
2.44	8.03	24.82	0.07	2.22	0.98	-0.31	5.90	3.91	-0.049
2.73	7.75	24.71	0.07	2.30	1.02	-0.32	6.01	3.99	-0.049
3.01	7.46	24.59	0.07	2.44	0.96	-0.33	6.18	3.88	-0.052
3.30	7.17	24.45	0.08	2.67	0.93	-0.37	6.46	3.82	-0.058
3.59	6.89	24.29	0.08	2.87	0.92	-0.41	6.70	3.79	-0.065
3.87	6.60	24.12	0.09	3.08	0.95	-0.44	6.94	3.86	-0.069
4.16	6.31	23.95	0.08	3.24	0.93	-0.45	7.12	3.82	-0.071
4.45	6.03	23.74	0.08	3.47	0.97	-0.48	7.36	3.89	-0.075
4.73	5.74	23.51	0.07	3.68	0.89	-0.47	7.59	3.74	-0.074
5.02	5.45	23.21	0.07	4.07	0.86	-0.53	7.98	3.67	-0.083
5.31	5.16	22.87	0.07	4.53	0.90	-0.55	8.42	3.76	-0.086
5.60	4.88	22.51	0.06	4.93	0.81	-0.57	8.78	3.56	-0.089
5.88	4.59	22.07	0.06	5.45	0.76	-0.59	9.23	3.45	-0.092
6.17	4.30	21.54	0.06	6.02	0.80	-0.60	9.70	3.54	-0.094
6.46	4.02	20.97	0.05	6.50	0.78	-0.63	10.08	3.48	-0.098
6.74	3.73	20.32	0.04	6.96	0.82	-0.63	10.43	3.59	-0.098
7.03	3.44	19.53	0.04	7.43	0.77	-0.61	10.78	3.48	-0.095
7.32	3.16	18.59	0.03	8.07	0.74	-0.63	11.24	3.41	-0.099
7.60	2.87	17.56	0.03	8.23	0.74	-0.54	11.35	3.40	-0.085
7.89	2.58	16.36	0.04	8.22	0.70	-0.48	11.34	3.30	-0.075
8.18	2.30	15.00	0.04	7.84	0.68	-0.40	11.08	3.26	-0.063
8.46	2.01	13.49	0.01	7.43	0.92	-0.30	10.78	3.79	-0.048
8.75	1.72	11.90	0.00	6.41	1.34	-0.26	10.01	4.57	-0.041
9.04	1.43	10.10	0.00	5.63	1.63	-0.15	9.39	5.05	-0.023
9.33	1.15	8.21	0.01	4.62	1.77	-0.05	8.50	5.27	-0.008
9.61	0.86	6.17	0.01	4.49	2.08	-0.03	8.38	5.70	-0.004
9.90	0.57	3.67	0.03	3.63	1.71	-0.05	7.53	5.18	-0.007
10.19	0.29	0.98	0.04	1.18	0.44	-0.03	4.30	2.63	-0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
10.47	0.00	7.62	-0.86	96.36	9.16	-26.69	38.83	11.97	-4.176

Table N-9 Grid #1, L0, Plasma-300, Center (46-55)

L0 (300)							U_∞ =	25.31	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.47	20.95	1.41	-0.63	8.38	5.28	-0.40	11.44	9.08	-0.063
-10.19	20.66	2.45	-0.21	9.22	4.75	0.10	12.00	8.61	0.016
-9.90	20.37	4.05	-0.07	7.41	3.29	0.11	10.75	7.16	0.017
-9.61	20.09	6.17	-0.03	2.59	0.44	0.00	6.35	2.63	0.000
-9.33	19.80	8.26	-0.03	3.39	0.48	0.05	7.27	2.75	0.007
-9.04	19.51	10.21	-0.02	4.28	0.49	0.11	8.18	2.76	0.017
-8.75	19.23	12.13	-0.02	5.55	0.43	0.19	9.31	2.59	0.029
-8.46	18.94	13.83	-0.02	6.56	0.45	0.27	10.12	2.65	0.043
-8.18	18.65	15.47	-0.02	7.08	0.44	0.35	10.52	2.61	0.055
-7.89	18.36	16.83	-0.01	7.44	0.43	0.44	10.78	2.60	0.068
-7.60	18.08	18.12	0.00	7.48	0.47	0.48	10.80	2.70	0.074
-7.32	17.79	19.20	0.01	7.12	0.52	0.51	10.55	2.86	0.079
-7.03	17.50	20.16	0.01	6.69	0.55	0.54	10.22	2.92	0.084
-6.74	17.22	20.93	0.02	6.18	0.55	0.53	9.82	2.93	0.083
-6.46	16.93	21.62	0.02	5.65	0.54	0.51	9.39	2.91	0.080
-6.17	16.64	22.23	0.03	4.99	0.59	0.49	8.83	3.03	0.076
-5.88	16.36	22.74	0.03	4.39	0.58	0.45	8.28	3.01	0.071
-5.60	16.07	23.14	0.04	4.02	0.54	0.43	7.92	2.91	0.067
-5.31	15.78	23.50	0.04	3.68	0.62	0.40	7.58	3.12	0.063
-5.02	15.49	23.79	0.05	3.30	0.70	0.38	7.18	3.30	0.059
-4.73	15.21	24.04	0.05	3.05	0.65	0.38	6.90	3.18	0.059
-4.45	14.92	24.27	0.05	2.77	0.64	0.33	6.58	3.17	0.051
-4.16	14.63	24.47	0.06	2.54	0.67	0.29	6.30	3.24	0.046
-3.87	14.35	24.63	0.06	2.32	0.69	0.26	6.02	3.28	0.041
-3.59	14.06	24.76	0.06	2.15	0.70	0.24	5.79	3.30	0.038
-3.30	13.77	24.88	0.07	2.00	0.70	0.21	5.59	3.30	0.033
-3.01	13.49	24.97	0.07	1.87	0.71	0.18	5.41	3.34	0.029
-2.73	13.20	25.06	0.08	1.76	0.69	0.15	5.24	3.29	0.024
-2.44	12.91	25.11	0.08	1.71	0.71	0.13	5.16	3.33	0.020

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.15	12.63	25.16	0.08	1.64	0.73	0.10	5.05	3.38	0.015
-1.87	12.34	25.21	0.09	1.54	0.74	0.08	4.90	3.40	0.012
-1.58	12.05	25.25	0.09	1.51	0.80	0.05	4.86	3.54	0.008
-1.29	11.76	25.28	0.09	1.47	0.81	0.02	4.79	3.55	0.003
-1.00	11.48	25.30	0.09	1.46	0.79	0.00	4.77	3.51	0.000
-0.72	11.19	25.31	0.09	1.45	0.79	-0.01	4.77	3.52	-0.002
-0.43	10.90	25.30	0.09	1.44	0.80	-0.04	4.74	3.54	-0.006
-0.14	10.62	25.29	0.09	1.43	0.77	-0.06	4.72	3.47	-0.010
0.14	10.33	25.28	0.10	1.45	0.78	-0.08	4.76	3.48	-0.013
0.43	10.04	25.25	0.10	1.49	0.82	-0.10	4.83	3.58	-0.016
0.72	9.76	25.21	0.10	1.50	0.83	-0.11	4.83	3.61	-0.018
1.00	9.47	25.16	0.09	1.55	0.77	-0.14	4.92	3.46	-0.022
1.29	9.18	25.11	0.09	1.61	0.75	-0.17	5.02	3.43	-0.027
1.58	8.90	25.04	0.09	1.69	0.76	-0.19	5.13	3.44	-0.030
1.87	8.61	24.97	0.08	1.74	0.76	-0.21	5.21	3.43	-0.033
2.15	8.32	24.89	0.08	1.82	0.73	-0.23	5.34	3.37	-0.036
2.44	8.03	24.79	0.09	1.94	0.72	-0.25	5.51	3.36	-0.039
2.73	7.75	24.67	0.09	2.10	0.71	-0.30	5.73	3.32	-0.046
3.01	7.46	24.53	0.09	2.32	0.70	-0.34	6.02	3.30	-0.053
3.30	7.17	24.37	0.08	2.52	0.68	-0.36	6.27	3.25	-0.056
3.59	6.89	24.21	0.08	2.71	0.68	-0.38	6.50	3.26	-0.059
3.87	6.60	24.04	0.08	2.94	0.64	-0.40	6.78	3.16	-0.063
4.16	6.31	23.83	0.08	3.18	0.64	-0.42	7.04	3.15	-0.066
4.45	6.03	23.60	0.08	3.40	0.62	-0.45	7.28	3.12	-0.070
4.73	5.74	23.37	0.08	3.61	0.63	-0.47	7.51	3.13	-0.073
5.02	5.45	23.08	0.07	3.95	0.62	-0.48	7.85	3.12	-0.075
5.31	5.16	22.74	0.07	4.32	0.61	-0.50	8.21	3.08	-0.079
5.60	4.88	22.35	0.07	4.74	0.58	-0.51	8.61	3.00	-0.079
5.88	4.59	21.89	0.07	5.20	0.56	-0.52	9.01	2.96	-0.082
6.17	4.30	21.36	0.07	5.77	0.57	-0.54	9.49	2.98	-0.084
6.46	4.02	20.77	0.05	6.28	0.59	-0.55	9.90	3.03	-0.086
6.74	3.73	20.08	0.05	6.79	0.65	-0.54	10.29	3.18	-0.084
7.03	3.44	19.25	0.06	7.29	0.62	-0.54	10.67	3.11	-0.084
7.32	3.16	18.29	0.05	7.79	0.59	-0.51	11.03	3.04	-0.079
7.60	2.87	17.24	0.04	7.90	0.60	-0.44	11.11	3.07	-0.068
7.89	2.58	16.03	0.03	7.88	0.64	-0.37	11.09	3.16	-0.057
8.18	2.30	14.66	0.03	7.51	0.66	-0.33	10.83	3.20	-0.052
8.46	2.01	13.16	0.03	6.90	0.69	-0.27	10.38	3.28	-0.042

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
8.75	1.72	11.56	0.01	5.93	0.97	-0.13	9.62	3.89	-0.020
9.04	1.43	9.83	0.01	5.19	1.42	-0.08	9.01	4.70	-0.012
9.33	1.15	7.90	0.01	4.30	1.66	-0.07	8.20	5.10	-0.012
9.61	0.86	5.18	0.06	8.98	1.22	-0.13	11.84	4.36	-0.020
9.90	0.57	0.36	0.10	1.54	0.85	-0.06	4.90	3.64	-0.009
10.19	0.29	0.06	0.18	0.31	0.42	-0.04	2.21	2.56	-0.006
10.47	0.00	0.31	0.06	0.43	0.01	-0.02	2.58	0.34	-0.003

Table N-10 Grid #1, L0, Plasma-300, Right (71-80)

L0 (300)							U_∞ =	25.27	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.47	20.95	1.04	-0.15	2.96	1.88	0.07	6.80	5.43	0.011
-10.19	20.66	1.91	-0.05	2.26	1.10	-0.10	5.95	4.15	-0.015
-9.90	20.37	4.03	-0.07	2.60	1.18	-0.09	6.38	4.29	-0.014
-9.61	20.09	6.09	-0.02	2.52	0.62	-0.04	6.29	3.12	-0.006
-9.33	19.80	8.23	-0.02	3.39	0.53	-0.01	7.29	2.89	-0.002
-9.04	19.51	10.18	0.00	4.35	0.46	0.06	8.25	2.69	0.010
-8.75	19.23	12.10	-0.01	5.59	0.53	0.16	9.36	2.87	0.024
-8.46	18.94	13.80	0.00	6.45	0.53	0.21	10.05	2.89	0.033
-8.18	18.65	15.44	0.01	7.07	0.56	0.31	10.52	2.97	0.049
-7.89	18.36	16.79	0.02	7.41	0.51	0.36	10.77	2.84	0.057
-7.60	18.08	18.05	0.02	7.36	0.55	0.40	10.73	2.93	0.062
-7.32	17.79	19.11	0.03	7.08	0.57	0.44	10.53	2.99	0.068
-7.03	17.50	20.05	0.04	6.59	0.57	0.45	10.16	3.00	0.071
-6.74	17.22	20.82	0.05	6.17	0.52	0.46	9.83	2.85	0.072
-6.46	16.93	21.53	0.05	5.63	0.50	0.45	9.39	2.81	0.071
-6.17	16.64	22.13	0.06	5.09	0.55	0.43	8.93	2.94	0.067
-5.88	16.36	22.65	0.07	4.54	0.59	0.40	8.43	3.05	0.063
-5.60	16.07	23.07	0.06	4.12	0.56	0.37	8.03	2.97	0.058
-5.31	15.78	23.44	0.07	3.66	0.60	0.35	7.57	3.06	0.055
-5.02	15.49	23.74	0.07	3.33	0.65	0.34	7.23	3.19	0.053
-4.73	15.21	24.01	0.08	3.01	0.67	0.30	6.87	3.24	0.047
-4.45	14.92	24.22	0.08	2.76	0.70	0.27	6.58	3.30	0.043
-4.16	14.63	24.43	0.08	2.48	0.68	0.25	6.24	3.26	0.039

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-3.87	14.35	24.60	0.08	2.27	0.59	0.21	5.96	3.03	0.033
-3.59	14.06	24.76	0.09	2.02	0.61	0.18	5.63	3.09	0.028
-3.30	13.77	24.88	0.09	1.84	0.66	0.16	5.38	3.22	0.024
-3.01	13.49	24.97	0.10	1.74	0.68	0.13	5.22	3.26	0.021
-2.73	13.20	25.05	0.10	1.65	0.68	0.11	5.09	3.25	0.017
-2.44	12.91	25.12	0.09	1.61	0.71	0.09	5.01	3.34	0.015
-2.15	12.63	25.17	0.10	1.54	0.74	0.07	4.92	3.40	0.011
-1.87	12.34	25.21	0.10	1.47	0.74	0.05	4.79	3.41	0.008
-1.58	12.05	25.24	0.11	1.41	0.74	0.02	4.69	3.40	0.003
-1.29	11.76	25.26	0.11	1.38	0.72	0.00	4.65	3.36	0.000
-1.00	11.48	25.27	0.11	1.36	0.79	-0.04	4.61	3.51	-0.006
-0.72	11.19	25.26	0.11	1.36	0.75	-0.05	4.61	3.44	-0.008
-0.43	10.90	25.26	0.11	1.38	0.71	-0.06	4.64	3.34	-0.009
-0.14	10.62	25.24	0.12	1.41	0.76	-0.07	4.71	3.46	-0.011
0.14	10.33	25.23	0.12	1.41	0.78	-0.10	4.69	3.49	-0.016
0.43	10.04	25.20	0.12	1.43	0.78	-0.12	4.73	3.50	-0.019
0.72	9.76	25.16	0.11	1.49	0.74	-0.14	4.84	3.40	-0.022
1.00	9.47	25.12	0.11	1.54	0.71	-0.16	4.91	3.35	-0.025
1.29	9.18	25.06	0.11	1.62	0.74	-0.17	5.03	3.40	-0.027
1.58	8.90	24.98	0.11	1.75	0.80	-0.21	5.24	3.54	-0.032
1.87	8.61	24.90	0.10	1.86	0.77	-0.25	5.40	3.48	-0.040
2.15	8.32	24.83	0.10	1.90	0.73	-0.26	5.45	3.38	-0.040
2.44	8.03	24.73	0.10	2.07	0.74	-0.30	5.69	3.40	-0.046
2.73	7.75	24.61	0.10	2.22	0.76	-0.33	5.89	3.45	-0.052
3.01	7.46	24.50	0.10	2.35	0.74	-0.37	6.06	3.40	-0.057
3.30	7.17	24.35	0.10	2.56	0.68	-0.38	6.34	3.26	-0.059
3.59	6.89	24.19	0.09	2.75	0.68	-0.39	6.56	3.27	-0.061
3.87	6.60	24.01	0.08	2.94	0.71	-0.38	6.79	3.33	-0.060
4.16	6.31	23.80	0.08	3.19	0.68	-0.43	7.07	3.26	-0.067
4.45	6.03	23.57	0.08	3.43	0.62	-0.45	7.33	3.12	-0.071
4.73	5.74	23.31	0.07	3.68	0.63	-0.46	7.59	3.14	-0.072
5.02	5.45	23.01	0.06	3.98	0.68	-0.47	7.90	3.27	-0.074
5.31	5.16	22.67	0.06	4.37	0.70	-0.45	8.27	3.30	-0.071
5.60	4.88	22.23	0.06	4.97	0.75	-0.47	8.82	3.43	-0.074
5.88	4.59	21.75	0.05	5.54	0.88	-0.56	9.32	3.72	-0.088
6.17	4.30	21.17	0.06	6.56	1.45	-0.63	10.14	4.76	-0.098
6.46	4.02	20.56	0.07	7.89	2.74	-0.57	11.12	6.55	-0.089
6.74	3.73	19.84	0.07	9.02	3.87	-0.44	11.88	7.79	-0.068

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.03	3.44	18.95	0.04	9.32	3.70	-0.40	12.08	7.62	-0.062
7.32	3.16	18.05	0.03	9.26	3.18	-0.43	12.04	7.06	-0.067
7.60	2.87	17.02	0.04	8.99	2.32	-0.46	11.87	6.03	-0.073
7.89	2.58	15.82	0.03	8.68	1.74	-0.45	11.66	5.23	-0.071
8.18	2.30	14.46	0.02	7.88	1.37	-0.39	11.11	4.62	-0.062
8.46	2.01	12.97	0.02	7.06	1.09	-0.21	10.52	4.14	-0.033
8.75	1.72	11.38	0.01	6.06	1.15	-0.09	9.74	4.25	-0.015
9.04	1.43	9.65	0.01	5.19	1.52	-0.04	9.01	4.88	-0.006
9.33	1.15	7.73	0.01	4.21	2.20	0.01	8.12	5.87	0.001
9.61	0.86	5.81	0.00	4.02	2.41	0.05	7.94	6.14	0.008
9.90	0.57	3.01	0.04	5.24	2.10	0.05	9.06	5.73	0.008
10.19	0.29	0.32	0.17	0.79	0.35	0.02	3.51	2.33	0.003
10.47	0.00	0.10	0.02	0.02	0.01	0.00	0.50	0.38	0.000

Table N-11 Grid #1, L1, Plasma-Off, Left (1-10)

L1 (Off)							U_∞ =	27.34	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.65	21.31	2.35	0.87	32.25	10.42	-2.91	20.77	11.80	-0.389
-10.36	21.02	2.82	-0.13	8.49	2.21	-0.08	10.65	5.43	-0.011
-10.07	20.73	4.80	0.00	2.56	0.36	0.01	5.85	2.19	0.001
-9.78	20.43	6.79	0.01	2.82	0.48	0.03	6.14	2.53	0.004
-9.49	20.14	9.00	0.00	3.63	0.60	0.07	6.97	2.82	0.009
-9.20	19.85	11.05	0.01	4.80	0.79	0.08	8.01	3.25	0.011
-8.90	19.56	13.04	0.02	5.93	0.69	0.17	8.90	3.03	0.022
-8.61	19.27	14.81	0.02	6.94	0.68	0.24	9.63	3.02	0.032
-8.32	18.97	16.44	0.02	7.64	0.64	0.29	10.11	2.93	0.039
-8.03	18.68	17.88	0.02	8.13	0.65	0.35	10.42	2.96	0.047
-7.74	18.39	19.21	0.03	8.22	0.58	0.40	10.48	2.80	0.053
-7.44	18.10	20.34	0.03	8.03	0.64	0.47	10.36	2.93	0.063
-7.15	17.81	21.38	0.03	7.79	0.77	0.51	10.21	3.22	0.068
-6.86	17.52	22.24	0.03	7.34	0.79	0.53	9.91	3.26	0.071
-6.57	17.22	23.06	0.03	6.62	0.69	0.49	9.41	3.05	0.066
-6.28	16.93	23.73	0.05	5.97	0.73	0.48	8.93	3.12	0.064
-5.98	16.64	24.31	0.05	5.31	0.81	0.44	8.43	3.29	0.059

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-5.69	16.35	24.77	0.05	4.91	0.83	0.43	8.10	3.34	0.058
-5.40	16.06	25.19	0.06	4.53	0.90	0.40	7.79	3.47	0.054
-5.11	15.76	25.55	0.06	4.14	0.87	0.41	7.45	3.42	0.054
-4.82	15.47	25.88	0.06	3.70	0.83	0.37	7.03	3.34	0.049
-4.52	15.18	26.14	0.07	3.40	0.84	0.33	6.74	3.35	0.045
-4.23	14.89	26.37	0.08	3.08	0.79	0.30	6.42	3.26	0.040
-3.94	14.60	26.56	0.08	2.84	0.78	0.26	6.16	3.23	0.035
-3.65	14.30	26.72	0.08	2.71	0.80	0.23	6.02	3.26	0.031
-3.36	14.01	26.87	0.08	2.51	0.88	0.19	5.79	3.43	0.026
-3.07	13.72	26.98	0.08	2.36	0.85	0.18	5.62	3.37	0.023
-2.77	13.43	27.07	0.08	2.24	0.87	0.16	5.47	3.41	0.021
-2.48	13.14	27.14	0.08	2.17	0.92	0.13	5.38	3.50	0.017
-2.19	12.84	27.21	0.08	2.07	0.85	0.10	5.26	3.36	0.013
-1.90	12.55	27.25	0.07	2.05	0.85	0.09	5.23	3.37	0.012
-1.61	12.26	27.29	0.07	1.99	0.85	0.05	5.16	3.37	0.007
-1.31	11.97	27.33	0.07	1.91	0.90	0.02	5.05	3.47	0.002
-1.02	11.68	27.34	0.07	1.91	0.91	-0.02	5.05	3.49	-0.003
-0.73	11.38	27.33	0.07	1.87	0.87	-0.02	5.01	3.42	-0.003
-0.44	11.09	27.33	0.06	1.86	0.87	-0.07	4.99	3.42	-0.009
-0.15	10.80	27.30	0.07	1.87	0.85	-0.12	5.00	3.36	-0.016
0.15	10.51	27.27	0.07	1.88	0.88	-0.12	5.01	3.43	-0.017
0.44	10.22	27.25	0.07	1.88	0.95	-0.12	5.02	3.56	-0.016
0.73	9.93	27.19	0.07	1.94	0.94	-0.15	5.10	3.55	-0.021
1.02	9.63	27.13	0.06	2.01	0.87	-0.19	5.19	3.40	-0.026
1.31	9.34	27.06	0.06	2.08	0.84	-0.21	5.27	3.35	-0.029
1.61	9.05	26.97	0.06	2.18	0.85	-0.22	5.40	3.38	-0.030
1.90	8.76	26.88	0.07	2.26	0.87	-0.23	5.49	3.41	-0.031
2.19	8.47	26.77	0.07	2.40	0.88	-0.26	5.67	3.44	-0.035
2.48	8.17	26.64	0.05	2.53	0.92	-0.29	5.81	3.50	-0.039
2.77	7.88	26.51	0.05	2.70	0.84	-0.31	6.01	3.36	-0.041
3.07	7.59	26.35	0.05	2.86	0.75	-0.35	6.19	3.17	-0.046
3.36	7.30	26.17	0.05	3.05	0.86	-0.37	6.39	3.38	-0.050
3.65	7.01	25.96	0.06	3.32	0.88	-0.40	6.66	3.43	-0.053
3.94	6.71	25.74	0.06	3.64	0.93	-0.41	6.97	3.53	-0.055
4.23	6.42	25.48	0.06	3.88	0.90	-0.43	7.20	3.47	-0.057
4.52	6.13	25.19	0.06	4.21	0.72	-0.45	7.50	3.11	-0.060
4.82	5.84	24.87	0.06	4.64	0.71	-0.50	7.88	3.07	-0.066
5.11	5.55	24.50	0.06	5.08	0.73	-0.53	8.24	3.13	-0.071

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
5.40	5.25	24.08	0.04	5.52	0.68	-0.54	8.59	3.02	-0.072
5.69	4.96	23.61	0.05	6.04	0.71	-0.58	8.99	3.08	-0.077
5.98	4.67	23.04	0.05	6.65	0.73	-0.60	9.43	3.11	-0.081
6.28	4.38	22.41	0.05	7.26	0.71	-0.56	9.85	3.07	-0.075
6.57	4.09	21.68	0.05	7.80	0.67	-0.57	10.21	2.99	-0.076
6.86	3.79	20.88	0.03	8.09	0.68	-0.54	10.40	3.01	-0.072
7.15	3.50	19.96	0.03	8.40	0.66	-0.48	10.60	2.98	-0.064
7.44	3.21	18.94	0.03	8.56	0.65	-0.44	10.70	2.96	-0.059
7.74	2.92	17.74	0.03	8.26	0.57	-0.37	10.51	2.77	-0.049
8.03	2.63	16.45	0.02	7.84	0.61	-0.34	10.24	2.85	-0.045
8.32	2.34	15.01	0.02	7.08	0.63	-0.26	9.73	2.91	-0.035
8.61	2.04	13.40	0.02	6.16	0.59	-0.20	9.08	2.82	-0.027
8.90	1.75	11.68	0.01	5.03	0.63	-0.13	8.20	2.91	-0.018
9.20	1.46	9.83	0.00	4.07	0.68	-0.07	7.38	3.03	-0.009
9.49	1.17	7.89	0.01	3.21	0.76	-0.01	6.55	3.19	-0.002
9.78	0.88	5.94	0.01	2.71	0.85	0.01	6.02	3.38	0.001
10.07	0.58	3.44	0.16	3.16	2.54	0.04	6.50	5.83	0.005
10.36	0.29	1.80	0.20	2.08	2.10	0.16	5.28	5.30	0.022
10.65	0.00	2.84	0.04	0.00	0.02	0.00	0.00	0.54	0.000

Table N-12 Grid #1, L1, Plasma-Off, Center (46-55)

L1 (Off)							U_∞ =	27.40	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.65	21.31	1.72	-0.09	8.39	1.73	-0.07	10.57	4.80	-0.009
-10.36	21.02	2.73	-0.03	8.03	1.61	-0.02	10.34	4.63	-0.003
-10.07	20.73	5.01	0.01	2.26	0.30	0.00	5.49	1.98	0.000
-9.78	20.43	7.02	0.00	2.52	0.39	0.02	5.80	2.29	0.003
-9.49	20.14	9.20	0.01	3.34	0.53	0.05	6.67	2.64	0.007
-9.20	19.85	11.23	0.01	4.33	0.46	0.07	7.59	2.48	0.009
-8.90	19.56	13.17	0.01	5.25	0.43	0.13	8.36	2.39	0.017
-8.61	19.27	14.91	0.00	6.13	0.45	0.18	9.03	2.44	0.024
-8.32	18.97	16.57	0.01	6.86	0.48	0.23	9.56	2.52	0.030
-8.03	18.68	17.98	0.02	7.51	0.51	0.28	10.00	2.61	0.037
-7.74	18.39	19.34	0.02	7.65	0.56	0.38	10.09	2.72	0.050

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-7.44	18.10	20.48	0.03	7.57	0.55	0.44	10.04	2.71	0.058
-7.15	17.81	21.52	0.04	7.21	0.52	0.43	9.80	2.64	0.058
-6.86	17.52	22.37	0.05	6.83	0.58	0.45	9.54	2.77	0.060
-6.57	17.22	23.13	0.05	6.30	0.55	0.44	9.16	2.70	0.058
-6.28	16.93	23.78	0.06	5.72	0.61	0.45	8.73	2.86	0.060
-5.98	16.64	24.32	0.06	5.19	0.60	0.42	8.31	2.83	0.056
-5.69	16.35	24.80	0.06	4.66	0.58	0.40	7.88	2.78	0.054
-5.40	16.06	25.23	0.07	4.15	0.57	0.37	7.43	2.77	0.050
-5.11	15.76	25.60	0.07	3.71	0.62	0.35	7.03	2.87	0.046
-4.82	15.47	25.92	0.07	3.33	0.68	0.29	6.66	3.01	0.039
-4.52	15.18	26.19	0.07	3.01	0.68	0.27	6.34	3.01	0.037
-4.23	14.89	26.41	0.07	2.77	0.66	0.26	6.08	2.96	0.034
-3.94	14.60	26.60	0.08	2.59	0.71	0.24	5.88	3.08	0.031
-3.65	14.30	26.77	0.08	2.43	0.66	0.21	5.69	2.96	0.029
-3.36	14.01	26.90	0.08	2.31	0.63	0.19	5.55	2.90	0.025
-3.07	13.72	27.01	0.08	2.20	0.68	0.16	5.41	3.00	0.021
-2.77	13.43	27.11	0.08	2.09	0.70	0.14	5.28	3.05	0.019
-2.48	13.14	27.20	0.08	2.01	0.69	0.12	5.17	3.02	0.016
-2.19	12.84	27.26	0.08	1.93	0.66	0.11	5.07	2.96	0.015
-1.90	12.55	27.31	0.08	1.88	0.70	0.09	5.01	3.05	0.012
-1.61	12.26	27.35	0.07	1.83	0.74	0.06	4.94	3.15	0.008
-1.31	11.97	27.38	0.07	1.82	0.72	0.03	4.92	3.09	0.004
-1.02	11.68	27.39	0.09	1.80	0.78	0.00	4.89	3.22	0.001
-0.73	11.38	27.40	0.08	1.81	0.86	-0.02	4.92	3.38	-0.003
-0.44	11.09	27.40	0.08	1.82	0.78	-0.04	4.92	3.22	-0.006
-0.15	10.80	27.39	0.08	1.81	0.77	-0.08	4.91	3.21	-0.010
0.15	10.51	27.35	0.08	1.86	0.78	-0.10	4.98	3.22	-0.013
0.44	10.22	27.31	0.09	1.90	0.75	-0.11	5.03	3.15	-0.015
0.73	9.93	27.27	0.08	1.93	0.79	-0.14	5.07	3.24	-0.019
1.02	9.63	27.22	0.08	1.96	0.78	-0.16	5.12	3.23	-0.022
1.31	9.34	27.14	0.09	2.03	0.76	-0.19	5.20	3.19	-0.025
1.61	9.05	27.07	0.08	2.08	0.76	-0.21	5.26	3.18	-0.028
1.90	8.76	26.98	0.08	2.18	0.72	-0.24	5.39	3.09	-0.032
2.19	8.47	26.85	0.08	2.33	0.67	-0.27	5.57	2.99	-0.036
2.48	8.17	26.73	0.07	2.43	0.69	-0.28	5.69	3.03	-0.037
2.77	7.88	26.57	0.07	2.64	0.78	-0.32	5.93	3.22	-0.042
3.07	7.59	26.41	0.08	2.86	0.72	-0.35	6.17	3.10	-0.046
3.36	7.30	26.21	0.07	3.12	0.69	-0.38	6.44	3.04	-0.051

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
3.65	7.01	25.97	0.06	3.46	0.66	-0.43	6.79	2.96	-0.057
3.94	6.71	25.74	0.06	3.67	0.66	-0.42	6.99	2.97	-0.056
4.23	6.42	25.48	0.06	3.97	0.67	-0.43	7.27	2.98	-0.057
4.52	6.13	25.15	0.06	4.33	0.68	-0.46	7.59	3.01	-0.061
4.82	5.84	24.81	0.05	4.74	0.63	-0.49	7.95	2.90	-0.065
5.11	5.55	24.44	0.05	5.12	0.56	-0.53	8.26	2.73	-0.071
5.40	5.25	24.01	0.05	5.53	0.58	-0.54	8.58	2.78	-0.072
5.69	4.96	23.51	0.04	6.04	0.60	-0.54	8.97	2.83	-0.072
5.98	4.67	22.95	0.05	6.53	0.56	-0.55	9.33	2.73	-0.073
6.28	4.38	22.32	0.04	7.03	0.53	-0.56	9.67	2.66	-0.074
6.57	4.09	21.59	0.03	7.43	0.58	-0.54	9.95	2.77	-0.072
6.86	3.79	20.79	0.03	7.76	0.55	-0.52	10.17	2.70	-0.069
7.15	3.50	19.84	0.03	7.98	0.53	-0.47	10.31	2.66	-0.063
7.44	3.21	18.82	0.03	8.01	0.51	-0.40	10.33	2.62	-0.054
7.74	2.92	17.64	0.03	7.85	0.47	-0.34	10.22	2.51	-0.046
8.03	2.63	16.31	0.01	7.39	0.50	-0.25	9.92	2.58	-0.033
8.32	2.34	14.89	0.01	6.70	0.49	-0.19	9.45	2.56	-0.026
8.61	2.04	13.34	0.01	5.95	0.53	-0.14	8.90	2.65	-0.019
8.90	1.75	11.62	0.00	4.84	0.54	-0.10	8.03	2.68	-0.013
9.20	1.46	9.79	0.00	3.78	0.58	-0.05	7.10	2.78	-0.007
9.49	1.17	7.88	0.01	2.96	0.68	-0.03	6.27	3.01	-0.004
9.78	0.88	5.85	-0.02	2.44	0.79	0.00	5.71	3.24	-0.001
10.07	0.58	3.40	0.01	1.75	0.73	0.02	4.83	3.12	0.003
10.36	0.29	1.30	0.06	0.68	0.34	0.01	3.00	2.14	0.002
10.65	0.00	0.14	-0.02	0.02	0.01	-0.01	0.54	0.34	-0.001

Table N-13 Grid #1, L1, Plasma-Off, Right (71-80)

L1 (Off)							U_∞ =	27.40	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.65	21.31	1.00	0.01	2.27	1.23	0.07	5.49	4.04	0.009
-10.36	21.02	2.45	0.02	3.33	1.49	0.05	6.66	4.46	0.007
-10.07	20.73	5.05	0.00	2.12	0.74	0.01	5.32	3.14	0.001
-9.78	20.43	7.17	0.00	2.57	0.70	0.03	5.85	3.05	0.004
-9.49	20.14	9.32	0.00	3.23	0.50	0.07	6.56	2.58	0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.20	19.85	11.33	0.01	4.30	0.60	0.11	7.56	2.82	0.014
-8.90	19.56	13.25	0.01	5.28	0.58	0.12	8.39	2.78	0.016
-8.61	19.27	14.98	0.01	6.04	0.64	0.18	8.97	2.93	0.025
-8.32	18.97	16.63	0.01	6.90	0.69	0.27	9.59	3.02	0.035
-8.03	18.68	18.06	0.03	7.33	0.58	0.32	9.88	2.79	0.043
-7.74	18.39	19.38	0.03	7.50	0.58	0.35	10.00	2.78	0.046
-7.44	18.10	20.52	0.04	7.37	0.61	0.38	9.91	2.85	0.051
-7.15	17.81	21.55	0.05	7.19	0.70	0.39	9.78	3.05	0.052
-6.86	17.52	22.38	0.05	6.91	0.72	0.45	9.59	3.10	0.060
-6.57	17.22	23.16	0.05	6.26	0.74	0.44	9.13	3.14	0.059
-6.28	16.93	23.81	0.05	5.66	0.77	0.41	8.68	3.21	0.055
-5.98	16.64	24.37	0.07	5.20	0.65	0.40	8.32	2.93	0.054
-5.69	16.35	24.85	0.07	4.69	0.63	0.39	7.91	2.91	0.052
-5.40	16.06	25.27	0.07	4.26	0.69	0.36	7.53	3.04	0.048
-5.11	15.76	25.62	0.08	3.83	0.64	0.35	7.14	2.91	0.046
-4.82	15.47	25.95	0.09	3.39	0.69	0.31	6.72	3.04	0.041
-4.52	15.18	26.22	0.08	3.07	0.66	0.28	6.39	2.96	0.037
-4.23	14.89	26.45	0.08	2.79	0.66	0.24	6.09	2.96	0.033
-3.94	14.60	26.64	0.08	2.56	0.68	0.23	5.84	3.01	0.031
-3.65	14.30	26.81	0.09	2.43	0.73	0.23	5.69	3.13	0.031
-3.36	14.01	26.93	0.09	2.28	0.74	0.22	5.52	3.14	0.029
-3.07	13.72	27.06	0.09	2.16	0.80	0.19	5.36	3.26	0.026
-2.77	13.43	27.15	0.11	2.07	0.80	0.15	5.26	3.26	0.020
-2.48	13.14	27.22	0.10	2.03	0.80	0.12	5.20	3.27	0.016
-2.19	12.84	27.29	0.10	1.96	0.84	0.11	5.11	3.34	0.014
-1.90	12.55	27.34	0.10	1.91	0.79	0.10	5.05	3.25	0.013
-1.61	12.26	27.37	0.10	1.88	0.83	0.06	5.01	3.33	0.009
-1.31	11.97	27.39	0.10	1.88	0.81	0.04	5.00	3.29	0.005
-1.02	11.68	27.40	0.09	1.87	0.79	0.01	5.00	3.23	0.001
-0.73	11.38	27.40	0.09	1.86	0.79	-0.03	4.98	3.24	-0.004
-0.44	11.09	27.40	0.09	1.84	0.78	-0.03	4.95	3.22	-0.004
-0.15	10.80	27.39	0.10	1.86	0.83	-0.07	4.98	3.32	-0.009
0.15	10.51	27.36	0.10	1.90	0.86	-0.12	5.03	3.37	-0.015
0.44	10.22	27.31	0.09	1.98	0.83	-0.13	5.14	3.32	-0.017
0.73	9.93	27.26	0.09	2.04	0.79	-0.15	5.21	3.25	-0.020
1.02	9.63	27.20	0.10	2.10	0.76	-0.18	5.29	3.18	-0.024
1.31	9.34	27.12	0.09	2.18	0.81	-0.18	5.39	3.29	-0.024
1.61	9.05	27.03	0.08	2.28	0.78	-0.22	5.51	3.23	-0.029

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
1.90	8.76	26.95	0.08	2.33	0.80	-0.24	5.57	3.27	-0.032
2.19	8.47	26.82	0.08	2.49	0.84	-0.26	5.76	3.34	-0.035
2.48	8.17	26.69	0.08	2.68	0.81	-0.30	5.97	3.28	-0.039
2.77	7.88	26.54	0.09	2.85	0.76	-0.32	6.16	3.18	-0.042
3.07	7.59	26.37	0.08	3.02	0.75	-0.34	6.34	3.15	-0.045
3.36	7.30	26.17	0.08	3.28	0.73	-0.34	6.61	3.12	-0.046
3.65	7.01	25.95	0.08	3.58	0.67	-0.38	6.90	2.98	-0.050
3.94	6.71	25.73	0.08	3.82	0.72	-0.40	7.13	3.10	-0.053
4.23	6.42	25.47	0.07	4.02	0.81	-0.43	7.32	3.28	-0.057
4.52	6.13	25.16	0.06	4.34	0.74	-0.44	7.60	3.14	-0.059
4.82	5.84	24.80	0.06	4.84	0.70	-0.45	8.03	3.05	-0.061
5.11	5.55	24.43	0.06	5.13	0.61	-0.50	8.27	2.85	-0.066
5.40	5.25	24.00	0.06	5.47	0.66	-0.50	8.53	2.97	-0.067
5.69	4.96	23.50	0.06	6.02	0.68	-0.49	8.95	3.02	-0.065
5.98	4.67	22.92	0.06	6.48	0.61	-0.51	9.29	2.84	-0.068
6.28	4.38	22.28	0.05	6.90	0.60	-0.52	9.59	2.83	-0.069
6.57	4.09	21.56	0.03	7.42	0.60	-0.47	9.94	2.83	-0.063
6.86	3.79	20.74	0.02	7.75	0.65	-0.46	10.16	2.94	-0.061
7.15	3.50	19.81	0.03	8.09	0.69	-0.41	10.38	3.03	-0.055
7.44	3.21	18.77	0.03	8.17	0.68	-0.39	10.43	3.02	-0.052
7.74	2.92	17.61	0.02	8.10	0.54	-0.34	10.39	2.68	-0.045
8.03	2.63	16.31	0.02	7.68	0.68	-0.28	10.11	3.01	-0.037
8.32	2.34	14.87	0.02	6.81	0.72	-0.22	9.53	3.11	-0.029
8.61	2.04	13.29	0.01	5.88	0.77	-0.18	8.85	3.20	-0.024
8.90	1.75	11.61	0.00	4.83	0.66	-0.11	8.02	2.97	-0.014
9.20	1.46	9.81	-0.01	3.87	0.62	-0.05	7.18	2.87	-0.007
9.49	1.17	7.86	-0.01	2.97	0.85	-0.04	6.29	3.36	-0.005
9.78	0.88	5.91	-0.01	2.27	0.80	-0.03	5.50	3.26	-0.004
10.07	0.58	3.50	0.03	1.79	0.64	-0.02	4.88	2.93	-0.002
10.36	0.29	1.40	0.03	1.04	0.31	-0.01	3.73	2.04	-0.001
10.65	0.00	0.15	0.02	0.03	0.02	0.00	0.63	0.49	0.000

Table N-14 Grid #1, L1, Plasma-150, Left (1-10)

L1 (150)							U_∞ =	27.26	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.65	21.31	9.26	2.50	82.48	13.44	-1.19	33.32	13.45	-0.160
-10.36	21.02	9.48	-0.03	76.47	6.54	-0.59	32.08	9.38	-0.079
-10.07	20.73	10.11	-0.07	43.34	2.15	-0.18	24.15	5.38	-0.024
-9.78	20.43	10.90	-0.05	3.79	1.50	-0.04	7.14	4.50	-0.006
-9.49	20.14	11.83	-0.05	2.78	0.63	0.02	6.12	2.91	0.003
-9.20	19.85	13.10	-0.02	3.35	0.45	0.08	6.71	2.46	0.011
-8.90	19.56	14.75	0.01	4.34	0.47	0.15	7.64	2.53	0.021
-8.61	19.27	16.39	0.02	5.16	0.47	0.18	8.33	2.52	0.024
-8.32	18.97	17.97	0.02	5.85	0.61	0.24	8.88	2.87	0.032
-8.03	18.68	19.31	0.03	6.07	0.75	0.30	9.04	3.17	0.040
-7.74	18.39	20.48	0.04	6.04	0.67	0.36	9.01	3.00	0.048
-7.44	18.10	21.44	0.05	5.96	0.75	0.37	8.96	3.18	0.050
-7.15	17.81	22.33	0.05	5.58	0.63	0.39	8.66	2.92	0.053
-6.86	17.52	23.03	0.06	5.28	0.70	0.41	8.43	3.07	0.055
-6.57	17.22	23.68	0.07	4.88	0.77	0.40	8.10	3.23	0.054
-6.28	16.93	24.22	0.08	4.50	0.82	0.38	7.78	3.31	0.051
-5.98	16.64	24.69	0.10	4.05	0.72	0.34	7.38	3.11	0.046
-5.69	16.35	25.10	0.10	3.74	0.75	0.33	7.09	3.18	0.044
-5.40	16.06	25.46	0.09	3.41	0.78	0.33	6.77	3.25	0.044
-5.11	15.76	25.77	0.10	3.06	0.72	0.30	6.41	3.10	0.041
-4.82	15.47	26.05	0.11	2.72	0.69	0.26	6.05	3.06	0.035
-4.52	15.18	26.27	0.12	2.55	0.73	0.22	5.86	3.14	0.030
-4.23	14.89	26.47	0.12	2.35	0.80	0.21	5.62	3.28	0.028
-3.94	14.60	26.64	0.12	2.19	0.78	0.20	5.43	3.23	0.026
-3.65	14.30	26.77	0.13	2.08	0.72	0.18	5.29	3.11	0.024
-3.36	14.01	26.88	0.13	2.00	0.77	0.16	5.19	3.22	0.022
-3.07	13.72	26.98	0.13	1.92	0.82	0.14	5.09	3.33	0.019
-2.77	13.43	27.06	0.14	1.84	0.87	0.13	4.98	3.43	0.018
-2.48	13.14	27.12	0.13	1.78	0.89	0.12	4.90	3.47	0.017
-2.19	12.84	27.17	0.14	1.74	0.85	0.09	4.84	3.37	0.012
-1.90	12.55	27.21	0.14	1.68	0.80	0.06	4.76	3.28	0.008
-1.61	12.26	27.24	0.14	1.65	0.85	0.05	4.72	3.38	0.007
-1.31	11.97	27.26	0.14	1.62	0.77	0.02	4.68	3.23	0.002
-1.02	11.68	27.26	0.14	1.64	0.82	0.01	4.69	3.31	0.001
-0.73	11.38	27.25	0.13	1.63	0.90	-0.01	4.69	3.48	-0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-0.44	11.09	27.25	0.14	1.63	0.90	-0.03	4.68	3.47	-0.004
-0.15	10.80	27.23	0.13	1.63	0.89	-0.06	4.69	3.46	-0.008
0.15	10.51	27.21	0.12	1.64	0.88	-0.08	4.69	3.44	-0.011
0.44	10.22	27.18	0.13	1.65	0.90	-0.10	4.71	3.48	-0.013
0.73	9.93	27.13	0.12	1.70	0.84	-0.12	4.78	3.36	-0.016
1.02	9.63	27.07	0.11	1.77	0.86	-0.16	4.88	3.41	-0.021
1.31	9.34	27.00	0.11	1.82	0.88	-0.19	4.94	3.44	-0.025
1.61	9.05	26.92	0.11	1.93	0.94	-0.19	5.10	3.55	-0.025
1.90	8.76	26.83	0.10	2.03	0.88	-0.22	5.23	3.43	-0.030
2.19	8.47	26.74	0.10	2.12	0.82	-0.24	5.35	3.31	-0.032
2.48	8.17	26.61	0.10	2.26	0.83	-0.27	5.51	3.35	-0.036
2.77	7.88	26.48	0.10	2.38	0.84	-0.30	5.66	3.36	-0.040
3.07	7.59	26.35	0.09	2.46	0.82	-0.30	5.76	3.33	-0.040
3.36	7.30	26.19	0.07	2.64	0.79	-0.32	5.96	3.26	-0.044
3.65	7.01	26.01	0.07	2.83	0.76	-0.34	6.17	3.20	-0.046
3.94	6.71	25.82	0.06	2.99	0.78	-0.36	6.35	3.24	-0.049
4.23	6.42	25.58	0.06	3.24	0.81	-0.39	6.60	3.31	-0.053
4.52	6.13	25.31	0.06	3.52	0.83	-0.40	6.88	3.35	-0.054
4.82	5.84	25.02	0.06	3.76	0.76	-0.44	7.12	3.20	-0.059
5.11	5.55	24.70	0.05	4.06	0.69	-0.43	7.39	3.04	-0.058
5.40	5.25	24.32	0.04	4.40	0.67	-0.43	7.70	3.00	-0.058
5.69	4.96	23.90	0.03	4.73	0.72	-0.43	7.98	3.11	-0.058
5.98	4.67	23.44	0.03	5.05	0.67	-0.43	8.24	3.01	-0.057
6.28	4.38	22.89	0.02	5.39	0.71	-0.42	8.52	3.08	-0.057
6.57	4.09	22.28	0.02	5.65	0.69	-0.39	8.72	3.05	-0.053
6.86	3.79	21.58	0.03	5.88	0.73	-0.35	8.89	3.13	-0.047
7.15	3.50	20.81	0.03	5.92	0.76	-0.31	8.93	3.19	-0.042
7.44	3.21	19.92	0.02	5.89	0.69	-0.33	8.90	3.05	-0.045
7.74	2.92	18.90	0.02	5.66	0.65	-0.28	8.73	2.96	-0.038
8.03	2.63	17.70	0.02	5.34	0.63	-0.23	8.47	2.91	-0.031
8.32	2.34	16.35	0.01	4.70	0.60	-0.18	7.95	2.84	-0.024
8.61	2.04	14.83	0.01	3.92	0.51	-0.13	7.27	2.63	-0.017
8.90	1.75	13.36	0.02	3.07	0.50	-0.07	6.42	2.60	-0.009
9.20	1.46	12.04	0.04	2.85	0.62	-0.03	6.19	2.89	-0.004
9.49	1.17	10.92	0.00	3.92	1.19	-0.05	7.27	4.00	-0.007
9.78	0.88	8.75	-0.26	25.76	4.65	-0.05	18.62	7.92	-0.007
10.07	0.58	4.54	0.59	67.87	18.04	-0.81	30.23	15.58	-0.109
10.36	0.29	2.25	0.93	29.33	10.66	-0.03	19.87	11.98	-0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
10.65	0.00	9.14	-0.50	0.48	0.01	0.00	2.55	0.28	0.000

Table N-15 Grid #1, L1, Plasma-150, Center (46-55)

L1 (150)							U_∞ =	27.47	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.65	21.31	4.81	-0.26	43.90	5.15	-0.28	24.12	8.26	-0.037
-10.36	21.02	6.32	-0.33	59.15	5.40	0.05	27.99	8.46	0.007
-10.07	20.73	7.85	0.08	39.44	1.39	-0.13	22.86	4.29	-0.017
-9.78	20.43	10.31	0.01	5.46	1.03	0.06	8.50	3.69	0.008
-9.49	20.14	11.63	-0.01	2.49	0.57	0.06	5.75	2.75	0.008
-9.20	19.85	12.98	0.00	3.02	0.39	0.06	6.33	2.29	0.008
-8.90	19.56	14.70	0.00	3.97	0.39	0.10	7.25	2.28	0.014
-8.61	19.27	16.38	0.00	4.84	0.40	0.14	8.01	2.29	0.018
-8.32	18.97	18.02	0.00	5.37	0.42	0.20	8.43	2.35	0.027
-8.03	18.68	19.39	0.01	5.56	0.48	0.24	8.58	2.51	0.031
-7.74	18.39	20.62	0.02	5.61	0.50	0.27	8.62	2.58	0.035
-7.44	18.10	21.63	0.01	5.44	0.48	0.29	8.49	2.53	0.038
-7.15	17.81	22.54	0.02	5.16	0.51	0.31	8.26	2.59	0.040
-6.86	17.52	23.30	0.03	4.77	0.46	0.32	7.95	2.46	0.042
-6.57	17.22	23.95	0.04	4.37	0.47	0.32	7.60	2.50	0.042
-6.28	16.93	24.48	0.04	4.08	0.51	0.32	7.35	2.61	0.042
-5.98	16.64	24.94	0.04	3.77	0.54	0.32	7.07	2.68	0.042
-5.69	16.35	25.34	0.04	3.49	0.59	0.31	6.80	2.79	0.042
-5.40	16.06	25.69	0.04	3.21	0.60	0.30	6.53	2.81	0.039
-5.11	15.76	25.99	0.05	2.94	0.50	0.29	6.24	2.57	0.038
-4.82	15.47	26.26	0.06	2.67	0.57	0.26	5.95	2.74	0.035
-4.52	15.18	26.48	0.06	2.47	0.66	0.25	5.72	2.97	0.033
-4.23	14.89	26.67	0.07	2.28	0.65	0.22	5.50	2.93	0.030
-3.94	14.60	26.84	0.07	2.06	0.63	0.20	5.23	2.88	0.026
-3.65	14.30	26.97	0.08	1.94	0.65	0.17	5.06	2.95	0.023
-3.36	14.01	27.08	0.08	1.86	0.66	0.15	4.97	2.96	0.019
-3.07	13.72	27.18	0.08	1.80	0.69	0.13	4.88	3.02	0.018
-2.77	13.43	27.26	0.08	1.68	0.69	0.10	4.72	3.01	0.013
-2.48	13.14	27.32	0.09	1.66	0.69	0.07	4.68	3.02	0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.19	12.84	27.36	0.08	1.61	0.70	0.06	4.62	3.04	0.008
-1.90	12.55	27.41	0.09	1.60	0.73	0.05	4.60	3.11	0.007
-1.61	12.26	27.44	0.09	1.55	0.70	0.03	4.53	3.05	0.004
-1.31	11.97	27.46	0.09	1.52	0.72	0.01	4.49	3.08	0.001
-1.02	11.68	27.47	0.08	1.51	0.76	-0.01	4.47	3.18	-0.002
-0.73	11.38	27.47	0.08	1.50	0.74	-0.05	4.46	3.13	-0.006
-0.44	11.09	27.47	0.09	1.51	0.68	-0.07	4.48	2.99	-0.009
-0.15	10.80	27.45	0.09	1.53	0.72	-0.08	4.50	3.09	-0.011
0.15	10.51	27.43	0.08	1.56	0.74	-0.10	4.55	3.14	-0.013
0.44	10.22	27.39	0.08	1.60	0.66	-0.12	4.61	2.95	-0.015
0.73	9.93	27.34	0.08	1.65	0.66	-0.13	4.68	2.97	-0.017
1.02	9.63	27.28	0.08	1.71	0.69	-0.15	4.76	3.03	-0.020
1.31	9.34	27.22	0.09	1.78	0.79	-0.17	4.86	3.23	-0.023
1.61	9.05	27.15	0.08	1.81	0.75	-0.20	4.90	3.15	-0.027
1.90	8.76	27.07	0.08	1.88	0.62	-0.22	4.99	2.86	-0.029
2.19	8.47	26.97	0.07	1.98	0.69	-0.25	5.12	3.01	-0.033
2.48	8.17	26.86	0.07	2.08	0.69	-0.26	5.25	3.03	-0.035
2.77	7.88	26.72	0.07	2.23	0.74	-0.28	5.43	3.13	-0.038
3.07	7.59	26.58	0.07	2.36	0.69	-0.29	5.59	3.03	-0.038
3.36	7.30	26.41	0.08	2.54	0.64	-0.32	5.80	2.92	-0.042
3.65	7.01	26.22	0.06	2.74	0.66	-0.35	6.02	2.95	-0.046
3.94	6.71	26.01	0.05	2.91	0.62	-0.35	6.21	2.87	-0.046
4.23	6.42	25.77	0.06	3.12	0.65	-0.35	6.42	2.93	-0.046
4.52	6.13	25.51	0.06	3.39	0.68	-0.37	6.70	3.01	-0.049
4.82	5.84	25.20	0.05	3.69	0.60	-0.39	6.99	2.82	-0.052
5.11	5.55	24.87	0.04	3.95	0.66	-0.40	7.23	2.95	-0.053
5.40	5.25	24.49	0.04	4.26	0.60	-0.39	7.52	2.81	-0.052
5.69	4.96	24.05	0.04	4.57	0.59	-0.41	7.78	2.79	-0.055
5.98	4.67	23.57	0.05	4.83	0.66	-0.43	8.00	2.95	-0.058
6.28	4.38	23.01	0.04	5.14	0.60	-0.41	8.25	2.83	-0.054
6.57	4.09	22.38	0.03	5.38	0.60	-0.40	8.44	2.82	-0.053
6.86	3.79	21.67	0.02	5.52	0.63	-0.36	8.55	2.88	-0.048
7.15	3.50	20.84	0.02	5.61	0.55	-0.33	8.62	2.70	-0.043
7.44	3.21	19.89	0.01	5.50	0.54	-0.30	8.53	2.68	-0.040
7.74	2.92	18.80	0.02	5.38	0.59	-0.28	8.44	2.81	-0.037
8.03	2.63	17.55	0.01	5.11	0.64	-0.23	8.23	2.92	-0.030
8.32	2.34	16.10	0.01	4.41	0.51	-0.16	7.65	2.59	-0.021
8.61	2.04	14.58	0.00	3.67	0.45	-0.09	6.97	2.44	-0.011

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
8.90	1.75	13.05	0.00	3.03	0.55	-0.06	6.34	2.69	-0.008
9.20	1.46	11.63	0.01	2.62	0.72	-0.02	5.89	3.08	-0.003
9.49	1.17	10.34	0.01	3.59	1.17	0.00	6.90	3.93	0.001
9.78	0.88	6.58	-0.27	27.59	5.42	-0.29	19.12	8.47	-0.038
10.07	0.58	2.01	-0.74	49.45	18.16	-0.98	25.60	15.51	-0.130
10.36	0.29	0.29	0.03	6.37	4.69	-0.35	9.19	7.88	-0.047
10.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000

Table N-16 Grid #1, L1, Plasma-150, Right (71-80)

L1 (150)							$U_\infty =$	27.63	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.65	21.31	3.90	-0.23	48.23	5.77	-1.03	25.14	8.70	-0.134
-10.36	21.02	5.12	-0.17	56.04	6.08	-1.39	27.09	8.93	-0.182
-10.07	20.73	8.00	0.00	28.52	1.88	-0.34	19.33	4.96	-0.045
-9.78	20.43	10.45	-0.02	3.15	1.12	0.03	6.43	3.83	0.004
-9.49	20.14	11.52	-0.01	2.49	0.64	0.03	5.71	2.88	0.004
-9.20	19.85	12.91	0.00	2.94	0.51	0.05	6.21	2.58	0.007
-8.90	19.56	14.61	0.01	3.97	0.43	0.10	7.21	2.37	0.013
-8.61	19.27	16.31	0.01	4.86	0.47	0.15	7.98	2.49	0.020
-8.32	18.97	17.97	0.01	5.41	0.66	0.19	8.41	2.94	0.025
-8.03	18.68	19.37	0.01	5.78	0.70	0.22	8.70	3.03	0.029
-7.74	18.39	20.61	0.01	5.70	0.58	0.26	8.64	2.75	0.035
-7.44	18.10	21.65	0.01	5.54	0.61	0.33	8.52	2.83	0.043
-7.15	17.81	22.56	0.02	5.14	0.56	0.30	8.21	2.71	0.040
-6.86	17.52	23.33	0.01	4.74	0.50	0.28	7.88	2.57	0.037
-6.57	17.22	23.99	0.02	4.41	0.59	0.31	7.60	2.78	0.041
-6.28	16.93	24.55	0.03	4.14	0.51	0.30	7.36	2.59	0.040
-5.98	16.64	25.04	0.03	3.72	0.53	0.29	6.98	2.63	0.038
-5.69	16.35	25.43	0.04	3.47	0.57	0.27	6.74	2.74	0.035
-5.40	16.06	25.78	0.04	3.22	0.68	0.27	6.49	2.98	0.035
-5.11	15.76	26.09	0.05	2.93	0.68	0.26	6.19	2.99	0.034
-4.82	15.47	26.35	0.05	2.69	0.70	0.24	5.94	3.04	0.032
-4.52	15.18	26.58	0.05	2.48	0.76	0.23	5.69	3.16	0.030
-4.23	14.89	26.77	0.05	2.29	0.71	0.21	5.48	3.05	0.028

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-3.94	14.60	26.92	0.06	2.18	0.67	0.19	5.34	2.97	0.024
-3.65	14.30	27.08	0.05	2.00	0.72	0.16	5.12	3.06	0.020
-3.36	14.01	27.18	0.05	1.90	0.69	0.15	4.99	3.00	0.019
-3.07	13.72	27.29	0.04	1.81	0.69	0.13	4.87	3.00	0.018
-2.77	13.43	27.37	0.05	1.75	0.71	0.12	4.78	3.05	0.016
-2.48	13.14	27.45	0.06	1.67	0.71	0.11	4.67	3.06	0.014
-2.19	12.84	27.50	0.06	1.60	0.73	0.09	4.57	3.09	0.012
-1.90	12.55	27.56	0.07	1.56	0.74	0.05	4.52	3.11	0.007
-1.61	12.26	27.59	0.07	1.53	0.76	0.04	4.47	3.15	0.005
-1.31	11.97	27.61	0.06	1.50	0.72	0.01	4.44	3.07	0.002
-1.02	11.68	27.62	0.06	1.49	0.74	-0.01	4.42	3.12	-0.001
-0.73	11.38	27.63	0.06	1.49	0.76	-0.03	4.41	3.16	-0.004
-0.44	11.09	27.63	0.06	1.47	0.79	-0.05	4.40	3.21	-0.007
-0.15	10.80	27.61	0.07	1.50	0.82	-0.06	4.44	3.27	-0.008
0.15	10.51	27.57	0.08	1.51	0.75	-0.08	4.44	3.14	-0.010
0.44	10.22	27.54	0.06	1.54	0.72	-0.10	4.50	3.08	-0.014
0.73	9.93	27.50	0.06	1.59	0.76	-0.13	4.56	3.15	-0.017
1.02	9.63	27.44	0.07	1.65	0.79	-0.15	4.65	3.22	-0.020
1.31	9.34	27.38	0.07	1.71	0.79	-0.16	4.74	3.21	-0.021
1.61	9.05	27.30	0.07	1.81	0.78	-0.18	4.87	3.19	-0.023
1.90	8.76	27.20	0.07	1.90	0.79	-0.21	4.99	3.21	-0.027
2.19	8.47	27.09	0.06	1.99	0.82	-0.24	5.10	3.27	-0.031
2.48	8.17	26.97	0.07	2.10	0.73	-0.25	5.24	3.09	-0.033
2.77	7.88	26.84	0.07	2.24	0.70	-0.26	5.42	3.03	-0.034
3.07	7.59	26.68	0.06	2.40	0.73	-0.28	5.61	3.10	-0.037
3.36	7.30	26.52	0.06	2.56	0.69	-0.30	5.79	3.01	-0.039
3.65	7.01	26.33	0.06	2.72	0.70	-0.30	5.97	3.02	-0.040
3.94	6.71	26.10	0.06	2.95	0.66	-0.33	6.22	2.94	-0.044
4.23	6.42	25.84	0.06	3.23	0.68	-0.36	6.51	3.00	-0.047
4.52	6.13	25.56	0.05	3.47	0.71	-0.37	6.74	3.05	-0.048
4.82	5.84	25.27	0.06	3.71	0.64	-0.37	6.97	2.89	-0.049
5.11	5.55	24.95	0.05	3.97	0.70	-0.39	7.21	3.03	-0.052
5.40	5.25	24.56	0.03	4.19	0.68	-0.39	7.41	2.98	-0.051
5.69	4.96	24.13	0.04	4.48	0.61	-0.40	7.66	2.83	-0.052
5.98	4.67	23.62	0.03	4.77	0.59	-0.39	7.90	2.78	-0.051
6.28	4.38	23.05	0.03	5.03	0.62	-0.37	8.12	2.85	-0.048
6.57	4.09	22.41	0.03	5.28	0.66	-0.35	8.31	2.94	-0.046
6.86	3.79	21.66	0.03	5.45	0.67	-0.33	8.45	2.96	-0.044

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.15	3.50	20.81	0.03	5.49	0.70	-0.29	8.48	3.02	-0.038
7.44	3.21	19.85	0.02	5.58	0.74	-0.26	8.55	3.12	-0.035
7.74	2.92	18.73	0.01	5.31	0.69	-0.24	8.34	3.00	-0.031
8.03	2.63	17.43	0.02	5.04	0.66	-0.17	8.13	2.94	-0.023
8.32	2.34	16.00	0.01	4.51	0.68	-0.14	7.69	2.99	-0.018
8.61	2.04	14.43	0.01	3.66	0.65	-0.09	6.92	2.92	-0.012
8.90	1.75	12.87	0.00	2.88	0.66	-0.05	6.14	2.93	-0.007
9.20	1.46	11.46	0.01	2.53	0.78	-0.04	5.76	3.20	-0.006
9.49	1.17	10.18	0.00	3.16	1.67	-0.05	6.43	4.68	-0.006
9.78	0.88	8.41	-0.09	13.38	5.21	-0.07	13.24	8.26	-0.010
10.07	0.58	0.67	0.77	56.83	14.14	-3.39	27.28	13.61	-0.443
10.36	0.29	-0.45	0.62	24.88	6.81	-1.34	18.05	9.45	-0.176
10.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000

Table N-17 Grid #1, L1, Plasma-300, Left (1-10)

L1 (300)							U_∞ =	27.39	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.65	21.31	9.69	2.97	89.19	11.32	-0.73	34.49	12.29	-0.098
-10.36	21.02	10.03	0.27	87.18	7.57	-0.51	34.09	10.05	-0.068
-10.07	20.73	10.10	0.05	41.93	5.34	0.01	23.65	8.44	0.002
-9.78	20.43	11.24	-0.08	4.58	4.82	0.09	7.81	8.02	0.012
-9.49	20.14	12.77	-0.06	3.19	1.57	0.02	6.52	4.57	0.002
-9.20	19.85	14.33	-0.03	3.03	1.14	0.01	6.35	3.90	0.001
-8.90	19.56	15.99	0.00	3.39	1.37	0.09	6.73	4.28	0.011
-8.61	19.27	17.57	0.03	3.78	1.09	0.16	7.10	3.81	0.021
-8.32	18.97	19.02	0.07	4.15	1.45	0.16	7.44	4.40	0.022
-8.03	18.68	20.20	0.08	4.49	1.59	0.23	7.74	4.60	0.030
-7.74	18.39	21.21	0.08	4.62	1.39	0.19	7.85	4.31	0.025
-7.44	18.10	22.05	0.08	4.64	1.21	0.23	7.87	4.02	0.031
-7.15	17.81	22.79	0.08	4.54	1.08	0.30	7.78	3.80	0.040
-6.86	17.52	23.42	0.08	4.51	1.05	0.29	7.75	3.74	0.039
-6.57	17.22	23.98	0.07	4.32	0.99	0.31	7.59	3.63	0.041
-6.28	16.93	24.47	0.08	4.06	0.91	0.32	7.36	3.48	0.042
-5.98	16.64	24.90	0.09	3.87	0.97	0.32	7.18	3.59	0.043

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-5.69	16.35	25.25	0.09	3.69	1.01	0.33	7.02	3.68	0.044
-5.40	16.06	25.59	0.09	3.46	0.93	0.31	6.80	3.52	0.042
-5.11	15.76	25.88	0.08	3.21	0.97	0.31	6.54	3.59	0.042
-4.82	15.47	26.14	0.07	2.99	0.97	0.31	6.31	3.59	0.042
-4.52	15.18	26.34	0.08	2.80	0.97	0.30	6.10	3.59	0.040
-4.23	14.89	26.53	0.08	2.61	0.95	0.28	5.90	3.56	0.037
-3.94	14.60	26.69	0.08	2.46	0.99	0.23	5.72	3.63	0.030
-3.65	14.30	26.83	0.09	2.32	0.98	0.21	5.56	3.62	0.028
-3.36	14.01	26.95	0.09	2.21	0.87	0.19	5.43	3.40	0.026
-3.07	13.72	27.04	0.09	2.12	0.90	0.16	5.32	3.46	0.022
-2.77	13.43	27.12	0.09	2.02	0.94	0.16	5.19	3.54	0.021
-2.48	13.14	27.20	0.09	1.96	0.93	0.13	5.11	3.52	0.018
-2.19	12.84	27.25	0.09	1.89	0.96	0.11	5.02	3.57	0.015
-1.90	12.55	27.31	0.09	1.84	0.84	0.09	4.95	3.35	0.012
-1.61	12.26	27.34	0.09	1.79	0.91	0.08	4.88	3.48	0.010
-1.31	11.97	27.36	0.09	1.78	0.98	0.04	4.87	3.61	0.006
-1.02	11.68	27.38	0.08	1.74	0.93	0.02	4.82	3.52	0.003
-0.73	11.38	27.39	0.09	1.73	0.97	0.00	4.80	3.60	-0.001
-0.44	11.09	27.39	0.10	1.71	1.00	-0.02	4.77	3.66	-0.002
-0.15	10.80	27.38	0.09	1.71	0.94	-0.05	4.78	3.53	-0.007
0.15	10.51	27.35	0.08	1.71	0.90	-0.07	4.78	3.47	-0.009
0.44	10.22	27.32	0.08	1.74	0.94	-0.09	4.82	3.55	-0.011
0.73	9.93	27.27	0.09	1.77	0.93	-0.11	4.85	3.51	-0.015
1.02	9.63	27.23	0.09	1.82	0.92	-0.15	4.93	3.51	-0.020
1.31	9.34	27.17	0.08	1.91	0.98	-0.16	5.05	3.61	-0.021
1.61	9.05	27.10	0.08	1.94	0.96	-0.19	5.09	3.58	-0.026
1.90	8.76	27.02	0.10	2.01	0.98	-0.22	5.18	3.61	-0.029
2.19	8.47	26.93	0.09	2.09	0.92	-0.22	5.28	3.49	-0.030
2.48	8.17	26.81	0.08	2.19	0.93	-0.24	5.41	3.53	-0.033
2.77	7.88	26.69	0.07	2.29	0.94	-0.24	5.53	3.54	-0.032
3.07	7.59	26.55	0.06	2.42	0.90	-0.26	5.69	3.47	-0.035
3.36	7.30	26.40	0.06	2.59	0.91	-0.30	5.87	3.49	-0.040
3.65	7.01	26.23	0.07	2.74	0.94	-0.35	6.05	3.54	-0.047
3.94	6.71	26.03	0.06	2.91	0.93	-0.35	6.23	3.53	-0.047
4.23	6.42	25.81	0.06	3.09	0.88	-0.35	6.42	3.42	-0.046
4.52	6.13	25.56	0.05	3.28	0.91	-0.37	6.61	3.48	-0.050
4.82	5.84	25.31	0.04	3.45	0.85	-0.39	6.78	3.36	-0.052
5.11	5.55	25.00	0.04	3.69	0.82	-0.38	7.01	3.30	-0.050

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.40	5.25	24.68	0.03	3.91	0.90	-0.35	7.22	3.45	-0.047
5.69	4.96	24.28	0.02	4.18	0.86	-0.36	7.47	3.39	-0.048
5.98	4.67	23.85	0.02	4.36	0.77	-0.35	7.62	3.21	-0.047
6.28	4.38	23.37	0.00	4.48	0.78	-0.36	7.73	3.23	-0.048
6.57	4.09	22.84	-0.01	4.48	0.77	-0.32	7.73	3.20	-0.043
6.86	3.79	22.22	-0.02	4.50	1.02	-0.29	7.74	3.69	-0.038
7.15	3.50	21.53	-0.03	4.46	1.14	-0.27	7.71	3.91	-0.036
7.44	3.21	20.78	-0.03	4.43	1.18	-0.21	7.69	3.96	-0.027
7.74	2.92	19.92	-0.04	4.21	1.42	-0.20	7.49	4.35	-0.026
8.03	2.63	18.89	-0.04	3.96	1.63	-0.17	7.26	4.66	-0.022
8.32	2.34	17.71	-0.05	3.76	2.13	-0.10	7.08	5.33	-0.013
8.61	2.04	16.31	-0.05	3.71	2.46	-0.06	7.03	5.73	-0.008
8.90	1.75	14.71	-0.02	3.77	3.47	-0.07	7.09	6.80	-0.010
9.20	1.46	12.97	0.01	4.00	3.96	-0.08	7.30	7.26	-0.011
9.49	1.17	11.42	-0.05	5.05	2.72	-0.02	8.20	6.02	-0.003
9.78	0.88	8.46	-0.48	35.38	4.12	0.98	21.72	7.41	0.131
10.07	0.58	5.63	-0.49	78.23	13.27	1.12	32.30	13.30	0.149
10.36	0.29	2.77	0.44	43.80	8.40	0.33	24.17	10.58	0.044
10.65	0.00	3.35	0.04	9.79	0.30	0.54	11.42	2.00	0.072

Table N-18 Grid #1, L1, Plasma-300, Center (46-55)

L1 (300)							U_∞ =	27.83	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.65	21.31	8.38	-0.21	80.81	5.60	0.52	32.30	8.50	0.066
-10.36	21.02	8.40	-0.19	82.50	5.61	0.69	32.64	8.51	0.089
-10.07	20.73	8.79	-0.03	24.98	1.16	0.05	17.96	3.87	0.007
-9.78	20.43	10.61	0.01	5.52	1.00	0.01	8.44	3.60	0.001
-9.49	20.14	12.46	0.01	2.85	0.77	0.01	6.07	3.15	0.001
-9.20	19.85	14.07	0.02	2.74	0.65	0.03	5.95	2.91	0.004
-8.90	19.56	15.84	0.03	3.22	0.67	0.07	6.44	2.95	0.009
-8.61	19.27	17.57	0.03	3.63	0.56	0.13	6.85	2.69	0.017
-8.32	18.97	19.14	0.04	3.87	0.54	0.16	7.06	2.64	0.021
-8.03	18.68	20.42	0.04	4.07	0.64	0.17	7.25	2.88	0.022
-7.74	18.39	21.54	0.05	4.05	0.61	0.21	7.23	2.80	0.027

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-7.44	18.10	22.47	0.06	4.00	0.60	0.23	7.19	2.78	0.029
-7.15	17.81	23.26	0.06	3.91	0.69	0.24	7.10	2.99	0.031
-6.86	17.52	23.91	0.06	3.82	0.66	0.26	7.02	2.92	0.033
-6.57	17.22	24.49	0.05	3.67	0.58	0.26	6.88	2.74	0.034
-6.28	16.93	24.97	0.05	3.52	0.61	0.26	6.74	2.81	0.033
-5.98	16.64	25.38	0.06	3.35	0.65	0.27	6.57	2.90	0.035
-5.69	16.35	25.76	0.06	3.11	0.62	0.28	6.33	2.82	0.036
-5.40	16.06	26.08	0.05	2.92	0.64	0.25	6.14	2.88	0.033
-5.11	15.76	26.36	0.05	2.72	0.67	0.23	5.93	2.94	0.030
-4.82	15.47	26.60	0.05	2.56	0.69	0.23	5.75	2.98	0.029
-4.52	15.18	26.80	0.06	2.41	0.67	0.21	5.57	2.93	0.028
-4.23	14.89	26.99	0.06	2.31	0.72	0.20	5.46	3.04	0.026
-3.94	14.60	27.14	0.05	2.21	0.70	0.21	5.35	3.01	0.027
-3.65	14.30	27.28	0.05	2.12	0.71	0.18	5.23	3.03	0.024
-3.36	14.01	27.39	0.06	2.03	0.65	0.17	5.11	2.89	0.022
-3.07	13.72	27.50	0.06	1.94	0.66	0.15	5.00	2.93	0.020
-2.77	13.43	27.58	0.06	1.88	0.79	0.14	4.92	3.19	0.018
-2.48	13.14	27.66	0.07	1.79	0.78	0.11	4.80	3.17	0.014
-2.19	12.84	27.72	0.07	1.75	0.75	0.09	4.75	3.12	0.012
-1.90	12.55	27.76	0.07	1.71	0.81	0.06	4.70	3.24	0.007
-1.61	12.26	27.79	0.08	1.66	0.78	0.04	4.63	3.18	0.006
-1.31	11.97	27.82	0.08	1.63	0.74	0.02	4.58	3.09	0.003
-1.02	11.68	27.83	0.08	1.61	0.82	0.02	4.56	3.26	0.002
-0.73	11.38	27.83	0.07	1.59	0.79	-0.01	4.53	3.20	-0.001
-0.44	11.09	27.83	0.08	1.58	0.78	-0.02	4.52	3.17	-0.002
-0.15	10.80	27.81	0.08	1.58	0.82	-0.04	4.52	3.26	-0.005
0.15	10.51	27.78	0.08	1.61	0.79	-0.06	4.55	3.19	-0.007
0.44	10.22	27.75	0.08	1.63	0.73	-0.07	4.59	3.06	-0.010
0.73	9.93	27.71	0.08	1.65	0.76	-0.08	4.62	3.14	-0.011
1.02	9.63	27.66	0.08	1.70	0.76	-0.11	4.68	3.13	-0.014
1.31	9.34	27.59	0.08	1.77	0.69	-0.13	4.78	2.98	-0.017
1.61	9.05	27.52	0.08	1.85	0.71	-0.18	4.89	3.03	-0.023
1.90	8.76	27.44	0.07	1.89	0.70	-0.18	4.94	3.00	-0.023
2.19	8.47	27.34	0.08	1.95	0.73	-0.18	5.01	3.07	-0.023
2.48	8.17	27.23	0.07	2.05	0.67	-0.18	5.14	2.94	-0.023
2.77	7.88	27.11	0.06	2.14	0.70	-0.19	5.26	3.02	-0.025
3.07	7.59	26.97	0.06	2.23	0.68	-0.23	5.37	2.97	-0.029
3.36	7.30	26.81	0.05	2.34	0.74	-0.24	5.49	3.08	-0.030

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.65	7.01	26.64	0.05	2.44	0.72	-0.23	5.61	3.05	-0.030
3.94	6.71	26.46	0.05	2.56	0.68	-0.27	5.75	2.97	-0.034
4.23	6.42	26.25	0.05	2.72	0.69	-0.28	5.93	2.98	-0.036
4.52	6.13	26.00	0.04	2.87	0.68	-0.29	6.09	2.96	-0.037
4.82	5.84	25.73	0.04	2.99	0.69	-0.29	6.22	2.98	-0.038
5.11	5.55	25.42	0.04	3.16	0.67	-0.29	6.38	2.94	-0.037
5.40	5.25	25.07	0.02	3.33	0.67	-0.29	6.56	2.94	-0.037
5.69	4.96	24.71	0.02	3.48	0.66	-0.31	6.70	2.93	-0.041
5.98	4.67	24.28	0.01	3.61	0.65	-0.29	6.83	2.90	-0.038
6.28	4.38	23.80	0.00	3.71	0.76	-0.27	6.92	3.13	-0.035
6.57	4.09	23.26	0.00	3.86	0.86	-0.26	7.06	3.34	-0.034
6.86	3.79	22.62	-0.01	3.93	0.87	-0.24	7.12	3.34	-0.031
7.15	3.50	21.90	-0.02	3.97	1.00	-0.17	7.16	3.58	-0.022
7.44	3.21	21.06	-0.04	4.03	1.30	-0.18	7.22	4.09	-0.024
7.74	2.92	20.10	-0.03	4.02	1.48	-0.18	7.21	4.37	-0.023
8.03	2.63	18.95	-0.04	4.08	1.88	-0.13	7.26	4.92	-0.017
8.32	2.34	17.61	-0.05	4.01	2.21	-0.12	7.20	5.34	-0.015
8.61	2.04	16.01	-0.03	4.09	2.72	-0.16	7.27	5.93	-0.020
8.90	1.75	14.23	-0.01	4.04	3.44	-0.08	7.22	6.67	-0.010
9.20	1.46	12.41	0.00	3.92	3.83	-0.05	7.11	7.03	-0.007
9.49	1.17	10.67	-0.02	4.13	3.12	-0.02	7.30	6.35	-0.002
9.78	0.88	6.93	-0.54	27.54	8.69	1.91	18.85	10.59	0.246
10.07	0.58	2.09	-1.25	55.92	19.15	2.68	26.87	15.72	0.345
10.36	0.29	0.40	-0.24	10.26	5.36	0.40	11.51	8.32	0.052
10.65	0.00	0.19	-0.07	0.00	0.00	0.00	0.13	0.07	0.000

Table N-19 Grid #1, L1, Plasma-300, Right (71-80)

L1 (300)							U_∞ =	28.04	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.65	21.31	5.84	0.12	62.49	5.99	0.07	28.20	8.73	0.009
-10.36	21.02	6.16	0.21	59.42	5.45	-0.02	27.49	8.32	-0.002
-10.07	20.73	8.86	0.10	17.53	1.41	-0.06	14.93	4.23	-0.008
-9.78	20.43	10.61	-0.01	3.36	1.13	0.01	6.54	3.79	0.001
-9.49	20.14	12.23	0.00	2.80	0.92	0.03	5.97	3.42	0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.20	19.85	13.88	0.02	2.82	0.72	0.06	5.99	3.02	0.007
-8.90	19.56	15.71	0.03	3.40	0.66	0.09	6.57	2.89	0.011
-8.61	19.27	17.46	0.04	3.83	0.59	0.12	6.98	2.74	0.015
-8.32	18.97	19.07	0.03	4.07	0.70	0.14	7.19	2.99	0.018
-8.03	18.68	20.40	0.04	4.22	0.79	0.18	7.32	3.16	0.022
-7.74	18.39	21.58	0.04	4.17	0.78	0.22	7.28	3.14	0.028
-7.44	18.10	22.54	0.05	4.14	0.77	0.24	7.26	3.13	0.030
-7.15	17.81	23.38	0.06	3.99	0.75	0.23	7.13	3.09	0.030
-6.86	17.52	24.06	0.05	3.86	0.74	0.22	7.01	3.08	0.028
-6.57	17.22	24.64	0.05	3.70	0.66	0.26	6.86	2.90	0.034
-6.28	16.93	25.13	0.05	3.51	0.77	0.27	6.68	3.14	0.034
-5.98	16.64	25.58	0.06	3.32	0.74	0.25	6.50	3.06	0.032
-5.69	16.35	25.95	0.06	3.11	0.67	0.26	6.29	2.92	0.033
-5.40	16.06	26.29	0.06	2.87	0.76	0.25	6.04	3.11	0.031
-5.11	15.76	26.56	0.06	2.72	0.77	0.23	5.88	3.14	0.029
-4.82	15.47	26.81	0.06	2.57	0.76	0.22	5.72	3.11	0.028
-4.52	15.18	27.01	0.05	2.46	0.75	0.21	5.60	3.09	0.027
-4.23	14.89	27.19	0.05	2.32	0.80	0.20	5.43	3.20	0.026
-3.94	14.60	27.35	0.05	2.19	0.91	0.19	5.28	3.40	0.024
-3.65	14.30	27.49	0.06	2.06	0.85	0.17	5.12	3.29	0.021
-3.36	14.01	27.61	0.07	1.95	0.81	0.17	4.98	3.21	0.021
-3.07	13.72	27.71	0.05	1.91	0.82	0.14	4.93	3.24	0.017
-2.77	13.43	27.79	0.05	1.85	0.85	0.14	4.85	3.29	0.018
-2.48	13.14	27.86	0.05	1.77	0.79	0.11	4.75	3.18	0.014
-2.19	12.84	27.93	0.06	1.68	0.82	0.08	4.63	3.23	0.010
-1.90	12.55	27.97	0.05	1.68	0.90	0.05	4.62	3.39	0.006
-1.61	12.26	28.00	0.06	1.62	0.92	0.06	4.54	3.42	0.007
-1.31	11.97	28.03	0.06	1.59	0.92	0.04	4.50	3.42	0.005
-1.02	11.68	28.04	0.07	1.57	0.85	0.03	4.47	3.29	0.004
-0.73	11.38	28.03	0.07	1.56	0.86	0.00	4.45	3.30	0.000
-0.44	11.09	28.03	0.06	1.56	0.81	-0.03	4.46	3.21	-0.004
-0.15	10.80	28.02	0.06	1.57	0.77	-0.04	4.47	3.12	-0.005
0.15	10.51	28.00	0.06	1.60	0.91	-0.07	4.51	3.41	-0.009
0.44	10.22	27.96	0.06	1.60	0.89	-0.08	4.52	3.36	-0.010
0.73	9.93	27.93	0.06	1.63	0.86	-0.09	4.56	3.32	-0.011
1.02	9.63	27.87	0.06	1.68	0.89	-0.11	4.62	3.37	-0.013
1.31	9.34	27.80	0.07	1.75	0.91	-0.12	4.72	3.41	-0.016
1.61	9.05	27.72	0.07	1.82	0.85	-0.13	4.81	3.30	-0.017

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.90	8.76	27.64	0.07	1.87	0.84	-0.15	4.87	3.26	-0.019
2.19	8.47	27.53	0.07	1.96	0.84	-0.16	4.99	3.27	-0.021
2.48	8.17	27.43	0.06	2.04	0.78	-0.17	5.10	3.16	-0.022
2.77	7.88	27.31	0.06	2.13	0.76	-0.20	5.21	3.12	-0.026
3.07	7.59	27.16	0.06	2.22	0.77	-0.22	5.32	3.13	-0.027
3.36	7.30	27.01	0.06	2.32	0.81	-0.23	5.43	3.21	-0.029
3.65	7.01	26.84	0.04	2.42	0.76	-0.24	5.54	3.12	-0.031
3.94	6.71	26.64	0.04	2.59	0.87	-0.24	5.74	3.33	-0.031
4.23	6.42	26.43	0.04	2.69	0.85	-0.26	5.86	3.28	-0.034
4.52	6.13	26.18	0.03	2.81	0.82	-0.24	5.97	3.23	-0.031
4.82	5.84	25.91	0.03	2.96	0.83	-0.26	6.13	3.24	-0.033
5.11	5.55	25.61	0.02	3.14	0.83	-0.28	6.32	3.25	-0.035
5.40	5.25	25.26	0.03	3.26	0.87	-0.28	6.44	3.33	-0.036
5.69	4.96	24.88	0.03	3.42	0.94	-0.25	6.60	3.46	-0.031
5.98	4.67	24.45	0.02	3.65	1.00	-0.27	6.81	3.56	-0.034
6.28	4.38	23.98	0.01	3.75	0.97	-0.27	6.91	3.52	-0.034
6.57	4.09	23.42	-0.01	3.85	0.88	-0.26	7.00	3.34	-0.033
6.86	3.79	22.76	0.00	4.06	1.21	-0.26	7.19	3.93	-0.032
7.15	3.50	22.00	-0.02	4.16	1.46	-0.23	7.28	4.31	-0.029
7.44	3.21	21.12	-0.02	4.22	1.69	-0.17	7.33	4.64	-0.022
7.74	2.92	20.10	-0.01	4.22	2.17	-0.14	7.32	5.25	-0.018
8.03	2.63	18.88	-0.03	4.35	2.44	-0.15	7.44	5.57	-0.019
8.32	2.34	17.47	-0.02	4.40	2.68	-0.17	7.48	5.84	-0.021
8.61	2.04	15.83	-0.02	4.41	2.77	-0.04	7.49	5.94	-0.005
8.90	1.75	14.05	-0.02	4.22	3.05	-0.02	7.33	6.23	-0.003
9.20	1.46	12.22	0.02	4.06	3.47	-0.15	7.19	6.64	-0.019
9.49	1.17	10.46	0.01	4.00	3.30	-0.07	7.13	6.48	-0.009
9.78	0.88	8.71	-0.20	9.17	5.51	0.09	10.80	8.37	0.011
10.07	0.58	3.61	-0.10	51.17	14.35	-0.60	25.52	13.51	-0.077
10.36	0.29	0.58	0.01	26.06	7.04	0.35	18.21	9.47	0.045
10.65	0.00	0.56	0.01	1.47	0.00	-0.03	4.32	0.16	-0.003

Table N-20 Grid #1, L2, Plasma-Off, Left (1-10)

L2 (Off)							U_∞ =	27.82	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.90	21.80	0.07	0.07	0.12	0.10	0.00	1.23	1.12	0.000
-10.60	21.50	0.83	0.00	0.53	0.11	0.00	2.61	1.21	0.001
-10.30	21.21	4.32	-0.01	2.23	0.36	0.00	5.37	2.15	0.000
-10.01	20.91	6.66	-0.01	2.49	0.52	0.00	5.67	2.58	0.000
-9.71	20.61	8.79	-0.01	3.04	0.55	0.05	6.26	2.66	0.006
-9.41	20.31	10.73	0.00	3.79	0.59	0.07	7.00	2.77	0.009
-9.11	20.01	12.63	0.01	4.75	0.56	0.07	7.83	2.70	0.008
-8.81	19.71	14.35	0.00	5.59	0.57	0.12	8.50	2.72	0.016
-8.51	19.41	16.01	0.01	6.40	0.65	0.19	9.09	2.90	0.024
-8.21	19.12	17.47	0.01	7.06	0.62	0.25	9.55	2.83	0.032
-7.91	18.82	18.82	0.01	7.39	0.57	0.30	9.77	2.70	0.038
-7.62	18.52	20.01	0.01	7.41	0.55	0.33	9.78	2.67	0.042
-7.32	18.22	21.12	0.02	7.23	0.57	0.34	9.66	2.72	0.043
-7.02	17.92	22.04	0.01	7.02	0.68	0.34	9.52	2.96	0.044
-6.72	17.62	22.90	0.02	6.50	0.66	0.37	9.16	2.93	0.048
-6.42	17.32	23.64	0.02	5.87	0.66	0.37	8.71	2.92	0.047
-6.12	17.02	24.29	0.03	5.31	0.67	0.37	8.28	2.94	0.048
-5.82	16.73	24.84	0.04	4.84	0.69	0.36	7.91	2.98	0.047
-5.53	16.43	25.33	0.04	4.33	0.70	0.37	7.47	3.01	0.047
-5.23	16.13	25.76	0.04	3.81	0.65	0.35	7.02	2.89	0.045
-4.93	15.83	26.13	0.03	3.46	0.69	0.30	6.69	2.98	0.039
-4.63	15.53	26.43	0.04	3.12	0.66	0.28	6.35	2.92	0.036
-4.33	15.23	26.68	0.04	2.89	0.67	0.26	6.11	2.93	0.034
-4.03	14.93	26.91	0.05	2.65	0.72	0.25	5.85	3.06	0.032
-3.73	14.64	27.10	0.05	2.45	0.67	0.21	5.63	2.94	0.027
-3.43	14.34	27.25	0.06	2.31	0.72	0.20	5.46	3.04	0.025
-3.14	14.04	27.40	0.06	2.15	0.77	0.18	5.27	3.16	0.023
-2.84	13.74	27.51	0.06	2.00	0.80	0.15	5.08	3.21	0.019
-2.54	13.44	27.60	0.05	1.90	0.80	0.11	4.95	3.22	0.015
-2.24	13.14	27.66	0.06	1.82	0.75	0.10	4.84	3.12	0.013
-1.94	12.84	27.73	0.07	1.74	0.79	0.10	4.75	3.19	0.012
-1.64	12.54	27.76	0.06	1.70	0.78	0.07	4.69	3.18	0.009
-1.34	12.25	27.80	0.06	1.67	0.76	0.05	4.65	3.13	0.006
-1.05	11.95	27.81	0.06	1.66	0.90	0.01	4.63	3.42	0.001
-0.75	11.65	27.82	0.07	1.64	0.84	-0.03	4.60	3.30	-0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-0.45	11.35	27.80	0.07	1.67	0.75	-0.04	4.64	3.11	-0.006
-0.15	11.05	27.78	0.07	1.68	0.81	-0.08	4.66	3.24	-0.010
0.15	10.75	27.76	0.07	1.71	0.82	-0.09	4.69	3.25	-0.011
0.45	10.45	27.71	0.06	1.78	0.83	-0.11	4.80	3.27	-0.015
0.75	10.15	27.65	0.07	1.85	0.77	-0.14	4.89	3.15	-0.018
1.05	9.86	27.59	0.08	1.90	0.80	-0.15	4.96	3.21	-0.019
1.34	9.56	27.52	0.07	1.96	0.85	-0.17	5.03	3.31	-0.022
1.64	9.26	27.41	0.06	2.11	0.85	-0.21	5.22	3.31	-0.027
1.94	8.96	27.29	0.06	2.25	0.80	-0.23	5.39	3.21	-0.029
2.24	8.66	27.16	0.07	2.37	0.82	-0.24	5.53	3.25	-0.032
2.54	8.36	27.02	0.08	2.52	0.79	-0.26	5.71	3.19	-0.034
2.84	8.06	26.85	0.07	2.72	0.75	-0.31	5.93	3.11	-0.040
3.14	7.77	26.66	0.06	2.96	0.74	-0.35	6.18	3.09	-0.045
3.43	7.47	26.45	0.06	3.21	0.75	-0.35	6.44	3.12	-0.045
3.73	7.17	26.21	0.05	3.47	0.78	-0.36	6.69	3.17	-0.046
4.03	6.87	25.95	0.05	3.75	0.77	-0.38	6.96	3.15	-0.049
4.33	6.57	25.64	0.06	4.06	0.68	-0.39	7.24	2.96	-0.051
4.63	6.27	25.29	0.06	4.45	0.72	-0.44	7.58	3.05	-0.057
4.93	5.97	24.89	0.05	4.86	0.76	-0.43	7.93	3.13	-0.055
5.23	5.67	24.44	0.05	5.35	0.71	-0.44	8.31	3.03	-0.057
5.53	5.38	23.92	0.05	5.87	0.67	-0.48	8.71	2.95	-0.062
5.82	5.08	23.34	0.05	6.30	0.60	-0.47	9.02	2.79	-0.060
6.12	4.78	22.70	0.04	6.73	0.60	-0.46	9.33	2.79	-0.059
6.42	4.48	21.97	0.03	7.24	0.61	-0.45	9.67	2.80	-0.058
6.72	4.18	21.16	0.02	7.46	0.62	-0.45	9.82	2.82	-0.058
7.02	3.88	20.22	0.03	7.59	0.62	-0.36	9.90	2.83	-0.047
7.32	3.58	19.16	0.02	7.66	0.60	-0.34	9.95	2.79	-0.044
7.62	3.29	17.99	0.02	7.54	0.59	-0.32	9.87	2.76	-0.041
7.91	2.99	16.74	0.02	7.06	0.59	-0.28	9.55	2.76	-0.036
8.21	2.69	15.31	0.02	6.31	0.59	-0.20	9.03	2.76	-0.026
8.51	2.39	13.78	0.01	5.44	0.57	-0.14	8.38	2.71	-0.018
8.81	2.09	12.10	0.00	4.51	0.55	-0.09	7.63	2.68	-0.012
9.11	1.79	10.37	0.01	3.55	0.57	-0.05	6.77	2.71	-0.007
9.41	1.49	8.47	0.00	2.91	0.53	-0.03	6.13	2.61	-0.003
9.71	1.19	6.48	0.00	2.19	0.47	-0.01	5.32	2.46	-0.001
10.01	0.90	4.30	0.00	1.66	0.39	-0.01	4.63	2.25	-0.001
10.30	0.60	2.13	-0.01	1.21	0.31	0.01	3.95	1.99	0.001
10.60	0.30	0.98	0.12	1.30	0.23	0.00	4.10	1.74	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
10.90	0.00	9.61	0.22	0.01	0.01	0.00	0.39	0.39	0.000

Table N-21 Grid #1, L2, Plasma-Off, Center (46-55)

L2 (Off)							U_∞ =	27.88	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.90	21.80	0.43	0.02	1.06	0.08	0.01	3.69	1.00	0.001
-10.60	21.50	1.64	-0.02	1.09	0.11	0.02	3.74	1.21	0.003
-10.30	21.21	4.67	-0.02	1.55	0.29	0.01	4.47	1.94	0.002
-10.01	20.91	6.84	-0.02	2.13	0.39	0.02	5.23	2.24	0.002
-9.71	20.61	8.96	-0.01	2.71	0.38	0.05	5.90	2.20	0.007
-9.41	20.31	10.87	-0.01	3.51	0.48	0.09	6.72	2.49	0.012
-9.11	20.01	12.76	-0.01	4.45	0.45	0.11	7.57	2.40	0.015
-8.81	19.71	14.46	-0.01	5.13	0.45	0.14	8.13	2.39	0.018
-8.51	19.41	16.09	0.00	5.96	0.37	0.19	8.76	2.20	0.025
-8.21	19.12	17.55	0.00	6.54	0.46	0.24	9.18	2.44	0.030
-7.91	18.82	18.89	0.01	6.74	0.44	0.27	9.31	2.37	0.034
-7.62	18.52	20.08	0.00	6.95	0.44	0.30	9.45	2.37	0.038
-7.32	18.22	21.15	0.02	7.00	0.46	0.34	9.49	2.44	0.044
-7.02	17.92	22.07	0.01	6.77	0.50	0.37	9.33	2.55	0.047
-6.72	17.62	22.91	0.01	6.29	0.54	0.37	9.00	2.63	0.048
-6.42	17.32	23.62	0.01	5.87	0.56	0.35	8.69	2.68	0.045
-6.12	17.02	24.27	0.02	5.31	0.50	0.35	8.27	2.53	0.045
-5.82	16.73	24.81	0.02	4.89	0.52	0.37	7.94	2.59	0.047
-5.53	16.43	25.29	0.03	4.40	0.60	0.37	7.52	2.77	0.048
-5.23	16.13	25.71	0.03	3.98	0.57	0.34	7.15	2.71	0.043
-4.93	15.83	26.09	0.03	3.53	0.51	0.31	6.74	2.56	0.039
-4.63	15.53	26.41	0.03	3.12	0.52	0.27	6.33	2.60	0.034
-4.33	15.23	26.69	0.03	2.79	0.56	0.25	5.99	2.69	0.032
-4.03	14.93	26.91	0.03	2.57	0.52	0.23	5.75	2.60	0.030
-3.73	14.64	27.13	0.03	2.32	0.51	0.21	5.46	2.56	0.027
-3.43	14.34	27.29	0.03	2.16	0.58	0.19	5.27	2.73	0.025
-3.14	14.04	27.44	0.03	2.02	0.58	0.17	5.10	2.73	0.022
-2.84	13.74	27.55	0.03	1.91	0.54	0.14	4.96	2.65	0.018
-2.54	13.44	27.65	0.04	1.79	0.59	0.12	4.80	2.74	0.016

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-2.24	13.14	27.72	0.04	1.76	0.67	0.10	4.76	2.93	0.012
-1.94	12.84	27.78	0.03	1.71	0.64	0.08	4.69	2.86	0.011
-1.64	12.54	27.83	0.03	1.64	0.64	0.07	4.59	2.86	0.009
-1.34	12.25	27.87	0.03	1.58	0.59	0.05	4.51	2.77	0.007
-1.05	11.95	27.87	0.03	1.55	0.64	0.04	4.47	2.87	0.005
-0.75	11.65	27.88	0.04	1.55	0.66	0.01	4.46	2.91	0.001
-0.45	11.35	27.86	0.05	1.54	0.64	-0.01	4.45	2.88	-0.001
-0.15	11.05	27.83	0.04	1.57	0.68	-0.03	4.49	2.96	-0.004
0.15	10.75	27.81	0.04	1.59	0.65	-0.06	4.52	2.90	-0.008
0.45	10.45	27.77	0.05	1.62	0.66	-0.07	4.56	2.91	-0.009
0.75	10.15	27.71	0.06	1.67	0.64	-0.10	4.64	2.87	-0.013
1.05	9.86	27.64	0.05	1.76	0.64	-0.13	4.75	2.86	-0.017
1.34	9.56	27.54	0.05	1.85	0.61	-0.16	4.88	2.80	-0.021
1.64	9.26	27.43	0.05	1.98	0.64	-0.19	5.04	2.86	-0.025
1.94	8.96	27.31	0.05	2.09	0.63	-0.21	5.19	2.85	-0.027
2.24	8.66	27.19	0.04	2.22	0.59	-0.23	5.35	2.75	-0.030
2.54	8.36	27.03	0.04	2.40	0.69	-0.27	5.56	2.98	-0.035
2.84	8.06	26.87	0.04	2.53	0.65	-0.28	5.71	2.90	-0.036
3.14	7.77	26.67	0.05	2.75	0.58	-0.29	5.95	2.73	-0.037
3.43	7.47	26.44	0.05	3.08	0.60	-0.33	6.30	2.78	-0.042
3.73	7.17	26.20	0.05	3.33	0.64	-0.36	6.55	2.88	-0.047
4.03	6.87	25.92	0.05	3.66	0.64	-0.37	6.86	2.87	-0.048
4.33	6.57	25.61	0.05	4.04	0.65	-0.37	7.21	2.88	-0.048
4.63	6.27	25.26	0.05	4.42	0.61	-0.42	7.54	2.81	-0.054
4.93	5.97	24.85	0.04	4.88	0.58	-0.43	7.92	2.72	-0.056
5.23	5.67	24.41	0.04	5.28	0.54	-0.43	8.24	2.64	-0.055
5.53	5.38	23.92	0.02	5.72	0.61	-0.42	8.58	2.80	-0.055
5.82	5.08	23.33	0.03	6.21	0.67	-0.43	8.94	2.93	-0.056
6.12	4.78	22.68	0.03	6.76	0.56	-0.44	9.33	2.69	-0.057
6.42	4.48	21.93	0.03	7.17	0.53	-0.44	9.61	2.62	-0.056
6.72	4.18	21.10	0.03	7.22	0.50	-0.39	9.64	2.53	-0.050
7.02	3.88	20.17	0.02	7.39	0.43	-0.37	9.75	2.36	-0.048
7.32	3.58	19.11	0.01	7.39	0.51	-0.33	9.75	2.57	-0.042
7.62	3.29	17.93	0.01	7.15	0.56	-0.25	9.59	2.69	-0.033
7.91	2.99	16.65	0.01	6.55	0.57	-0.23	9.18	2.70	-0.030
8.21	2.69	15.22	0.00	5.85	0.62	-0.17	8.68	2.82	-0.022
8.51	2.39	13.69	0.00	4.99	0.64	-0.16	8.02	2.87	-0.020
8.81	2.09	12.08	0.00	4.22	0.56	-0.07	7.37	2.69	-0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
9.11	1.79	10.34	-0.01	3.26	0.56	-0.05	6.48	2.69	-0.006
9.41	1.49	8.47	-0.01	2.58	0.64	-0.04	5.76	2.86	-0.005
9.71	1.19	6.55	-0.01	1.96	0.52	-0.01	5.03	2.59	-0.002
10.01	0.90	4.36	-0.06	1.62	0.45	-0.01	4.57	2.42	-0.002
10.30	0.60	1.97	-0.03	1.21	0.35	0.00	3.95	2.11	0.000
10.60	0.30	0.81	0.04	0.44	0.16	0.00	2.37	1.46	0.000
10.90	0.00	0.33	0.01	0.67	0.01	0.02	2.94	0.27	0.003

Table N-22 Grid #1, L2, Plasma-Off, Right (71-80)

L2 (Off)							U_∞ =	27.88	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.90	21.80	0.74	-0.01	2.36	0.21	0.06	5.51	1.64	0.007
-10.60	21.50	2.19	-0.04	2.37	0.13	0.07	5.52	1.29	0.009
-10.30	21.21	4.89	-0.03	2.15	0.46	0.06	5.26	2.43	0.008
-10.01	20.91	7.06	-0.03	2.28	0.59	0.06	5.42	2.74	0.008
-9.71	20.61	9.11	-0.01	2.89	0.61	0.08	6.09	2.80	0.010
-9.41	20.31	11.01	-0.01	3.70	0.53	0.11	6.89	2.60	0.015
-9.11	20.01	12.88	-0.02	4.59	0.56	0.16	7.67	2.69	0.020
-8.81	19.71	14.54	-0.02	5.25	0.54	0.19	8.21	2.62	0.024
-8.51	19.41	16.17	0.00	5.93	0.56	0.25	8.73	2.68	0.032
-8.21	19.12	17.61	0.00	6.40	0.52	0.28	9.06	2.59	0.036
-7.91	18.82	18.96	0.01	6.72	0.51	0.32	9.29	2.55	0.041
-7.62	18.52	20.13	0.00	6.86	0.56	0.36	9.39	2.67	0.046
-7.32	18.22	21.19	0.01	6.87	0.52	0.38	9.39	2.59	0.049
-7.02	17.92	22.09	0.02	6.70	0.61	0.42	9.27	2.80	0.054
-6.72	17.62	22.93	0.02	6.23	0.52	0.42	8.94	2.58	0.054
-6.42	17.32	23.64	0.02	5.80	0.48	0.40	8.63	2.47	0.051
-6.12	17.02	24.30	0.02	5.22	0.53	0.37	8.18	2.61	0.048
-5.82	16.73	24.83	0.02	4.81	0.61	0.38	7.85	2.79	0.049
-5.53	16.43	25.31	0.02	4.40	0.62	0.36	7.51	2.83	0.047
-5.23	16.13	25.72	0.02	3.98	0.58	0.33	7.15	2.73	0.043
-4.93	15.83	26.10	0.03	3.58	0.60	0.32	6.78	2.77	0.041
-4.63	15.53	26.41	0.03	3.26	0.61	0.31	6.47	2.80	0.040
-4.33	15.23	26.69	0.04	2.91	0.61	0.28	6.11	2.80	0.037

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.03	14.93	26.93	0.04	2.64	0.61	0.25	5.82	2.80	0.032
-3.73	14.64	27.13	0.04	2.41	0.62	0.23	5.56	2.83	0.030
-3.43	14.34	27.31	0.04	2.20	0.60	0.20	5.31	2.76	0.026
-3.14	14.04	27.46	0.04	2.07	0.60	0.18	5.15	2.78	0.023
-2.84	13.74	27.57	0.04	1.97	0.61	0.18	5.03	2.79	0.023
-2.54	13.44	27.67	0.04	1.87	0.67	0.15	4.90	2.93	0.019
-2.24	13.14	27.75	0.05	1.79	0.65	0.11	4.79	2.88	0.014
-1.94	12.84	27.81	0.04	1.74	0.64	0.09	4.73	2.86	0.011
-1.64	12.54	27.85	0.03	1.66	0.64	0.07	4.62	2.86	0.009
-1.34	12.25	27.89	0.05	1.63	0.67	0.06	4.58	2.92	0.007
-1.05	11.95	27.91	0.05	1.60	0.61	0.05	4.53	2.81	0.007
-0.75	11.65	27.91	0.05	1.56	0.61	0.01	4.48	2.80	0.002
-0.45	11.35	27.89	0.05	1.59	0.65	-0.01	4.51	2.89	-0.001
-0.15	11.05	27.88	0.05	1.61	0.61	-0.04	4.54	2.80	-0.005
0.15	10.75	27.84	0.04	1.63	0.61	-0.06	4.57	2.80	-0.008
0.45	10.45	27.79	0.05	1.69	0.69	-0.11	4.66	2.98	-0.014
0.75	10.15	27.73	0.06	1.76	0.69	-0.15	4.75	2.97	-0.019
1.05	9.86	27.65	0.06	1.85	0.67	-0.15	4.87	2.93	-0.019
1.34	9.56	27.57	0.05	1.93	0.66	-0.17	4.97	2.90	-0.022
1.64	9.26	27.47	0.05	2.01	0.62	-0.21	5.08	2.83	-0.027
1.94	8.96	27.35	0.05	2.16	0.67	-0.24	5.26	2.94	-0.031
2.24	8.66	27.21	0.06	2.35	0.70	-0.26	5.49	2.99	-0.033
2.54	8.36	27.06	0.06	2.51	0.68	-0.28	5.68	2.95	-0.036
2.84	8.06	26.89	0.06	2.71	0.65	-0.30	5.90	2.89	-0.038
3.14	7.77	26.70	0.05	2.96	0.72	-0.33	6.16	3.03	-0.042
3.43	7.47	26.47	0.04	3.20	0.76	-0.37	6.41	3.12	-0.047
3.73	7.17	26.22	0.05	3.51	0.73	-0.37	6.71	3.05	-0.048
4.03	6.87	25.94	0.05	3.88	0.63	-0.38	7.05	2.83	-0.049
4.33	6.57	25.63	0.05	4.18	0.55	-0.41	7.33	2.67	-0.052
4.63	6.27	25.28	0.04	4.54	0.58	-0.41	7.63	2.74	-0.052
4.93	5.97	24.90	0.03	4.91	0.63	-0.41	7.94	2.84	-0.053
5.23	5.67	24.45	0.02	5.32	0.66	-0.42	8.27	2.90	-0.053
5.53	5.38	23.92	0.03	5.72	0.63	-0.44	8.57	2.84	-0.057
5.82	5.08	23.34	0.02	6.14	0.62	-0.44	8.87	2.83	-0.057
6.12	4.78	22.67	0.02	6.51	0.56	-0.43	9.14	2.69	-0.055
6.42	4.48	21.91	0.02	6.89	0.48	-0.42	9.40	2.49	-0.054
6.72	4.18	21.06	0.02	7.06	0.57	-0.40	9.52	2.70	-0.052
7.02	3.88	20.11	0.02	7.17	0.58	-0.36	9.59	2.73	-0.047

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
7.32	3.58	19.05	0.02	7.13	0.54	-0.31	9.57	2.63	-0.039
7.62	3.29	17.86	0.02	6.87	0.57	-0.28	9.39	2.72	-0.036
7.91	2.99	16.57	0.02	6.16	0.55	-0.22	8.89	2.66	-0.028
8.21	2.69	15.15	0.01	5.49	0.59	-0.14	8.39	2.76	-0.018
8.51	2.39	13.65	0.00	4.82	0.60	-0.10	7.87	2.77	-0.013
8.81	2.09	12.05	0.00	4.04	0.53	-0.09	7.20	2.62	-0.012
9.11	1.79	10.33	0.00	3.17	0.50	-0.04	6.38	2.54	-0.005
9.41	1.49	8.50	0.00	2.63	0.51	-0.01	5.81	2.55	-0.002
9.71	1.19	6.60	0.00	1.97	0.43	-0.01	5.03	2.34	-0.002
10.01	0.90	4.52	-0.01	1.58	0.39	-0.02	4.51	2.23	-0.003
10.30	0.60	2.24	-0.02	1.13	0.37	-0.02	3.81	2.19	-0.003
10.60	0.30	1.10	0.01	0.47	0.18	-0.01	2.46	1.50	-0.001
10.90	0.00	0.40	0.01	0.38	0.01	0.00	2.22	0.32	0.000

Table N-23 Grid #1, L2, Plasma-150, Left (1-10)

L2 (150)							$U_\infty =$	28.16	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.90	21.80	0.17	0.05	0.25	0.15	0.01	1.76	1.40	0.001
-10.60	21.50	0.22	0.03	0.44	0.17	-0.01	2.34	1.48	-0.001
-10.30	21.21	2.32	-0.14	12.88	2.92	0.00	12.74	6.07	0.001
-10.01	20.91	7.16	-0.22	18.21	3.85	0.77	15.15	6.97	0.097
-9.71	20.61	10.56	-0.03	5.33	1.63	0.02	8.20	4.53	0.002
-9.41	20.31	12.17	-0.01	2.88	0.87	0.02	6.03	3.31	0.003
-9.11	20.01	13.81	0.00	3.49	0.67	0.07	6.64	2.92	0.009
-8.81	19.71	15.52	0.00	4.39	0.59	0.10	7.44	2.74	0.013
-8.51	19.41	17.19	0.01	5.15	0.55	0.13	8.06	2.63	0.017
-8.21	19.12	18.68	0.01	5.71	0.62	0.17	8.48	2.79	0.021
-7.91	18.82	20.07	0.01	5.71	0.62	0.25	8.49	2.79	0.031
-7.62	18.52	21.22	0.00	5.60	0.60	0.26	8.40	2.75	0.033
-7.32	18.22	22.30	0.00	5.45	0.64	0.25	8.29	2.83	0.031
-7.02	17.92	23.18	0.02	5.23	0.57	0.27	8.12	2.68	0.034
-6.72	17.62	23.97	0.02	4.77	0.60	0.28	7.75	2.75	0.035
-6.42	17.32	24.62	0.02	4.39	0.57	0.29	7.44	2.67	0.037
-6.12	17.02	25.18	0.03	4.10	0.60	0.28	7.19	2.76	0.035

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-5.82	16.73	25.66	0.03	3.77	0.68	0.27	6.89	2.93	0.035
-5.53	16.43	26.08	0.03	3.43	0.70	0.27	6.57	2.98	0.034
-5.23	16.13	26.43	0.03	3.15	0.72	0.24	6.30	3.01	0.030
-4.93	15.83	26.75	0.04	2.79	0.68	0.21	5.93	2.92	0.026
-4.63	15.53	26.99	0.04	2.63	0.72	0.22	5.76	3.02	0.027
-4.33	15.23	27.21	0.04	2.48	0.74	0.21	5.59	3.05	0.026
-4.03	14.93	27.39	0.05	2.32	0.82	0.18	5.41	3.21	0.022
-3.73	14.64	27.55	0.04	2.18	0.83	0.15	5.24	3.24	0.020
-3.43	14.34	27.69	0.05	2.03	0.69	0.14	5.06	2.94	0.018
-3.14	14.04	27.81	0.06	1.93	0.71	0.12	4.94	2.99	0.015
-2.84	13.74	27.90	0.06	1.89	0.75	0.09	4.88	3.08	0.012
-2.54	13.44	27.98	0.06	1.83	0.72	0.09	4.80	3.01	0.011
-2.24	13.14	28.04	0.06	1.78	0.85	0.06	4.74	3.28	0.008
-1.94	12.84	28.09	0.07	1.77	0.85	0.02	4.72	3.28	0.003
-1.64	12.54	28.12	0.06	1.72	0.80	0.02	4.66	3.18	0.002
-1.34	12.25	28.15	0.06	1.69	0.83	0.01	4.62	3.24	0.001
-1.05	11.95	28.15	0.06	1.69	0.76	-0.04	4.62	3.10	-0.005
-0.75	11.65	28.16	0.06	1.67	0.76	-0.05	4.59	3.10	-0.006
-0.45	11.35	28.16	0.07	1.70	0.76	-0.06	4.63	3.10	-0.007
-0.15	11.05	28.13	0.06	1.73	0.77	-0.08	4.67	3.12	-0.010
0.15	10.75	28.10	0.07	1.74	0.80	-0.10	4.68	3.17	-0.013
0.45	10.45	28.05	0.08	1.80	0.79	-0.11	4.77	3.16	-0.014
0.75	10.15	28.01	0.07	1.85	0.81	-0.12	4.83	3.20	-0.016
1.05	9.86	27.95	0.08	1.89	0.74	-0.16	4.88	3.05	-0.020
1.34	9.56	27.87	0.08	1.97	0.81	-0.18	4.99	3.19	-0.023
1.64	9.26	27.78	0.08	2.02	0.78	-0.20	5.04	3.14	-0.025
1.94	8.96	27.67	0.06	2.13	0.76	-0.21	5.19	3.09	-0.027
2.24	8.66	27.56	0.06	2.24	0.83	-0.23	5.31	3.24	-0.029
2.54	8.36	27.44	0.06	2.34	0.82	-0.22	5.43	3.22	-0.028
2.84	8.06	27.29	0.06	2.44	0.73	-0.22	5.55	3.04	-0.028
3.14	7.77	27.13	0.06	2.60	0.74	-0.23	5.72	3.06	-0.029
3.43	7.47	26.93	0.05	2.78	0.74	-0.23	5.92	3.05	-0.029
3.73	7.17	26.72	0.06	2.96	0.74	-0.27	6.11	3.05	-0.034
4.03	6.87	26.49	0.05	3.14	0.79	-0.28	6.29	3.15	-0.035
4.33	6.57	26.21	0.05	3.36	0.71	-0.30	6.51	3.00	-0.038
4.63	6.27	25.89	0.05	3.62	0.62	-0.32	6.75	2.79	-0.040
4.93	5.97	25.56	0.05	3.87	0.65	-0.33	6.99	2.87	-0.041
5.23	5.67	25.16	0.03	4.17	0.63	-0.32	7.25	2.82	-0.040

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.53	5.38	24.69	0.03	4.42	0.66	-0.31	7.47	2.88	-0.039
5.82	5.08	24.16	0.03	4.73	0.64	-0.32	7.72	2.85	-0.040
6.12	4.78	23.55	0.02	5.06	0.71	-0.30	7.99	3.00	-0.038
6.42	4.48	22.87	0.03	5.27	0.72	-0.32	8.16	3.01	-0.040
6.72	4.18	22.07	0.03	5.38	0.74	-0.30	8.23	3.06	-0.037
7.02	3.88	21.16	0.02	5.51	0.77	-0.27	8.33	3.12	-0.033
7.32	3.58	20.16	0.02	5.50	0.70	-0.24	8.33	2.97	-0.030
7.62	3.29	19.00	0.01	5.39	0.77	-0.19	8.24	3.11	-0.024
7.91	2.99	17.71	0.01	5.03	0.75	-0.16	7.96	3.08	-0.020
8.21	2.69	16.24	0.01	4.43	0.59	-0.11	7.47	2.74	-0.014
8.51	2.39	14.70	0.00	3.70	0.56	-0.08	6.83	2.67	-0.011
8.81	2.09	13.11	0.00	3.07	0.52	-0.06	6.22	2.56	-0.007
9.11	1.79	11.58	0.02	2.64	0.78	-0.03	5.77	3.13	-0.003
9.41	1.49	10.15	0.00	3.06	1.04	0.01	6.21	3.62	0.001
9.71	1.19	8.66	0.07	6.66	2.32	0.27	9.16	5.41	0.035
10.01	0.90	4.80	-0.48	35.53	10.48	2.80	21.17	11.49	0.353
10.30	0.60	0.54	-0.26	19.03	4.29	0.41	15.49	7.36	0.051
10.60	0.30	0.60	0.15	6.27	0.85	0.33	8.89	3.28	0.042
10.90	0.00	4.24	0.22	63.23	2.34	1.97	28.24	5.44	0.248

Table N-24 Grid #1, L2, Plasma-150, Center (46-55)

L2 (150)							$U_\infty =$	28.33	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.90	21.80	0.28	0.03	5.45	0.17	0.06	8.24	1.44	0.007
-10.60	21.50	0.60	-0.04	9.26	0.26	0.07	10.74	1.79	0.009
-10.30	21.21	4.74	-0.23	19.64	4.17	0.46	15.64	7.21	0.058
-10.01	20.91	8.69	-0.18	8.31	3.46	0.31	10.18	6.57	0.039
-9.71	20.61	10.66	-0.03	2.71	1.04	0.05	5.81	3.61	0.006
-9.41	20.31	12.11	0.00	2.60	0.57	0.07	5.70	2.67	0.009
-9.11	20.01	13.78	0.01	3.00	0.41	0.06	6.11	2.25	0.008
-8.81	19.71	15.43	0.00	3.79	0.45	0.09	6.87	2.37	0.011
-8.51	19.41	17.11	0.00	4.63	0.51	0.14	7.59	2.51	0.017
-8.21	19.12	18.59	-0.01	4.95	0.46	0.17	7.85	2.39	0.022
-7.91	18.82	19.99	0.00	5.13	0.47	0.18	8.00	2.43	0.022

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-7.62	18.52	21.18	0.01	5.17	0.57	0.20	8.03	2.66	0.025
-7.32	18.22	22.26	0.01	5.08	0.50	0.25	7.96	2.51	0.031
-7.02	17.92	23.16	0.01	4.85	0.45	0.25	7.77	2.36	0.031
-6.72	17.62	23.97	0.00	4.52	0.53	0.26	7.50	2.58	0.032
-6.42	17.32	24.64	0.00	4.24	0.57	0.27	7.27	2.65	0.033
-6.12	17.02	25.25	0.01	3.87	0.50	0.26	6.94	2.50	0.032
-5.82	16.73	25.75	0.01	3.58	0.49	0.26	6.68	2.48	0.032
-5.53	16.43	26.20	0.02	3.29	0.52	0.25	6.40	2.54	0.031
-5.23	16.13	26.57	0.03	2.98	0.48	0.22	6.09	2.45	0.027
-4.93	15.83	26.88	0.03	2.76	0.55	0.20	5.86	2.63	0.024
-4.63	15.53	27.13	0.04	2.60	0.57	0.18	5.70	2.66	0.022
-4.33	15.23	27.36	0.03	2.44	0.53	0.18	5.52	2.57	0.023
-4.03	14.93	27.55	0.03	2.26	0.56	0.17	5.31	2.63	0.022
-3.73	14.64	27.72	0.04	2.13	0.56	0.14	5.15	2.64	0.018
-3.43	14.34	27.85	0.04	2.05	0.62	0.14	5.05	2.79	0.017
-3.14	14.04	27.97	0.04	1.94	0.55	0.13	4.92	2.61	0.016
-2.84	13.74	28.06	0.04	1.85	0.56	0.11	4.81	2.65	0.014
-2.54	13.44	28.15	0.05	1.80	0.63	0.08	4.73	2.80	0.010
-2.24	13.14	28.21	0.05	1.73	0.72	0.07	4.64	3.00	0.009
-1.94	12.84	28.26	0.05	1.67	0.61	0.08	4.57	2.76	0.009
-1.64	12.54	28.29	0.05	1.64	0.55	0.06	4.52	2.61	0.008
-1.34	12.25	28.32	0.05	1.61	0.61	0.05	4.48	2.76	0.007
-1.05	11.95	28.33	0.06	1.61	0.60	0.02	4.47	2.74	0.003
-0.75	11.65	28.33	0.05	1.57	0.61	-0.01	4.42	2.75	-0.001
-0.45	11.35	28.32	0.05	1.57	0.61	-0.04	4.43	2.77	-0.004
-0.15	11.05	28.30	0.05	1.62	0.63	-0.06	4.49	2.81	-0.007
0.15	10.75	28.27	0.04	1.67	0.64	-0.05	4.56	2.82	-0.006
0.45	10.45	28.23	0.05	1.71	0.66	-0.06	4.62	2.87	-0.007
0.75	10.15	28.17	0.06	1.75	0.64	-0.08	4.67	2.83	-0.010
1.05	9.86	28.10	0.06	1.81	0.63	-0.12	4.75	2.80	-0.015
1.34	9.56	28.02	0.05	1.91	0.64	-0.14	4.88	2.83	-0.017
1.64	9.26	27.93	0.06	1.97	0.66	-0.16	4.95	2.87	-0.020
1.94	8.96	27.82	0.05	2.03	0.63	-0.17	5.04	2.80	-0.021
2.24	8.66	27.71	0.04	2.15	0.62	-0.18	5.18	2.77	-0.023
2.54	8.36	27.57	0.04	2.29	0.63	-0.20	5.35	2.80	-0.025
2.84	8.06	27.43	0.05	2.39	0.60	-0.22	5.45	2.73	-0.027
3.14	7.77	27.25	0.04	2.53	0.59	-0.22	5.61	2.71	-0.028
3.43	7.47	27.06	0.04	2.70	0.62	-0.25	5.80	2.77	-0.031

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
3.73	7.17	26.84	0.04	2.88	0.56	-0.25	5.99	2.63	-0.031
4.03	6.87	26.58	0.04	3.13	0.53	-0.25	6.24	2.57	-0.032
4.33	6.57	26.30	0.04	3.33	0.62	-0.28	6.44	2.79	-0.035
4.63	6.27	25.98	0.04	3.55	0.54	-0.30	6.66	2.59	-0.037
4.93	5.97	25.61	0.03	3.81	0.53	-0.29	6.89	2.58	-0.037
5.23	5.67	25.18	0.03	4.14	0.56	-0.30	7.18	2.64	-0.037
5.53	5.38	24.70	0.03	4.37	0.51	-0.29	7.38	2.52	-0.036
5.82	5.08	24.17	0.03	4.65	0.57	-0.28	7.61	2.66	-0.035
6.12	4.78	23.52	0.02	4.94	0.63	-0.29	7.85	2.79	-0.036
6.42	4.48	22.78	0.01	5.12	0.57	-0.27	7.99	2.66	-0.034
6.72	4.18	21.99	0.02	5.18	0.56	-0.25	8.04	2.63	-0.032
7.02	3.88	21.05	0.02	5.18	0.55	-0.23	8.03	2.61	-0.029
7.32	3.58	20.04	0.01	5.07	0.57	-0.21	7.95	2.65	-0.027
7.62	3.29	18.86	0.01	5.02	0.57	-0.18	7.91	2.66	-0.022
7.91	2.99	17.55	0.01	4.61	0.60	-0.14	7.58	2.73	-0.017
8.21	2.69	16.11	0.00	4.11	0.57	-0.09	7.16	2.67	-0.011
8.51	2.39	14.59	0.00	3.48	0.49	-0.08	6.59	2.48	-0.010
8.81	2.09	12.99	0.00	2.84	0.53	-0.04	5.95	2.57	-0.005
9.11	1.79	11.46	0.00	2.51	0.61	-0.03	5.59	2.77	-0.004
9.41	1.49	9.95	0.01	2.94	0.79	-0.06	6.05	3.14	-0.007
9.71	1.19	8.35	0.04	5.96	1.05	0.00	8.62	3.62	0.000
10.01	0.90	3.16	-0.64	19.19	2.92	1.22	15.47	6.03	0.152
10.30	0.60	0.15	-0.49	8.09	1.46	0.36	10.04	4.26	0.045
10.60	0.30	0.38	-0.08	5.80	0.27	0.05	8.50	1.84	0.006
10.90	0.00	0.04	0.02	0.00	0.00	0.00	0.07	0.13	0.000

Table N-25 Grid #1, L2, Plasma-150, Right (71-80)

L2 (150)							U_∞ =	28.42	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.90	21.80	1.28	0.07	22.71	0.42	0.14	16.77	2.29	0.017
-10.60	21.50	1.52	0.05	25.89	0.23	0.03	17.90	1.68	0.004
-10.30	21.21	4.02	-0.14	18.76	3.52	-0.26	15.24	6.60	-0.032
-10.01	20.91	7.50	-0.11	11.32	2.63	-0.36	11.83	5.70	-0.044
-9.71	20.61	10.01	-0.04	8.55	1.08	-0.05	10.29	3.66	-0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.41	20.31	12.14	-0.01	2.80	0.58	0.09	5.89	2.68	0.011
-9.11	20.01	13.82	0.00	3.26	0.49	0.08	6.35	2.47	0.010
-8.81	19.71	15.44	-0.01	3.89	0.44	0.10	6.94	2.33	0.012
-8.51	19.41	17.09	-0.01	4.66	0.47	0.18	7.59	2.41	0.022
-8.21	19.12	18.57	-0.01	5.08	0.45	0.17	7.93	2.35	0.021
-7.91	18.82	19.95	0.00	5.32	0.46	0.20	8.11	2.38	0.025
-7.62	18.52	21.11	-0.01	5.35	0.62	0.24	8.13	2.77	0.030
-7.32	18.22	22.20	0.00	5.09	0.58	0.25	7.94	2.68	0.031
-7.02	17.92	23.12	0.00	4.86	0.50	0.26	7.76	2.49	0.033
-6.72	17.62	23.94	0.01	4.59	0.51	0.27	7.54	2.51	0.034
-6.42	17.32	24.63	0.01	4.31	0.56	0.27	7.30	2.64	0.033
-6.12	17.02	25.24	0.02	3.93	0.52	0.27	6.98	2.54	0.034
-5.82	16.73	25.75	0.01	3.63	0.53	0.25	6.70	2.57	0.031
-5.53	16.43	26.19	0.01	3.32	0.56	0.24	6.41	2.62	0.029
-5.23	16.13	26.59	0.02	3.05	0.63	0.22	6.15	2.79	0.028
-4.93	15.83	26.92	0.03	2.83	0.60	0.20	5.92	2.73	0.025
-4.63	15.53	27.18	0.02	2.63	0.63	0.18	5.70	2.79	0.022
-4.33	15.23	27.42	0.03	2.41	0.60	0.18	5.46	2.73	0.023
-4.03	14.93	27.62	0.03	2.26	0.60	0.18	5.29	2.73	0.022
-3.73	14.64	27.80	0.03	2.13	0.57	0.17	5.13	2.66	0.021
-3.43	14.34	27.94	0.04	2.01	0.63	0.15	4.99	2.78	0.018
-3.14	14.04	28.06	0.03	1.94	0.57	0.13	4.91	2.65	0.016
-2.84	13.74	28.15	0.04	1.86	0.66	0.10	4.80	2.86	0.013
-2.54	13.44	28.23	0.05	1.79	0.68	0.08	4.70	2.90	0.010
-2.24	13.14	28.29	0.04	1.77	0.65	0.10	4.68	2.84	0.012
-1.94	12.84	28.35	0.04	1.71	0.65	0.08	4.61	2.84	0.010
-1.64	12.54	28.39	0.04	1.67	0.68	0.06	4.55	2.91	0.007
-1.34	12.25	28.42	0.05	1.65	0.67	0.04	4.52	2.88	0.005
-1.05	11.95	28.42	0.05	1.62	0.66	0.03	4.48	2.87	0.004
-0.75	11.65	28.42	0.04	1.63	0.63	-0.02	4.49	2.79	-0.002
-0.45	11.35	28.40	0.04	1.64	0.62	-0.04	4.51	2.78	-0.005
-0.15	11.05	28.38	0.05	1.67	0.63	-0.04	4.54	2.78	-0.005
0.15	10.75	28.36	0.05	1.69	0.63	-0.05	4.57	2.79	-0.006
0.45	10.45	28.31	0.04	1.74	0.66	-0.07	4.64	2.86	-0.008
0.75	10.15	28.25	0.04	1.80	0.70	-0.10	4.72	2.94	-0.012
1.05	9.86	28.19	0.04	1.88	0.68	-0.14	4.82	2.90	-0.017
1.34	9.56	28.11	0.05	1.95	0.67	-0.14	4.91	2.87	-0.017
1.64	9.26	28.02	0.05	1.99	0.65	-0.16	4.96	2.85	-0.019

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
1.94	8.96	27.91	0.05	2.09	0.65	-0.18	5.08	2.85	-0.022
2.24	8.66	27.78	0.05	2.20	0.70	-0.19	5.22	2.95	-0.023
2.54	8.36	27.64	0.05	2.30	0.63	-0.22	5.34	2.80	-0.027
2.84	8.06	27.49	0.05	2.40	0.59	-0.22	5.46	2.69	-0.027
3.14	7.77	27.32	0.04	2.57	0.60	-0.21	5.64	2.74	-0.026
3.43	7.47	27.12	0.05	2.72	0.57	-0.22	5.80	2.66	-0.027
3.73	7.17	26.89	0.04	2.88	0.56	-0.24	5.97	2.64	-0.029
4.03	6.87	26.64	0.04	3.10	0.62	-0.26	6.20	2.78	-0.032
4.33	6.57	26.35	0.04	3.32	0.62	-0.28	6.41	2.77	-0.034
4.63	6.27	26.01	0.04	3.63	0.59	-0.29	6.71	2.70	-0.036
4.93	5.97	25.64	0.03	3.86	0.59	-0.28	6.91	2.70	-0.034
5.23	5.67	25.20	0.03	4.12	0.60	-0.28	7.14	2.71	-0.035
5.53	5.38	24.71	0.03	4.34	0.68	-0.28	7.33	2.90	-0.035
5.82	5.08	24.14	0.03	4.65	0.65	-0.30	7.58	2.84	-0.037
6.12	4.78	23.51	0.02	4.87	0.64	-0.28	7.77	2.81	-0.035
6.42	4.48	22.77	0.02	5.02	0.64	-0.26	7.88	2.81	-0.033
6.72	4.18	21.93	0.02	5.09	0.59	-0.23	7.93	2.70	-0.029
7.02	3.88	21.00	0.02	5.19	0.62	-0.22	8.01	2.77	-0.027
7.32	3.58	19.96	0.01	5.04	0.64	-0.20	7.90	2.82	-0.024
7.62	3.29	18.78	0.01	4.86	0.63	-0.18	7.75	2.79	-0.022
7.91	2.99	17.48	0.00	4.55	0.49	-0.13	7.51	2.47	-0.016
8.21	2.69	16.06	-0.01	4.03	0.49	-0.12	7.07	2.45	-0.015
8.51	2.39	14.56	0.00	3.38	0.41	-0.08	6.47	2.26	-0.010
8.81	2.09	12.98	0.00	2.88	0.44	-0.05	5.97	2.34	-0.006
9.11	1.79	11.42	-0.01	2.48	0.54	-0.03	5.54	2.58	-0.004
9.41	1.49	9.90	-0.01	2.83	0.76	-0.03	5.92	3.07	-0.003
9.71	1.19	8.42	0.10	4.91	1.05	-0.04	7.80	3.60	-0.005
10.01	0.90	5.23	-0.90	28.30	7.63	0.94	18.72	9.71	0.117
10.30	0.60	1.30	-0.87	33.37	5.87	0.20	20.32	8.53	0.025
10.60	0.30	0.14	-0.12	6.13	0.35	0.05	8.71	2.09	0.007
10.90	0.00	0.06	0.01	0.02	0.01	-0.01	0.48	0.27	-0.001

Table N-26 Grid #1, L2, Plasma-300, Left (1-10)

L2 (300)							U_∞ =	28.83	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.90	21.80	0.37	0.00	1.89	0.39	0.07	4.77	2.17	0.008
-10.60	21.50	0.57	-0.07	3.78	0.38	0.08	6.74	2.14	0.010
-10.30	21.21	4.70	-0.06	17.20	1.34	0.08	14.39	4.02	0.010
-10.01	20.91	8.85	-0.10	8.06	1.64	0.11	9.85	4.45	0.013
-9.71	20.61	11.17	-0.03	2.90	1.28	-0.01	5.91	3.93	-0.001
-9.41	20.31	12.89	0.02	2.76	0.91	0.01	5.76	3.31	0.002
-9.11	20.01	14.73	0.02	3.25	0.84	0.04	6.26	3.18	0.005
-8.81	19.71	16.54	0.03	3.92	0.73	0.09	6.87	2.95	0.010
-8.51	19.41	18.28	0.03	4.39	0.87	0.12	7.27	3.23	0.015
-8.21	19.12	19.78	0.02	4.68	0.98	0.15	7.50	3.44	0.019
-7.91	18.82	21.15	0.03	4.75	0.92	0.15	7.56	3.33	0.018
-7.62	18.52	22.28	0.03	4.65	0.93	0.18	7.48	3.34	0.022
-7.32	18.22	23.30	0.03	4.48	0.95	0.15	7.34	3.38	0.018
-7.02	17.92	24.14	0.02	4.39	0.91	0.17	7.27	3.32	0.020
-6.72	17.62	24.88	0.03	4.25	0.96	0.22	7.15	3.40	0.026
-6.42	17.32	25.49	0.04	4.03	0.95	0.22	6.96	3.37	0.027
-6.12	17.02	26.02	0.03	3.68	0.90	0.20	6.65	3.30	0.024
-5.82	16.73	26.46	0.03	3.46	0.89	0.20	6.45	3.27	0.025
-5.53	16.43	26.85	0.03	3.30	0.89	0.21	6.30	3.28	0.026
-5.23	16.13	27.18	0.03	3.07	0.82	0.20	6.07	3.13	0.024
-4.93	15.83	27.46	0.04	2.86	0.84	0.19	5.87	3.17	0.023
-4.63	15.53	27.69	0.04	2.74	0.86	0.17	5.74	3.21	0.021
-4.33	15.23	27.89	0.04	2.61	0.84	0.16	5.60	3.18	0.020
-4.03	14.93	28.06	0.04	2.53	0.85	0.18	5.52	3.19	0.022
-3.73	14.64	28.23	0.04	2.43	0.82	0.16	5.41	3.14	0.020
-3.43	14.34	28.36	0.03	2.32	0.87	0.12	5.29	3.24	0.015
-3.14	14.04	28.47	0.04	2.25	0.81	0.09	5.21	3.13	0.011
-2.84	13.74	28.56	0.04	2.13	0.74	0.10	5.06	2.99	0.012
-2.54	13.44	28.64	0.04	2.05	0.78	0.08	4.97	3.07	0.010
-2.24	13.14	28.70	0.05	2.01	0.73	0.07	4.92	2.96	0.009
-1.94	12.84	28.74	0.04	2.00	0.81	0.05	4.91	3.11	0.006
-1.64	12.54	28.78	0.05	1.94	0.80	0.03	4.84	3.11	0.003
-1.34	12.25	28.81	0.05	1.90	0.81	0.02	4.79	3.13	0.003
-1.05	11.95	28.82	0.05	1.93	0.88	-0.01	4.82	3.26	-0.001
-0.75	11.65	28.83	0.06	1.95	0.85	-0.03	4.84	3.20	-0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-0.45	11.35	28.82	0.06	1.94	0.91	-0.07	4.83	3.30	-0.008
-0.15	11.05	28.81	0.06	1.95	0.83	-0.07	4.85	3.16	-0.009
0.15	10.75	28.78	0.06	1.97	0.82	-0.07	4.87	3.13	-0.009
0.45	10.45	28.75	0.06	1.99	0.80	-0.08	4.90	3.10	-0.010
0.75	10.15	28.71	0.06	2.04	0.85	-0.12	4.96	3.20	-0.014
1.05	9.86	28.64	0.07	2.11	0.89	-0.12	5.04	3.27	-0.015
1.34	9.56	28.58	0.07	2.16	0.77	-0.10	5.10	3.05	-0.012
1.64	9.26	28.50	0.06	2.20	0.76	-0.13	5.15	3.03	-0.016
1.94	8.96	28.42	0.06	2.25	0.88	-0.16	5.21	3.25	-0.019
2.24	8.66	28.30	0.06	2.35	0.78	-0.17	5.32	3.07	-0.020
2.54	8.36	28.17	0.06	2.45	0.78	-0.14	5.43	3.06	-0.017
2.84	8.06	28.04	0.06	2.56	0.82	-0.17	5.55	3.15	-0.021
3.14	7.77	27.89	0.06	2.62	0.91	-0.20	5.62	3.32	-0.024
3.43	7.47	27.71	0.06	2.76	0.90	-0.22	5.76	3.30	-0.027
3.73	7.17	27.53	0.05	2.85	0.91	-0.24	5.85	3.32	-0.029
4.03	6.87	27.31	0.04	2.96	0.86	-0.25	5.97	3.22	-0.030
4.33	6.57	27.08	0.04	3.09	0.94	-0.23	6.10	3.36	-0.027
4.63	6.27	26.80	0.04	3.26	0.93	-0.21	6.27	3.35	-0.025
4.93	5.97	26.47	0.04	3.47	1.02	-0.23	6.46	3.50	-0.028
5.23	5.67	26.12	0.04	3.66	1.17	-0.26	6.63	3.75	-0.031
5.53	5.38	25.71	0.02	3.84	1.19	-0.25	6.80	3.78	-0.030
5.82	5.08	25.24	0.02	4.03	1.32	-0.27	6.96	3.98	-0.032
6.12	4.78	24.71	0.02	4.19	1.32	-0.24	7.10	3.99	-0.028
6.42	4.48	24.08	0.01	4.47	1.60	-0.26	7.33	4.39	-0.031
6.72	4.18	23.38	0.01	4.56	1.76	-0.21	7.41	4.60	-0.026
7.02	3.88	22.54	0.00	4.80	1.86	-0.22	7.60	4.73	-0.027
7.32	3.58	21.55	-0.01	4.97	2.09	-0.22	7.73	5.01	-0.026
7.62	3.29	20.41	-0.01	5.02	2.38	-0.19	7.77	5.36	-0.023
7.91	2.99	19.12	-0.02	4.90	2.45	-0.19	7.68	5.43	-0.022
8.21	2.69	17.65	-0.02	4.76	2.27	-0.13	7.57	5.23	-0.015
8.51	2.39	16.07	-0.01	4.41	2.17	-0.09	7.28	5.11	-0.011
8.81	2.09	14.32	0.02	4.17	2.70	-0.03	7.09	5.70	-0.003
9.11	1.79	12.49	0.03	3.70	2.49	-0.05	6.67	5.47	-0.006
9.41	1.49	10.66	0.01	3.72	2.56	-0.04	6.69	5.55	-0.005
9.71	1.19	8.87	0.06	5.12	3.21	0.14	7.85	6.21	0.017
10.01	0.90	6.06	-0.05	15.82	6.49	0.97	13.80	8.84	0.117
10.30	0.60	1.67	-0.16	17.84	3.64	0.24	14.65	6.62	0.029
10.60	0.30	0.82	0.20	6.58	0.97	0.23	8.90	3.43	0.028

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
10.90	0.00	4.00	0.13	11.77	1.20	-0.35	11.90	3.80	-0.043

Table N-27 Grid #1, L2, Plasma-300, Center (46-55)

L2 (300)							U_∞ =	29.10	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.90	21.80	0.52	0.00	7.93	0.19	0.03	9.68	1.51	0.004
-10.60	21.50	1.12	0.02	11.73	0.25	0.04	11.77	1.73	0.005
-10.30	21.21	6.32	-0.02	10.82	1.23	0.10	11.30	3.80	0.011
-10.01	20.91	9.28	-0.03	2.94	0.99	0.03	5.89	3.42	0.004
-9.71	20.61	11.04	0.01	2.45	0.62	0.05	5.38	2.71	0.006
-9.41	20.31	12.83	0.02	2.49	0.45	0.04	5.42	2.30	0.005
-9.11	20.01	14.70	0.02	2.96	0.51	0.05	5.91	2.46	0.006
-8.81	19.71	16.49	0.01	3.44	0.55	0.10	6.37	2.56	0.011
-8.51	19.41	18.19	0.03	3.85	0.55	0.11	6.74	2.55	0.013
-8.21	19.12	19.71	0.03	4.24	0.64	0.12	7.07	2.76	0.014
-7.91	18.82	21.07	0.02	4.36	0.61	0.14	7.17	2.68	0.016
-7.62	18.52	22.25	0.02	4.32	0.59	0.15	7.14	2.64	0.017
-7.32	18.22	23.29	0.02	4.21	0.55	0.16	7.05	2.54	0.019
-7.02	17.92	24.17	0.04	4.18	0.64	0.17	7.02	2.76	0.021
-6.72	17.62	24.94	0.04	3.97	0.59	0.18	6.85	2.64	0.021
-6.42	17.32	25.58	0.03	3.78	0.57	0.20	6.69	2.59	0.024
-6.12	17.02	26.16	0.02	3.49	0.55	0.18	6.42	2.55	0.021
-5.82	16.73	26.62	0.02	3.27	0.51	0.17	6.22	2.45	0.020
-5.53	16.43	27.04	0.04	3.08	0.56	0.16	6.03	2.57	0.019
-5.23	16.13	27.39	0.04	2.88	0.57	0.17	5.84	2.59	0.020
-4.93	15.83	27.68	0.03	2.71	0.61	0.18	5.65	2.68	0.021
-4.63	15.53	27.92	0.02	2.58	0.61	0.17	5.52	2.69	0.020
-4.33	15.23	28.14	0.03	2.46	0.60	0.15	5.39	2.67	0.017
-4.03	14.93	28.32	0.05	2.35	0.62	0.12	5.27	2.71	0.014
-3.73	14.64	28.48	0.05	2.25	0.66	0.12	5.15	2.79	0.014
-3.43	14.34	28.62	0.04	2.16	0.64	0.12	5.05	2.74	0.014
-3.14	14.04	28.73	0.03	2.07	0.65	0.10	4.94	2.77	0.012
-2.84	13.74	28.83	0.05	1.99	0.73	0.09	4.85	2.93	0.010
-2.54	13.44	28.90	0.04	1.95	0.71	0.07	4.80	2.90	0.008

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-2.24	13.14	28.97	0.04	1.90	0.69	0.06	4.73	2.85	0.008
-1.94	12.84	29.02	0.05	1.84	0.65	0.05	4.66	2.78	0.006
-1.64	12.54	29.06	0.04	1.80	0.62	0.04	4.61	2.70	0.004
-1.34	12.25	29.09	0.04	1.76	0.59	0.02	4.56	2.64	0.002
-1.05	11.95	29.09	0.04	1.75	0.65	0.00	4.55	2.77	0.000
-0.75	11.65	29.10	0.05	1.77	0.70	-0.01	4.57	2.87	-0.001
-0.45	11.35	29.10	0.05	1.78	0.65	-0.03	4.58	2.77	-0.004
-0.15	11.05	29.08	0.04	1.77	0.63	-0.02	4.57	2.72	-0.002
0.15	10.75	29.04	0.03	1.81	0.66	-0.04	4.62	2.80	-0.005
0.45	10.45	29.01	0.03	1.84	0.61	-0.07	4.66	2.69	-0.008
0.75	10.15	28.96	0.03	1.88	0.65	-0.09	4.72	2.76	-0.010
1.05	9.86	28.90	0.04	1.91	0.75	-0.10	4.75	2.97	-0.012
1.34	9.56	28.84	0.03	1.96	0.76	-0.12	4.81	2.99	-0.014
1.64	9.26	28.75	0.04	2.04	0.68	-0.11	4.91	2.84	-0.013
1.94	8.96	28.65	0.04	2.12	0.66	-0.13	5.00	2.79	-0.016
2.24	8.66	28.55	0.05	2.20	0.71	-0.16	5.10	2.90	-0.019
2.54	8.36	28.42	0.04	2.28	0.69	-0.18	5.19	2.85	-0.021
2.84	8.06	28.29	0.04	2.37	0.65	-0.17	5.29	2.77	-0.020
3.14	7.77	28.13	0.03	2.45	0.66	-0.19	5.38	2.79	-0.022
3.43	7.47	27.96	0.03	2.55	0.67	-0.20	5.49	2.81	-0.024
3.73	7.17	27.76	0.03	2.71	0.68	-0.19	5.66	2.83	-0.022
4.03	6.87	27.54	0.02	2.85	0.80	-0.20	5.81	3.07	-0.024
4.33	6.57	27.30	0.03	2.95	0.80	-0.22	5.90	3.07	-0.026
4.63	6.27	27.01	0.03	3.11	0.81	-0.24	6.06	3.10	-0.028
4.93	5.97	26.68	0.03	3.32	0.95	-0.26	6.26	3.36	-0.031
5.23	5.67	26.30	0.02	3.59	0.94	-0.23	6.51	3.33	-0.027
5.53	5.38	25.86	0.01	3.73	1.09	-0.25	6.64	3.58	-0.030
5.82	5.08	25.38	0.01	3.89	1.14	-0.24	6.77	3.67	-0.028
6.12	4.78	24.81	0.01	4.06	1.17	-0.23	6.93	3.71	-0.028
6.42	4.48	24.15	0.01	4.24	1.30	-0.22	7.07	3.91	-0.026
6.72	4.18	23.36	0.00	4.44	1.48	-0.18	7.24	4.18	-0.021
7.02	3.88	22.49	0.00	4.72	1.70	-0.15	7.47	4.48	-0.017
7.32	3.58	21.46	-0.02	4.71	1.99	-0.22	7.46	4.84	-0.027
7.62	3.29	20.30	-0.02	4.70	2.04	-0.14	7.45	4.91	-0.016
7.91	2.99	18.98	-0.03	4.64	1.99	-0.10	7.40	4.85	-0.012
8.21	2.69	17.50	-0.02	4.39	2.04	-0.16	7.20	4.91	-0.019
8.51	2.39	15.92	-0.01	4.07	1.82	-0.09	6.94	4.64	-0.010
8.81	2.09	14.19	-0.01	3.65	1.90	-0.08	6.57	4.74	-0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
9.11	1.79	12.38	0.00	3.21	1.98	-0.05	6.16	4.83	-0.006
9.41	1.49	10.56	-0.01	3.14	1.84	-0.03	6.09	4.66	-0.003
9.71	1.19	8.62	0.01	3.75	1.53	-0.07	6.65	4.25	-0.008
10.01	0.90	4.88	-0.15	14.76	1.94	0.15	13.20	4.78	0.018
10.30	0.60	0.95	-0.16	5.91	1.00	0.09	8.36	3.44	0.011
10.60	0.30	0.14	-0.04	1.56	0.27	0.04	4.29	1.77	0.004
10.90	0.00	0.72	0.01	0.68	0.01	-0.03	2.82	0.26	-0.003

Table N-28 Grid #1, L2, Plasma-300, Right (71-80)

L2 (300)							U_∞ =	29.24	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.90	21.80	1.32	0.12	19.49	0.47	0.22	15.10	2.35	0.026
-10.60	21.50	1.69	0.08	20.53	0.29	0.12	15.50	1.85	0.014
-10.30	21.21	5.65	-0.01	12.72	1.23	0.10	12.20	3.80	0.011
-10.01	20.91	8.82	-0.05	5.67	1.27	0.08	8.15	3.85	0.009
-9.71	20.61	11.04	-0.01	2.55	0.94	0.11	5.46	3.32	0.013
-9.41	20.31	12.85	0.02	2.50	0.67	0.07	5.40	2.79	0.009
-9.11	20.01	14.71	0.02	3.02	0.62	0.08	5.94	2.69	0.009
-8.81	19.71	16.50	0.00	3.60	0.76	0.12	6.49	2.99	0.014
-8.51	19.41	18.21	0.02	3.93	0.89	0.15	6.78	3.23	0.018
-8.21	19.12	19.70	0.02	4.11	0.83	0.14	6.93	3.11	0.017
-7.91	18.82	21.05	0.03	4.34	0.78	0.16	7.12	3.03	0.019
-7.62	18.52	22.22	0.02	4.37	0.78	0.18	7.15	3.02	0.021
-7.32	18.22	23.27	0.01	4.30	0.75	0.21	7.09	2.96	0.025
-7.02	17.92	24.16	0.01	4.20	0.76	0.21	7.01	2.98	0.025
-6.72	17.62	24.95	0.02	4.00	0.74	0.24	6.84	2.95	0.028
-6.42	17.32	25.60	0.02	3.85	0.75	0.24	6.71	2.96	0.029
-6.12	17.02	26.21	0.03	3.55	0.74	0.22	6.44	2.94	0.026
-5.82	16.73	26.69	0.02	3.31	0.75	0.23	6.23	2.97	0.027
-5.53	16.43	27.11	0.01	3.13	0.79	0.23	6.05	3.03	0.027
-5.23	16.13	27.46	0.02	2.91	0.73	0.20	5.84	2.92	0.024
-4.93	15.83	27.77	0.02	2.76	0.72	0.19	5.68	2.91	0.023
-4.63	15.53	28.03	0.03	2.60	0.68	0.17	5.51	2.82	0.020
-4.33	15.23	28.25	0.03	2.48	0.74	0.17	5.39	2.94	0.020

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.03	14.93	28.43	0.03	2.37	0.64	0.16	5.26	2.75	0.019
-3.73	14.64	28.60	0.04	2.26	0.63	0.15	5.14	2.72	0.018
-3.43	14.34	28.74	0.04	2.15	0.67	0.14	5.01	2.79	0.017
-3.14	14.04	28.86	0.03	2.05	0.69	0.10	4.89	2.84	0.012
-2.84	13.74	28.95	0.03	1.96	0.67	0.10	4.79	2.79	0.012
-2.54	13.44	29.04	0.03	1.91	0.67	0.08	4.72	2.80	0.010
-2.24	13.14	29.10	0.03	1.86	0.65	0.06	4.66	2.77	0.008
-1.94	12.84	29.16	0.03	1.85	0.70	0.06	4.65	2.87	0.007
-1.64	12.54	29.20	0.03	1.79	0.72	0.05	4.57	2.90	0.006
-1.34	12.25	29.22	0.04	1.75	0.76	0.03	4.52	2.98	0.003
-1.05	11.95	29.24	0.03	1.76	0.68	0.01	4.54	2.82	0.001
-0.75	11.65	29.24	0.04	1.77	0.65	0.00	4.54	2.76	0.000
-0.45	11.35	29.23	0.04	1.77	0.68	0.00	4.55	2.82	0.000
-0.15	11.05	29.22	0.03	1.80	0.76	-0.03	4.59	2.99	-0.003
0.15	10.75	29.18	0.03	1.84	0.76	-0.03	4.64	2.99	-0.004
0.45	10.45	29.15	0.02	1.86	0.76	-0.06	4.66	2.98	-0.007
0.75	10.15	29.11	0.03	1.89	0.66	-0.08	4.71	2.79	-0.009
1.05	9.86	29.04	0.03	1.94	0.64	-0.09	4.76	2.74	-0.010
1.34	9.56	28.97	0.03	2.00	0.79	-0.10	4.83	3.04	-0.011
1.64	9.26	28.89	0.04	2.08	0.78	-0.12	4.93	3.03	-0.015
1.94	8.96	28.80	0.03	2.15	0.70	-0.14	5.01	2.87	-0.016
2.24	8.66	28.69	0.03	2.20	0.72	-0.16	5.07	2.91	-0.018
2.54	8.36	28.57	0.03	2.30	0.78	-0.16	5.18	3.03	-0.019
2.84	8.06	28.43	0.03	2.42	0.88	-0.16	5.32	3.21	-0.018
3.14	7.77	28.28	0.03	2.50	0.88	-0.17	5.41	3.20	-0.020
3.43	7.47	28.09	0.03	2.59	0.69	-0.17	5.51	2.84	-0.020
3.73	7.17	27.89	0.03	2.72	0.78	-0.18	5.64	3.03	-0.021
4.03	6.87	27.67	0.02	2.85	0.89	-0.19	5.77	3.23	-0.022
4.33	6.57	27.43	0.02	2.98	0.90	-0.22	5.90	3.25	-0.026
4.63	6.27	27.13	0.03	3.16	0.87	-0.23	6.08	3.19	-0.027
4.93	5.97	26.80	0.03	3.33	1.06	-0.22	6.25	3.53	-0.026
5.23	5.67	26.40	0.02	3.58	1.25	-0.25	6.47	3.82	-0.029
5.53	5.38	25.97	0.02	3.77	1.47	-0.24	6.64	4.14	-0.028
5.82	5.08	25.43	0.01	3.99	1.43	-0.17	6.83	4.09	-0.020
6.12	4.78	24.85	0.02	4.16	1.55	-0.19	6.98	4.25	-0.022
6.42	4.48	24.17	0.00	4.33	1.69	-0.20	7.11	4.45	-0.023
6.72	4.18	23.37	0.00	4.53	1.87	-0.21	7.28	4.68	-0.025
7.02	3.88	22.44	-0.01	4.70	1.99	-0.21	7.41	4.82	-0.025

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.32	3.58	21.43	-0.02	4.68	2.04	-0.16	7.40	4.88	-0.019
7.62	3.29	20.26	-0.03	4.73	2.16	-0.11	7.44	5.03	-0.012
7.91	2.99	18.95	-0.01	4.65	2.21	-0.17	7.37	5.09	-0.020
8.21	2.69	17.49	0.00	4.45	2.13	-0.06	7.22	4.99	-0.007
8.51	2.39	15.89	-0.02	4.04	1.90	-0.08	6.87	4.71	-0.010
8.81	2.09	14.16	0.01	3.56	1.94	-0.07	6.45	4.76	-0.009
9.11	1.79	12.36	0.00	3.27	1.92	0.00	6.18	4.74	0.001
9.41	1.49	10.51	-0.02	3.22	1.90	-0.02	6.14	4.72	-0.002
9.71	1.19	8.67	0.05	3.69	2.02	-0.13	6.57	4.86	-0.016
10.01	0.90	6.30	-0.16	12.86	5.55	0.22	12.27	8.06	0.026
10.30	0.60	2.28	-0.23	21.23	4.69	0.38	15.76	7.40	0.045
10.60	0.30	0.58	-0.04	10.37	0.47	0.02	11.01	2.35	0.002
10.90	0.00	0.83	-0.02	0.82	0.00	0.01	3.10	0.06	0.001

Table N-29 Grid #1, L3, Plasma-Off, Left (1-10)

L3 (Off)							U_∞ =	27.89	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.97	21.93	0.18	-0.01	0.44	0.28	-0.04	2.37	1.88	-0.005
-10.66	21.63	1.55	0.02	0.64	0.11	-0.04	2.87	1.17	-0.005
-10.36	21.33	4.69	0.00	1.39	0.21	-0.01	4.22	1.64	-0.002
-10.06	21.03	6.80	0.04	1.96	0.33	0.00	5.01	2.07	0.000
-9.76	20.73	8.81	0.15	2.60	0.43	-0.06	5.78	2.34	-0.008
-9.46	20.43	10.67	0.10	3.42	0.45	-0.03	6.64	2.40	-0.003
-9.16	20.13	12.56	0.03	3.69	0.46	0.01	6.89	2.43	0.002
-8.86	19.83	14.27	0.04	4.29	0.47	0.02	7.43	2.45	0.003
-8.56	19.53	15.89	0.03	4.84	0.52	0.09	7.89	2.59	0.011
-8.26	19.23	17.30	0.03	5.22	0.41	0.15	8.19	2.31	0.020
-7.96	18.93	18.65	0.03	5.54	0.39	0.16	8.44	2.25	0.020
-7.66	18.63	19.83	0.03	5.63	0.38	0.19	8.50	2.20	0.024
-7.36	18.33	20.92	0.04	5.74	0.45	0.22	8.59	2.40	0.028
-7.06	18.02	21.84	0.05	5.61	0.52	0.24	8.49	2.60	0.031
-6.76	17.72	22.73	0.05	5.31	0.54	0.23	8.26	2.64	0.029
-6.46	17.42	23.48	0.05	5.02	0.51	0.26	8.03	2.55	0.033
-6.16	17.12	24.18	0.06	4.49	0.44	0.27	7.60	2.39	0.034

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-5.86	16.82	24.73	0.06	4.18	0.49	0.25	7.33	2.52	0.032
-5.56	16.52	25.22	0.06	3.88	0.58	0.24	7.06	2.73	0.031
-5.26	16.22	25.66	0.07	3.47	0.46	0.22	6.68	2.44	0.028
-4.96	15.92	26.05	0.08	3.08	0.44	0.21	6.30	2.37	0.027
-4.66	15.62	26.37	0.08	2.80	0.49	0.19	6.00	2.52	0.024
-4.36	15.32	26.65	0.09	2.57	0.45	0.19	5.75	2.39	0.025
-4.06	15.02	26.88	0.08	2.37	0.45	0.17	5.52	2.42	0.022
-3.76	14.72	27.11	0.08	2.12	0.49	0.15	5.23	2.51	0.019
-3.45	14.42	27.28	0.09	1.98	0.44	0.13	5.04	2.38	0.016
-3.15	14.12	27.43	0.09	1.85	0.47	0.12	4.88	2.45	0.015
-2.85	13.82	27.55	0.09	1.74	0.54	0.09	4.73	2.62	0.011
-2.55	13.52	27.66	0.09	1.66	0.46	0.07	4.62	2.44	0.008
-2.25	13.22	27.73	0.09	1.62	0.49	0.07	4.56	2.50	0.009
-1.95	12.92	27.80	0.09	1.57	0.54	0.03	4.49	2.64	0.004
-1.65	12.62	27.85	0.09	1.51	0.57	0.02	4.41	2.70	0.002
-1.35	12.32	27.88	0.09	1.51	0.53	-0.01	4.41	2.62	-0.001
-1.05	12.02	27.89	0.09	1.50	0.48	-0.01	4.39	2.48	-0.001
-0.75	11.72	27.89	0.09	1.52	0.52	-0.03	4.41	2.60	-0.004
-0.45	11.42	27.87	0.09	1.52	0.55	-0.06	4.43	2.66	-0.008
-0.15	11.12	27.84	0.10	1.56	0.54	-0.07	4.47	2.64	-0.009
0.15	10.81	27.80	0.09	1.62	0.55	-0.08	4.56	2.67	-0.011
0.45	10.51	27.74	0.09	1.66	0.47	-0.10	4.62	2.47	-0.013
0.75	10.21	27.67	0.09	1.76	0.51	-0.14	4.76	2.57	-0.017
1.05	9.91	27.59	0.10	1.81	0.54	-0.15	4.83	2.64	-0.019
1.35	9.61	27.48	0.09	1.92	0.53	-0.16	4.96	2.61	-0.021
1.65	9.31	27.37	0.09	2.07	0.52	-0.18	5.15	2.58	-0.023
1.95	9.01	27.23	0.09	2.21	0.48	-0.21	5.33	2.48	-0.028
2.25	8.71	27.08	0.09	2.38	0.47	-0.21	5.53	2.45	-0.028
2.55	8.41	26.90	0.08	2.56	0.44	-0.24	5.74	2.38	-0.031
2.85	8.11	26.70	0.07	2.78	0.46	-0.26	5.98	2.42	-0.034
3.15	7.81	26.48	0.07	3.06	0.48	-0.28	6.27	2.48	-0.036
3.45	7.51	26.22	0.07	3.36	0.44	-0.31	6.58	2.39	-0.040
3.76	7.21	25.94	0.08	3.66	0.42	-0.31	6.86	2.32	-0.040
4.06	6.91	25.61	0.07	4.03	0.47	-0.34	7.19	2.45	-0.043
4.36	6.61	25.27	0.06	4.27	0.45	-0.33	7.41	2.40	-0.043
4.66	6.31	24.88	0.06	4.59	0.50	-0.36	7.68	2.54	-0.047
4.96	6.01	24.43	0.06	5.06	0.51	-0.37	8.07	2.57	-0.048
5.26	5.71	23.92	0.05	5.53	0.52	-0.38	8.43	2.60	-0.048

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
5.56	5.41	23.39	0.05	5.84	0.51	-0.37	8.66	2.55	-0.047
5.86	5.11	22.78	0.05	6.16	0.53	-0.34	8.90	2.62	-0.044
6.16	4.81	22.10	0.04	6.53	0.58	-0.37	9.16	2.72	-0.047
6.46	4.51	21.37	0.03	6.86	0.63	-0.40	9.39	2.84	-0.051
6.76	4.21	20.54	0.04	6.81	0.64	-0.32	9.36	2.86	-0.041
7.06	3.91	19.62	0.02	6.76	0.61	-0.25	9.32	2.80	-0.033
7.36	3.60	18.62	0.01	6.59	0.59	-0.24	9.21	2.77	-0.031
7.66	3.30	17.51	0.01	6.20	0.51	-0.24	8.93	2.55	-0.030
7.96	3.00	16.30	0.01	5.55	0.41	-0.17	8.45	2.29	-0.022
8.26	2.70	14.99	0.01	4.96	0.39	-0.13	7.99	2.25	-0.017
8.56	2.40	13.60	0.00	4.32	0.38	-0.10	7.45	2.22	-0.012
8.86	2.10	12.09	-0.02	3.64	0.34	-0.06	6.84	2.09	-0.008
9.16	1.80	10.43	-0.02	2.96	0.37	-0.04	6.17	2.19	-0.005
9.46	1.50	8.72	-0.02	2.46	0.53	-0.02	5.62	2.61	-0.003
9.76	1.20	7.10	-0.01	2.04	0.28	0.00	5.13	1.89	-0.001
10.06	0.90	-0.02	-0.03	0.10	0.10	0.00	1.14	1.16	0.001
10.36	0.60	0.00	-0.12	0.10	0.17	0.01	1.14	1.48	0.001
10.66	0.30	-0.02	-0.02	0.05	0.07	-0.01	0.83	0.92	-0.001
10.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000

Table N-30 Grid #1, L3, Plasma-Off, Center (46-55)

L3 (Off)							U_∞ =	27.90	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.97	21.93	0.22	0.12	0.19	0.11	0.02	1.57	1.21	0.002
-10.66	21.63	2.89	-0.04	1.20	0.23	0.07	3.93	1.71	0.009
-10.36	21.33	5.10	-0.01	1.13	0.18	0.03	3.82	1.52	0.004
-10.06	21.03	7.12	-0.01	1.61	0.19	0.05	4.55	1.58	0.006
-9.76	20.73	9.11	0.00	1.94	0.18	0.04	4.99	1.52	0.005
-9.46	20.43	10.93	0.00	2.58	0.25	0.07	5.75	1.80	0.009
-9.16	20.13	12.74	0.01	3.13	0.22	0.07	6.34	1.67	0.010
-8.86	19.83	14.38	0.01	3.63	0.19	0.10	6.83	1.57	0.013
-8.56	19.53	15.94	0.02	4.28	0.20	0.13	7.41	1.59	0.017
-8.26	19.23	17.35	0.02	4.80	0.26	0.17	7.86	1.84	0.022
-7.96	18.93	18.72	0.03	4.96	0.29	0.18	7.98	1.92	0.023

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-7.66	18.63	19.89	0.03	5.09	0.31	0.22	8.08	1.98	0.028
-7.36	18.33	20.98	0.04	5.29	0.30	0.22	8.25	1.97	0.028
-7.06	18.02	21.91	0.04	5.20	0.26	0.23	8.17	1.83	0.029
-6.76	17.72	22.79	0.05	4.91	0.25	0.24	7.94	1.79	0.031
-6.46	17.42	23.54	0.05	4.56	0.30	0.25	7.65	1.95	0.033
-6.16	17.12	24.20	0.06	4.23	0.26	0.26	7.37	1.84	0.033
-5.86	16.82	24.75	0.06	3.92	0.27	0.26	7.10	1.85	0.034
-5.56	16.52	25.27	0.07	3.52	0.29	0.24	6.72	1.94	0.030
-5.26	16.22	25.73	0.07	3.08	0.31	0.22	6.29	2.00	0.028
-4.96	15.92	26.12	0.08	2.75	0.28	0.20	5.95	1.91	0.026
-4.66	15.62	26.45	0.08	2.45	0.28	0.18	5.61	1.89	0.023
-4.36	15.32	26.72	0.08	2.24	0.30	0.17	5.36	1.96	0.022
-4.06	15.02	26.97	0.09	2.05	0.34	0.17	5.13	2.09	0.021
-3.76	14.72	27.16	0.09	1.91	0.37	0.16	4.96	2.19	0.020
-3.45	14.42	27.33	0.09	1.78	0.39	0.14	4.78	2.24	0.019
-3.15	14.12	27.47	0.09	1.67	0.40	0.12	4.63	2.27	0.016
-2.85	13.82	27.58	0.10	1.60	0.40	0.10	4.54	2.26	0.013
-2.55	13.52	27.68	0.09	1.51	0.33	0.08	4.41	2.06	0.011
-2.25	13.22	27.75	0.09	1.45	0.34	0.07	4.31	2.09	0.009
-1.95	12.92	27.82	0.09	1.41	0.36	0.05	4.25	2.16	0.007
-1.65	12.62	27.85	0.09	1.41	0.35	0.04	4.25	2.13	0.005
-1.35	12.32	27.89	0.09	1.35	0.36	0.02	4.17	2.16	0.002
-1.05	12.02	27.90	0.09	1.34	0.38	0.01	4.15	2.20	0.001
-0.75	11.72	27.90	0.09	1.38	0.39	-0.01	4.21	2.23	-0.001
-0.45	11.42	27.89	0.09	1.38	0.37	-0.02	4.22	2.19	-0.002
-0.15	11.12	27.86	0.09	1.40	0.37	-0.04	4.24	2.17	-0.005
0.15	10.81	27.80	0.09	1.53	0.40	-0.07	4.43	2.26	-0.009
0.45	10.51	27.74	0.09	1.59	0.41	-0.08	4.52	2.29	-0.011
0.75	10.21	27.67	0.09	1.64	0.39	-0.11	4.60	2.24	-0.014
1.05	9.91	27.59	0.09	1.75	0.38	-0.13	4.74	2.21	-0.017
1.35	9.61	27.48	0.08	1.89	0.39	-0.15	4.93	2.23	-0.020
1.65	9.31	27.35	0.07	2.04	0.44	-0.16	5.12	2.37	-0.021
1.95	9.01	27.21	0.08	2.22	0.40	-0.19	5.33	2.27	-0.024
2.25	8.71	27.04	0.08	2.44	0.46	-0.20	5.60	2.44	-0.025
2.55	8.41	26.86	0.08	2.63	0.41	-0.21	5.81	2.29	-0.027
2.85	8.11	26.65	0.08	2.83	0.40	-0.24	6.03	2.26	-0.031
3.15	7.81	26.43	0.08	3.01	0.40	-0.26	6.22	2.26	-0.033
3.45	7.51	26.16	0.08	3.31	0.38	-0.29	6.52	2.20	-0.037

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
3.76	7.21	25.86	0.08	3.57	0.37	-0.31	6.77	2.19	-0.040
4.06	6.91	25.54	0.08	3.85	0.35	-0.32	7.04	2.11	-0.041
4.36	6.61	25.18	0.07	4.20	0.35	-0.32	7.35	2.12	-0.042
4.66	6.31	24.77	0.07	4.62	0.32	-0.34	7.70	2.04	-0.044
4.96	6.01	24.33	0.07	4.89	0.32	-0.36	7.92	2.03	-0.046
5.26	5.71	23.84	0.06	5.29	0.35	-0.35	8.24	2.13	-0.045
5.56	5.41	23.29	0.06	5.75	0.38	-0.35	8.59	2.21	-0.044
5.86	5.11	22.64	0.06	6.34	0.44	-0.34	9.02	2.38	-0.044
6.16	4.81	21.92	0.06	6.77	0.52	-0.34	9.33	2.59	-0.044
6.46	4.51	21.18	0.06	6.92	0.59	-0.30	9.43	2.75	-0.038
6.76	4.21	20.39	0.04	6.90	0.64	-0.25	9.42	2.86	-0.033
7.06	3.91	19.52	0.04	7.01	0.61	-0.24	9.49	2.79	-0.031
7.36	3.60	18.52	0.03	6.62	0.55	-0.25	9.22	2.66	-0.032
7.66	3.30	17.38	0.02	6.03	0.42	-0.20	8.80	2.32	-0.026
7.96	3.00	16.15	0.01	5.29	0.32	-0.15	8.25	2.03	-0.019
8.26	2.70	14.84	0.01	4.61	0.32	-0.13	7.69	2.02	-0.017
8.56	2.40	13.46	0.00	4.02	0.31	-0.10	7.19	2.00	-0.013
8.86	2.10	11.97	-0.01	3.35	0.31	-0.08	6.56	1.99	-0.010
9.16	1.80	10.41	-0.01	2.78	0.40	-0.06	5.98	2.27	-0.008
9.46	1.50	8.77	0.00	2.40	0.69	-0.05	5.55	2.97	-0.007
9.76	1.20	7.18	-0.01	1.89	0.38	-0.03	4.93	2.20	-0.004
10.06	0.90	0.14	1.30	0.83	0.23	-0.10	3.26	1.71	-0.013
10.36	0.60	0.06	0.79	0.44	1.30	-0.23	2.37	4.09	-0.030
10.66	0.30	0.20	-0.36	0.26	0.52	-0.02	1.82	2.58	-0.002
10.97	0.00	0.45	0.13	0.01	0.03	0.00	0.32	0.60	0.000

Table N-31 Grid #1, L3, Plasma-Off, Right (71-80)

L3 (Off)							U_∞ =	27.83	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.97	21.93	0.66	-0.03	0.97	0.10	-0.06	3.54	1.14	-0.008
-10.66	21.63	3.02	-0.08	1.33	0.17	0.12	4.14	1.46	0.015
-10.36	21.33	5.37	-0.01	1.20	0.14	0.05	3.93	1.36	0.006
-10.06	21.03	7.33	-0.01	1.70	0.17	0.08	4.68	1.46	0.011
-9.76	20.73	9.29	0.01	2.01	0.16	0.07	5.10	1.46	0.008

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.46	20.43	11.06	0.00	2.69	0.18	0.09	5.89	1.51	0.012
-9.16	20.13	12.87	0.02	3.17	0.17	0.11	6.40	1.48	0.014
-8.86	19.83	14.45	0.01	3.63	0.19	0.12	6.84	1.59	0.015
-8.56	19.53	16.00	0.02	4.15	0.19	0.16	7.32	1.57	0.020
-8.26	19.23	17.39	0.02	4.66	0.25	0.19	7.76	1.80	0.025
-7.96	18.93	18.75	0.04	4.94	0.24	0.21	7.98	1.77	0.027
-7.66	18.63	19.89	0.04	5.04	0.21	0.24	8.07	1.66	0.030
-7.36	18.33	20.97	0.04	5.19	0.22	0.26	8.18	1.70	0.033
-7.06	18.02	21.89	0.04	5.17	0.26	0.29	8.17	1.83	0.037
-6.76	17.72	22.78	0.05	4.87	0.28	0.28	7.93	1.90	0.036
-6.46	17.42	23.53	0.06	4.48	0.25	0.28	7.60	1.78	0.036
-6.16	17.12	24.20	0.06	4.08	0.24	0.28	7.26	1.76	0.036
-5.86	16.82	24.74	0.06	3.86	0.29	0.28	7.06	1.94	0.037
-5.56	16.52	25.27	0.08	3.41	0.25	0.27	6.63	1.81	0.035
-5.26	16.22	25.72	0.08	3.00	0.21	0.25	6.22	1.64	0.032
-4.96	15.92	26.08	0.08	2.72	0.21	0.24	5.93	1.66	0.031
-4.66	15.62	26.39	0.08	2.51	0.26	0.23	5.70	1.82	0.030
-4.36	15.32	26.69	0.09	2.20	0.27	0.20	5.33	1.86	0.026
-4.06	15.02	26.93	0.09	1.97	0.29	0.18	5.04	1.92	0.023
-3.76	14.72	27.12	0.09	1.83	0.30	0.17	4.86	1.96	0.022
-3.45	14.42	27.27	0.09	1.73	0.30	0.16	4.73	1.97	0.021
-3.15	14.12	27.40	0.09	1.65	0.29	0.15	4.62	1.94	0.020
-2.85	13.82	27.51	0.08	1.58	0.29	0.13	4.52	1.93	0.017
-2.55	13.52	27.61	0.09	1.50	0.29	0.11	4.40	1.94	0.014
-2.25	13.22	27.68	0.09	1.45	0.33	0.10	4.33	2.06	0.012
-1.95	12.92	27.74	0.09	1.47	0.38	0.09	4.35	2.23	0.011
-1.65	12.62	27.78	0.10	1.43	0.35	0.07	4.30	2.13	0.009
-1.35	12.32	27.81	0.10	1.41	0.34	0.04	4.27	2.09	0.005
-1.05	12.02	27.82	0.10	1.42	0.35	0.03	4.29	2.14	0.004
-0.75	11.72	27.83	0.10	1.45	0.35	0.01	4.33	2.12	0.001
-0.45	11.42	27.81	0.10	1.49	0.33	-0.01	4.39	2.06	-0.001
-0.15	11.12	27.78	0.10	1.51	0.36	-0.02	4.42	2.15	-0.003
0.15	10.81	27.73	0.10	1.56	0.33	-0.05	4.49	2.08	-0.006
0.45	10.51	27.67	0.10	1.65	0.33	-0.07	4.61	2.06	-0.009
0.75	10.21	27.60	0.10	1.71	0.35	-0.09	4.70	2.11	-0.012
1.05	9.91	27.51	0.10	1.80	0.35	-0.10	4.83	2.12	-0.013
1.35	9.61	27.41	0.10	1.90	0.33	-0.12	4.95	2.07	-0.016
1.65	9.31	27.30	0.10	2.00	0.30	-0.15	5.08	1.98	-0.019

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.95	9.01	27.16	0.10	2.14	0.31	-0.17	5.26	2.01	-0.023
2.25	8.71	26.99	0.10	2.32	0.38	-0.19	5.48	2.21	-0.025
2.55	8.41	26.80	0.10	2.55	0.34	-0.23	5.73	2.08	-0.030
2.85	8.11	26.59	0.09	2.74	0.30	-0.25	5.95	1.96	-0.032
3.15	7.81	26.37	0.09	2.89	0.26	-0.26	6.11	1.85	-0.033
3.45	7.51	26.10	0.09	3.14	0.26	-0.28	6.37	1.82	-0.036
3.76	7.21	25.80	0.08	3.47	0.33	-0.30	6.69	2.05	-0.039
4.06	6.91	25.47	0.08	3.83	0.30	-0.33	7.03	1.98	-0.043
4.36	6.61	25.10	0.08	4.21	0.26	-0.36	7.37	1.82	-0.046
4.66	6.31	24.71	0.08	4.52	0.28	-0.36	7.64	1.91	-0.046
4.96	6.01	24.27	0.07	4.83	0.26	-0.36	7.90	1.85	-0.047
5.26	5.71	23.76	0.07	5.27	0.25	-0.37	8.25	1.81	-0.048
5.56	5.41	23.21	0.07	5.56	0.29	-0.37	8.47	1.93	-0.048
5.86	5.11	22.59	0.07	5.90	0.28	-0.36	8.73	1.90	-0.046
6.16	4.81	21.89	0.07	6.22	0.30	-0.36	8.96	1.98	-0.047
6.46	4.51	21.12	0.06	6.22	0.30	-0.34	8.96	1.97	-0.044
6.76	4.21	20.30	0.05	6.20	0.28	-0.32	8.95	1.90	-0.041
7.06	3.91	19.36	0.04	6.24	0.36	-0.29	8.98	2.16	-0.038
7.36	3.60	18.35	0.04	5.97	0.35	-0.26	8.78	2.12	-0.034
7.66	3.30	17.22	0.03	5.52	0.26	-0.20	8.45	1.83	-0.026
7.96	3.00	16.04	0.03	5.04	0.27	-0.15	8.07	1.86	-0.019
8.26	2.70	14.74	0.02	4.48	0.27	-0.13	7.61	1.87	-0.017
8.56	2.40	13.37	0.01	3.90	0.25	-0.11	7.10	1.81	-0.015
8.86	2.10	11.89	0.00	3.23	0.25	-0.08	6.46	1.80	-0.010
9.16	1.80	10.35	0.00	2.76	0.29	-0.05	5.97	1.94	-0.007
9.46	1.50	8.71	0.00	2.32	0.48	-0.06	5.47	2.48	-0.007
9.76	1.20	7.03	-0.01	1.74	0.31	-0.04	4.73	2.00	-0.006
10.06	0.90	0.42	-0.01	1.12	0.06	0.00	3.80	0.85	0.000
10.36	0.60	0.06	-0.03	0.14	0.11	0.01	1.36	1.22	0.001
10.66	0.30	0.07	0.04	0.09	0.07	0.00	1.09	0.93	0.001
10.97	0.00	0.35	0.02	0.50	0.03	0.03	2.55	0.62	0.004

Table N-32 Grid #1, L3, Plasma-150, Left (1-10)

L3 (150)							U_∞ =	29.91	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.97	21.93	0.48	-0.19	3.04	0.35	0.01	5.83	1.98	0.001
-10.66	21.63	0.62	0.21	4.60	0.59	0.06	7.17	2.57	0.007
-10.36	21.33	5.38	0.12	10.82	1.14	-0.24	11.00	3.58	-0.027
-10.06	21.03	8.51	0.03	4.64	0.77	-0.02	7.20	2.93	-0.002
-9.76	20.73	10.30	0.07	3.09	0.64	-0.03	5.87	2.66	-0.003
-9.46	20.43	12.08	0.04	2.80	0.57	-0.01	5.59	2.52	-0.001
-9.16	20.13	13.92	0.01	2.97	0.51	0.03	5.76	2.39	0.003
-8.86	19.83	15.66	0.03	3.54	0.52	0.06	6.29	2.41	0.006
-8.56	19.53	17.37	0.04	3.97	0.53	0.08	6.66	2.44	0.009
-8.26	19.23	18.90	0.02	4.34	0.50	0.09	6.96	2.36	0.010
-7.96	18.93	20.34	0.03	4.71	0.44	0.13	7.25	2.22	0.015
-7.66	18.63	21.58	0.03	4.86	0.51	0.13	7.37	2.40	0.015
-7.36	18.33	22.75	0.03	4.74	0.56	0.15	7.28	2.51	0.016
-7.06	18.02	23.73	0.04	4.76	0.54	0.18	7.30	2.45	0.020
-6.76	17.72	24.66	0.05	4.56	0.52	0.17	7.14	2.42	0.019
-6.46	17.42	25.42	0.05	4.35	0.60	0.17	6.97	2.60	0.019
-6.16	17.12	26.14	0.05	4.02	0.66	0.20	6.70	2.72	0.023
-5.86	16.82	26.72	0.05	3.79	0.60	0.21	6.51	2.59	0.023
-5.56	16.52	27.27	0.05	3.49	0.51	0.19	6.25	2.39	0.021
-5.26	16.22	27.71	0.06	3.24	0.51	0.17	6.01	2.39	0.020
-4.96	15.92	28.10	0.07	3.02	0.48	0.16	5.80	2.33	0.018
-4.66	15.62	28.42	0.07	2.83	0.56	0.13	5.62	2.50	0.015
-4.36	15.32	28.71	0.07	2.62	0.63	0.14	5.42	2.65	0.015
-4.06	15.02	28.94	0.08	2.47	0.54	0.12	5.25	2.45	0.014
-3.76	14.72	29.16	0.07	2.25	0.59	0.12	5.02	2.56	0.013
-3.45	14.42	29.34	0.08	2.14	0.55	0.12	4.89	2.48	0.014
-3.15	14.12	29.48	0.08	2.01	0.54	0.09	4.73	2.47	0.010
-2.85	13.82	29.60	0.08	1.89	0.65	0.09	4.59	2.70	0.010
-2.55	13.52	29.69	0.08	1.81	0.62	0.08	4.50	2.63	0.009
-2.25	13.22	29.77	0.08	1.74	0.53	0.06	4.41	2.43	0.007
-1.95	12.92	29.83	0.09	1.68	0.50	0.03	4.34	2.37	0.004
-1.65	12.62	29.87	0.09	1.65	0.54	0.01	4.30	2.45	0.002
-1.35	12.32	29.90	0.08	1.65	0.57	0.00	4.30	2.53	0.000
-1.05	12.02	29.91	0.08	1.64	0.58	0.00	4.28	2.55	0.000
-0.75	11.72	29.91	0.08	1.66	0.61	-0.01	4.31	2.61	-0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.45	11.42	29.90	0.08	1.66	0.60	-0.05	4.30	2.59	-0.006
-0.15	11.12	29.88	0.08	1.68	0.55	-0.07	4.33	2.48	-0.008
0.15	10.81	29.84	0.08	1.72	0.56	-0.08	4.39	2.50	-0.009
0.45	10.51	29.79	0.08	1.77	0.58	-0.10	4.45	2.55	-0.011
0.75	10.21	29.73	0.07	1.84	0.62	-0.11	4.54	2.63	-0.012
1.05	9.91	29.66	0.07	1.92	0.55	-0.12	4.63	2.49	-0.013
1.35	9.61	29.57	0.07	2.01	0.55	-0.13	4.74	2.47	-0.014
1.65	9.31	29.47	0.07	2.09	0.57	-0.16	4.83	2.52	-0.018
1.95	9.01	29.34	0.07	2.23	0.48	-0.19	4.99	2.32	-0.021
2.25	8.71	29.20	0.07	2.38	0.56	-0.18	5.16	2.51	-0.020
2.55	8.41	29.05	0.06	2.51	0.52	-0.20	5.30	2.41	-0.022
2.85	8.11	28.87	0.06	2.63	0.55	-0.20	5.43	2.48	-0.022
3.15	7.81	28.67	0.05	2.79	0.51	-0.22	5.59	2.38	-0.024
3.45	7.51	28.44	0.05	2.99	0.53	-0.20	5.78	2.43	-0.023
3.76	7.21	28.18	0.05	3.13	0.62	-0.21	5.91	2.63	-0.023
4.06	6.91	27.88	0.05	3.34	0.66	-0.22	6.11	2.72	-0.024
4.36	6.61	27.54	0.05	3.52	0.60	-0.24	6.27	2.60	-0.027
4.66	6.31	27.15	0.04	3.76	0.62	-0.26	6.48	2.62	-0.029
4.96	6.01	26.73	0.05	4.02	0.59	-0.25	6.70	2.57	-0.028
5.26	5.71	26.22	0.03	4.26	0.63	-0.23	6.90	2.65	-0.026
5.56	5.41	25.68	0.02	4.56	0.59	-0.23	7.14	2.56	-0.026
5.86	5.11	25.06	0.02	4.89	0.70	-0.25	7.40	2.80	-0.028
6.16	4.81	24.35	0.02	5.09	0.74	-0.24	7.54	2.87	-0.026
6.46	4.51	23.60	0.01	5.20	0.79	-0.22	7.62	2.97	-0.024
6.76	4.21	22.73	0.00	5.25	0.82	-0.24	7.66	3.04	-0.026
7.06	3.91	21.77	0.00	5.35	0.82	-0.20	7.73	3.03	-0.022
7.36	3.60	20.69	0.01	5.19	0.76	-0.21	7.62	2.91	-0.023
7.66	3.30	19.49	0.01	4.75	0.71	-0.14	7.28	2.81	-0.016
7.96	3.00	18.21	-0.01	4.31	0.53	-0.10	6.94	2.43	-0.012
8.26	2.70	16.78	-0.02	3.75	0.44	-0.10	6.48	2.22	-0.011
8.56	2.40	15.27	-0.03	3.26	0.45	-0.07	6.04	2.23	-0.008
8.86	2.10	13.69	-0.03	2.83	0.40	-0.04	5.62	2.12	-0.005
9.16	1.80	11.99	-0.04	2.46	0.58	-0.03	5.24	2.55	-0.003
9.46	1.50	10.24	-0.04	2.61	0.92	-0.04	5.40	3.20	-0.004
9.76	1.20	8.51	-0.02	4.12	0.72	-0.01	6.79	2.83	-0.001
10.06	0.90	0.05	0.01	3.00	0.22	0.07	5.79	1.58	0.007
10.36	0.60	0.31	-0.06	7.28	0.42	-0.25	9.02	2.18	-0.028
10.66	0.30	0.06	-0.02	0.11	0.11	0.00	1.13	1.09	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
10.97	0.00	0.83	0.05	0.00	0.00	0.00	0.00	0.08	0.000

Table N-33 Grid #1, L3, Plasma-150, Center (46-55)

L3 (150)							U_∞ =	30.01	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.97	21.93	0.44	0.01	0.94	0.18	0.04	3.23	1.41	0.004
-10.66	21.63	3.38	-0.28	20.80	1.09	-0.15	15.20	3.47	-0.016
-10.36	21.33	7.19	0.01	4.67	0.99	0.10	7.20	3.32	0.011
-10.06	21.03	8.78	0.00	2.17	0.75	0.04	4.91	2.88	0.004
-9.76	20.73	10.44	0.01	2.12	0.39	0.03	4.85	2.09	0.004
-9.46	20.43	12.20	0.01	2.11	0.23	0.05	4.84	1.60	0.006
-9.16	20.13	14.04	0.02	2.47	0.20	0.06	5.24	1.50	0.007
-8.86	19.83	15.74	0.01	2.96	0.22	0.08	5.74	1.55	0.009
-8.56	19.53	17.46	0.03	3.42	0.22	0.10	6.16	1.55	0.011
-8.26	19.23	18.95	0.03	3.80	0.27	0.11	6.49	1.73	0.013
-7.96	18.93	20.36	0.04	4.09	0.32	0.14	6.74	1.90	0.016
-7.66	18.63	21.61	0.04	4.25	0.30	0.15	6.87	1.84	0.017
-7.36	18.33	22.80	0.05	4.25	0.27	0.15	6.87	1.74	0.016
-7.06	18.02	23.79	0.05	4.18	0.29	0.17	6.81	1.78	0.019
-6.76	17.72	24.69	0.05	4.07	0.27	0.21	6.72	1.73	0.023
-6.46	17.42	25.45	0.05	3.92	0.30	0.21	6.60	1.83	0.023
-6.16	17.12	26.18	0.06	3.59	0.32	0.20	6.31	1.89	0.023
-5.86	16.82	26.78	0.06	3.35	0.27	0.19	6.10	1.74	0.021
-5.56	16.52	27.32	0.06	3.09	0.26	0.19	5.86	1.71	0.021
-5.26	16.22	27.77	0.07	2.90	0.28	0.18	5.67	1.76	0.020
-4.96	15.92	28.15	0.07	2.71	0.33	0.18	5.49	1.90	0.020
-4.66	15.62	28.48	0.07	2.53	0.33	0.18	5.30	1.90	0.020
-4.36	15.32	28.78	0.07	2.36	0.32	0.17	5.12	1.87	0.019
-4.06	15.02	29.03	0.07	2.18	0.29	0.15	4.93	1.79	0.017
-3.76	14.72	29.26	0.08	1.99	0.30	0.12	4.70	1.82	0.014
-3.45	14.42	29.42	0.09	1.90	0.36	0.12	4.60	1.99	0.013
-3.15	14.12	29.56	0.09	1.83	0.37	0.11	4.51	2.02	0.012
-2.85	13.82	29.69	0.08	1.71	0.33	0.08	4.35	1.91	0.009
-2.55	13.52	29.79	0.08	1.60	0.33	0.07	4.22	1.91	0.008

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.25	13.22	29.86	0.08	1.58	0.36	0.05	4.19	2.01	0.006
-1.95	12.92	29.93	0.08	1.54	0.38	0.04	4.14	2.05	0.005
-1.65	12.62	29.96	0.08	1.51	0.34	0.02	4.10	1.96	0.003
-1.35	12.32	29.99	0.07	1.48	0.32	0.02	4.05	1.87	0.002
-1.05	12.02	30.01	0.07	1.46	0.31	0.00	4.03	1.84	0.000
-0.75	11.72	30.01	0.07	1.49	0.36	-0.01	4.06	1.99	-0.002
-0.45	11.42	30.00	0.07	1.50	0.38	-0.03	4.08	2.05	-0.004
-0.15	11.12	29.98	0.07	1.52	0.38	-0.04	4.10	2.06	-0.005
0.15	10.81	29.93	0.07	1.57	0.38	-0.05	4.18	2.05	-0.005
0.45	10.51	29.87	0.07	1.63	0.35	-0.06	4.25	1.96	-0.007
0.75	10.21	29.82	0.07	1.67	0.34	-0.08	4.31	1.95	-0.008
1.05	9.91	29.74	0.07	1.76	0.41	-0.09	4.42	2.14	-0.010
1.35	9.61	29.65	0.06	1.86	0.44	-0.12	4.55	2.20	-0.013
1.65	9.31	29.53	0.07	1.95	0.36	-0.13	4.65	2.00	-0.014
1.95	9.01	29.41	0.06	2.02	0.38	-0.12	4.73	2.04	-0.014
2.25	8.71	29.27	0.06	2.14	0.40	-0.14	4.87	2.10	-0.016
2.55	8.41	29.09	0.06	2.26	0.35	-0.17	5.01	1.97	-0.019
2.85	8.11	28.91	0.06	2.43	0.35	-0.18	5.19	1.97	-0.020
3.15	7.81	28.68	0.07	2.61	0.37	-0.18	5.38	2.02	-0.020
3.45	7.51	28.44	0.06	2.79	0.38	-0.20	5.56	2.05	-0.022
3.76	7.21	28.18	0.05	2.92	0.36	-0.21	5.70	2.01	-0.023
4.06	6.91	27.87	0.06	3.11	0.34	-0.21	5.87	1.94	-0.024
4.36	6.61	27.50	0.06	3.32	0.30	-0.22	6.07	1.82	-0.024
4.66	6.31	27.11	0.04	3.53	0.36	-0.23	6.26	2.00	-0.026
4.96	6.01	26.66	0.04	3.78	0.36	-0.25	6.48	2.01	-0.028
5.26	5.71	26.15	0.04	4.05	0.37	-0.23	6.70	2.04	-0.026
5.56	5.41	25.58	0.04	4.48	0.44	-0.22	7.05	2.21	-0.025
5.86	5.11	24.93	0.03	4.94	0.58	-0.23	7.41	2.53	-0.026
6.16	4.81	24.21	0.03	5.42	0.89	-0.24	7.76	3.15	-0.026
6.46	4.51	23.39	0.03	5.49	0.93	-0.24	7.81	3.22	-0.027
6.76	4.21	22.51	0.02	5.21	0.68	-0.15	7.61	2.74	-0.017
7.06	3.91	21.58	0.01	5.15	0.70	-0.20	7.56	2.79	-0.022
7.36	3.60	20.53	0.01	4.98	0.64	-0.17	7.44	2.66	-0.019
7.66	3.30	19.30	0.00	4.55	0.47	-0.11	7.11	2.27	-0.012
7.96	3.00	17.99	-0.01	4.03	0.44	-0.08	6.69	2.20	-0.009
8.26	2.70	16.60	-0.01	3.65	0.37	-0.08	6.36	2.02	-0.009
8.56	2.40	15.13	-0.01	3.11	0.32	-0.05	5.87	1.90	-0.006
8.86	2.10	13.58	-0.02	2.73	0.36	-0.04	5.50	2.00	-0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
9.16	1.80	11.93	-0.01	2.40	0.43	-0.03	5.16	2.18	-0.003
9.46	1.50	10.25	0.00	2.49	0.74	-0.06	5.26	2.87	-0.006
9.76	1.20	8.50	0.01	3.40	0.64	-0.07	6.14	2.66	-0.008
10.06	0.90	1.29	0.98	15.12	0.68	-0.28	12.96	2.75	-0.031
10.36	0.60	0.24	-0.73	27.36	6.25	-2.00	17.43	8.33	-0.222
10.66	0.30	0.18	-1.12	9.98	1.70	-1.10	10.53	4.34	-0.122
10.97	0.00	0.25	-0.01	0.62	0.05	0.00	2.63	0.72	0.000

Table N-34 Grid #1, L3, Plasma-150, Right (71-80)

L3 (150)							U_∞ =	30.00	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.97	21.93	0.09	-0.11	1.10	0.23	0.08	3.49	1.59	0.009
-10.66	21.63	2.74	-0.14	13.59	0.61	0.13	12.28	2.60	0.015
-10.36	21.33	7.47	0.06	3.09	1.27	0.08	5.86	3.76	0.009
-10.06	21.03	8.91	0.01	2.20	0.82	0.06	4.94	3.01	0.006
-9.76	20.73	10.58	0.02	2.20	0.42	0.09	4.95	2.15	0.010
-9.46	20.43	12.32	0.02	2.24	0.32	0.09	4.99	1.88	0.010
-9.16	20.13	14.14	0.03	2.56	0.20	0.08	5.33	1.48	0.009
-8.86	19.83	15.80	0.03	3.05	0.21	0.11	5.82	1.53	0.013
-8.56	19.53	17.52	0.04	3.34	0.19	0.12	6.09	1.44	0.013
-8.26	19.23	18.98	0.03	3.69	0.26	0.14	6.41	1.71	0.015
-7.96	18.93	20.38	0.05	3.97	0.31	0.16	6.64	1.84	0.017
-7.66	18.63	21.62	0.04	4.06	0.24	0.17	6.71	1.65	0.018
-7.36	18.33	22.80	0.06	4.02	0.25	0.17	6.68	1.67	0.019
-7.06	18.02	23.77	0.05	3.95	0.24	0.19	6.63	1.64	0.021
-6.76	17.72	24.66	0.05	3.95	0.24	0.22	6.62	1.63	0.024
-6.46	17.42	25.44	0.05	3.80	0.28	0.22	6.50	1.76	0.024
-6.16	17.12	26.17	0.06	3.47	0.28	0.22	6.21	1.76	0.024
-5.86	16.82	26.76	0.06	3.28	0.25	0.23	6.04	1.68	0.026
-5.56	16.52	27.31	0.07	3.06	0.25	0.22	5.83	1.68	0.024
-5.26	16.22	27.74	0.07	2.89	0.28	0.22	5.67	1.75	0.024
-4.96	15.92	28.13	0.08	2.79	0.31	0.22	5.57	1.86	0.024
-4.66	15.62	28.46	0.08	2.64	0.32	0.22	5.41	1.87	0.024
-4.36	15.32	28.76	0.08	2.41	0.32	0.19	5.18	1.87	0.022

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.06	15.02	29.02	0.08	2.21	0.32	0.17	4.96	1.89	0.019
-3.76	14.72	29.24	0.09	2.00	0.32	0.16	4.71	1.87	0.018
-3.45	14.42	29.42	0.08	1.89	0.28	0.15	4.58	1.77	0.017
-3.15	14.12	29.57	0.09	1.76	0.29	0.12	4.43	1.81	0.013
-2.85	13.82	29.69	0.09	1.70	0.34	0.11	4.34	1.95	0.012
-2.55	13.52	29.79	0.09	1.61	0.35	0.10	4.23	1.98	0.011
-2.25	13.22	29.87	0.09	1.54	0.36	0.08	4.13	1.99	0.009
-1.95	12.92	29.93	0.09	1.50	0.38	0.06	4.08	2.06	0.006
-1.65	12.62	29.97	0.09	1.47	0.36	0.04	4.04	2.01	0.005
-1.35	12.32	30.00	0.09	1.42	0.33	0.03	3.98	1.91	0.003
-1.05	12.02	30.00	0.08	1.42	0.34	0.01	3.97	1.95	0.002
-0.75	11.72	30.00	0.09	1.45	0.31	-0.01	4.02	1.86	-0.001
-0.45	11.42	29.99	0.09	1.50	0.29	-0.02	4.08	1.80	-0.002
-0.15	11.12	29.97	0.08	1.53	0.31	-0.03	4.12	1.86	-0.003
0.15	10.81	29.93	0.08	1.55	0.33	-0.05	4.15	1.91	-0.005
0.45	10.51	29.88	0.08	1.61	0.33	-0.06	4.23	1.92	-0.007
0.75	10.21	29.82	0.08	1.65	0.35	-0.07	4.28	1.96	-0.008
1.05	9.91	29.73	0.09	1.72	0.37	-0.08	4.37	2.02	-0.009
1.35	9.61	29.64	0.09	1.82	0.37	-0.10	4.50	2.03	-0.012
1.65	9.31	29.52	0.08	1.91	0.37	-0.13	4.60	2.03	-0.014
1.95	9.01	29.39	0.08	2.06	0.34	-0.14	4.78	1.96	-0.016
2.25	8.71	29.24	0.08	2.18	0.30	-0.15	4.92	1.84	-0.016
2.55	8.41	29.08	0.08	2.31	0.34	-0.17	5.07	1.93	-0.019
2.85	8.11	28.86	0.07	2.51	0.33	-0.18	5.28	1.90	-0.020
3.15	7.81	28.64	0.08	2.66	0.37	-0.19	5.43	2.03	-0.021
3.45	7.51	28.40	0.08	2.78	0.35	-0.21	5.56	1.98	-0.023
3.76	7.21	28.12	0.07	2.99	0.34	-0.22	5.76	1.94	-0.025
4.06	6.91	27.80	0.07	3.20	0.37	-0.24	5.96	2.03	-0.027
4.36	6.61	27.44	0.06	3.36	0.35	-0.23	6.11	1.96	-0.026
4.66	6.31	27.04	0.06	3.56	0.30	-0.24	6.29	1.82	-0.027
4.96	6.01	26.58	0.07	3.73	0.31	-0.23	6.43	1.84	-0.026
5.26	5.71	26.05	0.06	3.96	0.32	-0.25	6.63	1.90	-0.027
5.56	5.41	25.46	0.05	4.33	0.31	-0.26	6.94	1.85	-0.029
5.86	5.11	24.81	0.05	4.48	0.35	-0.25	7.05	1.98	-0.028
6.16	4.81	24.11	0.04	4.53	0.35	-0.23	7.09	1.98	-0.026
6.46	4.51	23.28	0.03	4.74	0.41	-0.22	7.26	2.12	-0.024
6.76	4.21	22.38	0.03	4.79	0.32	-0.19	7.29	1.89	-0.022
7.06	3.91	21.36	0.03	4.57	0.29	-0.18	7.12	1.79	-0.020

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.36	3.60	20.31	0.02	4.46	0.36	-0.16	7.04	1.99	-0.017
7.66	3.30	19.12	0.01	4.24	0.34	-0.15	6.86	1.94	-0.016
7.96	3.00	17.86	0.00	3.94	0.33	-0.12	6.62	1.93	-0.013
8.26	2.70	16.47	0.00	3.57	0.33	-0.08	6.30	1.92	-0.009
8.56	2.40	15.02	0.00	3.07	0.33	-0.05	5.84	1.91	-0.006
8.86	2.10	13.45	-0.01	2.67	0.29	-0.04	5.45	1.81	-0.005
9.16	1.80	11.83	-0.01	2.30	0.34	-0.05	5.05	1.95	-0.005
9.46	1.50	10.20	-0.02	2.30	0.51	-0.04	5.05	2.37	-0.004
9.76	1.20	8.52	-0.02	2.34	0.42	-0.06	5.10	2.15	-0.006
10.06	0.90	2.73	0.03	11.66	0.18	0.09	11.38	1.43	0.010
10.36	0.60	0.22	0.06	1.24	0.18	-0.03	3.72	1.42	-0.003
10.66	0.30	0.01	0.08	0.11	0.11	0.01	1.11	1.09	0.001
10.97	0.00	0.25	0.06	0.01	0.01	0.01	0.40	0.32	0.001

Table N-35 Grid #1, L3, Plasma-300, Left (1-10)

L3 (300)							U_∞ =	31.13	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.97	21.93	-0.10	-0.29	2.42	0.64	-0.17	5.00	2.56	-0.018
-10.66	21.63	1.62	0.02	6.20	0.63	-0.15	8.00	2.55	-0.015
-10.36	21.33	6.47	0.02	3.89	0.78	-0.03	6.33	2.83	-0.003
-10.06	21.03	8.77	0.02	2.53	0.82	0.01	5.11	2.91	0.001
-9.76	20.73	10.89	0.03	2.52	0.85	-0.03	5.10	2.97	-0.003
-9.46	20.43	12.89	0.03	2.58	0.91	-0.01	5.16	3.07	-0.001
-9.16	20.13	14.88	0.02	2.82	0.79	0.04	5.39	2.85	0.004
-8.86	19.83	16.72	0.05	3.19	0.86	0.03	5.74	2.97	0.004
-8.56	19.53	18.49	0.04	3.54	0.96	0.00	6.04	3.15	0.000
-8.26	19.23	19.99	0.04	3.79	0.89	0.05	6.25	3.03	0.005
-7.96	18.93	21.46	0.04	3.90	0.81	0.09	6.35	2.90	0.010
-7.66	18.63	22.71	0.04	3.98	0.83	0.07	6.41	2.93	0.007
-7.36	18.33	23.89	0.04	3.98	0.92	0.07	6.41	3.08	0.007
-7.06	18.02	24.88	0.04	4.01	0.89	0.13	6.44	3.03	0.013
-6.76	17.72	25.80	0.05	3.86	0.78	0.14	6.31	2.84	0.015
-6.46	17.42	26.60	0.06	3.65	0.79	0.12	6.14	2.86	0.012
-6.16	17.12	27.33	0.06	3.44	0.89	0.14	5.96	3.04	0.014

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-5.86	16.82	27.92	0.07	3.33	0.82	0.17	5.86	2.91	0.018
-5.56	16.52	28.46	0.07	3.09	0.77	0.16	5.65	2.82	0.016
-5.26	16.22	28.90	0.07	2.90	0.92	0.12	5.47	3.08	0.012
-4.96	15.92	29.29	0.07	2.73	0.93	0.12	5.31	3.11	0.013
-4.66	15.62	29.63	0.07	2.55	0.83	0.15	5.13	2.93	0.015
-4.36	15.32	29.93	0.07	2.37	0.78	0.10	4.95	2.84	0.010
-4.06	15.02	30.18	0.07	2.21	0.84	0.09	4.78	2.95	0.009
-3.76	14.72	30.38	0.07	2.09	0.80	0.11	4.65	2.88	0.011
-3.45	14.42	30.55	0.07	2.00	0.69	0.10	4.55	2.67	0.011
-3.15	14.12	30.70	0.07	1.89	0.78	0.08	4.42	2.84	0.008
-2.85	13.82	30.79	0.07	1.83	0.75	0.05	4.35	2.78	0.005
-2.55	13.52	30.89	0.08	1.79	0.74	0.05	4.30	2.77	0.006
-2.25	13.22	30.96	0.08	1.76	0.85	0.05	4.26	2.96	0.005
-1.95	12.92	31.03	0.08	1.72	0.86	0.04	4.22	2.98	0.004
-1.65	12.62	31.08	0.08	1.68	0.87	0.02	4.16	2.99	0.002
-1.35	12.32	31.11	0.07	1.66	0.82	0.02	4.14	2.90	0.002
-1.05	12.02	31.13	0.07	1.66	0.78	-0.02	4.13	2.84	-0.002
-0.75	11.72	31.13	0.07	1.65	0.82	-0.02	4.13	2.90	-0.002
-0.45	11.42	31.12	0.08	1.64	0.76	-0.01	4.12	2.80	-0.001
-0.15	11.12	31.11	0.07	1.66	0.80	-0.01	4.13	2.87	-0.001
0.15	10.81	31.08	0.07	1.67	0.85	-0.04	4.15	2.96	-0.004
0.45	10.51	31.05	0.08	1.69	0.86	-0.07	4.18	2.97	-0.008
0.75	10.21	31.00	0.07	1.71	0.79	-0.06	4.19	2.86	-0.006
1.05	9.91	30.95	0.07	1.75	0.86	-0.06	4.25	2.98	-0.006
1.35	9.61	30.87	0.08	1.79	0.95	-0.07	4.29	3.13	-0.008
1.65	9.31	30.79	0.08	1.83	0.98	-0.09	4.34	3.17	-0.009
1.95	9.01	30.69	0.07	1.87	0.91	-0.09	4.40	3.07	-0.009
2.25	8.71	30.57	0.06	1.95	0.99	-0.09	4.48	3.19	-0.009
2.55	8.41	30.43	0.05	2.05	1.06	-0.09	4.59	3.31	-0.009
2.85	8.11	30.28	0.06	2.20	1.02	-0.13	4.76	3.24	-0.013
3.15	7.81	30.07	0.05	2.33	1.05	-0.12	4.91	3.29	-0.012
3.45	7.51	29.85	0.05	2.48	1.18	-0.15	5.06	3.50	-0.015
3.76	7.21	29.63	0.05	2.61	1.34	-0.11	5.19	3.72	-0.011
4.06	6.91	29.35	0.04	2.82	1.46	-0.14	5.39	3.88	-0.015
4.36	6.61	29.01	0.04	2.98	1.59	-0.16	5.54	4.04	-0.016
4.66	6.31	28.65	0.03	3.15	1.62	-0.14	5.70	4.09	-0.014
4.96	6.01	28.24	0.03	3.32	1.74	-0.12	5.85	4.23	-0.012
5.26	5.71	27.77	0.02	3.52	2.03	-0.18	6.03	4.57	-0.019

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.56	5.41	27.28	0.03	3.78	2.49	-0.16	6.25	5.07	-0.017
5.86	5.11	26.68	0.03	4.49	3.81	-0.14	6.81	6.27	-0.015
6.16	4.81	26.04	0.01	4.99	4.70	-0.13	7.18	6.96	-0.014
6.46	4.51	25.27	-0.02	5.51	5.53	-0.04	7.54	7.55	-0.004
6.76	4.21	24.37	-0.03	5.90	6.86	0.02	7.80	8.41	0.002
7.06	3.91	23.41	-0.02	5.97	6.40	-0.18	7.85	8.13	-0.018
7.36	3.60	22.24	-0.05	5.93	5.43	-0.08	7.82	7.49	-0.009
7.66	3.30	20.96	-0.06	5.40	3.85	-0.02	7.46	6.30	-0.002
7.96	3.00	19.59	-0.06	4.44	2.46	-0.03	6.77	5.04	-0.003
8.26	2.70	18.12	-0.03	4.00	2.04	-0.04	6.42	4.59	-0.004
8.56	2.40	16.57	-0.03	3.57	1.85	0.00	6.07	4.37	0.000
8.86	2.10	14.88	-0.03	3.22	1.73	-0.03	5.76	4.23	-0.003
9.16	1.80	13.02	-0.05	2.88	1.59	0.01	5.45	4.05	0.001
9.46	1.50	11.03	-0.06	2.86	1.87	0.04	5.43	4.39	0.004
9.76	1.20	9.23	-0.06	2.82	0.96	0.02	5.40	3.14	0.002
10.06	0.90	1.51	0.10	23.27	0.69	0.06	15.50	2.67	0.006
10.36	0.60	0.18	-0.10	25.03	2.24	0.46	16.07	4.80	0.047
10.66	0.30	0.03	-0.11	4.25	0.31	0.12	6.63	1.78	0.012
10.97	0.00	2.48	0.05	0.82	0.00	0.01	2.91	0.03	0.001

Table N-36 Grid #1, L3, Plasma-300, Center (46-55)

L3 (300)							U_∞ =	31.27	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.97	21.93	0.66	-0.04	1.57	0.22	0.03	4.00	1.52	0.003
-10.66	21.63	4.38	-0.04	5.77	0.53	0.12	7.68	2.33	0.013
-10.36	21.33	6.89	0.04	2.29	0.40	0.06	4.84	2.02	0.006
-10.06	21.03	8.96	0.03	1.82	0.36	0.03	4.31	1.91	0.003
-9.76	20.73	11.06	0.02	1.89	0.29	0.06	4.40	1.73	0.006
-9.46	20.43	13.04	0.03	1.83	0.29	0.03	4.32	1.72	0.004
-9.16	20.13	14.98	0.04	2.33	0.24	0.05	4.88	1.58	0.005
-8.86	19.83	16.78	0.04	2.60	0.31	0.07	5.16	1.79	0.007
-8.56	19.53	18.49	0.04	2.90	0.35	0.08	5.44	1.90	0.008
-8.26	19.23	20.00	0.04	3.30	0.39	0.10	5.81	1.99	0.010
-7.96	18.93	21.49	0.05	3.40	0.37	0.10	5.90	1.95	0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-7.66	18.63	22.74	0.05	3.52	0.37	0.10	6.00	1.94	0.010
-7.36	18.33	23.91	0.05	3.63	0.42	0.12	6.09	2.07	0.012
-7.06	18.02	24.91	0.05	3.69	0.46	0.16	6.14	2.18	0.016
-6.76	17.72	25.85	0.06	3.53	0.41	0.16	6.01	2.06	0.017
-6.46	17.42	26.64	0.06	3.37	0.44	0.15	5.87	2.13	0.015
-6.16	17.12	27.36	0.07	3.25	0.41	0.15	5.76	2.06	0.016
-5.86	16.82	27.97	0.07	3.14	0.38	0.17	5.67	1.98	0.017
-5.56	16.52	28.51	0.06	2.96	0.37	0.17	5.50	1.95	0.017
-5.26	16.22	28.97	0.07	2.79	0.43	0.17	5.34	2.09	0.017
-4.96	15.92	29.39	0.07	2.55	0.47	0.14	5.10	2.19	0.014
-4.66	15.62	29.74	0.07	2.34	0.55	0.14	4.89	2.36	0.014
-4.36	15.32	30.04	0.08	2.17	0.50	0.16	4.71	2.25	0.016
-4.06	15.02	30.29	0.08	2.01	0.50	0.14	4.54	2.25	0.014
-3.76	14.72	30.49	0.08	1.89	0.42	0.13	4.40	2.06	0.013
-3.45	14.42	30.65	0.08	1.82	0.47	0.11	4.32	2.19	0.011
-3.15	14.12	30.81	0.08	1.74	0.51	0.09	4.22	2.29	0.009
-2.85	13.82	30.93	0.08	1.68	0.46	0.10	4.14	2.17	0.010
-2.55	13.52	31.03	0.08	1.63	0.42	0.09	4.08	2.08	0.009
-2.25	13.22	31.11	0.07	1.58	0.48	0.08	4.02	2.21	0.008
-1.95	12.92	31.16	0.08	1.57	0.47	0.06	4.01	2.18	0.007
-1.65	12.62	31.22	0.08	1.53	0.46	0.05	3.96	2.18	0.005
-1.35	12.32	31.25	0.07	1.52	0.51	0.03	3.94	2.29	0.003
-1.05	12.02	31.27	0.08	1.51	0.47	0.04	3.94	2.20	0.004
-0.75	11.72	31.27	0.07	1.53	0.51	0.02	3.96	2.28	0.002
-0.45	11.42	31.27	0.08	1.52	0.56	0.00	3.94	2.38	0.000
-0.15	11.12	31.26	0.08	1.53	0.61	0.00	3.96	2.51	0.000
0.15	10.81	31.22	0.07	1.54	0.56	0.00	3.97	2.40	0.000
0.45	10.51	31.19	0.07	1.54	0.53	-0.01	3.97	2.33	-0.001
0.75	10.21	31.13	0.08	1.58	0.47	-0.03	4.02	2.19	-0.003
1.05	9.91	31.06	0.08	1.61	0.54	-0.04	4.06	2.34	-0.004
1.35	9.61	30.99	0.08	1.66	0.65	-0.06	4.12	2.57	-0.006
1.65	9.31	30.91	0.07	1.71	0.65	-0.07	4.18	2.59	-0.007
1.95	9.01	30.80	0.07	1.75	0.69	-0.06	4.23	2.65	-0.006
2.25	8.71	30.68	0.07	1.86	0.64	-0.08	4.36	2.55	-0.008
2.55	8.41	30.54	0.06	1.92	0.70	-0.11	4.43	2.68	-0.011
2.85	8.11	30.36	0.06	2.04	0.70	-0.10	4.57	2.67	-0.011
3.15	7.81	30.17	0.05	2.18	0.77	-0.12	4.72	2.80	-0.012
3.45	7.51	29.94	0.06	2.40	0.95	-0.13	4.95	3.11	-0.014

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.76	7.21	29.68	0.06	2.50	0.97	-0.12	5.05	3.15	-0.013
4.06	6.91	29.37	0.05	2.68	0.97	-0.11	5.23	3.15	-0.012
4.36	6.61	29.03	0.05	2.84	1.08	-0.14	5.39	3.32	-0.015
4.66	6.31	28.64	0.04	3.01	1.11	-0.12	5.55	3.37	-0.013
4.96	6.01	28.20	0.03	3.25	1.30	-0.14	5.76	3.65	-0.015
5.26	5.71	27.74	0.02	3.43	1.31	-0.11	5.92	3.67	-0.011
5.56	5.41	27.30	0.01	4.10	1.68	-0.05	6.47	4.14	-0.006
5.86	5.11	26.73	0.01	5.84	3.13	-0.01	7.72	5.66	-0.001
6.16	4.81	26.17	-0.02	8.62	6.26	-0.03	9.39	8.00	-0.003
6.46	4.51	25.24	0.01	9.68	7.14	-0.09	9.95	8.54	-0.009
6.76	4.21	24.33	-0.03	8.10	6.44	0.15	9.10	8.12	0.015
7.06	3.91	23.37	-0.03	8.40	7.08	-0.22	9.27	8.51	-0.022
7.36	3.60	22.24	-0.06	8.12	6.13	-0.33	9.11	7.92	-0.033
7.66	3.30	20.84	-0.06	6.48	3.89	-0.17	8.14	6.30	-0.017
7.96	3.00	19.44	-0.01	4.48	2.21	-0.05	6.77	4.75	-0.005
8.26	2.70	17.97	-0.02	3.63	1.44	-0.01	6.10	3.84	-0.001
8.56	2.40	16.42	-0.02	3.21	1.14	-0.06	5.73	3.42	-0.006
8.86	2.10	14.76	-0.02	2.79	1.09	-0.05	5.34	3.33	-0.005
9.16	1.80	13.01	-0.03	2.49	1.09	-0.01	5.05	3.34	-0.001
9.46	1.50	11.12	-0.06	2.56	1.66	-0.01	5.12	4.12	-0.001
9.76	1.20	9.25	-0.06	2.58	1.09	-0.05	5.14	3.34	-0.005
10.06	0.90	3.70	1.31	51.87	1.37	-0.85	23.03	3.74	-0.087
10.36	0.60	0.27	-0.41	76.81	10.97	1.45	28.03	10.59	0.149
10.66	0.30	-0.37	-1.32	26.78	3.19	-0.33	16.55	5.71	-0.034
10.97	0.00	0.00	-0.01	0.79	0.03	0.00	2.84	0.56	0.000

Table N-37 Grid #1, L3, Plasma-300, Right (71-80)

L3 (300)							U_∞ =	31.31	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.97	21.93	0.85	-0.07	4.33	0.32	0.07	6.65	1.81	0.007
-10.66	21.63	4.65	-0.01	5.66	0.44	0.15	7.60	2.11	0.015
-10.36	21.33	7.12	0.05	2.12	0.34	0.08	4.65	1.87	0.008
-10.06	21.03	9.17	0.03	1.83	0.31	0.05	4.32	1.78	0.005
-9.76	20.73	11.25	0.04	1.91	0.29	0.08	4.42	1.71	0.008

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.46	20.43	13.18	0.03	1.88	0.28	0.06	4.38	1.68	0.006
-9.16	20.13	15.09	0.05	2.40	0.28	0.09	4.95	1.69	0.009
-8.86	19.83	16.85	0.04	2.58	0.32	0.10	5.13	1.82	0.010
-8.56	19.53	18.55	0.05	2.89	0.38	0.11	5.43	1.98	0.011
-8.26	19.23	20.01	0.04	3.18	0.36	0.13	5.69	1.92	0.013
-7.96	18.93	21.51	0.06	3.38	0.36	0.13	5.87	1.93	0.013
-7.66	18.63	22.75	0.06	3.49	0.42	0.15	5.97	2.08	0.015
-7.36	18.33	23.92	0.07	3.53	0.43	0.17	6.00	2.09	0.017
-7.06	18.02	24.91	0.06	3.71	0.44	0.20	6.15	2.12	0.020
-6.76	17.72	25.85	0.07	3.55	0.45	0.20	6.01	2.15	0.020
-6.46	17.42	26.64	0.07	3.39	0.49	0.18	5.88	2.24	0.019
-6.16	17.12	27.36	0.07	3.30	0.44	0.21	5.80	2.12	0.021
-5.86	16.82	27.96	0.07	3.16	0.37	0.21	5.67	1.94	0.021
-5.56	16.52	28.51	0.07	3.05	0.41	0.21	5.57	2.04	0.022
-5.26	16.22	28.96	0.07	2.91	0.48	0.21	5.45	2.21	0.021
-4.96	15.92	29.39	0.08	2.65	0.42	0.19	5.20	2.08	0.019
-4.66	15.62	29.75	0.08	2.38	0.46	0.18	4.92	2.16	0.018
-4.36	15.32	30.06	0.08	2.13	0.47	0.17	4.66	2.19	0.017
-4.06	15.02	30.30	0.09	2.02	0.49	0.17	4.54	2.23	0.017
-3.76	14.72	30.52	0.09	1.89	0.53	0.15	4.39	2.32	0.015
-3.45	14.42	30.69	0.08	1.79	0.51	0.13	4.28	2.28	0.013
-3.15	14.12	30.84	0.08	1.73	0.51	0.11	4.20	2.28	0.012
-2.85	13.82	30.96	0.09	1.67	0.46	0.13	4.13	2.16	0.013
-2.55	13.52	31.06	0.08	1.62	0.46	0.11	4.06	2.17	0.011
-2.25	13.22	31.13	0.08	1.61	0.43	0.08	4.05	2.09	0.009
-1.95	12.92	31.19	0.09	1.59	0.48	0.07	4.02	2.20	0.007
-1.65	12.62	31.24	0.10	1.56	0.52	0.09	3.99	2.31	0.009
-1.35	12.32	31.28	0.11	1.54	0.46	0.06	3.97	2.17	0.006
-1.05	12.02	31.30	0.09	1.54	0.45	0.05	3.97	2.14	0.005
-0.75	11.72	31.31	0.09	1.53	0.46	0.02	3.95	2.16	0.002
-0.45	11.42	31.31	0.09	1.53	0.45	0.02	3.95	2.15	0.002
-0.15	11.12	31.29	0.09	1.53	0.42	0.01	3.95	2.07	0.001
0.15	10.81	31.26	0.10	1.55	0.49	0.00	3.98	2.24	0.000
0.45	10.51	31.22	0.09	1.59	0.54	-0.02	4.03	2.34	-0.002
0.75	10.21	31.16	0.08	1.61	0.53	-0.03	4.06	2.32	-0.003
1.05	9.91	31.11	0.09	1.66	0.57	-0.04	4.11	2.42	-0.005
1.35	9.61	31.03	0.10	1.71	0.57	-0.05	4.18	2.42	-0.005
1.65	9.31	30.94	0.08	1.74	0.61	-0.07	4.21	2.50	-0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.95	9.01	30.83	0.08	1.80	0.64	-0.09	4.28	2.55	-0.009
2.25	8.71	30.71	0.09	1.88	0.55	-0.10	4.38	2.38	-0.010
2.55	8.41	30.55	0.09	2.00	0.65	-0.09	4.51	2.57	-0.009
2.85	8.11	30.38	0.08	2.14	0.81	-0.09	4.68	2.88	-0.009
3.15	7.81	30.17	0.07	2.28	0.88	-0.13	4.83	3.00	-0.013
3.45	7.51	29.93	0.06	2.52	1.05	-0.11	5.07	3.27	-0.011
3.76	7.21	29.66	0.06	2.66	1.23	-0.13	5.20	3.54	-0.013
4.06	6.91	29.35	0.05	2.81	1.22	-0.10	5.35	3.53	-0.011
4.36	6.61	29.01	0.05	3.01	1.16	-0.12	5.54	3.45	-0.013
4.66	6.31	28.63	0.06	3.16	1.57	-0.16	5.68	4.00	-0.016
4.96	6.01	28.19	0.04	3.35	1.56	-0.14	5.84	3.99	-0.014
5.26	5.71	27.68	0.03	3.58	1.46	-0.14	6.05	3.86	-0.014
5.56	5.41	27.12	0.04	3.76	1.46	-0.17	6.19	3.86	-0.018
5.86	5.11	26.52	0.02	4.15	1.80	-0.15	6.51	4.29	-0.016
6.16	4.81	25.82	0.02	4.46	1.89	-0.09	6.74	4.40	-0.010
6.46	4.51	24.98	0.01	4.71	2.34	-0.14	6.93	4.88	-0.015
6.76	4.21	24.05	0.02	4.67	2.46	-0.15	6.90	5.01	-0.016
7.06	3.91	23.05	0.02	4.76	2.37	-0.17	6.97	4.92	-0.017
7.36	3.60	21.91	0.01	4.59	2.13	-0.16	6.84	4.67	-0.017
7.66	3.30	20.65	-0.01	4.38	1.79	-0.12	6.68	4.27	-0.012
7.96	3.00	19.29	0.00	3.86	1.26	-0.10	6.28	3.59	-0.010
8.26	2.70	17.85	-0.01	3.59	1.11	-0.05	6.05	3.37	-0.005
8.56	2.40	16.31	-0.02	3.23	1.12	-0.04	5.74	3.39	-0.004
8.86	2.10	14.65	-0.02	2.84	1.09	-0.06	5.38	3.34	-0.006
9.16	1.80	12.88	-0.03	2.59	0.94	-0.06	5.14	3.10	-0.006
9.46	1.50	11.02	-0.03	2.53	1.25	-0.08	5.08	3.57	-0.008
9.76	1.20	9.06	-0.03	2.16	0.77	-0.04	4.70	2.80	-0.004
10.06	0.90	3.37	-0.02	14.78	0.22	0.00	12.28	1.50	0.000
10.36	0.60	0.48	0.01	4.40	0.48	0.03	6.70	2.22	0.003
10.66	0.30	0.17	0.08	0.46	0.15	0.02	2.16	1.22	0.002
10.97	0.00	0.62	-0.01	2.34	0.00	0.01	4.89	0.14	0.001

Table N-38 Grid #1, L4, Plasma-Off, Left (1-10)

L4 (Off)							U_∞ =	28.79	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.30	22.60	0.77	0.01	1.20	0.13	0.01	3.81	1.23	0.001
-10.99	22.29	1.07	0.02	0.49	0.06	0.01	2.43	0.85	0.001
-10.68	21.98	3.63	0.03	1.12	0.34	0.00	3.67	2.01	0.000
-10.37	21.67	5.59	0.03	1.47	0.44	0.01	4.22	2.30	0.001
-10.06	21.36	7.59	0.04	1.92	0.24	0.01	4.82	1.72	0.001
-9.75	21.05	9.48	0.05	2.46	0.36	0.04	5.45	2.08	0.005
-9.44	20.74	11.32	0.06	3.14	0.41	0.04	6.15	2.22	0.005
-9.13	20.43	13.08	0.06	3.80	0.52	0.05	6.77	2.51	0.006
-8.82	20.12	14.80	0.05	4.41	0.66	0.09	7.30	2.82	0.011
-8.51	19.81	16.34	0.05	4.95	0.30	0.13	7.73	1.91	0.016
-8.20	19.50	17.82	0.05	5.39	0.31	0.16	8.06	1.94	0.019
-7.89	19.20	19.17	0.06	5.58	0.26	0.16	8.21	1.77	0.019
-7.59	18.89	20.42	0.06	5.68	0.29	0.19	8.28	1.87	0.023
-7.28	18.58	21.55	0.08	5.69	0.29	0.20	8.28	1.86	0.025
-6.97	18.27	22.59	0.08	5.52	0.28	0.21	8.16	1.85	0.026
-6.66	17.96	23.48	0.08	5.28	0.30	0.24	7.98	1.91	0.028
-6.35	17.65	24.31	0.08	4.89	0.27	0.23	7.68	1.81	0.028
-6.04	17.34	24.99	0.08	4.45	0.29	0.22	7.33	1.86	0.027
-5.73	17.03	25.60	0.08	4.18	0.36	0.22	7.10	2.10	0.026
-5.42	16.72	26.13	0.09	3.83	0.31	0.19	6.80	1.93	0.023
-5.11	16.41	26.60	0.10	3.47	0.29	0.19	6.47	1.86	0.023
-4.80	16.10	27.01	0.10	3.14	0.30	0.19	6.15	1.89	0.023
-4.49	15.79	27.37	0.10	2.80	0.41	0.17	5.81	2.22	0.020
-4.18	15.48	27.67	0.10	2.51	0.47	0.16	5.50	2.39	0.019
-3.87	15.17	27.92	0.09	2.29	0.56	0.15	5.26	2.61	0.018
-3.56	14.86	28.11	0.09	2.14	0.45	0.12	5.08	2.34	0.015
-3.25	14.55	28.28	0.10	1.98	0.38	0.10	4.89	2.15	0.013
-2.94	14.24	28.43	0.10	1.84	0.45	0.09	4.72	2.33	0.011
-2.63	13.93	28.54	0.10	1.75	0.39	0.08	4.59	2.18	0.009
-2.32	13.62	28.63	0.10	1.66	0.38	0.06	4.48	2.14	0.008
-2.01	13.31	28.70	0.10	1.59	0.42	0.05	4.38	2.26	0.006
-1.70	13.00	28.74	0.10	1.55	0.40	0.03	4.33	2.18	0.003
-1.39	12.69	28.78	0.10	1.51	0.39	0.02	4.27	2.17	0.002
-1.08	12.38	28.79	0.10	1.51	0.41	0.00	4.27	2.23	0.000
-0.77	12.07	28.79	0.10	1.51	0.46	-0.01	4.26	2.37	-0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-0.46	11.76	28.77	0.10	1.50	0.44	-0.03	4.25	2.30	-0.004
-0.15	11.46	28.74	0.10	1.51	0.40	-0.05	4.27	2.19	-0.007
0.15	11.15	28.69	0.09	1.53	0.39	-0.08	4.30	2.17	-0.009
0.46	10.84	28.62	0.09	1.62	0.39	-0.10	4.42	2.16	-0.012
0.77	10.53	28.55	0.08	1.67	0.43	-0.09	4.49	2.27	-0.011
1.08	10.22	28.45	0.08	1.77	0.39	-0.12	4.62	2.18	-0.015
1.39	9.91	28.34	0.09	1.89	0.34	-0.14	4.78	2.02	-0.017
1.70	9.60	28.20	0.08	2.08	0.41	-0.16	5.00	2.23	-0.019
2.01	9.29	28.05	0.09	2.21	0.42	-0.17	5.16	2.24	-0.020
2.32	8.98	27.89	0.08	2.36	0.41	-0.19	5.33	2.21	-0.023
2.63	8.67	27.69	0.08	2.56	0.45	-0.21	5.56	2.32	-0.025
2.94	8.36	27.46	0.08	2.76	0.39	-0.21	5.78	2.16	-0.026
3.25	8.05	27.20	0.07	3.04	0.37	-0.22	6.06	2.12	-0.027
3.56	7.74	26.92	0.07	3.33	0.38	-0.24	6.34	2.13	-0.029
3.87	7.43	26.60	0.07	3.64	0.31	-0.26	6.63	1.93	-0.032
4.18	7.12	26.23	0.06	4.05	0.31	-0.28	6.99	1.93	-0.034
4.49	6.81	25.84	0.06	4.39	0.27	-0.30	7.28	1.81	-0.036
4.80	6.50	25.38	0.06	4.80	0.26	-0.30	7.61	1.78	-0.036
5.11	6.19	24.88	0.06	5.20	0.30	-0.29	7.92	1.90	-0.034
5.42	5.88	24.31	0.05	5.73	0.30	-0.28	8.32	1.91	-0.034
5.73	5.57	23.68	0.05	6.17	0.27	-0.29	8.63	1.81	-0.035
6.04	5.26	22.98	0.04	6.47	0.27	-0.29	8.83	1.80	-0.035
6.35	4.95	22.20	0.03	6.63	0.26	-0.27	8.94	1.77	-0.032
6.66	4.64	21.34	0.03	6.69	0.28	-0.25	8.99	1.83	-0.030
6.97	4.33	20.39	0.03	6.55	0.25	-0.21	8.89	1.73	-0.025
7.28	4.02	19.31	0.02	6.43	0.28	-0.20	8.81	1.85	-0.025
7.59	3.72	18.17	0.02	6.13	0.26	-0.17	8.60	1.79	-0.020
7.89	3.41	16.90	0.02	5.65	0.19	-0.13	8.26	1.51	-0.016
8.20	3.10	15.59	0.01	5.03	0.21	-0.09	7.79	1.59	-0.011
8.51	2.79	14.15	0.00	4.39	0.29	-0.09	7.28	1.87	-0.010
8.82	2.48	12.67	0.00	3.71	0.29	-0.06	6.69	1.86	-0.007
9.13	2.17	11.08	0.00	3.03	0.20	-0.04	6.05	1.54	-0.005
9.44	1.86	9.44	-0.01	2.38	0.21	-0.02	5.36	1.60	-0.003
9.75	1.55	7.70	-0.01	1.77	0.22	-0.01	4.62	1.65	-0.002
10.06	1.24	5.95	-0.01	1.31	0.19	-0.01	3.97	1.52	-0.001
10.37	0.93	4.10	-0.01	0.95	0.16	-0.01	3.38	1.41	-0.001
10.68	0.62	2.62	0.00	0.77	0.13	-0.01	3.04	1.26	-0.001
10.99	0.31	1.36	0.12	0.68	0.06	-0.01	2.87	0.86	-0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
11.30	0.00	8.60	0.00	0.00	0.00	0.00	0.00	0.07	0.000

Table N-39 Grid #1, L4, Plasma-Off, Center (46-55)

L4 (Off)							U_∞ =	28.74	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.30	22.60	1.07	-0.07	1.17	0.03	0.00	3.76	0.59	0.000
-10.99	22.29	2.30	0.01	1.06	0.08	0.00	3.58	1.00	0.001
-10.68	21.98	4.12	0.01	1.01	0.17	0.00	3.49	1.43	0.000
-10.37	21.67	6.07	0.02	1.38	0.23	0.01	4.09	1.65	0.001
-10.06	21.36	8.04	0.03	1.77	0.20	0.01	4.63	1.57	0.001
-9.75	21.05	9.86	0.03	2.31	0.22	0.03	5.29	1.65	0.004
-9.44	20.74	11.65	0.04	2.97	0.20	0.05	5.99	1.56	0.006
-9.13	20.43	13.32	0.04	3.36	0.20	0.06	6.38	1.54	0.007
-8.82	20.12	14.96	0.05	4.03	0.22	0.08	6.98	1.64	0.010
-8.51	19.81	16.49	0.05	4.66	0.25	0.10	7.51	1.75	0.012
-8.20	19.50	17.95	0.06	5.18	0.30	0.14	7.92	1.89	0.017
-7.89	19.20	19.27	0.06	5.40	0.27	0.14	8.09	1.82	0.017
-7.59	18.89	20.54	0.07	5.40	0.25	0.16	8.09	1.73	0.020
-7.28	18.58	21.63	0.07	5.47	0.25	0.19	8.14	1.74	0.023
-6.97	18.27	22.65	0.08	5.30	0.26	0.20	8.01	1.79	0.024
-6.66	17.96	23.53	0.09	5.03	0.28	0.19	7.81	1.83	0.023
-6.35	17.65	24.31	0.10	4.84	0.26	0.20	7.65	1.77	0.024
-6.04	17.34	25.00	0.09	4.38	0.23	0.20	7.28	1.65	0.024
-5.73	17.03	25.60	0.09	4.01	0.24	0.20	6.97	1.70	0.025
-5.42	16.72	26.12	0.10	3.64	0.25	0.20	6.64	1.74	0.024
-5.11	16.41	26.60	0.10	3.24	0.27	0.18	6.26	1.79	0.022
-4.80	16.10	26.98	0.11	2.96	0.34	0.18	5.99	2.03	0.022
-4.49	15.79	27.33	0.11	2.65	0.31	0.15	5.66	1.93	0.018
-4.18	15.48	27.61	0.11	2.47	0.25	0.13	5.47	1.75	0.016
-3.87	15.17	27.86	0.11	2.30	0.26	0.13	5.28	1.79	0.015
-3.56	14.86	28.06	0.11	2.13	0.30	0.13	5.08	1.92	0.015
-3.25	14.55	28.23	0.11	1.96	0.29	0.10	4.87	1.89	0.012
-2.94	14.24	28.38	0.11	1.83	0.32	0.08	4.71	1.96	0.010
-2.63	13.93	28.50	0.10	1.71	0.30	0.07	4.54	1.90	0.008

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.32	13.62	28.59	0.11	1.64	0.30	0.05	4.46	1.89	0.006
-2.01	13.31	28.65	0.11	1.60	0.30	0.04	4.41	1.90	0.005
-1.70	13.00	28.70	0.11	1.54	0.29	0.03	4.32	1.86	0.004
-1.39	12.69	28.73	0.11	1.48	0.33	0.02	4.24	2.01	0.002
-1.08	12.38	28.74	0.10	1.45	0.34	-0.01	4.19	2.02	-0.001
-0.77	12.07	28.74	0.10	1.49	0.37	-0.03	4.24	2.10	-0.004
-0.46	11.76	28.72	0.10	1.49	0.37	-0.04	4.24	2.12	-0.004
-0.15	11.46	28.68	0.10	1.53	0.34	-0.06	4.30	2.02	-0.007
0.15	11.15	28.63	0.10	1.59	0.36	-0.08	4.39	2.09	-0.009
0.46	10.84	28.58	0.10	1.63	0.34	-0.09	4.44	2.03	-0.011
0.77	10.53	28.49	0.10	1.73	0.35	-0.11	4.58	2.05	-0.013
1.08	10.22	28.37	0.10	1.87	0.37	-0.13	4.76	2.13	-0.016
1.39	9.91	28.26	0.09	1.98	0.32	-0.14	4.90	1.98	-0.017
1.70	9.60	28.13	0.09	2.15	0.30	-0.16	5.10	1.92	-0.019
2.01	9.29	27.97	0.09	2.29	0.31	-0.17	5.26	1.92	-0.020
2.32	8.98	27.78	0.09	2.56	0.34	-0.19	5.56	2.02	-0.022
2.63	8.67	27.57	0.09	2.83	0.38	-0.22	5.86	2.15	-0.026
2.94	8.36	27.37	0.07	2.96	0.33	-0.21	5.98	2.00	-0.026
3.25	8.05	27.11	0.07	3.22	0.30	-0.23	6.25	1.90	-0.028
3.56	7.74	26.81	0.07	3.52	0.31	-0.25	6.53	1.92	-0.030
3.87	7.43	26.48	0.07	3.91	0.29	-0.26	6.88	1.88	-0.032
4.18	7.12	26.09	0.07	4.44	0.31	-0.26	7.33	1.94	-0.032
4.49	6.81	25.70	0.06	4.69	0.29	-0.27	7.53	1.87	-0.032
4.80	6.50	25.24	0.06	5.04	0.29	-0.26	7.81	1.89	-0.031
5.11	6.19	24.74	0.05	5.39	0.27	-0.25	8.08	1.80	-0.030
5.42	5.88	24.16	0.05	5.80	0.23	-0.27	8.38	1.68	-0.033
5.73	5.57	23.52	0.05	6.22	0.25	-0.28	8.68	1.72	-0.033
6.04	5.26	22.79	0.04	6.48	0.24	-0.25	8.86	1.72	-0.030
6.35	4.95	22.00	0.04	6.57	0.24	-0.23	8.92	1.71	-0.028
6.66	4.64	21.12	0.03	6.61	0.29	-0.22	8.94	1.88	-0.026
6.97	4.33	20.15	0.03	6.67	0.25	-0.19	8.98	1.75	-0.023
7.28	4.02	19.10	0.02	6.51	0.24	-0.18	8.88	1.70	-0.021
7.59	3.72	17.96	0.02	6.11	0.26	-0.15	8.60	1.78	-0.019
7.89	3.41	16.71	0.01	5.52	0.21	-0.12	8.17	1.59	-0.015
8.20	3.10	15.40	0.01	4.87	0.21	-0.09	7.68	1.61	-0.011
8.51	2.79	14.01	-0.01	4.28	0.22	-0.08	7.20	1.63	-0.010
8.82	2.48	12.55	-0.01	3.60	0.23	-0.07	6.60	1.65	-0.008
9.13	2.17	10.99	-0.01	2.86	0.22	-0.04	5.89	1.63	-0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
9.44	1.86	9.41	-0.01	2.26	0.23	-0.02	5.23	1.65	-0.003
9.75	1.55	7.73	-0.02	1.73	0.24	-0.01	4.58	1.71	-0.001
10.06	1.24	6.00	-0.02	1.26	0.23	0.00	3.90	1.66	0.000
10.37	0.93	4.19	-0.02	0.92	0.18	0.00	3.34	1.49	0.000
10.68	0.62	2.54	-0.01	0.63	0.16	0.00	2.76	1.38	0.000
10.99	0.31	0.70	0.05	0.31	0.09	0.00	1.94	1.02	0.000
11.30	0.00	0.88	0.05	0.01	0.01	0.00	0.27	0.35	0.000

Table N-40 Grid #1, L4, Plasma-Off, Right (71-80)

L4 (Off)							$U_\infty =$	28.76	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.30	22.60	1.00	-0.03	0.72	0.06	0.00	2.96	0.85	0.000
-10.99	22.29	2.69	-0.01	0.92	0.18	0.01	3.34	1.49	0.002
-10.68	21.98	4.48	0.00	1.01	0.18	0.02	3.49	1.47	0.002
-10.37	21.67	6.36	0.01	1.36	0.16	0.02	4.06	1.37	0.003
-10.06	21.36	8.27	0.02	1.66	0.17	0.02	4.48	1.44	0.003
-9.75	21.05	10.07	0.03	2.15	0.22	0.03	5.10	1.62	0.004
-9.44	20.74	11.85	0.04	2.88	0.24	0.04	5.90	1.69	0.005
-9.13	20.43	13.48	0.05	3.46	0.19	0.06	6.47	1.51	0.007
-8.82	20.12	15.14	0.05	4.01	0.18	0.08	6.96	1.49	0.010
-8.51	19.81	16.61	0.06	4.64	0.20	0.11	7.49	1.56	0.013
-8.20	19.50	18.07	0.07	5.06	0.23	0.13	7.82	1.66	0.016
-7.89	19.20	19.36	0.07	5.23	0.25	0.16	7.95	1.75	0.020
-7.59	18.89	20.59	0.07	5.38	0.29	0.19	8.06	1.87	0.023
-7.28	18.58	21.67	0.08	5.44	0.24	0.18	8.11	1.69	0.022
-6.97	18.27	22.68	0.08	5.25	0.25	0.20	7.97	1.74	0.024
-6.66	17.96	23.56	0.09	4.93	0.25	0.20	7.72	1.72	0.024
-6.35	17.65	24.36	0.10	4.62	0.23	0.20	7.47	1.67	0.024
-6.04	17.34	25.02	0.10	4.29	0.20	0.20	7.20	1.54	0.024
-5.73	17.03	25.63	0.10	3.97	0.24	0.20	6.93	1.72	0.024
-5.42	16.72	26.16	0.10	3.54	0.27	0.19	6.54	1.82	0.023
-5.11	16.41	26.61	0.10	3.15	0.24	0.17	6.17	1.70	0.021
-4.80	16.10	27.00	0.11	2.88	0.23	0.16	5.90	1.67	0.019
-4.49	15.79	27.34	0.11	2.60	0.27	0.14	5.60	1.79	0.017

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.18	15.48	27.65	0.11	2.31	0.32	0.12	5.28	1.97	0.015
-3.87	15.17	27.88	0.11	2.11	0.30	0.12	5.05	1.90	0.014
-3.56	14.86	28.08	0.11	1.98	0.30	0.10	4.89	1.91	0.012
-3.25	14.55	28.26	0.11	1.82	0.30	0.08	4.70	1.92	0.010
-2.94	14.24	28.39	0.11	1.77	0.33	0.08	4.62	1.99	0.009
-2.63	13.93	28.50	0.11	1.66	0.31	0.07	4.48	1.95	0.008
-2.32	13.62	28.60	0.10	1.56	0.34	0.04	4.35	2.02	0.005
-2.01	13.31	28.66	0.10	1.52	0.33	0.03	4.29	2.00	0.003
-1.70	13.00	28.70	0.10	1.51	0.33	0.02	4.27	2.00	0.002
-1.39	12.69	28.74	0.10	1.42	0.32	0.00	4.14	1.98	0.000
-1.08	12.38	28.76	0.10	1.38	0.31	-0.02	4.09	1.93	-0.002
-0.77	12.07	28.76	0.10	1.40	0.30	-0.03	4.11	1.91	-0.004
-0.46	11.76	28.75	0.10	1.42	0.30	-0.04	4.14	1.90	-0.005
-0.15	11.46	28.70	0.10	1.49	0.30	-0.05	4.25	1.89	-0.006
0.15	11.15	28.65	0.10	1.54	0.31	-0.08	4.32	1.93	-0.009
0.46	10.84	28.59	0.09	1.58	0.33	-0.08	4.37	1.99	-0.010
0.77	10.53	28.51	0.09	1.65	0.33	-0.09	4.46	2.00	-0.011
1.08	10.22	28.42	0.09	1.71	0.30	-0.10	4.54	1.90	-0.012
1.39	9.91	28.28	0.09	1.92	0.30	-0.13	4.82	1.90	-0.016
1.70	9.60	28.14	0.09	2.07	0.32	-0.15	5.01	1.96	-0.018
2.01	9.29	27.98	0.08	2.22	0.34	-0.15	5.18	2.02	-0.018
2.32	8.98	27.80	0.08	2.40	0.32	-0.16	5.39	1.96	-0.019
2.63	8.67	27.58	0.08	2.74	0.36	-0.18	5.75	2.08	-0.022
2.94	8.36	27.35	0.08	2.98	0.33	-0.20	6.00	1.99	-0.024
3.25	8.05	27.08	0.08	3.24	0.28	-0.22	6.25	1.85	-0.027
3.56	7.74	26.78	0.07	3.55	0.32	-0.23	6.55	1.96	-0.027
3.87	7.43	26.45	0.07	3.92	0.34	-0.23	6.88	2.04	-0.027
4.18	7.12	26.07	0.07	4.26	0.34	-0.25	7.17	2.03	-0.030
4.49	6.81	25.64	0.06	4.66	0.34	-0.27	7.51	2.04	-0.033
4.80	6.50	25.17	0.06	5.10	0.32	-0.25	7.85	1.97	-0.030
5.11	6.19	24.65	0.06	5.45	0.29	-0.24	8.12	1.89	-0.028
5.42	5.88	24.06	0.05	5.96	0.26	-0.26	8.49	1.77	-0.032
5.73	5.57	23.42	0.04	6.28	0.26	-0.26	8.71	1.77	-0.032
6.04	5.26	22.69	0.03	6.52	0.28	-0.24	8.88	1.82	-0.029
6.35	4.95	21.89	0.04	6.69	0.25	-0.22	8.99	1.74	-0.026
6.66	4.64	21.02	0.03	6.65	0.25	-0.20	8.97	1.73	-0.025
6.97	4.33	20.04	0.02	6.49	0.25	-0.20	8.86	1.74	-0.024
7.28	4.02	18.97	0.02	6.26	0.24	-0.18	8.70	1.71	-0.022

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
7.59	3.72	17.85	0.01	5.90	0.25	-0.14	8.45	1.74	-0.018
7.89	3.41	16.63	0.01	5.41	0.27	-0.11	8.09	1.80	-0.013
8.20	3.10	15.32	0.00	4.73	0.20	-0.08	7.56	1.57	-0.009
8.51	2.79	13.93	0.00	4.07	0.25	-0.06	7.02	1.73	-0.007
8.82	2.48	12.49	0.00	3.45	0.26	-0.05	6.46	1.76	-0.006
9.13	2.17	10.97	-0.01	2.76	0.20	-0.03	5.78	1.54	-0.004
9.44	1.86	9.38	-0.02	2.14	0.17	-0.02	5.09	1.42	-0.002
9.75	1.55	7.73	-0.02	1.64	0.15	-0.01	4.46	1.35	-0.001
10.06	1.24	6.01	-0.01	1.19	0.14	-0.01	3.80	1.31	-0.001
10.37	0.93	4.30	-0.01	0.84	0.14	0.00	3.18	1.32	0.000
10.68	0.62	2.61	-0.02	0.65	0.15	0.00	2.80	1.33	0.000
10.99	0.31	1.74	0.00	0.38	0.06	0.00	2.16	0.87	0.000
11.30	0.00	0.17	0.05	0.03	0.02	0.00	0.59	0.44	0.000

Table N-41 Grid #1, L4, Plasma-150, Left (1-10)

L4 (150)							U_∞ =	30.62	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.30	22.60	1.50	0.03	13.42	0.08	0.08	11.96	0.95	0.009
-10.99	22.29	1.07	0.07	8.46	0.06	-0.02	9.50	0.81	-0.002
-10.68	21.98	4.63	0.22	8.64	0.53	-0.22	9.60	2.38	-0.023
-10.37	21.67	7.10	0.08	2.98	0.42	0.02	5.64	2.12	0.002
-10.06	21.36	8.72	0.06	2.12	0.37	0.00	4.76	1.98	0.000
-9.75	21.05	10.48	0.06	2.23	0.34	0.00	4.87	1.90	0.000
-9.44	20.74	12.36	0.07	2.50	0.28	0.01	5.17	1.74	0.001
-9.13	20.43	14.20	0.06	2.92	0.31	0.04	5.58	1.81	0.004
-8.82	20.12	15.97	0.06	3.24	0.37	0.06	5.88	1.98	0.006
-8.51	19.81	17.58	0.07	3.64	0.36	0.05	6.23	1.95	0.005
-8.20	19.50	19.14	0.07	3.86	0.30	0.08	6.41	1.78	0.008
-7.89	19.20	20.52	0.08	4.03	0.31	0.10	6.56	1.82	0.010
-7.59	18.89	21.84	0.08	4.14	0.37	0.11	6.64	2.00	0.012
-7.28	18.58	22.99	0.08	4.13	0.31	0.13	6.64	1.83	0.013
-6.97	18.27	24.08	0.08	4.06	0.32	0.14	6.58	1.85	0.015
-6.66	17.96	25.00	0.08	3.86	0.32	0.15	6.41	1.86	0.016
-6.35	17.65	25.84	0.08	3.67	0.32	0.15	6.25	1.85	0.016

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-6.04	17.34	26.57	0.09	3.50	0.32	0.15	6.11	1.86	0.016
-5.73	17.03	27.23	0.09	3.21	0.32	0.17	5.85	1.85	0.018
-5.42	16.72	27.79	0.09	2.87	0.34	0.16	5.54	1.89	0.017
-5.11	16.41	28.29	0.10	2.64	0.32	0.14	5.30	1.85	0.015
-4.80	16.10	28.70	0.10	2.42	0.33	0.13	5.08	1.86	0.014
-4.49	15.79	29.05	0.10	2.19	0.34	0.13	4.83	1.90	0.014
-4.18	15.48	29.35	0.10	1.99	0.34	0.13	4.60	1.90	0.014
-3.87	15.17	29.63	0.10	1.79	0.35	0.11	4.37	1.92	0.012
-3.56	14.86	29.86	0.10	1.60	0.36	0.10	4.13	1.96	0.011
-3.25	14.55	30.05	0.10	1.44	0.34	0.08	3.92	1.90	0.009
-2.94	14.24	30.19	0.10	1.34	0.31	0.06	3.78	1.83	0.007
-2.63	13.93	30.32	0.09	1.26	0.31	0.06	3.66	1.83	0.006
-2.32	13.62	30.42	0.10	1.17	0.29	0.05	3.54	1.77	0.005
-2.01	13.31	30.50	0.11	1.14	0.29	0.03	3.48	1.74	0.003
-1.70	13.00	30.55	0.10	1.10	0.28	0.02	3.42	1.74	0.002
-1.39	12.69	30.59	0.10	1.06	0.32	0.01	3.37	1.85	0.001
-1.08	12.38	30.61	0.10	1.06	0.34	0.00	3.37	1.91	0.000
-0.77	12.07	30.62	0.10	1.07	0.35	0.00	3.38	1.92	0.000
-0.46	11.76	30.60	0.09	1.08	0.33	-0.02	3.39	1.89	-0.003
-0.15	11.46	30.58	0.10	1.11	0.37	-0.04	3.44	1.99	-0.004
0.15	11.15	30.54	0.10	1.14	0.38	-0.04	3.48	2.01	-0.005
0.46	10.84	30.48	0.10	1.18	0.38	-0.06	3.55	2.00	-0.007
0.77	10.53	30.41	0.09	1.27	0.36	-0.07	3.67	1.95	-0.007
1.08	10.22	30.31	0.09	1.34	0.33	-0.08	3.78	1.88	-0.009
1.39	9.91	30.21	0.09	1.40	0.34	-0.09	3.86	1.91	-0.009
1.70	9.60	30.08	0.09	1.51	0.36	-0.10	4.02	1.97	-0.011
2.01	9.29	29.93	0.09	1.64	0.36	-0.12	4.18	1.97	-0.013
2.32	8.98	29.76	0.08	1.72	0.36	-0.12	4.28	1.95	-0.013
2.63	8.67	29.56	0.07	1.89	0.30	-0.14	4.49	1.79	-0.015
2.94	8.36	29.33	0.07	2.04	0.33	-0.14	4.66	1.86	-0.015
3.25	8.05	29.08	0.07	2.21	0.33	-0.15	4.85	1.87	-0.016
3.56	7.74	28.78	0.08	2.46	0.33	-0.18	5.12	1.87	-0.019
3.87	7.43	28.45	0.08	2.67	0.29	-0.17	5.34	1.77	-0.018
4.18	7.12	28.07	0.07	2.92	0.29	-0.17	5.58	1.75	-0.018
4.49	6.81	27.67	0.06	3.15	0.33	-0.18	5.79	1.89	-0.019
4.80	6.50	27.18	0.06	3.45	0.32	-0.19	6.06	1.86	-0.020
5.11	6.19	26.65	0.06	3.73	0.29	-0.18	6.31	1.76	-0.020
5.42	5.88	26.04	0.05	3.95	0.27	-0.18	6.49	1.71	-0.019

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.73	5.57	25.37	0.05	4.15	0.33	-0.19	6.66	1.89	-0.020
6.04	5.26	24.64	0.04	4.31	0.34	-0.16	6.78	1.90	-0.017
6.35	4.95	23.81	0.04	4.41	0.26	-0.16	6.86	1.66	-0.017
6.66	4.64	22.87	0.03	4.45	0.25	-0.13	6.89	1.64	-0.014
6.97	4.33	21.86	0.03	4.34	0.25	-0.12	6.80	1.62	-0.013
7.28	4.02	20.75	0.02	4.25	0.26	-0.11	6.73	1.66	-0.012
7.59	3.72	19.56	0.01	4.01	0.28	-0.09	6.54	1.71	-0.010
7.89	3.41	18.25	0.00	3.67	0.24	-0.08	6.26	1.59	-0.008
8.20	3.10	16.87	0.00	3.28	0.22	-0.07	5.92	1.52	-0.007
8.51	2.79	15.38	0.00	2.84	0.19	-0.05	5.50	1.42	-0.005
8.82	2.48	13.81	-0.01	2.39	0.25	-0.03	5.05	1.65	-0.003
9.13	2.17	12.19	-0.01	2.07	0.29	-0.02	4.69	1.77	-0.002
9.44	1.86	10.51	-0.02	1.77	0.26	-0.01	4.34	1.65	-0.002
9.75	1.55	8.79	-0.02	1.72	0.28	-0.02	4.29	1.73	-0.002
10.06	1.24	7.10	-0.03	1.82	0.36	-0.03	4.41	1.97	-0.003
10.37	0.93	5.26	0.03	3.88	0.39	-0.02	6.43	2.03	-0.002
10.68	0.62	2.86	0.05	9.99	0.18	0.01	10.32	1.38	0.001
10.99	0.31	0.54	0.14	14.23	0.07	-0.01	12.32	0.86	-0.001
11.30	0.00	4.51	0.34	4.16	0.00	-0.01	6.66	0.05	-0.001

Table N-42 Grid #1, L4, Plasma-150, Center (46-55)

L4 (150)							$U_\infty =$	30.63	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.30	22.60	2.00	-0.04	22.26	0.03	0.08	15.41	0.58	0.009
-10.99	22.29	2.82	0.08	12.82	0.07	-0.03	11.69	0.89	-0.003
-10.68	21.98	5.57	0.09	4.72	0.34	0.04	7.09	1.90	0.004
-10.37	21.67	7.38	0.03	1.94	0.33	0.01	4.54	1.89	0.001
-10.06	21.36	9.09	0.03	1.67	0.26	0.00	4.22	1.66	0.000
-9.75	21.05	10.86	0.05	1.84	0.18	0.02	4.43	1.38	0.002
-9.44	20.74	12.73	0.05	2.07	0.22	0.03	4.70	1.53	0.003
-9.13	20.43	14.48	0.06	2.49	0.23	0.04	5.15	1.56	0.004
-8.82	20.12	16.19	0.06	2.83	0.21	0.06	5.49	1.50	0.006
-8.51	19.81	17.78	0.07	3.21	0.23	0.07	5.85	1.57	0.007
-8.20	19.50	19.32	0.08	3.65	0.20	0.08	6.24	1.47	0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-7.89	19.20	20.67	0.09	3.80	0.20	0.09	6.37	1.45	0.010
-7.59	18.89	21.94	0.08	3.83	0.20	0.10	6.39	1.45	0.011
-7.28	18.58	23.09	0.08	3.87	0.21	0.11	6.43	1.51	0.012
-6.97	18.27	24.13	0.08	3.73	0.23	0.12	6.31	1.57	0.013
-6.66	17.96	25.04	0.09	3.67	0.23	0.12	6.25	1.57	0.013
-6.35	17.65	25.87	0.09	3.46	0.21	0.13	6.07	1.51	0.014
-6.04	17.34	26.59	0.09	3.21	0.22	0.12	5.85	1.54	0.013
-5.73	17.03	27.24	0.09	2.97	0.22	0.12	5.63	1.52	0.013
-5.42	16.72	27.80	0.09	2.70	0.21	0.13	5.37	1.51	0.014
-5.11	16.41	28.29	0.10	2.46	0.23	0.13	5.12	1.57	0.014
-4.80	16.10	28.71	0.11	2.21	0.26	0.11	4.85	1.68	0.012
-4.49	15.79	29.05	0.10	2.08	0.24	0.12	4.71	1.61	0.012
-4.18	15.48	29.37	0.10	1.86	0.26	0.12	4.45	1.67	0.012
-3.87	15.17	29.64	0.10	1.72	0.26	0.10	4.28	1.68	0.011
-3.56	14.86	29.86	0.10	1.58	0.26	0.09	4.10	1.67	0.009
-3.25	14.55	30.05	0.10	1.44	0.27	0.08	3.91	1.70	0.009
-2.94	14.24	30.21	0.11	1.31	0.27	0.07	3.73	1.70	0.008
-2.63	13.93	30.34	0.11	1.22	0.26	0.06	3.60	1.68	0.006
-2.32	13.62	30.43	0.10	1.13	0.27	0.05	3.46	1.70	0.005
-2.01	13.31	30.51	0.10	1.07	0.25	0.04	3.37	1.64	0.004
-1.70	13.00	30.56	0.11	1.06	0.23	0.03	3.35	1.58	0.003
-1.39	12.69	30.60	0.11	1.03	0.25	0.02	3.31	1.63	0.002
-1.08	12.38	30.62	0.10	1.01	0.28	0.01	3.29	1.73	0.001
-0.77	12.07	30.63	0.10	1.01	0.28	0.00	3.28	1.73	0.000
-0.46	11.76	30.61	0.10	1.06	0.27	-0.02	3.36	1.70	-0.002
-0.15	11.46	30.58	0.10	1.10	0.28	-0.04	3.42	1.72	-0.004
0.15	11.15	30.54	0.09	1.09	0.28	-0.04	3.40	1.71	-0.004
0.46	10.84	30.48	0.09	1.12	0.29	-0.05	3.45	1.76	-0.006
0.77	10.53	30.41	0.09	1.19	0.29	-0.06	3.56	1.76	-0.007
1.08	10.22	30.31	0.09	1.27	0.27	-0.08	3.68	1.69	-0.008
1.39	9.91	30.19	0.09	1.39	0.28	-0.09	3.85	1.72	-0.010
1.70	9.60	30.06	0.09	1.49	0.28	-0.10	3.98	1.74	-0.010
2.01	9.29	29.90	0.09	1.60	0.29	-0.11	4.12	1.75	-0.011
2.32	8.98	29.72	0.08	1.71	0.27	-0.12	4.27	1.70	-0.013
2.63	8.67	29.51	0.08	1.88	0.29	-0.14	4.48	1.76	-0.015
2.94	8.36	29.27	0.08	2.08	0.27	-0.15	4.71	1.71	-0.016
3.25	8.05	29.02	0.07	2.22	0.26	-0.14	4.86	1.67	-0.015
3.56	7.74	28.72	0.07	2.43	0.27	-0.15	5.09	1.68	-0.016

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.87	7.43	28.38	0.07	2.61	0.24	-0.16	5.28	1.60	-0.017
4.18	7.12	28.00	0.07	2.83	0.28	-0.16	5.49	1.73	-0.017
4.49	6.81	27.56	0.07	3.11	0.31	-0.16	5.76	1.83	-0.017
4.80	6.50	27.07	0.06	3.39	0.26	-0.16	6.01	1.65	-0.017
5.11	6.19	26.51	0.06	3.68	0.21	-0.18	6.26	1.51	-0.019
5.42	5.88	25.90	0.05	3.90	0.26	-0.16	6.45	1.66	-0.017
5.73	5.57	25.21	0.04	4.08	0.24	-0.15	6.59	1.60	-0.016
6.04	5.26	24.46	0.03	4.25	0.25	-0.15	6.73	1.63	-0.016
6.35	4.95	23.60	0.03	4.31	0.26	-0.13	6.78	1.67	-0.014
6.66	4.64	22.66	0.02	4.36	0.29	-0.14	6.81	1.76	-0.014
6.97	4.33	21.65	0.02	4.27	0.28	-0.09	6.74	1.74	-0.010
7.28	4.02	20.54	0.02	4.11	0.24	-0.10	6.62	1.61	-0.011
7.59	3.72	19.35	0.01	3.88	0.22	-0.09	6.43	1.55	-0.009
7.89	3.41	18.05	0.00	3.55	0.25	-0.07	6.15	1.65	-0.007
8.20	3.10	16.68	0.00	3.15	0.24	-0.04	5.79	1.60	-0.004
8.51	2.79	15.24	-0.02	2.74	0.21	-0.02	5.41	1.51	-0.003
8.82	2.48	13.71	-0.02	2.37	0.19	-0.02	5.03	1.41	-0.002
9.13	2.17	12.10	-0.02	1.98	0.16	-0.01	4.60	1.33	-0.001
9.44	1.86	10.45	-0.02	1.64	0.20	0.00	4.19	1.45	0.000
9.75	1.55	8.76	-0.02	1.50	0.26	0.00	3.99	1.66	0.000
10.06	1.24	7.08	-0.02	1.61	0.39	0.00	4.14	2.04	0.000
10.37	0.93	5.31	0.02	2.94	0.48	-0.01	5.60	2.26	-0.001
10.68	0.62	3.11	0.17	4.72	0.50	-0.10	7.09	2.30	-0.010
10.99	0.31	0.45	0.11	1.78	0.08	-0.01	4.36	0.92	-0.001
11.30	0.00	0.45	0.08	0.01	0.01	0.00	0.30	0.26	0.000

Table N-43 Grid #1, L4, Plasma-150, Right (71-80)

L4 (150)							U_∞ =	30.65	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.30	22.60	2.30	-0.25	24.50	0.29	-0.46	16.15	1.75	-0.049
-10.99	22.29	3.78	0.01	6.16	0.54	0.03	8.10	2.40	0.003
-10.68	21.98	6.04	0.03	2.23	0.63	0.05	4.87	2.59	0.005
-10.37	21.67	7.62	0.03	1.82	0.42	0.03	4.40	2.12	0.003
-10.06	21.36	9.34	0.03	1.62	0.25	0.02	4.15	1.64	0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-9.75	21.05	11.11	0.04	1.84	0.19	0.04	4.43	1.42	0.004
-9.44	20.74	12.94	0.05	1.98	0.17	0.03	4.59	1.34	0.004
-9.13	20.43	14.68	0.06	2.45	0.17	0.06	5.11	1.33	0.006
-8.82	20.12	16.35	0.07	2.89	0.19	0.07	5.55	1.44	0.007
-8.51	19.81	17.92	0.07	3.23	0.20	0.06	5.87	1.45	0.007
-8.20	19.50	19.44	0.08	3.54	0.17	0.08	6.14	1.35	0.009
-7.89	19.20	20.77	0.08	3.70	0.23	0.10	6.28	1.57	0.010
-7.59	18.89	22.04	0.09	3.72	0.24	0.10	6.29	1.60	0.011
-7.28	18.58	23.18	0.09	3.73	0.19	0.12	6.30	1.41	0.013
-6.97	18.27	24.20	0.10	3.68	0.22	0.14	6.26	1.54	0.014
-6.66	17.96	25.10	0.10	3.61	0.23	0.13	6.20	1.56	0.014
-6.35	17.65	25.90	0.10	3.34	0.20	0.14	5.96	1.45	0.015
-6.04	17.34	26.62	0.10	3.12	0.20	0.13	5.77	1.44	0.014
-5.73	17.03	27.27	0.11	2.88	0.24	0.14	5.54	1.59	0.015
-5.42	16.72	27.81	0.10	2.67	0.27	0.13	5.33	1.68	0.013
-5.11	16.41	28.29	0.11	2.44	0.27	0.12	5.10	1.68	0.013
-4.80	16.10	28.69	0.11	2.25	0.25	0.11	4.90	1.63	0.012
-4.49	15.79	29.06	0.11	2.04	0.26	0.11	4.66	1.65	0.012
-4.18	15.48	29.38	0.11	1.83	0.22	0.10	4.42	1.53	0.011
-3.87	15.17	29.67	0.11	1.63	0.27	0.10	4.16	1.70	0.011
-3.56	14.86	29.88	0.12	1.50	0.27	0.09	3.99	1.68	0.009
-3.25	14.55	30.07	0.11	1.37	0.25	0.07	3.82	1.62	0.008
-2.94	14.24	30.22	0.11	1.27	0.24	0.06	3.68	1.59	0.007
-2.63	13.93	30.35	0.11	1.14	0.26	0.06	3.49	1.66	0.006
-2.32	13.62	30.45	0.11	1.11	0.29	0.04	3.44	1.75	0.005
-2.01	13.31	30.53	0.11	1.05	0.28	0.03	3.34	1.72	0.003
-1.70	13.00	30.59	0.11	0.98	0.26	0.02	3.23	1.68	0.002
-1.39	12.69	30.62	0.11	0.94	0.27	0.01	3.17	1.70	0.001
-1.08	12.38	30.65	0.11	0.93	0.26	0.00	3.15	1.65	0.000
-0.77	12.07	30.65	0.10	0.97	0.24	-0.01	3.22	1.60	-0.001
-0.46	11.76	30.63	0.10	1.01	0.25	-0.03	3.28	1.63	-0.003
-0.15	11.46	30.61	0.10	1.02	0.26	-0.04	3.29	1.67	-0.004
0.15	11.15	30.57	0.09	1.05	0.28	-0.04	3.34	1.72	-0.004
0.46	10.84	30.51	0.09	1.10	0.30	-0.04	3.42	1.79	-0.004
0.77	10.53	30.43	0.09	1.17	0.27	-0.06	3.54	1.69	-0.007
1.08	10.22	30.33	0.09	1.26	0.28	-0.08	3.66	1.72	-0.008
1.39	9.91	30.22	0.09	1.34	0.30	-0.09	3.78	1.79	-0.010
1.70	9.60	30.08	0.08	1.44	0.26	-0.09	3.92	1.68	-0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.01	9.29	29.92	0.08	1.58	0.26	-0.11	4.10	1.67	-0.011
2.32	8.98	29.73	0.08	1.70	0.27	-0.12	4.26	1.71	-0.012
2.63	8.67	29.53	0.07	1.86	0.28	-0.12	4.45	1.72	-0.013
2.94	8.36	29.29	0.07	2.05	0.28	-0.13	4.67	1.72	-0.014
3.25	8.05	29.02	0.07	2.19	0.24	-0.13	4.83	1.61	-0.014
3.56	7.74	28.70	0.07	2.44	0.28	-0.15	5.09	1.74	-0.016
3.87	7.43	28.34	0.07	2.64	0.29	-0.14	5.30	1.74	-0.015
4.18	7.12	27.95	0.06	2.88	0.28	-0.15	5.54	1.74	-0.016
4.49	6.81	27.51	0.06	3.18	0.25	-0.16	5.82	1.63	-0.018
4.80	6.50	27.01	0.05	3.47	0.24	-0.17	6.07	1.58	-0.018
5.11	6.19	26.45	0.05	3.68	0.23	-0.16	6.26	1.57	-0.017
5.42	5.88	25.81	0.04	3.86	0.22	-0.15	6.41	1.54	-0.016
5.73	5.57	25.11	0.04	4.09	0.20	-0.15	6.60	1.46	-0.016
6.04	5.26	24.35	0.03	4.21	0.21	-0.14	6.70	1.48	-0.015
6.35	4.95	23.49	0.03	4.27	0.22	-0.13	6.74	1.53	-0.014
6.66	4.64	22.55	0.02	4.30	0.25	-0.12	6.76	1.63	-0.013
6.97	4.33	21.54	0.02	4.16	0.25	-0.11	6.66	1.63	-0.011
7.28	4.02	20.44	0.01	3.99	0.23	-0.09	6.52	1.57	-0.010
7.59	3.72	19.25	0.00	3.74	0.22	-0.09	6.31	1.53	-0.009
7.89	3.41	17.96	0.00	3.43	0.24	-0.07	6.04	1.59	-0.008
8.20	3.10	16.61	-0.01	3.07	0.23	-0.06	5.71	1.55	-0.006
8.51	2.79	15.17	-0.02	2.68	0.20	-0.04	5.35	1.48	-0.004
8.82	2.48	13.68	-0.02	2.32	0.19	-0.03	4.97	1.41	-0.003
9.13	2.17	12.08	-0.02	1.98	0.19	-0.02	4.59	1.41	-0.002
9.44	1.86	10.43	-0.02	1.65	0.20	0.00	4.19	1.44	0.000
9.75	1.55	8.77	-0.03	1.51	0.28	0.00	4.02	1.71	0.000
10.06	1.24	7.10	-0.03	1.62	0.32	-0.01	4.16	1.85	-0.001
10.37	0.93	5.42	-0.01	2.74	0.35	-0.03	5.40	1.93	-0.003
10.68	0.62	3.49	0.08	5.35	0.60	-0.10	7.54	2.52	-0.011
10.99	0.31	1.49	0.01	5.82	0.06	0.03	7.87	0.77	0.003
11.30	0.00	0.18	0.02	0.03	0.01	0.00	0.60	0.35	0.000

Table N-44 Grid #1, L4, Plasma-300, Left (1-10)

L4 (300)							U_∞ =	32.04	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.30	22.60	0.68	-0.03	3.49	0.71	-0.04	5.83	2.63	-0.003
-10.99	22.29	0.92	0.03	1.23	0.38	0.00	3.47	1.93	0.000
-10.68	21.98	4.70	0.09	2.62	0.76	-0.01	5.05	2.72	-0.001
-10.37	21.67	6.88	0.05	1.90	0.69	0.02	4.30	2.60	0.002
-10.06	21.36	8.99	0.05	1.78	0.77	0.01	4.17	2.74	0.001
-9.75	21.05	11.00	0.06	1.93	0.52	0.03	4.34	2.26	0.002
-9.44	20.74	13.03	0.07	2.25	0.46	0.03	4.68	2.13	0.002
-9.13	20.43	14.94	0.07	2.68	0.42	0.04	5.11	2.02	0.004
-8.82	20.12	16.81	0.07	2.85	0.43	0.06	5.27	2.04	0.006
-8.51	19.81	18.43	0.07	3.00	0.48	0.08	5.41	2.16	0.007
-8.20	19.50	19.99	0.08	3.21	0.46	0.07	5.60	2.11	0.007
-7.89	19.20	21.40	0.09	3.26	0.49	0.06	5.64	2.20	0.006
-7.59	18.89	22.74	0.09	3.25	0.46	0.05	5.63	2.13	0.005
-7.28	18.58	23.92	0.09	3.40	0.47	0.09	5.75	2.15	0.008
-6.97	18.27	25.02	0.09	3.38	0.43	0.11	5.74	2.04	0.011
-6.66	17.96	25.99	0.08	3.26	0.39	0.10	5.64	1.96	0.009
-6.35	17.65	26.88	0.09	3.18	0.40	0.08	5.56	1.98	0.008
-6.04	17.34	27.65	0.09	3.03	0.40	0.09	5.43	1.98	0.009
-5.73	17.03	28.34	0.09	2.84	0.41	0.11	5.26	2.00	0.011
-5.42	16.72	28.92	0.10	2.68	0.44	0.11	5.11	2.07	0.010
-5.11	16.41	29.45	0.10	2.54	0.51	0.09	4.97	2.23	0.008
-4.80	16.10	29.91	0.10	2.31	0.40	0.10	4.74	1.98	0.009
-4.49	15.79	30.32	0.10	2.10	0.36	0.10	4.52	1.88	0.009
-4.18	15.48	30.65	0.10	1.90	0.40	0.09	4.30	1.98	0.009
-3.87	15.17	30.94	0.11	1.72	0.38	0.08	4.09	1.92	0.008
-3.56	14.86	31.17	0.10	1.64	0.42	0.07	4.00	2.02	0.007
-3.25	14.55	31.37	0.09	1.55	0.45	0.06	3.89	2.10	0.006
-2.94	14.24	31.54	0.09	1.43	0.45	0.06	3.74	2.10	0.006
-2.63	13.93	31.68	0.09	1.36	0.46	0.06	3.64	2.12	0.006
-2.32	13.62	31.79	0.10	1.33	0.43	0.06	3.60	2.06	0.006
-2.01	13.31	31.88	0.09	1.27	0.42	0.06	3.52	2.02	0.005
-1.70	13.00	31.94	0.09	1.24	0.44	0.03	3.48	2.06	0.003
-1.39	12.69	31.99	0.09	1.21	0.46	0.01	3.43	2.12	0.001
-1.08	12.38	32.02	0.08	1.20	0.45	0.01	3.42	2.09	0.001
-0.77	12.07	32.04	0.08	1.19	0.44	0.00	3.41	2.06	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.46	11.76	32.04	0.08	1.21	0.46	-0.01	3.43	2.12	-0.001
-0.15	11.46	32.03	0.09	1.21	0.45	-0.01	3.43	2.08	-0.001
0.15	11.15	31.99	0.08	1.24	0.47	-0.03	3.47	2.15	-0.003
0.46	10.84	31.95	0.08	1.25	0.46	-0.04	3.49	2.12	-0.003
0.77	10.53	31.90	0.08	1.30	0.46	-0.04	3.56	2.12	-0.004
1.08	10.22	31.83	0.08	1.34	0.48	-0.07	3.61	2.16	-0.007
1.39	9.91	31.74	0.08	1.40	0.53	-0.08	3.70	2.26	-0.008
1.70	9.60	31.63	0.08	1.46	0.56	-0.07	3.78	2.34	-0.007
2.01	9.29	31.50	0.07	1.53	0.60	-0.10	3.87	2.42	-0.010
2.32	8.98	31.34	0.07	1.68	0.63	-0.11	4.04	2.47	-0.010
2.63	8.67	31.15	0.07	1.82	0.63	-0.10	4.21	2.48	-0.010
2.94	8.36	30.94	0.06	1.95	0.58	-0.10	4.36	2.38	-0.010
3.25	8.05	30.70	0.07	2.13	0.58	-0.11	4.55	2.38	-0.011
3.56	7.74	30.42	0.06	2.28	0.74	-0.13	4.71	2.68	-0.013
3.87	7.43	30.09	0.06	2.47	0.76	-0.14	4.91	2.71	-0.014
4.18	7.12	29.71	0.06	2.66	0.74	-0.15	5.09	2.69	-0.014
4.49	6.81	29.28	0.05	2.85	0.71	-0.15	5.27	2.63	-0.015
4.80	6.50	28.80	0.05	3.03	0.79	-0.14	5.43	2.78	-0.014
5.11	6.19	28.27	0.05	3.20	0.81	-0.15	5.58	2.80	-0.015
5.42	5.88	27.66	0.04	3.38	0.80	-0.13	5.74	2.78	-0.013
5.73	5.57	26.98	0.03	3.50	0.75	-0.13	5.84	2.71	-0.013
6.04	5.26	26.21	0.03	3.63	0.76	-0.15	5.95	2.73	-0.014
6.35	4.95	25.38	0.03	3.69	0.74	-0.14	6.00	2.69	-0.013
6.66	4.64	24.43	0.02	3.73	0.73	-0.10	6.02	2.67	-0.010
6.97	4.33	23.41	0.01	3.65	0.70	-0.09	5.97	2.62	-0.009
7.28	4.02	22.27	0.01	3.64	0.68	-0.08	5.96	2.57	-0.008
7.59	3.72	21.04	0.00	3.51	0.64	-0.07	5.85	2.51	-0.007
7.89	3.41	19.72	-0.01	3.23	0.66	-0.07	5.61	2.53	-0.007
8.20	3.10	18.29	-0.01	2.94	0.60	-0.07	5.35	2.41	-0.006
8.51	2.79	16.76	-0.01	2.66	0.54	-0.03	5.09	2.30	-0.003
8.82	2.48	15.14	-0.01	2.39	0.47	0.00	4.82	2.13	0.000
9.13	2.17	13.40	-0.03	2.13	0.50	0.00	4.55	2.21	0.000
9.44	1.86	11.58	-0.03	1.80	0.45	0.01	4.19	2.10	0.001
9.75	1.55	9.64	-0.03	1.56	0.42	0.00	3.90	2.02	0.000
10.06	1.24	7.62	-0.03	1.46	0.36	0.00	3.77	1.87	0.000
10.37	0.93	5.51	-0.02	1.48	0.44	0.00	3.80	2.06	0.000
10.68	0.62	3.33	-0.01	1.76	0.33	0.02	4.14	1.78	0.002
10.99	0.31	1.07	0.04	1.43	0.13	-0.02	3.73	1.11	-0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
11.30	0.00	3.98	-0.74	19.03	31.65	-20.38	13.61	17.56	-1.985

Table N-45 Grid #1, L4, Plasma-300, Center (46-55)

L4 (300)							U_∞ =	32.10	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.30	22.60	1.05	-0.02	2.47	0.08	0.00	4.89	0.89	0.000
-10.99	22.29	2.78	0.03	2.70	0.18	-0.02	5.12	1.33	-0.002
-10.68	21.98	5.26	0.04	1.56	0.21	0.02	3.89	1.42	0.002
-10.37	21.67	7.37	0.04	1.46	0.21	0.00	3.77	1.44	0.000
-10.06	21.36	9.45	0.05	1.34	0.26	0.00	3.61	1.60	0.000
-9.75	21.05	11.45	0.06	1.65	0.26	0.01	4.00	1.59	0.001
-9.44	20.74	13.41	0.07	1.73	0.28	0.02	4.10	1.63	0.002
-9.13	20.43	15.22	0.07	2.12	0.28	0.03	4.53	1.65	0.003
-8.82	20.12	17.00	0.07	2.26	0.25	0.04	4.68	1.57	0.004
-8.51	19.81	18.61	0.08	2.55	0.26	0.04	4.98	1.58	0.004
-8.20	19.50	20.14	0.08	2.78	0.25	0.04	5.19	1.55	0.004
-7.89	19.20	21.53	0.09	2.88	0.26	0.06	5.28	1.58	0.006
-7.59	18.89	22.84	0.09	3.04	0.26	0.07	5.43	1.59	0.007
-7.28	18.58	24.00	0.10	3.11	0.29	0.08	5.49	1.68	0.007
-6.97	18.27	25.07	0.10	3.15	0.30	0.08	5.53	1.70	0.008
-6.66	17.96	26.04	0.10	3.02	0.32	0.08	5.42	1.76	0.008
-6.35	17.65	26.92	0.11	2.86	0.31	0.09	5.27	1.72	0.008
-6.04	17.34	27.67	0.11	2.79	0.27	0.10	5.20	1.62	0.009
-5.73	17.03	28.35	0.10	2.66	0.33	0.09	5.08	1.80	0.009
-5.42	16.72	28.96	0.10	2.53	0.42	0.10	4.95	2.02	0.009
-5.11	16.41	29.49	0.10	2.36	0.38	0.10	4.79	1.92	0.010
-4.80	16.10	29.96	0.11	2.12	0.32	0.10	4.53	1.77	0.009
-4.49	15.79	30.36	0.10	1.97	0.27	0.08	4.38	1.63	0.008
-4.18	15.48	30.68	0.10	1.84	0.26	0.08	4.23	1.59	0.008
-3.87	15.17	30.98	0.10	1.68	0.28	0.07	4.04	1.65	0.007
-3.56	14.86	31.23	0.10	1.60	0.29	0.07	3.94	1.68	0.007
-3.25	14.55	31.43	0.11	1.49	0.26	0.07	3.80	1.58	0.006
-2.94	14.24	31.60	0.11	1.38	0.27	0.06	3.66	1.62	0.006
-2.63	13.93	31.74	0.11	1.31	0.31	0.04	3.57	1.73	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.32	13.62	31.85	0.10	1.28	0.34	0.03	3.53	1.82	0.003
-2.01	13.31	31.94	0.10	1.23	0.30	0.03	3.46	1.71	0.003
-1.70	13.00	32.00	0.10	1.18	0.25	0.02	3.38	1.55	0.002
-1.39	12.69	32.05	0.10	1.17	0.27	0.02	3.37	1.63	0.002
-1.08	12.38	32.08	0.10	1.16	0.33	0.00	3.35	1.78	0.000
-0.77	12.07	32.09	0.10	1.15	0.37	-0.01	3.33	1.89	-0.001
-0.46	11.76	32.10	0.10	1.15	0.41	-0.01	3.35	1.99	-0.001
-0.15	11.46	32.08	0.10	1.18	0.41	-0.01	3.38	2.00	-0.001
0.15	11.15	32.05	0.10	1.20	0.42	-0.04	3.41	2.02	-0.003
0.46	10.84	31.99	0.10	1.24	0.46	-0.06	3.46	2.11	-0.006
0.77	10.53	31.94	0.10	1.25	0.38	-0.05	3.48	1.92	-0.005
1.08	10.22	31.86	0.09	1.30	0.40	-0.05	3.56	1.97	-0.005
1.39	9.91	31.76	0.09	1.36	0.40	-0.07	3.63	1.97	-0.006
1.70	9.60	31.64	0.09	1.42	0.41	-0.09	3.72	2.01	-0.009
2.01	9.29	31.50	0.09	1.51	0.44	-0.10	3.83	2.07	-0.010
2.32	8.98	31.33	0.08	1.63	0.45	-0.09	3.98	2.10	-0.009
2.63	8.67	31.15	0.07	1.76	0.47	-0.10	4.13	2.14	-0.010
2.94	8.36	30.92	0.07	1.90	0.46	-0.11	4.30	2.11	-0.010
3.25	8.05	30.66	0.07	2.06	0.48	-0.12	4.47	2.16	-0.012
3.56	7.74	30.35	0.07	2.25	0.44	-0.13	4.67	2.07	-0.013
3.87	7.43	30.00	0.06	2.41	0.51	-0.15	4.84	2.22	-0.014
4.18	7.12	29.62	0.06	2.58	0.47	-0.13	5.01	2.14	-0.013
4.49	6.81	29.19	0.06	2.77	0.57	-0.12	5.18	2.35	-0.012
4.80	6.50	28.69	0.06	2.92	0.68	-0.11	5.33	2.57	-0.010
5.11	6.19	28.13	0.05	3.09	0.63	-0.13	5.47	2.48	-0.013
5.42	5.88	27.51	0.04	3.25	0.65	-0.14	5.61	2.52	-0.013
5.73	5.57	26.81	0.03	3.35	0.64	-0.11	5.70	2.49	-0.011
6.04	5.26	26.02	0.02	3.49	0.64	-0.11	5.82	2.49	-0.010
6.35	4.95	25.17	0.02	3.52	0.63	-0.12	5.84	2.48	-0.011
6.66	4.64	24.23	0.01	3.56	0.62	-0.10	5.88	2.45	-0.009
6.97	4.33	23.20	0.01	3.51	0.56	-0.07	5.84	2.33	-0.007
7.28	4.02	22.05	0.01	3.42	0.55	-0.06	5.76	2.32	-0.005
7.59	3.72	20.85	-0.01	3.24	0.48	-0.05	5.61	2.15	-0.004
7.89	3.41	19.54	-0.01	2.99	0.48	-0.06	5.39	2.16	-0.006
8.20	3.10	18.13	-0.02	2.69	0.49	-0.02	5.11	2.19	-0.002
8.51	2.79	16.63	-0.02	2.45	0.41	-0.02	4.87	1.98	-0.002
8.82	2.48	15.02	-0.03	2.16	0.44	-0.02	4.58	2.07	-0.002
9.13	2.17	13.32	-0.03	1.86	0.48	-0.01	4.25	2.16	-0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
9.44	1.86	11.53	-0.03	1.58	0.38	-0.01	3.92	1.92	-0.001
9.75	1.55	9.66	-0.04	1.42	0.44	0.00	3.71	2.06	0.000
10.06	1.24	7.66	-0.05	1.28	0.46	-0.01	3.53	2.12	-0.001
10.37	0.93	5.61	-0.04	1.29	0.47	0.01	3.54	2.13	0.001
10.68	0.62	3.37	-0.02	1.33	0.27	0.00	3.59	1.61	0.000
10.99	0.31	0.54	0.07	0.61	0.15	0.00	2.43	1.21	0.000
11.30	0.00	0.03	0.06	0.02	0.00	0.00	0.44	0.22	0.000

Table N-46 Grid #1, L4, Plasma-300, Right (71-80)

L4 (300)							U_∞ =	32.15	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.30	22.60	1.54	-0.23	3.31	0.41	-0.10	5.66	2.00	-0.010
-10.99	22.29	3.35	0.04	2.03	0.38	0.05	4.43	1.92	0.005
-10.68	21.98	5.57	0.03	1.42	0.20	0.03	3.71	1.41	0.002
-10.37	21.67	7.74	0.04	1.37	0.20	0.01	3.64	1.41	0.001
-10.06	21.36	9.75	0.05	1.40	0.18	0.02	3.69	1.33	0.002
-9.75	21.05	11.74	0.06	1.69	0.22	0.02	4.05	1.46	0.002
-9.44	20.74	13.65	0.07	1.73	0.20	0.02	4.09	1.39	0.002
-9.13	20.43	15.42	0.08	2.11	0.23	0.04	4.52	1.48	0.004
-8.82	20.12	17.18	0.09	2.25	0.26	0.05	4.67	1.59	0.005
-8.51	19.81	18.75	0.08	2.50	0.30	0.06	4.92	1.70	0.005
-8.20	19.50	20.25	0.08	2.78	0.31	0.07	5.19	1.74	0.007
-7.89	19.20	21.62	0.09	2.89	0.26	0.07	5.28	1.58	0.007
-7.59	18.89	22.92	0.09	2.93	0.27	0.06	5.32	1.63	0.006
-7.28	18.58	24.05	0.10	3.06	0.34	0.08	5.44	1.80	0.008
-6.97	18.27	25.13	0.10	3.11	0.29	0.10	5.49	1.67	0.010
-6.66	17.96	26.08	0.10	3.01	0.31	0.09	5.40	1.74	0.008
-6.35	17.65	26.95	0.11	2.83	0.35	0.09	5.23	1.85	0.009
-6.04	17.34	27.70	0.12	2.75	0.32	0.10	5.16	1.75	0.010
-5.73	17.03	28.38	0.11	2.70	0.29	0.10	5.12	1.68	0.010
-5.42	16.72	28.96	0.12	2.56	0.30	0.10	4.97	1.71	0.010
-5.11	16.41	29.51	0.11	2.38	0.32	0.09	4.80	1.75	0.008
-4.80	16.10	29.98	0.11	2.18	0.37	0.09	4.59	1.88	0.008
-4.49	15.79	30.38	0.11	1.99	0.37	0.07	4.39	1.88	0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-4.18	15.48	30.71	0.11	1.83	0.32	0.07	4.21	1.77	0.007
-3.87	15.17	31.01	0.11	1.66	0.33	0.08	4.01	1.79	0.008
-3.56	14.86	31.27	0.12	1.53	0.30	0.07	3.85	1.71	0.007
-3.25	14.55	31.47	0.12	1.46	0.32	0.07	3.76	1.75	0.007
-2.94	14.24	31.63	0.12	1.41	0.37	0.05	3.69	1.90	0.005
-2.63	13.93	31.78	0.11	1.35	0.33	0.05	3.61	1.78	0.004
-2.32	13.62	31.89	0.11	1.27	0.30	0.04	3.50	1.69	0.004
-2.01	13.31	31.98	0.11	1.25	0.30	0.04	3.48	1.71	0.004
-1.70	13.00	32.05	0.10	1.21	0.33	0.03	3.42	1.78	0.003
-1.39	12.69	32.10	0.10	1.18	0.29	0.03	3.38	1.67	0.003
-1.08	12.38	32.13	0.10	1.15	0.32	0.02	3.34	1.76	0.001
-0.77	12.07	32.15	0.10	1.14	0.33	-0.01	3.32	1.78	-0.001
-0.46	11.76	32.15	0.10	1.16	0.30	-0.02	3.35	1.71	-0.002
-0.15	11.46	32.12	0.09	1.17	0.32	-0.02	3.37	1.76	-0.002
0.15	11.15	32.09	0.10	1.19	0.35	-0.02	3.40	1.83	-0.002
0.46	10.84	32.05	0.09	1.22	0.37	-0.03	3.44	1.89	-0.003
0.77	10.53	31.98	0.09	1.27	0.34	-0.04	3.50	1.81	-0.004
1.08	10.22	31.90	0.08	1.32	0.38	-0.05	3.57	1.92	-0.005
1.39	9.91	31.80	0.09	1.37	0.46	-0.08	3.64	2.11	-0.007
1.70	9.60	31.67	0.09	1.44	0.46	-0.10	3.74	2.12	-0.009
2.01	9.29	31.53	0.09	1.52	0.37	-0.08	3.84	1.88	-0.008
2.32	8.98	31.36	0.08	1.64	0.36	-0.08	3.98	1.88	-0.008
2.63	8.67	31.16	0.08	1.78	0.48	-0.09	4.15	2.15	-0.009
2.94	8.36	30.92	0.08	1.94	0.56	-0.12	4.34	2.34	-0.012
3.25	8.05	30.66	0.07	2.11	0.48	-0.10	4.51	2.16	-0.010
3.56	7.74	30.34	0.07	2.28	0.49	-0.12	4.70	2.19	-0.011
3.87	7.43	29.99	0.07	2.48	0.60	-0.12	4.90	2.41	-0.011
4.18	7.12	29.60	0.06	2.63	0.62	-0.12	5.04	2.46	-0.012
4.49	6.81	29.15	0.06	2.77	0.55	-0.14	5.18	2.31	-0.013
4.80	6.50	28.64	0.05	2.92	0.63	-0.11	5.32	2.46	-0.010
5.11	6.19	28.08	0.04	3.06	0.64	-0.08	5.44	2.48	-0.007
5.42	5.88	27.44	0.04	3.27	0.71	-0.11	5.62	2.63	-0.010
5.73	5.57	26.73	0.03	3.34	0.75	-0.13	5.68	2.69	-0.013
6.04	5.26	25.95	0.03	3.44	0.68	-0.11	5.77	2.57	-0.011
6.35	4.95	25.08	0.01	3.48	0.68	-0.09	5.80	2.57	-0.009
6.66	4.64	24.14	0.01	3.50	0.66	-0.09	5.82	2.52	-0.008
6.97	4.33	23.11	0.01	3.40	0.60	-0.07	5.74	2.41	-0.007
7.28	4.02	21.96	0.00	3.32	0.56	-0.08	5.67	2.33	-0.008

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
7.59	3.72	20.76	-0.01	3.16	0.56	-0.06	5.53	2.32	-0.005
7.89	3.41	19.46	-0.02	2.91	0.54	-0.05	5.31	2.29	-0.005
8.20	3.10	18.07	-0.01	2.68	0.49	-0.02	5.10	2.18	-0.002
8.51	2.79	16.55	-0.03	2.41	0.46	-0.01	4.83	2.12	-0.001
8.82	2.48	14.99	-0.03	2.13	0.45	-0.02	4.54	2.09	-0.001
9.13	2.17	13.31	-0.04	1.95	0.40	-0.01	4.34	1.97	-0.001
9.44	1.86	11.52	-0.04	1.63	0.35	-0.02	3.97	1.83	-0.002
9.75	1.55	9.66	-0.04	1.42	0.43	0.00	3.70	2.04	0.000
10.06	1.24	7.72	-0.04	1.29	0.41	0.00	3.53	1.99	0.000
10.37	0.93	5.71	-0.04	1.26	0.33	0.00	3.49	1.79	0.000
10.68	0.62	3.49	-0.03	1.35	0.29	0.00	3.61	1.68	0.000
10.99	0.31	1.54	0.02	1.20	0.09	0.00	3.40	0.94	0.000
11.30	0.00	0.49	0.03	0.90	0.01	-0.01	2.96	0.24	-0.001

Table N-47 Grid #1, L5, Plasma-Off, Left (1-10)

L5 (Off)							U_∞ =	27.19	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.54	23.08	0.43	-1.40	2.46	1.84	0.16	5.76	4.99	0.022
-11.23	22.77	1.56	0.00	0.61	0.20	-0.02	2.87	1.66	-0.003
-10.91	22.45	2.98	0.01	0.71	0.18	-0.01	3.10	1.56	-0.002
-10.59	22.13	4.67	0.02	0.79	0.16	0.00	3.27	1.46	0.000
-10.28	21.82	6.37	0.03	1.18	0.18	-0.01	4.00	1.56	-0.001
-9.96	21.50	8.06	0.03	1.48	0.19	0.00	4.47	1.58	0.000
-9.64	21.19	9.69	0.04	1.78	0.19	0.01	4.90	1.61	0.002
-9.33	20.87	11.23	0.06	2.34	0.19	0.02	5.63	1.59	0.002
-9.01	20.55	12.77	0.06	2.71	0.22	0.03	6.06	1.71	0.004
-8.70	20.24	14.21	0.07	3.24	0.22	0.06	6.62	1.73	0.008
-8.38	19.92	15.59	0.07	3.64	0.22	0.08	7.02	1.71	0.010
-8.06	19.60	16.85	0.08	3.98	0.26	0.10	7.34	1.86	0.013
-7.75	19.29	18.10	0.08	4.28	0.27	0.12	7.61	1.92	0.016
-7.43	18.97	19.21	0.09	4.38	0.24	0.12	7.70	1.82	0.016
-7.11	18.66	20.26	0.09	4.35	0.23	0.13	7.67	1.77	0.018
-6.80	18.34	21.15	0.09	4.33	0.26	0.14	7.65	1.89	0.019
-6.48	18.02	22.02	0.10	4.14	0.22	0.14	7.49	1.74	0.019

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-6.17	17.71	22.78	0.10	3.84	0.24	0.14	7.21	1.79	0.019
-5.85	17.39	23.47	0.10	3.56	0.21	0.14	6.94	1.70	0.019
-5.53	17.08	24.06	0.11	3.27	0.24	0.14	6.65	1.79	0.019
-5.22	16.76	24.59	0.10	3.00	0.25	0.14	6.37	1.86	0.019
-4.90	16.44	25.03	0.11	2.75	0.26	0.13	6.10	1.88	0.018
-4.58	16.13	25.44	0.11	2.51	0.25	0.13	5.83	1.83	0.018
-4.27	15.81	25.78	0.11	2.19	0.25	0.12	5.45	1.84	0.016
-3.95	15.49	26.07	0.12	2.00	0.25	0.12	5.20	1.85	0.016
-3.64	15.18	26.32	0.12	1.80	0.25	0.11	4.94	1.84	0.015
-3.32	14.86	26.54	0.12	1.61	0.25	0.09	4.67	1.85	0.012
-3.00	14.55	26.71	0.11	1.44	0.27	0.07	4.41	1.90	0.009
-2.69	14.23	26.87	0.11	1.28	0.28	0.05	4.16	1.95	0.007
-2.37	13.91	26.99	0.11	1.15	0.28	0.04	3.95	1.93	0.006
-2.06	13.60	27.07	0.11	1.12	0.25	0.03	3.89	1.85	0.005
-1.74	13.28	27.12	0.11	1.12	0.28	0.03	3.89	1.94	0.004
-1.42	12.96	27.17	0.11	1.05	0.26	0.02	3.77	1.87	0.002
-1.11	12.65	27.18	0.11	1.03	0.25	0.00	3.73	1.85	0.000
-0.79	12.33	27.19	0.11	1.03	0.24	-0.01	3.74	1.81	-0.001
-0.47	12.02	27.18	0.11	1.04	0.24	-0.02	3.76	1.80	-0.002
-0.16	11.70	27.16	0.10	1.07	0.24	-0.03	3.81	1.79	-0.004
0.16	11.38	27.10	0.10	1.14	0.27	-0.05	3.93	1.92	-0.007
0.47	11.07	27.03	0.10	1.22	0.25	-0.06	4.06	1.85	-0.008
0.79	10.75	26.94	0.09	1.32	0.26	-0.06	4.22	1.87	-0.009
1.11	10.43	26.82	0.09	1.46	0.28	-0.08	4.45	1.96	-0.011
1.42	10.12	26.68	0.09	1.64	0.33	-0.10	4.71	2.11	-0.013
1.74	9.80	26.53	0.09	1.79	0.29	-0.12	4.92	1.98	-0.016
2.06	9.49	26.36	0.09	1.93	0.26	-0.13	5.10	1.88	-0.018
2.37	9.17	26.15	0.08	2.15	0.29	-0.15	5.40	1.98	-0.020
2.69	8.85	25.92	0.08	2.39	0.28	-0.17	5.69	1.94	-0.023
3.00	8.54	25.66	0.07	2.56	0.25	-0.18	5.88	1.82	-0.024
3.32	8.22	25.38	0.07	2.82	0.26	-0.18	6.18	1.89	-0.024
3.64	7.91	25.07	0.07	3.11	0.25	-0.18	6.48	1.83	-0.025
3.95	7.59	24.72	0.07	3.35	0.26	-0.19	6.73	1.88	-0.026
4.27	7.27	24.32	0.06	3.67	0.25	-0.20	7.05	1.83	-0.027
4.58	6.96	23.88	0.06	4.00	0.23	-0.20	7.36	1.78	-0.027
4.90	6.64	23.39	0.06	4.36	0.22	-0.21	7.68	1.74	-0.028
5.22	6.32	22.84	0.06	4.67	0.19	-0.22	7.95	1.61	-0.030
5.53	6.01	22.24	0.05	4.94	0.22	-0.23	8.18	1.73	-0.031

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.85	5.69	21.58	0.05	5.18	0.28	-0.20	8.37	1.94	-0.027
6.17	5.38	20.85	0.04	5.35	0.23	-0.19	8.51	1.77	-0.026
6.48	5.06	20.06	0.03	5.53	0.20	-0.19	8.65	1.65	-0.026
6.80	4.74	19.17	0.03	5.48	0.21	-0.18	8.61	1.69	-0.024
7.11	4.43	18.23	0.03	5.34	0.22	-0.16	8.50	1.73	-0.021
7.43	4.11	17.20	0.02	5.08	0.19	-0.12	8.29	1.59	-0.017
7.75	3.79	16.11	0.02	4.59	0.16	-0.11	7.88	1.49	-0.015
8.06	3.48	14.92	0.00	4.19	0.19	-0.08	7.53	1.59	-0.011
8.38	3.16	13.68	0.00	3.63	0.15	-0.07	7.01	1.43	-0.010
8.70	2.85	12.38	-0.01	3.15	0.17	-0.05	6.53	1.49	-0.007
9.01	2.53	11.03	-0.01	2.56	0.18	-0.02	5.88	1.58	-0.003
9.33	2.21	9.63	-0.01	2.10	0.20	-0.01	5.34	1.64	-0.002
9.64	1.90	8.19	-0.01	1.68	0.17	-0.01	4.76	1.53	-0.002
9.96	1.58	6.66	-0.02	1.23	0.17	0.00	4.08	1.50	0.000
10.28	1.26	5.14	-0.02	0.84	0.16	0.00	3.37	1.46	0.000
10.59	0.95	3.56	-0.02	0.66	0.16	0.00	2.99	1.45	0.000
10.91	0.63	2.09	-0.02	0.58	0.13	0.00	2.81	1.33	0.000
11.23	0.32	1.07	0.01	0.58	0.10	0.02	2.80	1.14	0.002
11.54	0.00	1.32	-0.01	0.00	0.00	0.00	0.00	0.11	0.000

Table N-48 Grid #1, L5, Plasma-Off, Center (46-55)

L5 (Off)							U_∞ =	27.15	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.54	23.08	0.46	-0.27	0.89	0.25	0.02	3.47	1.84	0.003
-11.23	22.77	1.59	-0.10	0.81	0.23	0.10	3.32	1.78	0.013
-10.91	22.45	3.49	-0.01	0.67	0.16	0.02	3.01	1.48	0.003
-10.59	22.13	5.19	-0.01	0.73	0.18	0.01	3.14	1.57	0.002
-10.28	21.82	6.92	0.01	1.22	0.18	0.04	4.07	1.58	0.006
-9.96	21.50	8.55	0.02	1.43	0.21	0.03	4.40	1.68	0.004
-9.64	21.19	10.13	0.03	1.78	0.21	0.03	4.91	1.68	0.005
-9.33	20.87	11.62	0.04	2.30	0.20	0.05	5.58	1.65	0.007
-9.01	20.55	13.13	0.05	2.66	0.16	0.06	6.01	1.49	0.008
-8.70	20.24	14.51	0.05	3.06	0.18	0.07	6.44	1.55	0.010
-8.38	19.92	15.85	0.06	3.52	0.17	0.09	6.91	1.50	0.012

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-8.06	19.60	17.08	0.07	3.89	0.19	0.10	7.26	1.63	0.013
-7.75	19.29	18.29	0.08	4.08	0.20	0.12	7.44	1.63	0.017
-7.43	18.97	19.38	0.09	4.15	0.18	0.13	7.51	1.57	0.018
-7.11	18.66	20.39	0.10	4.26	0.21	0.14	7.61	1.70	0.019
-6.80	18.34	21.27	0.10	4.22	0.21	0.15	7.57	1.68	0.021
-6.48	18.02	22.10	0.10	3.94	0.21	0.16	7.31	1.70	0.021
-6.17	17.71	22.84	0.11	3.69	0.18	0.15	7.08	1.56	0.020
-5.85	17.39	23.50	0.12	3.41	0.22	0.14	6.80	1.71	0.018
-5.53	17.08	24.07	0.12	3.13	0.26	0.13	6.52	1.86	0.018
-5.22	16.76	24.60	0.12	2.83	0.23	0.14	6.19	1.78	0.019
-4.90	16.44	25.05	0.12	2.54	0.21	0.12	5.87	1.71	0.016
-4.58	16.13	25.44	0.13	2.30	0.24	0.13	5.59	1.82	0.017
-4.27	15.81	25.78	0.13	2.06	0.25	0.13	5.29	1.85	0.017
-3.95	15.49	26.07	0.14	1.85	0.25	0.11	5.01	1.83	0.015
-3.64	15.18	26.32	0.13	1.68	0.25	0.10	4.78	1.83	0.013
-3.32	14.86	26.54	0.13	1.49	0.26	0.08	4.50	1.87	0.011
-3.00	14.55	26.70	0.13	1.37	0.26	0.06	4.31	1.88	0.009
-2.69	14.23	26.84	0.14	1.28	0.24	0.05	4.16	1.82	0.007
-2.37	13.91	26.95	0.14	1.17	0.25	0.04	3.99	1.84	0.006
-2.06	13.60	27.03	0.14	1.09	0.22	0.04	3.85	1.71	0.005
-1.74	13.28	27.09	0.13	1.06	0.21	0.02	3.79	1.68	0.003
-1.42	12.96	27.13	0.13	1.02	0.21	0.01	3.71	1.69	0.002
-1.11	12.65	27.15	0.12	1.03	0.21	0.01	3.74	1.70	0.001
-0.79	12.33	27.14	0.12	1.05	0.22	0.00	3.78	1.74	-0.001
-0.47	12.02	27.13	0.12	1.06	0.23	-0.02	3.80	1.75	-0.003
-0.16	11.70	27.10	0.12	1.09	0.27	-0.03	3.84	1.93	-0.004
0.16	11.38	27.05	0.12	1.14	0.30	-0.04	3.94	2.00	-0.005
0.47	11.07	26.97	0.11	1.24	0.22	-0.05	4.11	1.74	-0.007
0.79	10.75	26.88	0.11	1.32	0.23	-0.06	4.23	1.78	-0.009
1.11	10.43	26.76	0.11	1.47	0.23	-0.08	4.46	1.77	-0.011
1.42	10.12	26.62	0.11	1.63	0.26	-0.10	4.70	1.86	-0.013
1.74	9.80	26.46	0.10	1.78	0.25	-0.10	4.91	1.86	-0.014
2.06	9.49	26.29	0.10	1.92	0.23	-0.12	5.11	1.76	-0.016
2.37	9.17	26.08	0.10	2.12	0.23	-0.13	5.36	1.76	-0.018
2.69	8.85	25.85	0.09	2.37	0.22	-0.14	5.67	1.72	-0.019
3.00	8.54	25.59	0.09	2.61	0.20	-0.15	5.96	1.64	-0.021
3.32	8.22	25.29	0.09	2.89	0.21	-0.16	6.26	1.67	-0.021
3.64	7.91	24.97	0.08	3.16	0.22	-0.17	6.55	1.73	-0.023

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.95	7.59	24.63	0.08	3.37	0.23	-0.18	6.76	1.78	-0.025
4.27	7.27	24.22	0.08	3.68	0.30	-0.20	7.07	2.01	-0.027
4.58	6.96	23.77	0.08	4.01	0.27	-0.21	7.38	1.93	-0.028
4.90	6.64	23.26	0.07	4.36	0.18	-0.20	7.69	1.58	-0.027
5.22	6.32	22.73	0.07	4.64	0.21	-0.21	7.94	1.67	-0.028
5.53	6.01	22.11	0.06	4.91	0.20	-0.20	8.16	1.66	-0.027
5.85	5.69	21.43	0.06	5.07	0.19	-0.19	8.30	1.58	-0.026
6.17	5.38	20.69	0.05	5.18	0.18	-0.18	8.39	1.58	-0.025
6.48	5.06	19.87	0.05	5.31	0.18	-0.16	8.48	1.57	-0.022
6.80	4.74	18.99	0.04	5.32	0.20	-0.14	8.50	1.63	-0.019
7.11	4.43	18.05	0.03	5.17	0.19	-0.13	8.38	1.59	-0.018
7.43	4.11	17.00	0.02	4.86	0.18	-0.11	8.12	1.56	-0.015
7.75	3.79	15.92	0.02	4.40	0.24	-0.09	7.73	1.79	-0.012
8.06	3.48	14.76	0.01	4.01	0.25	-0.08	7.37	1.83	-0.010
8.38	3.16	13.54	0.01	3.54	0.21	-0.06	6.93	1.68	-0.008
8.70	2.85	12.25	0.01	3.03	0.18	-0.04	6.41	1.56	-0.006
9.01	2.53	10.92	0.00	2.46	0.18	-0.03	5.78	1.55	-0.004
9.33	2.21	9.54	-0.01	2.00	0.18	-0.02	5.21	1.56	-0.003
9.64	1.90	8.12	-0.01	1.64	0.16	-0.01	4.72	1.46	-0.002
9.96	1.58	6.67	-0.02	1.26	0.18	-0.01	4.14	1.58	-0.001
10.28	1.26	5.17	-0.02	0.85	0.14	-0.01	3.40	1.37	-0.001
10.59	0.95	3.65	-0.02	0.64	0.13	0.00	2.95	1.34	-0.001
10.91	0.63	2.16	-0.02	0.46	0.14	-0.01	2.51	1.38	-0.001
11.23	0.32	1.25	-0.01	0.46	0.10	0.01	2.51	1.16	0.001
11.54	0.00	0.05	0.02	0.01	0.01	0.00	0.28	0.33	0.000

Table N-49 Grid #1, L5, Plasma-Off, Right (71-80)

L5 (Off)							U_∞ =	27.09	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.54	23.08	0.02	-0.31	0.41	0.16	0.06	2.38	1.47	0.008
-11.23	22.77	2.01	-0.03	0.79	0.13	0.04	3.29	1.35	0.005
-10.91	22.45	3.91	0.00	0.61	0.12	0.03	2.88	1.29	0.004
-10.59	22.13	5.59	-0.01	0.78	0.12	0.03	3.25	1.28	0.004
-10.28	21.82	7.35	0.03	1.20	0.12	0.07	4.04	1.28	0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.96	21.50	8.93	0.04	1.34	0.12	0.04	4.27	1.26	0.006
-9.64	21.19	10.48	0.05	1.83	0.15	0.07	5.00	1.43	0.010
-9.33	20.87	11.95	0.06	2.35	0.16	0.09	5.66	1.47	0.013
-9.01	20.55	13.41	0.09	2.56	0.15	0.08	5.91	1.44	0.011
-8.70	20.24	14.78	0.10	3.02	0.13	0.10	6.42	1.36	0.014
-8.38	19.92	16.10	0.11	3.55	0.14	0.14	6.96	1.38	0.019
-8.06	19.60	17.27	0.12	3.79	0.15	0.15	7.18	1.42	0.020
-7.75	19.29	18.49	0.14	3.99	0.15	0.16	7.37	1.43	0.022
-7.43	18.97	19.52	0.14	4.20	0.17	0.18	7.56	1.54	0.025
-7.11	18.66	20.52	0.16	4.14	0.16	0.19	7.52	1.50	0.025
-6.80	18.34	21.36	0.16	4.11	0.16	0.20	7.48	1.46	0.027
-6.48	18.02	22.17	0.17	3.87	0.18	0.19	7.26	1.59	0.026
-6.17	17.71	22.90	0.18	3.61	0.20	0.20	7.02	1.66	0.027
-5.85	17.39	23.55	0.19	3.38	0.19	0.19	6.79	1.59	0.026
-5.53	17.08	24.11	0.19	3.05	0.18	0.18	6.45	1.58	0.025
-5.22	16.76	24.62	0.20	2.79	0.19	0.17	6.16	1.60	0.023
-4.90	16.44	25.04	0.20	2.60	0.17	0.17	5.95	1.53	0.023
-4.58	16.13	25.42	0.21	2.34	0.16	0.17	5.64	1.49	0.023
-4.27	15.81	25.77	0.21	2.03	0.18	0.15	5.26	1.58	0.020
-3.95	15.49	26.06	0.21	1.80	0.18	0.14	4.95	1.55	0.019
-3.64	15.18	26.30	0.22	1.58	0.18	0.11	4.65	1.58	0.016
-3.32	14.86	26.51	0.21	1.41	0.19	0.09	4.38	1.59	0.012
-3.00	14.55	26.67	0.21	1.30	0.18	0.08	4.21	1.57	0.011
-2.69	14.23	26.81	0.21	1.17	0.18	0.06	3.99	1.58	0.009
-2.37	13.91	26.91	0.21	1.10	0.18	0.05	3.87	1.58	0.007
-2.06	13.60	26.99	0.20	1.02	0.19	0.04	3.72	1.59	0.005
-1.74	13.28	27.04	0.20	0.98	0.21	0.03	3.66	1.69	0.004
-1.42	12.96	27.08	0.19	0.99	0.23	0.02	3.68	1.75	0.002
-1.11	12.65	27.09	0.18	0.99	0.22	0.01	3.67	1.73	0.001
-0.79	12.33	27.09	0.18	1.00	0.20	-0.01	3.69	1.63	-0.001
-0.47	12.02	27.07	0.18	1.01	0.19	-0.02	3.71	1.62	-0.002
-0.16	11.70	27.03	0.18	1.07	0.22	-0.03	3.81	1.73	-0.004
0.16	11.38	26.97	0.16	1.13	0.23	-0.04	3.92	1.77	-0.005
0.47	11.07	26.90	0.16	1.20	0.23	-0.05	4.04	1.76	-0.007
0.79	10.75	26.80	0.15	1.32	0.23	-0.07	4.24	1.75	-0.010
1.11	10.43	26.68	0.15	1.45	0.20	-0.08	4.45	1.66	-0.011
1.42	10.12	26.54	0.14	1.62	0.21	-0.10	4.69	1.68	-0.014
1.74	9.80	26.38	0.14	1.79	0.19	-0.11	4.93	1.61	-0.016

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.06	9.49	26.19	0.14	1.99	0.17	-0.13	5.20	1.53	-0.018
2.37	9.17	25.99	0.13	2.15	0.18	-0.14	5.41	1.58	-0.019
2.69	8.85	25.75	0.13	2.36	0.20	-0.16	5.67	1.66	-0.022
3.00	8.54	25.49	0.12	2.64	0.20	-0.17	6.00	1.64	-0.023
3.32	8.22	25.20	0.11	2.86	0.19	-0.18	6.24	1.61	-0.025
3.64	7.91	24.88	0.11	3.13	0.18	-0.19	6.54	1.58	-0.026
3.95	7.59	24.52	0.10	3.38	0.19	-0.19	6.78	1.62	-0.026
4.27	7.27	24.09	0.10	3.74	0.18	-0.20	7.14	1.58	-0.027
4.58	6.96	23.64	0.09	4.13	0.16	-0.22	7.50	1.47	-0.029
4.90	6.64	23.14	0.09	4.42	0.15	-0.22	7.76	1.45	-0.030
5.22	6.32	22.58	0.08	4.66	0.14	-0.22	7.97	1.38	-0.030
5.53	6.01	21.95	0.07	4.96	0.17	-0.22	8.22	1.52	-0.030
5.85	5.69	21.26	0.07	5.11	0.15	-0.21	8.34	1.44	-0.029
6.17	5.38	20.52	0.06	5.25	0.14	-0.20	8.46	1.37	-0.027
6.48	5.06	19.72	0.05	5.33	0.19	-0.19	8.52	1.60	-0.025
6.80	4.74	18.82	0.05	5.20	0.20	-0.17	8.42	1.63	-0.023
7.11	4.43	17.87	0.04	5.16	0.15	-0.15	8.38	1.45	-0.020
7.43	4.11	16.83	0.03	4.79	0.17	-0.13	8.08	1.53	-0.017
7.75	3.79	15.78	0.03	4.38	0.15	-0.11	7.73	1.43	-0.015
8.06	3.48	14.60	0.02	4.03	0.12	-0.10	7.41	1.29	-0.013
8.38	3.16	13.38	0.01	3.52	0.13	-0.08	6.93	1.32	-0.010
8.70	2.85	12.11	0.01	3.03	0.16	-0.06	6.42	1.48	-0.008
9.01	2.53	10.79	0.01	2.41	0.14	-0.04	5.73	1.36	-0.005
9.33	2.21	9.43	0.00	1.99	0.13	-0.03	5.21	1.31	-0.004
9.64	1.90	8.01	0.00	1.60	0.13	-0.02	4.67	1.31	-0.003
9.96	1.58	6.58	-0.01	1.20	0.13	-0.02	4.04	1.33	-0.003
10.28	1.26	5.11	-0.01	0.86	0.11	-0.01	3.42	1.24	-0.002
10.59	0.95	3.64	-0.01	0.63	0.11	-0.01	2.92	1.21	-0.001
10.91	0.63	2.17	0.00	0.42	0.11	-0.02	2.40	1.24	-0.003
11.23	0.32	1.12	-0.12	0.39	0.13	0.00	2.30	1.31	0.000
11.54	0.00	0.10	0.07	0.01	0.01	0.00	0.43	0.42	0.000

Table N-50 Grid #1, L5, Plasma-150, Left (1-10)

L5 (150)							U_∞ =	29.43	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.54	23.08	0.51	-1.18	11.43	3.65	-0.38	11.49	6.49	-0.044
-11.23	22.77	1.20	0.07	5.72	0.49	0.06	8.13	2.38	0.007
-10.91	22.45	3.98	0.14	3.52	0.65	-0.03	6.37	2.73	-0.004
-10.59	22.13	5.75	0.04	1.65	0.61	-0.02	4.36	2.64	-0.003
-10.28	21.82	7.37	0.03	1.54	0.42	-0.01	4.22	2.19	-0.001
-9.96	21.50	9.00	0.05	1.44	0.37	0.01	4.08	2.08	0.002
-9.64	21.19	10.70	0.05	1.76	0.45	0.00	4.51	2.27	0.000
-9.33	20.87	12.37	0.06	2.10	0.33	0.03	4.92	1.96	0.003
-9.01	20.55	13.98	0.07	2.30	0.30	0.03	5.15	1.87	0.004
-8.70	20.24	15.48	0.08	2.73	0.32	0.04	5.61	1.91	0.005
-8.38	19.92	16.94	0.08	2.98	0.30	0.05	5.86	1.87	0.006
-8.06	19.60	18.31	0.08	3.12	0.27	0.06	6.00	1.78	0.007
-7.75	19.29	19.63	0.08	3.23	0.32	0.06	6.11	1.93	0.007
-7.43	18.97	20.77	0.09	3.42	0.28	0.07	6.29	1.78	0.008
-7.11	18.66	21.87	0.10	3.60	0.27	0.09	6.45	1.76	0.010
-6.80	18.34	22.86	0.10	3.60	0.28	0.10	6.45	1.79	0.012
-6.48	18.02	23.79	0.10	3.41	0.34	0.11	6.27	1.98	0.013
-6.17	17.71	24.58	0.11	3.32	0.29	0.12	6.19	1.84	0.013
-5.85	17.39	25.31	0.11	3.16	0.33	0.10	6.04	1.95	0.012
-5.53	17.08	25.96	0.11	2.91	0.36	0.10	5.80	2.03	0.011
-5.22	16.76	26.56	0.11	2.52	0.29	0.09	5.39	1.82	0.010
-4.90	16.44	27.05	0.11	2.28	0.29	0.10	5.13	1.82	0.011
-4.58	16.13	27.48	0.11	2.00	0.29	0.08	4.80	1.83	0.010
-4.27	15.81	27.85	0.11	1.83	0.31	0.09	4.60	1.88	0.010
-3.95	15.49	28.17	0.11	1.65	0.32	0.08	4.37	1.91	0.009
-3.64	15.18	28.44	0.11	1.54	0.32	0.06	4.22	1.93	0.007
-3.32	14.86	28.67	0.11	1.44	0.33	0.05	4.07	1.94	0.006
-3.00	14.55	28.86	0.11	1.35	0.32	0.06	3.95	1.92	0.007
-2.69	14.23	29.02	0.11	1.26	0.34	0.05	3.82	1.99	0.006
-2.37	13.91	29.15	0.11	1.22	0.32	0.04	3.75	1.94	0.004
-2.06	13.60	29.26	0.12	1.16	0.31	0.03	3.67	1.90	0.004
-1.74	13.28	29.34	0.11	1.11	0.31	0.03	3.58	1.88	0.003
-1.42	12.96	29.39	0.10	1.10	0.31	0.01	3.57	1.89	0.002
-1.11	12.65	29.42	0.10	1.08	0.31	0.00	3.53	1.88	0.000
-0.79	12.33	29.43	0.11	1.08	0.29	-0.01	3.54	1.82	-0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.47	12.02	29.42	0.10	1.12	0.31	-0.01	3.60	1.91	-0.002
-0.16	11.70	29.39	0.10	1.15	0.31	-0.02	3.65	1.90	-0.003
0.16	11.38	29.35	0.09	1.17	0.31	-0.04	3.68	1.91	-0.004
0.47	11.07	29.30	0.09	1.20	0.33	-0.05	3.73	1.95	-0.006
0.79	10.75	29.21	0.09	1.29	0.32	-0.07	3.85	1.93	-0.008
1.11	10.43	29.10	0.09	1.36	0.34	-0.07	3.96	1.99	-0.008
1.42	10.12	28.98	0.09	1.43	0.34	-0.08	4.07	1.97	-0.009
1.74	9.80	28.84	0.09	1.52	0.33	-0.09	4.19	1.95	-0.011
2.06	9.49	28.68	0.08	1.62	0.36	-0.10	4.33	2.03	-0.012
2.37	9.17	28.48	0.08	1.75	0.32	-0.11	4.50	1.93	-0.012
2.69	8.85	28.26	0.08	1.84	0.33	-0.11	4.61	1.95	-0.013
3.00	8.54	28.02	0.07	1.97	0.29	-0.12	4.77	1.84	-0.014
3.32	8.22	27.72	0.07	2.16	0.27	-0.12	4.99	1.75	-0.014
3.64	7.91	27.38	0.07	2.38	0.26	-0.13	5.24	1.74	-0.015
3.95	7.59	27.01	0.07	2.60	0.32	-0.12	5.48	1.92	-0.014
4.27	7.27	26.60	0.06	2.81	0.32	-0.14	5.69	1.91	-0.017
4.58	6.96	26.12	0.06	3.08	0.33	-0.15	5.97	1.96	-0.017
4.90	6.64	25.60	0.05	3.26	0.29	-0.15	6.13	1.82	-0.017
5.22	6.32	25.02	0.04	3.40	0.27	-0.15	6.26	1.76	-0.017
5.53	6.01	24.38	0.04	3.52	0.25	-0.14	6.38	1.70	-0.016
5.85	5.69	23.67	0.03	3.65	0.35	-0.13	6.49	2.01	-0.015
6.17	5.38	22.88	0.03	3.73	0.36	-0.13	6.56	2.05	-0.015
6.48	5.06	22.02	0.02	3.79	0.23	-0.12	6.61	1.63	-0.013
6.80	4.74	21.08	0.02	3.76	0.32	-0.11	6.58	1.92	-0.012
7.11	4.43	20.09	0.02	3.66	0.28	-0.10	6.50	1.81	-0.012
7.43	4.11	18.99	0.01	3.39	0.21	-0.07	6.26	1.54	-0.008
7.75	3.79	17.83	0.00	3.17	0.18	-0.06	6.05	1.45	-0.007
8.06	3.48	16.60	0.00	3.00	0.28	-0.06	5.88	1.81	-0.007
8.38	3.16	15.31	-0.01	2.65	0.25	-0.04	5.53	1.69	-0.005
8.70	2.85	13.90	-0.02	2.21	0.21	-0.03	5.05	1.54	-0.003
9.01	2.53	12.45	-0.03	1.87	0.20	-0.02	4.64	1.52	-0.003
9.33	2.21	10.93	-0.02	1.61	0.19	-0.02	4.32	1.48	-0.002
9.64	1.90	9.40	-0.03	1.31	0.19	-0.01	3.90	1.47	-0.001
9.96	1.58	7.81	-0.03	1.25	0.21	0.00	3.80	1.55	-0.001
10.28	1.26	6.23	-0.03	1.23	0.24	0.00	3.77	1.68	0.000
10.59	0.95	4.58	-0.03	1.63	0.37	-0.01	4.34	2.06	-0.001
10.91	0.63	2.75	-0.03	2.51	0.38	-0.04	5.38	2.09	-0.005
11.23	0.32	0.65	-0.08	2.30	0.19	0.04	5.15	1.49	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
11.54	0.00	2.31	-0.05	2.29	0.05	0.31	5.14	0.74	0.035

Table N-51 Grid #1, L5, Plasma-150, Center (46-55)

L5 (150)							U_∞ =	29.42	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.54	23.08	0.92	-0.06	11.23	0.79	0.45	11.39	3.02	0.052
-11.23	22.77	2.19	-0.04	13.98	0.70	0.45	12.71	2.84	0.052
-10.91	22.45	4.60	0.01	2.77	0.29	0.08	5.66	1.83	0.009
-10.59	22.13	6.18	0.00	1.33	0.27	0.04	3.92	1.76	0.004
-10.28	21.82	7.84	0.02	1.17	0.22	0.02	3.67	1.58	0.002
-9.96	21.50	9.45	0.03	1.16	0.15	0.02	3.67	1.33	0.002
-9.64	21.19	11.12	0.04	1.59	0.15	0.04	4.29	1.30	0.004
-9.33	20.87	12.74	0.05	1.81	0.17	0.04	4.57	1.41	0.004
-9.01	20.55	14.33	0.06	2.07	0.18	0.04	4.90	1.45	0.005
-8.70	20.24	15.79	0.06	2.41	0.19	0.06	5.28	1.49	0.007
-8.38	19.92	17.22	0.08	2.65	0.22	0.06	5.54	1.58	0.007
-8.06	19.60	18.53	0.09	2.90	0.23	0.07	5.79	1.64	0.009
-7.75	19.29	19.79	0.09	3.12	0.19	0.09	6.00	1.50	0.010
-7.43	18.97	20.92	0.09	3.24	0.18	0.10	6.12	1.46	0.011
-7.11	18.66	22.00	0.10	3.23	0.22	0.11	6.11	1.61	0.013
-6.80	18.34	22.96	0.11	3.23	0.22	0.11	6.11	1.59	0.013
-6.48	18.02	23.87	0.12	3.14	0.20	0.11	6.02	1.51	0.012
-6.17	17.71	24.64	0.12	3.02	0.28	0.11	5.90	1.79	0.013
-5.85	17.39	25.36	0.13	2.90	0.34	0.11	5.79	1.99	0.013
-5.53	17.08	26.01	0.12	2.68	0.26	0.12	5.56	1.72	0.013
-5.22	16.76	26.58	0.13	2.39	0.25	0.11	5.26	1.71	0.013
-4.90	16.44	27.05	0.13	2.17	0.30	0.12	5.01	1.86	0.013
-4.58	16.13	27.49	0.13	1.94	0.25	0.10	4.74	1.69	0.012
-4.27	15.81	27.86	0.13	1.74	0.20	0.09	4.48	1.53	0.011
-3.95	15.49	28.17	0.13	1.58	0.23	0.08	4.28	1.65	0.010
-3.64	15.18	28.43	0.13	1.49	0.22	0.08	4.15	1.60	0.009
-3.32	14.86	28.66	0.13	1.41	0.20	0.07	4.03	1.53	0.008
-3.00	14.55	28.84	0.13	1.32	0.23	0.06	3.91	1.61	0.007
-2.69	14.23	29.01	0.13	1.25	0.26	0.05	3.80	1.72	0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.37	13.91	29.14	0.14	1.17	0.22	0.04	3.68	1.60	0.005
-2.06	13.60	29.24	0.13	1.11	0.23	0.03	3.59	1.62	0.004
-1.74	13.28	29.31	0.13	1.10	0.26	0.02	3.57	1.75	0.002
-1.42	12.96	29.36	0.13	1.11	0.27	0.02	3.58	1.76	0.002
-1.11	12.65	29.40	0.14	1.08	0.28	0.01	3.53	1.80	0.001
-0.79	12.33	29.42	0.13	1.06	0.26	-0.01	3.49	1.74	-0.001
-0.47	12.02	29.40	0.13	1.09	0.25	-0.01	3.54	1.71	-0.002
-0.16	11.70	29.37	0.13	1.10	0.24	-0.02	3.57	1.66	-0.003
0.16	11.38	29.33	0.13	1.13	0.26	-0.03	3.61	1.72	-0.003
0.47	11.07	29.26	0.12	1.18	0.24	-0.04	3.69	1.66	-0.005
0.79	10.75	29.18	0.12	1.23	0.22	-0.05	3.77	1.58	-0.006
1.11	10.43	29.07	0.11	1.28	0.22	-0.06	3.85	1.61	-0.007
1.42	10.12	28.94	0.11	1.38	0.25	-0.06	3.99	1.70	-0.007
1.74	9.80	28.79	0.10	1.49	0.23	-0.07	4.15	1.63	-0.008
2.06	9.49	28.61	0.09	1.59	0.24	-0.08	4.29	1.68	-0.009
2.37	9.17	28.42	0.10	1.69	0.25	-0.09	4.42	1.69	-0.010
2.69	8.85	28.19	0.10	1.82	0.23	-0.10	4.59	1.61	-0.011
3.00	8.54	27.92	0.09	2.00	0.23	-0.10	4.81	1.64	-0.012
3.32	8.22	27.61	0.08	2.17	0.21	-0.11	5.00	1.57	-0.013
3.64	7.91	27.26	0.08	2.42	0.23	-0.12	5.29	1.62	-0.014
3.95	7.59	26.87	0.08	2.62	0.24	-0.13	5.50	1.67	-0.015
4.27	7.27	26.46	0.08	2.72	0.23	-0.12	5.61	1.63	-0.014
4.58	6.96	25.98	0.07	2.98	0.22	-0.12	5.87	1.59	-0.014
4.90	6.64	25.45	0.07	3.18	0.25	-0.13	6.06	1.71	-0.015
5.22	6.32	24.86	0.06	3.33	0.20	-0.13	6.20	1.52	-0.015
5.53	6.01	24.19	0.06	3.40	0.21	-0.12	6.27	1.56	-0.014
5.85	5.69	23.47	0.05	3.55	0.19	-0.11	6.41	1.49	-0.013
6.17	5.38	22.68	0.04	3.64	0.17	-0.10	6.48	1.38	-0.012
6.48	5.06	21.81	0.03	3.60	0.18	-0.10	6.45	1.45	-0.011
6.80	4.74	20.87	0.03	3.53	0.21	-0.07	6.38	1.57	-0.008
7.11	4.43	19.87	0.02	3.34	0.18	-0.08	6.21	1.45	-0.009
7.43	4.11	18.79	0.01	3.22	0.15	-0.08	6.10	1.33	-0.009
7.75	3.79	17.64	0.01	3.00	0.18	-0.06	5.89	1.42	-0.007
8.06	3.48	16.41	0.00	2.69	0.16	-0.05	5.57	1.38	-0.006
8.38	3.16	15.12	0.00	2.37	0.16	-0.04	5.23	1.36	-0.005
8.70	2.85	13.75	-0.01	2.08	0.17	-0.03	4.90	1.39	-0.004
9.01	2.53	12.32	-0.01	1.77	0.16	-0.02	4.53	1.35	-0.003
9.33	2.21	10.85	-0.01	1.50	0.20	-0.02	4.16	1.52	-0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
9.64	1.90	9.34	-0.02	1.26	0.20	-0.02	3.82	1.53	-0.002
9.96	1.58	7.76	-0.02	1.14	0.20	-0.01	3.63	1.53	-0.002
10.28	1.26	6.21	-0.03	1.09	0.22	-0.01	3.55	1.61	-0.001
10.59	0.95	4.64	-0.03	1.25	0.29	-0.02	3.80	1.83	-0.002
10.91	0.63	2.86	-0.02	1.50	0.33	-0.01	4.16	1.95	-0.001
11.23	0.32	0.91	0.00	1.44	0.17	0.02	4.09	1.42	0.003
11.54	0.00	0.21	0.02	0.34	0.00	0.00	1.99	0.21	0.000

Table N-52   Grid #1, L5, Plasma-150, Right (71-80)

L5 (150)							U_∞ =	29.35	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.54	23.08	0.09	-0.19	0.89	0.49	0.19	3.21	2.38	0.022
-11.23	22.77	1.39	0.12	2.93	0.27	0.14	5.83	1.76	0.016
-10.91	22.45	5.00	0.03	1.70	0.24	0.09	4.44	1.68	0.010
-10.59	22.13	6.53	0.01	1.35	0.21	0.08	3.95	1.54	0.009
-10.28	21.82	8.23	0.05	1.11	0.15	0.04	3.60	1.30	0.004
-9.96	21.50	9.82	0.04	1.15	0.12	0.04	3.66	1.18	0.004
-9.64	21.19	11.48	0.06	1.55	0.13	0.08	4.24	1.21	0.009
-9.33	20.87	13.08	0.08	1.68	0.14	0.06	4.42	1.26	0.007
-9.01	20.55	14.62	0.10	1.99	0.14	0.07	4.81	1.26	0.008
-8.70	20.24	16.03	0.11	2.43	0.14	0.09	5.31	1.26	0.011
-8.38	19.92	17.46	0.13	2.52	0.16	0.09	5.41	1.37	0.010
-8.06	19.60	18.73	0.14	2.74	0.14	0.10	5.64	1.28	0.011
-7.75	19.29	19.96	0.15	3.01	0.19	0.11	5.91	1.48	0.013
-7.43	18.97	21.06	0.15	3.22	0.18	0.13	6.11	1.45	0.016
-7.11	18.66	22.12	0.17	3.12	0.17	0.13	6.02	1.39	0.015
-6.80	18.34	23.05	0.17	3.15	0.14	0.14	6.04	1.27	0.016
-6.48	18.02	23.94	0.18	2.99	0.17	0.15	5.90	1.40	0.017
-6.17	17.71	24.68	0.18	2.94	0.18	0.14	5.84	1.45	0.017
-5.85	17.39	25.39	0.19	2.89	0.19	0.15	5.79	1.48	0.018
-5.53	17.08	26.03	0.20	2.63	0.15	0.15	5.53	1.34	0.017
-5.22	16.76	26.59	0.20	2.33	0.20	0.13	5.20	1.52	0.015
-4.90	16.44	27.06	0.21	2.09	0.22	0.12	4.93	1.58	0.014
-4.58	16.13	27.51	0.21	1.81	0.21	0.11	4.58	1.55	0.013

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.27	15.81	27.85	0.21	1.63	0.18	0.10	4.36	1.44	0.011
-3.95	15.49	28.14	0.20	1.50	0.17	0.10	4.17	1.39	0.011
-3.64	15.18	28.39	0.20	1.42	0.19	0.09	4.06	1.50	0.011
-3.32	14.86	28.61	0.20	1.33	0.19	0.09	3.93	1.50	0.010
-3.00	14.55	28.80	0.20	1.24	0.18	0.08	3.80	1.46	0.010
-2.69	14.23	28.95	0.20	1.19	0.19	0.07	3.72	1.50	0.008
-2.37	13.91	29.08	0.20	1.16	0.18	0.05	3.66	1.45	0.006
-2.06	13.60	29.19	0.19	1.13	0.20	0.05	3.61	1.51	0.005
-1.74	13.28	29.26	0.19	1.07	0.22	0.03	3.53	1.60	0.004
-1.42	12.96	29.31	0.19	1.05	0.20	0.02	3.49	1.52	0.003
-1.11	12.65	29.34	0.18	1.04	0.18	0.01	3.47	1.45	0.001
-0.79	12.33	29.35	0.18	1.07	0.21	0.01	3.52	1.55	0.001
-0.47	12.02	29.33	0.17	1.10	0.21	0.00	3.58	1.56	0.000
-0.16	11.70	29.31	0.18	1.12	0.21	-0.01	3.60	1.57	-0.002
0.16	11.38	29.26	0.17	1.15	0.22	-0.03	3.65	1.60	-0.003
0.47	11.07	29.19	0.16	1.20	0.20	-0.04	3.73	1.53	-0.004
0.79	10.75	29.09	0.15	1.24	0.19	-0.04	3.79	1.47	-0.005
1.11	10.43	29.00	0.15	1.28	0.19	-0.05	3.86	1.49	-0.006
1.42	10.12	28.86	0.15	1.36	0.18	-0.06	3.98	1.46	-0.007
1.74	9.80	28.70	0.14	1.45	0.24	-0.08	4.10	1.67	-0.009
2.06	9.49	28.52	0.14	1.51	0.24	-0.09	4.19	1.66	-0.010
2.37	9.17	28.32	0.13	1.60	0.25	-0.09	4.31	1.71	-0.010
2.69	8.85	28.09	0.12	1.72	0.23	-0.09	4.46	1.65	-0.011
3.00	8.54	27.83	0.11	1.89	0.19	-0.11	4.68	1.48	-0.013
3.32	8.22	27.51	0.11	2.13	0.19	-0.11	4.97	1.50	-0.013
3.64	7.91	27.16	0.10	2.34	0.15	-0.12	5.21	1.31	-0.014
3.95	7.59	26.78	0.10	2.49	0.15	-0.12	5.37	1.34	-0.014
4.27	7.27	26.34	0.09	2.71	0.17	-0.13	5.60	1.40	-0.016
4.58	6.96	25.84	0.08	2.97	0.20	-0.13	5.87	1.52	-0.016
4.90	6.64	25.30	0.07	3.15	0.17	-0.13	6.05	1.42	-0.015
5.22	6.32	24.71	0.07	3.27	0.16	-0.12	6.17	1.35	-0.014
5.53	6.01	24.03	0.06	3.35	0.17	-0.12	6.23	1.42	-0.014
5.85	5.69	23.31	0.06	3.46	0.16	-0.12	6.34	1.35	-0.014
6.17	5.38	22.51	0.04	3.52	0.14	-0.11	6.40	1.26	-0.013
6.48	5.06	21.63	0.04	3.48	0.14	-0.10	6.35	1.26	-0.011
6.80	4.74	20.70	0.03	3.43	0.16	-0.10	6.31	1.35	-0.011
7.11	4.43	19.70	0.02	3.18	0.15	-0.08	6.07	1.31	-0.009
7.43	4.11	18.62	0.02	3.10	0.15	-0.07	6.00	1.31	-0.008

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.75	3.79	17.48	0.01	2.90	0.14	-0.06	5.80	1.26	-0.007
8.06	3.48	16.27	0.00	2.69	0.14	-0.04	5.59	1.29	-0.005
8.38	3.16	14.98	0.00	2.29	0.14	-0.04	5.15	1.29	-0.004
8.70	2.85	13.62	-0.01	2.04	0.14	-0.03	4.86	1.26	-0.003
9.01	2.53	12.21	-0.01	1.81	0.15	-0.03	4.58	1.31	-0.004
9.33	2.21	10.75	-0.02	1.47	0.13	-0.02	4.13	1.22	-0.003
9.64	1.90	9.27	-0.02	1.25	0.15	-0.02	3.81	1.31	-0.002
9.96	1.58	7.71	-0.02	1.13	0.15	-0.02	3.63	1.32	-0.003
10.28	1.26	6.18	-0.02	1.04	0.17	-0.02	3.48	1.41	-0.002
10.59	0.95	4.64	-0.02	1.19	0.25	-0.03	3.72	1.72	-0.003
10.91	0.63	2.87	0.00	1.45	0.29	-0.05	4.10	1.84	-0.006
11.23	0.32	0.94	-0.14	1.17	0.20	0.01	3.69	1.51	0.001
11.54	0.00	0.16	0.09	0.02	0.01	0.00	0.48	0.29	0.000

Table N-53 Grid #1, L5, Plasma-300, Left (1-10)

L5 (300)							U_∞ =	31.09	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.54	23.08	0.51	-0.04	3.37	3.68	-0.06	5.90	6.17	-0.006
-11.23	22.77	1.56	0.08	1.91	0.37	-0.02	4.44	1.96	-0.002
-10.91	22.45	3.75	0.03	1.42	0.40	-0.03	3.83	2.03	-0.003
-10.59	22.13	5.77	0.05	1.27	0.61	0.00	3.62	2.51	0.000
-10.28	21.82	7.82	0.05	1.31	0.73	0.00	3.68	2.76	0.000
-9.96	21.50	9.64	0.07	1.30	0.44	-0.01	3.66	2.14	-0.001
-9.64	21.19	11.50	0.07	1.56	0.38	-0.02	4.02	1.99	-0.002
-9.33	20.87	13.21	0.09	1.65	0.96	0.02	4.13	3.16	0.002
-9.01	20.55	14.89	0.09	1.89	0.64	0.02	4.43	2.57	0.002
-8.70	20.24	16.45	0.10	2.20	0.73	0.02	4.77	2.74	0.002
-8.38	19.92	17.96	0.09	2.24	0.47	0.01	4.81	2.21	0.001
-8.06	19.60	19.29	0.11	2.40	0.45	0.04	4.98	2.15	0.004
-7.75	19.29	20.61	0.11	2.56	0.38	0.05	5.15	1.97	0.005
-7.43	18.97	21.79	0.11	2.63	0.40	0.04	5.21	2.04	0.004
-7.11	18.66	22.93	0.11	2.65	0.42	0.04	5.24	2.08	0.004
-6.80	18.34	23.92	0.12	2.67	0.43	0.05	5.25	2.11	0.005
-6.48	18.02	24.86	0.11	2.73	0.49	0.04	5.32	2.24	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-6.17	17.71	25.68	0.12	2.70	0.51	0.05	5.28	2.30	0.005
-5.85	17.39	26.47	0.12	2.58	0.50	0.07	5.16	2.28	0.007
-5.53	17.08	27.15	0.11	2.45	0.50	0.07	5.03	2.27	0.007
-5.22	16.76	27.76	0.11	2.30	0.53	0.08	4.87	2.33	0.008
-4.90	16.44	28.27	0.12	2.21	0.58	0.10	4.79	2.45	0.010
-4.58	16.13	28.75	0.12	2.14	0.45	0.06	4.70	2.16	0.006
-4.27	15.81	29.16	0.12	2.01	0.45	0.04	4.56	2.16	0.005
-3.95	15.49	29.53	0.12	1.92	0.52	0.05	4.46	2.32	0.005
-3.64	15.18	29.84	0.11	1.86	0.62	0.06	4.38	2.54	0.006
-3.32	14.86	30.11	0.12	1.76	0.55	0.05	4.26	2.37	0.005
-3.00	14.55	30.35	0.12	1.65	0.51	0.05	4.13	2.30	0.005
-2.69	14.23	30.55	0.11	1.54	0.56	0.04	3.99	2.41	0.004
-2.37	13.91	30.70	0.11	1.47	0.66	0.02	3.90	2.61	0.002
-2.06	13.60	30.83	0.11	1.36	0.61	0.03	3.74	2.52	0.003
-1.74	13.28	30.93	0.11	1.31	0.58	0.03	3.67	2.44	0.003
-1.42	12.96	31.00	0.11	1.29	0.65	0.02	3.66	2.59	0.003
-1.11	12.65	31.05	0.11	1.30	0.65	0.01	3.66	2.59	0.001
-0.79	12.33	31.09	0.11	1.26	0.71	0.01	3.61	2.71	0.001
-0.47	12.02	31.09	0.11	1.27	0.80	0.01	3.63	2.87	0.001
-0.16	11.70	31.08	0.11	1.30	0.88	-0.01	3.67	3.02	-0.001
0.16	11.38	31.05	0.11	1.32	0.77	-0.02	3.70	2.82	-0.002
0.47	11.07	30.98	0.10	1.39	0.75	-0.03	3.79	2.79	-0.003
0.79	10.75	30.90	0.11	1.46	0.89	-0.07	3.88	3.03	-0.007
1.11	10.43	30.80	0.10	1.52	0.85	-0.05	3.97	2.96	-0.006
1.42	10.12	30.68	0.09	1.62	1.01	-0.08	4.10	3.24	-0.008
1.74	9.80	30.54	0.08	1.75	1.40	-0.10	4.25	3.81	-0.010
2.06	9.49	30.36	0.07	1.84	1.27	-0.09	4.36	3.63	-0.010
2.37	9.17	30.14	0.08	1.99	1.17	-0.09	4.54	3.48	-0.009
2.69	8.85	29.91	0.07	2.14	1.29	-0.09	4.70	3.65	-0.009
3.00	8.54	29.63	0.08	2.25	1.39	-0.09	4.82	3.80	-0.010
3.32	8.22	29.33	0.09	2.33	1.34	-0.11	4.91	3.72	-0.012
3.64	7.91	28.97	0.09	2.48	1.51	-0.14	5.07	3.95	-0.014
3.95	7.59	28.58	0.08	2.68	1.61	-0.14	5.27	4.08	-0.014
4.27	7.27	28.15	0.06	2.84	1.52	-0.11	5.42	3.96	-0.011
4.58	6.96	27.65	0.05	2.99	1.42	-0.07	5.56	3.84	-0.007
4.90	6.64	27.10	0.05	3.16	1.50	-0.10	5.72	3.94	-0.011
5.22	6.32	26.49	0.05	3.28	1.46	-0.08	5.82	3.88	-0.008
5.53	6.01	25.81	0.03	3.40	1.45	-0.09	5.93	3.87	-0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.85	5.69	25.05	0.03	3.42	1.40	-0.11	5.95	3.80	-0.011
6.17	5.38	24.23	0.01	3.33	1.25	-0.07	5.87	3.59	-0.007
6.48	5.06	23.36	0.03	3.34	0.98	-0.05	5.88	3.18	-0.005
6.80	4.74	22.40	0.02	3.35	1.06	-0.05	5.89	3.30	-0.005
7.11	4.43	21.37	0.01	3.20	1.09	-0.03	5.76	3.35	-0.003
7.43	4.11	20.24	0.00	2.95	0.77	-0.02	5.52	2.82	-0.002
7.75	3.79	19.06	-0.01	2.73	0.63	-0.03	5.31	2.55	-0.003
8.06	3.48	17.80	-0.01	2.59	0.64	-0.03	5.18	2.58	-0.004
8.38	3.16	16.45	-0.01	2.33	0.59	-0.03	4.91	2.47	-0.004
8.70	2.85	15.03	-0.02	2.06	0.49	0.00	4.62	2.26	0.001
9.01	2.53	13.54	-0.03	1.85	0.44	0.00	4.37	2.14	0.000
9.33	2.21	11.95	-0.02	1.63	0.51	-0.01	4.11	2.30	-0.001
9.64	1.90	10.30	-0.02	1.39	0.53	0.00	3.79	2.35	0.000
9.96	1.58	8.54	-0.04	1.30	0.43	0.01	3.67	2.12	0.001
10.28	1.26	6.75	-0.04	1.18	0.39	0.01	3.49	2.01	0.001
10.59	0.95	4.91	-0.04	1.11	0.43	0.00	3.39	2.10	0.000
10.91	0.63	2.96	-0.04	1.15	0.30	0.00	3.45	1.75	0.000
11.23	0.32	0.80	-0.07	0.97	0.21	0.02	3.16	1.48	0.002
11.54	0.00	2.20	0.08	0.00	0.03	0.00	0.00	0.52	0.000

Table N-54 Grid #1, L5, Plasma-300, Center (46-55)

L5 (300)							$U_\infty =$	31.08	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.54	23.08	0.50	-0.05	1.07	0.40	0.08	3.33	2.03	0.008
-11.23	22.77	1.74	-0.02	1.71	0.28	0.07	4.21	1.69	0.007
-10.91	22.45	4.52	0.04	1.15	0.22	0.03	3.44	1.49	0.003
-10.59	22.13	6.38	0.02	1.11	0.22	0.03	3.39	1.51	0.003
-10.28	21.82	8.38	0.04	0.98	0.19	0.01	3.19	1.42	0.002
-9.96	21.50	10.12	0.04	1.05	0.20	0.02	3.30	1.44	0.002
-9.64	21.19	11.97	0.06	1.31	0.22	0.03	3.68	1.51	0.003
-9.33	20.87	13.64	0.07	1.37	0.21	0.02	3.76	1.46	0.003
-9.01	20.55	15.24	0.08	1.68	0.22	0.04	4.17	1.51	0.004
-8.70	20.24	16.77	0.08	1.85	0.24	0.05	4.37	1.58	0.005
-8.38	19.92	18.22	0.10	1.96	0.33	0.05	4.50	1.85	0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-8.06	19.60	19.53	0.10	2.15	0.28	0.06	4.72	1.71	0.006
-7.75	19.29	20.81	0.11	2.34	0.25	0.06	4.92	1.59	0.006
-7.43	18.97	21.96	0.11	2.34	0.26	0.05	4.92	1.62	0.005
-7.11	18.66	23.05	0.11	2.32	0.30	0.06	4.90	1.76	0.007
-6.80	18.34	24.03	0.12	2.42	0.36	0.06	5.00	1.92	0.007
-6.48	18.02	24.95	0.13	2.48	0.33	0.07	5.06	1.84	0.008
-6.17	17.71	25.78	0.14	2.43	0.30	0.08	5.01	1.77	0.008
-5.85	17.39	26.52	0.14	2.27	0.27	0.07	4.85	1.66	0.007
-5.53	17.08	27.19	0.14	2.17	0.30	0.06	4.74	1.76	0.006
-5.22	16.76	27.78	0.14	2.10	0.34	0.07	4.67	1.88	0.007
-4.90	16.44	28.31	0.14	2.05	0.31	0.07	4.61	1.79	0.007
-4.58	16.13	28.77	0.14	1.96	0.32	0.06	4.51	1.81	0.007
-4.27	15.81	29.18	0.14	1.86	0.40	0.06	4.39	2.02	0.006
-3.95	15.49	29.54	0.14	1.80	0.40	0.06	4.31	2.04	0.006
-3.64	15.18	29.86	0.14	1.70	0.42	0.06	4.19	2.09	0.007
-3.32	14.86	30.14	0.15	1.59	0.39	0.06	4.05	2.01	0.006
-3.00	14.55	30.37	0.14	1.48	0.36	0.05	3.92	1.93	0.005
-2.69	14.23	30.57	0.15	1.38	0.43	0.04	3.78	2.10	0.004
-2.37	13.91	30.72	0.15	1.30	0.42	0.03	3.67	2.08	0.003
-2.06	13.60	30.84	0.15	1.24	0.40	0.02	3.59	2.03	0.002
-1.74	13.28	30.94	0.14	1.20	0.41	0.02	3.52	2.06	0.002
-1.42	12.96	31.02	0.13	1.15	0.39	0.01	3.44	2.00	0.001
-1.11	12.65	31.06	0.14	1.14	0.46	0.01	3.44	2.19	0.001
-0.79	12.33	31.08	0.13	1.14	0.48	0.01	3.43	2.22	0.001
-0.47	12.02	31.08	0.13	1.16	0.54	-0.01	3.47	2.36	-0.001
-0.16	11.70	31.06	0.13	1.20	0.58	-0.02	3.52	2.44	-0.002
0.16	11.38	31.02	0.12	1.24	0.47	-0.03	3.59	2.21	-0.003
0.47	11.07	30.96	0.12	1.30	0.60	-0.04	3.66	2.49	-0.004
0.79	10.75	30.87	0.13	1.35	0.65	-0.04	3.74	2.60	-0.004
1.11	10.43	30.77	0.13	1.45	0.61	-0.03	3.87	2.51	-0.003
1.42	10.12	30.63	0.12	1.54	0.68	-0.04	3.99	2.66	-0.004
1.74	9.80	30.46	0.12	1.68	0.73	-0.06	4.17	2.74	-0.006
2.06	9.49	30.28	0.11	1.77	0.70	-0.08	4.28	2.70	-0.009
2.37	9.17	30.06	0.11	1.88	0.81	-0.07	4.41	2.89	-0.008
2.69	8.85	29.80	0.11	2.02	0.81	-0.09	4.57	2.89	-0.010
3.00	8.54	29.51	0.10	2.16	0.84	-0.10	4.73	2.95	-0.011
3.32	8.22	29.20	0.10	2.27	0.96	-0.09	4.85	3.16	-0.009
3.64	7.91	28.84	0.09	2.40	0.92	-0.08	4.99	3.09	-0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
3.95	7.59	28.44	0.09	2.48	0.93	-0.10	5.07	3.10	-0.010
4.27	7.27	27.99	0.09	2.68	0.95	-0.09	5.27	3.14	-0.009
4.58	6.96	27.49	0.07	2.86	0.94	-0.10	5.44	3.12	-0.011
4.90	6.64	26.91	0.06	3.01	0.87	-0.12	5.58	3.01	-0.012
5.22	6.32	26.28	0.06	3.06	0.91	-0.10	5.63	3.07	-0.011
5.53	6.01	25.60	0.07	3.12	0.93	-0.07	5.68	3.10	-0.007
5.85	5.69	24.85	0.06	3.13	0.84	-0.06	5.69	2.94	-0.006
6.17	5.38	24.02	0.05	3.15	0.80	-0.09	5.71	2.87	-0.009
6.48	5.06	23.14	0.05	3.05	0.76	-0.08	5.62	2.81	-0.008
6.80	4.74	22.17	0.03	3.01	0.70	-0.06	5.58	2.69	-0.006
7.11	4.43	21.15	0.02	2.86	0.56	-0.06	5.44	2.41	-0.006
7.43	4.11	20.04	0.01	2.69	0.54	-0.03	5.28	2.37	-0.003
7.75	3.79	18.88	0.00	2.51	0.45	-0.03	5.09	2.15	-0.003
8.06	3.48	17.62	0.00	2.36	0.41	-0.04	4.94	2.05	-0.004
8.38	3.16	16.27	-0.01	2.05	0.36	-0.01	4.60	1.93	-0.001
8.70	2.85	14.89	-0.02	1.82	0.38	-0.02	4.34	1.99	-0.002
9.01	2.53	13.43	-0.02	1.70	0.38	-0.01	4.19	1.99	-0.001
9.33	2.21	11.87	-0.03	1.44	0.33	-0.01	3.85	1.84	-0.002
9.64	1.90	10.24	-0.04	1.21	0.31	-0.01	3.54	1.80	-0.001
9.96	1.58	8.54	-0.04	1.14	0.41	0.00	3.44	2.06	0.000
10.28	1.26	6.80	-0.04	1.00	0.38	0.00	3.22	1.99	0.000
10.59	0.95	4.99	-0.05	0.89	0.34	-0.01	3.03	1.89	-0.001
10.91	0.63	3.03	-0.05	0.91	0.32	-0.01	3.07	1.81	-0.001
11.23	0.32	1.13	-0.01	0.75	0.21	0.00	2.79	1.47	0.000
11.54	0.00	0.06	-0.01	0.01	0.00	0.00	0.34	0.14	0.000

Table N-55 Grid #1, L5, Plasma-300, Right (71-80)

L5 (300)							U_∞ =	31.03	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.54	23.08	0.29	-0.14	0.75	0.42	0.12	2.78	2.08	0.013
-11.23	22.77	1.83	0.01	1.59	0.26	0.17	4.06	1.65	0.017
-10.91	22.45	4.90	0.03	0.99	0.19	0.04	3.21	1.39	0.004
-10.59	22.13	6.83	0.02	1.18	0.21	0.08	3.50	1.47	0.008
-10.28	21.82	8.81	0.07	0.96	0.20	0.03	3.16	1.45	0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-9.96	21.50	10.54	0.06	1.21	0.23	0.06	3.55	1.54	0.006
-9.64	21.19	12.36	0.10	1.38	0.28	0.06	3.78	1.70	0.006
-9.33	20.87	13.98	0.11	1.35	0.37	0.04	3.75	1.96	0.004
-9.01	20.55	15.55	0.13	1.75	0.22	0.08	4.26	1.51	0.009
-8.70	20.24	17.06	0.13	1.88	0.22	0.07	4.42	1.52	0.007
-8.38	19.92	18.47	0.15	1.91	0.27	0.07	4.46	1.67	0.007
-8.06	19.60	19.74	0.15	2.15	0.28	0.09	4.73	1.71	0.009
-7.75	19.29	21.00	0.17	2.33	0.29	0.11	4.92	1.73	0.011
-7.43	18.97	22.13	0.18	2.29	0.27	0.09	4.88	1.68	0.010
-7.11	18.66	23.19	0.19	2.31	0.29	0.08	4.90	1.73	0.008
-6.80	18.34	24.12	0.19	2.41	0.27	0.10	5.00	1.69	0.010
-6.48	18.02	25.02	0.20	2.58	0.25	0.12	5.17	1.60	0.012
-6.17	17.71	25.82	0.20	2.54	0.25	0.13	5.14	1.61	0.013
-5.85	17.39	26.58	0.22	2.24	0.30	0.10	4.82	1.76	0.010
-5.53	17.08	27.21	0.22	2.13	0.31	0.09	4.70	1.79	0.009
-5.22	16.76	27.80	0.23	2.10	0.32	0.08	4.67	1.83	0.009
-4.90	16.44	28.30	0.22	2.04	0.39	0.10	4.61	2.01	0.010
-4.58	16.13	28.76	0.23	2.00	0.47	0.09	4.56	2.22	0.009
-4.27	15.81	29.15	0.22	1.93	0.40	0.09	4.48	2.03	0.010
-3.95	15.49	29.51	0.23	1.87	0.36	0.10	4.40	1.92	0.010
-3.64	15.18	29.83	0.23	1.78	0.35	0.09	4.30	1.91	0.009
-3.32	14.86	30.10	0.23	1.68	0.38	0.08	4.18	2.00	0.008
-3.00	14.55	30.32	0.22	1.61	0.44	0.07	4.08	2.14	0.007
-2.69	14.23	30.52	0.21	1.49	0.46	0.06	3.94	2.18	0.007
-2.37	13.91	30.67	0.21	1.40	0.47	0.05	3.82	2.22	0.006
-2.06	13.60	30.80	0.21	1.33	0.45	0.05	3.71	2.17	0.005
-1.74	13.28	30.89	0.21	1.26	0.42	0.03	3.61	2.10	0.003
-1.42	12.96	30.96	0.20	1.22	0.46	0.02	3.56	2.17	0.002
-1.11	12.65	31.01	0.20	1.23	0.56	0.02	3.58	2.42	0.002
-0.79	12.33	31.03	0.19	1.22	0.60	0.02	3.56	2.50	0.002
-0.47	12.02	31.03	0.19	1.23	0.54	0.01	3.57	2.36	0.001
-0.16	11.70	31.01	0.19	1.27	0.57	0.01	3.63	2.43	0.001
0.16	11.38	30.96	0.19	1.32	0.61	-0.02	3.70	2.53	-0.002
0.47	11.07	30.90	0.18	1.40	0.62	-0.02	3.81	2.54	-0.002
0.79	10.75	30.81	0.18	1.50	0.74	-0.03	3.95	2.77	-0.003
1.11	10.43	30.67	0.17	1.61	0.77	-0.03	4.09	2.83	-0.004
1.42	10.12	30.54	0.15	1.72	0.74	-0.04	4.23	2.76	-0.004
1.74	9.80	30.38	0.15	1.81	0.72	-0.06	4.34	2.73	-0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.06	9.49	30.18	0.14	1.95	0.86	-0.07	4.50	2.99	-0.007
2.37	9.17	29.95	0.13	2.08	0.95	-0.09	4.65	3.14	-0.009
2.69	8.85	29.70	0.14	2.20	1.18	-0.08	4.78	3.50	-0.008
3.00	8.54	29.40	0.13	2.28	1.02	-0.07	4.87	3.26	-0.007
3.32	8.22	29.08	0.12	2.42	1.06	-0.05	5.01	3.31	-0.005
3.64	7.91	28.72	0.11	2.50	1.03	-0.09	5.09	3.27	-0.010
3.95	7.59	28.32	0.10	2.61	0.93	-0.09	5.20	3.10	-0.010
4.27	7.27	27.84	0.09	2.87	0.86	-0.06	5.46	2.99	-0.007
4.58	6.96	27.33	0.10	3.07	1.03	-0.12	5.64	3.27	-0.012
4.90	6.64	26.74	0.09	3.17	1.09	-0.13	5.73	3.37	-0.014
5.22	6.32	26.11	0.08	3.24	0.97	-0.09	5.80	3.17	-0.010
5.53	6.01	25.41	0.06	3.24	0.91	-0.07	5.80	3.08	-0.007
5.85	5.69	24.66	0.05	3.14	0.84	-0.07	5.71	2.96	-0.007
6.17	5.38	23.85	0.05	3.13	0.85	-0.07	5.70	2.96	-0.007
6.48	5.06	22.96	0.04	3.15	0.80	-0.08	5.72	2.89	-0.009
6.80	4.74	21.97	0.03	3.11	0.71	-0.07	5.68	2.72	-0.007
7.11	4.43	20.95	0.03	2.87	0.61	-0.06	5.46	2.51	-0.006
7.43	4.11	19.86	0.01	2.67	0.49	-0.04	5.26	2.26	-0.004
7.75	3.79	18.70	0.00	2.48	0.42	-0.06	5.07	2.09	-0.006
8.06	3.48	17.43	-0.01	2.32	0.41	-0.04	4.91	2.06	-0.004
8.38	3.16	16.13	-0.01	2.05	0.33	-0.03	4.62	1.84	-0.004
8.70	2.85	14.75	-0.01	1.86	0.36	-0.03	4.40	1.94	-0.003
9.01	2.53	13.30	-0.02	1.74	0.38	-0.02	4.25	2.00	-0.002
9.33	2.21	11.75	-0.03	1.49	0.32	-0.03	3.93	1.82	-0.003
9.64	1.90	10.17	-0.04	1.25	0.30	-0.02	3.60	1.77	-0.002
9.96	1.58	8.49	-0.04	1.19	0.29	-0.01	3.51	1.74	-0.001
10.28	1.26	6.75	-0.04	1.02	0.28	-0.02	3.25	1.72	-0.002
10.59	0.95	5.04	-0.05	0.91	0.24	-0.02	3.07	1.57	-0.002
10.91	0.63	3.07	-0.04	0.95	0.26	-0.01	3.14	1.64	-0.001
11.23	0.32	1.13	-0.11	0.83	0.22	0.00	2.94	1.50	0.000
11.54	0.00	0.38	0.01	0.75	0.02	-0.04	2.79	0.43	-0.004

Table N-56 Grid #1, L6, Plasma-Off, Left (1-10)

L6 (Off)							$U_\infty =$	26.69	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.87	23.73	2.60	0.16	1.63	0.21	0.03	4.78	1.73	0.004
-11.54	23.41	1.98	0.06	3.21	0.05	0.01	6.72	0.84	0.001
-11.21	23.08	3.05	-0.02	0.75	0.25	-0.02	3.24	1.88	-0.002
-10.89	22.75	4.65	-0.02	0.89	0.28	-0.01	3.54	1.97	-0.001
-10.56	22.43	6.35	-0.02	1.31	0.21	0.00	4.28	1.73	0.000
-10.24	22.10	8.05	-0.02	1.71	0.22	0.01	4.90	1.77	0.001
-9.91	21.78	9.74	-0.04	2.12	0.26	0.01	5.46	1.92	0.001
-9.59	21.45	11.37	-0.05	2.71	0.30	0.03	6.16	2.04	0.005
-9.26	21.13	13.02	-0.06	3.15	0.25	0.04	6.65	1.87	0.005
-8.94	20.80	14.58	-0.07	3.58	0.25	0.04	7.09	1.87	0.005
-8.61	20.48	16.15	-0.08	3.95	0.31	0.06	7.44	2.09	0.009
-8.29	20.15	17.56	-0.08	4.22	0.32	0.08	7.69	2.11	0.011
-7.96	19.83	18.93	-0.08	4.19	0.26	0.08	7.67	1.92	0.011
-7.64	19.50	20.14	-0.07	4.17	0.28	0.07	7.66	1.99	0.010
-7.31	19.18	21.26	-0.06	4.07	0.27	0.08	7.56	1.93	0.012
-6.99	18.85	22.21	-0.04	3.74	0.25	0.08	7.25	1.87	0.012
-6.66	18.53	23.06	-0.03	3.31	0.22	0.09	6.82	1.76	0.013
-6.34	18.20	23.78	-0.01	2.98	0.27	0.10	6.47	1.94	0.013
-6.01	17.88	24.42	0.01	2.55	0.30	0.10	5.99	2.06	0.014
-5.69	17.55	24.91	0.03	2.23	0.30	0.10	5.59	2.04	0.013
-5.36	17.23	25.34	0.05	1.99	0.29	0.09	5.29	2.01	0.012
-5.04	16.90	25.68	0.08	1.79	0.30	0.08	5.01	2.07	0.011
-4.71	16.58	25.97	0.11	1.62	0.29	0.07	4.77	2.02	0.010
-4.39	16.25	26.19	0.14	1.43	0.31	0.07	4.48	2.09	0.009
-4.06	15.93	26.37	0.17	1.32	0.30	0.05	4.31	2.05	0.007
-3.74	15.60	26.49	0.21	1.23	0.32	0.04	4.16	2.11	0.005
-3.41	15.28	26.60	0.25	1.17	0.34	0.03	4.06	2.20	0.004
-3.09	14.95	26.65	0.28	1.16	0.32	0.02	4.03	2.14	0.003
-2.76	14.63	26.68	0.32	1.18	0.33	0.02	4.07	2.14	0.003
-2.44	14.30	26.68	0.35	1.22	0.34	0.01	4.13	2.17	0.002
-2.11	13.98	26.69	0.40	1.21	0.35	0.00	4.12	2.22	0.000
-1.79	13.65	26.67	0.44	1.22	0.39	-0.01	4.14	2.33	-0.001
-1.46	13.33	26.64	0.48	1.24	0.43	-0.01	4.18	2.47	-0.002
-1.14	13.00	26.59	0.52	1.33	0.43	-0.02	4.32	2.46	-0.002
-0.81	12.68	26.54	0.56	1.37	0.41	-0.02	4.39	2.39	-0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.49	12.35	26.46	0.61	1.46	0.47	-0.03	4.53	2.57	-0.004
-0.16	12.03	26.38	0.65	1.57	0.48	-0.05	4.70	2.61	-0.007
0.16	11.70	26.29	0.68	1.68	0.46	-0.06	4.86	2.53	-0.008
0.49	11.38	26.19	0.72	1.80	0.57	-0.07	5.03	2.83	-0.010
0.81	11.05	26.07	0.75	1.90	0.54	-0.08	5.17	2.76	-0.012
1.14	10.73	25.95	0.77	1.98	0.46	-0.09	5.27	2.54	-0.012
1.46	10.40	25.81	0.80	2.11	0.50	-0.11	5.44	2.66	-0.015
1.79	10.08	25.66	0.82	2.23	0.52	-0.13	5.59	2.69	-0.018
2.11	9.75	25.51	0.83	2.33	0.51	-0.13	5.71	2.66	-0.018
2.44	9.43	25.32	0.83	2.51	0.49	-0.15	5.94	2.64	-0.022
2.76	9.10	25.11	0.83	2.73	0.53	-0.17	6.19	2.72	-0.023
3.09	8.78	24.91	0.81	2.81	0.54	-0.16	6.29	2.74	-0.022
3.41	8.45	24.68	0.78	2.90	0.54	-0.16	6.38	2.77	-0.022
3.74	8.13	24.42	0.76	3.08	0.53	-0.16	6.58	2.73	-0.023
4.06	7.80	24.15	0.73	3.21	0.51	-0.15	6.71	2.67	-0.021
4.39	7.48	23.83	0.69	3.44	0.55	-0.14	6.95	2.77	-0.020
4.71	7.15	23.48	0.66	3.65	0.49	-0.15	7.16	2.61	-0.022
5.04	6.83	23.07	0.62	3.82	0.44	-0.17	7.32	2.50	-0.024
5.36	6.50	22.63	0.57	4.04	0.41	-0.18	7.54	2.41	-0.025
5.69	6.18	22.14	0.52	4.28	0.43	-0.17	7.76	2.47	-0.024
6.01	5.85	21.60	0.47	4.52	0.38	-0.18	7.97	2.30	-0.025
6.34	5.53	20.99	0.43	4.56	0.36	-0.18	8.00	2.23	-0.026
6.66	5.20	20.33	0.38	4.66	0.42	-0.15	8.09	2.42	-0.021
6.99	4.88	19.58	0.34	4.74	0.36	-0.13	8.15	2.26	-0.018
7.31	4.55	18.78	0.30	4.75	0.36	-0.14	8.17	2.24	-0.020
7.64	4.23	17.87	0.27	4.57	0.31	-0.13	8.01	2.07	-0.018
7.96	3.90	16.89	0.24	4.35	0.25	-0.11	7.81	1.89	-0.015
8.29	3.58	15.82	0.21	4.07	0.26	-0.08	7.56	1.92	-0.011
8.61	3.25	14.65	0.19	3.78	0.26	-0.06	7.29	1.89	-0.009
8.94	2.93	13.37	0.16	3.44	0.25	-0.05	6.95	1.87	-0.007
9.26	2.60	12.04	0.14	2.99	0.27	-0.03	6.48	1.94	-0.005
9.59	2.28	10.61	0.12	2.56	0.33	-0.01	5.99	2.15	-0.002
9.91	1.95	9.06	0.09	2.10	0.33	-0.01	5.42	2.17	-0.002
10.24	1.63	7.44	0.08	1.70	0.30	0.00	4.89	2.04	0.000
10.56	1.30	5.76	0.05	1.25	0.21	0.00	4.19	1.72	0.000
10.89	0.98	0.15	0.31	2.35	0.03	-0.01	5.74	0.60	-0.001
11.21	0.65	0.14	1.05	2.35	0.23	-0.05	5.74	1.80	-0.006
11.54	0.33	0.11	0.51	0.42	0.10	-0.01	2.44	1.19	-0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
11.87	0.00	0.90	0.07	0.00	0.00	0.00	0.00	0.18	0.000

Table N-57 Grid #1, L6, Plasma-Off, Center (46-55)

L6 (Off)							U_∞ =	26.67	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.87	23.73	0.10	0.05	0.32	0.04	-0.01	2.12	0.75	-0.001
-11.54	23.41	1.39	-0.06	0.56	0.06	0.00	2.82	0.90	0.000
-11.21	23.08	3.28	-0.01	0.65	0.14	0.00	3.03	1.40	-0.001
-10.89	22.75	4.78	0.00	0.72	0.14	0.00	3.18	1.41	0.000
-10.56	22.43	6.41	0.00	1.16	0.15	0.00	4.05	1.44	0.001
-10.24	22.10	8.04	-0.01	1.53	0.15	0.01	4.63	1.43	0.001
-9.91	21.78	9.66	-0.02	1.82	0.16	0.02	5.06	1.50	0.002
-9.59	21.45	11.20	-0.02	2.41	0.17	0.03	5.82	1.53	0.004
-9.26	21.13	12.78	-0.03	2.95	0.20	0.04	6.44	1.68	0.006
-8.94	20.80	14.30	-0.03	3.33	0.21	0.05	6.84	1.71	0.007
-8.61	20.48	15.82	-0.03	3.69	0.22	0.06	7.20	1.75	0.009
-8.29	20.15	17.20	-0.04	3.99	0.19	0.07	7.49	1.62	0.010
-7.96	19.83	18.58	-0.04	4.12	0.19	0.10	7.61	1.64	0.014
-7.64	19.50	19.80	-0.03	4.08	0.21	0.10	7.58	1.71	0.014
-7.31	19.18	20.94	-0.02	3.98	0.18	0.10	7.48	1.59	0.013
-6.99	18.85	21.92	-0.01	3.75	0.21	0.11	7.26	1.71	0.016
-6.66	18.53	22.81	0.00	3.26	0.27	0.10	6.77	1.93	0.013
-6.34	18.20	23.57	0.01	2.93	0.26	0.10	6.42	1.89	0.014
-6.01	17.88	24.24	0.03	2.57	0.23	0.09	6.02	1.79	0.013
-5.69	17.55	24.79	0.05	2.26	0.22	0.07	5.64	1.76	0.010
-5.36	17.23	25.23	0.06	2.01	0.21	0.07	5.32	1.73	0.010
-5.04	16.90	25.59	0.09	1.77	0.21	0.06	4.99	1.72	0.008
-4.71	16.58	25.90	0.11	1.58	0.23	0.04	4.71	1.78	0.006
-4.39	16.25	26.14	0.13	1.39	0.26	0.04	4.42	1.92	0.005
-4.06	15.93	26.33	0.15	1.24	0.24	0.03	4.17	1.85	0.005
-3.74	15.60	26.46	0.17	1.19	0.24	0.03	4.09	1.82	0.004
-3.41	15.28	26.56	0.20	1.13	0.23	0.02	3.99	1.81	0.003
-3.09	14.95	26.62	0.22	1.12	0.27	0.02	3.97	1.95	0.003
-2.76	14.63	26.66	0.24	1.10	0.26	0.02	3.93	1.90	0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.44	14.30	26.67	0.26	1.07	0.25	0.01	3.88	1.87	0.001
-2.11	13.98	26.65	0.29	1.12	0.27	-0.01	3.97	1.95	-0.001
-1.79	13.65	26.62	0.32	1.19	0.29	-0.02	4.08	2.03	-0.002
-1.46	13.33	26.57	0.35	1.24	0.33	-0.02	4.17	2.15	-0.003
-1.14	13.00	26.51	0.38	1.28	0.34	-0.02	4.24	2.20	-0.003
-0.81	12.68	26.42	0.40	1.36	0.37	-0.04	4.37	2.29	-0.005
-0.49	12.35	26.34	0.43	1.42	0.38	-0.05	4.48	2.31	-0.006
-0.16	12.03	26.23	0.46	1.53	0.36	-0.05	4.64	2.26	-0.007
0.16	11.70	26.11	0.49	1.69	0.34	-0.07	4.88	2.20	-0.010
0.49	11.38	25.98	0.51	1.82	0.36	-0.09	5.06	2.24	-0.013
0.81	11.05	25.84	0.54	1.93	0.38	-0.10	5.21	2.32	-0.014
1.14	10.73	25.69	0.56	2.05	0.41	-0.10	5.37	2.40	-0.014
1.46	10.40	25.52	0.58	2.19	0.40	-0.11	5.55	2.38	-0.016
1.79	10.08	25.34	0.61	2.35	0.40	-0.12	5.75	2.39	-0.017
2.11	9.75	25.15	0.62	2.49	0.41	-0.14	5.92	2.41	-0.020
2.44	9.43	24.94	0.64	2.66	0.45	-0.15	6.12	2.53	-0.021
2.76	9.10	24.71	0.65	2.83	0.43	-0.16	6.31	2.46	-0.023
3.09	8.78	24.49	0.66	2.99	0.41	-0.16	6.49	2.40	-0.023
3.41	8.45	24.24	0.66	3.16	0.40	-0.16	6.67	2.38	-0.023
3.74	8.13	23.96	0.66	3.31	0.43	-0.17	6.82	2.47	-0.024
4.06	7.80	23.66	0.65	3.47	0.41	-0.16	6.99	2.40	-0.023
4.39	7.48	23.33	0.65	3.70	0.41	-0.15	7.21	2.40	-0.022
4.71	7.15	22.97	0.64	3.91	0.42	-0.16	7.42	2.43	-0.022
5.04	6.83	22.58	0.61	4.02	0.44	-0.15	7.52	2.48	-0.021
5.36	6.50	22.16	0.60	4.19	0.45	-0.14	7.68	2.52	-0.020
5.69	6.18	21.65	0.57	4.46	0.43	-0.14	7.92	2.46	-0.019
6.01	5.85	21.14	0.54	4.61	0.37	-0.13	8.05	2.29	-0.019
6.34	5.53	20.57	0.52	4.68	0.38	-0.10	8.12	2.31	-0.014
6.66	5.20	19.93	0.48	4.78	0.40	-0.09	8.20	2.36	-0.012
6.99	4.88	19.22	0.45	4.98	0.41	-0.07	8.37	2.42	-0.010
7.31	4.55	18.44	0.42	5.09	0.43	-0.06	8.46	2.46	-0.009
7.64	4.23	17.59	0.38	5.11	0.37	-0.05	8.47	2.29	-0.008
7.96	3.90	16.65	0.35	4.95	0.36	-0.03	8.34	2.26	-0.004
8.29	3.58	15.59	0.32	4.69	0.34	-0.03	8.13	2.19	-0.004
8.61	3.25	14.46	0.29	4.47	0.30	-0.01	7.93	2.05	-0.001
8.94	2.93	13.25	0.25	4.13	0.27	0.00	7.62	1.94	0.000
9.26	2.60	11.94	0.21	3.64	0.28	0.01	7.16	1.99	0.002
9.59	2.28	10.54	0.18	3.17	0.24	0.03	6.68	1.85	0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
9.91	1.95	9.02	0.15	2.58	0.26	0.04	6.03	1.90	0.005
10.24	1.63	7.44	0.10	2.09	0.35	0.03	5.43	2.22	0.004
10.56	1.30	5.80	0.07	1.49	0.22	0.02	4.57	1.76	0.003
10.89	0.98	0.25	0.09	2.98	0.04	0.09	6.47	0.75	0.013
11.21	0.65	-0.03	0.33	2.34	0.20	0.16	5.73	1.68	0.023
11.54	0.33	-0.22	0.33	1.58	0.11	-0.03	4.72	1.23	-0.004
11.87	0.00	-0.08	0.04	0.25	0.02	0.00	1.87	0.47	0.000

Table N-58 Grid #1, L6, Plasma-Off, Right (71-80)

L6 (Off)							U_∞ =	26.66	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.87	23.73	0.91	0.18	1.27	0.05	-0.01	4.23	0.81	-0.001
-11.54	23.41	2.47	-0.07	0.68	0.11	0.03	3.10	1.22	0.004
-11.21	23.08	3.46	0.01	0.76	0.18	0.02	3.27	1.57	0.003
-10.89	22.75	4.96	0.00	0.79	0.17	0.01	3.33	1.56	0.002
-10.56	22.43	6.55	0.00	1.27	0.19	0.03	4.23	1.63	0.004
-10.24	22.10	8.15	0.00	1.61	0.16	0.03	4.75	1.48	0.004
-9.91	21.78	9.71	0.00	1.81	0.16	0.03	5.04	1.48	0.004
-9.59	21.45	11.23	-0.01	2.46	0.17	0.04	5.89	1.54	0.006
-9.26	21.13	12.76	-0.01	2.85	0.19	0.06	6.33	1.61	0.009
-8.94	20.80	14.25	-0.02	3.29	0.19	0.07	6.80	1.63	0.009
-8.61	20.48	15.73	-0.02	3.79	0.18	0.09	7.30	1.60	0.013
-8.29	20.15	17.11	-0.02	4.07	0.21	0.11	7.56	1.72	0.015
-7.96	19.83	18.47	-0.01	4.13	0.21	0.11	7.62	1.72	0.016
-7.64	19.50	19.69	-0.01	4.12	0.22	0.12	7.61	1.76	0.016
-7.31	19.18	20.85	0.00	3.98	0.23	0.14	7.48	1.78	0.020
-6.99	18.85	21.83	0.01	3.78	0.20	0.13	7.30	1.67	0.018
-6.66	18.53	22.73	0.02	3.35	0.20	0.12	6.86	1.69	0.017
-6.34	18.20	23.51	0.03	2.98	0.20	0.11	6.47	1.67	0.016
-6.01	17.88	24.18	0.05	2.60	0.22	0.11	6.05	1.76	0.016
-5.69	17.55	24.74	0.07	2.28	0.21	0.10	5.67	1.73	0.015
-5.36	17.23	25.21	0.08	2.03	0.23	0.09	5.34	1.78	0.012
-5.04	16.90	25.58	0.10	1.80	0.23	0.08	5.03	1.81	0.011
-4.71	16.58	25.89	0.12	1.60	0.25	0.07	4.74	1.87	0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.39	16.25	26.14	0.14	1.42	0.27	0.05	4.47	1.97	0.007
-4.06	15.93	26.33	0.16	1.30	0.29	0.04	4.27	2.01	0.006
-3.74	15.60	26.46	0.18	1.19	0.29	0.03	4.09	2.00	0.005
-3.41	15.28	26.56	0.20	1.14	0.27	0.03	4.00	1.95	0.004
-3.09	14.95	26.62	0.22	1.10	0.27	0.02	3.93	1.95	0.003
-2.76	14.63	26.66	0.24	1.08	0.30	0.01	3.89	2.06	0.002
-2.44	14.30	26.66	0.25	1.08	0.31	0.00	3.90	2.08	0.001
-2.11	13.98	26.65	0.28	1.12	0.33	-0.01	3.97	2.14	-0.001
-1.79	13.65	26.61	0.30	1.20	0.32	-0.02	4.10	2.11	-0.003
-1.46	13.33	26.56	0.33	1.25	0.33	-0.02	4.19	2.15	-0.003
-1.14	13.00	26.50	0.34	1.30	0.35	-0.03	4.27	2.22	-0.004
-0.81	12.68	26.41	0.36	1.37	0.34	-0.04	4.39	2.19	-0.006
-0.49	12.35	26.30	0.39	1.49	0.36	-0.05	4.57	2.25	-0.008
-0.16	12.03	26.18	0.41	1.62	0.37	-0.07	4.78	2.28	-0.010
0.16	11.70	26.06	0.43	1.72	0.38	-0.08	4.92	2.32	-0.012
0.49	11.38	25.92	0.45	1.85	0.39	-0.08	5.10	2.35	-0.012
0.81	11.05	25.76	0.47	1.99	0.38	-0.10	5.29	2.30	-0.014
1.14	10.73	25.58	0.48	2.13	0.41	-0.12	5.47	2.41	-0.017
1.46	10.40	25.39	0.50	2.33	0.41	-0.13	5.72	2.41	-0.018
1.79	10.08	25.20	0.52	2.46	0.41	-0.14	5.88	2.42	-0.020
2.11	9.75	25.01	0.52	2.54	0.44	-0.14	5.98	2.48	-0.020
2.44	9.43	24.79	0.54	2.73	0.45	-0.15	6.19	2.53	-0.020
2.76	9.10	24.55	0.55	2.94	0.45	-0.16	6.43	2.51	-0.023
3.09	8.78	24.30	0.56	3.09	0.45	-0.15	6.59	2.51	-0.021
3.41	8.45	24.02	0.56	3.31	0.47	-0.15	6.82	2.58	-0.021
3.74	8.13	23.71	0.56	3.50	0.45	-0.16	7.02	2.53	-0.023
4.06	7.80	23.40	0.57	3.66	0.46	-0.17	7.18	2.54	-0.024
4.39	7.48	23.06	0.56	3.82	0.48	-0.17	7.33	2.59	-0.023
4.71	7.15	22.68	0.55	3.98	0.48	-0.15	7.48	2.59	-0.022
5.04	6.83	22.28	0.55	4.11	0.44	-0.14	7.60	2.49	-0.019
5.36	6.50	21.84	0.54	4.29	0.42	-0.13	7.77	2.44	-0.018
5.69	6.18	21.37	0.53	4.43	0.47	-0.12	7.89	2.58	-0.017
6.01	5.85	20.85	0.51	4.55	0.42	-0.11	8.00	2.44	-0.016
6.34	5.53	20.26	0.49	4.69	0.43	-0.12	8.12	2.46	-0.016
6.66	5.20	19.63	0.47	4.93	0.41	-0.09	8.33	2.39	-0.013
6.99	4.88	18.95	0.45	5.06	0.48	-0.07	8.44	2.61	-0.010
7.31	4.55	18.19	0.43	5.09	0.41	-0.07	8.46	2.42	-0.009
7.64	4.23	17.36	0.41	5.05	0.37	-0.04	8.43	2.29	-0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.96	3.90	16.46	0.39	5.14	0.36	-0.01	8.50	2.25	-0.002
8.29	3.58	15.45	0.35	5.12	0.35	0.02	8.48	2.23	0.003
8.61	3.25	14.34	0.32	4.93	0.33	0.05	8.32	2.17	0.006
8.94	2.93	13.16	0.29	4.66	0.33	0.05	8.09	2.17	0.007
9.26	2.60	11.89	0.25	4.21	0.30	0.05	7.69	2.04	0.008
9.59	2.28	10.52	0.21	3.77	0.30	0.07	7.28	2.05	0.010
9.91	1.95	9.04	0.16	3.14	0.31	0.06	6.65	2.08	0.008
10.24	1.63	7.48	0.11	2.48	0.32	0.05	5.91	2.14	0.007
10.56	1.30	5.84	0.07	1.79	0.24	0.03	5.02	1.85	0.004
10.89	0.98	2.31	0.06	8.27	0.04	-0.02	10.79	0.74	-0.003
11.21	0.65	0.68	0.21	3.81	0.15	-0.03	7.32	1.43	-0.005
11.54	0.33	0.19	0.12	0.53	0.03	-0.01	2.72	0.66	-0.001
11.87	0.00	-0.03	0.19	0.00	0.02	0.00	0.12	0.46	0.000

Table N-59 Grid #1, L6, Plasma-150, Left (1-10)

L6 (150)							U_∞ =	29.46	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.87	23.73	3.40	0.16	3.54	0.44	0.02	6.39	2.26	0.003
-11.54	23.41	4.41	0.16	5.45	0.13	0.06	7.92	1.23	0.007
-11.21	23.08	5.14	0.00	2.48	0.55	0.02	5.35	2.52	0.002
-10.89	22.75	7.28	0.02	2.68	0.54	0.06	5.56	2.50	0.006
-10.56	22.43	9.71	0.04	3.40	0.53	0.11	6.26	2.46	0.013
-10.24	22.10	12.08	0.07	4.49	0.37	0.16	7.19	2.06	0.019
-9.91	21.78	14.42	0.09	5.27	0.59	0.23	7.79	2.62	0.027
-9.59	21.45	16.49	0.14	5.89	0.64	0.31	8.24	2.72	0.036
-9.26	21.13	18.49	0.17	6.34	0.58	0.39	8.54	2.59	0.045
-8.94	20.80	20.17	0.21	6.10	0.57	0.44	8.38	2.57	0.050
-8.61	20.48	21.68	0.27	5.62	0.44	0.49	8.04	2.25	0.056
-8.29	20.15	22.94	0.33	5.08	0.58	0.50	7.65	2.59	0.057
-7.96	19.83	24.05	0.39	4.30	0.63	0.46	7.04	2.69	0.053
-7.64	19.50	24.93	0.45	3.66	0.68	0.38	6.50	2.80	0.043
-7.31	19.18	25.66	0.51	3.15	0.72	0.25	6.02	2.89	0.029
-6.99	18.85	26.23	0.59	2.86	0.86	0.16	5.74	3.16	0.018
-6.66	18.53	26.73	0.65	2.61	0.80	0.00	5.48	3.04	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-6.34	18.20	27.11	0.69	2.54	0.85	-0.13	5.41	3.13	-0.016
-6.01	17.88	27.44	0.73	2.50	0.83	-0.25	5.37	3.10	-0.029
-5.69	17.55	27.69	0.76	2.54	0.81	-0.35	5.41	3.06	-0.041
-5.36	17.23	27.90	0.80	2.66	0.89	-0.46	5.54	3.20	-0.053
-5.04	16.90	28.10	0.82	2.70	0.85	-0.50	5.58	3.14	-0.057
-4.71	16.58	28.24	0.84	2.84	0.84	-0.56	5.72	3.12	-0.065
-4.39	16.25	28.38	0.85	2.88	0.83	-0.55	5.76	3.09	-0.063
-4.06	15.93	28.50	0.84	2.92	0.79	-0.56	5.80	3.02	-0.065
-3.74	15.60	28.62	0.82	2.91	0.72	-0.54	5.79	2.87	-0.062
-3.41	15.28	28.72	0.80	2.90	0.83	-0.50	5.78	3.09	-0.057
-3.09	14.95	28.82	0.77	2.78	0.76	-0.44	5.66	2.95	-0.050
-2.76	14.63	28.92	0.74	2.70	0.75	-0.39	5.57	2.93	-0.045
-2.44	14.30	29.01	0.69	2.58	0.78	-0.30	5.45	3.00	-0.035
-2.11	13.98	29.11	0.63	2.36	0.63	-0.22	5.21	2.70	-0.025
-1.79	13.65	29.21	0.58	2.11	0.65	-0.16	4.93	2.74	-0.019
-1.46	13.33	29.28	0.52	1.97	0.69	-0.13	4.77	2.82	-0.015
-1.14	13.00	29.35	0.46	1.82	0.62	-0.08	4.58	2.67	-0.010
-0.81	12.68	29.40	0.40	1.70	0.58	-0.05	4.43	2.59	-0.006
-0.49	12.35	29.43	0.34	1.63	0.63	-0.04	4.33	2.69	-0.005
-0.16	12.03	29.46	0.29	1.58	0.60	-0.05	4.26	2.64	-0.006
0.16	11.70	29.46	0.23	1.56	0.52	-0.06	4.24	2.45	-0.006
0.49	11.38	29.45	0.18	1.56	0.54	-0.07	4.24	2.50	-0.008
0.81	11.05	29.42	0.14	1.56	0.51	-0.09	4.24	2.43	-0.010
1.14	10.73	29.36	0.10	1.60	0.49	-0.09	4.29	2.38	-0.011
1.46	10.40	29.27	0.06	1.67	0.50	-0.11	4.38	2.40	-0.013
1.79	10.08	29.15	0.03	1.87	0.52	-0.16	4.64	2.45	-0.019
2.11	9.75	29.01	0.01	1.96	0.47	-0.18	4.76	2.31	-0.021
2.44	9.43	28.81	-0.02	2.13	0.45	-0.19	4.96	2.27	-0.022
2.76	9.10	28.60	-0.04	2.23	0.42	-0.20	5.06	2.21	-0.023
3.09	8.78	28.34	-0.04	2.48	0.43	-0.21	5.34	2.22	-0.024
3.41	8.45	28.05	-0.06	2.70	0.44	-0.21	5.58	2.25	-0.024
3.74	8.13	27.73	-0.07	2.96	0.42	-0.21	5.84	2.19	-0.024
4.06	7.80	27.36	-0.08	3.17	0.39	-0.20	6.04	2.13	-0.023
4.39	7.48	26.94	-0.09	3.41	0.39	-0.21	6.27	2.11	-0.024
4.71	7.15	26.47	-0.09	3.62	0.37	-0.21	6.45	2.07	-0.024
5.04	6.83	25.96	-0.09	3.78	0.41	-0.21	6.60	2.19	-0.024
5.36	6.50	25.42	-0.09	3.83	0.39	-0.19	6.64	2.11	-0.022
5.69	6.18	24.76	-0.08	4.01	0.34	-0.18	6.80	1.98	-0.021

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
6.01	5.85	24.07	-0.09	4.12	0.35	-0.18	6.89	2.02	-0.021
6.34	5.53	23.31	-0.09	4.28	0.35	-0.17	7.02	2.02	-0.020
6.66	5.20	22.47	-0.09	4.33	0.31	-0.18	7.06	1.88	-0.020
6.99	4.88	21.56	-0.08	4.21	0.31	-0.15	6.96	1.89	-0.017
7.31	4.55	20.59	-0.08	4.02	0.30	-0.13	6.81	1.85	-0.015
7.64	4.23	19.51	-0.07	3.78	0.28	-0.11	6.60	1.80	-0.012
7.96	3.90	18.40	-0.07	3.66	0.27	-0.08	6.49	1.75	-0.010
8.29	3.58	17.17	-0.06	3.40	0.26	-0.08	6.26	1.73	-0.009
8.61	3.25	15.86	-0.05	2.96	0.27	-0.06	5.84	1.76	-0.007
8.94	2.93	14.48	-0.05	2.65	0.27	-0.05	5.53	1.76	-0.005
9.26	2.60	13.01	-0.04	2.32	0.24	-0.04	5.17	1.65	-0.004
9.59	2.28	11.48	-0.03	2.00	0.23	-0.03	4.80	1.62	-0.004
9.91	1.95	9.85	-0.02	1.67	0.31	-0.01	4.39	1.89	-0.001
10.24	1.63	8.14	-0.02	1.53	0.43	-0.02	4.20	2.24	-0.002
10.56	1.30	6.45	-0.03	1.37	0.32	-0.02	3.97	1.93	-0.003
10.89	0.98	-0.07	0.27	4.52	0.03	0.05	7.21	0.55	0.006
11.21	0.65	0.00	0.95	4.44	0.27	0.01	7.15	1.75	0.001
11.54	0.33	0.10	0.35	0.78	0.15	-0.02	3.00	1.33	-0.002
11.87	0.00	0.90	0.04	0.00	0.00	0.00	0.00	0.11	0.000

Table N-60 Grid #1, L6, Plasma-150, Center (46-55)

L6 (150)							U_∞ =	29.13	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.87	23.73	0.36	0.06	1.05	0.07	-0.04	3.52	0.89	-0.004
-11.54	23.41	1.83	0.01	2.42	0.09	-0.05	5.34	1.01	-0.005
-11.21	23.08	5.36	0.01	2.09	0.17	0.02	4.96	1.41	0.002
-10.89	22.75	7.37	0.03	2.40	0.21	0.05	5.32	1.59	0.006
-10.56	22.43	9.75	0.04	3.26	0.24	0.09	6.19	1.70	0.010
-10.24	22.10	12.06	0.06	4.43	0.27	0.16	7.23	1.77	0.018
-9.91	21.78	14.30	0.07	5.50	0.26	0.23	8.05	1.74	0.027
-9.59	21.45	16.35	0.10	6.27	0.31	0.30	8.60	1.92	0.036
-9.26	21.13	18.33	0.12	6.84	0.32	0.41	8.98	1.94	0.048
-8.94	20.80	20.01	0.16	6.53	0.37	0.48	8.77	2.09	0.056
-8.61	20.48	21.52	0.21	5.97	0.36	0.51	8.39	2.06	0.060

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-8.29	20.15	22.78	0.26	5.11	0.51	0.51	7.76	2.45	0.060
-7.96	19.83	23.90	0.31	4.09	0.46	0.45	6.95	2.33	0.053
-7.64	19.50	24.78	0.37	3.28	0.50	0.32	6.21	2.43	0.038
-7.31	19.18	25.49	0.43	2.86	0.58	0.19	5.81	2.62	0.023
-6.99	18.85	26.08	0.48	2.63	0.74	0.06	5.56	2.96	0.007
-6.66	18.53	26.58	0.52	2.47	0.67	-0.08	5.39	2.81	-0.009
-6.34	18.20	26.98	0.56	2.41	0.68	-0.20	5.33	2.84	-0.024
-6.01	17.88	27.29	0.60	2.57	0.73	-0.37	5.51	2.93	-0.043
-5.69	17.55	27.55	0.63	2.73	0.77	-0.50	5.67	3.01	-0.058
-5.36	17.23	27.76	0.67	2.93	0.75	-0.62	5.87	2.98	-0.073
-5.04	16.90	27.90	0.70	3.27	0.78	-0.75	6.21	3.04	-0.088
-4.71	16.58	28.03	0.73	3.54	0.82	-0.83	6.46	3.11	-0.098
-4.39	16.25	28.13	0.76	3.86	0.81	-0.89	6.75	3.10	-0.105
-4.06	15.93	28.21	0.77	4.14	0.80	-0.94	6.98	3.07	-0.110
-3.74	15.60	28.29	0.77	4.23	0.80	-0.92	7.06	3.07	-0.109
-3.41	15.28	28.37	0.77	4.33	0.80	-0.91	7.14	3.07	-0.107
-3.09	14.95	28.45	0.75	4.31	0.74	-0.83	7.13	2.95	-0.098
-2.76	14.63	28.52	0.74	4.29	0.73	-0.77	7.11	2.93	-0.091
-2.44	14.30	28.60	0.71	4.04	0.76	-0.66	6.90	2.99	-0.078
-2.11	13.98	28.69	0.67	3.75	0.66	-0.57	6.65	2.79	-0.068
-1.79	13.65	28.75	0.64	3.54	0.57	-0.47	6.46	2.58	-0.056
-1.46	13.33	28.82	0.58	3.37	0.54	-0.37	6.30	2.53	-0.043
-1.14	13.00	28.88	0.54	3.15	0.56	-0.28	6.10	2.57	-0.033
-0.81	12.68	28.95	0.49	2.78	0.52	-0.20	5.73	2.47	-0.024
-0.49	12.35	29.04	0.44	2.38	0.47	-0.14	5.30	2.36	-0.017
-0.16	12.03	29.07	0.38	2.21	0.48	-0.10	5.10	2.39	-0.012
0.16	11.70	29.11	0.32	1.99	0.50	-0.06	4.84	2.42	-0.008
0.49	11.38	29.13	0.28	1.84	0.48	-0.06	4.65	2.39	-0.008
0.81	11.05	29.11	0.23	1.78	0.60	-0.04	4.58	2.65	-0.005
1.14	10.73	29.09	0.19	1.74	0.58	-0.04	4.52	2.60	-0.005
1.46	10.40	29.03	0.14	1.73	0.50	-0.07	4.52	2.44	-0.008
1.79	10.08	28.97	0.10	1.71	0.54	-0.09	4.49	2.53	-0.011
2.11	9.75	28.87	0.06	1.78	0.47	-0.13	4.58	2.35	-0.015
2.44	9.43	28.73	0.03	1.92	0.42	-0.14	4.75	2.21	-0.016
2.76	9.10	28.55	0.01	2.04	0.38	-0.15	4.91	2.11	-0.018
3.09	8.78	28.33	-0.01	2.24	0.36	-0.17	5.14	2.05	-0.020
3.41	8.45	28.07	-0.03	2.47	0.39	-0.20	5.39	2.13	-0.023
3.74	8.13	27.75	-0.04	2.70	0.37	-0.22	5.65	2.09	-0.026

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
4.06	7.80	27.40	-0.05	2.92	0.38	-0.23	5.87	2.11	-0.027
4.39	7.48	27.00	-0.06	3.09	0.36	-0.21	6.03	2.05	-0.025
4.71	7.15	26.54	-0.06	3.34	0.29	-0.21	6.27	1.85	-0.024
5.04	6.83	26.02	-0.07	3.57	0.28	-0.21	6.48	1.82	-0.025
5.36	6.50	25.46	-0.07	3.71	0.28	-0.21	6.61	1.80	-0.025
5.69	6.18	24.84	-0.07	3.85	0.27	-0.19	6.73	1.79	-0.023
6.01	5.85	24.15	-0.08	3.93	0.24	-0.19	6.81	1.69	-0.022
6.34	5.53	23.37	-0.08	4.03	0.24	-0.17	6.89	1.68	-0.019
6.66	5.20	22.56	-0.07	4.02	0.24	-0.15	6.88	1.67	-0.018
6.99	4.88	21.66	-0.08	3.95	0.22	-0.13	6.82	1.61	-0.016
7.31	4.55	20.70	-0.07	3.84	0.20	-0.13	6.73	1.54	-0.015
7.64	4.23	19.64	-0.07	3.70	0.22	-0.11	6.61	1.59	-0.013
7.96	3.90	18.50	-0.06	3.45	0.22	-0.10	6.37	1.61	-0.012
8.29	3.58	17.26	-0.05	3.17	0.22	-0.08	6.12	1.59	-0.010
8.61	3.25	15.96	-0.05	2.88	0.19	-0.07	5.82	1.51	-0.008
8.94	2.93	14.58	-0.04	2.62	0.18	-0.05	5.56	1.47	-0.006
9.26	2.60	13.11	-0.04	2.31	0.18	-0.04	5.21	1.45	-0.005
9.59	2.28	11.55	-0.04	1.96	0.18	-0.02	4.81	1.47	-0.002
9.91	1.95	9.91	-0.04	1.61	0.22	-0.02	4.36	1.61	-0.002
10.24	1.63	8.23	-0.03	1.44	0.26	-0.01	4.12	1.74	-0.001
10.56	1.30	6.49	-0.03	1.22	0.19	-0.01	3.79	1.51	-0.001
10.89	0.98	0.35	0.18	6.68	0.04	0.06	8.87	0.66	0.008
11.21	0.65	0.13	0.52	6.66	0.23	0.24	8.86	1.63	0.028
11.54	0.33	0.27	0.29	4.60	0.22	0.19	7.37	1.62	0.022
11.87	0.00	0.00	0.06	0.00	0.02	0.00	0.20	0.43	0.000

Table N-61 Grid #1, L6, Plasma-150, Right (71-80)

L6 (150)							U_∞ =	28.95	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.87	23.73	1.12	0.45	1.41	0.10	0.01	4.10	1.10	0.001
-11.54	23.41	3.38	0.02	2.51	0.11	0.03	5.48	1.15	0.003
-11.21	23.08	5.45	0.03	2.04	0.29	0.04	4.93	1.87	0.005
-10.89	22.75	7.55	0.04	2.54	0.26	0.07	5.50	1.78	0.008
-10.56	22.43	9.90	0.05	3.40	0.20	0.11	6.37	1.53	0.013

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.24	22.10	12.12	0.06	4.54	0.23	0.16	7.36	1.65	0.019
-9.91	21.78	14.33	0.08	5.65	0.30	0.22	8.21	1.88	0.027
-9.59	21.45	16.32	0.09	6.39	0.28	0.31	8.73	1.84	0.037
-9.26	21.13	18.25	0.12	7.08	0.32	0.42	9.19	1.97	0.050
-8.94	20.80	19.91	0.15	6.87	0.38	0.49	9.05	2.12	0.059
-8.61	20.48	21.42	0.19	6.18	0.41	0.52	8.59	2.21	0.062
-8.29	20.15	22.68	0.23	5.34	0.46	0.51	7.98	2.35	0.060
-7.96	19.83	23.80	0.28	4.28	0.49	0.44	7.15	2.41	0.052
-7.64	19.50	24.66	0.33	3.42	0.51	0.32	6.39	2.46	0.039
-7.31	19.18	25.38	0.38	3.00	0.57	0.17	5.99	2.61	0.021
-6.99	18.85	25.97	0.42	2.71	0.63	0.04	5.69	2.73	0.005
-6.66	18.53	26.48	0.46	2.58	0.64	-0.10	5.55	2.76	-0.011
-6.34	18.20	26.88	0.49	2.53	0.65	-0.23	5.50	2.79	-0.027
-6.01	17.88	27.22	0.53	2.63	0.70	-0.37	5.60	2.89	-0.044
-5.69	17.55	27.45	0.57	2.90	0.79	-0.54	5.89	3.07	-0.064
-5.36	17.23	27.65	0.59	3.19	0.82	-0.66	6.17	3.14	-0.078
-5.04	16.90	27.79	0.63	3.63	0.83	-0.79	6.58	3.14	-0.094
-4.71	16.58	27.91	0.67	4.08	0.87	-0.90	6.97	3.21	-0.107
-4.39	16.25	27.99	0.70	4.53	0.92	-0.98	7.35	3.32	-0.117
-4.06	15.93	28.08	0.72	4.79	0.88	-1.05	7.56	3.24	-0.126
-3.74	15.60	28.14	0.73	5.07	0.88	-1.10	7.78	3.23	-0.131
-3.41	15.28	28.21	0.73	5.17	0.89	-1.09	7.85	3.26	-0.130
-3.09	14.95	28.27	0.73	5.28	0.88	-1.03	7.94	3.24	-0.123
-2.76	14.63	28.33	0.72	5.26	0.85	-0.96	7.92	3.19	-0.115
-2.44	14.30	28.40	0.70	5.02	0.82	-0.88	7.74	3.12	-0.105
-2.11	13.98	28.47	0.68	4.79	0.82	-0.76	7.56	3.12	-0.091
-1.79	13.65	28.56	0.65	4.42	0.85	-0.62	7.26	3.18	-0.074
-1.46	13.33	28.62	0.61	4.15	0.74	-0.53	7.04	2.97	-0.064
-1.14	13.00	28.69	0.56	3.75	0.60	-0.42	6.69	2.68	-0.051
-0.81	12.68	28.77	0.51	3.37	0.59	-0.31	6.34	2.65	-0.037
-0.49	12.35	28.82	0.46	3.10	0.62	-0.25	6.08	2.73	-0.030
-0.16	12.03	28.88	0.41	2.72	0.60	-0.19	5.70	2.68	-0.023
0.16	11.70	28.92	0.37	2.45	0.53	-0.15	5.40	2.51	-0.018
0.49	11.38	28.95	0.31	2.23	0.52	-0.10	5.15	2.49	-0.012
0.81	11.05	28.95	0.27	2.07	0.54	-0.10	4.96	2.53	-0.011
1.14	10.73	28.92	0.22	2.02	0.48	-0.08	4.91	2.40	-0.009
1.46	10.40	28.86	0.17	2.05	0.45	-0.09	4.94	2.31	-0.010
1.79	10.08	28.80	0.13	2.05	0.50	-0.10	4.94	2.44	-0.012

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.11	9.75	28.73	0.09	1.96	0.51	-0.11	4.84	2.46	-0.013
2.44	9.43	28.61	0.06	2.02	0.48	-0.13	4.90	2.40	-0.015
2.76	9.10	28.46	0.04	2.16	0.48	-0.16	5.08	2.40	-0.019
3.09	8.78	28.26	0.01	2.38	0.47	-0.19	5.33	2.36	-0.022
3.41	8.45	28.01	-0.01	2.58	0.43	-0.20	5.55	2.28	-0.024
3.74	8.13	27.73	-0.02	2.74	0.40	-0.22	5.72	2.19	-0.026
4.06	7.80	27.40	-0.04	2.95	0.41	-0.22	5.93	2.21	-0.026
4.39	7.48	27.00	-0.05	3.21	0.42	-0.23	6.19	2.24	-0.027
4.71	7.15	26.56	-0.06	3.47	0.37	-0.24	6.44	2.10	-0.028
5.04	6.83	26.05	-0.05	3.64	0.34	-0.23	6.59	2.00	-0.028
5.36	6.50	25.52	-0.06	3.75	0.31	-0.23	6.69	1.92	-0.028
5.69	6.18	24.90	-0.06	4.02	0.33	-0.22	6.92	1.98	-0.027
6.01	5.85	24.21	-0.06	4.11	0.35	-0.21	7.00	2.03	-0.024
6.34	5.53	23.44	-0.07	4.14	0.30	-0.20	7.03	1.90	-0.024
6.66	5.20	22.62	-0.07	4.25	0.30	-0.20	7.12	1.90	-0.024
6.99	4.88	21.73	-0.07	4.19	0.28	-0.16	7.07	1.83	-0.019
7.31	4.55	20.77	-0.06	3.95	0.23	-0.14	6.86	1.64	-0.017
7.64	4.23	19.69	-0.06	3.89	0.22	-0.13	6.81	1.63	-0.015
7.96	3.90	18.55	-0.05	3.64	0.24	-0.10	6.59	1.68	-0.012
8.29	3.58	17.34	-0.06	3.35	0.24	-0.08	6.32	1.69	-0.010
8.61	3.25	16.02	-0.05	3.03	0.23	-0.06	6.01	1.65	-0.007
8.94	2.93	14.64	-0.05	2.72	0.21	-0.05	5.70	1.60	-0.006
9.26	2.60	13.16	-0.04	2.39	0.22	-0.05	5.34	1.61	-0.006
9.59	2.28	11.61	-0.03	2.04	0.21	-0.03	4.94	1.57	-0.003
9.91	1.95	9.99	-0.03	1.71	0.21	-0.02	4.52	1.58	-0.002
10.24	1.63	8.29	-0.03	1.46	0.23	-0.02	4.17	1.65	-0.002
10.56	1.30	6.56	-0.02	1.25	0.21	-0.01	3.86	1.59	-0.001
10.89	0.98	3.00	0.05	11.19	0.04	0.00	11.56	0.67	-0.001
11.21	0.65	0.75	0.21	7.55	0.12	-0.09	9.49	1.20	-0.011
11.54	0.33	0.23	0.08	0.74	0.04	-0.02	2.98	0.69	-0.002
11.87	0.00	-0.03	0.25	0.00	0.02	0.00	0.12	0.53	0.000

Table N-62 Grid #1, L6, Plasma-300, Left (1-10)

L6 (300)							U_∞ =	32.36	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.87	23.73	3.91	0.43	5.12	0.65	0.06	6.99	2.50	0.006
-11.54	23.41	4.48	0.25	6.56	0.12	0.05	7.92	1.08	0.004
-11.21	23.08	5.96	0.02	3.85	0.48	0.01	6.07	2.15	0.001
-10.89	22.75	8.88	0.06	4.22	0.81	0.09	6.35	2.79	0.008
-10.56	22.43	12.01	0.10	5.32	0.94	0.19	7.13	3.00	0.018
-10.24	22.10	14.81	0.14	6.14	0.88	0.26	7.66	2.90	0.025
-9.91	21.78	17.48	0.19	6.63	0.85	0.39	7.96	2.85	0.037
-9.59	21.45	19.75	0.27	6.54	0.84	0.51	7.90	2.83	0.048
-9.26	21.13	21.77	0.34	5.70	0.89	0.55	7.37	2.91	0.053
-8.94	20.80	23.37	0.41	5.18	0.88	0.53	7.03	2.90	0.051
-8.61	20.48	24.76	0.49	4.43	0.97	0.47	6.50	3.05	0.045
-8.29	20.15	25.86	0.57	3.74	1.03	0.39	5.97	3.14	0.037
-7.96	19.83	26.76	0.66	3.04	1.26	0.25	5.39	3.47	0.023
-7.64	19.50	27.42	0.76	2.70	1.36	0.10	5.08	3.61	0.009
-7.31	19.18	27.96	0.84	2.47	1.39	-0.08	4.86	3.64	-0.008
-6.99	18.85	28.33	0.93	2.65	1.40	-0.29	5.03	3.66	-0.027
-6.66	18.53	28.62	1.01	3.03	1.56	-0.50	5.38	3.86	-0.048
-6.34	18.20	28.84	1.10	3.57	1.49	-0.74	5.84	3.78	-0.071
-6.01	17.88	29.02	1.17	4.26	1.60	-0.92	6.38	3.91	-0.088
-5.69	17.55	29.18	1.23	4.94	1.62	-1.08	6.87	3.93	-0.103
-5.36	17.23	29.31	1.27	5.65	1.56	-1.22	7.34	3.86	-0.117
-5.04	16.90	29.45	1.29	6.23	1.67	-1.29	7.71	4.00	-0.123
-4.71	16.58	29.62	1.31	6.67	1.63	-1.26	7.98	3.94	-0.121
-4.39	16.25	29.78	1.29	6.87	1.70	-1.22	8.10	4.03	-0.117
-4.06	15.93	29.97	1.26	6.89	1.71	-1.06	8.11	4.04	-0.101
-3.74	15.60	30.18	1.22	6.69	1.56	-0.88	7.99	3.86	-0.084
-3.41	15.28	30.40	1.16	6.37	1.36	-0.77	7.80	3.61	-0.073
-3.09	14.95	30.64	1.09	5.95	1.40	-0.58	7.54	3.65	-0.056
-2.76	14.63	30.87	1.01	5.45	1.34	-0.40	7.22	3.57	-0.038
-2.44	14.30	31.07	0.92	5.01	1.38	-0.27	6.92	3.63	-0.025
-2.11	13.98	31.27	0.83	4.61	1.36	-0.13	6.63	3.60	-0.012
-1.79	13.65	31.49	0.74	3.98	1.15	-0.05	6.16	3.32	-0.005
-1.46	13.33	31.68	0.64	3.45	1.31	0.03	5.74	3.54	0.002
-1.14	13.00	31.85	0.56	3.04	1.32	0.09	5.39	3.55	0.009
-0.81	12.68	32.00	0.47	2.68	1.20	0.13	5.06	3.38	0.013

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.49	12.35	32.13	0.39	2.23	1.13	0.19	4.61	3.28	0.018
-0.16	12.03	32.25	0.32	1.90	1.28	0.14	4.26	3.49	0.013
0.16	11.70	32.32	0.26	1.65	1.38	0.11	3.97	3.63	0.011
0.49	11.38	32.35	0.20	1.55	1.40	0.12	3.85	3.66	0.012
0.81	11.05	32.36	0.15	1.44	1.32	0.09	3.71	3.55	0.009
1.14	10.73	32.34	0.11	1.34	1.37	0.07	3.58	3.61	0.007
1.46	10.40	32.29	0.06	1.32	1.28	0.08	3.55	3.49	0.008
1.79	10.08	32.20	0.03	1.37	1.39	0.07	3.62	3.65	0.006
2.11	9.75	32.07	0.01	1.41	1.60	0.01	3.67	3.91	0.001
2.44	9.43	31.89	-0.01	1.47	1.54	-0.03	3.74	3.83	-0.002
2.76	9.10	31.69	-0.02	1.56	1.46	-0.01	3.86	3.73	-0.001
3.09	8.78	31.44	-0.04	1.69	1.46	0.01	4.01	3.73	0.001
3.41	8.45	31.16	-0.07	1.80	1.52	0.00	4.15	3.81	0.000
3.74	8.13	30.82	-0.09	1.93	1.55	-0.03	4.29	3.85	-0.003
4.06	7.80	30.45	-0.09	2.10	1.64	-0.05	4.48	3.95	-0.005
4.39	7.48	30.02	-0.09	2.20	1.72	-0.02	4.58	4.05	-0.002
4.71	7.15	29.54	-0.09	2.24	1.60	-0.03	4.63	3.91	-0.003
5.04	6.83	29.02	-0.10	2.37	1.48	-0.04	4.75	3.76	-0.004
5.36	6.50	28.42	-0.11	2.50	1.48	-0.09	4.88	3.75	-0.009
5.69	6.18	27.76	-0.11	2.65	1.33	-0.08	5.03	3.56	-0.008
6.01	5.85	27.03	-0.10	2.72	1.29	-0.07	5.10	3.51	-0.007
6.34	5.53	26.22	-0.09	2.78	1.09	-0.08	5.15	3.23	-0.008
6.66	5.20	25.34	-0.10	2.81	1.08	-0.09	5.18	3.21	-0.009
6.99	4.88	24.39	-0.10	2.77	0.99	-0.07	5.15	3.07	-0.006
7.31	4.55	23.36	-0.09	2.73	0.85	-0.06	5.11	2.85	-0.006
7.64	4.23	22.22	-0.09	2.69	0.95	-0.05	5.07	3.01	-0.004
7.96	3.90	21.00	-0.08	2.56	0.88	-0.05	4.94	2.90	-0.005
8.29	3.58	19.67	-0.08	2.40	0.76	-0.01	4.79	2.69	-0.001
8.61	3.25	18.26	-0.06	2.26	0.64	-0.03	4.64	2.47	-0.002
8.94	2.93	16.73	-0.07	2.04	0.63	-0.03	4.41	2.45	-0.003
9.26	2.60	15.13	-0.05	1.83	0.69	-0.03	4.18	2.57	-0.003
9.59	2.28	13.40	-0.04	1.73	0.57	-0.02	4.07	2.32	-0.002
9.91	1.95	11.55	-0.04	1.62	0.59	-0.02	3.93	2.38	-0.002
10.24	1.63	9.57	-0.04	1.61	0.87	0.01	3.92	2.88	0.001
10.56	1.30	7.58	-0.04	1.43	0.55	0.01	3.70	2.28	0.001
10.89	0.98	-0.06	0.14	5.53	0.04	-0.03	7.27	0.63	-0.003
11.21	0.65	-0.35	0.24	4.55	0.47	-0.08	6.59	2.12	-0.008
11.54	0.33	-0.11	-0.08	2.11	0.24	0.00	4.48	1.52	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
11.87	0.00	1.67	0.03	0.43	0.00	0.00	2.03	0.13	0.000

Table N-63 Grid #1, L6, Plasma-300, Center (46-55)

L6 (300)							U_∞ =	32.05	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.87	23.73	0.84	-0.02	1.13	1.21	-0.04	3.31	3.44	-0.004
-11.54	23.41	2.28	-0.12	2.91	0.55	-0.03	5.32	2.31	-0.003
-11.21	23.08	6.38	0.02	3.41	0.22	0.03	5.76	1.46	0.003
-10.89	22.75	9.13	0.05	3.92	0.41	0.09	6.18	2.01	0.009
-10.56	22.43	12.15	0.08	4.98	0.44	0.15	6.97	2.08	0.014
-10.24	22.10	14.89	0.11	6.07	0.48	0.28	7.69	2.16	0.027
-9.91	21.78	17.48	0.14	6.62	0.56	0.39	8.03	2.33	0.038
-9.59	21.45	19.68	0.20	6.63	0.55	0.49	8.04	2.32	0.048
-9.26	21.13	21.67	0.26	5.96	0.53	0.52	7.62	2.27	0.050
-8.94	20.80	23.25	0.32	5.21	0.59	0.56	7.12	2.41	0.054
-8.61	20.48	24.65	0.39	4.19	0.73	0.49	6.39	2.66	0.048
-8.29	20.15	25.71	0.47	3.47	0.79	0.41	5.81	2.77	0.040
-7.96	19.83	26.55	0.53	2.93	0.85	0.24	5.34	2.88	0.024
-7.64	19.50	27.19	0.60	2.58	0.87	0.09	5.02	2.91	0.009
-7.31	19.18	27.71	0.69	2.39	0.96	-0.11	4.83	3.06	-0.011
-6.99	18.85	28.10	0.76	2.57	1.03	-0.33	5.00	3.17	-0.032
-6.66	18.53	28.41	0.83	3.08	1.15	-0.57	5.47	3.35	-0.055
-6.34	18.20	28.64	0.91	3.80	1.17	-0.84	6.09	3.38	-0.082
-6.01	17.88	28.85	0.98	4.58	1.16	-1.07	6.68	3.37	-0.104
-5.69	17.55	28.99	1.04	5.50	1.31	-1.23	7.32	3.57	-0.120
-5.36	17.23	29.13	1.09	6.48	1.39	-1.38	7.94	3.68	-0.134
-5.04	16.90	29.26	1.13	7.21	1.38	-1.45	8.38	3.66	-0.142
-4.71	16.58	29.41	1.15	7.71	1.36	-1.51	8.66	3.63	-0.147
-4.39	16.25	29.53	1.17	8.19	1.40	-1.50	8.93	3.69	-0.146
-4.06	15.93	29.64	1.18	8.59	1.36	-1.43	9.15	3.64	-0.139
-3.74	15.60	29.79	1.18	8.68	1.25	-1.33	9.19	3.49	-0.130
-3.41	15.28	29.95	1.15	8.59	1.17	-1.18	9.14	3.38	-0.115
-3.09	14.95	30.10	1.12	8.45	1.15	-1.06	9.07	3.35	-0.103
-2.76	14.63	30.32	1.06	7.86	1.23	-0.87	8.75	3.46	-0.085

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.44	14.30	30.53	1.00	7.26	1.11	-0.68	8.41	3.28	-0.067
-2.11	13.98	30.71	0.93	6.77	1.03	-0.49	8.12	3.16	-0.047
-1.79	13.65	30.94	0.85	5.89	0.96	-0.31	7.57	3.06	-0.030
-1.46	13.33	31.15	0.77	5.15	0.85	-0.15	7.08	2.88	-0.015
-1.14	13.00	31.32	0.69	4.58	0.97	-0.06	6.68	3.07	-0.006
-0.81	12.68	31.50	0.61	3.94	1.06	0.03	6.20	3.22	0.003
-0.49	12.35	31.65	0.53	3.47	0.94	0.09	5.81	3.03	0.009
-0.16	12.03	31.77	0.46	2.98	0.97	0.12	5.38	3.07	0.012
0.16	11.70	31.90	0.39	2.49	0.95	0.12	4.93	3.04	0.011
0.49	11.38	31.98	0.34	2.15	0.95	0.12	4.57	3.04	0.012
0.81	11.05	32.02	0.29	1.92	1.02	0.14	4.32	3.15	0.014
1.14	10.73	32.05	0.23	1.72	1.03	0.12	4.09	3.16	0.011
1.46	10.40	32.04	0.19	1.54	1.01	0.10	3.87	3.13	0.009
1.79	10.08	31.99	0.14	1.46	1.02	0.08	3.77	3.14	0.008
2.11	9.75	31.91	0.10	1.40	1.12	0.02	3.70	3.30	0.002
2.44	9.43	31.78	0.06	1.42	1.11	0.01	3.72	3.29	0.001
2.76	9.10	31.61	0.03	1.44	1.04	0.02	3.74	3.18	0.001
3.09	8.78	31.38	0.02	1.52	1.10	-0.02	3.85	3.27	-0.002
3.41	8.45	31.12	0.00	1.64	1.26	-0.03	3.99	3.51	-0.003
3.74	8.13	30.81	-0.03	1.77	1.23	-0.04	4.15	3.46	-0.004
4.06	7.80	30.45	-0.03	1.86	1.16	-0.05	4.25	3.36	-0.005
4.39	7.48	30.03	-0.05	1.92	1.18	-0.06	4.33	3.39	-0.006
4.71	7.15	29.57	-0.07	2.06	1.10	-0.10	4.47	3.27	-0.010
5.04	6.83	29.05	-0.06	2.20	0.96	-0.07	4.62	3.05	-0.007
5.36	6.50	28.48	-0.07	2.29	0.87	-0.04	4.72	2.91	-0.004
5.69	6.18	27.82	-0.08	2.45	0.91	-0.09	4.88	2.98	-0.009
6.01	5.85	27.08	-0.08	2.56	0.88	-0.05	4.99	2.93	-0.005
6.34	5.53	26.29	-0.09	2.65	0.77	-0.06	5.08	2.74	-0.005
6.66	5.20	25.43	-0.09	2.60	0.78	-0.05	5.03	2.76	-0.005
6.99	4.88	24.46	-0.09	2.56	0.62	-0.06	5.00	2.46	-0.006
7.31	4.55	23.44	-0.09	2.56	0.54	-0.08	4.99	2.30	-0.008
7.64	4.23	22.31	-0.08	2.56	0.58	-0.07	4.99	2.38	-0.007
7.96	3.90	21.08	-0.08	2.39	0.51	-0.05	4.82	2.23	-0.005
8.29	3.58	19.77	-0.06	2.26	0.41	-0.04	4.69	2.00	-0.004
8.61	3.25	18.34	-0.06	2.13	0.44	-0.04	4.55	2.06	-0.004
8.94	2.93	16.79	-0.06	1.95	0.41	-0.03	4.36	2.01	-0.003
9.26	2.60	15.20	-0.05	1.75	0.34	-0.03	4.13	1.82	-0.003
9.59	2.28	13.46	-0.04	1.63	0.40	-0.02	3.98	1.96	-0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
9.91	1.95	11.62	-0.04	1.49	0.48	0.00	3.80	2.17	0.000
10.24	1.63	9.66	-0.04	1.43	0.64	-0.01	3.73	2.50	-0.001
10.56	1.30	7.65	-0.04	1.28	0.41	-0.01	3.53	2.01	-0.001
10.89	0.98	1.53	0.13	9.45	0.05	0.00	9.59	0.70	0.000
11.21	0.65	0.93	0.25	8.57	0.45	0.13	9.13	2.10	0.012
11.54	0.33	0.86	-0.01	6.00	0.18	0.11	7.64	1.32	0.011
11.87	0.00	-0.06	0.04	0.28	0.04	-0.01	1.65	0.62	-0.001

Table N-64   Grid #1, L6, Plasma-300, Right (71-80)

L6 (300)							U_∞ =	31.86	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.87	23.73	1.26	0.67	1.38	0.23	0.00	3.68	1.51	0.000
-11.54	23.41	3.65	0.10	3.13	0.15	0.04	5.56	1.21	0.004
-11.21	23.08	6.62	0.02	3.49	0.29	0.07	5.87	1.68	0.007
-10.89	22.75	9.35	0.05	3.97	0.38	0.10	6.25	1.94	0.010
-10.56	22.43	12.27	0.09	5.13	0.48	0.21	7.11	2.17	0.021
-10.24	22.10	14.94	0.10	6.19	0.53	0.30	7.81	2.28	0.029
-9.91	21.78	17.46	0.14	6.84	0.57	0.41	8.21	2.36	0.041
-9.59	21.45	19.60	0.19	6.99	0.55	0.51	8.30	2.32	0.050
-9.26	21.13	21.56	0.24	6.36	0.60	0.57	7.92	2.42	0.056
-8.94	20.80	23.11	0.29	5.67	0.64	0.59	7.47	2.51	0.058
-8.61	20.48	24.49	0.35	4.59	0.77	0.55	6.73	2.75	0.054
-8.29	20.15	25.56	0.41	3.63	0.76	0.44	5.98	2.73	0.044
-7.96	19.83	26.41	0.49	3.02	0.78	0.31	5.46	2.77	0.031
-7.64	19.50	27.05	0.57	2.70	0.88	0.13	5.16	2.94	0.013
-7.31	19.18	27.58	0.62	2.57	0.96	-0.08	5.03	3.07	-0.008
-6.99	18.85	28.00	0.69	2.71	1.01	-0.29	5.17	3.15	-0.029
-6.66	18.53	28.33	0.75	3.14	1.09	-0.50	5.56	3.27	-0.049
-6.34	18.20	28.58	0.81	3.87	1.19	-0.77	6.18	3.43	-0.076
-6.01	17.88	28.78	0.88	4.84	1.30	-1.00	6.91	3.58	-0.098
-5.69	17.55	28.95	0.93	5.78	1.28	-1.21	7.55	3.55	-0.119
-5.36	17.23	29.08	0.99	6.92	1.42	-1.35	8.26	3.75	-0.133
-5.04	16.90	29.18	1.04	7.89	1.56	-1.49	8.82	3.93	-0.147
-4.71	16.58	29.31	1.07	8.61	1.60	-1.53	9.21	3.97	-0.151

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-4.39	16.25	29.42	1.10	9.22	1.58	-1.55	9.53	3.95	-0.152
-4.06	15.93	29.54	1.12	9.58	1.44	-1.52	9.72	3.77	-0.150
-3.74	15.60	29.64	1.12	9.99	1.51	-1.44	9.92	3.86	-0.142
-3.41	15.28	29.74	1.12	10.19	1.40	-1.38	10.02	3.72	-0.136
-3.09	14.95	29.91	1.08	9.79	1.38	-1.17	9.82	3.69	-0.115
-2.76	14.63	30.07	1.04	9.53	1.44	-1.05	9.69	3.76	-0.103
-2.44	14.30	30.24	1.01	9.04	1.25	-0.84	9.44	3.51	-0.082
-2.11	13.98	30.44	0.95	8.28	1.16	-0.67	9.03	3.37	-0.066
-1.79	13.65	30.64	0.89	7.47	1.19	-0.51	8.58	3.43	-0.050
-1.46	13.33	30.82	0.83	6.81	1.09	-0.34	8.19	3.28	-0.033
-1.14	13.00	31.03	0.74	5.79	1.09	-0.17	7.55	3.27	-0.016
-0.81	12.68	31.21	0.67	5.05	1.06	-0.09	7.06	3.23	-0.009
-0.49	12.35	31.37	0.60	4.38	1.19	-0.01	6.57	3.42	-0.001
-0.16	12.03	31.52	0.53	3.84	1.22	0.07	6.15	3.47	0.006
0.16	11.70	31.62	0.45	3.44	1.12	0.11	5.82	3.33	0.011
0.49	11.38	31.74	0.39	2.91	1.01	0.12	5.35	3.16	0.012
0.81	11.05	31.82	0.33	2.59	1.15	0.12	5.05	3.37	0.012
1.14	10.73	31.84	0.27	2.34	1.22	0.13	4.80	3.47	0.012
1.46	10.40	31.86	0.23	2.08	1.19	0.10	4.53	3.43	0.010
1.79	10.08	31.85	0.18	1.86	1.22	0.06	4.28	3.47	0.006
2.11	9.75	31.79	0.15	1.71	1.33	0.07	4.10	3.63	0.006
2.44	9.43	31.69	0.12	1.66	1.29	0.04	4.05	3.57	0.004
2.76	9.10	31.55	0.08	1.68	1.27	0.04	4.07	3.54	0.004
3.09	8.78	31.35	0.04	1.74	1.37	0.00	4.14	3.68	0.000
3.41	8.45	31.11	0.02	1.82	1.38	-0.03	4.24	3.69	-0.003
3.74	8.13	30.81	0.01	1.96	1.44	0.00	4.40	3.77	0.000
4.06	7.80	30.47	-0.01	2.03	1.48	-0.07	4.48	3.83	-0.007
4.39	7.48	30.06	-0.03	2.16	1.48	-0.07	4.62	3.82	-0.007
4.71	7.15	29.59	-0.05	2.28	1.67	-0.06	4.74	4.05	-0.006
5.04	6.83	29.09	-0.05	2.35	1.49	-0.06	4.81	3.83	-0.006
5.36	6.50	28.51	-0.06	2.48	1.21	-0.08	4.94	3.45	-0.008
5.69	6.18	27.84	-0.08	2.62	1.09	-0.06	5.08	3.28	-0.006
6.01	5.85	27.14	-0.07	2.71	1.11	-0.08	5.17	3.31	-0.008
6.34	5.53	26.34	-0.07	2.74	1.07	-0.06	5.20	3.24	-0.006
6.66	5.20	25.47	-0.07	2.71	0.95	-0.09	5.17	3.06	-0.008
6.99	4.88	24.52	-0.07	2.70	0.80	-0.09	5.16	2.80	-0.009
7.31	4.55	23.49	-0.06	2.69	0.72	-0.07	5.15	2.67	-0.007
7.64	4.23	22.34	-0.06	2.67	0.70	-0.08	5.13	2.62	-0.008

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.96	3.90	21.12	-0.06	2.54	0.51	-0.05	5.00	2.25	-0.005
8.29	3.58	19.81	-0.06	2.37	0.50	-0.06	4.83	2.21	-0.006
8.61	3.25	18.39	-0.05	2.28	0.51	-0.06	4.73	2.24	-0.005
8.94	2.93	16.85	-0.04	2.08	0.48	-0.04	4.52	2.18	-0.004
9.26	2.60	15.25	-0.05	1.84	0.44	-0.02	4.26	2.08	-0.002
9.59	2.28	13.50	-0.04	1.72	0.43	-0.01	4.12	2.07	-0.001
9.91	1.95	11.67	-0.05	1.56	0.32	-0.01	3.92	1.79	-0.001
10.24	1.63	9.74	-0.05	1.40	0.36	-0.01	3.71	1.88	-0.001
10.56	1.30	7.68	-0.04	1.34	0.32	-0.02	3.63	1.79	-0.002
10.89	0.98	4.53	0.08	8.43	0.09	0.01	9.12	0.93	0.001
11.21	0.65	1.16	0.08	7.52	0.27	0.09	8.61	1.62	0.008
11.54	0.33	0.34	-0.12	1.61	0.10	-0.01	3.98	1.00	-0.001
11.87	0.00	-0.03	0.22	0.00	0.02	0.00	0.11	0.45	0.000

Table N-65 Grid #2, L0, Plasma-Off, Left (1-10)

L0 (Off)							$U_\infty =$	29.00	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.40	20.81	1.14	-0.09	1.87	0.28	-0.06	4.72	1.83	-0.008
-10.12	20.52	3.12	0.00	2.56	0.51	0.00	5.52	2.47	0.000
-9.83	20.24	5.56	-0.03	2.79	0.75	0.01	5.76	2.98	0.002
-9.55	19.95	7.66	-0.03	3.72	0.86	0.04	6.65	3.19	0.005
-9.26	19.67	9.75	-0.02	4.73	1.23	0.07	7.50	3.83	0.008
-8.98	19.38	11.69	-0.03	5.92	1.27	0.10	8.39	3.88	0.011
-8.69	19.10	13.60	-0.02	7.22	1.60	0.17	9.27	4.36	0.021
-8.41	18.81	15.28	-0.04	8.25	1.52	0.30	9.90	4.25	0.036
-8.12	18.53	16.89	-0.04	8.94	1.25	0.42	10.31	3.86	0.050
-7.84	18.24	18.29	-0.03	9.48	1.25	0.46	10.62	3.85	0.054
-7.55	17.96	19.58	-0.04	9.44	1.20	0.46	10.59	3.77	0.055
-7.27	17.67	20.68	-0.05	9.15	1.28	0.52	10.43	3.90	0.062
-6.98	17.39	21.67	-0.05	8.80	1.36	0.61	10.23	4.02	0.073
-6.70	17.10	22.50	-0.06	8.31	1.23	0.60	9.94	3.82	0.072
-6.41	16.82	23.27	-0.07	7.67	1.17	0.63	9.55	3.74	0.075
-6.13	16.53	23.92	-0.08	7.00	1.18	0.63	9.13	3.75	0.075
-5.84	16.25	24.51	-0.09	6.49	1.31	0.61	8.78	3.95	0.073

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-5.56	15.96	24.99	-0.10	6.00	1.30	0.56	8.44	3.93	0.067
-5.27	15.68	25.41	-0.10	5.56	1.20	0.56	8.13	3.78	0.067
-4.99	15.39	25.79	-0.11	5.14	1.30	0.58	7.82	3.93	0.069
-4.70	15.11	26.14	-0.13	4.73	1.32	0.55	7.50	3.97	0.066
-4.42	14.82	26.45	-0.13	4.30	1.29	0.53	7.15	3.91	0.063
-4.13	14.54	26.74	-0.12	3.91	1.27	0.48	6.82	3.89	0.057
-3.85	14.25	26.99	-0.13	3.69	1.29	0.46	6.62	3.91	0.054
-3.56	13.97	27.22	-0.15	3.50	1.29	0.42	6.45	3.92	0.050
-3.28	13.68	27.42	-0.16	3.38	1.39	0.42	6.34	4.07	0.050
-2.99	13.40	27.61	-0.16	3.21	1.36	0.43	6.17	4.03	0.051
-2.71	13.11	27.79	-0.16	3.03	1.29	0.39	6.01	3.92	0.046
-2.42	12.83	27.94	-0.16	2.88	1.29	0.37	5.86	3.92	0.044
-2.14	12.54	28.08	-0.17	2.83	1.22	0.38	5.80	3.80	0.046
-1.85	12.26	28.21	-0.17	2.76	1.28	0.36	5.72	3.91	0.042
-1.57	11.97	28.34	-0.18	2.58	1.42	0.33	5.54	4.10	0.039
-1.28	11.69	28.45	-0.17	2.49	1.30	0.32	5.44	3.93	0.038
-1.00	11.40	28.54	-0.18	2.37	1.24	0.30	5.31	3.84	0.035
-0.71	11.12	28.65	-0.17	2.20	1.26	0.27	5.12	3.87	0.032
-0.43	10.83	28.72	-0.17	2.19	1.35	0.27	5.10	4.00	0.032
-0.14	10.55	28.80	-0.16	2.11	1.36	0.21	5.01	4.02	0.025
0.14	10.26	28.86	-0.15	2.07	1.20	0.22	4.96	3.77	0.026
0.43	9.98	28.90	-0.16	2.00	1.24	0.19	4.88	3.85	0.022
0.71	9.69	28.93	-0.15	1.94	1.29	0.15	4.81	3.91	0.017
1.00	9.41	28.97	-0.14	1.93	1.28	0.11	4.80	3.91	0.014
1.28	9.12	28.99	-0.15	1.92	1.25	0.09	4.78	3.86	0.011
1.57	8.84	29.00	-0.15	1.94	1.25	0.09	4.81	3.86	0.011
1.85	8.55	28.99	-0.14	1.92	1.24	0.05	4.78	3.84	0.006
2.14	8.27	28.98	-0.14	1.91	1.18	0.03	4.77	3.75	0.003
2.42	7.98	28.94	-0.13	1.97	1.14	-0.01	4.84	3.69	-0.001
2.71	7.70	28.89	-0.12	2.06	1.19	-0.08	4.95	3.76	-0.010
2.99	7.41	28.82	-0.12	2.15	1.17	-0.10	5.05	3.72	-0.012
3.28	7.13	28.74	-0.13	2.22	1.04	-0.09	5.14	3.52	-0.010
3.56	6.84	28.62	-0.12	2.36	1.02	-0.12	5.30	3.49	-0.015
3.85	6.56	28.49	-0.11	2.54	1.07	-0.17	5.50	3.57	-0.020
4.13	6.27	28.32	-0.10	2.68	1.02	-0.17	5.64	3.48	-0.020
4.42	5.99	28.12	-0.09	2.94	1.05	-0.21	5.92	3.54	-0.025
4.70	5.70	27.87	-0.08	3.22	1.03	-0.24	6.19	3.49	-0.028
4.99	5.42	27.56	-0.09	3.53	0.93	-0.27	6.48	3.32	-0.032

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
5.27	5.13	27.21	-0.08	3.86	0.96	-0.27	6.78	3.38	-0.032
5.56	4.85	26.80	-0.07	4.32	1.00	-0.33	7.17	3.45	-0.039
5.84	4.56	26.29	-0.06	4.82	1.13	-0.34	7.57	3.67	-0.040
6.13	4.28	25.69	-0.06	5.42	1.12	-0.35	8.02	3.65	-0.042
6.41	3.99	25.00	-0.05	6.02	1.12	-0.40	8.46	3.64	-0.047
6.70	3.71	24.18	-0.05	6.69	1.17	-0.40	8.92	3.73	-0.047
6.98	3.42	23.22	-0.03	7.21	1.22	-0.39	9.26	3.81	-0.047
7.27	3.14	22.10	-0.01	7.71	1.09	-0.41	9.58	3.60	-0.049
7.55	2.85	20.79	-0.02	7.95	1.13	-0.37	9.73	3.66	-0.044
7.84	2.57	19.26	-0.02	7.85	1.21	-0.33	9.66	3.79	-0.040
8.12	2.28	17.58	-0.01	7.37	1.11	-0.27	9.36	3.63	-0.032
8.41	2.00	15.72	0.00	6.92	1.09	-0.19	9.07	3.59	-0.022
8.69	1.71	13.73	0.01	6.06	1.08	-0.08	8.49	3.59	-0.009
8.98	1.43	11.52	0.02	4.85	1.12	-0.16	7.59	3.64	-0.019
9.26	1.14	9.21	0.02	3.79	1.17	-0.02	6.71	3.73	-0.002
9.55	0.86	7.00	0.02	3.42	0.89	0.03	6.38	3.26	0.004
9.83	0.57	3.72	0.02	2.67	0.39	0.01	5.63	2.15	0.001
10.12	0.29	0.52	0.07	0.71	0.09	-0.02	2.91	1.05	-0.002
10.40	0.00	14.40	0.06	172.42	0.01	-1.27	45.28	0.35	-0.151

Table N-66 Grid #2, L0, Plasma-Off, Center (46-55)

L0 (Off)							U_∞ =	29.12	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.40	20.81	0.34	-0.06	0.31	0.03	-0.01	1.92	0.58	-0.001
-10.12	20.52	3.18	-0.03	1.72	0.25	0.02	4.50	1.71	0.002
-9.83	20.24	5.64	-0.03	2.20	0.30	0.02	5.10	1.89	0.003
-9.55	19.95	7.73	-0.03	2.85	0.43	0.03	5.79	2.26	0.004
-9.26	19.67	9.80	-0.04	3.70	0.49	0.05	6.61	2.39	0.006
-8.98	19.38	11.70	-0.04	4.88	0.44	0.12	7.59	2.27	0.014
-8.69	19.10	13.56	-0.04	6.00	0.42	0.19	8.41	2.22	0.022
-8.41	18.81	15.23	-0.05	6.95	0.46	0.25	9.06	2.32	0.029
-8.12	18.53	16.80	-0.05	7.82	0.49	0.32	9.61	2.40	0.037
-7.84	18.24	18.18	-0.05	8.33	0.60	0.37	9.91	2.67	0.043
-7.55	17.96	19.45	-0.06	8.40	0.64	0.42	9.95	2.75	0.049

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-7.27	17.67	20.54	-0.07	8.24	0.53	0.46	9.86	2.49	0.054
-6.98	17.39	21.52	-0.06	8.04	0.63	0.52	9.74	2.72	0.062
-6.70	17.10	22.40	-0.07	7.50	0.64	0.57	9.41	2.75	0.067
-6.41	16.82	23.17	-0.07	7.03	0.64	0.57	9.10	2.76	0.067
-6.13	16.53	23.82	-0.09	6.54	0.71	0.57	8.78	2.89	0.067
-5.84	16.25	24.41	-0.10	6.04	0.66	0.55	8.44	2.78	0.065
-5.56	15.96	24.93	-0.10	5.59	0.71	0.53	8.12	2.88	0.062
-5.27	15.68	25.39	-0.09	5.20	0.79	0.54	7.83	3.04	0.064
-4.99	15.39	25.80	-0.11	4.78	0.77	0.53	7.51	3.02	0.062
-4.70	15.11	26.17	-0.11	4.38	0.74	0.50	7.19	2.96	0.059
-4.42	14.82	26.50	-0.12	4.05	0.75	0.48	6.92	2.98	0.056
-4.13	14.54	26.77	-0.13	3.77	0.80	0.47	6.67	3.08	0.055
-3.85	14.25	27.02	-0.13	3.54	0.81	0.44	6.46	3.09	0.052
-3.56	13.97	27.27	-0.13	3.25	0.82	0.41	6.19	3.12	0.048
-3.28	13.68	27.47	-0.13	3.10	0.83	0.39	6.05	3.13	0.046
-2.99	13.40	27.67	-0.13	2.93	0.79	0.37	5.88	3.06	0.044
-2.71	13.11	27.84	-0.15	2.78	0.82	0.37	5.73	3.11	0.043
-2.42	12.83	28.00	-0.15	2.63	0.84	0.33	5.57	3.14	0.039
-2.14	12.54	28.13	-0.14	2.52	0.83	0.32	5.45	3.14	0.038
-1.85	12.26	28.27	-0.14	2.38	0.89	0.30	5.30	3.24	0.036
-1.57	11.97	28.39	-0.14	2.26	0.91	0.28	5.16	3.27	0.033
-1.28	11.69	28.51	-0.14	2.10	0.78	0.25	4.98	3.04	0.029
-1.00	11.40	28.61	-0.15	2.02	0.75	0.24	4.88	2.98	0.028
-0.71	11.12	28.71	-0.15	1.92	0.80	0.22	4.76	3.08	0.026
-0.43	10.83	28.81	-0.14	1.81	0.74	0.19	4.62	2.96	0.022
-0.14	10.55	28.87	-0.14	1.77	0.79	0.18	4.57	3.05	0.021
0.14	10.26	28.93	-0.14	1.75	0.84	0.17	4.54	3.14	0.020
0.43	9.98	29.00	-0.14	1.68	0.80	0.15	4.46	3.08	0.018
0.71	9.69	29.05	-0.14	1.63	0.75	0.13	4.39	2.97	0.015
1.00	9.41	29.08	-0.14	1.61	0.74	0.11	4.36	2.96	0.013
1.28	9.12	29.11	-0.14	1.58	0.75	0.10	4.32	2.98	0.012
1.57	8.84	29.12	-0.13	1.55	0.72	0.07	4.28	2.91	0.008
1.85	8.55	29.12	-0.13	1.55	0.71	0.05	4.27	2.90	0.006
2.14	8.27	29.10	-0.13	1.57	0.72	0.02	4.30	2.92	0.002
2.42	7.98	29.07	-0.13	1.62	0.70	0.00	4.37	2.88	0.000
2.71	7.70	29.02	-0.11	1.70	0.71	-0.02	4.48	2.89	-0.002
2.99	7.41	28.96	-0.12	1.75	0.71	-0.05	4.54	2.89	-0.006
3.28	7.13	28.88	-0.12	1.82	0.69	-0.08	4.63	2.84	-0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.56	6.84	28.76	-0.11	1.97	0.65	-0.09	4.82	2.77	-0.011
3.85	6.56	28.62	-0.10	2.10	0.61	-0.12	4.97	2.68	-0.014
4.13	6.27	28.45	-0.10	2.26	0.60	-0.16	5.16	2.65	-0.019
4.42	5.99	28.24	-0.09	2.48	0.59	-0.18	5.41	2.64	-0.022
4.70	5.70	27.99	-0.09	2.72	0.58	-0.20	5.67	2.60	-0.024
4.99	5.42	27.69	-0.09	3.05	0.63	-0.21	6.00	2.73	-0.025
5.27	5.13	27.32	-0.08	3.45	0.64	-0.22	6.38	2.75	-0.026
5.56	4.85	26.90	-0.07	3.81	0.53	-0.25	6.70	2.51	-0.030
5.84	4.56	26.39	-0.06	4.24	0.53	-0.29	7.07	2.51	-0.034
6.13	4.28	25.76	-0.06	4.88	0.49	-0.32	7.58	2.40	-0.038
6.41	3.99	25.02	-0.05	5.47	0.52	-0.34	8.03	2.48	-0.040
6.70	3.71	24.14	-0.05	6.29	0.57	-0.37	8.61	2.58	-0.044
6.98	3.42	23.15	-0.04	6.85	0.60	-0.36	8.99	2.65	-0.042
7.27	3.14	21.98	-0.03	7.23	0.63	-0.37	9.24	2.73	-0.044
7.55	2.85	20.66	-0.02	7.39	0.53	-0.34	9.34	2.50	-0.040
7.84	2.57	19.15	-0.01	7.23	0.53	-0.25	9.23	2.51	-0.030
8.12	2.28	17.46	-0.01	6.65	0.60	-0.20	8.85	2.66	-0.023
8.41	2.00	15.61	-0.02	5.91	0.63	-0.17	8.35	2.74	-0.020
8.69	1.71	13.62	-0.01	5.04	0.73	-0.08	7.71	2.93	-0.010
8.98	1.43	11.50	-0.02	4.27	0.71	-0.06	7.09	2.90	-0.007
9.26	1.14	9.16	-0.02	3.34	0.73	-0.06	6.28	2.93	-0.007
9.55	0.86	7.01	0.02	3.08	0.50	-0.02	6.03	2.44	-0.003
9.83	0.57	3.62	0.10	2.17	0.22	-0.03	5.06	1.60	-0.004
10.12	0.29	0.11	-0.06	0.07	0.05	0.00	0.91	0.73	0.000
10.40	0.00	0.06	0.00	0.00	0.00	0.00	0.16	0.19	0.000

Table N-67 Grid #2, L0, Plasma-Off, Right (71-80)

L0 (Off)							U_∞ =	29.14	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.40	20.81	0.60	0.05	0.44	0.07	0.03	2.29	0.88	0.003
-10.12	20.52	3.32	0.00	1.81	0.22	0.04	4.61	1.62	0.005
-9.83	20.24	5.74	-0.03	2.24	0.26	0.04	5.13	1.77	0.005
-9.55	19.95	7.79	-0.03	2.81	0.34	0.06	5.76	2.01	0.008
-9.26	19.67	9.82	-0.03	3.59	0.37	0.08	6.50	2.08	0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-8.98	19.38	11.72	-0.04	4.68	0.42	0.14	7.42	2.23	0.017
-8.69	19.10	13.57	-0.04	5.62	0.43	0.20	8.14	2.26	0.023
-8.41	18.81	15.23	-0.05	6.68	0.42	0.26	8.87	2.23	0.030
-8.12	18.53	16.78	-0.06	7.35	0.45	0.35	9.30	2.30	0.041
-7.84	18.24	18.14	-0.06	7.85	0.52	0.40	9.61	2.48	0.047
-7.55	17.96	19.44	-0.07	8.02	0.50	0.44	9.72	2.43	0.051
-7.27	17.67	20.50	-0.07	7.98	0.51	0.48	9.69	2.45	0.056
-6.98	17.39	21.49	-0.08	7.73	0.57	0.53	9.54	2.59	0.062
-6.70	17.10	22.34	-0.09	7.56	0.60	0.56	9.43	2.65	0.066
-6.41	16.82	23.11	-0.10	7.12	0.58	0.54	9.15	2.61	0.064
-6.13	16.53	23.78	-0.10	6.51	0.58	0.55	8.75	2.62	0.065
-5.84	16.25	24.37	-0.11	6.11	0.59	0.56	8.48	2.64	0.066
-5.56	15.96	24.88	-0.12	5.68	0.62	0.54	8.18	2.70	0.064
-5.27	15.68	25.37	-0.12	5.21	0.62	0.53	7.84	2.71	0.062
-4.99	15.39	25.77	-0.13	4.82	0.65	0.52	7.53	2.76	0.062
-4.70	15.11	26.14	-0.14	4.47	0.74	0.49	7.26	2.95	0.058
-4.42	14.82	26.47	-0.13	4.18	0.74	0.50	7.01	2.94	0.059
-4.13	14.54	26.78	-0.13	3.80	0.69	0.48	6.69	2.85	0.056
-3.85	14.25	27.03	-0.14	3.53	0.69	0.44	6.44	2.86	0.052
-3.56	13.97	27.27	-0.15	3.35	0.73	0.41	6.28	2.93	0.048
-3.28	13.68	27.47	-0.14	3.12	0.74	0.41	6.06	2.95	0.048
-2.99	13.40	27.67	-0.15	2.92	0.74	0.38	5.87	2.95	0.045
-2.71	13.11	27.84	-0.16	2.76	0.73	0.37	5.70	2.92	0.043
-2.42	12.83	28.03	-0.16	2.58	0.72	0.34	5.52	2.90	0.040
-2.14	12.54	28.17	-0.16	2.38	0.73	0.32	5.29	2.94	0.037
-1.85	12.26	28.32	-0.16	2.24	0.72	0.30	5.13	2.92	0.036
-1.57	11.97	28.45	-0.16	2.10	0.71	0.28	4.97	2.90	0.033
-1.28	11.69	28.56	-0.16	1.97	0.72	0.25	4.82	2.92	0.030
-1.00	11.40	28.67	-0.16	1.92	0.66	0.22	4.75	2.78	0.026
-0.71	11.12	28.76	-0.16	1.80	0.70	0.21	4.60	2.87	0.024
-0.43	10.83	28.83	-0.16	1.73	0.74	0.20	4.51	2.95	0.023
-0.14	10.55	28.92	-0.16	1.65	0.67	0.17	4.41	2.81	0.020
0.14	10.26	28.98	-0.16	1.60	0.65	0.15	4.34	2.76	0.017
0.43	9.98	29.04	-0.16	1.57	0.70	0.12	4.30	2.88	0.014
0.71	9.69	29.08	-0.16	1.50	0.72	0.10	4.20	2.90	0.011
1.00	9.41	29.11	-0.15	1.46	0.63	0.08	4.15	2.73	0.009
1.28	9.12	29.13	-0.15	1.47	0.68	0.06	4.16	2.83	0.008
1.57	8.84	29.14	-0.15	1.47	0.68	0.04	4.17	2.83	0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.85	8.55	29.14	-0.14	1.49	0.63	0.03	4.19	2.73	0.003
2.14	8.27	29.12	-0.14	1.50	0.66	0.00	4.20	2.79	0.000
2.42	7.98	29.10	-0.14	1.52	0.70	-0.03	4.23	2.87	-0.003
2.71	7.70	29.05	-0.14	1.55	0.70	-0.05	4.27	2.87	-0.006
2.99	7.41	28.99	-0.14	1.62	0.64	-0.05	4.36	2.74	-0.006
3.28	7.13	28.91	-0.13	1.72	0.57	-0.09	4.50	2.59	-0.010
3.56	6.84	28.80	-0.13	1.88	0.59	-0.12	4.70	2.64	-0.014
3.85	6.56	28.65	-0.12	2.03	0.59	-0.13	4.89	2.63	-0.016
4.13	6.27	28.49	-0.11	2.18	0.54	-0.15	5.07	2.51	-0.017
4.42	5.99	28.27	-0.10	2.46	0.60	-0.19	5.38	2.65	-0.022
4.70	5.70	28.02	-0.10	2.75	0.59	-0.21	5.69	2.64	-0.025
4.99	5.42	27.71	-0.10	2.98	0.51	-0.23	5.92	2.44	-0.027
5.27	5.13	27.34	-0.09	3.32	0.52	-0.25	6.26	2.47	-0.029
5.56	4.85	26.92	-0.09	3.76	0.56	-0.27	6.65	2.56	-0.032
5.84	4.56	26.39	-0.09	4.22	0.53	-0.28	7.05	2.50	-0.033
6.13	4.28	25.77	-0.08	4.84	0.50	-0.32	7.55	2.43	-0.037
6.41	3.99	25.02	-0.07	5.41	0.57	-0.33	7.98	2.59	-0.038
6.70	3.71	24.16	-0.06	5.95	0.59	-0.34	8.37	2.64	-0.040
6.98	3.42	23.16	-0.04	6.45	0.58	-0.38	8.71	2.61	-0.045
7.27	3.14	21.99	-0.04	6.91	0.55	-0.34	9.02	2.54	-0.040
7.55	2.85	20.66	-0.04	6.89	0.49	-0.30	9.00	2.40	-0.035
7.84	2.57	19.16	-0.02	6.73	0.49	-0.29	8.90	2.41	-0.034
8.12	2.28	17.46	-0.02	6.31	0.54	-0.24	8.62	2.53	-0.028
8.41	2.00	15.61	-0.03	5.59	0.54	-0.17	8.11	2.51	-0.021
8.69	1.71	13.64	-0.01	4.82	0.60	-0.12	7.53	2.65	-0.014
8.98	1.43	11.49	0.00	3.94	0.61	-0.07	6.81	2.67	-0.008
9.26	1.14	9.16	-0.01	3.22	0.65	-0.05	6.16	2.76	-0.006
9.55	0.86	6.98	-0.01	2.90	0.51	-0.01	5.84	2.45	-0.001
9.83	0.57	3.49	-0.01	2.73	0.23	-0.03	5.67	1.64	-0.003
10.12	0.29	-0.02	-0.03	0.13	0.05	0.01	1.24	0.75	0.001
10.40	0.00	0.02	0.03	0.01	0.01	0.00	0.27	0.25	0.000

Table N-68 Grid #2, L0, Plasma-150, Left (1-10)

L0 (150)							U_∞ =	29.01	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.40	20.81	0.85	-0.07	1.77	0.29	-0.08	4.59	1.85	-0.009
-10.12	20.52	3.18	-0.05	2.55	0.62	-0.03	5.51	2.71	-0.003
-9.83	20.24	5.57	-0.03	2.94	0.96	0.00	5.91	3.37	-0.001
-9.55	19.95	7.65	-0.02	3.83	1.03	0.03	6.74	3.49	0.003
-9.26	19.67	9.74	-0.02	4.99	1.01	0.02	7.70	3.46	0.003
-8.98	19.38	11.66	-0.03	6.08	1.02	0.09	8.50	3.49	0.010
-8.69	19.10	13.57	-0.02	7.51	1.30	0.26	9.45	3.92	0.031
-8.41	18.81	15.27	-0.02	8.33	1.20	0.28	9.95	3.78	0.034
-8.12	18.53	16.86	-0.04	8.98	1.24	0.35	10.33	3.84	0.042
-7.84	18.24	18.27	-0.04	9.43	1.27	0.45	10.59	3.88	0.053
-7.55	17.96	19.56	-0.05	9.47	1.05	0.52	10.61	3.54	0.061
-7.27	17.67	20.64	-0.05	9.25	1.19	0.55	10.48	3.77	0.066
-6.98	17.39	21.62	-0.06	8.89	1.25	0.57	10.28	3.85	0.067
-6.70	17.10	22.46	-0.06	8.53	1.10	0.60	10.07	3.61	0.072
-6.41	16.82	23.24	-0.07	7.87	1.16	0.58	9.67	3.72	0.069
-6.13	16.53	23.88	-0.07	7.20	1.16	0.61	9.25	3.71	0.073
-5.84	16.25	24.47	-0.08	6.59	1.17	0.58	8.85	3.72	0.069
-5.56	15.96	24.94	-0.10	6.15	1.19	0.58	8.55	3.76	0.069
-5.27	15.68	25.39	-0.10	5.67	1.21	0.54	8.21	3.79	0.064
-4.99	15.39	25.77	-0.11	5.24	1.24	0.52	7.89	3.84	0.061
-4.70	15.11	26.13	-0.11	4.86	1.25	0.54	7.60	3.86	0.064
-4.42	14.82	26.42	-0.12	4.59	1.37	0.49	7.39	4.04	0.058
-4.13	14.54	26.70	-0.12	4.32	1.32	0.48	7.16	3.97	0.057
-3.85	14.25	26.94	-0.13	4.08	1.37	0.51	6.96	4.03	0.060
-3.56	13.97	27.19	-0.14	3.83	1.46	0.46	6.74	4.16	0.055
-3.28	13.68	27.38	-0.13	3.61	1.45	0.42	6.55	4.15	0.050
-2.99	13.40	27.58	-0.14	3.39	1.40	0.41	6.35	4.08	0.048
-2.71	13.11	27.74	-0.15	3.26	1.30	0.39	6.23	3.93	0.047
-2.42	12.83	27.90	-0.15	3.12	1.29	0.42	6.09	3.92	0.050
-2.14	12.54	28.04	-0.17	3.00	1.22	0.38	5.97	3.81	0.045
-1.85	12.26	28.17	-0.17	2.88	1.35	0.33	5.85	4.01	0.039
-1.57	11.97	28.30	-0.16	2.73	1.36	0.30	5.70	4.01	0.036
-1.28	11.69	28.42	-0.14	2.59	1.26	0.29	5.55	3.87	0.034
-1.00	11.40	28.51	-0.15	2.50	1.30	0.28	5.45	3.94	0.033
-0.71	11.12	28.61	-0.16	2.37	1.35	0.24	5.30	4.00	0.029

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-0.43	10.83	28.71	-0.15	2.28	1.30	0.23	5.21	3.93	0.028
-0.14	10.55	28.78	-0.15	2.21	1.29	0.19	5.13	3.92	0.023
0.14	10.26	28.82	-0.15	2.21	1.31	0.18	5.13	3.95	0.021
0.43	9.98	28.89	-0.15	2.14	1.19	0.14	5.04	3.75	0.017
0.71	9.69	28.95	-0.13	2.05	1.18	0.13	4.93	3.74	0.015
1.00	9.41	28.98	-0.14	1.97	1.17	0.12	4.84	3.72	0.014
1.28	9.12	29.00	-0.15	1.95	1.19	0.10	4.82	3.77	0.012
1.57	8.84	29.01	-0.14	1.93	1.13	0.04	4.78	3.67	0.005
1.85	8.55	29.01	-0.13	1.92	1.13	0.03	4.78	3.66	0.004
2.14	8.27	29.00	-0.14	1.97	1.10	0.00	4.83	3.62	0.000
2.42	7.98	28.96	-0.14	2.02	1.16	-0.06	4.89	3.71	-0.007
2.71	7.70	28.93	-0.13	2.08	1.07	-0.08	4.97	3.57	-0.010
2.99	7.41	28.86	-0.12	2.15	0.99	-0.08	5.05	3.42	-0.009
3.28	7.13	28.76	-0.11	2.29	1.03	-0.13	5.21	3.49	-0.015
3.56	6.84	28.65	-0.11	2.42	1.07	-0.19	5.36	3.57	-0.022
3.85	6.56	28.51	-0.09	2.56	1.03	-0.20	5.52	3.51	-0.023
4.13	6.27	28.33	-0.09	2.74	0.98	-0.20	5.70	3.41	-0.023
4.42	5.99	28.12	-0.10	2.95	0.96	-0.21	5.92	3.39	-0.025
4.70	5.70	27.86	-0.09	3.26	0.90	-0.25	6.22	3.28	-0.030
4.99	5.42	27.56	-0.07	3.57	0.99	-0.30	6.51	3.43	-0.035
5.27	5.13	27.21	-0.07	3.94	0.96	-0.35	6.84	3.39	-0.041
5.56	4.85	26.77	-0.07	4.45	0.93	-0.34	7.27	3.33	-0.041
5.84	4.56	26.27	-0.05	4.96	1.00	-0.38	7.67	3.46	-0.045
6.13	4.28	25.66	-0.05	5.52	1.12	-0.42	8.10	3.65	-0.050
6.41	3.99	24.93	-0.05	6.11	1.27	-0.38	8.52	3.88	-0.045
6.70	3.71	24.09	-0.03	6.78	1.28	-0.41	8.97	3.91	-0.048
6.98	3.42	23.11	-0.03	7.39	1.15	-0.44	9.37	3.70	-0.052
7.27	3.14	21.96	-0.02	7.75	1.02	-0.41	9.60	3.49	-0.049
7.55	2.85	20.66	-0.01	8.00	1.04	-0.39	9.75	3.51	-0.047
7.84	2.57	19.14	-0.01	8.11	1.10	-0.33	9.81	3.61	-0.039
8.12	2.28	17.42	0.00	7.66	1.08	-0.28	9.54	3.59	-0.033
8.41	2.00	15.54	-0.01	7.00	1.20	-0.17	9.12	3.77	-0.020
8.69	1.71	13.53	0.00	5.93	1.17	-0.14	8.39	3.74	-0.016
8.98	1.43	11.35	0.01	4.86	1.10	-0.08	7.60	3.61	-0.010
9.26	1.14	9.01	0.01	3.76	0.92	-0.06	6.68	3.30	-0.007
9.55	0.86	6.71	0.00	3.48	0.70	-0.04	6.43	2.89	-0.005
9.83	0.57	3.64	-0.04	2.54	0.38	0.01	5.49	2.12	0.001
10.12	0.29	0.50	0.01	0.75	0.15	-0.01	2.98	1.35	-0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
10.40	0.00	-3.73	-1.90	772.13	93.05	-11.46	95.78	33.25	-1.362

Table N-69 Grid #2, L0, Plasma-150, Center (46-55)

L0 (150)							U_∞ =	29.09	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.40	20.81	0.37	-0.08	0.27	0.10	0.00	1.78	1.07	0.000
-10.12	20.52	3.18	-0.07	1.72	0.23	0.02	4.51	1.64	0.002
-9.83	20.24	5.61	-0.03	2.25	0.25	0.02	5.15	1.71	0.002
-9.55	19.95	7.70	-0.03	3.07	0.39	0.04	6.03	2.14	0.005
-9.26	19.67	9.73	-0.03	3.95	0.43	0.07	6.83	2.27	0.008
-8.98	19.38	11.64	-0.04	5.24	0.49	0.14	7.87	2.41	0.017
-8.69	19.10	13.49	-0.04	6.44	0.49	0.19	8.72	2.41	0.023
-8.41	18.81	15.15	-0.04	7.36	0.54	0.25	9.33	2.52	0.029
-8.12	18.53	16.70	-0.04	8.03	0.56	0.34	9.74	2.57	0.040
-7.84	18.24	18.11	-0.05	8.68	0.61	0.44	10.13	2.69	0.051
-7.55	17.96	19.39	-0.06	8.72	0.67	0.48	10.15	2.82	0.057
-7.27	17.67	20.50	-0.06	8.52	0.62	0.51	10.03	2.71	0.061
-6.98	17.39	21.51	-0.05	8.12	0.58	0.50	9.80	2.61	0.059
-6.70	17.10	22.37	-0.06	7.74	0.61	0.54	9.57	2.69	0.064
-6.41	16.82	23.15	-0.06	7.21	0.66	0.56	9.23	2.78	0.066
-6.13	16.53	23.83	-0.06	6.68	0.67	0.55	8.88	2.81	0.065
-5.84	16.25	24.41	-0.07	6.22	0.69	0.55	8.57	2.85	0.065
-5.56	15.96	24.92	-0.08	5.76	0.68	0.52	8.25	2.84	0.062
-5.27	15.68	25.41	-0.07	5.26	0.67	0.49	7.88	2.81	0.058
-4.99	15.39	25.81	-0.08	4.87	0.70	0.49	7.58	2.88	0.057
-4.70	15.11	26.18	-0.08	4.47	0.79	0.45	7.27	3.06	0.053
-4.42	14.82	26.50	-0.09	4.12	0.79	0.43	6.98	3.06	0.050
-4.13	14.54	26.79	-0.10	3.87	0.73	0.44	6.76	2.94	0.052
-3.85	14.25	27.03	-0.10	3.69	0.73	0.44	6.60	2.94	0.052
-3.56	13.97	27.27	-0.11	3.50	0.73	0.40	6.43	2.95	0.048
-3.28	13.68	27.47	-0.11	3.33	0.79	0.41	6.27	3.05	0.048
-2.99	13.40	27.67	-0.11	3.10	0.76	0.40	6.06	2.99	0.047
-2.71	13.11	27.84	-0.11	2.94	0.76	0.36	5.89	2.99	0.043
-2.42	12.83	28.02	-0.12	2.73	0.76	0.33	5.68	3.00	0.039

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.14	12.54	28.15	-0.12	2.65	0.76	0.31	5.59	2.99	0.037
-1.85	12.26	28.29	-0.12	2.56	0.81	0.30	5.50	3.09	0.035
-1.57	11.97	28.42	-0.12	2.40	0.88	0.28	5.32	3.22	0.034
-1.28	11.69	28.53	-0.12	2.32	0.88	0.27	5.23	3.23	0.031
-1.00	11.40	28.63	-0.11	2.22	0.84	0.25	5.12	3.15	0.029
-0.71	11.12	28.71	-0.12	2.11	0.76	0.24	4.99	3.00	0.028
-0.43	10.83	28.79	-0.12	2.03	0.78	0.22	4.90	3.03	0.026
-0.14	10.55	28.88	-0.11	1.93	0.88	0.21	4.78	3.23	0.025
0.14	10.26	28.94	-0.11	1.87	0.88	0.18	4.70	3.22	0.021
0.43	9.98	29.00	-0.11	1.79	0.78	0.15	4.60	3.04	0.017
0.71	9.69	29.03	-0.12	1.75	0.73	0.15	4.55	2.95	0.018
1.00	9.41	29.06	-0.11	1.70	0.71	0.13	4.48	2.90	0.016
1.28	9.12	29.09	-0.12	1.71	0.72	0.11	4.49	2.92	0.013
1.57	8.84	29.09	-0.13	1.71	0.76	0.08	4.49	3.00	0.009
1.85	8.55	29.09	-0.12	1.72	0.77	0.06	4.50	3.03	0.007
2.14	8.27	29.07	-0.12	1.71	0.73	0.03	4.49	2.93	0.003
2.42	7.98	29.04	-0.11	1.72	0.70	-0.01	4.51	2.88	-0.001
2.71	7.70	29.00	-0.11	1.77	0.63	-0.02	4.57	2.72	-0.003
2.99	7.41	28.92	-0.10	1.87	0.62	-0.06	4.70	2.70	-0.007
3.28	7.13	28.82	-0.10	1.97	0.63	-0.08	4.82	2.72	-0.010
3.56	6.84	28.70	-0.09	2.04	0.58	-0.11	4.91	2.63	-0.013
3.85	6.56	28.56	-0.08	2.20	0.61	-0.15	5.09	2.68	-0.017
4.13	6.27	28.37	-0.08	2.37	0.67	-0.17	5.30	2.81	-0.020
4.42	5.99	28.13	-0.07	2.62	0.61	-0.20	5.56	2.69	-0.024
4.70	5.70	27.87	-0.07	2.87	0.55	-0.24	5.83	2.54	-0.028
4.99	5.42	27.57	-0.07	3.17	0.57	-0.25	6.12	2.59	-0.029
5.27	5.13	27.21	-0.06	3.54	0.58	-0.27	6.47	2.61	-0.032
5.56	4.85	26.77	-0.06	4.00	0.59	-0.28	6.87	2.64	-0.034
5.84	4.56	26.24	-0.06	4.48	0.56	-0.33	7.28	2.57	-0.039
6.13	4.28	25.62	-0.04	5.01	0.56	-0.35	7.69	2.56	-0.041
6.41	3.99	24.90	-0.03	5.46	0.60	-0.34	8.03	2.65	-0.040
6.70	3.71	24.05	-0.03	6.02	0.61	-0.35	8.43	2.68	-0.041
6.98	3.42	23.04	-0.03	6.61	0.59	-0.34	8.84	2.65	-0.040
7.27	3.14	21.87	-0.02	6.99	0.67	-0.35	9.09	2.81	-0.042
7.55	2.85	20.50	-0.02	7.04	0.58	-0.30	9.12	2.62	-0.036
7.84	2.57	18.96	-0.02	6.92	0.56	-0.25	9.04	2.56	-0.029
8.12	2.28	17.26	-0.01	6.42	0.64	-0.19	8.71	2.75	-0.022
8.41	2.00	15.40	0.00	5.77	0.58	-0.16	8.26	2.62	-0.019

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
8.69	1.71	13.36	-0.01	4.98	0.57	-0.11	7.67	2.59	-0.013
8.98	1.43	11.21	-0.01	4.17	0.61	-0.07	7.02	2.68	-0.008
9.26	1.14	8.85	-0.01	3.20	0.53	-0.05	6.15	2.49	-0.006
9.55	0.86	6.59	-0.01	2.94	0.39	-0.04	5.89	2.13	-0.005
9.83	0.57	3.44	-0.04	2.16	0.23	-0.01	5.06	1.65	-0.001
10.12	0.29	0.23	0.06	0.26	0.13	0.08	1.75	1.26	0.009
10.40	0.00	0.06	0.03	0.01	0.01	0.00	0.38	0.32	0.001

Table N-70 Grid #2, L0, Plasma-150, Right (71-80)

L0 (150)							U_∞ =	29.07	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.40	20.81	0.55	0.02	0.39	0.12	0.04	2.14	1.18	0.005
-10.12	20.52	3.33	-0.07	1.81	0.18	0.04	4.62	1.46	0.004
-9.83	20.24	5.71	-0.03	2.20	0.20	0.04	5.10	1.54	0.005
-9.55	19.95	7.74	-0.04	2.92	0.32	0.05	5.88	1.95	0.006
-9.26	19.67	9.76	-0.04	3.76	0.38	0.09	6.67	2.13	0.011
-8.98	19.38	11.62	-0.04	5.00	0.42	0.16	7.69	2.24	0.019
-8.69	19.10	13.45	-0.03	6.06	0.39	0.21	8.47	2.14	0.024
-8.41	18.81	15.10	-0.04	7.18	0.40	0.30	9.22	2.18	0.036
-8.12	18.53	16.64	-0.04	7.81	0.43	0.37	9.61	2.25	0.043
-7.84	18.24	18.02	-0.05	8.32	0.47	0.42	9.92	2.35	0.050
-7.55	17.96	19.28	-0.05	8.41	0.47	0.46	9.97	2.36	0.054
-7.27	17.67	20.39	-0.06	8.23	0.48	0.52	9.87	2.39	0.062
-6.98	17.39	21.39	-0.05	8.04	0.50	0.55	9.76	2.44	0.065
-6.70	17.10	22.28	-0.06	7.56	0.48	0.54	9.46	2.39	0.063
-6.41	16.82	23.08	-0.07	7.05	0.53	0.56	9.13	2.51	0.066
-6.13	16.53	23.74	-0.07	6.60	0.58	0.56	8.84	2.61	0.066
-5.84	16.25	24.34	-0.08	6.21	0.55	0.56	8.57	2.56	0.067
-5.56	15.96	24.86	-0.08	5.78	0.57	0.53	8.27	2.59	0.063
-5.27	15.68	25.34	-0.09	5.31	0.59	0.52	7.92	2.65	0.061
-4.99	15.39	25.75	-0.08	4.89	0.63	0.50	7.61	2.74	0.059
-4.70	15.11	26.13	-0.09	4.45	0.64	0.47	7.25	2.75	0.056
-4.42	14.82	26.46	-0.09	4.14	0.64	0.44	7.00	2.75	0.053
-4.13	14.54	26.74	-0.10	3.89	0.70	0.43	6.78	2.89	0.051

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-3.85	14.25	26.99	-0.11	3.66	0.68	0.45	6.58	2.84	0.053
-3.56	13.97	27.23	-0.11	3.49	0.67	0.42	6.42	2.81	0.050
-3.28	13.68	27.45	-0.12	3.28	0.68	0.39	6.23	2.84	0.046
-2.99	13.40	27.65	-0.11	3.12	0.70	0.39	6.08	2.88	0.046
-2.71	13.11	27.83	-0.12	2.95	0.72	0.36	5.90	2.93	0.042
-2.42	12.83	27.97	-0.12	2.82	0.72	0.35	5.77	2.91	0.041
-2.14	12.54	28.14	-0.13	2.64	0.71	0.33	5.59	2.90	0.039
-1.85	12.26	28.28	-0.13	2.51	0.72	0.31	5.45	2.92	0.037
-1.57	11.97	28.42	-0.13	2.35	0.72	0.29	5.28	2.91	0.034
-1.28	11.69	28.53	-0.13	2.22	0.73	0.25	5.12	2.94	0.030
-1.00	11.40	28.64	-0.12	2.10	0.74	0.23	4.98	2.96	0.027
-0.71	11.12	28.72	-0.12	2.04	0.77	0.22	4.92	3.03	0.026
-0.43	10.83	28.79	-0.12	1.98	0.71	0.22	4.83	2.90	0.026
-0.14	10.55	28.86	-0.13	1.87	0.70	0.18	4.71	2.87	0.022
0.14	10.26	28.92	-0.13	1.81	0.69	0.16	4.63	2.86	0.019
0.43	9.98	28.98	-0.13	1.72	0.67	0.13	4.51	2.81	0.016
0.71	9.69	29.01	-0.13	1.68	0.70	0.12	4.46	2.87	0.014
1.00	9.41	29.04	-0.12	1.64	0.66	0.09	4.41	2.80	0.011
1.28	9.12	29.05	-0.12	1.64	0.61	0.07	4.41	2.69	0.009
1.57	8.84	29.06	-0.12	1.63	0.64	0.07	4.39	2.75	0.008
1.85	8.55	29.07	-0.13	1.62	0.71	0.04	4.37	2.90	0.004
2.14	8.27	29.06	-0.13	1.64	0.70	0.01	4.40	2.89	0.001
2.42	7.98	29.02	-0.11	1.67	0.66	0.00	4.45	2.80	0.000
2.71	7.70	28.96	-0.11	1.75	0.63	-0.03	4.55	2.74	-0.004
2.99	7.41	28.89	-0.11	1.79	0.62	-0.05	4.60	2.71	-0.005
3.28	7.13	28.81	-0.09	1.90	0.65	-0.07	4.74	2.77	-0.008
3.56	6.84	28.69	-0.09	1.98	0.60	-0.09	4.84	2.66	-0.011
3.85	6.56	28.54	-0.09	2.16	0.58	-0.13	5.05	2.63	-0.015
4.13	6.27	28.36	-0.08	2.28	0.53	-0.14	5.19	2.51	-0.016
4.42	5.99	28.15	-0.07	2.48	0.52	-0.17	5.42	2.49	-0.020
4.70	5.70	27.89	-0.08	2.76	0.50	-0.18	5.71	2.44	-0.022
4.99	5.42	27.58	-0.08	3.07	0.48	-0.21	6.02	2.38	-0.025
5.27	5.13	27.22	-0.07	3.38	0.50	-0.24	6.33	2.44	-0.029
5.56	4.85	26.78	-0.06	3.73	0.50	-0.27	6.64	2.43	-0.031
5.84	4.56	26.24	-0.05	4.24	0.53	-0.31	7.09	2.52	-0.036
6.13	4.28	25.61	-0.05	4.79	0.48	-0.32	7.53	2.38	-0.037
6.41	3.99	24.85	-0.04	5.34	0.56	-0.35	7.95	2.58	-0.041
6.70	3.71	23.98	-0.03	5.91	0.53	-0.35	8.36	2.50	-0.041

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
6.98	3.42	22.96	-0.04	6.40	0.56	-0.32	8.70	2.58	-0.038
7.27	3.14	21.76	-0.03	6.83	0.60	-0.32	8.99	2.65	-0.038
7.55	2.85	20.44	-0.02	6.94	0.50	-0.29	9.06	2.42	-0.035
7.84	2.57	18.87	-0.02	6.78	0.56	-0.26	8.96	2.58	-0.030
8.12	2.28	17.15	-0.01	6.36	0.59	-0.24	8.67	2.64	-0.029
8.41	2.00	15.28	0.00	5.70	0.64	-0.17	8.22	2.76	-0.021
8.69	1.71	13.28	-0.01	4.92	0.59	-0.11	7.63	2.64	-0.014
8.98	1.43	11.13	0.00	4.07	0.48	-0.06	6.94	2.37	-0.007
9.26	1.14	8.79	0.00	3.12	0.46	-0.03	6.08	2.32	-0.004
9.55	0.86	6.51	-0.03	2.85	0.46	-0.04	5.80	2.34	-0.005
9.83	0.57	3.21	-0.11	2.64	0.23	0.00	5.59	1.66	0.000
10.12	0.29	0.14	0.01	0.17	0.07	0.01	1.43	0.93	0.001
10.40	0.00	0.07	0.05	0.01	0.01	0.00	0.35	0.40	0.000

Table N-71 Grid #2, L0, Plasma-300, Left (1-10)

L0 (300)							U_∞ =	28.68	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.40	20.81	0.38	0.01	0.55	0.15	-0.01	2.58	1.33	-0.002
-10.12	20.52	3.19	-0.04	2.05	0.51	0.00	5.00	2.50	0.000
-9.83	20.24	5.49	-0.03	2.67	0.89	0.02	5.70	3.28	0.002
-9.55	19.95	7.59	-0.02	3.78	1.03	0.02	6.78	3.55	0.003
-9.26	19.67	9.68	-0.01	4.97	1.29	0.09	7.77	3.95	0.011
-8.98	19.38	11.59	-0.01	6.23	1.24	0.21	8.70	3.88	0.026
-8.69	19.10	13.46	-0.02	7.36	1.33	0.28	9.46	4.02	0.034
-8.41	18.81	15.12	-0.02	8.23	1.27	0.36	10.01	3.93	0.044
-8.12	18.53	16.71	-0.03	9.10	1.30	0.42	10.52	3.97	0.050
-7.84	18.24	18.08	-0.04	9.47	1.57	0.45	10.73	4.37	0.055
-7.55	17.96	19.35	-0.03	9.48	1.23	0.55	10.74	3.87	0.067
-7.27	17.67	20.41	-0.04	9.15	1.31	0.60	10.55	3.98	0.073
-6.98	17.39	21.37	-0.05	8.57	1.19	0.60	10.21	3.80	0.073
-6.70	17.10	22.16	-0.05	8.21	1.20	0.57	9.99	3.82	0.069
-6.41	16.82	22.90	-0.05	7.75	1.18	0.60	9.71	3.79	0.073
-6.13	16.53	23.52	-0.06	6.98	1.21	0.65	9.21	3.83	0.079
-5.84	16.25	24.06	-0.10	6.66	1.48	0.69	9.00	4.24	0.084

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-5.56	15.96	24.52	-0.10	6.28	1.46	0.65	8.74	4.21	0.079
-5.27	15.68	24.97	-0.09	5.83	1.26	0.63	8.42	3.92	0.076
-4.99	15.39	25.36	-0.10	5.36	1.29	0.64	8.07	3.96	0.078
-4.70	15.11	25.69	-0.11	4.96	1.40	0.63	7.76	4.13	0.076
-4.42	14.82	26.01	-0.11	4.61	1.41	0.56	7.49	4.14	0.068
-4.13	14.54	26.28	-0.11	4.28	1.31	0.58	7.22	3.99	0.070
-3.85	14.25	26.53	-0.11	3.98	1.33	0.58	6.95	4.02	0.070
-3.56	13.97	26.76	-0.13	3.72	1.44	0.53	6.73	4.18	0.064
-3.28	13.68	26.96	-0.13	3.60	1.44	0.51	6.61	4.19	0.062
-2.99	13.40	27.16	-0.12	3.33	1.28	0.51	6.36	3.95	0.062
-2.71	13.11	27.33	-0.13	3.08	1.40	0.48	6.12	4.12	0.059
-2.42	12.83	27.50	-0.14	2.94	1.33	0.47	5.98	4.02	0.057
-2.14	12.54	27.64	-0.15	2.82	1.34	0.44	5.86	4.04	0.054
-1.85	12.26	27.78	-0.14	2.63	1.32	0.39	5.65	4.00	0.048
-1.57	11.97	27.90	-0.14	2.49	1.20	0.36	5.50	3.81	0.044
-1.28	11.69	28.03	-0.15	2.37	1.21	0.33	5.37	3.83	0.040
-1.00	11.40	28.14	-0.14	2.32	1.33	0.32	5.31	4.02	0.039
-0.71	11.12	28.22	-0.15	2.22	1.41	0.32	5.19	4.14	0.039
-0.43	10.83	28.32	-0.14	2.07	1.37	0.30	5.02	4.08	0.036
-0.14	10.55	28.40	-0.14	2.04	1.32	0.26	4.98	4.00	0.032
0.14	10.26	28.48	-0.14	1.95	1.31	0.20	4.87	3.98	0.024
0.43	9.98	28.54	-0.15	1.85	1.28	0.17	4.74	3.95	0.021
0.71	9.69	28.59	-0.14	1.76	1.20	0.15	4.62	3.82	0.018
1.00	9.41	28.63	-0.15	1.73	1.28	0.15	4.59	3.95	0.018
1.28	9.12	28.66	-0.14	1.69	1.32	0.13	4.53	4.00	0.016
1.57	8.84	28.67	-0.13	1.68	1.23	0.09	4.52	3.86	0.011
1.85	8.55	28.68	-0.13	1.64	1.19	0.05	4.47	3.80	0.006
2.14	8.27	28.67	-0.13	1.65	1.09	0.03	4.47	3.63	0.003
2.42	7.98	28.64	-0.12	1.72	1.10	0.02	4.57	3.65	0.003
2.71	7.70	28.60	-0.11	1.80	1.04	-0.01	4.68	3.55	-0.001
2.99	7.41	28.54	-0.12	1.84	1.10	-0.05	4.74	3.66	-0.006
3.28	7.13	28.45	-0.11	1.97	1.13	-0.09	4.89	3.70	-0.011
3.56	6.84	28.34	-0.10	2.14	1.19	-0.12	5.10	3.80	-0.015
3.85	6.56	28.19	-0.09	2.31	1.20	-0.18	5.30	3.82	-0.022
4.13	6.27	28.02	-0.08	2.51	1.09	-0.23	5.53	3.64	-0.028
4.42	5.99	27.82	-0.07	2.70	1.00	-0.23	5.73	3.49	-0.027
4.70	5.70	27.56	-0.07	3.05	1.01	-0.25	6.09	3.50	-0.030
4.99	5.42	27.25	-0.07	3.45	1.04	-0.31	6.48	3.56	-0.038

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
5.27	5.13	26.90	-0.07	3.76	0.99	-0.32	6.76	3.47	-0.039
5.56	4.85	26.48	-0.06	4.23	1.00	-0.35	7.17	3.49	-0.042
5.84	4.56	25.96	-0.05	4.74	0.98	-0.39	7.59	3.45	-0.047
6.13	4.28	25.33	-0.03	5.37	1.00	-0.38	8.08	3.49	-0.046
6.41	3.99	24.61	-0.01	5.97	1.10	-0.37	8.52	3.65	-0.045
6.70	3.71	23.76	-0.02	6.57	1.16	-0.44	8.93	3.75	-0.053
6.98	3.42	22.73	-0.01	7.15	1.04	-0.43	9.32	3.55	-0.052
7.27	3.14	21.61	-0.01	7.47	1.10	-0.37	9.53	3.65	-0.046
7.55	2.85	20.25	0.00	7.69	1.11	-0.35	9.67	3.67	-0.042
7.84	2.57	18.70	0.00	7.69	1.08	-0.31	9.67	3.62	-0.038
8.12	2.28	17.00	0.01	7.31	1.20	-0.23	9.43	3.82	-0.028
8.41	2.00	15.06	0.03	6.50	1.42	-0.19	8.89	4.16	-0.023
8.69	1.71	13.08	0.01	5.54	1.25	-0.12	8.20	3.90	-0.015
8.98	1.43	10.93	0.02	4.66	1.25	-0.09	7.53	3.90	-0.011
9.26	1.14	8.61	0.02	3.51	1.16	-0.04	6.53	3.76	-0.005
9.55	0.86	6.14	0.02	2.99	0.98	-0.03	6.03	3.45	-0.004
9.83	0.57	3.43	0.02	2.13	0.55	0.01	5.09	2.58	0.002
10.12	0.29	0.55	0.02	0.72	0.15	0.00	2.95	1.33	0.000
10.40	0.00	11.10	-0.01	22.48	0.01	-0.13	16.53	0.41	-0.016

Table N-72 Grid #2, L0, Plasma-300, Center (46-55)

L0 (300)							U_∞ =	28.72	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.40	20.81	0.60	-0.03	0.55	0.09	0.00	2.59	1.02	0.000
-10.12	20.52	3.34	-0.03	1.67	0.56	0.00	4.49	2.62	0.000
-9.83	20.24	5.54	-0.03	2.23	0.88	0.00	5.20	3.26	0.000
-9.55	19.95	7.62	-0.03	3.04	0.49	0.06	6.07	2.44	0.007
-9.26	19.67	9.59	-0.03	3.89	0.48	0.09	6.87	2.41	0.011
-8.98	19.38	11.45	-0.04	5.02	0.46	0.14	7.80	2.37	0.017
-8.69	19.10	13.25	-0.04	6.05	0.47	0.20	8.57	2.38	0.024
-8.41	18.81	14.91	-0.04	7.09	0.48	0.27	9.27	2.41	0.032
-8.12	18.53	16.44	-0.06	7.81	0.52	0.36	9.73	2.52	0.043
-7.84	18.24	17.79	-0.05	8.29	0.60	0.43	10.02	2.69	0.052
-7.55	17.96	19.05	-0.04	8.41	0.55	0.45	10.10	2.57	0.054

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-7.27	17.67	20.13	-0.05	8.19	0.56	0.51	9.97	2.60	0.062
-6.98	17.39	21.12	-0.05	7.91	0.63	0.56	9.79	2.77	0.068
-6.70	17.10	21.95	-0.06	7.65	0.61	0.58	9.63	2.72	0.071
-6.41	16.82	22.74	-0.07	7.11	0.60	0.55	9.29	2.69	0.067
-6.13	16.53	23.40	-0.08	6.54	0.66	0.55	8.91	2.83	0.067
-5.84	16.25	23.99	-0.08	6.00	0.63	0.56	8.53	2.77	0.068
-5.56	15.96	24.47	-0.07	5.60	0.67	0.56	8.24	2.84	0.068
-5.27	15.68	24.93	-0.08	5.19	0.72	0.56	7.93	2.95	0.068
-4.99	15.39	25.34	-0.09	4.70	0.72	0.56	7.55	2.96	0.068
-4.70	15.11	25.72	-0.09	4.26	0.75	0.51	7.19	3.02	0.061
-4.42	14.82	26.04	-0.09	3.89	0.82	0.48	6.87	3.15	0.058
-4.13	14.54	26.33	-0.10	3.68	0.86	0.47	6.68	3.22	0.057
-3.85	14.25	26.58	-0.11	3.45	0.83	0.44	6.46	3.18	0.053
-3.56	13.97	26.81	-0.12	3.28	0.74	0.44	6.31	3.00	0.053
-3.28	13.68	27.01	-0.13	3.11	0.79	0.42	6.14	3.10	0.051
-2.99	13.40	27.21	-0.13	2.94	0.78	0.40	5.97	3.07	0.049
-2.71	13.11	27.37	-0.14	2.83	0.75	0.38	5.85	3.01	0.047
-2.42	12.83	27.53	-0.13	2.72	0.80	0.36	5.74	3.12	0.044
-2.14	12.54	27.67	-0.13	2.61	0.79	0.36	5.62	3.10	0.043
-1.85	12.26	27.81	-0.14	2.46	0.84	0.33	5.46	3.19	0.040
-1.57	11.97	27.94	-0.14	2.30	0.84	0.30	5.28	3.19	0.036
-1.28	11.69	28.06	-0.14	2.19	0.77	0.28	5.15	3.05	0.035
-1.00	11.40	28.17	-0.13	2.06	0.77	0.26	5.00	3.05	0.032
-0.71	11.12	28.27	-0.14	1.93	0.76	0.24	4.84	3.03	0.029
-0.43	10.83	28.36	-0.14	1.81	0.76	0.21	4.69	3.04	0.026
-0.14	10.55	28.45	-0.13	1.70	0.79	0.18	4.54	3.09	0.022
0.14	10.26	28.52	-0.12	1.67	0.84	0.17	4.49	3.19	0.020
0.43	9.98	28.58	-0.12	1.61	0.87	0.16	4.42	3.25	0.020
0.71	9.69	28.63	-0.13	1.56	0.84	0.13	4.35	3.18	0.016
1.00	9.41	28.67	-0.13	1.52	0.78	0.11	4.30	3.08	0.014
1.28	9.12	28.70	-0.12	1.49	0.79	0.09	4.25	3.09	0.011
1.57	8.84	28.72	-0.11	1.47	0.78	0.07	4.23	3.07	0.008
1.85	8.55	28.72	-0.11	1.47	0.70	0.05	4.22	2.92	0.006
2.14	8.27	28.71	-0.11	1.48	0.68	0.03	4.23	2.86	0.004
2.42	7.98	28.69	-0.10	1.49	0.62	0.01	4.25	2.74	0.001
2.71	7.70	28.65	-0.10	1.56	0.67	-0.01	4.34	2.86	-0.001
2.99	7.41	28.58	-0.09	1.63	0.72	-0.04	4.44	2.96	-0.005
3.28	7.13	28.49	-0.09	1.72	0.70	-0.06	4.56	2.91	-0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
3.56	6.84	28.39	-0.08	1.81	0.65	-0.07	4.68	2.81	-0.008
3.85	6.56	28.24	-0.07	2.03	0.64	-0.11	4.96	2.78	-0.014
4.13	6.27	28.07	-0.07	2.17	0.61	-0.15	5.13	2.73	-0.018
4.42	5.99	27.87	-0.07	2.35	0.60	-0.18	5.34	2.70	-0.022
4.70	5.70	27.61	-0.06	2.63	0.67	-0.20	5.65	2.85	-0.024
4.99	5.42	27.29	-0.06	2.93	0.63	-0.24	5.96	2.76	-0.029
5.27	5.13	26.92	-0.05	3.27	0.54	-0.26	6.30	2.55	-0.032
5.56	4.85	26.45	-0.04	3.78	0.57	-0.30	6.77	2.62	-0.037
5.84	4.56	25.93	-0.04	4.21	0.60	-0.33	7.14	2.69	-0.039
6.13	4.28	25.28	-0.03	4.74	0.55	-0.35	7.58	2.58	-0.042
6.41	3.99	24.54	-0.02	5.21	0.56	-0.35	7.95	2.60	-0.043
6.70	3.71	23.66	-0.02	5.78	0.55	-0.35	8.37	2.59	-0.042
6.98	3.42	22.61	-0.01	6.32	0.51	-0.35	8.76	2.49	-0.043
7.27	3.14	21.41	-0.01	6.65	0.54	-0.35	8.98	2.56	-0.042
7.55	2.85	20.03	0.00	6.85	0.53	-0.32	9.11	2.54	-0.039
7.84	2.57	18.47	0.00	6.78	0.65	-0.25	9.06	2.81	-0.031
8.12	2.28	16.73	0.00	6.21	0.49	-0.20	8.68	2.44	-0.024
8.41	2.00	14.86	0.01	5.52	0.59	-0.13	8.18	2.68	-0.016
8.69	1.71	12.85	0.01	4.78	0.69	-0.09	7.61	2.88	-0.011
8.98	1.43	10.70	0.00	3.90	0.71	-0.05	6.88	2.92	-0.006
9.26	1.14	8.38	0.00	2.98	0.67	-0.03	6.01	2.84	-0.004
9.55	0.86	5.93	0.01	2.43	0.69	-0.04	5.42	2.89	-0.005
9.83	0.57	3.24	0.00	1.69	0.38	0.00	4.53	2.13	0.000
10.12	0.29	0.55	0.13	0.75	0.50	0.27	3.02	2.45	0.032
10.40	0.00	0.25	0.04	0.27	0.01	0.00	1.81	0.42	0.001

Table N-73 Grid #2, L0, Plasma-300, Right (71-80)

L0 (300)							U_∞ =	28.72	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.40	20.81	0.91	0.19	0.79	0.27	0.13	3.09	1.81	0.016
-10.12	20.52	3.42	-0.03	1.81	0.33	0.03	4.69	1.99	0.004
-9.83	20.24	5.59	-0.03	2.27	0.41	0.04	5.25	2.24	0.005
-9.55	19.95	7.63	-0.04	2.99	0.40	0.06	6.02	2.19	0.007
-9.26	19.67	9.60	-0.02	3.77	0.41	0.09	6.76	2.23	0.011

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-8.98	19.38	11.43	-0.04	4.90	0.39	0.14	7.71	2.16	0.017
-8.69	19.10	13.19	-0.03	5.87	0.38	0.21	8.44	2.14	0.026
-8.41	18.81	14.80	-0.04	6.69	0.47	0.26	9.00	2.39	0.032
-8.12	18.53	16.32	-0.05	7.36	0.45	0.34	9.45	2.34	0.042
-7.84	18.24	17.67	-0.05	8.03	0.47	0.41	9.87	2.39	0.050
-7.55	17.96	18.95	-0.05	8.20	0.47	0.47	9.97	2.39	0.057
-7.27	17.67	20.04	-0.05	8.06	0.51	0.51	9.89	2.49	0.062
-6.98	17.39	21.03	-0.05	7.86	0.55	0.56	9.76	2.58	0.068
-6.70	17.10	21.87	-0.06	7.58	0.53	0.56	9.59	2.55	0.068
-6.41	16.82	22.65	-0.07	7.01	0.52	0.57	9.22	2.50	0.069
-6.13	16.53	23.30	-0.07	6.51	0.60	0.59	8.88	2.69	0.072
-5.84	16.25	23.89	-0.07	6.08	0.61	0.58	8.59	2.71	0.070
-5.56	15.96	24.37	-0.08	5.66	0.62	0.57	8.28	2.74	0.069
-5.27	15.68	24.83	-0.08	5.27	0.69	0.54	8.00	2.88	0.066
-4.99	15.39	25.24	-0.09	4.80	0.73	0.51	7.63	2.97	0.062
-4.70	15.11	25.61	-0.09	4.41	0.66	0.49	7.31	2.84	0.060
-4.42	14.82	25.93	-0.10	4.00	0.63	0.48	6.97	2.77	0.058
-4.13	14.54	26.22	-0.11	3.74	0.67	0.48	6.73	2.84	0.058
-3.85	14.25	26.48	-0.10	3.44	0.73	0.47	6.46	2.97	0.057
-3.56	13.97	26.72	-0.10	3.20	0.69	0.44	6.22	2.89	0.053
-3.28	13.68	26.93	-0.11	3.00	0.68	0.42	6.03	2.88	0.051
-2.99	13.40	27.13	-0.11	2.83	0.73	0.39	5.86	2.97	0.048
-2.71	13.11	27.29	-0.13	2.74	0.73	0.38	5.77	2.97	0.046
-2.42	12.83	27.47	-0.13	2.61	0.70	0.37	5.63	2.91	0.044
-2.14	12.54	27.64	-0.14	2.46	0.72	0.35	5.46	2.94	0.043
-1.85	12.26	27.78	-0.13	2.33	0.75	0.35	5.32	3.02	0.043
-1.57	11.97	27.91	-0.13	2.18	0.72	0.31	5.14	2.96	0.038
-1.28	11.69	28.04	-0.13	2.07	0.74	0.27	5.01	2.99	0.032
-1.00	11.40	28.15	-0.13	1.97	0.72	0.26	4.89	2.96	0.031
-0.71	11.12	28.25	-0.14	1.89	0.74	0.24	4.78	3.00	0.030
-0.43	10.83	28.34	-0.14	1.79	0.74	0.22	4.66	2.99	0.026
-0.14	10.55	28.43	-0.14	1.70	0.70	0.20	4.54	2.90	0.024
0.14	10.26	28.49	-0.14	1.66	0.68	0.19	4.49	2.88	0.023
0.43	9.98	28.55	-0.14	1.61	0.69	0.17	4.42	2.90	0.021
0.71	9.69	28.62	-0.13	1.53	0.73	0.14	4.30	2.97	0.017
1.00	9.41	28.66	-0.13	1.45	0.68	0.12	4.20	2.86	0.015
1.28	9.12	28.69	-0.12	1.43	0.64	0.11	4.16	2.79	0.014
1.57	8.84	28.71	-0.12	1.45	0.70	0.08	4.19	2.91	0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.85	8.55	28.72	-0.11	1.41	0.73	0.05	4.14	2.97	0.006
2.14	8.27	28.70	-0.11	1.44	0.65	0.02	4.17	2.81	0.002
2.42	7.98	28.68	-0.11	1.49	0.66	0.00	4.25	2.84	0.000
2.71	7.70	28.63	-0.11	1.53	0.72	-0.01	4.30	2.96	-0.001
2.99	7.41	28.56	-0.10	1.59	0.68	-0.05	4.38	2.87	-0.006
3.28	7.13	28.49	-0.09	1.65	0.61	-0.07	4.48	2.73	-0.009
3.56	6.84	28.37	-0.09	1.79	0.61	-0.10	4.66	2.73	-0.013
3.85	6.56	28.21	-0.08	1.99	0.57	-0.14	4.91	2.63	-0.017
4.13	6.27	28.02	-0.07	2.20	0.56	-0.16	5.16	2.61	-0.019
4.42	5.99	27.82	-0.07	2.37	0.59	-0.19	5.36	2.67	-0.023
4.70	5.70	27.55	-0.06	2.64	0.55	-0.22	5.65	2.59	-0.026
4.99	5.42	27.23	-0.05	2.92	0.55	-0.24	5.95	2.57	-0.029
5.27	5.13	26.86	-0.05	3.28	0.51	-0.28	6.30	2.50	-0.034
5.56	4.85	26.37	-0.04	3.85	0.52	-0.31	6.83	2.51	-0.037
5.84	4.56	25.82	-0.03	4.29	0.56	-0.34	7.21	2.61	-0.041
6.13	4.28	25.17	-0.03	4.80	0.54	-0.33	7.62	2.55	-0.040
6.41	3.99	24.39	-0.02	5.41	0.55	-0.37	8.10	2.57	-0.045
6.70	3.71	23.48	-0.02	5.92	0.50	-0.36	8.47	2.45	-0.044
6.98	3.42	22.44	-0.01	6.35	0.48	-0.35	8.78	2.41	-0.043
7.27	3.14	21.23	0.00	6.76	0.54	-0.33	9.05	2.56	-0.040
7.55	2.85	19.88	-0.01	6.81	0.53	-0.26	9.09	2.53	-0.031
7.84	2.57	18.32	-0.01	6.63	0.51	-0.23	8.97	2.49	-0.028
8.12	2.28	16.57	0.00	6.11	0.55	-0.19	8.60	2.57	-0.023
8.41	2.00	14.70	0.00	5.34	0.58	-0.14	8.05	2.64	-0.017
8.69	1.71	12.69	0.00	4.66	0.55	-0.11	7.52	2.57	-0.013
8.98	1.43	10.54	0.01	3.76	0.56	-0.07	6.76	2.61	-0.009
9.26	1.14	8.24	0.01	2.99	0.60	-0.04	6.02	2.69	-0.005
9.55	0.86	5.89	0.02	2.57	0.74	-0.03	5.58	2.99	-0.003
9.83	0.57	3.21	0.01	2.02	0.37	-0.02	4.95	2.11	-0.003
10.12	0.29	0.21	-0.10	0.29	0.17	0.03	1.86	1.46	0.004
10.40	0.00	0.08	0.01	0.01	0.01	0.00	0.43	0.32	0.000

Table N-74 Grid #2, L1, Plasma-Off, Left (1-10)

L1 (Off)							U_∞ =	30.18	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.69	21.38	1.88	0.04	13.99	1.63	-0.58	12.39	4.24	-0.064
-10.40	21.09	2.31	-0.21	6.02	1.10	-0.22	8.13	3.48	-0.024
-10.11	20.80	4.66	-0.05	1.91	0.18	0.01	4.58	1.40	0.001
-9.81	20.51	6.59	0.01	2.28	0.36	0.01	5.00	2.00	0.001
-9.52	20.21	8.63	0.00	2.91	0.56	0.04	5.65	2.47	0.005
-9.23	19.92	10.55	0.01	3.81	0.56	0.08	6.47	2.47	0.008
-8.93	19.63	12.45	0.00	4.86	0.65	0.10	7.30	2.67	0.011
-8.64	19.33	14.16	0.00	5.80	0.63	0.14	7.98	2.62	0.016
-8.35	19.04	15.82	0.00	6.76	0.73	0.18	8.61	2.83	0.020
-8.06	18.75	17.28	-0.01	7.58	0.70	0.27	9.12	2.77	0.030
-7.76	18.45	18.68	-0.02	8.18	0.66	0.34	9.48	2.68	0.038
-7.47	18.16	19.91	-0.02	8.55	0.67	0.43	9.69	2.71	0.047
-7.18	17.87	21.02	-0.04	8.52	0.76	0.45	9.67	2.88	0.049
-6.88	17.58	22.01	-0.04	8.32	0.74	0.49	9.56	2.85	0.054
-6.59	17.28	22.92	-0.04	7.98	0.68	0.50	9.36	2.73	0.055
-6.30	16.99	23.70	-0.04	7.47	0.69	0.50	9.06	2.75	0.055
-6.01	16.70	24.41	-0.05	6.91	0.76	0.50	8.71	2.89	0.055
-5.71	16.40	25.02	-0.06	6.51	0.88	0.54	8.45	3.10	0.059
-5.42	16.11	25.59	-0.06	5.99	0.78	0.50	8.11	2.93	0.055
-5.13	15.82	26.10	-0.06	5.48	0.87	0.54	7.76	3.09	0.059
-4.83	15.53	26.55	-0.07	5.01	0.77	0.48	7.42	2.90	0.053
-4.54	15.23	26.94	-0.08	4.59	0.74	0.46	7.10	2.85	0.050
-4.25	14.94	27.31	-0.09	4.24	0.75	0.44	6.82	2.86	0.049
-3.95	14.65	27.60	-0.10	3.94	0.72	0.44	6.57	2.80	0.048
-3.66	14.35	27.88	-0.10	3.67	0.83	0.42	6.35	3.03	0.046
-3.37	14.06	28.14	-0.10	3.43	0.80	0.38	6.13	2.96	0.042
-3.08	13.77	28.40	-0.11	3.15	0.81	0.38	5.88	2.98	0.041
-2.78	13.47	28.60	-0.11	2.97	0.83	0.38	5.71	3.02	0.042
-2.49	13.18	28.79	-0.12	2.78	0.75	0.35	5.52	2.87	0.039
-2.20	12.89	28.95	-0.13	2.66	0.84	0.33	5.40	3.04	0.037
-1.90	12.60	29.11	-0.12	2.53	0.87	0.31	5.27	3.08	0.034
-1.61	12.30	29.27	-0.12	2.35	0.84	0.30	5.08	3.04	0.033
-1.32	12.01	29.42	-0.12	2.18	0.76	0.26	4.90	2.88	0.029
-1.03	11.72	29.54	-0.13	2.08	0.83	0.24	4.78	3.02	0.026
-0.73	11.42	29.64	-0.12	2.00	0.88	0.25	4.68	3.10	0.028

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.44	11.13	29.75	-0.12	1.90	0.80	0.23	4.57	2.97	0.025
-0.15	10.84	29.85	-0.11	1.77	0.76	0.19	4.41	2.88	0.021
0.15	10.55	29.94	-0.12	1.69	0.77	0.18	4.31	2.90	0.020
0.44	10.25	30.01	-0.11	1.62	0.73	0.16	4.22	2.82	0.017
0.73	9.96	30.06	-0.11	1.56	0.78	0.14	4.14	2.93	0.015
1.03	9.67	30.10	-0.12	1.50	0.72	0.12	4.05	2.80	0.013
1.32	9.37	30.14	-0.12	1.48	0.75	0.11	4.03	2.87	0.012
1.61	9.08	30.18	-0.11	1.43	0.77	0.08	3.97	2.91	0.009
1.90	8.79	30.18	-0.11	1.40	0.77	0.05	3.92	2.90	0.006
2.20	8.50	30.17	-0.10	1.42	0.74	0.02	3.95	2.84	0.002
2.49	8.20	30.16	-0.10	1.42	0.64	0.01	3.94	2.66	0.001
2.78	7.91	30.12	-0.09	1.42	0.67	-0.01	3.95	2.71	-0.001
3.08	7.62	30.06	-0.09	1.47	0.69	-0.02	4.02	2.75	-0.002
3.37	7.32	29.97	-0.08	1.55	0.68	-0.04	4.13	2.74	-0.005
3.66	7.03	29.86	-0.09	1.66	0.62	-0.06	4.28	2.60	-0.007
3.95	6.74	29.71	-0.08	1.80	0.59	-0.09	4.44	2.55	-0.010
4.25	6.44	29.52	-0.07	1.98	0.58	-0.13	4.67	2.52	-0.014
4.54	6.15	29.28	-0.07	2.24	0.58	-0.14	4.97	2.52	-0.015
4.83	5.86	29.00	-0.07	2.52	0.56	-0.16	5.27	2.47	-0.018
5.13	5.57	28.64	-0.08	2.88	0.55	-0.18	5.63	2.45	-0.020
5.42	5.27	28.21	-0.07	3.29	0.55	-0.21	6.01	2.46	-0.023
5.71	4.98	27.73	-0.06	3.73	0.57	-0.21	6.40	2.51	-0.023
6.01	4.69	27.12	-0.05	4.13	0.59	-0.24	6.73	2.55	-0.026
6.30	4.39	26.39	-0.05	4.68	0.62	-0.25	7.17	2.61	-0.027
6.59	4.10	25.53	-0.04	5.26	0.54	-0.24	7.60	2.43	-0.027
6.88	3.81	24.55	-0.04	5.66	0.49	-0.24	7.88	2.33	-0.027
7.18	3.52	23.40	-0.03	6.18	0.58	-0.25	8.24	2.52	-0.028
7.47	3.22	22.05	-0.01	6.61	0.69	-0.23	8.52	2.75	-0.026
7.76	2.93	20.57	-0.01	6.41	0.66	-0.18	8.39	2.69	-0.020
8.06	2.64	18.89	-0.01	6.21	0.62	-0.17	8.26	2.62	-0.019
8.35	2.34	17.08	-0.01	5.73	0.63	-0.16	7.94	2.64	-0.018
8.64	2.05	15.12	-0.02	5.07	0.58	-0.10	7.46	2.53	-0.011
8.93	1.76	13.01	-0.01	4.31	0.40	-0.06	6.88	2.11	-0.007
9.23	1.46	10.75	0.00	3.58	0.25	-0.03	6.27	1.66	-0.003
9.52	1.17	8.39	-0.10	3.29	0.15	-0.01	6.01	1.29	-0.001
9.81	0.88	4.52	-0.78	4.74	1.09	0.46	7.21	3.46	0.050
10.11	0.59	0.85	-0.33	1.46	0.32	0.07	4.00	1.87	0.008
10.40	0.29	0.11	-0.06	0.24	0.06	0.00	1.63	0.81	0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
10.69	0.00	0.81	0.04	0.00	0.00	0.00	0.00	0.00	0.000

Table N-75 Grid #2, L1, Plasma-Off, Center (46-55)

L1 (Off)							$U_\infty =$	30.27	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.69	21.38	1.25	0.37	7.42	1.43	0.43	9.00	3.95	0.047
-10.40	21.09	2.90	-0.35	5.16	1.52	0.08	7.50	4.07	0.008
-10.11	20.80	4.99	-0.06	1.70	0.20	0.00	4.31	1.48	0.001
-9.81	20.51	6.88	-0.01	2.08	0.33	0.04	4.77	1.91	0.004
-9.52	20.21	8.89	-0.01	2.67	0.32	0.04	5.40	1.85	0.004
-9.23	19.92	10.75	-0.01	3.41	0.32	0.06	6.10	1.87	0.007
-8.93	19.63	12.58	-0.01	4.25	0.37	0.08	6.81	2.00	0.009
-8.64	19.33	14.25	-0.01	5.16	0.38	0.12	7.50	2.04	0.013
-8.35	19.04	15.89	-0.02	6.14	0.42	0.18	8.19	2.13	0.019
-8.06	18.75	17.30	-0.02	6.67	0.47	0.23	8.53	2.27	0.025
-7.76	18.45	18.67	-0.03	7.35	0.45	0.29	8.96	2.21	0.032
-7.47	18.16	19.90	-0.03	7.65	0.44	0.33	9.14	2.19	0.036
-7.18	17.87	21.01	-0.04	7.60	0.44	0.36	9.11	2.20	0.040
-6.88	17.58	21.98	-0.04	7.58	0.48	0.41	9.09	2.29	0.045
-6.59	17.28	22.92	-0.04	7.23	0.42	0.42	8.89	2.14	0.046
-6.30	16.99	23.72	-0.04	6.80	0.44	0.44	8.62	2.20	0.048
-6.01	16.70	24.42	-0.05	6.44	0.53	0.45	8.38	2.40	0.049
-5.71	16.40	25.04	-0.06	6.13	0.57	0.46	8.18	2.50	0.051
-5.42	16.11	25.61	-0.05	5.71	0.62	0.48	7.90	2.59	0.052
-5.13	15.82	26.12	-0.05	5.18	0.55	0.46	7.52	2.46	0.050
-4.83	15.53	26.59	-0.06	4.69	0.46	0.42	7.16	2.25	0.046
-4.54	15.23	26.99	-0.07	4.34	0.54	0.41	6.88	2.42	0.045
-4.25	14.94	27.34	-0.07	3.99	0.55	0.39	6.60	2.45	0.043
-3.95	14.65	27.66	-0.07	3.68	0.61	0.38	6.34	2.57	0.042
-3.66	14.35	27.95	-0.07	3.39	0.57	0.36	6.09	2.50	0.040
-3.37	14.06	28.22	-0.08	3.14	0.57	0.33	5.85	2.50	0.036
-3.08	13.77	28.48	-0.09	2.85	0.57	0.32	5.58	2.50	0.035
-2.78	13.47	28.70	-0.10	2.64	0.61	0.31	5.37	2.58	0.034
-2.49	13.18	28.90	-0.10	2.49	0.62	0.29	5.21	2.60	0.032

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.20	12.89	29.09	-0.10	2.30	0.58	0.28	5.01	2.52	0.031
-1.90	12.60	29.25	-0.10	2.15	0.56	0.25	4.84	2.48	0.027
-1.61	12.30	29.39	-0.10	2.02	0.58	0.22	4.69	2.51	0.024
-1.32	12.01	29.53	-0.10	1.91	0.62	0.21	4.56	2.60	0.023
-1.03	11.72	29.65	-0.11	1.83	0.59	0.19	4.47	2.53	0.021
-0.73	11.42	29.75	-0.11	1.73	0.59	0.16	4.35	2.53	0.018
-0.44	11.13	29.85	-0.11	1.64	0.58	0.16	4.23	2.52	0.017
-0.15	10.84	29.94	-0.11	1.58	0.55	0.14	4.15	2.46	0.015
0.15	10.55	30.02	-0.11	1.53	0.56	0.11	4.09	2.47	0.012
0.44	10.25	30.09	-0.11	1.47	0.54	0.11	4.00	2.42	0.012
0.73	9.96	30.15	-0.10	1.39	0.55	0.09	3.89	2.45	0.010
1.03	9.67	30.20	-0.11	1.35	0.53	0.08	3.84	2.42	0.009
1.32	9.37	30.24	-0.10	1.29	0.55	0.06	3.75	2.44	0.007
1.61	9.08	30.26	-0.10	1.30	0.54	0.03	3.77	2.42	0.004
1.90	8.79	30.27	-0.10	1.25	0.52	0.01	3.70	2.38	0.001
2.20	8.50	30.27	-0.10	1.25	0.53	0.01	3.70	2.41	0.001
2.49	8.20	30.25	-0.09	1.28	0.50	0.00	3.73	2.34	0.001
2.78	7.91	30.21	-0.09	1.31	0.46	-0.03	3.79	2.24	-0.003
3.08	7.62	30.14	-0.09	1.36	0.48	-0.05	3.86	2.28	-0.005
3.37	7.32	30.07	-0.09	1.43	0.46	-0.06	3.95	2.25	-0.006
3.66	7.03	29.96	-0.09	1.52	0.43	-0.06	4.07	2.17	-0.007
3.95	6.74	29.81	-0.10	1.66	0.41	-0.09	4.26	2.11	-0.010
4.25	6.44	29.62	-0.09	1.82	0.46	-0.10	4.46	2.24	-0.011
4.54	6.15	29.39	-0.09	2.04	0.44	-0.11	4.72	2.18	-0.013
4.83	5.86	29.10	-0.08	2.28	0.38	-0.14	4.99	2.03	-0.015
5.13	5.57	28.74	-0.08	2.61	0.40	-0.17	5.33	2.10	-0.018
5.42	5.27	28.31	-0.08	2.97	0.37	-0.19	5.69	2.01	-0.021
5.71	4.98	27.80	-0.08	3.39	0.38	-0.19	6.08	2.03	-0.021
6.01	4.69	27.17	-0.07	3.91	0.40	-0.20	6.53	2.09	-0.022
6.30	4.39	26.41	-0.06	4.53	0.46	-0.24	7.03	2.25	-0.026
6.59	4.10	25.55	-0.05	5.03	0.48	-0.24	7.41	2.29	-0.026
6.88	3.81	24.54	-0.05	5.61	0.46	-0.23	7.82	2.25	-0.025
7.18	3.52	23.38	-0.05	6.04	0.38	-0.21	8.12	2.04	-0.023
7.47	3.22	22.04	-0.04	6.18	0.45	-0.22	8.21	2.22	-0.024
7.76	2.93	20.56	-0.03	6.02	0.60	-0.19	8.11	2.55	-0.021
8.06	2.64	18.89	-0.03	5.81	0.46	-0.16	7.96	2.24	-0.017
8.35	2.34	17.07	-0.03	5.31	0.40	-0.10	7.61	2.09	-0.011
8.64	2.05	15.08	-0.02	4.73	0.50	-0.08	7.19	2.35	-0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
8.93	1.76	12.94	-0.02	3.99	0.53	-0.05	6.60	2.40	-0.005
9.23	1.46	10.67	-0.01	3.31	0.38	-0.03	6.01	2.05	-0.003
9.52	1.17	8.40	-0.01	2.83	0.30	0.01	5.56	1.81	0.001
9.81	0.88	5.59	-0.53	4.16	2.94	0.42	6.74	5.66	0.046
10.11	0.59	1.55	-0.32	2.52	1.33	0.09	5.25	3.81	0.010
10.40	0.29	0.60	-0.06	0.51	0.06	0.00	2.36	0.83	-0.001
10.69	0.00	2.10	0.29	0.05	0.02	0.00	0.71	0.50	0.000

Table N-76 Grid #2, L1, Plasma-Off, Right (71-80)

L1 (Off)							U_∞ =	30.32	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.69	21.38	2.20	0.03	15.61	1.42	-0.26	13.03	3.93	-0.028
-10.40	21.09	3.36	-0.35	8.89	1.22	-0.39	9.83	3.65	-0.042
-10.11	20.80	5.14	-0.03	1.69	0.16	0.01	4.29	1.30	0.001
-9.81	20.51	7.00	-0.02	2.06	0.25	0.03	4.74	1.63	0.003
-9.52	20.21	8.99	0.00	2.62	0.29	0.04	5.34	1.79	0.005
-9.23	19.92	10.85	-0.01	3.43	0.30	0.06	6.10	1.80	0.006
-8.93	19.63	12.65	-0.01	4.25	0.32	0.10	6.80	1.87	0.011
-8.64	19.33	14.30	-0.01	5.09	0.32	0.14	7.44	1.88	0.015
-8.35	19.04	15.90	-0.01	6.11	0.38	0.17	8.15	2.04	0.019
-8.06	18.75	17.32	-0.02	6.78	0.42	0.22	8.59	2.15	0.024
-7.76	18.45	18.67	-0.02	7.16	0.39	0.26	8.83	2.07	0.029
-7.47	18.16	19.88	-0.03	7.32	0.44	0.33	8.92	2.18	0.036
-7.18	17.87	20.99	-0.04	7.39	0.47	0.38	8.97	2.27	0.041
-6.88	17.58	21.95	-0.05	7.36	0.45	0.40	8.95	2.22	0.043
-6.59	17.28	22.88	-0.05	7.02	0.50	0.42	8.74	2.34	0.045
-6.30	16.99	23.69	-0.05	6.66	0.52	0.42	8.51	2.38	0.046
-6.01	16.70	24.42	-0.05	6.23	0.48	0.43	8.23	2.29	0.046
-5.71	16.40	25.04	-0.06	5.94	0.50	0.44	8.04	2.33	0.048
-5.42	16.11	25.61	-0.07	5.52	0.56	0.45	7.75	2.46	0.049
-5.13	15.82	26.11	-0.07	5.14	0.57	0.45	7.47	2.49	0.049
-4.83	15.53	26.58	-0.07	4.75	0.59	0.45	7.18	2.53	0.049
-4.54	15.23	26.99	-0.08	4.39	0.63	0.45	6.91	2.61	0.049
-4.25	14.94	27.35	-0.08	4.03	0.58	0.40	6.62	2.52	0.043

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-3.95	14.65	27.69	-0.08	3.65	0.54	0.35	6.30	2.42	0.038
-3.66	14.35	27.97	-0.08	3.41	0.57	0.36	6.09	2.50	0.039
-3.37	14.06	28.24	-0.09	3.15	0.57	0.34	5.85	2.49	0.037
-3.08	13.77	28.50	-0.10	2.89	0.63	0.32	5.60	2.63	0.035
-2.78	13.47	28.73	-0.10	2.68	0.63	0.31	5.40	2.62	0.034
-2.49	13.18	28.94	-0.10	2.42	0.52	0.27	5.13	2.39	0.029
-2.20	12.89	29.11	-0.10	2.29	0.56	0.26	4.99	2.47	0.028
-1.90	12.60	29.28	-0.11	2.13	0.56	0.23	4.81	2.47	0.025
-1.61	12.30	29.44	-0.10	1.99	0.55	0.22	4.65	2.44	0.024
-1.32	12.01	29.58	-0.10	1.86	0.54	0.20	4.49	2.42	0.022
-1.03	11.72	29.71	-0.10	1.77	0.59	0.18	4.38	2.52	0.020
-0.73	11.42	29.82	-0.11	1.67	0.55	0.17	4.26	2.45	0.019
-0.44	11.13	29.91	-0.10	1.63	0.55	0.17	4.21	2.44	0.018
-0.15	10.84	29.99	-0.10	1.55	0.56	0.16	4.11	2.47	0.017
0.15	10.55	30.07	-0.11	1.47	0.53	0.13	3.99	2.41	0.015
0.44	10.25	30.14	-0.11	1.40	0.54	0.11	3.90	2.43	0.011
0.73	9.96	30.21	-0.11	1.36	0.54	0.08	3.85	2.43	0.008
1.03	9.67	30.26	-0.11	1.32	0.55	0.06	3.79	2.45	0.007
1.32	9.37	30.28	-0.10	1.31	0.52	0.06	3.77	2.37	0.007
1.61	9.08	30.31	-0.10	1.28	0.50	0.04	3.73	2.34	0.005
1.90	8.79	30.32	-0.10	1.28	0.49	0.03	3.73	2.30	0.003
2.20	8.50	30.31	-0.10	1.29	0.47	0.01	3.74	2.26	0.001
2.49	8.20	30.28	-0.10	1.29	0.47	0.00	3.74	2.25	0.000
2.78	7.91	30.25	-0.10	1.31	0.45	-0.01	3.78	2.21	-0.001
3.08	7.62	30.19	-0.09	1.34	0.45	-0.03	3.81	2.22	-0.003
3.37	7.32	30.11	-0.08	1.39	0.46	-0.05	3.89	2.24	-0.005
3.66	7.03	29.99	-0.08	1.49	0.44	-0.07	4.02	2.18	-0.008
3.95	6.74	29.83	-0.07	1.65	0.46	-0.09	4.24	2.24	-0.010
4.25	6.44	29.64	-0.08	1.83	0.43	-0.10	4.46	2.16	-0.011
4.54	6.15	29.38	-0.07	2.10	0.39	-0.12	4.78	2.06	-0.014
4.83	5.86	29.08	-0.07	2.37	0.39	-0.14	5.08	2.07	-0.015
5.13	5.57	28.73	-0.07	2.69	0.41	-0.15	5.41	2.10	-0.017
5.42	5.27	28.30	-0.06	3.05	0.43	-0.16	5.76	2.17	-0.018
5.71	4.98	27.77	-0.06	3.48	0.40	-0.18	6.15	2.09	-0.020
6.01	4.69	27.14	-0.06	4.00	0.39	-0.18	6.59	2.05	-0.019
6.30	4.39	26.39	-0.05	4.48	0.41	-0.21	6.98	2.10	-0.023
6.59	4.10	25.53	-0.05	4.96	0.41	-0.20	7.35	2.12	-0.022
6.88	3.81	24.52	-0.05	5.48	0.43	-0.20	7.72	2.15	-0.022

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.18	3.52	23.36	-0.04	5.77	0.45	-0.22	7.92	2.20	-0.024
7.47	3.22	22.01	-0.04	5.98	0.48	-0.18	8.07	2.29	-0.020
7.76	2.93	20.51	-0.04	5.88	0.49	-0.16	8.00	2.32	-0.017
8.06	2.64	18.84	-0.04	5.68	0.54	-0.15	7.86	2.41	-0.017
8.35	2.34	17.03	-0.03	5.30	0.56	-0.09	7.59	2.46	-0.010
8.64	2.05	15.04	-0.03	4.63	0.53	-0.06	7.09	2.40	-0.006
8.93	1.76	12.94	-0.02	4.00	0.50	-0.06	6.60	2.34	-0.006
9.23	1.46	10.67	-0.03	3.32	0.60	-0.04	6.01	2.55	-0.004
9.52	1.17	8.33	-0.02	2.72	0.63	-0.01	5.44	2.61	-0.002
9.81	0.88	5.83	-0.07	2.93	1.25	0.04	5.65	3.69	0.005
10.11	0.59	2.68	0.01	2.91	0.70	0.05	5.63	2.77	0.005
10.40	0.29	0.49	0.14	0.36	0.39	0.12	1.98	2.06	0.013
10.69	0.00	0.04	0.36	0.01	0.02	0.01	0.35	0.42	0.001

Table N-77 Grid #2, L1, Plasma-150, Left (1-10)

L1 (150)							U_∞ =	29.79	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.69	21.38	1.76	0.29	27.58	1.08	-0.02	17.63	3.48	-0.002
-10.40	21.09	3.73	0.72	43.38	0.32	0.11	22.11	1.89	0.013
-10.11	20.80	7.69	-0.01	41.49	0.26	0.17	21.62	1.70	0.019
-9.81	20.51	10.34	0.04	2.92	0.65	0.01	5.73	2.70	0.001
-9.52	20.21	11.29	-0.01	2.77	0.62	0.06	5.58	2.64	0.007
-9.23	19.92	12.77	0.00	3.51	0.43	0.10	6.29	2.21	0.011
-8.93	19.63	14.47	0.01	4.39	0.48	0.13	7.03	2.33	0.014
-8.64	19.33	16.07	0.03	5.12	0.49	0.17	7.60	2.35	0.019
-8.35	19.04	17.62	0.04	5.75	0.64	0.22	8.05	2.69	0.024
-8.06	18.75	18.97	0.04	6.37	0.75	0.25	8.47	2.90	0.029
-7.76	18.45	20.19	0.06	6.59	0.77	0.29	8.62	2.95	0.033
-7.47	18.16	21.20	0.06	6.69	0.72	0.37	8.68	2.85	0.042
-7.18	17.87	22.16	0.06	6.57	0.72	0.37	8.60	2.85	0.041
-6.88	17.58	22.96	0.06	6.41	0.75	0.40	8.50	2.91	0.045
-6.59	17.28	23.71	0.05	6.05	0.72	0.41	8.26	2.85	0.047
-6.30	16.99	24.33	0.05	5.72	0.76	0.43	8.03	2.92	0.049
-6.01	16.70	24.91	0.05	5.37	0.77	0.42	7.78	2.95	0.047

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-5.71	16.40	25.42	0.05	5.09	0.77	0.43	7.57	2.94	0.048
-5.42	16.11	25.89	0.04	4.72	0.79	0.42	7.30	2.98	0.047
-5.13	15.82	26.32	0.04	4.27	0.78	0.41	6.94	2.96	0.046
-4.83	15.53	26.70	0.02	3.90	0.78	0.39	6.63	2.96	0.044
-4.54	15.23	27.02	0.02	3.72	0.87	0.35	6.48	3.12	0.040
-4.25	14.94	27.33	0.02	3.51	0.83	0.35	6.29	3.07	0.039
-3.95	14.65	27.61	0.01	3.23	0.82	0.35	6.03	3.04	0.039
-3.66	14.35	27.86	-0.01	3.01	0.81	0.33	5.82	3.03	0.037
-3.37	14.06	28.07	-0.02	2.87	0.92	0.32	5.69	3.22	0.036
-3.08	13.77	28.27	-0.02	2.73	0.85	0.30	5.54	3.09	0.034
-2.78	13.47	28.46	-0.02	2.57	0.85	0.30	5.38	3.10	0.034
-2.49	13.18	28.64	-0.03	2.42	0.80	0.27	5.22	2.99	0.030
-2.20	12.89	28.78	-0.04	2.33	0.76	0.27	5.12	2.92	0.030
-1.90	12.60	28.93	-0.04	2.18	0.85	0.25	4.95	3.09	0.028
-1.61	12.30	29.06	-0.03	2.10	0.91	0.23	4.86	3.20	0.026
-1.32	12.01	29.18	-0.03	2.00	0.89	0.20	4.74	3.16	0.023
-1.03	11.72	29.28	-0.04	1.94	0.93	0.20	4.67	3.23	0.022
-0.73	11.42	29.38	-0.04	1.81	0.91	0.19	4.51	3.19	0.021
-0.44	11.13	29.48	-0.06	1.70	0.87	0.17	4.37	3.13	0.019
-0.15	10.84	29.55	-0.05	1.59	0.88	0.14	4.24	3.15	0.015
0.15	10.55	29.62	-0.03	1.56	0.93	0.12	4.19	3.24	0.013
0.44	10.25	29.68	-0.04	1.49	0.92	0.11	4.10	3.21	0.012
0.73	9.96	29.72	-0.04	1.44	0.83	0.11	4.02	3.06	0.013
1.03	9.67	29.76	-0.05	1.40	0.85	0.07	3.97	3.09	0.008
1.32	9.37	29.78	-0.04	1.39	0.87	0.06	3.95	3.13	0.006
1.61	9.08	29.79	-0.03	1.38	0.89	0.03	3.94	3.17	0.004
1.90	8.79	29.79	-0.05	1.36	0.78	0.02	3.92	2.97	0.003
2.20	8.50	29.77	-0.05	1.38	0.80	-0.01	3.94	3.00	-0.001
2.49	8.20	29.74	-0.05	1.40	0.82	-0.01	3.97	3.04	-0.002
2.78	7.91	29.70	-0.04	1.45	0.76	-0.04	4.04	2.92	-0.004
3.08	7.62	29.64	-0.04	1.50	0.74	-0.06	4.11	2.89	-0.007
3.37	7.32	29.54	-0.05	1.59	0.73	-0.07	4.23	2.88	-0.008
3.66	7.03	29.41	-0.05	1.71	0.71	-0.08	4.39	2.82	-0.009
3.95	6.74	29.25	-0.04	1.90	0.81	-0.13	4.62	3.01	-0.014
4.25	6.44	29.06	-0.04	2.11	0.87	-0.16	4.88	3.14	-0.018
4.54	6.15	28.82	-0.04	2.37	0.76	-0.16	5.16	2.92	-0.018
4.83	5.86	28.53	-0.04	2.65	0.74	-0.15	5.47	2.89	-0.017
5.13	5.57	28.19	-0.05	2.91	0.74	-0.14	5.72	2.89	-0.016

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
5.42	5.27	27.78	-0.05	3.21	0.70	-0.18	6.02	2.80	-0.020
5.71	4.98	27.28	-0.04	3.61	0.79	-0.19	6.38	2.99	-0.022
6.01	4.69	26.69	-0.04	4.07	0.80	-0.22	6.77	3.00	-0.024
6.30	4.39	26.05	-0.05	4.47	0.76	-0.24	7.09	2.93	-0.027
6.59	4.10	25.27	-0.04	4.73	0.78	-0.24	7.30	2.96	-0.027
6.88	3.81	24.39	-0.05	5.07	0.78	-0.24	7.56	2.97	-0.027
7.18	3.52	23.40	-0.03	5.20	0.71	-0.22	7.66	2.83	-0.025
7.47	3.22	22.25	-0.02	5.21	0.77	-0.17	7.66	2.94	-0.019
7.76	2.93	20.98	-0.03	5.00	0.90	-0.15	7.50	3.18	-0.017
8.06	2.64	19.47	-0.03	4.76	0.95	-0.12	7.32	3.28	-0.013
8.35	2.34	17.80	-0.02	4.12	0.65	-0.12	6.81	2.71	-0.013
8.64	2.05	16.01	-0.01	3.54	0.55	-0.09	6.32	2.48	-0.010
8.93	1.76	14.26	0.00	2.76	0.43	-0.05	5.58	2.19	-0.005
9.23	1.46	13.05	0.01	2.53	0.31	-0.03	5.34	1.87	-0.003
9.52	1.17	11.91	-0.02	8.21	0.10	0.03	9.62	1.06	0.003
9.81	0.88	1.11	-2.09	20.80	2.10	1.01	15.31	4.86	0.114
10.11	0.59	-0.34	-0.58	2.05	0.40	0.21	4.80	2.14	0.024
10.40	0.29	-0.13	-0.09	0.05	0.03	0.00	0.77	0.59	0.000
10.69	0.00	-0.41	-0.02	0.00	0.00	0.00	0.00	0.07	0.000

Table N-78 Grid #2, L1, Plasma-150, Center (46-55)

L1 (150)							$U_\infty =$	30.07	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.69	21.38	4.73	1.61	59.54	1.60	-0.49	25.66	4.21	-0.054
-10.40	21.09	5.68	0.57	68.02	0.59	-0.02	27.43	2.56	-0.002
-10.11	20.80	7.99	0.01	26.36	2.07	-0.13	17.08	4.78	-0.014
-9.81	20.51	10.30	-0.01	2.42	0.75	0.03	5.17	2.88	0.003
-9.52	20.21	11.29	-0.02	2.23	0.36	0.03	4.97	2.00	0.004
-9.23	19.92	12.76	-0.01	2.85	0.27	0.07	5.62	1.74	0.007
-8.93	19.63	14.49	-0.01	3.75	0.32	0.10	6.44	1.89	0.011
-8.64	19.33	16.17	-0.01	4.77	0.41	0.14	7.27	2.13	0.016
-8.35	19.04	17.77	-0.01	5.43	0.42	0.19	7.75	2.15	0.021
-8.06	18.75	19.15	0.00	5.73	0.38	0.23	7.96	2.04	0.026
-7.76	18.45	20.39	0.00	6.03	0.39	0.27	8.17	2.08	0.030

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-7.47	18.16	21.43	-0.01	6.07	0.45	0.33	8.20	2.22	0.036
-7.18	17.87	22.40	-0.01	5.89	0.49	0.36	8.07	2.33	0.040
-6.88	17.58	23.22	0.00	5.71	0.47	0.35	7.94	2.28	0.039
-6.59	17.28	23.97	0.00	5.40	0.49	0.36	7.73	2.34	0.040
-6.30	16.99	24.60	-0.01	5.25	0.48	0.37	7.62	2.30	0.041
-6.01	16.70	25.18	-0.02	5.05	0.48	0.39	7.48	2.31	0.043
-5.71	16.40	25.69	-0.02	4.76	0.57	0.40	7.25	2.51	0.045
-5.42	16.11	26.17	-0.02	4.36	0.58	0.36	6.94	2.53	0.040
-5.13	15.82	26.59	-0.02	4.02	0.54	0.35	6.66	2.45	0.038
-4.83	15.53	26.96	-0.03	3.77	0.59	0.34	6.46	2.56	0.038
-4.54	15.23	27.30	-0.03	3.50	0.60	0.33	6.22	2.57	0.036
-4.25	14.94	27.59	-0.05	3.28	0.53	0.33	6.02	2.41	0.036
-3.95	14.65	27.86	-0.05	3.08	0.56	0.31	5.84	2.49	0.035
-3.66	14.35	28.10	-0.05	2.92	0.60	0.30	5.68	2.58	0.033
-3.37	14.06	28.32	-0.06	2.72	0.54	0.30	5.49	2.45	0.033
-3.08	13.77	28.53	-0.07	2.54	0.55	0.28	5.30	2.47	0.031
-2.78	13.47	28.72	-0.07	2.40	0.52	0.28	5.15	2.40	0.031
-2.49	13.18	28.91	-0.07	2.22	0.52	0.26	4.95	2.39	0.029
-2.20	12.89	29.05	-0.07	2.09	0.51	0.25	4.81	2.38	0.028
-1.90	12.60	29.19	-0.07	1.98	0.58	0.23	4.68	2.52	0.025
-1.61	12.30	29.33	-0.07	1.84	0.58	0.21	4.51	2.52	0.023
-1.32	12.01	29.45	-0.07	1.74	0.53	0.19	4.38	2.42	0.021
-1.03	11.72	29.56	-0.07	1.62	0.56	0.16	4.23	2.49	0.018
-0.73	11.42	29.66	-0.07	1.49	0.59	0.15	4.06	2.56	0.016
-0.44	11.13	29.75	-0.07	1.43	0.57	0.15	3.98	2.52	0.016
-0.15	10.84	29.83	-0.07	1.37	0.58	0.12	3.89	2.52	0.014
0.15	10.55	29.90	-0.08	1.30	0.55	0.10	3.79	2.46	0.011
0.44	10.25	29.95	-0.08	1.28	0.55	0.09	3.76	2.47	0.010
0.73	9.96	30.00	-0.08	1.23	0.56	0.08	3.68	2.48	0.009
1.03	9.67	30.03	-0.07	1.20	0.54	0.06	3.65	2.43	0.007
1.32	9.37	30.05	-0.07	1.17	0.49	0.04	3.60	2.34	0.004
1.61	9.08	30.07	-0.07	1.14	0.49	0.03	3.55	2.32	0.003
1.90	8.79	30.06	-0.06	1.15	0.52	0.01	3.57	2.40	0.001
2.20	8.50	30.05	-0.06	1.17	0.49	0.00	3.60	2.33	0.000
2.49	8.20	30.01	-0.06	1.21	0.43	-0.02	3.66	2.18	-0.002
2.78	7.91	29.97	-0.07	1.26	0.40	-0.04	3.74	2.12	-0.004
3.08	7.62	29.89	-0.07	1.31	0.40	-0.05	3.80	2.11	-0.006
3.37	7.32	29.78	-0.06	1.39	0.45	-0.06	3.92	2.23	-0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.66	7.03	29.65	-0.05	1.54	0.49	-0.08	4.12	2.34	-0.009
3.95	6.74	29.50	-0.05	1.67	0.41	-0.10	4.29	2.14	-0.011
4.25	6.44	29.30	-0.05	1.82	0.42	-0.12	4.49	2.14	-0.013
4.54	6.15	29.05	-0.05	2.03	0.44	-0.14	4.73	2.19	-0.015
4.83	5.86	28.76	-0.05	2.27	0.41	-0.15	5.01	2.14	-0.016
5.13	5.57	28.40	-0.04	2.58	0.38	-0.17	5.35	2.04	-0.019
5.42	5.27	27.99	-0.04	2.88	0.37	-0.18	5.65	2.01	-0.020
5.71	4.98	27.51	-0.04	3.17	0.37	-0.18	5.92	2.03	-0.020
6.01	4.69	26.94	-0.04	3.52	0.41	-0.17	6.24	2.12	-0.019
6.30	4.39	26.26	-0.04	3.87	0.51	-0.18	6.54	2.38	-0.020
6.59	4.10	25.48	-0.04	4.15	0.50	-0.19	6.78	2.35	-0.021
6.88	3.81	24.58	-0.03	4.41	0.39	-0.18	6.98	2.09	-0.020
7.18	3.52	23.56	-0.03	4.56	0.59	-0.16	7.10	2.56	-0.017
7.47	3.22	22.37	-0.03	4.53	0.58	-0.16	7.08	2.52	-0.018
7.76	2.93	21.02	-0.02	4.39	0.49	-0.12	6.97	2.32	-0.014
8.06	2.64	19.47	-0.02	4.22	0.44	-0.10	6.83	2.22	-0.011
8.35	2.34	17.71	-0.02	3.77	0.36	-0.06	6.46	1.99	-0.007
8.64	2.05	15.78	-0.01	3.20	0.41	-0.06	5.95	2.12	-0.007
8.93	1.76	13.95	-0.01	2.46	0.44	-0.03	5.21	2.20	-0.003
9.23	1.46	12.59	-0.01	2.12	0.45	-0.01	4.84	2.24	-0.001
9.52	1.17	11.60	0.01	5.63	0.32	0.05	7.90	1.89	0.006
9.81	0.88	3.54	-4.00	65.78	11.14	4.21	26.97	11.10	0.466
10.11	0.59	0.32	-1.34	14.87	3.44	-0.54	12.83	6.17	-0.060
10.40	0.29	0.04	0.00	0.19	0.05	0.00	1.45	0.72	0.000
10.69	0.00	3.26	0.28	0.00	0.01	0.00	0.21	0.37	0.000

Table N-79 Grid #2, L1, Plasma-150, Right (71-80)

L1 (150)							U_∞ =	30.17	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.69	21.38	7.77	1.27	64.06	2.01	0.82	26.53	4.70	0.090
-10.40	21.09	9.24	0.55	79.36	1.67	0.41	29.53	4.28	0.045
-10.11	20.80	9.42	0.04	13.23	3.03	0.16	12.06	5.77	0.017
-9.81	20.51	10.18	-0.01	2.36	0.81	0.06	5.09	2.99	0.006
-9.52	20.21	11.25	-0.01	2.20	0.37	0.05	4.92	2.03	0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.23	19.92	12.70	-0.01	2.75	0.31	0.05	5.50	1.84	0.005
-8.93	19.63	14.44	-0.01	3.65	0.26	0.10	6.34	1.69	0.012
-8.64	19.33	16.12	-0.02	4.63	0.30	0.14	7.13	1.81	0.015
-8.35	19.04	17.73	-0.03	5.24	0.40	0.18	7.59	2.08	0.020
-8.06	18.75	19.13	-0.02	5.58	0.42	0.22	7.83	2.14	0.024
-7.76	18.45	20.39	-0.02	5.80	0.36	0.27	7.98	1.98	0.029
-7.47	18.16	21.43	-0.02	5.85	0.39	0.30	8.02	2.08	0.033
-7.18	17.87	22.42	-0.02	5.71	0.42	0.34	7.92	2.16	0.037
-6.88	17.58	23.26	-0.03	5.61	0.43	0.37	7.85	2.18	0.040
-6.59	17.28	24.02	-0.03	5.34	0.46	0.37	7.66	2.26	0.040
-6.30	16.99	24.67	-0.03	5.14	0.47	0.38	7.51	2.27	0.041
-6.01	16.70	25.25	-0.03	4.89	0.51	0.39	7.33	2.36	0.042
-5.71	16.40	25.76	-0.04	4.66	0.52	0.39	7.15	2.38	0.043
-5.42	16.11	26.24	-0.05	4.33	0.51	0.39	6.89	2.37	0.043
-5.13	15.82	26.67	-0.04	3.98	0.57	0.39	6.61	2.49	0.043
-4.83	15.53	27.06	-0.04	3.68	0.52	0.38	6.36	2.40	0.041
-4.54	15.23	27.36	-0.06	3.50	0.47	0.35	6.20	2.27	0.038
-4.25	14.94	27.67	-0.06	3.31	0.53	0.33	6.03	2.42	0.036
-3.95	14.65	27.95	-0.07	3.08	0.50	0.32	5.82	2.35	0.036
-3.66	14.35	28.20	-0.07	2.90	0.55	0.31	5.64	2.46	0.034
-3.37	14.06	28.41	-0.08	2.78	0.59	0.31	5.53	2.54	0.034
-3.08	13.77	28.63	-0.08	2.58	0.57	0.29	5.32	2.50	0.032
-2.78	13.47	28.82	-0.08	2.37	0.53	0.27	5.10	2.41	0.030
-2.49	13.18	28.98	-0.09	2.23	0.54	0.26	4.95	2.43	0.029
-2.20	12.89	29.14	-0.09	2.12	0.61	0.25	4.83	2.58	0.028
-1.90	12.60	29.30	-0.09	1.91	0.58	0.23	4.58	2.54	0.025
-1.61	12.30	29.45	-0.09	1.73	0.52	0.20	4.36	2.38	0.022
-1.32	12.01	29.56	-0.09	1.66	0.54	0.19	4.27	2.44	0.021
-1.03	11.72	29.67	-0.10	1.61	0.54	0.18	4.20	2.44	0.020
-0.73	11.42	29.76	-0.09	1.53	0.52	0.17	4.10	2.39	0.018
-0.44	11.13	29.85	-0.09	1.41	0.49	0.15	3.94	2.33	0.016
-0.15	10.84	29.93	-0.09	1.33	0.47	0.14	3.83	2.27	0.015
0.15	10.55	29.99	-0.09	1.32	0.49	0.11	3.80	2.31	0.012
0.44	10.25	30.05	-0.09	1.26	0.48	0.10	3.72	2.30	0.011
0.73	9.96	30.11	-0.08	1.20	0.50	0.09	3.63	2.35	0.010
1.03	9.67	30.14	-0.07	1.16	0.54	0.08	3.57	2.44	0.009
1.32	9.37	30.16	-0.07	1.15	0.50	0.05	3.55	2.33	0.006
1.61	9.08	30.17	-0.08	1.15	0.51	0.04	3.55	2.37	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.90	8.79	30.17	-0.07	1.13	0.53	0.04	3.53	2.41	0.005
2.20	8.50	30.14	-0.07	1.14	0.47	0.02	3.54	2.28	0.003
2.49	8.20	30.10	-0.07	1.17	0.47	-0.01	3.59	2.26	-0.001
2.78	7.91	30.05	-0.07	1.20	0.48	-0.01	3.64	2.29	-0.001
3.08	7.62	29.98	-0.06	1.25	0.47	-0.03	3.70	2.27	-0.003
3.37	7.32	29.88	-0.06	1.34	0.46	-0.06	3.84	2.25	-0.006
3.66	7.03	29.76	-0.07	1.43	0.48	-0.06	3.96	2.30	-0.007
3.95	6.74	29.58	-0.06	1.60	0.44	-0.08	4.19	2.21	-0.009
4.25	6.44	29.38	-0.06	1.78	0.40	-0.09	4.42	2.10	-0.010
4.54	6.15	29.13	-0.06	2.02	0.42	-0.12	4.71	2.15	-0.013
4.83	5.86	28.86	-0.06	2.17	0.39	-0.13	4.88	2.08	-0.014
5.13	5.57	28.49	-0.04	2.49	0.38	-0.15	5.23	2.05	-0.017
5.42	5.27	28.06	-0.04	2.83	0.44	-0.15	5.58	2.19	-0.016
5.71	4.98	27.57	-0.05	3.09	0.43	-0.16	5.83	2.17	-0.017
6.01	4.69	26.99	-0.04	3.36	0.44	-0.17	6.07	2.21	-0.018
6.30	4.39	26.29	-0.04	3.67	0.49	-0.17	6.35	2.33	-0.019
6.59	4.10	25.50	-0.04	3.95	0.47	-0.17	6.59	2.28	-0.019
6.88	3.81	24.58	-0.04	4.17	0.40	-0.16	6.77	2.11	-0.018
7.18	3.52	23.54	-0.04	4.29	0.43	-0.15	6.87	2.18	-0.016
7.47	3.22	22.32	-0.03	4.33	0.50	-0.13	6.90	2.36	-0.014
7.76	2.93	20.93	-0.03	4.28	0.47	-0.11	6.86	2.26	-0.012
8.06	2.64	19.37	-0.03	4.18	0.46	-0.11	6.78	2.26	-0.012
8.35	2.34	17.58	-0.02	3.73	0.37	-0.08	6.40	2.03	-0.008
8.64	2.05	15.62	-0.02	3.13	0.48	-0.06	5.86	2.31	-0.006
8.93	1.76	13.81	-0.01	2.35	0.44	-0.04	5.09	2.21	-0.005
9.23	1.46	12.44	-0.01	2.11	0.47	-0.03	4.81	2.27	-0.003
9.52	1.17	11.35	-0.08	4.51	1.13	0.08	7.04	3.53	0.009
9.81	0.88	4.15	-1.52	49.97	14.80	2.41	23.43	12.75	0.264
10.11	0.59	0.31	-0.25	6.95	3.53	-0.94	8.74	6.23	-0.103
10.40	0.29	0.08	0.03	0.04	0.04	0.00	0.70	0.69	0.000
10.69	0.00	0.04	0.37	0.00	0.01	0.00	0.19	0.27	0.000

Table N-80   Grid #2, L1, Plasma-300, Left (1-10)

L1 (300)							U_∞ =	29.83	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.69	21.38	4.62	0.70	51.42	5.08	1.04	24.03	7.56	0.117
-10.40	21.09	5.26	0.79	53.58	2.13	-0.36	24.54	4.89	-0.040
-10.11	20.80	8.25	0.03	31.41	1.54	-0.01	18.78	4.16	-0.001
-9.81	20.51	11.13	0.24	4.21	3.78	0.13	6.88	6.51	0.015
-9.52	20.21	12.80	0.03	3.51	2.67	0.03	6.28	5.48	0.003
-9.23	19.92	14.29	-0.05	3.35	1.71	0.02	6.14	4.39	0.003
-8.93	19.63	15.91	0.02	3.82	1.64	0.07	6.56	4.30	0.008
-8.64	19.33	17.46	0.09	4.32	1.63	0.09	6.96	4.28	0.010
-8.35	19.04	18.84	0.11	4.70	1.66	0.11	7.27	4.31	0.012
-8.06	18.75	19.97	0.11	5.18	1.54	0.16	7.63	4.17	0.018
-7.76	18.45	21.02	0.11	5.54	1.50	0.20	7.89	4.10	0.023
-7.47	18.16	21.90	0.11	5.62	1.53	0.28	7.94	4.15	0.031
-7.18	17.87	22.72	0.11	5.61	1.58	0.31	7.94	4.22	0.035
-6.88	17.58	23.41	0.11	5.58	1.67	0.36	7.92	4.33	0.041
-6.59	17.28	24.06	0.09	5.51	1.77	0.42	7.87	4.46	0.047
-6.30	16.99	24.63	0.08	5.37	1.66	0.39	7.76	4.32	0.043
-6.01	16.70	25.16	0.07	5.14	1.66	0.39	7.60	4.32	0.044
-5.71	16.40	25.64	0.06	4.95	1.67	0.47	7.46	4.33	0.052
-5.42	16.11	26.06	0.05	4.70	1.52	0.46	7.27	4.14	0.052
-5.13	15.82	26.43	0.03	4.44	1.68	0.40	7.06	4.35	0.045
-4.83	15.53	26.79	0.03	4.22	2.16	0.43	6.89	4.93	0.048
-4.54	15.23	27.11	0.03	4.11	2.39	0.39	6.79	5.19	0.044
-4.25	14.94	27.39	0.00	3.78	2.07	0.36	6.52	4.82	0.041
-3.95	14.65	27.65	0.00	3.56	1.76	0.33	6.33	4.44	0.038
-3.66	14.35	27.89	-0.01	3.35	1.71	0.34	6.14	4.38	0.038
-3.37	14.06	28.10	-0.01	3.23	1.93	0.35	6.03	4.65	0.039
-3.08	13.77	28.29	0.00	3.03	1.98	0.36	5.83	4.71	0.040
-2.78	13.47	28.48	-0.02	2.80	1.88	0.33	5.61	4.59	0.037
-2.49	13.18	28.66	-0.03	2.71	1.76	0.32	5.52	4.45	0.035
-2.20	12.89	28.81	-0.04	2.65	1.96	0.27	5.45	4.69	0.030
-1.90	12.60	28.94	-0.05	2.50	2.07	0.31	5.30	4.82	0.034
-1.61	12.30	29.08	-0.04	2.34	2.16	0.31	5.13	4.92	0.035
-1.32	12.01	29.20	-0.04	2.18	1.83	0.24	4.95	4.53	0.027
-1.03	11.72	29.31	-0.06	2.12	1.66	0.19	4.87	4.32	0.022
-0.73	11.42	29.40	-0.05	2.03	1.86	0.16	4.78	4.57	0.018

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.44	11.13	29.49	-0.05	1.97	1.99	0.17	4.70	4.73	0.020
-0.15	10.84	29.56	-0.05	1.88	1.72	0.15	4.60	4.39	0.017
0.15	10.55	29.63	-0.06	1.77	1.64	0.13	4.46	4.30	0.014
0.44	10.25	29.69	-0.05	1.70	1.78	0.04	4.37	4.47	0.004
0.73	9.96	29.74	-0.05	1.69	1.97	0.04	4.36	4.70	0.005
1.03	9.67	29.78	-0.05	1.65	2.00	0.03	4.31	4.75	0.004
1.32	9.37	29.81	-0.06	1.60	1.75	0.07	4.24	4.44	0.008
1.61	9.08	29.83	-0.06	1.56	1.86	0.03	4.19	4.58	0.004
1.90	8.79	29.83	-0.06	1.52	1.97	0.10	4.14	4.71	0.012
2.20	8.50	29.82	-0.06	1.50	1.95	0.08	4.10	4.69	0.009
2.49	8.20	29.79	-0.05	1.56	1.88	0.01	4.19	4.60	0.001
2.78	7.91	29.76	-0.06	1.57	1.94	-0.05	4.20	4.67	-0.006
3.08	7.62	29.67	-0.07	1.61	1.79	-0.01	4.26	4.48	-0.001
3.37	7.32	29.57	-0.07	1.71	1.81	-0.08	4.38	4.51	-0.009
3.66	7.03	29.44	-0.06	1.82	1.86	-0.05	4.52	4.57	-0.006
3.95	6.74	29.28	-0.07	1.99	1.78	-0.11	4.73	4.47	-0.012
4.25	6.44	29.09	-0.06	2.17	1.75	-0.11	4.93	4.44	-0.013
4.54	6.15	28.86	-0.05	2.35	1.72	-0.18	5.14	4.39	-0.021
4.83	5.86	28.57	-0.06	2.58	1.68	-0.16	5.38	4.34	-0.018
5.13	5.57	28.24	-0.07	2.80	1.83	-0.11	5.61	4.53	-0.012
5.42	5.27	27.83	-0.08	3.06	1.95	-0.15	5.86	4.68	-0.017
5.71	4.98	27.37	-0.07	3.37	1.92	-0.24	6.15	4.65	-0.027
6.01	4.69	26.84	-0.07	3.76	2.03	-0.25	6.50	4.77	-0.028
6.30	4.39	26.22	-0.08	4.18	2.31	-0.23	6.86	5.09	-0.026
6.59	4.10	25.55	-0.10	4.25	2.23	-0.15	6.91	5.01	-0.017
6.88	3.81	24.76	-0.11	4.43	2.39	-0.12	7.06	5.19	-0.014
7.18	3.52	23.85	-0.09	4.60	2.50	-0.14	7.19	5.30	-0.015
7.47	3.22	22.86	-0.10	4.60	2.60	-0.05	7.19	5.41	-0.005
7.76	2.93	21.74	-0.13	4.49	2.54	0.01	7.10	5.34	0.001
8.06	2.64	20.47	-0.12	4.26	2.67	-0.06	6.92	5.48	-0.006
8.35	2.34	19.07	-0.10	4.18	3.27	-0.12	6.85	6.06	-0.013
8.64	2.05	17.44	-0.09	3.95	3.05	-0.12	6.66	5.85	-0.013
8.93	1.76	15.63	-0.05	3.98	2.73	-0.06	6.69	5.54	-0.007
9.23	1.46	13.72	-0.02	4.38	1.93	-0.01	7.01	4.65	-0.001
9.52	1.17	11.78	-0.13	7.10	1.20	0.04	8.93	3.67	0.004
9.81	0.88	4.37	-1.96	35.94	7.77	1.51	20.09	9.35	0.170
10.11	0.59	0.34	-0.67	5.65	2.40	-0.28	7.97	5.20	-0.032
10.40	0.29	-0.04	-0.14	0.31	0.56	0.08	1.87	2.50	0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
10.69	0.00	6.37	-1.47	329.23	298.75	-240.37	60.82	57.94	-27.007

Table N-81 Grid #2, L1, Plasma-300, Center (46-55)

L1 (300)							U_∞ =	30.24	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.69	21.38	7.74	1.10	96.25	3.04	-0.91	32.44	5.77	-0.099
-10.40	21.09	8.68	0.38	82.01	1.47	0.11	29.94	4.01	0.012
-10.11	20.80	9.95	-0.04	20.77	1.19	0.02	15.07	3.60	0.002
-9.81	20.51	11.14	-0.03	3.41	1.00	0.02	6.11	3.31	0.003
-9.52	20.21	12.73	-0.02	2.81	0.67	0.03	5.54	2.70	0.003
-9.23	19.92	14.32	0.01	2.66	0.63	0.07	5.39	2.62	0.008
-8.93	19.63	16.03	0.01	3.06	0.56	0.07	5.78	2.48	0.007
-8.64	19.33	17.71	0.02	3.50	0.54	0.11	6.19	2.43	0.012
-8.35	19.04	19.23	0.02	3.86	0.52	0.16	6.49	2.39	0.017
-8.06	18.75	20.48	0.01	4.21	0.69	0.19	6.78	2.75	0.021
-7.76	18.45	21.59	0.01	4.43	0.71	0.24	6.96	2.78	0.026
-7.47	18.16	22.51	0.03	4.48	0.71	0.26	7.00	2.78	0.028
-7.18	17.87	23.32	0.03	4.52	0.70	0.28	7.03	2.77	0.031
-6.88	17.58	24.02	0.01	4.55	0.63	0.30	7.05	2.63	0.033
-6.59	17.28	24.67	0.00	4.49	0.67	0.32	7.01	2.70	0.035
-6.30	16.99	25.19	-0.01	4.40	0.79	0.31	6.93	2.94	0.034
-6.01	16.70	25.71	-0.01	4.23	0.73	0.32	6.80	2.83	0.035
-5.71	16.40	26.15	-0.01	4.05	0.69	0.35	6.66	2.75	0.038
-5.42	16.11	26.59	-0.02	3.89	0.77	0.38	6.52	2.91	0.041
-5.13	15.82	26.94	-0.03	3.68	0.76	0.37	6.34	2.89	0.040
-4.83	15.53	27.29	-0.03	3.44	0.73	0.34	6.13	2.83	0.037
-4.54	15.23	27.58	-0.03	3.26	0.73	0.34	5.97	2.83	0.037
-4.25	14.94	27.86	-0.05	3.05	0.72	0.34	5.77	2.80	0.038
-3.95	14.65	28.11	-0.04	2.89	0.66	0.34	5.62	2.69	0.038
-3.66	14.35	28.35	-0.05	2.70	0.75	0.34	5.44	2.87	0.037
-3.37	14.06	28.56	-0.06	2.54	0.81	0.32	5.27	2.97	0.035
-3.08	13.77	28.75	-0.06	2.38	0.72	0.29	5.10	2.81	0.032
-2.78	13.47	28.92	-0.06	2.29	0.70	0.28	5.00	2.76	0.030
-2.49	13.18	29.09	-0.06	2.14	0.69	0.27	4.84	2.75	0.030

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-2.20	12.89	29.24	-0.08	2.05	0.74	0.27	4.73	2.84	0.029
-1.90	12.60	29.39	-0.07	1.92	0.79	0.25	4.58	2.94	0.027
-1.61	12.30	29.51	-0.07	1.78	0.78	0.21	4.41	2.92	0.023
-1.32	12.01	29.62	-0.08	1.69	0.72	0.21	4.30	2.81	0.023
-1.03	11.72	29.73	-0.08	1.60	0.68	0.20	4.18	2.72	0.021
-0.73	11.42	29.82	-0.10	1.51	0.72	0.17	4.06	2.81	0.019
-0.44	11.13	29.90	-0.09	1.44	0.77	0.16	3.97	2.90	0.017
-0.15	10.84	29.98	-0.08	1.37	0.72	0.15	3.87	2.81	0.016
0.15	10.55	30.05	-0.08	1.29	0.73	0.14	3.75	2.82	0.015
0.44	10.25	30.10	-0.07	1.23	0.78	0.12	3.67	2.92	0.013
0.73	9.96	30.16	-0.07	1.19	0.75	0.09	3.61	2.87	0.010
1.03	9.67	30.20	-0.07	1.17	0.75	0.07	3.57	2.87	0.008
1.32	9.37	30.22	-0.07	1.11	0.71	0.03	3.49	2.79	0.003
1.61	9.08	30.24	-0.07	1.08	0.72	0.03	3.44	2.80	0.003
1.90	8.79	30.24	-0.07	1.05	0.64	0.03	3.39	2.64	0.003
2.20	8.50	30.23	-0.07	1.05	0.57	0.00	3.38	2.50	0.000
2.49	8.20	30.20	-0.06	1.07	0.61	-0.01	3.42	2.59	-0.001
2.78	7.91	30.15	-0.06	1.09	0.65	-0.01	3.45	2.66	-0.001
3.08	7.62	30.07	-0.07	1.15	0.64	-0.02	3.54	2.64	-0.003
3.37	7.32	29.97	-0.07	1.22	0.61	-0.07	3.65	2.59	-0.007
3.66	7.03	29.85	-0.07	1.30	0.59	-0.07	3.77	2.53	-0.008
3.95	6.74	29.71	-0.07	1.41	0.70	-0.08	3.92	2.76	-0.009
4.25	6.44	29.51	-0.06	1.53	0.65	-0.09	4.09	2.66	-0.010
4.54	6.15	29.27	-0.06	1.72	0.63	-0.12	4.33	2.63	-0.013
4.83	5.86	28.99	-0.06	1.94	0.62	-0.12	4.60	2.60	-0.013
5.13	5.57	28.65	-0.05	2.17	0.66	-0.14	4.87	2.69	-0.016
5.42	5.27	28.27	-0.05	2.37	0.71	-0.15	5.09	2.78	-0.017
5.71	4.98	27.82	-0.05	2.63	0.65	-0.16	5.36	2.67	-0.018
6.01	4.69	27.30	-0.05	2.83	0.64	-0.18	5.57	2.65	-0.020
6.30	4.39	26.70	-0.06	3.10	0.79	-0.18	5.82	2.94	-0.020
6.59	4.10	25.99	-0.05	3.31	0.71	-0.13	6.02	2.79	-0.015
6.88	3.81	25.21	-0.06	3.52	0.78	-0.12	6.20	2.92	-0.013
7.18	3.52	24.32	-0.07	3.56	0.85	-0.13	6.24	3.06	-0.014
7.47	3.22	23.29	-0.07	3.64	1.00	-0.11	6.31	3.31	-0.012
7.76	2.93	22.08	-0.06	3.59	1.11	-0.07	6.26	3.48	-0.007
8.06	2.64	20.71	-0.05	3.56	1.17	-0.09	6.24	3.58	-0.009
8.35	2.34	19.14	-0.05	3.50	1.25	-0.06	6.19	3.70	-0.006
8.64	2.05	17.24	-0.05	3.42	1.34	-0.05	6.12	3.83	-0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
8.93	1.76	15.26	-0.06	3.36	1.89	-0.04	6.06	4.55	-0.004
9.23	1.46	13.19	-0.05	3.43	1.88	-0.04	6.13	4.53	-0.004
9.52	1.17	11.29	0.00	5.02	1.96	-0.03	7.41	4.63	-0.003
9.81	0.88	6.37	-1.04	38.10	11.96	1.80	20.41	11.43	0.197
10.11	0.59	0.54	-0.87	16.59	6.76	-0.35	13.47	8.60	-0.039
10.40	0.29	0.02	0.01	0.60	0.23	0.00	2.56	1.58	-0.001
10.69	0.00	0.30	0.12	0.30	0.02	0.00	1.82	0.46	0.000

Table N-82 Grid #2, L1, Plasma-300, Right (71-80)

L1 (300)							U_∞ =	30.44	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.69	21.38	4.40	0.59	47.92	2.95	0.65	22.74	5.64	0.070
-10.40	21.09	7.04	0.26	66.20	2.51	0.33	26.73	5.21	0.036
-10.11	20.80	9.28	0.07	13.41	1.11	0.13	12.03	3.47	0.014
-9.81	20.51	10.92	0.01	3.33	0.86	0.06	5.99	3.04	0.007
-9.52	20.21	12.55	0.01	2.64	0.61	0.06	5.34	2.57	0.006
-9.23	19.92	14.19	0.01	2.72	0.59	0.08	5.42	2.53	0.009
-8.93	19.63	15.94	0.02	3.17	0.60	0.10	5.85	2.54	0.011
-8.64	19.33	17.66	0.02	3.58	0.56	0.13	6.21	2.45	0.014
-8.35	19.04	19.22	0.02	3.87	0.63	0.18	6.46	2.61	0.020
-8.06	18.75	20.52	0.01	4.14	0.68	0.20	6.69	2.71	0.021
-7.76	18.45	21.68	0.01	4.31	0.67	0.24	6.82	2.69	0.025
-7.47	18.16	22.63	0.00	4.32	0.61	0.25	6.82	2.58	0.027
-7.18	17.87	23.47	0.00	4.29	0.62	0.24	6.80	2.59	0.026
-6.88	17.58	24.19	0.00	4.32	0.65	0.28	6.83	2.65	0.030
-6.59	17.28	24.84	0.00	4.22	0.62	0.30	6.75	2.58	0.033
-6.30	16.99	25.40	-0.03	4.10	0.61	0.30	6.65	2.57	0.033
-6.01	16.70	25.92	-0.03	4.00	0.64	0.32	6.57	2.63	0.034
-5.71	16.40	26.38	-0.03	3.84	0.67	0.33	6.44	2.68	0.035
-5.42	16.11	26.79	-0.04	3.60	0.67	0.34	6.24	2.69	0.037
-5.13	15.82	27.15	-0.04	3.42	0.72	0.34	6.08	2.78	0.037
-4.83	15.53	27.48	-0.05	3.33	0.65	0.35	6.00	2.66	0.038
-4.54	15.23	27.78	-0.05	3.17	0.63	0.34	5.85	2.61	0.037
-4.25	14.94	28.07	-0.05	2.95	0.73	0.33	5.64	2.81	0.036

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-3.95	14.65	28.32	-0.06	2.75	0.69	0.33	5.45	2.72	0.036
-3.66	14.35	28.54	-0.06	2.60	0.67	0.31	5.29	2.68	0.033
-3.37	14.06	28.76	-0.06	2.46	0.70	0.29	5.15	2.74	0.031
-3.08	13.77	28.96	-0.07	2.31	0.65	0.28	4.99	2.65	0.030
-2.78	13.47	29.13	-0.07	2.18	0.69	0.27	4.85	2.72	0.029
-2.49	13.18	29.28	-0.08	2.06	0.73	0.24	4.72	2.80	0.026
-2.20	12.89	29.44	-0.07	1.92	0.68	0.22	4.55	2.72	0.024
-1.90	12.60	29.58	-0.07	1.81	0.70	0.22	4.42	2.74	0.024
-1.61	12.30	29.70	-0.07	1.71	0.74	0.21	4.30	2.82	0.023
-1.32	12.01	29.82	-0.07	1.61	0.74	0.19	4.16	2.84	0.020
-1.03	11.72	29.93	-0.08	1.51	0.78	0.18	4.03	2.90	0.020
-0.73	11.42	30.02	-0.08	1.42	0.73	0.17	3.92	2.81	0.019
-0.44	11.13	30.11	-0.08	1.34	0.72	0.15	3.80	2.79	0.016
-0.15	10.84	30.18	-0.08	1.30	0.73	0.14	3.75	2.80	0.015
0.15	10.55	30.25	-0.08	1.23	0.80	0.12	3.65	2.93	0.013
0.44	10.25	30.31	-0.07	1.18	0.80	0.10	3.57	2.93	0.011
0.73	9.96	30.36	-0.07	1.15	0.74	0.07	3.52	2.84	0.007
1.03	9.67	30.39	-0.07	1.11	0.75	0.07	3.46	2.84	0.007
1.32	9.37	30.42	-0.07	1.09	0.75	0.06	3.43	2.84	0.006
1.61	9.08	30.44	-0.08	1.07	0.65	0.03	3.40	2.65	0.004
1.90	8.79	30.43	-0.07	1.06	0.67	0.01	3.39	2.68	0.001
2.20	8.50	30.42	-0.06	1.06	0.60	-0.01	3.39	2.54	-0.001
2.49	8.20	30.38	-0.06	1.11	0.69	-0.03	3.46	2.73	-0.003
2.78	7.91	30.32	-0.06	1.14	0.65	-0.04	3.51	2.66	-0.005
3.08	7.62	30.25	-0.07	1.17	0.60	-0.03	3.56	2.54	-0.003
3.37	7.32	30.15	-0.05	1.23	0.57	-0.05	3.65	2.49	-0.005
3.66	7.03	30.02	-0.04	1.31	0.53	-0.07	3.75	2.39	-0.008
3.95	6.74	29.86	-0.05	1.46	0.61	-0.09	3.97	2.57	-0.010
4.25	6.44	29.66	-0.05	1.59	0.65	-0.11	4.15	2.66	-0.012
4.54	6.15	29.42	-0.05	1.77	0.66	-0.12	4.38	2.68	-0.013
4.83	5.86	29.15	-0.06	1.95	0.70	-0.11	4.58	2.74	-0.012
5.13	5.57	28.81	-0.06	2.19	0.60	-0.11	4.86	2.55	-0.012
5.42	5.27	28.41	-0.05	2.42	0.57	-0.13	5.11	2.48	-0.015
5.71	4.98	27.94	-0.05	2.64	0.55	-0.14	5.34	2.43	-0.015
6.01	4.69	27.42	-0.05	2.84	0.67	-0.13	5.54	2.69	-0.014
6.30	4.39	26.82	-0.05	3.03	0.71	-0.14	5.72	2.77	-0.015
6.59	4.10	26.11	-0.06	3.21	0.80	-0.12	5.89	2.95	-0.013
6.88	3.81	25.29	-0.06	3.42	0.82	-0.14	6.08	2.98	-0.015

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.18	3.52	24.36	-0.05	3.47	0.86	-0.15	6.12	3.05	-0.016
7.47	3.22	23.28	-0.05	3.54	1.05	-0.14	6.18	3.37	-0.015
7.76	2.93	22.04	-0.04	3.55	1.10	-0.10	6.19	3.44	-0.011
8.06	2.64	20.61	-0.03	3.62	1.36	-0.09	6.25	3.84	-0.010
8.35	2.34	18.97	-0.05	3.64	1.32	-0.07	6.27	3.78	-0.008
8.64	2.05	17.04	-0.04	3.64	1.48	-0.04	6.26	4.00	-0.004
8.93	1.76	14.98	-0.03	3.45	1.91	0.03	6.10	4.54	0.003
9.23	1.46	12.90	-0.03	3.49	2.59	0.00	6.14	5.29	0.000
9.52	1.17	10.89	-0.02	4.33	2.92	-0.10	6.84	5.61	-0.011
9.81	0.88	6.96	-0.09	25.27	8.91	0.25	16.52	9.81	0.027
10.11	0.59	0.86	0.09	11.19	4.30	-0.05	10.99	6.81	-0.005
10.40	0.29	0.19	0.13	0.46	0.30	-0.05	2.24	1.79	-0.006
10.69	0.00	0.03	0.34	0.00	0.02	0.00	0.18	0.43	0.000

Table N-83 Grid #2, L2, Plasma-Off, Left (1-10)

L2 (Off)							$U_\infty =$	30.27	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.82	21.63	0.89	0.26	3.91	1.97	0.04	6.53	4.63	0.004
-10.52	21.34	2.09	0.13	1.52	0.56	0.02	4.08	2.48	0.002
-10.22	21.04	4.54	-0.01	1.51	0.56	-0.02	4.05	2.47	-0.002
-9.93	20.74	6.52	-0.02	2.06	0.46	-0.01	4.74	2.24	-0.001
-9.63	20.45	8.46	-0.02	2.69	0.60	0.00	5.42	2.57	0.000
-9.34	20.15	10.22	-0.02	3.39	0.69	0.03	6.08	2.74	0.003
-9.04	19.86	11.95	-0.02	4.28	0.71	0.03	6.83	2.79	0.003
-8.74	19.56	13.55	-0.02	5.29	0.88	0.08	7.60	3.10	0.009
-8.45	19.26	15.10	-0.03	5.99	0.90	0.18	8.08	3.13	0.019
-8.15	18.97	16.49	-0.04	6.82	1.17	0.20	8.63	3.57	0.022
-7.85	18.67	17.82	-0.04	7.53	1.36	0.27	9.06	3.86	0.029
-7.56	18.37	18.98	-0.05	7.89	1.41	0.32	9.28	3.92	0.035
-7.26	18.08	20.10	-0.05	7.95	0.67	0.31	9.31	2.70	0.034
-6.96	17.78	21.07	-0.06	8.09	0.79	0.35	9.40	2.94	0.038
-6.67	17.48	21.98	-0.07	8.04	0.91	0.37	9.37	3.16	0.041
-6.37	17.19	22.78	-0.07	7.70	0.66	0.40	9.16	2.67	0.044
-6.08	16.89	23.54	-0.08	7.25	0.73	0.43	8.90	2.82	0.047

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-5.78	16.60	24.20	-0.10	6.86	0.86	0.47	8.65	3.06	0.051
-5.48	16.30	24.80	-0.10	6.44	0.84	0.48	8.38	3.02	0.053
-5.19	16.00	25.35	-0.10	6.00	0.78	0.43	8.09	2.92	0.047
-4.89	15.71	25.86	-0.10	5.51	0.71	0.43	7.75	2.78	0.047
-4.59	15.41	26.31	-0.11	5.24	0.70	0.43	7.56	2.76	0.047
-4.30	15.11	26.74	-0.12	4.86	0.77	0.41	7.28	2.89	0.045
-4.00	14.82	27.12	-0.12	4.52	0.87	0.40	7.03	3.08	0.043
-3.70	14.52	27.47	-0.13	4.16	0.84	0.36	6.74	3.02	0.039
-3.41	14.22	27.77	-0.14	3.89	0.85	0.37	6.52	3.04	0.040
-3.11	13.93	28.05	-0.14	3.66	0.89	0.36	6.32	3.11	0.039
-2.82	13.63	28.30	-0.15	3.49	0.84	0.33	6.17	3.02	0.036
-2.52	13.34	28.54	-0.16	3.22	0.90	0.33	5.93	3.14	0.036
-2.22	13.04	28.76	-0.16	3.00	0.82	0.32	5.72	2.99	0.035
-1.93	12.74	28.97	-0.15	2.83	0.79	0.29	5.56	2.94	0.032
-1.63	12.45	29.15	-0.15	2.66	0.77	0.27	5.39	2.90	0.030
-1.33	12.15	29.32	-0.15	2.45	0.77	0.22	5.17	2.90	0.024
-1.04	11.85	29.48	-0.15	2.30	0.77	0.22	5.01	2.91	0.024
-0.74	11.56	29.62	-0.16	2.16	0.80	0.22	4.85	2.95	0.024
-0.44	11.26	29.74	-0.16	2.06	0.85	0.18	4.74	3.05	0.020
-0.15	10.96	29.86	-0.14	1.93	0.81	0.14	4.59	2.98	0.015
0.15	10.67	29.95	-0.14	1.82	0.80	0.14	4.46	2.95	0.016
0.44	10.37	30.04	-0.14	1.69	0.83	0.16	4.30	3.00	0.017
0.74	10.08	30.11	-0.13	1.63	0.77	0.12	4.21	2.90	0.014
1.04	9.78	30.17	-0.14	1.56	0.73	0.12	4.13	2.83	0.013
1.33	9.48	30.22	-0.13	1.49	0.75	0.09	4.03	2.86	0.010
1.63	9.19	30.26	-0.13	1.46	0.77	0.07	3.99	2.90	0.007
1.93	8.89	30.27	-0.13	1.43	0.74	0.03	3.95	2.84	0.004
2.22	8.59	30.27	-0.12	1.43	0.67	0.01	3.96	2.70	0.002
2.52	8.30	30.24	-0.11	1.44	0.68	0.00	3.97	2.73	0.000
2.82	8.00	30.20	-0.11	1.43	0.66	-0.02	3.96	2.68	-0.002
3.11	7.71	30.13	-0.11	1.52	0.66	-0.03	4.07	2.68	-0.003
3.41	7.41	30.03	-0.11	1.65	0.67	-0.05	4.25	2.70	-0.006
3.70	7.11	29.90	-0.11	1.77	0.74	-0.06	4.39	2.83	-0.007
4.00	6.82	29.72	-0.10	1.92	0.74	-0.08	4.58	2.83	-0.009
4.30	6.52	29.52	-0.09	2.10	0.68	-0.10	4.78	2.72	-0.011
4.59	6.22	29.24	-0.09	2.41	0.69	-0.10	5.13	2.74	-0.011
4.89	5.93	28.90	-0.08	2.73	0.69	-0.13	5.46	2.74	-0.015
5.19	5.63	28.49	-0.07	3.11	0.70	-0.18	5.82	2.77	-0.020

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.48	5.33	28.03	-0.06	3.43	0.66	-0.20	6.12	2.68	-0.022
5.78	5.04	27.46	-0.07	3.81	0.64	-0.21	6.45	2.65	-0.022
6.08	4.74	26.78	-0.06	4.29	0.66	-0.19	6.84	2.69	-0.021
6.37	4.45	26.00	-0.05	4.74	0.71	-0.18	7.19	2.79	-0.019
6.67	4.15	25.09	-0.05	5.19	0.75	-0.20	7.52	2.85	-0.022
6.96	3.85	24.05	-0.05	5.50	0.75	-0.16	7.75	2.86	-0.018
7.26	3.56	22.86	-0.05	5.71	0.75	-0.16	7.89	2.86	-0.017
7.56	3.26	21.53	-0.04	5.87	0.79	-0.15	8.00	2.94	-0.017
7.85	2.96	20.06	-0.04	5.72	0.60	-0.16	7.90	2.57	-0.018
8.15	2.67	18.40	-0.04	5.38	0.73	-0.07	7.66	2.83	-0.008
8.45	2.37	16.65	-0.03	4.88	0.77	-0.08	7.30	2.89	-0.008
8.74	2.07	14.72	-0.03	4.17	0.72	-0.04	6.75	2.80	-0.004
9.04	1.78	12.70	-0.02	3.52	0.75	-0.03	6.20	2.86	-0.003
9.34	1.48	10.53	-0.03	2.98	0.84	-0.04	5.70	3.03	-0.004
9.63	1.19	8.25	-0.01	2.43	0.80	0.00	5.15	2.96	0.000
9.93	0.89	5.87	-0.01	2.05	0.81	0.00	4.73	2.98	-0.001
10.22	0.59	3.51	-0.02	1.72	1.19	0.07	4.33	3.61	0.007
10.52	0.30	2.27	-0.13	1.26	0.79	-0.05	3.71	2.94	-0.005
10.82	0.00	11.90	1.40	288.95	33.42	-9.08	56.15	19.10	-0.991

Table N-84 Grid #2, L2, Plasma-Off, Center (46-55)

L2 (Off)							$U_\infty =$	30.33	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.82	21.63	1.11	0.01	2.10	0.31	0.15	4.78	1.84	0.017
-10.52	21.34	2.93	-0.01	1.15	0.24	0.03	3.54	1.63	0.004
-10.22	21.04	4.79	-0.02	1.30	0.24	0.02	3.76	1.63	0.002
-9.93	20.74	6.67	-0.04	1.78	0.30	0.04	4.40	1.82	0.004
-9.63	20.45	8.58	-0.03	2.23	0.28	0.04	4.92	1.73	0.004
-9.34	20.15	10.28	-0.03	2.85	0.32	0.07	5.57	1.87	0.007
-9.04	19.86	12.01	-0.03	3.71	0.28	0.11	6.35	1.75	0.011
-8.74	19.56	13.59	-0.04	4.39	0.29	0.13	6.91	1.76	0.014
-8.45	19.26	15.13	-0.05	5.27	0.32	0.17	7.57	1.86	0.018
-8.15	18.97	16.52	-0.05	6.13	0.36	0.20	8.16	1.98	0.022
-7.85	18.67	17.83	-0.05	6.72	0.36	0.24	8.55	1.98	0.026

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-7.56	18.37	19.01	-0.06	7.01	0.35	0.29	8.73	1.95	0.031
-7.26	18.08	20.14	-0.05	7.35	0.42	0.34	8.94	2.13	0.037
-6.96	17.78	21.11	-0.06	7.56	0.40	0.37	9.07	2.10	0.040
-6.67	17.48	22.04	-0.07	7.46	0.41	0.40	9.01	2.12	0.044
-6.37	17.19	22.86	-0.08	7.21	0.44	0.42	8.85	2.18	0.046
-6.08	16.89	23.64	-0.08	6.88	0.45	0.44	8.65	2.22	0.047
-5.78	16.60	24.30	-0.08	6.60	0.41	0.45	8.47	2.11	0.049
-5.48	16.30	24.89	-0.09	6.30	0.40	0.43	8.28	2.10	0.046
-5.19	16.00	25.43	-0.10	5.97	0.44	0.44	8.06	2.18	0.048
-4.89	15.71	25.95	-0.10	5.42	0.50	0.45	7.67	2.34	0.049
-4.59	15.41	26.41	-0.11	5.02	0.55	0.44	7.38	2.44	0.048
-4.30	15.11	26.83	-0.11	4.70	0.58	0.43	7.15	2.52	0.046
-4.00	14.82	27.22	-0.11	4.25	0.54	0.39	6.80	2.43	0.042
-3.70	14.52	27.56	-0.10	3.97	0.54	0.38	6.57	2.42	0.041
-3.41	14.22	27.85	-0.11	3.74	0.51	0.37	6.37	2.35	0.040
-3.11	13.93	28.13	-0.11	3.49	0.46	0.36	6.16	2.23	0.039
-2.82	13.63	28.39	-0.12	3.26	0.50	0.33	5.95	2.33	0.036
-2.52	13.34	28.63	-0.12	2.98	0.48	0.32	5.70	2.29	0.035
-2.22	13.04	28.85	-0.12	2.73	0.47	0.29	5.44	2.25	0.032
-1.93	12.74	29.07	-0.12	2.51	0.47	0.27	5.22	2.26	0.030
-1.63	12.45	29.25	-0.12	2.34	0.47	0.24	5.04	2.26	0.026
-1.33	12.15	29.43	-0.12	2.14	0.50	0.22	4.82	2.34	0.024
-1.04	11.85	29.58	-0.12	2.05	0.51	0.20	4.72	2.35	0.022
-0.74	11.56	29.71	-0.13	1.93	0.50	0.19	4.58	2.33	0.020
-0.44	11.26	29.83	-0.13	1.79	0.47	0.17	4.41	2.27	0.018
-0.15	10.96	29.93	-0.12	1.71	0.49	0.14	4.31	2.31	0.016
0.15	10.67	30.03	-0.12	1.58	0.50	0.13	4.15	2.32	0.014
0.44	10.37	30.11	-0.12	1.50	0.48	0.12	4.04	2.29	0.013
0.74	10.08	30.18	-0.11	1.44	0.46	0.10	3.95	2.23	0.010
1.04	9.78	30.24	-0.11	1.38	0.44	0.08	3.87	2.18	0.008
1.33	9.48	30.29	-0.11	1.34	0.41	0.07	3.82	2.10	0.007
1.63	9.19	30.32	-0.11	1.29	0.39	0.05	3.75	2.06	0.006
1.93	8.89	30.33	-0.10	1.30	0.42	0.04	3.76	2.15	0.004
2.22	8.59	30.32	-0.11	1.29	0.39	0.02	3.75	2.06	0.002
2.52	8.30	30.31	-0.11	1.31	0.39	0.00	3.77	2.06	0.000
2.82	8.00	30.26	-0.10	1.38	0.42	-0.01	3.87	2.14	-0.001
3.11	7.71	30.19	-0.10	1.42	0.45	-0.02	3.93	2.22	-0.002
3.41	7.41	30.10	-0.10	1.47	0.44	-0.03	4.00	2.18	-0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.70	7.11	29.96	-0.10	1.61	0.41	-0.07	4.18	2.12	-0.007
4.00	6.82	29.79	-0.09	1.77	0.40	-0.09	4.39	2.09	-0.010
4.30	6.52	29.58	-0.09	1.91	0.34	-0.10	4.56	1.93	-0.011
4.59	6.22	29.29	-0.08	2.20	0.40	-0.13	4.89	2.09	-0.014
4.89	5.93	28.94	-0.08	2.51	0.38	-0.12	5.22	2.04	-0.013
5.19	5.63	28.53	-0.08	2.76	0.38	-0.14	5.48	2.05	-0.015
5.48	5.33	28.06	-0.07	3.09	0.34	-0.15	5.80	1.92	-0.016
5.78	5.04	27.47	-0.07	3.46	0.37	-0.17	6.13	1.99	-0.018
6.08	4.74	26.78	-0.06	3.91	0.44	-0.17	6.52	2.19	-0.018
6.37	4.45	25.98	-0.06	4.28	0.46	-0.20	6.82	2.25	-0.022
6.67	4.15	25.07	-0.05	4.65	0.44	-0.18	7.11	2.18	-0.019
6.96	3.85	24.01	-0.05	5.06	0.41	-0.18	7.42	2.12	-0.019
7.26	3.56	22.79	-0.04	5.32	0.46	-0.21	7.61	2.24	-0.023
7.56	3.26	21.46	-0.03	5.36	0.51	-0.15	7.63	2.35	-0.017
7.85	2.96	19.99	-0.04	5.16	0.46	-0.16	7.49	2.23	-0.017
8.15	2.67	18.34	-0.04	4.79	0.49	-0.15	7.22	2.30	-0.016
8.45	2.37	16.59	-0.04	4.31	0.52	-0.08	6.84	2.39	-0.008
8.74	2.07	14.71	-0.03	3.73	0.55	-0.07	6.37	2.44	-0.007
9.04	1.78	12.68	-0.02	3.16	0.54	-0.04	5.86	2.43	-0.004
9.34	1.48	10.57	-0.02	2.60	0.50	-0.03	5.32	2.34	-0.003
9.63	1.19	8.36	-0.01	2.17	0.55	-0.02	4.86	2.45	-0.002
9.93	0.89	5.99	0.02	2.00	0.58	-0.03	4.66	2.51	-0.003
10.22	0.59	3.07	0.05	1.74	0.47	-0.01	4.35	2.26	-0.002
10.52	0.30	1.51	-0.03	0.97	0.43	-0.03	3.24	2.17	-0.003
10.82	0.00	0.13	0.00	0.11	0.00	0.00	1.09	0.21	0.000

Table N-85 Grid #2, L2, Plasma-Off, Right (71-80)

L2 (Off)							$U_\infty =$	30.35	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.82	21.63	1.04	0.14	2.58	0.26	0.15	5.29	1.67	0.017
-10.52	21.34	3.04	-0.03	1.01	0.16	0.07	3.32	1.32	0.007
-10.22	21.04	4.90	-0.04	1.18	0.16	0.04	3.57	1.30	0.004
-9.93	20.74	6.77	-0.05	1.80	0.22	0.07	4.42	1.54	0.007
-9.63	20.45	8.66	-0.04	2.14	0.27	0.04	4.82	1.73	0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.34	20.15	10.34	-0.05	2.84	0.23	0.09	5.55	1.59	0.009
-9.04	19.86	12.04	-0.04	3.66	0.28	0.11	6.31	1.73	0.012
-8.74	19.56	13.61	-0.06	4.42	0.29	0.15	6.93	1.77	0.016
-8.45	19.26	15.13	-0.05	5.16	0.23	0.19	7.49	1.58	0.021
-8.15	18.97	16.49	-0.06	5.91	0.25	0.23	8.01	1.63	0.025
-7.85	18.67	17.82	-0.07	6.48	0.29	0.27	8.39	1.79	0.029
-7.56	18.37	18.99	-0.08	6.81	0.33	0.31	8.60	1.88	0.034
-7.26	18.08	20.12	-0.08	7.27	0.32	0.37	8.89	1.86	0.040
-6.96	17.78	21.11	-0.09	7.43	0.32	0.41	8.98	1.87	0.045
-6.67	17.48	22.03	-0.10	7.38	0.36	0.42	8.95	1.98	0.046
-6.37	17.19	22.85	-0.10	7.12	0.37	0.46	8.79	2.00	0.050
-6.08	16.89	23.62	-0.11	6.83	0.40	0.47	8.61	2.09	0.051
-5.78	16.60	24.29	-0.12	6.44	0.37	0.47	8.36	2.01	0.051
-5.48	16.30	24.90	-0.11	6.18	0.38	0.49	8.19	2.02	0.053
-5.19	16.00	25.43	-0.12	5.96	0.40	0.47	8.04	2.09	0.051
-4.89	15.71	25.94	-0.12	5.44	0.45	0.44	7.68	2.21	0.048
-4.59	15.41	26.40	-0.13	5.00	0.41	0.43	7.36	2.10	0.047
-4.30	15.11	26.84	-0.13	4.54	0.38	0.41	7.02	2.03	0.045
-4.00	14.82	27.21	-0.13	4.24	0.48	0.40	6.78	2.29	0.043
-3.70	14.52	27.56	-0.13	3.90	0.48	0.39	6.50	2.28	0.043
-3.41	14.22	27.88	-0.14	3.55	0.43	0.37	6.21	2.15	0.040
-3.11	13.93	28.16	-0.14	3.32	0.43	0.35	6.00	2.17	0.038
-2.82	13.63	28.41	-0.14	3.19	0.45	0.36	5.88	2.21	0.039
-2.52	13.34	28.65	-0.14	2.99	0.47	0.33	5.70	2.25	0.036
-2.22	13.04	28.86	-0.14	2.83	0.47	0.32	5.54	2.26	0.035
-1.93	12.74	29.09	-0.14	2.54	0.43	0.29	5.25	2.17	0.031
-1.63	12.45	29.28	-0.13	2.32	0.40	0.25	5.02	2.10	0.027
-1.33	12.15	29.45	-0.14	2.15	0.41	0.24	4.83	2.12	0.026
-1.04	11.85	29.60	-0.14	1.99	0.41	0.21	4.65	2.10	0.023
-0.74	11.56	29.74	-0.14	1.86	0.42	0.21	4.50	2.14	0.023
-0.44	11.26	29.86	-0.14	1.76	0.40	0.18	4.37	2.08	0.019
-0.15	10.96	29.97	-0.14	1.65	0.43	0.16	4.24	2.15	0.017
0.15	10.67	30.07	-0.14	1.54	0.40	0.13	4.09	2.08	0.014
0.44	10.37	30.15	-0.13	1.46	0.39	0.11	3.98	2.05	0.012
0.74	10.08	30.22	-0.13	1.40	0.37	0.09	3.90	2.00	0.010
1.04	9.78	30.27	-0.13	1.35	0.40	0.08	3.83	2.08	0.009
1.33	9.48	30.31	-0.12	1.30	0.37	0.07	3.76	2.01	0.007
1.63	9.19	30.34	-0.12	1.31	0.40	0.04	3.77	2.08	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.93	8.89	30.35	-0.12	1.29	0.40	0.01	3.74	2.09	0.001
2.22	8.59	30.34	-0.11	1.28	0.38	0.00	3.73	2.02	-0.001
2.52	8.30	30.31	-0.11	1.28	0.34	-0.01	3.73	1.93	-0.001
2.82	8.00	30.27	-0.10	1.31	0.33	-0.03	3.77	1.91	-0.004
3.11	7.71	30.20	-0.11	1.38	0.34	-0.04	3.87	1.93	-0.004
3.41	7.41	30.10	-0.10	1.46	0.34	-0.06	3.99	1.93	-0.007
3.70	7.11	29.97	-0.09	1.58	0.34	-0.08	4.14	1.91	-0.008
4.00	6.82	29.78	-0.09	1.73	0.31	-0.10	4.34	1.84	-0.011
4.30	6.52	29.56	-0.09	1.94	0.29	-0.12	4.58	1.76	-0.013
4.59	6.22	29.26	-0.08	2.23	0.31	-0.13	4.92	1.84	-0.014
4.89	5.93	28.92	-0.08	2.53	0.33	-0.15	5.24	1.90	-0.017
5.19	5.63	28.50	-0.08	2.83	0.29	-0.17	5.55	1.77	-0.018
5.48	5.33	28.02	-0.07	3.10	0.30	-0.18	5.80	1.80	-0.020
5.78	5.04	27.43	-0.06	3.46	0.32	-0.20	6.13	1.87	-0.022
6.08	4.74	26.73	-0.06	3.90	0.43	-0.20	6.51	2.17	-0.021
6.37	4.45	25.94	-0.06	4.26	0.63	-0.20	6.80	2.61	-0.022
6.67	4.15	25.02	-0.05	4.59	0.61	-0.19	7.06	2.57	-0.021
6.96	3.85	23.96	-0.05	4.87	0.38	-0.19	7.27	2.03	-0.021
7.26	3.56	22.76	-0.04	5.04	0.45	-0.19	7.39	2.22	-0.020
7.56	3.26	21.40	-0.03	5.10	0.50	-0.18	7.44	2.33	-0.020
7.85	2.96	19.93	-0.03	4.83	0.38	-0.14	7.24	2.04	-0.016
8.15	2.67	18.30	-0.02	4.55	0.37	-0.13	7.03	2.00	-0.014
8.45	2.37	16.54	-0.02	4.09	0.35	-0.09	6.67	1.95	-0.010
8.74	2.07	14.68	-0.02	3.58	0.33	-0.07	6.24	1.90	-0.008
9.04	1.78	12.69	-0.02	3.07	0.43	-0.06	5.78	2.16	-0.007
9.34	1.48	10.62	-0.01	2.60	0.44	-0.06	5.31	2.18	-0.006
9.63	1.19	8.46	0.00	2.26	0.37	-0.05	4.95	2.01	-0.006
9.93	0.89	6.10	0.02	2.30	0.43	-0.05	4.99	2.15	-0.006
10.22	0.59	3.45	0.01	2.05	0.44	-0.06	4.71	2.19	-0.006
10.52	0.30	1.46	-0.16	1.01	0.40	0.01	3.31	2.09	0.001
10.82	0.00	0.13	0.04	0.01	0.01	0.00	0.37	0.32	0.000

Table N-86 Grid #2, L2, Plasma-150, Left (1-10)

L2 (150)							U_∞ =	30.12	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.82	21.63	2.74	0.04	27.67	0.87	-0.10	17.46	3.10	-0.011
-10.52	21.34	2.39	-0.03	28.62	0.36	-0.08	17.76	2.00	-0.008
-10.22	21.04	4.90	-0.15	24.11	1.60	0.39	16.30	4.20	0.043
-9.93	20.74	8.88	-0.10	6.33	1.58	0.14	8.35	4.17	0.015
-9.63	20.45	10.27	-0.02	2.47	0.90	0.01	5.21	3.15	0.001
-9.34	20.15	11.60	-0.01	2.63	0.63	0.04	5.38	2.63	0.005
-9.04	19.86	13.19	0.00	3.13	0.44	0.04	5.87	2.20	0.004
-8.74	19.56	14.80	0.00	3.99	0.63	0.04	6.64	2.64	0.004
-8.45	19.26	16.40	-0.01	4.72	0.80	0.10	7.21	2.97	0.011
-8.15	18.97	17.81	-0.02	5.27	0.73	0.15	7.62	2.83	0.016
-7.85	18.67	19.16	-0.02	5.59	0.66	0.18	7.85	2.71	0.020
-7.56	18.37	20.30	-0.03	5.70	0.69	0.20	7.93	2.76	0.022
-7.26	18.08	21.40	-0.04	5.71	0.67	0.26	7.93	2.71	0.029
-6.96	17.78	22.32	-0.04	5.77	0.63	0.28	7.97	2.63	0.030
-6.67	17.48	23.18	-0.05	5.56	0.62	0.31	7.83	2.62	0.034
-6.37	17.19	23.90	-0.05	5.39	0.67	0.32	7.71	2.73	0.036
-6.08	16.89	24.57	-0.06	5.10	0.74	0.32	7.50	2.86	0.035
-5.78	16.60	25.13	-0.06	4.88	0.70	0.34	7.33	2.77	0.037
-5.48	16.30	25.66	-0.07	4.56	0.76	0.35	7.09	2.89	0.038
-5.19	16.00	26.14	-0.06	4.19	0.64	0.33	6.80	2.67	0.037
-4.89	15.71	26.57	-0.06	3.85	0.63	0.31	6.52	2.63	0.034
-4.59	15.41	26.94	-0.06	3.60	0.65	0.31	6.30	2.68	0.034
-4.30	15.11	27.29	-0.08	3.33	0.76	0.29	6.05	2.89	0.032
-4.00	14.82	27.60	-0.08	3.11	0.83	0.26	5.85	3.03	0.029
-3.70	14.52	27.87	-0.08	2.92	0.74	0.28	5.67	2.86	0.031
-3.41	14.22	28.12	-0.10	2.76	0.72	0.27	5.52	2.83	0.029
-3.11	13.93	28.35	-0.10	2.63	0.79	0.25	5.38	2.95	0.027
-2.82	13.63	28.56	-0.10	2.45	0.76	0.25	5.20	2.89	0.028
-2.52	13.34	28.76	-0.10	2.32	0.75	0.23	5.05	2.87	0.025
-2.22	13.04	28.94	-0.10	2.18	0.77	0.20	4.90	2.92	0.023
-1.93	12.74	29.10	-0.10	2.05	0.69	0.21	4.75	2.75	0.023
-1.63	12.45	29.26	-0.10	1.89	0.68	0.20	4.57	2.74	0.022
-1.33	12.15	29.39	-0.10	1.80	0.77	0.19	4.45	2.92	0.021
-1.04	11.85	29.51	-0.11	1.73	0.68	0.19	4.36	2.73	0.021
-0.74	11.56	29.63	-0.10	1.58	0.70	0.15	4.17	2.78	0.016

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.44	11.26	29.73	-0.10	1.49	0.73	0.14	4.05	2.83	0.016
-0.15	10.96	29.83	-0.10	1.38	0.71	0.15	3.90	2.80	0.016
0.15	10.67	29.91	-0.10	1.32	0.67	0.10	3.81	2.71	0.011
0.44	10.37	29.97	-0.08	1.27	0.68	0.08	3.74	2.73	0.009
0.74	10.08	30.03	-0.09	1.21	0.59	0.10	3.66	2.55	0.011
1.04	9.78	30.07	-0.09	1.16	0.58	0.08	3.57	2.53	0.008
1.33	9.48	30.10	-0.09	1.10	0.67	0.06	3.49	2.72	0.007
1.63	9.19	30.12	-0.08	1.09	0.71	0.03	3.46	2.80	0.003
1.93	8.89	30.11	-0.09	1.06	0.66	0.01	3.42	2.70	0.001
2.22	8.59	30.09	-0.08	1.09	0.63	0.00	3.46	2.63	0.000
2.52	8.30	30.05	-0.07	1.11	0.61	-0.02	3.50	2.60	-0.002
2.82	8.00	29.99	-0.08	1.14	0.58	-0.02	3.54	2.52	-0.002
3.11	7.71	29.90	-0.07	1.19	0.55	-0.03	3.62	2.47	-0.003
3.41	7.41	29.78	-0.08	1.26	0.60	-0.04	3.73	2.56	-0.004
3.70	7.11	29.62	-0.06	1.37	0.59	-0.06	3.89	2.55	-0.006
4.00	6.82	29.43	-0.05	1.51	0.64	-0.09	4.08	2.65	-0.010
4.30	6.52	29.20	-0.05	1.70	0.65	-0.10	4.33	2.69	-0.011
4.59	6.22	28.91	-0.05	1.91	0.65	-0.12	4.59	2.68	-0.013
4.89	5.93	28.58	-0.06	2.13	0.74	-0.14	4.85	2.85	-0.015
5.19	5.63	28.17	-0.05	2.35	0.71	-0.12	5.09	2.80	-0.013
5.48	5.33	27.72	-0.04	2.53	0.62	-0.12	5.28	2.62	-0.014
5.78	5.04	27.18	-0.04	2.76	0.59	-0.13	5.52	2.56	-0.014
6.08	4.74	26.55	-0.05	2.98	0.63	-0.16	5.73	2.63	-0.017
6.37	4.45	25.81	-0.04	3.20	0.74	-0.15	5.94	2.85	-0.017
6.67	4.15	24.95	-0.04	3.49	0.71	-0.13	6.20	2.80	-0.014
6.96	3.85	23.98	-0.04	3.70	0.71	-0.14	6.38	2.79	-0.016
7.26	3.56	22.89	-0.04	3.76	0.65	-0.11	6.44	2.67	-0.012
7.56	3.26	21.62	-0.04	3.82	0.82	-0.12	6.49	3.00	-0.013
7.85	2.96	20.21	-0.04	3.66	0.80	-0.09	6.35	2.98	-0.010
8.15	2.67	18.64	-0.03	3.42	0.67	-0.05	6.14	2.72	-0.006
8.45	2.37	16.88	-0.03	3.13	0.62	-0.04	5.87	2.61	-0.004
8.74	2.07	15.01	-0.02	2.55	0.53	-0.02	5.30	2.41	-0.002
9.04	1.78	13.17	-0.02	2.02	0.50	-0.03	4.72	2.35	-0.003
9.34	1.48	11.49	-0.02	1.97	0.60	-0.01	4.66	2.57	-0.001
9.63	1.19	10.12	-0.04	2.68	1.61	0.08	5.44	4.21	0.009
9.93	0.89	7.17	0.49	40.50	17.42	-3.57	21.13	13.86	-0.393
10.22	0.59	4.60	0.87	78.68	22.69	-2.26	29.45	15.82	-0.249
10.52	0.30	3.18	-0.58	43.05	0.89	-0.61	21.79	3.14	-0.068

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
10.82	0.00	3.55	-2.51	36.01	107.96	40.83	19.92	34.50	4.501

Table N-87 Grid #2, L2, Plasma-150, Center (46-55)

L2 (150)							U_∞ =	30.26	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.82	21.63	2.60	0.00	39.18	0.41	0.24	20.69	2.12	0.027
-10.52	21.34	4.72	0.22	63.99	2.13	-0.55	26.44	4.82	-0.061
-10.22	21.04	7.36	-0.26	22.49	1.44	0.30	15.67	3.97	0.032
-9.93	20.74	8.92	-0.19	3.29	1.17	0.19	5.99	3.57	0.021
-9.63	20.45	10.22	-0.05	2.28	0.48	0.07	4.99	2.29	0.008
-9.34	20.15	11.61	-0.03	2.32	0.32	0.07	5.03	1.86	0.007
-9.04	19.86	13.20	-0.02	2.68	0.23	0.07	5.42	1.60	0.007
-8.74	19.56	14.73	-0.03	3.32	0.27	0.10	6.03	1.73	0.011
-8.45	19.26	16.34	-0.03	4.24	0.30	0.13	6.80	1.80	0.014
-8.15	18.97	17.75	-0.03	4.73	0.33	0.15	7.19	1.91	0.017
-7.85	18.67	19.08	-0.04	4.98	0.34	0.19	7.37	1.94	0.020
-7.56	18.37	20.25	-0.05	5.23	0.37	0.23	7.56	2.00	0.025
-7.26	18.08	21.34	-0.05	5.32	0.39	0.26	7.62	2.08	0.028
-6.96	17.78	22.29	-0.06	5.16	0.42	0.27	7.51	2.13	0.029
-6.67	17.48	23.18	-0.05	4.97	0.46	0.27	7.37	2.23	0.030
-6.37	17.19	23.92	-0.07	4.83	0.39	0.28	7.26	2.07	0.031
-6.08	16.89	24.60	-0.07	4.65	0.37	0.30	7.12	2.02	0.033
-5.78	16.60	25.20	-0.08	4.49	0.40	0.30	7.00	2.10	0.033
-5.48	16.30	25.77	-0.07	4.12	0.38	0.29	6.70	2.02	0.032
-5.19	16.00	26.24	-0.08	3.92	0.44	0.31	6.54	2.20	0.034
-4.89	15.71	26.69	-0.08	3.66	0.45	0.30	6.33	2.22	0.033
-4.59	15.41	27.07	-0.08	3.43	0.45	0.31	6.12	2.21	0.034
-4.30	15.11	27.43	-0.08	3.18	0.42	0.30	5.89	2.14	0.033
-4.00	14.82	27.73	-0.09	3.01	0.40	0.30	5.73	2.08	0.033
-3.70	14.52	28.02	-0.10	2.79	0.41	0.30	5.52	2.12	0.033
-3.41	14.22	28.28	-0.10	2.59	0.43	0.28	5.32	2.18	0.030
-3.11	13.93	28.52	-0.10	2.45	0.46	0.27	5.17	2.24	0.029
-2.82	13.63	28.74	-0.09	2.26	0.49	0.25	4.97	2.32	0.028
-2.52	13.34	28.94	-0.10	2.11	0.46	0.25	4.80	2.25	0.027

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.22	13.04	29.11	-0.10	2.00	0.48	0.23	4.68	2.28	0.025
-1.93	12.74	29.28	-0.10	1.87	0.48	0.21	4.53	2.30	0.023
-1.63	12.45	29.43	-0.10	1.72	0.47	0.20	4.33	2.26	0.022
-1.33	12.15	29.57	-0.10	1.59	0.47	0.18	4.17	2.26	0.019
-1.04	11.85	29.70	-0.10	1.46	0.48	0.14	4.00	2.29	0.016
-0.74	11.56	29.80	-0.10	1.40	0.44	0.15	3.91	2.19	0.016
-0.44	11.26	29.91	-0.10	1.33	0.47	0.13	3.81	2.28	0.014
-0.15	10.96	30.00	-0.10	1.24	0.42	0.11	3.67	2.15	0.012
0.15	10.67	30.07	-0.10	1.16	0.43	0.09	3.57	2.17	0.010
0.44	10.37	30.13	-0.10	1.11	0.45	0.09	3.49	2.21	0.010
0.74	10.08	30.19	-0.10	1.08	0.42	0.07	3.43	2.15	0.007
1.04	9.78	30.22	-0.09	1.03	0.41	0.05	3.36	2.12	0.005
1.33	9.48	30.25	-0.09	1.00	0.44	0.04	3.31	2.20	0.004
1.63	9.19	30.26	-0.09	0.98	0.43	0.03	3.28	2.18	0.003
1.93	8.89	30.26	-0.09	0.98	0.37	0.02	3.27	2.01	0.003
2.22	8.59	30.23	-0.09	0.98	0.38	0.02	3.27	2.03	0.002
2.52	8.30	30.19	-0.09	0.99	0.36	-0.02	3.29	1.99	-0.002
2.82	8.00	30.12	-0.08	1.04	0.40	-0.03	3.37	2.10	-0.004
3.11	7.71	30.03	-0.08	1.10	0.39	-0.05	3.47	2.05	-0.005
3.41	7.41	29.91	-0.08	1.17	0.35	-0.05	3.58	1.96	-0.006
3.70	7.11	29.77	-0.07	1.25	0.38	-0.06	3.69	2.03	-0.007
4.00	6.82	29.57	-0.08	1.41	0.37	-0.08	3.92	2.01	-0.009
4.30	6.52	29.34	-0.07	1.53	0.39	-0.09	4.09	2.07	-0.009
4.59	6.22	29.05	-0.07	1.74	0.36	-0.10	4.36	1.99	-0.011
4.89	5.93	28.70	-0.06	1.98	0.34	-0.10	4.65	1.94	-0.011
5.19	5.63	28.30	-0.05	2.11	0.39	-0.11	4.80	2.07	-0.012
5.48	5.33	27.82	-0.05	2.30	0.40	-0.12	5.01	2.10	-0.013
5.78	5.04	27.25	-0.05	2.52	0.42	-0.13	5.24	2.14	-0.014
6.08	4.74	26.60	-0.04	2.75	0.42	-0.13	5.48	2.14	-0.014
6.37	4.45	25.83	-0.04	3.00	0.37	-0.12	5.73	2.01	-0.013
6.67	4.15	24.96	-0.04	3.17	0.41	-0.13	5.88	2.13	-0.014
6.96	3.85	23.96	-0.04	3.32	0.43	-0.12	6.02	2.16	-0.013
7.26	3.56	22.83	-0.03	3.38	0.45	-0.09	6.07	2.22	-0.010
7.56	3.26	21.56	-0.03	3.36	0.47	-0.08	6.06	2.26	-0.009
7.85	2.96	20.14	-0.03	3.33	0.47	-0.09	6.03	2.26	-0.010
8.15	2.67	18.55	-0.04	3.08	0.46	-0.08	5.80	2.23	-0.009
8.45	2.37	16.80	-0.04	2.72	0.39	-0.05	5.45	2.05	-0.006
8.74	2.07	14.95	-0.03	2.25	0.37	-0.04	4.96	2.00	-0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
9.04	1.78	13.10	-0.02	1.77	0.34	-0.03	4.40	1.92	-0.003
9.34	1.48	11.41	-0.01	1.75	0.44	-0.01	4.37	2.20	-0.001
9.63	1.19	9.94	-0.01	2.51	0.91	0.01	5.24	3.15	0.001
9.93	0.89	5.96	0.25	35.65	4.38	-0.86	19.73	6.92	-0.094
10.22	0.59	0.62	0.25	41.10	6.34	0.16	21.19	8.32	0.018
10.52	0.30	-0.59	-0.24	7.02	0.41	0.22	8.76	2.10	0.024
10.82	0.00	0.07	-0.01	0.01	0.00	0.00	0.30	0.10	0.000

Table N-88 Grid #2, L2, Plasma-150, Right (71-80)

L2 (150)							U_∞ =	30.32	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.82	21.63	2.07	0.09	22.49	0.30	0.06	15.64	1.80	0.007
-10.52	21.34	3.07	0.12	38.65	1.74	-0.05	20.51	4.35	-0.005
-10.22	21.04	7.39	-0.31	19.89	1.63	0.05	14.71	4.21	0.005
-9.93	20.74	8.99	-0.17	2.65	1.15	0.07	5.37	3.54	0.008
-9.63	20.45	10.23	-0.06	2.22	0.50	0.08	4.92	2.34	0.008
-9.34	20.15	11.61	-0.04	2.25	0.28	0.10	4.95	1.75	0.010
-9.04	19.86	13.19	-0.03	2.56	0.23	0.09	5.28	1.58	0.009
-8.74	19.56	14.72	-0.05	3.29	0.23	0.12	5.98	1.57	0.013
-8.45	19.26	16.28	-0.05	4.16	0.27	0.15	6.73	1.72	0.016
-8.15	18.97	17.70	-0.05	4.53	0.30	0.17	7.02	1.81	0.019
-7.85	18.67	19.00	-0.05	4.70	0.37	0.19	7.15	2.02	0.020
-7.56	18.37	20.17	-0.06	5.14	0.37	0.24	7.48	2.01	0.027
-7.26	18.08	21.27	-0.07	5.32	0.36	0.29	7.61	1.98	0.031
-6.96	17.78	22.25	-0.07	5.20	0.34	0.29	7.52	1.93	0.032
-6.67	17.48	23.13	-0.07	4.94	0.33	0.31	7.33	1.88	0.034
-6.37	17.19	23.89	-0.08	4.73	0.39	0.31	7.17	2.05	0.034
-6.08	16.89	24.58	-0.08	4.69	0.41	0.33	7.14	2.11	0.036
-5.78	16.60	25.17	-0.10	4.45	0.36	0.35	6.96	1.97	0.038
-5.48	16.30	25.77	-0.10	4.04	0.34	0.35	6.63	1.92	0.038
-5.19	16.00	26.25	-0.10	3.80	0.38	0.34	6.43	2.04	0.037
-4.89	15.71	26.70	-0.10	3.60	0.42	0.34	6.26	2.13	0.038
-4.59	15.41	27.11	-0.10	3.34	0.35	0.33	6.03	1.96	0.036
-4.30	15.11	27.46	-0.11	3.15	0.34	0.31	5.85	1.94	0.034

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.00	14.82	27.75	-0.12	2.96	0.34	0.32	5.68	1.91	0.034
-3.70	14.52	28.03	-0.12	2.82	0.47	0.31	5.54	2.25	0.034
-3.41	14.22	28.29	-0.13	2.66	0.45	0.29	5.38	2.22	0.032
-3.11	13.93	28.54	-0.12	2.49	0.40	0.27	5.20	2.10	0.030
-2.82	13.63	28.75	-0.13	2.33	0.41	0.26	5.03	2.11	0.028
-2.52	13.34	28.97	-0.13	2.10	0.33	0.25	4.78	1.91	0.027
-2.22	13.04	29.16	-0.13	1.97	0.34	0.24	4.63	1.91	0.026
-1.93	12.74	29.35	-0.13	1.79	0.43	0.22	4.41	2.16	0.024
-1.63	12.45	29.49	-0.13	1.69	0.48	0.20	4.28	2.28	0.022
-1.33	12.15	29.63	-0.12	1.56	0.46	0.18	4.12	2.25	0.020
-1.04	11.85	29.75	-0.13	1.49	0.46	0.17	4.02	2.24	0.018
-0.74	11.56	29.86	-0.13	1.37	0.46	0.15	3.86	2.23	0.016
-0.44	11.26	29.97	-0.13	1.26	0.37	0.13	3.71	2.01	0.014
-0.15	10.96	30.07	-0.12	1.20	0.38	0.12	3.61	2.04	0.013
0.15	10.67	30.12	-0.12	1.18	0.40	0.10	3.58	2.09	0.011
0.44	10.37	30.19	-0.12	1.08	0.34	0.08	3.44	1.94	0.009
0.74	10.08	30.26	-0.11	1.00	0.37	0.07	3.29	2.00	0.007
1.04	9.78	30.30	-0.11	0.96	0.35	0.05	3.24	1.94	0.006
1.33	9.48	30.31	-0.11	0.96	0.33	0.05	3.24	1.89	0.005
1.63	9.19	30.32	-0.11	0.97	0.34	0.03	3.25	1.92	0.003
1.93	8.89	30.31	-0.10	0.94	0.32	0.02	3.20	1.87	0.002
2.22	8.59	30.29	-0.10	0.94	0.33	0.00	3.19	1.91	0.000
2.52	8.30	30.25	-0.09	0.95	0.35	-0.02	3.21	1.96	-0.002
2.82	8.00	30.19	-0.09	0.99	0.34	-0.03	3.29	1.93	-0.003
3.11	7.71	30.10	-0.09	1.04	0.35	-0.04	3.37	1.96	-0.004
3.41	7.41	29.98	-0.08	1.12	0.33	-0.06	3.49	1.88	-0.007
3.70	7.11	29.83	-0.08	1.23	0.34	-0.07	3.66	1.92	-0.007
4.00	6.82	29.62	-0.07	1.37	0.32	-0.09	3.87	1.86	-0.010
4.30	6.52	29.39	-0.07	1.52	0.32	-0.10	4.06	1.85	-0.011
4.59	6.22	29.09	-0.07	1.73	0.35	-0.11	4.33	1.96	-0.012
4.89	5.93	28.72	-0.06	1.95	0.35	-0.12	4.60	1.96	-0.013
5.19	5.63	28.29	-0.06	2.18	0.36	-0.13	4.87	1.98	-0.014
5.48	5.33	27.79	-0.07	2.35	0.39	-0.14	5.05	2.06	-0.015
5.78	5.04	27.22	-0.06	2.51	0.38	-0.15	5.23	2.03	-0.016
6.08	4.74	26.57	-0.06	2.70	0.37	-0.15	5.42	2.01	-0.016
6.37	4.45	25.80	-0.05	2.94	0.31	-0.16	5.65	1.83	-0.018
6.67	4.15	24.92	-0.04	3.11	0.33	-0.12	5.82	1.90	-0.013
6.96	3.85	23.90	-0.04	3.20	0.43	-0.14	5.90	2.17	-0.015

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.26	3.56	22.77	-0.04	3.29	0.44	-0.12	5.98	2.19	-0.013
7.56	3.26	21.47	-0.04	3.33	0.39	-0.12	6.02	2.05	-0.013
7.85	2.96	20.07	-0.03	3.28	0.44	-0.10	5.97	2.19	-0.010
8.15	2.67	18.50	-0.03	3.07	0.47	-0.07	5.78	2.25	-0.007
8.45	2.37	16.78	-0.03	2.82	0.37	-0.07	5.54	2.01	-0.008
8.74	2.07	14.93	-0.02	2.34	0.28	-0.05	5.04	1.75	-0.006
9.04	1.78	13.10	-0.02	1.80	0.27	-0.04	4.43	1.72	-0.004
9.34	1.48	11.39	-0.01	1.75	0.36	-0.03	4.36	1.98	-0.003
9.63	1.19	9.94	0.00	2.64	0.56	-0.04	5.36	2.47	-0.004
9.93	0.89	6.68	-0.24	25.95	4.65	-0.55	16.80	7.11	-0.060
10.22	0.59	1.97	-0.46	39.05	8.07	-0.60	20.61	9.37	-0.066
10.52	0.30	0.26	-0.32	9.63	0.91	0.45	10.24	3.15	0.049
10.82	0.00	0.04	0.01	0.00	0.00	0.00	0.09	0.11	0.000

Table N-89 Grid #2, L2, Plasma-300, Left (1-10)

L2 (300)							U_∞ =	30.60	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.82	21.63	2.68	0.05	23.14	0.99	-0.26	15.72	3.25	-0.027
-10.52	21.34	2.99	0.06	26.26	0.32	0.00	16.74	1.85	0.000
-10.22	21.04	6.71	-0.06	10.77	1.05	0.09	10.73	3.35	0.010
-9.93	20.74	9.33	-0.02	2.83	1.12	0.02	5.49	3.45	0.002
-9.63	20.45	11.09	0.01	2.43	1.19	-0.01	5.09	3.56	-0.001
-9.34	20.15	12.81	0.01	2.51	1.25	0.00	5.18	3.66	0.000
-9.04	19.86	14.64	0.01	2.96	1.24	0.04	5.62	3.64	0.004
-8.74	19.56	16.40	0.03	3.40	0.96	0.07	6.02	3.20	0.008
-8.45	19.26	18.05	0.03	3.72	1.24	0.06	6.30	3.64	0.007
-8.15	18.97	19.49	0.01	4.00	1.44	0.15	6.53	3.92	0.016
-7.85	18.67	20.80	0.01	4.10	1.22	0.15	6.62	3.61	0.016
-7.56	18.37	21.90	0.00	4.06	0.99	0.16	6.59	3.25	0.017
-7.26	18.08	22.92	-0.01	3.94	0.78	0.18	6.49	2.89	0.019
-6.96	17.78	23.78	0.00	3.94	0.77	0.21	6.49	2.87	0.023
-6.67	17.48	24.57	-0.01	3.82	0.84	0.24	6.38	3.00	0.025
-6.37	17.19	25.21	-0.02	3.72	0.84	0.21	6.30	2.99	0.022
-6.08	16.89	25.81	-0.03	3.54	0.79	0.23	6.15	2.91	0.024

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-5.78	16.60	26.33	-0.03	3.41	0.86	0.27	6.03	3.03	0.029
-5.48	16.30	26.79	-0.03	3.26	0.87	0.28	5.90	3.04	0.030
-5.19	16.00	27.18	-0.04	3.07	0.78	0.26	5.73	2.89	0.028
-4.89	15.71	27.54	-0.05	2.90	0.71	0.27	5.57	2.75	0.029
-4.59	15.41	27.85	-0.05	2.81	0.69	0.26	5.48	2.71	0.028
-4.30	15.11	28.13	-0.07	2.71	0.69	0.26	5.38	2.71	0.027
-4.00	14.82	28.39	-0.07	2.58	0.74	0.25	5.25	2.81	0.027
-3.70	14.52	28.64	-0.07	2.42	0.79	0.27	5.08	2.91	0.028
-3.41	14.22	28.86	-0.08	2.28	0.87	0.24	4.94	3.05	0.025
-3.11	13.93	29.06	-0.08	2.15	0.85	0.21	4.79	3.01	0.023
-2.82	13.63	29.24	-0.07	2.03	0.72	0.21	4.66	2.78	0.022
-2.52	13.34	29.42	-0.08	1.90	0.63	0.21	4.51	2.60	0.023
-2.22	13.04	29.57	-0.08	1.82	0.64	0.21	4.41	2.61	0.022
-1.93	12.74	29.72	-0.08	1.69	0.62	0.17	4.25	2.58	0.019
-1.63	12.45	29.85	-0.08	1.60	0.66	0.16	4.13	2.65	0.018
-1.33	12.15	29.97	-0.07	1.49	0.66	0.15	3.99	2.66	0.016
-1.04	11.85	30.08	-0.08	1.39	0.62	0.14	3.86	2.57	0.014
-0.74	11.56	30.18	-0.08	1.29	0.63	0.14	3.71	2.59	0.015
-0.44	11.26	30.27	-0.07	1.24	0.72	0.12	3.64	2.77	0.012
-0.15	10.96	30.36	-0.07	1.18	0.69	0.08	3.55	2.71	0.008
0.15	10.67	30.42	-0.07	1.13	0.59	0.07	3.48	2.51	0.008
0.44	10.37	30.49	-0.07	1.08	0.64	0.07	3.40	2.60	0.007
0.74	10.08	30.54	-0.07	1.02	0.65	0.07	3.30	2.63	0.007
1.04	9.78	30.57	-0.07	0.99	0.61	0.05	3.26	2.54	0.005
1.33	9.48	30.60	-0.07	1.00	0.62	0.04	3.26	2.57	0.004
1.63	9.19	30.60	-0.06	0.97	0.62	0.01	3.21	2.58	0.001
1.93	8.89	30.60	-0.06	0.95	0.60	0.00	3.18	2.54	0.000
2.22	8.59	30.57	-0.07	0.97	0.65	-0.02	3.22	2.64	-0.002
2.52	8.30	30.53	-0.05	0.97	0.62	-0.03	3.21	2.57	-0.003
2.82	8.00	30.47	-0.05	1.02	0.66	-0.03	3.30	2.65	-0.003
3.11	7.71	30.38	-0.06	1.06	0.62	-0.03	3.36	2.58	-0.003
3.41	7.41	30.26	-0.05	1.11	0.63	-0.06	3.45	2.59	-0.006
3.70	7.11	30.12	-0.05	1.21	0.65	-0.07	3.60	2.63	-0.008
4.00	6.82	29.95	-0.04	1.31	0.67	-0.10	3.74	2.67	-0.011
4.30	6.52	29.73	-0.04	1.40	0.72	-0.08	3.87	2.77	-0.009
4.59	6.22	29.47	-0.04	1.57	0.69	-0.10	4.09	2.72	-0.011
4.89	5.93	29.16	-0.05	1.73	0.62	-0.10	4.29	2.57	-0.010
5.19	5.63	28.77	-0.05	1.89	0.67	-0.10	4.50	2.68	-0.011

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.48	5.33	28.34	-0.05	2.04	0.74	-0.09	4.67	2.81	-0.010
5.78	5.04	27.81	-0.04	2.23	0.72	-0.11	4.88	2.77	-0.012
6.08	4.74	27.22	-0.03	2.33	0.71	-0.11	4.99	2.76	-0.012
6.37	4.45	26.53	-0.04	2.47	0.88	-0.06	5.13	3.07	-0.007
6.67	4.15	25.74	-0.05	2.65	1.04	-0.12	5.32	3.33	-0.013
6.96	3.85	24.82	-0.04	2.80	1.18	-0.14	5.47	3.55	-0.015
7.26	3.56	23.76	-0.03	2.86	1.22	-0.09	5.53	3.61	-0.010
7.56	3.26	22.55	-0.04	3.00	1.48	-0.11	5.66	3.98	-0.011
7.85	2.96	21.20	-0.05	3.02	1.56	-0.08	5.68	4.08	-0.009
8.15	2.67	19.66	-0.05	3.14	1.72	-0.04	5.79	4.28	-0.005
8.45	2.37	17.97	-0.04	3.08	1.82	-0.09	5.73	4.41	-0.010
8.74	2.07	16.06	-0.03	3.11	2.12	-0.06	5.76	4.75	-0.006
9.04	1.78	14.05	-0.02	2.94	1.94	0.03	5.60	4.55	0.003
9.34	1.48	11.89	-0.02	2.89	2.26	0.02	5.55	4.92	0.002
9.63	1.19	9.84	-0.01	2.99	2.43	0.00	5.65	5.10	0.000
9.93	0.89	7.65	0.10	6.64	4.69	0.14	8.42	7.08	0.015
10.22	0.59	5.26	0.10	16.62	4.78	0.49	13.32	7.14	0.052
10.52	0.30	1.69	-0.23	12.35	0.54	-0.36	11.48	2.40	-0.039
10.82	0.00	9.00	0.11	97.92	0.03	0.83	32.34	0.58	0.089

Table N-90 Grid #2, L2, Plasma-300, Center (46-55)

L2 (300)							U_∞ =	30.85	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.82	21.63	1.35	0.06	14.93	0.36	0.26	12.52	1.95	0.027
-10.52	21.34	4.35	0.22	18.93	1.25	-0.21	14.10	3.62	-0.022
-10.22	21.04	7.64	-0.11	3.60	0.64	0.01	6.15	2.60	0.001
-9.93	20.74	9.30	-0.07	2.10	0.55	0.02	4.70	2.40	0.003
-9.63	20.45	11.06	-0.01	2.01	0.43	0.04	4.59	2.13	0.004
-9.34	20.15	12.83	0.00	2.01	0.40	0.05	4.60	2.05	0.006
-9.04	19.86	14.64	-0.01	2.56	0.47	0.06	5.18	2.23	0.007
-8.74	19.56	16.34	-0.01	3.05	0.43	0.10	5.66	2.13	0.010
-8.45	19.26	18.00	0.00	3.33	0.46	0.10	5.91	2.20	0.011
-8.15	18.97	19.40	-0.01	3.62	0.48	0.14	6.17	2.24	0.015
-7.85	18.67	20.73	-0.01	3.77	0.56	0.17	6.30	2.42	0.018

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-7.56	18.37	21.89	-0.02	3.74	0.58	0.16	6.27	2.46	0.017
-7.26	18.08	22.93	-0.01	3.68	0.52	0.19	6.22	2.34	0.020
-6.96	17.78	23.81	-0.02	3.64	0.48	0.20	6.18	2.26	0.021
-6.67	17.48	24.63	-0.03	3.59	0.46	0.22	6.14	2.20	0.023
-6.37	17.19	25.32	-0.03	3.45	0.53	0.24	6.02	2.35	0.025
-6.08	16.89	25.96	-0.04	3.17	0.58	0.23	5.77	2.48	0.024
-5.78	16.60	26.49	-0.04	3.04	0.52	0.23	5.65	2.34	0.024
-5.48	16.30	26.97	-0.05	2.88	0.51	0.23	5.51	2.32	0.024
-5.19	16.00	27.38	-0.05	2.80	0.47	0.25	5.42	2.21	0.026
-4.89	15.71	27.78	-0.05	2.67	0.50	0.24	5.29	2.28	0.026
-4.59	15.41	28.10	-0.06	2.59	0.54	0.25	5.22	2.37	0.026
-4.30	15.11	28.40	-0.06	2.43	0.46	0.24	5.05	2.20	0.025
-4.00	14.82	28.68	-0.07	2.28	0.41	0.24	4.90	2.08	0.026
-3.70	14.52	28.92	-0.07	2.14	0.46	0.23	4.74	2.19	0.025
-3.41	14.22	29.16	-0.08	2.03	0.51	0.21	4.62	2.32	0.023
-3.11	13.93	29.37	-0.08	1.88	0.45	0.21	4.44	2.18	0.022
-2.82	13.63	29.55	-0.08	1.78	0.43	0.20	4.32	2.13	0.021
-2.52	13.34	29.72	-0.09	1.67	0.45	0.19	4.19	2.18	0.020
-2.22	13.04	29.87	-0.09	1.56	0.48	0.17	4.05	2.25	0.018
-1.93	12.74	30.01	-0.09	1.50	0.45	0.16	3.97	2.18	0.016
-1.63	12.45	30.13	-0.09	1.45	0.48	0.16	3.91	2.26	0.017
-1.33	12.15	30.25	-0.10	1.37	0.48	0.16	3.79	2.24	0.016
-1.04	11.85	30.36	-0.10	1.30	0.43	0.14	3.70	2.13	0.015
-0.74	11.56	30.46	-0.09	1.22	0.49	0.13	3.57	2.28	0.014
-0.44	11.26	30.54	-0.08	1.17	0.55	0.12	3.51	2.40	0.013
-0.15	10.96	30.61	-0.09	1.13	0.56	0.11	3.44	2.43	0.011
0.15	10.67	30.68	-0.09	1.07	0.55	0.10	3.36	2.40	0.011
0.44	10.37	30.74	-0.09	1.02	0.50	0.08	3.28	2.28	0.009
0.74	10.08	30.79	-0.08	0.99	0.42	0.08	3.23	2.11	0.008
1.04	9.78	30.82	-0.08	0.94	0.44	0.06	3.14	2.15	0.006
1.33	9.48	30.84	-0.08	0.91	0.45	0.04	3.09	2.17	0.004
1.63	9.19	30.85	-0.08	0.89	0.46	0.02	3.06	2.20	0.003
1.93	8.89	30.84	-0.08	0.88	0.43	0.01	3.05	2.12	0.002
2.22	8.59	30.82	-0.07	0.87	0.41	0.00	3.03	2.07	0.000
2.52	8.30	30.78	-0.07	0.86	0.40	-0.01	3.01	2.05	-0.001
2.82	8.00	30.71	-0.06	0.89	0.36	-0.02	3.06	1.96	-0.002
3.11	7.71	30.61	-0.07	0.93	0.34	-0.02	3.12	1.89	-0.002
3.41	7.41	30.50	-0.06	0.97	0.37	-0.04	3.20	1.96	-0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.70	7.11	30.35	-0.07	1.05	0.35	-0.06	3.32	1.91	-0.006
4.00	6.82	30.17	-0.06	1.15	0.40	-0.06	3.47	2.06	-0.007
4.30	6.52	29.94	-0.05	1.25	0.44	-0.07	3.62	2.16	-0.008
4.59	6.22	29.66	-0.06	1.41	0.39	-0.08	3.84	2.03	-0.008
4.89	5.93	29.34	-0.06	1.55	0.42	-0.08	4.04	2.09	-0.009
5.19	5.63	28.94	-0.05	1.73	0.42	-0.10	4.27	2.11	-0.011
5.48	5.33	28.47	-0.05	1.91	0.54	-0.10	4.48	2.39	-0.011
5.78	5.04	27.93	-0.05	2.03	0.51	-0.10	4.61	2.31	-0.011
6.08	4.74	27.31	-0.05	2.15	0.64	-0.08	4.75	2.59	-0.009
6.37	4.45	26.60	-0.04	2.28	0.73	-0.10	4.89	2.78	-0.011
6.67	4.15	25.78	-0.05	2.45	0.82	-0.10	5.08	2.93	-0.011
6.96	3.85	24.82	-0.05	2.60	0.86	-0.07	5.23	3.01	-0.008
7.26	3.56	23.74	-0.04	2.68	1.14	-0.07	5.31	3.46	-0.007
7.56	3.26	22.50	-0.05	2.86	1.12	-0.09	5.48	3.43	-0.009
7.85	2.96	21.13	-0.05	2.92	1.24	-0.06	5.54	3.61	-0.006
8.15	2.67	19.56	-0.06	2.89	1.26	-0.01	5.51	3.63	-0.001
8.45	2.37	17.89	-0.04	2.77	1.40	-0.06	5.40	3.83	-0.006
8.74	2.07	16.00	-0.03	2.70	1.46	-0.11	5.32	3.92	-0.012
9.04	1.78	13.99	-0.01	2.55	1.32	-0.03	5.18	3.72	-0.003
9.34	1.48	11.87	-0.05	2.38	1.37	-0.02	5.00	3.79	-0.002
9.63	1.19	9.78	-0.06	2.54	1.64	-0.02	5.17	4.15	-0.002
9.93	0.89	7.31	0.01	7.90	3.45	-0.24	9.11	6.02	-0.025
10.22	0.59	3.09	-0.03	15.06	3.68	-0.15	12.58	6.22	-0.016
10.52	0.30	0.52	0.04	4.48	0.55	-0.06	6.86	2.41	-0.007
10.82	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.000

Table N-91 Grid #2, L2, Plasma-300, Right (71-80)

L2 (300)							U_∞ =	30.95	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.82	21.63	0.76	0.07	11.64	0.31	0.16	11.02	1.80	0.016
-10.52	21.34	4.38	0.04	12.09	1.63	0.01	11.23	4.13	0.001
-10.22	21.04	7.60	-0.10	3.30	0.95	0.04	5.87	3.15	0.004
-9.93	20.74	9.35	-0.05	2.07	0.58	0.06	4.65	2.46	0.006
-9.63	20.45	11.13	-0.01	2.01	0.34	0.09	4.58	1.87	0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.34	20.15	12.86	0.00	1.99	0.29	0.07	4.56	1.75	0.007
-9.04	19.86	14.66	-0.01	2.61	0.36	0.10	5.22	1.94	0.010
-8.74	19.56	16.35	-0.02	3.06	0.49	0.13	5.65	2.26	0.013
-8.45	19.26	18.00	-0.02	3.33	0.69	0.16	5.90	2.69	0.016
-8.15	18.97	19.38	-0.03	3.63	0.67	0.19	6.15	2.64	0.020
-7.85	18.67	20.71	-0.02	3.73	0.57	0.19	6.24	2.45	0.020
-7.56	18.37	21.86	-0.03	3.82	0.61	0.21	6.31	2.52	0.022
-7.26	18.08	22.93	-0.03	3.68	0.62	0.24	6.20	2.55	0.025
-6.96	17.78	23.81	-0.04	3.69	0.64	0.23	6.21	2.58	0.024
-6.67	17.48	24.64	-0.04	3.59	0.60	0.27	6.12	2.51	0.028
-6.37	17.19	25.34	-0.05	3.45	0.53	0.27	6.00	2.35	0.028
-6.08	16.89	26.01	-0.06	3.19	0.57	0.24	5.77	2.44	0.025
-5.78	16.60	26.53	-0.06	3.02	0.57	0.25	5.61	2.43	0.026
-5.48	16.30	27.04	-0.07	2.89	0.50	0.27	5.49	2.29	0.028
-5.19	16.00	27.46	-0.07	2.78	0.45	0.27	5.39	2.16	0.028
-4.89	15.71	27.84	-0.07	2.67	0.43	0.28	5.28	2.12	0.029
-4.59	15.41	28.18	-0.08	2.54	0.48	0.29	5.15	2.23	0.030
-4.30	15.11	28.49	-0.08	2.39	0.41	0.27	5.00	2.06	0.028
-4.00	14.82	28.77	-0.09	2.24	0.41	0.25	4.83	2.07	0.026
-3.70	14.52	29.03	-0.09	2.04	0.39	0.23	4.61	2.01	0.024
-3.41	14.22	29.26	-0.09	1.91	0.37	0.22	4.47	1.98	0.023
-3.11	13.93	29.48	-0.09	1.78	0.40	0.21	4.31	2.04	0.022
-2.82	13.63	29.66	-0.10	1.68	0.40	0.21	4.19	2.06	0.022
-2.52	13.34	29.84	-0.10	1.55	0.41	0.20	4.03	2.07	0.020
-2.22	13.04	29.99	-0.10	1.45	0.41	0.18	3.89	2.07	0.018
-1.93	12.74	30.13	-0.11	1.38	0.43	0.16	3.79	2.12	0.017
-1.63	12.45	30.24	-0.11	1.35	0.37	0.17	3.75	1.95	0.017
-1.33	12.15	30.36	-0.11	1.28	0.39	0.16	3.65	2.01	0.017
-1.04	11.85	30.47	-0.11	1.20	0.40	0.15	3.54	2.04	0.016
-0.74	11.56	30.57	-0.11	1.16	0.43	0.14	3.49	2.11	0.015
-0.44	11.26	30.65	-0.10	1.11	0.39	0.12	3.40	2.01	0.013
-0.15	10.96	30.74	-0.10	1.08	0.39	0.11	3.36	2.01	0.012
0.15	10.67	30.80	-0.10	1.05	0.41	0.09	3.32	2.07	0.010
0.44	10.37	30.85	-0.10	1.02	0.46	0.09	3.26	2.18	0.010
0.74	10.08	30.90	-0.10	0.98	0.42	0.08	3.19	2.10	0.008
1.04	9.78	30.93	-0.09	0.94	0.39	0.05	3.13	2.01	0.006
1.33	9.48	30.95	-0.08	0.92	0.40	0.05	3.10	2.05	0.005
1.63	9.19	30.95	-0.08	0.92	0.45	0.04	3.10	2.18	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.93	8.89	30.95	-0.08	0.90	0.38	0.03	3.06	2.00	0.003
2.22	8.59	30.92	-0.08	0.90	0.34	0.00	3.06	1.88	0.000
2.52	8.30	30.87	-0.08	0.89	0.37	0.00	3.05	1.97	0.000
2.82	8.00	30.81	-0.08	0.91	0.36	-0.02	3.08	1.93	-0.002
3.11	7.71	30.72	-0.07	0.93	0.37	-0.03	3.12	1.96	-0.003
3.41	7.41	30.60	-0.06	0.97	0.33	-0.05	3.18	1.87	-0.005
3.70	7.11	30.46	-0.07	1.02	0.32	-0.06	3.27	1.83	-0.006
4.00	6.82	30.27	-0.06	1.12	0.34	-0.07	3.42	1.89	-0.007
4.30	6.52	30.05	-0.06	1.22	0.31	-0.07	3.57	1.81	-0.007
4.59	6.22	29.77	-0.06	1.36	0.37	-0.07	3.77	1.96	-0.008
4.89	5.93	29.43	-0.06	1.55	0.48	-0.10	4.02	2.23	-0.010
5.19	5.63	29.01	-0.06	1.78	0.51	-0.09	4.31	2.30	-0.009
5.48	5.33	28.52	-0.06	1.97	0.45	-0.10	4.53	2.17	-0.010
5.78	5.04	27.96	-0.05	2.09	0.58	-0.12	4.67	2.46	-0.012
6.08	4.74	27.32	-0.06	2.17	0.72	-0.08	4.76	2.75	-0.009
6.37	4.45	26.61	-0.05	2.31	0.78	-0.10	4.91	2.85	-0.010
6.67	4.15	25.78	-0.06	2.44	0.78	-0.11	5.05	2.86	-0.011
6.96	3.85	24.79	-0.05	2.71	0.98	-0.12	5.32	3.19	-0.013
7.26	3.56	23.72	-0.05	2.71	1.10	-0.09	5.32	3.38	-0.009
7.56	3.26	22.47	-0.06	2.92	1.37	-0.08	5.53	3.78	-0.008
7.85	2.96	21.09	-0.07	2.99	1.55	-0.07	5.58	4.02	-0.008
8.15	2.67	19.53	-0.06	2.98	1.36	-0.04	5.58	3.77	-0.005
8.45	2.37	17.84	-0.04	2.90	1.46	-0.02	5.50	3.90	-0.002
8.74	2.07	15.98	-0.02	2.81	1.53	-0.05	5.42	4.00	-0.005
9.04	1.78	13.99	-0.03	2.55	1.29	-0.03	5.16	3.67	-0.003
9.34	1.48	11.89	-0.04	2.48	1.31	-0.01	5.09	3.69	-0.001
9.63	1.19	9.84	-0.05	2.77	1.67	-0.02	5.38	4.17	-0.002
9.93	0.89	7.26	-0.21	8.69	5.10	0.18	9.53	7.30	0.019
10.22	0.59	3.71	-0.30	12.96	5.51	0.35	11.63	7.58	0.037
10.52	0.30	0.89	-0.17	4.27	0.91	-0.01	6.68	3.08	-0.001
10.82	0.00	0.21	0.02	0.36	0.00	0.00	1.94	0.16	0.000

Table N-92 Grid #2, L3, Plasma-Off, Left (1-10)

L3 (Off)							U_∞ =	31.05	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.04	22.08	0.25	-0.06	0.27	0.17	-0.01	1.68	1.31	-0.001
-10.74	21.78	1.31	-0.13	0.57	0.16	0.00	2.44	1.29	0.000
-10.44	21.48	3.98	0.00	1.19	0.24	0.01	3.52	1.56	0.001
-10.13	21.18	6.03	0.00	1.60	0.30	0.01	4.08	1.76	0.001
-9.83	20.87	8.00	-0.01	1.93	0.33	0.01	4.48	1.86	0.001
-9.53	20.57	9.80	-0.01	2.41	0.34	0.04	5.00	1.88	0.004
-9.23	20.27	11.54	0.00	3.04	0.38	0.05	5.62	1.97	0.005
-8.92	19.97	13.13	-0.01	3.58	0.36	0.05	6.09	1.93	0.005
-8.62	19.66	14.65	-0.02	4.15	0.40	0.10	6.56	2.04	0.010
-8.32	19.36	16.05	-0.02	4.89	0.39	0.12	7.12	2.02	0.013
-8.02	19.06	17.42	-0.02	5.61	0.34	0.14	7.63	1.87	0.014
-7.71	18.76	18.62	-0.03	6.08	0.39	0.17	7.94	2.01	0.018
-7.41	18.45	19.76	-0.03	6.42	0.38	0.23	8.16	1.98	0.023
-7.11	18.15	20.81	-0.04	6.78	0.39	0.25	8.39	2.01	0.026
-6.81	17.85	21.79	-0.03	7.04	0.43	0.26	8.55	2.12	0.027
-6.50	17.55	22.66	-0.04	6.93	0.48	0.29	8.48	2.23	0.030
-6.20	17.24	23.47	-0.04	6.73	0.53	0.32	8.35	2.34	0.033
-5.90	16.94	24.21	-0.05	6.64	0.50	0.34	8.30	2.28	0.035
-5.60	16.64	24.90	-0.05	6.29	0.47	0.34	8.08	2.22	0.035
-5.29	16.34	25.50	-0.06	6.07	0.45	0.34	7.93	2.15	0.035
-4.99	16.03	26.06	-0.05	5.76	0.49	0.32	7.73	2.25	0.033
-4.69	15.73	26.58	-0.06	5.38	0.50	0.34	7.47	2.28	0.035
-4.39	15.43	27.06	-0.06	5.01	0.50	0.35	7.21	2.27	0.037
-4.08	15.13	27.49	-0.06	4.58	0.49	0.34	6.89	2.26	0.035
-3.78	14.82	27.88	-0.06	4.31	0.53	0.33	6.68	2.34	0.034
-3.48	14.52	28.21	-0.06	4.01	0.55	0.31	6.45	2.38	0.032
-3.18	14.22	28.55	-0.08	3.74	0.54	0.30	6.22	2.36	0.031
-2.87	13.92	28.84	-0.08	3.50	0.57	0.28	6.02	2.44	0.029
-2.57	13.61	29.10	-0.07	3.24	0.57	0.25	5.80	2.44	0.026
-2.27	13.31	29.36	-0.07	3.05	0.52	0.25	5.63	2.32	0.026
-1.97	13.01	29.60	-0.08	2.86	0.51	0.23	5.45	2.30	0.024
-1.66	12.71	29.83	-0.07	2.54	0.53	0.22	5.14	2.34	0.022
-1.36	12.40	30.02	-0.06	2.33	0.53	0.20	4.92	2.34	0.020
-1.06	12.10	30.19	-0.06	2.22	0.50	0.17	4.80	2.27	0.017
-0.76	11.80	30.35	-0.06	2.10	0.49	0.15	4.66	2.26	0.016

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.45	11.50	30.49	-0.07	1.95	0.46	0.14	4.50	2.18	0.014
-0.15	11.19	30.61	-0.06	1.83	0.43	0.12	4.36	2.10	0.012
0.15	10.89	30.73	-0.06	1.73	0.51	0.11	4.23	2.30	0.011
0.45	10.59	30.83	-0.07	1.64	0.47	0.09	4.12	2.22	0.010
0.76	10.29	30.91	-0.06	1.48	0.42	0.06	3.92	2.08	0.007
1.06	9.98	30.98	-0.06	1.40	0.43	0.05	3.81	2.11	0.005
1.36	9.68	31.02	-0.05	1.36	0.43	0.02	3.75	2.11	0.002
1.66	9.38	31.05	-0.05	1.32	0.47	0.01	3.70	2.20	0.001
1.97	9.08	31.05	-0.05	1.34	0.53	0.01	3.73	2.34	0.001
2.27	8.77	31.04	-0.04	1.33	0.51	0.00	3.71	2.29	0.000
2.57	8.47	31.00	-0.04	1.32	0.44	-0.01	3.70	2.14	-0.001
2.87	8.17	30.93	-0.04	1.37	0.44	-0.01	3.77	2.14	-0.001
3.18	7.87	30.83	-0.03	1.43	0.41	-0.03	3.85	2.05	-0.004
3.48	7.56	30.69	-0.03	1.54	0.41	-0.05	3.99	2.05	-0.006
3.78	7.26	30.51	-0.04	1.67	0.36	-0.06	4.16	1.93	-0.007
4.08	6.96	30.28	-0.04	1.86	0.30	-0.07	4.39	1.78	-0.007
4.39	6.66	29.99	-0.03	2.06	0.32	-0.09	4.62	1.81	-0.009
4.69	6.35	29.64	-0.03	2.26	0.36	-0.10	4.84	1.94	-0.010
4.99	6.05	29.23	-0.03	2.52	0.39	-0.10	5.11	2.02	-0.011
5.29	5.75	28.73	-0.03	2.85	0.34	-0.12	5.43	1.88	-0.013
5.60	5.45	28.16	-0.03	3.17	0.35	-0.14	5.73	1.92	-0.015
5.90	5.14	27.49	-0.03	3.48	0.42	-0.12	6.01	2.08	-0.013
6.20	4.84	26.70	-0.02	3.82	0.42	-0.15	6.30	2.08	-0.015
6.50	4.54	25.82	-0.02	4.17	0.43	-0.13	6.58	2.12	-0.013
6.81	4.24	24.82	-0.02	4.39	0.38	-0.12	6.75	1.99	-0.013
7.11	3.93	23.69	-0.02	4.55	0.41	-0.11	6.87	2.07	-0.011
7.41	3.63	22.42	-0.02	4.61	0.43	-0.10	6.92	2.11	-0.011
7.71	3.33	21.02	-0.02	4.43	0.43	-0.08	6.78	2.10	-0.008
8.02	3.03	19.50	-0.02	4.19	0.43	-0.06	6.59	2.12	-0.006
8.32	2.72	17.83	-0.02	3.84	0.46	-0.05	6.31	2.19	-0.006
8.62	2.42	16.05	-0.03	3.33	0.35	-0.06	5.88	1.90	-0.006
8.92	2.12	14.13	-0.03	2.91	0.37	-0.04	5.49	1.97	-0.004
9.23	1.82	12.05	-0.02	2.45	0.44	-0.03	5.04	2.14	-0.003
9.53	1.51	9.85	-0.02	2.23	0.46	-0.02	4.81	2.19	-0.002
9.83	1.21	8.13	-0.07	2.42	0.19	-0.02	5.01	1.40	-0.002
10.13	0.91	0.19	0.38	2.05	2.67	-0.31	4.61	5.26	-0.032
10.44	0.61	0.10	0.43	1.98	3.07	-0.45	4.53	5.65	-0.047
10.74	0.30	0.16	0.07	0.09	0.19	-0.03	0.98	1.40	-0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
11.04	0.00	0.42	0.01	0.00	0.00	0.00	0.00	0.00	0.000

Table N-93 Grid #2, L3, Plasma-Off, Center (46-55)

L3 (Off)							U_∞ =	31.06	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.04	22.08	0.05	-0.03	0.12	0.11	0.02	1.10	1.05	0.002
-10.74	21.78	2.06	0.00	1.11	0.15	-0.01	3.39	1.23	-0.001
-10.44	21.48	4.38	0.00	0.93	0.19	0.00	3.11	1.40	0.000
-10.13	21.18	6.25	0.00	1.36	0.23	0.00	3.75	1.53	0.000
-9.83	20.87	8.13	0.01	1.64	0.23	0.01	4.13	1.56	0.001
-9.53	20.57	9.88	0.01	2.19	0.21	0.02	4.77	1.47	0.002
-9.23	20.27	11.58	0.01	2.78	0.23	0.04	5.37	1.55	0.004
-8.92	19.97	13.17	0.01	3.31	0.26	0.05	5.86	1.63	0.006
-8.62	19.66	14.67	0.00	3.86	0.28	0.08	6.32	1.70	0.008
-8.32	19.36	16.07	0.01	4.59	0.28	0.10	6.90	1.71	0.010
-8.02	19.06	17.43	0.00	5.25	0.26	0.12	7.37	1.63	0.013
-7.71	18.76	18.65	0.00	5.68	0.23	0.16	7.67	1.55	0.017
-7.41	18.45	19.80	-0.01	6.04	0.27	0.19	7.91	1.67	0.019
-7.11	18.15	20.83	-0.01	6.33	0.29	0.24	8.10	1.73	0.025
-6.81	17.85	21.79	-0.02	6.46	0.28	0.26	8.18	1.71	0.027
-6.50	17.55	22.68	-0.02	6.50	0.28	0.26	8.21	1.71	0.027
-6.20	17.24	23.49	-0.02	6.40	0.33	0.28	8.14	1.85	0.029
-5.90	16.94	24.23	-0.02	6.21	0.33	0.28	8.02	1.86	0.029
-5.60	16.64	24.92	-0.03	6.01	0.34	0.29	7.90	1.88	0.030
-5.29	16.34	25.51	-0.03	5.81	0.36	0.30	7.76	1.93	0.031
-4.99	16.03	26.06	-0.03	5.52	0.35	0.32	7.56	1.90	0.033
-4.69	15.73	26.59	-0.03	5.15	0.34	0.30	7.30	1.87	0.031
-4.39	15.43	27.07	-0.04	4.80	0.34	0.29	7.05	1.89	0.030
-4.08	15.13	27.52	-0.04	4.49	0.34	0.29	6.82	1.89	0.030
-3.78	14.82	27.91	-0.04	4.16	0.35	0.29	6.56	1.90	0.030
-3.48	14.52	28.27	-0.05	3.86	0.35	0.28	6.33	1.91	0.029
-3.18	14.22	28.60	-0.05	3.61	0.39	0.26	6.12	2.02	0.027
-2.87	13.92	28.89	-0.05	3.34	0.41	0.25	5.88	2.06	0.026
-2.57	13.61	29.16	-0.06	3.09	0.40	0.23	5.66	2.03	0.024

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-2.27	13.31	29.43	-0.06	2.83	0.41	0.21	5.41	2.06	0.022
-1.97	13.01	29.66	-0.06	2.60	0.39	0.20	5.19	2.01	0.021
-1.66	12.71	29.86	-0.06	2.40	0.38	0.20	4.99	1.99	0.020
-1.36	12.40	30.06	-0.06	2.20	0.38	0.17	4.78	1.98	0.018
-1.06	12.10	30.24	-0.05	2.04	0.38	0.15	4.60	1.99	0.016
-0.76	11.80	30.41	-0.05	1.88	0.38	0.13	4.41	1.99	0.013
-0.45	11.50	30.54	-0.05	1.76	0.36	0.13	4.28	1.94	0.013
-0.15	11.19	30.67	-0.05	1.65	0.32	0.11	4.13	1.83	0.011
0.15	10.89	30.77	-0.05	1.52	0.34	0.08	3.98	1.87	0.008
0.45	10.59	30.87	-0.05	1.44	0.33	0.06	3.87	1.84	0.006
0.76	10.29	30.94	-0.04	1.37	0.32	0.06	3.77	1.81	0.006
1.06	9.98	31.00	-0.04	1.31	0.31	0.04	3.69	1.79	0.005
1.36	9.68	31.03	-0.04	1.27	0.31	0.04	3.63	1.78	0.004
1.66	9.38	31.06	-0.04	1.25	0.28	0.02	3.60	1.70	0.002
1.97	9.08	31.06	-0.04	1.23	0.24	0.00	3.58	1.59	0.001
2.27	8.77	31.04	-0.04	1.23	0.27	-0.01	3.58	1.69	-0.001
2.57	8.47	31.01	-0.04	1.26	0.29	-0.01	3.62	1.74	-0.001
2.87	8.17	30.93	-0.03	1.31	0.25	-0.02	3.68	1.61	-0.002
3.18	7.87	30.83	-0.03	1.35	0.27	-0.04	3.75	1.67	-0.004
3.48	7.56	30.69	-0.03	1.45	0.32	-0.04	3.88	1.81	-0.004
3.78	7.26	30.52	-0.03	1.55	0.32	-0.05	4.01	1.83	-0.005
4.08	6.96	30.28	-0.03	1.71	0.29	-0.06	4.21	1.73	-0.006
4.39	6.66	29.99	-0.03	1.92	0.25	-0.07	4.46	1.62	-0.007
4.69	6.35	29.65	-0.03	2.14	0.25	-0.10	4.71	1.60	-0.010
4.99	6.05	29.23	-0.03	2.41	0.27	-0.11	5.00	1.66	-0.011
5.29	5.75	28.73	-0.03	2.74	0.31	-0.10	5.33	1.78	-0.011
5.60	5.45	28.13	-0.03	3.18	0.28	-0.12	5.74	1.71	-0.012
5.90	5.14	27.41	-0.02	3.83	0.33	-0.13	6.30	1.84	-0.014
6.20	4.84	26.66	-0.02	4.64	0.36	-0.08	6.93	1.92	-0.008
6.50	4.54	25.79	-0.04	5.34	0.41	-0.06	7.44	2.06	-0.007
6.81	4.24	24.73	-0.06	5.54	0.45	-0.13	7.58	2.16	-0.013
7.11	3.93	23.59	-0.07	5.00	0.41	-0.11	7.20	2.07	-0.012
7.41	3.63	22.32	-0.07	4.72	0.44	-0.10	6.99	2.13	-0.010
7.71	3.33	20.90	-0.02	4.40	0.47	-0.10	6.75	2.21	-0.011
8.02	3.03	19.37	-0.02	3.97	0.37	-0.08	6.42	1.96	-0.008
8.32	2.72	17.72	-0.02	3.64	0.31	-0.05	6.14	1.79	-0.005
8.62	2.42	15.94	-0.02	3.25	0.26	-0.04	5.80	1.65	-0.004
8.92	2.12	14.06	-0.02	2.82	0.30	-0.02	5.41	1.76	-0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
9.23	1.82	12.02	-0.02	2.41	0.41	-0.01	4.99	2.06	-0.001
9.53	1.51	9.88	-0.02	2.09	0.58	-0.02	4.66	2.46	-0.002
9.83	1.21	8.11	-0.03	1.87	0.25	0.00	4.40	1.60	0.000
10.13	0.91	0.72	0.64	1.80	0.43	-0.23	4.33	2.12	-0.023
10.44	0.61	0.67	0.55	1.43	0.51	-0.29	3.85	2.31	-0.030
10.74	0.30	0.46	0.16	0.25	0.32	-0.04	1.60	1.82	-0.004
11.04	0.00	0.09	0.02	0.02	0.04	0.00	0.40	0.61	0.000

Table N-94 Grid #2, L3, Plasma-Off, Right (71-80)

L3 (Off)							$U_\infty =$	31.08	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.04	22.08	0.06	-0.05	0.13	0.10	0.03	1.16	1.02	0.004
-10.74	21.78	2.91	0.01	0.89	0.23	0.01	3.04	1.53	0.001
-10.44	21.48	4.67	0.00	1.00	0.21	0.00	3.21	1.46	0.000
-10.13	21.18	6.49	0.00	1.46	0.21	0.02	3.88	1.49	0.002
-9.83	20.87	8.33	0.01	1.77	0.20	0.02	4.28	1.45	0.002
-9.53	20.57	10.02	0.01	2.23	0.22	0.03	4.80	1.52	0.003
-9.23	20.27	11.67	0.01	2.84	0.23	0.04	5.42	1.55	0.004
-8.92	19.97	13.24	0.01	3.36	0.21	0.06	5.89	1.46	0.007
-8.62	19.66	14.75	0.02	3.90	0.23	0.07	6.35	1.54	0.007
-8.32	19.36	16.12	0.01	4.59	0.27	0.08	6.90	1.66	0.009
-8.02	19.06	17.47	0.01	5.22	0.33	0.13	7.35	1.86	0.014
-7.71	18.76	18.67	0.00	5.54	0.32	0.15	7.57	1.81	0.016
-7.41	18.45	19.82	0.00	5.92	0.32	0.18	7.82	1.83	0.019
-7.11	18.15	20.85	0.00	6.29	0.30	0.21	8.07	1.76	0.022
-6.81	17.85	21.83	-0.01	6.41	0.29	0.25	8.15	1.74	0.026
-6.50	17.55	22.69	0.00	6.35	0.30	0.28	8.10	1.75	0.029
-6.20	17.24	23.50	0.00	6.29	0.29	0.28	8.07	1.74	0.029
-5.90	16.94	24.24	-0.01	6.19	0.30	0.28	8.00	1.77	0.029
-5.60	16.64	24.91	-0.02	6.05	0.31	0.29	7.91	1.78	0.030
-5.29	16.34	25.52	-0.02	5.81	0.34	0.31	7.75	1.88	0.032
-4.99	16.03	26.07	-0.02	5.48	0.35	0.32	7.53	1.91	0.033
-4.69	15.73	26.59	-0.02	5.15	0.42	0.31	7.30	2.10	0.032
-4.39	15.43	27.06	-0.03	4.82	0.42	0.31	7.06	2.10	0.032

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.08	15.13	27.50	-0.04	4.51	0.41	0.29	6.83	2.05	0.030
-3.78	14.82	27.89	-0.04	4.19	0.41	0.28	6.58	2.07	0.029
-3.48	14.52	28.27	-0.03	3.84	0.38	0.27	6.31	1.99	0.028
-3.18	14.22	28.59	-0.03	3.63	0.40	0.25	6.13	2.04	0.026
-2.87	13.92	28.89	-0.04	3.33	0.41	0.24	5.87	2.06	0.025
-2.57	13.61	29.17	-0.04	3.07	0.42	0.23	5.63	2.08	0.024
-2.27	13.31	29.42	-0.04	2.88	0.46	0.22	5.46	2.17	0.023
-1.97	13.01	29.66	-0.04	2.65	0.43	0.21	5.23	2.10	0.022
-1.66	12.71	29.88	-0.05	2.38	0.39	0.18	4.97	2.00	0.019
-1.36	12.40	30.08	-0.04	2.23	0.38	0.17	4.80	1.99	0.017
-1.06	12.10	30.25	-0.04	2.11	0.39	0.17	4.68	2.01	0.017
-0.76	11.80	30.41	-0.05	1.93	0.36	0.14	4.47	1.94	0.014
-0.45	11.50	30.55	-0.04	1.86	0.39	0.12	4.39	2.01	0.012
-0.15	11.19	30.67	-0.04	1.75	0.41	0.11	4.26	2.06	0.011
0.15	10.89	30.78	-0.04	1.64	0.35	0.09	4.12	1.89	0.010
0.45	10.59	30.89	-0.04	1.49	0.33	0.07	3.93	1.85	0.007
0.76	10.29	30.97	-0.04	1.43	0.33	0.07	3.85	1.84	0.007
1.06	9.98	31.02	-0.03	1.38	0.36	0.05	3.78	1.92	0.005
1.36	9.68	31.06	-0.03	1.34	0.35	0.04	3.73	1.91	0.004
1.66	9.38	31.08	-0.03	1.33	0.33	0.02	3.70	1.86	0.002
1.97	9.08	31.08	-0.03	1.29	0.32	0.01	3.66	1.82	0.001
2.27	8.77	31.07	-0.03	1.29	0.33	0.00	3.66	1.84	0.000
2.57	8.47	31.02	-0.03	1.32	0.33	-0.01	3.69	1.85	-0.001
2.87	8.17	30.94	-0.02	1.37	0.30	-0.02	3.76	1.76	-0.002
3.18	7.87	30.85	-0.02	1.42	0.27	-0.03	3.83	1.68	-0.003
3.48	7.56	30.71	-0.02	1.50	0.27	-0.04	3.95	1.67	-0.004
3.78	7.26	30.52	-0.03	1.62	0.30	-0.05	4.09	1.77	-0.006
4.08	6.96	30.28	-0.02	1.76	0.30	-0.07	4.27	1.76	-0.007
4.39	6.66	29.99	-0.02	1.94	0.28	-0.07	4.48	1.71	-0.008
4.69	6.35	29.63	-0.02	2.16	0.27	-0.08	4.73	1.66	-0.008
4.99	6.05	29.20	-0.02	2.49	0.24	-0.08	5.07	1.57	-0.009
5.29	5.75	28.69	-0.02	2.79	0.26	-0.10	5.37	1.65	-0.010
5.60	5.45	28.08	-0.02	3.10	0.28	-0.09	5.66	1.70	-0.009
5.90	5.14	27.40	-0.02	3.43	0.33	-0.10	5.96	1.86	-0.011
6.20	4.84	26.60	-0.02	3.68	0.34	-0.11	6.17	1.88	-0.011
6.50	4.54	25.69	-0.03	3.92	0.28	-0.10	6.37	1.70	-0.011
6.81	4.24	24.67	-0.02	4.07	0.24	-0.10	6.49	1.57	-0.010
7.11	3.93	23.53	-0.02	4.16	0.29	-0.10	6.56	1.73	-0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.41	3.63	22.26	-0.01	4.18	0.32	-0.10	6.58	1.81	-0.010
7.71	3.33	20.84	-0.02	4.05	0.30	-0.07	6.47	1.76	-0.007
8.02	3.03	19.31	-0.03	3.84	0.30	-0.07	6.30	1.77	-0.008
8.32	2.72	17.64	-0.02	3.57	0.31	-0.05	6.08	1.80	-0.006
8.62	2.42	15.88	-0.03	3.16	0.35	-0.03	5.72	1.90	-0.003
8.92	2.12	14.00	-0.03	2.76	0.37	-0.02	5.34	1.97	-0.003
9.23	1.82	12.01	-0.02	2.28	0.41	-0.03	4.86	2.07	-0.003
9.53	1.51	9.92	-0.02	1.95	0.39	-0.01	4.50	2.00	-0.001
9.83	1.21	7.77	-0.02	1.61	0.33	-0.01	4.09	1.84	-0.001
10.13	0.91	4.52	0.08	4.88	0.49	-0.10	7.11	2.26	-0.011
10.44	0.61	2.18	0.06	1.78	0.24	-0.04	4.29	1.59	-0.004
10.74	0.30	0.14	-0.39	0.53	0.20	-0.07	2.34	1.45	-0.007
11.04	0.00	0.01	0.05	0.01	0.01	0.00	0.33	0.34	0.000

Table N-95 Grid #2, L3, Plasma-150, Left (1-10)

L3 (150)							U_∞ =	31.35	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.04	22.08	1.74	-0.03	19.96	0.24	1.00	14.25	1.55	0.102
-10.74	21.78	1.56	0.11	15.12	0.36	0.95	12.40	1.90	0.097
-10.44	21.48	5.98	0.08	10.24	7.77	0.08	10.21	8.89	0.008
-10.13	21.18	7.98	0.04	3.05	4.46	-0.02	5.57	6.74	-0.002
-9.83	20.87	9.43	0.02	2.08	1.32	0.04	4.60	3.66	0.004
-9.53	20.57	10.97	0.01	2.04	0.49	0.01	4.55	2.22	0.001
-9.23	20.27	12.65	0.01	2.17	0.36	0.03	4.69	1.91	0.003
-8.92	19.97	14.25	0.01	2.53	0.27	0.05	5.07	1.67	0.005
-8.62	19.66	15.83	0.00	3.05	0.29	0.05	5.57	1.73	0.005
-8.32	19.36	17.32	0.00	3.54	0.37	0.07	6.00	1.93	0.007
-8.02	19.06	18.72	-0.01	3.88	0.34	0.09	6.28	1.86	0.009
-7.71	18.76	19.96	-0.01	4.18	0.35	0.10	6.52	1.88	0.011
-7.41	18.45	21.15	-0.01	4.40	0.40	0.13	6.69	2.02	0.013
-7.11	18.15	22.19	-0.01	4.53	0.48	0.15	6.79	2.21	0.015
-6.81	17.85	23.19	-0.01	4.56	0.48	0.17	6.81	2.22	0.018
-6.50	17.55	24.05	-0.02	4.50	0.43	0.20	6.76	2.09	0.020
-6.20	17.24	24.84	-0.02	4.38	0.45	0.20	6.67	2.15	0.020

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-5.90	16.94	25.55	-0.03	4.34	0.44	0.21	6.64	2.12	0.021
-5.60	16.64	26.22	-0.03	4.08	0.38	0.22	6.44	1.98	0.022
-5.29	16.34	26.79	-0.03	3.87	0.46	0.22	6.27	2.16	0.022
-4.99	16.03	27.32	-0.03	3.62	0.42	0.22	6.07	2.08	0.022
-4.69	15.73	27.78	-0.04	3.46	0.41	0.22	5.93	2.04	0.023
-4.39	15.43	28.20	-0.04	3.29	0.48	0.23	5.79	2.20	0.023
-4.08	15.13	28.58	-0.04	3.08	0.48	0.22	5.59	2.22	0.023
-3.78	14.82	28.91	-0.04	2.88	0.46	0.20	5.41	2.15	0.021
-3.48	14.52	29.22	-0.04	2.66	0.42	0.21	5.20	2.06	0.022
-3.18	14.22	29.50	-0.04	2.46	0.47	0.21	5.00	2.19	0.021
-2.87	13.92	29.74	-0.04	2.33	0.50	0.21	4.87	2.25	0.021
-2.57	13.61	29.96	-0.04	2.15	0.43	0.17	4.67	2.10	0.018
-2.27	13.31	30.16	-0.04	1.97	0.44	0.17	4.47	2.12	0.017
-1.97	13.01	30.36	-0.04	1.78	0.47	0.15	4.25	2.19	0.015
-1.66	12.71	30.51	-0.04	1.66	0.50	0.12	4.11	2.26	0.013
-1.36	12.40	30.65	-0.04	1.53	0.51	0.11	3.94	2.27	0.011
-1.06	12.10	30.78	-0.04	1.46	0.46	0.12	3.86	2.16	0.012
-0.76	11.80	30.90	-0.04	1.36	0.47	0.11	3.72	2.18	0.011
-0.45	11.50	31.01	-0.03	1.25	0.48	0.09	3.57	2.20	0.009
-0.15	11.19	31.10	-0.03	1.16	0.49	0.08	3.44	2.22	0.009
0.15	10.89	31.18	-0.03	1.10	0.49	0.07	3.34	2.22	0.007
0.45	10.59	31.24	-0.03	1.06	0.46	0.07	3.29	2.17	0.007
0.76	10.29	31.29	-0.03	1.02	0.45	0.06	3.22	2.14	0.006
1.06	9.98	31.33	-0.03	0.98	0.43	0.04	3.15	2.08	0.004
1.36	9.68	31.35	-0.03	0.93	0.44	0.03	3.07	2.11	0.003
1.66	9.38	31.35	-0.03	0.89	0.46	0.02	3.01	2.15	0.002
1.97	9.08	31.34	-0.03	0.87	0.47	0.00	2.98	2.18	0.000
2.27	8.77	31.29	-0.02	0.88	0.42	-0.01	2.99	2.07	-0.001
2.57	8.47	31.23	-0.02	0.89	0.37	-0.03	3.02	1.95	-0.003
2.87	8.17	31.14	-0.02	0.92	0.40	-0.02	3.06	2.01	-0.002
3.18	7.87	31.03	-0.03	0.95	0.37	-0.03	3.11	1.94	-0.003
3.48	7.56	30.87	-0.03	1.02	0.37	-0.05	3.23	1.94	-0.005
3.78	7.26	30.68	-0.02	1.11	0.40	-0.06	3.37	2.02	-0.006
4.08	6.96	30.41	-0.02	1.26	0.39	-0.08	3.58	2.00	-0.008
4.39	6.66	30.10	-0.02	1.41	0.33	-0.07	3.79	1.83	-0.008
4.69	6.35	29.73	-0.02	1.58	0.33	-0.08	4.02	1.83	-0.008
4.99	6.05	29.30	-0.02	1.76	0.38	-0.09	4.23	1.96	-0.009
5.29	5.75	28.78	-0.02	1.93	0.39	-0.09	4.43	1.99	-0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
5.60	5.45	28.20	-0.02	2.09	0.41	-0.09	4.62	2.04	-0.009
5.90	5.14	27.53	-0.02	2.25	0.46	-0.10	4.78	2.16	-0.010
6.20	4.84	26.78	-0.02	2.39	0.43	-0.11	4.93	2.10	-0.011
6.50	4.54	25.91	-0.01	2.59	0.44	-0.08	5.14	2.10	-0.008
6.81	4.24	24.94	-0.02	2.72	0.54	-0.10	5.26	2.35	-0.010
7.11	3.93	23.84	-0.03	2.74	0.52	-0.08	5.27	2.29	-0.008
7.41	3.63	22.62	-0.02	2.71	0.46	-0.04	5.25	2.16	-0.004
7.71	3.33	21.25	-0.02	2.69	0.47	-0.04	5.23	2.19	-0.005
8.02	3.03	19.77	-0.02	2.52	0.38	-0.03	5.06	1.96	-0.003
8.32	2.72	18.14	-0.02	2.35	0.41	-0.04	4.89	2.04	-0.004
8.62	2.42	16.37	-0.02	2.11	0.35	-0.03	4.64	1.89	-0.003
8.92	2.12	14.47	-0.03	1.78	0.29	-0.02	4.25	1.71	-0.002
9.23	1.82	12.48	-0.03	1.52	0.34	-0.01	3.93	1.87	-0.001
9.53	1.51	10.52	-0.03	1.72	0.46	0.00	4.19	2.17	0.001
9.83	1.21	9.05	-0.10	2.80	0.28	-0.01	5.34	1.69	-0.001
10.13	0.91	0.03	0.16	0.61	0.49	-0.09	2.48	2.23	-0.009
10.44	0.61	0.03	0.14	0.56	0.51	-0.03	2.38	2.29	-0.003
10.74	0.30	0.01	0.00	0.11	0.19	-0.03	1.06	1.38	-0.003
11.04	0.00	0.84	0.01	0.00	0.00	0.00	0.00	0.00	0.000

Table N-96 Grid #2, L3, Plasma-150, Center (46-55)

L3 (150)							U_∞ =	31.43	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.04	22.08	-0.02	0.07	0.10	0.12	0.02	1.00	1.12	0.002
-10.74	21.78	0.68	0.08	3.29	0.84	0.04	5.77	2.92	0.004
-10.44	21.48	6.06	0.00	6.27	3.22	-0.04	7.97	5.71	-0.004
-10.13	21.18	7.98	0.00	2.44	1.81	0.04	4.97	4.28	0.004
-9.83	20.87	9.47	0.01	1.91	0.70	0.04	4.40	2.67	0.004
-9.53	20.57	11.02	0.03	1.91	0.39	0.02	4.40	1.98	0.002
-9.23	20.27	12.66	0.03	1.89	0.25	0.03	4.38	1.58	0.003
-8.92	19.97	14.25	0.03	2.27	0.19	0.04	4.80	1.38	0.004
-8.62	19.66	15.82	0.02	2.76	0.22	0.04	5.29	1.49	0.004
-8.32	19.36	17.29	0.03	3.21	0.26	0.06	5.70	1.61	0.006
-8.02	19.06	18.69	0.02	3.60	0.27	0.07	6.04	1.65	0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-7.71	18.76	19.92	0.02	3.81	0.27	0.10	6.21	1.64	0.010
-7.41	18.45	21.10	0.02	4.03	0.26	0.12	6.39	1.63	0.013
-7.11	18.15	22.17	0.02	4.11	0.27	0.15	6.45	1.65	0.015
-6.81	17.85	23.16	0.02	4.18	0.30	0.15	6.50	1.74	0.015
-6.50	17.55	24.03	0.01	4.11	0.30	0.16	6.45	1.75	0.016
-6.20	17.24	24.82	0.01	4.04	0.28	0.16	6.40	1.70	0.016
-5.90	16.94	25.54	0.01	3.96	0.29	0.18	6.33	1.71	0.018
-5.60	16.64	26.22	0.01	3.82	0.26	0.20	6.22	1.62	0.020
-5.29	16.34	26.79	0.00	3.62	0.31	0.20	6.06	1.77	0.020
-4.99	16.03	27.34	0.00	3.41	0.31	0.19	5.88	1.79	0.020
-4.69	15.73	27.81	0.00	3.20	0.32	0.19	5.69	1.80	0.020
-4.39	15.43	28.24	-0.01	3.06	0.38	0.18	5.57	1.97	0.019
-4.08	15.13	28.62	-0.01	2.87	0.34	0.18	5.40	1.85	0.018
-3.78	14.82	28.98	-0.01	2.66	0.29	0.18	5.19	1.70	0.018
-3.48	14.52	29.30	-0.02	2.42	0.39	0.17	4.95	1.99	0.017
-3.18	14.22	29.59	-0.02	2.23	0.45	0.17	4.75	2.13	0.017
-2.87	13.92	29.84	-0.01	2.06	0.37	0.16	4.56	1.95	0.016
-2.57	13.61	30.07	-0.02	1.90	0.34	0.15	4.39	1.87	0.015
-2.27	13.31	30.28	-0.02	1.75	0.35	0.14	4.21	1.88	0.014
-1.97	13.01	30.46	-0.02	1.63	0.33	0.13	4.06	1.83	0.014
-1.66	12.71	30.64	-0.02	1.49	0.31	0.13	3.89	1.78	0.013
-1.36	12.40	30.79	-0.03	1.35	0.30	0.11	3.69	1.74	0.011
-1.06	12.10	30.91	-0.03	1.28	0.32	0.09	3.61	1.80	0.009
-0.76	11.80	31.03	-0.03	1.20	0.32	0.09	3.49	1.80	0.009
-0.45	11.50	31.12	-0.02	1.16	0.34	0.09	3.42	1.86	0.009
-0.15	11.19	31.21	-0.02	1.09	0.34	0.09	3.32	1.86	0.009
0.15	10.89	31.28	-0.02	1.01	0.31	0.07	3.20	1.78	0.007
0.45	10.59	31.34	-0.02	0.97	0.32	0.06	3.14	1.80	0.006
0.76	10.29	31.38	-0.02	0.91	0.30	0.05	3.04	1.76	0.005
1.06	9.98	31.41	-0.02	0.86	0.29	0.04	2.95	1.72	0.004
1.36	9.68	31.43	-0.02	0.83	0.29	0.03	2.91	1.72	0.003
1.66	9.38	31.42	-0.02	0.82	0.27	0.01	2.88	1.66	0.002
1.97	9.08	31.40	-0.02	0.80	0.24	0.00	2.84	1.56	0.000
2.27	8.77	31.35	-0.01	0.82	0.26	0.00	2.88	1.64	0.000
2.57	8.47	31.28	-0.01	0.83	0.30	-0.02	2.90	1.73	-0.002
2.87	8.17	31.18	-0.02	0.83	0.28	-0.02	2.91	1.68	-0.002
3.18	7.87	31.05	-0.02	0.88	0.26	-0.03	2.99	1.61	-0.003
3.48	7.56	30.89	-0.02	0.96	0.27	-0.04	3.12	1.64	-0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
3.78	7.26	30.68	-0.01	1.04	0.30	-0.05	3.24	1.73	-0.005
4.08	6.96	30.42	-0.02	1.17	0.28	-0.05	3.45	1.68	-0.005
4.39	6.66	30.11	-0.01	1.30	0.27	-0.06	3.63	1.65	-0.006
4.69	6.35	29.73	-0.01	1.44	0.26	-0.07	3.81	1.64	-0.007
4.99	6.05	29.28	-0.01	1.61	0.24	-0.07	4.04	1.57	-0.007
5.29	5.75	28.76	-0.01	1.82	0.29	-0.08	4.30	1.72	-0.008
5.60	5.45	28.15	-0.02	2.08	0.37	-0.08	4.59	1.93	-0.008
5.90	5.14	27.45	-0.01	2.51	0.45	-0.11	5.04	2.14	-0.011
6.20	4.84	26.69	-0.02	3.49	0.58	-0.07	5.95	2.43	-0.007
6.50	4.54	25.82	-0.05	3.81	0.61	-0.04	6.21	2.48	-0.004
6.81	4.24	24.76	-0.05	3.76	0.62	-0.04	6.17	2.50	-0.004
7.11	3.93	23.68	-0.05	3.13	0.62	-0.07	5.63	2.51	-0.007
7.41	3.63	22.46	-0.03	2.81	0.65	-0.07	5.34	2.57	-0.007
7.71	3.33	21.11	-0.03	2.63	0.55	-0.02	5.16	2.35	-0.002
8.02	3.03	19.63	-0.03	2.42	0.40	-0.02	4.95	2.02	-0.002
8.32	2.72	18.01	-0.03	2.20	0.36	-0.03	4.72	1.91	-0.003
8.62	2.42	16.25	-0.03	1.94	0.29	-0.02	4.43	1.70	-0.002
8.92	2.12	14.37	-0.02	1.63	0.23	-0.01	4.06	1.51	-0.001
9.23	1.82	12.42	-0.03	1.42	0.29	0.00	3.80	1.72	0.000
9.53	1.51	10.48	-0.03	1.53	0.56	0.00	3.94	2.38	0.000
9.83	1.21	8.95	-0.05	1.83	0.42	0.00	4.30	2.05	0.000
10.13	0.91	0.56	0.55	1.54	0.40	-0.14	3.95	2.02	-0.014
10.44	0.61	0.50	0.46	1.20	0.51	-0.20	3.48	2.28	-0.020
10.74	0.30	0.14	0.01	0.20	0.18	-0.04	1.43	1.36	-0.004
11.04	0.00	0.03	-0.04	0.01	0.00	0.00	0.28	0.09	0.000

Table N-97 Grid #2, L3, Plasma-150, Right (71-80)

L3 (150)							U_∞ =	31.47	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.04	22.08	0.39	0.25	0.38	0.21	0.11	1.96	1.44	0.011
-10.74	21.78	1.67	0.16	7.25	1.22	-0.23	8.55	3.51	-0.024
-10.44	21.48	5.80	0.06	8.84	2.22	-0.15	9.45	4.73	-0.015
-10.13	21.18	7.95	0.05	3.82	1.29	0.02	6.21	3.61	0.002
-9.83	20.87	9.61	0.03	1.99	0.67	0.05	4.49	2.60	0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-9.53	20.57	11.15	0.03	2.01	0.42	0.04	4.50	2.05	0.004
-9.23	20.27	12.78	0.03	2.06	0.24	0.03	4.56	1.57	0.003
-8.92	19.97	14.33	0.03	2.39	0.20	0.04	4.91	1.41	0.004
-8.62	19.66	15.89	0.03	2.77	0.23	0.04	5.29	1.53	0.004
-8.32	19.36	17.33	0.03	3.16	0.25	0.07	5.65	1.58	0.007
-8.02	19.06	18.71	0.04	3.55	0.26	0.08	5.98	1.61	0.009
-7.71	18.76	19.94	0.03	3.72	0.23	0.11	6.13	1.53	0.011
-7.41	18.45	21.11	0.03	3.96	0.26	0.13	6.32	1.63	0.013
-7.11	18.15	22.17	0.03	4.10	0.27	0.15	6.43	1.66	0.015
-6.81	17.85	23.16	0.02	4.18	0.30	0.16	6.49	1.75	0.016
-6.50	17.55	24.03	0.03	4.14	0.30	0.17	6.46	1.73	0.017
-6.20	17.24	24.82	0.03	4.09	0.31	0.18	6.43	1.77	0.018
-5.90	16.94	25.55	0.02	3.96	0.33	0.19	6.33	1.83	0.019
-5.60	16.64	26.23	0.01	3.78	0.32	0.19	6.18	1.79	0.019
-5.29	16.34	26.80	0.01	3.54	0.31	0.20	5.98	1.78	0.020
-4.99	16.03	27.34	0.01	3.32	0.33	0.19	5.79	1.83	0.019
-4.69	15.73	27.82	0.00	3.16	0.36	0.19	5.65	1.91	0.019
-4.39	15.43	28.25	0.01	3.02	0.32	0.19	5.52	1.79	0.019
-4.08	15.13	28.62	0.01	2.86	0.35	0.19	5.38	1.89	0.019
-3.78	14.82	28.99	0.00	2.61	0.38	0.19	5.13	1.95	0.019
-3.48	14.52	29.31	0.00	2.43	0.32	0.18	4.95	1.79	0.018
-3.18	14.22	29.60	-0.01	2.27	0.34	0.16	4.78	1.84	0.016
-2.87	13.92	29.86	-0.01	2.06	0.35	0.14	4.56	1.87	0.014
-2.57	13.61	30.11	-0.01	1.83	0.33	0.13	4.30	1.83	0.013
-2.27	13.31	30.32	-0.02	1.70	0.33	0.14	4.15	1.82	0.014
-1.97	13.01	30.50	-0.02	1.57	0.34	0.13	3.99	1.85	0.013
-1.66	12.71	30.67	-0.01	1.48	0.39	0.11	3.87	1.99	0.011
-1.36	12.40	30.81	-0.01	1.38	0.40	0.10	3.74	2.00	0.010
-1.06	12.10	30.94	-0.01	1.31	0.37	0.10	3.63	1.92	0.010
-0.76	11.80	31.07	-0.02	1.20	0.35	0.08	3.48	1.88	0.008
-0.45	11.50	31.16	-0.01	1.13	0.35	0.07	3.37	1.87	0.007
-0.15	11.19	31.25	-0.01	1.06	0.34	0.07	3.28	1.86	0.007
0.15	10.89	31.33	-0.01	1.02	0.31	0.06	3.20	1.77	0.006
0.45	10.59	31.39	-0.02	0.98	0.33	0.04	3.14	1.81	0.004
0.76	10.29	31.43	-0.01	0.93	0.35	0.04	3.06	1.89	0.004
1.06	9.98	31.46	-0.01	0.87	0.33	0.03	2.96	1.81	0.003
1.36	9.68	31.47	-0.01	0.83	0.30	0.02	2.90	1.73	0.002
1.66	9.38	31.47	-0.01	0.81	0.29	0.01	2.86	1.70	0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.97	9.08	31.44	0.00	0.80	0.31	0.00	2.83	1.77	0.000
2.27	8.77	31.39	0.00	0.80	0.29	-0.01	2.84	1.72	-0.001
2.57	8.47	31.32	0.00	0.81	0.30	-0.02	2.86	1.74	-0.002
2.87	8.17	31.21	-0.01	0.84	0.29	-0.03	2.92	1.72	-0.003
3.18	7.87	31.08	-0.01	0.89	0.28	-0.04	2.99	1.68	-0.004
3.48	7.56	30.92	-0.01	0.95	0.28	-0.04	3.10	1.69	-0.004
3.78	7.26	30.71	-0.01	1.04	0.29	-0.04	3.24	1.72	-0.004
4.08	6.96	30.45	-0.01	1.17	0.29	-0.04	3.43	1.70	-0.004
4.39	6.66	30.11	-0.01	1.32	0.32	-0.04	3.65	1.80	-0.004
4.69	6.35	29.72	-0.01	1.48	0.31	-0.06	3.87	1.77	-0.006
4.99	6.05	29.28	-0.01	1.62	0.35	-0.06	4.04	1.88	-0.006
5.29	5.75	28.74	-0.01	1.79	0.34	-0.06	4.25	1.85	-0.007
5.60	5.45	28.15	-0.01	1.94	0.32	-0.06	4.43	1.78	-0.006
5.90	5.14	27.46	-0.01	2.07	0.31	-0.06	4.57	1.78	-0.006
6.20	4.84	26.68	-0.02	2.17	0.34	-0.06	4.68	1.85	-0.006
6.50	4.54	25.77	-0.02	2.31	0.36	-0.06	4.83	1.92	-0.007
6.81	4.24	24.75	-0.02	2.40	0.38	-0.06	4.92	1.95	-0.006
7.11	3.93	23.65	-0.01	2.43	0.37	-0.05	4.95	1.93	-0.005
7.41	3.63	22.41	-0.02	2.42	0.35	-0.04	4.94	1.88	-0.004
7.71	3.33	21.04	-0.02	2.44	0.38	-0.05	4.96	1.96	-0.005
8.02	3.03	19.55	-0.02	2.25	0.32	-0.02	4.76	1.79	-0.002
8.32	2.72	17.92	-0.03	2.13	0.36	-0.03	4.63	1.91	-0.003
8.62	2.42	16.18	-0.03	1.91	0.35	-0.02	4.39	1.89	-0.002
8.92	2.12	14.31	-0.02	1.65	0.32	-0.02	4.08	1.80	-0.002
9.23	1.82	12.39	-0.03	1.40	0.30	0.00	3.76	1.74	0.000
9.53	1.51	10.49	-0.02	1.35	0.28	0.00	3.69	1.69	0.000
9.83	1.21	8.71	-0.04	1.63	0.34	0.00	4.06	1.84	0.000
10.13	0.91	4.51	0.11	10.28	0.64	-0.42	10.19	2.54	-0.042
10.44	0.61	1.73	0.27	5.02	0.59	-0.41	7.12	2.45	-0.041
10.74	0.30	-0.13	-0.32	0.31	0.22	-0.02	1.76	1.48	-0.002
11.04	0.00	0.04	0.01	0.00	0.01	0.00	0.16	0.25	0.000

Table N-98 Grid #2, L3, Plasma-300, Left (1-10)

L3 (300)							U_∞ =	32.62	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.04	22.08	0.67	-0.07	4.22	0.35	0.01	6.30	1.82	0.001
-10.74	21.78	1.48	0.05	4.72	0.36	0.04	6.66	1.83	0.003
-10.44	21.48	5.74	0.02	3.17	0.75	0.01	5.46	2.65	0.001
-10.13	21.18	7.93	0.02	2.27	0.79	0.03	4.62	2.73	0.002
-9.83	20.87	9.98	0.02	2.06	0.74	0.02	4.40	2.64	0.002
-9.53	20.57	11.93	0.02	2.08	0.72	0.03	4.42	2.61	0.003
-9.23	20.27	13.88	0.02	2.28	0.88	0.01	4.63	2.88	0.001
-8.92	19.97	15.66	0.03	2.57	0.80	0.03	4.91	2.74	0.003
-8.62	19.66	17.39	0.04	2.83	0.75	0.04	5.15	2.65	0.004
-8.32	19.36	18.89	0.02	3.13	0.88	0.09	5.43	2.87	0.008
-8.02	19.06	20.36	0.02	3.36	1.23	0.11	5.62	3.41	0.010
-7.71	18.76	21.64	0.01	3.51	1.28	0.08	5.75	3.47	0.007
-7.41	18.45	22.87	0.01	3.57	1.24	0.07	5.79	3.42	0.006
-7.11	18.15	23.92	0.00	3.60	1.37	0.11	5.81	3.59	0.011
-6.81	17.85	24.91	0.02	3.53	1.57	0.17	5.76	3.85	0.016
-6.50	17.55	25.77	0.02	3.44	1.48	0.12	5.69	3.73	0.012
-6.20	17.24	26.56	0.01	3.29	1.38	0.16	5.56	3.60	0.015
-5.90	16.94	27.25	0.00	3.19	1.54	0.15	5.47	3.80	0.014
-5.60	16.64	27.88	0.00	3.11	1.27	0.12	5.41	3.45	0.011
-5.29	16.34	28.44	0.00	2.99	1.26	0.14	5.30	3.44	0.013
-4.99	16.03	28.95	0.00	2.81	1.19	0.18	5.14	3.35	0.016
-4.69	15.73	29.39	-0.02	2.62	1.18	0.15	4.96	3.33	0.014
-4.39	15.43	29.80	-0.02	2.42	1.08	0.17	4.76	3.19	0.016
-4.08	15.13	30.15	-0.02	2.25	0.94	0.15	4.60	2.97	0.014
-3.78	14.82	30.45	-0.02	2.09	0.84	0.15	4.43	2.81	0.014
-3.48	14.52	30.73	-0.02	1.98	0.88	0.12	4.31	2.88	0.011
-3.18	14.22	30.97	-0.03	1.86	0.91	0.13	4.18	2.93	0.012
-2.87	13.92	31.20	-0.03	1.74	0.96	0.14	4.04	3.01	0.013
-2.57	13.61	31.41	-0.03	1.65	1.03	0.12	3.93	3.11	0.012
-2.27	13.31	31.58	-0.03	1.59	0.93	0.12	3.87	2.96	0.011
-1.97	13.01	31.74	-0.03	1.54	0.88	0.11	3.81	2.88	0.010
-1.66	12.71	31.88	-0.03	1.46	0.88	0.09	3.71	2.88	0.009
-1.36	12.40	32.02	-0.03	1.38	0.79	0.09	3.60	2.72	0.009
-1.06	12.10	32.14	-0.03	1.33	0.76	0.08	3.53	2.68	0.008
-0.76	11.80	32.25	-0.03	1.28	0.81	0.05	3.46	2.76	0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.45	11.50	32.35	-0.04	1.22	0.82	0.07	3.39	2.78	0.007
-0.15	11.19	32.42	-0.03	1.18	0.78	0.07	3.34	2.70	0.006
0.15	10.89	32.49	-0.02	1.16	0.80	0.05	3.30	2.74	0.004
0.45	10.59	32.54	-0.03	1.12	0.85	0.05	3.25	2.82	0.005
0.76	10.29	32.58	-0.02	1.06	0.72	0.04	3.16	2.61	0.004
1.06	9.98	32.61	-0.02	1.03	0.67	0.03	3.11	2.50	0.003
1.36	9.68	32.62	-0.03	1.01	0.83	0.00	3.08	2.80	0.000
1.66	9.38	32.62	-0.03	1.00	0.98	-0.01	3.07	3.04	-0.001
1.97	9.08	32.58	-0.02	1.01	0.90	-0.02	3.08	2.91	-0.002
2.27	8.77	32.52	-0.03	1.01	0.86	-0.04	3.08	2.84	-0.004
2.57	8.47	32.44	-0.01	1.01	0.86	-0.03	3.08	2.84	-0.003
2.87	8.17	32.32	-0.02	1.06	0.90	-0.02	3.15	2.90	-0.002
3.18	7.87	32.20	-0.02	1.08	0.90	-0.03	3.19	2.91	-0.002
3.48	7.56	32.02	-0.01	1.13	0.97	-0.05	3.25	3.02	-0.004
3.78	7.26	31.81	-0.02	1.19	1.03	-0.07	3.34	3.11	-0.006
4.08	6.96	31.55	-0.02	1.24	1.08	-0.07	3.41	3.18	-0.006
4.39	6.66	31.26	-0.02	1.25	1.04	-0.04	3.43	3.12	-0.004
4.69	6.35	30.90	-0.03	1.38	1.11	-0.05	3.61	3.22	-0.004
4.99	6.05	30.47	-0.03	1.58	1.38	-0.08	3.85	3.60	-0.008
5.29	5.75	29.96	-0.02	1.79	1.54	-0.07	4.10	3.80	-0.006
5.60	5.45	29.39	-0.01	1.94	1.58	-0.06	4.27	3.86	-0.006
5.90	5.14	28.72	-0.02	2.09	1.84	-0.02	4.43	4.15	-0.001
6.20	4.84	27.99	-0.02	2.35	2.15	0.00	4.70	4.49	0.000
6.50	4.54	27.15	-0.02	2.74	2.68	-0.05	5.07	5.02	-0.005
6.81	4.24	26.21	-0.04	2.92	2.85	-0.05	5.24	5.17	-0.004
7.11	3.93	25.10	-0.02	3.11	2.78	-0.06	5.41	5.11	-0.005
7.41	3.63	23.88	0.00	3.33	3.28	-0.10	5.60	5.55	-0.009
7.71	3.33	22.45	0.00	3.22	2.90	-0.05	5.50	5.22	-0.005
8.02	3.03	20.94	-0.02	2.87	2.27	-0.01	5.19	4.62	-0.001
8.32	2.72	19.31	-0.03	2.71	2.13	-0.02	5.05	4.48	-0.002
8.62	2.42	17.54	-0.04	2.52	1.92	-0.01	4.86	4.25	-0.001
8.92	2.12	15.63	-0.05	2.45	1.66	-0.03	4.80	3.95	-0.003
9.23	1.82	13.49	-0.03	2.31	1.56	-0.04	4.66	3.82	-0.004
9.53	1.51	11.23	-0.03	2.54	1.50	0.03	4.89	3.76	0.003
9.83	1.21	8.78	-0.05	7.38	0.65	0.00	8.33	2.47	0.000
10.13	0.91	0.53	0.41	10.07	3.29	0.00	9.73	5.56	0.000
10.44	0.61	0.25	0.32	10.75	3.89	-0.17	10.05	6.05	-0.016
10.74	0.30	0.03	0.04	0.29	0.76	-0.04	1.66	2.67	-0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
11.04	0.00	1.68	0.01	0.00	0.00	0.00	0.00	0.04	0.000

Table N-99 Grid #2, L3, Plasma-300, Center (46-55)

L3 (300)							U_∞ =	32.78	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.04	22.08	0.08	0.09	0.17	0.31	0.02	1.28	1.70	0.002
-10.74	21.78	1.87	0.04	3.40	0.41	-0.03	5.62	1.96	-0.003
-10.44	21.48	6.07	0.03	2.16	0.41	-0.01	4.49	1.95	0.000
-10.13	21.18	8.15	0.04	1.71	0.45	0.00	3.99	2.04	0.000
-9.83	20.87	10.14	0.03	1.65	0.49	0.01	3.92	2.14	0.001
-9.53	20.57	12.08	0.04	1.76	0.50	0.01	4.05	2.15	0.001
-9.23	20.27	13.96	0.05	1.90	0.52	0.01	4.20	2.19	0.001
-8.92	19.97	15.71	0.04	2.28	0.43	0.01	4.60	1.99	0.001
-8.62	19.66	17.40	0.05	2.40	0.47	0.04	4.72	2.08	0.004
-8.32	19.36	18.90	0.05	2.68	0.57	0.04	4.99	2.30	0.003
-8.02	19.06	20.35	0.05	2.86	0.64	0.06	5.16	2.44	0.006
-7.71	18.76	21.63	0.05	3.01	0.56	0.06	5.29	2.29	0.006
-7.41	18.45	22.84	0.04	3.16	0.68	0.07	5.42	2.51	0.006
-7.11	18.15	23.91	0.05	3.25	0.87	0.10	5.50	2.84	0.010
-6.81	17.85	24.91	0.04	3.23	0.93	0.08	5.48	2.94	0.007
-6.50	17.55	25.77	0.04	3.19	0.82	0.10	5.45	2.76	0.009
-6.20	17.24	26.59	0.03	3.00	0.77	0.11	5.28	2.68	0.010
-5.90	16.94	27.30	0.03	2.85	0.75	0.14	5.15	2.65	0.013
-5.60	16.64	27.96	0.02	2.77	0.79	0.14	5.08	2.71	0.013
-5.29	16.34	28.52	0.02	2.65	0.75	0.13	4.97	2.63	0.012
-4.99	16.03	29.04	0.02	2.54	0.80	0.15	4.87	2.73	0.014
-4.69	15.73	29.50	0.02	2.39	0.75	0.15	4.71	2.63	0.014
-4.39	15.43	29.90	0.02	2.21	0.60	0.13	4.54	2.37	0.012
-4.08	15.13	30.27	0.02	2.04	0.59	0.14	4.35	2.35	0.013
-3.78	14.82	30.59	0.02	1.86	0.55	0.12	4.16	2.26	0.011
-3.48	14.52	30.87	0.02	1.75	0.60	0.14	4.03	2.36	0.013
-3.18	14.22	31.13	0.02	1.67	0.65	0.12	3.94	2.47	0.011
-2.87	13.92	31.36	0.00	1.57	0.57	0.12	3.82	2.30	0.011
-2.57	13.61	31.56	0.00	1.52	0.60	0.11	3.76	2.37	0.011

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.27	13.31	31.75	0.00	1.42	0.66	0.10	3.64	2.47	0.009
-1.97	13.01	31.93	0.00	1.35	0.58	0.10	3.54	2.33	0.010
-1.66	12.71	32.06	0.00	1.28	0.56	0.08	3.46	2.29	0.007
-1.36	12.40	32.20	0.00	1.23	0.47	0.08	3.38	2.09	0.007
-1.06	12.10	32.32	0.00	1.18	0.52	0.06	3.32	2.20	0.006
-0.76	11.80	32.43	0.00	1.12	0.60	0.07	3.23	2.37	0.006
-0.45	11.50	32.51	0.00	1.07	0.57	0.05	3.16	2.30	0.005
-0.15	11.19	32.59	-0.01	1.04	0.64	0.06	3.11	2.43	0.005
0.15	10.89	32.66	0.00	0.98	0.62	0.03	3.03	2.39	0.003
0.45	10.59	32.72	0.00	0.93	0.53	0.04	2.94	2.22	0.003
0.76	10.29	32.76	0.00	0.90	0.53	0.02	2.89	2.22	0.002
1.06	9.98	32.78	0.00	0.88	0.59	0.01	2.86	2.35	0.001
1.36	9.68	32.78	0.00	0.85	0.53	0.01	2.81	2.21	0.001
1.66	9.38	32.77	-0.01	0.85	0.54	0.00	2.81	2.25	0.000
1.97	9.08	32.73	0.00	0.85	0.54	-0.02	2.82	2.23	-0.002
2.27	8.77	32.67	0.00	0.87	0.54	-0.01	2.84	2.23	-0.001
2.57	8.47	32.58	0.00	0.87	0.54	-0.02	2.85	2.25	-0.002
2.87	8.17	32.46	0.00	0.91	0.60	-0.02	2.91	2.36	-0.002
3.18	7.87	32.31	0.00	0.95	0.64	-0.04	2.98	2.45	-0.004
3.48	7.56	32.12	0.00	0.99	0.72	-0.05	3.03	2.59	-0.005
3.78	7.26	31.90	0.00	1.03	0.63	-0.05	3.10	2.42	-0.005
4.08	6.96	31.62	0.00	1.07	0.68	-0.06	3.16	2.51	-0.005
4.39	6.66	31.30	-0.01	1.14	0.70	-0.04	3.25	2.55	-0.003
4.69	6.35	30.94	-0.01	1.23	0.83	-0.03	3.39	2.77	-0.003
4.99	6.05	30.50	-0.01	1.44	0.95	-0.06	3.67	2.97	-0.005
5.29	5.75	29.99	-0.01	2.33	1.54	-0.15	4.66	3.78	-0.014
5.60	5.45	29.32	-0.01	5.95	2.29	-0.24	7.44	4.62	-0.022
5.90	5.14	28.22	-0.03	13.42	3.38	-0.28	11.18	5.61	-0.026
6.20	4.84	25.88	-0.04	46.23	5.24	-0.46	20.74	6.98	-0.043
6.50	4.54	25.85	-0.13	29.18	6.25	0.75	16.48	7.63	0.070
6.81	4.24	23.71	-0.09	48.55	3.68	0.06	21.25	5.85	0.006
7.11	3.93	23.91	-0.09	22.79	3.79	0.16	14.56	5.94	0.015
7.41	3.63	22.48	-0.08	25.89	4.78	0.33	15.52	6.67	0.031
7.71	3.33	22.22	-0.06	6.81	5.18	0.24	7.96	6.94	0.022
8.02	3.03	20.78	-0.05	4.05	3.28	0.17	6.14	5.53	0.016
8.32	2.72	19.09	-0.04	2.53	1.65	0.06	4.86	3.91	0.006
8.62	2.42	17.37	-0.04	2.25	1.35	0.06	4.57	3.55	0.005
8.92	2.12	15.50	-0.05	2.10	0.96	0.00	4.43	2.99	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
9.23	1.82	13.43	-0.05	2.05	1.21	0.01	4.37	3.35	0.001
9.53	1.51	11.23	-0.05	2.60	2.03	-0.03	4.92	4.35	-0.003
9.83	1.21	8.97	-0.07	4.81	0.97	0.04	6.69	3.00	0.003
10.13	0.91	1.36	0.45	12.88	1.56	-0.60	10.95	3.81	-0.056
10.44	0.61	0.90	0.29	10.86	2.56	-0.58	10.05	4.88	-0.054
10.74	0.30	0.20	-0.26	0.20	0.47	-0.04	1.35	2.09	-0.004
11.04	0.00	0.59	-0.02	0.47	0.00	-0.01	2.09	0.19	-0.001

Table N-100 Grid #2, L3, Plasma-300, Right (71-80)

L3 (300)							U_∞ =	32.88	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.04	22.08	0.25	0.17	0.36	0.14	0.03	1.82	1.14	0.002
-10.74	21.78	3.71	0.02	3.37	0.40	0.00	5.58	1.93	0.000
-10.44	21.48	6.35	0.04	2.13	0.52	0.02	4.44	2.20	0.002
-10.13	21.18	8.41	0.05	1.72	0.47	0.04	3.99	2.08	0.003
-9.83	20.87	10.34	0.06	1.70	0.47	0.01	3.97	2.08	0.001
-9.53	20.57	12.24	0.06	1.81	0.42	0.02	4.09	1.98	0.002
-9.23	20.27	14.09	0.06	2.00	0.42	0.03	4.30	1.96	0.003
-8.92	19.97	15.83	0.06	2.28	0.51	0.03	4.59	2.18	0.003
-8.62	19.66	17.49	0.05	2.43	0.48	0.05	4.74	2.10	0.005
-8.32	19.36	18.97	0.06	2.68	0.49	0.07	4.97	2.12	0.006
-8.02	19.06	20.40	0.06	2.92	0.61	0.05	5.20	2.37	0.004
-7.71	18.76	21.67	0.05	3.01	0.76	0.06	5.28	2.66	0.005
-7.41	18.45	22.89	0.06	3.11	0.85	0.09	5.36	2.80	0.008
-7.11	18.15	23.94	0.06	3.16	0.87	0.11	5.41	2.83	0.010
-6.81	17.85	24.95	0.06	3.19	0.88	0.09	5.43	2.85	0.008
-6.50	17.55	25.83	0.05	3.16	0.90	0.11	5.41	2.88	0.011
-6.20	17.24	26.64	0.04	2.99	1.01	0.12	5.26	3.06	0.011
-5.90	16.94	27.35	0.05	2.91	0.95	0.13	5.18	2.96	0.012
-5.60	16.64	28.00	0.04	2.83	0.98	0.15	5.11	3.01	0.013
-5.29	16.34	28.57	0.04	2.67	0.93	0.14	4.97	2.94	0.013
-4.99	16.03	29.10	0.03	2.52	0.95	0.11	4.83	2.97	0.010
-4.69	15.73	29.56	0.03	2.36	0.88	0.14	4.67	2.85	0.013
-4.39	15.43	29.98	0.03	2.13	0.90	0.13	4.44	2.89	0.012

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.08	15.13	30.35	0.02	1.99	0.87	0.14	4.29	2.84	0.013
-3.78	14.82	30.69	0.02	1.84	0.82	0.13	4.13	2.75	0.012
-3.48	14.52	30.97	0.01	1.76	0.75	0.13	4.03	2.64	0.012
-3.18	14.22	31.22	0.02	1.66	0.66	0.12	3.92	2.46	0.011
-2.87	13.92	31.44	0.02	1.59	0.60	0.11	3.83	2.36	0.010
-2.57	13.61	31.65	0.02	1.50	0.56	0.10	3.72	2.28	0.009
-2.27	13.31	31.84	0.01	1.45	0.62	0.12	3.66	2.39	0.011
-1.97	13.01	32.02	0.01	1.38	0.69	0.09	3.57	2.52	0.009
-1.66	12.71	32.17	0.02	1.30	0.68	0.08	3.47	2.50	0.008
-1.36	12.40	32.30	0.01	1.25	0.62	0.07	3.40	2.39	0.006
-1.06	12.10	32.43	0.02	1.21	0.62	0.06	3.34	2.39	0.005
-0.76	11.80	32.53	0.02	1.15	0.61	0.06	3.26	2.38	0.006
-0.45	11.50	32.63	0.01	1.09	0.53	0.03	3.17	2.21	0.003
-0.15	11.19	32.71	0.01	1.05	0.58	0.04	3.12	2.32	0.003
0.15	10.89	32.77	0.01	1.00	0.60	0.04	3.04	2.35	0.004
0.45	10.59	32.83	0.01	0.94	0.55	0.04	2.95	2.26	0.004
0.76	10.29	32.86	0.00	0.91	0.62	0.03	2.90	2.40	0.003
1.06	9.98	32.88	0.01	0.88	0.63	0.03	2.86	2.41	0.003
1.36	9.68	32.88	0.01	0.86	0.68	0.01	2.82	2.50	0.001
1.66	9.38	32.86	0.01	0.88	0.73	-0.01	2.85	2.59	-0.001
1.97	9.08	32.81	0.01	0.87	0.66	0.00	2.84	2.47	0.000
2.27	8.77	32.75	0.01	0.88	0.57	-0.01	2.85	2.30	-0.001
2.57	8.47	32.65	0.02	0.92	0.55	-0.02	2.91	2.25	-0.002
2.87	8.17	32.52	0.01	0.96	0.61	-0.02	2.99	2.37	-0.001
3.18	7.87	32.37	0.01	0.98	0.69	-0.04	3.01	2.53	-0.003
3.48	7.56	32.17	0.01	1.03	0.76	-0.05	3.08	2.65	-0.004
3.78	7.26	31.93	0.01	1.07	0.83	-0.05	3.15	2.77	-0.005
4.08	6.96	31.67	-0.01	1.10	0.85	-0.04	3.19	2.81	-0.003
4.39	6.66	31.35	0.00	1.15	0.82	-0.05	3.26	2.75	-0.005
4.69	6.35	30.97	0.00	1.27	0.91	-0.05	3.43	2.91	-0.005
4.99	6.05	30.49	0.00	1.41	1.07	-0.05	3.62	3.15	-0.004
5.29	5.75	29.94	-0.01	1.66	1.16	-0.04	3.92	3.28	-0.004
5.60	5.45	29.33	-0.01	1.81	1.32	-0.05	4.09	3.49	-0.005
5.90	5.14	28.61	0.00	1.94	1.53	-0.06	4.24	3.76	-0.006
6.20	4.84	27.79	-0.01	2.05	1.69	-0.10	4.36	3.95	-0.009
6.50	4.54	26.90	-0.04	2.24	1.83	-0.06	4.55	4.11	-0.006
6.81	4.24	25.93	-0.03	2.40	2.22	-0.07	4.71	4.53	-0.007
7.11	3.93	24.82	-0.03	2.55	2.34	-0.02	4.85	4.65	-0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.41	3.63	23.56	-0.04	2.49	2.05	0.00	4.80	4.35	0.000
7.71	3.33	22.18	-0.04	2.58	1.87	-0.02	4.89	4.16	-0.002
8.02	3.03	20.70	-0.03	2.41	1.57	-0.03	4.72	3.81	-0.003
8.32	2.72	19.04	-0.05	2.31	1.29	0.01	4.63	3.45	0.001
8.62	2.42	17.32	-0.04	2.27	1.44	0.00	4.58	3.65	0.000
8.92	2.12	15.40	-0.04	2.18	1.27	0.03	4.49	3.43	0.003
9.23	1.82	13.41	-0.03	2.04	1.17	0.00	4.34	3.29	0.000
9.53	1.51	11.27	-0.04	2.02	1.27	0.00	4.32	3.43	0.000
9.83	1.21	9.05	-0.05	1.91	0.97	0.00	4.20	2.99	0.000
10.13	0.91	5.53	0.03	9.17	1.58	-0.09	9.21	3.82	-0.008
10.44	0.61	2.92	0.02	5.84	1.05	-0.03	7.35	3.11	-0.003
10.74	0.30	-0.03	-0.19	0.34	0.25	-0.02	1.78	1.52	-0.002
11.04	0.00	0.11	0.02	0.21	0.00	-0.01	1.38	0.17	-0.001

Table N-101 Grid #2, L4, Plasma-Off, Left (1-10)

L4 (Off)							$U_\infty =$	30.73	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.16	22.33	1.18	0.50	2.61	1.72	-0.15	5.26	4.26	-0.015
-10.86	22.02	2.38	0.04	0.69	0.56	0.01	2.71	2.43	0.001
-10.55	21.72	3.74	0.01	0.86	0.37	0.01	3.02	1.98	0.001
-10.25	21.41	5.42	0.01	1.06	0.25	0.00	3.34	1.61	0.000
-9.94	21.10	7.12	0.01	1.40	0.26	0.01	3.85	1.67	0.001
-9.63	20.80	8.70	0.02	1.73	0.28	0.03	4.27	1.73	0.003
-9.33	20.49	10.27	0.02	2.23	0.35	0.02	4.86	1.93	0.002
-9.02	20.19	11.76	0.03	2.68	0.54	0.05	5.33	2.39	0.006
-8.72	19.88	13.22	0.02	3.07	0.46	0.05	5.70	2.20	0.006
-8.41	19.58	14.60	0.02	3.78	0.53	0.07	6.33	2.38	0.008
-8.11	19.27	15.95	0.02	4.37	0.42	0.09	6.80	2.10	0.010
-7.80	18.96	17.17	0.02	4.82	0.41	0.12	7.15	2.08	0.013
-7.49	18.66	18.36	0.01	5.18	0.52	0.15	7.41	2.35	0.016
-7.19	18.35	19.46	0.00	5.57	0.55	0.16	7.68	2.42	0.017
-6.88	18.05	20.52	0.00	5.95	0.49	0.16	7.94	2.29	0.017
-6.58	17.74	21.44	-0.01	6.05	0.48	0.18	8.00	2.26	0.019
-6.27	17.43	22.34	-0.01	6.08	0.40	0.20	8.02	2.06	0.021

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-5.96	17.13	23.13	-0.01	6.06	0.39	0.24	8.01	2.03	0.026
-5.66	16.82	23.87	-0.02	5.91	0.50	0.24	7.91	2.29	0.026
-5.35	16.52	24.54	-0.02	5.69	0.52	0.24	7.76	2.35	0.026
-5.05	16.21	25.19	-0.03	5.49	0.44	0.24	7.63	2.16	0.026
-4.74	15.91	25.75	-0.02	5.27	0.46	0.25	7.47	2.22	0.026
-4.44	15.60	26.27	-0.02	4.96	0.44	0.23	7.25	2.17	0.024
-4.13	15.29	26.75	-0.03	4.59	0.44	0.22	6.97	2.15	0.023
-3.82	14.99	27.20	-0.03	4.27	0.52	0.23	6.72	2.36	0.025
-3.52	14.68	27.61	-0.04	3.97	0.47	0.24	6.49	2.24	0.025
-3.21	14.38	27.97	-0.04	3.71	0.53	0.24	6.27	2.36	0.025
-2.91	14.07	28.31	-0.04	3.44	0.51	0.21	6.03	2.32	0.023
-2.60	13.76	28.62	-0.05	3.20	0.49	0.20	5.82	2.28	0.021
-2.29	13.46	28.89	-0.05	3.06	0.52	0.22	5.69	2.35	0.023
-1.99	13.15	29.15	-0.05	2.86	0.50	0.19	5.50	2.31	0.021
-1.68	12.85	29.37	-0.05	2.68	0.46	0.17	5.33	2.20	0.018
-1.38	12.54	29.60	-0.05	2.46	0.47	0.14	5.10	2.24	0.015
-1.07	12.23	29.80	-0.06	2.30	0.49	0.13	4.93	2.28	0.014
-0.76	11.93	29.97	-0.05	2.14	0.44	0.11	4.76	2.15	0.012
-0.46	11.62	30.12	-0.04	2.05	0.40	0.10	4.66	2.06	0.011
-0.15	11.32	30.27	-0.05	1.99	0.42	0.09	4.59	2.10	0.009
0.15	11.01	30.38	-0.05	1.92	0.46	0.07	4.50	2.20	0.008
0.46	10.71	30.49	-0.05	1.84	0.44	0.07	4.41	2.16	0.008
0.76	10.40	30.58	-0.04	1.70	0.39	0.06	4.25	2.03	0.006
1.07	10.09	30.65	-0.04	1.66	0.34	0.04	4.19	1.90	0.004
1.38	9.79	30.70	-0.04	1.61	0.39	0.02	4.12	2.03	0.002
1.68	9.48	30.73	-0.04	1.57	0.41	0.03	4.08	2.09	0.003
1.99	9.18	30.73	-0.04	1.54	0.40	0.00	4.04	2.07	0.000
2.29	8.87	30.71	-0.03	1.55	0.36	-0.02	4.05	1.96	-0.002
2.60	8.56	30.67	-0.03	1.60	0.34	-0.02	4.11	1.89	-0.002
2.91	8.26	30.59	-0.02	1.64	0.37	-0.02	4.17	1.98	-0.002
3.21	7.95	30.47	-0.03	1.69	0.39	-0.03	4.24	2.04	-0.004
3.52	7.65	30.34	-0.03	1.80	0.36	-0.03	4.37	1.94	-0.004
3.82	7.34	30.15	-0.03	1.93	0.36	-0.05	4.52	1.96	-0.005
4.13	7.03	29.89	-0.03	2.12	0.32	-0.04	4.74	1.85	-0.004
4.44	6.73	29.58	-0.03	2.33	0.31	-0.06	4.97	1.82	-0.006
4.74	6.42	29.20	-0.03	2.59	0.30	-0.08	5.24	1.79	-0.009
5.05	6.12	28.74	-0.02	2.82	0.31	-0.09	5.47	1.82	-0.009
5.35	5.81	28.22	-0.02	3.06	0.39	-0.09	5.69	2.03	-0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
5.66	5.51	27.61	-0.02	3.26	0.36	-0.09	5.87	1.97	-0.010
5.96	5.20	26.87	-0.01	3.65	0.36	-0.10	6.22	1.94	-0.011
6.27	4.89	26.06	-0.02	3.83	0.34	-0.09	6.37	1.90	-0.010
6.58	4.59	25.12	-0.02	4.01	0.31	-0.09	6.51	1.81	-0.009
6.88	4.28	24.11	-0.02	4.04	0.30	-0.07	6.54	1.77	-0.007
7.19	3.98	22.93	-0.02	4.02	0.42	-0.07	6.53	2.10	-0.008
7.49	3.67	21.65	-0.02	3.96	0.41	-0.09	6.48	2.08	-0.010
7.80	3.36	20.25	-0.02	3.89	0.34	-0.07	6.41	1.90	-0.007
8.11	3.06	18.76	-0.02	3.52	0.38	-0.06	6.11	2.00	-0.006
8.41	2.75	17.15	-0.01	3.33	0.47	-0.05	5.94	2.23	-0.005
8.72	2.45	15.44	-0.01	2.89	0.39	-0.02	5.53	2.04	-0.003
9.02	2.14	13.65	-0.02	2.47	0.30	-0.02	5.12	1.79	-0.002
9.33	1.84	11.77	-0.02	2.14	0.29	-0.01	4.76	1.75	-0.001
9.63	1.53	9.84	-0.02	1.82	0.36	0.00	4.39	1.96	0.000
9.94	1.22	7.82	-0.02	1.45	0.27	0.00	3.91	1.68	0.000
10.25	0.92	5.77	-0.01	1.28	0.27	0.00	3.68	1.69	0.000
10.55	0.61	3.54	0.00	1.05	0.20	0.00	3.33	1.46	0.000
10.86	0.31	0.99	-0.05	0.71	0.05	0.00	2.74	0.76	0.000
11.16	0.00	11.23	0.11	3.92	0.00	-0.01	6.44	0.18	-0.001

Table N-102 Grid #2, L4, Plasma-Off, Center (42-51)

L4 (Off)							$U_\infty =$	30.69	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.16	22.33	1.11	0.11	0.57	0.04	0.00	2.45	0.65	0.000
-10.86	22.02	2.75	-0.01	0.71	0.20	0.00	2.74	1.45	0.000
-10.55	21.72	4.17	0.00	0.78	0.24	0.01	2.88	1.60	0.001
-10.25	21.41	5.75	0.00	1.03	0.21	0.01	3.31	1.50	0.001
-9.94	21.10	7.42	0.01	1.31	0.23	0.01	3.73	1.56	0.001
-9.63	20.80	8.94	0.01	1.52	0.23	0.02	4.01	1.57	0.002
-9.33	20.49	10.46	0.02	2.03	0.21	0.02	4.64	1.49	0.002
-9.02	20.19	11.89	0.02	2.44	0.24	0.04	5.09	1.59	0.004
-8.72	19.88	13.33	0.01	2.84	0.26	0.04	5.49	1.68	0.004
-8.41	19.58	14.67	0.01	3.34	0.31	0.06	5.96	1.81	0.006
-8.11	19.27	15.96	0.02	3.84	0.32	0.07	6.39	1.83	0.008

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-7.80	18.96	17.18	0.01	4.35	0.33	0.08	6.79	1.88	0.009
-7.49	18.66	18.36	0.02	4.83	0.32	0.11	7.16	1.83	0.012
-7.19	18.35	19.45	0.01	5.13	0.36	0.14	7.38	1.95	0.015
-6.88	18.05	20.47	0.00	5.31	0.32	0.15	7.51	1.86	0.016
-6.58	17.74	21.40	0.00	5.51	0.31	0.18	7.65	1.83	0.020
-6.27	17.43	22.28	0.00	5.63	0.28	0.19	7.73	1.73	0.020
-5.96	17.13	23.10	-0.01	5.61	0.27	0.19	7.72	1.70	0.021
-5.66	16.82	23.83	-0.01	5.49	0.33	0.21	7.64	1.86	0.023
-5.35	16.52	24.53	-0.02	5.31	0.33	0.23	7.51	1.88	0.024
-5.05	16.21	25.15	-0.02	5.21	0.37	0.23	7.44	1.99	0.025
-4.74	15.91	25.70	-0.02	5.04	0.33	0.23	7.32	1.87	0.024
-4.44	15.60	26.23	-0.03	4.75	0.32	0.23	7.10	1.85	0.025
-4.13	15.29	26.70	-0.03	4.47	0.33	0.22	6.89	1.86	0.024
-3.82	14.99	27.14	-0.03	4.27	0.34	0.20	6.73	1.91	0.021
-3.52	14.68	27.55	-0.03	3.99	0.36	0.21	6.51	1.94	0.022
-3.21	14.38	27.94	-0.03	3.67	0.36	0.20	6.24	1.95	0.021
-2.91	14.07	28.26	-0.04	3.40	0.35	0.19	6.01	1.92	0.021
-2.60	13.76	28.57	-0.04	3.20	0.34	0.17	5.83	1.89	0.018
-2.29	13.46	28.85	-0.04	3.04	0.33	0.16	5.68	1.86	0.017
-1.99	13.15	29.12	-0.04	2.82	0.32	0.17	5.47	1.85	0.018
-1.68	12.85	29.35	-0.05	2.64	0.34	0.15	5.30	1.91	0.016
-1.38	12.54	29.58	-0.05	2.41	0.38	0.14	5.06	2.02	0.014
-1.07	12.23	29.78	-0.04	2.22	0.34	0.12	4.85	1.90	0.013
-0.76	11.93	29.96	-0.04	2.08	0.36	0.12	4.70	1.95	0.013
-0.46	11.62	30.13	-0.04	1.93	0.36	0.11	4.52	1.94	0.012
-0.15	11.32	30.27	-0.04	1.81	0.32	0.09	4.38	1.85	0.010
0.15	11.01	30.39	-0.04	1.75	0.37	0.08	4.31	1.98	0.008
0.46	10.71	30.48	-0.04	1.67	0.38	0.06	4.20	2.00	0.007
0.76	10.40	30.56	-0.05	1.60	0.30	0.04	4.12	1.78	0.004
1.07	10.09	30.63	-0.04	1.51	0.32	0.03	4.01	1.83	0.003
1.38	9.79	30.67	-0.03	1.48	0.28	0.03	3.96	1.73	0.004
1.68	9.48	30.69	-0.03	1.48	0.29	0.02	3.96	1.76	0.002
1.99	9.18	30.69	-0.04	1.46	0.27	0.00	3.93	1.69	0.000
2.29	8.87	30.67	-0.03	1.47	0.26	-0.01	3.94	1.68	-0.001
2.60	8.56	30.61	-0.03	1.49	0.30	-0.02	3.97	1.79	-0.002
2.91	8.26	30.53	-0.03	1.50	0.28	-0.02	4.00	1.72	-0.002
3.21	7.95	30.41	-0.02	1.58	0.25	-0.03	4.09	1.63	-0.003
3.52	7.65	30.25	-0.03	1.72	0.27	-0.05	4.28	1.69	-0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.82	7.34	30.05	-0.03	1.83	0.30	-0.05	4.41	1.77	-0.006
4.13	7.03	29.79	-0.03	1.99	0.27	-0.07	4.60	1.69	-0.007
4.44	6.73	29.48	-0.03	2.23	0.26	-0.07	4.87	1.67	-0.008
4.74	6.42	29.08	-0.03	2.52	0.28	-0.08	5.18	1.71	-0.009
5.05	6.12	28.64	-0.03	2.72	0.28	-0.09	5.37	1.72	-0.009
5.35	5.81	28.09	-0.03	2.95	0.28	-0.08	5.60	1.73	-0.008
5.66	5.51	27.46	-0.03	3.19	0.28	-0.07	5.82	1.72	-0.007
5.96	5.20	26.74	-0.03	3.51	0.23	-0.07	6.10	1.56	-0.008
6.27	4.89	25.92	-0.03	3.77	0.26	-0.09	6.32	1.66	-0.010
6.58	4.59	24.99	-0.03	3.92	0.32	-0.09	6.45	1.84	-0.010
6.88	4.28	23.96	-0.02	3.91	0.31	-0.08	6.44	1.82	-0.008
7.19	3.98	22.80	-0.03	3.85	0.35	-0.07	6.39	1.91	-0.008
7.49	3.67	21.53	-0.02	3.88	0.30	-0.08	6.42	1.79	-0.009
7.80	3.36	20.16	-0.03	3.79	0.32	-0.05	6.34	1.84	-0.006
8.11	3.06	18.66	-0.03	3.40	0.33	-0.04	6.00	1.87	-0.004
8.41	2.75	17.05	-0.03	3.08	0.32	-0.03	5.72	1.84	-0.003
8.72	2.45	15.39	-0.03	2.71	0.32	-0.03	5.37	1.84	-0.003
9.02	2.14	13.60	-0.03	2.35	0.36	-0.03	4.99	1.95	-0.003
9.33	1.84	11.76	-0.02	1.99	0.30	-0.01	4.59	1.79	-0.001
9.63	1.53	9.82	-0.02	1.67	0.32	-0.01	4.21	1.84	-0.001
9.94	1.22	7.86	-0.02	1.37	0.30	-0.01	3.82	1.78	-0.001
10.25	0.92	5.93	-0.01	1.18	0.22	0.00	3.54	1.54	0.000
10.55	0.61	3.66	0.01	1.03	0.17	0.00	3.31	1.35	0.000
10.86	0.31	1.35	-0.06	0.76	0.05	0.00	2.84	0.71	0.000
11.16	0.00	0.47	0.01	0.00	0.00	0.00	0.11	0.09	0.000

Table N-103 Grid #2, L4, Plasma-Off, Right (71-80)

L4 (Off)							U_∞ =	30.69	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.16	22.33	1.14	0.06	0.41	0.05	0.02	2.09	0.73	0.002
-10.86	22.02	2.99	-0.02	0.75	0.17	0.03	2.83	1.34	0.003
-10.55	21.72	4.49	0.00	0.76	0.19	0.02	2.85	1.43	0.002
-10.25	21.41	6.02	0.00	1.10	0.23	0.02	3.42	1.55	0.002
-9.94	21.10	7.65	0.01	1.32	0.23	0.03	3.74	1.55	0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.63	20.80	9.14	0.01	1.56	0.23	0.03	4.07	1.56	0.003
-9.33	20.49	10.62	0.01	2.04	0.26	0.05	4.65	1.66	0.005
-9.02	20.19	12.04	0.01	2.44	0.25	0.07	5.09	1.63	0.007
-8.72	19.88	13.45	0.02	2.79	0.24	0.06	5.44	1.60	0.006
-8.41	19.58	14.74	0.01	3.25	0.21	0.08	5.87	1.50	0.008
-8.11	19.27	16.03	0.02	3.79	0.19	0.10	6.34	1.44	0.010
-7.80	18.96	17.22	0.01	4.23	0.24	0.11	6.70	1.61	0.011
-7.49	18.66	18.39	0.01	4.57	0.26	0.13	6.96	1.65	0.013
-7.19	18.35	19.45	0.00	4.83	0.28	0.15	7.16	1.73	0.015
-6.88	18.05	20.47	0.00	5.13	0.33	0.16	7.38	1.86	0.017
-6.58	17.74	21.40	0.00	5.38	0.34	0.18	7.55	1.89	0.019
-6.27	17.43	22.29	0.00	5.37	0.32	0.20	7.55	1.83	0.022
-5.96	17.13	23.08	-0.01	5.40	0.26	0.22	7.57	1.67	0.023
-5.66	16.82	23.84	-0.01	5.27	0.28	0.22	7.48	1.71	0.024
-5.35	16.52	24.50	-0.01	5.07	0.30	0.23	7.34	1.77	0.024
-5.05	16.21	25.12	-0.02	5.02	0.33	0.24	7.30	1.87	0.026
-4.74	15.91	25.68	-0.02	4.89	0.34	0.25	7.21	1.89	0.027
-4.44	15.60	26.20	-0.02	4.70	0.34	0.24	7.06	1.89	0.026
-4.13	15.29	26.68	-0.02	4.39	0.37	0.23	6.83	1.99	0.025
-3.82	14.99	27.13	-0.03	4.13	0.35	0.22	6.62	1.93	0.023
-3.52	14.68	27.52	-0.04	3.91	0.31	0.21	6.44	1.80	0.022
-3.21	14.38	27.90	-0.04	3.72	0.35	0.23	6.29	1.93	0.025
-2.91	14.07	28.23	-0.04	3.49	0.37	0.22	6.09	1.97	0.023
-2.60	13.76	28.55	-0.04	3.24	0.35	0.20	5.86	1.93	0.022
-2.29	13.46	28.82	-0.04	3.03	0.33	0.19	5.67	1.87	0.021
-1.99	13.15	29.09	-0.05	2.83	0.36	0.18	5.48	1.96	0.019
-1.68	12.85	29.33	-0.04	2.63	0.39	0.16	5.28	2.02	0.017
-1.38	12.54	29.55	-0.04	2.46	0.34	0.14	5.11	1.89	0.015
-1.07	12.23	29.74	-0.04	2.29	0.32	0.13	4.93	1.84	0.014
-0.76	11.93	29.92	-0.04	2.13	0.32	0.12	4.75	1.85	0.013
-0.46	11.62	30.08	-0.04	1.97	0.31	0.10	4.57	1.82	0.010
-0.15	11.32	30.24	-0.03	1.83	0.32	0.09	4.41	1.83	0.009
0.15	11.01	30.37	-0.03	1.68	0.35	0.08	4.22	1.92	0.008
0.46	10.71	30.47	-0.03	1.61	0.33	0.07	4.13	1.86	0.007
0.76	10.40	30.56	-0.03	1.55	0.30	0.05	4.06	1.79	0.005
1.07	10.09	30.62	-0.03	1.52	0.30	0.03	4.02	1.80	0.004
1.38	9.79	30.67	-0.03	1.49	0.29	0.02	3.98	1.77	0.003
1.68	9.48	30.69	-0.04	1.47	0.29	0.01	3.95	1.76	0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.99	9.18	30.69	-0.03	1.44	0.31	0.00	3.91	1.82	0.000
2.29	8.87	30.66	-0.03	1.46	0.33	-0.01	3.93	1.86	-0.001
2.60	8.56	30.60	-0.03	1.49	0.31	-0.02	3.98	1.82	-0.002
2.91	8.26	30.51	-0.02	1.58	0.28	-0.03	4.09	1.74	-0.003
3.21	7.95	30.39	-0.03	1.66	0.27	-0.03	4.19	1.70	-0.003
3.52	7.65	30.23	-0.02	1.77	0.27	-0.04	4.34	1.69	-0.004
3.82	7.34	30.02	-0.03	1.92	0.28	-0.05	4.52	1.72	-0.005
4.13	7.03	29.76	-0.03	2.10	0.25	-0.06	4.72	1.64	-0.006
4.44	6.73	29.42	-0.03	2.34	0.25	-0.06	4.99	1.64	-0.007
4.74	6.42	29.02	-0.02	2.63	0.29	-0.08	5.29	1.76	-0.008
5.05	6.12	28.56	-0.03	2.87	0.28	-0.06	5.51	1.71	-0.007
5.35	5.81	28.03	-0.03	3.09	0.25	-0.07	5.72	1.64	-0.007
5.66	5.51	27.41	-0.03	3.16	0.26	-0.07	5.79	1.68	-0.008
5.96	5.20	26.69	-0.02	3.48	0.26	-0.08	6.08	1.65	-0.008
6.27	4.89	25.87	-0.02	3.68	0.28	-0.08	6.25	1.73	-0.008
6.58	4.59	24.93	-0.02	3.76	0.30	-0.07	6.31	1.77	-0.007
6.88	4.28	23.88	-0.03	3.75	0.26	-0.06	6.31	1.65	-0.007
7.19	3.98	22.71	-0.03	3.86	0.30	-0.08	6.40	1.80	-0.009
7.49	3.67	21.44	-0.02	3.79	0.28	-0.07	6.34	1.74	-0.008
7.80	3.36	20.06	-0.03	3.57	0.30	-0.04	6.16	1.77	-0.005
8.11	3.06	18.58	-0.03	3.29	0.27	-0.05	5.91	1.71	-0.005
8.41	2.75	16.98	-0.03	3.01	0.31	-0.04	5.65	1.82	-0.004
8.72	2.45	15.34	-0.03	2.65	0.35	-0.01	5.31	1.92	-0.001
9.02	2.14	13.59	-0.03	2.39	0.39	-0.01	5.04	2.04	-0.001
9.33	1.84	11.75	-0.03	2.01	0.34	0.00	4.62	1.90	0.000
9.63	1.53	9.85	-0.02	1.67	0.31	0.00	4.22	1.82	0.000
9.94	1.22	7.92	-0.03	1.43	0.27	0.00	3.89	1.70	-0.001
10.25	0.92	6.00	-0.01	1.22	0.20	-0.01	3.59	1.45	-0.001
10.55	0.61	3.79	0.00	1.04	0.17	0.00	3.33	1.35	-0.001
10.86	0.31	1.42	-0.03	0.85	0.04	0.00	3.00	0.69	0.000
11.16	0.00	0.24	0.03	0.38	0.01	0.00	2.02	0.31	0.000

Table N-104 Grid #2, L4, Plasma-150, Left (1-10)

L4 (150)							U_∞ =	32.40	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.16	22.33	1.42	0.38	21.28	2.80	1.07	14.24	5.17	0.102
-10.86	22.02	2.59	0.45	21.31	1.67	0.41	14.25	3.99	0.039
-10.55	21.72	5.13	0.16	11.65	4.79	0.01	10.53	6.75	0.001
-10.25	21.41	7.17	0.05	2.93	2.95	-0.06	5.29	5.30	-0.006
-9.94	21.10	8.66	0.03	2.00	1.07	0.01	4.36	3.20	0.001
-9.63	20.80	10.19	0.03	1.94	0.65	0.01	4.30	2.49	0.001
-9.33	20.49	11.84	0.04	2.06	0.44	0.01	4.42	2.05	0.001
-9.02	20.19	13.43	0.04	2.25	0.38	0.02	4.63	1.91	0.002
-8.72	19.88	15.02	0.04	2.65	0.44	0.05	5.02	2.05	0.004
-8.41	19.58	16.52	0.04	3.09	0.44	0.05	5.42	2.05	0.004
-8.11	19.27	17.97	0.03	3.34	0.48	0.07	5.64	2.14	0.007
-7.80	18.96	19.31	0.03	3.60	0.49	0.06	5.86	2.16	0.005
-7.49	18.66	20.59	0.03	3.80	0.45	0.07	6.02	2.08	0.007
-7.19	18.35	21.76	0.04	4.03	0.55	0.08	6.20	2.28	0.008
-6.88	18.05	22.86	0.04	4.18	0.51	0.11	6.31	2.20	0.011
-6.58	17.74	23.84	0.03	4.20	0.46	0.12	6.32	2.09	0.012
-6.27	17.43	24.77	0.02	4.18	0.46	0.12	6.31	2.09	0.012
-5.96	17.13	25.59	0.02	4.11	0.51	0.13	6.26	2.21	0.012
-5.66	16.82	26.36	0.02	3.93	0.52	0.15	6.12	2.22	0.014
-5.35	16.52	27.03	0.01	3.80	0.50	0.16	6.01	2.18	0.015
-5.05	16.21	27.66	0.01	3.62	0.48	0.16	5.87	2.14	0.015
-4.74	15.91	28.22	0.01	3.41	0.56	0.14	5.70	2.31	0.013
-4.44	15.60	28.74	0.02	3.23	0.56	0.14	5.55	2.31	0.014
-4.13	15.29	29.17	0.00	3.09	0.57	0.16	5.42	2.34	0.015
-3.82	14.99	29.59	0.00	2.84	0.54	0.14	5.20	2.28	0.014
-3.52	14.68	29.96	0.00	2.60	0.46	0.14	4.97	2.08	0.013
-3.21	14.38	30.28	0.00	2.41	0.53	0.13	4.79	2.25	0.013
-2.91	14.07	30.58	0.00	2.17	0.58	0.12	4.55	2.34	0.011
-2.60	13.76	30.86	0.01	1.96	0.52	0.12	4.32	2.23	0.011
-2.29	13.46	31.09	-0.01	1.86	0.48	0.09	4.21	2.14	0.009
-1.99	13.15	31.30	-0.01	1.72	0.50	0.10	4.05	2.18	0.010
-1.68	12.85	31.48	-0.01	1.61	0.56	0.09	3.91	2.32	0.008
-1.38	12.54	31.66	-0.01	1.50	0.62	0.08	3.78	2.42	0.008
-1.07	12.23	31.82	-0.01	1.38	0.53	0.08	3.62	2.26	0.007
-0.76	11.93	31.95	-0.01	1.29	0.54	0.06	3.51	2.28	0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.46	11.62	32.06	-0.01	1.22	0.50	0.07	3.40	2.19	0.006
-0.15	11.32	32.17	-0.01	1.16	0.51	0.08	3.33	2.20	0.007
0.15	11.01	32.25	-0.02	1.12	0.56	0.05	3.26	2.31	0.005
0.46	10.71	32.32	-0.02	1.08	0.61	0.05	3.20	2.42	0.005
0.76	10.40	32.37	-0.01	1.03	0.60	0.05	3.14	2.39	0.004
1.07	10.09	32.40	-0.01	0.98	0.52	0.02	3.06	2.23	0.002
1.38	9.79	32.40	-0.01	0.97	0.56	0.01	3.04	2.30	0.001
1.68	9.48	32.38	-0.01	0.97	0.56	0.00	3.05	2.31	0.000
1.99	9.18	32.36	0.00	0.95	0.49	0.00	3.02	2.15	0.000
2.29	8.87	32.30	0.00	0.97	0.48	-0.01	3.05	2.13	-0.001
2.60	8.56	32.21	-0.01	1.00	0.47	-0.03	3.09	2.12	-0.003
2.91	8.26	32.08	-0.02	1.01	0.49	-0.04	3.11	2.17	-0.004
3.21	7.95	31.92	-0.01	1.05	0.42	-0.05	3.16	2.00	-0.004
3.52	7.65	31.73	-0.01	1.11	0.41	-0.04	3.25	1.97	-0.004
3.82	7.34	31.50	0.00	1.16	0.57	-0.04	3.32	2.34	-0.003
4.13	7.03	31.21	0.00	1.28	0.56	-0.03	3.49	2.31	-0.003
4.44	6.73	30.86	0.00	1.41	0.47	-0.06	3.67	2.12	-0.006
4.74	6.42	30.44	-0.02	1.58	0.46	-0.06	3.88	2.09	-0.006
5.05	6.12	29.95	-0.01	1.77	0.50	-0.05	4.10	2.19	-0.005
5.35	5.81	29.38	-0.01	1.94	0.60	-0.06	4.30	2.38	-0.006
5.66	5.51	28.73	0.00	2.08	0.48	-0.06	4.45	2.14	-0.006
5.96	5.20	27.98	0.00	2.20	0.48	-0.06	4.58	2.15	-0.006
6.27	4.89	27.15	-0.01	2.38	0.60	-0.06	4.76	2.39	-0.006
6.58	4.59	26.22	-0.02	2.48	0.55	-0.06	4.86	2.30	-0.006
6.88	4.28	25.18	-0.02	2.58	0.52	-0.05	4.96	2.23	-0.005
7.19	3.98	24.02	-0.02	2.55	0.49	-0.06	4.93	2.16	-0.005
7.49	3.67	22.78	-0.03	2.52	0.51	-0.04	4.90	2.21	-0.004
7.80	3.36	21.38	-0.03	2.51	0.55	-0.03	4.89	2.30	-0.003
8.11	3.06	19.90	-0.02	2.38	0.55	-0.02	4.76	2.30	-0.002
8.41	2.75	18.27	-0.03	2.26	0.44	-0.03	4.64	2.05	-0.003
8.72	2.45	16.56	-0.03	2.05	0.44	-0.01	4.42	2.04	-0.001
9.02	2.14	14.71	-0.02	1.78	0.38	-0.01	4.12	1.89	-0.001
9.33	1.84	12.80	-0.03	1.58	0.29	0.00	3.88	1.65	0.000
9.63	1.53	10.85	-0.03	1.39	0.29	-0.01	3.64	1.67	-0.001
9.94	1.22	9.03	-0.02	1.33	0.37	0.01	3.57	1.88	0.001
10.25	0.92	7.31	-0.02	1.85	0.46	0.00	4.19	2.08	0.000
10.55	0.61	4.91	0.06	5.39	0.72	-0.17	7.16	2.63	-0.016
10.86	0.31	0.72	-0.03	1.83	0.16	0.01	4.17	1.25	0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
11.16	0.00	3.51	0.60	2.58	13.25	-4.89	4.96	11.24	-0.466

Table N-105 Grid #2, L4, Plasma-150, Center (42-51)

L4 (150)							U_∞ =	32.40	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.16	22.33	0.20	0.12	0.63	0.13	0.01	2.45	1.11	0.001
-10.86	22.02	3.18	0.05	11.07	2.04	-0.03	10.27	4.41	-0.002
-10.55	21.72	5.65	0.03	5.94	2.88	0.04	7.52	5.24	0.004
-10.25	21.41	7.43	0.02	2.05	1.70	-0.04	4.42	4.03	-0.004
-9.94	21.10	8.91	0.02	1.60	0.75	0.00	3.91	2.66	0.000
-9.63	20.80	10.42	0.03	1.65	0.35	0.01	3.97	1.83	0.001
-9.33	20.49	12.03	0.03	1.73	0.28	0.01	4.06	1.65	0.001
-9.02	20.19	13.60	0.04	1.97	0.30	0.02	4.34	1.68	0.002
-8.72	19.88	15.13	0.04	2.42	0.32	0.03	4.80	1.74	0.002
-8.41	19.58	16.60	0.04	2.75	0.31	0.05	5.12	1.73	0.005
-8.11	19.27	18.05	0.04	3.05	0.29	0.05	5.39	1.65	0.005
-7.80	18.96	19.36	0.04	3.34	0.35	0.07	5.64	1.83	0.007
-7.49	18.66	20.60	0.04	3.61	0.40	0.07	5.87	1.95	0.007
-7.19	18.35	21.76	0.04	3.75	0.39	0.07	5.98	1.92	0.007
-6.88	18.05	22.85	0.04	3.86	0.39	0.09	6.06	1.92	0.009
-6.58	17.74	23.83	0.04	3.87	0.34	0.12	6.07	1.79	0.012
-6.27	17.43	24.73	0.03	3.90	0.33	0.13	6.10	1.78	0.013
-5.96	17.13	25.55	0.02	3.90	0.35	0.14	6.10	1.81	0.013
-5.66	16.82	26.34	0.01	3.73	0.34	0.13	5.96	1.80	0.012
-5.35	16.52	26.99	0.01	3.62	0.42	0.14	5.87	2.00	0.014
-5.05	16.21	27.63	0.02	3.47	0.44	0.14	5.75	2.06	0.014
-4.74	15.91	28.22	0.02	3.28	0.45	0.13	5.59	2.08	0.013
-4.44	15.60	28.72	0.01	3.11	0.45	0.12	5.45	2.07	0.012
-4.13	15.29	29.17	0.00	2.90	0.47	0.15	5.26	2.11	0.014
-3.82	14.99	29.60	0.00	2.64	0.37	0.15	5.02	1.88	0.014
-3.52	14.68	29.97	0.01	2.46	0.40	0.15	4.84	1.96	0.014
-3.21	14.38	30.31	0.01	2.26	0.39	0.13	4.64	1.92	0.013
-2.91	14.07	30.60	0.00	2.09	0.37	0.13	4.46	1.88	0.012
-2.60	13.76	30.87	0.00	1.91	0.40	0.12	4.26	1.95	0.011

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.29	13.46	31.11	0.00	1.77	0.42	0.11	4.11	2.00	0.010
-1.99	13.15	31.32	0.00	1.67	0.42	0.10	3.98	1.99	0.009
-1.68	12.85	31.51	0.00	1.53	0.39	0.09	3.81	1.92	0.008
-1.38	12.54	31.68	0.00	1.44	0.33	0.08	3.70	1.78	0.008
-1.07	12.23	31.83	0.00	1.36	0.36	0.08	3.60	1.85	0.008
-0.76	11.93	31.95	-0.01	1.27	0.38	0.07	3.48	1.90	0.006
-0.46	11.62	32.07	-0.01	1.20	0.39	0.05	3.38	1.92	0.005
-0.15	11.32	32.16	-0.01	1.14	0.40	0.04	3.30	1.96	0.004
0.15	11.01	32.25	0.00	1.07	0.39	0.05	3.19	1.94	0.005
0.46	10.71	32.32	0.00	1.02	0.35	0.04	3.11	1.83	0.004
0.76	10.40	32.36	-0.01	0.97	0.39	0.03	3.04	1.93	0.002
1.07	10.09	32.39	0.00	0.94	0.45	0.02	2.99	2.06	0.002
1.38	9.79	32.40	0.00	0.91	0.38	0.01	2.94	1.91	0.001
1.68	9.48	32.39	0.00	0.90	0.34	0.01	2.92	1.80	0.001
1.99	9.18	32.34	-0.01	0.89	0.32	0.00	2.90	1.76	0.000
2.29	8.87	32.28	0.00	0.89	0.33	-0.01	2.91	1.77	-0.001
2.60	8.56	32.18	0.00	0.89	0.36	-0.02	2.91	1.84	-0.002
2.91	8.26	32.05	-0.01	0.91	0.33	-0.03	2.94	1.77	-0.003
3.21	7.95	31.89	-0.01	0.96	0.43	-0.04	3.02	2.03	-0.003
3.52	7.65	31.68	0.00	1.02	0.35	-0.04	3.11	1.82	-0.003
3.82	7.34	31.44	0.00	1.10	0.29	-0.05	3.24	1.67	-0.005
4.13	7.03	31.13	-0.01	1.22	0.26	-0.05	3.41	1.57	-0.005
4.44	6.73	30.78	-0.01	1.35	0.27	-0.05	3.58	1.62	-0.005
4.74	6.42	30.35	-0.01	1.51	0.28	-0.06	3.79	1.63	-0.005
5.05	6.12	29.85	-0.01	1.68	0.31	-0.07	4.00	1.72	-0.006
5.35	5.81	29.27	-0.01	1.84	0.34	-0.06	4.19	1.80	-0.006
5.66	5.51	28.60	-0.01	2.00	0.36	-0.07	4.37	1.85	-0.006
5.96	5.20	27.86	-0.01	2.09	0.38	-0.05	4.46	1.91	-0.005
6.27	4.89	27.02	-0.02	2.19	0.35	-0.07	4.57	1.83	-0.007
6.58	4.59	26.07	-0.02	2.35	0.36	-0.07	4.73	1.85	-0.006
6.88	4.28	25.03	-0.02	2.43	0.34	-0.06	4.82	1.81	-0.006
7.19	3.98	23.87	-0.03	2.38	0.38	-0.03	4.76	1.91	-0.003
7.49	3.67	22.62	-0.03	2.36	0.42	-0.04	4.74	1.99	-0.004
7.80	3.36	21.23	-0.03	2.37	0.41	-0.03	4.75	1.98	-0.003
8.11	3.06	19.76	-0.03	2.23	0.39	-0.02	4.61	1.93	-0.002
8.41	2.75	18.16	-0.03	2.15	0.44	-0.03	4.52	2.04	-0.003
8.72	2.45	16.45	-0.03	1.98	0.44	-0.02	4.34	2.04	-0.001
9.02	2.14	14.64	-0.04	1.69	0.39	-0.01	4.02	1.93	-0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
9.33	1.84	12.76	-0.03	1.47	0.33	-0.01	3.74	1.77	-0.001
9.63	1.53	10.83	-0.03	1.29	0.34	0.00	3.50	1.81	0.000
9.94	1.22	9.00	-0.03	1.22	0.31	0.00	3.41	1.71	0.000
10.25	0.92	7.34	-0.03	1.56	0.37	0.01	3.85	1.88	0.001
10.55	0.61	5.05	0.09	3.48	0.64	-0.17	5.76	2.47	-0.016
10.86	0.31	0.96	0.04	2.15	0.16	0.00	4.53	1.22	0.000
11.16	0.00	6.19	-1.85	0.45	0.00	0.02	2.07	0.09	0.002

Table N-106 Grid #2, L4, Plasma-150, Right (71-80)

L4 (150)							U_∞ =	32.40	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.16	22.33	0.39	0.13	1.15	0.11	0.04	3.30	1.00	0.004
-10.86	22.02	3.66	-0.05	10.22	0.52	0.03	9.87	2.23	0.003
-10.55	21.72	6.09	0.02	3.97	1.86	0.02	6.15	4.21	0.001
-10.25	21.41	7.65	0.00	1.99	1.22	0.04	4.35	3.41	0.004
-9.94	21.10	9.12	0.02	1.61	0.56	0.03	3.91	2.31	0.003
-9.63	20.80	10.63	0.02	1.72	0.30	0.06	4.05	1.70	0.005
-9.33	20.49	12.23	0.03	1.79	0.25	0.04	4.13	1.55	0.004
-9.02	20.19	13.77	0.03	1.97	0.22	0.04	4.33	1.45	0.004
-8.72	19.88	15.29	0.04	2.42	0.26	0.06	4.81	1.57	0.006
-8.41	19.58	16.71	0.05	2.71	0.28	0.06	5.08	1.64	0.005
-8.11	19.27	18.13	0.05	2.99	0.33	0.08	5.34	1.76	0.007
-7.80	18.96	19.41	0.04	3.29	0.34	0.08	5.60	1.80	0.008
-7.49	18.66	20.64	0.04	3.52	0.38	0.11	5.79	1.89	0.010
-7.19	18.35	21.79	0.04	3.66	0.34	0.11	5.91	1.80	0.011
-6.88	18.05	22.85	0.04	3.82	0.29	0.14	6.03	1.67	0.013
-6.58	17.74	23.82	0.03	3.88	0.35	0.14	6.08	1.83	0.013
-6.27	17.43	24.72	0.03	3.87	0.35	0.15	6.07	1.84	0.014
-5.96	17.13	25.53	0.03	3.84	0.41	0.16	6.05	1.97	0.015
-5.66	16.82	26.30	0.03	3.73	0.41	0.17	5.96	1.99	0.016
-5.35	16.52	26.98	0.02	3.55	0.37	0.15	5.82	1.89	0.015
-5.05	16.21	27.63	0.02	3.34	0.34	0.14	5.64	1.80	0.014
-4.74	15.91	28.18	0.01	3.23	0.40	0.15	5.55	1.96	0.014
-4.44	15.60	28.70	0.01	3.08	0.38	0.16	5.41	1.90	0.016

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-4.13	15.29	29.15	0.01	2.91	0.38	0.16	5.26	1.90	0.015
-3.82	14.99	29.59	0.02	2.64	0.35	0.15	5.02	1.82	0.014
-3.52	14.68	29.97	0.01	2.42	0.33	0.13	4.80	1.77	0.013
-3.21	14.38	30.30	0.01	2.22	0.34	0.13	4.60	1.80	0.012
-2.91	14.07	30.61	0.01	2.03	0.34	0.12	4.40	1.79	0.012
-2.60	13.76	30.87	0.01	1.87	0.36	0.11	4.22	1.85	0.011
-2.29	13.46	31.12	0.01	1.76	0.42	0.11	4.10	2.01	0.010
-1.99	13.15	31.34	0.00	1.59	0.40	0.10	3.89	1.94	0.009
-1.68	12.85	31.53	0.00	1.49	0.36	0.10	3.77	1.85	0.009
-1.38	12.54	31.69	0.00	1.40	0.38	0.08	3.65	1.90	0.008
-1.07	12.23	31.83	0.00	1.35	0.38	0.08	3.58	1.90	0.008
-0.76	11.93	31.97	0.00	1.27	0.41	0.07	3.48	1.99	0.007
-0.46	11.62	32.08	-0.01	1.21	0.43	0.07	3.40	2.02	0.006
-0.15	11.32	32.17	-0.01	1.16	0.37	0.07	3.32	1.87	0.006
0.15	11.01	32.26	-0.01	1.09	0.39	0.05	3.22	1.92	0.004
0.46	10.71	32.33	0.00	1.04	0.40	0.04	3.15	1.94	0.003
0.76	10.40	32.37	0.00	0.98	0.35	0.03	3.06	1.83	0.003
1.07	10.09	32.39	0.00	0.93	0.40	0.01	2.98	1.96	0.001
1.38	9.79	32.40	-0.01	0.91	0.37	0.01	2.95	1.89	0.001
1.68	9.48	32.38	0.00	0.90	0.36	0.01	2.93	1.86	0.001
1.99	9.18	32.34	0.00	0.89	0.36	0.00	2.91	1.86	0.000
2.29	8.87	32.27	0.00	0.89	0.34	-0.02	2.92	1.80	-0.002
2.60	8.56	32.16	0.00	0.90	0.35	-0.02	2.93	1.83	-0.002
2.91	8.26	32.03	0.00	0.92	0.32	-0.03	2.97	1.74	-0.003
3.21	7.95	31.85	0.00	0.97	0.34	-0.03	3.04	1.79	-0.003
3.52	7.65	31.65	-0.01	1.01	0.32	-0.03	3.10	1.74	-0.003
3.82	7.34	31.41	-0.01	1.10	0.32	-0.04	3.24	1.74	-0.003
4.13	7.03	31.10	-0.01	1.23	0.33	-0.05	3.42	1.76	-0.004
4.44	6.73	30.73	-0.01	1.36	0.31	-0.06	3.60	1.72	-0.005
4.74	6.42	30.29	-0.01	1.54	0.32	-0.07	3.83	1.74	-0.007
5.05	6.12	29.78	-0.01	1.72	0.35	-0.06	4.04	1.83	-0.006
5.35	5.81	29.19	-0.01	1.87	0.39	-0.05	4.22	1.92	-0.005
5.66	5.51	28.52	0.00	1.99	0.35	-0.05	4.35	1.83	-0.005
5.96	5.20	27.77	-0.01	2.08	0.34	-0.06	4.45	1.81	-0.006
6.27	4.89	26.93	-0.02	2.19	0.36	-0.05	4.57	1.85	-0.005
6.58	4.59	25.98	-0.02	2.31	0.41	-0.04	4.69	1.97	-0.004
6.88	4.28	24.92	-0.03	2.40	0.40	-0.04	4.78	1.95	-0.004
7.19	3.98	23.77	-0.03	2.39	0.43	-0.03	4.77	2.01	-0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.49	3.67	22.50	-0.03	2.40	0.38	-0.04	4.78	1.89	-0.003
7.80	3.36	21.13	-0.03	2.34	0.40	-0.02	4.72	1.95	-0.002
8.11	3.06	19.65	-0.03	2.15	0.39	-0.01	4.52	1.92	-0.001
8.41	2.75	18.08	-0.04	2.10	0.36	-0.02	4.47	1.85	-0.002
8.72	2.45	16.39	-0.04	1.94	0.36	-0.01	4.30	1.85	-0.001
9.02	2.14	14.59	-0.04	1.67	0.37	-0.01	3.99	1.87	-0.001
9.33	1.84	12.73	-0.03	1.44	0.29	-0.02	3.70	1.66	-0.002
9.63	1.53	10.84	-0.03	1.27	0.30	-0.01	3.47	1.69	-0.001
9.94	1.22	9.03	-0.03	1.17	0.28	0.00	3.34	1.64	0.000
10.25	0.92	7.34	-0.03	1.55	0.29	-0.01	3.84	1.67	-0.001
10.55	0.61	5.12	-0.04	3.54	0.38	0.04	5.80	1.89	0.004
10.86	0.31	0.74	-0.04	1.64	0.12	-0.01	3.96	1.05	-0.001
11.16	0.00	0.54	0.03	0.17	0.01	0.01	1.26	0.27	0.000

Table N-107 Grid #2, L4, Plasma-300, Left (1-10)

L4 (300)							U_∞ =	33.73	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.16	22.33	0.82	-0.08	2.09	2.08	-0.16	4.29	4.27	-0.014
-10.86	22.02	2.55	0.10	3.58	0.86	0.03	5.61	2.75	0.002
-10.55	21.72	5.16	0.05	2.71	1.01	0.05	4.88	2.98	0.004
-10.25	21.41	7.26	0.05	1.94	0.86	0.02	4.13	2.76	0.002
-9.94	21.10	9.20	0.05	1.69	0.80	0.01	3.85	2.66	0.001
-9.63	20.80	11.07	0.05	1.88	0.84	0.01	4.06	2.71	0.001
-9.33	20.49	12.93	0.05	1.86	0.82	0.02	4.05	2.69	0.002
-9.02	20.19	14.65	0.07	2.06	0.73	0.00	4.25	2.54	0.000
-8.72	19.88	16.37	0.06	2.25	0.78	0.04	4.45	2.62	0.004
-8.41	19.58	17.92	0.07	2.49	0.99	0.05	4.68	2.94	0.004
-8.11	19.27	19.42	0.06	2.70	1.09	0.08	4.87	3.09	0.007
-7.80	18.96	20.81	0.06	2.87	1.09	0.06	5.03	3.09	0.005
-7.49	18.66	22.10	0.05	2.96	1.25	0.02	5.10	3.32	0.002
-7.19	18.35	23.28	0.06	3.09	1.47	0.06	5.21	3.60	0.005
-6.88	18.05	24.41	0.05	3.14	1.54	0.11	5.25	3.68	0.010
-6.58	17.74	25.42	0.07	3.22	1.67	0.08	5.32	3.83	0.007
-6.27	17.43	26.35	0.07	3.12	1.84	0.11	5.24	4.02	0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-5.96	17.13	27.17	0.05	3.14	1.85	0.15	5.25	4.04	0.013
-5.66	16.82	27.96	0.04	2.95	1.57	0.07	5.09	3.72	0.006
-5.35	16.52	28.65	0.04	2.88	1.78	0.06	5.03	3.96	0.006
-5.05	16.21	29.30	0.06	2.75	1.85	0.02	4.92	4.03	0.002
-4.74	15.91	29.85	0.03	2.68	2.02	0.04	4.85	4.21	0.004
-4.44	15.60	30.36	0.02	2.50	1.81	0.04	4.69	3.99	0.003
-4.13	15.29	30.80	0.02	2.37	1.82	0.05	4.57	4.00	0.004
-3.82	14.99	31.19	0.02	2.17	1.68	0.11	4.37	3.84	0.010
-3.52	14.68	31.53	0.02	2.00	1.54	0.09	4.20	3.68	0.008
-3.21	14.38	31.85	0.03	1.92	1.68	0.05	4.10	3.84	0.005
-2.91	14.07	32.13	0.02	1.81	1.60	0.09	3.99	3.75	0.007
-2.60	13.76	32.38	0.01	1.77	1.50	0.09	3.95	3.63	0.008
-2.29	13.46	32.60	0.01	1.69	1.51	0.07	3.86	3.65	0.006
-1.99	13.15	32.80	0.02	1.58	1.48	0.06	3.73	3.60	0.006
-1.68	12.85	32.97	0.02	1.48	1.43	0.08	3.61	3.55	0.007
-1.38	12.54	33.13	0.01	1.41	1.24	0.07	3.52	3.30	0.006
-1.07	12.23	33.26	0.01	1.34	1.33	0.04	3.43	3.42	0.004
-0.76	11.93	33.39	0.01	1.24	1.45	0.04	3.30	3.57	0.004
-0.46	11.62	33.49	0.02	1.17	1.28	0.05	3.21	3.36	0.004
-0.15	11.32	33.56	0.01	1.11	1.30	0.01	3.13	3.38	0.001
0.15	11.01	33.62	0.01	1.09	1.38	0.02	3.10	3.49	0.002
0.46	10.71	33.68	0.02	1.04	1.30	0.02	3.03	3.37	0.002
0.76	10.40	33.71	0.01	1.02	1.44	0.01	2.99	3.55	0.001
1.07	10.09	33.73	0.00	1.02	1.51	0.02	3.00	3.64	0.002
1.38	9.79	33.71	0.00	1.01	1.46	0.00	2.98	3.59	0.000
1.68	9.48	33.68	0.00	1.04	1.56	-0.04	3.02	3.70	-0.003
1.99	9.18	33.63	0.00	1.07	1.47	-0.05	3.07	3.59	-0.004
2.29	8.87	33.53	0.00	1.11	1.61	-0.01	3.12	3.76	-0.001
2.60	8.56	33.42	0.00	1.15	1.70	0.00	3.19	3.87	0.000
2.91	8.26	33.29	0.00	1.25	1.83	-0.01	3.31	4.01	-0.001
3.21	7.95	33.11	-0.01	1.35	2.00	0.02	3.45	4.19	0.001
3.52	7.65	32.87	0.01	1.44	2.05	0.00	3.55	4.24	0.000
3.82	7.34	32.57	0.01	1.60	2.33	-0.01	3.75	4.53	-0.001
4.13	7.03	32.25	0.00	1.68	2.49	-0.04	3.85	4.68	-0.003
4.44	6.73	31.90	-0.01	1.70	2.54	-0.09	3.86	4.72	-0.008
4.74	6.42	31.46	0.00	1.74	2.53	-0.10	3.91	4.72	-0.009
5.05	6.12	30.97	-0.01	1.95	2.62	-0.05	4.14	4.80	-0.005
5.35	5.81	30.38	-0.03	2.27	3.03	0.00	4.47	5.17	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
5.66	5.51	29.73	-0.02	2.45	3.20	0.02	4.64	5.30	0.002
5.96	5.20	28.95	-0.03	2.65	3.34	0.05	4.83	5.42	0.005
6.27	4.89	28.12	-0.06	2.74	3.32	-0.07	4.90	5.40	-0.007
6.58	4.59	27.17	-0.04	2.89	3.45	-0.16	5.04	5.51	-0.014
6.88	4.28	26.09	-0.01	3.00	3.45	-0.10	5.13	5.51	-0.009
7.19	3.98	24.92	-0.02	2.91	3.25	-0.08	5.06	5.34	-0.007
7.49	3.67	23.65	-0.03	2.84	3.08	0.02	5.00	5.20	0.001
7.80	3.36	22.28	-0.02	2.85	2.89	0.04	5.01	5.04	0.004
8.11	3.06	20.78	-0.05	2.73	2.59	0.01	4.90	4.77	0.000
8.41	2.75	19.18	-0.04	2.55	2.33	-0.07	4.73	4.52	-0.006
8.72	2.45	17.49	-0.03	2.42	2.11	-0.01	4.61	4.31	-0.001
9.02	2.14	15.65	-0.05	2.37	2.05	-0.03	4.57	4.24	-0.003
9.33	1.84	13.72	-0.05	2.22	1.95	-0.06	4.41	4.14	-0.005
9.63	1.53	11.64	-0.04	2.19	1.85	0.02	4.38	4.04	0.001
9.94	1.22	9.51	-0.03	1.96	1.73	0.00	4.16	3.90	0.000
10.25	0.92	7.33	-0.04	2.05	1.51	0.01	4.25	3.64	0.001
10.55	0.61	4.95	-0.03	2.46	1.18	0.01	4.65	3.22	0.001
10.86	0.31	1.75	0.02	2.14	0.38	-0.04	4.34	1.83	-0.003
11.16	0.00	4.16	0.03	1.28	0.05	-0.02	3.35	0.63	-0.002

Table N-108 Grid #2, L4, Plasma-300, Center (42-51)

L4 (300)							$U_\infty =$	33.76	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.16	22.33	0.58	0.06	0.68	0.10	0.00	2.43	0.92	0.000
-10.86	22.02	3.39	0.02	2.58	0.49	0.02	4.76	2.07	0.002
-10.55	21.72	5.70	0.03	1.93	0.54	0.00	4.11	2.18	0.000
-10.25	21.41	7.67	0.04	1.53	0.59	0.02	3.67	2.28	0.002
-9.94	21.10	9.56	0.04	1.37	0.55	0.01	3.46	2.19	0.001
-9.63	20.80	11.38	0.05	1.55	0.52	0.03	3.69	2.13	0.003
-9.33	20.49	13.20	0.05	1.57	0.44	0.01	3.71	1.97	0.001
-9.02	20.19	14.86	0.05	1.80	0.48	0.00	3.97	2.05	0.000
-8.72	19.88	16.53	0.06	1.93	0.48	0.02	4.12	2.05	0.002
-8.41	19.58	18.06	0.06	2.13	0.49	0.04	4.32	2.07	0.004
-8.11	19.27	19.53	0.06	2.39	0.65	0.07	4.58	2.40	0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-7.80	18.96	20.87	0.07	2.57	0.73	0.07	4.75	2.53	0.006
-7.49	18.66	22.15	0.07	2.60	0.67	0.04	4.77	2.42	0.004
-7.19	18.35	23.31	0.07	2.75	0.87	0.07	4.91	2.76	0.006
-6.88	18.05	24.42	0.07	2.82	0.92	0.08	4.98	2.85	0.007
-6.58	17.74	25.40	0.07	2.86	1.02	0.09	5.01	2.98	0.008
-6.27	17.43	26.34	0.07	2.84	1.05	0.05	5.00	3.03	0.005
-5.96	17.13	27.17	0.06	2.74	1.13	0.03	4.90	3.15	0.003
-5.66	16.82	27.93	0.05	2.71	1.13	0.07	4.87	3.14	0.006
-5.35	16.52	28.61	0.06	2.69	1.31	0.06	4.86	3.39	0.005
-5.05	16.21	29.27	0.05	2.54	1.35	0.09	4.72	3.44	0.008
-4.74	15.91	29.83	0.05	2.40	1.30	0.06	4.59	3.37	0.005
-4.44	15.60	30.33	0.04	2.19	1.20	0.06	4.38	3.25	0.006
-4.13	15.29	30.80	0.03	2.02	1.03	0.06	4.20	3.00	0.006
-3.82	14.99	31.21	0.04	1.88	1.02	0.08	4.06	2.99	0.007
-3.52	14.68	31.54	0.03	1.79	1.18	0.07	3.97	3.21	0.006
-3.21	14.38	31.86	0.03	1.70	1.01	0.07	3.86	2.98	0.006
-2.91	14.07	32.16	0.03	1.61	1.00	0.05	3.76	2.97	0.004
-2.60	13.76	32.42	0.03	1.56	1.04	0.10	3.70	3.02	0.009
-2.29	13.46	32.65	0.03	1.49	1.08	0.08	3.61	3.08	0.007
-1.99	13.15	32.85	0.02	1.42	1.09	0.08	3.53	3.10	0.007
-1.68	12.85	33.03	0.02	1.31	1.01	0.05	3.39	2.98	0.004
-1.38	12.54	33.19	0.02	1.26	0.99	0.06	3.33	2.95	0.006
-1.07	12.23	33.31	0.00	1.19	0.94	0.07	3.23	2.87	0.006
-0.76	11.93	33.44	0.01	1.09	0.89	0.05	3.09	2.79	0.004
-0.46	11.62	33.54	0.01	1.05	0.97	0.04	3.03	2.92	0.004
-0.15	11.32	33.61	0.00	0.97	0.90	0.04	2.92	2.80	0.003
0.15	11.01	33.68	0.00	0.94	0.85	0.03	2.88	2.74	0.003
0.46	10.71	33.73	0.00	0.90	0.90	0.02	2.81	2.81	0.002
0.76	10.40	33.75	0.00	0.88	0.90	-0.01	2.79	2.80	-0.001
1.07	10.09	33.76	0.01	0.87	0.95	0.01	2.76	2.88	0.001
1.38	9.79	33.75	0.00	0.86	0.94	0.04	2.75	2.87	0.003
1.68	9.48	33.71	0.00	0.87	0.96	0.00	2.76	2.90	0.000
1.99	9.18	33.65	0.01	0.90	1.04	-0.01	2.81	3.02	-0.001
2.29	8.87	33.56	0.00	0.95	1.05	-0.03	2.89	3.04	-0.003
2.60	8.56	33.44	0.00	1.03	1.26	-0.02	3.00	3.32	-0.001
2.91	8.26	33.27	0.01	1.12	1.30	-0.04	3.13	3.38	-0.003
3.21	7.95	33.07	0.01	1.19	1.48	-0.01	3.23	3.60	0.000
3.52	7.65	32.83	0.01	1.27	1.83	-0.01	3.34	4.01	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.82	7.34	32.54	0.02	1.36	1.88	-0.03	3.46	4.06	-0.002
4.13	7.03	32.21	0.01	1.41	1.79	-0.02	3.52	3.97	-0.002
4.44	6.73	31.82	0.01	1.50	2.04	-0.02	3.63	4.23	-0.001
4.74	6.42	31.37	-0.01	1.65	2.10	0.00	3.80	4.29	0.000
5.05	6.12	30.87	-0.01	1.80	2.16	-0.04	3.97	4.36	-0.003
5.35	5.81	30.27	-0.01	2.07	2.46	-0.07	4.26	4.64	-0.006
5.66	5.51	29.57	-0.02	2.26	2.77	-0.09	4.45	4.93	-0.008
5.96	5.20	28.79	-0.01	2.27	2.78	-0.05	4.46	4.94	-0.005
6.27	4.89	27.94	-0.01	2.26	2.58	0.03	4.45	4.76	0.003
6.58	4.59	26.99	-0.02	2.31	2.30	-0.04	4.51	4.50	-0.004
6.88	4.28	25.92	-0.03	2.40	2.48	-0.02	4.59	4.66	-0.002
7.19	3.98	24.72	-0.03	2.45	2.32	-0.02	4.63	4.51	-0.002
7.49	3.67	23.49	-0.04	2.43	2.43	0.01	4.62	4.61	0.001
7.80	3.36	22.12	-0.03	2.45	2.11	-0.01	4.64	4.30	-0.001
8.11	3.06	20.64	-0.03	2.33	1.74	-0.03	4.52	3.90	-0.003
8.41	2.75	19.05	-0.04	2.27	1.56	-0.01	4.46	3.70	-0.001
8.72	2.45	17.36	-0.04	2.14	1.59	-0.06	4.34	3.74	-0.006
9.02	2.14	15.54	-0.05	2.01	1.45	-0.03	4.20	3.57	-0.003
9.33	1.84	13.63	-0.05	1.90	1.27	0.00	4.08	3.34	0.000
9.63	1.53	11.63	-0.04	1.78	1.25	0.01	3.95	3.31	0.001
9.94	1.22	9.56	-0.05	1.64	1.06	-0.02	3.79	3.06	-0.001
10.25	0.92	7.41	-0.04	1.66	0.94	-0.01	3.82	2.87	-0.001
10.55	0.61	5.01	-0.02	1.92	0.69	-0.02	4.10	2.46	-0.002
10.86	0.31	1.74	0.06	1.69	0.21	0.00	3.86	1.36	0.000
11.16	0.00	3.18	0.00	0.45	0.03	-0.10	1.99	0.49	-0.009

Table N-109 Grid #2, L4, Plasma-300, Right (71-80)

L4 (300)							U_∞ =	33.80	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.16	22.33	0.75	0.15	0.92	0.12	0.00	2.84	1.02	0.000
-10.86	22.02	3.78	0.00	2.83	0.34	0.03	4.97	1.73	0.003
-10.55	21.72	6.10	0.02	1.80	0.38	0.05	3.97	1.82	0.004
-10.25	21.41	8.01	0.03	1.48	0.48	0.04	3.60	2.04	0.004
-9.94	21.10	9.87	0.04	1.39	0.52	0.04	3.49	2.14	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-9.63	20.80	11.64	0.05	1.53	0.57	0.06	3.66	2.24	0.005
-9.33	20.49	13.41	0.06	1.52	0.48	0.04	3.65	2.06	0.003
-9.02	20.19	15.04	0.06	1.84	0.51	0.06	4.02	2.10	0.005
-8.72	19.88	16.68	0.07	1.96	0.56	0.06	4.15	2.22	0.005
-8.41	19.58	18.17	0.07	2.13	0.65	0.05	4.31	2.38	0.004
-8.11	19.27	19.61	0.06	2.44	0.63	0.08	4.63	2.36	0.007
-7.80	18.96	20.93	0.05	2.67	0.91	0.09	4.83	2.81	0.008
-7.49	18.66	22.20	0.06	2.69	0.94	0.09	4.85	2.87	0.008
-7.19	18.35	23.33	0.06	2.78	0.97	0.09	4.93	2.92	0.008
-6.88	18.05	24.43	0.07	2.89	1.20	0.08	5.03	3.24	0.007
-6.58	17.74	25.42	0.06	2.91	1.29	0.10	5.05	3.36	0.009
-6.27	17.43	26.34	0.06	2.82	1.19	0.07	4.97	3.22	0.006
-5.96	17.13	27.16	0.05	2.74	1.37	0.10	4.90	3.46	0.009
-5.66	16.82	27.93	0.05	2.75	1.32	0.10	4.90	3.40	0.009
-5.35	16.52	28.63	0.05	2.70	1.27	0.09	4.86	3.34	0.008
-5.05	16.21	29.27	0.05	2.62	1.53	0.11	4.79	3.66	0.010
-4.74	15.91	29.84	0.05	2.47	1.48	0.14	4.65	3.60	0.013
-4.44	15.60	30.36	0.06	2.29	1.50	0.13	4.48	3.63	0.012
-4.13	15.29	30.81	0.04	2.15	1.50	0.10	4.34	3.62	0.009
-3.82	14.99	31.23	0.03	2.00	1.46	0.10	4.18	3.58	0.009
-3.52	14.68	31.58	0.04	1.87	1.44	0.09	4.05	3.55	0.008
-3.21	14.38	31.91	0.02	1.76	1.41	0.12	3.92	3.51	0.010
-2.91	14.07	32.21	0.03	1.68	1.53	0.08	3.84	3.66	0.007
-2.60	13.76	32.48	0.03	1.60	1.39	0.07	3.74	3.49	0.006
-2.29	13.46	32.69	0.03	1.53	1.21	0.06	3.66	3.25	0.005
-1.99	13.15	32.90	0.03	1.44	1.17	0.04	3.55	3.20	0.004
-1.68	12.85	33.09	0.03	1.36	1.25	0.03	3.46	3.31	0.003
-1.38	12.54	33.26	0.03	1.29	1.25	0.01	3.36	3.30	0.000
-1.07	12.23	33.39	0.02	1.21	1.16	0.06	3.25	3.18	0.005
-0.76	11.93	33.50	0.03	1.13	1.15	0.05	3.14	3.17	0.005
-0.46	11.62	33.60	0.02	1.07	1.15	0.03	3.07	3.18	0.003
-0.15	11.32	33.67	0.02	1.03	1.07	0.03	3.00	3.06	0.002
0.15	11.01	33.74	0.02	1.00	1.19	0.02	2.96	3.23	0.002
0.46	10.71	33.78	0.02	0.94	1.22	0.04	2.86	3.27	0.003
0.76	10.40	33.80	0.03	0.92	1.18	0.03	2.83	3.22	0.003
1.07	10.09	33.80	0.02	0.93	1.11	0.01	2.85	3.12	0.001
1.38	9.79	33.79	0.02	0.92	1.23	0.00	2.84	3.28	0.000
1.68	9.48	33.75	0.02	0.92	1.24	-0.01	2.84	3.29	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
1.99	9.18	33.68	0.02	0.97	1.18	-0.02	2.92	3.21	-0.002
2.29	8.87	33.58	0.02	1.04	1.43	-0.03	3.02	3.54	-0.002
2.60	8.56	33.45	0.03	1.13	1.68	-0.03	3.14	3.84	-0.003
2.91	8.26	33.28	0.02	1.23	1.79	0.00	3.28	3.95	0.000
3.21	7.95	33.09	-0.01	1.29	1.75	-0.05	3.37	3.92	-0.004
3.52	7.65	32.84	0.00	1.40	2.01	-0.04	3.50	4.20	-0.003
3.82	7.34	32.54	0.01	1.48	2.17	-0.02	3.60	4.36	-0.001
4.13	7.03	32.21	0.02	1.55	2.27	-0.01	3.68	4.45	-0.001
4.44	6.73	31.80	0.01	1.60	2.38	-0.06	3.75	4.56	-0.005
4.74	6.42	31.35	0.01	1.80	2.34	-0.04	3.96	4.52	-0.004
5.05	6.12	30.82	-0.01	2.03	2.55	-0.01	4.22	4.73	-0.001
5.35	5.81	30.21	-0.02	2.36	3.11	0.04	4.54	5.22	0.003
5.66	5.51	29.52	-0.02	2.53	3.45	-0.09	4.71	5.49	-0.008
5.96	5.20	28.71	-0.01	2.64	3.62	-0.10	4.81	5.63	-0.009
6.27	4.89	27.84	0.01	2.60	3.48	-0.03	4.77	5.52	-0.003
6.58	4.59	26.89	0.00	2.64	2.86	-0.01	4.80	5.00	-0.001
6.88	4.28	25.84	-0.02	2.74	2.76	0.04	4.90	4.92	0.004
7.19	3.98	24.68	-0.03	2.75	2.92	0.02	4.91	5.05	0.001
7.49	3.67	23.40	-0.02	2.65	2.63	0.00	4.81	4.79	0.000
7.80	3.36	22.00	-0.04	2.70	2.46	-0.05	4.86	4.64	-0.004
8.11	3.06	20.53	-0.04	2.55	2.14	-0.04	4.72	4.33	-0.004
8.41	2.75	18.96	-0.04	2.37	1.92	-0.02	4.55	4.10	-0.002
8.72	2.45	17.30	-0.04	2.24	1.62	0.00	4.43	3.77	0.000
9.02	2.14	15.50	-0.04	2.11	1.46	-0.03	4.29	3.58	-0.002
9.33	1.84	13.65	-0.04	1.99	1.41	-0.04	4.18	3.52	-0.003
9.63	1.53	11.63	-0.04	1.92	1.13	-0.03	4.10	3.15	-0.003
9.94	1.22	9.55	-0.04	1.69	1.00	-0.02	3.84	2.96	-0.002
10.25	0.92	7.45	-0.04	1.72	0.93	0.01	3.88	2.85	0.001
10.55	0.61	5.14	-0.04	2.00	0.54	0.00	4.19	2.17	0.000
10.86	0.31	1.66	0.02	1.98	0.12	0.01	4.16	1.01	0.001
11.16	0.00	1.14	-0.01	1.42	0.01	0.01	3.53	0.21	0.001

Table N-110 Grid #2, L5, Plasma-Off, Left (1-10)

L5 (Off)							$U_\infty =$	31.13	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.47	22.95	0.88	0.09	1.58	1.30	-0.11	4.04	3.67	-0.011
-11.16	22.63	1.73	0.06	0.39	0.22	-0.02	2.00	1.49	-0.002
-10.84	22.32	3.17	0.00	0.62	0.21	-0.02	2.52	1.48	-0.002
-10.53	22.00	4.74	0.01	0.72	0.17	-0.01	2.72	1.31	-0.001
-10.22	21.69	6.29	0.02	1.03	0.21	-0.01	3.26	1.48	-0.001
-9.90	21.38	7.81	0.02	1.25	0.25	-0.01	3.59	1.59	-0.001
-9.59	21.06	9.32	0.02	1.41	0.22	0.01	3.81	1.50	0.001
-9.27	20.75	10.70	0.02	1.78	0.23	0.01	4.28	1.54	0.001
-8.96	20.43	12.12	0.02	2.18	0.26	0.01	4.75	1.63	0.001
-8.64	20.12	13.47	0.02	2.47	0.27	0.04	5.05	1.68	0.005
-8.33	19.80	14.80	0.02	2.82	0.25	0.05	5.40	1.62	0.005
-8.02	19.49	15.99	0.02	3.22	0.25	0.05	5.76	1.62	0.005
-7.70	19.17	17.22	0.01	3.58	0.29	0.05	6.08	1.72	0.005
-7.39	18.86	18.35	0.00	3.87	0.27	0.07	6.32	1.67	0.008
-7.07	18.55	19.47	0.01	4.05	0.28	0.08	6.46	1.69	0.009
-6.76	18.23	20.47	0.00	4.19	0.28	0.10	6.58	1.69	0.011
-6.44	17.92	21.45	-0.01	4.36	0.28	0.13	6.71	1.69	0.013
-6.13	17.60	22.34	-0.01	4.48	0.30	0.15	6.80	1.76	0.016
-5.82	17.29	23.21	-0.02	4.59	0.34	0.16	6.88	1.88	0.017
-5.50	16.97	23.98	-0.02	4.60	0.30	0.17	6.89	1.75	0.018
-5.19	16.66	24.72	-0.03	4.44	0.25	0.17	6.77	1.61	0.017
-4.87	16.35	25.35	-0.03	4.40	0.31	0.18	6.74	1.80	0.018
-4.56	16.03	25.97	-0.03	4.25	0.33	0.19	6.62	1.84	0.020
-4.24	15.72	26.52	-0.03	4.12	0.33	0.20	6.52	1.83	0.021
-3.93	15.40	27.05	-0.04	3.91	0.37	0.18	6.35	1.94	0.019
-3.61	15.09	27.53	-0.04	3.60	0.35	0.18	6.09	1.90	0.018
-3.30	14.77	27.98	-0.04	3.24	0.29	0.17	5.79	1.74	0.018
-2.99	14.46	28.37	-0.05	2.98	0.35	0.16	5.54	1.90	0.017
-2.67	14.15	28.74	-0.06	2.78	0.31	0.16	5.35	1.79	0.016
-2.36	13.83	29.06	-0.05	2.61	0.28	0.14	5.18	1.71	0.015
-2.04	13.52	29.36	-0.05	2.41	0.29	0.14	4.98	1.72	0.014
-1.73	13.20	29.64	-0.06	2.19	0.27	0.13	4.75	1.68	0.013
-1.41	12.89	29.90	-0.05	1.97	0.27	0.12	4.51	1.68	0.012
-1.10	12.57	30.12	-0.06	1.82	0.30	0.11	4.33	1.76	0.011
-0.79	12.26	30.32	-0.06	1.68	0.27	0.10	4.16	1.67	0.011

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.47	11.94	30.50	-0.06	1.53	0.26	0.10	3.97	1.65	0.010
-0.16	11.63	30.68	-0.05	1.31	0.30	0.07	3.68	1.76	0.007
0.16	11.32	30.81	-0.06	1.21	0.30	0.06	3.53	1.76	0.006
0.47	11.00	30.93	-0.06	1.12	0.29	0.04	3.39	1.74	0.005
0.79	10.69	31.01	-0.05	1.06	0.31	0.04	3.31	1.78	0.004
1.10	10.37	31.07	-0.05	1.00	0.25	0.03	3.21	1.60	0.003
1.41	10.06	31.12	-0.05	0.94	0.25	0.02	3.11	1.59	0.002
1.73	9.74	31.13	-0.05	0.92	0.25	0.01	3.08	1.60	0.001
2.04	9.43	31.12	-0.05	0.92	0.25	-0.01	3.08	1.62	-0.001
2.36	9.12	31.09	-0.05	0.91	0.27	-0.02	3.06	1.67	-0.002
2.67	8.80	31.01	-0.05	0.93	0.26	-0.02	3.09	1.64	-0.002
2.99	8.49	30.90	-0.05	0.99	0.25	-0.04	3.19	1.60	-0.004
3.30	8.17	30.74	-0.04	1.07	0.22	-0.04	3.33	1.51	-0.004
3.61	7.86	30.54	-0.04	1.17	0.23	-0.05	3.47	1.52	-0.005
3.93	7.54	30.30	-0.05	1.29	0.24	-0.05	3.65	1.56	-0.005
4.24	7.23	29.99	-0.05	1.47	0.24	-0.06	3.90	1.56	-0.006
4.56	6.92	29.61	-0.04	1.66	0.24	-0.07	4.14	1.58	-0.007
4.87	6.60	29.16	-0.04	1.82	0.25	-0.07	4.33	1.61	-0.007
5.19	6.29	28.63	-0.04	2.00	0.27	-0.07	4.55	1.66	-0.007
5.50	5.97	28.01	-0.04	2.19	0.24	-0.07	4.75	1.59	-0.007
5.82	5.66	27.30	-0.04	2.44	0.26	-0.08	5.01	1.63	-0.009
6.13	5.34	26.46	-0.04	2.68	0.27	-0.08	5.26	1.68	-0.008
6.44	5.03	25.53	-0.04	2.88	0.24	-0.07	5.45	1.58	-0.007
6.76	4.72	24.50	-0.04	2.97	0.23	-0.07	5.54	1.54	-0.007
7.07	4.40	23.35	-0.04	3.01	0.21	-0.06	5.58	1.46	-0.007
7.39	4.09	22.08	-0.04	3.02	0.20	-0.05	5.58	1.45	-0.006
7.70	3.77	20.72	-0.04	2.94	0.20	-0.04	5.51	1.43	-0.004
8.02	3.46	19.24	-0.04	2.78	0.24	-0.04	5.35	1.57	-0.005
8.33	3.14	17.69	-0.04	2.59	0.23	-0.04	5.16	1.55	-0.004
8.64	2.83	16.02	-0.04	2.39	0.23	-0.03	4.97	1.53	-0.003
8.96	2.51	14.33	-0.04	2.07	0.20	0.00	4.62	1.44	-0.001
9.27	2.20	12.50	-0.04	1.84	0.24	-0.01	4.36	1.56	-0.001
9.59	1.89	10.65	-0.03	1.54	0.24	-0.01	3.99	1.58	-0.001
9.90	1.57	8.73	-0.03	1.34	0.23	0.00	3.72	1.55	0.000
10.22	1.26	6.77	-0.03	1.10	0.30	0.01	3.37	1.75	0.001
10.53	0.94	4.74	-0.02	0.92	0.22	0.00	3.08	1.52	0.000
10.84	0.63	2.82	-0.01	0.75	0.15	0.00	2.79	1.23	0.000
11.16	0.31	0.78	-0.20	0.84	0.15	0.02	2.94	1.25	0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
11.47	0.00	17.18	0.00	0.02	0.00	0.00	0.47	0.02	0.000

Table N-111 Grid #2, L5, Plasma-Off, Center (46-55)

L5 (Off)							U_∞ =	31.10	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.47	22.95	0.97	-0.01	1.59	0.63	-0.02	4.06	2.56	-0.002
-11.16	22.63	2.20	0.00	1.39	0.30	0.02	3.79	1.77	0.002
-10.84	22.32	3.60	0.00	0.55	0.15	0.01	2.38	1.26	0.001
-10.53	22.00	5.12	0.00	0.61	0.13	0.01	2.51	1.16	0.001
-10.22	21.69	6.61	-0.01	0.96	0.15	0.03	3.16	1.23	0.004
-9.90	21.38	8.10	0.00	1.12	0.16	0.02	3.41	1.29	0.002
-9.59	21.06	9.53	0.01	1.22	0.17	0.02	3.56	1.34	0.002
-9.27	20.75	10.90	0.00	1.67	0.19	0.03	4.15	1.40	0.003
-8.96	20.43	12.29	0.01	1.95	0.18	0.04	4.49	1.37	0.004
-8.64	20.12	13.59	0.01	2.26	0.18	0.05	4.83	1.36	0.005
-8.33	19.80	14.90	0.01	2.73	0.16	0.06	5.32	1.30	0.006
-8.02	19.49	16.08	0.00	3.13	0.21	0.07	5.69	1.46	0.007
-7.70	19.17	17.26	0.00	3.34	0.21	0.07	5.87	1.46	0.008
-7.39	18.86	18.39	0.00	3.64	0.20	0.09	6.14	1.43	0.009
-7.07	18.55	19.47	0.00	3.88	0.19	0.10	6.33	1.40	0.010
-6.76	18.23	20.45	-0.01	4.10	0.20	0.12	6.51	1.45	0.013
-6.44	17.92	21.40	-0.01	4.26	0.22	0.13	6.64	1.49	0.013
-6.13	17.60	22.30	-0.01	4.33	0.21	0.15	6.69	1.48	0.015
-5.82	17.29	23.13	-0.02	4.26	0.20	0.15	6.63	1.44	0.015
-5.50	16.97	23.92	-0.03	4.13	0.22	0.16	6.54	1.51	0.016
-5.19	16.66	24.65	-0.03	4.07	0.20	0.16	6.49	1.43	0.017
-4.87	16.35	25.30	-0.03	4.02	0.22	0.17	6.44	1.52	0.018
-4.56	16.03	25.91	-0.03	3.81	0.22	0.17	6.28	1.52	0.018
-4.24	15.72	26.49	-0.03	3.62	0.21	0.16	6.12	1.46	0.017
-3.93	15.40	27.02	-0.04	3.43	0.25	0.16	5.96	1.61	0.016
-3.61	15.09	27.50	-0.04	3.27	0.25	0.16	5.81	1.62	0.017
-3.30	14.77	27.94	-0.04	3.04	0.22	0.16	5.60	1.52	0.016
-2.99	14.46	28.34	-0.05	2.76	0.23	0.14	5.34	1.54	0.015
-2.67	14.15	28.70	-0.05	2.59	0.25	0.15	5.17	1.61	0.015

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.36	13.83	29.03	-0.05	2.43	0.22	0.14	5.01	1.52	0.014
-2.04	13.52	29.33	-0.05	2.25	0.24	0.12	4.82	1.58	0.012
-1.73	13.20	29.61	-0.05	2.07	0.23	0.12	4.63	1.54	0.012
-1.41	12.89	29.86	-0.06	1.91	0.21	0.11	4.44	1.48	0.012
-1.10	12.57	30.09	-0.05	1.73	0.22	0.10	4.23	1.51	0.011
-0.79	12.26	30.30	-0.05	1.56	0.23	0.09	4.02	1.53	0.009
-0.47	11.94	30.48	-0.05	1.41	0.23	0.08	3.82	1.55	0.008
-0.16	11.63	30.63	-0.05	1.31	0.25	0.07	3.69	1.59	0.007
0.16	11.32	30.77	-0.05	1.20	0.23	0.06	3.53	1.53	0.006
0.47	11.00	30.89	-0.05	1.07	0.20	0.04	3.33	1.44	0.004
0.79	10.69	30.98	-0.05	0.98	0.21	0.03	3.18	1.47	0.003
1.10	10.37	31.04	-0.04	0.95	0.21	0.02	3.14	1.47	0.002
1.41	10.06	31.08	-0.05	0.91	0.20	0.01	3.07	1.43	0.001
1.73	9.74	31.10	-0.05	0.90	0.23	0.00	3.05	1.53	0.000
2.04	9.43	31.08	-0.05	0.89	0.22	-0.01	3.03	1.51	-0.001
2.36	9.12	31.04	-0.06	0.88	0.21	-0.01	3.01	1.48	-0.001
2.67	8.80	30.97	-0.05	0.88	0.17	-0.02	3.02	1.34	-0.002
2.99	8.49	30.86	-0.05	0.92	0.16	-0.02	3.08	1.29	-0.002
3.30	8.17	30.69	-0.05	1.02	0.19	-0.03	3.26	1.40	-0.003
3.61	7.86	30.49	-0.05	1.12	0.21	-0.04	3.41	1.47	-0.004
3.93	7.54	30.24	-0.05	1.23	0.18	-0.04	3.56	1.35	-0.004
4.24	7.23	29.92	-0.05	1.40	0.18	-0.04	3.80	1.38	-0.005
4.56	6.92	29.52	-0.04	1.62	0.21	-0.05	4.09	1.47	-0.005
4.87	6.60	29.06	-0.04	1.82	0.21	-0.06	4.34	1.46	-0.006
5.19	6.29	28.53	-0.04	2.02	0.18	-0.06	4.57	1.38	-0.006
5.50	5.97	27.91	-0.04	2.22	0.18	-0.06	4.79	1.35	-0.006
5.82	5.66	27.19	-0.04	2.39	0.19	-0.06	4.97	1.40	-0.006
6.13	5.34	26.37	-0.04	2.58	0.17	-0.07	5.17	1.31	-0.007
6.44	5.03	25.44	-0.04	2.77	0.17	-0.06	5.35	1.34	-0.007
6.76	4.72	24.40	-0.04	2.85	0.19	-0.05	5.43	1.41	-0.006
7.07	4.40	23.27	-0.04	2.92	0.21	-0.05	5.50	1.47	-0.005
7.39	4.09	22.01	-0.04	2.96	0.18	-0.06	5.53	1.37	-0.006
7.70	3.77	20.65	-0.04	2.86	0.18	-0.05	5.44	1.37	-0.006
8.02	3.46	19.20	-0.04	2.72	0.17	-0.04	5.30	1.33	-0.004
8.33	3.14	17.66	-0.04	2.54	0.20	-0.03	5.12	1.45	-0.003
8.64	2.83	16.04	-0.04	2.23	0.24	-0.02	4.81	1.58	-0.002
8.96	2.51	14.36	-0.04	1.93	0.28	-0.02	4.46	1.69	-0.003
9.27	2.20	12.58	-0.04	1.69	0.23	-0.01	4.18	1.55	-0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
9.59	1.89	10.78	-0.03	1.40	0.21	-0.01	3.80	1.48	-0.001
9.90	1.57	8.96	-0.03	1.25	0.23	-0.01	3.59	1.53	-0.001
10.22	1.26	7.03	-0.03	1.08	0.30	-0.02	3.34	1.78	-0.002
10.53	0.94	5.03	-0.03	1.05	0.28	0.00	3.30	1.70	0.000
10.84	0.63	2.80	-0.02	0.91	0.19	-0.01	3.07	1.40	-0.001
11.16	0.31	0.28	-0.11	0.38	0.12	0.00	1.97	1.12	0.000
11.47	0.00	0.05	0.04	0.01	0.01	0.00	0.31	0.27	0.000

Table N-112 Grid #2, L5, Plasma-Off, Right (71-80)

L5 (Off)							$U_\infty\ =$	31.09	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.47	22.95	0.50	-0.10	0.61	0.22	0.04	2.52	1.51	0.004
-11.16	22.63	2.22	-0.07	0.74	0.15	0.09	2.77	1.25	0.009
-10.84	22.32	3.87	-0.01	0.55	0.13	0.03	2.38	1.16	0.003
-10.53	22.00	5.33	-0.02	0.63	0.13	0.03	2.56	1.14	0.003
-10.22	21.69	6.82	-0.02	1.02	0.15	0.07	3.24	1.23	0.007
-9.90	21.38	8.30	-0.01	1.15	0.13	0.05	3.45	1.16	0.005
-9.59	21.06	9.68	0.00	1.22	0.19	0.03	3.56	1.40	0.003
-9.27	20.75	11.01	-0.02	1.70	0.19	0.08	4.20	1.41	0.008
-8.96	20.43	12.42	0.00	2.03	0.19	0.08	4.58	1.41	0.009
-8.64	20.12	13.69	-0.01	2.29	0.18	0.07	4.86	1.37	0.008
-8.33	19.80	14.95	0.00	2.69	0.17	0.09	5.28	1.33	0.009
-8.02	19.49	16.13	-0.02	3.17	0.18	0.11	5.72	1.35	0.012
-7.70	19.17	17.31	-0.01	3.50	0.17	0.11	6.02	1.34	0.012
-7.39	18.86	18.43	-0.02	3.80	0.18	0.12	6.27	1.37	0.012
-7.07	18.55	19.49	-0.01	4.01	0.14	0.13	6.44	1.19	0.014
-6.76	18.23	20.44	-0.03	4.10	0.16	0.15	6.51	1.28	0.016
-6.44	17.92	21.38	-0.03	4.30	0.18	0.16	6.67	1.38	0.017
-6.13	17.60	22.27	-0.03	4.37	0.19	0.18	6.72	1.40	0.018
-5.82	17.29	23.10	-0.03	4.26	0.17	0.19	6.64	1.33	0.019
-5.50	16.97	23.86	-0.04	4.16	0.18	0.19	6.56	1.38	0.020
-5.19	16.66	24.60	-0.04	4.03	0.19	0.20	6.46	1.39	0.020
-4.87	16.35	25.23	-0.05	3.95	0.17	0.21	6.39	1.34	0.022
-4.56	16.03	25.84	-0.05	3.82	0.18	0.22	6.28	1.36	0.022

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-4.24	15.72	26.42	-0.06	3.60	0.19	0.20	6.10	1.40	0.021
-3.93	15.40	26.97	-0.05	3.40	0.19	0.20	5.93	1.40	0.021
-3.61	15.09	27.43	-0.05	3.17	0.20	0.19	5.73	1.44	0.019
-3.30	14.77	27.87	-0.06	2.98	0.22	0.18	5.55	1.52	0.019
-2.99	14.46	28.27	-0.06	2.76	0.23	0.18	5.34	1.53	0.018
-2.67	14.15	28.65	-0.06	2.54	0.18	0.17	5.13	1.38	0.018
-2.36	13.83	28.98	-0.07	2.38	0.21	0.17	4.97	1.48	0.017
-2.04	13.52	29.29	-0.06	2.21	0.22	0.16	4.78	1.50	0.016
-1.73	13.20	29.57	-0.06	2.05	0.18	0.14	4.60	1.38	0.014
-1.41	12.89	29.83	-0.07	1.88	0.21	0.13	4.41	1.48	0.013
-1.10	12.57	30.07	-0.07	1.68	0.22	0.12	4.17	1.51	0.013
-0.79	12.26	30.28	-0.07	1.52	0.22	0.10	3.97	1.51	0.011
-0.47	11.94	30.47	-0.06	1.39	0.21	0.09	3.80	1.48	0.009
-0.16	11.63	30.63	-0.06	1.24	0.21	0.07	3.58	1.49	0.008
0.16	11.32	30.76	-0.06	1.14	0.19	0.06	3.43	1.42	0.006
0.47	11.00	30.88	-0.06	1.04	0.17	0.04	3.27	1.32	0.004
0.79	10.69	30.97	-0.06	0.97	0.17	0.03	3.17	1.33	0.004
1.10	10.37	31.04	-0.06	0.90	0.17	0.03	3.05	1.32	0.003
1.41	10.06	31.08	-0.06	0.85	0.16	0.02	2.97	1.30	0.002
1.73	9.74	31.09	-0.06	0.86	0.16	0.00	2.99	1.28	0.000
2.04	9.43	31.07	-0.06	0.89	0.17	-0.01	3.03	1.34	-0.001
2.36	9.12	31.04	-0.06	0.88	0.20	-0.01	3.01	1.45	-0.001
2.67	8.80	30.96	-0.06	0.89	0.19	-0.01	3.03	1.39	-0.001
2.99	8.49	30.84	-0.06	0.92	0.15	-0.02	3.09	1.26	-0.002
3.30	8.17	30.68	-0.06	1.01	0.16	-0.03	3.24	1.28	-0.003
3.61	7.86	30.47	-0.06	1.12	0.15	-0.04	3.40	1.26	-0.004
3.93	7.54	30.21	-0.06	1.27	0.18	-0.05	3.62	1.35	-0.005
4.24	7.23	29.88	-0.06	1.42	0.17	-0.05	3.83	1.31	-0.006
4.56	6.92	29.48	-0.06	1.57	0.15	-0.06	4.03	1.26	-0.006
4.87	6.60	29.01	-0.05	1.80	0.15	-0.07	4.32	1.23	-0.007
5.19	6.29	28.48	-0.05	1.96	0.15	-0.08	4.50	1.24	-0.008
5.50	5.97	27.87	-0.05	2.09	0.16	-0.08	4.65	1.29	-0.008
5.82	5.66	27.14	-0.05	2.37	0.17	-0.08	4.95	1.31	-0.008
6.13	5.34	26.32	-0.05	2.57	0.18	-0.08	5.16	1.36	-0.009
6.44	5.03	25.38	-0.05	2.80	0.20	-0.08	5.39	1.42	-0.008
6.76	4.72	24.35	-0.05	2.82	0.19	-0.08	5.40	1.39	-0.008
7.07	4.40	23.20	-0.05	2.88	0.16	-0.07	5.46	1.28	-0.007
7.39	4.09	21.94	-0.05	2.89	0.19	-0.06	5.47	1.41	-0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
7.70	3.77	20.61	-0.05	2.82	0.18	-0.05	5.40	1.38	-0.006
8.02	3.46	19.17	-0.05	2.62	0.19	-0.05	5.20	1.42	-0.005
8.33	3.14	17.64	-0.05	2.46	0.17	-0.04	5.05	1.31	-0.004
8.64	2.83	16.03	-0.04	2.20	0.16	-0.05	4.78	1.28	-0.005
8.96	2.51	14.37	-0.04	1.92	0.16	-0.04	4.45	1.29	-0.004
9.27	2.20	12.63	-0.03	1.71	0.17	-0.04	4.21	1.33	-0.004
9.59	1.89	10.83	-0.03	1.42	0.17	-0.02	3.84	1.32	-0.002
9.90	1.57	8.97	-0.03	1.24	0.20	-0.02	3.58	1.42	-0.002
10.22	1.26	7.07	-0.02	1.04	0.25	-0.02	3.29	1.62	-0.002
10.53	0.94	5.15	-0.01	0.89	0.24	-0.02	3.04	1.59	-0.002
10.84	0.63	3.10	0.00	0.74	0.16	-0.02	2.77	1.27	-0.002
11.16	0.31	0.30	0.09	0.80	0.18	0.17	2.88	1.37	0.018
11.47	0.00	0.05	0.08	0.03	0.04	0.00	0.52	0.67	0.000

Table N-113 Grid #2, L5, Plasma-150, Left (1-10)

L5 (150)							U_∞ =	32.17	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.47	22.95	0.34	-0.18	5.30	1.57	0.09	7.15	3.89	0.009
-11.16	22.63	0.85	0.04	2.96	1.59	0.02	5.35	3.92	0.002
-10.84	22.32	4.11	0.03	4.67	4.04	0.11	6.72	6.25	0.011
-10.53	22.00	6.03	0.01	2.10	2.45	-0.02	4.51	4.87	-0.002
-10.22	21.69	7.55	0.01	1.42	0.92	-0.06	3.70	2.99	-0.006
-9.90	21.38	8.98	0.03	1.14	0.30	-0.01	3.31	1.71	-0.001
-9.59	21.06	10.46	0.03	1.29	0.37	-0.01	3.53	1.89	-0.001
-9.27	20.75	11.96	0.04	1.45	0.25	-0.01	3.74	1.57	-0.001
-8.96	20.43	13.48	0.03	1.49	0.24	0.00	3.79	1.53	0.000
-8.64	20.12	14.87	0.04	1.79	0.27	0.02	4.16	1.61	0.002
-8.33	19.80	16.32	0.04	2.20	0.25	0.01	4.61	1.56	0.001
-8.02	19.49	17.63	0.04	2.42	0.25	0.02	4.84	1.56	0.002
-7.70	19.17	18.89	0.04	2.58	0.27	0.05	4.99	1.62	0.004
-7.39	18.86	20.06	0.03	2.85	0.26	0.04	5.25	1.57	0.004
-7.07	18.55	21.20	0.03	2.93	0.29	0.05	5.32	1.66	0.005
-6.76	18.23	22.24	0.03	2.93	0.32	0.06	5.32	1.77	0.006
-6.44	17.92	23.26	0.02	2.94	0.33	0.07	5.33	1.78	0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-6.13	17.60	24.16	0.02	3.02	0.33	0.08	5.40	1.77	0.008
-5.82	17.29	25.00	0.02	3.08	0.30	0.07	5.46	1.70	0.007
-5.50	16.97	25.76	0.02	3.04	0.30	0.08	5.42	1.70	0.007
-5.19	16.66	26.50	0.01	2.80	0.29	0.09	5.20	1.67	0.008
-4.87	16.35	27.16	0.01	2.74	0.33	0.11	5.14	1.78	0.011
-4.56	16.03	27.77	0.01	2.64	0.34	0.10	5.05	1.82	0.010
-4.24	15.72	28.31	0.01	2.54	0.37	0.08	4.96	1.90	0.008
-3.93	15.40	28.81	0.00	2.49	0.37	0.10	4.90	1.90	0.010
-3.61	15.09	29.26	0.00	2.35	0.37	0.09	4.76	1.90	0.009
-3.30	14.77	29.67	-0.01	2.24	0.36	0.10	4.66	1.87	0.009
-2.99	14.46	30.05	-0.01	2.00	0.35	0.10	4.39	1.84	0.010
-2.67	14.15	30.39	-0.01	1.85	0.35	0.10	4.22	1.84	0.010
-2.36	13.83	30.68	-0.02	1.70	0.31	0.09	4.06	1.74	0.009
-2.04	13.52	30.95	-0.02	1.55	0.31	0.08	3.87	1.74	0.007
-1.73	13.20	31.19	-0.02	1.40	0.34	0.07	3.68	1.81	0.007
-1.41	12.89	31.41	-0.02	1.23	0.30	0.06	3.45	1.69	0.006
-1.10	12.57	31.58	-0.02	1.13	0.28	0.04	3.30	1.65	0.004
-0.79	12.26	31.72	-0.02	1.07	0.33	0.04	3.21	1.78	0.004
-0.47	11.94	31.86	-0.02	0.99	0.31	0.03	3.09	1.74	0.003
-0.16	11.63	31.97	-0.02	0.90	0.31	0.03	2.95	1.74	0.003
0.16	11.32	32.06	-0.02	0.84	0.28	0.02	2.85	1.66	0.002
0.47	11.00	32.12	-0.02	0.80	0.28	0.02	2.77	1.65	0.001
0.79	10.69	32.16	-0.02	0.76	0.27	0.01	2.70	1.62	0.001
1.10	10.37	32.17	-0.02	0.73	0.27	0.01	2.66	1.62	0.001
1.41	10.06	32.17	-0.02	0.71	0.29	0.00	2.63	1.67	0.000
1.73	9.74	32.13	-0.01	0.72	0.29	-0.01	2.64	1.68	-0.001
2.04	9.43	32.07	-0.01	0.75	0.29	-0.02	2.69	1.66	-0.001
2.36	9.12	31.96	-0.02	0.78	0.27	-0.02	2.75	1.61	-0.002
2.67	8.80	31.83	-0.02	0.82	0.23	-0.02	2.81	1.49	-0.002
2.99	8.49	31.65	-0.02	0.90	0.29	-0.02	2.94	1.67	-0.002
3.30	8.17	31.42	-0.02	0.96	0.28	-0.03	3.04	1.66	-0.003
3.61	7.86	31.14	-0.02	1.03	0.29	-0.04	3.15	1.69	-0.004
3.93	7.54	30.81	-0.02	1.11	0.26	-0.04	3.28	1.58	-0.004
4.24	7.23	30.41	-0.02	1.24	0.27	-0.04	3.47	1.61	-0.004
4.56	6.92	29.95	-0.02	1.36	0.31	-0.05	3.63	1.73	-0.005
4.87	6.60	29.42	-0.02	1.46	0.29	-0.05	3.76	1.67	-0.005
5.19	6.29	28.81	-0.03	1.59	0.26	-0.04	3.91	1.57	-0.004
5.50	5.97	28.14	-0.03	1.66	0.27	-0.04	4.01	1.63	-0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.82	5.66	27.38	-0.04	1.72	0.24	-0.05	4.07	1.53	-0.004
6.13	5.34	26.51	-0.04	1.87	0.26	-0.05	4.26	1.59	-0.005
6.44	5.03	25.55	-0.04	1.95	0.28	-0.04	4.35	1.66	-0.004
6.76	4.72	24.50	-0.04	1.95	0.28	-0.03	4.34	1.66	-0.003
7.07	4.40	23.38	-0.03	1.89	0.31	-0.04	4.27	1.73	-0.004
7.39	4.09	22.12	-0.04	1.92	0.26	-0.04	4.30	1.59	-0.004
7.70	3.77	20.79	-0.04	1.87	0.25	-0.02	4.25	1.56	-0.002
8.02	3.46	19.38	-0.04	1.77	0.25	-0.01	4.13	1.54	-0.001
8.33	3.14	17.86	-0.04	1.66	0.23	-0.01	4.00	1.49	-0.001
8.64	2.83	16.24	-0.04	1.55	0.25	0.00	3.87	1.55	0.000
8.96	2.51	14.58	-0.04	1.37	0.24	-0.01	3.64	1.51	-0.001
9.27	2.20	12.78	-0.04	1.22	0.23	-0.01	3.43	1.51	0.000
9.59	1.89	10.97	-0.04	1.04	0.19	0.00	3.16	1.37	0.000
9.90	1.57	9.14	-0.04	0.96	0.17	0.00	3.05	1.29	0.000
10.22	1.26	7.36	-0.03	0.98	0.20	0.01	3.07	1.38	0.001
10.53	0.94	5.57	-0.03	1.33	0.37	0.01	3.58	1.89	0.001
10.84	0.63	3.30	0.05	2.24	0.42	-0.10	4.65	2.01	-0.009
11.16	0.31	0.49	-0.14	1.31	0.30	-0.01	3.56	1.71	-0.001
11.47	0.00	23.17	-11.53	0.00	0.00	0.00	0.00	0.01	0.000

Table N-114 Grid #2, L5, Plasma-150, Center (46-55)

L5 (150)							$U_\infty =$	32.16	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.47	22.95	2.71	-0.16	22.25	3.62	-1.22	14.67	5.92	-0.118
-11.16	22.63	3.86	-0.11	22.54	3.67	-0.91	14.76	5.96	-0.088
-10.84	22.32	4.83	0.02	4.13	1.46	0.09	6.32	3.76	0.008
-10.53	22.00	6.35	0.00	1.56	0.85	0.08	3.89	2.86	0.008
-10.22	21.69	7.84	0.01	1.15	0.39	0.04	3.33	1.95	0.004
-9.90	21.38	9.24	0.01	0.93	0.20	0.01	3.00	1.40	0.001
-9.59	21.06	10.68	0.01	1.17	0.16	0.03	3.37	1.24	0.003
-9.27	20.75	12.20	0.02	1.29	0.15	0.03	3.53	1.20	0.003
-8.96	20.43	13.65	0.03	1.29	0.16	0.03	3.54	1.24	0.003
-8.64	20.12	15.00	0.02	1.60	0.20	0.04	3.93	1.39	0.004
-8.33	19.80	16.40	0.03	1.90	0.19	0.04	4.29	1.36	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-8.02	19.49	17.69	0.03	2.04	0.19	0.04	4.44	1.36	0.004
-7.70	19.17	18.95	0.02	2.24	0.19	0.05	4.65	1.37	0.005
-7.39	18.86	20.10	0.02	2.50	0.19	0.06	4.91	1.35	0.006
-7.07	18.55	21.22	0.03	2.60	0.23	0.07	5.02	1.50	0.006
-6.76	18.23	22.24	0.02	2.60	0.24	0.06	5.01	1.51	0.006
-6.44	17.92	23.23	0.02	2.65	0.20	0.07	5.06	1.39	0.007
-6.13	17.60	24.12	0.01	2.74	0.20	0.09	5.15	1.41	0.008
-5.82	17.29	24.96	0.01	2.84	0.19	0.10	5.24	1.37	0.010
-5.50	16.97	25.74	0.01	2.80	0.21	0.10	5.21	1.41	0.009
-5.19	16.66	26.47	0.01	2.62	0.22	0.09	5.03	1.46	0.008
-4.87	16.35	27.12	0.00	2.59	0.22	0.09	5.00	1.46	0.008
-4.56	16.03	27.72	0.00	2.41	0.21	0.08	4.83	1.43	0.007
-4.24	15.72	28.27	0.00	2.29	0.21	0.09	4.71	1.42	0.009
-3.93	15.40	28.76	-0.01	2.22	0.22	0.09	4.63	1.45	0.008
-3.61	15.09	29.20	-0.01	2.14	0.22	0.09	4.55	1.47	0.009
-3.30	14.77	29.63	-0.02	2.02	0.23	0.09	4.42	1.50	0.009
-2.99	14.46	30.00	-0.02	1.86	0.24	0.10	4.24	1.51	0.009
-2.67	14.15	30.35	-0.02	1.70	0.23	0.09	4.05	1.48	0.008
-2.36	13.83	30.65	-0.02	1.56	0.22	0.08	3.88	1.46	0.008
-2.04	13.52	30.92	-0.02	1.40	0.23	0.07	3.68	1.50	0.007
-1.73	13.20	31.17	-0.02	1.29	0.23	0.06	3.53	1.49	0.006
-1.41	12.89	31.38	-0.02	1.14	0.20	0.06	3.33	1.40	0.005
-1.10	12.57	31.57	-0.02	1.06	0.21	0.05	3.20	1.44	0.005
-0.79	12.26	31.72	-0.02	0.98	0.21	0.04	3.07	1.44	0.004
-0.47	11.94	31.85	-0.02	0.90	0.22	0.03	2.95	1.47	0.003
-0.16	11.63	31.96	-0.02	0.83	0.23	0.03	2.84	1.49	0.003
0.16	11.32	32.05	-0.02	0.77	0.24	0.03	2.72	1.53	0.002
0.47	11.00	32.11	-0.02	0.71	0.19	0.02	2.63	1.37	0.002
0.79	10.69	32.15	-0.03	0.68	0.21	0.02	2.57	1.42	0.002
1.10	10.37	32.16	-0.03	0.66	0.21	0.01	2.53	1.41	0.001
1.41	10.06	32.16	-0.02	0.63	0.19	0.00	2.47	1.36	0.000
1.73	9.74	32.11	-0.02	0.66	0.21	-0.01	2.52	1.42	-0.001
2.04	9.43	32.05	-0.02	0.68	0.22	-0.01	2.57	1.45	-0.001
2.36	9.12	31.93	-0.02	0.73	0.21	-0.02	2.66	1.43	-0.002
2.67	8.80	31.78	-0.03	0.77	0.19	-0.02	2.74	1.37	-0.002
2.99	8.49	31.60	-0.03	0.83	0.18	-0.02	2.84	1.31	-0.002
3.30	8.17	31.36	-0.03	0.88	0.20	-0.03	2.92	1.39	-0.003
3.61	7.86	31.07	-0.03	0.96	0.21	-0.04	3.04	1.43	-0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
3.93	7.54	30.72	-0.04	1.04	0.21	-0.04	3.17	1.41	-0.004
4.24	7.23	30.32	-0.03	1.14	0.22	-0.04	3.31	1.47	-0.004
4.56	6.92	29.85	-0.03	1.26	0.20	-0.04	3.49	1.38	-0.004
4.87	6.60	29.31	-0.03	1.37	0.23	-0.04	3.64	1.50	-0.004
5.19	6.29	28.70	-0.04	1.49	0.24	-0.04	3.79	1.53	-0.004
5.50	5.97	28.01	-0.04	1.55	0.22	-0.05	3.87	1.46	-0.004
5.82	5.66	27.25	-0.03	1.63	0.22	-0.04	3.97	1.47	-0.004
6.13	5.34	26.39	-0.04	1.75	0.21	-0.04	4.11	1.44	-0.004
6.44	5.03	25.42	-0.04	1.79	0.23	-0.03	4.16	1.50	-0.003
6.76	4.72	24.38	-0.04	1.81	0.20	-0.04	4.18	1.39	-0.003
7.07	4.40	23.26	-0.04	1.80	0.22	-0.04	4.17	1.45	-0.003
7.39	4.09	22.03	-0.04	1.80	0.22	-0.03	4.18	1.45	-0.003
7.70	3.77	20.71	-0.05	1.70	0.26	-0.03	4.06	1.58	-0.003
8.02	3.46	19.32	-0.05	1.61	0.30	-0.03	3.94	1.71	-0.003
8.33	3.14	17.82	-0.05	1.52	0.25	-0.02	3.83	1.55	-0.002
8.64	2.83	16.24	-0.04	1.39	0.21	-0.02	3.66	1.43	-0.002
8.96	2.51	14.58	-0.04	1.22	0.22	-0.01	3.44	1.47	-0.001
9.27	2.20	12.85	-0.03	1.14	0.20	0.00	3.32	1.38	0.000
9.59	1.89	11.08	-0.03	0.97	0.19	-0.01	3.06	1.34	-0.001
9.90	1.57	9.32	-0.03	0.85	0.20	-0.01	2.87	1.40	-0.001
10.22	1.26	7.55	-0.03	0.90	0.24	-0.01	2.94	1.54	-0.001
10.53	0.94	5.71	-0.03	1.45	0.44	-0.01	3.74	2.07	-0.001
10.84	0.63	3.36	-0.01	2.33	0.50	-0.02	4.74	2.19	-0.002
11.16	0.31	0.05	-0.08	0.84	0.25	-0.04	2.85	1.57	-0.004
11.47	0.00	-0.39	0.06	0.00	0.00	0.00	0.10	0.21	0.000

Table N-115 Grid #2, L5, Plasma-150, Right (71-80)

L5 (150)							U_∞ =	32.15	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.47	22.95	0.52	0.02	2.21	0.26	0.11	4.63	1.58	0.011
-11.16	22.63	1.76	-0.04	4.58	0.72	-0.02	6.66	2.63	-0.002
-10.84	22.32	4.94	-0.02	2.85	1.32	0.13	5.25	3.57	0.012
-10.53	22.00	6.53	-0.01	1.51	0.83	0.11	3.82	2.83	0.010
-10.22	21.69	8.05	0.02	1.07	0.33	0.04	3.21	1.80	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-9.90	21.38	9.40	0.01	0.88	0.22	0.02	2.92	1.47	0.002
-9.59	21.06	10.86	0.01	1.21	0.17	0.07	3.42	1.27	0.006
-9.27	20.75	12.34	0.02	1.30	0.14	0.06	3.54	1.18	0.005
-8.96	20.43	13.77	0.03	1.26	0.14	0.03	3.49	1.16	0.003
-8.64	20.12	15.10	0.01	1.66	0.17	0.06	4.00	1.27	0.006
-8.33	19.80	16.49	0.02	1.93	0.19	0.08	4.32	1.35	0.008
-8.02	19.49	17.76	0.02	1.95	0.17	0.06	4.34	1.28	0.006
-7.70	19.17	18.98	0.01	2.18	0.18	0.07	4.59	1.32	0.007
-7.39	18.86	20.11	0.00	2.47	0.20	0.09	4.89	1.39	0.009
-7.07	18.55	21.22	0.01	2.60	0.20	0.10	5.01	1.38	0.010
-6.76	18.23	22.24	0.01	2.63	0.16	0.10	5.04	1.25	0.009
-6.44	17.92	23.23	0.01	2.69	0.18	0.10	5.10	1.32	0.009
-6.13	17.60	24.10	0.00	2.75	0.18	0.12	5.16	1.31	0.011
-5.82	17.29	24.94	0.01	2.89	0.18	0.12	5.29	1.32	0.012
-5.50	16.97	25.69	0.00	2.80	0.19	0.12	5.20	1.35	0.012
-5.19	16.66	26.43	-0.01	2.57	0.18	0.11	4.99	1.31	0.010
-4.87	16.35	27.07	-0.01	2.52	0.20	0.11	4.93	1.39	0.011
-4.56	16.03	27.70	-0.01	2.42	0.27	0.10	4.84	1.63	0.010
-4.24	15.72	28.24	-0.01	2.33	0.28	0.12	4.75	1.63	0.011
-3.93	15.40	28.73	-0.02	2.26	0.21	0.12	4.67	1.43	0.012
-3.61	15.09	29.16	-0.02	2.17	0.25	0.13	4.59	1.56	0.012
-3.30	14.77	29.57	-0.03	2.09	0.26	0.13	4.50	1.57	0.013
-2.99	14.46	29.97	-0.03	1.85	0.24	0.12	4.23	1.52	0.011
-2.67	14.15	30.33	-0.02	1.65	0.20	0.11	4.00	1.40	0.010
-2.36	13.83	30.63	-0.02	1.54	0.17	0.10	3.86	1.27	0.010
-2.04	13.52	30.90	-0.02	1.39	0.16	0.09	3.67	1.26	0.009
-1.73	13.20	31.16	-0.02	1.23	0.20	0.07	3.46	1.39	0.007
-1.41	12.89	31.37	-0.02	1.11	0.18	0.06	3.27	1.31	0.006
-1.10	12.57	31.55	-0.02	1.02	0.17	0.06	3.14	1.28	0.006
-0.79	12.26	31.71	-0.03	0.93	0.18	0.05	3.00	1.34	0.005
-0.47	11.94	31.84	-0.03	0.87	0.18	0.04	2.91	1.33	0.004
-0.16	11.63	31.94	-0.03	0.82	0.18	0.04	2.82	1.32	0.004
0.16	11.32	32.03	-0.03	0.75	0.16	0.03	2.69	1.23	0.003
0.47	11.00	32.09	-0.03	0.72	0.18	0.03	2.63	1.31	0.002
0.79	10.69	32.13	-0.04	0.68	0.19	0.03	2.57	1.36	0.002
1.10	10.37	32.15	-0.04	0.65	0.18	0.02	2.51	1.33	0.002
1.41	10.06	32.13	-0.04	0.65	0.18	0.01	2.50	1.32	0.001
1.73	9.74	32.10	-0.04	0.65	0.15	0.00	2.51	1.22	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.04	9.43	32.02	-0.04	0.67	0.15	-0.01	2.54	1.20	-0.001
2.36	9.12	31.91	-0.04	0.73	0.17	-0.02	2.66	1.27	-0.002
2.67	8.80	31.76	-0.04	0.79	0.16	-0.02	2.77	1.24	-0.002
2.99	8.49	31.57	-0.04	0.85	0.17	-0.02	2.86	1.30	-0.002
3.30	8.17	31.34	-0.04	0.87	0.19	-0.03	2.91	1.35	-0.003
3.61	7.86	31.03	-0.04	0.97	0.19	-0.03	3.06	1.37	-0.003
3.93	7.54	30.68	-0.04	1.04	0.17	-0.03	3.18	1.27	-0.003
4.24	7.23	30.26	-0.04	1.17	0.18	-0.04	3.36	1.31	-0.004
4.56	6.92	29.79	-0.04	1.29	0.18	-0.05	3.53	1.31	-0.005
4.87	6.60	29.23	-0.04	1.40	0.24	-0.05	3.68	1.51	-0.005
5.19	6.29	28.62	-0.04	1.49	0.24	-0.05	3.79	1.53	-0.005
5.50	5.97	27.95	-0.04	1.47	0.19	-0.05	3.77	1.35	-0.005
5.82	5.66	27.19	-0.04	1.61	0.18	-0.05	3.94	1.31	-0.005
6.13	5.34	26.31	-0.04	1.80	0.20	-0.05	4.18	1.40	-0.005
6.44	5.03	25.36	-0.05	1.86	0.17	-0.06	4.24	1.28	-0.006
6.76	4.72	24.30	-0.05	1.82	0.21	-0.05	4.19	1.42	-0.005
7.07	4.40	23.20	-0.05	1.78	0.21	-0.04	4.16	1.42	-0.004
7.39	4.09	21.96	-0.05	1.82	0.19	-0.05	4.19	1.34	-0.004
7.70	3.77	20.66	-0.05	1.79	0.20	-0.04	4.17	1.40	-0.004
8.02	3.46	19.28	-0.05	1.64	0.24	-0.03	3.99	1.52	-0.003
8.33	3.14	17.80	-0.04	1.51	0.19	-0.03	3.82	1.35	-0.003
8.64	2.83	16.22	-0.04	1.40	0.19	-0.04	3.67	1.35	-0.003
8.96	2.51	14.61	-0.05	1.22	0.23	-0.02	3.43	1.49	-0.001
9.27	2.20	12.88	-0.04	1.14	0.21	-0.02	3.33	1.41	-0.002
9.59	1.89	11.12	-0.04	0.96	0.14	-0.02	3.06	1.16	-0.002
9.90	1.57	9.35	-0.04	0.86	0.14	-0.02	2.88	1.17	-0.002
10.22	1.26	7.57	-0.03	0.89	0.15	-0.02	2.93	1.19	-0.002
10.53	0.94	5.83	-0.03	1.11	0.28	-0.01	3.28	1.66	-0.001
10.84	0.63	3.79	0.01	1.84	0.33	-0.05	4.21	1.78	-0.005
11.16	0.31	0.47	0.14	1.02	0.22	0.21	3.15	1.46	0.020
11.47	0.00	0.09	0.08	0.03	0.03	0.00	0.57	0.58	0.000

Table N-116 Grid #2, L5, Plasma-300, Left (1-10)

L5 (300)							U_∞ =	33.98	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.47	22.95	0.75	-0.22	1.61	1.06	-0.08	3.74	3.03	-0.007
-11.16	22.63	1.72	0.05	1.18	0.39	-0.01	3.20	1.83	-0.001
-10.84	22.32	4.42	0.01	1.32	0.43	-0.02	3.37	1.93	-0.002
-10.53	22.00	6.34	0.03	1.27	0.37	-0.01	3.31	1.78	-0.001
-10.22	21.69	8.27	0.03	1.02	0.29	-0.01	2.97	1.59	-0.001
-9.90	21.38	9.98	0.05	0.98	0.34	-0.01	2.92	1.71	-0.001
-9.59	21.06	11.76	0.04	1.15	0.32	-0.02	3.15	1.67	-0.002
-9.27	20.75	13.43	0.04	1.14	0.34	-0.01	3.14	1.71	-0.001
-8.96	20.43	15.02	0.05	1.40	0.51	0.01	3.49	2.10	0.001
-8.64	20.12	16.56	0.05	1.62	0.62	0.00	3.74	2.32	0.000
-8.33	19.80	18.06	0.06	1.58	0.68	0.01	3.70	2.42	0.001
-8.02	19.49	19.37	0.06	1.81	0.88	-0.01	3.96	2.76	-0.001
-7.70	19.17	20.72	0.06	2.00	0.67	0.00	4.17	2.41	0.000
-7.39	18.86	21.92	0.05	2.11	0.73	0.02	4.27	2.52	0.001
-7.07	18.55	23.08	0.04	2.13	0.77	0.02	4.29	2.58	0.002
-6.76	18.23	24.13	0.04	2.25	0.84	0.01	4.42	2.70	0.001
-6.44	17.92	25.19	0.03	2.35	1.00	0.02	4.52	2.94	0.002
-6.13	17.60	26.10	0.04	2.44	1.20	-0.02	4.60	3.23	-0.002
-5.82	17.29	26.99	0.02	2.31	1.28	0.04	4.47	3.33	0.003
-5.50	16.97	27.76	0.03	2.30	1.22	0.06	4.47	3.26	0.006
-5.19	16.66	28.49	0.02	2.31	1.27	0.08	4.47	3.32	0.007
-4.87	16.35	29.15	0.02	2.34	1.39	0.07	4.50	3.47	0.006
-4.56	16.03	29.78	0.02	2.22	1.40	0.05	4.39	3.48	0.005
-4.24	15.72	30.32	0.01	2.19	1.52	0.05	4.36	3.63	0.004
-3.93	15.40	30.86	0.01	2.01	1.55	0.03	4.17	3.67	0.003
-3.61	15.09	31.28	0.01	1.90	1.59	0.08	4.05	3.71	0.007
-3.30	14.77	31.69	0.01	1.72	1.55	0.06	3.86	3.66	0.005
-2.99	14.46	32.05	0.01	1.63	1.46	0.05	3.75	3.55	0.004
-2.67	14.15	32.37	0.00	1.55	1.49	0.06	3.66	3.59	0.005
-2.36	13.83	32.65	0.00	1.51	1.46	0.09	3.61	3.56	0.008
-2.04	13.52	32.90	0.00	1.44	1.57	0.09	3.53	3.69	0.008
-1.73	13.20	33.12	0.00	1.46	1.72	0.04	3.55	3.86	0.003
-1.41	12.89	33.32	0.00	1.38	1.61	0.04	3.46	3.73	0.003
-1.10	12.57	33.48	-0.01	1.35	1.79	0.06	3.42	3.94	0.005
-0.79	12.26	33.62	-0.01	1.30	1.65	0.05	3.36	3.78	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.47	11.94	33.75	-0.01	1.26	1.52	0.01	3.31	3.63	0.001
-0.16	11.63	33.85	0.00	1.22	1.59	0.02	3.25	3.71	0.002
0.16	11.32	33.91	0.01	1.19	1.67	-0.02	3.21	3.80	-0.001
0.47	11.00	33.96	-0.01	1.20	1.73	-0.01	3.23	3.87	-0.001
0.79	10.69	33.98	-0.02	1.26	1.88	-0.01	3.30	4.04	-0.001
1.10	10.37	33.98	-0.02	1.18	1.72	-0.02	3.19	3.85	-0.002
1.41	10.06	33.94	-0.03	1.26	1.89	0.00	3.30	4.04	0.000
1.73	9.74	33.87	-0.02	1.31	2.12	0.00	3.37	4.29	0.000
2.04	9.43	33.75	-0.02	1.32	2.32	-0.02	3.38	4.48	-0.002
2.36	9.12	33.62	-0.03	1.33	2.31	-0.10	3.39	4.47	-0.009
2.67	8.80	33.45	-0.01	1.36	2.35	-0.08	3.44	4.51	-0.007
2.99	8.49	33.22	-0.01	1.35	2.44	-0.04	3.42	4.60	-0.004
3.30	8.17	32.96	-0.02	1.33	2.38	-0.04	3.40	4.54	-0.003
3.61	7.86	32.68	-0.02	1.39	2.37	-0.03	3.47	4.53	-0.003
3.93	7.54	32.34	-0.01	1.49	2.47	-0.06	3.59	4.62	-0.006
4.24	7.23	31.92	-0.01	1.66	2.54	-0.06	3.79	4.69	-0.005
4.56	6.92	31.43	-0.01	1.84	2.69	-0.03	4.00	4.82	-0.003
4.87	6.60	30.85	-0.03	1.99	2.82	-0.03	4.15	4.94	-0.002
5.19	6.29	30.21	-0.06	2.09	2.85	-0.02	4.26	4.97	-0.002
5.50	5.97	29.47	-0.06	2.22	3.13	-0.03	4.39	5.20	-0.002
5.82	5.66	28.68	-0.04	2.09	2.62	-0.07	4.26	4.76	-0.006
6.13	5.34	27.80	-0.03	2.17	2.54	-0.08	4.33	4.69	-0.007
6.44	5.03	26.84	-0.04	2.23	2.83	-0.05	4.39	4.95	-0.004
6.76	4.72	25.76	-0.04	2.21	2.61	-0.02	4.38	4.76	-0.002
7.07	4.40	24.61	-0.04	2.07	1.91	0.07	4.24	4.07	0.006
7.39	4.09	23.35	-0.03	1.97	1.35	0.05	4.13	3.42	0.005
7.70	3.77	22.01	-0.04	1.94	1.20	0.02	4.09	3.22	0.002
8.02	3.46	20.56	-0.05	1.83	1.30	-0.02	3.98	3.36	-0.002
8.33	3.14	19.06	-0.05	1.68	1.25	-0.05	3.82	3.29	-0.004
8.64	2.83	17.42	-0.05	1.68	1.04	-0.02	3.81	3.01	-0.002
8.96	2.51	15.72	-0.06	1.56	1.05	-0.03	3.67	3.01	-0.002
9.27	2.20	13.93	-0.05	1.48	0.83	-0.01	3.58	2.69	-0.001
9.59	1.89	12.02	-0.05	1.42	0.81	0.00	3.50	2.65	0.000
9.90	1.57	10.00	-0.05	1.31	0.80	0.01	3.37	2.62	0.001
10.22	1.26	7.92	-0.04	1.25	0.71	0.00	3.29	2.48	0.000
10.53	0.94	5.74	-0.04	1.38	0.83	0.00	3.45	2.68	0.000
10.84	0.63	3.41	-0.03	1.45	0.60	0.00	3.54	2.28	0.000
11.16	0.31	0.70	-0.12	1.16	0.46	0.01	3.16	1.99	0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
11.47	0.00	11.89	0.69	836.38	82.12	17.63	85.11	26.67	1.527

Table N-117 Grid #2, L5, Plasma-300, Center (46-55)

L5 (300)							U_∞ =	34.01	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.47	22.95	1.66	0.14	8.45	1.60	0.56	8.55	3.72	0.048
-11.16	22.63	3.18	0.16	8.70	1.60	0.87	8.67	3.72	0.076
-10.84	22.32	5.01	0.02	1.09	0.27	0.02	3.06	1.53	0.002
-10.53	22.00	6.79	0.01	1.10	0.26	0.04	3.09	1.51	0.003
-10.22	21.69	8.65	0.04	0.84	0.22	0.01	2.70	1.39	0.001
-9.90	21.38	10.31	0.02	0.91	0.24	0.03	2.80	1.45	0.002
-9.59	21.06	12.09	0.04	1.01	0.26	0.02	2.95	1.49	0.002
-9.27	20.75	13.68	0.04	1.00	0.32	0.02	2.94	1.66	0.001
-8.96	20.43	15.23	0.04	1.26	0.29	0.04	3.30	1.59	0.003
-8.64	20.12	16.74	0.04	1.41	0.34	0.03	3.49	1.72	0.003
-8.33	19.80	18.18	0.04	1.38	0.33	0.04	3.45	1.70	0.003
-8.02	19.49	19.47	0.04	1.63	0.38	0.04	3.75	1.81	0.003
-7.70	19.17	20.79	0.04	1.81	0.45	0.05	3.95	1.98	0.004
-7.39	18.86	21.99	0.04	1.81	0.44	0.04	3.95	1.94	0.004
-7.07	18.55	23.12	0.05	1.87	0.50	0.04	4.02	2.09	0.004
-6.76	18.23	24.16	0.03	2.04	0.48	0.07	4.20	2.04	0.006
-6.44	17.92	25.18	0.04	2.12	0.63	0.07	4.28	2.34	0.006
-6.13	17.60	26.09	0.04	2.12	0.74	0.06	4.28	2.54	0.005
-5.82	17.29	26.95	0.04	2.00	0.78	0.07	4.15	2.59	0.006
-5.50	16.97	27.72	0.03	2.00	0.79	0.07	4.16	2.62	0.006
-5.19	16.66	28.45	0.03	2.06	0.93	0.10	4.22	2.83	0.008
-4.87	16.35	29.11	0.03	2.07	1.03	0.09	4.23	2.99	0.008
-4.56	16.03	29.74	0.03	2.04	1.00	0.09	4.20	2.95	0.008
-4.24	15.72	30.30	0.02	1.94	0.93	0.08	4.10	2.83	0.007
-3.93	15.40	30.82	0.01	1.81	0.98	0.09	3.95	2.91	0.008
-3.61	15.09	31.27	0.01	1.73	1.13	0.08	3.87	3.12	0.007
-3.30	14.77	31.68	0.00	1.58	1.12	0.07	3.69	3.11	0.006
-2.99	14.46	32.05	0.00	1.44	1.02	0.06	3.53	2.97	0.006
-2.67	14.15	32.37	0.00	1.33	1.04	0.06	3.39	3.00	0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.36	13.83	32.66	0.00	1.29	1.29	0.06	3.34	3.34	0.005
-2.04	13.52	32.90	0.00	1.24	1.13	0.07	3.27	3.12	0.006
-1.73	13.20	33.13	0.00	1.20	1.11	0.06	3.22	3.09	0.005
-1.41	12.89	33.33	-0.01	1.18	1.13	0.08	3.20	3.13	0.007
-1.10	12.57	33.50	-0.01	1.18	1.29	0.04	3.20	3.34	0.004
-0.79	12.26	33.64	-0.01	1.14	1.33	0.03	3.14	3.39	0.003
-0.47	11.94	33.76	-0.02	1.10	1.18	0.06	3.08	3.19	0.005
-0.16	11.63	33.87	-0.03	1.06	1.21	0.07	3.02	3.24	0.006
0.16	11.32	33.94	-0.03	1.04	1.32	0.04	3.00	3.38	0.003
0.47	11.00	34.00	-0.03	1.05	1.60	0.01	3.02	3.71	0.001
0.79	10.69	34.01	-0.03	1.02	1.45	-0.01	2.98	3.54	-0.001
1.10	10.37	33.99	-0.02	1.02	1.34	-0.01	2.96	3.41	-0.001
1.41	10.06	33.96	-0.04	1.05	1.62	-0.01	3.01	3.74	-0.001
1.73	9.74	33.88	-0.03	1.07	1.68	0.02	3.04	3.81	0.002
2.04	9.43	33.75	-0.03	1.14	1.88	0.03	3.14	4.03	0.003
2.36	9.12	33.61	-0.01	1.16	1.88	-0.03	3.16	4.03	-0.003
2.67	8.80	33.42	-0.03	1.18	1.76	-0.04	3.20	3.90	-0.003
2.99	8.49	33.19	-0.02	1.17	1.83	-0.04	3.18	3.97	-0.003
3.30	8.17	32.92	-0.02	1.14	1.93	-0.06	3.13	4.09	-0.005
3.61	7.86	32.62	-0.02	1.17	1.74	0.02	3.18	3.88	0.002
3.93	7.54	32.26	-0.02	1.34	2.07	0.02	3.40	4.23	0.002
4.24	7.23	31.83	-0.04	1.52	2.20	0.01	3.63	4.36	0.001
4.56	6.92	31.32	-0.05	1.64	2.13	0.05	3.77	4.29	0.005
4.87	6.60	30.74	-0.03	1.77	2.20	0.04	3.91	4.36	0.003
5.19	6.29	30.07	-0.03	1.84	2.20	0.01	3.98	4.37	0.001
5.50	5.97	29.34	-0.02	1.88	2.13	0.01	4.03	4.30	0.000
5.82	5.66	28.53	-0.06	1.81	2.04	0.02	3.96	4.20	0.002
6.13	5.34	27.66	-0.05	1.82	1.84	-0.09	3.97	3.99	-0.008
6.44	5.03	26.68	-0.05	1.97	1.85	-0.09	4.12	4.00	-0.008
6.76	4.72	25.60	-0.04	1.97	1.72	-0.03	4.12	3.85	-0.003
7.07	4.40	24.47	-0.04	1.83	1.56	-0.08	3.98	3.67	-0.007
7.39	4.09	23.24	-0.05	1.81	1.41	-0.05	3.96	3.50	-0.005
7.70	3.77	21.91	-0.06	1.78	1.23	0.00	3.92	3.27	0.000
8.02	3.46	20.50	-0.07	1.68	1.25	-0.02	3.81	3.29	-0.002
8.33	3.14	19.01	-0.06	1.52	0.92	-0.03	3.63	2.83	-0.002
8.64	2.83	17.41	-0.06	1.56	0.91	-0.05	3.67	2.81	-0.004
8.96	2.51	15.75	-0.06	1.36	0.81	-0.02	3.43	2.65	-0.002
9.27	2.20	13.97	-0.05	1.32	0.54	-0.01	3.38	2.16	-0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
9.59	1.89	12.12	-0.05	1.22	0.56	-0.01	3.25	2.20	-0.001
9.90	1.57	10.21	-0.06	1.22	0.72	-0.02	3.25	2.50	-0.002
10.22	1.26	8.18	-0.05	1.30	0.75	-0.04	3.35	2.54	-0.004
10.53	0.94	6.01	-0.05	1.92	1.27	-0.03	4.08	3.32	-0.003
10.84	0.63	3.65	-0.03	1.87	0.89	-0.02	4.02	2.77	-0.002
11.16	0.31	0.34	0.01	1.78	0.29	0.01	3.92	1.58	0.001
11.47	0.00	-0.41	-0.02	0.00	0.00	0.00	0.13	0.06	0.000

Table N-118 Grid #2, L5, Plasma-300, Right (71-80)

L5 (300)							U_∞ =	33.98	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.47	22.95	0.67	0.10	2.98	0.36	0.13	5.08	1.77	0.011
-11.16	22.63	2.82	-0.01	2.10	0.28	0.12	4.26	1.56	0.010
-10.84	22.32	5.29	0.02	1.05	0.27	0.05	3.02	1.54	0.005
-10.53	22.00	7.10	0.02	1.14	0.30	0.09	3.15	1.62	0.007
-10.22	21.69	8.94	0.04	0.83	0.21	0.03	2.68	1.34	0.003
-9.90	21.38	10.52	0.01	0.99	0.20	0.06	2.92	1.33	0.005
-9.59	21.06	12.28	0.05	1.05	0.24	0.07	3.02	1.45	0.006
-9.27	20.75	13.85	0.04	0.98	0.29	0.03	2.92	1.59	0.003
-8.96	20.43	15.38	0.04	1.35	0.36	0.08	3.42	1.78	0.007
-8.64	20.12	16.86	0.03	1.46	0.36	0.08	3.55	1.76	0.007
-8.33	19.80	18.26	0.04	1.42	0.32	0.05	3.51	1.66	0.004
-8.02	19.49	19.55	0.03	1.67	0.35	0.09	3.80	1.75	0.008
-7.70	19.17	20.84	0.04	1.85	0.45	0.09	4.00	1.98	0.008
-7.39	18.86	22.03	0.04	1.81	0.48	0.10	3.96	2.05	0.009
-7.07	18.55	23.15	0.04	1.84	0.50	0.08	3.99	2.07	0.007
-6.76	18.23	24.14	0.03	2.05	0.45	0.10	4.21	1.98	0.009
-6.44	17.92	25.16	0.03	2.16	0.67	0.13	4.32	2.41	0.011
-6.13	17.60	26.06	0.02	2.18	0.71	0.11	4.34	2.47	0.010
-5.82	17.29	26.93	0.03	2.02	0.74	0.09	4.18	2.54	0.008
-5.50	16.97	27.69	0.01	2.04	0.97	0.10	4.21	2.90	0.009
-5.19	16.66	28.42	0.01	2.12	1.05	0.13	4.28	3.02	0.011
-4.87	16.35	29.07	0.02	2.22	1.25	0.10	4.38	3.28	0.009
-4.56	16.03	29.73	0.02	2.22	1.38	0.10	4.39	3.45	0.009

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.24	15.72	30.28	-0.01	2.19	1.68	0.10	4.35	3.81	0.008
-3.93	15.40	30.81	-0.01	2.00	1.53	0.11	4.16	3.64	0.009
-3.61	15.09	31.27	-0.01	1.86	1.47	0.10	4.01	3.57	0.009
-3.30	14.77	31.69	0.01	1.72	1.44	0.08	3.86	3.53	0.007
-2.99	14.46	32.05	0.01	1.57	1.55	0.09	3.69	3.67	0.008
-2.67	14.15	32.37	0.01	1.48	1.45	0.11	3.58	3.55	0.009
-2.36	13.83	32.65	-0.01	1.44	1.52	0.13	3.53	3.63	0.011
-2.04	13.52	32.89	-0.01	1.40	1.45	0.09	3.48	3.54	0.007
-1.73	13.20	33.11	-0.02	1.42	1.62	0.08	3.51	3.75	0.007
-1.41	12.89	33.32	-0.02	1.39	1.77	0.10	3.48	3.91	0.009
-1.10	12.57	33.50	-0.02	1.36	1.69	0.10	3.43	3.82	0.008
-0.79	12.26	33.65	-0.04	1.32	1.61	0.11	3.38	3.74	0.010
-0.47	11.94	33.76	-0.04	1.33	1.65	0.09	3.40	3.78	0.008
-0.16	11.63	33.86	-0.03	1.34	1.60	0.08	3.41	3.72	0.007
0.16	11.32	33.93	-0.04	1.35	1.73	0.09	3.42	3.87	0.008
0.47	11.00	33.98	-0.03	1.31	1.73	0.05	3.36	3.87	0.005
0.79	10.69	33.98	-0.03	1.29	1.84	0.02	3.35	3.99	0.001
1.10	10.37	33.97	-0.04	1.32	2.12	0.00	3.38	4.29	0.000
1.41	10.06	33.93	-0.02	1.35	2.05	-0.02	3.42	4.22	-0.002
1.73	9.74	33.85	-0.01	1.39	2.29	-0.04	3.47	4.45	-0.003
2.04	9.43	33.72	-0.03	1.47	2.14	0.02	3.57	4.31	0.001
2.36	9.12	33.58	-0.04	1.45	2.21	0.05	3.54	4.38	0.005
2.67	8.80	33.39	-0.04	1.47	2.55	0.06	3.57	4.70	0.006
2.99	8.49	33.15	-0.05	1.49	2.62	0.01	3.59	4.76	0.001
3.30	8.17	32.87	-0.04	1.49	2.75	-0.01	3.59	4.88	-0.001
3.61	7.86	32.57	-0.04	1.55	2.87	0.05	3.67	4.99	0.004
3.93	7.54	32.21	-0.04	1.62	2.81	0.03	3.74	4.93	0.002
4.24	7.23	31.77	-0.05	1.82	2.93	-0.03	3.97	5.04	-0.003
4.56	6.92	31.27	-0.03	2.06	3.12	-0.08	4.23	5.20	-0.007
4.87	6.60	30.65	-0.05	2.23	3.11	-0.09	4.40	5.19	-0.008
5.19	6.29	30.00	-0.06	2.33	3.33	-0.05	4.50	5.37	-0.005
5.50	5.97	29.26	-0.05	2.22	3.02	-0.11	4.38	5.12	-0.009
5.82	5.66	28.46	-0.05	2.12	2.88	-0.16	4.28	4.99	-0.014
6.13	5.34	27.59	-0.05	2.12	2.68	-0.10	4.29	4.82	-0.009
6.44	5.03	26.61	-0.05	2.23	2.43	-0.02	4.39	4.59	-0.002
6.76	4.72	25.53	-0.07	2.18	2.21	0.02	4.34	4.37	0.002
7.07	4.40	24.41	-0.07	2.00	1.80	-0.06	4.16	3.94	-0.005
7.39	4.09	23.19	-0.06	1.99	1.56	-0.04	4.15	3.67	-0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.70	3.77	21.87	-0.06	1.94	1.42	-0.04	4.09	3.51	-0.003
8.02	3.46	20.46	-0.06	1.75	1.19	-0.01	3.89	3.21	-0.001
8.33	3.14	18.98	-0.07	1.61	0.88	-0.02	3.74	2.76	-0.002
8.64	2.83	17.39	-0.06	1.66	0.69	-0.04	3.79	2.44	-0.004
8.96	2.51	15.75	-0.06	1.43	0.56	-0.03	3.52	2.20	-0.003
9.27	2.20	14.02	-0.06	1.41	0.64	-0.03	3.49	2.35	-0.003
9.59	1.89	12.15	-0.05	1.33	0.66	-0.04	3.40	2.40	-0.004
9.90	1.57	10.23	-0.04	1.25	0.65	-0.02	3.29	2.37	-0.002
10.22	1.26	8.21	-0.05	1.31	0.68	-0.02	3.37	2.43	-0.002
10.53	0.94	6.12	-0.05	1.36	0.79	-0.04	3.43	2.62	-0.003
10.84	0.63	3.93	-0.03	1.46	0.46	-0.05	3.55	2.00	-0.005
11.16	0.31	0.46	0.17	1.68	0.23	0.13	3.81	1.41	0.012
11.47	0.00	0.03	0.05	0.03	0.03	-0.01	0.54	0.53	-0.001

Table N-119 Grid #2, L6, Plasma-Off, Left (1-10)

L6 (Off)							U_∞ =	30.64	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.71	23.43	1.41	-0.11	4.52	1.49	0.21	6.94	3.98	0.022
-11.39	23.10	1.97	-0.02	0.81	0.20	0.01	2.95	1.47	0.001
-11.07	22.78	3.23	0.01	0.63	0.19	0.01	2.60	1.44	0.001
-10.75	22.46	4.60	0.01	0.58	0.17	0.01	2.49	1.36	0.001
-10.43	22.14	5.96	0.00	0.80	0.16	0.01	2.91	1.30	0.001
-10.11	21.82	7.32	0.00	1.00	0.19	0.01	3.26	1.42	0.001
-9.79	21.50	8.70	0.00	1.06	0.22	0.00	3.36	1.53	0.000
-9.47	21.18	9.94	0.01	1.28	0.24	0.02	3.70	1.61	0.002
-9.15	20.86	11.22	0.00	1.63	0.25	0.02	4.16	1.62	0.002
-8.82	20.54	12.42	-0.01	1.89	0.21	0.03	4.49	1.50	0.003
-8.50	20.22	13.62	0.00	2.03	0.21	0.03	4.65	1.51	0.003
-8.18	19.90	14.74	0.00	2.24	0.23	0.03	4.88	1.55	0.003
-7.86	19.57	15.85	0.00	2.58	0.25	0.05	5.25	1.63	0.005
-7.54	19.25	16.91	-0.01	2.86	0.28	0.05	5.52	1.73	0.006
-7.22	18.93	17.96	-0.01	3.04	0.27	0.07	5.69	1.68	0.007
-6.90	18.61	18.94	-0.02	3.27	0.25	0.07	5.90	1.64	0.008
-6.58	18.29	19.90	-0.03	3.51	0.22	0.08	6.12	1.54	0.008

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-6.26	17.97	20.78	-0.03	3.72	0.25	0.09	6.29	1.63	0.010
-5.94	17.65	21.64	-0.02	3.85	0.29	0.09	6.41	1.77	0.009
-5.62	17.33	22.44	-0.03	3.79	0.30	0.09	6.35	1.78	0.009
-5.29	17.01	23.22	-0.03	3.73	0.28	0.11	6.30	1.73	0.011
-4.97	16.69	23.92	-0.04	3.74	0.30	0.11	6.31	1.78	0.012
-4.65	16.37	24.61	-0.04	3.73	0.28	0.12	6.30	1.74	0.013
-4.33	16.04	25.23	-0.04	3.70	0.33	0.12	6.28	1.86	0.013
-4.01	15.72	25.82	-0.05	3.67	0.37	0.12	6.26	1.98	0.013
-3.69	15.40	26.36	-0.05	3.51	0.33	0.13	6.12	1.88	0.014
-3.37	15.08	26.89	-0.04	3.33	0.27	0.12	5.96	1.71	0.013
-3.05	14.76	27.35	-0.04	3.18	0.27	0.12	5.82	1.69	0.013
-2.73	14.44	27.79	-0.04	2.95	0.26	0.12	5.61	1.67	0.012
-2.41	14.12	28.18	-0.04	2.77	0.32	0.12	5.43	1.85	0.013
-2.09	13.80	28.54	-0.05	2.60	0.33	0.10	5.26	1.88	0.011
-1.76	13.48	28.88	-0.05	2.44	0.33	0.11	5.09	1.86	0.011
-1.44	13.16	29.17	-0.04	2.34	0.33	0.09	4.99	1.88	0.010
-1.12	12.84	29.44	-0.05	2.19	0.31	0.09	4.84	1.82	0.010
-0.80	12.52	29.68	-0.04	2.06	0.29	0.08	4.69	1.75	0.009
-0.48	12.19	29.89	-0.04	1.89	0.32	0.07	4.49	1.86	0.008
-0.16	11.87	30.09	-0.04	1.74	0.31	0.06	4.30	1.83	0.007
0.16	11.55	30.26	-0.04	1.59	0.26	0.05	4.12	1.66	0.005
0.48	11.23	30.39	-0.03	1.47	0.26	0.05	3.96	1.65	0.005
0.80	10.91	30.50	-0.03	1.37	0.26	0.03	3.82	1.68	0.004
1.12	10.59	30.58	-0.03	1.27	0.28	0.02	3.68	1.74	0.002
1.44	10.27	30.62	-0.02	1.22	0.28	0.01	3.60	1.73	0.001
1.76	9.95	30.64	-0.02	1.16	0.29	0.00	3.52	1.77	0.000
2.09	9.63	30.62	-0.03	1.11	0.26	-0.01	3.44	1.67	-0.001
2.41	9.31	30.56	-0.03	1.12	0.27	-0.01	3.46	1.69	-0.002
2.73	8.99	30.46	-0.02	1.14	0.27	-0.01	3.48	1.71	-0.002
3.05	8.66	30.31	-0.02	1.16	0.26	-0.02	3.52	1.68	-0.002
3.37	8.34	30.12	-0.03	1.26	0.26	-0.02	3.66	1.66	-0.003
3.69	8.02	29.89	-0.02	1.35	0.27	-0.04	3.79	1.68	-0.004
4.01	7.70	29.58	-0.02	1.39	0.30	-0.04	3.85	1.77	-0.004
4.33	7.38	29.23	-0.02	1.54	0.27	-0.04	4.05	1.71	-0.004
4.65	7.06	28.81	-0.01	1.67	0.24	-0.05	4.22	1.59	-0.005
4.97	6.74	28.31	-0.02	1.81	0.20	-0.05	4.39	1.46	-0.005
5.29	6.42	27.74	-0.02	1.99	0.22	-0.06	4.60	1.53	-0.006
5.62	6.10	27.07	-0.02	2.20	0.21	-0.06	4.85	1.50	-0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.94	5.78	26.32	-0.02	2.39	0.23	-0.06	5.05	1.56	-0.006
6.26	5.46	25.47	-0.02	2.52	0.26	-0.06	5.18	1.66	-0.006
6.58	5.13	24.55	-0.01	2.60	0.22	-0.06	5.26	1.55	-0.006
6.90	4.81	23.53	-0.02	2.68	0.23	-0.05	5.34	1.57	-0.006
7.22	4.49	22.42	-0.01	2.68	0.26	-0.05	5.35	1.65	-0.005
7.54	4.17	21.21	-0.01	2.58	0.30	-0.03	5.25	1.79	-0.003
7.86	3.85	19.92	-0.01	2.44	0.22	-0.04	5.10	1.55	-0.004
8.18	3.53	18.55	-0.01	2.38	0.28	-0.04	5.04	1.73	-0.004
8.50	3.21	17.10	-0.01	2.19	0.24	-0.04	4.83	1.60	-0.004
8.82	2.89	15.57	-0.01	1.91	0.20	-0.02	4.51	1.47	-0.003
9.15	2.57	14.01	-0.01	1.69	0.18	-0.02	4.25	1.39	-0.003
9.47	2.25	12.34	-0.01	1.55	0.21	-0.01	4.06	1.50	-0.001
9.79	1.93	10.67	-0.01	1.31	0.25	-0.01	3.74	1.65	-0.001
10.11	1.60	8.92	-0.01	1.11	0.26	-0.02	3.44	1.67	-0.002
10.43	1.28	7.11	-0.01	0.97	0.27	-0.02	3.22	1.69	-0.002
10.75	0.96	5.19	-0.01	0.99	0.17	-0.02	3.25	1.35	-0.002
11.07	0.64	0.40	-0.01	0.88	0.07	-0.01	3.06	0.85	-0.001
11.39	0.32	0.10	-0.15	0.16	0.07	-0.01	1.33	0.88	-0.001
11.71	0.00	1.34	-0.01	0.00	0.00	0.00	0.00	0.06	0.000

Table N-120 Grid #2, L6, Plasma-Off, Center (46-55)

L6 (Off)							U_∞ =	30.58	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.71	23.43	1.30	-0.17	3.48	0.87	0.14	6.10	3.05	0.014
-11.39	23.10	2.27	-0.05	1.67	0.76	0.08	4.22	2.85	0.009
-11.07	22.78	3.46	0.00	0.53	0.13	0.00	2.39	1.20	0.000
-10.75	22.46	4.84	0.01	0.49	0.12	0.00	2.28	1.15	0.000
-10.43	22.14	6.18	0.01	0.70	0.15	0.00	2.75	1.25	0.000
-10.11	21.82	7.54	0.01	0.92	0.15	0.00	3.14	1.26	0.000
-9.79	21.50	8.90	0.01	0.95	0.15	0.00	3.19	1.26	0.000
-9.47	21.18	10.10	0.01	1.13	0.16	0.00	3.48	1.29	0.000
-9.15	20.86	11.34	0.01	1.48	0.16	0.00	3.98	1.32	0.000
-8.82	20.54	12.55	0.01	1.72	0.16	0.01	4.29	1.30	0.001
-8.50	20.22	13.74	0.01	1.82	0.14	0.02	4.41	1.21	0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-8.18	19.90	14.84	0.01	2.12	0.17	0.03	4.77	1.34	0.003
-7.86	19.57	15.94	0.01	2.53	0.20	0.02	5.20	1.47	0.003
-7.54	19.25	16.98	0.01	2.78	0.21	0.02	5.46	1.48	0.002
-7.22	18.93	18.01	0.00	2.94	0.18	0.04	5.61	1.39	0.004
-6.90	18.61	18.98	-0.01	3.16	0.16	0.05	5.81	1.31	0.005
-6.58	18.29	19.92	-0.01	3.30	0.16	0.06	5.94	1.30	0.006
-6.26	17.97	20.80	-0.01	3.54	0.20	0.07	6.15	1.45	0.008
-5.94	17.65	21.64	-0.02	3.63	0.21	0.08	6.23	1.49	0.008
-5.62	17.33	22.44	-0.01	3.69	0.18	0.09	6.28	1.38	0.009
-5.29	17.01	23.22	-0.02	3.65	0.19	0.09	6.25	1.44	0.010
-4.97	16.69	23.92	-0.03	3.58	0.21	0.10	6.19	1.51	0.010
-4.65	16.37	24.58	-0.03	3.52	0.20	0.10	6.14	1.45	0.011
-4.33	16.04	25.20	-0.03	3.44	0.19	0.11	6.07	1.41	0.011
-4.01	15.72	25.79	-0.03	3.36	0.19	0.11	6.00	1.43	0.011
-3.69	15.40	26.34	-0.03	3.27	0.18	0.10	5.91	1.39	0.010
-3.37	15.08	26.85	-0.03	3.04	0.18	0.11	5.70	1.37	0.012
-3.05	14.76	27.31	-0.04	2.90	0.18	0.10	5.57	1.39	0.010
-2.73	14.44	27.77	-0.04	2.66	0.20	0.09	5.33	1.47	0.010
-2.41	14.12	28.15	-0.04	2.52	0.21	0.10	5.19	1.52	0.011
-2.09	13.80	28.52	-0.04	2.33	0.21	0.09	4.99	1.49	0.010
-1.76	13.48	28.84	-0.04	2.19	0.22	0.08	4.84	1.55	0.009
-1.44	13.16	29.14	-0.04	2.06	0.22	0.07	4.70	1.53	0.008
-1.12	12.84	29.40	-0.03	1.99	0.22	0.06	4.61	1.54	0.007
-0.80	12.52	29.64	-0.03	1.86	0.18	0.06	4.45	1.40	0.006
-0.48	12.19	29.85	-0.02	1.71	0.17	0.06	4.28	1.34	0.006
-0.16	11.87	30.05	-0.03	1.56	0.19	0.05	4.09	1.41	0.005
0.16	11.55	30.22	-0.03	1.43	0.18	0.04	3.91	1.37	0.004
0.48	11.23	30.35	-0.03	1.34	0.17	0.04	3.79	1.36	0.004
0.80	10.91	30.45	-0.03	1.28	0.19	0.02	3.69	1.41	0.002
1.12	10.59	30.52	-0.03	1.20	0.18	0.01	3.58	1.41	0.002
1.44	10.27	30.56	-0.02	1.11	0.19	0.01	3.45	1.42	0.001
1.76	9.95	30.58	-0.02	1.09	0.18	0.01	3.42	1.37	0.001
2.09	9.63	30.55	-0.02	1.06	0.18	0.00	3.37	1.40	0.000
2.41	9.31	30.49	-0.02	1.06	0.20	0.00	3.36	1.44	-0.001
2.73	8.99	30.39	-0.02	1.08	0.19	-0.02	3.40	1.44	-0.002
3.05	8.66	30.24	-0.02	1.14	0.20	-0.02	3.50	1.45	-0.003
3.37	8.34	30.05	-0.02	1.20	0.18	-0.03	3.58	1.40	-0.003
3.69	8.02	29.81	-0.02	1.26	0.17	-0.03	3.68	1.35	-0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
4.01	7.70	29.50	-0.02	1.37	0.17	-0.04	3.83	1.33	-0.004
4.33	7.38	29.14	-0.02	1.47	0.16	-0.04	3.96	1.29	-0.004
4.65	7.06	28.71	-0.02	1.58	0.15	-0.04	4.11	1.28	-0.005
4.97	6.74	28.22	-0.02	1.72	0.17	-0.05	4.29	1.33	-0.005
5.29	6.42	27.63	-0.02	1.90	0.15	-0.04	4.51	1.27	-0.004
5.62	6.10	26.97	-0.02	2.13	0.16	-0.05	4.77	1.31	-0.006
5.94	5.78	26.22	-0.02	2.25	0.16	-0.05	4.90	1.31	-0.006
6.26	5.46	25.37	-0.02	2.37	0.18	-0.05	5.03	1.40	-0.006
6.58	5.13	24.44	-0.02	2.42	0.19	-0.05	5.09	1.44	-0.005
6.90	4.81	23.42	-0.02	2.49	0.18	-0.04	5.16	1.38	-0.004
7.22	4.49	22.31	-0.02	2.51	0.17	-0.05	5.18	1.36	-0.005
7.54	4.17	21.10	-0.02	2.45	0.18	-0.04	5.12	1.40	-0.005
7.86	3.85	19.83	-0.02	2.34	0.20	-0.03	5.00	1.45	-0.004
8.18	3.53	18.47	-0.02	2.24	0.22	-0.02	4.89	1.52	-0.002
8.50	3.21	17.03	-0.02	2.10	0.22	-0.01	4.74	1.53	-0.002
8.82	2.89	15.52	-0.02	1.87	0.22	-0.02	4.47	1.55	-0.002
9.15	2.57	13.95	-0.02	1.65	0.23	-0.01	4.20	1.56	-0.001
9.47	2.25	12.31	-0.02	1.41	0.20	0.00	3.89	1.47	0.000
9.79	1.93	10.62	-0.02	1.19	0.21	0.01	3.56	1.51	0.001
10.11	1.60	8.88	-0.02	1.06	0.21	0.01	3.36	1.52	0.001
10.43	1.28	7.08	-0.02	0.88	0.19	0.00	3.06	1.42	0.000
10.75	0.96	5.29	-0.02	0.70	0.17	0.00	2.73	1.36	0.000
11.07	0.64	2.53	-0.07	1.71	0.20	0.03	4.28	1.46	0.003
11.39	0.32	1.28	0.00	0.62	0.14	0.00	2.58	1.21	0.000
11.71	0.00	0.10	-0.02	0.01	0.00	0.00	0.34	0.20	0.000

Table N-121 Grid #2, L6, Plasma-Off, Right (71-80)

L6 (Off)							U_∞ =	30.60	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.71	23.43	1.16	0.20	1.35	0.29	-0.01	3.80	1.76	-0.002
-11.39	23.10	2.59	0.00	0.50	0.23	0.00	2.30	1.55	0.000
-11.07	22.78	3.62	0.00	0.54	0.20	0.00	2.40	1.46	0.000
-10.75	22.46	5.00	0.00	0.53	0.14	0.00	2.37	1.21	0.000
-10.43	22.14	6.35	0.00	0.77	0.18	0.00	2.87	1.37	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.11	21.82	7.70	0.00	0.94	0.18	0.00	3.17	1.40	0.000
-9.79	21.50	9.04	0.01	0.95	0.21	0.01	3.18	1.48	0.001
-9.47	21.18	10.23	0.01	1.18	0.21	0.01	3.54	1.49	0.001
-9.15	20.86	11.48	0.00	1.56	0.17	0.00	4.08	1.35	0.001
-8.82	20.54	12.68	0.01	1.74	0.16	0.01	4.32	1.30	0.002
-8.50	20.22	13.84	0.01	1.83	0.19	0.02	4.43	1.41	0.002
-8.18	19.90	14.92	0.00	2.10	0.19	0.02	4.74	1.44	0.003
-7.86	19.57	16.01	0.00	2.48	0.20	0.03	5.15	1.47	0.003
-7.54	19.25	17.05	0.00	2.75	0.22	0.04	5.42	1.52	0.004
-7.22	18.93	18.07	0.00	2.94	0.20	0.04	5.60	1.45	0.004
-6.90	18.61	19.02	0.00	3.15	0.18	0.05	5.80	1.40	0.005
-6.58	18.29	19.97	-0.01	3.33	0.21	0.06	5.96	1.49	0.007
-6.26	17.97	20.84	-0.01	3.53	0.24	0.07	6.14	1.60	0.007
-5.94	17.65	21.68	-0.01	3.64	0.22	0.07	6.23	1.53	0.008
-5.62	17.33	22.48	-0.01	3.65	0.21	0.08	6.24	1.48	0.009
-5.29	17.01	23.24	-0.02	3.66	0.25	0.08	6.25	1.62	0.009
-4.97	16.69	23.95	-0.02	3.61	0.25	0.09	6.21	1.63	0.009
-4.65	16.37	24.63	-0.02	3.54	0.22	0.09	6.15	1.54	0.010
-4.33	16.04	25.23	-0.03	3.53	0.24	0.10	6.14	1.61	0.011
-4.01	15.72	25.80	-0.03	3.45	0.24	0.09	6.07	1.61	0.010
-3.69	15.40	26.34	-0.03	3.31	0.23	0.09	5.95	1.56	0.009
-3.37	15.08	26.86	-0.03	3.06	0.24	0.10	5.72	1.61	0.011
-3.05	14.76	27.32	-0.03	2.88	0.27	0.09	5.55	1.70	0.010
-2.73	14.44	27.76	-0.03	2.68	0.21	0.09	5.35	1.50	0.010
-2.41	14.12	28.16	-0.03	2.51	0.19	0.10	5.18	1.42	0.010
-2.09	13.80	28.53	-0.03	2.33	0.24	0.08	4.99	1.59	0.009
-1.76	13.48	28.85	-0.03	2.19	0.24	0.07	4.84	1.61	0.008
-1.44	13.16	29.15	-0.03	2.06	0.23	0.07	4.69	1.58	0.008
-1.12	12.84	29.41	-0.02	1.94	0.24	0.06	4.55	1.61	0.007
-0.80	12.52	29.66	-0.02	1.82	0.23	0.06	4.41	1.57	0.006
-0.48	12.19	29.87	-0.02	1.70	0.25	0.05	4.27	1.62	0.005
-0.16	11.87	30.06	-0.02	1.56	0.23	0.04	4.08	1.56	0.004
0.16	11.55	30.22	-0.02	1.46	0.25	0.04	3.95	1.64	0.005
0.48	11.23	30.37	-0.02	1.32	0.27	0.03	3.75	1.70	0.003
0.80	10.91	30.47	-0.02	1.21	0.26	0.02	3.59	1.66	0.002
1.12	10.59	30.54	-0.02	1.15	0.23	0.02	3.50	1.57	0.002
1.44	10.27	30.58	-0.02	1.10	0.22	0.01	3.43	1.54	0.001
1.76	9.95	30.60	-0.02	1.07	0.23	0.00	3.39	1.56	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.09	9.63	30.57	-0.02	1.05	0.22	0.00	3.35	1.53	0.000
2.41	9.31	30.50	-0.01	1.07	0.25	-0.01	3.39	1.64	-0.001
2.73	8.99	30.40	-0.01	1.08	0.25	-0.01	3.40	1.63	-0.001
3.05	8.66	30.25	-0.01	1.14	0.21	-0.01	3.50	1.50	-0.001
3.37	8.34	30.05	-0.02	1.23	0.22	-0.02	3.62	1.52	-0.003
3.69	8.02	29.81	-0.02	1.30	0.20	-0.03	3.72	1.47	-0.004
4.01	7.70	29.50	-0.02	1.39	0.19	-0.04	3.85	1.43	-0.004
4.33	7.38	29.14	-0.02	1.50	0.22	-0.04	4.00	1.53	-0.004
4.65	7.06	28.71	-0.02	1.59	0.21	-0.04	4.13	1.49	-0.005
4.97	6.74	28.21	-0.02	1.72	0.18	-0.04	4.29	1.37	-0.005
5.29	6.42	27.62	-0.02	1.92	0.18	-0.05	4.53	1.40	-0.005
5.62	6.10	26.95	-0.02	2.11	0.22	-0.05	4.75	1.54	-0.006
5.94	5.78	26.20	-0.02	2.29	0.24	-0.05	4.94	1.59	-0.005
6.26	5.46	25.35	-0.03	2.38	0.23	-0.05	5.05	1.58	-0.005
6.58	5.13	24.42	-0.03	2.38	0.23	-0.05	5.04	1.56	-0.005
6.90	4.81	23.40	-0.02	2.46	0.21	-0.03	5.13	1.50	-0.003
7.22	4.49	22.29	-0.03	2.48	0.21	-0.04	5.14	1.49	-0.004
7.54	4.17	21.08	-0.02	2.45	0.22	-0.03	5.11	1.54	-0.003
7.86	3.85	19.81	-0.02	2.36	0.26	-0.02	5.02	1.67	-0.002
8.18	3.53	18.45	-0.02	2.28	0.23	-0.02	4.93	1.57	-0.002
8.50	3.21	17.00	-0.02	2.03	0.22	-0.01	4.66	1.54	-0.001
8.82	2.89	15.51	-0.02	1.81	0.22	-0.01	4.39	1.54	-0.002
9.15	2.57	13.95	-0.02	1.60	0.23	0.00	4.14	1.57	0.000
9.47	2.25	12.30	-0.03	1.41	0.24	0.00	3.88	1.59	0.000
9.79	1.93	10.62	-0.02	1.19	0.22	0.01	3.56	1.52	0.001
10.11	1.60	8.90	-0.02	1.07	0.26	0.01	3.39	1.67	0.001
10.43	1.28	7.12	-0.03	0.90	0.23	0.00	3.10	1.57	0.000
10.75	0.96	5.31	-0.02	0.71	0.19	0.01	2.75	1.43	0.001
11.07	0.64	3.26	-0.03	0.73	0.16	0.01	2.79	1.29	0.001
11.39	0.32	1.00	-0.17	0.34	0.13	-0.01	1.89	1.19	-0.001
11.71	0.00	0.08	-0.03	0.02	0.02	0.00	0.50	0.40	0.000

Table N-122 Grid #2, L6, Plasma-150, Left (1-10)

L6 (150)							U_∞ =	32.28	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.71	23.43	1.03	-0.39	17.30	2.69	0.19	12.88	5.08	0.019
-11.39	23.10	2.26	-0.02	8.45	2.45	0.27	9.01	4.85	0.026
-11.07	22.78	4.42	0.06	3.37	2.07	0.03	5.68	4.45	0.003
-10.75	22.46	5.93	0.02	1.77	1.68	0.01	4.12	4.02	0.001
-10.43	22.14	7.38	0.00	1.36	0.79	0.01	3.61	2.76	0.001
-10.11	21.82	8.75	0.01	1.07	0.41	0.01	3.21	1.98	0.001
-9.79	21.50	10.10	0.01	1.05	0.29	0.00	3.18	1.66	0.000
-9.47	21.18	11.45	0.01	1.24	0.25	0.01	3.44	1.54	0.001
-9.15	20.86	12.88	0.02	1.32	0.27	0.01	3.55	1.62	0.001
-8.82	20.54	14.16	0.02	1.40	0.26	0.01	3.66	1.56	0.001
-8.50	20.22	15.44	0.02	1.75	0.23	0.02	4.10	1.50	0.002
-8.18	19.90	16.66	0.01	1.95	0.25	0.03	4.33	1.54	0.003
-7.86	19.57	17.88	0.01	2.07	0.24	0.03	4.46	1.52	0.003
-7.54	19.25	18.99	0.01	2.27	0.31	0.04	4.67	1.73	0.004
-7.22	18.93	20.07	0.01	2.46	0.30	0.04	4.86	1.70	0.004
-6.90	18.61	21.06	0.01	2.64	0.30	0.04	5.03	1.71	0.004
-6.58	18.29	22.06	0.00	2.67	0.27	0.04	5.06	1.62	0.004
-6.26	17.97	22.97	0.00	2.79	0.33	0.06	5.18	1.79	0.006
-5.94	17.65	23.85	-0.01	2.94	0.35	0.07	5.31	1.83	0.007
-5.62	17.33	24.66	-0.01	2.99	0.33	0.07	5.35	1.79	0.007
-5.29	17.01	25.42	-0.01	3.06	0.34	0.06	5.42	1.80	0.006
-4.97	16.69	26.13	-0.01	3.10	0.31	0.07	5.45	1.72	0.007
-4.65	16.37	26.81	-0.02	3.02	0.34	0.07	5.38	1.82	0.007
-4.33	16.04	27.41	-0.02	2.84	0.31	0.09	5.22	1.73	0.008
-4.01	15.72	27.99	-0.02	2.79	0.32	0.07	5.18	1.75	0.007
-3.69	15.40	28.53	-0.02	2.69	0.37	0.08	5.09	1.89	0.008
-3.37	15.08	29.00	-0.02	2.60	0.38	0.07	4.99	1.90	0.007
-3.05	14.76	29.42	-0.02	2.52	0.34	0.06	4.92	1.81	0.005
-2.73	14.44	29.86	-0.02	2.49	0.32	0.06	4.89	1.74	0.006
-2.41	14.12	30.24	-0.02	2.36	0.32	0.06	4.76	1.76	0.006
-2.09	13.80	30.59	-0.03	2.26	0.36	0.07	4.66	1.85	0.007
-1.76	13.48	30.91	-0.03	2.11	0.35	0.05	4.51	1.82	0.005
-1.44	13.16	31.18	-0.02	1.93	0.41	0.04	4.31	1.98	0.004
-1.12	12.84	31.42	-0.02	1.82	0.36	0.05	4.17	1.87	0.005
-0.80	12.52	31.64	-0.02	1.67	0.34	0.05	4.00	1.80	0.005

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.48	12.19	31.81	-0.02	1.59	0.35	0.04	3.91	1.84	0.004
-0.16	11.87	31.97	-0.02	1.46	0.47	0.04	3.74	2.13	0.004
0.16	11.55	32.10	-0.01	1.39	0.46	0.02	3.65	2.10	0.002
0.48	11.23	32.18	-0.02	1.32	0.32	0.02	3.56	1.75	0.002
0.80	10.91	32.25	-0.01	1.28	0.28	0.01	3.50	1.65	0.001
1.12	10.59	32.28	-0.01	1.25	0.35	0.02	3.46	1.83	0.002
1.44	10.27	32.27	0.00	1.24	0.35	0.02	3.45	1.84	0.001
1.76	9.95	32.23	-0.02	1.21	0.31	0.00	3.41	1.72	0.000
2.09	9.63	32.14	-0.01	1.19	0.29	-0.01	3.38	1.68	-0.001
2.41	9.31	32.02	-0.01	1.24	0.33	-0.01	3.45	1.79	-0.001
2.73	8.99	31.86	-0.02	1.30	0.38	-0.02	3.53	1.91	-0.002
3.05	8.66	31.65	-0.01	1.36	0.33	-0.02	3.62	1.77	-0.002
3.37	8.34	31.39	-0.01	1.41	0.30	-0.02	3.68	1.69	-0.002
3.69	8.02	31.08	-0.01	1.51	0.31	-0.03	3.81	1.74	-0.003
4.01	7.70	30.70	0.00	1.62	0.29	-0.03	3.94	1.66	-0.003
4.33	7.38	30.24	0.00	1.72	0.28	-0.03	4.06	1.64	-0.003
4.65	7.06	29.71	0.00	1.75	0.35	-0.04	4.10	1.83	-0.004
4.97	6.74	29.15	0.00	1.77	0.37	-0.03	4.12	1.87	-0.003
5.29	6.42	28.51	-0.01	1.79	0.29	-0.03	4.15	1.67	-0.003
5.62	6.10	27.78	-0.01	1.91	0.28	-0.03	4.29	1.64	-0.003
5.94	5.78	26.97	-0.01	1.97	0.32	-0.03	4.35	1.76	-0.003
6.26	5.46	26.08	0.00	2.11	0.32	-0.04	4.50	1.76	-0.004
6.58	5.13	25.11	-0.01	2.10	0.30	-0.04	4.48	1.69	-0.004
6.90	4.81	24.08	-0.01	2.06	0.30	-0.03	4.45	1.68	-0.003
7.22	4.49	22.95	-0.01	1.98	0.32	-0.03	4.36	1.74	-0.003
7.54	4.17	21.73	-0.01	1.99	0.33	-0.03	4.37	1.78	-0.003
7.86	3.85	20.44	-0.02	1.93	0.33	-0.03	4.31	1.78	-0.003
8.18	3.53	19.07	-0.02	1.79	0.32	-0.02	4.14	1.76	-0.002
8.50	3.21	17.62	-0.01	1.65	0.30	-0.01	3.98	1.70	-0.001
8.82	2.89	16.09	-0.01	1.53	0.28	-0.02	3.83	1.63	-0.002
9.15	2.57	14.50	0.00	1.35	0.24	-0.02	3.60	1.52	-0.002
9.47	2.25	12.80	0.00	1.23	0.20	-0.02	3.43	1.40	-0.002
9.79	1.93	11.07	-0.01	1.07	0.21	-0.02	3.20	1.43	-0.002
10.11	1.60	9.31	-0.01	0.93	0.22	0.00	2.99	1.45	0.000
10.43	1.28	7.51	-0.01	0.86	0.20	-0.01	2.88	1.40	-0.001
10.75	0.96	5.73	0.01	1.22	0.16	-0.02	3.42	1.25	-0.002
11.07	0.64	0.74	-0.04	1.91	0.19	0.04	4.28	1.35	0.004
11.39	0.32	0.00	0.18	0.53	0.30	-0.10	2.25	1.71	-0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
11.71	0.00	-2.42	-0.31	131.08	2.13	-16.34	35.47	4.52	-1.568

Table N-123 Grid #2, L6, Plasma-150, Center (46-55)

L6 (150)							U_∞ =	32.19	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.71	23.43	0.52	-0.05	17.28	4.15	0.16	12.91	6.33	0.015
-11.39	23.10	1.66	-0.02	17.25	4.19	0.20	12.90	6.36	0.019
-11.07	22.78	4.65	0.03	2.69	1.92	-0.01	5.09	4.30	-0.001
-10.75	22.46	6.11	0.03	1.52	1.36	-0.05	3.83	3.62	-0.005
-10.43	22.14	7.57	0.02	1.21	0.44	0.00	3.42	2.06	0.000
-10.11	21.82	8.95	0.03	0.93	0.20	0.00	2.99	1.40	0.000
-9.79	21.50	10.28	0.03	0.98	0.20	0.00	3.08	1.39	0.000
-9.47	21.18	11.64	0.02	1.13	0.17	0.00	3.30	1.27	0.000
-9.15	20.86	13.05	0.03	1.18	0.15	0.00	3.38	1.20	0.000
-8.82	20.54	14.31	0.03	1.30	0.16	0.01	3.54	1.24	0.001
-8.50	20.22	15.55	0.03	1.60	0.16	0.00	3.93	1.25	0.000
-8.18	19.90	16.77	0.03	1.80	0.19	0.01	4.17	1.34	0.001
-7.86	19.57	17.97	0.02	1.90	0.19	0.02	4.28	1.35	0.002
-7.54	19.25	19.06	0.02	2.04	0.23	0.03	4.44	1.48	0.003
-7.22	18.93	20.12	0.03	2.28	0.20	0.02	4.69	1.40	0.002
-6.90	18.61	21.13	0.03	2.50	0.19	0.03	4.91	1.35	0.003
-6.58	18.29	22.10	0.02	2.51	0.19	0.04	4.93	1.36	0.004
-6.26	17.97	23.00	0.01	2.60	0.23	0.05	5.01	1.49	0.005
-5.94	17.65	23.88	0.01	2.66	0.17	0.04	5.07	1.29	0.004
-5.62	17.33	24.66	0.01	2.69	0.21	0.05	5.09	1.44	0.005
-5.29	17.01	25.43	0.01	2.80	0.22	0.05	5.20	1.47	0.005
-4.97	16.69	26.13	0.00	2.81	0.23	0.06	5.21	1.50	0.006
-4.65	16.37	26.80	0.00	2.69	0.23	0.05	5.09	1.50	0.005
-4.33	16.04	27.41	0.00	2.68	0.23	0.05	5.09	1.48	0.005
-4.01	15.72	27.99	0.00	2.58	0.20	0.06	4.99	1.40	0.006
-3.69	15.40	28.51	0.00	2.47	0.22	0.07	4.89	1.44	0.006
-3.37	15.08	28.99	0.00	2.43	0.22	0.06	4.84	1.46	0.006
-3.05	14.76	29.41	-0.01	2.32	0.22	0.05	4.73	1.45	0.005
-2.73	14.44	29.83	-0.01	2.30	0.22	0.06	4.71	1.44	0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.41	14.12	30.20	-0.01	2.20	0.26	0.06	4.61	1.57	0.006
-2.09	13.80	30.55	-0.01	2.03	0.24	0.06	4.43	1.52	0.006
-1.76	13.48	30.85	-0.01	1.89	0.25	0.05	4.27	1.55	0.005
-1.44	13.16	31.13	-0.02	1.78	0.26	0.04	4.15	1.59	0.004
-1.12	12.84	31.38	-0.01	1.67	0.22	0.04	4.01	1.45	0.004
-0.80	12.52	31.59	0.00	1.52	0.22	0.03	3.82	1.44	0.003
-0.48	12.19	31.76	0.00	1.43	0.21	0.02	3.72	1.42	0.002
-0.16	11.87	31.91	0.00	1.38	0.23	0.02	3.65	1.49	0.002
0.16	11.55	32.02	-0.01	1.29	0.22	0.02	3.52	1.47	0.002
0.48	11.23	32.11	-0.01	1.24	0.23	0.02	3.45	1.49	0.001
0.80	10.91	32.17	-0.01	1.17	0.24	0.00	3.36	1.53	0.000
1.12	10.59	32.19	-0.01	1.14	0.21	0.00	3.32	1.42	0.000
1.44	10.27	32.19	0.00	1.16	0.20	0.00	3.35	1.39	0.000
1.76	9.95	32.14	0.00	1.13	0.23	0.00	3.31	1.49	0.000
2.09	9.63	32.06	0.00	1.12	0.23	-0.01	3.29	1.51	-0.001
2.41	9.31	31.93	0.00	1.17	0.23	-0.02	3.36	1.50	-0.001
2.73	8.99	31.77	0.00	1.25	0.24	-0.02	3.47	1.53	-0.002
3.05	8.66	31.54	-0.01	1.27	0.19	-0.02	3.51	1.34	-0.002
3.37	8.34	31.28	-0.01	1.32	0.22	-0.02	3.56	1.46	-0.002
3.69	8.02	30.95	-0.01	1.45	0.19	-0.02	3.74	1.37	-0.002
4.01	7.70	30.56	-0.01	1.55	0.20	-0.02	3.87	1.41	-0.002
4.33	7.38	30.10	-0.01	1.60	0.24	-0.03	3.93	1.52	-0.003
4.65	7.06	29.58	-0.01	1.65	0.28	-0.04	4.00	1.64	-0.003
4.97	6.74	29.01	-0.01	1.73	0.23	-0.03	4.09	1.48	-0.003
5.29	6.42	28.36	-0.01	1.76	0.21	-0.02	4.12	1.41	-0.002
5.62	6.10	27.64	-0.01	1.90	0.23	-0.04	4.28	1.48	-0.003
5.94	5.78	26.83	-0.02	1.99	0.24	-0.04	4.39	1.53	-0.003
6.26	5.46	25.93	-0.01	1.94	0.23	-0.03	4.33	1.48	-0.003
6.58	5.13	24.97	-0.01	1.96	0.22	-0.03	4.35	1.45	-0.003
6.90	4.81	23.94	-0.02	1.97	0.22	-0.02	4.36	1.46	-0.002
7.22	4.49	22.81	-0.02	1.91	0.28	-0.02	4.30	1.64	-0.002
7.54	4.17	21.59	-0.02	1.92	0.30	-0.02	4.31	1.71	-0.002
7.86	3.85	20.31	-0.03	1.82	0.22	-0.02	4.19	1.45	-0.002
8.18	3.53	18.96	-0.02	1.67	0.20	-0.02	4.02	1.38	-0.001
8.50	3.21	17.51	-0.02	1.56	0.20	-0.01	3.88	1.37	-0.001
8.82	2.89	16.01	-0.02	1.41	0.23	-0.01	3.68	1.49	-0.001
9.15	2.57	14.41	-0.02	1.25	0.23	-0.01	3.47	1.49	-0.001
9.47	2.25	12.75	-0.02	1.13	0.20	0.00	3.31	1.39	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
9.79	1.93	11.01	-0.02	0.95	0.18	0.00	3.03	1.33	0.000
10.11	1.60	9.25	-0.03	0.84	0.19	0.00	2.85	1.35	0.000
10.43	1.28	7.46	-0.03	0.76	0.17	0.00	2.70	1.27	0.000
10.75	0.96	5.75	-0.03	0.78	0.16	0.00	2.74	1.25	0.000
11.07	0.64	2.89	-0.10	2.61	0.32	0.11	5.02	1.76	0.011
11.39	0.32	1.07	-0.02	0.92	0.15	0.01	2.98	1.21	0.001
11.71	0.00	0.03	0.00	0.00	0.00	0.00	0.22	0.11	0.000

Table N-124 Grid #2, L6, Plasma-150, Right (71-80)

L6 (150)							U_∞ =	32.21	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.71	23.43	1.05	0.17	4.85	0.58	0.06	6.84	2.37	0.006
-11.39	23.10	3.21	0.00	4.57	2.19	0.04	6.64	4.59	0.004
-11.07	22.78	4.87	0.03	2.06	2.16	0.01	4.46	4.57	0.001
-10.75	22.46	6.26	0.03	1.38	1.04	0.00	3.64	3.17	0.000
-10.43	22.14	7.75	0.01	1.11	0.46	-0.01	3.27	2.10	-0.001
-10.11	21.82	9.11	0.01	0.89	0.31	0.01	2.94	1.73	0.001
-9.79	21.50	10.42	0.03	1.01	0.22	0.01	3.12	1.44	0.001
-9.47	21.18	11.80	0.03	1.17	0.17	0.01	3.36	1.29	0.001
-9.15	20.86	13.18	0.03	1.21	0.18	0.01	3.41	1.32	0.001
-8.82	20.54	14.43	0.03	1.37	0.18	0.01	3.64	1.33	0.001
-8.50	20.22	15.67	0.02	1.64	0.20	0.00	3.98	1.38	0.000
-8.18	19.90	16.88	0.03	1.83	0.20	0.02	4.20	1.39	0.002
-7.86	19.57	18.06	0.03	1.88	0.21	0.02	4.26	1.41	0.002
-7.54	19.25	19.14	0.03	2.12	0.25	0.03	4.52	1.54	0.003
-7.22	18.93	20.21	0.03	2.38	0.30	0.03	4.79	1.70	0.002
-6.90	18.61	21.18	0.03	2.47	0.29	0.03	4.88	1.66	0.003
-6.58	18.29	22.16	0.03	2.44	0.27	0.04	4.85	1.63	0.004
-6.26	17.97	23.05	0.02	2.52	0.28	0.06	4.93	1.65	0.006
-5.94	17.65	23.92	0.02	2.60	0.28	0.04	5.01	1.65	0.004
-5.62	17.33	24.70	0.02	2.69	0.32	0.05	5.09	1.75	0.004
-5.29	17.01	25.47	0.01	2.77	0.31	0.04	5.16	1.73	0.004
-4.97	16.69	26.17	0.01	2.79	0.25	0.06	5.18	1.55	0.005
-4.65	16.37	26.84	0.01	2.64	0.25	0.07	5.04	1.55	0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.33	16.04	27.44	0.01	2.60	0.29	0.07	5.01	1.66	0.007
-4.01	15.72	28.02	0.01	2.57	0.28	0.06	4.97	1.65	0.006
-3.69	15.40	28.55	0.01	2.46	0.28	0.06	4.87	1.65	0.006
-3.37	15.08	29.02	0.01	2.40	0.30	0.05	4.81	1.69	0.005
-3.05	14.76	29.46	0.00	2.40	0.28	0.05	4.81	1.65	0.005
-2.73	14.44	29.87	0.00	2.34	0.28	0.05	4.75	1.63	0.005
-2.41	14.12	30.24	0.00	2.22	0.28	0.05	4.62	1.66	0.005
-2.09	13.80	30.59	0.00	2.06	0.27	0.06	4.45	1.61	0.005
-1.76	13.48	30.89	-0.01	1.91	0.28	0.05	4.29	1.64	0.005
-1.44	13.16	31.17	0.00	1.80	0.28	0.05	4.16	1.64	0.005
-1.12	12.84	31.40	0.00	1.67	0.28	0.04	4.02	1.65	0.004
-0.80	12.52	31.60	0.00	1.55	0.29	0.04	3.87	1.68	0.004
-0.48	12.19	31.78	0.00	1.46	0.26	0.03	3.75	1.58	0.003
-0.16	11.87	31.92	-0.01	1.37	0.26	0.03	3.64	1.57	0.003
0.16	11.55	32.04	0.00	1.33	0.28	0.03	3.58	1.65	0.003
0.48	11.23	32.13	0.01	1.28	0.29	0.02	3.51	1.67	0.002
0.80	10.91	32.19	0.00	1.25	0.25	0.01	3.47	1.57	0.001
1.12	10.59	32.21	0.00	1.20	0.28	0.01	3.40	1.64	0.001
1.44	10.27	32.19	0.00	1.18	0.24	0.00	3.37	1.52	0.000
1.76	9.95	32.14	0.00	1.19	0.22	0.00	3.38	1.46	0.000
2.09	9.63	32.06	0.00	1.17	0.23	-0.01	3.36	1.50	0.000
2.41	9.31	31.93	0.00	1.17	0.26	-0.01	3.36	1.58	-0.001
2.73	8.99	31.76	0.00	1.24	0.25	-0.01	3.45	1.54	-0.001
3.05	8.66	31.54	-0.01	1.29	0.28	-0.02	3.53	1.64	-0.002
3.37	8.34	31.27	-0.01	1.37	0.29	-0.03	3.63	1.68	-0.002
3.69	8.02	30.94	-0.01	1.50	0.25	-0.02	3.81	1.56	-0.002
4.01	7.70	30.54	-0.01	1.61	0.28	-0.02	3.94	1.64	-0.002
4.33	7.38	30.08	-0.01	1.71	0.32	-0.02	4.06	1.75	-0.002
4.65	7.06	29.55	-0.01	1.72	0.28	-0.03	4.07	1.64	-0.002
4.97	6.74	28.97	-0.01	1.73	0.25	-0.03	4.08	1.54	-0.003
5.29	6.42	28.34	-0.01	1.82	0.28	-0.03	4.19	1.63	-0.003
5.62	6.10	27.59	-0.01	1.89	0.31	-0.03	4.27	1.72	-0.003
5.94	5.78	26.78	-0.01	1.93	0.32	-0.02	4.31	1.74	-0.001
6.26	5.46	25.89	-0.01	1.99	0.26	-0.03	4.38	1.60	-0.003
6.58	5.13	24.92	-0.01	1.98	0.26	-0.03	4.37	1.57	-0.003
6.90	4.81	23.89	-0.01	1.94	0.29	-0.02	4.33	1.66	-0.002
7.22	4.49	22.77	-0.01	1.95	0.28	-0.01	4.33	1.65	-0.001
7.54	4.17	21.56	-0.03	1.92	0.28	-0.01	4.30	1.63	-0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
7.86	3.85	20.28	-0.03	1.79	0.25	-0.01	4.16	1.54	-0.001
8.18	3.53	18.93	-0.02	1.65	0.26	-0.01	3.99	1.57	-0.001
8.50	3.21	17.50	-0.02	1.55	0.27	-0.01	3.87	1.61	-0.001
8.82	2.89	15.99	-0.02	1.42	0.27	0.00	3.70	1.60	0.000
9.15	2.57	14.41	-0.03	1.25	0.25	0.00	3.47	1.56	0.000
9.47	2.25	12.74	-0.03	1.15	0.30	0.00	3.34	1.70	0.000
9.79	1.93	11.03	-0.02	0.97	0.28	0.01	3.06	1.65	0.001
10.11	1.60	9.27	-0.02	0.86	0.22	0.00	2.88	1.46	0.000
10.43	1.28	7.49	-0.03	0.78	0.23	0.01	2.73	1.48	0.001
10.75	0.96	5.72	-0.03	0.80	0.24	0.00	2.77	1.53	0.000
11.07	0.64	3.70	-0.02	1.17	0.25	0.02	3.36	1.54	0.002
11.39	0.32	0.37	0.00	0.61	0.14	0.01	2.42	1.15	0.001
11.71	0.00	0.03	-0.05	0.02	0.02	0.00	0.41	0.39	0.000

Table N-125 Grid #2, L6, Plasma-300, Left (1-10)

L6 (300)							U_∞ =	33.53	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.71	23.43	1.22	-0.25	8.95	2.31	-0.13	8.92	4.53	-0.012
-11.39	23.10	2.55	0.01	3.20	1.12	-0.03	5.34	3.16	-0.002
-11.07	22.78	4.59	0.02	0.98	0.30	0.00	2.95	1.64	0.000
-10.75	22.46	6.25	0.02	0.98	0.32	0.01	2.95	1.70	0.001
-10.43	22.14	8.06	0.03	0.90	0.28	0.01	2.82	1.58	0.001
-10.11	21.82	9.68	0.03	0.86	0.29	0.00	2.77	1.62	0.000
-9.79	21.50	11.26	0.02	1.08	0.34	0.01	3.09	1.75	0.001
-9.47	21.18	12.81	0.02	1.14	0.36	0.02	3.18	1.80	0.002
-9.15	20.86	14.28	0.03	1.11	0.48	0.01	3.14	2.06	0.001
-8.82	20.54	15.63	0.03	1.34	0.53	0.01	3.46	2.18	0.001
-8.50	20.22	17.01	0.04	1.45	0.63	0.02	3.59	2.36	0.002
-8.18	19.90	18.27	0.04	1.45	0.63	0.03	3.59	2.37	0.002
-7.86	19.57	19.46	0.03	1.57	0.72	0.04	3.74	2.52	0.004
-7.54	19.25	20.59	0.02	1.82	0.94	0.04	4.02	2.88	0.003
-7.22	18.93	21.71	0.03	1.89	1.26	0.04	4.10	3.34	0.004
-6.90	18.61	22.73	0.02	1.99	1.49	0.07	4.21	3.64	0.006
-6.58	18.29	23.69	0.04	2.00	1.43	0.05	4.22	3.56	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-6.26	17.97	24.58	0.01	2.21	1.87	0.03	4.44	4.08	0.002
-5.94	17.65	25.48	0.01	2.38	2.20	0.07	4.60	4.43	0.006
-5.62	17.33	26.30	0.01	2.53	2.80	0.02	4.74	4.99	0.002
-5.29	17.01	27.08	0.01	2.52	3.23	0.02	4.73	5.36	0.002
-4.97	16.69	27.79	-0.01	2.71	3.70	0.10	4.91	5.74	0.009
-4.65	16.37	28.43	0.01	2.81	4.26	0.02	5.00	6.16	0.002
-4.33	16.04	29.05	0.01	3.15	5.18	0.09	5.29	6.79	0.008
-4.01	15.72	29.62	-0.01	3.56	5.98	0.04	5.63	7.29	0.003
-3.69	15.40	30.16	-0.03	4.03	6.78	-0.10	5.99	7.76	-0.009
-3.37	15.08	30.64	0.00	4.35	7.56	0.02	6.22	8.20	0.002
-3.05	14.76	31.11	0.02	4.86	8.23	0.06	6.57	8.56	0.006
-2.73	14.44	31.52	0.02	4.62	8.42	0.22	6.41	8.65	0.020
-2.41	14.12	31.84	-0.01	4.82	8.51	0.23	6.55	8.70	0.020
-2.09	13.80	32.20	-0.03	4.57	8.46	0.18	6.37	8.67	0.016
-1.76	13.48	32.51	-0.04	4.38	8.52	0.05	6.24	8.71	0.004
-1.44	13.16	32.76	-0.03	4.69	9.39	-0.12	6.46	9.14	-0.011
-1.12	12.84	32.98	0.01	4.64	9.97	-0.10	6.42	9.42	-0.009
-0.80	12.52	33.17	0.00	4.53	10.21	0.02	6.35	9.53	0.002
-0.48	12.19	33.31	0.00	4.95	10.15	0.15	6.64	9.50	0.014
-0.16	11.87	33.38	-0.04	5.22	10.60	0.07	6.81	9.71	0.006
0.16	11.55	33.46	-0.03	5.62	10.83	0.13	7.07	9.82	0.012
0.48	11.23	33.53	0.00	5.57	11.05	-0.09	7.04	9.91	-0.008
0.80	10.91	33.53	-0.02	5.72	11.61	0.01	7.13	10.16	0.001
1.12	10.59	33.52	-0.03	5.94	11.96	0.26	7.27	10.31	0.023
1.44	10.27	33.48	-0.02	6.19	12.31	0.27	7.42	10.46	0.024
1.76	9.95	33.41	0.01	6.42	11.36	0.18	7.55	10.05	0.016
2.09	9.63	33.30	0.01	6.64	11.64	0.42	7.69	10.17	0.038
2.41	9.31	33.15	0.02	6.25	11.64	0.31	7.45	10.18	0.028
2.73	8.99	32.94	0.01	6.26	11.61	0.06	7.46	10.16	0.005
3.05	8.66	32.67	-0.02	6.75	11.71	0.23	7.75	10.21	0.020
3.37	8.34	32.40	0.01	6.83	12.23	0.11	7.80	10.43	0.010
3.69	8.02	32.08	-0.01	6.53	11.84	0.01	7.62	10.26	0.001
4.01	7.70	31.64	-0.03	7.04	11.99	0.24	7.91	10.33	0.021
4.33	7.38	31.08	0.02	7.23	12.39	0.37	8.02	10.50	0.033
4.65	7.06	30.59	0.00	6.39	11.40	0.19	7.54	10.07	0.016
4.97	6.74	29.93	0.00	5.44	9.43	-0.13	6.96	9.16	-0.011
5.29	6.42	29.25	0.02	5.13	9.09	-0.13	6.75	8.99	-0.011
5.62	6.10	28.55	-0.02	4.38	8.18	-0.04	6.24	8.53	-0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.94	5.78	27.75	-0.05	3.55	6.21	-0.07	5.62	7.43	-0.006
6.26	5.46	26.84	-0.02	3.23	5.39	0.00	5.36	6.93	0.000
6.58	5.13	25.89	0.00	2.89	4.51	-0.06	5.07	6.33	-0.005
6.90	4.81	24.82	0.01	2.40	3.45	-0.08	4.62	5.54	-0.007
7.22	4.49	23.71	-0.01	2.01	2.57	-0.04	4.22	4.78	-0.003
7.54	4.17	22.49	-0.01	1.97	1.99	-0.05	4.18	4.21	-0.004
7.86	3.85	21.20	-0.01	1.78	1.57	-0.02	3.98	3.74	-0.001
8.18	3.53	19.85	-0.02	1.61	1.48	-0.03	3.79	3.62	-0.003
8.50	3.21	18.41	-0.01	1.54	1.40	-0.03	3.70	3.53	-0.003
8.82	2.89	16.89	-0.02	1.45	1.17	-0.03	3.60	3.23	-0.003
9.15	2.57	15.30	-0.02	1.30	0.87	-0.02	3.40	2.78	-0.001
9.47	2.25	13.61	-0.01	1.29	0.86	-0.01	3.39	2.76	-0.001
9.79	1.93	11.87	-0.02	1.22	0.77	0.00	3.30	2.62	0.000
10.11	1.60	10.02	-0.02	1.12	0.72	-0.01	3.16	2.54	-0.001
10.43	1.28	8.05	-0.02	1.13	0.54	-0.02	3.17	2.20	-0.002
10.75	0.96	6.16	0.02	2.28	0.29	-0.05	4.51	1.60	-0.004
11.07	0.64	0.93	0.00	5.62	0.72	0.02	7.07	2.54	0.002
11.39	0.32	0.03	0.04	1.49	0.53	-0.07	3.65	2.17	-0.006
11.71	0.00	7.02	0.28	128.99	0.09	-3.30	33.87	0.88	-0.293

Table N-126 Grid #2, L6, Plasma-300, Center (46-55)

L6 (300)							U_∞ =	33.55	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.71	23.43	0.98	0.00	8.03	2.97	0.05	8.45	5.13	0.004
-11.39	23.10	2.32	0.07	7.25	1.93	0.01	8.03	4.14	0.001
-11.07	22.78	4.87	0.04	0.77	0.23	0.00	2.61	1.43	0.000
-10.75	22.46	6.57	0.03	0.88	0.24	-0.01	2.79	1.45	-0.001
-10.43	22.14	8.34	0.03	0.76	0.23	0.00	2.60	1.43	0.000
-10.11	21.82	9.93	0.04	0.74	0.25	0.00	2.56	1.50	0.000
-9.79	21.50	11.51	0.04	0.95	0.25	0.00	2.90	1.48	0.000
-9.47	21.18	13.04	0.04	0.94	0.24	0.00	2.89	1.45	0.000
-9.15	20.86	14.46	0.04	0.98	0.23	0.01	2.95	1.44	0.001
-8.82	20.54	15.82	0.04	1.19	0.28	0.00	3.25	1.56	0.000
-8.50	20.22	17.19	0.04	1.21	0.27	0.00	3.28	1.54	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-8.18	19.90	18.41	0.05	1.19	0.33	0.01	3.25	1.72	0.001
-7.86	19.57	19.57	0.04	1.40	0.51	0.00	3.53	2.13	0.000
-7.54	19.25	20.69	0.05	1.61	0.64	0.01	3.78	2.38	0.001
-7.22	18.93	21.81	0.04	1.67	0.57	0.01	3.85	2.24	0.001
-6.90	18.61	22.82	0.04	1.67	0.61	0.01	3.85	2.32	0.001
-6.58	18.29	23.79	0.04	1.73	0.82	0.03	3.92	2.70	0.003
-6.26	17.97	24.66	0.04	1.86	1.12	0.02	4.07	3.15	0.002
-5.94	17.65	25.53	0.03	2.00	1.32	-0.02	4.22	3.43	-0.002
-5.62	17.33	26.34	0.05	2.01	1.63	-0.03	4.23	3.81	-0.003
-5.29	17.01	27.09	0.05	1.91	1.76	0.02	4.12	3.95	0.002
-4.97	16.69	27.76	0.02	2.00	2.17	0.04	4.21	4.39	0.004
-4.65	16.37	28.39	0.02	2.13	2.53	-0.01	4.35	4.74	-0.001
-4.33	16.04	29.00	0.04	2.31	2.70	-0.07	4.53	4.90	-0.006
-4.01	15.72	29.56	0.04	2.56	3.29	-0.09	4.77	5.41	-0.008
-3.69	15.40	30.10	0.01	2.82	4.43	0.03	5.01	6.27	0.002
-3.37	15.08	30.62	0.02	2.98	5.26	0.02	5.14	6.83	0.002
-3.05	14.76	31.08	0.02	2.96	5.26	0.09	5.13	6.83	0.008
-2.73	14.44	31.52	0.01	2.96	5.38	0.15	5.13	6.91	0.013
-2.41	14.12	31.88	0.01	3.05	6.25	-0.01	5.20	7.45	-0.001
-2.09	13.80	32.21	0.02	3.04	6.32	-0.10	5.19	7.49	-0.009
-1.76	13.48	32.50	0.02	3.04	6.11	-0.09	5.20	7.37	-0.008
-1.44	13.16	32.75	0.05	3.08	6.49	-0.05	5.23	7.59	-0.004
-1.12	12.84	32.97	0.01	3.19	7.13	0.05	5.32	7.96	0.004
-0.80	12.52	33.15	0.01	3.14	7.67	0.02	5.28	8.26	0.002
-0.48	12.19	33.30	0.00	3.22	7.79	-0.12	5.35	8.32	-0.011
-0.16	11.87	33.43	0.05	3.15	7.80	-0.23	5.29	8.32	-0.021
0.16	11.55	33.49	0.02	3.47	8.53	-0.29	5.55	8.70	-0.026
0.48	11.23	33.54	0.00	3.62	8.60	-0.23	5.67	8.74	-0.020
0.80	10.91	33.55	0.01	3.67	8.60	-0.08	5.71	8.74	-0.007
1.12	10.59	33.55	0.01	3.64	8.28	0.08	5.69	8.58	0.007
1.44	10.27	33.51	0.00	3.77	8.74	0.08	5.78	8.81	0.007
1.76	9.95	33.43	0.00	3.82	9.02	-0.15	5.83	8.95	-0.014
2.09	9.63	33.32	0.02	4.06	9.28	-0.12	6.00	9.08	-0.011
2.41	9.31	33.16	0.00	3.88	8.76	0.01	5.87	8.82	0.001
2.73	8.99	32.96	-0.03	3.99	8.73	-0.21	5.95	8.81	-0.018
3.05	8.66	32.69	0.00	4.09	9.20	-0.15	6.03	9.04	-0.014
3.37	8.34	32.35	0.00	4.07	9.26	-0.18	6.01	9.07	-0.016
3.69	8.02	31.97	0.01	4.11	9.38	-0.24	6.04	9.13	-0.022

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
4.01	7.70	31.53	0.02	4.15	8.92	0.00	6.07	8.90	0.000
4.33	7.38	31.01	0.00	4.41	8.78	0.19	6.25	8.83	0.017
4.65	7.06	30.47	-0.01	4.01	8.09	0.05	5.97	8.48	0.005
4.97	6.74	29.85	0.00	3.70	6.93	0.06	5.73	7.85	0.005
5.29	6.42	29.17	-0.03	3.22	6.19	0.12	5.34	7.42	0.011
5.62	6.10	28.41	-0.01	2.69	5.18	0.04	4.89	6.78	0.003
5.94	5.78	27.60	0.00	2.30	4.30	-0.01	4.52	6.18	-0.001
6.26	5.46	26.72	0.00	2.13	3.92	-0.10	4.35	5.90	-0.009
6.58	5.13	25.75	0.00	1.95	2.87	-0.07	4.16	5.05	-0.006
6.90	4.81	24.71	0.00	1.84	2.27	-0.01	4.04	4.49	-0.001
7.22	4.49	23.58	-0.02	1.76	1.78	-0.02	3.95	3.98	-0.001
7.54	4.17	22.35	-0.02	1.76	1.43	0.00	3.95	3.56	0.000
7.86	3.85	21.06	-0.03	1.57	1.12	0.00	3.73	3.15	0.000
8.18	3.53	19.73	-0.04	1.40	0.94	-0.01	3.52	2.88	-0.001
8.50	3.21	18.32	-0.03	1.29	0.68	0.00	3.39	2.46	0.000
8.82	2.89	16.79	-0.03	1.24	0.76	0.01	3.32	2.59	0.001
9.15	2.57	15.23	-0.04	1.13	0.67	0.00	3.17	2.44	0.000
9.47	2.25	13.54	-0.03	1.16	0.58	-0.01	3.21	2.26	-0.001
9.79	1.93	11.79	-0.04	1.07	0.56	0.02	3.08	2.22	0.001
10.11	1.60	9.95	-0.04	0.99	0.58	0.01	2.96	2.27	0.001
10.43	1.28	8.00	-0.05	1.01	0.57	0.00	2.99	2.24	0.000
10.75	0.96	6.13	-0.03	1.20	0.44	0.00	3.27	1.97	0.000
11.07	0.64	2.96	-0.04	4.23	0.79	0.12	6.13	2.65	0.011
11.39	0.32	1.14	0.01	1.50	0.30	0.02	3.65	1.63	0.002
11.71	0.00	0.93	0.01	0.00	0.00	0.00	0.00	0.00	0.000

Table N-127 Grid #2, L6, Plasma-300, Right (71-80)

L6 (300)							U_∞ =	33.57	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.71	23.43	1.22	0.12	1.25	0.34	0.00	3.32	1.72	0.000
-11.39	23.10	3.28	0.01	0.91	0.23	-0.01	2.84	1.44	-0.001
-11.07	22.78	5.08	0.01	0.76	0.27	0.00	2.59	1.56	0.000
-10.75	22.46	6.79	0.01	0.93	0.34	-0.01	2.87	1.74	-0.001
-10.43	22.14	8.54	0.02	0.80	0.30	0.01	2.66	1.62	0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.11	21.82	10.10	0.03	0.82	0.24	0.00	2.70	1.47	0.000
-9.79	21.50	11.69	0.03	1.01	0.33	0.00	2.99	1.72	0.000
-9.47	21.18	13.20	0.04	0.97	0.33	0.00	2.93	1.72	0.000
-9.15	20.86	14.60	0.04	1.04	0.35	0.00	3.03	1.76	0.000
-8.82	20.54	15.96	0.04	1.21	0.38	-0.01	3.28	1.85	0.000
-8.50	20.22	17.32	0.04	1.23	0.40	0.00	3.30	1.90	0.000
-8.18	19.90	18.52	0.04	1.22	0.47	0.02	3.28	2.04	0.002
-7.86	19.57	19.67	0.05	1.42	0.54	0.01	3.54	2.19	0.001
-7.54	19.25	20.78	0.06	1.61	0.58	0.00	3.78	2.28	0.000
-7.22	18.93	21.90	0.05	1.66	0.70	0.01	3.84	2.48	0.001
-6.90	18.61	22.89	0.04	1.71	0.91	0.01	3.89	2.84	0.001
-6.58	18.29	23.83	0.05	1.76	1.06	0.04	3.96	3.07	0.003
-6.26	17.97	24.70	0.05	1.91	1.43	0.01	4.12	3.56	0.001
-5.94	17.65	25.56	0.05	2.08	1.83	0.01	4.30	4.03	0.001
-5.62	17.33	26.36	0.04	2.13	2.11	-0.01	4.35	4.32	-0.001
-5.29	17.01	27.11	0.05	2.11	2.41	0.03	4.33	4.62	0.003
-4.97	16.69	27.80	0.05	2.16	2.75	0.09	4.38	4.94	0.008
-4.65	16.37	28.44	0.04	2.32	3.30	0.04	4.54	5.41	0.003
-4.33	16.04	29.04	0.04	2.66	4.03	0.01	4.86	5.98	0.001
-4.01	15.72	29.63	0.04	3.06	4.68	0.01	5.21	6.44	0.001
-3.69	15.40	30.16	0.04	3.30	5.41	0.00	5.41	6.93	0.000
-3.37	15.08	30.67	0.05	3.41	5.78	-0.09	5.50	7.16	-0.008
-3.05	14.76	31.11	0.06	3.29	6.21	0.10	5.41	7.42	0.009
-2.73	14.44	31.54	0.05	3.53	7.01	0.14	5.59	7.89	0.013
-2.41	14.12	31.87	0.05	3.80	7.97	0.08	5.80	8.41	0.007
-2.09	13.80	32.23	0.02	3.61	7.97	0.09	5.66	8.41	0.008
-1.76	13.48	32.52	0.03	3.83	8.80	0.04	5.83	8.84	0.004
-1.44	13.16	32.78	0.04	4.05	9.13	-0.11	6.00	9.00	-0.009
-1.12	12.84	32.96	0.04	4.50	9.27	0.04	6.32	9.07	0.004
-0.80	12.52	33.15	0.02	4.31	9.25	-0.02	6.18	9.06	-0.001
-0.48	12.19	33.29	0.01	4.33	10.05	-0.13	6.20	9.44	-0.011
-0.16	11.87	33.41	0.05	4.71	10.53	-0.29	6.46	9.67	-0.026
0.16	11.55	33.50	-0.02	4.57	10.54	-0.22	6.37	9.67	-0.020
0.48	11.23	33.57	-0.02	4.85	10.74	-0.09	6.56	9.76	-0.008
0.80	10.91	33.55	-0.03	5.08	10.71	-0.01	6.71	9.75	-0.001
1.12	10.59	33.51	0.01	5.29	11.16	-0.14	6.85	9.95	-0.012
1.44	10.27	33.49	0.01	5.59	11.41	-0.20	7.04	10.06	-0.018
1.76	9.95	33.42	0.03	5.33	11.22	-0.15	6.88	9.98	-0.013

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
2.09	9.63	33.29	0.03	5.45	11.52	0.12	6.95	10.11	0.010
2.41	9.31	33.12	0.02	5.19	11.80	0.26	6.78	10.23	0.023
2.73	8.99	32.94	0.00	5.96	12.88	-0.02	7.27	10.69	-0.002
3.05	8.66	32.68	-0.01	6.28	12.57	0.00	7.47	10.56	0.000
3.37	8.34	32.36	0.00	5.96	11.47	0.25	7.27	10.09	0.022
3.69	8.02	31.95	-0.03	6.14	11.74	0.02	7.38	10.21	0.001
4.01	7.70	31.48	-0.05	5.90	11.77	0.06	7.24	10.22	0.005
4.33	7.38	30.96	-0.04	5.85	10.78	0.06	7.21	9.78	0.005
4.65	7.06	30.39	-0.03	5.25	10.06	-0.01	6.82	9.45	-0.001
4.97	6.74	29.78	0.00	4.61	8.93	0.08	6.40	8.90	0.007
5.29	6.42	29.12	0.02	4.30	8.08	-0.07	6.18	8.47	-0.006
5.62	6.10	28.39	-0.01	3.71	6.58	-0.01	5.74	7.64	-0.001
5.94	5.78	27.55	-0.02	3.36	6.18	0.00	5.46	7.41	0.000
6.26	5.46	26.61	-0.03	2.94	5.16	0.01	5.11	6.77	0.001
6.58	5.13	25.68	-0.01	2.49	4.28	0.02	4.70	6.16	0.001
6.90	4.81	24.64	-0.02	2.15	3.23	-0.07	4.37	5.35	-0.006
7.22	4.49	23.52	-0.02	1.91	2.45	-0.04	4.12	4.67	-0.003
7.54	4.17	22.30	-0.02	1.82	1.93	0.04	4.02	4.14	0.003
7.86	3.85	21.03	-0.03	1.58	1.43	0.00	3.75	3.56	0.000
8.18	3.53	19.71	-0.03	1.43	1.05	0.00	3.56	3.06	0.000
8.50	3.21	18.29	-0.04	1.35	0.96	0.03	3.46	2.92	0.003
8.82	2.89	16.76	-0.04	1.27	0.83	0.01	3.36	2.71	0.001
9.15	2.57	15.20	-0.04	1.18	0.76	0.01	3.23	2.60	0.001
9.47	2.25	13.53	-0.04	1.21	0.76	0.02	3.27	2.60	0.002
9.79	1.93	11.78	-0.04	1.12	0.84	0.01	3.15	2.73	0.001
10.11	1.60	9.96	-0.04	1.03	0.64	0.00	3.02	2.38	0.000
10.43	1.28	8.02	-0.04	1.08	0.63	0.00	3.09	2.37	0.000
10.75	0.96	6.08	-0.03	1.16	0.69	0.00	3.21	2.47	0.000
11.07	0.64	3.74	-0.04	1.70	0.55	0.02	3.89	2.22	0.002
11.39	0.32	0.54	0.06	0.74	0.18	0.07	2.56	1.28	0.006
11.71	0.00	0.11	0.00	0.45	0.01	-0.01	2.00	0.28	0.000

Table N-128 Grid #1, L0, Plasma-150, Left (1-10), Equilibrated

L0 (150), Equilibrated							U_∞ =	25.55	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.57	21.15	0.25	0.33	0.97	1.10	0.17	3.86	4.11	0.026
-10.28	20.86	1.43	0.25	3.58	1.81	0.26	7.41	5.27	0.040
-9.99	20.57	4.67	0.02	3.49	1.34	-0.06	7.32	4.54	-0.010
-9.70	20.28	7.03	-0.02	3.61	0.95	-0.04	7.44	3.82	-0.006
-9.42	19.99	9.26	-0.02	4.90	1.02	0.05	8.66	3.95	0.008
-9.13	19.70	11.30	-0.03	6.44	1.39	0.18	9.93	4.61	0.028
-8.84	19.41	13.26	-0.06	7.85	1.48	0.19	10.97	4.77	0.030
-8.55	19.12	14.95	-0.03	9.37	2.37	0.38	11.98	6.02	0.059
-8.26	18.83	16.62	-0.02	9.85	3.02	0.41	12.28	6.80	0.063
-7.97	18.54	18.00	-0.04	9.42	2.38	0.46	12.02	6.04	0.071
-7.68	18.25	19.21	-0.02	8.32	1.30	0.49	11.29	4.46	0.075
-7.39	17.96	20.20	0.00	7.33	1.05	0.53	10.60	4.01	0.081
-7.10	17.67	21.09	-0.02	6.58	0.98	0.56	10.04	3.88	0.086
-6.81	17.38	21.82	-0.01	6.07	1.13	0.55	9.64	4.16	0.084
-6.52	17.09	22.45	0.01	5.56	0.92	0.59	9.23	3.75	0.090
-6.23	16.80	22.98	0.01	4.82	0.92	0.56	8.60	3.75	0.085
-5.94	16.51	23.46	0.03	4.13	0.92	0.51	7.95	3.76	0.078
-5.65	16.22	23.77	0.04	3.88	1.07	0.47	7.71	4.06	0.072
-5.36	15.93	24.07	0.03	3.54	1.10	0.43	7.36	4.10	0.065
-5.07	15.64	24.36	0.04	3.09	0.98	0.39	6.89	3.87	0.059
-4.78	15.35	24.57	0.05	2.89	1.17	0.34	6.65	4.24	0.052
-4.49	15.06	24.77	0.06	2.69	1.14	0.35	6.42	4.18	0.054
-4.20	14.77	24.92	0.08	2.57	1.17	0.34	6.27	4.24	0.052
-3.91	14.48	25.05	0.08	2.44	1.27	0.27	6.11	4.42	0.041
-3.62	14.20	25.18	0.09	2.22	1.26	0.21	5.83	4.39	0.033
-3.33	13.91	25.27	0.08	2.15	1.34	0.21	5.74	4.54	0.032
-3.04	13.62	25.34	0.09	2.04	1.24	0.17	5.59	4.37	0.026
-2.75	13.33	25.40	0.10	1.99	1.33	0.15	5.52	4.51	0.023
-2.46	13.04	25.46	0.09	1.93	1.35	0.12	5.44	4.55	0.018
-2.17	12.75	25.49	0.08	1.90	1.30	0.10	5.39	4.46	0.015

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-1.88	12.46	25.54	0.10	1.83	1.22	0.02	5.29	4.33	0.003
-1.59	12.17	25.54	0.11	1.77	1.31	-0.01	5.20	4.48	-0.001
-1.30	11.88	25.54	0.10	1.79	1.27	-0.04	5.24	4.42	-0.006
-1.01	11.59	25.55	0.08	1.75	1.29	-0.05	5.18	4.44	-0.008
-0.72	11.30	25.52	0.10	1.80	1.26	-0.10	5.25	4.40	-0.015
-0.43	11.01	25.52	0.10	1.79	1.10	-0.11	5.24	4.10	-0.017
-0.14	10.72	25.49	0.11	1.81	1.11	-0.14	5.26	4.12	-0.021
0.14	10.43	25.44	0.12	1.88	1.19	-0.19	5.37	4.26	-0.029
0.43	10.14	25.41	0.12	1.99	1.28	-0.24	5.52	4.43	-0.036
0.72	9.85	25.34	0.12	2.02	1.22	-0.25	5.56	4.32	-0.038
1.01	9.56	25.28	0.11	2.06	1.29	-0.20	5.62	4.44	-0.030
1.30	9.27	25.22	0.11	2.20	1.21	-0.28	5.80	4.31	-0.043
1.59	8.98	25.14	0.11	2.29	1.30	-0.36	5.92	4.46	-0.054
1.88	8.69	25.05	0.12	2.33	1.28	-0.31	5.98	4.43	-0.048
2.17	8.40	24.95	0.12	2.39	1.19	-0.30	6.06	4.26	-0.046
2.46	8.11	24.83	0.11	2.72	1.32	-0.32	6.46	4.50	-0.049
2.75	7.82	24.69	0.10	2.84	1.26	-0.40	6.60	4.39	-0.061
3.04	7.53	24.56	0.10	2.82	1.19	-0.42	6.57	4.27	-0.065
3.33	7.24	24.43	0.10	2.96	1.07	-0.41	6.73	4.05	-0.063
3.62	6.95	24.24	0.09	3.23	1.16	-0.47	7.03	4.21	-0.073
3.91	6.66	24.03	0.07	3.51	1.19	-0.50	7.33	4.26	-0.076
4.20	6.37	23.82	0.06	3.67	1.13	-0.50	7.50	4.17	-0.077
4.49	6.08	23.57	0.05	3.92	1.00	-0.51	7.75	3.91	-0.078
4.78	5.79	23.28	0.05	4.28	1.05	-0.55	8.10	4.01	-0.084
5.07	5.50	22.97	0.04	4.58	1.12	-0.57	8.37	4.14	-0.087
5.36	5.21	22.60	0.04	4.96	1.10	-0.63	8.72	4.10	-0.097
5.65	4.92	22.15	0.05	5.72	1.18	-0.71	9.36	4.25	-0.108
5.94	4.64	21.67	0.05	6.29	1.17	-0.74	9.82	4.24	-0.114
6.23	4.35	21.07	0.04	7.00	1.38	-0.82	10.36	4.59	-0.126
6.52	4.06	20.39	0.04	7.50	1.50	-0.75	10.72	4.79	-0.115
6.81	3.77	19.65	0.02	7.95	1.38	-0.69	11.04	4.60	-0.106
7.10	3.48	18.77	0.01	8.29	1.29	-0.68	11.27	4.44	-0.104

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.39	3.19	17.77	0.02	8.62	1.23	-0.64	11.49	4.35	-0.099
7.68	2.90	16.59	0.01	8.32	0.94	-0.57	11.29	3.80	-0.087
7.97	2.61	15.29	0.00	7.93	0.75	-0.48	11.02	3.39	-0.074
8.26	2.32	13.84	0.00	7.17	0.78	-0.41	10.48	3.47	-0.063
8.55	2.03	12.20	0.01	6.00	0.73	-0.28	9.59	3.34	-0.043
8.84	1.74	10.49	0.02	4.96	0.83	-0.14	8.72	3.57	-0.022
9.13	1.45	8.63	0.01	3.99	1.00	-0.02	7.82	3.91	-0.004
9.42	1.16	6.67	0.01	3.25	0.93	-0.02	7.05	3.77	-0.004
9.70	0.87	4.34	0.00	2.67	0.73	-0.02	6.40	3.34	-0.002
9.99	0.58	1.59	-0.02	2.24	1.59	0.04	5.86	4.93	0.005
10.28	0.29	0.48	-0.09	1.37	1.42	0.04	4.59	4.67	0.006
10.57	0.00	2.01	0.01	0.00	0.00	0.00	0.00	0.01	0.000

Table N-129 Grid #1, L0, Plasma-150, Center (46-55), Equilibrated

L0 (150), Equilibrated							U_∞ =	25.62	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.57	21.15	0.13	0.28	0.95	2.09	-0.28	3.80	5.64	-0.042
-10.28	20.86	1.08	0.36	2.75	4.13	-0.72	6.47	7.93	-0.109
-9.99	20.57	4.08	-0.11	6.90	3.38	-0.10	10.25	7.18	-0.016
-9.70	20.28	6.92	-0.07	3.26	1.28	0.08	7.04	4.42	0.012
-9.42	19.99	9.09	-0.04	4.01	0.54	0.07	7.81	2.87	0.011
-9.13	19.70	11.13	-0.04	5.44	0.69	0.13	9.10	3.23	0.019
-8.84	19.41	13.11	-0.04	6.56	0.69	0.25	10.00	3.24	0.038
-8.55	19.12	14.85	-0.05	7.73	0.56	0.35	10.85	2.92	0.054
-8.26	18.83	16.52	-0.06	8.17	0.62	0.35	11.16	3.08	0.053
-7.97	18.54	17.87	-0.05	8.52	0.70	0.43	11.39	3.27	0.065
-7.68	18.25	19.06	-0.05	8.23	0.79	0.50	11.20	3.46	0.076
-7.39	17.96	20.07	-0.04	7.66	0.72	0.50	10.80	3.31	0.077
-7.10	17.67	20.92	-0.03	7.04	0.63	0.50	10.35	3.11	0.076
-6.81	17.38	21.65	-0.03	6.52	0.69	0.56	9.96	3.25	0.085

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-6.52	17.09	22.30	-0.04	5.70	0.82	0.51	9.31	3.52	0.078
-6.23	16.80	22.88	-0.02	4.89	0.72	0.44	8.63	3.32	0.067
-5.94	16.51	23.36	0.00	4.23	0.73	0.47	8.03	3.35	0.071
-5.65	16.22	23.74	0.01	3.72	0.75	0.43	7.53	3.38	0.065
-5.36	15.93	24.06	0.01	3.40	0.78	0.39	7.19	3.45	0.060
-5.07	15.64	24.32	0.00	3.09	0.68	0.37	6.87	3.22	0.056
-4.78	15.35	24.56	0.02	2.76	0.90	0.35	6.49	3.69	0.053
-4.49	15.06	24.79	0.02	2.46	0.87	0.31	6.13	3.64	0.048
-4.20	14.77	24.94	0.00	2.29	0.73	0.28	5.90	3.34	0.043
-3.91	14.48	25.09	0.01	2.17	0.86	0.24	5.74	3.63	0.036
-3.62	14.20	25.23	0.01	2.02	0.87	0.21	5.54	3.64	0.033
-3.33	13.91	25.31	0.00	1.94	0.85	0.18	5.44	3.59	0.027
-3.04	13.62	25.40	0.02	1.84	0.94	0.16	5.30	3.79	0.024
-2.75	13.33	25.47	0.03	1.74	0.96	0.13	5.15	3.83	0.019
-2.46	13.04	25.53	0.02	1.68	0.85	0.10	5.05	3.60	0.015
-2.17	12.75	25.57	0.02	1.62	0.94	0.08	4.97	3.78	0.012
-1.88	12.46	25.61	0.05	1.58	0.96	0.05	4.91	3.82	0.007
-1.59	12.17	25.62	0.05	1.58	0.93	-0.01	4.91	3.77	-0.002
-1.30	11.88	25.62	0.04	1.63	0.95	-0.02	4.98	3.81	-0.003
-1.01	11.59	25.60	0.04	1.62	1.09	-0.03	4.97	4.08	-0.004
-0.72	11.30	25.59	0.04	1.55	1.06	-0.04	4.86	4.01	-0.006
-0.43	11.01	25.56	0.06	1.59	0.95	-0.08	4.92	3.79	-0.012
-0.14	10.72	25.54	0.05	1.57	0.95	-0.13	4.89	3.80	-0.020
0.14	10.43	25.52	0.05	1.50	0.97	-0.14	4.78	3.84	-0.021
0.43	10.14	25.47	0.05	1.57	1.05	-0.18	4.89	4.01	-0.027
0.72	9.85	25.40	0.06	1.61	0.97	-0.22	4.95	3.84	-0.033
1.01	9.56	25.33	0.06	1.75	0.92	-0.23	5.16	3.74	-0.036
1.30	9.27	25.27	0.04	1.79	0.93	-0.24	5.22	3.76	-0.036
1.59	8.98	25.20	0.05	1.84	0.93	-0.25	5.29	3.77	-0.037
1.88	8.69	25.09	0.06	1.97	0.95	-0.29	5.47	3.80	-0.045
2.17	8.40	24.99	0.05	2.11	0.93	-0.32	5.67	3.76	-0.049
2.46	8.11	24.86	0.05	2.29	0.94	-0.39	5.90	3.79	-0.059

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
2.75	7.82	24.72	0.05	2.50	0.93	-0.40	6.17	3.77	-0.061
3.04	7.53	24.56	0.06	2.67	0.92	-0.43	6.37	3.75	-0.065
3.33	7.24	24.42	0.04	2.81	0.95	-0.48	6.54	3.80	-0.074
3.62	6.95	24.26	0.04	3.00	0.86	-0.51	6.76	3.62	-0.077
3.91	6.66	24.04	0.05	3.29	0.91	-0.54	7.08	3.73	-0.081
4.20	6.37	23.81	0.05	3.52	1.05	-0.60	7.33	4.00	-0.092
4.49	6.08	23.55	0.05	3.79	0.92	-0.65	7.60	3.75	-0.099
4.78	5.79	23.23	0.05	4.25	0.77	-0.66	8.04	3.43	-0.100
5.07	5.50	22.91	0.03	4.72	0.81	-0.68	8.48	3.52	-0.104
5.36	5.21	22.51	0.02	5.19	0.94	-0.73	8.89	3.79	-0.112
5.65	4.92	22.11	0.01	5.45	0.85	-0.72	9.11	3.61	-0.110
5.94	4.64	21.61	0.02	5.98	0.70	-0.72	9.54	3.26	-0.109
6.23	4.35	21.04	0.04	6.53	0.87	-0.70	9.97	3.63	-0.106
6.52	4.06	20.38	0.03	6.75	0.77	-0.72	10.14	3.43	-0.109
6.81	3.77	19.62	0.02	7.41	0.76	-0.71	10.62	3.40	-0.108
7.10	3.48	18.72	0.02	7.71	0.72	-0.64	10.84	3.32	-0.097
7.39	3.19	17.68	0.02	7.85	0.62	-0.55	10.93	3.07	-0.084
7.68	2.90	16.54	0.01	7.63	0.62	-0.50	10.78	3.06	-0.076
7.97	2.61	15.28	0.00	7.52	0.42	-0.39	10.70	2.52	-0.059
8.26	2.32	13.83	-0.02	6.93	0.47	-0.32	10.27	2.68	-0.048
8.55	2.03	12.25	-0.01	5.88	0.43	-0.22	9.46	2.55	-0.034
8.84	1.74	10.53	-0.01	4.87	0.51	-0.13	8.61	2.80	-0.019
9.13	1.45	8.67	-0.02	3.92	0.65	-0.09	7.73	3.14	-0.013
9.42	1.16	6.70	-0.01	2.93	0.58	-0.04	6.68	2.97	-0.006
9.70	0.87	4.49	-0.02	2.21	0.39	-0.01	5.80	2.45	-0.002
9.99	0.58	1.47	0.00	1.87	0.19	-0.05	5.33	1.71	-0.008
10.28	0.29	0.19	-0.11	0.84	0.23	0.02	3.59	1.88	0.003
10.57	0.00	-0.01	0.00	0.00	0.01	0.00	0.15	0.31	0.000

Table N-130 Grid #1, L0, Plasma-150, Right (71-80), Equilibrated

L0 (150), Equilibrated							U_∞ =	25.62	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.57	21.15	0.02	0.06	0.42	0.13	0.02	2.52	1.39	0.003
-10.28	20.86	1.04	0.01	1.53	0.14	0.06	4.83	1.46	0.009
-9.99	20.57	4.49	-0.02	2.23	0.28	0.06	5.83	2.08	0.009
-9.70	20.28	6.79	-0.03	2.89	0.44	0.11	6.64	2.60	0.017
-9.42	19.99	9.03	-0.05	3.76	0.52	0.11	7.56	2.82	0.017
-9.13	19.70	11.05	-0.06	4.90	0.58	0.15	8.64	2.97	0.023
-8.84	19.41	13.02	-0.03	6.16	0.56	0.29	9.69	2.93	0.044
-8.55	19.12	14.76	-0.04	6.93	0.78	0.36	10.27	3.45	0.055
-8.26	18.83	16.36	-0.06	7.61	0.64	0.41	10.77	3.11	0.062
-7.97	18.54	17.72	-0.06	7.99	0.66	0.53	11.04	3.17	0.081
-7.68	18.25	19.02	-0.02	7.69	0.93	0.47	10.83	3.77	0.072
-7.39	17.96	20.03	-0.01	7.40	1.06	0.49	10.62	4.02	0.075
-7.10	17.67	20.92	-0.01	6.89	0.91	0.58	10.25	3.73	0.088
-6.81	17.38	21.63	-0.01	6.62	0.79	0.60	10.04	3.46	0.091
-6.52	17.09	22.28	0.00	6.04	0.65	0.55	9.59	3.15	0.083
-6.23	16.80	22.83	-0.02	5.32	0.90	0.63	9.00	3.70	0.096
-5.94	16.51	23.30	-0.01	4.71	1.03	0.54	8.47	3.96	0.083
-5.65	16.22	23.66	0.02	4.18	1.04	0.49	7.98	3.98	0.075
-5.36	15.93	23.99	0.03	3.74	0.94	0.46	7.55	3.77	0.070
-5.07	15.64	24.29	0.03	3.34	0.85	0.48	7.13	3.59	0.074
-4.78	15.35	24.55	0.03	2.92	0.95	0.48	6.67	3.80	0.073
-4.49	15.06	24.74	0.04	2.68	1.02	0.42	6.39	3.95	0.063
-4.20	14.77	24.90	0.05	2.50	1.00	0.33	6.18	3.91	0.051
-3.91	14.48	25.05	0.06	2.38	0.97	0.28	6.02	3.84	0.043
-3.62	14.20	25.19	0.06	2.15	0.93	0.27	5.72	3.76	0.041
-3.33	13.91	25.29	0.07	2.02	0.94	0.21	5.54	3.79	0.032
-3.04	13.62	25.41	0.06	1.86	0.96	0.18	5.32	3.83	0.027
-2.75	13.33	25.49	0.06	1.73	1.01	0.16	5.13	3.92	0.025
-2.46	13.04	25.53	0.06	1.67	1.19	0.14	5.05	4.25	0.021
-2.17	12.75	25.58	0.07	1.67	1.12	0.10	5.05	4.14	0.015

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-1.88	12.46	25.61	0.08	1.58	0.97	0.03	4.91	3.85	0.005
-1.59	12.17	25.62	0.06	1.57	1.16	0.03	4.89	4.20	0.004
-1.30	11.88	25.60	0.05	1.59	1.12	0.04	4.93	4.13	0.006
-1.01	11.59	25.61	0.07	1.59	1.01	-0.03	4.92	3.91	-0.005
-0.72	11.30	25.61	0.07	1.60	1.00	-0.05	4.94	3.91	-0.008
-0.43	11.01	25.59	0.06	1.65	1.00	-0.10	5.01	3.90	-0.015
-0.14	10.72	25.55	0.07	1.69	0.98	-0.14	5.08	3.87	-0.021
0.14	10.43	25.50	0.06	1.72	1.08	-0.20	5.12	4.06	-0.031
0.43	10.14	25.47	0.07	1.76	1.09	-0.19	5.18	4.08	-0.030
0.72	9.85	25.42	0.07	1.82	1.09	-0.24	5.26	4.07	-0.037
1.01	9.56	25.35	0.06	1.88	1.15	-0.24	5.36	4.18	-0.037
1.30	9.27	25.27	0.05	2.02	1.15	-0.27	5.55	4.18	-0.042
1.59	8.98	25.18	0.05	2.12	1.05	-0.35	5.68	4.00	-0.054
1.88	8.69	25.07	0.06	2.19	1.03	-0.42	5.78	3.96	-0.064
2.17	8.40	24.99	0.07	2.26	0.88	-0.41	5.87	3.67	-0.063
2.46	8.11	24.87	0.05	2.41	0.90	-0.39	6.06	3.69	-0.060
2.75	7.82	24.72	0.06	2.61	1.01	-0.46	6.31	3.92	-0.071
3.04	7.53	24.54	0.06	2.91	1.12	-0.57	6.66	4.13	-0.087
3.33	7.24	24.35	0.06	3.13	0.97	-0.57	6.91	3.84	-0.087
3.62	6.95	24.17	0.06	3.38	0.73	-0.58	7.18	3.34	-0.089
3.91	6.66	23.98	0.05	3.53	0.84	-0.57	7.34	3.58	-0.087
4.20	6.37	23.76	0.04	3.76	0.95	-0.61	7.56	3.80	-0.093
4.49	6.08	23.48	0.04	4.08	0.97	-0.60	7.88	3.84	-0.091
4.78	5.79	23.20	0.05	4.48	1.01	-0.67	8.27	3.93	-0.102
5.07	5.50	22.88	0.04	4.87	1.08	-0.76	8.61	4.06	-0.116
5.36	5.21	22.48	0.04	5.22	0.93	-0.73	8.92	3.76	-0.111
5.65	4.92	22.05	0.03	5.67	0.90	-0.75	9.30	3.70	-0.115
5.94	4.64	21.55	0.03	6.07	0.67	-0.72	9.61	3.21	-0.110
6.23	4.35	20.94	0.05	6.50	0.87	-0.70	9.95	3.64	-0.107
6.52	4.06	20.23	0.01	7.06	0.99	-0.64	10.37	3.88	-0.098
6.81	3.77	19.51	0.01	7.45	0.81	-0.61	10.65	3.52	-0.093
7.10	3.48	18.62	0.02	8.02	0.70	-0.56	11.05	3.27	-0.085

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.39	3.19	17.66	0.02	8.27	0.78	-0.48	11.22	3.44	-0.073
7.68	2.90	16.56	0.02	8.16	0.75	-0.39	11.15	3.38	-0.059
7.97	2.61	15.24	0.02	7.85	0.72	-0.32	10.93	3.32	-0.049
8.26	2.32	13.81	0.00	6.98	0.83	-0.27	10.31	3.56	-0.041
8.55	2.03	12.24	0.00	6.09	0.73	-0.17	9.63	3.34	-0.027
8.84	1.74	10.56	-0.01	5.08	0.62	-0.16	8.80	3.09	-0.024
9.13	1.45	8.69	-0.02	4.07	0.90	-0.05	7.88	3.71	-0.007
9.42	1.16	6.73	0.00	2.93	0.96	-0.06	6.68	3.82	-0.009
9.70	0.87	4.60	0.00	2.35	0.66	-0.03	5.98	3.17	-0.005
9.99	0.58	1.73	0.09	2.86	0.32	0.01	6.60	2.19	0.001
10.28	0.29	0.12	0.03	1.37	0.52	-0.02	4.57	2.83	-0.003
10.57	0.00	-0.05	0.14	0.01	0.02	-0.01	0.39	0.54	-0.001

Table N-131 Grid #1, L0, Plasma-300, Left (1-10), Equilibrated

L0 (300), Equilibrated							U_∞ =	24.71	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.57	21.15	0.34	0.27	0.09	0.10	0.01	1.21	1.27	0.002
-10.28	20.86	1.11	0.23	1.21	0.22	0.07	4.45	1.91	0.012
-9.99	20.57	3.44	-0.10	3.90	3.07	-0.21	7.99	7.10	-0.035
-9.70	20.28	6.43	-0.08	4.53	1.71	0.11	8.61	5.30	0.018
-9.42	19.99	8.63	-0.04	3.84	0.69	0.07	7.93	3.35	0.011
-9.13	19.70	10.63	-0.05	5.03	0.73	0.17	9.08	3.47	0.028
-8.84	19.41	12.48	-0.03	6.09	0.77	0.20	9.99	3.56	0.033
-8.55	19.12	14.10	-0.04	6.75	1.04	0.22	10.51	4.13	0.036
-8.26	18.83	15.57	-0.03	7.67	1.15	0.31	11.21	4.34	0.051
-7.97	18.54	16.91	-0.02	8.07	1.19	0.41	11.49	4.41	0.068
-7.68	18.25	18.10	-0.05	7.76	0.87	0.52	11.28	3.78	0.086
-7.39	17.96	19.20	-0.03	6.87	0.65	0.53	10.61	3.27	0.087
-7.10	17.67	20.08	-0.02	6.06	0.60	0.48	9.96	3.14	0.078
-6.81	17.38	20.80	-0.01	5.55	0.66	0.51	9.53	3.30	0.083

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-6.52	17.09	21.42	0.01	5.06	0.72	0.48	9.10	3.43	0.078
-6.23	16.80	21.96	-0.01	4.50	0.79	0.49	8.59	3.59	0.081
-5.94	16.51	22.42	0.00	4.04	0.81	0.43	8.13	3.65	0.070
-5.65	16.22	22.78	0.01	3.70	0.79	0.40	7.78	3.60	0.065
-5.36	15.93	23.12	0.00	3.35	0.72	0.35	7.41	3.44	0.057
-5.07	15.64	23.38	0.00	3.03	0.80	0.31	7.04	3.63	0.051
-4.78	15.35	23.63	0.01	2.79	0.80	0.33	6.76	3.62	0.054
-4.49	15.06	23.85	0.01	2.61	0.80	0.28	6.54	3.63	0.045
-4.20	14.77	24.03	0.01	2.45	0.94	0.25	6.34	3.92	0.040
-3.91	14.48	24.18	0.01	2.26	0.99	0.24	6.09	4.03	0.039
-3.62	14.20	24.29	0.02	2.10	1.00	0.18	5.87	4.05	0.030
-3.33	13.91	24.39	0.01	2.03	1.01	0.14	5.76	4.07	0.024
-3.04	13.62	24.46	0.01	1.94	0.93	0.13	5.64	3.90	0.021
-2.75	13.33	24.54	0.03	1.90	1.07	0.10	5.58	4.19	0.016
-2.46	13.04	24.60	0.03	1.89	1.05	0.07	5.57	4.15	0.012
-2.17	12.75	24.64	0.03	1.82	1.08	0.06	5.47	4.20	0.010
-1.88	12.46	24.67	0.05	1.80	1.05	0.02	5.43	4.14	0.004
-1.59	12.17	24.69	0.05	1.84	1.03	-0.03	5.49	4.10	-0.004
-1.30	11.88	24.71	0.05	1.81	1.09	-0.06	5.44	4.23	-0.010
-1.01	11.59	24.70	0.05	1.84	1.03	-0.06	5.49	4.11	-0.009
-0.72	11.30	24.69	0.04	1.88	1.04	-0.10	5.55	4.14	-0.016
-0.43	11.01	24.68	0.06	1.90	1.03	-0.17	5.58	4.11	-0.028
-0.14	10.72	24.66	0.06	1.93	1.02	-0.16	5.62	4.09	-0.026
0.14	10.43	24.62	0.06	1.95	1.06	-0.19	5.65	4.16	-0.031
0.43	10.14	24.56	0.06	2.01	1.22	-0.21	5.73	4.47	-0.034
0.72	9.85	24.54	0.08	1.95	1.15	-0.23	5.65	4.34	-0.038
1.01	9.56	24.51	0.07	1.98	1.16	-0.26	5.69	4.36	-0.043
1.30	9.27	24.44	0.07	2.06	1.10	-0.31	5.81	4.25	-0.051
1.59	8.98	24.34	0.10	2.24	1.02	-0.35	6.05	4.09	-0.058
1.88	8.69	24.26	0.10	2.26	0.97	-0.36	6.08	3.98	-0.058
2.17	8.40	24.15	0.08	2.30	1.03	-0.38	6.14	4.10	-0.063
2.46	8.11	24.02	0.10	2.45	1.00	-0.39	6.33	4.05	-0.064

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
2.75	7.82	23.90	0.11	2.58	0.97	-0.42	6.50	3.98	-0.070
3.04	7.53	23.76	0.10	2.74	0.99	-0.44	6.70	4.02	-0.071
3.33	7.24	23.60	0.08	2.86	1.04	-0.43	6.84	4.12	-0.070
3.62	6.95	23.41	0.09	2.98	1.01	-0.47	6.99	4.07	-0.078
3.91	6.66	23.22	0.09	3.18	0.99	-0.45	7.22	4.03	-0.074
4.20	6.37	22.97	0.07	3.48	0.90	-0.51	7.55	3.83	-0.084
4.49	6.08	22.70	0.06	3.67	0.97	-0.54	7.75	3.99	-0.088
4.78	5.79	22.43	0.06	3.87	0.97	-0.56	7.97	3.98	-0.091
5.07	5.50	22.08	0.05	4.13	0.87	-0.58	8.22	3.77	-0.096
5.36	5.21	21.70	0.05	4.52	0.84	-0.61	8.61	3.71	-0.100
5.65	4.92	21.25	0.06	5.04	0.75	-0.63	9.08	3.50	-0.104
5.94	4.64	20.77	0.05	5.36	0.70	-0.62	9.37	3.39	-0.102
6.23	4.35	20.19	0.05	5.78	0.74	-0.65	9.73	3.48	-0.106
6.52	4.06	19.57	0.04	6.33	0.72	-0.62	10.18	3.44	-0.101
6.81	3.77	18.79	0.05	6.75	0.65	-0.59	10.52	3.27	-0.096
7.10	3.48	17.92	0.04	7.20	0.61	-0.59	10.86	3.15	-0.096
7.39	3.19	16.93	0.02	7.39	0.62	-0.57	11.00	3.17	-0.093
7.68	2.90	15.81	0.04	7.37	0.63	-0.49	10.99	3.22	-0.081
7.97	2.61	14.49	0.03	7.06	0.58	-0.39	10.75	3.08	-0.064
8.26	2.32	13.08	0.02	6.51	0.58	-0.36	10.33	3.07	-0.058
8.55	2.03	11.53	0.02	5.66	0.72	-0.22	9.63	3.43	-0.037
8.84	1.74	9.81	0.03	4.55	0.72	-0.13	8.63	3.42	-0.021
9.13	1.45	8.03	0.02	3.56	0.69	-0.11	7.63	3.36	-0.018
9.42	1.16	6.20	0.02	2.84	0.68	-0.03	6.82	3.33	-0.005
9.70	0.87	4.03	0.01	2.26	0.48	-0.01	6.09	2.79	-0.001
9.99	0.58	1.04	-0.02	0.75	0.13	0.03	3.51	1.44	0.006
10.28	0.29	0.25	-0.02	0.34	0.20	0.05	2.36	1.82	0.008
10.57	0.00	0.80	0.10	0.00	0.00	0.00	0.00	0.04	0.000

Table N-132 Grid #1, L0, Plasma-300, Center (46-55), Equilibrated

L0 (300), Equilibrated							U_∞ =	24. 68	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.57	21.15	0.56	0.88	1.56	8.48	3.29	5.06	11.80	0.540
-10.28	20.86	1.45	0.97	1.74	8.90	2.45	5.35	12.08	0.402
-9.99	20.57	3.86	-0.11	4.14	2.72	0.01	8.24	6.68	0.002
-9.70	20.28	6.32	-0.06	2.92	1.19	0.02	6.93	4.42	0.003
-9.42	19.99	8.39	-0.03	3.63	0.94	0.12	7.72	3.92	0.019
-9.13	19.70	10.30	-0.03	4.79	0.74	0.12	8.87	3.48	0.020
-8.84	19.41	12.17	-0.05	5.86	0.64	0.18	9.81	3.24	0.029
-8.55	19.12	13.82	-0.06	6.62	0.81	0.31	10.43	3.65	0.051
-8.26	18.83	15.41	-0.04	7.44	0.83	0.41	11.05	3.70	0.068
-7.97	18.54	16.80	-0.05	7.84	0.81	0.46	11.35	3.64	0.075
-7.68	18.25	17.99	-0.04	7.88	0.91	0.51	11.37	3.86	0.083
-7.39	17.96	19.01	-0.04	7.10	1.02	0.60	10.80	4.09	0.099
-7.10	17.67	19.89	-0.03	6.49	0.88	0.54	10.32	3.80	0.089
-6.81	17.38	20.61	-0.04	6.13	0.86	0.53	10.03	3.75	0.087
-6.52	17.09	21.26	-0.02	5.67	0.83	0.52	9.64	3.69	0.086
-6.23	16.80	21.81	-0.01	5.07	0.72	0.51	9.12	3.45	0.084
-5.94	16.51	22.29	0.00	4.53	0.82	0.46	8.63	3.68	0.075
-5.65	16.22	22.66	-0.01	4.11	0.94	0.42	8.21	3.92	0.069
-5.36	15.93	23.03	0.01	3.56	0.91	0.39	7.65	3.86	0.063
-5.07	15.64	23.33	0.02	3.22	0.81	0.37	7.27	3.64	0.060
-4.78	15.35	23.55	0.03	2.94	0.79	0.33	6.94	3.60	0.055
-4.49	15.06	23.78	0.03	2.66	0.80	0.28	6.61	3.62	0.046
-4.20	14.77	23.96	0.05	2.42	0.85	0.27	6.31	3.74	0.044
-3.91	14.48	24.09	0.05	2.29	0.92	0.24	6.13	3.88	0.040
-3.62	14.20	24.23	0.03	2.12	0.84	0.19	5.91	3.70	0.031
-3.33	13.91	24.33	0.04	2.01	0.84	0.17	5.74	3.71	0.027
-3.04	13.62	24.43	0.05	1.99	0.86	0.14	5.72	3.76	0.023
-2.75	13.33	24.51	0.06	1.88	0.82	0.09	5.56	3.67	0.015
-2.46	13.04	24.57	0.06	1.78	0.89	0.04	5.40	3.83	0.006
-2.17	12.75	24.62	0.05	1.73	1.05	0.02	5.33	4.16	0.003

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-1.88	12.46	24.66	0.05	1.70	1.01	-0.03	5.29	4.08	-0.004
-1.59	12.17	24.68	0.07	1.65	0.97	-0.03	5.20	3.99	-0.005
-1.30	11.88	24.68	0.08	1.74	1.00	-0.06	5.34	4.05	-0.010
-1.01	11.59	24.68	0.09	1.76	0.98	-0.12	5.38	4.01	-0.020
-0.72	11.30	24.67	0.10	1.79	1.05	-0.16	5.43	4.15	-0.027
-0.43	11.01	24.66	0.09	1.78	1.10	-0.18	5.40	4.26	-0.029
-0.14	10.72	24.64	0.08	1.79	0.96	-0.20	5.42	3.97	-0.032
0.14	10.43	24.59	0.09	1.87	0.95	-0.21	5.54	3.96	-0.034
0.43	10.14	24.56	0.10	1.90	1.00	-0.23	5.58	4.05	-0.037
0.72	9.85	24.52	0.11	1.91	1.04	-0.23	5.61	4.13	-0.038
1.01	9.56	24.44	0.11	2.03	1.18	-0.27	5.78	4.40	-0.044
1.30	9.27	24.37	0.10	2.10	1.19	-0.30	5.87	4.42	-0.049
1.59	8.98	24.28	0.11	2.12	0.96	-0.30	5.90	3.97	-0.049
1.88	8.69	24.17	0.11	2.21	0.96	-0.32	6.03	3.97	-0.053
2.17	8.40	24.09	0.10	2.31	0.98	-0.35	6.15	4.01	-0.058
2.46	8.11	23.98	0.11	2.38	1.01	-0.38	6.24	4.07	-0.063
2.75	7.82	23.83	0.12	2.49	1.11	-0.39	6.39	4.27	-0.065
3.04	7.53	23.68	0.13	2.69	0.98	-0.45	6.65	4.01	-0.074
3.33	7.24	23.53	0.13	2.83	0.83	-0.48	6.82	3.68	-0.078
3.62	6.95	23.34	0.10	3.13	1.01	-0.48	7.17	4.08	-0.079
3.91	6.66	23.14	0.09	3.33	1.11	-0.50	7.39	4.27	-0.082
4.20	6.37	22.92	0.09	3.62	1.11	-0.54	7.71	4.26	-0.088
4.49	6.08	22.67	0.09	3.90	0.92	-0.52	8.01	3.88	-0.085
4.78	5.79	22.40	0.09	4.08	0.88	-0.55	8.18	3.79	-0.090
5.07	5.50	22.05	0.09	4.51	1.00	-0.59	8.60	4.05	-0.096
5.36	5.21	21.67	0.07	4.89	1.00	-0.57	8.96	4.05	-0.094
5.65	4.92	21.23	0.05	5.19	0.94	-0.60	9.23	3.93	-0.098
5.94	4.64	20.74	0.06	5.64	0.82	-0.63	9.62	3.66	-0.103
6.23	4.35	20.15	0.05	6.06	0.84	-0.68	9.97	3.72	-0.111
6.52	4.06	19.48	0.04	6.69	0.94	-0.69	10.48	3.93	-0.113
6.81	3.77	18.68	0.05	7.31	0.85	-0.64	10.95	3.73	-0.106
7.10	3.48	17.83	0.05	7.71	0.69	-0.56	11.25	3.35	-0.092

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.39	3.19	16.81	0.04	7.95	0.70	-0.52	11.43	3.40	-0.085
7.68	2.90	15.69	0.03	7.80	0.68	-0.49	11.32	3.34	-0.081
7.97	2.61	14.43	0.02	7.63	0.60	-0.36	11.19	3.13	-0.059
8.26	2.32	12.97	0.02	6.78	0.74	-0.24	10.55	3.49	-0.040
8.55	2.03	11.44	0.03	5.87	0.79	-0.17	9.82	3.60	-0.029
8.84	1.74	9.77	0.03	4.82	0.80	-0.10	8.89	3.63	-0.016
9.13	1.45	7.99	0.02	3.61	0.78	-0.04	7.70	3.58	-0.006
9.42	1.16	6.16	0.01	2.80	0.77	-0.02	6.78	3.55	-0.003
9.70	0.87	4.05	0.01	2.25	0.55	-0.04	6.08	2.99	-0.007
9.99	0.58	0.74	-0.03	1.13	0.19	-0.17	4.31	1.76	-0.028
10.28	0.29	0.00	-0.09	0.81	0.23	-0.26	3.64	1.94	-0.043
10.57	0.00	-0.03	0.01	0.01	0.01	0.00	0.29	0.29	0.000

Table N-133 Grid #1, L0, Plasma-300, Right (71-80), Equilibrated

L0 (300), Equilibrated							U_∞ =	24. 63	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.57	21.15	0.02	0.05	0.17	0.19	0.05	1.65	1.76	0.008
-10.28	20.86	0.60	0.01	0.37	0.28	0.01	2.48	2.14	0.001
-9.99	20.57	4.10	-0.06	2.04	0.47	0.06	5.80	2.78	0.010
-9.70	20.28	6.11	-0.07	2.53	0.80	0.10	6.46	3.63	0.017
-9.42	19.99	8.23	-0.06	3.35	0.71	0.12	7.43	3.42	0.020
-9.13	19.70	10.12	-0.07	4.21	0.82	0.07	8.33	3.67	0.012
-8.84	19.41	11.95	-0.07	5.32	0.68	0.21	9.37	3.35	0.034
-8.55	19.12	13.61	-0.06	6.14	0.53	0.37	10.06	2.95	0.061
-8.26	18.83	15.20	-0.05	6.99	0.53	0.38	10.73	2.96	0.063
-7.97	18.54	16.51	-0.06	7.23	0.70	0.46	10.91	3.40	0.076
-7.68	18.25	17.74	-0.05	7.18	0.83	0.50	10.88	3.71	0.082
-7.39	17.96	18.81	-0.05	6.91	1.04	0.51	10.67	4.13	0.084
-7.10	17.67	19.70	-0.05	6.68	0.91	0.51	10.49	3.86	0.084
-6.81	17.38	20.49	-0.05	6.19	0.92	0.54	10.10	3.89	0.088

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-6.52	17.09	21.17	-0.05	5.71	0.84	0.57	9.70	3.72	0.094
-6.23	16.80	21.74	-0.05	5.17	0.83	0.53	9.23	3.71	0.087
-5.94	16.51	22.23	-0.02	4.79	0.81	0.57	8.88	3.65	0.094
-5.65	16.22	22.63	-0.01	4.37	0.79	0.51	8.48	3.61	0.085
-5.36	15.93	22.97	0.01	3.95	0.76	0.48	8.07	3.55	0.078
-5.07	15.64	23.27	0.00	3.62	0.84	0.45	7.73	3.71	0.074
-4.78	15.35	23.52	0.00	3.32	1.00	0.43	7.39	4.05	0.070
-4.49	15.06	23.73	0.00	3.10	0.98	0.37	7.15	4.01	0.062
-4.20	14.77	23.91	0.00	2.83	0.94	0.34	6.83	3.93	0.057
-3.91	14.48	24.04	0.03	2.67	1.02	0.33	6.63	4.10	0.054
-3.62	14.20	24.17	0.04	2.45	1.04	0.34	6.36	4.13	0.056
-3.33	13.91	24.29	0.04	2.29	0.98	0.31	6.15	4.02	0.051
-3.04	13.62	24.39	0.03	2.13	0.90	0.28	5.92	3.86	0.046
-2.75	13.33	24.46	0.05	2.00	0.92	0.24	5.74	3.90	0.040
-2.46	13.04	24.52	0.06	1.91	1.09	0.20	5.60	4.25	0.033
-2.17	12.75	24.57	0.05	1.79	1.02	0.14	5.43	4.11	0.023
-1.88	12.46	24.61	0.04	1.75	0.93	0.09	5.38	3.91	0.014
-1.59	12.17	24.61	0.04	1.77	1.21	0.07	5.40	4.46	0.012
-1.30	11.88	24.63	0.05	1.78	1.21	0.00	5.42	4.47	0.000
-1.01	11.59	24.63	0.06	1.75	1.01	-0.03	5.38	4.08	-0.004
-0.72	11.30	24.63	0.07	1.73	0.98	-0.04	5.35	4.02	-0.006
-0.43	11.01	24.63	0.07	1.74	0.96	-0.08	5.35	3.98	-0.014
-0.14	10.72	24.60	0.08	1.79	1.08	-0.13	5.44	4.21	-0.021
0.14	10.43	24.56	0.08	1.82	1.15	-0.14	5.48	4.35	-0.022
0.43	10.14	24.51	0.08	1.89	1.06	-0.15	5.58	4.18	-0.025
0.72	9.85	24.45	0.10	1.97	1.12	-0.20	5.70	4.30	-0.033
1.01	9.56	24.38	0.08	2.03	1.07	-0.21	5.78	4.21	-0.035
1.30	9.27	24.32	0.08	2.10	1.02	-0.24	5.88	4.11	-0.040
1.59	8.98	24.21	0.10	2.18	1.02	-0.27	5.99	4.10	-0.045
1.88	8.69	24.13	0.09	2.29	1.10	-0.35	6.14	4.25	-0.057
2.17	8.40	24.03	0.09	2.39	1.25	-0.36	6.27	4.54	-0.059
2.46	8.11	23.91	0.11	2.46	1.14	-0.31	6.37	4.33	-0.051

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.75	7.82	23.78	0.12	2.56	1.03	-0.35	6.49	4.13	-0.058
3.04	7.53	23.64	0.09	2.71	1.01	-0.42	6.68	4.08	-0.069
3.33	7.24	23.46	0.07	2.91	1.08	-0.38	6.93	4.22	-0.063
3.62	6.95	23.25	0.08	3.18	0.95	-0.41	7.23	3.96	-0.067
3.91	6.66	23.04	0.08	3.37	1.10	-0.45	7.45	4.26	-0.074
4.20	6.37	22.84	0.08	3.59	1.00	-0.47	7.69	4.07	-0.077
4.49	6.08	22.55	0.08	3.83	0.94	-0.49	7.95	3.94	-0.081
4.78	5.79	22.25	0.08	4.16	0.86	-0.49	8.27	3.77	-0.080
5.07	5.50	21.90	0.06	4.54	0.79	-0.55	8.65	3.62	-0.091
5.36	5.21	21.51	0.05	4.99	0.90	-0.59	9.07	3.85	-0.098
5.65	4.92	21.07	0.06	5.43	0.98	-0.58	9.46	4.02	-0.096
5.94	4.64	20.57	0.05	6.01	1.07	-0.56	9.95	4.20	-0.093
6.23	4.35	19.97	0.03	6.65	0.97	-0.63	10.46	4.01	-0.104
6.52	4.06	19.31	0.04	7.33	0.90	-0.64	10.99	3.84	-0.105
6.81	3.77	18.55	0.05	7.94	0.88	-0.63	11.44	3.80	-0.103
7.10	3.48	17.67	0.03	8.52	0.87	-0.64	11.85	3.79	-0.105
7.39	3.19	16.63	0.02	8.50	0.82	-0.47	11.83	3.67	-0.077
7.68	2.90	15.52	0.03	8.27	0.73	-0.49	11.67	3.47	-0.080
7.97	2.61	14.26	0.01	7.85	0.87	-0.45	11.37	3.80	-0.074
8.26	2.32	12.82	0.03	6.65	1.08	-0.34	10.46	4.23	-0.055
8.55	2.03	11.32	0.04	5.78	1.05	-0.23	9.76	4.16	-0.038
8.84	1.74	9.64	0.02	4.74	1.01	-0.14	8.83	4.09	-0.023
9.13	1.45	7.89	0.00	3.75	1.09	-0.15	7.86	4.23	-0.024
9.42	1.16	6.07	0.00	2.90	1.14	-0.14	6.91	4.34	-0.023
9.70	0.87	4.00	0.02	2.29	0.65	-0.04	6.14	3.28	-0.006
9.99	0.58	0.85	0.01	5.38	0.20	0.41	9.41	1.82	0.067
10.28	0.29	-0.11	-0.08	5.72	0.40	0.66	9.71	2.55	0.108
10.57	0.00	0.26	0.14	0.61	0.02	0.04	3.18	0.55	0.006

Table N-134 Grid #1, L2, Plasma-150, Left (1-10), Equilibrated

L2 (150), Equilibrated							U_∞ =	29.21	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.92	21.83	0.21	-0.05	2.48	2.91	-1.59	5.39	5.84	-0.186
-10.62	21.53	-0.07	0.07	5.49	0.70	-0.42	8.02	2.87	-0.050
-10.32	21.23	6.03	-0.06	31.18	0.91	0.33	19.11	3.27	0.038
-10.02	20.93	9.51	-0.08	3.95	0.86	-0.04	6.80	3.18	-0.004
-9.72	20.64	10.68	-0.03	2.32	0.60	0.04	5.22	2.64	0.005
-9.42	20.34	12.19	-0.02	2.42	0.45	0.04	5.32	2.29	0.005
-9.12	20.04	14.06	-0.03	3.01	0.32	0.04	5.94	1.95	0.005
-8.82	19.74	15.84	-0.03	3.79	0.21	0.09	6.67	1.55	0.011
-8.52	19.44	17.65	-0.04	4.42	0.24	0.10	7.20	1.68	0.012
-8.22	19.14	19.25	-0.03	4.84	0.25	0.15	7.53	1.71	0.018
-7.93	18.84	20.73	-0.02	5.04	0.34	0.16	7.69	2.00	0.019
-7.63	18.54	21.96	-0.01	4.99	0.32	0.18	7.64	1.93	0.022
-7.33	18.24	23.10	-0.02	4.91	0.29	0.25	7.58	1.85	0.029
-7.03	17.94	24.04	-0.02	4.53	0.26	0.28	7.29	1.74	0.032
-6.73	17.64	24.86	-0.02	4.16	0.24	0.24	6.99	1.69	0.029
-6.43	17.35	25.56	-0.02	3.82	0.24	0.23	6.69	1.69	0.027
-6.13	17.05	26.19	-0.02	3.33	0.31	0.19	6.25	1.89	0.022
-5.83	16.75	26.71	-0.02	2.94	0.38	0.19	5.87	2.12	0.022
-5.53	16.45	27.16	-0.01	2.67	0.30	0.22	5.59	1.87	0.025
-5.23	16.15	27.51	-0.01	2.45	0.33	0.21	5.36	1.96	0.024
-4.93	15.85	27.84	-0.02	2.24	0.37	0.18	5.12	2.09	0.021
-4.64	15.55	28.06	-0.01	2.08	0.32	0.18	4.94	1.93	0.021
-4.34	15.25	28.29	-0.01	1.88	0.31	0.17	4.70	1.90	0.020
-4.04	14.95	28.50	-0.01	1.66	0.35	0.15	4.41	2.03	0.017
-3.74	14.65	28.67	0.00	1.54	0.36	0.13	4.25	2.06	0.015
-3.44	14.36	28.78	0.01	1.47	0.41	0.11	4.14	2.18	0.013
-3.14	14.06	28.87	0.01	1.43	0.47	0.10	4.09	2.35	0.011
-2.84	13.76	28.97	0.01	1.34	0.42	0.08	3.96	2.21	0.009
-2.54	13.46	29.04	0.01	1.19	0.41	0.06	3.74	2.19	0.007
-2.24	13.16	29.11	0.00	1.18	0.45	0.05	3.72	2.29	0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-1.94	12.86	29.17	0.00	1.12	0.43	0.02	3.63	2.23	0.002
-1.64	12.56	29.19	0.01	1.08	0.42	0.00	3.56	2.23	0.000
-1.35	12.26	29.21	0.00	1.01	0.47	-0.02	3.44	2.35	-0.003
-1.05	11.96	29.21	0.00	1.01	0.48	-0.04	3.44	2.38	-0.004
-0.75	11.66	29.19	0.02	1.08	0.42	-0.06	3.55	2.22	-0.007
-0.45	11.36	29.18	0.01	1.11	0.45	-0.09	3.60	2.28	-0.010
-0.15	11.07	29.15	0.02	1.16	0.50	-0.10	3.69	2.43	-0.012
0.15	10.77	29.08	0.01	1.21	0.49	-0.13	3.76	2.40	-0.015
0.45	10.47	29.02	0.01	1.26	0.43	-0.14	3.84	2.25	-0.017
0.75	10.17	28.95	0.01	1.29	0.42	-0.14	3.89	2.21	-0.017
1.05	9.87	28.86	0.02	1.37	0.44	-0.17	4.01	2.27	-0.020
1.35	9.57	28.76	0.01	1.49	0.45	-0.18	4.18	2.29	-0.021
1.64	9.27	28.66	0.01	1.59	0.44	-0.21	4.32	2.28	-0.024
1.94	8.97	28.55	0.01	1.71	0.47	-0.24	4.48	2.34	-0.028
2.24	8.67	28.43	0.02	1.79	0.49	-0.27	4.58	2.40	-0.032
2.54	8.37	28.26	0.03	1.95	0.45	-0.27	4.79	2.30	-0.032
2.84	8.07	28.08	0.03	2.15	0.36	-0.28	5.02	2.07	-0.033
3.14	7.78	27.90	0.02	2.30	0.35	-0.29	5.19	2.02	-0.034
3.44	7.48	27.70	0.02	2.41	0.37	-0.29	5.31	2.09	-0.034
3.74	7.18	27.46	0.02	2.59	0.40	-0.30	5.51	2.17	-0.035
4.04	6.88	27.21	0.02	2.73	0.36	-0.31	5.66	2.05	-0.036
4.34	6.58	26.91	0.01	2.93	0.32	-0.31	5.86	1.94	-0.036
4.64	6.28	26.55	0.01	3.22	0.30	-0.31	6.15	1.88	-0.036
4.93	5.98	26.15	0.02	3.44	0.32	-0.32	6.35	1.94	-0.038
5.23	5.68	25.70	0.02	3.73	0.31	-0.34	6.61	1.90	-0.039
5.53	5.38	25.17	0.01	4.07	0.31	-0.31	6.91	1.90	-0.036
5.83	5.08	24.58	0.00	4.22	0.32	-0.29	7.03	1.95	-0.034
6.13	4.79	23.93	0.00	4.38	0.29	-0.30	7.16	1.84	-0.035
6.43	4.49	23.17	0.01	4.58	0.30	-0.29	7.33	1.86	-0.034
6.73	4.19	22.32	0.00	4.75	0.30	-0.28	7.46	1.87	-0.033
7.03	3.89	21.34	-0.01	4.72	0.25	-0.26	7.44	1.70	-0.031
7.33	3.59	20.27	-0.02	4.58	0.22	-0.21	7.32	1.62	-0.024

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.63	3.29	19.09	-0.02	4.46	0.21	-0.19	7.23	1.55	-0.022
7.93	2.99	17.76	-0.02	4.12	0.27	-0.17	6.95	1.79	-0.020
8.22	2.69	16.27	-0.02	3.58	0.21	-0.11	6.48	1.56	-0.013
8.52	2.39	14.72	-0.03	3.01	0.18	-0.08	5.94	1.45	-0.010
8.82	2.09	13.05	-0.03	2.45	0.16	-0.05	5.36	1.37	-0.006
9.12	1.79	11.44	-0.03	2.08	0.18	-0.04	4.94	1.47	-0.005
9.42	1.50	9.95	-0.02	2.13	0.57	-0.04	4.99	2.59	-0.005
9.72	1.20	8.57	-0.01	3.04	1.33	-0.09	5.97	3.95	-0.010
10.02	0.90	4.68	-0.34	17.56	2.94	0.40	14.34	5.87	0.047
10.32	0.60	0.30	-0.19	2.13	0.25	-0.19	5.00	1.73	-0.023
10.62	0.30	0.28	-0.13	1.76	0.20	-0.19	4.54	1.51	-0.022
10.92	0.00	0.83	0.05	0.00	0.00	0.00	0.00	0.14	0.000

Table N-135 Grid #1, L2, Plasma-150, Center (46-55), Equilibrated

L2 (150), Equilibrated							U_∞ =	29.35	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.92	21.83	3.18	-0.02	22.48	0.83	-0.25	16.15	3.11	-0.029
-10.62	21.53	3.74	-0.01	30.01	0.93	-0.29	18.66	3.28	-0.034
-10.32	21.23	5.47	-0.08	18.81	0.98	0.15	14.77	3.37	0.018
-10.02	20.93	9.10	-0.02	3.64	0.50	0.04	6.50	2.41	0.004
-9.72	20.64	10.53	-0.04	2.38	0.43	0.02	5.26	2.25	0.002
-9.42	20.34	12.08	-0.02	2.31	0.29	0.06	5.18	1.82	0.007
-9.12	20.04	13.86	-0.02	2.72	0.31	0.07	5.62	1.90	0.008
-8.82	19.74	15.64	-0.02	3.51	0.21	0.07	6.38	1.57	0.009
-8.52	19.44	17.43	-0.03	4.40	0.28	0.10	7.15	1.79	0.011
-8.22	19.14	19.03	-0.04	4.74	0.25	0.14	7.42	1.71	0.016
-7.93	18.84	20.49	-0.03	5.10	0.22	0.16	7.69	1.60	0.019
-7.63	18.54	21.76	-0.03	5.13	0.26	0.21	7.71	1.73	0.025
-7.33	18.24	22.93	-0.04	4.89	0.25	0.23	7.53	1.69	0.027
-7.03	17.94	23.91	-0.04	4.51	0.29	0.21	7.24	1.84	0.025

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-6.73	17.64	24.78	-0.04	4.16	0.25	0.22	6.95	1.69	0.025
-6.43	17.35	25.51	-0.03	3.92	0.25	0.22	6.74	1.72	0.026
-6.13	17.05	26.15	-0.02	3.58	0.27	0.23	6.44	1.77	0.027
-5.83	16.75	26.72	-0.01	3.06	0.36	0.20	5.96	2.05	0.024
-5.53	16.45	27.20	-0.01	2.75	0.32	0.21	5.65	1.92	0.024
-5.23	16.15	27.60	-0.01	2.41	0.28	0.18	5.28	1.82	0.021
-4.93	15.85	27.93	-0.02	2.22	0.29	0.17	5.08	1.83	0.019
-4.64	15.55	28.19	-0.02	2.03	0.26	0.16	4.86	1.73	0.019
-4.34	15.25	28.43	-0.03	1.84	0.29	0.13	4.62	1.83	0.016
-4.04	14.95	28.64	-0.02	1.68	0.33	0.12	4.41	1.94	0.014
-3.74	14.65	28.81	-0.01	1.45	0.30	0.11	4.10	1.88	0.012
-3.44	14.36	28.94	-0.02	1.34	0.33	0.10	3.94	1.96	0.011
-3.14	14.06	29.07	-0.02	1.25	0.34	0.07	3.80	1.98	0.008
-2.84	13.76	29.15	-0.02	1.20	0.36	0.07	3.74	2.05	0.008
-2.54	13.46	29.21	-0.02	1.14	0.34	0.06	3.64	1.98	0.006
-2.24	13.16	29.27	-0.02	1.07	0.34	0.03	3.53	1.99	0.004
-1.94	12.86	29.31	-0.02	1.06	0.40	0.03	3.51	2.15	0.003
-1.64	12.56	29.34	-0.01	1.04	0.39	0.01	3.47	2.13	0.001
-1.35	12.26	29.35	-0.01	1.00	0.34	-0.01	3.40	2.00	-0.001
-1.05	11.96	29.35	-0.02	1.00	0.36	-0.03	3.41	2.04	-0.003
-0.75	11.66	29.33	-0.03	1.04	0.36	-0.05	3.47	2.05	-0.005
-0.45	11.36	29.32	-0.02	1.01	0.35	-0.06	3.42	2.00	-0.007
-0.15	11.07	29.28	-0.02	1.04	0.41	-0.07	3.48	2.17	-0.008
0.15	10.77	29.23	-0.01	1.10	0.42	-0.08	3.57	2.20	-0.009
0.45	10.47	29.17	-0.01	1.17	0.38	-0.10	3.68	2.09	-0.011
0.75	10.17	29.12	-0.01	1.21	0.40	-0.13	3.75	2.16	-0.015
1.05	9.87	29.03	0.01	1.32	0.36	-0.15	3.92	2.05	-0.017
1.35	9.57	28.93	0.02	1.39	0.32	-0.15	4.02	1.94	-0.017
1.64	9.27	28.83	0.00	1.44	0.33	-0.17	4.09	1.96	-0.019
1.94	8.97	28.71	0.00	1.54	0.33	-0.18	4.22	1.94	-0.021
2.24	8.67	28.58	0.00	1.64	0.31	-0.20	4.37	1.91	-0.023
2.54	8.37	28.43	0.00	1.80	0.34	-0.22	4.57	1.99	-0.026

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.84	8.07	28.25	0.00	1.96	0.31	-0.23	4.77	1.90	-0.027
3.14	7.78	28.07	-0.01	2.03	0.30	-0.23	4.85	1.87	-0.026
3.44	7.48	27.86	0.00	2.15	0.39	-0.24	4.99	2.12	-0.028
3.74	7.18	27.61	0.00	2.38	0.40	-0.25	5.25	2.16	-0.029
4.04	6.88	27.33	0.00	2.58	0.30	-0.26	5.47	1.88	-0.030
4.34	6.58	27.03	0.00	2.78	0.28	-0.28	5.68	1.80	-0.032
4.64	6.28	26.69	0.00	2.97	0.29	-0.28	5.87	1.85	-0.032
4.93	5.98	26.28	-0.02	3.25	0.25	-0.28	6.14	1.70	-0.033
5.23	5.68	25.81	-0.01	3.54	0.25	-0.30	6.41	1.69	-0.035
5.53	5.38	25.28	-0.01	3.87	0.22	-0.30	6.70	1.60	-0.035
5.83	5.08	24.69	-0.01	4.11	0.24	-0.30	6.91	1.68	-0.035
6.13	4.79	24.03	-0.02	4.29	0.26	-0.28	7.06	1.73	-0.033
6.43	4.49	23.26	-0.03	4.60	0.28	-0.30	7.31	1.81	-0.035
6.73	4.19	22.41	-0.03	4.72	0.26	-0.29	7.40	1.75	-0.033
7.03	3.89	21.47	-0.03	4.70	0.27	-0.25	7.39	1.76	-0.029
7.33	3.59	20.39	-0.04	4.76	0.25	-0.23	7.43	1.72	-0.026
7.63	3.29	19.19	-0.03	4.44	0.19	-0.18	7.18	1.50	-0.021
7.93	2.99	17.89	-0.03	4.08	0.20	-0.13	6.88	1.52	-0.016
8.22	2.69	16.45	-0.04	3.66	0.22	-0.12	6.52	1.60	-0.014
8.52	2.39	14.91	-0.04	3.09	0.20	-0.06	5.99	1.51	-0.007
8.82	2.09	13.28	-0.05	2.48	0.17	-0.06	5.36	1.41	-0.007
9.12	1.79	11.59	-0.04	1.95	0.19	-0.03	4.75	1.47	-0.003
9.42	1.50	10.02	-0.04	1.83	0.33	-0.03	4.61	1.95	-0.003
9.72	1.20	8.45	0.00	3.13	0.56	-0.09	6.02	2.55	-0.011
10.02	0.90	5.03	0.05	13.40	1.55	-0.08	12.47	4.24	-0.010
10.32	0.60	0.16	0.05	1.38	0.25	0.02	4.01	1.70	0.003
10.62	0.30	0.13	0.13	0.19	0.24	0.04	1.50	1.68	0.005
10.92	0.00	0.02	0.01	0.00	0.00	0.00	0.13	0.23	0.000

Table N-136 Grid #1, L2, Plasma-150, Right (71-80), Equilibrated

L2 (150), Equilibrated							$U_\infty =$	29.42	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.92	21.83	1.57	0.31	19.18	0.12	-0.01	14.89	1.19	-0.001
-10.62	21.53	1.85	0.43	26.36	0.24	-0.08	17.45	1.65	-0.009
-10.32	21.23	6.13	-0.06	21.84	2.57	0.27	15.89	5.45	0.031
-10.02	20.93	9.07	-0.06	2.86	0.92	0.00	5.75	3.26	0.000
-9.72	20.64	10.42	-0.04	2.36	0.48	0.04	5.22	2.36	0.004
-9.42	20.34	12.04	-0.03	2.43	0.33	0.03	5.30	1.96	0.004
-9.12	20.04	13.83	-0.02	2.80	0.26	0.05	5.69	1.72	0.006
-8.82	19.74	15.59	-0.02	3.42	0.21	0.08	6.28	1.55	0.009
-8.52	19.44	17.38	-0.02	4.22	0.30	0.12	6.99	1.86	0.014
-8.22	19.14	18.92	-0.04	4.61	0.34	0.13	7.30	1.99	0.015
-7.93	18.84	20.37	-0.03	4.85	0.26	0.16	7.49	1.74	0.018
-7.63	18.54	21.66	-0.03	4.98	0.30	0.17	7.59	1.87	0.020
-7.33	18.24	22.82	-0.04	4.90	0.26	0.18	7.53	1.73	0.020
-7.03	17.94	23.79	-0.03	4.74	0.37	0.17	7.40	2.06	0.020
-6.73	17.64	24.66	-0.04	4.39	0.36	0.19	7.12	2.05	0.022
-6.43	17.35	25.41	-0.04	4.15	0.29	0.22	6.92	1.82	0.025
-6.13	17.05	26.07	-0.03	3.81	0.32	0.25	6.64	1.91	0.029
-5.83	16.75	26.64	-0.03	3.29	0.35	0.25	6.17	2.02	0.028
-5.53	16.45	27.13	-0.03	2.96	0.32	0.23	5.85	1.94	0.027
-5.23	16.15	27.53	-0.04	2.79	0.30	0.24	5.68	1.87	0.027
-4.93	15.85	27.88	-0.03	2.52	0.35	0.22	5.40	2.00	0.025
-4.64	15.55	28.20	-0.02	2.17	0.41	0.17	5.01	2.18	0.019
-4.34	15.25	28.42	-0.03	2.02	0.35	0.17	4.83	2.02	0.019
-4.04	14.95	28.63	-0.02	1.80	0.34	0.15	4.57	1.97	0.017
-3.74	14.65	28.84	-0.02	1.57	0.40	0.13	4.27	2.15	0.015
-3.44	14.36	28.97	-0.02	1.52	0.39	0.11	4.19	2.13	0.013
-3.14	14.06	29.07	-0.02	1.41	0.36	0.09	4.03	2.03	0.010
-2.84	13.76	29.18	-0.01	1.31	0.37	0.09	3.89	2.07	0.010
-2.54	13.46	29.26	-0.03	1.25	0.39	0.07	3.81	2.11	0.009
-2.24	13.16	29.31	-0.02	1.23	0.47	0.05	3.77	2.34	0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-1.94	12.86	29.35	-0.02	1.17	0.44	0.01	3.67	2.27	0.002
-1.64	12.56	29.39	-0.02	1.08	0.42	0.01	3.54	2.20	0.001
-1.35	12.26	29.41	-0.02	1.04	0.40	0.00	3.46	2.15	0.000
-1.05	11.96	29.42	-0.02	1.10	0.43	-0.02	3.56	2.23	-0.002
-0.75	11.66	29.40	-0.02	1.13	0.43	-0.03	3.61	2.24	-0.003
-0.45	11.36	29.38	-0.02	1.15	0.42	-0.06	3.64	2.21	-0.007
-0.15	11.07	29.35	-0.02	1.15	0.39	-0.06	3.65	2.12	-0.007
0.15	10.77	29.32	-0.02	1.14	0.40	-0.07	3.62	2.16	-0.009
0.45	10.47	29.28	-0.03	1.16	0.41	-0.10	3.66	2.19	-0.012
0.75	10.17	29.22	-0.03	1.23	0.48	-0.12	3.77	2.36	-0.013
1.05	9.87	29.15	-0.02	1.26	0.48	-0.13	3.82	2.34	-0.015
1.35	9.57	29.06	-0.02	1.32	0.47	-0.15	3.90	2.34	-0.017
1.64	9.27	28.97	-0.01	1.35	0.43	-0.16	3.94	2.22	-0.018
1.94	8.97	28.83	-0.01	1.51	0.39	-0.17	4.18	2.11	-0.019
2.24	8.67	28.70	-0.01	1.62	0.40	-0.20	4.32	2.15	-0.023
2.54	8.37	28.55	-0.02	1.73	0.45	-0.22	4.47	2.28	-0.025
2.84	8.07	28.36	-0.02	1.91	0.43	-0.24	4.70	2.22	-0.027
3.14	7.78	28.17	-0.01	2.11	0.35	-0.23	4.93	2.02	-0.027
3.44	7.48	27.96	-0.01	2.27	0.37	-0.24	5.12	2.07	-0.028
3.74	7.18	27.71	-0.03	2.41	0.39	-0.26	5.27	2.12	-0.030
4.04	6.88	27.45	-0.03	2.61	0.40	-0.29	5.49	2.16	-0.033
4.34	6.58	27.11	-0.02	2.80	0.35	-0.28	5.69	2.01	-0.032
4.64	6.28	26.75	-0.03	3.07	0.30	-0.27	5.96	1.87	-0.031
4.93	5.98	26.34	-0.04	3.42	0.33	-0.30	6.29	1.96	-0.035
5.23	5.68	25.88	-0.03	3.68	0.30	-0.29	6.52	1.87	-0.034
5.53	5.38	25.37	-0.02	3.94	0.30	-0.29	6.75	1.87	-0.034
5.83	5.08	24.78	-0.03	4.29	0.33	-0.30	7.04	1.95	-0.034
6.13	4.79	24.10	-0.04	4.65	0.33	-0.31	7.33	1.95	-0.036
6.43	4.49	23.36	-0.05	4.82	0.41	-0.29	7.47	2.18	-0.034
6.73	4.19	22.51	-0.04	4.87	0.42	-0.24	7.50	2.19	-0.027
7.03	3.89	21.53	-0.03	4.87	0.40	-0.22	7.50	2.16	-0.026
7.33	3.59	20.48	-0.05	4.80	0.45	-0.20	7.45	2.27	-0.024

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.63	3.29	19.31	-0.03	4.68	0.23	-0.17	7.35	1.64	-0.019
7.93	2.99	18.00	-0.04	4.35	0.34	-0.09	7.09	1.99	-0.011
8.22	2.69	16.55	-0.05	3.83	0.30	-0.11	6.65	1.85	-0.012
8.52	2.39	14.99	-0.04	3.06	0.25	-0.07	5.95	1.69	-0.008
8.82	2.09	13.37	-0.04	2.39	0.32	-0.04	5.26	1.92	-0.005
9.12	1.79	11.71	-0.04	2.01	0.23	-0.03	4.81	1.64	-0.004
9.42	1.50	10.12	-0.02	1.81	0.31	-0.02	4.57	1.88	-0.002
9.72	1.20	8.59	-0.07	2.22	0.74	0.05	5.06	2.93	0.005
10.02	0.90	5.74	-0.28	12.69	6.31	0.53	12.11	8.54	0.062
10.32	0.60	1.81	-0.23	13.94	7.99	-0.21	12.69	9.61	-0.025
10.62	0.30	0.53	-0.07	2.23	0.48	0.24	5.08	2.35	0.027
10.92	0.00	0.07	-0.04	0.00	0.01	0.00	0.24	0.33	0.000

Table N-137 Grid #1, L2, Plasma-300, Left (1-10), Equilibrated

L2 (300), Equilibrated							U_∞ =	29.95	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.92	21.83	-0.04	0.26	8.58	0.93	-0.38	9.78	3.21	-0.042
-10.62	21.53	0.43	0.11	15.21	0.57	-0.26	13.02	2.51	-0.029
-10.32	21.23	6.75	-0.06	22.03	0.85	-0.04	15.67	3.08	-0.004
-10.02	20.93	9.65	-0.05	2.94	0.76	-0.05	5.72	2.92	-0.006
-9.72	20.64	11.24	-0.03	2.32	0.51	0.04	5.08	2.38	0.004
-9.42	20.34	13.03	0.00	2.16	0.42	0.04	4.90	2.17	0.004
-9.12	20.04	14.97	0.01	2.57	0.33	0.03	5.35	1.91	0.003
-8.82	19.74	16.93	-0.03	2.98	1.43	0.01	5.77	3.99	0.001
-8.52	19.44	18.77	-0.02	3.28	1.07	0.09	6.05	3.46	0.010
-8.22	19.14	20.35	-0.02	3.40	0.38	0.11	6.16	2.06	0.012
-7.93	18.84	21.81	-0.01	3.43	0.42	0.16	6.18	2.16	0.018
-7.63	18.54	23.04	-0.02	3.49	0.45	0.17	6.24	2.23	0.019
-7.33	18.24	24.16	-0.02	3.37	0.35	0.17	6.13	1.97	0.019
-7.03	17.94	25.09	-0.03	3.24	0.33	0.16	6.01	1.91	0.018

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-6.73	17.64	25.95	-0.03	2.92	0.41	0.14	5.71	2.14	0.016
-6.43	17.35	26.62	-0.01	2.80	0.37	0.18	5.59	2.04	0.020
-6.13	17.05	27.20	-0.02	2.69	0.42	0.18	5.48	2.18	0.020
-5.83	16.75	27.68	-0.02	2.48	0.36	0.16	5.26	2.01	0.018
-5.53	16.45	28.11	-0.03	2.29	0.34	0.17	5.05	1.95	0.019
-5.23	16.15	28.46	-0.03	2.03	0.49	0.15	4.75	2.34	0.017
-4.93	15.85	28.74	-0.03	1.90	0.44	0.13	4.60	2.22	0.015
-4.64	15.55	28.97	-0.02	1.74	0.28	0.13	4.41	1.77	0.014
-4.34	15.25	29.18	-0.01	1.62	0.33	0.13	4.25	1.92	0.015
-4.04	14.95	29.36	0.00	1.46	0.35	0.12	4.04	1.98	0.013
-3.74	14.65	29.50	0.00	1.38	0.36	0.11	3.92	1.99	0.012
-3.44	14.36	29.60	0.01	1.29	0.43	0.12	3.79	2.18	0.013
-3.14	14.06	29.71	0.00	1.16	0.36	0.09	3.60	2.01	0.010
-2.84	13.76	29.77	0.00	1.13	0.40	0.08	3.54	2.11	0.009
-2.54	13.46	29.84	0.01	1.07	0.37	0.07	3.46	2.04	0.008
-2.24	13.16	29.88	0.01	1.07	0.43	0.06	3.45	2.19	0.007
-1.94	12.86	29.92	0.03	1.03	0.49	0.04	3.38	2.33	0.004
-1.64	12.56	29.95	0.02	1.00	0.48	0.02	3.35	2.32	0.002
-1.35	12.26	29.95	0.02	1.02	0.43	0.02	3.38	2.18	0.002
-1.05	11.96	29.95	0.02	1.00	0.48	0.01	3.34	2.30	0.001
-0.75	11.66	29.95	0.02	1.02	0.47	0.01	3.37	2.29	0.001
-0.45	11.36	29.94	0.02	1.03	0.46	-0.01	3.38	2.26	-0.001
-0.15	11.07	29.91	0.02	1.00	0.41	-0.03	3.34	2.13	-0.003
0.15	10.77	29.85	0.02	1.05	0.45	-0.05	3.42	2.24	-0.005
0.45	10.47	29.80	0.02	1.07	0.45	-0.07	3.45	2.24	-0.008
0.75	10.17	29.75	0.02	1.11	0.43	-0.07	3.51	2.18	-0.008
1.05	9.87	29.69	0.02	1.14	0.44	-0.07	3.56	2.22	-0.008
1.35	9.57	29.59	0.03	1.19	0.44	-0.10	3.64	2.21	-0.011
1.64	9.27	29.50	0.02	1.25	0.40	-0.12	3.73	2.11	-0.013
1.94	8.97	29.40	0.02	1.28	0.39	-0.12	3.78	2.09	-0.014
2.24	8.67	29.28	0.02	1.39	0.45	-0.14	3.93	2.23	-0.016
2.54	8.37	29.14	0.01	1.48	0.43	-0.16	4.07	2.19	-0.017

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.84	8.07	28.99	0.01	1.56	0.37	-0.17	4.17	2.04	-0.019
3.14	7.78	28.81	0.01	1.71	0.35	-0.19	4.37	1.97	-0.021
3.44	7.48	28.61	0.00	1.84	0.40	-0.19	4.53	2.10	-0.021
3.74	7.18	28.41	0.01	1.95	0.39	-0.19	4.66	2.09	-0.021
4.04	6.88	28.16	0.01	2.10	0.43	-0.20	4.84	2.19	-0.023
4.34	6.58	27.90	0.00	2.25	0.51	-0.22	5.01	2.38	-0.025
4.64	6.28	27.60	-0.01	2.41	0.55	-0.22	5.18	2.47	-0.025
4.93	5.98	27.24	-0.03	2.54	0.51	-0.20	5.32	2.39	-0.022
5.23	5.68	26.86	-0.02	2.67	0.51	-0.21	5.46	2.39	-0.023
5.53	5.38	26.40	-0.03	2.85	0.67	-0.25	5.63	2.73	-0.028
5.83	5.08	25.90	-0.03	3.02	0.70	-0.21	5.81	2.80	-0.024
6.13	4.79	25.32	-0.04	3.17	0.83	-0.22	5.94	3.05	-0.025
6.43	4.49	24.66	-0.05	3.32	0.89	-0.16	6.08	3.16	-0.017
6.73	4.19	23.86	-0.04	3.52	0.94	-0.23	6.27	3.23	-0.025
7.03	3.89	22.95	-0.06	3.65	1.27	-0.21	6.38	3.76	-0.023
7.33	3.59	21.92	-0.03	3.94	1.69	-0.14	6.63	4.34	-0.016
7.63	3.29	20.72	-0.02	4.01	1.74	-0.18	6.69	4.41	-0.020
7.93	2.99	19.40	-0.06	4.01	2.32	-0.10	6.68	5.09	-0.012
8.22	2.69	17.84	-0.06	3.96	2.27	-0.08	6.64	5.03	-0.009
8.52	2.39	16.19	-0.05	3.68	1.71	-0.10	6.40	4.37	-0.011
8.82	2.09	14.42	-0.02	3.48	1.87	-0.15	6.23	4.56	-0.017
9.12	1.79	12.62	-0.04	3.19	1.93	-0.13	5.96	4.63	-0.014
9.42	1.50	10.92	-0.02	3.74	2.12	0.06	6.45	4.86	0.007
9.72	1.20	9.12	-0.03	7.01	3.05	0.04	8.84	5.83	0.004
10.02	0.90	4.56	-0.33	24.78	4.78	0.14	16.62	7.30	0.016
10.32	0.60	-0.31	-0.12	5.20	0.62	0.13	7.61	2.63	0.014
10.62	0.30	-0.43	-0.01	2.12	0.65	0.18	4.86	2.69	0.020
10.92	0.00	2.53	0.04	0.71	0.00	0.01	2.81	0.16	0.001

Table N-138 Grid #1, L2, Plasma-300, Center (46-55), Equilibrated

L2 (300), Equilibrated							U_∞ =	30.29	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.92	21.83	1.25	-0.04	7.43	0.51	-0.43	9.00	2.36	-0.047
-10.62	21.53	1.54	-0.02	11.21	0.61	-0.67	11.05	2.58	-0.073
-10.32	21.23	6.73	0.03	10.73	0.69	0.09	10.81	2.75	0.010
-10.02	20.93	9.26	-0.01	2.41	0.56	-0.01	5.13	2.46	-0.001
-9.72	20.64	10.99	-0.02	2.08	0.40	-0.01	4.76	2.10	-0.001
-9.42	20.34	12.84	0.00	1.91	0.28	0.04	4.57	1.76	0.005
-9.12	20.04	14.79	0.01	2.27	0.30	0.01	4.98	1.82	0.001
-8.82	19.74	16.69	-0.01	2.62	0.27	0.04	5.35	1.71	0.005
-8.52	19.44	18.49	-0.01	3.01	0.34	0.08	5.72	1.93	0.009
-8.22	19.14	20.09	0.00	3.32	0.32	0.06	6.01	1.88	0.007
-7.93	18.84	21.59	-0.01	3.14	0.25	0.11	5.85	1.65	0.012
-7.63	18.54	22.86	-0.01	3.14	0.33	0.12	5.85	1.89	0.013
-7.33	18.24	24.01	0.00	3.19	0.31	0.12	5.90	1.84	0.013
-7.03	17.94	24.98	0.00	3.06	0.33	0.12	5.77	1.89	0.013
-6.73	17.64	25.87	-0.01	2.85	0.32	0.14	5.58	1.87	0.015
-6.43	17.35	26.60	-0.02	2.68	0.31	0.16	5.40	1.85	0.017
-6.13	17.05	27.22	-0.03	2.60	0.27	0.17	5.32	1.72	0.018
-5.83	16.75	27.74	-0.03	2.46	0.38	0.18	5.18	2.05	0.020
-5.53	16.45	28.22	-0.02	2.22	0.38	0.16	4.92	2.04	0.017
-5.23	16.15	28.61	-0.02	1.99	0.28	0.15	4.65	1.75	0.016
-4.93	15.85	28.94	-0.02	1.82	0.24	0.13	4.45	1.62	0.014
-4.64	15.55	29.21	-0.02	1.62	0.26	0.12	4.20	1.67	0.013
-4.34	15.25	29.45	-0.01	1.43	0.29	0.10	3.95	1.77	0.011
-4.04	14.95	29.62	-0.02	1.38	0.34	0.10	3.87	1.91	0.011
-3.74	14.65	29.78	-0.01	1.25	0.31	0.09	3.70	1.83	0.009
-3.44	14.36	29.93	-0.01	1.14	0.27	0.08	3.52	1.71	0.009
-3.14	14.06	30.03	-0.02	1.07	0.35	0.07	3.42	1.94	0.007
-2.84	13.76	30.12	-0.02	1.01	0.37	0.05	3.32	2.00	0.005
-2.54	13.46	30.17	-0.01	0.98	0.37	0.03	3.27	2.00	0.003
-2.24	13.16	30.21	-0.01	0.97	0.35	0.01	3.25	1.96	0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-1.94	12.86	30.26	0.00	0.95	0.37	0.02	3.22	2.00	0.002
-1.64	12.56	30.27	-0.01	0.96	0.38	0.04	3.23	2.04	0.004
-1.35	12.26	30.28	-0.01	0.92	0.42	0.01	3.17	2.14	0.001
-1.05	11.96	30.29	0.00	0.92	0.42	-0.02	3.16	2.15	-0.002
-0.75	11.66	30.28	-0.01	0.93	0.40	-0.04	3.18	2.08	-0.005
-0.45	11.36	30.26	-0.01	0.92	0.40	-0.04	3.16	2.08	-0.004
-0.15	11.07	30.23	-0.01	0.93	0.43	-0.05	3.18	2.17	-0.006
0.15	10.77	30.20	-0.01	0.93	0.38	-0.06	3.18	2.04	-0.006
0.45	10.47	30.16	0.00	0.97	0.39	-0.07	3.25	2.07	-0.008
0.75	10.17	30.10	-0.01	1.02	0.36	-0.09	3.34	1.99	-0.010
1.05	9.87	30.01	-0.01	1.09	0.35	-0.10	3.44	1.96	-0.011
1.35	9.57	29.94	-0.01	1.11	0.32	-0.11	3.47	1.87	-0.012
1.64	9.27	29.85	-0.02	1.18	0.34	-0.11	3.58	1.91	-0.012
1.94	8.97	29.76	-0.01	1.25	0.35	-0.12	3.69	1.95	-0.013
2.24	8.67	29.64	-0.01	1.31	0.37	-0.13	3.78	2.00	-0.014
2.54	8.37	29.50	-0.02	1.38	0.37	-0.15	3.88	2.00	-0.016
2.84	8.07	29.36	-0.03	1.43	0.38	-0.14	3.94	2.05	-0.015
3.14	7.78	29.17	-0.04	1.56	0.40	-0.14	4.13	2.08	-0.015
3.44	7.48	28.98	-0.03	1.69	0.38	-0.17	4.29	2.02	-0.019
3.74	7.18	28.79	-0.04	1.73	0.42	-0.19	4.34	2.15	-0.021
4.04	6.88	28.56	-0.03	1.84	0.48	-0.19	4.48	2.28	-0.020
4.34	6.58	28.26	-0.03	2.04	0.29	-0.19	4.71	1.78	-0.021
4.64	6.28	27.94	-0.04	2.19	0.43	-0.18	4.89	2.16	-0.020
4.93	5.98	27.59	-0.04	2.31	0.42	-0.20	5.02	2.15	-0.022
5.23	5.68	27.18	-0.05	2.47	0.48	-0.21	5.19	2.28	-0.023
5.53	5.38	26.74	-0.05	2.65	0.59	-0.19	5.37	2.54	-0.020
5.83	5.08	26.19	-0.05	2.89	0.62	-0.18	5.61	2.60	-0.020
6.13	4.79	25.57	-0.06	3.13	0.71	-0.18	5.84	2.79	-0.019
6.43	4.49	24.85	-0.08	3.39	0.62	-0.19	6.08	2.59	-0.021
6.73	4.19	24.05	-0.09	3.62	0.85	-0.22	6.28	3.04	-0.024
7.03	3.89	23.13	-0.08	3.90	1.13	-0.16	6.52	3.51	-0.017
7.33	3.59	22.11	-0.07	4.17	1.77	-0.16	6.74	4.39	-0.017

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
7.63	3.29	20.86	-0.06	4.31	1.95	0.01	6.85	4.61	0.001
7.93	2.99	19.48	-0.05	3.94	1.28	-0.10	6.55	3.74	-0.011
8.22	2.69	17.98	-0.06	3.80	1.40	-0.10	6.44	3.91	-0.011
8.52	2.39	16.32	-0.06	3.65	1.61	-0.11	6.30	4.19	-0.011
8.82	2.09	14.56	-0.04	3.32	1.77	-0.08	6.01	4.39	-0.008
9.12	1.79	12.74	-0.04	2.99	1.87	-0.02	5.71	4.52	-0.002
9.42	1.50	10.94	-0.03	2.90	1.87	0.03	5.62	4.51	0.003
9.72	1.20	8.96	-0.08	5.69	1.66	0.05	7.88	4.26	0.006
10.02	0.90	4.26	-0.24	20.73	3.32	0.16	15.03	6.02	0.017
10.32	0.60	0.52	-0.10	5.68	1.13	-0.02	7.87	3.50	-0.003
10.62	0.30	0.04	-0.05	0.71	0.75	-0.06	2.79	2.85	-0.006
10.92	0.00	0.01	0.03	0.00	0.01	0.00	0.18	0.25	0.000

Table N-139 Grid #1, L2, Plasma-300, Right (71-80), Equilibrated

L2 (300), Equilibrated							U_∞ =	30.44	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-10.92	21.83	3.60	0.21	38.30	0.13	0.14	20.33	1.20	0.015
-10.62	21.53	3.84	0.25	30.04	0.27	0.07	18.01	1.69	0.008
-10.32	21.23	7.24	-0.04	5.19	1.35	-0.03	7.49	3.82	-0.004
-10.02	20.93	9.17	-0.02	2.31	0.62	-0.02	5.00	2.58	-0.003
-9.72	20.64	10.89	-0.01	1.99	0.44	0.01	4.64	2.19	0.001
-9.42	20.34	12.76	-0.01	1.83	0.43	0.06	4.45	2.17	0.006
-9.12	20.04	14.72	-0.01	2.28	0.48	0.05	4.96	2.28	0.006
-8.82	19.74	16.63	-0.02	2.62	0.49	0.10	5.31	2.29	0.011
-8.52	19.44	18.45	-0.01	2.79	0.30	0.06	5.48	1.80	0.007
-8.22	19.14	20.00	-0.02	2.97	0.34	0.10	5.66	1.93	0.011
-7.93	18.84	21.49	-0.01	3.10	0.41	0.11	5.79	2.09	0.011
-7.63	18.54	22.77	-0.02	3.12	0.42	0.08	5.80	2.14	0.008
-7.33	18.24	23.92	-0.01	3.13	0.50	0.11	5.81	2.32	0.012
-7.03	17.94	24.91	-0.02	3.06	0.40	0.12	5.74	2.08	0.013

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-6.73	17.64	25.78	-0.03	2.92	0.30	0.16	5.61	1.81	0.017
-6.43	17.35	26.55	-0.03	2.82	0.38	0.14	5.52	2.01	0.015
-6.13	17.05	27.21	-0.02	2.60	0.35	0.15	5.29	1.93	0.016
-5.83	16.75	27.75	-0.03	2.47	0.39	0.13	5.17	2.04	0.014
-5.53	16.45	28.22	-0.03	2.32	0.44	0.15	5.00	2.17	0.016
-5.23	16.15	28.62	-0.02	2.14	0.42	0.14	4.80	2.14	0.015
-4.93	15.85	28.98	-0.02	1.88	0.34	0.14	4.50	1.90	0.015
-4.64	15.55	29.26	-0.02	1.71	0.35	0.13	4.29	1.96	0.014
-4.34	15.25	29.51	-0.03	1.58	0.36	0.12	4.13	1.97	0.013
-4.04	14.95	29.71	-0.03	1.46	0.39	0.11	3.97	2.05	0.012
-3.74	14.65	29.88	-0.03	1.33	0.37	0.09	3.78	2.01	0.010
-3.44	14.36	30.02	-0.03	1.23	0.40	0.08	3.64	2.07	0.008
-3.14	14.06	30.13	-0.03	1.15	0.39	0.07	3.52	2.04	0.008
-2.84	13.76	30.21	-0.02	1.11	0.45	0.05	3.45	2.20	0.006
-2.54	13.46	30.30	-0.03	1.02	0.42	0.05	3.32	2.14	0.006
-2.24	13.16	30.36	-0.03	1.00	0.38	0.03	3.28	2.03	0.003
-1.94	12.86	30.40	-0.04	0.97	0.37	0.03	3.24	2.00	0.003
-1.64	12.56	30.42	-0.03	0.94	0.37	0.02	3.18	1.99	0.003
-1.35	12.26	30.44	-0.02	0.93	0.44	0.01	3.18	2.18	0.001
-1.05	11.96	30.44	-0.03	0.93	0.45	-0.02	3.17	2.20	-0.002
-0.75	11.66	30.44	-0.03	0.93	0.54	-0.01	3.18	2.42	-0.002
-0.45	11.36	30.42	-0.03	0.96	0.49	-0.03	3.21	2.30	-0.003
-0.15	11.07	30.41	-0.02	0.95	0.36	-0.06	3.20	1.96	-0.006
0.15	10.77	30.38	-0.02	0.99	0.41	-0.04	3.27	2.11	-0.005
0.45	10.47	30.34	-0.01	1.00	0.40	-0.05	3.29	2.07	-0.006
0.75	10.17	30.29	-0.03	1.03	0.43	-0.07	3.33	2.16	-0.008
1.05	9.87	30.23	-0.02	1.10	0.48	-0.07	3.44	2.29	-0.008
1.35	9.57	30.14	-0.03	1.11	0.40	-0.10	3.47	2.08	-0.011
1.64	9.27	30.05	-0.03	1.16	0.42	-0.12	3.54	2.12	-0.013
1.94	8.97	29.97	-0.02	1.21	0.45	-0.13	3.62	2.21	-0.014
2.24	8.67	29.84	-0.04	1.32	0.41	-0.13	3.77	2.10	-0.014
2.54	8.37	29.70	-0.03	1.40	0.43	-0.17	3.88	2.15	-0.018

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.84	8.07	29.57	-0.04	1.48	0.43	-0.17	4.00	2.16	-0.018
3.14	7.78	29.42	-0.05	1.58	0.39	-0.17	4.13	2.06	-0.018
3.44	7.48	29.21	-0.04	1.70	0.50	-0.18	4.29	2.32	-0.019
3.74	7.18	28.99	-0.04	1.85	0.55	-0.21	4.47	2.44	-0.022
4.04	6.88	28.75	-0.05	2.01	0.66	-0.25	4.66	2.66	-0.027
4.34	6.58	28.47	-0.04	2.17	0.44	-0.22	4.84	2.17	-0.024
4.64	6.28	28.14	-0.05	2.29	0.43	-0.22	4.97	2.15	-0.023
4.93	5.98	27.79	-0.04	2.42	0.68	-0.28	5.11	2.70	-0.030
5.23	5.68	27.40	-0.05	2.57	0.77	-0.24	5.27	2.89	-0.026
5.53	5.38	26.92	-0.06	2.78	0.74	-0.23	5.48	2.82	-0.025
5.83	5.08	26.38	-0.08	3.02	1.05	-0.24	5.71	3.37	-0.026
6.13	4.79	25.73	-0.08	3.35	1.46	-0.21	6.01	3.97	-0.023
6.43	4.49	25.00	-0.07	3.59	1.66	-0.17	6.22	4.23	-0.018
6.73	4.19	24.19	-0.10	3.70	1.58	-0.07	6.32	4.13	-0.008
7.03	3.89	23.27	-0.08	3.90	1.82	-0.09	6.49	4.43	-0.010
7.33	3.59	22.18	-0.10	4.05	2.32	-0.17	6.61	5.00	-0.018
7.63	3.29	20.97	-0.09	4.11	2.81	0.04	6.66	5.51	0.004
7.93	2.99	19.64	-0.09	4.02	2.45	-0.01	6.59	5.14	-0.002
8.22	2.69	18.12	-0.07	3.97	2.50	-0.26	6.55	5.19	-0.028
8.52	2.39	16.49	-0.05	3.66	2.55	-0.09	6.29	5.25	-0.009
8.82	2.09	14.72	-0.03	3.51	2.25	-0.04	6.16	4.93	-0.004
9.12	1.79	12.89	-0.04	2.96	2.62	-0.07	5.65	5.31	-0.007
9.42	1.50	11.09	-0.05	2.95	2.75	0.07	5.64	5.45	0.008
9.72	1.20	9.25	-0.08	3.60	3.37	0.03	6.23	6.03	0.003
10.02	0.90	6.25	-0.37	18.22	10.93	0.22	14.02	10.86	0.023
10.32	0.60	2.80	-0.07	21.15	11.20	-0.28	15.11	11.00	-0.031
10.62	0.30	0.03	0.26	1.36	1.46	-0.30	3.83	3.97	-0.033
10.92	0.00	0.06	0.03	0.02	0.00	0.00	0.44	0.17	0.000

Table N-140 Grid #1, L5, Plasma-150, Left (1-10), Equilibrated

L5 (150), Equilibrated							U_∞ =	30.57	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.80	23.60	0.36	0.51	15.96	13.15	-5.19	13.07	11.86	-0.555
-11.47	23.27	0.89	-0.51	8.62	4.81	-2.61	9.60	7.18	-0.279
-11.15	22.95	1.27	-0.14	2.18	0.53	0.04	4.83	2.38	0.004
-10.83	22.63	3.90	-0.02	2.10	0.57	0.02	4.74	2.47	0.002
-10.51	22.30	5.76	0.02	1.50	0.46	0.00	4.01	2.21	0.000
-10.18	21.98	7.53	0.02	1.41	0.63	0.04	3.88	2.60	0.004
-9.86	21.66	9.32	0.03	1.33	0.30	-0.01	3.77	1.80	-0.001
-9.54	21.33	11.08	0.03	1.53	0.33	-0.01	4.05	1.87	-0.001
-9.21	21.01	12.94	0.03	1.74	0.26	0.01	4.31	1.65	0.001
-8.89	20.69	14.60	0.03	1.97	0.30	0.03	4.59	1.80	0.004
-8.57	20.36	16.27	0.04	2.33	0.23	0.06	5.00	1.58	0.006
-8.24	20.04	17.78	0.04	2.55	0.18	0.06	5.23	1.41	0.007
-7.92	19.72	19.27	0.06	2.71	0.28	0.08	5.38	1.74	0.008
-7.60	19.39	20.57	0.04	2.94	0.33	0.08	5.61	1.87	0.008
-7.27	19.07	21.84	0.04	2.96	0.24	0.07	5.62	1.62	0.008
-6.95	18.75	23.00	0.05	2.95	0.22	0.07	5.62	1.55	0.008
-6.63	18.42	24.05	0.05	2.93	0.24	0.08	5.60	1.59	0.008
-6.30	18.10	24.97	0.04	2.85	0.31	0.08	5.53	1.83	0.009
-5.98	17.78	25.80	0.05	2.80	0.21	0.11	5.48	1.51	0.012
-5.66	17.45	26.58	0.06	2.56	0.21	0.12	5.23	1.49	0.013
-5.33	17.13	27.24	0.05	2.31	0.23	0.10	4.97	1.56	0.011
-5.01	16.81	27.82	0.05	2.07	0.23	0.09	4.71	1.57	0.009
-4.69	16.48	28.32	0.05	1.88	0.27	0.08	4.48	1.69	0.008
-4.36	16.16	28.73	0.05	1.71	0.38	0.08	4.27	2.02	0.009
-4.04	15.84	29.10	0.05	1.57	0.37	0.09	4.09	2.00	0.009
-3.72	15.52	29.41	0.04	1.46	0.38	0.08	3.95	2.02	0.008
-3.39	15.19	29.69	0.04	1.35	0.28	0.05	3.80	1.73	0.005
-3.07	14.87	29.91	0.05	1.22	0.22	0.06	3.61	1.55	0.007
-2.75	14.55	30.09	0.06	1.12	0.20	0.05	3.47	1.48	0.005
-2.42	14.22	30.26	0.05	1.03	0.37	0.05	3.32	1.99	0.005
-2.10	13.90	30.37	0.05	0.99	0.40	0.04	3.25	2.07	0.004
-1.78	13.58	30.46	0.04	0.91	0.33	0.01	3.13	1.87	0.001
-1.45	13.25	30.52	0.05	0.90	0.36	0.01	3.10	1.97	0.001
-1.13	12.93	30.55	0.06	0.89	0.31	-0.01	3.09	1.81	-0.002
-0.81	12.61	30.57	0.06	0.88	0.33	0.00	3.07	1.88	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-0.48	12.28	30.55	0.05	0.88	0.26	-0.02	3.07	1.65	-0.002
-0.16	11.96	30.51	0.04	0.91	0.27	-0.02	3.13	1.70	-0.002
0.16	11.64	30.44	0.04	0.96	0.29	-0.04	3.20	1.77	-0.004
0.48	11.31	30.37	0.04	1.04	0.31	-0.03	3.34	1.83	-0.003
0.81	10.99	30.27	0.05	1.12	0.27	-0.05	3.46	1.69	-0.005
1.13	10.67	30.16	0.05	1.16	0.32	-0.06	3.52	1.86	-0.006
1.45	10.34	30.02	0.04	1.22	0.34	-0.06	3.62	1.91	-0.007
1.78	10.02	29.84	0.04	1.32	0.29	-0.09	3.76	1.77	-0.009
2.10	9.70	29.64	0.03	1.41	0.38	-0.10	3.88	2.01	-0.011
2.42	9.37	29.39	0.02	1.58	0.36	-0.12	4.12	1.96	-0.012
2.75	9.05	29.14	0.03	1.67	0.34	-0.10	4.23	1.91	-0.011
3.07	8.73	28.85	0.02	1.83	0.30	-0.11	4.42	1.78	-0.011
3.39	8.40	28.51	0.03	1.96	0.34	-0.12	4.58	1.92	-0.013
3.72	8.08	28.12	0.02	2.15	0.25	-0.14	4.79	1.65	-0.015
4.04	7.76	27.68	0.02	2.38	0.27	-0.14	5.05	1.71	-0.015
4.36	7.43	27.18	0.01	2.64	0.28	-0.13	5.32	1.74	-0.014
4.69	7.11	26.67	0.02	2.70	0.30	-0.12	5.38	1.80	-0.012
5.01	6.79	26.07	0.02	2.86	0.37	-0.16	5.54	1.99	-0.017
5.33	6.46	25.42	0.01	2.97	0.32	-0.12	5.64	1.85	-0.013
5.66	6.14	24.70	0.01	2.97	0.26	-0.10	5.64	1.66	-0.011
5.98	5.82	23.94	0.00	3.11	0.21	-0.11	5.77	1.51	-0.012
6.30	5.49	23.05	-0.01	3.28	0.19	-0.10	5.93	1.42	-0.011
6.63	5.17	22.11	-0.01	3.16	0.18	-0.10	5.82	1.39	-0.010
6.95	4.85	21.09	-0.01	3.07	0.15	-0.08	5.73	1.25	-0.009
7.27	4.53	20.04	-0.01	2.95	0.25	-0.08	5.62	1.65	-0.008
7.60	4.20	18.89	-0.01	2.82	0.32	-0.06	5.50	1.86	-0.007
7.92	3.88	17.69	-0.02	2.65	0.23	-0.05	5.33	1.56	-0.006
8.24	3.56	16.40	-0.02	2.39	0.30	-0.05	5.05	1.78	-0.006
8.57	3.23	15.04	-0.03	2.09	0.29	-0.06	4.73	1.75	-0.006
8.89	2.91	13.58	-0.02	1.86	0.16	-0.02	4.47	1.33	-0.002
9.21	2.59	12.08	-0.03	1.55	0.20	0.00	4.07	1.46	0.000
9.54	2.26	10.49	-0.04	1.29	0.19	-0.01	3.71	1.42	-0.001
9.86	1.94	8.90	-0.03	1.12	0.21	-0.01	3.45	1.50	-0.001
10.18	1.62	7.21	-0.03	1.02	0.26	-0.01	3.31	1.67	-0.001
10.51	1.29	5.52	-0.02	0.91	0.23	-0.01	3.12	1.56	-0.001
10.83	0.97	3.68	-0.04	1.02	0.20	0.00	3.30	1.46	0.000
11.15	0.65	0.75	-0.02	0.68	0.07	-0.04	2.70	0.85	-0.004
11.47	0.32	0.24	0.13	0.23	0.12	-0.02	1.58	1.11	-0.002

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
11.80	0.00	1.35	-0.01	0.00	0.00	0.00	0.00	0.11	0.000

Table N-141 Grid #1, L5, Plasma-150, Center (46-55), Equilibrated

L5 (150), Equilibrated							U_∞ =	30.58	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.80	23.596	-0.001	-0.288	3.176	1.471	0.093	5.83	3.97	0.010
-11.47	23.273	0.221	0.332	4.712	3.181	0.186	7.10	5.83	0.020
-11.15	22.949	1.421	-0.009	1.914	0.349	0.042	4.52	1.93	0.005
-10.83	22.626	4.206	0.007	1.614	0.404	0.010	4.15	2.08	0.001
-10.51	22.303	5.978	0.014	1.313	0.358	-0.002	3.75	1.96	0.000
-10.18	21.980	7.795	0.017	1.175	0.166	-0.001	3.54	1.33	0.000
-9.86	21.657	9.573	0.020	1.057	0.161	0.010	3.36	1.31	0.001
-9.54	21.333	11.319	0.029	1.381	0.165	-0.006	3.84	1.33	-0.001
-9.21	21.010	13.103	0.029	1.511	0.149	0.007	4.02	1.26	0.001
-8.89	20.687	14.760	0.026	1.746	0.216	0.017	4.32	1.52	0.002
-8.57	20.364	16.343	0.033	2.206	0.234	0.017	4.86	1.58	0.002
-8.24	20.040	17.860	0.044	2.303	0.217	0.040	4.96	1.52	0.004
-7.92	19.717	19.296	0.053	2.299	0.235	0.043	4.96	1.59	0.005
-7.60	19.394	20.584	0.052	2.502	0.181	0.029	5.17	1.39	0.003
-7.27	19.071	21.840	0.044	2.555	0.174	0.051	5.23	1.36	0.005
-6.95	18.747	22.959	0.048	2.585	0.189	0.074	5.26	1.42	0.008
-6.63	18.424	24.008	0.053	2.730	0.205	0.090	5.40	1.48	0.010
-6.30	18.101	24.911	0.059	2.682	0.223	0.081	5.35	1.54	0.009
-5.98	17.778	25.795	0.055	2.515	0.179	0.079	5.19	1.38	0.008
-5.66	17.455	26.535	0.060	2.360	0.138	0.077	5.02	1.22	0.008
-5.33	17.131	27.214	0.056	2.114	0.154	0.060	4.75	1.28	0.006
-5.01	16.808	27.803	0.058	1.860	0.168	0.067	4.46	1.34	0.007
-4.69	16.485	28.307	0.059	1.684	0.215	0.080	4.24	1.51	0.009
-4.36	16.162	28.721	0.053	1.596	0.204	0.083	4.13	1.48	0.009
-4.04	15.838	29.092	0.047	1.529	0.173	0.065	4.04	1.36	0.007
-3.72	15.515	29.394	0.052	1.435	0.182	0.075	3.92	1.40	0.008
-3.39	15.192	29.678	0.057	1.244	0.204	0.070	3.65	1.48	0.008
-3.07	14.869	29.901	0.054	1.163	0.219	0.050	3.53	1.53	0.005
-2.75	14.545	30.103	0.063	1.055	0.206	0.041	3.36	1.48	0.004

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-2.42	14.222	30.250	0.057	0.984	0.261	0.023	3.24	1.67	0.002
-2.10	13.899	30.375	0.049	0.967	0.237	0.019	3.22	1.59	0.002
-1.78	13.576	30.459	0.050	0.895	0.185	0.020	3.09	1.41	0.002
-1.45	13.253	30.538	0.054	0.840	0.220	0.015	3.00	1.53	0.002
-1.13	12.929	30.576	0.045	0.796	0.226	0.012	2.92	1.55	0.001
-0.81	12.606	30.585	0.040	0.798	0.237	-0.007	2.92	1.59	-0.001
-0.48	12.283	30.558	0.044	0.828	0.253	-0.013	2.98	1.64	-0.001
-0.16	11.960	30.505	0.041	0.879	0.248	-0.020	3.07	1.63	-0.002
0.16	11.636	30.452	0.044	0.891	0.212	-0.025	3.09	1.51	-0.003
0.48	11.313	30.380	0.040	0.932	0.215	-0.042	3.16	1.52	-0.005
0.81	10.990	30.281	0.046	1.008	0.221	-0.051	3.28	1.54	-0.005
1.13	10.667	30.157	0.040	1.075	0.190	-0.061	3.39	1.43	-0.007
1.45	10.343	29.990	0.036	1.164	0.192	-0.075	3.53	1.43	-0.008
1.78	10.020	29.810	0.028	1.254	0.219	-0.081	3.66	1.53	-0.009
2.10	9.697	29.622	0.035	1.270	0.199	-0.077	3.68	1.46	-0.008
2.42	9.374	29.374	0.031	1.419	0.170	-0.080	3.89	1.35	-0.009
2.75	9.051	29.087	0.026	1.560	0.270	-0.099	4.08	1.70	-0.011
3.07	8.727	28.799	0.025	1.615	0.237	-0.109	4.15	1.59	-0.012
3.39	8.404	28.455	0.035	1.784	0.199	-0.110	4.37	1.46	-0.012
3.72	8.081	28.073	0.026	2.012	0.166	-0.110	4.64	1.33	-0.012
4.04	7.758	27.633	0.013	2.210	0.169	-0.104	4.86	1.34	-0.011
4.36	7.434	27.159	0.007	2.375	0.170	-0.106	5.04	1.35	-0.011
4.69	7.111	26.613	0.006	2.631	0.250	-0.103	5.30	1.64	-0.011
5.01	6.788	26.000	0.006	2.819	0.249	-0.113	5.49	1.63	-0.012
5.33	6.465	25.335	-0.005	2.881	0.224	-0.104	5.55	1.55	-0.011
5.66	6.141	24.634	-0.010	2.931	0.218	-0.092	5.60	1.53	-0.010
5.98	5.818	23.868	-0.008	3.114	0.229	-0.095	5.77	1.56	-0.010
6.30	5.495	23.013	-0.023	3.188	0.190	-0.105	5.84	1.43	-0.011
6.63	5.172	22.103	-0.024	3.171	0.197	-0.093	5.82	1.45	-0.010
6.95	4.848	21.122	-0.018	3.009	0.153	-0.070	5.67	1.28	-0.007
7.27	4.525	20.084	-0.021	2.915	0.194	-0.060	5.58	1.44	-0.006
7.60	4.202	18.943	-0.030	2.755	0.300	-0.040	5.43	1.79	-0.004
7.92	3.879	17.746	-0.032	2.512	0.245	-0.037	5.18	1.62	-0.004
8.24	3.556	16.488	-0.037	2.241	0.204	-0.035	4.89	1.48	-0.004
8.57	3.232	15.140	-0.036	1.975	0.195	-0.026	4.60	1.44	-0.003
8.89	2.909	13.741	-0.035	1.752	0.266	0.007	4.33	1.69	0.001
9.21	2.586	12.273	-0.040	1.499	0.252	-0.019	4.00	1.64	-0.002
9.54	2.263	10.735	-0.040	1.218	0.213	-0.006	3.61	1.51	-0.001

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
9.86	1.939	9.149	-0.040	1.000	0.137	-0.004	3.27	1.21	0.000
10.18	1.616	7.490	-0.035	0.927	0.163	0.000	3.15	1.32	0.000
10.51	1.293	5.833	-0.037	0.794	0.138	-0.001	2.91	1.21	0.000
10.83	0.970	4.073	-0.022	0.875	0.152	0.001	3.06	1.27	0.000
11.15	0.646	1.957	-0.117	1.026	0.116	0.001	3.31	1.11	0.000
11.47	0.323	0.237	-0.087	0.236	0.063	0.003	1.59	0.82	0.000
11.80	0.000	0.002	0.003	0.000	0.000	0.000	0.00	0.00	0.000

Table N-142 Grid #1, L5, Plasma-150, Right (71-80), Equilibrated

L5 (150), Equilibrated							U_∞ =	30.58	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.80	23.60	-0.02	-0.29	1.81	0.51	-0.14	4.39	2.33	-0.015
-11.47	23.27	0.04	0.14	1.51	2.54	-0.09	4.01	5.21	-0.010
-11.15	22.95	1.38	-0.03	1.68	0.90	0.06	4.23	3.10	0.007
-10.83	22.63	4.48	-0.01	1.49	0.21	0.00	4.00	1.50	0.000
-10.51	22.30	6.20	-0.01	1.30	0.23	0.01	3.74	1.58	0.002
-10.18	21.98	7.99	0.02	1.21	0.30	0.01	3.59	1.80	0.002
-9.86	21.66	9.77	0.02	1.10	0.17	0.01	3.43	1.34	0.001
-9.54	21.33	11.49	0.03	1.36	0.18	0.01	3.82	1.37	0.001
-9.21	21.01	13.25	0.04	1.45	0.18	0.03	3.93	1.40	0.003
-8.89	20.69	14.87	0.05	1.72	0.27	0.02	4.29	1.70	0.003
-8.57	20.36	16.47	0.04	2.02	0.22	0.03	4.65	1.55	0.004
-8.24	20.04	17.92	0.05	2.12	0.21	0.05	4.76	1.51	0.005
-7.92	19.72	19.35	0.06	2.30	0.27	0.04	4.96	1.70	0.004
-7.60	19.39	20.64	0.05	2.50	0.29	0.05	5.17	1.75	0.005
-7.27	19.07	21.86	0.05	2.62	0.28	0.05	5.29	1.74	0.005
-6.95	18.75	22.96	0.06	2.52	0.22	0.06	5.20	1.55	0.006
-6.63	18.42	23.99	0.05	2.54	0.22	0.05	5.21	1.54	0.006
-6.30	18.10	24.91	0.06	2.59	0.23	0.06	5.26	1.57	0.007
-5.98	17.78	25.76	0.06	2.49	0.27	0.08	5.16	1.70	0.009
-5.66	17.45	26.53	0.06	2.28	0.24	0.07	4.94	1.61	0.008
-5.33	17.13	27.20	0.06	2.07	0.20	0.07	4.71	1.46	0.007
-5.01	16.81	27.79	0.06	1.83	0.23	0.06	4.43	1.58	0.007
-4.69	16.48	28.29	0.06	1.64	0.23	0.06	4.19	1.56	0.007

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-4.36	16.16	28.72	0.06	1.58	0.22	0.08	4.11	1.54	0.008
-4.04	15.84	29.11	0.06	1.46	0.22	0.07	3.95	1.54	0.008
-3.72	15.52	29.43	0.06	1.33	0.21	0.06	3.77	1.50	0.007
-3.39	15.19	29.72	0.05	1.20	0.21	0.05	3.58	1.49	0.006
-3.07	14.87	29.93	0.05	1.13	0.26	0.04	3.47	1.66	0.005
-2.75	14.55	30.11	0.06	1.07	0.25	0.05	3.38	1.63	0.005
-2.42	14.22	30.27	0.06	0.99	0.26	0.04	3.25	1.66	0.004
-2.10	13.90	30.38	0.06	0.96	0.32	0.02	3.20	1.85	0.002
-1.78	13.58	30.47	0.06	0.89	0.24	0.02	3.08	1.60	0.002
-1.45	13.25	30.53	0.06	0.86	0.28	0.01	3.02	1.72	0.001
-1.13	12.93	30.56	0.05	0.83	0.29	0.00	2.99	1.77	0.000
-0.81	12.61	30.58	0.05	0.82	0.29	0.00	2.96	1.75	0.000
-0.48	12.28	30.57	0.05	0.82	0.29	-0.01	2.95	1.75	-0.001
-0.16	11.96	30.53	0.05	0.86	0.26	-0.02	3.03	1.68	-0.002
0.16	11.64	30.49	0.05	0.88	0.27	-0.02	3.06	1.70	-0.002
0.48	11.31	30.41	0.04	0.93	0.38	-0.04	3.16	2.01	-0.004
0.81	10.99	30.29	0.04	1.02	0.31	-0.05	3.30	1.82	-0.005
1.13	10.67	30.16	0.05	1.09	0.24	-0.04	3.41	1.59	-0.005
1.45	10.34	30.00	0.05	1.19	0.23	-0.06	3.57	1.57	-0.006
1.78	10.02	29.80	0.04	1.30	0.26	-0.07	3.73	1.66	-0.007
2.10	9.70	29.61	0.03	1.36	0.26	-0.07	3.81	1.68	-0.008
2.42	9.37	29.38	0.03	1.41	0.25	-0.08	3.88	1.62	-0.008
2.75	9.05	29.11	0.03	1.54	0.30	-0.10	4.06	1.79	-0.010
3.07	8.73	28.79	0.03	1.74	0.28	-0.10	4.31	1.74	-0.011
3.39	8.40	28.43	0.02	1.92	0.32	-0.11	4.53	1.86	-0.012
3.72	8.08	28.04	0.01	2.11	0.26	-0.09	4.75	1.66	-0.009
4.04	7.76	27.61	0.00	2.31	0.22	-0.08	4.97	1.54	-0.009
4.36	7.43	27.13	0.00	2.52	0.21	-0.11	5.19	1.49	-0.012
4.69	7.11	26.59	0.01	2.71	0.19	-0.11	5.39	1.43	-0.012
5.01	6.79	26.01	0.00	2.85	0.17	-0.11	5.52	1.36	-0.012
5.33	6.46	25.35	0.00	2.96	0.20	-0.10	5.62	1.48	-0.011
5.66	6.14	24.64	0.00	3.08	0.23	-0.09	5.74	1.57	-0.010
5.98	5.82	23.87	-0.01	3.21	0.20	-0.07	5.86	1.44	-0.008
6.30	5.49	23.04	-0.01	3.29	0.23	-0.09	5.93	1.57	-0.009
6.63	5.17	22.14	-0.01	3.21	0.25	-0.09	5.86	1.62	-0.010
6.95	4.85	21.18	-0.03	3.34	0.22	-0.08	5.98	1.52	-0.009
7.27	4.53	20.13	-0.05	3.05	0.29	-0.06	5.71	1.76	-0.006
7.60	4.20	19.00	-0.03	2.79	0.22	-0.05	5.46	1.53	-0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
7.92	3.88	17.83	-0.03	2.58	0.22	-0.04	5.25	1.53	-0.004
8.24	3.56	16.56	-0.03	2.25	0.25	-0.02	4.91	1.62	-0.002
8.57	3.23	15.26	-0.05	2.00	0.23	-0.03	4.63	1.55	-0.003
8.89	2.91	13.85	-0.04	1.74	0.21	-0.03	4.31	1.50	-0.003
9.21	2.59	12.40	-0.05	1.52	0.21	-0.01	4.03	1.50	-0.001
9.54	2.26	10.88	-0.05	1.23	0.16	-0.01	3.63	1.30	-0.001
9.86	1.94	9.31	-0.05	1.03	0.21	-0.01	3.33	1.49	-0.001
10.18	1.62	7.70	-0.05	0.92	0.30	0.00	3.13	1.79	0.000
10.51	1.29	6.07	-0.04	0.86	0.24	0.00	3.04	1.61	0.000
10.83	0.97	4.30	-0.04	0.98	0.18	0.00	3.24	1.39	0.000
11.15	0.65	2.35	-0.06	1.19	0.10	-0.01	3.57	1.02	-0.001
11.47	0.32	0.43	-0.41	0.46	0.13	-0.01	2.23	1.18	-0.001
11.80	0.00	0.19	-0.03	1.48	0.00	-0.04	3.97	0.16	-0.004

Table N-143 Grid #1, L5, Plasma-300, Left (1-10), Equilibrated

L5 (300), Equilibrated							U_∞ =	33.01	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.80	23.60	0.43	3.41	37.26	21.48	0.45	18.49	14.04	0.042
-11.47	23.27	0.45	0.01	2.31	1.60	0.10	4.61	3.83	0.009
-11.15	22.95	1.72	0.03	1.26	0.73	-0.02	3.40	2.59	-0.002
-10.83	22.63	3.60	0.01	1.37	1.46	-0.03	3.54	3.67	-0.003
-10.51	22.30	5.87	0.02	1.28	0.98	-0.01	3.43	3.00	-0.001
-10.18	21.98	8.00	-0.01	1.23	2.54	-0.03	3.36	4.83	-0.002
-9.86	21.66	10.07	0.03	1.32	0.53	0.00	3.48	2.20	0.000
-9.54	21.33	12.08	0.04	1.58	0.72	-0.04	3.81	2.57	-0.004
-9.21	21.01	14.03	0.04	1.61	0.59	0.00	3.84	2.32	0.000
-8.89	20.69	15.79	0.05	1.86	0.66	0.03	4.14	2.46	0.003
-8.57	20.36	17.53	0.06	1.95	0.56	0.00	4.23	2.26	0.000
-8.24	20.04	19.10	0.06	1.98	0.36	0.03	4.27	1.83	0.003
-7.92	19.72	20.63	0.05	2.34	0.67	0.05	4.63	2.48	0.005
-7.60	19.39	21.99	0.04	2.32	0.70	0.04	4.62	2.54	0.003
-7.27	19.07	23.33	0.06	2.21	0.72	0.03	4.51	2.56	0.003
-6.95	18.75	24.46	0.06	2.44	0.70	0.10	4.73	2.53	0.009
-6.63	18.42	25.57	0.05	2.38	0.76	0.06	4.68	2.65	0.006

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-6.30	18.10	26.54	0.07	2.47	0.92	0.05	4.76	2.91	0.005
-5.98	17.78	27.49	0.05	2.20	0.76	0.02	4.49	2.64	0.002
-5.66	17.45	28.29	0.05	2.14	0.77	0.08	4.43	2.66	0.007
-5.33	17.13	28.99	0.02	2.18	1.71	0.13	4.48	3.96	0.012
-5.01	16.81	29.63	0.05	2.07	1.53	0.12	4.36	3.74	0.011
-4.69	16.48	30.23	0.06	1.92	1.30	0.04	4.20	3.46	0.004
-4.36	16.16	30.71	0.05	1.88	1.39	0.03	4.16	3.57	0.003
-4.04	15.84	31.16	0.05	1.75	1.48	0.03	4.01	3.69	0.002
-3.72	15.52	31.53	0.06	1.61	1.56	-0.02	3.85	3.79	-0.002
-3.39	15.19	31.84	0.06	1.45	1.22	0.03	3.65	3.35	0.003
-3.07	14.87	32.12	0.05	1.35	1.26	0.06	3.51	3.40	0.005
-2.75	14.55	32.36	0.05	1.23	1.49	0.04	3.37	3.69	0.003
-2.42	14.22	32.54	0.04	1.33	1.56	-0.04	3.50	3.79	-0.004
-2.10	13.90	32.68	0.06	1.44	1.88	0.13	3.64	4.16	0.012
-1.78	13.58	32.80	0.06	1.27	2.16	0.20	3.41	4.45	0.018
-1.45	13.25	32.90	0.07	1.25	2.18	-0.02	3.39	4.47	-0.002
-1.13	12.93	32.96	0.04	1.21	2.04	-0.10	3.33	4.33	-0.009
-0.81	12.61	33.01	0.02	1.28	2.41	-0.06	3.43	4.70	-0.006
-0.48	12.28	33.01	0.02	1.27	2.39	0.08	3.42	4.68	0.008
-0.16	11.96	32.97	0.00	1.41	2.95	0.02	3.59	5.20	0.002
0.16	11.64	32.94	0.02	1.45	3.62	-0.02	3.65	5.77	-0.002
0.48	11.31	32.90	0.02	1.65	4.33	0.05	3.90	6.31	0.005
0.81	10.99	32.80	0.03	1.79	4.36	-0.27	4.06	6.33	-0.025
1.13	10.67	32.67	0.02	2.22	5.13	0.04	4.51	6.86	0.004
1.45	10.34	32.52	0.02	2.60	5.86	0.27	4.89	7.33	0.025
1.78	10.02	32.37	-0.01	2.70	5.43	-0.04	4.98	7.06	-0.003
2.10	9.70	32.18	0.04	3.01	5.85	-0.65	5.25	7.33	-0.060
2.42	9.37	31.92	0.04	3.14	5.69	-0.46	5.37	7.23	-0.042
2.75	9.05	31.67	-0.03	3.62	6.77	-0.18	5.77	7.88	-0.017
3.07	8.73	31.33	-0.04	4.73	8.93	0.07	6.59	9.06	0.006
3.39	8.40	30.98	-0.01	4.78	8.82	0.30	6.62	9.00	0.027
3.72	8.08	30.61	0.02	4.74	8.27	-0.18	6.59	8.71	-0.017
4.04	7.76	30.13	-0.09	5.00	8.78	-0.03	6.77	8.98	-0.003
4.36	7.43	29.62	-0.08	5.27	8.57	-0.07	6.96	8.87	-0.007
4.69	7.11	29.08	-0.02	5.81	9.26	-0.11	7.30	9.22	-0.010
5.01	6.79	28.49	-0.07	5.74	9.15	-0.27	7.26	9.17	-0.025
5.33	6.46	27.78	-0.01	6.07	9.31	-0.13	7.47	9.24	-0.012
5.66	6.14	26.96	-0.02	6.40	9.30	0.11	7.66	9.24	0.010

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
5.98	5.82	26.14	0.01	6.03	8.49	0.04	7.44	8.83	0.004
6.30	5.49	25.25	-0.03	5.67	7.44	-0.15	7.22	8.26	-0.014
6.63	5.17	24.25	-0.06	5.47	6.84	0.05	7.08	7.92	0.005
6.95	4.85	23.19	-0.02	4.90	6.63	-0.12	6.71	7.80	-0.011
7.27	4.53	22.03	-0.04	4.40	5.43	-0.07	6.35	7.06	-0.007
7.60	4.20	20.79	-0.03	4.07	4.75	-0.37	6.11	6.60	-0.034
7.92	3.88	19.56	-0.06	3.55	3.50	-0.04	5.71	5.67	-0.004
8.24	3.56	18.16	-0.08	3.08	2.45	-0.03	5.32	4.74	-0.003
8.57	3.23	16.68	-0.07	2.69	2.24	-0.06	4.97	4.54	-0.006
8.89	2.91	15.15	-0.05	2.33	2.06	-0.03	4.63	4.35	-0.003
9.21	2.59	13.58	-0.05	2.19	1.72	0.03	4.48	3.97	0.003
9.54	2.26	11.85	-0.07	1.91	1.53	0.04	4.19	3.74	0.004
9.86	1.94	10.09	-0.08	1.70	1.52	-0.03	3.95	3.74	-0.003
10.18	1.62	8.24	-0.05	1.72	1.44	-0.07	3.97	3.63	-0.006
10.51	1.29	6.31	-0.05	1.58	1.13	-0.01	3.81	3.23	-0.001
10.83	0.97	4.25	-0.06	1.90	0.72	0.01	4.18	2.57	0.001
11.15	0.65	1.18	0.01	1.39	0.35	-0.07	3.57	1.80	-0.007
11.47	0.32	0.11	0.13	0.57	0.52	0.00	2.28	2.18	0.000
11.80	0.00	1.35	0.00	0.00	0.00	0.00	0.00	0.03	0.000

Table N-144 Grid #1, L5, Plasma-300, Center (46-55), Equilibrated

L5 (300), Equilibrated							U_∞ =	33.04	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-11.80	23.60	-0.16	0.69	11.00	7.67	-2.39	10.04	8.38	-0.219
-11.47	23.27	-0.27	0.64	10.14	6.43	-1.66	9.64	7.68	-0.152
-11.15	22.95	1.79	0.03	1.49	0.73	-0.03	3.69	2.58	-0.002
-10.83	22.63	4.07	0.03	1.17	0.27	0.00	3.28	1.57	0.000
-10.51	22.30	6.22	0.03	1.11	0.23	-0.01	3.19	1.47	-0.001
-10.18	21.98	8.34	0.04	1.13	0.25	0.00	3.21	1.52	0.000
-9.86	21.66	10.39	0.05	1.12	0.25	0.02	3.21	1.51	0.002
-9.54	21.33	12.31	0.06	1.27	0.21	0.01	3.41	1.39	0.001
-9.21	21.01	14.22	0.05	1.24	0.29	0.00	3.36	1.64	0.000
-8.89	20.69	15.93	0.05	1.57	0.26	-0.01	3.79	1.54	-0.001
-8.57	20.36	17.66	0.05	1.72	0.24	0.00	3.97	1.49	0.000

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-8.24	20.04	19.18	0.04	1.78	0.30	0.01	4.04	1.67	0.001
-7.92	19.72	20.69	0.05	2.05	0.37	0.03	4.33	1.83	0.003
-7.60	19.39	22.06	0.06	2.13	0.32	0.04	4.42	1.70	0.004
-7.27	19.07	23.34	0.06	1.98	0.25	0.03	4.26	1.51	0.003
-6.95	18.75	24.47	0.07	2.12	0.37	0.03	4.41	1.85	0.003
-6.63	18.42	25.55	0.07	2.20	0.40	0.02	4.49	1.91	0.001
-6.30	18.10	26.58	0.06	2.16	0.63	0.04	4.45	2.41	0.004
-5.98	17.78	27.45	0.07	1.98	0.64	0.05	4.26	2.41	0.004
-5.66	17.45	28.25	0.07	1.95	0.58	0.03	4.22	2.30	0.003
-5.33	17.13	28.96	0.06	1.97	0.58	0.03	4.24	2.31	0.003
-5.01	16.81	29.61	0.05	1.90	0.61	0.05	4.17	2.36	0.005
-4.69	16.48	30.17	0.04	1.76	0.67	0.05	4.02	2.48	0.004
-4.36	16.16	30.69	0.04	1.61	0.73	0.06	3.84	2.59	0.005
-4.04	15.84	31.13	0.06	1.50	0.77	0.08	3.70	2.65	0.007
-3.72	15.52	31.52	0.08	1.37	0.73	0.05	3.54	2.58	0.005
-3.39	15.19	31.86	0.07	1.29	0.66	-0.02	3.43	2.46	-0.002
-3.07	14.87	32.13	0.07	1.18	0.72	0.00	3.29	2.57	0.000
-2.75	14.55	32.37	0.07	1.06	0.62	0.03	3.11	2.38	0.003
-2.42	14.22	32.55	0.04	0.98	0.60	0.05	3.00	2.34	0.004
-2.10	13.90	32.74	0.03	1.00	1.03	-0.03	3.02	3.07	-0.003
-1.78	13.58	32.88	0.01	0.90	1.21	-0.01	2.88	3.33	-0.001
-1.45	13.25	32.95	0.03	0.84	1.15	-0.03	2.78	3.25	-0.003
-1.13	12.93	32.99	0.04	0.90	1.51	0.02	2.86	3.72	0.002
-0.81	12.61	33.03	0.04	0.92	1.63	-0.07	2.91	3.86	-0.007
-0.48	12.28	33.04	0.04	0.89	1.47	-0.08	2.85	3.67	-0.008
-0.16	11.96	33.02	0.07	0.94	1.65	-0.07	2.93	3.89	-0.006
0.16	11.64	32.98	0.03	1.01	1.75	-0.06	3.04	4.00	-0.006
0.48	11.31	32.92	0.01	1.13	2.51	-0.03	3.22	4.80	-0.003
0.81	10.99	32.82	0.01	1.25	2.54	-0.08	3.38	4.82	-0.007
1.13	10.67	32.69	0.01	1.32	2.23	-0.07	3.47	4.52	-0.007
1.45	10.34	32.55	0.02	1.53	3.34	0.01	3.75	5.53	0.001
1.78	10.02	32.37	0.02	1.86	3.08	-0.13	4.12	5.31	-0.012
2.10	9.70	32.15	0.03	1.98	3.72	-0.06	4.25	5.84	-0.005
2.42	9.37	31.91	0.00	2.08	4.40	-0.18	4.36	6.35	-0.016
2.75	9.05	31.62	0.00	2.50	4.65	-0.23	4.79	6.52	-0.021
3.07	8.73	31.29	-0.03	2.87	5.03	-0.25	5.13	6.79	-0.023
3.39	8.40	30.88	0.00	3.17	5.25	-0.24	5.39	6.93	-0.022
3.72	8.08	30.49	0.00	3.37	4.67	-0.13	5.56	6.54	-0.012

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
4.04	7.76	30.05	0.02	3.34	4.85	0.11	5.53	6.67	0.010
4.36	7.43	29.56	0.02	3.32	5.03	0.21	5.52	6.79	0.019
4.69	7.11	28.96	-0.01	3.47	5.62	0.18	5.64	7.18	0.016
5.01	6.79	28.35	-0.08	3.70	5.22	0.01	5.82	6.92	0.001
5.33	6.46	27.67	-0.05	3.93	5.14	-0.14	6.00	6.86	-0.013
5.66	6.14	26.90	-0.01	3.90	5.05	-0.34	5.98	6.80	-0.031
5.98	5.82	26.10	0.03	3.72	4.46	-0.11	5.84	6.39	-0.010
6.30	5.49	25.22	-0.03	3.74	4.36	-0.02	5.85	6.32	-0.001
6.63	5.17	24.23	-0.07	3.64	4.36	-0.06	5.77	6.32	-0.005
6.95	4.85	23.14	-0.05	3.56	3.80	-0.15	5.71	5.90	-0.014
7.27	4.53	22.01	-0.03	3.23	3.26	-0.08	5.44	5.47	-0.007
7.60	4.20	20.85	-0.05	2.89	2.23	-0.09	5.15	4.52	-0.009
7.92	3.88	19.58	-0.03	2.71	2.11	-0.10	4.98	4.40	-0.009
8.24	3.56	18.27	-0.05	2.43	1.74	0.02	4.72	3.99	0.002
8.57	3.23	16.86	-0.05	2.20	1.31	-0.06	4.49	3.46	-0.005
8.89	2.91	15.36	-0.08	2.00	1.08	-0.06	4.28	3.14	-0.005
9.21	2.59	13.79	-0.07	1.82	1.14	-0.05	4.08	3.23	-0.004
9.54	2.26	12.13	-0.07	1.63	1.00	-0.03	3.87	3.03	-0.002
9.86	1.94	10.37	-0.08	1.41	0.73	0.02	3.60	2.59	0.002
10.18	1.62	8.56	-0.06	1.52	1.03	0.01	3.73	3.06	0.000
10.51	1.29	6.70	-0.07	1.36	1.20	0.00	3.54	3.31	0.000
10.83	0.97	4.73	-0.05	1.49	0.79	-0.02	3.70	2.69	-0.002
11.15	0.65	2.13	-0.01	1.77	0.23	-0.03	4.03	1.46	-0.003
11.47	0.32	0.41	0.07	0.80	0.24	0.01	2.70	1.47	0.001
11.80	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.000

Table N-145 Grid #1, L5, Plasma-300, Right (71-80), Equilibrated

L5 (300), Equilibrated							U_∞ =	33.07	m/s
Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/U_\infty{}^2$
-11.80	23.60	0.12	0.05	2.95	2.01	-0.03	5.20	4.29	-0.003
-11.47	23.27	0.28	0.13	2.12	1.84	-0.01	4.40	4.10	-0.001
-11.15	22.95	1.76	0.09	1.27	0.56	0.00	3.41	2.27	0.000
-10.83	22.63	4.35	0.02	1.14	0.35	-0.01	3.23	1.80	-0.001
-10.51	22.30	6.48	0.02	1.18	0.32	0.01	3.29	1.72	0.001

Y^{*}	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
-10.18	21.98	8.59	0.04	1.12	0.34	0.02	3.20	1.76	0.002
-9.86	21.66	10.61	0.03	1.16	0.30	0.00	3.25	1.67	0.000
-9.54	21.33	12.51	0.03	1.32	0.27	0.01	3.47	1.57	0.001
-9.21	21.01	14.36	0.04	1.40	0.37	0.01	3.58	1.83	0.001
-8.89	20.69	16.08	0.04	1.65	0.41	0.04	3.89	1.95	0.003
-8.57	20.36	17.78	0.05	1.68	0.39	0.04	3.92	1.90	0.004
-8.24	20.04	19.26	0.06	1.78	0.39	0.03	4.04	1.89	0.003
-7.92	19.72	20.73	0.07	2.04	0.37	0.03	4.31	1.84	0.003
-7.60	19.39	22.07	0.06	2.13	0.52	0.04	4.41	2.18	0.004
-7.27	19.07	23.36	0.06	2.13	0.50	0.06	4.41	2.14	0.006
-6.95	18.75	24.50	0.07	2.24	0.54	0.07	4.53	2.22	0.006
-6.63	18.42	25.60	0.10	2.28	0.70	0.07	4.56	2.52	0.007
-6.30	18.10	26.56	0.10	2.27	0.82	0.06	4.56	2.73	0.005
-5.98	17.78	27.48	0.10	2.02	0.79	0.03	4.30	2.69	0.003
-5.66	17.45	28.26	0.08	1.97	0.75	0.09	4.24	2.62	0.008
-5.33	17.13	28.95	0.07	1.96	0.71	0.08	4.24	2.56	0.007
-5.01	16.81	29.59	0.06	1.92	0.91	0.06	4.19	2.88	0.005
-4.69	16.48	30.18	0.06	1.86	1.13	0.03	4.12	3.22	0.003
-4.36	16.16	30.68	0.07	1.80	1.35	0.02	4.06	3.52	0.002
-4.04	15.84	31.14	0.09	1.59	1.14	0.10	3.81	3.23	0.009
-3.72	15.52	31.51	0.08	1.52	1.14	0.12	3.73	3.23	0.011
-3.39	15.19	31.86	0.09	1.33	1.25	0.08	3.48	3.39	0.007
-3.07	14.87	32.14	0.07	1.26	1.29	0.04	3.40	3.43	0.003
-2.75	14.55	32.38	0.05	1.20	1.54	0.03	3.31	3.75	0.003
-2.42	14.22	32.58	0.05	1.14	1.65	0.00	3.22	3.88	0.000
-2.10	13.90	32.75	0.04	1.07	1.78	-0.06	3.13	4.03	-0.006
-1.78	13.58	32.87	0.02	0.99	1.70	0.05	3.01	3.95	0.004
-1.45	13.25	32.96	0.04	1.00	1.44	0.10	3.02	3.63	0.009
-1.13	12.93	33.02	0.05	1.03	1.55	-0.04	3.06	3.76	-0.004
-0.81	12.61	33.07	0.08	1.04	1.99	-0.01	3.09	4.26	-0.001
-0.48	12.28	33.07	0.05	1.07	2.39	-0.09	3.13	4.67	-0.008
-0.16	11.96	33.05	0.05	1.12	2.33	-0.11	3.20	4.62	-0.010
0.16	11.64	33.00	0.02	1.30	2.89	-0.06	3.45	5.14	-0.005
0.48	11.31	32.96	0.00	1.39	3.19	-0.03	3.56	5.40	-0.003
0.81	10.99	32.87	-0.01	1.49	2.93	0.04	3.69	5.18	0.004
1.13	10.67	32.74	0.00	1.68	3.20	-0.06	3.92	5.41	-0.005
1.45	10.34	32.56	-0.01	1.81	3.36	0.09	4.07	5.55	0.008
1.78	10.02	32.37	0.01	2.16	4.04	-0.12	4.44	6.08	-0.011

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$	$\sqrt{\overline{u'u'}}/U_\infty$	$\sqrt{\overline{v'v'}}/U_\infty$	$\overline{u'v'}/{U_\infty}^2$
2.10	9.70	32.15	0.02	2.37	4.70	-0.19	4.65	6.56	-0.017
2.42	9.37	31.90	0.01	2.67	5.14	-0.15	4.94	6.85	-0.014
2.75	9.05	31.62	0.03	2.98	5.81	-0.20	5.22	7.29	-0.018
3.07	8.73	31.28	0.03	3.39	5.75	-0.18	5.57	7.25	-0.017
3.39	8.40	30.90	-0.03	3.66	6.13	-0.32	5.79	7.49	-0.029
3.72	8.08	30.54	-0.01	3.54	6.46	-0.10	5.69	7.69	-0.009
4.04	7.76	30.05	0.01	3.95	6.89	0.07	6.01	7.94	0.006
4.36	7.43	29.50	0.02	4.18	5.98	0.04	6.19	7.40	0.004
4.69	7.11	28.95	-0.02	4.35	6.33	-0.04	6.31	7.60	-0.003
5.01	6.79	28.28	-0.04	4.62	6.88	0.07	6.50	7.93	0.006
5.33	6.46	27.63	-0.07	5.64	7.39	0.10	7.18	8.22	0.009
5.66	6.14	26.82	0.04	5.30	7.16	-0.33	6.96	8.09	-0.031
5.98	5.82	26.06	0.07	4.71	7.31	-0.30	6.56	8.17	-0.028
6.30	5.49	25.19	0.01	4.33	5.76	-0.15	6.29	7.26	-0.013
6.63	5.17	24.20	-0.03	4.01	5.12	-0.04	6.05	6.84	-0.004
6.95	4.85	23.20	-0.06	3.96	4.97	-0.03	6.02	6.74	-0.003
7.27	4.53	22.07	-0.10	3.75	4.00	0.01	5.85	6.04	0.001
7.60	4.20	20.88	-0.08	3.07	2.89	0.01	5.30	5.14	0.001
7.92	3.88	19.62	-0.07	2.95	3.26	0.00	5.20	5.46	0.000
8.24	3.56	18.29	-0.06	2.72	2.73	0.00	4.98	5.00	0.000
8.57	3.23	16.92	-0.08	2.28	2.06	0.04	4.56	4.34	0.004
8.89	2.91	15.47	-0.11	2.01	1.68	0.01	4.29	3.92	0.001
9.21	2.59	13.90	-0.06	1.96	1.43	-0.04	4.23	3.61	-0.003
9.54	2.26	12.27	-0.07	1.75	1.34	-0.02	4.00	3.50	-0.002
9.86	1.94	10.59	-0.07	1.47	1.02	-0.02	3.66	3.05	-0.002
10.18	1.62	8.79	-0.08	1.56	1.01	0.02	3.77	3.04	0.002
10.51	1.29	6.97	-0.09	1.43	1.00	-0.01	3.62	3.02	-0.001
10.83	0.97	5.00	-0.06	1.54	0.94	-0.01	3.75	2.93	-0.001
11.15	0.65	2.81	-0.05	1.58	0.56	0.00	3.80	2.26	0.000
11.47	0.32	0.43	-0.21	1.15	0.34	-0.04	3.25	1.76	-0.003
11.80	0.00	-0.14	0.02	1.87	0.00	0.01	4.14	0.09	0.001

Table N-146 TKE (m^2/s^2), L0, Grid #1

L0, Grid #1									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-10.47	2.95	2.51	4.81	5.70	4.93	6.83	0.80	0.67	2.42
-10.19	1.27	1.23	1.60	5.99	3.53	6.99	1.03	0.93	1.68
-9.90	1.98	1.84	1.88	5.00	2.91	5.35	2.16	1.69	1.89
-9.61	2.36	2.10	1.74	1.80	1.64	1.51	2.09	1.82	1.57
-9.33	2.86	2.42	2.21	2.31	2.07	1.93	2.55	2.19	1.96
-9.04	3.55	3.03	2.68	2.93	2.68	2.39	3.06	2.73	2.40
-8.75	4.27	3.82	3.27	3.64	3.22	2.99	3.71	3.32	3.06
-8.46	4.84	4.31	3.89	4.17	3.69	3.51	4.21	3.70	3.49
-8.18	5.14	4.57	4.22	4.55	3.95	3.76	4.64	3.98	3.82
-7.89	5.18	4.72	4.45	4.73	4.12	3.94	4.84	4.17	3.96
-7.60	4.87	4.56	4.45	4.54	3.98	3.97	4.66	4.04	3.95
-7.32	4.49	4.40	4.27	4.29	3.88	3.82	4.38	3.86	3.82
-7.03	4.12	4.04	3.86	3.92	3.62	3.62	4.04	3.60	3.58
-6.74	3.83	3.85	3.63	3.58	3.43	3.36	3.76	3.40	3.35
-6.46	3.48	3.53	3.42	3.14	3.00	3.10	3.31	3.03	3.07
-6.17	3.27	3.14	3.11	2.79	2.66	2.79	3.03	2.64	2.82
-5.88	3.01	2.80	2.86	2.54	2.43	2.49	2.74	2.39	2.57
-5.60	2.83	2.64	2.64	2.38	2.25	2.28	2.53	2.21	2.34
-5.31	2.66	2.48	2.41	2.21	2.06	2.15	2.33	2.00	2.13
-5.02	2.50	2.27	2.33	2.03	1.90	2.00	2.13	1.85	1.99
-4.73	2.25	2.10	2.18	1.81	1.75	1.85	1.96	1.71	1.84
-4.45	2.13	1.99	2.08	1.69	1.61	1.71	1.76	1.59	1.73
-4.16	2.05	1.87	1.99	1.63	1.48	1.61	1.60	1.47	1.58
-3.87	1.96	1.79	1.90	1.59	1.43	1.50	1.55	1.37	1.43
-3.59	1.96	1.64	1.80	1.51	1.34	1.42	1.50	1.32	1.32
-3.30	1.89	1.61	1.75	1.48	1.24	1.35	1.46	1.26	1.25
-3.01	1.87	1.54	1.65	1.45	1.20	1.29	1.42	1.20	1.21
-2.73	1.86	1.54	1.63	1.42	1.18	1.22	1.41	1.19	1.16
-2.44	1.82	1.48	1.59	1.39	1.18	1.21	1.36	1.18	1.16

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-2.15	1.81	1.43	1.53	1.36	1.17	1.18	1.32	1.16	1.14
-1.87	1.74	1.42	1.50	1.32	1.14	1.14	1.28	1.13	1.10
-1.58	1.74	1.43	1.48	1.34	1.13	1.16	1.32	1.12	1.07
-1.29	1.74	1.40	1.42	1.36	1.15	1.14	1.33	1.13	1.05
-1.00	1.73	1.41	1.45	1.33	1.11	1.12	1.30	1.13	1.07
-0.72	1.73	1.43	1.44	1.33	1.10	1.12	1.32	1.14	1.06
-0.43	1.76	1.46	1.42	1.33	1.13	1.12	1.31	1.13	1.04
-0.14	1.78	1.43	1.42	1.35	1.17	1.10	1.31	1.14	1.09
0.14	1.73	1.41	1.41	1.36	1.14	1.11	1.31	1.12	1.09
0.43	1.72	1.45	1.39	1.40	1.14	1.16	1.34	1.14	1.11
0.72	1.73	1.46	1.42	1.42	1.17	1.17	1.37	1.17	1.12
1.00	1.74	1.45	1.42	1.43	1.19	1.16	1.40	1.18	1.13
1.29	1.81	1.47	1.44	1.41	1.22	1.18	1.43	1.20	1.18
1.58	1.85	1.47	1.47	1.45	1.21	1.22	1.45	1.23	1.28
1.87	1.85	1.49	1.52	1.50	1.25	1.25	1.48	1.24	1.32
2.15	1.91	1.59	1.58	1.53	1.31	1.28	1.54	1.26	1.31
2.44	1.97	1.63	1.60	1.57	1.33	1.33	1.60	1.32	1.40
2.73	2.02	1.69	1.66	1.61	1.43	1.41	1.64	1.36	1.49
3.01	2.04	1.74	1.70	1.67	1.48	1.51	1.70	1.41	1.54
3.30	2.09	1.85	1.80	1.73	1.52	1.60	1.83	1.53	1.62
3.59	2.19	1.94	1.89	1.84	1.59	1.69	1.93	1.61	1.71
3.87	2.30	2.05	2.02	1.94	1.71	1.79	1.99	1.72	1.83
4.16	2.38	2.16	2.09	2.09	1.83	1.91	2.10	1.88	1.94
4.45	2.48	2.25	2.22	2.19	1.95	2.01	2.23	2.02	2.02
4.73	2.62	2.36	2.29	2.31	2.15	2.12	2.43	2.15	2.15
5.02	2.78	2.49	2.46	2.51	2.34	2.28	2.70	2.35	2.33
5.31	2.95	2.71	2.72	2.75	2.49	2.47	2.93	2.57	2.53
5.60	3.17	2.99	2.87	2.96	2.73	2.66	3.27	2.88	2.86
5.88	3.46	3.23	3.10	3.26	2.98	2.88	3.69	3.34	3.21
6.17	3.95	3.52	3.41	3.67	3.25	3.17	4.45	3.83	4.00
6.46	4.30	3.77	3.64	4.01	3.62	3.43	5.45	4.57	5.32
6.74	4.70	3.98	3.89	4.33	3.97	3.72	6.28	5.26	6.44

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
7.03	4.80	4.30	4.10	4.53	4.19	3.95	6.61	5.60	6.51
7.32	5.00	4.67	4.41	4.88	4.35	4.19	6.46	5.59	6.22
7.60	5.16	4.75	4.48	4.98	4.52	4.25	6.30	5.45	5.65
7.89	5.32	4.77	4.46	5.02	4.43	4.26	6.05	5.17	5.21
8.18	5.15	4.62	4.26	4.80	4.20	4.08	5.56	4.65	4.62
8.46	5.04	4.48	4.17	4.46	3.98	3.79	4.93	4.21	4.08
8.75	4.76	4.13	3.87	4.16	3.51	3.45	4.41	3.70	3.61
9.04	4.58	3.80	3.63	3.84	3.25	3.31	4.04	3.21	3.35
9.33	4.13	3.48	3.20	3.47	3.07	2.98	3.78	3.04	3.20
9.61	4.83	4.10	3.29	6.70	5.38	5.10	3.87	3.33	3.22
9.90	3.55	3.00	2.67	4.16	0.82	1.19	4.56	3.03	3.67
10.19	0.43	0.39	0.81	0.28	0.20	0.37	0.35	0.36	0.57
10.47	8.32	27.06	52.76	0.00	0.01	0.22	0.20	0.03	0.01

Table N-147 TKE (m^2/s^2), L1, Grid #1

L1, Grid #1									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-10.65	21.34	47.96	50.26	5.06	24.52	43.20	1.75	27.00	34.24
-10.36	5.35	41.50	47.37	4.82	32.27	44.06	2.41	31.06	32.43
-10.07	1.46	22.74	23.64	1.28	20.42	13.07	1.43	15.20	9.47
-9.78	1.65	2.65	4.70	1.46	3.24	3.26	1.63	2.14	2.25
-9.49	2.12	1.71	2.38	1.93	1.53	1.81	1.87	1.56	1.86
-9.20	2.79	1.90	2.08	2.40	1.71	1.70	2.45	1.72	1.77
-8.90	3.31	2.41	2.38	2.84	2.18	1.94	2.93	2.20	2.03
-8.61	3.81	2.81	2.44	3.29	2.62	2.10	3.34	2.67	2.21
-8.32	4.14	3.23	2.80	3.67	2.89	2.20	3.79	3.03	2.38
-8.03	4.39	3.41	3.04	4.01	3.02	2.35	3.96	3.24	2.50
-7.74	4.40	3.35	3.01	4.10	3.05	2.33	4.04	3.14	2.47
-7.44	4.34	3.36	2.93	4.06	2.96	2.30	3.99	3.08	2.46

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-7.15	4.28	3.10	2.81	3.86	2.83	2.30	3.94	2.85	2.37
-6.86	4.07	2.99	2.78	3.70	2.62	2.24	3.82	2.62	2.30
-6.57	3.66	2.83	2.66	3.42	2.42	2.13	3.50	2.50	2.18
-6.28	3.35	2.66	2.49	3.17	2.30	2.07	3.22	2.32	2.14
-5.98	3.06	2.38	2.42	2.90	2.16	2.00	2.92	2.12	2.03
-5.69	2.87	2.25	2.35	2.62	2.04	1.86	2.66	2.02	1.89
-5.40	2.72	2.10	2.20	2.36	1.91	1.78	2.48	1.95	1.82
-5.11	2.51	1.89	2.09	2.16	1.72	1.70	2.23	1.80	1.74
-4.82	2.26	1.71	1.98	2.00	1.62	1.62	2.04	1.70	1.66
-4.52	2.12	1.64	1.88	1.85	1.57	1.54	1.86	1.62	1.61
-4.23	1.94	1.57	1.78	1.72	1.47	1.51	1.72	1.50	1.56
-3.94	1.81	1.48	1.72	1.65	1.34	1.46	1.62	1.42	1.55
-3.65	1.75	1.40	1.65	1.54	1.30	1.42	1.58	1.36	1.46
-3.36	1.69	1.39	1.54	1.47	1.26	1.34	1.51	1.29	1.38
-3.07	1.60	1.37	1.51	1.44	1.25	1.30	1.48	1.25	1.37
-2.77	1.55	1.36	1.48	1.40	1.18	1.33	1.44	1.23	1.35
-2.48	1.54	1.34	1.44	1.35	1.17	1.28	1.42	1.19	1.28
-2.19	1.46	1.29	1.42	1.29	1.15	1.25	1.40	1.16	1.25
-1.90	1.45	1.24	1.34	1.29	1.16	1.26	1.35	1.15	1.29
-1.61	1.42	1.25	1.35	1.29	1.13	1.22	1.36	1.14	1.27
-1.31	1.40	1.20	1.38	1.27	1.12	1.18	1.35	1.11	1.26
-1.02	1.41	1.23	1.33	1.29	1.14	1.22	1.33	1.12	1.21
-0.73	1.37	1.27	1.35	1.34	1.12	1.19	1.32	1.12	1.21
-0.44	1.37	1.26	1.36	1.30	1.09	1.18	1.31	1.13	1.19
-0.15	1.36	1.26	1.32	1.29	1.13	1.20	1.35	1.16	1.17
0.15	1.38	1.26	1.31	1.32	1.15	1.20	1.38	1.13	1.26
0.44	1.41	1.27	1.34	1.32	1.13	1.18	1.41	1.13	1.25
0.73	1.44	1.27	1.35	1.36	1.16	1.21	1.41	1.17	1.25
1.02	1.44	1.32	1.37	1.37	1.20	1.23	1.43	1.22	1.28
1.31	1.46	1.35	1.44	1.40	1.28	1.23	1.50	1.25	1.33
1.61	1.52	1.43	1.45	1.42	1.28	1.28	1.53	1.29	1.33
1.90	1.56	1.45	1.49	1.45	1.25	1.30	1.57	1.34	1.35

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
2.19	1.64	1.47	1.50	1.50	1.33	1.34	1.67	1.40	1.40
2.48	1.72	1.54	1.56	1.56	1.39	1.36	1.74	1.41	1.41
2.77	1.77	1.61	1.61	1.71	1.49	1.42	1.80	1.47	1.45
3.07	1.81	1.64	1.66	1.79	1.53	1.46	1.88	1.57	1.50
3.36	1.95	1.71	1.75	1.90	1.59	1.54	2.00	1.63	1.56
3.65	2.10	1.80	1.84	2.06	1.70	1.58	2.12	1.71	1.59
3.94	2.28	1.89	1.92	2.17	1.77	1.62	2.27	1.81	1.73
4.23	2.39	2.02	1.99	2.32	1.88	1.71	2.41	1.96	1.77
4.52	2.46	2.17	2.09	2.50	2.04	1.77	2.54	2.09	1.81
4.82	2.67	2.26	2.15	2.69	2.15	1.84	2.77	2.17	1.89
5.11	2.91	2.37	2.25	2.84	2.30	1.91	2.87	2.33	1.99
5.40	3.10	2.54	2.40	3.05	2.43	2.00	3.07	2.44	2.07
5.69	3.38	2.73	2.52	3.32	2.58	2.07	3.35	2.55	2.18
5.98	3.69	2.86	2.56	3.54	2.75	2.13	3.54	2.68	2.32
6.28	3.98	3.05	2.63	3.78	2.87	2.24	3.75	2.83	2.36
6.57	4.23	3.17	2.63	4.01	2.99	2.36	4.01	2.97	2.36
6.86	4.38	3.30	2.76	4.15	3.07	2.40	4.20	3.06	2.63
7.15	4.53	3.34	2.80	4.26	3.08	2.48	4.39	3.09	2.81
7.44	4.61	3.29	2.80	4.26	3.02	2.67	4.43	3.16	2.96
7.74	4.42	3.16	2.81	4.16	2.98	2.75	4.32	3.00	3.19
8.03	4.22	2.98	2.79	3.94	2.88	2.98	4.18	2.85	3.39
8.32	3.85	2.65	2.95	3.60	2.46	3.11	3.77	2.59	3.54
8.61	3.38	2.22	3.08	3.24	2.06	3.41	3.33	2.15	3.59
8.90	2.83	1.78	3.62	2.69	1.79	3.74	2.74	1.77	3.64
9.20	2.38	1.74	3.98	2.18	1.67	3.87	2.24	1.66	3.77
9.49	1.98	2.56	3.88	1.82	2.38	3.63	1.91	2.41	3.65
9.78	1.78	15.21	19.75	1.62	16.50	18.12	1.54	9.29	7.34
10.07	2.85	42.96	45.75	1.24	33.81	37.53	1.22	35.49	32.76
10.36	2.09	19.99	26.10	0.51	5.53	7.81	0.68	15.85	16.55
10.65	0.01	0.24	5.04	0.02	0.00	0.00	0.02	0.00	0.74

Table N-148 TKE (m^2/s^2), L2, Grid #1

L2, Grid #1									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-10.90	0.11	0.20	1.14	0.57	2.81	4.06	1.29	11.57	9.98
-10.60	0.32	0.30	2.08	0.60	4.76	5.99	1.25	13.06	10.41
-10.30	1.30	7.90	9.27	0.92	11.90	6.02	1.31	11.14	6.98
-10.01	1.50	11.03	4.85	1.26	5.89	1.97	1.44	6.97	3.47
-9.71	1.79	3.48	2.09	1.54	1.88	1.53	1.75	4.82	1.74
-9.41	2.19	1.88	1.83	2.00	1.59	1.47	2.11	1.69	1.58
-9.11	2.65	2.08	2.05	2.45	1.70	1.74	2.58	1.88	1.82
-8.81	3.08	2.49	2.32	2.79	2.12	1.99	2.89	2.17	2.18
-8.51	3.53	2.85	2.63	3.17	2.57	2.20	3.25	2.56	2.41
-8.21	3.84	3.16	2.83	3.50	2.70	2.44	3.46	2.76	2.47
-7.91	3.98	3.17	2.83	3.59	2.80	2.48	3.62	2.89	2.56
-7.62	3.98	3.10	2.79	3.69	2.87	2.45	3.71	2.98	2.57
-7.32	3.90	3.04	2.71	3.73	2.79	2.38	3.70	2.83	2.53
-7.02	3.85	2.90	2.65	3.64	2.65	2.41	3.65	2.68	2.48
-6.72	3.58	2.68	2.60	3.41	2.53	2.28	3.37	2.55	2.37
-6.42	3.27	2.48	2.49	3.21	2.40	2.18	3.14	2.43	2.30
-6.12	2.99	2.35	2.29	2.91	2.18	2.02	2.87	2.23	2.15
-5.82	2.76	2.23	2.17	2.71	2.04	1.89	2.71	2.08	2.03
-5.53	2.51	2.07	2.09	2.50	1.90	1.82	2.51	1.94	1.96
-5.23	2.23	1.93	1.94	2.27	1.73	1.73	2.28	1.84	1.82
-4.93	2.08	1.74	1.85	2.02	1.66	1.66	2.09	1.72	1.74
-4.63	1.89	1.68	1.80	1.82	1.59	1.59	1.93	1.63	1.64
-4.33	1.78	1.61	1.72	1.68	1.49	1.53	1.76	1.51	1.61
-4.03	1.69	1.57	1.69	1.55	1.41	1.48	1.62	1.43	1.50
-3.73	1.56	1.50	1.63	1.41	1.34	1.45	1.51	1.35	1.44
-3.43	1.51	1.36	1.60	1.37	1.34	1.40	1.40	1.32	1.41
-3.14	1.46	1.32	1.53	1.30	1.24	1.36	1.33	1.26	1.37
-2.84	1.40	1.32	1.43	1.23	1.21	1.36	1.29	1.26	1.31
-2.54	1.35	1.27	1.42	1.19	1.21	1.33	1.27	1.23	1.29

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-2.24	1.28	1.32	1.37	1.22	1.23	1.29	1.22	1.21	1.26
-1.94	1.27	1.31	1.40	1.17	1.14	1.24	1.19	1.18	1.28
-1.64	1.24	1.26	1.37	1.14	1.09	1.21	1.15	1.18	1.25
-1.34	1.22	1.26	1.36	1.09	1.11	1.18	1.15	1.16	1.25
-1.05	1.28	1.22	1.41	1.10	1.10	1.20	1.11	1.14	1.22
-0.75	1.24	1.22	1.40	1.10	1.09	1.23	1.09	1.13	1.21
-0.45	1.21	1.23	1.42	1.09	1.09	1.21	1.12	1.13	1.22
-0.15	1.25	1.25	1.39	1.12	1.13	1.20	1.11	1.15	1.28
0.15	1.26	1.27	1.39	1.12	1.15	1.23	1.12	1.16	1.30
0.45	1.30	1.30	1.39	1.14	1.18	1.23	1.19	1.20	1.31
0.75	1.31	1.33	1.45	1.16	1.20	1.26	1.22	1.25	1.28
1.05	1.35	1.31	1.50	1.20	1.22	1.33	1.26	1.28	1.29
1.34	1.40	1.39	1.47	1.23	1.27	1.36	1.29	1.31	1.39
1.64	1.48	1.40	1.48	1.31	1.32	1.36	1.32	1.32	1.43
1.94	1.52	1.44	1.57	1.36	1.33	1.39	1.41	1.37	1.43
2.24	1.59	1.54	1.57	1.40	1.38	1.46	1.52	1.45	1.46
2.54	1.66	1.58	1.61	1.54	1.46	1.48	1.59	1.47	1.54
2.84	1.73	1.59	1.69	1.59	1.49	1.51	1.68	1.50	1.65
3.14	1.85	1.67	1.77	1.67	1.56	1.56	1.84	1.59	1.69
3.43	1.98	1.76	1.83	1.84	1.66	1.61	1.98	1.64	1.64
3.73	2.12	1.85	1.88	1.99	1.72	1.69	2.12	1.72	1.75
4.03	2.26	1.96	1.91	2.15	1.83	1.83	2.25	1.86	1.87
4.33	2.37	2.04	2.01	2.34	1.98	1.87	2.37	1.97	1.94
4.63	2.58	2.12	2.10	2.52	2.05	1.96	2.56	2.11	2.01
4.93	2.81	2.26	2.25	2.73	2.17	2.14	2.77	2.22	2.20
5.23	3.03	2.40	2.41	2.91	2.35	2.26	2.99	2.36	2.41
5.53	3.27	2.54	2.51	3.17	2.44	2.41	3.17	2.51	2.62
5.82	3.45	2.69	2.67	3.44	2.61	2.51	3.38	2.65	2.71
6.12	3.67	2.89	2.76	3.66	2.78	2.61	3.54	2.76	2.86
6.42	3.92	3.00	3.04	3.85	2.85	2.77	3.69	2.83	3.01
6.72	4.04	3.06	3.16	3.86	2.87	2.96	3.81	2.84	3.20
7.02	4.11	3.14	3.33	3.91	2.86	3.21	3.87	2.90	3.34

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
7.32	4.13	3.10	3.53	3.95	2.82	3.35	3.83	2.84	3.36
7.62	4.06	3.08	3.70	3.86	2.79	3.37	3.72	2.74	3.45
7.91	3.83	2.89	3.67	3.56	2.60	3.31	3.36	2.52	3.43
8.21	3.45	2.51	3.52	3.24	2.34	3.22	3.04	2.26	3.29
8.51	3.00	2.13	3.29	2.82	1.99	2.95	2.71	1.90	2.97
8.81	2.53	1.79	3.43	2.39	1.68	2.78	2.29	1.66	2.75
9.11	2.06	1.71	3.10	1.91	1.56	2.59	1.83	1.51	2.59
9.41	1.72	2.05	3.14	1.61	1.87	2.49	1.57	1.80	2.56
9.71	1.33	4.49	4.16	1.24	3.51	2.64	1.20	2.98	2.85
10.01	1.03	23.00	11.16	1.04	11.06	8.35	0.99	17.96	9.21
10.30	0.76	11.66	10.74	0.78	4.77	3.46	0.75	19.62	12.96
10.60	0.77	3.56	3.78	0.30	3.04	0.91	0.32	3.24	5.42
10.90	0.01	32.79	6.48	0.34	0.00	0.34	0.20	0.01	0.41

Table N-149 TKE (m^2/s^2), L3, Grid #1

L3, Grid #1									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-10.97	0.36	1.70	1.53	0.15	0.56	0.90	0.53	0.66	2.33
-10.66	0.37	2.59	3.42	0.72	10.94	3.15	0.75	7.10	3.05
-10.36	0.80	5.98	2.33	0.66	2.83	1.34	0.67	2.18	1.23
-10.06	1.14	2.71	1.67	0.90	1.46	1.09	0.93	1.51	1.07
-9.76	1.51	1.86	1.69	1.06	1.26	1.09	1.09	1.31	1.10
-9.46	1.94	1.68	1.74	1.41	1.17	1.06	1.43	1.28	1.08
-9.16	2.08	1.74	1.80	1.67	1.34	1.29	1.67	1.38	1.34
-8.86	2.38	2.03	2.03	1.91	1.59	1.46	1.91	1.63	1.45
-8.56	2.68	2.25	2.25	2.24	1.82	1.62	2.17	1.76	1.64
-8.26	2.82	2.42	2.34	2.53	2.03	1.84	2.46	1.98	1.77
-7.96	2.97	2.57	2.36	2.62	2.21	1.89	2.59	2.14	1.87
-7.66	3.00	2.69	2.41	2.70	2.28	1.95	2.63	2.15	1.96

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-7.36	3.09	2.65	2.45	2.80	2.26	2.02	2.71	2.13	1.98
-7.06	3.07	2.65	2.45	2.73	2.23	2.08	2.71	2.10	2.08
-6.76	2.92	2.54	2.32	2.58	2.17	1.97	2.58	2.09	2.00
-6.46	2.76	2.48	2.22	2.43	2.11	1.91	2.36	2.04	1.94
-6.16	2.47	2.34	2.17	2.25	1.95	1.83	2.16	1.87	1.87
-5.86	2.34	2.20	2.08	2.09	1.81	1.76	2.08	1.77	1.76
-5.56	2.23	2.00	1.93	1.91	1.68	1.67	1.83	1.66	1.73
-5.26	1.97	1.87	1.91	1.70	1.59	1.61	1.60	1.58	1.69
-4.96	1.76	1.75	1.83	1.52	1.52	1.51	1.47	1.55	1.54
-4.66	1.65	1.69	1.69	1.37	1.43	1.44	1.38	1.48	1.42
-4.36	1.51	1.63	1.58	1.27	1.34	1.33	1.23	1.36	1.30
-4.06	1.41	1.50	1.53	1.19	1.24	1.25	1.13	1.27	1.25
-3.76	1.31	1.42	1.45	1.14	1.14	1.15	1.06	1.16	1.21
-3.45	1.21	1.34	1.35	1.08	1.13	1.15	1.02	1.09	1.15
-3.15	1.16	1.28	1.34	1.04	1.10	1.13	0.97	1.03	1.12
-2.85	1.14	1.27	1.29	1.00	1.02	1.07	0.94	1.02	1.06
-2.55	1.06	1.22	1.27	0.92	0.97	1.03	0.89	0.98	1.04
-2.25	1.05	1.13	1.31	0.89	0.97	1.03	0.89	0.95	1.02
-1.95	1.05	1.09	1.29	0.89	0.96	1.02	0.93	0.94	1.03
-1.65	1.04	1.10	1.27	0.88	0.93	1.00	0.89	0.92	1.04
-1.35	1.02	1.11	1.24	0.86	0.90	1.01	0.88	0.88	1.00
-1.05	0.99	1.11	1.22	0.86	0.88	0.99	0.89	0.88	0.99
-0.75	1.02	1.13	1.23	0.88	0.92	1.02	0.90	0.88	1.00
-0.45	1.04	1.13	1.20	0.88	0.94	1.04	0.91	0.89	0.99
-0.15	1.05	1.11	1.23	0.88	0.95	1.07	0.93	0.92	0.97
0.15	1.08	1.14	1.26	0.96	0.98	1.05	0.95	0.94	1.02
0.45	1.07	1.18	1.27	1.00	0.99	1.04	0.99	0.97	1.06
0.75	1.14	1.23	1.25	1.02	1.01	1.03	1.03	1.00	1.07
1.05	1.18	1.24	1.31	1.06	1.09	1.07	1.08	1.04	1.12
1.35	1.22	1.28	1.37	1.14	1.15	1.15	1.11	1.10	1.14
1.65	1.29	1.33	1.40	1.24	1.16	1.18	1.15	1.14	1.18
1.95	1.34	1.35	1.39	1.31	1.20	1.22	1.23	1.20	1.22

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
2.25	1.42	1.47	1.47	1.45	1.27	1.25	1.35	1.24	1.22
2.55	1.50	1.51	1.55	1.52	1.31	1.31	1.44	1.32	1.32
2.85	1.62	1.59	1.61	1.61	1.39	1.37	1.52	1.42	1.48
3.15	1.77	1.65	1.69	1.70	1.49	1.47	1.58	1.51	1.58
3.45	1.90	1.76	1.83	1.84	1.58	1.67	1.70	1.57	1.78
3.76	2.04	1.87	1.98	1.97	1.64	1.73	1.90	1.66	1.94
4.06	2.25	2.00	2.14	2.10	1.72	1.82	2.07	1.79	2.01
4.36	2.36	2.06	2.28	2.28	1.81	1.96	2.23	1.85	2.09
4.66	2.55	2.19	2.39	2.47	1.94	2.06	2.40	1.93	2.37
4.96	2.79	2.30	2.53	2.61	2.07	2.27	2.55	2.02	2.46
5.26	3.03	2.44	2.77	2.82	2.21	2.37	2.76	2.14	2.52
5.56	3.17	2.57	3.14	3.06	2.46	2.89	2.92	2.32	2.61
5.86	3.35	2.80	4.15	3.39	2.76	4.48	3.09	2.42	2.98
6.16	3.55	2.91	4.84	3.65	3.16	7.44	3.26	2.44	3.18
6.46	3.74	3.00	5.52	3.76	3.21	8.41	3.26	2.58	3.52
6.76	3.72	3.04	6.38	3.77	2.94	7.27	3.24	2.55	3.57
7.06	3.68	3.08	6.19	3.81	2.93	7.74	3.30	2.43	3.57
7.36	3.59	2.97	5.68	3.59	2.81	7.13	3.16	2.41	3.36
7.66	3.35	2.73	4.62	3.22	2.51	5.18	2.89	2.29	3.09
7.96	2.98	2.42	3.45	2.81	2.23	3.34	2.66	2.14	2.56
8.26	2.68	2.10	3.02	2.46	2.01	2.54	2.38	1.95	2.35
8.56	2.35	1.85	2.71	2.17	1.72	2.18	2.08	1.70	2.18
8.86	1.99	1.61	2.47	1.83	1.54	1.94	1.74	1.48	1.97
9.16	1.67	1.52	2.24	1.59	1.41	1.79	1.52	1.32	1.77
9.46	1.49	1.76	2.36	1.54	1.62	2.11	1.40	1.40	1.89
9.76	1.16	2.42	1.89	1.14	2.02	1.84	1.02	1.38	1.47
10.06	0.10	1.61	11.98	0.53	7.90	26.62	0.59	5.92	7.50
10.36	0.14	3.85	13.64	0.87	16.81	43.89	0.13	0.71	2.44
10.66	0.06	0.11	2.28	0.39	5.84	14.99	0.08	0.11	0.30
10.97	0.00	0.00	0.41	0.02	0.34	0.41	0.27	0.01	1.17

Table N-150 TKE (m^2/s^2), L4, Grid #1

L4, Grid #1									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-11.30	0.66	6.75	2.10	0.60	11.15	1.27	0.39	12.39	1.86
-10.99	0.28	4.26	0.81	0.57	6.45	1.44	0.55	3.35	1.21
-10.68	0.73	4.58	1.69	0.59	2.53	0.88	0.59	1.43	0.81
-10.37	0.96	1.70	1.29	0.80	1.14	0.84	0.76	1.12	0.79
-10.06	1.08	1.24	1.27	0.99	0.96	0.80	0.92	0.94	0.79
-9.75	1.41	1.28	1.23	1.27	1.01	0.95	1.18	1.02	0.96
-9.44	1.77	1.39	1.36	1.58	1.15	1.00	1.56	1.07	0.97
-9.13	2.16	1.62	1.55	1.78	1.36	1.20	1.82	1.31	1.17
-8.82	2.54	1.81	1.64	2.13	1.52	1.25	2.10	1.54	1.26
-8.51	2.63	2.00	1.74	2.46	1.72	1.41	2.42	1.71	1.40
-8.20	2.85	2.08	1.84	2.74	1.93	1.51	2.64	1.85	1.55
-7.89	2.92	2.17	1.88	2.84	2.00	1.57	2.74	1.97	1.57
-7.59	2.99	2.26	1.86	2.82	2.02	1.65	2.84	1.98	1.60
-7.28	2.99	2.22	1.94	2.86	2.04	1.70	2.84	1.96	1.70
-6.97	2.90	2.19	1.90	2.78	1.98	1.73	2.75	1.95	1.70
-6.66	2.79	2.09	1.83	2.65	1.95	1.67	2.59	1.92	1.66
-6.35	2.58	1.99	1.79	2.55	1.84	1.58	2.42	1.77	1.59
-6.04	2.37	1.91	1.72	2.30	1.72	1.53	2.24	1.66	1.53
-5.73	2.27	1.76	1.63	2.12	1.60	1.50	2.11	1.56	1.50
-5.42	2.07	1.60	1.56	1.94	1.46	1.48	1.91	1.47	1.43
-5.11	1.88	1.48	1.53	1.75	1.35	1.37	1.70	1.35	1.35
-4.80	1.72	1.37	1.36	1.65	1.23	1.22	1.55	1.25	1.27
-4.49	1.60	1.26	1.23	1.48	1.16	1.12	1.43	1.15	1.18
-4.18	1.49	1.16	1.15	1.36	1.06	1.05	1.32	1.03	1.08
-3.87	1.43	1.07	1.05	1.28	0.99	0.98	1.21	0.95	1.00
-3.56	1.29	0.98	1.03	1.22	0.92	0.94	1.14	0.88	0.92
-3.25	1.18	0.89	1.00	1.13	0.85	0.87	1.06	0.81	0.89
-2.94	1.15	0.83	0.94	1.08	0.79	0.83	1.05	0.75	0.89
-2.63	1.07	0.78	0.91	1.00	0.74	0.81	0.99	0.70	0.84

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-2.32	1.02	0.73	0.88	0.97	0.70	0.81	0.95	0.70	0.78
-2.01	1.01	0.71	0.84	0.95	0.66	0.77	0.92	0.66	0.78
-1.70	0.97	0.69	0.84	0.91	0.64	0.71	0.92	0.62	0.77
-1.39	0.95	0.69	0.83	0.91	0.64	0.72	0.87	0.61	0.73
-1.08	0.96	0.70	0.82	0.89	0.65	0.74	0.85	0.59	0.74
-0.77	0.99	0.71	0.81	0.93	0.65	0.76	0.85	0.61	0.73
-0.46	0.97	0.71	0.83	0.93	0.66	0.78	0.86	0.63	0.73
-0.15	0.95	0.74	0.83	0.93	0.69	0.79	0.89	0.64	0.75
0.15	0.96	0.76	0.85	0.97	0.68	0.81	0.92	0.66	0.77
0.46	1.00	0.78	0.86	0.98	0.70	0.85	0.95	0.70	0.80
0.77	1.05	0.81	0.88	1.04	0.74	0.81	0.99	0.72	0.80
1.08	1.08	0.84	0.91	1.12	0.77	0.85	1.00	0.77	0.85
1.39	1.12	0.87	0.96	1.15	0.84	0.88	1.11	0.82	0.92
1.70	1.24	0.94	1.01	1.23	0.89	0.92	1.20	0.85	0.95
2.01	1.31	1.00	1.07	1.30	0.94	0.98	1.28	0.92	0.94
2.32	1.38	1.04	1.15	1.45	0.99	1.04	1.36	0.99	1.00
2.63	1.50	1.09	1.23	1.61	1.09	1.11	1.55	1.07	1.13
2.94	1.58	1.18	1.27	1.64	1.18	1.18	1.65	1.16	1.25
3.25	1.71	1.27	1.35	1.76	1.24	1.27	1.76	1.22	1.29
3.56	1.86	1.39	1.51	1.91	1.35	1.35	1.93	1.36	1.39
3.87	1.98	1.48	1.62	2.10	1.43	1.46	2.13	1.46	1.54
4.18	2.18	1.60	1.70	2.38	1.56	1.53	2.30	1.58	1.63
4.49	2.33	1.74	1.78	2.49	1.71	1.67	2.50	1.71	1.66
4.80	2.53	1.89	1.91	2.66	1.82	1.80	2.71	1.85	1.77
5.11	2.75	2.01	2.00	2.83	1.95	1.86	2.87	1.95	1.85
5.42	3.02	2.11	2.09	3.02	2.08	1.95	3.11	2.04	1.99
5.73	3.22	2.24	2.13	3.23	2.16	1.99	3.27	2.15	2.04
6.04	3.37	2.32	2.20	3.36	2.25	2.07	3.40	2.21	2.06
6.35	3.44	2.34	2.22	3.41	2.29	2.08	3.47	2.25	2.08
6.66	3.49	2.35	2.23	3.45	2.32	2.09	3.45	2.27	2.08
6.97	3.40	2.29	2.18	3.46	2.28	2.03	3.37	2.21	2.00
7.28	3.36	2.25	2.16	3.37	2.17	1.99	3.25	2.11	1.94

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
7.59	3.20	2.14	2.08	3.19	2.05	1.86	3.08	1.98	1.86
7.89	2.92	1.95	1.94	2.86	1.90	1.74	2.84	1.83	1.73
8.20	2.62	1.75	1.77	2.54	1.69	1.59	2.47	1.65	1.59
8.51	2.34	1.51	1.60	2.25	1.48	1.43	2.16	1.44	1.44
8.82	2.00	1.32	1.43	1.91	1.28	1.30	1.85	1.25	1.29
9.13	1.62	1.18	1.31	1.54	1.07	1.17	1.48	1.08	1.17
9.44	1.30	1.01	1.13	1.24	0.92	0.98	1.15	0.92	0.99
9.75	1.00	1.00	0.99	0.99	0.88	0.93	0.90	0.90	0.92
10.06	0.75	1.09	0.91	0.74	1.00	0.87	0.67	0.97	0.85
10.37	0.56	2.13	0.96	0.55	1.71	0.88	0.49	1.54	0.79
10.68	0.45	5.08	1.04	0.39	2.61	0.80	0.40	2.97	0.82
10.99	0.37	7.15	0.78	0.20	0.93	0.38	0.22	2.94	0.64
11.30	0.00	2.08	25.34	0.01	0.01	0.01	0.02	0.02	0.46

Table N-151 TKE (m^2/s^2), L5, Grid #1

L5, Grid #1									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-11.54	2.15	7.54	3.52	0.57	6.01	0.73	0.29	0.69	0.58
-11.23	0.41	3.11	1.14	0.52	7.34	0.99	0.46	1.60	0.92
-10.91	0.44	2.08	0.91	0.41	1.53	0.68	0.37	0.97	0.59
-10.59	0.47	1.13	0.94	0.45	0.80	0.67	0.45	0.78	0.69
-10.28	0.68	0.98	1.02	0.70	0.69	0.59	0.66	0.63	0.58
-9.96	0.83	0.91	0.87	0.82	0.66	0.63	0.73	0.64	0.72
-9.64	0.98	1.10	0.97	0.99	0.87	0.77	0.99	0.84	0.83
-9.33	1.26	1.22	1.31	1.25	0.99	0.79	1.25	0.91	0.86
-9.01	1.47	1.30	1.27	1.41	1.13	0.95	1.36	1.07	0.99
-8.70	1.73	1.52	1.46	1.62	1.30	1.04	1.58	1.28	1.05
-8.38	1.93	1.64	1.35	1.84	1.43	1.14	1.85	1.34	1.09
-8.06	2.12	1.70	1.42	2.04	1.57	1.22	1.97	1.44	1.22

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-7.75	2.28	1.78	1.47	2.14	1.66	1.29	2.07	1.60	1.31
-7.43	2.31	1.85	1.52	2.17	1.71	1.30	2.18	1.70	1.28
-7.11	2.29	1.93	1.54	2.24	1.73	1.31	2.15	1.64	1.30
-6.80	2.30	1.94	1.55	2.22	1.73	1.39	2.13	1.64	1.34
-6.48	2.18	1.87	1.61	2.08	1.67	1.40	2.03	1.58	1.41
-6.17	2.04	1.81	1.61	1.94	1.65	1.37	1.91	1.56	1.40
-5.85	1.89	1.74	1.54	1.81	1.62	1.27	1.78	1.54	1.27
-5.53	1.75	1.64	1.47	1.69	1.47	1.24	1.62	1.39	1.22
-5.22	1.63	1.40	1.41	1.53	1.32	1.22	1.49	1.26	1.21
-4.90	1.50	1.29	1.40	1.38	1.23	1.18	1.39	1.15	1.22
-4.58	1.38	1.14	1.30	1.27	1.10	1.14	1.25	1.01	1.24
-4.27	1.22	1.07	1.23	1.16	0.97	1.13	1.11	0.91	1.17
-3.95	1.12	0.98	1.22	1.05	0.91	1.10	0.99	0.83	1.11
-3.64	1.03	0.93	1.24	0.96	0.85	1.06	0.88	0.81	1.06
-3.32	0.93	0.88	1.15	0.87	0.80	0.99	0.80	0.76	1.03
-3.00	0.85	0.83	1.08	0.82	0.77	0.92	0.74	0.71	1.02
-2.69	0.78	0.80	1.05	0.76	0.75	0.91	0.68	0.69	0.97
-2.37	0.71	0.77	1.06	0.71	0.70	0.86	0.64	0.67	0.94
-2.06	0.69	0.74	0.98	0.65	0.67	0.82	0.60	0.66	0.89
-1.74	0.70	0.71	0.94	0.63	0.68	0.80	0.60	0.65	0.84
-1.42	0.65	0.71	0.97	0.61	0.69	0.77	0.61	0.62	0.84
-1.11	0.64	0.69	0.97	0.62	0.68	0.80	0.60	0.61	0.90
-0.79	0.64	0.69	0.98	0.64	0.66	0.81	0.60	0.64	0.91
-0.47	0.64	0.72	1.03	0.65	0.67	0.85	0.60	0.65	0.88
-0.16	0.65	0.73	1.09	0.68	0.67	0.89	0.64	0.66	0.92
0.16	0.71	0.74	1.05	0.72	0.69	0.86	0.68	0.68	0.97
0.47	0.74	0.77	1.07	0.73	0.71	0.95	0.71	0.70	1.01
0.79	0.79	0.80	1.17	0.77	0.72	1.00	0.77	0.71	1.12
1.11	0.87	0.85	1.18	0.85	0.75	1.03	0.83	0.74	1.19
1.42	0.98	0.88	1.32	0.94	0.81	1.11	0.91	0.77	1.23
1.74	1.04	0.92	1.57	1.02	0.86	1.20	0.99	0.84	1.26
2.06	1.09	0.99	1.56	1.07	0.92	1.24	1.08	0.87	1.40

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
2.37	1.22	1.04	1.58	1.17	0.97	1.34	1.17	0.93	1.51
2.69	1.33	1.08	1.71	1.30	1.02	1.41	1.28	0.97	1.69
3.00	1.40	1.13	1.82	1.41	1.12	1.50	1.42	1.04	1.65
3.32	1.54	1.21	1.83	1.55	1.19	1.62	1.52	1.16	1.74
3.64	1.68	1.32	2.00	1.69	1.32	1.66	1.66	1.24	1.76
3.95	1.81	1.46	2.15	1.80	1.43	1.71	1.78	1.32	1.77
4.27	1.96	1.56	2.18	1.99	1.48	1.82	1.96	1.44	1.87
4.58	2.12	1.71	2.21	2.14	1.60	1.90	2.14	1.58	2.05
4.90	2.29	1.77	2.33	2.27	1.72	1.94	2.29	1.66	2.13
5.22	2.43	1.83	2.37	2.42	1.76	1.98	2.40	1.72	2.10
5.53	2.58	1.89	2.43	2.56	1.80	2.03	2.57	1.76	2.07
5.85	2.73	2.00	2.41	2.63	1.87	1.98	2.63	1.81	1.99
6.17	2.79	2.05	2.29	2.68	1.90	1.97	2.69	1.83	1.99
6.48	2.87	2.01	2.16	2.74	1.89	1.91	2.76	1.81	1.98
6.80	2.85	2.04	2.20	2.76	1.87	1.86	2.70	1.79	1.91
7.11	2.78	1.97	2.15	2.68	1.76	1.71	2.66	1.66	1.74
7.43	2.63	1.80	1.86	2.52	1.69	1.62	2.48	1.62	1.58
7.75	2.37	1.68	1.68	2.32	1.59	1.48	2.27	1.52	1.45
8.06	2.19	1.64	1.62	2.13	1.43	1.38	2.07	1.42	1.36
8.38	1.89	1.45	1.46	1.87	1.26	1.20	1.83	1.21	1.19
8.70	1.66	1.21	1.28	1.60	1.12	1.10	1.59	1.09	1.11
9.01	1.37	1.03	1.15	1.32	0.97	1.04	1.27	0.98	1.06
9.33	1.15	0.90	1.07	1.09	0.85	0.88	1.06	0.80	0.91
9.64	0.92	0.75	0.96	0.90	0.73	0.76	0.86	0.70	0.77
9.96	0.70	0.73	0.87	0.72	0.67	0.78	0.67	0.64	0.74
10.28	0.50	0.74	0.78	0.49	0.66	0.69	0.49	0.61	0.65
10.59	0.41	1.00	0.77	0.39	0.77	0.61	0.37	0.72	0.57
10.91	0.36	1.44	0.72	0.30	0.91	0.61	0.27	0.87	0.60
11.23	0.34	1.25	0.59	0.28	0.81	0.48	0.26	0.68	0.52
11.54	0.00	1.17	0.01	0.01	0.17	0.01	0.01	0.01	0.38

Table N-152 TKE (m^2/s^2), L6, Grid #1

L6, Grid #1									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-11.87	0.92	1.99	2.89	0.18	0.56	1.17	0.66	0.75	0.80
-11.54	1.63	2.79	3.34	0.31	1.25	1.73	0.40	1.31	1.64
-11.21	0.50	1.52	2.17	0.40	1.13	1.81	0.47	1.17	1.89
-10.89	0.58	1.61	2.52	0.43	1.31	2.17	0.48	1.40	2.17
-10.56	0.76	1.96	3.13	0.66	1.75	2.71	0.73	1.80	2.80
-10.24	0.97	2.43	3.51	0.84	2.35	3.28	0.88	2.39	3.36
-9.91	1.19	2.93	3.74	0.99	2.88	3.59	0.98	2.97	3.70
-9.59	1.50	3.27	3.69	1.29	3.29	3.59	1.32	3.34	3.77
-9.26	1.70	3.46	3.29	1.57	3.58	3.25	1.52	3.70	3.48
-8.94	1.91	3.34	3.03	1.77	3.45	2.90	1.74	3.62	3.15
-8.61	2.13	3.03	2.70	1.95	3.16	2.46	1.99	3.30	2.68
-8.29	2.27	2.83	2.38	2.09	2.81	2.13	2.14	2.90	2.19
-7.96	2.22	2.47	2.15	2.16	2.28	1.89	2.17	2.39	1.90
-7.64	2.23	2.17	2.03	2.15	1.89	1.73	2.17	1.96	1.79
-7.31	2.17	1.94	1.93	2.08	1.72	1.68	2.10	1.79	1.76
-6.99	2.00	1.86	2.03	1.98	1.68	1.80	1.99	1.67	1.86
-6.66	1.77	1.70	2.29	1.76	1.57	2.11	1.77	1.61	2.11
-6.34	1.63	1.70	2.53	1.59	1.55	2.49	1.59	1.59	2.53
-6.01	1.43	1.67	2.93	1.40	1.65	2.87	1.41	1.66	3.07
-5.69	1.26	1.68	3.28	1.24	1.75	3.40	1.25	1.85	3.53
-5.36	1.14	1.78	3.61	1.11	1.84	3.94	1.13	2.01	4.17
-5.04	1.05	1.78	3.95	0.99	2.03	4.29	1.02	2.23	4.72
-4.71	0.96	1.84	4.15	0.90	2.18	4.53	0.92	2.47	5.11
-4.39	0.87	1.86	4.28	0.83	2.34	4.79	0.85	2.73	5.40
-4.06	0.81	1.85	4.30	0.74	2.47	4.97	0.79	2.83	5.51
-3.74	0.78	1.81	4.12	0.71	2.52	4.97	0.74	2.97	5.75
-3.41	0.76	1.86	3.87	0.68	2.56	4.88	0.70	3.03	5.80
-3.09	0.74	1.77	3.67	0.69	2.53	4.80	0.68	3.08	5.58
-2.76	0.75	1.72	3.40	0.68	2.51	4.54	0.69	3.06	5.48

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-2.44	0.78	1.68	3.20	0.66	2.40	4.18	0.70	2.92	5.14
-2.11	0.78	1.50	2.98	0.69	2.21	3.90	0.72	2.80	4.72
-1.79	0.80	1.38	2.57	0.74	2.05	3.43	0.76	2.63	4.33
-1.46	0.84	1.33	2.38	0.78	1.95	3.00	0.79	2.45	3.95
-1.14	0.88	1.22	2.18	0.81	1.86	2.77	0.82	2.18	3.44
-0.81	0.89	1.14	1.94	0.86	1.65	2.50	0.86	1.98	3.05
-0.49	0.97	1.13	1.68	0.90	1.43	2.21	0.92	1.86	2.78
-0.16	1.03	1.09	1.59	0.95	1.34	1.97	1.00	1.66	2.53
0.16	1.07	1.04	1.51	1.02	1.24	1.72	1.05	1.49	2.28
0.49	1.19	1.05	1.48	1.09	1.16	1.55	1.12	1.37	1.96
0.81	1.22	1.04	1.38	1.16	1.19	1.47	1.18	1.30	1.87
1.14	1.22	1.04	1.35	1.23	1.16	1.37	1.27	1.25	1.78
1.46	1.30	1.08	1.30	1.30	1.12	1.27	1.37	1.25	1.64
1.79	1.37	1.20	1.38	1.38	1.13	1.24	1.44	1.27	1.54
2.11	1.42	1.21	1.51	1.45	1.13	1.26	1.49	1.23	1.52
2.44	1.50	1.29	1.50	1.56	1.17	1.27	1.59	1.25	1.48
2.76	1.63	1.32	1.51	1.63	1.21	1.24	1.69	1.32	1.47
3.09	1.68	1.45	1.57	1.70	1.30	1.31	1.77	1.42	1.56
3.41	1.72	1.57	1.66	1.78	1.43	1.45	1.89	1.51	1.60
3.74	1.81	1.69	1.74	1.87	1.54	1.50	1.98	1.57	1.70
4.06	1.86	1.78	1.87	1.94	1.65	1.51	2.06	1.68	1.76
4.39	1.99	1.90	1.96	2.05	1.72	1.55	2.15	1.82	1.82
4.71	2.07	1.99	1.92	2.17	1.81	1.58	2.23	1.92	1.97
5.04	2.13	2.10	1.92	2.23	1.92	1.58	2.28	1.99	1.92
5.36	2.23	2.11	1.99	2.32	1.99	1.58	2.35	2.03	1.84
5.69	2.36	2.18	1.99	2.45	2.06	1.68	2.45	2.17	1.86
6.01	2.45	2.23	2.01	2.49	2.09	1.72	2.49	2.23	1.91
6.34	2.46	2.32	1.94	2.53	2.13	1.71	2.56	2.22	1.90
6.66	2.54	2.32	1.94	2.59	2.13	1.69	2.67	2.28	1.83
6.99	2.55	2.26	1.88	2.70	2.08	1.59	2.77	2.24	1.75
7.31	2.55	2.16	1.79	2.76	2.02	1.55	2.75	2.09	1.71
7.64	2.44	2.03	1.82	2.74	1.96	1.57	2.71	2.06	1.69

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
7.96	2.30	1.96	1.72	2.65	1.83	1.45	2.75	1.94	1.53
8.29	2.17	1.83	1.58	2.52	1.70	1.33	2.74	1.79	1.43
8.61	2.02	1.61	1.45	2.39	1.53	1.28	2.63	1.63	1.39
8.94	1.84	1.46	1.33	2.20	1.40	1.18	2.49	1.47	1.28
9.26	1.63	1.28	1.26	1.96	1.24	1.05	2.25	1.30	1.14
9.59	1.45	1.11	1.15	1.71	1.07	1.01	2.03	1.13	1.08
9.91	1.21	0.99	1.11	1.42	0.92	0.99	1.72	0.96	0.94
10.24	1.00	0.98	1.24	1.22	0.85	1.03	1.40	0.84	0.88
10.56	0.73	0.85	0.99	0.85	0.70	0.85	1.02	0.73	0.83
10.89	1.19	2.27	2.79	1.51	3.36	4.75	4.16	5.62	4.26
11.21	1.29	2.35	2.51	1.27	3.44	4.51	1.98	3.83	3.89
11.54	0.26	0.47	1.17	0.85	2.41	3.09	0.28	0.39	0.85
11.87	0.00	0.00	0.22	0.13	0.01	0.16	0.01	0.01	0.01

Table N-153 TKE (m^2/s^2), L0, Grid #2

L0, Grid #2									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-10.40	1.08	1.03	0.35	0.17	0.18	0.32	0.25	0.25	0.53
-10.12	1.54	1.59	1.28	0.98	0.98	1.11	1.02	0.99	1.07
-9.83	1.77	1.95	1.78	1.25	1.25	1.55	1.25	1.20	1.34
-9.55	2.29	2.43	2.41	1.64	1.73	1.77	1.58	1.62	1.69
-9.26	2.98	3.00	3.13	2.09	2.19	2.19	1.98	2.07	2.09
-8.98	3.59	3.55	3.73	2.66	2.87	2.74	2.55	2.71	2.64
-8.69	4.41	4.40	4.34	3.21	3.46	3.26	3.03	3.23	3.13
-8.41	4.88	4.77	4.75	3.70	3.95	3.79	3.55	3.79	3.58
-8.12	5.10	5.11	5.20	4.16	4.30	4.17	3.90	4.12	3.91
-7.84	5.37	5.35	5.52	4.47	4.65	4.44	4.18	4.39	4.25
-7.55	5.32	5.26	5.36	4.52	4.70	4.48	4.26	4.44	4.34
-7.27	5.21	5.22	5.23	4.38	4.57	4.37	4.24	4.36	4.29

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-6.98	5.08	5.07	4.88	4.33	4.35	4.27	4.15	4.27	4.20
-6.70	4.77	4.82	4.70	4.07	4.18	4.13	4.08	4.02	4.06
-6.41	4.42	4.52	4.46	3.84	3.93	3.85	3.85	3.79	3.76
-6.13	4.09	4.18	4.09	3.62	3.67	3.60	3.55	3.59	3.55
-5.84	3.90	3.88	4.07	3.35	3.45	3.32	3.35	3.38	3.34
-5.56	3.65	3.67	3.87	3.15	3.22	3.14	3.15	3.17	3.14
-5.27	3.38	3.44	3.54	2.99	2.96	2.95	2.92	2.95	2.98
-4.99	3.22	3.24	3.32	2.78	2.78	2.71	2.73	2.76	2.76
-4.70	3.03	3.06	3.18	2.56	2.63	2.51	2.61	2.54	2.54
-4.42	2.80	2.98	3.01	2.40	2.46	2.35	2.46	2.39	2.32
-4.13	2.59	2.82	2.80	2.29	2.30	2.27	2.24	2.30	2.20
-3.85	2.49	2.72	2.65	2.17	2.21	2.14	2.11	2.17	2.09
-3.56	2.40	2.64	2.58	2.04	2.11	2.01	2.04	2.08	1.94
-3.28	2.39	2.53	2.52	1.97	2.06	1.95	1.93	1.98	1.84
-2.99	2.28	2.40	2.30	1.86	1.93	1.86	1.83	1.91	1.78
-2.71	2.16	2.28	2.24	1.80	1.85	1.79	1.74	1.83	1.73
-2.42	2.09	2.21	2.13	1.73	1.74	1.76	1.65	1.77	1.66
-2.14	2.02	2.11	2.08	1.68	1.70	1.70	1.56	1.68	1.59
-1.85	2.02	2.11	1.97	1.64	1.69	1.65	1.48	1.62	1.54
-1.57	2.00	2.04	1.84	1.58	1.64	1.57	1.40	1.53	1.45
-1.28	1.90	1.93	1.79	1.44	1.60	1.48	1.35	1.48	1.40
-1.00	1.80	1.90	1.82	1.39	1.53	1.42	1.29	1.42	1.35
-0.71	1.73	1.86	1.82	1.36	1.44	1.34	1.25	1.41	1.32
-0.43	1.77	1.79	1.72	1.28	1.40	1.29	1.23	1.34	1.26
-0.14	1.73	1.75	1.68	1.28	1.41	1.24	1.16	1.28	1.20
0.14	1.63	1.76	1.63	1.29	1.37	1.25	1.12	1.25	1.17
0.43	1.62	1.66	1.57	1.24	1.29	1.24	1.14	1.19	1.15
0.71	1.62	1.61	1.48	1.19	1.24	1.20	1.11	1.19	1.13
1.00	1.61	1.57	1.50	1.18	1.21	1.15	1.05	1.15	1.06
1.28	1.59	1.57	1.50	1.17	1.21	1.14	1.07	1.13	1.04
1.57	1.60	1.53	1.45	1.14	1.23	1.13	1.08	1.14	1.07
1.85	1.58	1.53	1.41	1.13	1.25	1.09	1.06	1.16	1.07

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
2.14	1.55	1.53	1.37	1.15	1.22	1.08	1.08	1.17	1.04
2.42	1.56	1.59	1.41	1.16	1.21	1.05	1.11	1.17	1.08
2.71	1.63	1.58	1.42	1.20	1.20	1.12	1.12	1.19	1.13
2.99	1.66	1.57	1.47	1.23	1.24	1.18	1.13	1.20	1.13
3.28	1.63	1.66	1.55	1.25	1.30	1.21	1.14	1.27	1.13
3.56	1.69	1.74	1.66	1.31	1.31	1.23	1.24	1.29	1.20
3.85	1.81	1.80	1.76	1.35	1.40	1.33	1.31	1.37	1.28
4.13	1.85	1.86	1.80	1.43	1.52	1.39	1.36	1.41	1.38
4.42	2.00	1.96	1.85	1.53	1.61	1.48	1.53	1.50	1.48
4.70	2.12	2.08	2.03	1.65	1.71	1.65	1.67	1.63	1.60
4.99	2.23	2.28	2.25	1.84	1.87	1.78	1.74	1.77	1.73
5.27	2.41	2.45	2.37	2.05	2.06	1.91	1.92	1.94	1.90
5.56	2.66	2.69	2.62	2.17	2.29	2.18	2.16	2.11	2.19
5.84	2.98	2.98	2.86	2.39	2.52	2.40	2.37	2.39	2.43
6.13	3.27	3.32	3.19	2.68	2.78	2.65	2.67	2.63	2.67
6.41	3.57	3.69	3.53	2.99	3.03	2.88	2.99	2.95	2.98
6.70	3.93	4.03	3.86	3.43	3.31	3.16	3.27	3.22	3.21
6.98	4.22	4.27	4.09	3.72	3.60	3.42	3.51	3.48	3.42
7.27	4.40	4.39	4.28	3.93	3.83	3.59	3.73	3.71	3.65
7.55	4.54	4.52	4.40	3.96	3.81	3.69	3.69	3.72	3.67
7.84	4.53	4.60	4.39	3.88	3.74	3.71	3.61	3.67	3.57
8.12	4.24	4.37	4.25	3.62	3.53	3.35	3.43	3.47	3.33
8.41	4.00	4.10	3.96	3.27	3.18	3.06	3.06	3.17	2.96
8.69	3.57	3.55	3.39	2.88	2.77	2.73	2.71	2.75	2.60
8.98	2.98	2.98	2.96	2.49	2.39	2.30	2.28	2.27	2.16
9.26	2.48	2.34	2.33	2.03	1.86	1.82	1.94	1.79	1.79
9.55	2.16	2.09	1.98	1.79	1.66	1.56	1.71	1.65	1.65
9.83	1.53	1.46	1.34	1.20	1.20	1.03	1.48	1.44	1.19
10.12	0.40	0.45	0.43	0.06	0.20	0.62	0.09	0.12	0.23
10.40	86.22	0.32	11.25	0.00	0.01	0.14	0.01	0.01	0.01

Table N-154 TKE (m^2/s^2), L1, Grid #2

L1, Grid #2									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-10.69	7.81	14.33	28.25	4.43	30.57	49.64	8.52	33.03	25.44
-10.40	3.56	21.85	27.86	3.34	34.31	41.74	5.06	40.51	34.36
-10.11	1.04	20.87	16.47	0.95	14.22	10.98	0.92	8.13	7.26
-9.81	1.32	1.78	3.99	1.21	1.58	2.21	1.15	1.59	2.09
-9.52	1.73	1.69	3.09	1.49	1.30	1.74	1.46	1.29	1.63
-9.23	2.18	1.97	2.53	1.87	1.56	1.64	1.86	1.53	1.66
-8.93	2.75	2.44	2.73	2.31	2.04	1.81	2.28	1.96	1.88
-8.64	3.21	2.81	2.97	2.77	2.59	2.02	2.71	2.46	2.07
-8.35	3.74	3.20	3.18	3.28	2.92	2.19	3.24	2.82	2.25
-8.06	4.14	3.56	3.36	3.57	3.05	2.45	3.60	3.00	2.41
-7.76	4.42	3.68	3.52	3.90	3.21	2.57	3.78	3.08	2.49
-7.47	4.61	3.70	3.57	4.04	3.26	2.60	3.88	3.12	2.47
-7.18	4.64	3.65	3.60	4.02	3.19	2.61	3.93	3.07	2.45
-6.88	4.53	3.58	3.63	4.03	3.09	2.59	3.91	3.02	2.49
-6.59	4.33	3.39	3.64	3.83	2.95	2.58	3.76	2.90	2.42
-6.30	4.08	3.24	3.52	3.62	2.86	2.59	3.59	2.80	2.36
-6.01	3.84	3.07	3.40	3.48	2.77	2.48	3.36	2.70	2.32
-5.71	3.69	2.93	3.31	3.35	2.66	2.37	3.22	2.59	2.25
-5.42	3.38	2.76	3.11	3.16	2.47	2.33	3.04	2.42	2.14
-5.13	3.18	2.52	3.06	2.86	2.28	2.22	2.85	2.27	2.07
-4.83	2.89	2.34	3.19	2.58	2.18	2.08	2.67	2.10	1.99
-4.54	2.66	2.30	3.25	2.44	2.05	2.00	2.51	1.98	1.90
-4.25	2.49	2.17	2.93	2.27	1.90	1.88	2.30	1.92	1.84
-3.95	2.33	2.02	2.66	2.14	1.82	1.77	2.09	1.79	1.72
-3.66	2.25	1.91	2.53	1.98	1.76	1.73	1.99	1.73	1.63
-3.37	2.11	1.90	2.58	1.85	1.63	1.67	1.86	1.68	1.58
-3.08	1.98	1.79	2.50	1.71	1.54	1.55	1.76	1.57	1.48
-2.78	1.90	1.71	2.34	1.63	1.46	1.49	1.66	1.45	1.43

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-2.49	1.77	1.61	2.24	1.55	1.37	1.42	1.47	1.38	1.39
-2.20	1.75	1.54	2.30	1.44	1.30	1.39	1.43	1.36	1.30
-1.90	1.70	1.51	2.28	1.36	1.28	1.36	1.34	1.25	1.26
-1.61	1.60	1.50	2.25	1.30	1.21	1.28	1.27	1.12	1.22
-1.32	1.47	1.44	2.00	1.26	1.13	1.21	1.20	1.10	1.18
-1.03	1.46	1.43	1.89	1.21	1.09	1.14	1.18	1.07	1.14
-0.73	1.44	1.36	1.94	1.16	1.04	1.11	1.11	1.02	1.08
-0.44	1.35	1.28	1.98	1.11	1.00	1.11	1.09	0.95	1.03
-0.15	1.27	1.24	1.80	1.07	0.97	1.05	1.06	0.90	1.01
0.15	1.23	1.24	1.71	1.04	0.92	1.01	1.00	0.90	1.01
0.44	1.17	1.20	1.74	1.00	0.91	1.00	0.97	0.87	0.99
0.73	1.17	1.13	1.83	0.97	0.89	0.97	0.95	0.85	0.95
1.03	1.11	1.12	1.83	0.94	0.87	0.96	0.94	0.85	0.93
1.32	1.11	1.13	1.68	0.92	0.83	0.91	0.91	0.82	0.92
1.61	1.10	1.13	1.71	0.92	0.81	0.90	0.89	0.83	0.86
1.90	1.08	1.07	1.75	0.89	0.83	0.84	0.88	0.83	0.87
2.20	1.08	1.09	1.73	0.89	0.83	0.81	0.88	0.81	0.83
2.49	1.03	1.11	1.72	0.89	0.82	0.84	0.88	0.82	0.90
2.78	1.04	1.10	1.75	0.89	0.83	0.87	0.88	0.84	0.90
3.08	1.08	1.12	1.70	0.92	0.86	0.89	0.90	0.86	0.88
3.37	1.12	1.16	1.76	0.95	0.92	0.91	0.93	0.90	0.90
3.66	1.14	1.21	1.84	0.98	1.02	0.94	0.96	0.95	0.92
3.95	1.20	1.35	1.88	1.04	1.04	1.05	1.06	1.02	1.03
4.25	1.28	1.49	1.96	1.14	1.12	1.09	1.13	1.09	1.12
4.54	1.41	1.56	2.03	1.24	1.23	1.17	1.25	1.22	1.22
4.83	1.54	1.70	2.13	1.33	1.34	1.28	1.38	1.28	1.32
5.13	1.71	1.83	2.31	1.51	1.48	1.42	1.55	1.44	1.40
5.42	1.92	1.96	2.50	1.67	1.62	1.54	1.74	1.63	1.50
5.71	2.15	2.20	2.65	1.88	1.77	1.64	1.94	1.76	1.60
6.01	2.36	2.43	2.89	2.16	1.96	1.74	2.19	1.90	1.76
6.30	2.65	2.61	3.24	2.50	2.19	1.95	2.44	2.08	1.87
6.59	2.90	2.75	3.24	2.76	2.33	2.01	2.69	2.21	2.01

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
6.88	3.08	2.93	3.41	3.04	2.40	2.15	2.95	2.29	2.12
7.18	3.38	2.96	3.55	3.21	2.58	2.21	3.11	2.36	2.16
7.47	3.65	2.99	3.60	3.32	2.55	2.32	3.23	2.42	2.29
7.76	3.53	2.95	3.51	3.31	2.44	2.35	3.19	2.37	2.32
8.06	3.42	2.85	3.47	3.13	2.33	2.37	3.11	2.32	2.49
8.35	3.18	2.38	3.72	2.85	2.06	2.38	2.93	2.05	2.48
8.64	2.83	2.04	3.50	2.62	1.80	2.38	2.58	1.81	2.56
8.93	2.36	1.59	3.36	2.26	1.45	2.63	2.25	1.40	2.68
9.23	1.92	1.42	3.15	1.85	1.29	2.65	1.96	1.29	3.04
9.52	1.72	4.16	4.15	1.56	2.98	3.49	1.67	2.82	3.63
9.81	2.91	11.45	21.86	3.55	38.46	25.03	2.09	32.39	17.09
10.11	0.89	1.23	4.03	1.93	9.16	11.67	1.81	5.24	7.75
10.40	0.15	0.04	0.43	0.29	0.12	0.41	0.38	0.04	0.38
10.69	0.00	0.00	313.99	0.03	0.01	0.16	0.01	0.01	0.01

Table N-155 TKE (m^2/s^2), L2, Grid #2

L2, Grid #2									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-10.82	2.94	14.27	12.07	1.21	19.79	7.64	1.42	11.39	5.98
-10.52	1.04	14.49	13.29	0.70	33.06	10.09	0.59	20.20	6.86
-10.22	1.03	12.85	5.91	0.77	11.96	2.12	0.67	10.76	2.13
-9.93	1.26	3.95	1.97	1.04	2.23	1.33	1.01	1.90	1.33
-9.63	1.65	1.68	1.81	1.25	1.38	1.22	1.21	1.36	1.17
-9.34	2.04	1.63	1.88	1.59	1.32	1.21	1.54	1.27	1.14
-9.04	2.50	1.78	2.10	1.99	1.46	1.51	1.97	1.39	1.48
-8.74	3.09	2.31	2.18	2.34	1.80	1.74	2.36	1.76	1.77
-8.45	3.44	2.76	2.48	2.80	2.27	1.89	2.70	2.22	2.01
-8.15	4.00	3.00	2.72	3.24	2.53	2.05	3.08	2.42	2.15
-7.85	4.45	3.13	2.66	3.54	2.66	2.16	3.39	2.54	2.15

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-7.56	4.65	3.20	2.53	3.68	2.80	2.16	3.57	2.76	2.21
-7.26	4.31	3.19	2.36	3.88	2.86	2.10	3.80	2.84	2.15
-6.96	4.44	3.20	2.36	3.98	2.79	2.06	3.87	2.77	2.16
-6.67	4.48	3.09	2.33	3.94	2.72	2.02	3.87	2.63	2.10
-6.37	4.18	3.03	2.28	3.82	2.61	1.99	3.75	2.56	1.99
-6.08	3.99	2.92	2.17	3.67	2.51	1.87	3.61	2.55	1.88
-5.78	3.86	2.79	2.13	3.51	2.45	1.78	3.40	2.40	1.79
-5.48	3.64	2.66	2.06	3.35	2.25	1.70	3.28	2.19	1.70
-5.19	3.39	2.42	1.93	3.21	2.18	1.63	3.18	2.09	1.61
-4.89	3.11	2.24	1.81	2.96	2.06	1.58	2.94	2.01	1.55
-4.59	2.97	2.13	1.75	2.78	1.94	1.56	2.70	1.85	1.51
-4.30	2.81	2.04	1.70	2.64	1.80	1.45	2.46	1.75	1.40
-4.00	2.70	1.97	1.66	2.40	1.70	1.35	2.36	1.65	1.32
-3.70	2.50	1.83	1.60	2.25	1.60	1.30	2.19	1.65	1.21
-3.41	2.37	1.74	1.58	2.12	1.51	1.27	1.99	1.56	1.14
-3.11	2.27	1.71	1.50	1.97	1.45	1.16	1.88	1.45	1.09
-2.82	2.16	1.60	1.38	1.88	1.37	1.10	1.82	1.37	1.04
-2.52	2.06	1.53	1.27	1.73	1.29	1.06	1.73	1.22	0.98
-2.22	1.91	1.48	1.23	1.60	1.24	1.02	1.65	1.15	0.93
-1.93	1.81	1.37	1.16	1.49	1.18	0.98	1.49	1.11	0.90
-1.63	1.72	1.29	1.13	1.41	1.09	0.97	1.36	1.08	0.86
-1.33	1.61	1.29	1.08	1.32	1.03	0.92	1.28	1.01	0.83
-1.04	1.54	1.20	1.01	1.28	0.97	0.87	1.20	0.97	0.80
-0.74	1.48	1.14	0.96	1.21	0.92	0.85	1.14	0.91	0.80
-0.44	1.46	1.11	0.98	1.13	0.90	0.86	1.08	0.82	0.75
-0.15	1.37	1.05	0.93	1.10	0.83	0.84	1.04	0.79	0.73
0.15	1.31	0.99	0.86	1.04	0.80	0.81	0.97	0.79	0.73
0.44	1.26	0.97	0.86	0.99	0.78	0.76	0.92	0.71	0.74
0.74	1.20	0.90	0.84	0.95	0.75	0.71	0.88	0.68	0.70
1.04	1.15	0.87	0.80	0.91	0.72	0.69	0.88	0.65	0.66
1.33	1.12	0.89	0.81	0.87	0.72	0.68	0.84	0.65	0.66
1.63	1.12	0.90	0.79	0.84	0.71	0.67	0.85	0.65	0.69

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
1.93	1.08	0.86	0.78	0.86	0.67	0.66	0.85	0.63	0.64
2.22	1.05	0.86	0.81	0.84	0.68	0.64	0.83	0.64	0.62
2.52	1.06	0.86	0.79	0.85	0.68	0.63	0.81	0.65	0.63
2.82	1.05	0.86	0.84	0.90	0.72	0.63	0.82	0.67	0.63
3.11	1.09	0.87	0.84	0.94	0.74	0.63	0.86	0.70	0.65
3.41	1.16	0.93	0.87	0.95	0.76	0.67	0.90	0.72	0.65
3.70	1.25	0.98	0.93	1.01	0.81	0.70	0.96	0.79	0.67
4.00	1.33	1.07	0.99	1.09	0.89	0.77	1.02	0.85	0.73
4.30	1.39	1.18	1.06	1.13	0.96	0.84	1.11	0.92	0.77
4.59	1.55	1.28	1.13	1.30	1.05	0.90	1.27	1.04	0.86
4.89	1.71	1.44	1.17	1.44	1.16	0.99	1.43	1.15	1.01
5.19	1.90	1.53	1.28	1.57	1.25	1.08	1.56	1.27	1.14
5.48	2.05	1.58	1.39	1.72	1.35	1.23	1.70	1.37	1.21
5.78	2.23	1.68	1.48	1.91	1.47	1.27	1.89	1.45	1.34
6.08	2.48	1.80	1.52	2.18	1.58	1.39	2.17	1.53	1.45
6.37	2.73	1.97	1.67	2.37	1.69	1.51	2.45	1.62	1.54
6.67	2.97	2.10	1.84	2.54	1.79	1.63	2.60	1.72	1.61
6.96	3.13	2.20	1.99	2.74	1.87	1.73	2.63	1.82	1.84
7.26	3.23	2.21	2.04	2.89	1.91	1.91	2.74	1.86	1.90
7.56	3.33	2.32	2.24	2.93	1.92	1.99	2.80	1.86	2.15
7.85	3.16	2.23	2.29	2.81	1.90	2.08	2.61	1.86	2.27
8.15	3.05	2.05	2.43	2.64	1.77	2.07	2.46	1.77	2.17
8.45	2.82	1.87	2.45	2.42	1.55	2.09	2.22	1.60	2.18
8.74	2.45	1.54	2.61	2.14	1.31	2.08	1.96	1.31	2.17
9.04	2.13	1.26	2.44	1.85	1.05	1.93	1.75	1.04	1.92
9.34	1.91	1.28	2.58	1.55	1.09	1.87	1.52	1.05	1.90
9.63	1.62	2.15	2.71	1.36	1.71	2.09	1.31	1.60	2.22
9.93	1.43	28.96	5.67	1.29	20.02	5.68	1.36	15.30	6.90
10.22	1.46	50.69	10.70	1.11	23.72	9.37	1.24	23.56	9.24
10.52	1.03	21.97	6.45	0.70	3.71	2.52	0.70	5.27	2.59
10.82	161.18	71.99	48.97	0.06	0.00	0.00	0.01	0.00	0.18

Table N-156 TKE (m^2/s^2), L3, Grid #2

L3, Grid #2									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-11.04	0.22	10.10	2.29	0.11	0.11	0.24	0.12	0.29	0.25
-10.74	0.37	7.74	2.54	0.63	2.07	1.91	0.56	4.23	1.88
-10.44	0.71	9.00	1.96	0.56	4.74	1.29	0.60	5.53	1.33
-10.13	0.95	3.75	1.53	0.79	2.13	1.08	0.83	2.55	1.09
-9.83	1.13	1.70	1.40	0.94	1.31	1.07	0.99	1.33	1.08
-9.53	1.38	1.26	1.40	1.20	1.15	1.13	1.23	1.21	1.12
-9.23	1.71	1.26	1.58	1.51	1.07	1.21	1.54	1.15	1.21
-8.92	1.97	1.40	1.68	1.78	1.23	1.35	1.78	1.29	1.39
-8.62	2.28	1.67	1.79	2.07	1.49	1.43	2.07	1.50	1.46
-8.32	2.64	1.95	2.01	2.44	1.74	1.62	2.43	1.70	1.58
-8.02	2.98	2.11	2.30	2.75	1.93	1.75	2.78	1.90	1.77
-7.71	3.23	2.27	2.40	2.95	2.04	1.79	2.93	1.98	1.89
-7.41	3.40	2.40	2.40	3.15	2.15	1.92	3.12	2.11	1.98
-7.11	3.59	2.51	2.48	3.31	2.19	2.06	3.29	2.19	2.01
-6.81	3.74	2.52	2.55	3.37	2.24	2.08	3.35	2.24	2.03
-6.50	3.71	2.46	2.46	3.39	2.21	2.01	3.32	2.22	2.03
-6.20	3.63	2.42	2.34	3.36	2.16	1.89	3.29	2.20	2.00
-5.90	3.57	2.39	2.36	3.27	2.12	1.80	3.25	2.15	1.93
-5.60	3.38	2.23	2.19	3.18	2.04	1.78	3.18	2.05	1.90
-5.29	3.26	2.16	2.12	3.08	1.97	1.70	3.07	1.93	1.80
-4.99	3.12	2.02	2.00	2.93	1.86	1.67	2.92	1.82	1.74
-4.69	2.94	1.93	1.90	2.74	1.76	1.57	2.79	1.76	1.62
-4.39	2.76	1.89	1.75	2.57	1.72	1.41	2.62	1.67	1.51
-4.08	2.53	1.78	1.60	2.42	1.61	1.31	2.46	1.61	1.43
-3.78	2.42	1.67	1.47	2.25	1.47	1.21	2.30	1.49	1.33
-3.48	2.28	1.54	1.43	2.11	1.41	1.17	2.11	1.38	1.26
-3.18	2.14	1.47	1.38	2.00	1.34	1.16	2.01	1.30	1.16
-2.87	2.04	1.41	1.35	1.87	1.22	1.07	1.87	1.20	1.10
-2.57	1.91	1.29	1.34	1.75	1.12	1.06	1.74	1.08	1.03

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-2.27	1.79	1.20	1.26	1.62	1.05	1.04	1.67	1.02	1.03
-1.97	1.69	1.13	1.21	1.49	0.98	0.97	1.54	0.96	1.03
-1.66	1.53	1.08	1.17	1.39	0.90	0.92	1.39	0.94	0.99
-1.36	1.43	1.02	1.08	1.29	0.82	0.85	1.31	0.89	0.93
-1.06	1.36	0.96	1.05	1.21	0.80	0.85	1.25	0.84	0.91
-0.76	1.29	0.91	1.04	1.13	0.76	0.86	1.15	0.78	0.88
-0.45	1.20	0.87	1.02	1.06	0.75	0.82	1.12	0.74	0.81
-0.15	1.13	0.82	0.98	0.99	0.72	0.84	1.08	0.70	0.82
0.15	1.12	0.79	0.98	0.93	0.66	0.80	0.99	0.66	0.80
0.45	1.06	0.76	0.98	0.88	0.65	0.73	0.91	0.65	0.75
0.76	0.95	0.73	0.89	0.84	0.61	0.71	0.88	0.64	0.77
1.06	0.91	0.70	0.85	0.81	0.58	0.74	0.87	0.60	0.76
1.36	0.89	0.68	0.92	0.79	0.56	0.69	0.85	0.56	0.77
1.66	0.89	0.67	0.99	0.77	0.55	0.70	0.83	0.55	0.80
1.97	0.93	0.67	0.96	0.74	0.52	0.69	0.81	0.55	0.77
2.27	0.92	0.65	0.94	0.75	0.54	0.70	0.81	0.55	0.73
2.57	0.88	0.63	0.93	0.78	0.56	0.71	0.83	0.55	0.73
2.87	0.90	0.66	0.98	0.78	0.56	0.76	0.83	0.57	0.79
3.18	0.92	0.66	0.99	0.81	0.57	0.80	0.84	0.58	0.84
3.48	0.97	0.70	1.05	0.88	0.61	0.86	0.89	0.62	0.89
3.78	1.02	0.76	1.11	0.94	0.67	0.83	0.96	0.67	0.95
4.08	1.08	0.83	1.16	1.00	0.73	0.87	1.03	0.73	0.97
4.39	1.19	0.87	1.15	1.09	0.79	0.92	1.11	0.82	0.99
4.69	1.31	0.96	1.24	1.19	0.85	1.03	1.21	0.90	1.09
4.99	1.46	1.07	1.48	1.34	0.93	1.20	1.36	0.98	1.24
5.29	1.59	1.16	1.66	1.52	1.06	1.94	1.52	1.07	1.41
5.60	1.76	1.25	1.76	1.73	1.22	4.12	1.69	1.13	1.56
5.90	1.95	1.35	1.96	2.08	1.48	8.40	1.88	1.19	1.74
6.20	2.12	1.41	2.25	2.50	2.04	25.73	2.01	1.26	1.87
6.50	2.30	1.51	2.71	2.88	2.21	17.72	2.10	1.34	2.03
6.81	2.38	1.63	2.88	2.99	2.19	26.12	2.16	1.39	2.31
7.11	2.48	1.63	2.95	2.71	1.88	13.29	2.22	1.40	2.44

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
7.41	2.52	1.58	3.31	2.58	1.73	15.34	2.25	1.38	2.27
7.71	2.43	1.58	3.06	2.43	1.59	5.99	2.17	1.41	2.23
8.02	2.31	1.45	2.57	2.17	1.41	3.67	2.07	1.28	1.99
8.32	2.15	1.38	2.42	1.97	1.28	2.09	1.94	1.24	1.80
8.62	1.84	1.23	2.22	1.76	1.11	1.80	1.75	1.13	1.85
8.92	1.64	1.03	2.06	1.56	0.93	1.53	1.56	0.99	1.72
9.23	1.44	0.93	1.94	1.41	0.86	1.63	1.35	0.85	1.61
9.53	1.35	1.09	2.02	1.34	1.05	2.32	1.17	0.82	1.65
9.83	1.31	1.54	4.02	1.06	1.12	2.89	0.97	0.98	1.44
10.13	2.36	0.55	6.68	1.12	0.97	7.22	2.69	5.46	5.37
10.44	2.53	0.54	7.32	0.97	0.85	6.71	1.01	2.81	3.45
10.74	0.14	0.15	0.53	0.28	0.19	0.33	0.37	0.26	0.30
11.04	0.00	0.00	0.00	0.03	0.00	0.24	0.01	0.00	0.10

Table N-157 TKE (m^2/s^2), L4, Grid #2

L4, Grid #2									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-11.16	2.16	12.04	2.08	0.30	0.38	0.39	0.23	0.63	0.52
-10.86	0.63	11.49	2.22	0.45	6.55	1.54	0.46	5.37	1.58
-10.55	0.62	8.22	1.86	0.51	4.41	1.23	0.48	2.92	1.09
-10.25	0.65	2.94	1.40	0.62	1.87	1.06	0.67	1.60	0.98
-9.94	0.83	1.54	1.25	0.77	1.17	0.96	0.77	1.08	0.96
-9.63	1.00	1.30	1.36	0.87	1.00	1.03	0.89	1.01	1.05
-9.33	1.29	1.25	1.34	1.12	1.01	1.00	1.15	1.02	1.00
-9.02	1.61	1.32	1.39	1.34	1.14	1.14	1.35	1.10	1.17
-8.72	1.76	1.54	1.52	1.55	1.37	1.21	1.52	1.34	1.26
-8.41	2.16	1.76	1.74	1.83	1.53	1.31	1.73	1.50	1.39
-8.11	2.39	1.91	1.90	2.08	1.67	1.52	1.99	1.66	1.54
-7.80	2.62	2.05	1.98	2.34	1.85	1.65	2.24	1.82	1.79

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-7.49	2.85	2.13	2.11	2.57	2.00	1.63	2.41	1.95	1.81
-7.19	3.06	2.29	2.28	2.75	2.07	1.81	2.55	2.00	1.87
-6.88	3.22	2.34	2.34	2.82	2.12	1.87	2.73	2.06	2.05
-6.58	3.27	2.33	2.44	2.91	2.10	1.94	2.86	2.12	2.10
-6.27	3.24	2.32	2.48	2.96	2.12	1.95	2.84	2.11	2.00
-5.96	3.22	2.31	2.50	2.94	2.12	1.93	2.83	2.12	2.06
-5.66	3.20	2.23	2.26	2.91	2.04	1.92	2.77	2.07	2.04
-5.35	3.11	2.15	2.33	2.82	2.02	2.00	2.68	1.96	1.99
-5.05	2.97	2.05	2.30	2.79	1.96	1.94	2.67	1.84	2.08
-4.74	2.87	1.98	2.35	2.69	1.86	1.85	2.62	1.82	1.98
-4.44	2.70	1.89	2.15	2.54	1.78	1.70	2.52	1.73	1.90
-4.13	2.51	1.83	2.10	2.40	1.68	1.52	2.38	1.64	1.83
-3.82	2.39	1.69	1.93	2.31	1.51	1.45	2.24	1.49	1.73
-3.52	2.22	1.53	1.77	2.17	1.43	1.49	2.11	1.37	1.65
-3.21	2.12	1.47	1.80	2.01	1.32	1.36	2.04	1.28	1.58
-2.91	1.97	1.37	1.71	1.87	1.23	1.31	1.93	1.18	1.61
-2.60	1.84	1.24	1.63	1.77	1.15	1.30	1.79	1.11	1.50
-2.29	1.79	1.17	1.60	1.68	1.10	1.29	1.68	1.09	1.37
-1.99	1.68	1.11	1.53	1.57	1.04	1.26	1.59	0.99	1.30
-1.68	1.57	1.08	1.46	1.49	0.96	1.16	1.51	0.93	1.31
-1.38	1.47	1.06	1.32	1.40	0.88	1.13	1.40	0.89	1.27
-1.07	1.39	0.96	1.33	1.28	0.86	1.07	1.30	0.86	1.18
-0.76	1.29	0.92	1.35	1.22	0.83	0.99	1.22	0.84	1.14
-0.46	1.23	0.86	1.23	1.14	0.79	1.01	1.14	0.82	1.11
-0.15	1.20	0.83	1.21	1.07	0.77	0.94	1.07	0.76	1.05
0.15	1.19	0.84	1.24	1.06	0.73	0.90	1.01	0.74	1.10
0.46	1.14	0.85	1.17	1.02	0.68	0.90	0.97	0.72	1.08
0.76	1.05	0.82	1.23	0.95	0.68	0.89	0.93	0.67	1.05
1.07	1.00	0.75	1.27	0.91	0.69	0.91	0.91	0.67	1.02
1.38	1.00	0.77	1.24	0.88	0.64	0.90	0.89	0.64	1.08
1.68	0.99	0.77	1.30	0.89	0.62	0.91	0.88	0.63	1.08
1.99	0.97	0.72	1.27	0.86	0.60	0.97	0.88	0.63	1.08

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
2.29	0.96	0.73	1.36	0.87	0.61	1.00	0.89	0.62	1.23
2.60	0.97	0.74	1.43	0.90	0.62	1.14	0.90	0.63	1.40
2.91	1.01	0.75	1.54	0.89	0.62	1.21	0.93	0.62	1.51
3.21	1.04	0.74	1.68	0.91	0.69	1.33	0.96	0.66	1.52
3.52	1.08	0.76	1.74	1.00	0.68	1.55	1.02	0.66	1.71
3.82	1.15	0.87	1.97	1.06	0.70	1.62	1.10	0.71	1.83
4.13	1.22	0.92	2.09	1.13	0.74	1.60	1.18	0.78	1.91
4.44	1.32	0.94	2.12	1.25	0.81	1.77	1.30	0.84	1.99
4.74	1.45	1.02	2.14	1.40	0.89	1.88	1.46	0.93	2.07
5.05	1.57	1.13	2.29	1.50	1.00	1.98	1.57	1.03	2.29
5.35	1.72	1.27	2.65	1.62	1.09	2.26	1.67	1.13	2.74
5.66	1.81	1.28	2.82	1.73	1.18	2.52	1.71	1.17	2.99
5.96	2.00	1.34	2.99	1.87	1.24	2.52	1.87	1.21	3.13
6.27	2.09	1.49	3.03	2.01	1.27	2.42	1.98	1.27	3.04
6.58	2.16	1.52	3.17	2.12	1.36	2.31	2.03	1.36	2.75
6.88	2.17	1.55	3.22	2.11	1.39	2.44	2.00	1.40	2.75
7.19	2.22	1.52	3.08	2.10	1.38	2.38	2.08	1.41	2.83
7.49	2.19	1.52	2.96	2.09	1.39	2.43	2.03	1.39	2.64
7.80	2.11	1.53	2.87	2.05	1.39	2.28	1.93	1.37	2.58
8.11	1.95	1.47	2.66	1.86	1.31	2.03	1.78	1.27	2.34
8.41	1.90	1.35	2.44	1.70	1.29	1.92	1.66	1.23	2.15
8.72	1.64	1.24	2.26	1.52	1.21	1.87	1.50	1.15	1.93
9.02	1.39	1.08	2.21	1.35	1.04	1.73	1.39	1.02	1.78
9.33	1.21	0.93	2.08	1.14	0.90	1.58	1.17	0.87	1.70
9.63	1.09	0.84	2.02	0.99	0.82	1.51	0.99	0.78	1.53
9.94	0.86	0.85	1.85	0.84	0.76	1.35	0.85	0.73	1.35
10.25	0.77	1.15	1.78	0.70	0.96	1.30	0.71	0.92	1.32
10.55	0.63	3.05	1.82	0.60	2.06	1.30	0.61	1.96	1.27
10.86	0.38	0.99	1.26	0.40	1.15	0.95	0.45	0.88	1.05
11.16	1.96	7.92	0.66	0.00	0.22	0.24	0.20	0.09	0.71

Table N-158 TKE (m^2/s^2), L5, Grid #2

L5, Grid #2									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-11.47	1.44	3.43	1.34	1.11	12.94	-5.02	0.42	1.24	1.67
-11.16	0.30	2.28	0.78	0.85	13.10	-5.43	0.44	2.65	1.19
-10.84	0.41	4.35	0.87	0.35	2.80	-5.21	0.34	2.08	0.66
-10.53	0.44	2.28	0.82	0.37	1.20	-5.04	0.38	1.17	0.72
-10.22	0.62	1.17	0.65	0.56	0.77	-4.80	0.58	0.70	0.52
-9.90	0.75	0.72	0.66	0.64	0.57	-4.58	0.64	0.55	0.60
-9.59	0.81	0.83	0.74	0.70	0.67	-4.39	0.71	0.69	0.65
-9.27	1.00	0.85	0.74	0.93	0.72	-4.13	0.95	0.72	0.64
-8.96	1.22	0.86	0.96	1.06	0.73	-3.87	1.11	0.70	0.86
-8.64	1.37	1.03	1.12	1.22	0.90	-3.64	1.23	0.91	0.91
-8.33	1.54	1.23	1.13	1.45	1.05	-3.40	1.43	1.06	0.87
-8.02	1.74	1.34	1.35	1.67	1.11	-3.14	1.67	1.06	1.01
-7.70	1.93	1.43	1.34	1.77	1.22	-2.88	1.84	1.18	1.15
-7.39	2.07	1.55	1.42	1.92	1.34	-2.66	1.99	1.34	1.15
-7.07	2.16	1.61	1.45	2.03	1.42	-2.46	2.07	1.40	1.17
-6.76	2.23	1.63	1.55	2.15	1.42	-2.26	2.13	1.39	1.25
-6.44	2.32	1.63	1.68	2.24	1.43	-2.06	2.24	1.44	1.42
-6.13	2.39	1.67	1.82	2.27	1.47	-1.87	2.28	1.46	1.44
-5.82	2.46	1.69	1.79	2.23	1.52	-1.68	2.22	1.54	1.38
-5.50	2.45	1.67	1.76	2.18	1.50	-1.53	2.17	1.49	1.51
-5.19	2.35	1.55	1.79	2.13	1.42	-1.42	2.11	1.37	1.59
-4.87	2.36	1.53	1.86	2.12	1.40	-1.26	2.06	1.36	1.73
-4.56	2.29	1.49	1.81	2.02	1.31	-1.13	2.00	1.35	1.80
-4.24	2.22	1.46	1.86	1.91	1.25	-1.01	1.90	1.30	1.93
-3.93	2.14	1.43	1.78	1.84	1.22	-0.90	1.80	1.23	1.76
-3.61	1.97	1.36	1.74	1.76	1.18	-0.82	1.69	1.21	1.67
-3.30	1.77	1.30	1.63	1.63	1.13	-0.77	1.60	1.18	1.58
-2.99	1.66	1.17	1.54	1.49	1.05	-0.66	1.49	1.05	1.56
-2.67	1.54	1.10	1.52	1.42	0.96	-0.56	1.36	0.93	1.47

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-2.36	1.44	1.01	1.48	1.33	0.89	-0.46	1.30	0.85	1.48
-2.04	1.35	0.93	1.51	1.25	0.82	-0.35	1.21	0.78	1.42
-1.73	1.23	0.87	1.59	1.15	0.76	-0.25	1.12	0.72	1.52
-1.41	1.12	0.77	1.50	1.06	0.67	-0.15	1.05	0.64	1.58
-1.10	1.06	0.71	1.57	0.97	0.64	-0.02	0.95	0.59	1.52
-0.79	0.97	0.70	1.48	0.90	0.60	0.09	0.87	0.56	1.47
-0.47	0.90	0.65	1.39	0.82	0.56	0.21	0.80	0.53	1.49
-0.16	0.81	0.61	1.40	0.78	0.53	0.32	0.73	0.50	1.47
0.16	0.76	0.56	1.43	0.72	0.50	0.46	0.66	0.45	1.54
0.47	0.70	0.54	1.46	0.64	0.45	0.59	0.60	0.45	1.52
0.79	0.68	0.51	1.57	0.59	0.45	0.73	0.57	0.44	1.57
1.10	0.62	0.50	1.45	0.58	0.43	0.86	0.53	0.42	1.72
1.41	0.59	0.50	1.57	0.56	0.41	1.00	0.51	0.41	1.70
1.73	0.58	0.51	1.72	0.56	0.43	1.16	0.51	0.40	1.84
2.04	0.59	0.52	1.82	0.55	0.45	1.31	0.53	0.41	1.81
2.36	0.59	0.53	1.82	0.54	0.47	1.47	0.54	0.45	1.83
2.67	0.59	0.52	1.86	0.53	0.48	1.63	0.54	0.48	2.01
2.99	0.62	0.59	1.90	0.54	0.51	1.80	0.54	0.51	2.05
3.30	0.65	0.62	1.86	0.61	0.54	1.97	0.59	0.53	2.12
3.61	0.70	0.66	1.88	0.66	0.58	2.16	0.64	0.58	2.21
3.93	0.76	0.69	1.98	0.70	0.62	2.35	0.72	0.60	2.21
4.24	0.85	0.76	2.10	0.79	0.68	2.55	0.79	0.67	2.38
4.56	0.95	0.84	2.27	0.91	0.73	2.75	0.86	0.73	2.59
4.87	1.04	0.88	2.40	1.01	0.80	2.95	0.97	0.82	2.67
5.19	1.14	0.92	2.47	1.10	0.87	3.16	1.05	0.86	2.83
5.50	1.22	0.97	2.67	1.20	0.89	3.36	1.13	0.83	2.62
5.82	1.35	0.98	2.36	1.29	0.93	3.58	1.27	0.89	2.50
6.13	1.48	1.07	2.36	1.37	0.98	3.80	1.37	1.00	2.40
6.44	1.56	1.12	2.53	1.47	1.01	4.00	1.50	1.01	2.33
6.76	1.60	1.12	2.41	1.52	1.00	4.18	1.50	1.01	2.19
7.07	1.61	1.10	1.99	1.57	1.01	4.34	1.52	1.00	1.90
7.39	1.61	1.09	1.66	1.57	1.01	4.50	1.54	1.00	1.77

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
7.70	1.57	1.06	1.57	1.52	0.98	4.64	1.50	1.00	1.68
8.02	1.51	1.01	1.56	1.45	0.95	4.76	1.41	0.94	1.47
8.33	1.41	0.94	1.47	1.37	0.88	4.87	1.31	0.85	1.25
8.64	1.31	0.90	1.36	1.24	0.80	4.98	1.18	0.79	1.17
8.96	1.14	0.80	1.30	1.10	0.72	5.05	1.04	0.72	1.00
9.27	1.04	0.73	1.16	0.96	0.67	5.16	0.94	0.67	1.02
9.59	0.89	0.61	1.11	0.80	0.58	5.24	0.80	0.55	1.00
9.90	0.79	0.57	1.05	0.74	0.53	5.34	0.72	0.50	0.95
10.22	0.70	0.59	0.98	0.69	0.57	5.46	0.65	0.52	1.00
10.53	0.57	0.85	1.10	0.67	0.95	5.55	0.57	0.70	1.07
10.84	0.45	1.33	1.02	0.55	1.41	5.65	0.45	1.08	0.96
11.16	0.50	0.81	0.81	0.25	0.55	5.83	0.49	0.62	0.95
11.47	0.01	0.00	0.02	0.01	0.00	5.74	0.03	0.03	0.03

Table N-159 TKE (m^2/s^2), L6, Grid #2

L6, Grid #2									
Y* (mm)	Left			Center			Right		
	Off	150	300	Off	150	300	Off	150	300
-11.71	3.00	10.00	5.63	2.17	10.72	5.50	0.82	2.72	0.79
-11.39	0.51	5.45	2.16	1.21	10.72	4.59	0.36	3.38	0.57
-11.07	0.41	2.72	0.64	0.33	2.30	0.50	0.37	2.11	0.52
-10.75	0.38	1.72	0.65	0.30	1.44	0.56	0.33	1.21	0.64
-10.43	0.48	1.08	0.59	0.43	0.83	0.50	0.47	0.79	0.55
-10.11	0.59	0.74	0.58	0.54	0.56	0.50	0.56	0.60	0.53
-9.79	0.64	0.67	0.71	0.55	0.59	0.60	0.58	0.61	0.67
-9.47	0.76	0.74	0.75	0.64	0.65	0.59	0.69	0.67	0.65
-9.15	0.94	0.80	0.79	0.82	0.67	0.61	0.86	0.69	0.69
-8.82	1.05	0.83	0.94	0.94	0.73	0.73	0.95	0.78	0.80
-8.50	1.12	0.99	1.04	0.98	0.88	0.74	1.01	0.92	0.82
-8.18	1.23	1.10	1.04	1.15	1.00	0.76	1.15	1.02	0.84

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
-7.86	1.42	1.16	1.14	1.37	1.04	0.96	1.34	1.04	0.98
-7.54	1.57	1.29	1.38	1.49	1.14	1.12	1.48	1.18	1.10
-7.22	1.65	1.38	1.57	1.56	1.24	1.12	1.57	1.34	1.18
-6.90	1.76	1.47	1.74	1.66	1.35	1.14	1.67	1.38	1.31
-6.58	1.87	1.47	1.72	1.73	1.35	1.28	1.77	1.36	1.41
-6.26	1.98	1.56	2.04	1.87	1.41	1.49	1.89	1.40	1.67
-5.94	2.07	1.64	2.29	1.92	1.42	1.66	1.93	1.44	1.95
-5.62	2.04	1.66	2.66	1.94	1.45	1.82	1.93	1.50	2.12
-5.29	2.00	1.70	2.88	1.92	1.51	1.84	1.95	1.54	2.26
-4.97	2.02	1.70	3.21	1.90	1.52	2.09	1.93	1.52	2.45
-4.65	2.01	1.68	3.53	1.86	1.46	2.33	1.88	1.44	2.81
-4.33	2.01	1.57	4.16	1.81	1.45	2.50	1.89	1.44	3.35
-4.01	2.02	1.56	4.77	1.78	1.39	2.93	1.85	1.42	3.87
-3.69	1.92	1.53	5.40	1.72	1.34	3.63	1.77	1.37	4.36
-3.37	1.80	1.49	5.96	1.61	1.33	4.12	1.65	1.35	4.59
-3.05	1.73	1.43	6.55	1.54	1.27	4.11	1.57	1.34	4.75
-2.73	1.60	1.40	6.52	1.43	1.26	4.17	1.44	1.31	5.27
-2.41	1.55	1.34	6.66	1.37	1.23	4.65	1.35	1.25	5.88
-2.09	1.47	1.31	6.51	1.27	1.14	4.68	1.28	1.16	5.79
-1.76	1.38	1.23	6.45	1.21	1.07	4.58	1.22	1.10	6.32
-1.44	1.33	1.17	7.04	1.14	1.02	4.78	1.15	1.04	6.59
-1.12	1.25	1.09	7.30	1.10	0.94	5.16	1.09	0.98	6.89
-0.80	1.17	1.00	7.37	1.02	0.87	5.41	1.02	0.92	6.78
-0.48	1.11	0.97	7.55	0.94	0.82	5.50	0.98	0.86	7.19
-0.16	1.03	0.96	7.91	0.88	0.81	5.48	0.89	0.82	7.62
0.16	0.93	0.92	8.23	0.80	0.76	6.00	0.86	0.81	7.55
0.48	0.86	0.82	8.31	0.76	0.73	6.11	0.79	0.78	7.80
0.80	0.82	0.78	8.66	0.73	0.71	6.14	0.73	0.75	7.89
1.12	0.78	0.80	8.95	0.69	0.68	5.96	0.69	0.74	8.23
1.44	0.75	0.80	9.25	0.65	0.68	6.25	0.66	0.71	8.50
1.76	0.73	0.76	8.89	0.63	0.68	6.42	0.65	0.70	8.28
2.09	0.69	0.74	9.14	0.62	0.68	6.67	0.64	0.70	8.48

Y* (mm)	Off	150	300	Off	150	300	Off	150	300
2.41	0.69	0.79	8.94	0.63	0.70	6.32	0.66	0.72	8.49
2.73	0.71	0.84	8.94	0.64	0.75	6.36	0.67	0.74	9.42
3.05	0.71	0.84	9.23	0.67	0.73	6.64	0.68	0.78	9.42
3.37	0.76	0.86	9.53	0.69	0.77	6.67	0.72	0.83	8.71
3.69	0.81	0.91	9.18	0.72	0.82	6.74	0.75	0.88	8.94
4.01	0.84	0.95	9.52	0.77	0.88	6.54	0.79	0.95	8.83
4.33	0.91	1.00	9.81	0.81	0.92	6.59	0.86	1.01	8.32
4.65	0.95	1.05	8.89	0.87	0.97	6.05	0.90	1.00	7.66
4.97	1.00	1.07	7.44	0.94	0.98	5.31	0.95	0.99	6.77
5.29	1.10	1.04	7.11	1.03	0.98	4.71	1.05	1.05	6.19
5.62	1.21	1.10	6.28	1.14	1.06	3.94	1.17	1.10	5.15
5.94	1.31	1.15	4.88	1.20	1.12	3.30	1.26	1.12	4.77
6.26	1.39	1.22	4.31	1.28	1.08	3.03	1.31	1.13	4.05
6.58	1.41	1.20	3.70	1.31	1.09	2.41	1.30	1.12	3.38
6.90	1.45	1.18	2.92	1.33	1.10	2.05	1.34	1.12	2.69
7.22	1.47	1.15	2.29	1.34	1.10	1.77	1.34	1.12	2.18
7.54	1.44	1.16	1.98	1.32	1.11	1.59	1.33	1.10	1.87
7.86	1.33	1.13	1.68	1.27	1.02	1.34	1.31	1.02	1.51
8.18	1.33	1.06	1.54	1.23	0.94	1.17	1.25	0.95	1.24
8.50	1.22	0.98	1.47	1.16	0.88	0.99	1.13	0.91	1.16
8.82	1.05	0.90	1.31	1.05	0.82	1.00	1.01	0.84	1.05
9.15	0.94	0.80	1.08	0.94	0.74	0.90	0.92	0.75	0.97
9.47	0.88	0.72	1.08	0.81	0.67	0.87	0.82	0.73	0.99
9.79	0.78	0.64	1.00	0.70	0.57	0.81	0.70	0.63	0.98
10.11	0.69	0.57	0.92	0.64	0.52	0.78	0.67	0.54	0.83
10.43	0.62	0.53	0.84	0.53	0.46	0.79	0.57	0.50	0.85
10.75	0.58	0.69	1.29	0.44	0.47	0.82	0.45	0.52	0.92
11.07	0.47	1.05	3.17	0.96	1.47	2.51	0.44	0.71	1.13
11.39	0.12	0.42	1.01	0.38	0.54	0.90	0.23	0.37	0.46
11.71	0.00	66.60	64.54	0.01	0.00	0.00	0.02	0.02	0.23

Table N-160 TKE (m^2/s^2), L0, Grid #1, Equilibrated

L0, Grid #1, Equilibrated						
Y* (mm)	Left		Center		Right	
	150	300	150	300	150	300
-10.57	1.04	0.09	1.52	5.02	0.27	0.18
-10.28	2.70	0.72	3.44	5.32	0.83	0.33
-9.99	2.42	3.48	5.14	3.43	1.26	1.26
-9.70	2.28	3.12	2.27	2.06	1.67	1.67
-9.42	2.96	2.26	2.28	2.28	2.14	2.03
-9.13	3.91	2.88	3.06	2.77	2.74	2.52
-8.84	4.67	3.43	3.63	3.25	3.36	3.00
-8.55	5.87	3.89	4.15	3.72	3.85	3.33
-8.26	6.43	4.41	4.40	4.14	4.13	3.76
-7.97	5.90	4.63	4.61	4.33	4.33	3.96
-7.68	4.81	4.32	4.51	4.39	4.31	4.01
-7.39	4.19	3.76	4.19	4.06	4.23	3.97
-7.10	3.78	3.33	3.84	3.69	3.90	3.79
-6.81	3.60	3.11	3.61	3.50	3.70	3.55
-6.52	3.24	2.89	3.26	3.25	3.34	3.27
-6.23	2.87	2.64	2.81	2.90	3.11	3.00
-5.94	2.53	2.42	2.48	2.68	2.87	2.80
-5.65	2.48	2.24	2.24	2.52	2.61	2.58
-5.36	2.32	2.04	2.09	2.24	2.34	2.36
-5.07	2.04	1.92	1.89	2.01	2.09	2.23
-4.78	2.03	1.80	1.83	1.86	1.94	2.16
-4.49	1.92	1.71	1.67	1.73	1.85	2.04
-4.20	1.87	1.70	1.51	1.64	1.75	1.88
-3.91	1.86	1.63	1.52	1.60	1.67	1.84
-3.62	1.74	1.55	1.44	1.48	1.54	1.75
-3.33	1.75	1.52	1.39	1.42	1.48	1.64
-3.04	1.64	1.43	1.39	1.43	1.41	1.51
-2.75	1.66	1.49	1.35	1.35	1.37	1.46
-2.46	1.64	1.47	1.26	1.34	1.43	1.50

Y* (mm)	150	300	150	300	150	300
-2.17	1.60	1.45	1.28	1.39	1.40	1.41
-1.88	1.52	1.42	1.27	1.36	1.28	1.34
-1.59	1.54	1.43	1.26	1.31	1.36	1.49
-1.30	1.53	1.45	1.29	1.37	1.36	1.50
-1.01	1.52	1.44	1.36	1.37	1.30	1.38
-0.72	1.53	1.46	1.30	1.42	1.30	1.36
-0.43	1.44	1.47	1.27	1.44	1.32	1.35
-0.14	1.46	1.48	1.26	1.37	1.34	1.44
0.14	1.53	1.50	1.23	1.41	1.40	1.48
0.43	1.63	1.61	1.31	1.45	1.43	1.48
0.72	1.62	1.55	1.29	1.48	1.45	1.55
1.01	1.67	1.57	1.33	1.61	1.51	1.55
1.30	1.71	1.58	1.36	1.65	1.58	1.56
1.59	1.79	1.63	1.38	1.54	1.58	1.60
1.88	1.81	1.61	1.46	1.59	1.61	1.69
2.17	1.79	1.66	1.52	1.64	1.57	1.82
2.46	2.02	1.72	1.62	1.69	1.65	1.80
2.75	2.05	1.77	1.72	1.80	1.81	1.80
3.04	2.00	1.87	1.79	1.83	2.01	1.86
3.33	2.02	1.95	1.88	1.83	2.05	2.00
3.62	2.19	2.00	1.93	2.07	2.06	2.06
3.91	2.35	2.09	2.10	2.22	2.19	2.23
4.20	2.40	2.19	2.29	2.36	2.35	2.30
4.49	2.46	2.32	2.36	2.41	2.52	2.39
4.78	2.67	2.42	2.51	2.48	2.75	2.51
5.07	2.85	2.50	2.77	2.75	2.98	2.67
5.36	3.03	2.68	3.06	2.95	3.07	2.95
5.65	3.45	2.89	3.15	3.07	3.29	3.21
5.94	3.73	3.03	3.34	3.23	3.37	3.54
6.23	4.19	3.26	3.70	3.45	3.68	3.81
6.52	4.50	3.52	3.76	3.82	4.02	4.11
6.81	4.67	3.70	4.08	4.08	4.13	4.41

Y* (mm)	150	300	150	300	150	300
7.10	4.79	3.90	4.22	4.20	4.36	4.70
7.39	4.93	4.00	4.23	4.33	4.52	4.66
7.68	4.63	4.00	4.12	4.24	4.45	4.50
7.97	4.34	3.82	3.97	4.11	4.28	4.36
8.26	3.98	3.55	3.70	3.76	3.91	3.87
8.55	3.37	3.19	3.15	3.33	3.41	3.41
8.84	2.90	2.63	2.69	2.81	2.85	2.88
9.13	2.49	2.12	2.28	2.19	2.49	2.42
9.42	2.09	1.76	1.76	1.78	1.95	2.02
9.70	1.70	1.37	1.30	1.40	1.50	1.47
9.99	1.91	0.44	1.03	0.66	1.59	2.79
10.28	1.40	0.27	0.54	0.52	0.95	3.06
10.57	0.00	0.00	0.00	0.01	0.01	0.32

Table N-161 TKE (m^2/s^2), L2, Grid #1, Equilibrated

L2, Grid #1, Equilibrated						
Y* (mm)	Left		Center		Right	
	150	300	150	300	150	300
-10.92	2.69	4.76	11.66	3.97	9.65	19.22
-10.62	3.10	7.89	15.47	5.91	13.30	15.15
-10.32	16.04	11.44	9.89	5.71	12.20	3.27
-10.02	2.40	1.85	2.07	1.48	1.89	1.47
-9.72	1.46	1.41	1.41	1.24	1.42	1.22
-9.42	1.43	1.29	1.30	1.10	1.38	1.13
-9.12	1.67	1.45	1.52	1.29	1.53	1.38
-8.82	2.00	2.21	1.86	1.44	1.81	1.55
-8.52	2.33	2.18	2.34	1.67	2.26	1.54
-8.22	2.54	1.89	2.50	1.82	2.48	1.66
-7.93	2.69	1.92	2.66	1.69	2.56	1.75
-7.63	2.65	1.97	2.69	1.73	2.64	1.77

Y* (mm)	150	300	150	300	150	300
-7.33	2.60	1.86	2.57	1.75	2.58	1.81
-7.03	2.40	1.78	2.40	1.69	2.55	1.73
-6.73	2.20	1.67	2.21	1.59	2.38	1.61
-6.43	2.03	1.59	2.09	1.50	2.22	1.60
-6.13	1.82	1.56	1.92	1.43	2.06	1.47
-5.83	1.66	1.42	1.71	1.42	1.82	1.43
-5.53	1.48	1.32	1.54	1.30	1.64	1.38
-5.23	1.39	1.26	1.35	1.13	1.55	1.28
-4.93	1.31	1.17	1.25	1.03	1.43	1.11
-4.64	1.20	1.01	1.15	0.94	1.29	1.03
-4.34	1.10	0.98	1.06	0.86	1.18	0.97
-4.04	1.01	0.91	1.00	0.86	1.07	0.93
-3.74	0.95	0.87	0.88	0.78	0.99	0.85
-3.44	0.94	0.86	0.83	0.70	0.96	0.81
-3.14	0.95	0.76	0.79	0.71	0.88	0.77
-2.84	0.88	0.76	0.78	0.69	0.84	0.78
-2.54	0.80	0.72	0.74	0.67	0.82	0.72
-2.24	0.82	0.75	0.71	0.66	0.85	0.69
-1.94	0.77	0.76	0.73	0.66	0.81	0.67
-1.64	0.75	0.74	0.71	0.67	0.75	0.65
-1.35	0.74	0.73	0.67	0.67	0.72	0.69
-1.05	0.74	0.74	0.68	0.67	0.77	0.69
-0.75	0.75	0.75	0.70	0.66	0.78	0.74
-0.45	0.78	0.74	0.68	0.66	0.78	0.72
-0.15	0.83	0.70	0.72	0.68	0.77	0.65
0.15	0.85	0.75	0.76	0.66	0.77	0.70
0.45	0.85	0.76	0.77	0.68	0.79	0.70
0.75	0.85	0.77	0.81	0.69	0.85	0.73
1.05	0.91	0.79	0.84	0.72	0.87	0.79
1.35	0.97	0.81	0.86	0.71	0.89	0.76
1.64	1.02	0.82	0.89	0.76	0.89	0.79
1.94	1.09	0.84	0.93	0.80	0.95	0.83

Y* (mm)	150	300	150	300	150	300
2.24	1.14	0.92	0.98	0.84	1.01	0.86
2.54	1.20	0.96	1.07	0.87	1.09	0.91
2.84	1.26	0.97	1.14	0.91	1.17	0.96
3.14	1.32	1.03	1.16	0.98	1.23	0.98
3.44	1.39	1.12	1.27	1.03	1.32	1.10
3.74	1.50	1.17	1.39	1.08	1.40	1.20
4.04	1.54	1.27	1.44	1.16	1.51	1.33
4.34	1.62	1.38	1.53	1.16	1.58	1.31
4.64	1.76	1.48	1.63	1.31	1.69	1.36
4.93	1.88	1.52	1.75	1.37	1.88	1.55
5.23	2.02	1.59	1.89	1.48	1.99	1.67
5.53	2.19	1.76	2.05	1.62	2.12	1.76
5.83	2.27	1.86	2.18	1.75	2.31	2.04
6.13	2.33	2.00	2.28	1.92	2.49	2.40
6.43	2.44	2.11	2.44	2.01	2.62	2.62
6.73	2.52	2.23	2.49	2.23	2.64	2.64
7.03	2.48	2.46	2.48	2.51	2.63	2.86
7.33	2.40	2.81	2.51	2.97	2.62	3.18
7.63	2.33	2.88	2.32	3.13	2.46	3.46
7.93	2.20	3.17	2.14	2.61	2.35	3.24
8.22	1.89	3.12	1.94	2.60	2.06	3.23
8.52	1.59	2.70	1.64	2.63	1.66	3.11
8.82	1.31	2.67	1.33	2.54	1.36	2.88
9.12	1.13	2.56	1.07	2.43	1.12	2.79
9.42	1.35	2.93	1.08	2.39	1.06	2.85
9.72	2.19	5.03	1.84	3.68	1.48	3.48
10.02	10.25	14.78	7.48	12.03	9.50	14.58
10.32	1.19	2.91	0.82	3.40	10.97	16.18
10.62	0.98	1.39	0.22	0.73	1.36	1.41
10.92	0.00	0.35	0.00	0.00	0.01	0.01

Table N-162 TKE (m^2/s^2), L5, Grid #1, Equilibrated

L5, Grid #1, Equilibrated						
Y* (mm)	Left		Center		Right	
	150	300	150	300	150	300
-11.80	14.55	29.37	2.32	9.34	1.16	2.48
-11.47	6.71	1.96	3.95	8.29	2.02	1.98
-11.15	1.36	1.00	1.13	1.11	1.29	0.92
-10.83	1.34	1.42	1.01	0.72	0.85	0.75
-10.51	0.98	1.13	0.84	0.67	0.77	0.75
-10.18	1.02	1.89	0.67	0.69	0.76	0.73
-9.86	0.81	0.93	0.61	0.69	0.63	0.73
-9.54	0.93	1.15	0.77	0.74	0.77	0.79
-9.21	1.00	1.10	0.83	0.76	0.81	0.88
-8.89	1.14	1.26	0.98	0.91	1.00	1.03
-8.57	1.28	1.25	1.22	0.98	1.12	1.04
-8.24	1.37	1.17	1.26	1.04	1.16	1.09
-7.92	1.50	1.50	1.27	1.21	1.29	1.20
-7.60	1.64	1.51	1.34	1.22	1.39	1.32
-7.27	1.60	1.46	1.36	1.11	1.45	1.31
-6.95	1.59	1.57	1.39	1.25	1.37	1.39
-6.63	1.58	1.57	1.47	1.30	1.38	1.49
-6.30	1.58	1.70	1.45	1.40	1.41	1.54
-5.98	1.51	1.48	1.35	1.31	1.38	1.41
-5.66	1.38	1.45	1.25	1.26	1.26	1.36
-5.33	1.27	1.94	1.13	1.27	1.14	1.34
-5.01	1.15	1.80	1.01	1.25	1.03	1.41
-4.69	1.07	1.61	0.95	1.22	0.94	1.50
-4.36	1.04	1.63	0.90	1.17	0.90	1.58
-4.04	0.97	1.62	0.85	1.13	0.84	1.37
-3.72	0.92	1.59	0.81	1.05	0.77	1.33
-3.39	0.82	1.34	0.72	0.97	0.70	1.29
-3.07	0.72	1.30	0.69	0.95	0.69	1.27
-2.75	0.66	1.36	0.63	0.84	0.66	1.37

Y* (mm)	150	300	150	300	150	300
-2.42	0.70	1.45	0.62	0.79	0.62	1.39
-2.10	0.69	1.66	0.60	1.01	0.64	1.42
-1.78	0.62	1.71	0.54	1.06	0.56	1.35
-1.45	0.63	1.71	0.53	1.00	0.57	1.22
-1.13	0.60	1.63	0.51	1.20	0.56	1.29
-0.81	0.60	1.85	0.52	1.28	0.55	1.52
-0.48	0.57	1.83	0.54	1.18	0.55	1.73
-0.16	0.59	2.18	0.56	1.30	0.56	1.73
0.16	0.63	2.54	0.55	1.38	0.57	2.10
0.48	0.68	2.99	0.57	1.82	0.65	2.29
0.81	0.69	3.08	0.61	1.89	0.66	2.21
1.13	0.74	3.68	0.63	1.77	0.66	2.44
1.45	0.78	4.23	0.68	2.44	0.71	2.59
1.78	0.81	4.07	0.74	2.47	0.78	3.10
2.10	0.89	4.43	0.73	2.85	0.81	3.54
2.42	0.97	4.42	0.79	3.24	0.83	3.90
2.75	1.01	5.20	0.91	3.58	0.92	4.39
3.07	1.06	6.83	0.93	3.95	1.01	4.57
3.39	1.15	6.80	0.99	4.21	1.12	4.90
3.72	1.20	6.51	1.09	4.02	1.19	5.00
4.04	1.33	6.89	1.19	4.10	1.27	5.42
4.36	1.46	6.92	1.27	4.18	1.36	5.08
4.69	1.50	7.54	1.44	4.55	1.45	5.34
5.01	1.62	7.45	1.53	4.46	1.51	5.75
5.33	1.65	7.69	1.55	4.54	1.58	6.51
5.66	1.61	7.85	1.57	4.48	1.66	6.23
5.98	1.66	7.26	1.67	4.09	1.70	6.01
6.30	1.73	6.56	1.69	4.05	1.76	5.04
6.63	1.67	6.15	1.68	4.00	1.73	4.56
6.95	1.61	5.77	1.58	3.68	1.78	4.47
7.27	1.60	4.91	1.55	3.25	1.67	3.87
7.60	1.57	4.41	1.53	2.56	1.50	2.98

Y^*	Y	$\bar{u}$	$\bar{v}$	$\overline{u'u'}$	$\overline{v'v'}$	$\overline{u'v'}$
7.92	1.44	3.52	1.38	2.41	1.40	3.10
8.24	1.34	2.77	1.22	2.08	1.25	2.73
8.57	1.19	2.47	1.09	1.75	1.12	2.17
8.89	1.01	2.20	1.01	1.54	0.97	1.85
9.21	0.87	1.95	0.88	1.48	0.86	1.69
9.54	0.74	1.72	0.72	1.32	0.69	1.54
9.86	0.66	1.61	0.57	1.07	0.62	1.24
10.18	0.64	1.58	0.54	1.27	0.61	1.28
10.51	0.57	1.36	0.47	1.28	0.55	1.22
10.83	0.61	1.31	0.51	1.14	0.58	1.24
11.15	0.38	0.87	0.57	1.00	0.65	1.07
11.47	0.18	0.54	0.15	0.52	0.30	0.75
11.80	0.00	0.00	0.00	0.00	0.74	0.94

Table N-163 Vibrational Temperatures (N_2)

Loc.	**x (in)**	**Temperature (K)**	
		150 W	**300 W**
Plasma - L1	10.56	1233	1540
L2 - L3	12.92	1100	1403
L3 - L4	17.64	1033	1360
L4 - L5	20.4	-	1257
L5 - L6	24.73	-	1140

APPENDIX O

PRELIMINARY DATA

Preliminary measurements were made in the Lexan test section utilizing PIV. Contour plots of $(\bar{u}/U_\infty)$ taken with Grid #0 can be seen in Figure O-1.

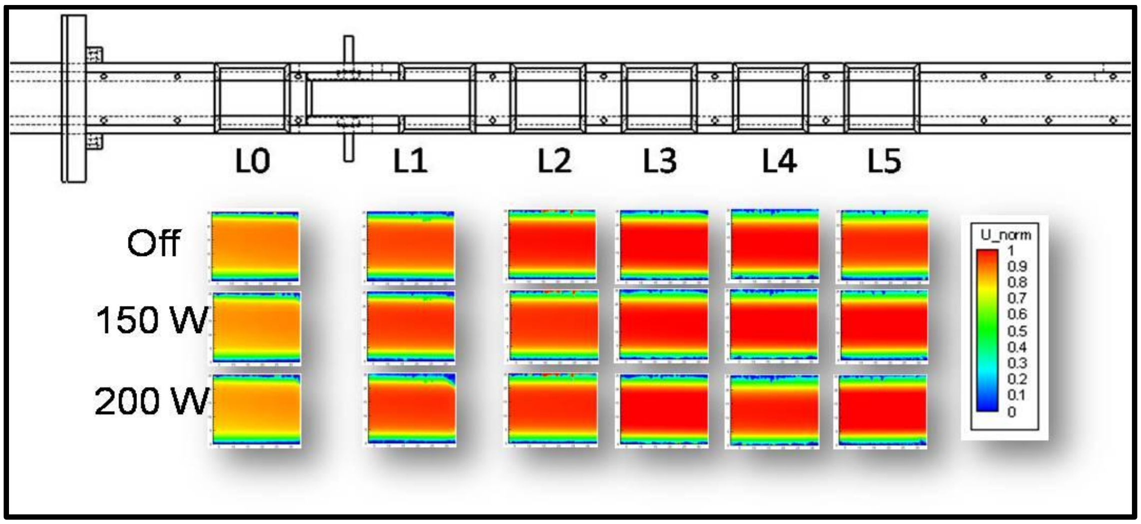

Fig. O-1 $\bar{u}/U_\infty$ **contours (Lexan test section, Grid #0)**

The axial velocities were normalized by the entrance axial free-stream velocity for each case. There was significant flow acceleration from L0 through L5 due to displacement thickness growth along the walls. Figures O-2 and O-3 present profile plots of $\bar{u}$ and $\bar{v}$ at locations L0 and L1, respectively.

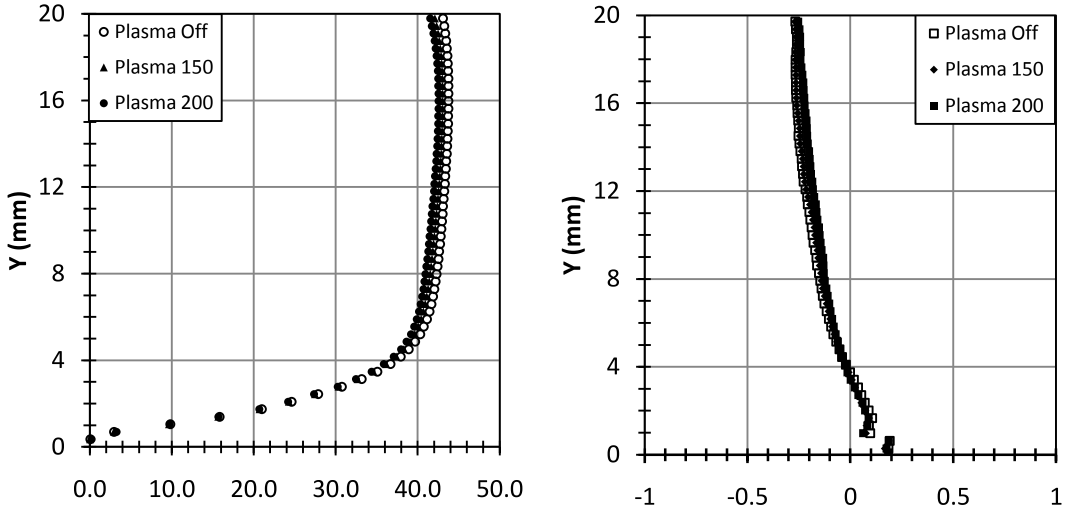

Fig. O-2 Preliminary L0 velocity profiles (left) $\bar{u}$ (right) $\bar{v}$

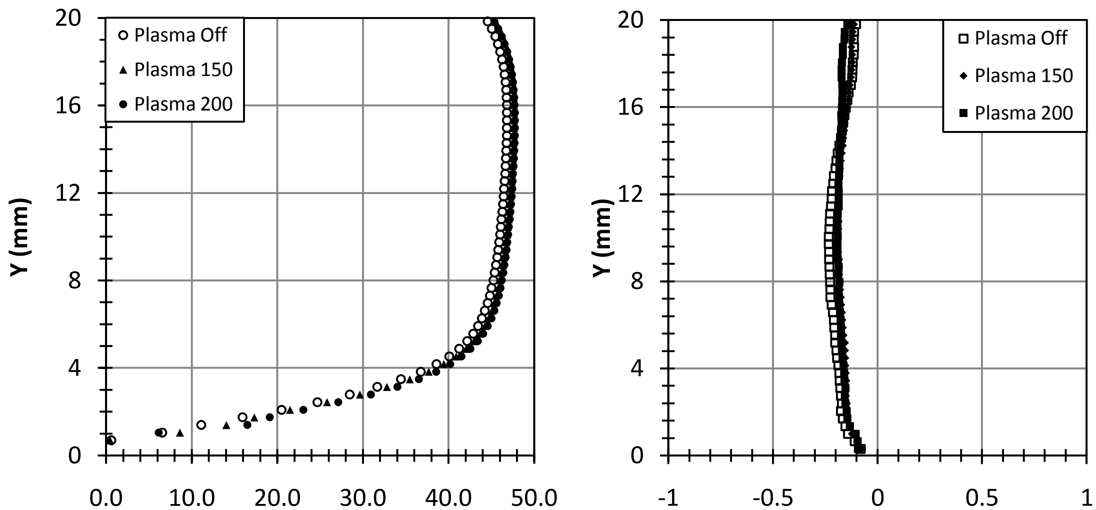

Fig. O-3 Preliminary L1 velocity profiles (left) $\bar{u}$ (right) $\bar{v}$

The axial free-stream velocities at L0 were lower in magnitude for the plasma-150 and plasma-300 cases. This was due to high local translational temperatures at the near-wall plasma-discharge region. The upstream flow effectively sees a blockage downstream, which serves to retard the flow. On the other hand, this trend reversed downstream of the plasma discharge, and the plasma-on axial velocities continued to grow. This effect can be attributed to the temperature increase in the flow due to vibrational energy cascading into translation energy. Higher temperatures lead to thicker boundary layers, and hence, thicker displacement thicknesses which served to accelerate the flow downstream. There was no discernable effect on $\bar{v}$, which was expected. Figures O-4 and O-5 show profile plots of $\bar{u}$ and $\bar{v}$ at locations L0 and L1, respectively.

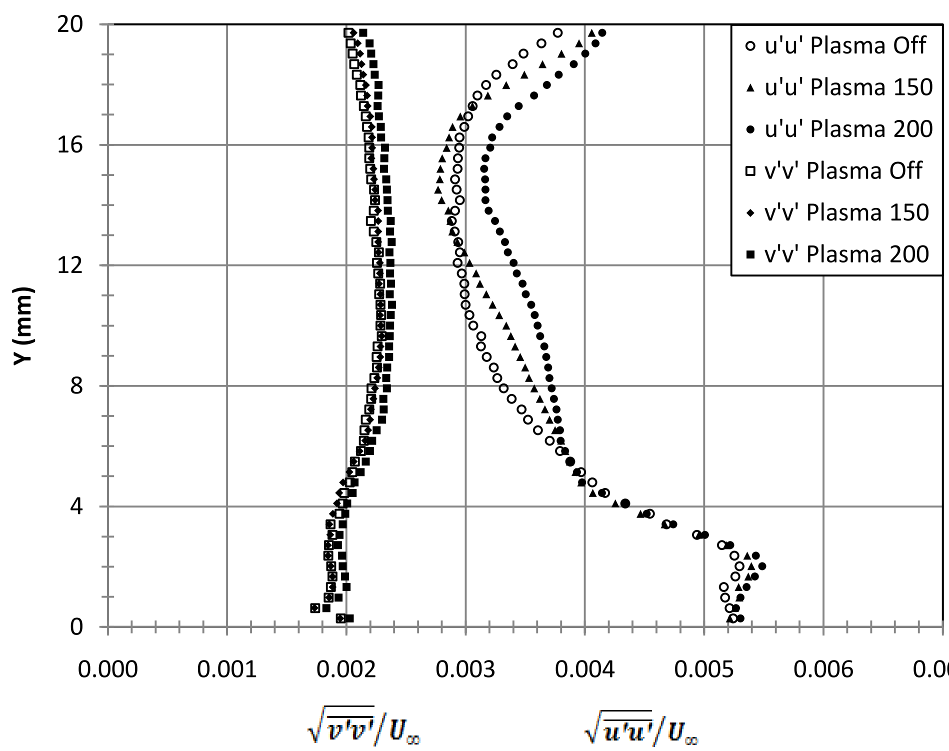

Fig. O-4 Preliminary L0 fluctuating velocities

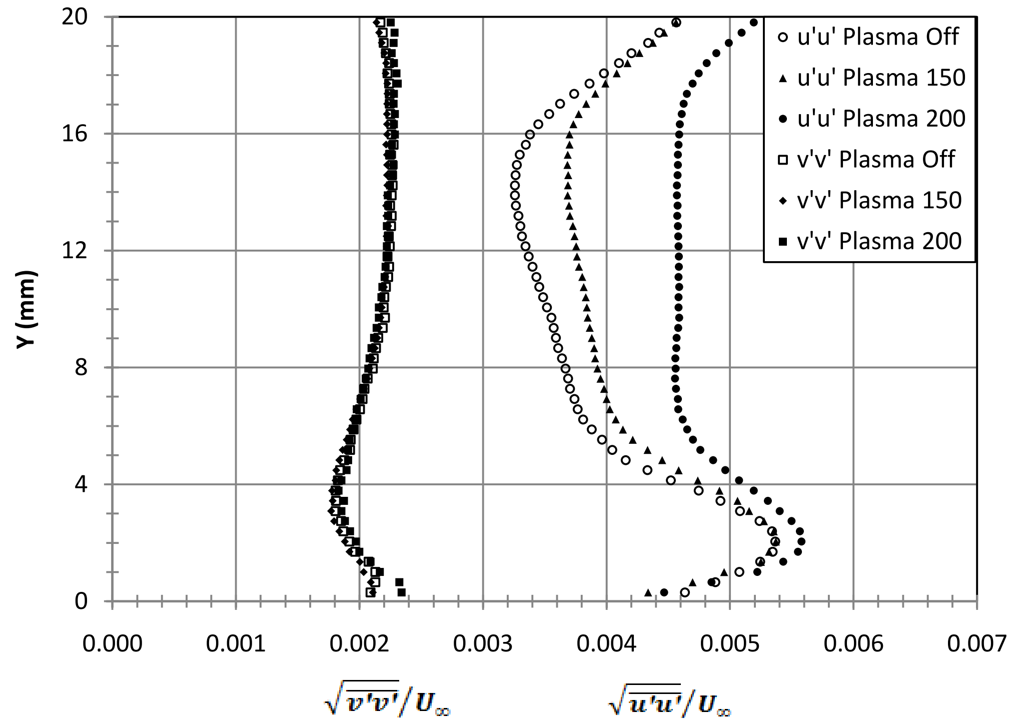

Fig. O-5   Preliminary L1 fluctuating velocities

The magnitudes of the free-stream turbulence intensities were extremely low with Grid #0 (on the order of 0.3 - 0.5%). This could be attributed to a number of mechanisms. Due to the near-vacuum pressures required for plasma ignition, the Reynolds number was very low. The mesh size was also relatively small (0.25”). On the other hand, there were no fine-mesh screens upstream to kill background turbulence, only honeycomb to straighten the flow. The complex interaction between the background turbulence and the grid turbulence could also have been a factor. The wake shedding frequency could have been such that the interaction with the background turbulent eddies resulted in a net reduction in turbulence. In any case, the largest turbulence damping mechanism by far was the secondary contraction after the grid. The grid could have been repositioned between the downwind grid-box flange and the upwind test section flange, but that would have placed the plasma discharge within the wake-mixing region downstream of the grid, which would have been undesirable. Regardless, the coupling between the plasma-induced non-equilibrium and the axial turbulence intensity can clearly be seen.

The L0 and L1 fluctuating velocity profiles were averaged across a 0.2” vertical span at the centerline. These values showed that the percent increase in magnitude was 14% for plasma-off, 22% for plasma-150 and 34% for plasma-200. The observed increases in axial turbulence intensities for the plasma-on cases coincided with vibrational decay downstream of the plasma field. The transport equations listed in Section 1.2 provide an explanation for the observed coupling between the axial turbulence and the plasma field. Unfortunately, the effects of the displacement thickness growth (pressure gradients) served to mask the effects of the vibrational non-equilibrium downstream (locations L2 - L5). The two effects were effectively acting in opposite directions. The vibrational energy cascading into the flow was serving to enhance the turbulence, prolonging and extending the decay; while the mechanical effects were serving to kill the turbulence. Because of this, the walls of the final test section configuration were designed to diverge, negating or at least significantly reducing the mechanical effects of displacement thickness growth.

VITA

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