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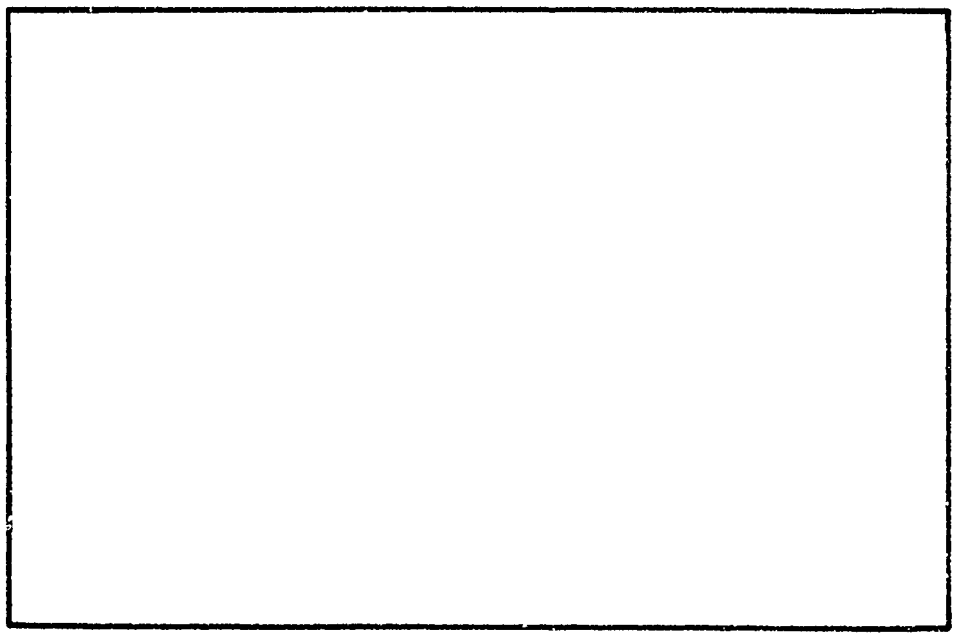

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AN EXPERIMENTAL INVESTIGATION OF THE FLOW PAST AN IDEALIZED WING-BODY JUNCTION: FINAL REPORT

July 1990

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and

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Report VPI-AOE-172

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Velocity measurements, pressure measurements and surface oil-flow visualizations, performed in the flow past an idealized wing-body junction, are presented. The junction consists of a cylindrical wing mounted normal to a flat surface on which an otherwise two-dimensional turbulent boundary is growing. The velocity measurements were made over a detailed grid using hot-wires and a three-component laser Doppler anemometer. At most locations all components of mean velocity and the Reynolds stress tensor were measured. These data clearly reveal, for the first time, the turbulence structure of the horseshoe vortex and the surrounding flow.

The purpose of this report is to present the data in a form suitable for use by other researchers, especially those wishing to compute this flow. For discussions of the results we refer the reader to our other publications on this subject.

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A. INTRODUCTION

An appendage-body juncture flow is formed when a boundary layer on a surface encounters a protuberance or strut projecting from that surface. Upstream of the protuberance the time-averaged vorticity direction of the boundary layer is spanwise across the surface. In order to satisfy the vortex theorems of fluid dynamics, streamwise legs of this upstream vorticity stretch around the protuberance in a horseshoe shape (figure A-1) with each leg having vorticity of the opposite sense. In most practical situations the protuberance has some airfoil section and therefore imposes strong pressure gradients upon the junction flow. These greatly complicate the flow producing a region of strong flow acceleration between the leading edge and maximum thickness, and a region of adverse pressure gradient (and possible separation) towards the trailing edge. This type of three-dimensional turbulent flow occurs in many situations of engineering interest, such as in turbomachinery blade and end-wall flows, aircraft wing and body junction flows, and ship appendage and hull junction flows.

The purpose of this investigation was to study in detail the time-averaged and time-dependent properties of an idealized wing-body junction flow. It is hoped that these data and the understanding gained from them will aid the development of successful calculation methods.

The purpose of this report is to present on graphs, tables and magnetic disc the data collected. For discussion of the results presented below we refer the reader to Devenport and Simpson (1986, 1987, 1988a, 1988b, 1988c, 1990).

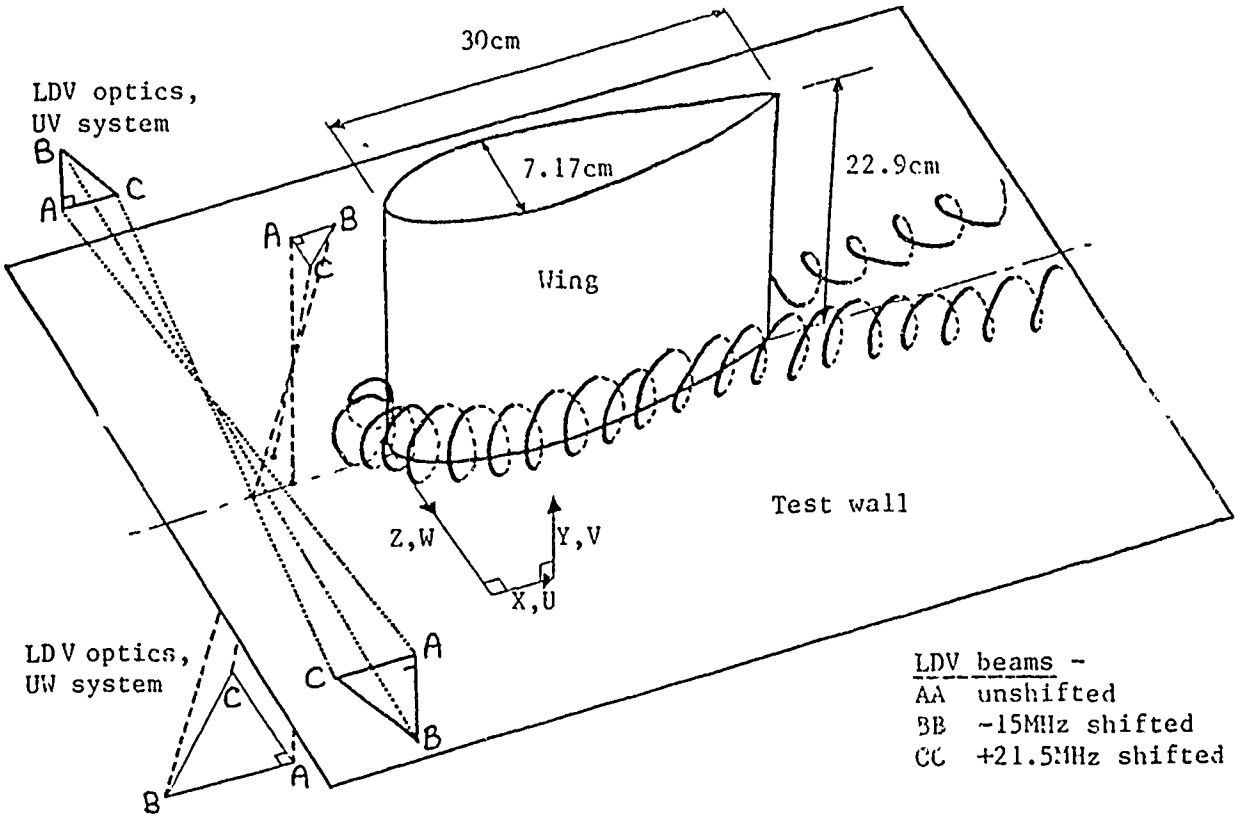

Figure A-1 Perspective view of the wing-body junction showing the 3-component LDV system.

A.1 APPARATUS

The wing

The wing shape is shown in figure A.1-1. It consists of a 3:2 elliptical nose (with its major axis aligned with the chord) joined to a NACA 0020 tail at the maximum thickness. The wing is symmetrical, has a maximum thickness of 7.17cm, a chord of 30.5cm and is 22.9cm high (figure A-1). It was fabricated at VPI on a computer-controlled milling machine. The streamlines produced by the wing in an unbounded potential flow have been computed and are shown in figure A.1-1.

The wind tunnel

The wind tunnel is of an open-circuit type and is powered by a centrifugal blower. Air from the blower is supplied to the test section after first passing through a fixed-setting damper, a plenum, a section of honeycomb to remove the mean swirl of the flow, seven screens to remove much of the turbulence intensity, and a 4:1 contraction to further reduce turbulence levels and accelerate the flow to test speed. The potential core of the flow entering the test section is uniform to within 0.5% in the spanwise direction and 1% in the vertical direction and has a turbulence intensity of 0.2% at 27m/s. This tunnel has been used in much previous research at VPI&SU and at Southern Methodist University.

Figure A.1-2 is a side view of the 8m long and 0.91m wide test section. The upper wall is made from plexiglas reinforced with aluminum channel. The glass side walls are lined internally with removable 6.4-mm thick plexiglas sheets. The lower wall is built from 19-mm thick fin-form plywood, except in a rectangular section surrounding the wing where 6.4-mm thick plexiglas is used.

Flow entering the test section is subjected to a further 1.5:1 contraction produced by the shape of the upper wall. A throat is reached 1.63 m downstream of the entrance where the test section is 254 mm in height. Downstream of the throat the upper wall is almost parallel to the flat lower wall, diverging gradually from it with distance downstream.

In the absence of the wing this arrangement produces a flow of very nearly zero streamwise pressure gradient. The streamwise variation of velocity in the potential core of the test section is plotted for three different throat velocities (U_{ref}) in figure A.1-3. These measurements were made using a single-sensor hot-wire probe with the anemometer and data acquisition system described in section E of this report. They are tabulated in tables A.1-1 through A.1-3.

The test-wall boundary layer is tripped by the blunt leading edge of the plywood floor, the height of the step from the wind-tunnel contraction to the test wall being 0.63cm. Smoke for use with a laser anemometer can be introduced into the boundary layer upstream of this trip. In the absence of the wing a zero-pressure-gradient turbulent boundary layer is produced on the test wall between locations 1 and 2 marked on figure A.1-2. The time-mean and time-dependent properties of this boundary layer over a range of Reynolds numbers were documented during previous research. They are described in detail by Ahn (1986). Briefly, this work shows the statistical and spectral properties of this boundary layer to be very like those of equilibrium boundary layers studied by previous workers. Measurements made in the boundary layer closely satisfy the two-dimensional momentum integral equation. Velocity and pressure spectra show no preferred frequencies.

The wing was mounted in the test section at zero incidence and sweep with its leading edge 1.39m downstream of the throat (figure A.1-2). As recommended by Dechow

(1977) a gap (of 37mm) was left between the upper end of the wing and the upper wall of the wind tunnel. This gap prevented the formation of a second junction vortex here which might have interfered with the flow on the test wall further downstream.

Since measurements were only made with the wing at zero angle of attack it was possible to minimize blockage-induced pressure gradients by removing the plexiglas liner from the side walls of the wind tunnel in the region surrounding the wing. This effectively increased the width of the test section by 12.7 mm from a location 330 mm upstream of the wing leading edge to another 203 mm downstream of its trailing edge. (Note that the abrupt corners at the edges of the remaining liner were faired over using adhesive tape.) These distances were chosen so that the side walls of the wind tunnel would, very approximately, follow a streamline produced by the wing in unbounded flow. The position of this streamline was estimated assuming two-dimensional potential flow.

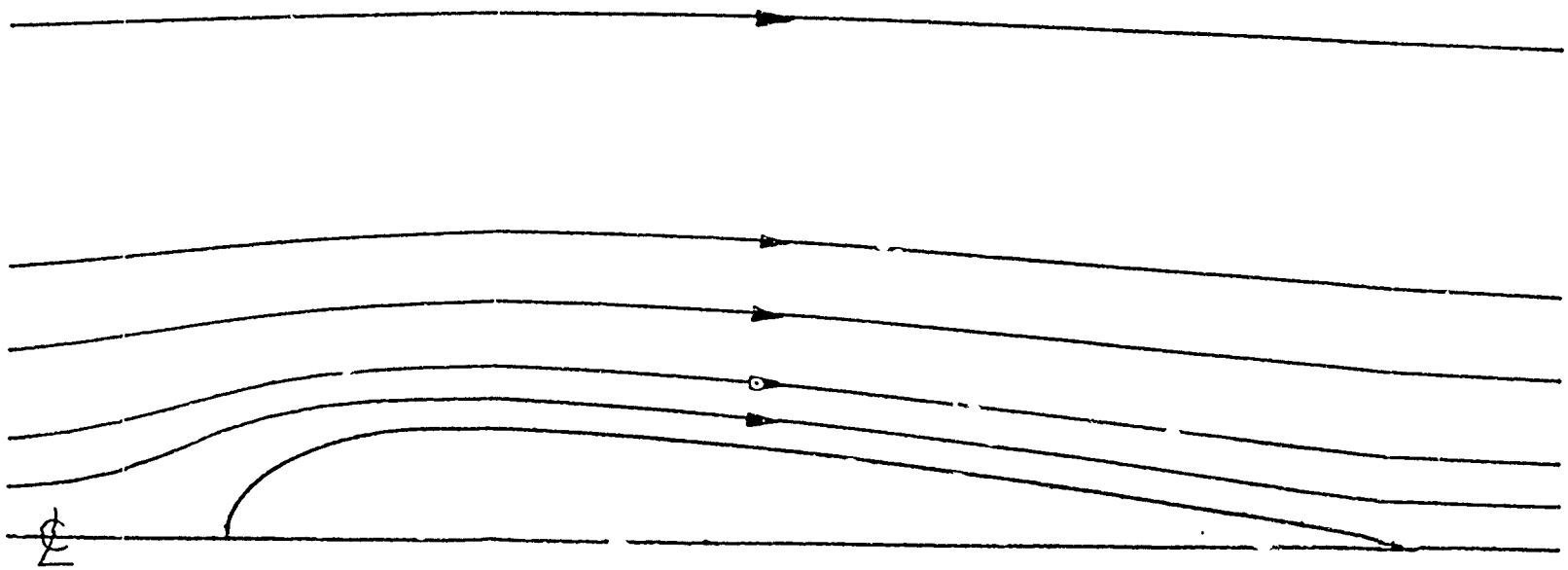

Figure A.1-1 Streamlines produced by a two-dimensional wing with a 1.5 to 1 elliptical nose and a NACA 0020 tail in an unbounded potential flow.

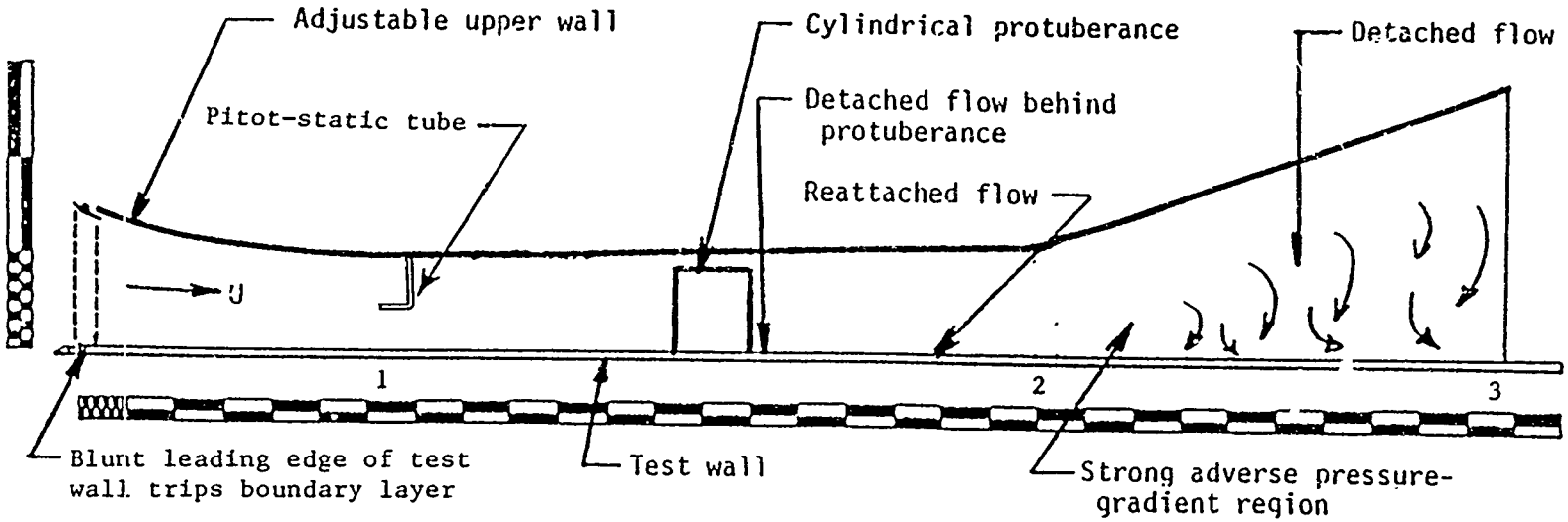

Figure A.1-2 Sideview schematic of the wind-tunnel test section for the wing-body junction experiments. Major divisions on scales: 25.4cm.

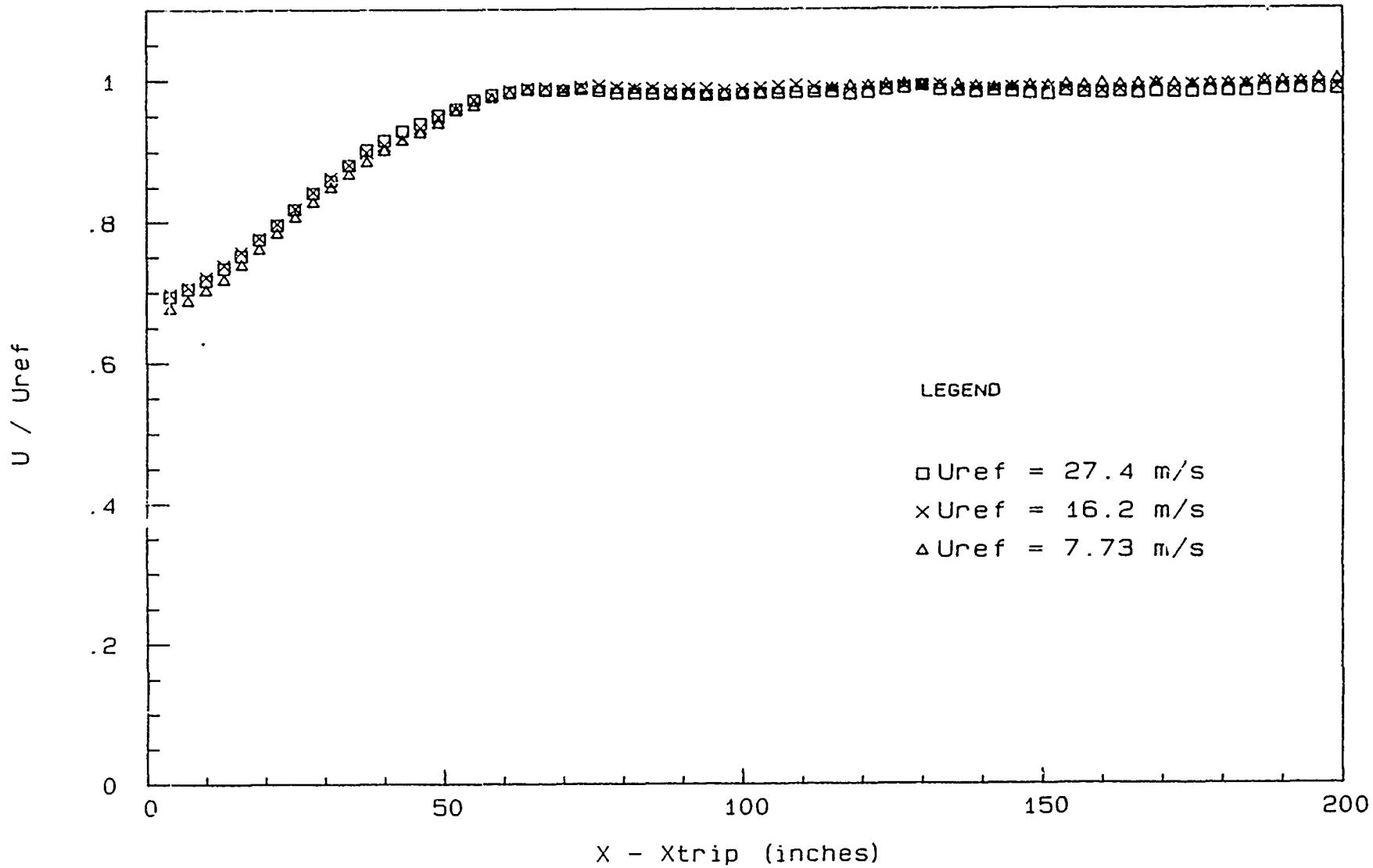

Figure A.1-3 Streamwise variation of velocity in the potential core of the test section in the absence of the wing.

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Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 21.1
density (kilograms per meter cubed) = 1.127356
viscosity (meters squared per second) = 1.612435E-05
Atmospheric pressure (Pascals) = 95200
Velocity of undisturbed free stream (Uref, in m/s) = 27.46239

Note: X1 is measured from the leading edge of the test wall

X1/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
1.4164E+00	1.7705E+00	0.0000E+00	6.9373E-01	1.5382E-05	2.1476E-08
2.4788E+00	1.7705E+00	0.0000E+00	7.0498E-01	1.6667E-05	2.7691E-08
3.5411E+00	1.7705E+00	0.0000E+00	7.1707E-01	1.4948E-05	2.4372E-08
4.6034E+00	1.7705E+00	0.0000E+00	7.3397E-01	1.6470E-05	2.4677E-08
5.6657E+00	1.7705E+00	0.0000E+00	7.5165E-01	1.6226E-05	2.7907E-08
6.7280E+00	1.7705E+00	0.0000E+00	7.7473E-01	1.7415E-05	2.3913E-08
7.7904E+00	1.7705E+00	0.0000E+00	7.9536E-01	1.8115E-05	2.7124E-08
8.8084E+00	1.7705E+00	0.0000E+00	8.1813E-01	2.2780E-05	3.2515E-08
9.9150E+00	1.7705E+00	0.0000E+00	8.4161E-01	1.9599E-05	2.6100E-08
1.0977E+01	1.7705E+00	0.0000E+00	8.5935E-01	2.0528E-05	2.2065E-08
1.2040E+01	1.7705E+00	0.0000E+00	8.8145E-01	2.0830E-05	2.3775E-08
1.3102E+01	1.7705E+00	0.0000E+00	9.0252E-01	2.2484E-05	3.6472E-08
1.4164E+01	1.7705E+00	0.0000E+00	9.1563E-01	2.1674E-05	4.6860E-08
1.5227E+01	1.7705E+00	0.0000E+00	9.2863E-01	2.3712E-05	3.3562E-08
1.6289E+01	1.7705E+00	0.0000E+00	9.3856E-01	2.5269E-05	4.1870E-08
1.7351E+01	1.7705E+00	0.0000E+00	9.4999E-01	2.7992E-05	4.1485E-08
1.8414E+01	1.7705E+00	0.0000E+00	9.5676E-01	2.5469E-05	4.0394E-08
1.9476E+01	1.7705E+00	0.0000E+00	9.7167E-01	2.5835E-05	5.5108E-08
2.0538E+01	1.7705E+00	0.0000E+00	9.7937E-01	2.7732E-05	4.8590E-08
2.1601E+01	1.7705E+00	0.0000E+00	9.8259E-01	2.5815E-05	4.4155E-08
2.2663E+01	1.7705E+00	0.0000E+00	9.8612E-01	2.7036E-05	3.9365E-08
2.3725E+01	1.7705E+00	0.0000E+00	9.8459E-01	2.7329E-05	5.8255E-08
2.4788E+01	1.7705E+00	0.0000E+00	9.8421E-01	2.5597E-05	3.8622E-08
2.5850E+01	1.7705E+00	0.0000E+00	9.8ccOE-01	2.7299E-05	5.5417E-08
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2.7975E+01	1.7705E+00	0.0000E+00	9.8048E-01	2.7205E-05	3.2493E-08
2.9037E+01	1.7705E+00	0.0000E+00	9.8048E-01	2.6403E-05	5.0821E-08
3.0099E+01	1.7705E+00	0.0000E+00	9.7943E-01	2.8170E-05	5.3150E-08
3.1161E+01	1.7705E+00	0.0000E+00	9.7576E-01	2.6511E-05	5.1283E-08
3.2224E+01	1.7705E+00	0.0000E+00	9.7865E-01	2.6924E-05	3.3342E-08
3.3286E+01	1.7705E+00	0.0000E+00	9.7751E-01	2.7428E-05	5.8158E-08
3.4348E+01	1.7705E+00	0.0000E+00	9.7780E-01	2.9524E-05	5.7553E-08
3.5411E+01	1.7705E+00	0.0000E+00	9.7914E-01	2.6543E-05	4.6[illegible]E-08
3.6473E+01	1.7705E+00	0.0000E+00	9.8036E-01	2.9489E-05	5.[illegible]33E-08
3.7535E+01	1.7705E+00	0.0000E+00	9.8086E-01	2.6893E-05	5.1[illegible]E-08
3.8598E+01	1.7705E+00	0.0000E+00	9.8145E-01	2.8296E-05	4.257[illegible]E-08
3.9660E+01	1.7705E+00	0.0000E+00	9.8191E-01	2.7420E-05	4.5[illegible]E-08
4.0722E+01	1.7705E+00	0.0000E+00	9.8191E-01	2.4210E-05	5.[illegible]35E-08
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4.3909E+01	1.7705E+00	0.0000E+00	9.8498E-01	2.7082E-05	4.[illegible]30E-08
4.4972E+01	1.7705E+00	0.0000E+00	9.8775E-01	2.8841E-05	4.5595E-08
4.6034E+01	1.7705E+00	0.0000E+00	9.9158E-01	2.7965E-05	4.[illegible]19E-08
4.7096E+01	1.7705E+00	0.0000E+00	9.8459E-01	2.6175E-05	3.9567E-08
4.8159E+01	1.7705E+00	0.0000E+00	9.8354E-01	2.6629E-05	4.9605E-08
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5.5595E+01	1.7705E+00	0.0000E+00	9.8038E-01	2.[illegible]17E-05	4.8516E-08
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5.7720E+01	1.7705E+00	0.0000E+00	9.8134E-01	3.0432E-05	5.0556E-08
5.8782E-01	1.7705E+00	0.0000E+00	9.7952E-01	2.[illegible]38E-05	4.5893E-08
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6.1969E+01	1.7705E+00	0.0000E+00	9.8057E-01	2.6231E-05	4.4965E-08
6.3031E+01	1.7705E+00	0.0000E+00	9.8278E-01	2.7052E-05	4.7624E-08
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6.7280E+01	1.7705E+00	0.0000E+00	9.8593E-01	2.8830E-05	4.1643E-08
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6.9405E+01	1.7705E+00	0.0000E+00	9.8549E-01	2.7547E-05	3.4417E-08
7.0467E+01	1.7705E+00	0.0000E+00	9.8421E-01	2.7579E-05	4.0863E-08

Table A.1-1 Variation of velocity in the potential core of the test section in the absence of the wing, Uref = 27.5m/s.

File E451145 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 21.1
density (kilograms per meter cubed) = 1.125284
viscosity (meters squared per second) = 1.615404E-05
Atmospheric pressure (Pascals) = 95025
Velocity of undisturbed free stream (Uref, in m/s) = 16.2645

Note: X1 is measured from the leading edge of the test wall

X1/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
1.4164E+00	1.7705E+00	0.0000E+00	6.9747E-01	4.7120E-05	5.5290E-08
2.4798E+00	1.7705E+00	0.0000E+00	7.0694E-01	5.1198E-05	7.9259E-08
3.5411E+00	1.7705E+00	0.0000E+00	7.2132E-01	5.0585E-05	6.3017E-08
4.6034E+00	1.7705E+00	0.0000E+00	7.3815E-01	5.5073E-05	9.8420E-08
5.6657E+00	1.7705E+00	0.0000E+00	7.5669E-01	5.5147E-05	5.3320E-08
6.7280E+00	1.7705E+00	0.0000E+00	7.7681E-01	5.4522E-05	9.0450E-08
7.7904E+00	1.7705E+00	0.0000E+00	7.9664E-01	5.9027E-05	9.3629E-08
8.8527E+00	1.7705E+00	0.0000E+00	8.1888E-01	5.7810E-05	5.2880E-08
9.9150E+00	1.7705E+00	0.0000E+00	8.4292E-01	6.2646E-05	9.1426E-08
1.0977E+01	1.7705E+00	0.0000E+00	8.6287E-01	6.7545E-05	1.1486E-07
1.2040E+01	1.7705E+00	0.0000E+00	8.8103E-01	6.6606E-05	6.8956E-08
1.3102E+01	1.7705E+00	0.0000E+00	8.9883E-01	6.7313E-05	4.5480E-08
1.4164E+01	1.7705E+00	0.0000E+00	9.0862E-01	7.2856E-05	6.7721E-08
1.5227E+01	1.7705E+00	0.0000E+00	9.1814E-01	7.4245E-05	1.0034E-07
1.6289E+01	1.7705E+00	0.0000E+00	9.3293E-01	7.4545E-05	1.6876E-07
1.7351E+01	1.7705E+00	0.0000E+00	9.4752E-01	7.5320E-05	1.2805E-07
1.8414E+01	1.7705E+00	0.0000E+00	9.5848E-01	7.5181E-05	1.4756E-07
1.9476E+01	1.7705E+00	0.0000E+00	9.7173E-01	8.5490E-05	1.7115E-07
2.0538E+01	1.7705E+00	0.0000E+00	9.7657E-01	8.7134E-05	1.5729E-07
2.1601E+01	1.7705E+00	0.0000E+00	9.8479E-01	9.7079E-05	1.3083E-07
2.2663E+01	1.7705E+00	0.0000E+00	9.8835E-01	9.0825E-05	9.5663E-08
2.3725E+01	1.7705E+00	0.0000E+00	9.8827E-01	8.9299E-05	7.8423E-08
2.4788E+01	1.7705E+00	0.0000E+00	9.9490E-01	8.6411E-05	1.1465E-07
2.5850E+01	1.7705E+00	0.0000E+00	9.8985E-01	8.4122E-05	1.1374E-07
2.6912E+01	1.7705E+00	0.0000E+00	9.9149E-01	8.6672E-05	1.3739E-07
2.7975E+01	1.7705E+00	0.0000E+00	9.8983E-01	8.1452E-05	1.0246E-07
2.9037E+01	1.7705E+00	0.0000E+00	9.8721E-01	8.3060E-05	9.5646E-08
3.0099E+01	1.7705E+00	0.0000E+00	9.8766E-01	8.2889E-05	1.1732E-07
3.1161E+01	1.7705E+00	0.0000E+00	9.8426E-01	7.8920E-05	1.3599E-07
3.2224E+01	1.7705E+00	0.0000E+00	9.8664E-01	8.2494E-05	7.2347E-08
3.3286E+01	1.7705E+00	0.0000E+00	9.8731E-01	8.4145E-05	1.3865E-07
3.4348E+01	1.7705E+00	0.0000E+00	9.8496E-01	8.2036E-05	1.1079E-07
3.5411E+01	1.7705E+00	0.0000E+00	9.8638E-01	7.7033E-05	1.0521E-07
3.6473E+01	1.7705E+00	0.0000E+00	9.8836E-01	7.9337E-05	1.3196E-07
3.7535E+01	1.7705E+00	0.0000E+00	9.9059E-01	8.2734E-05	1.3274E-07
3.8598E+01	1.7705E+00	0.0000E+00	9.9195E-01	8.4507E-05	7.7646E-08
3.9660E+01	1.7705E+00	0.0000E+00	9.8922E-01	9.2329E-05	1.5144E-07
4.0722E+01	1.7705E+00	0.0000E+00	9.8677E-01	7.6196E-05	1.2743E-07
4.1785E+01	1.7705E+00	0.0000E+00	9.8489E-01	7.4970E-05	1.4872E-07
4.2847E+01	1.7705E+00	0.0000E+00	9.8839E-01	8.6953E-05	1.2023E-07
4.3909E+01	1.7705E+00	0.0000E+00	9.8867E-01	7.7137E-05	1.4261E-07
4.4972E+01	1.7705E+00	0.0000E+00	9.9079E-01	8.1497E-05	1.2419E-07
4.6034E+01	1.7705E+00	0.0000E+00	9.9174E-01	7.7365E-05	1.5159E-07
4.7096E+01	1.7705E+00	0.0000E+00	9.9212E-01	8.0116E-05	9.8813E-08
4.8159E+01	1.7705E+00	0.0000E+00	9.8633E-01	8.0776E-05	1.3689E-07
4.9221E+01	1.7705E+00	0.0000E+00	9.8701E-01	8.3349E-05	1.2872E-07
5.0283E+01	1.7705E+00	0.0000E+00	9.8621E-01	7.9275E-05	1.1666E-07
5.1346E+01	1.7705E+00	0.0000E+00	9.8736E-01	8.0718E-05	1.4160E-07
5.2408E+01	1.7705E+00	0.0000E+00	9.8741E-01	8.0287E-05	7.5774E-08
5.3470E+01	1.7705E+00	0.0000E+00	9.8638E-01	7.9530E-05	1.0221E-07
5.4533E+01	1.7705E+00	0.0000E+00	9.8547E-01	8.1440E-05	1.5609E-07
5.5595E+01	1.7705E+00	0.0000E+00	9.8295E-01	7.9315E-05	1.4342E-07
5.6657E+01	1.7705E+00	0.0000E+00	9.8215E-01	8.1013E-05	1.2545E-07
5.7720E+01	1.7705E+00	0.0000E+00	9.8417E-01	7.8870E-05	1.3416E-07
5.8782E+01	1.7705E+00	0.0000E+00	9.8620E-01	8.0221E-05	1.7585E-07
5.9844E+01	1.7705E+00	0.0000E+00	9.8220E-01	8.1867E-05	1.4210E-07
6.0907E+01	1.7705E+00	0.0000E+00	9.8458E-01	8.1651E-05	1.5727E-07
6.1969E+01	1.7705E+00	0.0000E+00	9.9110E-01	8.1281E-05	1.3852E-07
6.3031E+01	1.7705E+00	0.0000E+00	9.9004E-01	8.2613E-05	6.9835E-08
6.4093E+01	1.7705E+00	0.0000E+00	9.9068E-01	9.4273E-05	2.0193E-07
6.5156E+01	1.7705E+00	0.0000E+00	9.9184E-01	7.9923E-05	1.2644E-07
6.6218E+01	1.7705E+00	0.0000E+00	9.9447E-01	8.4596E-05	1.3800E-07
6.7280E+01	1.7705E+00	0.0000E+00	9.9218E-01	8.1172E-05	7.4719E-08
6.8343E+01	1.7705E+00	0.0000E+00	9.9289E-01	7.9361E-05	2.0563E-07
6.9405E+01	1.7705E+00	0.0000E+00	9.9222E-01	8.2527E-05	1.5705E-07
7.0467E+01	1.7705E+00	0.0000E+00	9.8711E-01	8.2424E-05	8.4537E-08

Table A.1-2 Variation of velocity in the potential core of the test section in the absence of the wing, Uref = 16.3m/s.

File EA52125 .FES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 22.5
density (kilograms per meter cubed) = 1.114955
viscosity (meters squared per second) = 1.635464E-05
Atmospheric pressure (Pascals) = 94595
Velocity of undisturbed free stream (Uref, in m/s) = 7.714318

Note: X1 is measured from the leading edge of the test wall

X1/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
1.4164E+00	1.7705E+00	0.0000E+00	6.7547E-01	8.4442E-05	2.6010E-07
2.4789E+00	1.7705E+00	0.0000E+00	6.8650E-01	8.7559E-05	1.7323E-07
3.5411E+00	1.7705E+00	0.0000E+00	7.0167E-01	7.7896E-05	1.1611E-07
4.6034E+00	1.7705E+00	0.0000E+00	7.1676E-01	7.9107E-05	2.6281E-07
5.6657E+00	1.7705E+00	0.0000E+00	7.3774E-01	1.0062E-04	3.0219E-07
6.7280E+00	1.7705E+00	0.0000E+00	7.5945E-01	8.9767E-05	2.4236E-07
7.7904E+00	1.7705E+00	0.0000E+00	7.8263E-01	9.7519E-05	1.8635E-07
8.8527E+00	1.7705E+00	0.0000E+00	8.0513E-01	1.0312E-04	2.8292E-07
9.9150E+00	1.7705E+00	0.0000E+00	8.2696E-01	1.1819E-04	3.1719E-07
1.0977E+01	1.7705E+00	0.0000E+00	8.4832E-01	1.0025E-04	3.1741E-07
1.2040E+01	1.7705E+00	0.0000E+00	8.6710E-01	1.1346E-04	3.6989E-07
1.3102E+01	1.7705E+00	0.0000E+00	8.8457E-01	1.0558E-04	2.3436E-07
1.4164E+01	1.7705E+00	0.0000E+00	9.0016E-01	1.1217E-04	2.8199E-07
1.5227E+01	1.7705E+00	0.0000E+00	9.1420E-01	1.1498E-04	3.7426E-07
1.6289E+01	1.7705E+00	0.0000E+00	9.2474E-01	1.1211E-04	3.7177E-07
1.7351E+01	1.7705E+00	0.0000E+00	9.3796E-01	1.1770E-04	4.0672E-07
1.8414E+01	1.7705E+00	0.0000E+00	9.5509E-01	1.1659E-04	3.5910E-07
1.9476E+01	1.7705E+00	0.0000E+00	9.62[illegible]4E-01	1.2144E-04	2.5606E-07
2.0539E+01	1.7705E+00	0.0000E+00	9.7237E-01	1.3422E-04	2.9278E-07
2.1601E+01	1.7705E+00	0.0000E+00	9.7759E-01	1.2175E-04	3.1655E-07
2.2663E+01	1.7705E+00	0.0000E+00	9.8451E-01	1.2159E-04	3.9415E-07
2.3725E+01	1.7705E+00	0.0000E+00	9.8[illegible]9E-01	1.2395E-04	2.8232E-07
2.4789E+01	1.7705E+00	0.0000E+00	9.8526E-01	1.1791E-04	[illegible]
2.5851E+01	1.7705E+00	0.0000E+00	9.8619E-01	1.2994E-04	[illegible]
2.6912E+01	1.7705E+00	0.0000E+00	9.8558E-01	1.2499E-04	[illegible]
2.7975E+01	1.7705E+00	0.0000E+00	9.8487E-01	1.[illegible]119E-04	[illegible]
2.9037E+01	1.7705E+00	0.0000E+00	9.8492E-01	1.2207E-04	4.1777E-07
3.0099E+01	1.7705E+00	0.0000E+00	9.8876E-01	1.2065E-04	3.6234E-07
3.1161E+01	1.7705E+00	0.0000E+00	9.7888E-01	1.2824E-04	[illegible]
3.2224E+01	1.7705E+00	0.0000E+00	9.7754E-01	1.2797E-04	3.2699E-07
3.3286E+01	1.7705E+00	0.0000E+00	9.7735E-01	1.1917E-04	2.7244E-07
3.4348E+01	1.7705E+00	0.0000E+00	9.7811E-01	1.1554E-04	2.8820E-07
3.5411E+01	1.7705E+00	0.0000E+00	9.7908E-01	1.1721E-04	[illegible]
3.6473E+01	1.7705E+00	0.0000E+00	9.7941E-01	1.1392E-04	3.1816E-07
3.7535E+01	1.7705E+00	0.0000E+00	9.8360E-01	1.1684E-04	3.4299E-07
3.8598E+01	1.7705E+00	0.0000E+00	9.8557E-01	1.1568E-04	4.3898E-07
3.9660E+01	1.7705E+00	0.0000E+00	9.8344E-01	1.1529E-04	[illegible]
4.0722E+01	1.7705E+00	0.0000E+00	9.8626E-01	1.1872E-04	[illegible]
4.1785E+01	1.7705E+00	0.0000E+00	9.8034E-01	1.1651E-04	[illegible]
4.2847E+01	1.7705E+00	0.0000E+00	9.9071E-01	1.1744E-04	3.6829E-07
4.3909E+01	1.7705E+00	0.0000E+00	9.9172E-01	1.1577E-04	4.5779E-07
4.4972E+01	1.7705E+00	0.0000E+00	9.9217E-01	1.2161E-04	[illegible]
4.6034E+01	1.7705E+00	0.0000E+00	9.9178E-01	1.2247E-04	3.6659E-07
4.7096E+01	1.7705E+00	0.0000E+00	9.8969E-01	1.1760E-04	[illegible]
4.8159E+01	1.7705E+00	0.0000E+00	9.91[illegible]	[illegible]	[illegible]
4.9221E+01	1.7705E+00	0.0000E+00	9.8867E-01	1.2778E-04	[illegible]
5.0283E+01	1.7705E+00	0.0000E+00	[illegible]	1.2147E-04	3.5764E-07
5.1346E+01	1.7705E+00	0.0000E+00	9.8695E-01	1.2176E-04	4.2751E-07
5.2408E+01	1.7705E+00	0.0000E+00	9.8927E-01	1.1916E-04	[illegible]
5.3470E+01	1.7705E+00	0.0000E+00	9.8946E-01	1.2652E-04	[illegible]
5.4533E+01	1.7705E+00	0.0000E+00	9.9046E-01	1.1724E-04	4.5959E-07
5.5595E+01	1.7705E+00	0.0000E+00	9.8924E-01	1.1807E-04	[illegible]
5.6657E+01	1.7705E+00	0.0000E+00	9.9251E-01	1.2412E-04	4.3249E-07
5.7720E+01	1.7705E+00	0.0000E+00	9.9051E-01	1.2207E-04	[illegible]
5.8782E+01	1.7705E+00	0.0000E+00	9.9181E-01	1.2274E-04	4.2775E-07
5.9844E+01	1.7705E+00	0.0000E+00	9.9274E-01	1.2767E-04	[illegible]
6.0907E+01	1.7705E+00	0.0000E+00	9.9151E-01	1.2032E-04	5.4654E-07
6.1969E+01	1.7705E+00	0.0000E+00	9.9002E-01	1.1871E-04	4.1899E-07
6.3031E+01	1.7705E+00	0.0000E+00	9.9257E-01	1.1991E-04	5.2176E-07
6.4093E+01	1.7705E+00	0.0000E+00	9.9201E-01	1.1511E-04	[illegible]
6.5156E+01	1.7705E+00	0.0000E+00	9.9069E-01	1.2912E-04	[illegible]
6.6218E+01	1.7705E+00	0.0000E+00	9.9607E-01	1.2221E-04	4.9913E-07
6.7280E+01	1.7705E+00	0.0000E+00	9.9567E-01	1.1784E-04	[illegible]
6.8343E+01	1.7705E+00	0.0000E+00	9.9174E-01	1.2290E-04	[illegible]
6.9405E+01	1.7705E+00	0.0000E+00	9.9934E-01	1.2511E-04	[illegible]
7.0467E+01	1.7705E+00	0.0000E+00	9.9875E-01	1.2259E-04	3.5732E-07

Table A.1-I Variation of velocity in the potential core of the test section in the absence of the wing, Uref = 7.7m/s.

A.2 COORDINATE SYSTEM, NOMINAL TEST CONDITIONS

Results will be presented using the right-handed coordinate system (X,Y,Z) and (U,V,W) defined in figure A-1. Distances have been non-dimensionalized on the maximum thickness of the wing T (or t) equal to 71.7mm. Velocities have been non-dimensionalized on U_{ref} the approach main-stream velocity measured using a pitot-static tube mounted in the wind tunnel throat (see figure A.1-2). Measurements have been made at three different Reynolds numbers, of nominal values 2500, 4500 and 6700, based on U_{ref} and the momentum thickness of the approach boundary layer 2.15T upstream of the wing leading edge. For Re_θ = 6700 the total boundary layer thickness (δ_{995}) here was 36mm. δ_{995} was estimated to be 40mm at Re_θ = 4500 and 46mm at Re_θ = 2500.

A.3 ORGANIZATION OF RESULTS

The rest of this report is divided into a number of sections. Section B deals with preliminary measurements made in the approach flow far upstream of the wing and in the boundary-layer on the wing surface. The rest of the results are presented in sections C through F, each section dealing with a different measurement technique. Where necessary subsections are used to distinguish measurements made in different regions.

Each section begins with a description of the measurement technique, estimates of uncertainty and any bias error known or suspected to be present. Uncertainties were calculated using the method of Kline and McClintock (1953) for 95% confidence limits. Results are then presented using diagrams and tables (where relevant).

The tabulated data are also available on floppy disc. The 1.4 Mbyte 3.5" disc, written on an IBM PS2 computer, contains the tabulated data exactly as it appears in this report.

This disc is organized into 3 subdirectories, one each for the static-pressure data (subdirectory CP), single-hot-wire data (subdirectory HW) and laser-anemometer data (subdirectory LDV). Each table is stored in a file with the name stated in the top left-hand corner of the table.

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B. PRELIMINARY MEASUREMENTS

B.1 THE BOUNDARY LAYER ON THE WING

The flow over the surface of the wing, outside the immediate influence of the test wall boundary layer, is of special interest for a number of reasons. First, this boundary layer must be tripped to avoid any unsteadiness of non-uniformity that might result from natural transition. Second, the symmetry of this boundary layer is a good indicator of the symmetry of the flow as a whole. Third, two-dimensionality of this boundary layer is an indication that the flow on the test wall is independent of the height of the wing.

The boundary layer on the wing has been investigated without a trip and using three different trips. The first of these trips consisted of a 6.35-mm wide strip of 220 grade sandpaper attached to the wing surface with its downstream end 28.2mm downstream of the leading edge of the wing, as measured in the X direction. The second trip was a similar strip of coarser 120 grade sandpaper. The third consisted of a 1-mm diameter wire mounted 10 mm upstream of the maximum thickness of the wing. This diameter was chosen according to criteria stated by Schlichting (1968) to ensure that the wire would be fully effective at the lowest speeds of interest.

To examine the effects of these trips hot-wire measurements were made in the wake of the wing 1mm downstream of its trailing edge. The flow here was expected to closely resemble the boundary layer at the trailing edge. A TSI single-sensor hot wire probe (type 1210-T1.5) was used, operated using equipment described in section E of this report. With the sensor parallel to the trailing edge of the wing spanwise traverses were made at several heights from the test wall for each case. All these data were taken at the highest test Reynolds number, Re_θ = 6700, corresponding to a nominal undisturbed free-stream velocity

of 27 m/s. The data are tabulated in tables B.1-1 through B.1-20.

Figures B.1-1 and B.1-2 compare profiles of mean velocity U/U_{ref} and streamwise turbulence normal stress u^2/U_{ref}^2 measured at the mid height of the wing for the four different cases. Differences between the cases in the velocity and stress measured immediately downstream of the trailing edge are a result of the 0.5mm uncertainty in the positioning of the hot-wire probe in the streamwise (X) direction. Uncertainties in absolute positioning in the Y and Z directions are also about 0.5mm. However, uncertainty in the relative Z-location of points in the same profile is less than 0.05mm.

The profiles appear to show, as would be expected, that the boundary layer leaving the wing is at its thinnest with no trip. The close similarity between these data and those measured with the 220-grade sandpaper suggests that this trip was ineffective. Both the 120-grade sandpaper and the wire increased the boundary layer thickness at the trailing edge, the latter by almost a factor of two.

Oil-flow visualizations were performed on the surface of the wing to help interpret these results. Those performed without a trip and using the 220-grade sandpaper showed the presence of a separation bubble with separation occurring just upstream of the maximum thickness of the wing. This bubble was 23mm long at the mid-height of the wing but is thought to have been very thin because its presence was not apparent in the pressure distribution on the wing surface. It seems likely that this bubble resulted from the separation of a laminar boundary layer and was the cause of transition in these two cases. Oil-flow visualizations performed with the 120-grade sandpaper showed no regions of separation. Those performed with the wire showed the presence of a separation bubble immediately downstream of this trip, 9mm long at the mid height of the wing.

Figures B.1-3 through B.1-18 compare, for each case, profiles measured on either side of the wing. Figures B.1-19 through B.1-26 compare profiles measured at different heights. These data show that in all the cases the wing wake was closely symmetrical. They also show, in all cases, very little change in the flow properties with height around the mid-height of the wing, between Y/T = 1.06 and 2.12. This suggests that the time-averaged structure of the boundary layer on the wing surface was closely two-dimensional here.

All the following measurements (except some laser anemometer measurements) were taken with the wire trip. Laser anemometer measurements in planes 5, 8 and 10 (spanwise planes at and downstream of the wing maximum thickness) were taken with the 120-grade sandpaper trip.

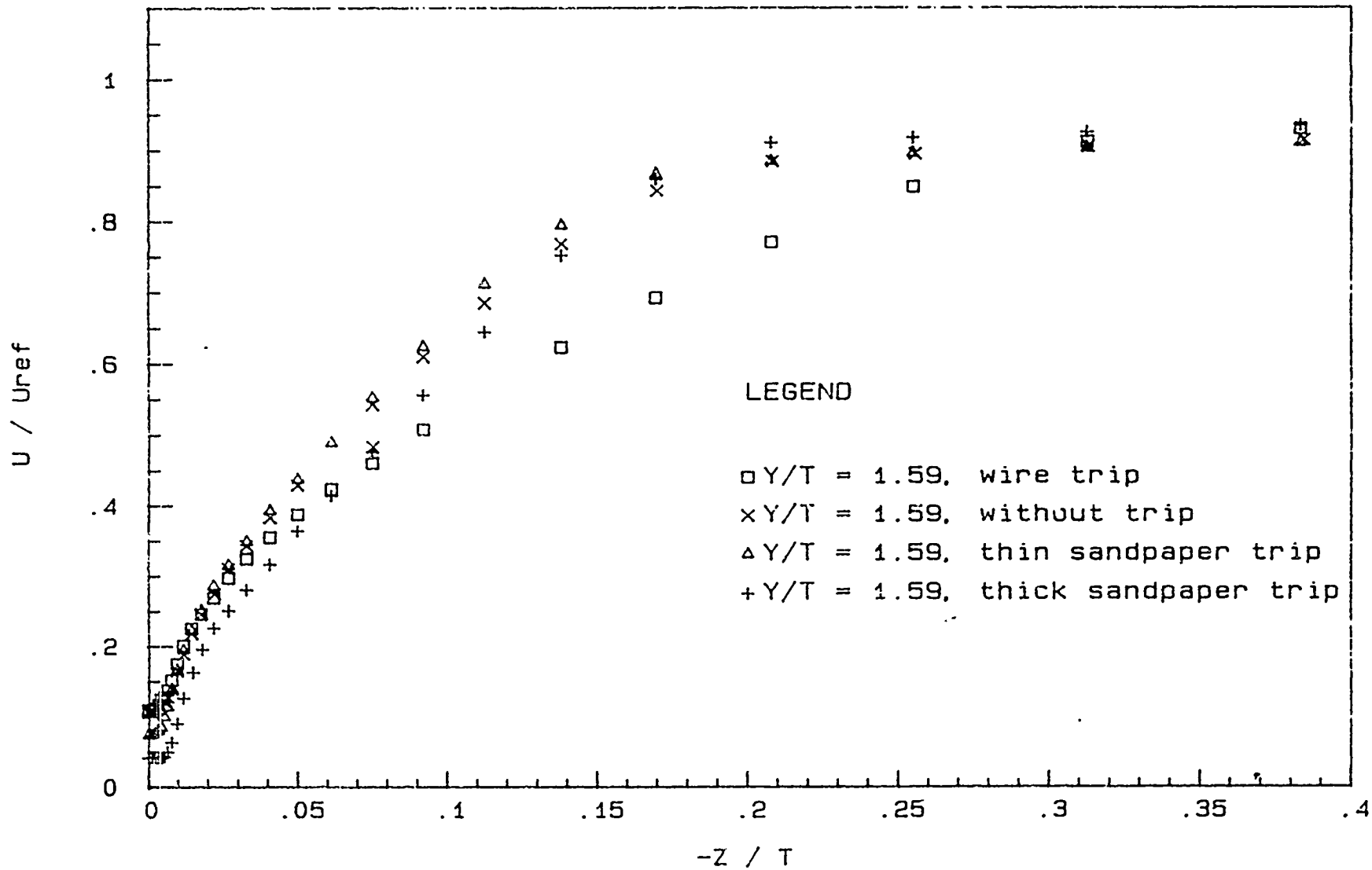


Figure B.1-1 Comparison of mean-velocity profiles measured 1mm downstream of the trailing edge of the wing with different boundary-layer trips, Re_θ = 6700.

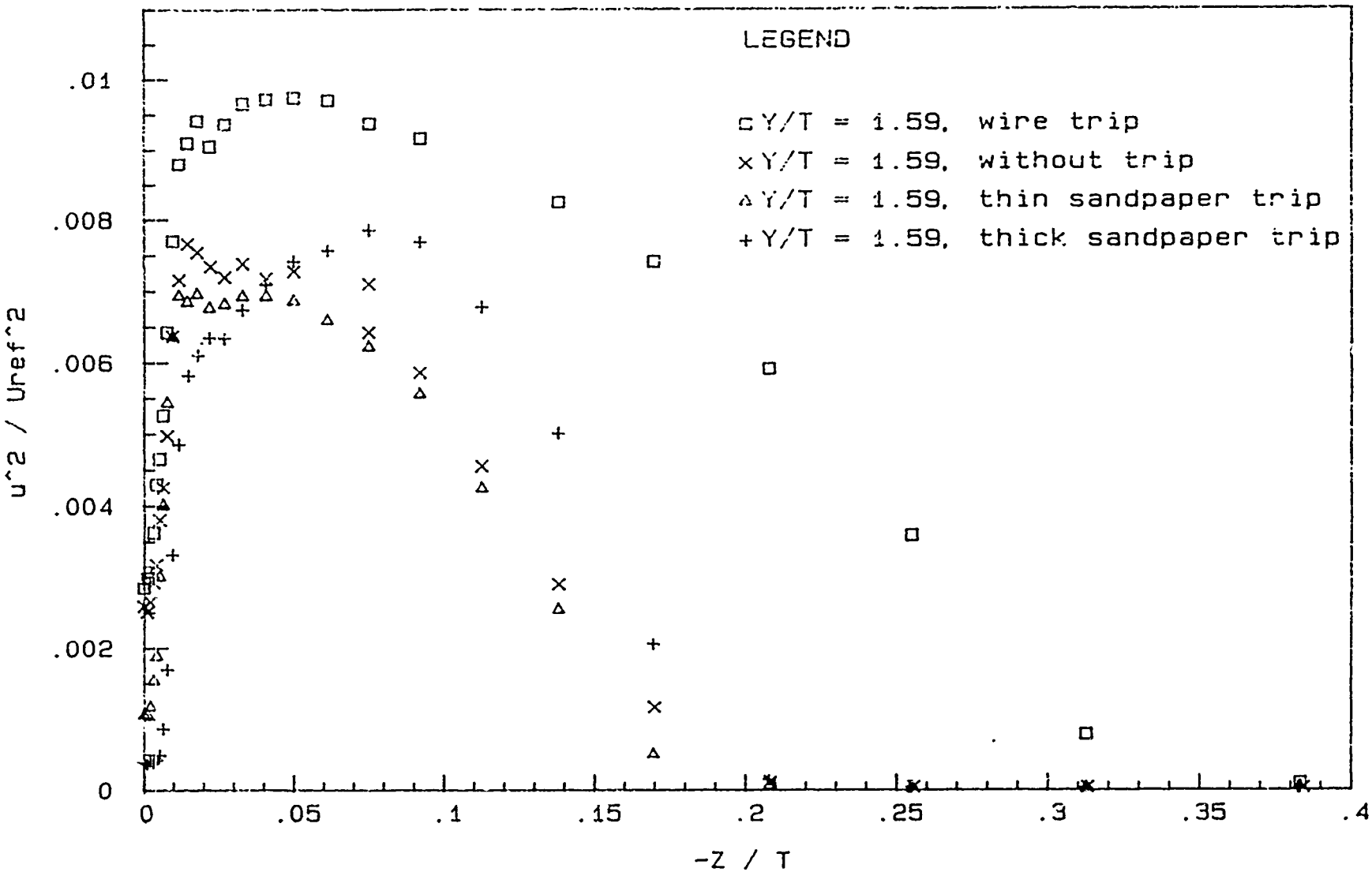


Figure B.1-2 Comparison of profiles of $\overline{u^2}/U_{ref}^2$ measured 1mm downstream of the trailing edge of the wing with different boundary layer trips, Re_θ = 6700.

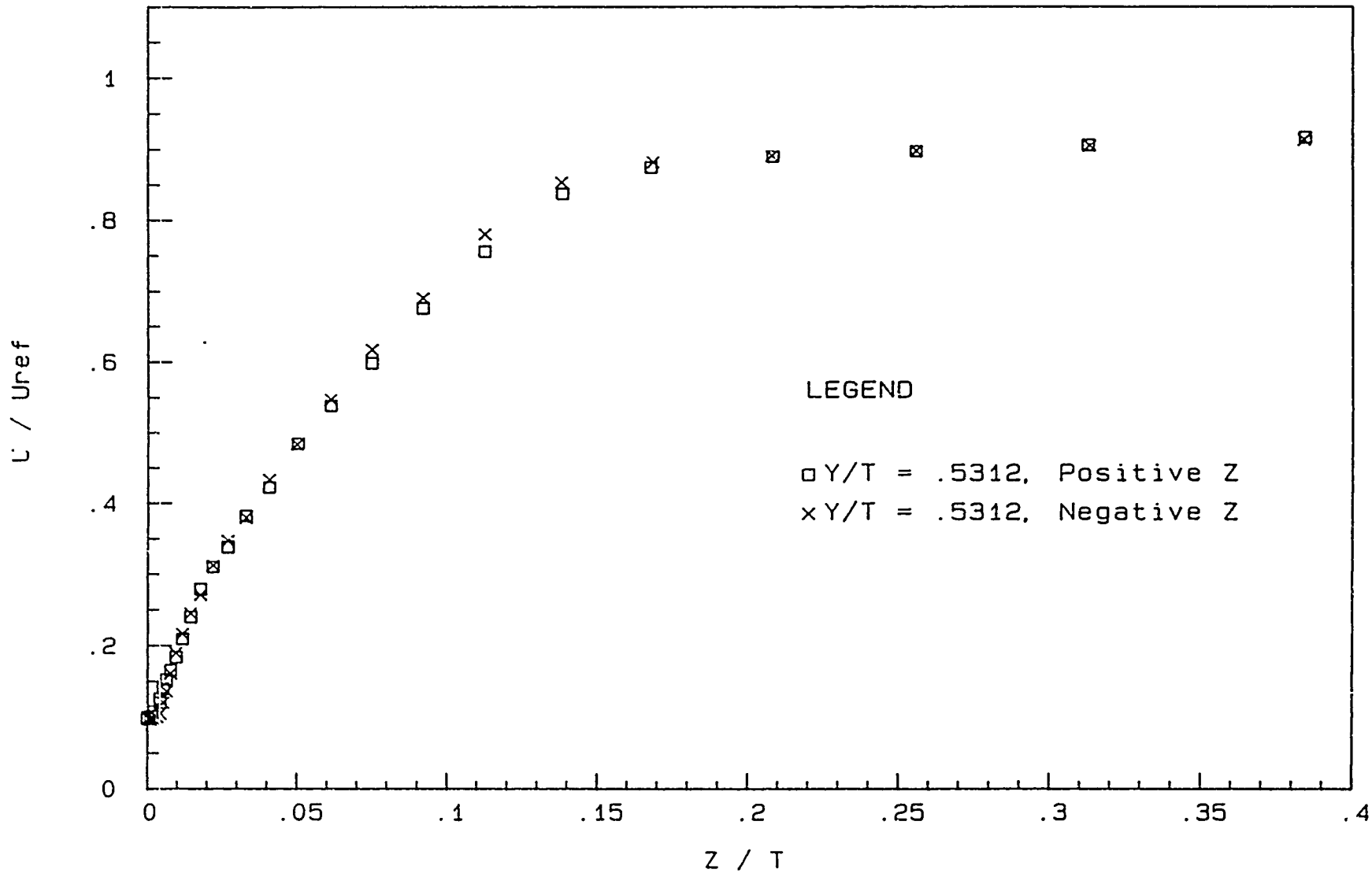


Figure B.1-3 Mean velocity profiles measured on either side of the wing 1mm downstream of its trailing edge with no boundary layer trip, Re_θ = 6700.

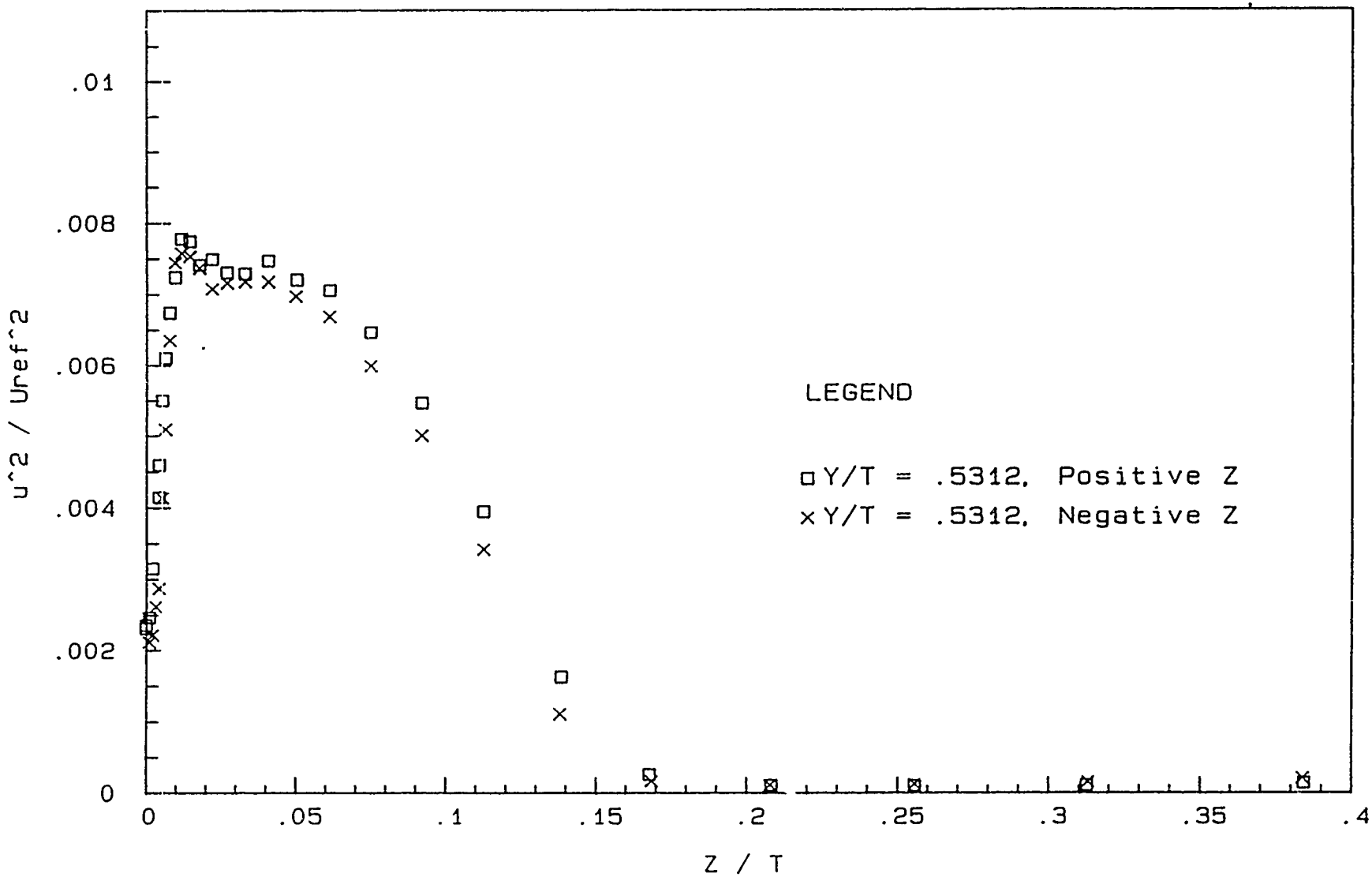


Figure B.1-4 Profiles of $\overline{u^2}/U_{ref}^2$ measured on either side of the wing 1mm downstream of its trailing edge with no boundary layer trip, Re_θ = 6700.

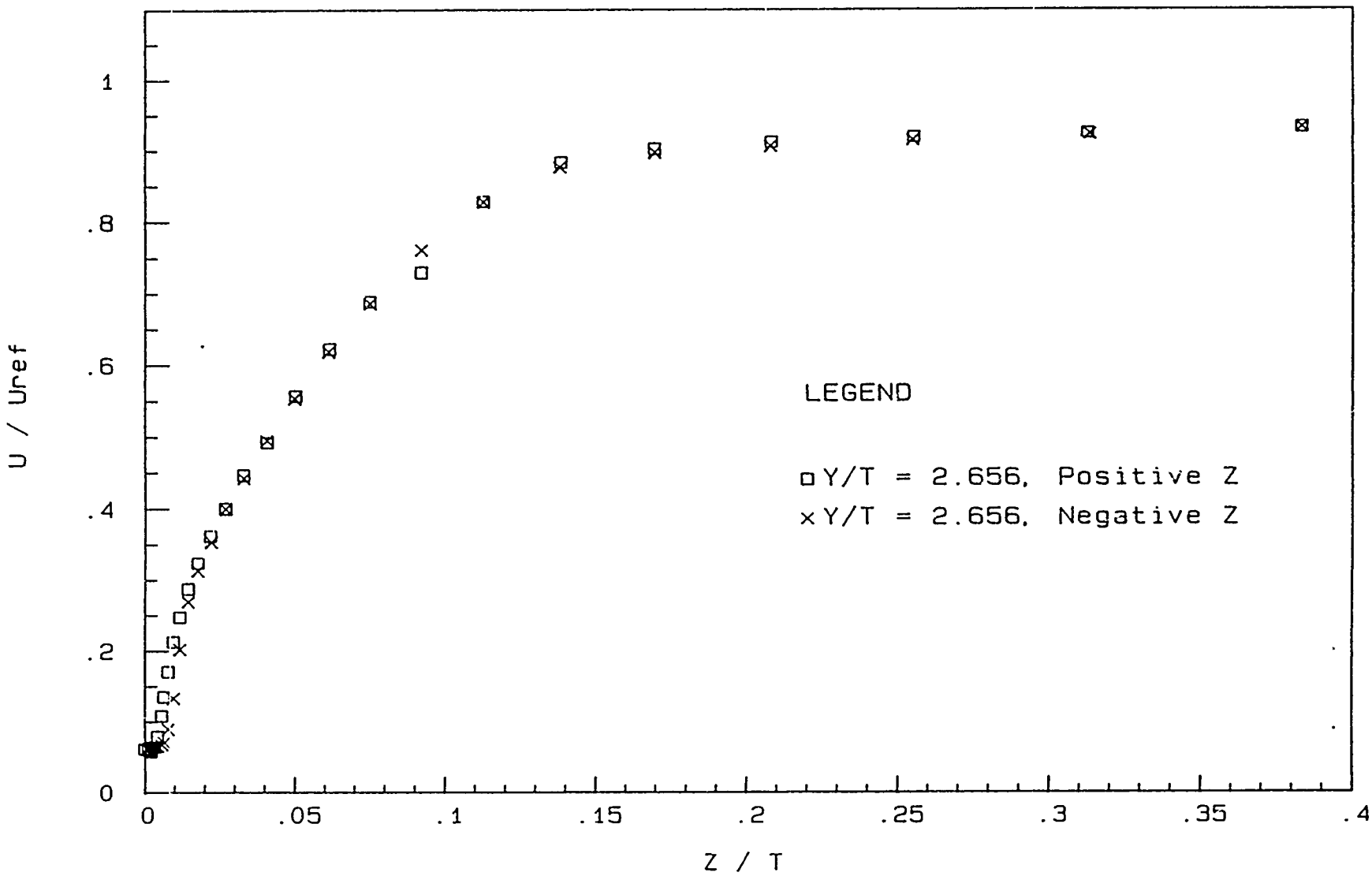


Figure B.1-5 Mean velocity profiles measured on either side of the wing 1mm downstream of its trailing edge with no boundary layer trip, Re_θ = 6700.

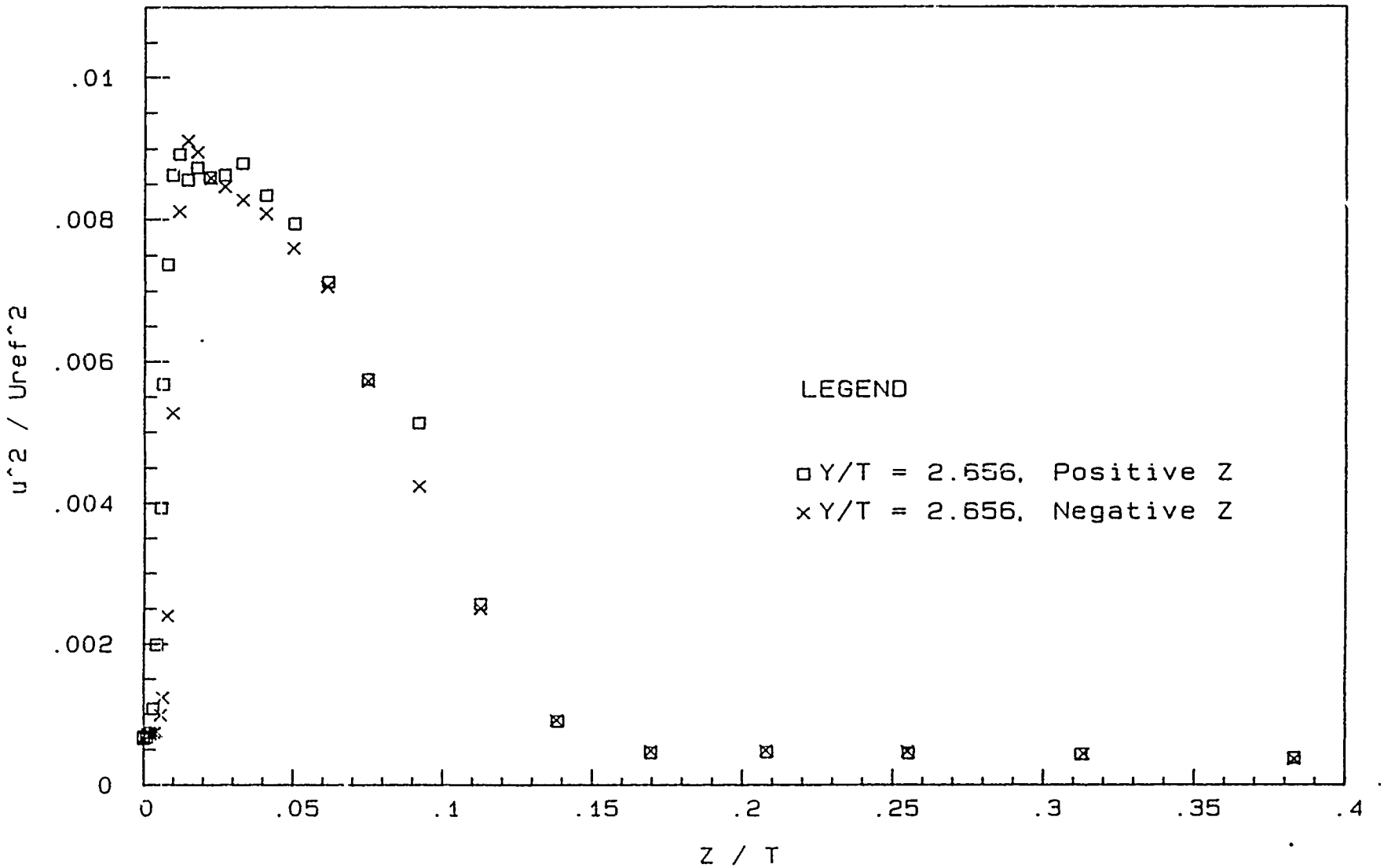


Figure B.1-6 Profiles of $\overline{u^2}/U^2_{ref}$ measured on either side of the wing 1mm downstream of its trailing edge with no boundary layer trip, Re_θ = 6700.

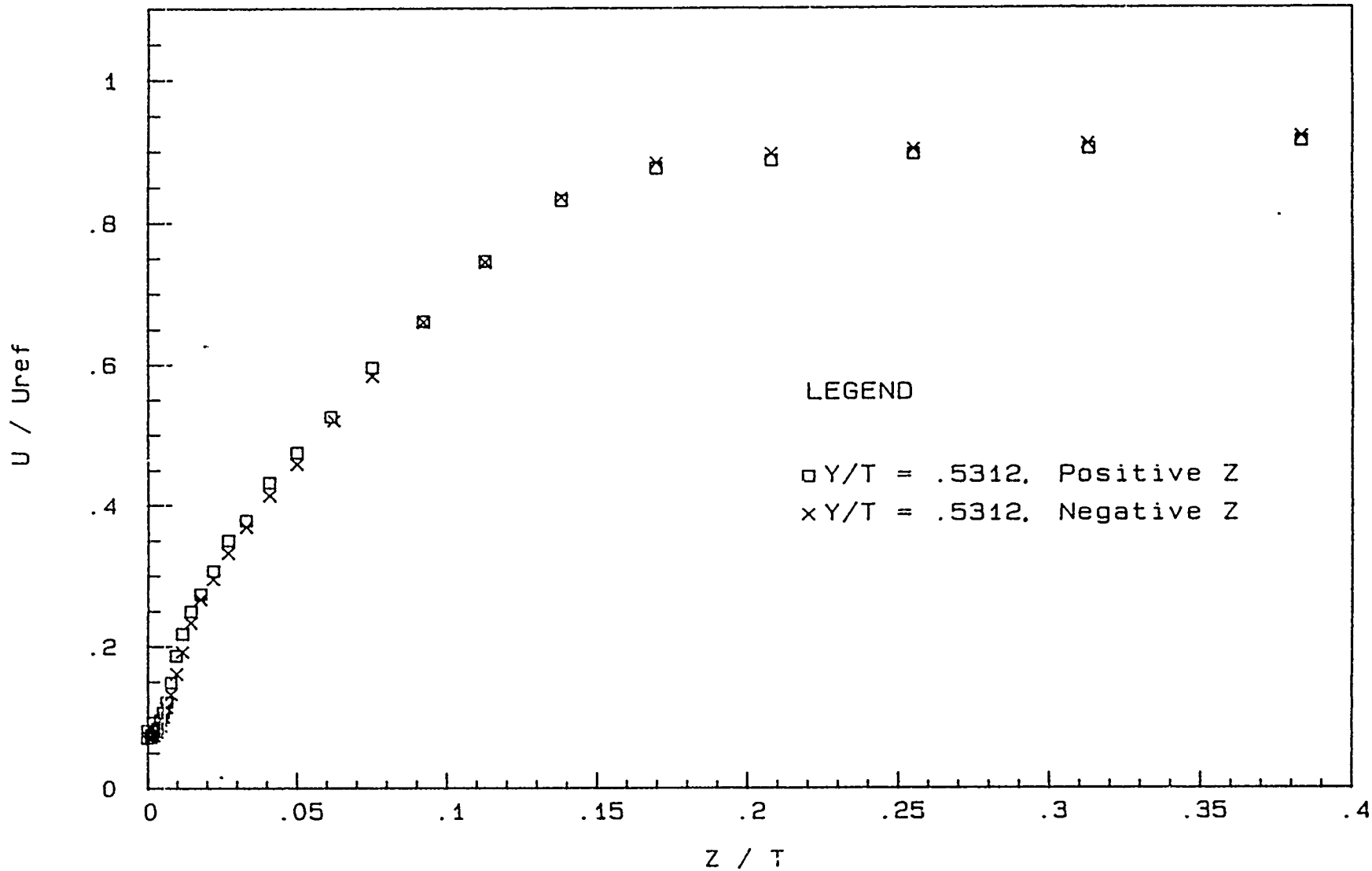


Figure B.1-7 Mean velocity profiles measured on either side of the wing 1mm downstream of its trailing edge with the 220-grade sandpaper trip, Re_θ = 6700.

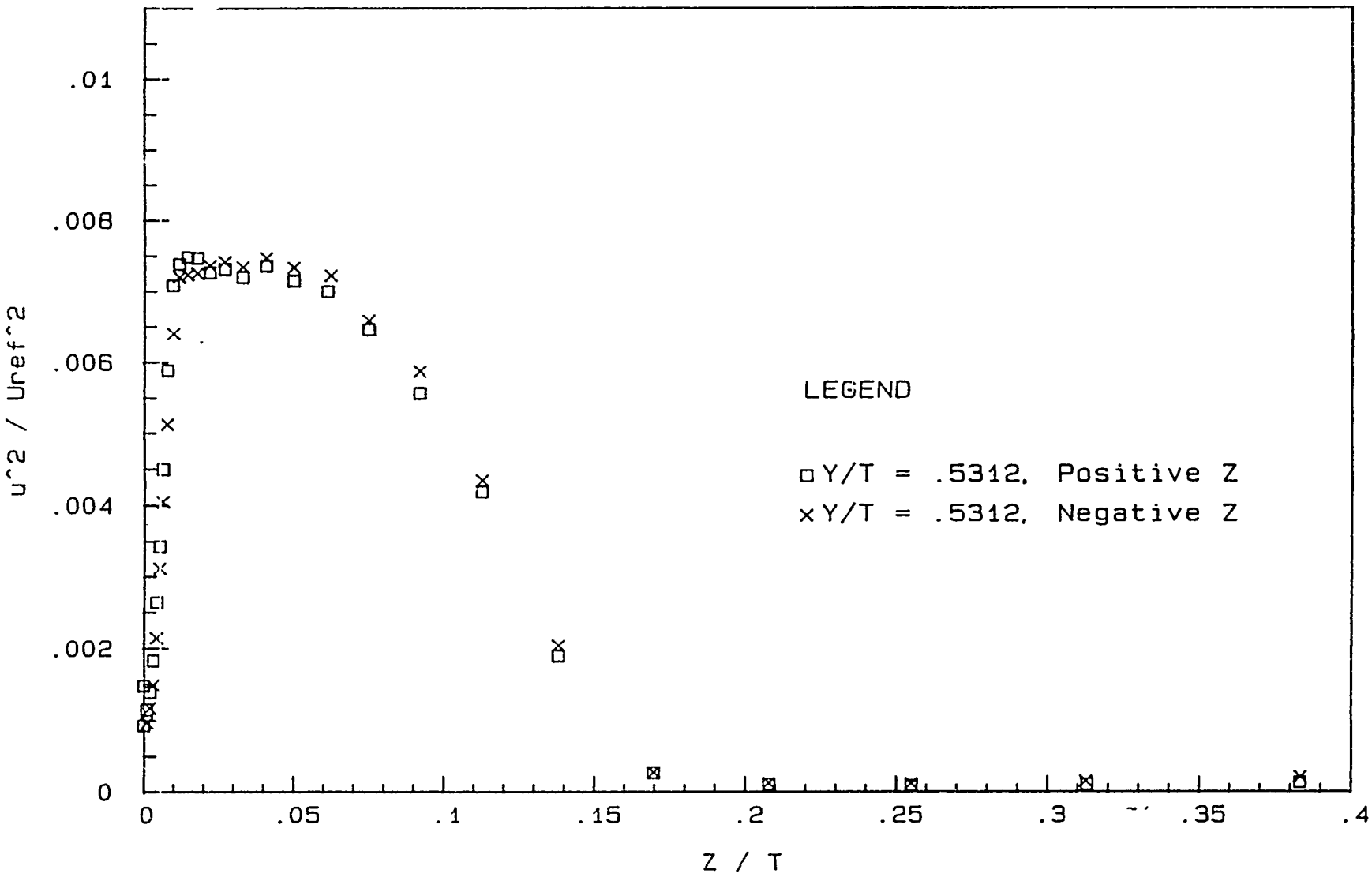


Figure B.1-8 Profiles of $\overline{u^2}/U_{ref}^2$ measured on either side of the wing 1mm downstream of its trailing edge with the 220-grade sandpaper trip, Re_θ = 6700.

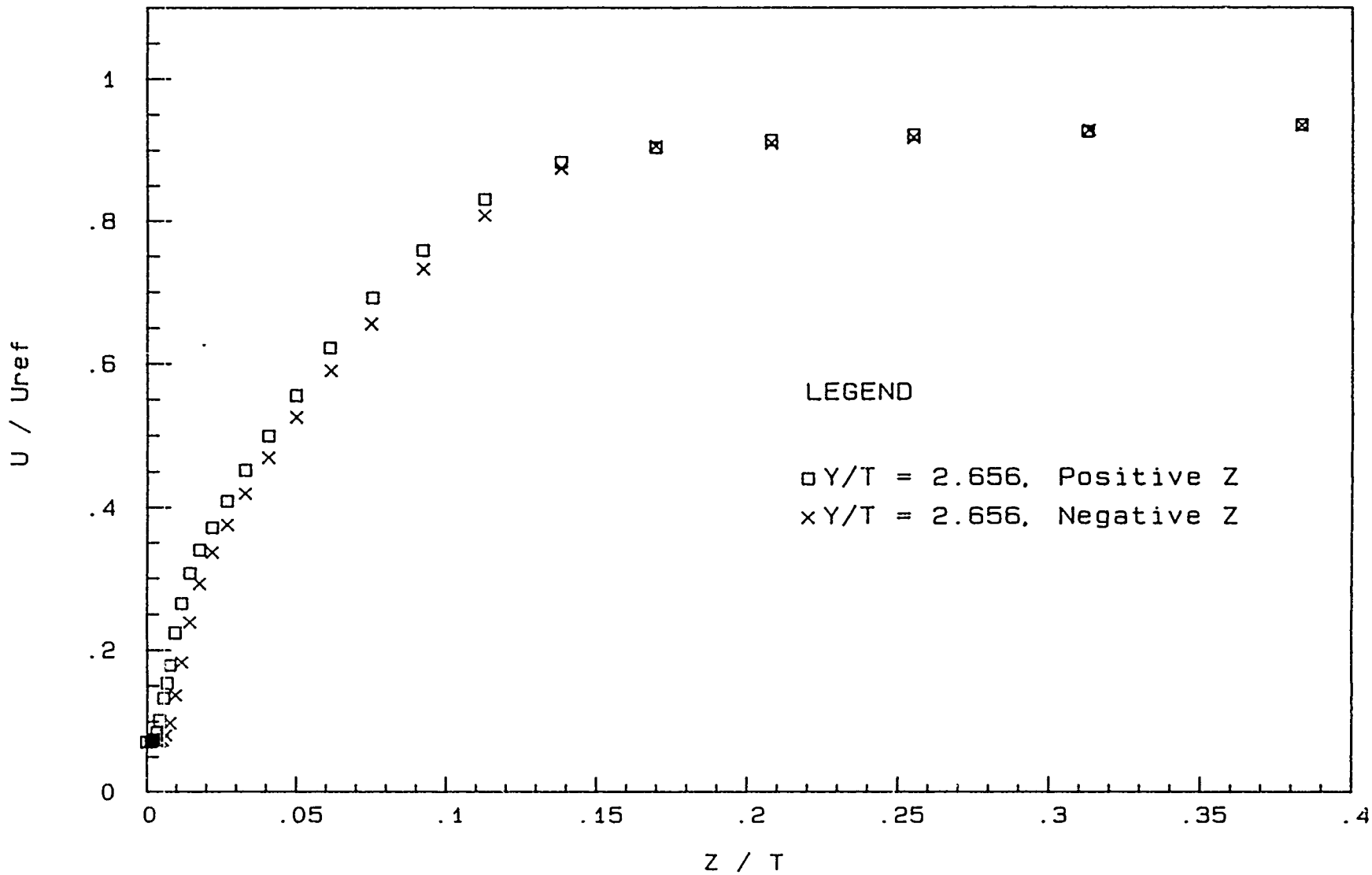


Figure B.1-9 Mean velocity profiles measured on either side of the wing 1mm downstream of its trailing edge with the 220-grade sandpaper trip, Re_θ = 6700.

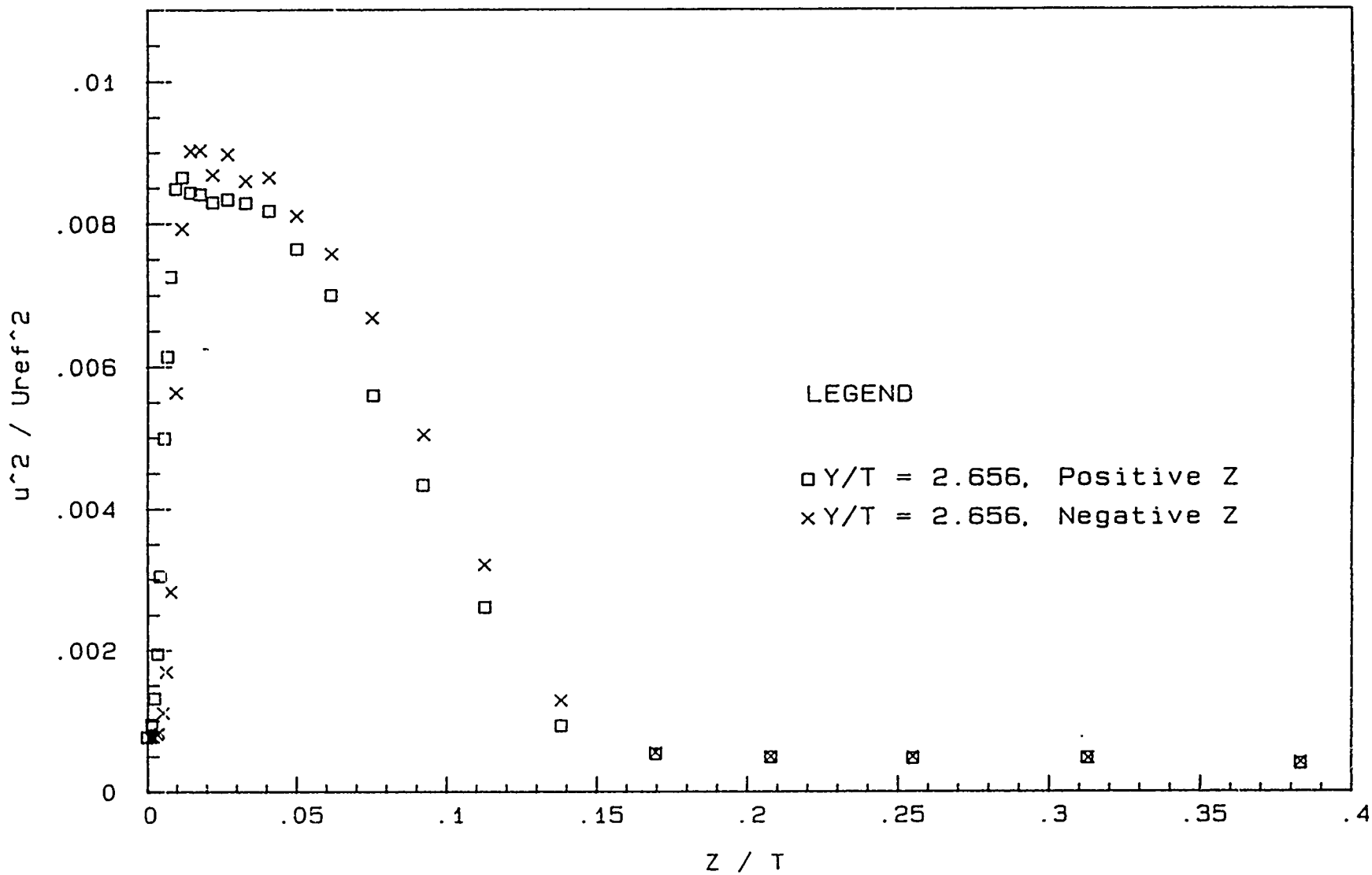


Figure B.1-10 Profiles of $\overline{u^2}/U_{ref}^2$ measured on either side of the wing 1mm downstream of its trailing edge with the 220-grade sandpaper trip, Re_θ = 6700.

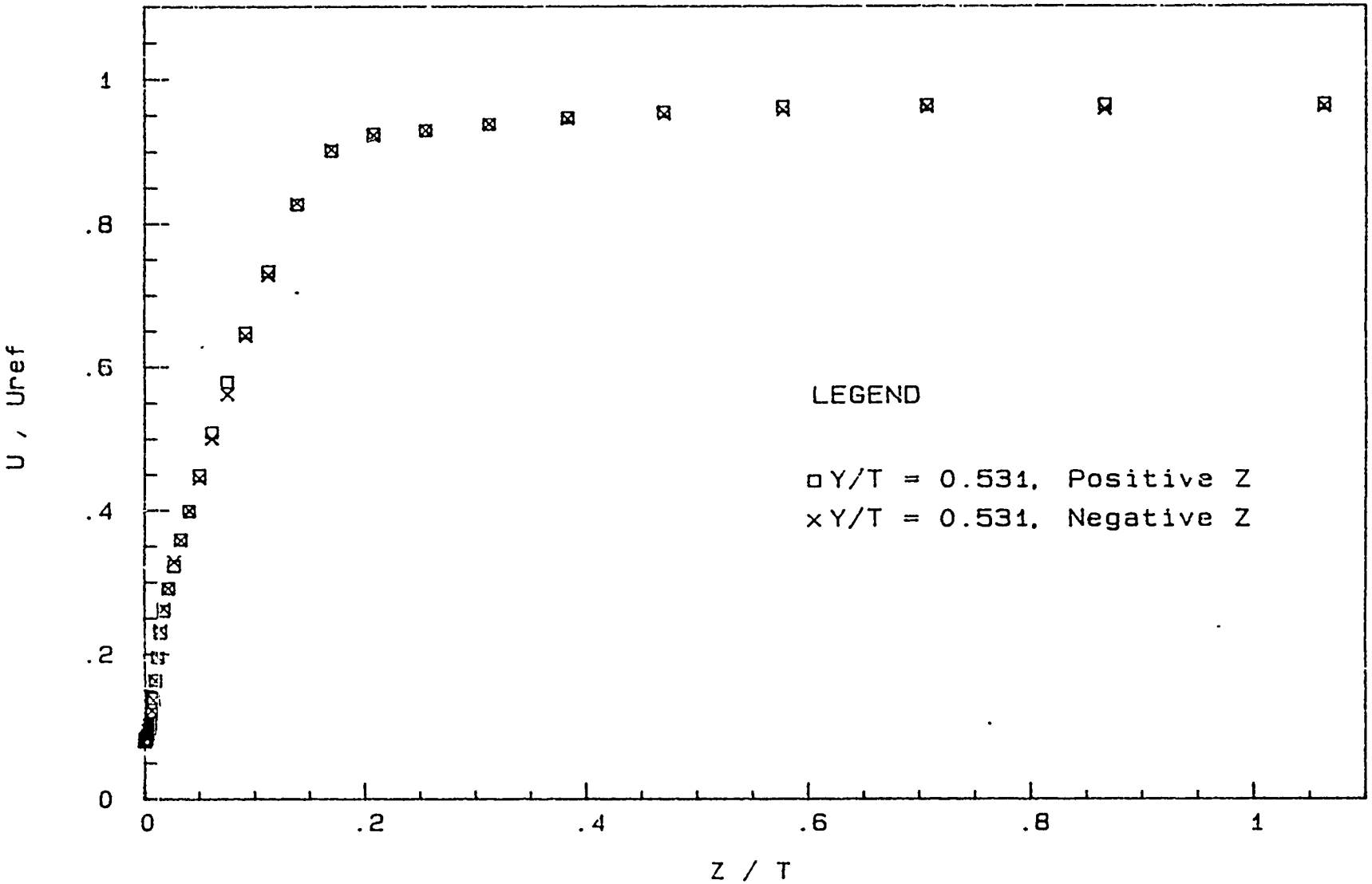


Figure B.1-11 Mean velocity profiles measured on either side of the wing 1mm downstream of its trailing edge with the 120-grade sandpaper trip, Re_θ = 6700.

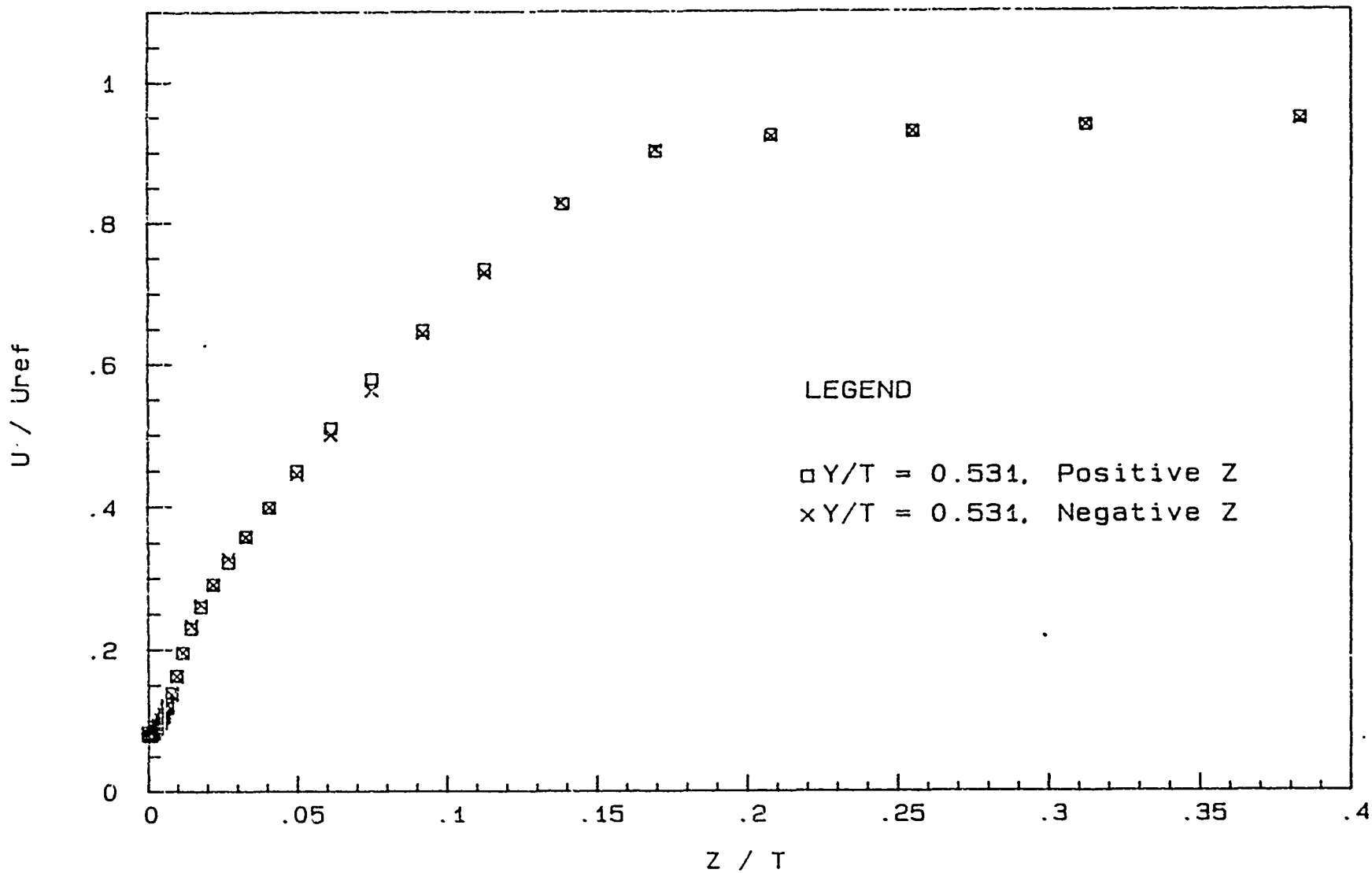


Figure B.1-12 Profiles of $\overline{u^2}/U^2_{ref}$ measured on either side of the wing 1mm downstream of its trailing edge with the 120-grade sandpaper trip, Re_θ = 6700.

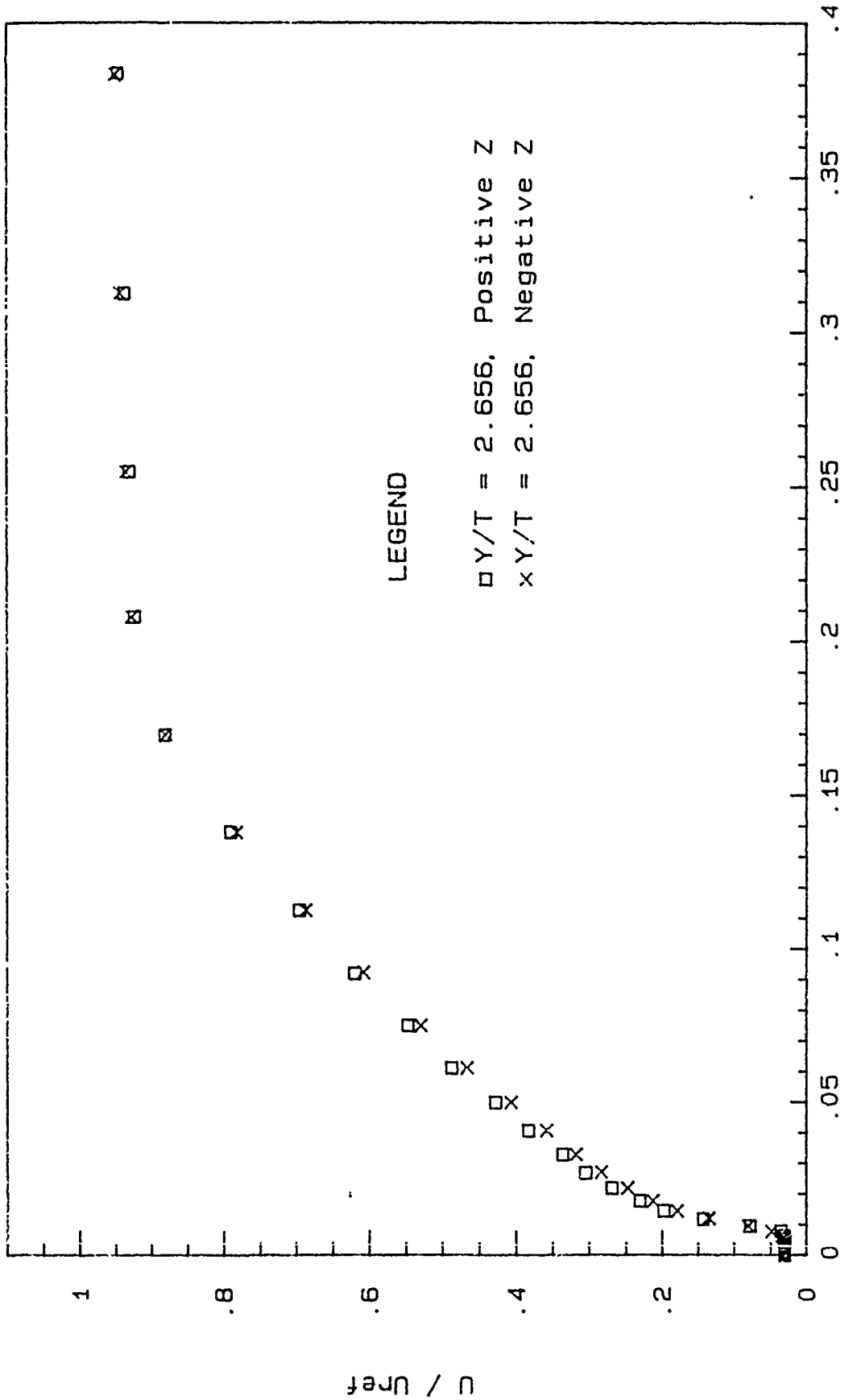


Figure B.1-13 Mean velocity profiles measured on either side of the wing 1mm downstream of its trailing edge with the 120-grade sandpaper trip, $Re_\theta = 6700$.

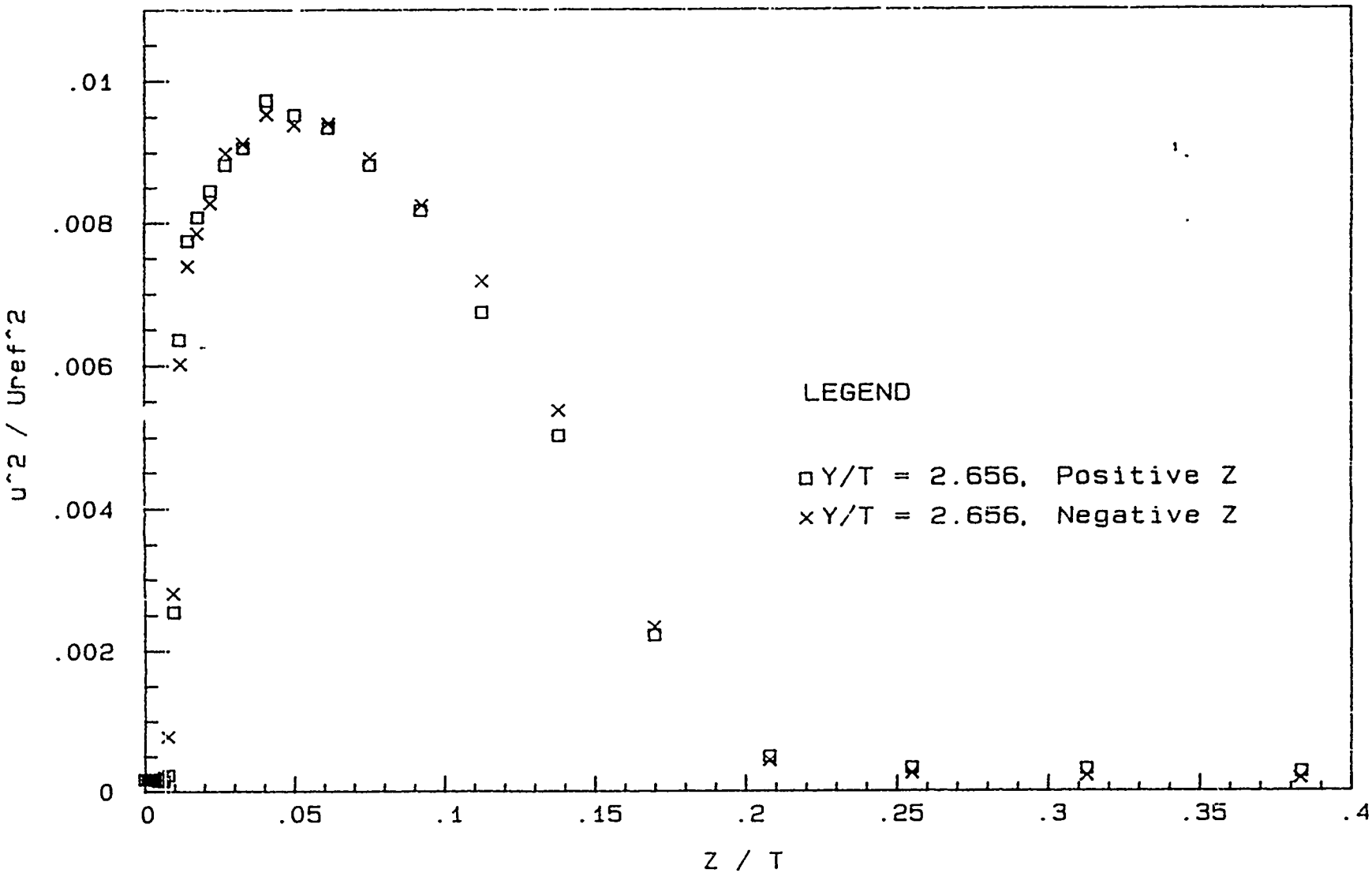


Figure B.1-14 Profiles of $\overline{u^2}/U_{ref}^2$ measured on either side of the wing 1mm downstream of its trailing edge with the 120-grade sandpaper trip, Re_θ = 6700.

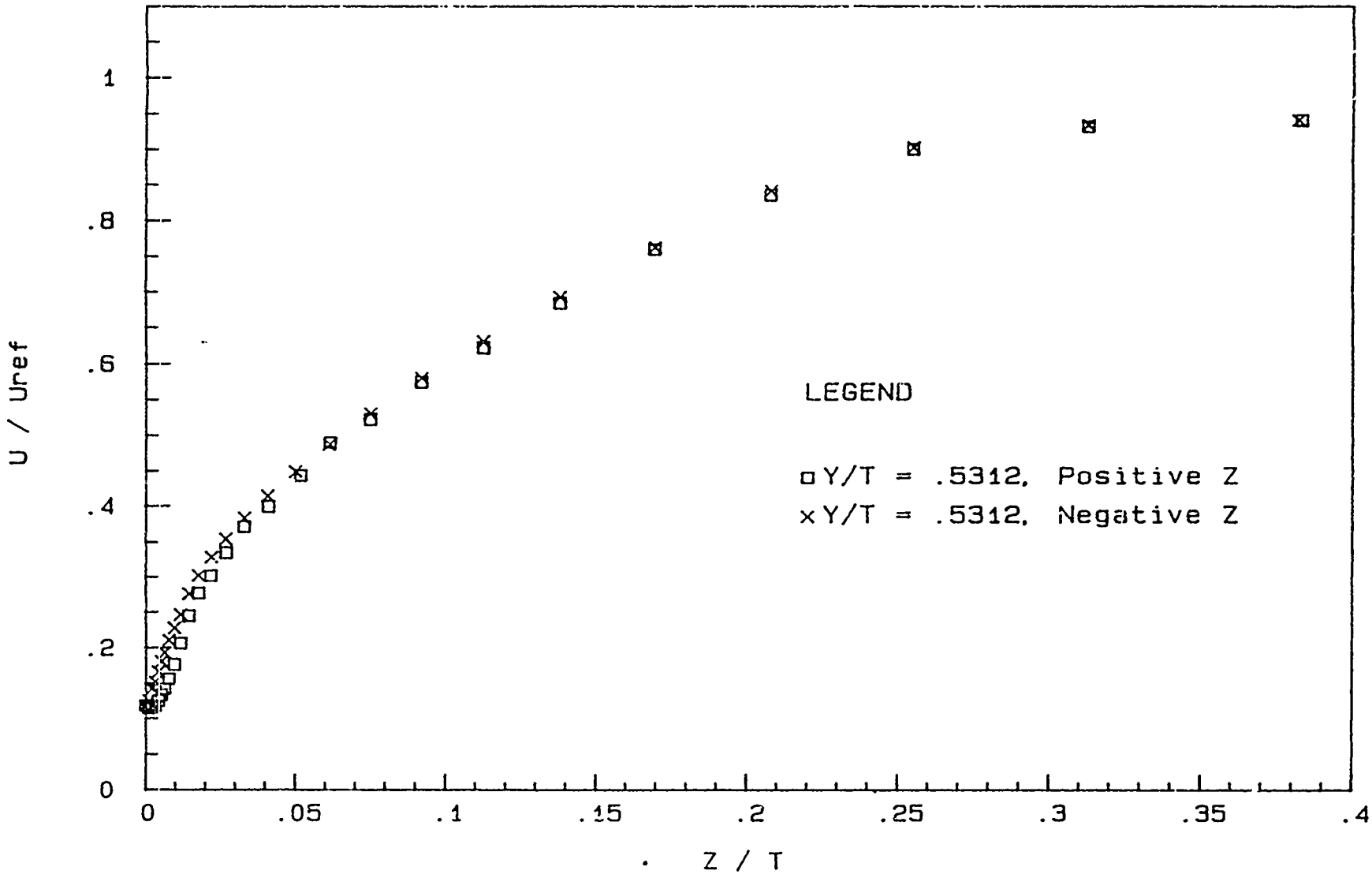


Figure B.1-15 Mean velocity profiles measured on either side of the wing 1mm downstream of its trailing edge with the wire trip, Re_θ = 6700.

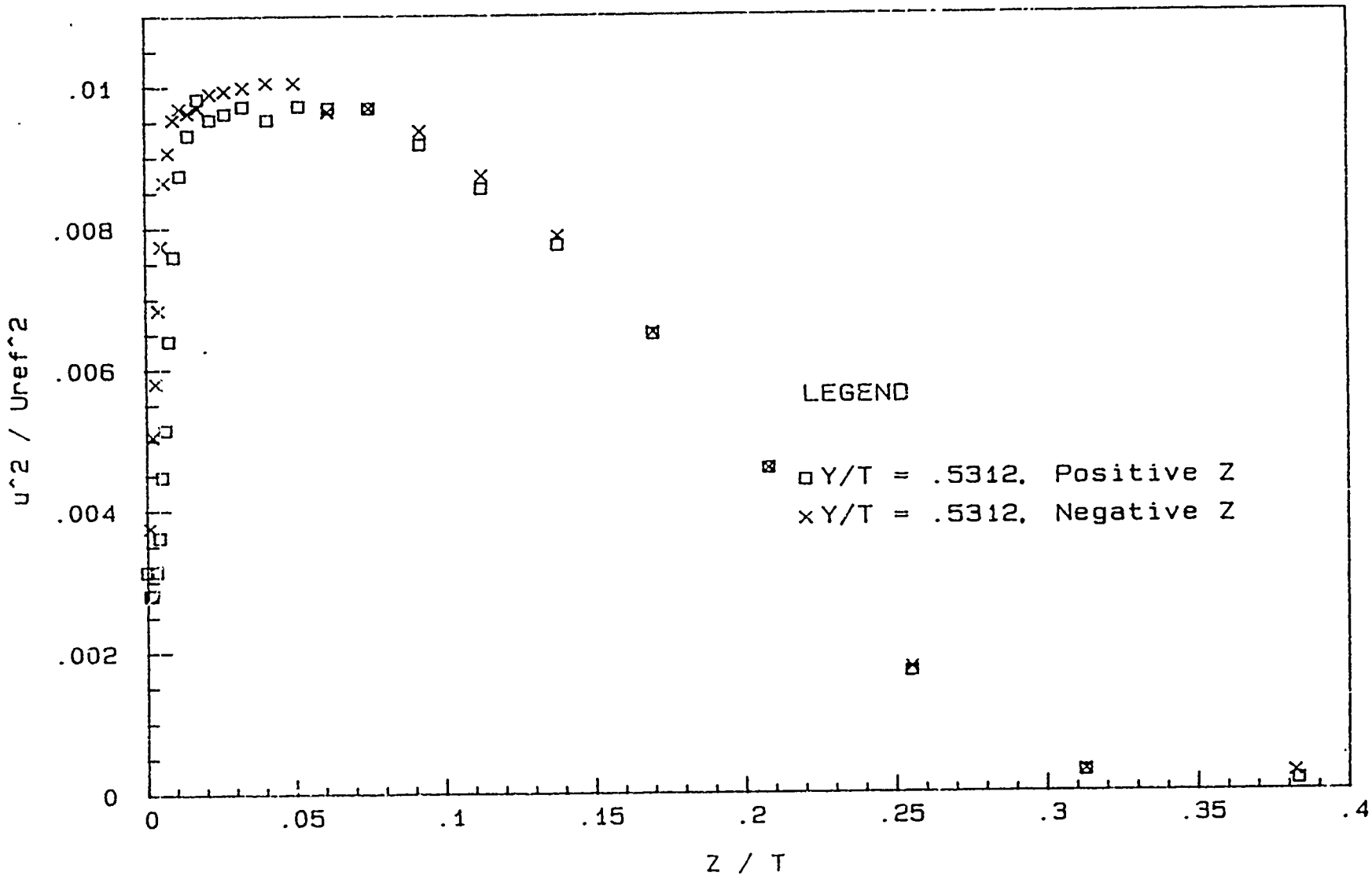


Figure B.1-16 Profiles of u^2/U^2_{ref} measured on either side of the wing 1mm downstream of its trailing edge with the wire trip, Re_θ = 6700.

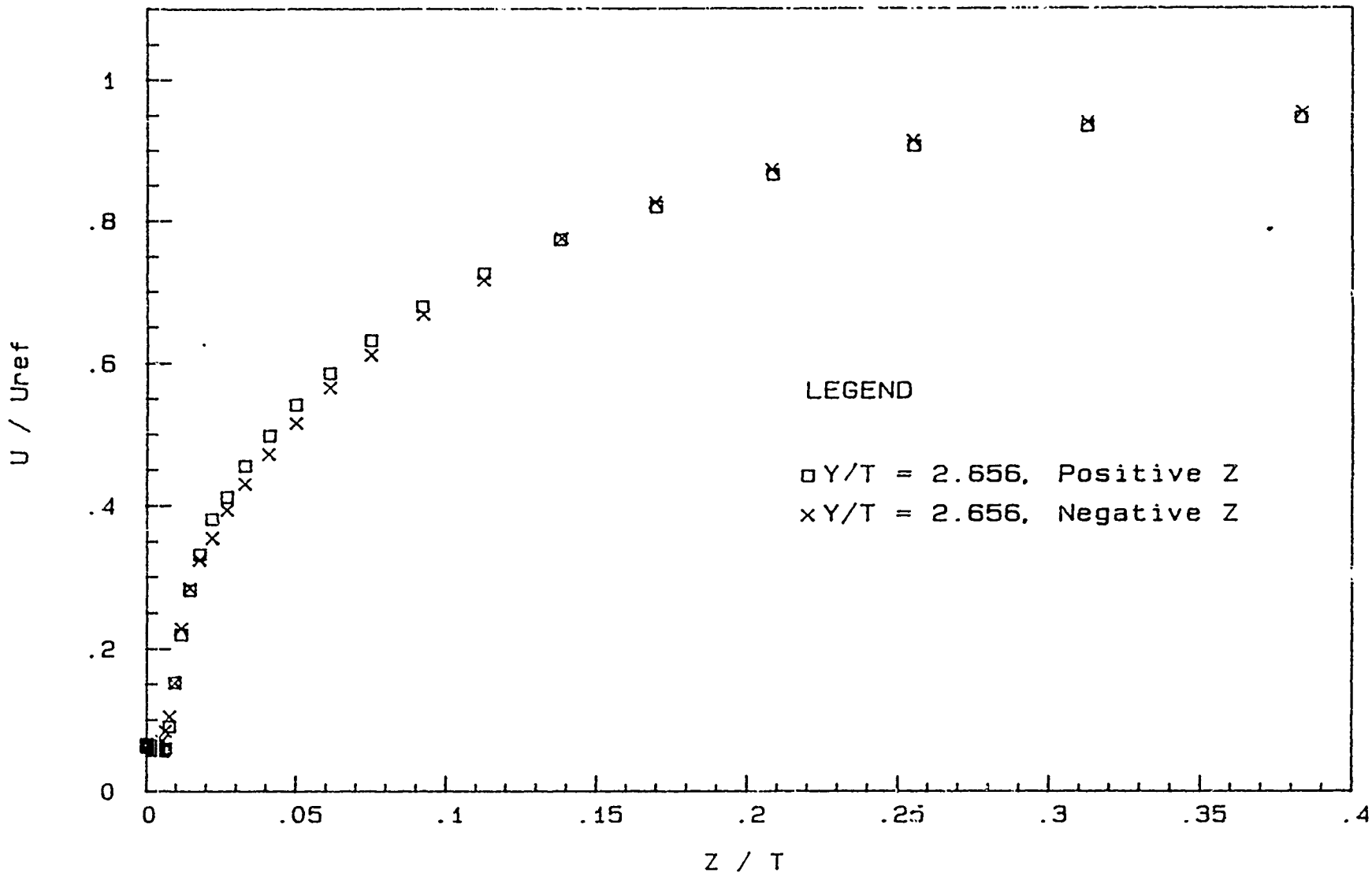


Figure B.1-17 Mean velocity profiles measured on either side of the wing 1mm downstream of its trailing edge with the wire trip, Re_θ = 6700.

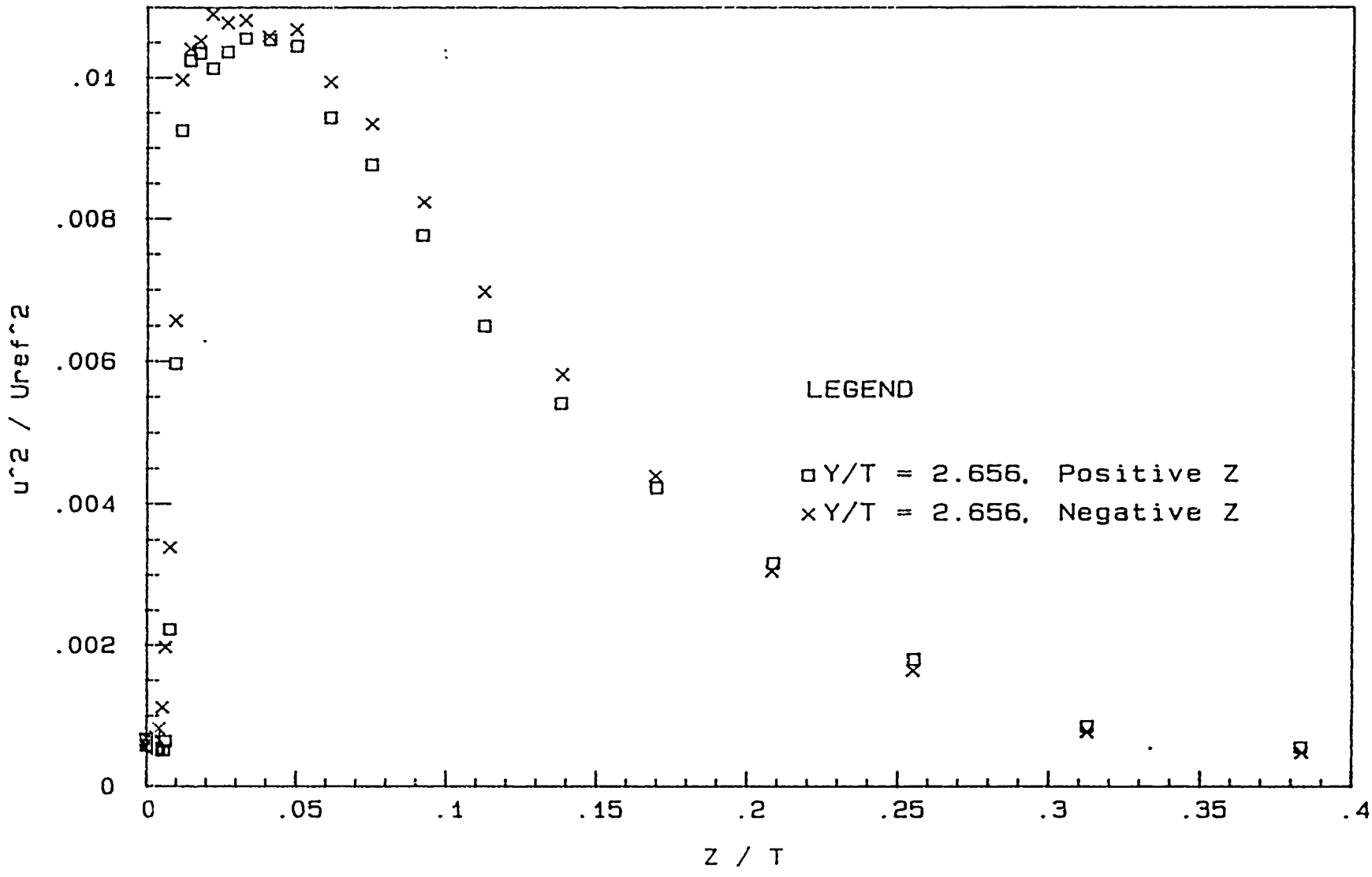


Figure B.1-18 Profiles of $\overline{u^2}/U_{ref}^2$ measured on either side of the wing 1mm downstream of its trailing edge with the wire trip, Re_θ = 6700.

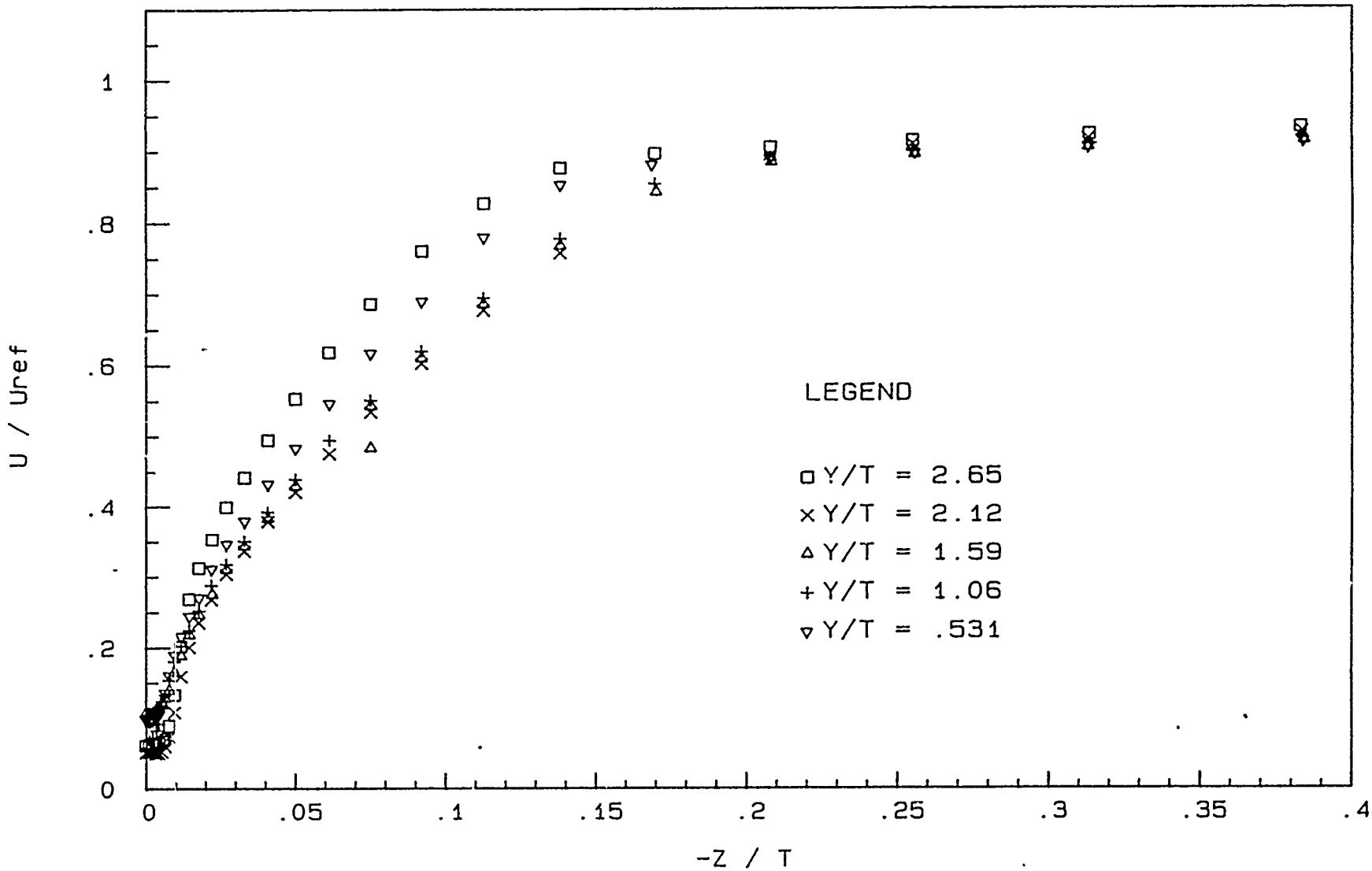


Figure B.1-19 Comparison of mean velocity profiles measured at different heights 1mm downstream of the trailing edge of the wing, no trip, Re_θ = 6700.

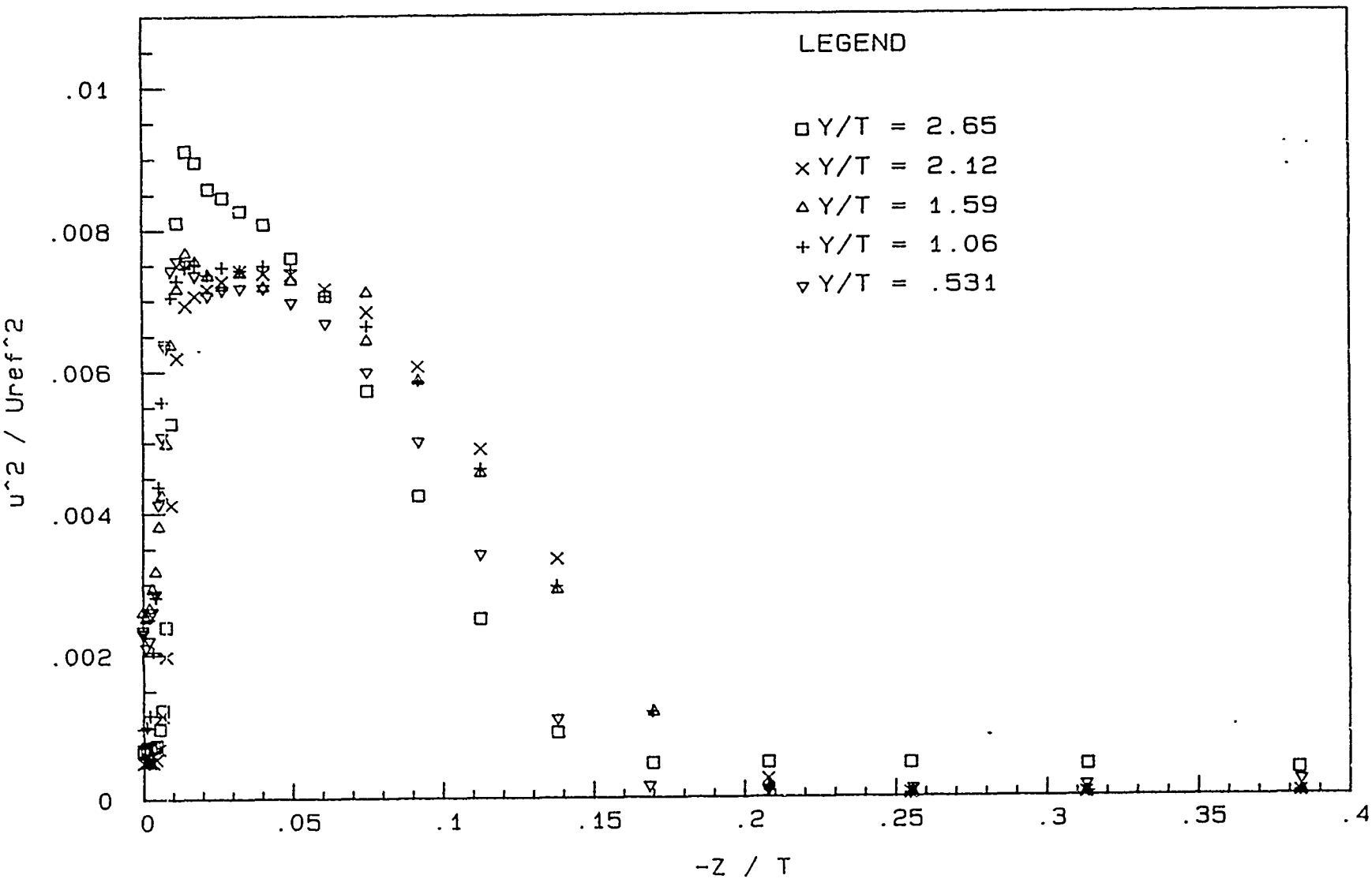


Figure B.1-20 Comparison of profiles of $\overline{u^2}/U_{ref}^2$ measured at different heights 1mm downstream of the trailing edge of the wing, no trip, Re_θ = 6700.

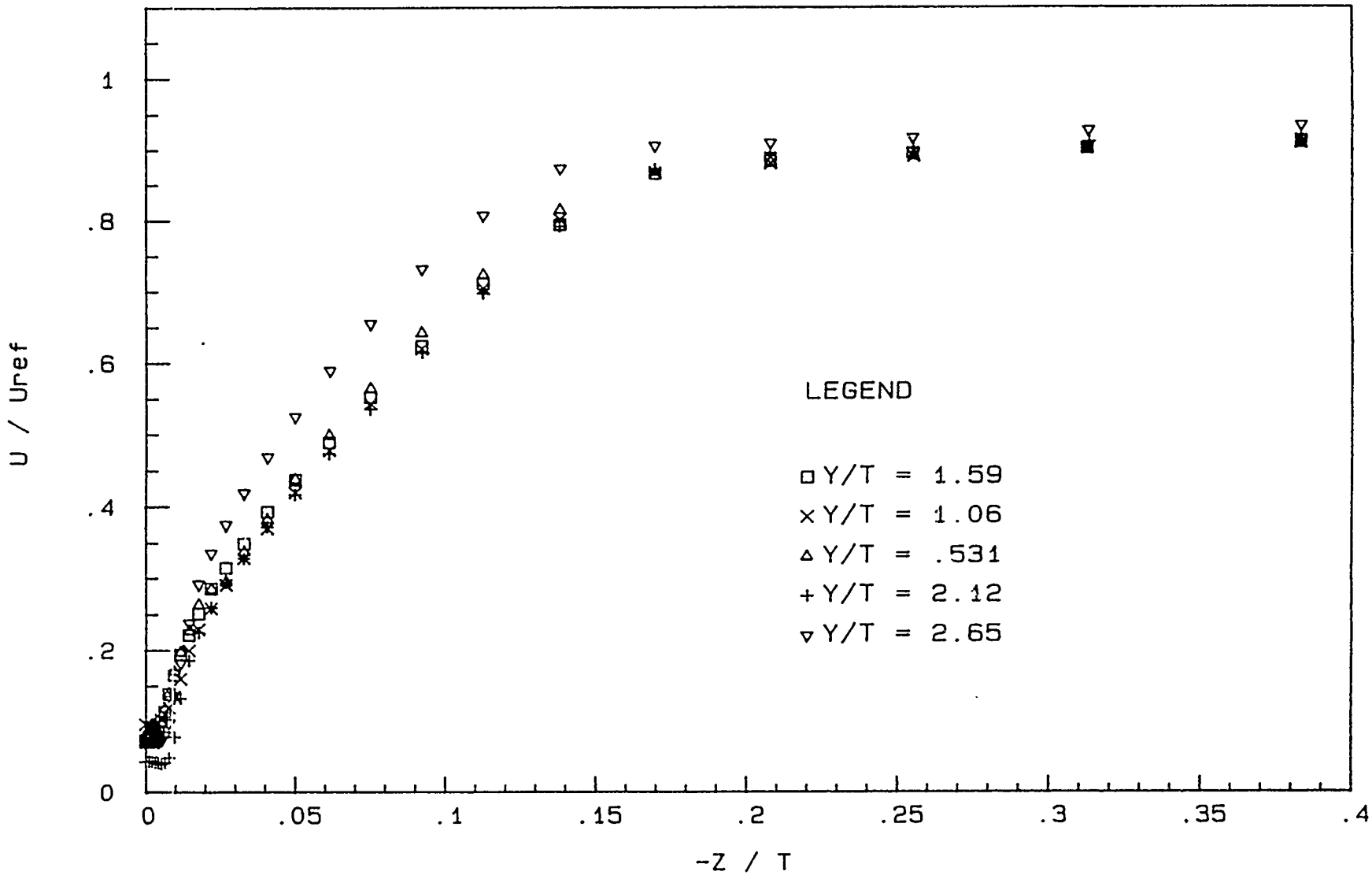


Figure B.1-21 Comparison of mean velocity profiles measured at different heights 1mm downstream of the trailing edge of the wing, 220-grade sandpaper trip, Re_θ = 6700.

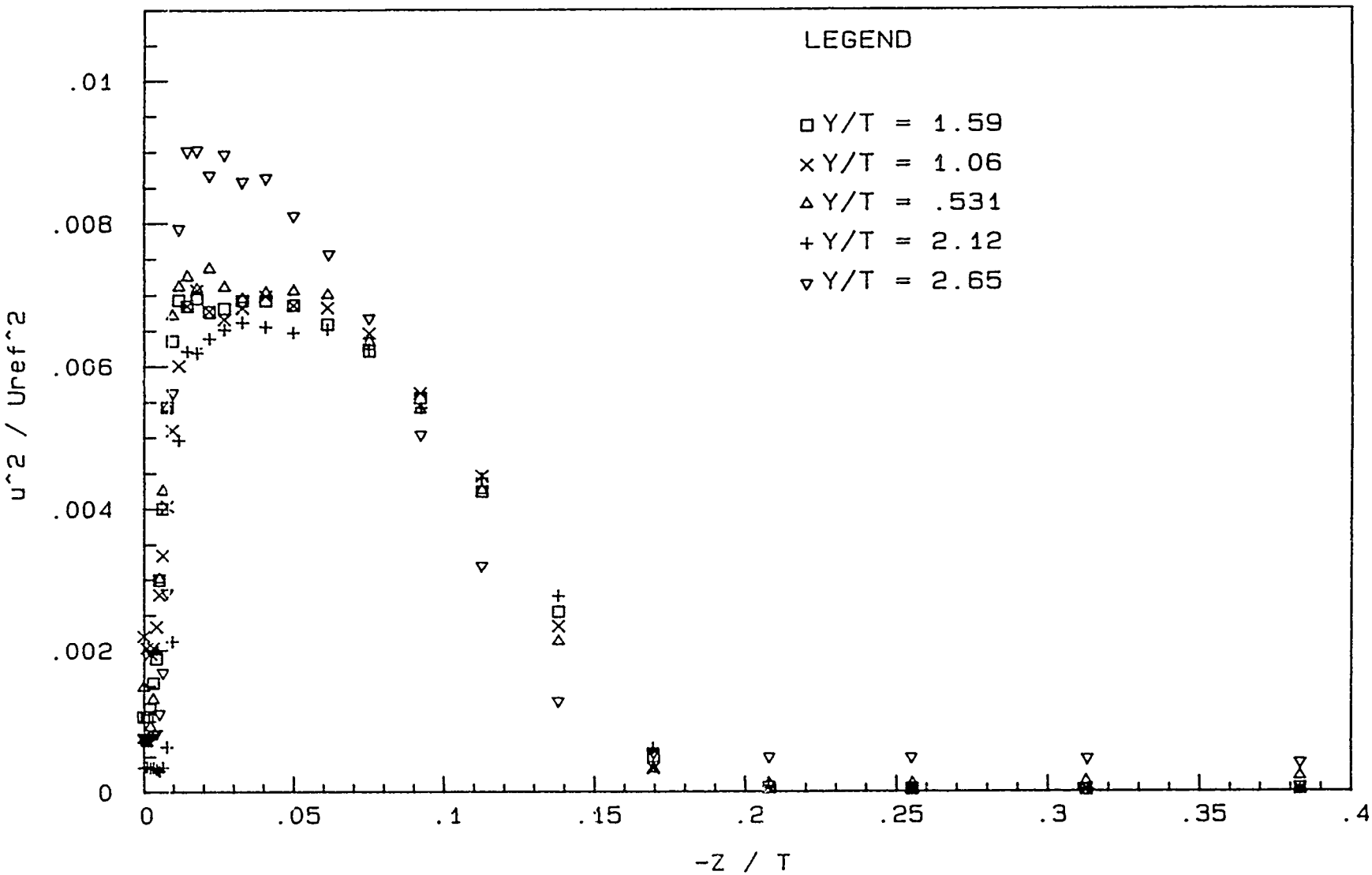


Figure B.1-22 Compari[illegible] profiles of $\overline{u^2}/U_{ref}^2$ measured at different heights 1mm downstream of the tra[illegible]ge of the wing, 220-grade sandpaper trip, Re_θ = 6700.

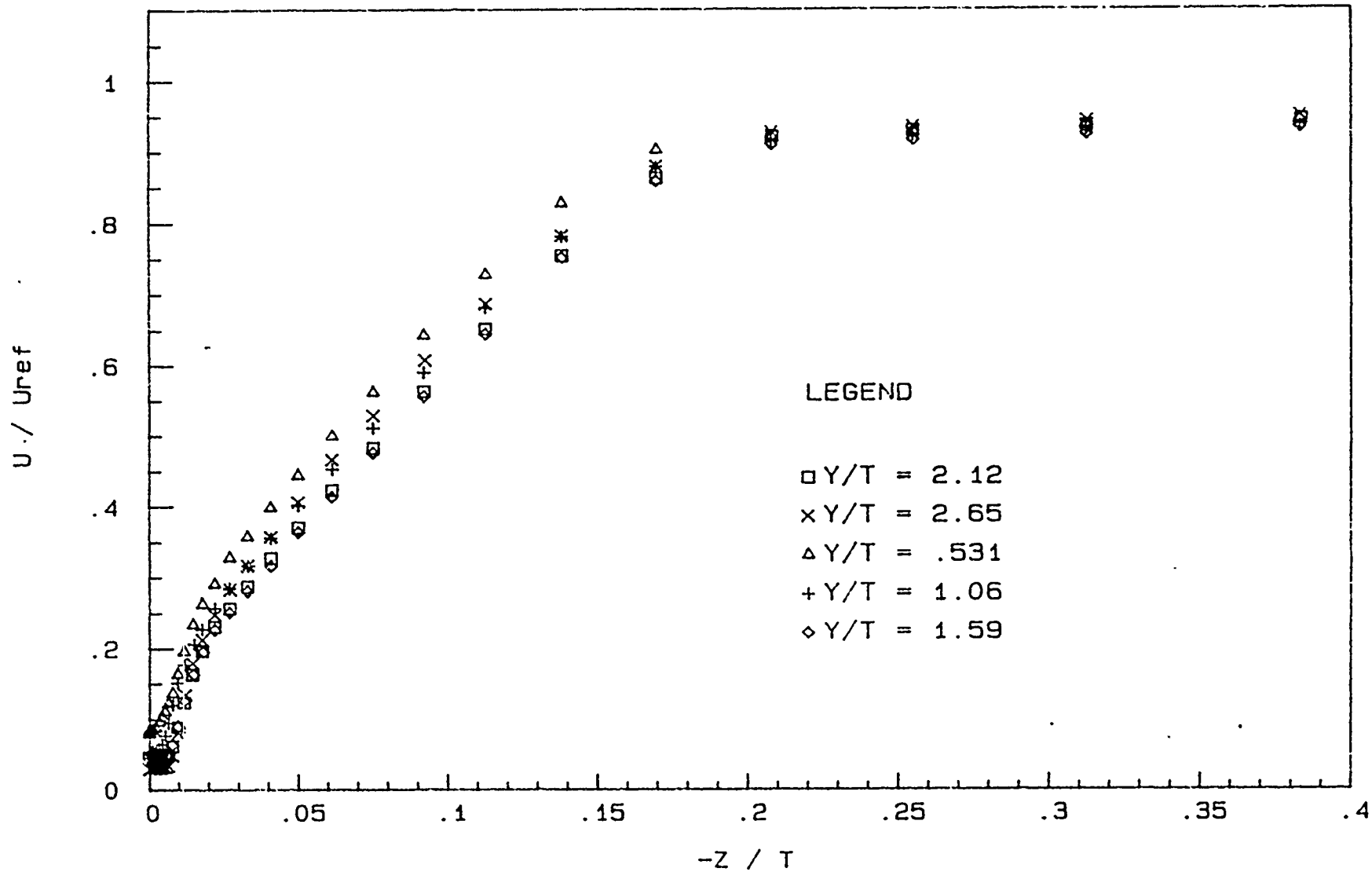


Figure B.1-23 Comparison of mean velocity profiles measured at different heights 1mm downstream of the trailing edge of the wing, 120-grade sandpaper trip, Re_θ = 6700.

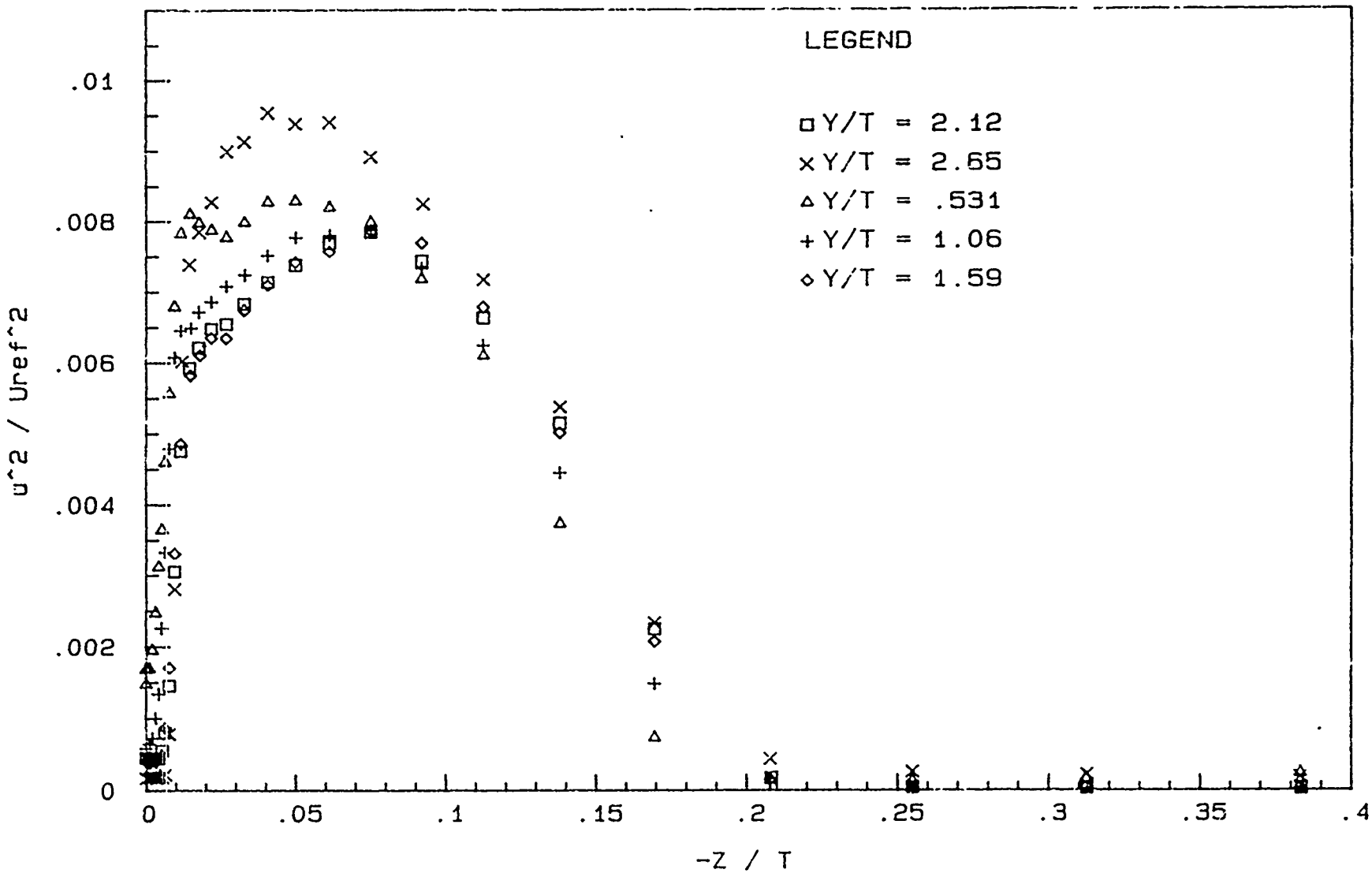


Figure B.1-24 Comparison of profiles of $\overline{u^2}/U_{ref}^2$ measured at different heights 1mm downstream of the trailing edge of the wing, 120-grade sandpaper trip, Re_θ = 6700.

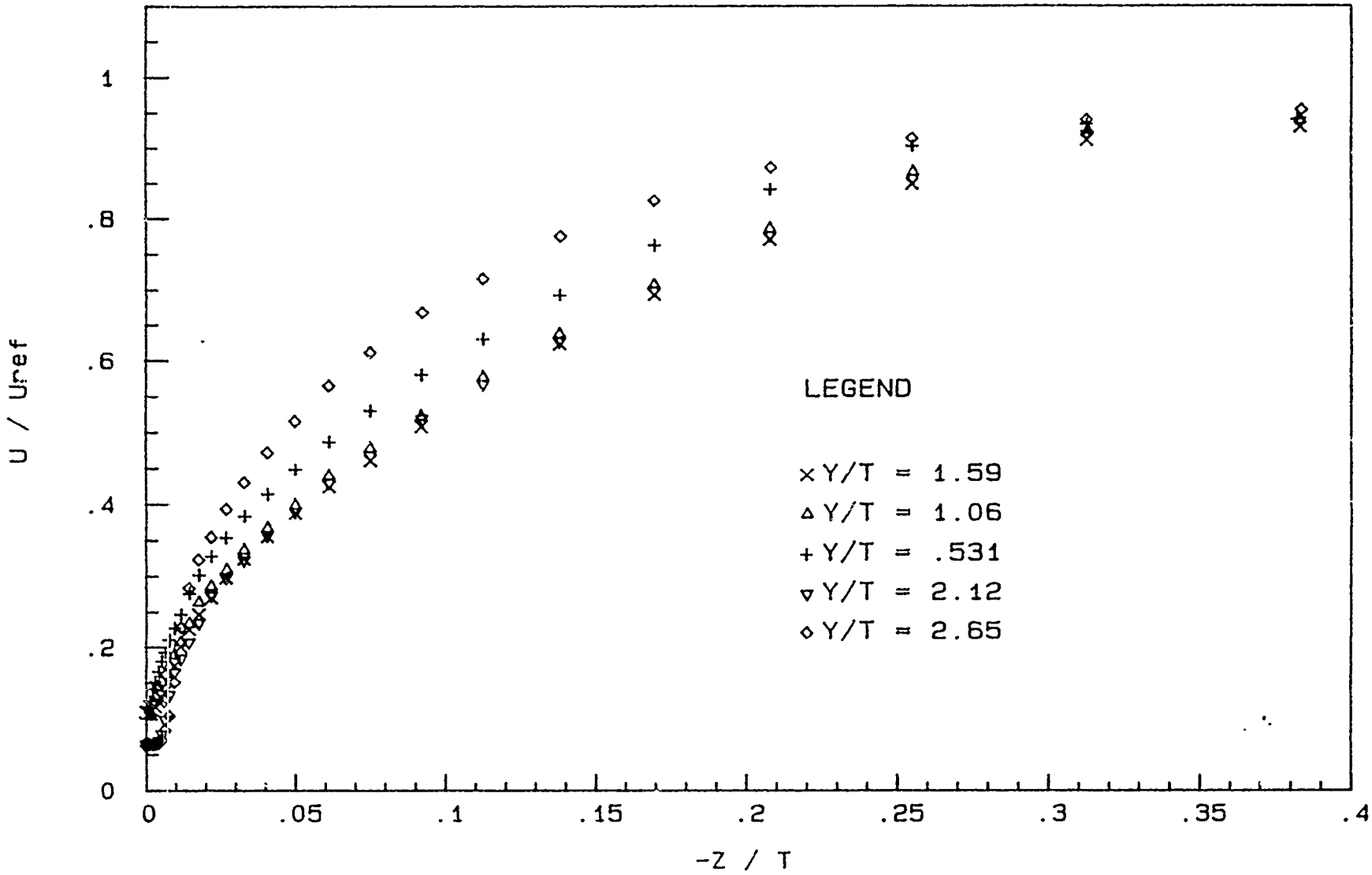


Figure B.1-25 Comparison of mean velocity profiles measured at different heights 1mm downstream of the trailing edge of the wing, wire trip, Re_θ = 6700.

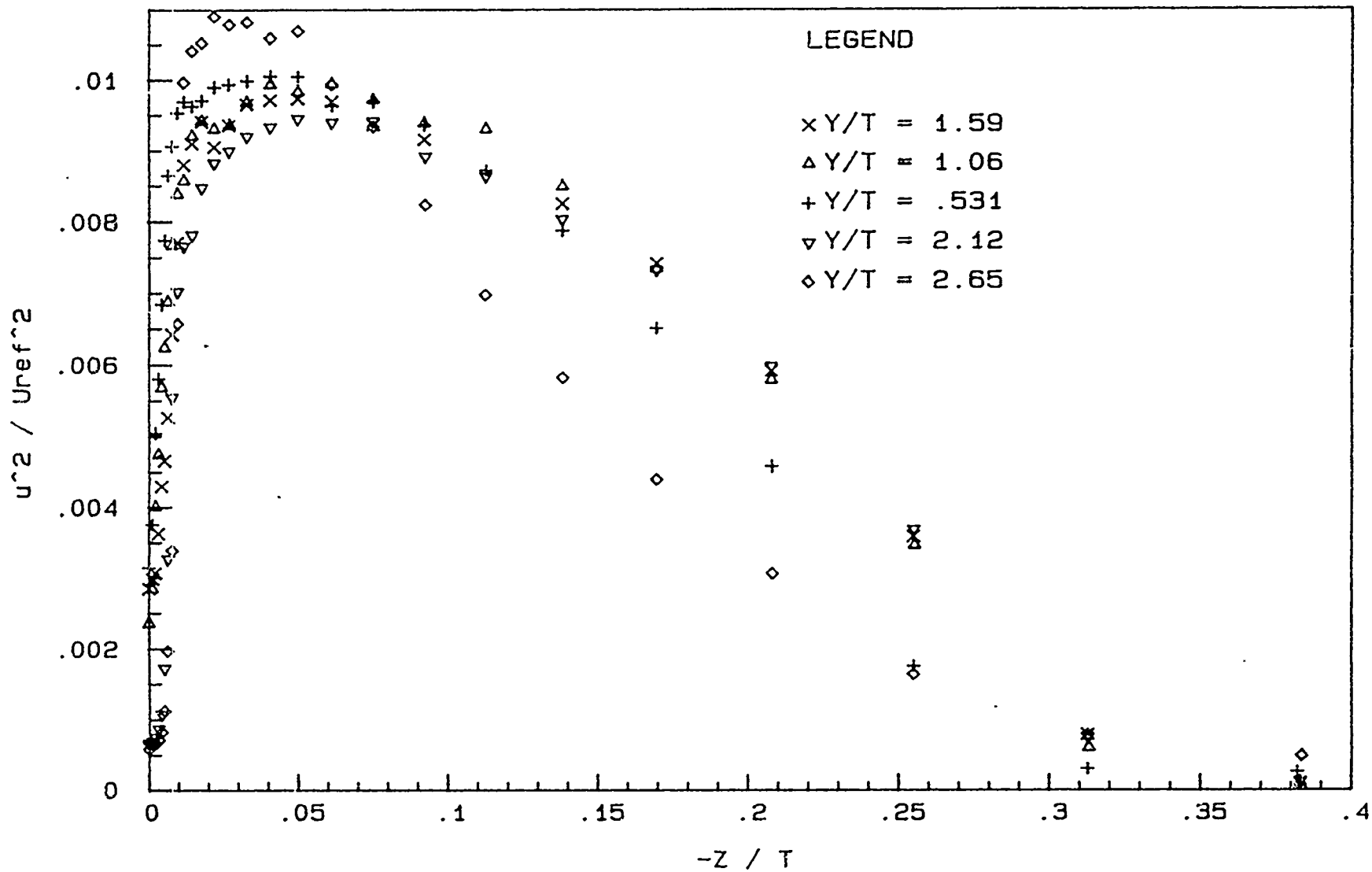


Figure B.1-26 Comparison of profiles of $\overline{u^2}/U_{ref}^2$ measured at different heights 1mm downstream of the trailing edge of the wing, wire trip, Re_θ = 6700.

File E464179 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23.8
density (kilograms per meter cubed) = 1.121501
viscosity (meters squared per second) = 1.632329E-05
Atmospheric pressure (Pascals) = 95575
Velocity of undisturbed free stream (Uref, in m/s) = 27.70094
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089468E-03
Estimated momentum thickness Reynolds number = 6939.904

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	5.3116E-01	0.0000E+00	9.7449E-02	2.3115E-03	1.4929E-04
4.2635E+00	5.3116E-01	-1.0623E-03	9.5774E-02	2.1136E-03	1.2170E-04
4.2635E+00	5.3116E-01	-2.1246E-03	9.7084E-02	2.2163E-03	1.3140E-04
4.2635E+00	5.3116E-01	-3.1870E-03	1.0010E-01	2.6157E-03	1.7988E-04
4.2635E+00	5.3116E-01	-4.2493E-03	1.0464E-01	2.8707E-03	2.0161E-04
4.2635E+00	5.3116E-01	-5.3116E-03	1.1970E-01	4.1309E-03	3.2065E-04
4.2635E+00	5.3116E-01	-6.3739E-03	1.3573E-01	5.0907E-03	3.5957E-04
4.2635E+00	5.3116E-01	-7.7904E-03	1.6051E-01	6.3452E-03	3.7723E-04
4.2635E+00	5.3116E-01	-9.5609E-03	1.8921E-01	7.4372E-03	3.3876E-04
4.2635E+00	5.3116E-01	-1.1686E-02	2.1619E-01	7.5723E-03	2.4365E-04
4.2635E+00	5.3116E-01	-1.4518E-02	2.4460E-01	7.5283E-03	1.7236E-04
4.2635E+00	5.3116E-01	-1.7705E-02	2.7084E-01	7.3625E-03	1.2612E-04
4.2635E+00	5.3116E-01	-2.1955E-02	3.1157E-01	7.0738E-03	1.2324E-04
4.2635E+00	5.3116E-01	-2.6912E-02	3.4656E-01	7.1586E-03	1.0967E-04
4.2635E+00	5.3116E-01	-3.2932E-02	3.7954E-01	7.1793E-03	8.3595E-05
4.2635E+00	5.3116E-01	-4.0722E-02	4.3274E-01	7.1758E-03	5.1079E-05
4.2635E+00	5.3116E-01	-4.9929E-02	4.8294E-01	6.9693E-03	2.7297E-05
4.2635E+00	5.3116E-01	-6.1261E-02	5.4674E-01	6.6828E-03	-5.2448E-05
4.2635E+00	5.3116E-01	-7.5071E-02	6.1698E-01	5.9877E-03	-6.2041E-05
4.2635E+00	5.3116E-01	-9.2068E-02	6.8981E-01	5.0023E-03	-1.0962E-04
4.2635E+00	5.3116E-01	-1.1261E-01	7.7977E-01	3.4113E-03	-1.4477E-04
4.2635E+00	5.3116E-01	-1.3810E-01	8.5289E-01	1.1001E-03	-5.9431E-05
4.2635E+00	5.3116E-01	-1.6856E-01	8.9099E-01	1.6440E-04	-4.7200E-07
4.2635E+00	5.3116E-01	-2.0786E-01	8.9024E-01	1.0536E-04	-8.6770E-09
4.2635E+00	5.3116E-01	-2.5567E-01	8.9701E-01	1.1713E-04	-1.0400E-06
4.2635E+00	5.3116E-01	-3.1303E-01	9.0491E-01	1.5172E-04	-2.7299E-06
4.2635E+00	5.3116E-01	-3.8385E-01	9.1246E-01	2.0583E-04	-6.5825E-06
4.2635E+00	5.3116E-01	-4.6990E-01	9.2619E-01	2.7559E-04	-1.1480E-05
4.2635E+00	5.3116E-01	-5.7684E-01	9.3131E-01	3.5429E-04	-1.4331E-05
4.2635E+00	5.3116E-01	-7.0680E-01	9.3856E-01	4.5203E-04	-1.7648E-05
4.2635E+00	5.3116E-01	-8.6544E-01	9.4369E-01	7.4542E-04	-3.8097E-05
4.2635E+00	5.3116E-01	-1.0623E+00	9.4888E-01	8.2115E-04	-3.8415E-05
4.2635E+00	5.3116E-01	0.0000E+00	9.9502E-02	2.3546E-03	1.4692E-04
4.2635E+00	5.3116E-01	1.0623E-03	1.0112E-01	2.4619E-03	1.5192E-04
4.2635E+00	5.3116E-01	2.1246E-03	1.0779E-01	3.1479E-03	2.3621E-04
4.2635E+00	5.3116E-01	4.2493E-03	1.2015E-01	4.1420E-03	3.2230E-04
4.2635E+00	5.3116E-01	4.2493E-03	1.2520E-01	4.5920E-03	3.6594E-04
4.2635E+00	5.3116E-01	5.3116E-03	1.3973E-01	5.5009E-03	4.1639E-04
4.2635E+00	5.3116E-01	6.3739E-03	1.5245E-01	6.1007E-03	3.9323E-04
4.2635E+00	5.3116E-01	7.7904E-03	1.6559E-01	6.7395E-03	4.0382E-04
4.2635E+00	5.3116E-01	9.5609E-03	1.8369E-01	7.2394E-03	3.6264E-04
4.2635E+00	5.3116E-01	1.1686E-02	2.0911E-01	7.7738E-03	2.7568E-04
4.2635E+00	5.3116E-01	1.4518E-02	2.4005E-01	7.7398E-03	1.8846E-04
4.2635E+00	5.3116E-01	1.7705E-02	2.7089E-01	7.4106E-03	1.2509E-04
4.2635E+00	5.3116E-01	2.1955E-02	3.1002E-01	7.4889E-03	1.3645E-04
4.2635E+00	5.3116E-01	2.6912E-02	3.3821E-01	7.3929E-03	1.1947E-04
4.2635E+00	5.3116E-01	3.2932E-02	3.9187E-01	7.2897E-03	1.1697E-04
4.2635E+00	5.3116E-01	4.0722E-02	4.2207E-01	7.4674E-03	7.9325E-05
4.2635E+00	5.3116E-01	5.0283E-02	4.8440E-01	7.2034E-03	2.1758E-05
4.2635E+00	5.3116E-01	6.1261E-02	5.3821E-01	7.0544E-03	-4.1130E-05
4.2635E+00	5.3116E-01	7.5071E-02	5.9833E-01	6.4606E-03	-7.1119E-05
4.2635E+00	5.3116E-01	9.2068E-02	6.7593E-01	5.4654E-03	-1.5539E-04
4.2635E+00	5.3116E-01	1.1261E-01	7.5511E-01	3.9427E-03	-1.4713E-04
4.2635E+00	5.3116E-01	1.3846E-01	8.3667E-01	1.6222E-03	-9.4321E-05
4.2635E+00	5.3116E-01	1.6755E-01	8.7399E-01	2.5975E-04	-5.3918E-06
4.2635E+00	5.3116E-01	2.0822E-01	8.8949E-01	1.0460E-04	2.0393E-07
4.2635E+00	5.3116E-01	2.5567E-01	8.9663E-01	1.0357E-04	-6.9621E-08
4.2635E+00	5.3116E-01	3.1268E-01	9.0567E-01	1.1092E-04	-1.0149E-06
4.2635E+00	5.3116E-01	3.8421E-01	9.1626E-01	1.3830E-04	-2.7116E-06
4.2635E+00	5.3116E-01	4.6990E-01	9.2601E-01	1.7289E-04	-4.0528E-06
4.2635E+00	5.3116E-01	5.7720E-01	9.3161E-01	2.5334E-04	-8.5136E-06
4.2635E+00	5.3116E-01	7.0644E-01	9.4126E-01	4.3752E-04	-1.6159E-05
4.2635E+00	5.3116E-01	8.6686E-01	9.4367E-01	7.2151E-04	-3.3567E-05
4.2635E+00	5.3116E-01	1.0634E+00	9.4401E-01	9.3219E-04	-4.3093E-05

Table B.1-1 Hot-wire velocity measurements at the trailing edge, no trip, Y / T = .531

File E463170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.120746
viscosity (meters squared per second) = 1.634278E-05
Atmospheric pressure (Pascals) = 95575
Velocity of undisturbed free stream (Uref, in m/s) = 27.64021
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091253E-03
Estimated momentum thickness Reynolds number = 5919.472

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	1.0623E+00	0.0000E+00	6.8775E-02	9.8069E-04	4.9004E-05
4.2635E+00	1.0623E+00	-1.0623E-03	6.9020E-02	1.0103E-03	5.7646E-05
4.2635E+00	1.0623E+00	-2.1246E-03	7.1053E-02	1.1677E-03	7.0314E-05
4.2635E+00	1.0623E+00	-3.1868E-03	8.2429E-02	2.0449E-03	1.5048E-04
4.2635E+00	1.0623E+00	-4.2491E-03	9.2109E-02	2.8182E-03	2.3503E-04
4.2635E+00	1.0623E+00	-5.3114E-03	1.1410E-01	4.3891E-03	3.2345E-04
4.2635E+00	1.0623E+00	-6.3739E-03	1.3236E-01	5.5753E-03	4.2285E-04
4.2635E+00	1.0623E+00	-7.7904E-03	1.5359E-01	6.4369E-03	3.8397E-04
4.2635E+00	1.0623E+00	-9.5609E-03	1.8027E-01	7.0471E-03	2.9202E-04
4.2635E+00	1.0623E+00	-1.1686E-02	2.0261E-01	7.2907E-03	2.4935E-04
4.2635E+00	1.0623E+00	-1.4518E-02	2.2443E-01	7.4649E-03	2.2724E-04
4.2635E+00	1.0623E+00	-1.7705E-02	2.5255E-01	7.5136E-03	1.7109E-04
4.2635E+00	1.0623E+00	-2.1955E-02	2.8793E-01	7.3641E-03	1.3439E-04
4.2635E+00	1.0623E+00	-2.6912E-02	3.1830E-01	7.4696E-03	1.5363E-04
4.2635E+00	1.0623E+00	-3.2932E-02	3.5066E-01	7.4248E-03	1.1887E-04
4.2635E+00	1.0623E+00	-4.0722E-02	3.9240E-01	7.4664E-03	8.5990E-05
4.2635E+00	1.0623E+00	-4.9929E-02	4.3936E-01	7.4353E-03	5.2952E-05
4.2635E+00	1.0623E+00	-6.1261E-02	4.9459E-01	7.0636E-03	1.7179E-05
4.2635E+00	1.0623E+00	-7.5071E-02	5.5112E-01	6.4726E-03	-5.5614E-05
4.2635E+00	1.0623E+00	-9.2066E-02	6.1953E-01	5.8512E-03	-9.7353E-05
4.2635E+00	1.0623E+00	-1.1291E-01	6.9455E-01	4.8148E-03	-1.1945E-04
4.2635E+00	1.0623E+00	-1.3819E-01	7.7792E-01	2.9533E-03	-1.2230E-04
4.2635E+00	1.0623E+00	-1.6962E-01	8.5433E-01	1.3910E-03	-5.1567E-05
4.2635E+00	1.0623E+00	-2.0796E-01	8.9203E-01	1.3439E-04	-1.1514E-05
4.2635E+00	1.0623E+00	-2.5496E-01	8.9949E-01	4.2026E-05	1.1249E-07
4.2635E+00	1.0623E+00	-3.1374E-01	9.0949E-01	4.0179E-05	1.1403E-07
4.2635E+00	1.0623E+00	-3.8350E-01	9.1874E-01	3.7831E-05	1.1221E-07
4.2635E+00	1.0623E+00	-4.6990E-01	9.2917E-01	3.8559E-05	9.1410E-08
4.2635E+00	1.0623E+00	-5.7649E-01	9.3762E-01	4.4616E-05	1.3654E-07
4.2635E+00	1.0623E+00	-7.0644E-01	9.7587E-01	3.7035E-05	1.0499E-07
4.2635E+00	1.0623E+00	-8.6756E-01	9.8794E-01	3.7025E-05	1.1571E-07
4.2635E+00	1.0623E+00	-1.0623E+00	9.9555E-01	4.4535E-05	1.4796E-07

Table B.1-2 Hot-wire velocity measurements at the trailing edge, no trip, Y / T = 1.062

File E462170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.120746
viscosity (meters squared per second) = 1.634278E-05
Atmospheric pressure (Pascals) = 95575
Velocity of undisturbed free stream (Uref, in m/s) = 27.71325
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089105E-03
Estimated momentum thickness Reynolds number = 6934.096

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	1.5935E+00	0.0000E+00	1.0672E-01	2.5905E-03	1.4293E-04
4.2635E+00	1.5935E+00	-1.0623E-03	1.0587E-01	2.5054E-03	1.3373E-04
4.2635E+00	1.5935E+00	-2.1246E-03	1.0699E-01	2.6474E-03	1.5500E-04
4.2635E+00	1.5935E+00	-3.1870E-03	1.1065E-01	2.9205E-03	1.7198E-04
4.2635E+00	1.5935E+00	-4.2493E-03	1.1445E-01	3.1670E-03	1.9297E-04
4.2635E+00	1.5935E+00	-5.3116E-03	1.2149E-01	3.8013E-03	2.5334E-04
4.2635E+00	1.5935E+00	-6.3739E-03	1.2750E-01	4.2466E-03	2.8379E-04
4.2635E+00	1.5935E+00	-7.7904E-03	1.3891E-01	4.9729E-03	3.2991E-04
4.2635E+00	1.5935E+00	-9.5609E-03	1.6456E-01	6.3710E-03	3.5927E-04
4.2635E+00	1.5935E+00	-1.1686E-02	1.9850E-01	7.1580E-03	3.9771E-04
4.2635E+00	1.5935E+00	-1.4518E-02	2.1795E-01	7.6651E-03	2.2847E-04
4.2635E+00	1.5935E+00	-1.7705E-02	2.4588E-01	7.5424E-03	1.4663E-04
4.2635E+00	1.5935E+00	-2.2132E-02	2.7505E-01	7.3441E-03	1.6183E-04
4.2635E+00	1.5935E+00	-2.6912E-02	3.1032E-01	7.1964E-03	9.2178E-05
4.2635E+00	1.5935E+00	-3.2932E-02	3.4274E-01	7.3853E-03	1.1748E-04
4.2635E+00	1.5935E+00	-4.0722E-02	3.8294E-01	7.1772E-03	7.1246E-05
4.2635E+00	1.5935E+00	-4.9929E-02	4.2928E-01	7.2753E-03	4.0139E-05
4.2635E+00	1.5935E+00	-7.5071E-02	4.8319E-01	7.0990E-03	1.6599E-05
4.2635E+00	1.5935E+00	-7.5071E-02	5.4290E-01	6.4185E-03	-5.1007E-05
4.2635E+00	1.5935E+00	-9.2068E-02	6.0964E-01	5.8542E-03	-1.0529E-04
4.2635E+00	1.5935E+00	-1.1261E-01	6.8526E-01	4.5490E-03	-1.1528E-04
4.2635E+00	1.5935E+00	-1.3813E-01	7.6792E-01	2.9994E-03	-9.5486E-05
4.2635E+00	1.5935E+00	-1.6897E-01	8.4299E-01	1.1812E-03	-5.3842E-05
4.2635E+00	1.5935E+00	-2.0822E-01	9.0426E-01	1.2484E-04	-1.3099E-06
4.2635E+00	1.5935E+00	-2.5567E-01	8.9474E-01	4.4485E-05	1.0521E-07
4.2635E+00	1.5935E+00	-3.1303E-01	9.0492E-01	3.7497E-05	9.3573E-08
4.2635E+00	1.5935E+00	-3.8421E-01	9.1349E-01	3.4342E-05	9.7975E-08
4.2635E+00	1.5935E+00	-4.7025E-01	9.2402E-01	3.7506E-05	1.0393E-07
4.2635E+00	1.5935E+00	-5.7613E-01	9.3253E-01	3.4836E-05	9.2780E-08
4.2635E+00	1.5935E+00	-7.0644E-01	9.4204E-01	3.5326E-05	1.1330E-07
4.2635E+00	1.5935E+00	-8.6615E-01	9.5463E-01	3.8021E-05	1.0621E-07
4.2635E+00	1.5935E+00	-1.0623E+00	9.6224E-01	3.4027E-05	1.1117E-07

Table B.1-3 Hot-wire velocity measurements at the trailing edge, no trip, Y / T = 1.594

File E461170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.121215
viscosity (meters squared per second) = 1.6335945-05
Atmospheric pressure (Pascals) = 95615
Velocity of undisturbed free stream (Uref, in m/s) = 27.72874
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08E647E-03
Estimated momentum thickness Reynolds number = 6940.1

X/T	Y/T	Z/T	U/Uref	u2/Uref2	uZ/Uref3
4.2635E+00	2.1246E+00	0.0000E+00	5.1078E-02	5.0251E-04	1.3959E-05
4.2635E+00	2.1246E+00	-1.0623E-03	5.1405E-02	5.1404E-04	1.4096E-05
4.2635E+00	2.1246E+00	-2.1246E-03	5.0987E-02	5.1148E-04	1.5193E-05
4.2635E+00	2.1246E+00	-3.1870E-03	4.9915E-02	5.0855E-04	1.7373E-05
4.2635E+00	2.1246E+00	-4.2493E-03	4.9955E-02	5.5337E-04	2.1673E-05
4.2635E+00	2.1246E+00	-5.3116E-03	5.1859E-02	6.9942E-04	3.6329E-05
4.2635E+00	2.1246E+00	-6.3739E-03	5.9802E-02	1.1556E-03	7.7259E-05
4.2635E+00	2.1246E+00	-7.7904E-03	7.3149E-02	1.9732E-03	1.4215E-04
4.2635E+00	2.1246E+00	-9.5a09E-03	1.0748E-01	4.1119E-03	2.9401E-04
4.2635E+00	2.1246E+00	-1.1686E-02	1.5979E-01	6.1905E-03	2.9960E-04
4.2635E+00	2.1246E+00	-1.4518E-02	2.0011E-01	6.9239E-03	2.7086E-04
4.2635E+00	2.1246E+00	-1.7705E-02	2.3479E-01	7.0600E-03	1.9300E-04
4.2635E+00	2.1246E+00	-2.1955E-02	2.6731E-01	7.1566E-03	1.3645E-04
4.2635E+00	2.1246E+00	-2.6912E-02	3.0348E-01	7.2710E-03	1.4166E-04
4.2635E+00	2.1246E+00	-3.2932E-02	3.3589E-01	7.4163E-03	1.3527E-04
4.2635E+00	2.1246E+00	-4.0722E-02	3.7842E-01	7.3734E-03	1.0332E-04
4.2635E+00	2.1246E+00	-4.9929E-02	4.2040E-01	7.3536E-03	4.4062E-05
4.2635E+00	2.1246E+00	-6.1261E-02	4.7479E-01	7.1659E-03	2.1775E-05
4.2635E+00	2.1246E+00	-7.5071E-02	5.3391E-01	6.8257E-03	-3.7527E-05
4.2635E+00	2.1246E+00	-9.2068E-02	6.0217E-01	6.0587E-03	-8.8782E-05
4.2635E+00	2.1246E+00	-1.1261E-01	6.7693E-01	4.8902E-03	-1.0212E-04
4.2635E+00	2.1246E+00	-1.3810E-01	7.5721E-01	3.3371E-03	-8.1755E-05
4.2635E+00	2.1246E+00	-2.0796E-01	8.9377E-01	2.4903E-04	-7.9520E-06
4.2635E+00	2.1246E+00	-2.5496E-01	9.0394E-01	4.9558E-05	1.4508E-07
4.2635E+00	2.1246E+00	-3.1303E-01	9.1667E-01	3.8339E-05	7.4331E-08
4.2635E+00	2.1246E+00	-3.8357E-01	9.2598E-01	3.6903E-05	9.8398E-08
4.2635E+00	2.1246E+00	-4.7061E-01	9.3483E-01	4.4156E-05	1.1398E-07
4.2635E+00	2.1246E+00	-5.7484E-01	9.4561E-01	4.0123E-05	1.1390E-07
4.2635E+00	2.1246E+00	-7.0680E-01	9.5033E-01	3.4569E-05	1.0660E-07
4.2635E+00	2.1246E+00	-8.6615E-01	9.6152E-01	4.3950E-05	9.8a7E-08
4.2635E+00	2.1246E+00	-1.0623E+00	9.6941E-01	4.1695E-05	1.0170E-07

Table B.1-4 Hot-wire velocity measurements at the trailing edge, no trip, Y / T = 2.125

File E460179 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.121215
viscosity (meters squared per second) = 1.633594E-05
Atmospheric pressure (Pascals) = 95615
Velocity of undisturbed free stream (Uref, in m/s) = 27.73238
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08854E-03
Estimated momentum thickness Reynolds number = 6949.827

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	2.6558E+00	0.0000E+00	6.1422E-02	6.4790E-04	1.8366E-05
4.2635E+00	2.6558E+00	1.0623E-03	6.0135E-02	6.6453E-04	2.2585E-05
4.2635E+00	2.6558E+00	2.1246E-03	5.8925E-02	7.3221E-04	3.1928E-05
4.2635E+00	2.6558E+00	3.1870E-03	6.4074E-02	1.0740E-03	6.9108E-05
4.2635E+00	2.6558E+00	4.2493E-03	7.8993E-02	1.9885E-03	1.5286E-04
4.2635E+00	2.6558E+00	5.6657E-03	1.0788E-01	3.9315E-03	3.2660E-04
4.2635E+00	2.6558E+00	6.3739E-03	1.3525E-01	5.6750E-03	4.1917E-04
4.2635E+00	2.6558E+00	7.7904E-03	1.7048E-01	7.3698E-03	4.6993E-04
4.2635E+00	2.6558E+00	9.5609E-03	2.1237E-01	8.6246E-03	3.9527E-04
4.2635E+00	2.6558E+00	1.1686E-02	2.4720E-01	8.9221E-03	2.7034E-04
4.2635E+00	2.6558E+00	1.4518E-02	2.8732E-01	8.5587E-03	2.0383E-04
4.2635E+00	2.6558E+00	1.7705E-02	3.2366E-01	8.7278E-03	1.6444E-04
4.2635E+00	2.6558E+00	2.1955E-02	3.6144E-01	8.5914E-03	1.3437E-04
4.2635E+00	2.6558E+00	2.6912E-02	3.9979E-01	8.6262E-03	1.1988E-04
4.2635E+00	2.6558E+00	3.2932E-02	4.4666E-01	9.7890E-03	6.3523E-05
4.2635E+00	2.6558E+00	4.0722E-02	4.9226E-01	8.3350E-03	9.2566E-06
4.2635E+00	2.6558E+00	5.0283E-02	5.5677E-01	7.9386E-03	-7.7786E-05
4.2635E+00	2.6558E+00	6.1615E-02	6.2209E-01	7.1238E-03	-9.4624E-05
4.2635E+00	2.6558E+00	7.5071E-02	6.8875E-01	5.7434E-03	-1.4085E-04
4.2635E+00	2.6558E+00	9.2068E-02	7.2953E-01	5.1291E-03	-1.6314E-04
4.2635E+00	2.6558E+00	1.1261E-01	8.2872E-01	2.5566E-03	-1.0594E-04
4.2635E+00	2.6558E+00	1.3846E-01	8.8341E-01	8.9557E-04	-2.3534E-05
4.2635E+00	2.6558E+00	1.6962E-01	9.0190E-01	4.5504E-04	4.3975E-06
4.2635E+00	2.6558E+00	2.0822E-01	9.1128E-01	4.6095E-04	-2.5314E-06
4.2635E+00	2.6558E+00	2.5531E-01	9.1890E-01	4.4865E-04	-1.2754E-06
4.2635E+00	2.6558E+00	3.1268E-01	9.2457E-01	4.2899E-04	-1.0547E-06
4.2635E+00	2.6558E+00	3.8314E-01	9.3247E-01	3.7736E-04	4.5677E-06
4.2635E+00	2.6558E+00	4.7025E-01	9.3755E-01	2.7503E-04	-7.5814E-07
4.2635E+00	2.6558E+00	5.7684E-01	9.4363E-01	1.3769E-04	4.3713E-07
4.2635E+00	2.6558E+00	7.0786E-01	9.4743E-01	6.7875E-05	-3.6654E-07
4.2635E+00	2.6558E+00	8.6615E-01	9.5524E-01	4.2986E-05	1.3090E-07
4.2635E+00	2.6558E+00	1.0630E+00	9.6263E-01	3.7854E-05	1.1351E-07
4.2635E+00	2.6558E+00	0.0000E+00	6.1104E-02	6.8466E-04	2.1696E-05
4.2635E+00	2.6558E+00	-1.0623E-03	6.3139E-02	7.2135E-04	2.2954E-05
4.2635E+00	2.6558E+00	-2.3017E-03	6.5191E-02	7.1066E-04	2.0750E-05
4.2635E+00	2.6558E+00	-3.3640E-03	6.5444E-02	7.2956E-04	2.3110E-05
4.2635E+00	2.6558E+00	-4.2493E-03	6.4883E-02	7.4775E-04	2.5642E-05
4.2635E+00	2.6558E+00	-5.6657E-03	6.7383E-02	9.8089E-04	5.0703E-05
4.2635E+00	2.6558E+00	-6.3739E-03	7.3703E-02	1.2317E-03	8.0350E-05
4.2635E+00	2.6558E+00	-7.7904E-03	8.9187E-02	2.3939E-03	1.7914E-04
4.2635E+00	2.6558E+00	-9.5609E-03	1.3281E-01	5.2722E-03	3.7977E-04
4.2635E+00	2.6558E+00	-1.1686E-02	2.0153E-01	8.1030E-03	3.8175E-04
4.2635E+00	2.6558E+00	-1.4518E-02	2.6891E-01	9.1134E-03	2.2285E-04
4.2635E+00	2.6558E+00	-1.7705E-02	3.1259E-01	8.9519E-03	1.5239E-04
4.2635E+00	2.6558E+00	-2.2132E-02	3.5306E-01	8.5904E-03	1.4137E-04
4.2635E+00	2.6558E+00	-2.6912E-02	3.9912E-01	8.4520E-03	9.9160E-05
4.2635E+00	2.6558E+00	-3.2932E-02	4.4179E-01	8.2699E-03	7.1210E-05
4.2635E+00	2.6558E+00	-4.0722E-02	4.9467E-01	8.0765E-03	1.8729E-05
4.2635E+00	2.6558E+00	-4.9929E-02	5.5329E-01	7.5959E-03	-2.9582E-05
4.2635E+00	2.6558E+00	-6.1261E-02	6.1806E-01	7.0595E-03	-7.7315E-05
4.2635E+00	2.6558E+00	-7.5071E-02	6.9603E-01	5.7176E-03	-1.0223E-04
4.2635E+00	2.6558E+00	-9.2068E-02	7.6074E-01	4.2360E-03	-1.0909E-04
4.2635E+00	2.6558E+00	-1.1261E-01	8.2754E-01	2.4940E-03	-1.2318E-04
4.2635E+00	2.6558E+00	-1.3810E-01	8.7652E-01	9.0876E-04	-2.9903E-05
4.2635E+00	2.6558E+00	-1.6962E-01	8.9676E-01	4.7685E-04	3.3841E-06
4.2635E+00	2.6558E+00	-2.0796E-01	9.0545E-01	4.7963E-04	1.8785E-06
4.2635E+00	2.6558E+00	-2.5496E-01	9.1436E-01	4.7055E-04	-5.8290E-06
4.2635E+00	2.6558E+00	-3.1339E-01	9.2308E-01	4.3265E-04	5.8302E-08
4.2635E+00	2.6558E+00	-3.8314E-01	9.3245E-01	3.6136E-04	1.7461E-06
4.2635E+00	2.6558E+00	-4.6990E-01	9.3948E-01	2.8787E-04	-1.3264E-06
4.2635E+00	2.6558E+00	-5.7613E-01	9.4786E-01	1.4554E-04	1.7227E-06
4.2635E+00	2.6558E+00	-7.0680E-01	9.5534E-01	7.2452E-05	5.9033E-07
4.2635E+00	2.6558E+00	-8.6586E-01	9.6363E-01	4.5632E-05	1.5806E-07
4.2635E+00	2.6558E+00	-1.0623E+00	9.7342E-01	4.0150E-05	1.0829E-07

Table B.1-5 Hot-wire velocity measurements at the trailing edge, no trip, Y / T = 2.656

File E47b170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.130882
viscosity (meters squared per second) = 1.611204E-05
Atmospheric pressure (Pascals) = 95790
Velocity of undisturbed free stream (Uref, in m/s) = 27.7139
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089085E-03
Estimated momentum thickness Reynolds number = 7033.518

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	5.3116E-01	0.0000E+00	7.0924E-02	9.2594E-04	5.4161E-05
4.2635E+00	5.3116E-01	-1.0623E-03	7.1603E-02	9.6177E-04	5.3342E-05
4.2635E+00	5.3116E-01	-2.1246E-03	7.4062E-02	1.1656E-03	7.3440E-05
4.2635E+00	5.3116E-01	-3.1870E-03	7.8776E-02	1.4837E-03	1.0215E-04
4.2635E+00	5.3116E-01	-4.2493E-03	8.7458E-02	2.1447E-03	1.6437E-04
4.2635E+00	5.3116E-01	-5.3116E-03	1.0909E-01	3.1120E-03	2.5492E-04
4.2635E+00	5.3116E-01	-6.3739E-03	1.1332E-01	4.0441E-03	3.3158E-04
4.2635E+00	5.3116E-01	-7.7904E-03	1.3163E-01	5.1223E-03	3.7119E-04
4.2635E+00	5.3116E-01	-9.7380E-03	1.6065E-01	6.4004E-03	3.5926E-04
4.2635E+00	5.3116E-01	-1.1686E-02	1.9150E-01	7.2005E-03	2.9363E-04
4.2635E+00	5.3116E-01	-1.4518E-02	2.3302E-01	7.2311E-03	1.7415E-04
4.2635E+00	5.3116E-01	-1.7705E-02	2.6635E-01	7.2537E-03	1.4959E-04
4.2635E+00	5.3116E-01	-2.1955E-02	2.9469E-01	7.3560E-03	1.3672E-04
4.2635E+00	5.3116E-01	-2.6912E-02	3.3215E-01	7.4139E-03	1.2663E-04
4.2635E+00	5.3116E-01	-3.2932E-02	3.6529E-01	7.3379E-03	1.1793E-04
4.2635E+00	5.3116E-01	-4.0722E-02	4.1310E-01	7.4699E-03	7.4622E-05
4.2635E+00	5.3116E-01	-4.9929E-02	4.5801E-01	7.3319E-03	4.2469E-05
4.2635E+00	5.3116E-01	-6.2523E-02	5.1984E-01	7.2168E-03	-1.9735E-07
4.2635E+00	5.3116E-01	-7.5071E-02	5.8286E-01	6.5814E-03	-8.2513E-05
4.2635E+00	5.3116E-01	-9.2068E-02	6.5971E-01	5.8694E-03	-1.0974E-04
4.2635E+00	5.3116E-01	-1.1261E-01	7.4413E-01	4.3366E-03	-1.5394E-04
4.2635E+00	5.3116E-01	-1.3810E-01	8.3499E-01	2.0336E-03	-1.0669E-04
4.2635E+00	5.3116E-01	-1.6979E-01	8.8362E-01	2.7079E-04	-5.3007E-06
4.2635E+00	5.3116E-01	-2.0786E-01	8.9618E-01	1.2264E-04	-5.0330E-09
4.2635E+00	5.3116E-01	-2.5496E-01	9.0300E-01	1.1650E-04	-3.9546E-07
4.2635E+00	5.3116E-01	-3.1268E-01	9.0998E-01	1.4928E-04	-2.7573E-06
4.2635E+00	5.3116E-01	-3.8314E-01	9.1985E-01	2.0870E-04	-6.2819E-05
4.2635E+00	5.3116E-01	-4.6990E-01	9.2697E-01	2.7839E-04	-1.0225E-05
4.2635E+00	5.3116E-01	-5.7613E-01	9.3829E-01	3.3626E-04	-1.3561E-05
4.2635E+00	5.3116E-01	-7.0659E-01	9.4592E-01	4.9332E-04	-2.2870E-05
4.2635E+00	5.3116E-01	-8.6650E-01	9.4924E-01	7.9465E-04	-4.2439E-05
4.2635E+00	5.3116E-01	-1.0627E+00	9.5088E-01	9.7936E-04	-5.0454E-05

Table B.1-6 Hot-wire velocity measurements at the trailing edge, 220-grade sandpaper trip, Y / T = .531

File E472170 .RES
velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.129049
viscosity (meters squared per second) = 1.615253E-05
Atmospheric pressure (Pascals) = 95550
Velocity of undisturbed free stream (Uref, in m/s) = 27.73025
Estimated momentum thickness at Y/T = -2.140, Z/T=0 (m) = 4.088603E-03
Estimated momentum thickness Reynolds number = 7019.209

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	1.0623E+00	0.0000E+00	9.5449E-02	2.1981E-03	1.4207E-04
4.2635E+00	1.0623E+00	-1.4623E-03	9.2772E-02	2.0273E-03	1.3601E-04
4.2635E+00	1.0623E+00	-2.3017E-03	9.2033E-02	1.9456E-03	1.1693E-04
4.2635E+00	1.0623E+00	-3.1870E-03	9.3047E-02	2.0295E-03	1.2802E-04
4.2635E+00	1.0623E+00	-4.2493E-03	9.6563E-02	2.3332E-03	1.6644E-04
4.2635E+00	1.0623E+00	-5.3116E-03	1.0234E-01	2.7881E-03	2.0468E-04
4.2635E+00	1.0623E+00	-6.3739E-03	1.0917E-01	3.3447E-03	2.5613E-04
4.2635E+00	1.0623E+00	-7.7904E-03	1.1882E-01	4.0309E-03	2.9131E-04
4.2635E+00	1.0623E+00	-9.5609E-03	1.3513E-01	5.0947E-03	3.5346E-04
4.2635E+00	1.0623E+00	-1.1686E-02	1.5968E-01	6.0064E-03	3.1669E-04
4.2635E+00	1.0623E+00	-1.4518E-02	1.9933E-01	6.8427E-03	2.1158E-04
4.2635E+00	1.0623E+00	-1.7705E-02	2.2891E-01	7.0668E-03	1.9932E-04
4.2635E+00	1.0623E+00	-2.1955E-02	2.5796E-01	6.7687E-03	1.3227E-04
4.2635E+00	1.0623E+00	-2.6912E-02	2.9065E-01	6.6562E-03	1.1025E-04
4.2635E+00	1.0623E+00	-3.2932E-02	3.2834E-01	6.8153E-03	1.2596E-04
4.2635E+00	1.0623E+00	-4.0722E-02	3.6986E-01	6.9839E-03	1.0462E-04
4.2635E+00	1.0623E+00	-4.9929E-02	4.1898E-01	6.8504E-03	5.5896E-05
4.2635E+00	1.0623E+00	-6.1261E-02	4.7745E-01	6.8184E-03	1.8618E-05
4.2635E+00	1.0623E+00	-7.5071E-02	5.4293E-01	6.4594E-03	-4.3818E-05
4.2635E+00	1.0623E+00	-9.2068E-02	6.1952E-01	5.6180E-03	-9.4106E-05
4.2635E+00	1.0623E+00	-1.1261E-01	7.0416E-01	4.4536E-03	-1.3792E-04
4.2635E+00	1.0623E+00	-1.3810E-01	8.0143E-01	2.3365E-03	-1.0513E-04
4.2635E+00	1.0623E+00	-1.6962E-01	8.6925E-01	3.2962E-04	-1.2522E-05
4.2635E+00	1.0623E+00	-2.0786E-01	8.8088E-01	4.8974E-05	8.1271E-08
4.2635E+00	1.0623E+00	-2.5531E-01	8.9039E-01	3.7967E-05	6.6906E-08
4.2635E+00	1.0623E+00	-3.1268E-01	9.0174E-01	3.4014E-05	5.5452E-08
4.2635E+00	1.0623E+00	-3.8314E-01	9.0878E-01	3.2452E-05	5.8226E-08
4.2635E+00	1.0623E+00	-4.6990E-01	9.1928E-01	3.6402E-05	7.3016E-08
4.2635E+00	1.0623E+00	-5.7613E-01	9.2849E-01	3.3159E-05	7.9205E-08
4.2635E+00	1.0623E+00	-7.0644E-01	9.3801E-01	3.5736E-05	7.4491E-08
4.2635E+00	1.0623E+00	-8.6579E-01	9.5087E-01	4.5277E-05	9.1138E-08
4.2635E+00	1.0623E+00	-1.0627E+00	9.5928E-01	3.1326E-05	8.9219E-08

Table B.1-7 Hot-wire velocity measurements at the trailing edge, 220-grade sandpaper trip, Y / T = 1.062

File E471170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.128049
viscosity (meters squared per second) = 1.615253E-05
Atmospheric pressure (Pascals) = 95550
Velocity of undisturbed free stream (Uref, in m/s) = 27.70877
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089236E-03
Estimated momentum thickness Reynolds number = 7014.859

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	1.5935E+00	0.0000E+00	7.3512E-02	1.0625E-03	5.9979E-05
4.2635E+00	1.5935E+00	-1.0623E-03	7.3522E-02	1.0635E-03	6.0446E-05
4.2635E+00	1.5935E+00	-2.1246E-03	7.5757E-02	1.1693E-03	6.8700E-05
4.2635E+00	1.5935E+00	-3.1870E-03	7.9856E-02	1.5360E-03	1.0839E-04
4.2635E+00	1.5935E+00	-4.2493E-03	8.4179E-02	1.8815E-03	1.3431E-04
4.2635E+00	1.5935E+00	-5.3116E-03	9.9404E-02	2.9969E-03	2.4431E-04
4.2635E+00	1.5935E+00	-6.3739E-03	1.1359E-01	3.9987E-03	3.1151E-04
4.2635E+00	1.5935E+00	-7.7904E-03	1.3839E-01	5.4253E-03	3.6098E-04
4.2635E+00	1.5935E+00	-9.5609E-03	1.6507E-01	6.3549E-03	3.4276E-04
4.2635E+00	1.5935E+00	-1.1686E-02	1.9377E-01	6.9273E-03	2.5331E-04
4.2635E+00	1.5935E+00	-1.4519E-02	2.2151E-01	6.8430E-03	1.6547E-04
4.2635E+00	1.5935E+00	-1.7705E-02	2.5098E-01	6.9507E-03	1.5557E-04
4.2635E+00	1.5935E+00	-2.1955E-02	2.8550E-01	6.7622E-03	1.1645E-04
4.2635E+00	1.5935E+00	-2.6912E-02	3.1469E-01	6.8110E-03	1.1256E-04
4.2635E+00	1.5935E+00	-3.2932E-02	3.4864E-01	6.9213E-03	9.7503E-05
4.2635E+00	1.5935E+00	-4.0722E-02	3.9250E-01	6.9183E-03	6.7612E-05
4.2635E+00	1.5935E+00	-4.9929E-02	4.3698E-01	6.8552E-03	2.9648E-05
4.2635E+00	1.5935E+00	-6.1261E-02	4.8901E-01	6.5841E-03	1.2715E-05
4.2635E+00	1.5935E+00	-7.5071E-02	5.5193E-01	6.2126E-03	-5.9330E-05
4.2635E+00	1.5935E+00	-9.2068E-02	6.2352E-01	5.5522E-03	-9.6203E-05
4.2635E+00	1.5935E+00	-1.1261E-01	7.1117E-01	4.2361E-03	-1.1015E-04
4.2635E+00	1.5935E+00	-1.3810E-01	7.9377E-01	2.5391E-03	-1.0577E-04
4.2635E+00	1.5935E+00	-1.6962E-01	8.6628E-01	4.9795E-04	-2.2181E-05
4.2635E+00	1.5935E+00	-2.0786E-01	8.8437E-01	5.8435E-05	1.3844E-07
4.2635E+00	1.5935E+00	-2.5496E-01	8.9521E-01	3.5265E-05	5.9322E-08
4.2635E+00	1.5935E+00	-3.1268E-01	9.0246E-01	2.9381E-05	5.3992E-08
4.2635E+00	1.5935E+00	-3.8314E-01	9.0979E-01	4.1723E-05	4.8552E-08
4.2635E+00	1.5935E+00	-4.6990E-01	9.2260E-01	3.2800E-05	7.7977E-08
4.2635E+00	1.5935E+00	-5.7613E-01	9.3144E-01	3.2122E-05	7.3768E-08
4.2635E+00	1.5935E+00	-7.0680E-01	9.3928E-01	3.1143E-05	6.7607E-08
4.2635E+00	1.5935E+00	-8.6615E-01	9.4949E-01	3.2949E-05	6.0219E-08
4.2635E+00	1.5935E+00	-1.0630E+00	9.5375E-01	3.7163E-05	7.4730E-08

Table B.1-8 Hot-wire velocity measurements at the trailing edge, 220-grade sandpaper trip, Y / T = 1.594

File S474170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.128049
viscosity (meters squared per second) = 1.615253E-05
Atmospheric pressure (Pascals) = 95550
Velocity of undisturbed free stream (Uref, in m/s) = 27.74701
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.088109E-03
Est.meter momentum thickness Reynolds number = 7022.602

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	2.1246E+00	0.0000E+00	4.3218E-02	3.4377E-04	7.6355E-06
4.2635E+00	2.1246E+00	-1.0623E-03	4.3800E-02	3.5957E-04	8.7798E-06
4.2635E+00	2.1246E+00	-2.1246E-03	4.3152E-02	3.4243E-04	7.9247E-06
4.2635E+00	2.1246E+00	-3.1870E-03	4.2224E-02	3.4496E-04	8.9961E-06
4.2635E+00	2.1246E+00	-4.2493E-03	4.1456E-02	3.2171E-04	9.1519E-06
4.2635E+00	2.1246E+00	-5.3116E-03	4.0485E-02	2.9659E-04	7.4678E-06
4.2635E+00	2.1246E+00	-6.3739E-03	4.1996E-02	3.4857E-04	1.1912E-05
4.2635E+00	2.1246E+00	-7.7904E-03	4.8891E-02	5.3469E-04	3.7301E-05
4.2635E+00	2.1246E+00	-9.5609E-03	7.7865E-02	2.1269E-03	1.4769E-04
4.2635E+00	2.1246E+00	-1.1686E-02	1.3248E-01	4.9601E-03	2.9851E-04
4.2635E+00	2.1246E+00	-1.4518E-02	1.8542E-01	6.2095E-03	2.4406E-04
4.2635E+00	2.1246E+00	-1.7705E-02	2.2525E-01	6.1876E-03	1.4829E-04
4.2635E+00	2.1246E+00	-2.1955E-02	2.5931E-01	6.3898E-03	1.3383E-04
4.2635E+00	2.1246E+00	-2.6912E-02	2.9475E-01	6.5178E-03	1.3241E-04
4.2635E+00	2.1246E+00	-3.2932E-02	3.2844E-01	6.6176E-03	1.1376E-04
4.2635E+00	2.1246E+00	-4.0722E-02	3.7181E-01	6.5572E-03	9.0885E-05
4.2635E+00	2.1246E+00	-4.9929E-02	4.1664E-01	6.4737E-03	5.4621E-05
4.2635E+00	2.1246E+00	-6.1261E-02	4.7352E-01	6.5202E-03	3.8810E-06
4.2635E+00	2.1246E+00	-7.5071E-02	5.3616E-01	6.2431E-03	-4.6336E-05
4.2635E+00	2.1246E+00	-9.2422E-02	6.1471E-01	5.4145E-03	-6.0027E-05
4.2635E+00	2.1246E+00	-1.1261E-01	6.9774E-01	4.4292E-03	-9.4521E-05
4.2635E+00	2.1246E+00	-1.3810E-01	7.9161E-01	2.7684E-03	-9.3727E-05
4.2635E+00	2.1246E+00	-1.6962E-01	8.7294E-01	6.1562E-04	-2.9726E-05
4.2635E+00	2.1246E+00	-2.0786E-01	8.9587E-01	5.7519E-05	1.1165E-07
4.2635E+00	2.1246E+00	-2.5531E-01	9.0168E-01	4.0097E-05	3.8364E-08
4.2635E+00	2.1246E+00	-3.1339E-01	9.1131E-01	3.2972E-05	4.4223E-08
4.2635E+00	2.1246E+00	-3.8314E-01	9.2050E-01	3.4432E-05	5.5830E-08
4.2635E+00	2.1246E+00	-4.6990E-01	9.3058E-01	3.2515E-05	5.9731E-08
4.2635E+00	2.1246E+00	-5.7649E-01	9.4086E-01	3.4016E-05	5.9853E-08
4.2635E+00	2.1246E+00	-7.0659E-01	9.4897E-01	3.1376E-05	5.0499E-08
4.2635E+00	2.1246E+00	-8.6615E-01	9.5660E-01	3.1242E-05	5.2503E-08
4.2635E+00	2.1246E+00	-1.0634E+00	9.6365E-01	3.0938E-05	5.3933E-08

Table B.1-9 Hot-wire velocity measurements at the trailing edge, 220-grade sandpaper trip, Y / T = 2.125

File E475170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.128049
viscosity (meters squared per second) = 1.615253E-05
Atmospheric pressure (Pascals) = 95550
Velocity of undisturbed free stream (Uref, in m/s) = 27.70092
Estimated momentum thickness at X/T = -2.145, Z/T=0 (m) = 4.089495E-03
Estimated momentum thickness Reynolds number = 7013.086

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	2.6558E+00	0.0000E+00	7.1602E-02	7.7597E-04	2.6494E-05
4.2635E+00	2.6558E+00	-1.0623E-03	7.2363E-02	7.6367E-04	2.2847E-05
4.2635E+00	2.6558E+00	-2.1246E-03	7.2416E-02	7.7081E-04	2.3452E-05
4.2635E+00	2.6559E+00	-3.1870E-03	7.2027E-02	8.1304E-04	2.9231E-05
4.2635E+00	2.6558E+00	-4.2493E-03	7.1180E-02	8.3129E-04	3.3017E-05
4.2635E+00	2.6558E+00	-5.3116E-03	7.3178E-02	1.1109E-03	6.3539E-05
4.2635E+00	2.6558E+00	-6.3739E-03	8.0433E-02	1.6908E-03	1.2758E-04
4.2635E+00	2.6558E+00	-7.7904E-03	9.7531E-02	2.8222E-03	2.2792E-04
4.2635E+00	2.6558E+00	-9.5609E-03	1.3657E-01	5.6341E-03	4.5949E-04
4.2635E+00	2.6559E+00	-1.1686E-02	1.8187E-01	7.9266E-03	4.8139E-04
4.2635E+00	2.6558E+00	-1.4518E-02	2.3809E-01	9.0162E-03	3.1665E-04
4.2635E+00	2.6558E+00	-1.7705E-02	2.9215E-01	9.0264E-03	2.4703E-04
4.2635E+00	2.6558E+00	-2.1955E-02	3.3586E-01	8.6826E-03	1.7129E-04
4.2635E+00	2.6558E+00	-2.6912E-02	3.7521E-01	8.9728E-03	1.5682E-04
4.2635E+00	2.6558E+00	-3.2932E-02	4.1907E-01	8.5953E-03	9.9581E-05
4.2635E+00	2.6558E+00	-4.0722E-02	4.6902E-01	8.6443E-03	4.3123E-05
4.2635E+00	2.6559E+00	-4.9929E-02	5.2517E-01	8.1047E-03	2.4667E-05
4.2635E+00	2.6558E+00	-6.1615E-02	5.9988E-01	7.5721E-03	-7.4485E-05
4.2635E+00	2.6558E+00	-7.5071E-02	6.5543E-01	6.6782E-03	-1.1656E-04
4.2635E+00	2.6558E+00	-9.2245E-02	7.3211E-01	5.0363E-03	-1.4602E-04
4.2635E+00	2.6559E+00	-1.1241E-01	8.0718E-01	3.1977E-03	-1.2869E-04
4.2635E+00	2.6558E+00	-1.3810E-01	8.7441E-01	1.2818E-03	-3.9194E-05
4.2635E+00	2.6558E+00	-1.6962E-01	9.0593E-01	5.4931E-04	-5.0444E-06
4.2635E+00	2.6558E+00	-2.0766E-01	9.0962E-01	4.9078E-04	-1.7108E-06
4.2635E+00	2.6558E+00	-2.5496E-01	9.1729E-01	4.8879E-04	-3.9453E-06
4.2635E+00	2.6558E+00	-3.1303E-01	9.2783E-01	4.7061E-04	-3.7861E-06
4.2635E+00	2.6559E+00	-3.8314E-01	9.3426E-01	4.1356E-04	-6.2054E-06
4.2635E+00	2.6558E+00	-4.7025E-01	9.4490E-01	2.7324E-04	-3.1677E-06
4.2635E+00	2.6558E+00	-5.7649E-01	9.5577E-01	1.2965E-04	8.7026E-07
4.2635E+00	2.6558E+00	-7.0680E-01	9.6056E-01	6.0255E-05	2.1657E-07
4.2635E+00	2.6558E+00	-8.6615E-01	9.7010E-01	4.1923E-05	8.5361E-08
4.2635E+00	2.6558E+00	-1.0623E+00	9.8259E-01	3.7188E-05	7.3469E-08
4.2635E+00	2.6558E+00	0.0000E+00	7.0177E-02	7.6125E-04	2.4045E-05
4.2635E+00	2.6558E+00	1.4164E-03	7.0644E-02	9.8358E-04	4.7460E-05
4.2635E+00	2.6558E+00	2.4788E-03	7.5213E-02	1.3123E-03	8.6344E-05
4.2635E+00	2.6558E+00	3.5640E-03	8.4672E-02	1.9470E-03	1.4346E-04
4.2635E+00	2.6558E+00	4.2493E-03	1.0134E-01	3.0387E-03	2.3992E-04
4.2635E+00	2.6558E+00	5.6657E-03	1.3241E-01	4.9889E-03	3.5138E-04
4.2635E+00	2.6558E+00	6.7280E-03	1.5307E-01	6.1386E-03	4.1311E-04
4.2635E+00	2.6558E+00	7.7904E-03	1.7767E-01	7.2559E-03	4.0777E-04
4.2635E+00	2.6558E+00	9.5609E-03	2.2361E-01	8.4844E-03	3.1570E-04
4.2635E+00	2.6558E+00	1.1686E-02	2.6496E-01	8.6458E-03	2.2829E-04
4.2635E+00	2.6558E+00	1.4518E-02	3.0686E-01	8.4345E-03	1.6657E-04
4.2635E+00	2.6558E+00	1.7705E-02	3.3949E-01	8.4110E-03	1.2233E-04
4.2635E+00	2.6558E+00	2.1955E-02	3.7134E-01	8.2974E-03	1.2341E-04
4.2635E+00	2.6559E+00	2.6912E-02	4.0848E-01	8.3396E-03	8.3980E-05
4.2635E+00	2.6558E+00	3.2932E-02	4.5174E-01	8.2891E-03	4.8781E-05
4.2635E+00	2.6558E+00	4.0722E-02	4.9921E-01	8.1762E-03	1.5512E-05
4.2635E+00	2.6558E+00	4.9929E-02	5.5515E-01	7.6424E-03	-6.8662E-05
4.2635E+00	2.6559E+00	6.1261E-02	6.2211E-01	6.9976E-03	-1.1944E-04
4.2635E+00	2.6558E+00	7.5425E-02	6.9197E-01	5.5932E-03	-1.4999E-04
4.2635E+00	2.6558E+00	9.2068E-02	7.5809E-01	4.3301E-03	-1.5717E-04
4.2635E+00	2.6558E+00	1.1261E-01	8.3070E-01	2.6026E-03	-1.1848E-04
4.2635E+00	2.6558E+00	1.3810E-01	8.8300E-01	9.2762E-04	-2.5699E-05
4.2635E+00	2.6559E+00	1.6962E-01	9.0384E-01	5.3377E-04	-1.7925E-06
4.2635E+00	2.6558E+00	2.0786E-01	9.1347E-01	4.8751E-04	2.4623E-06
4.2635E+00	2.6558E+00	2.5496E-01	9.2090E-01	4.7126E-04	-4.5435E-06
4.2635E+00	2.6558E+00	3.1268E-01	9.2615E-01	4.7321E-04	-4.2515E-06
4.2635E+00	2.6558E+00	3.8314E-01	9.3505E-01	3.9577E-04	-4.6701E-07
4.2635E+00	2.6558E+00	4.7061E-01	9.4378E-01	3.0409E-04	-6.7403E-07
4.2635E+00	2.6558E+00	5.7613E-01	9.5137E-01	1.4952E-04	-5.2512E-06
4.2635E+00	2.6558E+00	7.0680E-01	9.6099E-01	6.5116E-05	5.2548E-07
4.2635E+00	2.6558E+00	8.6650E-01	9.6691E-01	4.6809E-05	1.2819E-07
4.2635E+00	2.6558E+00	1.0623E+00	9.7479E-01	3.5257E-05	7.3289E-08

Table B.1-10 Hot-wire velocity measurements at the trailing edge, 220-grade sandpaper trip, Y / T = 2.656

File E516170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.115178
viscosity (meters squared per second) = 1.638E-05
Atmospheric pressure (Pascals) = 94780
Velocity of undisturbed free stream (Uref, in m/s) = 27.60475
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.086409E-03
Estimated momentum thickness Reynolds number = 6935.897

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	5.3116E-01	0.0000E+00	7.9264E-02	1.4736E-03	9.2137E-05
4.2635E+00	5.3116E-01	1.0623E-03	7.8776E-02	1.4409E-03	8.8421E-05
4.2635E+00	5.3116E-01	2.1246E-03	8.2083E-02	1.7185E-03	1.2058E-04
4.2635E+00	5.3116E-01	3.1870E-03	8.8975E-02	2.1631E-03	1.5579E-04
4.2635E+00	5.3116E-01	4.2493E-03	9.6772E-02	2.7900E-03	2.2179E-04
4.2635E+00	5.3116E-01	5.3116E-03	1.0466E-01	3.4826E-03	2.8507E-04
4.2635E+00	5.3116E-01	6.3739E-03	1.1789E-01	4.3592E-03	3.4668E-04
4.2635E+00	5.3116E-01	7.7904E-03	1.3878E-01	5.7931E-03	4.4919E-04
4.2635E+00	5.3116E-01	9.5609E-03	1.6362E-01	6.7913E-03	3.7340E-04
4.2635E+00	5.3116E-01	1.1686E-02	1.9534E-01	7.5930E-03	3.1797E-04
4.2635E+00	5.3116E-01	1.4518E-02	2.2942E-01	7.7421E-03	2.0426E-04
4.2635E+00	5.3116E-01	1.7705E-02	2.5960E-01	7.7565E-03	1.9144E-04
4.2635E+00	5.3116E-01	2.1955E-02	2.9127E-01	7.4885E-03	1.5486E-04
4.2635E+00	5.3116E-01	2.6912E-02	3.2229E-01	7.6195E-03	1.4005E-04
4.2635E+00	5.3116E-01	3.2932E-02	3.5883E-01	7.8140E-03	1.6255E-04
4.2635E+00	5.3116E-01	4.0722E-02	3.9848E-01	7.8714E-03	1.3495E-04
4.2635E+00	5.3116E-01	4.9929E-02	4.4899E-01	8.1877E-03	1.0541E-04
4.2635E+00	5.3116E-01	6.1261E-02	5.0905E-01	7.9963E-03	6.6339E-06
4.2635E+00	5.3116E-01	7.5071E-02	5.7865E-01	7.8023E-03	-2.9739E-05
4.2635E+00	5.3116E-01	9.2068E-02	6.4764E-01	7.2199E-03	-1.2729E-04
4.2635E+00	5.3116E-01	1.1261E-01	7.3317E-01	5.8125E-03	-1.6011E-04
4.2635E+00	5.3116E-01	1.3891E-01	8.2619E-01	3.7454E-03	-1.9291E-04
4.2635E+00	5.3116E-01	1.6962E-01	9.0080E-01	8.6286E-04	-4.6696E-05
4.2635E+00	5.3116E-01	2.0766E-01	9.2371E-01	1.4352E-04	5.2597E-08
4.2635E+00	5.3116E-01	2.5496E-01	9.2857E-01	1.0841E-04	-1.8420E-07
4.2635E+00	5.3116E-01	3.1232E-01	9.3713E-01	1.2183E-04	-2.1707E-06
4.2635E+00	5.3116E-01	3.8314E-01	9.4616E-01	1.4027E-04	-2.2780E-06
4.2635E+00	5.3116E-01	4.6990E-01	9.5412E-01	2.1937E-04	-7.3924E-06
4.2635E+00	5.3116E-01	5.7654E-01	9.6134E-01	3.3052E-04	-1.3597E-05
4.2635E+00	5.3116E-01	7.0644E-01	9.6313E-01	6.0901E-04	-3.2190E-05
4.2635E+00	5.3116E-01	8.6615E-01	9.6360E-01	9.3149E-04	-4.8113E-05
4.2635E+00	5.3116E-01	1.0623E+00	9.6447E-01	1.0633E-03	-4.6589E-05
4.2635E+00	5.3116E-01	0.0000E+00	8.3729E-02	1.6829E-03	1.0621E-04
4.2635E+00	5.3116E-01	-1.0623E-03	8.4170E-02	1.6882E-03	1.0397E-04
4.2635E+00	5.3116E-01	-2.1246E-03	8.7566E-02	1.9454E-03	1.3637E-04
4.2635E+00	5.3116E-01	-3.1870E-03	9.5407E-02	2.4697E-03	1.7938E-04
4.2635E+00	5.3116E-01	-4.2493E-03	1.0237E-01	3.1208E-03	2.5281E-04
4.2635E+00	5.3116E-01	-5.3116E-03	1.0995E-01	3.6415E-03	2.8465E-04
4.2635E+00	5.3116E-01	-6.3739E-03	1.2205E-01	4.5934E-03	3.6919E-04
4.2635E+00	5.3116E-01	-7.7904E-03	1.3614E-01	5.5638E-03	3.9630E-04
4.2635E+00	5.3116E-01	-9.5609E-03	1.6257E-01	6.7857E-03	4.1772E-04
4.2635E+00	5.3116E-01	-1.1686E-02	1.9537E-01	7.8247E-03	3.4335E-04
4.2635E+00	5.3116E-01	-1.4695E-02	2.3333E-01	8.0955E-03	2.1849E-04
4.2635E+00	5.3116E-01	-1.7705E-02	2.6270E-01	7.9727E-03	1.7031E-04
4.2635E+00	5.3116E-01	-2.1955E-02	2.9057E-01	7.8722E-03	1.9828E-04
4.2635E+00	5.3116E-01	-2.6912E-02	3.2606E-01	7.7696E-03	1.4834E-04
4.2635E+00	5.3116E-01	-3.2932E-02	3.5761E-01	7.9785E-03	1.4549E-04
4.2635E+00	5.3116E-01	-4.0722E-02	3.9870E-01	8.2691E-03	1.4839E-04
4.2635E+00	5.3116E-01	-4.9929E-02	4.4467E-01	8.2863E-03	8.4969E-05
4.2635E+00	5.3116E-01	-6.1261E-02	5.0007E-01	8.1949E-03	5.3037E-05
4.2635E+00	5.3116E-01	-7.5071E-02	5.6204E-01	7.9797E-03	-2.5024E-05
4.2635E+00	5.3116E-01	-9.2068E-02	6.4321E-01	7.1834E-03	-1.2345E-04
4.2635E+00	5.3116E-01	-1.1261E-01	7.2767E-01	6.0943E-03	-1.6486E-04
4.2635E+00	5.3116E-01	-1.3810E-01	8.2807E-01	3.7209E-03	-1.9200E-04
4.2635E+00	5.3116E-01	-1.6962E-01	9.0289E-01	7.2253E-04	-3.8336E-05
4.2635E+00	5.3116E-01	-2.0786E-01	9.2158E-01	1.4069E-04	2.4406E-07
4.2635E+00	5.3116E-01	-2.5496E-01	9.2854E-01	1.1802E-04	-8.2309E-07
4.2635E+00	5.3116E-01	-3.1232E-01	9.3749E-01	1.5809E-04	-3.8385E-06
4.2635E+00	5.3116E-01	-3.8314E-01	9.4455E-01	2.2726E-04	-8.5070E-06
4.2635E+00	5.3116E-01	-4.7025E-01	9.5098E-01	3.2470E-04	-1.2852E-05
4.2635E+00	5.3116E-01	-5.7720E-01	9.5678E-01	4.3047E-04	-2.1803E-05
4.2635E+00	5.3116E-01	-7.0659E-01	9.6050E-01	6.2345E-04	-3.2799E-05
4.2635E+00	5.3116E-01	-8.6615E-01	9.5780E-01	9.8426E-04	-5.5415E-05
4.2635E+00	5.3116E-01	-1.0623E+00	9.6147E-01	1.2344E-03	-6.8193E-05

Table B.1-11 Hot-wire velocity measurements at the trailing edge, 120-grade sandpaper trip, Y / T = .531

File E51717) .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.115178
viscosity (meters squared per second) = 1.63817E-05
Atmospheric pressure (Pascals) = 94780
Velocity of undisturbed free stream (Uref, in m/s) = 27.80725
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.066336E-03
Estimated momentum thickness Reynolds number = 6936.384

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	1.0623E+00	0.0000E+00	5.4070E-02	5.8233E-04	1.9306E-05
4.2635E+00	1.0623E+00	-1.0623E-03	5.4868E-02	6.4147E-04	2.5692E-05
4.2635E+00	1.0623E+00	-2.1246E-03	5.5149E-02	7.2298E-04	3.3831E-05
4.2635E+00	1.0623E+00	-3.1870E-03	5.8525E-02	1.0020E-03	6.3426E-05
4.2635E+00	1.0623E+00	-4.2493E-03	6.4202E-02	1.3415E-03	9.1006E-05
4.2635E+00	1.0623E+00	-5.3116E-03	7.7061E-02	2.2606E-03	1.8313E-04
4.2635E+00	1.0623E+00	-6.3739E-03	9.4825E-02	3.3357E-03	2.4993E-04
4.2635E+00	1.0623E+00	-7.7904E-03	1.2019E-01	4.7895E-03	3.3474E-04
4.2635E+00	1.0623E+00	-9.5609E-03	1.5121E-01	6.0782E-03	3.1835E-04
4.2635E+00	1.0623E+00	-1.1686E-02	1.7656E-01	6.4559E-03	2.6265E-04
4.2635E+00	1.0623E+00	-1.5050E-02	2.0661E-01	6.4902E-03	1.8673E-04
4.2635E+00	1.0623E+00	-1.7705E-02	2.2686E-01	6.7176E-03	1.9585E-04
4.2635E+00	1.0623E+00	-2.1955E-02	2.5758E-01	6.8593E-03	1.6977E-04
4.2635E+00	1.0623E+00	-2.6912E-02	2.8457E-01	7.0864E-03	1.7700E-04
4.2635E+00	1.0623E+00	-3.3109E-02	3.1702E-01	7.2454E-03	1.6324E-04
4.2635E+00	1.0623E+00	-4.0722E-02	3.5626E-01	7.5162E-03	1.4724E-04
4.2635E+00	1.0623E+00	-5.0106E-02	4.0156E-01	7.7721E-03	8.9519E-05
4.2635E+00	1.0623E+00	-6.1438E-02	4.5338E-01	7.8018E-03	3.5592E-05
4.2635E+00	1.0623E+00	-7.5071E-02	5.1170E-01	7.8761E-03	5.2567E-05
4.2635E+00	1.0623E+00	-9.2069E-02	5.9060E-01	7.3354E-03	-7.1475E-05
4.2635E+00	1.0623E+00	-1.1261E-01	6.8152E-01	6.2402E-03	-1.3407E-04
4.2635E+00	1.0623E+00	-1.3810E-01	7.8109E-01	4.4434E-03	-1.8366E-04
4.2635E+00	1.0623E+00	-1.6962E-01	8.7961E-01	1.4765E-03	-9.1551E-05
4.2635E+00	1.0623E+00	-2.0786E-01	9.1632E-01	1.0438E-04	-1.5646E-08
4.2635E+00	1.0623E+00	-2.5496E-01	9.2339E-01	3.7132E-05	3.5488E-08
4.2635E+00	1.0623E+00	-3.1268E-01	9.3177E-01	2.9347E-05	2.2397E-08
4.2635E+00	1.0623E+00	-3.8314E-01	9.3847E-01	2.6307E-05	2.2038E-08
4.2635E+00	1.0623E+00	-4.6990E-01	9.4775E-01	2.7623E-05	1.0209E-08
4.2635E+00	1.0623E+00	-5.7649E-01	9.5509E-01	2.9068E-05	3.3244E-08
4.2635E+00	1.0623E+00	-7.0644E-01	9.6519E-01	2.8589E-05	2.0422E-08
4.2635E+00	1.0623E+00	-8.6615E-01	9.7331E-01	2.9512E-05	3.2565E-08
4.2635E+00	1.0623E+00	-1.0623E+00	9.8260E-01	2.9034E-05	1.9867E-08

Table B.1-12 Hot-wire velocity measurements at the trailing edge, 120-grade sandpaper trip, Y / T = 1.062

File E518170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.115178
viscosity (meters squared per second) = 1.63817E-05
Atmospheric pressure (Pascals) = 94780
Velocity of undisturbed free stream (Uref, in m/s) = 27.8185
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.086006E-03
Estimated momentum thickness Reynolds number = 6938.629

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	1.5935E+00	0.0000E+00	4.1545E-02	3.9558E-04	1.0905E-05
4.2635E+00	1.5935E+00	-1.0623E-03	4.1804E-02	3.7262E-04	9.0709E-06
4.2635E+00	1.5935E+00	-2.1246E-03	4.2024E-02	4.1104E-04	1.2511E-05
4.2635E+00	1.5935E+00	-3.1870E-03	4.1103E-02	3.8997E-04	1.1474E-05
4.2635E+00	1.5935E+00	-4.2493E-03	4.1450E-02	4.3175E-04	1.5704E-05
4.2635E+00	1.5935E+00	-5.3116E-03	4.2861E-02	4.9351E-04	2.1807E-05
4.2635E+00	1.5935E+00	-6.3739E-03	4.9344E-02	8.6143E-04	5.5778E-05
4.2635E+00	1.5935E+00	-7.7904E-03	6.3458E-02	1.7043E-03	1.2220E-04
4.2635E+00	1.5935E+00	-9.5609E-03	8.9927E-02	3.3141E-03	2.4129E-04
4.2635E+00	1.5935E+00	-1.1686E-02	1.2625E-01	4.8529E-03	2.8934E-04
4.2635E+00	1.5935E+00	-1.4873E-02	1.6261E-01	5.8192E-03	2.5241E-04
4.2635E+00	1.5935E+00	-1.8059E-02	1.9574E-01	6.1056E-03	1.8253E-04
4.2635E+00	1.5935E+00	-2.1955E-02	2.2612E-01	6.3478E-03	1.9342E-04
4.2635E+00	1.5935E+00	-2.6912E-02	2.5142E-01	6.3423E-03	1.5802E-04
4.2635E+00	1.5935E+00	-3.2932E-02	2.8089E-01	6.7407E-03	1.7013E-04
4.2635E+00	1.5935E+00	-4.0722E-02	3.1676E-01	7.0950E-03	1.3962E-04
4.2635E+00	1.5935E+00	-4.9929E-02	3.6421E-01	7.4167E-03	1.4525E-04
4.2635E+00	1.5935E+00	-6.1261E-02	4.1435E-01	7.5697E-03	8.3909E-05
4.2635E+00	1.5935E+00	-7.5071E-02	4.7625E-01	7.9568E-03	5.3226E-05
4.2635E+00	1.5935E+00	-9.2068E-02	5.5623E-01	7.6915E-03	-3.1069E-05
4.2635E+00	1.5935E+00	-1.1261E-01	6.4499E-01	6.7778E-03	-1.2997E-04
4.2635E+00	1.5935E+00	-1.3810E-01	7.5179E-01	5.0064E-03	-1.6165E-04
4.2635E+00	1.5935E+00	-1.6962E-01	8.5973E-01	2.0645E-03	-1.2145E-04
4.2635E+00	1.5935E+00	-2.0786E-01	9.1047E-01	1.4947E-04	-2.5944E-06
4.2635E+00	1.5935E+00	-2.5496E-01	9.1707E-01	3.9422E-05	3.3841E-08
4.2635E+00	1.5935E+00	-3.1268E-01	9.2462E-01	3.2172E-05	1.2341E-08
4.2635E+00	1.5935E+00	-3.8314E-01	9.3388E-01	2.8136E-05	1.0358E-08
4.2635E+00	1.5935E+00	-4.6990E-01	9.4163E-01	2.8302E-05	2.7252E-08
4.2635E+00	1.5935E+00	-5.7613E-01	9.5009E-01	2.8299E-05	2.3318E-08
4.2635E+00	1.5935E+00	-7.0644E-01	9.5936E-01	2.7314E-05	3.2373E-08
4.2635E+00	1.5935E+00	-8.6615E-01	9.6584E-01	3.0448E-05	7.5732E-09
4.2635E+00	1.5935E+00	-1.0623E+00	9.7551E-01	2.8162E-05	2.6333E-08

Table B.1-13 Hot-wire velocity measurements at the trailing edge, 120-grade sandpaper trip, Y / T = 1.594

File E514170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.115178
viscosity (meters squared per second) = 1.63917E-05
Atmospheric pressure (Pascals) = 94789
Velocity of undisturbed free stream (Uref, in m/s) = 27.83724
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.085455E-03
Estimated momentum thickness Reynolds number = 6942.369

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	2.1246E+00	0.0000E+00	4.4953E-02	4.5165E-04	1.4050E-05
4.2635E+00	2.1246E+00	-1.0623E-03	4.5530E-02	4.4975E-04	1.2952E-05
4.2635E+00	2.1246E+00	-2.1246E-03	4.5067E-02	4.3559E-04	1.2784E-05
4.2635E+00	2.1246E+00	-3.1870E-03	4.4749E-02	4.4053E-04	1.3819E-05
4.2635E+00	2.1246E+00	-4.2493E-03	4.4079E-02	4.4231E-04	1.4669E-05
4.2635E+00	2.1246E+00	-5.3116E-03	4.5576E-02	5.4852E-04	2.5623E-05
4.2635E+00	2.1246E+00	-6.3739E-03	4.9704E-02	9.0150E-04	4.9949E-05
4.2635E+00	2.1246E+00	-7.7904E-03	6.1304E-02	1.4548E-03	1.0602E-04
4.2635E+00	2.1246E+00	-9.5609E-03	9.8938E-02	3.0549E-03	2.2580E-04
4.2635E+00	2.1246E+00	-1.1686E-02	1.2356E-01	4.7499E-03	2.7644E-04
4.2635E+00	2.1246E+00	-1.4518E-02	1.6261E-01	5.9238E-03	2.4457E-04
4.2635E+00	2.1246E+00	-1.7705E-02	1.9649E-01	6.2111E-03	2.2276E-04
4.2635E+00	2.1246E+00	-2.1955E-02	2.3931E-01	6.4786E-03	1.8930E-04
4.2635E+00	2.1246E+00	-2.6912E-02	2.5672E-01	6.5469E-03	1.6733E-04
4.2635E+00	2.1246E+00	-3.2932E-02	2.8737E-01	6.8283E-03	1.4160E-04
4.2635E+00	2.1246E+00	-4.0722E-02	3.2716E-01	7.1422E-03	1.3592E-04
4.2635E+00	2.1246E+00	-4.9929E-02	3.7965E-01	7.3792E-03	1.4799E-04
4.2635E+00	2.1246E+00	-6.1261E-02	4.2370E-01	7.6858E-03	9.8635E-05
4.2635E+00	2.1246E+00	-7.5071E-02	4.8290E-01	7.8452E-03	2.7646E-05
4.2635E+00	2.1246E+00	-9.2068E-02	5.6316E-01	7.4362E-03	-3.1187E-05
4.2635E+00	2.1246E+00	-1.1261E-01	6.5178E-01	6.6297E-03	-9.3531E-05
4.2635E+00	2.1246E+00	-1.3810E-01	7.5437E-01	5.1378E-03	-1.8378E-04
4.2635E+00	2.1246E+00	-1.6962E-01	8.6389E-01	2.2425E-03	-1.1693E-04
4.2635E+00	2.1246E+00	-2.0822E-01	9.2152E-01	1.7184E-04	-2.5073E-06
4.2635E+00	2.1246E+00	-2.5496E-01	9.2967E-01	3.7885E-05	4.1855E-08
4.2635E+00	2.1246E+00	-3.1268E-01	9.3666E-01	2.7120E-05	2.6033E-08
4.2635E+00	2.1246E+00	-3.8350E-01	9.4490E-01	2.4140E-05	1.6369E-08
4.2635E+00	2.1246E+00	-4.6990E-01	9.5242E-01	2.3796E-05	2.3034E-08
4.2635E+00	2.1246E+00	-5.7649E-01	9.6144E-01	2.5072E-05	1.8917E-08
4.2635E+00	2.1246E+00	-7.0644E-01	9.6898E-01	2.5032E-05	1.4884E-08
4.2635E+00	2.1246E+00	-8.6615E-01	9.7790E-01	2.7003E-05	1.8015E-08
4.2635E+00	2.1246E+00	-1.0623E+00	9.8709E-01	2.5199E-05	1.5291E-08

Table B.1-14 Hot-wire velocity measurements at the trailing edge, 120-grade sandpaper trip, Y / T = 2.125

File E515170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.115178
viscosity (meters squared per second) = 1.63817E-05
Atmospheric pressure (Pascals) = 94780
Velocity of undisturbed free stream (Uref, in m/s) = 27.81853
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.086002E-03
Estimated momentum thickness Reynolds number = 6938.655

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	2.6558E+00	0.0000E+00	2.9836E-02	1.7042E-04	4.3281E-06
4.2635E+00	2.6558E+00	-1.2394E-03	3.0216E-02	1.7761E-04	4.1357E-06
4.2635E+00	2.6558E+00	-2.3017E-03	3.0574E-02	1.8465E-04	4.3288E-06
4.2635E+00	2.6558E+00	-3.3640E-03	3.0965E-02	1.7409E-04	3.5539E-06
4.2635E+00	2.6558E+00	-4.2493E-03	3.1389E-02	1.8101E-04	3.9792E-06
4.2635E+00	2.6558E+00	-5.3116E-03	3.2053E-02	1.8446E-04	4.4158E-06
4.2635E+00	2.6558E+00	-6.3739E-03	3.4271E-02	2.1493E-04	5.8006E-06
4.2635E+00	2.6558E+00	-7.7904E-03	4.8298E-02	7.7953E-04	4.8073E-05
4.2635E+00	2.6558E+00	-9.5609E-03	8.0243E-02	2.8065E-03	2.1892E-04
4.2635E+00	2.6558E+00	-1.2040E-02	1.3435E-01	6.0220E-03	4.1339E-04
4.2635E+00	2.6558E+00	-1.4519E-02	1.7873E-01	7.3857E-03	3.5142E-04
4.2635E+00	2.6558E+00	-1.7705E-02	2.1213E-01	7.8465E-03	3.0532E-04
4.2635E+00	2.6558E+00	-2.1955E-02	2.4756E-01	8.2741E-03	2.5828E-04
4.2635E+00	2.6558E+00	-2.7069E-02	2.8324E-01	8.9913E-03	2.7439E-04
4.2635E+00	2.6558E+00	-3.2932E-02	3.1729E-01	9.1261E-03	2.5042E-04
4.2635E+00	2.6558E+00	-4.0722E-02	3.5757E-01	9.5333E-03	1.7771E-04
4.2635E+00	2.6558E+00	-4.9929E-02	4.0649E-01	9.3801E-03	1.4739E-04
4.2635E+00	2.6558E+00	-6.1261E-02	4.6656E-01	9.4017E-03	4.4075E-05
4.2635E+00	2.6558E+00	-7.5071E-02	5.2916E-01	8.9161E-03	1.4267E-05
4.2635E+00	2.6558E+00	-9.2422E-02	6.0766E-01	8.2429E-03	-1.1149E-04
4.2635E+00	2.6558E+00	-1.1261E-01	6.8676E-01	7.1741E-03	-1.3647E-04
4.2635E+00	2.6558E+00	-1.3810E-01	7.8221E-01	5.3690E-03	-2.0795E-04
4.2635E+00	2.6558E+00	-1.6962E-01	8.7999E-01	2.3269E-03	-1.3578E-04
4.2635E+00	2.6558E+00	-2.0786E-01	9.2756E-01	4.3299E-04	-1.4691E-05
4.2635E+00	2.6558E+00	-2.5496E-01	9.3539E-01	2.5060E-04	3.3340E-06
4.2635E+00	2.6558E+00	-3.1268E-01	9.4338E-01	2.1745E-04	3.0187E-06
4.2635E+00	2.6558E+00	-3.8314E-01	9.5054E-01	1.8211E-04	-4.0068E-07
4.2635E+00	2.6558E+00	-4.6990E-01	9.5778E-01	1.3396E-04	1.4184E-06
4.2635E+00	2.6558E+00	-5.7613E-01	9.6613E-01	7.7528E-05	1.2667E-07
4.2635E+00	2.6558E+00	-7.0644E-01	9.7135E-01	4.1839E-05	9.0197E-08
4.2635E+00	2.6558E+00	-8.6615E-01	9.7835E-01	3.2229E-05	2.8641E-08
4.2635E+00	2.6558E+00	-1.0623E+00	9.8542E-01	2.7982E-05	1.4598E-08
4.2635E+00	2.6558E+00	0.0000E+00	2.9639E-02	1.6788E-04	3.9353E-06
4.2635E+00	2.6558E+00	1.0623E-03	3.0072E-02	1.7672E-04	4.5112E-06
4.2635E+00	2.6558E+00	2.1246E-03	2.9848E-02	1.7362E-04	4.3328E-06
4.2635E+00	2.6558E+00	3.1870E-03	2.9701E-02	1.6317E-04	3.7754E-06
4.2635E+00	2.6558E+00	4.2493E-03	2.9549E-02	1.5165E-04	3.1355E-06
4.2635E+00	2.6558E+00	5.3116E-03	2.9761E-02	1.5427E-04	3.4479E-06
4.2635E+00	2.6558E+00	6.3739E-03	3.0104E-02	1.4386E-04	3.0018E-06
4.2635E+00	2.6558E+00	7.7904E-03	3.5044E-02	2.2695E-04	7.0504E-06
4.2635E+00	2.6558E+00	9.5609E-03	7.8021E-02	2.5418E-03	2.0661E-04
4.2635E+00	2.6558E+00	1.1686E-02	1.4240E-01	6.3567E-03	4.1040E-04
4.2635E+00	2.6558E+00	1.4518E-02	1.9723E-01	7.7429E-03	3.4215E-04
4.2635E+00	2.6558E+00	1.7705E-02	2.3047E-01	8.0758E-03	3.0300E-04
4.2635E+00	2.6558E+00	2.1955E-02	2.6853E-01	8.4549E-03	2.5786E-04
4.2635E+00	2.6558E+00	2.6912E-02	3.0480E-01	8.8245E-03	2.6833E-04
4.2635E+00	2.6558E+00	3.2932E-02	3.3541E-01	9.0663E-03	2.1634E-04
4.2635E+00	2.6558E+00	4.0722E-02	3.6272E-01	9.7218E-03	2.2278E-04
4.2635E+00	2.6558E+00	4.9929E-02	4.2721E-01	9.5219E-03	1.3916E-04
4.2635E+00	2.6558E+00	6.1261E-02	4.8725E-01	9.3418E-03	3.7012E-05
4.2635E+00	2.6558E+00	7.5071E-02	5.4710E-01	8.8181E-03	-8.9651E-06
4.2635E+00	2.6558E+00	9.2068E-02	6.2014E-01	8.1717E-03	-1.1319E-04
4.2635E+00	2.6558E+00	1.1261E-01	6.9554E-01	6.7367E-03	-1.5350E-04
4.2635E+00	2.6558E+00	1.3810E-01	7.9014E-01	5.0201E-03	-2.0484E-04
4.2635E+00	2.6558E+00	1.6962E-01	8.8081E-01	2.2143E-03	-1.3116E-04
4.2635E+00	2.6558E+00	2.0786E-01	9.2336E-01	4.8846E-04	-9.1781E-06
4.2635E+00	2.6558E+00	2.5496E-01	9.3068E-01	3.2380E-04	3.2581E-06
4.2635E+00	2.6558E+00	3.1268E-01	9.3734E-01	3.0968E-04	2.5941E-06
4.2635E+00	2.6558E+00	3.8350E-01	9.4645E-01	2.6801E-04	1.6627E-07
4.2635E+00	2.6558E+00	4.6990E-01	9.5457E-01	1.8613E-04	1.2702E-06
4.2635E+00	2.6558E+00	5.7613E-01	9.6304E-01	9.8728E-05	8.1089E-07
4.2635E+00	2.6558E+00	7.0644E-01	9.7103E-01	5.1274E-05	6.3496E-09
4.2635E+00	2.6558E+00	8.6615E-01	9.8081E-01	3.4913E-05	2.7787E-08
4.2635E+00	2.6558E+00	1.0623E+00	9.8708E-01	3.1620E-05	7.9822E-09

Table B.1-15 Hot-wire velocity measurements at the trailing edge, 120-grade sandpaper trip, Y / T = 2.656

File E457170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 24.8
density (kilograms per meter cubed) = 1.095374
viscosity (meters squared per second) = 1.675601E-05
Atmospheric pressure (Pascals) = 93663
Velocity of undisturbed free stream (Uref, in m/s) = 27.77571
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087263E-03
Estimated momentum thickness Reynolds number = 6775.278

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	5.3116E-01	-1.0623E+00	9.6068E-01	1.0521E-03	-5.1386E-05
4.2635E+00	5.3116E-01	-8.6615E-01	9.6110E-01	8.4460E-04	-4.1207E-05
4.2635E+00	5.3116E-01	-7.0644E-01	9.5978E-01	5.2258E-04	-2.0831E-05
4.2635E+00	5.3116E-01	-5.7578E-01	9.5229E-01	4.0339E-04	-1.8485E-05
4.2635E+00	5.3116E-01	-4.6884E-01	9.4525E-01	3.2172E-04	-1.0812E-05
4.2635E+00	5.3116E-01	-3.8208E-01	9.4017E-01	2.5443E-04	-7.1096E-06
4.2635E+00	5.3116E-01	-3.1268E-01	9.3315E-01	2.9816E-04	-3.7517E-06
4.2635E+00	5.3116E-01	-2.5496E-01	9.0254E-01	1.7554E-03	-1.2542E-04
4.2635E+00	5.3116E-01	-2.0796E-01	8.4121E-01	4.5745E-03	-2.5670E-04
4.2635E+00	5.3116E-01	-1.6962E-01	7.6237E-01	6.5088E-03	-1.9566E-04
4.2635E+00	5.3116E-01	-1.3810E-01	6.9253E-01	7.8747E-03	-1.6229E-04
4.2635E+00	5.3116E-01	-1.1261E-01	6.3006E-01	8.7247E-03	-1.0074E-04
4.2635E+00	5.3116E-01	-9.2068E-02	5.7991E-01	9.3616E-03	-2.3399E-06
4.2635E+00	5.3116E-01	-7.5071E-02	5.3006E-01	9.6915E-03	4.7663E-05
4.2635E+00	5.3116E-01	-6.1261E-02	4.8659E-01	9.6373E-03	5.3431E-05
4.2635E+00	5.3116E-01	-4.9929E-02	4.4852E-01	1.004EE-02	1.6984E-04
4.2635E+00	5.3116E-01	-4.0722E-02	4.1375E-01	1.0050E-02	1.8075E-04
4.2635E+00	5.3116E-01	-3.2932E-02	3.8339E-01	9.9879E-03	1.7799E-04
4.2635E+00	5.3116E-01	-2.6735E-02	3.5381E-01	9.9369E-03	2.2812E-04
4.2635E+00	5.3116E-01	-2.1955E-02	3.2827E-01	9.9005E-03	2.2053E-04
4.2635E+00	5.3116E-01	-1.7705E-02	3.0197E-01	9.7093E-03	2.1101E-04
4.2635E+00	5.3116E-01	-1.4518E-02	2.7617E-01	9.6259E-03	2.1868E-04
4.2635E+00	5.3116E-01	-1.1686E-02	2.4614E-01	9.6930E-03	3.0807E-04
4.2635E+00	5.3116E-01	-9.5609E-03	2.2749E-01	9.5314E-03	4.2265E-04
4.2635E+00	5.3116E-01	-7.7904E-03	2.1036E-01	9.0614E-03	4.7445E-04
4.2635E+00	5.3116E-01	-6.3739E-03	1.9270E-01	8.6491E-03	5.4675E-04
4.2635E+00	5.3116E-01	-5.3116E-03	1.8058E-01	7.7437E-03	5.3302E-04
4.2635E+00	5.3116E-01	-4.2493E-03	1.6614E-01	6.8412E-03	4.6813E-04
4.2635E+00	5.3116E-01	-3.1870E-03	1.5158E-01	5.8009E-03	4.4506E-04
4.2635E+00	5.3116E-01	-2.1246E-03	1.4163E-01	5.0455E-03	4.0681E-04
4.2635E+00	5.3116E-01	-1.0623E-03	1.2545E-01	3.7545E-03	2.8991E-04
4.2635E+00	5.3116E-01	0.0000E+00	1.1854E-01	3.1415E-03	2.1791E-04
4.2635E+00	5.3116E-01	1.0623E-03	1.1473E-01	2.8085E-03	1.8866E-04
4.2635E+00	5.3116E-01	2.1246E-03	1.1530E-01	2.8148E-03	1.8425E-04
4.2635E+00	5.3116E-01	3.1870E-03	1.1796E-01	3.1446E-03	2.3440E-04
4.2635E+00	5.3116E-01	4.2493E-03	1.2500E-01	3.6230E-03	2.6767E-04
4.2635E+00	5.3116E-01	5.3116E-03	1.3329E-01	4.4756E-03	3.6348E-04
4.2635E+00	5.3116E-01	6.3739E-03	1.4182E-01	5.1444E-03	4.1468E-04
4.2635E+00	5.3116E-01	7.7904E-03	1.5615E-01	6.4044E-03	5.2210E-04
4.2635E+00	5.3116E-01	9.5609E-03	1.7633E-01	7.5971E-03	5.0866E-04
4.2635E+00	5.3116E-01	1.1686E-02	2.0597E-01	8.7460E-03	4.6259E-04
4.2635E+00	5.3116E-01	1.4518E-02	2.4449E-01	9.3151E-03	2.9569E-04
4.2635E+00	5.3116E-01	1.7705E-02	2.7721E-01	9.82E4E-03	2.5665E-04
4.2635E+00	5.3116E-01	2.1955E-02	3.0174E-01	9.5327E-03	1.9419E-04
4.2635E+00	5.3116E-01	2.6912E-02	3.3467E-01	9.6164E-03	1.7746E-04
4.2635E+00	5.3116E-01	3.2932E-02	3.7098E-01	9.7200E-03	2.2150E-04
4.2635E+00	5.3116E-01	4.1076E-02	3.9918E-01	9.5292E-03	1.5919E-04
4.2635E+00	5.3116E-01	5.1700E-02	4.4295E-01	9.7227E-03	9.5378E-05
4.2635E+00	5.3116E-01	6.1615E-02	4.8932E-01	9.6938E-03	9.3455E-05
4.2635E+00	5.3116E-01	7.5071E-02	5.2190E-01	9.6898E-03	9.9050E-05
4.2635E+00	5.3116E-01	9.2068E-02	5.7409E-01	9.1712E-03	9.7845E-06
4.2635E+00	5.3116E-01	1.1261E-01	6.2218E-01	8.5425E-03	-7.2573E-05
4.2635E+00	5.3116E-01	1.3810E-01	6.8444E-01	7.7449E-03	-1.2766E-04
4.2635E+00	5.3116E-01	1.6962E-01	7.5982E-01	6.4866E-03	-1.9396E-04
4.2635E+00	5.3116E-01	2.0784E-01	8.3532E-01	4.5734E-03	-2.4540E-04
4.2635E+00	5.3116E-01	2.5496E-01	8.9940E-01	1.6941E-03	-1.2309E-04
4.2635E+00	5.3116E-01	3.1268E-01	9.3133E-01	2.9032E-04	-4.6090E-06
4.2635E+00	5.3116E-01	3.8314E-01	9.3994E-01	1.4321E-04	-7.8865E-07
4.2635E+00	5.3116E-01	4.7043E-01	9.4974E-01	1.8413E-04	-4.0491E-06
4.2635E+00	5.3116E-01	5.7631E-01	9.5566E-01	2.3951E-04	-6.3162E-06
4.2635E+00	5.3116E-01	7.0644E-01	9.6421E-01	4.1369E-04	-1.5954E-05
4.2635E+00	5.3116E-01	8.6615E-01	9.6269E-01	7.6035E-04	-3.6161E-05
4.2635E+00	5.3116E-01	1.0623E+00	9.5814E-01	1.1066E-03	-5.1551E-05
4.2635E+00	5.3116E-01	1.0623E+00	9.6083E-01	1.0897E-03	-5.2307E-05

Table B.1-16 Hot-wire velocity measurements at the trailing edge, 1mm wire trip, Y / T = .531

File E456170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.094639
viscosity (meters squared per second) = 1.677594E-05
Atmospheric pressure (Pascals) = 93663
Velocity of undisturbed free stream (Uref, in m/s) = 27.74003
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08E315E-03
Estimatec momentum thickness Reynolds number = 6760.273

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	1.0623E+00	0.0000E+00	1.0482E-01	2.3553E-03	1.4892E-04
4.2635E+00	1.0623E+00	-1.0623E-03	1.1029E-01	2.8419E-03	1.9723E-04
4.2635E+00	1.0623E+00	-2.1246E-03	1.2308E-01	4.0031E-03	3.1449E-04
4.2635E+00	1.0623E+00	-3.1870E-03	1.3226E-01	4.7344E-03	3.7029E-04
4.2635E+00	1.0623E+00	-4.2493E-03	1.4363E-01	5.6803E-03	4.5254E-04
4.2635E+00	1.0623E+00	-5.3116E-03	1.5187E-01	6.2352E-03	4.5837E-04
4.2635E+00	1.0623E+00	-6.3739E-03	1.6221E-01	6.8730E-03	4.9164E-04
4.2635E+00	1.0623E+00	-7.7904E-03	1.7369E-01	7.6655E-03	4.8980E-04
4.2635E+00	1.0623E+00	-9.5609E-03	1.8860E-01	8.3816E-03	5.0483E-04
4.2635E+00	1.0623E+00	-1.1686E-02	2.0641E-01	8.5700E-03	3.6168E-04
4.2635E+00	1.0623E+00	-1.4518E-02	2.3374E-01	9.2027E-03	3.4073E-04
4.2635E+00	1.0623E+00	-1.7705E-02	2.6307E-01	9.4180E-03	2.8782E-04
4.2635E+00	1.0623E+00	-2.1955E-02	2.8573E-01	9.3057E-03	2.4229E-04
4.2635E+00	1.0623E+00	-2.7089E-02	3.0911E-01	9.3573E-03	1.7532E-04
4.2635E+00	1.0623E+00	-3.2932E-02	3.3625E-01	9.6790E-03	1.9296E-04
4.2635E+00	1.0623E+00	-4.0722E-02	3.6592E-01	9.9320E-03	2.2137E-04
4.2635E-00	1.0623E+00	-4.9929E-02	3.9845E-01	9.8302E-03	1.6075E-04
4.2635E+00	1.0623E+00	-6.1261E-02	4.3907E-01	9.9449E-03	1.1359E-04
4.2635E+00	1.0623E+00	-7.5071E-02	4.7714E-01	9.7187E-03	9.2718E-05
4.2635E+00	1.0623E+00	-9.2068E-02	5.2162E-01	9.3858E-03	1.5275E-05
4.2635E+00	1.0623E+00	-1.1261E-01	5.7577E-01	9.3045E-03	-5.3945E-05
4.2635E+00	1.0623E+00	-1.3810E-01	6.3689E-01	8.4903E-03	-8.2695E-05
4.2635E+00	1.0623E+00	-1.6962E-01	7.0666E-01	7.3396E-03	-1.3659E-04
4.2635E+00	1.0623E+00	-2.0786E-01	7.8496E-01	5.7798E-03	-1.9231E-04
4.2635E+00	1.0623E+00	-2.5531E-01	8.6557E-01	3.4556E-03	-2.3071E-04
4.2635E+00	1.0623E+00	-3.1303E-01	9.2409E-01	6.0238E-04	-3.1723E-05
4.2635E+00	1.0623E+00	-3.8314E-01	9.3831E-01	1.0142E-04	5.5847E-07
4.2635E+00	1.0623E+00	-4.6990E-01	9.4678E-01	5.0921E-05	1.5257E-07
4.2635E+00	1.0623E+00	-5.7613E-01	9.5899E-01	4.7669E-05	1.3501E-07
4.2635E+00	1.0623E+00	-7.0644E-01	9.6715E-01	4.7524E-05	1.5051E-07
4.2635E+00	1.0623E+00	-8.6615E-01	9.7429E-01	4.5284E-05	1.5461E-07
4.2635E+00	1.0623E+00	-1.0623E+00	9.8230E-01	4.5748E-05	1.3911E-07

Table B.1-17 Hot-wire velocity measurements at the trailing edge, 1mm wire trip, Y / T = 1.062

File E455170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 25
density (kilograss per meter cubed) = 1.099279
viscosity (meters squared per second) = 1.670514E-05
Atmospheric pressure (Pascals) = 94060
Velocity of undisturbed free stream (Uref, in m/s) = 27.63019
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091359E-03
Estimated momentum thickness Reynolds number = 6767.413

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	1.5935E+00	0.0000E+00	1.0978E-01	2.8494E-03	1.8050E-04
4.2635E+00	1.5935E+00	-1.2394E-03	1.0980E-01	2.9818E-03	2.0100E-04
4.2635E+00	1.5935E+00	-2.1246E-03	1.1183E-01	3.0620E-03	1.9795E-04
4.2635E+00	1.5935E+00	-3.1870E-03	1.1660E-01	3.6195E-03	2.6642E-04
4.2635E+00	1.5935E+00	-4.2493E-03	1.2485E-01	4.2925E-03	3.3236E-04
4.2635E+00	1.5935E+00	-5.3116E-03	1.2825E-01	4.6517E-03	3.5252E-04
4.2635E+00	1.5935E+00	-6.3739E-03	1.3729E-01	5.2586E-03	3.9170E-04
4.2635E+00	1.5935E+00	-7.7904E-03	1.5114E-01	6.4191E-03	4.7420E-04
4.2635E+00	1.5935E+00	-9.5609E-03	1.7466E-01	7.7065E-03	4.6185E-04
4.2635E+00	1.5935E+00	-1.1686E-02	2.0056E-01	8.7955E-03	3.9212E-04
4.2635E+00	1.5935E+00	-1.4518E-02	2.2519E-01	9.0991E-03	3.6157E-04
4.2635E+00	1.5935E+00	-1.7705E-02	2.4600E-01	9.4062E-03	2.9624E-04
4.2635E+00	1.5935E+00	-2.1955E-02	2.6955E-01	9.0482E-03	2.2958E-04
4.2635E+00	1.5935E+00	-2.6912E-02	2.9751E-01	9.3611E-03	2.1580E-04
4.2635E+00	1.5935E+00	-3.2932E-02	3.2420E-01	9.6503E-03	2.3353E-04
4.2635E+00	1.5935E+00	-4.0722E-02	3.5486E-01	9.7128E-03	2.0266E-04
4.2635E+00	1.5935E+00	-4.9929E-02	3.8742E-01	9.7329E-03	1.4941E-04
4.2635E+00	1.5935E+00	-6.1261E-02	4.2358E-01	9.6960E-03	1.4332E-04
4.2635E+00	1.5935E+00	-7.5071E-02	4.6039E-01	9.3646E-03	9.6355E-05
4.2635E+00	1.5935E+00	-9.2068E-02	5.0786E-01	9.1546E-03	6.4560E-05
4.2635E+00	1.5935E+00	1.1261E-01	5.6002E-01	8.7476E-03	-9.7216E-06
4.2635E+00	1.5935E+00	-1.3810E-01	6.2297E-01	8.2503E-03	-9.0251E-05
4.2635E+00	1.5935E+00	-1.6962E-01	6.9265E-01	7.4108E-03	-1.2928E-04
4.2635E+00	1.5935E+00	-2.0786E-01	7.7015E-01	5.9090E-03	-1.9770E-04
4.2635E+00	1.5935E+00	-2.5496E-01	8.4821E-01	3.5770E-03	-2.1686E-04
4.2635E+00	1.5935E+00	-3.1268E-01	9.1029E-01	7.8370E-04	-4.5922E-05
4.2635E+00	1.5935E+00	-3.8314E-01	9.2914E-01	9.9865E-05	6.7561E-07
4.2635E+00	1.5935E+00	-4.8088E-01	9.3653E-01	4.6940E-05	9.6954E-08
4.2635E+00	1.5935E+00	-5.7649E-01	9.4537E-01	3.6146E-05	6.5292E-08
4.2635E+00	1.5935E+00	-7.0644E-01	9.5468E-01	3.6829E-05	7.2689E-08
4.2635E+00	1.5935E+00	-8.6615E-01	9.6399E-01	3.8520E-05	8.2502E-08
4.2635E+00	1.5935E+00	-1.0517E+00	9.7159E-01	3.5329E-05	1.0458E-07

Table B.1-18 Hot-wire velocity measurements at the trailing edge, 1mm wire trip, Y / T = 1.594

File E45E170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.094639
viscosity (meters squared per second) = 1.677594E-05
Atmospheric pressure (Pascals) = 93663
Velocity of undisturbed free stream (Uref, in m/s) = 27.81713
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.086046E-03
Estimated momentum thickness Reynolds number = 6775.3

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	2.1246E+00	0.0000E+00	6.4849E-02	6.6653E-04	2.2550E-05
4.2635E+00	2.1246E+00	-1.0623E-03	6.5187E-02	6.9043E-04	2.3677E-05
4.2635E+00	2.1246E+00	-2.1246E-03	6.5390E-02	7.4655E-04	3.0184E-05
4.2635E+00	2.1246E+00	-3.1870E-03	6.6788E-02	8.6506E-04	4.1780E-05
4.2635E+00	2.1246E+00	-4.2493E-03	7.0014E-02	1.0764E-03	6.2763E-05
4.2635E+00	2.1246E+00	-5.3116E-03	7.8722E-02	1.7300E-03	1.2857E-04
4.2635E+00	2.1246E+00	-6.3739E-03	9.9588E-02	3.2733E-03	2.6117E-04
4.2635E+00	2.1246E+00	-7.7904E-03	1.3381E-01	5.5499E-03	4.0890E-04
4.2635E+00	2.1246E+00	-9.5609E-03	1.6536E-01	7.0242E-03	4.3512E-04
4.2635E+00	2.1246E+00	-1.1686E-02	1.8465E-01	7.6613E-03	3.9714E-04
4.2635E+00	2.1246E+00	-1.4518E-02	2.0703E-01	7.8167E-03	2.8285E-04
4.2635E+00	2.1246E+00	-1.7705E-02	2.3501E-01	8.4772E-03	2.7126E-04
4.2635E+00	2.1246E+00	-2.1955E-02	2.7352E-01	8.8267E-03	2.5043E-04
4.2635E+00	2.1246E+00	-2.6912E-02	2.9806E-01	8.9965E-03	2.1649E-04
4.2635E+00	2.1246E+00	-3.2932E-02	3.2293E-01	9.2050E-03	2.0802E-04
4.2635E+00	2.1246E+00	-4.0722E-02	3.5646E-01	9.3387E-03	1.6673E-04
4.2635E+00	2.1246E+00	-4.9929E-02	3.8951E-01	9.4509E-03	1.8097E-04
4.2635E+00	2.1246E+00	-6.1261E-02	4.2878E-01	9.4000E-03	1.7229E-04
4.2635E+00	2.1246E+00	-7.5071E-02	4.6802E-01	9.4212E-03	7.8897E-05
4.2635E+00	2.1246E+00	-9.2422E-02	5.1843E-01	8.9147E-03	3.9232E-05
4.2635E+00	2.1246E+00	-1.1261E-01	5.6713E-01	8.6354E-03	-9.7052E-06
4.2635E+00	2.1246E+00	-1.3810E-01	6.2677E-01	8.0335E-03	-6.7225E-05
4.2635E+00	2.1246E+00	-1.6962E-01	6.9938E-01	7.3257E-03	-1.2080E-04
4.2635E+00	2.1246E+00	-2.0786E-01	7.7611E-01	5.9816E-03	-1.9087E-04
4.2635E+00	2.1246E+00	-2.5513E-01	8.5613E-01	3.6794E-03	-2.2243E-04
4.2635E+00	2.1246E+00	-3.1268E-01	9.1936E-01	7.4961E-04	-4.5452E-05
4.2635E+00	2.1246E+00	-3.8314E-01	9.3733E-01	1.0799E-04	4.3091E-07
4.2635E+00	2.1246E+00	-4.6990E-01	9.4766E-01	5.8506E-05	1.9889E-07
4.2635E+00	2.1246E+00	-5.7666E-01	9.5841E-01	5.1034E-05	1.2321E-07
4.2635E+00	2.1246E+00	-7.0644E-01	9.6297E-01	4.9794E-05	1.4020E-07
4.2635E+00	2.1246E+00	-8.6721E-01	9.7203E-01	4.5032E-05	1.3057E-07
4.2635E+00	2.1246E+00	-1.0623E+00	9.7987E-01	4.1487E-05	1.4006E-07

Table B.1-19 Hot-wire velocity measurements at the trailing edge, 1mm wire trip, Y / T = 2.125

File E459170 .RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.102902
viscosity (meters squared per second) = 1.665026E-05
Atmospheric pressure (Pascals) = 94370
Velocity of undisturbed free strear (Uref, in m/s) = 27.77409
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087311E-03
Estimated momentum thickness Reynolds number = 6817.991

X/T	Y/T	Z/T	U/Uref	u2/Uref2	u3/Uref3
4.2635E+00	2.6558E+00	0.0000E+00	6.6247E-02	6.6828E-04	2.0843E-05
4.2635E+00	2.6558E+00	-1.0623E-03	6.5394E-02	6.5029E-04	2.1475E-05
4.2635E+00	2.6558E+00	-2.1246E-03	6.4060E-02	6.5884E-04	2.5116E-05
4.2635E+00	2.6558E+00	-3.1870E-03	6.4348E-02	7.0803E-04	3.0521E-05
4.2635E+00	2.6558E+00	-4.2493E-03	6.5831E-02	8.1751E-04	4.5720E-05
4.2635E+00	2.6558E+00	-5.3116E-03	7.0824E-02	1.1181E-03	7.9031E-05
4.2635E+00	2.6558E+00	-6.3739E-03	8.3846E-02	1.9670E-03	1.5628E-04
4.2635E+00	2.6558E+00	-7.7904E-03	1.0411E-01	3.3861E-03	2.7690E-04
4.2635E+00	2.6558E+00	-9.5609E-03	1.5100E-01	6.5686E-03	4.9168E-04
4.2635E+00	2.6558E+00	-1.1686E-02	2.2801E-01	9.9606E-03	4.9815E-04
4.2635E+00	2.6558E+00	-1.4518E-02	2.8318E-01	1.0409E-02	2.6831E-04
4.2635E+00	2.6558E+00	-1.7705E-02	3.2333E-01	1.0522E-02	1.8005E-04
4.2635E+00	2.6558E+00	-2.1955E-02	3.5405E-01	1.0900E-02	2.0845E-04
4.2635E+00	2.6558E+00	-2.6912E-02	3.9333E-01	1.0783E-02	1.3793E-04
4.2635E+00	2.6558E+00	-3.2932E-02	4.2970E-01	1.0618E-02	1.3267E-04
4.2635E+00	2.6558E+00	-4.0722E-02	4.7149E-01	1.0588E-02	9.7144E-05
4.2635E+00	2.6558E+00	-4.9929E-02	5.1493E-01	1.0686E-02	7.9264E-06
4.2635E+00	2.6558E+00	-6.1261E-02	5.6484E-01	9.9337E-03	-3.6465E-05
4.2635E+00	2.6558E+00	-7.5071E-02	6.1119E-01	9.3367E-03	-1.2749E-04
4.2635E+00	2.6558E+00	-9.2422E-02	6.6768E-01	8.2321E-03	-1.5973E-04
4.2635E+00	2.6558E+00	-1.1261E-01	7.1557E-01	6.9735E-03	-1.5027E-04
4.2635E+00	2.6558E+00	-1.3846E-01	7.7492E-01	5.8120E-03	-1.6892E-04
4.2635E+00	2.6558E+00	-1.6962E-01	8.2527E-01	4.3890E-03	-1.6463E-04
4.2635E+00	2.6558E+00	-2.0822E-01	8.7219E-01	3.0534E-03	-1.3762E-04
4.2635E+00	2.6558E+00	-2.5496E-01	9.1324E-01	1.6356E-03	-7.1388E-05
4.2635E+00	2.6558E+00	-3.1268E-01	9.3922E-01	7.7575E-04	-1.1185E-05
4.2635E+00	2.6558E+00	-3.8350E-01	9.5324E-01	4.8314E-04	-1.7797E-06
4.2635E+00	2.6558E+00	-4.7025E-01	9.5644E-01	3.4933E-04	-1.4236E-06
4.2635E+00	2.6558E+00	-5.7684E-01	9.6595E-01	1.7812E-04	2.0675E-06
4.2635E+00	2.6558E+00	-7.0715E-01	9.7355E-01	7.9905E-05	2.1426E-07
4.2635E+00	2.6558E+00	-8.6615E-01	9.8224E-01	5.4925E-05	2.0508E-07
4.2635E+00	2.6558E+00	-1.0623E+00	9.8495E-01	4.8928E-05	1.5346E-07
4.2635E+00	2.6558E+00	0.0000E+00	6.1605E-02	5.8270E-04	1.6980E-05
4.2635E+00	2.6558E+00	1.0623E-03	6.1312E-02	5.8957E-04	1.7978E-05
4.2635E+00	2.6558E+00	2.1246E-03	6.0355E-02	5.5488E-04	1.5961E-05
4.2635E+00	2.6558E+00	3.1411E-03	5.8251E-02	5.3503E-04	1.8996E-05
4.2635E+00	2.6558E+00	4.2493E-03	5.6904E-02	5.1291E-04	1.7327E-05
4.2635E+00	2.6558E+00	5.7720E-03	5.6378E-02	5.1018E-04	2.2350E-05
4.2635E+00	2.6558E+00	6.3739E-03	5.9553E-02	6.4062E-04	3.5551E-05
4.2635E+00	2.6558E+00	7.7904E-03	9.0033E-02	2.2269E-03	1.7236E-04
4.2635E+00	2.6558E+00	9.5609E-03	1.5189E-01	5.9641E-03	3.9293E-04
4.2635E+00	2.6558E+00	1.1686E-02	2.1952E-01	9.2424E-03	4.1510E-04
4.2635E+00	2.6558E+00	1.4518E-02	2.8049E-01	1.0241E-02	2.8984E-04
4.2635E+00	2.6558E+00	1.7705E-02	3.3092E-01	1.0346E-02	2.2891E-04
4.2635E+00	2.6558E+00	2.1955E-02	3.8042E-01	1.0129E-02	1.2977E-04
4.2635E+00	2.6558E+00	2.6912E-02	4.1155E-01	1.0366E-02	9.6894E-05
4.2635E+00	2.6558E+00	3.2932E-02	4.5484E-01	1.0561E-02	6.6776E-05
4.2635E+00	2.6558E+00	4.1076E-02	4.9755E-01	1.0540E-02	-7.5841E-06
4.2635E+00	2.6558E+00	4.9929E-02	5.4126E-01	1.0446E-02	-7.8096E-05
4.2635E+00	2.6558E+00	6.1261E-02	5.8527E-01	9.4256E-03	-7.5758E-05
4.2635E+00	2.6558E+00	7.5071E-02	6.3109E-01	8.7605E-03	-1.4213E-04
4.2635E+00	2.6558E+00	9.2068E-02	6.7828E-01	7.7605E-03	-1.5022E-04
4.2635E+00	2.6558E+00	1.1261E-01	7.2521E-01	6.4950E-03	-1.5875E-04
4.2635E+00	2.6558E+00	1.3810E-01	7.7297E-01	5.4066E-03	-1.4784E-04
4.2635E+00	2.6558E+00	1.6997E-01	8.1896E-01	4.2220E-03	-1.2031E-04
4.2635E+00	2.6558E+00	2.0857E-01	8.6466E-01	3.1613E-03	-1.2086E-04
4.2635E+00	2.6558E+00	2.5531E-01	9.0566E-01	1.7946E-03	-7.5713E-05
4.2635E+00	2.6558E+00	3.1268E-01	9.3347E-01	8.4749E-04	-1.3862E-05
4.2635E+00	2.6558E+00	3.8314E-01	9.4494E-01	5.5647E-04	-4.2061E-06
4.2635E+00	2.6558E+00	4.7025E-01	9.5190E-01	3.9055E-04	-4.8289E-06
4.2635E+00	2.6558E+00	5.8074E-01	9.5654E-01	2.0566E-04	9.3730E-07
4.2635E+00	2.6558E+00	7.0680E-01	9.6683E-01	9.0594E-05	3.0407E-07
4.2635E+00	2.6558E+00	8.6721E-01	9.7139E-01	5.0533E-05	1.7830E-07
4.2635E+00	2.6558E+00	1.0623E+00	9.8377E-01	4.4960E-05	1.3604E-07

Table B.1-20 Hot-wire velocity measurements at the trailing edge, 1mm wire trip, Y / T = 2.656

B.2 BOUNDARY CONDITIONS, DESCRIPTION OF THE APPROACH FLOW

As described in section A.1, sections of the internal liner of the wind-tunnel side walls were removed to minimize blockage-induced pressure gradients. Results to be presented in section D.3 indeed show that these pressure gradients were small. It therefore seems that the present flows would be most easily computed by assuming them to be unbounded in the spanwise direction. Hot-wire velocity profiles presented in section B.1 suggest that the flow past the wing is closely two-dimensional near its mid span. This implies that the flow on the test wall is independent of the height of the wing.

Given these assumptions, the problem of specifying boundary conditions reduces to one in which only properties of the test-wall boundary layer need be specified at a position sufficiently far upstream for it to be two-dimensional in the time mean. This position was chosen to be 4.29 chord lengths (18.2T) upstream of the wing leading edge. Mean-velocity and turbulence stress profiles were measured at this location, on the centerline of the test section, using the single-hot-wire technique described in section E of this report. These measurements were made at the highest test Reynolds number, corresponding to a free-stream velocity of 27 m/s. They are plotted in figures B.2-1 through B.2-3 and are tabulated in table B.2-1. The displacement thickness, momentum thickness and skin-friction coefficient (based on U_{ref}) deduced from these data are 0.41T, 0.30T and 3.2×10^{-3} respectively, where T is the maximum thickness of the wing.

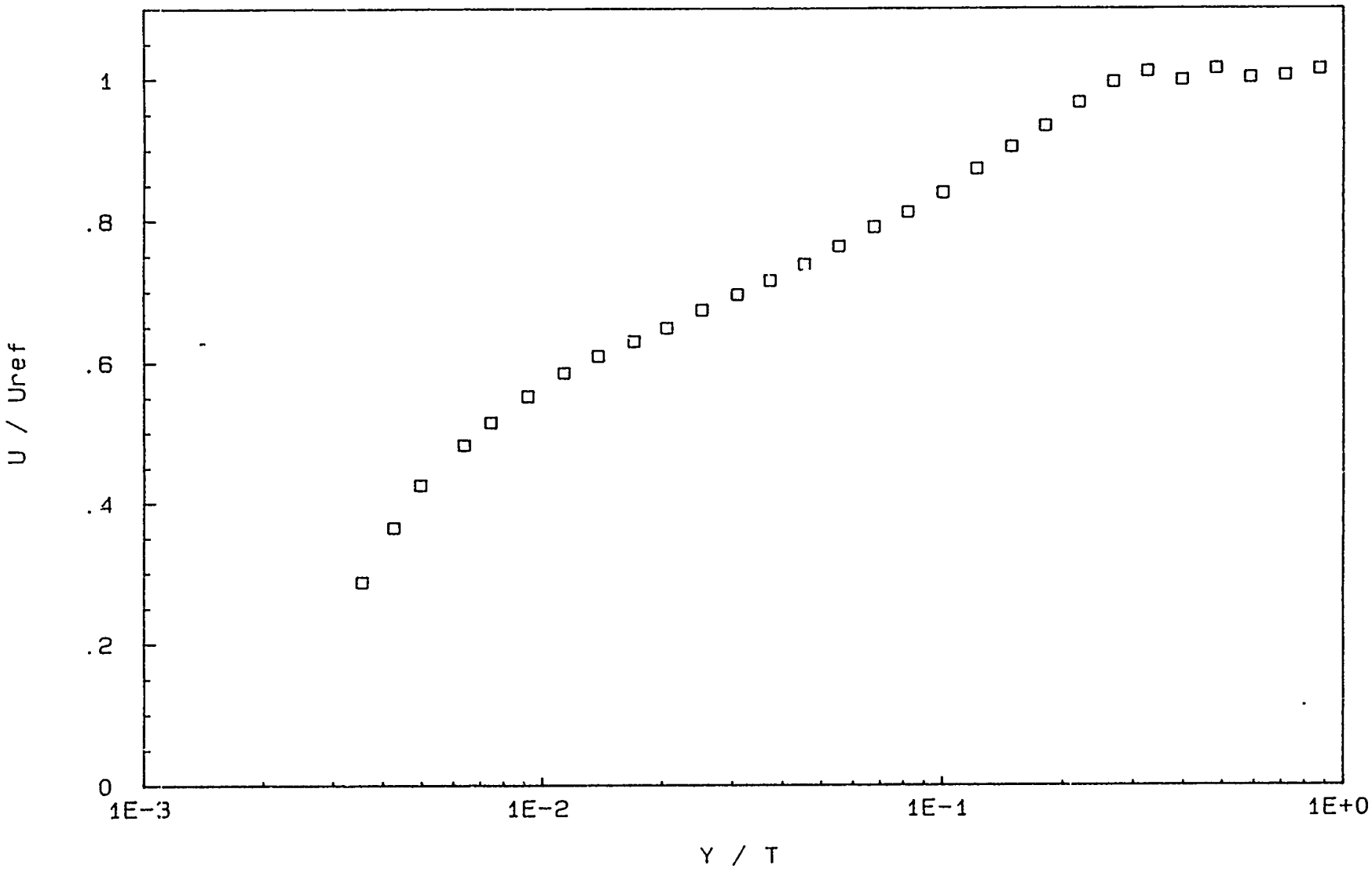


Figure B.2-1 Mean velocity profile measured 4.29 chord lengths upstream of the wing, U_{ref} = 27m/s.

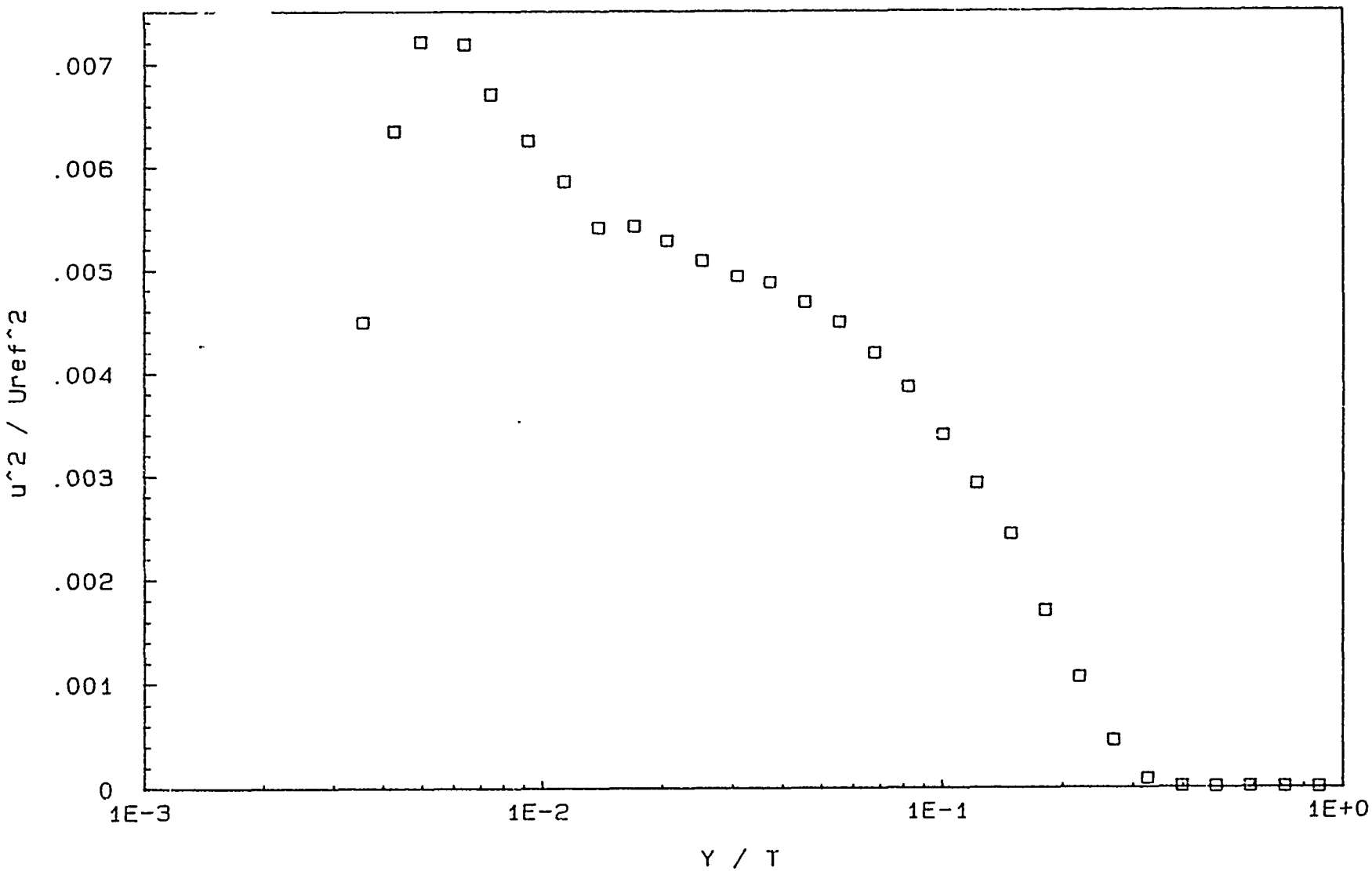


Figure B.2-2 Profile of $\overline{u^2}/U_{ref}^2$ measured 4.29 chord lengths upstream of the wing, U_{ref} = 27m/s.

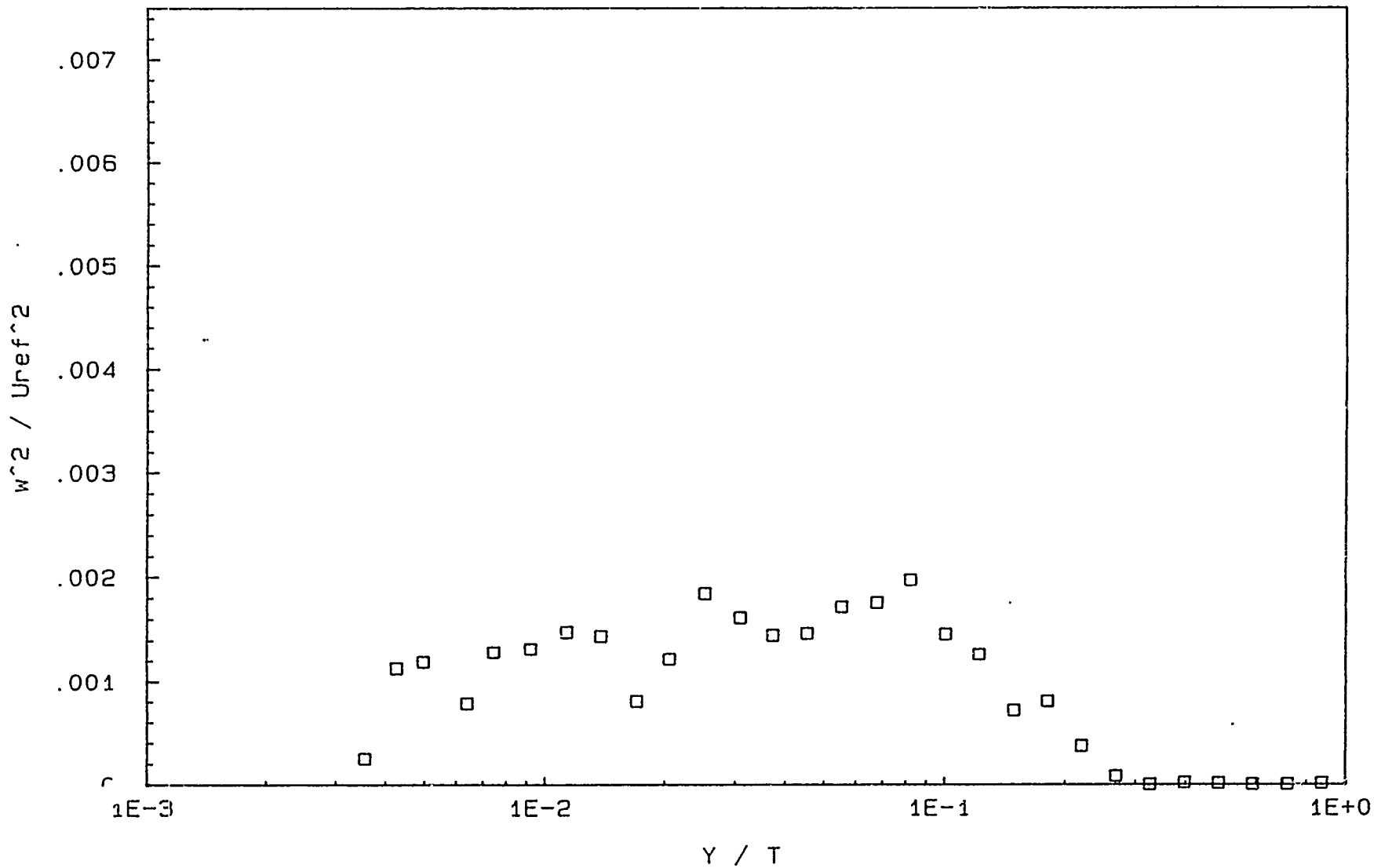


Figure B.2-3 Profile of $\overline{w^2}/U_{ref}^2$ measured 4.29 chord lengths upstream of the wing, U_{ref} = 27m/s.

File T-81
velocity measurements obtained using the single-sensor hot wire probe
Flow temperature degree centigrade) = 25
density(kg/m^3) = 1.096
viscosity(m^2 sec) = 1.660E-02E-05
Atmospheric pressure (Pascals = 9373)
velocity of undisturbed free stream (Uref,m/sec)= 26.99
Location of traverse: X/C = -4.29 Z/T = 0 (X/T = -18.24)

Y/T	U/Uref	u2/Uref2	w2/Uref2	uw/Uref2
0.354[illegible]E-02	0.2869E+00	0.4490E-02	0.2513E-03	-.1096E-03
0.4248E-02	0.3647E+00	0.6351E-02	0.1129E-02	0.1533E-03
0.4956E-02	0.4257E+00	0.7209E-02	0.1189E-02	-.2564E-03
0.6[illegible]E-02	0.4827E+00	0.7184E-02	0.7830E-03	-.3338E-03
0.7434E-02	0.5150E+00	0.6706E-02	0.1283E-02	-.1493E-03
0.9204E-02	0.5523E+00	0.6256E-02	0.1315E-02	-.2023E-03
0.1133E-01	0.5850E+00	0.5860E-02	0.1479E-02	-.1979E-03
0.1381E-01	0.6092E+00	0.5411E-02	0.1438E-02	-.1201E-03
0.1699E-01	0.6297E+00	0.5425E-02	0.8054E-03	-.1767E-03
0.2053E-01	0.6489E+00	0.5281E-02	0.1216E-02	-.1506E-03
0.2513E-01	0.6741E+00	0.5088E-02	0.1841E-02	0.6466E-04
0.3180E-01	0.6960E+00	0.4935E-02	0.1613E-02	-.1038E-03
0.3717E-01	0.7160E+00	0.4873E-02	0.1448E-02	-.1212E-03
0.4531E-01	0.7381E+00	0.4680E-02	0.1465E-02	-.1460E-03
0.5522E-01	0.7637E+00	0.4487E-02	0.1715E-02	-.3838E-04
0.6761E-01	0.7907E+00	0.4192E-02	0.1754E-02	0.2425E-04
0.8212E-01	0.8123E+00	0.3863E-02	0.1967E-02	-.1082E-04
0.1005E+00	0.8400E+00	0.3393E-02	0.1456E-02	-.1033E-03
0.1218E+00	0.8736E+00	0.2923E-02	0.1259E-02	-.2155E-04
0.1487E+00	0.9042E+00	0.2431E-02	0.7159E-03	-.7019E-04
0.1805E+00	0.9334E+00	0.1692E-02	0.8039E-03	0.8045E-05
0.2198E+00	0.9662E+00	0.1053E-02	0.3700E-03	-.2617E-04
0.2680E+00	0.9957E+00	0.4523E-03	0.8251E-04	-.1592E-04
0.3260E+00	0.1011E+01	0.8491E-04	0.2397E-05	-.1817E-05
0.3972E+00	0.9985E+00	0.1567E-04	0.2047E-04	0.2516E-05
0.4832E+00	0.1015E+01	0.1167E-04	0.1518E-04	-.7677E-06
0.5883E+00	0.1002E+01	0.1090E-04	0.5025E-05	-.2834E-06
0.7165E+00	0.1005E+01	0.9323E-05	0.5495E-05	-.5709E-06
0.8722E+00	0.1014E+01	0.8832E-05	0.1545E-04	0.1412E-05

Table B.2-1 Hot-wire velocity measurements at the wind-tunnel throat, X/T = 18.2.

C. SURFACE OIL-FLOW VISUALIZATIONS

Surface-oil-flow visualizations have been performed on the wind tunnel floor and the wing. To preserve these we used a technique devised by Peter Sutton at Cambridge university for low-speed flows. The technique is as follows.

Opaque black self-adhesive plastic film is applied to the surfaces on which the oil-flow visualization is to be performed. A conventional paint mixture of finely ground titanium dioxide ($Ti0_2$), kerosene and a small amount of oleic acid is used. The relative proportions of these is varied depending on the magnitude of the shear stresses expected. We found a mixture of 15 parts kerosene, 5 parts $Ti0_2$ and 1 part oleic acid to be ideal for the wing-body junction flow at an approach boundary-layer Reynolds number Re_θ of 6700. After a thin coat of paint has been applied, the wind tunnel is switched on and left running at the desired flow conditions until the paint dries. The plastic film may then be peeled away with the oil-flow record intact on its surface. To make the oil-flow permanent it can be sprayed with a fixer (of the type artists use on charcoal drawings) or it can be covered with clear plastic film. Photocopies may then be made. In fact, a good photocopier can be used to increase or decrease the contrast and improve the record or highlight particular features.

Oil-flow records obtained at approach-boundary-layer Reynolds numbers Re_θ of 6700 and 4500 are shown in figures C-1 and C-2. Ideally the streaks on these diagrams indicate the direction of the time-mean wall shear stress and therefore should lie along the limiting streamlines at the surface. However, pressure forces can be a significant influence if the oil film gets too thick in regions where the shear stresses are small (such as near separation). This effect was minimized by applying the paint very sparingly, but at Re_θ = 4500 some

accumulation of the oil towards the trailing edge of the wing was unavoidable.

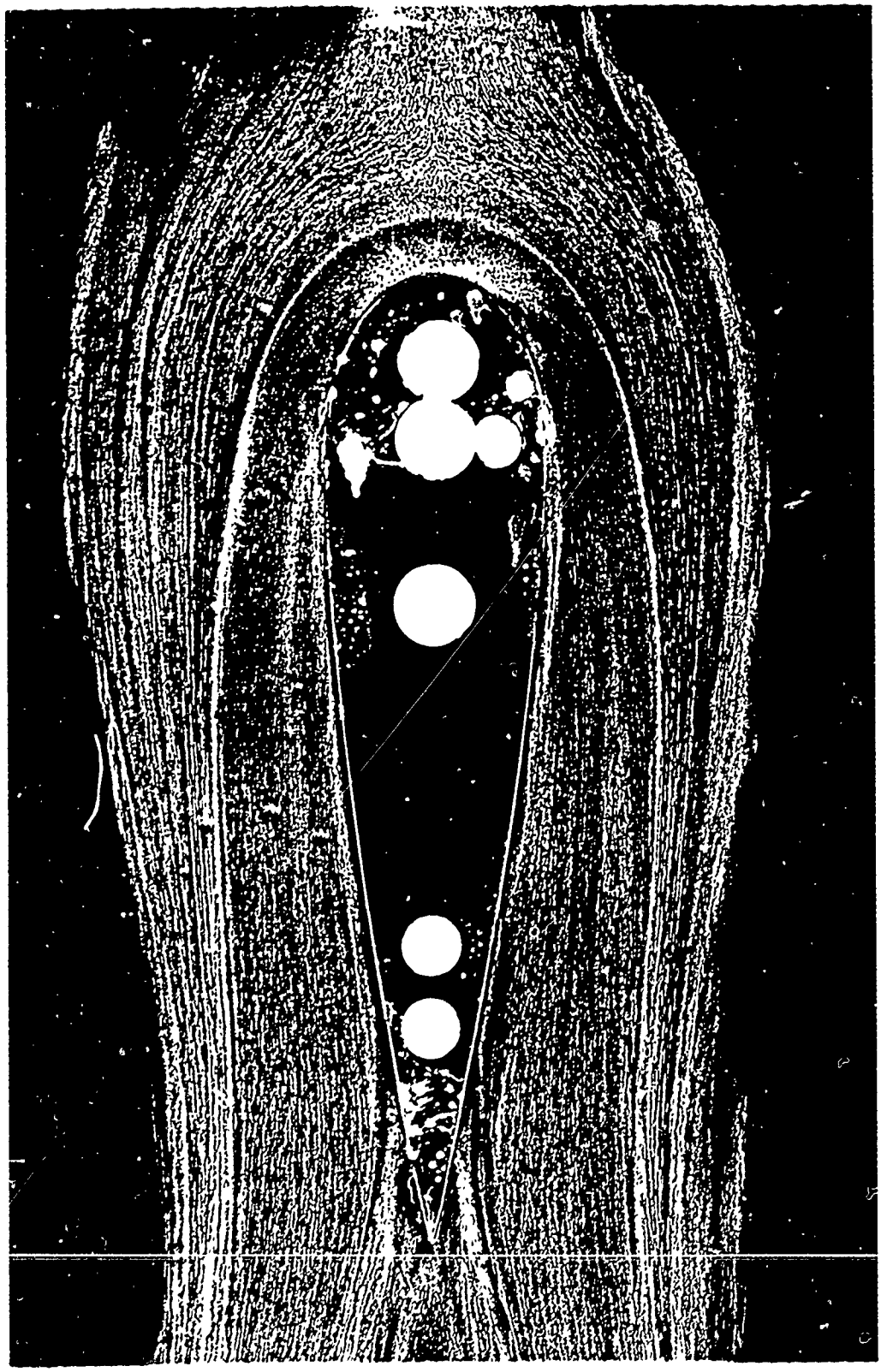


Figure C-1 Surface oil-flow visualization on the test wall surrounding the wing for Re_θ = 6700.

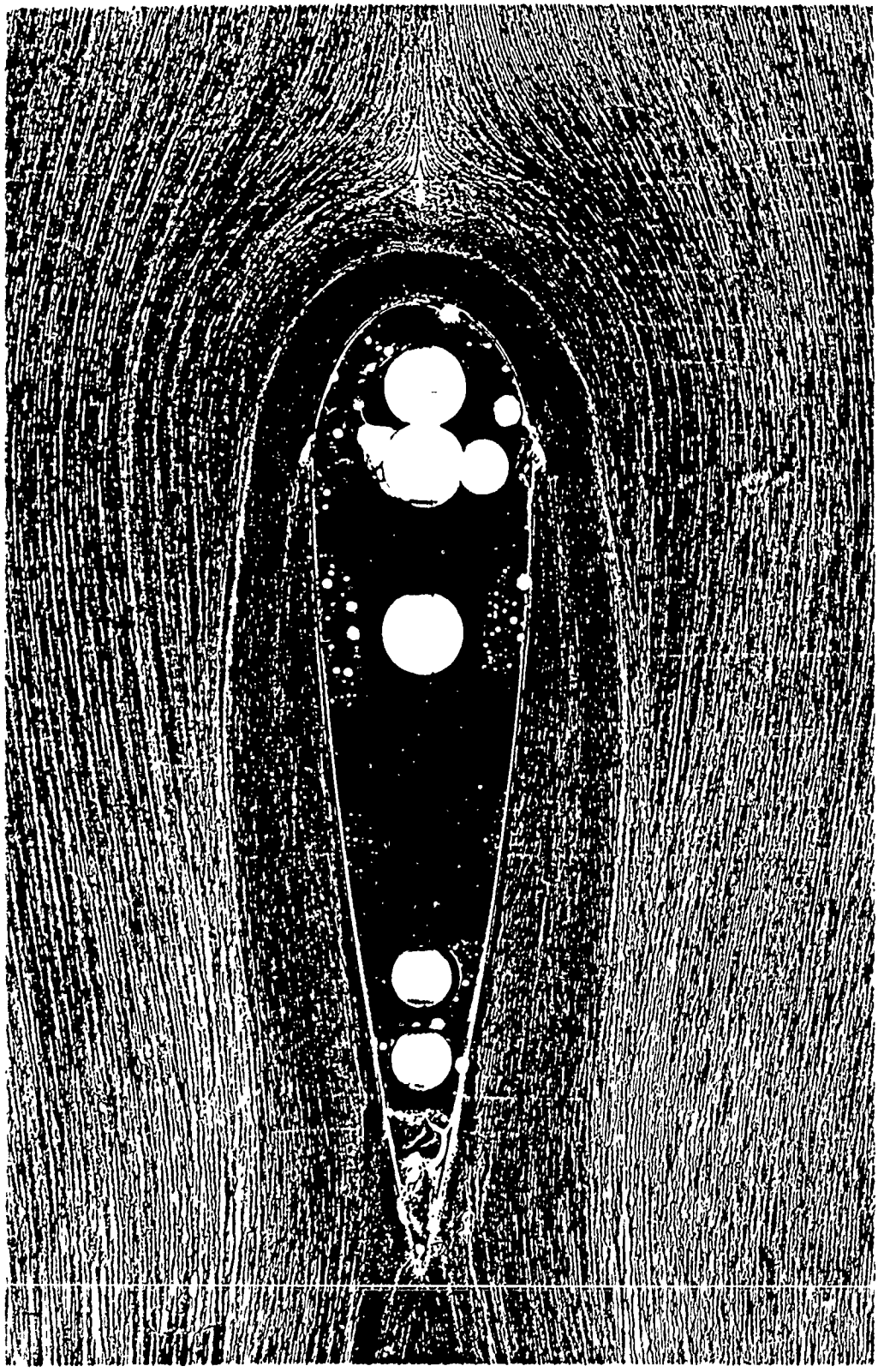


Figure C-2 Surface oil-flow visualization on the test wall surrounding the wing for Re_{θ} = 4500.

D. MEASUREMENTS OF TIME-MEAN WALL STATIC PRESSURE

Measurements of time-mean static pressure have been made on the wing surface and on the surrounding test wall using an array of 1mm diameter tappings. Data were taken at all three Reynolds numbers using a scanivalve and conventional inclined manometers.

Pressures are plotted in terms of the coefficient C_p. Defined as

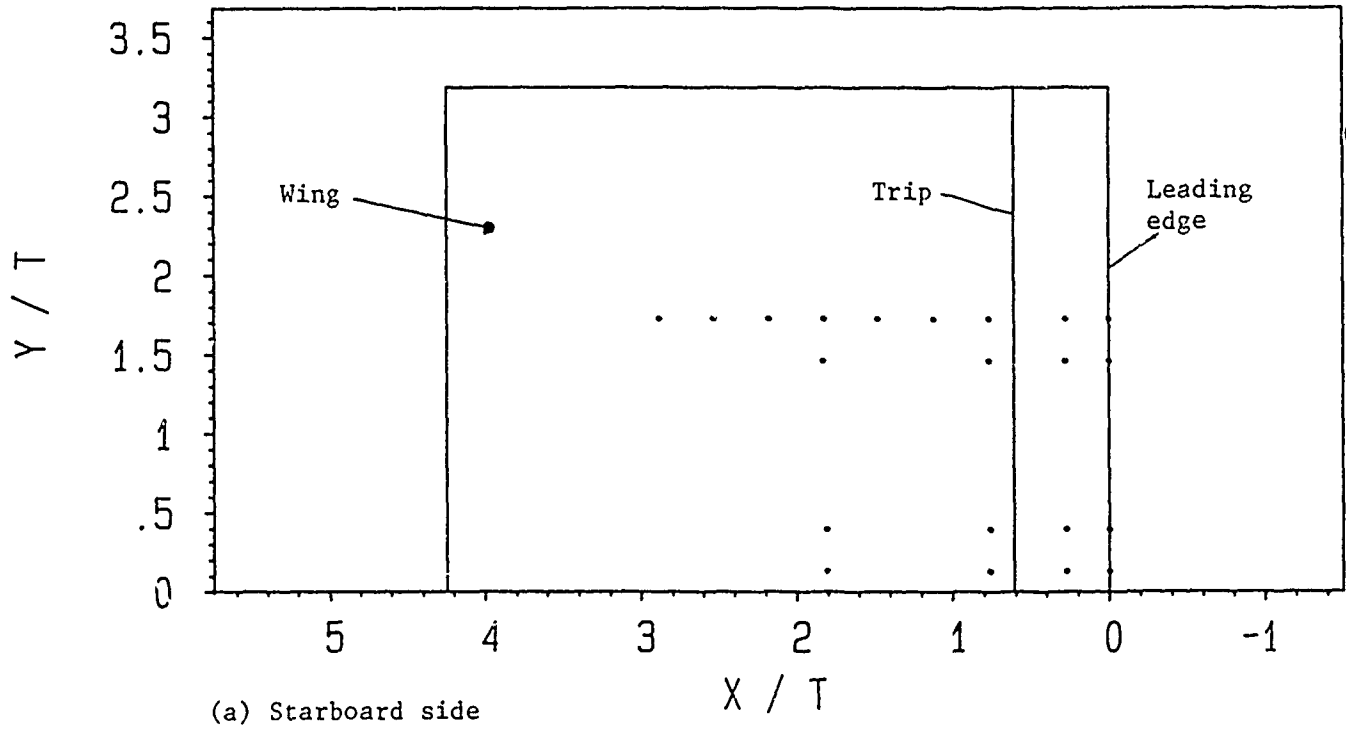
$$C_p = (p - p_{ref})/(p_o - p_{ref})$$

where p_o and p_{ref} are respectively the stagnation and static pressures measured in the potential flow at the wind-tunnel throat using a pitot-static tube.

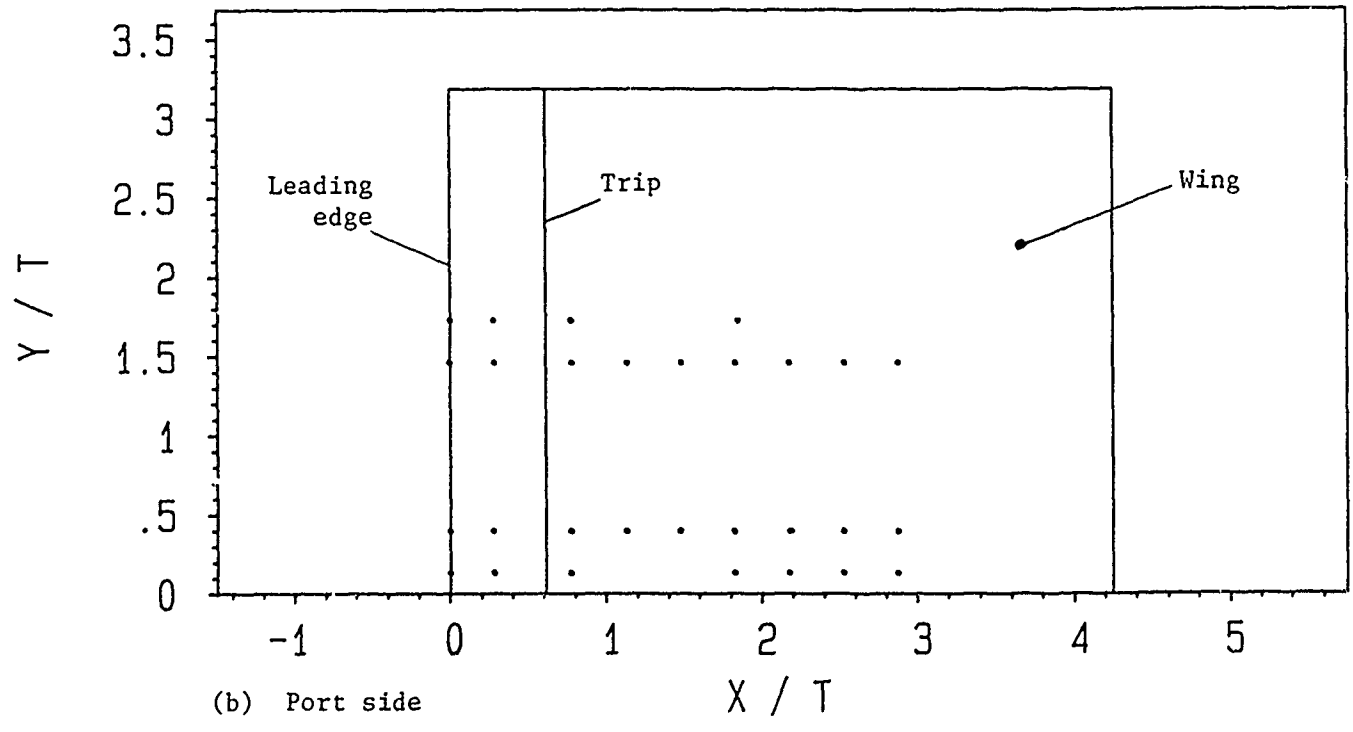
Uncertainties in the pressure measurements at Re_θ = 6700, 4500 and 2500 are estimated to be ± 0.005, ± 0.008 and ± 0.039 in C_p respectively. Bias errors are expected to be negligible.

D.1 PRESSURE MEASUREMENTS ON THE WING

Positions of pressure tappings on the wing are shown in figure D.1-1. Data are presented in the figures and table following. Note that there is an uncertainty of about ± 0.3mm (.004T) in the position of static pressure ports which is significant in measurements made upstream of the maximum thickness. Note also that the trip wire has affected the pressure measurements made immediately downstream of it.



(a) Starboard side



(b) Port side

Figure D.1-1 Positions of pressure tappings on the wing surface projected on to an XZ plane.

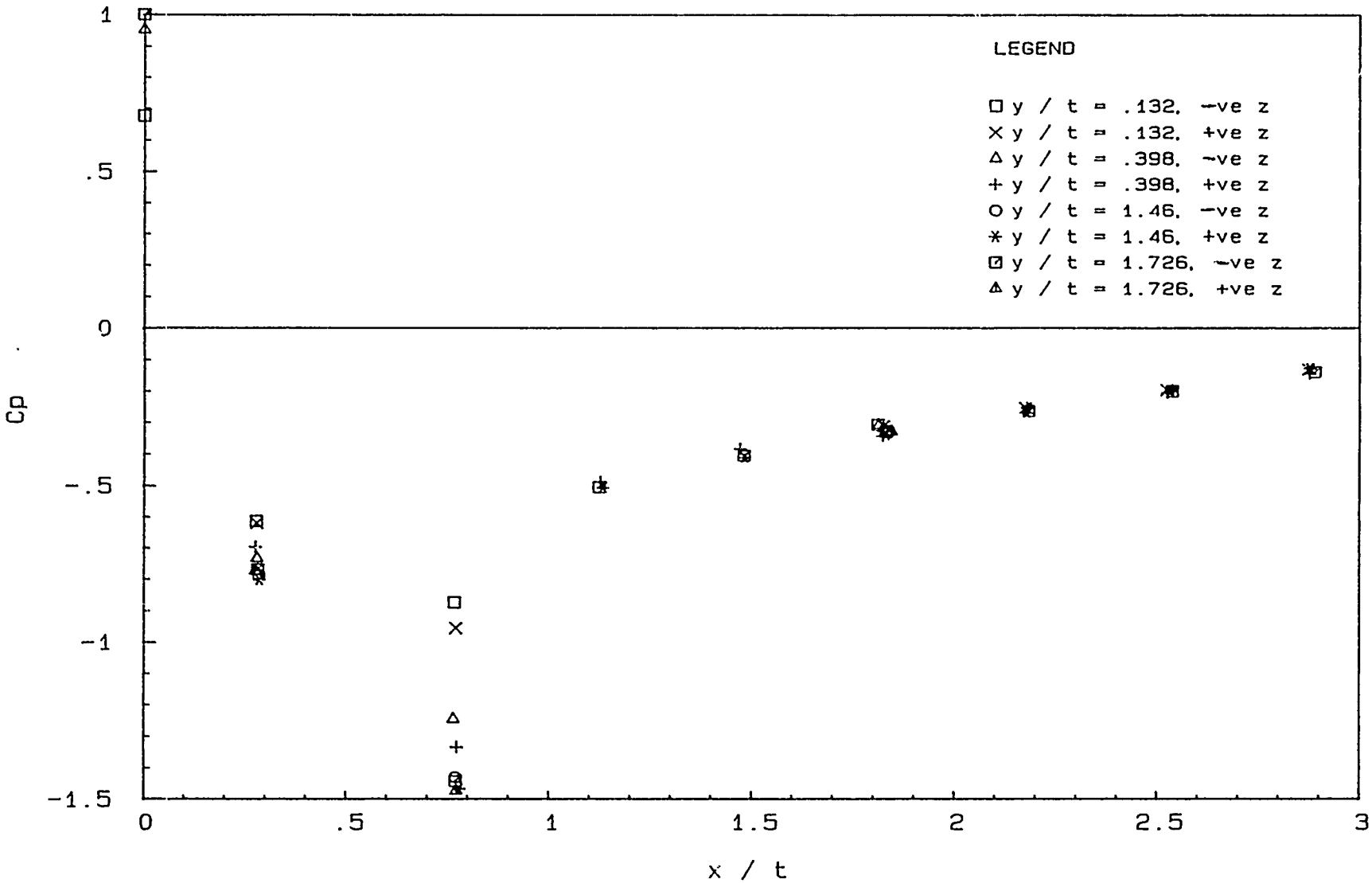


Figure D.1-2 Distributions of time-mean static pressure on the wing surface at Re_θ = 6701.

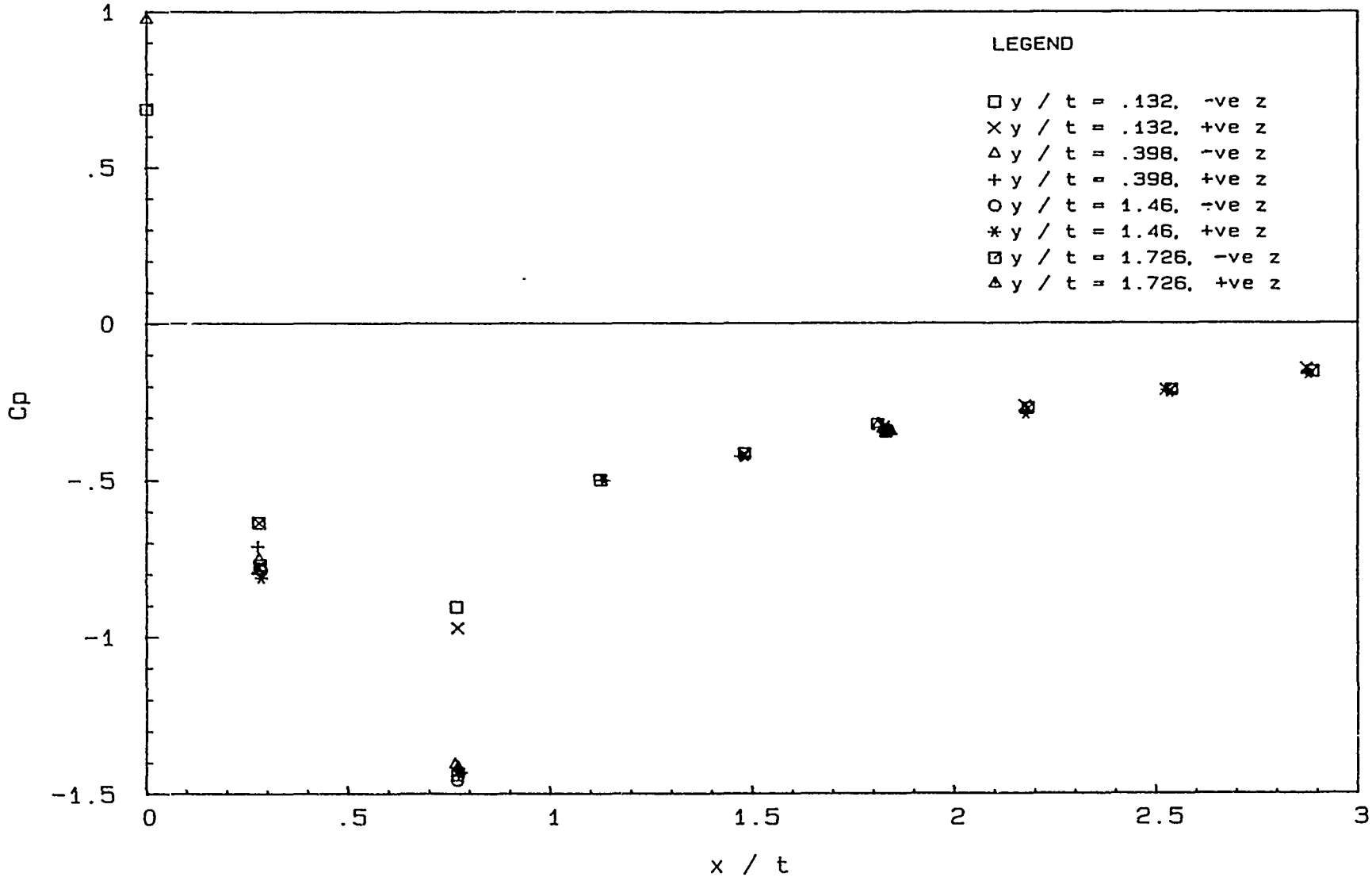


Figure D.1-3 Distributions of time-mean static pressure on the wing surface at Re_θ = 4423.

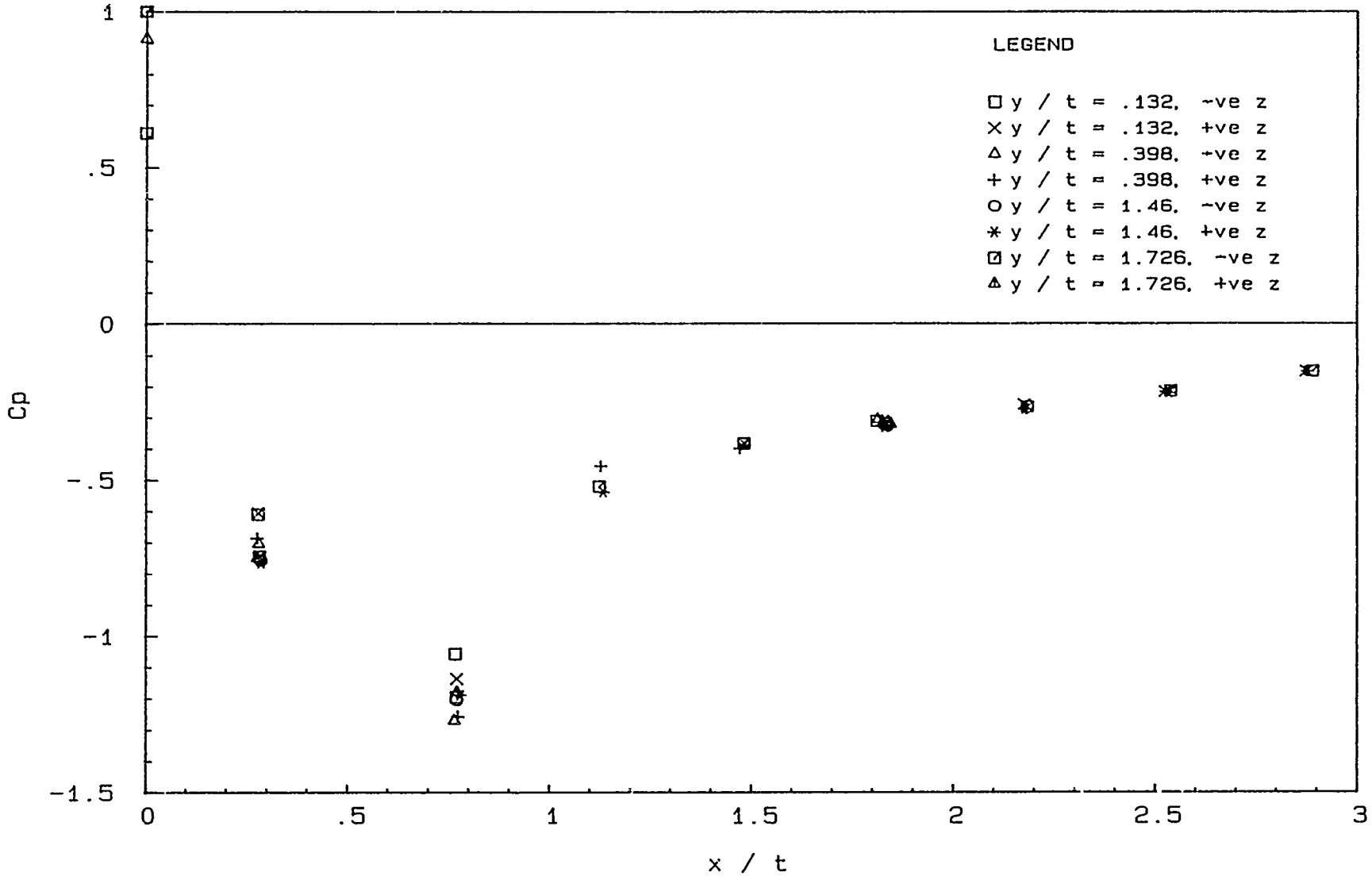


Figure D.1-4 Distributions of time-mean static pressure on the wing surface at Re_θ = 2423.

File L07270.RES
Time-mean static pressures on the wing surface
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.089812
viscosity (meters squared per second) = 1.690531E-05
Atmospheric pressure (Pascals) = 93250
Velocity of undisturbed free stream (Uref, in m/s) = 27.606
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092276E-03
Estimated momentum thickness Reynolds number = 6701.575

X/T	Y/T	Z/T	Cp
0.0000E+00	1.3279E-01	0.0000E+00	6.7699E-01
2.7838E-01	1.3279E-01	-3.8877E-01	-6.1465E-01
7.6681E-01	1.3279E-01	-5.0012E-01	-8.7351E-01
1.8105E+00	1.3279E-01	-4.3468E-01	-3.0732E-01
2.7869E-01	1.3279E-01	3.8894E-01	-6.2056E-01
7.7031E-01	1.3279E-01	5.0011E-01	-9.5609E-01
1.8247E+00	1.3279E-01	4.3311E-01	-3.1130E-01
2.1748E+00	1.3279E-01	3.9042E-01	-2.5312E-01
2.5243E+00	1.3279E-01	3.4071E-01	-1.9740E-01
2.8736E+00	1.3279E-01	2.8493E-01	-1.3100E-01
0.0000E+00	3.9837E-01	0.0000E+00	9.4952E-01
2.7963E-01	3.9837E-01	-3.8944E-01	-7.3352E-01
7.6461E-01	3.9837E-01	-5.0013E-01	-1.2457E+00
1.8125E+00	3.9837E-01	-4.3446E-01	-3.0805E-01
2.7558E-01	3.9837E-01	3.8725E-01	-6.9689E-01
7.7350E-01	3.9837E-01	5.0010E-01	-1.3348E+00
1.1271E+00	3.9837E-01	4.9042E-01	-4.8755E-01
1.4712E+00	3.9837E-01	4.6749E-01	-3.8234E-01
1.8226E+00	3.9837E-01	4.3334E-01	-3.4187E-01
2.1794E+00	3.9837E-01	3.8981E-01	-2.5118E-01
2.5261E+00	3.9837E-01	3.4045E-01	-2.0451E-01
2.8764E+00	3.9837E-01	2.8446E-01	-1.4432E-01
0.0000E+00	1.4607E+00	0.0000E+00	1.0025E+00
2.8463E-01	1.4607E+00	-3.9210E-01	-7.8779E-01
7.6991E-01	1.4607E+00	-5.0011E-01	-1.4316E+00
1.8357E+00	1.4607E+00	-4.3190E-01	-3.3196E-01
2.8526E-01	1.4607E+00	3.9244E-01	-8.0322E-01
7.7881E-01	1.4607E+00	5.0008E-01	-1.4687E+00
1.1327E+00	1.4607E+00	4.9014E-01	-5.0683E-01
1.4818E+00	1.4607E+00	4.6660E-01	-4.1075E-01
1.8300E+00	1.4607E+00	4.3253E-01	-3.3983E-01
2.1769E+00	1.4607E+00	3.9014E-01	-2.6811E-01
2.5331E+00	1.4607E+00	3.3938E-01	-1.9918E-01
2.8771E+00	1.4607E+00	2.8434E-01	-1.2745E-01
0.0000E+00	1.7263E+00	0.0000E+00	9.9943E-01
2.8213E-01	1.7263E+00	-3.9078E-01	-7.6831E-01
7.6991E-01	1.7263E+00	-5.0011E-01	-1.4434E+00
1.1229E+00	1.7263E+00	-4.9063E-01	-5.0531E-01
1.4805E+00	1.7263E+00	-4.6671E-01	-4.0494E-01
1.8307E+00	1.7263E+00	-4.3245E-01	-3.2901E-01
2.1822E+00	1.7263E+00	-3.8944E-01	-2.6300E-01
2.5373E+00	1.7263E+00	-3.3874E-01	-2.0094E-01
2.8[illegible]E+00	1.7263E+00	-2.8234E-01	-1.3930E-01
2.[illegible]-01	1.7263E+00	3.8742E-01	-7.7358E-01
7.[illegible]E-01	1.7263E+00	5.0011E-01	-1.4745E+00
1.8441E+00	1.7263E+00	4.3078E-01	-3.2899E-01

Table D.1-1 Time-mean static pressures on the wing surface at Re_Θ = 6701.

File E10240.RES
Time-mean static pressures on the wing surface
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.089812
viscosity (meters squared per second) = 1.690531E-05
Atmospheric pressure (Pascals) = 93250
Velocity of undisturbed free stream (Uref, in m/s) = 16.426
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.540036E-03
Estimated momentum thickness Reynolds number = 4423.842

X/T	Y/T	Z/T	Cp
0.0000E+00	1.3279E-01	0.0000E+00	6.8642E-01
2.7838E-01	1.3279E-01	-3.8877E-01	-6.3557E-01
7.6681E-01	1.3279E-01	-5.0012E-01	-9.0522E-01
1.8105E+00	1.3279E-01	-4.3468E-01	-3.2202E-01
2.7869E-01	1.3279E-01	3.8894E-01	-6.3557E-01
7.7031E-01	1.3279E-01	5.0011E-01	-9.7290E-01
1.8247E+00	1.3279E-01	4.3311E-01	-3.3050E-01
2.1748E+00	1.3279E-01	3.9042E-01	-2.6270E-01
2.5243E+00	1.3279E-01	3.4071E-01	-2.1186E-01
2.8736E+00	1.3279E-01	2.8493E-01	-1.4406E-01
0.0000E+00	3.9837E-01	0.0000E+00	9.7454E-01
2.7963E-01	3.9837E-01	-3.8944E-01	-7.5421E-01
7.6461E-01	3.9837E-01	-5.0013E-01	-1.4067E+00
1.8125E+00	3.9837E-01	-4.3446E-01	-3.2202E-01
2.7558E-01	3.9837E-01	3.8725E-01	-7.1064E-01
7.7350E-01	3.9837E-01	5.0010E-01	-1.4382E+00
1.1271E+00	3.9837E-01	4.9042E-01	-4.9998E-01
1.4712E+00	3.9837E-01	4.6749E-01	-4.2371E-01
1.8226E+00	3.9837E-01	4.3334E-01	-3.4745E-01
2.1794E+00	3.9837E-01	3.8981E-01	-2.7965E-01
2.5261E+00	3.9837E-01	3.4045E-01	-2.1186E-01
2.8764E+00	3.9837E-01	2.8446E-01	-1.5254E-01
0.0000E+00	1.4607E+00	0.0000E+00	1.0237E+00
2.8463E-01	1.4607E+00	-3.9210E-01	-7.8811E-01
7.6991E-01	1.4607E+00	-5.0011E-01	-1.4576E+00
1.8357E+00	1.4607E+00	-4.3190E-01	-3.3897E-01
2.8526E-01	1.4607E+00	3.9244E-01	-8.1216E-01
7.7881E-01	1.4607E+00	5.0008E-01	-1.4322E+00
1.1327E+00	1.4607E+00	4.9014E-01	-4.9998E-01
1.4818E+00	1.4607E+00	4.6660E-01	-4.2371E-01
1.8300E+00	1.4607E+00	4.3253E-01	-3.4745E-01
2.1769E+00	1.4607E+00	3.9014E-01	-2.8813E-01
2.5331E+00	1.4607E+00	3.3938E-01	-2.2033E-01
2.8771E+00	1.4607E+00	2.8434E-01	-1.6101E-01
0.0000E+00	1.7263E+00	0.0000E+00	1.0270E+00
2.8213E-01	1.7263E+00	-3.9078E-01	-7.7116E-01
7.6991E-01	1.7263E+00	-5.0011E-01	-1.4406E+00
1.1229E+00	1.7263E+00	-4.9063E-01	-4.9998E-01
1.4805E+00	1.7263E+00	-4.6671E-01	-4.1524E-01
1.8307E+00	1.7263E+00	-4.3243E-01	-3.4686E-01
2.1822E+00	1.7263E+00	-3.8944E-01	-2.7072E-01
2.5373E+00	1.7263E+00	-3.3874E-01	-2.1166E-01
2.8890E+00	1.7263E+00	-2.8234E-01	-1.5254E-01
2.7589E-01	1.7263E+00	3.8742E-01	-7.8811E-01
7.7102E-01	1.7263E+00	5.0011E-01	-1.4152E+00
1.8441E+00	1.7263E+00	4.3096E-01	-3.4745E-01

Table D.1-2 Time-mean static pressures on the wing surface at Re_θ = 4423.

File E11225.RES
Time-mean static pressures on the wing surface
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.098461
viscosity (meters squared per second) = 1.675057E-05
Atmospheric pressure (Pascals) = 93990
Velocity of undisturbed free stream (Uref, in m/s) = 8.324001
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 5.201149E-03
Estimated momentum thickness Reynolds number = 2591.99

X/T	Y/T	Z/T	Cp
0.0000E+00	1.3279E-01	0.0000E+00	6.0888E-01
2.7838E-01	1.3279E-01	-3.8877E-01	-6.0971E-01
7.6681E-01	1.3279E-01	-5.0012E-01	-1.0572E+00
1.8105E+00	1.3279E-01	-4.3468E-01	-3.1053E-01
2.7869E-01	1.3279E-01	3.8894E-01	-6.0592E-01
7.7031E-01	1.3279E-01	5.0011E-01	-1.1361E+00
1.8247E+00	1.3279E-01	4.3311E-01	-3.1053E-01
2.1748E+00	1.3279E-01	3.9042E-01	-2.5752E-01
2.5243E+00	1.3279E-01	3.4071E-01	-2.1586E-01
2.8736E+00	1.3279E-01	2.8493E-01	-1.5148E-01
0.0000E+00	3.9837E-01	0.0000E+00	9.1267E-01
2.7963E-01	3.9837E-01	-3.8944E-01	-7.0438E-01
7.6461E-01	3.9837E-01	-5.0013E-01	-1.2702E+00
1.8125E+00	3.9837E-01	-4.3446E-01	-3.0589E-01
2.7558E-01	3.9837E-01	3.8725E-01	-6.8545E-01
7.7359E-01	3.9837E-01	5.0010E-01	-1.2573E+00
1.1271E+00	3.9837E-01	4.9042E-01	-4.5444E-01
1.4712E+00	3.9837E-01	4.6749E-01	-3.9763E-01
1.8226E+00	3.9837E-01	4.3334E-01	-3.2568E-01
2.1794E+00	3.9837E-01	3.8981E-01	-2.7266E-01
2.5261E+00	3.9837E-01	3.4045E-01	-2.1586E-01
2.8764E+00	3.9837E-01	2.8446E-01	-1.5148E-01
0.0000E+00	1.4607E+00	0.0000E+00	9.9995E-01
2.8463E-01	1.4607E+00	-3.9210E-01	-7.5740E-01
7.6991E-01	1.4607E+00	-5.0011E-01	-1.2043E+00
1.8357E+00	1.4607E+00	-4.3190E-01	-3.2693E-01
2.8526E-01	1.4607E+00	3.9244E-01	-7.6497E-01
7.7881E-01	1.4607E+00	5.0008E-01	-1.1891E+00
1.1327E+00	1.4607E+00	4.9014E-01	-5.3775E-01
1.4818E+00	1.4607E+00	4.6660E-01	-3.8627E-01
1.8300E+00	1.4607E+00	4.3253E-01	-3.3069E-01
2.1769E+00	1.4607E+00	3.9014E-01	-2.7266E-01
2.5331E+00	1.4607E+00	3.3938E-01	-2.1965E-01
2.8771E+00	1.4607E+00	2.8434E-01	-1.5148E-01
0.0000E+00	1.7263E+00	0.0000E+00	9.9995E-01
2.8213E-01	1.7263E+00	-3.9078E-01	-7.4406E-01
7.6991E-01	1.7263E+00	-5.0011E-01	-1.1950E+00
1.1229E+00	1.7263E+00	-4.9063E-01	-5.2009E-01
1.4805E+00	1.7263E+00	-4.6671E-01	-3.8249E-01
1.8307E+00	1.7263E+00	-4.3245E-01	-3.1811E-01
2.1822E+00	1.7263E+00	-3.8944E-01	-2.6509E-01
2.5373E+00	1.7263E+00	-3.3874E-01	-2.1420E-01
2.8890E+00	1.7263E+00	-2.8234E-01	-1.5148E-01
2.7589E-01	1.7263E+00	3.8742E-01	-7.4983E-01
7.7102E-01	1.7263E+00	5.0011E-01	-1.1800E+00
1.8441E+00	1.7263E+00	4.3096E-01	-3.2189E-01

Table D.1-3 Time-mean static pressures on the wing surface at Re_θ = 2592.

D.2 PRESSURE MEASUREMENTS ON THE TEST WALL

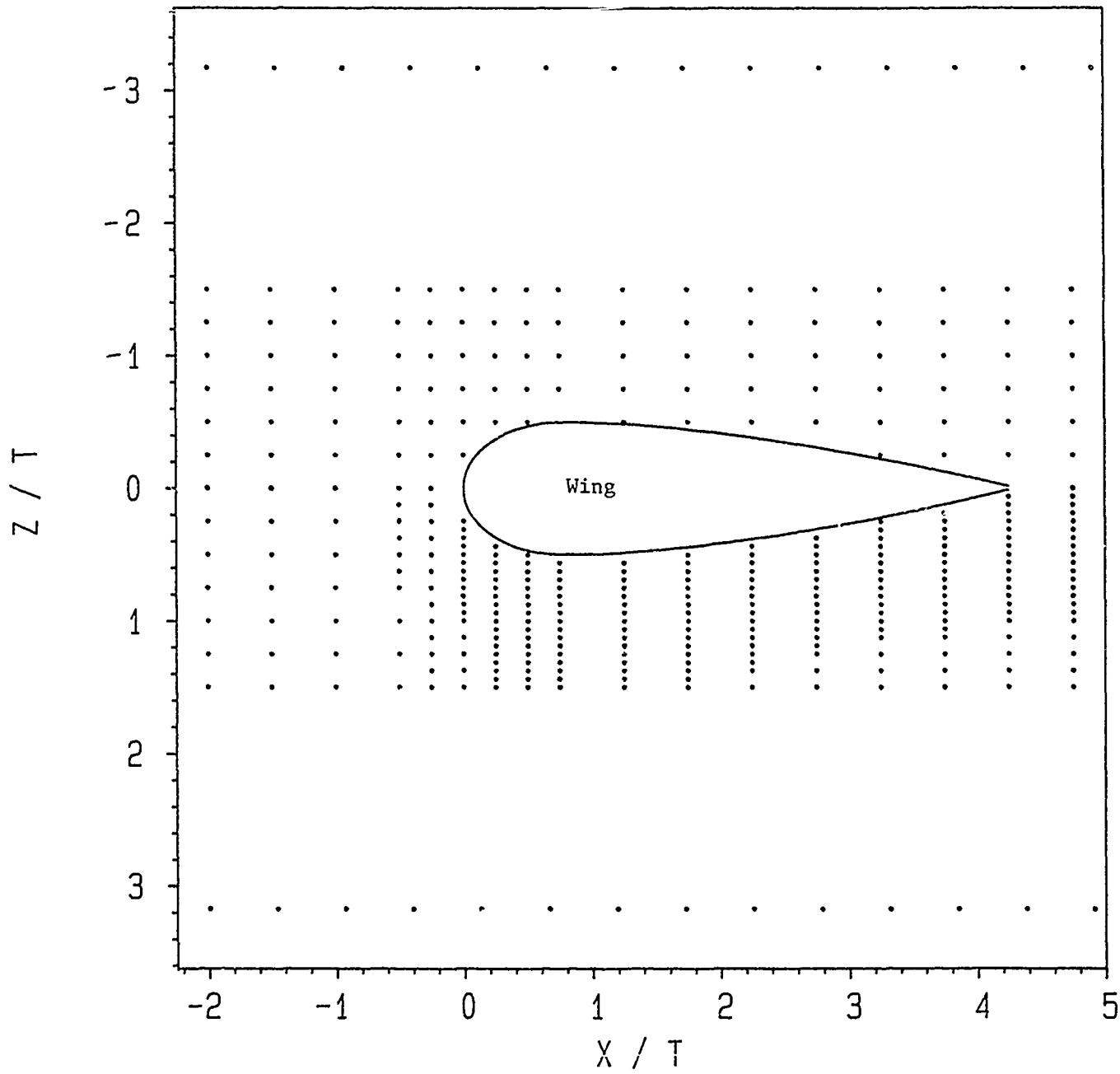


Figure D.2-1 Positions of pressure tappings on the test wall surrounding the wing.

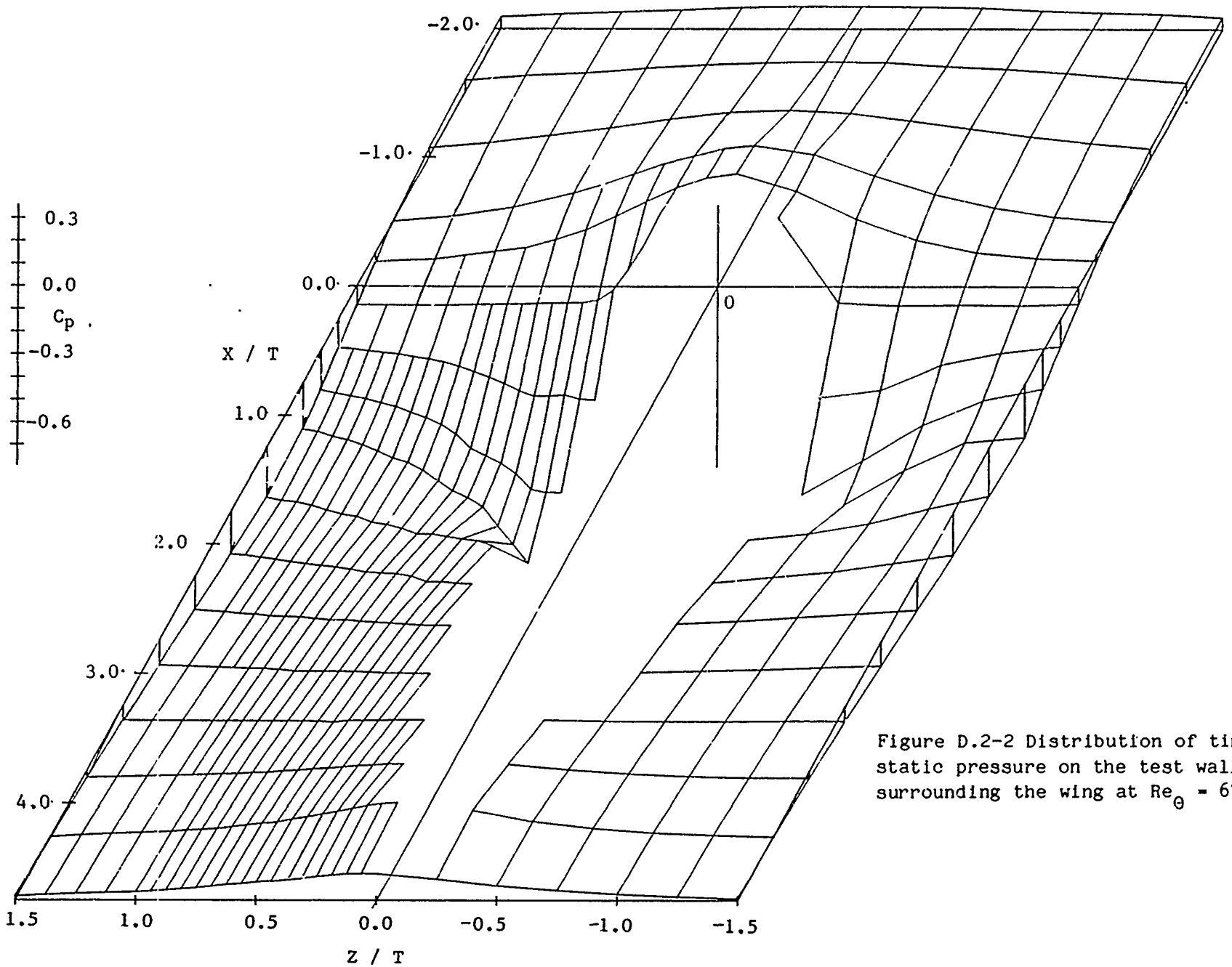


Figure D.2-2 Distribution of time-mean static pressure on the test wall surrounding the wing at Re_θ = 6766.

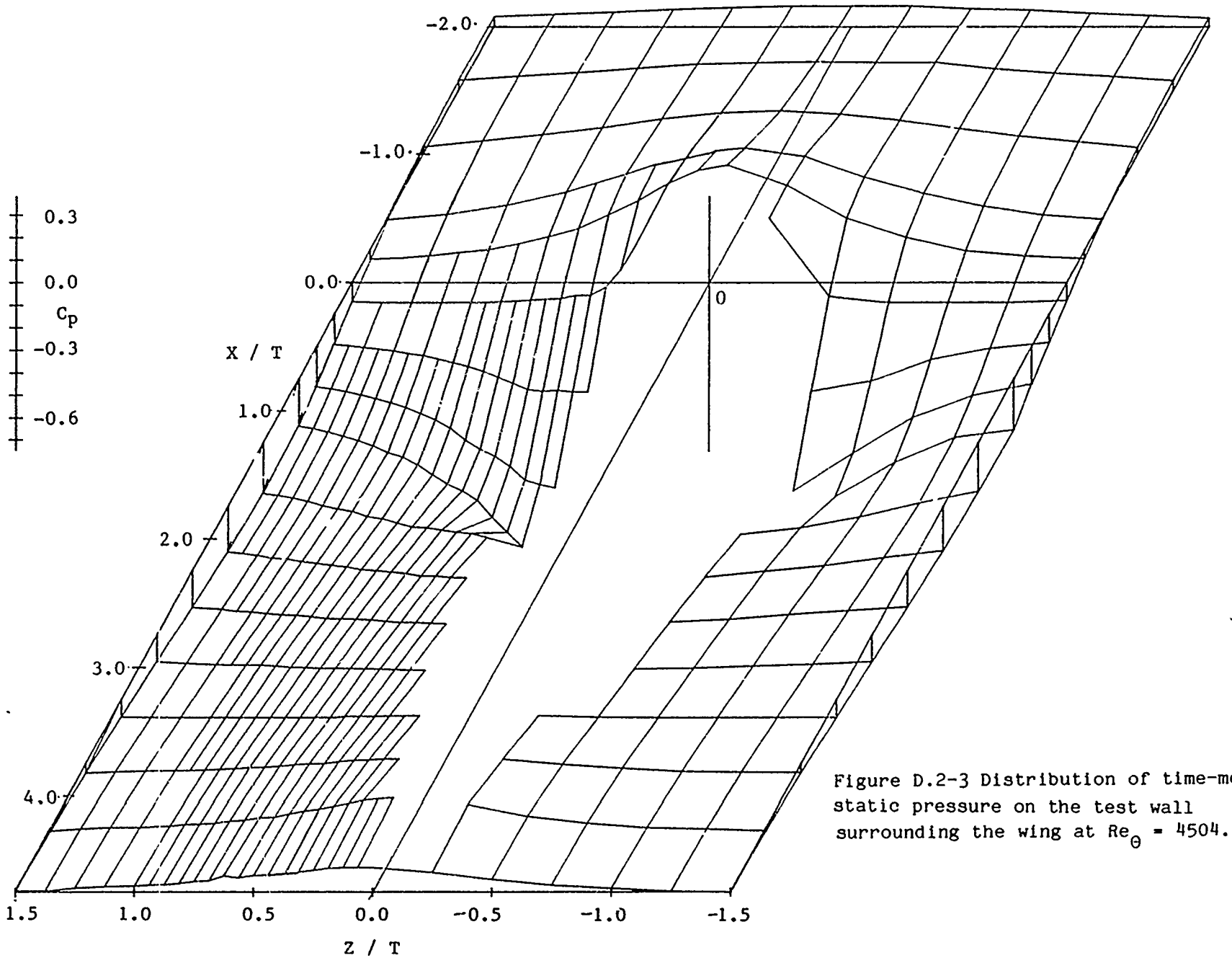


Figure D.2-3 Distribution of time-mean static pressure on the test wall surrounding the wing at Re_θ = 4504.

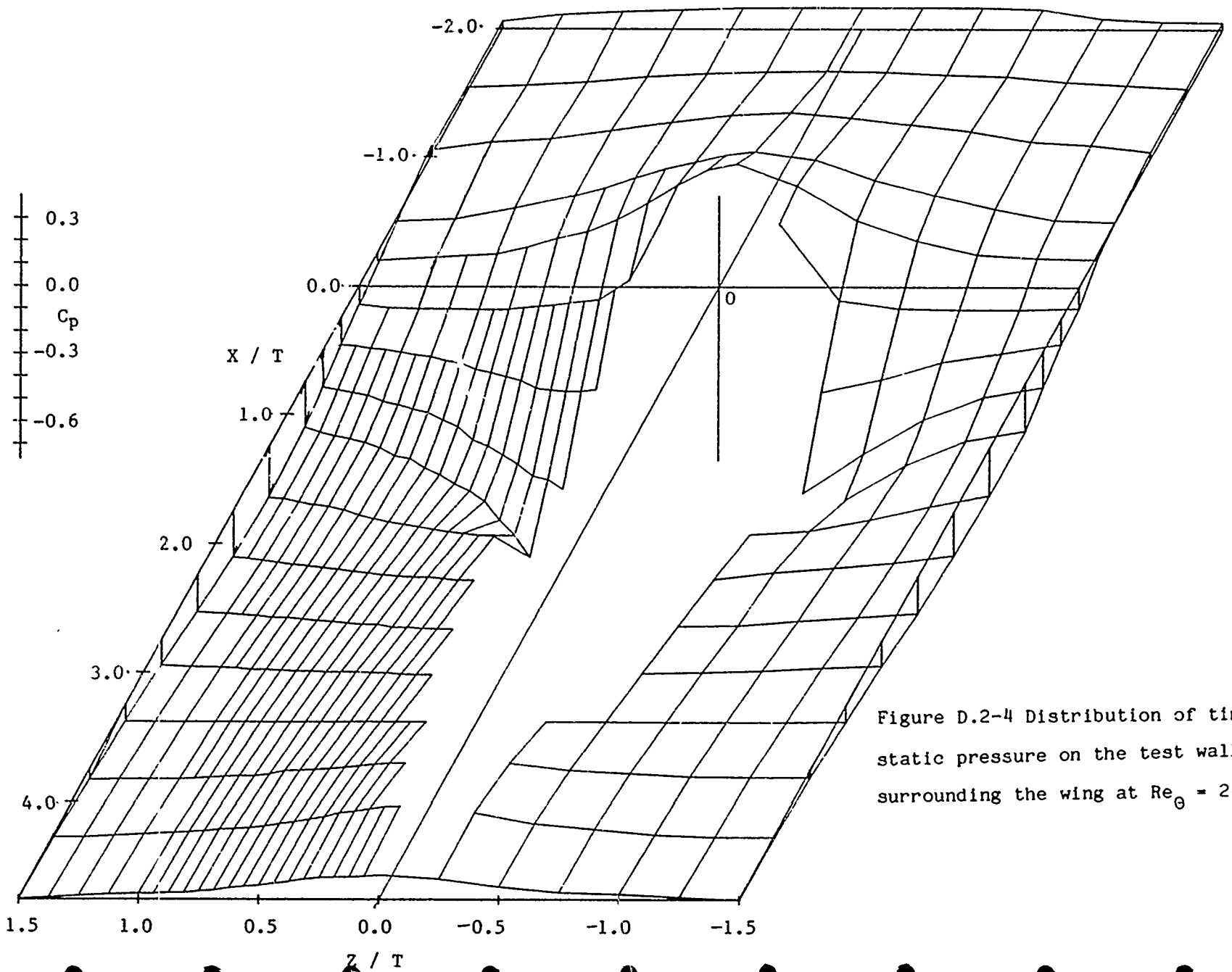


Figure D.2-4 Distribution of time-mean static pressure on the test wall surrounding the wing at Re_θ = 2420.

Table D.2-1 Time-mean static pressures on the test wall surrounding the wing at Re_Θ = 6766.

File E34270.RES
Time-mean static pressures on the test wall surrounding the wing
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.099746
viscosity (meters squared per second) = 1.675057E-05
Atmospheric pressure (Pascals) = 94100
Velocity of undisturbed free stream (Uref, in m/s) = 27.619
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091891E-03
Estimated momentum thickness Reynolds number = 6766.032

X/T	Y/T	Z/T	Cp
-2.0000E+00	0.0000E+00	-1.5000E+00	5.3040E-02
-2.0000E+00	0.0000E+00	-1.2500E+00	6.6110E-02
-2.0000E+00	0.0000E+00	-1.0000E+00	7.1944E-02
-2.0000E+00	0.0000E+00	-7.5000E-01	7.9863E-02
-2.0000E+00	0.0000E+00	-5.0000E-01	9.2036E-02
-2.0000E+00	0.0000E+00	-2.5000E-01	9.7295E-02
-2.0000E+00	0.0000E+00	0.0000E+00	9.8758E-02
-2.0000E+00	0.0000E+00	2.5000E-01	9.7049E-02
-2.0000E+00	0.0000E+00	5.0000E-01	9.2036E-02
-2.0000E+00	0.0000E+00	7.5000E-01	8.1330E-02
-2.0000E+00	0.0000E+00	1.0000E+00	7.2166E-02
-2.0000E+00	0.0000E+00	1.2500E+00	6.2759E-02
-2.0000E+00	0.0000E+00	1.5000E+00	5.0705E-02
-1.5000E+00	0.0000E+00	-1.5000E+00	4.9317E-02
-1.5000E+00	0.0000E+00	-1.2500E+00	6.7486E-02
-1.5000E+00	0.0000E+00	-1.0000E+00	9.0038E-02
-1.5000E+00	0.0000E+00	-7.5000E-01	1.0751E-01
-1.5000E+00	0.0000E+00	-5.0000E-01	1.1910E-01
-1.5000E+00	0.0000E+00	-2.5000E-01	1.3757E-01
-1.5000E+00	0.0000E+00	0.0000E+00	1.4040E-01
-1.5000E+00	0.0000E+00	2.5000E-01	1.3393E-01
-1.5000E+00	0.0000E+00	5.0000E-01	1.2366E-01
-1.5000E+00	0.0000E+00	7.5000E-01	1.0869E-01
-1.5000E+00	0.0000E+00	1.0000E+00	8.7211E-02
-1.5000E+00	0.0000E+00	1.2500E+00	7.5922E-02
-1.5000E+00	0.0000E+00	1.5000E+00	5.4995E-02
-1.0000E+00	0.0000E+00	-1.5000E+00	4.1420E-02
-1.0000E+00	0.0000E+00	-1.2500E+00	6.4897E-02
-1.0000E+00	0.0000E+00	-1.0000E+00	9.4706E-02
-1.0000E+00	0.0000E+00	-7.5000E-01	1.3000E-01
-1.0000E+00	0.0000E+00	-5.0000E-01	1.6529E-01
-1.0000E+00	0.0000E+00	-2.5000E-01	1.9706E-01
-1.0000E+00	0.0000E+00	0.0000E+00	2.1118E-01
-1.0000E+00	0.0000E+00	2.5000E-01	1.9941E-01
-1.0000E+00	0.0000E+00	5.0000E-01	1.6864E-01
-1.0000E+00	0.0000E+00	7.5000E-01	1.3018E-01
-1.0000E+00	0.0000E+00	1.0000E+00	9.5972E-02
-1.0000E+00	0.0000E+00	1.2500E+00	6.3314E-02
-1.0000E+00	0.0000E+00	1.5000E+00	3.9528E-02
-5.0000E-01	0.0000E+00	-1.5000E+00	1.7647E-03
-5.0000E-01	0.0000E+00	-1.2500E+00	2.3529E-02
-5.0000E-01	0.0000E+00	-1.0000E+00	6.4118E-02
-5.0000E-01	0.0000E+00	-7.5000	1.2353E-01
-5.0000E-01	0.0000E+00	-5.000	2.0529E-01
-5.0000E-01	0.0000E+00	-2.5000 01	2.9971E-01
-5.0000E-01	0.0000E+00	0.0000E+00	3.3905E-01
-5.0000E-01	0.0000E+00	1.2500E-01	3.2308E-01
-5.0000E-01	0.0000E+00	3.7500E-01	2.5773E-01
-5.0000E-01	0.0000E+00	5.0000E-01	2.1080E-01
-5.0000E-01	0.0000E+00	6.2500E-01	1.6450E-01
-5.0000E-01	0.0000E+00	7.5000E-01	1.2557E-01
-5.0000E-01	0.0000E+00	1.0000E+00	6.3194E-02
-5.0000E-01	0.0000E+00	1.2500E+00	2.3036E-02
-5.0000E-01	0.0000E+00	1.5000E+00	6.5083E-04
-2.5000E-01	0.0000E+00	-1.5000E+00	-2.8468E-02
-2.5000E-01	0.0000E+00	-1.2500E+00	-1.6156E-02
-2.5000E-01	0.0000E+00	-1.0000E+00	7.4317E-03
-2.5000E-01	0.0000E+00	-7.5000E-01	6.4300E-02
-2.5000E-01	0.0000E+00	-5.0000E-01	1.5490E-01
-2.5000E-01	0.0000E+00	-2.5000E-01	2.7986E-01
-2.5000E-01	0.0000E+00	0.0000E+00	3.5773E-01
-2.5000E-01	0.0000E+00	1.2500E-01	3.3548E-01
-2.5000E-01	0.0000E+00	2.5000E-01	2.9188E-01
-2.5000E-01	0.0000E+00	3.7500E-01	2.3132E-01
-2.5000E-01	0.0000E+00	5.0000E-01	1.6616E-01
-2.5000E-01	0.0000E+00	6.2500E-01	1.0726E-01
-2.5000E-01	0.0000E+00	7.5000E-01	6.2833E-02
-2.5000E-01	0.0000E+00	8.7500E-01	2.6527E-02
-2.5000E-01	0.0000E+00	1.0000E+00	1.0352E-02
-2.5000E-01	0.0000E+00	1.1250E+00	-6.4660E-03
-2.5000E-01	0.0000E+00	1.2500E+00	-2.3278E-02
-2.5000E-01	0.0000E+00	1.3750E+00	-2.7969E-02
-2.5000E-01	0.0000E+00	1.5000E+00	-3.5145E-02
0.0000E+00	0.0000E+00	-1.5000E+00	-7.6237E-02
0.0000E+00	0.0000E+00	-1.2500E+00	-8.4758E-02
0.0000E+00	0.0000E+00	-1.0000E+00	-8.0052E-02
0.0000E+00	0.0000E+00	-7.5000E-01	-8.5007E-02
0.0000E+00	0.0000E+00	-5.0000E-01	-7.0731E-02
0.0000E+00	0.0000E+00	-2.5000E-01	3.0315E-01
0.0000E+00	0.0000E+00	2.5000E-01	3.0668E-01
0.0000E+00	0.0000E+00	3.1250E-01	1.7469E-01
0.0000E+00	0.0000E+00	3.7500E-01	7.2029E-02
0.0000E+00	0.0000E+00	4.3750E-01	-1.9536E-02
0.0000E+00	0.0000E+00	5.0000E-01	-6.1902E-02
0.0000E+00	0.0000E+00	5.6250E-01	-7.2457E-02
0.0000E+00	0.0000E+00	6.2500E-01	-7.3544E-02
0.0000E+00	0.0000E+00	6.8750E-01	-7.4492E-02
0.0000E+00	0.0000E+00	7.5000E-01	-7.6390E-02
0.0000E+00	0.0000E+00	8.1250E-01	-7.8333E-02
0.0000E+00	0.0000E+00	8.7500E-01	-7.8887E-02
0.0000E+00	0.0000E+00	9.3750E-01	-7.9580E-02
0.0000E+00	0.0000E+00	1.0000E+00	-8.0703E-02
0.0000E+00	0.0000E+00	1.1250E+00	-8.4608E-02
0.0000E+00	0.0000E+00	1.2500E+00	-8.4106E-02
0.0000E+00	0.0000E+00	1.3750E+00	-8.1595E-02
0.0000E+00	0.0000E+00	1.5000E+00	-7.9719E-02
2.5000E-01	0.0000E+00	-1.5000E+00	-1.2178E-01
2.5000E-01	0.0000E+00	-1.2500E+00	-1.5294E-01
2.5000E-01	0.0000E+00	-1.0000E+00	-2.0570E-01
2.5000E-01	0.0000E+00	-7.5000E-01	-3.1584E-01
2.5000E-01	0.0000E+00	-5.0000E-01	-3.4964E-01
2.5000E-01	0.0000E+00	4.3750E-01	-3.5948E-01
2.5000E-01	0.0000E+00	5.0000E-01	-3.5291E-01
2.5000E-01	0.0000E+00	5.6250E-01	-3.3471E-01
2.5000E-01	0.0000E+00	6.2500E-01	-3.4254E-01
2.5000E-01	0.0000E+00	6.8750E-01	-3.4210E-01
2.5000E-01	0.0000E+00	7.5000E-01	-3.1661E-01
2.5000E-01	0.0000E+00	8.1250E-01	-2.8396E-01
2.5000E-01	0.0000E+00	8.7500E-01	-2.5629E-01
2.5000E-01	0.0000E+00	9.3750E-01	-2.3267E-01
2.5000E-01	0.0000E+00	1.0000E+00	-2.0988E-01
2.5000E-01	0.0000E+00	1.0625E+00	-1.9200E-01
2.5000E-01	0.0000E+00	1.1250E+00	-1.7830E-01
2.5000E-01	0.0000E+00	1.1875E+00	-1.6862E-01
2.5000E-01	0.0000E+00	1.2500E+00	-1.5663E-01
2.5000E-01	0.0000E+00	1.3125E+00	-1.4962E-01
2.5000E-01	0.0000E+00	1.3750E+00	-1.4127E-01
2.5000E-01	0.0000E+00	1.4375E+00	-1.3236E-01
2.5000E-01	0.0000E+00	1.5000E+00	-1.2757E-01
5.0000E-01	0.0000E+00	-1.5000E+00	-1.6647E-01
5.0000E-01	0.0000E+00	-1.2500E+00	-2.1850E-01
5.0000E-01	0.0000E+00	-1.0000E+00	-3.2589E-01
5.0000E-01	0.0000E+00	-7.5000E-01	-4.8446E-01
5.0000E-01	0.0000E+00	-5.0000E-01	-6.3524E-01
5.0000E-01	0.0000E+00	5.0000E-01	-6.2353E-01
5.0000E-01	0.0000E+00	5.6250E-01	-6.2280E-01
5.0000E-01	0.0000E+00	6.2500E-01	-6.0944E-01
5.0000E-01	0.0000E+00	6.8750E-01	-5.4173E-01
5.0000E-01	0.0000E+00	7.5000E-01	-4.9472E-01
5.0000E-01	0.0000E+00	8.1250E-01	-4.6177E-01
5.0000E-01	0.0000E+00	8.7500E-01	-4.2816E-01
5.0000E-01	0.0000E+00	9.3750E-01	-3.6691E-01
5.0000E-01	0.0000E+00	1.0000E+00	-3.2333E-01
5.0000E-01	0.0000E+00	1.0625E+00	-2.9308E-01
5.0000E-01	0.0000E+00	1.1250E+00	-2.6873E-01
5.0000E-01	0.0000E+00	1.1875E+00	-2.4356E-01

5.0000E-01	0.0000E+00	1.2500E+00	-2.2716E-01
5.0000E-01	0.0000E+00	1.3125E+00	-2.1077E-01
5.0000E-01	0.0000E+00	1.3750E+00	-1.9766E-01
5.0000E-01	0.0000E+00	1.4375E+00	-1.8479E-01
5.0000E-01	0.0000E+00	1.5000E+00	-1.7126E-01
7.5000E-01	0.0000E+00	-1.5000E+00	-2.3883E-01
7.5000E-01	0.0000E+00	-1.2500E+00	-2.6208E-01
7.5000E-01	0.0000E+00	-1.0000E+00	-3.8406E-01
7.5000E-01	0.0000E+00	-7.5000E-01	-5.3650E-01
7.5000E-01	0.0000E+00	5.6250E-01	-7.9293E-01
7.5000E-01	0.0000E+00	6.2500E-01	-7.1004E-01
7.5000E-01	0.0000E+00	6.8750E-01	-6.2959E-01
7.5000E-01	0.0000E+00	7.5000E-01	-5.4439E-01
7.5000E-01	0.0000E+00	8.1250E-01	-5.0432E-01
7.5000E-01	0.0000E+00	8.7500E-01	-4.7409E-01
7.5000E-01	0.0000E+00	9.3750E-01	-4.3150E-01
7.5000E-01	0.0000E+00	1.0000E+00	-3.8478E-01
7.5000E-01	0.0000E+00	1.0625E+00	-3.4875E-01
7.5000E-01	0.0000E+00	1.1250E+00	-3.3029E-01
7.5000E-01	0.0000E+00	1.1875E+00	-2.9832E-01
7.5000E-01	0.0000E+00	1.2500E+00	-2.7158E-01
7.5000E-01	0.0000E+00	1.3125E+00	-2.4979E-01
7.5000E-01	0.0000E+00	1.3750E+00	-2.3499E-01
7.5000E-01	0.0000E+00	1.4375E+00	-2.1376E-01
7.5000E-01	0.0000E+00	1.5000E+00	-2.0230E-01
1.2500E+00	0.0000E+00	-1.5000E+00	-2.1325E-01
1.2500E+00	0.0000E+00	-1.2500E+00	-2.6846E-01
1.2500E+00	0.0000E+00	-1.0000E+00	-3.3504E-01
1.2500E+00	0.0000E+00	-7.5000E-01	-3.7908E-01
1.2500E+00	0.0000E+00	-5.0000E-01	-4.0575E-01
1.2500E+00	0.0000E+00	5.6250E-01	-4.3261E-01
1.2500E+00	0.0000E+00	6.2500E-01	-4.0891E-01
1.2500E+00	0.0000E+00	6.8750E-01	-4.0130E-01
1.2500E+00	0.0000E+00	7.5000E-01	-3.9053E-01
1.2500E+00	0.0000E+00	8.1250E-01	-3.7927E-01
1.2500E+00	0.0000E+00	8.7500E-01	-3.7990E-01
1.2500E+00	0.0000E+00	9.3750E-01	-3.5587E-01
1.2500E+00	0.0000E+00	1.0000E+00	-3.3779E-01
1.2500E+00	0.0000E+00	1.0625E+00	-3.2812E-01
1.2500E+00	0.0000E+00	1.1250E+00	-3.0157E-01
1.2500E+00	0.0000E+00	1.1875E+00	-2.9265E-01
1.2500E+00	0.0000E+00	1.2500E+00	-2.7481E-01
1.2500E+00	0.0000E+00	1.3125E+00	-2.5411E-01
1.2500E+00	0.0000E+00	1.3750E+00	-2.3983E-01
1.2500E+00	0.0000E+00	1.4375E+00	-2.3237E-01
1.2500E+00	0.0000E+00	1.5000E+00	-2.1972E-01
1.7500E+00	0.0000E+00	-1.5000E+00	-1.8775E-01
1.7500E+00	0.0000E+00	-1.2500E+00	-2.2361E-01
1.7500E+00	0.0000E+00	-1.0000E+00	-2.6100E-01
1.7500E+00	0.0000E+00	-7.5000E-01	-2.8445E-01
1.7500E+00	0.0000E+00	-5.0000E-01	-3.0965E-01
1.7500E+00	0.0000E+00	5.0000E-01	-3.1517E-01
1.7500E+00	0.0000E+00	5.6250E-01	-3.1150E-01
1.7500E+00	0.0000E+00	6.2500E-01	-3.0387E-01
1.7500E+00	0.0000E+00	6.8750E-01	-3.0506E-01
1.7500E+00	0.0000E+00	7.5000E-01	-2.7995E-01
1.7500E+00	0.0000E+00	8.1250E-01	-2.6873E-01
1.7500E+00	0.0000E+00	8.7500E-01	-2.6518E-01
1.7500E+00	0.0000E+00	9.3750E-01	-2.6171E-01
1.7500E+00	0.0000E+00	1.0000E+00	-2.4838E-01
1.7500E+00	0.0000E+00	1.0625E+00	-2.3952E-01
1.7500E+00	0.0000E+00	1.1250E+00	-2.3283E-01
1.7500E+00	0.0000E+00	1.1875E+00	-2.2448E-01
1.7500E+00	0.0000E+00	1.2500E+00	-2.1655E-01
1.7500E+00	0.0000E+00	1.3125E+00	-2.0609E-01
1.7500E+00	0.0000E+00	1.3750E+00	-1.9840E-01
1.7500E+00	0.0000E+00	1.4375E+00	-1.8816E-01
1.7500E+00	0.0000E+00	1.5000E+00	-1.8456E-01
2.2500E+00	0.0000E+00	-1.5000E+00	-1.4551E-01
2.2500E+00	0.0000E+00	-1.2500E+00	-1.6250E-01
2.2500E+00	0.0000E+00	-1.0000E+00	-1.7860E-01
2.2500E+00	0.0000E+00	-7.5000E-01	-1.9528E-01
2.2500E+00	0.0000E+00	-5.0000E-01	-2.0565E-01
2.2500E+00	0.0000E+00	4.3750E-01	-2.1477E-01
2.2500E+00	0.0000E+00	5.0000E-01	-2.1240E-01
2.2500E+00	0.0000E+00	5.6250E-01	-2.1033E-01
2.2500E+00	0.0000E+00	6.2500E-01	-2.0588E-01
2.2500E+00	0.0000E+00	6.8750E-01	-2.0174E-01
2.2500E+00	0.0000E+00	7.5000E-01	-1.9877E-01
2.2500E+00	0.0000E+00	8.1250E-01	-1.9367E-01
2.2500E+00	0.0000E+00	8.7500E-01	-1.8894E-01
2.2500E+00	0.0000E+00	9.3750E-01	-1.8855E-01
2.2500E+00	0.0000E+00	1.0000E+00	-1.8277E-01
2.2500E+00	0.0000E+00	1.0625E+00	-1.7681E-01
2.2500E+00	0.0000E+00	1.1250E+00	-1.7383E-01
2.2500E+00	0.0000E+00	1.1875E+00	-1.7204E-01
2.2500E+00	0.0000E+00	1.2500E+00	-1.6554E-01
2.2500E+00	0.0000E+00	1.3125E+00	-1.6145E-01
2.2500E+00	0.0000E+00	1.3750E+00	-1.5375E-01
2.2500E+00	0.0000E+00	1.5000E+00	-1.4516E-01
2.7500E+00	0.0000E+00	-1.5000E+00	-1.0458E-01
2.7500E+00	0.0000E+00	-1.2500E+00	-1.1287E-01
2.7500E+00	0.0000E+00	-1.0000E+00	-1.2206E-01
2.7500E+00	0.0000E+00	-7.5000E-01	-1.2768E-01
2.7500E+00	0.0000E+00	-5.0000E-01	-1.3479E-01
2.7500E+00	0.0000E+00	3.7500E-01	-1.3986E-01
2.7500E+00	0.0000E+00	4.3750E-01	-1.4002E-01
2.7500E+00	0.0000E+00	5.0000E-01	-1.3569E-01
2.7500E+00	0.0000E+00	5.6250E-01	-1.3659E-01
2.7500E+00	0.0000E+00	6.2500E-01	-1.3181E-01
2.7500E+00	0.0000E+00	6.8750E-01	-1.2884E-01
2.7500E+00	0.0000E+00	7.5000E-01	-1.2870E-01
2.7500E+00	0.0000E+00	8.1250E-01	-1.2841E-01
2.7500E+00	0.0000E+00	8.7500E-01	-1.2942E-01
2.7500E+00	0.0000E+00	9.3750E-01	-1.3031E-01
2.7500E+00	0.0000E+00	1.0000E+00	-1.2160E-01
2.7500E+00	0.0000E+00	1.0625E+00	-1.1662E-01
2.7500E+00	0.0000E+00	1.1250E+00	-1.1694E-01
2.7500E+00	0.0000E+00	1.1875E+00	-1.1360E-01
2.7500E+00	0.0000E+00	1.2500E+00	-1.1123E-01
2.7500E+00	0.0000E+00	1.3750E+00	-1.0695E-01
2.7500E+00	0.0000E+00	1.5000E+00	-1.0280E-01
3.2500E+00	0.0000E+00	-1.5000E+00	-6.3703E-02
3.2500E+00	0.0000E+00	-1.2500E+00	-6.4296E-02
3.2500E+00	0.0000E+00	-1.0000E+00	-6.6665E-02
3.2500E+00	0.0000E+00	-7.5000E-01	-6.4888E-02
3.2500E+00	0.0000E+00	-5.0000E-01	-6.3279E-02
3.2500E+00	0.0000E+00	-2.5000E-01	-5.7916E-02
3.2500E+00	0.0000E+00	2.5000E-01	-5.9330E-02
3.2500E+00	0.0000E+00	3.1250E-01	-5.7881E-02
3.2500E+00	0.0000E+00	3.7500E-01	-5.9556E-02
3.2500E+00	0.0000E+00	4.3750E-01	-6.2518E-02
3.2500E+00	0.0000E+00	5.0000E-01	-6.2386E-02
3.2500E+00	0.0000E+00	5.6250E-01	-6.2981E-02
3.2500E+00	0.0000E+00	6.2500E-01	-6.9813E-02
3.2500E+00	0.0000E+00	6.8750E-01	-6.4112E-02
3.2500E+00	0.0000E+00	7.5000E-01	-6.3577E-02
3.2500E+00	0.0000E+00	8.1250E-01	-6.3556E-02
3.2500E+00	0.0000E+00	8.7500E-01	-6.3026E-02
3.2500E+00	0.0000E+00	9.3750E-01	-6.4995E-02
3.2500E+00	0.0000E+00	1.0000E+00	-6.3216E-02
3.2500E+00	0.0000E+00	1.0625E+00	-6.2814E-02
3.2500E+00	0.0000E+00	1.1250E+00	-6.4888E-02
3.2500E+00	0.0000E+00	1.2500E+00	-6.2814E-02
3.2500E+00	0.0000E+00	1.3750E+00	-6.2814E-02
3.2500E+00	0.0000E+00	1.5000E+00	-6.1926E-02
3.7500E+00	0.0000E+00	-1.5000E+00	-2.9343E-02
3.7500E+00	0.0000E+00	-1.2500E+00	-2.6033E-02
3.7500E+00	0.0000E+00	-1.0000E+00	-2.0073E-02
3.7500E+00	0.0000E+00	-7.5000E-01	-8.1543E-03
3.7500E+00	0.0000E+00	-5.0000E-01	9.4721E-03
3.7500E+00	0.0000E+00	-2.5000E-01	3.1774E-02
3.7500E+00	0.0000E+00	1.8750E-01	3.4102E-02
3.7500E+00	0.0000E+00	2.5000E-01	3.2219E-02
3.7500E+00	0.0000E+00	3.1250E-01	2.6292E-02
3.7500E+00	0.0000E+00	3.7500E-01	2.3975E-02
3.7500E+00	0.0000E+00	4.3750E-01	1.8643E-02
3.7500E+00	0.0000E+00	5.0000E-01	1.2719E-02
3.7500E+00	0.0000E+00	5.6250E-01	9.7567E-03
3.7500E+00	0.0000E+00	6.2500E-01	3.8325E-03
3.7500E+00	0.0000E+00	6.8750E-01	7.3480E-04
3.7500E+00	0.0000E+00	7.5000E-01	-5.9463E-03
3.7500E+00	0.0000E+00	8.1250E-01	-7.0516E-03
3.7500E+00	0.0000E+00	8.7500E-01	-1.1753E-02
3.7500E+00	0.0000E+00	9.3750E-01	-1.2340E-02
3.7500E+00	0.0000E+00	1.0000E+00	-1.5866E-02

3.7500E+00	0.0000E+00	1.0625E+00	-1.7629E-02
3.7500E+00	0.0000E+00	1.1250E+00	-1.9392E-02
3.7500E+00	0.0000E+00	1.2500E+00	-2.3212E-02
3.7500E+00	0.0000E+00	1.3750E+00	-2.7031E-02
3.7500E+00	0.0000E+00	1.5000E+00	-2.9969E-02
4.2500E+00	0.0000E+00	-1.5000E+00	-3.8582E-03
4.2500E+00	0.0000E+00	-1.2500E+00	5.9357E-03
4.2500E+00	0.0000E+00	-1.0000E+00	1.5378E-02
4.2500E+00	0.0000E+00	-7.5000E-01	3.5161E-02
4.2500E+00	0.0000E+00	-5.0000E-01	6.5594E-02
4.2500E+00	0.0000E+00	-2.5000E-01	1.1375E-01
4.2500E+00	0.0000E+00	6.2500E-02	1.4808E-01
4.2500E+00	0.0000E+00	1.2500E-01	1.4263E-01
4.2500E+00	0.0000E+00	1.8750E-01	1.3261E-01
4.2500E+00	0.0000E+00	2.5000E-01	1.2054E-01
4.2500E+00	0.0000E+00	3.1250E-01	1.0668E-01
4.2500E+00	0.0000E+00	3.7500E-01	9.4299E-02
4.2500E+00	0.0000E+00	4.3750E-01	8.2512E-02
4.2500E+00	0.0000E+00	5.0000E-01	7.2450E-02
4.2500E+00	0.0000E+00	5.6250E-01	5.8867E-02
4.2500E+00	0.0000E+00	6.2500E-01	5.4126E-02
4.2500E+00	0.0000E+00	6.8750E-01	4.5889E-02
4.2500E+00	0.0000E+00	7.5000E-01	3.7720E-02
4.2500E+00	0.0000E+00	8.1250E-01	3.0647E-02
4.2500E+00	0.0000E+00	8.7500E-01	2.6490E-02
4.2500E+00	0.0000E+00	9.3750E-01	2.2945E-02
4.2500E+00	0.0000E+00	1.0000E+00	1.7976E-02
4.2500E+00	0.0000E+00	1.1250E+00	1.2082E-02
4.2500E+00	0.0000E+00	1.2500E+00	7.9565E-03
4.2500E+00	0.0000E+00	1.3750E+00	1.7650E-03
4.2500E+00	0.0000E+00	1.5000E+00	-5.8937E-03
4.7500E+00	0.0000E+00	-1.5000E+00	9.4243E-03
4.7500E+00	0.0000E+00	-1.2500E+00	1.7944E-02
4.7500E+00	0.0000E+00	-1.0000E+00	2.9347E-02
4.7500E+00	0.0000E+00	-7.5000E-01	4.5408E-02
4.7500E+00	0.0000E+00	-5.0000E-01	6.6579E-02
4.7500E+00	0.0000E+00	-2.5000E-01	9.6330E-02
4.7500E+00	0.0000E+00	0.0000E+00	1.2041E-01
4.7500E+00	0.0000E+00	6.2500E-02	1.2213E-01
4.7500E+00	0.0000E+00	1.2500E-01	1.1852E-01
4.7500E+00	0.0000E+00	1.8750E-01	1.1261E-01
4.7500E+00	0.0000E+00	2.5000E-01	1.0637E-01
4.7500E+00	0.0000E+00	3.1250E-01	9.6027E-02
4.7500E+00	0.0000E+00	3.7500E-01	
4.7500E+00	0.0000E+00	4.3750E-01	8.8641E-02
4.7500E+00	0.0000E+00	5.0000E-01	8.1182E-02
4.7500E+00	0.0000E+00	5.6250E-01	7.3802E-02
4.7500E+00	0.0000E+00	6.2500E-01	6.9628E-02
4.7500E+00	0.0000E+00	6.8750E-01	6.1439E-02
4.7500E+00	0.0000E+00	7.5000E-01	5.4908E-02
4.7500E+00	0.0000E+00	8.1250E-01	4.8752E-02
4.7500E+00	0.0000E+00	8.7500E-01	4.3729E-02
4.7500E+00	0.0000E+00	9.3750E-01	3.9216E-02
4.7500E+00	0.0000E+00	1.0000E+00	3.5383E-02
4.7500E+00	0.0000E+00	1.1250E+00	3.2502E-02
4.7500E+00	0.0000E+00	1.2500E+00	2.7733E-02
4.7500E+00	0.0000E+00	1.3750E+00	2.2999E-02
4.7500E+00	0.0000E+00	1.5000E+00	1.7102E-02

Table D.2-2 Time-mean static pressures on the test wall surrounding the wing at Re_Θ = 4504.

File E35240.RES
Time-mean static pressures on the test-wall surrounding the wing
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.10635
viscosity (meters squared per second) = 1.663636E-05
Atmospheric pressure (Pascals) = 94665
Velocity of undisturbed free stream (Uref, in m/s) = 16.464
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.537938E-03
Estimated momentum thickness Reynolds number = 4503.677

X/T	Y/T	Z/T	Cp
-2.0000E+00	0.0000E+00	-1.5000E+00	4.1274E-02
-2.0000E+00	0.0000E+00	-1.2500E+00	5.1931E-02
-2.0000E+00	0.0000E+00	-1.0000E+00	6.1096E-02
-2.0000E+00	0.0000E+00	-7.5000E-01	7.5480E-02
-2.0000E+00	0.0000E+00	-5.0000E-01	8.0616E-02
-2.0000E+00	0.0000E+00	-2.5000E-01	9.1720E-02
-2.0000E+00	0.0000E+00	0.0000E+00	9.1720E-02
-2.0000E+00	0.0000E+00	2.5000E-01	9.0191E-02
-2.0000E+00	0.0000E+00	5.0000E-01	8.3797E-02
-2.0000E+00	0.0000E+00	7.5000E-01	7.6053E-02
-2.0000E+00	0.0000E+00	1.0000E+00	6.3387E-02
-2.0000E+00	0.0000E+00	1.2500E+00	5.3503E-02
-2.0000E+00	0.0000E+00	1.5000E+00	4.4331E-02
-1.5000E+00	0.0000E+00	-1.5000E+00	4.4294E-02
-1.5000E+00	0.0000E+00	-1.2500E+00	6.1045E-02
-1.5000E+00	0.0000E+00	-1.0000E+00	7.6686E-02
-1.5000E+00	0.0000E+00	-7.5000E-01	9.5827E-02
-1.5000E+00	0.0000E+00	-5.0000E-01	1.2583E-01
-1.5000E+00	0.0000E+00	-2.5000E-01	1.2372E-01
-1.5000E+00	0.0000E+00	0.0000E+00	1.2830E-01
-1.5000E+00	0.0000E+00	2.5000E-01	1.2219E-01
-1.5000E+00	0.0000E+00	5.0000E-01	1.1608E-01
-1.5000E+00	0.0000E+00	7.5000E-01	9.7348E-02
-1.5000E+00	0.0000E+00	1.0000E+00	7.6560E-02
-1.5000E+00	0.0000E+00	1.2500E+00	6.0742E-02
-1.5000E+00	0.0000E+00	1.5000E+00	4.3748E-02
-1.0000E+00	0.0000E+00	-1.5000E+00	3.0202E-02
-1.0000E+00	0.0000E+00	-1.2500E+00	5.6686E-02
-1.0000E+00	0.0000E+00	-1.0000E+00	8.2913E-02
-1.0000E+00	0.0000E+00	-7.5000E-01	1.1715E-01
-1.0000E+00	0.0000E+00	-5.0000E-01	1.5346E-01
-1.0000E+00	0.0000E+00	-2.5000E-01	1.7953E-01
-1.0000E+00	0.0000E+00	0.0000E+00	1.9463E-01
-1.0000E+00	0.0000E+00	2.5000E-01	1.8351E-01
-1.0000E+00	0.0000E+00	5.0000E-01	1.5737E-01
-1.0000E+00	0.0000E+00	7.5000E-01	1.1845E-01
-1.0000E+00	0.0000E+00	1.0000E+00	8.6297E-02
-1.0000E+00	0.0000E+00	1.2500E+00	5.8726E-02
-1.0000E+00	0.0000E+00	1.5000E+00	3.1041E-02
-5.0000E-01	0.0000E+00	-1.5000E+00	-5.0421E-03
-5.0000E-01	0.0000E+00	-1.2500E+00	1.6807E-02
-5.0000E-01	0.0000E+00	-1.0000E+00	5.5839E-02
-5.0000E-01	0.0000E+00	-7.5000E-01	1.1168E-01
-5.0000E-01	0.0000E+00	-5.0000E-01	1.8488E-01
-5.0000E-01	0.0000E+00	-2.5000E-01	2.7732E-01
-5.0000E-01	0.0000E+00	0.0000E+00	3.1429E-01
-5.0000E-01	0.0000E+00	1.2500E-01	2.9917E-01
-5.0000E-01	0.0000E+00	2.5000E-01	
-5.0000E-01	0.0000E+00	3.7500E-01	2.4197E-01
-5.0000E-01	0.0000E+00	5.0000E-01	1.9628E-01
-5.0000E-01	0.0000E+00	6.2500E-01	1.5567E-01
-5.0000E-01	0.0000E+00	7.5000E-01	1.1429E-01
-5.0000E-01	0.0000E+00	1.0000E+00	5.7048E-02
-5.0000E-01	0.0000E+00	1.2500E+00	1.6779E-02
-5.0000E-01	0.0000E+00	1.5000E+00	-6.7115E-03
-2.5000E-01	0.0000E+00	-1.5000E+00	-3.7038E-02
-2.5000E-01	0.0000E+00	-1.2500E+00	-2.3570E-02
-2.5000E-01	0.0000E+00	-1.0000E+00	-1.6921E-03
-2.5000E-01	0.0000E+00	-7.5000E-01	5.8726E-02
-2.5000E-01	0.0000E+00	-5.0000E-01	1.4430E-01
-2.5000E-01	0.0000E+00	-2.5000E-01	2.9027E-01
-2.5000E-01	0.0000E+00	0.0000E+00	3.8256E-01
-2.5000E-01	0.0000E+00	1.2500E-01	3.5571E-01
-2.5000E-01	0.0000E+00	2.5000E-01	2.9581E-01
-2.5000E-01	0.0000E+00	3.7500E-01	2.2017E-01
-2.5000E-01	0.0000E+00	5.0000E-01	1.5772E-01
-2.5000E-01	0.0000E+00	6.2500E-01	9.5639E-02
-2.5000E-01	0.0000E+00	7.5000E-01	5.8726E-02
-2.5000E-01	0.0000E+00	8.7500E-01	2.6846E-02
-2.5000E-01	0.0000E+00	1.0000E+00	1.6779E-03
-2.5000E-01	0.0000E+00	1.1250E+00	-1.1745E-02
-2.5000E-01	0.0000E+00	1.2500E+00	-2.5168E-02
-2.5000E-01	0.0000E+00	1.3750E+00	-3.5236E-02
-2.5000E-01	0.0000E+00	1.5000E+00	-4.0269E-02
0.0000E+00	0.0000E+00	-1.5000E+00	-8.0539E-02
0.0000E+00	0.0000E+00	-1.2500E+00	-9.0606E-02
0.0000E+00	0.0000E+00	-1.0000E+00	-8.8928E-02
0.0000E+00	0.0000E+00	-7.5000E-01	-8.9078E-02
0.0000E+00	0.0000E+00	-5.0000E-01	-6.0506E-02
0.0000E+00	0.0000E+00	-2.5000E-01	2.8572E-01
0.0000E+00	0.0000E+00	2.5000E-01	2.9027E-01
0.0000E+00	0.0000E+00	3.1250E-01	1.5940E-01
0.0000E+00	0.0000E+00	3.7500E-01	5.2102E-02
0.0000E+00	0.0000E+00	4.3750E-01	-2.3530E-02
0.0000E+00	0.0000E+00	5.0000E-01	-5.7144E-02
0.0000E+00	0.0000E+00	5.6250E-01	-5.8726E-02
0.0000E+00	0.0000E+00	6.2500E-01	-7.2149E-02
0.0000E+00	0.0000E+00	6.8750E-01	-7.5505E-02
0.0000E+00	0.0000E+00	7.5000E-01	-7.8861E-02
0.0000E+00	0.0000E+00	8.1250E-01	-8.3894E-02
0.0000E+00	0.0000E+00	8.7500E-01	-8.5716E-02
0.0000E+00	0.0000E+00	9.3750E-01	-8.9078E-02
0.0000E+00	0.0000E+00	1.0000E+00	-8.9078E-02
0.0000E+00	0.0000E+00	1.1250E+00	-9.0758E-02
0.0000E+00	0.0000E+00	1.2500E+00	-9.0758E-02
0.0000E+00	0.0000E+00	1.3750E+00	-8.9767E-02
0.0000E+00	0.0000E+00	1.5000E+00	-8.2239E-02
2.5000E-01	0.0000E+00	-1.5000E+00	-1.2459E-01
2.5000E-01	0.0000E+00	-1.2500E+00	-1.5179E-01
2.5000E-01	0.0000E+00	-1.0000E+00	-2.0260E-01
2.5000E-01	0.0000E+00	-7.5000E-01	-2.9737E-01
2.5000E-01	0.0000E+00	-5.0000E-01	-3.4376E-01
2.5000E-01	0.0000E+00	4.3750E-01	-3.4483E-01
2.5000E-01	0.0000E+00	5.0000E-01	-3.4475E-01
2.5000E-01	0.0000E+00	5.6250E-01	-3.3602E-01
2.5000E-01	0.0000E+00	6.2500E-01	-3.4198E-01
2.5000E-01	0.0000E+00	6.8750E-01	-3.3221E-01
2.5000E-01	0.0000E+00	7.5000E-01	-3.0491E-01
2.5000E-01	0.0000E+00	8.1250E-01	-2.7704E-01
2.5000E-01	0.0000E+00	8.7500E-01	-2.4959E-01
2.5000E-01	0.0000E+00	9.3750E-01	-2.3027E-01
2.5000E-01	0.0000E+00	1.0000E+00	-2.1311E-01
2.5000E-01	0.0000E+00	1.0625E+00	-1.9672E-01
2.5000E-01	0.0000E+00	1.1250E+00	-1.8136E-01
2.5000E-01	0.0000E+00	1.1875E+00	-1.7319E-01
2.5000E-01	0.0000E+00	1.2500E+00	-1.6122E-01
2.5000E-01	0.0000E+00	1.3125E+00	-1.5220E-01
2.5000E-01	0.0000E+00	1.3750E+00	-1.4426E-01
2.5000E-01	0.0000E+00	1.4375E+00	-1.3629E-01
2.5000E-01	0.0000E+00	1.5000E+00	-1.3136E-01
5.0000E-01	0.0000E+00	-1.5000E+00	-1.6857E-01
5.0000E-01	0.0000E+00	-1.2500E+00	-2.2021E-01
5.0000E-01	0.0000E+00	-1.0000E+00	-3.1593E-01
5.0000E-01	0.0000E+00	-7.5000E-01	-4.7552E-01
5.0000E-01	0.0000E+00	-5.0000E-01	-6.4382E-01
5.0000E-01	0.0000E+00	5.0000E-01	-6.2518E-01
5.0000E-01	0.0000E+00	5.6250E-01	-6.1146E-01
5.0000E-01	0.0000E+00	6.2500E-01	-5.9179E-01
5.0000E-01	0.0000E+00	6.8750E-01	-5.3202E-01
5.0000E-01	0.0000E+00	7.5000E-01	-4.8607E-01
5.0000E-01	0.0000E+00	8.1250E-01	-4.5415E-01
5.0000E-01	0.0000E+00	8.7500E-01	-4.1432E-01
5.0000E-01	0.0000E+00	9.3750E-01	-3.6152E-01
5.0000E-01	0.0000E+00	1.0000E+00	-3.2354E-01
5.0000E-01	0.0000E+00	1.0625E+00	-2.9524E-01
5.0000E-01	0.0000E+00	1.1250E+00	-2.6885E-01
5.0000E-01	0.0000E+00	1.1875E+00	-2.4754E-01

5.0000E-01	0.0000E+00	1.2500E+00	-2.2989E-01
5.0000E-01	0.0000E+00	1.3125E+00	-2.1346E-01
5.0000E-01	0.0000E+00	1.3750E+00	-1.9836E-01
5.0000E-01	0.0000E+00	1.4375E+00	-1.8626E-01
5.0000E-01	0.0000E+00	1.5000E+00	-1.7751E-01
7.5000E-01	0.0000E+00	-1.5000E+00	-2.2962E-01
7.5000E-01	0.0000E+00	-1.2500E+00	-2.6382E-01
7.5000E-01	0.0000E+00	-1.0000E+00	-3.7376E-01
7.5000E-01	0.0000E+00	-7.5000E-01	-5.2611E-01
7.5000E-01	0.0000E+00	5.6250E-01	-7.4708E-01
7.5000E-01	0.0000E+00	6.2500E-01	-6.8121E-01
7.5000E-01	0.0000E+00	6.8750E-01	-6.1412E-01
7.5000E-01	0.0000E+00	7.5000E-01	-5.4023E-01
7.5000E-01	0.0000E+00	8.1250E-01	-4.9835E-01
7.5000E-01	0.0000E+00	8.7500E-01	-4.6712E-01
7.5000E-01	0.0000E+00	9.3750E-01	-4.2574E-01
7.5000E-01	0.0000E+00	1.0000E+00	-3.8333E-01
7.5000E-01	0.0000E+00	1.0625E+00	-3.4744E-01
7.5000E-01	0.0000E+00	1.1250E+00	-3.2786E-01
7.5000E-01	0.0000E+00	1.1875E+00	-2.9721E-01
7.5000E-01	0.0000E+00	1.2500E+00	-2.7376E-01
7.5000E-01	0.0000E+00	1.3125E+00	-2.5452E-01
7.5000E-01	0.0000E+00	1.3750E+00	-2.3567E-01
7.5000E-01	0.0000E+00	1.4375E+00	-2.2021E-01
7.5000E-01	0.0000E+00	1.5000E+00	-2.0879E-01
1.2500E+00	0.0000E+00	-1.5000E+00	-2.1858E-01
1.2500E+00	0.0000E+00	-1.2500E+00	-2.7078E-01
1.2500E+00	0.0000E+00	-1.0000E+00	-3.3059E-01
1.2500E+00	0.0000E+00	-7.5000E-01	-3.7931E-01
1.2500E+00	0.0000E+00	-5.0000E-01	-4.0819E-01
1.2500E+00	0.0000E+00	5.6250E-01	-4.1942E-01
1.2500E+00	0.0000E+00	6.2500E-01	-4.0230E-01
1.2500E+00	0.0000E+00	6.8750E-01	-3.9606E-01
1.2500E+00	0.0000E+00	7.5000E-01	-3.8659E-01
1.2500E+00	0.0000E+00	8.1250E-01	-3.7618E-01
1.2500E+00	0.0000E+00	8.7500E-01	-3.7292E-01
1.2500E+00	0.0000E+00	9.3750E-01	-3.5443E-01
1.2500E+00	0.0000E+00	1.0000E+00	-3.3550E-01
1.2500E+00	0.0000E+00	1.0625E+00	-3.2458E-01
1.2500E+00	0.0000E+00	1.1250E+00	-3.0378E-01
1.2500E+00	0.0000E+00	1.1875E+00	-2.9195E-01
1.2500E+00	0.0000E+00	1.2500E+00	-2.7822E-01
1.2500E+00	0.0000E+00	1.3125E+00	-2.5979E-01
1.2500E+00	0.0000E+00	1.3750E+00	-2.4468E-01
1.2500E+00	0.0000E+00	1.4375E+00	-2.3326E-01
1.2500E+00	0.0000E+00	1.5000E+00	-2.2310E-01
1.7500E+00	0.0000E+00	-1.5000E+00	-1.9607E-01
1.7500E+00	0.0000E+00	-1.2500E+00	-2.2786E-01
1.7500E+00	0.0000E+00	-1.0000E+00	-2.6393E-01
1.7500E+00	0.0000E+00	-7.5000E-01	-2.9804E-01
1.7500E+00	0.0000E+00	-5.0000E-01	-3.1259E-01
1.7500E+00	0.0000E+00	5.0000E-01	-3.1534E-01
1.7500E+00	0.0000E+00	5.6250E-01	-3.1207E-01
1.7500E+00	0.0000E+00	6.2500E-01	-3.0565E-01
1.7500E+00	0.0000E+00	6.8750E-01	-3.0616E-01
1.7500E+00	0.0000E+00	7.5000E-01	-2.9516E-01
1.7500E+00	0.0000E+00	8.1250E-01	-2.8871E-01
1.7500E+00	0.0000E+00	8.7500E-01	-2.8293E-01
1.7500E+00	0.0000E+00	9.3750E-01	-2.7719E-01
1.7500E+00	0.0000E+00	1.0000E+00	-2.6597E-01
1.7500E+00	0.0000E+00	1.0625E+00	-2.5807E-01
1.7500E+00	0.0000E+00	1.1250E+00	-2.5000E-01
1.7500E+00	0.0000E+00	1.1875E+00	-2.4194E-01
1.7500E+00	0.0000E+00	1.2500E+00	-2.3065E-01
1.7500E+00	0.0000E+00	1.3125E+00	-2.2581E-01
1.7500E+00	0.0000E+00	1.3750E+00	-2.1371E-01
1.7500E+00	0.0000E+00	1.4375E+00	-2.0484E-01
1.7500E+00	0.0000E+00	1.5000E+00	-1.9839E-01
2.2500E+00	0.0000E+00	-1.5000E+00	-1.6076E-01
2.2500E+00	0.0000E+00	-1.2500E+00	-1.7683E-01
2.2500E+00	0.0000E+00	-1.0000E+00	-1.9355E-01
2.2500E+00	0.0000E+00	-7.5000E-01	-2.1345E-01
2.2500E+00	0.0000E+00	-5.0000E-01	-2.2581E-01
2.2500E+00	0.0000E+00	4.3750E-01	-2.3387E-01
2.2500E+00	0.0000E+00	5.0000E-01	-2.2903E-01
2.2500E+00	0.0000E+00	5.6250E-01	-2.2581E-01
2.2500E+00	0.0000E+00	6.2500E-01	-2.2581E-01
2.2500E+00	0.0000E+00	6.8750E-01	-2.2060E-01
2.2500E+00	0.0000E+00	7.5000E-01	-2.1345E-01
2.2500E+00	0.0000E+00	8.1250E-01	-2.1024E-01
2.2500E+00	0.0000E+00	8.7500E-01	-2.0864E-01
2.2500E+00	0.0000E+00	9.3750E-01	-2.0772E-01
2.2500E+00	0.0000E+00	1.0000E+00	-1.9967E-01
2.2500E+00	0.0000E+00	1.0625E+00	-1.9355E-01
2.2500E+00	0.0000E+00	1.1250E+00	-1.9194E-01
2.2500E+00	0.0000E+00	1.1875E+00	-1.8710E-01
2.2500E+00	0.0000E+00	1.2500E+00	-1.7903E-01
2.2500E+00	0.0000E+00	1.3125E+00	-1.7742E-01
2.2500E+00	0.0000E+00	1.3750E+00	-1.6760E-01
2.2500E+00	0.0000E+00	1.5000E+00	-1.6076E-01
2.7500E+00	0.0000E+00	-1.5000E+00	-1.1755E-01
2.7500E+00	0.0000E+00	-1.2500E+00	-1.2839E-01
2.7500E+00	0.0000E+00	-1.0000E+00	-1.3619E-01
2.7500E+00	0.0000E+00	-7.5000E-01	-1.4492E-01
2.7500E+00	0.0000E+00	-5.0000E-01	-1.4920E-01
2.7500E+00	0.0000E+00	3.7500E-01	-1.5484E-01
2.7500E+00	0.0000E+00	4.3750E-01	-1.5323E-01
2.7500E+00	0.0000E+00	5.0000E-01	-1.5000E-01
2.7500E+00	0.0000E+00	5.6250E-01	-1.4758E-01
2.7500E+00	0.0000E+00	6.2500E-01	-1.4585E-01
2.7500E+00	0.0000E+00	6.8750E-01	-1.4468E-01
2.7500E+00	0.0000E+00	7.5000E-01	-1.4396E-01
2.7500E+00	0.0000E+00	8.1250E-01	-1.4396E-01
2.7500E+00	0.0000E+00	8.7500E-01	-1.4032E-01
2.7500E+00	0.0000E+00	9.3750E-01	-1.3952E-01
2.7500E+00	0.0000E+00	1.0000E+00	-1.3296E-01
2.7500E+00	0.0000E+00	1.0625E+00	-1.2893E-01
2.7500E+00	0.0000E+00	1.1250E+00	-1.2973E-01
2.7500E+00	0.0000E+00	1.1875E+00	-1.2893E-01
2.7500E+00	0.0000E+00	1.2500E+00	-1.2742E-01
2.7500E+00	0.0000E+00	1.3750E+00	-1.2178E-01
2.7500E+00	0.0000E+00	1.5000E+00	-1.1452E-01
3.2500E+00	0.0000E+00	-1.5000E+00	-7.9840E-02
3.2500E+00	0.0000E+00	-1.2500E+00	-7.9840E-02
3.2500E+00	0.0000E+00	-1.0000E+00	-7.9840E-02
3.2500E+00	0.0000E+00	-7.5000E-01	-7.9773E-02
3.2500E+00	0.0000E+00	-5.0000E-01	-7.5744E-02
3.2500E+00	0.0000E+00	-2.5000E-01	-6.9298E-02
3.2500E+00	0.0000E+00	2.5000E-01	-6.9298E-02
3.2500E+00	0.0000E+00	3.1250E-01	-7.2461E-02
3.2500E+00	0.0000E+00	3.7500E-01	-7.2521E-02
3.2500E+00	0.0000E+00	4.3750E-01	-7.5681E-02
3.2500E+00	0.0000E+00	5.0000E-01	-7.4071E-02
3.2500E+00	0.0000E+00	5.6250E-01	-7.4133E-02
3.2500E+00	0.0000E+00	6.2500E-01	-8.1317E-02
3.2500E+00	0.0000E+00	6.8750E-01	-7.8967E-02
3.2500E+00	0.0000E+00	7.5000E-01	-7.9840E-02
3.2500E+00	0.0000E+00	8.1250E-01	-7.9773E-02
3.2500E+00	0.0000E+00	8.7500E-01	-7.9840E-02
3.2500E+00	0.0000E+00	9.3750E-01	-7.9840E-02
3.2500E+00	0.0000E+00	1.0000E+00	-7.9033E-02
3.2500E+00	0.0000E+00	1.0625E+00	-7.9033E-02
3.2500E+00	0.0000E+00	1.1250E+00	-7.8967E-02
3.2500E+00	0.0000E+00	1.2500E+00	-7.8967E-02
3.2500E+00	0.0000E+00	1.3750E+00	-7.8097E-02
3.2500E+00	0.0000E+00	1.5000E+00	-7.5181E-02
3.7500E+00	0.0000E+00	-1.5000E+00	-3.9320E-02
3.7500E+00	0.0000E+00	-1.2500E+00	-3.4649E-02
3.7500E+00	0.0000E+00	-1.0000E+00	-3.1426E-02
3.7500E+00	0.0000E+00	-7.5000E-01	-1.6936E-02
3.7500E+00	0.0000E+00	-5.0000E-01	0.0000E+00
3.7500E+00	0.0000E+00	-2.5000E-01	2.2562E-02
3.7500E+00	0.0000E+00	1.8750E-01	2.4174E-02
3.7500E+00	0.0000E+00	2.5000E-01	2.0933E-02
3.7500E+00	0.0000E+00	3.1250E-01	1.6922E-02
3.7500E+00	0.0000E+00	3.7500E-01	1.5196E-02
3.7500E+00	0.0000E+00	4.3750E-01	9.6134E-03
3.7500E+00	0.0000E+00	5.0000E-01	8.0245E-04
3.7500E+00	0.0000E+00	5.6250E-01	0.0000E+00
3.7500E+00	0.0000E+00	6.2500E-01	-4.0294E-03
3.7500E+00	0.0000E+00	6.8750E-01	-1.0484E-02
3.7500E+00	0.0000E+00	7.5000E-01	-1.5287E-02
3.7500E+00	0.0000E+00	8.1250E-01	-1.6801E-02
3.7500E+00	0.0000E+00	8.7500E-01	-2.1401E-02
3.7500E+00	0.0000E+00	8.7500E-01	-2.1401E-02
3.7500E+00	0.0000E+00	9.3750E-01	-2.4438E-02
3.7500E+00	0.0000E+00	1.0000E+00	-2.7493E-02

3.7500E+00	0.0000E+00	1.0625E+00	-2.9710E-02
3.7500E+00	0.0000E+00	1.1250E+00	-3.0472E-02
3.7500E+00	0.0000E+00	1.2500E+00	-3.2102E-02
3.7500E+00	0.0000E+00	1.3750E+00	-3.5159E-02
4.2500E+00	0.0000E+00	1.5000E+00	-4.1274E-02
4.2500E+00	0.0000E+00	-1.5000E+00	-1.4522E-02
4.2500E+00	0.0000E+00	-1.2500E+00	-3.8217E-03
4.2500E+00	0.0000E+00	-1.0000E+00	2.2930E-03
4.2500E+00	0.0000E+00	-7.5000E-01	2.2911E-02
4.2500E+00	0.0000E+00	-5.0000E-01	5.3414E-02
4.2500E+00	0.0000E+00	-2.5000E-01	1.0530E-01
4.2500E+00	0.0000E+00	6.2500E-02	1.3735E-01
4.2500E+00	0.0000E+00	1.2500E-01	1.3114E-01
4.2500E+00	0.0000E+00	1.8750E-01	1.2285E-01
4.2500E+00	0.0000E+00	2.5000E-01	1.0854E-01
4.2500E+00	0.0000E+00	3.1250E-01	9.4777E-02
4.2500E+00	0.0000E+00	3.7500E-01	8.2548E-02
4.2500E+00	0.0000E+00	4.3750E-01	7.4905E-02
4.2500E+00	0.0000E+00	5.0000E-01	6.1147E-02
4.2500E+00	0.0000E+00	5.6250E-01	4.7389E-02
4.2500E+00	0.0000E+00	6.2500E-01	4.4331E-02
4.2500E+00	0.0000E+00	6.8750E-01	3.3603E-02
4.2500E+00	0.0000E+00	7.5000E-01	2.8996E-02
4.2500E+00	0.0000E+00	8.1250E-01	1.9774E-02
4.2500E+00	0.0000E+00	8.7500E-01	1.5998E-02
4.2500E+00	0.0000E+00	9.3750E-01	1.3690E-02
4.2500E+00	0.0000E+00	1.0000E+00	7.6179E-03
4.2500E+00	0.0000E+00	1.1250E+00	7.6433E-04
4.2500E+00	0.0000E+00	1.2500E+00	0.0000E+00
4.2500E+00	0.0000E+00	1.3750E+00	-6.1147E-03
4.2500E+00	0.0000E+00	1.5000E+00	-1.5236E-02
4.7500E+00	0.0000E+00	-1.5000E+00	-7.6433E-04
4.7500E+00	0.0000E+00	-1.2500E+00	5.3503E-03
4.7500E+00	0.0000E+00	-1.0000E+00	1.8329E-02
4.7500E+00	0.0000E+00	-7.5000E-01	3.2075E-02
4.7500E+00	0.0000E+00	-5.0000E-01	5.7277E-02
4.7500E+00	0.0000E+00	-2.5000E-01	8.8368E-02
4.7500E+00	0.0000E+00	0.0000E+00	1.0952E-01
4.7500E+00	0.0000E+00	6.2500E-02	1.0997E-01
4.7500E+00	0.0000E+00	1.2500E-01	1.0777E-01
4.7500E+00	0.0000E+00	1.8750E-01	1.0395E-01
4.7500E+00	0.0000E+00	2.5000E-01	9.4777E-02
4.7500E+00	0.0000E+00	3.1250E-01	8.7134E-02
4.7500E+00	0.0000E+00	3.7500E-01	
4.7500E+00	0.0000E+00	4.3750E-01	7.6941E-02
4.7500E+00	0.0000E+00	5.0000E-01	7.2370E-02
4.7500E+00	0.0000E+00	5.6250E-01	6.1859E-02
4.7500E+00	0.0000E+00	6.2500E-01	7.2551E-02
4.7500E+00	0.0000E+00	6.8750E-01	4.8917E-02
4.7500E+00	0.0000E+00	7.5000E-01	4.5096E-02
4.7500E+00	0.0000E+00	8.1250E-01	3.6688E-02
4.7500E+00	0.0000E+00	8.7500E-01	3.2102E-02
4.7500E+00	0.0000E+00	9.3750E-01	3.0573E-02
4.7500E+00	0.0000E+00	1.0000E+00	2.5966E-02
4.7500E+00	0.0000E+00	1.1250E+00	2.2892E-02
4.7500E+00	0.0000E+00	1.2500E+00	1.5971E-02
4.7500E+00	0.0000E+00	1.3750E+00	2.5000E-03
4.7500E+00	0.0000E+00	1.5000E+00	4.5556E-03

Table D.2-3 Time-mean static pressures on the test wall surrounding the wing at Re_Θ = 2420.

File E36225.RES
Time-mean static pressures on the test-wall surrounding the wing
Flow temperature (degrees centigrade) = 25
density (kilograss per meter cubed) = 1.091098
viscosity (meters squared per second) = 1.688581E-05
Atmospheric pressure (Pascals) = 93360
Velocity of undisturbed free stream (Uref, in m/s) = 7.7186
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 5.280292E-03
Estimated momentum thickness Reynolds number = 2420.506

X/T	Y/T	Z/T	Cp
-2.0000E+00	0.0000E+00	-1.5000E+00	3.1348E-02
-2.0000E+00	0.0000E+00	-1.2500E+00	3.4565E-02
-2.0000E+00	0.0000E+00	-1.0000E+00	4.8390E-02
-2.0000E+00	0.0000E+00	-7.5000E-01	8.9868E-02
-2.0000E+00	0.0000E+00	-5.0000E-01	9.6781E-02
-2.0000E+00	0.0000E+00	-2.5000E-01	9.7153E-02
-2.0000E+00	0.0000E+00	0.0000E+00	9.6781E-02
-2.0000E+00	0.0000E+00	2.5000E-01	9.6781E-02
-2.0000E+00	0.0000E+00	5.0000E-01	9.3324E-02
-2.0000E+00	0.0000E+00	7.5000E-01	8.4683E-02
-2.0000E+00	0.0000E+00	1.0000E+00	7.6042E-02
-2.0000E+00	0.0000E+00	1.2500E+00	6.2216E-02
-2.0000E+00	0.0000E+00	1.5000E+00	3.1228E-02
-1.5000E+00	0.0000E+00	-1.5000E+00	2.2158E-02
-1.5000E+00	0.0000E+00	-1.2500E+00	3.6930E-02
-1.5000E+00	0.0000E+00	-1.0000E+00	5.1701E-02
-1.5000E+00	0.0000E+00	-7.5000E-01	7.6350E-02
-1.5000E+00	0.0000E+00	-5.0000E-01	8.2978E-02
-1.5000E+00	0.0000E+00	-2.5000E-01	9.6017E-02
-1.5000E+00	0.0000E+00	0.0000E+00	9.9710E-02
-1.5000E+00	0.0000E+00	2.5000E-01	9.4528E-02
-1.5000E+00	0.0000E+00	5.0000E-01	8.6586E-02
-1.5000E+00	0.0000E+00	7.5000E-01	7.2155E-02
-1.5000E+00	0.0000E+00	1.0000E+00	4.7633E-02
-1.5000E+00	0.0000E+00	1.2500E+00	3.2977E-02
-1.5000E+00	0.0000E+00	1.5000E+00	2.2158E-02
-1.0000E+00	0.0000E+00	-1.5000E+00	2.9385E-02
-1.0000E+00	0.0000E+00	-1.2500E+00	5.8770E-02
-1.0000E+00	0.0000E+00	-1.0000E+00	7.3462E-02
-1.0000E+00	0.0000E+00	-7.5000E-01	1.1754E-01
-1.0000E+00	0.0000E+00	-5.0000E-01	1.4692E-01
-1.0000E+00	0.0000E+00	-2.5000E-01	1.7764E-01
-1.0000E+00	0.0000E+00	0.0000E+00	2.0138E-01
-1.0000E+00	0.0000E+00	2.5000E-01	1.8646E-01
-1.0000E+00	0.0000E+00	5.0000E-01	1.5427E-01
-1.0000E+00	0.0000E+00	7.5000E-01	1.1754E-01
-1.0000E+00	0.0000E+00	1.0000E+00	8.1420E-02
-1.0000E+00	0.0000E+00	1.2500E+00	6.7125E-02
-1.0000E+00	0.0000E+00	1.5000E+00	2.9833E-02
-5.0000E-01	0.0000E+00	-1.5000E+00	0.0000E+00
-5.0000E-01	0.0000E+00	-1.2500E+00	1.1103E-02
-5.0000E-01	0.0000E+00	-1.0000E+00	5.8770E-02
-5.0000E-01	0.0000E+00	-7.5000E-01	1.1933E-01
-5.0000E-01	0.0000E+00	-5.0000E-01	1.8646E-01
-5.0000E-01	0.0000E+00	-2.5000E-01	2.7596E-01
-5.0000E-01	0.0000E+00	0.0000E+00	3.1325E-01
-5.0000E-01	0.0000E+00	1.2500E-01	2.9385E-01
-5.0000E-01	0.0000E+00	2.5000E-01	2.3121E-01
-5.0000E-01	0.0000E+00	3.7500E-01	2.3121E-01
-5.0000E-01	0.0000E+00	5.0000E-01	1.9392E-01
-5.0000E-01	0.0000E+00	6.2500E-01	1.4917E-01
-5.0000E-01	0.0000E+00	7.5000E-01	1.1387E-01
-5.0000E-01	0.0000E+00	1.0000E+00	5.9667E-02
-5.0000E-01	0.0000E+00	1.2500E+00	1.1188E-02
-5.0000E-01	0.0000E+00	1.5000E+00	0.0000E+00
-2.5000E-01	0.0000E+00	-1.5000E+00	-2.2375E-02
-2.5000E-01	0.0000E+00	-1.2500E+00	-1.4917E-02
-2.5000E-01	0.0000E+00	-1.0000E+00	0.0000E+00
-2.5000E-01	0.0000E+00	-7.5000E-01	5.9667E-02
-2.5000E-01	0.0000E+00	-5.0000E-01	1.5031E-01
-2.5000E-01	0.0000E+00	-2.5000E-01	3.0296E-01
-2.5000E-01	0.0000E+00	0.0000E+00	3.9970E-01
-2.5000E-01	0.0000E+00	1.2500E-01	3.7009E-01
-2.5000E-01	0.0000E+00	2.5000E-01	3.0348E-01
-2.5000E-01	0.0000E+00	3.7500E-01	2.2206E-01
-2.5000E-01	0.0000E+00	5.0000E-01	1.5174E-01
-2.5000E-01	0.0000E+00	6.2500E-01	9.6959E-02
-2.5000E-01	0.0000E+00	7.5000E-01	6.7642E-02
-2.5000E-01	0.0000E+00	8.7500E-01	2.9607E-02
-2.5000E-01	0.0000E+00	1.0000E+00	0.0000E+00
-2.5000E-01	0.0000E+00	1.1250E+00	-7.4019E-03
-2.5000E-01	0.0000E+00	1.2500E+00	-1.4917E-02
-2.5000E-01	0.0000E+00	1.3750E+00	-2.2375E-02
-2.5000E-01	0.0000E+00	1.5000E+00	-3.0063E-02
0.0000E+00	0.0000E+00	-1.5000E+00	-9.6959E-02
0.0000E+00	0.0000E+00	-1.2500E+00	-1.0442E-01
0.0000E+00	0.0000E+00	-1.0000E+00	-1.0363E-01
0.0000E+00	0.0000E+00	-7.5000E-01	-9.6959E-02
0.0000E+00	0.0000E+00	-5.0000E-01	-5.9667E-02
0.0000E+00	0.0000E+00	-2.5000E-01	2.7757E-01
0.0000E+00	0.0000E+00	2.5000E-01	2.7757E-01
0.0000E+00	0.0000E+00	3.1250E-01	1.4917E-01
0.0000E+00	0.0000E+00	3.7500E-01	2.6509E-02
0.0000E+00	0.0000E+00	4.3750E-01	-1.4917E-02
0.0000E+00	0.0000E+00	5.0000E-01	-5.9667E-02
0.0000E+00	0.0000E+00	5.6250E-01	-6.7125E-02
0.0000E+00	0.0000E+00	6.2500E-01	-7.5157E-02
0.0000E+00	0.0000E+00	6.8750E-01	-8.5771E-02
0.0000E+00	0.0000E+00	7.5000E-01	-8.9500E-02
0.0000E+00	0.0000E+00	8.1250E-01	-9.6224E-02
0.0000E+00	0.0000E+00	8.7500E-01	-1.0442E-01
0.0000E+00	0.0000E+00	9.3750E-01	-1.0522E-01
0.0000E+00	0.0000E+00	1.0000E+00	-1.0522E-01
0.0000E+00	0.0000E+00	1.1250E+00	-9.9925E-02
0.0000E+00	0.0000E+00	1.2500E+00	-1.0069E-01
0.0000E+00	0.0000E+00	1.3750E+00	-9.6224E-02
0.0000E+00	0.0000E+00	1.5000E+00	-8.0074E-02
2.5000E-01	0.0000E+00	-1.5000E+00	-1.1347E-01
2.5000E-01	0.0000E+00	-1.2500E+00	-1.5507E-01
2.5000E-01	0.0000E+00	-1.0000E+00	-1.9511E-01
2.5000E-01	0.0000E+00	-7.5000E-01	-2.7233E-01
2.5000E-01	0.0000E+00	-5.0000E-01	-3.2906E-01
2.5000E-01	0.0000E+00	4.3750E-01	-3.1517E-01
2.5000E-01	0.0000E+00	5.0000E-01	-3.2498E-01
2.5000E-01	0.0000E+00	5.6250E-01	-3.2384E-01
2.5000E-01	0.0000E+00	6.2500E-01	-3.1759E-01
2.5000E-01	0.0000E+00	6.8750E-01	-3.0895E-01
2.5000E-01	0.0000E+00	7.5000E-01	-2.7545E-01
2.5000E-01	0.0000E+00	8.1250E-01	-2.5851E-01
2.5000E-01	0.0000E+00	8.7500E-01	-2.4004E-01
2.5000E-01	0.0000E+00	9.3750E-01	-2.2527E-01
2.5000E-01	0.0000E+00	1.0000E+00	-1.9728E-01
2.5000E-01	0.0000E+00	1.0625E+00	-1.8760E-01
2.5000E-01	0.0000E+00	1.1250E+00	-1.6988E-01
2.5000E-01	0.0000E+00	1.1875E+00	-1.6122E-01
2.5000E-01	0.0000E+00	1.2500E+00	-1.5023E-01
2.5000E-01	0.0000E+00	1.3125E+00	-1.3924E-01
2.5000E-01	0.0000E+00	1.3750E+00	-1.3400E-01
2.5000E-01	0.0000E+00	1.4375E+00	-1.2283E-01
2.5000E-01	0.0000E+00	1.5000E+00	-1.1911E-01
5.0000E-01	0.0000E+00	-1.5000E+00	-1.6249E-01
5.0000E-01	0.0000E+00	-1.2500E+00	-2.0681E-01
5.0000E-01	0.0000E+00	-1.0000E+00	-3.0652E-01
5.0000E-01	0.0000E+00	-7.5000E-01	-4.5784E-01
5.0000E-01	0.0000E+00	-5.0000E-01	-6.3278E-01
5.0000E-01	0.0000E+00	5.0000E-01	-6.1303E-01
5.0000E-01	0.0000E+00	5.6250E-01	-5.6971E-01
5.0000E-01	0.0000E+00	6.2500E-01	-5.5328E-01
5.0000E-01	0.0000E+00	6.8750E-01	-5.0224E-01
5.0000E-01	0.0000E+00	7.5000E-01	-4.6156E-01
5.0000E-01	0.0000E+00	8.1250E-01	-4.2100E-01
5.0000E-01	0.0000E+00	8.7500E-01	-3.9456E-01
5.0000E-01	0.0000E+00	9.3750E-01	-3.3710E-01
5.0000E-01	0.0000E+00	1.0000E+00	-3.0778E-01
5.0000E-01	0.0000E+00	1.0625E+00	-2.7481E-01
5.0000E-01	0.0000E+00	1.1250E+00	-2.5851E-01
5.0000E-01	0.0000E+00	1.1875E+00	-2.4004E-01

5.0000E-01	0.0000E+00	1.2500E+00	-2.2527E-01
5.0000E-01	0.0000E+00	1.3125E+00	-1.9942E-01
5.0000E-01	0.0000E+00	1.3750E+00	-1.8687E-01
5.0000E-01	0.0000E+00	1.4375E+00	-1.7588E-01
5.0000E-01	0.0000E+00	1.5000E+00	-1.6488E-01
7.5000E-01	0.0000E+00	-1.5000E+00	-2.1252E-01
7.5000E-01	0.0000E+00	-1.2500E+00	-2.5649E-01
7.5000E-01	0.0000E+00	-1.0000E+00	-3.6438E-01
7.5000E-01	0.0000E+00	-7.5000E-01	-5.1951E-01
7.5000E-01	0.0000E+00	5.6250E-01	-7.6946E-01
7.5000E-01	0.0000E+00	6.2500E-01	-6.7419E-01
7.5000E-01	0.0000E+00	6.8750E-01	-6.0564E-01
7.5000E-01	0.0000E+00	7.5000E-01	-5.2397E-01
7.5000E-01	0.0000E+00	8.1250E-01	-4.8000E-01
7.5000E-01	0.0000E+00	8.7500E-01	-4.4719E-01
7.5000E-01	0.0000E+00	9.3750E-01	-4.0720E-01
7.5000E-01	0.0000E+00	1.0000E+00	-3.7668E-01
7.5000E-01	0.0000E+00	1.0625E+00	-3.3606E-01
7.5000E-01	0.0000E+00	1.1250E+00	-3.2384E-01
7.5000E-01	0.0000E+00	1.1875E+00	-2.8805E-01
7.5000E-01	0.0000E+00	1.2500E+00	-2.6382E-01
7.5000E-01	0.0000E+00	1.3125E+00	-2.4723E-01
7.5000E-01	0.0000E+00	1.3750E+00	-2.3450E-01
7.5000E-01	0.0000E+00	1.4375E+00	-2.1985E-01
7.5000E-01	0.0000E+00	1.5000E+00	-1.9786E-01
1.2500E+00	0.0000E+00	-1.5000E+00	-2.1419E-01
1.2500E+00	0.0000E+00	-1.2500E+00	-2.6220E-01
1.2500E+00	0.0000E+00	-1.0000E+00	-3.1994E-01
1.2500E+00	0.0000E+00	-7.5000E-01	-3.7084E-01
1.2500E+00	0.0000E+00	-5.0000E-01	-3.8684E-01
1.2500E+00	0.0000E+00	5.6250E-01	-3.9266E-01
1.2500E+00	0.0000E+00	6.2500E-01	-3.9839E-01
1.2500E+00	0.0000E+00	6.8750E-01	-3.8107E-01
1.2500E+00	0.0000E+00	7.5000E-01	-3.7374E-01
1.2500E+00	0.0000E+00	8.1250E-01	-3.6357E-01
1.2500E+00	0.0000E+00	8.7500E-01	-3.5175E-01
1.2500E+00	0.0000E+00	9.3750E-01	-3.4076E-01
1.2500E+00	0.0000E+00	1.0000E+00	-3.2977E-01
1.2500E+00	0.0000E+00	1.0625E+00	-3.1511E-01
1.2500E+00	0.0000E+00	1.1250E+00	-2.9913E-01
1.2500E+00	0.0000E+00	1.1875E+00	-2.7697E-01
1.2500E+00	0.0000E+00	1.2500E+00	-2.6177E-01
1.2500E+00	0.0000E+00	1.3125E+00	-2.5450E-01
1.2500E+00	0.0000E+00	1.3750E+00	-2.4359E-01
1.2500E+00	0.0000E+00	1.4375E+00	-2.2905E-01
1.2500E+00	0.0000E+00	1.5000E+00	-2.2527E-01
1.7500E+00	0.0000E+00	-1.5000E+00	-1.9203E-01
1.7500E+00	0.0000E+00	-1.2500E+00	-2.2527E-01
1.7500E+00	0.0000E+00	-1.0000E+00	-2.4916E-01
1.7500E+00	0.0000E+00	-7.5000E-01	-2.6904E-01
1.7500E+00	0.0000E+00	-5.0000E-01	-2.9944E-01
1.7500E+00	0.0000E+00	5.0000E-01	-3.0412E-01
1.7500E+00	0.0000E+00	5.6250E-01	-3.0282E-01
1.7500E+00	0.0000E+00	6.2500E-01	-2.9544E-01
1.7500E+00	0.0000E+00	6.8750E-01	-2.8805E-01
1.7500E+00	0.0000E+00	7.5000E-01	-2.9046E-01
1.7500E+00	0.0000E+00	8.1250E-01	-2.8467E-01
1.7500E+00	0.0000E+00	8.7500E-01	-2.7898E-01
1.7500E+00	0.0000E+00	9.3750E-01	-2.7129E-01
1.7500E+00	0.0000E+00	1.0000E+00	-2.6442E-01
1.7500E+00	0.0000E+00	1.0625E+00	-2.5457E-01
1.7500E+00	0.0000E+00	1.1250E+00	-2.4759E-01
1.7500E+00	0.0000E+00	1.1875E+00	-2.4962E-01
1.7500E+00	0.0000E+00	1.2500E+00	-2.3365E-01
1.7500E+00	0.0000E+00	1.3125E+00	-2.2493E-01
1.7500E+00	0.0000E+00	1.3750E+00	-2.1455E-01
1.7500E+00	0.0000E+00	1.4375E+00	-2.0604E-01
1.7500E+00	0.0000E+00	1.5000E+00	-2.0070E-01
2.2500E+00	0.0000E+00	-1.5000E+00	-1.6264E-01
2.2500E+00	0.0000E+00	-1.0000E+00	-1.9724E-01
2.2500E+00	0.0000E+00	-7.5000E-01	-2.1790E-01
2.2500E+00	0.0000E+00	-5.0000E-01	-2.2147E-01
2.2500E+00	0.0000E+00	4.3750E-01	-2.3531E-01
2.2500E+00	0.0000E+00	5.0000E-01	-2.3185E-01
2.2500E+00	0.0000E+00	5.6250E-01	-2.3008E-01
2.2500E+00	0.0000E+00	6.2500E-01	-2.2493E-01
2.2500E+00	0.0000E+00	6.8750E-01	-2.2493E-01
2.2500E+00	0.0000E+00	7.5000E-01	-2.1109E-01
2.2500E+00	0.0000E+00	8.1250E-01	-2.1087E-01
2.2500E+00	0.0000E+00	8.7500E-01	-2.0575E-01
2.2500E+00	0.0000E+00	9.3750E-01	-1.9917E-01
2.2500E+00	0.0000E+00	1.0000E+00	-1.9574E-01
2.2500E+00	0.0000E+00	1.0625E+00	-1.8887E-01
2.2500E+00	0.0000E+00	1.1250E+00	-1.8200E-01
2.2500E+00	0.0000E+00	1.1875E+00	-1.8134E-01
2.2500E+00	0.0000E+00	1.1250E+00	-1.7302E-01
2.2500E+00	0.0000E+00	1.3125E+00	-1.6956E-01
2.2500E+00	0.0000E+00	1.3750E+00	-1.6390E-01
2.2500E+00	0.0000E+00	1.5000E+00	-1.5796E-01
2.7500E+00	0.0000E+00	-1.5000E+00	-1.0989E-01
2.7500E+00	0.0000E+00	-1.2500E+00	-1.2019E-01
2.7500E+00	0.0000E+00	-1.0000E+00	-1.3393E-01
2.7500E+00	0.0000E+00	-7.5000E-01	-1.4079E-01
2.7500E+00	0.0000E+00	-5.0000E-01	-1.4534E-01
2.7500E+00	0.0000E+00	3.7500E-01	-1.5226E-01
2.7500E+00	0.0000E+00	4.3750E-01	-1.4995E-01
2.7500E+00	0.0000E+00	5.0000E-01	-1.4646E-01
2.7500E+00	0.0000E+00	5.6250E-01	-1.4188E-01
2.7500E+00	0.0000E+00	6.2500E-01	-1.4079E-01
2.7500E+00	0.0000E+00	6.8750E-01	-1.3736E-01
2.7500E+00	0.0000E+00	7.5000E-01	-1.3736E-01
2.7500E+00	0.0000E+00	8.1250E-01	-1.3842E-01
2.7500E+00	0.0000E+00	8.7500E-01	-1.3393E-01
2.7500E+00	0.0000E+00	9.3750E-01	-1.3496E-01
2.7500E+00	0.0000E+00	1.0000E+00	-1.3049E-01
2.7500E+00	0.0000E+00	1.0625E+00	-1.2706E-01
2.7500E+00	0.0000E+00	1.1250E+00	-1.2706E-01
2.7500E+00	0.0000E+00	1.1875E+00	-1.2019E-01
2.7500E+00	0.0000E+00	1.2500E+00	-1.1676E-01
2.7500E+00	0.0000E+00	1.3750E+00	-1.1419E-01
2.7500E+00	0.0000E+00	1.5000E+00	-1.0810E-01
3.2500E+00	0.0000E+00	-1.5000E+00	-7.3232E-02
3.2500E+00	0.0000E+00	-1.2500E+00	-7.5437E-02
3.2500E+00	0.0000E+00	-1.0000E+00	-7.5437E-02
3.2500E+00	0.0000E+00	-7.5000E-01	-7.5437E-02
3.2500E+00	0.0000E+00	-5.0000E-01	-7.2114E-02
3.2500E+00	0.0000E+00	-2.5000E-01	-7.2669E-02
3.2500E+00	0.0000E+00	2.5000E-01	-7.2669E-02
3.2500E+00	0.0000E+00	3.1250E-01	-7.2669E-02
3.2500E+00	0.0000E+00	3.7500E-01	-7.2669E-02
3.2500E+00	0.0000E+00	4.3750E-01	-7.2669E-02
3.2500E+00	0.0000E+00	5.0000E-01	-7.2669E-02
3.2500E+00	0.0000E+00	5.6250E-01	-7.2114E-02
3.2500E+00	0.0000E+00	6.2500E-01	-7.4861E-02
3.2500E+00	0.0000E+00	6.8750E-01	-7.4861E-02
3.2500E+00	0.0000E+00	7.5000E-01	-7.4861E-02
3.2500E+00	0.0000E+00	8.1250E-01	-7.5437E-02
3.2500E+00	0.0000E+00	8.7500E-01	-7.5437E-02
3.2500E+00	0.0000E+00	9.3750E-01	-7.5437E-02
3.2500E+00	0.0000E+00	1.0000E+00	-7.2669E-02
3.2500E+00	0.0000E+00	1.0625E+00	-7.3232E-02
3.2500E+00	0.0000E+00	1.1250E+00	-7.2669E-02
3.2500E+00	0.0000E+00	1.2500E+00	-7.2669E-02
3.2500E+00	0.0000E+00	1.3750E+00	-7.3488E-02
3.2500E+00	0.0000E+00	1.5000E+00	-7.2114E-02
3.2500E+00	0.0000E+00	-1.5000E+00	-3.4340E-02
3.7500E+00	0.0000E+00	-1.2500E+00	-3.0906E-02
3.7500E+00	0.0000E+00	-1.0000E+00	-2.7683E-02
3.7500E+00	0.0000E+00	-7.5000E-01	-1.3842E-02
3.7500E+00	0.0000E+00	-5.0000E-01	-1.2891E-09
3.7500E+00	0.0000E+00	-2.5000E-01	3.1385E-02
3.7500E+00	0.0000E+00	1.8750E-01	3.1144E-02
3.7500E+00	0.0000E+00	2.5000E-01	3.1144E-02
3.7500E+00	0.0000E+00	3.1250E-01	2.4223E-02
3.7500E+00	0.0000E+00	3.7500E-01	1.7170E-02
3.7500E+00	0.0000E+00	4.3750E-01	1.0302E-02
3.7500E+00	0.0000E+00	5.0000E-01	3.4340E-03
3.7500E+00	0.0000E+00	5.6250E-01	-1.2891E-09
3.7500E+00	0.0000E+00	6.2500E-01	-3.4604E-03
3.7500E+00	0.0000E+00	6.8750E-01	-5.5796E-03
3.7500E+00	0.0000E+00	7.5000E-01	-2.0318E-02
3.7500E+00	0.0000E+00	8.1250E-01	-2.7758E-02
3.7500E+00	0.0000E+00	8.7500E-01	-2.7758E-02
3.7500E+00	0.0000E+00	9.3750E-01	-3.1470E-02
3.7500E+00	0.0000E+00	1.0000E+00	-3.4966E-02

3.7500E+00	0.0000E+00	1.0625E+00	-3.8463E-02
3.7500E+00	0.0000E+00	1.1250E+00	-4.1960E-02
3.7500E+00	0.0000E+00	1.2500E+00	-4.1319E-02
3.7500E+00	0.0000E+00	1.3750E+00	-4.3385E-02
3.7500E+00	0.0000E+00	1.5000E+00	-4.4762E-02
4.2500E+00	0.0000E+00	-1.5000E+00	-1.3879E-02
4.2500E+00	0.0000E+00	-1.2500E+00	-1.0409E-02
4.2500E+00	0.0000E+00	-1.0000E+00	-2.9988E-09
4.2500E+00	0.0000E+00	-7.5000E-01	2.4103E-02
4.2500E+00	0.0000E+00	-5.0000E-01	4.8206E-02
4.2500E+00	0.0000E+00	-2.5000E-01	9.6411E-02
4.2500E+00	0.0000E+00	6.2500E-02	1.2491E-01
4.2500E+00	0.0000E+00	1.2500E-01	1.2051E-01
4.2500E+00	0.0000E+00	1.8750E-01	1.1103E-01
4.2500E+00	0.0000E+00	2.5000E-01	9.9855E-02
4.2500E+00	0.0000E+00	3.1250E-01	9.3683E-02
4.2500E+00	0.0000E+00	3.7500E-01	7.5752E-02
4.2500E+00	0.0000E+00	4.3750E-01	6.4926E-02
4.2500E+00	0.0000E+00	5.0000E-01	5.4675E-02
4.2500E+00	0.0000E+00	5.6250E-01	4.5107E-02
4.2500E+00	0.0000E+00	6.2500E-01	3.4697E-02
4.2500E+00	0.0000E+00	6.8750E-01	2.7758E-02
4.2500E+00	0.0000E+00	7.5000E-01	2.4288E-02
4.2500E+00	0.0000E+00	8.1250E-01	2.0818E-02
4.2500E+00	0.0000E+00	8.7500E-01	1.3773E-02
4.2500E+00	0.0000E+00	9.3750E-01	1.0330E-02
4.2500E+00	0.0000E+00	1.0000E+00	6.8343E-03
4.2500E+00	0.0000E+00	1.1250E+00	-2.9759E-09
4.2500E+00	0.0000E+00	1.2500E+00	-6.9395E-03
4.2500E+00	0.0000E+00	1.3750E+00	-1.3879E-02
4.2500E+00	0.0000E+00	1.5000E+00	-1.3773E-02
4.7500E+00	0.0000E+00	-1.5000E+00	-3.4433E-03
4.7500E+00	0.0000E+00	-1.2500E+00	1.0330E-02
4.7500E+00	0.0000E+00	-1.0000E+00	2.4103E-02
4.7500E+00	0.0000E+00	-7.5000E-01	3.0989E-02
4.7500E+00	0.0000E+00	-5.0000E-01	5.5092E-02
4.7500E+00	0.0000E+00	-2.5000E-01	8.9525E-02
4.7500E+00	0.0000E+00	0.0000E+00	1.0252E-01
4.7500E+00	0.0000E+00	6.2500E-02	9.9098E-02
4.7500E+00	0.0000E+00	1.2500E-01	9.5681E-02
4.7500E+00	0.0000E+00	1.8750E-01	9.6411E-02
4.7500E+00	0.0000E+00	2.5000E-01	9.2968E-02
4.7500E+00	0.0000E+00	3.1250E-01	8.6082E-02
4.7500E+00	0.0000E+00	3.7500E-01	7.5752E-02
4.7500E+00	0.0000E+00	4.3750E-01	6.8344E-02
4.7500E+00	0.0000E+00	5.0000E-01	5.8535E-02
4.7500E+00	0.0000E+00	5.6250E-01	5.4675E-02
4.7500E+00	0.0000E+00	6.2500E-01	4.8206E-02
4.7500E+00	0.0000E+00	6.8750E-01	3.7876E-02
4.7500E+00	0.0000E+00	7.5000E-01	3.4433E-02
4.7500E+00	0.0000E+00	8.1250E-01	2.7973E-02
4.7500E+00	0.0000E+00	8.7500E-01	2.7758E-02
4.7500E+00	0.0000E+00	9.3750E-01	2.4103E-02
4.7500E+00	0.0000E+00	1.0000E+00	2.4103E-02
4.7500E+00	0.0000E+00	1.1250E+00	2.0660E-02
4.7500E+00	0.0000E+00	1.2500E+00	1.3773E-02
4.7500E+00	0.0000E+00	1.3750E+00	6.8865E-03
4.7500E+00	0.0000E+00	1.5000E+00	-2.9988E-09
4.7500E+00	0.0000E+00	0.0000E+00	1.0674E-01

D.3 MEASUREMENTS MADE TO EXAMINE BLOCKAGE-INDUCED PRESSURE GRADIENTS

Pressures were measured on the test wall along lines parallel with the X axis ±3.19T from the centerline of the wing (figure D.2-1). These data were compared with pressures calculated for a wing of infinite span in an unbounded potential flow, to give some indication of the magnitude of the blockage-induced pressure gradients in the real flow. The results, plotted in figure D.3-1 and listed in the subsequent tables, indicate that these were minimal.

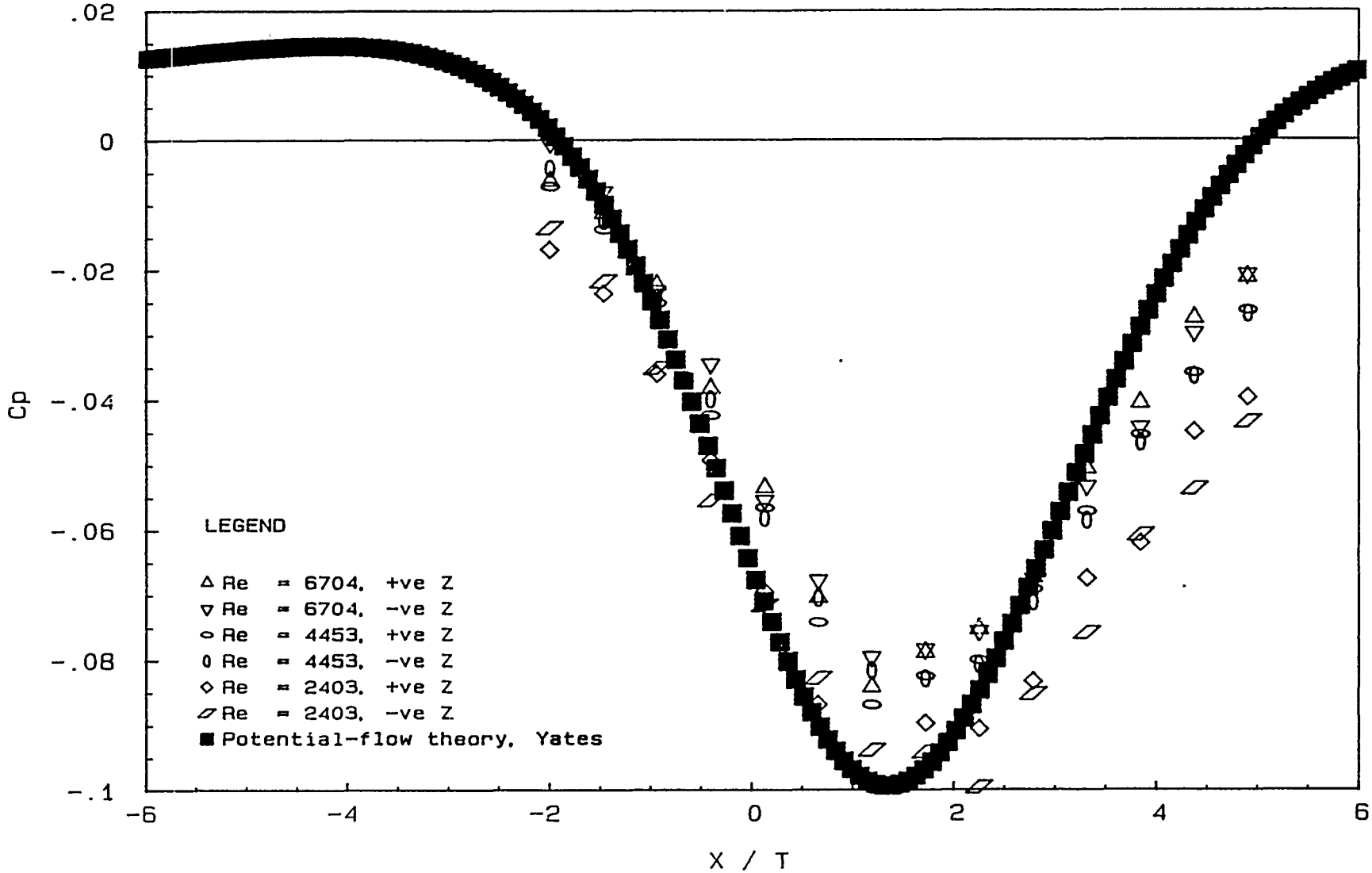


Figure D.3-1 Distributions of time-mean static pressure along lines ±3.17T from the centerline of the wing, comparison with potential-flow computation.

File E553270.DAT
Cp distributions measured +-3.17T from the plane of symmetry
Flow temperature (degrees centigrade) = 27.6
density (kilograms per meter cubed) = 1.095104
viscosity (meters squared per second) = 1.688541E-05
Atmospheric pressure (Pascals) = 94510
Velocity of undisturbed free stream (Uref, in m/s) = 27.63648
Reynolds number based on Uref and chord of wing = 498868.5
Date 11/30/88

X/T	Y/T	Z/T	Cp
-2.0000E+00	0.0000E+00	-3.1870E+00	-4.4510E-04
-2.0000E+00	0.0000E+00	3.1870E+00	-6.3043E-03
-1.4688E+00	0.0000E+00	-3.1870E+00	-7.9326E-03
-1.4688E+00	0.0000E+00	3.1870E+00	-1.1288E-02
-9.3768E-01	0.0000E+00	-3.1870E+00	-2.3186E-02
-9.3768E-01	0.0000E+00	3.1870E+00	-2.2276E-02
-4.0652E-01	0.0000E+00	-3.1870E+00	-3.4505E-02
-4.0652E-01	0.0000E+00	3.1870E+00	-3.8267E-02
1.2465E-01	0.0000E+00	-3.1870E+00	-5.5439E-02
1.2465E-01	0.0000E+00	3.1870E+00	-5.3488E-02
6.5581E-01	0.0000E+00	-3.1870E+00	-6.7749E-02
6.5581E-01	0.0000E+00	3.1870E+00	-7.0438E-02
1.1870E+00	0.0000E+00	-3.1870E+00	-7.9552E-02
1.1870E+00	0.0000E+00	3.1870E+00	-8.4172E-02
1.7181E+00	0.0000E+00	-3.1870E+00	-7.8375E-02
1.7181E+00	0.0000E+00	3.1870E+00	-7.8869E-02
2.2493E+00	0.0000E+00	-3.1870E+00	-7.5603E-02
2.2493E+00	0.0000E+00	3.1870E+00	-7.5304E-02
2.7805E+00	0.0000E+00	-3.1870E+00	-6.7611E-02
2.7805E+00	0.0000E+00	3.1870E+00	-6.7370E-02
3.3116E+00	0.0000E+00	-3.1870E+00	-5.3296E-02
3.3116E+00	0.0000E+00	3.1870E+00	-5.0580E-02
3.8428E+00	0.0000E+00	-3.1870E+00	-4.4239E-02
3.8428E+00	0.0000E+00	3.1870E+00	-4.0551E-02
4.3739E+00	0.0000E+00	-3.1870E+00	-2.9724E-02
4.3739E+00	0.0000E+00	3.1870E+00	-2.7485E-02
4.9051E+00	0.0000E+00	-3.1870E+00	-2.0728E-02
4.9051E+00	0.0000E+00	3.1870E+00	-2.1179E-02

Table D.3-1 Cp measurements on the test wall 3.17T from the plane of symmetry, Re = 6704.

File E554245.DAT
Cp distributions measured +-3.17T from the plane of symmetry
Flow temperature (degrees centigrade) = 28
density (kilograms per meter cubed) = 1.093649
viscosity (meters squared per second) = 1.692517E-05
Atmospheric pressure (Pascals) = 94510
Velocity of undisturbed free stream (Uref, in m/s) = 16.59324
Reynolds number based on Uref and chord of wing = 298822.4
Date 11/30/88

X/T	Y/T	Z/T	Cp
-2.0000E+00	0.0000E+00	-3.1870E+00	-4.3566E-03
-2.0000E+00	0.0000E+00	3.1870E+00	-7.1033E-03
-1.4688E+00	0.0000E+00	-3.1870E+00	-1.2438E-02
-1.4688E+00	0.0000E+00	3.1870E+00	-1.3784E-02
-9.3768E-01	0.0000E+00	-3.1870E+00	-2.4245E-02
-9.3768E-01	0.0000E+00	3.1870E+00	-2.5053E-02
-4.0652E-01	0.0000E+00	-3.1870E+00	-3.9931E-02
-4.0652E-01	0.0000E+00	3.1870E+00	-4.2339E-02
1.2465E-01	0.0000E+00	-3.1870E+00	-5.8157E-02
1.2465E-01	0.0000E+00	3.1870E+00	-5.6561E-02
6.5581E-01	0.0000E+00	-3.1870E+00	-7.0560E-02
6.5581E-01	0.0000E+00	3.1870E+00	-7.4222E-02
1.1870E+00	0.0000E+00	-3.1870E+00	-8.1572E-02
1.1870E+00	0.0000E+00	3.1870E+00	-8.6847E-02
1.7181E+00	0.0000E+00	-3.1870E+00	-8.2840E-02
1.7181E+00	0.0000E+00	3.1870E+00	-8.2442E-02
2.2493E+00	0.0000E+00	-3.1870E+00	-8.0771E-02
2.2493E+00	0.0000E+00	3.1870E+00	-8.0019E-02
2.7805E+00	0.0000E+00	-3.1870E+00	-7.1157E-02
2.7805E+00	0.0000E+00	3.1870E+00	-6.9130E-02
3.3116E+00	0.0000E+00	-3.1870E+00	-5.8572E-02
3.3116E+00	0.0000E+00	3.1870E+00	-5.7120E-02
3.8428E+00	0.0000E+00	-3.1870E+00	-4.6567E-02
3.8428E+00	0.0000E+00	3.1870E+00	-4.5380E-02
4.3739E+00	0.0000E+00	-3.1870E+00	-3.6370E-02
4.3739E+00	0.0000E+00	3.1870E+00	-3.5839E-02
4.9051E+00	0.0000E+00	-3.1870E+00	-2.6758E-02
4.9051E+00	0.0000E+00	3.1870E+00	-2.6223E-02

Table D.3-2 Cp measurements on the test wall 3.17T from the plane of symmetry, Re = 4453.

File E555225.DAT
Cp distributions measured +-3.17T from the plane of symmetry
Flow temperature (degrees centigrade) = 26.9
density (kilograms per meter cubed) = 1.097661
viscosity (meters squared per second) = 1.681592E-05
Atmospheric pressure (Pascals) = 94510
Velocity of undisturbed free stream (Uref, in m/s) = 7.647181
Reynolds number based on Uref and chord of wing = 138610.4
Date 11/30/88

X/T	Y/T	Z/T	Cp
-2.0000E+00	0.0000E+00	-3.1870E+00	-1.3544E-02
-2.0000E+00	0.0000E+00	3.1870E+00	-1.6861E-02
-1.4688E+00	0.0000E+00	-3.1870E+00	-2.1712E-02
-1.4688E+00	0.0000E+00	3.1870E+00	-2.3594E-02
-9.3768E-01	0.0000E+00	-3.1870E+00	-3.5099E-02
-9.3768E-01	0.0000E+00	3.1870E+00	-3.6033E-02
-4.0652E-01	0.0000E+00	-3.1870E+00	-5.5452E-02
-4.0652E-01	0.0000E+00	3.1870E+00	-4.9305E-02
1.2465E-01	0.0000E+00	-3.1870E+00	-7.1622E-02
1.2465E-01	0.0000E+00	3.1870E+00	-6.9495E-02
6.5581E-01	0.0000E+00	-3.1870E+00	-8.2747E-02
6.5581E-01	0.0000E+00	3.1870E+00	-8.6808E-02
1.1870E+00	0.0000E+00	-3.1870E+00	-9.3836E-02
1.1870E+00	0.0000E+00	3.1870E+00	-9.9222E-02
1.7181E+00	0.0000E+00	-3.1870E+00	-9.4106E-02
1.7181E+00	0.0000E+00	3.1870E+00	-8.9678E-02
2.2493E+00	0.0000E+00	-3.1870E+00	-9.9556E-02
2.2493E+00	0.0000E+00	3.1870E+00	-9.0581E-02
2.7805E+00	0.0000E+00	-3.1870E+00	-8.5223E-02
2.7805E+00	0.0000E+00	3.1870E+00	-8.3294E-02
3.3116E+00	0.0000E+00	-3.1870E+00	-7.5860E-02
3.3116E+00	0.0000E+00	3.1870E+00	-6.7473E-02
3.8428E+00	0.0000E+00	-3.1870E+00	-6.0754E-02
3.8428E+00	0.0000E+00	3.1870E+00	-6.2022E-02
4.3739E+00	0.0000E+00	-3.1870E+00	-5.3635E-02
4.3739E+00	0.0000E+00	3.1870E+00	-4.4893E-02
4.9051E+00	0.0000E+00	-3.1870E+00	-4.3363E-02
4.9051E+00	0.0000E+00	3.1870E+00	-3.9665E-02

Table D.3-3 Cp measurements on the test wall 3.17T from the plane of symmetry, Re = 2403.

E. HOT-WIRE ANEMOMETRY

A boundary-layer type single hot-wire probe (TSI model 1218T1.5) was used to measure mean velocity and three components of the Reynolds stress tensor. The probe was operated using a constant temperature anemometer bridge of the type designed by Miller (1976) and modified by Simpson et al. (1979). The frequency response of this combination was found to be flat from zero to 12 kHz at an overheat ratio of 1.7. The bridge output was fed through a TSI amplifier (type 1015C) into an analogue-to-digital converter and signal processor (Data Precision Data 6000). This was interfaced to an IBM AT computer enabling calibrations and measurements to be made on line.

The probe was fixed in its traverse gear with the sensor wire in an XZ plane parallel to the test wall. The traverse gear allowed the probe to be rotated about an axis normal to the wind-tunnel floor passing through the middle of the sensor wire. The sensor wire could thus be rotated to any angle of yaw while remaining at the same location.

For the purposes of the analysis below we will define U_s as the component of velocity in the time-mean flow direction, W_s as the component normal to U_s and parallel to the wind-tunnel floor and V_s as the component normal to both U_s and W_s and positive away from the wall.

If it is assumed that time-mean velocities normal to the wind-tunnel floor are negligible with respect to the magnitude of the mean-velocity vector we may write the effective velocity measured by the above hot-wire as

$$U_{eff}^2 = U_s^2(\cos^2\alpha + k^2\sin^2\alpha) + h^2V_s'^2 + W_s^2(\sin^2\alpha + k^2\cos^2\alpha)$$
$$+ 2U_sW_s\cos\alpha\sin\alpha(1-k^2)$$

given Jorgensen's (1977) equation. Here α is the angle at which the hot-wire probe is yawed

relative to the mean-velocity vector. k and h are the axial sensitivity and pitch factor of the probe respectively. By ignoring second order terms, the above equation can be decomposed into

$$\overline{U_{eff}} = \sqrt{A}\,\overline{U_s}$$

and

$$\overline{u_{eff}^2} = A\,\overline{u_s^2} + (F^2/4A)\,\overline{w_s^2} + F\,\overline{u_s w_s}$$

where

$$A = \cos^2\alpha + k^2\sin^2\alpha$$

$$F = \sin 2\alpha\,(1-k^2)$$

and

$$U_{eff} = \overline{U_{eff}} + u_{eff}$$

$$U_s = \overline{U_s} + u_s$$

$$W_s = w_s$$

So, two measurements of U_{eff} (and $\overline{u_{eff}^2}$), made with the probe at two different angles of yaw (about $\pm 30°$) can be used to determine the magnitude and the relative direction of the mean-velocity vector ($\overline{U_s}$ and α). A third measurement will yield $\overline{u_s^2}$, $\overline{w_s^2}$, $\overline{u_s w_s}$ and redundant values of $\overline{U_s}$ and α.

Velocity profiles have been measured in this manner in a region surrounding the nose of the wing for a nominal approach boundary layer Reynolds number Re_θ of 6700. No data were taken in the region immediately ahead of the wing because instantaneous flow reversals and high velocities normal to the test wall were expected here.

The results are organized according to the nominal spanwise (YZ) plane in which they were measured. Planes are lettered from A to G starting at the most upstream location (see figure E.1-1 for example). Velocities have been resolved into the laboratory fixed coordinate system (U,V,W) described in section A.2.

Table E.1 contains estimates of the uncertainty in these measurements. Some bias

errors not included in these estimates are present in the measurements made closest to the leading edge of the wing because of the high turbulence levels here. Table E-2 shows locations at which turbulence intensities exceeded 30%. Skewing of the mean flow in the boundary layer is a further source of error not included here. At many locations close to the wall measurements show the mean-flow angle changing substantially over distances comparable to the diameter of the prongs of the hot-wire probe. Interference by the prongs is therefore likely. Comparisons between hot-wire and laser anemometer measurements taken in the vicinity of the wing maximum thickness (plane G) show substantial differences which we attribute to this interference.

Value of:	X/T	-1.0?	1.63×10^{-2}	2.83×10^{-2}
	Y/T	6.37×10^{-3}	1.81×10^{-2}	2.20×10^{-1}
	Z/T	0.0	-6.20×10^{-1}	-1.132
	U/U_{ref}	3.58×10^{-1}	4.39×10^{-1}	8.89×10^{-1}
	W/U_{ref}	1.00×10^{-4}	-5.67×10^{-1}	-1.57×10^{-1}
	$\overline{u^2}/U_{ref}^2$	7.17×10^{-3}	2.33×10^{-2}	3.48×10^{-3}
	$-\overline{uw}/U_{ref}^2$	1.03×10^{-5}	-1.46×10^{-2}	-2.61×10^{-4}
Uncertainty in:	U/U_{ref}	5.0×10^{-3}	7.1×10^{-3}	5.2×10^{-3}
	W/U_{ref}	7.2×10^{-3}	6.8×10^{-3}	9.0×10^{-3}
	$\overline{u^2}/U_{ref}^2$	7.1×10^{-5}	4.7×10^{-4}	3.1×10^{-5}
	$\overline{w^2}/U_{ref}^2$	2.8×10^{-4}	4.2×10^{-4}	1.4×10^{-4}
	$-\overline{uw}/U_{ref}^2$	5.8×10^{-5}	4.2×10^{-4}	4.4×10^{-5}

Table E-1 Estimates of uncertainty in single-hot-wire measurements.

Plane	X/T	Y/T	Z/T	Data file name	peak t.i.
C	-0.667	.0038-.0149	0	E48470.RES	45%
C	-0.667	.0028-.0096	-0.25	E47470.RES	40%
C	-0.667	.0028-.0177	-0.131	E49470.RES	44%
D	-0.338	.0025-.0552	-0.25	E50470.RES	39%
E	0.013	.0035-.0092	-0.49	E70470.RES	40%

Table E-2 Locations at which the local turbulence intensity exceeded 30% during hot-wire measurements.

E.1 HOT-WIRE MEASUREMENTS IN PLANES A AND B

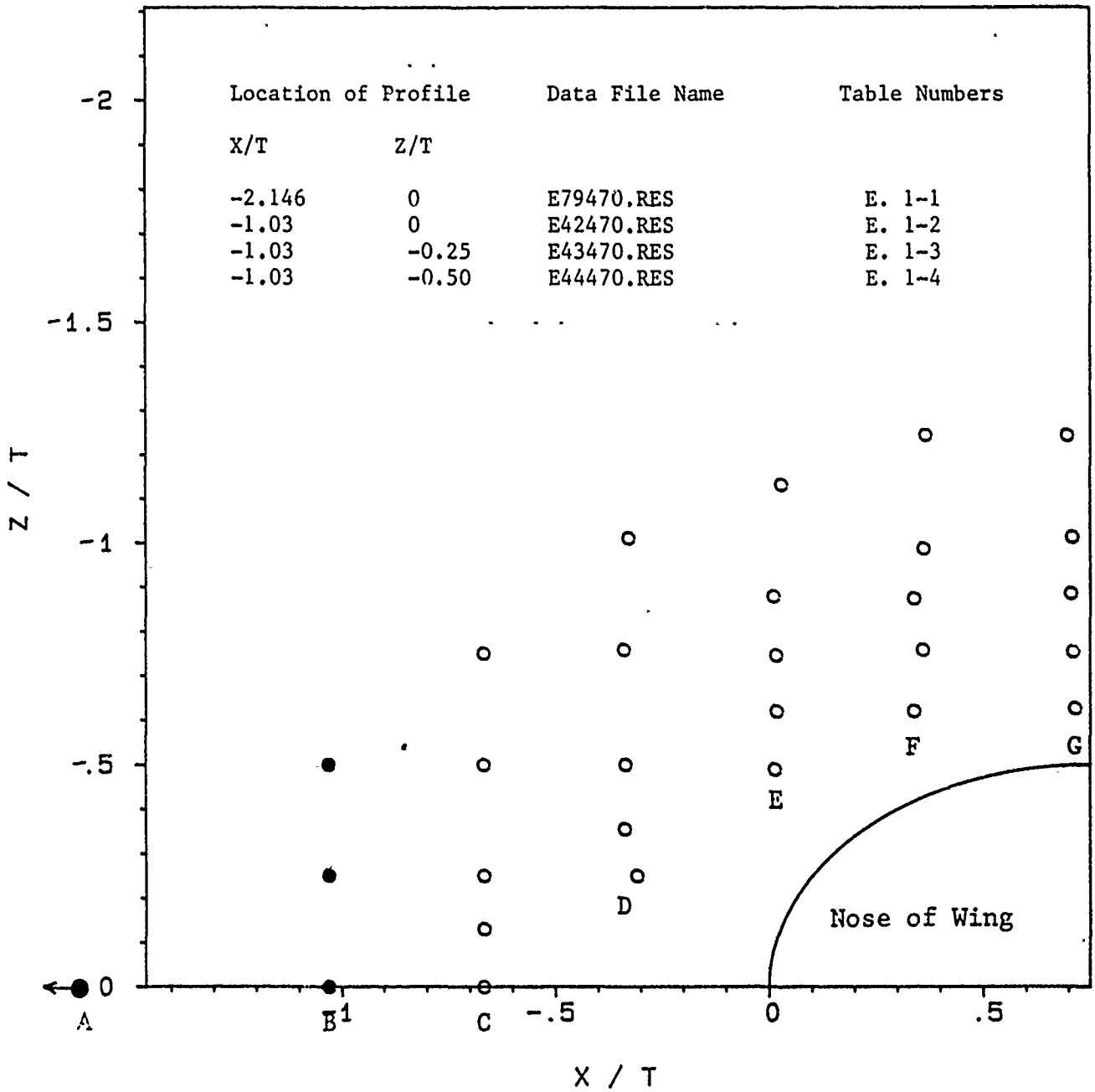


Figure E.1-1 Location of hot-wire profiles measured in planes A and B.

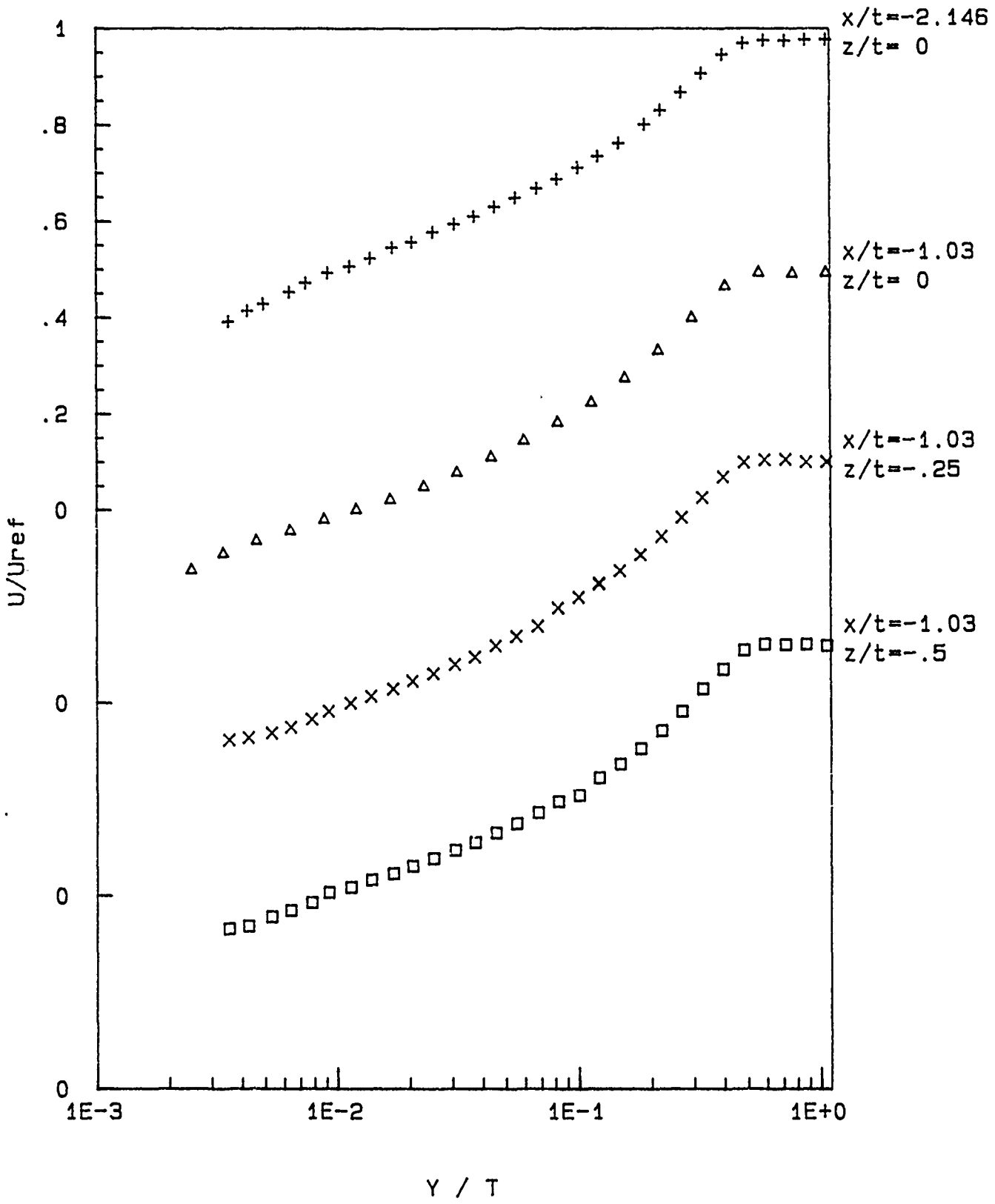


FIGURE E.1-2 Profiles of Mean-Velocity Component U, Planes A and B

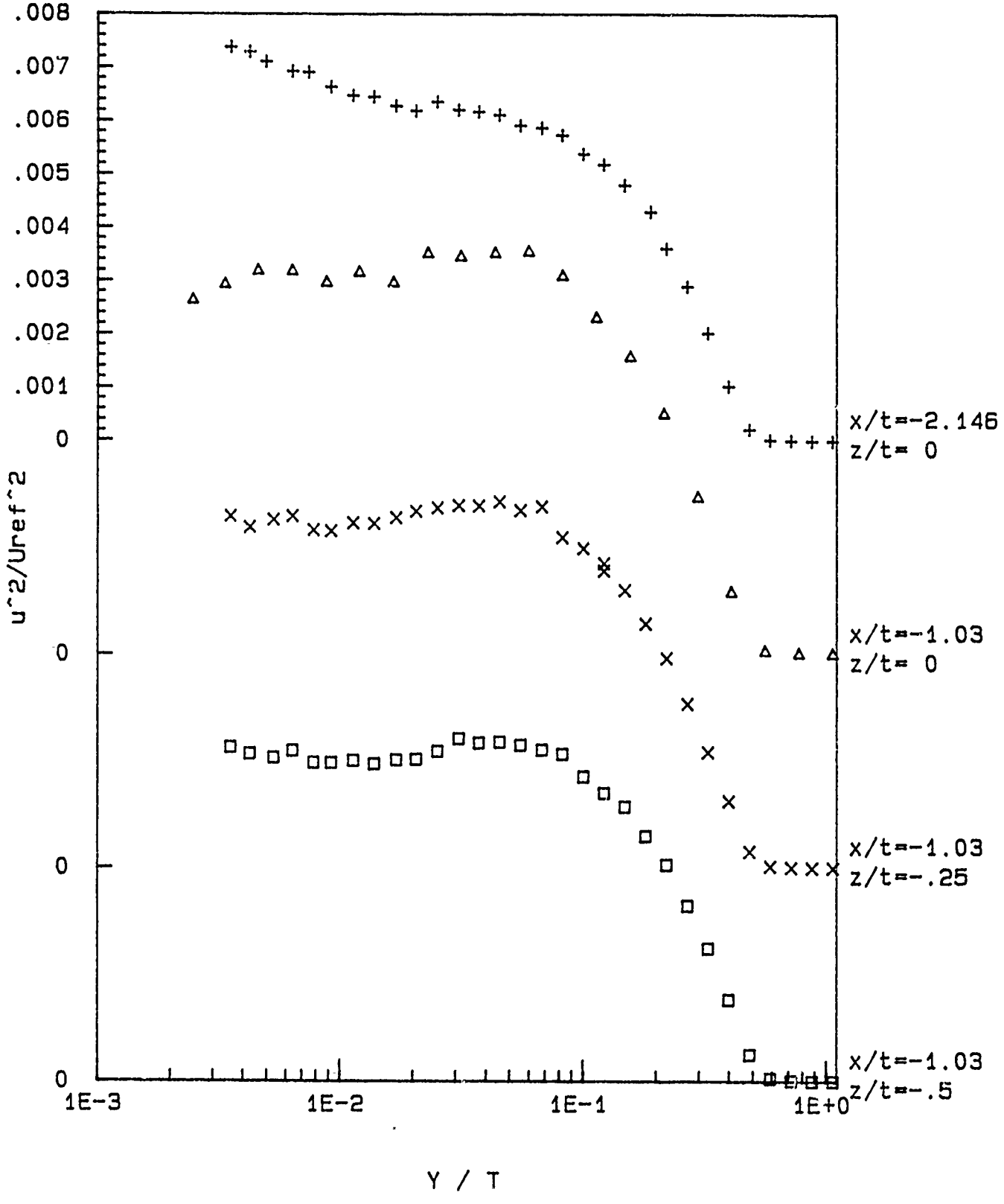


FIGURE E.1-3 Profiles of the U Component of Turbulence Normal Stress, Planes A and B

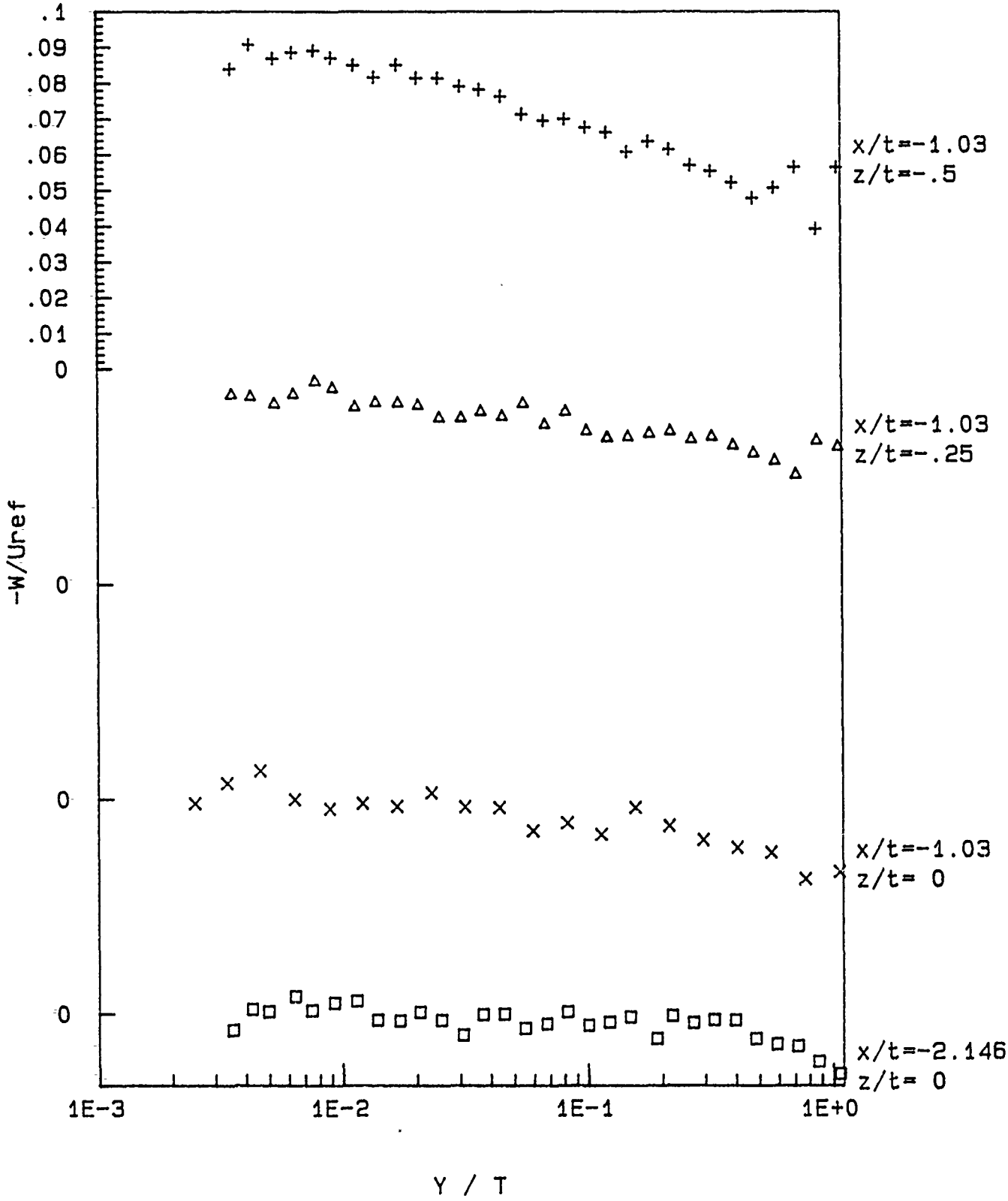


FIGURE E.1-4 Profiles of Mean-Velocity Component W, Planes A and B

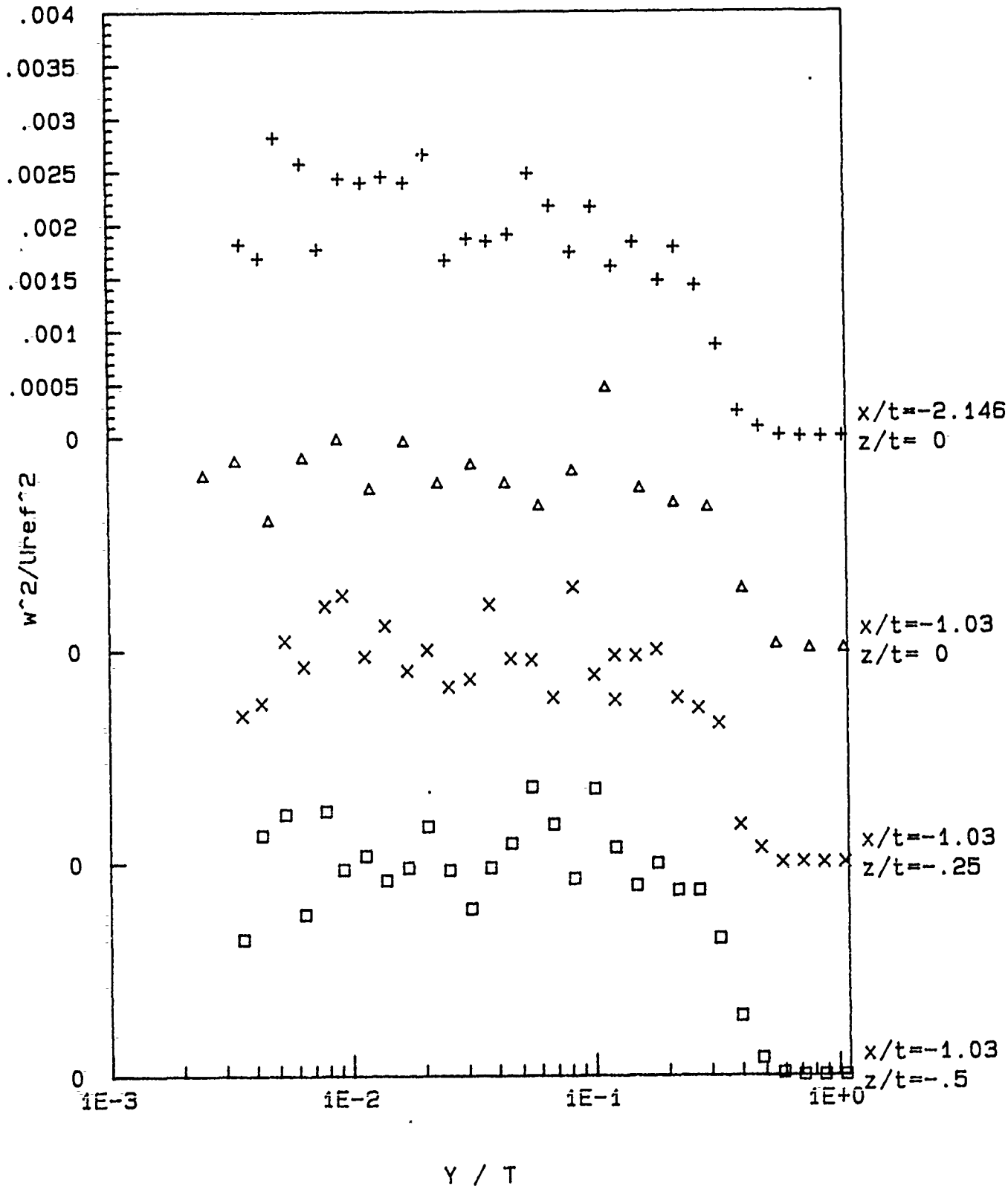


FIGURE E.1-5 Profiles of the W Component of Turbulence Normal Stress, Planes A and B

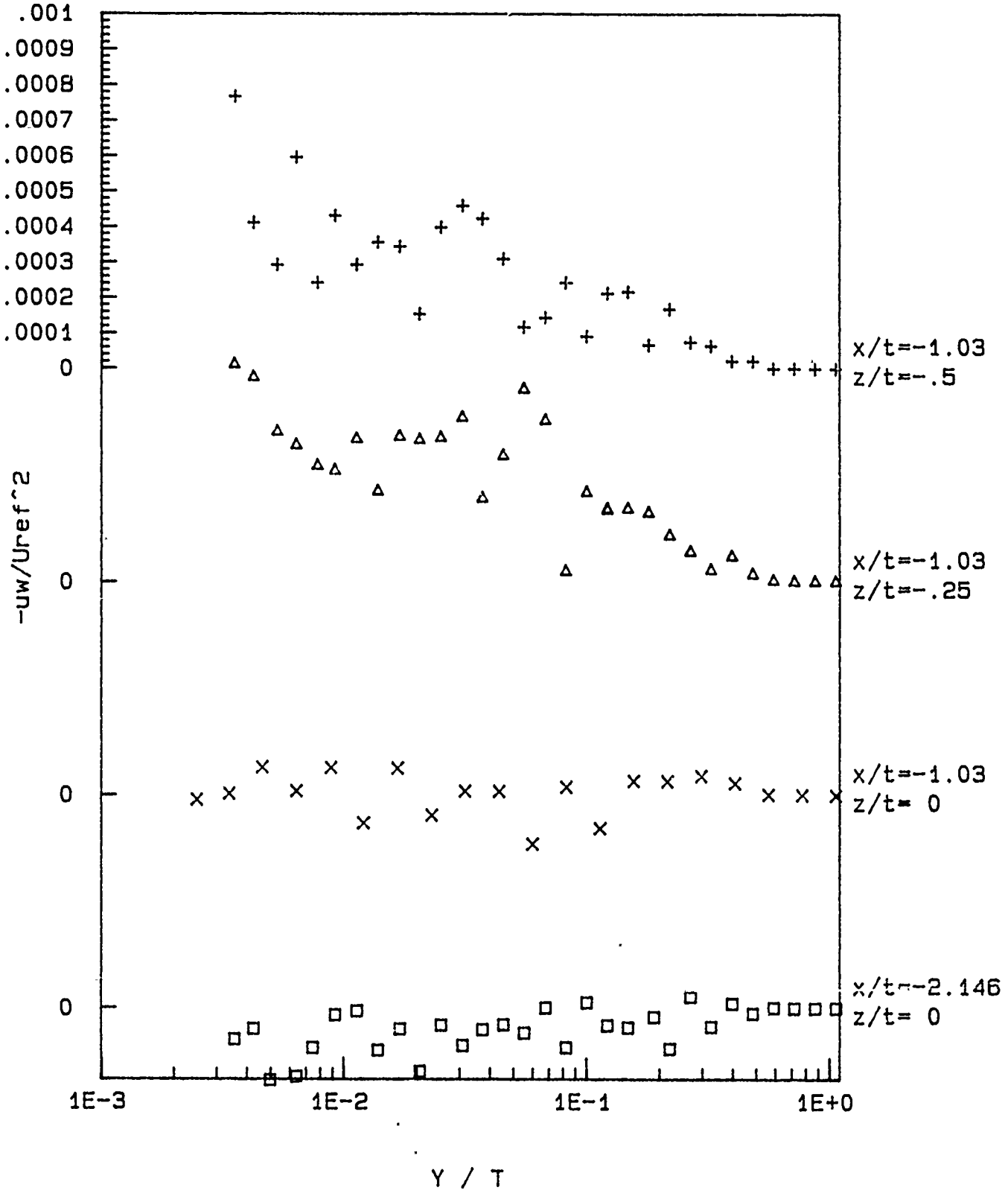


FIGURE E.1-6 Profiles of the UW Reynolds Shear Stress, Planes A and B

File E79470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.38213
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.129559E-03
Estimated momentum thickness Reynolds number = 6612.077

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-2.1460E+00	3.5411E-03	0.0000E+00	3.9103E-01	7.3748E-03	4.5817E-03	1.8169E-03	8.8917E-05
-2.1460E+00	4.2493E-03	0.0000E+00	4.1412E-01	7.2670E-03	-1.2988E-03	1.6878E-03	5.8692E-05
-2.1460E+00	4.9575E-03	0.0000E+00	4.2840E-01	7.1038E-03	-5.9741E-04	2.8227E-03	2.0372E-04
-2.1460E+00	6.3739E-03	0.0000E+00	4.5372E-01	6.9227E-03	-4.8917E-03	2.5737E-03	1.9393E-04
-2.1460E+00	7.4363E-03	0.0000E+00	4.7239E-01	6.9049E-03	-9.2589E-04	1.7653E-03	1.1223E-04
-2.1460E+00	9.2068E-03	0.0000E+00	4.9328E-01	6.6328E-03	-3.0684E-03	2.4354E-03	1.9985E-05
-2.1460E+00	1.1371E-02	0.0000E+00	5.0679E-01	6.4671E-03	-3.6238E-03	2.3957E-03	8.1255E-06
-2.1460E+00	1.3816E-02	0.0000E+00	5.2328E-01	6.4466E-03	1.7471E-03	2.4512E-03	1.1933E-04
-2.1460E+00	1.6997E-02	0.0000E+00	5.4595E-01	6.2735E-03	1.9419E-03	2.3947E-03	5.8909E-05
-2.1460E+00	2.0538E-02	0.0000E+00	5.5712E-01	6.1945E-03	-4.3659E-04	2.6580E-03	1.7917E-04
-2.1460E+00	2.5142E-02	0.0000E+00	5.7937E-01	6.3566E-03	1.7766E-03	1.6612E-03	4.7767E-05
-2.1460E+00	3.0807E-02	0.0000E+00	5.9453E-01	6.2053E-03	5.9594E-03	1.8658E-03	1.0564E-04
-2.1460E+00	3.7181E-02	0.0000E+00	6.1043E-01	6.1652E-03	2.0775E-04	1.8422E-03	6.0499E-05
-2.1460E+00	4.5326E-02	0.0000E+00	6.3060E-01	6.1088E-03	7.8143E-05	1.9056E-03	4.6741E-05
-2.1460E+00	5.5241E-02	0.0000E+00	6.4853E-01	5.9114E-03	4.0454E-03	2.4780E-03	7.0179E-05
-2.1460E+00	6.7635E-02	0.0000E+00	6.6889E-01	5.8682E-03	2.7727E-03	2.1718E-03	-7.5231E-07
-2.1460E+00	8.2153E-02	0.0000E+00	6.8786E-01	5.7309E-03	-5.7026E-04	1.7362E-03	1.1151E-04
-2.1460E+00	1.0021E-01	0.0000E+00	7.1163E-01	5.3792E-03	3.2315E-03	2.1612E-03	-1.5862E-05
-2.1460E+00	1.2181E-01	0.0000E+00	7.3587E-01	5.1794E-03	2.3580E-03	1.6019E-03	4.8930E-05
-2.1460E+00	1.4837E-01	0.0000E+00	7.6283E-01	4.7948E-03	8.6407E-04	1.8281E-03	5.4924E-05
-2.1460E+00	1.8945E-01	0.0000E+00	8.0205E-01	4.2928E-03	6.9028E-03	1.4683E-03	2.4600E-05
-2.1460E+00	2.1990E-01	0.0000E+00	8.3043E-01	3.6081E-03	5.1308E-04	1.7826E-03	1.1454E-04
-2.1460E+00	2.6806E-01	0.0000E+00	8.6820E-01	2.8923E-03	2.5391E-03	1.4210E-03	-3.2840E-05
-2.1460E+00	3.2613E-01	0.0000E+00	9.0733E-01	2.0185E-03	1.6105E-03	8.6434E-04	5.2409E-05
-2.1460E+00	3.9766E-01	0.0000E+00	9.4622E-01	1.0274E-03	1.7737E-03	2.3804E-04	-1.3203E-05
-2.1460E+00	4.8336E-01	0.0000E+00	9.6978E-01	2.1688E-04	6.9058E-03	9.3909E-05	1.5059E-05
-2.1460E+00	5.8853E-01	0.0000E+00	9.7587E-01	2.4084E-05	8.4533E-03	1.3006E-05	-1.3881E-06
-2.1460E+00	7.1671E-01	0.0000E+00	9.7498E-01	7.8117E-06	8.9935E-03	3.4600E-06	5.7991E-07
-2.1460E+00	8.7252E-01	0.0000E+00	9.7695E-01	4.7377E-06	1.3324E-02	1.3053E-06	2.8493E-07
-2.1460E+00	1.0623E+00	0.0000E+00	9.7722E-01	3.5564E-06	1.6759E-02	2.7727E-06	-4.3624E-07

Table E.1-1 Hot-wire velocity measurements at X/T = -2.146, Z/T = 0.

File E42470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.0484
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.109012E-03
Estimated momentum thickness Reynolds number = 6745.331

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-1.0300E+00	2.4788E-03	0.0000E+00	2.7697E-01	6.6251E-03	1.2031E-03	1.6300E-03	1.3847E-05
-1.0300E+00	3.3640E-03	0.0000E+00	3.0995E-01	6.9166E-03	-4.4458E-03	1.7677E-03	-3.4227E-06
-1.0300E+00	4.6034E-03	0.0000E+00	3.3681E-01	7.1728E-03	-7.9467E-03	1.2065E-03	-7.7892E-05
-1.0300E+00	6.3739E-03	0.0000E+00	3.5752E-01	7.1690E-03	1.0014E-04	1.7955E-03	-1.0280E-05
-1.0300E+00	8.9527E-03	0.0000E+00	3.8051E-01	6.9558E-03	2.7625E-03	1.9723E-03	-7.6540E-05
-1.0300E+00	1.2040E-02	0.0000E+00	4.0127E-01	7.1467E-03	1.1666E-03	1.5026E-03	7.9644E-05
-1.0300E+00	1.6643E-02	0.0000E+00	4.2183E-01	6.9499E-03	2.0549E-03	1.9496E-03	-7.5114E-05
-1.0300E+00	2.3017E-02	0.0000E+00	4.4932E-01	7.5037E-03	-1.7689E-03	1.5572E-03	5.7454E-05
-1.0300E+00	3.1516E-02	0.0000E+00	4.7831E-01	7.4443E-03	2.2152E-03	1.7339E-03	-1.0857E-05
-1.0300E+00	4.3555E 02	0.0000E+00	5.0996E-01	7.5065E-03	2.4098E-03	1.5570E-03	-9.9134E-06
-1.0300E+00	5.9844E-02	0.0000E+00	5.4449E-01	7.5358E-03	8.9015E-03	1.3434E-03	1.3842E-04
-1.0300E+00	8.2507E-02	0.0000E+00	5.8216E-01	7.0795E-03	6.6718E-03	1.6718E-03	-2.2155E-05
-1.0300E+00	1.1367E-01	0.0000E+00	6.2336E-01	6.2923E-03	9.9097E-03	2.4536E-03	9.3941E-05
-1.0300E+00	1.5652E-01	0.0000E+00	6.7415E-01	5.5642E-03	2.3091E-03	1.5070E-03	-4.0239E-05
-1.0300E+00	2.1530E-01	0.0000E+00	7.3121E-01	4.4919E-03	7.4398E-03	1.3705E-03	-3.9403E-05
-1.0300E+00	2.9639E-01	0.0000E+00	7.9944E-01	2.9312E-03	1.1411E-02	1.3293E-03	-5.3904E-05
-1.0300E+00	4.0793E-01	0.0000E+00	8.6554E-01	1.1572E-03	1.3557E-02	5.6047E-04	-3.3812E-05
-1.0300E+00	5.6126E-01	0.0000E+00	9.3353E-01	5.3711E-05	1.4948E-02	4.1533E-05	-1.5229E-06
-1.0300E+00	7.7195E-01	0.0000E+00	8.9115E-01	1.0126E-05	2.2349E-02	4.1019E-06	-5.3553E-07
-1.0300E+00	1.0623E+00	0.0000E+00	8.9267E-01	3.8951E-06	2.0323E-02	1.3394E-06	1.3929E-08

Table E.1-2 Hot-wire velocity measurements at X/T = -1.03, Z/T = 0.

File E43470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.02741
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.10965E-03
Estimated momentum thickness Reynolds number = 6741.143

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-1.0300E+00	3.5411E-03	-2.5000E-01	3.2346E-01	6.5822E-03	-5.2774E-02	1.3864E-03	-6.1130E-04
-1.0300E+00	4.2493E-03	-2.5000E-01	3.2843E-01	6.3784E-03	-5.2304E-02	1.5038E-03	-5.7523E-04
-1.0300E+00	5.3116E-03	-2.5000E-01	3.3836E-01	6.5201E-03	-5.0173E-02	2.0904E-03	-4.2102E-04
-1.0300E+00	6.3739E-03	-2.5000E-01	3.5029E-01	6.5899E-03	-5.2914E-02	1.8483E-03	-3.9318E-04
-1.0300E+00	7.7904E-03	-2.5000E-01	3.6715E-01	6.3274E-03	-5.6479E-02	2.4181E-03	-3.2491E-04
-1.0300E+00	9.2068E-03	-2.5000E-01	3.8335E-01	6.3109E-03	-5.4605E-02	2.5187E-03	-3.1213E-04
-1.0300E+00	1.1331E-02	-2.5000E-01	4.0085E-01	6.4594E-03	-4.9345E-02	1.9420E-03	-4.0115E-04
-1.0300E+00	1.3810E-02	-2.5000E-01	4.1486E-01	6.4454E-03	-5.0574E-02	2.2333E-03	-2.5337E-04
-1.0300E+00	1.6997E-02	-2.5000E-01	4.3013E-01	6.5584E-03	-5.0442E-02	1.8079E-03	-4.0788E-04
-1.0300E+00	2.0538E-02	-2.5000E-01	4.4651E-01	6.6808E-03	-4.9825E-02	2.0026E-03	-3.9833E-04
-1.0300E+00	2.5142E-02	-2.5000E-01	4.6206E-01	6.7481E-03	-4.6301E-02	1.6540E-03	-4.0455E-04
-1.0300E+00	3.0807E-02	-2.5000E-01	4.8091E-01	6.7897E-03	-4.6284E-02	1.7276E-03	-4.6164E-04
-1.0300E+00	3.7181E-02	-2.5000E-01	4.9639E-01	6.7804E-03	-4.8118E-02	2.4298E-03	-2.3365E-04
-1.0300E+00	4.5326E-02	-2.5000E-01	5.1993E-01	6.8618E-03	-4.6660E-02	1.9208E-03	-3.5462E-04
-1.0300E+00	5.5241E-02	-2.5000E-01	5.3945E-01	6.6971E-03	-5.0352E-02	1.9058E-03	-5.4202E-04
-1.0300E+00	6.7635E-02	-2.5000E-01	5.6045E-01	6.7697E-03	-4.4450E-02	1.5516E-03	-4.5285E-04
-1.0300E+00	9.2153E-02	-2.5000E-01	5.9809E-01	6.1935E-03	-4.8071E-02	2.5882E-03	-2.8446E-05
-1.0300E+00	1.0021E-01	-2.5000E-01	6.2021E-01	5.9877E-03	-4.2635E-02	1.7641E-03	-2.5148E-04
-1.0300E+00	1.2181E-01	-2.5000E-01	6.4934E-01	5.5659E-03	-4.0637E-02	1.9503E-03	-2.0458E-04
-1.0300E+00	1.2191 01	-2.5000E-01	6.4742E-01	5.7063E-03	-4.0675E-02	1.5305E-03	-2.0123E-04
-1.0300E+00	1.4837E-01	-2.5000E-01	6.7508E-01	5.2026E-03	-4.1015E-02	1.9464E-03	-2.0500E-04
-1.0300E+00	1.8059E-01	-2.5000E-01	7.0866E-01	4.5763E-03	-4.1900E-02	2.0039E-03	-1.9392E-04
-1.0300E+00	2.1970E-01	-2.5000E-01	7.4623E-01	3.9322E-03	-4.2566E-02	1.5491E-03	-1.3010E-04
-1.0300E+00	2.6806E-01	-2.5000E-01	7.8606E-01	3.0705E-03	-4.0314E-02	1.4509E-03	-8.4042E-05
-1.0300E+00	3.2613E-01	-2.5000E-01	8.2701E-01	2.1694E-03	-4.1042E-02	1.3091E-03	-3.2847E-05
-1.0300E+00	3.9731E-01	-2.5000E-01	8.6988E-01	1.2536E-03	-3.8562E-02	3.5566E-04	-7.1088E-05
-1.0300E+00	4.8336E-01	-2.5000E-01	8.9972E-01	3.1019E-04	-3.6470E-02	1.3772E-04	-2.0867E-05
-1.0300E+00	5.8853E-01	-2.5000E-01	9.0491E-01	3.8889E-05	-3.4289E-02	2.5647E-06	-3.1039E-06
-1.0300E+00	7.1671E-01	-2.5000E-01	9.0542E-01	1.2298E-05	-3.0439E-02	7.3902E-06	-3.4295E-08
-1.0300E+00	8.7252E-01	-2.5000E-01	9.0032E-01	8.3709E-06	-3.9997E-02	5.0818E-06	2.7796E-07
-1.0300E+00	1.0623E+00	-2.5000E-01	9.0098E-01	7.0860E-06	-3.8274E-02	2.6014E-06	-7.5366E-08

Table E.1-3 Hot-wire velocity measurements at X/T = -1.03, Z/T = -.25.

File E44470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.99069
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.110767E-03
Estimated momentum thickness Reynolds number = 6733.815

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-1.0300E+00	3.5411E-03	-5.0000E-01	3.3183E-01	6.2473E-03	-8.3998E-02	1.2846E-03	-7.6681E-04
-1.0300E+00	4.2493E-03	-5.0000E-01	3.3772E-01	6.1309E-03	-9.0751E-02	2.2610E-03	-4.1114E-04
-1.0300E+00	5.3116E-03	-5.0000E-01	3.5700E-01	6.0566E-03	-8.6802E-02	2.4585E-03	-2.9113E-04
-1.0300E+00	6.3739E-03	-5.0000E-01	3.7039E-01	6.1888E-03	-8.8560E-02	1.5166E-03	-5.9554E-04
-1.0300E+00	7.7904E-03	-5.0000E-01	3.8612E-01	5.9625E-03	-8.9058E-02	2.4884E-03	-2.4157E-04
-1.0300E+00	9.2068E-03	-5.0000E-01	4.0736E-01	5.9636E-03	-8.7011E-02	1.9366E-03	-4.3130E-04
-1.0300E+00	1.1331E-02	-5.0000E-01	4.1811E-01	6.0018E-03	-8.4914E-02	2.0678E-03	-2.9234E-04
-1.0300E+00	1.3810E-02	-5.0000E-01	4.3343E-01	5.9399E-03	-8.1576E-02	1.8349E-03	-3.5562E-04
-1.0300E+00	1.6997E-02	-5.0000E-01	4.4651E-01	6.0155E-03	-8.5030E-02	1.9524E-03	-3.4355E-04
-1.0300E+00	2.0538E-02	-5.0000E-01	4.6200E-01	6.0258E-03	-8.1356E-02	2.3416E-03	-1.5307E-04
-1.0300E+00	2.5142E-02	-5.0000E-01	4.7806E-01	6.1790E-03	-8.1417E-02	1.9319E-03	-3.9853E-04
-1.0300E+00	3.0807E-02	-5.0000E-01	4.9491E-01	6.4182E-03	-7.9014E-02	1.5683E-03	-4.5905E-04
-1.0300E+00	3.7181E-02	-5.0000E-01	5.1117E-01	6.3326E-03	-7.8176E-02	1.9534E-03	-4.2287E-04
-1.0300E+00	4.5326E-02	-5.0000E-01	5.3115E-01	6.3548E-03	-7.6251E-02	2.1824E-03	-3.0908E-04
-1.0300E+00	5.5241E-02	-5.0000E-01	5.5040E-01	6.2942E-03	-7.1261E-02	2.7106E-03	-1.1645E-04
-1.0300E+00	6.7635E-02	-5.0000E-01	5.7345E-01	6.2052E-03	-6.9502E-02	2.3601E-03	-1.4263E-04
-1.0300E+00	8.2153E-02	-5.0000E-01	5.9590E-01	6.1270E-03	-6.9918E-02	1.8487E-03	-2.4219E-04
-1.0300E+00	1.0021E-01	-5.0000E-01	6.0905E-01	5.7055E-03	-6.7596E-02	2.6932E-03	-9.0694E-05
-1.0300E+00	1.2181E-01	-5.0000E-01	6.4526E-01	5.3952E-03	-6.6193E-02	2.1423E-03	-2.1226E-04
-1.0300E+00	1.4837E-01	-5.0000E-01	6.7350E-01	5.1422E-03	-6.0814E-02	1.7842E-03	-2.1678E-04
-1.0300E+00	1.8059E-01	-5.0000E-01	7.0566E-01	4.5880E-03	-6.3707E-02	1.9910E-03	-6.6525E-05
-1.0300E+00	2.1990E-01	-5.0000E-01	7.4287E-01	4.0536E-03	-6.1402E-02	1.7390E-03	-1.6826E-04
-1.0300E+00	2.6806E-01	-5.0000E-01	7.8322E-01	3.2863E-03	-5.6950E-02	1.7388E-03	-7.4596E-05
-1.0300E+00	3.2613E-01	-5.0000E-01	8.3004E-01	2.4915E-03	-5.5376E-02	1.2876E-03	-6.4021E-05
-1.0300E+00	3.9731E-01	-5.0000E-01	8.7106E-01	1.5306E-03	-5.2109E-02	5.6033E-04	-2.1626E-05
-1.0300E+00	4.8371E-01	-5.0000E-01	9.1031E-01	4.9884E-04	-4.7837E-02	1.6176E-04	-2.1569E-05
-1.0300E+00	5.8853E-01	-5.0000E-01	9.2284E-01	5.8516E-05	-5.0680E-02	2.2868E-05	-8.1541E-07
-1.0300E+00	7.1671E-01	-5.0000E-01	9.2091E-01	1.4521E-05	-5.6519E-02	5.4421E-06	-2.4143E-07
-1.0300E+00	8.7252E-01	-5.0000E-01	9.2258E-01	9.1229E-06	-3.9203E-02	6.0842E-06	1.1624E-07
-1.0300E+00	1.0623E+00	-5.0000E-01	9.1920E-01	6.7813E-06	-5.6446E-02	3.7858E-06	-3.6100E-07

Table E.1-4 Hot-wire velocity measurements at X/T = -1.03, Z/T = -.50.

E.2 HOT-WIRE MEASUREMENTS IN PLANE C

Location of Profile		Data File Name	Table Numbers
X/T	Z/T		
-0.6667	0	E48470.RES	E. 2-1
-0.6667	-0.131	E49470.RES	E. 2-2
-0.6667	-0.25	E47470.RES	E. 2-3
-0.6667	-0.50	E45470.RES	E. 2-4
-0.6667	-0.75	E46470.RES	E. 2-5

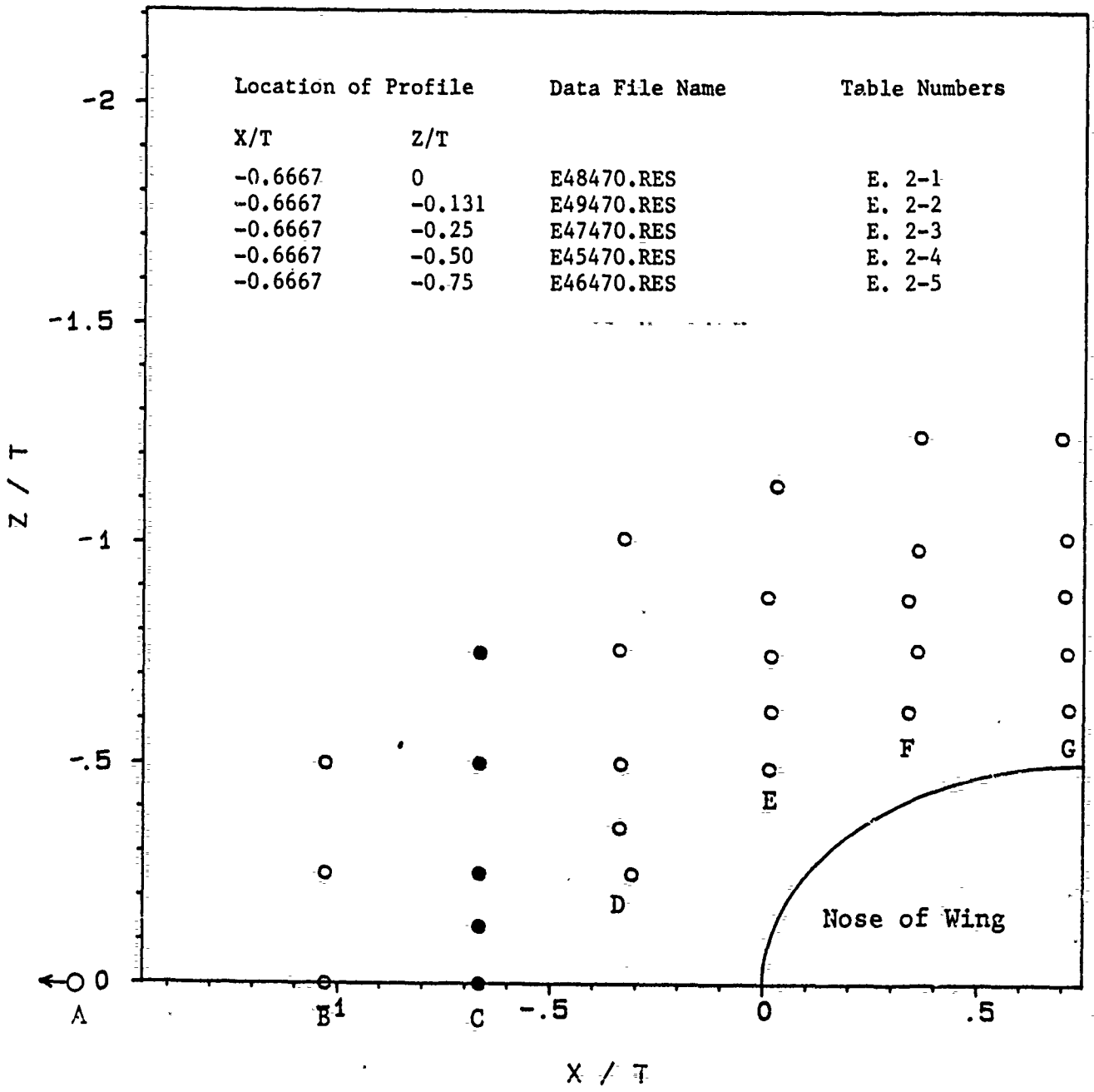


Figure E.2-1 Location of hot-wire profiles measured in plane C.

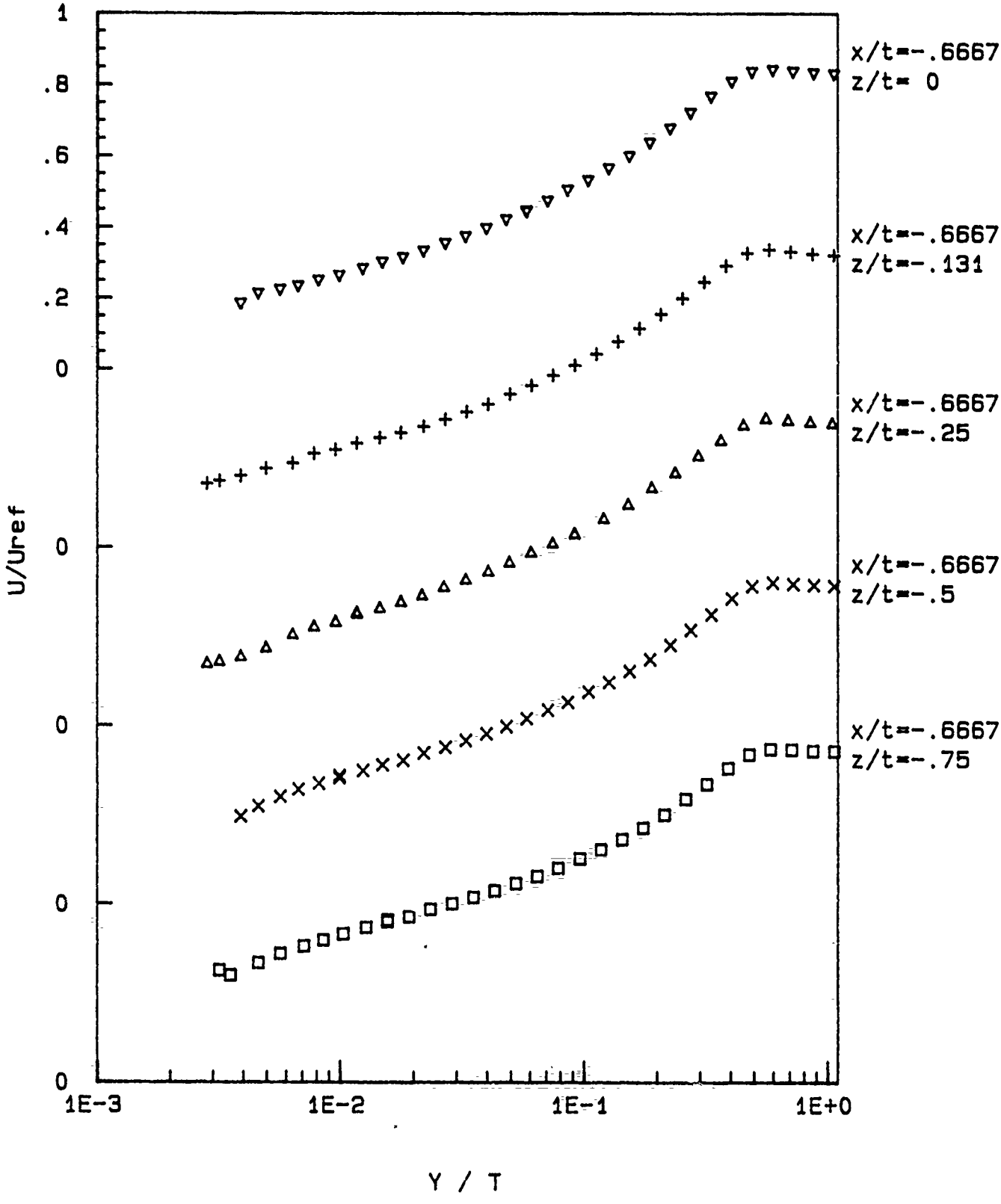


FIGURE E.2-2 Profiles of Mean-Velocity Component U, Plane C

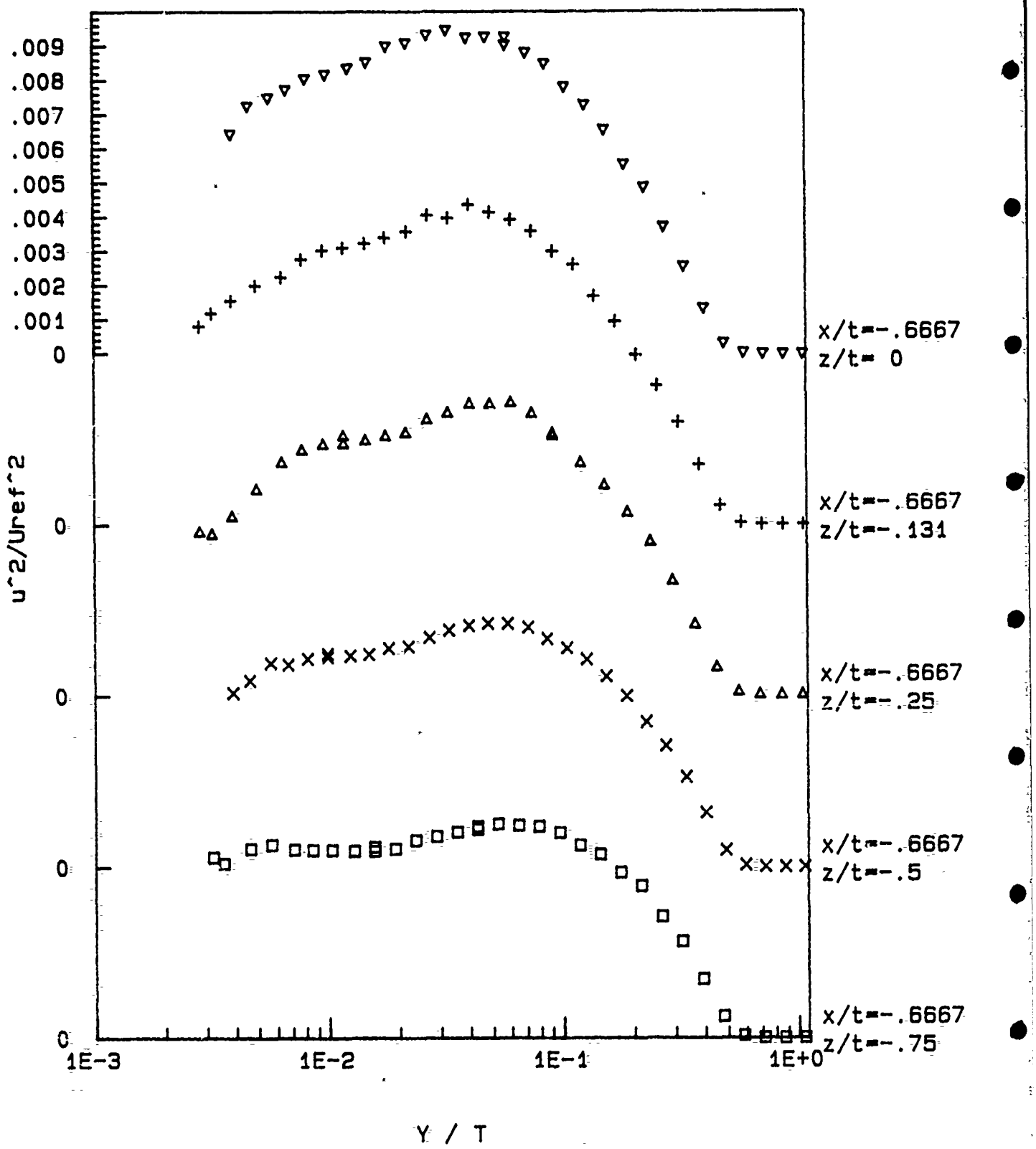


FIGURE E.2-3 Profiles of the U Component of Turbulence Normal Stress, Plane C

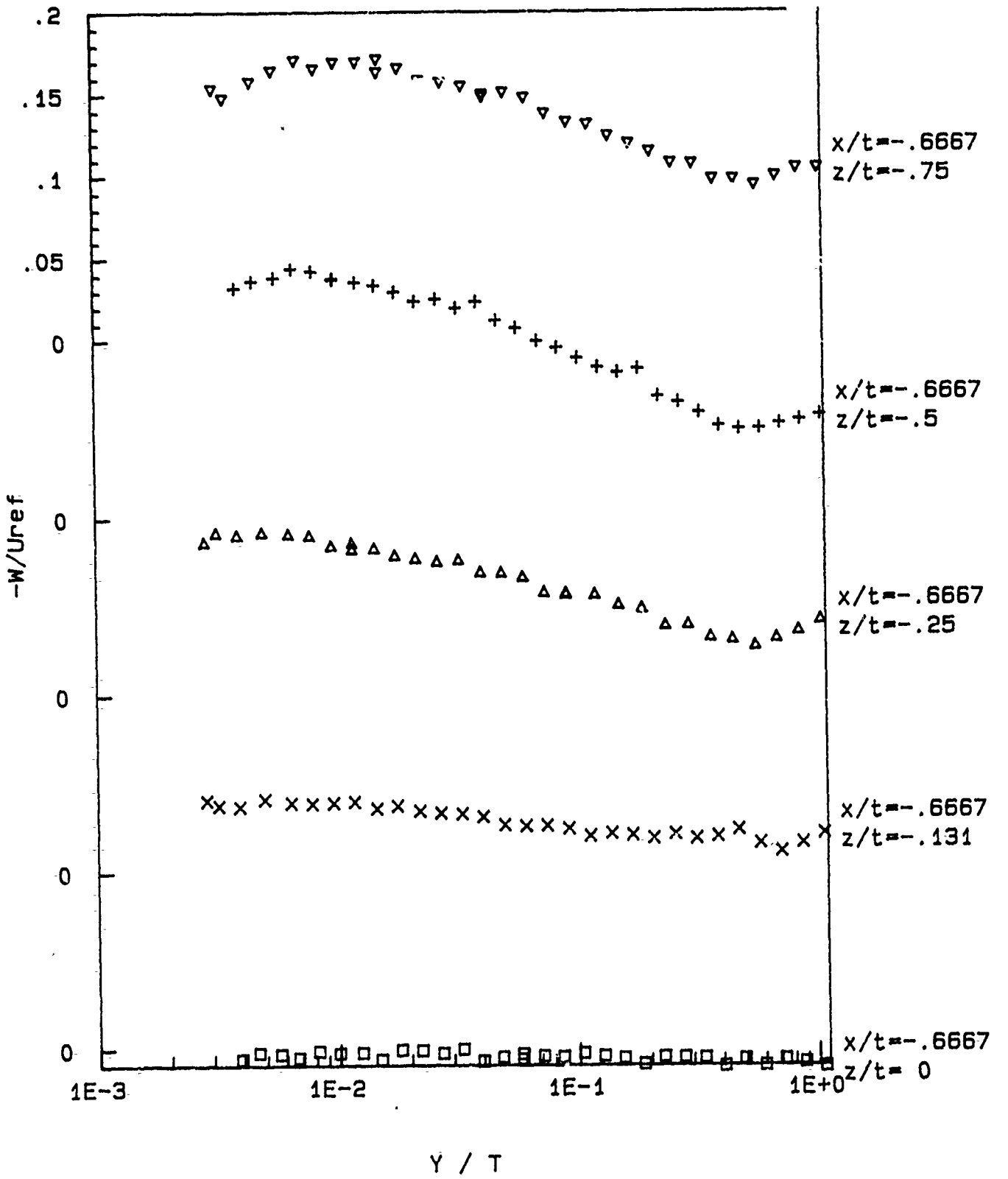


FIGURE E.2-4 Profiles of Mean-Velocity Component W, Plane C

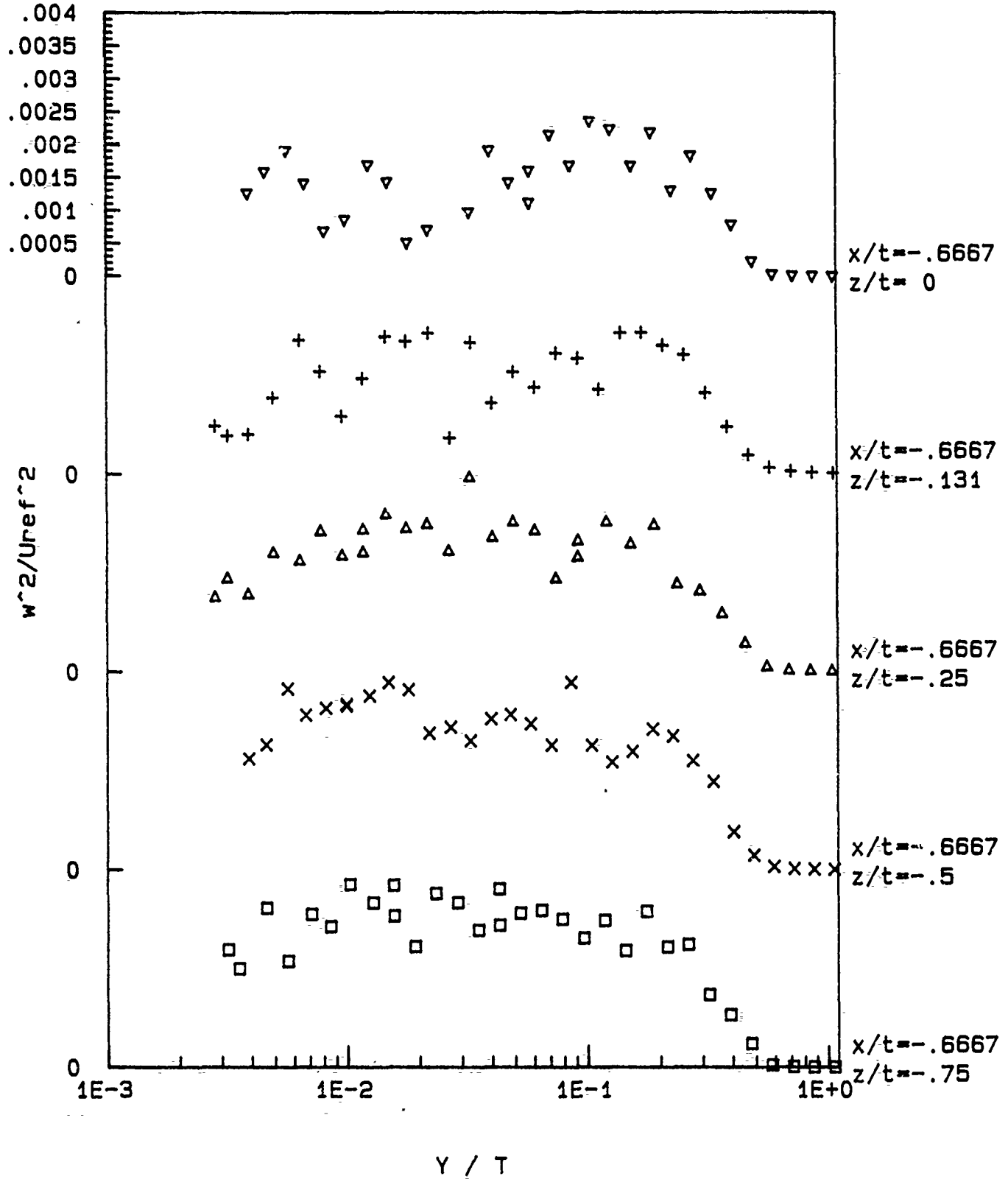


FIGURE E.2-5 Profiles of the W Component of Turbulence Normal Stress, Plane C

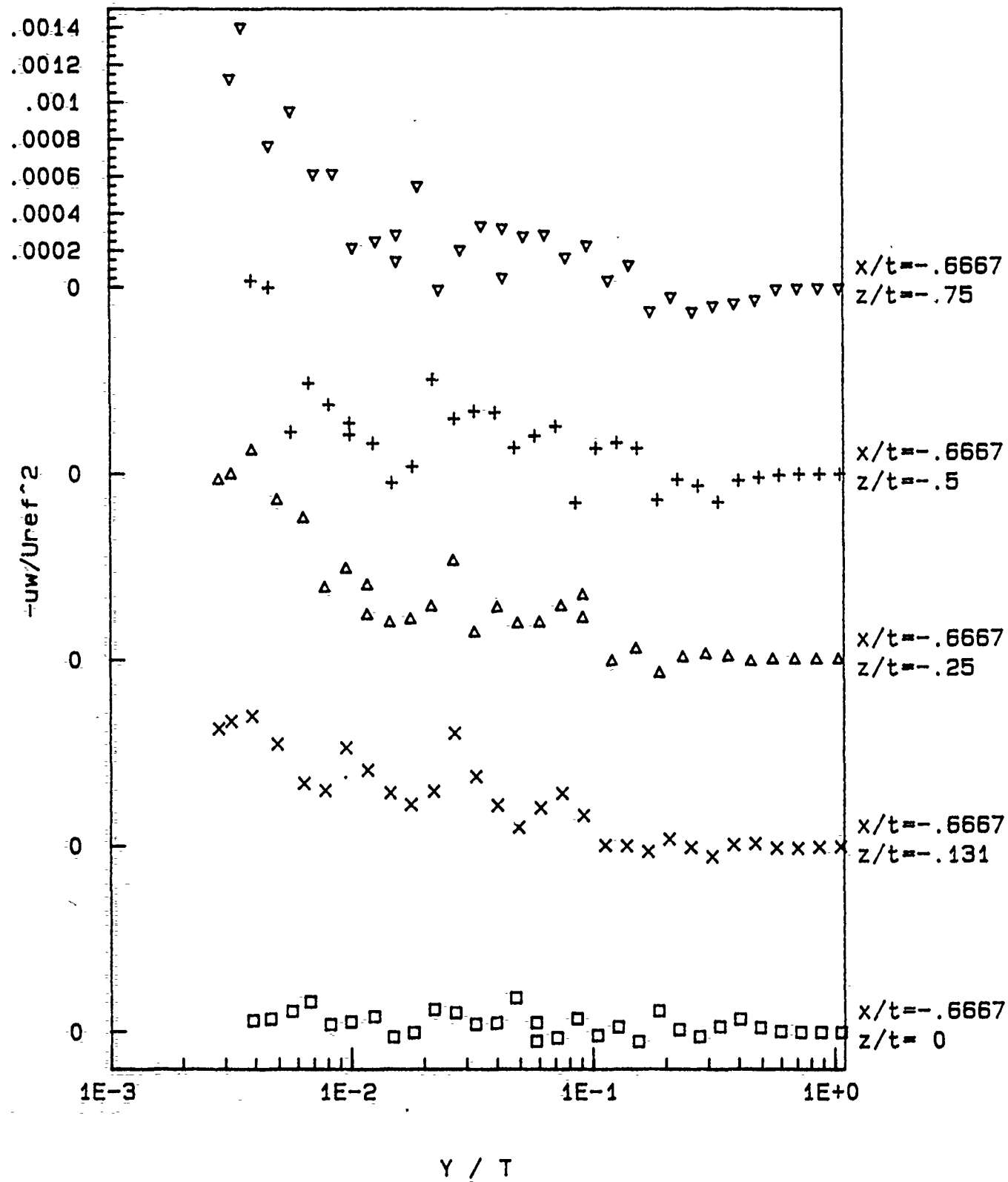


FIGURE E.2-6 Profiles of the UW Reynolds Shear Stress, Plane C

File E48470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.42035
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097803E-03
Estimated momentum thickness Reynolds number = 6819.435

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-6.6670E-01	3.0032E-03	0.0000E+00	1.8779E-01	6.4549E-03	6.1905E-03	1.2674E-03	-6.1682E-05
-6.6670E-01	4.6034E-03	0.0000E+00	2.1567E-01	7.2697E-03	2.1179E-03	1.5931E-03	-6.9424E-05
-6.6670E-01	5.6657E-03	0.0000E+00	2.2613E-01	7.5122E-03	3.1935E-03	1.9144E-03	-1.1079E-04
-6.6670E-01	6.7280E-03	0.0000E+00	2.3720E-01	7.7481E-03	5.2044E-03	1.4128E-03	-1.6304E-04
-6.6670E-01	8.1445E-03	0.0000E+00	2.5306E-01	8.0684E-03	1.2776E-03	6.8938E-04	-3.9884E-05
-6.6670E-01	9.9150E-03	0.0000E+00	2.6720E-01	8.1917E-03	2.5835E-03	8.6141E-04	-5.5592E-05
-6.6670E-01	1.2394E-02	0.0000E+00	2.8643E-01	8.3667E-03	2.1703E-03	1.6945E-03	-8.3508E-05
-6.6670E-01	1.4873E-02	0.0000E+00	3.0463E-01	8.5433E-03	6.5890E-03	1.4362E-03	2.7500E-05
-6.6670E-01	1.8059E-02	0.0000E+00	3.1785E-01	9.0122E-03	5.8288E-04	5.1334E-04	3.1014E-06
-6.6670E-01	2.1955E-02	0.0000E+00	3.3598E-01	9.1026E-03	9.6931E-04	7.0959E-04	-1.2230E-04
-6.6670E-01	2.6912E-02	0.0000E+00	3.5723E-01	9.3388E-03	2.7255E-03		-1.0411E-04
-6.6670E-01	3.2578E-02	0.0000E+00	3.7726E-01	9.4812E-03	1.6245E-04	9.8279E-04	-4.3205E-05
-6.6670E-01	3.9640E-02	0.0000E+00	3.9985E-01	9.2531E-03	7.3976E-03	1.9169E-03	-4.8783E-05
-6.6670E-01	4.7805E-02	0.0000E+00	4.2417E-01	9.2805E-03	5.2048E-03	1.4297E-03	-1.8440E-04
-6.6670E-01	5.8074E-02	0.0000E+00	4.4742E-01	9.0471E-03	3.2199E-03	1.6069E-03	5.0560E-05
-6.6670E-01	5.8074E-02	0.0000E+00	4.4915E-01	9.2788E-03	6.3127E-03	1.1212E-03	-5.0118E-05
-6.6670E-01	7.0822E-02	0.0000E+00	4.7712E-01	8.8227E-03	4.5879E-03	2.1582E-03	3.1407E-05
-6.6670E-01	8.5694E-02	0.0000E+00	5.0777E-01	8.4966E-03	4.9982E-03	1.6918E-03	-7.2397E-05
-6.6670E-01	1.0411E-01	0.0000E+00	5.3509E-01	7.8269E-03	2.7118E-03	2.3600E-03	1.7985E-05
-6.6670E-01	1.2642E-01	0.0000E+00	5.6765E-01	7.2994E-03	4.5918E-03	2.2358E-03	-2.6225E-05
-6.6670E-01	1.5333E-01	0.0000E+00	6.0204E-01	6.5745E-03	5.8208E-03	1.6815E-03	5.2714E-05
-6.6670E-01	1.8626E-01	0.0000E+00	6.4034E-01	5.5553E-03	9.3817E-03	2.1918E-03	-1.1377E-04
-6.6670E-01	2.2592E-01	0.0000E+00	6.8080E-01	4.8860E-03	5.0326E-03	1.3054E-03	-1.2882E-05
-6.6670E-01	2.7408E-01	0.0000E+00	7.2478E-01	3.7230E-03	5.2964E-03	1.8366E-03	2.5084E-05
-6.6670E-01	3.3286E-01	0.0000E+00	7.7038E-01	2.5640E-03	5.7901E-03	1.2638E-03	-2.9216E-05
-6.6670E-01	4.0368E-01	0.0000E+00	8.1170E-01	1.3401E-03	1.0600E-02	7.8688E-04	-6.9471E-05
-6.6670E-01	4.9009E-01	0.0000E+00	8.3935E-01	3.2159E-04	6.3282E-03	2.2611E-04	-2.3507E-05
-6.6670E-01	5.9455E-01	0.0000E+00	8.4456E-01	4.1268E-05	1.0472E-02	2.7845E-05	-2.2593E-06
-6.6670E-01	7.2132E-01	0.0000E+00	8.3979E-01	1.2882E-05	6.4356E-03	9.1074E-06	5.0886E-07
-6.6670E-01	8.7535E-01	0.0000E+00	8.3604E-01	6.7380E-06	8.4901E-03	6.0266E-06	5.0831E-07
-6.6670E-01	1.0623E+00	0.0000E+00	8.3349E-01	5.7971E-06	1.1132E-02	4.4682E-06	9.1291E-07

Table E.2-1 Hot-wire velocity measurements at X/T = -.667, Z/T = 0.

File E49470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.41614
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097929E-03
Estimated momentum thickness Reynolds number = 6818.597

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-6.6670E-01	2.8329E-03	-1.3100E-01	1.7999E-01	5.8103E-03	-4.3787E-02	7.2719E-04	-6.3058E-04
-6.6670E-01	3.1870E-03	-1.3100E-01	1.8791E-01	6.1830E-03	-4.0682E-02	5.7900E-04	-6.6977E-04
-6.6670E-01	3.8952E-03	-1.3100E-01	2.0194E-01	6.5491E-03	-3.9930E-02	5.9984E-04	-6.9790E-04
-6.6670E-01	4.9575E-03	-1.3100E-01	2.2263E-01	6.9926E-03	-4.4575E-02	1.1582E-03	-5.4643E-04
-6.6670E-01	6.3739E-03	-1.3100E-01	2.3732E-01	7.2353E-03	-4.2144E-02	2.0274E-03	-3.3517E-04
-6.6670E-01	7.7904E-03	-1.3100E-01	2.6427E-01	7.7635E-03	-4.1576E-02	1.5509E-03	-2.9659E-04
-6.6670E-01	9.5609E-03	-1.3100E-01	2.7505E-01	8.0239E-03	-4.2185E-02	8.7114E-04	-5.2752E-04
-6.6670E-01	1.1686E-02	-1.3100E-01	2.9323E-01	8.1006E-03	-4.2858E-02	1.4463E-03	-4.0762E-04
-6.6670E-01	1.4518E-02	-1.3100E-01	3.0871E-01	8.2233E-03	-3.8533E-02	2.0804E-03	-2.8347E-04
-6.6670E-01	1.7705E-02	-1.3100E-01	3.2326E-01	8.3900E-03	-4.0254E-02	2.0096E-03	-2.2124E-04
-6.6670E-01	2.1955E-02	-1.3100E-01	3.4059E-01	8.5667E-03	-3.7028E-02	2.1345E-03	-2.9383E-04
-6.6670E-01	2.6912E-02	-1.3100E-01	3.6037E-01	9.0509E-03	-3.5759E-02	5.4419E-04	-6.0618E-04
-6.6670E-01	3.2932E-02	-1.3100E-01	3.8210E-01	8.9717E-03	-3.5243E-02	1.9933E-03	-3.7271E-04
-6.6670E-01	4.0368E-02	-1.3100E-01	4.0362E-01	9.3618E-03	-3.3552E-02	1.0712E-03	-2.1676E-04
-6.6670E-01	4.9575E-02	-1.3100E-01	4.3194E-01	9.1414E-03	-2.8351E-02	1.5482E-03	-9.9233E-05
-6.6670E-01	6.0907E-02	-1.3100E-01	4.5618E-01	8.9167E-03	-2.7720E-02	1.3138E-03	-2.0432E-04
-6.6670E-01	7.4717E-02	-1.3100E-01	4.8469E-01	8.5756E-03	-2.8049E-02	1.8321E-03	-2.8192E-04
-6.6670E-01	9.1714E-02	-1.3100E-01	5.1238E-01	7.9846E-03	-2.6140E-02	1.7500E-03	-1.6363E-04
-6.6670E-01	1.1261E-01	-1.3100E-01	5.4467E-01	7.5972E-03	-2.1728E-02	1.2769E-03	-2.5573E-06
-6.6670E-01	1.3810E-01	-1.3100E-01	5.7964E-01	6.6660E-03	-2.3192E-02	2.1402E-03	1.6510E-06
-6.6670E-01	1.6926E-01	-1.3100E-01	6.1648E-01	5.9277E-03	-2.2250E-02	2.1456E-03	3.0980E-05
-6.6670E-01	2.0751E-01	-1.3100E-01	6.5686E-01	4.9574E-03	-2.0356E-02	1.9515E-03	-3.7257E-05
-6.6670E-01	2.5460E-01	-1.3100E-01	7.0047E-01	4.0556E-03	-2.2766E-02	1.8065E-03	8.2661E-06
-6.6670E-01	3.1232E-01	-1.3100E-01	7.4671E-01	2.9833E-03	-2.0048E-02	1.2248E-03	5.9305E-05
-6.6670E-01	3.8314E-01	-1.3100E-01	7.9286E-01	1.7467E-03	-2.1457E-02	7.1158E-04	-6.2193E-06
-6.6670E-01	4.6955E-01	-1.3100E-01	8.2809E-01	5.5274E-04	-2.5493E-02	2.8129E-04	-1.2942E-05
-6.6670E-01	5.7613E-01	-1.3100E-01	8.3735E-01	5.5358E-05	-1.7104E-02	9.0097E-05	1.1779E-05
-6.6670E-01	7.0644E-01	-1.3100E-01	8.3141E-01	1.2820E-05	-1.2194E-02	3.8704E-05	1.1814E-05
-6.6670E-01	8.6615E-01	-1.3100E-01	8.2557E-01	6.1544E-06	-1.7308E-02	2.3545E-05	5.8269E-06
-6.6670E-01	1.0623E+00	-1.3100E-01	8.2183E-01	4.6412E-06	-2.3030E-02	1.2918E-05	3.2514E-06

Table E.2-2 Hot-wire velocity measurements at X/T = -.667, Z/T = -.131.

File E47470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.29745
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.101486E-03
Estimated momentum thickness Reynolds number = 6794.97

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-6.6670E-01	2.8329E-03	-2.5000E-01	1.7312E-01	4.7741E-03	-9.2404E-02	1.1175E-03	-9.6455E-04
-6.6670E-01	3.1870E-03	-2.5000E-01	1.7902E-01	4.7021E-03	-9.8224E-02	1.4013E-03	-9.9373E-04
-6.6670E-01	3.8952E-03	-2.5000E-01	1.9254E-01	5.2244E-03	-9.6590E-02	1.1584E-03	-1.1229E-03
-6.6670E-01	4.9575E-03	-2.5000E-01	2.1710E-01	6.0142E-03	-9.8480E-02	1.7893E-03	-8.5418E-04
-6.6670E-01	6.3739E-03	-2.5000E-01	2.5485E-01	6.8015E-03	-9.7456E-02	1.6690E-03	-7.5695E-04
-6.6670E-01	7.7904E-03	-2.5000E-01	2.7655E-01	7.1602E-03	-9.6255E-02	2.1184E-03	-3.8277E-04
-6.6670E-01	9.5609E-03	-2.5000E-01	2.9013E-01	7.3285E-03	-9.0110E-02	1.7475E-03	-4.8633E-04
-6.6670E-01	1.1686E-02	-2.5000E-01	3.1624E-01	7.5772E-03	-9.1805E-02	2.1447E-03	-2.3675E-04
-6.6670E-01	1.1686E-02	-2.5000E-01	3.1251E-01	7.3496E-03	-8.8014E-02	1.7957E-03	-3.9731E-04
-6.6670E-01	1.4518E-02	-2.5000E-01	3.2850E-01	7.4418E-03	-8.8389E-02	2.3753E-03	-1.9612E-04
-6.6670E-01	1.7705E-02	-2.5000E-01	3.4628E-01	7.5735E-03	-8.4119E-02	2.1603E-03	-2.1283E-04
-6.6670E-01	2.1601E-02	-2.5000E-01	3.6420E-01	7.6581E-03	-8.2190E-02	2.2234E-03	-2.8262E-04
-6.6670E-01	2.6558E-02	-2.5000E-01	3.8837E-01	8.0525E-03	-8.0216E-02	1.8174E-03	-5.2853E-04
-6.6670E-01	3.2578E-02	-2.5000E-01	4.0870E-01	8.2495E-03	-8.1317E-02	2.9370E-03	-1.4372E-04
-6.6670E-01	4.0368E-02	-2.5000E-01	4.3203E-01	8.5109E-03	-7.3805E-02	2.0253E-03	-2.7690E-04
-6.6670E-01	4.9221E-02	-2.5000E-01	4.5714E-01	8.5035E-03	-7.3329E-02	2.2611E-03	-1.9105E-04
-6.6670E-01	6.0552E-02	-2.5000E-01	4.8531E-01	8.5466E-03	-7.0849E-02	2.1269E-03	-1.9632E-04
-6.6670E-01	7.4363E-02	-2.5000E-01	5.1151E-01	8.2294E-03	-6.1486E-02	1.3974E-03	-2.8470E-04
-6.6670E-01	9.1360E-02	-2.5000E-01	5.3698E-01	7.6461E-03	-6.0818E-02	1.7258E-03	-3.4438E-04
-6.6670E-01	9.1360E-02	-2.5000E-01	5.3758E-01	7.5756E-03	-6.0275E-02	1.9728E-03	-2.2202E-04
-6.6670E-01	1.2040E-01	-2.5000E-01	5.7951E-01	6.7862E-03	-6.0062E-02	2.2622E-03	1.2671E-05
-6.6670E-01	1.5156E-01	-2.5000E-01	6.1933E-01	6.1306E-03	-5.3984E-02	1.9269E-03	-5.4723E-05
-6.6670E-01	1.8980E-01	-2.5000E-01	6.6707E-01	5.3241E-03	-5.1694E-02	2.2115E-03	7.5276E-05
-6.6670E-01	2.3690E-01	-2.5000E-01	7.0895E-01	4.4716E-03	-4.1285E-02	1.3178E-03	-1.0055E-05
-6.6670E-01	2.9462E-01	-2.5000E-01	7.5605E-01	3.3341E-03	-4.1811E-02	1.2104E-03	-2.6086E-05
-6.6670E-01	3.6509E-01	-2.5000E-01	7.9952E-01	2.0581E-03	-3.4288E-02	8.7102E-04	-1.4403E-05
-6.6670E-01	4.5184E-01	-2.5000E-01	8.4273E-01	8.0158E-04	-3.2743E-02	4.1970E-04	1.1396E-05
-6.6670E-01	5.5807E-01	-2.5000E-01	8.6082E-01	6.7785E-05	-2.8789E-02	6.1215E-05	8.8337E-07
-6.6670E-01	6.8874E-01	-2.5000E-01	8.5614E-01	1.3423E-05	-3.3548E-02	9.7238E-06	1.3803E-06
-6.6670E-01	8.4880E-01	-2.5000E-01	8.5117E-01	4.9929E-06	-3.7965E-02	3.6752E-06	5.0501E-07
-6.6670E-01	1.0450E+00	-2.5000E-01	8.4778E-01	3.3415E-06	-4.4559E-02	3.4002E-07	-4.8101E-07

Table E.2-3 Hot-wire velocity measurements at X/T = -.667, Z/T = -.25.

File E45470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.90719
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.083405E-03
Estimated momentum thickness Reynolds number = 6916.125

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-6.6670E-01	3.8952E-03	-5.0000E-01	2.4617E-01	5.0909E-03	-1.4005E-01	1.6819E-03	-1.0370E-03
-6.6670E-01	4.6034E-03	-5.0000E-01	2.7534E-01	5.4480E-03	-1.4431E-01	1.8930E-03	-9.9985E-04
-6.6670E-01	5.6657E-03	-5.0000E-01	3.0138E-01	5.9678E-03	-1.4628E-01	2.7419E-03	-2.2306E-04
-6.6670E-01	6.7280E-03	-5.0000E-01	3.2268E-01	5.9217E-03	-1.5190E-01	2.3388E-03	-4.8794E-04
-6.6670E-01	8.1445E-03	-5.0000E-01	3.3934E-01	6.0904E-03	-1.5018E-01	2.4433E-03	-3.7089E-04
-6.6670E-01	9.9150E-03	-5.0000E-01	3.6082E-01	6.2362E-03	-1.4557E-01	2.4777E-03	-2.7340E-04
-6.6670E-01	9.9150E-03	-5.0000E-01	3.5484E-01	6.1407E-03	-1.4495E-01	2.5016E-03	-2.1080E-04
-6.6670E-01	1.2394E-02	-5.0000E-01	3.7463E-01	6.1770E-03	-1.4348E-01	2.6316E-03	-1.6333E-04
-6.6670E-01	1.4873E-02	-5.0000E-01	3.9106E-01	6.2191E-03	-1.4136E-01	2.8368E-03	4.9336E-05
-6.6670E-01	1.8059E-02	-5.0000E-01	4.0419E-01	6.4002E-03	-1.3743E-01	2.7245E-03	-3.8223E-05
-6.6670E-01	2.1955E-02	-5.0000E-01	4.2418E-01	6.4432E-03	-1.3157E-01	2.0630E-03	-5.0789E-04
-6.6670E-01	2.6912E-02	-5.0000E-01	4.4028E-01	6.7172E-03	-1.3289E-01	2.1567E-03	-2.9561E-04
-6.6670E-01	3.2579E-02	-5.0000E-01	4.5978E-01	6.9291E-03	-1.2734E-01	1.9483E-03	-3.3702E-04
-6.6670E-01	3.9660E-02	-5.0000E-01	4.7898E-01	7.0606E-03	-1.3132E-01	2.2815E-03	-3.2883E-04
-6.6670E-01	4.7805E-02	-5.0000E-01	4.9910E-01	7.1236E-03	-1.1982E-01	2.3480E-03	-1.3849E-04
-6.6670E-01	5.8074E-02	-5.0000E-01	5.2134E-01	7.1178E-03	-1.1521E-01	2.2086E-03	-2.0185E-04
-6.6670E-01	7.0822E-02	-5.0000E-01	5.4525E-01	7.0044E-03	-1.0734E-01	1.8821E-03	-2.5475E-04
-6.6670E-01	8.5694E-02	-5.0000E-01	5.6768E-01	6.6709E-03	-1.0334E-01	2.8394E-03	1.5761E-04
-6.6670E-01	1.0411E-01	-5.0000E-01	5.9710E-01	6.4039E-03	-9.6943E-02	1.8780E-03	-1.3712E-04
-6.6670E-01	1.2642E-01	-5.0000E-01	6.2323E-01	6.0678E-03	-9.1204E-02	1.6258E-03	-1.6499E-04
-6.6670E-01	1.5333E-01	-5.0000E-01	6.5461E-01	5.5738E-03	-8.8237E-02	1.7874E-03	-1.3608E-04
-6.6670E-01	1.8626E-01	-5.0000E-01	6.8834E-01	4.9895E-03	-9.0551E-02	2.1285E-03	1.4085E-04
-6.6670E-01	2.2592E-01	-5.0000E-01	7.2814E-01	4.2304E-03	-7.3573E-02	2.0214E-03	3.0348E-05
-6.6670E-01	2.7409E-01	-5.0000E-01	7.7087E-01	3.5368E-03	-7.0027E-02	1.6485E-03	6.5352E-05
-6.6670E-01	3.3286E-01	-5.0000E-01	8.1398E-01	2.6210E-03	-6.3638E-02	1.3295E-03	1.5287E-04
-6.6670E-01	4.0368E-01	-5.0000E-01	8.5860E-01	1.5742E-03	-5.5691E-02	5.6832E-04	3.5416E-05
-6.6670E-01	4.9009E-01	-5.0000E-01	8.9319E-01	4.8655E-04	-5.3611E-02	2.1303E-04	1.9575E-05
-6.6670E-01	5.9455E-01	-5.0000E-01	9.0335E-01	5.3373E-05	-5.3754E-02	3.8792E-05	7.5949E-06
-6.6670E-01	7.2132E-01	-5.0000E-01	8.9947E-01	1.1217E-05	-5.7077E-02	1.0086E-05	1.2911E-06
-6.6670E-01	8.7535E-01	-5.0000E-01	8.9652E-01	5.6342E-06	-5.9244E-02	4.5859E-06	9.5320E-08
-6.6670E-01	1.0620E+00	-5.0000E-01	8.9431E-01	4.5207E-06	-6.2122E-02	1.3945E-06	-3.2590E-07

Table E.2-4 Hot-wire velocity measurements at X/T = -.667, Z/T = -.50.

File E46470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.92023
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.083024E-03
Estimated momentum thickness Reynolds number = 6918.71

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-6.6670E-01	3.1870E-03	-7.5000E-01	3.1421E-01	5.2837E-03	-1.5440E-01	1.7814E-03	-1.1287E-03
-6.6670E-01	3.5411E-03	-7.5000E-01	3.0026E-01	5.1031E-03	-1.4856E-01	1.4930E-03	-1.4041E-03
-6.6670E-01	4.6034E-03	-7.5000E-01	3.3484E-01	5.5257E-03	-1.5866E-01	2.4164E-03	-7.6521E-04
-6.6670E-01	5.6657E-03	-7.5000E-01	3.6080E-01	5.6454E-03	-1.6517E-01	1.6056E-03	-9.5322E-04
-6.6670E-01	7.0822E-03	-7.5000E-01	3.8221E-01	5.5068E-03	-1.7153E-01	2.3207E-03	-6.1389E-04
-6.6670E-01	8.4986E-03	-7.5000E-01	3.9913E-01	5.4922E-03	-1.6626E-01	2.1327E-03	-6.1466E-04
-6.6670E-01	1.0269E-02	-7.5000E-01	4.1630E-01	5.4963E-03	-1.7000E-01	2.7727E-03	-2.1770E-04
-6.6670E-01	1.2748E-02	-7.5000E-01	4.3463E-01	5.4642E-03	-1.7043E-01	2.4925E-03	-2.5335E-04
-6.6670E-01	1.5581E-02	-7.5000E-01	4.5060E-01	5.4667E-03	-1.7191E-01	2.7604E-03	-1.4545E-04
-6.6670E-01	1.5581E-02	-7.5000E-01	4.5555E-01	5.5793E-03	-1.6409E-01	2.2914E-03	-2.8865E-04
-6.6670E-01	1.9122E-02	-7.5000E-01	4.6519E-01	5.5271E-03	-1.6637E-01	1.8278E-03	-5.5034E-04
-6.6670E-01	2.3371E-02	-7.5000E-01	4.8576E-01	5.7821E-03	-1.5907E-01	2.6351E-03	7.8448E-06
-6.6670E-01	2.8683E-02	-7.5000E-01	5.0154E-01	5.8936E-03	-1.5780E-01	2.4936E-03	-2.0602E-04
-6.6670E-01	3.5057E-02	-7.5000E-01	5.1890E-01	6.0150E-03	-1.5523E-01	2.0757E-03	-3.3620E-04
-6.6670E-01	4.2847E-02	-7.5000E-01	5.3711E-01	6.0959E-03	-1.5053E-01	2.1501E-03	-3.2065E-04
-6.6670E-01	4.2847E-02	-7.5000E-01	5.3774E-01	6.1770E-03	-1.4908E-01	2.7042E-03	-5.5537E-05
-6.6670E-01	5.2408E-02	-7.5000E-01	5.5802E-01	6.2528E-03	-1.5165E-01	2.3385E-03	-2.7977E-04
-6.6670E-01	6.4093E-02	-7.5000E-01	5.7766E-01	6.2107E-03	-1.4829E-01	2.3777E-03	-2.8774E-04
-6.6670E-01	7.8258E-02	-7.5000E-01	6.0111E-01	6.1794E-03	-1.3890E-01	2.2442E-03	-1.6496E-04
-6.6670E-01	9.5963E-02	-7.5000E-01	6.2756E-01	6.0037E-03	-1.3332E-01	1.9554E-03	-2.3102E-04
-6.6670E-01	1.1721E-01	-7.5000E-01	6.5279E-01	5.6227E-03	-1.3196E-01	2.2253E-03	-4.0807E-05
-6.6670E-01	1.4306E-01	-7.5000E-01	6.8178E-01	5.3623E-03	-1.2492E-01	1.7637E-03	-1.2355E-04
-6.6670E-01	1.7493E-01	-7.5000E-01	7.1455E-01	4.8288E-03	-1.2028E-01	2.3645E-03	1.2571E-04
-6.6670E-01	2.1388E-01	-7.5000E-01	7.5156E-01	4.4381E-03	-1.1538E-01	1.8204E-03	4.8277E-05
-6.6670E-01	2.6133E-01	-7.5000E-01	7.9493E-01	3.5404E-03	-1.0839E-01	1.8597E-03	1.2820E-04
-6.6670E-01	3.1905E-01	-7.5000E-01	8.3660E-01	2.8122E-03	-1.0787E-01	1.0967E-03	9.7567E-05
-6.6670E-01	3.8987E-01	-7.5000E-01	8.8163E-01	1.7166E-03	-9.8597E-02	7.9171E-04	8.3139E-05
-6.6670E-01	4.7663E-01	-7.5000E-01	9.2014E-01	6.2665E-04	-9.8400E-02	3.5338E-04	6.4083E-05
-6.6670E-01	5.8215E-01	-7.5000E-01	9.3537E-01	7.1758E-05	-9.4696E-02	2.6180E-05	6.9444E-06
-6.6670E-01	7.1140E-01	-7.5000E-01	9.3350E-01	1.2269E-05	-1.0027E-01	7.0454E-06	7.6724E-07
-6.6670E-01	8.6933E-01	-7.5000E-01	9.3021E-01	5.8037E-06	-1.0499E-01	2.7032E-06	-7.5180E-07
-6.6670E-01	1.0623E+00	-7.5000E-01	9.2941E-01	3.7273E-06	-1.0492E-01	3.4485E-06	5.3668E-08

Table E.2-5 Hot-wire velocity measurements at X/T = -.667, Z/T = -.75.

E.3 HOT-WIRE MEASUREMENTS IN PLANE D

Location of Profile		Data File Name	Table Numbers
X/T	Z/T		
-0.338	-0.25	E50470.RES	E. 3-1
-0.338	-0.355	E51470.RES	E. 3-2
-0.336	-0.5	E71470.RES	E. 3-3
-0.340	-0.758	E72470.RES	E. 3-4
-0.329	-1.011	E73470.RES	E. 3-5

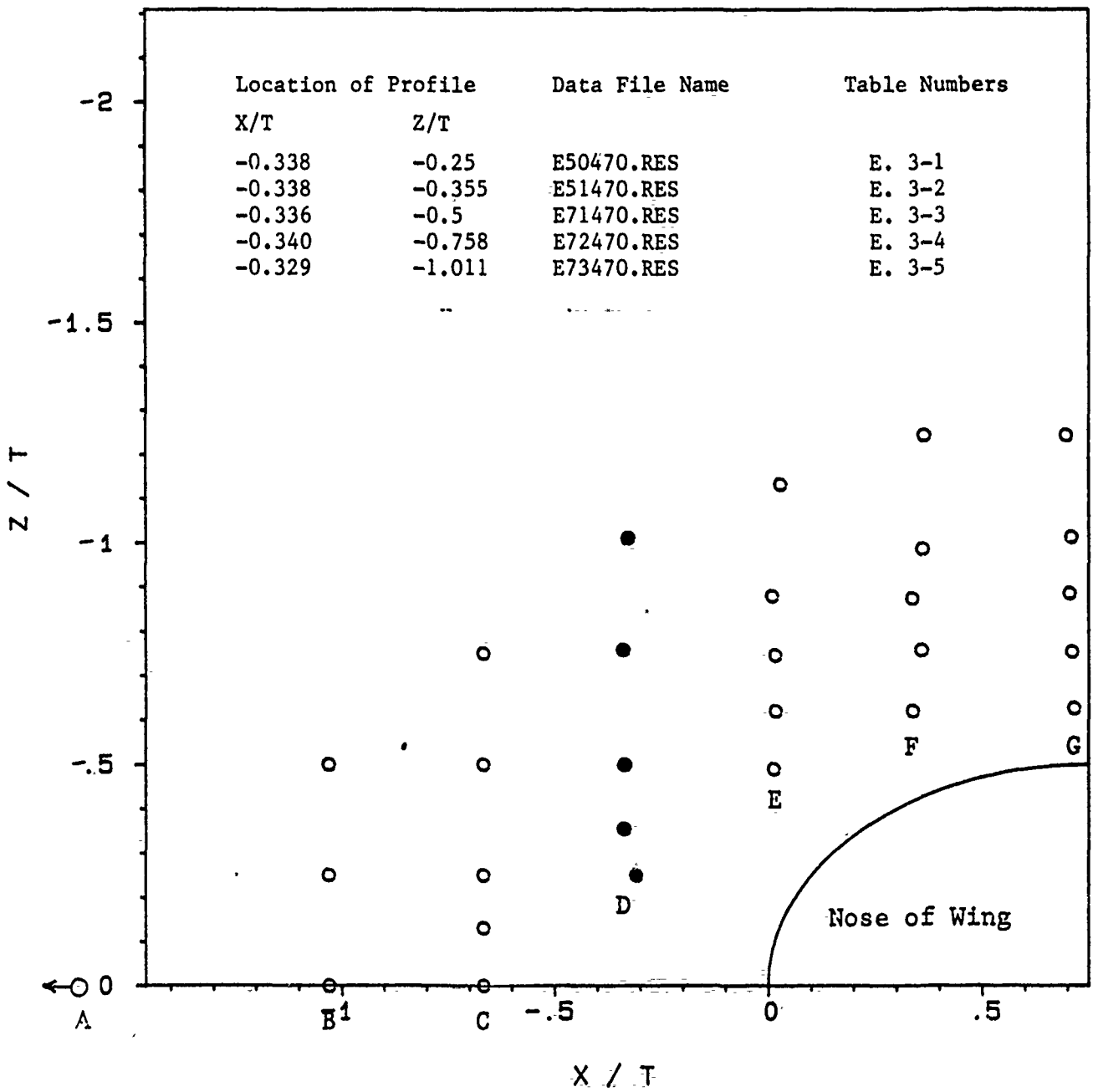


Figure E.3-1 Location of hot-wire profiles measured in plane D.

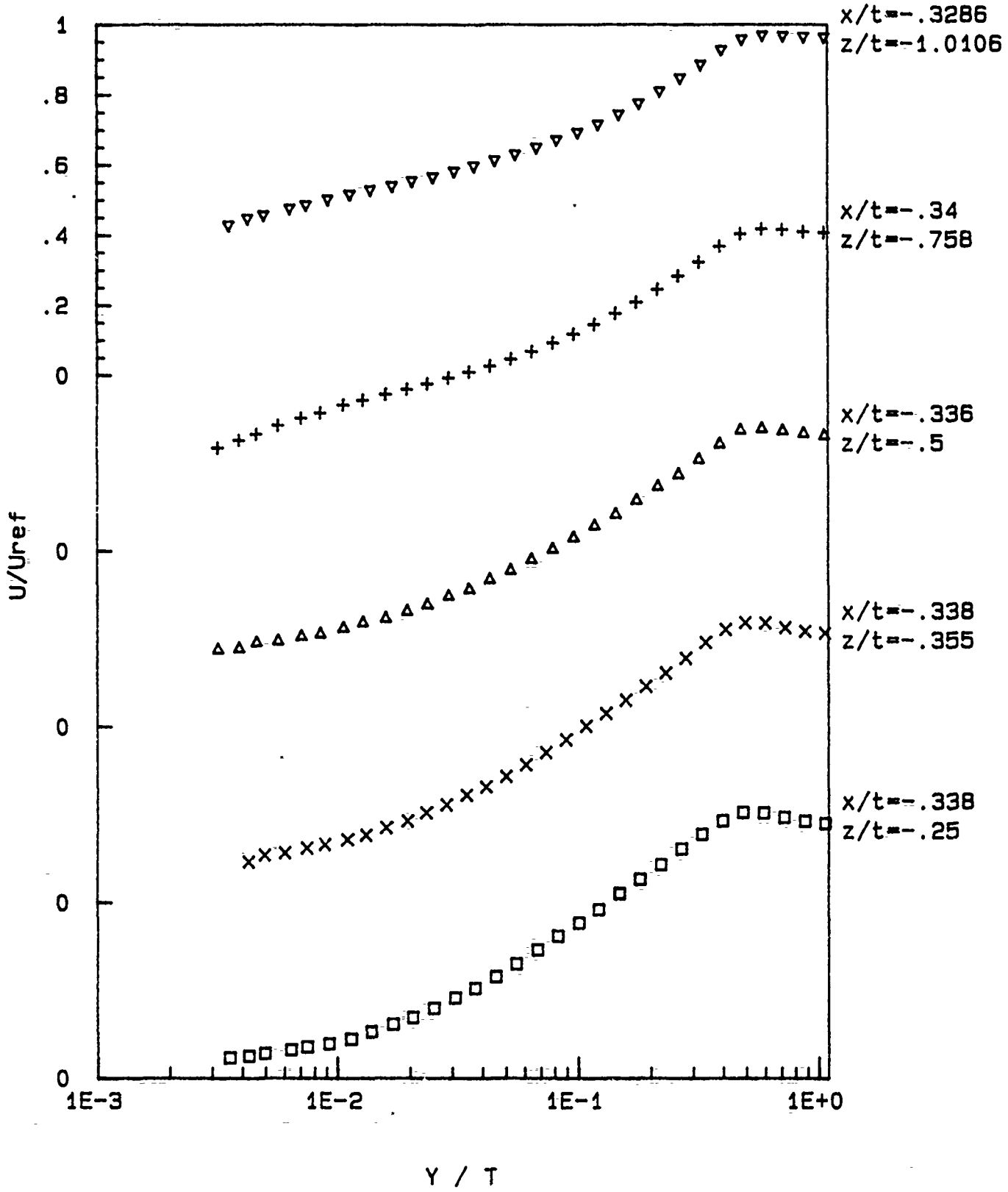


FIGURE E.3-2 Profiles of Mean-Velocity Component U, Plane D

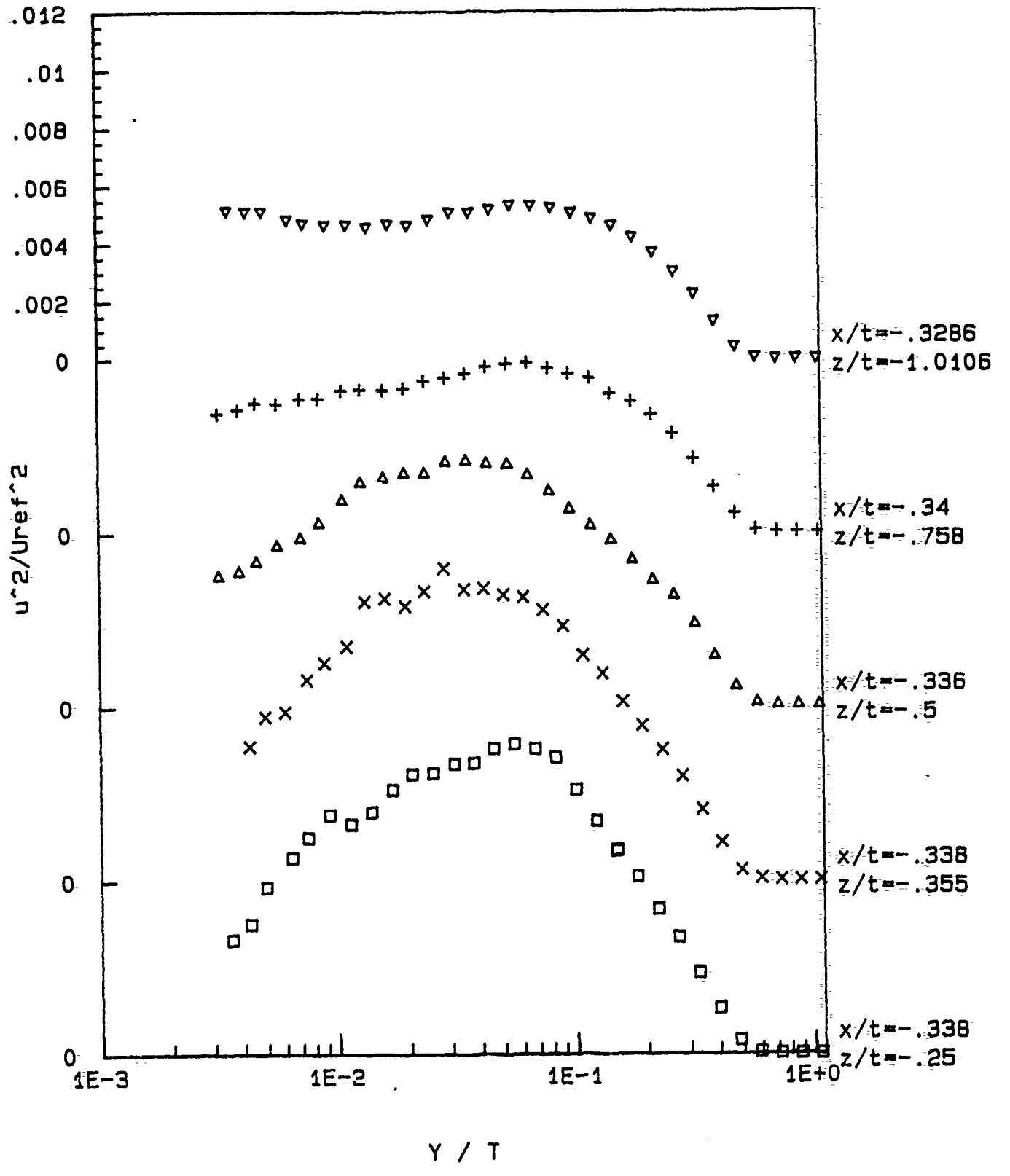


FIGURE E.3-3 Profiles of the U Component of Turbulence Normal Stress, Plane D

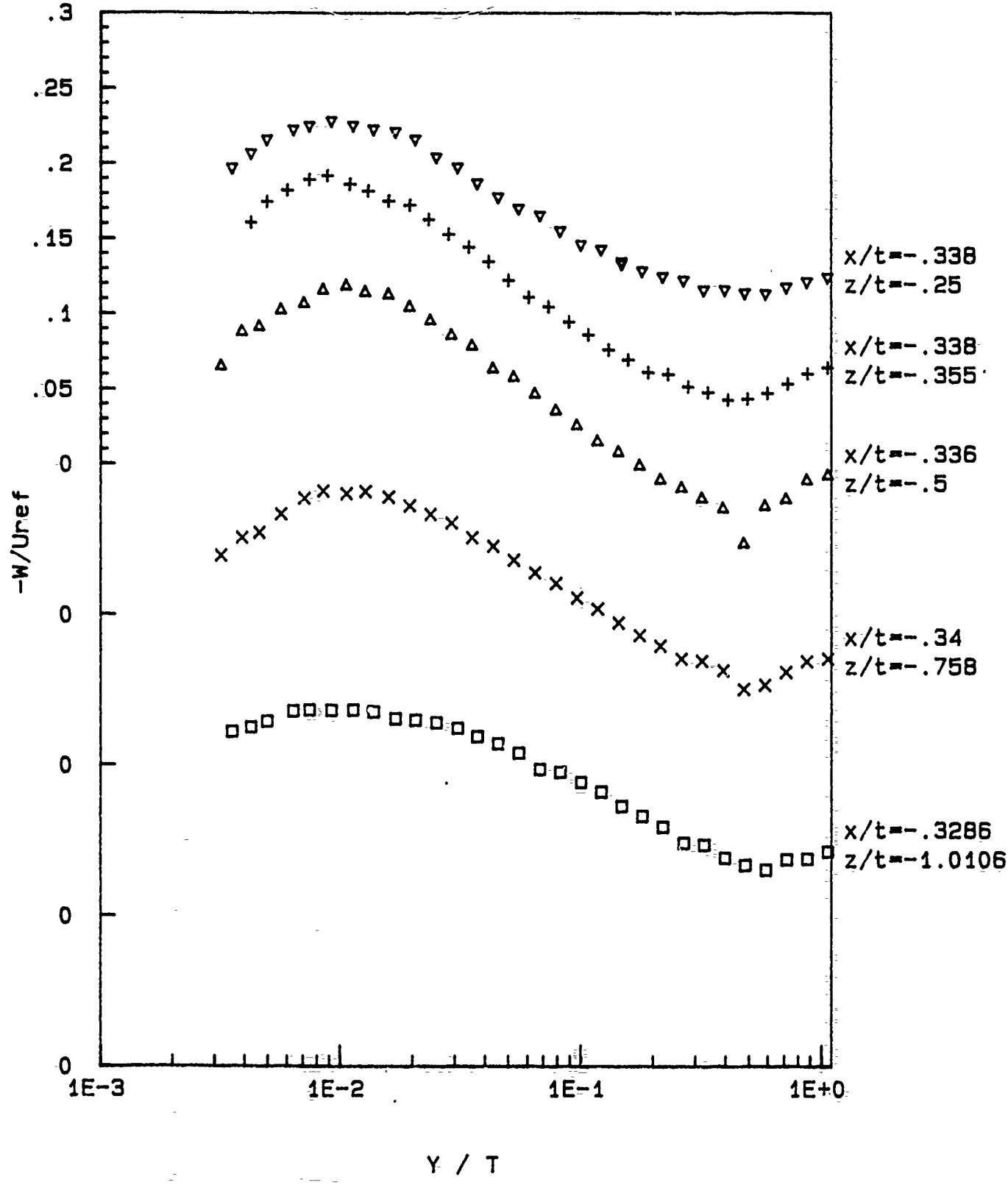


FIGURE E.3-4 Profiles of Mean-Velocity Component W, Plane D

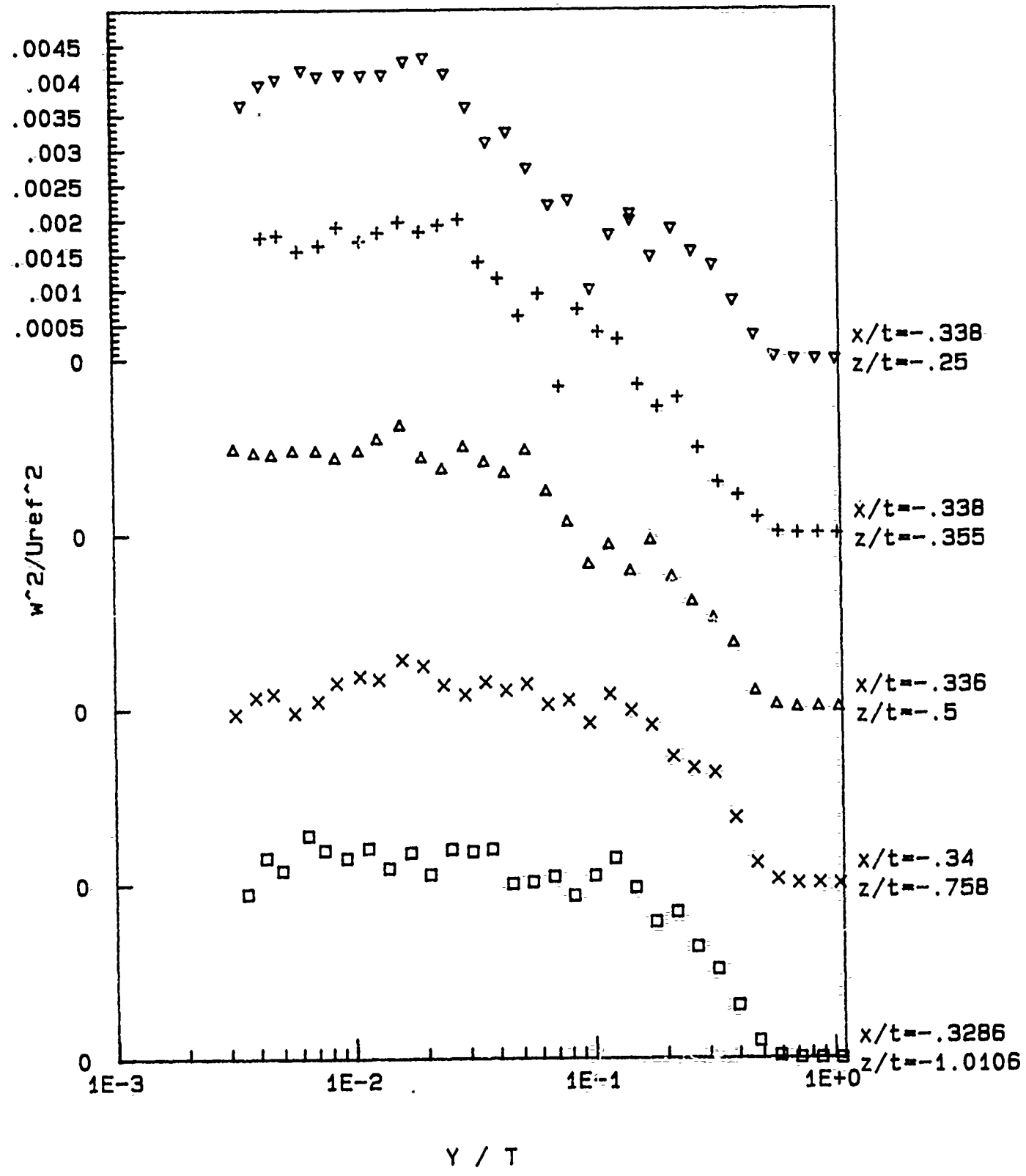


FIGURE E.3-5 Profiles of the W Component of Turbulence Normal Stress, Plane D

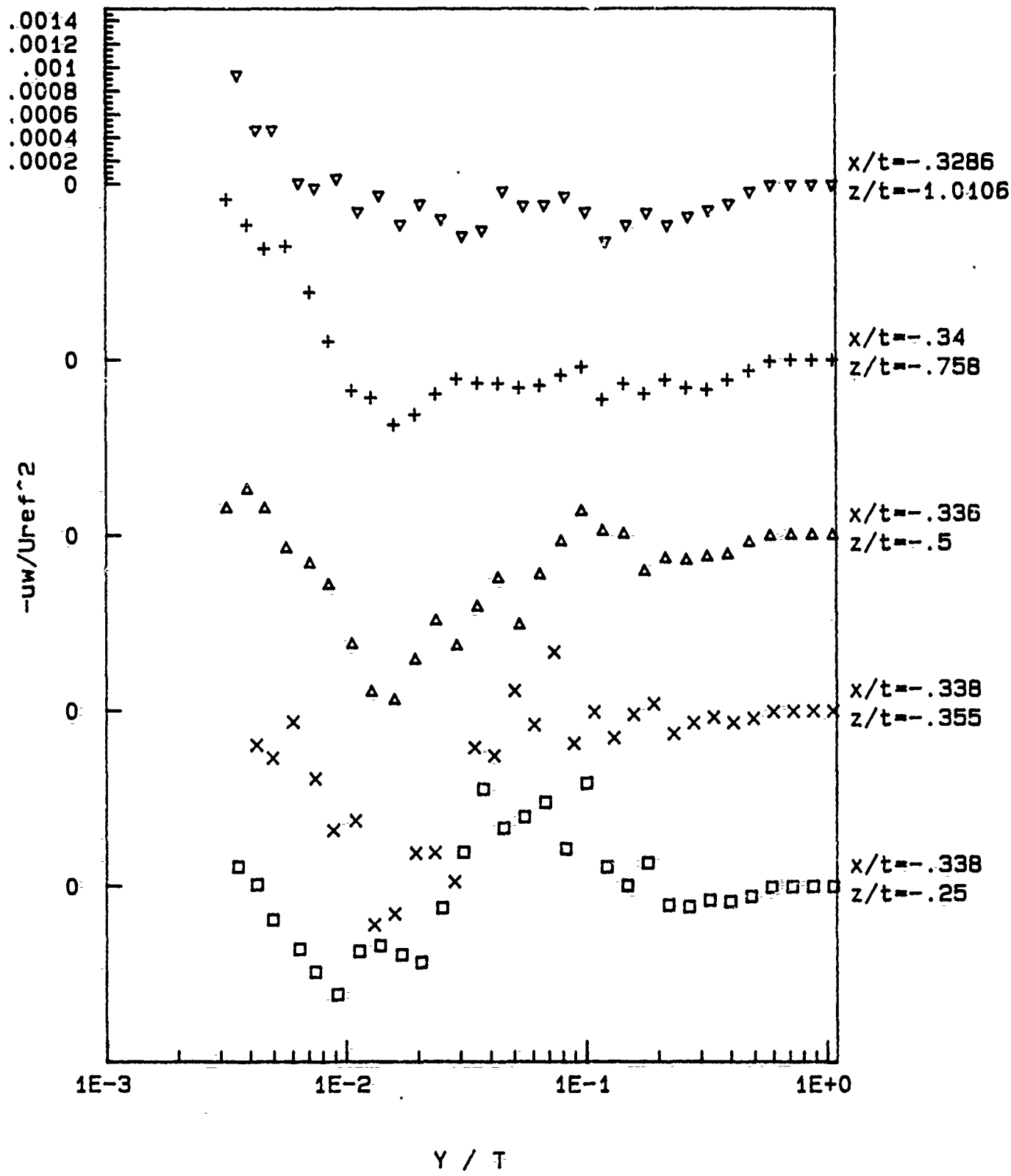


FIGURE E.3-6 Profiles of the UW Reynolds Shear Stress, Plane D

File E50470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.8039
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.116481E-03
Estimated momentum thickness Reynolds number = 6696.506

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-3.3800E-01	3.5411E-03	-2.5000E-01	5.9520E-02	3.9632E-03	-1.9718E-01	3.6592E-03	-1.6685E-04
-3.3800E-01	4.2493E-03	-2.5000E-01	6.3368E-02	4.5075E-03	-2.0696E-01	3.9452E-03	-1.3751E-05
-3.3800E-01	4.9575E-03	-2.5000E-01	7.0980E-02	5.7761E-03	-2.1616E-01	4.0249E-03	2.8749E-04
-3.3800E-01	6.3739E-03	-2.5000E-01	8.1618E-02	6.7922E-03	-2.2280E-01	4.1574E-03	5.3730E-04
-3.3800E-01	7.4363E-03	-2.5000E-01	8.9362E-02	7.4785E-03	-2.2539E-01	4.0698E-03	7.3385E-04
-3.3800E-01	9.2068E-03	-2.5000E-01	9.8734E-02	8.2714E-03	-2.2880E-01	4.0933E-03	9.2626E-04
-3.3800E-01	1.1331E-02	-2.5000E-01	1.1186E-01	7.9406E-03	-2.2553E-01	4.0788E-03	5.5337E-04
-3.3800E-01	1.3810E-02	-2.5000E-01	1.3301E-01	8.3670E-03	-2.2311E-01	4.0886E-03	5.0530E-04
-3.3800E-01	1.6997E-02	-2.5000E-01	1.5451E-01	9.1394E-03	-2.2144E-01	4.2760E-03	5.8424E-04
-3.3800E-01	2.0538E-02	-2.5000E-01	1.7387E-01	9.6692E-03	-2.1632E-01	4.3264E-03	6.4974E-04
-3.3800E-01	2.5142E-02	-2.5000E-01	1.9964E-01	9.7088E-03	-2.0442E-01	4.0948E-03	1.8433E-04
-3.3800E-01	3.0807E-02	-2.5000E-01	2.2974E-01	1.0034E-02	-1.9759E-01	3.6206E-03	-2.9186E-04
-3.3800E-01	3.7181E-02	-2.5000E-01	2.5668E-01	1.0055E-02	-1.8708E-01	3.1085E-03	-8.2920E-04
-3.3800E-01	4.5326E-02	-2.5000E-01	2.8990E-01	1.0556E-02	-1.7783E-01	3.2621E-03	-4.9476E-04
-3.3800E-01	5.5241E-02	-2.5000E-01	3.2518E-01	1.0713E-02	-1.7022E-01	2.7393E-03	-5.9257E-04
-3.3800E-01	6.7635E-02	-2.5000E-01	3.6615E-01	1.0547E-02	-1.6565E-01	2.2152E-03	-7.1694E-04
-3.3800E-01	8.2153E-02	-2.5000E-01	4.0568E-01	1.0236E-02	-1.5549E-01	2.2833E-03	-3.2025E-04
-3.3800E-01	1.0021E-01	-2.5000E-01	4.4269E-01	9.1212E-03	-1.4613E-01	1.0074E-03	-8.8049E-04
-3.3800E-01	1.2181E-01	-2.5000E-01	4.8108E-01	8.0428E-03	-1.4308E-01	1.7904E-03	-1.6346E-04
-3.3800E-01	1.4837E-01	-2.5000E-01	5.2738E-01	7.0232E-03	-1.3491E-01	1.9994E-03	-6.1514E-06
-3.3800E-01	1.4837E-01	-2.5000E-01	5.2575E-01	7.0441E-03	-1.3341E-01	2.0907E-03	-4.9515E-06
-3.3800E-01	1.8059E-01	-2.5000E-01	5.6699E-01	6.1155E-03	-1.2859E-01	1.4750E-03	-1.9810E-04
-3.3800E-01	2.1990E-01	-2.5000E-01	6.0854E-01	4.9959E-03	-1.2498E-01	1.8776E-03	1.6131E-04
-3.3800E-01	2.6806E-01	-2.5000E-01	6.5297E-01	4.0200E-03	-1.2237E-01	1.5471E-03	1.7648E-04
-3.3800E-01	3.2613E-01	-2.5000E-01	6.9564E-01	2.7953E-03	-1.1601E-01	1.3497E-03	1.1941E-04
-3.3800E-01	3.9731E-01	-2.5000E-01	7.3303E-01	1.5781E-03	-1.1607E-01	8.4175E-04	1.2984E-04
-3.3800E-01	4.8336E-01	-2.5000E-01	7.5685E-01	4.6132E-04	-1.1407E-01	3.5213E-04	8.5826E-05
-3.3800E-01	5.8853E-01	-2.5000E-01	7.5548E-01	5.5410E-05	-1.1344E-01	4.3578E-05	8.9252E-06
-3.3800E-01	7.1671E-01	-2.5000E-01	7.4259E-01	1.4513E-05	-1.1778E-01	9.7366E-06	4.4637E-06
-3.3800E-01	8.7252E-01	-2.5000E-01	7.3198E-01	5.0406E-06	-1.2150E-01	3.9202E-06	4.7471E-07
-3.3800E-01	1.0623E+00	-2.5000E-01	7.2565E-01	2.9064E-06	-1.2439E-01	3.2149E-06	-6.4724E-08

Table E.3-1 Hot-wire velocity measurements at X/T = -.338, Z/T = -.25.

File E51470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.80377
Estimated momentum thickness at X/T = -2.14e, Z/T=0 (m) = 4.116484E-03
Estimated momentum thickness Reynolds number = 6496.482

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-3.3800E-01	4.2493E-03	-3.5500E-01	1.1669E-01	4.6421E-03	-2.6069E-01	4.2487E-03	2.9391E-04
-3.3800E-01	4.9575E-03	-3.5500E-01	1.3520E-01	5.6594E-03	-2.7457E-01	4.2843E-03	4.0455E-04
-3.3800E-01	6.0198E-03	-3.5500E-01	1.4197E-01	5.8374E-03	-2.8209E-01	4.0546E-03	9.3924E-05
-3.3800E-01	7.4363E-03	-3.5500E-01	1.5523E-01	6.9409E-03	-2.8926E-01	4.1368E-03	5.7896E-04
-3.3800E-01	8.8527E-03	-3.5500E-01	1.6590E-01	7.5278E-03	-2.9193E-01	4.3986E-03	1.0223E-03
-3.3800E-01	1.0977E-02	-3.5500E-01	1.7973E-01	8.0930E-03	-2.8631E-01	4.1931E-03	9.3876E-04
-3.3800E-01	1.3102E-02	-3.5500E-01	1.9317E-01	9.6433E-03	-2.8176E-01	4.3171E-03	1.8285E-03
-3.3800E-01	1.5935E-02	-3.5500E-01	2.1402E-01	9.7490E-03	-2.7507E-01	4.4688E-03	1.7336E-03
-3.3800E-01	1.9476E-02	-3.5500E-01	2.3314E-01	9.4813E-03	-2.7225E-01	4.3282E-03	1.2147E-03
-3.3800E-01	2.3371E-02	-3.5500E-01	2.5611E-01	9.9954E-03	-2.6251E-01	4.4251E-03	1.2119E-03
-3.3800E-01	2.8329E-02	-3.5500E-01	2.7897E-01	1.0784E-02	-2.5286E-01	4.5047E-03	1.4592E-03
-3.3800E-01	3.4348E-02	-3.5500E-01	3.0687E-01	1.0058E-02	-2.4414E-01	3.8909E-03	3.1339E-04
-3.3800E-01	4.1431E-02	-3.5500E-01	3.3009E-01	1.0084E-02	-2.3458E-01	3.6530E-03	3.8208E-04
-3.3800E-01	5.0293E-02	-3.5500E-01	3.5972E-01	9.8710E-03	-2.2214E-01	3.1177E-03	-1.7182E-04
-3.3800E-01	6.0907E-02	-3.5500E-01	3.9304E-01	9.7807E-03	-2.1087E-01	3.4340E-03	1.1820E-04
-3.3800E-01	7.3654E-02	-3.5500E-01	4.2773E-01	9.3365E-03	-2.0462E-01	2.1072E-03	-5.0251E-04
-3.3800E-01	8.9235E-02	-3.5500E-01	4.6439E-01	8.7885E-03	-1.9450E-01	3.2086E-03	2.7766E-04
-3.3800E-01	1.0800E-01	-3.5500E-01	5.0285E-01	7.7699E-03	-1.8611E-01	2.8857E-03	1.0342E-05
-3.3800E-01	1.3067E-01	-3.5500E-01	5.3860E-01	7.1462E-03	-1.7598E-01	2.7803E-03	2.3161E-04
-3.3800E-01	1.5793E-01	-3.5500E-01	5.7660E-01	6.1590E-03	-1.6947E-01	2.1353E-03	3.0439E-05
-3.3800E-01	1.9122E-01	-3.5500E-01	6.1648E-01	5.3409E-03	-1.6112E-01	1.8109E-03	-5.9845E-05
-3.3900E-01	2.3159E-01	-3.5500E-01	6.5469E-01	4.4907E-03	-1.5986E-01	1.9470E-03	1.9570E-04
-3.3800E-01	2.8010E-01	-3.5500E-01	6.9648E-01	3.5762E-03	-1.5147E-01	1.2213E-03	1.0346E-04
-3.3800E-01	3.3888E-01	-3.5500E-01	7.4228E-01	2.4347E-03	-1.4778E-01	7.3555E-04	5.5103E-05
-3.3800E-01	4.0970E-01	-3.5500E-01	7.7801E-01	1.2997E-03	-1.4279E-01	5.5081E-04	9.9678E-05
-3.3800E-01	4.9575E-01	-3.5500E-01	7.9776E-01	3.3691E-04	-1.4344E-01	2.3299E-04	6.4988E-05
-3.3800E-01	5.9986E-01	-3.5500E-01	7.9704E-01	4.4997E-05	-1.4726E-01	1.9595E-05	7.7009E-06
-3.3800E-01	7.2557E-01	-3.5500E-01	7.8314E-01	1.2397E-05	-1.5349E-01	7.0215E-06	3.3020E-06
-3.3800E-01	8.7783E-01	-3.5500E-01	7.7320E-01	5.0487E-06	-1.6035E-01	2.1617E-06	1.6636E-07
-3.3800E-01	1.0623E+00	-3.5500E-01	7.6763E-01	3.0780E-06	-1.6445E-01	1.4238E-06	-2.9367E-07

Table E.3-2 Hot-wire velocity measurements at X/T = -.338, Z/T = -.355.

File E71470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.27433
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.132942E-03
Estimated momentum thickness Reynolds number = 6590.453

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-3.3600E-01	3.1870E-03	-5.0000E-01	2.1978E-01	4.5027E-03	-2.6473E-01	3.7084E-03	-2.2690E-04
-3.3600E-01	3.8952E-03	-5.0000E-01	2.2318E-01	4.6488E-03	-2.8754E-01	3.6508E-03	-3.8784E-04
-3.3600E-01	4.6034E-03	-5.0000E-01	2.3962E-01	4.9964E-03	-2.9113E-01	3.6238E-03	-2.2373E-04
-3.3600E-01	5.6657E-03	-5.0000E-01	2.4430E-01	5.5502E-03	-3.0201E-01	3.6916E-03	1.1779E-04
-3.3600E-01	7.0822E-03	-5.0000E-01	2.5717E-01	5.8011E-03	-3.0630E-01	3.6813E-03	2.4781E-04
-3.3600E-01	8.4986E-03	-5.0000E-01	2.6430E-01	6.3316E-03	-3.1544E-01	3.5754E-03	4.3050E-04
-3.3600E-01	1.0623E-02	-5.0000E-01	2.8102E-01	7.1169E-03	-3.1831E-01	3.6791E-03	9.3571E-04
-3.3600E-01	1.2748E-02	-5.0000E-01	2.9645E-01	7.7388E-03	-3.1388E-01	3.8463E-03	1.3453E-03
-3.3600E-01	1.5935E-02	-5.0000E-01	3.0876E-01	7.8927E-03	-3.1222E-01	4.0443E-03	1.4139E-03
-3.3600E-01	1.9476E-02	-5.0000E-01	3.2895E-01	8.0429E-03	-3.0403E-01	3.5844E-03	1.0678E-03
-3.3600E-01	2.3725E-02	-5.0000E-01	3.4731E-01	8.0499E-03	-2.9494E-01	3.4208E-03	7.3446E-04
-3.3600E-01	2.9037E-02	-5.0000E-01	3.7224E-01	8.4398E-03	-2.8529E-01	3.7341E-03	9.4875E-04
-3.3600E-01	3.5411E-02	-5.0000E-01	3.9141E-01	8.4883E-03	-2.7824E-01	3.5159E-03	6.1597E-04
-3.3600E-01	4.3201E-02	-5.0000E-01	4.1923E-01	8.3836E-03	-2.6306E-01	3.3628E-03	3.7112E-04
-3.3600E-01	5.2762E-02	-5.0000E-01	4.4526E-01	8.3564E-03	-2.5741E-01	3.6877E-03	7.7002E-04
-3.3600E-01	6.4448E-02	-5.0000E-01	4.7620E-01	7.9754E-03	-2.4630E-01	3.0935E-03	3.4078E-04
-3.3600E-01	7.8966E-02	-5.0000E-01	5.0584E-01	7.4159E-03	-2.3539E-01	2.6563E-03	5.7589E-05
-3.3600E-01	9.6317E-02	-5.0000E-01	5.3856E-01	6.7969E-03	-2.2530E-01	2.0509E-03	-2.0248E-04
-3.3600E-01	1.1756E-01	-5.0000E-01	5.7254E-01	6.2268E-03	-2.1479E-01	2.3277E-03	-3.1089E-05
-3.3600E-01	1.4377E-01	-5.0000E-01	6.0490E-01	5.7252E-03	-2.0778E-01	1.9479E-03	-5.1048E-06
-3.3600E-01	1.7564E-01	-5.0000E-01	6.4440E-01	5.0346E-03	-1.9853E-01	2.3932E-03	3.1403E-04
-3.3600E-01	2.1459E-01	-5.0000E-01	6.8395E-01	4.3377E-03	-1.8939E-01	1.8658E-03	2.0291E-04
-3.3600E-01	2.6204E-01	-5.0000E-01	7.1783E-01	3.7972E-03	-1.8389E-01	1.5112E-03	2.1944E-04
-3.3600E-01	3.1976E-01	-5.0000E-01	7.6138E-01	2.8190E-03	-1.7705E-01	1.2763E-03	1.8856E-04
-3.3600E-01	3.8952E-01	-5.0000E-01	8.0488E-01	1.7236E-03	-1.7013E-01	9.1994E-04	1.6902E-04
-3.3600E-01	4.7663E-01	-5.0000E-01	8.4411E-01	6.5889E-04	-1.4689E-01	2.3608E-04	6.4308E-05
-3.3600E-01	5.8286E-01	-5.0000E-01	8.4868E-01	8.2282E-05	-1.7193E-01	3.5822E-05	9.2376E-06
-3.3600E-01	7.1211E-01	-5.0000E-01	8.4277E-01	1.5673E-05	-1.7651E-01		1.2801E-06
-3.3600E-01	8.6969E-01	-5.0000E-01	8.3482E-01	5.0901E-06	-1.8927E-01	4.6991E-06	5.0426E-07
-3.3600E-01	1.0623E+00	-5.0000E-01	8.2917E-01	3.1428E-06	-1.9236E-01	3.8089E-06	1.2716E-07

Table E.3-3 Hot-wire velocity measurements at X/T = -.336, Z/T = -.5.

File E72470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.23034
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.134328E-03
Estimated momentum thickness Reynolds number = 6581.624

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-3.4000E-01	3.1870E-03	-7.5800E-01	2.9491E-01	4.1395E-03	-2.3920E-01	2.4343E-03	-1.3713E-03
-3.4000E-01	3.8952E-03	-7.5800E-01	3.1649E-01	4.2605E-03	-2.5113E-01	2.6714E-03	-1.1530E-03
-3.4000E-01	4.6034E-03	-7.5800E-01	3.3403E-01	4.4998E-03	-2.5469E-01	2.7206E-03	-9.4659E-04
-3.4000E-01	5.3657E-03	-7.5800E-01	3.5895E-01	4.4699E-03	-2.6678E-01	2.4497E-03	-9.6218E-04
-3.4000E-01	7.0822E-03	-7.5800E-01	3.7942E-01	4.6257E-03	-2.7739E-01	2.6162E-03	-5.7536E-04
-3.4000E-01	8.4986E-03	-7.5900E-01	3.9463E-01	4.6500E-03	-2.8229E-01	2.8772E-03	-1.5572E-04
-3.4000E-01	1.0623E-02	-7.5800E-01	4.1740E-01	4.9222E-03	-2.8054E-01	2.9750E-03	2.6631E-04
-3.4000E-01	1.2748E-02	-7.5800E-01	4.3105E-01	4.9687E-03	-2.8198E-01	2.9271E-03	3.2696E-04
-3.4000E-01	1.5935E-02	-7.5800E-01	4.4768E-01	4.9396E-03	-2.7836E-01	3.2102E-03	5.5818E-04
-3.4000E-01	1.9476E-02	-7.5800E-01	4.6213E-01	4.9960E-03	-2.7237E-01	3.1185E-03	4.7078E-04
-3.4000E-01	2.3725E-02	-7.5800E-01	4.7740E-01	5.2600E-03	-2.6665E-01	2.8451E-03	2.9442E-04
-3.4000E-01	2.9037E-02	-7.5800E-01	4.9445E-01	5.3631E-03	-2.6102E-01	2.7044E-03	1.6390E-04
-3.4000E-01	3.5411E-02	-7.5800E-01	5.1122E-01	5.5133E-03	-2.5119E-01	2.8827E-03	2.0073E-04
-3.4000E-01	4.3201E-02	-7.5800E-01	5.2857E-01	5.7405E-03	-2.4552E-01	2.7677E-03	2.0395E-04
-3.4000E-01	5.2762E-02	-7.5800E-01	5.4781E-01	5.8423E-03	-2.3630E-01	2.8581E-03	2.4070E-04
-3.4000E-01	6.4448E-02	-7.5800E-01	5.6922E-01	5.8807E-03	-2.2793E-01	2.5803E-03	2.2009E-04
-3.4000E-01	7.8966E-02	-7.5800E-01	5.9390E-01	5.6790E-03	-2.2094E-01	2.6259E-03	1.3153E-04
-3.4000E-01	9.6317E-02	-7.5800E-01	6.1917E-01	5.4972E-03	-2.1124E-01	2.2936E-03	5.9512E-05
-3.4000E-01	1.1756E-01	-7.5800E-01	6.4609E-01	5.3487E-03	-2.0395E-01	2.7068E-03	3.4197E-04
-3.4000E-01	1.4377E-01	-7.5800E-01	6.7721E-01	4.8009E-03	-1.9469E-01	2.4733E-03	2.0646E-04
-3.4000E-01	1.7564E-01	-7.5800E-01	7.0946E-01	4.5098E-03	-1.8619E-01	2.2614E-03	2.9275E-04
-3.4000E-01	2.1459E-01	-7.5800E-01	7.4553E-01	4.0659E-03	-1.7930E-01	1.8096E-03	1.7143E-04
-3.4000E-01	2.6204E-01	-7.5800E-01	7.8416E-01	3.4032E-03	-1.7060E-01	1.6480E-03	2.4180E-04
-3.4000E-01	3.1976E-01	-7.5800E-01	8.2421E-01	2.5278E-03	-1.6937E-01	1.5806E-03	2.5678E-04
-3.4000E-01	3.9093E-01	-7.5800E-01	8.6890E-01	1.5788E-03	-1.6297E-01	9.3852E-04	1.7159E-04
-3.4000E-01	4.7734E-01	-7.5800E-01	9.0446E-01	6.4798E-04	-1.5059E-01	2.9538E-04	9.4158E-05
-3.4000E-01	5.8286E-01	-7.5800E-01	9.1877E-01	7.1150E-05	-1.5336E-01	5.8221E-05	1.2678E-05
-3.4000E-01	7.1211E-01	-7.5800E-01	9.1656E-01	1.1767E-05	-1.6185E-01	6.2702E-06	1.3977E-07
-3.4000E-01	8.6969E-01	-7.5800E-01	9.1061E-01	5.4651E-06	-1.6917E-01	5.3202E-06	8.5196E-07
-3.4000E-01	1.0623E+00	-7.5800E-01	9.0817E-	3.9812E-06	-1.7091E-01	2.1796E-06	-3.4471E-07

Table E.3-4 Hot-wire velocity measurements at X/T = -.340, Z/T = -.758.

File E73470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.26607
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.133202E-03
Estimated momentum thickness Reynolds number = 6588.794

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
-3.2860E-01	3.5411E-03	-1.0106E+00	4.3006E-01	5.1755E-03	-2.2207E-01	2.3656E-03	-9.4044E-04
-3.2860E-01	4.2493E-03	-1.0106E+00	4.4982E-01	5.1371E-03	-2.2521E-01	2.8773E-03	-4.6565E-04
-3.2860E-01	4.9575E-03	-1.0106E+00	4.5851E-01	5.1230E-03	-2.2907E-01	2.6972E-03	-4.6698E-04
-3.2860E-01	6.3739E-03	-1.0106E+00	4.7783E-01	4.8582E-03	-2.3584E-01	3.1955E-03	-1.3231E-05
-3.2860E-01	7.4353E-03	-1.0106E+00	4.8730E-01	4.7141E-03	-2.3663E-01	2.9855E-03	3.1027E-05
-3.2860E-01	9.2068E-03	-1.0106E+00	5.0427E-01	4.6581E-03	-2.3655E-01	2.8718E-03	-5.0827E-05
-3.2860E-01	1.1331E-02	-1.0106E+00	5.1825E-01	4.6689E-03	-2.3659E-01	3.0095E-03	2.3047E-04
-3.2860E-01	1.3810E-02	-1.0106E+00	5.3084E-01	4.5838E-03	-2.3548E-01	2.7252E-03	9.1849E-05
-3.2860E-01	1.6997E-02	-1.0106E+00	5.4218E-01	4.7016E-03	-2.3069E-01	2.9466E-03	3.4248E-04
-3.2860E-01	2.0538E-02	-1.0106E+00	5.5627E-01	4.6457E-03	-2.2975E-01	2.6339E-03	1.6812E-04
-3.2860E-01	2.5142E-02	-1.0106E+00	5.6786E-01	4.8556E-03	-2.2824E-01	2.9955E-03	2.9601E-04
-3.2860E-01	3.0807E-02	-1.0106E+00	5.8412E-01	5.1085E-03	-2.2448E-01	2.9619E-03	4.4046E-04
-3.2860E-01	3.7181E-02	-1.0106E+00	5.9891E-01	5.0991E-03	-2.1896E-01	2.9949E-03	3.9170E-04
-3.2860E-01	4.5326E-02	-1.0106E+00	6.1542E-01	5.2005E-03	-2.1423E-01	2.5002E-03	5.8585E-05
-3.2860E-01	5.5241E-02	-1.0106E+00	6.3234E-01	5.3450E-03	-2.0901E-01	2.5242E-03	1.8052E-04
-3.2860E-01	6.7635E-02	-1.0106E+00	6.5206E-01	5.3411E-03	-1.9710E-01	2.6039E-03	1.7478E-04
-3.2860E-01	8.2153E-02	-1.0106E+00	6.7331E-01	5.2579E-03	-1.9535E-01	2.3276E-03	1.0218E-04
-3.2860E-01	1.0021E-01	-1.0106E+00	6.9462E-01	5.0842E-03	-1.8850E-01	2.6123E-03	2.3411E-04
-3.2860E-01	1.2181E-01	-1.0106E+00	7.1808E-01	4.8880E-03	-1.8213E-01	2.8619E-03	4.8755E-04
-3.2860E-01	1.4837E-01	-1.0106E+00	7.4634E-01	4.6279E-03	-1.7265E-01	2.4406E-03	3.4643E-04
-3.2860E-01	1.8059E-01	-1.0106E+00	7.7759E-01	4.2202E-03	-1.6595E-01	1.9466E-03	2.4137E-04
-3.2860E-01	2.1990E-01	-1.0106E+00	8.1194E-01	3.7003E-03	-1.5896E-01	2.0920E-03	3.4786E-04
-3.2860E-01	2.6806E-01	-1.0106E+00	8.4907E-01	3.0168E-03	-1.4815E-01	1.5905E-03	2.7599E-04
-3.2860E-01	3.2613E-01	-1.0106E+00	8.8821E-01	2.2514E-03	-1.4706E-01	1.2728E-03	2.1830E-04
-3.2860E-01	3.9731E-01	-1.0106E+00	9.2871E-01	1.3149E-03	-1.3827E-01	7.5200E-04	1.6423E-
-3.2860E-01	4.8336E-01	-1.0106E+00	9.5898E-01	4.2847E-04	-1.3350E-01	2.4685E-04	6.1197[illegible]
-3.2860E-01	5.8853E-01	-1.0106E+00	9.7058E-01	4.7403E-05	-1.3035E-01	3.0430E-05	4.3765E-0[illegible]
-3.2860E-01	7.1671E-01	-1.0106E+00	9.6915E-01	1.0492E-05	-1.3731E-01	8.0226E-06	1.9938E-06
-3.2860E-01	8.7252E-01	-1.0106E+00	9.6657E-01	5.9096E-06	-1.3784E-01		-2.4833E-07
-3.2860E-01	1.0623E+00	-1.0106E+00	9.6542E-01	4.2950E-06	-1.4261E-01	2.1614E-08	-4.7459E-07

Table E.3-5 Hot-wire velocity measurements at X/T = -.329, Z/T = -1.011.

E.4 HOT-WIRE MEASUREMENTS IN PLANE E

Location of Profile		Data File Name	Table Numbers
X/T	Z/T		
0.013	-0.49	E70470.RES	E. 4-1
0.016	-0.62	E69470.RES	E. 4-2
0.016	-0.74	E68470.RES	E. 4-3
0.009	-0.879	E67470.RES	E. 4-4
0.028	-1.132	E66470.RES	E. 4-5

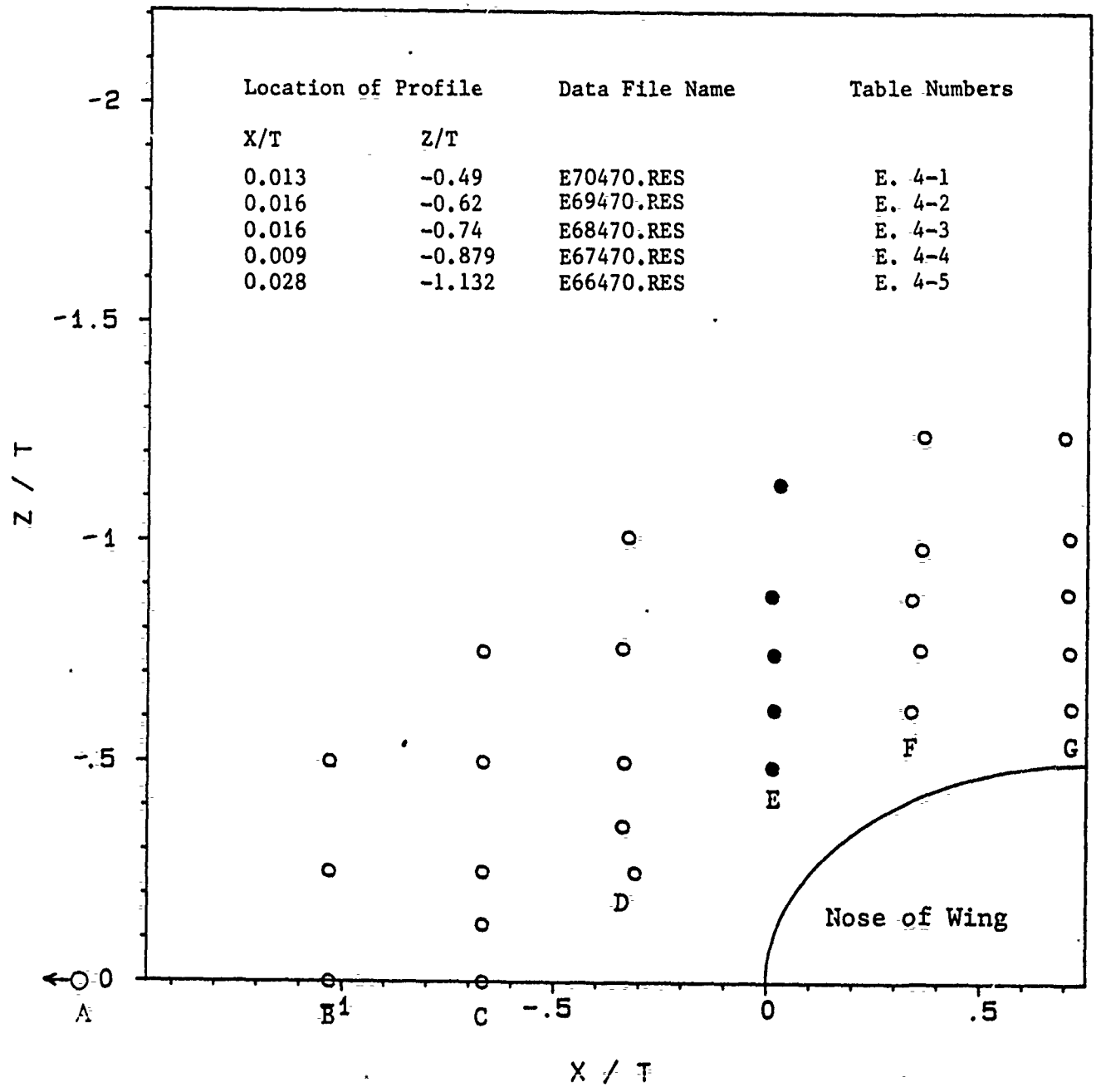


Figure E.4-1 Location of hot-wire profiles measured in plane E.

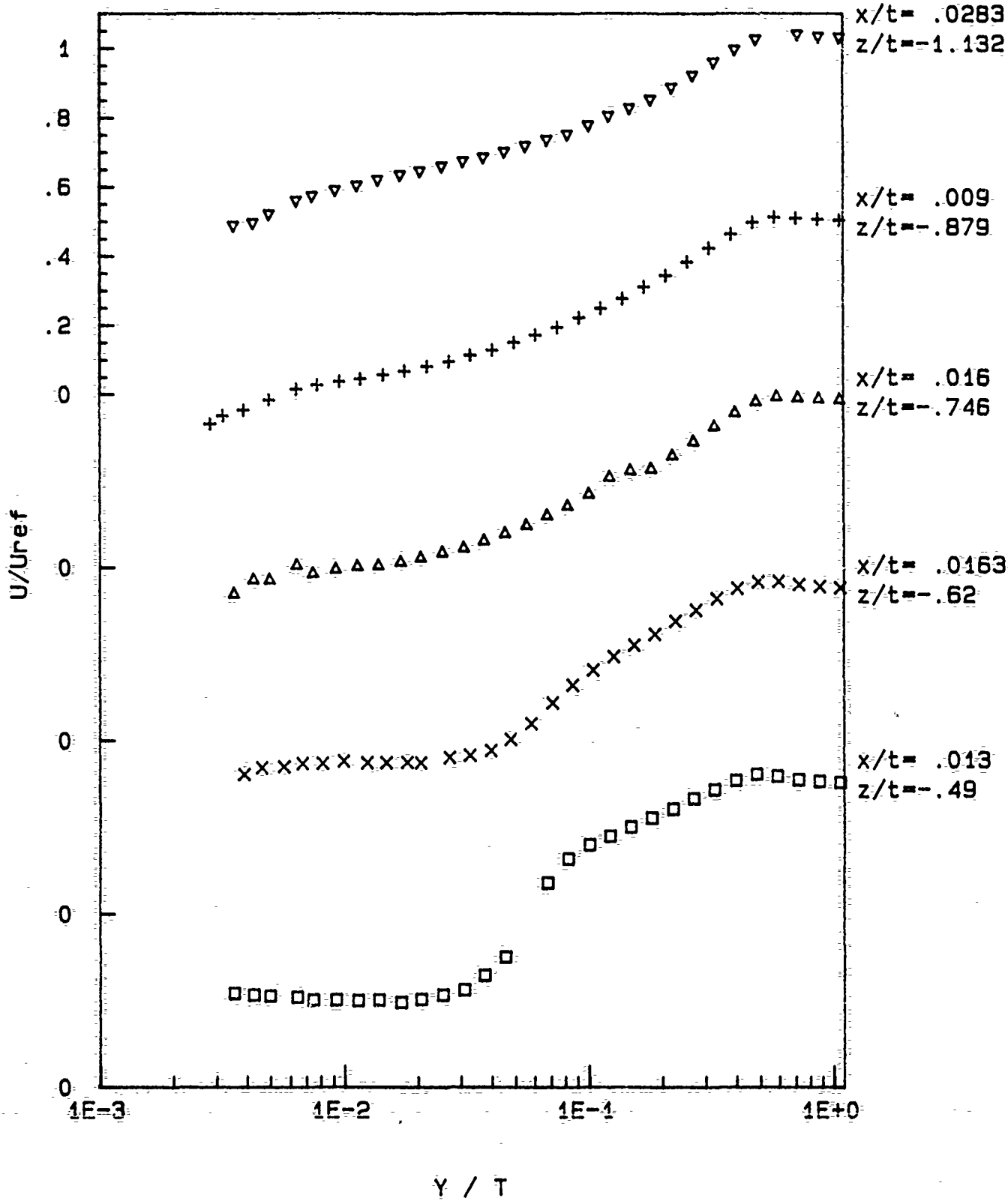


FIGURE E.4-2 Profiles of Mean Velocity Component U, Plane E

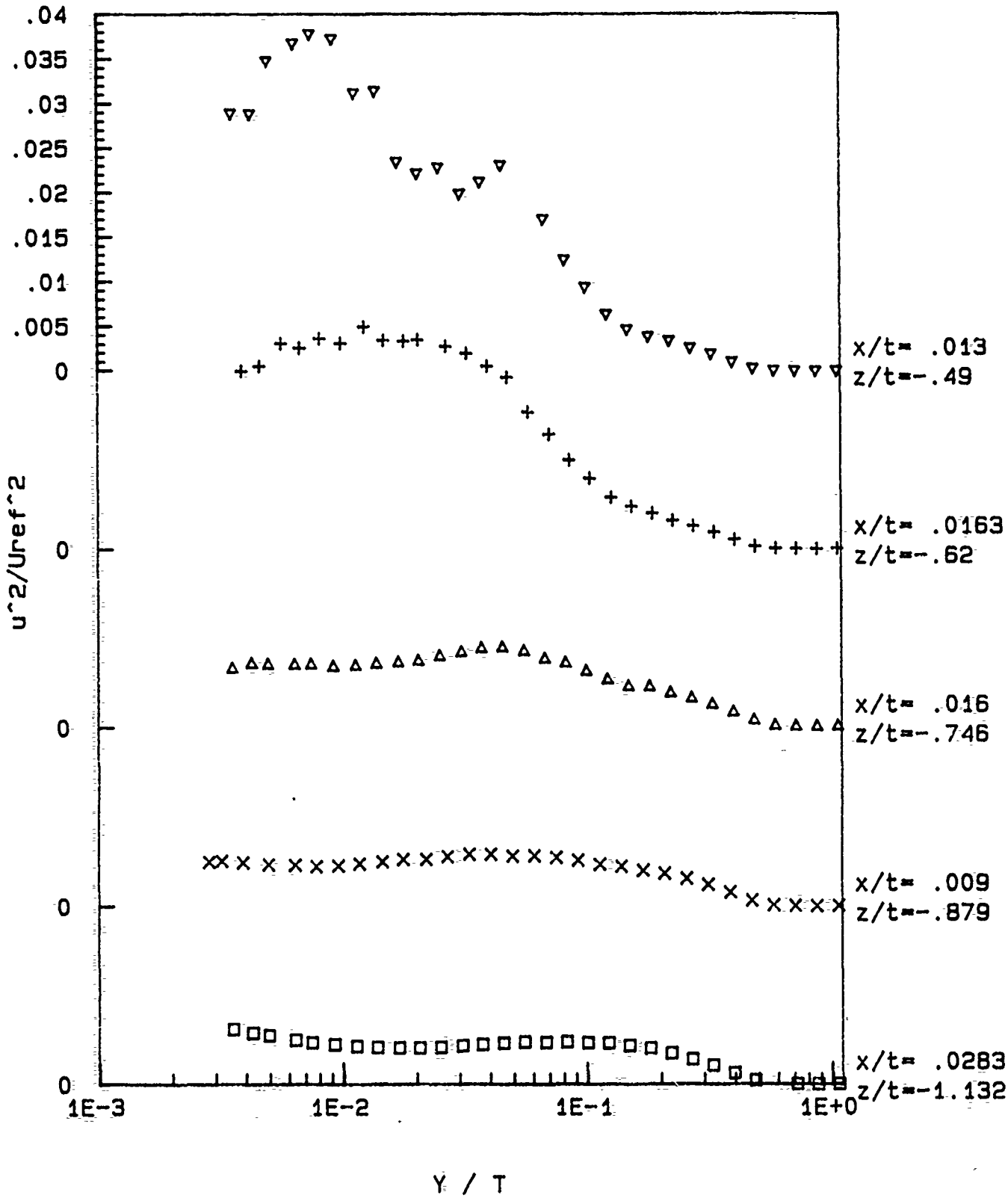


FIGURE E.4-3 Profiles of the U Component of Turbulence Normal Stress, Plane E

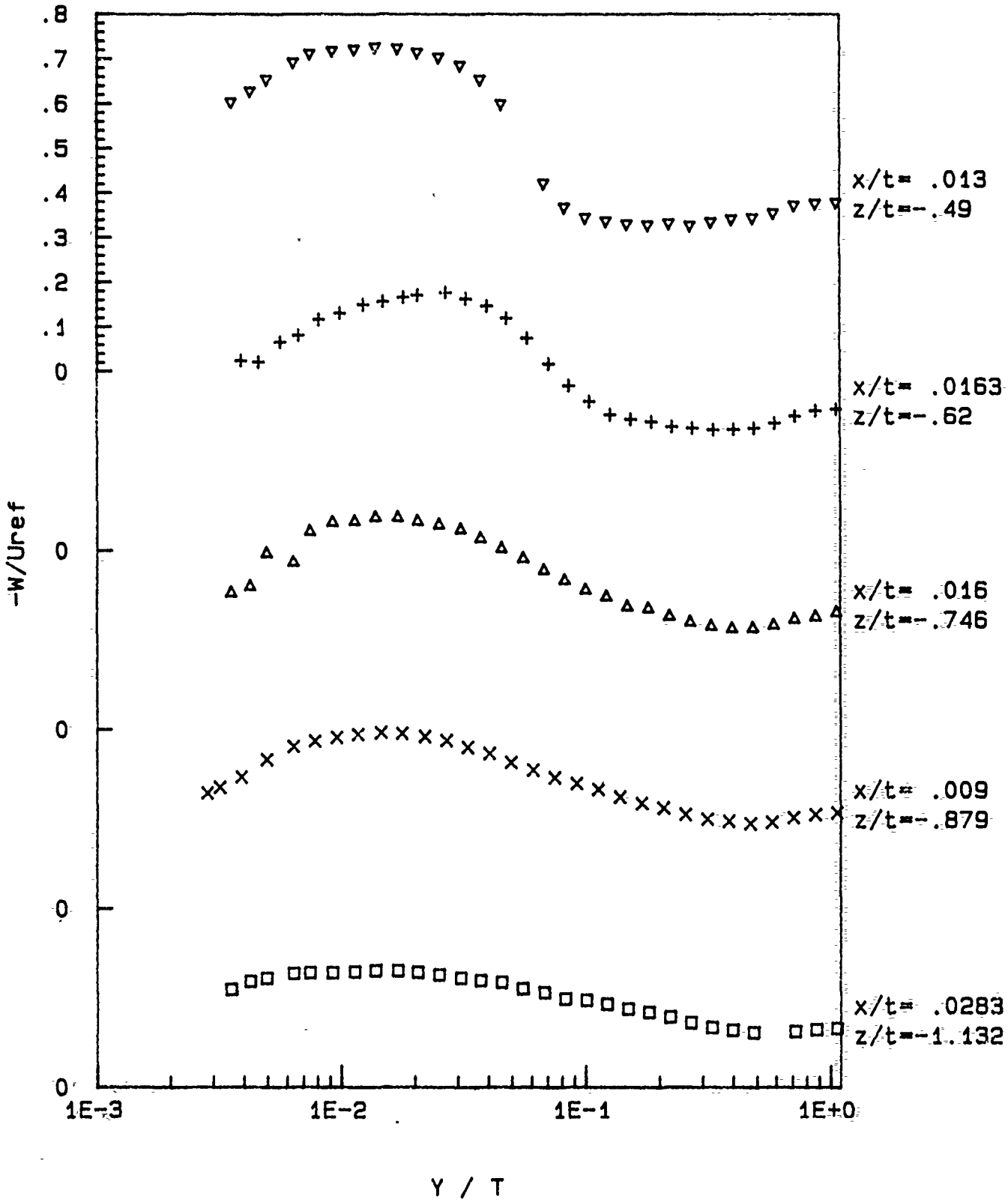


FIGURE E.4-4 Profiles of Mean-Velocity Component W, Plane E

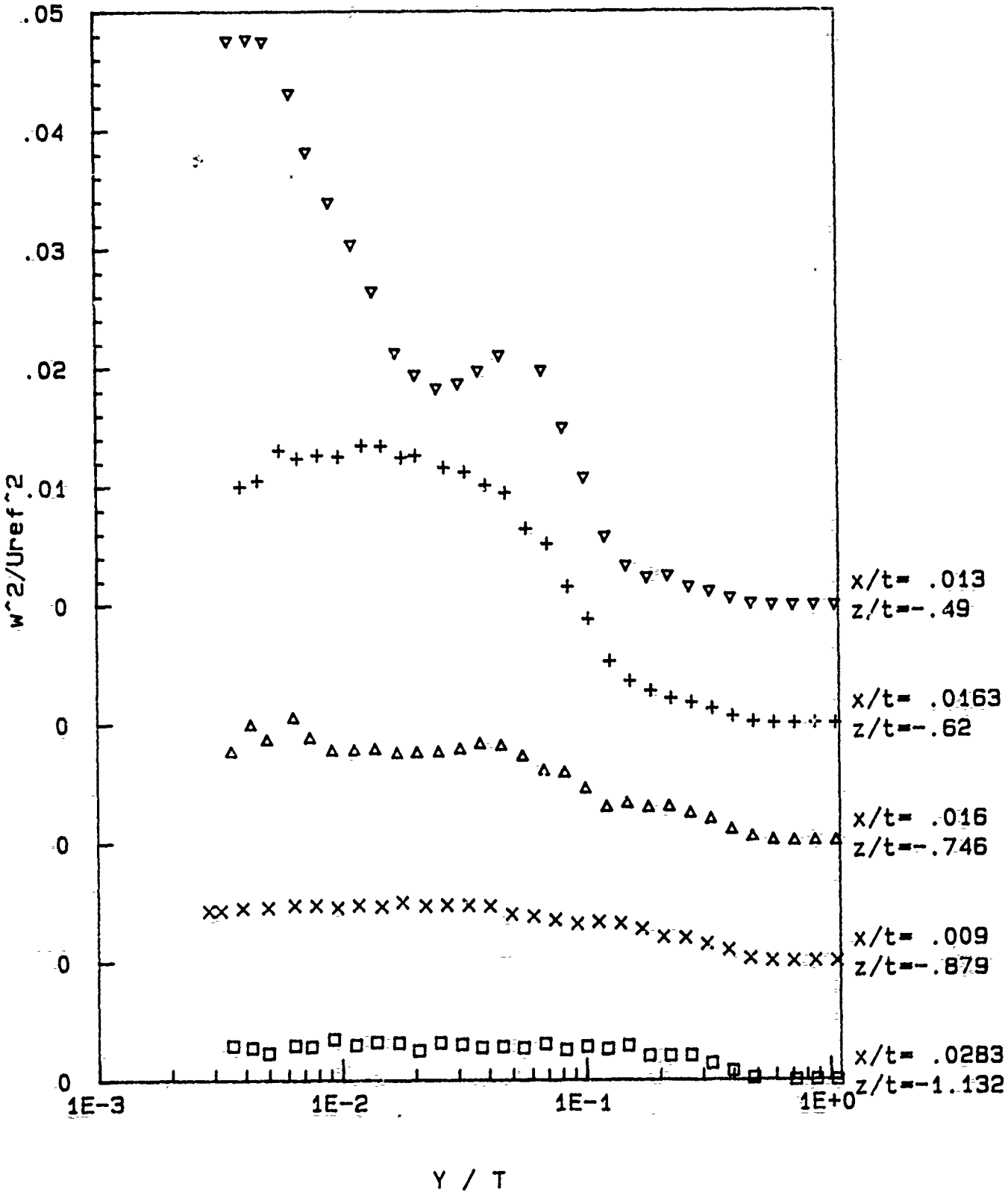


FIGURE E.4-5 Profiles of the W Component of Turbulence Normal Stress, Plane E

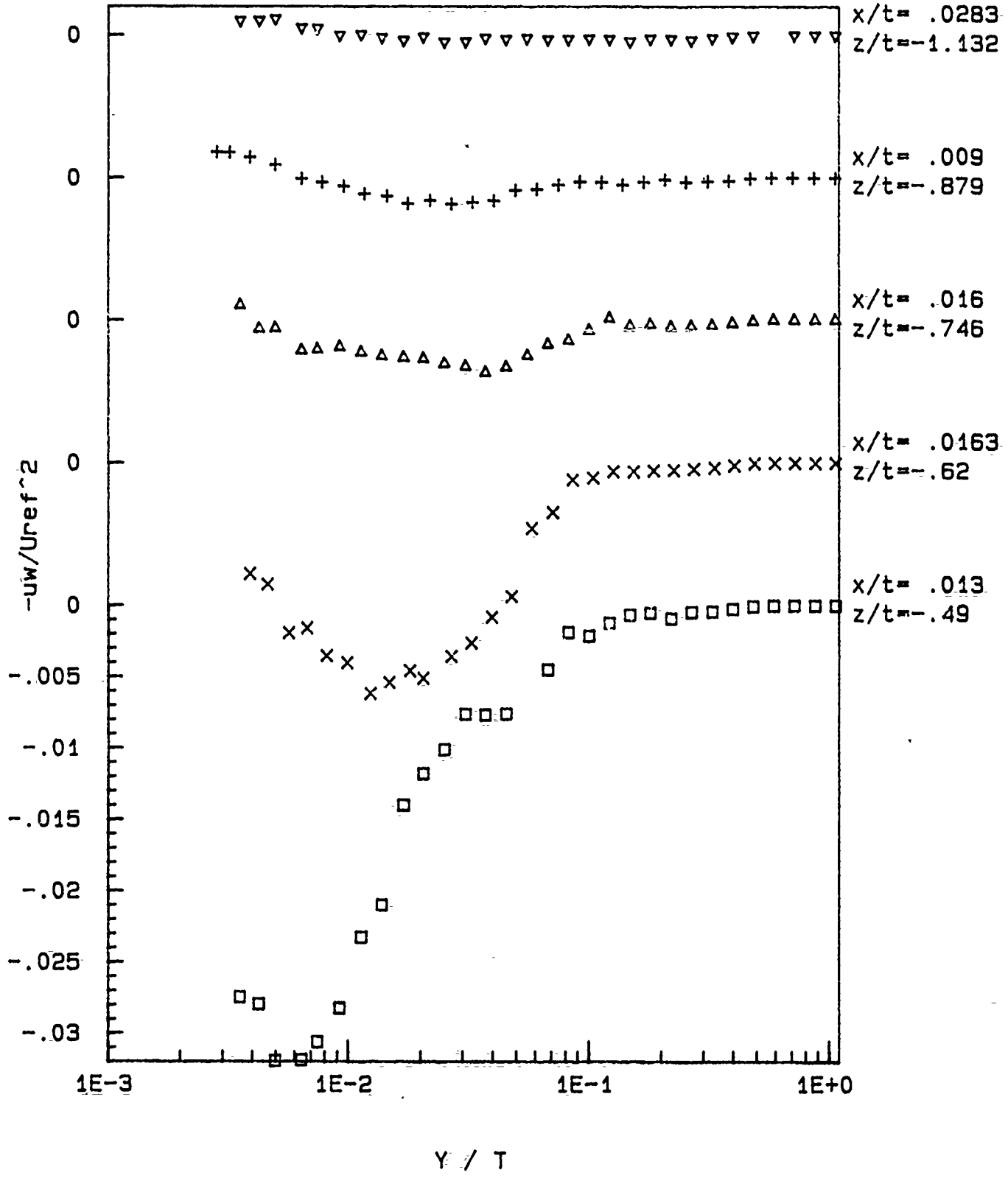


FIGURE E.4-6 Profiles of the UW Reynolds Shear Stress, Plane E

File E70470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.41641
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.128487E-03
Estimated momentum thickness Reynolds number = 6618.949

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
1.3000E-02	3.5411E-03	-4.9000E-01	2.7168E-01	2.8978E-02	-6.0404E-01	4.7628E-02	2.7474E-02
1.3000E-02	4.2493E-03	-4.9000E-01	2.6644E-01	2.8900E-02	-6.2857E-01	4.7714E-02	2.7963E-02
1.3000E-02	4.9575E-03	-4.9000E-01	2.6404E-01	3.4825E-02	-6.5481E-01	4.7519E-02	3.1953E-02
1.3000E-02	6.3739E-03	-4.9000E-01	2.6087E-01	3.6787E-02	-6.9307E-01	4.3147E-02	3.1883E-02
1.3000E-02	7.4363E-03	-4.9000E-01	2.5191E-01	3.7837E-02	-7.1249E-01	3.8198E-02	3.0603E-02
1.3000E-02	9.2068E-03	-4.9000E-01	2.5195E-01	3.7292E-02	-7.1925E-01	3.3947E-02	2.8234E-02
1.3000E-02	1.1331E-02	-4.9000E-01	2.5059E-01	3.1193E-02	-7.2231E-01	3.0405E-02	2.3251E-02
1.3000E-02	1.3810E-02	-4.9000E-01	2.5259E-01	3.1418E-02	-7.2721E-01	2.6449E-02	2.0988E-02
1.3000E-02	1.6997E-02	-4.9000E-01	2.4527E-01	2.3468E-02	-7.2461E-01	2.1281E-02	1.4009E-02
1.3000E-02	2.0538E-02	-4.9000E-01	2.5448E-01	2.2186E-02	-7.1527E-01	1.9420E-02	1.1810E-02
1.3000E-02	2.5142E-02	-4.9000E-01	2.6665E-01	2.2848E-02	-7.0428E-01	1.8276E-02	1.0128E-02
1.3000E-02	3.0807E-02	-4.9000E-01	2.8146E-01	1.9919E-02	-6.8654E-01	1.8695E-02	7.6302E-03
1.3000E-02	3.7181E-02	-4.9000E-01	3.2370E-01	2.1220E-02	-6.5472E-01	1.9746E-02	7.6978E-03
1.3000E-02	4.5326E-02	-4.9000E-01	3.7672E-01	2.3118E-02	-5.9996E-01	2.1071E-02	7.6152E-03
1.3000E-02	6.7635E-02	-4.9000E-01	5.9068E-01	1.7061E-02	-4.2248E-01	1.9796E-02	4.5221E-03
1.3000E-02	8.2153E-02	-4.9000E-01	6.6004E-01	1.2483E-02	-3.6828E-01	1.4941E-02	1.8818E-03
1.3000E-02	1.0021E-01	-4.9000E-01	6.9991E-01	9.3993E-03	-3.4490E-01	1.0763E-02	2.1369E-03
1.3000E-02	1.2181E-01	-4.9000E-01	7.2481E-01	6.3660E-03	-3.3768E-01	5.7908E-03	1.2304E-03
1.3000E-02	1.4837E-01	-4.9000E-01	7.5159E-01	4.6718E-03	-3.3118E-01	3.3360E-03	6.7338E-04
1.3000E-02	1.8059E-01	-4.9000E-01	7.7757E-01	3.8522E-03	-3.2883E-01	2.3635E-03	5.2331E-04
1.3000E-02	2.1990E-01	-4.9000E-01	8.0334E-01	3.4144E-03	-3.3256E-01	2.5082E-03	9.2620E-04
1.3000E-02	2.6806E-01	-4.9000E-01	8.3332E-01	2.5765E-03	-3.2807E-01	1.5652E-03	4.6734E-04
1.3000E-02	3.2613E-01	-4.9000E-01	8.5944E-01	1.9150E-03	-3.3577E-01	1.1761E-03	4.3955E-04
1.3000E-02	3.9731E-01	-4.9000E-01	8.8575E-01	1.0427E-03	-3.4237E-01	6.2630E-04	2.5843E-04
1.3000E-02	4.8336E-01	-4.9000E-01	9.0299E-01	2.8156E-04	-3.4496E-01	1.7756E-04	7.0295E-05
1.3000E-02	5.8853E-01	-4.9000E-01	8.9839E-01	4.4532E-05	-3.5579E-01	3.9915E-05	2.2970E-05
1.3000E-02	7.1671E-01	-4.9000E-01	8.8753E-01	1.3005E-05	-3.7303E-01	9.6526E-06	4.3689E-06
1.3000E-02	8.7252E-01	-4.9000E-01	8.8297E-01	5.0110E-06	-3.7744E-01	5.3032E-07	-2.9498E-06
1.3000E-02	1.0623E+00	-4.9000E-01	8.8033E-01	3.8716E-06	-3.7989E-01	3.7331E-06	-4.2883E-07

Table E.4-1 Hot-wire velocity measurements at X/T = .013, Z/T = -.49.

File E69470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.428
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.128125E-03
Estimated momentum thickness Reynolds number = 6621.272

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
1.6300E-02	3.8952E-03	-6.2000E-01	4.0383E-01	1.9973E-02	-4.2493E-01	2.0019E-02	7.7892E-03
1.6300E-02	4.6034E-03	-6.2000E-01	4.2284E-01	2.0513E-02	-4.2222E-01	2.0500E-02	8.5425E-03
1.6300E-02	5.6657E-03	-6.2000E-01	4.2605E-01	2.3066E-02	-4.6640E-01	2.3050E-02	1.1946E-02
1.6300E-02	6.7280E-03	-6.2000E-01	4.3546E-01	2.2555E-02	-4.8182E-01	2.2369E-02	1.1603E-02
1.6300E-02	8.1445E-03	-6.2000E-01	4.3600E-01	2.3621E-02	-5.1709E-01	2.2626E-02	1.3545E-02
1.6300E-02	9.9150E-03	-6.2000E-01	4.4241E-01	2.3083E-02	-5.3118E-01	2.2516E-02	1.4040E-02
1.6300E-02	1.2394E-02	-6.2000E-01	4.3728E-01	2.4945E-02	-5.5039E-01	2.3434E-02	1.6194E-02
1.6300E-02	1.4873E-02	-6.2000E-01	4.3776E-01	2.3384E-02	-5.5705E-01	2.3399E-02	1.5403E-02
1.6300E-02	1.8059E-02	-6.2000E-01	4.3860E-01	2.3309E-02	-5.6667E-01	2.2435E-02	1.4586E-02
1.6300E-02	2.0538E-02	-6.2000E-01	4.3784E-01	2.3447E-02	-5.7128E-01	2.2587E-02	1.5125E-02
1.6300E-02	2.6912E-02	-6.2000E-01	4.5236E-01	2.2741E-02	-5.7743E-01	2.1583E-02	1.3577E-02
1.6300E-02	3.2578E-02	-6.2000E-01	4.5904E-01	2.1924E-02	-5.6356E-01	2.1180E-02	1.2631E-02
1.6300E-02	3.9660E-02	-6.2000E-01	4.7264E-01	2.0486E-02	-5.4692E-01	2.0094E-02	1.0823E-02
1.6300E-02	4.7805E-02	-6.2000E-01	5.0510E-01	1.9241E-02	-5.1953E-01	1.9432E-02	9.3601E-03
1.6300E-02	5.8074E-02	-6.2000E-01	5.5044E-01	1.5336E-02	-4.7521E-01	1.6384E-02	4.5846E-03
1.6300E-02	7.0822E-02	-6.2000E-01	6.1066E-01	1.2837E-02	-4.1756E-01	1.5125E-02	3.4758E-03
1.6300E-02	8.5694E-02	-6.2000E-01	6.6281E-01	9.9555E-03	-3.6850E-01	1.1500E-02	1.1758E-03
1.6300E-02	1.0411E-01	-6.2000E-01	7.0532E-01	7.9251E-03	-3.3304E-01	8.7928E-03	1.0415E-03
1.6300E-02	1.2642E-01	-6.2000E-01	7.4457E-01	5.7636E-03	-3.0378E-01	5.2293E-03	6.1059E-04
1.6300E-02	1.5333E-01	-6.2000E-01	7.7747E-01	4.7535E-03	-2.9355E-01	3.5598E-03	6.1670E-04
1.6300E-02	1.8626E-01	-6.2000E-01	8.0869E-01	3.9637E-03	-2.8799E-01	2.7393E-03	5.4322E-04
1.6300E-02	2.2592E-01	-6.2000E-01	8.4637E-01	3.1724E-03	-2.7675E-01	2.1010E-03	5.0287E-04
1.6300E-02	2.7408E-01	-6.2000E-01	8.7820E-01	2.5354E-03	-2.7412E-01	1.7470E-03	4.1790E-04
1.6300E-02	3.3286E-01	-6.2000E-01	9.1138E-01	1.8596E-03	-2.7027E-01	1.2347E-03	3.5213E-04
1.6300E-02	4.0368E-01	-6.2000E-01	9.4149E-01	1.0329E-03	-2.7096E-01	6.0399E-04	1.8461E-04
1.6300E-02	4.9009E-01	-6.2000E-01	9.5951E-01	2.6549E-04	-2.7387E-01	1.4180E-04	3.1701E-05
1.6300E-02	5.9490E-01	-6.2000E-01	9.6116E-01	3.8126E-05	-2.8491E-01	2.1774E-05	1.0425E-05
1.6300E-02	7.2132E-01	-6.2000E-01	9.5184E-01	1.1392E-05	-3.0094E-01	6.9887E-06	2.5560E-06
1.6300E-02	8.7535E-01	-6.2000E-01	9.4613E-01	6.9693E-06	-3.1320E-01		-1.9293E-06
1.6300E-02	1.0623E+00	-6.2000E-01	9.4301E-01	4.4800E-06	-3.1679E-01	3.9171E-06	-2.4331E-07

Table E.4-2 Hot-wire velocity measurements at X/T = .016, Z/T = -.62.

File E69470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.39463
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.129168E-03
Estimated momentum thickness Reynolds number = 6614.582

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
1.6000E-02	3.5411E-03	-7.4600E-01	4.2371E-01	8.5678E-03	-3.0461E-01	7.5794E-03	-1.0157E-03
1.6000E-02	4.2493E-03	-7.4600E-01	4.6464E-01	7.1090E-03	-3.1922E-01	9.8438E-03	6.5458E-04
1.6000E-02	4.9575E-03	-7.4600E-01	4.6422E-01	6.9776E-03	-3.9307E-01	8.5521E-03	6.0850E-04
1.6000E-02	6.3739E-03	-7.4600E-01	5.0730E-01	6.9577E-03	-3.7343E-01	1.0415E-02	2.1584E-03
1.6000E-02	7.4383E-03	-7.4600E-01	4.8256E-01	7.0302E-03	-4.4209E-01	8.7092E-03	2.0809E-03
1.6000E-02	9.2068E-03	-7.4600E-01	4.9440E-01	6.7591E-03	-4.6245E-01	7.6483E-03	1.9129E-03
1.6000E-02	1.1331E-02	-7.4600E-01	5.0329E-01	6.8704E-03	-4.6517E-01	7.6993E-03	2.2774E-03
1.6000E-02	1.3810E-02	-7.4600E-01	5.0548E-01	7.0595E-03	-4.7366E-01	7.7550E-03	2.5277E-03
1.6000E-02	1.6997E-02	-7.4600E-01	5.1568E-01	7.2350E-03	-4.7369E-01	7.4321E-03	2.6687E-03
1.6000E-02	2.0538E-02	-7.4600E-01	5.2847E-01	7.3973E-03	-4.6465E-01	7.4780E-03	2.7427E-03
1.6000E-02	2.5142E-02	-7.4600E-01	5.4322E-01	7.9385E-03	-4.5682E-01	7.5423E-03	3.0802E-03
1.6000E-02	3.0807E-02	-7.4600E-01	5.5626E-01	8.3770E-03	-4.4641E-01	7.7654E-03	3.2735E-03
1.6000E-02	3.7181E-02	-7.4600E-01	5.7666E-01	8.8191E-03	-4.2609E-01	8.2183E-03	3.7081E-03
1.6000E-02	4.5326E-02	-7.4600E-01	5.9854E-01	8.8988E-03	-4.0407E-01	8.0705E-03	3.3210E-03
1.6000E-02	5.5595E-02	-7.4600E-01	6.2204E-01	8.4723E-03	-3.8131E-01	7.1744E-03	2.5118E-03
1.6000E-02	6.7635E-02	-7.4600E-01	6.5042E-01	7.6493E-03	-3.5521E-01	5.9716E-03	1.7201E-03
1.6000E-02	8.2153E-02	-7.4600E-01	6.7798E-01	7.1517E-03	-3.3222E-01	5.7606E-03	1.4322E-03
1.6000E-02	1.0021E-01	-7.4600E-01	7.1169E-01	6.2304E-03	-3.1090E-01	4.4184E-03	7.1938E-04
1.6000E-02	1.2181E-01	-7.4600E-01	7.6079E-01	5.2799E-03	-2.9598E-01	2.8827E-03	-9.7124E-05
1.6000E-02	1.4637E-01	-7.4600E-01	7.7930E-01	4.5096E-03	-2.7369E-01	3.1837E-03	4.5331E-04
1.6000E-02	1.8059E-01	-7.4600E-01	7.8439E-01	4.4642E-03	-2.6975E-01	2.8373E-03	3.2088E-04
1.6000E-02	2.1990E-01	-7.4600E-01	8.2245E-01	3.7623E-03	-2.5244E-01	2.6907E-03	4.8863E-04
1.6000E-02	2.6896E-01	-7.4600E-01	8.6335E-01	3.1700E-03	-2.3936E-01	2.3455E-03	4.4933E-04
1.6000E-02	3.2613E-01	-7.4600E-01	9.0650E-01	2.4698E-03	-2.3004E-01	1.9419E-03	4.0359E-04
1.6000E-02	3.9731E-01	-7.4600E-01	9.4698E-01	1.6225E-03	-2.2497E-01	9.8513E-04	2.4595E-04
1.6000E-02	4.8336E-01	-7.4600E-01	9.7860E-01	6.7741E-04	-2.2576E-01	3.9368E-04	9.3363E-05
1.6000E-02	5.8853E-01	-7.4600E-01	9.9331E-01	8.4713E-05	-2.3269E-01	6.5860E-05	1.5554E-05
1.6000E-02	7.1671E-01	-7.4600E-01	9.9018E-01	1.4611E-05	-2.4609E-01	7.1681E-06	3.1074E-06
1.6000E-02	8.7252E-01	-7.4600E-01	9.8678E-01	6.4133E-06	-2.5140E-01	3.6023E-06	6.4779E-10
1.6000E-02	1.0623E+00	-7.4600E-01	9.8465E-01	4.3963E-06	-2.6118E-01	2.6626E-06	-6.2214E-07

Table E.4-3 Hot-wire velocity measurements at X/T = .016, Z/T = -.74.

File E57470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.4248
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.128225E-03
Estimated momentum thickness Reynolds number = 6620.629

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
9.0000E-03	2.8329E-03	-8.7900E-01	4.1553E-01	4.9583E-03	-2.5795E-01	4.3017E-03	-1.7958E-03
9.0000E-03	3.1870E-03	-8.7900E-01	4.3945E-01	5.0640E-03	-2.7113E-01	4.3077E-03	-1.7667E-03
9.0000E-03	3.8952E-03	-8.7900E-01	4.5591E-01	4.9936E-03	-2.9410E-01	4.5323E-03	-1.4315E-03
9.0000E-03	4.9575E-03	-8.7900E-01	4.8524E-01	4.6556E-03	-3.3321E-01	4.5574E-03	-8.8961E-04
9.0000E-03	6.3739E-03	-8.7900E-01	5.1692E-01	4.6076E-03	-3.6231E-01	4.7775E-03	7.1227E-05
9.0000E-03	7.7904E-03	-8.7900E-01	5.2848E-01	4.4448E-03	-3.7461E-01	4.7476E-03	3.1905E-04
9.0000E-03	9.5609E-03	-8.7900E-01	5.3769E-01	4.5178E-03	-3.8230E-01	4.5512E-03	6.0412E-04
9.0000E-03	1.1686E-02	-8.7900E-01	5.4614E-01	4.7620E-03	-3.8903E-01	4.7550E-03	1.1418E-03
9.0000E-03	1.4518E-02	-8.7900E-01	5.5793E-01	4.9549E-03	-3.9337E-01	4.6483E-03	1.2868E-03
9.0000E-03	1.7705E-02	-8.7900E-01	5.6873E-01	5.2346E-03	-3.9186E-01	5.0279E-03	1.8242E-03
9.0000E-03	2.1955E-02	-8.7900E-01	5.8231E-01	5.2409E-03	-3.8454E-01	4.7049E-03	1.6098E-03
9.0000E-03	2.6912E-02	-8.7900E-01	5.9569E-01	5.5401E-03	-3.7574E-01	4.7863E-03	1.8547E-03
9.0000E-03	3.2932E-02	-8.7900E-01	6.1443E-01	5.8015E-03	-3.6066E-01	4.7441E-03	1.7483E-03
9.0000E-03	4.0368E-02	-8.7900E-01	6.2930E-01	5.8099E-03	-3.4662E-01	4.6826E-03	1.6126E-03
9.0000E-03	4.9575E-02	-8.7900E-01	6.5122E-01	5.5950E-03	-3.2663E-01	3.9791E-03	8.9019E-04
9.0000E-03	6.0907E-02	-8.7900E-01	6.7311E-01	5.6458E-03	-3.0951E-01	3.8002E-03	8.1599E-04
9.0000E-03	7.4717E-02	-8.7900E-01	6.9465E-01	5.4367E-03	-2.9255E-01	3.5019E-03	5.1153E-04
9.0000E-03	9.1714E-02	-8.7900E-01	7.2236E-01	5.1308E-03	-2.7907E-01	3.1663E-03	2.7176E-04
9.0000E-03	1.1261E-01	-8.7900E-01	7.4963E-01	4.6604E-03	-2.6628E-01	3.3423E-03	3.2851E-04
9.0000E-03	1.3810E-01	-8.7900E-01	7.7726E-01	4.4515E-03	-2.4915E-01	3.1811E-03	5.1065E-04
9.0000E-03	1.6926E-01	-8.7900E-01	8.1133E-01	3.9908E-03	-2.3459E-01	2.7318E-03	3.1417E-04
9.0000E-03	2.0751E-01	-8.7900E-01	8.4466E-01	3.6480E-03	-2.2454E-01	2.0272E-03	1.5002E-04
9.0000E-03	2.5460E-01	-8.7900E-01	8.8335E-01	3.0621E-03	-2.1009E-01	1.9670E-03	3.0291E-04
9.0000E-03	3.1232E-01	-8.7900E-01	9.2386E-01	2.3743E-03	-1.9966E-01	1.4539E-03	2.6250E-04
9.0000E-03	3.8314E-01	-8.7900E-01	9.6422E-01	1.5272E-03	-1.9547E-01	9.5778E-04	2.1837E-04
9.0000E-03	4.6955E-01	-8.7900E-01	9.9742E-01	5.8245E-04	-1.8969E-01	2.4986E-04	5.0274E-05
9.0000E-03	5.7613E-01	-8.7900E-01	1.0132E+00	6.8523E-05	-1.9236E-01	4.3560E-05	8.5365E-06
9.0000E-03	7.0644E-01	-8.7900E-01	1.0099E+00	1.2252E-05	-2.0326E-01	7.1704E-06	1.5765E-06
9.0000E-03	8.6615E-01	-8.7900E-01	1.0067E+00	6.0697E-06	-2.1011E-01	4.2476E-06	4.7490E-07
9.0000E-03	1.0623E+00	-8.7900E-01	1.0042E+00	4.3026E-06	-2.1436E-01	5.8561E-06	-5.9191E-07

Table E.4-4 Hot-wire velocity measurements at X/T = .019, Z/T = -.879.

File E66470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.49613
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.125999E-03
Estimated momentum thickness Reynolds number = 6634.923

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
2.8300E-02	3.5411E-03	-1.1320E+00	4.8951E-01	6.1907E-03	-2.1870E-01	2.9428E-03	-1.0127E-03
2.8300E-02	4.2493E-03	-1.1320E+00	4.9727E-01	5.7724E-03	-2.3719E-01	2.7654E-03	-1.0156E-03
2.8300E-02	4.9575E-03	-1.1320E+00	5.2285E-01	5.4825E-03	-2.4407E-01	2.2923E-03	-1.1225E-03
2.8300E-02	6.3739E-03	-1.1320E+00	5.6262E-01	4.9779E-03	-2.5466E-01	2.9640E-03	-5.1167E-04
2.8300E-02	7.4363E-03	-1.1320E+00	5.7496E-01	4.6918E-03	-2.5635E-01	2.8512E-03	-4.6831E-04
2.8300E-02	9.2068E-03	-1.1320E+00	5.9142E-01	4.4563E-03	-2.5637E-01	3.4682E-03	2.3395E-05
2.8300E-02	1.1331E-02	-1.1320E+00	6.0590E-01	4.2830E-03	-2.5814E-01	2.9974E-03	-5.1470E-05
2.8300E-02	1.3810E-02	-1.1320E+00	6.2198E-01	4.1304E-03	-2.6114E-01	3.2161E-03	1.6468E-04
2.8300E-02	1.6997E-02	-1.1320E+00	6.3584E-01	4.0910E-03	-2.6104E-01	3.1772E-03	3.7173E-04
2.8300E-02	2.0538E-02	-1.1320E+00	6.4757E-01	4.0983E-03	-2.5711E-01	2.4972E-03	1.2136E-04
2.8300E-02	2.5142E-02	-1.1320E+00	6.6144E-01	4.1594E-03	-2.5179E-01	3.1784E-03	4.6690E-04
2.8300E-02	3.0807E-02	-1.1320E+00	6.7556E-01	4.3396E-03	-2.4435E-01	3.0363E-03	4.4460E-04
2.8300E-02	3.7181E-02	-1.1320E+00	6.8647E-01	4.4758E-03	-2.3872E-01	2.7494E-03	2.1756E-04
2.8300E-02	4.5326E-02	-1.1320E+00	7.0333E-01	4.6165E-03	-2.3465E-01	2.8446E-03	2.8155E-04
2.8300E-02	5.5241E-02	-1.1320E+00	7.2059E-01	4.7324E-03	-2.2055E-01	2.7066E-03	2.0598E-04
2.8300E-02	6.7635E-02	-1.1320E+00	7.3882E-01	4.7029E-03	-2.1169E-01	3.0667E-03	3.0040E-04
2.8300E-02	8.2153E-02	-1.1320E+00	7.5368E-01	4.7496E-03	-1.9760E-01	2.5319E-03	2.7939E-04
2.8300E-02	1.0039E-01	-1.1320E+00	7.7989E-01	4.6703E-03	-1.9442E-01	2.8367E-03	2.3059E-04
2.8300E-02	1.2181E-01	-1.1320E+00	8.0757E-01	4.6328E-03	-1.8622E-01	2.6326E-03	2.8700E-04
2.8300E-02	1.4837E-01	-1.1320E+00	8.2983E-01	4.3475E-03	-1.7518E-01	2.9083E-03	4.3343E-04
2.8300E-02	1.8059E-01	-1.1320E+00	8.5448E-01	4.0355E-03	-1.6775E-01	2.0380E-03	2.3548E-04
2.8300E-02	2.1990E-01	-1.1320E+00	8.8911E-01	3.4753E-03	-1.5722E-01	2.0343E-03	2.6146E-04
2.8300E-02	2.6806E-01	-1.1320E+00	9.2341E-01	2.7918E-03	-1.4440E-01	2.0656E-03	3.3515E-04
2.8300E-02	3.2613E-01	-1.1320E+00	9.6213E-01	2.0884E-03	-1.3372E-01	1.3953E-03	2.0729E-04
2.8300E-02	3.9731E-01	-1.1320E+00	9.9794E-01	1.2342E-03	-1.2790E-01	7.6085E-04	8.9576E-05
2.8300E-02	4.8336E-01	-1.1320E+00	1.0274E+00	4.1010E-04	-1.2246E-01	1.7732E-04	1.6465E-05
2.8300E-02	7.1671E-01	-1.1320E+00	1.0419E+00	1.2901E-05	-1.2467E-01	6.4832E-06	2.2717E-06
2.8300E-02	8.7252E-01	-1.1320E+00	1.0353E+00	6.8858E-06	-1.2914E-01	7.8861E-06	2.0007E-06
2.8300E-02	1.0623E+00	-1.1320E+00	1.0336E+00	4.7395E-06	-1.3194E-01	3.8458E-06	-3.9071E-07

Table E.4-5 Hot-wire velocity measurements at X/T = .028, Z/T = -1.132.

E.5 HOT-WIRE MEASUREMENTS IN PLANE F

Location of Profile X/T	Z/T	Data File Name	Table Numbers
0.338	-0.620	E62470.RES	E. 5-1
0.359	-0.758	E61470.RES	E. 5-2
0.338	-0.874	E63470.RES	E. 5-3
0.361	-0.987	E64470.RES	E. 5-4
0.365	-1.244	E65470.RES	E. 5-5

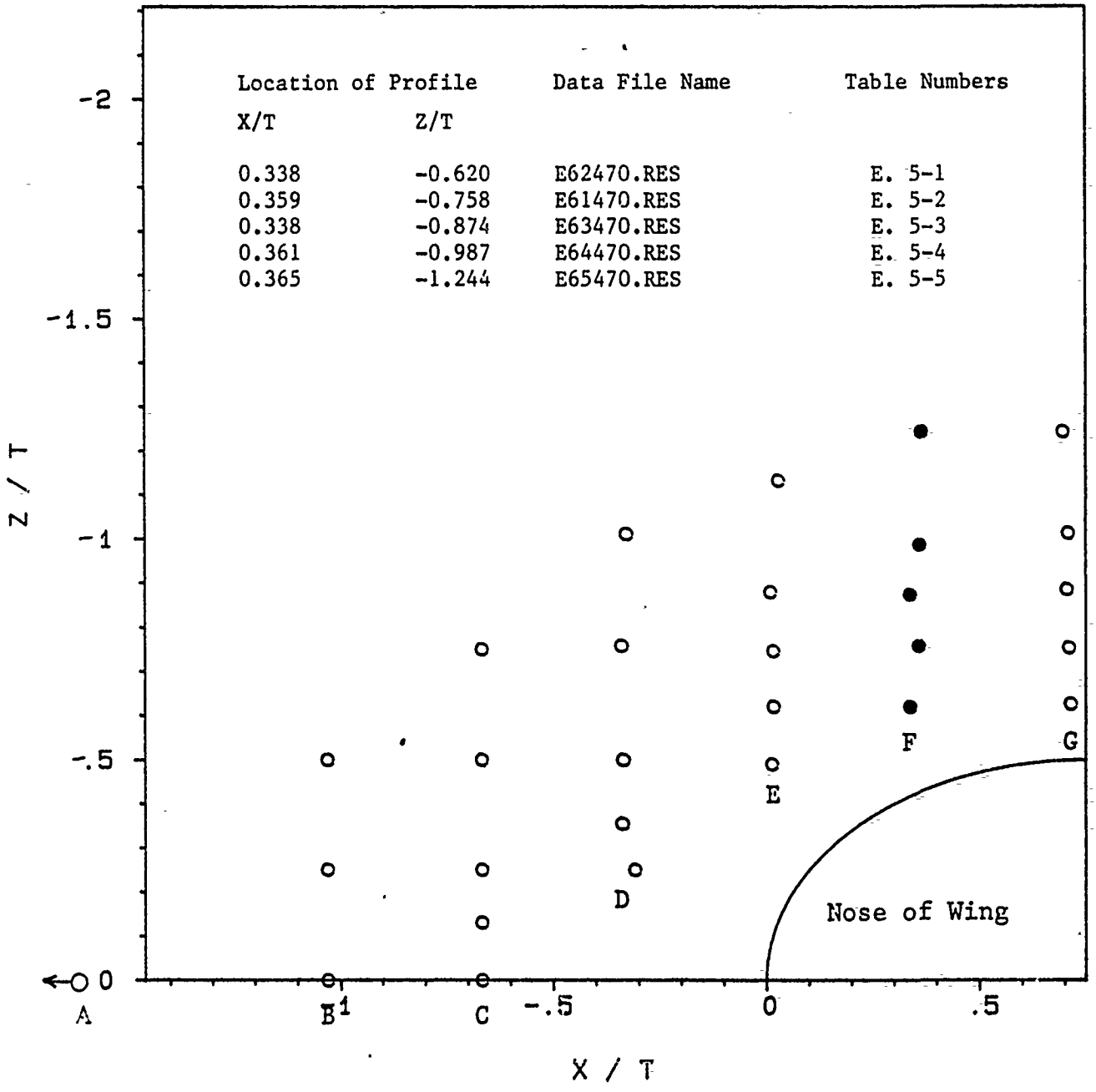


Figure E.5-1 Location of hot-wire profiles measured in plane F.

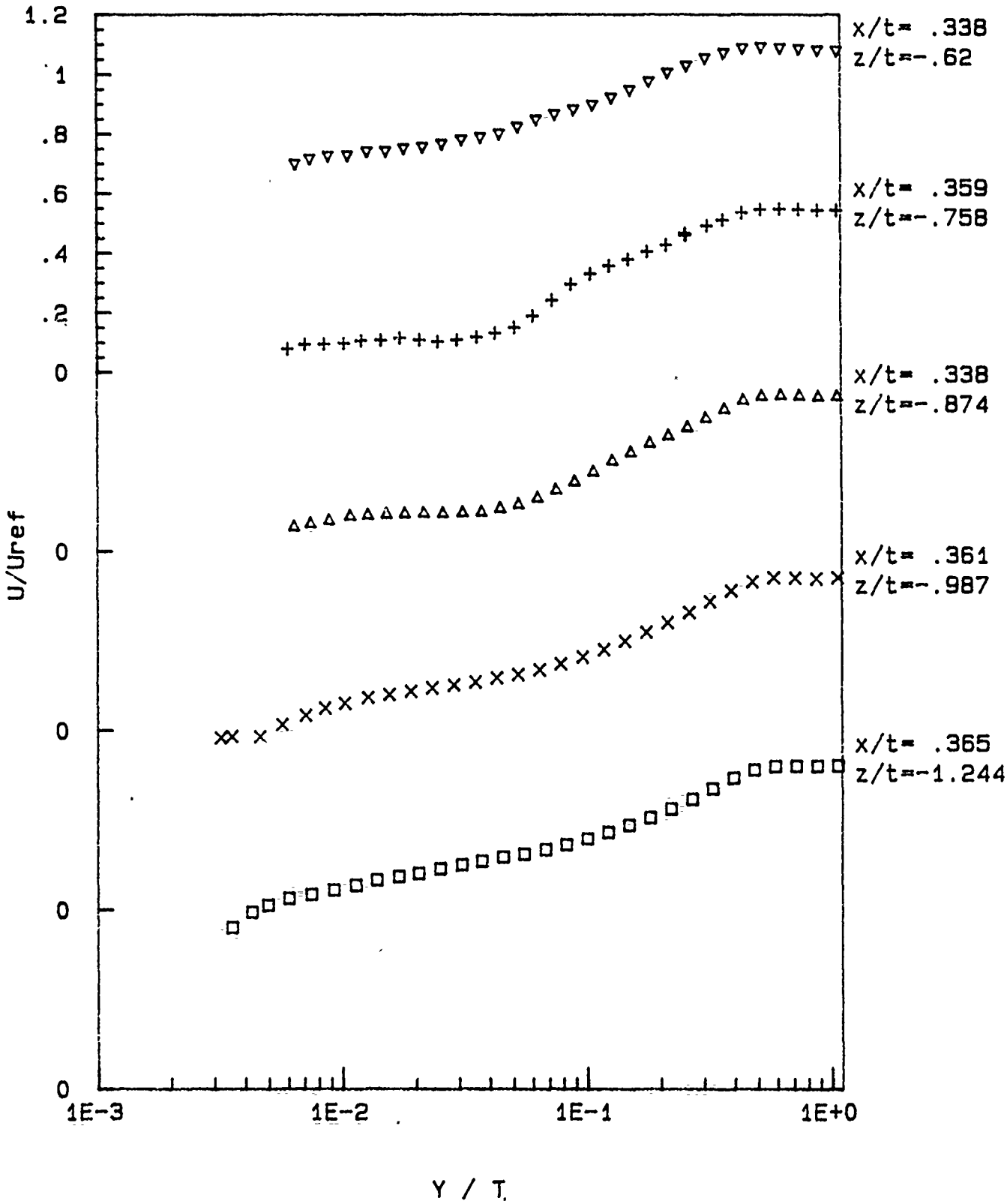


FIGURE E.5-2 Profiles of Mean Velocity Component U, Plane F

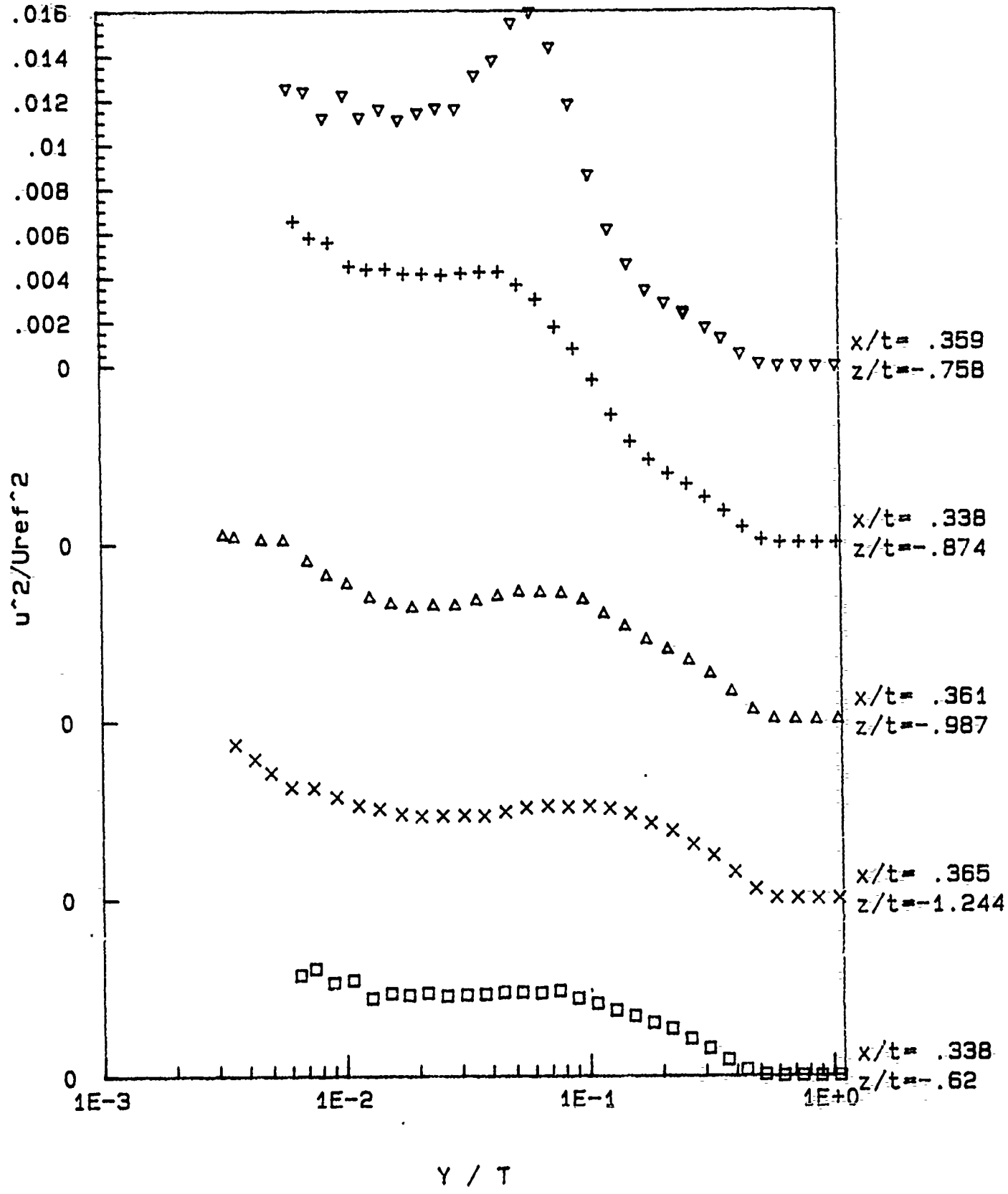


FIGURE E.5-3 Profiles of the U Component of Turbulence Normal Stress, Plane F

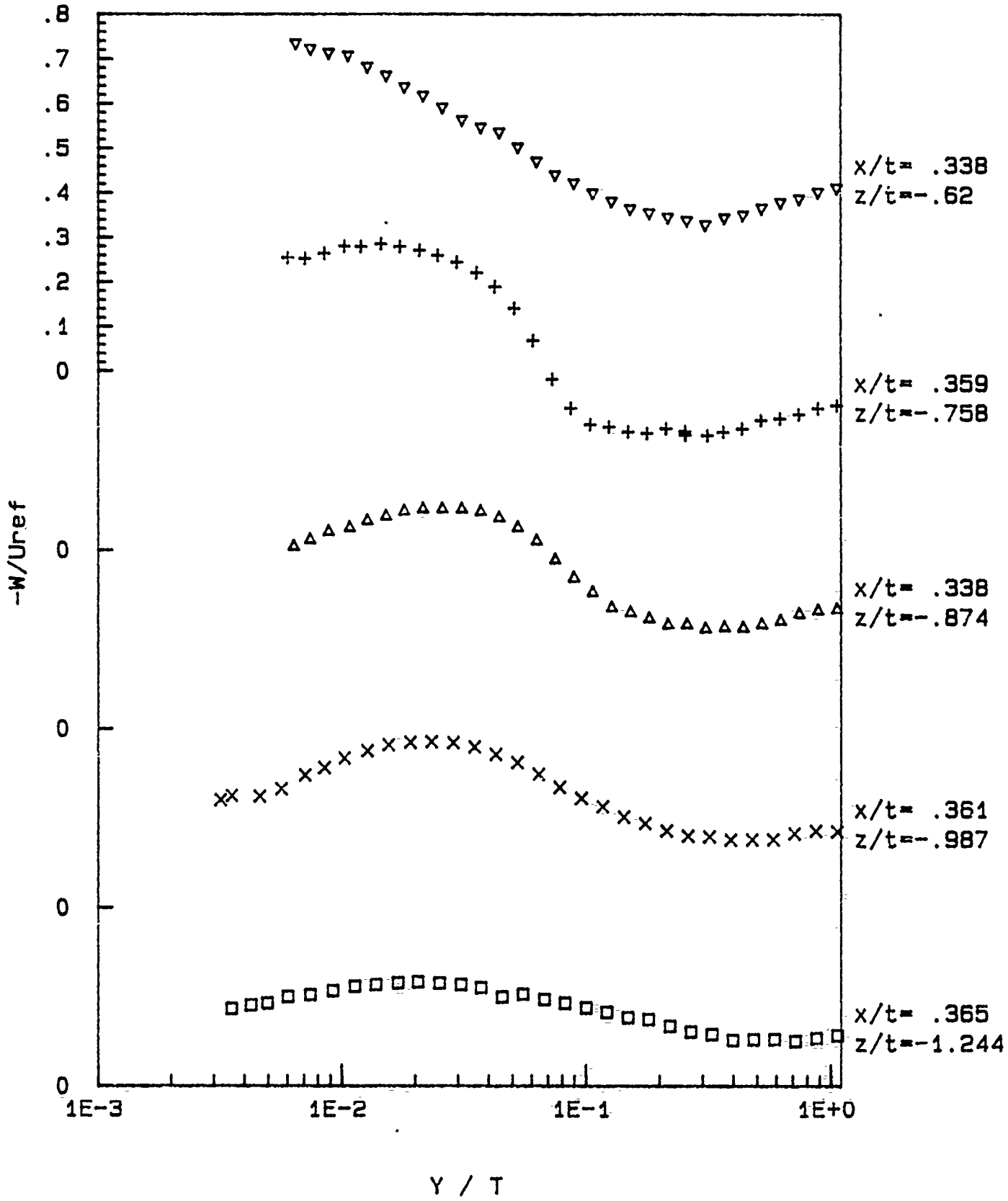


FIGURE E.5-4 Profiles of Mean-Velocity Component W, Plane F

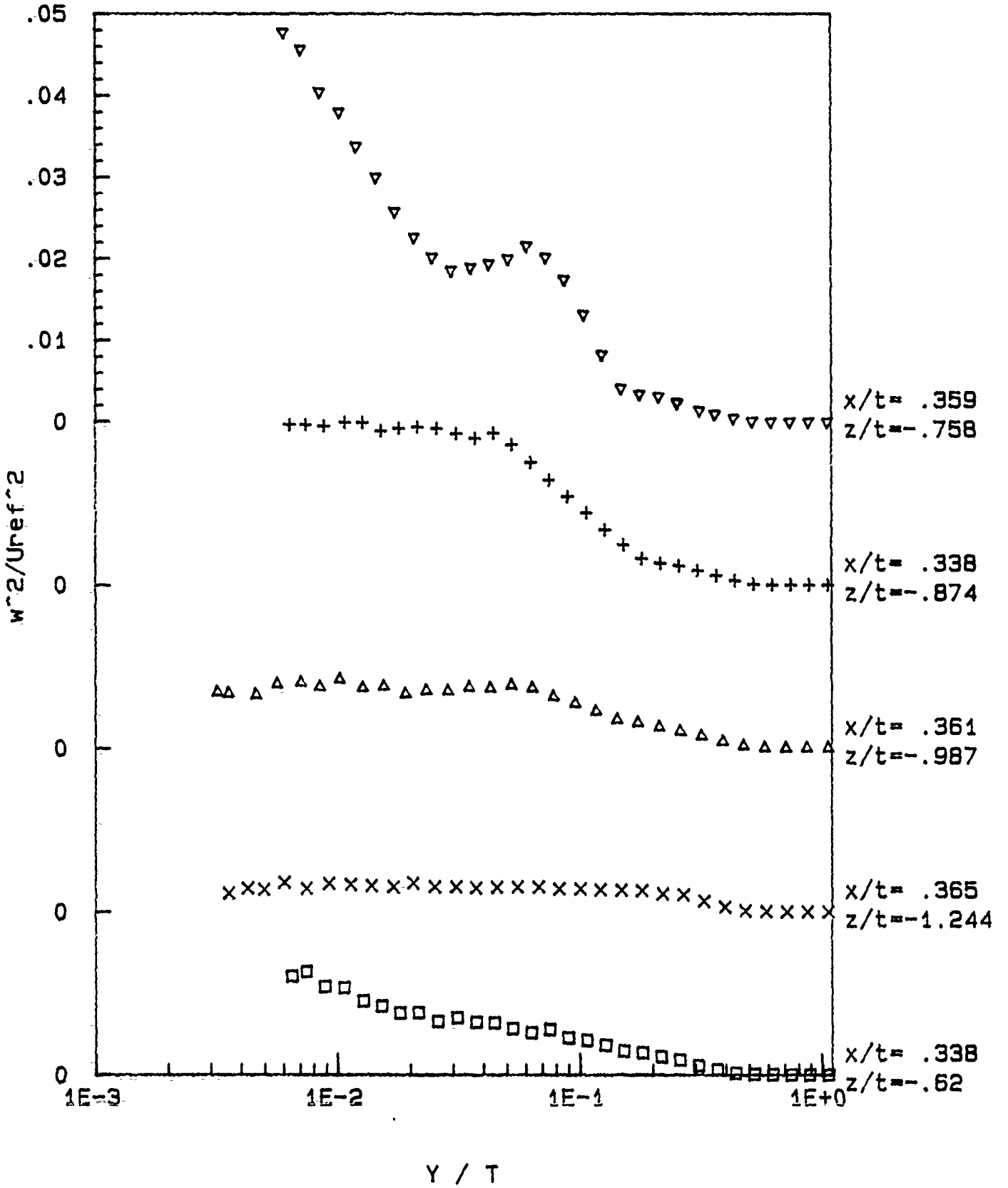


FIGURE E.5-5 Profiles of the W Component of Turbulence Normal Stress, Plane F

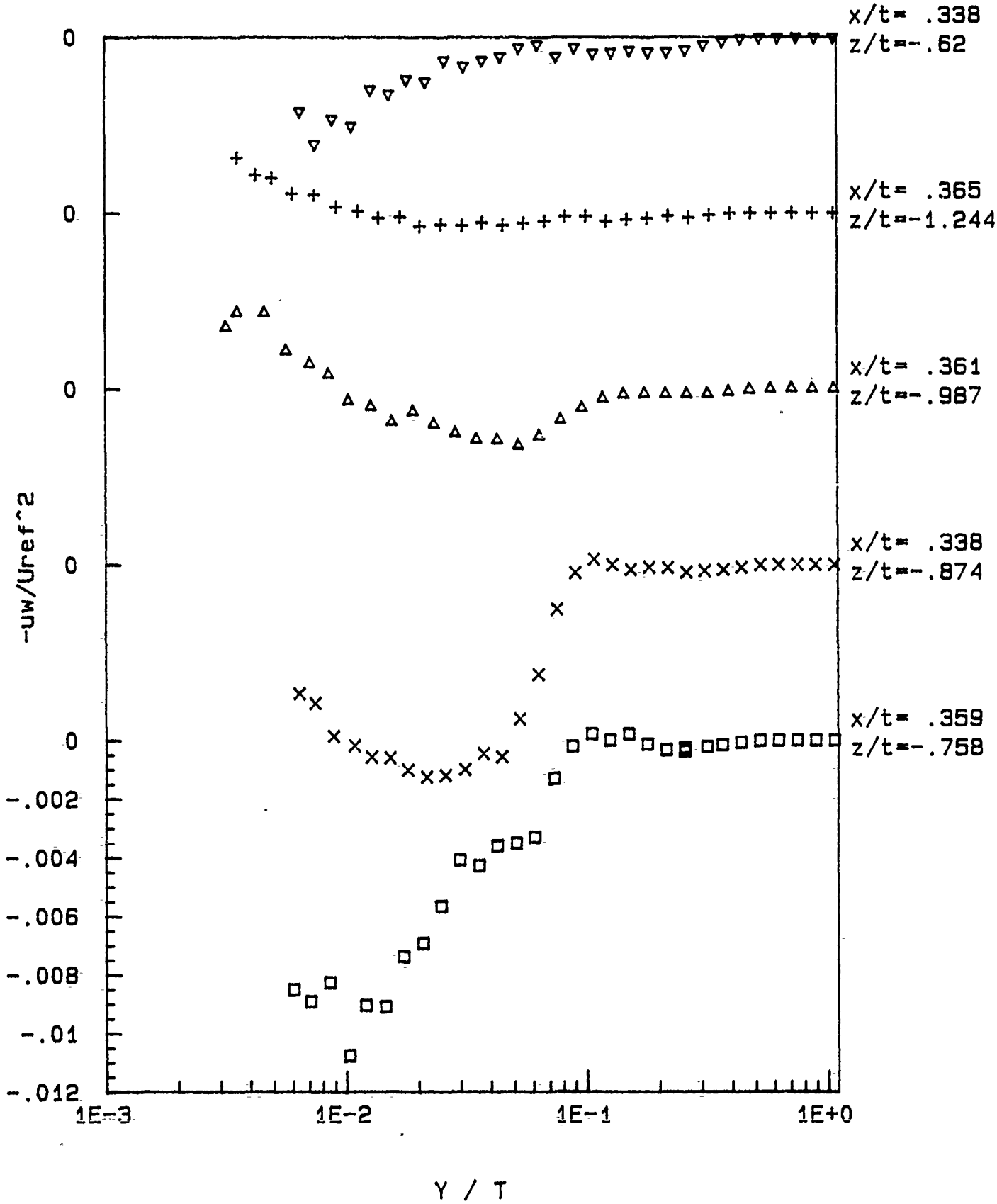


FIGURE E.5-6 Profiles of the UW Reynolds Shear Stress, Plane F

File E62470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.909
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.11326E-03
Estimated momentum thickness Reynolds number = 6717.504

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
3.3800E-01	6.4802E-03	-6.2000E-01	7.0222E-01	4.5746E-03	-7.3537E-01	1.2068E-02	2.5310E-03
3.3800E-01	7.4363E-03	-6.2000E-01	7.1920E-01	4.8678E-03	-7.2287E-01	1.2644E-02	3.6491E-03
3.3800E-01	8.8527E-03	-6.2000E-01	7.2949E-01	4.2215E-03	-7.1449E-01	1.0799E-02	2.7840E-03
3.3800E-01	1.0623E-02	-6.2000E-01	7.3026E-01	4.3329E-03	-7.0839E-01	1.0676E-02	3.0304E-03
3.3800E-01	1.2748E-02	-6.2000E-01	7.4305E-01	3.5179E-03	-6.8334E-01	9.0385E-03	1.7768E-03
3.3800E-01	1.5227E-02	-6.2000E-01	7.4489E-01	3.7445E-03	-6.6342E-01	8.4326E-03	1.9345E-03
3.3800E-01	1.8059E-02	-6.2000E-01	7.5388E-01	3.6651E-03	-6.3728E-01	7.5908E-03	1.4322E-03
3.3800E-01	2.1601E-02	-6.2000E-01	7.5948E-01	3.7493E-03	-6.1862E-01	7.6421E-03	1.5055E-03
3.3800E-01	2.5850E-02	-6.2000E-01	7.7001E-01	3.6257E-03	-5.9235E-01	6.5616E-03	7.8732E-04
3.3800E-01	3.1161E-02	-6.2000E-01	7.8306E-01	3.6629E-03	-5.6426E-01	7.0155E-03	9.7957E-04
3.3800E-01	3.7181E-02	-6.2000E-01	7.9162E-01	3.6994E-03	-5.4747E-01	6.4683E-03	7.8785E-04
3.3800E-01	4.4263E-02	-6.2000E-01	8.0325E-01	3.7779E-03	-5.3651E-01	6.4034E-03	6.5371E-04
3.3800E-01	5.2762E-02	-6.2000E-01	8.2732E-01	3.7839E-03	-5.0306E-01	5.6871E-03	3.5076E-04
3.3800E-01	6.3031E-02	-6.2000E-01	8.5127E-01	3.7613E-03	-4.7115E-01	5.2006E-03	2.4609E-04
3.3800E-01	7.5071E-02	-6.2000E-01	8.6905E-01	3.8545E-03	-4.4091E-01	5.5760E-03	6.5702E-04
3.3800E-01	8.9589E-02	-6.2000E-01	8.8407E-01	3.5202E-03	-4.2301E-01	4.5448E-03	3.5250E-04
3.3800E-01	1.0694E-01	-6.2000E-01	9.0047E-01	3.2719E-03	-4.0063E-01	4.2582E-03	5.5196E-04
3.3800E-01	1.2783E-01	-6.2000E-01	9.2491E-01	2.9778E-03	-3.8230E-01	3.6431E-03	5.1640E-04
3.3800E-01	1.5227E-01	-6.2000E-01	9.5076E-01	2.7037E-03	-3.6495E-01	2.9174E-03	4.4190E-04
3.3800E-01	1.8201E-01	-6.2000E-01	9.7888E-01	2.4092E-03	-3.5568E-01	2.7000E-03	5.0260E-04
3.3800E-01	2.1707E-01	-6.2000E-01	1.0085E+00	2.1383E-03	-3.4626E-01	2.2037E-03	4.8903E-04
3.3800E-01	2.5885E-01	-6.2000E-01	1.0318E+00	1.6824E-03	-3.3897E-01	1.8221E-03	4.3846E-04
3.3800E-01	3.0878E-01	-6.2000E-01	1.0567E+00	1.2440E-03	-3.2937E-01	1.0827E-03	2.5147E-04
3.3800E-01	3.6827E-01	-6.2000E-01	1.0747E+00	7.2249E-04	-3.4529E-01	6.0196E-04	1.4501E-04
3.3800E-01	4.3945E-01	-6.2000E-01	1.0895E+00	2.7254E-04	-3.5146E-01	1.9292E-04	5.3244E-05
3.3800E-01	5.2443E-01	-6.2000E-01	1.0935E+00	5.4716E-05	-3.6716E-01	6.1860E-05	1.9837E-05
3.3800E-01	6.2571E-01	-6.2000E-01	1.0906E+00	2.2269E-05	-3.7955E-01	2.6011E-05	1.4680E-05
3.3800E-01	7.4646E-01	-6.2000E-01	1.0875E+00	1.0253E-05	-3.8816E-01	3.0886E-06	5.6260E-08
3.3800E-01	8.9023E-01	-6.2000E-01	1.0836E+00	1.2393E-05	-4.0261E-01	7.5395E-06	4.5699E-06
3.3800E-01	1.0623E+00	-6.2000E-01	1.0811E+00	1.0227E-05	-4.1235E-01	7.4924E-06	4.0355E-06

Table E.5-1 Hot-wire velocity measurements at X/T = .338, Z/T = -.62.

File E61470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.5525
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093865E-03
Estimated momentum thickness Reynolds number = 6845.715

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
3.5900E-01	6.0198E-03	-7.5800E-01	6.7900E-01	1.2571E-02	-6.5456E-01	4.7781E-02	8.5136E-03
3.5900E-01	7.0822E-03	-7.5800E-01	6.9503E-01	1.2418E-02	-6.5238E-01	4.5655E-02	8.9163E-03
3.5900E-01	8.4986E-03	-7.5800E-01	6.9540E-01	1.1216E-02	-6.6428E-01	4.0448E-02	8.2670E-03
3.5900E-01	1.0269E-02	-7.5800E-01	6.9832E-01	1.2239E-02	-6.8029E-01	3.7992E-02	1.0762E-02
3.5900E-01	1.2040E-02	-7.5800E-01	7.0714E-01	1.1241E-02	-6.7975E-01	3.3779E-02	9.0463E-03
3.5900E-01	1.4518E-02	-7.5800E-01	7.0870E-01	1.1603E-02	-6.8531E-01	2.9977E-02	9.0300E-03
3.5900E-01	1.7351E-02	-7.5800E-01	7.1583E-01	1.1120E-02	-6.7920E-01	2.5789E-02	7.3678E-03
3.5900E-01	2.0892E-02	-7.5800E-01	7.0939E-01	1.1430E-02	-6.7107E-01	2.2632E-02	6.9230E-03
3.5900E-01	2.4788E-02	-7.5800E-01	7.0456E-01	1.1644E-02	-6.5941E-01	2.0203E-02	5.6589E-03
3.5900E-01	2.9745E-02	-7.5800E-01	7.0977E-01	1.1596E-02	-6.4415E-01	1.8609E-02	4.0775E-03
3.5900E-01	3.5765E-02	-7.5800E-01	7.1881E-01	1.3121E-02	-6.2051E-01	1.8943E-02	4.2697E-03
3.5900E-01	4.2493E-02	-7.5800E-01	7.3265E-01	1.3797E-02	-5.8955E-01	1.9394E-02	3.5960E-03
3.5900E-01	5.0992E-02	-7.5800E-01	7.5184E-01	1.5468E-02	-5.4051E-01	2.0000E-02	3.4993E-03
3.5900E-01	6.0907E-02	-7.5800E-01	7.8997E-01	1.5973E-02	-4.6847E-01	2.1591E-02	3.3002E-03
3.5900E-01	7.2946E-02	-7.5800E-01	8.4275E-01	1.4377E-02	-3.8250E-01	2.0176E-02	1.3050E-03
3.5900E-01	8.7110E-02	-7.5800E-01	8.9597E-01	1.1834E-02	-3.1786E-01	1.7467E-02	2.0480E-04
3.5900E-01	1.0446E-01	-7.5800E-01	9.3124E-01	8.6334E-03	-2.8103E-01	1.3150E-02	-2.1974E-04
3.5900E-01	1.2465E-01	-7.5800E-01	9.5811E-01	6.1864E-03	-2.7564E-01	8.2532E-03	-3.6722E-06
3.5900E-01	1.4908E-01	-7.5800E-01	9.8052E-01	4.6059E-03	-2.6462E-01	4.1102E-03	-2.1959E-04
3.5900E-01	1.7812E-01	-7.5800E-01	1.0058E+00	3.4349E-03	-2.6155E-01	3.3865E-03	1.3152E-04
3.5900E-01	2.1317E-01	-7.5800E-01	1.0284E+00	2.8607E-03	-2.7238E-01	3.0973E-03	3.2797E-04
3.5900E-01	2.5496E-01	-7.5800E-01	1.0631E+00	2.4523E-03	-2.6594E-01	2.2415E-03	2.5118E-04
3.5900E-01	2.5496E-01	-7.5800E-01	1.0681E+00	2.4329E-03	-2.5879E-01	2.3119E-03	3.4164E-04
3.5900E-01	2.5496E-01	-7.5800E-01	1.0613E+00	2.3812E-03	-2.5782E-01	2.4183E-03	3.8027E-04
3.5900E-01	3.1445E-01	-7.5800E-01	1.0930E+00	1.7277E-03	-2.5616E-01	1.3883E-03	2.1743E-04
3.5900E-01	3.6402E-01	-7.5800E-01	1.1129E+00	1.2594E-03	-2.6438E-01	9.3894E-04	1.6220E-04
3.5900E-01	4.3520E-01	-7.5800E-01	1.1366E+00	5.6697E-04	-2.7190E-01	4.3204E-04	8.0101E-05
3.5900E-01	5.2018E-01	-7.5800E-01	1.1478E+00	1.2065E-04	-2.9085E-01	9.3150E-05	1.6025E-05
3.5900E-01	6.2181E-01	-7.5800E-01	1.1494E+00	2.4253E-05	-2.9469E-01	9.2599E-06	4.4506E-06
3.5900E-01	7.4327E-01	-7.5800E-01	1.1479E+00	9.7508E-06	-3.0416E-01	7.2469E-06	1.9386E-06
3.5900E-01	8.8846E-01	-7.5800E-01	1.1459E+00	7.0951E-06	-3.1790E-01	3.1248E-06	2.6121E-08
3.5900E-01	1.0623E+00	-7.5800E-01	1.1444E+00	6.2952E-06	-3.2432E-01	1.5646E-06	-1.2568E-06

Table E.5-2 Hot-wire velocity measurements at X/T = .359, Z/T = -.758.

File E63470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.6927
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089711E-03
Estimated momentum thickness Reynolds number = 6873.566

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
3.3800E-01	6.3739E-03	-8.7400E-01	6.8157E-01	1.4536E-02	-4.0739E-01	1.9686E-02	4.4024E-03
3.3800E-01	7.4363E-03	-8.7400E-01	6.9220E-01	1.3786E-02	-4.2242E-01	1.9653E-02	4.7307E-03
3.3800E-01	8.8527E-03	-8.7400E-01	7.0244E-01	1.3573E-02	-4.4061E-01	1.9489E-02	5.8576E-03
3.3800E-01	1.0800E-02	-8.7400E-01	7.1795E-01	1.2490E-02	-4.4937E-01	1.9925E-02	6.1856E-03
3.3800E-01	1.2748E-02	-8.7400E-01	7.2088E-01	1.2362E-02	-4.6502E-01	1.9920E-02	6.5659E-03
3.3800E-01	1.5227E-02	-8.7400E-01	7.2382E-01	1.2370E-02	-4.7535E-01	1.8895E-02	6.5913E-03
3.3800E-01	1.8059E-02	-8.7400E-01	7.2587E-01	1.2160E-02	-4.8587E-01	1.9215E-02	7.0145E-03
3.3800E-01	2.1601E-02	-8.7400E-01	7.2814E-01	1.2139E-02	-4.9180E-01	1.9386E-02	7.2552E-03
3.3800E-01	2.5850E-02	-8.7400E-01	7.2709E-01	1.2098E-02	-4.9189E-01	1.9219E-02	7.1965E-03
3.3800E-01	3.1161E-02	-8.7400E-01	7.2883E-01	1.2166E-02	-4.9164E-01	1.8587E-02	6.9852E-03
3.3800E-01	3.7181E-02	-8.7400E-01	7.3118E-01	1.2231E-02	-4.8570E-01	1.7997E-02	6.4496E-03
3.3800E-01	4.4263E-02	-8.7400E-01	7.4375E-01	1.2236E-02	-4.7127E-01	1.8642E-02	6.5593E-03
3.3800E-01	5.2762E-02	-8.7400E-01	7.5745E-01	1.1642E-02	-4.4944E-01	1.7214E-02	5.2588E-03
3.3800E-01	6.3031E-02	-8.7400E-01	7.7898E-01	1.0984E-02	-4.1951E-01	1.5056E-02	3.7398E-03
3.3800E-01	7.5071E-02	-8.7400E-01	8.0521E-01	9.7413E-03	-3.7712E-01	1.2862E-02	1.5256E-03
3.3800E-01	8.9589E-02	-8.7400E-01	8.3333E-01	8.7624E-03	-3.3694E-01	1.0844E-02	2.7222E-04
3.3800E-01	1.0694E-01	-8.7400E-01	8.6623E-01	7.3615E-03	-3.0403E-01	8.8442E-03	-1.8067E-04
3.3800E-01	1.2783E-01	-8.7400E-01	9.0291E-01	5.7984E-03	-2.6991E-01	6.7830E-03	3.4676E-06
3.3800E-01	1.5227E-01	-8.7400E-01	9.3124E-01	4.5753E-03	-2.5899E-01	4.9107E-03	1.6949E-04
3.3800E-01	1.8201E-01	-8.7400E-01	9.6235E-01	3.7659E-03	-2.4575E-01	3.2261E-03	8.6925E-05
3.3800E-01	2.1707E-01	-8.7400E-01	9.8761E-01	3.1297E-03	-2.3202E-01	2.6677E-03	1.0714E-04
3.3800E-01	2.5885E-01	-8.7400E-01	1.0154E+00	2.6713E-03	-2.3268E-01	2.3607E-03	2.7062E-04
3.3800E-01	3.0878E-01	-8.7400E-01	1.0464E+00	2.0681E-03	-2.2323E-01	1.7534E-03	2.1385E-04
3.3800E-01	3.6827E-01	-8.7400E-01	1.0762E+00	1.4391E-03	-2.2635E-01	1.1585E-03	1.7564E-04
3.3800E-01	4.3945E-01	-8.7400E-01	1.1062E+00	7.0862E-04	-2.2559E-01	5.3546E-04	9.8331E-05
3.3800E-01	5.2443E-01	-8.7400E-01	1.1198E+00	1.5520E-04	-2.3296E-01	1.0736E-04	1.3753E-05
3.3800E-01	6.2571E-01	-8.7400E-01	1.1233E+00	2.9542E-05	-2.4126E-01	1.7911E-05	5.3043E-06
3.3800E-01	7.4646E-01	-8.7400E-01	1.1213E+00	1.3926E-05	-2.5673E-01	5.6198E-06	3.6127E-07
3.3800E-01	8.9023E-01	-8.7400E-01	1.1190E+00	9.8504E-06	-2.6432E-01	6.9317E-06	-1.2399E-06
3.3800E-01	1.0623E+00	-8.7400E-01	1.1192E+00	8.8152E-06	-2.6688E-01	3.7780E-06	-1.4803E-06

Table E.5-3 Hot-wire velocity measurements at X/T = .338, Z/T = -.874.

File E64470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 25.84716
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.146514E-03
Estimated momentum thickness Reynolds number = 6504.594

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
3.6100E-01	3.1870E-03	-9.8700E-01	5.7724E-01	8.3670E-03	-2.4076E-01	6.8082E-03	-2.0924E-03
3.6100E-01	3.5411E-03	-9.8700E-01	5.8112E-01	8.2703E-03	-2.5002E-01	6.6867E-03	-2.5901E-03
3.6100E-01	4.6034E-03	-9.8700E-01	5.8072E-01	8.1446E-03	-2.4845E-01	6.4904E-03	-2.5781E-03
3.6100E-01	5.6657E-03	-9.8700E-01	6.2045E-01	8.1386E-03	-2.6539E-01	7.8240E-03	-1.2805E-03
3.6100E-01	7.0822E-03	-9.8700E-01	6.5207E-01	7.1868E-03	-2.9603E-01	8.0436E-03	-8.4178E-04
3.6100E-01	8.4986E-03	-9.8700E-01	6.7662E-01	6.5505E-03	-3.1264E-01	7.5181E-03	-4.7664E-04
3.6100E-01	1.0269E-02	-9.8700E-01	6.9294E-01	6.1546E-03	-3.3404E-01	8.4493E-03	4.2032E-04
3.6100E-01	1.2748E-02	-9.8700E-01	7.1174E-01	5.5418E-03	-3.5088E-01	7.3967E-03	6.2185E-04
3.6100E-01	1.5581E-02	-9.8700E-01	7.2217E-01	5.2555E-03	-3.6394E-01	7.5788E-03	1.1285E-03
3.6100E-01	1.9122E-02	-9.8700E-01	7.3257E-01	5.0940E-03	-3.6947E-01	6.6626E-03	7.8926E-04
3.6100E-01	2.3371E-02	-9.8700E-01	7.4495E-01	5.1761E-03	-3.7072E-01	7.0565E-03	1.2160E-03
3.6100E-01	2.8683E-02	-9.8700E-01	7.5413E-01	5.1808E-03	-3.6897E-01	7.0281E-03	1.5226E-03
3.6100E-01	3.5057E-02	-9.8700E-01	7.6385E-01	5.3991E-03	-3.5943E-01	7.4503E-03	1.7352E-03
3.6100E-01	4.2847E-02	-9.8700E-01	7.7786E-01	5.6109E-03	-3.4287E-01	7.3259E-03	1.7604E-03
3.6100E-01	5.2408E-02	-9.8700E-01	7.8965E-01	5.7918E-03	-3.2460E-01	7.7282E-03	1.9430E-03
3.6100E-01	6.4093E-02	-9.8700E-01	8.0559E-01	5.7660E-03	-2.9830E-01	7.3952E-03	1.6234E-03
3.6100E-01	7.8258E-02	-9.8700E-01	8.2549E-01	5.7284E-03	-2.6908E-01	6.3256E-03	1.0662E-03
3.6100E-01	9.5963E-02	-9.8700E-01	8.4781E-01	5.4353E-03	-2.4440E-01	5.4729E-03	6.6147E-04
3.6100E-01	1.1721E-01	-9.8700E-01	8.7301E-01	4.8002E-03	-2.2587E-01	4.5213E-03	3.3049E-04
3.6100E-01	1.4306E-01	-9.8700E-01	9.0198E-01	4.2268E-03	-2.0243E-01	3.4710E-03	1.9783E-04
3.6100E-01	1.7493E-01	-9.8700E-01	9.3155E-01	3.6279E-03	-1.8797E-01	3.1071E-03	1.7347E-04
3.6100E-01	2.1388E-01	-9.8700E-01	9.6366E-01	3.1734E-03	-1.7169E-01	2.5731E-03	1.8557E-04
3.6100E-01	2.6133E-01	-9.8700E-01	9.9760E-01	2.6891E-03	-1.6034E-01	2.0378E-03	1.8476E-04
3.6100E-01	3.1905E-01	-9.8700E-01	1.0337E+00	2.0841E-03	-1.5886E-01	1.4788E-03	1.7523E-04
3.6100E-01	3.8987E-01	-9.8700E-01	1.0705E+00	1.2762E-03	-1.5170E-01	7.9532E-04	1.1826E-04
3.6100E-01	4.7663E-01	-9.8700E-01	1.1005E+00	4.3615E-04	-1.5222E-01	2.8361E-04	4.3970E-05
3.6100E-01	5.8215E-01	-9.8700E-01	1.1146E+00	4.9364E-05	-1.5264E-01	5.3011E-05	9.6237E-06
3.6100E-01	7.1140E-01	-9.8700E-01	1.1128E+00	1.3981E-05	-1.6610E-01	7.1429E-06	1.7577E-06
3.6100E-01	8.6933E-01	-9.8700E-01	1.1111E+00	7.8959E-06	-1.7205E-01	5.4696E-06	5.2744E-07
3.6100E-01	1.0623E+00	-9.8700E-01	1.1133E+00	6.9076E-06	-1.7007E-01	2.6880E-06	-7.7462E-07

Table E.5-4 Hot-wire velocity measurements at X/T = .361, Z/T = -.987.

File E65470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.57232
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.123631E-03
Estimated momentum thickness Reynolds number = 6650.183

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
3.6500E-01	3.5411E-03	-1.2440E+00	5.4135E-01	6.9732E-03	-1.7337E-01	2.2511E-03	-1.8881E-03
3.6500E-01	4.2493E-03	-1.2440E+00	5.9271E-01	6.2997E-03	-1.8058E-01	2.9033E-03	-1.2949E-03
3.6500E-01	4.9575E-03	-1.2440E+00	6.1625E-01	5.6871E-03	-1.8529E-01	2.7402E-03	-1.1896E-03
3.6500E-01	6.0198E-03	-1.2440E+00	6.3851E-01	5.0274E-03	-2.0006E-01	3.6177E-03	-6.5209E-04
3.6500E-01	7.4363E-03	-1.2440E+00	6.5231E-01	5.0044E-03	-2.0415E-01	2.8381E-03	-6.2336E-04
3.6500E-01	9.2068E-03	-1.2440E+00	6.6689E-01	4.5815E-03	-2.1351E-01	3.4648E-03	-2.1006E-04
3.6500E-01	1.1331E-02	-1.2440E+00	6.8333E-01	4.2041E-03	-2.2314E-01	3.3455E-03	-5.7977E-05
3.6500E-01	1.3810E-02	-1.2440E+00	7.0026E-01	4.0573E-03	-2.2683E-01	3.2169E-03	1.7180E-04
3.6500E-01	1.6997E-02	-1.2440E+00	7.1186E-01	3.8087E-03	-2.3089E-01	3.0646E-03	1.3569E-04
3.6500E-01	2.0538E-02	-1.2440E+00	7.2253E-01	3.7091E-03	-2.3350E-01	3.5273E-03	4.6948E-04
3.6500E-01	2.5142E-02	-1.2440E+00	7.3828E-01	3.7460E-03	-2.3058E-01	3.0704E-03	3.9937E-04
3.6500E-01	3.0807E-02	-1.2440E+00	7.5078E-01	3.7537E-03	-2.2713E-01	3.0981E-03	4.3049E-04
3.6500E-01	3.7181E-02	-1.2440E+00	7.6335E-01	3.7375E-03	-2.2013E-01	2.9373E-03	3.2683E-04
3.6500E-01	4.5326E-02	-1.2440E+00	7.7735E-01	3.9120E-03	-1.9910E-01	3.0295E-03	4.1748E-04
3.6500E-01	5.5241E-02	-1.2440E+00	7.8708E-01	4.1099E-03	-2.0578E-01	3.0618E-03	3.4842E-04
3.6500E-01	6.7635E-02	-1.2440E+00	8.0222E-01	4.1768E-03	-1.9384E-01	3.0789E-03	2.7769E-04
3.6500E-01	8.2153E-02	-1.2440E+00	8.1838E-01	4.1381E-03	-1.8551E-01	2.8316E-03	1.2188E-04
3.6500E-01	1.0021E-01	-1.2440E+00	8.3827E-01	4.1633E-03	-1.7524E-01	2.8151E-03	1.1110E-04
3.6500E-01	1.2181E-01	-1.2440E+00	8.5994E-01	4.0773E-03	-1.6555E-01	2.7190E-03	2.8771E-04
3.6500E-01	1.4837E-01	-1.2440E+00	8.8467E-01	3.8341E-03	-1.5320E-01	2.6511E-03	2.2253E-04
3.6500E-01	1.8059E-01	-1.2440E+00	9.0929E-01	3.4165E-03	-1.4918E-01	2.5841E-03	1.8002E-04
3.6500E-01	2.1990E-01	-1.2440E+00	9.3898E-01	3.0567E-03	-1.3394E-01	2.1895E-03	9.8626E-05
3.6500E-01	2.6806E-01	-1.2440E+00	9.7096E-01	2.4417E-03	-1.2125E-01	2.1181E-03	1.6275E-04
3.6500E-01	3.2613E-01	-1.2440E+00	1.0069E+00	1.9390E-03	-1.1572E-01	1.3229E-03	6.9322E-05
3.6500E-01	3.9731E-01	-1.2440E+00	1.0420E+00	1.1994E-03	-1.0266E-01	6.0570E-04	1.2323E-05
3.6500E-01	4.8336E-01	-1.2440E+00	1.0694E+00	4.1851E-04	-1.0433E-01	1.3431E-04	6.9838E-07
3.6500E-01	5.8853E-01	-1.2440E+00	1.0815E+00	4.4107E-05	-1.0486E-01	5.2054E-05	2.3109E-06
3.6500E-01	7.1671E-01	-1.2440E+00	1.0826E+00	1.1533E-05	-1.0077E-01	5.9203E-06	8.7829E-07
3.6500E-01	8.7252E-01	-1.2440E+00	1.0830E+00	5.9415E-06	-1.0731E-01	9.3268E-06	2.1545E-07
3.6500E-01	1.0623E+00	-1.2440E+00	1.0834E+00	5.3793E-06	-1.1332E-01	1.1472E-06	-7.0129E-07

Table E.5-5 Hot-wire velocity measurements at X/T = .365, Z/T = -1.244.

E.6 HOT-WIRE MEASUREMENTS IN PLANE G

Location of Profile		Data File Name	Table Numbers
X/T	Z/T		
0.714	-0.626	E76470.RES	E. 6-1
0.710	-0.754	E77470.RES	E. 6-2
0.705	-0.885	E78470.RES	E. 6-3
0.708	-1.013	E74470.RES	E. 6-4
0.696	-1.243	E75470.RES	E. 6-5

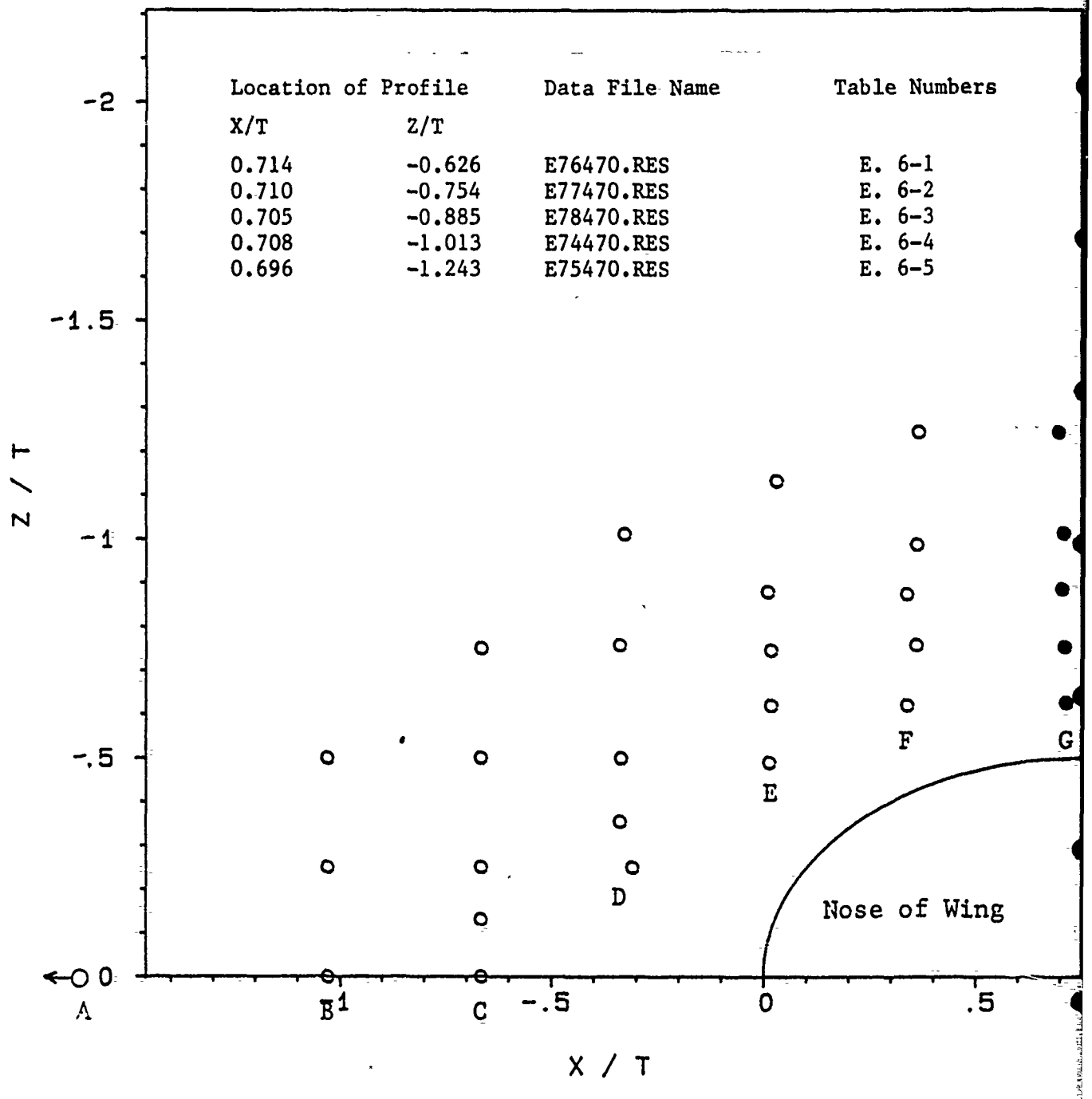


Figure E.6-1 Location of hot-wire profiles measured in plane G.

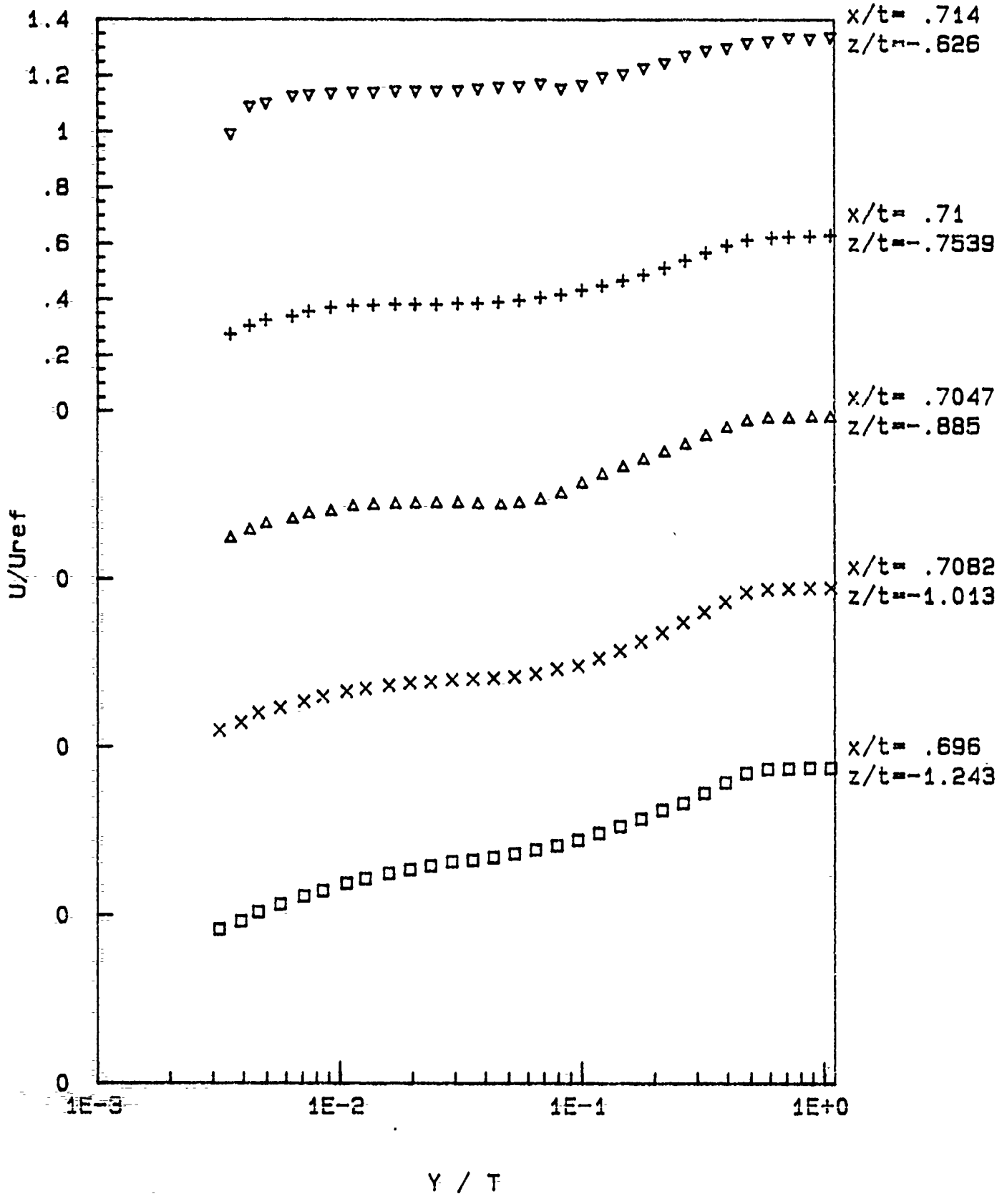


FIGURE E.6-2 Profiles of Mean Velocity Component U, Plane G

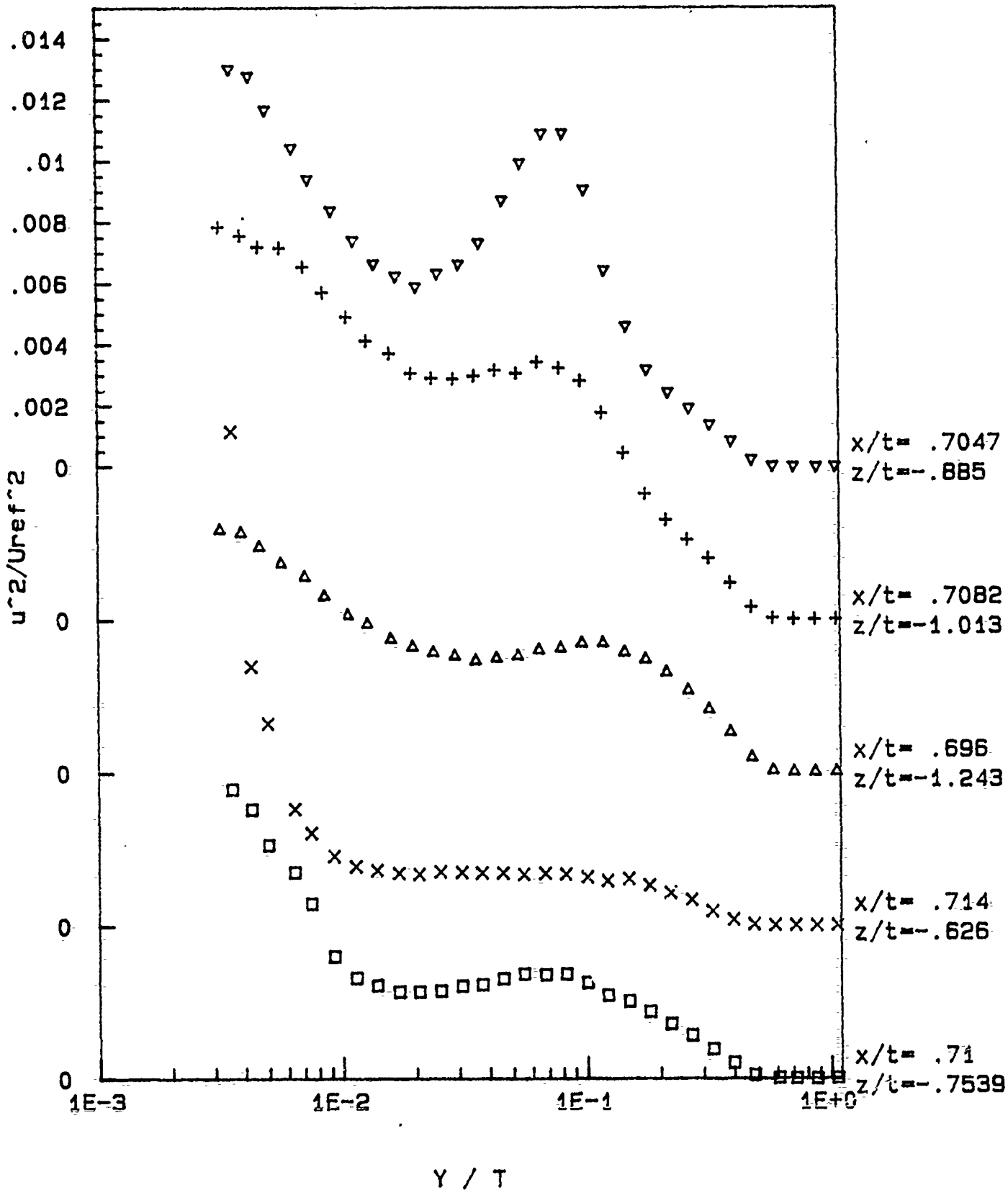


FIGURE E.6-3 Profiles of the U Component of Turbulence Normal Stress, Plane G

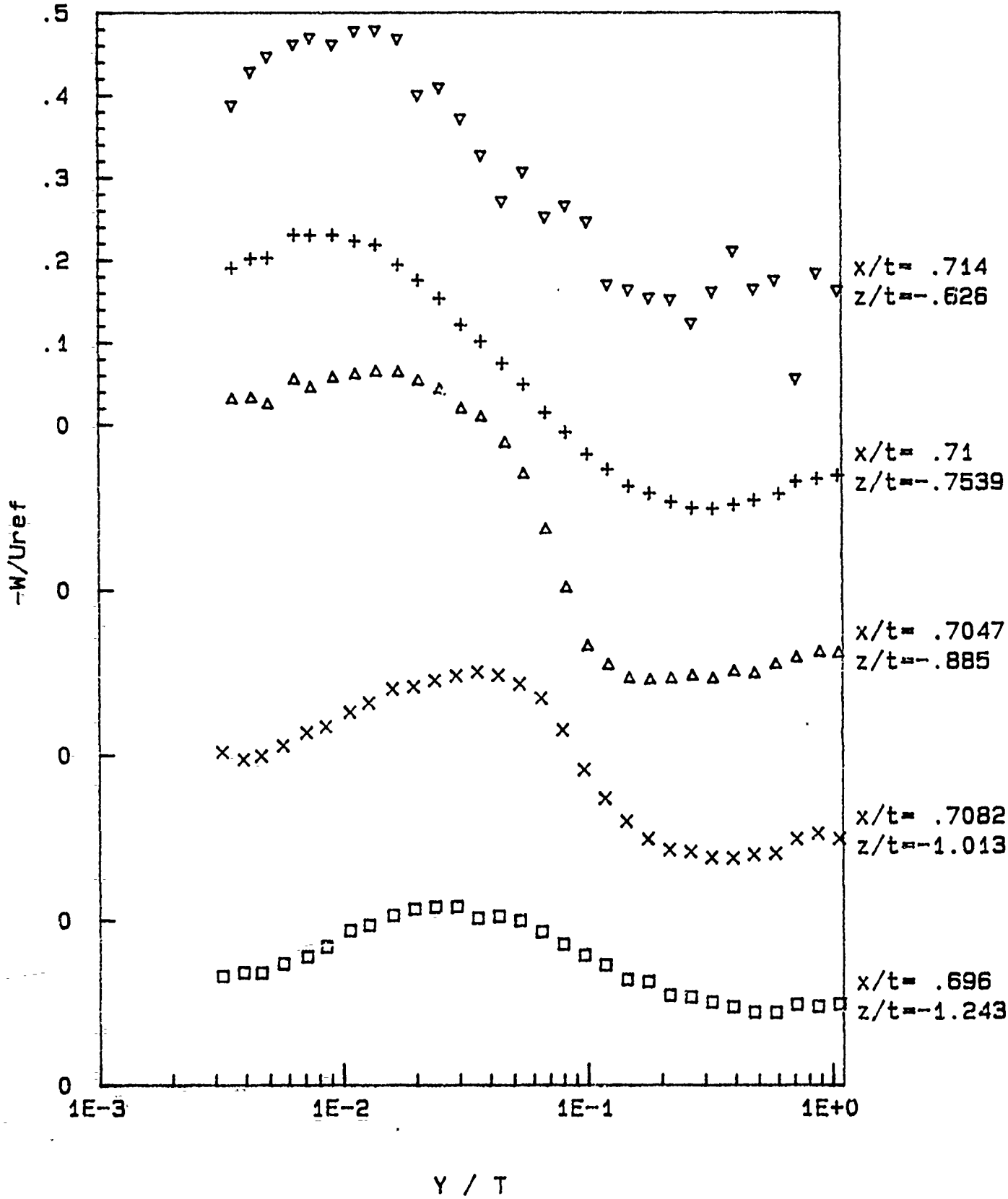


FIGURE E.6-4 Profiles of Mean-Velocity Component W, Plane G

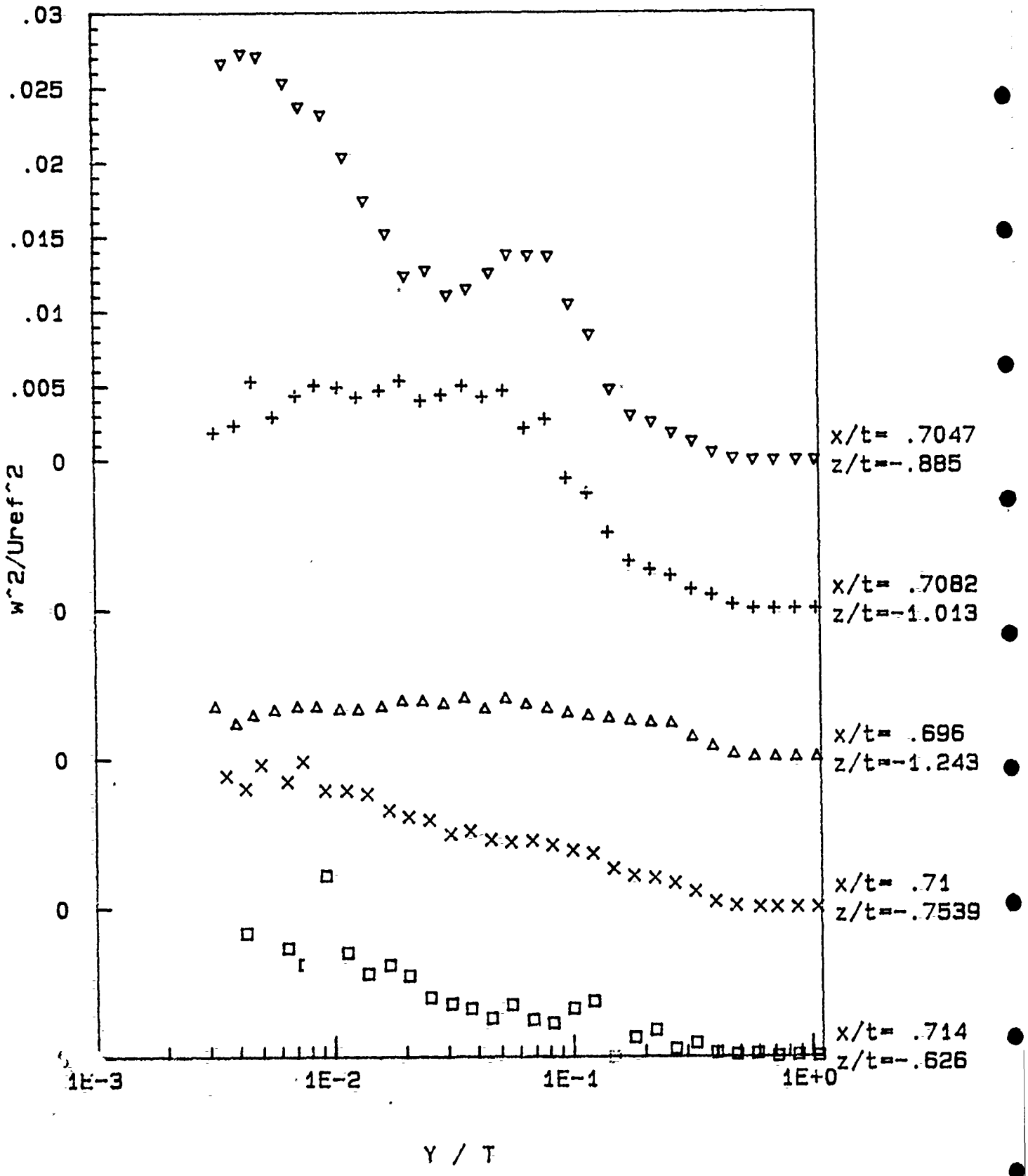


FIGURE E.6-5 Profiles of the W Component of Turbulence Normal Stress, Plane G

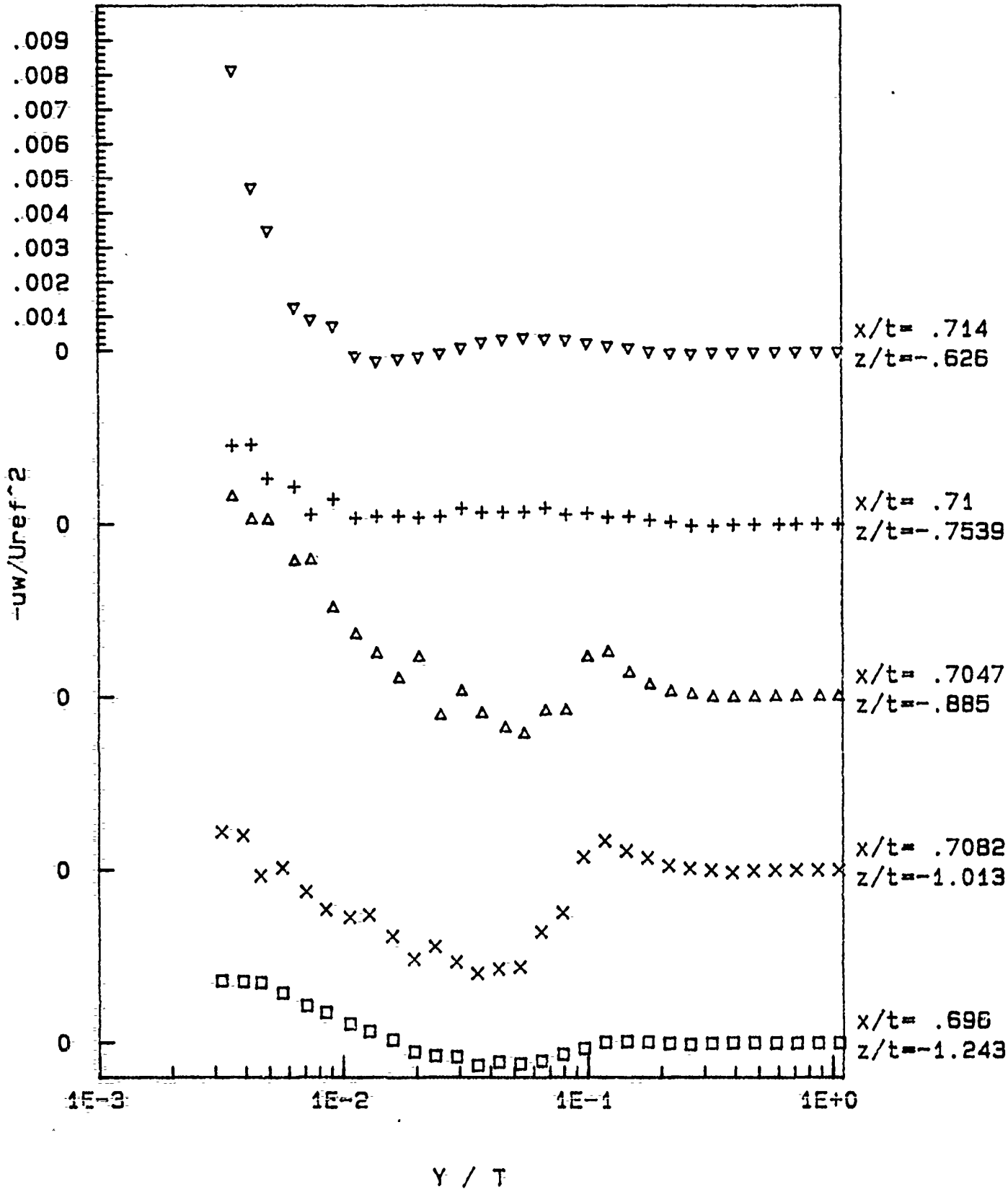


FIGURE E.6-6 Profiles of the UW Reynolds Shear Stress, Plane G

File E76470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.25167
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.133655E-03
Estimated momentum thickness Reynolds number = 6585.906

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
7.1400E-01	3.5411E-03	-6.2600E-01	9.9502E-01	1.6149E-02	-3.8884E-01		-8.1460E-03
7.1400E-01	4.2493E-03	-6.2600E-01	1.0931E+00	8.4749E-03	-4.2935E-01	8.2998E-03	-4.7394E-03
7.1400E-01	4.9575E-03	-6.2600E-01	1.1046E+00	6.6153E-03	-4.4754E-01		-3.4979E-03
7.1400E-01	6.3739E-03	-6.2600E-01	1.1302E+00	3.8157E-03	-4.6250E-01	7.3113E-03	-1.2684E-03
7.1400E-01	7.4363E-03	-6.2600E-01	1.1358E+00	3.0320E-03	-4.7057E-01	6.2167E-03	-9.1829E-04
7.1400E-01	9.2068E-03	-6.2600E-01	1.1409E+00	2.2647E-03	-4.6200E-01	1.2166E-02	-7.3127E-04
7.1400E-01	1.1331E-02	-6.2600E-01	1.1442E+00	1.9357E-03	-4.7846E-01	6.9805E-03	1.2815E-04
7.1400E-01	1.3810E-02	-6.2600E-01	1.1443E+00	1.8107E-03	-4.7961E-01	5.5787E-03	2.8336E-04
7.1400E-01	1.6997E-02	-6.2600E-01	1.1489E+00	1.7088E-03	-4.6896E-01	6.1497E-03	2.0862E-04
7.1400E-01	2.0538E-02	-6.2600E-01	1.1488E+00	1.6877E-03	-4.0081E-01	5.4424E-03	1.5425E-04
7.1400E-01	2.5142E-02	-6.2600E-01	1.1495E+00	1.7564E-03	-4.1018E-01	3.9648E-03	4.9663E-05
7.1400E-01	3.0807E-02	-6.2600E-01	1.1503E+00	1.7472E-03	-3.7204E-01	3.5464E-03	-1.0817E-04
7.1400E-01	3.7181E-02	-6.2600E-01	1.1568E+00	1.7215E-03	-3.2769E-01	3.2223E-03	-2.7419E-04
7.1400E-01	4.5326E-02	-6.2600E-01	1.1630E+00	1.7208E-03	-2.7209E-01	2.5727E-03	-3.6061E-04
7.1400E-01	5.5241E-02	-6.2600E-01	1.1660E+00	1.6710E-03	-3.0747E-01	3.4863E-03	-4.0331E-04
7.1400E-01	6.7635E-02	-6.2600E-01	1.1746E+00	1.7018E-03	-2.5280E-01	2.4630E-03	-3.7072E-04
7.1400E-01	8.2153E-02	-6.2600E-01	1.1570E+00	1.6823E-03	-2.6697E-01	2.2568E-03	-3.4490E-04
7.1400E-01	1.0021E-01	-6.2600E-01	1.1692E+00	1.5793E-03	-2.4699E-01	3.2205E-03	-2.3976E-04
7.1400E-01	1.2181E-01	-6.2600E-01	1.1981E+00	1.4653E-03	-1.7086E-01	3.7151E-03	-1.6742E-04
7.1400E-01	1.4837E-01	-6.2600E-01	1.2093E+00	1.5244E-03	-1.6479E-01		-1.0484E-04
7.1400E-01	1.8059E-01	-6.2600E-01	1.2297E+00	1.3125E-03	-1.5470E-01	1.2848E-03	-9.5544E-06
7.1400E-01	2.1990E-01	-6.2600E-01	1.2492E+00	1.0714E-03	-1.5284E-01	1.7581E-03	4.4152E-05
7.1400E-01	2.6806E-01	-6.2600E-01	1.2749E+00	8.4092E-04	-1.2414E-01	5.2027E-04	6.1549E-05
7.1400E-01	3.2613E-01	-6.2600E-01	1.2928E+00	4.6803E-04	-1.6250E-01	9.0005E-04	2.6561E-05
7.1400E-01	3.9731E-01	-6.2600E-01	1.3020E+00	1.8890E-04	-2.1162E-01	2.6723E-04	2.7416E-05
7.1400E-01	4.8336E-01	-6.2600E-01	1.3206E+00	4.5390E-05	-1.6551E-01	1.3496E-04	1.1841E-05
7.1400E-01	5.8853E-01	-6.2600E-01	1.3269E+00	1.4812E-05	-1.7623E-01	2.0761E-04	4.0721E-06
7.1400E-01	7.1671E-01	-6.2600E-01	1.3386E+00	1.2406E-05	-5.6782E-02	1.9100E-05	1.2020E-06
7.1400E-01	8.7252E-01	-6.2600E-01	1.3354E+00	8.2626E-06	-1.8505E-01	9.9709E-05	2.3556E-06
7.1400E-01	1.0623E+00	-6.2600E-01	1.3412E+00	7.5913E-06	-1.6408E-01	4.4658E-05	7.4413E-07

Table E.6-1 Hot-wire velocity measurements at X/T = .714, Z/T = -.626.

File E77470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.26233
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.13332E-03
Estimated momentum thickness Reynolds number = 6588.043

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
7.1000E-01	3.5411E-03	-7.5390E-01	8.7547E-01	9.4502E-03	-3.9033E-01	8.8625E-03	-2.2723E-03
7.1000E-01	4.2493E-03	-7.5390E-01	9.0456E-01	8.7980E-03	-4.0200E-01	7.9990E-03	-2.2995E-03
7.1000E-01	4.9575E-03	-7.5390E-01	9.2658E-01	7.6294E-03	-4.0268E-01	9.6109E-03	-1.3133E-03
7.1000E-01	6.3739E-03	-7.5390E-01	9.3938E-01	6.7377E-03	-4.3091E-01	8.4695E-03	-1.0724E-03
7.1000E-01	7.4383E-03	-7.5390E-01	9.5649E-01	5.7106E-03	-4.3049E-01	9.8271E-03	-2.6641E-04
7.1000E-01	9.2068E-03	-7.5390E-01	9.7124E-01	3.9838E-03	-4.3031E-01	7.8646E-03	-7.1944E-04
7.1000E-01	1.1331E-02	-7.5390E-01	9.7737E-01	3.2853E-03	-4.2331E-01	7.8496E-03	-1.7167E-04
7.1000E-01	1.3810E-02	-7.5390E-01	9.7978E-01	3.0411E-03	-4.1872E-01	7.6244E-03	-2.2319E-04
7.1000E-01	1.6997E-02	-7.5390E-01	9.8301E-01	2.8336E-03	-3.9419E-01	6.5195E-03	-2.2894E-04
7.1000E-01	2.0538E-02	-7.5390E-01	9.8254E-01	2.8361E-03	-3.7537E-01	6.0985E-03	-1.8487E-04
7.1000E-01	2.5142E-02	-7.5390E-01	9.8189E-01	2.8592E-03	-3.5325E-01	5.8605E-03	-2.1766E-04
7.1000E-01	3.0807E-02	-7.5390E-01	9.8614E-01	3.0266E-03	-3.2108E-01	4.9042E-03	-4.5593E-04
7.1000E-01	3.7181E-02	-7.5390E-01	9.8575E-01	3.0606E-03	-3.0107E-01	5.1237E-03	-3.3267E-04
7.1000E-01	4.5326E-02	-7.5390E-01	9.9095E-01	3.2654E-03	-2.7463E-01	4.5418E-03	-3.4669E-04
7.1000E-01	5.5241E-02	-7.5390E-01	9.9659E-01	3.4174E-03	-2.4890E-01	4.3857E-03	-3.5227E-04
7.1000E-01	6.7635E-02	-7.5390E-01	1.0075E+00	3.3856E-03	-2.1470E-01	4.4709E-03	-4.6621E-04
7.1000E-01	8.2153E-02	-7.5390E-01	1.0178E+00	3.4236E-03	-1.9117E-01	4.1911E-03	-2.7741E-04
7.1000E-01	1.0021E-01	-7.5390E-01	1.0344E+00	3.1257E-03	-1.6407E-01	3.8128E-03	-3.1016E-04
7.1000E-01	1.2181E-01	-7.5390E-01	1.0502E+00	2.7169E-03	-1.4606E-01	3.6081E-03	-2.0326E-04
7.1000E-01	1.4837E-01	-7.5390E-01	1.0689E+00	2.5172E-03	-1.2573E-01	2.5800E-03	-2.2226E-04
7.1000E-01	1.8059E-01	-7.5390E-01	1.0891E+00	2.1786E-03	-1.1732E-01	2.1298E-03	-1.1822E-04
7.1000E-01	2.1990E-01	-7.5390E-01	1.1141E+00	1.7824E-03	-1.0660E-01	1.9591E-03	-5.8547E-05
7.1000E-01	2.6806E-01	-7.5390E-01	1.1406E+00	1.4050E-03	-9.9297E-02	1.6520E-03	4.8837E-05
7.1000E-01	3.2613E-01	-7.5390E-01	1.1683E+00	9.5384E-04	-9.8663E-02	1.0561E-03	5.9985E-05
7.1000E-01	3.9731E-01	-7.5390E-01	1.1939E+00	4.9969E-04	-1.0320E-01	3.7543E-04	2.3625E-05
7.1000E-01	4.8336E-01	-7.5390E-01	1.2142E+00	1.0943E-04	-1.0898E-01	1.0813E-04	6.0517E-06
7.1000E-01	6.0765E-01	-7.5390E-01	1.2224E+00	1.5728E-05	-1.1655E-01	1.6191E-05	4.0995E-06
7.1000E-01	7.1671E-01	-7.5390E-01	1.2254E+00	8.3817E-06	-1.3161E-01	1.0638E-05	9.5973E-07
7.1000E-01	8.7252E-01	-7.5390E-01	1.2275E+00	7.1299E-06	-1.3476E-01	3.0992E-06	-2.8228E-07
7.1000E-01	1.0623E+00	-7.5390E-01	1.2310E+00	5.8260E-06	-1.3919E-01	6.9698E-06	4.5332E-07

Table E.6-2 Hot-wire velocity measurements at X/T = .710, Z/T = -.754.

File E78470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.2746
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.132934E-03
Estimated momentum thickness Reynolds number = 6590.508

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
7.0470E-01	3.5411E-03	-8.8500E-01	7.4462E-01	1.3019E-02	-4.3053E-01	2.6674E-02	-5.7782E-03
7.0470E-01	4.2493E-03	-8.8500E-01	7.7320E-01	1.2795E-02	-4.3182E-01	2.7311E-02	-5.1088E-03
7.0470E-01	4.9575E-03	-8.8500E-01	7.9580E-01	1.1689E-02	-4.2424E-01	2.7132E-02	-5.0964E-03
7.0470E-01	6.3739E-03	-8.8500E-01	8.1293E-01	1.0428E-02	-4.5433E-01	2.5349E-02	-3.9072E-03
7.0470E-01	7.4363E-03	-8.8500E-01	8.3191E-01	9.4065E-03	-4.4427E-01	2.3731E-02	-3.9355E-03
7.0470E-01	9.2068E-03	-8.8500E-01	8.4084E-01	8.3753E-03	-4.5635E-01	2.3208E-02	-2.5544E-03
7.0470E-01	1.1331E-02	-8.8500E-01	8.5823E-01	7.4062E-03	-4.6039E-01	2.0367E-02	-1.7903E-03
7.0470E-01	1.3810E-02	-8.8500E-01	8.6312E-01	6.6379E-03	-4.6402E-01	1.7436E-02	-1.2336E-03
7.0470E-01	1.6997E-02	-8.8500E-01	8.6655E-01	6.2343E-03	-4.6299E-01	1.5217E-02	-5.0628E-04
7.0470E-01	2.0538E-02	-8.8500E-01	8.6786E-01	5.8858E-03	-4.5261E-01	1.2382E-02	-1.1321E-03
7.0470E-01	2.5142E-02	-8.8500E-01	8.6972E-01	6.3253E-03	-4.4242E-01	1.2742E-02	5.5844E-04
7.0470E-01	3.0807E-02	-8.8500E-01	8.7014E-01	6.6318E-03	-4.1843E-01	1.1079E-02	-1.4556E-04
7.0470E-01	3.7181E-02	-8.8500E-01	8.6645E-01	7.3206E-03	-4.0870E-01	1.1491E-02	5.0247E-04
7.0470E-01	4.6388E-02	-8.8500E-01	8.6558E-01	8.7194E-03	-3.7716E-01	1.2561E-02	9.1046E-04
7.0470E-01	5.5241E-02	-8.8500E-01	8.7066E-01	9.9308E-03	-3.3909E-01	1.3817E-02	1.0870E-03
7.0470E-01	6.7635E-02	-8.8500E-01	8.8358E-01	1.0898E-02	-2.7210E-01	1.3744E-02	4.2229E-04
7.0470E-01	8.2153E-02	-8.8500E-01	9.0582E-01	1.0911E-02	-2.0176E-01	1.3717E-02	4.0442E-04
7.0470E-01	1.0021E-01	-8.8500E-01	9.4105E-01	9.0557E-03	-1.3069E-01	1.0462E-02	-1.1400E-03
7.0470E-01	1.2181E-01	-8.8500E-01	9.7270E-01	6.4234E-03	-1.0805E-01	8.4297E-03	-1.2857E-03
7.0470E-01	1.4837E-01	-8.8500E-01	1.0003E+00	4.5821E-03	-9.1999E-02	4.7471E-03	-6.7962E-04
7.0470E-01	1.8059E-01	-8.8500E-01	1.0262E+00	3.1724E-03	-9.0084E-02	2.9946E-03	-3.3985E-04
7.0470E-01	2.1990E-01	-8.8500E-01	1.0528E+00	2.4375E-03	-9.1333E-02	2.5384E-03	-1.3339E-04
7.0470E-01	2.6806E-01	-8.8500E-01	1.0797E+00	1.9117E-03	-9.5003E-02	1.8437E-03	-5.6856E-05
7.0470E-01	3.2613E-01	-8.8500E-01	1.1111E+00	1.3763E-03	-9.1518E-02	1.2567E-03	2.8424E-05
7.0470E-01	3.9731E-01	-8.8500E-01	1.1404E+00	8.3441E-04	-9.9985E-02	5.3828E-04	2.6517E-05
7.0470E-01	4.8336E-01	-8.8500E-01	1.1653E+00	2.3388E-04	-9.7839E-02	1.1488E-04	1.7278E-05
7.0470E-01	5.8853E-01	-8.8500E-01	1.1747E+00	2.7488E-05	-1.0884E-01	1.8400E-05	5.5634E-06
7.0470E-01	7.1671E-01	-8.8500E-01	1.1745E+00	9.2938E-06	-1.1686E-01	5.0742E-06	1.5861E-06
7.0470E-01	8.8952E-01	-8.8500E-01	1.1788E+00	5.9144E-06	-1.2377E-01	4.6364E-06	2.2533E-08
7.0470E-01	1.0623E+00	-8.8500E-01	1.1778E+00	5.7647E-06	-1.2257E-01	1.0339E-06	-1.2909E-07

Table E.6-3 Hot-wire velocity measurements at X/T = .705, Z/T = -.885.

File E74470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.29486
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.132296E-03
Estimated momentum thickness Reynolds number = 6594.572

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
7.0820E-01	3.1870E-03	-1.0130E+00	6.6145E-01	1.2849E-02	-2.0364E-01	1.1878E-02	-1.0982E-03
7.0820E-01	3.8952E-03	-1.0130E+00	6.8872E-01	1.2557E-02	-1.9476E-01	1.2351E-02	-9.9651E-04
7.0820E-01	4.6034E-03	-1.0130E+00	7.2334E-01	1.2190E-02	-1.9894E-01	1.5311E-02	1.7506E-04
7.0820E-01	5.6657E-03	-1.0130E+00	7.4135E-01	1.2157E-02	-2.1143E-01	1.2908E-02	-6.0143E-05
7.0820E-01	7.0822E-03	-1.0130E+00	7.6342E-01	1.1534E-02	-2.2730E-01	1.4340E-02	6.3278E-04
7.0820E-01	8.4986E-03	-1.0130E+00	7.8213E-01	1.0691E-02	-2.3425E-01	1.5045E-02	1.1505E-03
7.0820E-01	1.0623E-02	-1.0130E+00	8.0010E-01	9.8921E-03	-2.5181E-01	1.4903E-02	1.3750E-03
7.0820E-01	1.2748E-02	-1.0130E+00	8.1087E-01	9.1175E-03	-2.6330E-01	1.4236E-02	1.3008E-03
7.0820E-01	1.5935E-02	-1.0130E+00	8.2183E-01	8.6988E-03	-2.8013E-01	1.4676E-02	1.9198E-03
7.0820E-01	1.9476E-02	-1.0130E+00	8.3059E-01	8.0595E-03	-2.8298E-01	1.5347E-02	2.5894E-03
7.0820E-01	2.3725E-02	-1.0130E+00	8.3428E-01	7.8886E-03	-2.9064E-01	1.3993E-02	2.2208E-03
7.0820E-01	2.9037E-02	-1.0130E+00	8.4159E-01	7.8698E-03	-2.9616E-01	1.4388E-02	2.6658E-03
7.0820E-01	3.5411E-02	-1.0130E+00	8.4418E-01	7.9675E-03	-3.0090E-01	1.4984E-02	3.0032E-03
7.0820E-01	4.3201E-02	-1.0130E+00	8.4835E-01	8.1510E-03	-2.9679E-01	1.4237E-02	2.8619E-03
7.0820E-01	5.2762E-02	-1.0130E+00	8.5365E-01	8.0529E-03	-2.8612E-01	1.4660E-02	2.8047E-03
7.0820E-01	6.4448E-02	-1.0130E+00	8.6356E-01	8.4200E-03	-2.6859E-01	1.2137E-02	1.7839E-03
7.0820E-01	7.8966E-02	-1.0130E+00	8.8142E-01	8.2231E-03	-2.3051E-01	1.2730E-02	1.2306E-03
7.0820E-01	9.6317E-02	-1.0130E+00	8.9147E-01	7.7976E-03	-1.8205E-01	8.7645E-03	-3.7450E-04
7.0820E-01	1.1756E-01	-1.0130E+00	9.1926E-01	6.7535E-03	-1.4733E-01	7.7565E-03	-8.4655E-04
7.0820E-01	1.4377E-01	-1.0130E+00	9.4662E-01	5.4320E-03	-1.1979E-01	5.1117E-03	-5.4765E-04
7.0820E-01	1.7564E-01	-1.0130E+00	9.7919E-01	4.1054E-03	-9.8431E-02	3.2155E-03	-3.5253E-04
7.0820E-01	2.1459E-01	-1.0130E+00	1.0109E+00	3.2550E-03	-8.5039E-02	2.6115E-03	-1.2143E-04
7.0820E-01	2.6204E-01	-1.0130E+00	1.0475E+00	2.6073E-03	-8.2829E-02	2.2453E-03	-4.3165E-05
7.0820E-01	3.1976E-01	-1.0130E+00	1.0849E+00	1.9985E-03	-7.5782E-02	1.3095E-03	5.0927E-06
7.0820E-01	3.9093E-01	-1.0130E+00	1.1212E+00	1.1822E-03	-7.4795E-02	9.4511E-04	7.1383E-05
7.0820E-01	4.7734E-01	-1.0130E+00	1.1553E+00	4.0644E-04	-7.9250E-02	2.8547E-04	2.0358E-05
7.0820E-01	5.8286E-01	-1.0130E+00	1.1655E+00	5.0266E-05	-8.0835E-02	2.9692E-05	4.1161E-06
7.0820E-01	7.1211E-01	-1.0130E+00	1.1678E+00	1.1624E-05	-9.8278E-02	5.1885E-06	1.9653E-06
7.0820E-01	8.6969E-01	-1.0130E+00	1.1701E+00	6.8127E-06	-1.0508E-01	2.5163E-06	1.1649E-06
7.0820E-01	1.0623E+00	-1.0130E+00	1.1715E+00	4.8489E-06	-9.8942E-02	2.8972E-06	-6.8107E-07

Table E.6-4 Hot-wire velocity measurements at X/T = .708, Z/T = -1.013.

File E75470.RES
Velocity measurements obtained using the single-sensor hot wire probe
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.106
viscosity (meters squared per second) = 1.65237E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 26.34887
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.130601E-03
Estimated momentum thickness Reynolds number = 6605.406

X/T	Y/T	Z/T	U/Uref	u2/Uref2	W/Uref	w2/Uref2	uw/Uref2
6.9600E-01	3.1870E-03	-1.2430E+00	5.5048E-01	7.9351E-03	-1.3197E-01	3.4157E-03	-1.7939E-03
6.9600E-01	3.8952E-03	-1.2430E+00	5.7959E-01	7.8281E-03	-1.3667E-01	2.2579E-03	-1.7741E-03
6.9600E-01	4.6034E-03	-1.2430E+00	6.1268E-01	7.3746E-03	-1.3606E-01	2.8456E-03	-1.7357E-03
6.9600E-01	5.6657E-03	-1.2430E+00	6.3968E-01	6.8199E-03	-1.4712E-01	3.1564E-03	-1.4395E-03
6.9600E-01	7.0822E-03	-1.2430E+00	6.6902E-01	6.3882E-03	-1.5598E-01	3.4107E-03	-1.0718E-03
6.9600E-01	8.4986E-03	-1.2430E+00	6.8828E-01	5.7569E-03	-1.6772E-01	3.3990E-03	-8.7933E-04
6.9600E-01	1.0623E-02	-1.2430E+00	7.1438E-01	5.1386E-03	-1.8753E-01	3.2194E-03	-5.4499E-04
6.9600E-01	1.2748E-02	-1.2430E+00	7.3126E-01	4.8439E-03	-1.9409E-01	3.2021E-03	-3.3023E-04
6.9600E-01	1.5935E-02	-1.2430E+00	7.4927E-01	4.3475E-03	-2.0575E-01	3.4168E-03	-8.7205E-05
6.9600E-01	1.9476E-02	-1.2430E+00	7.6290E-01	4.0980E-03	-2.1345E-01	3.7979E-03	2.6348E-04
6.9600E-01	2.3725E-02	-1.2430E+00	7.7711E-01	3.9140E-03	-2.1607E-01	3.7634E-03	3.8402E-04
6.9600E-01	2.9037E-02	-1.2430E+00	7.9090E-01	3.8043E-03	-2.1623E-01	3.6029E-03	4.0984E-04
6.9600E-01	3.5411E-02	-1.2430E+00	7.9699E-01	3.6466E-03	-2.0213E-01	3.9676E-03	6.6032E-04
6.9600E-01	4.3201E-02	-1.2430E+00	8.0714E-01	3.7304E-03	-2.0467E-01	3.2675E-03	5.5603E-04
6.9600E-01	5.2762E-02	-1.2430E+00	8.2093E-01	3.8013E-03	-1.9953E-01	3.9384E-03	6.1496E-04
6.9600E-01	6.4448E-02	-1.2430E+00	8.3434E-01	3.9888E-03	-1.8569E-01	3.5617E-03	5.2666E-04
6.9600E-01	7.8966E-02	-1.2430E+00	8.4955E-01	4.0583E-03	-1.7087E-01	3.2814E-03	3.3189E-04
6.9600E-01	9.6317E-02	-1.2430E+00	8.6969E-01	4.2085E-03	-1.5717E-01	2.9623E-03	1.6749E-04
6.9600E-01	1.1756E-01	-1.2430E+00	8.9462E-01	4.2246E-03	-1.4545E-01	2.7825E-03	-2.2809E-05
6.9600E-01	1.4377E-01	-1.2430E+00	9.1903E-01	3.9103E-03	-1.2776E-01	2.6081E-03	-3.6562E-05
6.9600E-01	1.7564E-01	-1.2430E+00	9.4563E-01	3.6828E-03	-1.2528E-01	2.4400E-03	-2.8272E-05
6.9600E-01	2.1459E-01	-1.2430E+00	9.7666E-01	3.2543E-03	-1.0835E-01	2.3138E-03	1.2326E-05
6.9600E-01	2.6204E-01	-1.2430E+00	1.0017E+00	2.6585E-03	-1.0637E-01	2.2812E-03	4.6813E-05
6.9600E-01	3.1976E-01	-1.2430E+00	1.0375E+00	2.0388E-03	-1.0026E-01	1.3397E-03	1.6648E-05
6.9600E-01	3.9093E-01	-1.2430E+00	1.0756E+00	1.2901E-03	-9.4419E-02	7.4289E-04	-3.8937E-06
6.9600E-01	4.7734E-01	-1.2430E+00	1.1090E+00	4.7503E-04	-8.8221E-02	2.1801E-04	-1.0018E-05
6.9600E-01	5.8286E-01	-1.2430E+00	1.1234E+00	5.6205E-05	-8.7768E-02	3.6934E-05	-2.6093E-06
6.9600E-01	7.1211E-01	-1.2430E+00	1.1254E+00	1.0906E-05	-9.7508E-02	1.0730E-05	3.8998E-07
6.9600E-01	8.6969E-01	-1.2430E+00	1.1279E+00	6.3399E-06	-9.5199E-02	4.1092E-06	8.6448E-07
6.9600E-01	1.0623E+00	-1.2430E+00	1.1278E+00	6.0399E-06	-9.8181E-02		-2.8785E-07

Table E.6-5 Hot-wire velocity measurements at X/T = .696, Z/T = -1.243.

F. LASER DOPPLER ANEMOMETRY

A 3-component laser doppler velocimeter (LDV) was used to measure detailed profiles of mean velocity and turbulence quantities in 6 planes surrounding the wing. These planes (for organizational reasons numbered 1, 3, 4, 5, 8 and 10) are illustrated in figure F-1.

The LDV uses a Coherent Innova 90 argon-ion laser operated at a wavelength of 514.5nm with a power of about 1.5W. Light from the laser is passed through a dual Bragg cell containing 21.5MHz and 15MHz transducers. The Bragg cell is adjusted so that almost all the light leaving it is in four beams of approximately equal intensity, one unshifted and the other three shifted by -15HMz, 21.5MHz and 6.5MHz. One of three different sets of sending optics is used to direct these beams to the measurement volume. Each set of sending optics produces an arrangement of the beams that is sensitive to a different pair of velocity components. Only one set of sending optics is used at any one time.

The optical system designed by Simpson and Chew (1979) is used to measure velocity components in the UV plane. This system produces convergent beams that enter the wind tunnel through one of its glass side walls (figure A-1). The unshifted and 21.5MHz shifted beams make an angle of 0.8° with the horizontal wind-tunnel floor and are bisected by a YZ plane (figure A-1). In the measurement volume these beams produce a moving fringe pattern sensitive to U-component velocities. Their 0.8° inclination ensures that there is no ference of the beams by the wind-tunnel floor (prior to the measurement volume) when measurements are being made close to the floor. The unshifted and -15MHz shifted beams lie in the same vertical plane with the latter inclined at about 6° to the wind-tunnel floor. These form a fringe pattern sensitive to -V.cos 3.4° + W.sin 3.4° which in the present

measurements was indistinguishable from -V. A third signal around 36.5MHz is obtained from the fringe pattern formed by the -15MHz and 21.5MHz shifted beams and measures 0.7041 x (U - V.cos 4.4° - W.sin 4.4°), the W contribution again being negligible in the present experiments. The 6.5MHz shifted beam is not used by the UV optics.

The UW optical system (figure A-1) produces a similar arrangement of three beams. Here the beams enter the wind tunnel through the plexiglas plate set in its floor. The unshifted beam lies parallel to the y-axis. The -15MHz shifted beam lies in an XY plane at an angle of about 5° to the unshifted beam with which it measures U.cos 2.5° - V.sin 2.5°. The 21.5MHz shifted beam lies in a YZ plane also at an angle of about 5° to the unshifted beam with which it measures -W.cos 2.5° + V.sin 2.5°. The fringe pattern produced by the -15MHz and 21.5MHz shifted beams is sensitive to 0.7071.(U - W). At almost all locations the contribution from V to measurements in the UW plane was negligible. Again the 6.5MHz shifted beam is not used.

The VW optical system, shown separately in Figure F-2, produces three pairs of beams all of which lie in the same spanwise plane and converge on the same measurement volume. A pair of beams producing a fringe pattern sensitive to -W.cos 3.1° + V.sin 3.1° enters the wind tunnel through its plexiglas floor. This pair includes the 6.5MHz shifted beam aligned vertically and the 21.5MHz shifted beam aligned at an angle of about 6° to the vertical. A second pair of beams (the unshifted and -15MHz shifted) also enters through the wind-tunnel floor but with its bisector at an angle of about 45° to the vertical. These beams form a fringe pattern sensitive to 0.7071(V - W). The third pair, comprising additional unshifted and -15MHz shifted beams (obtained using a beam splitter), enters the wind tunnel through one of its side walls. This pair produces fringes sensitive to -V.cos 3.4°

+ W.sin 3.4°. At each measurement location the signal produced by each pair of beams is measured separately while the other two pairs are blocked. This is necessary to eliminate interference between the different pairs.

The flow is seeded using a dioctal phthalate smoke produced by the aerosol generator described by Simpson and Chew (1979), originally designed by Echols and Young (1963). Smoke is injected into the boundary layer through the slot located at the leading edge of the wind tunnel floor (see figure A.1-2). Some of the smoke discharged into the room returns through the centrifugal blower providing seeding particles in the free steam.

Light scattered from the measurement volume is collected through the side wall of the wind tunnel, about 20° away from the axis of the UV optics in the downstream direction. The scattered light is focused on to the 200 micron pinhole of a single photomultiplier tube by a large converging lens. This off-axis scattering arrangement makes the effective size of the UV and UW measurement volumes 0.3x0.3x0.6mm and 0.07x0.3x0.07mm in the X, Y and Z directions respectively. The effective size of the VW measurement volume is different for the different pairs of beams. The measurement volumes produced by those beams entering through the wind-tunnel floor have approximately the same dimensions as the UW measurement volume. However, for the pair of beams entering through the side wall the measurement volume dimensions are the same as those of the UV system.

In planes 1, 3, 4 and 5 data were obtained from the photomultiplier signal using fast-sweep-rate sampling spectrum analysis. This method, described in detail by Simpson and Barr (1974, 1975) and Simpson and Chew (1979) involves the detection of peaks in the output of a rapidly swept filter spectrum analyzer. This is a simple and accurate method that does not suffer from the bias errors present in other techniques, such as those using

particle averaging or slow-sweep-rate spectrum analysis. However, when using this method, only a fraction of those particles traversing the measurement volume are detected. This means that data obtained from different signals over the same period of time will not have been produced by the same set of seeding particles. The Reynolds shear stresses therefore cannot be obtained directly by multiplying the signals of different velocity components. Instead they are obtained using the mean square of signals that correspond to the difference of velocity components. The U-V, U-W and V-W signals produced by the optical systems described above enable the $-\overline{uv}$, $-\overline{uw}$ and $-\overline{vw}$ shear stresses to be measured.

Measurements in planes 8 and 10 were made using a DANTEC Model 57N10 Burst Spectrum Analyzer (BSA). This device detects bursts in the photomultiplier signal then digitally calculates their spectrum to determine the instantaneous Doppler frequency. Both Doppler frequency and detection time are recorded enabling true time averages to be calculated. Since the BSA can monitor one signal at a time the Reynolds stresses were again obtained using the mean square of the signals that correspond to the difference in velocity components.

LDV measurements are presented in the following sections. To simplify the presentation for planes 3, 4, 5, 8 and 10 an additional coordinate 'S' is used. 'S' is distance measured from the wing surface along the plane as shown in figure F-1. Where necessary measurements have been corrected for velocity-gradient broadening (due to gradients in the Y direction) using the methods described by Durst et. al (1981). In planes 1, 3, 4 and 5 corrections were also made for finite transit-time broadening (Durst et al. (1981)) in measurements taken with the UW and VW optical systems. This error results from having only a small number of fringes in the measurement volume (i.e. a small measurement

volume diameter). It increases the measured turbulence intensity by an amount in proportion to the mean velocity while leaving the mean velocity unaffected. It is therefore easy to correct. Curiously, corrections for finite-transit-time broadening did not have to be applied to VW and UW measurements made with the BSA. The reasons for this are not fully understood. It may result from the fact that the BSA only takes the spectrum of the central part of the Doppler burst.

Uncertainty estimates for the measurements presented below are listed in table F-1. Some bias errors not included in these estimates may be present in measurements of turbulence quantities made outside of the boundary layer and very close to the test wall ($Y/T < 6 \times 10^{-3}$). Turbulence measurements in the free stream are unreliable because of a lack of seeding particles and inaccuracies in the corrections for finite-transit-time broadening. Very close to the wall the turbulence measurements may have been affected by inaccuracies in the velocity-gradient broadening correction. Turbulence measurements (particularly Reynolds shear stresses) immediately downstream of the wing trailing edge in plane 10 may also be in error to velocity gradient broadening in the spanwise direction and small innacuracies in spanwise position here of the order of .5mm.

		PLANE 1	PLANE 3	PLANE 4	PLANE 4
VALUE OF:	X/T	$-2.\cdot \times 10^{-1}$	-4.6×10^{-2}	4.6×10^{-1}	3.8×10^{-1}
	Y/T	1.9×10^{-2}	1.6×10^{-2}	9.6×10^{-3}	1.8×10^{-1}
	Z/T	0	-5.2×10^{-1}	-5.1×10^{-1}	-9.6×10^{-1}
	U/U_{ref}	-3.4×10^{-1}	2.8×10^{-1}	1.1×10^{0}	9.5×10^{-1}
	W/U_{ref}	7.1×10^{-3}	-6.6×10^{-1}	-5.4×10^{-1}	-2.3×10^{-1}
	$\overline{u^2}/U_{ref}^2$	5.2×10^{-2}	3.9×10^{-2}	2.3×10^{-3}	3.6×10^{-3}
	$-\overline{uv}/U_{ref}^2$	7.0×10^{-3}	4.5×10^{-3}	-2.4×10^{-4}	-1.2×10^{-3}
UNCERTAINTY IN:	U/U_{ref}	2.5×10^{-2}	3.5×10^{-2}	3.7×10^{-2}	3.6×10^{-2}
	V/U_{ref}	2.5×10^{-2}	3.5×10^{-2}	3.5×10^{-2}	3.5×10^{-2}
	W/U_{ref}	2.5×10^{-2}	3.6×10^{-2}	3.6×10^{-2}	3.5×10^{-2}
	$\overline{u^2}/U_{ref}^2$	1.6×10^{-3}	1.3×10^{-3}	1.4×10^{-4}	1.9×10^{-4}
	$\overline{v^2}/U_{ref}^2$	7.5×10^{-4}	4.4×10^{-4}	1.5×10^{-4}	1.4×10^{-4}
	$\overline{w^2}/U_{ref}^2$	4.3×10^{-4}	1.0×10^{-3}	3.0×10^{-4}	2.0×10^{-4}
	$-\overline{uv}/U_{ref}^2$	1.3×10^{-3}	1.1×10^{-3}	1.5×10^{-4}	2.0×10^{-4}
	$-\overline{uw}/U_{ref}^2$	-	9.2×10^{-4}	2.2×10^{-4}	2.1×10^{-4}
	$-\overline{vw}/U_{ref}^2$	-	9.6×10^{-4}	2.2×10^{-4}	1.5×10^{-4}

TABLE F-1. ESTIMATES OF UNCERTAINTY IN LDV MEASUREMENTS

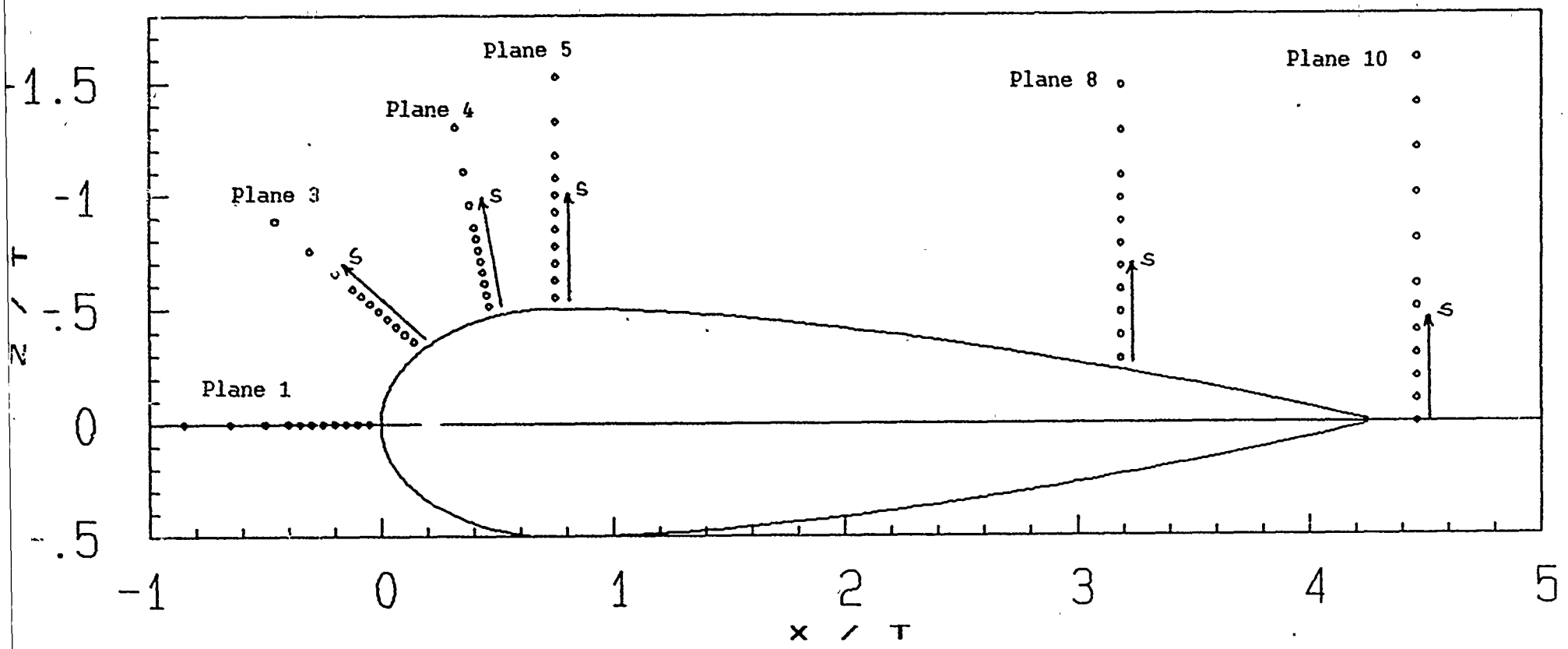


Figure F-1 Locations of the LDV profiles.

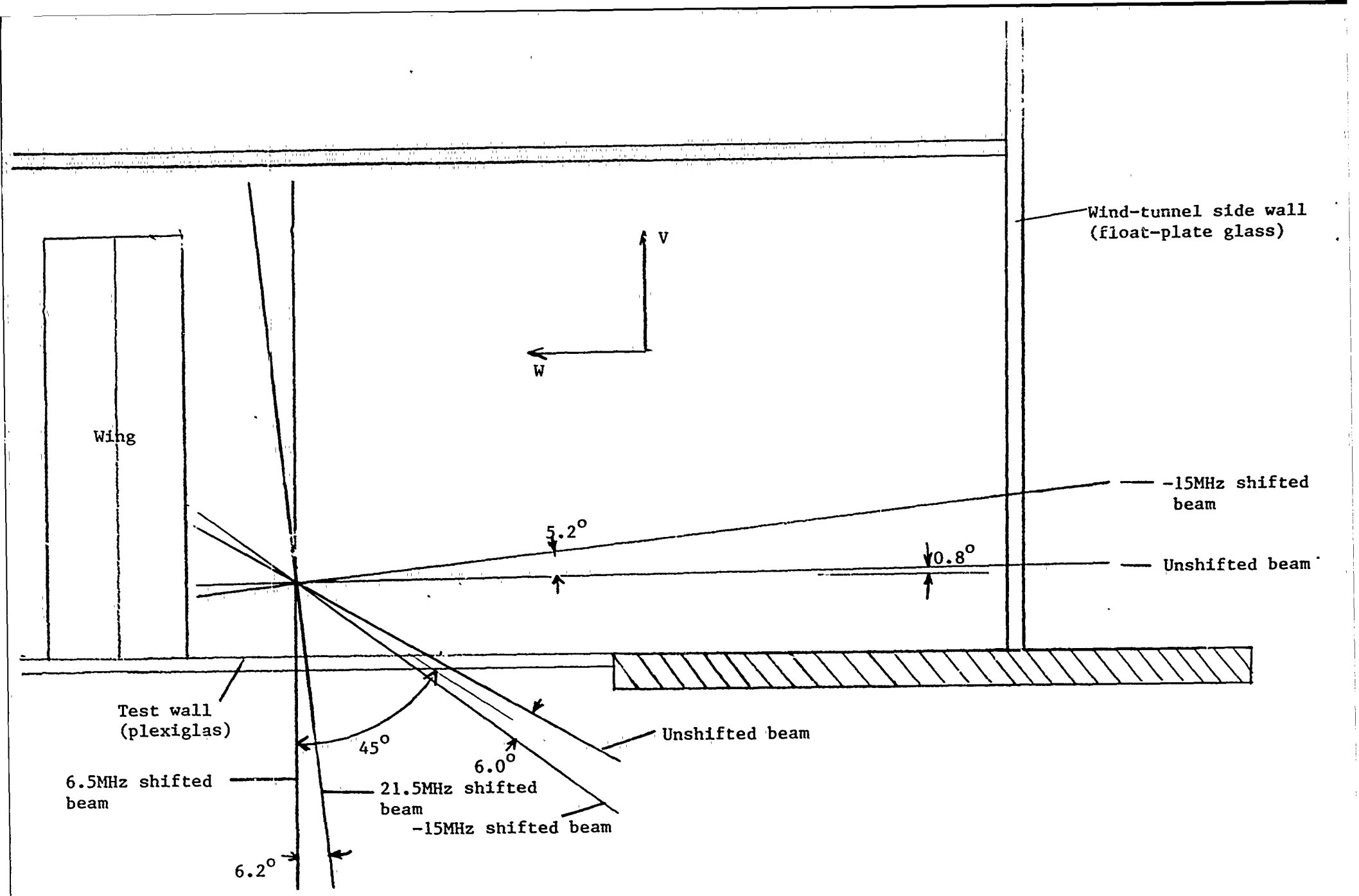


Figure F-1 The VW optical system of the laser anemometer as seen from downstream.

F.1 LDV MEASUREMENTS IN PLANE 1

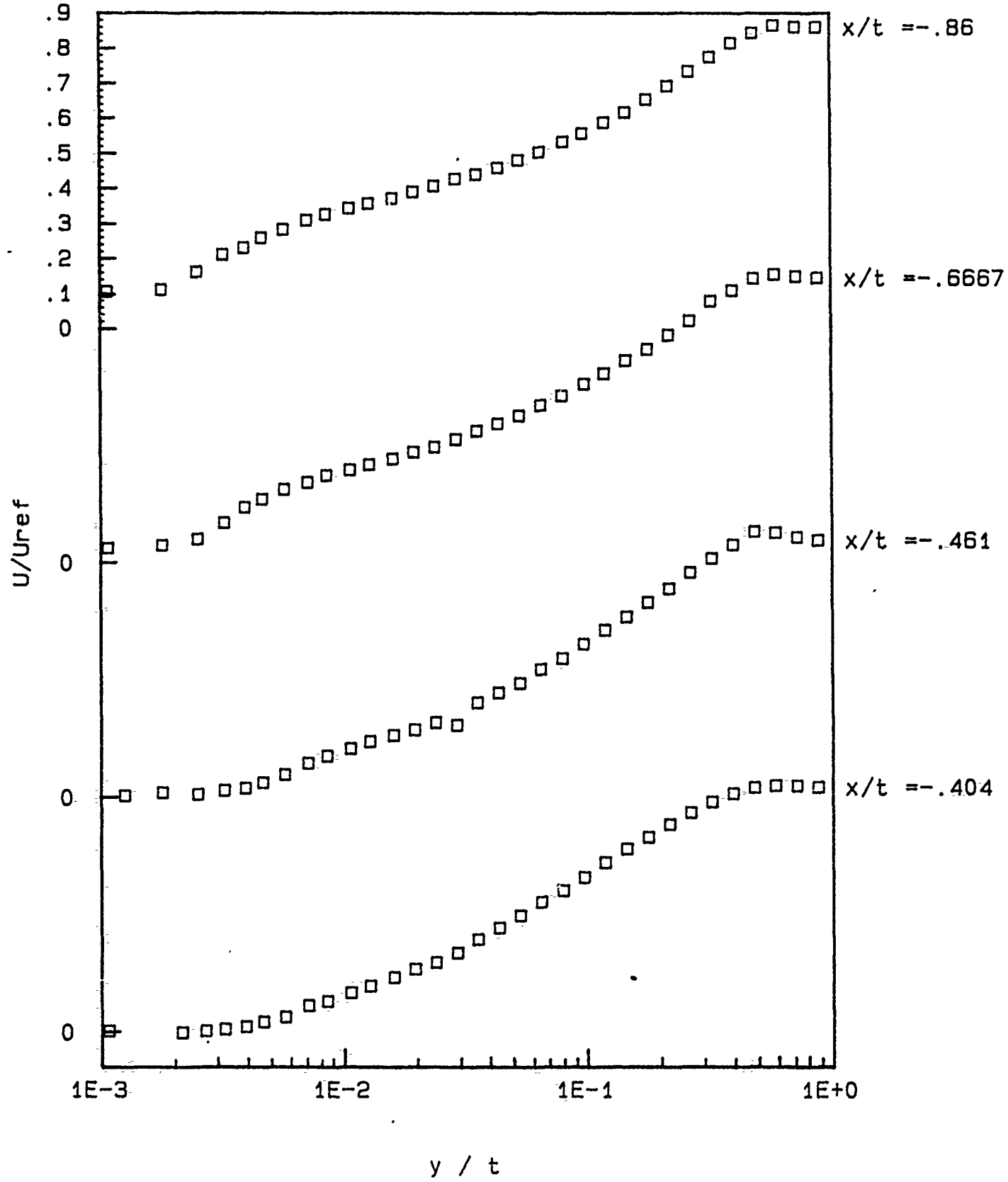


Figure F.1-1(a) Profiles of mean-velocity component U, plane 1.

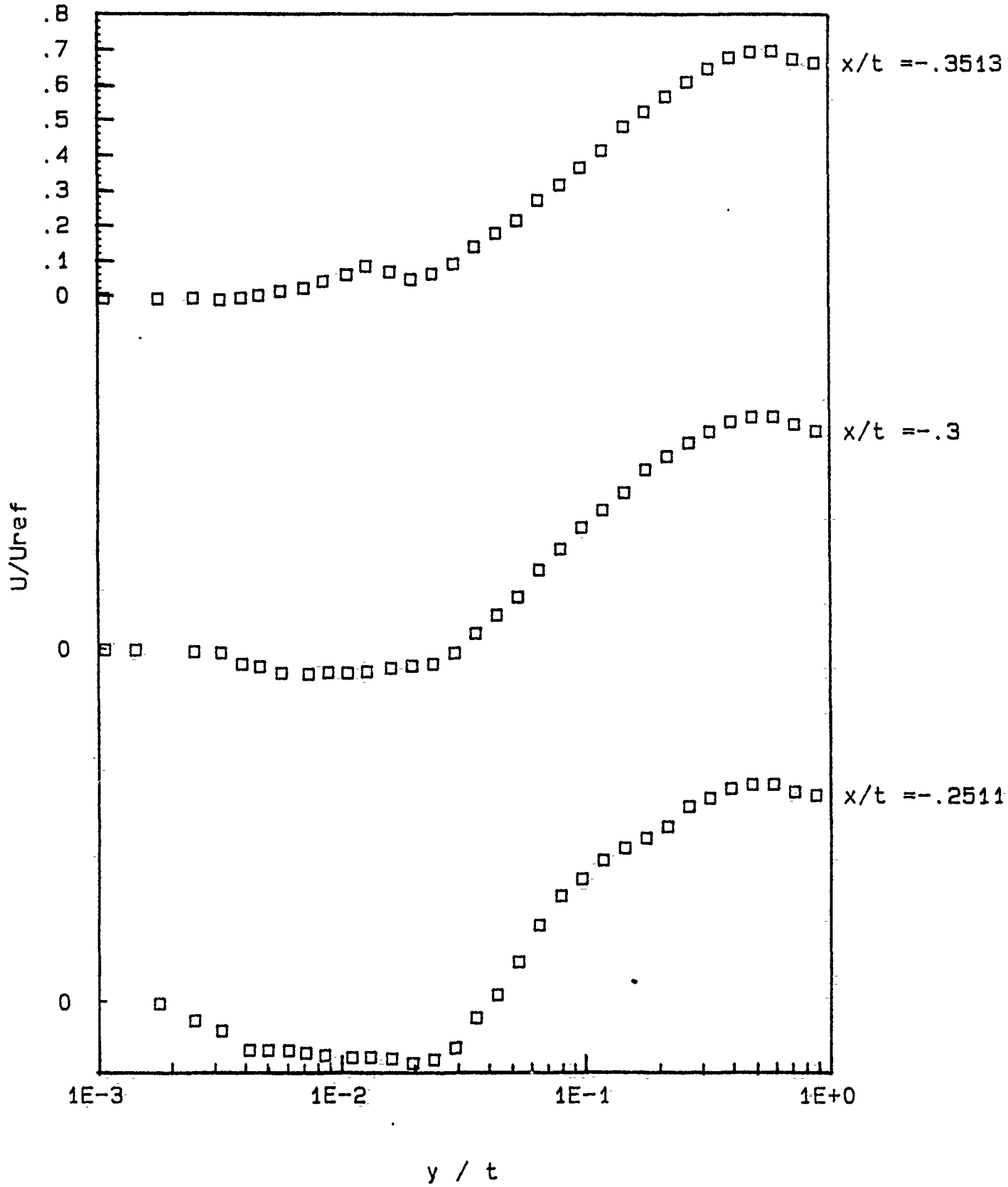


Figure F.1-1(b) Profiles of mean-velocity component U, plane 1.

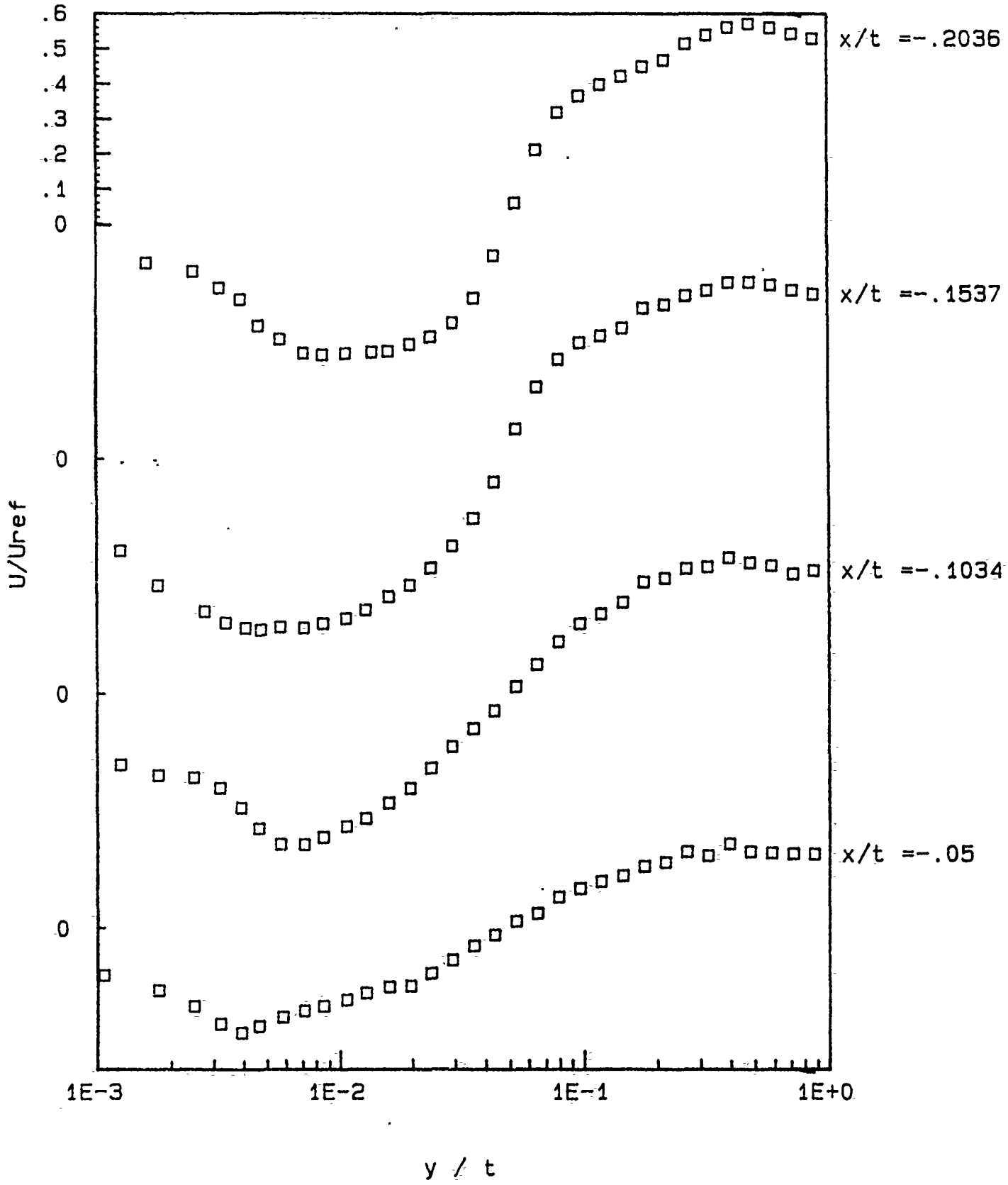


Figure F.1-1(c) Profiles of mean-velocity component U, plane 1.

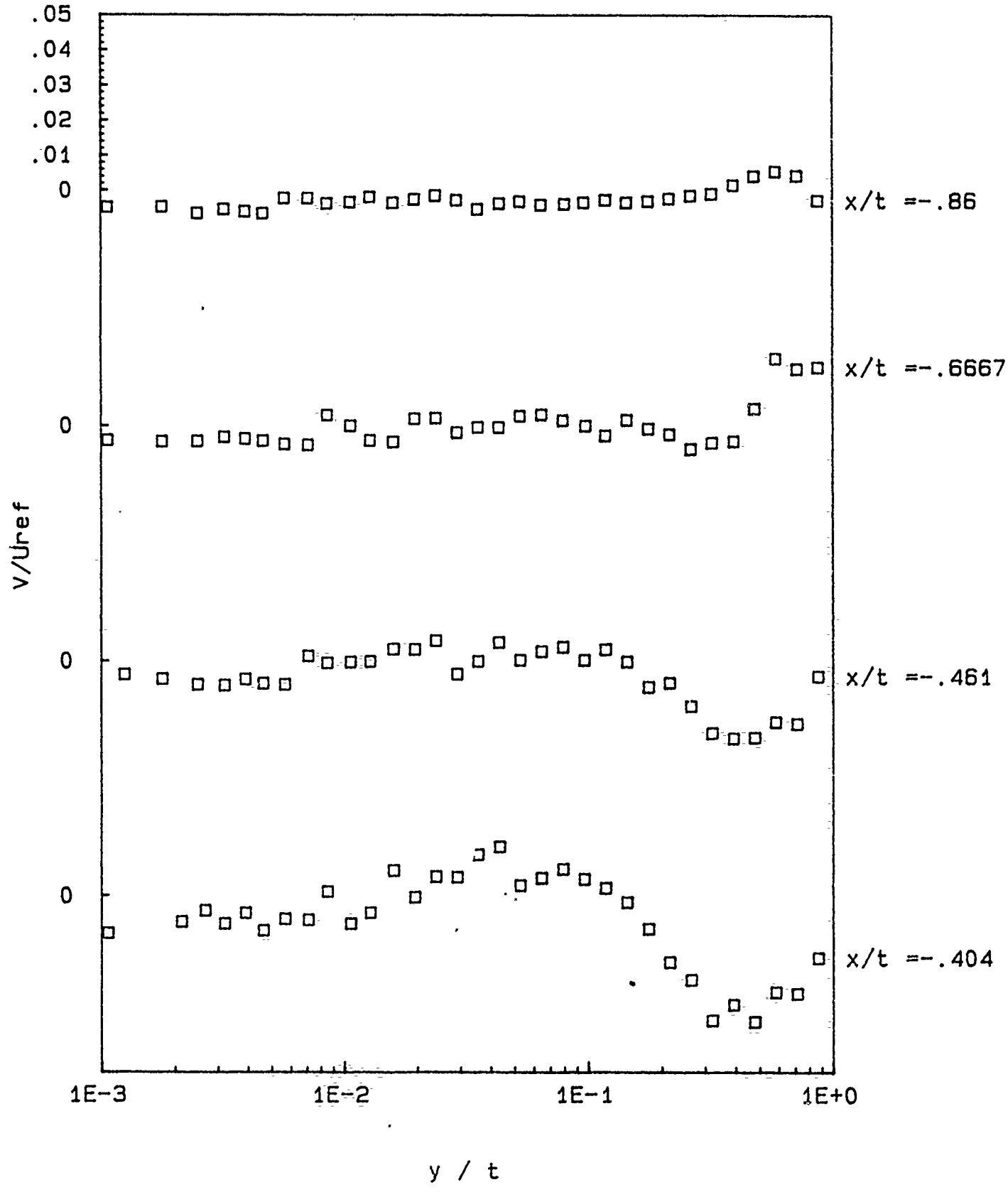


Figure F.1-2(a) Profiles of mean-velocity component V, plane 1.

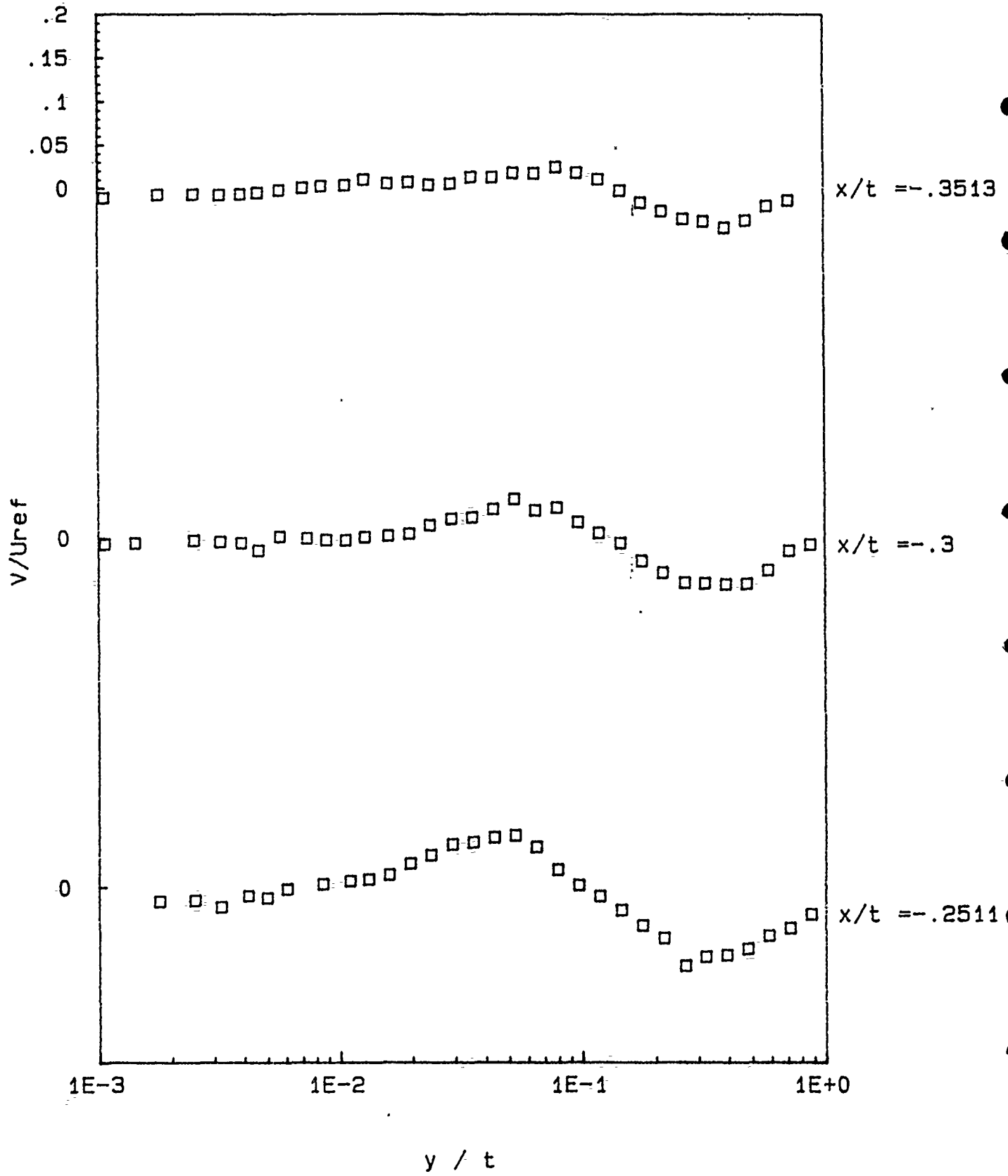


Figure F.1-2(b) Profiles of mean-velocity component V, plane 1.

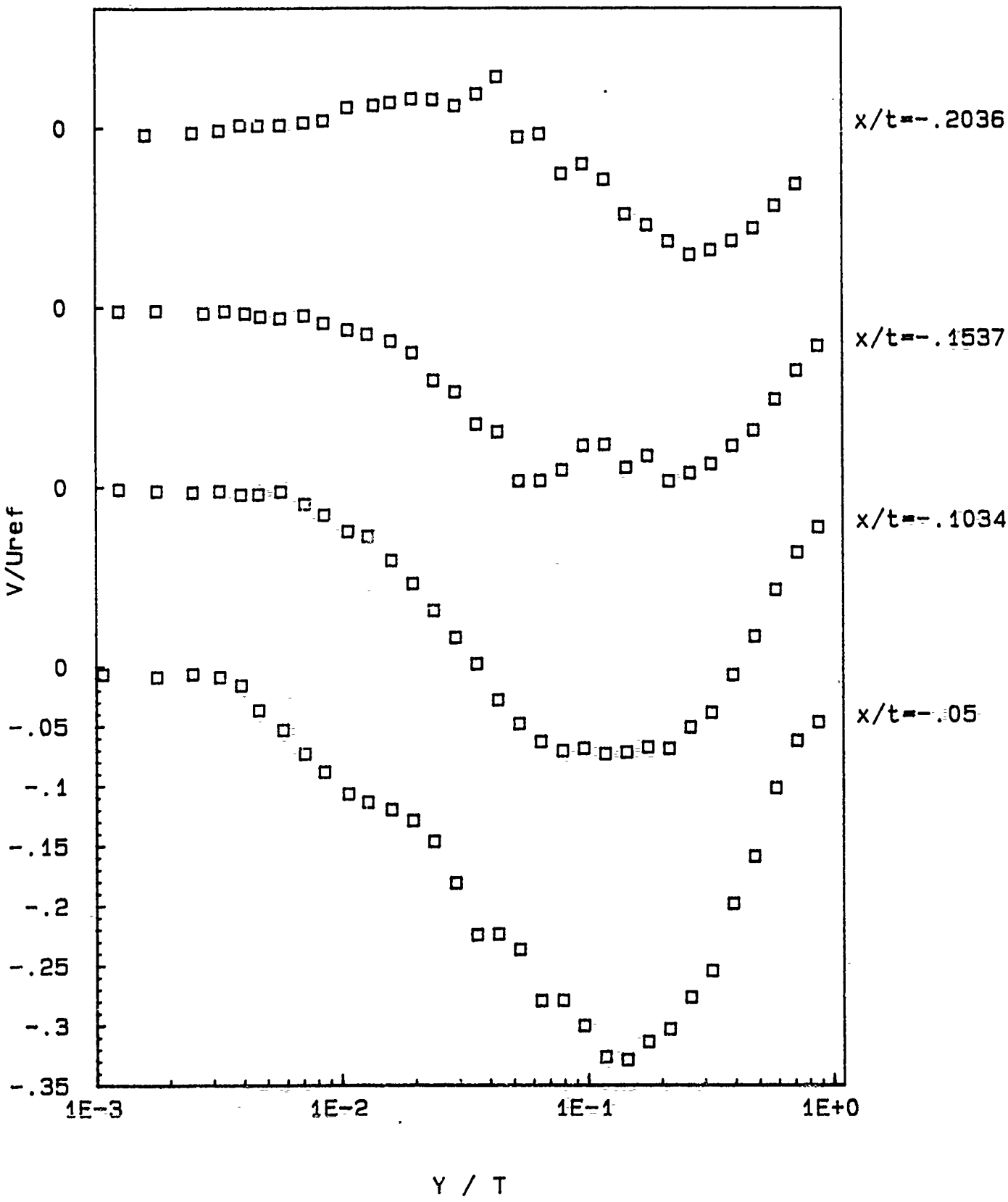


Figure F.1-2(c) Profiles of mean-velocity component V, plane 1.

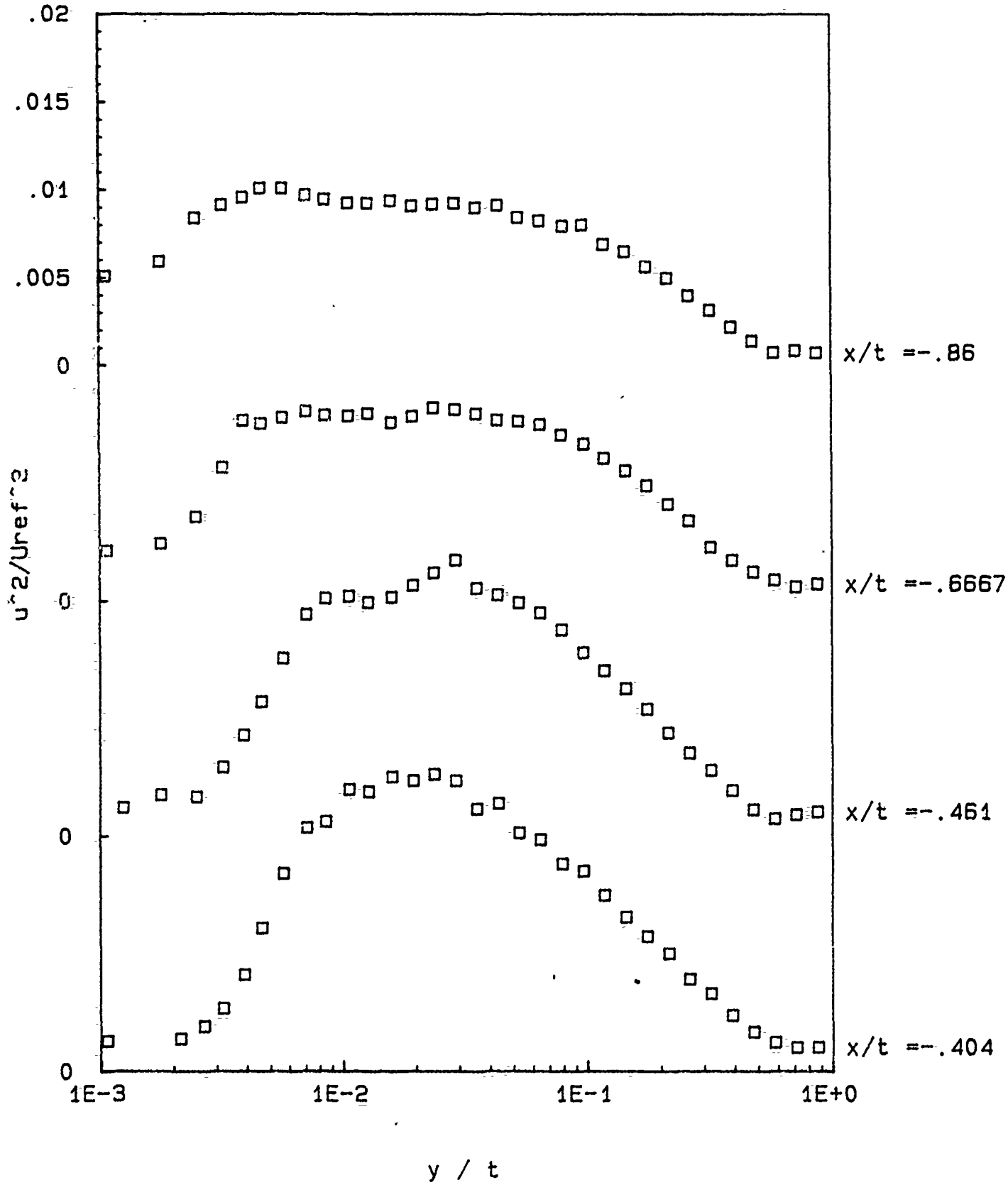


Figure F.1-3(a) Profiles of the U component of turbulence normal stress, plane 1.

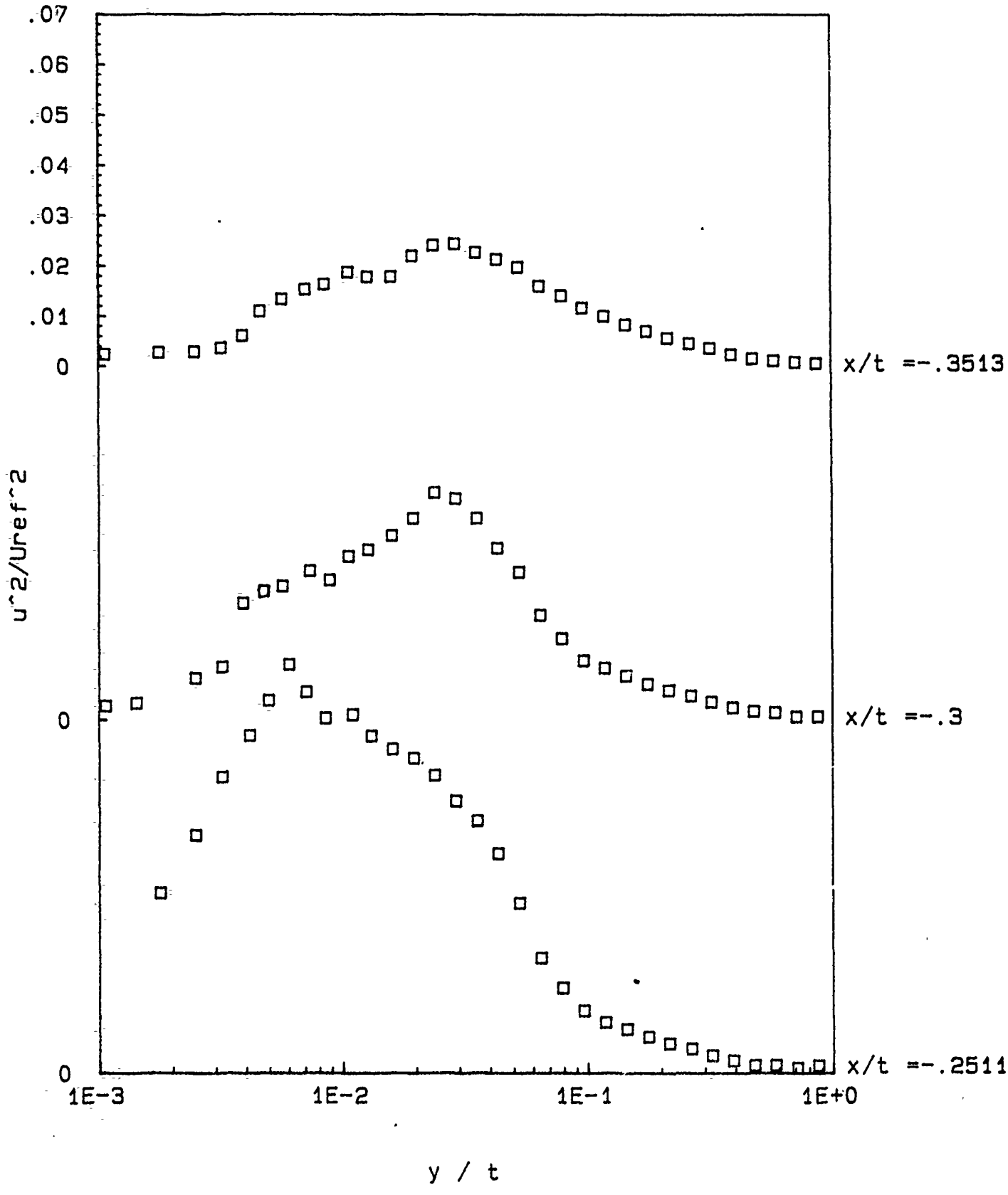


Figure F.1-3(b) Profiles of the U component of turbulence normal stress, plane 1.

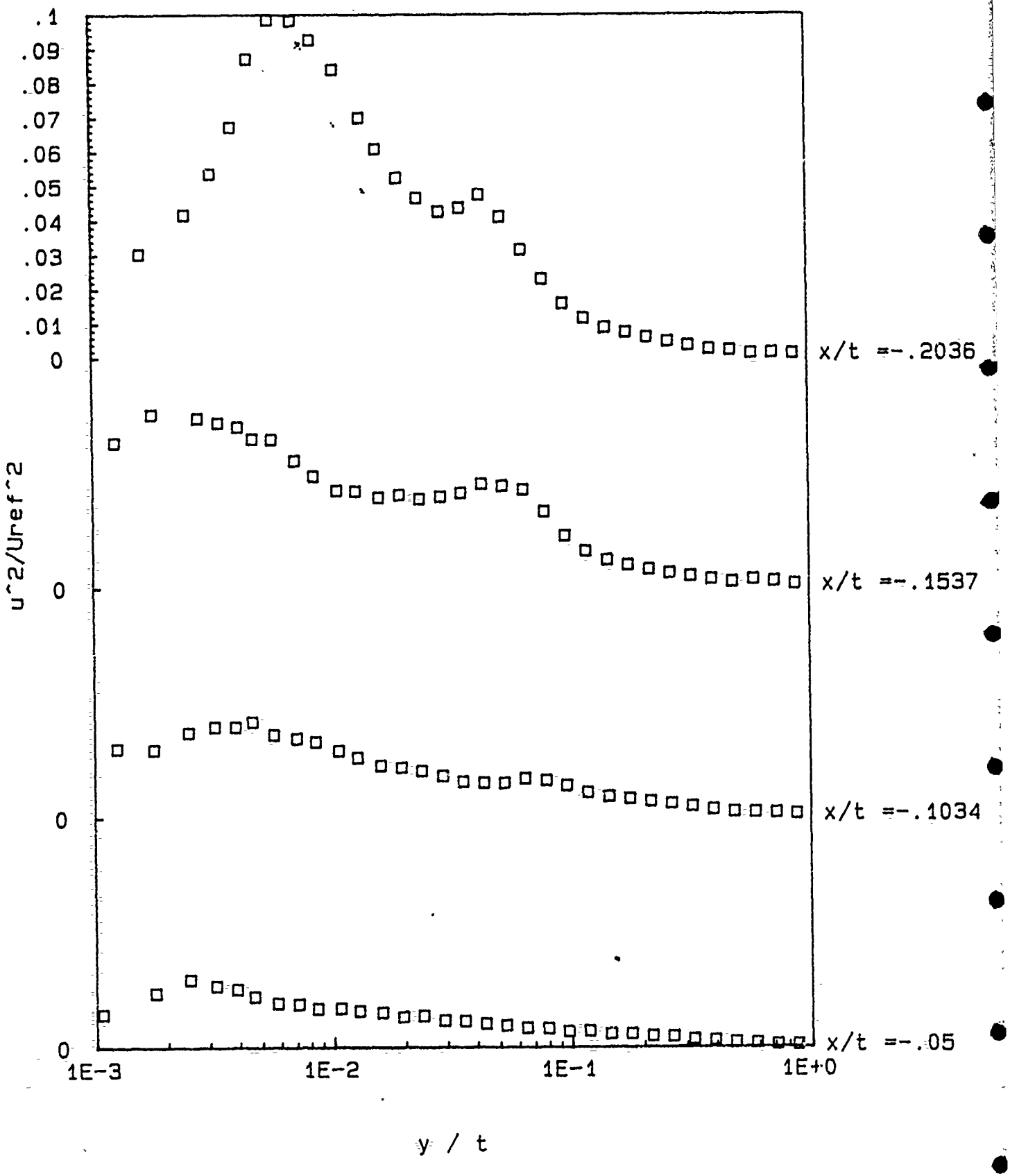


Figure F.1-3(c) Profiles of the U component of turbulence normal stress, plane 1.

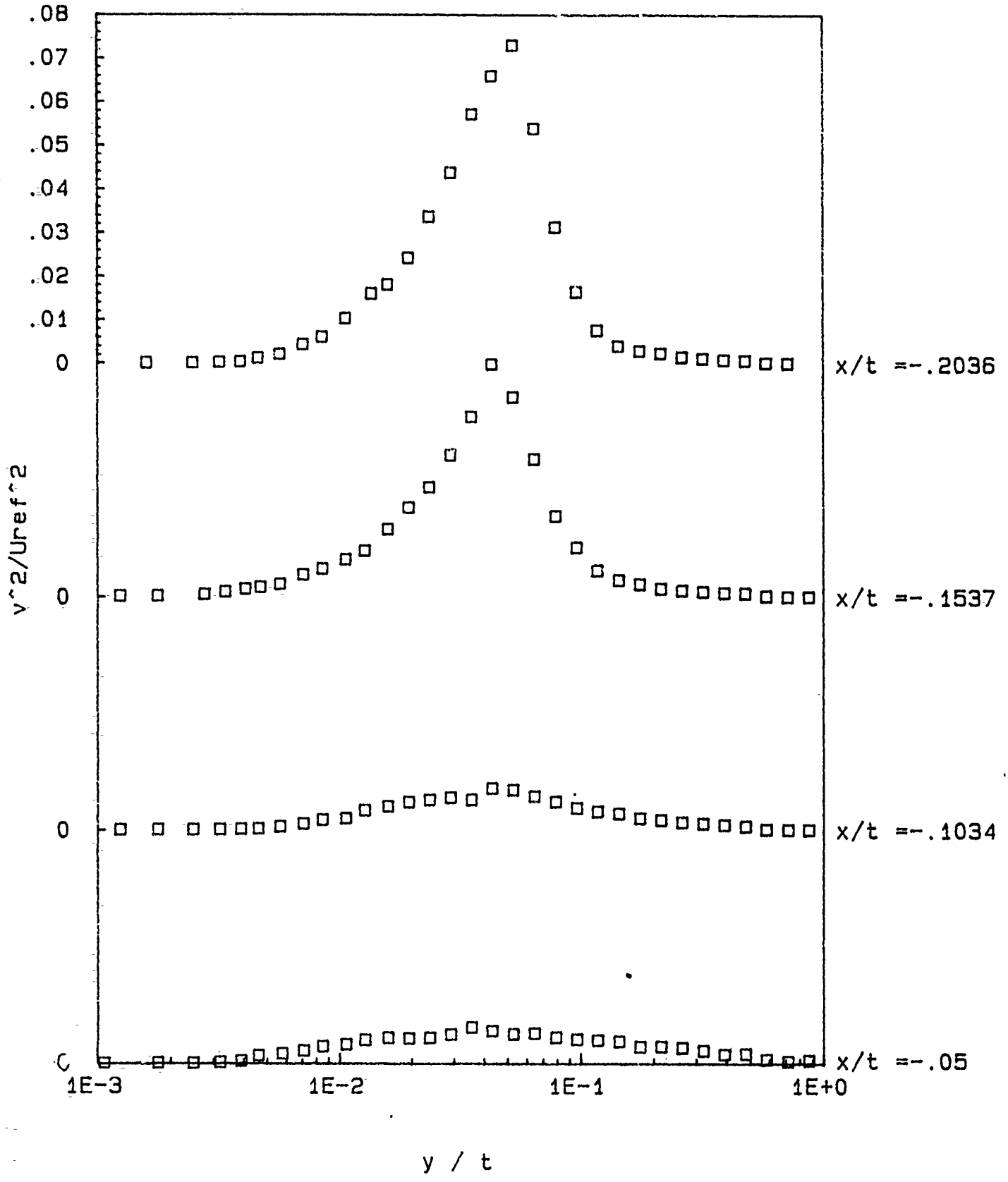


Figure F.1-4(a) Profiles of the V component of turbulence normal stress, plane 1.

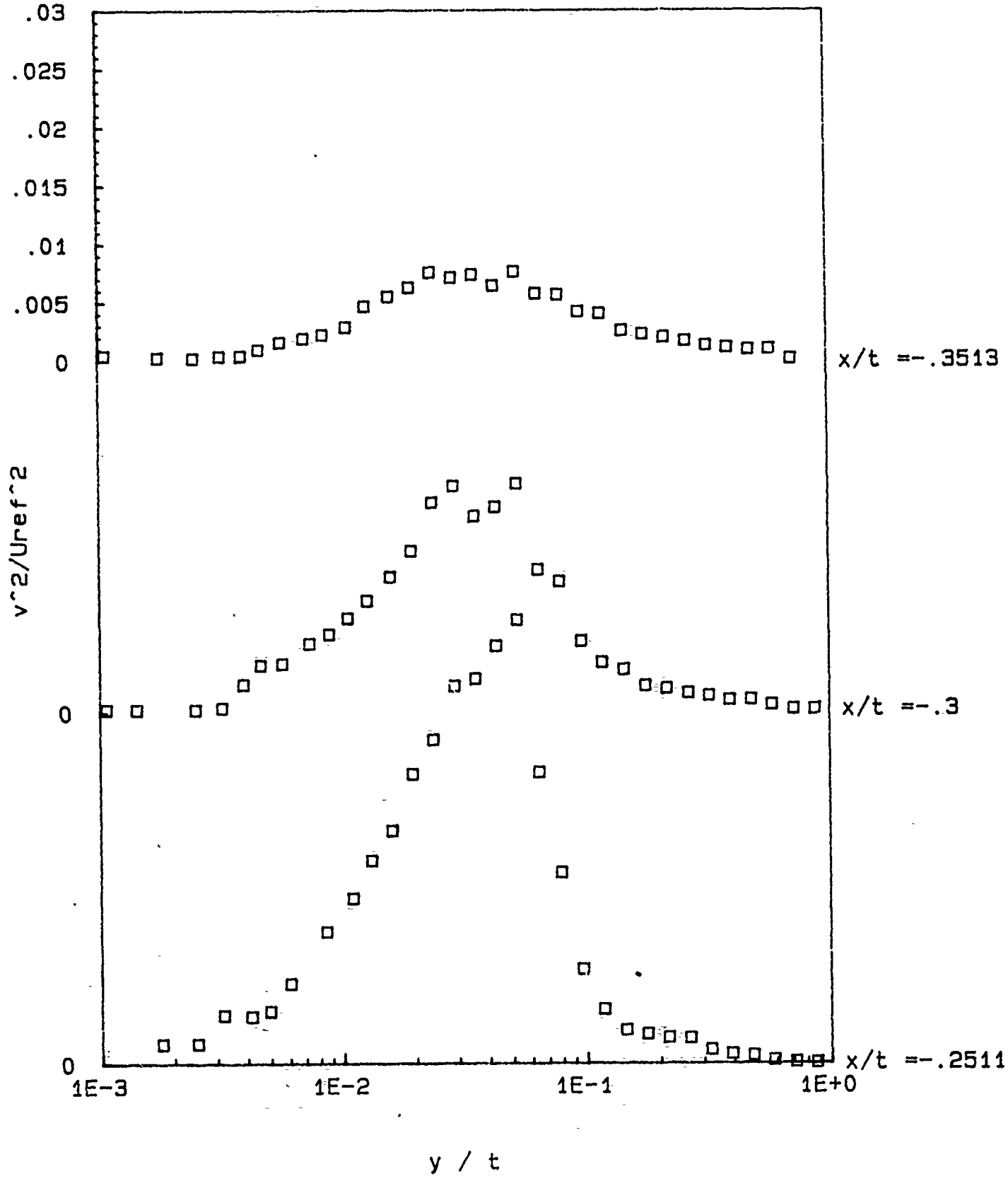


Figure F.1-4(b) Profiles of the V component of turbulence normal stress, plane 1.

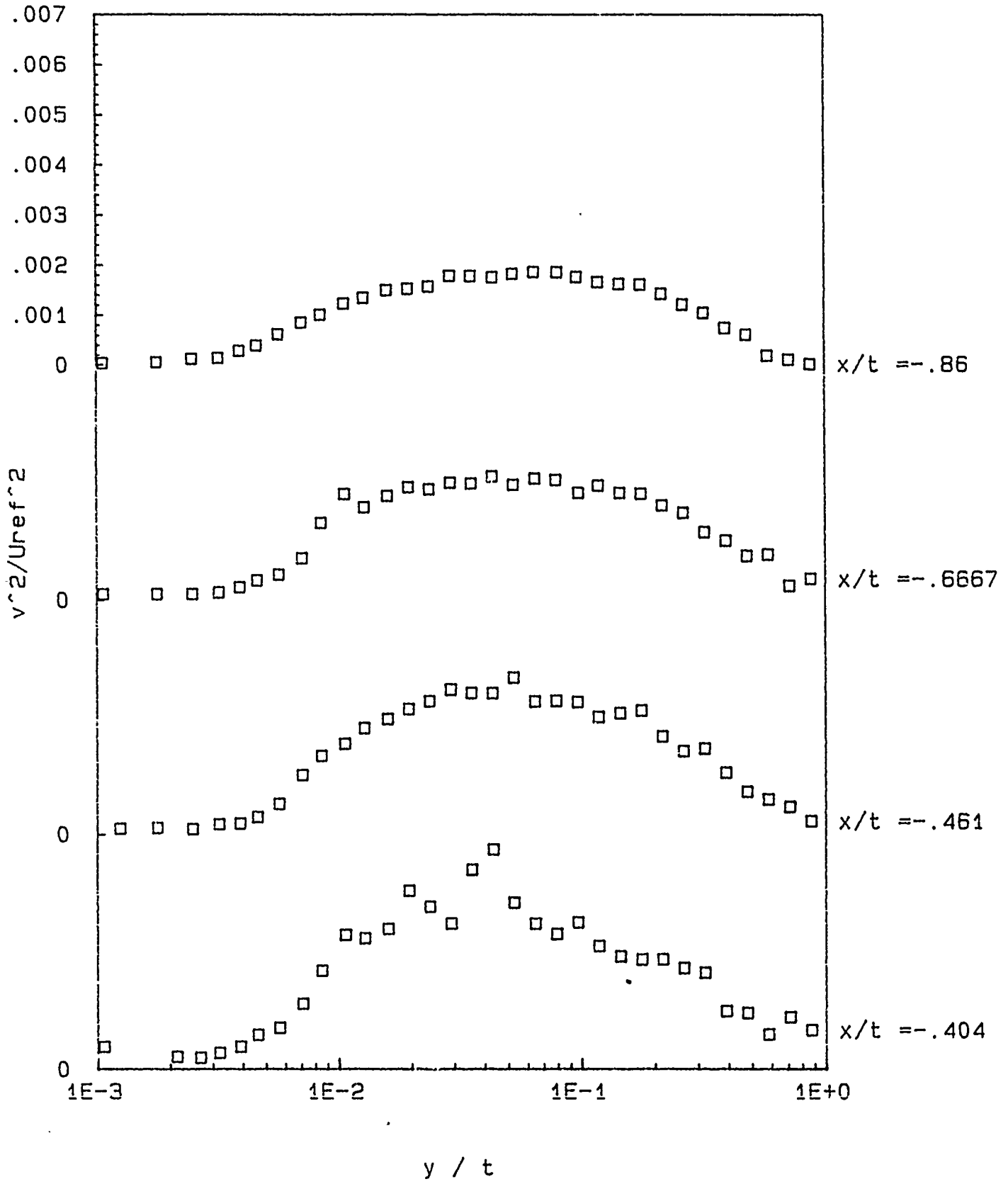


Figure F.1-4(c) Profiles of the V component of turbulence normal stress, plane 1.

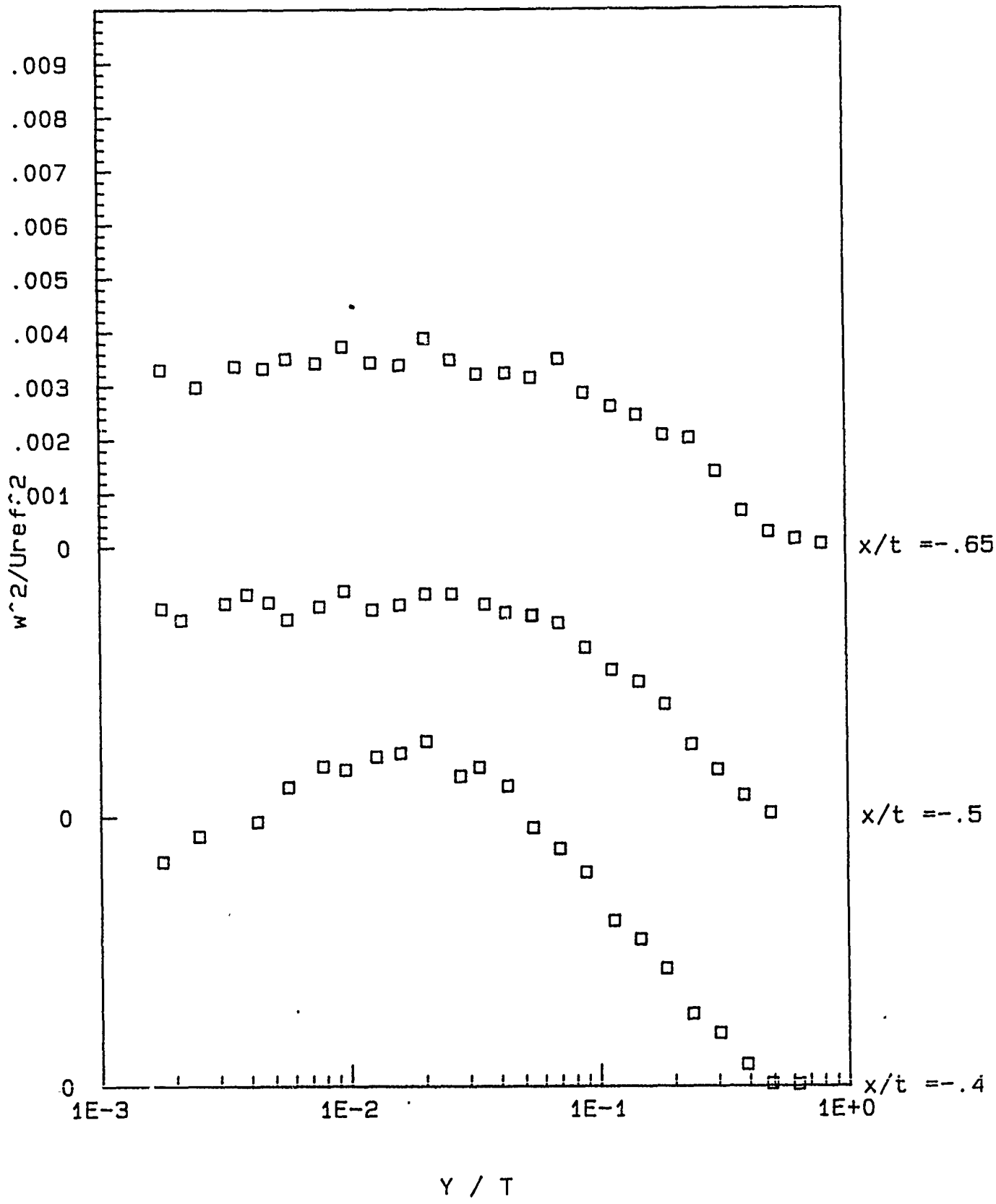


Figure F.1-5(a) Profiles of the W component of turbulence normal stress, plane 1.

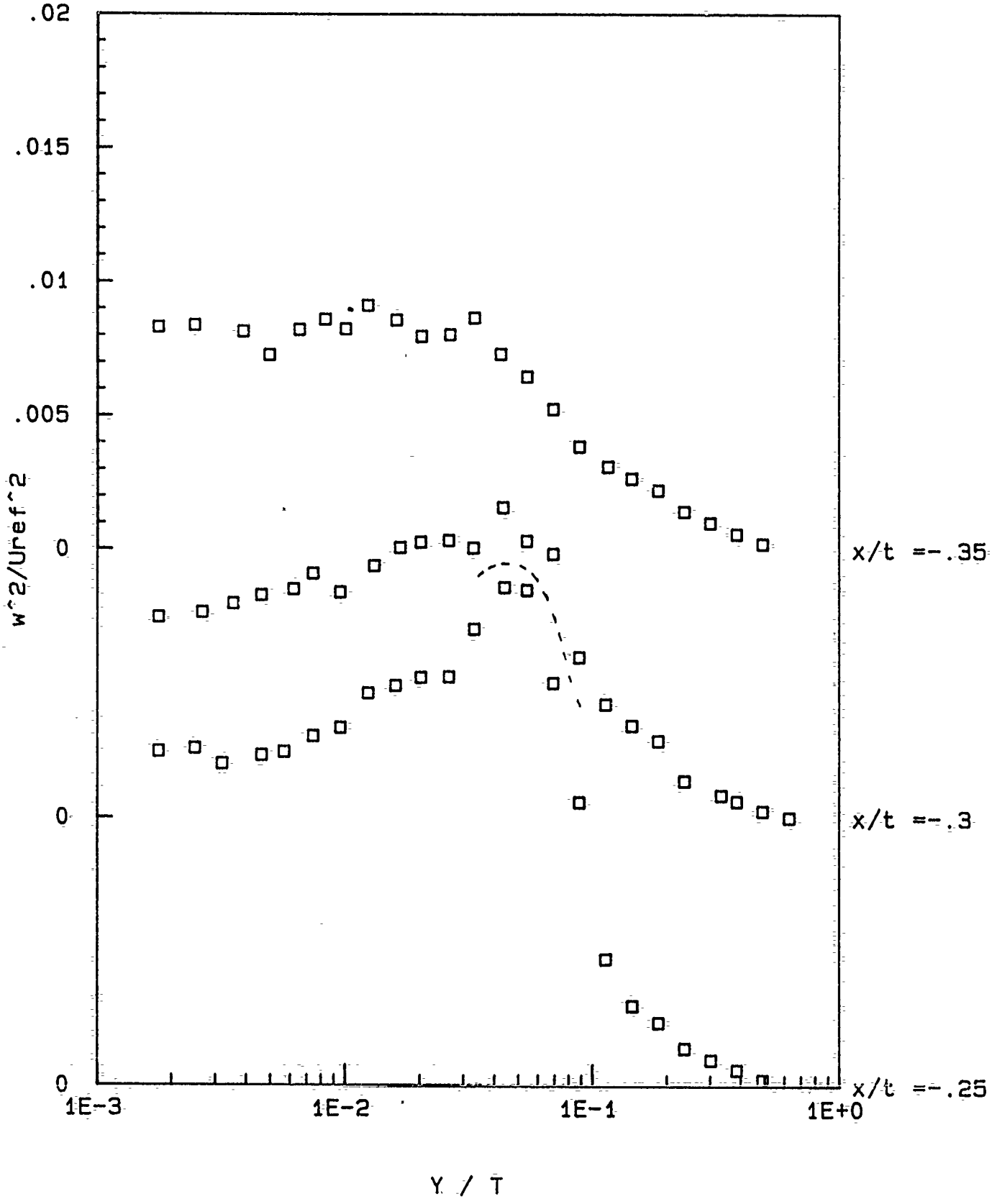


Figure F.1-5(b) Profiles of the W component of turbulence normal stress, plane 1.

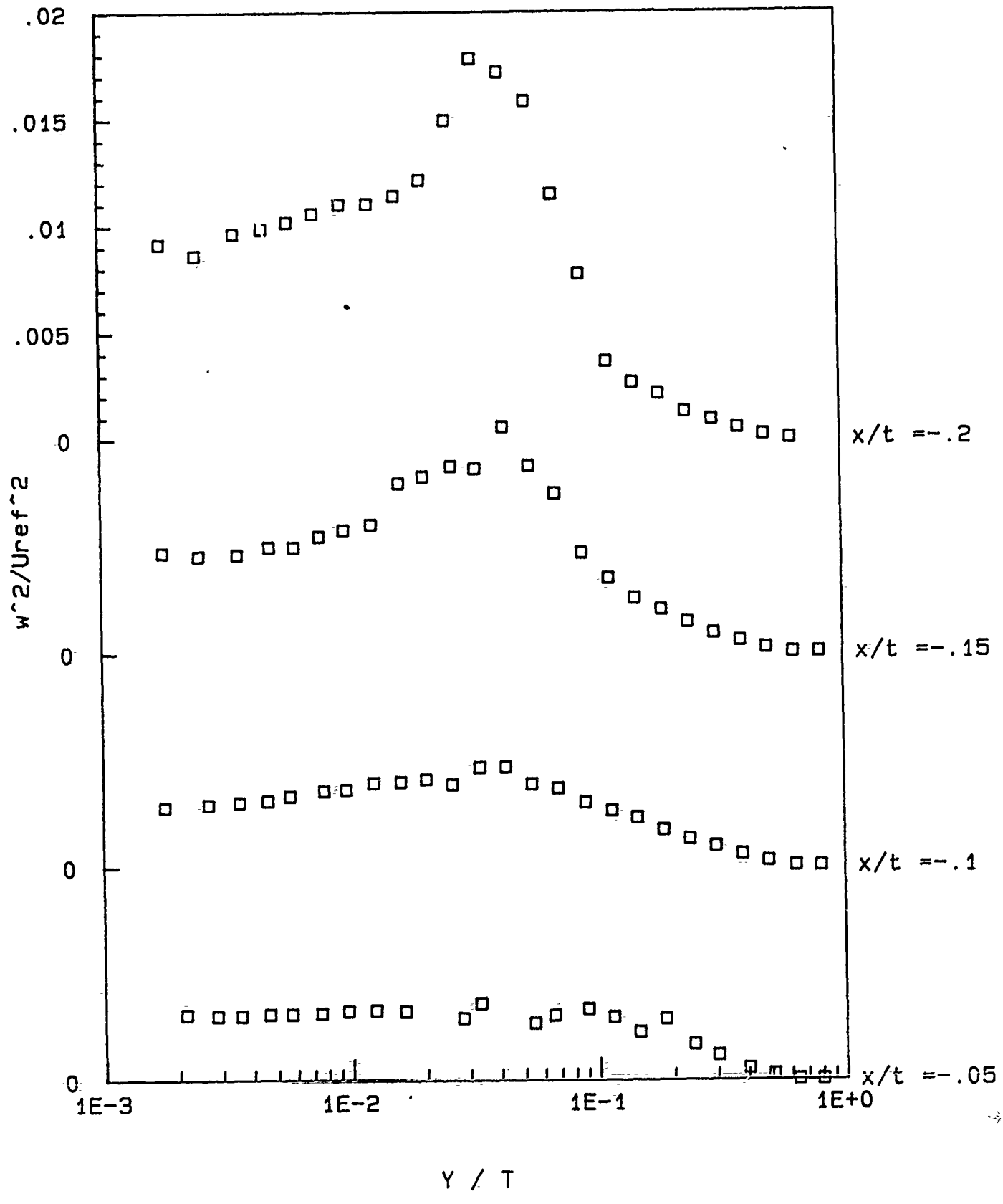


Figure F.1-5(c) Profiles of the W component of turbulence normal stress, plane 1.

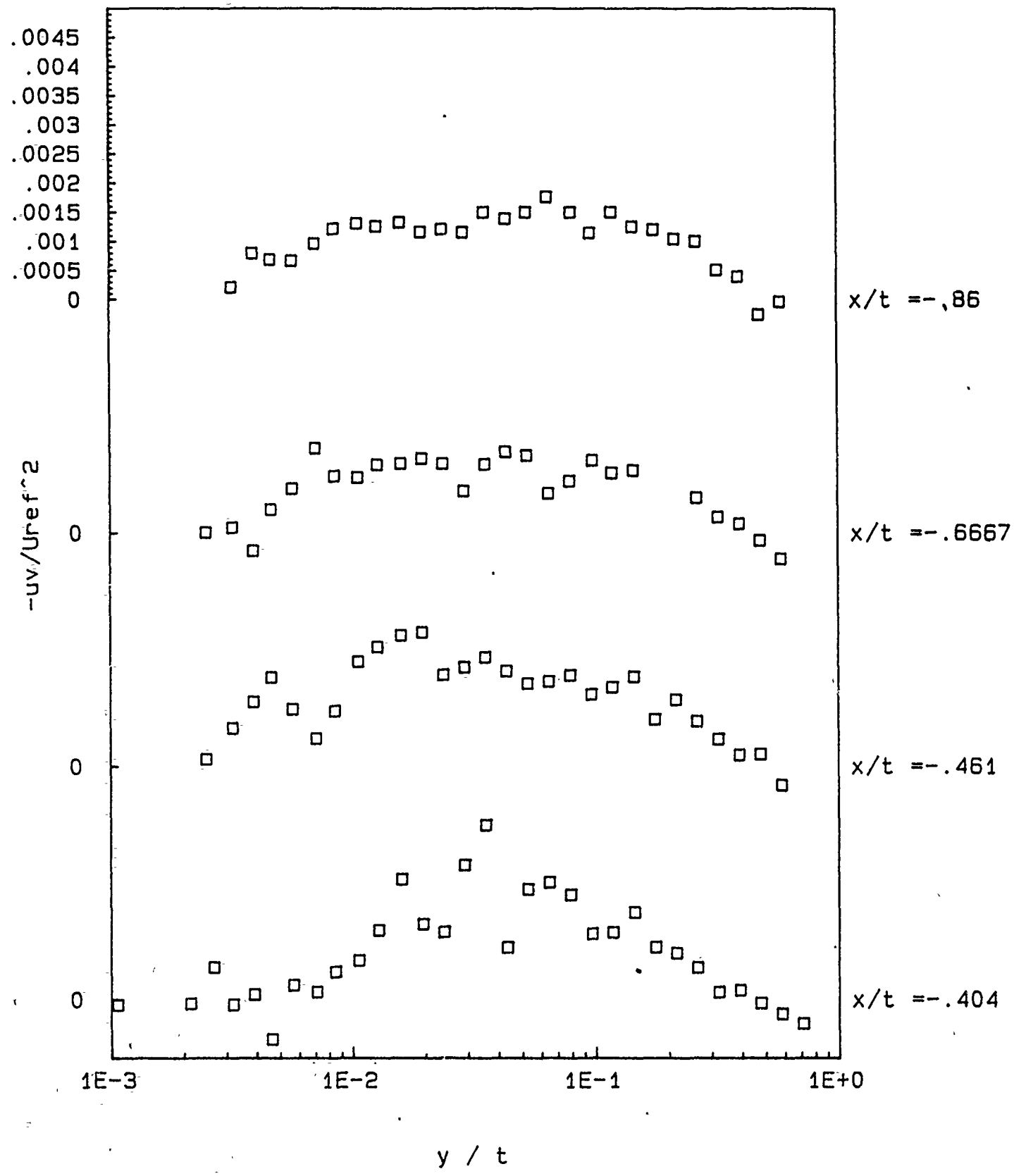


Figure F.1-6(a) Profiles of UV Reynolds shear stress, plane 1.

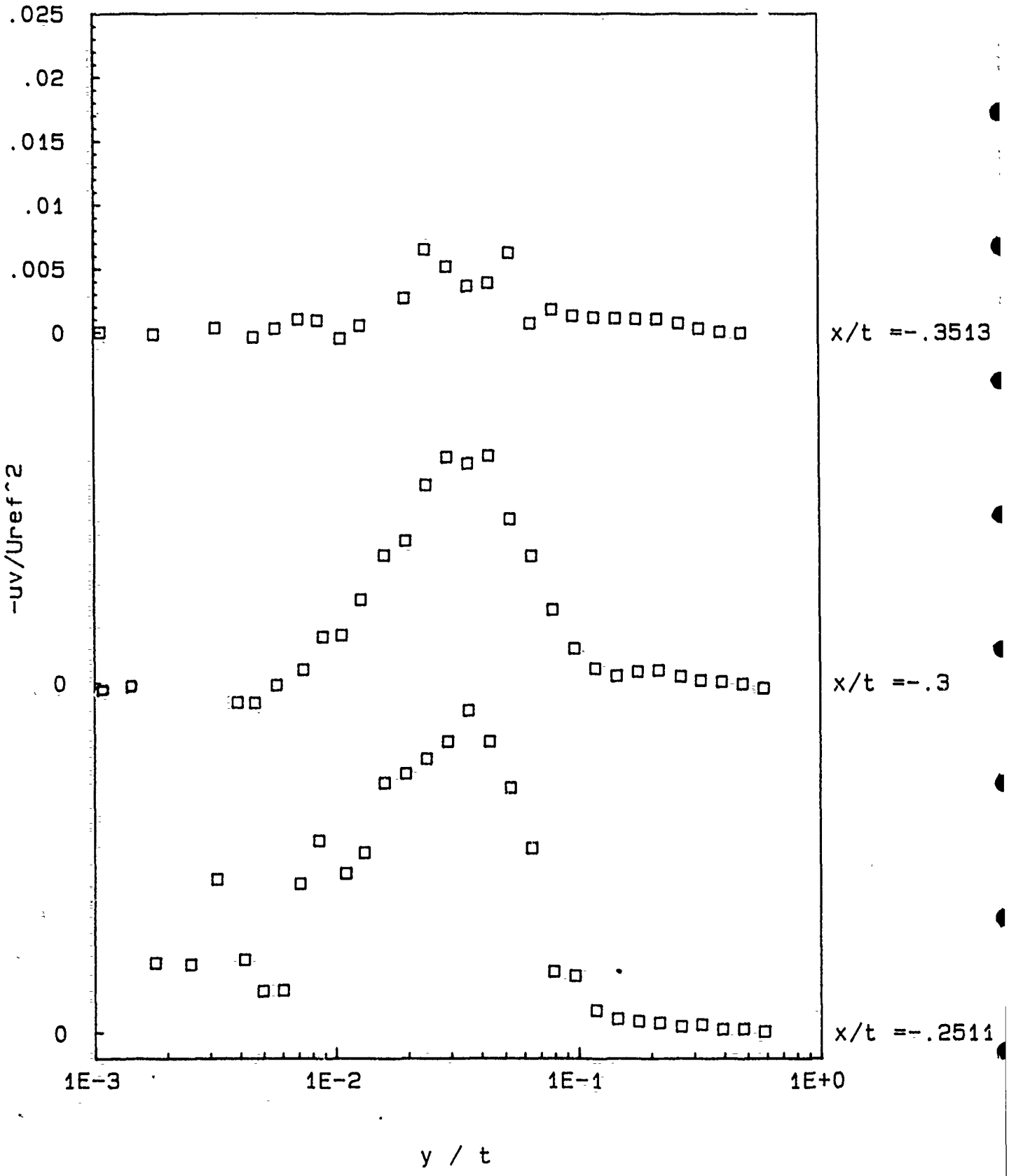


Figure F.1-6(b) Profiles of UV Reynolds shear stress, plane 1.

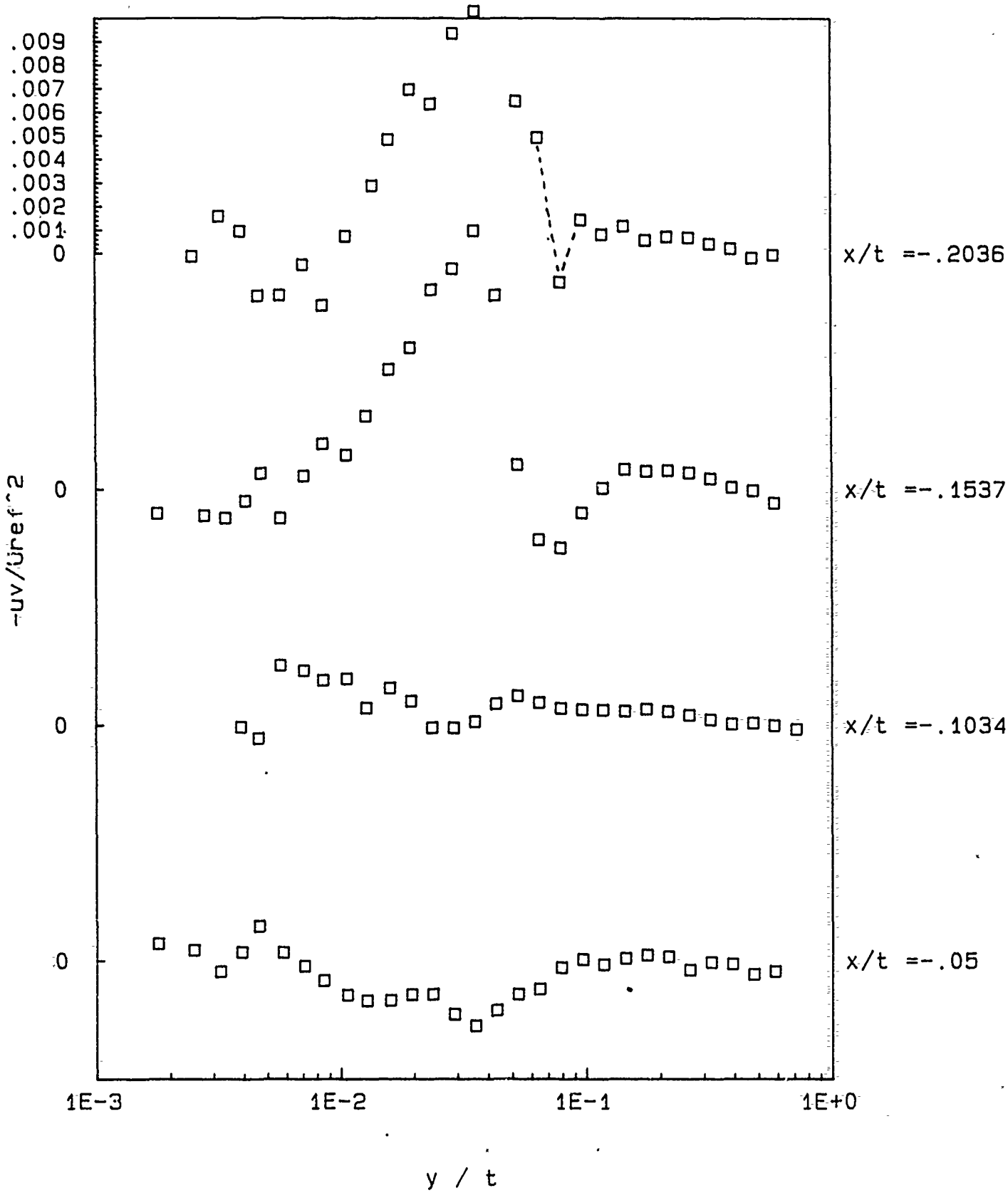


Figure F.1-6(c) Profiles of UV Reynolds shear stress, plane 1.

File E230770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 26
density (kilograms per meter cubed) = 1.099213
viscosity (meters squared per second) = 1.678899E-05
Atmospheric pressure (Pascals) = 94370
Velocity of undisturbed free stream (Uref, in m/s) = 27.53919
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09426E-03
Estimated momentum thickness Reynolds number = 6734.938
Location of traverse: X/T =-.86 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	1.0526E-01	5.0815E-03	6.5237E-01	-1.7206E-01	9.7867E-01	-4.7951E-03	4.4173E-05	1.1222E-01	4.0965E-01	
1.7705E-03	1.0981E-01	5.9204E-03	8.1587E-01	2.4640E-01	9.8100E-01	-4.6194E-03	6.1412E-05	1.1869E-01	7.9564E-01	
2.4788E-03	1.6126E-01	8.3944E-03	4.0562E-01	-4.0357E-01	9.8852E-01	-6.5147E-03	1.2907E-04	-7.0897E-01	1.3894E+00	
3.1870E-03	2.1111E-01	9.1332E-03	2.1794E-01	-4.1486E-01	9.9644E-01	-5.2921E-03	1.4888E-04	-1.7438E-01	7.3012E-01	-2.1042E-04
3.8952E-03	2.3060E-01	9.5669E-03	2.5903E-01	-3.4435E-01	1.0000E+00	-5.9613E-03	2.9166E-04	-3.0080E-01	1.2249E+00	-8.0037E-04
4.6034E-03	2.5853E-01	1.0086E-02	6.4721E-02	-4.1436E-01	1.0000E+00	-6.5045E-03	3.9883E-04	-3.0268E-01	8.0208E-01	-6.8859E-04
5.6657E-03	2.8246E-01	1.0087E-02	6.3304E-02	-3.1532E-01	1.0000E+00	-2.1310E-03	6.2297E-04	-4.0576E-01	9.1995E-01	-6.7011E-04
7.0822E-03	3.0873E-01	9.6760E-03	4.3550E-03	-2.6601E-01	1.0000E+00	-2.1835E-03	8.5516E-04	-1.1427E-01	6.1973E-01	-9.6601E-04
8.4986E-03	3.2564E-01	9.4486E-03	-4.7779E-02	-2.8751E-01	1.0000E+00	-3.6331E-03	1.0127E-03	-8.9564E-02	4.7234E-01	-1.2171E-03
1.0623E-02	3.4317E-01	9.2494E-03	-6.2098E-02	-2.4283E-01	1.0000E+00	-3.2455E-03	1.2351E-03	-1.6784E-02	2.6948E-01	-1.3106E-03
1.2748E-02	3.5619E-01	9.2312E-03	-5.2992E-02	-1.9228E-01	1.0000E+00	-1.7969E-03	1.3482E-03	6.4030E-02	8.5094E-02	-1.2607E-03
1.5935E-02	3.7117E-01	9.3700E-03	-3.8463E-02	-2.4876E-01	1.0000E+00	-3.4015E-03	1.5019E-03	1.4479E-01	1.0542E-01	-1.3299E-03
1.9476E-02	3.8978E-01	9.0817E-03	-4.0679E-02	-2.5573E-01	1.0000E+00	-2.4551E-03	1.5300E-03	1.2585E-01	1.3669E-03	-1.1642E-03
2.3725E-02	4.0634E-01	9.1758E-03	-4.0627E-04	-2.8203E-01	1.0000E+00	-1.3691E-03	1.5724E-03	1.0795E-01	1.0101E-02	-1.2100E-03
2.9037E-02	4.2686E-01	9.2288E-03	-2.1074E-02	-3.1657E-01	1.0000E+00	-2.7303E-03	1.7881E-03	1.8196E-01	1.0384E-01	-1.1581E-03
3.5411E-02	4.3883E-01	8.9877E-03	-3.1887E-02	-2.7663E-01	1.0000E+00	-5.2276E-03	1.7836E-03	1.0059E-01	5.5171E-02	-1.5022E-03
4.3555E-02	4.5816E-01	9.1066E-03	-1.3372E-01	-2.1537E-01	1.0000E+00	-3.5845E-03	1.7597E-03	1.1471E-01	-6.7053E-02	-1.3920E-03
5.2762E-02	4.7964E-01	8.4105E-03	-1.0964E-01	-3.2642E-01	1.0000E+00	-3.0033E-03	1.8285E-03	6.0597E-02	9.1154E-02	-1.5050E-03
6.4448E-02	5.0257E-01	8.2296E-03	-1.1783E-01	-2.9810E-01	1.0000E+00	-3.9690E-03	1.8633E-03	1.1268E-01	3.0628E-02	-1.7628E-03
8.0382E-02	5.3249E-01	7.9352E-03	-1.4178E-01	-2.7859E-01	1.0000E+00	-3.7091E-03	1.8633E-03	6.6198E-02	3.2069E-02	-1.5016E-03
9.6317E-02	5.5639E-01	7.9941E-03	-9.8731E-02	-2.4156E-01	1.0000E+00	-3.2559E-03	1.7658E-03	1.8203E-01	3.9175E-02	-1.1428E-03
1.1792E-01	5.8701E-01	6.8942E-03	-2.0065E-01	-2.1797E-01	1.0000E+00	-2.5534E-03	1.6640E-03	1.3848E-01	6.1364E-02	-1.5028E-03
1.4377E-01	6.1599E-01	6.4835E-03	-2.1017E-01	-1.5909E-01	1.0000E+00	-3.3155E-03	1.6251E-03	2.1504E-01	2.1753E-02	-1.2536E-03
1.7564E-01	6.5292E-01	5.6249E-03	-2.4581E-01	-2.1541E-01	1.0000E+00	-2.9232E-03	1.6139E-03	1.6283E-01	-1.7350E-03	-1.2038E-03
2.1459E-01	6.9172E-01	4.9740E-03	-3.4997E-01	-3.6379E-02	1.0000E+00	-2.1856E-03	1.4316E-03	1.7553E-01	4.6970E-02	-1.0439E-03
2.6204E-01	7.3312E-01	3.9794E-03	-4.5803E-01	6.2021E-02	1.0000E+00	-1.2974E-03	1.2172E-03	2.5246E-01	5.3573E-02	-1.0018E-03
3.1976E-01	7.7374E-01	3.1402E-03	-4.5345E-01	1.5875E-01	1.0000E+00	-7.2446E-04	1.0501E-03	3.3898E-01	3.9654E-01	-5.1331E-04
3.9093E-01	8.1369E-01	2.1907E-03	-3.4966E-01	-4.4487E-02	1.0000E+00	1.6996E-03	7.4772E-04	2.0258E-01	2.5961E-01	-3.9673E-04
4.7734E-01	8.4209E-01	1.4070E-03	-4.0535E-01	1.9617E-01	1.0000E+00	4.3013E-03	6.1385E-04	2.9067E-01	5.5111E-01	2.5694E-04
5.8286E-01	8.6366E-01	7.4725E-04	1.4413E-01	-3.1313E-01	1.0000E+00	5.6113E-03	1.9671E-04	2.6196E-01	-1.6680E-01	3.4424E-05
7.1211E-01	8.5905E-01	8.6407E-04	-1.1017E-01	-3.2299E-01	1.0000E+00	4.4125E-03	1.1855E-04	5.4912E-02	-4.9354E-01	
8.6969E-01	8.5837E-01	7.3727E-04	6.6547E-03	-5.5007E-01	1.0000E+00	-2.5935E-03	3.3007E-05	2.6206E-01	-7.1713E-01	

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-1 U and V component velocity measurements made at X/T = -.86 with the laser anemometer, plane 1.

File E231770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 27.1
density (kilograms per meter cubed) = 1.103308
viscosity (meters squared per second) = 1.675057E-05
Atmospheric pressure (Pascals) = 95070
Velocity of undisturbed free stream (Uref, in m/s) = 27.68912
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089817E-03
Estimated momentum thickness Reynolds number = 6779.770
Location of traverse; X/T =-.667 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	4.2509E-02	2.8418E-03	1.3817E+00	1.8357E+00	8.2901E-01	-4.2102E-03	1.1820E-04	-9.9559E-01	1.9853E+00	
1.7705E-03	4.9940E-02	3.2619E-03	1.3003E+00	1.5931E+00	8.5266E-01	-4.5287E-03	1.1626E-04	-5.2201E-01	1.3390E+00	
2.4788E-03	6.8218E-02	4.7675E-03	9.9140E-01	5.5457E-01	8.7403E-01	-4.4490E-03	1.1610E-04	-3.7399E-01	1.2874E+00	-9.3857E-06
3.1870E-03	1.1515E-01	7.5711E-03	4.9958E-01	-1.9634E-01	9.2957E-01	-3.2564E-03	1.5072E-04	-3.3295E-01	1.3057E+00	-9.2866E-05
3.8952E-03	1.5873E-01	1.0243E-02	4.3760E-01	1.1583E-01	9.6205E-01	-3.7412E-03	2.5384E-04	-5.0649E-01	1.7315E+00	3.0563E-04
4.6034E-03	1.8222E-01	1.0077E-02	1.5718E-01	-3.3914E-01	9.7337E-01	-4.3453E-03	3.9172E-04	-1.8467E-01	1.0854E+00	-4.0427E-04
5.6657E-03	2.1009E-01	1.0418E-02	1.1291E-01	-3.5421E-01	9.8669E-01	-5.2769E-03	5.0676E-04	-2.6235E-01	6.5810E-01	-7.6215E-04
7.0822E-03	2.3015E-01	1.0760E-02	1.8626E-02	-2.1146E-01	9.8980E-01	-5.5115E-03	8.3272E-04	-8.7417E-02	1.0658E+00	-1.4549E-03
8.4986E-03	2.4990E-01	1.0545E-02	-4.4048E-02	-2.2439E-01	9.9211E-01	3.0248E-03	1.5390E-03	-1.4273E-01	9.8367E-01	-9.7222E-04
1.0623E-02	2.6574E-01	1.0500E-02	-1.0608E-01	-2.3202E-01	9.9467E-01	-2.1809E-05	2.1149E-03	-6.2747E-01	1.1614E+00	-9.5163E-04
1.2748E-02	2.8100E-01	1.0649E-02	-4.7543E-02	-2.1096E-01	9.9786E-01	-4.2388E-03	1.8460E-03	-1.9333E-01	3.0955E-01	-1.1729E-03
1.5935E-02	2.9709E-01	1.0123E-02	-7.2441E-02	-3.5204E-01	1.0000E+00	-4.5938E-03	2.0728E-03	-1.3963E-01	5.2380E-01	-1.1918E-03
1.9478E-02	3.1651E-01	1.0476E-02	-1.1612E-01	-3.0916E-01	1.0000E+00	2.0201E-03	2.2517E-03	-5.8097E-02	3.3856E-01	-1.2777E-03
2.3725E-02	3.3063E-01	1.0968E-02	-1.3182E-01	-2.2312E-01	1.0000E+00	2.2386E-03	2.2072E-03	-1.4641E-01	2.2534E-01	-1.1876E-03
2.9037E-02	3.5312E-01	1.0866E-02	-1.2375E-01	-2.0242E-01	1.0000E+00	-1.8991E-03	2.3404E-03	-3.1279E-02	3.4096E-01	-7.2022E-04
3.5411E-02	3.7624E-01	1.0635E-02	-1.1181E-01	-2.5499E-01	1.0000E+00	-3.5906E-04	2.3246E-03	-1.5213E-01	2.0591E-01	-1.1770E-03
4.3201E-02	3.9736E-01	1.0260E-02	-1.3250E-01	-2.6573E-01	1.0000E+00	-4.0270E-04	2.4657E-03	-1.6643E-02	3.6876E-01	-1.3913E-03
5.2762E-02	4.2045E-01	1.0194E-02	-1.4530E-01	-2.7958E-01	1.0000E+00	2.8432E-03	2.2951E-03	1.0057E-01	1.8139E-02	-1.3326E-03
6.4625E-02	4.4951E-01	1.0021E-02	-1.9048E-01	-2.4638E-01	1.0000E+00	3.3042E-03	2.4213E-03	-1.4044E-01	3.2970E-01	-6.7671E-04
7.8966E-02	4.7713E-01	9.4260E-03	-1.8598E-01	-2.8890E-01	1.0000E+00	1.5796E-03	2.3952E-03	4.4265E-03	5.6833E-02	-8.9238E-04
9.7734E-02	5.1051E-01	8.9016E-03	-2.2237E-01	-2.1448E-01	1.0000E+00	5.3927E-05	2.1354E-03	2.6483E-02	6.6054E-02	-1.2429E-03
1.1756E-01	5.4028E-01	8.0898E-03	-2.2727E-01	-2.4791E-01	1.0000E+00	-2.7486E-03	2.2807E-03	-1.9236E-02	2.9457E-02	-1.0295E-03
1.4377E-01	5.7734E-01	7.3889E-03	-2.7644E-01	-1.2780E-01	1.0000E+00	1.7154E-03	2.1336E-03	-4.9150E-02	2.1709E-01	-1.0750E-03
1.7564E-01	6.0975E-01	6.5556E-03	-2.9611E-01	-8.6273E-02	1.0000E+00	-7.8829E-04	2.1162E-03	-2.7209E-02	-5.3387E-03	-9.3647E-04
2.1459E-01	6.5042E-01	5.4912E-03	-3.0552E-01	-1.3573E-01	1.0000E+00	-2.4133E-03	1.8860E-03	8.4991E-02	1.9202E-01	-8.9612E-04
2.6204E-01	6.9119E-01	4.5520E-03	-4.2245E-01	6.9490E-02	1.0000E+00	-6.5690E-03	1.7391E-03	-5.2782E-02	4.0622E-01	-6.0368E-04
3.1976E-01	7.4695E-01	3.0456E-03	-4.4092E-01	6.4466E-02	1.0000E+00	-4.7489E-03	1.3532E-03	-4.9447E-02	3.0159E-01	-2.7468E-04
3.9200E-01	7.7718E-01	2.3028E-03	-4.2100E-01	1.6714E-01	1.0000E+00	-4.3514E-03	1.1835E-03	-1.3537E-01	5.7907E-01	-1.5865E-04
4.7769E-01	8.1171E-01	1.6431E-03	-1.5100E-01	-1.8610E-01	1.0000E+00	5.0549E-03	8.8020E-04	-1.6533E-01	2.9409E-01	1.2753E-04
5.8286E-01	8.2319E-01	1.1841E-03	3.4818E-02	-4.2421E-02	1.0000E+00	1.9240E-02	9.0912E-04	2.2080E-01	1.4108E-01	4.4294E-04
7.1211E-01	8.1725E-01	8.0208E-04	-1.1376E-02	-6.8627E-01	1.0000E+00	1.6322E-02	2.8292E-04	4.6537E-01	1.6093E-03	
8.6969E-01	8.1304E-01	9.6470E-04	1.3596E-01	-2.7458E-01	1.0000E+00	1.6837E-02	4.2441E-04	6.1128E-02	3.7188E-02	

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-2 U and V component velocity measurements made at X/T = -.67 with the laser anemometer, plane 1.

File E307770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.103412
viscosity (meters squared per second) = 1.656109E-05
Atmospheric pressure (Pascals) = 93780
Velocity of undisturbed free stream (Uref, in m/s) = 27.59038
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09274E-03
Estimated momentum thickness Reynolds number = 6837.772
Location of traverse; X/T =-.5 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	2.6387E-02	3.0062E-03	9.5452E-01	1.5418E+00	6.6056E-01	-2.0718E-04	9.2877E-05	-6.0736E-01	3.7461E+00	-6.2499E-05
2.1246E-03	3.1218E-02	3.6196E-03	8.6556E-01	9.6077E-01	6.6229E-01	-5.1215E-04	9.7296E-05	-6.0349E-01	3.0874E+00	-4.6433E-04
2.8329E-03	5.0362E-02	5.5447E-03	6.4104E-01	3.1905E-01	7.3274E-01	-3.6326E-04	1.7475E-04	-2.6781E-01	2.3786E+00	-8.6067E-04
3.5411E-03	6.7027E-02	7.2817E-03	4.4460E-01	5.8098E-02	7.7925E-01	-5.3372E-04	2.9345E-04	-4.8770E-01	1.8993E+00	-9.1417E-04
4.6034E-03	9.5684E-02	9.0859E-03	2.5852E-01	-2.7111E-01	8.0895E-01	-1.1[illegible]4E-03	5.2660E-04	-3.6715E-01	1.3500E+00	-5.7135E-04
5.8428E-03	1.0336E-01	1.0100E-02	1.8351E-01	-3.3506E-01	8.4373E-01	-2.0414E-03	7.5241E-04	-2.7426E-01	9.4580E-01	-1.1244E-03
7.4363E-03	1.3949E-01	1.1341E-02	-7.3914E-03	-2.3251E-01	8.5979E-01	2.3991E-04	1.0749E-03	-2.2469E-01	7.4187E-01	-1.5223E-03
9.5609E-03	1.6009E-01	1.2114E-02	-8.1894E-02	-2.7535E-01	8.8676E-01	1.3353E-04	1.3850E-03	-1.4262E-01	6.5103E-01	-1.5252E-03
1.2394E-02	1.7566E-01	1.2635E-02	-1.2125E-01	-2.5112E-01	9.0556E-01	-8.4864E-04	1.6671E-03	-1.5098E-01	5.5261E-01	-1.6334E-03
1.5935E-02	1.9788E-01	1.2703E-02	-1.5615E-01	-1.9443E-01	9.2986E-01	-1.5835E-03	2.0058E-03	-1.3959E-01	5.1633E-01	-1.5033E-03
2.0184E-02	2.1369E-01	1.3037E-02	-1.9970E-01	-1.7016E-01	9.4596E-01	1.4077E-04	2.1104E-03	-2.6007E-02	4.1462E-01	-1.8362E-03
2.5850E-02	2.5807E-01	1.3003E-02	-2.5773E-01	-1.0713E-01	9.7232E-01	4.4275E-04	2.2527E-03	1.7280E-02	2.5933E-01	-1.4345E-03
3.4348E-02	2.9004E-01	1.2443E-02	-2.6164E-01	-1.2333E-01	9.8603E-01	1.3943E-03	2.3850E-03	5.4195E-02	2.4011E-01	-1.7247E-03
4.2493E-02	3.1047E-01	1.2665E-02	-2.4452E-01	-9.2933E-02	9.9114E-01	5.7086E-04	2.5980E-03	-3.7259E-02	2.9071E-01	-1.0908E-03
5.4897E-02	3.6000E-01	1.1813E-02	-2.6549E-01	-8.4136E-02	9.9843E-01	5.2417E-03	2.3937E-03	5.6691E-02	2.6608E-01	-1.4503E-03
6.9051E-02	3.8880E-01	1.1091E-02	-2.7809E-01	-1.3040E-01	1.0000E+00	5.3042E-03	2.3635E-03	6.6024E-02	1.9774E-01	-1.9490E-03
8.8173E-02	4.3462E-01	1.0105E-02	-2.8591E-01	-1.1324E-01	1.0000E+00	5.4343E-03	2.2759E-03	1.4849E-01	2.0616E-01	-1.5327E-03
1.1296E-01	4.8143E-01	8.9407E-03	-3.0230E-01	-1.1857E-01	1.0000E+00	4.1937E-03	2.2027E-03	1.6310E-01	2.3647E-01	-1.4689E-03
1.4412E-01	5.2503E-01	7.6564E-03	2.9149E-01	-1.3138E-01	1.0000E+00	1.1052E-03	1.9686E-03	9.2101E-02	9.5062E-03	-1.5148E-03
1.8414E-01	5.7506E-01	5.9725E-03	-3.8196E-01	1.4514E-02	1.0000E+00	-6.5027E-04	1.7993E-03	2.2242E-01	1.8396E-01	-9.5907E-04
2.3513E-01	6.2464E-01	4.6688E-03	-4.4863E-01	3.2247E-02	1.0000E+00	-8.9350E-03	1.4764E-03	3.2126E-01	2.3008E-01	-7.6475E-04
3.0028E-01	6.8330E-01	3.0327E-03	-5.7471E-01	2.5270E-01	1.0000E+00	-1.4738E-02	1.0977E-03	3.0581E-01	4.2522E-01	-6.2608E-04
3.8350E-01	7.3608E-01	1.7386E-03	-7.2939E-01	6.5696E-01	1.0000E+00	-2.1331E-02	7.5746E-04	5.2828E-01	7.0112E-01	-3.3464E-04
4.8973E-01	7.7430E-01	3.9847E-04	-1.1090E+00	2.1775E+00	1.0000E+00	-2.4936E-02	3.5170E-04	5.7809E-01	1.3950E+00	-3.0309E-05
6.2748E-01	7.7042E-01	5.8951E-05	7.3028E-02	1.5203E-01	1.0000E+00	-2.3682E-02	6.1352E-05	2.1694E-01	1.4128E-01	2.2413E-05
7.9887E-01	7.6187E-01	3.0045E-05	-2.2337E-01	-1.2885E-01	1.0000E+00	-1.7117E-02	3.4925E-05	1.5908E-01	-2.1518E-01	1.1096E-05
1.0202E+00	7.4672E-01	2.6230E-05	-2.9541E-01	-1.9584E-01	1.0000E+00	-8.0556E-04	3.6671E-05	7.0839E-02	-3.6742E-01	1.3923E-05
1.3028E+00	7.4117E-01	3.2460E-05	-3.3363E-01	-2.0249E-01	1.0000E+00	4.6415E-03	2.8897E-05	1.4996E-01	-2.2431E-01	1.4767E-05
1.6636E+00	7.3570E-01	2.8116E-05	-4.2923E-01	-3.3558E-02	1.0000E+00	2.2193E-02	2.4242E-05	-1.4472E-01	-1.1014E-01	1.3669E-05

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-3 U and V component velocity measurements made at X/T = -.50 with the laser anemometer, plane 1.

File E232770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 27.1
density (kilograms per meter cubed) = 1.103308
viscosity (meters squared per second) = 1.675057E-05
Atmospheric pressure (Pascals) = 95070
Velocity of undisturbed free stream (Uref, in m/s) = 27.70854
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089243E-03
Estimated momentum thickness Reynolds number = 6783.573
Location of traverse: X/T =-.461 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.2394E-03	5.0978E-03	1.6196E-03	7.5356E-01	1.8046E+00	5.0247E-01	-3.8749E-03	1.1474E-04	-7.2366E-01	1.1173E+00	
1.7705E-03	1.3080E-02	2.3422E-03	1.0004E+00	1.6632E+00	5.4441E-01	-5.1942E-03	1.3038E-04	-7.2767E-01	1.8362E+00	
2.4788E-03	9.0247E-03	2.2227E-03	6.9120E-01	1.5502E+00	5.1960E-01	-6.7813E-03	1.0275E-04	-5.5246E-01	1.4406E+00	-1.2246E-04
3.1870E-03	2.0531E-02	3.9087E-03	7.6110E-01	9.7829E-01	5.7950E-01	-6.9607E-03	2.0255E-04	-8.1157E-01	2.3929E+00	-6.5554E-04
3.8952E-03	2.7217E-02	5.7228E-03	4.7172E-01	5.0713E-01	6.0303E-01	-5.1780E-03	2.1793E-04	-6.0718E-01	2.0862E+00	-1.1089E-03
4.6034E-03	4.3196E-02	7.6342E-03	4.9855E-01	3.0536E-01	6.5794E-01	-6.4479E-03	3.4585E-04	-4.2982E-01	1.6514E+00	-1.5292E-03
5.6657E-03	6.5845E-02	1.0116E-02	1.1498E-01	-1.4766E-01	7.2528E-01	-6.7191E-03	6.0978E-04	-3.4821E-01	1.5448E+00	-9.8098E-04
7.0822E-03	9.8169E-02	1.2584E-02	-6.0074E-02	-2.9617E-01	7.9833E-01	1.4028E-03	1.1848E-03	-5.6106E-01	1.0854E+00	-4.7879E-04
8.4986E-03	1.1915E-01	1.3504E-02	-1.5846E-01	-3.2526E-01	8.3924E-01	-5.4943E-04	1.5685E-03	-2.7204E-01	4.4798E-01	-9.5063E-04
1.0623E-02	1.3998E-01	1.3617E-02	-2.2977E-01	-1.4738E-01	8.7205E-01	-2.9647E-04	1.8092E-03	-2.8645E-01	5.9036E-01	-1.8027E-03
1.2748E-02	1.6012E-01	1.3265E-02	-2.8240E-01	-5.6948E-02	9.0422E-01	-1.1721E-04	2.1190E-03	-2.5362E-01	6.7871E-01	-2.0544E-03
1.5935E-02	1.7742E-01	1.3566E-02	-3.0475E-01	-5.7755E-02	9.2463E-01	3.4270E-03	2.3000E-03	1.6936E-02	1.9490E-01	-2.2508E-03
1.9476E-02	1.9328E-01	1.4228E-02	-3.3813E-01	-1.0145E-01	9.3234E-01	3.3054E-03	2.5022E-03	-1.0050E-02	3.7805E-01	-2.3043E-03
2.3725E-02	2.1402E-01	1.4936E-02	-3.1907E-01	8.0583E-03	9.4863E-01	5.8128E-03	2.6548E-03	1.0694E-02	3.5984E-01	-1.5683E-03
2.9037E-02	2.0686E-01	1.5669E-02	-2.1052E-01	-1.3279E-01	9.4127E-01	-3.7600E-03	2.8910E-03	-9.0850E-03	4.1833E-01	-1.7027E-03
3.5411E-02	2.7047E-01	1.4068E-02	-2.4217E-01	-7.3750E-02	9.8316E-01	-3.0621E-05	2.8207E-03	-8.4708E-02	2.7135E-01	-1.8712E-03
4.3201E-02	2.9904E-01	1.3671E-02	-2.4970E-01	-1.5719E-01	9.9227E-01	5.3591E-03	2.8142E-03	1.1239E-01	3.2903E-01	-1.6318E-03
5.2762E-02	3.2628E-01	1.3232E-02	-2.9352E-01	-5.9899E-02	9.9502E-01	3.0477E-04	3.1291E-03	-8.9770E-02	4.9771E-01	-1.4226E-03
6.4448E-02	3.6608E-01	1.2672E-02	-2.6996E-01	-7.4161E-02	9.9958E-01	2.7515E-03	2.6485E-03	-1.2830E-02	6.2775E-02	-1.4557E-03
7.8966E-02	3.9721E-01	1.1705E-02	-2.9156E-01	-2.0737E-02	1.0000E+00	4.0572E-03	2.6640E-03	4.5897E-02	1.6392E-01	-1.5630E-03
9.6317E-02	4.3846E-01	1.0415E-02	-2.8900E-01	-5.4730E-02	1.0000E+00	2.9433E-04	2.6402E-03	4.4097E-02	2.1089E-01	-1.2326E-03
1.1756E-01	4.7768E-01	9.3888E-03	-2.9415E-01	-8.9370E-02	1.0000E+00	3.3829E-03	2.3396E-03	7.1700E-02	-7.1583E-03	-1.3581E-03
1.4377E-01	5.1538E-01	8.3699E-03	-3.5264E-01	1.0624E-02	1.0000E+00	-1.7843E-04	2.4159E-03	4.6705E-02	2.2364E-01	-1.5379E-03
1.7564E-01	5.5655E-01	7.2001E-03	-3.3268E-01	9.9473E-03	1.0000E+00	-7.4139E-03	2.4719E-03	-3.4835E-02	3.1408E-01	-8.0530E-04
2.1459E-01	5.9558E-01	5.8616E-03	-3.3240E-01	1.1786E-02	1.0000E+00	-6.2014E-03	1.9564E-03	1.0010E-01	1.0620E-01	-1.1446E-03
2.6204E-01	6.4147E-01	4.7173E-03	-3.6130E-01	3.3624E-02	1.0000E+00	-1.2892E-02	1.6632E-03	8.1090E-02	2.2055E-01	-7.7119E-04
3.1976E-01	6.8191E-01	3.7235E-03	-4.7762E-01	2.8495E-01	1.0000E+00	-2.0545E-02	1.7142E-03	-2.7835E-01	8.7887E-01	-4.6701E-04
3.9093E-01	7.2028E-01	2.5815E-03	-4.2876E-01	7.5715E-02	1.0000E+00	-2.2020E-02	1.2337E-03	-2.5800E-01	7.7651E-01	-1.9446E-04
4.7769E-01	7.5782E-01	1.5026E-03	-8.2311E-02	-9.6204E-03	1.0000E+00	-2.1718E-02	8.5307E-04	-3.3766E-01	3.3751E-01	-2.1053E-04
5.8286E-01	7.5519E-01	9.8208E-04	2.8831E-01	-1.1202E-01	1.0000E+00	-1.7324E-02	7.0068E-04	-1.1943E-01	-2.4559E-02	3.2277E-04
7.1246E-01	7.4173E-01	1.2201E-03	-2.9952E-02	-2.1176E-01	1.0000E+00	-1.7832E-02	5.5223E-04	-2.6282E-01	-4.7785E-01	
8.6969E-01	7.3304E-01	1.3782E-03	-1.1082E-01	-2.3033E-01	1.0000E+00	-4.2383E-03	2.6480E-04	-1.3653E-01	3.1394E-01	

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-4 U and V component velocity measurements made at X/T = -.46 with the laser anemometer, plane 1.

File E233770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 26.1
density (kilograms per meter cubed) = 1.104144
viscosity (meters squared per second) = 1.669327E-05
Atmospheric pressure (Pascals) = 94825
Velocity of undisturbed free stream (Uref, in m/s) = 27.62568
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091693E-03
Estimated momentum thickness Reynolds number = 6790.570
Location of traverse: X/T =-.404 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	3.1103E-03	1.6982E-03	6.7889E-01	1.5446E+00	4.6328E-01	-1.0679E-02	4.4479E-04	-1.3291E+00	2.0328E+00	9.4982E-05
2.1246E-03	-1.7214E-03	1.8370E-03	1.6948E-01	1.5271E+00	4.2754E-01	-7.3770E-03	2.4277E-04	-1.0158E+00	2.1770E+00	7.1428E-05
2.6558E-03	3.3877E-03	2.5433E-03	4.8353E-01	1.3924E+00	4.7264E-01	-4.1897E-03	2.2524E-04	-8.7203E-01	2.0279E+00	-5.5325E-04
3.1870E-03	8.0283E-03	3.5662E-03	4.1853E-01	9.4657E-01	5.1091E-01	-7.9499E-03	3.2237E-04	-9.9749E-01	1.9509E+00	8.5433E-05
3.8952E-03	1.5495E-02	5.4769E-03	2.4812E-01	1.2390E-01	5.5867E-01	-4.8502E-03	4.4599E-04	-6.4633E-01	1.5550E+00	-9.0008E-05
4.6034E-03	2.8511E-02	8.1379E-03	3.0326E-01	6.4684E-02	5.9860E-01	-9.8670E-03	6.8271E-04	-5.7959E-01	1.2133E+00	6.8234E-04
5.6657E-03	4.3067E-02	1.1238E-02	8.0964E-02	-4.8839E-02	6.3893E-01	-6.5565E-03	8.2230E-04	-3.3779E-01	6.3869E-01	-2.5007E-04
7.0822E-03	7.5868E-02	1.3821E-02	1.4261E-01	-1.0512E-01	7.3456E-01	-6.8558E-03	1.3008E-03	-8.8218E-02	6.4640E-01	-1.3240E-04
8.4986E-03	8.7862E-02	1.4177E-02	1.1959E-02	-1.9271E-01	7.6936E-01	1.1663E-03	1.9618E-03	-3.5481E-01	6.7816E-01	-4.7865E-04
1.0623E-02	1.1243E-01	1.5996E-02	-1.1931E-01	-2.6234E-01	8.0948E-01	-7.9025E-03	2.6752E-03	-5.1054E-01	5.4032E-01	-6.7422E-04
1.2748E-02	1.3107E-01	1.5865E-02	-2.2939E-01	-1.7340E-01	8.4026E-01	-4.8178E-03	2.6026E-03	-1.9433E-01	3.9823E-01	-1.1925E-03
1.5935E-02	1.5594E-01	1.6711E-02	-1.9209E-01	-1.6924E-01	8.7693E-01	7.2429E-03	2.7940E-03	3.4081E-02	2.4578E-01	-2.0655E-03
1.9476E-02	1.8020E-01	1.6488E-02	-2.8632E-01	-1.2305E-01	9.0873E-01	-3.8059E-04	3.5556E-03	-7.0966E-03	4.3577E-01	-1.2943E-03
2.3725E-02	1.9865E-01	1.6945E-02	-2.7901E-01	-1.3541E-01	9.2408E-01	5.5035E-03	3.2305E-03	-1.3426E-02	3.1838E-01	-1.1581E-03
2.9037E-02	2.2633E-01	1.6484E-02	-2.9073E-01	-4.8091E-03	9.5231E-01	5.3277E-03	2.8936E-03	1.4969E-02	-2.4575E-02	-2.3090E-03
3.5411E-02	2.6454E-01	1.4887E-02	-2.4213E-01	-5.9147E-02	9.7704E-01	1.1732E-02	3.9696E-03	-2.2654E-02	1.8828E-01	-2.9912E-03
4.3378E-02	2.9722E-01	1.5199E-02	-2.0339E-01	1.9874E-02	9.8823E-01	1.3956E-02	4.3704E-03	-2.6019E-01	6.0966E-01	-8.9153E-04
5.2762E-02	3.3187E-01	1.6515E-02	-2.3526E-01	-1.4172E-01	9.9720E-01	2.9769E-03	3.3090E-03	5.7563E-03	4.2016E-01	-1.8953E-03
6.4448E-02	3.7035E-01	1.3134E-02	-2.8592E-01	-2.3628E-02	9.9928E-01	5.0685E-03	2.8911E-03	-1.3032E-03	2.8362E-01	-2.0099E-03
7.8966E-02	4.0349E-01	1.1756E-02	-3.4828E-01	-8.1189E-02	1.0000E+00	7.5727E-03	2.6907E-03	1.5227E-01	1.8390E-01	-1.8005E-03
9.6317E-02	4.4099E-01	1.1344E-02	-3.3562E-01	2.4952E-02	1.0000E+00	4.7266E-03	2.9209E-03	8.9059E-02	2.3325E-01	-1.1271E-03
1.1756E-01	4.8325E-01	9.9770E-03	-3.4282E-01	-7.1485E-03	1.0000E+00	2.2231E-03	2.4475E-03	8.3149E-02	7.3491E-02	-1.1542E-03
1.4377E-01	5.2193E-01	8.7370E-03	-3.1929E-01	-1.0173E-01	1.0000E+00	-1.8186E-03	2.2411E-03	9.0559E-02	1.0780E-01	-1.4985E-03
1.7564E-01	5.5531E-01	7.6464E-03	-3.6297E-01	-6.6572E-02	1.0000E+00	-9.3900E-03	2.1818E-03	8.3641E-02	1.8366E-01	-8.9810E-04
2.1459E-01	5.9171E-01	6.6738E-03	-3.5390E-01	1.8213E-02	1.0000E+00	-1.8853E-02	2.1864E-03	-1.0746E-01	4.9996E-01	-7.9752E-04
2.6204E-01	6.2597E-01	5.2168E-03	-4.3328E-01	3.1967E-02	1.0000E+00	-2.3903E-02	2.0120E-03	-9.2458E-02	6.7032E-01	-5.4729E-04
3.1976E-01	6.5580E-01	4.3975E-03	-4.7100E-01	1.3983E-01	1.0000E+00	-3.5274E-02	1.9171E-03	-3.5346E-01	7.5074E-01	-1.2705E-04
3.9093E-01	6.8008E-01	3.1712E-03	-4.8100E-01	3.0602E-01	1.0000E+00	-3.0865E-02	1.1527E-03	-3.4388E-03	4.4979E-01	-1.5964E-04
4.7734E-01	6.9723E-01	2.2285E-03	-4.6636E-01	2.8117E-01	1.0000E+00	-3.5718E-02	1.1179E-03	-5.8686E-01	1.4023E+00	5.9432E-05
5.8286E-01	7.0271E-01	1.6402E-03	-3.6014E-01	3.0441E-01	1.0000E+00	-2.7293E-02	6.8947E-04	-4.0436E-02	6.0730E-01	2.4443E-04
7.1211E-01	7.0187E-01	1.3438E-03	-2.1553E-01	9.5473E-02	1.0000E+00	-2.7674E-02	1.0360E-03	-1.0474E+00	1.9873E+00	4.1146E-04
8.6969E-01	6.9809E-01	1.3623E-03	-2.0827E-01	2.5304E-01	1.0000E+00	-1.7447E-02	7.7517E-04	-6.9219E-01	5.7238E-01	

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-5 U and V component velocity measurements made at X/T = -.40 with the laser anemometer, plane 1.

File E234770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 26
density (kilograms per meter cubed) = 1.098514
viscosity (meters squared per second) = 1.678899E-05
Atmospheric pressure (Pascals) = 94310
Velocity of undisturbed free stream (Uref, in m/s) = 27.62803
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091624E-03
Estimated momentum thickness Reynolds number = 6752.313
Location of traverse; X/T =-.3513 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	-8.0183E-03	2.4423E-03	-6.3074E-02	2.0934E+00	3.6780E-01	-1.0790E-02	4.8182E-04	-1.1047E+00	1.5324E+00	-2.9027E-05
1.7705E-03	-9.6917E-03	2.7757E-03	-6.4426E-03	1.7533E+00	3.7880E-01	-7.1202E-03	2.9996E-04	-1.0980E+00	2.2742E+00	1.3218E-04
2.4788E-03	-7.6744E-03	2.9844E-03	6.0553E-02	1.2301E+00	3.9504E-01	-6.8066E-03	2.5569E-04	-6.6992E-01	1.8049E+00	
3.1870E-03	-1.2449E-02	3.6937E-03	-1.2731E-01	9.3098E-01	3.8936E-01	-7.4593E-03	4.1583E-04	-5.0020E-01	1.5736E+00	-3.6601E-04
3.8952E-03	-6.8860E-03	6.2025E-03	7.4090E-03	9.4245E-01	4.4227E-01	-6.7459E-03	4.2516E-04	-4.2834E-01	1.5998E+00	-1.3657E-03
4.6034E-03	9.6961E-04	1.1019E-02	3.7448E-02	3.3088E-01	4.9682E-01	-5.0307E-03	9.7207E-04	-3.6282E-01	1.7155E+00	3.6628E-04
5.6657E-03	1.2565E-02	1.3415E-02	5.1997E-02	2.4907E-01	5.3342E-01	-1.9586E-03	1.6079E-03	-3.9768E-01	8.0893E-01	-3.0403E-04
7.0822E-03	2.1484E-02	1.5297E-02	-9.0251E-02	3.8613E-02	5.6460E-01	8.1638E-04	1.9618E-03	-4.8612E-01	1.0300E+00	-1.0274E-03
8.4984E-03	4.0783E-02	1.6363E-02	-1.2139E-01	-5.3832E-02	6.3319E-01	2.6392E-03	2.2464E-03	-1.9108E-01	5.4457E-01	-9.5204E-04
1.0623E-02	5.9713E-02	1.8805E-02	-1.8944E-01	-9.2869E-03	6.6735E-01	3.5169E-03	2.9122E-03	-1.5979E-01	3.4457E-01	4.6057E-04
1.2748E-02	8.3909E-02	1.7842E-02	-1.1691E-01	-2.4685E-01	7.3289E-01	1.0301E-02	4.6585E-03	-3.8672E-01	1.0906E+00	-5.3619E-04
1.5935E-02	6.8236E-02	1.7852E-02	-3.8544E-02	1.9429E-01	6.9519E-01	5.7794E-03	5.5175E-03	-1.3346E-01	5.7359E-01	-2.3687E-03
1.9476E-02	4.6392E-02	2.2026E-02	-6.3804E-01	1.4323E+00	6.4492E-01	7.4246E-03	6.2966E-03	-1.2580E-01	6.1892E-01	-2.7067E-03
2.3725E-02	6.2877E-02	2.4091E-02	-7.4013E-01	1.3511E+00	6.9565E-01	4.3009E-03	7.5763E-03	1.1336E-01	1.1172E+00	-6.5419E-03
2.9037E-02	9.0861E-02	2.4431E-02	-8.2681E-01	1.6388E+00	7.6642E-01	5.6674E-03	7.1429E-03	1.3678E-01	1.1224E+00	-5.1840E-03
3.5411E-02	1.3913E-01	2.2652E-02	-7.1370E-01	1.3228E+00	8.4680E-01	1.3003E-02	7.3641E-03	1.8552E-01	1.4940E+00	-3.6298E-03
4.3201E-02	1.7742E-01	2.1363E-02	-6.6621E-01	9.3074E-01	8.9012E-01	1.2982E-02	6.4150E-03	2.9866E-01	1.3322E+00	-3.9085E-03
5.2762E-02	2.1374E-01	1.9764E-02	-5.3255E-01	5.4389E-01	9.2607E-01	1.9062E-02	7.6240E-03	8.2732E-01	2.9353E+00	-6.2712E-03
6.4448E-02	2.7080E-01	1.5988E-02	-4.9343E-01	4.1892E-01	9.7278E-01	1.7393E-02	5.7587E-03	2.2906E-01	1.6878E+00	-7.3992E-04
7.9143E-02	3.1433E-01	1.4089E-02	-4.4649E-01	3.5164E-01	9.8804E-01	2.4736E-02	5.6436E-03	3.8007E-01	1.3570E+00	-1.8275E-03
9.6317E-02	3.6387E-01	1.1706E-02	-3.6062E-01	4.1733E-02	9.9930E-01	1.7882E-02	4.1967E-03	1.0121E-01	5.8914E-01	-1.3289E-03
1.1792E-01	4.1172E-01	9.9928E-03	-2.8940E-01	1.1873E-04	1.0000E+00	1.0459E-02	4.0331E-03	-1.5562E-01	4.4223E-01	-1.2114E-03
1.4448E-01	4.7931E-01	8.3335E-03	-3.7368E-01	7.1685E-02	1.0000E+00	-2.7469E-03	2.5688E-03	1.4033E-01	1.9349E-01	-1.1393E-03
1.7564E-01	5.2173E-01	7.0493E-03	-2.9228E-01	-1.4163E-01	1.0000E+00	-1.6159E-02	2.2759E-03	5.1828E-02	-4.4718E-03	-1.1206E-03
2.1459E-01	5.6442E-01	5.7069E-03	-3.5749E-01	-3.5713E-02	1.0000E+00	-2.6227E-02	1.9956E-03	1.1012E-01	1.4658E-01	-1.1053E-03
2.6310E-01	6.0669E-01	4.6298E-03	-4.0156E-01	-8.7309E-03	1.0000E+00	-3.4817E-02	1.6986E-03	1.1002E-01	3.0880E-01	-7.5653E-04
3.1976E-01	6.4415E-01	3.6942E-03	-4.8398E-01	2.3431E-01	1.0000E+00	-3.7577E-02	1.2991E-03	1.8098E-01	3.3604E-01	-3.5360E-04
3.9093E-01	6.7501E-01	2.4577E-03	-5.3722E-01	3.3229E-01	1.0000E+00	-4.4820E-02	1.1340E-03	-3.5499E-02	6.4694E-01	-8.2052E-05
4.7734E-01	6.9118E-01	1.5941E-03	-4.7338E-01	5.0726E-01	1.0000E+00	-3.6519E-02	9.4796E-04	-1.0160E-01	6.9864E-01	1.2445E-05
5.8286E-01	6.9359E-01	1.2054E-03	-1.5615E-02	-2.3776E-01	1.0000E+00	-1.9651E-02	1.0145E-03	1.3660E-01	-6.8044E-02	
7.1211E-01	6.7069E-01	9.3356E-04	-7.9035E-02	-6.6102E-01	1.0000E+00	-1.3325E-02	1.4989E-04	-1.4349E-02	-7.3290E-01	
8.6969E-01	6.6056E-01	7.0916E-04	-1.8441E-01	-8.1372E-01	1.0000E+00					

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-6 U and V component velocity measurements made at X/T = -.35 with the laser anemometer, plane 1.

File E235770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 26
density (kilograms per meter cubed) = 1.099388
viscosity (meters squared per second) = 1.678899E-05
Atmospheric pressure (Pascals) = 94385
Velocity of undisturbed free stream (Uref, in m/s) = 27.64833
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091023E-03
Estimated momentum thickness Reynolds number = 6756.285
Location of traverse; X/T =-.3 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	-2.9969E-03	2.7463E-03	8.3609E-02	1.2245E+00	4.6599E-01	-7.2092E-03	2.4255E-04	-1.1422E+00	2.3889E+00	6.7751E-04
1.4164E-03	-3.2047E-03	3.2935E-03	1.1735E-01	1.0297E+00	4.7603E-01	-5.9844E-03	2.0567E-04	-7.5361E-01	1.6438E+00	3.3480E-04
2.4788E-03	-7.8935E-03	8.3196E-03	9.0591E-02	1.1057E+00	4.4637E-01	-2.7237E-03	2.4703E-04	-6.3009E-01	2.0320E+00	
3.1870E-03	-1.1461E-02	1.0495E-02	-3.6007E-02	1.1394E+00	4.3870E-01	-4.2004E-03	3.8860E-04	-5.7068E-01	2.1511E+00	
3.8952E-03	-4.3553E-02	2.3205E-02	-6.0110E-01	1.2455E+00	3.9604E-01	-5.7695E-03	2.3894E-03	-5.8181E-01	1.0839E+00	1.5387E-03
4.6034E-03	-7.1067E-02	2.7814E-02	-9.7625E-01	2.5403E+00	3.1746E-01	-1.4426E-02	4.0425E-03	-6.6601E-01	1.1810E+00	1.5676E-03
5.6657E-03	-6.8638E-02	2.6547E-02	-8.0430E-01	2.0968E+00	3.2572E-01	1.8082E-03	4.1721E-03	-4.6845E-01	1.0212E+00	1.7539E-04
7.3300E-03	-7.0979E-02	2.9562E-02	-1.0071E+00	2.2077E+00	3.4412E-01	-1.4448E-04	5.9051E-03	-3.7869E-01	8.0353E-01	-1.0315E-03
8.8527E-03	-6.7235E-02	2.7729E-02	-8.9521E-01	1.7941E+00	3.5546E-01	-2.3200E-03	6.6879E-03	-2.1758E-01	6.3419E-01	-3.6203E-03
1.0623E-02	-6.7921E-02	3.2471E-02	-1.0143E+00	1.9631E+00	3.6394E-01	-2.6888E-03	8.0704E-03	-1.2499E-01	5.9558E-01	-3.7443E-03
1.2748E-02	-6.3950E-02	3.3800E-02	-1.1150E+00	1.7628E+00	3.9856E-01	1.2074E-03	9.5511E-03	4.9450E-02	5.2387E-01	-6.5064E-03
1.5935E-02	-5.3839E-02	3.6608E-02	-1.0721E+00	1.4728E+00	4.3632E-01	2.7962E-03	1.1583E-02	7.1292E-02	4.7175E-01	-9.9898E-03
1.9476E-02	-4.7315E-02	4.0007E-02	-9.8884E-01	9.1600E-01	4.7008E-01	5.0419E-03	1.3807E-02	3.4460E-01	4.5638E-01	-1.1125E-02
2.3725E-02	-4.2003E-02	4.5093E-02	-8.3552E-01	2.1303E-01	5.0750E-01	1.4934E-02	1.7953E-02	4.4328E-01	5.9840E-01	-1.5511E-02
2.9037E-02	-1.0893E-02	4.3943E-02	-8.0156E-01	1.6496E-01	5.4090E-01	2.2264E-02	1.9352E-02	5.7450E-01	9.1803E-01	-1.7687E-02
3.5411E-02	4.4961E-02	3.9992E-02	-8.5242E-01	4.7877E-01	6.7192E-01	2.3657E-02	1.6740E-02	6.9685E-01	8.3795E-01	-1.7162E-02
4.3201E-02	9.6259E-02	3.4099E-02	-8.7619E-01	6.8500E-01	7.5779E-01	3.3333E-02	1.7549E-02	9.5975E-01	1.3660E+00	-1.7786E-02
5.2762E-02	1.4776E-01	2.9322E-02	-7.3290E-01	5.3451E-01	8.2250E-01	4.5086E-02	1.9547E-02	1.0496E+00	1.4940E+00	-1.2824E-02
6.4448E-02	2.2419E-01	2.0764E-02	-7.4772E-01	9.4068E-01	9.2730E-01	3.1751E-02	1.2184E-02	1.2292E+00	2.6521E+00	-9.9328E-03
7.8966E-02	2.9365E-01	1.6147E-02	-5.1754E-01	6.9599E-01	9.7466E-01	3.4963E-02	1.1164E-02	1.1980E+00	3.0148E+00	-5.7229E-03
9.6671E-02	3.4509E-01	1.1820E-02	-3.4282E-01	1.4697E-01	9.9770E-01	1.8118E-02	6.0859E-03	5.6690E-01	1.7173E+00	-2.6993E-03
1.1756E-01	3.9396E-01	1.0261E-02	-2.6393E-01	8.5343E-02	1.0000E+00	5.7485E-03	4.2594E-03	1.4136E-01	6.4404E-01	-1.1216E-03
1.4377E-01	4.4310E-01	8.7708E-03	-2.4447E-01	-4.9538E-02	1.0000E+00	-5.7709E-03	3.6364E-03	-3.3578E-02	5.3033E-01	-5.4476E-04
1.7564E-01	5.0825E-01	7.1005E-03	-3.0270E-01	-3.7513E-02	1.0000E+00	-2.6049E-02	2.2479E-03	1.4216E-01	1.7986E-01	-9.0425E-04
2.1459E-01	5.4605E-01	5.8731E-03	-3.1987E-01	8.7001E-03	1.0000E+00	-3.9699E-02	1.9903E-03	1.5413E-01	2.3985E-01	-1.0042E-03
2.6434E-01	5.8461E-01	4.8131E-03	-4.0447E-01	4.9823E-02	1.0000E+00	-5.1161E-02	1.6249E-03	1.2236E-01	2.7743E-01	-5.1702E-04
3.2011E-01	6.1680E-01	3.5657E-03	-4.6234E-01	2.1199E-01	1.0000E+00	-5.1637E-02	1.3700E-03	2.1081E-01	6.0009E-01	-2.0240E-04
3.9093E-01	6.4438E-01	2.4530E-03	-5.3709E-01	3.9277E-01	1.0000E+00	-5.2945E-02	1.0286E-03	1.2100E-01	5.2877E-01	-9.8201E-05
4.7734E-01	6.5770E-01	1.7082E-03	-2.5725E-01	3.2871E-01	1.0000E+00	-5.2174E-02	1.0595E-03	-3.6675E-01	1.2140E+00	7.4852E-05
5.8286E-01	6.5857E-01	1.4855E-03	-1.4701E-01	2.6232E-01	1.0000E+00	-3.6505E-02	6.2255E-04	-7.8458E-02	3.0316E-01	4.2147E-04
7.1211E-01	6.3769E-01	6.2066E-04	2.2863E-01	-8.3793E-01	1.0000E+00	-1.4341E-02	2.4053E-04	2.3738E-01	-6.1368E-01	
8.7075E-01	6.1836E-01	6.7738E-04	-8.7477E-02	-7.4237E-01	1.0000E+00	-7.1377E-03	2.6361E-04	1.5096E-02	2.4448E-01	

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-7 U and V component velocity measurements made at X/T = -.30 with the laser anemometer, plane 1.

File E225770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 24.8
density (kilograms per meter cubed) = 1.112648
viscosity (meters squared per second) = 1.654237E-05
Atmospheric pressure (Pascals) = 95140
Velocity of undisturbed free stream (Uref, in m/s) = 27.59286
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092666E-03
Estimated momentum thickness Reynolds number = 6846.001
Location of traverse: X/T =-.251 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	-5.8183E-03	3.5730E-02	-7.9730E-01	1.7465E+00	5.3256E-01	-1.6010E-02	1.7092E-03	-1.1377E+00	1.8049E+00	-5.4748E-03
2.4788E-03	-5.3905E-02	4.7188E-02	-8.3353E-01	8.5929E-01	4.5368E-01	-1.4777E-02	1.7498E-03	-8.2667E-01	1.2991E+00	-5.3503E-03
3.1870E-03	-8.2620E-02	5.8727E-02	-7.6843E-01	6.7542E-01	4.1123E-01	-2.2333E-02	4.1742E-03	-4.9583E-01	7.6419E-01	-1.2033E-02
4.1431E-03	-1.3707E-01	6.7007E-02	-6.9310E-01	-8.4217E-03	3.4150E-01	-9.5134E-03	4.0327E-03	-3.9482E-01	6.8396E-01	-5.7288E-03
4.9575E-03	-1.3702E-01	7.3966E-02	-6.3695E-01	-8.3149E-02	3.5691E-01	-1.2033E-02	4.4930E-03	-1.8415E-01	2.5010E-01	-3.2489E-03
6.0198E-03	-1.3771E-01	8.1141E-02	-3.9910E-01	-1.2555E-01	3.4589E-01	-1.7848E-03	6.8532E-03	-2.2620E-01	4.6695E-01	-3.3200E-03
7.0822E-03	-1.4452E-01	7.5637E-02	-5.1356E-01	-3.5796E-01	3.4405E-01	-8.4726E-04	8.7478E-03	-1.5780E-01	5.8698E-01	-7.2233E-03
8.4986E-03	-1.5151E-01	7.0439E-02	-5.7792E-01	-3.2569E-01	3.1947E-01	3.9724E-03	1.1274E-02	-1.0872E-01	3.3092E-01	-1.5041E-02
1.0977E-02	-1.5734E-01	7.1138E-02	-4.2940E-01	-5.3093E-01	3.2398E-01	7.5557E-03	1.4147E-02	1.1740E-01	-9.3050E-02	-1.2481E-02
1.3102E-02	-1.5708E-01	6.6875E-02	-4.3986E-01	-6.2805E-01	3.2590E-01	9.3408E-03	1.7351E-02	7.7383E-02	-6.8145E-03	-1.4095E-02
1.5935E-02	-1.6074E-01	6.4248E-02	-3.2656E-01	-7.9101E-01	3.1787E-01	1.4703E-02	1.9905E-02	1.6672E-01	-2.1284E-01	-1.9570E-02
1.9476E-02	-1.7376E-01	6.2445E-02	-2.3058E-01	-9.7070E-01	3.0795E-01	2.7394E-02	2.4[illegible]2E-02	2.3214E-01	-3.0993E-01	-2.0294E-02
2.3725E-02	-1.6311E-01	5.9012E-02	-1.5707E-01	-9.3982E-01	3.1996E-01	3.7108E-02	2.7696E-02	2.2507E-01	-4.3413E-01	-2.1466E-02
2.9037E-02	-1.2977E-01	5.3928E-02	-1.4689E-01	-8.6317E-01	3.5018E-01	4.9294E-02	3.2287E-02	3.3874E-01	-3.4808E-01	-2.2812E-02
3.5411E-02	-4.4175E-02	4.9998E-02	-3.5441E-01	-6.0669E-01	4.8804E-01	5.1951E-02	3.2901E-02	4.7674E-01	-2.5084E-01	-2.5233E-02
4.3201E-02	2.0392E-02	4.3540E-02	-4.6525E-01	-3.4999E-01	5.8308E-01	5.7635E-02	3.5722E-02	4.6127E-01	-2.2317E-01	-2.2810E-02
5.2762E-02	1.1408E-01	3.3694E-02	-4.2147E-01	7.3147E-02	7.4792E-01	5.9867E-02	3.7939E-02	4.0485E-01	4.2655E-02	-1.9174E-02
6.4448E-02	2.1873E-01	2.2807E-02	-3.7549E-01	3.4917E-01	9.1506E-01	4.6552E-02	2.4877E-02	7.0459E-01	6.4587E-01	-1.4459E-02
7.8966E-02	3.0196E-01	1.6883E-02	-1.6364E-01	2.6247E-01	9.8223E-01	2.0685E-02	1.6292E-02	8.0086E-01	1.3454E+00	-4.8043E-03
9.6317E-02	3.5001E-01	1.2384E-02	-1.0548E-01	2.1515E-02	9.9922E-01	2.7759E-03	8.0526E-03	4.7766E-01	1.4941E+00	-4.4584E-03
1.1756E-01	4.0277E-01	1.0021E-02	-1.1224E-01	-7.1314E-02	1.0000E+00	-1.0030E-02	4.6300E-03	4.2565E-01	1.0878E+00	-1.7488E-03
1.4377E-01	4.3704E-01	8.6794E-03	-2.2402E-01	2.8461E-02	1.0000E+00	-2.6025E-02	2.8363E-03	1.7627E-01	-7.6672E-02	-1.0990E-03
1.7564E-01	4.6520E-01	7.1738E-03	-2.6840E-01	-5.8697E-02	1.0000E+00	-4.3259E-02	2.5026E-03	1.7882E-01	2.5323E-01	-9.2876E-04
2.1459E-01	4.9734E-01	5.8693E-03	-2.3976E-01	-1.2658E-02	1.0000E+00	-5.8207E-02	2.1757E-03	2.1218E-01	3.2026E-01	-8.0567E-04
2.6346E-01	5.5557E-01	4.8053E-03	-3.2374E-01	4.3059E-02	1.0000E+00	-8.9696E-02	2.1520E-03	-3.7541E-01	5.9957E-01	-5.1038E-04
3.2011E-01	5.7903E-01	3.4634E-03	-4.4133E-01	2.4648E-01	1.0000E+00	-7.9028E-02	1.1310E-03	2.8907E-01	5.2075E-01	-6.4888E-04
3.9093E-01	6.0588E-01	2.4655E-03	-5.5096E-01	5.3349E-01	1.0000E+00	-7.7117E-02	8.0115E-04	3.3994E-01	2.9957E-01	-2.7298E-04
4.7698E-01	6.1728E-01	1.4830E-03	-3.7142E-01	3.5886E-01	1.0000E+00	-6.9905E-02	6.4443E-04	3.2232E-01	4.6071E-01	-3.1794E-04
5.8286E-01	6.1781E-01	1.5246E-03	3.9483E-02	1.4610E-01	1.0000E+00	-5.4784E-02	2.6239E-04	-1.1101E-01	9.0263E-02	-9.8502E-05
7.1211E-01	5.9698E-01	9.5577E-04	-1.1021E-01	-3.5314E-01	1.0000E+00	-4.6200E-02	1.0419E-04	1.5536E-02	-4.5292E-01	
8.6969E-01	5.8693E-01	1.4999E-03	8.2079E-02	3.0253E-01	1.0000E+00	-3.0242E-02	6.4915E-05	-7.5066E-02	-5.9015E-01	

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-8 U and V component velocity measurements made at X/T = -.25 with the laser anemometer, plane 1.

File E226770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 24.8
density (kilograms per meter cubed) = 1.112648
viscosity (meters squared per second) = 1.654237E-05
Atmospheric pressure (Pascals) = 95140
Velocity of undisturbed free stream (Uref, in m/s) = 27.50626
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09524E-03
Estimated momentum thickness Reynolds number = 6828.807
Location of traverse; X/T =-.2036 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.5935E-03	-1.1055E-01	3.0420E-02	-8.0067E-01	2.7391E-01	2.8736E-01	-5.8026E-03	1.8148E-04	-5.6909E-01	1.8745E+00	
2.4788E-03	-1.3568E-01	4.1768E-02	-6.8297E-01	-6.8726E-02	2.8715E-01	-4.2717E-03	1.9493E-04	-2.4278E-01	1.7650E+00	1.1850E-04
3.1870E-03	-1.8249E-01	5.3644E-02	-5.8821E-01	-4.0350E-01	2.1589E-01	-2.4791E-03	3.2872E-04	-5.7479E-01	2.6492E+00	-1.5820E-03
3.8952E-03	-2.1472E-01	6.7220E-02	-3.4307E-01	-7.8379E-01	2.2298E-01	2.1927E-03	4.6273E-04	-5.0740E-01	2.1261E+00	-9.5078E-04
4.6034E-03	-2.9059E-01	8.7047E-02	-6.2970E-03	-1.1681E+00	2.0980E-01	1.8289E-03	1.3443E-03	-4.4564E-01	1.8384E+00	1.7977E-03
5.6657E-03	-3.2796E-01	9.8312E-02	2.2694E-01	-1.1356E+00	2.0665E-01	2.0760E-03	2.2203E-03	-3.6023E-01	1.2808E+00	1.7775E-03
7.0822E-03	-3.6758E-01	9.8194E-02	4.2333E-01	-9.7875E-01	1.8646E-01	4.1050E-03	4.4565E-03	3.2428E-02	4.3035E-01	4.6365E-04
8.4986E-03	-3.7227E-01	9.2539E-02	5.2447E-01	-8.2366E-01	1.7535E-01	6.0388E-03	6.1565E-03	7.7999E-02	3.0506E-01	2.2022E-03
1.0623E-02	-3.6886E-01	8.3868E-02	5.6171E-01	-6.9045E-01	1.5783E-01	1.6857E-02	1.0391E-02	2.0996E-02	2.5174E-01	-7.4905E-04
1.3633E-02	-3.6449E-01	6.9906E-02	6.5027E-01	-4.2861E-01	1.3923E-01	1.8575E-02	1.6113E-02	7.4017E-02	-5.2214E-02	-2.8789E-03
1.5935E-02	-3.6212E-01	6.0792E-02	6.9898E-01	-2.1458E-01	1.2363E-01	2.0960E-02	1.8182E-02	1.3326E-01	-1.5501E-01	-4.8402E-03
1.9476E-02	-3.4246E-01	5.2440E-02	6.6323E-01	-4.0241E-02	1.0925E-01	2.3990E-02	2.4285E-02	2.4670E-01	-2.7212E-01	-6.9602E-03
2.3725E-02	-3.2062E-01	4.6595E-02	6.1356E-01	1.3635E-01	1.0457E-01	2.3546E-02	3.3738E-02	2.7197E-01	-3.2845E-01	-6.3488E-03
2.9214E-02	-2.8059E-01	4.2566E-02	4.4486E-01	9.7859E-02	1.1046E-01	1.8212E-02	4.3781E-02	3.4624E-01	-3.4502E-01	-9.3373E-03
3.5765E-02	-2.1004E-01	4.3756E-02	2.6077E-01	-3.1953E-01	1.7522E-01	2.8214E-02	5.7217E-02	2.8378E-01	-4.9660E-01	-1.0285E-02
4.3201E-02	-8.9021E-02	4.7550E-02	7.2839E-02	-2.4768E-01	3.4470E-01	4.2478E-02	6.5934E-02	3.1333E-01	-4.3726E-01	-1.4913E-02
5.2762E-02	6.0112E-02	4.1109E-02	-4.0631E-02	-2.3640E-02	6.1057E-01	-8.0541E-03	7.2957E-02	5.0166E-01	-2.4934E-01	-6.4694E-03
6.4448E-02	2.1164E-01	3.1551E-02	-7.0910E-02	1.2839E-01	8.8467E-01	-5.2577E-03	5.3883E-02	5.0821E-01	1.4833E-01	-4.9192E-03
7.8966E-02	3.1808E-01	2.2996E-02	-1.9693E-02	2.5047E-01	9.7780E-01	-3.8750E-02	3.1290E-02	7.0441E-01	9.7880E-01	1.2092E-03
9.6317E-02	3.6529E-01	1.5912E-02	-2.8208E-02	3.8234E-01	9.9575E-01	-3.0558E-02	1.6445E-02	7.4310E-01	1.9701E+00	-1.4365E-03
1.1756E-01	3.9668E-01	1.1559E-02	-7.3533E-02	1.8433E-01	1.0000E+00	-4.3570E-02	7.6267E-03	3.0567E-01	1.1512E+00	-8.1618E-04
1.4341E-01	4.2049E-01	8.8046E-03	-1.3302E-01	-3.0739E-02	1.0000E+00	-7.2543E-02	4.0454E-03	6.9444E-02	1.9237E-01	-1.1732E-03
1.7564E-01	4.4787E-01	7.4979E-03	-1.3609E-01	1.1090E-01	1.0000E+00	-8.1643E-02	2.9422E-03	5.8058E-02	1.9839E-01	-5.7170E-04
2.1477E-01	4.6570E-01	5.9854E-03	-2.8949E-01	8.2331E-03	1.0000E+00	-9.5244E-02	2.3734E-03	1.2434E-01	3.9427E-01	-7.2035E-04
2.6275E-01	5.1279E-01	4.8019E-03	-3.2445E-01	1.0765E-01	1.0000E+00	-1.0640E-01	1.5614E-03	2.3229E-01	4.9328E-01	-6.8792E-04
3.1976E-01	5.3718E-01	3.6209E-03	-4.5239E-01	2.2411E-01	1.0000E+00	-1.0254E-01	1.2025E-03	2.8322E-01	6.3187E-01	-4.1849E-04
3.9093E-01	5.5883E-01	2.5208E-03	-4.2511E-01	4.4830E-01	1.0000E+00	-9.4649E-02	9.2598E-04	2.4563E-01	6.1600E-01	-2.2462E-04
4.7734E-01	5.6969E-01	2.2162E-03	1.1923E-01	9.0977E-01	1.0000E+00	-8.3982E-02	7.6647E-04	9.7621E-03	9.6067E-01	1.7644E-04
5.8286E-01	5.5717E-01	1.2618E-03	-1.0154E-01	-7.7266E-02	1.0000E+00	-6.5201E-02	2.3494E-04	4.0385E-02	-1.9005E-01	4.4137E-05
7.1211E-01	5.4019E-01	1.4337E-03	2.7534E-02	-4.1396E-01	1.0000E+00	-4.6983E-02	1.5216E-04	-1.1197E-01	-1.6707E-01	
8.6989E-01	5.2710E-01	1.1875E-03	8.0750E-02	-5.4502E-01	1.0000E+00					

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-9 U and V component velocity measurements made at X/T = -.20 with the laser anemometer, plane 1.

File E227770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 24.8
density (kilograms per meter cubed) = 1.112648
viscosity (meters squared per second) = 1.654237E-05
Atmospheric pressure (Pascals) = 95140
Velocity of undisturbed free stream (Uref, in m/s) = 27.59707
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092542E-03
Estimated momentum thickness Reynolds number = 6846.836
Location of traverse; X/T =-.1537 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.2394E-03	-2.6162E-01	4.2358E-02	-2.6782E-01	-6.9864E-01	6.9962E-02	-3.1940E-03	1.8322E-04	-4.3261E-01	1.6742E+00	
1.7705E-03	-3.6050E-01	5.0527E-02	2.7986E-01	-5.2979E-01	6.4010E-02	-2.9495E-03	2.5873E-04	1.8901E-01	1.8786E+00	1.0211E-03
2.7620E-03	-4.3470E-01	4.9337E-02	6.9487E-01	1.2398E-01	5.6077E-02	-5.2075E-03	6.3243E-04	-1.9279E-02	1.5004E+00	1.1204E-03
3.3640E-03	-4.6664E-01	4.8074E-02	9.3590E-01	7.3336E-01	5.2467E-02	-3.3825E-03	1.1621E-03	-2.4875E-01	1.5785E+00	1.2235E-03
4.0722E-03	-4.8138E-01	4.6879E-02	1.0166E+00	1.1692E+00	5.0494E-02	-5.3033E-03	1.8313E-03	-2.3573E-02	1.3120E+00	4.9190E-04
4.7096E-03	-4.8660E-01	4.3381E-02	1.0259E+00	1.3815E+00	4.3832E-02	-7.8518E-03	2.3035E-03	1.9360E-01	1.2941E+00	-6.7998E-04
5.6657E-03	-4.7848E-01	4.3167E-02	1.0610E+00	1.5964E+00	4.2457E-02	-9.4384E-03	2.9746E-03	3.0717E-01	9.8814E-01	1.2277E-03
7.0822E-03	-4.8055E-01	3.7020E-02	1.0848E+00	2.1439E+00	3.5340E-02	-7.1786E-03	5.1601E-03	2.4543E-01	1.1736E+00	-5.7703E-04
8.4986E-03	-4.6784E-01	3.2521E-02	1.0119E+00	2.0573E+00	3.2041E-02	-1.3304E-02	6.4924E-03	2.7926E-01	1.1422E+00	-1.9330E-03
1.0623E-02	-4.5417E-01	2.8250E-02	8.9363E-01	2.0005E+00	2.4498E-02	-1.9092E-02	8.6097E-03	4.7653E-01	1.1434E+00	-1.4646E-03
1.2748E-02	-4.2959E-01	2.8113E-02	7.9562E-01	1.5522E+00	2.5977E-02	-2.2764E-02	1.0591E-02	5.8593E-01	7.3935E-01	-3.1148E-03
1.5935E-02	-3.9146E-01	2.6264E-02	5.7774E-01	8.8273E-01	2.8032E-02	-2.8617E-02	1.5548E-02	5.6992E-01	7.0000E-01	-5.0929E-03
1.9476E-02	-3.5912E-01	2.7002E-02	3.9351E-01	6.6420E-01	2.8354E-02	-3.8310E-02	2.0518E-02	7.0646E-01	7.7754E-01	-6.0103E-03
2.3725E-02	-3.1006E-01	2.5839E-02	1.4724E-02	1.4369E-01	3.0011E-02	-6.1203E-02	2.5161E-02	6.9723E-01	8.0270E-01	-8.4694E-03
2.9037E-02	-2.4706E-01	2.6440E-02	-1.7960E-01	1.4988E-01	5.7746E-02	-7.0972E-02	3.2559E-02	8.4448E-01	1.5923E+00	-9.3768E-03
3.5411E-02	-1.6821E-01	2.7679E-02	-2.9021E-01	3.5675E-01	1.3940E-01	-9.7888E-02	4.1292E-02	9.9085E-01	1.8427E+00	-1.0530E-02
4.3201E-02	-6.4954E-02	3.0265E-02	-3.8631E-02	6.8636E-01	3.3995E-01	-1.0456E-01	5.3375E-02	9.5797E-01	1.1676E+00	-8.2301E-03
5.2762E-02	8.5668E-02	2.9631E-02	3.9388E-01	2.6209E-01	6.7371E-01	-1.4542E-01	4.5787E-02	1.0036E+00	1.9889E+00	-1.0525E-03
6.4448E-02	2.0526E-01	2.8572E-02	3.3615E-01	-4.4577E-02	8.9518E-01	-1.4520E-01	3.1550E-02	9.9948E-01	2.3828E+00	2.1408E-03
7.8966E-02	2.8310E-01	2.2094E-02	1.5841E-01	-8.2014E-02	9.7660E-01	-1.3634E-01	1.8501E-02	8.8215E-01	2.1059E+00	2.4805E-03
9.6317E-02	3.3143E-01	1.5161E-02	3.1210E-02	1.7760E-02	9.9602E-01	-1.1570E-01	1.1347E-02	6.7238E-01	1.5459E+00	9.8949E-04
1.1756E-01	3.5011E-01	1.0648E-02	-9.7501E-02	1.6141E-01	9.9907E-01	-1.1487E-01	6.0741E-03	3.1302E-01	5.8127E-01	-6.8380E-05
1.4377E-01	3.7235E-01	7.9842E-03	-1.6194E-01	-1.2918E-03	1.0000E+00	-1.3416E-01	3.8624E-03	1.2500E-01	1.8150E-01	-8.6142E-04
1.7564E-01	4.2931E-01	6.6401E-03	-1.9533E-01	-9.6001E-02	1.0000E+00	-1.2437E-01	2.9378E-03	9.6148E-02	1.4680E-01	-7.7510E-04
2.1477E-01	4.3843E-01	5.2824E-03	-2.4690E-01	-3.4162E-02	1.0000E+00	-1.4551E-01	1.9306E-03	1.3886E-01	2.5015E-01	-8.0829E-04
2.6204E-01	4.6497E-01	4.2636E-03	-3.3077E-01	4.6547E-02	1.0000E+00	-1.3877E-01	1.5120E-03	2.7660E-01	2.2722E-01	-7.1354E-04
3.1976E-01	4.7965E-01	3.3508E-03	-3.6584E-01	1.8796E-01	1.0000E+00	-1.3121E-01	1.2285E-03	2.4664E-01	6.4813E-01	-4.5882E-04
3.9093E-01	5.0216E-01	2.4151E-03	-4.2429E-01	5.8444E-01	1.0000E+00	-1.1594E-01	9.7797E-04	1.0446E-01	4.3759E-01	-9.6291E-05
4.7734E-01	5.0328E-01	1.6767E-03	-2.2222E-01	2.1301E-01	1.0000E+00	-1.0291E-01	9.4345E-04	-2.1139E-01	5.4186E-01	4.4835E-05
5.8286E-01	4.9495E-01	2.3539E-03	3.3827E-02	-1.7964E-02	1.0000E+00	-7.7057E-02	2.6571E-04	2.6214E-01	1.3179E-01	5.6758E-04
7.1211E-01	4.8000E-01	1.8215E-03	3.7659E-01	-7.4408E-03	1.0000E+00	-5.2815E-02	1.2291E-04	1.1261E-02	-4.5440E-01	
8.6969E-01	4.6890E-01	1.0102E-03	1.7309E-01	-6.0589E-01	1.0000E+00	-3.2339E-02	9.6984E-05	-1.4118E-01	2.0331E-01	

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-10 U and V component velocity measurements made at X/T = -.15 with the laser anemometer, plane 1.

File E228770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 26
density (kilograms per meter cubed) = 1.099213
viscosity (meters squared per second) = 1.678899E-05
Atmospheric pressure (Pascals) = 94370
Velocity of undisturbed free stream (Uref, in m/s) = 27.54494
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09409E-03
Estimated momentum thickness Reynolds number = 6736.062
Location of traverse: X/T =-.1034 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.2394E-03	-2.0276E-01	2.0152E-02	-5.2882E-01	-3.2408E-01	3.3163E-02	-2.0701E-03	8.3628E-05	-3.3663E-02	7.0308E-01	
1.7705E-03	-2.3261E-01	1.9842E-02	-6.4459E-01	-7.9031E-02	7.1677E-03	-3.4742E-03	1.3770E-04	-4.4047E-01	1.4175E+00	
2.4788E-03	-2.3925E-01	2.4782E-02	-4.2425E-01	-3.6252E-01	3.0165E-02	-4.6859E-03	1.1489E-04	-2.2563E-01	1.2824E+00	
3.1870E-03	-2.6903E-01	2.6466E-02	-3.3110E-01	-4.8447E-01	1.8724E-02	-3.5963E-03	1.4636E-04	-4.5992E-02	1.3532E+00	
3.8952E-03	-3.2494E-01	2.6374E-02	-6.9559E-02	-5.3719E-01	8.6054E-03	-6.6174E-03	2.4416E-04	-2.6901E-01	1.5865E+00	6.9773E-05
4.6034E-03	-3.8379E-01	2.7881E-02	4.0763E-02	-3.3659E-01	6.7924E-03	-6.4072E-03	3.4620E-04	-1.3881E-01	1.4965E+00	5.5950E-04
5.6657E-03	-4.2854E-01	2.4076E-02	8.5391E-02	-1.6495E-02	4.0562E-03	-4.0710E-03	8.2364E-04	-1.6249E-01	2.1250E+00	-2.5456E-03
7.0822E-03	-4.2960E-01	2.3002E-02	8.1426E-02	-5.7601E-02	2.3116E-03	-1.4594E-02	1.4875E-03	9.5809E-02	1.3818E+00	-2.3224E-03
8.4986E-03	-4.0854E-01	2.2060E-02	2.9508E-02	1.7275E-01	5.3862E-03	-2.3579E-02	2.3899E-03	4.6296E-01	1.9662E+00	-1.9139E-03
1.0623E-02	-3.7715E-01	1.9375E-02	3.1279E-03	2.6448E-02	3.9756E-03	-3.7514E-02	2.7255E-03	3.9291E-01	1.1505E+00	-1.9847E-03
1.2748E-02	-3.5469E-01	1.7427E-02	-3.7939E-02	-4.6035E-02	3.3548E-03	-4.1749E-02	4.5634E-03	2.7365E-01	1.3520E+00	-7.3411E-04
1.5935E-02	-3.1021E-01	1.5017E-02	-2.2606E-02	-1.3397E-01	4.6231E-03	-6.1898E-02	5.5131E-03	2.2229E-01	1.2347E+00	-1.5862E-03
1.9476E-02	-2.6849E-01	1.4493E-02	-7.5380E-02	1.6186E-01	1.2560E-02	-8.1188E-02	6.4817E-03	-1.5230E-02	1.5006E+00	-1.0160E-03
2.3725E-02	-2.1125E-01	1.3552E-02	-9.7672E-02	3.0791E-01	3.4135E-02	-1.0365E-01	6.9567E-03	-3.0717E-01	1.1059E+00	1.1017E-04
2.9037E-02	-1.5002E-01	1.2032E-02	6.2249E-02	2.4883E-01	8.5171E-02	-1.2613E-01	7.5400E-03	-4.8477E-01	1.3485E+00	1.1552E-04
3.5411E-02	-9.8873E-02	1.0441E-02	1.8536E-03	2.4755E-01	1.6372E-01	-1.4807E-01	6.9955E-03	-3.5533E-01	6.5449E-01	-1.4664E-04
4.3201E-02	-4.8102E-02	1.0053E-02	1.2408E-01	1.8317E-01	3.1044E-01	-1.7842E-01	9.6066E-03	-7.8173E-01	1.4623E+00	-9.1079E-04
5.2762E-02	2.0581E-02	9.9998E-03	1.8440E-01	9.7524E-02	5.8085E-01	-1.9824E-01	9.2685E-03	-6.1323E-01	1.0961E+00	-1.2513E-03
6.4448E-02	8.4142E-02	1.1344E-02	6.7211E-01	1.5014E+00	7.8635E-01	-2.1317E-01	7.7910E-03	-4.3792E-01	6.1320E-01	-9.5781E-04
7.8966E-02	1.4835E-01	1.0716E-02	4.7421E-01	6.4975E-01	9.3760E-01	-2.2086E-01	6.5414E-03	-2.5902E-01	6.7587E-01	-7.1861E-04
9.6317E-02	2.0032E-01	9.3003E-03	2.0614E-01	1.4062E-01	9.8358E-01	-2.1871E-01	5.0891E-03	-1.3286E-02	1.9967E-01	-6.6186E-04
1.1756E-01	2.2711E-01	7.2186E-03	6.3301E-02	-1.2945E-02	9.9727E-01	-2.2332E-01	4.2915E-03	3.7993E-03	2.9039E-01	-6.4561E-04
1.4377E-01	2.6022E-01	6.0278E-03	-1.8004E-03	-4.6874E-02	1.0000E+00	-2.2199E-01	3.8292E-03	8.7064E-02	1.4163E-01	-6.0005E-04
1.7564E-01	3.1795E-01	5.4548E-03	-9.3623E-02	-8.6726E-02	1.0000E+00	-2.1765E-01	2.7492E-03	9.6331E-02	5.8573E-02	-6.8538E-04
2.1459E-01	3.2790E-01	4.6292E-03	-1.0825E-01	-9.4798E-02	1.0000E+00	-2.1894E-01	2.3404E-03	4.5625E-02	1.4342E-01	-5.8014E-04
2.6204E-01	3.5621E-01	4.0208E-03	-2.2253E-01	7.5866E-02	1.0000E+00	-2.0094E-01	1.8402E-03	2.2886E-02	1.3672E-01	-4.3274E-04
3.1976E-01	3.6071E-01	3.1975E-03	-2.3822E-01	2.1665E-01	1.0000E+00	-1.8882E-01	1.5459E-03	-1.1065E-01	3.8965E-01	-2.3457E-04
3.9093E-01	3.8722E-01	2.2816E-03	-1.8618E-01	1.8228E-01	1.0000E+00	-1.5726E-01	1.2348E-03	-2.6766E-01	5.1741E-01	-6.1761E-05
4.7805E-01	3.7230E-01	1.6632E-03	-1.8417E-01	4.5801E-02	1.0000E+00	-1.2498E-01	9.3041E-04	-1.2792E-01	2.4942E-01	-1.0126E-04
5.8286E-01	3.6382E-01	1.3820E-03	1.7078E-01	-2.6450E-01	1.0000E+00	-8.6138E-02	2.1221E-04	-2.5512E-01	-2.8644E-01	2.0809E-06
7.1459E-01	3.4007E-01	1.2654E-03	-1.8040E-01	-7.6573E-02	1.0000E+00	-5.4721E-02	1.5631E-04	-9.8478E-02	-3.0183E-02	1.7121E-04
8.6969E-01	3.5032E-01	9.8218E-04	-1.1988E-01	-4.2339E-01	1.0000E+00	-3.3851E-02	1.4340E-04	-7.5116E-02	4.3435E-03	

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-11 U and V component velocity measurements made at X/T = -.10 with the laser anemometer, plane 1.

File E229770.RES
U and V component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 26
density (kilograms per meter cubed) = 1.099213
viscosity (meters squared per second) = 1.678899E-05
Atmospheric pressure (Pascals) = 94370
Velocity of undisturbed free stream (Uref, in m/s) = 27.66959
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090394E-03
Estimated momentum thickness Reynolds number = 6760.438
Location of traverse: X/T =-.05 Z/T = 0

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	FFF	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	-1.3368E-01	9.6460E-03	-9.2490E-01	3.7513E-01	2.5464E-02	-6.5914E-03	1.5355E-04	-8.9383E-01	1.4793E+00	
1.7705E-03	-1.7639E-01	1.5860E-02	-6.2167E-01	-2.2338E-01	3.2121E-02	-8.8439E-03	1.9998E-04	-8.8999E-01	1.3844E+00	-7.2927E-04
2.4788E-03	-2.2150E-01	1.9770E-02	-4.5741E-01	-3.8623E-01	1.8928E-02	-6.5305E-03	1.4017E-04	-5.9603E-01	1.0866E+00	-4.5106E-04
3.1870E-03	-2.7207E-01	1.7855E-02	-4.3536E-01	3.2926E-02	6.6624E-03	-8.9817E-03	3.2234E-04	-5.7352E-01	1.5342E+00	4.5383E-04
3.8952E-03	-2.9712E-01	1.6878E-02	-1.3184E-01	-1.7303E-01	9.0048E-03	-1.5940E-02	5.9798E-04	-1.3333E-01	7.7342E-01	-3.7873E-04
4.6034E-03	-2.7787E-01	1.4779E-02	-1.6178E-02	-3.6382E-02	1.3111E-02	-3.6888E-02	1.8702E-03	4.1575E-02	8.0513E-01	-1.4847E-03
5.7720E-03	-2.5201E-01	1.2801E-02	-1.1749E-01	-1.3430E-01	1.2152E-02	-5.3287E-02	2.2769E-03	1.6352E-01	8.3660E-01	-3.5636E-04
7.0822E-03	-2.3417E-01	1.2566E-02	-1.2768E-01	-1.0907E-01	1.6389E-02	-7.3310E-02	2.9581E-03	1.3177E-01	3.8398E-01	2.2021E-04
8.4986E-03	-2.2043E-01	1.1250E-02	-1.2296E-01	-8.5709E-02	1.8043E-02	-8.8343E-02	3.9471E-03	2.2853E-01	7.0144E-01	8.3542E-04
1.0623E-02	-2.0256E-01	1.1297E-02	-7.0417E-02	4.3593E-02	2.8654E-02	-1.0670E-01	4.4285E-03	2.5733E-01	4.5581E-01	1.4454E-03
1.2748E-02	-1.8335E-01	1.0593E-02	-9.5950E-02	3.7831E-02	3.9566E-02	-1.1388E-01	5.4719E-03	1.1069E-01	3.7389E-01	1.6965E-03
1.5935E-02	-1.6578E-01	1.0090E-02	2.9134E-02	-9.1194E-02	5.1276E-02	-1.1991E-01	5.9423E-03	2.1141E-01	4.5417E-01	1.6745E-03
1.9476E-02	-1.6321E-01	8.8433E-03	4.0242E-03	-5.4753E-02	4.0849E-02	-1.2921E-01	5.8166E-03	2.0074E-01	3.4409E-01	1.4335E-03
2.3725E-02	-1.2689E-01	9.1784E-03	1.6017E-01	-8.4744E-02	9.7571E-02	-1.4631E-01	5.9424E-03	3.1911E-01	6.5993E-01	1.4190E-03
2.9037E-02	-8.8842E-02	7.7642E-03	6.5112E-02	-3.7889E-03	1.5732E-01	-1.8124E-01	6.7160E-03	2.5077E-01	4.2758E-01	2.2591E-03
3.5411E-02	-4.8862E-02	7.6211E-03	1.2255E-01	3.0847E-01	2.7384E-01	-2.2454E-01	8.3304E-03	-3.1921E-02	1.6677E-01	2.7559E-03
4.3201E-02	-1.7838E-02	6.8165E-03	5.0652E-02	6.7922E-02	4.0952E-01	-2.2405E-01	7.4989E-03	2.1652E-02	2.4842E-01	2.0941E-03
5.2762E-02	2.1137E-02	6.2992E-03	6.0298E-02	1.2627E-01	6.0809E-01	-2.3677E-01	6.7866E-03	-3.9055E-02	2.3397E-01	1.4082E-03
6.4448E-02	4.3301E-02	5.6047E-03	9.3228E-02	2.3436E-01	7.2097E-01	-2.7957E-01	6.9495E-03	-1.0544E-01	1.1147E-01	1.1889E-03
7.8966E-02	8.9892E-02	5.3838E-03	5.1153E-02	9.9847E-02	8.9371E-01	-2.7934E-01	6.0333E-03	-3.8463E-02	1.0351E-01	2.7723E-04
9.6317E-02	1.1395E-01	4.6079E-03	3.7191E-02	-1.3301E-01	9.5332E-01	-3.0030E-01	5.5584E-03	-2.5116E-02	1.8652E-01	-6.2565E-05
1.1756E-01	1.3387E-01	4.6976E-03	4.3063E-02	1.1400E-01	9.7161E-01	-3.2629E-01	5.3815E-03	-5.4215E-02	-4.7500E-02	1.4984E-04
1.4377E-01	1.4991E-01	3.8108E-03	-2.1192E-02	5.2637E-02	9.9002E-01	-3.2898E-01	5.1134E-03	-1.7051E-01	9.6739E-02	-1.1114E-04
1.7564E-01	1.7717E-01	3.9065E-03	-7.9754E-02	2.1649E-01	9.9547E-01	-3.1364E-01	3.8648E-03	-3.3291E-02	-2.5829E-01	-2.5061E-04
2.1459E-01	1.8789E-01	3.1644E-03	-1.4646E-01	-2.8191E-02	1.0000E+00	-3.0317E-01	3.8918E-03	-1.6484E-01	1.5626E-01	-1.8204E-04
2.6204E-01	2.1890E-01	3.0412E-03	-8.5038E-02	2.9585E-01	1.0000E+00	-2.7663E-01	3.6559E-03	-3.7081E-01	3.8279E-01	3.7860E-04
3.1976E-01	2.0713E-01	2.2593E-03	-1.2542E-02	3.9352E-01	1.0000E+00	-2.5445E-01	2.9619E-03	-1.9615E-01	-2.6965E-02	5.4557E-05
3.9093E-01	2.4096E-01	1.9126E-03	4.8631E-02	1.6126E-01	1.0000E+00	-1.9835E-01	2.1401E-03	-2.5933E-01	-5.0404E-03	1.2082E-04
4.7734E-01	2.1795E-01	1.4704E-03	2.6924E-01	2.6026E-02	1.0000E+00	-1.5883E-01	2.2521E-03	-2.9808E-01	2.1320E-02	5.5589E-04
5.8286E-01	2.1472E-01	1.1244E-03	2.0523E-01	-6.9924E-01	1.0000E+00	-1.0174E-01	9.4999E-04	-1.0764E-01	-3.3756E-01	4.3153E-04
7.1211E-01	2.1222E-01	7.4186E-04	1.7053E-01	-3.1647E-01	1.0000E+00	-6.2222E-02	5.3974E-04	-7.2909E-02	-4.5853E-01	
8.6969E-01	2.1185E-01	6.4247E-04	2.6825E-01	-2.4518E-01	1.0000E+00	-4.6747E-02	7.5384E-04	-2.3000E-01	-8.1870E-02	

FFF = proportion of time for which the flow is in the downstream (+ve X) direction

Table F.1-12 U and V component velocity measurements made at X/T = -.05 with the laser anemometer, plane 1.

File E253770.RES
W component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 21
density (kilograms per meter cubed) = 1.11542
viscosity (meters squared per second) = 1.632107E-05
Atmospheric pressure (Pascals) = 94160
Velocity of undisturbed free stream (Uref, in m/s) = 27.514
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09501E-03
Estimated momentum thickness Reynolds number = 6922.957
Location of traverse: X/T =-.65 Z/T = 0

Y/T	W/Uref	w2/Uref2
1.7705E-03	-1.5172E-02	3.3039E-03
2.4789E-03	-1.3638E-02	2.9824E-03
3.5411E-03	-1.7250E-02	3.3699E-03
4.6034E-03	-1.7760E-02	3.3305E-03
5.6657E-03	-1.3963E-02	3.5082E-03
7.4363E-03	-1.4691E-02	3.4272E-03
9.5609E-03	-1.6517E-02	3.7339E-03
1.2394E-02	-9.9035E-03	3.4323E-03
1.6112E-02	-8.4051E-03	3.3884E-03
2.0361E-02	-1.4702E-02	3.8892E-03
2.5850E-02	-1.3825E-02	3.4834E-03
3.2932E-02	-1.1098E-02	3.2147E-03
4.2847E-02	-1.4759E-02	3.2355E-03
5.43[illegible]E-02	-1.4506E-02	3.1480E-03
6.99[illegible]-02	-1.4645E-02	3.4967E-03
8.85[illegible]7E-02	-1.1790E-02	2.8570E-03
1.1385E-01	-1.0946E-02	2.6148E-03
1.4412E-01	-7.8900E-03	2.4514E-03
1.8414E-01	-4.6358E-03	2.0820E-03
2.3513E-01	-2.8210E-04	2.0227E-03
3.0028E-01	-4.1289E-03	1.4027E-03
3.8368E-01	1.1533E-03	6.6830E-04
4.8973E-01	6.4577E-03	2.7251E-04
6.2589E-01	1.6319E-02	1.4644E-04
7.9887E-01	1.8708E-02	5.7955E-05
1.0205E+00	1.5636E-02	3.9504E-05
1.3028E+00	1.6975E-02	
1.6636E+00	2.0236E-02	
2.1246E+00	1.7196E-02	

Table F.1-13 W component velocity measurements made at X/T = -.65 with the laser anemometer, plane 1.

File E254770.RES
W component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 21
density (kilograms per meter cubed) = 1.11542
viscosity (meters squared per second) = 1.632107E-05
Atmospheric pressure (Pascals) = 94160
Velocity of undisturbed free stream (Uref, in m/s) = 27.44197
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097157E-03
Estimated momentum thickness Reynolds number = 6908.454
Location of traverse; X/T =-.5 Z/T = 0

Y/T	W/Uref	w2/Uref2
1.7705E-03	-4.3182E-03	3.8665E-03
2.1246E-03	-1.3159E-02	3.6569E-03
3.1870E-03	-8.8190E-03	3.9639E-03
3.8952E-03	-8.5039E-03	4.1362E-03
4.7805E-03	-9.2981E-03	3.9848E-03
5.6657E-03	-9.5957E-03	3.6696E-03
7.6133E-03	-1.0581E-02	3.9106E-03
9.5609E-03	-1.2314E-02	4.1975E-03
1.2394E-02	-1.0274E-02	3.8442E-03
1.5935E-02	-7.8838E-03	3.9394E-03
2.0184E-02	-6.9510E-03	4.1429E-03
2.5850E-02	-6.5265E-03	4.1382E-03
3.5057E-02	-1.0018E-02	3.9436E-03
4.2493E-02	-7.4367E-03	3.7863E-03
5.4178E-02	-4.0317E-03	3.7314E-03
5.4533E-02	-1.0241E-02	3.7350E-03
6.9051E-02	-1.1063E-02	3.5928E-03
8.8527E-02	-1.1534E-02	3.1302E-03
1.1296E-01	-1.2044E-02	2.7236E-03
1.4518E-01	-1.1435E-02	2.4970E-03
1.8449E-01	-8.0318E-03	2.0822E-03
2.3548E-01	-1.4126E-02	1.3298E-03
3.0028E-01	-1.1346E-02	8.6830E-04
3.8350E-01	-8.3298E-03	3.8920E-04
4.8973E-01	-2.6767E-03	5.7213E-05
6.2571E-01	6.0260E-03	
7.9887E-01	9.3490E-03	
1.0205E+00	7.1678E-03	
1.3028E+00	7.4067E-03	
1.6636E+00	7.9132E-03	
2.1246E+00	5.3421E-03	

Table F.1-14 W component velocity measurements made at X/T = -.50 with the laser anemometer, plane 1.

File E255770.RES
W component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 21
density (kilograms per meter cubed) = 1.108016
viscosity (meters squared per second) = 1.641256E-05
Atmospheric pressure (Pascals) = 93535
Velocity of undisturbed free stream (Uref, in m/s) = 27.5105
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.095114E-03
Estimated momentum thickness Reynolds number = 6883.667
Location of traverse; X/T =-.4 Z/T = 0

Y/T	W/Uref	w2/Uref2
1.7705E-03	-6.2594E-03	4.1651E-03
2.4788E-03	-8.0643E-03	4.6401E-03
4.2493E-03	-3.1648E-03	4.9119E-03
5.6657E-03	-5.6687E-03	5.5567E-03
7.7904E-03	-5.4854E-03	5.9371E-03
9.5609E-03	-5.1363E-03	5.8740E-03
1.2748E-02	-4.2339E-03	6.1160E-03
1.5935E-02	-5.7239E-03	6.1816E-03
2.0184E-02	-7.9040E-03	6.4042E-03
2.7620E-02	-1.3950E-02	5.7523E-03
3.2932E-02	-1.1839E-02	5.9137E-03
4.2847E-02	-4.9969E-03	5.5653E-03
5.4178E-02	-1.0935E-02	4.7906E-03
6.9051E-02	-3.5259E-03	4.3978E-03
8.8173E-02	-5.3912E-03	3.9598E-03
1.1367E-01	-2.5367E-03	3.0627E-03
1.4518E-01	-7.3761E-04	2.7167E-03
1.8414E-01	1.0896E-04	2.1752E-03
2.3513E-01	-9.5325E-04	1.3321E-03
3.0276E-01	-4.0277E-04	9.7785E-04
3.8810E-01	6.8042E-03	3.9598E-04
4.8973E-01	1.1941E-02	3.7107E-05
6.2571E-01	1.9508E-02	2.5906E-05
7.9887E-01	1.7616E-02	
1.0202E+00	5.3676E-03	
1.3024E+00	5.8516E-03	
1.6636E+00	-8.1109E-03	
2.1246E+00	-3.0291E-03	

Table F.1-15 W component velocity measurements made at X/T = -.40 with the laser anemometer, plane 1.

File E256770.RES
W component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 21
density (kilograms per meter cubed) = 1.108016
viscosity (meters squared per second) = 1.641256E-05
Atmospheric pressure (Pascals) = 93535
Velocity of undisturbed free stream (Uref, in m/s) = 27.56924
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093367E-03
Estimated momentum thickness Reynolds number = 6895.424
Location of traverse; X/T =-.35 Z/T = 0

Y/T	W/Uref	w2/Uref2
1.7705E-03	-4.1004E-03	8.2953E-03
2.4788E-03	-3.3504E-03	8.3648E-03
3.8952E-03	-4.0529E-03	8.1360E-03
4.9575E-03	-8.5503E-03	7.2488E-03
6.5510E-03	-2.9996E-03	8.2059E-03
8.3215E-03	-5.5343E-03	8.5862E-03
1.0092E-02	-5.5037E-03	8.2268E-03
1.2394E-02	-7.3077E-03	9.1103E-03
1.6112E-02	-1.1887E-02	8.5603E-03
2.0361E-02	-1.4441E-02	7.9537E-03
2.6558E-02	-1.2322E-02	8.0219E-03
3.3286E-02	-7.4194E-03	8.6515E-03
4.2493E-02	-1.0963E-02	7.2915E-03
5.4356E-02	-8.5086E-03	6.4535E-03
6.9228E-02	-5.3569E-03	5.2326E-03
8.8527E-02	7.7105E-05	3.8443E-03
1.1579E-01	-6.2303E-03	3.0958E-03
1.4412E-01	-6.4789E-03	2.6522E-03
1.8414E-01	-6.8257E-03	2.2210E-03
2.3513E-01	-1.4229E-02	1.4210E-03
3.0064E-01	-3.5497E-03	1.0012E-03
3.8350E-01	1.7833E-03	5.8287E-04
4.8973E-01	4.2201E-03	2.2033E-04
6.2642E-01	7.2282E-03	
7.9887E-01	-6.5343E-03	
1.0202E+00	-2.9627E-03	
1.3028E+00	-1.2543E-03	
1.6636E+00	-8.3537E-04	
2.1264E+00	-8.1759E-03	

Table F.1-16 W component velocity measurements made at X/T = -.35 with the laser anemometer, plane 1.

File E257770.RES
W component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 21
density (kilograms per meter cubed) = 1.108075
viscosity (meters squared per second) = 1.641256E-05
Atmospheric pressure (Pascals) = 93540
Velocity of undisturbed free stream (Uref, in m/s) = 27.47483
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.096177E-03
Estimated momentum thickness Reynolds number = 6876.526
Location of traverse; X/T =-.3 Z/T = 0

Y/T	W/Uref	w2/Uref2
1.7705E-03	-8.0899E-03	7.4744E-03
2.6558E-03	-9.7721E-03	7.6543E-03
3.5411E-03	-1.5113E-02	7.9873E-03
4.6034E-03	-1.6430E-02	8.3015E-03
6.1969E-03	-2.1996E-02	8.5235E-03
7.4363E-03	-1.7185E-02	9.1085E-03
9.5609E-03	-1.2006E-02	8.4027E-03
1.3102E-02	-1.0652E-02	9.3941E-03
1.6643E-02	-1.4208E-02	1.0080E-02
2.0184E-02	-1.5743E-02	1.0280E-02
2.6204E-02	-3.2118E-02	1.0349E-02
3.2932E-02	-2.3585E-02	1.0070E-02
4.3378E-02	-1.4734E-02	1.1581E-02
5.4178E-02	-2.3587E-02	1.0323E-02
6.9051E-02	-1.5922E-02	9.8340E-03
8.8173E-02	-1.7670E-02	5.9788E-03
1.1296E-01	-1.6197E-02	4.2181E-03
1.4412E-01	-1.2093E-02	3.4277E-03
1.8414E-01	-1.1436E-02	2.8629E-03
2.3513E-01	-2.2522E-03	1.3700E-03
3.3215E-01	1.0960E-03	8.3645E-04
3.8350E-01	8.3824E-04	6.1391E-04
4.8973E-01	8.1910E-03	2.5427E-04
6.2571E-01	1.0355E-02	1.0557E-05
7.9887E-01	2.8533E-03	
1.0202E+00	-4.8080E-03	
1.3028E+00	-2.6953E-03	
1.6636E+00	-1.8225E-03	
2.1254E+00	-5.2215E-03	

Table F.1-17 W component velocity measurements made at X/T = -.30 with the laser anemometer, plane 1.

File E258770.RES
W component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 21
density (kilograms per meter cubed) = 1.108075
viscosity (meters squared per second) = 1.641256E-05
Atmospheric pressure (Pascals) = 93540
Velocity of undisturbed free stream (Uref, in m/s) = 27.53058
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094516E-03
Estimated momentum thickness Reynolds number = 6887.686
Location of traverse; X/T =-.25 Z/T = 0

Y/T	W/Uref	w2/Uref2
1.7705E-03	1.4438E-02	1.2460E-02
2.4788E-03	1.2103E-02	1.2581E-02
3.1870E-03	1.3431E-02	1.2003E-02
4.6034E-03	1.2456E-02	1.2329E-02
5.6657E-03	8.1122E-03	1.2449E-02
7.4363E-03	4.6821E-03	1.3038E-02
9.5609E-03	2.0204E-03	1.3353E-02
1.2394E-02	-2.1301E-03	1.4649E-02
1.5935E-02	-4.9151E-03	1.4926E-02
2.0184E-02	-1.4711E-03	1.5230E-02
2.6204E-02	5.7821E-03	1.5259E-02
3.3109E-02	5.8004E-03	1.7038E-02
4.3909E-02	-3.7589E-04	1.8590E-02
5.4178E-02	8.8447E-03	1.8489E-02
6.9051E-02	7.4711E-03	1.5008E-02
8.8173E-02	1.5474E-02	1.0565E-02
1.1296E-01	2.3841E-03	4.7149E-03
1.4465E-01	3.6594E-03	2.9736E-03
1.8449E-01	7.6755E-03	2.3498E-03
2.3513E-01	1.7371E-03	1.3964E-03
3.0170E-01	3.4851E-03	9.6519E-04
3.8350E-01	4.1336E-03	5.8476E-04
4.8973E-01	7.5478E-03	2.2308E-04
6.2571E-01	5.5542E-03	
7.9887E-01	1.5258E-02	
1.0212E+00	-8.9436E-04	
1.3028E+00	1.0531E-03	2.7239E-05
1.6636E+00	-1.3465E-03	
2.1246E+00	-1.1189E-02	

Table F.1-18 W component velocity measurements made at X/T = -.25 with the laser anemometer, plane 1.

File E259770.RES
W component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 21.8
density (kilograms per meter cubed) = 1.111979
viscosity (meters squared per second) = 1.641256E-05
Atmospheric pressure (Pascals) = 94125
Velocity of undisturbed free stream (Uref, in m/s) = 27.60673
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092255E-03
Estimated momentum thickness Reynolds number = 6902.923
Location of traverse; X/T =-.2 Z/T = 0

Y/T	W/Uref	w2/Uref2
1.7705E-03	-9.5800E-03	9.1641E-03
2.4788E-03	-1.1709E-02	8.6206E-03
3.5411E-03	-1.1693E-02	9.6447E-03
4.6034E-03	-1.1811E-02	9.8746E-03
5.8428E-03	-1.0553E-02	1.0181E-02
7.4363E-03	-9.6145E-03	1.0585E-02
9.5609E-03	-8.5868E-03	1.1001E-02
1.2394E-02	-1.5567E-03	1.1029E-02
1.5935E-02	6.9066E-03	1.1403E-02
2.0184E-02	7.1552E-03	1.2120E-02
2.5850E-02	-1.6012E-04	1.4926E-02
3.2932E-02	-4.5015E-03	1.7805E-02
4.2493E-02	1.3903E-02	1.7172E-02
5.4178E-02	1.1810E-02	1.5813E-02
6.9051E-02	2.3706E-02	1.1448E-02
8.8527E-02	2.0411E-02	7.7135E-03
1.1367E-01	4.4941E-03	3.6040E-03
1.4412E-01	1.0112E-02	2.6081E-03
1.8414E-01	1.4760E-02	2.0821E-03
2.3548E-01	3.0216E-03	1.2484E-03
3.0241E-01	-1.7987E-03	8.8523E-04
3.8456E-01	4.0865E-03	4.9489E-04
4.8973E-01	3.7012E-03	1.7542E-04
6.2571E-01	1.0223E-02	2.6425E-07
8.0028E-01	6.4064E-03	
1.0202E+00	-1.6652E-03	
1.3028E+00	-3.3959E-03	
1.6636E+00	-4.9685E-03	
2.1246E+00	-2.6258E-02	

Table F.1-19 W component velocity measurements made at X/T = -.20 with the laser anemometer, plane 1.

File E260770.RES
W component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 21.8
density (kilograms per meter cubed) = 1.111979
viscosity (meters squared per second) = 1.641256E-05
Atmospheric pressure (Pascals) = 94125
Velocity of undisturbed free stream (Uref, in m/s) = 27.58169
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092998E-03
Estimated momentum thickness Reynolds number = 6897.914
Location of traverse; X/T =-.15 Z/T = 0

Y/T	W/Uref	w2/Uref2
1.7705E-03	2.2062E-03	4.7129E-03
2.4788E-03	1.6398E-04	4.5506E-03
3.5411E-03	2.3325E-03	4.6265E-03
4.7805E-03	-4.2827E-04	4.9858E-03
6.0198E-03	1.7122E-03	4.9718E-03
7.6133E-03	-6.6110E-04	5.4677E-03
9.5609E-03	-8.4972E-03	5.7539E-03
1.2394E-02	-1.7709E-02	6.0018E-03
1.6112E-02	-1.9382E-02	7.9352E-03
2.0184E-02	-1.3929E-02	8.2362E-03
2.6381E-02	3.0520E-03	8.7171E-03
3.2932E-02	5.9274E-03	8.6015E-03
4.2847E-02	-1.6256E-02	1.0550E-02
5.4356E-02	1.3545E-03	8.7274E-03
6.9051E-02	-9.2893E-03	7.4202E-03
8.8173E-02	4.7730E-03	4.6400E-03
1.1314E-01	1.1849E-02	3.4453E-03
1.4412E-01	7.9553E-03	2.5170E-03
1.8484E-01	8.8524E-03	1.9915E-03
2.3548E-01	3.2974E-03	1.3959E-03
3.0028E-01	5.4758E-03	8.8125E-04
3.8350E-01	3.0908E-03	5.3296E-04
4.8973E-01	6.3914E-03	2.1439E-04
6.2571E-01	-2.4656E-03	8.0378E-06
7.9887E-01	4.9490E-03	4.8339E-06
1.0202E+00	-1.7094E-02	1.2793E-05
1.3028E+00	-1.4269E-02	
1.6636E+00	-1.9393E-02	
2.1246E+00	-3.9880E-02	

Table F.1-20 W component velocity measurements made at X/T = -.15 with the laser anemometer, plane 1.

File E261770.RES
W component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.113882
viscosity (meters squared per second) = 1.637584E-05
Atmospheric pressure (Pascals) = 94350
Velocity of undisturbed free stream (Uref, in m/s) = 27.58593
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092872E-03
Estimated momentum thickness Reynolds number = 6914.23
Location of traverse; X/T =-.1 Z/T = 0

Y/T	W/Uref	w2/Uref2
1.7705E-03	1.3382E-02	2.8013E-03
2.6558E-03	1.0332E-02	2.9137E-03
3.5411E-03	8.7575E-03	3.0153E-03
4.6034E-03	1.8416E-03	3.0926E-03
5.6657E-03	-5.3311E-03	3.3090E-03
7.7904E-03	-7.9328E-03	3.5463E-03
9.5609E-03	-8.5543E-03	3.5967E-03
1.2394E-02	-7.0963E-03	3.9098E-03
1.5935E-02	-3.6784E-03	3.9496E-03
2.0184E-02	8.8806E-03	4.0561E-03
2.5850E-02	1.6563E-02	3.8173E-03
3.3286E-02	-3.7989E-03	4.6206E-03
4.2493E-02	-4.3872E-03	4.6373E-03
5.4178E-02	1.1418E-02	3.8295E-03
6.9051E-02	-2.1082E-03	3.6189E-03
8.8881E-02	-4.4443E-03	2.9687E-03
1.1402E-01	-9.9315E-04	2.5785E-03
1.4412E-01	-9.8846E-04	2.2485E-03
1.8414E-01	8.8431E-03	1.6800E-03
2.3548E-01	7.9856E-03	1.2506E-03
3.0028E-01	-3.7345E-03	9.2579E-04
3.8492E-01	-6.2575E-03	5.4788E-04
4.9009E-01	-8.1312E-03	2.3683E-04
6.3137E-01	3.2034E-03	1.6634E-05
7.9887E-01	-4.8422E-04	1.6186E-06
1.0205E+00	-2.3658E-02	
1.3031E+00	-3.3127E-02	
1.6629E+00	-3.0254E-02	

Table F.1-21 W component velocity measurements made at X/T = -.10 with the laser anemometer, plane 1.

File E262770.RES
W component velocity measurements obtained with the laser anemometer
Flow temperature (degrees centigrade) = 21.9
density (kilograms per meter cubed) = 1.114791
viscosity (meters squared per second) = 1.637584E-05
Atmospheric pressure (Pascals) = 94395
Velocity of undisturbed free stream (Uref, in m/s) = 27.60781
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092223E-03
Estimated momentum thickness Reynolds number = 6918.617
Location of traverse; X/T =-.05 Z/T = 0

Y/T	W/Uref	w2/Uref2
2.1246E-03	-1.0076E-04	3.0926E-03
2.8329E-03	-3.4930E-03	3.0297E-03
3.5411E-03	-7.4941E-03	3.0254E-03
4.6034E-03	-9.9269E-03	3.1084E-03
5.6657E-03	-8.8350E-03	3.1006E-03
7.4363E-03	-9.1652E-03	3.1351E-03
9.5609E-03	-6.9701E-03	3.2276E-03
1.2394E-02	1.0910E-03	3.2643E-03
1.6289E-02	1.2055E-02	3.2106E-03
2.7975E-02	9.6040E-03	2.8858E-03
3.2932E-02	-3.6468E-03	3.5616E-03
5.4533E-02	9.6487E-04	2.6339E-03
6.3510E-02	-6.6867E-04	2.9977E-03
8.9589E-02	5.8319E-03	3.2980E-03
1.1367E-01	7.3220E-03	2.9205E-03
1.4448E-01	2.0251E-03	2.2175E-03
1.8449E-01	1.1132E-02	2.8380E-03
2.4115E-01	4.6818E-03	1.6575E-03
3.0099E-01	1.7128E-03	1.1413E-03
4.0085E-01	-5.8927E-04	5.3764E-04
5.0744E-01	-6.4123E-03	2.5670E-04
6.3916E-01	-1.8666E-02	2.0208E-05
7.9887E-01	-2.5891E-02	1.5456E-05
1.0347E+00	-3.3543E-02	2.4584E-06
1.3028E+00	-5.5483E-02	8.5494E-06
1.6714E+00	-6.7619E-02	1.2324E-05

Table F.1-22 W component velocity measurements made at X/T = -.05 with the laser anemometer, plane 1.

F.2 LDV MEASUREMENTS IN PLANE 3

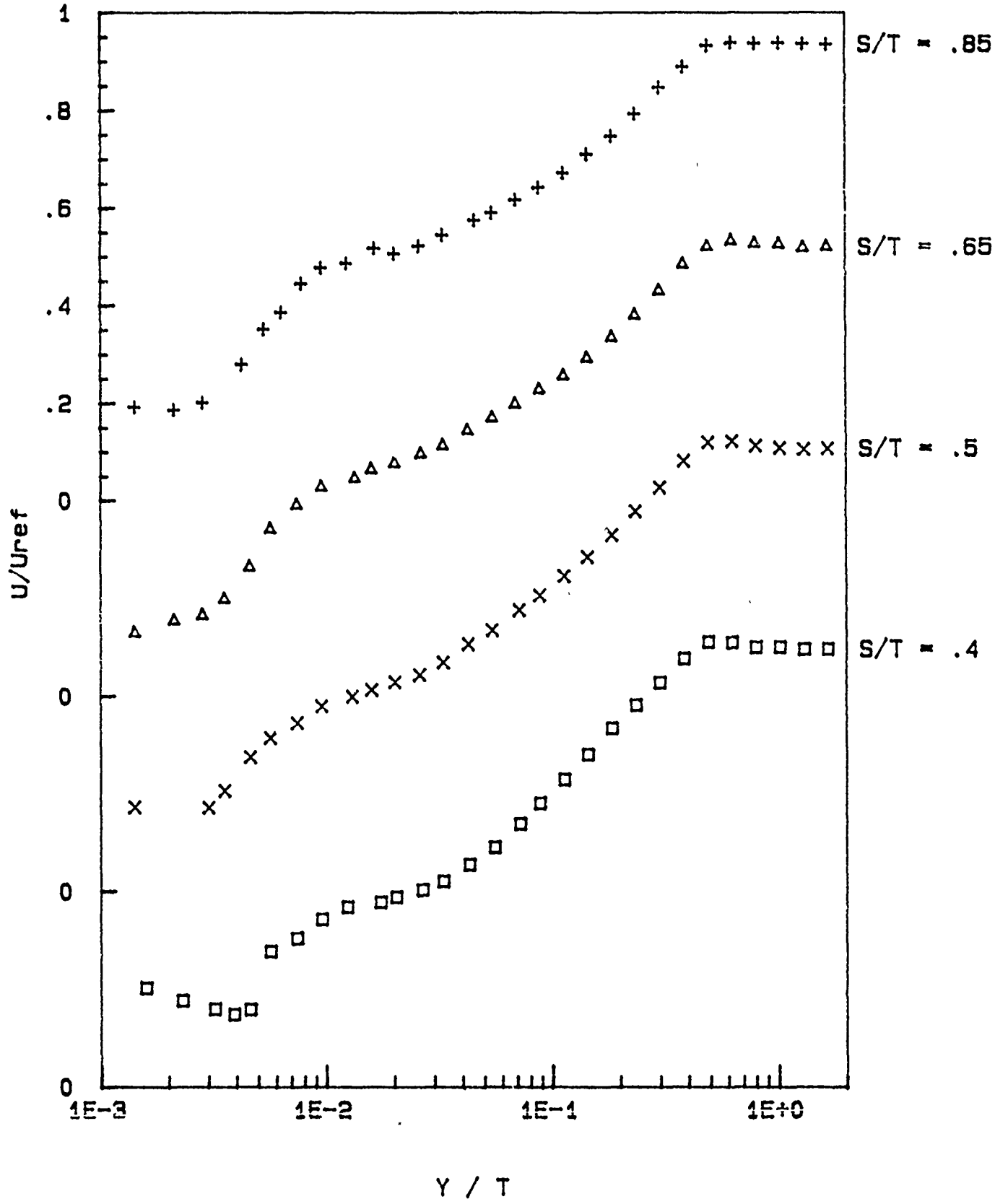


Figure F.2-1(a) Profiles of mean-velocity component U, plane 3.

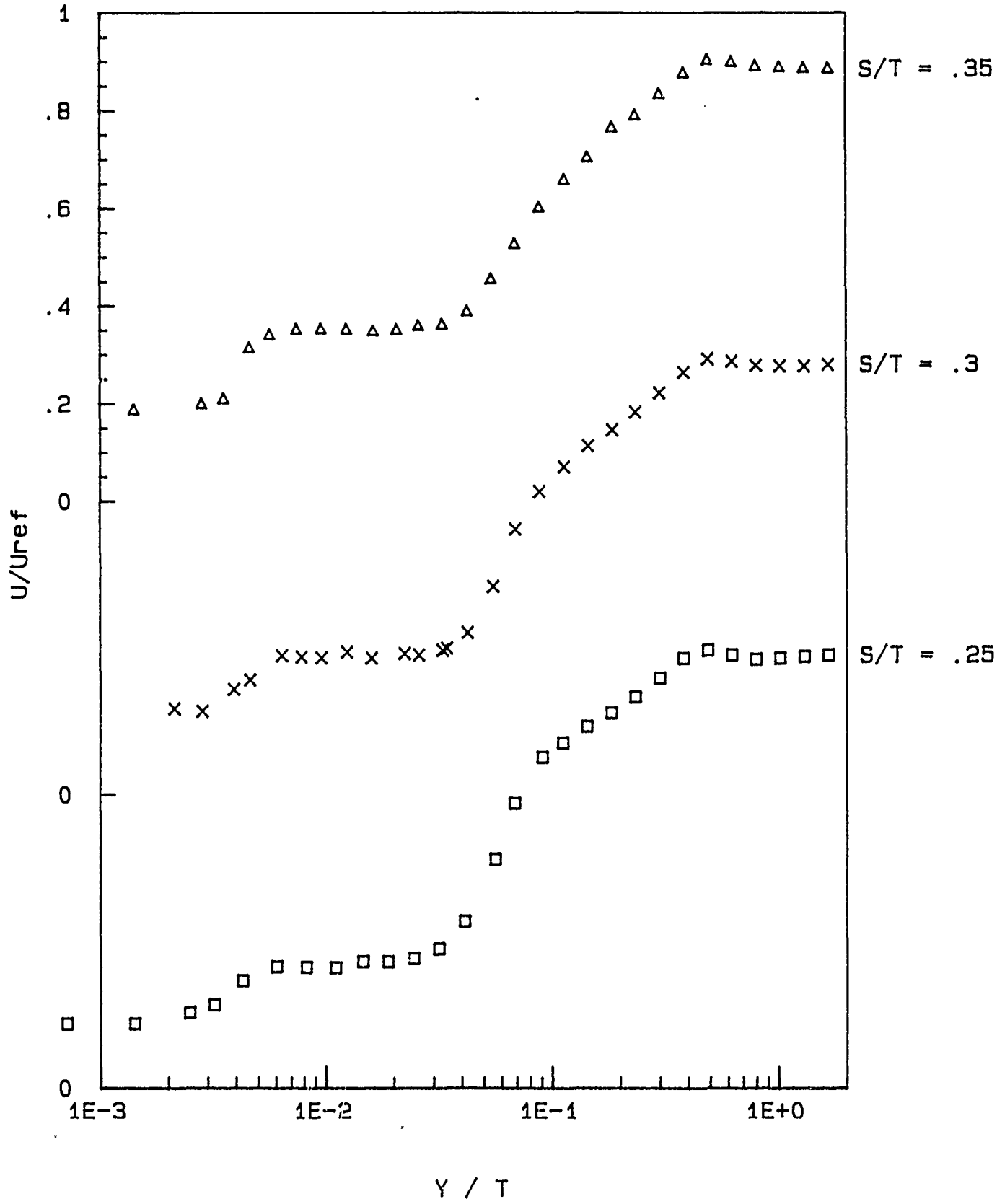


Figure F.2-1(b) Profiles of mean-velocity component U, plane 3.

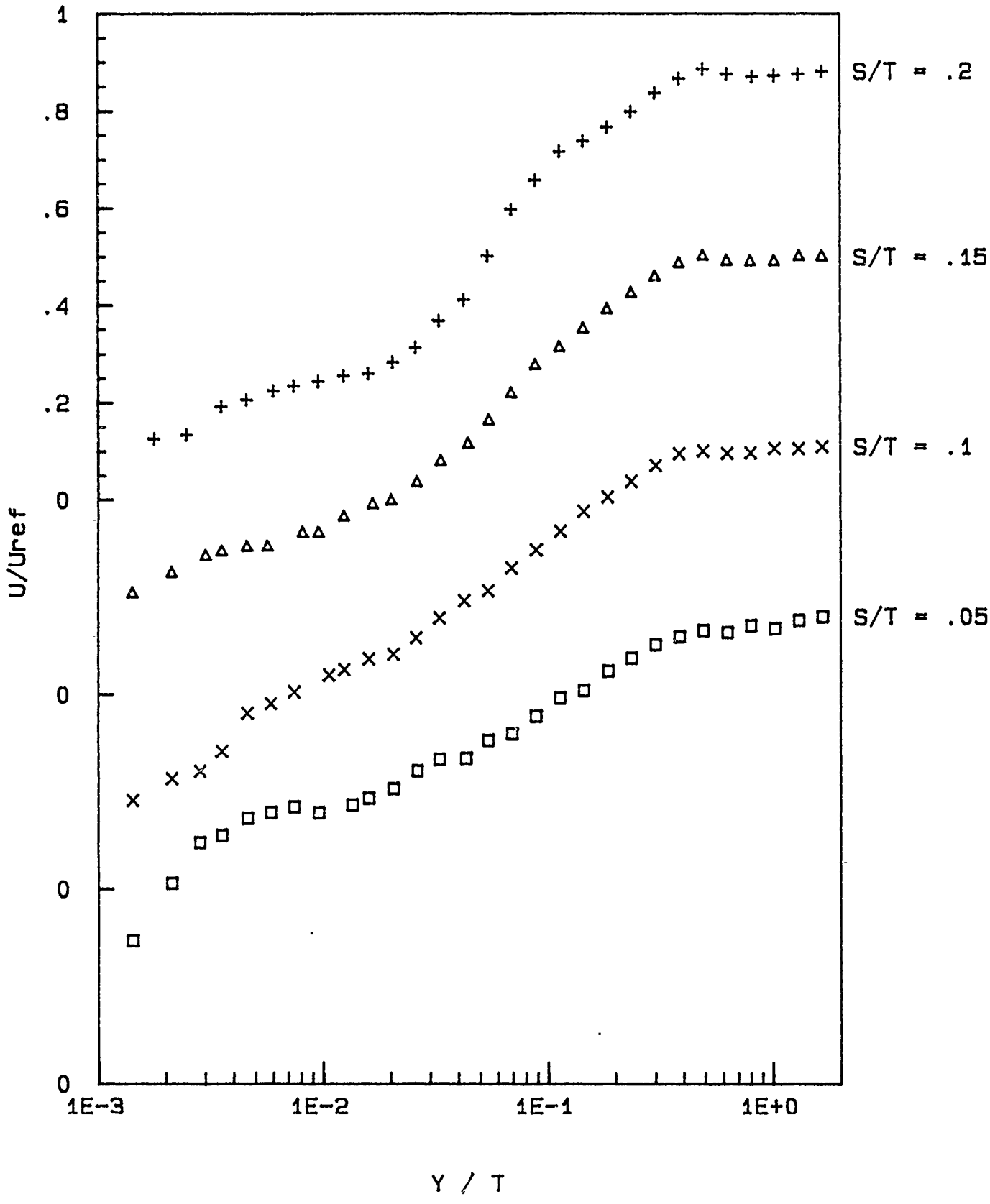


Figure F.2-1(c) Profiles of mean-velocity component U, plane 3.

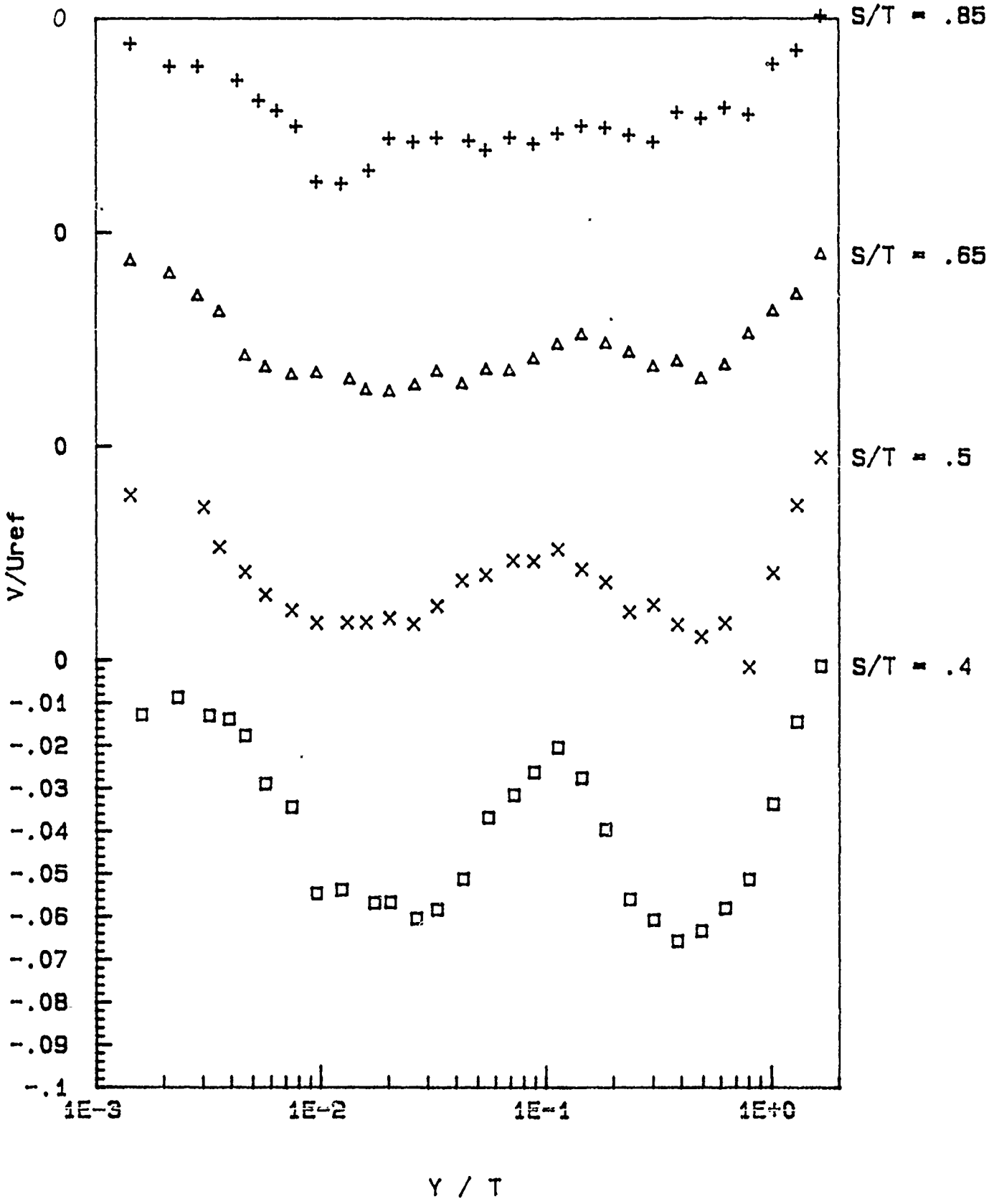


Figure F.2-2(a) Profiles of mean-velocity component V, plane 3.

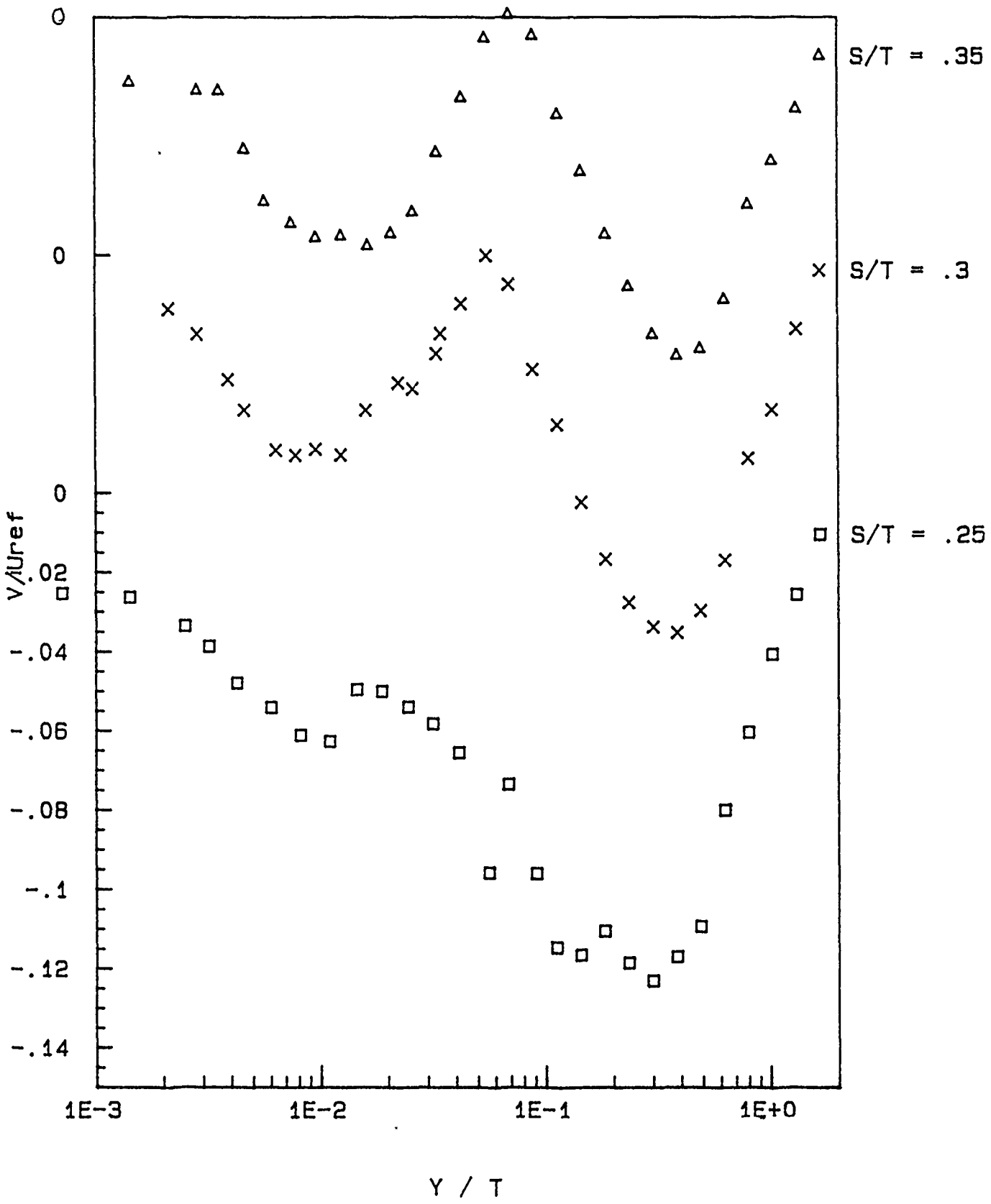


Figure F.2-2(b) Profiles of mean-velocity component V, plane 3.

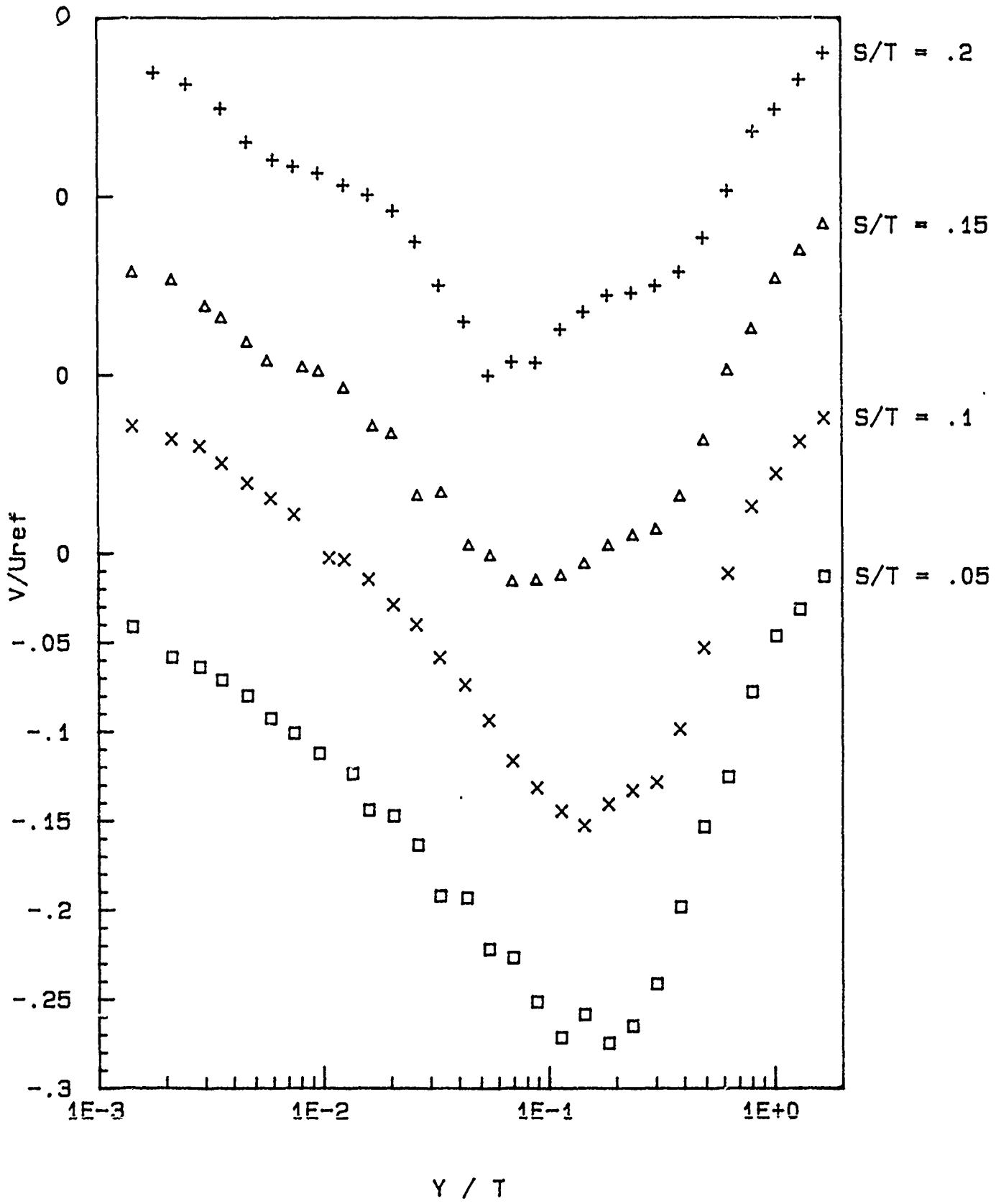


Figure F.2-2(c) Profiles of mean-velocity component V, plane 3.

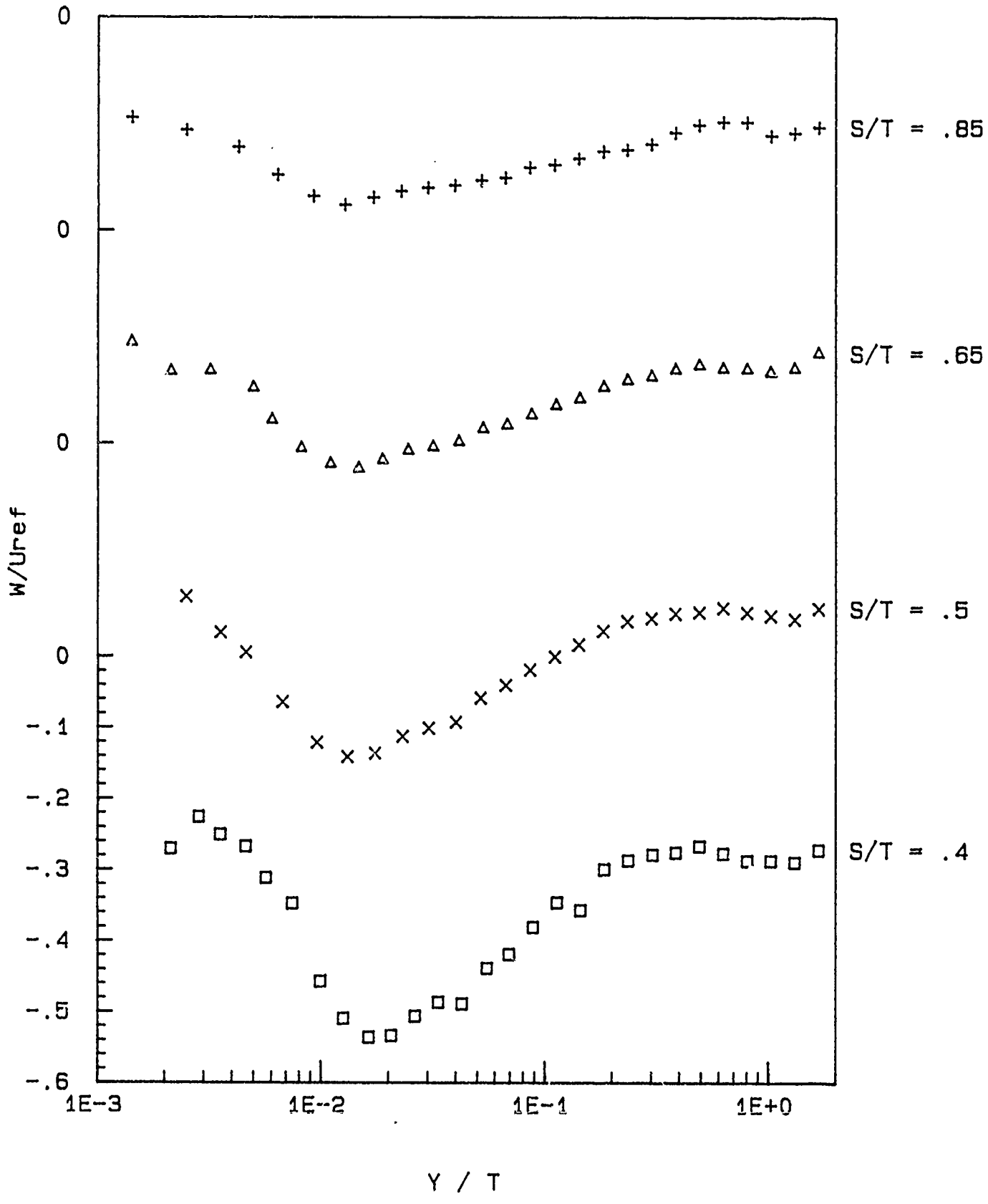


Figure F.2-3(a) Profiles of mean-velocity component W, plane 3.

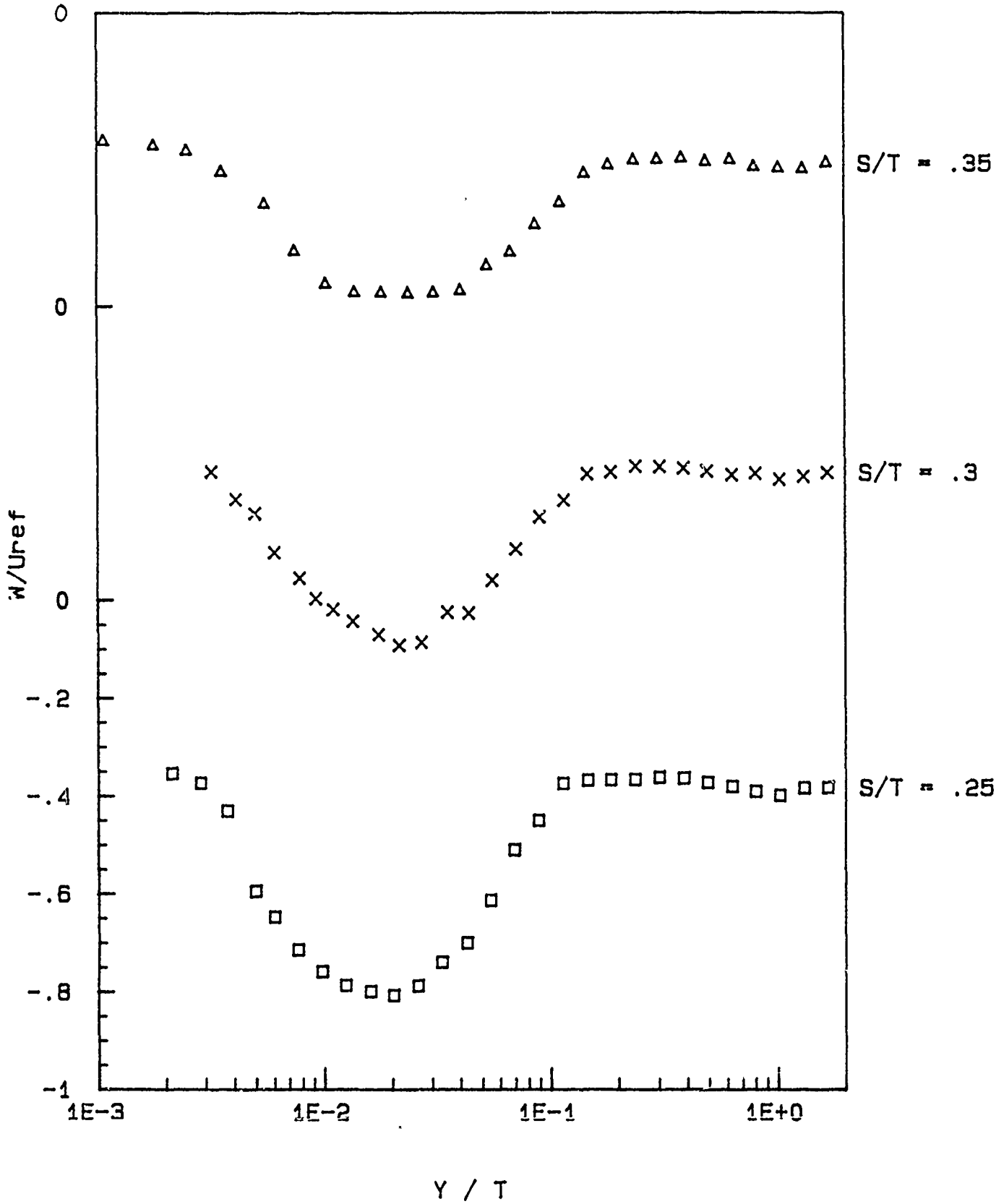


Figure F.2-3(b) Profiles of mean-velocity component W, plane 3.

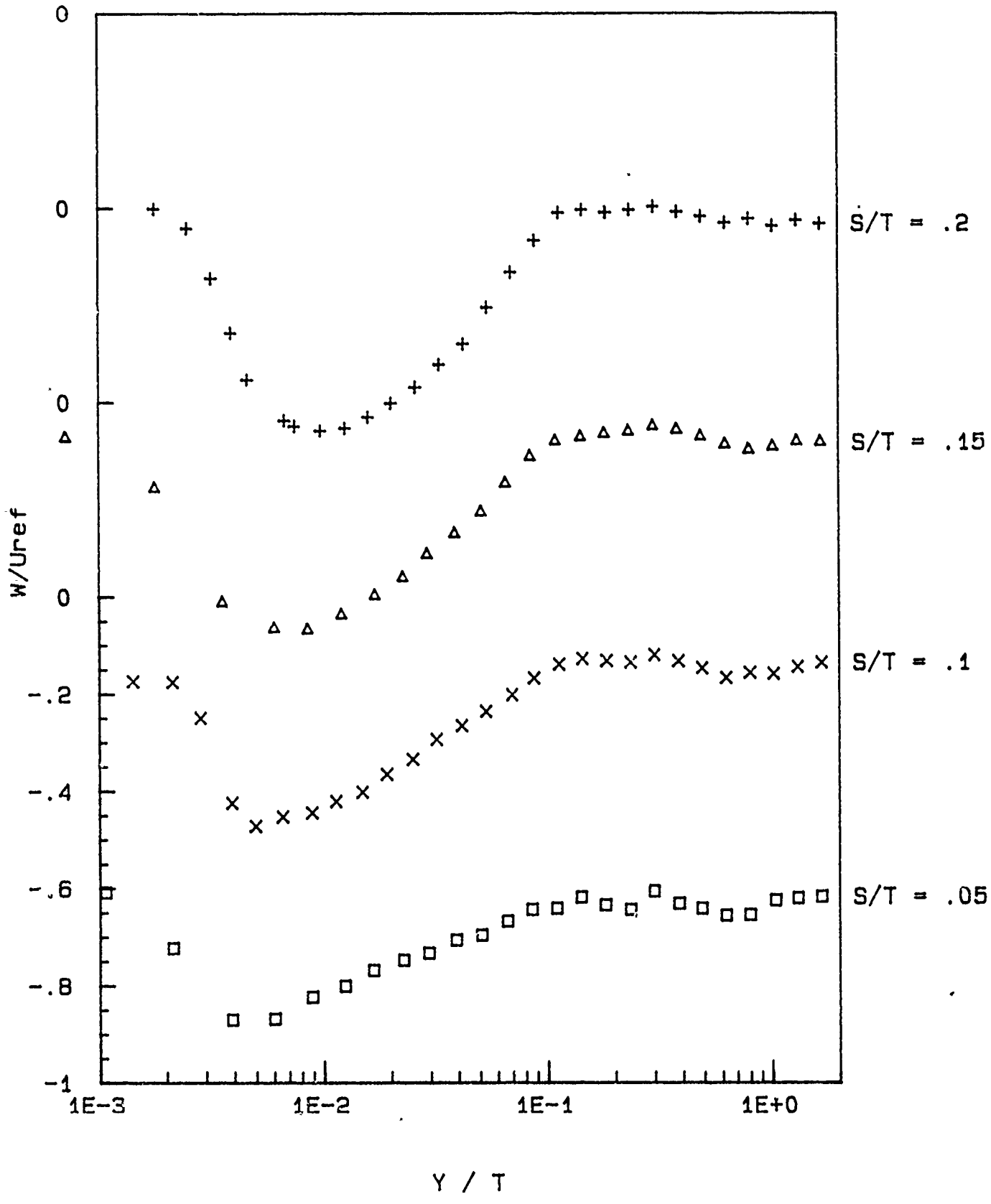


Figure F.2-3(c) Profiles of mean-velocity component W, plane 3.

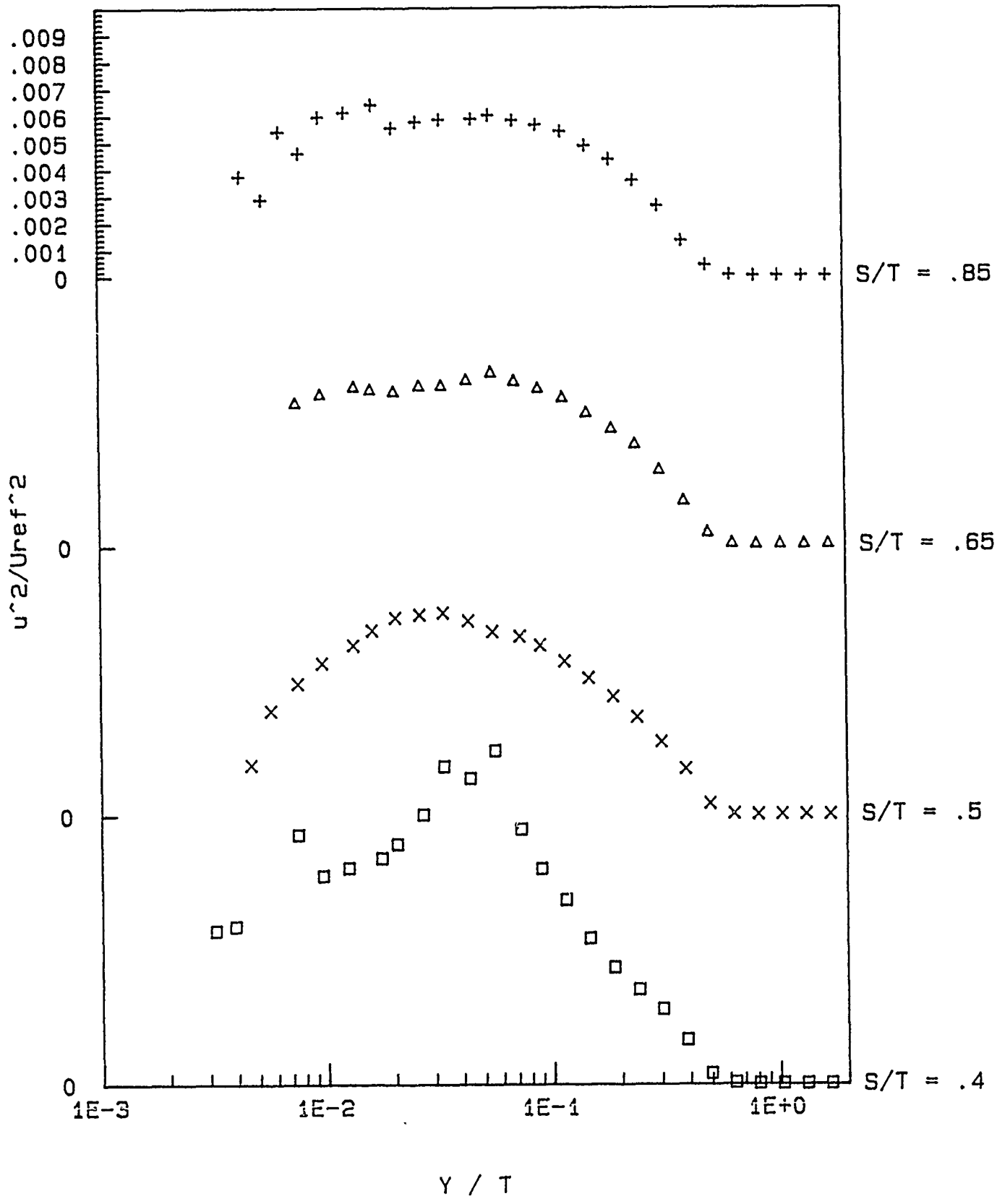


Figure F.2-4(a) Profiles of U-component of turbulence normal stress, plane 3.

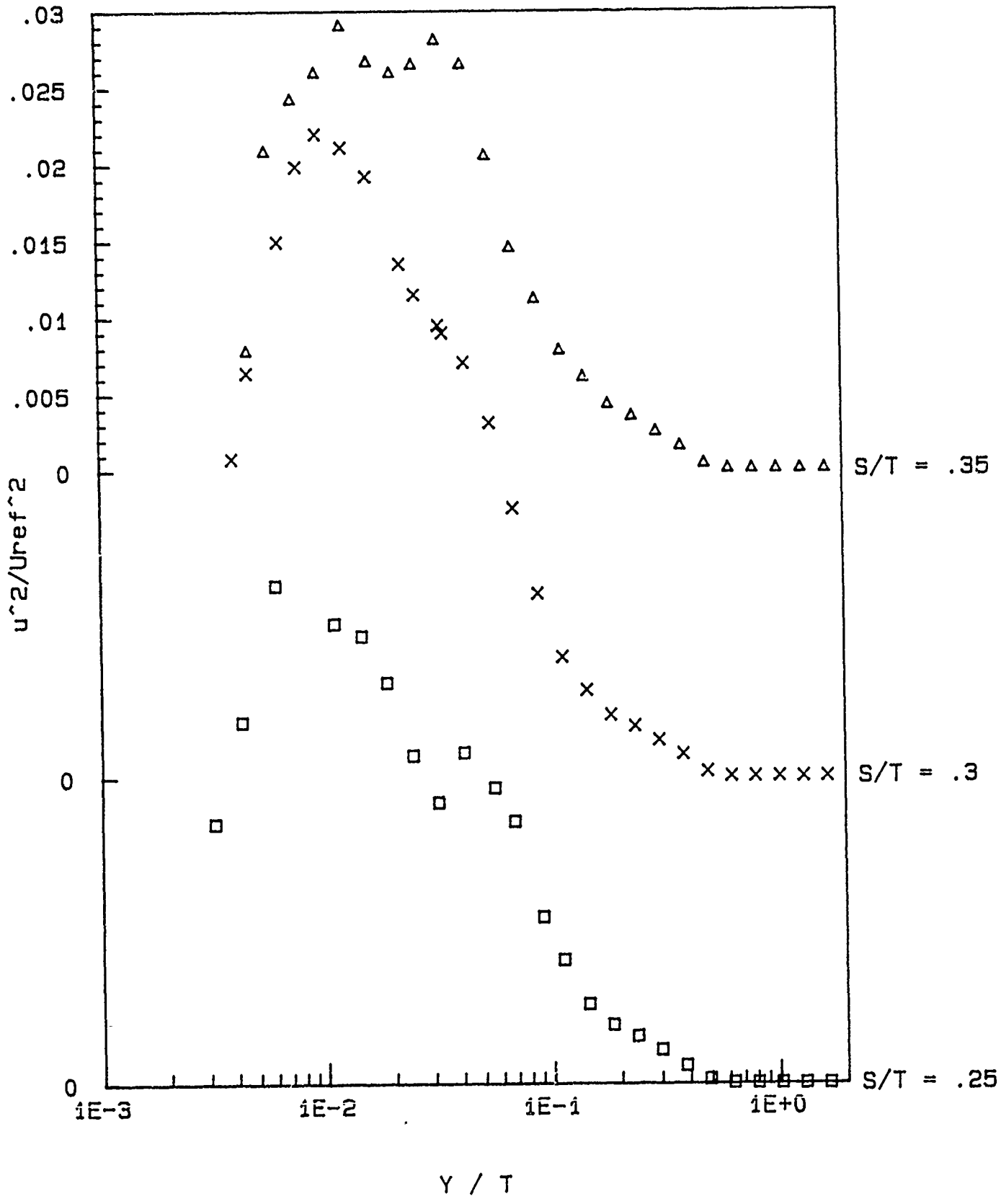


Figure F.2-4(b) Profiles of U-component of turbulence normal stress, plane 3.

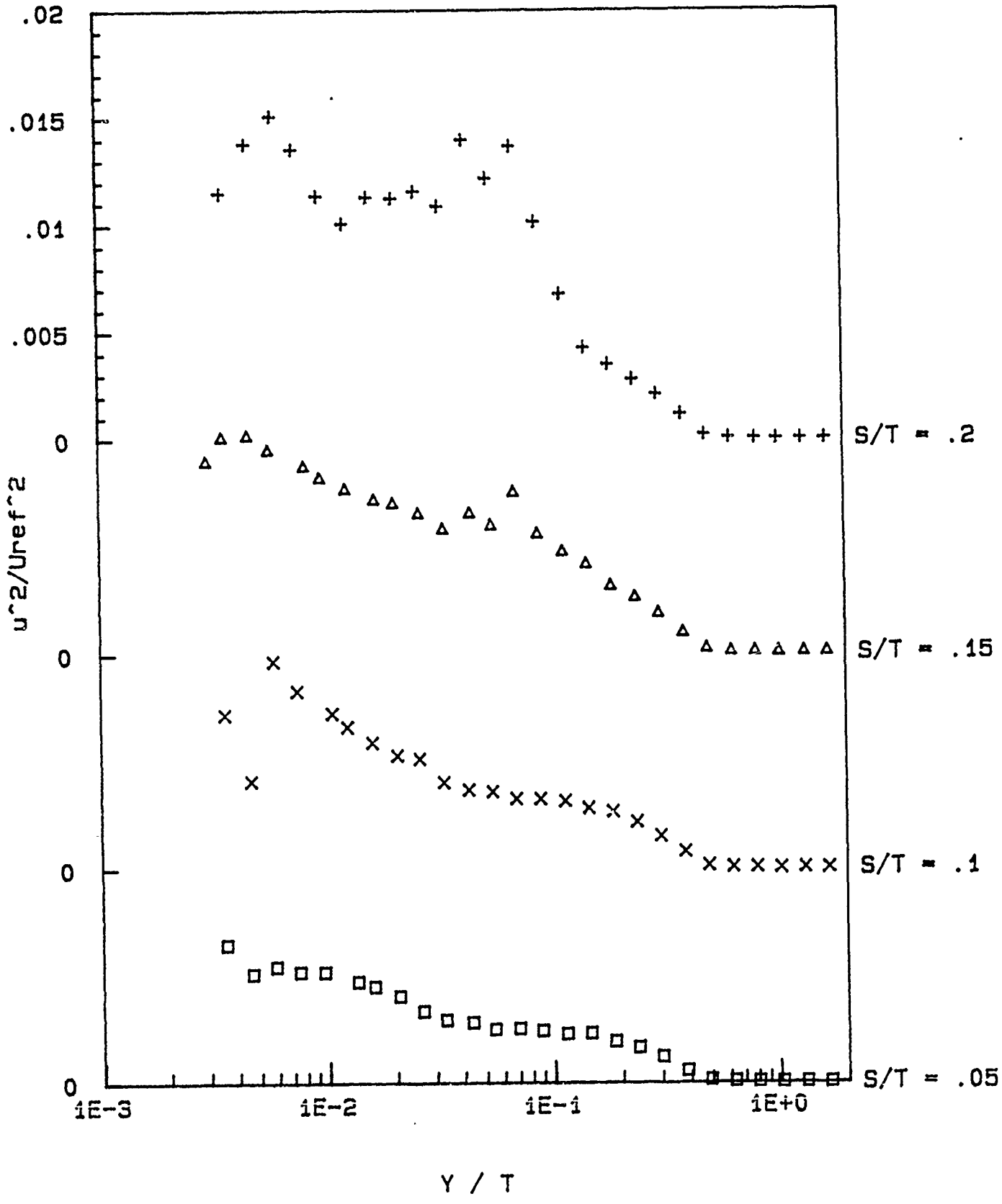


Figure F.2-4(c) Profiles of U-component of turbulence normal stress, plane 3.

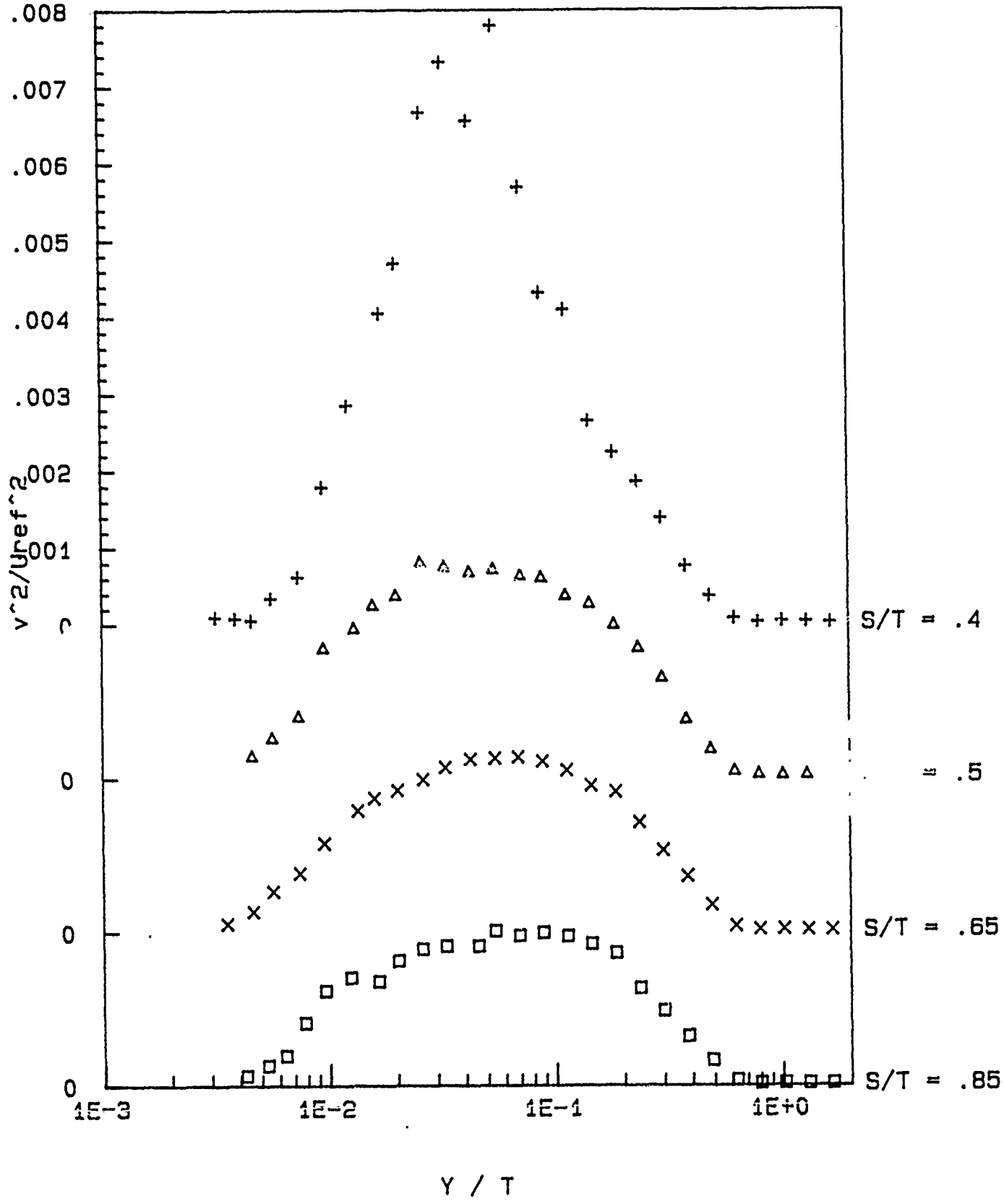


Figure F.2-5(a) Profiles of V-component of turbulence normal stress, plane 3.

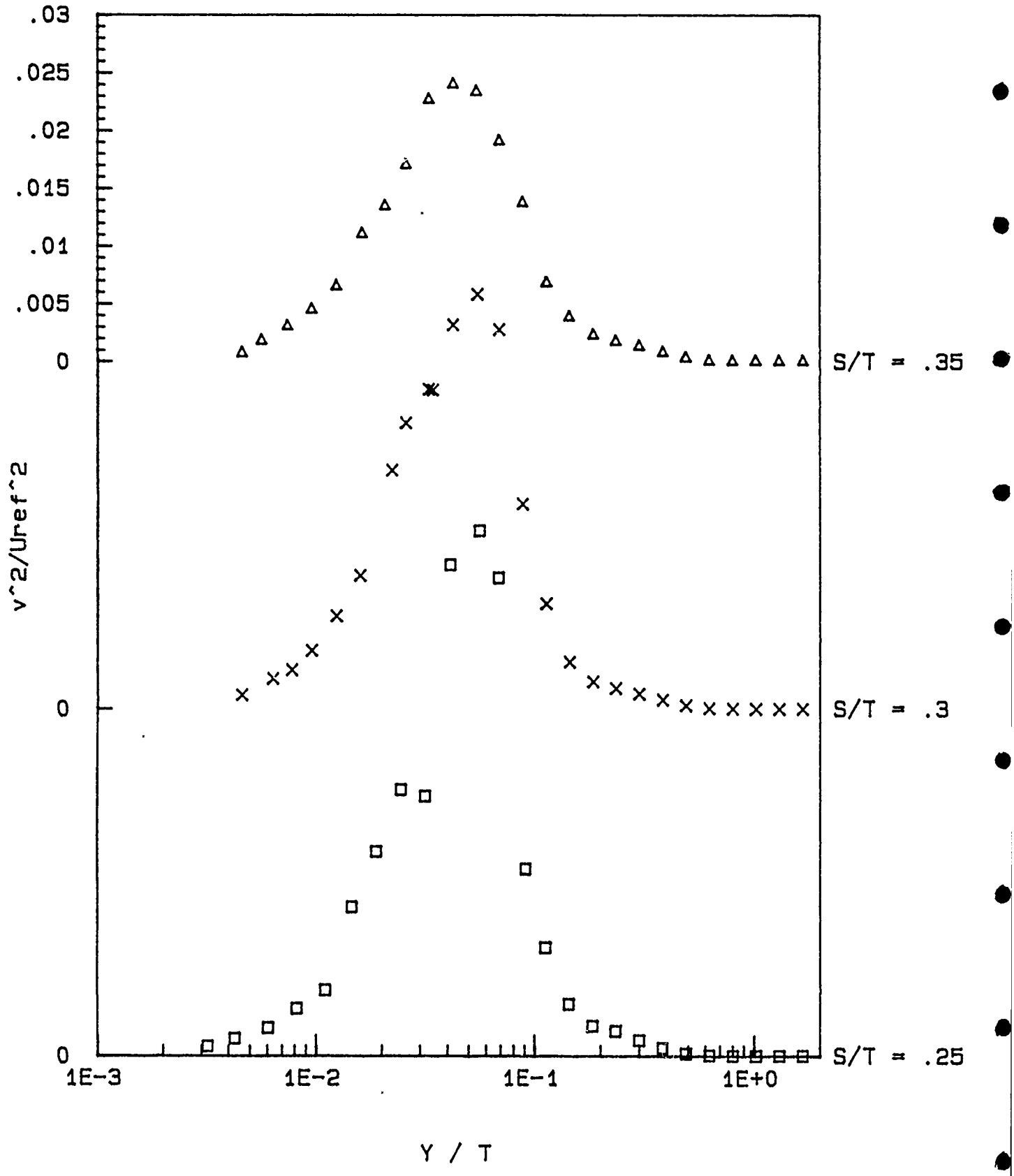


Figure F.2-5(b) Profiles of V-component of turbulence normal stress, plane 3.

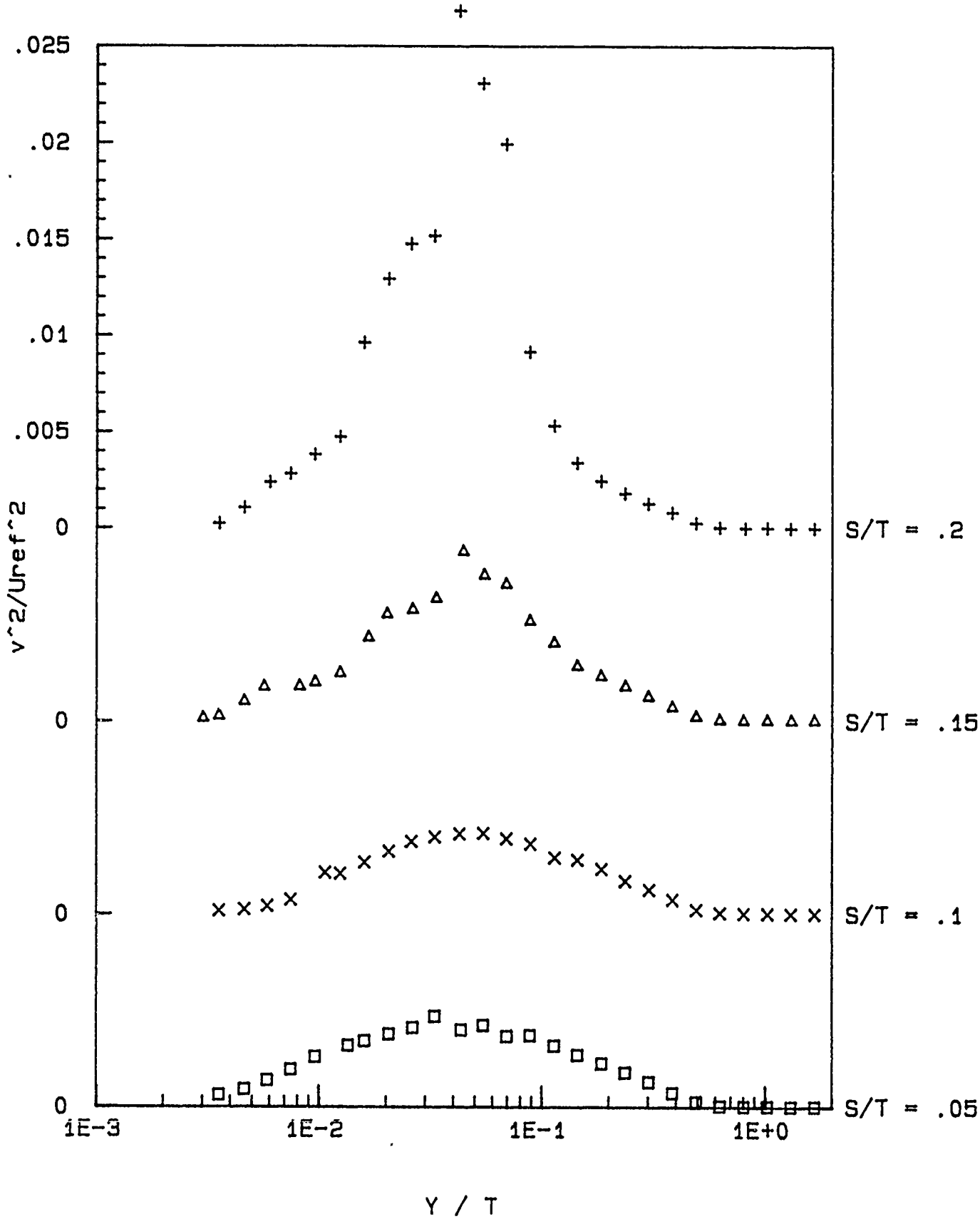


Figure F.2-5(c) Profiles of V-component of turbulence normal stress, plane 3.

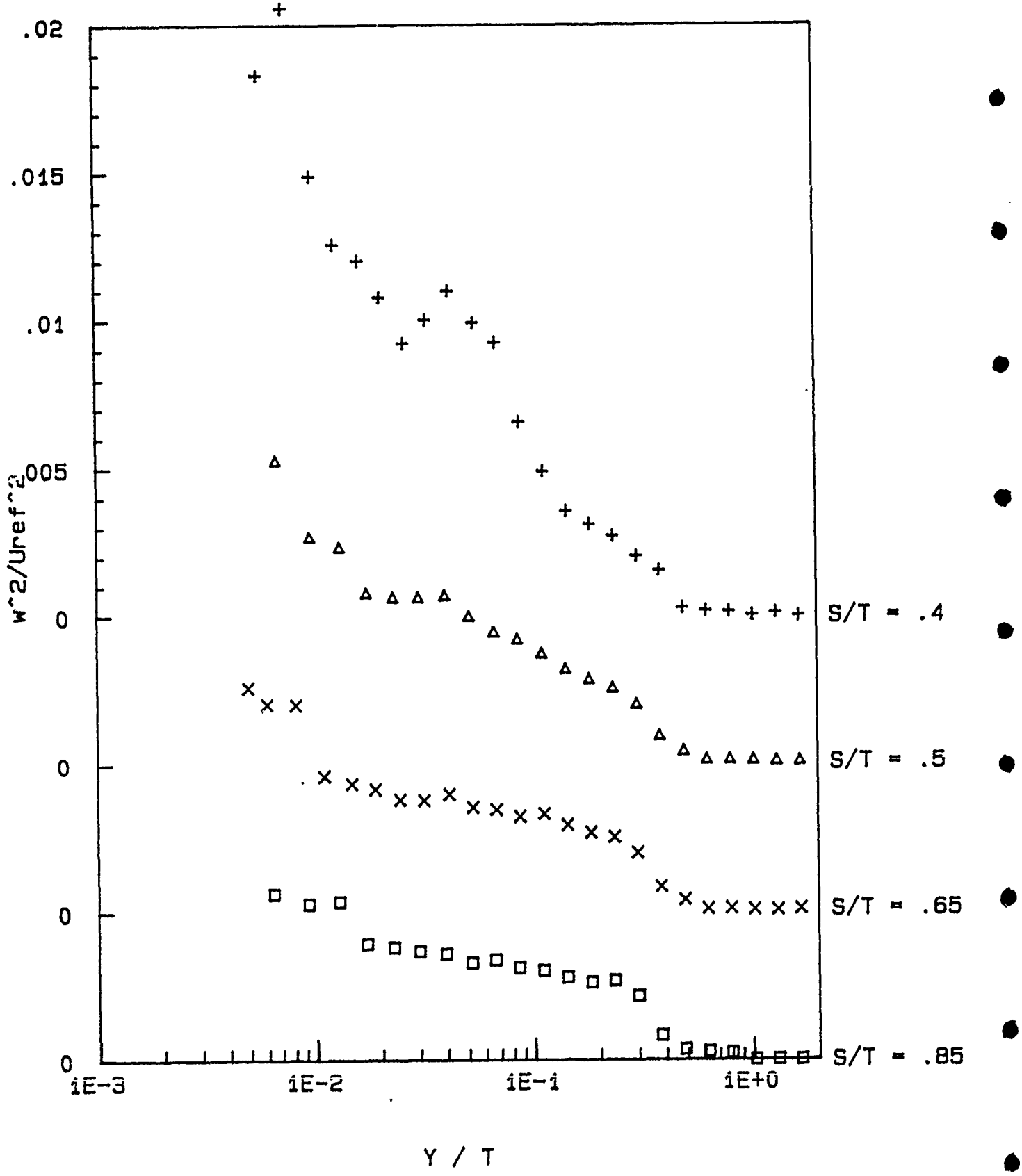


Figure F.2-6(a) Profiles of W-component of turbulence normal stress, plane 3.

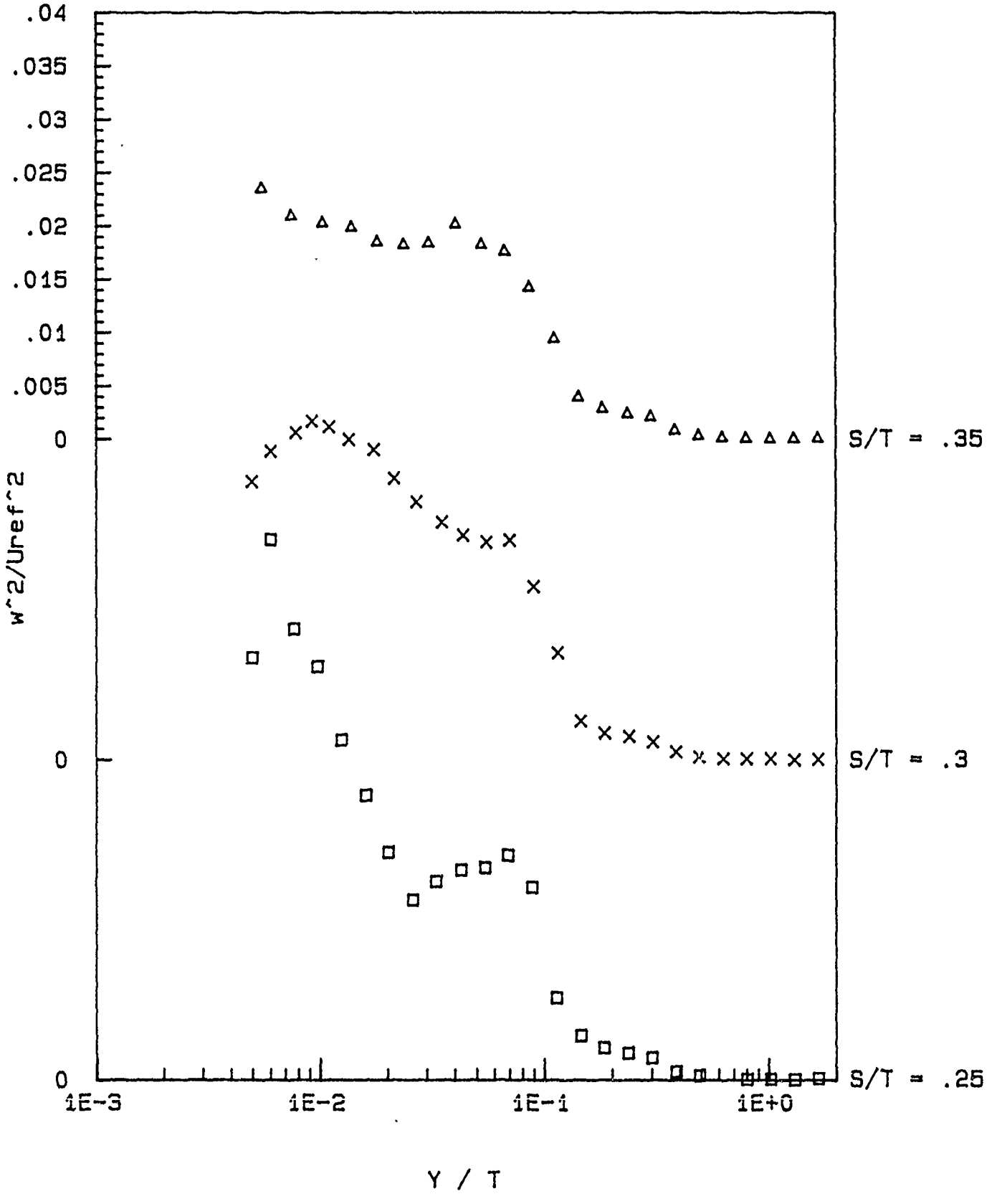


Figure F.2-6(b) Profiles of W-component of turbulence normal stress, plane 3.

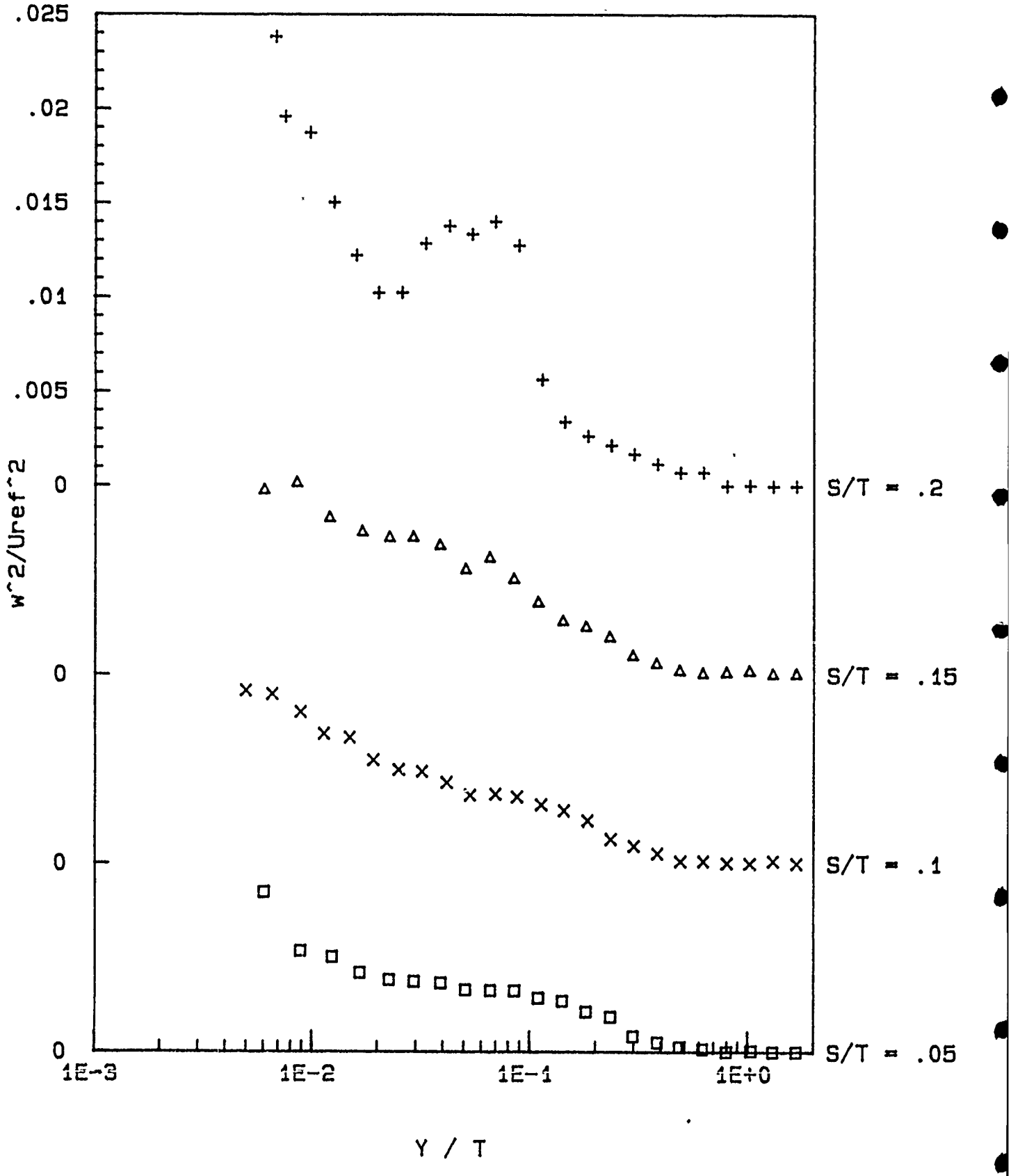


Figure F.2-6(c) Profiles of W-component of turbulence normal stress, plane 3.

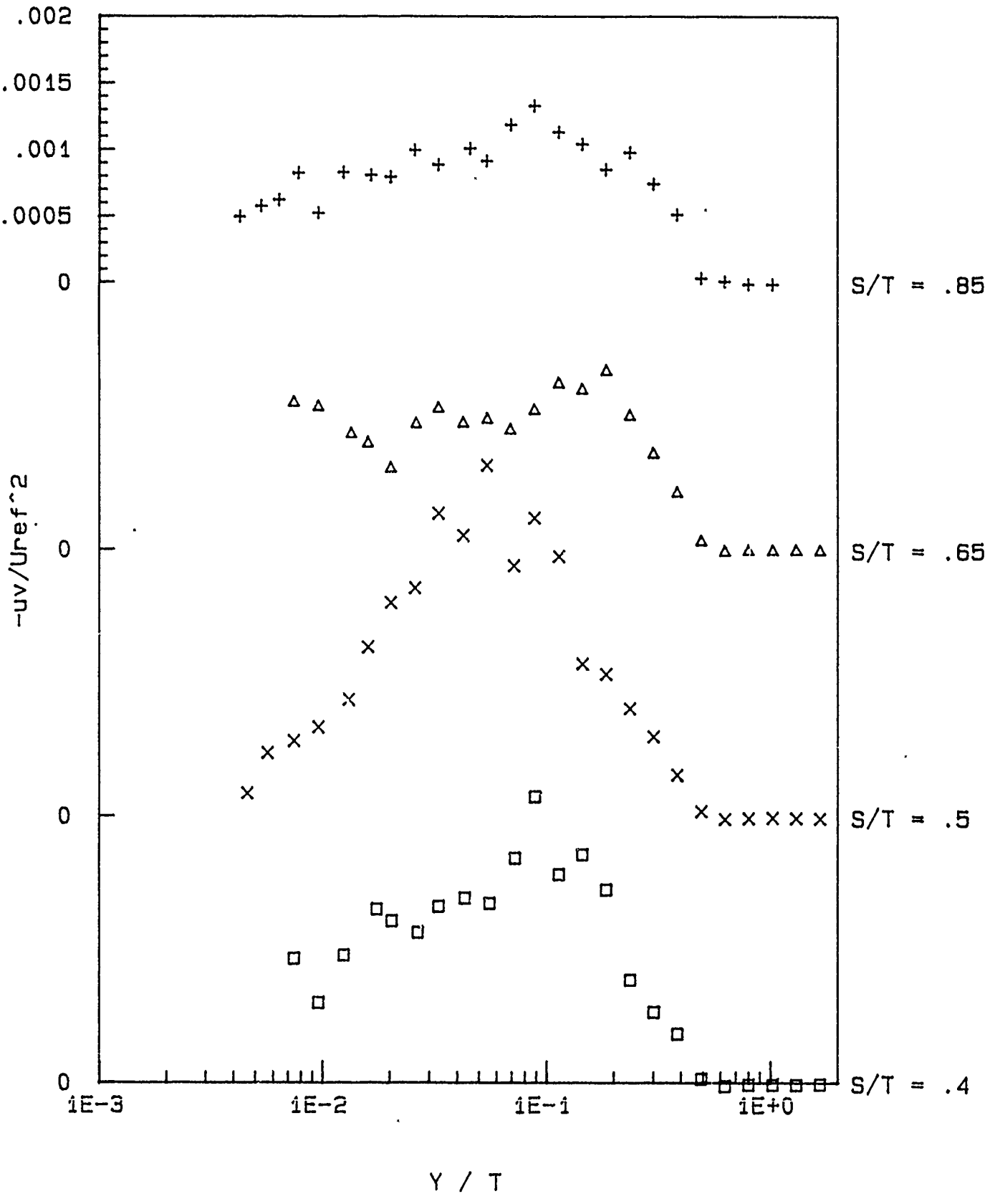


Figure F.2-7(a) Profiles of UV Reynolds shear stress, plane 3.

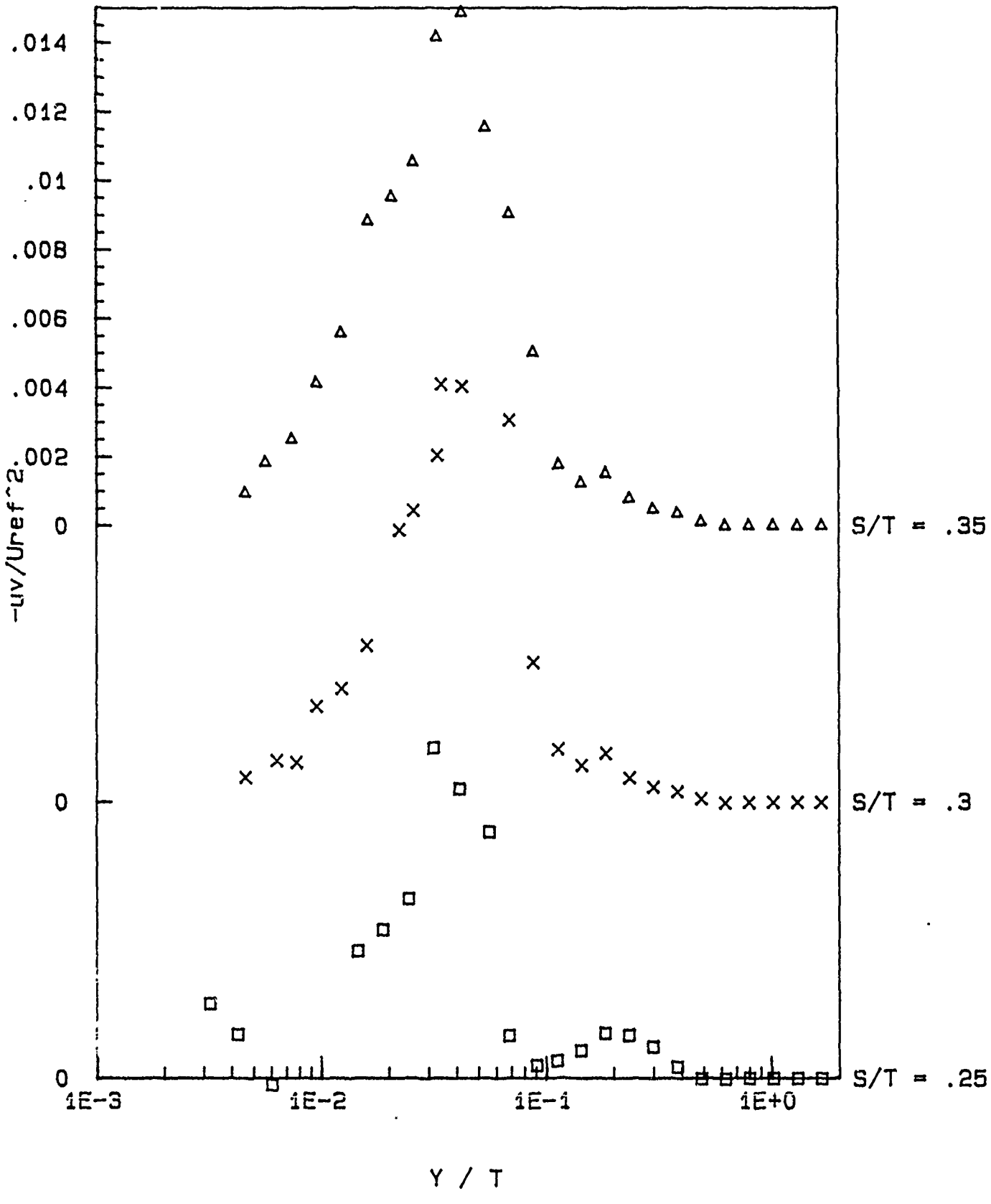


Figure F.2-7(b) Profiles of UV Reynolds shear stress, plane 3.

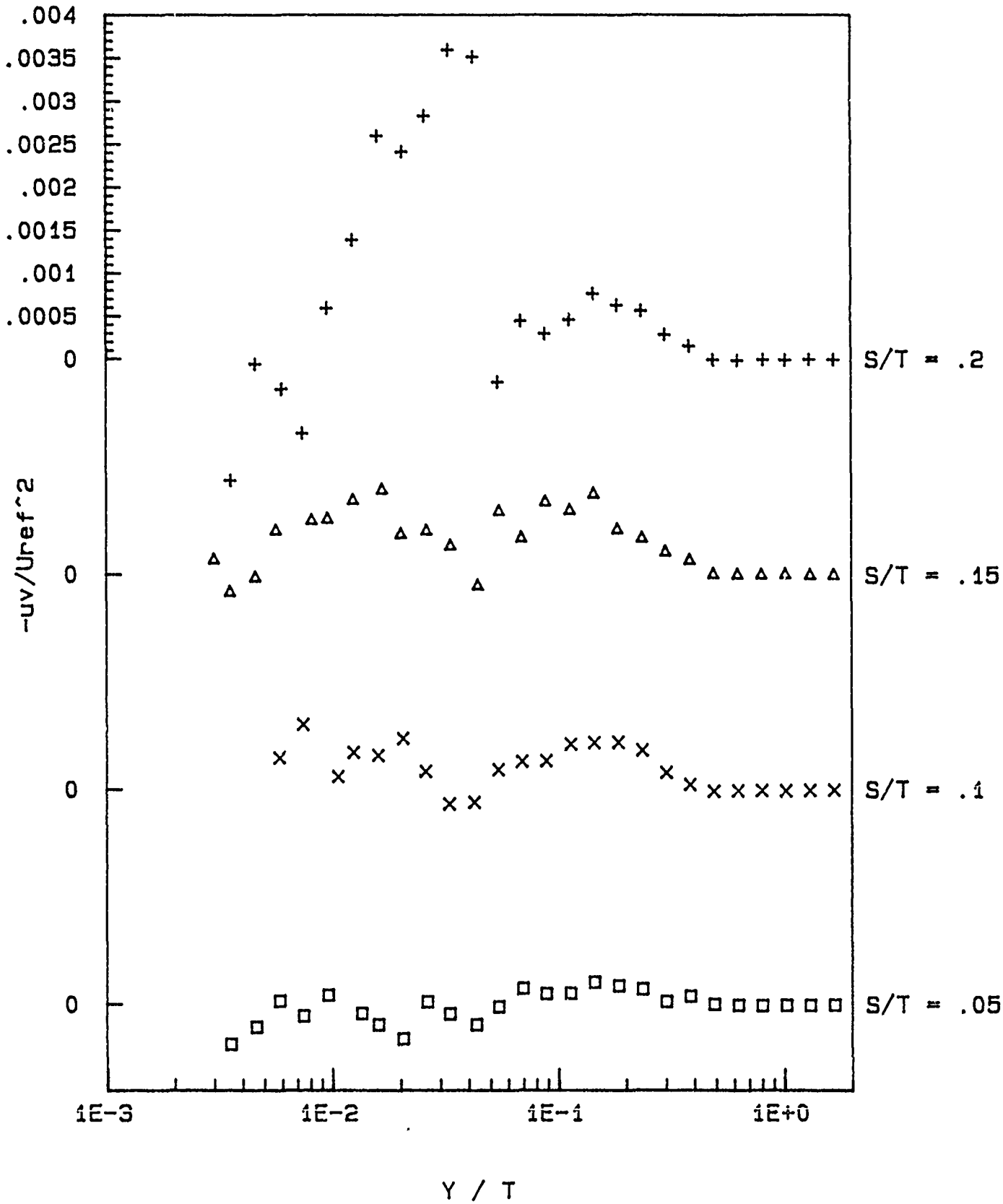


Figure F.2-7(c) Profiles of UV Reynolds shear stress, plane 3.

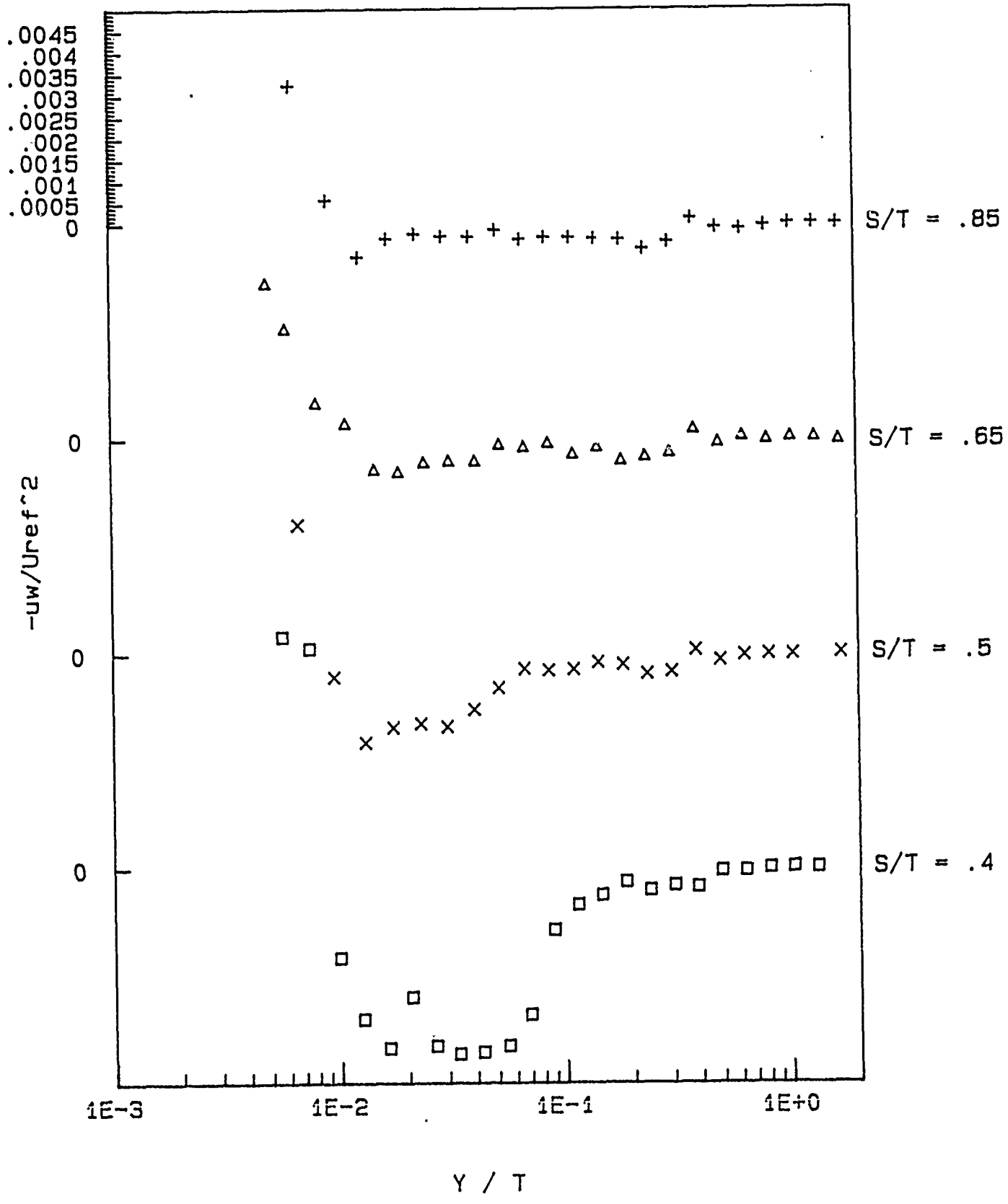


Figure F.2-8(a) Profiles of UW Reynolds shear stress, plane 3.

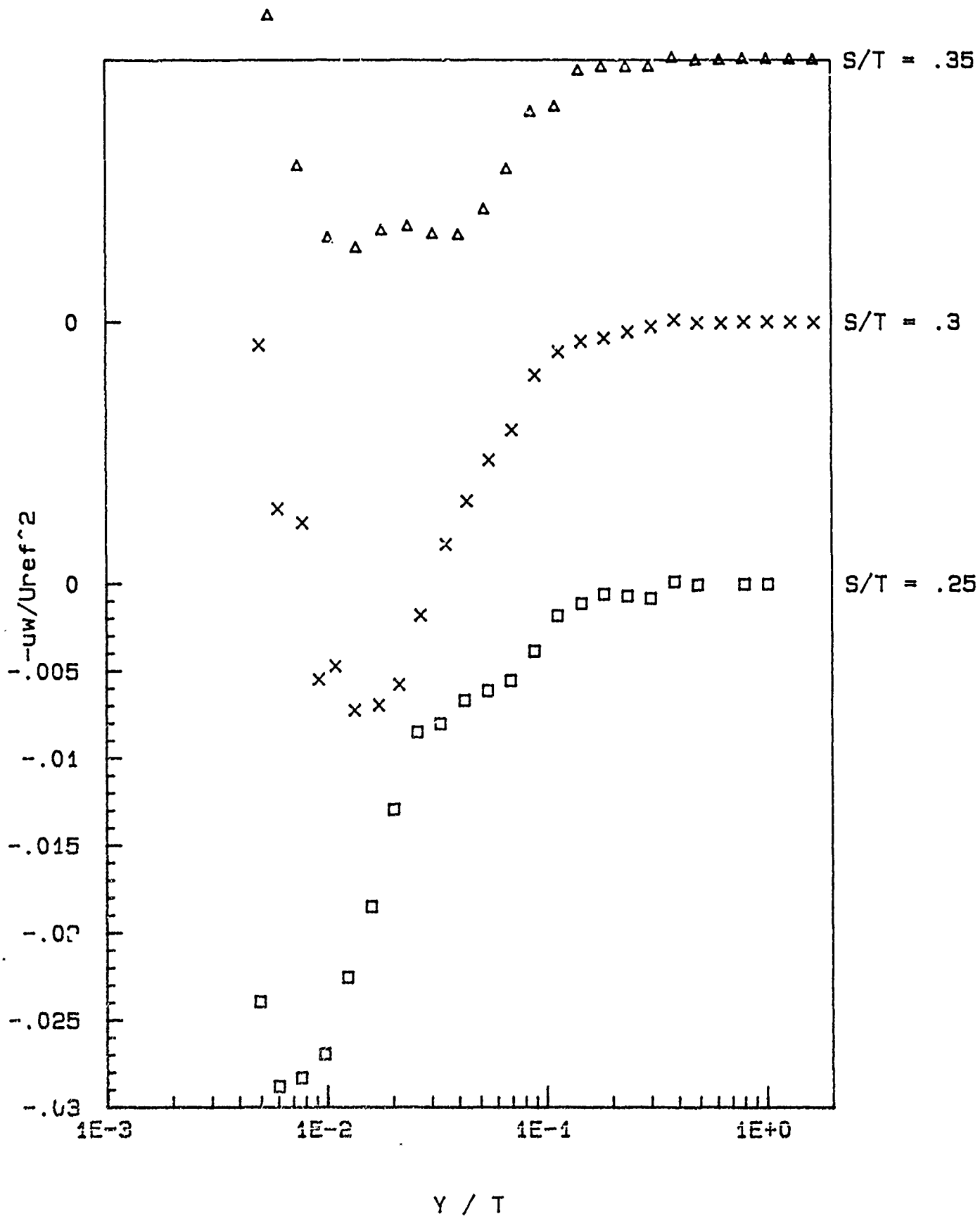


Figure F.2-8(b) Profiles of UW Reynolds shear stress, plane 3.

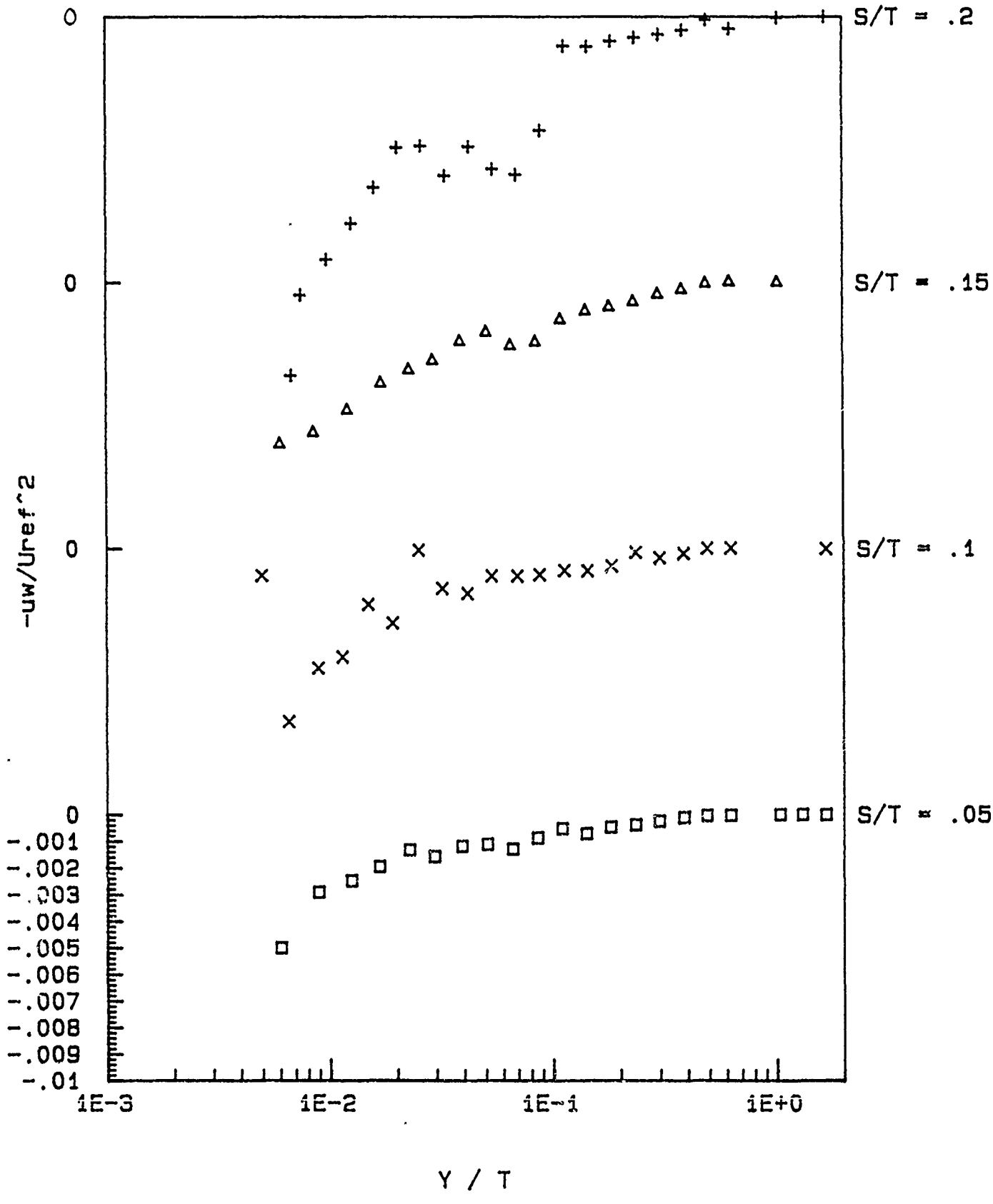


Figure F.2-8(c) Profiles of UW Reynolds shear stress, plane 3.

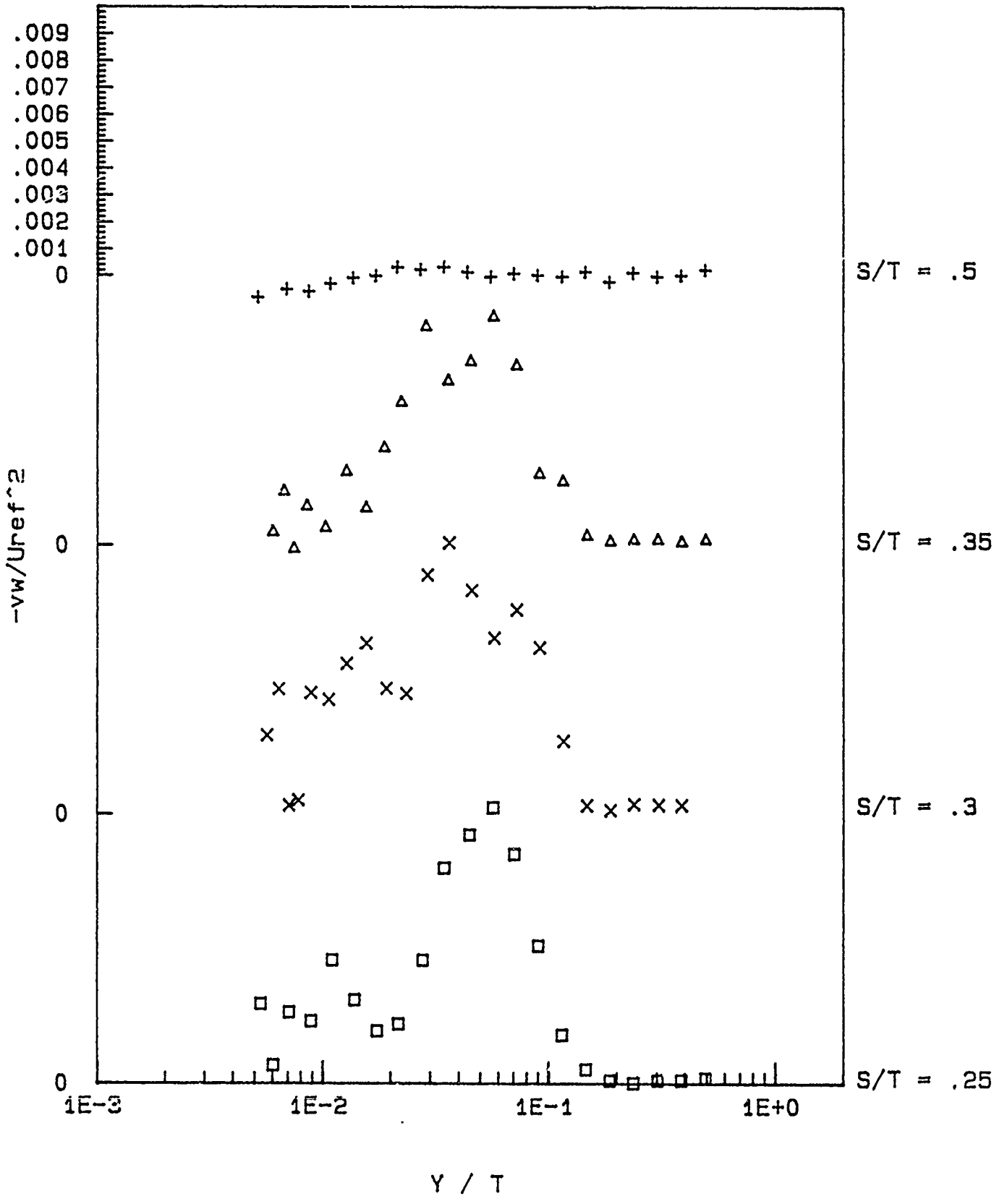


Figure F.2-9(a) Profiles of VW Reynolds shear stress, plane 3.

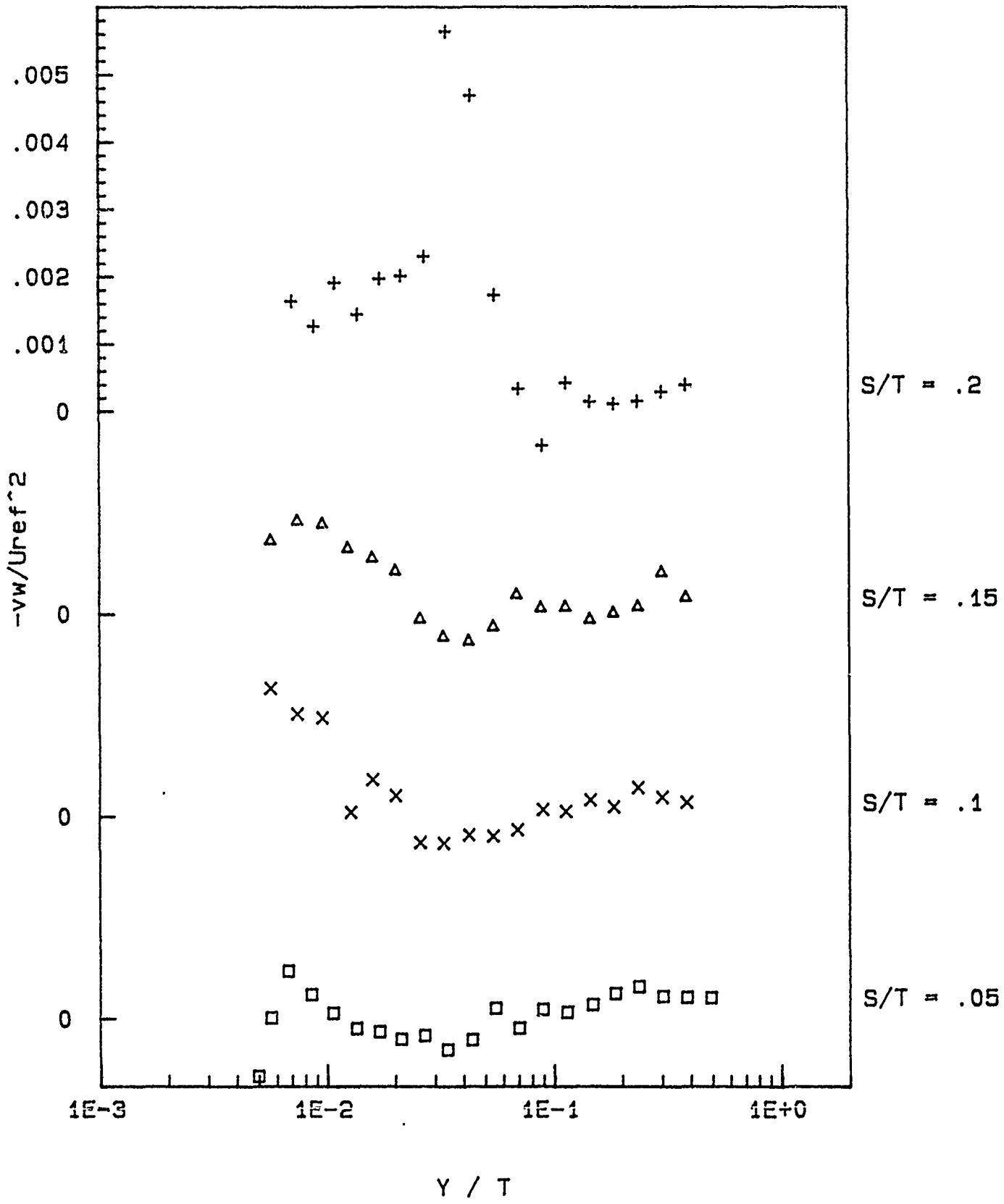


Figure F.2-9(b) Profiles of VW Reynolds shear stress, plane 3.

File E284770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.123061
viscosity (meters squared per second) = 1.626671E-05
Atmospheric pressure (Pascals) = 95450
Velocity of undisturbed free stream (Uref, in m/s) = 27.51973
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094839E-03
Estimated momentum thickness Reynolds number = 6927.575
Location of traverse; X/T =-.4578 Z/T =-.8872 (Plane 3 , S/T = 0.85)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	1.9259E-01				-5.8386E-03				
2.1246E-03	1.8615E-01				-1.1222E-02				
2.8329E-03	2.0177E-01				-1.1168E-02				
4.2493E-03	2.7998E-01	3.7490E-03			-1.4442E-02	1.3055E-04	-5.6999E-01	2.1632E+00	-4.9789E-04
5.3116E-03	3.5218E-01	2.8891E-03			-1.9172E-02	2.6548E-04	-2.7291E-01	1.6378E+00	-5.7589E-04
6.3739E-03	3.8655E-01	5.4142E-03			-2.1544E-02	3.9215E-04	-1.1182E-01	7.5077E-01	-6.2425E-04
7.7904E-03	4.4522E-01	4.6219E-03			-2.5131E-02	8.2158E-04	3.6506E-02	8.2196E-01	-8.2416E-04
9.5609E-03	4.7817E-01	5.9726E-03	8.7504E-02	6.6835E-02	-3.8194E-02	1.2357E-03	-1.2344E-01	7.8407E-01	-5.2399E-04
1.2394E-02	4.8736E-01	6.1367E-03	5.7872E-02	-1.0136E-01	-3.8578E-02	1.4083E-03	-7.4593E-02	3.1522E-01	-8.2923E-04
1.6466E-02	5.1823E-01	6.4185E-03	8.4497E-02	-3.1535E-01	-3.5493E-02	1.3597E-03	1.9624E-01	7.9267E-02	-8.0744E-04
2.0184E-02	5.0715E-01	5.5573E-03	4.2078E-02	-3.8353E-01	-2.8016E-02	1.6248E-03	-8.1779E-02	1.1556E-01	-7.9493E-04
2.5850E-02	5.2262E-01	5.7749E-03	5.8902E-02	-2.8152E-01	-2.8795E-02	1.7800E-03	2.6685E-03	1.5522E-01	-9.9631E-04
3.2932E-02	5.4528E-01	5.8667E-03	8.2867E-02	-3.2095E-01	-2.7826E-02	1.8177E-03	2.3180E-02	1.7067E-01	-8.8576E-04
4.5680E-02	5.7623E-01	5.8890E-03	-1.6680E-02	-3.4757E-01	-2.8473E-02	1.8154E-03	1.1508E-01	8.8592E-02	-1.0084E-03
5.4178E-02	5.9066E-01	6.0331E-03	-5.2649E-03	-3.2185E-01	-3.0668E-02	2.0161E-03	-6.6510E-02	1.6164E-01	-9.1482E-04
6.9405E-02	6.1719E-01	5.8317E-03	-7.8780E-02	-3.3292E-01	-2.7772E-02	1.9525E-03	4.3199E-02	4.4129E-02	-1.1869E-03
8.8173E-02	6.4259E-01	5.6706E-03	-1.0366E-01	-3.5462E-01	-2.9195E-02	1.9916E-03	3.3903E-02	7.2253E-02	-1.3280E-03
1.1296E-01	6.7201E-01	5.4193E-03	-1.5849E-01	-2.8784E-01	-2.6848E-02	1.9448E-03	6.7069E-02	3.8141E-02	-1.1320E-03
1.4412E-01	7.1080E-01	4.8700E-03	-2.1737E-01	-2.0954E-01	-2.5050E-02	1.8458E-03	1.2408E-01	-2.6219E-03	-1.0408E-03
1.8449E-01	7.4752E-01	4.3685E-03	-2.4890E-01	-2.2435E-01	-2.5463E-02	1.7240E-03	1.2124E-01	4.5715E-02	-8.5028E-04
2.3513E-01	7.9319E-01	3.5748E-03	-3.6837E-01	-9.6687E-02	-2.7205E-02	1.2662E-03	2.6041E-01	9.8629E-03	-9.7932E-04
3.0028E-01	8.4737E-01	2.6378E-03	-4.2942E-01	1.0837E-01	-2.8883E-02	9.7080E-04	3.1528E-01	1.3278E-01	-7.4228E-04
3.8350E-01	8.8909E-01	1.3372E-03	-6.4871E-01	1.5770E-01	-2.1894E-02	6.4018E-04	4.4234E-01	5.3634E-01	-5.1189E-04
4.8973E-01	9.3254E-01	4.3030E-04	-9.4296E-01	1.3751E+00	-2.3354E-02	3.2500E-04	3.6470E-01	6.3664E-01	-3.2826E-05
6.2571E-01	9.3793E-01	5.9050E-05	-2.1258E-02	-2.8595E-02	-2.0816E-02	6.3751E-05	2.3182E-01	6.7031E-02	-9.3658E-06
7.9887E-01	9.3740E-01	2.9397E-05	-2.2625E-01	-2.0731E-01	-2.2400E-02	2.5954E-05	7.0711E-02	-3.2887E-01	1.1181E-05
1.0202E+00	9.3838E-01	3.0610E-05	-1.9982E-01	-8.5719E-02	-1.0664E-02	3.0548E-05	-1.8086E-02	-1.9143E-01	1.3850E-05
1.3045E+00	9.3625E-01	2.5374E-05	-2.3823E-01	4.0818E-02	-7.4376E-03	2.8052E-05	-1.6168E-02	-2.1024E-01	
1.6636E+00	9.3523E-01	2.0856E-05	-2.3994E-01	3.4443E-02	6.7737E-04	2.6635E-05	-2.3650E-02	-1.8645E-01	

Table F.2-1 Velocity measurements made at S/T = 0.85 with the UV system of the laser anemometer, plane 3

File E285770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.9
density (kilograms per meter cubed) = 1.105698
viscosity (meters squared per second) = 1.656088E-05
Atmospheric pressure (Pascals) = 94260
Velocity of undisturbed free stream (Uref, in m/s) = 27.52845
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09458E-03
Estimated momentum thickness Reynolds number = 6806.245
Location of traverse; X/T =-.308 Z/T =-.7547 (Plane 3 , S/T = 0.65)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	1.2958E-01				-6.8848E-03				
2.1246E-03	1.5471E-01				-9.8645E-03				
2.8329E-03	1.6618E-01				-1.5122E-02				
3.5411E-03	1.9898E-01				-1.8859E-02	1.1608E-04			
4.6034E-03	2.6479E-01				-2.9086E-02	2.7482E-04			
5.6657E-03	3.4222E-01				-3.1787E-02	5.3370E-04	-8.3775E-02	7.0916E-01	
7.4363E-03	3.9138E-01	5.2986E-03	2.1058E-01	7.8199E-01	-3.3515E-02	7.7137E-04	-4.6170E-02	2.9859E-01	-1.0962E-03
9.5609E-03	4.2833E-01	5.6203E-03	5.3298E-02	3.3358E-02	-3.3103E-02	1.1581E-03	8.9992E-02	2.3830E-01	-1.0647E-03
1.3456E-02	4.4643E-01	5.8988E-03	3.6919E-02	-1.7052E-01	-3.4666E-02	1.5830E-03	-2.3257E-02	3.3758E-01	-8.6061E-04
1.5935E-02	4.6410E-01	5.7926E-03	9.4466E-02	-1.6960E-01	-3.7098E-02	1.7460E-03	-9.2589E-02	4.0756E-01	-7.8902E-04
2.0184E-02	4.7690E-01	5.7166E-03	4.5301E-02	-2.2028E-01	-3.7518E-02	1.8456E-03	-6.1279E-02	2.8926E-01	-6.0153E-04
2.6204E-02	4.9579E-01	5.9222E-03	4.8185E-02	-2.3778E-01	-3.5964E-02	1.9889E-03	-9.0202E-02	2.4315E-01	-9.3673E-04
3.2932E-02	5.1295E-01	5.9411E-03	3.1094E-03	-2.5671E-01	-3.2757E-02	2.1431E-03	-1.6184E-01	2.6767E-01	-1.0531E-03
4.2493E-02	5.4420E-01	6.1467E-03	-4.7675E-02	-2.8415E-01	-3.5646E-02	2.2498E-03	-9.6980E-02	3.1081E-01	-9.4284E-04
5.4533E-02	5.6960E-01	6.4294E-03	-1.0397E-02	-2.7219E-01	-3.2326E-02	2.2647E-03	-4.0416E-02	1.8238E-01	-9.7109E-04
6.9051E-02	5.9796E-01	6.1020E-03	-4.2022E-02	-2.2730E-01	-3.2603E-02	2.2770E-03	-5.4816E-02	1.0334E-01	-8.9068E-04
8.8173E-02	6.2789E-01	5.8383E-03	-1.1888E-01	-2.5123E-01	-2.9842E-02	2.2228E-03	3.5184E-02	1.4036E-01	-1.0386E-03
1.1296E-01	6.5604E-01	5.4792E-03	-1.2857E-01	-2.5931E-01	-2.6466E-02	2.1050E-03	1.3608E-01	9.1835E-02	-1.2398E-03
1.4412E-01	6.9243E-01	4.9156E-03	-2.0163E-01	-2.6857E-01	-2.4180E-02	1.9087E-03	1.4623E-01	1.9926E-02	-1.1929E-03
1.8520E-01	7.3425E-01	4.3282E-03	-2.3608E-01	-2.3236E-01	-2.6252E-02	1.8227E-03	1.3818E-01	2.7480E-02	-1.3345E-03
2.3513E-01	7.7996E-01	3.7391E-03	-3.3846E-01	-1.3108E-01	-2.8362E-02	1.4261E-03	2.6402E-01	2.3708E-02	-9.9634E-04
3.0028E-01	8.2990E-01	2.7934E-03	-4.4778E-01	9.0829E-02	-3.1687E-02	1.0586E-03	3.2431E-01	6.8085E-02	-7.1004E-04
3.8350E-01	8.8461E-01	1.6439E-03	-6.0967E-01	2.4918E-01	-3.0425E-02	7.2306E-04	4.0734E-01	3.9163E-01	-4.1954E-04
4.8973E-01	9.2076E-01	4.6425E-04	-1.0057E+00	1.6889E+00	-3.4566E-02	3.4995E-04	3.6068E-01	6.1083E-01	-5.4133E-05
6.2606E-01	9.3212E-01	5.5361E-05	-3.5954E-03	1.6258E-01	-3.1293E-02	7.4532E-05	1.4916E-01	-7.3907E-03	2.1744E-05
7.9887E-01	9.2687E-01	3.5171E-05	-2.0729E-01	-1.6508E-01	-2.4024E-02	3.3553E-05	8.3085E-02	-2.2314E-01	1.3258E-05
1.0209E+00	9.2559E-01	3.1314E-05	-2.1328E-01	-3.0125E-01	-1.8670E-02	3.5808E-05	8.6338E-02	-2.6824E-01	1.6639E-05
1.3028E+00	9.1804E-01	3.1146E-05	-1.3443E-01	-3.2103E-01	-1.4752E-02	3.0543E-05	2.5097E-01	-1.8312E-01	1.3148E-05
1.6636E+00	9.2053E-01	3.4542E-05	-2.0004E-01	-3.0797E-01	-5.3593E-03	2.5368E-05	1.9470E-01	-1.5571E-01	1.4782E-05

Table F.2-2 Velocity measurements made at S/T = 0.65 with the UV system of the laser anemometer, plane 3

File E286770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.113237
viscosity (meters squared per second) = 1.641027E-05
Atmospheric pressure (Pascals) = 94615
Velocity of undisturbed free stream (Uref, in m/s) = 27.53122
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094497E-03
Estimated momentum thickness Reynolds number = 6869.266
Location of traverse; X/T =-.1957 Z/T =-.6553 (Plane 3 , S/T = 0.50)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	1.7357E-01				-1.1477E-02				
3.0099E-03	1.7261E-01				-1.4271E-02				
3.5411E-03	2.0702E-01				-2.3595E-02				
4.6034E-03	2.7551E-01	1.8869E-03			-2.9427E-02	2.8348E-04	-4.5190E-01	1.7837E+00	-1.6988E-04
5.6657E-03	3.1505E-01	3.9060E-03			-3.4795E-02	5.1552E-04	-2.0068E-01	1.0198E+00	-4.7256E-04
7.4363E-03	3.4549E-01	4.9115E-03	6.1501E-02	3.6689E-01	-3.8384E-02	7.9871E-04	-3.9791E-02	4.5426E-01	-5.6224E-04
9.5609E-03	3.8001E-01	5.6764E-03	1.0702E-01	1.9938E-02	-4.1322E-02	1.6832E-03	-3.1030E-02	4.4876E-01	-6.6565E-04
1.3102E-02	4.0026E-01	6.3454E-03	1.0091E-02	-2.2408E-01	-4.1255E-02	1.9396E-03	2.7389E-02	3.0060E-01	-8.7328E-04
1.5935E-02	4.1360E-01	6.8824E-03	-2.6298E-02	-1.7633E-01	-4.1175E-02	2.2442E-03	5.9664E-02	2.6024E-01	-1.2661E-03
2.0184E-02	4.2944E-01	7.3526E-03	-7.1531E-02	-1.8779E-01	-4.0248E-02	2.3640E-03	1.0826E-01	2.2106E-01	-1.5999E-03
2.5850E-02	4.4434E-01	7.4523E-03	-1.0720E-01	-1.9141E-01	-4.1646E-02	2.8011E-03	1.0129E-02	2.6109E-01	-1.7098E-03
3.2932E-02	4.6991E-01	7.5365E-03	-1.4189E-01	-1.5487E-01	-3.7392E-02	2.7414E-03	9.6610E-02	3.2070E-01	-2.2680E-03
4.2493E-02	5.0738E-01	7.2316E-03	-1.4043E-01	-1.1852E-01	-3.1395E-02	2.6730E-03	9.3700E-02	1.3425E-01	-2.1034E-03
5.4178E-02	5.3532E-01	6.8372E-03	-1.3990E-01	-1.9085E-01	-3.0088E-02	2.7131E-03	9.8190E-02	9.3910E-02	-2.6298E-03
7.1530E-02	5.7675E-01	6.6554E-03	-1.9346E-01	-1.3643E-01	-2.6706E-02	2.6264E-03	8.5246E-02	1.8992E-01	-1.8756E-03
8.8173E-02	6.0680E-01	6.3240E-03	-1.7070E-01	-1.9726E-01	-2.6871E-02	2.5993E-03	1.0814E-01	1.7242E-01	-2.2348E-03
1.1296E-01	6.4629E-01	5.7254E-03	-1.8592E-01	-1.8818E-01	-2.4106E-02	2.3661E-03	2.0132E-01	7.7470E-02	-1.9469E-03
1.4412E-01	6.8574E-01	5.0957E-03	-2.0667E-01	-1.7821E-01	-2.8798E-02	2.2630E-03	1.6313E-01	7.5860E-02	-1.1403E-03
1.8431E-01	7.3038E-01	4.4104E-03	-2.5852E-01	-1.7319E-01	-3.1833E-02	1.9878E-03	2.2979E-01	8.7806E-02	-1.0635E-03
2.3513E-01	7.7891E-01	3.6369E-03	-3.3213E-01	-9.3682E-02	-3.8805E-02	1.6838E-03	1.8934E-01	2.5731E-02	-8.0548E-04
3.0028E-01	8.2804E-01	2.7274E-03	-4.3852E-01	3.1305E-02	-3.7180E-02	1.2954E-03	2.7827E-01	1.6329E-01	-5.9419E-04
3.8350E-01	8.8185E-01	1.7238E-03	-5.8351E-01	3.9897E-01	-4.1809E-02	7.5437E-04	4.0870E-01	4.1115E-01	-3.0750E-04
4.8973E-01	9.1973E-01	4.3659E-04	-1.0299E+00	1.7391E+00	-4.4644E-02	3.6033E-04	3.4882E-01	6.8460E-01	-3.4181E-05
6.2571E-01	9.2215E-01	5.2706E-05	6.8825E-02	1.1348E-01	-4.1434E-02	7.3858E-05	1.2288E-01	-3.2266E-02	2.3257E-05
7.9993E-01	9.1329E-01	3.3779E-05	-1.9332E-01	-1.7358E-01	-5.1720E-02	3.6302E-05	1.4232E-01	-3.1560E-01	1.6711E-05
1.0202E+00	9.0831E-01	3.4262E-05	-1.5779E-01	-2.8398E-01	-2.9672E-02	2.8771E-05	2.0165E-01	-2.4996E-01	1.3686E-05
1.3028E+00	9.0542E-01	3.4355E-05	-2.2940E-01	-2.7612E-01	-1.3860E-02	3.2217E-05	4.1143E-02	-2.9935E-01	1.5182E-05
1.6636E+00	9.0757E-01	3.3821E-05	-2.6519E-01	-1.8532E-01	-2.5952E-03	3.3613E-05	1.7323E-01	-2.7597E-01	1.7903E-05

Table F.2-3 Velocity measurements made at S/T = 0.50 with the UV system of the laser anemometer, plane 3

File E287770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.9
density (kilograms per meter cubed) = 1.122028
viscosity (meters squared per second) = 1.627742E-05
Atmospheric pressure (Pascals) = 95330
Velocity of undisturbed free stream (Uref, in m/s) = 27.53963
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094247E-03
Estimated momentum thickness Reynolds number = 6927.024
Location of traverse; X/T =-.1208 Z/T =-.589 (Plane 3 , S/T = 0.40)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.5935E-03	2.0306E-01				-1.2902E-02				
2.3017E-03	1.7706E-01				-8.8140E-03				
3.1870E-03	1.5971E-01	5.7374E-03			-1.3050E-02	1.0348E-04			
3.8952E-03	1.4885E-01	5.8859E-03			-1.3897E-02	8.3936E-05			
4.6034E-03	1.5889E-01				-1.7745E-02	5.9718E-05			
5.6657E-03	2.7812E-01				-2.9055E-02	3.4193E-04			
7.4363E-03	3.0459E-01	9.2855E-03	4.3553E-02	3.7391E-01	-3.4517E-02	6.2211E-04	-3.6144E-01	1.5969E+00	-9.3035E-04
9.5609E-03	3.4368E-01	7.7567E-03	3.2166E-02	2.6677E-01	-5.4683E-02	1.7910E-03	-6.9793E-01	9.4366E-01	-5.9865E-04
1.2394E-02	3.6875E-01	8.0523E-03	-1.0055E-02	8.2070E-02	-5.3838E-02	2.8545E-03	-2.7447E-01	5.1146E-01	-9.5337E-04
1.7351E-02	3.7852E-01	8.4082E-03	-9.9193E-02	6.0773E-02	-5.6849E-02	4.0543E-03	-7.1609E-02	3.1897E-01	-1.2988E-03
2.0361E-02	3.8881E-01	8.9319E-03	-1.8857E-01	1.4331E-01	-5.6739E-02	4.6985E-03	-2.0229E-02	3.3305E-01	-1.2104E-03
2.6558E-02	4.0354E-01	1.0020E-02	-3.4915E-01	3.5058E-01	-6.0541E-02	6.6719E-03	4.7177E-02	4.2587E-01	-1.1258E-03
3.2932E-02	4.2111E-01	1.1819E-02	-5.8255E-01	8.9366E-01	-5.8437E-02	7.3248E-03	1.1007E-01	5.1613E-01	-1.3198E-03
4.3024E-02	4.5530E-01	1.1371E-02	-6.2354E-01	9.2561E-01	-5.1263E-02	6.5580E-03	2.6535E-01	6.7542E-01	-1.3825E-03
5.5595E-02	4.9070E-01	1.2402E-02	-6.8042E-01	7.6420E-01	-3.6851E-02	7.8006E-03	9.0271E-01	2.1466E+00	-1.3436E-03
7.2238E-02	5.3849E-01	9.4787E-03	-5.0303E-01	4.8597E-01	-3.1596E-02	5.6917E-03	8.1455E-01	1.9208E+00	-1.6816E-03
8.8527E-02	5.8132E-01	8.0075E-03	-3.0759E-01	8.4838E-02	-2.6259E-02	4.3182E-03	5.6206E-01	9.4860E-01	-2.1417E-03
1.1296E-01	6.2962E-01	6.8520E-03	-2.8569E-01	1.7259E-02	-2.0505E-02	4.0976E-03	3.6966E-01	4.1316E-01	-1.5585E-03
1.4412E-01	6.8073E-01	5.4262E-03	-2.0011E-01	-9.4348E-02	-2.7696E-02	2.6497E-03	2.5163E-01	1.3763E-01	-1.7079E-03
1.8449E-01	7.3428E-01	4.3420E-03	-2.3677E-01	-1.3827E-01	-3.9717E-02	2.2360E-03	2.2815E-01	1.0739E-01	-1.4441E-03
2.3584E-01	7.8189E-01	3.5176E-03	-3.1217E-01	-1.2240E-01	-5.6055E-02	1.8567E-03	1.8779E-01	1.7289E-01	-7.7010E-04
3.0064E-01	8.2787E-01	2.7942E-03	-4.4245E-01	1.1147E-01	-6.0883E-02	1.3832E-03	1.6002E-01	2.0791E-01	-5.2760E-04
3.8350E-01	8.7726E-01	1.6523E-03	-6.4729E-01	3.7065E-01	-6.5809E-02	7.5647E-04	3.7314E-01	3.3265E-01	-3.6566E-04
4.8973E-01	9.1119E-01	3.9668E-04	-8.8588E-01	1.4565E+00	-6.3480E-02	3.6495E-04	2.5627E-01	5.3552E-01	-2.7243E-05
6.2571E-01	9.0970E-01	6.2932E-05	9.5151E-02	3.9564E-02	-5.8147E-02	7.6697E-05	3.7974E-01	1.5771E-01	2.5682E-05
7.9887E-01	9.0046E-01	2.9473E-05	-4.2990E-02	-2.5772E-01	-5.1340E-02	3.1917E-05	2.1467E-01	-1.1690E-01	1.3957E-05
1.0202E+00	9.0078E-01	2.5129E-05	-1.0132E-01	-2.6336E-01	-3.3752E-02	4.2095E-05	2.3475E-01	-2.6787E-01	1.6334E-05
1.3028E+00	8.9627E-01	2.5650E-05	-2.9431E-01	-9.9658E-02	-1.4522E-02	4.0373E-05	-2.3026E-01	-2.2156E-01	1.6448E-05
1.6636E+00	8.9686E-01	2.5305E-05	-1.8611E-02	-4.1873E-01	-1.4269E-03	2.4852E-05	-4.4210E-02	-2.4087E-01	1.0989E-05

Table F.2-4 Velocity measurements made at S/T = 0.40 with the UV system of the laser anemometer, plane 3

File E288770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.2
density (kilograms per meter cubed) = 1.125869
viscosity (meters squared per second) = 1.61923E-05
Atmospheric pressure (Pascals) = 95430
Velocity of undisturbed free stream (Uref, in m/s) = 27.51743
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094908E-03
Estimated momentum thickness Reynolds number = 6958.947
Location of traverse; X/T =-.0833 Z/T =-.5559 (Plane 3 , S/T = 0.35)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	1.8530E-01				-1.6437E-02				
2.8329E-03	1.9733E-01				-1.8534E-02				
3.5411E-03	2.0747E-01				-1.8638E-02				
4.6034E-03	3.1203E-01	7.7903E-03			-3.3406E-02	7.1486E-04			-9.4990E-04
5.6657E-03	3.3914E-01	2.0813E-02	-7.0715E-01	1.0819E+00	-4.6648E-02	1.7949E-03	-4.2977E-01	1.7876E+00	-1.8284E-03
7.4363E-03	3.5007E-01	2.4214E-02	-7.9384E-01	8.3035E-01	-5.2098E-02	3.0506E-03	-2.7379E-01	8.2037E-01	-2.4954E-03
9.5609E-03	3.5048E-01	2.5953E-02	-8.6446E-01	7.9076E-01	-5.5749E-02	4.4865E-03	-7.8306E-02	4.8329E-01	-4.1240E-03
1.2394E-02	3.5001E-01	2.8992E-02	-8.1666E-01	3.8213E-01	-5.5310E-02	6.4849E-03	-1.0335E-03	2.3894E-01	-5.5734E-03
1.6289E-02	3.4631E-01	2.6645E-02	-8.1716E-01	3.9627E-01	-5.7876E-02	1.1050E-02	1.9856E-01	1.7389E-01	-8.8299E-03
2.0715E-02	3.4923E-01	2.5928E-02	-8.1699E-01	3.3769E-01	-5.4670E-02	1.3443E-02	3.1078E-01	2.8856E-01	-9.5093E-03
2.5850E-02	3.5739E-01	2.6458E-02	-6.9530E-01	-6.7394E-02	-4.9233E-02	1.7006E-02	5.1341E-01	2.1624E-01	-1.0531E-02
3.2932E-02	3.5959E-01	2.8062E-02	-4.9514E-01	-4.2938E-01	-3.4224E-02	2.2670E-02	5.6625E-01	-4.6444E-03	-1.4149E-02
4.2493E-02	3.8650E-01	2.6469E-02	-4.7637E-01	-4.2467E-01	-2.0430E-02	2.3986E-02	6.1408E-01	-3.9603E-02	-1.4847E-02
5.4178E-02	4.5282E-01	2.0531E-02	-5.6084E-01	-2.8625E-02	-5.2990E-03	2.3352E-02	8.6364E-01	5.0017E-01	-1.1531E-02
6.9051E-02	5.2512E-01	1.4498E-02	-5.3927E-01	2.5483E-01	4.9375E-04	1.9066E-02	9.8704E-01	9.9464E-01	-9.0266E-03
8.8173E-02	6.0023E-01	1.1147E-02	-2.8144E-01	2.9442E-01	-4.7645E-03	1.3723E-02	9.8191E-01	1.3041E+00	-5.0028E-03
1.1367E-01	6.5647E-01	7.7946E-03	-2.0270E-01	6.3412E-02	-2.4597E-02	6.7851E-03	6.9277E-01	1.4207E+00	-1.7385E-03
1.4412E-01	7.0220E-01	6.0363E-03	-2.0193E-01	-2.3898E-02	-3.9088E-02	3.8437E-03	2.8072E-01	2.4394E-01	-1.2287E-03
1.8520E-01	7.6341E-01	4.2599E-03	-2.4184E-01	-1.5012E-01	-5.4962E-02	2.2889E-03	1.8655E-01	7.7076E-02	-1.4964E-03
2.3513E-01	7.8875E-01	3.4755E-03	-3.4035E-01	-9.2664E-02	-6.8136E-02	1.7410E-03	2.6455E-01	1.2390E-01	-7.7981E-04
3.0064E-01	8.3235E-01	2.4702E-03	-4.4620E-01	-2.7641E-02	-8.0292E-02	1.3158E-03	2.5837E-01	2.0430E-01	-4.7058E-04
3.8456E-01	8.7425E-01	1.5108E-03	-6.4428E-01	4.1150E-01	-8.5600E-02	7.9435E-04	4.4478E-01	5.3047E-01	-3.4474E-04
4.8973E-01	9.0092E-01	3.6591E-04	-1.1350E+00	2.4657E+00	-8.3858E-02	3.1020E-04	2.8010E-01	8.2992E-01	-1.0378E-04
6.2571E-01	8.9680E-01	5.2688E-05	1.0473E-01	2.1280E-01	-7.1328E-02	6.5584E-05	1.9163E-01	-1.0411E-02	1.1539E-05
7.9887E-01	8.8827E-01	2.8140E-05	-7.4922E-03	-3.0419E-01	-4.7376E-02	2.4575E-05	6.0425E-02	-2.5498E-01	6.4908E-06
1.0202E+00	8.8644E-01	2.1119E-05	-1.6278E-01	-8.7972E-02	-3.6240E-02	3.0298E-05	-1.4824E-01	-1.1570E-01	1.0281E-05
1.3026E+00	8.8480E-01	2.8204E-05	1.8325E-02	-3.1667E-01	-2.3118E-02	2.8281E-05	-4.7873E-02	-2.3361E-01	1.4904E-05
1.6728E+00	8.8436E-01	2.9191E-05	-4.4440E-02	-3.7089E-01	-9.8396E-03	2.8519E-05	7.4891E-02	-2.5193E-01	1.1311E-05

Table F.2-5 Velocity measurements made at S/T = 0.35 with the UV system of the laser anemometer, plane 3

File E289770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 25.2
density (kilograms per meter cubed) = 1.085636
viscosity (meters squared per second) = 1.692379E-05
Atmospheric pressure (Pascals) = 92955
Velocity of undisturbed free stream (Uref, in m/s) = 27.55028
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093931E-03
Estimated momentum thickness Reynolds number = 6664.517
Location of traverse; X/T =-.0459 Z/T =-.5228001 (Plane 3 , S/T = 0.30)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
2.1246E-03	1.7706E-01				-1.3675E-02				
2.8329E-03	1.7161E-01				-2.0002E-02				
3.8952E-03	2.1629E-01	2.0805E-02	1.2903E-01	9.5775E-02	-3.1506E-02				
4.6034E-03	2.3532E-01	2.6416E-02	-2.8665E-02	-4.5043E-01	-3.9175E-02	1.2000E-03	-7.6140E-01	2.6098E+00	-7.2414E-04
6.3739E-03	2.8543E-01	3.4979E-02	-4.1833E-01	-5.3002E-01	-4.9247E-02	2.6140E-03	-2.8035E-01	8.7809E-01	-1.2015E-03
7.7904E-03	2.8273E-01	3.9865E-02	-3.5124E-01	-8.4573E-01	-5.0597E-02	3.3860E-03	-1.4507E-01	6.2285E-01	-1.1473E-03
9.5609E-03	2.8034E-01	4.2021E-02	-2.2496E-01	-1.0156E+00	-4.9054E-02	5.0599E-03	-4.3037E-02	1.3468E-01	-2.7808E-03
1.2394E-02	2.9264E-01	4.1131E-02	-1.7813E-01	-1.0318E+00	-5.0495E-02	8.0517E-03	3.4968E-02	-2.5599E-02	-3.2880E-03
1.5935E-02	2.8024E-01	3.9218E-02	-4.4653E-02	-9.8797E-01	-3.9178E-02	1.1544E-02	1.3762E-01	-1.6285E-01	-4.5396E-03
2.2309E-02	2.8954E-01	3.3514E-02	-1.0163E-01	-9.1059E-01	-3.2244E-02	2.0633E-02	2.4239E-01	-3.4803E-01	-7.8706E-03
2.5850E-02	2.8649E-01	3.1499E-02	3.5679E-02	-8.3609E-01	-3.3804E-02	2.4727E-02	3.0075E-01	-3.6730E-01	-8.4465E-03
3.2932E-02	2.9595E-01	2.9486E-02	5.6170E-02	-7.1228E-01	-2.4947E-02	2.7647E-02	3.4355E-01	-4.8573E-01	-1.0042E-02
3.4348E-02	3.0056E-01	2.8993E-02	-1.1071E-02	-7.5635E-01	-1.9871E-02	2.7584E-02	3.5508E-01	-5.2352E-01	-1.2104E-02
4.2493E-02	3.3234E-01	2.7052E-02	-2.5606E-02	-5.6112E-01	-1.2316E-02	3.3211E-02	3.5895E-01	-5.0592E-01	-1.2042E-02
5.4887E-02	4.2604E-01	2.3119E-02	-2.5965E-01	-3.5878E-01	-6.9428E-05	3.5846E-02	3.8849E-01	-3.5722E-01	
6.9051E-02	5.4413E-01	1.7548E-02	-2.9442E-01	3.3686E-02	-7.4734E-03	3.2790E-02	4.2328E-01	-1.5956E-01	-1.1057E-02
8.8173E-02	6.2061E-01	1.1968E-02	-1.3529E-01	1.7664E-01	-2.8907E-02	1.7700E-02	6.0047E-01	6.8445E-01	-4.0440E-03
1.1296E-01	6.7128E-01	7.8341E-03	-7.9057E-02	4.2537E-02	-4.2837E-02	9.1065E-03	6.4175E-01	1.2877E+00	-1.5137E-03
1.4448E-01	7.1436E-01	5.6695E-03	-1.3144E-01	-8.5390E-02	-6.2417E-02	4.0727E-03	1.8723E-01	1.9475E-01	-1.0600E-03
1.8484E-01	7.4686E-01	4.0328E-03	-2.5550E-01	-5.4873E-02	-7.6764E-02	2.3654E-03	2.6451E-01	2.0011E-01	-1.4062E-03
2.3513E-01	7.8323E-01	3.3036E-03	-3.1319E-01	-4.6026E-02	-8.7751E-02	1.7915E-03	2.5223E-01	1.3852E-01	-6.9240E-04
3.0028E-01	8.2261E-01	2.4019E-03	-4.3785E-01	4.0670E-02	-9.3889E-02	1.3160E-03	3.2132E-01	2.8364E-01	-4.2605E-04
3.8350E-01	8.6445E-01	1.4735E-03	-6.7455E-01	4.4809E-01	-9.5357E-02	7.9920E-04	4.5009E-01	4.9887E-01	-2.9187E-04
4.8973E-01	8.9206E-01	3.5198E-04	-1.0552E+00	2.1482E+00	-8.9769E-02	3.1879E-04	4.3982E-01	1.1452E+00	-9.3085E-05
6.2571E-01	8.8673E-01	5.9361E-05	3.4378E-02	4.7624E-02	-7.6966E-02	6.6057E-05	3.5676E-02	2.3138E-02	2.2261E-05
7.9887E-01	8.7824E-01	2.8926E-05	-3.4082E-02	-3.1891E-01	-5.1340E-02	3.0699E-05	-3.1227E-02	-1.9374E-01	9.4354E-06
1.0202E+00	8.7744E-01	2.6414E-05	-1.1980E-01	-2.7490E-01	-3.9008E-02	2.5515E-05	-1.2842E-01	-1.2879E-01	1.1601E-05
1.3028E+00	8.7719E-01	2.4693E-05	-1.3912E-01	-2.7213E-01	-1.8650E-02	1.6541E-05	7.1739E-02	-3.4833E-01	5.5859E-06
1.6636E+00	8.8045E-01	2.8370E-05	-2.6206E-01	-2.3255E-01	-3.8507E-03	1.8740E-05	4.7853E-02	-2.7536E-01	1.1170E-05

Table F.2-6 Velocity measurements made at S/T = 0.30 with the UV system of the laser anemometer, plane 3

File E290770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 25.2
density (kilograms per meter cubed) = 1.10298
viscosity (meters squared per second) = 1.665768E-05
Atmospheric pressure (Pascals) = 94440
Velocity of undisturbed free stream (Uref, in m/s) = 28.16233
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.075979E-03
Estimated momentum thickness Reynolds number = 6891.059
Location of traverse; X/T =-.0084 Z/T =-.4896 (Plane 3 , S/T = 0.25)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
7.0822E-04	1.3147E-01				-2.5385E-02				
1.4164E-03	1.3209E-01				-2.6378E-02				
2.4788E-03	1.5478E-01				-3.3606E-02				
3.1870E-03	1.7076E-01	1.6988E-02	7.5147E-01	6.2484E-01	-3.8751E-02	8.2669E-04	-4.1748E-01	1.2124E+00	-2.1552E-03
4.2493E-03	2.2021E-01	2.3607E-02	3.7482E-01	-1.3184E-01	-4.8023E-02	1.5161E-03	-4.1225E-01	1.3456E+00	-1.2647E-03
6.0198E-03	2.4893E-01	3.2516E-02	2.9345E-01	-6.9288E-01	-5.4187E-02	2.4307E-03	1.0011E-01	3.9759E-01	1.9572E-04
8.1445E-03	2.4789E-01				-6.1194E-02	4.1085E-03	2.2939E-01	3.7398E-01	
1.0977E-02	2.4651E-01	3.0019E-02	5.8817E-01	-3.5502E-01	-6.2756E-02	5.6993E-03	3.5090E-01	2.0731E-01	
1.4518E-02	2.5928E-01	2.9217E-02	4.6726E-01	-4.6776E-01	-4.9682E-02	1.2917E-02	2.7544E-01	-2.6291E-01	-3.6907E-03
1.8768E-02	2.5896E-01	2.6155E-02	4.7337E-01	-1.7695E-01	-5.0122E-02	1.7670E-02	2.8495E-01	-2.7709E-01	-4.3001E-03
2.4433E-02	2.6561E-01	2.1415E-02	3.8904E-01	-1.0773E-01	-5.4060E-02	2.3019E-02	4.3096E-01	-1.8782E-01	-5.1921E-03
3.1516E-02	2.8555E-01	1.8347E-02	2.3173E-01	1.6823E-02	-5.8361E-02	2.2459E-02	6.4562E-01	1.9583E-01	-9.5644E-03
4.1076E-02	3.4141E-01	2.1597E-02	-1.6209E-02	-1.7471E-01	-6.5648E-02	4.2458E-02	3.8350E-01	-4.8136E-01	-8.3681E-03
5.5949E-02	4.6818E-01	1.9303E-02	-8.5131E-02	4.7993E-02	-9.5913E-02	4.5413E-02	7.5891E-01	8.3196E-02	-7.1222E-03
6.8343E-02	5.8305E-01	1.7099E-02	-6.4211E-02	1.2629E-02	-7.3570E-02	4.1326E-02	5.8419E-01	-4.8374E-02	-1.2303E-03
9.0652E-02	6.7703E-01	1.0862E-02	-6.7829E-02	1.1426E-01	-9.6085E-02	1.6151E-02	6.9352E-01	9.1406E-01	-3.6425E-04
1.1154E-01	7.0602E-01	8.0895E-03	-8.0303E-02	-1.5281E-02	-1.1472E-01	9.3648E-03	6.2892E-01	9.6285E-01	-4.8965E-04
1.4271E-01	7.3989E-01	5.1838E-03	-1.8864E-01	-7.9799E-02	-1.1661E-01	4.4926E-03	2.0709E-01	1.7394E-01	-8.0279E-04
1.8272E-01	7.6789E-01	3.8256E-03	-2.2488E-01	-1.1217E-01	-1.1057E-01	2.5921E-03	1.5295E-01	5.8201E-02	-1.3062E-03
2.3371E-01	8.0093E-01	3.0821E-03	-2.9156E-01	-1.3390E-01	-1.1858E-01	2.1491E-03	1.7938E-02	3.8607E-01	-1.2403E-03
2.9887E-01	8.3878E-01	2.1905E-03	-4.5420E-01	4.2334E-02	-1.2319E-01	1.3591E-03	2.3263E-01	3.4731E-01	-9.0933E-04
3.8208E-01	8.7941E-01	1.1557E-03	-6.8814E-01	6.6281E-01	-1.1705E-01	6.7966E-04	3.4298E-01	4.4960E-01	-3.1890E-04
4.8831E-01	8.9634E-01	2.6905E-04	-9.3065E-01	2.1174E+00	-1.0937E-01	2.0694E-04	1.3507E-01	6.8040E-01	2.0350E-05
6.2429E-01	8.8624E-01	5.2890E-05	5.3655E-02	3.5442E-02	-8.0040E-02	7.4916E-05	2.9221E-03	-1.1995E-01	2.2104E-05
7.9745E-01	8.7727E-01	2.4734E-05	-2.3319E-02	-1.9797E-01	-6.0483E-02	2.7925E-05	-5.3090E-02	-1.3005E-01	4.0792E-06
1.0188E+00	8.7960E-01	2.3791E-05	-1.0743E-01	-3.2709E-01	-4.0622E-02	2.9302E-05	-7.3574E-02	-1.7449E-01	9.5408E-06
1.3013E+00	8.8354E-01	2.2082E-05	-1.6133E-01	-2.4967E-01	-2.5724E-02	2.3877E-05	-9.0390E-02	-1.7178E-01	8.4254E-06
1.6629E+00	8.8627E-01	2.2861E-05	-2.3548E-01	-1.4595E-01	-1.0497E-02	2.8982E-05	-7.5302E-02	-1.5735E-01	1.2932E-05

Table F.2-7 Velocity measurements made at S/T = 0.25 with the UV system of the laser anemometer, plane 3

File E291770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.120257
viscosity (meters squared per second) = 1.626486E-05
Atmospheric pressure (Pascals) = 94890
Velocity of undisturbed free stream (Uref, in m/s) = 27.46314
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.096525E-03
Estimated momentum thickness Reynolds number = 6916.964
Location of traverse; X/T = .029 Z/T =-.4565 (Plane 3 , S/T = 0.20)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	1.2573E-01				-3.0757E-02				
2.4788E-03	1.3350E-01				-3.7237E-02				
3.5411E-03	1.9208E-01	1.1515E-02			-5.0802E-02	2.6004E-04			1.4067E-03
4.6034E-03	2.0634E-01	1.3813E-02	4.6366E-01	5.7224E-01	-6.9650E-02	1.0787E-03			5.8133E-05
6.0198E-03	2.2456E-01	1.5115E-02	6.4032E-01	7.8223E-01	-7.9551E-02	2.3957E-03	1.2286E-01	1.2682E+00	3.4801E-04
7.4363E-03	2.3469E-01	1.3549E-02	6.0272E-01	8.3853E-01	-8.3416E-02	2.8263E-03	2.7730E-01	9.8161E-01	8.6544E-04
9.5609E-03	2.4419E-01	1.1369E-02	4.0400E-01	5.3706E-01	-8.7138E-02	3.8286E-03	4.4002E-01	1.0783E+00	-5.8957E-04
1.2394E-02	2.5519E-01	1.0075E-02	2.4051E-01	2.5627E-01	-9.3818E-02	4.7466E-03	5.2049E-01	1.1475E+00	-1.3867E-03
1.5935E-02	2.6019E-01	1.1311E-02	3.1317E-01	4.6799E-01	-9.9340E-02	9.6296E-03	4.5399E-01	6.9139E-01	-2.5974E-03
2.0538E-02	2.8348E-01	1.1245E-02	-3.5313E-03	2.7631E-01	-1.0818E-01	1.2942E-02	7.3279E-01	1.2186E+00	-2.4109E-03
2.5850E-02	3.1311E-01	1.1573E-02	-1.0292E-01	2.3375E-01	-1.2566E-01	1.4761E-02	7.7384E-01	1.6492E+00	-2.8284E-03
3.2932E-02	3.6809E-01	1.0867E-02	-3.4799E-01	3.7246E-01	-1.5019E-01	1.5181E-02	7.8130E-01	2.1232E+00	-3.5926E-03
4.2493E-02	4.1179E-01	1.3978E-02	-3.5301E-01	4.9301E-01	-1.7048E-01	2.6839E-02	9.1362E-01	1.7480E+00	-3.5110E-03
5.4178E-02	5.0168E-01	1.2175E-02	-1.0937E-02	4.0362E-01	-2.0063E-01	2.3055E-02	9.1412E-01	2.3666E+00	2.6868E-04
6.9051E-02	5.9802E-01	1.3680E-02	2.2306E-01	2.7267E-02	-1.9292E-01	1.9930E-02	7.9383E-01	1.7369E+00	-4.4415E-04
8.8173E-02	6.5826E-01	1.0132E-02	1.7593E-01	3.1637E-02	-1.9344E-01	9.1499E-03	6.5982E-01	1.5437E+00	-2.9353E-04
1.1314E-01	7.1710E-01	6.7668E-03	-2.3816E-02	-7.7282E-02	-1.7482E-01	5.3186E-03	3.4482E-01	3.5979E-01	-4.5664E-04
1.4412E-01	7.3820E-01	4.2611E-03	-1.3807E-01	-1.7877E-01	-1.6498E-01	3.4019E-03	2.3238E-01	5.0396E-02	-7.6003E-04
1.8414E-01	7.6755E-01	3.4697E-03	-2.3494E-01	-1.1757E-01	-1.5570E-01	2.4481E-03	1.5831E-01	3.7410E-03	-6.2655E-04
2.3513E-01	7.9967E-01	2.7875E-03	-3.5419E-01	-1.9751E-02	-1.5446E-01	1.8195E-03	1.9563E-01	8.8884E-02	-5.5959E-04
3.0028E-01	8.3785E-01	2.0914E-03	-4.8912E-01	1.6510E-01	-1.5032E-01	1.2947E-03	2.2067E-01	1.6582E-01	-2.8234E-04
3.8350E-01	8.6741E-01	1.1448E-03	-7.2796E-01	5.5220E-01	-1.4252E-01	8.2852E-04	2.4224E-01	4.0435E-01	-1.4615E-04
4.8973E-01	8.8659E-01	2.1497E-04	-5.4403E-01	1.4670E+00	-1.2351E-01	2.8903E-04	2.0589E-01	1.1444E+00	9.2975E-06
6.2571E-01	8.7608E-01	5.7971E-05	-3.3343E-03	3.8115E-02	-9.7078E-02	6.5632E-05	3.5929E-03	-1.1786E-01	1.7173E-05
8.1480E-01	8.7098E-01	2.9925E-05	-1.2598E-01	-2.2559E-01	-6.3822E-02	3.3523E-05	-1.2127E-01	-2.1906E-01	9.6848E-06
1.0202E+00	8.7331E-01	2.6148E-05	-1.1063E-01	-2.5194E-01	-5.1295E-02	3.4111E-05	-4.2122E-02	-2.8600E-01	1.2901E-05
1.3028E+00	8.7628E-01	2.3096E-05	-1.6118E-01	-2.9372E-01	-3.4819E-02	2.3651E-05	-1.7327E-01	-1.6431E-01	6.4039E-06
1.6636E+00	8.8161E-01	1.8674E-05	-1.1318E-01	-2.5162E-01	-1.9921E-02	2.4483E-05	-1.2051E-01	-2.5400E-01	8.8028E-06

Table F.2-8 Velocity measurements made at S/T = 0.20 with the UV system of the laser anemometer, plane 3

File E292770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.2
density (kilograms per meter cubed) = 1.118672
viscosity (meters squared per second) = 1.629646E-05
Atmospheric pressure (Pascals) = 94820
Velocity of undisturbed free stream (Uref, in m/s) = 27.40042
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.098399E-03
Estimated momentum thickness Reynolds number = 6890.932
Location of traverse; X/T = .0665 Z/T =-.4234 (Plane 3 , S/T = 0.15)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	2.0709E-01				-4.3549E-02				
2.1246E-03	2.4910E-01				-4.7911E-02				
3.0099E-03	2.8402E-01	8.9578E-03			-6.2507E-02	1.5214E-04			-1.6497E-04
3.5411E-03	2.9323E-01	1.0085E-02	1.4970E-01	2.0164E-01	-6.9044E-02	2.6644E-04			2.1737E-04
4.6034E-03	3.0278E-01	1.0160E-02	9.4624E-02	-5.2669E-02	-8.2729E-02	1.0202E-03	-9.3035E-01	4.0098E+00	4.5814E-05
5.6657E-03	3.0309E-01	9.4852E-03	5.5148E-02	-3.1423E-02	-9.3179E-02	1.7765E-03	-7.2962E-01	2.4196E+00	-5.0148E-04
8.1445E-03	3.3152E-01	8.7263E-03	1.3629E-02	-2.2127E-02	-9.6578E-02	1.7953E-03	1.3748E-02	9.6264E-01	-6.2085E-04
9.5609E-03	3.3133E-01	8.1820E-03	1.7392E-03	-4.4744E-02	-9.8830E-02	2.0053E-03	7.9732E-02	1.1838E+00	-6.3509E-04
1.2394E-02	3.6467E-01	7.6504E-03	2.0475E-02	-1.2231E-02	-1.0835E-01	2.4876E-03	1.7021E-02	7.7883E-01	-8.5466E-04
1.6643E-02	3.9036E-01	7.1568E-03	-6.6020E-02	3.9645E-02	-1.2972E-01	4.3342E-03	7.8836E-02	7.0747E-01	-9.7661E-04
2.0184E-02	3.9780E-01	6.9808E-03	-6.4634E-02	2.6990E-02	-1.3388E-01	5.5417E-03	-1.8135E-01	6.3232E-01	-4.5561E-04
2.6204E-02	4.3466E-01	6.4987E-03	-1.2612E-01	1.8731E-01	-1.6860E-01	5.7809E-03	-2.3397E-01	4.2592E-01	-4.9529E-04
3.3463E-02	4.7866E-01	5.7778E-03	-3.9476E-02	9.1097E-02	-1.6689E-01	6.3532E-03	-3.0166E-01	5.0790E-01	-3.2115E-04
4.4263E-02	5.1417E-01	6.5170E-03	4.0825E-02	1.4271E-02	-1.9640E-01	8.7952E-03	-5.6289E-01	9.6856E-01	1.4209E-04
5.4887E-02	5.6231E-01	5.9493E-03	2.0299E-01	1.3300E-01	-2.0226E-01	7.5597E-03	-3.7790E-01	5.7066E-01	-7.2593E-04
6.9051E-02	6.1810E-01	7.5015E-03	3.9028E-01	3.9562E-01	-2.1671E-01	7.0955E-03	-2.6385E-01	3.8159E-01	-4.1352E-04
8.8173E-02	6.7646E-01	5.5413E-03	1.6702E-01	5.2856E-02	-2.1592E-01	5.1825E-03	3.9221E-02	1.3262E-01	-8.3661E-04
1.1296E-01	7.1257E-01	4.7233E-03	2.2874E-02	-1.3751E-01	-2.1336E-01	4.0573E-03	1.8863E-01	1.1888E-01	-7.3747E-04
1.4412E-01	7.5070E-01	4.1271E-03	-7.3626E-02	-1.6602E-01	-2.0677E-01	2.8618E-03	2.0561E-01	2.0428E-02	-9.2811E-04
1.8414E-01	7.9025E-01	3.1085E-03	-2.2750E-01	-1.4119E-01	-1.9640E-01	2.3206E-03	2.1875E-01	6.7862E-02	-5.1260E-04
2.3584E-01	8.2369E-01	2.5865E-03	-2.9700E-01	-2.7197E-02	-1.9088E-01	1.7988E-03	2.4361E-01	1.7769E-01	-4.0800E-04
3.0028E-01	8.5825E-01	1.8420E-03	-4.5168E-01	1.1910E-01	-1.8753E-01	1.2717E-03	2.3806E-01	2.9429E-01	-2.4964E-04
3.8350E-01	8.8562E-01	9.1889E-04	-7.7460E-01	6.8931E-01	-1.6888E-01	7.2726E-04	2.6605E-01	3.2970E-01	-1.5150E-04
4.8973E-01	9.0088E-01	2.0148E-04	-1.8255E-01	1.3149E+00	-1.3767E-01	2.4466E-04	-1.7839E-01	7.0841E-01	8.6403E-06
6.2642E-01	8.9011E-01	6.7299E-05	-1.4468E-01	-6.9211E-02	-9.8536E-02	6.9124E-05	-4.7647E-02	-9.5096E-02	1.4602E-05
7.9887E-01	8.8939E-01	5.1626E-05	-3.5526E-01	-2.2359E-01	-7.5218E-02	4.7905E-05	1.5215E-01	-1.8614E-01	1.8459E-05
1.0202E+00	8.8976E-01	4.3688E-05	-5.2936E-01	9.2724E-02	-4.6928E-02	3.2527E-05	-2.1279E-02	-1.8801E-01	1.0757E-05
1.3152E+00	9.0021E-01	4.5021E-05	-3.0008E-01	-3.4978E-01	-3.1264E-02	3.6456E-05	-4.1866E-03	-2.0678E-01	2.1148E-05
1.6640E+00	8.9982E-01	4.5266E-05	-3.0691E-01	-3.4438E-01	-1.6376E-02	3.3015E-05	-7.1908E-02	-2.5823E-01	2.0542E-05

Table F.2-9 Velocity measurements made at S/T = 0.15 with the UV system of the laser anemometer, plane 3

File E293770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.5
density (kilograms per meter cubed) = 1.115709
viscosity (meters squared per second) = 1.635252E-05
Atmospheric pressure (Pascals) = 94665
Velocity of undisturbed free stream (Uref, in m/s) = 27.44573
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097045E-03
Estimated momentum thickness Reynolds number = 6876.393
Location of traverse; X/T = .1309 Z/T =-.3903 (Plane 3 , S/T = 0.1)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	1.8307E-01				-2.8749E-02				
2.1246E-03	2.2760E-01				-3.6180E-02				
2.8329E-03	2.4267E-01				-4.0074E-02				
3.5411E-03	2.8312E-01	7.2024E-03			-4.9660E-02	1.7761E-04			
4.6034E-03	3.6204E-01	4.0960E-03			-6.0928E-02	2.5046E-04			
5.8428E-03	3.8163E-01	9.6920E-03	-5.1991E-02	1.2089E-01	-6.9298E-02	4.2878E-04	5.2197E-01	2.0113E+00	-3.6738E-04
7.4363E-03	4.0572E-01	8.2992E-03	-4.5847E-02	6.6929E-02	-7.8438E-02	7.5163E-04	8.7579E-02	1.7944E+00	-7.5489E-04
1.0623E-02	4.4077E-01	7.2480E-03	-2.9229E-02	-9.2522E-02	-1.0262E-01	2.1553E-03	-3.7816E-01	6.0470E-01	-1.4679E-04
1.2394E-02	4.5166E-01	6.6133E-03	-2.3066E-02	-8.3392E-02	-1.0373E-01	2.1014E-03	1.5797E-01	3.9185E-01	-4.2899E-04
1.5935E-02	4.7376E-01	5.8820E-03	-3.8560E-02	-1.3052E-01	-1.1484E-01	2.6880E-03	3.1989E-01	5.8101E-01	-3.9493E-04
2.0538E-02	4.8349E-01	5.2656E-03	1.4100E-02	-1.4198E-01	-1.2900E-01	3.2553E-03	1.9882E-01	2.6414E-01	-5.9055E-04
2.5850E-02	5.1675E-01	5.1175E-03	2.0801E-02	-3.1480E-02	-1.4028E-01	3.7681E-03	2.2304E-01	3.7139E-01	-2.0528E-04
3.2932E-02	5.5779E-01	4.0174E-03	4.4601E-02	-1.2736E-01	-1.5864E-01	4.0072E-03	2.1883E-01	2.7844E-01	1.7247E-04
4.2493E-02	5.9316E-01	3.6588E-03	5.8763E-02	-4.8365E-02	-1.7389E-01	4.1672E-03	1.9871E-01	3.2572E-01	1.5151E-04
5.4178E-02	6.1380E-01	3.5853E-03	9.5711E-02	-1.0503E-01	-1.9377E-01	4.1924E-03	-1.3415E-02	1.3680E-01	-2.2787E-04
6.9051E-02	6.6049E-01	3.2473E-03	5.3102E-02	-2.0851E-02	-2.1658E-01	3.9182E-03	4.7439E-02	3.6681E-02	-3.2485E-04
8.8527E-02	6.9796E-01	3.2393E-03	4.2320E-02	-1.2334E-01	-2.3154E-01	3.6491E-03	7.9112E-02	4.8379E-02	-3.3191E-04
1.1367E-01	7.3610E-01	3.1395E-03	-2.2658E-04	-1.1306E-01	-2.4473E-01	2.9356E-03	1.5693E-01	1.5755E-01	-5.2406E-04
1.4412E-01	7.7719E-01	2.8034E-03	-1.0748E-01	-9.9523E-02	-2.5283E-01	2.8317E-03	1.6621E-01	2.1343E-01	-5.4420E-04
1.8449E-01	8.0677E-01	2.6331E-03	-1.9034E-01	-1.2442E-01	-2.4067E-01	2.3441E-03	1.4970E-01	1.3860E-01	-5.4846E-04
2.3513E-01	8.3872E-01	2.1495E-03	-3.3132E-01	-2.1221E-02	-2.3312E-01	1.7243E-03	1.4332E-01	2.2127E-01	-4.5321E-04
3.0135E-01	8.7158E-01	1.4937E-03	-4.7889E-01	2.2145E-01	-2.2852E-01	1.2798E-03	8.6137E-02	3.2184E-01	-1.9315E-04
3.8350E-01	8.9536E-01	7.5735E-04	-5.6616E-01	1.0348E+00	-1.9867E-01	7.6633E-04	-3.7216E-02	3.6460E-01	-5.1354E-05
4.8973E-01	9.0134E-01	1.3901E-04	4.2593E-01	1.0397E+00	-1.5301E-01	2.4290E-04	-5.3114E-01	4.8404E-01	2.3431E-05
6.2571E-01	8.9607E-01	5.7764E-05	1.5901E-03	-1.3611E-01	-1.1171E-01	8.8051E-05	-1.6727E-01	7.5077E-02	1.8438E-05
7.9887E-01	8.9693E-01	4.6257E-05	-1.7460E-01	-3.5254E-01	-7.4035E-02	4.9741E-05	-3.0715E-01	4.3813E-01	1.6886E-05
1.0202E+00	9.0636E-01	3.0871E-05	-1.2083E-01	-3.0855E-01	-5.5498E-02	4.3895E-05	-8.1972E-02	-1.3116E-01	1.7924E-05
1.3028E+00	9.0572E-01	3.4545E-05	-2.4280E-01	-3.4857E-01	-3.7618E-02	3.7648E-05	7.8437E-02	-1.8789E-01	1.4965E-05
1.6636E+00	9.1013E-01	2.6736E-05	-1.4608E-01	-1.6667E-01	-2.4240E-02	3.1565E-05	1.5869E-01	-2.1865E-01	8.8995E-06

Table F.2-10 Velocity measurements made at S/T = 0.1 with the UV system of the laser anemometer, plane 5

File E294770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.8
density (kilograms per meter cubed) = 1.118522
viscosity (meters squared per second) = 1.632419E-05
Atmospheric pressure (Pascals) = 95000
Velocity of undisturbed free stream (Uref, in m/s) = 27.43363
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097406E-03
Estimated momentum thickness Reynolds number = 6885.899
Location of traverse; X/T = .1414 Z/T =-.3571 (Plane 3 , S/T = 0.05)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	2.9485E-01				-4.1514E-02				
2.1246E-03	4.1209E-01				-5.8650E-02				
2.8329E-03	4.9575E-01				-6.3977E-02				
3.5411E-03	5.1056E-01	6.4889E-03	-3.1134E-01	1.4020E+00	-7.1297E-02	6.2448E-04			4.6391E-04
4.6034E-03	5.4577E-01	5.1109E-03			-8.0131E-02	9.1096E-04	-2.6750E-02	1.9222E+00	2.6383E-04
5.8428E-03	5.5744E-01	5.4462E-03	-1.0541E-01	7.9725E-02	-9.2814E-02	1.3958E-03	-9.4023E-02	1.3039E+00	-4.0167E-05
7.4363E-03	5.6908E-01	5.1947E-03	-1.1851E-01	-2.8598E-02	-1.0111E-01	1.9472E-03	1.6097E-01	6.7920E-01	1.3600E-04
9.5609E-03	5.5712E-01	5.1829E-03	-4.0257E-02	-6.7803E-02	-1.1238E-01	2.6070E-03	2.2393E-01	6.2013E-01	-1.0646E-04
1.3456E-02	5.7280E-01	4.7367E-03	-8.4449E-03	-1.2016E-01	-1.2389E-01	3.1961E-03	4.1643E-01	8.3023E-01	1.0529E-04
1.5935E-02	5.8645E-01	4.5091E-03	7.2672E-04	-1.9180E-02	-1.4424E-01	3.4334E-03	3.5554E-01	6.5025E-01	2.3717E-04
2.0538E-02	6.0614E-01	4.0506E-03	-3.7219E-02	-9.3298E-03	-1.4748E-01	3.7857E-03	1.8019E-01	2.5513E-01	4.0230E-04
2.6204E-02	6.4298E-01	3.3533E-03	6.8662E-02	6.1908E-02	-1.6380E-01	4.1227E-03	2.4169E-01	1.5374E-01	-2.9767E-05
3.2932E-02	6.6642E-01	2.9315E-03	4.6041E-02	-5.1791E-02	-1.9228E-01	4.7136E-03	2.6031E-02	1.2219E-01	1.1020E-04
4.3201E-02	6.6865E-01	2.8100E-03	1.8063E-02	-6.7793E-02	-1.9341E-01	4.0033E-03	1.9016E-01	2.3647E-01	2.3850E-04
5.4178E-02	7.0564E-01	2.5036E-03	-7.2554E-02	-2.1544E-02	-2.2215E-01	4.2303E-03	9.9614E-02	1.2169E-01	2.8063E-05
6.9405E-02	7.1917E-01	2.5246E-03	-4.6877E-02	-8.2028E-02	-2.2689E-01	3.6700E-03	1.5518E-01	1.7309E-01	-1.8745E-04
8.8173E-02	7.5562E-01	2.4288E-03	-1.2212E-02	1.2170E-02	-2.5167E-01	3.7246E-03	4.9193E-02	6.4809E-02	-1.2340E-04
1.1296E-01	7.9291E-01	2.2774E-03	-6.5667E-02	-4.3700E-02	-2.7171E-01	3.1849E-03	2.4127E-02	8.9637E-02	-1.2893E-04
1.4412E-01	8.0824E-01	2.3050E-03	-9.9978E-02	-1.9519E-01	-2.5871E-01	2.7110E-03	8.4886E-02	2.0892E-01	-2.5890E-04
1.8484E-01	8.4852E-01	1.9081E-03	-2.0201E-01	-6.3594E-02	-2.7479E-01	2.2657E-03	8.2805E-03	1.4412E-01	-2.1719E-04
2.3513E-01	8.7532E-01	1.6338E-03	-3.2900E-01	1.2209E-01	-2.6507E-01	1.7892E-03	-4.4937E-02	1.4691E-01	-1.7739E-04
3.0028E-01	9.0272E-01	1.2124E-03	-4.6083E-01	2.4237E-01	-2.4146E-01	1.3083E-03	-8.4589E-02	2.8262E-01	-3.0183E-05
3.8350E-01	9.1904E-01	5.4979E-04	-7.2757E-01	1.1956E+00	-1.9825E-01	7.3963E-04	-2.1051E-01	3.9858E-01	-9.3302E-05
4.8973E-01	9.3174E-01	1.4117E-04	1.9987E-01	6.8444E-01	-1.5354E-01	2.6217E-04	-6.7779E-01	8.5244E-01	3.3495E-07
6.2571E-01	9.2753E-01	6.2364E-05	-1.3310E-01	-2.5244E-01	-1.2554E-01	6.8725E-05	-1.1985E-01	-4.5177E-02	1.0371E-05
7.9887E-01	9.4165E-01	4.8901E-05	-2.9518E-01	-2.3172E-01	-7.7908E-02	4.1627E-05	7.5841E-02	-2.4568E-01	1.7660E-05
1.0202E+00	9.3579E-01	4.2983E-05	-3.4752E-01	-1.2412E-01	-4.6488E-02	3.6200E-05	-2.0677E-02	-2.1925E-01	1.2947E-05
1.3028E+00	9.5267E-01	3.9092E-05	-4.0829E-01	1.3969E-02	-3.1648E-02	3.5350E-05	-3.3629E-02	-2.1364E-01	1.2108E-05
1.6636E+00	9.6028E-01	3.3099E-05	-4.2421E-01	1.2603E-01	-1.3200E-02	3.1128E-05	-4.1713E-02	-2.0069E-01	7.3452E-06

Table F.2-11 Velocity measurements made at S/T = 0.05 with the UV system of the laser anemometer, plane 3

File E283770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.121614
viscosity (meters squared per second) = 1.62877E-05
Atmospheric pressure (Pascals) = 95327
Velocity of undisturbed free stream (Uref, in m/s) = 27.51761
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094902E-03
Estimated momentum thickness Reynolds number = 6918.223
Location of traverse; X/T =-.4578 Z/T =-.8872 (Plane 3 , S/T = 0.85)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.4164E-03	-1.4133E-01		
2.4788E-03	-1.5874E-01		
4.2493E-03	-1.8307E-01		
6.3739E-03	-2.2223E-01	5.6340E-03	-3.2338E-03
9.2068E-03	-2.5222E-01	5.2826E-03	-5.6350E-04
1.2748E-02	-2.6466E-01	5.3540E-03	7.6139E-04
1.6997E-02	-2.5396E-01	3.9326E-03	3.3439E-04
2.2663E-02	-2.4501E-01	3.8113E-03	2.2877E-04
2.9745E-02	-2.4017E-01	3.6771E-03	2.8401E-04
3.9306E-02	-2.3681E-01	3.5913E-03	2.9524E-04
5.1700E-02	-2.2974E-01	3.2859E-03	1.4040E-04
6.6910E-02	-2.2502E-01	3.3759E-03	3.5669E-04
8.4986E-02	-2.1173E-01	3.1143E-03	3.1362E-04
1.0977E-01	-2.0769E-01	3.0119E-03	3.2378E-04
1.4093E-01	-1.9850E-01	2.7849E-03	3.4427E-04
1.8166E-01	-1.8847E-01	2.6149E-03	3.7014E-04
2.3194E-01	-1.8642E-01	2.6748E-03	5.9088E-04
2.9816E-01	-1.7837E-01	2.1574E-03	4.1500E-04
3.8031E-01	-1.6227E-01	8.2602E-04	-1.2727E-04
4.8654E-01	-1.5118E-01	3.4007E-04	9.3917E-05
6.2283E-01	-1.4706E-01	2.7889E-04	1.2226E-04
7.9568E-01	-1.4740E-01	2.2316E-04	4.6718E-05
1.0216E+00	-1.6614E-01		
1.2996E+00	-1.6215E-01	5.5929E-06	-1.3401E-05
1.6518E+00	-1.5431E-01		

Table F.2-12 Velocity measurements made at S/T = 0.85 with the UW system of the laser anemometer, plane 3

File E282770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.11759
viscosity (meters squared per second) = 1.634634E-05
Atmospheric pressure (Pascals) = 94985
Velocity of undisturbed free stream (Uref, in m/s) = 27.58585
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092874E-03
Estimated momentum thickness Reynolds number = 6907.075
Location of traverse; X/T =-.308 Z/T =-.7574 (Plane 3 , S/T = 0.65)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.4164E-03	-1.5851E-01		
2.1246E-03	-1.9933E-01		
3.1870E-03	-1.9839E-01		
4.9575E-03	-2.2264E-01	7.6074E-03	-3.5979E-03
6.0198E-03	-2.6767E-01	7.0418E-03	-2.5367E-03
8.1445E-03	-3.0747E-01	7.0194E-03	-8.0979E-04
1.0977E-02	-3.2967E-01	4.6046E-03	-3.2580E-04
1.4695E-02	-3.3603E-01	4.3466E-03	7.4836E-04
1.8768E-02	-3.2396E-01	4.1542E-03	8.0082E-04
2.4433E-02	-3.1060E-01	3.8062E-03	5.8224E-04
3.1516E-02	-3.0560E-01	3.7885E-03	5.5093E-04
4.1076E-02	-2.9811E-01	3.9872E-03	5.4846E-04
5.2762E-02	-2.7989E-01	3.5476E-03	1.6901E-04
6.7635E-02	-2.7426E-01	3.4653E-03	2.3360E-04
8.6756E-02	-2.6000E-01	3.2268E-03	1.3839E-04
1.1190E-01	-2.4699E-01	3.3224E-03	3.9843E-04
1.4271E-01	-2.3741E-01	2.9400E-03	2.3278E-04
1.8272E-01	-2.2077E-01	2.6885E-03	5.4545E-04
2.3371E-01	-2.1150E-01	2.5334E-03	4.5664E-04
2.9922E-01	-2.0578E-01	2.0040E-03	3.5848E-04
3.8208E-01	-1.9637E-01	8.6294E-04	-1.6420E-04
4.8831E-01	-1.9025E-01	4.0883E-04	1.3237E-04
6.2429E-01	-1.9488E-01	1.0770E-04	-1.7474E-05
7.9745E-01	-1.9584E-01	1.1953E-04	6.2579E-05
1.0188E+00	-1.9985E-01	8.0349E-05	2.0508E-06
1.3013E+00	-1.9447E-01	5.9803E-05	3.7139E-06
1.6622E+00	-1.7304E-01	1.0297E-04	7.9480E-05

Table F.2-13 Velocity measurements made at S/T = 0.65 with the UW system of the laser anemometer, plane 3

File E281770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22.5
density (kilograms per meter cubed) = 1.120836
viscosity (meters squared per second) = 1.627773E-05
Atmospheric pressure (Pascals) = 95100
Velocity of undisturbed free stream (Uref, in m/s) = 27.50899
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.095159E-03
Estimated momentum thickness Reynolds number = 6920.727
Location of traverse; X/T =-.1957 Z/T =-.6553 (Plane 3 , S/T = 0.50)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.4788E-03	-2.1593E-01		
3.5411E-03	-2.6649E-01		
4.6034E-03	-2.9420E-01		
6.7280E-03	-3.6400E-01	1.0243E-02	-3.0114E-03
9.5609E-03	-4.2127E-01	7.6458E-03	5.3718E-04
1.3102E-02	-4.4163E-01	7.2880E-03	2.0603E-03
1.7351E-02	-4.3639E-01	5.7364E-03	1.7127E-03
2.3017E-02	-4.1268E-01	5.5940E-03	1.6233E-03
3.0099E-02	-4.0094E-01	5.5927E-03	1.6974E-03
3.9837E-02	-3.9243E-01	5.6552E-03	1.2957E-03
5.1346E-02	-3.5827E-01	4.9591E-03	7.9506E-04
6.6572E-02	-3.4005E-01	4.4126E-03	3.5541E-04
8.5340E-02	-3.1843E-01	4.1761E-03	3.9072E-04
1.1013E-01	-2.9992E-01	3.6979E-03	3.6960E-04
1.4129E-01	-2.8297E-01	3.1628E-03	2.0507E-04
1.8148E-01	-2.6380E-01	2.8223E-03	2.5789E-04
2.3265E-01	-2.5015E-01	2.5253E-03	4.7846E-04
2.9851E-01	-2.4585E-01	1.9824E-03	4.2021E-04
3.9102E-01	-2.3931E-01	9.1283E-04	-8.0393E-05
4.8761E-01	-2.3747E-01	3.9468E-04	1.5871E-04
6.2288E-01	-2.3149E-01	1.1359E-04	3.8872E-05
7.9603E-01	-2.3808E-01	1.1105E-04	1.8126E-05
1.0177E+00	-2.4225E-01	9.9695E-05	2.2075E-05
1.2999E+00	-2.4702E-01	6.1565E-05	
1.6609E+00	-2.3230E-01	6.5170E-05	-7.4519E-06

Table F.2-14 Velocity measurements made at S/T = 0.50 with the UW system of the laser anemometer, plane 3

File E280770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24.5
density (kilograms per meter cubed) = 1.108326
viscosity (meters squared per second) = 1.654735E-05
Atmospheric pressure (Pascals) = 94675
Velocity of undisturbed free stream (Uref, in m/s) = 27.5575
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093716E-03
Estimated momentum thickness Reynolds number = 6817.562
Location of traverse; X/T =-.1208 Z/T =-.589 (Plane 3 , S/T = 0.40)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.1246E-03	-2.7093E-01		
2.8329E-03	-2.2626E-01		
3.5411E-03	-2.5122E-01		
4.6034E-03	-2.6805E-01		
5.6657E-03	-3.1242E-01	1.8319E-02	-5.3957E-03
7.4363E-03	-3.4777E-01	2.0581E-02	-5.1208E-03
9.9150E-03	-4.5759E-01	1.4895E-02	2.0761E-03
1.2571E-02	-5.0993E-01	1.2567E-02	3.4981E-03
1.6289E-02	-5.3614E-01	1.2027E-02	4.1779E-03
2.0538E-02	-5.3397E-01	1.0788E-02	2.9898E-03
2.6204E-02	-5.0635E-01	9.2332E-03	4.1242E-03
3.3286E-02	-4.8659E-01	1.0030E-02	4.3178E-03
[illegible]	-4.3882E-01	1.1007E-02	4.2739E-03
5.5064E-02	-4.3891E-01	9.9300E-03	4.1265E-03
6.9051E-02	-4.1903E-01	9.2580E-03	3.4029E-03
8.8173E-02	-3.8095E-01	6.5692E-03	1.4256E-03
1.1296E-01	-3.4634E-01	4.8968E-03	8.5360E-04
1.4412E-01	-3.5725E-01	3.5518E-03	6.2920E-04
1.8414E-01	-2.9956E-01	3.1041E-03	3.2078E-04
2.3548E-01	-2.8709E-01	2.7074E-03	5.1790E-04
3.0205E-01	-2.7890E-01	2.0315E-03	4.0015E-04
3.8350E-01	-2.7611E-01	1.5395E-03	4.3713E-04
4.8973E-01	-2.6689E-01	2.7607E-04	6.9063E-05
6.2571E-01	-2.7736E-01	1.8290E-04	5.7516E-05
7.9887E-01	-2.8784E-01	1.4712E-04	5.[illegible]032E-06
1.0202E+00	-2.8732E-01	3.3895E-05	-2.0091E-05
1.3028E+00	-2.8964E-01	1.1072E-04	-1.0128E-05
1.6636E+00	-2.7217E-01		

Table F.2-15 Velocity measurements made at S/T = 0.40 with the UW system of the laser anemometer, plane 3

File E279770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.10427
viscosity (meters squared per second) = 1.65866E-05
Atmospheric pressure (Pascals) = 94170
Velocity of undisturbed free stream (Uref, in m/s) = 27.56189
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093586E-03
Estimated momentum thickness Reynolds number = 6802.297
Location of traverse; X/T =-.0833 Z/T =-.5559 (Plane 3 , S/T = 0.35)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.0623E-03	-2.6265E-01		
1.7705E-03	-2.7174E-01		
2.4788E-03	-2.8252E-01		
3.5411E-03	-3.2589E-01		
5.4887E-03	-3.9194E-01	2.3481E-02	-2.5004E-03
7.4363E-03	-4.8843E-01	2.0907E-02	6.1218E-03
1.0269E-02	-5.5486E-01	2.0246E-02	1.0238E-02
1.3810E-02	-5.7259E-01	1.9833E-02	1.0817E-02
1.8059E-02	-5.7365E-01	1.8452E-02	9.8042E-03
2.3725E-02	-5.7487E-01	1.8196E-02	9.5791E-03
3.0807E-02	-5.7370E-01	1.8349E-02	1.0021E-02
4.0368E-02	-5.6848E-01	2.0144E-02	1.0069E-02
5.2762E-02	-5.1730E-01	1.8211E-02	8.6107E-03
6.6926E-02	-4.8979E-01	1.7564E-02	6.2972E-03
8.6048E-02	-4.3302E-01	1.4180E-02	3.0129E-03
1.1084E-01	-3.8809E-01	9.4161E-03	2.7327E-03
1.4235E-01	-3.2947E-01	3.9429E-03	6.6239E-04
1.8201E-01	-3.1157E-01	2.8815E-03	4.4467E-04
2.3477E-01	-3.0177E-01	2.3753E-03	4.7325E-04
2.9816E-01	-3.0007E-01	2.0713E-03	4.3644E-04
3.8137E-01	-2.9790E-01	8.3124E-04	-8.7780E-05
4.8761E-01	-3.0485E-01	3.2316E-04	8.8986E-05
6.2358E-01	-3.0078E-01	1.3160E-04	5.4304E-05
7.9674E-01	-3.1559E-01	9.3576E-05	-1.8961E-05
1.0181E+00	-3.1810E-01	5.6667E-05	-1.8236E-05
1.3006E+00	-3.1970E-01	6.5031E-05	1.3690E-05
1.6615E+00	-3.0789E-01	1.0470E-04	1.8908E-05

Table F.2-16 Velocity measurements made at S/T = 0.35 with the UW system of the laser anemometer, plane 3

File E278770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22.5
density (kilograms per meter cubed) = 1.123736
viscosity (meters squared per second) = 1.623573E-05
Atmospheric pressure (Pascals) = 95346
Velocity of undisturbed free stream (Uref, in m/s) = 27.52457
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094695E-03
Estimated momentum thickness Reynolds number = 6941.772
Location of traverse; X/T =-.0459 Z/T =-.5228001 (Plane 3 , S/T = 0.30)

Y/T	W/Uref	w2/Uref2	uw/Uref2
3.1870E-03	-3.3808E-01		
4.0722E-03	-3.9451E-01		
4.9575E-03	-4.2337E-01	2.6079E-02	1.3335E-03
6.0198E-03	-5.0320E-01	2.8880E-02	1.0716E-02
7.7904E-03	-5.5504E-01	3.0634E-02	1.1508E-02
9.2068E-03	-5.9639E-01	3.1733E-02	2.0490E-02
1.0977E-02	-6.1921E-01	3.1202E-02	1.9712E-02
1.3456E-02	-6.4323E-01	2.9980E-02	2.2260E-02
1.7351E-02	-6.7084E-01	2.9032E-02	2.1960E-02
2.1424E-02	-6.9192E-01	2.6379E-02	2.0780E-02
2.6912E-02	-6.8607E-01	2.4172E-02	1.6797E-02
3.5057E-02	-6.2431E-01	2.2260E-02	1.2741E-02
4.3555E-02	-6.2625E-01	2.1039E-02	1.0262E-02
5.5241E-02	-5.5887E-01	2.0380E-02	7.9055E-03
7.0113E-02	-4.9548E-01	2.0554E-02	6.1980E-03
8.9589E-02	-4.2972E-01	1.6191E-02	3.0451E-03
1.1455E-01	-3.9557E-01	1.0027E-02	1.7173E-03
1.4518E-01	-3.4209E-01	3.6288E-03	1.1184E-03
1.8520E-01	-3.3820E-01	2.5137E-03	9.2738E-04
2.3761E-01	-3.2656E-01	2.1951E-03	5.9015E-04
3.0312E-01	-3.2754E-01	1.7046E-03	2.6041E-04
3.8562E-01	-3.3072E-01	7.4623E-04	-1.2473E-04
4.9079E-01	-3.3645E-01	2.6982E-04	6.5245E-05
6.2925E-01	-3.4394E-01	1.1185E-04	7.1574E-05
7.9993E-01	-3.4120E-01	1.2394E-04	-1.4293E-05
1.0212E+00	-3.5345E-01	1.3208E-04	-2.4116E-05
1.3038E+00	-3.4703E-01	1.1343E-05	-4.7759E-06
1.6647E+00	-3.3962E-01	6.8471E-05	1.6237E-05

Table F.2-17 Velocity measurements made at S/T = 0.30 with the UW system of the laser anemometer, plane 3

File E277770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.123149
viscosity (meters squared per second) = 1.622298E-05
Atmospheric pressure (Pascals) = 95135
Velocity of undisturbed free stream (Uref, in m/s) = 27.35028
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = .0040999
Estimated momentum thickness Reynolds number = 6912.014
Location of traverse; X/T =-.0084 Z/T =-.4896 (Plane 3 , S/T = 0.25)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.1246E-03	-3.5484E-01		
2.8329E-03	-3.7421E-01		
3.7181E-03	-4.3127E-01		
4.9575E-03	-5.9544E-01	3.9570E-02	2.3960E-02
6.0198E-03	-6.4758E-01	5.0597E-02	2.8821E-02
7.6133E-03	-7.1444E-01	4.2211E-02	2.8314E-02
9.7380E-03	-7.5870E-01	3.8703E-02	2.6960E-02
1.2394E-02	-7.8707E-01	3.1808E-02	2.2546E-02
1.5935E-02	-8.0016E-01	2.6625E-02	1.8506E-02
2.0184E-02	-8.0751E-01	2.1303E-02	1.2935E-02
2.5850E-02	-7.8791E-01	1.6865E-02	8.4997E-03
3.2932E-02	-7.3990E-01	1.8618E-02	8.0256E-03
4.2493E-02	-6.9970E-01	1.9683E-02	6.6748E-03
5.4178E-02	-6.1316E-01	1.9885E-02	6.1181E-03
6.9051E-02	-5.1051E-01	2.1044E-02	5.5497E-03
8.8350E-02	-4.5001E-01	1.8025E-02	3.8600E-03
1.1296E-01	-3.7431E-01	7.6915E-03	1.8444E-03
1.4518E-01	-3.6824E-01	4.1447E-03	1.1456E-03
1.8414E-01	-3.6713E-01	3.0308E-03	6.0419E-04
2.3513E-01	-3.6675E-01	2.5079E-03	7.1820E-04
3.0028E-01	-3.6227E-01	2.0913E-03	8.5199E-04
3.8456E-01	-3.6415E-01	7.7142E-04	-1.1930E-04
4.9044E-01	-3.7270E-01	4.3458E-04	7.2043E-05
6.2712E-01	-3.8097E-01		
7.9887E-01	-3.9137E-01	9.7983E-05	1.7929E-05
1.0202E+00	-3.9929E-01	1.0269E-04	8.3921E-06
1.3031E+00	-3.8382E-01	4.0895E-05	
1.6636E+00	-3.8312E-01	1.6109E-04	

Table F.2-18 Velocity measurements made at S/T = 0.25 with the UW system of the laser anemometer, plane 3

File E276770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.108883
viscosity (meters squared per second) = 1.647469E-05
Atmospheric pressure (Pascals) = 94245
Velocity of undisturbed free stream (Uref, in m/s) = 27.56807
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093402E-03
Estimated momentum thickness Reynolds number = 6849.731
Location of traverse; X/T = .029 Z/T =-.4565 (Plane 3 , S/T = 0.20)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.7705E-03	-4.0129E-01		
2.4788E-03	-4.4175E-01		
3.1870E-03	-5.4464E-01		
3.8952E-03	-6.5743E-01		
4.6034E-03	-7.5375E-01		
6.7280E-03	-8.3788E-01	2.3814E-02	1.3495E-02
7.4363E-03	-8.4966E-01	1.9584E-02	1.0469E-02
9.7380E-03	-8.5905E-01	1.8724E-02	9.1237E-03
1.2571E-02	-8.5346E-01	1.5023E-02	7.7609E-03
1.5935E-02	-8.3076E-01	1.2222E-02	6.4137E-03
2.0184E-02	-8.0210E-01	1.0220E-02	4.9065E-03
2.5850E-02	-7.6911E-01	1.0233E-02	4.8439E-03
3.3109E-02	-7.2228E-01	1.2847E-02	5.9711E-03
4.2493E-02	-6.7998E-01	1.3783E-02	4.8732E-03
5.4178E-02	-6.0487E-01	1.3346E-02	5.7215E-03
6.9228E-02	-5.3211E-01	1.4031E-02	5.9312E-03
8.8527E-02	-4.6644E-01	1.2746E-02	4.2667E-03
1.1331E-01	-4.0963E-01	5.6385E-03	1.0920E-03
1.4412E-01	-4.0375E-01	3.3873E-03	1.1214E-03
1.8414E-01	-4.0936E-01	2.6374E-03	9.1322E-04
2.3513E-01	-4.0391E-01	2.1545E-03	7.7599E-04
3.0028E-01	-3.9745E-01	1.6888E-03	6.6416E-04
3.8350E-01	-4.0818E-01	1.1580E-03	4.9830E-04
4.9009E-01	-4.1780E-01	7.1522E-04	1.1539E-04
6.2571E-01	-4.3106E-01	7.2857E-04	4.4619E-04
7.9887E-01	-4.2257E-01		
1.0212E+00	-4.3719E-01	3.9858E-05	2.8259E-05
1.3031E+00	-4.2559E-01		
1.6636E+00	-4.3222E-01		

Table F.2-19 Velocity measurements made at S/T = 0.20 with the UW system of the laser anemometer, plane 3

File E275770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.111225
viscosity (meters squared per second) = 1.639706E-05
Atmospheric pressure (Pascals) = 94125
Velocity of undisturbed free stream (Uref, in m/s) = 27.52136
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094791E-03
Estimated momentum thickness Reynolds number = 6872.831
Location of traverse; X/T = .0665 Z/T =-.4234 (Plane 3 , S/T = 0.15)

Y/T	W/Uref	w2/Uref2	uw/Uref2
7.0822E-04	-4.7348E-01		
1.7705E-03	-5.7712E-01		
3.5411E-03	-8.1266E-01		
6.0198E-03	-8.6558E-01	9.7420E-03	6.0871E-03
8.4986E-03	-8.6848E-01	1.0125E-02	5.6492E-03
1.2040E-02	-8.3793E-01	8.2749E-03	4.7973E-03
1.6997E-02	-7.9802E-01	7.5254E-03	3.7831E-03
2.2663E-02	-7.6149E-01	7.2256E-03	3.2924E-03
2.9037E-02	-7.1364E-01	7.2341E-03	2.9349E-03
3.8598E-02	-6.7091E-01	6.8003E-03	2.2177E-03
5.0637E-02	-6.2620E-01	5.5340E-03	1.8842E-03
6.5156E-02	-5.6739E-01	6.1558E-03	2.3801E-03
8.4278E-02	-5.1243E-01	5.0256E-03	2.2469E-03
1.0907E-01	-4.8087E-01	3.7903E-03	1.4016E-03
1.4129E-01	-4.7224E-01	2.8119E-03	1.0785E-03
1.8024E-01	-4.6531E-01	2.5029E-03	9.2518E-04
2.3123E-01	-4.6089E-01	1.9491E-03	7.3178E-04
2.9639E-01	-4.5026E-01	9.7007E-04	4.5273E-04
3.7960E-01	-4.5762E-01	5.5243E-04	2.6533E-04
4.8584E-01	-4.7138E-01	1.7340E-04	4.1625E-05
6.2217E-01	-4.8793E-01	2.6115E-05	-1.7202E-05
7.9497E-01	-4.9881E-01	7.3613E-05	
1.0163E+00	-4.9201E-01	1.5296E-04	-2.9667E-06
1.2992E+00	-4.8114E-01		
1.6597E+00	-4.8274E-01		

Table F.2-20 Velocity measurements made at S/T = 0.15 with the UW system of the laser anemometer, plane 3

File E274770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 21.2
density (kilograms per meter cubed) = 1.110932
viscosity (meters squared per second) = 1.636701E-05
Atmospheric pressure (Pascals) = 93845
Velocity of undisturbed free stream (Uref, in m/s) = 27.50796
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.095189E-03
Estimated momentum thickness Reynolds number = 6882.764
Location of traverse; X/T = .1309 Z/T =-.3903 (Plane 3 , S/T = 0.1)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.4164E-03	-5.7410E-01		
2.1246E-03	-5.7543E-01		
2.8329E-03	-6.4921E-01		
3.8952E-03	-8.2430E-01		
4.9575E-03	-8.7203E-01	9.1437E-03	1.0157E-03
6.5510E-03	-8.5267E-01	8.9542E-03	6.5053E-03
8.8527E-03	-8.4417E-01	8.0011E-03	4.4781E-03
1.1331E-02	-8.2099E-01	6.8535E-03	4.0654E-03
1.4873E-02	-8.0154E-01	6.6572E-03	2.0973E-03
1.9122E-02	-7.6516E-01	5.4642E-03	2.7942E-03
2.4965E-02	-7.3423E-01	4.9491E-03	5.5163E-05
3.1870E-02	-6.9332E-01	4.8445E-03	1.4984E-03
4.1431E-02	-6.6535E-01	4.2654E-03	1.6811E-03
5.3116E-02	-6.3576E-01	3.6047E-03	1.0267E-03
6.9405E-02	-6.0163E-01	3.6677E-03	1.0284E-03
8.7110E-02	-5.6697E-01	3.5197E-03	9.7556E-04
1.1261E-01	-5.3875E-01	3.1119E-03	8.1562E-04
1.4306E-01	-5.2753E-01	2.7971E-03	8.3550E-04
1.8307E-01	-5.3163E-01	2.2735E-03	6.5850E-04
2.3442E-01	-5.3505E-01	1.2815E-03	1.3827E-04
2.9922E-01	-5.1965E-01	9.2911E-04	3.4485E-04
3.8314E-01	-5.3225E-01	5.2530E-04	1.8006E-04
4.8902E-01	-5.4696E-01	1.1579E-04	-1.4107E-05
6.2465E-01	-5.6701E-01	1.2588E-04	-2.5086E-05
7.9780E-01	-5.5638E-01	1.7083E-05	
1.0191E+00	-5.5817E-01		
1.3017E+00	-5.4406E-01	1.3812E-04	
1.6629E+00	-5.3491E-01		

Table F.2-21 Velocity measurements made at S/T = 0.1 with the UW system of the laser anemometer, plane 5

File E273770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 21
density (kilograms per meter cubed) = 1.111392
viscosity (meters squared per second) = 1.635165E-05
Atmospheric pressure (Pascals) = 93820
Velocity of undisturbed free stream (Uref, in m/s) = 27.53412
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094411E-03
Estimated momentum thickness Reynolds number = 6894.473
Location of traverse; X/T = .1414 Z/T =-.3571 (Plane 3 , S/T = 0.05)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.0623E-03	-6.0877E-01		
2.1246E-03	-7.2338E-01		
3.8952E-03	-8.7013E-01		
6.0198E-03	-8.6829E-01	8.4723E-03	5.0084E-03
8.8527E-03	-8.2321E-01	5.3298E-03	2.9034E-03
1.2394E-02	-8.0067E-01	5.0175E-03	2.4865E-03
1.6643E-02	-7.6823E-01	4.1800E-03	1.9553E-03
2.2663E-02	-7.4743E-01	3.8087E-03	1.3270E-03
2.9391E-02	-7.3249E-01	3.7128E-03	1.5804E-03
3.8952E-02	-7.0608E-01	3.6373E-03	1.1845E-03
5.0637E-02	-6.9572E-01	3.2824E-03	1.1222E-03
6.5864E-02	-6.6714E-01	3.2511E-03	1.2971E-03
8.4986E-02	-6.4297E-01	3.2330E-03	8.7395E-04
1.0942E-01	-6.4076E-01	2.8571E-03	5.2038E-04
1.4058E-01	-6.1789E-01	2.6954E-03	7.1917E-04
1.8059E-01	-6.3439E-01	2.1340E-03	4.6503E-04
2.3371E-01	-6.4378E-01	1.8566E-03	3.7929E-04
2.9710E-01	-6.0599E-01	8.2343E-04	2.4528E-04
3.8350E-01	-6.3131E-01	4.8536E-04	1.0616E-04
4.8654E-01	-6.4141E-01	2.4870E-04	3.5208E-05
6.2217E-01	-6.5615E-01	1.5046E-04	2.5022E-05
7.9533E-01	-6.5456E-01		
1.0343E+00	-6.2415E-01	6.2947E-05	-4.7456E-06
1.2992E+00	-6.1965E-01		
1.6601E+00	-6.1647E-01		

Table F.2-22 Velocity measurements made at S/T = 0.05 with the UW system of the laser anemometer, plane 3

File E310770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.114941
viscosity (meters squared per second) = 1.642785E-05
Atmospheric pressure (Pascals) = 95080
Velocity of undisturbed free stream (Uref, in m/s) = 27.54567
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094068E-03
Estimated momentum thickness Reynolds number = 6864.798
Location of traverse; X/T =-.1957 Z/T =-.6553 (Plane 3 , S/T = 0.50)

Y/T	vw/Uref2
5.1346E-03	7.9517E-04
6.9051E-03	5.0085E-04
8.6756E-03	5.7691E-04
1.0800E-02	2.9350E-04
1.3633E-02	7.8594E-05
1.7174E-02	-4.9524E-06
2.1424E-02	-3.2420E-04
2.7089E-02	-2.3355E-04
3.4171E-02	-3.4212E-04
4.3732E-02	-1.5441E-04
5.5418E-02	2.3316E-05
7.0290E-02	-1.0410E-04
8.9412E-02	-4.0421E-05
1.1491E-01	1.5299E-05
1.4536E-01	-1.6843E-04
1.8538E-01	2.1582E-04
2.3637E-01	-1.4147E-04
3.0152E-01	1.6188E-05
3.8509E-01	-3.7585E-05
4.9097E-01	-2.4586E-04

Table F.2-23 Velocity measurements made at S/T = 0.50 with the VW system of the laser anemometer, plane 3

File E311770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 24.2
density (kilograms per meter cubed) = 1.11507
viscosity (meters squared per second) = 1.643448E-05
Atmospheric pressure (Pascals) = 95155
Velocity of undisturbed free stream (Uref, in m/s) = 27.54641
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094046E-03
Estimated momentum thickness Reynolds number = 6862.172
Location of traverse; X/T =-.0883 Z/T =-.5559 (Plane 3 , S/T = 0.35)

Y/T	vw/Uref2
6.0198E-03	-4.6288E-04
6.7280E-03	-1.9758E-03
7.4363E-03	1.5943E-04
8.4986E-03	-1.4324E-03
1.0269E-02	-6.2165E-04
1.2748E-02	-2.7147E-03
1.5581E-02	-1.3575E-03
1.8768E-02	-3.5911E-03
2.2309E-02	-5.2866E-03
2.8683E-02	-8.0991E-03
3.5765E-02	-6.0843E-03
4.5326E-02	-6.8184E-03
5.7011E-02	-8.4696E-03
7.2238E-02	-6.6636E-03
9.1360E-02	-2.6324E-03
1.1579E-01	-2.3551E-03
1.4766E-01	-3.4098E-04
1.8697E-01	-1.2276E-04
2.3796E-01	-1.9712E-04
3.0312E-01	-1.9244E-04
3.8775E-01	-1.1155E-04
4.9292E-01	-1.9123E-04

Table F.2-24 Velocity measurements made at S/T = 0.35 with the VW system of the laser anemometer, plane 5

File E323770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 25.7
density (kilograms per meter cubed) = 1.104573
viscosity (meters squared per second) = 1.665512E-05
Atmospheric pressure (Pascals) = 94735
Velocity of undisturbed free stream (Uref, in m/s) = 27.63228
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091498E-03
Estimated momentum thickness Reynolds number = 6788.148
Location of traverse; X/T =-.0459 Z/T =-.5228001 (Plane 3 , S/T = 0.30)

Y/T	vw/Uref2
5.6657E-03	-2.9266E-03
6.3739E-03	-4.6507E-03
7.0822E-03	-3.2100E-04
7.7904E-03	-5.0838E-04
8.8527E-03	-4.5138E-03
1.0623E-02	-4.2552E-03
1.2748E-02	-5.5969E-03
1.5581E-02	-6.3539E-03
1.9122E-02	-4.6699E-03
2.3371E-02	-4.4762E-03
2.9037E-02	-8.8903E-03
3.6119E-02	-1.0081E-02
4.5680E-02	-8.3211E-03
5.7365E-02	-6.5497E-03
7.2238E-02	-7.6052E-03
9.1360E-02	-6.1929E-03
1.1615E-01	-2.7225E-03
1.4731E-01	-3.3003E-04
1.8732E-01	-1.4915E-04
2.3831E-01	-3.8721E-04
3.0524E-01	-3.5667E-04
3.8669E-01	-3.5057E-04

Table F.2-25 Velocity measurements made at S/T = 0.30 with the VW system of the laser anemometer, plane 3

File E312770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.105707
viscosity (meters squared per second) = 1.660802E-05
Atmospheric pressure (Pascals) = 94610
Velocity of undisturbed free stream (Uref, in m/s) = 27.56324
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093546E-03
Estimated momentum thickness Reynolds number = 6793.789
Location of traverse; X/T =-.00842 Z/T =-.4896 (Plane 3 , S/T = 0.25)

Y/T	vw/Uref2
5.3116E-03	-2.9502E-03
6.0198E-03	-6.5649E-04
7.0822E-03	-2.6410E-03
8.8527E-03	-2.3115E-03
1.0977E-02	-4.5744E-03
1.3810E-02	-3.0883E-03
1.7351E-02	-1.9387E-03
2.1601E-02	-2.1951E-03
2.7620E-02	-4.5747E-03
3.4348E-02	-7.9934E-03
4.4618E-02	-9.2299E-03
5.6657E-02	-1.0235E-02
7.0467E-02	-8.5147E-03
8.9943E-02	-5.1091E-03
1.1438E-01	-1.8017E-02
1.4554E-01	-5.2127E-04
1.8555E-01	-9.8521E-05
2.3654E-01	-1.6679E-05
3.0170E-01	-1.1571E-04
3.8527E-01	-1.2209E-04
4.91 5E-01	-1.9732E-04

Table F.2-26 Velocity measurements made at S/T = 0.25 with the VW system of the laser anemometer, plane 3

File E322770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 26
density (kilograms per meter cubed) = 1.107425
viscosity (meters squared per second) = 1.662507E-05
Atmospheric pressure (Pascals) = 95075
Velocity of undisturbed free stream (Uref, in m/s) = 27.60336
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092355E-03
Estimated momentum thickness Reynolds number = 6794.724
Location of traverse; X/T = .029 Z/T =-.4565 (Plane 3 , S/T = 0.20)

Y/T	vw/Uref2
7.0822E-03	-1.6361E-03
8.8527E-03	-1.2637E-03
1.0977E-02	-1.9128E-03
1.3810E-02	-1.4387E-03
1.7351E-02	-1.9698E-03
2.1601E-02	-2.0156E-03
2.7266E-02	-2.3039E-03
3.4346E-02	-5.6391E-03
4.3909E-02	-4.6886E-03
5.5595E-02	-1.7253E-03
7.0822E-02	-3.3757E-04
8.9589E-02	5.0202E-04
1.1438E-01	-4.2966E-04
1.4589E-01	-1.5197E-04
1.8591E-01	-1.1638E-04
2.3654E-01	-1.5588E-04
3.0170E-01	-2.9485E-04
3.8492E-01	-3.9724E-04

Table F.2-27 Velocity measurements made at S/T = 0.20 with the VW system of the laser anemometer, plane 3

File E320770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 25.8
density (kilograms per meter cubed) = 1.110614
viscosity (meters squared per second) = 1.656881E-05
Atmospheric pressure (Pascals) = 95285
Velocity of undisturbed free stream (Uref, in m/s) = 27.58964
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092762E-03
Estimated momentum thickness Reynolds number = 6815.084
Location of traverse; X/T = .0665 Z/T =-.4234 (Plane 3 , S/T = 0.15)

Y/T	vw/Uref2
5.6657E-03	-1.0855E-03
7.4363E-03	-1.3752E-03
9.5609E-03	-1.3330E-03
1.2394E-02	-9.7100E-04
1.5935E-02	-8.2371E-04
2.0184E-02	-6.3356E-04
2.5850E-02	8.0010E-05
3.2932E-02	3.4099E-04
4.2493E-02	4.0643E-04
5.4533E-02	1.9159E-04
6.9051E-02	-2.8498E-04
8.8173E-02	-8.8040E-05
1.1296E-01	-1.0079E-04
1.4483E-01	8.3443E-05
1.8414E-01	-1.0543E-05
2.3584E-01	-1.0599E-04
3.0028E-01	-6.1445E-04
3.8350E-01	-2.4144E-04

Table F.2-28 Velocity measurements made at S/T = 0.15 with the VW system of the laser anemometer, plane 3

File E321770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 26
density (kilograms per meter cubed) = 1.107192
viscosity (meters squared per second) = 1.662857E-05
Atmospheric pressure (Pascals) = 95055
Velocity of undisturbed free stream (Uref, in m/s) = 27.62884
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = .0040916
Estimated momentum thickness Reynolds number = 6798.31
Location of traverse; X/T = .1039 Z/T =-.3903 (Plane 3 , S/T = 0.10)

Y/T	vw/Uref2
5.6657E-03	-1.9034E-03
7.4363E-03	-1.5208E-03
9.5609E-03	-1.4627E-03
1.2748E-02	-6.5139E-05
1.5935E-02	-5.4769E-04
2.0184E-02	-3.0909E-04
2.5850E-02	3.8648E-04
3.2932E-02	3.9573E-04
4.2493E-02	2.7079E-04
5.4178E-02	2.8883E-04
6.9405E-02	1.9358E-04
8.9589E-02	-1.0523E-04
1.1296E-01	-7.9514E-05
1.4483E-01	-2.4700E-04
1.8414E-01	-1.4488E-04
2.3513E-01	-4.3255E-04
3.0064E-01	-2.8859E-04
3.8492E-01	-2.1190E-04

Table F.2-29 Velocity measurements made at S/T = 0.10 with the VW system of the laser anemometer, plane 3

File E314770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 26.2
density (kilograms per meter cubed) = 1.099177
viscosity (meters squared per second) = 1.675845E-05
Atmospheric pressure (Pascals) = 94430
Velocity of undisturbed free stream (Uref, in m/s) = 27.52952
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094548E-03
Estimated momentum thickness Reynolds number = 6726.215
Location of traverse; X/T = .1414 Z/T =-.3571 (Plane 3 , S/T = 0.05)

Y/T	vw/Uref2
4.9575E-03	8.5025E-04
5.6657E-03	-1.6999E-05
6.7280E-03	-7.1264E-04
8.4986E-03	-3.6276E-04
1.0623E-02	-8.7441E-05
1.3456E-02	1.4084E-04
1.6997E-02	1.8940E-04
2.1246E-02	2.9737E-04
2.6912E-02	2.4400E-04
3.3994E-02	4.5624E-04
4.3555E-02	3.0744E-04
5.5241E-02	-1.6059E-04
7.0113E-02	1.3327E-04
8.9235E-02	-1.4415E-04
1.1402E-01	-1.0176E-04
1.4766E-01	-2.1563E-04
1.8555E-01	-3.7990E-04
2.3619E-01	-4.8341E-04
3.0135E-01	-3.3509E-04
3.8456E-01	-3.2296E-04
4.9079E-01	-3.1773E-04

Table F.2-30 Velocity measurements made at S/T = 0.05 with the VW system of the laser anemometer, plane 3

F.3 LDV MEASUREMENTS IN PLANE 4

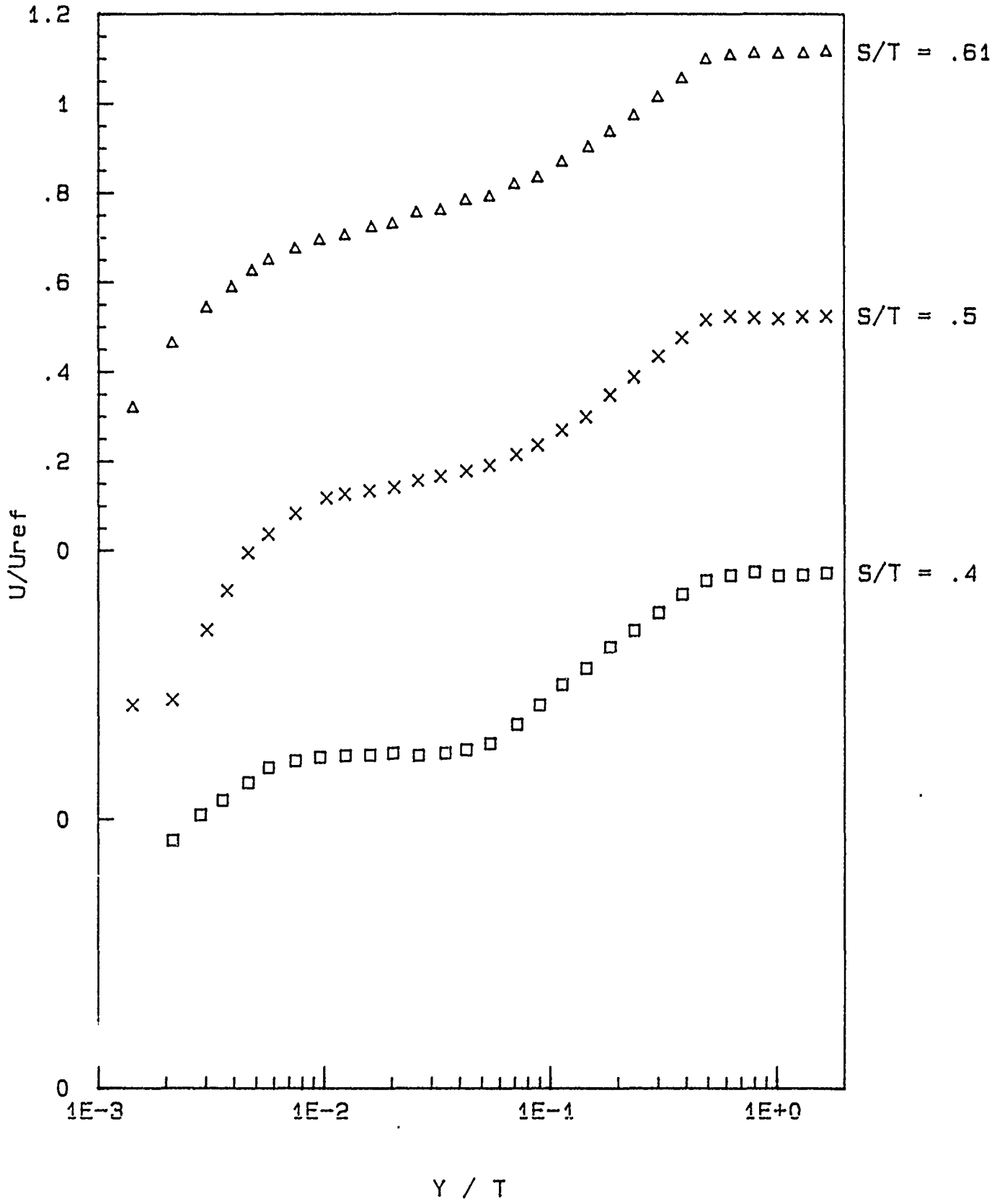


Figure F.3-1(a) Profiles of mean-velocity component U, plane 4.

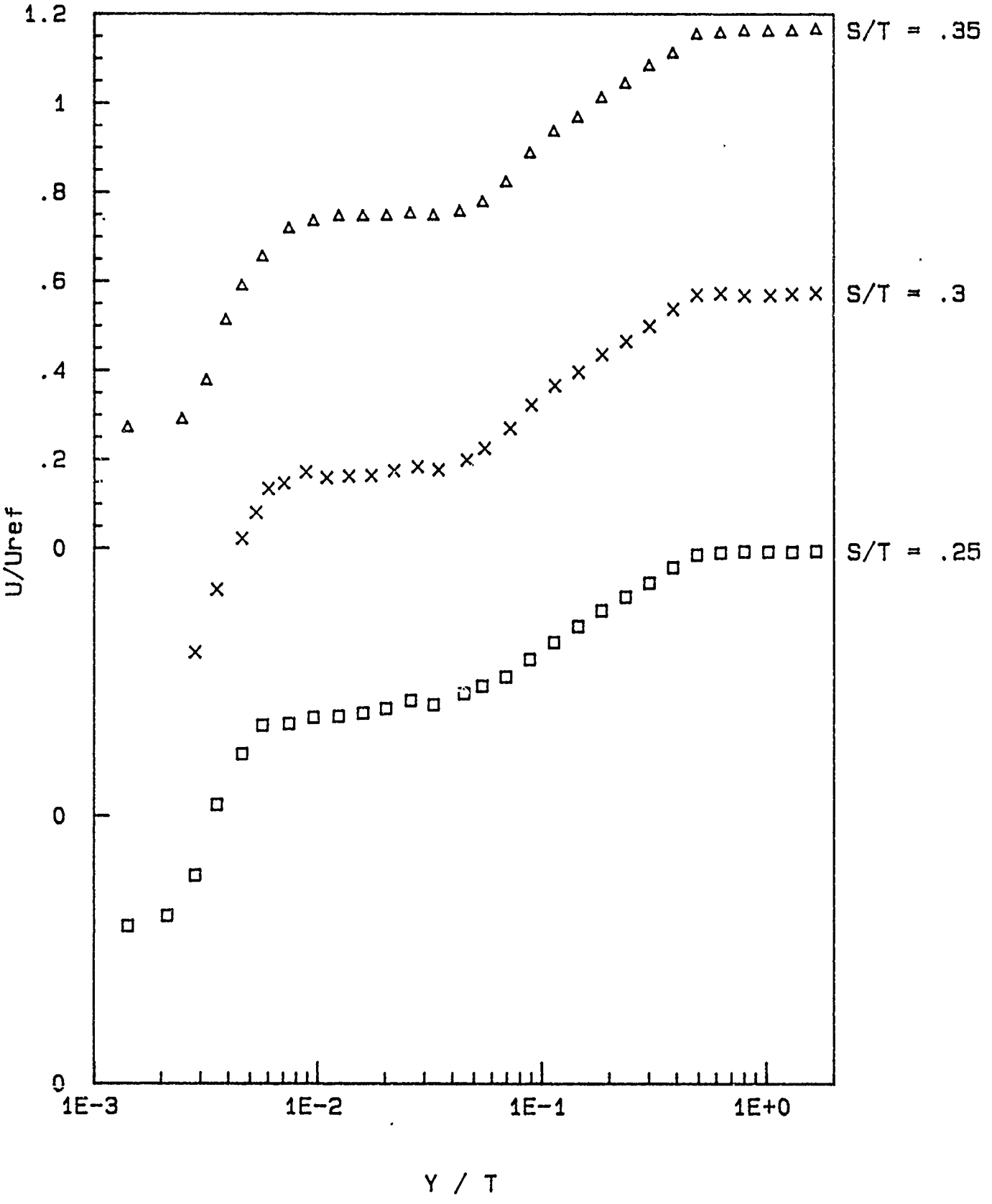


Figure F.3-1(b) Profiles of mean-velocity component U, plane 4.

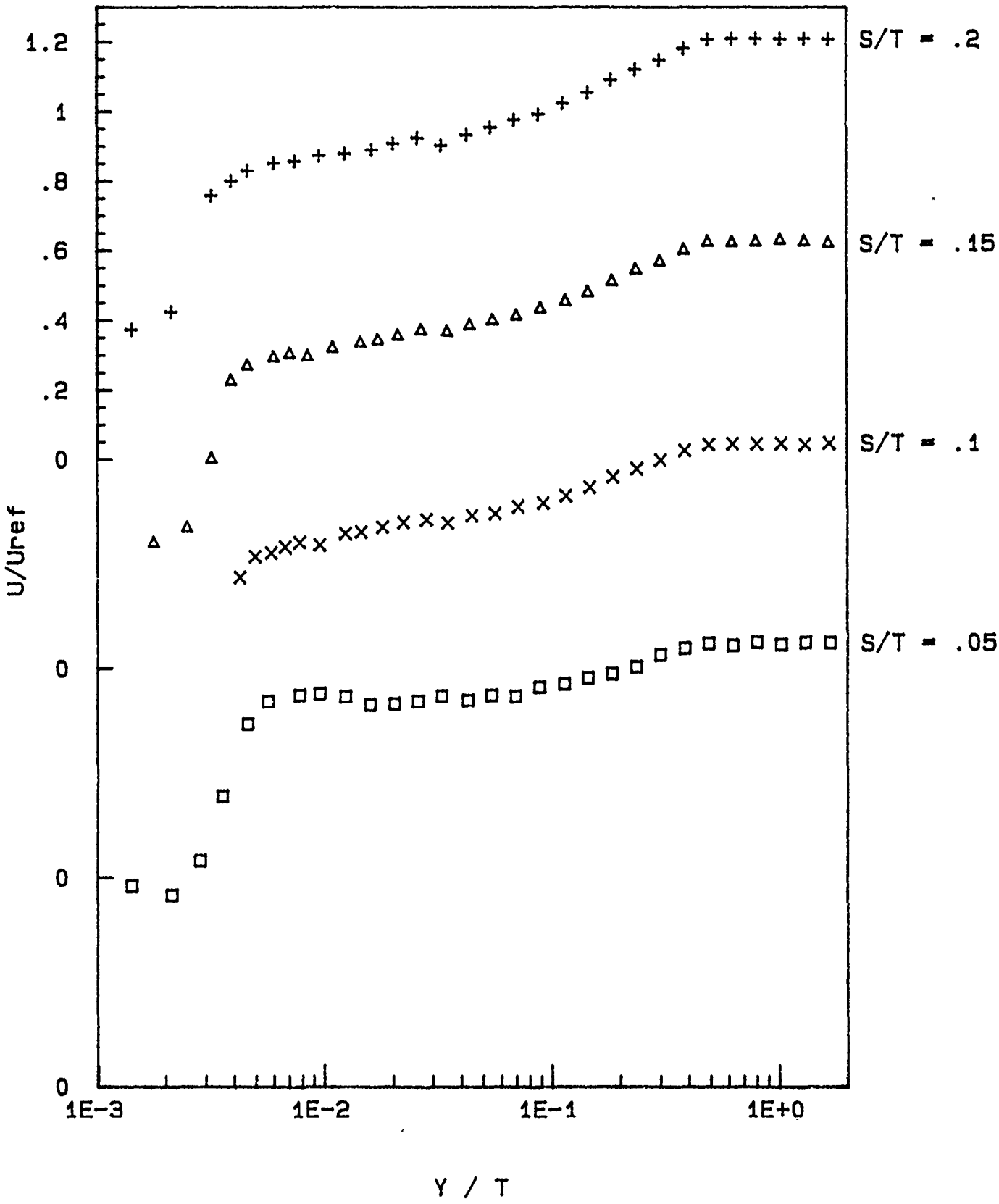


Figure F.3-1(c) Profiles of mean-velocity component U, plane 4.

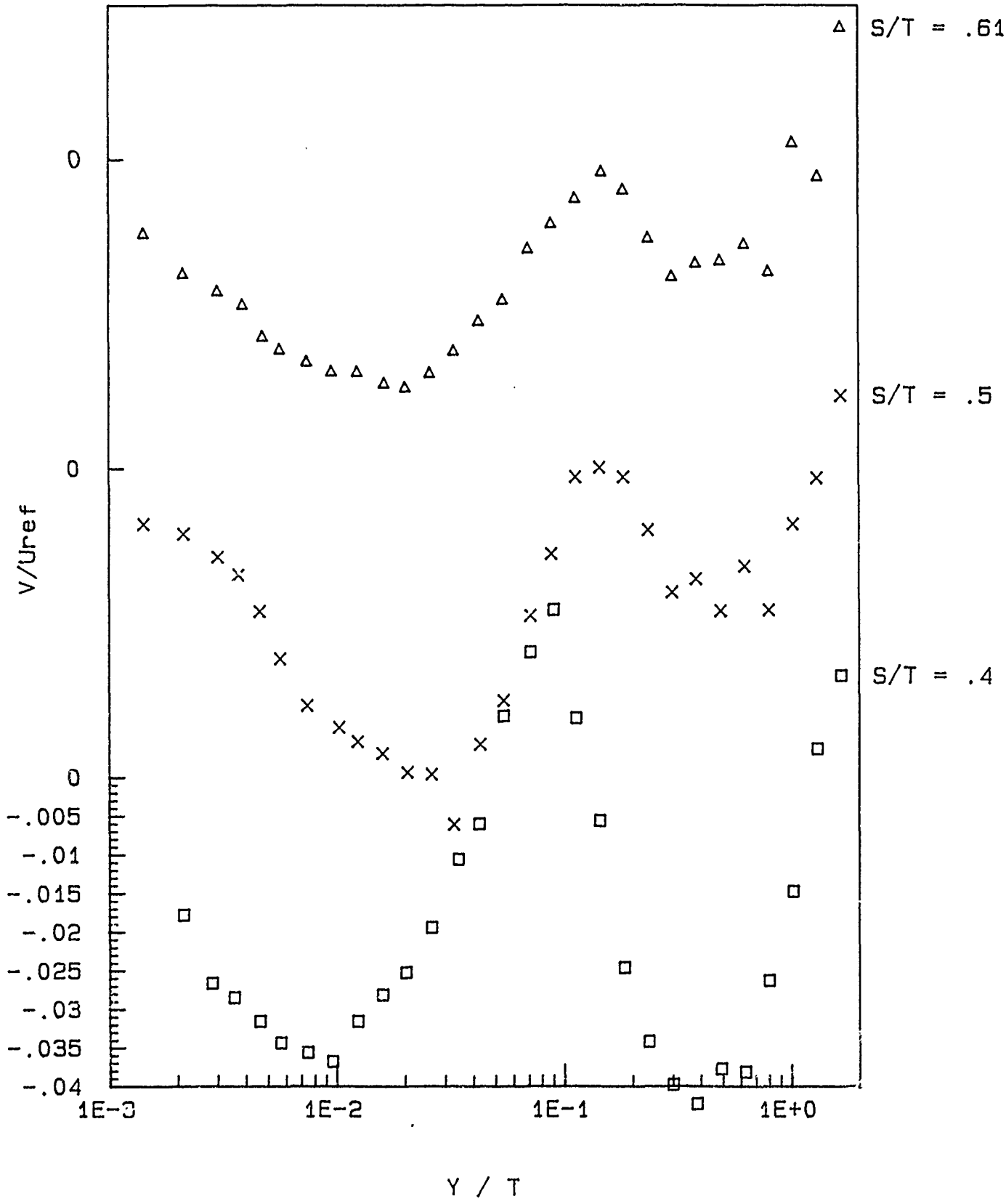


Figure F.3-2(a) Profiles of mean-velocity component V, plane 4.

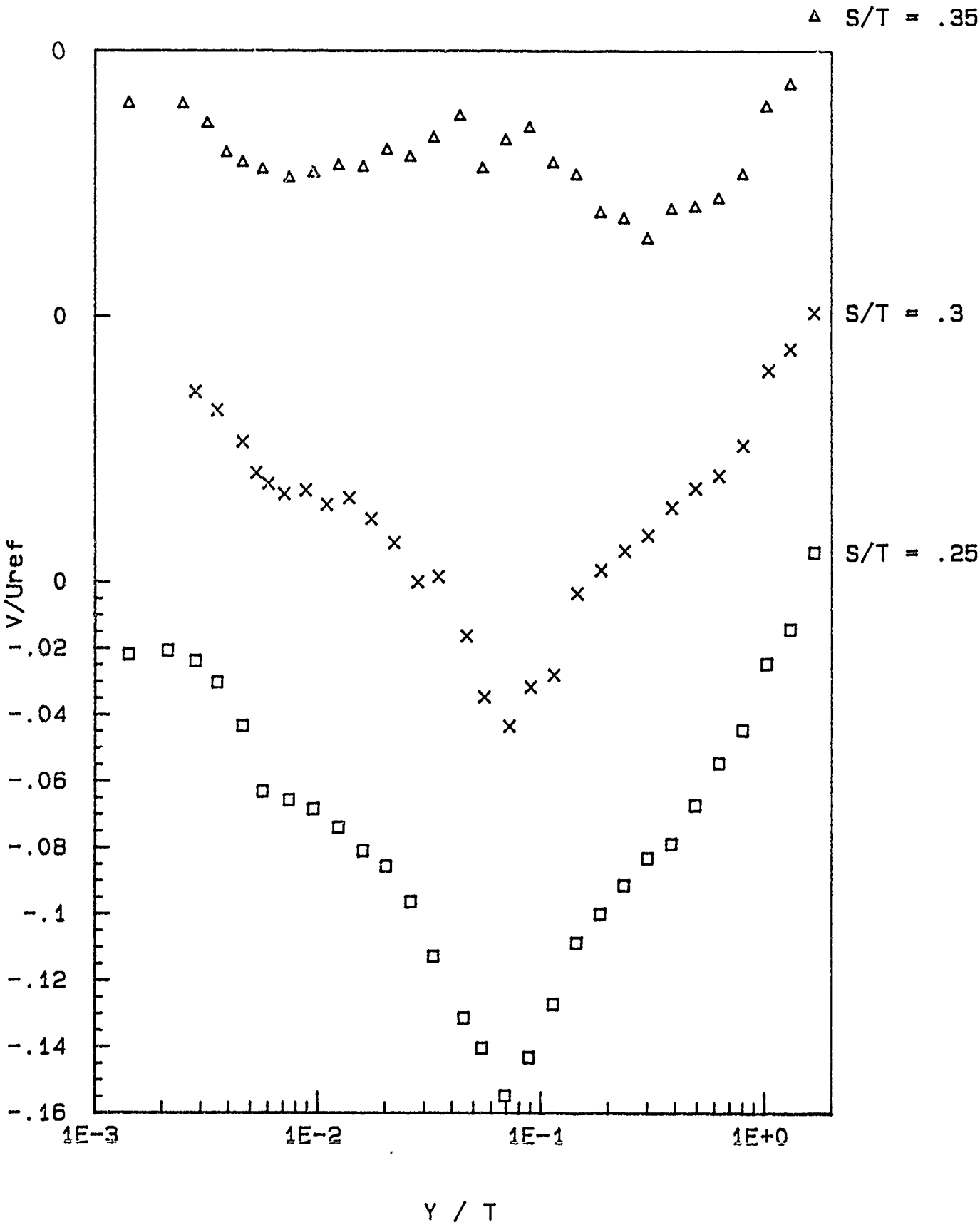


Figure F.3-2(b) Profiles of mean-velocity component V, plane 4.

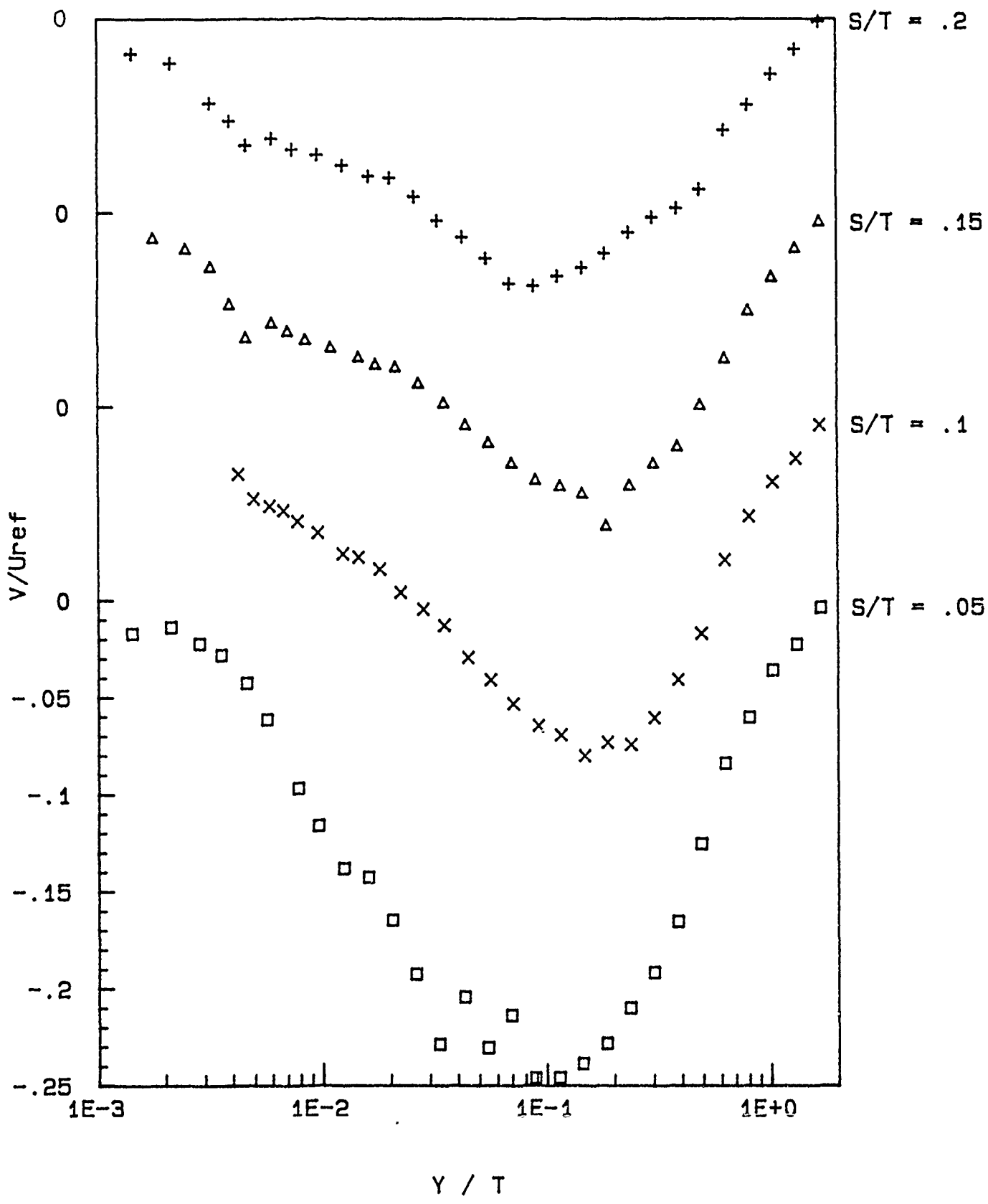


Figure F.3-2(c) Profiles of mean-velocity component V, plane 4.

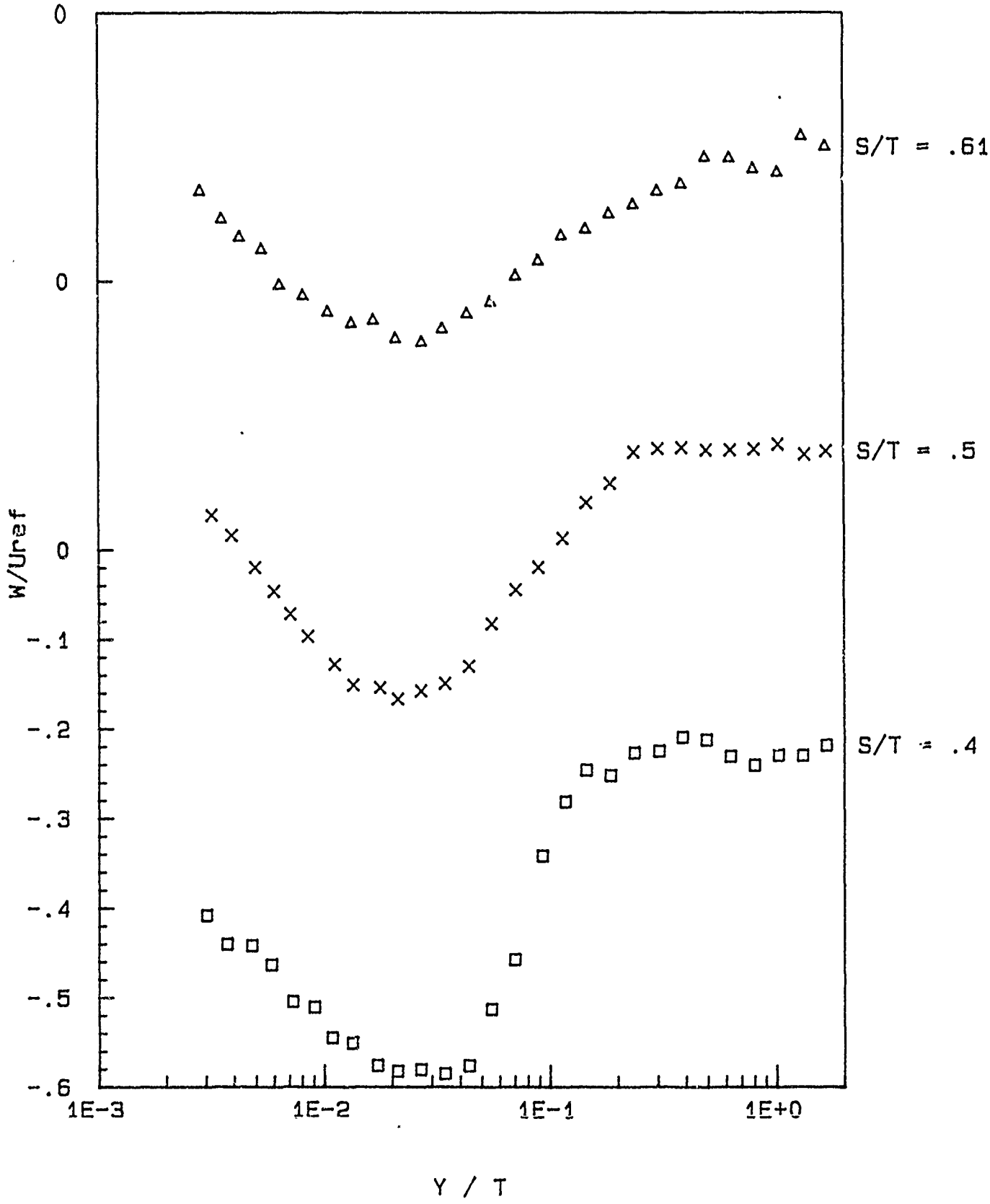


Figure F.3-3(a) Profiles of mean-velocity component W, plane 4.

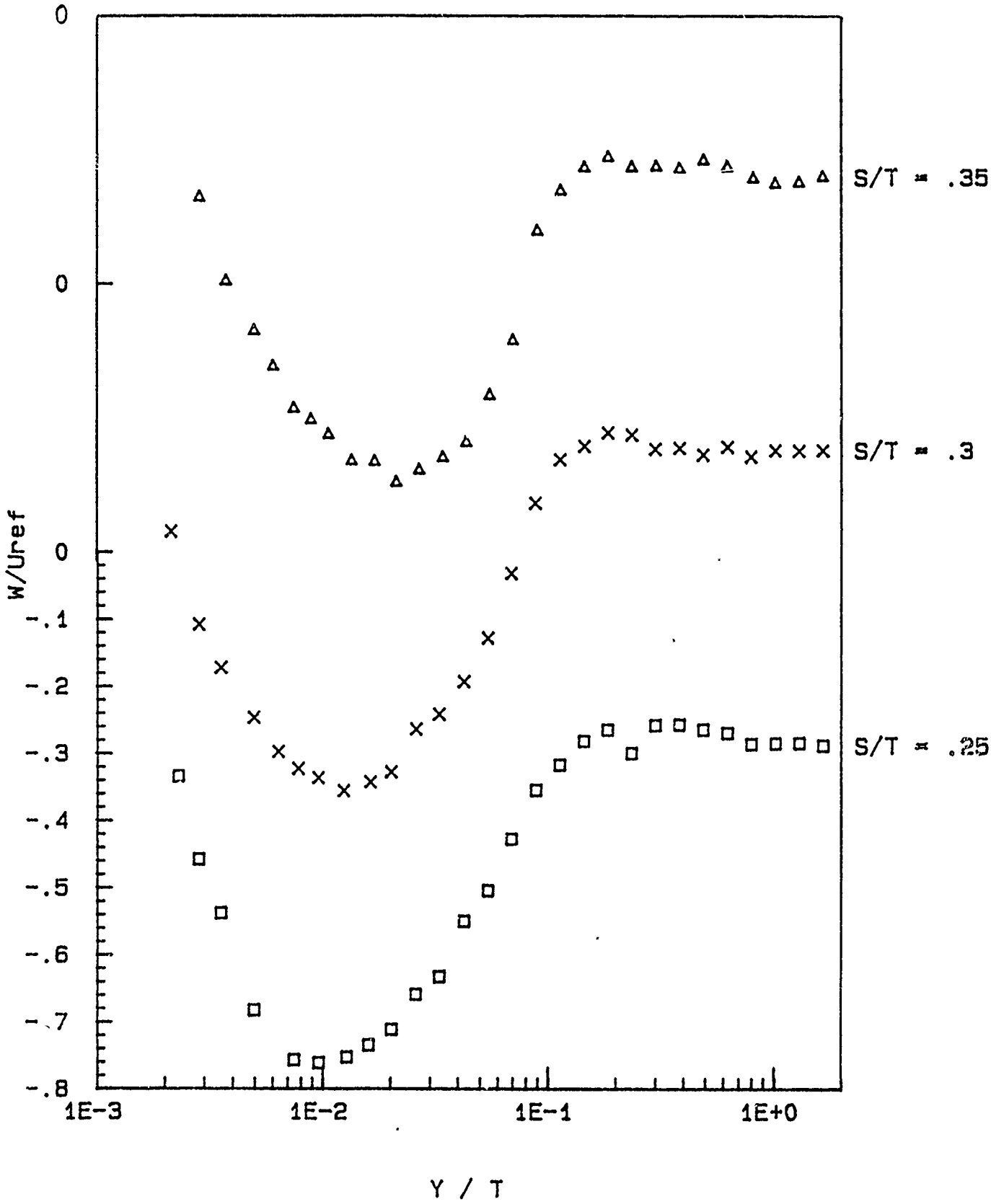


Figure F.3-3(b) Profiles of mean-velocity component W, plane 4.

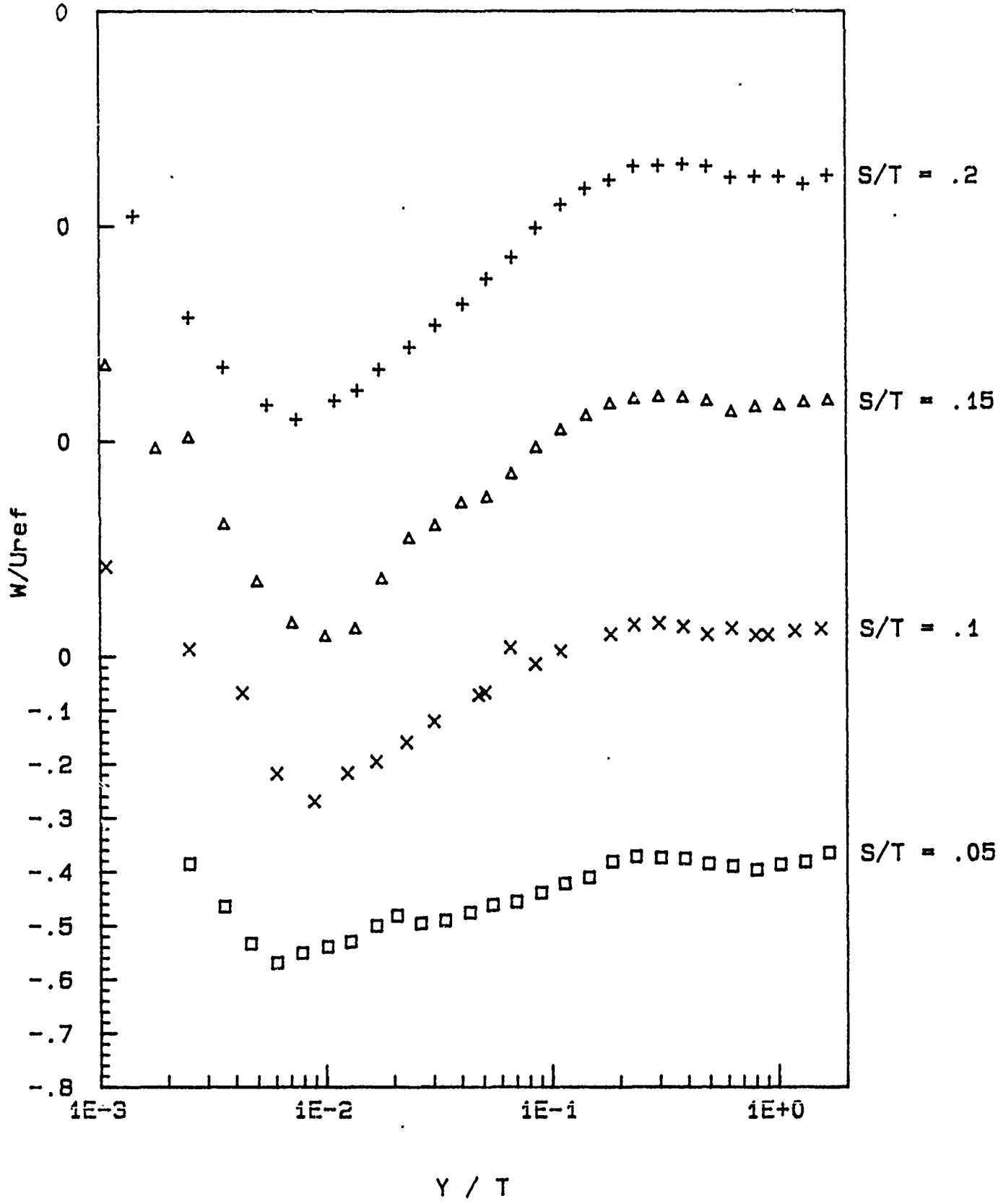


Figure F.3-3(c) Profiles of mean-velocity component W, plane 4.

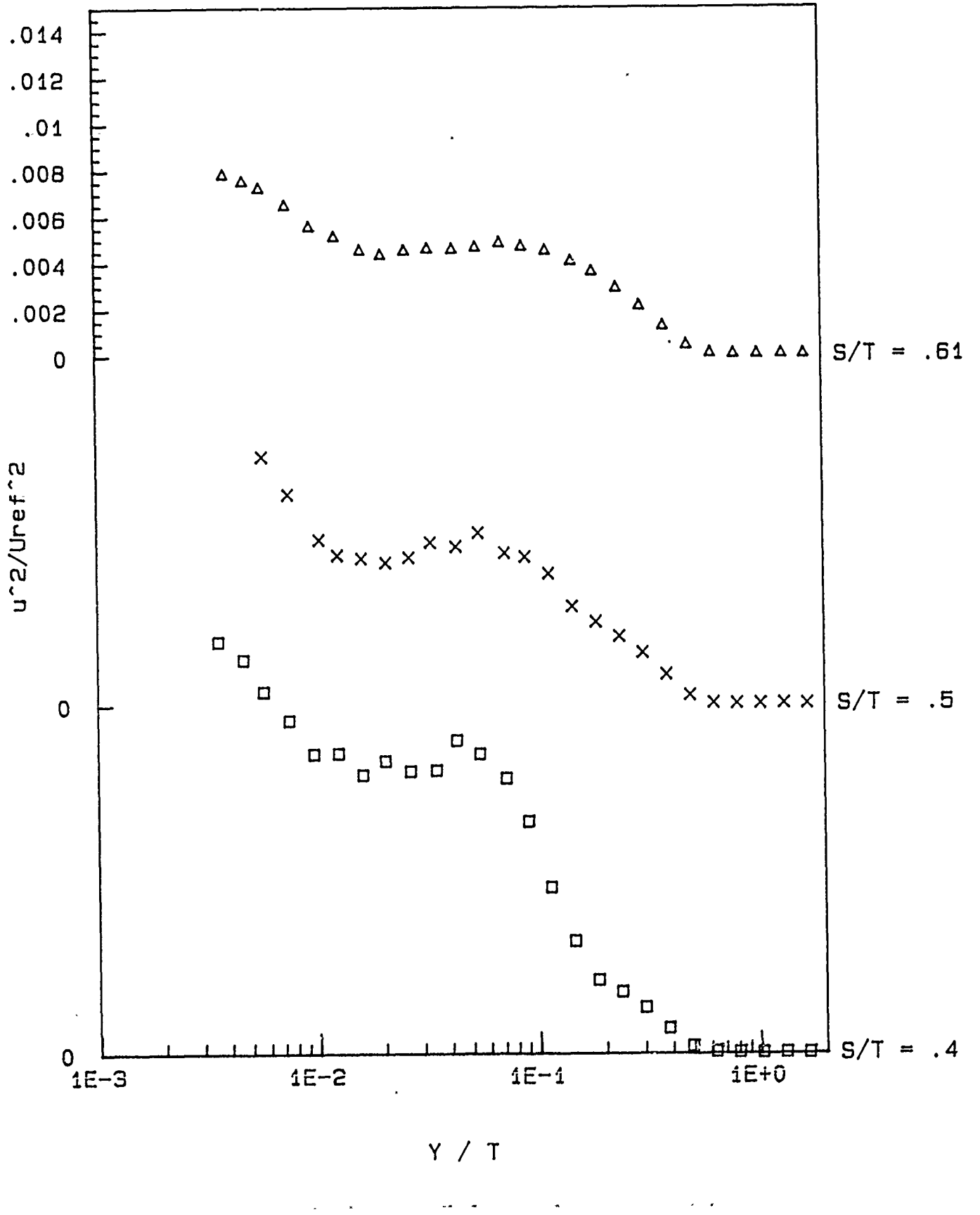


Figure F.3-4(a) Profiles of U-component of turbulence normal stress, plane 4.

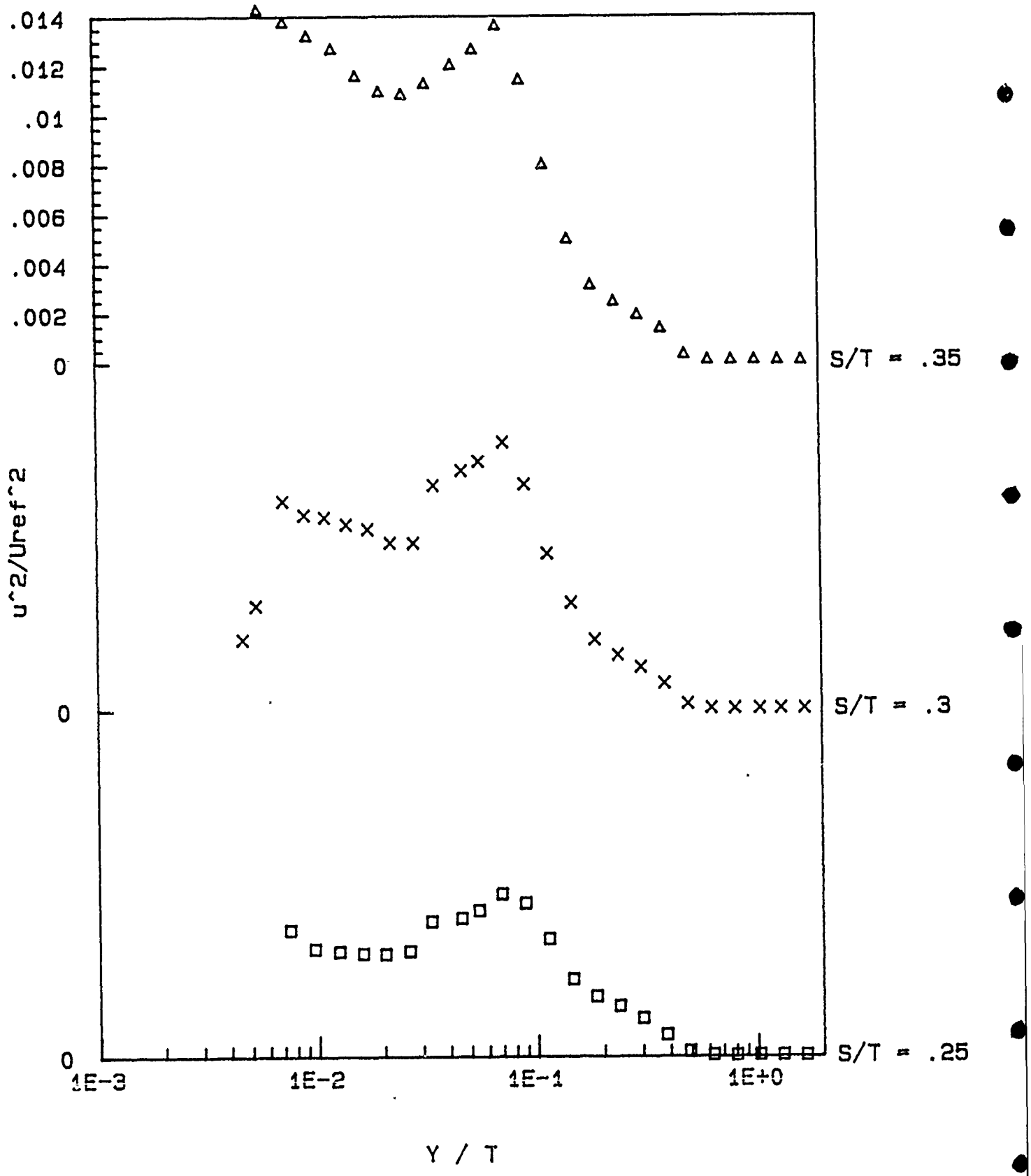


Figure F.3-4(b) Profiles of U-component of turbulence normal stress, plane 4.

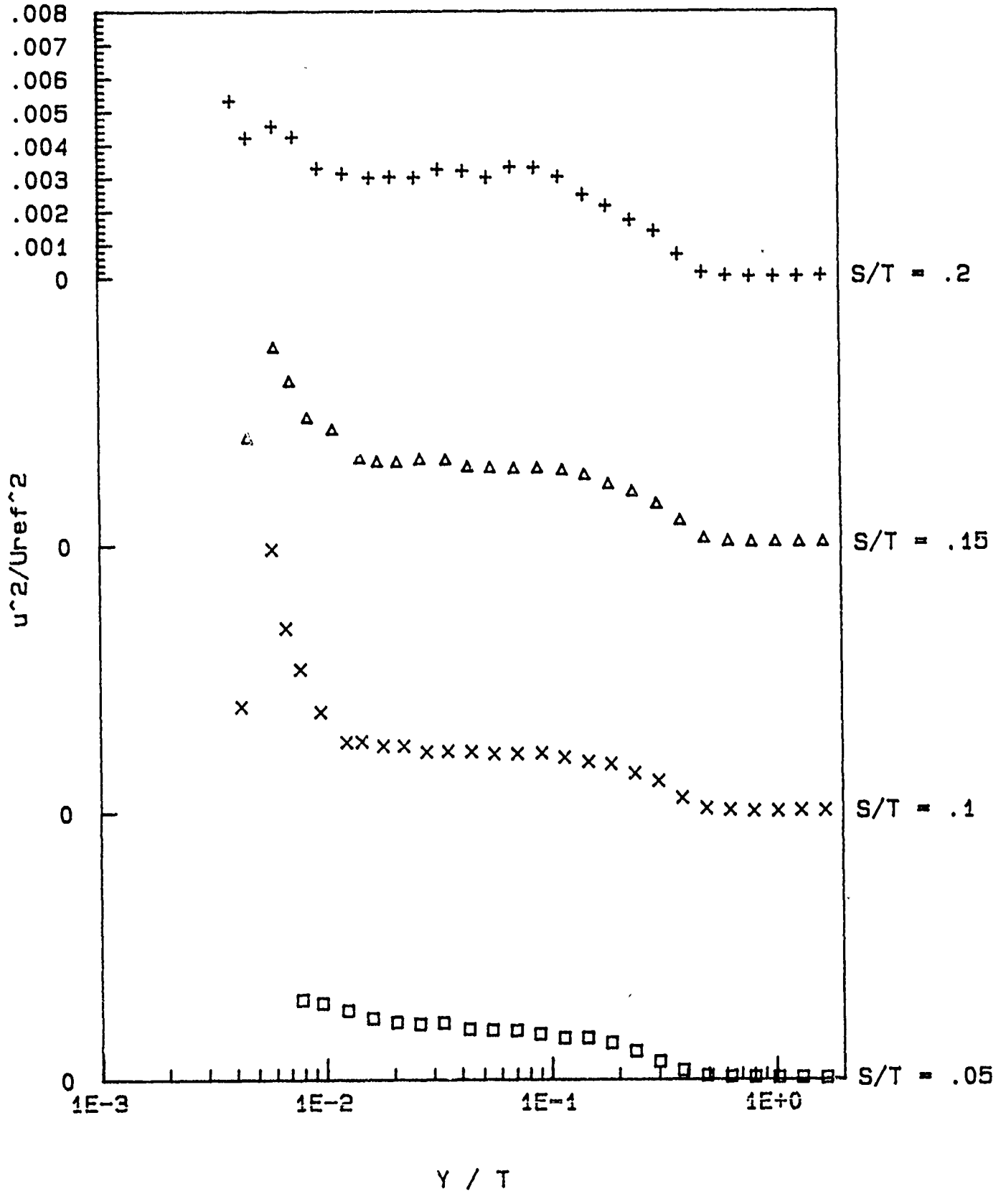


Figure F.3-4(c) Profiles of U-component of turbulence normal stress, plane 4.

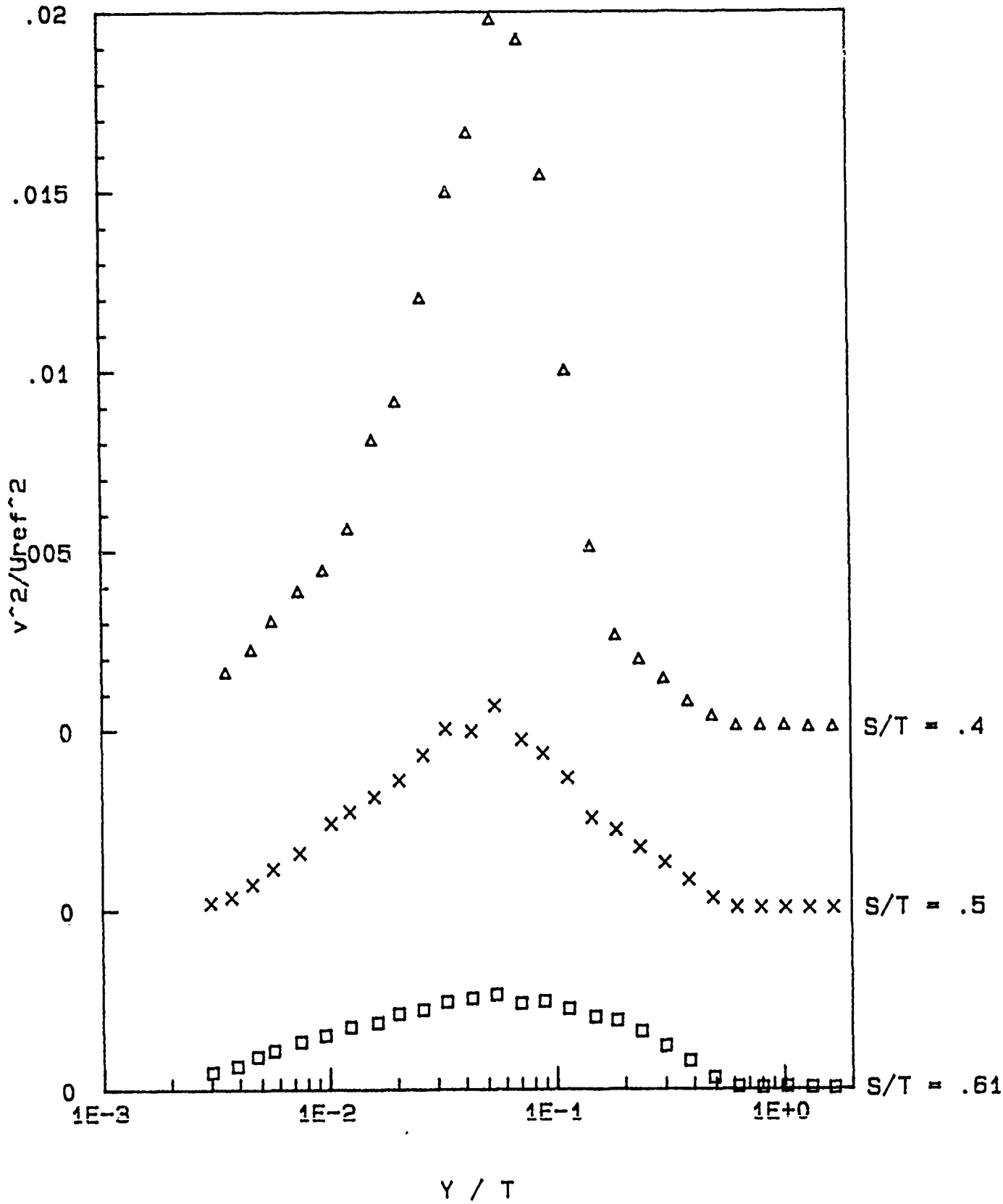


Figure F.3-5(a) Profiles of V-component of turbulence normal stress, plane 4.

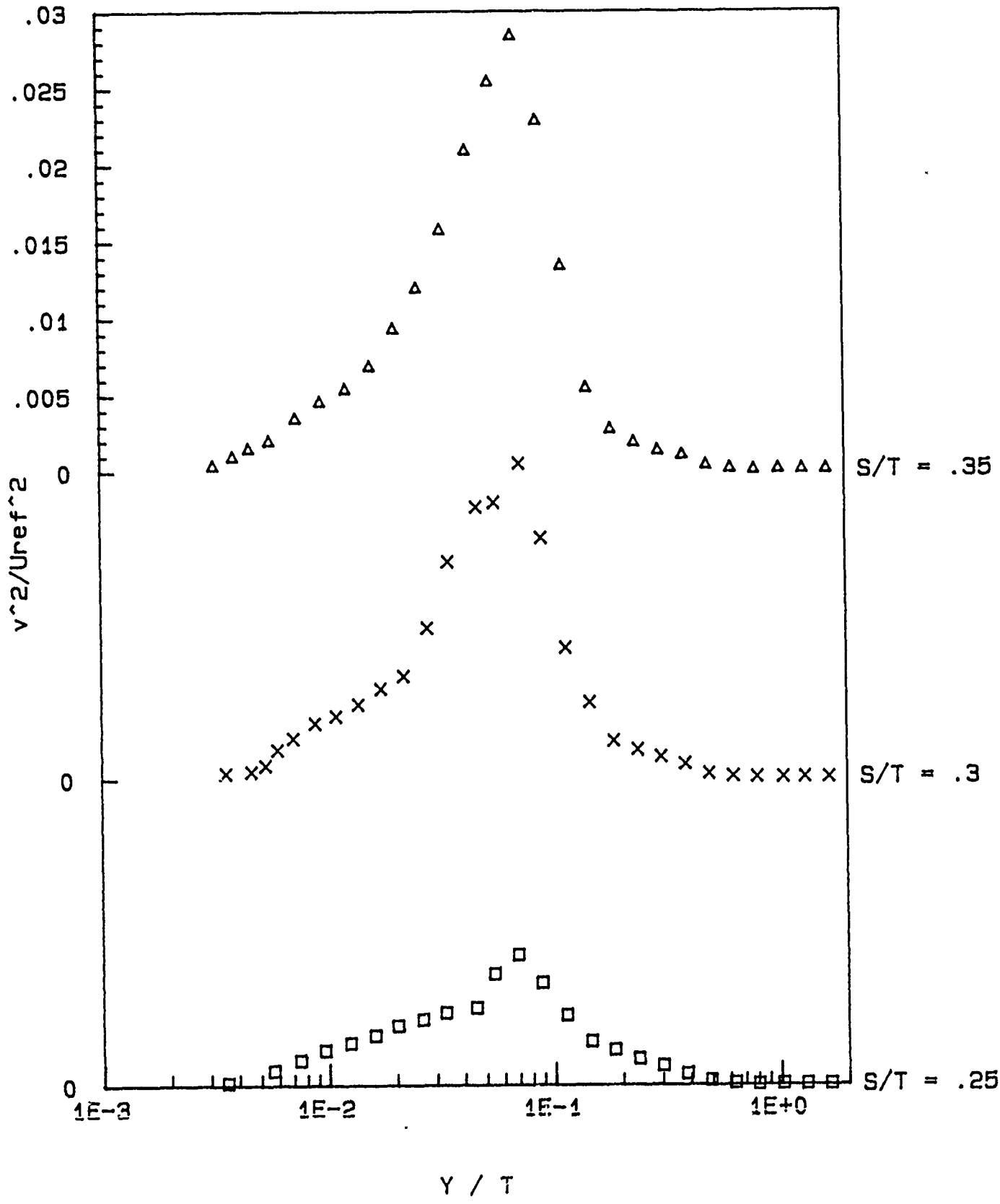


Figure F.3-5(b) Profiles of V-component of turbulence normal stress, plane 4.

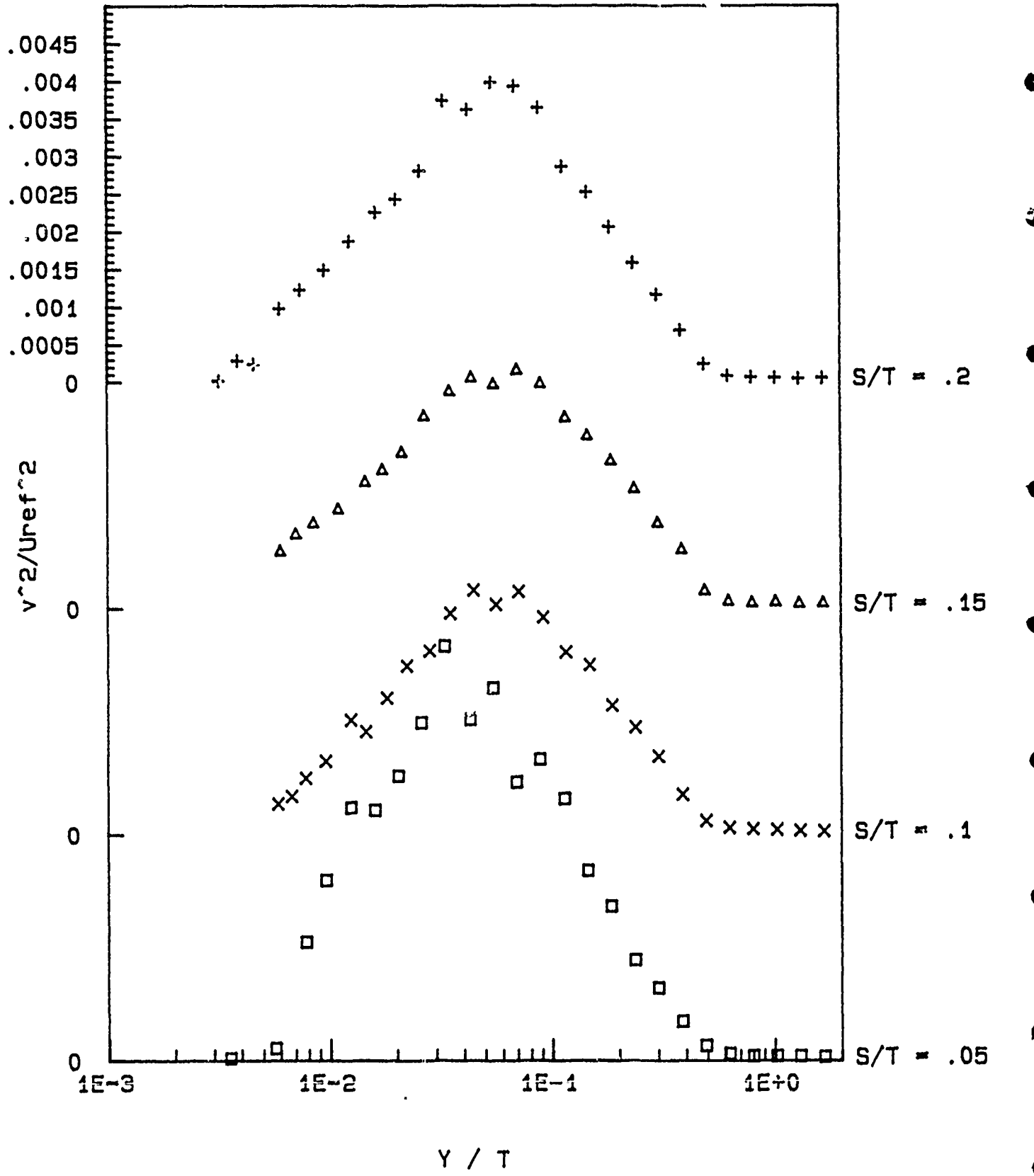


Figure F.3-5(c) Profiles of V-component of turbulence normal stress, plane 4.

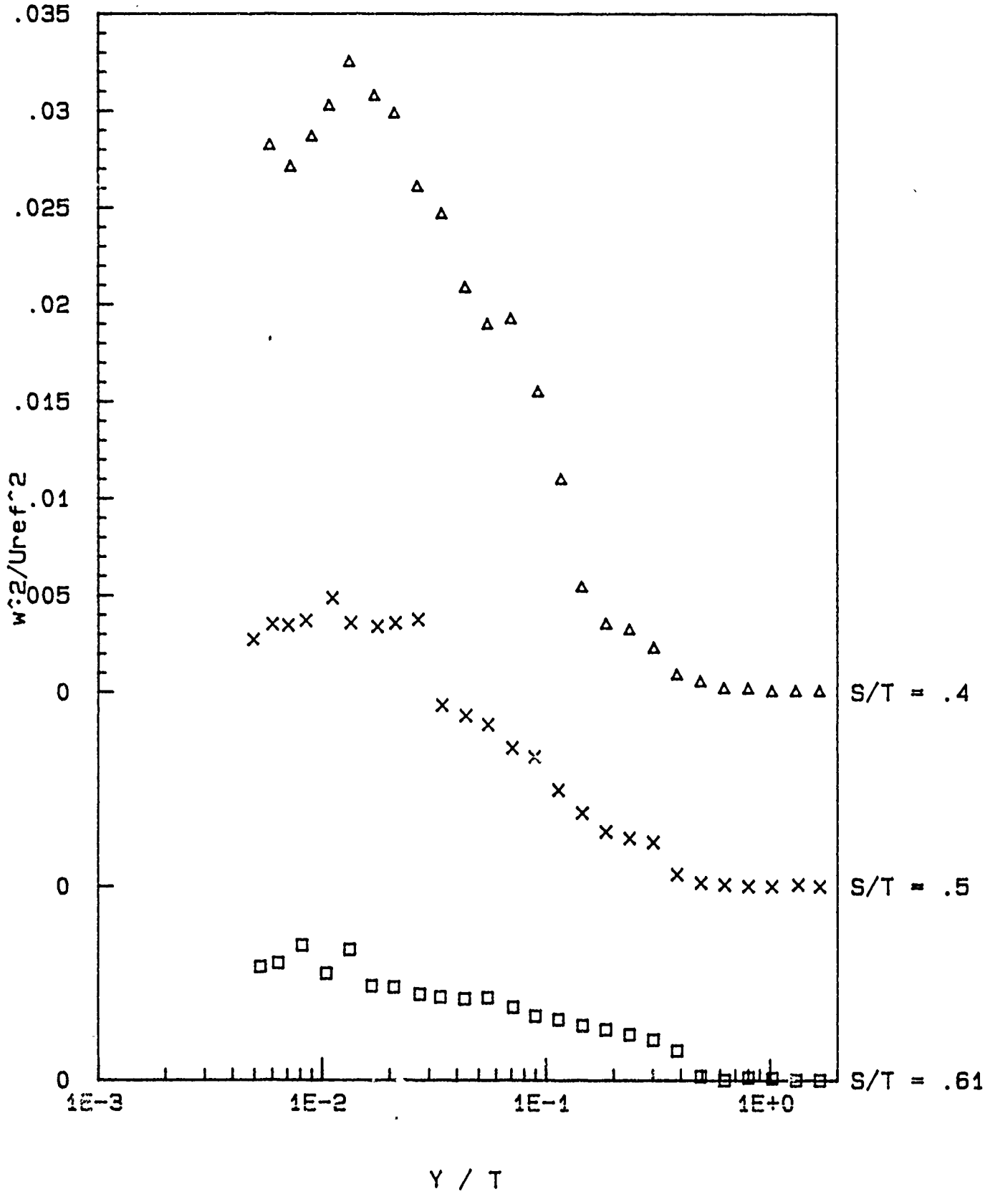


Figure F.3-6(a) Profiles of W-component of turbulence normal stress, plane 4.

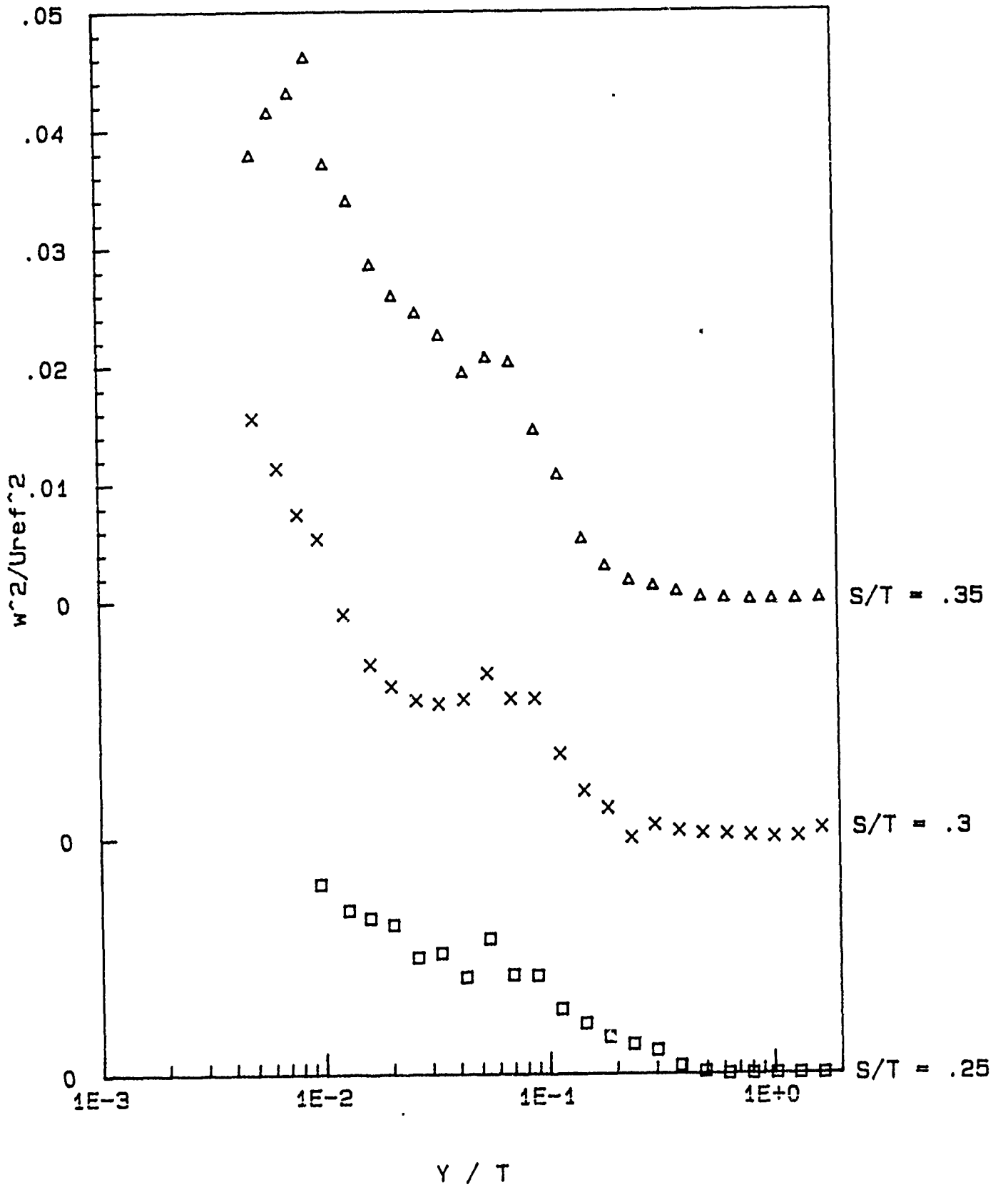


Figure F.3-6(b) Profiles of W-component of turbulence normal stress, plane 4.

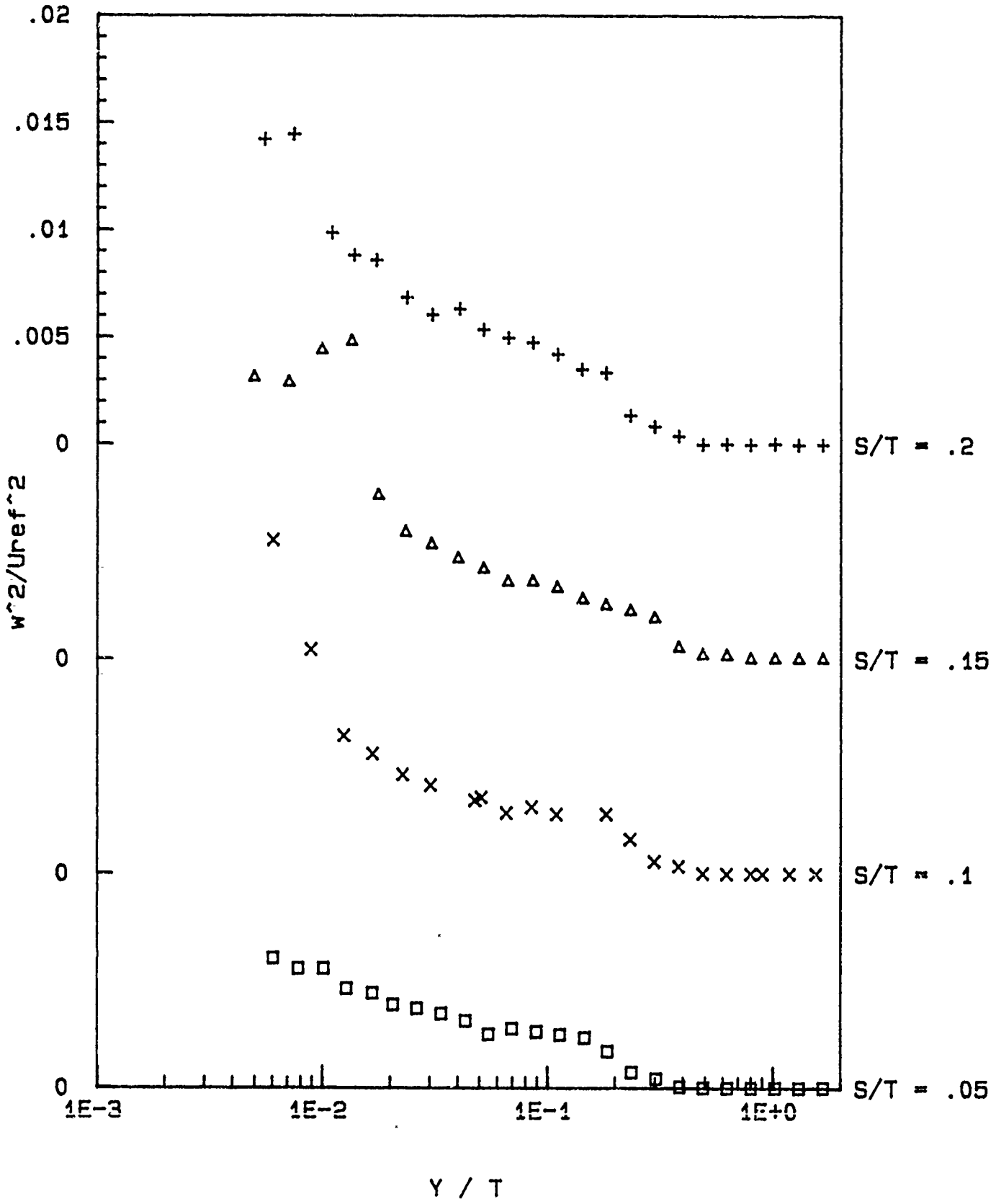


Figure F.3-6(c) Profiles of W-component of turbulence normal stress, plane 4.

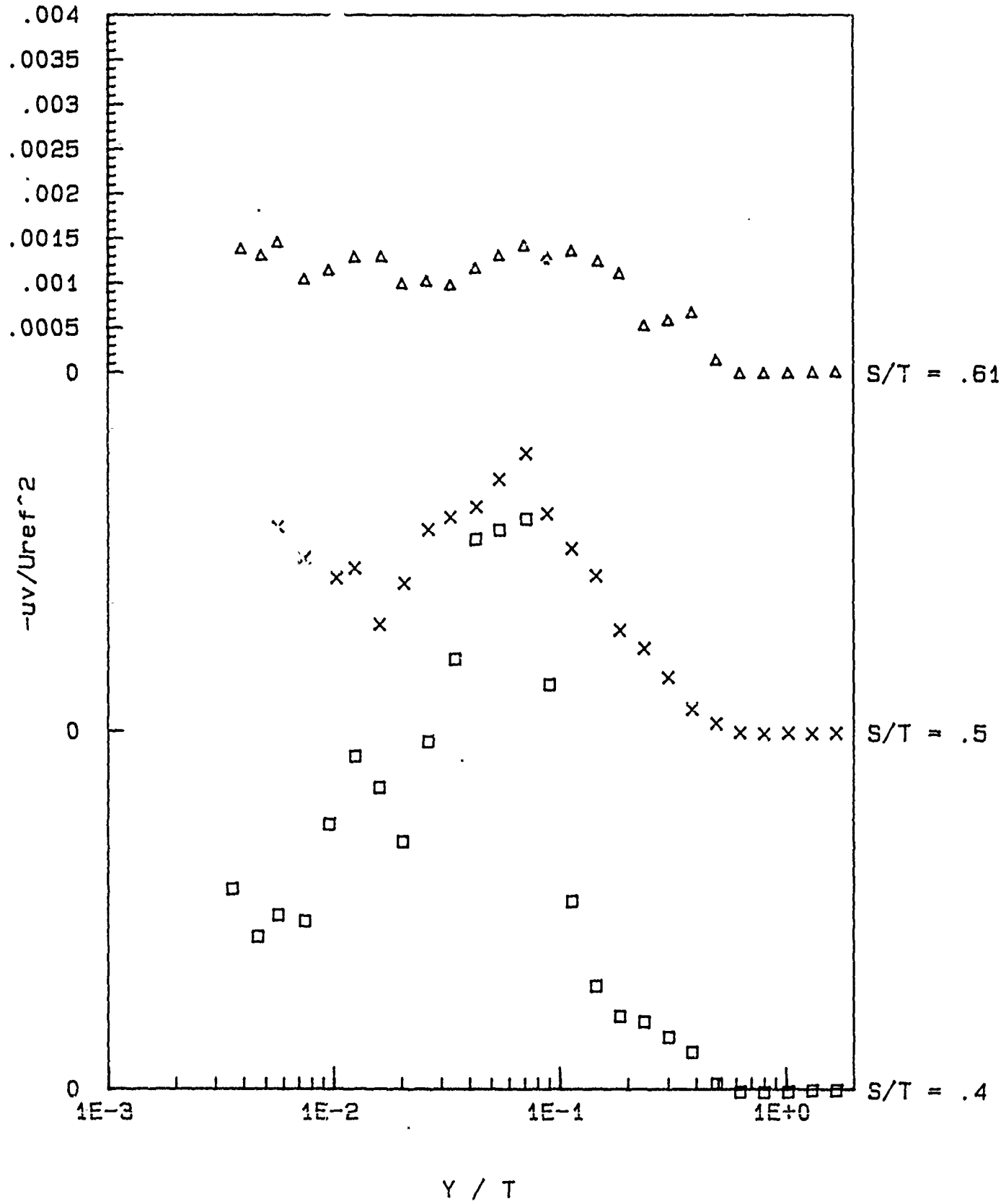


Figure F.3-7(a) Profiles of UV Reynolds shear stress, plane 4.

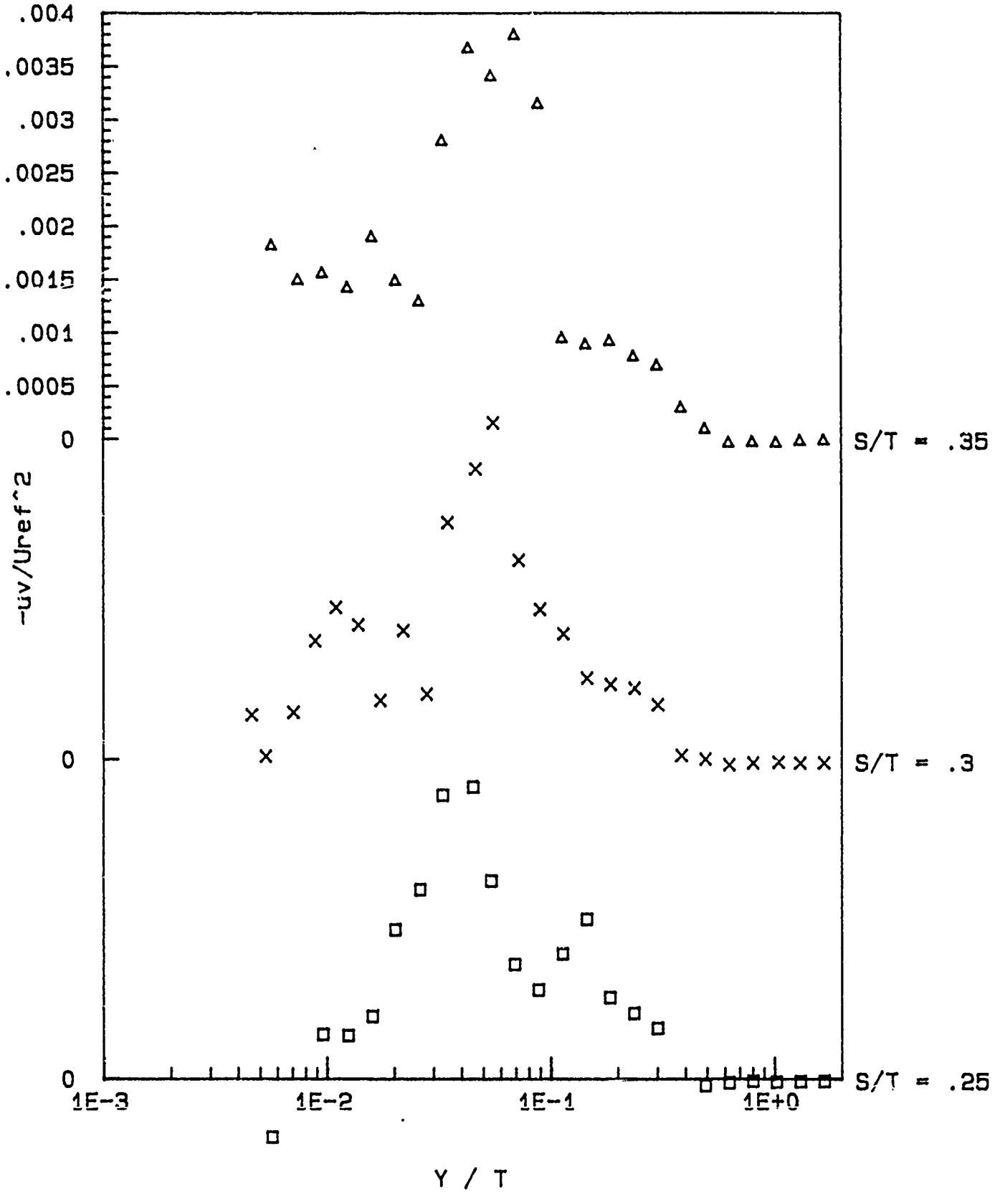


Figure F.3-7(b) Profiles of UV Reynolds shear stress, plane 4.

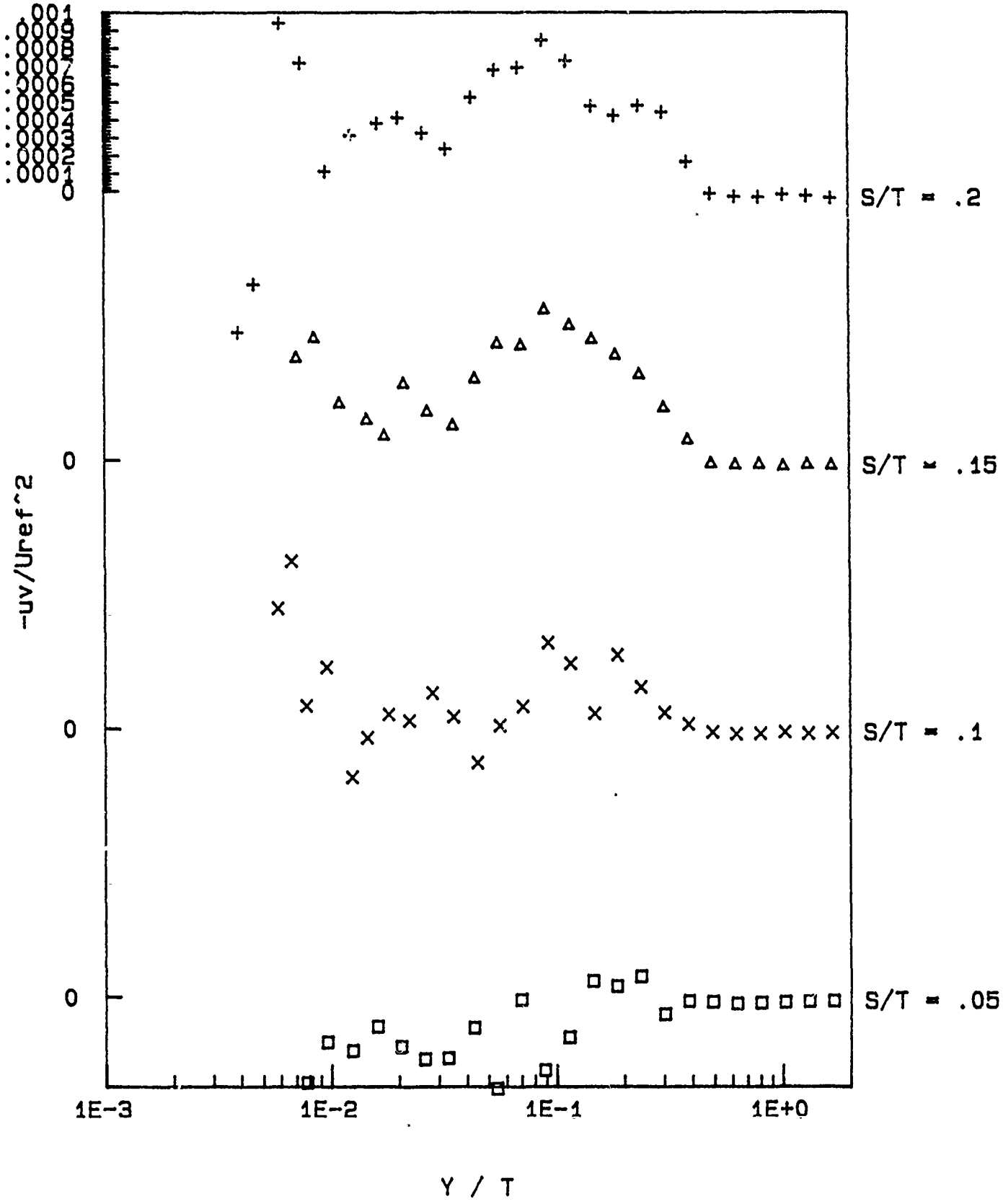


Figure F.3-7(c) Profiles of UV Reynolds shear stress, plane 4.

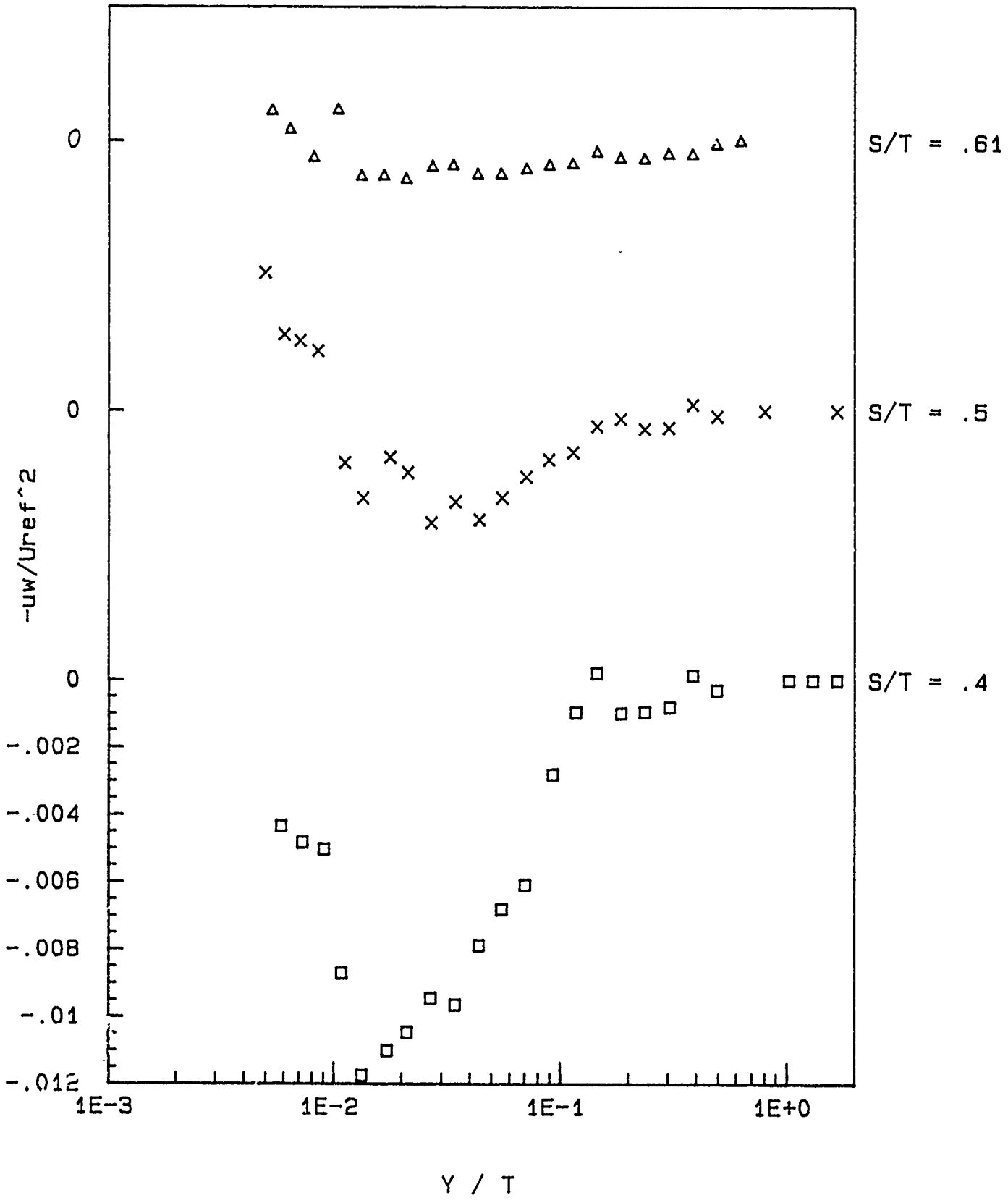


Figure F.3-8(a) Profiles of UW Reynolds shear stress, plane 4.

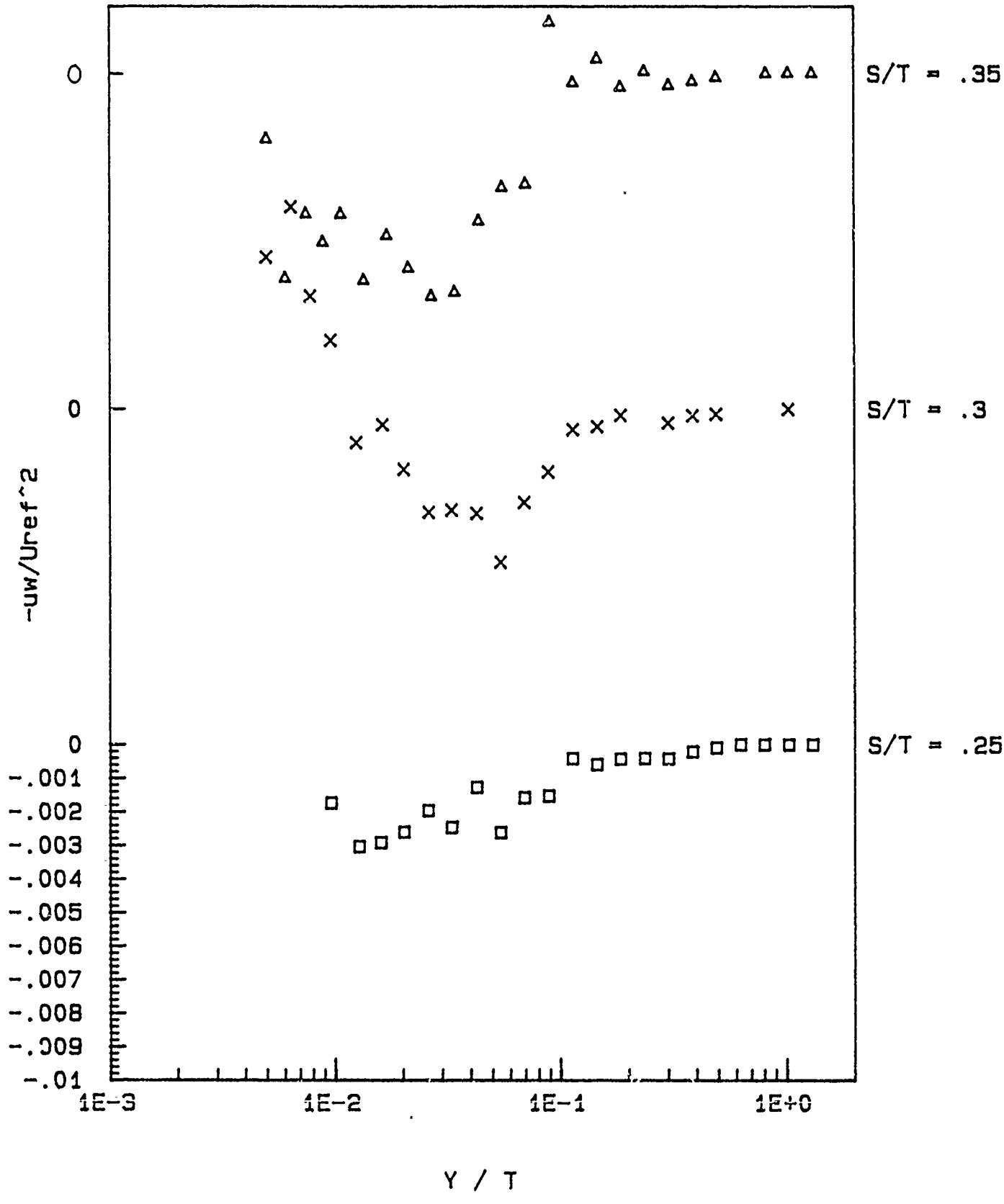


Figure F.3-8(b) Profiles of UW Reynolds shear stress, plane 4.

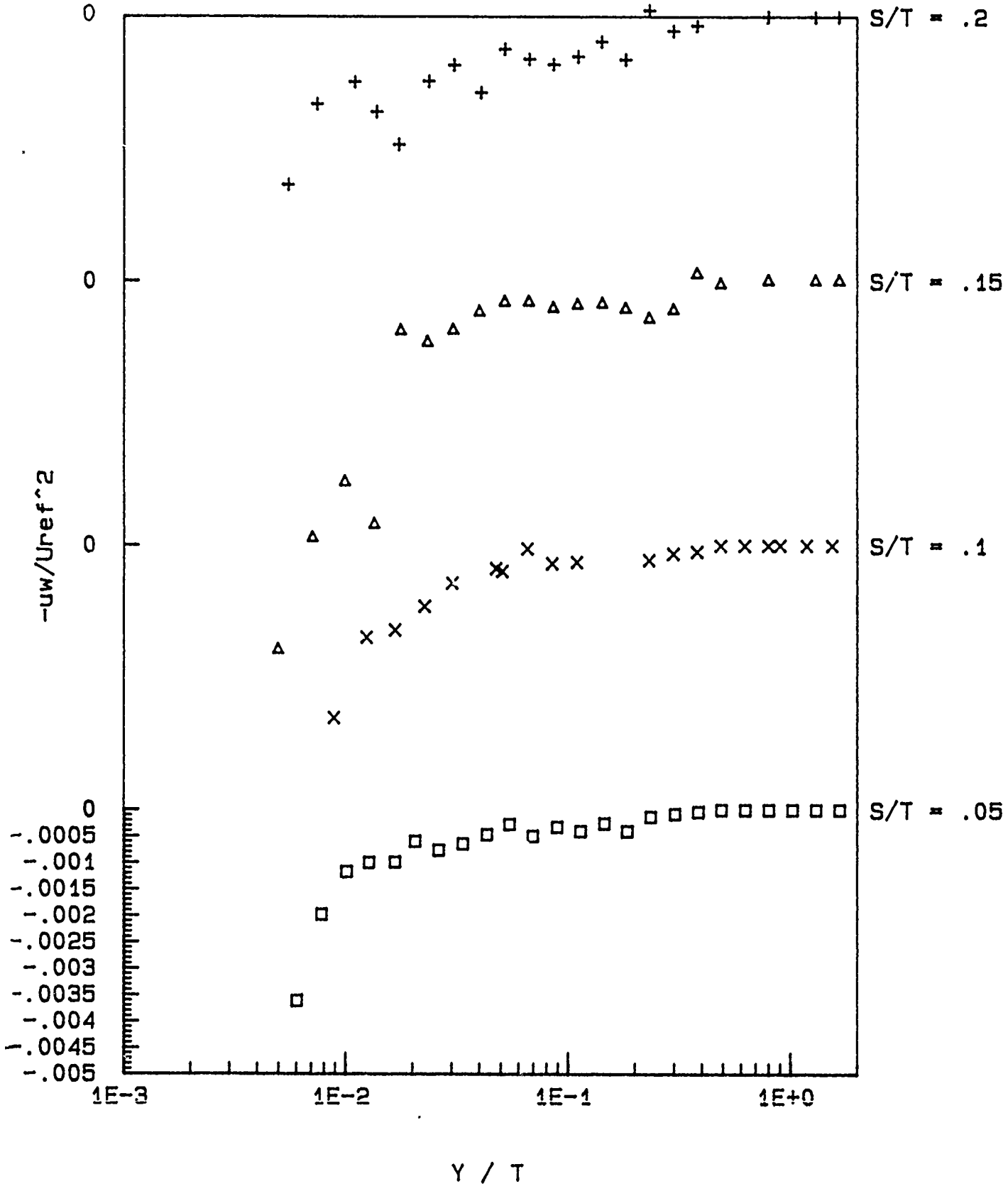


Figure F.3-8(c) Profiles of UW Reynolds shear stress, plane 4.

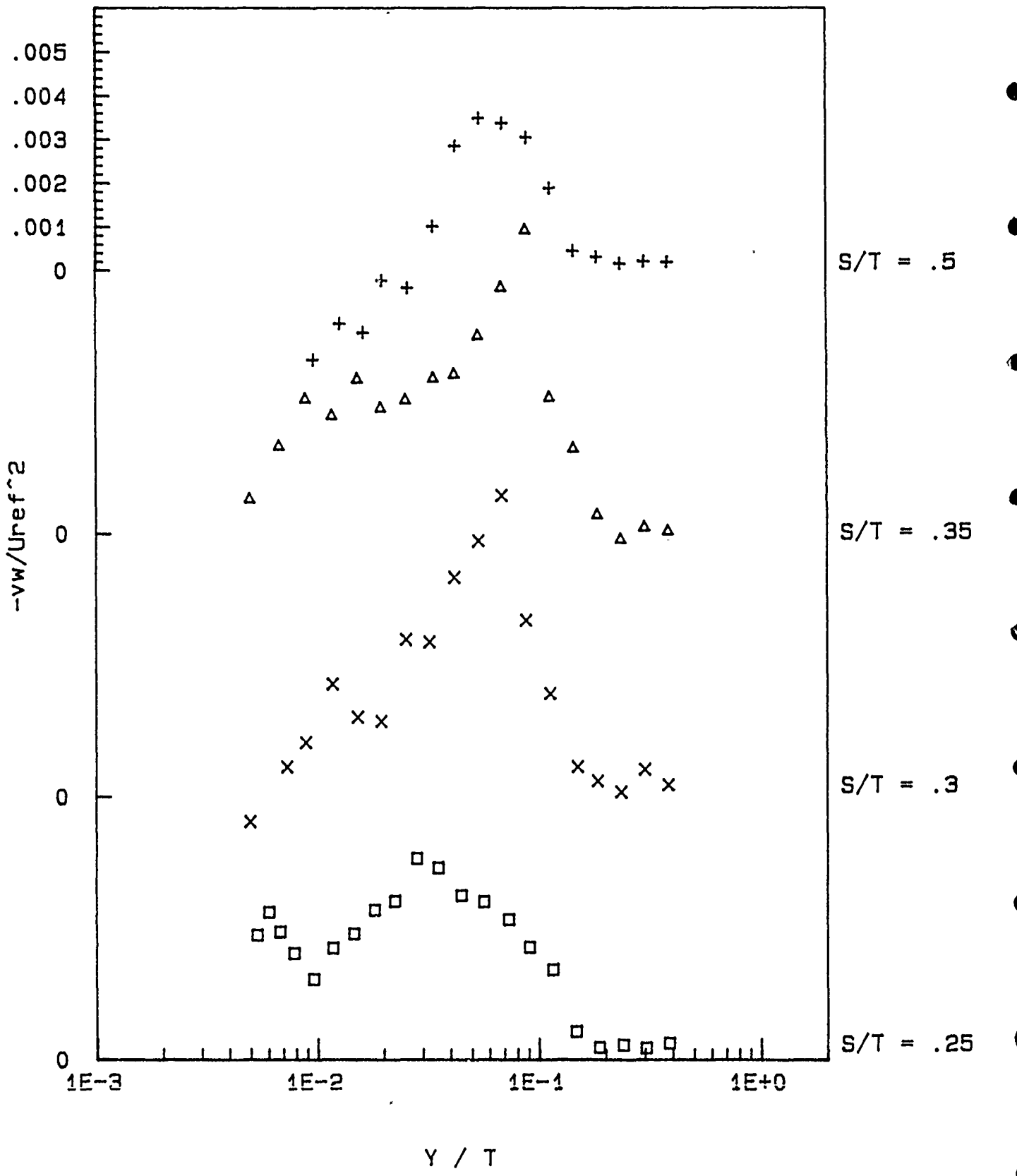


Figure F.3-9(a) Profiles of VW Reynolds shear stress, plane 4.

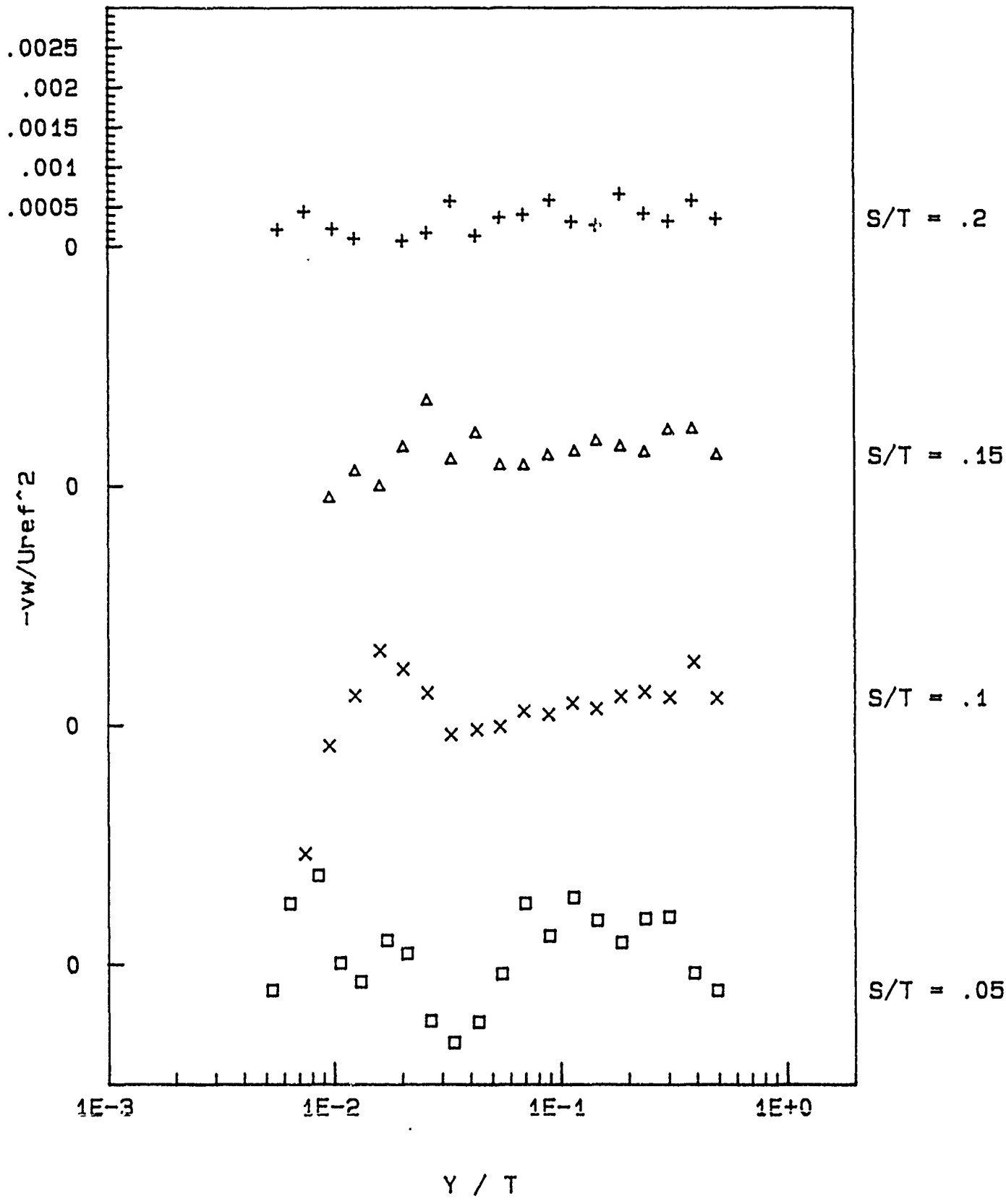


Figure F.3-9(b) Profiles of VW Reynolds shear stress, plane 4.

File E304770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.9
density (kilograms per meter cubed) = 1.091328
viscosity (meters squared per second) = 1.677894E-05
Atmospheric pressure (Pascals) = 93035
Velocity of undisturbed free stream (Uref, in m/s) = 27.61344
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092056E-03
Estimated momentum thickness Reynolds number = 6734.379
Location of traverse; X/T = .361 Z/T =-1.0689 (Plane 4 , S/T = 0.61)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	3.1746E-01				-9.6966E-03				
2.1246E-03	4.6189E-01				-1.4944E-02				
3.0099E-03	5.4075E-01				-1.7206E-02	4.8806E-04	-1.9920E-01	1.2800E+00	
3.8952E-03	5.8690E-01	7.8176E-03			-1.8960E-02	6.5925E-04	-4.1614E-02	1.2963E+00	-1.3644E-03
4.7805E-03	6.2378E-01	7.5280E-03			-2.3095E-02	9.2476E-04	-1.8121E-01	9.9459E-01	-1.2929E-03
5.6657E-03	6.4889E-01	7.2237E-03	-5.7486E-01	1.0566E+00	-2.4734E-02	1.0878E-03	-6.5969E-02	6.6109E-01	-1.4372E-03
7.4363E-03	6.7358E-01	6.4789E-03	-4.0405E-01	4.3576E-01	-2.6334E-02	1.3414E-03	3.4503E-02	5.1548E-01	-1.0265E-03
9.5609E-03	6.9267E-01	5.5548E-03	-2.3902E-01	1.6368E-01	-2.7593E-02	1.5160E-03	5.0896E-02	3.6281E-01	-1.1271E-03
1.2394E-02	7.0327E-01	5.1102E-03	-1.5369E-01	1.9555E-01	-2.7655E-02	1.7449E-03	3.0379E-02	3.4420E-01	-1.2726E-03
1.6289E-02	7.2192E-01	4.5182E-03	-7.9571E-02	3.5544E-02	-2.9121E-02	1.8620E-03	1.0864E-01	2.3099E-01	-1.2806E-03
2.0184E-02	7.2923E-01	4.3276E-03	-1.1086E-01	-2.0256E-02	-2.9664E-02	2.1100E-03	9.4834E-02	2.4004E-01	-9.7371E-04
2.5850E-02	7.5408E-01	4.5078E-03	-9.3453E-02	-1.4606E-02	-2.7812E-02	2.2208E-03	1.1989E-01	2.2448E-01	-1.0049E-03
3.2932E-02	7.5967E-01	4.5844E-03	-6.7087E-02	-5.4679E-02	-2.4931E-02	2.4414E-03	1.1584E-01	2.4809E-01	-9.6327E-04
4.2493E-02	7.8227E-01	4.5697E-03	-4.7771E-02	-1.7539E-01	-2.1077E-02	2.5355E-03	1.3997E-01	1.3949E-01	-1.1518E-03
5.4178E-02	7.9018E-01	4.6535E-03	-9.4999E-02	-1.7041E-01	-1.8311E-02	2.6401E-03	1.6194E-01	1.9722E-01	-1.2951E-03
6.9759E-02	8.1758E-01	4.8267E-03	-8.6968E-02	-1.9578E-01	-1.1693E-02	2.3969E-03	1.5055E-01	4.8495E-02	-1.4052E-03
8.8173E-02	8.3235E-01	4.6901E-03	-8.8867E-02	-2.2426E-01	-8.4210E-03	2.4511E-03	1.5206E-01	4.3664E-02	-1.2662E-03
1.1296E-01	8.6789E-01	4.4978E-03	-1.6406E-01	-2.5593E-01	-5.1615E-03	2.2412E-03	2.2948E-01	5.9341E-02	-1.3445E-03
1.4766E-01	9.0065E-01	4.0329E-03	-2.2179E-01	-2.6456E-01	-1.7255E-03	2.0161E-03	2.0224E-01	3.2972E-02	-1.2311E-03
1.8414E-01	9.3470E-01	3.5867E-03	-2.8539E-01	-2.1107E-01	-4.0589E-03	1.9145E-03	2.5089E-01	1.0233E-01	-1.0905E-03
2.3619E-01	9.7136E-01	2.8701E-03	-3.5198E-01	-7.4103E-02	-1.0338E-02	1.6145E-03	2.6737E-01	9.7740E-02	-5.1019E-04
3.0028E-01	1.0122E+00	2.0962E-03	-5.0147E-01	1.8726E-01	-1.5326E-02	1.2048E-03	3.1904E-01	3.1909E-01	-5.6989E-04
3.8350E-01	1.0543E+00	1.2381E-03	-6.6628E-01	4.1922E-01	-1.3565E-02	7.8606E-04	2.8508E-01	3.8976E-01	-6.5599E-04
4.8973E-01	1.0969E+00	4.1541E-04	-1.1199E+00	1.7145E+00	-1.3222E-02	3.1948E-04	5.0287E-01	8.6744E-01	-1.2375E-04
6.2571E-01	1.1058E+00	6.5787E-05	-1.0336E-01	-1.8410E-01	-1.1079E-02	7.0752E-05	1.3083E-01	-8.9203E-02	2.3498E-05
7.9993E-01	1.1105E+00	4.3031E-05	-1.7891E-01	-3.0211E-01	-1.4641E-02	4.8734E-05	1.0417E-01	-3.2388E-01	2.2523E-05
1.0223E+00	1.1088E+00	3.5265E-05	-2.1586E-01	-3.5980E-01	2.1001E-03	6.3314E-05	-7.6849E-01	4.5078E-01	1.9979E-05
1.3205E+00	1.1104E+00	2.7151E-05	-1 5527E-01	-3.7621E-01	-2.3007E-03	4.3062E-05	2.1038E-01	-1.5887E-01	1.3406E-05
1.6636E+00	1.1141E+00	2.8606E-05	-2.0541E-01	-3.4793E-01	1.7034E-02	3.1573E-05	1.2135E-01	-3.1696E-01	9.8313E-06

Table F.3-1 Velocity measurements made at S/T = 0.61 with the UV system of the laser anemometer, plane 4

File E303770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.8
density (kilograms per meter cubed) = 1.095275
viscosity (meters squared per second) = 1.671414E-05
Atmospheric pressure (Pascals) = 93340
Velocity of undisturbed free stream (Uref, in m/s) = 27.61273
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092077E-03
Estimated momentum thickness Reynolds number = 6760.347
Location of traverse; X/T = .382 Z/T =-.9562 (Plane 4 , S/T = 0.50)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	2.5635E-01				-7.2038E-03				
2.1246E-03	2.6817E-01				-8.5014E-03				
3.0099E-03	4.2385E-01				-1.1487E-02	2.0651E-04	-2.4735E-01	2.1486E+00	
3.7181E-03	5.1197E-01				-1.3790E-02	3.6866E-04	-5.6942E-02	2.0576E+00	
4.6034E-03	5.9636E-01				-1.8514E-02	7.1673E-04	-6.6004E-02	1.4078E+00	
5.6657E-03	6.3832E-01	1.0714E-02	-5.2560E-01	1.1310E+00	-2.4633E-02	1.1489E-03	-2.2207E-01	1.1949E+00	-2.2754E-03
7.4363E-03	6.8448E-01	9.0836E-03	-4.9330E-01	8.0006E-01	-3.0698E-02	1.5948E-03	-8.3573E-02	8.4609E-01	-1.9358E-03
1.0269E-02	7.1898E-01	7.1234E-03	-3.6577E-01	3.4550E-01	-3.3546E-02	2.4196E-03	1.9316E-02	4.2781E-01	-1.7099E-03
1.2394E-02	7.2778E-01	6.4563E-03	-3.1995E-01	3.9004E-01	-3.5387E-02	2.7446E-03	4.9905E-02	4.1784E-01	-1.8179E-03
1.5935E-02	7.3506E-01	6.3096E-03	-2.3346E-01	2.8075E-01	-3.6925E-02	3.1552E-03	1.0592E-01	4.2652E-01	-1.1892E-03
2.0538E-02	7.4253E-01	6.1331E-03	-2.5032E-01	2.0458E-01	-3.9357E-02	3.6213E-03	1.0066E-01	3.0644E-01	-1.6527E-03
2.6204E-02	7.5785E-01	6.3564E-03	-2.7509E-01	2.2346E-01	-3.9612E-02	4.3197E-03	1.4782E-01	4.2517E-01	-2.2501E-03
3.2932E-02	7.6710E-01	6.9949E-03	-3.9012E-01	4.0986E-01	-4.6132E-02	5.0439E-03	2.8047E-01	3.6894E-01	-2.3894E-03
4.2847E-02	7.7887E-01	6.8213E-03	-3.8262E-01	3.7136E-01	-3.5707E-02	4.9746E-03	3.0710E-01	3.5047E-01	-2.5047E-03
5.4178E-02	7.9152E-01	7.4166E-03	-4.9441E-01	4.2236E-01	-3.0037E-02	5.6882E-03	6.4139E-01	9.4213E-01	-2.8151E-03
7.1176E-02	8.1558E-01	6.5391E-03	-3.9981E-01	3.2579E-01	-1.9060E-02	4.7419E-03	8.4542E-01	1.5558E+00	-3.1038E-03
8.8173E-02	8.3695E-01	6.3724E-03	-3.6950E-01	2.7477E-01	-1.1060E-02	4.3533E-03	7.8328E-01	1.4041E+00	-2.4275E-03
1.1296E-01	8.7045E-01	5.6371E-03	-3.0645E-01	1.6362E-01	-1.1173E-03	3.6730E-03	8.5915E-01	1.7706E+00	-2.0384E-03
1.4412E-01	8.9995E-01	4.2221E-03	-2.1999E-01	-1.6871E-01	1.3065E-04	2.5608E-03	2.7388E-01	1.2122E-01	-1.7334E-03
1.8414E-01	9.4919E-01	3.5657E-03	-2.7362E-01	-1.7136E-01	-1.1240E-03	2.2225E-03	2.8819E-01	2.2164E-02	-1.1279E-03
2.3513E-01	9.8875E-01	2.9441E-03	-3.5153E-01	-1.0916E-01	-8.0072E-03	1.7426E-03	2.5058E-01	5.4446E-02	-9.2424E-04
3.0028E-01	1.0351E+00	2.2322E-03	-4.8433E-01	3.3817E-03	-1.6071E-02	1.3136E-03	3.3754E-01	2.3469E-01	-5.9679E-04
3.8350E-01	1.0767E+00	1.3016E-03	-7.0204E-01	5.2717E-01	-1.4313E-02	8.2829E-04	3.8711E-01	4.3816E-01	-2.4302E-04
4.8973E-01	1.1166E+00	4.0733E-04	-1.1980E+00	1.8465E+00	-1.8438E-02	3.2779E-04	4.7599E-01	8.5997E-01	-8.5106E-05
6.2571E-01	1.1248E+00	5.7827E-05	-6.8693E-02	-1.5723E-01	-1.2655E-02	6.5186E-05	3.2556E-02	-7.4472E-03	1.6851E-05
7.9887E-01	1.1217E+00	5.4913E-05	-7.4476E-02	-3.7312E-01	-1.8337E-02	6.2347E-05	-1.0610E-01	-2.3653E-01	3.0967E-05
1.0212E+00	1.1190E+00	5.3870E-05	-1.1844E-01	-3.5501E-01	-7.1904E-03	4.8453E-05	1.2846E-01	-3.5170E-01	2.3274E-05
1.3028E+00	1.1237E+00	6.0162E-05	-3.0621E-01	-2.6062E-01	-1.2170E-03	4.7373E-05	1.3780E-01	-2.3251E-01	2.9324E-05
1.6636E+00	1.1246E+00	4.7041E-05	-2.9084E-01	-2.6787E-01	9.4539E-03	4.4147E-05	2.1400E-01	-2.3688E-01	2.5153E-05

Table F.3-2 Velocity measurements made at S/T = 0.50 with the UV system of the laser anemometer, plane 4

File E302770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.098402
viscosity (meters squared per second) = 1.671846E-05
Atmospheric pressure (Pascals) = 93985
Velocity of undisturbed free stream (Uref, in m/s) = 27.50258
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09535E-03
Estimated momentum thickness Reynolds number = 6737.024
Location of traverse; X/T = .4004 Z/T =-.8579 (Plane 4 , S/T = 0.40)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
2.1246E-03	5.5344E-01				-1.7838E-02				
2.8329E-03	6.1028E-01				-2.6659E-02				
3.5411E-03	6.4313E-01	1.7742E-02	-3.3765E-01	5.7045E-01	-2.8506E-02	1.5867E-03	-1.5730E-01	1.2580E+00	-2.2323E-03
4.6034E-03	6.8279E-01	1.6969E-02	-3.5377E-01	3.2568E-01	-3.1567E-02	2.2112E-03	-6.3886E-02	8.3789E-01	-1.7004E-03
5.6657E-03	7.1647E-01	1.5579E-02	-3.9105E-01	3.0376E-01	-3.4362E-02	3.0054E-03	1.3044E-01	6.8406E-01	-1.9413E-03
7.4363E-03	7.3136E-01	1.4342E-02	-4.5055E-01	5.4116E-02	-3.5605E-02	3.8314E-03	4.0922E-02	4.1003E-01	-1.8766E-03
9.5609E-03	7.3910E-01	1.2896E-02	-3.8875E-01	-6.9934E-02	-3.6802E-02	4.4165E-03	1.2441E-01	3.1673E-01	-2.9579E-03
1.2394E-02	7.[illegible]6E-01	1.2924E-02	-4.3261E-01	5.6341E-02	-3.1579E-02	5.5642E-03	1.3381E-01	1.7900E-01	-3.7160E-03
1.5935E-02	7.4[illegible]7E-01	1.1985E-02	-3.1555E-01	-1.4349E-01	-2.8134E-02	8.0434E-03	1.4610E-01	1.3356E-01	-3.3657E-03
2.0184E-02	7.4838E-01	1.2599E-02	-2.9783E-01	-1.7793E-02	-2.5224E-02	9.1124E-03	1.9120E-01	-5.6211E-02	-2.7611E-03
2.6204E-02	7.4357E-01	1.2144E-02	-2.7305E-01	-1.4240E-01	-1.9405E-02	1.1985E-02	2.4543E-01	-1.2393E-01	-3.8796E-03
3.4348E-02	7.4879E-01	1.2182E-02	-2.4903E-01	-2.6950E-01	-1.0619E-02	1.4939E-02	3.0979E-01	-2.4224E-01	-4.8008E-03
4.2493E-02	7.5614E-01	1.3485E-02	-2.4007E-01	-2.1703E-01	-6.0266E-03	1.6592E-02	3.6802E-01	-3.1847E-01	-4.1394E-03
5.4178E-02	7.6977E-01	1.2901E-02	-2.5904E-01	-1.4058E-01	7.9432E-03	1.9740E-02	3.1678E-01	-3.4646E-01	-6.2452E-03
7.1176E-02	8.1253E-01	1.1836E-02	-3.6250E-01	-2.2505E-02	1.6222E-02	1.9175E-02	4.5277E-01	-1.4480E-01	-6.3681E-03
8.9943E-02	8.5631E-01	9.9822E-03	-3.8681E-01	2.7435E-01	2.1680E-02	1.5406E-02	6.9271E-01	3.9451E-01	-4.5170E-03
1.1296E-01	9.0188E-01	7.1495E-03	-3.5208E-01	3.8900E-01	7.6392E-03	9.9595E-03	7.7724E-01	1.1609E+00	-2.0969E-03
1.4412E-01	9.3811E-01	4.8313E-03	-2.5104E-01	1.2778E-01	-5.6276E-03	5.0586E-03	5.6333E-01	1.1318E+00	-1.1509E-03
1.8414E-01	9.8446E-01	3.1652E-03	-2.8213E-01	-8.6088E-02	-2.4639E-02	2.5888E-03	2.2489E-01	1.9373E-01	-8.1123E-04
2.3513E-01	1.0221E+00	2.6510E-03	-3.5908E-01	-5.8397E-02	-3.4222E-02	1.9240E-03	1.9152E-01	1.9765E-01	-7.5052E-04
3.0064E-01	1.0620E+00	1.9755E-03	-5.0190E-01	7.6923E-02	-3.9800E-02	1.3912E-03	1.8385E-01	4.0817E-01	-5.7922E-04
3.8350E-01	1.1033E+00	1.0859E-03	-8.0400E-01	7.4829E-01	-4.2291E-02	7.5159E-04	2.2691E-01	5.5734E-01	-4.1417E-04
4.9009E-01	1.1341E+00	3.1042E-04	-1.1927E+00	2.3351E+00	-3.7733E-02	3.4507E-04	5.0660E-01	9.0692E-01	-5.6781E-05
6.2571E-01	1.1454E+00	6.4998E-05	-1.0176E-01	-2.2705E-01	-3.8125E-02	7.8976E-05	1.4534E-01	-1.2965E-01	3.1470E-05
7.9887E-01	1.1531E+00	5.1456E-05	-1.7505E-01	-3.5841E-01	-2.6272E-02	8.0181E-05	-8.5570E-03	-3.7766E-01	3.4960E-05
1.0202E+00	1.1444E+00	4.9310E-05	-2.8304E-01	-2.1492E-01	-1.4739E-02	6.9419E-05	4.5452E-02	-3.5879E-01	3.3080E-05
1.3028E+00	1.1466E+00	4.9015E-05	-3.8682E-01	-1.1484E-01	3.7115E-03	3.7471E-05	-7.8780E-02	-9.8020E-02	1.7143E-05
1.6647E+00	1.1508E+00	4.2007E-05	-3.5033E-01	-5.6650E-02	1.3198E-02	3.7979E-05	-4.7169E-03	-2.8481E-01	1.7872E-05

Table F.3-3 Velocity measurements made at S/T = 0.40 with the UV system of the laser anemometer, plane 5

File E301770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.8
density (kilograms per meter cubed) = 1.099865
viscosity (meters squared per second) = 1.668759E-05
Atmospheric pressure (Pascals) = 94047
Velocity of undisturbed free stream (Uref, in m/s) = 27.48834
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.095774E-03
Estimated momentum thickness Reynolds number = 6746.694
Location of traverse; X/T = .4096 Z/T =-.8088 (Plane 4 , S/T = 0.35)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	2.6938E-01				-1.6054E-02				
2.4788E-03	2.8785E-01				-1.6242E-02				
3.1870E-03	3.7522E-01				-2.2104E-02	3.6120E-04			
3.8952E-03	5.1027E-01				-3.0926E-02	9.3883E-04			
4.6034E-03	5.8787E-01				-3.3866E-02	1.4677E-03	-1.1586E-01	1.1358E+00	
5.6657E-03	6.5281E-01	1.4226E-02			-3.5970E-02	1.9500E-03	1.5730E-01	9.5003E-01	-1.8116E-03
7.4363E-03	7.1627E-01	1.3731E-02	-1.7925E-01	5.1707E-01	-3.8434E-02	3.4418E-03	1.0373E-01	4.2378E-01	-1.4858E-03
9.5609E-03	7.3287E-01	1.3159E-02	-1.0803E-01	4.3094E-02	-3.7021E-02	4.5242E-03	1.3850E-01	2.0993E-01	-1.5519E-03
1.2394E-02	7.4404E-01	1.2635E-02	-9.5913E-02	-3.3448E-02	-3.4760E-02	5.3323E-03	1.4229E-01	1.7042E-01	-1.4122E-03
1.5935E-02	7.4403E-01	1.1554E-02	-2.4931E-02	-6.1461E-02	-3.5222E-02	6.6278E-03	1.0889E-01	-2.7812E-02	-1.8900E-03
2.0361E-02	7.4567E-01	1.0914E-02	3.0163E-02	3.8099E-03	-3.0037E-02	9.2486E-03	1.1794E-01	1.7071E-02	-1.4774E-03
2.5850E-02	7.5038E-01	1.0816E-02	2.2999E-02	1.3388E-01	-3.2205E-02	1.1897E-02	1.5855E-01	-1.1768E-01	-1.2846E-03
3.2932E-02	7.4550E-01	1.1238E-02	-2.3813E-02	-3.0468E-02	-2.6404E-02	1.5696E-02	2.4805E-01	-2.4571E-01	-2.7955E-03
4.3201E-02	7.5438E-01	1.1992E-02	-6.3031E-02	-7.6798E-02	-1.9839E-02	2.0889E-02	2.3355E-01	-4.2684E-01	-3.6616E-03
5.4533E-02	7.7620E-01	1.2621E-02	-1.8463E-01	3.7423E-02	-3.5700E-02	2.5360E-02	3.6471E-01	-3.3118E-01	-3.4008E-03
6.9405E-02	8.2061E-01	1.3576E-02	-2.4024E-01	4.2140E-03	-2.7142E-02	2.8352E-02	3.3138E-01	-3.4088E-01	-3.7854E-03
8.8527E-02	8.8553E-01	1.1385E-02	-2.8422E-01	2.4885E-01	-2.3451E-02	2.2807E-02	4.7446E-01	8.1182E-04	-3.1415E-03
1.1296E-01	9.3437E-01	7.9661E-03	-2.5439E-01	4.1718E-01	-3.4096E-02	1.3353E-02	6.9630E-01	9.4352E-01	-9.3991E-04
1.4412E-01	9.6575E-01	4.9534E-03	-2.4673E-01	2.4272E-01	-3.7613E-02	5.3840E-03	4.5523E-01	8.0820E-01	-8.7983E-04
1.8449E-01	1.0099E+00	3.0847E-03	-2.5561E-01	-7.5049E-02	-4.9073E-02	2.6655E-03	1.8549E-01	8.2807E-02	-9.1519E-04
2.3513E-01	1.0415E+00	2.4153E-03	-3.4642E-01	-1.0011E-01	-5.0811E-02	1.8208E-03	2.6043E-01	1.5174E-01	-7.6884E-04
3.0028E-01	1.0816E+00	1.8733E-03	-4.6495E-01	4.2528E-02	-5.6815E-02	1.2691E-03	2.9902E-01	3.9827E-01	-6.8321E-04
3.8350E-01	1.1095E+00	1.3302E-03	-6.6149E-01	3.7622E-01	-4.7952E-02	9.9086E-04	2.2170E-01	4.2533E-01	-2.8694E-04
4.9009E-01	1.1518E+00	2.9288E-04	-1.1575E+00	2.3723E+00	-4.7301E-02	3.3706E-04	4.0852E-01	8.7063E-01	-8.7224E-05
6.2606E-01	1.1554E+00	6.0128E-05	-9.2535E-02	-2.3998E-01	-4.4626E-02	1.0094E-04	1.5558E-01	-2.4700E-01	4.0468E-05
7.9887E-01	1.1598E+00	6.1546E-05	-3.2096E-01	-1.7074E-01	-3.7434E-02	4.5407E-05	1.3908E-01	-2.7742E-01	3.4078E-05
1.0202E+00	1.1590E+00	5.6506E-05	-2.9852E-01	-1.8315E-01	-1.6923E-02	7.7635E-05	-1.0843E-01	-3.7009E-01	4.0673E-05
1.3028E+00	1.1599E+00	4.0834E-05	-2.5471E-01	-2.4328E-01	-1.0178E-02	5.9550E-05	8.8012E-02	-3.9124E-01	2.3626E-05
1.6636E+00	1.1640E+00	3.5253E-05	-2.2495E-01	-3.4811E-01	1.0447E-02	5.0200E-05	-3.0176E-01	1.7150E-01	1.8792E-05

Table F.3-4 Velocity measurements made at S/T = 0.35 with the UV system of the laser anemometer, plane 4

File E300770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.8
density (kilograms per meter cubed) = 1.10335
viscosity (meters squared per second) = 1.663488E-05
Atmospheric pressure (Pascals) = 94345
Velocity of undisturbed free stream (Uref, in m/s) = 27.48248
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.095948E-03
Estimated momentum thickness Reynolds number = 6766.916
Location of traverse; X/T = .4187 Z/T =-.7596 (Plane 4 , S/T = 0.30)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
2.8329E-03	3.6788E-01				-2.2693E-02				
3.5411E-03	5.0861E-01				-2.8276E-02	3.8802E-04			
4.6034E-03	6.2308E-01	2.8700E-03			-3.7808E-02	4.8828E-04			-4.1706E-04
5.3116E-03	6.8137E-01	4.2212E-03			-4.7196E-02	8.8373E-04			-2.7822E-05
6.0198E-03	7.3473E-01				-5.0463E-02	1.8890E-03	2.1218E-01	7.6536E-01	
7.0822E-03	7.4695E-01	8.4441E-03	-2.3611E-01	8.0939E-01	-5.3559E-02	2.6527E-03	1.7455E-01	6.7098E-01	-4.3832E-04
8.8527E-03	7.7211E-01	7.8773E-03	-1.0892E-01	6.2455E-01	-5.2373E-02	3.6173E-03	2.2664E-01	5.1070E-01	-1.1129E-03
1.0977E-02	7.5905E-01	7.7906E-03	-3.1236E-02	4.4337E-01	-5.6766E-02	4.0865E-03	1.8993E-01	3.6597E-01	-1.4240E-03
1.3810E-02	7.6290E-01	7.4948E-03	-4.1119E-02	4.4887E-01	-5.4711E-02	4.8504E-03	3.0307E-01	1.9951E-01	-1.2598E-03
1.7351E-02	7.6401E-01	7.3163E-03	-7.1767E-02	4.4547E-01	-6.1044E-02	5.8611E-03	3.5281E-01	3.5580E-01	-5.5119E-04
2.1955E-02	7.7526E-01	6.7496E-03	-1.0348E-01	3.3055E-01	-6.8283E-02	6.6927E-03	3.4399E-01	2.5391E-01	-1.2081E-03
2.7975E-02	7.8415E-01	6.7379E-03	-1.4802E-01	2.5225E-01	-8.0062E-02	9.8203E-03	2.7981E-01	4.0705E-01	-6.1061E-04
3.4703E-02	7.7735E-01	9.0722E-03	-2.0259E-01	2.6202E-01	-7.8403E-02	1.4127E-02	4.9814E-01	3.1389E-01	-2.2204E-03
4.6388E-02	7.9932E-01	9.6590E-03	-3.1153E-01	2.3807E-01	-9.6318E-02	1.7695E-02	6.6288E-01	5.9327E-01	-2.7225E-03
5.5595E-02	8.2545E-01	1.0032E-02	-3.9549E-01	4.5575E-01	-1.1465E-01	1.7986E-02	7.7342E-01	1.0433E+00	-3.1568E-03
7.2238E-02	8.7050E-01	1.0801E-02	-3.0735E-01	3.2989E-01	-1.2347E-01	2.0514E-02	8.2712E-01	1.0102E+00	-1.8655E-03
8.9943E-02	9.2292E-01	9.1052E-03	-2.2386E-01	2.7460E-01	-1.1154E-01	1.5652E-02	8.3240E-01	1.1235E+00	-1.4040E-03
1.1438E-01	9.6700E-01	6.2947E-03	-1.6278E-01	2.5768E-01	-1.0793E-01	8.5165E-03	6.5143E-01	1.0977E+00	-1.1761E-03
1.4554E-01	9.9678E-01	4.3096E-03	-1.8695E-01	8.9004E-02	-8.3362E-02	4.9411E-03	4.7204E-01	6.8413E-01	-7.5895E-04
1.8591E-01	1.0360E+00	2.8238E-03	-2.4992E-01	-6.5532E-02	-7.6362E-02	2.4228E-03	2.4213E-01	1.1365E-01	-7.0040E-04
2.3725E-01	1.0654E+00	2.2133E-03	-3.5367E-01	9.7799E-03	-7.0523E-02	1.8579E-03	1.9866E-01	1.2707E-01	-6.6401E-04
3.0170E-01	1.0994E+00	1.7109E-03	-4.8899E-01	6.6844E-02	-6.5818E-02	1.3864E-03	1.5817E-01	2.8733E-01	-5.0767E-04
3.8527E-01	1.1380E+00	1.0575E-03	-6.8696E-01	5.8658E-01	-5.7442E-02	9.1743E-04	-6.7281E-04	7.5096E-01	-3.4995E-05
4.9115E-01	1.1697E+00	2.4411E-04	-1.1210E+00	2.2019E+00	-5.1755E-02	3.0123E-04	3.8413E-01	8.2942E-01	-4.3834E-08
6.2716E-01	1.1729E+00	5.4408E-05	-8.3603E-02	-1.9755E-01	-4.7847E-02	1.3042E-04	-3.5406E-02	-4.1090E-01	5.3130E-05
8.0241E-01	1.1683E+00	4.7072E-05	-1.1230E-01	-3.6155E-01	-3.8798E-02	7.8568E-05	1.1637E-01	-3.9702E-01	3.5039E-05
1.0432E+00	1.1683E+00	4.6762E-05	-1.7051E-01	-3.7745E-01	-1.6165E-02	5.7396E-05	-3.1644E-02	-2.6525E-01	2.8655E-05
1.3042E+00	1.1717E+00	5.6990E-05	-2.5240E-01	-3.2759E-01	-9.7698E-03	6.2525E-05	4.3048E-02	-3.4715E-01	3.6318E-05
1.6650E+00	1.1736E+00	4.7705E-05	-2.2748E-01	-3.6854E-01	1.2634E-03	5.8430E-05	7.0897E-02	-3.1039E-01	3.2826E-05

Table F.3-5 Velocity measurements made at S/T = 0.30 with the UV system of the laser anemometer, plane 4

File E299770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.1
density (kilograms per meter cubed) = 1.109156
viscosity (meters squared per second) = 1.647494E-05
Atmospheric pressure (Pascals) = 94300
Velocity of undisturbed free stream (Uref, in m/s) = 27.40349
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.098307E-03
Estimated momentum thickness Reynolds number = 6816.895
Location of traverse; X/T = .4279 Z/T =-.7107 (Plane 4 , S/T = 0.25)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	3.5344E-01				-2.1989E-02				
2.1246E-03	3.7657E-01				-2.0793E-02				
2.8329E-03	4.6694E-01				-2.3905E-02				
3.5411E-03	6.2563E-01				-3.0378E-02	1.8185E-04			
4.6034E-03	7.3939E-01				-4.3499E-02				
5.6657E-03	8.0339E-01				-6.3202E-02	9.7258E-04			
7.4363E-03	8.0704E-01	5.1262E-03	-1.7809E-01	4.2919E-01	-6.5752E-02	1.6453E-03	7.3959E-02	7.5174E-01	-1.1766E-03
9.5609E-03	8.2119E-01	4.3570E-03	-1.2536E-01	3.2058E-01	-6.8485E-02	2.2880E-03	2.0078E-01	9.1083E-01	-4.1719E-04
1.2394E-02	8.2389E-01	4.2537E-03	-8.7024E-02	2.5180E-01	-7.4049E-02	2.7664E-03	2.0866E-01	7.7082E-01	-4.0530E-04
1.5935E-02	8.3090E-01	4.1692E-03	-1.1144E-01	2.0247E-01	-8.1057E-02	3.2724E-03	2.0838E-01	7.7528E-01	-5.8716E-04
2.0184E-02	8.4176E-01	4.1426E-03	-2.0426E-01	2.2409E-01	-8.5711E-02	3.8910E-03	1.9069E-01	7.5267E-01	-1.3991E-03
2.6027E-02	8.5950E-01	4.2688E-03	-1.5455E-01	2.1699E-01	-9.6429E-02	4.2847E-03	1.5296E-01	6.2194E-01	-1.7748E-03
3.2932E-02	8.4948E-01	5.4601E-03	-3.2040E-01	3.2429E-01	-1.1287E-01	4.7416E-03	5.4667E-02	1.1479E-01	-2.6610E-03
4.4972E-02	8.7493E-01	5.5906E-03	-4.5530E-01	5.9497E-01	-1.3138E-01	5.0494E-03	-9.2624E-02	5.2822E-03	-2.7378E-03
5.4178E-02	8.9197E-01	5.9145E-03	-3.6572E-01	4.7700E-01	-1.4043E-01	7.2652E-03	-1.4795E-01	6.1309E-01	-1.8553E-03
6.9051E-02	9.1266E-01	6.5690E-03	-3.0841E-01	5.8294E-01	-1.5480E-01	8.4941E-03	-2.1161E-01	6.4326E-01	-1.0723E-03
8.8173E-02	9.5173E-01	6.2014E-03	-5.9631E-02	3.2498E-01	-1.4319E-01	6.6638E-03	1.9606E-02	4.9816E-01	-8.3258E-04
1.1296E-01	9.8996E-01	4.7523E-03	-1.1659E-01	1.9301E-01	-1.2716E-01	4.5609E-03	2.1015E-01	3.5947E-01	-1.1732E-03
1.4448E-01	1.0254E+00	3.1159E-03	-2.1612E-01	-2.1887E-02	-1.0862E-01	2.8478E-03	3.3259E-01	3.4564E-01	-1.4977E-03
1.8414E-01	1.0608E+00	2.4241E-03	-2.6526E-01	-1.1245E-01	-9.9979E-02	2.2933E-03	1.9289E-01	1.7746E-01	-7.6154E-04
2.3513E-01	1.0914E+00	2.0334E-03	-3.6043E-01	1.4157E-03	-9.1324E-02	1.7037E-03	2.5412E-01	7.0633E-02	-6.1418E-04
3.0028E-01	1.1228E+00	1.5370E-03	-4.6960E-01	4.3301E-02	-8.3057E-02	1.2395E-03	2.9364E-01	2.3583E-01	-4.7324E-04
3.8350E-01	1.1580E+00	8.5831E-04	-7.6315E-01	3.8131E-01	-7.8790E-02	7.2189E-04	5.2589E-01	3.8115E-01	
4.8973E-01	1.1860E+00	2.0326E-04	-1.0273E+00	2.1556E+00	-6.7200E-02	2.8798E-04	1.7354E-01	4.1121E-01	6.4963E-05
6.2571E-01	1.1909E+00	5.7103E-05	-7.7758E-02	-2.2849E-01	-5.4433E-02	1.0230E-04	7.3458E-02	-3.1235E-01	3.7963E-05
7.9887E-01	1.1935E+00	4.4257E-05	-2.2508E-01	-2.4662E-01	-4.4581E-02	5.0485E-05	1.6573E-01	-2.1521E-01	2.1741E-05
1.0202E+00	1.1931E+00	5.4724E-05	-2.3001E-01	-3.1230E-01	-2.4582E-02	5.6322E-05	2.1407E-02	-2.9431E-01	2.9480E-05
1.3028E+00	1.1927E+00	4.6528E-05	-2.6710E-01	-3.1908E-01	-1.4245E-02	4.9517E-05	1.1778E-01	-3.9773E-01	2.5624E-05
1.6636E+00	1.1949E+00	4.0438E-05	-2.3588E-01	-3.0980E-01	8.9901E-03	4.9364E-05	-1.7513E-01	2.3746E-03	2.2273E-05

Table F.3-6 Velocity measurements made at S/T = 0.25 with the UV system of the laser anemometer, plane 4

File E298770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.1
density (kilograms per meter cubed) = 1.109332
viscosity (meters squared per second) = 1.647232E-05
Atmospheric pressure (Pascals) = 94315
Velocity of undisturbed free stream (Uref, in m/s) = 27.4209
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097767E-03
Estimated momentum thickness Reynolds number = 6821 446
Location of traverse; X/T = .4371 Z/T =-.6613 (Plane 4 , S/T = 0.20)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	3.7264E-01				-1.7965E-02				
2.1246E-03	4.2449E-01				-2.2876E-02				
3.1870E-03	7.5831E-01				-4.3443E-02	2.1345E-05			
3.8952E-03	8.0058E-01	5.3310E-03			-5.2578E-02	2.8885E-04			7.8626E-04
4.6034E-03	8.3011E-01	4.2176E-03			-6.5207E-02	2.4587E-04			5.1835E-04
6.0198E-03	8.5176E-01	4.5644E-03	-4.4647E-01	1.2524E+00	-6.1634E-02	9.7783E-04	-1.9285E-01	1.4715E+00	-9.4165E-04
7.4363E-03	8.5779E-01	4.2403E-03	-2.5311E-01	4.8807E-01	-6.7365E-02	1.2265E-03	-1.4460E-01	1.4543E+00	-7.1713E-04
9.5609E-03	8.7351E-01	3.2944E-03	-7.2548E-02	2.6737E-01	-7.0311E-02	1.4923E-03	-7.8815E-02	9.2984E-01	-1.1176E-04
1.2394E-02	8.7873E-01	3.1431E-03	-5.9031E-02	2.1042E-01	-7.5672E-02	1.8706E-03	-3.1280E-02	7.5492E-01	-3.1367E-04
1.6289E-02	8.8999E-01	3.0184E-03	-6.4849E-02	8.5480E-02	-8.1282E-02	2.2591E-03	-1.3606E-02	6.6178E-01	-3.8141E-04
2.0184E-02	9.0856E-01	3.0377E-03	-1.0475E-01	1.7200E-01	-8.2154E-02	2.4359E-03	-1.3270E-02	2.9277E-01	-4.1436E-04
2.5850E-02	9.2456E-01	3.0209E-03	-6.9177E-02	6.2294E-02	-9.1799E-02	2.8094E-03	-6.1168E-02	3.6652E-01	-3.2608E-04
3.2932E-02	9.0185E-01	3.2695E-03	-7.3362E-02	6.5027E-02	-1.0414E-01	3.7425E-03	-5.8882E-02	4.0282E-01	-2.3771E-04
4.2493E-02	9.3338E-01	3.2174E-03	-1.9124E-01	1.4384E-01	-1.1266E-01	3.6221E-03	-6.6273E-02	1.3226E-01	-5.2673E-04
5.4178E-02	9.5478E-01	3.0190E-03	-1.4830E-01	3.1370E-02	-1.2361E-01	3.9867E-03	-1.3696E-01	3.7333E-01	-6.7963E-04
6.9051E-02	9.7685E-01	3.3258E-03	-1.0232E-01	1.5389E-01	-1.3668E-01	3.9331E-03	-1.6989E-01	3.3655E-01	-6.9331E-04
8.8173E-02	9.9358E-01	3.3112E-03	-1.1914E-01	3.3734E-02	-1.3784E-01	3.6477E-03	1.1127E-02	2.0975E-01	-8.4463E-04
1.1296E-01	1.0238E+00	3.0422E-03	-1.5068E-01	4.6900E-02	-1.3273E-01	2.8643E-03	1.6655E-01	1.5947E-01	-7.2938E-04
1.4554E-01	1.0553E+00	2.4932E-03	-2.2963E-01	-4.1528E-02	-1.2832E-01	2.5245E-03	2.2113E-01	1.5859E-01	-4.7707E-04
1.8414E-01	1.0906E+00	2.1622E-03	-2.7507E-01	-1.1279E-01	-1.2092E-01	2.0602E-03	2.4044E-01	1.7287E-01	-4.2234E-04
2.3513E-01	1.1205E+00	1.7379E-03	-3.5596E-01	-6.3533E-02	-1.1010E-01	1.5817E-03	2.5486E-01	2.0864E-01	-4.8009E-04
3.0028E-01	1.1484E+00	1.4069E-03	-3.8771E-01	2.3427E-01	-1.0221E-01	1.1657E-03	2.5613E-01	2.9910E-01	-4.4282E-04
3.8350E-01	1.1815E+00	7.0455E-04	-8.3182E-01	6.6647E-01	-9.7510E-02	6.9067E-04	4.5168E-01	5.7591E-01	-1.6524E-04
4.8973E-01	1.2070E+00	1.6124E-04	-7.4474E-01	1.7011E+00	-8.7858E-02	2.4450E-04	1.8318E-01	5.7208E-01	1.4903E-05
6.2571E-01	1.2092E+00	6.6777E-05	-1.8820E-01	-2.2684E-01	-5.7234E-02	8.8293E-05	-2.7589E-01	5.7088E-02	3.0646E-05
7.9887E-01	1.2096E+00	4.6102E-05	-2.0642E-01	-2.5406E-01	-4.4231E-02	7.0274E-05	-8.4112E-02	-3.2041E-01	3.2521E-05
1.0220E+00	1.2086E+00	4.5722E-05	-1.4925E-01	-3.4384E-01	-2.8420E-02	5.7834E-05	-2.0313E 01	-1.2462E-01	1.9439E-05
1.3031E+00	1.2094E+00	4.9718E-05	-2.7999E-01	-1.6341E-01	-1.5650E-02	5.1240E-05	-8.2241E-02	1983E-01	2.5674E-05
1.6636E+00	1.2080E+00	6.6694E-05	-4.4214E-01	-3.0636E-02	-1.5329E-03	5.7974E-05	-4.1208E-02	-4.1159E-01	3.8600E-05

Table F.3-7 Velocity measurements made at S/T = 0.20 with the UV system of the laser anemometer, plane 4

File E297770.RES
Non-redundant U and V component velocity measurements obtained with the Uv optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.2
density (kilograms per meter cubed) = 1.101726
viscosity (meters squared per second) = 1.659035E-05
Atmospheric pressure (Pascals) = 93700
Velocity of undisturbed free stream (Uref, in m/s) = 27.43819
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09727E-03
Estimated momentum thickness Reynolds number = 6776.329
Location of traverse; X/T = .4463 Z/T =-.6122 (Plane 4 , S/T = 0.15)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	3.6008E-01				-1.3618E-02				
2.4788E-03	4.0264E-01				-1.9297E-02				
3.1870E-03	6.0114E-01				-2.8615E-02				
3.8952E-03	8.2495E-01				-4.7983E-02				
4.6034E-03	8.6887E-01	3.1853E-03			-6.5112E-02				
6.0198E-03	8.9252E-01	5.8958E-03	-1.1240E+00	3.1018E+00	-5.7594E-02	7.4762E-04	-1.6687E-01	2.7847E+00	-1.0674E-03
7.0822E-03	9.0 .4E-01	4.8831E-03	-1.1056E+00	3.6988E+00	-6.1797E-02	9.7411E-04	-7.1188E-02	2.1654E+00	-5.6679E-04
8.4986E-03	8.9499E-01	3.7817E-03	-4.4690E-01	1.3011E+00	-6.6194E-02	1.1215E-03	-3.0915E-02	1.5749E+00	-6.7717E-04
1.0977E-02	9.1966E-01	3.4288E-03	-3.1788E-01	1.0685E+00	-7.0167E-02	1.3070E-03	-3.5260E-02	1.0226E+00	-3.1236E-04
1.4518E-02	9.3345E-01	2.5646E-03	-8.4596E-02	3.5296E-01	-7.5181E-02	1.6678E-03	7.2432E-02	1.1685E+00	-2.2057E-04
1.7351E-02	9.4151E-01	2.4704E-03	-6.9360E-02	2.9287E-01	-7.8995E-02	1.8297E-03	1.7295E-01	9.0316E-01	-1.3137E-04
2.1246E-02	9.5496E-01	2.4548E-03	-7.8947E-02	3.0515E-01	-8.0349E-02	2.0619E-03	2.1347E-01	5.5151E-01	-4.2457E-04
2.6912E-02	9.6972E-01	2.5291E-03	2.3362E-02	3.7036E-01	-8.8659E-02	2.5435E-03	1.1563E-01	4.7421E-01	-2.6681E-04
3.5057E-02	9.6540E-01	2.5231E-03	-1.0575E-01	2.7629E-01	-9.8855E-02	2.8754E-03	7.3456E-02	3.7316E-01	-1.8882E-04
4.3909E-02	9.8418E-01	2.3122E-03	-3.9922E-02	9.9358E-02	-1.1003E-01	3.0530E-03	9.3829E-02	2.9006E-01	-4.5243E-04
5.5241E-02	9.9796E-01	2.2852E-03	-4.6256E-02	7.1922E-02	-1.1924E-01	2.9691E-03	1.4618E-01	2.1715E-01	-6.4767E-04
7.0467E-02	1.0118E+00	2.2564E-03	-8.9150E-02	1.2275E-01	-1.2975E-01	3.1554E-03	8.2399E-02	2.7021E-01	-6.3683E-04
8.9589E-02	1.0328E+00	2.2706E-03	-1.1695E-01	-4.1677E-02	-1.3828E-01	2.9748E-03	1.1877E-01	1.6416E-01	-8.3489E-04
1.1579E-01	1.0530E+00	2.2146E-03	-1.4200E-01	-2.7192E-02	-1.4152E-01	2.5239E-03	1.7395E-01	1.3576E-01	-7.4835E-04
1.4518E-01	1.0786E+00	2.0669E-03	-2.0737E-01	-9.9536E-02	-1.4521E-01	2.2821E-03	2.0314E-01	1.1311E-01	-6.6985E-04
1.8520E-01	1.1107E+00	1.7861E-03	-2.8944E-01	3.0513E-02	-1.6197E-01	1.9504E-03	2.1368E-01	1.9895E-01	-5.8127E-04
2.3619E-01	1.1441E+00	1.5689E-03	-3.4573E-01	3.0656E-02	-1.4119E-01	1.5780E-03	2.5754E-01	3.4394E-01	-4.7342E-04
3.0205E-01	1.1676E+00	1.1999E-03	-5.1737E-01	2.4721E-01	-1.2977E-01	1.1232E-03	2.7875E-01	3.9107E-01	-2.8886E-04
3.8492E-01	1.2006E+00	6.9934E-04	-7.0120E-01	7.7283E-01	-1.2095E-01	7.6865E-04	-2.4113E-02	7.4850E-01	-1.0827E-04
4.9079E-01	1.2235E+00	1.6400E-04	-4.8295E-01	1.1408E+00	-9.9622E-02	2.2579E-04	5.8813E-03	6.6155E-01	2.5752E-05
6.2677E-01	1.2229E+00	7.2834E-05	-1.7592E-01	-2.1233E-01	-7.5529E-02	8.7201E-05	-1.9282E-03	-1.4953E-01	3.1738E-05
7.9993E-01	1.2244E+00	5.6959E-05	-3.1381E-01	-4.0342E-02	-7.0986E-02	6.7697E-05	-6.0946E-02	-3.2832E-01	2.7638E-05
1.0212E+00	1.2299E+00	6.2802E-05	-2.9575E-01	-1.0960E-01	3.3682E-02	7.3653E-05	-5.8910E-02	-2.4781E-01	3.8923E-05
1.3038E+00	1.2250E+00	5.0430E-05	-2.4782E-01	-2.3457E-01	-1.8718E-02	5.6974E-05	-8.7098E-04	-2.9008E-01	2.9546E-05
1.6647E+00	1.2212E+00	5.3596E-05	-1.7053E-01	-2.8181E-01	-5.1524E-03	6.0321E-05	-1.1087E-01	-2.5839E-01	3.4040E-05

Table F.3-8 Velocity measurements made at S/T = 0.15 with the UV system of the laser anemometer, plane 4

File E298770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.104059
viscosity (meters squared per second) = 1.654668E-05
Atmospheric pressure (Pascals) = 93835
Velocity of undisturbed free stream (Uref, in m/s) = 27.41561
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097945E-03
Estimated momentum thickness Reynolds number = 6789.74
Location of traverse; X/T = .4554 Z/T =-.563 (Plane 4 , S/T = 0.10)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
4.2493E-03	6.6280E-01	3.1736E-03			-3.4723E-02				
4.9575E-03	9.2261E-01				-4.7563E-02				
5.8428E-03	9.3314E-01	7.8819E-03	-1.5600E+00	3.6929E+00	-5.1312E-02	4.1150E-04	5.2647E-01	1.2059E+00	-6.7242E-04
6.7280E-03	9.5024E-01	5.5213E-03	-1.4329E+00	3.9490E+00	-5.3532E-02	5.0996E-04	4.2026E-01	1.6374E+00	-9.3565E-04
7.7904E-03	9.6299E-01	4.2896E-03	-1.0.92E+00	3.0210E+00	-5.9218E-02	7.4981E-04	5.5227E-02	1.5835E+00	-1.2597E-04
9.5609E-03	9.5604E-01	3.0153E-03	-2.9487E-01	6.8960E-01	-6.5101E-02	9.7641E-04	2.4287E-02	1.0958E+00	-3.4445E-04
1.2394E-02	9.8913E-01	2.1120E-03	-1.0315E-01	3.4869E-01	-7.5937E-02	1.5204E-03	-7.4216E-02	1.0582E+00	2.7146E-04
1.4518E-02	9.9291E-01	2.1235E-03	-1.2638E-01	2.7637E-01	-7.7746E-02	1.3657E-03	2.1888E-01	4.5851E-01	5.0764E-05
1.8059E-02	1.0069E+00	1.9975E-03	-1.2615E-01	1.2907E-01	-8.3855E-02	1.8133E-03	1.8147E-01	3.8954E-01	-7.9856E-05
2.2309E-02	1.0211E+00	1.9908E-03	4.7477E-03	1.9558E-01	-9.5897E-02	2.2422E-03	1.8049E-01	3.4960E-01	-4.4237E-05
2.8152E-02	1.0283E+00	1.8102E-03	-7.5295E-02	5.0148E-02	-1.0453E-01	2.4396E-03	1.6234E-01	3.5453E-01	-2.0039E-04
3.5057E-02	1.0192E+00	1.8300E-03	-1.4279E-01	3.2638E-02	-1.1290E-01	2.9381E-03	1.5471E-01	2.5007E-01	-6.6325E-05
4.4618E-02	1.0404E+00	1.8220E-03	-4.2094E-02	4.0952E-02	-1.2933E-01	3.2419E-03	7.5742E-02	2.3599E-01	1.9044E-04
5.6303E-02	1.0463E+00	1.7530E-03	-7.5937E-02	2.2738E-02	-1.4087E-01	3.0553E-03	4.4897E-02	1.5891E-01	-1.6819E-05
7.1176E-02	1.0661E+00	1.7517E-03	-1.4601E-01	1.2858E-01	-1.5315E-01	3.2246E-03	-2.1004E-02	2.1416E-01	-1.2414E-04
9.1714E-02	1.0772E+00	1.7732E-03	-1.1879E-01	5.7656E-02	-1.6453E-01	2.8838E-03	7.1638E-02	3.4519E-01	-4.7976E-04
1.1579E-01	1.0966E+00	1.6481E-03	-2.1862E-01	1.6236E-02	-1.6925E-01	2.4229E-03	9.4632E-02	1.6228E-01	-3.6508E-04
1.4802E-01	1.1217E+00	1.5113E-03	-2.1863E-01	4.6811E-02	-1.7994E-01	2.2490E-03	-7.0995E-02	2.8786E-01	-8.4083E-05
1.8661E-01	1.1517E+00	1.4431E-03	-2.8633E-01	1.0462E-02	-1.7300E-01	1.7150E-03	9.6331E-02	3.4337E-01	-4.1100E-04
2.3725E-01	1.1746E+00	1.1632E-03	-3.5562E-01	3.2813E-02	-1.7423E-01	1.4225E-03	1.7270E-01	2.7422E-01	-2.3148E-04
3.0241E-01	1.1998E+00	9.3681E-04	-4.8606E-01	2.3172E-01	-1.6034E-01	1.0403E-03	1.1765E-01	4.1131E-01	-8.8248E-05
3.8562E-01	1.2273E+00	4.2946E-04	-7.9407E-01	1.0584E+00	-1.4070E-01	5.3222E-04	1.3560E-01	5.5118E-01	-2.3057E-05
4.9296E-01	1.2437E+00	1.1071E-04	-2.2442E-01	2.5340E-01	-1.1690E-01	1.8260E-04	-1.9376E-01	2.2919E-01	2.2662E-05
6.2783E-01	1.2464E+00	6.8477E-05	-1.9575E-01	-1.5276E-01	-7.8893E-02	9.2558E-05	-1.5799E-01	-2.0555E-01	3.1898E-05
8.0170E-01	1.2461E+00	4.1767E-05	-1.8329E-01	-9.7420E-02	-5.6453E-02	7.5084E-05	-5.3305E-02	-3.6892E-01	2.8350E-05
1.0266E+00	1.2476E+00	4.1358E-05	-1.9780E-01	-2.3914E-01	-3.8611E-02	6.2514E-05	-9.1071E-02	-3.8946E-01	2.1039E-05
1.3049E+00	1.2440E+00	6.0213E-05	-2.9814E-01	-1.4530E-01	-2.6648E-02	5.3185E-05	4.0736E-02	-3.6124E-01	2.8301E-05
1.6657E+00	1.2486E+00	5.3812E-05	-2.8350E-01	-6.9549E-02	-9.3822E-03	4.2516E-05	2.4222E-02	-2.4609E-01	2.3092E-05

Table F.3-9 Velocity measurements made at S/T = 0.10 with the UV system of the laser anemometer, plane 4

File E295770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.3
density (kilograms per meter cubed) = 1.114342
viscosity (meters squared per second) = 1.636404E-05
Atmospheric pressure (Pascals) = 94485
Velocity of undisturbed free stream (Uref, in m/s) = 27.32083
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.100784E-03
Estimated momentum thickness Reynolds number = 6846.527
Location of traverse; X/T = .4646 Z/T =-.5139 (Plane 4 , S/T = 0.05)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	5.7670E-01				-1.7093E-02				
2.1246E-03	5.5012E-01				-1.3703E-02				
2.8329E-03	6.4924E-01				-2.2259E-02				
3.5411E-03	8.3408E-01				-2.8153E-02	2.7603E-05			
4.6034E-03	1.0413E+00				-4.2631E-02				
5.6657E-03	1.1063E+00				-6.1493E-02	1.6490E-04			
7.7904E-03	1.1238E+00	2.3944E-03	1.0084E-01	6.0936E-01	-9.6808E-02	1.5768E-03	-6.8553E-01	2.4386E+00	4.7970E-04
9.5609E-03	1.1282E+00	2.2975E-03	4.6247E-02	3.4886E-01	-1.1613E-01	2.3947E-03	-4.7424E-01	9.5146E-01	2.5079E-04
1.2394E-02	1.1203E+00	2.0729E-03	-5.2247E-02	5.5255E-01	-1.3818E-01	3.3571E-03	-3.4989E-01	4.9597E-01	2.9917E-04
1.5935E-02	1.0963E+00	1.8410E-03	-1.0428E-01	2.7680E-01	-1.4267E-01	3.3226E-03	-1.5360E-01	1.8144E-01	1.6452E-04
2.0361E-02	1.0999E+00	1.7221E-03	-1.4687E-01	2.4323E-01	-1.6485E-01	3.7781E-03	-1.6988E-01	1.6238E-01	2.7580E-04
2.5850E-02	1.1067E+00	1.6680E-03	-1.7256E-01	2.8015E-01	-1.9264E-01	4.4853E-03	-1.0114E-01	8.3222E-02	3.4666E-04
3.2932E-02	1.1216E+00	1.7044E-03	-2.0564E-01	3.1421E-01	-2.2873E-01	5.5003E-03	-1.8380E-01	2.3902E-02	3.4078E-04
4.2847E-02	1.1087E+00	1.5099E-03	-1.3269E-01	1.1071E-01	-2.0438E-01	4.5231E-03	-1.0897E-01	-1.9078E-02	1.7164E-04
5.4178E-02	1.1235E+00	1.4722E-03	-1.1711E-01	1.2789E-01	-2.3050E-01	4.9469E-03	-1.2991E-01	-1.7352E-03	5.1064E-04
6.9405E-02	1.1214E+00	1.4709E-03	-1.8721E-01	1.0749E-01	-2.1375E-01	3.6920E-03	-3.6803E-02	3.4657E-02	1.4904E-05
8.8173E-02	1.1479E+00	1.3628E-03	-7.3615E-02	3.2168E-01	-2.4626E-01	3.9979E-03	-2.1449E-01	2.3452E-01	4.0995E-04
1.1331E-01	1.1567E+00	1.2382E-03	-1.8617E-01	7.7411E-02	-2.4593E-01	3.4742E-03	-2.2076E-01	2.9079E-01	2.2378E-04
1.4412E-01	1.1744E+00	1.2443E-03	-1.6256E-01	1.9825E-01	-2.3857E-01	2.5213E-03	-1.8552E-01	2.2828E-01	-9.0439E-05
1.8414E-01	1.1860E+00	1.0952E-03	-2.8716E-01	1.5950E-01	-2.2818E-01	2.0505E-03	-2.2125E-01	4.3628E-01	-6.0419E-05
2.3513E-01	1.2055E+00	8.4277E-04	-3.9004E-01	9.5340E-02	-2.0996E-01	1.3328E-03	-1.4467E-02	9.8872E-02	-1.1489E-04
3.0028E-01	1.2410E+00	5.2879E-04	-5.4165E-01	5.5226E-01	-1.9163E-01	9.6546E-04	-2.3559E-01	2.9692E-01	9.5971E-05
3.8350E-01	1.2594E+00	2.6188E-04	-3.7429E-01	7.6722E-01	-1.6541E-01	5.2062E-04	-4.8586E-01	4.9680E-01	2.2521E-05
4.8973E-01	1.2728E+00	1.0710E-04	-7.8715E-02	-3.0446E-02	-1.2537E-01	1.9875E-04	-4.8944E-01	4.9860E-01	2.7701E-05
6.2571E-01	1.2668E+00	7.9107E-05	-1.3649E-01	-3.1700E-01	-8.3882E-02	9.4054E-05	2.8604E-02	-2.0545E-01	3.7043E-05
7.9958E-01	1.2769E+00	6.8653E-05	-1.4650E-01	-3.0482E-01	-6.0200E-02	6.3214E-05	6.8876E-02	-3.0206E-01	3.2561E-05
1.0205E+00	1.2699E+00	5.9428E-05	-1.2551E-01	-3.5342E-01	-3.5838E-02	5.9187E-05	4.4946E-03	-3.2414E-01	2.9172E-05
1.3028E+00	1.2757E+00	5.2919E-05	-1.7678E-01	-1.8742E-01	-2.2625E-02	6.0085E-05	-2.5623E-02	-2.9686E-01	2.3834E-05
1.6707E+00	1.2752E+00	4.0267E-05	-1.0730E-01	-2.1993E-01	-3.7000E-03	4.9817E-05	-7.7562E-02	-2.2714E-01	2.1216E-05

Table F.3-10 Velocity measurements made at S/T = 0.05 with the UV system of the laser anemometer, plane 4

File E263770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.092133
viscosity (meters squared per second) = 1.677092E-05
Atmospheric pressure (Pascals) = 93135
Velocity of undisturbed free stream (Uref, in m/s) = 27.60061
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092436E-03
Estimated momentum thickness Reynolds number = 6735.095
Location of traverse; X/T = .361 Z/T =-1.0689 (Plane 4 , S/T = 0.61)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.8329E-03	-1.9998E-01		
3.5411E-03	-2.3113E-01		
4.2493E-03	-2.5136E-01		
5.3116E-03	-2.6537E-01	5.8488E-03	-8.9091E-04
6.3739E-03	-3.0552E-01	6.0548E-03	-3.3641E-04
8.1443E-03	-3.1720E-01	6.9607E-03	5.0792E-04
1.0446E-02	-3.3547E-01	5.4970E-03	-9.1629E-04
1.3279E-02	-3.4826E-01	6.7372E-03	1.0608E-03
1.6643E-02	-3.4472E-01	4.8570E-03	1.0505E-03
2.0892E-02	-3.6503E-01	4.7906E-03	1.1417E-03
2.7266E-02	-3.6904E-01	4.4392E-03	7.8330E-04
3.3640E-02	-3.5427E-01	4.2781E-03	7.3335E-04
4.3201E-02	-3.3727E-01	4.1843E-03	1.0059E-03
5.4887E-02	-3.2422E-01	4.2452E-03	9.9877E-04
7.1176E-02	-2.9499E-01	3.7610E-03	8.4259E-04
8.9589E-02	-2.7787E-01	3.3134E-03	7.3431E-04
1.1367E-01	-2.4950E-01	3.1375E-03	6.9090E-04
1.4554E-01	-2.4243E-01	2.8126E-03	3.3764E-04
1.8484E-01	-2.2513E-01	2.6120E-03	5.2165E-04
2.3584E-01	-2.1497E-01	2.3544E-03	5.4507E-04
3.0099E-01	-2.0005E-01	2.0906E-03	3.9727E-04
3.8421E-01	-1.9185E-01	1.5272E-03	4.0822E-04
4.9044E-01	-1.6201E-01	2.0077E-04	1.1079E-04
6.2642E-01	-1.6312E-01		
7.9958E-01	-1.7517E-01	1.4533E-04	
1.0223E+00	-1.7920E-01	1.1333E-04	
1.3035E+00	-1.3852E-01		
1.6643E+00	-1.5005E-01		

Table F.3-11 Velocity measurements made at S/T = 0.61 with the UW system of the laser anemometer, plane 4

File E264770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 23.2
density (kilograms per meter cubed) = 1.094613
viscosity (meters squared per second) = 1.669817E-05
Atmospheric pressure (Pascals) = 93095
Velocity of undisturbed free stream (Uref, in m/s) = 27.54947
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093954E-03
Estimated momentum thickness Reynolds number = 6754.409
Location of traverse; X/T = .382 Z/T =-.9562 (Plane 4 , S/T = 0.50)

Y/T	W/Uref	w2/Uref2	uw/Uref2
3.1870E-03	-2.6163E-01		
3.8952E-03	-2.8418E-01		
4.9575E-03	-3.1979E-01	1.2728E-02	-4.0979E-03
6.0198E-03	-3.4638E-01	1.3523E-02	-2.2535E-03
7.0822E-03	-3.7179E-01	1.3474E-02	-2.0709E-03
8.4986E-03	-3.9664E-01	1.3715E-02	-1.7787E-03
1.1154E-02	-4.2810E-01	1.4869E-02	1.5535E-03
1.3456E-02	-4.5115E-01	1.3585E-02	2.5989E-03
1.7705E-02	-4.5404E-01	1.3400E-02	1.3849E-03
2.1246E-02	-4.6676E-01	1.3577E-02	1.8380E-03
2.6912E-02	-4.5769E-01	1.3765E-02	3.3284E-03
3.4348E-02	-4.4917E-01	9.3538E-03	2.7057E-03
4.3909E-02	-4.2996E-01	8.7876E-03	3.2396E-03
5.5241E-02	-3.8252E-01	8.3400E-03	2.5824E-03
7.0822E-02	-3.4447E-01	7.1345E-03	1.9608E-03
8.9235E-02	-3.1929E-01	6.6912E-03	1.4489E-03
1.1402E-01	-2.8714E-01	4.9781E-03	1.2268E-03
1.4518E-01	-2.4725E-01	3.7782E-03	4.5020E-04
1.8520E-01	-2.2553E-01	2.8234E-03	2.2937E-04
2.3619E-01	-1.9083E-01	2.4749E-03	5.3028E-04
3.0135E-01	-1.8709E-01	2.2802E-03	4.9672E-04
3.8456E-01	-1.8568E-01	6.2408E-04	-1.9099E-04
4.9256E-01	-1.8853E-01	1.8723E-04	1.5522E-04
6.2712E-01	-1.8833E-01	1.0001E-04	
7.9993E-01	-1.8749E-01		
1.0212E+00	-1.8219E-01		
1.3368E+00	-1.9358E-01		
1.6686E+00	-1.8982E-01		

Table F.3-12 Velocity measurements made at S/T = 0.50 with the UW system of the laser anemometer, plane 4

File E265770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.097175
viscosity (meters squared per second) = 1.673716E-05
Atmospheric pressure (Pascals) = 93880
Velocity of undisturbed free stream (Uref, in m/s) = 27.61168
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092108E-03
Estimated momentum thickness Reynolds number = 6750.844
Location of traverse; X/T = .4004 Z/T =-.8579 (Plane 4 , S/T = 0.40)

Y/T	W/Uref	w2/Uref2	uw/Uref2
3.0099E-03	-4.0852E-01		
3.7181E-03	-4.4061E-01		
4.7805E-03	-4.4225E-01		
5.8428E-03	-4.6361E-01	2.8158E-02	4.3524E-03
7.2592E-03	-5.0476E-01	2.7058E-02	4.8369E-03
9.0297E-03	-5.1078E-01	2.8623E-02	5.0370E-03
1.0800E-02	-5.4506E-01	3.0209E-02	8.7147E-03
1.3279E-02	-5.5109E-01	3.2470E-02	1.1756E-02
1.7174E-02	-5.7628E-01	3.0721E-02	1.1011E-02
2.1069E-02	-5.8254E-01	2.9810E-02	1.0460E-02
2.6735E-02	-5.8065E-01	2.6024E-02	9.4488E-03
3.4171E-02	-5.8532E-01	2.4605E-02	9.6480E-03
4.3732E-02	-5.7631E-01	2.0803E-02	7.8756E-03
5.5064E-02	-5.1302E-01	1.8914E-02	6.8056E-03
6.9936E-02	-4.5756E-01	1.9185E-02	6.0832E-03
9.2599E-02	-3.4186E-01	1.5432E-02	2.8089E-03
1.1739E-01	-2.8146E-01	1.0926E-02	9.6028E-04
1.4501E-01	-2.4614E-01	5.3685E-03	-2.1772E-04
1.8573E-01	-2.5209E-01	3.4692E-03	9.9005E-04
2.3601E-01	-2.2670E-01	3.1705E-03	9.4275E-04
3.0365E-01	-2.2508E-01	2.2262E-03	8.0380E-04
3.8474E-01	-2.0940E-01	8.5916E-04	-1.4382E-04
4.9062E-01	-2.1239E-01	4.9963E-04	2.9625E-04
6.2553E-01	-2.3092E-01	1.5896E-04	
7.9975E-01	-2.4079E-01	1.3211E-04	
1.0221E+00	-2.2970E-01		
1.3036E+00	-2.3015E-01		
1.6645E+00	-2.1874E-01		

Table F.3-13 Velocity measurements made at S/T = 0.40 with the UW system of the laser anemometer, plane 4

File E266770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.116884
viscosity (meters squared per second) = 1.635668E-05
Atmospheric pressure (Pascals) = 94925
Velocity of undisturbed free stream (Uref, in m/s) = 27.56703
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093433E-03
Estimated momentum thickness Reynolds number = 6898.945
Location of traverse; X/T = .4096 Z/T =-.8088 (Plane 4 , S/T = 0.35)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.8329E-03	-2.7179E-01		
3.7181E-03	-3.9693E-01		
4.9575E-03	-4.7087E-01	3.7769E-02	1.9657E-03
6.0198E-03	-5.2374E-01	4.1381E-02	6.1310E-03
7.4363E-03	-5.8660E-01	4.3029E-02	4.1956E-03
8.8527E-03	-6.0351E-01	4.6049E-02	5.0467E-03
1.0623E-02	-6.2551E-01	3.6971E-02	4.2053E-03
1.3456E-02	-6.6504E-01	3.3844E-02	6.1936E-03
1.6997E-02	-6.6581E-01	2.8437E-02	4.8441E-03
2.1246E-02	-6.9689E-01	2.5778E-02	5.8205E-03
2.6912E-02	-6.7804E-01	2.4344E-02	6.6677E-03
3.4171E-02	-6.5939E-01	2.2428E-02	6.5386E-03
4.3555E-02	-6.3674E-01	1.9281E-02	4.4085E-03
5.5241E-02	-5.6637E-01	2.0553E-02	3.4072E-03
7.0290E-02	-4.8448E-01	2.0161E-02	3.3073E-03
8.9943E-02	-3.2112E-01	1.4407E-02	-1.5173E-03
1.1438E-01	-2.6111E-01	1.0608E-02	2.8387E-04
1.4554E-01	-2.2637E-01	5.2006E-03	-4.1925E-04
1.8520E-01	-2.1081E-01	2.8902E-03	4.1919E-04
2.3619E-01	-2.2617E-01	1.6522E-03	-5.0638E-05
3.0347E-01	-2.2469E-01	1.1916E-03	3.6843E-04
3.8527E-01	-2.2791E-01	7.0486E-04	2.4761E-04
4.9186E-01	-2.1560E-01	2.0650E-04	1.2627E-04
6.2712E-01	-2.2532E-01	1.2609E-04	
8.1728E-01	-2.4241E-01	1.8585E-05	7.3151E-06
1.0212E+00	-2.5061E-01		
1.3038E+00	-2.4887E-01		
1.6647E+00	-2.4008E-01		

Table F.3-14 Velocity measurements made at S/T = 0.35 with the UW system of the laser anemometer, plane 4

File E267770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22.2
density (kilograms per meter cubed) = 1.126872
viscosity (meters squared per second) = 1.617789E-05
Atmospheric pressure (Pascals) = 95515
Velocity of undisturbed free stream (Uref, in m/s) = 27.52282
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094747E-03
Estimated momentum thickness Reynolds number = 6966.237
Location of traverse; X/T = .4187 Z/T =-.7596 (Plane 4 , S/T = 0.30)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.1246E-03	-3.6967E-01		
2.8329E-03	-5.0803E-01		
3.5411E-03	-5.7232E-01		
4.9575E-03	-6.4684E-01	3.5584E-02	-4.5256E-03
6.3739E-03	-6.9757E-01	3.1366E-02	-6.0283E-03
7.7904E-03	-7.2255E-01	2.7438E-02	-3.3535E-03
9.5609E-03	-7.3656E-01	2.5351E-02	-2.0370E-03
1.2394E-02	-7.5594E-01	1.8956E-02	1.0111E-03
1.6289E-02	-7.4287E-01	1.4713E-02	4.7212E-04
2.0184E-02	-7.2746E-01	1.2851E-02	1.8034E-03
2.6027E-02	-6.6353E-01	1.1658E-02	3.0853E-03
3.2932E-02	-6.4130E-01	1.1359E-02	3.0115E-03
4.2493E-02	-5.9230E-01	1.1759E-02	3.1125E-03
5.4178E-02	-5.2775E-01	1.3951E-02	4.5707E-03
6.9051E-02	-4.3107E-01	1.1805E-02	2.7053E-03
8.8173E-02	-3.2629E-01	1.1789E-02	1.8755E-03
1.1367E-01	-2.6143E-01	7.1114E-03	6.1597E-04
1.4554E-01	-2.4120E-01	3.9738E-03	5.2142E-04
1.8502E-01	-2.2104E-01	2.5242E-03	1.8525E-04
2.3504E-01	-2.2413E-01		
3.0028E-01	-2.4539E-01	1.0942E-03	4.1647E-04
3.8456E-01	-2.4393E-01	5.7070E-04	1.9657E-04
4.8973E-01	-2.5395E-01	3.4045E-04	1.4521E-04
6.2712E-01	-2.4208E-01	2.9348E-04	
7.9887E-01	-2.5676E-01	1.4621E-04	
1.0202E+00	-2.4765E-01		
1.3028E+00	-2.4824E-01	7.3535E-05	
1.6636E+00	-2.4711E-01	7.5343E-04	

Table F.3-15 Velocity measurements made at S/T = 0.30 with the UW system of the laser anemometer, plane 4

File E268770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.116538
viscosity (meters squared per second) = 1.631904E-05
Atmospheric pressure (Pascals) = 94575
Velocity of undisturbed free stream (Uref, in m/s) = 27.593
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092662E-03
Estimated momentum thickness Reynolds number = 6920.068
Location of traverse; X/T = .4279 Z/T =-.7105 (Plane 4 , S/T = 0.25)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.3017E-03	-3.3490E-01		
2.8329E-03	-4.5856E-01		
3.5411E-03	-5.3833E-01		
4.9575E-03	-6.8273E-01		
7.4363E-03	-7.5701E-01		
9.5609E-03	-7.6155E-01	1.6121E-02	1.7481E-03
1.2748E-02	-7.5294E-01	1.3875E-02	3.0502E-03
1.5935E-02	-7.3484E-01	1.3232E-02	2.9264E-03
2.0184E-02	-7.1114E-01	1.2671E-02	2.6118E-03
2.5850E-02	-6.5877E-01	9.8911E-03	1.9664E-03
3.2932E-02	-6.3244E-01	1.0235E-02	2.4710E-03
4.2493E-02	-5.4966E-01	8.1973E-03	1.2743E-03
5.4178E-02	-5.0417E-01	1.1477E-02	2.6250E-03
6.9051E-02	-4.2750E-01	8.3945E-03	1.5871E-03
8.8527E-02	-3.5440E-01	8.3140E-03	1.5336E-03
1.1296E-01	-3.1672E-01	5.4836E-03	4.1702E-04
1.4448E-01	-2.8143E-01	4.2772E-03	6.0305E-04
1.8414E-01	-2.6451E-01	3.1118E-03	4.3155E-04
2.3513E-01	-2.9965E-01	2.4832E-03	4.1411E-04
3.0028E-01	-2.5743E-01	1.9719E-03	4.2425E-04
3.8350E-01	-2.5635E-01	6.3673E-04	2.1413E-04
4.8973E-01	-2.6424E-01	1.5169E-04	8.5776E-05
6.2571E-01	-2.6910E-01		
7.9887E-01	-2.8565E-01		
1.0212E+00	-2.8484E-01		
1.3028E+00	-2.8423E-01		
1.6636E+00	-2.8783E-01		

Table F.3-16 Velocity measurements made at S/T = 0.25 with the UW system of the laser anemometer, plane 4

File E269770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 21.1
density (kilograms per meter cubed) = 1.118652
viscosity (meters squared per second) = 1.62498E-05
Atmospheric pressure (Pascals) = 94465
Velocity of undisturbed free stream (Uref, in m/s) = 27.535
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094385E-03
Estimated momentum thickness Reynolds number = 6937.863
Location of traverse; X/T = .4371 Z/T =-.6613 (Plane 4 , S/T = 0.20)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.4164E-03	-3.8117E-01		
2.4788E-03	-5.6998E-01		
3.5411E-03	-6.6242E-01		
5.4887E-03	-7.3247E-01	1.4232E-02	3.1793E-03
7.4363E-03	-7.5921E-01	1.4464E-02	1.6509E-03
1.0977E-02	-7.2413E-01	9.8532E-03	1.2309E-03
1.3810E-02	-7.0562E-01	8.8095E-03	1.7967E-03
1.7351E-02	-6.6626E-01	8.5855E-03	2.4200E-03
2.3725E-02	-6.2495E-01	6.8369E-03	1.2158E-03
3.0807E-02	-5.8453E-01	6.0393E-03	9.1647E-04
4.0722E-02	-5.4481E-01	6.3172E-03	1.4338E-03
5.2054E-02	-4.9792E-01	5.3523E-03	6.1301E-04
6.7103E-02	-4.5770E-01	4.9604E-03	8.0279E-04
8.6048E-02	-4.0298E-01	4.7547E-03	9.0582E-04
1.1119E-01	-3.5988E-01	4.2087E-03	7.5291E-04
1.4200E-01	-3.2981E-01	3.5068E-03	4.6977E-04
1.8201E-01	-3.1399E-01	3.3612E-03	8.1242E-04
2.3300E-01	-2.8864E-01	1.3558E-03	-1.2051E-04
2.9851E-01	-2.8727E-01	8.5583E-04	2.6902E-04
3.8208E-01	-2.8457E-01	3.9984E-04	1.6732E-04
4.8761E-01	-2.8865E-01		
6.2358E-01	-3.0952E-01	3.5091E-05	
7.9674E-01	-3.0751E-01		
1.0195E+00	-3.0784E-01	4.5333E-05	
1.3006E+00	-3.2179E-01		
1.6615E+00	-3.0532E-01		

Table F.3-17 Velocity measurements made at S/T = 0.20 with the UW system of the laser anemometer, plane 4

File E270770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 21.5
density (kilograms per meter cubed) = 1.119025
viscosity (meters squared per second) = 1.626145E-05
Atmospheric pressure (Pascals) = 94625
Velocity of undisturbed free stream (Uref, in m/s) = 27.55922
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093665E-03
Estimated momentum thickness Reynolds number = 6937.771
Location of traverse; X/T = .4463 Z/T =-.6122 (Plane 4 , S/T = 0.15)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.0623E-03	-2.6117E-01		
1.7705E-03	-4.1535E-01		
2.4788E-03	-3.9538E-01		
3.5411E-03	-5.5659E-01		
4.9575E-03	-6.6311E-01	1.3109E-02	6.9887E-03
7.0822E-03	-7.4023E-01	1.2870E-02	4.8692E-03
9.9150E-03	-7.6472E-01	1.4387E-02	3.8052E-03
1.3456E-02	-7.5075E-01	1.4783E-02	4.6152E-03
1.7705E-02	-6.5763E-01	7.5997E-03	9.5265E-04
2.3371E-02	-5.8233E-01	5.8846E-03	1.1710E-03
3.0453E-02	-5.5860E-01	5.3118E-03	9.3839E-04
4.0014E-02	-5.1612E-01	4.6529E-03	5.9142E-04
5.1877E-02	-5.0596E-01	4.1747E-03	4.0348E-04
6.6572E-02	-4.6285E-01	3.5759E-03	4.0214E-04
8.5871E-02	-4.1372E-01	3.5917E-03	5.2247E-04
1.1048E-01	-3.8099E-01	3.3033E-03	4.5703E-04
1.4271E-01	-3.5387E-01	2.7546E-03	4.3704E-04
1.8166E-01	-3.3229E-01	2.4851E-03	5.3596E-04
2.3265E-01	-3.2310E-01	2.2280E-03	7.1894E-04
2.9798E-01	-3.1930E-01	1.9012E-03	5.5483E-04
3.8120E-01	-3.2022E-01	5.1997E-04	-1.3104E-04
4.8725E-01	-3.2704E-01	1.8075E-04	6.5194E-05
6.2323E-01	-3.4729E-01	1.6028E-04	
7.9639E-01	-3.3776E-01		
1.0177E+00	-3.3481E-01		
1.3003E+00	-3.2896E-01		
1.6611E+00	-3.2538E-01		

Table F.3-18 Velocity measurements made at S/T = 0.15 with the UW system of the laser anemometer, plane 4

File E271770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24.5
density (kilograms per meter cubed) = 1.098258
viscosity (meters squared per second) = 1.669904E-05
Atmospheric pressure (Pascals) = 93815
Velocity of undisturbed free stream (Uref, in m/s) = 27.51553
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094964E-03
Estimated momentum thickness Reynolds number = 6747.4
Location of traverse; X/T = .4554 Z/T =-.563 (Plane 4 , S/T = 0.10)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.0623E-03	-2.3327E-01		
2.4788E-03	-3.8602E-01		
4.2493E-03	-4.6753E-01		
6.0198E-03	-6.1754E-01	1.5540E-02	
8.8527E-03	-6.6900E-01	1.0436E-02	3.2671E-03
1.2394E-02	-6.1629E-01	6.4222E-03	1.7421E-03
1.6643E-02	-5.9523E-01	5.5799E-03	1.6023E-03
2.2663E-02	-5.5861E-01	4.6065E-03	1.1542E-03
3.0099E-02	-5.2020E-01	4.1206E-03	7.1468E-04
4.7450E-02	-4.7084E-01	3.4231E-03	4.3808E-04
5.0637E-02	-4.6630E-01	3.5498E-03	4.8988E-04
6.5510E-02	-3.8248E-01	2.8274E-03	6.4421E-05
8.4632E-02	-4.1344E-01	3.1049E-03	3.4375E-04
1.0942E-01	-3.9002E-01	2.7665E-03	3.1523E-04
1.8201E-01	-3.5804E-01	2.7847E-03	
2.3159E-01	-3.4067E-01	1.6086E-03	2.7750E-04
2.9674E-01	-3.3761E-01	5.8248E-04	1.5635E-04
3.7996E-01	-3.4397E-01	3.5067E-04	1.1727E-04
4.8619E-01	-3.5896E-01	1.6532E-05	3.4835E-06
6.2217E-01	-3.4724E-01		
7.9533E-01	-3.5999E-01		
8.9837E-01	-3.5948E-01		
1.1809E+00	-3.5197E-01		
1.5418E+00	-3.4753E-01		

Table F.3-19 Velocity measurements made at S/T = 0.10 with the UW system of the laser anemometer, plane 4

File E272770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22.6
density (kilograms per meter cubed) = 1.11109
viscosity (meters squared per second) = 1.642482E-05
Atmospheric pressure (Pascals) = 94305
Velocity of undisturbed free stream (Uref, in m/s) = 27.52493
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094684E-03
Estimated momentum thickness Reynolds number = 6861.927
Location of traverse; X/T = .4646 Z/T =-.5139 (Plane 4 , S/T = 0.05)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.4788E-03	-3.8552E-01		
3.5411E-03	-4.4465E-01		
4.6034E-03	-5.3349E-01		
6.0198E-03	-5.6914E-01	6.0497E-03	3.6221E-03
7.7904E-03	-5.5076E-01	5.5573E-03	1.9811E-03
1.0092E-02	-5.3920E-01	5.5709E-03	1.1752E-03
1.2748E-02	-5.2995E-01	4.6293E-03	1.0001E-03
1.6643E-02	-5.0032E-01	4.4161E-03	9.9334E-04
2.0538E-02	-4.8102E-01	3.8728E-03	6.0230E-04
2.6204E-02	-4.9562E-01	3.7071E-03	7.6732E-04
3.3640E-02	-4.8986E-01	3.4629E-03	6.4599E-04
4.3201E-02	-4.7521E-01	3.1278E-03	4.6922E-04
5.4533E-02	-4.6137E-01	2.4992E-03	2.7491E-04
6.9405E-02	-4.5528E-01	2.7627E-03	5.0134E-04
8.9235E-02	-4.3861E-01	2.6178E-03	3.2654E-04
1.1367E-01	-4.2174E-01	2.4812E-03	4.0565E-04
1.4572E-01	-4.1038E-01	2.3469E-03	2.5882E-04
1.8449E-01	-3.8098E-01	1.7100E-03	4.0962E-04
2.3548E-01	-3.7157E-01	7.3609E-04	1.2994E-04
3.0205E-01	-3.7362E-01	4.2844E-04	7.8443E-05
3.8492E-01	-3.7543E-01	6.1435E-05	3.0778E-05
4.9009E-01	-3.8516E-01		
6.2606E-01	-3.8953E-01		
7.9922E-01	-3.9577E-01		
1.0205E+00	-3.8628E-01		
1.3031E+00	-3.8128E-01		
1.6640E+00	-3.6430E-01		

Table F.3-20 Velocity measurements made at S/T = 0.05 with the UW system of the laser anemometer, plane 4

File E319770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 25.5
density (kilograms per meter cubed) = 1.110587
viscosity (meters squared per second) = 1.65564E-05
Atmospheric pressure (Pascals) = 95187
Velocity of undisturbed free stream (Uref, in m/s) = 27.57027
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093337E-03
Estimated momentum thickness Reynolds number = 6816.36
Location of traverse; X/T = .382 Z/T =-.9562 (Plane 4 , S/T = 0.50)

Y/T	vw/Uref2
9.5609E-03	2.0275E-03
1.2748E-02	1.2034E-03
1.6289E-02	1.4115E-03
1.9830E-02	2.2001E-04
2.5850E-02	3.8903E-04
3.3640E-02	-1.0215E-03
4.2493E-02	-2.8622E-03
5.4178E-02	-3.4902E-03
6.9051E-02	-3.3753E-03
8.8881E-02	-3.0537E-03
1.1296E-01	-1.8929E-03
1.4412E-01	-4.5499E-04
1.8414E-01	-3.1851E-04
2.3513E-01	-1.6988E-04
3.0099E-01	-2.1700E-04
3.8350E-01	-1.9960E-04

Table F.3-21 Velocity measurements made at S/T = 0.50 with the VW system of the laser anemometer, plane 4

File E318770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 25.9
density (kilograms per meter cubed) = 1.10698
viscosity (meters squared per second) = 1.662749E-05
Atmospheric pressure (Pascals) = 95005
Velocity of undisturbed free stream (Uref, in m/s) = 27.59184
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092697E-03
Estimated momentum thickness Reynolds number = 6791.464
Location of traverse; X/T = .4096 Z/T =-.8088 (Plane 4 , S/T = 0.35)

Y/T	vw/Uref2
4.9575E-03	-7.8103E-04
6.7280E-03	-1.9887E-03
8.8527E-03	-3.0675E-03
1.1686E-02	-2.6861E-03
1.5227E-02	-3.5201E-03
1.9476E-02	-2.8580E-03
2.5142E-02	-3.0392E-03
3.3640E-02	-3.5412E-03
4.1785E-02	-3.6338E-03
5.3470E-02	-4.5055E-03
6.8343E-02	-5.6075E-03
8.7465E-02	-6.9234E-03
1.1225E-01	-3.0990E-03
1.4341E-01	-1.9342E-03
1.8343E-01	-4.1968E-04
2.3442E-01	1.3963E-04
2.9958E-01	-1.3466E-04
3.8314E-01	-4.8386E-05

Table F.3-22 Velocity measurements made at S/T = 0.35 with the VW system of the laser anemometer, plane 4

File E326770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 26.8
density (kilograms per meter cubed) = 1.09779
viscosity (meters squared per second) = 1.68055E-05
Atmospheric pressure (Pascals) = 94500
Velocity of undisturbed free stream (Uref, in m/s) = 27.64453
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091135E-03
Estimated momentum thickness Reynolds number = 6729.791
Location of traverse; X/T = .4187 Z/T =-.7596 (Plane 4 , S/T = 0.30)

Y/T	vw/Uref2
4.9575E-03	5.6981E-04
7.2592E-03	-6.8597E-04
8.8527E-03	-1.2366E-03
1.1686E-02	-2.5733E-03
1.5227E-02	-1.8118E-03
1.9476E-02	-1.7186E-03
2.5142E-02	-3.5930E-03
3.2224E-02	-3.5372E-03
4.1785E-02	-5.0072E-03
5.3470E-02	-5.8391E-03
6.8343E-02	-6.8749E-03
8.7465E-02	-4.0274E-03
1.1225E-01	-2.3565E-03
1.4873E-01	-6.8443E-04
1.8343E-01	-3.6202E-04
2.3442E-01	-1.1012E-04
2.9958E-01	-6.2349E-04
3.8279E-01	-2.7288E-04

Table F.3-23 Velocity measurements made at S/T = 0.30 with the VW system of the laser anemometer, plane 4

File E317770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 24.6
density (kilograms per meter cubed) = 1.114215
viscosity (meters squared per second) = 1.646414E-05
Atmospheric pressure (Pascals) = 95210
Velocity of undisturbed free stream (Uref, in m/s) = 27.59056
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092734E-03
Estimated momentum thickness Reynolds number = 6858.592
Location of traverse; X/T = .4279 Z/T =-.7107 (Plane 4 , S/T = 0.25)

Y/T	vw/Uref2
5.3116E-03	-2.8469E-03
6.0198E-03	-3.3684E-03
6.7280E-03	-2.9163E-03
7.7904E-03	-2.4261E-03
9.5609E-03	-1.8312E-03
1.1686E-02	-2.5470E-03
1.4518E-02	-2.8745E-03
1.8059E-02	-3.4144E-03
2.2309E-02	-3.6172E-03
2.7975E-02	-4.5888E-03
3.5057E-02	-4.3769E-03
4.4618E-02	-3.7440E-03
5.6303E-02	-3.6014E-03
7.2946E-02	-3.1939E-03
9.0297E-02	-2.5667E-03
1.1508E-01	-2.0525E-03
1.4625E-01	-6.4079E-04
1.8626E-01	-2.7494E-04
2.3902E-01	-3.3464E-04
3.0276E-01	-2.5841E-04
3.8598E-01	-3.7247E-04

Table F.3-24 Velocity measurements made at S/T = 0.25 with the VW system of the laser anemometer, plane 4

File E325770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 26.1
density (kilograms per meter cubed) = 1.102723
viscosity (meters squared per second) = 1.670026E-05
Atmospheric pressure (Pascals) = 94703
Velocity of undisturbed free stream (Uref, in m/s) = 27.61052
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092143E-03
Estimated momentum thickness Reynolds number = 6765.537
Location of traverse; X/T = .4371 Z/T =-.6613 (Plane 4 , S/T = 0.20)

Y/T	vw/Uref2
5.6657E-03	-2.1746E-04
7.4363E-03	-4.4359E-04
9.9150E-03	-2.2559E-04
1.2394E-02	-1.0135E-04
2.0184E-02	-7.1190E-05
2.5850E-02	-1.7379E-04
3.2932E-02	-5.7483E-04
4.2493E-02	-1.3909E-04
5.4178E-02	-3.6990E-04
6.9051E-02	-4.0727E-04
9.0297E-02	-5.8937E-04
1.1296E-01	-3.1840E-04
1.4412E-01	-2.7097E-04
1.8414E-01	-6.6617E-04
2.3548E-01	-4.1860E-04
3.0135E-01	-3.2621E-04
3.8350E-01	-5.8486E-04
4.8973E-01	-3.5445E-04

Table F.3-25 Velocity measurements made at S/T = 0.20 with the VW system of the laser anemometer, plane 4

File E316770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.9
density (kilograms per meter cubed) = 1.116196
viscosity (meters squared per second) = 1.640512E-05
Atmospheric pressure (Pascals) = 95155
Velocity of undisturbed free stream (Uref, in m/s) = 27.55466
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = .0040938
Estimated momentum thickness Reynolds number = 6876.104
Location of traverse; X/T = .4463 Z/T =-.6122 (Plane 4 , S/T = 0.15)

Y/T	vw/Uref2
9.5609E-03	1.5898E-04
1.2394E-02	-1.7768E-04
1.5935E-02	1.0865E-05
2.0184E-02	-4.7904E-04
2.5850E-02	-1.0645E-03
3.2932E-02	-3.2369E-04
4.2493E-02	-6.5345E-04
5.4178E-02	-2.5141E-04
6.9051E-02	-2.5075E-04
8.8173E-02	-3.7673E-04
1.1579E-01	-4.2791E-04
1.4412E-01	-5.5866E-04
1.8414E-01	-4.8886E-04
2.3513E-01	-4.1776E-04
3.0028E-01	-6.9854E-04
3.8350E-01	-7.1166E-04
4.8973E-01	-3.8350E-04

Table F.3-26 Velocity measurements made at S/T = 0.15 with the VW system of the laser anemometer, plane 4

File E324770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 25.7
density (kilograms per meter cubed) = 1.10469
viscosity (meters squared per second) = 1.665336E-05
Atmospheric pressure (Pascals) = 94745
Velocity of undisturbed free stream (Uref, in m/s) = 27.58639
Estmated momentum thickness at X/T = -2.146, Z/T=0. (m) = 4.092858E-03
Estimated momentum thickness Reynolds number = 6779.845
Location of traverse; X/T = .4554 Z/T =-.563 (Plane 4 , S/T = 0.10)

Y/T	vw/Uref2
7.4363E-03	1.6079E-03
9.5609E-03	2.5180E-04
1.2394E-02	-3.7593E-04
1.5935E-02	-9.4472E-04
2.0184E-02	-7.0898E-04
2.5850E-02	-4.0643E-04
3.2932E-02	1.1364E-04
4.2847E-02	5.0537E-05
5.4178E-02	1.1910E-05
6.9051E-02	-1.8300E-04
8.8527E-02	-1.4036E-04
1.1296E-01	-2.8624E-04
1.4412E-01	-2.1321E-04
1.8449E-01	-3.6836E-04
2.3513E-01	-4.2648E-04
3.0276E-01	-3.5664E-04
3.8704E-01	-8.0230E-04
4.9009E-01	-3.4588E-04

Table F.3-27 Velocity measurements made at S/T = 0.10 with the VW system of the laser anemometer, plane 4

File E315770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.111071
viscosity (meters squared per second) = 1.648506E-05
Atmospheric pressure (Pascals) = 94750
Velocity of undisturbed free stream (Uref, in m/s) = 27.58065
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093029E-03
Estimated momentum thickness Reynolds number = 6847.92
Location of traverse; X/T = .4646 Z/T =-.5139 (Plane 4 , S/T = 0.05)

Y/T	vw/Uref2
5.3116E-03	3.2171E-04
6.3739E-03	-7.6963E-04
8.4986E-03	-1.1189E-03
1.0623E-02	-1.9296E-05
1.3102E-02	2.1524E-04
1.6997E-02	-3.0777E-04
2.0892E-02	-1.4237E-04
2.6558E-02	7.0454E-04
3.3640E-02	9.7637E-04
4.3201E-02	7.1728E-04
5.4887E-02	1.1115E-04
6.9759E-02	-7.7220E-04
8.8881E-02	-3.6366E-04
1.1402E-01	-8.4872E-04
1.4483E-01	-5.5787E-04
1.8484E-01	-2.8331E-04
2.3619E-01	-5.8022E-04
3.0099E-01	-6.0372E-04
3.8704E-01	1.0183E-04
4.9044E-01	3.1985E-04

Table F.3-28 Velocity measurements made at S/T = 0.05 with the VW system of the laser anemometer, plane 4

F.4 LDV MEASUREMENTS IN PLANE 5

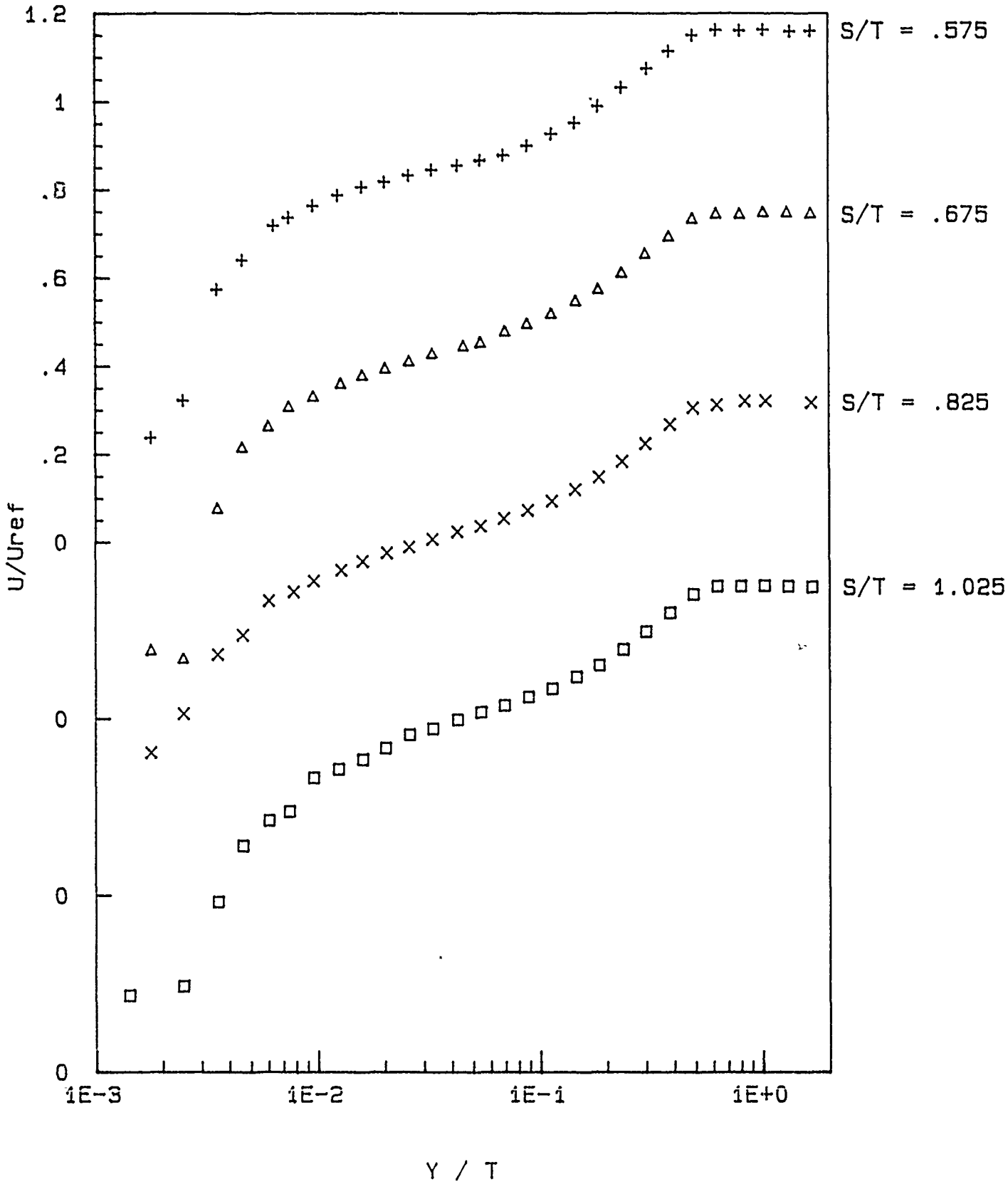


Figure F.4-1(a) Profiles of mean-velocity component U, plane 5.

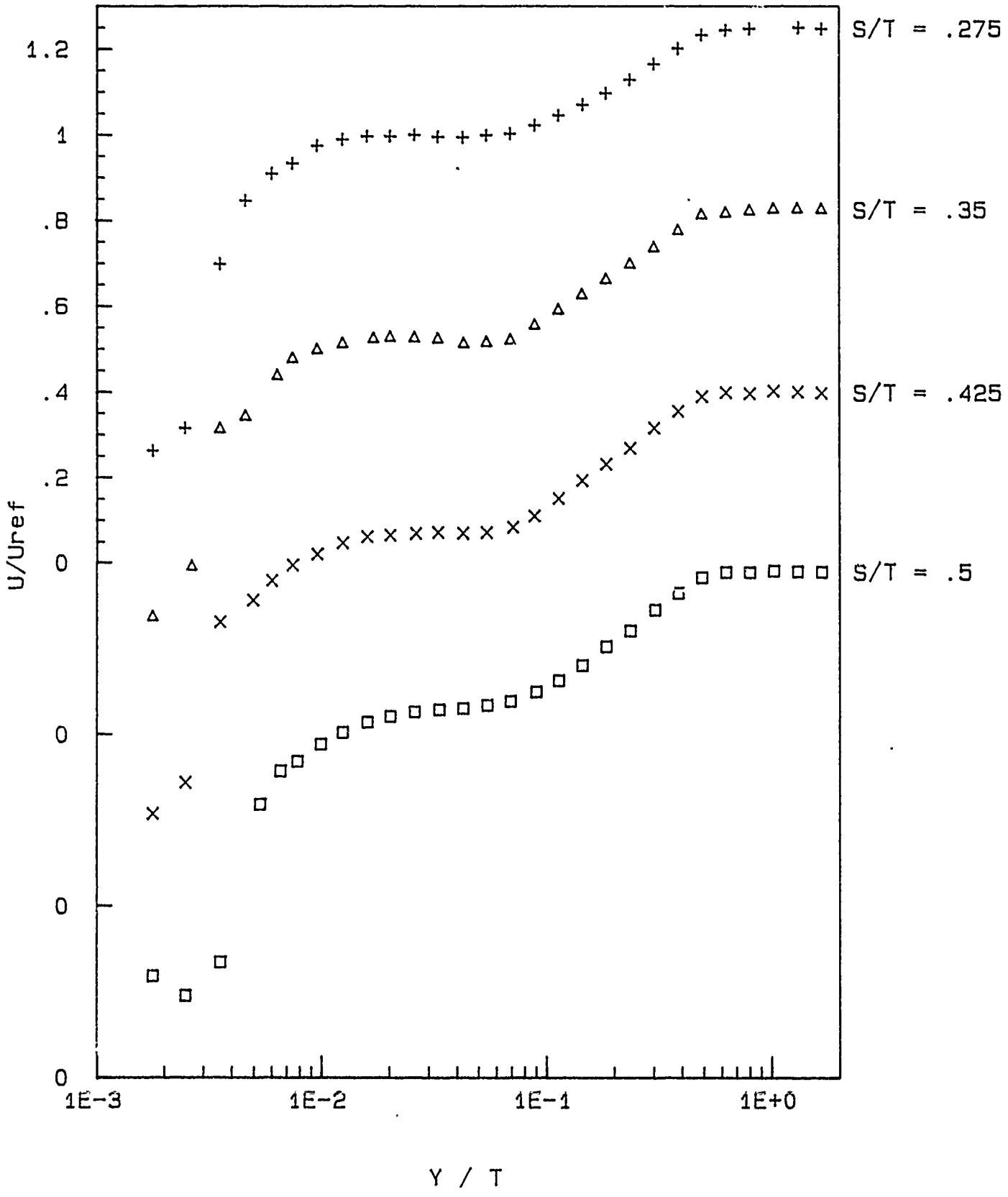


Figure F.4-1(b) Profiles of mean-velocity component U, plane 5.

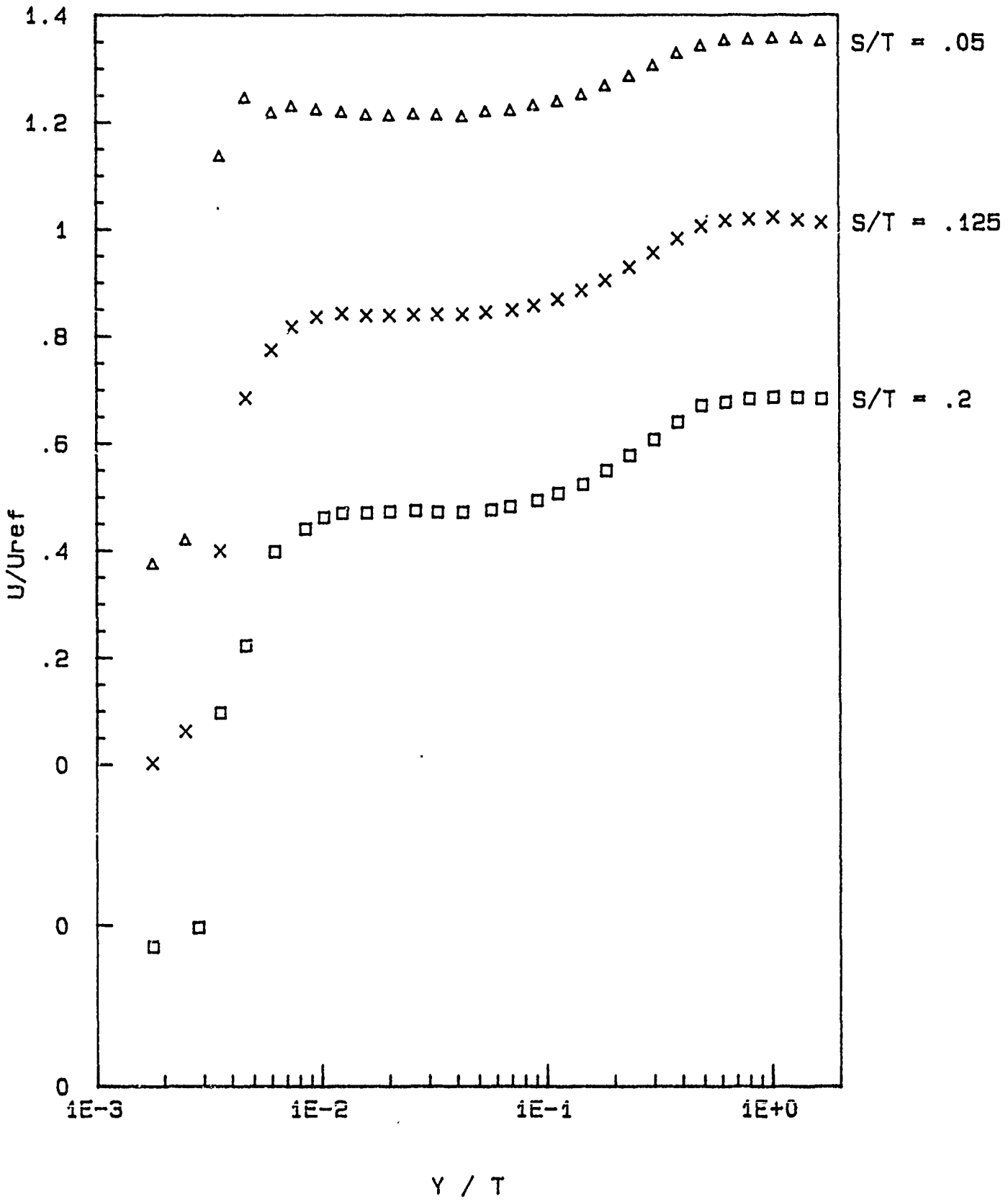


Figure F.4-1(c) Profiles of mean-velocity component U, plane 5.

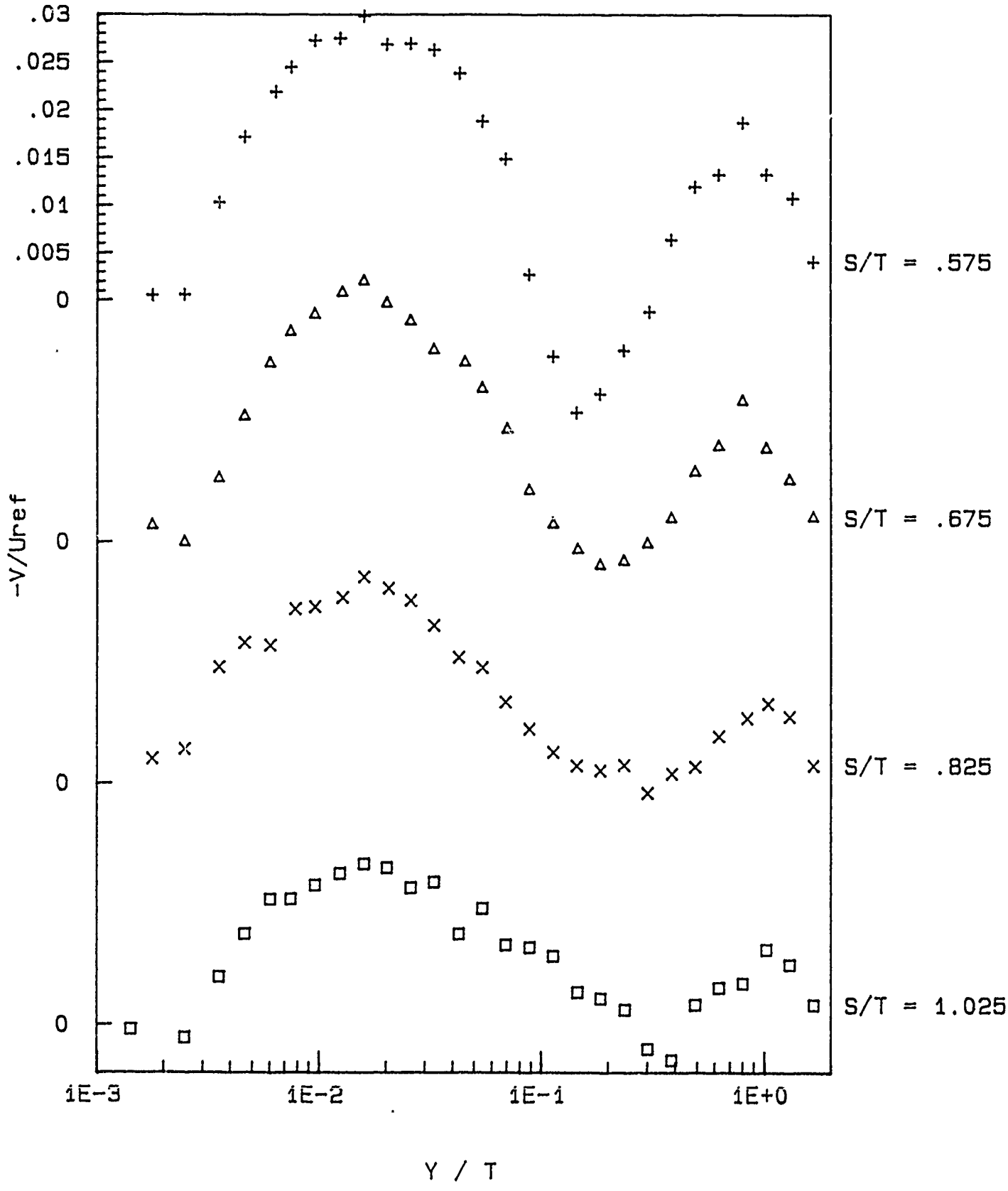


Figure F.4-2(a) Profiles of mean-velocity component V, plane 5.

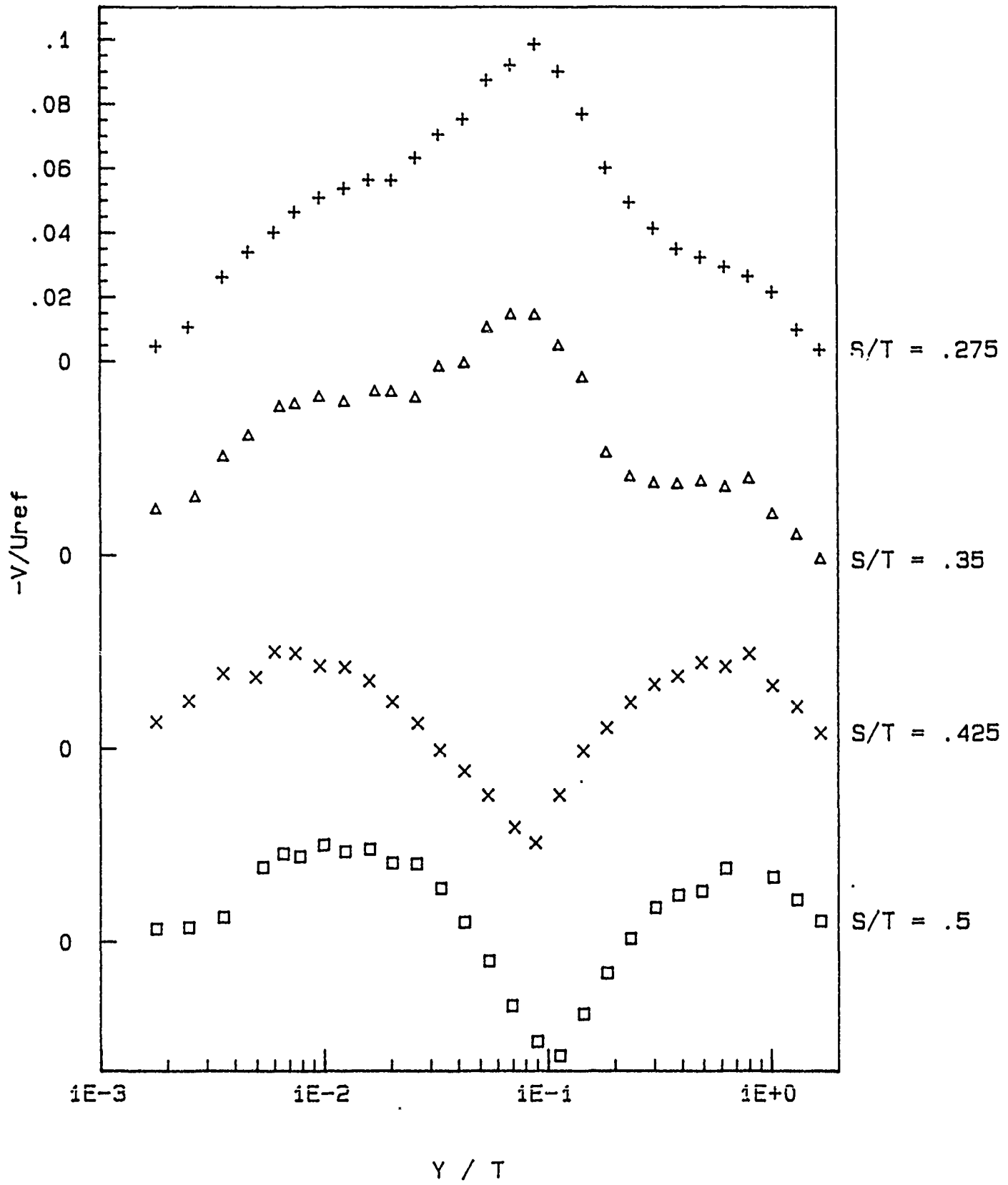


Figure F.4-2(b) Profiles of mean-velocity component V, plane 5.

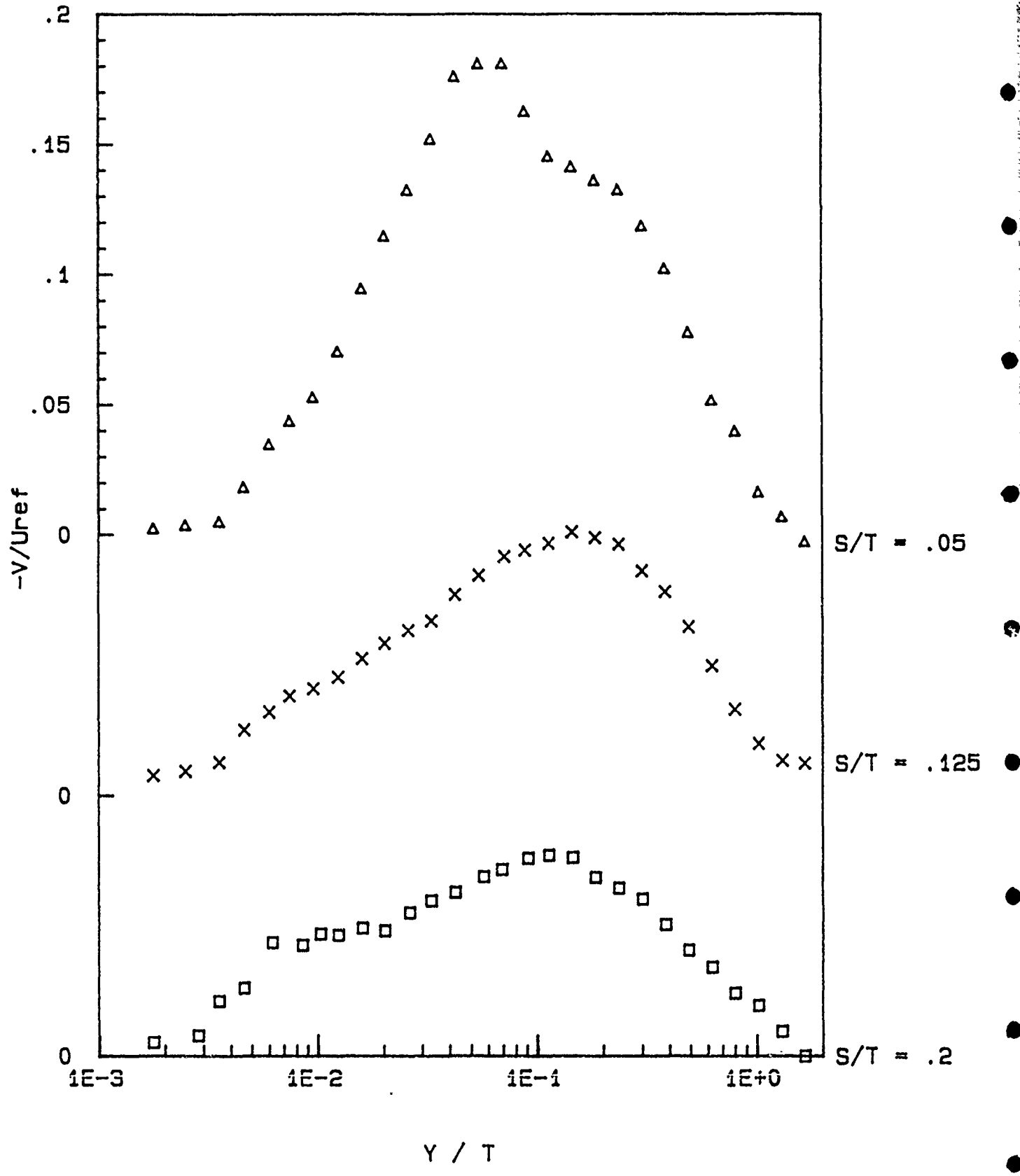


Figure F.4-2(c) Profiles of mean-velocity component V, plane 5.

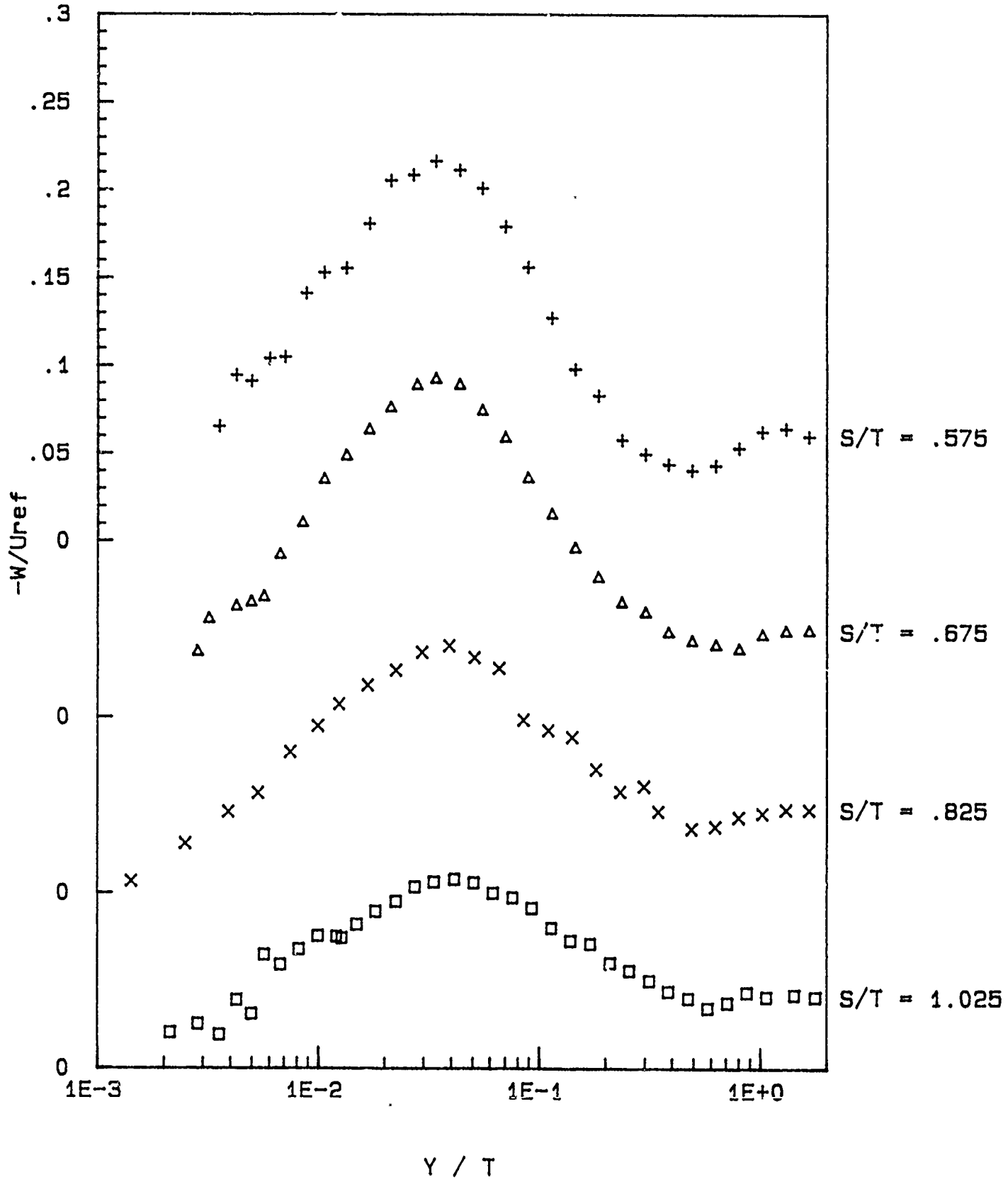


Figure F.4-3(a) Profiles of mean-velocity component W, plane 5.

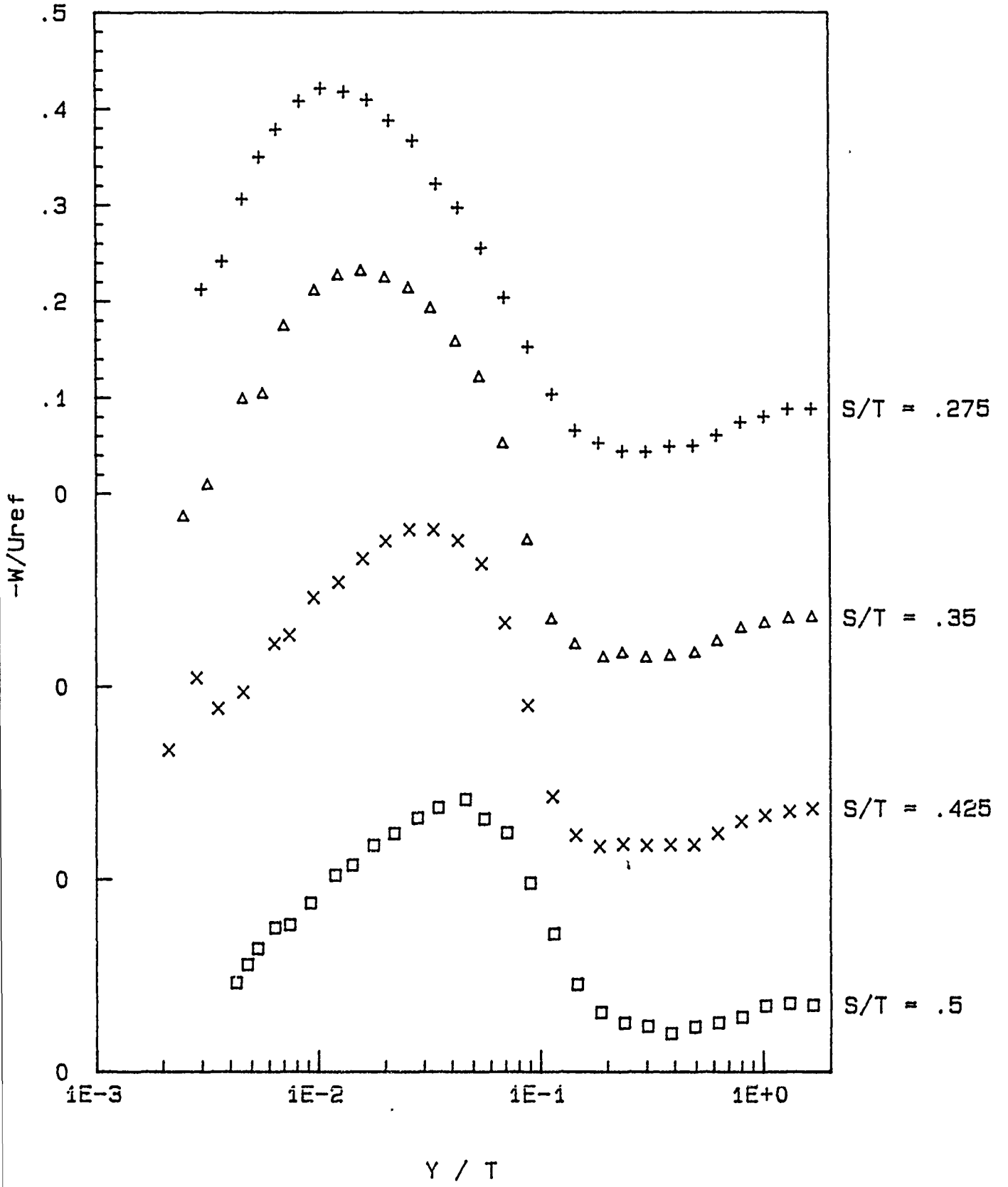


Figure F.4-3(b) Profiles of mean-velocity component W, plane 5.

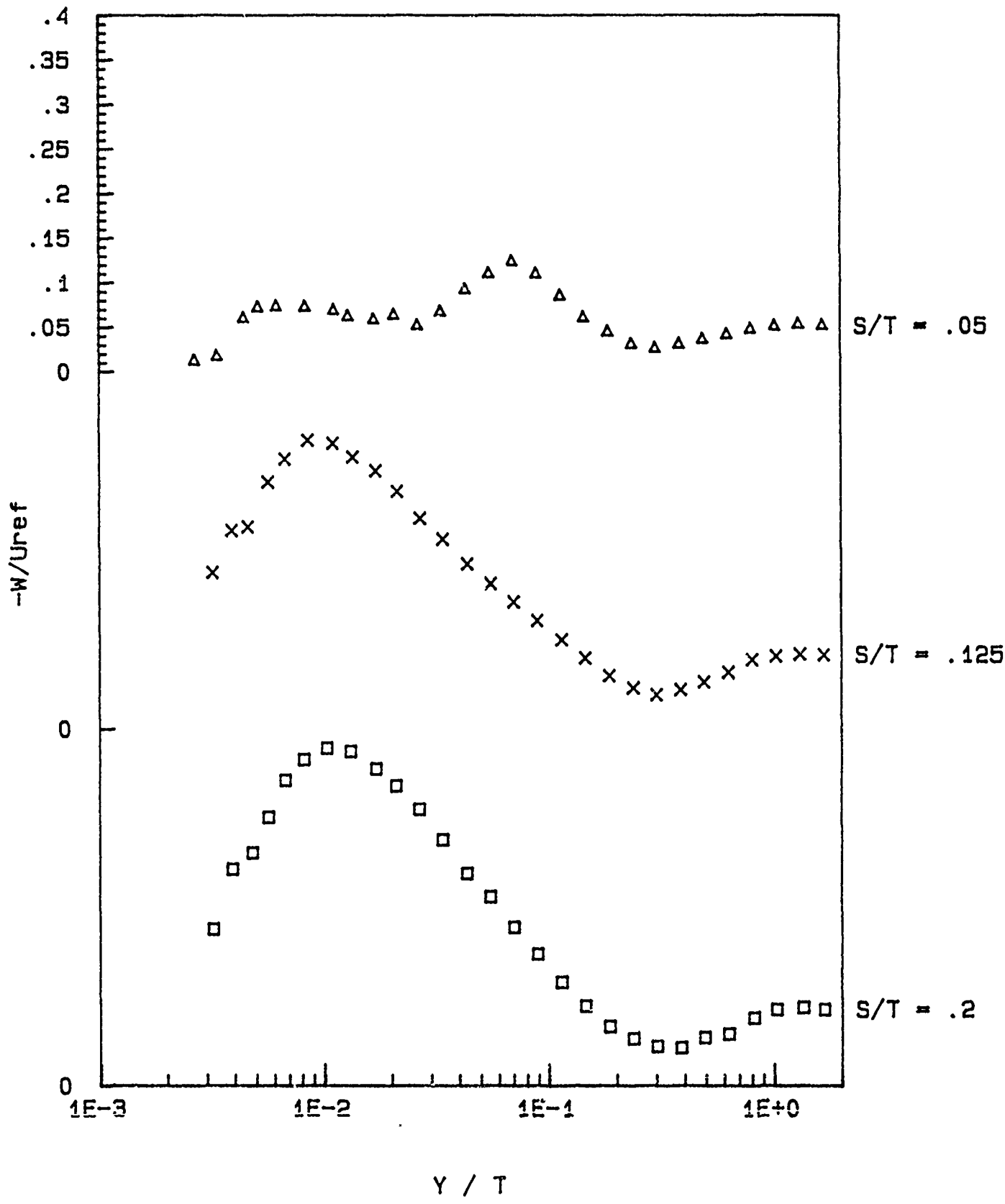


Figure F.4-3(c) Profiles of mean-velocity component W, plane 5.

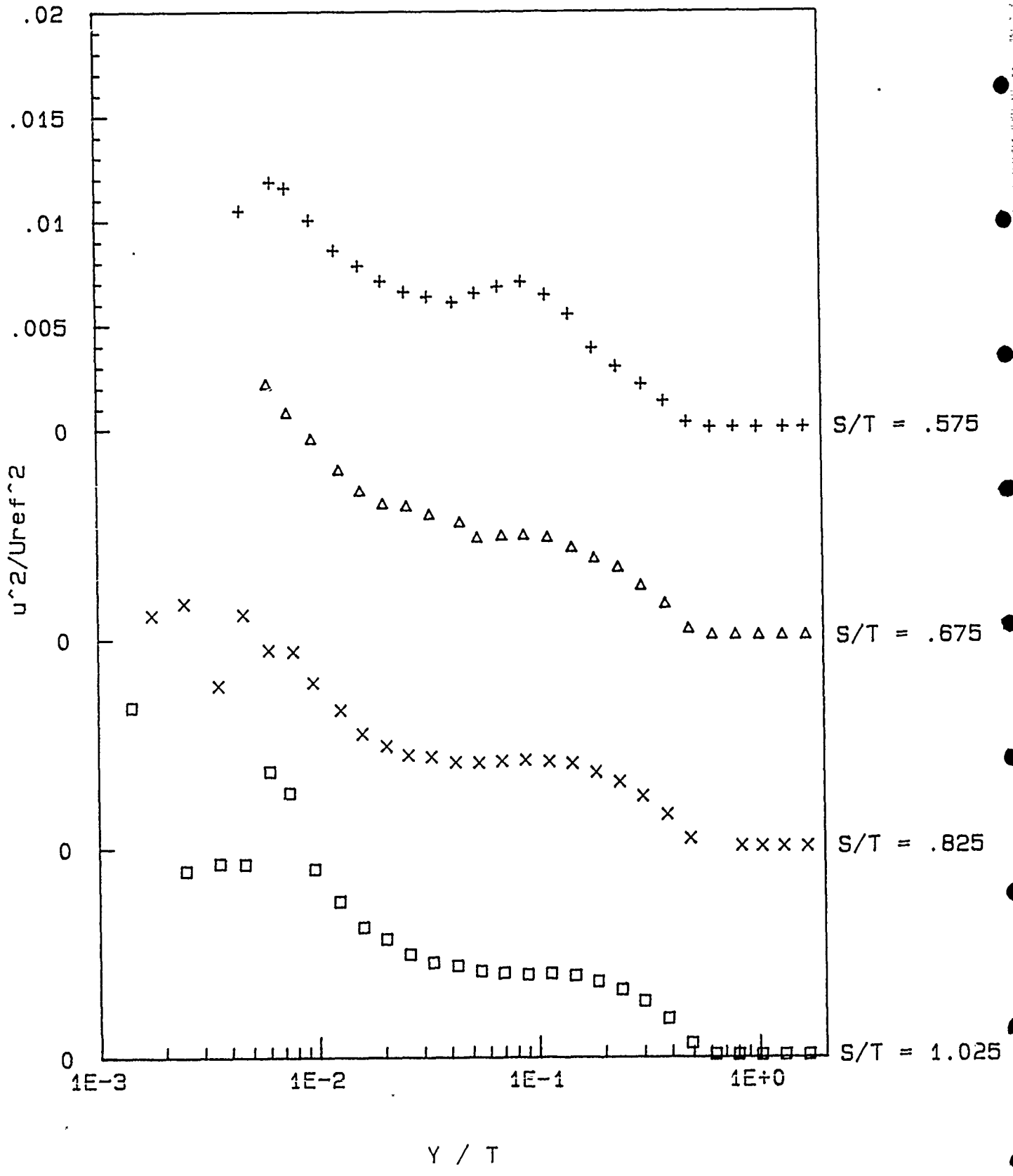


Figure F.4-4(a) Profiles of U-component of turbulence normal stress, plane 5.

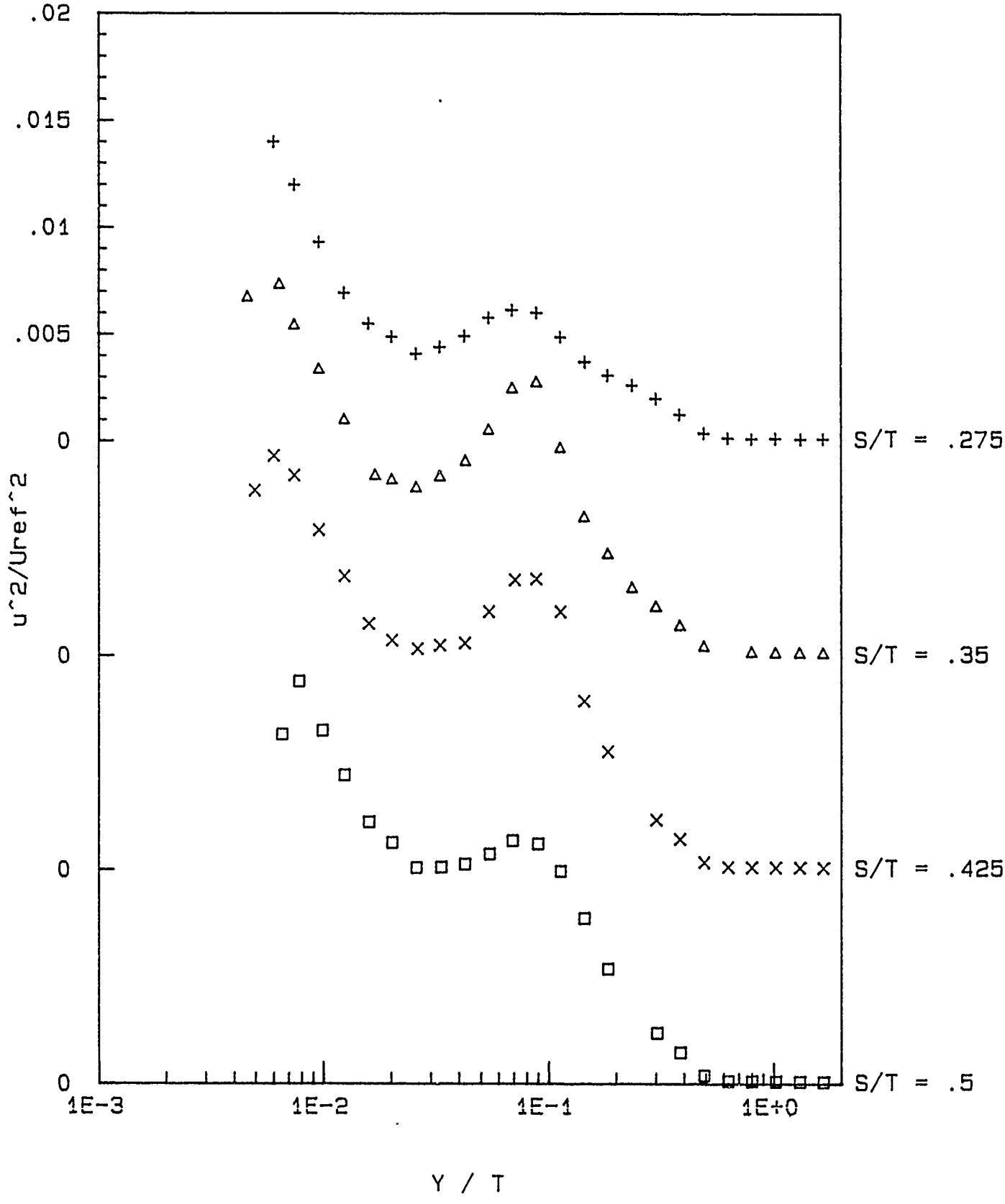


Figure F.4-4(b) Profiles of U-component of turbulence normal stress, plane 5.

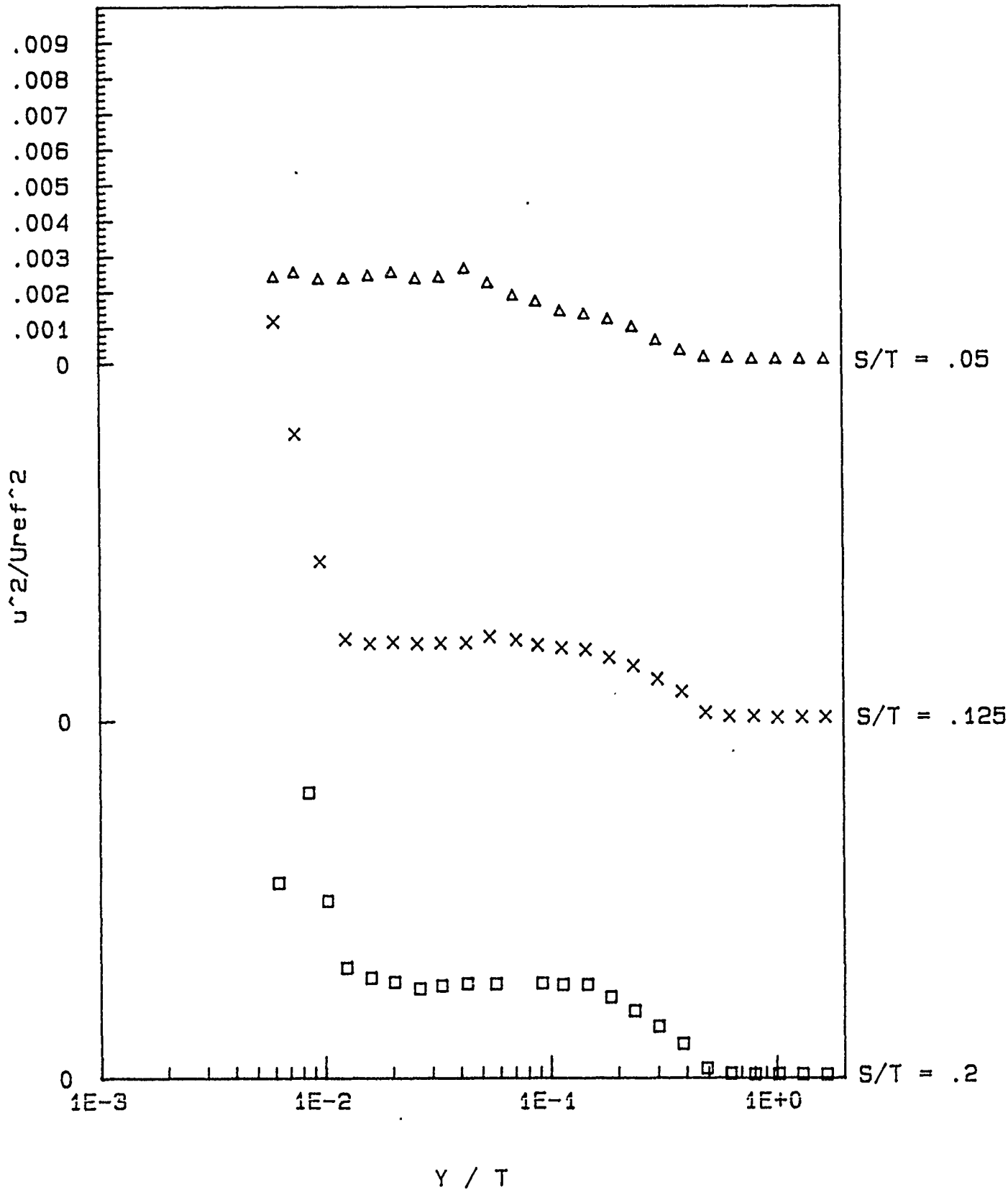


Figure F.4-4(c) Profiles of U-component of turbulence normal stress, plane 5.

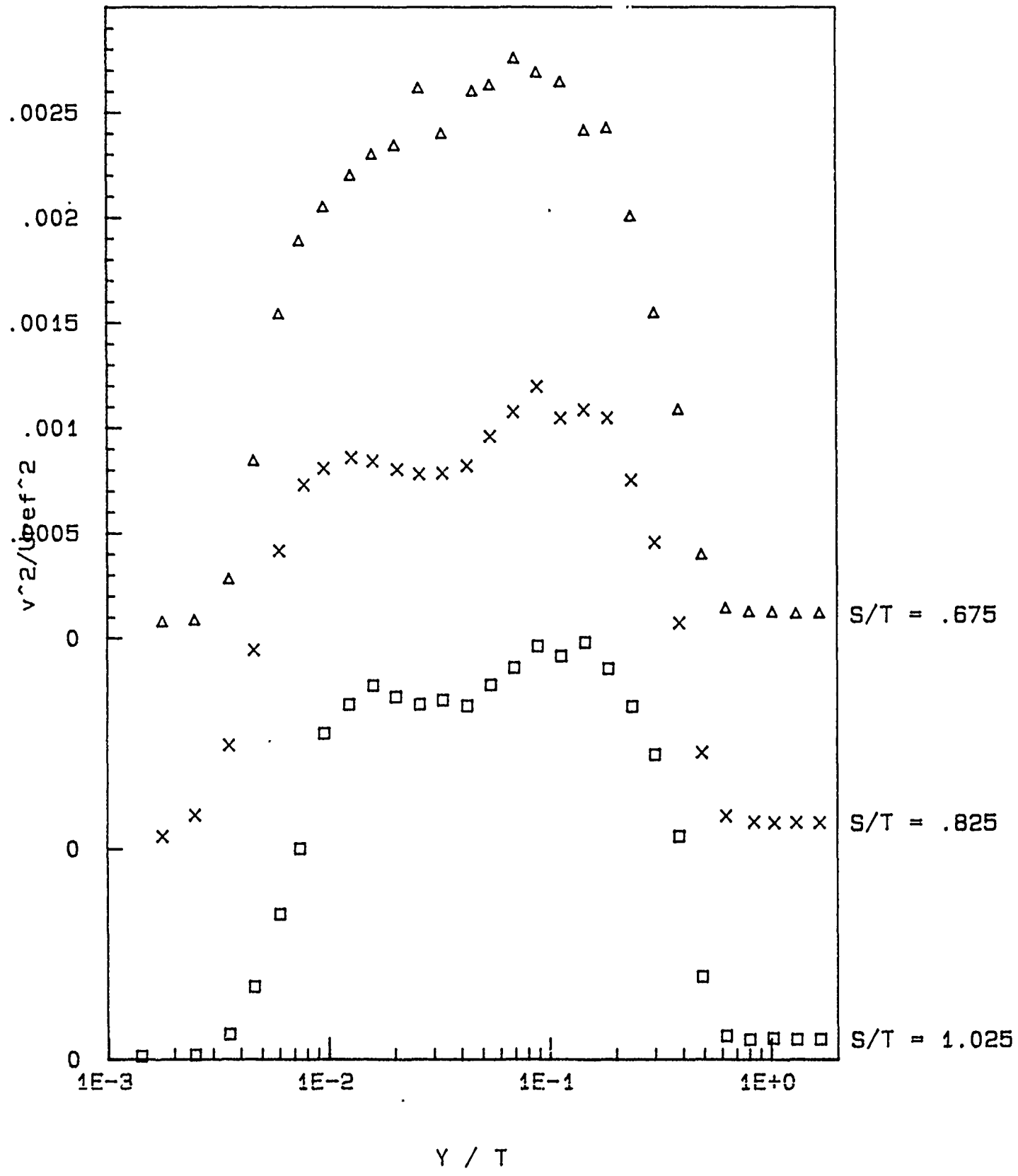


Figure F.4-5(a) Profiles of V-component of turbulence normal stress, plane 5.

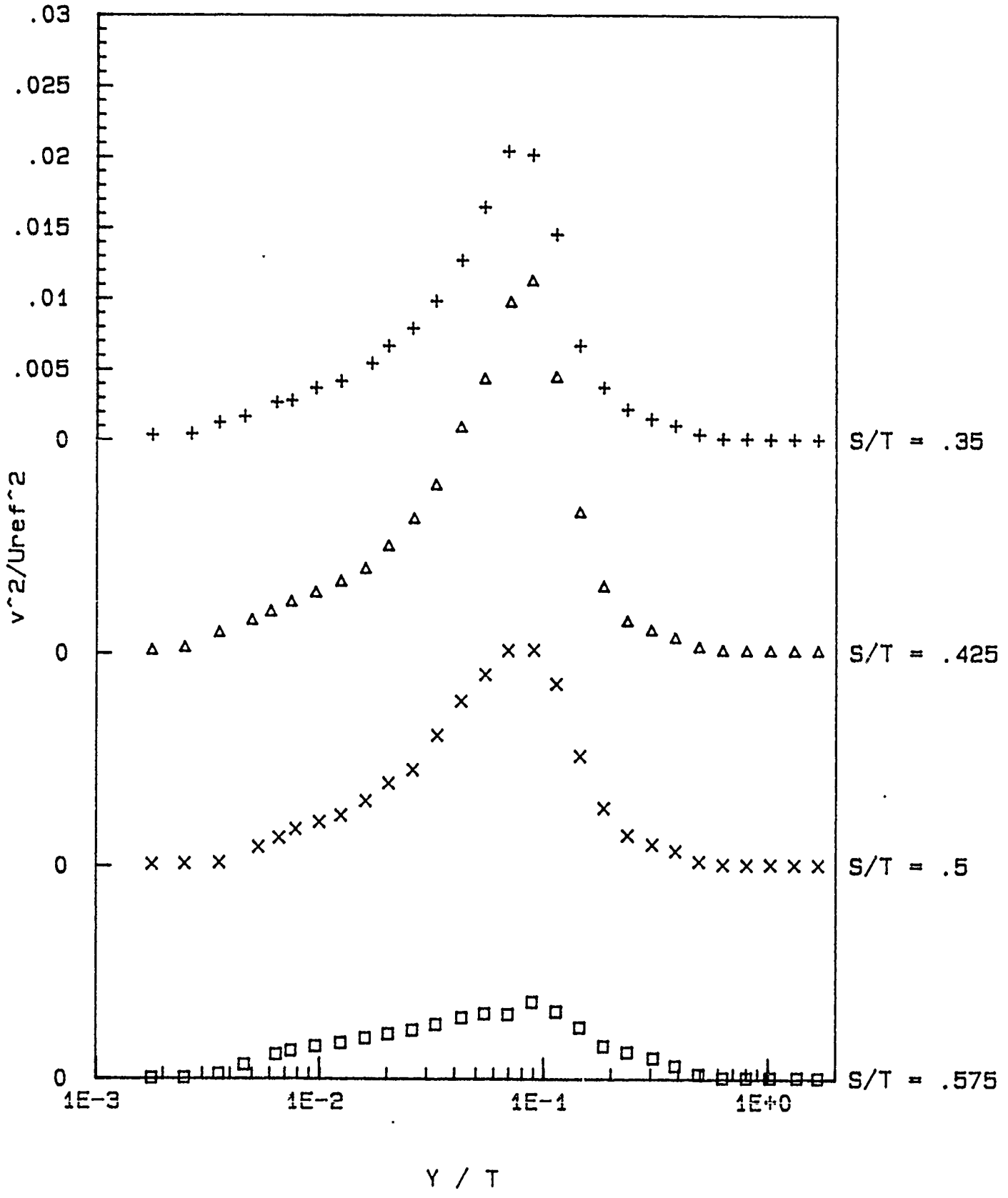


Figure F.4-5(b) Profiles of V-component of turbulence normal stress, plane 5.

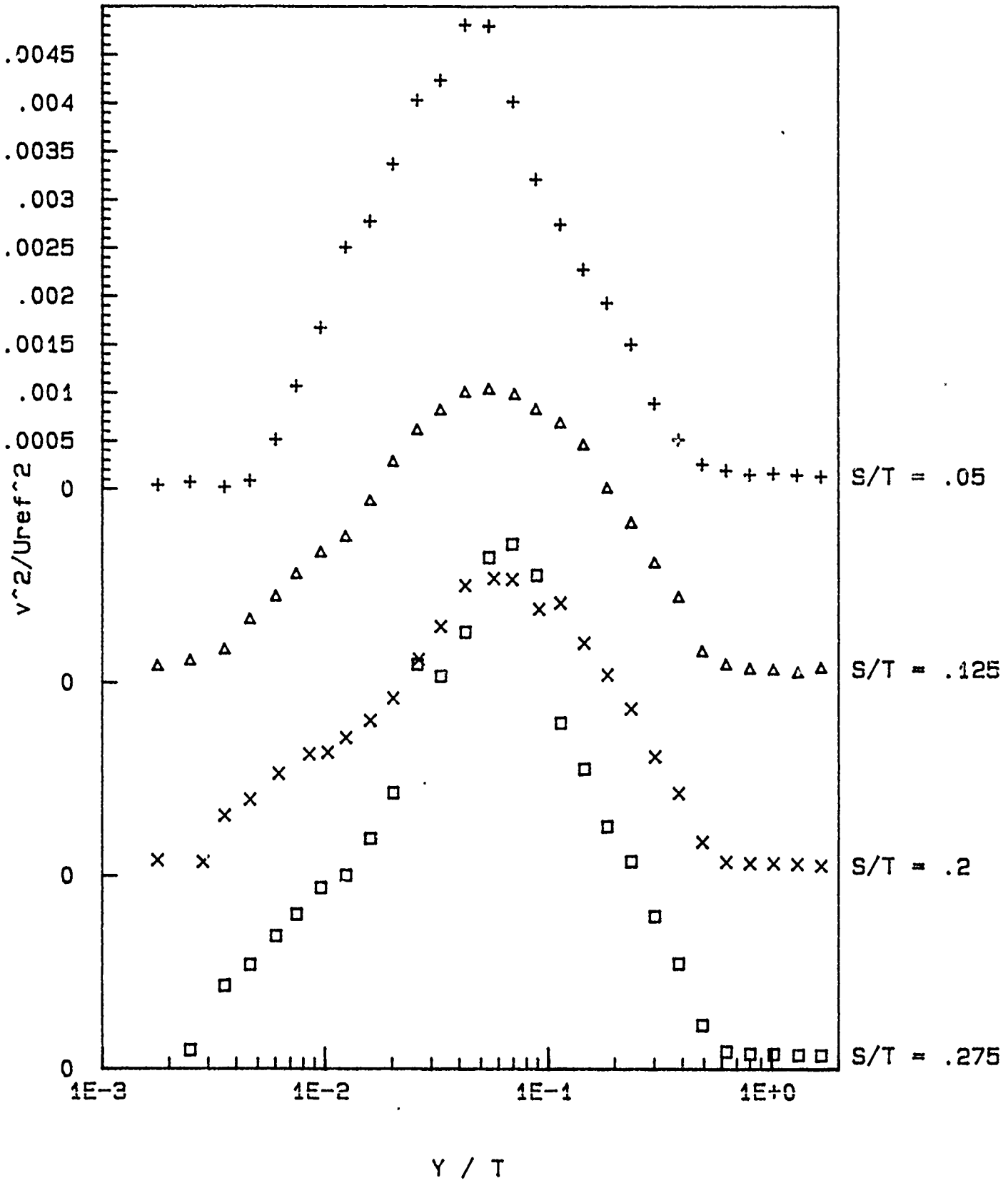


Figure F.4-5(c) Profiles of V-component of turbulence normal stress, plane 5.

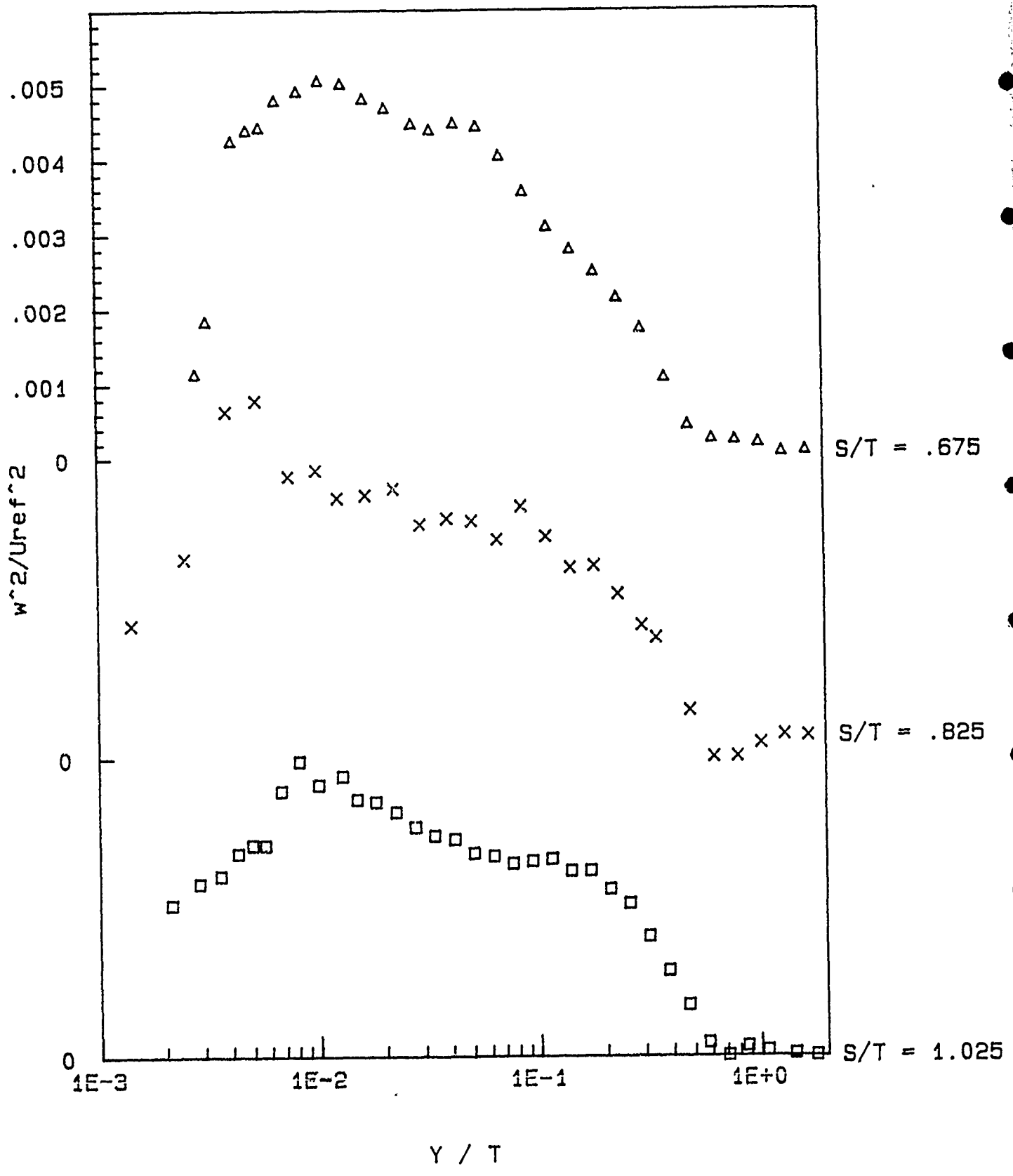


Figure F.4-6(a) Profiles of W-component of turbulence normal stress, plane 5.

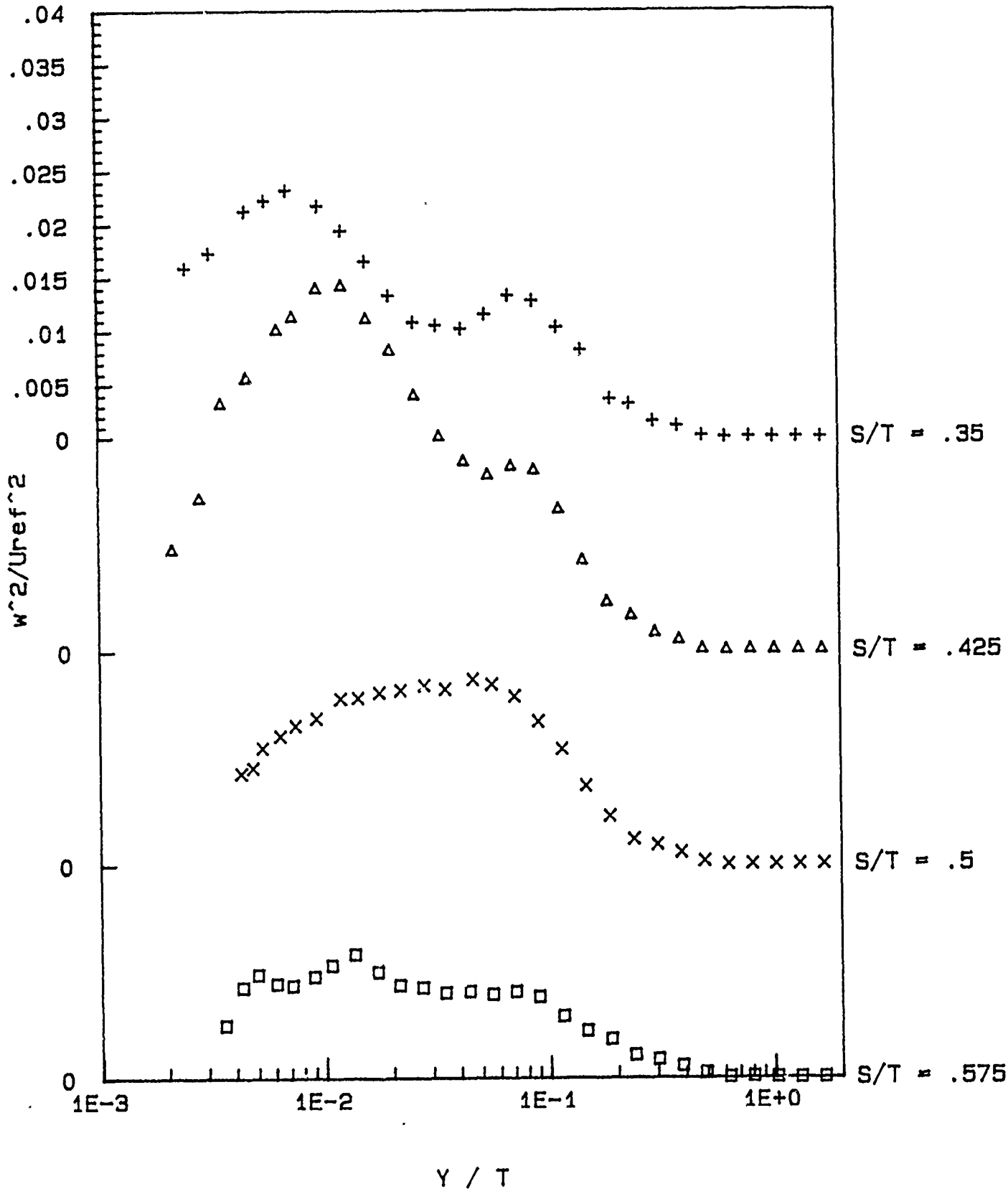


Figure F.4-6(b) Profiles of W-component of turbulence normal stress, plane 5.

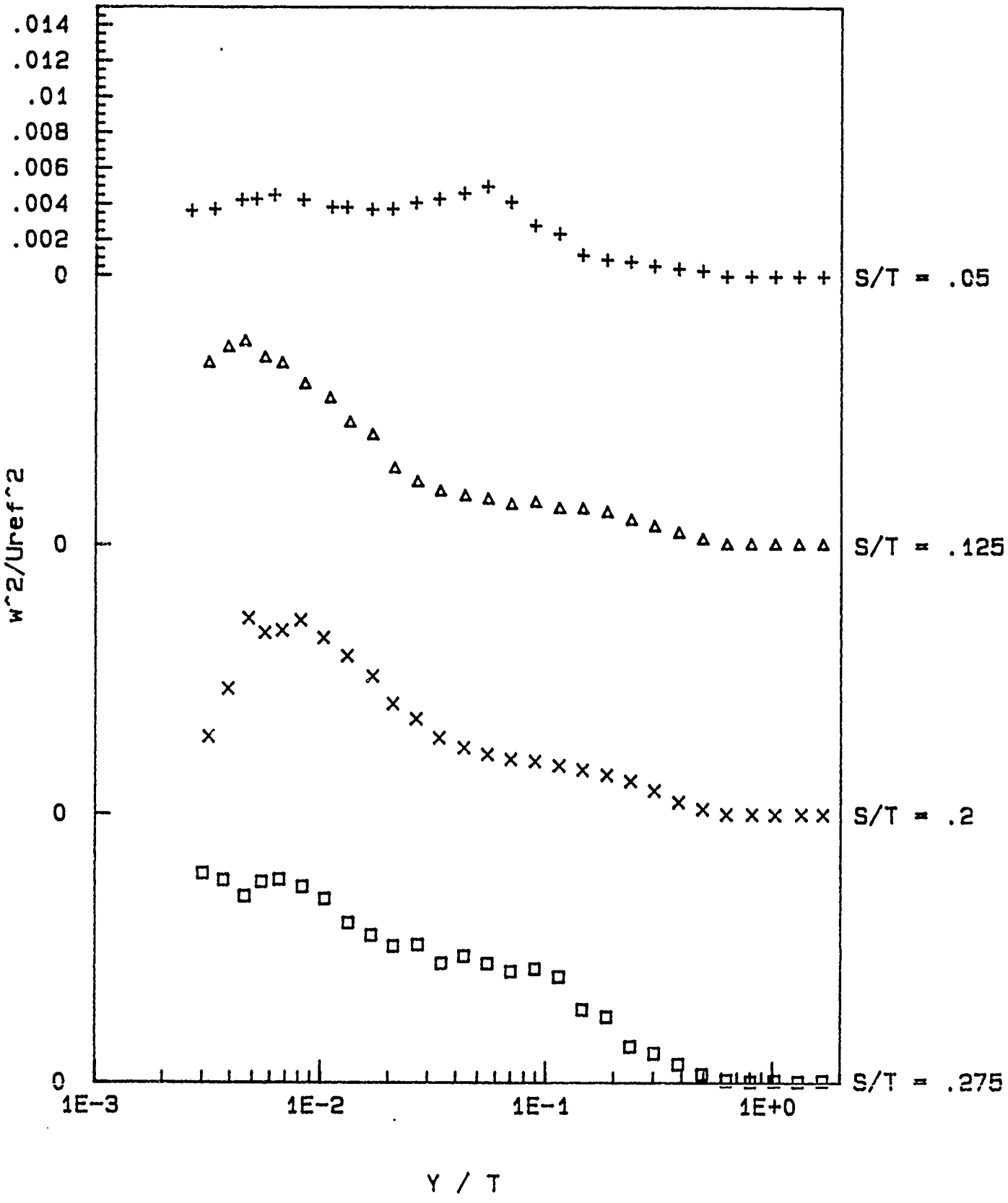


Figure F.4-6(c) Profiles of W-component of turbulence normal stress, plane 5.

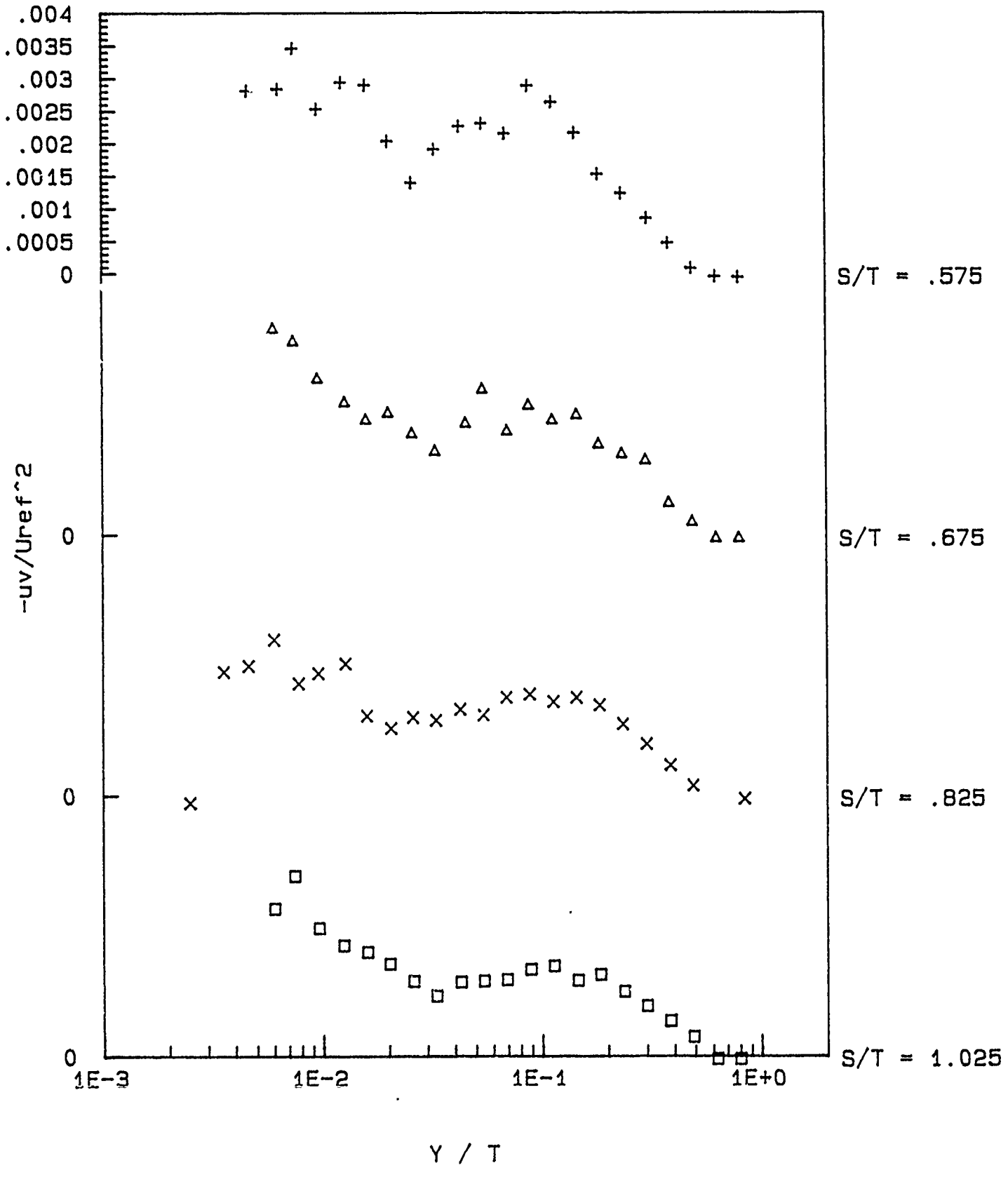


Figure F.4-7(a) Profiles of UV Reynolds shear stress, plane 5.

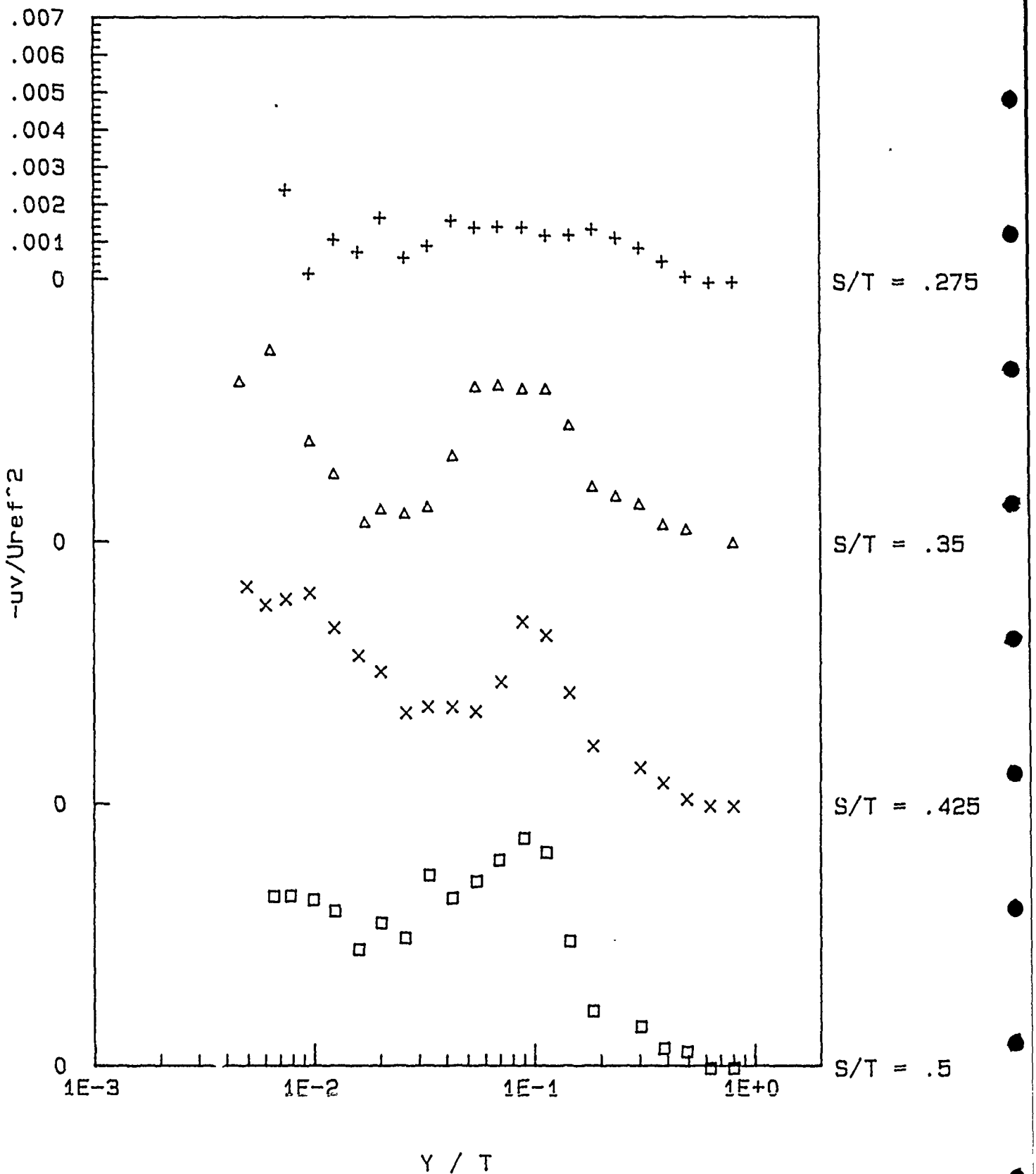


Figure F.4-7(b) Profiles of UV Reynolds shear stress, plane 5.

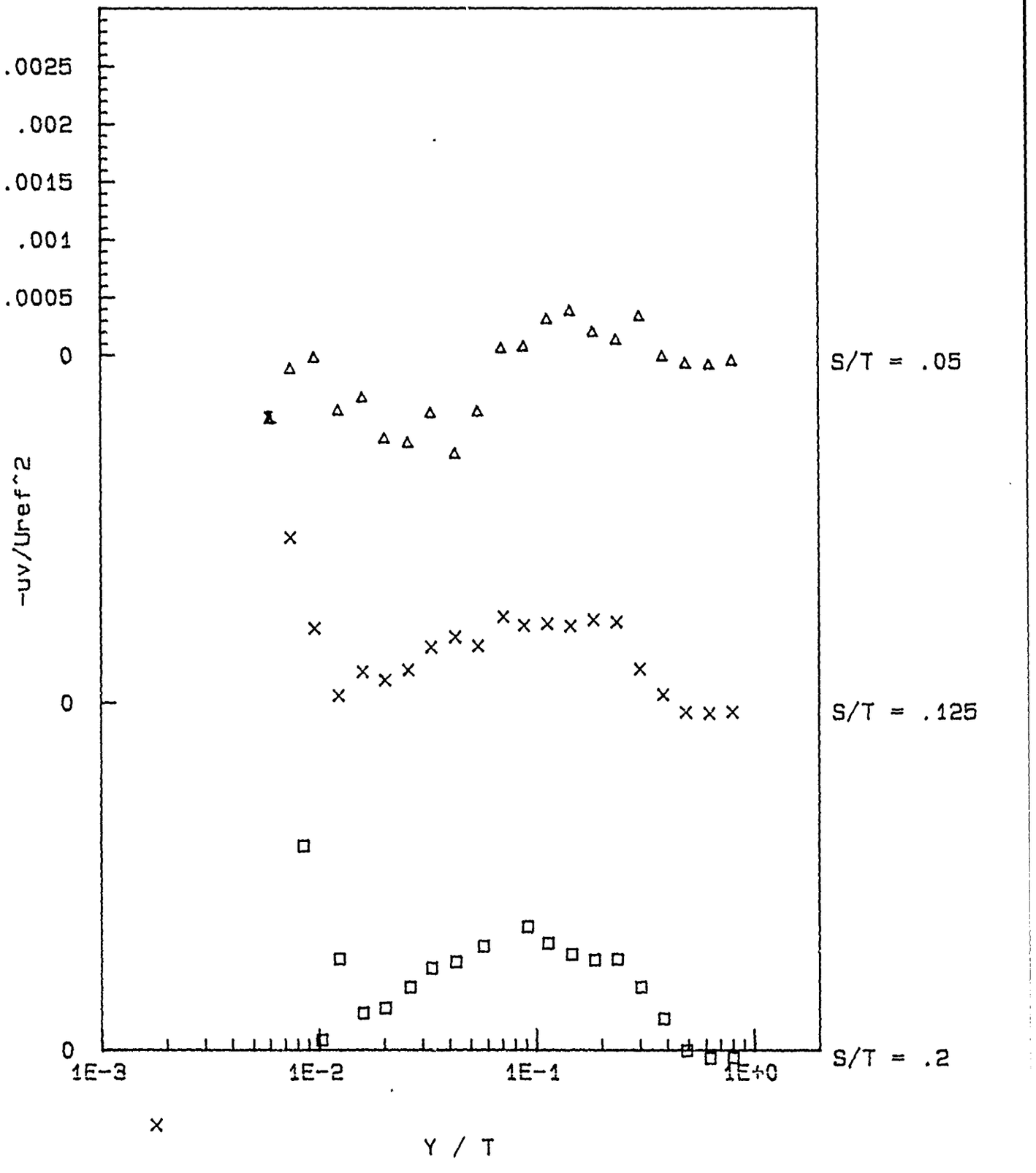


Figure F.4-7(c) Profiles of UV Reynolds shear stress, plane 5.

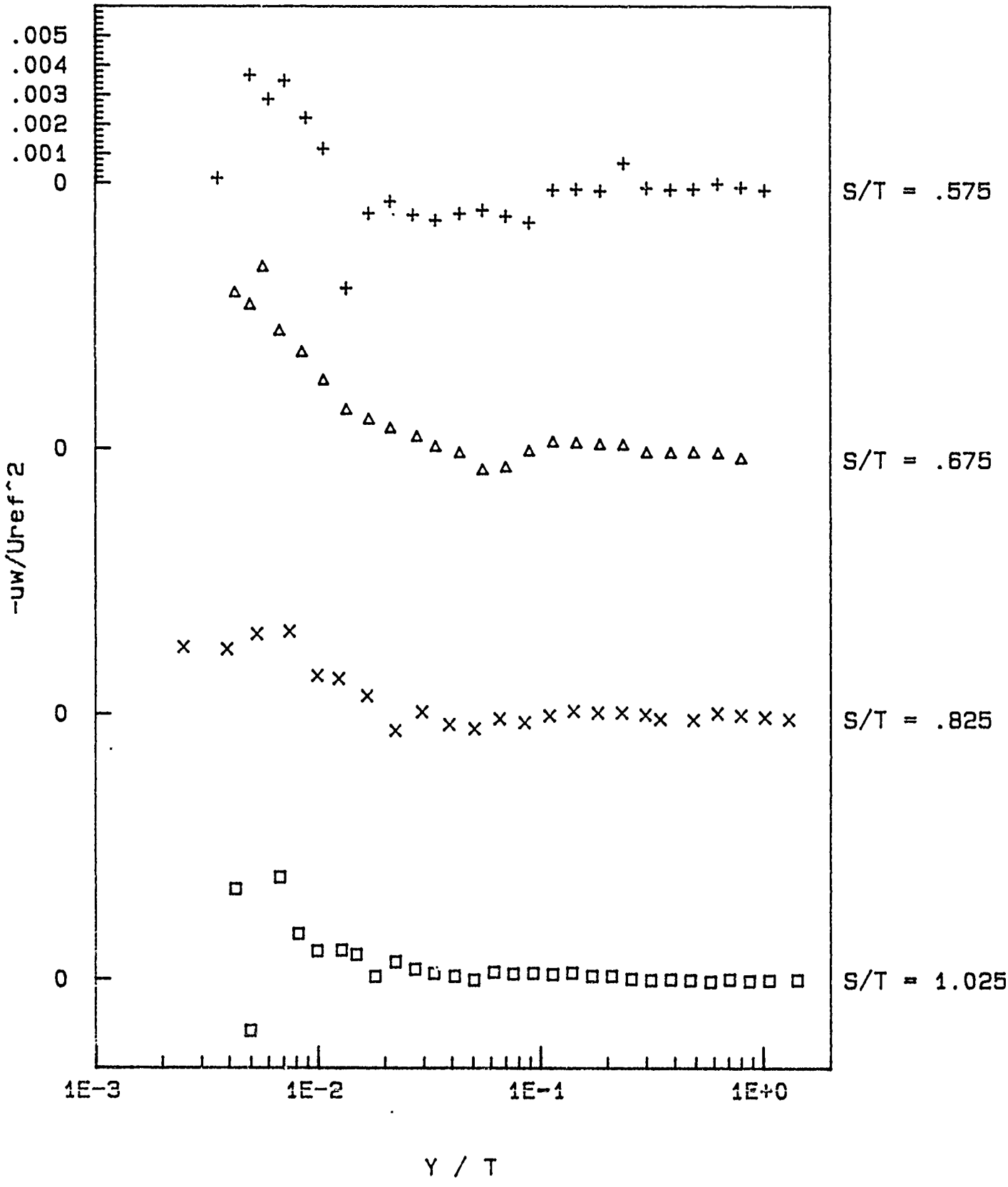


Figure F.4-8(a) Profiles of UW Reynolds shear stress, plane 5.

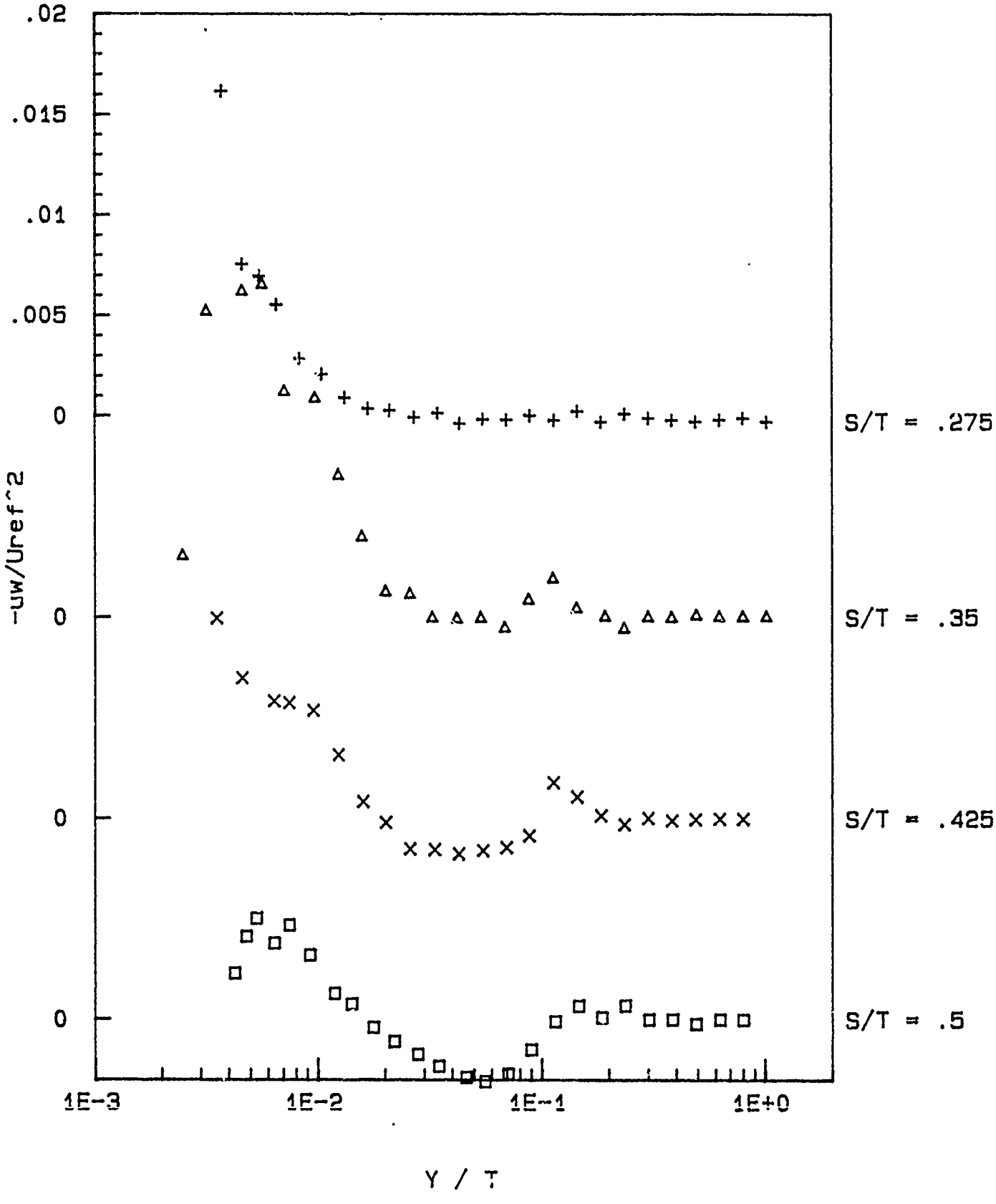


Figure F.4-8(b) Profiles of UW Reynolds shear stress, plane 5.

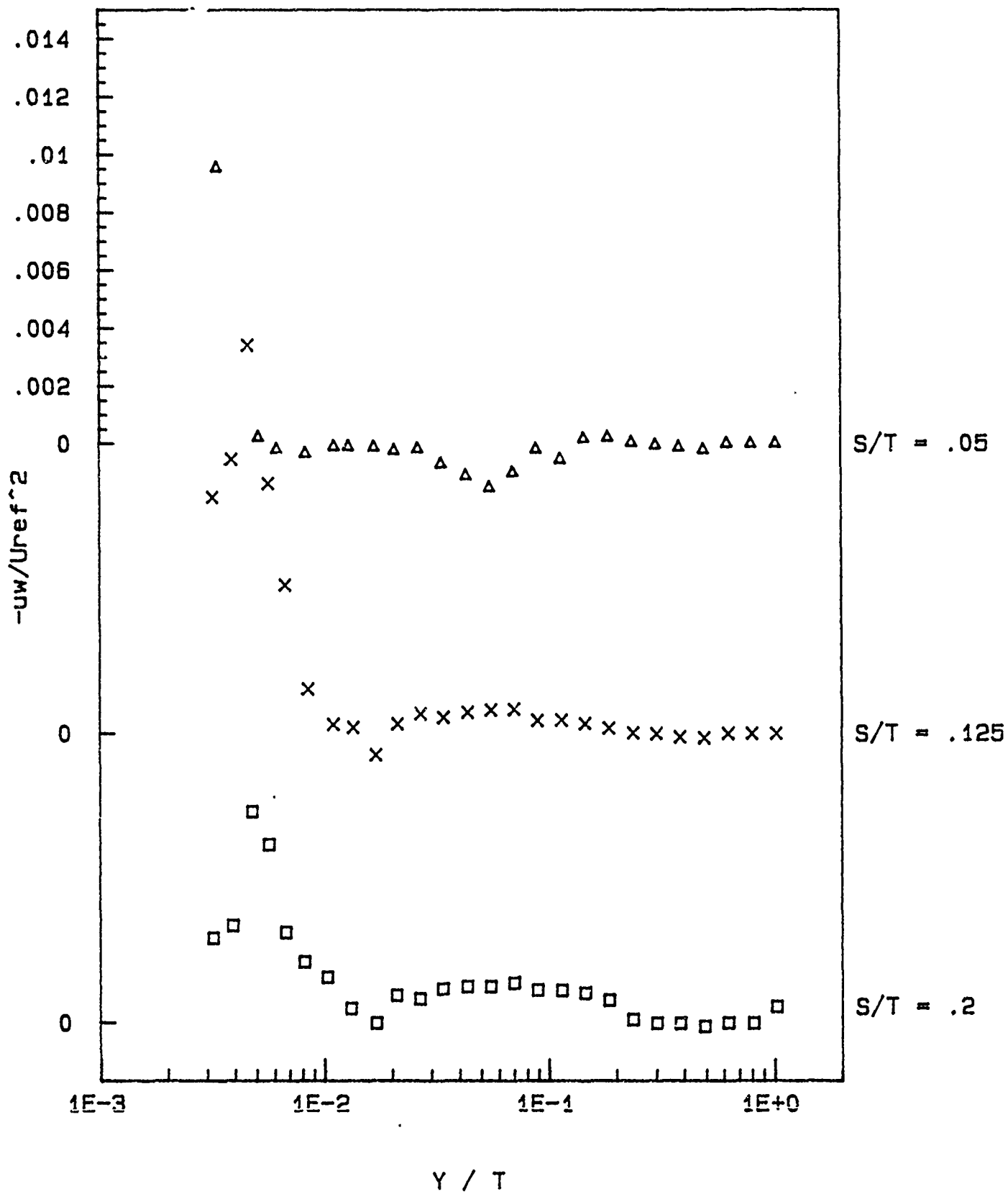


Figure F.4-8(c) Profiles of UW Reynolds shear stress, plane 5.

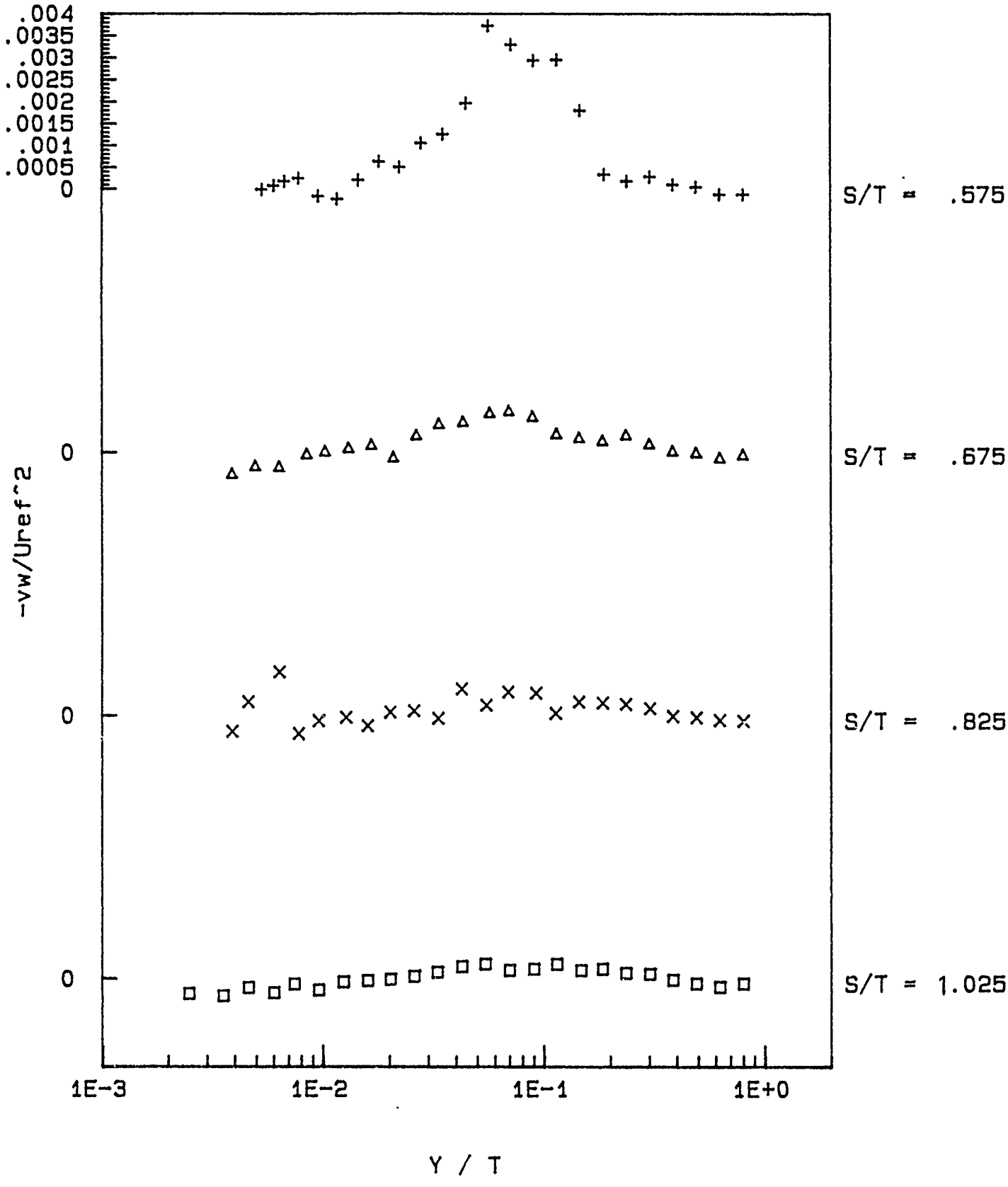


Figure F.4-9(a) Profiles of VW Reynolds shear stress, plane 5.

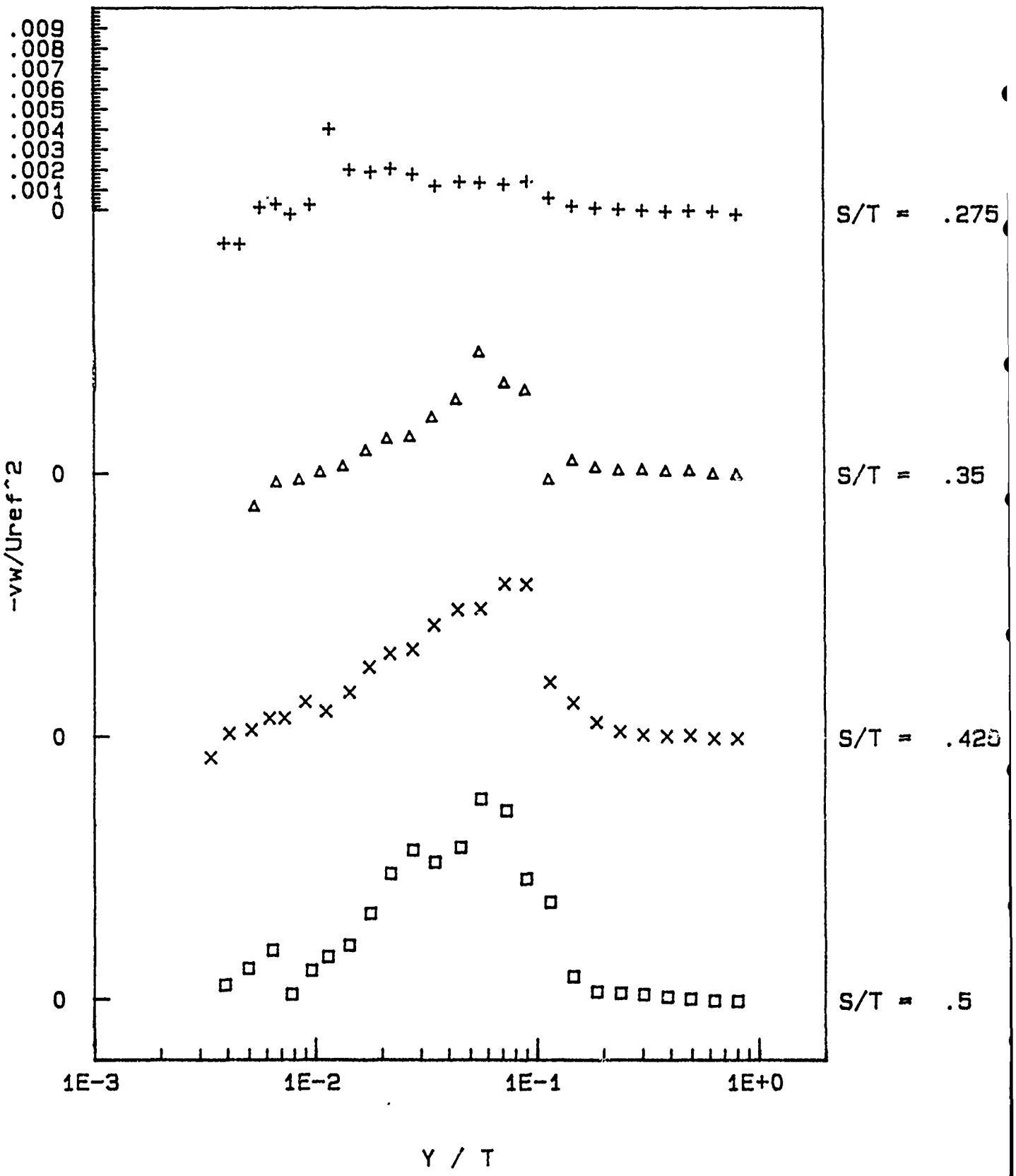


Figure F.4-9(b) Profiles of VW Reynolds shear stress, plane 5.

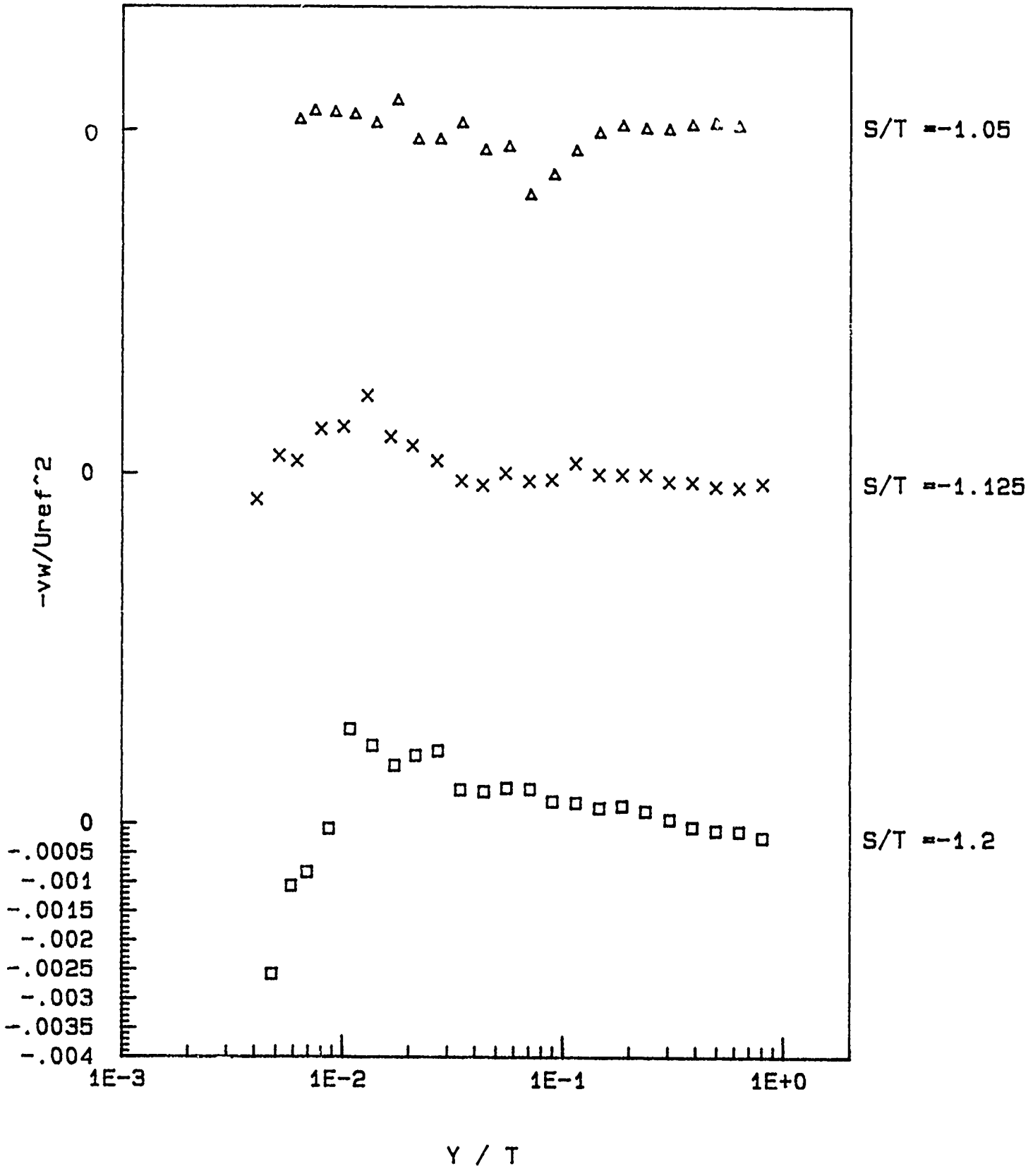


Figure F.4-9(c) Profiles of VW Reynolds shear stress, plane 5.

File E519770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.2
density (kilograms per meter cubed) = 1.124158
viscosity (meters squared per second) = 1.621694E-05
Atmospheric pressure (Pascals) = 95285
Velocity of undisturbed free stream (Uref, in m/s) = 27.68443
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089955E-03
Estimated momentum thickness Reynolds number = 6982.089
Location of traverse; X/T = .75 Z/T =-1.525 (Plane 5 , S/T = 1.03)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	1.7333E-01	1.6749E-02			4.9073E-04	1.4646E-05			
2.4788E-03	1.9459E-01	8.9327E-03			1.3486E-03	2.1521E-05			
3.5411E-03	3.8550E-01	9.2887E-03			-5.0177E-03	1.1981E-04	-7.5369E-01	3.3431E+00	
4.6034E-03	5.1277E-01	9.2436E-03			-9.4973E-03	3.4546E-04	-5.6333E-01	2.1523E+00	
6.0198E-03	5.7033E-01	1.3678E-02	-4.9502E-01	1.0223E+00	-1.3140E-02	6.8958E-04	-1.7095E-01	8.7344E-01	-2.2659E-03
7.4363E-03	5.9042E-01	1.2659E-02	-4.7567E-01	3.8695E-01	-1.3161E-02	1.0014E-03	-1.5363E-01	1.0386E+00	-2.7654E-03
9.5609E-03	6.6689E-01	9.0127E-03	-3.6883E-01	5.8617E-01	-1.4631E-02	1.5480E-03	1.5051E-01	2.6824E-01	-1.9655E-03
1.2394E-02	6.8659E-01	7.4493E-03	-3.0063E-01	3.5389E-02	-1.5829E-02	1.6857E-03	1.1747E-01	2.5093E-01	-1.7005E-03
1.5935E-02	7.0834E-01	6.2318E-03	-2.0096E-01	-1.4049E-01	-1.6850E-02	1.7760E-03	2.1935E-01	2.1447E-01	-1.5977E-03
2.0184E-02	7.3426E-01	5.6691E-03	-1.0683E-01	-1.0483E-01	-1.6428E-02	1.7221E-03	2.4137E-01	9.9006E-02	-1.4129E-03
2.5850E-02	7.6456E-01	4.9232E-03	2.4103E-02	-1.7579E-01	-1.4325E-02	1.6865E-03	2.0572E-01	1.5359E-01	-1.1480E-03
3.2932E-02	7.7799E-01	4.5288E-03	7.5568E-03	-2.8304E-01	-1.4947E-02	1.7061E-03	1.1675E-01	2.1010E-01	-9.2151E-04
4.2493E-02	7.9825E-01	4.3835E-03	1.1420E-01	-2.5054E-01	-9.4971E-03	1.6794E-03	3.9847E-02	-1.0017E-02	-1.1362E-03
5.4178E-02	8.1558E-01	4.1197E-03	5.3350E-02	-3.2782E-01	-1.2186E-02	1.7798E-03	4.1738E-02	-5.7034E-02	-1.1533E-03
6.9051E-02	8.3072E-01	4.0351E-03	5.4943E-02	-3.8829E-01	-8.3385E-03	1.8608E-03	-3.0462E-02	-9.8114E-02	-1.1713E-03
8.8527E-02	8.5012E-01	3.9599E-03	3.5467E-02	-4.0262E-01	-8.1053E-03	1.9635E-03	1.0002E-02	-1.4240E-01	-1.3286E-03
1.1296E-01	8.6881E-01	3.9937E-03	-1.9865E-02	-3.4050E-01	-7.1921E-03	1.9159E-03	9.0133E-02	-1.5229E-01	-1.3825E-03
1.4518E-01	8.9602E-01	3.8999E-03	-8.7700E-02	-3.4017E-01	-3.4011E-03	1.9820E-03	6.8323E-02	-1.6469E-01	-1.1600E-03
1.8449E-01	9.2202E-01	3.6138E-03	-1.2057E-01	-3.5320E-01	-2.7388E-03	1.8559E-03	1.1609E-01	-1.3779E-01	-1.2499E-03
2.3690E-01	9.5756E-01	3.2194E-03	-2.5359E-01	-2.3905E-01	-1.5719E-03	1.6766E-03	1.3873E-01	-7.8820E-02	-9.9244E-04
3.0028E-01	9.9843E-01	2.6701E-03	-3.8965E-01	-1.3666E-01	2.5355E-03	1.4481E-03	2.4466E-01	-3.2449E-04	-7.6728E-04
3.8350E-01	1.0406E+00	1.8429E-03	-5.7497E-01	1.6052E-01	3.7205E-03	1.0595E-03	3.9244E-01	2.2376E-01	-5.3644E-04
4.8973E-01	1.0826E+00	6.5506E-04	-9.4890E-01	1.0139E+00	-2.1044E-03	3.9355E-04	4.9900E-01	7.8715E-01	-2.9472E-04
6.2571E-01	1.1007E+00	1.1580E-04	-3.5833E-02	-3.9956E-01	-3.8860E-03	1.1152E-04	6.4136E-02	-2.7114E-01	4.6316E-05
7.9887E-01	1.1008E+00	1.0974E-04	-9.6807E-02	-3.2423E-01	-4.3498E-03	9.4840E-05	8.1202E-02	-4.2202E-01	4.5893E-05
1.0202E+00	1.1022E+00	1.0606E-04	-1.7163E-01	-4.2789E-01	-7.8938E-03	1.0092E-04	6.3057E-02	-4.4748E-01	
1.3028E+00	1.1006E+00	1.0670E-04	-1.7555E-01	-4.4196E-01	-6.3153E-03	9.5293E-05	4.7915E-02	-4.8435E-01	
1.6678E+00	1.0990E+00	1.0531E-04	-1.9226E-01	-3.2980E-01	-2.0940E-03	9.6269E-05	7.5768E-02	-4.4565E-01	

Table F.4-1 Velocity measurements made at S/T = 1.03 with the UV system of the laser anemometer, plane 5

File E520770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.6
density (kilograms per meter cubed) = 1.125288
viscosity (meters squared per second) = 1.62176E-05
Atmospheric pressure (Pascals) = 95510
Velocity of undisturbed free stream (Uref, in m/s) = 27.67157
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090335E-03
Estimated momentum thickness Reynolds number = 6979.211
Location of traverse; X/T = .75 Z/T =-1.325 (Plane 5 , S/T = 0.83)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	3.2422E-01	1.1164E-02			-2.5785E-03	5.9596E-05			
2.4788E-03	4.1237E-01	1.1716E-02			-3.6012E-03	1.6131E-04	-3.8600E-01	2.8453E+00	1.1084E-04
3.5411E-03	5.4661E-01	7.7869E-03			-1.2197E-02	4.9332E-04	-3.4381E-01	1.5808E+00	-1.8983E-03
4.6034E-03	5.9090E-01	1.1191E-02			-1.4733E-02	9.4543E-04	-1.7064E-01	6.8053E-01	-1.9889E-03
6.0198E-03	6.6837E-01	9.4887E-03			-1.4471E-02	1.4158E-03	2.5381E-02	5.8171E-01	-2.3933E-03
7.7904E-03	6.8846E-01	9.4237E-03	-4.3203E-01	3.5112E-01	-1.8274E-02	1.7304E-03	-1.3336E-01	6.1055E-01	-1.7181E-03
9.5609E-03	7.1337E-01	7.9216E-03	-3.3120E-01	1.5210E-01	-1.8514E-02	1.8076E-03	1.8573E-01	3.4790E-01	-1.8753E-03
1.2748E-02	7.3789E-01	6.6036E-03	-1.6210E-01	-9.6832E-02	-1.9464E-02	1.8591E-03	2.4245E-01	2.7841E-01	-2.0240E-03
1.5935E-02	7.5782E-01	5.4830E-03	-9.4781E-02	-9.9413E-03	-2.1633E-02	1.8421E-03	2.4983E-01	2.1866E-01	-1.2206E-03
2.0538E-02	7.7693E-01	4.9010E-03	-1.1645E-02	-1.4606E-01	-2.0431E-02	1.8021E-03	2.2814E-01	1.2696E-01	-1.0282E-03
2.5850E-02	7.9077E-01	4.4467E-03	3.8011E-02	-1.8664E-01	-1.9136E-02	1.7804E-03	2.0277E-01	1.6264E-01	-1.1979E-03
3.2932E-02	8.0836E-01	4.3663E-03	4.7186E-02	-2.4017E-01	-1.6539E-02	1.7850E-03	5.2108E-02	5.1385E-02	-1.1524E-03
4.2493E-02	8.2512E-01	4.1175E-03	8.9145E-02	-2.5554E-01	-1.3187E-02	1.8202E-03	5.7155E-02	-7.4970E-02	-1.3192E-03
5.4178E-02	8.3765E-01	4.0839E-03	9.6826E-02	-3.0277E-01	-1.2131E-02	1.9600E-03	1.3081E-02	-1.8690E-02	-1.2332E-03
6.9051E-02	8.5485E-01	4.1634E-03	4.8034E-02	-3.5022E-01	-8.5031E-03	2.0761E-03	7.7854E-03	-6.0688E-02	-1.5020E-03
8.8173E-02	8.7339E-01	4.2288E-03	2.6131E-02	-3.3906E-01	-5.6954E-03	2.1969E-03	8.3237E-02	-1.3449E-01	-1.5496E-03
1.1296E-01	8.9456E-01	4.1422E-03	-2.3306E-02	-3.6907E-01	-3.2497E-03	2.0461E-03	9.6652E-02	-1.8812E-01	-1.4356E-03
1.4412E-01	9.2101E-01	4.0522E-03	-1.2322E-01	-3.3410E-01	-1.8578E-03	2.0860E-03	1.1797E-01	-1.7332E-01	-1.4999E-03
1.8414E-01	9.4874E-01	3.6286E-03	-1.6864E-01	-3.2424E-01	-1.3736E-03	2.0468E-03	1.3460E-01	-3.5368E-02	-1.3817E-03
2.3513E-01	9.8416E-01	3.1643E-03	-2.4317E-01	-2.7299E-01	-1.9238E-03	1.7518E-03	1.8224E-01	-1.1177E-01	-1.0921E-03
3.0028E-01	1.0246E+00	2.4811E-03	-3.8795E-01	-1.6092E-01	9.9597E-04	1.4561E-03	2.5269E-01	2.8685E-02	-7.8680E-04
3.8598E-01	1.0683E+00	1.5968E-03	-5.8674E-01	8.4121E-02	-1.0398E-03	1.0731E-03	3.6683E-01	2.6258E-01	-4.6149E-04
4.8973E-01	1.1062E+00	4.5640E-04	-9.8409E-01	1.2294E+00	-1.7534E-03	4.5813E-04	5.3446E-01	6.1582E-01	-1.4986E-04
6.2642E-01	1.1122E+00				-4.9376E-03	1.5700E-04	1.1282E-01	-3.3896E-01	
8.3782E-01	1.1215E+00	8.8788E-05	-1.5957E-01	-4.2063E-01	-6.8573E-03	1.2902E-04	-7.6199E-02	-5.1246E-01	5.5162E-05
1.0372E+00	1.1218E+00	8.7124E-05	-1.4757E-01	-3.7781E-01	-8.3623E-03	1.2503E-04	-4.5749E-02	-5.9034E-01	
1.3028E+00	1.1178E+00	7.7648E-05	-1.3598E-01	-4.4975E-01	-7.0132E-03	1.2646E-04	4.3914E-02	-5.5867E-01	
1.6636E+00	1.1179E+00	7.9287E-05	-1.8264E-01	-2.9019E-01	-1.8926E-03	1.2558E-04	-1.0539E-02	-5.8496E-01	

Table F.4-2 Velocity measurements made at S/T = 0.83 with the UV system of the laser anemometer, plane 5

File E521770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.4
density (kilograms per meter cubed) = 1.115612
viscosity (meters squared per second) = 1.639239E-05
Atmospheric pressure (Pascals) = 94945
Velocity of undisturbed free stream (Uref, in m/s) = 27.66036
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090667E-03
Estimated momentum thickness Reynolds number = 6902.552
Location of traverse; X/T = .75 Z/T =-1.175 (Plane 5 , S/T = 0.67)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	1.5330E-01				-1.6915E-03	7.1426E-05	-8.8263E-01	2.5143E+00	
2.4788E-03	1.3475E-01				6.5397E-05	7.9668E-05			
3.5411E-03	4.7460E-01				-6.6415E-03	2.7480E-04	-5.6985E-01	2.1447E+00	
4.6034E-03	6.1345E-01				-1.3118E-02	8.3736E-04	-1.3220E-01	1.3955E+00	
6.0198E-03	6.6094E-01	1.2141E-02			-1.8714E-02	1.5335E-03	-2.8877E-02	7.3406E-01	-3.1485E-03
7.4363E-03	7.0555E-01	1.0770E-02	-5.2665E-01	8.1532E-01	-2.1989E-02	1.8823E-03	2.5394E-02	6.5645E-01	-2.9562E-03
9.5609E-03	7.2885E-01	9.5147E-03	-4.2311E-01	2.8755E-01	-2.3814E-02	2.0431E-03	1.3375E-01	3.5461E-01	-2.3796E-03
1.2748E-02	7.5799E-01	8.0182E-03	-2.9059E-01	1.0041E-01	-2.6087E-02	2.1926E-03	2.1588E-01	3.3750E-01	-2.0179E-03
1.5935E-02	7.7696E-01	7.0254E-03	-2.1584E-01	6.9115E-02	-2.7288E-02	2.2939E-03	1.1838E-01	2.7881E-01	-1.7494E-03
2.0184E-02	7.9236E-01	6.4092E-03	-1.0050E-01	-2.6621E-02	-2.4959E-02	2.3351E-03	1.5674E-01	2.2721E-01	-1.8552E-03
2.5850E-02	8.0862E-01	6.2868E-03	-2.0107E-02	-4.9124E-02	-2.3076E-02	2.6079E-03	1.6090E-01	4.7662E-01	-1.5383E-03
3.2932E-02	8.2544E-01	5.8698E-03	-4.7401E-02	-9.7336E-02	-2.0085E-02	2.3924E-03	1.4357E-01	1.6830E-01	-1.2657E-03
4.5326E-02	8.4292E-01	5.5125E-03	-5.8221E-02	-1.1011E-01	-1.8801E-02	2.5946E-03	7.6683E-02	7.0285E-02	-1.6955E-03
5.4178E-02	8.5065E-01	4.7734E-03	-2.7353E-02	-2.3366E-01	-1.6055E-02	2.6235E-03	-2.0772E-02	3.4494E-03	-2.2224E-03
7.0113E-02	8.7540E-01	4.8621E-03	3.8988E-03	-2.7458E-01	-1.1765E-02	2.7494E-03	6.3573E-02	-1.2020E-01	-1.5744E-03
8.8173E-02	8.9307E-01	4.9140E-03	-5.3267E-02	-2.9660E-01	-5.3756E-03	2.6822E-03	9.9373E-02	-1.6410E-01	-1.9721E-03
1.1296E-01	9.1612E-01	4.7822E-03	-1.1251E-01	-3.2346E-01	-1.8396E-03	2.6365E-03	1.6866E-01	-2.6096E-02	-1.7461E-03
1.4589E-01	9.4495E-01	4.2861E-03	-1.5443E-01	-2.8594E-01	8.1254E-04	2.4065E-03	1.6216E-01	-5.0892E-02	-1.8226E-03
1.8414E-01	9.7165E-01	3.7955E-03	-2.3076E-01	-2.4944E-01	2.4573E-03	2.4187E-03	1.0219E-01	1.6917E-01	-1.3714E-03
2.3513E-01	1.0085E+00	3.3393E-03	-3.0992E-01	-2.3727E-01	2.0298E-03	1.9986E-03	2.3056E-01	8.7070E-02	-1.2229E-03
3.0028E-01	1.0522E+00	2.4704E-03	-4.0004E-01	-1.5167E-01	1.7787E-04	1.5386E-03	2.7719E-01	5.6618E-02	-1.1264E-03
3.8350E-01	1.0915E+00	1.6105E-03	-5.9956E-01	1.5899E-01	-2.4667E-03	1.0793E-03	4.0533E-01	3.0023E-01	-4.7136E-04
4.8973E-01	1.1318E+00	4.2186E-04	-9.3729E-01	1.3926E+00	-7.3221E-03	3.9080E-04	5.6552E-01	7.1721E-01	-1.8146E-04
6.2571E-01	1.1431E+00	1.2233E-04	-8.9674E-02	-3.2476E-01	-1.0014E-02	1.3631E-04	1.3065E-01	-3.9532E-01	6.9535E-05
7.9958E-01	1.1426E+00	1.1605E-04	-1.5271E-01	-4.6688E-01	-1.4790E-02	1.1883E-04	9.3905E-02	-4.8077E-01	7.0649E-05
1.0202E+00	1.1467E+00	1.0960E-04	-2.3823E-01	-3.1139E-01	-9.7758E-03	1.1768E-04	2.0176E-03	-4.8602E-01	
1.3028E+00	1.1463E+00	9.9011E-05	-1.7433E-01	-4.4165E-01	-6.4989E-03	1.1113E-04	2.3480E-02	-5.1763E-01	
1.6636E+00	1.1438E+00	9.6976E-05	-2.2340E-01	-3.4538E-01	-2.5568E-03	1.1348E-04	3.4795E-02	-4.7797E-01	

Table F.4-3 Velocity measurements made at S/T = 0.67 with the UV system of the laser anemometer, plane 5

File E522770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.3
density (kilograms per meter cubed) = 1.112756
viscosity (meters squared per second) = 1.643018E-05
Atmospheric pressure (Pascals) = 94670
Velocity of undisturbed free stream (Uref, in m/s) = 27.692
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089732E-03
Estimated momentum thickness Reynolds number = 6892.976
Location of traverse; X/T = .75 Z/T =-1.075 (Plane 5 , S/T = 0.58)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	2.3739E-01				-5.6865E-04	5.1285E-05			
2.4788E-03	3.2266E-01				-6.4160E-04	6.4663E-05			
3.5411E-03	5.7386E-01				-1.0308E-02	3.4742E-04	-4.2604E-01	2.3807E+00	
4.6034E-03	6.4093E-01	1.0494E-02			-1.7178E-02	9.9037E-04	-1.4613E-01	1.0578E+00	-2.8113E-03
6.3739E-03	7.1883E-01	1.1867E-02	-5.4939E-01	1.0729E+00	-2.1933E-02	1.7163E-03	2.5539E-02	5.7065E-01	-2.8397E-03
7.4363E-03	7.3681E-01	1.1592E-02	-4.3747E-01	4.2439E-01	-2.4490E-02	1.9853E-03	5.8986E-02	3.8584E-01	-3.4594E-03
9.5609E-03	7.5376E-01	1.0039E-02	-3.4393E-01	1.5346E-01	-2.7296E-02	2.3155E-03	1.5482E-01	2.6529E-01	-2.5287E-03
1.2394E-02	7.8798E-01	8.5791E-03	-2.8606E-01	7.1428E-02	-2.7509E-02	2.5505E-03	1.6429E-01	3.0343E-01	-2.9374E-03
1.5935E-02	8.0631E-01	7.8464E-03	-2.4016E-01	7.6698E-02	-2.9829E-02	2.8750E-03	1.5409E-01	2.8227E-01	-2.8957E-03
2.0184E-02	8.1817E-01	7.1109E-03	-2.4667E-01	1.8847E-03	-2.6848E-02	3.1791E-03	1.0535E-01	2.1174E-01	-2.0343E-03
2.5850E-02	8.3309E 01	6.5857E-03	-2.4386E-01	6.2153E-02	-2.6926E-02	3.4353E-03	8.6477E-02	3.2006E-01	-1.3925E-03
3.2932E-02	8.4521E-01	6.3505E-03	-1.6521E-01	-3.0166E-02	-2.6287E-02	3.8543E-03	1.5404E-01	2.4773E-01	-1.9099E-03
4.2847E-02	8.5521E-01	6.0969E-03	-1.5226E-01	-3.0307E-02	-2.3833E-02	4.3203E-03	2.0514E-01	3.1144E-01	-2.2629E-03
5.4178E-02	8.6665E-01	6.5308E-03	-1.7983E-01	-1.0326E-03	-1.8831E-02	4.5990E-03	2.7676E-01	2.5472E-01	-2.3078E-03
6.9051E-02	8.7848E-01	6.8302E-03	-2.2986E-01	-5.8923E-03	-1.4858E-02	4.5519E-03	3.3825E-01	2.9414E-01	-2.1496E-03
8.8173E-02	9.0015E-01	7.0806E-03	-2.2979E-01	-1.1862E-02	-2.7715E-03	5.4345E-03	5.7857E-01	6.7647E-01	-2.8850E-03
1.1296E-01	9.2708E-01	6.4349E-03	-2.2918E-01	-1.0949E-01	5.8302E-03	4.7573E-03	5.8389E-01	8.7100E-01	-2.6332E-03
1.4412E-01	9.5249E-01	5.5048E-03	-2.5319E-01	-1.4413E-01	1.1699E-02	3.6397E-03	4.5049E-01	5.8915E-01	-2.1582E-03
1.8414E-01	9.9002E-01	3.9032E-03	-2.7767E-01	-2.0249E-01	9.7438E-03	2.3150E-03	2.5154E-01	-3.2967E-02	-1.5229E-03
2.3513E-01	1.0317E+00	3.0145E-03	-2.7246E-01	-2.8476E-01	5.1819E-03	1.8875E-03	2.2567E-01	-7.5216E-02	-1.2277E-03
3.0666E-01	1.0751E+00	2.1679E-03	-4.3977E-01	-9.0509E-02	1.1273E-03	1.4895E-03	3.0373E-01	9.6488E-02	-8.4580E-04
3.8350E-01	1.1143E+00	1.3586E-03	-5.8670E-01	6.6160E-02	-6.4356E-03	9.3714E-04	3.9427E-01	1.3243E-01	-4.6282E-04
4.8973E-01	1.1504E+00	3.4856E-04	-9.7189E-01	1.6788E+00	-1.1984E-02	3.3813E-04	5.6504E-01	8.2159E-01	-7.8008E-05
6.2642E-01	1.1617E+00	9.9023E-05	-1.6408E-01	-4.2921E-01	-1.3233E-02	1.0318E-04	-4.5303E-02	-2.8267E-01	5.1410E-05
7.9958E-01	1.1607E+00	9.8927E-05	-1.5973E-01	-5.2814E-01	-1.8708E-02	1.0475E-04	-3.3141E-03	-5.5116E-01	6.1723E-05
1.0202E+00	1.1631E+00	9.6490E-05	-1.7786E-01	-5.1942E-01	-1.3258E-02	9.5478E-05	2.9285E-02	-5.4247E-01	
1.3474E+00	1.1592E+00	9.9942E-05	-1.6964E-01	-5.0801E-01	-1.0781E-02	1.0547E-04	8.7639E-02	-5.6282E-01	
1.6636E+00	1.1602E+00	1.0065E-04	-2.2002E-01	-2.2233E-01	-4.1106E-03	8.0063E-05	-4.4080E-02	-4.1392E-01	

Table F.4-4 Velocity measurements made at S/T = 0.58 with the UV system of the laser anemometer, plane 5

File E523770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.7
density (kilograms per meter cubed) = 1.123082
viscosity (meters squared per second) = 1.625368E-05
Atmospheric pressure (Pascals) = 95355
Velocity of undisturbed free stream (Uref, in m/s) = 27.66414
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090555E-03
Estimated momentum thickness Reynolds number = 6962.221
Location of traverse; X/T = .75 Z/T =-1 (Plane 5 , S/T = 0.50)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	2.3708E-01				-4.0232E-03	1.2422E-04	-9.5227E-01	1.5945E+00	
2.4788E-03	1.9121E-01				-4.4814E-03	1.7721E-04	-9.3920E-01	1.8597E+00	
3.5411E-03	2.6971E-01				-7.6681E-03	2.5343E-04	-8.7414E-01	2.4345E+00	
5.3116E-03	6.3759E-01				-2.3066E-02	1.3544E-03	-2.5636E-01	1.3123E+00	
6.5510E-03	7.1518E-01	1.6311E-02			-2.7372E-02	2.0030E-03	-6.9877E-02	7.8987E-01	-4.5246E-03
7.7904E-03	7.3800E-01	1.8792E-02	-4.7794E-01	3.5647E-01	-2.6478E-02	2.6123E-03	1.0685E-01	6.6480E-01	-4.5274E-03
9.9150E-03	7.7767E-01	1.6491E-02	-4.5882E-01	1.1701E-01	-3.0112E-02	3.1297E-03	2.0548E-01	4.5145E-01	-4.4268E-03
1.2394E-02	8.0501E-01	1.4406E-02	-4.6988E-01	1.6837E-01	-2.7958E-02	3.5877E-03	3.3465E-01	4.4386E-01	-4.1308E-03
1.5935E-02	8.2901E-01	1.2214E-02	-4.6981E-01	1.6600E-01	-2.8732E-02	4.6006E-03	2.2384E-01	4.7561E-01	-3.0981E-03
2.0184E-02	8.4273E-01	1.1238E-02	-3.9005E-01	2.3431E-01	-2.4442E-02	5.8708E-03	2.1272E-01	3.8186E-01	-3.8063E-03
2.5850E-02	8.5338E-01	1.0078E-02	-3.6746E-01	1.0665E-01	-2.4167E-02	6.7996E-03	1.6617E-01	4.4627E-03	-3.4073E-03
3.3286E-02	8.5835E-01	1.0096E-02	-3.1912E-01	9.8032E-02	-1.6576E-02	9.2322E-03	2.6482E-01	-3.8606E-02	-5.0835E-03
4.2493E-02	8.6114E-01	1.0252E-02	-3.4413E-01	8.6957E-02	-6.0169E-03	1.1640E-02	3.0308E-01	-1.7941E-01	-4.4667E-03
5.4533E-02	8.6876E-01	1.0721E-02	-2.8112E-01	-4.7810E-03	5.9766E-03	1.3527E-02	3.6265E-01	-2.5855E-01	-4.9117E-03
6.9051E-02	8.7782E-01	1.1349E-02	-2.7992E-01	4.5269E-02	1.9880E-02	1.5234E-02	4.2654E-01	-3.0832E-01	-5.4885E-03
8.9589E-02	9.0006E-01	1.1204E-02	-2.7709E-01	4.8285E-02	3.0912E-02	1.5274E-02	5.6153E-01	-2.3126E-02	-6.0612E-03
1.1296E-01	9.2632E-01	9.9177E-03	-3.3881E-01	1.5237E-01	3.5342E-02	1.2870E-02	7.7360E-01	4.6746E-01	-5.6817E-03
1.4412E-01	9.6189E-01	7.7238E-03	-3.8342E-01	1.8252E-01	2.2346E-02	7.7902E-03	8.2148E-01	1.1045E+00	-3.3166E-03
1.8414E-01	1.0060E+00	5.3617E-03	-2.3689E-01	-8.1519E-02	9.6580E-03	4.1116E-03	4.2861E-01	4.8057E-01	-1.4497E-03
2.3513E-01	1.0425E+00				-1.0259E-03	2.1976E-03	2.6158E-01	5.0868E-02	
3.0276E-01	1.0910E+00	2.3753E-03	-4.2157E-01	-5.3908E-02	-1.0626E-02	1.5511E-03	2.6989E-01	3.0411E-02	-1.0414E-03
3.8421E-01	1.1303E+00	1.4690E-03	-6.2261E-01	2.0265E-01	-1.4502E-02	1.1004E-03	3.5512E-01	2.2592E-01	-4.5738E-04
4.8973E-01	1.1661E+00	3.8858E-04	-8.9671E-01	1.3382E+00	-1.5720E-02	3.4844E-04	3.6723E-01	3.7730E-01	-3.6261E-04
6.2571E-01	1.1786E+00	1.2468E-04	-1.2730E-01	-3.8927E-01	-2.2796E-02	1.4176E-04	6.0237E-02	-3.5050E-01	7.5860E-05
7.9887E-01	1.1782E+00	1.1489E-04	-1.4419E-01	-3.8903E-01	-4.0983E-01	1.2242E-04	1.4163E-01	-4.5774E-01	7.4532E-05
1.0202E+00	1.1821E+00	1.0924E-04	-2.0326E-01	-3.8481E-01	-2.0012E-02	1.2781E-04	6.0902E-02	-4.1904E-01	
1.3028E+00	1.1809E+00	9.6963E-05	-1.7645E-01	-3.7370E-01	-1.2998E-02	1.1899E-04	3.5707E-02	-5.0717E-01	
1.6636E+00	1.1791E+00	9.0413E-05	-1.8384E-01	-3.6633E-01	-6.4485E-03	1.1155E-04	-2.0428E-02	-4.1389E-01	

Table F.4-5 Velocity measurements made at S/T = 0.50 with the UV system of the laser anemometer, plane 5

File E524770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.1
density (kilograms per meter cubed) = 1.121234
viscosity (meters squared per second) = 1.625496E-05
Atmospheric pressure (Pascals) = 95005
Velocity of undisturbed free stream (Uref, in m/s) = 27.67214
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090319E-03
Estimated momentum thickness Reynolds number = 6963.283
Location of traverse; X/T = .75 Z/T =-.925 (Plane 5 , S/T = 0.43)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	2.1567E-01				-8.2514E-03	1.3191E-04			
2.4788E-03	2.8895E-01				-1.4735E-02	3.2519E-04			
3.5411E-03	6.6288E-01				-2.3305E-02	1.3650E-03	-3.1709E-01	1.5089E+00	
4.9575E-03	7.1367E-01	1.7709E-02			-2.2132E-02	2.2438E-03	5.2915E-02	7.2936E-01	-5.7825E-03
6.0198E-03	7.5944E-01	1.9323E-02	-4.7605E-01	7.0000E-01	-3.0024E-02	2.8367E-03	3.7281E-02	6.8939E-01	-5.2885E-03
7.4363E-03	7.9530E-01	1.8414E-02	-4.7984E-01	2.7272E-01	-2.9598E-02	3.5339E-03	2.2714E-01	5.6602E-01	-5.4515E-03
9.5609E-03	8.2132E-01	1.5850E-02	-4.5312E-01	1.0991E-01	-2.5641E-02	4.1825E-03	2.4916E-01	4.1474E-01	-5.6262E-03
1.2394E-02	8.4738E-01	1.3705E-02	-4.9456E-01	3.7390E-01	-2.5241E-02	4.9826E-03	2.9823E-01	3.6949E-01	-4.6895E-03
1.5935E-02	8.6215E-01	1.1482E-02	-3.7047E-01	1.8539E-01	-2.0934E-02	5.8675E-03	1.9485E-01	2.4537E-01	-3.9442E-03
2.0184E-02	8.6576E-01	1.0706E-02	-4.0631E-01	2.6536E-01	-1.4452E-02	7.4823E-03	8.7270E-02	6.4581E-02	-3.5136E-03
2.6204E-02	8.6979E-01	1.0317E-02	-2.6738E-01	1.0643E-01	-7.7994E-03	9.3957E-03	3.8490E-02	-4.8568E-02	-2.4119E-03
3.2932E-02	8.7228E-01	1.0471E-02	-2.0342E-01	9.8178E-02	5.7631E-04	1.1788E-02	1.5692E-02	-1.6610E-01	-2.5799E-03
4.2493E-02	8.7046E-01	1.0582E-02	-1.3619E-01	-2.8543E-02	7.0633E-03	1.5855E-02	2.9138E-02	-3.6659E-01	-2.5683E-03
5.4178E-02	8.7185E-01	1.2050E-02	-1.5167E-01	-5.5767E-02	1.4544E-02	1.9280E-02	4.6230E-02	-4.2300E-01	-2.4497E-03
7.0822E-02	8.8420E-01	1.3536E-02	-2.5441E-01	-8.8952E-03	2.4515E-02	2.4672E-02	6.2186E-02	-5.3560E-01	-3.2468E-03
8.8173E-02	9.1034E-01	1.3585E-02	-2.3256E-01	-1.1355E-01	2.9311E-02	2.6190E-02	1.5759E-01	-4.0595E-01	-4.8482E-03
1.1296E-01	9.5158E-01	1.2055E-02	-2.7886E-01	1.1011E-01	1.4391E-02	1.9396E-02	3.6160E-01	3.5581E-02	-4.4810E-03
1.4412E-01	9.9347E-01	7.8765E-03	-2.6481E-01	9.2236E-02	7.2761E-04	9.8561E-03	6.6025E-01	7.8052E-01	-2.9487E-03
1.8414E-01	1.0318E+00	5.5210E-03	-2.5803E-01	9.5228E-02	-6.3491E-03	4.6205E-03	3.9774E-01	5.2204E-01	-1.5278E-03
2.3513E-01	1.0684E+00				-1.4270E-02	2.1867E-03	2.1223E-01	-1.4006E-02	
3.0099E-01	1.1157E+00	2.3381E-03	-4.7178E-01	1.4449E-01	-1.9893E-02	1.5651E-03	3.0394E-01	1.7007E-01	-9.5887E-04
3.8385E-01	1.1549E+00	1.4354E-03	-6.1139E-01	2.8309E-01	-2.2489E-02	1.0269E-03	2.8473E-01	1.3118E-01	-5.4090E-04
4.9079E-01	1.1893E+00	3.5343E-04	-7.0760E-01	9.9527E-01	-2.6674E-02	3.6839E-04	4.5533E-01	6.6794E-01	-1.0672E-04
6.2571E-01	1.1988E+00	1.3859E-04	-8.4871E-02	-4.1769E-01	-2.5470E-02	1.4389E-04	7.4785E-02	-3.5258E-01	7.6750E-05
7.9887E-01	1.1962E+00	1.2445E-04	-8.4375E-02	-5.1914E-01	-2.9405E-02	1.3059E-04	1.3370E-01	-4.6009E-01	7.8756E-05
1.0202E+00	1.2026E+00	1.1910E-04	-1.1048E-01	-4.5798E-01	-1.9473E-02	1.2305E-04	-2.0375E-02	-4.6283E-01	
1.3059E+00	1.2007E+00	1.1065E-04	-1.1868E-01	-4.7236E-01	-1.2941E-02	1.2073E-04	4.6757E-02	-4.9227E-01	
1.6636E+00	1.1979E+00	9.7844E-05	-1.4803E-01	-4.4805E-01	-4.8020E-03	1.1894E-04	-1.8296E-02	-3.9106E-01	

Table F.4-6 Velocity measurements made at S/T = 0.43 with the UV system of the laser anemometer, plane 5

File E525770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.8
density (kilograms per meter cubed) = 1.117168
viscosity (meters squared per second) = 1.634397E-05
Atmospheric pressure (Pascals) = 94885
Velocity of undisturbed free stream (Uref, in m/s) = 27.64132
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09123E-03
Estimated momentum thickness Reynolds number = 6919.187
Location of traverse; X/T = .75 Z/T =-.85 (Plane 5 , S/T = 0.35)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	2.7332E-01				-1.3965E-02	3.8128E-04	-6.5056E-01	2.4899E+00	
2.6558E-03	3.9107E-01				-1.7705E-02	4.6117E-04			
3.5411E-03	7.1210E-01				-3.0304E-02	1.2685E-03	-3.6643E-01	2.7368E+00	
4.6034E-03	7.4151E-01	1.6696E-02			-3.6791E-02	1.6893E-03	-1.3147E-01	1.8915E+00	-4.2320E-03
6.3739E-03	8.3624E-01	1.7295E-02	-1.0182E+00	2.1181E+00	-4.5714E-02	2.6849E-03	1.4718E-01	1.7311E+00	-5.0624E-03
7.4363E-03	8.7600E-01	1.5884E-02	-9.4287E-01	1.5034E+00	-4.6688E-02	2.8164E-03	3.7904E-01	1.3920E+00	
9.5609E-03	8.9720E-01	1.3326E-02	-8.4221E-01	1.1243E+00	-4.8927E-02	3.7149E-03	3.2216E-01	1.1890E+00	-2.6344E-03
1.2394E-02	9.1068E-01	1.0972E-02	-7.0920E-01	1.1191E+00	-4.7277E-02	4.1989E-03	1.8051E-01	3.3531E-01	-1.7632E-03
1.6997E-02	9.2236E-01	8.3690E-03	-4.7897E-01	7.4300E-01	-5.0548E-02	5.4538E-03	1.0526E-01	2.4631E-01	-4.6281E-04
2.0184E-02	9.2550E-01	8.1618E-03	-3.6802E-01	6.8055E-01	-5.0367E-02	6.6738E-03	1.8622E-01	3.3725E-01	-8.1601E-04
2.5850E-02	9.2418E-01	7.8011E-03	-2.5091E-01	3.2138E-01	-4.8592E-02	7.9051E-03	1.5059E-01	1.1535E-01	-7.0304E-04
3.2932E-02	9.2181E-01	8.3073E-03	-2.5490E-01	3.8510E-01	-5.8185E-02	9.8519E-03	2.0024E-01	6.7486E-02	-8.8175E-04
4.2847E-02	9.1114E-01	9.0364E-03	-2.8264E-01	1.5235E-01	-5.9210E-02	1.2726E-02	3.4005E-01	1.3984E-01	-2.2438E-03
5.4178E-02	9.1368E-01	1.0495E-02	-3.3281E-01	4.0442E-01	-7.0287E-02	1.6475E-02	4.5697E-01	1.8172E-01	-4.0871E-03
6.9051E-02	9.1972E-01	1.2442E-02	-3.5952E-01	3.8320E-01	-7.4210E-02	2.0433E-02	6.7366E-01	2.8377E-01	-4.1272E-03
8.8527E-02	9.5394E-01	1.2730E-02	-3.0075E-01	4.0111E-01	-7.4159E-02	2.0172E-02	8.2154E-01	7.7381E-01	-4.0235E-03
1.1296E-01	9.8927E-01	9.6482E-03	-2.9647E-01	2.6412E-01	-6.4582E-02	1.4557E-02	8.6646E-01	1.1115E+00	-4.0235E-03
1.4412E-01	1.0255E+00	6.4145E-03	-2.8567E-01	1.2717E-01	-5.4739E-02	6.7041E-03	5.9369E-01	7.8062E-01	-3.0602E-03
1.8414E-01	1.0610E+00	4.6986E-03	-2.4273E-01	-7.4808E-02	-3.1365E-02	3.7510E-03	2.1844E-01	5.5295E-02	-1.4236E-03
2.3513E-01	1.0969E+00	3.1125E-03	-3.0217E-01	-2.0005E-01	-2.4001E-02	2.2050E-03	2.3651E-01	5.4489E-02	-1.1643E-03
3.0028E-01	1.1350E+00	2.2364E-03	-4.6653E-01	3.7098E-02	-2.1939E-02	1.5678E-03	2.7574E-01	3.6700E-02	-9.4904E-04
3.8350E-01	1.1752E+00	1.3510E-03	-5.8739E-01	1.7390E-01	-2.1678E-02	1.0907E-03	3.5954E-01	4.8630E-01	-4.0073E-04
4.8973E-01	1.2121E+00	3.8877E-4	-8.3376E-01	1.0907E+00	-2.2522E-02	4.6442E-04	6.8803E-01	1.1571E+00	-2.6909E-04
6.2571E-01	1.2161E+00				-2.0732E-02	1.6113E-04	-7.7190E-02	-4.3163E-02	
7.9887E-01	1.2211E+00	1.1919E-04	-2.2419E-01	-4.1072E-01	-2.3350E-02	1.5356E-04	5.1820E-02	-4.8442E-01	8.5149E-05
1.0202E+00	1.2256E+00	9.5342E-05	-1.2230E-01	-4.2786E-01	-1.2367E-02	1.1347E-04	6.8592E-02	-4.9422E-01	
1.3042E+00	1.2260E+00	8.3796E-05	-1.5417E-01	-4.2316E-01	-5.9520E-03	1.2611E-04	1.2452E-01	-4.1432E-01	
1.6636E+00	1.2245E+00	6.8743E-05	-5.1483E-02	-3.6922E-01	1.5588E-03	9.4812E-05	8.5530E-02	-4.5932E-01	

Table F.4-7 Velocity measurements made at S/T = 0.35 with the UV system of the laser anemometer, plane 5

File E526770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.8
density (kilograms per meter cubed) = 1.106748
viscosity (meters squared per second) = 1.649785E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.65568
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090805E-03
Estimated momentum thickness Reynolds number = 6857.5
Location of traverse; X/T = .75 Z/T =-.775 (Plane 5 , S/T = 0.27)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	2.6226E-01				-4.8263E-03				
2.4788E-03	3.1517E-01				-1.0763E-02	1.9450E-04			
3.5411E-03	6.9825E-01				-2.6206E-02	8.6133E-04	-8.5364E-01	4.7292E+00	
4.6034E-03	8.4589E-01				-3.3992E-02	1.0800E-03	-6.9781E-02	2.2593E+00	
6.0198E-03	9.0886E-01	1.4015E-02			-4.0095E-02	1.3754E-03	5.3589E-02	1.7356E+00	
7.4363E-03	9.3289E-01	1.1984E-02	-1.0091E+00	1.6584E+00	-4.6524E-02	1.5999E-03	-1.4031E-01	1.6619E+00	-2.3798E-03
9.5609E-03	9.7494E-01	9.3063E-03	-1.0180E+00	2.1294E+00	-5.0904E-02	1.8767E-03	1.0574E-01	1.2104E+00	-1.4377E-04
1.2394E-02	9.8942E-01	6.9261E-03	-5.7710E-01	1.0714E+00	-5.3767E-02	2.0039E-03	1.5950E-01	1.1259E+00	-1.0527E-03
1.5935E-02	9.9672E-01	5.4956E-03	-3.4055E-01	6.8258E-01	-5.6377E-02	2.3849E-03	3.2276E-02	6.1725E-01	-7.1182E-04
2.0184E-02	9.9643E-01	4.8746E-03	-1.3235E-01	2.6239E-01	-5.6230E-02	2.8577E-03	-4.7126E-02	3.4050E-01	-1.6399E-03
2.5850E-02	9.9992E-01	4.0849E-03	-1.2483E-01	2.3904E-01	-6.3277E-02	4.1863E-03	-1.5011E-02	2.6497E-01	-5.6838E-04
3.2932E-02	9.9535E-01	4.4006E-03	-1.7886E-01	1.8978E-01	-7.0564E-02	4.0634E-03	-2.0356E-02	4.2809E-01	-8.8424E-04
4.2493E-02	9.9430E-01	4.9216E-03	-2.1352E-01	3.7732E-01	-7.5213E-02	4.5218E-03	9.2822E-02	3.9076E-02	-1.5618E-03
5.4178E-02	9.9936E-01	5.7833E-03	-2.1711E-01	3.4294E-01	-8.7363E-02	5.2929E-03	-8.5293E-02	3.7217E-02	-1.3677E-03
6.9051E-02	1.0030E+00	6.1345E-03	-2.9094E-01	4.9223E-01	-9.1897E-02	5.4323E-03	-4.8042E-02	2.9866E-02	-1.3950E-03
8.8881E-02	1.0227E+00	6.0104E-03	-2.4974E-01	3.7468E-01	-9.8429E-02	5.1110E-03	-1.4064E-01	1.0531E-01	-1.3708E-03
1.1331E-01	1.0456E+00	4.8672E-03	-2.2058E-01	3.6012E-01	-8.9970E-02	3.5786E-03	3.6506E-02	6.4488E-02	-1.1581E-03
1.4518E-01	1.0706E+00	3.7183E-03	-2.4581E-01	-9.1370E-02	-7.6819E-02	3.1027E-03	2.2222E-01	3.5295E-01	-1.1764E-03
1.8414E-01	1.0978E+00	3.0870E-03	-2.4925E-01	-2.0029E-01	-6.0040E-02	2.5093E-03	2.2294E-01	1.4615E-01	-1.3278E-03
2.3513E-01	1.1287E+00	2.6220E-03	-2.9419E-01	-1.2111E-01	-4.9360E-02	2.1466E-03	2.0694E-01	1.7086E-01	-1.0946E-03
3.0028E-01	1.1648E+00	1.9989E-03	-4.4181E-01	5.1356E-02	-4.1248E-02	1.5804E-03	3.1231E-01	2.2714E-01	-8.1996E-04
3.8350E-01	1.2011E+00	1.2590E-03	-5.2697E-01	1.3454E-01	-3.4908E-02	1.0904E-03	2.9948E-01	3.5264E-01	-4.6172E-04
4.8973E-01	1.2328E+00	3.8506E-04	-7.4284E-01	1.0022E+00	-3.2337E-02	4.5446E-04	3.9496E-01	7.3450E-01	-5.4943E-05
6.2571E-01	1.2440E+00	1.4998E-04	3.7699E-02	-3.5587E-01	-2.9320E-02	1.7997E-04	7.6795E-02	-2.3022E-01	1.0289E-04
7.9887E-01	1.2471E+00	1.2290E-04	-1.0988E-01	-8.4693E-02	-2.6381E-02	1.5764E-04	2.6064E-02	-3.5433E-01	9.3155E-05
1.0202E+00		1.4144E-04	-7.6564E-02	-3.0521E-01	-2.1492E-02	1.5442E-04	4.2673E-02	-3.5942E-01	
1.3187E+00	1.2499E+00	1.0220E-04	-1.9259E-01	-1.3399E-01	-9.8053E-03	1.4422E-04	7.5700E-02	-3.5310E-01	
1.6634E+00	1.2466E+00	1.1546E-04	-1.1547E-01	-4.5113E-01	-3.6342E-03	1.4170E-04	7.0385E-02	-3.0105E-01	

Table F.4-8 Velocity measurements made at S/T = 0.27 with the UV system of the laser anemometer, plane 5

File E527770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.4
density (kilograms per meter cubed) = 1.107328
viscosity (meters squared per second) = 1.651502E-05
Atmospheric pressure (Pascals) = 94240
Velocity of undisturbed free stream (Uref, in m/s) = 27.67217
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090318E-03
Estimated momentum thickness Reynolds number = 6853.64
Location of traverse; X/T = .75 Z/T = .7 (Plane 5 , S/T = 0.20)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	2.6086E-01				-5.2091E-03	1.5970E-04			
2.8329E-03	2.9650E-01				-7.8353E-03	1.4369E-04			
3.5411E-03	6.9710E-01				-2.1038E-02	6.2394E-04	-7.5321E-01	3.7454E+00	
4.6034E-03	8.2261E-01				-2.6091E-02	7.9137E-04	-2.2995E-01	3.2349E+00	
6.1969E-03	9.9800E-01	5.4720E-03			-4.3583E-02	1.0580E-03	-2.1643E-01	2.2629E+00	
8.4986E-03	1.0402E+00	7.9979E-03	-1.4079E+00	3.3310E+00	-4.2554E-02	1.2588E-03	-9.4936E-02	1.5892E+00	-1.7599E-03
1.0269E-02	1.0619E+00	4.9593E-03	-8.4468E-01	1.7197E+00	-4.6830E-02	1.2772E-03	-1.0206E-01	1.2815E+00	-8.2854E-05
1.2394E-02	1.0697E+00	3.0867E-03	-3.9983E-01	7.6334E-01	-4.6374E-02	1.4304E-03	1.6652E-01	9.4938E-01	-7.8706E-04
1.5935E-02	1.0707E+00	2.8034E-03	-3.0682E-01	4.7943E-01	-4.9088E-02	1.6092E-03	-2.5711E-03	5.0087E-01	-3.1748E-04
2.0184E-02	1.0729E+00	2.6837E-03	1.5676E-02	5.0793E-01	-4.8066E-02	1.8391E-03	4.9017E-02	3.8528E-01	-3.6141E-04
2.6204E-02	1.0747E+00	2.4976E-03	-1.1074E-01	7.6785E-02	-5.4962E-02	2.2415E-03	4.6379E-02	2.5118E-01	-5.4161E-04
3.2932E-02	1.0720E+00	2.5865E-03	-9.6288E-02	1.7497E-02	-5.9570E-02	2.5817E-03	-4.0623E-04	1.9497E-01	-7.0642E-04
4.2493E-02	1.0717E+00	2.6425E-03	-1.1784E-01	-1.0432E-01	-6.2785E-02	3.0058E-03	8.9027E-02	1.7980E-01	-7.6062E-04
5.7011E-02	1.0756E+00	2.6405E-03	-1.5707E-01	-2.3482E-02	-6.8802E-02	3.0801E-03	4.1856E-02	2.6088E-01	-8.9596E-04
6.9051E-02	1.0820E+00				-7.1489E-02	3.0681E-03	-1.3181E-02	1.1359E-01	
9.1006E-02	1.0936E+00	2.6533E-03	-1.4867E-01	-8.2387E-02	-7.5841E-02	2.7616E-03	1.2154E-01	-1.0533E-01	-1.0652E-03
1.1296E-01	1.1070E+00	2.6131E-03	-1.9380E-01	-1.4731E-01	-7.6990E-02	2.8243E-03	1.1008E-01	9.2644E-02	-9.2250E-04
1.4483E-01	1.1234E+00	2.6177E-03	-2.5798E-01	4.3918E-02	-7.6132E-02	2.4106E-03	1.4865E-01	1.7729E-02	-8.2523E-04
1.8449E-01	1.1492E+00	2.2618E-03	-2.7897E-01	-1.5955E-01	-6.8553E-02	2.0813E-03	2.0975E-01	1.2865E-03	-7.7732E-04
2.3513E-01	1.1776E+00	1.8796E-03	-2.8609E-01	-1.4427E-01	-6.4385E-02	1.7292E-03	2.3111E-01	1.9160E-01	-7.8341E-04
3.0135E-01	1.2068E+00	1.4469E-03	-4.2331E-01	-8.4479E-02	-6.0143E-02	1.2350E-03	2.3094E-01	2.3489E-02	-5.4361E-04
3.8350E-01	1.2400E+00	9.5765E-04	-6.0701E-01	2.8472E-0	-5.6372E-02	8.5519E-04	2.9356E-01	2.6779E-01	-2.7050E-04
4.9009E-01	1.2705E+00	2.6577E-04	-6.7161E-01	9.4189E-01	-4.0634E-02	3.5280E-04	3.2611E-01	6.1740E-01	5.1497E-06
6.2571E-01	1.2767E+00	1.1654E-04	-1.3241E-01	-3.3227E-01	-3.4005E-02	1.4367E-04	-3.2042E-02	-2.0688E-01	6.9935E-05
7.9887E-01	1.2831E+00	7.7685E-05	-1.7672E-01	-4.3732E-01	-2.4122E-02	1.3099E-04	-9.9614E-03	-4.3991E-01	6.8300E-05
1.0202E+00	1.2861E+00	1.0900E-04	-1.6840E-01	-4.9154E-01	-1.9342E-02	1.3104E-04	-1.1285E-01	-3.3121E-01	
1.3028E+00	1.2858E+00	1.0061E-04	-2.1927E-01	-3.7127E-01	-9.3547E-03	1.2356E-04	-9.0[illegible]E-02	-4.5341E-01	
1.6636E+00	1.2828E+00	9.1295E-05	-1.8838E-01	-3.1618E-01	2.8226E-05	1.0610E-04	-3.5040E-02	-2.5669E-01	

Table F.4-9 Velocity measurements made at S/T = 0.20 with the UV system of the laser anemometer, plane 5

File E529770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.2
density (kilograms per meter cubed) = 1.09195
viscosity (meters squared per second) = 1.669527E-05
Atmospheric pressure (Pascals) = 92555
Velocity of undisturbed free stream (Uref, in m/s) = 27.66974
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090389E-03
Estimated momentum thickness Reynolds number = 6779.166
Location of traverse; X/T = .75 Z/T =-.625 (Plane 5 , S/T = 0.13)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	3.0387E-01				-7.7424E-03	1.6032E-04	-7.4874E-01	1.6252E+00	
2.4788E-03	3.6261E-01				-9.3473E-03	2.1863E-04	-6.4002E-01	2.0572E+00	
3.5411E-03	6.9979E-01				-1.2770E-02	3.3316E-04			
4.6034E-03	9.8504E-01				-2.5254E-02	6.4454E-04	-9.4118E-02	2.8664E+00	
6.0198E-03	1.0747E+00	1.1191E-02			-3.2137E-02	8.8040E-04	4.4758E-02	2.1036E+00	-2.4623E-03
7.4363E-03	1.1178E+00	8.0303E-03			-3.8227E-02	1.1116E-03	1.7621E-02	1.7886E+00	-1.4259E-03
9.5609E-03	1.1363E+00	4.4669E-03	-9.8759E-01	2.2743E+00	-4.1107E-02	1.3369E-03	1.3418E-01	1.1562E+00	-6.4224E-04
1.2394E-02	1.1426E+00	2.2894E-03	-2.4345E-01	3.5848E-01	-4.5480E-02	1.4992E-03	2.2101E-01	6.1630E-01	-6.0849E-05
1.5935E-02	1.1388E+00	2.1645E-03	-2.5182E-01	2.5119E-01	-5.2606E-02	1.8711E-03	1.4695E-01	4.9841E-01	-2.6748E-04
2.0184E-02	1.1391E+00	2.2079E-03	-1.7877E-01	1.2606E-01	-5.8498E-02	2.2766E-03	1.3345E-01	4.6890E-01	-1.9477E-04
2.5850E-02	1.1399E+00	2.1600E-03	-2.5064E-01	1.2457E-01	-6.3321E-02	2.6020E-03	1.1933E-01	3.3185E-01	-2.8153E-04
3.2932E-02	1.1412E+00	2.1798E-03	-1.4585E-01	8.9532E-02	-6.7127E-02	2.8095E-03	1.1128E-01	1.7941E-01	-4.8084E-04
4.2493E-02	1.1414E+00	2.1903E-03	-2.2029E-01	2.5380E-02	-7.7073E-02	2.9930E-03	-2.7150E-02	1.3126E-01	-5.6890E-04
5.4178E-02	1.1447E+00	2.3631E-03	-2.2148E-01	1.2486E-01	-8.4488E-02	3.0253E-03	1.0891E-01	5.5360E-02	-4.9005E-04
7.0822E-02	1.1489E+00	2.2707E-03	-2.8019E-01	5.9690E-02	-9.1745E-02	2.9712E-03	4.4730E-02	7.8377E-02	-7.4280E-04
8.8173E-02	1.1574E+00	2.1197E-03	-2.4173E-01	8.3718E-03	-9.4204E-02	2.8189E-03	4.7953E-02	2.4843E-02	-6.6821E-04
1.1296E-01	1.1692E+00	2.0499E-03	-2.6564E-01	-6.9791E-02	-9.6808E-02	2.6730E-03	1.2738E-01	1.1746E-01	-6.8251E-04
1.4412E-01	1.1854E+00	1.9940E-03	-2.9763E-01	8.3221E-02	-1.0114E-01	2.4479E-03	1.2529E-01	1.2005E-01	-6.6501E-04
1.8414E-01	1.2047E+00	1.7718E-03	-3.1747E-01	-9.9785E-03	-9.8998E-02	2.0004E-03	1.4425E-01	1.6823E-01	-7.1705E-04
2.3513E-01	1.2292E+00	1.5411E-03	-3.5435E-01	-2.3902E-02	-9.6414E-02	1.6394E-03	2.1468E-01	1.4001E-01	-6.9793E-04
3.0028E-01	1.2557E+00	1.1724E-03	-4.3741E-01	1.0246E-01	-8.6139E-02	1.2290E-03	2.4356E-01	1.7589E-01	-2.9201E-04
3.8350E-01	1.2827E+00	8.1886E-04	-6.5021E-01	6.5113E-01	-7.1186E-02	8.7309E-04	1.2411E-01	4.0935E-01	-6.7430E-05
4.8973E-01	1.3055E+00	2.3095E-04	-3.5863E-01	2.7759E-01	-6.4757E-02	3.1284E-04	2.3097E-01	4.3552E-01	8.1167E-05
6.2571E-01	1.3161E+00	1.2184E-04	-2.1890E-01	-2.7780E-01	-4.9748E-02	1.7478E-04	-2.4918E-02	-3.0529E-01	9.3934E-05
7.9887E-01	1.3191E+00	1.2796E-04	-1.5893E-01	-3.6829E-01	-3.3146E-02	1.3110E-04	-1.1594E-02	-3.7619E-01	7.9053E-05
1.0202E+00	1.3224E+00	9.0452E-05	-9.2059E-02	-2.9343E-01	-1.9982E-02	1.2293E-04	5.3802E-02	-1.5110E-01	
1.3106E+00	1.3178E+00	9.8140E-05	-1.6010E-01	-4.8740E-01	-1.3393E-02	9.3527E-05	1.9415E-02	-2.9745E-01	
1.6636E+00	1.3127E+00	1.0135E-04	-2.0683E-01	-4.3415E-01	-1.2400E-02	1.4366E-04	3.2853E-02	-4.0743E-01	

Table F.4-10 Velocity measurements made at S/T = 0.13 with the UV system of the laser anemometer, plane 5

File E530770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 22.1
density (kilograms per meter cubed) = 1.106836
viscosity (meters squared per second) = 1.646641E-05
Atmospheric pressure (Pascals) = 93785
Velocity of undisturbed free stream (Uref, in m/s) = 27.64722
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091056E-03
Estimated momentum thickness Reynolds number = 6868.912
Location of traverse; X/T = .75 Z/T =-.55 (Plane 5 , S/T = 0.05)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.7705E-03	3.7247E-01				-1.8505E-03	4.4533E-05			
2.4788E-03	4.1725E-01				-3.1462E-03	7.6982E-05			
3.5411E-03	1.1342E+00				-4.4320E-03	2.3688E-05			
4.6034E-03	1.2429E+00				-1.7737E-02	9.1223E-05			
6.0198E-03	1.2151E+00	2.3957E-03			-3.4145E-02	5.1531E-04			5.5688E-04
7.4363E-03	1.2274E+00	2.5115E-03	-2.0357E-01	1.0044E+00	-4.3081E-02	1.0698E-03	-4.0153E-01	1.6993E+00	1.2416E-04
9.5609E-03	1.2211E+00	2.3320E-03	-3.1265E-01	5.4748E-01	-5.2294E-02	1.6735E-03	-1.4560E-01	1.2452E+00	2.8246E-05
1.2394E-02	1.2164E+00	2.3522E-03	-5.0107E-01	8.8263E-01	-6.9814E-02	2.5056E-03	1.6140E-02	9.6462E-01	4.8640E-04
1.5935E-02	1.2113E+00	2.4238E-03	-7.2097E-01	1.2151E+00	-9.3864E-02	2.7770E-03	-2.5571E-01	4.9144E-01	3.7363E-04
2.0184E-02	1.2099E+00	2.5221E-03	-7.8982E-01	1.3661E+00	-1.1414E-01	3.3680E-03	-2.2053E-01	3.2907E-01	7.2984E-04
2.5850E-02	1.2126E+00	2.3331E-03	-6.7230E-01	1.0163E+00	-1.3179E-01	4.0300E-03	-1.6050E-01	3.7567E-01	7.6480E-04
3.2932E-02	1.2111E+00	2.3828E-03	-7.0345E-01	9.8592E-01	-1.5145E-01	4.2368E-03	-2.6570E-01	1.5018E-02	5.0762E-04
4.2493E-02	1.2081E+00	2.6283E-03	-7.9513E-01	1.1058E+00	-1.7537E-01	4.8089E-03	-1.9522E-01	-3.9245E-02	8.6125E-04
5.4178E-02	1.2175E+00	2.2214E-03	-5.1314E-01	7.0606E-01	-1.8020E-01	4.7963E-03	-2.4161E-01	-4.4056E-02	4.9378E-04
6.9759E-02	1.2195E+00	1.8689E-03	-3.0360E-01	1.2873E-01	-1.8031E-01	4.0137E-03	-2.6008E-01	-1.2461E-01	-5.2980E-05
8.8173E-02	1.2289E+00	1.6937E-03	-3.1653E-01	2.3155E-01	-1.6196E-01	3.2083E-03	-2.0986E-01	5.2601E-02	-6.7512E-05
1.1296E-01	1.2367E+00	1.4263E-03	-2.8214E-01	1.5013E-01	-1.4470E-01	2.7417E-03	-1.5695E-01	4.3292E-01	-3.0434E-04
1.4412E-01	1.2485E+00	1.3404E-03	-3.4230E-01	1.1498E-01	-1.4062E-01	2.2748E-03	-1.0243E-01	2.6395E-01	-3.7308E-04
1.8414E-01	1.2655E+00	1.2013E-03	-3.3009E-01	6.5715E-02	-1.3542E-01	1.9302E-03	1.2494E-02	1.4037E-01	-1.9198E-04
2.3513E-01	1.2833E+00	9.8540E-04	-4.4177E-01	2.5062E-01	-1.3181E-01	1.4998E-03	-8.5495E-02	1.8774E-01	-1.2570E-04
3.0028E-01	1.3029E+00	6.1009E-04	-5.1409E-01	2.2076E-01	-1.1792E-01	8.9133E-04	-1.1531E-01	2.3276E-02	-3.2963E-04
3.8350E-01	1.3259E+00	3.3522E-04	-3.9573E-01	2.9449E-01	-1.0155E-01	5.1327E-04	-1.6115E-01	3.4611E-03	1.6801E-05
4.8973E-01	1.3396E+00	1.4798E-04	4.6237E-02	-2.3428E-01	-7.7078E-02	2.6001E-04	-2.5695E-02	-1.7433E-01	8.0028E-05
6.2571E-01	1.3502E+00	1.1305E-04	2.7882E-02	-5.0757E-01	-5.1054E-02	1.9744E-04	5.8242E-02	-4.5722E-01	8.9923E-05
7.9887E-01	1.3519E+00	8.4851E-05	7.4892E-03	-5.9437E-01	-3.9161E-02	1.5303E-04	1.6900E-01	-5.5967E-01	5.4826E-05
1.0202E+00	1.3538E+00	8.0478E-05	-5.7994E-02	-5.1077E-01	-1.5727E-02	1.6676E-04	-1.7631E-01	-5.1446E-01	
1.3028E+00	1.3544E+00	8.1153E-05	-9.5636E-02	-5.2529E-01	-6.2058E-03	1.4970E-04	-2.8157E-01	-5.6663E-01	
1.6636E+00	1.3484E+00	7.6178E-05	-3.9326E-02	-4.9289E-01	3.2634E-03	1.3794E-04	-2.6513E-01	-4.6119E-01	

Table F.4-11 Velocity measurements made at S/T = 0.05 with the UV system of the laser anemometer, plane 5

File E500770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.114826
viscosity (meters squared per second) = 1.634409E-05
Atmospheric pressure (Pascals) = 94430
Velocity of undisturbed free stream (Uref, in m/s) = 27.72897
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08864E-03
Estimated momentum thickness Reynolds number = 6936.682
Location of traverse; X/T = .75 Z/T =-1.525 (Plane 5 , S/T = 1.03)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.1246E-03	-2.0382E-02	2.0400E-03	
2.8329E-03	-2.5234E-02	2.3222E-03	
3.5411E-03	-1.9154E-02	2.4240E-03	
4.2493E-03	-3.8881E-02	2.7233E-03	-3.0582E-03
4.9575E-03	-3.0943E-02	2.8366E-03	1.7429E-03
5.6657E-03	-6.4740E-02	2.8309E-03	
6.7280E-03	-5.9018E-02	3.5559E-03	-3.4596E-03
8.1445E-03	-6.7790E-02	3.9568E-03	-1.5414E-03
9.9150E-03	-7.5321E-02	3.6330E-03	-9.5714E-04
1.2040E-02	-7.5092E-02		
1.2748E-02	-7.4188E-02	3.7516E-03	-9.8466E-04
1.4873E-02	-8.1974E-02	3.4408E-03	-8.3892E-04
1.8059E-02	-8.9311E-02	3.4051E-03	-9.7417E-05
2.2309E-02	-9.4945E-02	3.2689E-03	-5.9193E-04
2.7266E-02	-1.0325E-01	3.0686E-03	-3.4393E-04
3.3286E-02	-1.0605E-01	2.9501E-03	-2.0344E-04
4.1076E-02	-1.0763E-01	2.9019E-03	-1.0545E-04
5.0283E-02	-1.0559E-01	2.7169E-03	2.5030E-05
6.1615E-02	-9.9816E-02	2.6776E-03	-2.4434E-04
7.5425E-02	-9.7216E-02	2.5770E-03	-1.8685E-04
9.2422E-02	-9.1183E-02	2.6091E-03	-2.0891E-04
1.1296E-01	-7.9842E-02	2.6384E-03	-1.7257E-04
1.3846E-01	-7.2613E-02	2.4767E-03	-2.2249E-04
1.6997E-01	-7.0882E-02	2.4800E-03	-1.1316E-04
2.0822E-01	-6.0010E-02	2.2294E-03	-1.1279E-04
2.5531E-01	-5.5674E-02	2.0410E-03	-1.2933E-05
3.1303E-01	-4.9851E-02	1.5995E-03	2.0747E-05
3.8279E-01	-4.3791E-02	1.1365E-03	5.6396E-06
4.7025E-01	-3.9863E-02	6.7897E-04	2.9495E-05
5.7649E-01	-3.4308E-02	1.7463E-04	8.2859E-05
7.0680E-01	-3.7370E-02		
8.6650E-01	-4.3349E-02	1.2790E-04	
1.0627E+00	-4.0880E-02	7.1045E-05	
1.4168E+00	-4.1974E-02	2.9678E-05	
1.7709E+00	-4.0855E-02		

Table F.4-12 Velocity measurements made at S/T = 1.03 with the UW system of the laser anemometer, plane 5

File E501770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22.1
density (kilograms per meter cubed) = 1.112147
viscosity (meters squared per second) = 1.638778E-05
Atmospheric pressure (Pascals) = 94235
Velocity of undisturbed free stream (Uref, in m/s) = 27.76323
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087631E-03
Estimated momentum thickness Reynolds number = 6925.03
Location of traverse; X/T = .75 Z/T =-1.325 (Plane 5 , S/T = 0.83)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.4164E-03	-6.5417E-03	1.7825E-03	
2.4788E-03	-2.7914E-02	2.6668E-03	-2.2691E-03
3.8952E-03	-4.6073E-02	4.6380E-03	-2.1986E-03
5.3116E-03	-5.6820E-02	4.7838E-03	-2.7065E-03
7.4363E-03	-8.0026E-02	3.7668E-03	-2.7974E-03
9.9150E-03	-9.4934E-02	3.8457E-03	-1.2943E-03
1.2394E-02	-1.0738E-01	3.4741E-03	-1.1930E-03
1.6643E-02	-1.1818E-01	3.5122E-03	-6,1202E-04
2.2309E-02	-1.2666E-01	3.5969E-03	5.6256E-04
2.9391E-02	-1.3695E-01	3.1143E-03	-6.7206E-05
3.8952E-02	-1.4063E-01	3.1949E-03	3.6166E-04
5.0637E-02	-1.3392E-01	3.1619E-03	4.9756E-04
6.5510E-02	-1.2790E-01	2.9162E-03	1.6318E-04
8.4632E-02	-9.8424E-02	3.3573E-03	2.8547E-04
1.0942E-01	-9.2466E-02	2.9541E-03	5.4429E-05
1.4058E-01	-8.8674E-02	2.5367E-03	-9.7746E-05
1.8059E-01	-7.0348E-02	2.5612E-03	-3.6676E-05
2.3159E-01	-5.7572E-02	2.1784E-03	-4.8232E-05
2.9603E-01	-6.0674E-02	1.7618E-03	1.8855E-05
3.4455E-01	-4.6432E-02	1.5934E-03	1.6949E-04
4.8619E-01	-3.6538E-02	6.2303E-04	1.9989E-04
6.2217E-01	-3.7727E-02		
7.9533E-01	-4.3127E-02	6.8467E-06	
1.0166E+00	-4.5400E-02	1.8596E-04	1.1243E-04
1.2992E+00	-4.7571E-02	2.9879E-04	1.7586E-04
1.6601E+00	-4.7529E-02	2.8086E-04	

Table F.4-13 Velocity measurements made at S/T = 0.83 with the UW system of the laser anemometer, plane 5

File E502770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22.1
density (kilograms per meter cubed) = 1.117222
viscosity (meters squared per second) = 1.631334E-05
Atmospheric pressure (Pascals) = 94665
Velocity of undisturbed free stream (Uref, in m/s) = 27.77486
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087289E-03
Estimated momentum thickness Reynolds number = 6958.961
Location of traverse; X/T = .75 Z/T =-1.175 (Plane 5 , S/T = 0.67)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.8329E-03	-3.6695E-02	1.1259E-03	
3.1870E-03	-5.5419E-02	1.8250E-03	
4.2493E-03	-6.2509E-02	4.2404E-03	-5.2452E-03
4.9575E-03	-6.4899E-02	4.3863E-03	-4.8323E-03
5.6657E-03	-6.7850E-02	4.4218E-03	-6.1194E-03
6.7280E-03	-9.1954E-02	4.7853E-03	-3.9435E-03
8.4986E-03	-1.1018E-01	4.9052E-03	-3.2260E-03
1.0623E-02	-1.3479E-01	5.0466E-03	-2.2795E-03
1.3456E-02	-1.4821E-01	5.0047E-03	-1.2779E-03
1.6997E-02	-1.6310E-01	4.8001E-03	-9.5020E-04
2.1246E-02	-1.7566E-01	4.6753E-03	-6.4992E-04
2.7975E-02	-1.8851E-01	4.4616E-03	-3.6386E-04
3.3994E-02	-1.9207E-01	4.3832E-03	-2.2347E-05
4.3555E-02	-1.8869E-01	4.4710E-03	1.8795E-04
5.5241E-02	-1.7394E-01	4.4248E-03	7.5867E-04
7.0113E-02	-1.5845E-01	4.0322E-03	6.7011E-04
8.9235E-02	-1.3554E-01	3.5542E-03	1.1946E-04
1.1402E-01	-1.1490E-01	3.0826E-03	-1.8106E-04
1.4518E-01	-9.5667E-02	2.7790E-03	-1.5318E-04
1.8520E-01	-7.8999E-02	2.4?32E-03	-9.4646E-05
2.3619E-01	-6.4647E-02	2.1311E-03	-8.2944E-05
3.0135E-01	-5.8962E-02	1.7201E-03	1.7663E-04
3.8456E-01	-4.7682E-02	1.0629E-03	1.8911E-04
4.9079E-01	-4.2890E-02	4.2167E-04	1.7387E-04
6.2819E-01	-4.0505E-02	2.4135E-04	2.0535E-04
7.9993E-01	-3.8266E-02	2.2361E-04	
1.0212E+00	-4.6483E-02	1.8568E-04	
1.3038E+00	-4.8485E-02	6.2468E-05	
1.6647E+00	-4.8958E-02	8.1735E-05	

Table F.4-14 Velocity measurements made at S/T = 0.67 with the UW system of the laser anemometer, plane 5

File E503770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22.1
density (kilograms per meter cubed) = 1.111557
viscosity (meters squared per second) = 1.639648E-05
Atmospheric pressure (Pascals) = 94185
Velocity of undisturbed free stream (Uref, in m/s) = 27.75275
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08794E-03
Estimated momentum thickness Reynolds number = 6919.264
Location of traverse; X/T = .75 Z/T =-1.075 (Plane 5 , S/T = 0.58)

Y/T	W/Uref	w2/Uref2	uw/Uref2
3.5411E-03	-6.5364E-02	4.9765E-03	-1.7711E-04
4.2493E-03	-9.4538E-02	8.5423E-03	
4.9575E-03	-9.1165E-02	9.7209E-03	-3.6686E-03
6.0198E-03	-1.0408E-01	8.8703E-03	-2.8534E-03
7.0822E-03	-1.0497E-01	8.6883E-03	-3.4799E-03
8.8527E-03	-1.4110E-01	9.5433E-03	-2.2148E-03
1.0623E-02	-1.5288E-01	1.0612E-02	-1.1646E-03
1.3456E-02	-1.5545E-01	1.1634E-02	3.5634E-03
1.6997E-02	-1.8080E-01	9.9641E-03	1.0154E-03
2.1246E-02	-2.0543E-01	8.7016E-03	6.1723E-04
2.6912E-02	-2.0852E-01	8.5017E-03	1.0686E-03
3.3994E-02	-2.1643E-01	7.9932E-03	1.2596E-03
4.3555E-02	-2.1134E-01	8.1179E-03	1.0291E-03
5.5241E-02	-2.0099E-01	7.8293E-03	9.0870E-04
7.0113E-02	-1.7906E-01	8.0973E-03	1.1168E-03
8.9235E-02	-1.5600E-01	7.6022E-03	1.3310E-03
1.1402E-01	-1.2713E-01	5.7933E-03	2.2277E-04
1.4518E-01	-9.8002E-02	4.4196E-03	2.0038E-04
1.8591E-01	-8.2951E-02	3.6178E-03	2.5766E-04
2.3690E-01	-5.7654E-02	2.1100E-03	-6.8223E-04
3.0135E-01	-4.9618E-02	1.7152E-03	1.6344E-04
3.8456E-01	-4.3845E-02	1.1085E-03	2.2080E-04
4.9079E-01	-4.0490E-02	4.4765E-04	1.9653E-04
6.2677E-01	-4.3273E-02	6.9026E-05	2.1944E-05
7.9993E-01	-5.3259E-02	1.0816E-04	
1.0212E+00	-6.2679E-02	4.9101E-05	
1.3038E+00	-6.4309E-02		
1.6647E+00	-5.9960E-02	6.2812E-05	

Table F.4-15 Velocity measurements made at S/T = 0.58 with the UW system of the laser anemometer, plane 5

File E511770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.109986
viscosity (meters squared per second) = 1.641537E-05
Atmospheric pressure (Pascals) = 94020
Velocity of undisturbed free stream (Uref, in m/s) = 27.75812
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087782E-03
Estimated momentum thickness Reynolds number = 6912.372
Location of traverse; X/T = .75 Z/T =-1 (Plane 5 , S/T = 0.50)

Y/T	W/Uref	w2/Uref2	uw/Uref2
4.2493E-03	-9.2441E-02	8.6384E-03	-2.2891E-03
4.7805E-03	-1.1134E-01	9.1183E-03	-4.1208E-03
5.3116E-03	-1.2792E-01	1.0994E-02	-5.0171E-03
6.3739E-03	-1.4965E-01	1.2116E-02	-3.7836E-03
7.4363E-03	-1.5272E-01	1.3064E-02	-4.6773E-03
9.2068E-03	-1.7531E-01	1.3743E-02	-3.1908E-03
1.1863E-02	-2.0407E-01	1.5594E-02	-1.2732E-03
1.4164E-02	-2.1456E-01	1.5664E-02	-7.5410E-04
1.7705E-02	-2.3502E-01	1.6142E-02	4.1160E-04
2.1955E-02	-2.4739E-01	1.6361E-02	1.1054E-03
2.7975E-02	-2.6354E-01	1.6818E-02	1.7393E-03
3.4703E-02	-2.7433E-01	1.6458E-02	2.3376E-03
4.6034E-02	-2.8260E-01	1.7367E-02	2.8837E-03
5.5949E-02	-2.6230E-01	1.6895E-02	3.0964E-03
7.0822E-02	-2.4794E-01	1.5774E-02	2.7109E-03
8.9943E-02	-1.9562E-01	1.3407E-02	1.5004E-03
1.1473E-01	-1.4312E-01	1.0821E-02	9.8942E-05
1.4625E-01	-9.0494E-02	7.3543E-03	-6.7349E-04
1.8591E-01	-6.1637E-02	4.5114E-03	-9.9226E-05
2.369	-5.0574E-02	2.3399E-03	-6.8902E-04
3.0205E-01	-4.7098E-02	1.8243E-03	4.7315E-06
3.8527E-01	-3.9554E-02	1.1021E-03	-2.4613E-06
4.9150E-01	-4.6641E-02	2.9569E-04	2.1337E-04
6.2748E-01	-5.0791E-02		
8.0064E-01	-5.6637E-02		
1.0220E+00	-6.8460E-02		
1.3045E+00	-7.0969E-02	1.8223E-05	
1.6654E+00	-6.9154E-02	4.6055E-05	

Table F.4-16 Velocity measurements made at S/T = 0.50 with the UW system of the laser anemometer, plane 5

File E505770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.112878
viscosity (meters squared per second) = 1.63727E-05
Atmospheric pressure (Pascals) = 94265
Velocity of undisturbed free stream (Uref, in m/s) = 27.75357
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087915E-03
Estimated momentum thickness Reynolds number = 6929.475
Location of traverse; X/T = .75 Z/T =-.925 (Plane 5 , S/T = 0.43)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.1246E-03	-1.3426E-01	9.4720E-03	
2.8329E-03	-2.0923E-01	1.4277E-02	
3.5411E-03	-1.7726E-01	2.3162E-02	-9.9490E-03
4.6034E-03	-1.9436E-01	2.5542E-02	-6.9715E-03
6.3739E-03	-2.4466E-01	3.0083E-02	-5.8289E-03
7.4363E-03	-2.5360E-01	3.1255E-02	-5.7341E-03
9.5609E-03	-2.9245E-01	3.3916E-02	-5.3562E-03
1.2394E-02	-3.0839E-01	3.4147E-02	-3.1465E-03
1.5935E-02	-3.3276E-01	3.1097E-02	-8.2796E-04
2.0184E-02	-3.5099E-01	2.8114E-02	2.0258E-04
2.5850E-02	-3.6304E-01	2.3911E-02	1.5194E-03
3.3286E-02	-3.6282E-01	2.0023E-02	1.5461E-03
4.2847E-02	-3.5142E-01	1.7683E-02	1.7575E-03
5.4887E-02	-3.2728E-01	1.6404E-02	1.5939E-03
6.9759E-02	-2.6596E-01	1.7224E-02	1.4372E-03
8.8173E-02	-1.8027E-01	1.6845E-02	8.5094E-04
1.1296E-01	-8.5695E-02	1.3183E-02	-1.7934E-03
1.4412E-01	-4.5404E-02	8.3749E-03	-1.0931E-03
1.8449E-01	-3.3982E-02	4.4494E-03	-1.5129E-04
2.3513E-01	-3.6120E-02	3.2053E-03	2.8775E-04
3.0028E-01	-3.5126E-02	1.5820E-03	-2.6724E-05
3.8350E-01	-3.5881E-02	9.2266E-04	9.1374E-05
4.8973E-01	-3.5609E-02	5.3903E-05	
6.2571E-01	-4.7519E-02		
7.9887E-01	-6.0121E-02		
1.0202E+00	-6.6271E-02		
1.3095E+00	-7.0375E-02		
1.6636E+00	-7.3315E-02		

Table F.4-17 Velocity measurements made at S/T = 0.43 with the UW system of the laser anemometer, plane 5

File E506770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 21.5
density (kilograms per meter cubed) = 1.114708
viscosity (meters squared per second) = 1.632442E-05
Atmospheric pressure (Pascals) = 94260
Velocity of undisturbed free stream (Uref, in m/s) = 27.81664
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08606E-03
Estimated momentum thickness Reynolds number = 6962.603
Location of traverse; X/T =-.75 Z/T =-.85 (Plane 5 , S/T = 0.35)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.4788E-03	-1.7579E-01	1.5977E-02	-3.0112E-03
3.1870E-03	-2.0863E-01	1.7342E-02	-1.5178E-02
4.6034E-03	-2.9785E-01	2.1304E-02	-1.6175E-02
5.6657E-03	-3.0341E-01	2.2291E-02	-1.6512E-02
7.0822E-03	-3.7352E-01	2.3238E-02	-1.1187E-02
9.7380E-03	-4.1037E-01	2.1777E-02	-1.0856E-02
1.2394E-02	-4.2613E-01	1.9395E-02	-7.0069E-03
1.5758E-02	-4.3070E-01	1.6545E-02	-3.9437E-03
2.0184E-02	-4.2362E-01	1.3311E-02	-1.2231E-03
2.5850E-02	-4.1257E-01	1.0831E-02	-1.1021E-03
3.2578E-02	-3.9173E-01	1.0513E-02	6.8426E-05
4.2139E-02	-3.5707E-01	1.0185E-02	1.0766E-04
5.3824E-02	-3.2026E-01	1.1546E-02	7.6319E-05
6.8697E-02	-2.5122E-01	1.3313E-02	5.6066E-04
8.7819E-02	-1.5099E-01	1.2816E-02	-8.4055E-04
1.1261E-01	-6.8744E-02	1.0306E-02	-1.8907E-03
1.4377E-01	-4.2927E-02	8.1735E-03	-4.1352E-04
1.9299E-01	-2.9485E-02	3.5623E-03	-3.3683E-06
2.3477E-01	-3.3739E-02	3.1199E-03	5.9597E-04
3.0028E-01	-2.9090E-02	1.4768E-03	2.3559E-05
3.8314E-01	-3.1105E-02	1.0437E-03	4.6289E-05
4.9504E-01	-3.4131E-02	1.2570E-04	
6.2535E-01	-4.6173E-02		
7.9851E-01	-6.0038E-02	4.3604E-06	
1.0198E+00	-6.5088E-02		
1.3024E+00	-6.9971E-02		
1.6632E+00	-7.1333E-02		

Table F.4-18 Velocity measurements made at S/T = 0.35 with the UW system of the laser anemometer, plane 5

File E507770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.118191
viscosity (meters squared per second) = 1.629492E-05
Atmospheric pressure (Pascals) = 94715
Velocity of undisturbed free stream (Uref, in m/s) = 27.80503
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.086401E-03
Estimated momentum thickness Reynolds number = 6972.881
Location of traverse; X/T = .75 Z/T =-.775 (Plane 5 , S/T = 0.27)

Y/T	W/Uref	w2/Uref2	uw/Uref2
3.0099E-03	-2.1249E-01	1.1666E-02	-1.9196E-02
3.7181E-03	-2.4171E-01	1.1290E-02	
4.6034E-03	-3.0650E-01	1.0389E-02	-7.5476E-03
5.4887E-03	-3.5010E-01	1.1193E-02	-6.9450E-03
6.5510E-03	-3.7868E-01	1.1321E-02	-5.5304E-03
8.3215E-03	-4.0821E-01	1.0923E-02	-2.8568E-03
1.0446E-02	-4.2147E-01	1.0245E-02	-2.0658E-03
1.3279E-02	-4.1787E-01	8.9034E-03	-9.0629E-04
1.6820E-02	-4.0931E-01	8.2153E-03	-3.5287E-04
2.1069E-02	-3.8802E-01	7.6072E-03	-2.8022E-04
2.7089E-02	-3.6676E-01	7.6898E-03	7.0048E-05
3.4525E-02	-3.2179E-01	6.6624E-03	-1.4122E-04
4.3378E-02	-2.9704E-01	7.0665E-03	3.7265E-04
5.5064E-02	-2.5519E-01	6.6479E-03	1.6016E-04
6.9936E-02	-2.0365E-01	6.2106E-03	1.8390E-04
8.9058E-02	-1.5246E-01	6.3495E-03	-3.3157E-05
1.1385E-01	-1.0327E-01	5.9081E-03	2.1362E-04
1.4501E-01	-6.5471E-02	4.0929E-03	-2.5088E-04
1.8502E-01	-5.2607E-02	3.6816E-03	2.9174E-04
2.3601E-01	-4.3929E-02	2.0321E-03	-1.1830E-04
3.0152E-01	-4.3414E-02	1.6509E-03	1.0347E-04
3.8474E-01	-4.9278E-02	1.0490E-03	1.9612E-04
4.9062E-01	-4.9938E-02	4.8528E-04	2.6134E-04
6.2659E-01	-6.1038E-02	1.7179E-04	1.7436E-04
7.9975E-01	-7.4488E-02	8.0917E-05	8.6500E-05
1.0211E+00	-8.0305E-02	1.3697E-04	
1.3026E+00	-8.8163E-02	9.4981E-05	
1.6645E+00	-8.8312E-02	1.4638E-04	

Table F.4-19 Velocity measurements made at S/T = 0.27 with the UW system of the laser anemometer, plane 5

File E508770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.118899
viscosity (meters squared per second) = 1.62846E-05
Atmospheric pressure (Pascals) = 94775
Velocity of undisturbed free stream (Uref, in m/s) = 27.72972
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.088618E-03
Estimated momentum thickness Reynolds number = 6962.176
Location of traverse; X/T = .75 Z/T =-.7 (Plane 5 , S/T = 0.20)

Y/T	W/Uref	w2/Uref2	uw/Uref2
3.1870E-03	-1.7545E-01	4.3073E-03	-2.9346E-03
3.8952E-03	-2.4270E-01	6.9936E-03	-3.3668E-03
4.7805E-03	-2.6104E-01	1.0899E-02	-7.3018E-03
5.6657E-03	-3.0106E-01	1.0103E-02	-6.1539E-03
6.7280E-03	-3.4247E-01	1.0221E-02	-3.1207E-03
8.1445E-03	-3.6555E-01	1.0806E-02	-2.0979E-03
1.0269E-02	-3.7838E-01	9.8162E-03	-1.5756E-03
1.3102E-02	-3.7457E-01	8.8011E-03	-4.9423E-04
1.6997E-02	-3.5528E-01	7.6763E-03	1.1808E-05
2.0892E-02	-3.3572E-01	6.1353E-03	-9.5496E-04
2.6558E-02	-3.0948E-01	5.3044E-03	-8.2573E-04
3.3640E-02	-2.7543E-01	4.2417E-03	-1.1723E-03
4.3201E-02	-2.3777E-01	3.6955E-03	-1.2545E-03
5.4887E-02	-2.1139E-01	3.3254E-03	-1.2574E-03
6.9759E-02	-1.7719E-01	3.0643E-03	-1.3813E-03
8.8881E-02	-1.4744E-01	2.9408E-03	-1.1313E-03
1.1367E-01	-1.1591E-01	2.7004E-03	-1.1178E-03
1.4483E-01	-8.8890E-02	2.4720E-03	-1.0260E-03
1.8484E-01	-6.6070E-02	2.1750E-03	-7.8481E-04
2.3584E-01	-5.2506E-02	1.8457E-03	-1.1586E-04
3.0099E-01	-4.4049E-02	1.3112E-03	8.1287E-06
3.8421E-01	-4.2402E-02	6.7147E-04	1.4419E-05
4.9044E-01	-5.4026E-02	2.8937E-04	1.2254E-04
6.2642E-01	-5.7998E-02		
8.0984E-01	-7.5933E-02	4.4470E-06	7.4595E-06
1.0209E+00	-8.5297E-02		
1.3389E+00	-8.7884E-02		
1.6643E+00	-8.5460E-02		

Table F.4-20 Velocity measurements made at S/T = 0.20 with the UW system of the laser anemometer, plane 5

File E509770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 21.9
density (kilograms per meter cubed) = 1.115618
viscosity (meters squared per second) = 1.632823E-05
Atmospheric pressure (Pascals) = 94465
Velocity of undisturbed free stream (Uref, in m/s) = 27.76442
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087596E-03
Estimated momentum thickness Reynolds number = 6950.524
Location of traverse; X/T = .75 Z/T =-.625 (Plane 5 , S/T = 0.13)

Y/T	W/Uref	w2/Uref2	uw/Uref2
3.1870E-03	-1.7523E-01	1.0086E-02	-8.1606E-03
3.8952E-03	-2.2224E-01	1.0972E-02	-9.4702E-03
4.6034E-03	-2.2653E-01	1.1287E-02	-1.3409E-02
5.6657E-03	-2.7687E-01	1.0397E-02	-8.6291E-03
6.7280E-03	-3.0239E-01	1.0065E-02	-5.1264E-03
8.4986E-03	-3.2336E-01	8.9156E-03	-1.5322E-03
1.0977E-02	-3.2014E-01	8.1187E-03	-3.1403E-04
1.3456E-02	-3.0462E-01	6.7623E-03	-2.1093E-04
1.6997E-02	-2.8928E-01	6.0757E-03	7.4562E-04
2.1246E-02	-2.6594E-01	4.2056E-03	-3.3400E-04
2.6912E-02	-2.3589E-01	3.4537E-03	-6.8005E-04
3.3994E-02	-2.1242E-01	2.9496E-03	-5.5721E-04
4.3555E-02	-1.8498E-01	2.6795E-03	-7.3352E-04
5.5241E-02	-1.6259E-01	2.4958E-03	-8.1256E-04
7.0113E-02	-1.4217E-01	2.2180E-03	-8.3570E-04
8.9235E-02	-1.2140E-01	2.3243E-03	-4.4847E-04
1.1402E-01	-9.9789E-02	1.9849E-03	-4.5998E-04
1.4518E-01	-7.9412E-02	1.9708E-03	-3.3701E-04
1.8520E-01	-5.9436E-02	1.7633E-03	-1.8702E-04
2.3725E-01	-4.5924E-02	1.3387E-03	-1.8283E-05
3.0135E-01	-3.8516E-02	9.7862E-04	8.5131E-06
3.8456E-01	-4.3957E-02	6.2308E-04	1.2017E-04
4.9079E-01	-5.2645E-02	2.7225E-04	1.5484E-04
6.2783E-01	-6.3657E-02		
7.9993E-01	-7.7846E-02		
1.0212E+00	-8.1747E-02		
1.3038E+00	-8.3836E-02		
1.6647E+00	-8.3211E-02		

Table F.4-21 Velocity measurements made at S/T = 0.13 with the UW system of the laser anemometer, plane 5

File E510770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 21.5
density (kilograms per meter cubed) = 1.118374
viscosity (meters squared per second) = 1.627091E-05
Atmospheric pressure (Pascals) = 94570
Velocity of undisturbed free stream (Uref, in m/s) = 27.73585
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.088438E-03
Estimated momentum thickness Reynolds number = 6969.267
Location of traverse; X/T = .75 Z/T =-.55 (Plane 5 , S/T = 0.05)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.6558E-03	-1.1686E-02	3.6406E-03	
3.3640E-03	-1.7007E-02	3.7264E-03	-9.5310E-03
4.4263E-03	-5.9428E-02	4.2263E-03	
5.1346E-03	-7.1530E-02	4.2901E-03	-2.1297E-04
6.1969E-03	-7.2792E-02	4.5129E-03	2.0325E-04
8.3215E-03	-7.1885E-02	4.2530E-03	3.5285E-04
1.1154E-02	-6.8298E-02	3.8339E-03	1.0830E-04
1.2925E-02	-6.1442E-02	3.8338E-03	1.1182E-04
1.6820E-02	-5.8179E-02	3.7158E-03	1.3255E-04
2.0715E-02	-6.2855E-02	3.7406E-03	2.4471E-04
2.6381E-02	-5.1215E-02	4.0955E-03	1.8380E-04
3.3463E-02	-6.6707E-02	4.3097E-03	7.0735E-04
4.3024E-02	-9.1864E-02	4.6307E-03	1.1202E-03
5.4710E-02	-1.0946E-01	5.0095E-03	1.5259E-03
6.9582E-02	-1.2322E-01	4.1475E-03	1.0065E-03
8.8704E-02	-1.0936E-01	2.8238E-03	1.9402E-04
1.1349E-01	-8.4587E-02	2.3597E-03	5.5181E-04
1.4465E-01	-6.0241E-02	1.1820E-03	-1.7035E-04
1.8467E-01	-4.4056E-02	9.0771E-04	-2.1499E-04
2.3566E-01	-3.0349E-02	8.0115E-04	-3.6996E-05
3.0081E-01	-2.6051E-02	5.7280E-04	5.3456E-05
3.8403E-01	-3.0202E-02	4.2344E-04	1.3072E-04
4.9026E-01	-3.6038E-02	3.0258E-04	
6.2624E-01	-4.1195E-02		
7.9940E-01	-4.7491E-02		
1.0207E+00	-5.0678E-02		
1.3033E+00	-5.2738E-02		
1.6641E+00	-5.1464E-02		

Table F.4-22 Velocity measurements made at S/T = 0.05 with the UW system of the laser anemometer, plane 5

File E532770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 25.2
density (kilograms per meter cubed) = 1.096322
viscosity (meters squared per second) = 1.675883E-05
Atmospheric pressure (Pascals) = 93870
Velocity of undisturbed free stream (Uref, in m/s) = 27.61288
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092073E-03
Estimated momentum thickness Reynolds number = 6742.35
Location of traverse; X/T = .75 Z/T =-1.525 (Plane 5 , S/T = 1.03)

Y/T	vw/Uref2
2.4788E-03	3.3933E-04
3.5411E-03	3.9136E-04
4.6034E-03	2.0460E-04
6.0198E-03	3.2026E-04
7.4363E-03	1.1857E-04
9.5609E-03	2.5853E-04
1.2394E-02	7.5040E-05
1.5935E-02	4.3156E-05
2.0184E-02	1.1504E-05
2.5850E-02	-5.4448E-05
3.2932E-02	-1.5022E-04
4.2433E-02	-2.8064E-04
5.4178E-02	-3.4042E-04
6.9759E-02	-1.9733E-04
8.9943E-02	-2.2394E-04
1.1438E-01	-3.3405E-04
1.4695E-01	-1.9274E-04
1.8414E-01	-2.2432E-04
2.3513E-01	-1.3146E-04
3.0099E-01	-1.1230E-04
3.8385E-01	2.4944E-05
4.8973E-01	1.0762E-04
6.2571E-01	1.8550E-04
7.9887E-01	1.0834E-04

Table F.4-23 Velocity measurements made at S/T = 1.03 with the VW system of the laser anemometer, plane 5

File E533770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 25.2
density (kilograms per meter cubed) = 1.096556
viscosity (meters squared per second) = 1.675526E-05
Atmospheric pressure (Pascals) = 93890
Velocity of undisturbed free stream (Uref, in m/s) = 27.62487
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091717E-03
Estimated momentum thickness Reynolds number = 6746.129
Location of traverse; X/T = .75 Z/T =-1.325 (Plane 5 , S/T = 0.83)

Y/T	vw/Uref2
3.8952E-03	3.6163E-04
4.6034E-03	-3.1233E-04
6.3739E-03	-9.9463E-04
7.7904E-03	4.1091E-04
9.5609E-03	1.2081E-04
1.2748E-02	4.0713E-05
1.5935E-02	2.3348E-04
2.0184E-02	-7.8356E-05
2.5850E-02	-1.0804E-04
3.3286E-02	6.2799E-05
4.2493E-02	-6.1000E-04
5.4887E-02	-2.3728E-04
6.9051E-02	-5.4244E-04
9.2068E-02	-5.1576E-04
1.1296E-01	-5.3666E-05
1.4412E-01	-3.1204E-04
1.8449E-01	-2.9363E-04
2.3513E-01	-2.6432E-04
3.0241E-01	-1.6683E-04
3.8350E-01	1.2744E-05
4.9044E-01	4.2193E-05
6.2571E-01	1.0467E-04
7.9887E-01	1.2433E-04

Table F.4-24 Velocity measurements made at S/T = 0.83 with the VW system of the laser anemometer, plane 5

File E534770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 25.4
density (kilograms per meter cubed) = 1.097339
viscosity (meters squared per second) = 1.675197E-05
Atmospheric pressure (Pascals) = 94020
Velocity of undisturbed free stream (Uref, in m/s) = 27.63375
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091454E-03
Estimated momentum thickness Reynolds number = 6749.191
Location of traverse; X/T = .75 Z/T =-1.175 (Plane 5 , S/T = 0.67)

Y/T	vw/Uref2
3.8952E-03	5.1832E-04
4.9575E-03	3.4073E-04
6.3739E-03	3.5613E-04
8.4986E-03	6.8129E-05
1.0269E-02	5.9315E-06
1.3102E-02	-7.1534E-05
1.6643E-02	-1.4449E-04
2.0892E-02	1.4381E-04
2.6558E-02	-3.6220E-04
3.3640E-02	-6.2208E-04
4.3201E-02	-6.7239E-04
5.7011E-02	-8.7682E-04
6.9759E-02	-9.2329E-04
8.9235E-02	-7.9137E-04
1.1438E-01	-3.9290E-04
1.4483E-01	-3.0447E-04
1.8484E-01	-2.3701E-04
2.3654E-01	-3.7101E-04
3.0099E-01	-1.6757E-04
3.8421E-01	-2.3285E-06
4.9044E-01	3.4184E-05
6.2854E-01	1.5205E-04
7.9958E-01	9.2825E-05

Table F.4-25 Velocity measurements made at S/T = 0.67 with the VW system of the laser anemometer, plane 5

File E535770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 28
density (kilograms per meter cubed) = 1.08948
viscosity (meters squared per second) = 1.698577E-05
Atmospheric pressure (Pascals) = 94160
Velocity of undisturbed free stream (Uref, in m/s) = 27.6995
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08951E-03
Estimated momentum thickness Reynolds number = 6668.956
Location of traverse; X/T = .78 Z/T = 1.075 (Plane 5 , S/T = 0.58)

Y/T	vw/Uref2
5.3116E-03	2.4100E-06
6.0198E-03	-7.9366E-05
6.7280E-03	-1.8265E-04
7.7904E-03	-2.5109E-04
9.5609E-03	1.5847E-04
1.1686E-02	2.2326E-04
1.4518E-02	-2.1185E-04
1.8059E-02	-6.3236E-04
2.2309E-02	-5.0737E-04
2.7975E-02	-1.0574E-03
3.5057E-02	-1.2606E-03
4.4618E-02	-1.9651E-03
5.6303E-02	-3.7249E-03
7.1530E-02	-3.2930E-03
9.0297E-02	-2.9359E-03
1.1508E-01	-2.9467E-03
1.4625E-01	-1.7984E-03
1.8839E-01	-3.3593E-04
2.3867E-01	-1.8524E-04
3.0276E-01	-2.8806E-04
3.8562E-01	-1.0512E-04
4.9186E-01	-4.9213E-05
6.2783E-01	1.1611E-04
8.0099E-01	1.1918E-04

Table F.4-26 Velocity measurements made at S/T = 0.58 with the VW system of the laser anemometer, plane 5

File E536770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 28
density (kilograms per meter cubed) = 1.086992
viscosity (meters squared per second) = 1.702464E-05
Atmospheric pressure (Pascals) = 93945
Velocity of undisturbed free stream (Uref, in m/s) = 27.63204
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091505E-03
Estimated momentum thickness Reynolds number = 6640.762
Location of traverse; X/T = .75 Z/T =-1 (Plane 5 , S/T = 0.50)

Y/T	vw/Uref2
3.8952E-03	-7.1129E-04
4.9575E-03	-1.5253E-03
6.3739E-03	-2.4275E-03
7.7904E-03	-2.5922E-04
9.5609E-03	-1.4198E-03
1.1331E-02	-2.1035E-03
1.4164E-02	-2.6692E-03
1.7705E-02	-4.2436E-03
2.1955E-02	-6.2072E-03
2.7620E-02	-7.3628E-03
3.4703E-02	-6.7721E-03
4.5326E-02	-7.5019E-03
5.5949E-02	-9.8978E-03
7.2946E-02	-9.3267E-03
8.9943E-02	-5.9312E-03
1.1473E-01	-4.7904E-03
1.4589E-01	-1.1198E-03
1.8591E-01	-3.7214E-04
2.3796E-01	-2.9493E-04
3.0205E-01	-2.3085E-04
3.8669E-01	-1.1394E-04
4.9150E-01	-1.1297E-05
6.2748E-01	8.2448E-05
8.0064E-01	1.0443E-04

Table F.4-27 Velocity measurements made at S/T = 0.50 with the VW system of the laser anemometer, plane 5

File E537770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 27
density (kilograms per meter cubed) = 1.09108
viscosity (meters squared per second) = 1.691753E-05
Atmospheric pressure (Pascals) = 93985
Velocity of undisturbed free stream (Uref, in m/s) = 27.6572
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09076E-03
Estimated momentum thickness Reynolds number = 6687.677
Location of traverse; X/T = .75 Z/T =-.925 (Plane 5 , S/T = 0.43)

Y/T	vw/Uref
3.3640E-03	1.0428E-03
4.0722E-03	-1.4724E-04
5.1346E-03	-3.2456E-04
6.1969E-03	-9.0371E-04
7.2592E-03	-9.2043E-04
9.0297E-03	-1.7097E-03
1.1154E-02	-1.2423E-03
1.4341E-02	-2.1754E-03
1.7528E-02	-3.4175E-03
2.1778E-02	-4.0960E-03
2.7443E-02	-4.3026E-03
3.4525E-02	-5.5024E-03
4.4086E-02	-6.2544E-03
5.5772E-02	-6.3113E-03
7.1707E-02	-7.5376E-03
8.9766E-02	-7.5013E-03
1.1491E-01	-2.6703E-03
1.4678E-01	-1.6520E-03
1.8573E-01	-6.8784E-04
2.3708E-01	-2.2720E-04
3.0188E-01	-7.0324E-05
3.8509E-01	-6.2451E-06
4.9132E-01	-3.8144E-05
6.2872E-01	1.0804E-04
8.0046E-01	1.1045E-04

Table F.4-28 Velocity measurements made at S/T = 0.43 with the VW system of the laser anemometer, plane 5

File E538770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 27
density (kilograms per meter cubed) = 1.086726
viscosity (meters squared per second) = 1.69853E-05
Atmospheric pressure (Pascals) = 93610
Velocity of undisturbed free stream (Uref, in m/s) = 27.65559
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090808E-03
Estimated momentum thickness Reynolds number = 6660.682
Location of traverse; X/T = .75 Z/T =-.85 (Plane 5 , S/T = 0.35)

Y/T	vw/Uref2
5.3116E-03	1.6932E-03
6.7280E-03	4.8935E-04
8.4986E-03	3.7860E-04
1.0623E-02	-3.3127E-06
1.3456E-02	-2.9246E-04
1.6997E-02	-1.0507E-03
2.1246E-02	-1.6481E-03
2.6912E-02	-1.7465E-03
3.3994E-02	-2.7147E-03
4.3555E-02	-3.5710E-03
5.5241E-02	-5.9355E-03
7.1884E-02	-4.4162E-03
8.9235E-02	-4.0430E-03
1.1402E-01	3.6675E-04
1.4589E-01	-5.7505E-04
1.8520E-01	-2.2158E-04
2.3619E-01	-8.4838E-05
3.0170E-01	-1.1289E-04
3.8456E-01	-4.2521E-05
4.9256E-01	-5.7609E-05
6.2677E-01	1.0058E-04
8.0028E-01	1.2269E-04

Table F.4-29 Velocity measurements made at S/T = 0.35 with the VW system of the laser anemometer, plane 5

File E539770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 25.3
density (kilograms per meter cubed) = 1.097473
viscosity (meters squared per second) = 1.67456E-05
Atmospheric pressure (Pascals) = 94000
Velocity of undisturbed free stream (Uref, in m/s) = 27.65475
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090833E-03
Estimated momentum thickness Reynolds number = 6755.862
Location of traverse; X/T = .75 Z/T =-.775 (Plane 5 , S/T = 0.27)

Y/T	vw/Uref2
3.8952E-03	1.6328E-03
4.6034E-03	1.6668E-03
5.6657E-03	-1.5903E-04
6.7280E-03	-3.1065E-04
7.7904E-03	1.8641E-04
9.5609E-03	-2.6766E-04
1.1686E-02	-4.0192E-03
1.4518E-02	-1.9990E-03
1.8059E-02	-1.8907E-03
2.2309E-02	-2.0535E-03
2.7975E-02	-1.7754E-03
3.5411E-02	-1.1950E-03
4.5680E-02	-1.3976E-03
5.6303E-02	-1.3607E-03
7.2238E-02	-1.2895E-03
9.1714E-02	-1.4143E-03
1.1544E-01	-5.9884E-04
1.4625E-01	-2.0535E-04
1.8626E-01	-1.0620E-04
2.3725E-01	-3.3979E-05
3.0276E-01	2.3422E-05
3.8562E-01	7.1152E-05
4.9186E-01	3.6710E-05
6.2783E-01	7.0173E-05
8.0099E-01	2.1917E-04

Table F.4-30 Velocity measurements made at S/T = 0.27 with the VW system of the laser anemometer, plane 5

File E540770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 24.5
density (kilograms per meter cubed) = 1.101595
viscosity (meters squared per second) = 1.664846E-05
Atmospheric pressure (Pascals) = 94100
Velocity of undisturbed free stream (Uref, in m/s) = 27.53132
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.094494E-03
Estimated momentum thickness Reynolds number = 6771.005
Location of traverse; X/T = .75 Z/T =-.7 (Plane 5 , S/T = 0.20)

Y/T	vw/Uref2
4.7805E-03	2.5805E-03
5.8428E-03	1.0682E-03
6.9051E-03	8.3600E-04
8.6756E-03	8.8830E-05
1.0800E-02	-1.6190E-03
1.3633E-02	-1.3363E-03
1.7174E-02	-9.9636E-04
2.1424E-02	-1.1692E-03
2.7089E-02	-1.2507E-03
3.4171E-02	-5.8089E-04
4.3732E-02	-5.5017E-04
5.5418E-02	-6.1258E-04
7.0644E-02	-5.9397E-04
8.9412E-02	-3.8332E-04
1.1420E-01	-3.6156E-04
1.4572E-01	-2.7113E-04
1.8538E-01	-3.0141E-04
2.3637E-01	-2.1616E-04
3.0400E-01	-7.4543E-05
3.8474E-01	5.8447E-05
4.9239E-01	1.1703E-04
6.2695E-01	1.3144E-04
8.0011E-01	2.3887E-04

Table F.4-31 Velocity measurements made at S/T = 0.20 with the VW system of the laser anemometer, plane 5

File E541770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 24.9
density (kilograms per meter cubed) = 1.11017
viscosity (meters squared per second) = 1.653697E-05
Atmospheric pressure (Pascals) = 94960
Velocity of undisturbed free stream (Uref, in m/s) = 27.71033
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08919E-03
Estimated momentum thickness Reynolds number = 6852.09
Location of traverse; X/T = .75 Z/T =-.625 (Plane 5 , S/T = 0.13)

Y/T	vw/Uref2
4.0722E-03	4.4333E-04
5.1346E-03	-3.0271E-04
6.1969E-03	-2.1232E-04
7.9674E-03	-7.6095E-04
1.0092E-02	-8.0354E-04
1.2925E-02	-1.3359E-03
1.6466E-02	-6.2886E-04
2.0715E-02	-4.7640E-04
2.6735E-02	-2.2160E-04
3.4525E-02	1.2420E-04
4.3024E-02	1.9828E-04
5.4710E-02	-1.3702E-05
6.9936E-02	1.2698E-04
8.8704E-02	9.8641E-05
1.1349E-01	-1.8360E-04
1.4465E-01	1.1882E-05
1.8467E-01	1.9314E-05
2.3566E-01	1.5986E-05
3.0081E-01	1.3769E-04
3.8403E-01	1.4710E-04
4.9026E-01	2.2134E-04
6.2624E-01	2.3686E-04
7.9940E-01	1.6904E-04

Table F.4-32 Velocity measurements made at S/T = 0.13 with the VW system of the laser anemometer, plane 5

File E542770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 24.6
density (kilograms per meter cubed) = 1.109124
viscosity (meters squared per second) = 1.653971E-05
Atmospheric pressure (Pascals) = 94775
Velocity of undisturbed free stream (Uref, in m/s) = 27.71352
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089096E-03
Estimated momentum thickness Reynolds number = 6851.585
Location of traverse; X/T = .75 Z/T =-.55 (Plane 5 , S/T = 0.05)

Y/T	vw/Uref2
6.3739E-03	-4.7451E-05
7.4363E-03	-1.9430E-04
9.2068E-03	-1.7226E-04
1.1331E-02	-1.3732E-04
1.4164E-02	1.1265E-05
1.7705E-02	-3.8085E-04
2.1955E-02	2.9300E-04
2.7620E-02	2.8759E-04
3.4703E-02	5.6332E-06
4.4263E-02	4.6844E-04
5.6657E-02	4.0607E-04
7.0822E-02	1.2352E-03
9.1006E-02	6.8963E-04
1.1473E-01	4.7708E-04
1.4589E-01	1.7169E-04
1.8626E-01	5.1717E-05
2.3761E-01	9.8511E-05
3.0205E-01	1.1161E-04
3.8527E-01	3.3368E-05

Table F.4-33 Velocity measurements made at S/T = 0.05 with the VW system of the laser anemometer, plane 5

F.5 LDV MEASUREMENTS IN PLANE 8

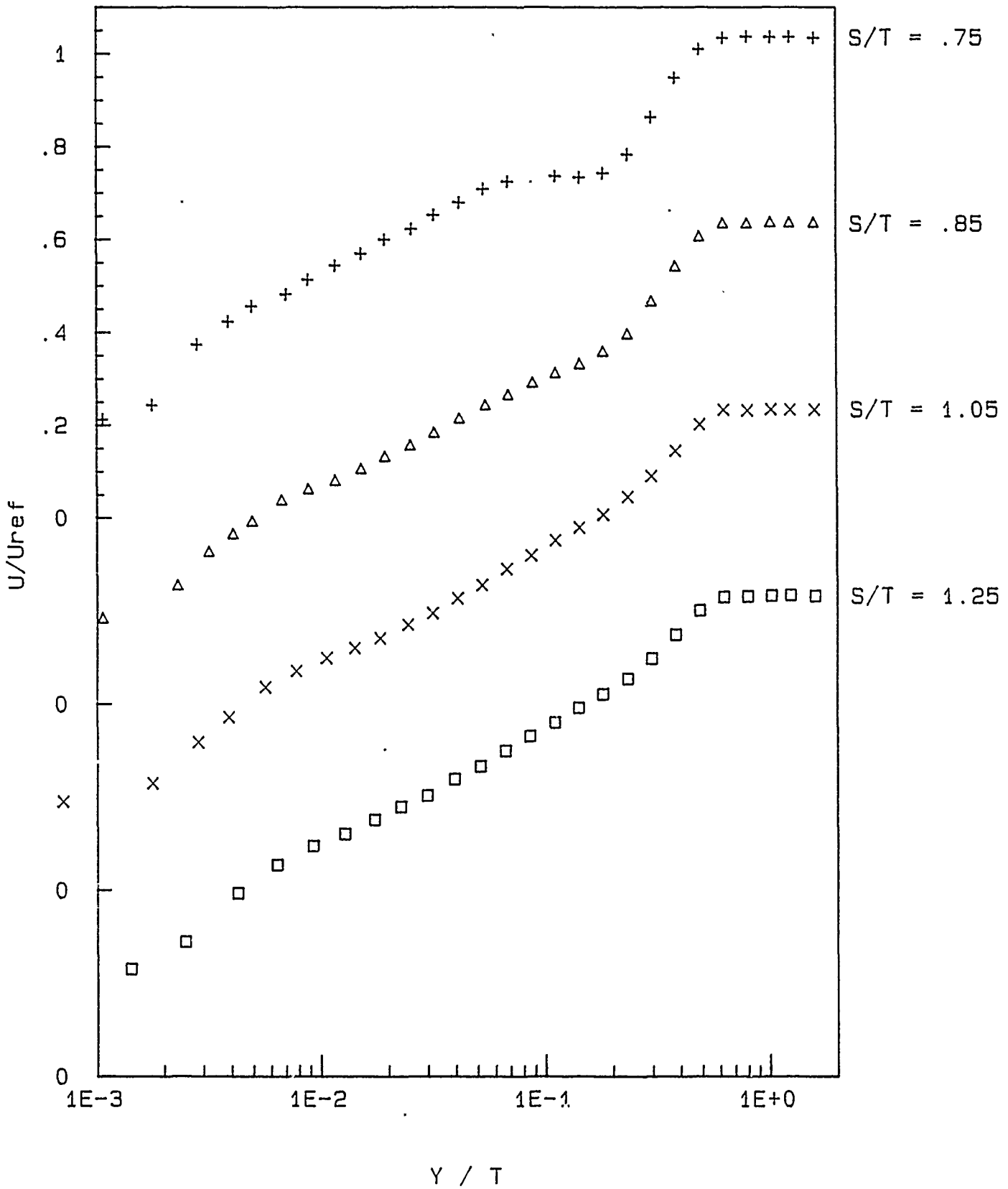


Figure F.5-1(a) Profiles of mean-velocity component U, plane 8.

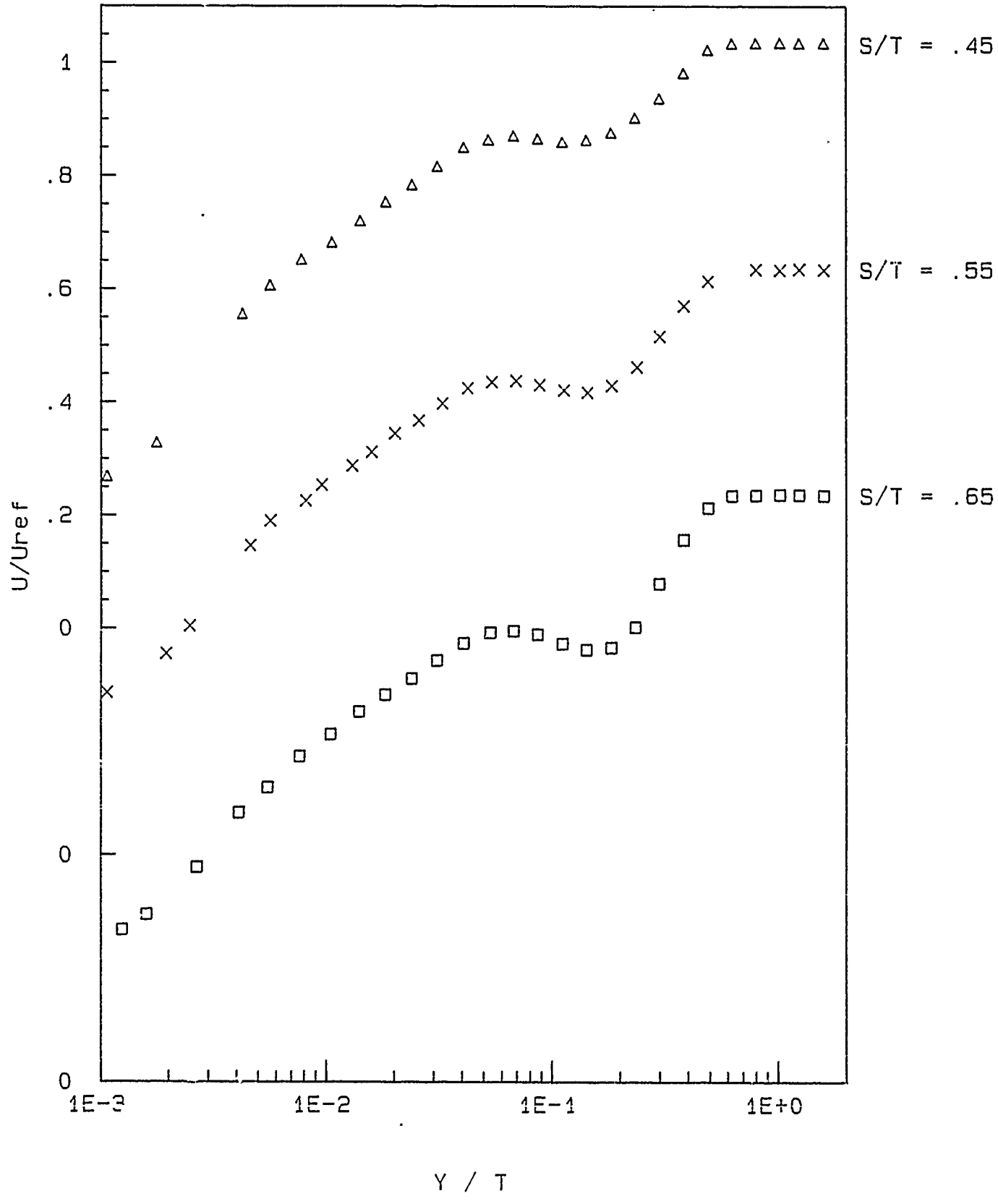


Figure F.5-1(b) Profiles of mean-velocity component U, plane 8.

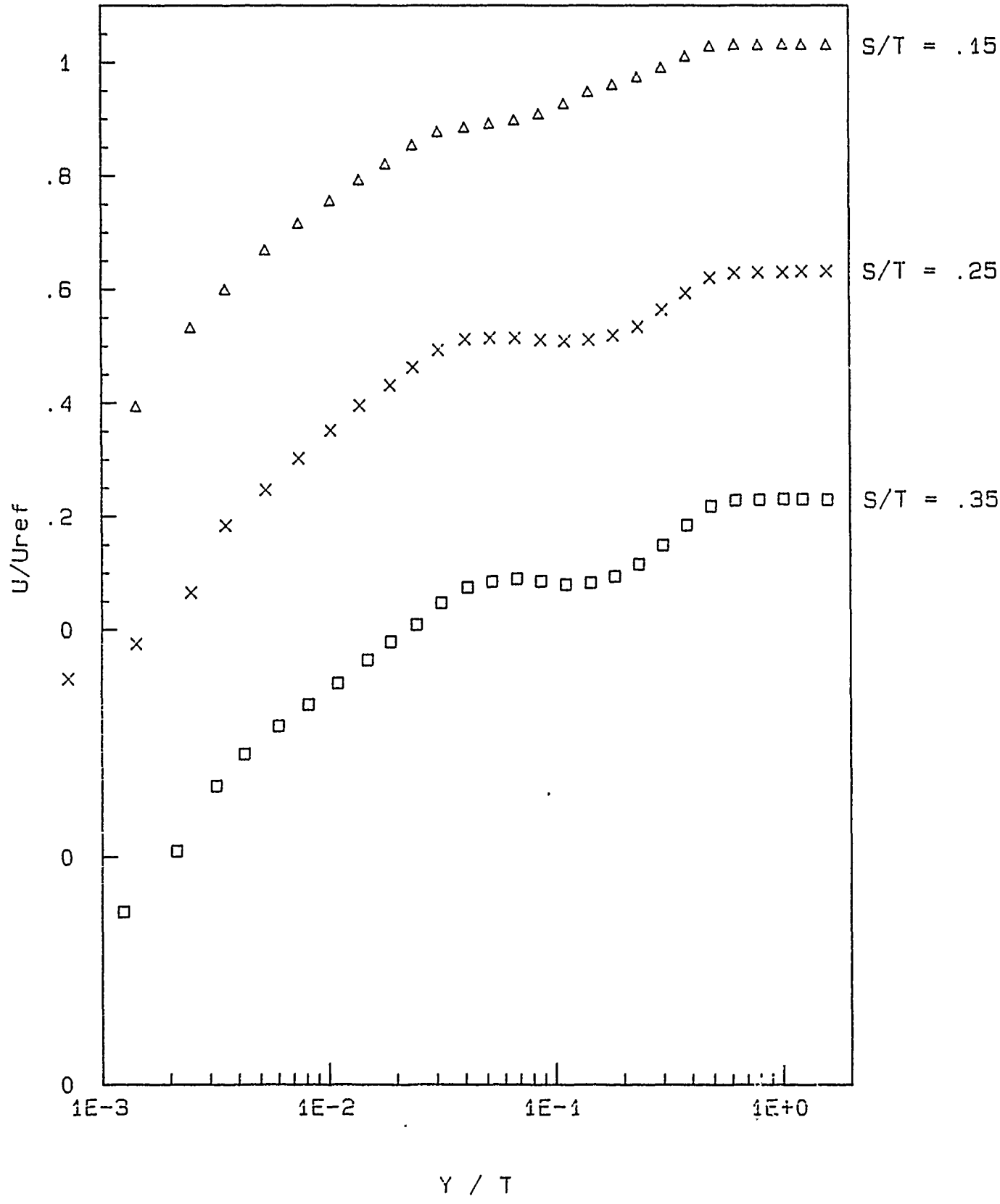


Figure F.5-1(c) Profiles of mean-velocity component U, plane 8.

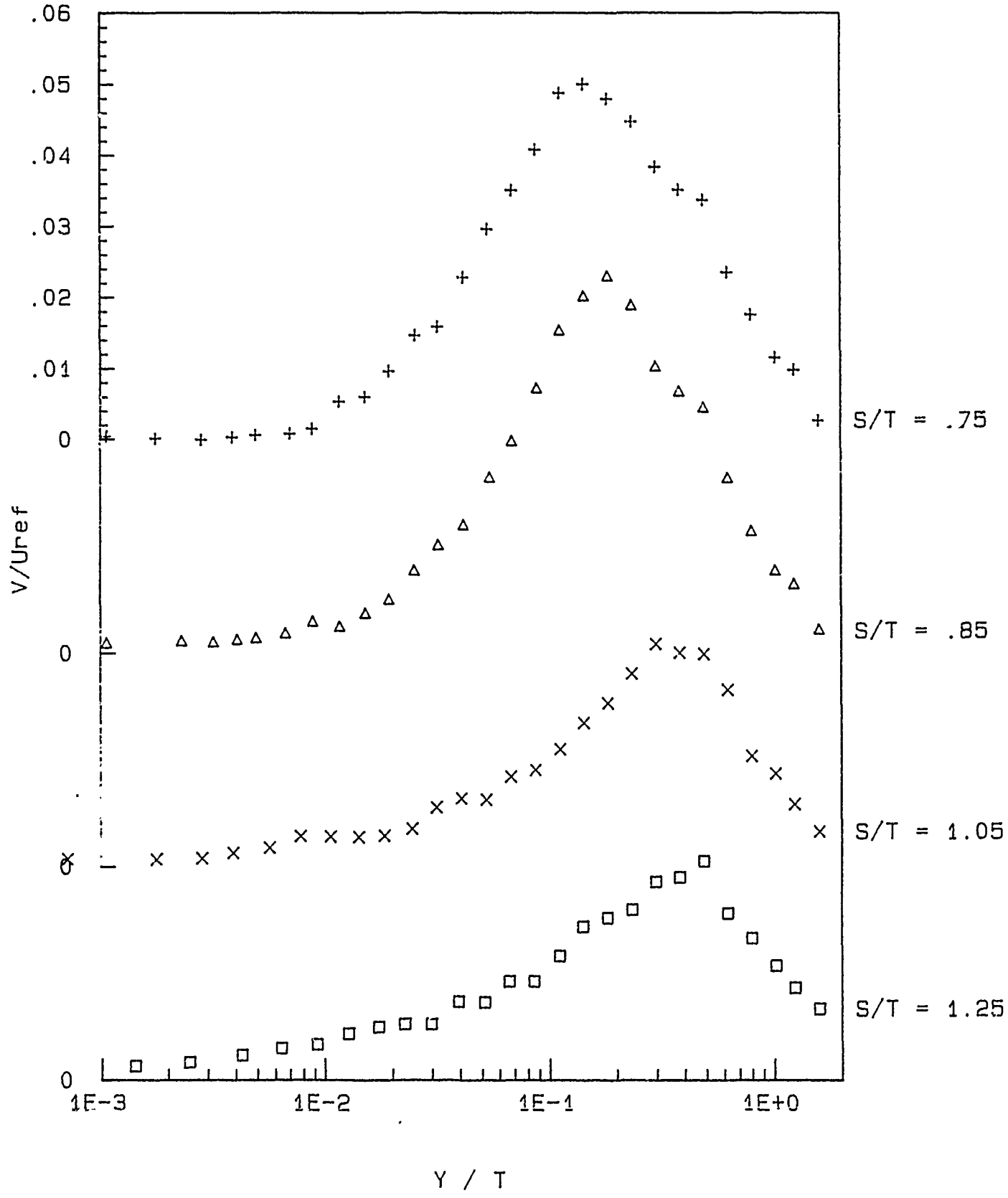


Figure F.5-2(a) Profiles of mean-velocity component V, plane 8.

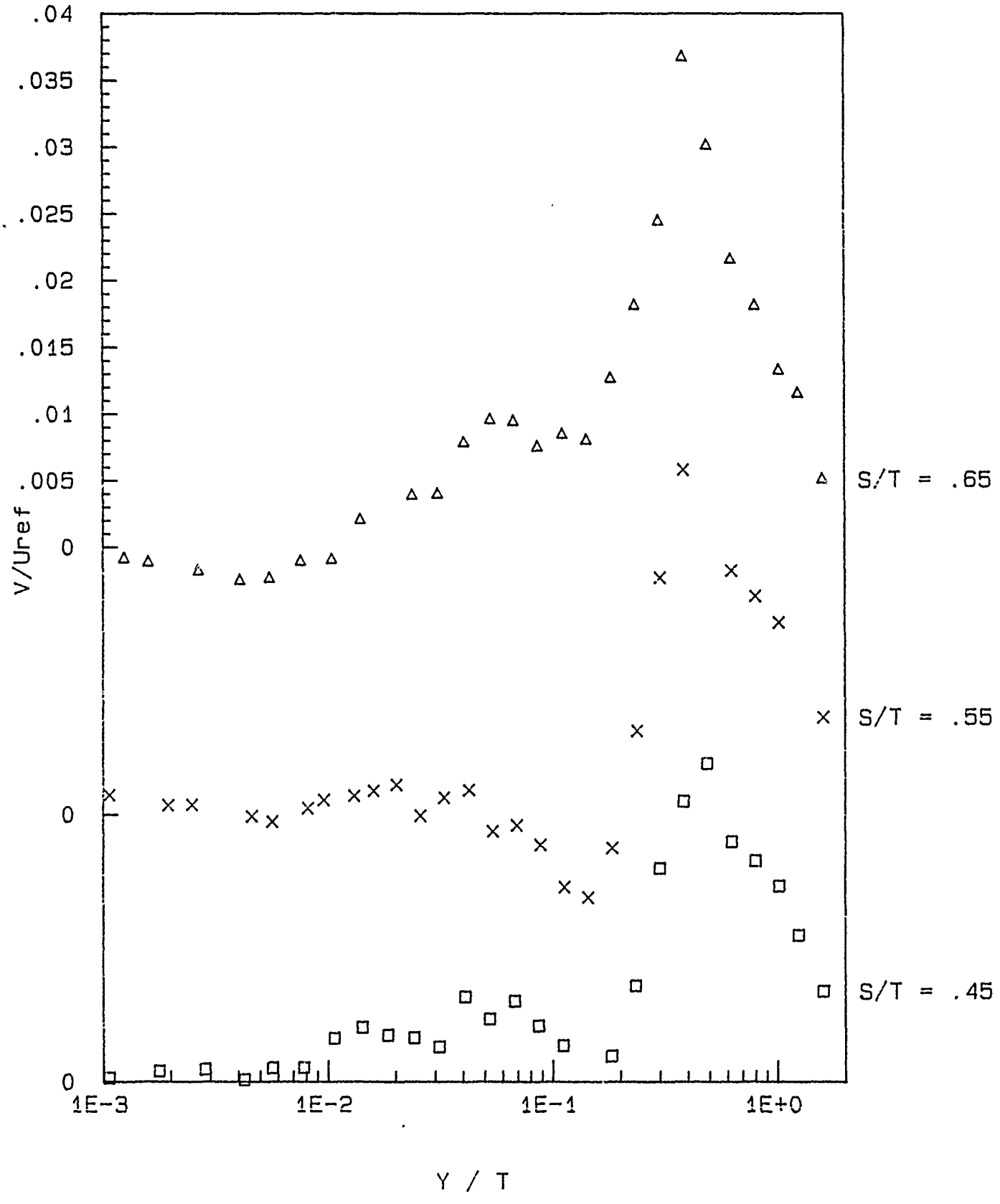


Figure F.5-2(b) Profiles of mean-velocity component V, plane 8.

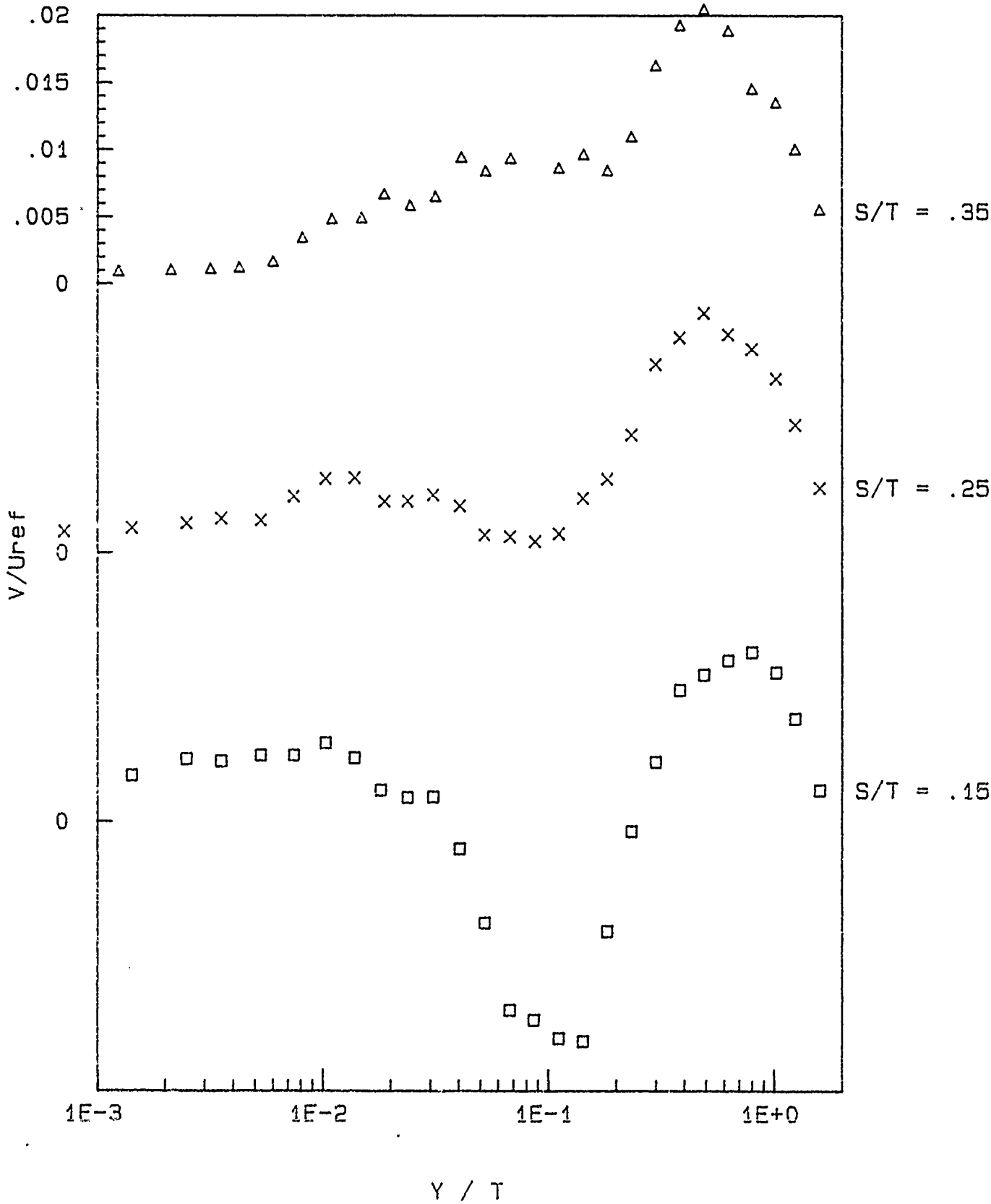


Figure F.5-2(c) Profiles of mean-velocity component V, plane 8.

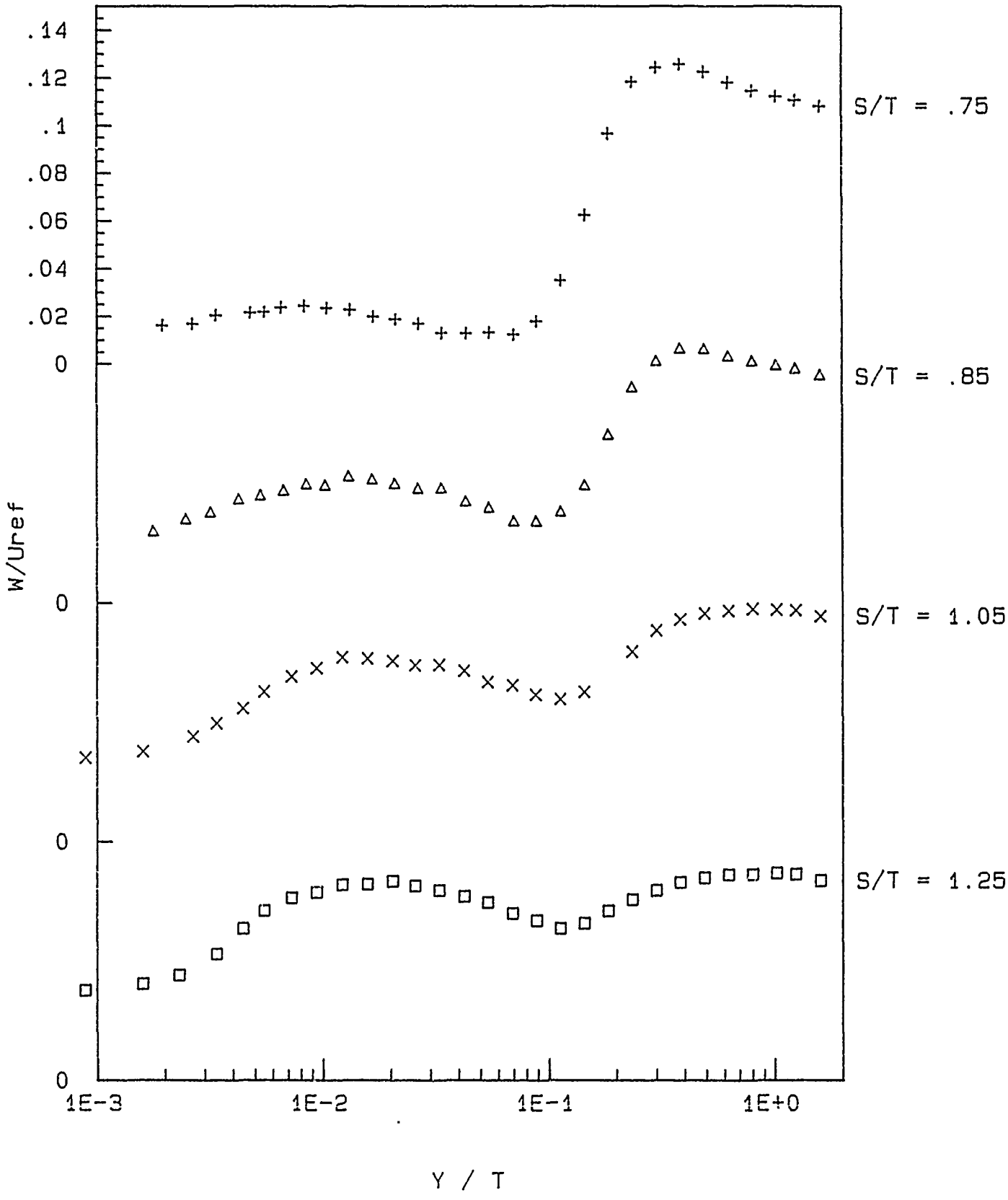


Figure F.5-3(a) Profiles of mean-velocity component W, plane 8.

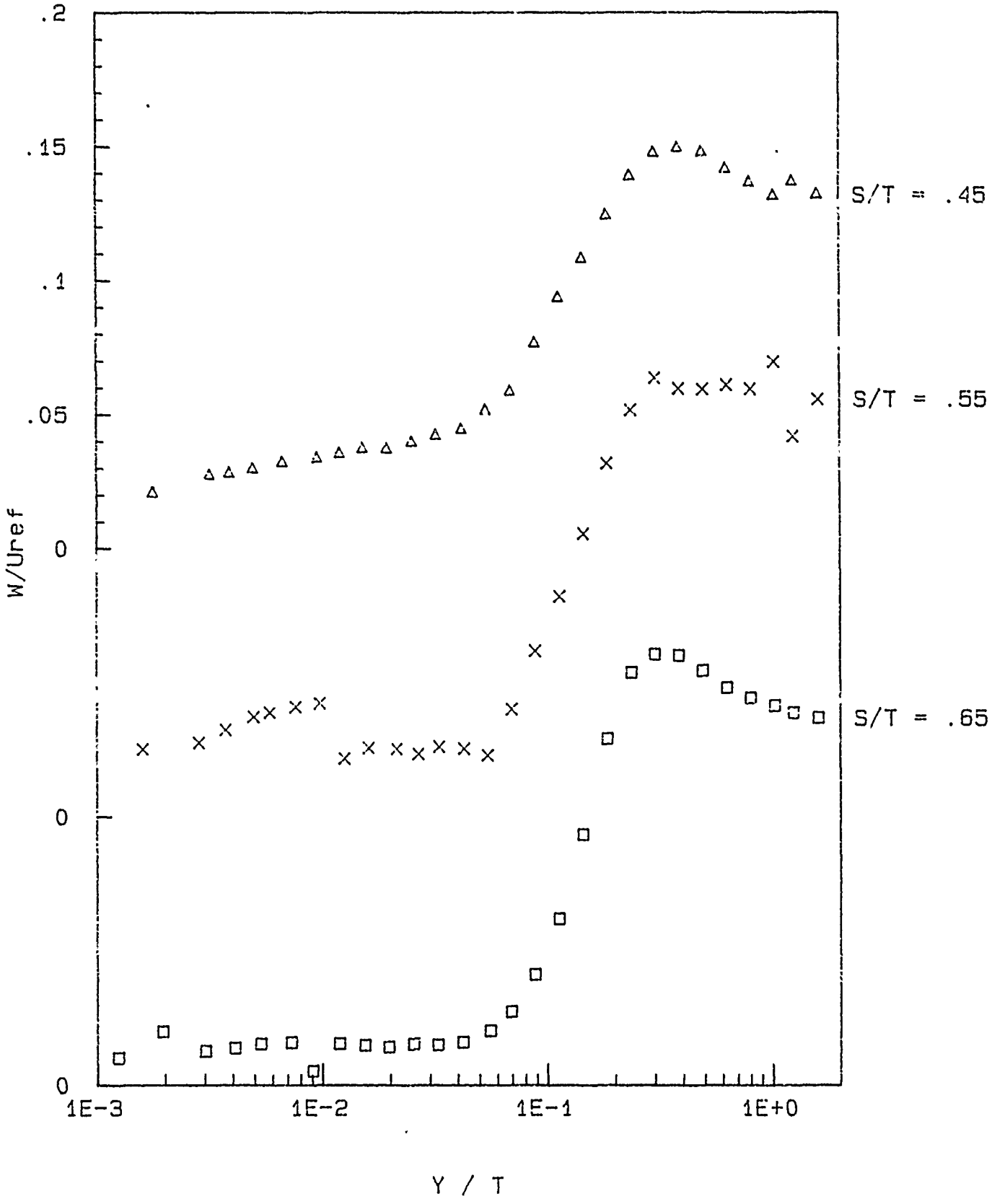


Figure F.5-3(b) Profiles of mean-velocity component W, plane 8.

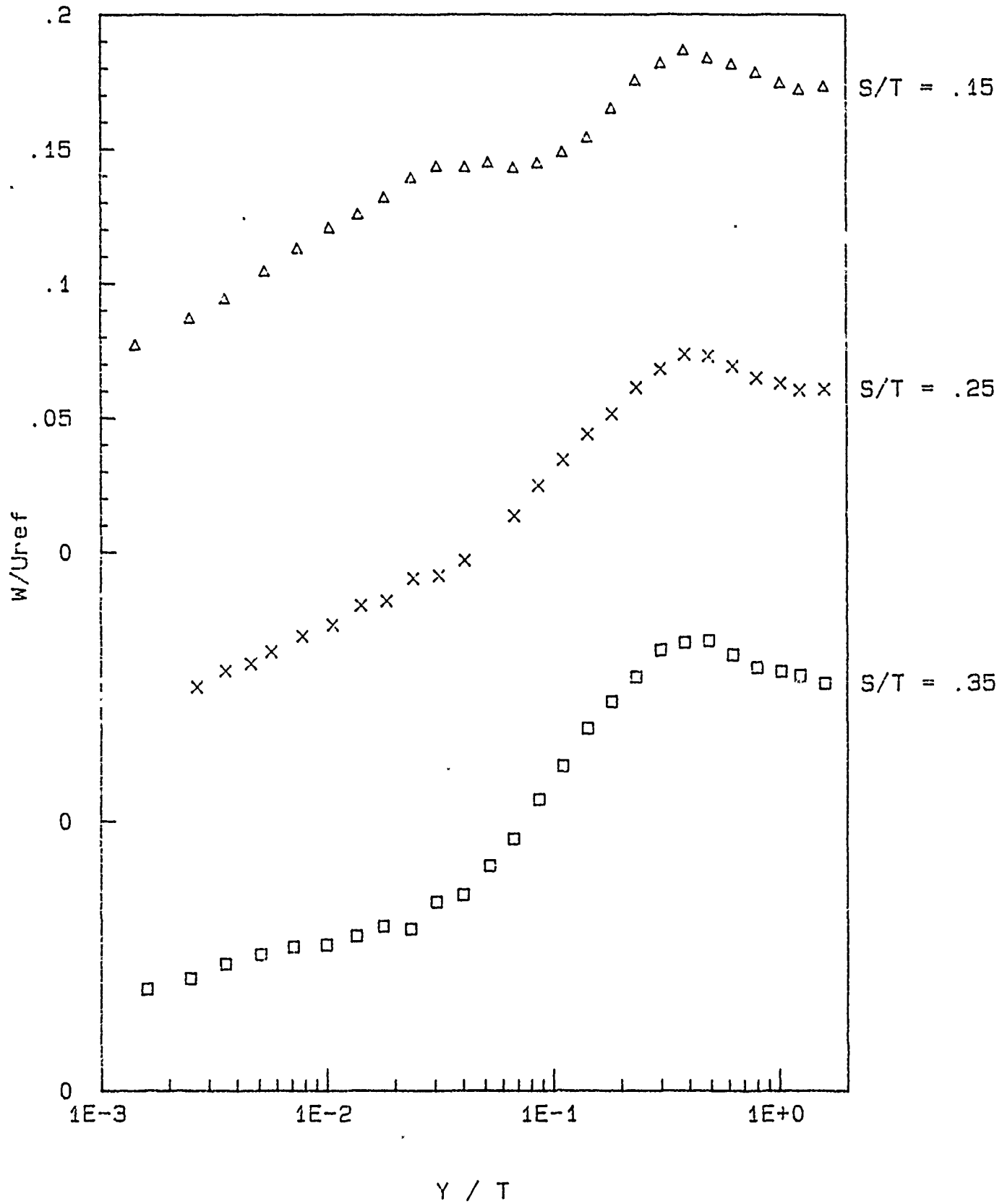


Figure F.5-3(c) Profiles of mean-velocity component W, plane 8.

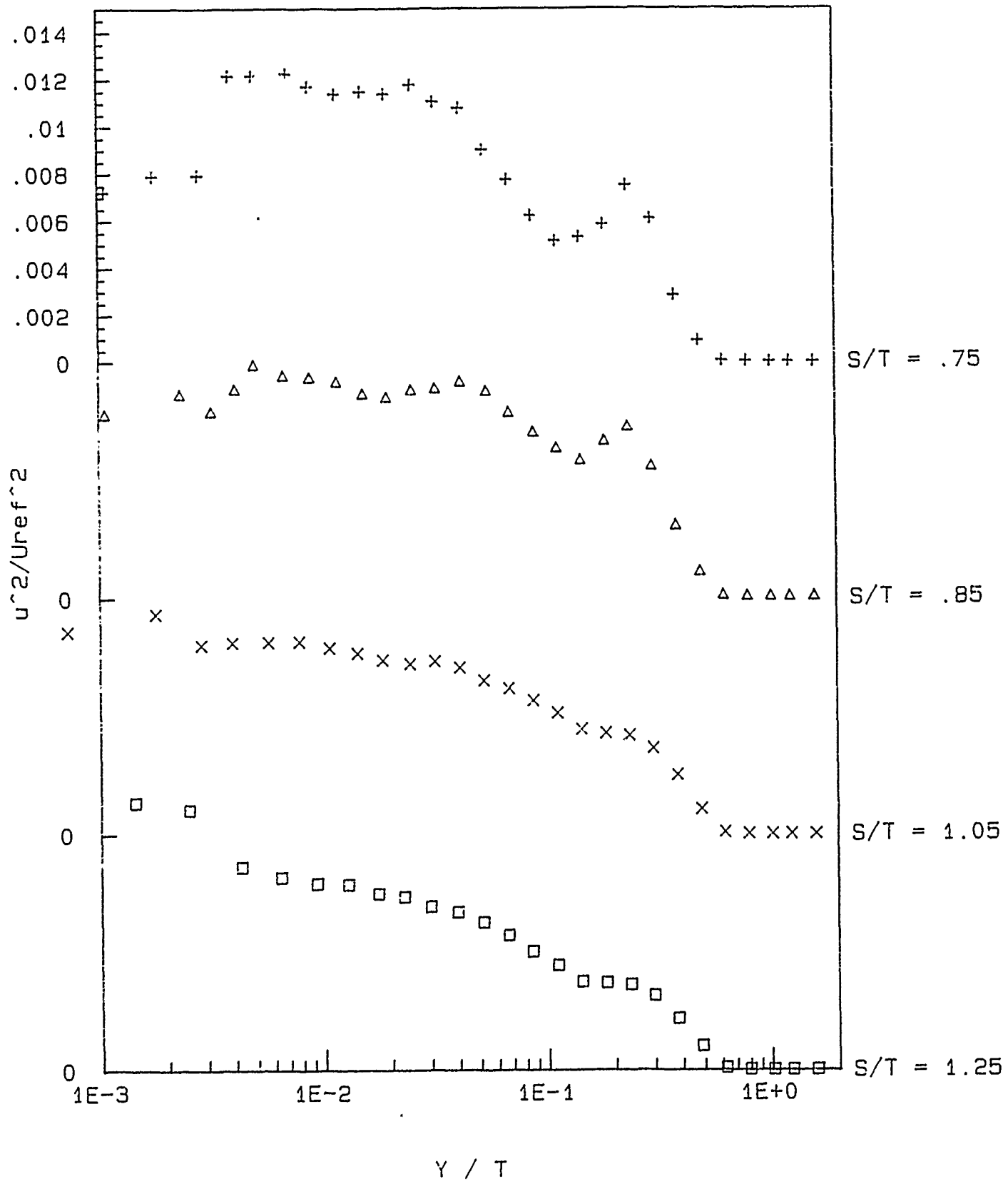


Figure F.5-4(a) Profiles of U component of turbulence normal stress, plane 8.

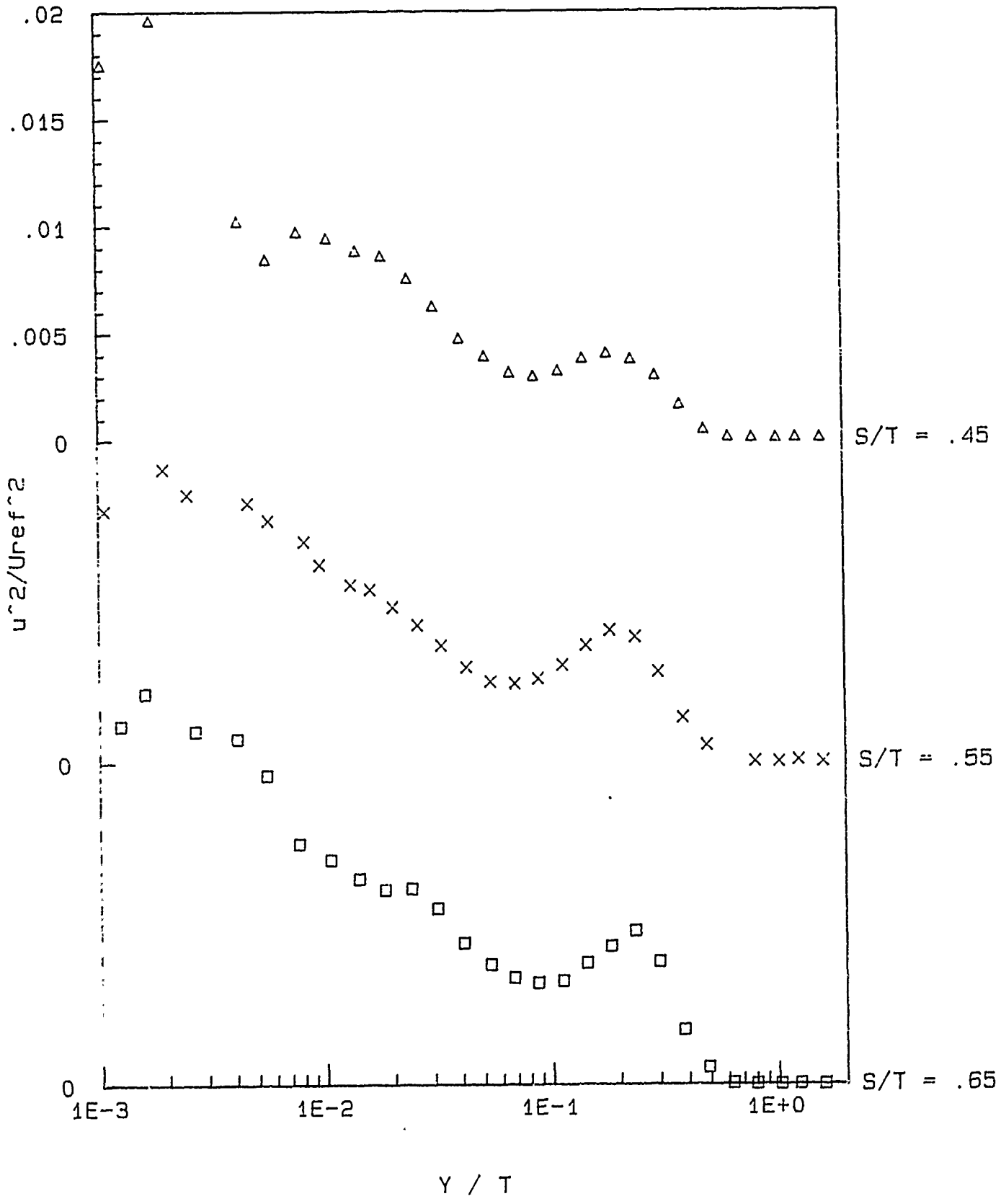


Figure F.5-4(b) Profiles of U component of turbulence normal stress, plane 8.

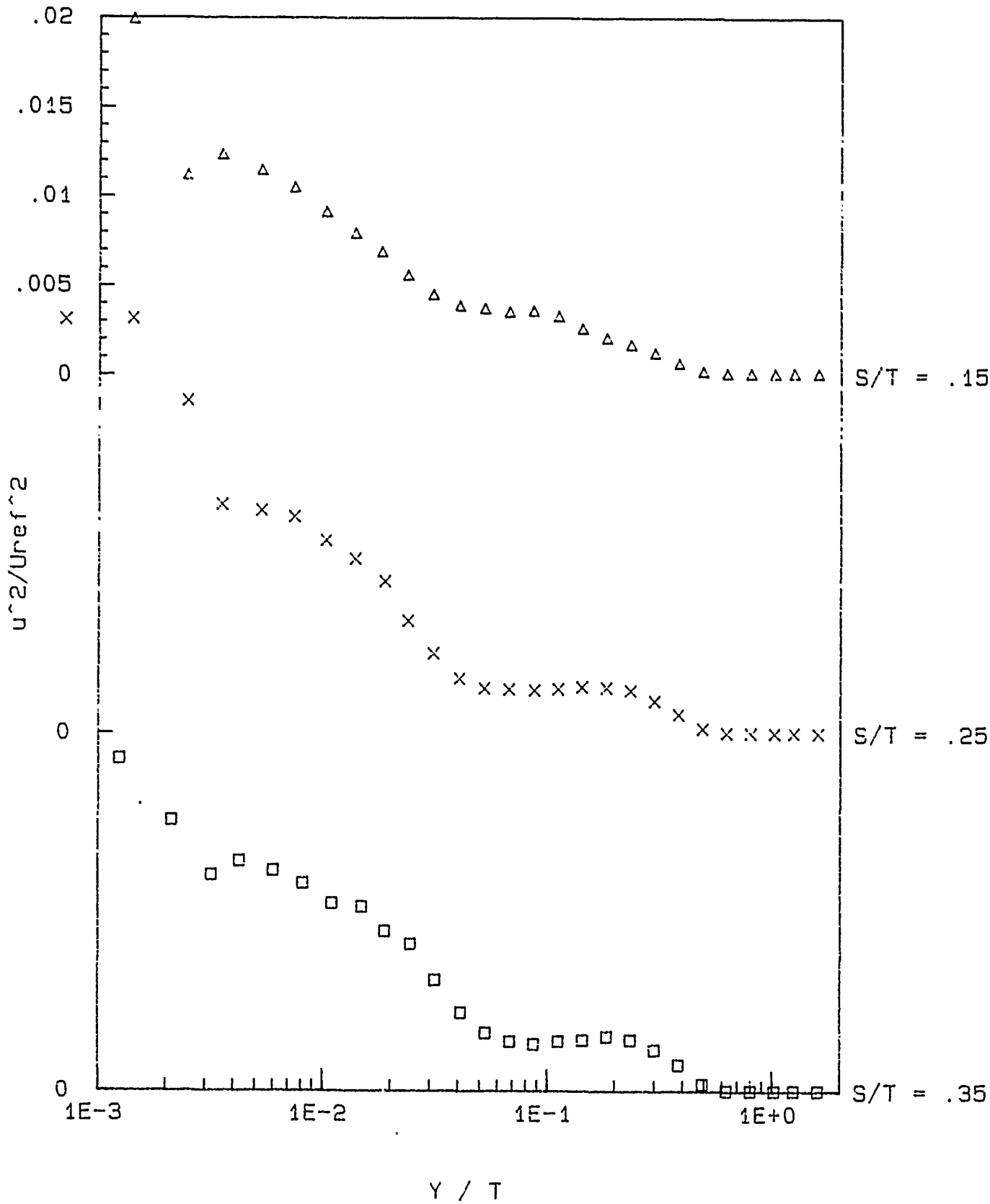
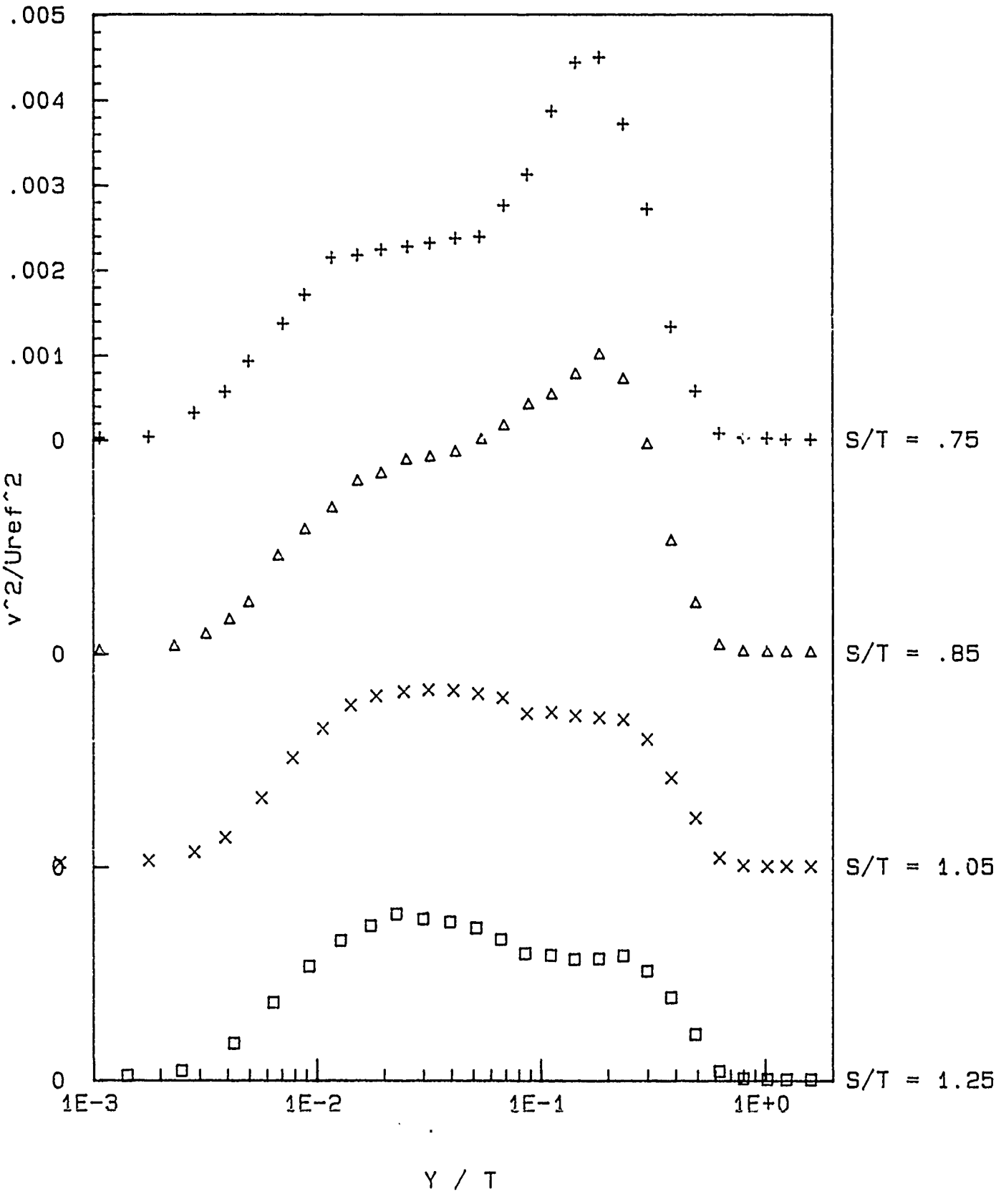


Figure F.5-4(c) Profiles of U component of turbulence normal stress, plane 8.



F_gure F.5-5(a) Profiles of V component of turbulence normal stress, plane 8.

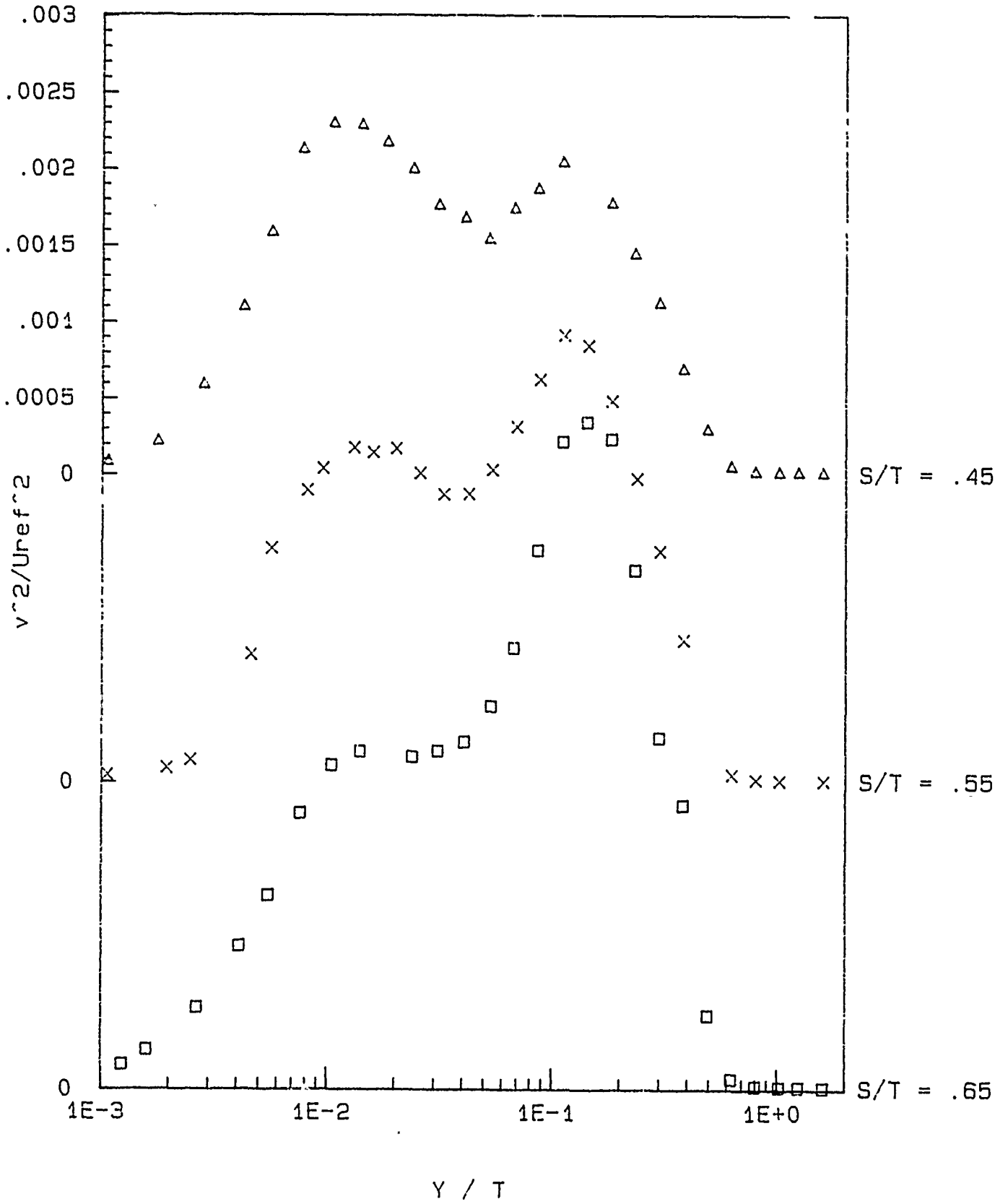


Figure F.5-5(b) Profiles of V component of turbulence normal stress, plane 8.

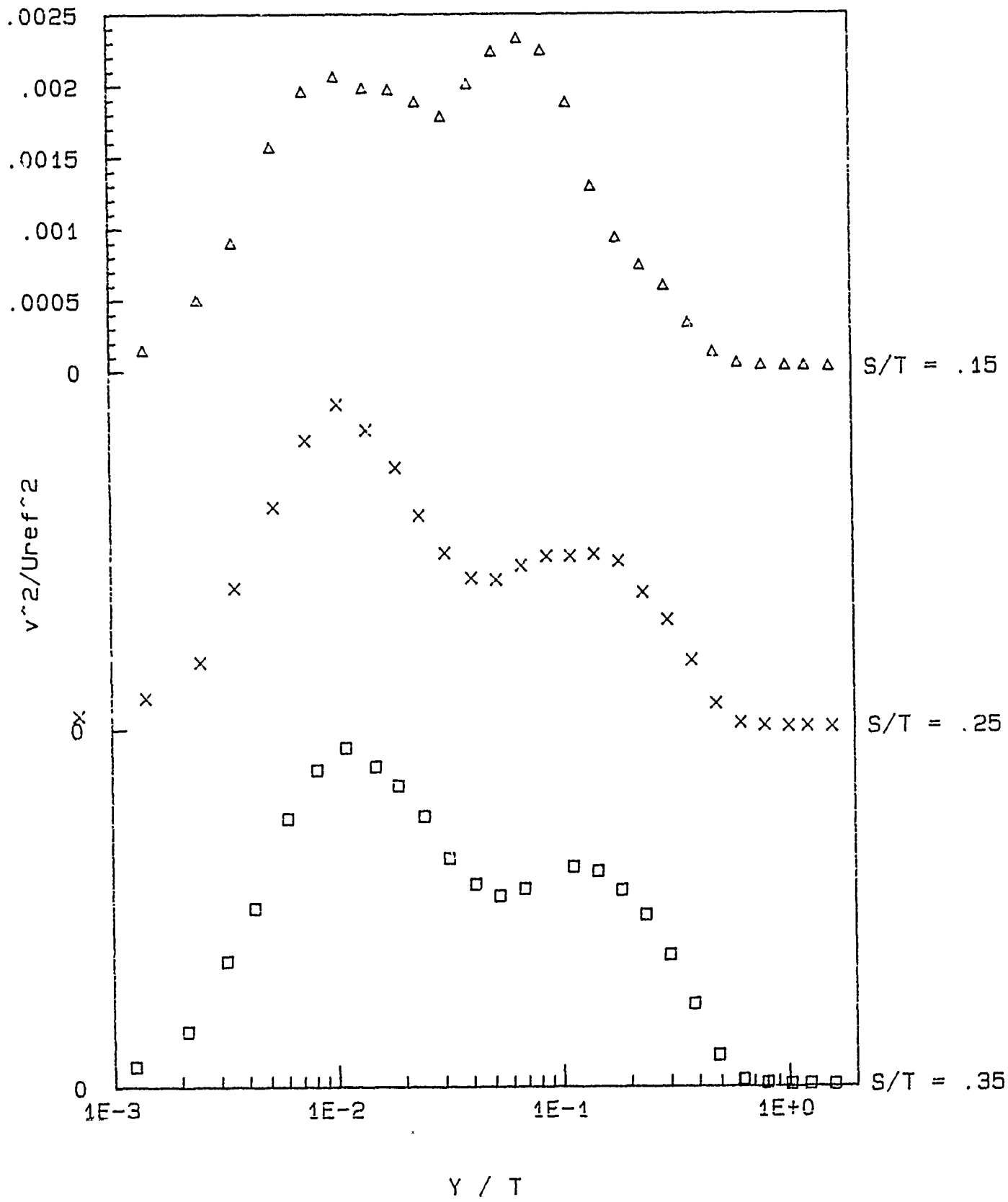


Figure F.5-5(c) Profiles of V component of turbulence normal stress, plane 8.

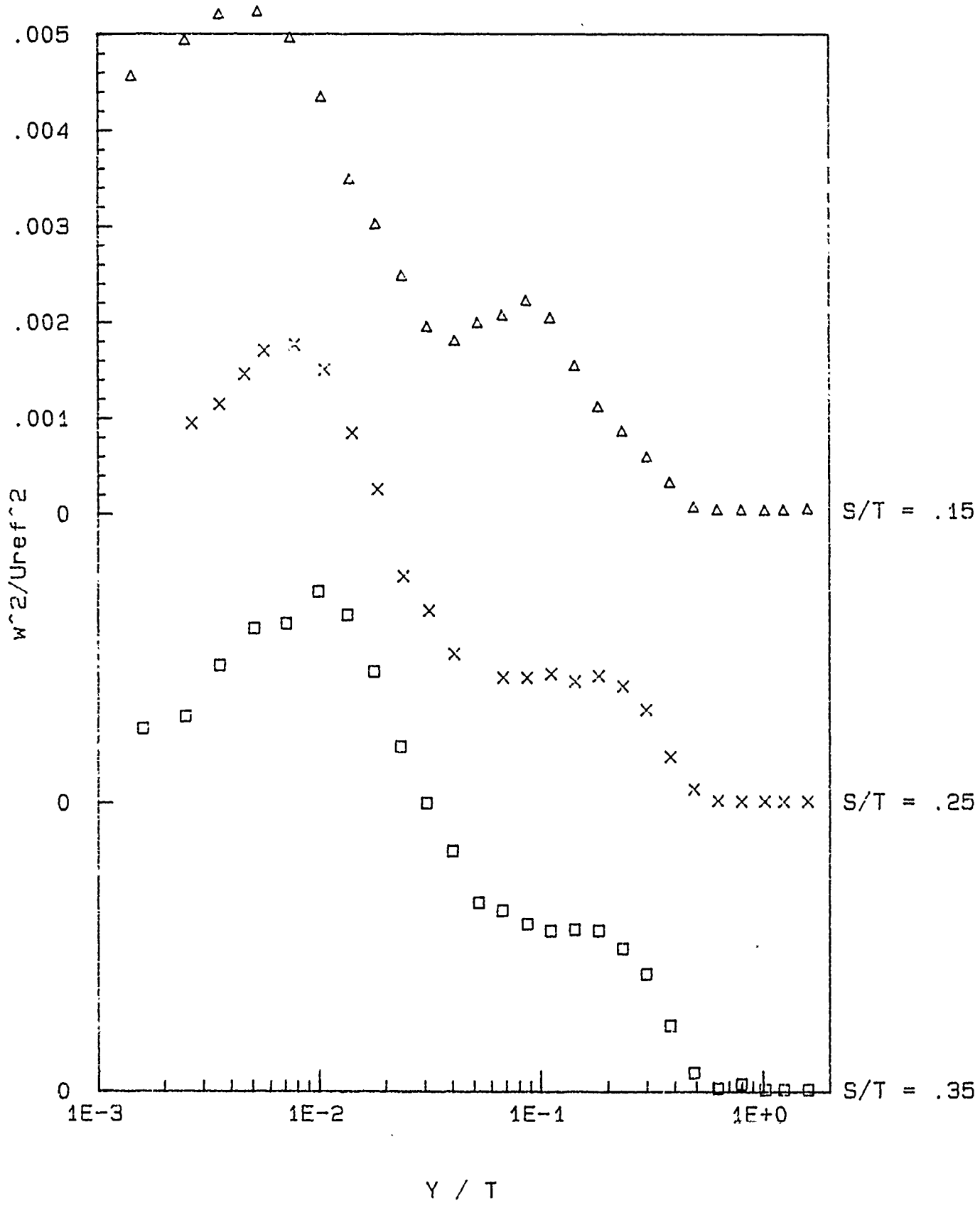


Figure F.5-6(a) Profiles of W component of turbulence normal stress, plane 8.

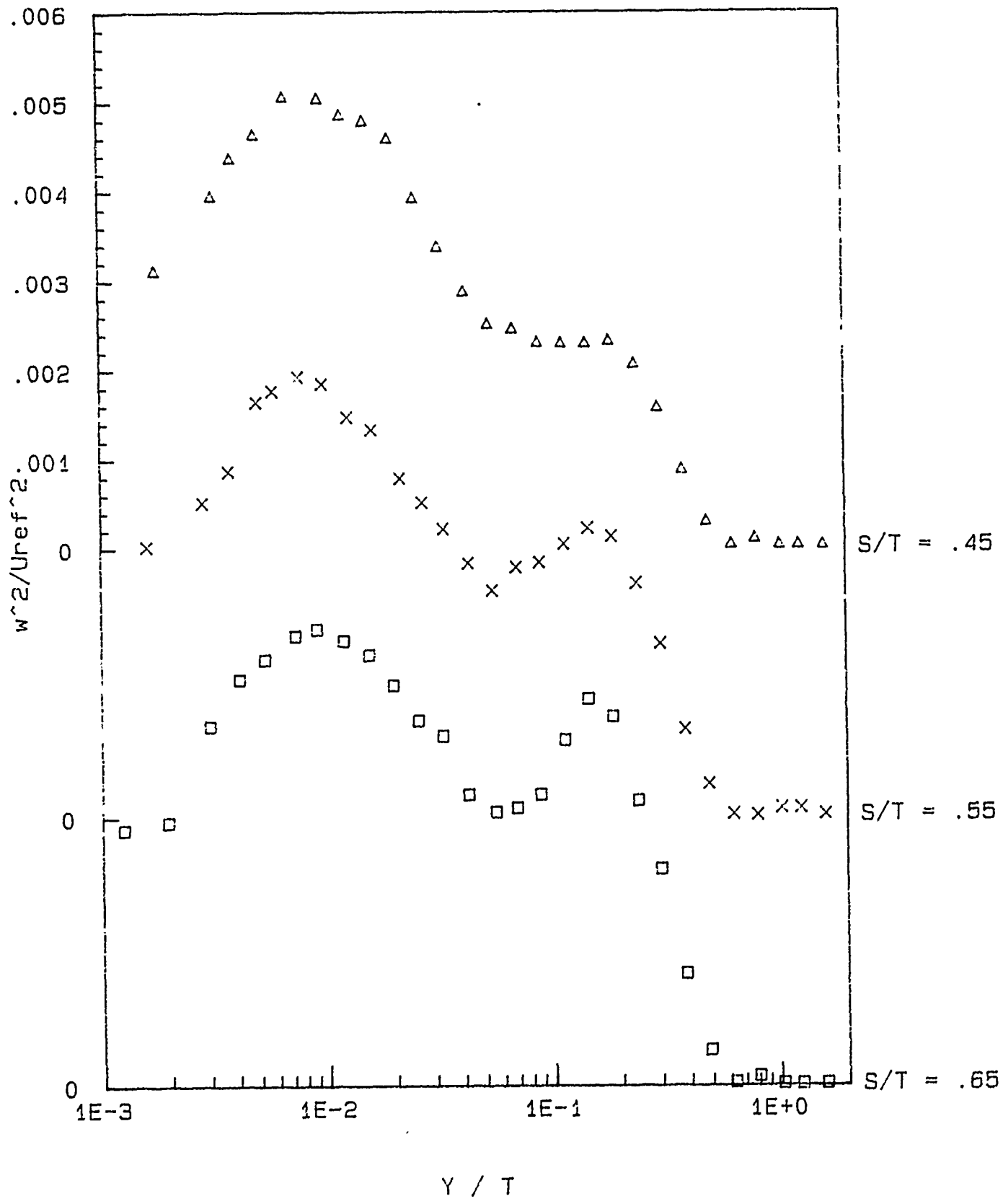


Figure F.5-6(b) Profiles of W component of turbulence normal stress, plane 8.

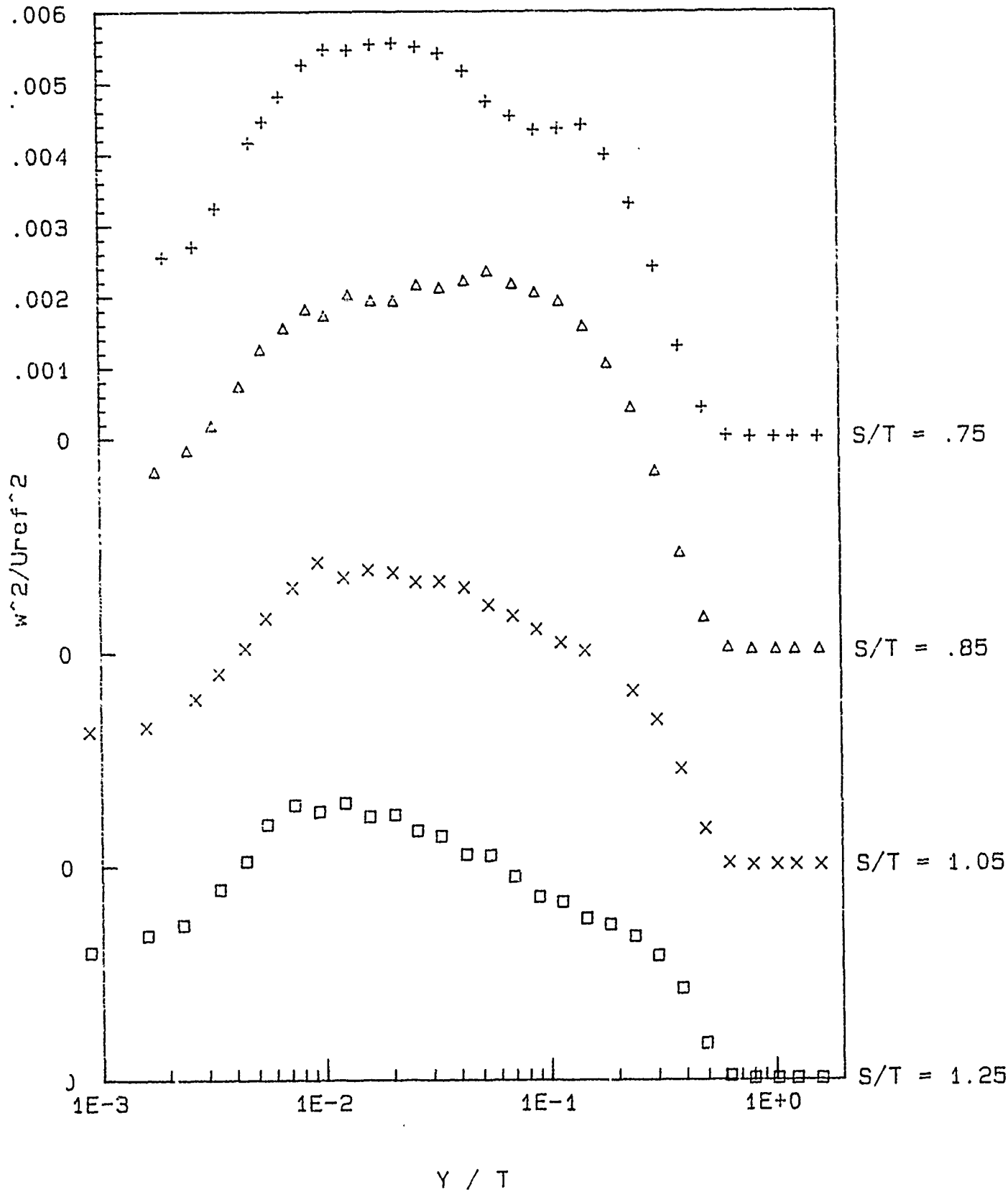


Figure F.5-6(c) Profiles of W component of turbulence normal stress, plane 8.

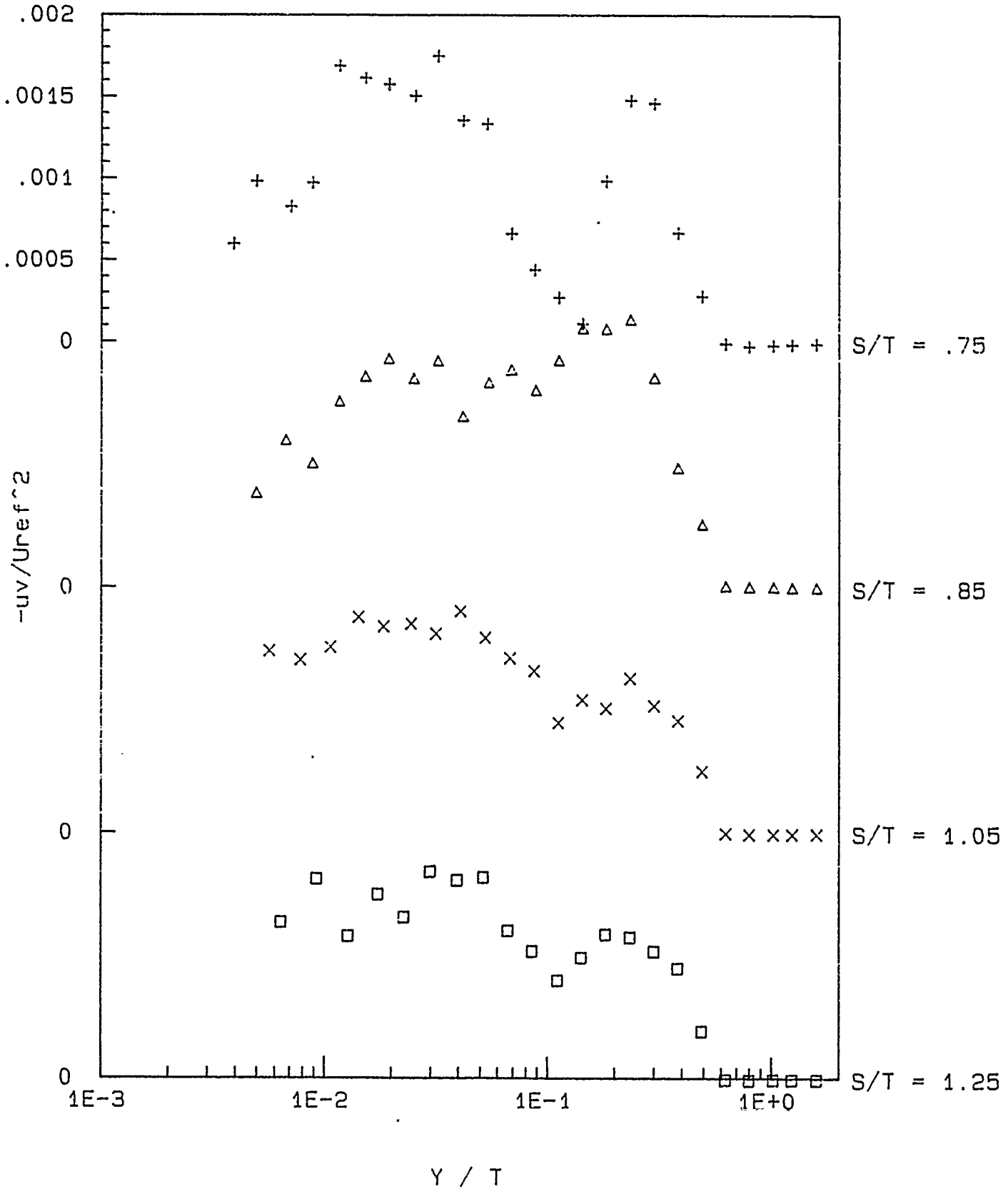


Figure F.5-7(a) Profiles of UV Reynolds shear stress, plane 8.

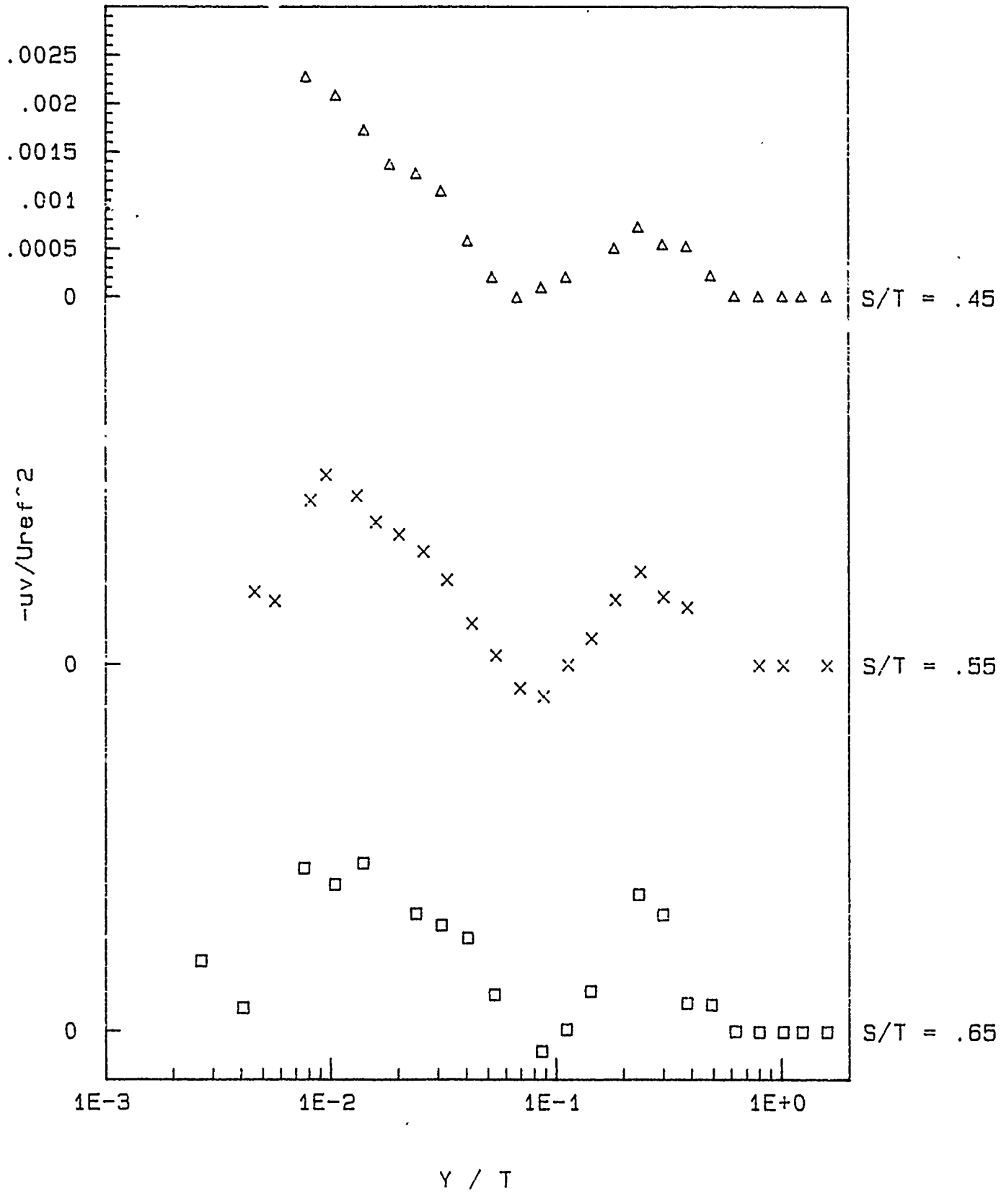


Figure F.5-7(b) Profiles of UV Reynolds shear stress, plane 8.

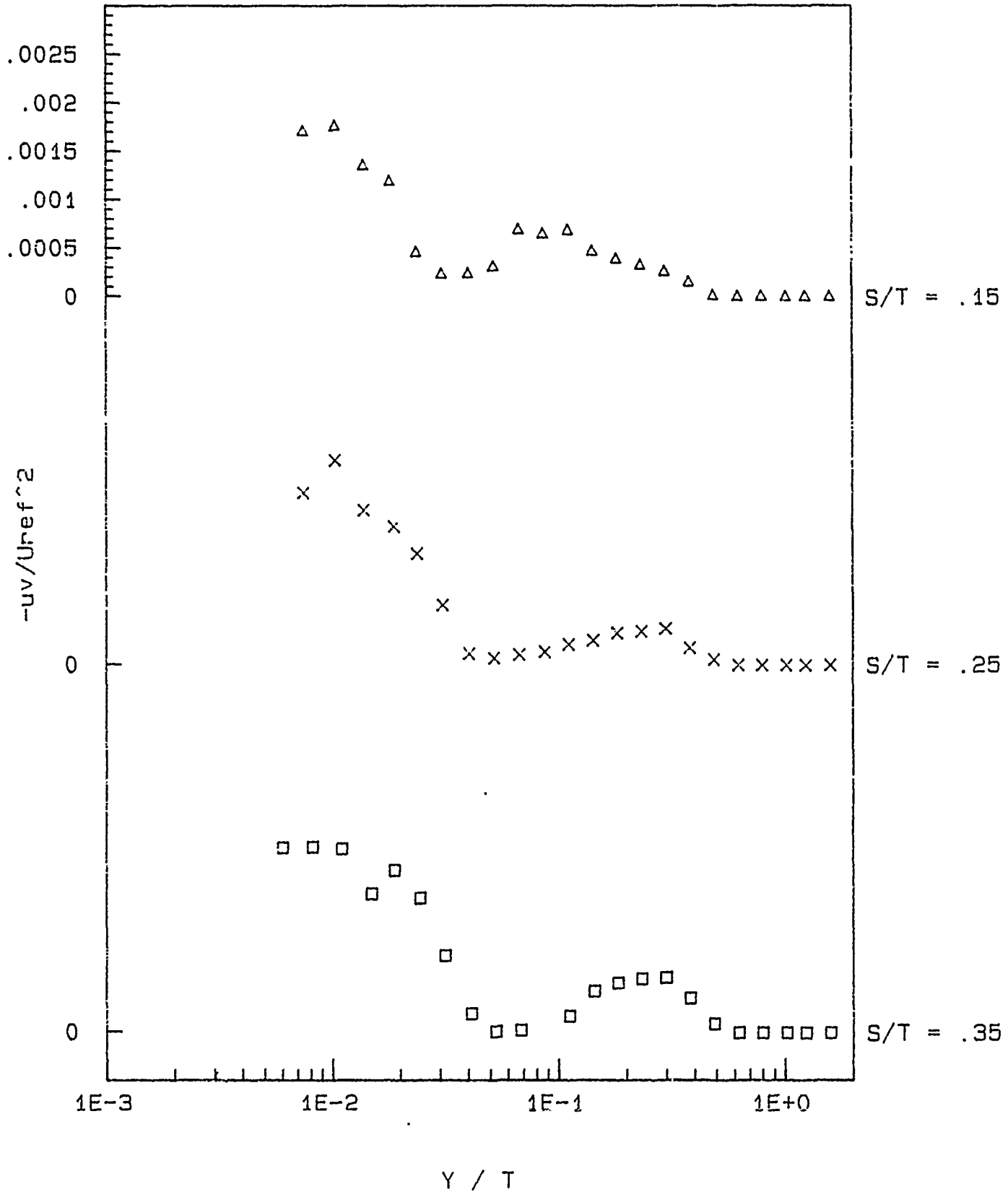


Figure F.5-7(c) Profiles of UV Reynolds shear stress, plane 8.

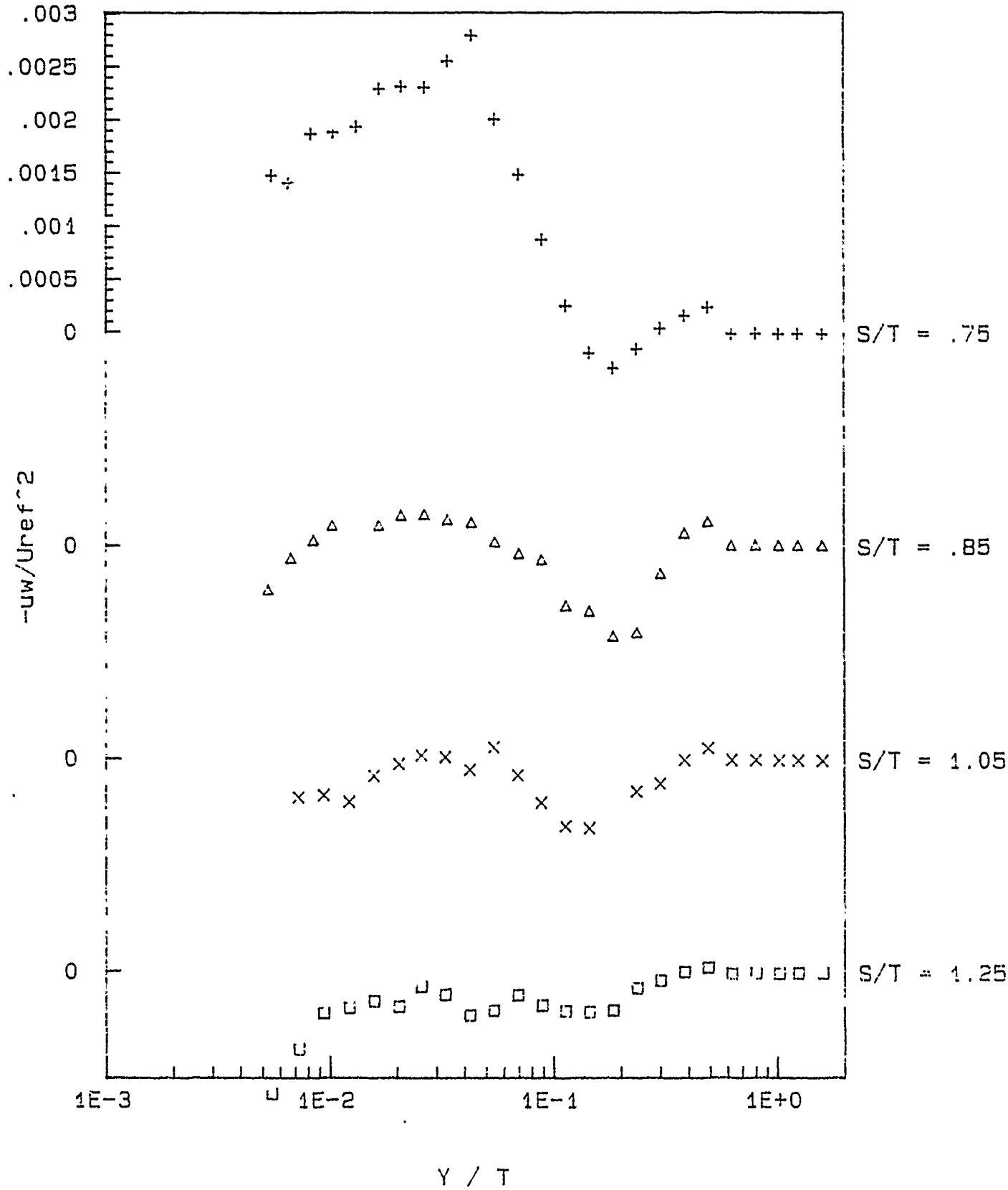


Figure F.5-8(a) Profiles of UW Reynolds shear stress, plane 8.

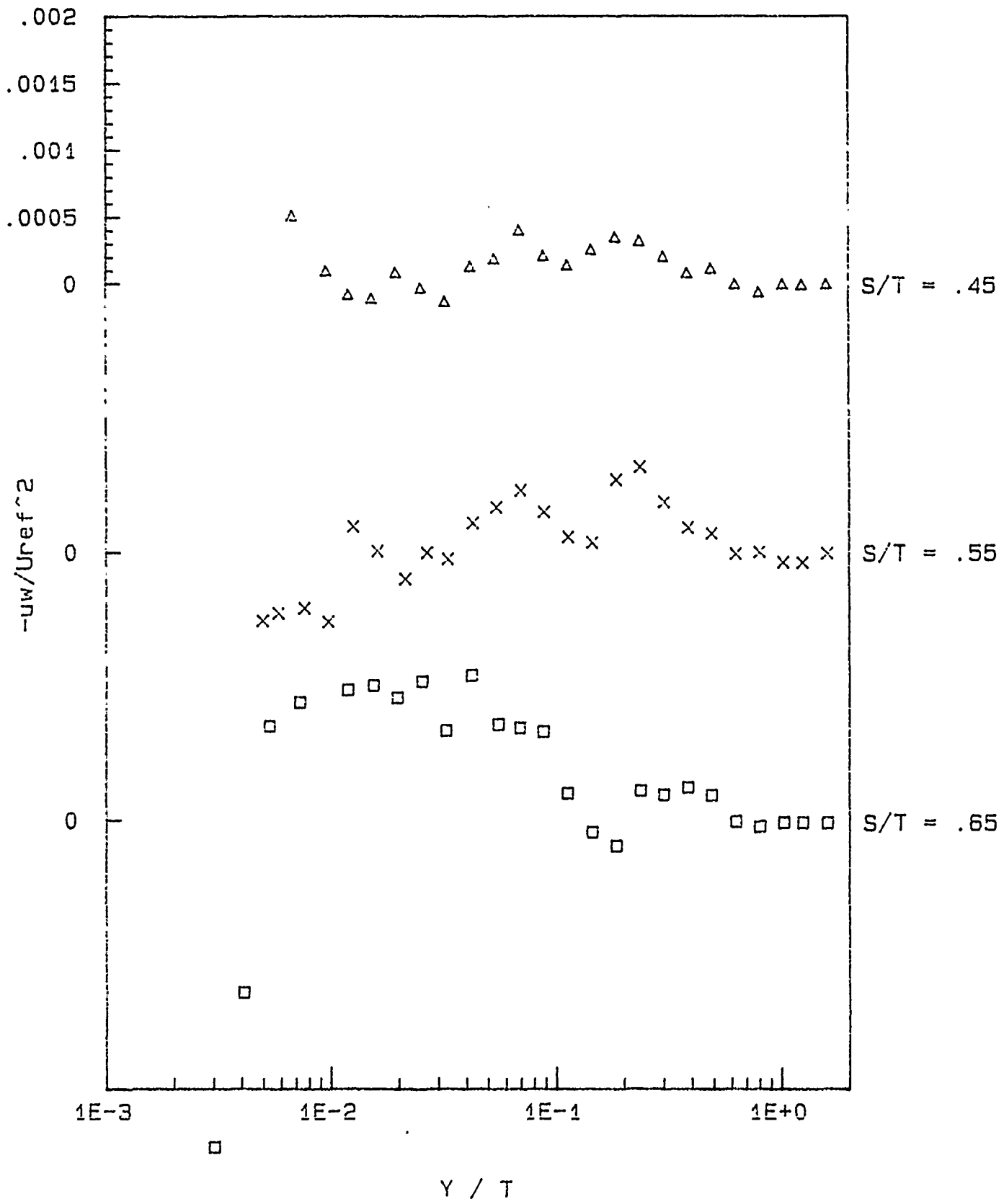


Figure F.5-8(b) Profiles of UW Reynolds shear stress, plane 8.

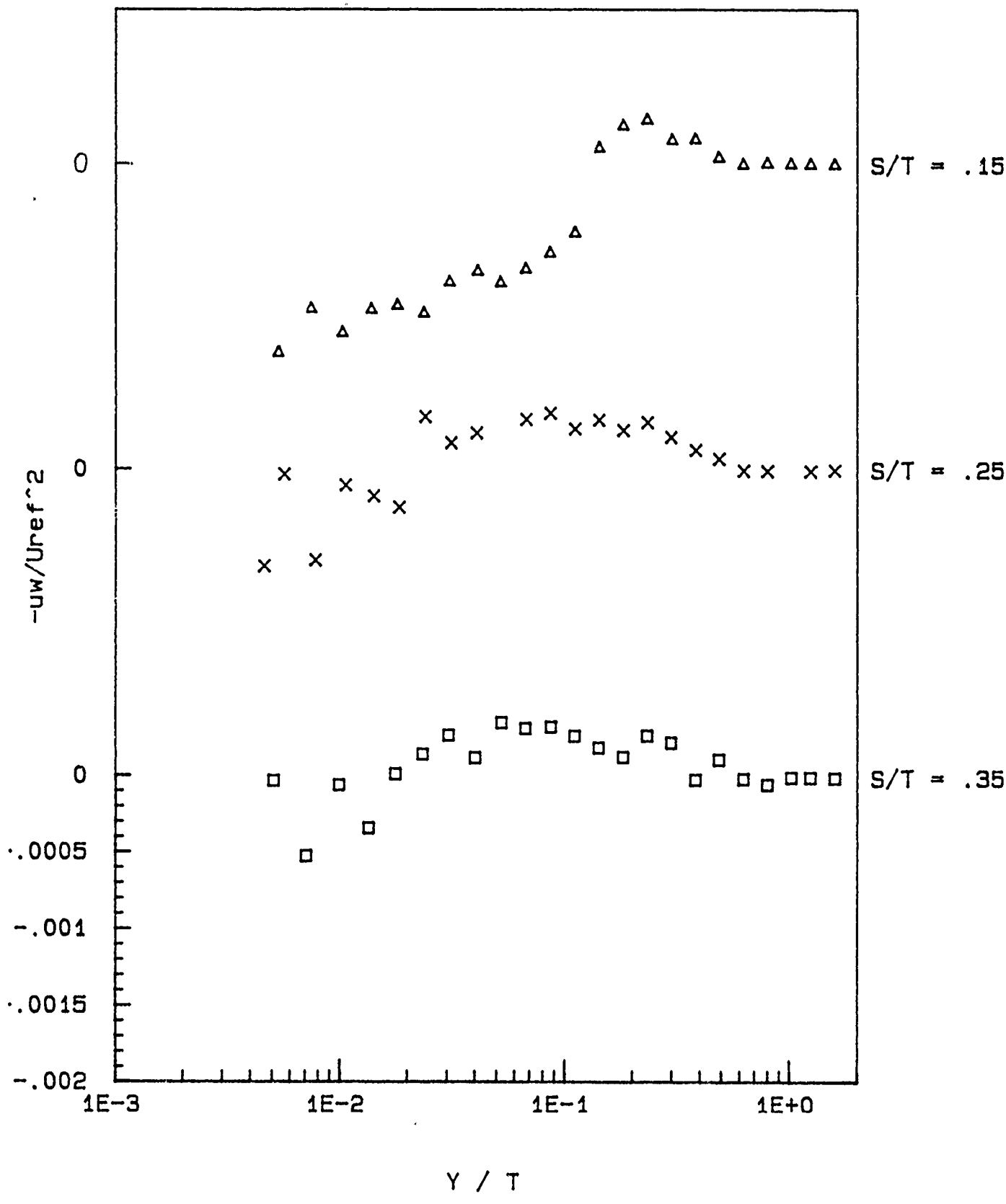


Figure F.5-8(c) Profiles of UW Reynolds shear stress, plane 8.

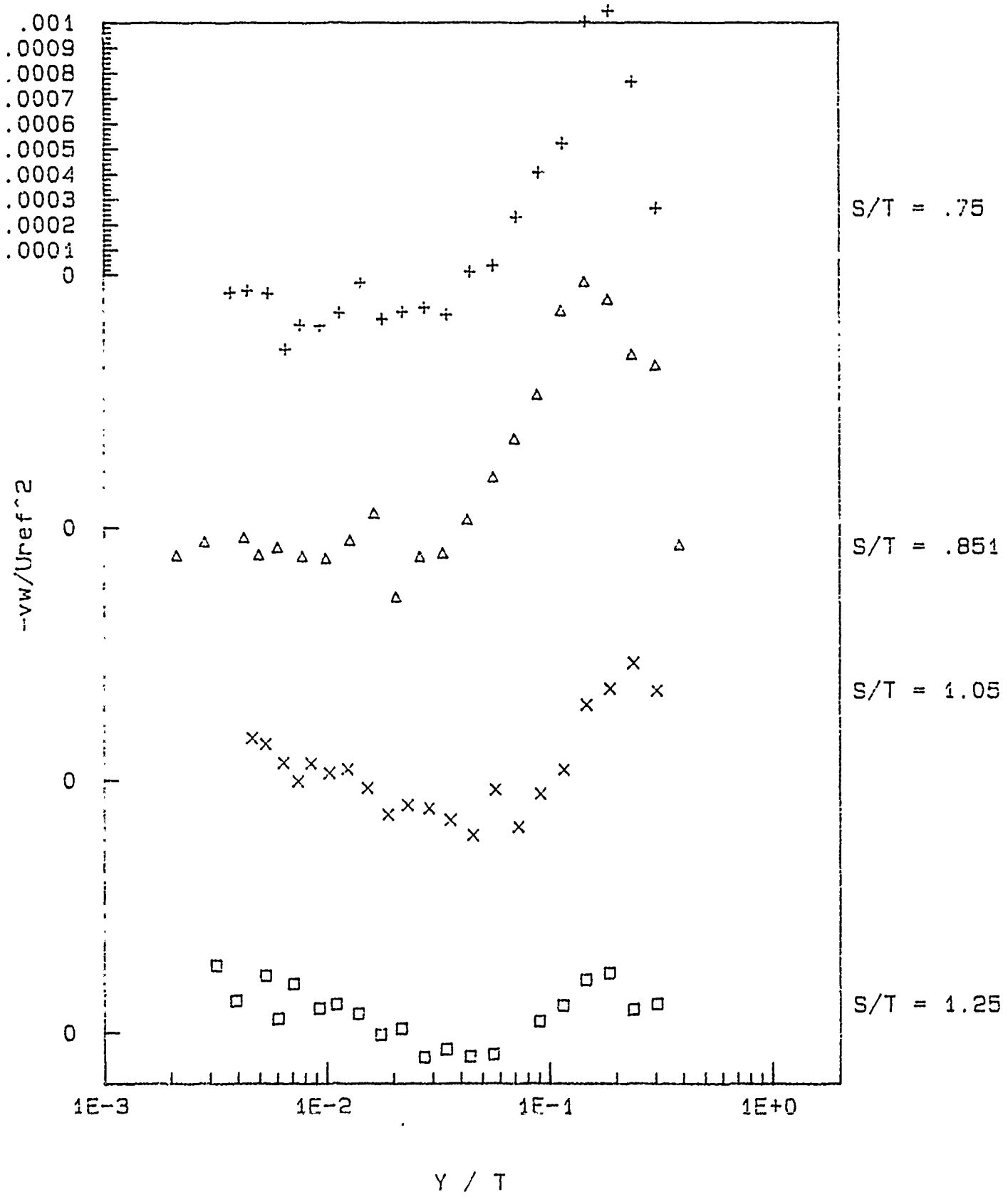


Figure F.5-9(a) Profiles of VW Reynolds shear stress, plane 8.

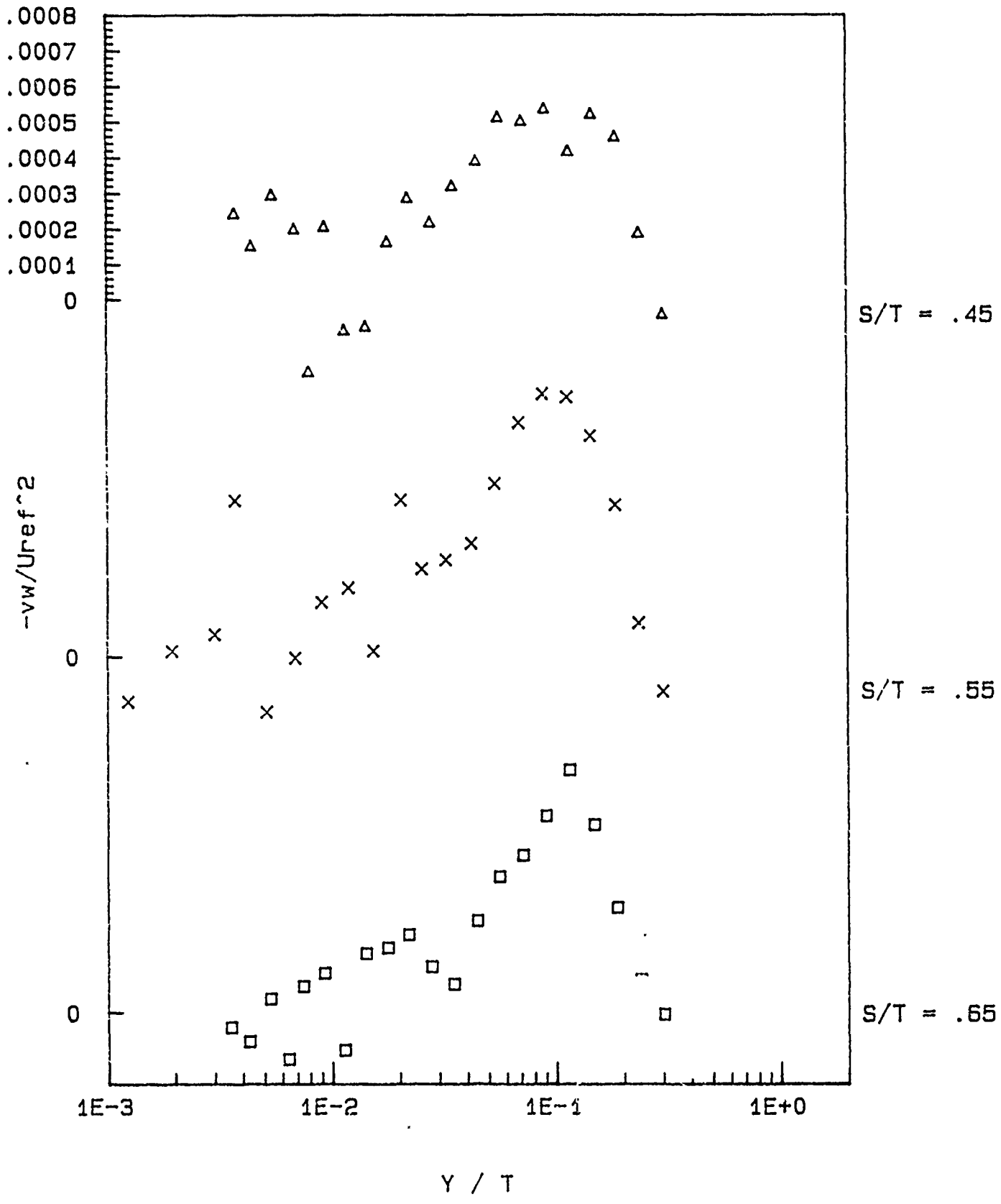


Figure F.5-9(b) Profiles of VW Reynolds shear stress, plane 8.

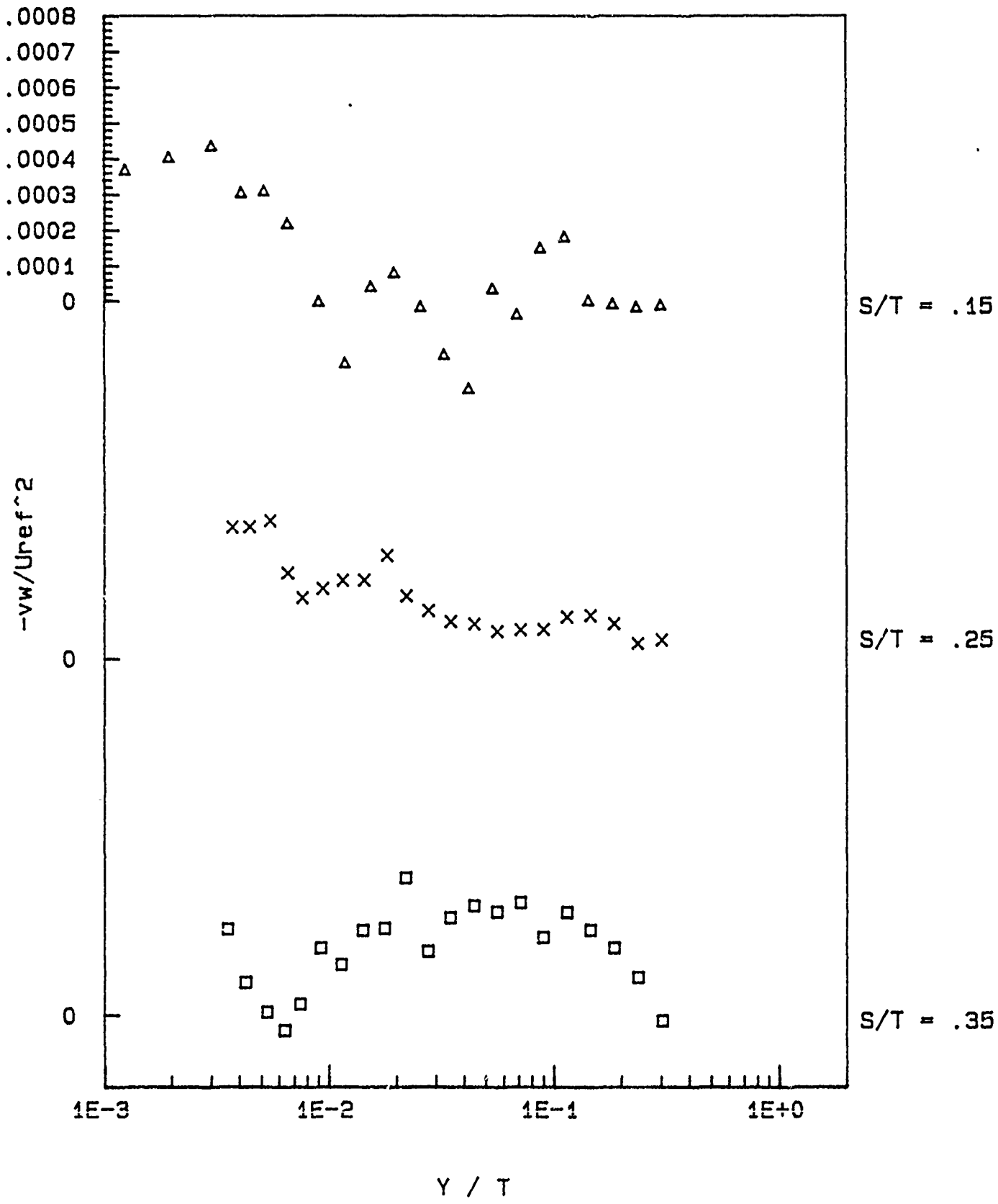


Figure F.5-9(c) Profiles of VW Reynolds shear stress, plane 8.

File E580770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.7
density (kilograms per meter cubed) = 1.107523
viscosity (meters squared per second) = 1.656791E-05
Atmospheric pressure (Pascals) = 94670
Velocity of undisturbed free stream (Uref, in m/s) = 27.771
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087402E-03
Estimated momentum thickness Reynolds number = 6851.274
Location of traverse: X/T = 3.187 Z/T =-1.4801 (Plane 8 , S/T = 1.25)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	2.3140E-01	1.1358E-02			1.9785E-03	5.7543E-05	7.1580E-02	2.2797E+00	
2.4788E-03	2.8937E-01	1.1053E-02			2.5174E-03	1.1385E-04	4.2906E-02	1.3884E+00	
4.2493E-03	3.9411E-01	8.6136E-03			3.5048E-03	4.3627E-04	-1.7655E-01	9.9372E-01	
6.3739E-03	4.5485E-01	6.1624E-03	-1.2560E-01	5.9817E-01	4.4713E-03	9.1622E-04	-1.1226E-01	4.0541E-01	-9.5120E-04
9.2068E-03	4.9536E-01	7.9003E-03	-9.7268E-02	9.1256E-02	5.0380E-03	1.3445E-03	5.8901E-03	1.0381E-01	-1.2166E-03
1.2748E-02	5.2131E-01	7.8658E-03	5.0226E-03	-1.0073E-0.	6.5487E-03	1.6456E-03	7.6914E-02	1.4926E-01	-8.6722E-04
1.7351E-02	5.5167E-01	7.4805E-03	2.7767E-02	-2.7563E-01	7.4712E-03	1.8203E-03	1.0334E-01	1.5168E-02	-1.1221E-03
2.2663E-02	5.7994E-01	7.3456E-03	6.5124E-02	-3.1774E-01	7.8799E-03	1.9579E-03	1.4036E-01	-7.8564E-03	-9.6135E-04
2.9745E-02	6.0414E-01	6.9219E-03	3.7738E-02	-3.6062E-01	7.9019E-03	1.8999E-03	1.2871E-01	-1.9631E-02	-1.2607E-03
3.9306E-02	6.3926E-01	6.6939E-03	3.6140E-02	-3.3621E-01	1.1071E-02	1.8619E-03	1.9314E-01	1.2688E-02	-1.2082E-03
5.1346E-02	6.6712E-01	6.2585E-03	-3.0183E-02	-2.6696E-01	1.0952E-02	1.7932E-03	1.8451E-01	-6.4343E-02	-1.2260E-03
6.6218E-02	7.0032E-01	5.7128E-03	-7.6708E-02	-3.0501E-01	1.3911E-02	1.6575E-03	1.5252E-01	-1.6423E-02	-9.0050E-04
8.4986E-02	7.3205E-01	5.0122E-03	-8.3529E-02	-2.4578E-01	1.3895E-02	1.4923E-03	1.3697E-01	-2.1634E-02	-7.7458E-04
1.1048E-01	7.6155E-01	4.4318E-03	-2.9526E-03	-2.2171E-01	1.7497E-02	1.4703E-03	1.5196E-01	6.8256E-02	-5.9636E-04
1.4093E-01	7.9274E-01	3.7378E-03	-8.4750E-03	-2.7610E-01	2.1626E-02	1.4244E-03	2.3159E-02	-5.6309E-02	-7.3599E-04
1.8139E-01	8.2205E-01	3.6803E-03	-1.7772E-02	-3.8885E-01	2.2839E-02	1.4320E-03	2.3724E-02	-1.5209E-01	-8.7788E-04
2.3300E-01	8.5493E-01	3.6069E-03	-1.2442E-01	-3.7381E-01	2.3996E-02	1.4675E-03	1.0297E-01	-1.7049E-01	-8.6009E-04
2.9780E-01	8.9897E-01	3.1441E-03	-2.8994E-01	-3.1522E-01	2.7903E-02	1.2878E-03	2.1587E-01	-9.1283E-02	-7.7406E-04
3.8031E-01	9.5013E-01	2.1741E-03	-4.6805E-01	-1.6399E-01	2.8544E-02	9.7704E-04	4.5016E-01	2.6323E-01	-6.7081E-04
4.8654E-01	1.0021E+00	1.0134E-03	-9.8321E-01	7.6142E-01	3.0819E-02	5.4231E-04	6.8382E-01	7.6708E-01	-2.8580E-04
6.2252E-01	1.0311E+00	8.6114E-05	-1.8049E-01	1.1796E+00	2.3456E-02	1.1030E-04	1.1976E+00	2.8981E+00	1.0057E-05
7.9568E-01	1.0324E+00	2.1368E-05	1.4674E-01	-1.8435E-01	1.9950E-02	2.5826E-05	1.6720E-01	-1.2616E-01	1.2308E-05
1.0170E+00	1.0337E+00	1.6903E-05	1.4600E-01	-1.9007E-01	1.6079E-02	1.7517E-05	1.4026E-01	-1.2441E-01	1.0352E-05
1.2362E+00	1.0349E+00	1.6566E-05	9.8694E-02	-1.6998E-01	1.2987E-02	1.5264E-05	-1.6745E-02	-2.4087E-01	1.0384E-05
1.5903E+00	1.0328E+00	1.6443E-05	1.1663E-01	-2.2612E-01	1.0004E-02	1.4290E-05	-5.3862E-03	-2.7758E-01	1.0053E-05

Table F.5-1 Velocity measurements made at S/T = 1.25 with the UV system of the laser anemometer, plane 8

File E581770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.113182
viscosity (meters squared per second) = 1.645381E-05
Atmospheric pressure (Pascals) = 94930
Velocity of undisturbed free stream (Uref, in m/s) = 27.67145
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090339E-03
Estimated momentum thickness Reynolds number = 6878.992
Location of traverse: X/T = 3.187 Z/T =-1.2802 (Plane 8 , S/T = 1.05)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
7.0822E-04	1.9061E-01	8.5961E-03			1.0258E-03	5.3773E-05	1.1115E-01	2.0582E+00	
1.7705E-03	2.3079E-01	9.3643E-03			1.0158E-03	8.0901E-05	2.8337E-02	1.9430E+00	
2.8328E-03	3.1906E-01	8.0417E-03			1.1782E-03	1.8071E-04	-1.0087E-01	1.5713E+00	
3.8952E-03	3.7251E-01	8.1427E-03			1.9524E-03	3.5342E-04	-3.2751E-01	1.4890E+00	
5.6657E-03	4.3728E-01	8.1505E-03	-8.0888E-02	7.6648E-01	2.6977E-03	8.1713E-04	-1.6953E-01	8.0844E-01	-1.1108E-03
7.7904E-03	4.7199E-01	8.1827E-03	-2.3033E-02	9.5140E-02	4.3053E-03	1.2887E-03	-1.6691E-01	3.6029E-01	-1.0567E-03
1.0623E-02	5.0006E-01	7.9005E-03	2.4217E-02	-1.6924E-01	4.2788E-03	1.6340E-03	2.7225E-02	2.0477E-01	-1.1346E-03
1.4164E-02	5.2183E-01	7.6856E-03	4.8696E-02	-3.0347E-01	4.1845E-03	1.9079E-03	9.9273E-02	1.6174E-01	-1.3175E-03
1.8414E-02	5.4293E-01	7.3805E-03	1.2458E-01	-1.8588E-01	4.3712E-03	2.0163E-03	9.0875E-02	2.8535E-03	-1.2605E-03
2.4433E-02	5.7153E-01	7.2327E-03	3.7499E-02	-3.6064E-01	5.3333E-03	2.0656E-03	7.6327E-02	2.1771E-02	-1.2774E-03
3.1516E-02	5.9655E-01	7.3356E-03	4.7133E-02	-3.4776E-01	8.3904E-03	2.0879E-03	1.2535E-01	-3.2340E-02	-1.2155E-03
4.0722E-02	6.2806E-01	7.0682E-03	1.1439E-02	-3.3644E-01	9.6543E-03	2.0820E-03	1.4903E-01	-7.1786E-02	-1.3547E-03
5.2408E-02	6.5639E-01	6.5169E-03	-4.1744E-02	-4.1111E-01	9.4632E-03	2.0429E-03	1.5011E-01	-3.6258E-02	-1.1916E-03
6.7635E-02	6.9123E-01	6.1709E-03	-5.2550E-02	-2.5683E-01	1.2696E-02	1.9943E-03	1.8294E-01	6.5951E-02	-1.0676E-03
8.6756E-02	7.2010E-01	5.6639E-03	-9.5257E-02	-2.4752E-01	1.3666E-02	1.8068E-03	9.2515E-02	-3.7334E-02	-9.8866E-04
1.1154E-01	7.5327E-01	5.1327E-03	-9.6315E-02	-2.4361E-01	1.6557E-02	1.8242E-03	7.2962E-02	-4.9078E-02	-6.7219E-04
1.4235E-01	7.8020E-01	4.4380E-03	-6.6697E-02	-2.1957E-01	2.0270E-02	1.7827E-03	5.2088E-02	-1.6255E-02	-8.1373E-04
1.8237E-01	8.0825E-01	4.2727E-03	-5.4918E-02	-2.4118E-01	2.3038E-02	1.7611E-03	6.1656E-02	-8.4031E-02	-7.6004E-04
2.3336E-01	8.4603E-01	4.1820E-03	-1.1320E-01	-3.7059E-01	2.7206E-02	1.7387E-03	1.1536E-01	-1.9130E-02	-9.4509E-04
2.9851E-01	8.9105E-01	3.6312E-03	-2.6503E-01	-2.5193E-01	3.1372E-02	1.5079E-03	2.6603E-01	1.1045E-02	-7.7678E-04
3.8173E-01	9.4570E-01	2.4975E-03	-5.9592E-01	1.2080E-01	3.0152E-02	1.0538E-03	4.2396E-01	1.1897E-01	-6.8569E-04
4.8831E-01	1.0023E+00	1.0535E-03	-9.8651E-01	8.3561E-01	2.9976E-02	5.8167E-04	6.5169E-01	6.4604E-01	-3.7572E-04
6.2394E-01	1.0344E+00	7.6626E-05	-2.3685E-01	1.8010E+00	2.4935E-02	1.1308E-04	1.1480E+00	2.5515E+00	4.0395E-06
7.9710E-01	1.0325E+00	2.0943E-05	-4.1135E-02	-2.3946E-01	1.5589E-02	2.2928E-05	1.5199E-01	-1.8258E-01	9.2133E-06
1.0184E+00	1.0349E+00	1.9031E-05	-9.7715E-02	-1.9448E-01	1.3097E-02	1.4701E-05	5.8357E-02	-3.1125E-01	9.6694E-06
1.2376E+00	1.0345E+00	1.6602E-05	-1.0947E-01	-2.9264E-01	8.7972E-03	1.5275E-05	8.6178E-02	-3.0767E-01	9.2449E-06
1.5917E+00	1.0344E+00	1.4299E-05	-1.6084E-01	-2.6858E-01	4.9276E-03	1.3211E-05	2.4726E-01	-1.9740E-01	7.8646E-06

Table F.5-2 Velocity measurements made at S/T = 1.05 with the UV system of the laser anemometer, plane 8

File E582770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.8
density (kilograms per meter cubed) = 1.113932
viscosity (meters squared per second) = 1.64342E-05
Atmospheric pressure (Pascals) = 94930
Velocity of undisturbed free stream (Uref, in m/s) = 27.64529
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091113E-03
Estimated momentum thickness Reynolds number = 6881.991
Location of traverse: X/T = 3.187 Z/T =-1.0802 (Plane 8 , S/T = 0.85)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	1.8221E-01	7.7433E-03			1.2418E-03	2.7362E-05	-3.7266E-01	2.7985E+00	
2.3017E-03	2.5269E-01	8.5966E-03			1.5260E-03	8.0349E-05	-8.8094E-03	1.7723E+00	
3.1870E-03	3.2513E-01	7.8606E-03			1.3857E-03	2.2369E-04	-1.0797E-01	1.5294E+00	
4.0722E-03	3.6372E-01	8.8174E-03			1.7200E-03	3.9437E-04	-1.9295E-01	1.1596E+00	
4.9575E-03	3.9056E-01	9.8461E-03	9.6767E-02	4.5183E-01	1.9724E-03	5.9495E-04	-1.9950E-01	8.7072E-01	-5.6496E-04
6.7230E-03	4.3643E-01	9.3628E-03	4.5214E-02	4.2473E-02	2.6133E-03	1.1403E-03	-9.9070E-02	5.2954E-01	-8.6757E-04
8.8527E-03	4.6016E-01	9.3027E-03	9.4792E-02	-1.9541E-01	4.2681E-03	1.4522E-03	-4.3589E-02	2.9259E-01	-7.4578E-04
1.1686E-02	4.7860E-01	9.1319E-03	7.8787E-02	-2.5344E-01	3.5655E-03	1.7082E-03	-1.6024E-02	1.6277E-01	-1.1263E-03
1.5227E-02	5.0348E-01	8.6072E-03	1.2425E-01	-3.0117E-01	5.4132E-03	2.0211E-03	6.9165E-02	5.5482E-02	-1.2784E-03
1.9476E-02	5.3041E-01	8.4532E-03	1.6879E-01	-3.7029E-01	7.3512E-03	2.1125E-03	1.7420E-01	3.8101E-02	-1.3869E-03
2.5142E-02	5.5419E-01	8.7760E-03	1.5383E-01	-3.9490E-01	1.1395E-02	2.2718E-03	1.5151E-01	2.1851E-02	-1.2663E-03
3.2224E-02	5.8148E-01	8.8474E-03	1.4134E-01	-4.3103E-01	1.5042E-02	2.3062E-03	9.9991E-02	-3.7731E-02	-1.3739E-03
4.1785E-02	6.1254E-01	9.1307E-03	4.6181E-02	-4.6599E-01	1.7876E-02	2.3656E-03	1.3333E-01	-1.7266E-01	-1.0339E-03
5.4533E-02	6.4094E-01	8.7309E-03	-3.2889E-02	-4.6434E-01	2.4560E-02	2.5112E-03	1.4030E-01	-8.0141E-02	-1.2417E-03
6.8697E-02	6.6309E-01	7.8235E-03	-7.4486E-02	-4.5614E-01	2.9638E-02	2.6759E-03	1.5022E-01	-9.6268E-02	-1.3198E-03
8.8527E-02	6.8945E-01	6.9773E-03	-1.0414E-01	-3.2739E-01	3.7105E-02	2.9261E-03	1.2475E-01	-1.4473E-01	-1.1951E-03
1.1225E-01	7.1047E-01	6.3051E-03	-8.2149E-02	-2.3074E-01	4.5248E-02	3.0402E-03	9.5120E-02	-1.8938E-01	-1.3790E-03
1.4377E-01	7.2921E-01	5.7830E-03	8.2993E-03	-2.8258E-01	5.0079E-02	3.2805E-03	1.4484E-01	-2.1242E-01	-1.5735E-03
1.8343E-01	7.5637E-01	6.6005E-03	1.5901E-03	-3.8768E-01	5.2887E-02	3.5100E-03	1.7792E-01	-2.1155E-01	-1.5703E-03
2.3442E-01	7.9369E-01	7.2085E-03	-1.5460E-01	-4.0890E-01	4.8749E-02	3.2200E-03	3.6915E-01	-5.1811E-02	-1.6274E-03
2.9958E-01	8.6385E-01	5.5430E-03	-4.6287E-01	-2.5535E-02	4.0152E-02	2.4538E-03	5.0257E-01	3.4273E-01	-1.2702E-03
3.8279E-01	9.3922E-01	3.0036E-03	-5.6978E-01	1.6534E-02	3.6654E-02	1.3188E-03	5.2150E-01	3.1324E-01	-7.2030E-04
4.8973E-01	1.0037E+00	1.0604E-03	-1.0262E+00	9.8942E-01	3.4373E-02	5.8884E-04	7.3603E-01	7.6054E-01	-3.7389E-04
6.2500E-01	1.0325E+00	6.0420E-05	1.8716E-01	5.3698E-01	2.4494E-02	9.6053E-05	9.3738E-01	2.0430E+00	2.4299E-06
7.9816E-01	1.0322E+00	2.0677E-05	-4.8578E-02	-2.0961E-01	1.6970E-02	2.1492E-05	1.3923E-01	-1.5765E-01	6.9656E-06
1.0195E+00	1.0346E+00	1.7349E-05	-1.4083E-01	-2.8893E-01	1.1419E-02	1.4088E-05	2.8753E-02	-2.0535E-01	7.8979E-06
1.2387E+00	1.0341E+00	1.5789E-05	-2.2334E-01	-2.8070E-01	9.5098E-03	1.5178E-05	4.4837E-02	-2.4558E-01	1.1664E-05
1.5928E+00	1.0337E+00	1.7059E-05	-1.4948E-01	-2.9724E-01	3.1415E-03	1.3653E-05	1.4800E-01	-2.9738E-01	1.1449E-05

Table F.5-3 Velocity measurements made at S/T = 0.85 with the UV system of the laser anemometer, plane 8

File E583770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.7
density (kilograms per meter cubed) = 1.186517
viscosity (meters squared per second) = 1.655304E-05
Atmospheric pressure (Pascals) = 94755
Velocity of undisturbed free stream (Uref, in m/s) = 27.68043
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090074E-03
Estimated momentum thickness Reynolds number = 6839.527
Location of traverse; X/T = 3.187 Z/T =-.98015 (Plane 8 , S/T = 0.75)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	2.1234E-01	7.2260E-03			4.5183E-04	3.4566E-05	3.4179E-02	1.9857E+00	
1.7705E-03	2.4359E-01	7.9230E-03			1.6954E-04	4.8993E-05	-1.5327E-01	2.0639E+00	
2.8329E-03	3.7417E-01	7.9470E-03			-1.2566E-05	3.2844E-04	-2.6707E-01	1.3912E+00	
3.8952E-03	4.2350E-01	1.2173E-02	6.6419E-02	6.1340E-01	3.3384E-04	5.8050E-04	-2.6859E-01	1.0320E+00	-5.9889E-04
4.9575E-03	4.5665E-01	1.2181E-02	1.6033E-02	3.0124E-02	6.6729E-04	9.3659E-04	-1.9822E-01	7.4612E-01	-9.8269E-04
7.0822E-03	4.8222E-01	1.2253E-02	3.5410E-02	-3.0544E-01	8.5361E-04	1.3761E-03	-1.3089E-01	4.4213E-01	-8.2618E-04
8.8527E-03	5.1361E-01	1.1701E-02	4.1868E-02	-3.1115E-01	1.5254E-03	1.7153E-03	-3.4353E-02	1.3933E-01	-9.7203E-04
1.1686E-02	5.4419E-01	1.1395E-02	5.2588E-02	-4.2765E-01	5.3829E-03	2.1544E-03	1.3699E-01	1.4795E-01	-1.6878E-03
1.5227E-02	5.6966E-01	1.1482E-02	3.1699E-03	-4.8529E-01	6.0233E-03	2.1832E-03	1.6164E-01	1.6136E-02	-1.6147E-03
1.9476E-02	6.0061E-01	1.1368E-02	-1.1630E-02	-5.6914E-01	9.6421E-03	2.2479E-03	1.6984E-01	-3.8623E-02	-1.5760E-03
2.5496E-02	6.2325E-01	1.1773E-02	-7.9371E-02	-6.2091E-01	1.4673E-02	2.2823E-03	1.8528E-01	-5.8300E-02	-1.5061E-03
3.2224E-02	6.5328E-01	1.1062E-02	-1.4670E-01	-6.5543E-01	1.5900E-02	2.3269E-03	1.1630E-01	3.2525E-03	-1.7486E-03
4.1765E-02	6.8034E-01	1.0780E-02	-2.7155E-01	-5.1885E-01	2.2891E-02	2.3803E-03	1.6372E-01	1.0069E-01	-1.3556E-03
5.3470E-02	7.0911E-01	9.0181E-03	-3.7828E-01	-3.7145E-01	2.9658E-02	2.3987E-03	5.0704E-02	-5.5318E-02	-1.3325E-03
6.8697E-02	7.2531E-01	7.7417E-03	-4.1065E-01	-1.9174E-01	3.51[illegible]E-02	2.7676E-03	-8.6169E-02	9.4414E-02	-6.6153E-04
8.7465E-02	7.3638E-01	6.2143E-03	-3.2085E-01	-9.0699E-02	4.0858E-02	3.1341E-03	-8.9532E-02	-1.0687E-01	-4.4083E-04
1.1225E-01	7.3706E-01	5.1288E-03	-1.4102E-01	-2.2303E-01	4.8827E-02	3.8774E-03	-1.6218E-01	-1.5877E-02	-2.7140E-04
1.4341E-01	7.3370E-01	5.3068E-03	2.5046E-02	-1.1931E-01	5.0081E-02	4.4464E-03	-1.0193E-01	-1.7417E-01	-1.1084E-04
1.8343E-01	7.4337E-01	5.8365E-03	6.5788E-02	-2.2766E-01	4.8007E-02	4.5068E-03	2.7292E-02	-2.9229E-01	-9.8499E-04
2.3442E-01	7.8336E-01	7.5005E-03	-7.9343E-02	-4.5314E-01	4.4777E-02	3.7246E-03	2.4980E-01	-1.5663E-01	-1.4801E-03
2.9958E-01	8.6360E-01	6.0819E-03	-4.6118E-01	-1.3486E-01	3.8377E-02	2.7235E-03	5.1343E-01	3.9187E-01	-1.4613E-03
3.8279E-01	9.4884E-01	2.8190E-03	-6.2242E-01	6.8168E-02	3.5185E-02	1.3397E-03	5.5419E-01	4.3850E-01	-6.6768E-04
4.8902E-01	1.0097E+00	9.0922E-04	-1.1950E+00	1.5305E+00	3.3741E-02	5.8478E-04	7.2101E-01	8.4218E-01	-2.7919E-04
6.2500E-01	1.0340E+00	5.1920E-05	2.6984E-01	3.8070E-01	2.3570E-02	8.7977E-05	9.4190E-01	2.0658E+00	9.3527E-06
7.9816E-01	1.0366E+00	3.4516E-05	-1.2630E-01	-3.6314E-02	1.7612E-02	3.7383E-05	1.2839E-01	1.3820E-01	2.4626E-05
1.0195E+00	1.0358E+00	2.2789E-05	-1.5762E-01	3.3859E-02	1.1554E-02	2.9701E-05	5.2301E-02	3.1913E-02	1.8946E-05
1.2387E+00	1.0363E+00	2.4085E-05	-1.6156E-01	6.4367E-02	9.8364E-03	1.6638E-05	5.2107E-02	-2.0164E-01	1.4586E-05
1.5928E+00	1.0342E+00	1.3828E-05	-1.9605E-01	-1.8425E-01	2.7073E-03	1.5268E-05	1.5644E-01	-1.1774E-01	1.0266E-05

Table F.5-4 Velocity measurements made at S/T = 0.75 with the UV system of the laser anemometer, plane 8

File E584770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 25.1
density (kilograms per meter cubed) = 1.10446
viscosity (meters squared per second) = 1.663106E-05
Atmospheric pressure (Pascals) = 94535
Velocity of undisturbed free stream (Uref, in m/s) = 27.63593
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09139E-03
Estimated momentum thickness Reynolds number = 6798.688
Location of traverse: X/T = 3.187 Z/T =-.88015 (Plane 8 , S/T = 0.65)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.2394E-03	2.6838E-01	1.6738E-02	4.8941E-01	3.9698E-01	-8.7955E-04	1.6090E-04	-1.9160E-01	1.5162E+00	
1.5935E-03	2.9584E-01	1.8246E-02	2.9760E-01	1.5845E-01	-1.1374E-03	2.5761E-04	-2.1506E-01	1.6544E+00	
2.6558E-03	3.7893E-01	1.6476E-02			-1.8063E-03	5.3284E-04	-2.4525E-01	1.2984E+00	-7.2400E-04
4.0722E-03	4.7512E-01	1.6117E-02	-1.5558E-01	-4.7649E-01	-2.3062E-03	9.3631E-04	-2.3626E-01	6.4570E-01	-2.3826E-04
5.4887E-03	5.2000E-01	1.4402E-02	-2.5091E-01	-3.9043E-01	-2.3772E-03	1.2664E-03	-1.0699E-01	3.4531E-01	
7.6133E-03	5.7492E-01	1.1202E-02	-2.4053E-01	1.0285E-01	-1.0767E-03	1.8040E-03	2.3930E-02	3.4100E-01	-1.6799E-03
1.0446E-02	6.1369E-01	1.0448E-02	-2.7687E-01	-1.5236E-01	-9.4076E-04	2.1189E-03	1.0308E-01	1.3248E-01	-1.5131E-03
1.3987E-02	6.5395E-01	9.5672E-03	-2.5825E-01	-2.5646E-01	2.0441E-03	2.2081E-03	2.8201E-01	1.0417E-01	-1.[illegible]
1.8237E-02	6.8378E-01	9.0627E-03	-3.6227E-01	-4.4289E-02					
2.3902E-02	7.1192E-01	9.1172E-03	-5.0364E-01	7.7235E-02	3.8730E-03	2.1750E-03	2.5806E-01	5.0995E-03	-
3.0984E-02	7.4418E-01	8.1892E-03	-5.3829E-01	2.3293E-01	3.9662E-03	2.2119E-03	3.0773E-01	2.5703E-01	
4.0545E-02	7.7494E-01	6.5850E-03	-6.0839E-01	5.5540E-01	7.8161E-03	2.2702E-03	1.7933E-01	1.8173E-01	-9.[illegible]E-04
5.3293E-02	7.9345E-01	5.5831E-03	-5.1449E-01	3.6851E-01	9.5304E-03	2.5057E-03	-6.0475E-03	1.3306E-01	-3.7309E-04
6.7453E-02	7.9616E-01	4.9661E-03	-4.0601E-01	3.0113E-01	9.4126E-03	2.8867E-03	-8.2046E-02	2.1827E-02	
8.6225E-02	7.9003E-01	4.7260E-03	-1.7734E-01	-8.7227E-02	7.4729E-03	3.5242E-03	-9.4922E-02	-1.3728E-01	2.1108E-04
1.1101E-01	7.7353E-01	4.8151E-03	-4.6010E-02	-2.0511E-01	8.4380E-03	4.2343E-03	-3.1994E-02	-3.3124E-01	-1.7944E-05
1.4217E-01	7.6323E-01	5.6474E-03	-3.3605E-02	-2.0673E-01	8.0007E-03	4.3625E-03	9.7088E-02	-2.9342E-01	-4.1149E-04
1.8219E-01	7.6675E-01	6.4391E-03	-3.3046E-02	-2.9753E-01	1.2630E-02	4.2503E-03	2.5225E-01	-4.5455E-02	
2.3318E-01	8.0334E-01	7.1472E-03	-1.2479E-01	-4.0674E-01	1.8090E-02	3.3929E-03	3.3532E-01	1.0413E-01	-1.4120E-03
2.9834E-01	8.8002E-01	5.7062E-03	-5.0633E-01	-1.1582E-01	2.4422E-02	2.2987E-03	5.0714E-01	3.6013E-01	-1.2028E-03
3.8155E-01	9.5761E-01	2.5277E-03	-6.4683E-01	6.7644E-02	3.6708E-02	1.8560E-03	5.1209E-01	3.9097E-01	-2.0814E-04
4.8955E-01	1.0137E+00	7.8098E-04	-1.1594E+00	1.4213E+00	3.0080E-02	4.8517E-04	7.5419E-01	7.8852E-01	-2.6911E-04
6.2376E-01	1.0351E+00	4.7507E-05	1.8050E-01	4.2587E-01	2.1549E-02	6.9813E-05	6.6866E-01	1.2016E+00	5.1950E-06
7.9692E-01	1.0363E+00	2.0674E-05	-5.9124E-02	-1.9663E-01	1.8070E-02	2.2369E-05	1.1813E-01	-1.7330E-01	1.0494E-05
1.0182E+00	1.0373E+00	1.4815E-05	-1.4365E-01	-1.7556E-01	1.3248E-02	1.6870E-05	9.7345E-02	-2.1480E-01	8.9705E-06
1.2374E+00	1.0370E+00	1.5751E-05	-1.6085E-01	-1.4350E-01	1.1517E-02	1.5835E-05	6.2156E-02	-2.2619E-02	9.8029E-06
1.5915E+00	1.0357E+00	1.2768E-05	-2.2717E-01	-1.2977E-01	5.0771E-03	1.4953E-05	1.5913E-01	-7.8700E-02	8.7976E-06

Table F.5-5 Velocity measurements made at S/T = 0.65 with the UV system of the laser anemometer, plane 8

File E585770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.102318
viscosity (meters squared per second) = 1.665908E-05
Atmospheric pressure (Pascals) = 94320
Velocity of undisturbed free stream (Uref, in m/s) = 27.60207
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092393E-03
Estimated momentum thickness Reynolds number = 6780.597
Location of traverse: X/T = 3.187 Z/T =-.78015 (Plane 8 , S/T = 0.55)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	2.8740E-01	1.1751E-02	7.8496E-01	4.3621E+00	1.4676E-03	4.8423E-05	2.9959E-02	2.6240E+00	
1.9476E-03	3.5647E-01	1.3706E-02	1.2429E-01	3.1606E+00	6.9909E-04	9.3155E-05	-2.1944E-01	2.3797E+00	
2.4788E-03	4.0504E-01	1.2505E-02			7.3857E-04	1.4753E-04	-2.0530E-01	2.3714E+00	
4.6034E-03	5.4693E-01	1.2106E-02	-3.7608E-01	5.8581E-01	-1.2544E-04	8.3698E-04	-2.2720E-01	1.0024E+00	-7.4672E-04
5.6657E-03	5.9057E-01	1.1290E-02	-3.7726E-01	3.3796E-01	-5.3707E-04	1.5295E-03	-1.6733E-02	3.1470E-01	-6.5026E-04
8.1445E-03	6.6642E-01	1.0295E-02	-3.1982E-01	-7.1434E-02	4.8660E-04	1.9087E-03	7.8965E-02	1.3713E-01	-1.6917E-03
9.5609E-03	6.5420E-01	9.2106E-03	-2.5981E-01	-8.9169E-03	1.1072E-03	2.0516E-03	1.2896E-01	2.1338E-02	-1.9530E-03
1.3102E-02	6.8813E-01	8.2885E-03	-2.1768E-01	-1.4247E-01	1.4226E-03	2.1869E-03	1.4556E-01	5.0477E-02	-1.7367E-03
1.5935E-02	7.1220E-01	8.0542E-03	-3.1966E-01	1.6643E-02	1.7932E-03	2.1576E-03	3.1030E-01	1.2143E-01	-1.4662E-03
2.0184E-02	7.4502E-01	7.2363E-03	-2.8143E-01	-4.8738E-02	2.2556E-03	2.1816E-03	3.4383E-01	1.1154E-01	-1.3359E-03
2.5850E-02	7.6775E-01	6.4099E-03	-3.3237E-01	-5.8522E-03	-8.3364E-05	2.0216E-03	2.3532E-01	1.4397E-01	-1.1619E-03
3.2932E-02	7.9789E-01	5.4395E-03	-3.4663E-01	3.9899E-02	1.2809E-03	1.8822E-03	2.3780E-01	1.5411E-01	-8.6932E-04
4.2493E-02	8.2519E-01	4.4339E-03	-2.4521E-01	4.9472E-02	1.8562E-03	1.8840E-03	1.4618E-01	2.8388E-01	-4.1980E-04
5.4178E-02	8.3641E-01	3.7701E-03	-1.0154E-01	-4.9597E-02	-1.2499E-03	2.0440E-03	-2.7415E-02	8.4059E-02	-9.0544E-05
6.9405E-02	8.3815E-01	3.6715E-03	-1.0620E-01	-1.5243E-01	-7.9085E-04	2.3259E-03	-1.2726E-01	1.5649E-01	2.4841E-04
8.8173E-02	8.3100E-01	3.8947E-03	-1.3777E-01	-1.7385E-01	-2.2698E-03	2.6364E-03	-7.7758E-02	-9.1044E-02	3.3547E-04
1.1296E-01	8.2163E-01	4.5376E-03	-1.1483E-01	-2.1183E-01	-5.4331E-03	2.9263E-03	-5.0300E-02	-1.2188E-01	5.8562E-06
1.4412E-01	8.1748E-01	5.4495E-03	-1.5413E-01	-3.1792E-01	-6.2011E-03	2.8572E-03	5.0199E-02	-5.0441E-02	-2.6714E-04
1.8414E-01	8.2971E-01	6.1518E-03	-2.6568E-01	-2.9922E-01	-2.4947E-03	2.4957E-03	1.6959E-01	-6.1901E-03	-6.6455E-04
2.3796E-01	8.6252E-01	5.8355E-03	-4.1525E-01	-1.4613E-01	6.2867E-03	1.9866E-03	3.3883E-01	1.1105E-01	-9.5615E-04
3.0064E-01	9.1685E-01	4.2140E-03	-6.1246E-01	1.8576E-01	1.7755E-02	1.5124E-03	4.5691E-01	3.9873E-01	-8.9677E-04
3.8350E-01	9.7073E-01	2.0638E-03	-6.8553E-01	1.4537E-01	2.5841E-02	9.3113E-04	5.6425E-01	4.8638E-01	-5.8511E-04
4.8973E-01	1.0139E+00	7.9353E-04	-1.2371E+00	1.7549E+00					
6.2571E-01					1.8290E-02	5.2795E-05	4.5145E-01	4.8691E-01	
7.9887E-01	1.0353E+00	2.8539E-05	-2.7543E-02	-1.5227E-01	1.6363E-02	2.0624E-05	1.4305E-01	-1.5269E-01	1.4397E-05
1.0202E+00	1.0340E+00	2.3202E-05	-8.8283E-02	-1.3244E-01	1.4400E-02	1.5092E-05	6.1047E-02	-1.8486E-01	1.2821E-05
1.2394E+00	1.0354E+00	8.9775E-05	-1.5410E-01	2.3157E-01					
1.5935E+00	1.0344E+00	2.1502E-05	-4.8847E-02	-7.9613E-02	7.2911E-03	1.4509E-05	6.7801E-02	-2.8575E-01	1.3051E-05

Table F.5-6 Velocity measurements made at S/T = 0.55 with the UV system of the laser anemometer; plane 8

File E586770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 25.3
density (kilograms per meter cubed) = 1.100333
viscosity (meters squared per second) = 1.670207E-05
Atmospheric pressure (Pascals) = 94245
Velocity of undisturbed free stream (Uref, in m/s) = 27.61582
Estmated momentum thickness at X/T = -2.146, Z/T=0 (s) = 4.091986E-03
Estimated momentum thickness Reynolds number = 6765.842
Location of traverse; X/T = 3.187 Z/T =-.68015 (Plane 8 , S/T = 0.45)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	2.6477E-01	1.7447E-02			2.7383E-04	8.1528E-05	-9.7745E-01	2.7901E+00	
1.7705E-03	3.2495E-01	1.9534E-02			8.0494E-04	2.1477E-04	-1.5282E-01	2.0746E+00	
2.8329E-03					9.3888E-04	5.8873E-04	-1.5141E-01	9.4890E-01	
4.2493E-03	5.5191E-01	1.0159E-02			1.5328E-04	1.0954E-03	-2.4877E-01	7.4689E-01	
5.6657E-03	6.0291E-01	8.3709E-03			1.0248E-03	1.5849E-03	-1.0327E-01	2.4136E-01	
7.7904E-03	6.4874E-01	9.6512E-03	-3.2009E-01	6.5063E-01	1.0557E-03	2.1285E-03	4.2252E-02	4.0054E-02	-2.2567E-03
1.0623E-02	6.7869E-01	9.3455E-03	-1.8982E-01	-8.1466E-02	3.2512E-03	2.2971E-03	1.5837E-01	7.7693E-03	-2.0665E-03
1.4164E-02	7.1728E-01	8.7456E-03	-2.1594E-01	-1.6718E-01	4.0801E-03	2.2855E-03	2.7235E-01	5.3119E-02	-1.7068E-03
1.8414E-02	7.5034E-01	8.5198E-03	-2.4563E-01	-1.4357E-01	3.4936E-03	2.1726E-03	2.4430E-01	1.0750E-01	-1.3504E-03
2.4079E-02	7.8088E-01	7.4699E-03	-3.0967E-01	-1.6467E-01	3.2962E-03	1.9973E-03	3.4970E-01	2.6531E-01	-1.2576E-03
3.1161E-02	8.1342E-01	6.1524E-03	-3.0507E-01	-7.7567E-02	2.6166E-03	1.7619E-03	3.0422E-01	1.7573E-01	-1.0754E-03
4.0722E-02	8.4713E-01	4.6798E-03	-3.2442E-01	9.0382E-02	6.3756E-03	1.6772E-03	2.4946E-01	3.3758E-01	-5.6150E-04
5.2408E-02	8.6054E-01	3.8373E-03	-2.1434E-01	1.5541E-01	4.6946E-03	1.5395E-03	1.4244E-01	1.6545E-01	-1.8465E-04
6.7635E-02	8.6728E-01	3.0733E-03	-8.6210E-02	-1.3759E-01	6.0370E-03	1.7420E-03	-1.5725E-01	3.2173E-01	2.2107E-05
8.6402E-02	8.6228E-01	2.9142E-03	-4.4509E-02	-1.8672E-01	4.1938E-03	1.8701E-03	-1.0547E-01	-3.6549E-02	-7.9978E-05
1.1119E-01	8.5686E-01	3.1646E-03	-1.1651E-01	-1.8713E-01	2.6984E-03	2.0438E-03	-8.8241E-02	-7.5735E-02	-1.8680E-04
1.4235E-01	8.5998E-01	3.7357E-03	-1.8033E-01	-1.8884E-01					
1.8237E-01	8.7327E-01	3.9724E-03	-2.6860E-01	-1.7718E-01	1.9023E-03	1.7774E-03	7.4790E-02	6.9971E-02	-4.8762E-04
2.3336E-01	8.9948E-01	3.6988E-03	-4.2342E-01	-1.3942E-01	7.1860E-03	1.4436E-03	1.7143E-01	1.2604E-01	-7.0550E-04
2.9887E-01	9.3420E-01	2.9348E-03	-5.6384E-01	1.5772E-02	1.5979E-02	1.1216E-03	3.1790E-01	3.0973E-01	-5.2505E-04
3.8173E-01	9.7909E-01	1.5773E-03	-8.0925E-01	3.7987E-01	2.0992E-02	6.9011E-04	6.0753E-01	7.1631E-01	-5.0536E-04
4.8796E-01	1.0194E+00	4.1534E-04	-1.1787E+00	1.5585E+00	2.3832E-02	2.9546E-04	8.7204E-01	1.3334E+00	-1.9954E-04
6.2394E-01	1.0307E+00	4.4138E-05	1.0685E-01	2.2519E-01	1.7974E-02	5.3197E-05	3.5253E-01	3.2115E-01	9.2391E-06
7.9710E-01	1.0318E+00	2.8665E-05	5.7956E-04	-1.0813E-01	1.6532E-02	2.1248E-05	1.2308E-01	-1.7660E-01	1.4586E-05
1.0184E+00	1.0325E+00	2.0681E-05	-1.3853E-01	-1.1954E-03	1.4631E-02	1.6209E-05	-6.6695E-02	-2.2904E-01	1.1909E-05
1.2376E+00	1.0317E+00	2.0929E-05	-1.5206E-01	-5.7232E-02	1.0956E-02	1.5259E-05	9.6509E-02	-2.6534E-01	1.2720E-05
1.5917E+00	1.0319E+00	1.8874E-05	-2.4864E-01	8.7483E-03	6.7607E-03	1.5704E-05	2.2430E-02	-2.6960E-01	1.2617E-05

Table F.5-7 Velocity measurements made at S/T = 0.45 with the UV system of the laser anemometer, plane 8

File E587770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.8
density (kilograms per meter cubed) = 1.106835
viscosity (meters squared per second) = 1.65825E-05
Atmospheric pressure (Pascals) = 94643
Velocity of undisturbed free stream (Uref, in m/s) = 27.68627
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.059901E-03
Estimated momentum thickness Reynolds number = 6828.53
Location of traverse; X/T = 3.187 Z/T =-.58015 (Plane 8 , S/T = 0.35)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.2394E-03	3.0381E-01	1.8548E-02			8.4339E-04	1.4256E-04	-1.9711E-01	2.2201E+00	
2.1246E-03	4.1069E-01	1.5101E-02			9.4998E-04	3.8783E-04	-2.0680E-01	1.4622E+00	
3.1870E-03	5.2565E-01	1.2044E-02			1.0377E-03	8.7904E-04	-1.8688E-01	1.1492E+00	
4.2493E-03	5.8211E-01	1.2830E-02			1.1339E-03	1.2502E-03	-1.3521E-01	3.1190E-01	
6.0198E-03	6.3126E-01	1.2291E-02	-2.8985E-01	2.1344E-01	1.5758E-03	1.8760E-03	1.9813E-02	1.2300E-01	-1.8963E-03
8.1445E-03	6.6916E-01	1.1571E-02	-2.1609E-01	-1.2504E-02	3.3508E-03	2.2172E-03	9.7403E-02	9.2977E-02	-1.9019E-03
1.0977E-02	7.0660E-01	1.0471E-02	-1.5237E-01	-2.1876E-01	4.7421E-03	2.3708E-03	2.4271E-01	1.5495E-01	-1.8838E-03
1.4873E-02	7.4783E-01	1.0272E-02	-2.1869E-01	-2.5326E-01	4.8103E-03	2.2396E-03	2.8795E-01	2.0925E-01	-1.4188E-03
1.8768E-02	7.7976E-01	8.9055E-03	-2.8806E-01	-2.4050E-01	6.5962E-03	2.1075E-03	3.6893E-01	2.4166E-01	-1.6608E-03
2.4433E-02	8.0956E-01	8.1824E-03	-4.3459E-01	-4.8318E-02	5.7409E-03	1.8905E-03	3.8721E-01	3.3829E-01	-1.3748E-03
3.1516E-02	8.4801E-01	6.1856E-03	-5.2394E-01	2.1915E-01	6.4057E-03	1.5956E-03	3.9902E-01	3.8523E-01	-7.8314E-04
4.1076E-02	8.7509E-01	4.3632E-03	-4.8416E-01	3.4345E-01	9.3398E-03	1.4146E-03	3.1396E-01	4.0449E-01	-1.8374E-04
5.2762E-02	8.8525E-01	3.2345E-03	-2.8379E-01	2.3036E-01	8.3144E-03	1.3328E-03	2.0926E-01	4.1429E-01	2.8449E-06
6.7989E-02	8.8990E-01	2.7520E-03	-4.7408E-02	-1.8598E-01	9.2440E-03	1.3837E-03	-8.5433E-02	7.8826E-02	-1.3438E-05
8.6756E-02	8.8598E-01	2.6134E-03	-4.5068E-02	-2.3904E-01					
1.1154E-01	8.8021E-01	2.7664E-03	-1.0651E-01	-2.7727E-01	8.5226E-03	1.5364E-03	-7.8001E-02	-9.4714E-02	-1.5894E-04
1.4341E-01	8.8314E-01	2.8450E-03	-1.1958E-01	-4.1637E-01	9.5398E-03	1.5049E-03	1.8155E-02	-1.7206E-01	-4.1753E-04
1.8307E-01	8.9467E-01	3.0410E-03	-2.4933E-01	-3.1489E-01	8.3413E-03	1.3734E-03	9.4514E-02	-3.7950E-02	-5.0092E-04
2.3371E-01	9.1571E-01	2.8496E-03	-3.6581E-01	-3.1928E-01	1.0868E-02	1.2002E-03	1.7318E-01	-3.8140E-02	-5.4325E-04
2.9887E-01	9.4936E-01	2.2850E-03	-6.2666E-01	6.3649E-02	1.6160E-02	9.2032E-04	3.6831E-01	2.5329E-01	-5.5714E-04
3.8206E-01	9.8459E-01	1.4546E-03	-9.3027E-01	7.4514E-01	1.9143E-02	5.7567E-04	5.6931E-01	5.2780E-01	-3.4388E-04
4.8831E-01	1.0181E+00	3.7957E-04	-1.4380E+00	2.8612E+00	2.0355E-02	2.1841E-04	8.1935E-01	1.4438E+00	-7.9996E-05
6.2429E-01	1.0284E+00	4.0778E-05	1.9155E-01	1.0306E-01	1.8730E-02	4.4498E-05	3.1317E-01	3.4730E-01	1.3868E-05
7.9745E-01	1.0299E+00	2.8616E-05	-4.2598E-02	-1.2349E-01	1.4417E-02	2.3567E-05	5.6752E-02	-2.2130E-01	1.3783E-05
1.0188E+00	1.0311E+00	2.1572E-05	-1.1803E-01	-1.3808E-01	1.3407E-02	1.6085E-05	-4.7063E-02	-3.3534E-01	1.2351E-05
1.2380E+00	1.0308E+00	2.0948E-05	-1.2472E-01	-1.1680E-01	9.9195E-03	1.6132E-05	-1.5287E-02	-3.2418E-01	1.2863E-05
1.5921E+00	1.0297E+00	2.0167E-05	-1.6030E-01	-8.3164E-02	5.4243E-03	1.5963E-05	7.8558E-02	-3.0379E-01	1.3126E-05

Table F.5-8 Velocity measurements made at S/T = 0.35 with the UV system of the laser anemometer, plane 8

File E588770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 25.6
density (kilograms per meter cubed) = 1.183362
viscosity (meters squared per second) = 1.666904E-05
Atmospheric pressure (Pascals) = 94600
Velocity of undisturbed free stream (Uref, in m/s) = 27.66008
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090675E-03
Estimated momentum thickness Reynolds number = 6787.939
Location of traverse: X/T = 3.187 Z/T =-.48015 (Plane 8 , S/T = 0.25)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
7.0822E-04	3.1436E-01	2.9084E-02			1.5919E-03	9.8629E-05	-3.0124E-01	2.7939E+00	
1.4164E-03	3.7632E-01	2.3159E-02			1.8649E-03	2.2203E-04	-9.7779E-03	1.8909E+00	
2.4788E-03	4.6589E-01	1.8559E-02			2.2161E-03	4.7051E-04	-9.3200E-02	1.1954E+00	
3.5411E-03	5.8416E-01	1.2755E-02			2.5779E-03	9.8715E-04	-1.9302E-01	9.8290E-01	
5.3116E-03	6.4700E-01	1.2431E-02			2.4560E-03	1.5541E-03	-1.3543E-01	5.1367E-01	
7.4363E-03	7.0266E-01	1.2066E-02	-3.9624E-01	3.6633E-01	4.2284E-03	2.0204E-03	4.8798E-02	1.8985E-01	-1.7662E-03
1.0269E-02	7.5141E-01	1.0743E-02	-3.2800E-01	-1.6866E-02	5.5411E-03	2.2726E-03	3.2297E-01	3.0202E-01	-2.1015E-03
1.3810E-02	7.9588E-01	9.7287E-03	-4.1155E-01	1.2381E-03	5.6165E-03	2.0950E-03	3.5409E-01	3.4585E-01	-1.5854E-03
1.8768E-02	8.3145E-01	8.4686E-03	-5.5041E-01	4.2088E-02	3.8589E-03	1.8316E-03	3.6137E-01	3.4331E-01	-1.4160E-03
2.3725E-02	8.6327E-01	6.2621E-03	-6.0330E-01	2.5344E-01	3.8681E-03	1.4940E-03	4.9482E-01	6.2624E-01	-1.1363E-03
3.0807E-02	8.9344E-01	4.4446E-03	-6.4071E-01	7.3966E-01	4.3391E-03	1.2300E-03	3.7702E-01	5.1695E-01	-6.0757E-04
4.0368E-02	9.1235E-01	3.0498E-03	-3.7448E-01	2.5880E-01	3.5149E-03	1.0553E-03	1.6639E-0.	3.4115E-01	-1.0815E-04
5.2054E-02	9.1418E-01	2.5204E-03	-1.7243E-01	-2.0484E-01	1.3327E-03	1.0435E-03	-1.7534E-02	8.1113E-02	-6.0335E-05
6.7280E-02	9.1449E-01	2.4634E-03	-1.7950E-01	-1.7171E-01	1.2018E-03	1.1422E-03	-8.5772E-02	2.1414E-02	-9.7869E-05
8.7110E-02	9.1099E-01	2.4112E-03	-1.5922E-01	-2.5760E-01	8.5892E-04	1.2082E-03	-9.2128E-02	1.0615E-01	-1.2820E-04
1.1084E-01	9.0914E-01	2.4728E-03	-1.7193E-01	-3.9368E-01	1.4437E-03	1.2087E-03	-9.2275E-02	1.2001E-02	-2.0364E-04
1.4200E-01	9.1137E-01	2.5973E-03	-2.5144E-01	-2.7630E-01	4.0934E-03	1.2208E-03	-3.1481E-02	5.5183E-02	-2.4341E-04
1.8201E-01	9.1924E-01	2.5481E-03	-3.5739E-01	-2.8392E-01	5.5247E-03	1.1713E-03	-1.9065E-02	1.0224E-01	-3.1859E-04
2.3300E-01	9.3413E-01	2.3994E-03	-4.9469E-01	-1.1887E-01	8.8147E-03	9.5249E-04	1.6444E-01	2.1459E-01	-3.3796E-04
2.9816E-01	9.6424E-01	1.8054E-03	-6.9592E-01	2.3458E-01	1.4064E-02	7.6039E-04	3.6778E-01	4.3311E-01	-3.6533E-04
3.8137E-01	9.9345E-01	1.0674E-03	-9.3358E-01	7.3303E-01	1.6045E-02	4.7823E-04	5.0917E-01	7.4209E-01	-1.6737E-04
4.8761E-01	1.0208E+00	2.6200E-04	-1.2728E+00	2.4844E+00	1.7872E-02	1.7761E-04	8.3299E-01	1.7081E+00	-4.6104E-05
6.2358E-01	1.0290E+00	3.8792E-05	6.4306E-02	-1.2637E-01	1.6272E-02	4.0104E-05	1.4532E-01	3.7351E-03	1.1289E-05
7.9674E-01	1.0302E+00	2.6659E-05	-6.5746E-02	-3.7578E-02	1.5184E-02	2.1938E-05	8.9328E-02	-1.7044E-01	1.2497E-05
1.0181E+00	1.0304E+00	2.2944E-05	-9.1901E-02	-9.4565E-02	1.2995E-02	1.6871E-05	-1.9518E-02	-2.2637E-01	1.2789E-05
1.2373E+00	1.0324E+00	2.3106E-05	-7.5798E-02	-2.0907E-02	9.5502E-03	1.5735E-05	-1.2174E-02	-2.1811E-01	1.3257E-05
1.5914E+00	1.0321E+00	1.8028E-05	-2.0968E-01	-2.4358E-02	4.8620E-03	1.5472E-05	6.9890E-02	-3.3724E-01	1.0643E-05

Table F.5-9 Velocity measurements made at S/T = 0.25 with the UV system of the laser anemometer, plane 8

File E589770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.8
density (kilograms per meter cubed) = 1.108788
viscosity (meters squared per second) = 1.655329E-05
Atmospheric pressure (Pascals) = 94810
Velocity of undisturbed free stream (Uref, in m/s) = 27.67796
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090147E-03
Estimated momentum thickness Reynolds number = 6838.938
Location of traverse: X/T = 3.187 Z/T =-.38015 (Plane 8 , S/T = 0.15)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	3.9048E-01	1.9804E-02			3.4542E-03	1.4245E-04	-1.6360E-02	2.1661E+00	
2.4788E-03	5.2937E-01	1.1075E-02			4.6759E-03	4.9145E-04	-1.6687E-02	1.2257E+00	
3.5411E-03	5.9644E-01	1.2236E-02			4.5163E-03	8.8776E-04	-2.1567E-01	1.1089E+00	
5.3116E-03	6.6610E-01	1.1362E-02			4.9548E-03	1.5609E-03	-5.7459E-02	4.0879E-01	
7.4363E-03	7.1339E-01	1.0384E-02	-4.6832E-01	5.0755E-01	4.9417E-03	1.9491E-03	1.3090E-01	2.8456E-01	-1.6562E-03
1.0269E-02	7.5264E-01	9.0693E-03	-4.1124E-01	1.8539E-01	5.8756E-03	2.0509E-03	3.1043E-01	2.2002E-01	-1.7497E-03
1.3810E-02	7.8975E-01	7.8280E-03	-3.8082E-01	-2.7135E-02	4.7517E-03	1.9740E-03	3.0658E-01	2.7433E-01	-1.3403E-03
1.8059E-02	8.1800E-01	6.7924E-03	-4.4298E-01	-3.9036E-03	2.3486E-03	1.9625E-03	2.6871E-01	3.5306E-01	-1.1777E-03
2.3725E-02	8.5112E-01	5.4813E-03	-4.6829E-01	1.5500E-01	1.7958E-03	1.8764E-03	2.1456E-01	3.8438E-01	-4.4410E-04
3.0807E-02	8.7471E-01	4.3924E-03	-4.1459E-01	3.6099E-02	1.8385E-03	1.7717E-03	6.7572E-02	1.6121E-01	-2.1979E-04
4.0368E-02	8.8244E-01	3.7725E-03	-3.9683E-01	-2.1267E-03	-2.0214E-03	2.0008E-03	1.4901E-02	1.3374E-01	-2.2531E-04
5.2054E-02	8.8869E-01	3.6390E-03	-3.7231E-01	-8.5556E-02	-7.5345E-03	2.2277E-03	6.5339E-02	2.5804E-02	-2.9565E-04
6.7280E-02	8.9525E-01	3.4509E-03	-3.9332E-01	-5.8708E-02	-1.4026E-02	2.3200E-03	1.6212E-01	1.7275E-01	-6.7905E-04
8.6048E-02	9.0616E-01	3.5100E-03	-4.7812E-01	4.2751E-02	-1.4753E-02	2.2342E-03	3.7174E-01	3.8305E-01	-6.3493E-04
1.1084E-01	9.2462E-01	3.2049E-03	-5.5083E-01	3.4833E-01	-1.6109E-02	1.8700E-03	4.6372E-01	5.1683E-01	-6.7005E-04
1.4200E-01	9.4509E-01	2.5148E-03	-4.9976E-01	3.4112E-01	-1.6336E-02	1.2819E-03	2.6283E-01	4.5878E-01	-4.5545E-04
1.8201E-01	9.5805E-01	1.9956E-03	-4.2415E-01	1.3880E-01	-8.1236E-03	9.2240E-04	8.8691E-02	2.8612E-01	-3.7539E-04
2.3300E-01	9.7117E-01	1.6194E-03	-5.3797E-01	1.7443E-01	-6.9577E-04	7.3040E-04	1.3443E-01	3.2587E-01	-3.1265E-04
2.9816E-01	9.8725E-01	1.1622E-03	-8.0085E-01	6.7792E-01	4.4604E-03	5.8647E-04	3.2674E-01	6.6510E-01	-2.4207E-04
3.8137E-01	1.0074E+00	5.8946E-04	-9.4519E-01	1.1593E+00	9.8183E-03	3.2565E-04	5.9048E-01	1.3190E+00	-1.3656E-04
4.8761E-01	1.0252E+00	1.3943E-04	-3.9953E-01	1.6488E+00	1.0971E-02	1.2130E-04	6.9291E-01	1.5479E+00	1.1762E-06
6.2358E-01	1.0275E+00	5.5492E-05	1.0655E-01	-1.2655E-01	1.2024E-02	4.3586E-05	1.2798E-01	-1.0397E-01	1.5014E-05
7.9674E-01	1.0277E+00	4.0324E-05	1.2589E-02	-1.3061E-01	1.2638E-02	2.8966E-05	1.2132E-02	-1.9879E-01	1.3816E-05
1.0181E+00	1.0288E+00	3.9148E-05	1.0147E-01	-9.9309E-02	1.1141E-02	2.5489E-05	3.6476E-02	-1.9373E-01	1.5300E-05
1.2373E+00	1.0287E+00	3.9944E-05	8.8786E-02	-6.3032E-02	7.6755E-03	2.2730E-05	6.4044E-02	-1.9134E-01	1.5927E-05
1.5914E+00	1.0279E+00	3.7332E-05	7.2640E-02	-1.2394E-01	2.3621E-03	1.8529E-05	1.0727E-01	-1.1776E-01	1.5218E-05

Table F.5-10 Velocity measurements made at S/T = 0.15 with the UV system of the laser anemometer, plane 8

File E569770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24.2
density (kilograms per meter cubed) = 1.114015
viscosity (meters squared per second) = 1.645004E-05
Atmospheric pressure (Pascals) = 95065
Velocity of undisturbed free stream (Uref, in m/s) = 27.67649
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09019E-03
Estimated momentum thickness Reynolds number = 6881.569
Location of traverse: X/T = 3.167 Z/T =-1.4801 (Plane 8 , S/T = 1.25)

Y/T	U/Uref	u2/Uref2	uw/Uref2
6.8527E-04	3.7632E-02	1.8028E-03	
1.5935E-03	4.0407E-02	2.0376E-03	
2.3017E-03	4.4031E-02	2.1844E-03	
3.3440E-03	5.2869E-02	2.6834E-03	
4.4263E-03	6.3542E-02	3.0780E-03	
5.4887E-03	7.1008E-02	3.5956E-03	1.1513E-03
7.2592E-03	7.6359E-02	3.8662E-03	7.3007E-04
9.3839E-03	7.8723E-02	3.7743E-03	3.9318E-04
1.2217E-02	8.1856E-02	3.8954E-03	3.4327E-04
1.5758E-02	8.2075E-02	3.7015E-03	2.8037E-04
2.0361E-02	8.3280E-02	3.7302E-03	3.3032E-04
2.5673E-02	8.1384E-02	3.5011E-03	1.4222E-04
3.2755E-02	7.9468E-02	3.4240E-03	2.1788E-04
4.2316E-02	7.6999E-02	3.1660E-03	4.1752E-04
5.4001E-02	7.4510E-02	3.1528E-03	3.7088E-04
6.9228E-02	6.9845E-02	2.8569E-03	2.2415E-04
8.8704E-02	6.6864E-02	2.5710E-03	3.2197E-04
1.1278E-01	6.3546E-02	2.5012E-03	3.7342E-04
1.4394E-01	6.5740E-02	2.2669E-03	3.8448E-04
1.8396E-01	7.1006E-02	2.1861E-03	3.6829E-04
2.3530E-01	7.5751E-02	2.0155E-03	1.5937E-04
3.0011E-01	7.9467E-02	1.7476E-03	8.6938E-05
3.8332E-01	8.2816E-02	1.2851E-03	5.7964E-06
4.8955E-01	8.4821E-02	5.1238E-04	-3.5624E-05
6.2553E-01	8.6063E-02	5.4552E-05	2.1940E-05
7.9869E-01	8.6196E-02	2.4263E-05	1.9600E-05
1.0200E+00	8.6793E-02	2.2027E-05	2.0668E-05
1.2392E+00	8.6329E-02	1.9504E-05	1.8543E-05
1.5933E+00	8.3678E-02	1.9921E-05	1.8847E-05

Table F.5-11 Velocity measurements made at S/T = 1.25 with the UW system of the laser anemometer, plane 8

File E568770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24.35
density (kilograms per meter cubed) = 1.113219
viscosity (meters squared per second) = 1.646822E-05
Atmospheric pressure (Pascals) = 95045
Velocity of undisturbed free stream (Uref, in m/s) = 27.66907
Estimated momentum thickness at X/T = -8.146, Z/T=0 (m) = 4.090409E-03
Estimated momentum thickness Reynolds number = 6872.496
Location of traverse: X/T = 3.187 Z/T =-1.2802 (Plane 8 , S/T = 1.05)

Y/T	W/Uref	w2/Uref2	uw/Uref2
8.8527E-04	3.5210E-02	1.9022E-03	
1.5935E-03	3.7880E-02	1.9607E-03	
2.6558E-03	4.4104E-02	2.3579E-03	
3.3640E-03	4.9605E-02	2.7160E-03	
4.4263E-03	5.5830E-02	3.0710E-03	
5.4887E-03	6.2853E-02	3.4934E-02	
7.2598E-03	6.9160E-02	3.9214E-03	3.6584E-04
9.3839E-03	7.2762E-02	4.2749E-03	3.4561E-04
1.2217E-02	7.7269E-02	4.0644E-03	4.1018E-04
1.5758E-02	7.6786E-02	4.1658E-03	1.6461E-04
2.0361E-02	7.5721E-02	4.1326E-03	5.1740E-05
2.5673E-02	7.3914E-02	4.0009E-03	-3.1162E-05
3.2755E-02	7.4112E-02	4.0050E-03	-1.3674E-05
4.2316E-02	7.1693E-02	3.9202E-03	1.0900E-04
5.4001E-02	6.6945E-02	3.6673E-03	-1.0534E-04
6.9228E-02	6.5564E-02	3.5218E-03	1.5872E-04
8.7996E-02	6.1589E-02	3.3294E-03	4.1733E-04
1.1278E-01	5.9704E-02	3.1466E-03	6.3860E-04
1.4394E-01	6.2729E-02	3.0301E-03	6.5636E-04
2.3495E-01	7.9725E-02	2.4602E-03	3.1098E-04
3.0011E-01	8.8501E-02	2.0614E-03	2.3763E-04
3.8332E-01	9.3104E-02	1.3699E-03	1.6607E-05
4.8955E-01	9.5662E-02	5.2689E-04	-9.4539E-05
6.2553E-01	9.6719E-02	4.6115E-05	1.5297E-05
7.9869E-01	9.7510E-02	2.2645E-05	1.5908E-05
1.0200E+00	9.7126E-02	2.3143E-05	2.1671E-05
1.2392E+00	9.6940E-02	2.1039E-05	2.0948E-05
1.5933E+00	9.4428E-02	2.2707E-05	2.1116E-05

Table F.5-12 Velocity measurements made at S/T = 1.05 with the UW system of the laser anemometer, plane 8

File E567770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.107436
viscosity (meters squared per second) = 1.653917E-05
Atmospheric pressure (Pascals) = 94440
Velocity of undisturbed free stream (Uref, in m/s) = 27.79755
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.086621E-03
Estimated momentum thickness Reynolds number = 6868.423
Location of traverse; X/T = 3.187 Z/T =-1.0602 (Plane 8 , S/T = 0.85)

Y/T	U/Uref	u2/Uref2	uw/Uref2
1.7705E-03	2.9367E-02	2.5252E-03	
2.4788E-03	3.4440E-02	2.8225E-03	
3.1870E-03	3.7290E-02	3.1728E-03	
4.2493E-03	4.2718E-02	3.7266E-03	
5.3116E-03	4.4406E-02	4.2422E-03	4.3519E-04
6.7260E-03	4.6395E-02	4.5397E-03	1.3614E-04
8.4936E-03	4.9184E-02	4.8075E-03	-3.3060E-05
1.0269E-02	4.8561E-02	4.7093E-03	-1.7043E-04
1.3102E-02	5.2406E-02	5.0090E-03	
1.6643E-02	5.1179E-02	4.9239E-03	-1.7364E-04
2.0892E-02	4.9133E-02	4.9230E-03	-2.6767E-04
2.6558E-02	4.7278E-02	5.1480E-03	-2.7491E-04
3.3640E-02	4.7379E-02	5.1047E-03	-2.2420E-04
4.3201E-02	4.1848E-02	5.2069E-03	-1.9633E-04
5.4887E-02	3.9277E-02	5.3375E-03	-1.6865E-05
7.0467E-02	3.3540E-02	5.1620E-03	9.6382E-05
8.8861E-02	3.3524E-02	5.0350E-03	1.5389E-04
1.1367E-01	3.7611E-02	4.9152E-03	5.8484E-04
1.4483E-01	4.8692E-02	4.5611E-03	6.3726E-04
1.8484E-01	6.9862E-02	4.0418E-03	8.7225E-04
2.3584E-01	8.9826E-02	3.4186E-03	8.3831E-04
3.0099E-01	1.0074E-01	2.5259E-03	2.8167E-04
3.8421E-01	1.0602E-01	1.3787E-03	-9.7341E-05
4.9044E-01	1.0581E-01	4.6897E-04	-2.0344E-04
6.2642E-01	1.0279E-01	4.9806E-05	1.6969E-05
7.9958E-01	1.0070E-01	2.1176E-05	1.6830E-05
1.0209E+00	9.8960E-02	1.9491E-05	1.9497E-05
1.2401E+00	9.7553E-02	1.9081E-05	1.9379E-05
1.5942E+00	9.4797E-02	2.0565E-05	1.9354E-05

Table F.5-13 Velocity measurements made at S/T = 0.85 with the UW system of the laser anemometer, plane 8

File E566770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24
density (kilograms per meter cubed) = 1.106967
viscosity (meters squared per second) = 1.654618E-05
Atmospheric pressure (Pascals) = 94400
Velocity of undisturbed free stream (Uref, in m/s) = 27.7709
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087405E-03
Estimated momentum thickness Reynolds number = 6860.248
Location of traverse; X/T = 3.187 Z/T =-.98015 (Plane 8 , S/T = 0.75)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.9476E-03	1.6167E-02	2.5607E-03	
2.6558E-03	1.6879E-02	2.7036E-03	
3.3640E-03	2.0430E-02	3.2479E-03	
4.7805E-03	2.1555E-02	4.1693E-03	
5.4887E-03	2.1844E-02	4.4673E-03	-1.4800E-03
6.5510E-03	2.3725E-02	4.8183E-03	-1.4106E-03
8.3215E-03	2.4458E-02	5.2644E-03	-1.8711E-03
1.0446E-02	2.3454E-02	5.4772E-03	-1.8853E-03
1.3279E-02	2.2779E-02	5.4716E-03	-1.9371E-03
1.6820E-02	1.9949E-02	5.5490E-03	-2.2933E-03
2.1069E-02	1.8728E-02	5.5665E-03	-2.3163E-03
2.6735E-02	1.6983E-02	5.5139E-03	-2.3082E-03
3.3817E-02	1.2996E-02	5.4192E-03	-2.5524E-03
4.3378E-02	1.2832E-02	5.1724E-03	-2.7954E-03
5.5064E-02	1.3265E-02	4.7385E-03	-2.0059E-03
7.0290E-02	1.2325E-02	4.5377E-03	-1.4821E-03
8.9058E-02	1.6012E-02	4.3388E-03	-8.7229E-04
1.1385E-01	3.5100E-02	4.3629E-03	-2.4772E-04
1.4536E-01	6.2469E-02	4.4114E-03	1.9655E-04
1.8502E-01	9.6662E-02	3.9963E-03	3.3775E-04
2.3601E-01	1.1837E-01	3.3089E-03	1.6033E-04
3.0117E-01	1.2428E-01	2.4225E-03	-3.5361E-05
3.8438E-01	1.2573E-01	1.3013E-03	-1.5473E-04
4.9062E-01	1.2253E-01	4.3753E-04	-2.3110E-04
6.2657E-01	1.1807E-01	4.5154E-05	1.5947E-05
7.9975E-01	1.1455E-01	2.2819E-05	1.6381E-05
1.0211E+00	1.1215E-01	1.9138E-05	1.8671E-05
1.2403E+00	1.1056E-01	1.7277E-05	1.8610E-05
1.5944E+00	1.0802E-01	1.7786E-05	1.8477E-05

Table F.5-14 Velocity measurements made at S/T = 0.75 with the UW system of the laser anemometer, plane 8

File E545770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.2
density (kilograms per meter cubed) = 1.094746
viscosity (meters squared per second) = 1.678297E-05
Atmospheric pressure (Pascals) = 93735
Velocity of undisturbed free stream (Uref, in m/s) = 27.7637
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087617E-03
Estimated momentum thickness Reynolds number = 6762.057
Location of traverse: X/T = 3.127 Z/T =-.88015 (Plane 8 , S/T = 0.65)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.2394E-03	1.0135E-02	2.8707E-03	
1.9476E-03	1.9942E-02	2.9503E-03	
3.0099E-03	1.2720E-02	4.0274E-03	2.4348E-03
4.0722E-03	1.3855E-02	4.5496E-03	1.2806E-03
5.3116E-03	1.5466E-02	4.7750E-03	-7.0264E-04
7.2592E-03	1.6922E-02	5.0397E-03	-8.8217E-04
1.1863E-02	1.5509E-02	4.9806E-03	-9.7463E-04
1.5404E-02	1.4946E-02	4.8233E-03	-1.0063E-03
1.9653E-02	1.4265E-02	4.4830E-03	-9.1671E-04
2.5319E-02	1.5461E-02	4.0857E-03	-1.0400E-03
3.2401E-02	1.5031E-02	3.9112E-03	-6.7010E-04
4.1962E-02	1.6076E-02	3.2543E-03	-1.0846E-03
5.5418E-02	2.0344E-02	3.0619E-03	-7.1521E-04
6.8874E-02	2.7475E-02	3.1060E-03	-6.8991E-04
8.7642E-02	4.1232E-02	3.2559E-03	-6.6003E-04
1.1243E-01	6.2056E-02	3.8689E-03	-2.0084E-04
1.4394E-01	9.3450E-02	4.3261E-03	8.8738E-05
1.8431E-01	1.2918E-01	4.1280E-03	1.9065E-04
2.3637E-01	1.5394E-01	3.1832E-03	-2.2413E-04
2.9975E-01	1.6077E-01	2.4223E-03	-1.9097E-04
3.8297E-01	1.6023E-01	1.2489E-03	-2.4728E-04
4.8920E-01	1.5454E-01	3.9296E-04	-1.8855E-04
6.2518E-01	1.4819E-01	3.5416E-05	8.1901E-06
7.9834E-01	1.4434E-01	1.0158E-04	4.5496E-05
1.0197E+00	1.4140E-01	2.1642E-05	1.5688E-05
1.2388E+00	1.3885E-01	2.0619E-05	1.5310E-05
1.5930E+00	1.3687E-01	2.3576E-05	1.8054E-05

Table F.5-15 Velocity measurements made at S/T = 0.65 with the UW system of the laser anemometer, plane 8

File E564770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.095656
viscosity (meters squared per second) = 1.676037E-05
Atmospheric pressure (Pascals) = 93750
Velocity of undisturbed free stream (Uref, in m/s) = 28.00379
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.080584E-03
Estimated momentum thickness Reynolds number = 6817.977
Location of traverse: X/T = 3.187 Z/T =-.78015 (Plane 8 , S/T = 0.55)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.5935E-03	2.5296E-02	3.0385E-03	
2.8329E-03	2.7696E-02	3.5272E-03	
3.7181E-03	3.2536E-02	3.6784E-03	
4.9575E-03	3.7367E-02	4.6569E-03	5.1066E-04
5.8428E-03	3.9036E-02	4.7783E-03	4.5382E-04
7.6133E-03	4.1109E-02	4.9354E-03	4.1653E-04
9.7380E-03	4.2403E-02	4.8602E-03	5.1666E-04
1.2571E-02	2.1768E-02	4.4815E-03	-1.9457E-04
1.6112E-02	2.5755E-02	4.3375E-03	-8.9999E-06
2.1424E-02	2.5438E-02	3.7926E-03	1.9918E-04
2.6735E-02	2.3494E-02	3.5223E-03	1.3638E-06
3.3109E-02	2.6264E-02	3.2238E-03	5.0154E-05
4.2670E-02	2.5594E-02	2.8416E-03	-2.1865E-04
5.4356E-02	2.3011E-02	2.5360E-03	-3.3599E-04
6.9582E-02	4.0240E-02	2.7965E-03	-4.6201E-04
8.8350E-02	6.1981E-02	2.8509E-03	-3.0127E-04
1.1314E-01	8.2278E-02	3.0563E-03	-1.1337E-04
1.4465E-01	1.0569E-01	3.2311E-03	-7.1620E-05
1.8431E-01	1.3195E-01	3.1393E-03	-5.4237E-04
2.3530E-01	1.5176E-01	2.6106E-03	-6.3664E-04
3.0046E-01	1.6384E-01	1.9435E-03	-3.7440E-04
3.8403E-01	1.5981E-01	9.8353E-04	-1.8401E-04
4.8991E-01	1.5955E-01	3.6860E-04	-1.4068E-04
6.2624E-01	1.6119E-01	3.3637E-05	1.2611E-05
7.9904E-01	1.5966E-01	1.9413E-05	-2.8773E-06
1.0204E+00	1.6987E-01	9.7579E-05	7.5549E-05
1.2396E+00	1.4197E-01	1.0049E-04	7.7721E-05
1.5937E+00	1.5576E-01	2.8336E-05	7.9531E-06

Table F.5-16 Velocity measurements made at S/T = 0.55 with the UW system of the laser anemometer, plane 8

File E563770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.8
density (kilograms per meter cubed) = 1.099716
viscosity (meters squared per second) = 1.673301E-05
Atmospheric pressure (Pascals) = 94350
Velocity of undisturbed free stream (Uref, in m/s) = 27.75863
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.067766E-03
Estimated momentum thickness Reynolds number = 6781.257
Location of traverse; X/T = 3.187 Z/T =-.68015 (Plane 8 , S/T = 0.45)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.7705E-03	2.0468E-02	3.1042E-03	
3.1870E-03	2.7169E-02	3.9434E-03	
3.8952E-03	2.7931E-02	4.3613E-03	
4.9575E-03	2.9551E-02	4.6328E-03	
6.7280E-03	3.1918E-02	5.0565E-03	-4.9943E-04
9.5609E-03	3.3493E-02	5.0333E-03	-8.6359E-05
1.2040E-02	3.5261E-02	4.8457E-03	9.2165E-05
1.5227E-02	3.7134E-02	4.7780E-03	1.2046E-04
1.9476E-02	3.6947E-02	4.5819E-03	-7.4733E-05
2.5142E-02	3.9475E-02	3.9122E-03	4.2259E-05
3.2224E-02	4.2001E-02	3.3634E-03	1.4316E-04
4.1785E-02	4.4261E-02	2.8640E-03	-1.1880E-04
5.3470E-02	5.1427E-02	2.5011E-03	-1.7799E-04
6.8697E-02	5.8527E-02	2.4455E-03	-3.9212E-04
8.8527E-02	7.6523E-02	2.2942E-03	-1.9780E-04
1.1261E-01	9.3338E-02	2.2844E-03	-1.2832E-04
1.4377E-01	1.0809E-01	2.2634E-03	-2.4611E-04
1.8343E-01	1.2428E-01	2.3110E-03	-3.3773E-04
2.3477E-01	1.3887E-01	2.0503E-03	-3.1090E-04
2.9958E-01	1.4754E-01	1.5657E-03	-1.9214E-04
3.8279E-01	1.4924E-01	9.6837E-04	-7.0242E-05
4.8902E-01	1.4780E-01	2.8499E-04	-1.0472E-04
6.2500E-01	1.4144E-01	3.1193E-05	1.2787E-05
7.9816E-01	1.3639E-01	9.4048E-05	7.3542E-05
1.0195E+00	1.3142E-01	2.2098E-05	1.2249E-05
1.2387E+00	1.3687E-01	2.7396E-05	1.6877E-05
1.5928E+00	1.3180E-01	1.9397E-05	1.2896E-05

Table F.5-17 Velocity measurements made at S/T = 0.45 with the UW system of the laser anemometer, plane 8

File E562770.RE5
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.4
density (kilograms per meter cubed) = 1.101715
viscosity (meters squared per second) = 1.668542E-05
Atmospheric pressure (Pascals) = 94395
Velocity of undisturbed free stream (Uref, in m/s) = 27.46566
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09645E-03
Estimated momentum thickness Reynolds number = 6743.115
Location of traverse: X/T = 3.167 Z/T =-.58015 (Plane 8 , S/T = 0.35)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.5935E-03	3.7735E-02	3.7815E-03	
2.4788E-03	4.1711E-02	3.9071E-03	
3.5411E-03	4.7065E-02	4.4404E-03	
5.0637E-03	5.0589E-02	4.8263E-03	3.6271E-05
7.0822E-03	5.3473E-02	4.8744E-03	5.3004E-04
9.9150E-03	5.4186E-02	5.2070E-03	6.5479E-05
1.3456E-02	5.7553E-02	4.9636E-03	3.4609E-04
1.7705E-02	6.1125E-02	4.3739E-03	-7.3460E-06
2.3371E-02	6.0025E-02	3.5901E-03	-1.3785E-04
3.0453E-02	7.0122E-02	2.9992E-03	-2.6177E-04
4.0014E-02	7.2826E-02	2.5029E-03	-1.1469E-04
5.2408E-02	8.3522E-02	1.9655E-03	-3.4342E-04
6.6926E-02	9.3524E-02	1.8829E-03	-3.0550E-04
8.6756E-02	1.0822E-01	1.7440E-03	-3.1549E-04
1.1048E-01	1.2064E-01	1.6731E-03	-2.5582E-04
1.4164E-01	1.3461E-01	1.6867E-03	-1.7928E-04
1.8166E-01	1.4456E-01	1.6755E-03	-1.1798E-04
2.3265E-01	1.5376E-01	1.4900E-03	-2.5854E-04
2.9780E-01	1.6374E-01	1.2257E-03	-2.1256E-04
3.8102E-01	1.6660E-01	6.8957E-04	3.0905E-05
4.8725E-01	1.6716E-01	1.9662E-04	-1.0262E-04
6.2323E-01	1.6198E-01	3.3168E-05	2.5083E-05
7.9639E-01	1.5728E-01	8.2131E-05	6.2144E-05
1.0177E+00	1.5581E-01	2.0764E-05	1.3794E-05
1.2369E+00	1.5442E-01	2.0919E-05	1.5805E-05
1.5910E+00	1.5147E-01	2.1724E-05	1.8186E-05

Table F.5-18 Velocity measurements made at S/T = 0.35 with the UW system of the laser anemometer, plane 8

File E561770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.7
density (kilograms per meter cubed) = 1.102066
viscosity (meters squared per second) = 1.6693E-05
Atmospheric pressure (Pascals) = 94520
Velocity of undisturbed free stream (Uref, in m/s) = 27.46872
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.096359E-03
Estimated momentum thickness Reynolds number = 6740.652
Location of traverse: X/T = 3.187 Z/T =-.48015 (Plane 8 , S/T = 0.25)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.6558E-03	5.0144E-02	3.9576E-03	
3.5411E-03	5.6134E-02	4.1575E-03	
4.6634E-03	5.8880E-02	4.4712E-03	6.3543E-04
5.6657E-03	6.3265E-02	4.7138E-03	3.5530E-05
7.7904E-03	6.9024E-02	4.7749E-03	5.9776E-04
1.0623E-02	7.3236E-02	4.5140E-03	1.0747E-04
1.4164E-02	8.0376E-02	3.8541E-03	1.7745E-04
1.8414E-02	8.2026E-02	3.2657E-03	2.5107E-04
2.4079E-02	9.0431E-02	2.3599E-03	-3.4123E-04
3.1339E-02	9.1446E-02	2.0002E-03	-1.6919E-04
4.0722E-02	9.7134E-02	1.5540E-03	-2.3405E-04
6.7635E-02	1.1364E-01	1.3084E-03	-3.2315E-04
8.6402E-02	1.2494E-01	1.3080E-03	-3.6473E-04
1.1119E-01	1.3446E-01	1.3486E-03	-2.6127E-04
1.4235E-01	1.4400E-01	1.2693E-03	-3.1973E-04
1.8237E-01	1.5155E-01	1.3277E-03	-2.5159E-04
2.3407E-01	1.6135E-01	1.2182E-03	-3.0451E-04
2.9851E-01	1.6824E-01	9.7372E-04	-2.0787E-04
3.8314E-01	1.7368E-01	4.8554E-04	-1.2211E-04
4.8796E-01	1.7310E-01	1.4707E-04	-6.6240E-05
6.2571E-01	1.6928E-01	2.7704E-05	1.1495E-05
7.9745E-01	1.6496E-01	2.1712E-05	1.4017E-05
1.0184E+00	1.6294E-01	2.2113E-05	
1.2376E+00	1.6037E-01	2.0378E-05	1.5203E-05
1.5917E+00	1.6085E-01	2.1586E-05	7.3013E-06

Table F.5-19 Velocity measurements made at S/T = 0.25 with the UW system of the laser anemometer, plane 8

File E560770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.15
density (kilograms per meter cubed) = 1.106961
viscosity (meters squared per second) = 1.659562E-05
Atmospheric pressure (Pascals) = 94765
Velocity of undisturbed free stream (Uref, in m/s) = 27.44485
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097071E-03
Estimated momentum thickness Reynolds number = 6775.492
Location of traverse: X/T = 3.167 Z/T =-.38015 (Plane 8 , S/T = 0.15)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.4164E-03	7.6628E-02	4.5551E-03	
2.4789E-03	8.6600E-02	4.9308E-03	
3.5411E-03	9.3821E-02	5.2001E-03	
5.3116E-03	1.0405E-01	5.2297E-03	1.2455E-03
7.4363E-03	1.1250E-01	4.9533E-03	9.5922E-04
1.0269E-02	1.2015E-01	4.3376E-03	1.1160E-03
1.3810E-02	1.2522E-01	3.4791E-03	9.6252E-04
1.8059E-02	1.3147E-01	3.0115E-03	9.3695E-04
2.3725E-02	1.3877E-01	2.4724E-03	9.8669E-04
3.0807E-02	1.4302E-01	1.9377E-03	7.8236E-04
4.1076E-02	1.4285E-01	1.7943E-03	7.1259E-04
5.2054E-02	1.4443E-01	1.9834E-03	7.8821E-04
6.7280E-02	1.4249E-01	2.0611E-03	6.9666E-04
8.6048E-02	1.4421E-01	2.2155E-03	5.9264E-04
1.1084E-01	1.4837E-01	2.0347E-03	4.6132E-04
1.4235E-01	1.5368E-01	1.5371E-03	-9.3852E-05
1.8201E-01	1.6452E-01	1.1094E-03	-2.3740E-04
2.3300E-01	1.7495E-01	8.5177E-04	-2.7713E-04
3.0135E-01	1.8125E-01	5.8596E-04	-1.4445E-04
3.8137E-01	1.8615E-01	3.2114E-04	-1.4938E-04
4.8761E-01	1.8311E-01	6.3243E-05	-3.0022E-05
6.2358E-01	1.8098E-01	3.6732E-05	1.4324E-05
7.9674E-01	1.7780E-01	3.5967E-05	8.7751E-06
1.0181E+00	1.7399E-01	3.3483E-05	1.1652E-05
1.2373E+00	1.7151E-01	3.4583E-05	1.6030E-05
1.5914E+00	1.7269E-01	4.6322E-05	1.6637E-05

Table F.5-20 Velocity measurements made at S/T = 0.15 with the UW system of the laser anemometer, plane 8

File E617770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 22.4
density (kilograms per meter cubed) = 1.184988
viscosity (meters squared per second) = 1.621342E-05
Atmospheric pressure (Pascals) = 95420
Velocity of undisturbed free stream (Uref, in m/s) = 27.64987
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090977E-03
Estimated momentum thickness Reynolds number = 6976.626
Location of traverse: X/T = 3.187 Z/T =-1.4801 (Plane 8 , S/T = 1.25)

Y/T	vw/Uref2
3.1870E-03	-2.6807E-04
3.8952E-03	-1.2720E-04
5.3116E-03	-2.2794E-04
6.0198E-03	-5.6282E-05
7.0822E-03	-1.9451E-04
9.2068E-03	-9.7907E-05
1.0977E-02	-1.1292E-04
1.3810E-02	-7.6027E-05
1.7351E-02	7.7584E-06
2.1601E-02	-1.7310E-05
2.7266E-02	9.6295E-05
3.4348E-02	6.4052E-05
4.3909E-02	9.3428E-05
5.5595E-02	8.4866E-05
8.9589E-02	-4.6433E-05
1.1438E-01	-1.0870E-04
1.4554E-01	-2.1056E-04
1.8555E-01	-2.3710E-04
2.3654E-01	-9.3720E-05
3.0170E-01	-1.1446E-04

Table F.5-21 Velocity measurements made at S/T = 1.25 with the VW system of the laser anemometer, plane 8

File E616770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 21.8
density (kilograms per meter cubed) = 1.130704
viscosity (meters squared per second) = 1.610615E-05
Atmospheric pressure (Pascals) = 95710
Velocity of undisturbed free stream (Uref, in m/s) = 27.70171
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089445E-03
Estimated momentum thickness Reynolds number = 7033.625
Location of traverse: X/T = 5.187 Z/T =-1.2802 (Plane 8 , S/T = 1.05)

Y/T	vw/Uref2
4.6034E-03	-1.6664E-04
5.3116E-03	-1.4449E-04
6.3759E-03	-6.8817E-05
7.4363E-03	4.1829E-06
8.4986E-03	-6.7454E-05
1.0269E-02	-2.8313E-05
1.2394E-02	-4.3627E-05
1.5227E-02	3.1264E-05
1.8768E-02	1.3636E-04
2.3017E-02	9.8055E-05
2.8683E-02	1.1094E-04
3.5765E-02	1.5798E-04
4.5326E-02	2.1812E-04
5.7011E-02	3.7099E-05
7.2238E-02	1.8351E-04
9.1006E-02	5.3092E-05
1.1579E-01	-4.2430E-05
1.4695E-01	-2.9914E-04
1.8697E-01	-3.6308E-04
2.3796E-01	-4.6564E-04
3.0312E-01	-3.5596E-04

Table F.5-22 Velocity measurements made at S/T = 1.05 with the VW system of the laser anemometer, plane 8

File E608770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.1
density (kilograms per meter cubed) = 1.111508
viscosity (meters squared per second) = 1.644007E-05
Atmospheric pressure (Pascals) = 94500
Velocity of undisturbed free stream (Uref, in m/s) = 27.67827
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090137E-03
Estimated momentum thickness Reynolds number = 6886.099
Location of traverse; X/T = 3.187 Z/T =-1.0807 (Plane 8 , S/T = 0.85)

Y/T	vw/Uref2
2.1246E-03	1.1660E-04
2.8329E-03	6.3425E-05
4.2493E-03	4.6453E-05
4.9575E-03	1.1443E-04
6.0198E-03	8.5515E-05
7.7904E-03	1.2033E-04
9.9150E-03	1.2984E-04
1.2748E-02	5.6280E-05
1.6289E-02	-5.0234E-05
2.0538E-02	2.8176E-04
2.6204E-02	1.2182E-04
3.3286E-02	1.0822E-04
4.2847E-02	-2.4179E-05
5.5949E-02	-1.9207E-04
6.9759E-02	-3.4529E-04
8.8527E-02	-5.2019E-04
1.1331E-01	-8.5134E-04
1.4448E-01	-9.6665E-04
1.8449E-01	-8.9595E-04
2.3548E-01	-6.7747E-04
3.0064E-01	-6.3485E-04
3.8385E-01	7.4620E-05

Table F.5-23 Velocity measurements made at S/T = 0.85 with the VW system of the laser anemometer, plane 8

File E609770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.2
density (kilograms per meter cubed) = 1.117247
viscosity (meters squared per second) = 1.635988E-05
Atmospheric pressure (Pascals) = 95020
Velocity of undisturbed free stream (Uref, in m/s) = 27.68562
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08992E-03
Estimated momentum thickness Reynolds number = 6921.321
Location of traverse: X/T = 3.187 Z/T =-.98015 (Plane 8 , S/T = 0.75)

Y/T	vw/Uref2
3.7181E-03	6.6710E-05
4.4263E-03	6.1618E-05
5.4887E-03	7.1134E-05
6.5510E-03	2.9463E-04
7.6133E-03	1.9645E-04
9.2839E-03	1.9976E-04
1.1508E-02	1.4981E-04
1.4341E-02	2.9359E-05
1.7882E-02	1.7435E-04
2.2132E-02	1.4453E-04
2.7797E-02	1.2779E-04
3.4880E-02	1.5646E-04
4.4441E-02	-1.4017E-05
5.6126E-02	-3.8535E-05
7.1353E-02	-2.3117E-04
9.0120E-02	-4.0653E-04
1.1491E-01	-5.2239E-04
1.4607E-01	-1.0041E-03
1.8608E-01	-1.0466E-03
2.3708E-01	-7.6557E-04
3.0223E-01	-2.6395E-04

Table F.5-24 Velocity measurements made at S/T = 0.75 with the VW system of the laser anemometer, plane 8

File E610770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.4
density (kilograms per meter cubed) = 1.113555
viscosity (meters squared per second) = 1.642266E-05
Atmospheric pressure (Pascals) = 94770
Velocity of undisturbed free stream (Uref, in m/s) = 27.67857
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090129E-03
Estimated momentum thickness Reynolds number = 6893.459
Location of traverse; X/T = 3.187 Z/T =-.88015 (Plane 8 , S/T = 0.65)

Y/T	vw/Uref2
3.5411E-05	4.1013E-05
4.2493E-03	8.1131E-05
5.3116E-03	-3.9022E-05
6.3739E-03	1.3073E-04
7.4363E-03	-7.4218E-05
9.2068E-03	-1.1033E-04
1.1331E-02	1.0552E-04
1.4164E-02	-1.6631E-04
1.7705E-02	-1.8200E-04
2.1955E-02	-2.1860E-04
2.7620E-02	-1.2877E-04
3.4703E-02	-7.9516E-05
4.4263E-02	-2.5817E-04
5.5949E-02	-3.8156E-04
7.1176E-02	-4.4183E-04
8.9943E-02	-5.5192E-04
1.1473E-01	-6.8076E-04
1.4766E-01	-5.2716E-04
1.8591E-01	-2.9448E-04
2.3690E-01	-9.1973E-05
3.0205E-01	5.0810E-06

Table F.5-25 Velocity measurements made at S/T = 0.65 with the VW system of the laser anemometer, plane 8

File E611770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.5
density (kilograms per meter cubed) = 1.107659
viscosity (meters squared per second) = 1.651438E-05
Atmospheric pressure (Pascals) = 94300
Velocity of undisturbed free stream (Uref, in m/s) = 27.7151
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08905E-03
Estimated momentum thickness Reynolds number = 6862.409
Location of traverse; X/T = 3.187 Z/T =-.76015 (Plane 8 , S/T = 0.55)

Y/T	vw/Uref2
1.2394E-03	1.2620E-04
1.9478E-03	-1.5646E-05
3.0099E-03	-6.2460E-05
3.7181E-03	-4.3789E-04
5.1346E-03	1.5622E-04
6.9051E-03	3.8841E-06
9.0297E-03	-1.5168E-04
1.1863E-02	-1.9235E-04
1.5404E-02	-1.5816E-05
2.0361E-02	-4.3827E-04
2.5319E-02	-2.4464E-04
3.2401E-02	-2.6993E-04
4.1962E-02	-3.1663E-04
5.3647E-02	-4.8526E-04
6.8874E-02	-6.5611E-04
8.7642E-02	-7.3630E-04
1.1243E-01	-7.2692E-04
1.4359E-01	-6.1835E-04
1.8360E-01	-4.2460E-04
2.3460E-01	-9.3692E-05
3.0011E-01	9.8082E-05

Table F.5-26 Velocity measurements made at S/T = 0.55 with the VW system of the laser anemometer, plane 8

File E612770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.7
density (kilograms per meter cubed) = 1.102922
viscosity (meters squared per second) = 1.659393E-05
Atmospheric pressure (Pascals) = 93960
Velocity of undisturbed free stream (Uref, in m/s) = 27.73453
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.088476E-03
Estimated momentum thickness Reynolds number = 6833.34
Location of traverse: X/T = 3.187 Z/T =-.68015 (Plane 8 , S/T = 0.45)

Y/T	vw/Uref2
3.7181E-03	-2.3938E-04
4.4263E-03	-1.4744E-04
5.4887E-03	-2.9104E-04
6.9051E-03	-1.9549E-04
7.9674E-03	2.0585E-04
9.3839E-03	-2.0189E-04
1.1508E-02	8.9331E-05
1.4341E-02	7.8461E-05
1.7882E-02	-1.5913E-04
2.2132E-02	-2.8313E-04
2.7797E-02	-2.1421E-04
3.4880E-02	-3.1625E-04
4.4441E-02	-3.8719E-04
5.6126E-02	-5.0995E-04
7.1353E-02	-4.9929E-04
9.0120E-02	-5.3377E-04
1.1491E-01	-4.1386E-04
1.4607E-01	-5.1859E-04
1.8608E-01	-4.5474E-04
2.3708E-01	-1.8409E-04
3.0223E-01	4.4140E-05

Table F.5-27 Velocity measurements made at S/T = 0.45 with the VW system of the laser anemometer, plane 8

File E613770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.2
density (kilograms per meter cubed) = 1.104078
viscosity (meters squared per second) = 1.655501E-05
Atmospheric pressure (Pascals) = 93900
Velocity of undisturbed free stream (Uref, in m/s) = 27.76105
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087695E-03
Estimated momentum thickness Reynolds number = 6854.642
Location of traverse; X/T = 3.187 Z/T =-.58015 (Plane 8 , S/T = 0.35)

Y/T	vw/Uref2
3.5411E-03	-2.4271E-04
4.2493E-03	-9.2611E-05
5.3116E-03	-9.5148E-06
6.3739E-03	4.2003E-05
7.4363E-03	-3.2470E-05
9.2068E-03	-1.8955E-04
1.1331E-02	-1.4265E-04
1.4164E-02	-2.3833E-04
1.7705E-02	-2.4465E-04
2.1955E-02	-3.8554E-04
2.7620E-02	-1.7920E-04
3.4703E-02	-2.7418E-04
4.4263E-02	-3.0755E-04
5.5949E-02	-2.9028E-04
7.1176E-02	-3.1659E-04
8.9943E-02	-2.1867E-04
1.1473E-01	-2.8903E-04
1.4589E-01	-2.3973E-04
1.8591E-01	-1.8910E-04
2.3690E-01	-1.0684E-04
3.0418E-01	1.4302E-05

Table F.5-28 Velocity measurements made at S/T = 0.35 with the VW system of the laser anemometer, plane 8

File E614770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 22.9
density (kilograms per meter cubed) = 1.184609
viscosity (meters squared per second) = 1.653411E-05
Atmospheric pressure (Pascals) = 93850
Velocity of undisturbed free stream (Uref, in m/s) = 27.75976
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087733E-03
Estimated momentum thickness Reynolds number = 6863.056
Location of traverse; X/T = 3.167 Z/T =-.48015 (Plane B , S/T = 0.25)

Y/T	vw/Uref2
3.7181E-03	-3.6813E-04
4.4263E-03	-3.6886E-04
5.4887E-03	-3.8660E-04
6.5510E-03	-2.3933E-04
7.6133E-03	-1.7065E-04
9.3829E-03	-1.9553E-04
1.1508E-02	-2.1897E-04
1.4341E-02	-2.1933E-04
1.8237E-02	-2.8858E-04
2.2132E-02	-1.7474E-04
2.7797E-02	-1.3388E-04
3.4880E-02	-1.0313E-04
4.4441E-02	-9.6598E-05
5.6126E-02	-7.5868E-05
7.1353E-02	-8.0429E-05
9.0120E-02	-8.1452E-05
1.1491E-01	-1.1650E-04
1.4607E-01	-1.2093E-04
1.8608E-01	-9.7557E-05
2.3708E-01	-4.1861E-05
3.0223E-01	-5.2509E-05

Table F.5-29 Velocity measurements made at S/T = 0.25 with the VW system of the laser anemometer, plane 8

File E615770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 24.2
density (kilograms per meter cubed) = 1.100246
viscosity (meters squared per second) = 1.665591E-05
Atmospheric pressure (Pascals) = 93890
Velocity of undisturbed free stream (Uref, in m/s) = 27.77714
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087221E-03
Estimated momentum thickness Reynolds number = 6816.279
Location of traverse: X/T = 3.187 Z/T =-.38015 (Plane 8 , S/T = 0.15)

Y/T	vw/Uref2
1.2394E-03	-3.6386E-04
1.9476E-03	-4.0028E-04
3.0099E-03	-4.3196E-04
4.0722E-03	-3.0057E-04
5.1346E-03	-3.0551E-04
6.5510E-03	-2.1393E-04
9.0297E-03	5.1318E-06
1.1863E-02	1.7728E-04
1.5404E-02	-3.6802E-05
1.9653E-02	-7.6629E-05
2.5673E-02	1.9945E-05
3.2755E-02	1.5348E-04
4.1962E-02	2.4884E-04
5.3647E-02	-3.1154E-05
6.8874E-02	4.0588E-05
8.7642E-02	-1.4582E-04
1.1243E-01	-1.7713E-04
1.4359E-01	2.3541E-06
1.8360E-01	1.1918E-05
2.3460E-01	2.0946E-05
2.9975E-01	1.4859E-05

Table F.5-30 Velocity measurements made at S/T = 0.15 with the VW system of the laser anemometer, plane 8

F.6 LDV MEASUREMENTS IN PLANE 10

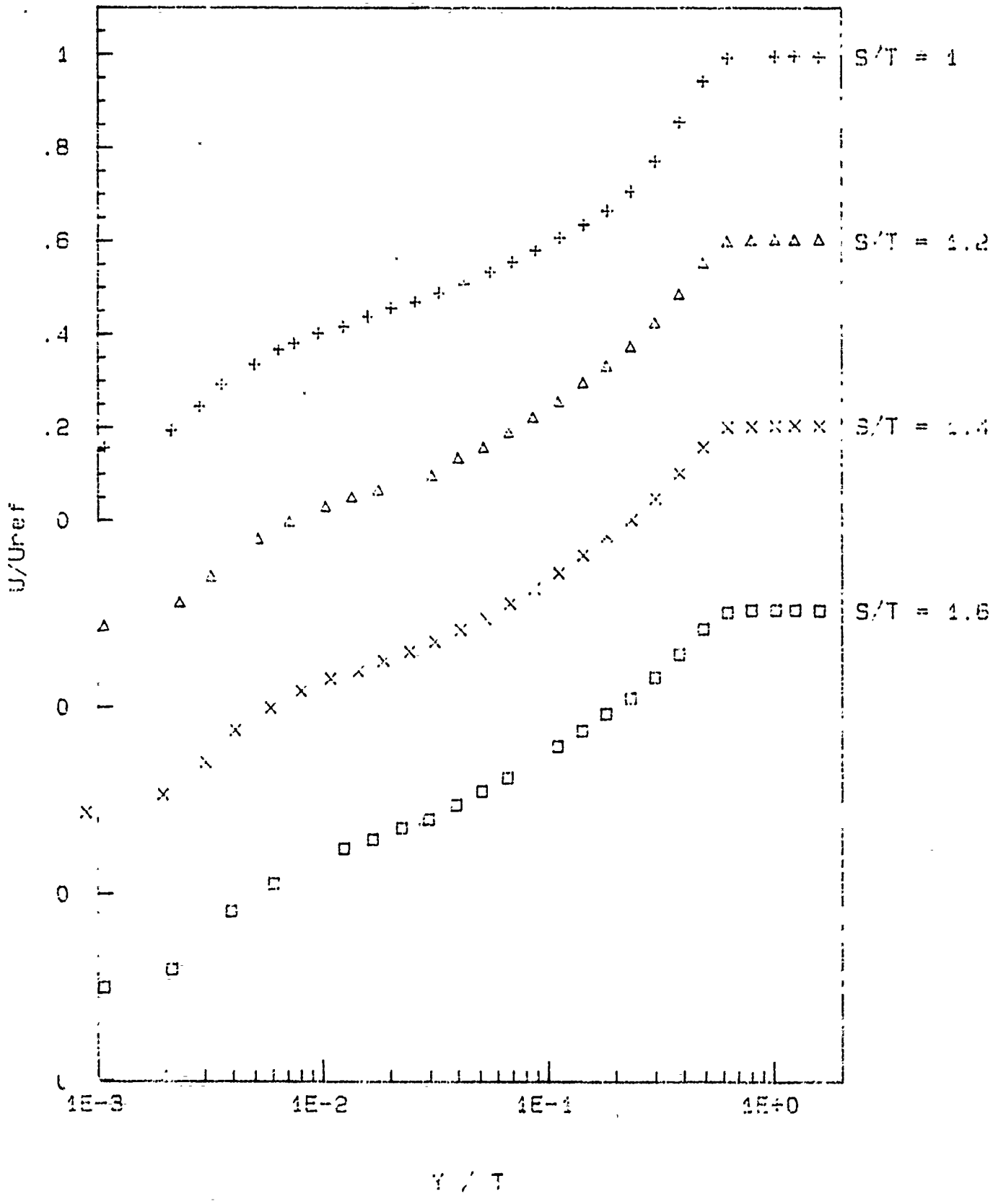


Figure F.6-1(a) Profiles of mean-velocity component U, plane 10.

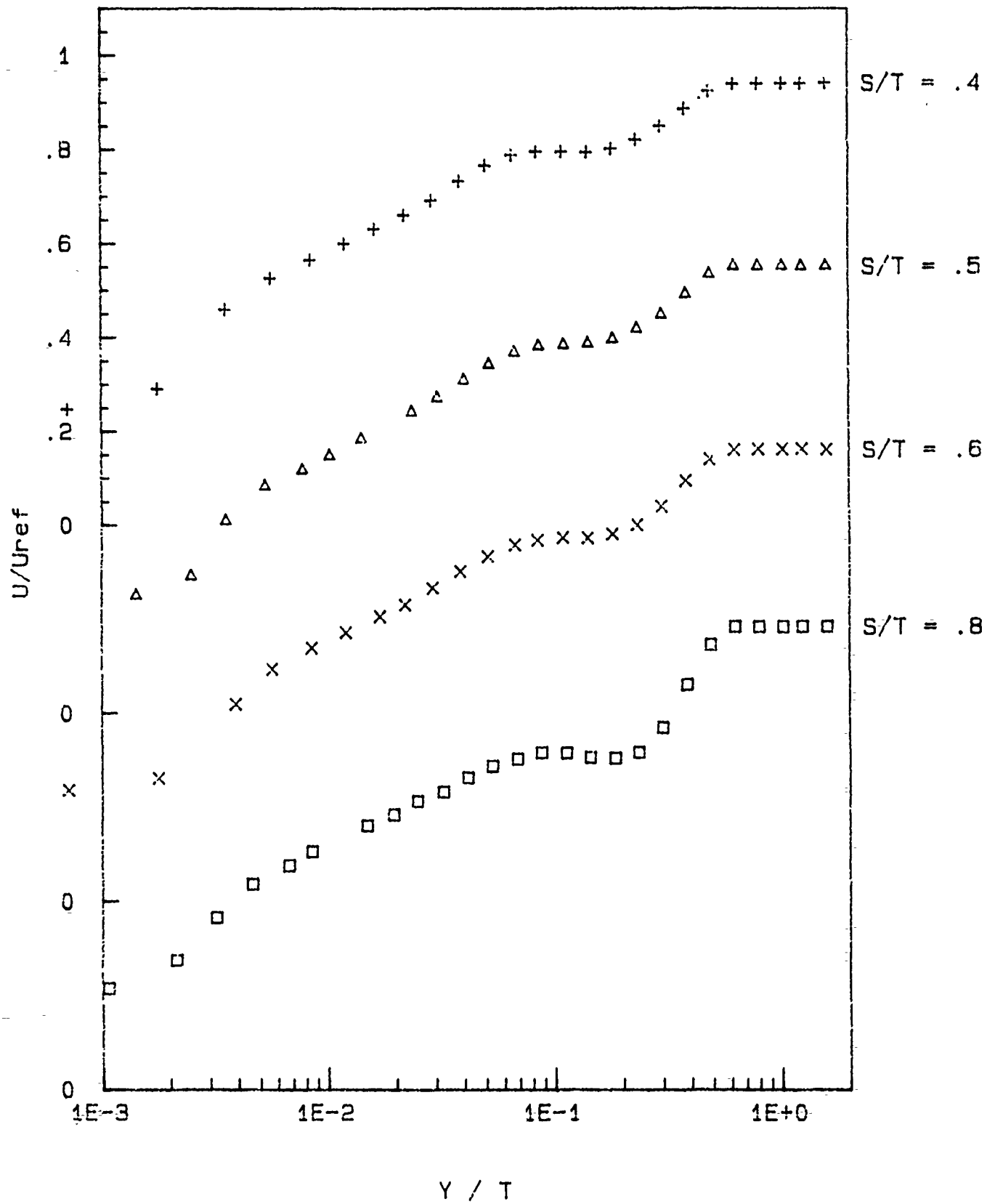


Figure F.6-1(b) Profiles of mean-velocity component U, plane 10.

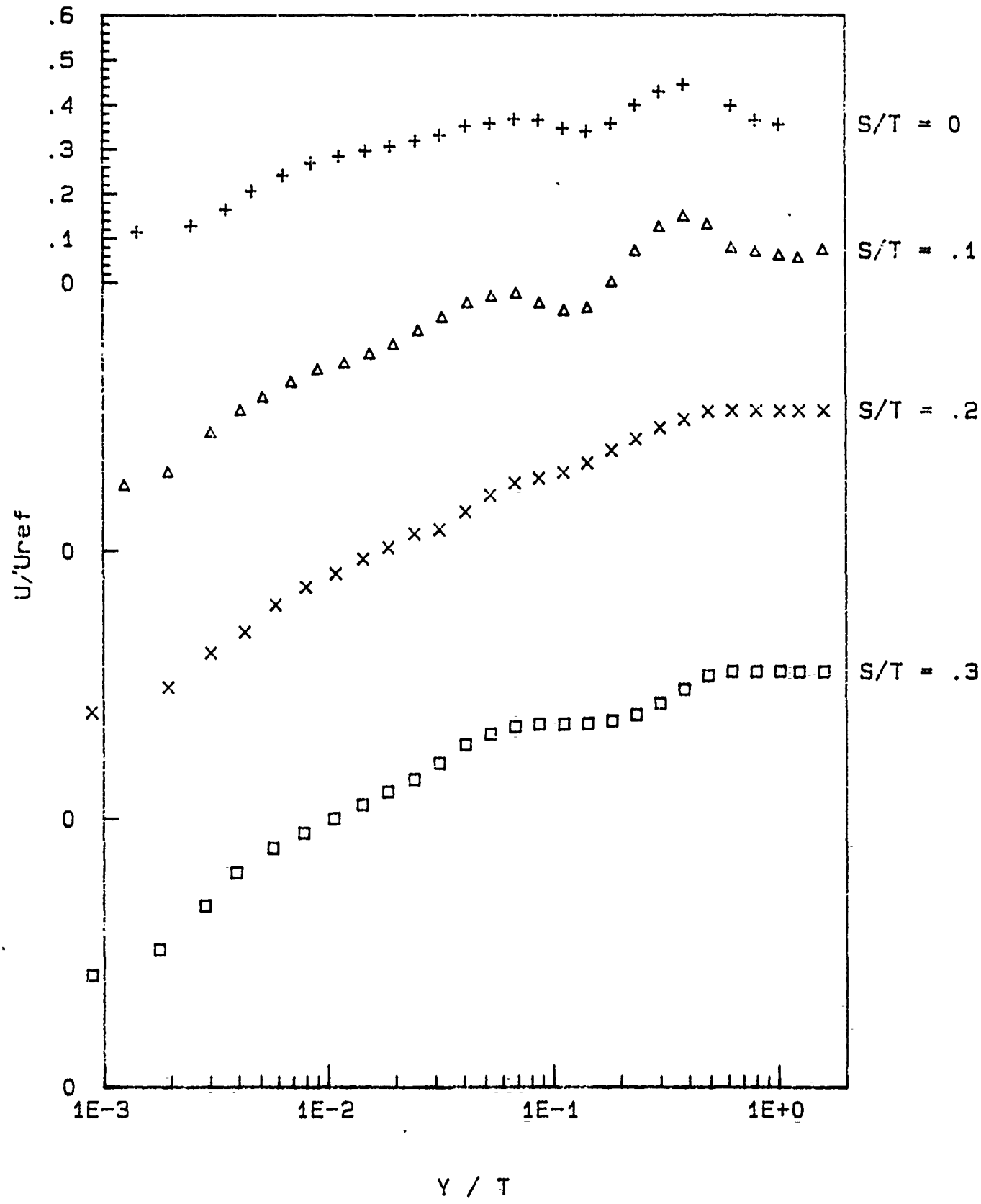


Figure F.6-1(c) Profiles of mean-velocity component U, plane 10.

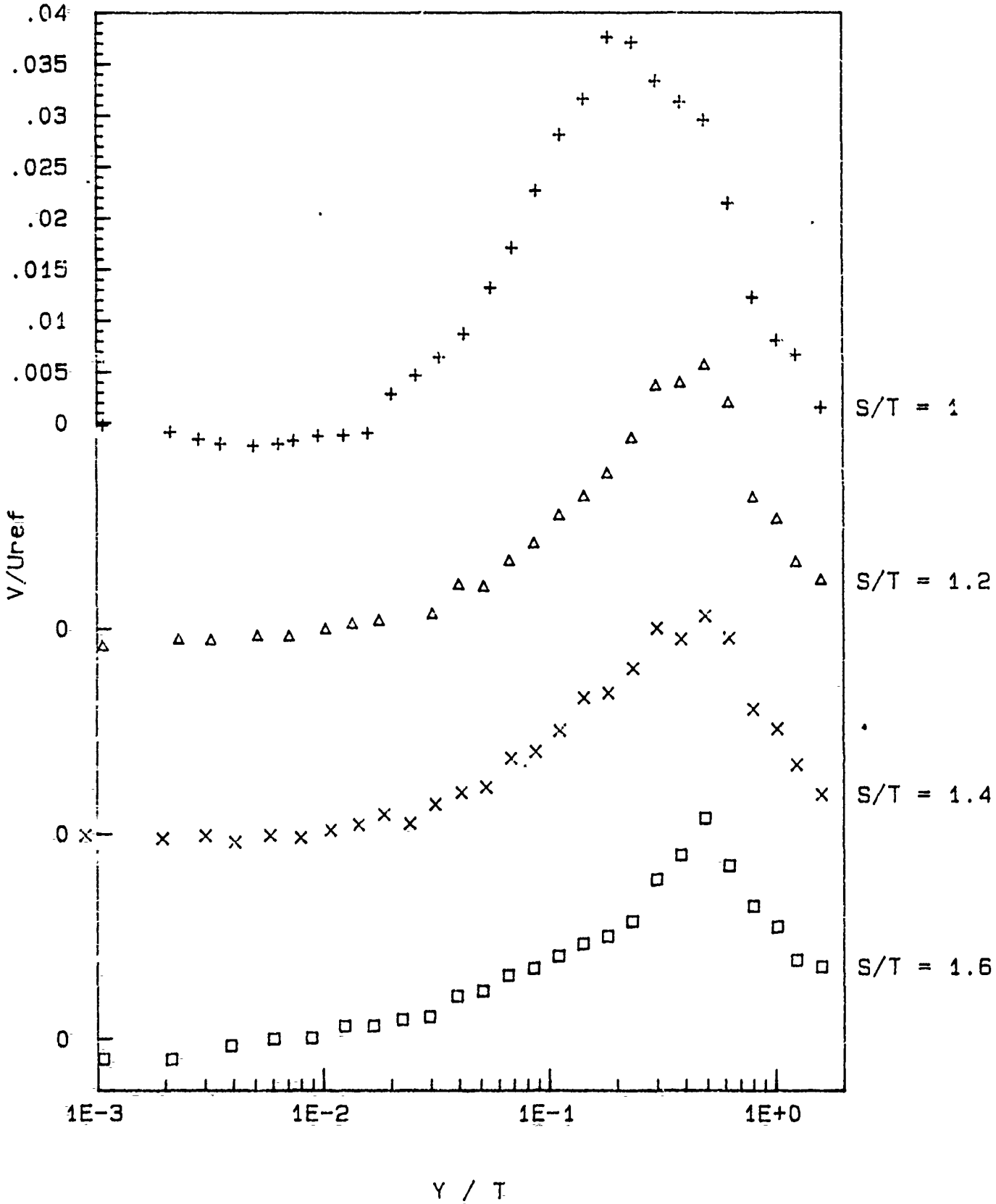


Figure F.6-2(a) Profiles of mean-velocity component V, plane 10.

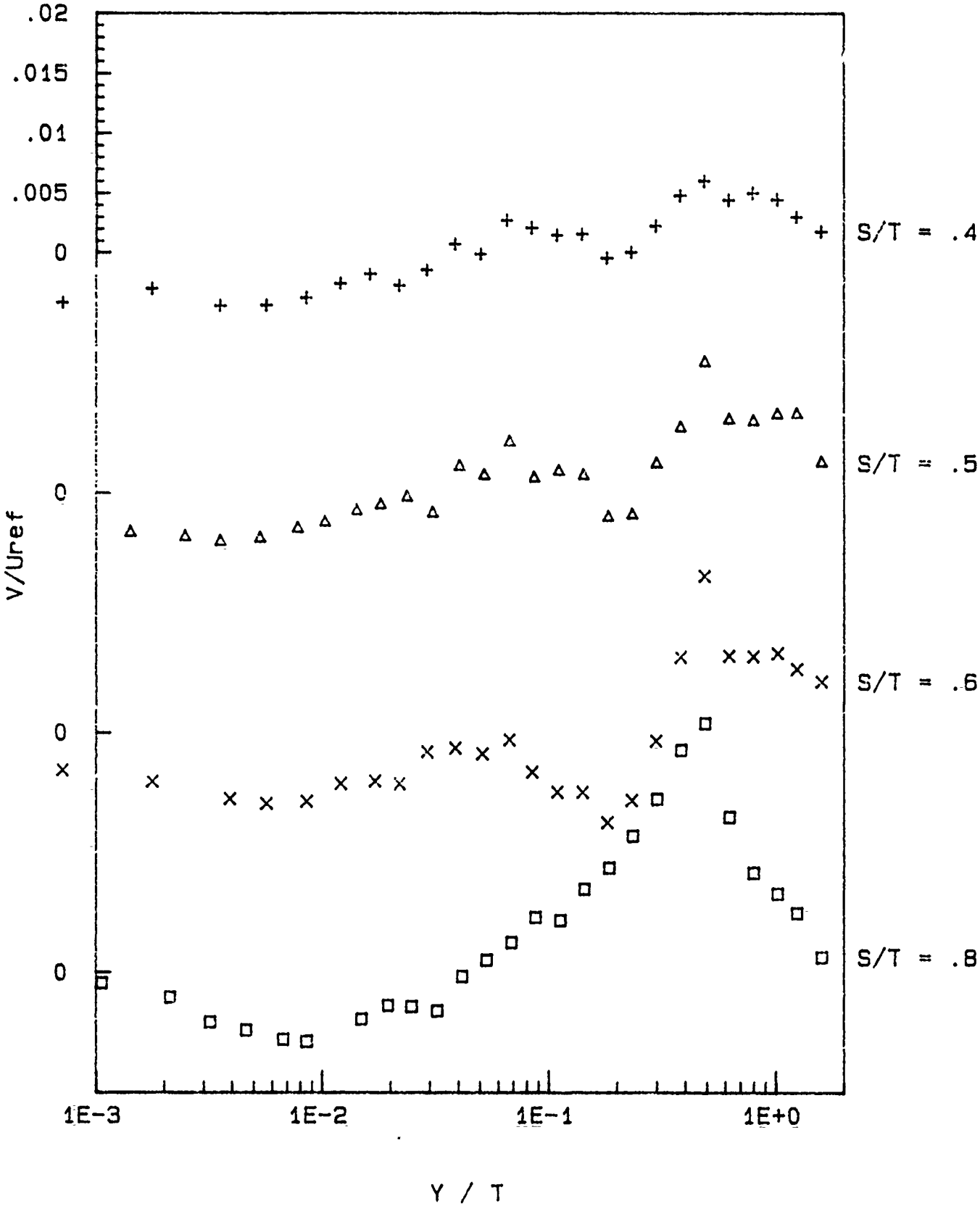


Figure F.6-2(b) Profiles of mean-velocity component V, plane 10.

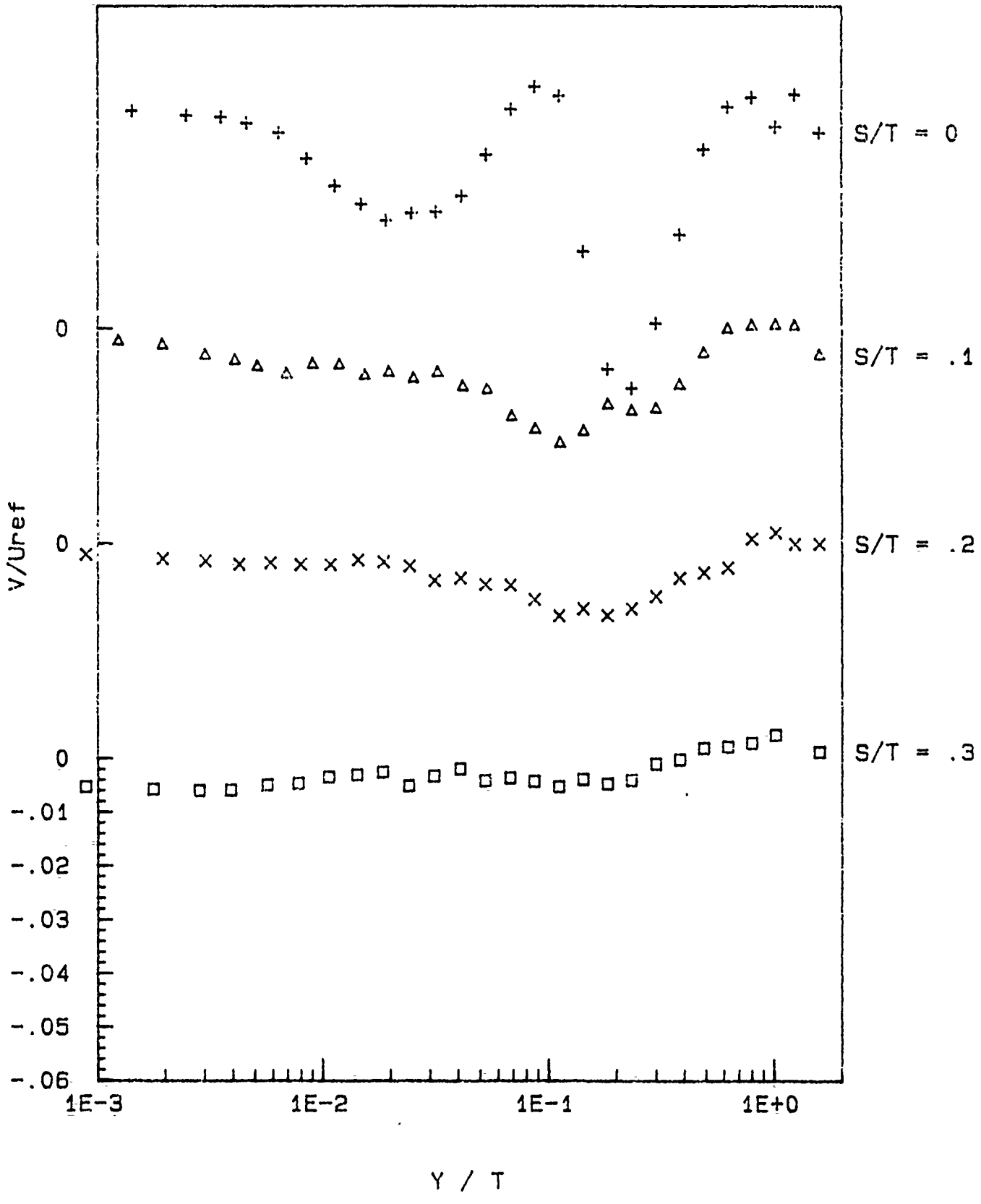


Figure F.6-2(c) Profiles of mean-velocity component V, plane 10.

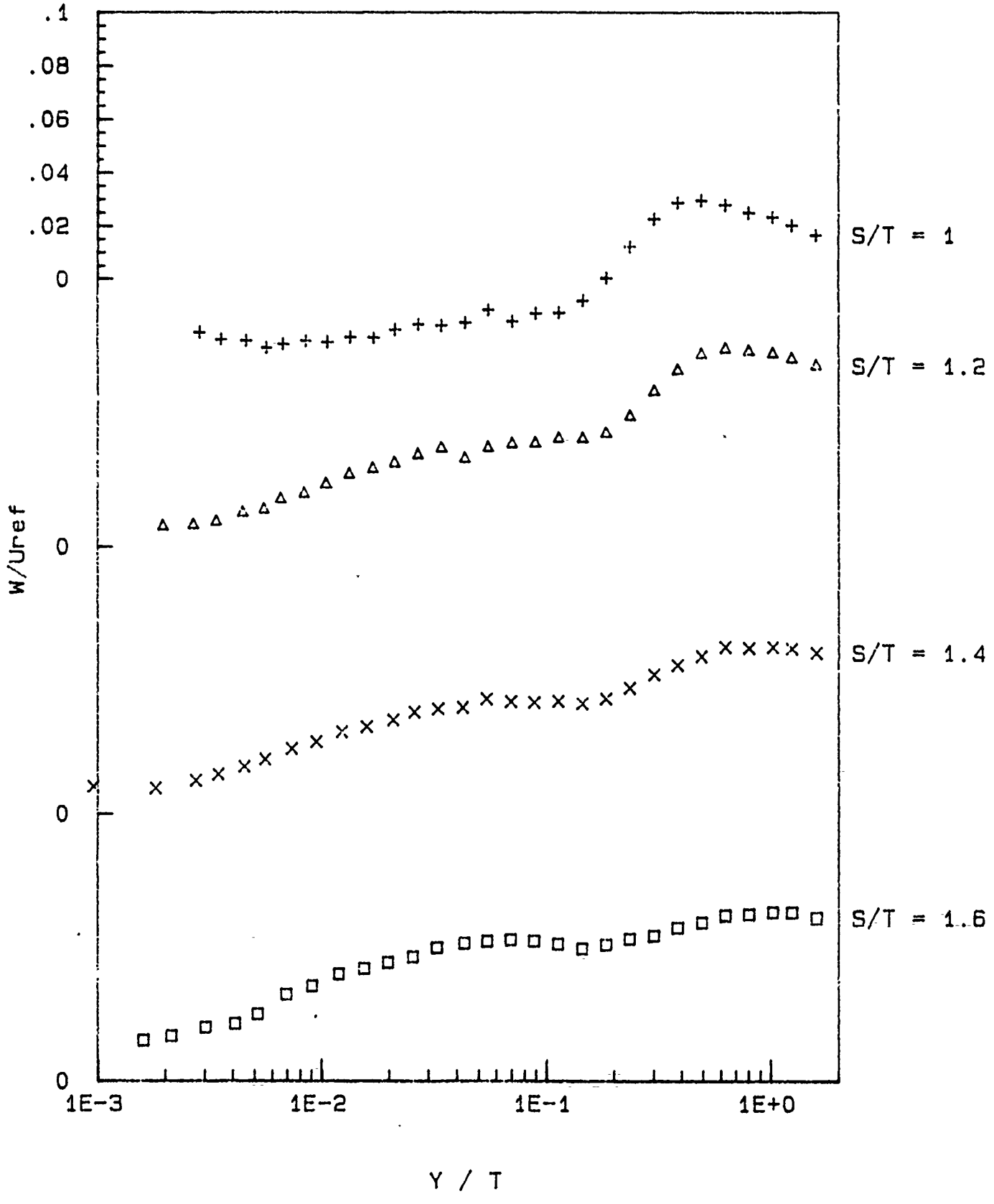


Figure F.6-3(a) Profiles of mean-velocity component W, plane 10.

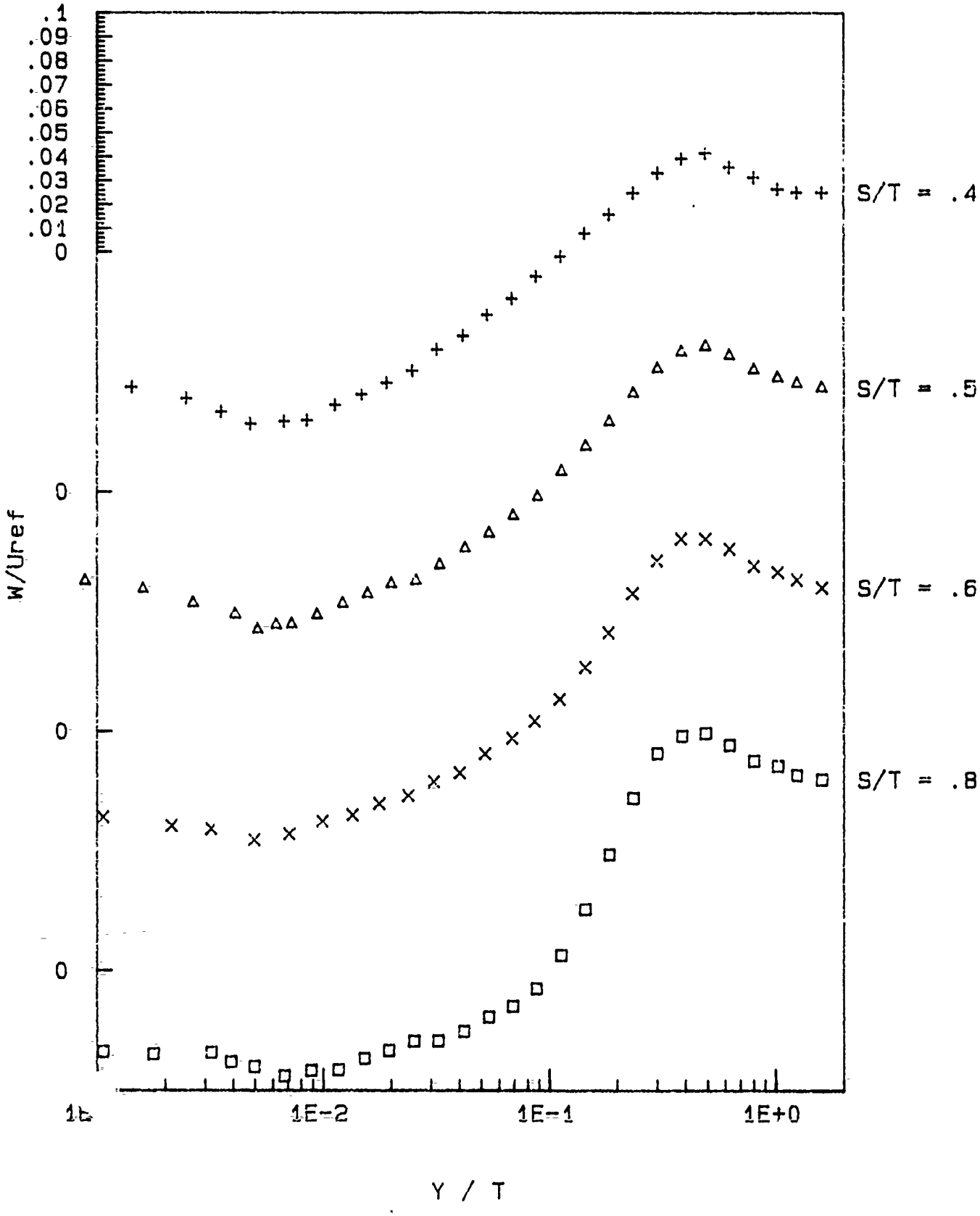


Figure F.6-3(b) Profiles of mean-velocity component W, plane 10.

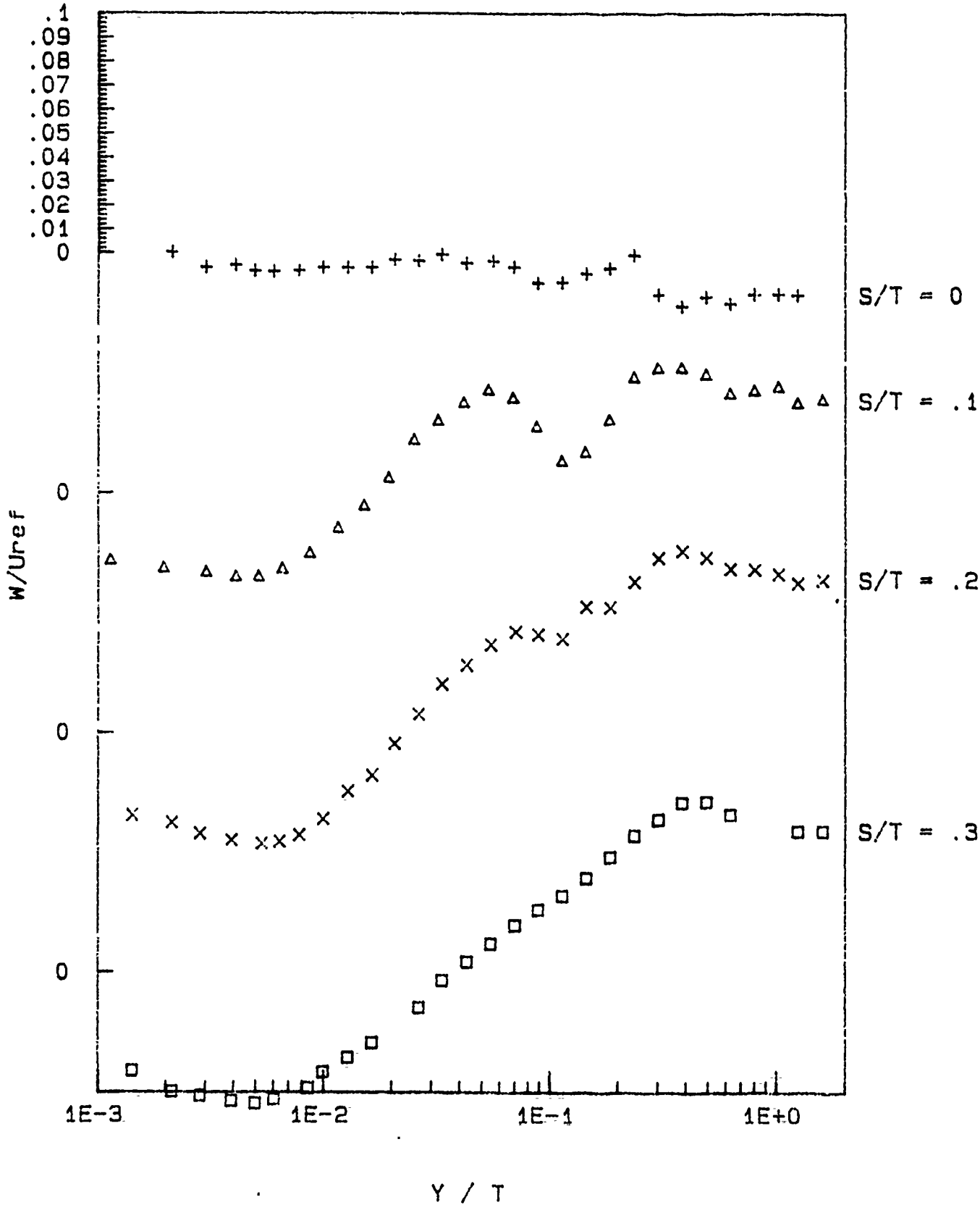


Figure F.6-3(c) Profiles of mean-velocity component W, plane 10.

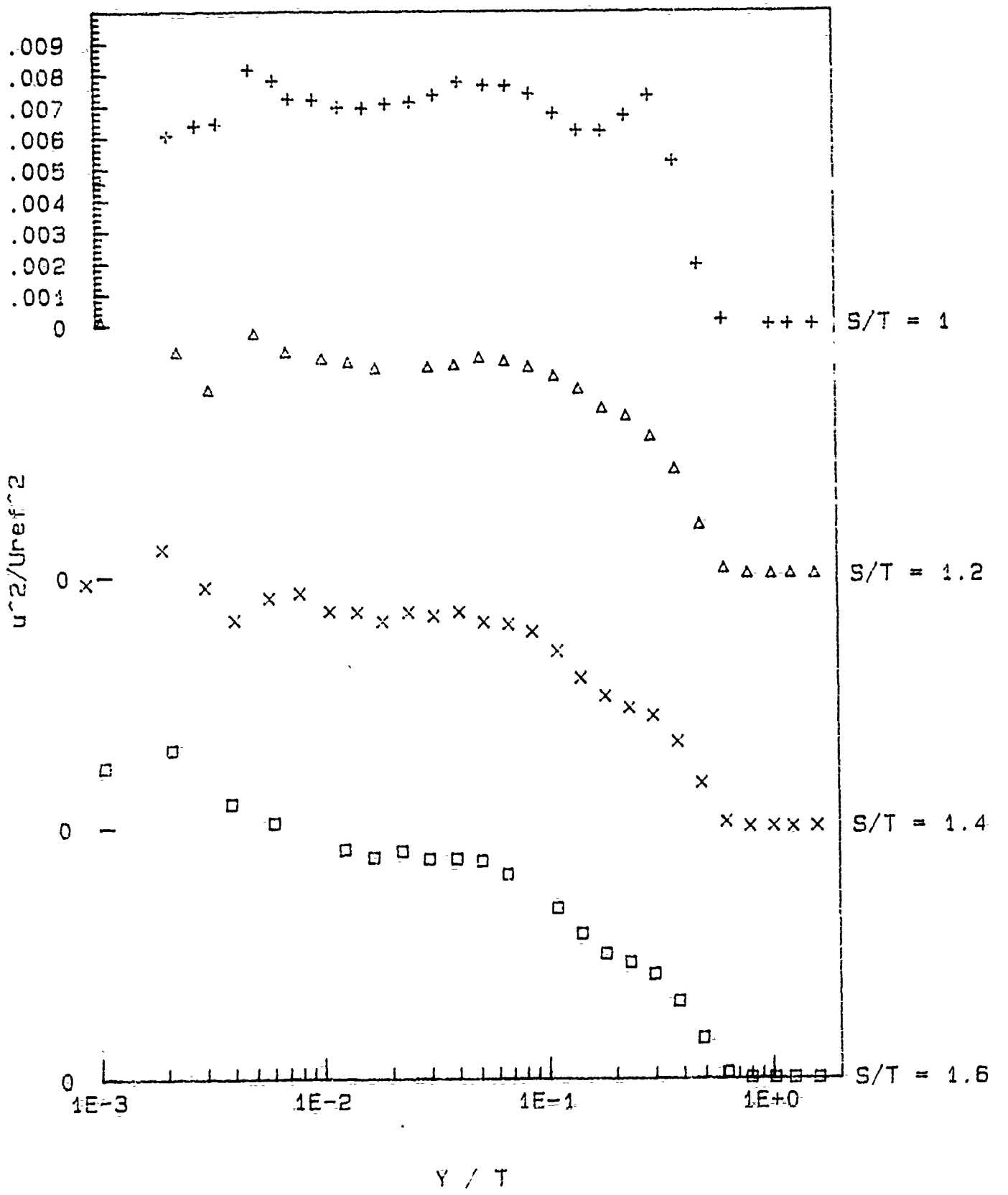


Figure F.6-4(a) Profiles of U component of turbulence normal stress, plane 10.

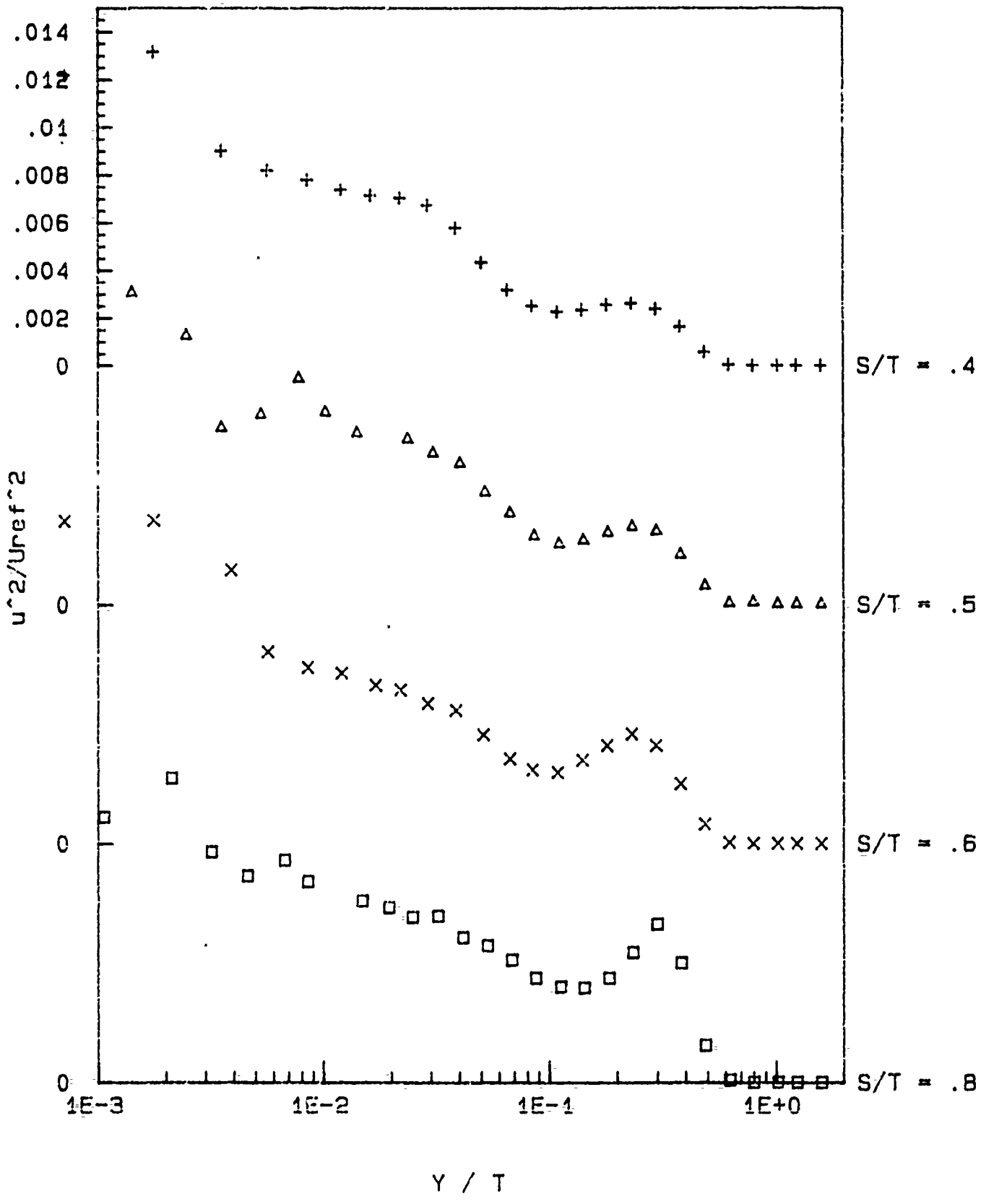


Figure F.6-4(b) Profiles of U component of turbulence normal stress, plane 10.

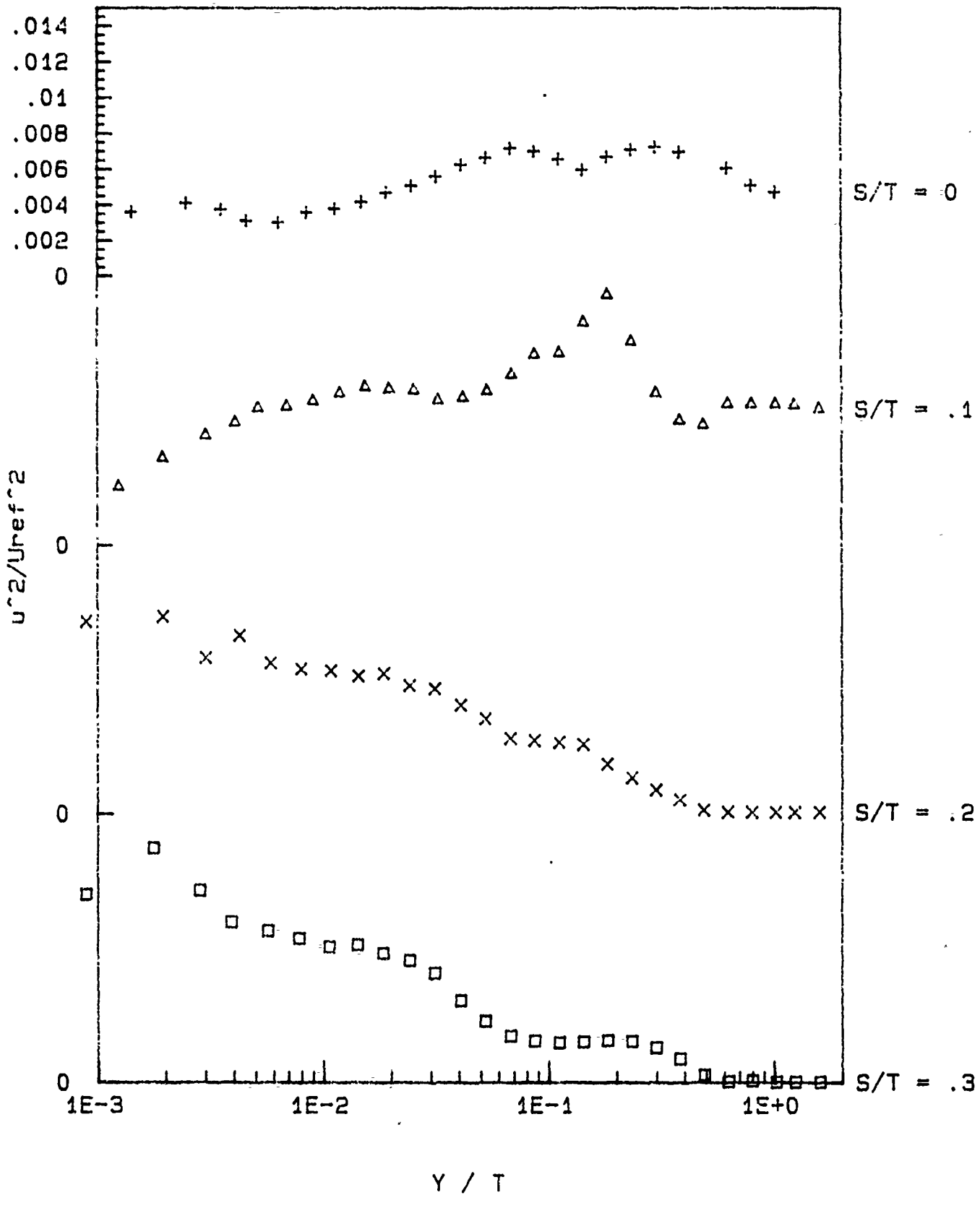


Figure F.6-4(c) Profiles of U component of turbulence normal stress, plane 10.

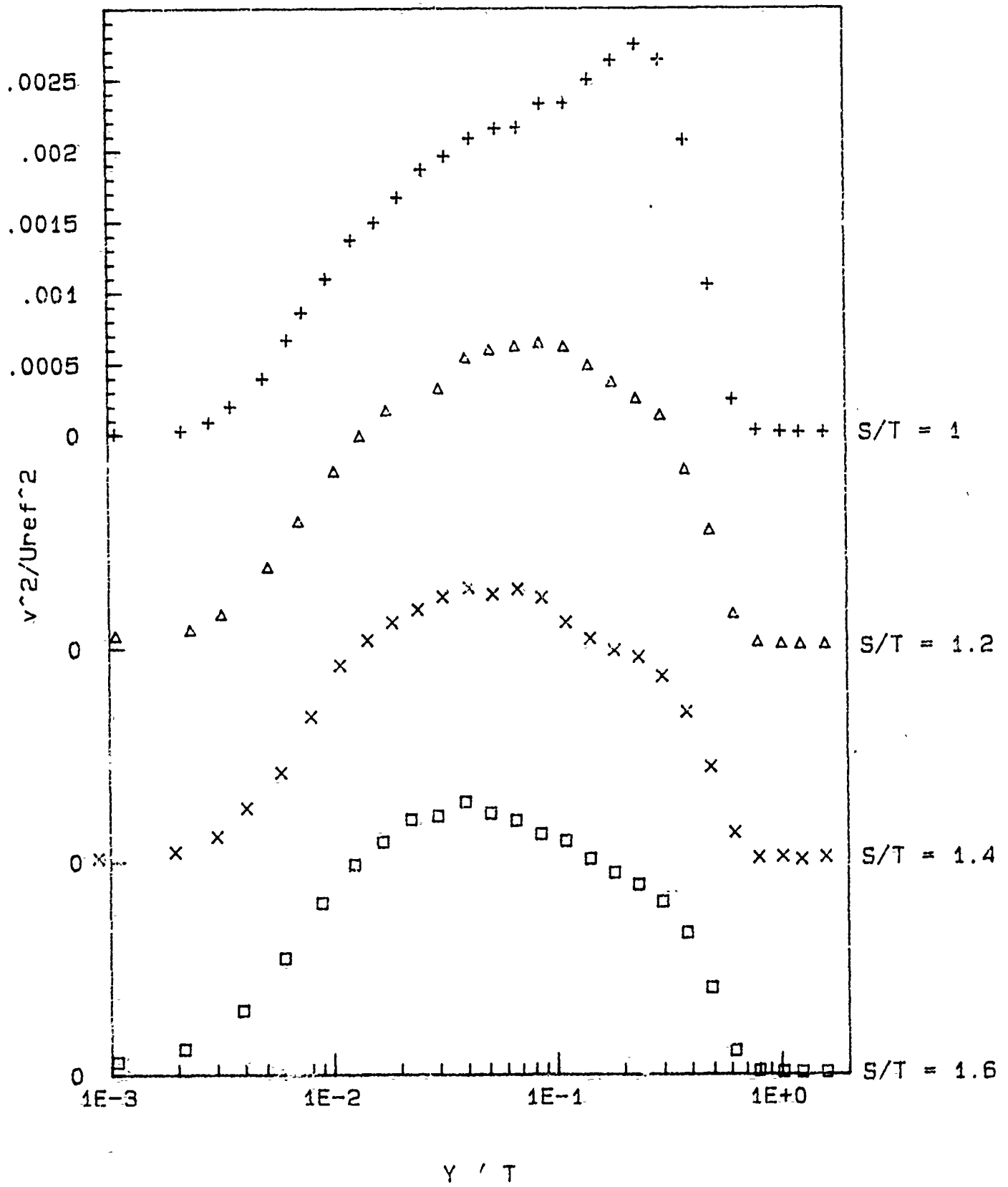


Figure F.6-5(a) Profiles of V component of turbulence normal stress, plane 10.

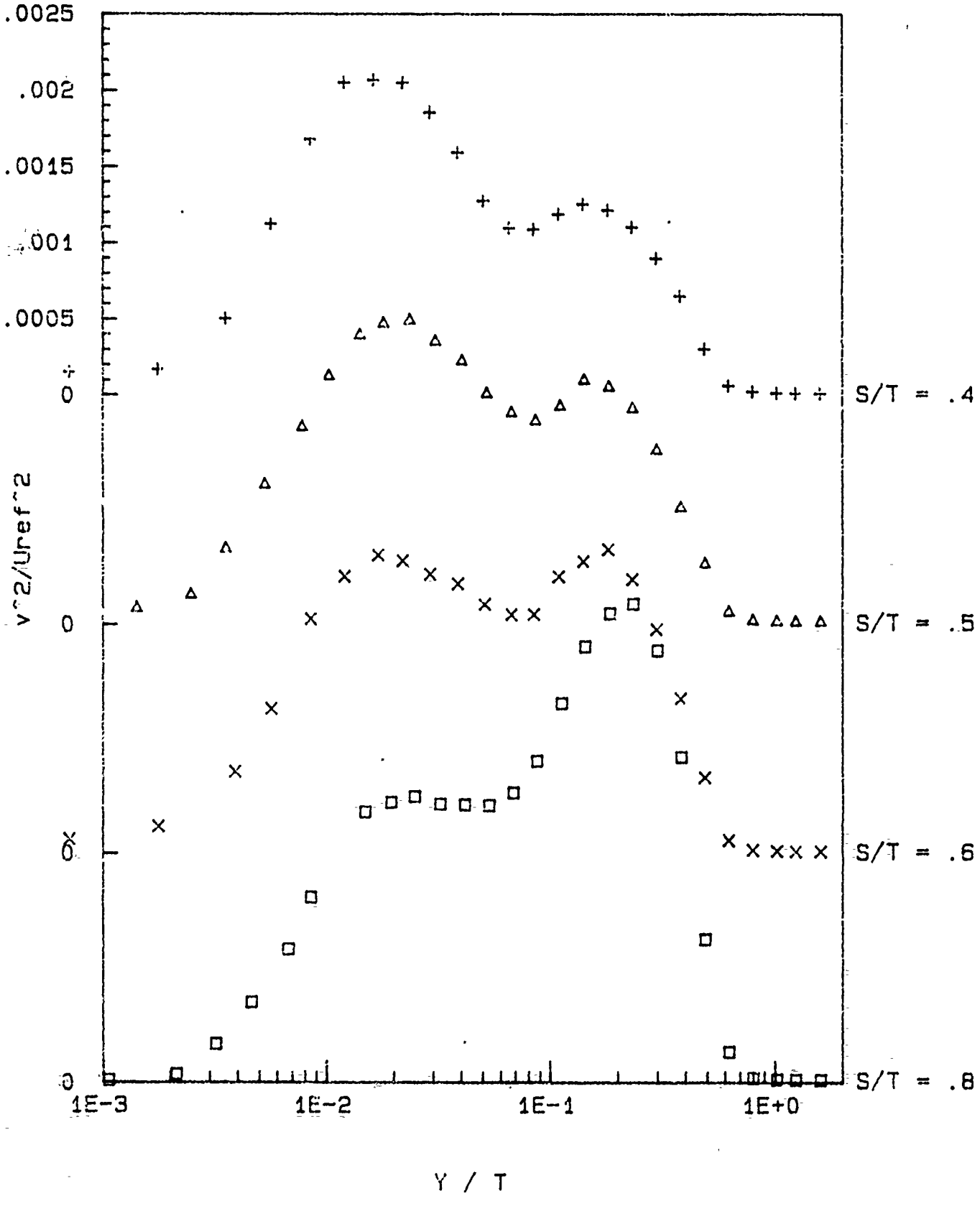


Figure F.6-5(b) Pro ... of V component of turbulence normal stress, plane 10.

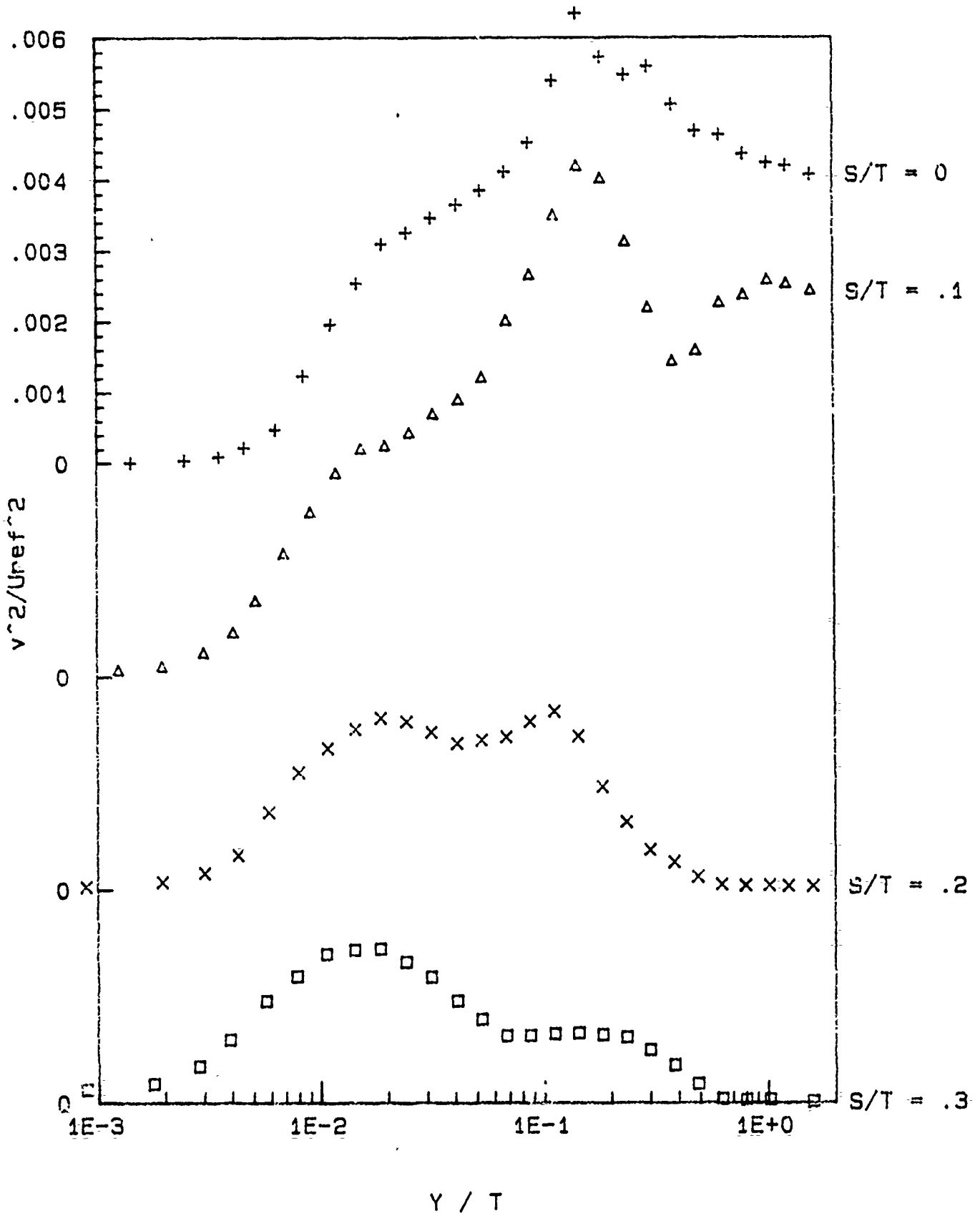


Figure F.6-5(c) Profiles of V component of turbulence normal stress, plane 10.

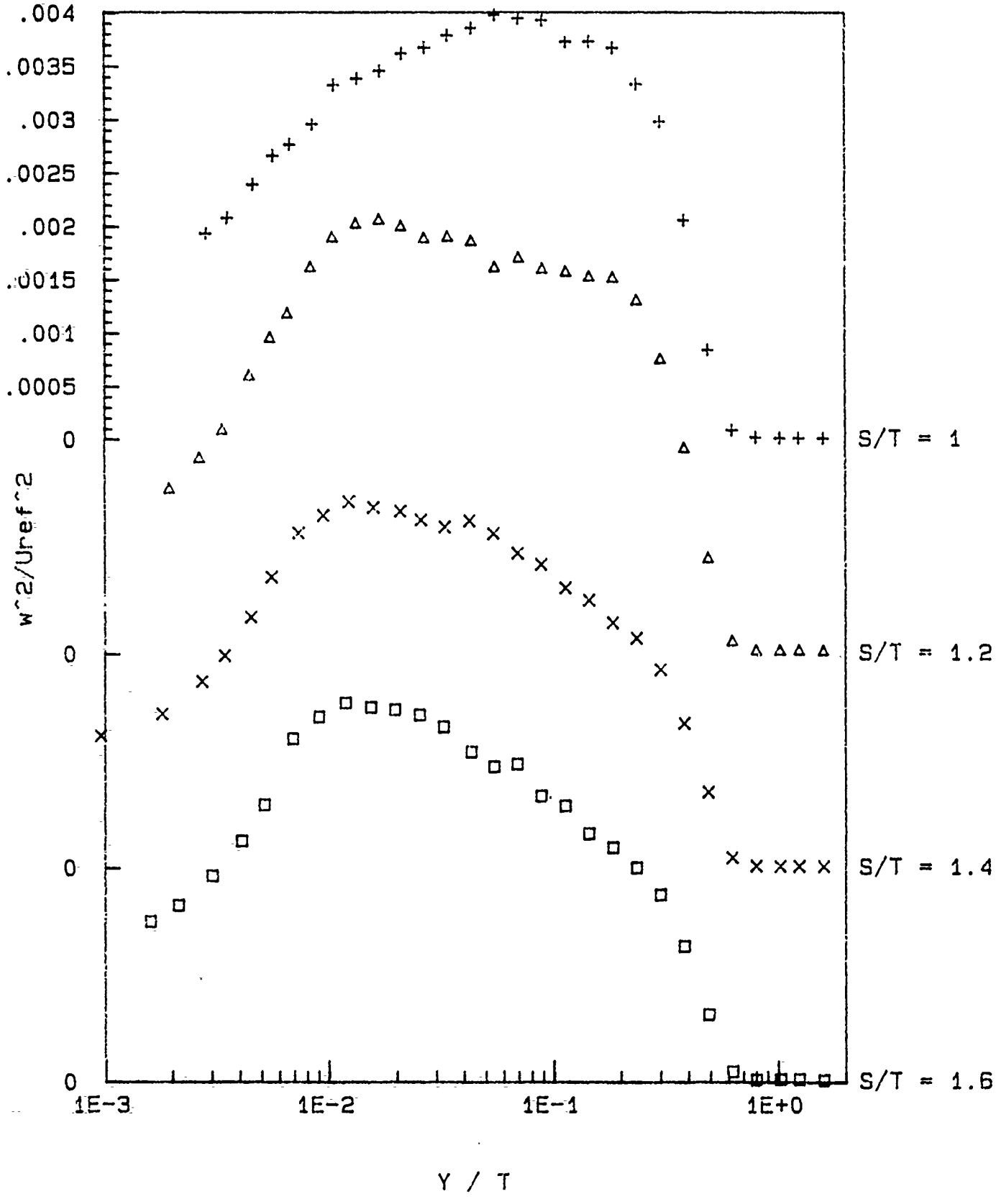


Figure F.6-6(a) Profiles of W component of turbulence normal stress, plane 10.

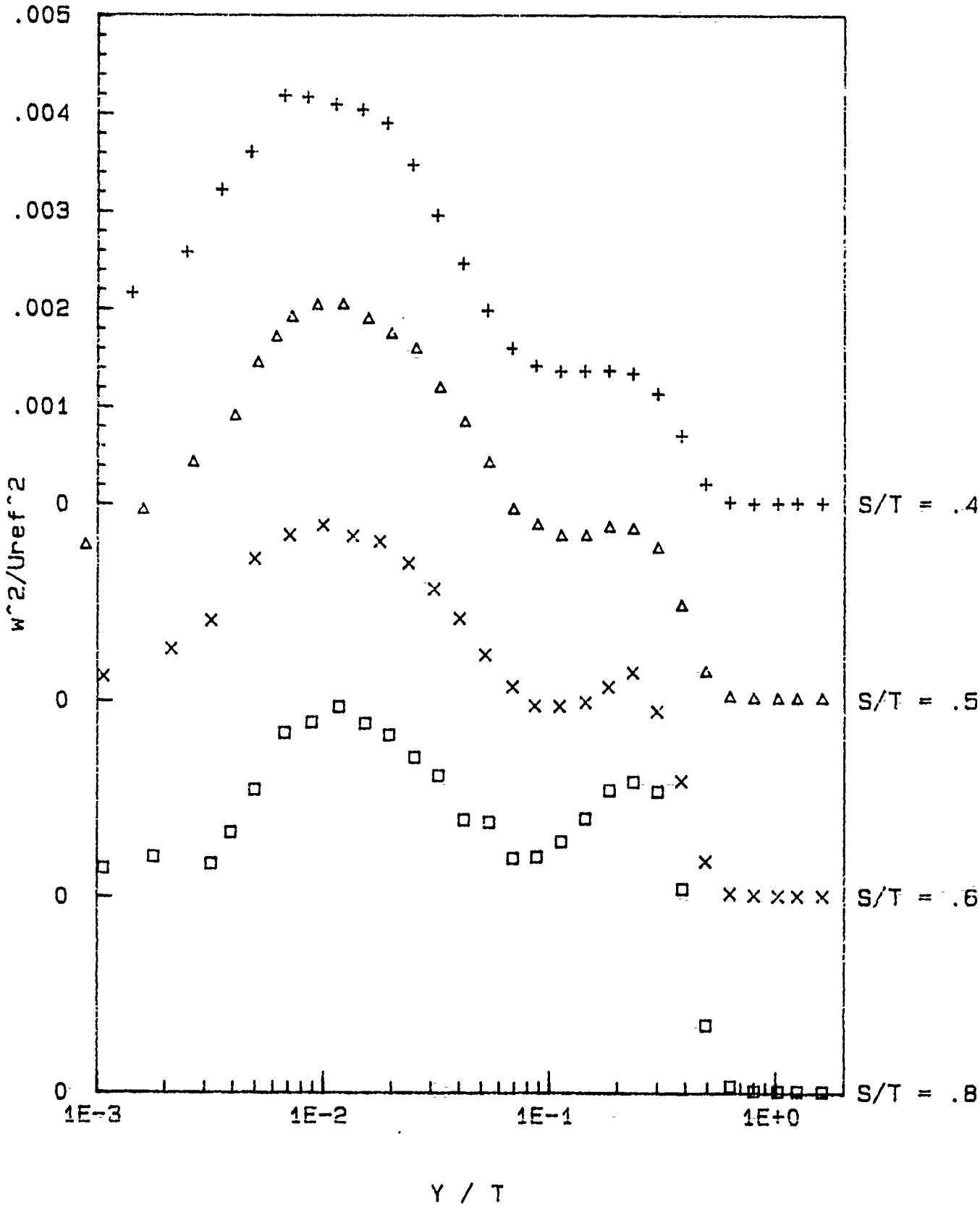


Figure F.6-6(b) Profiles of W component of turbulence normal stress, plane 10.

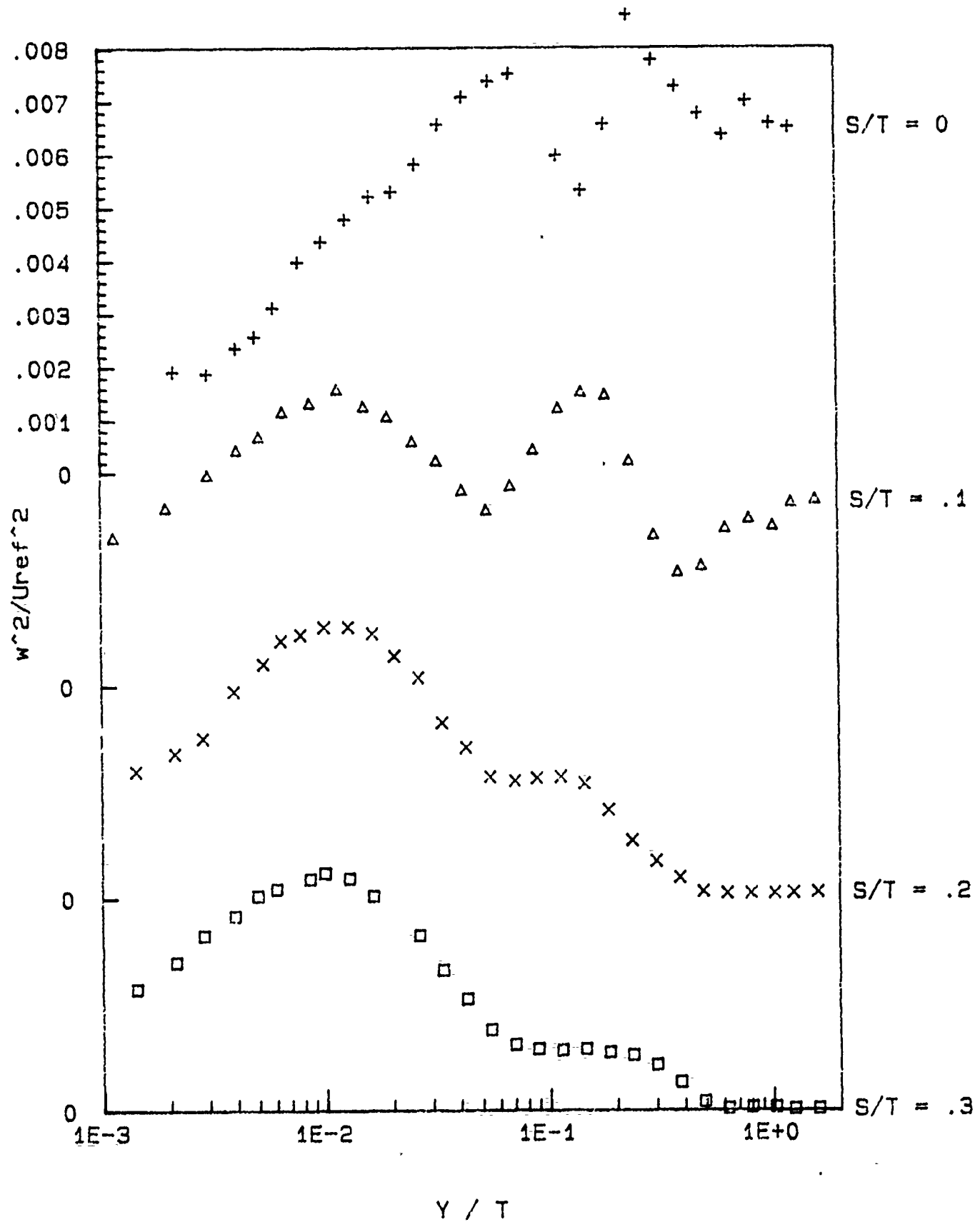


Figure F.6-6(c) Profiles of W component of turbulence normal stress, plane 10.

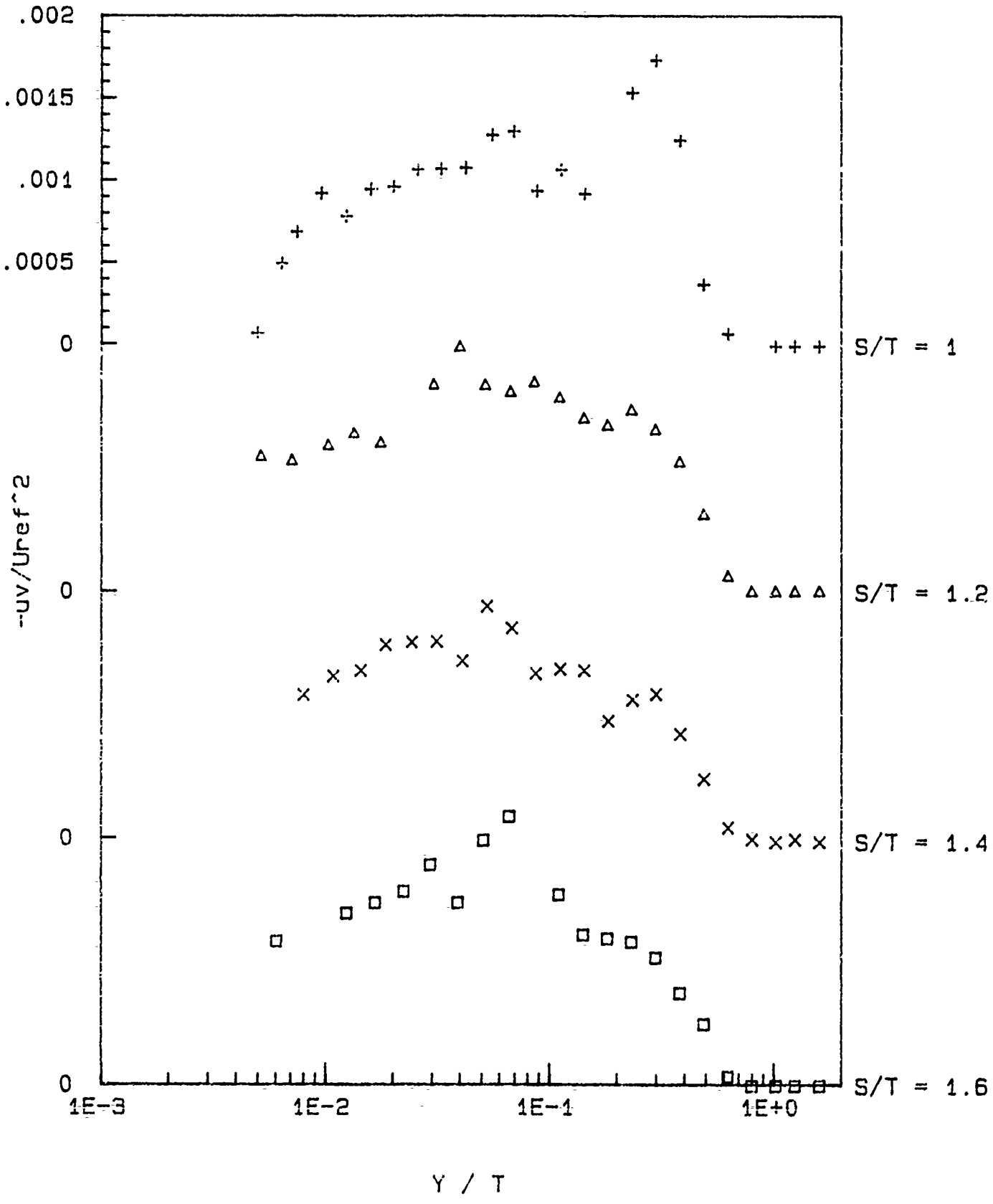


Figure F.6-7(a) Profiles of UV Reynolds shear stress, plane 10.

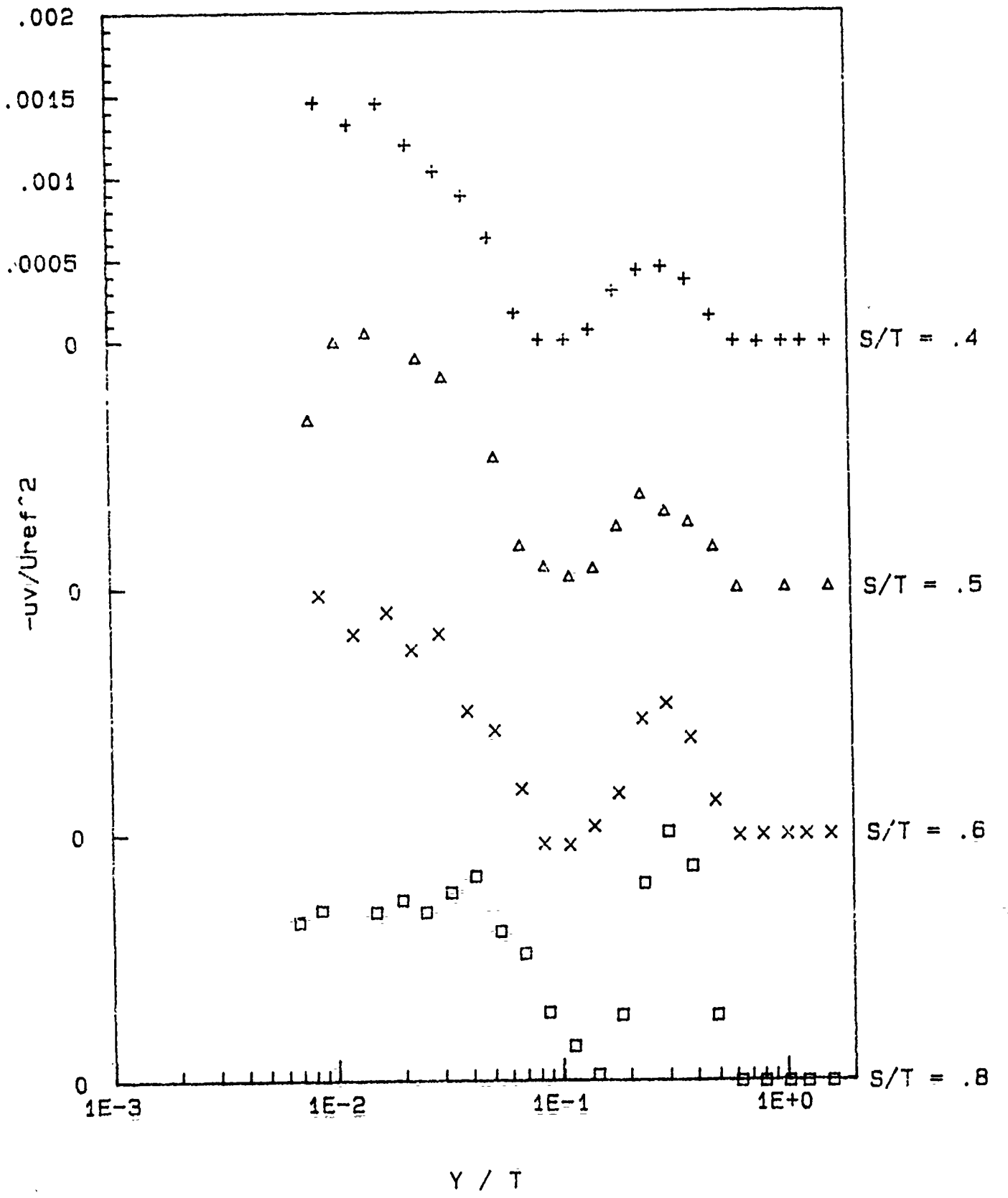


Figure F.6-7(b) Profiles of UV Reynolds shear stress, plane 10.

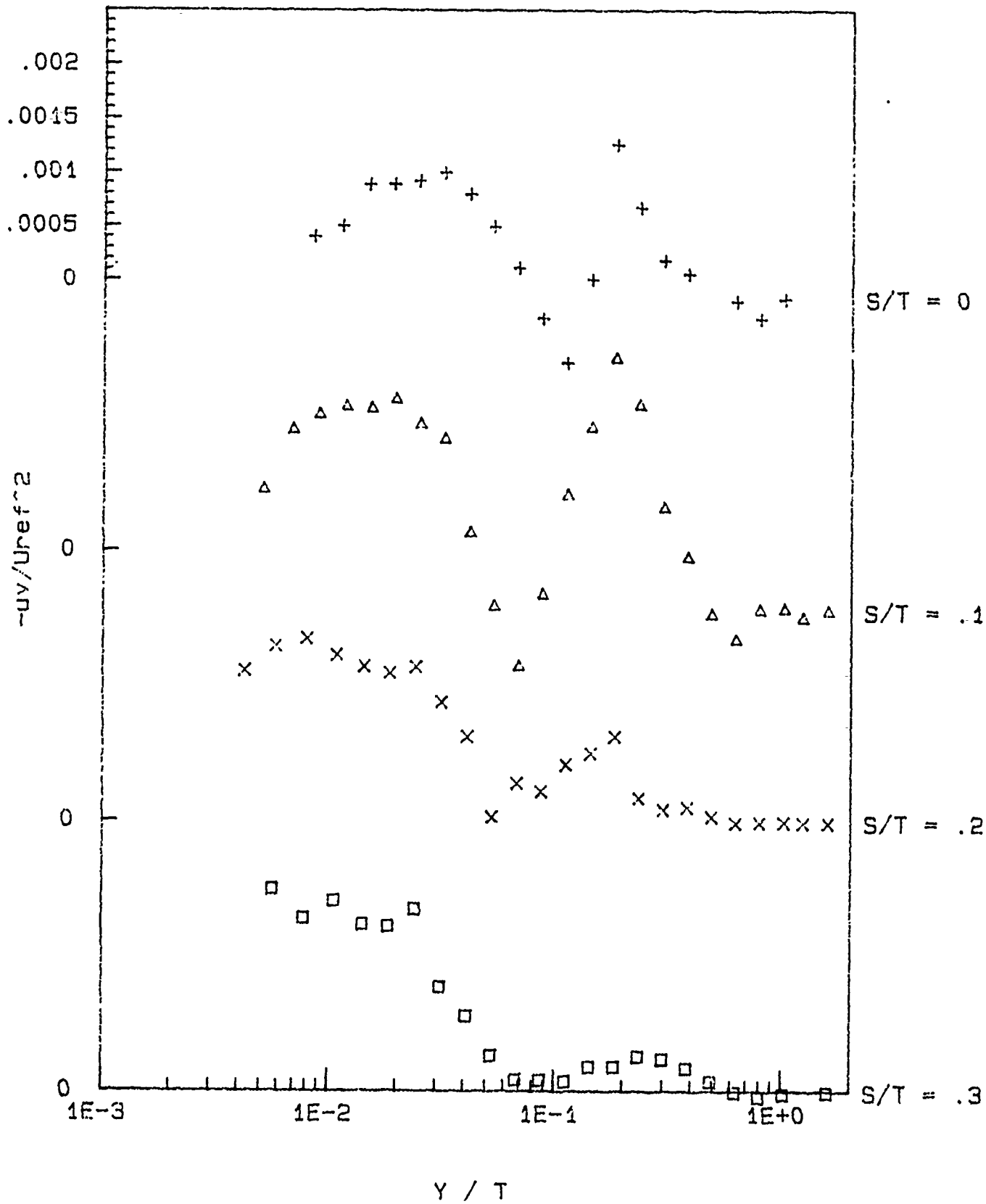


Figure F.6-7(c) Profiles of UV Reynolds shear stress, plane 10.

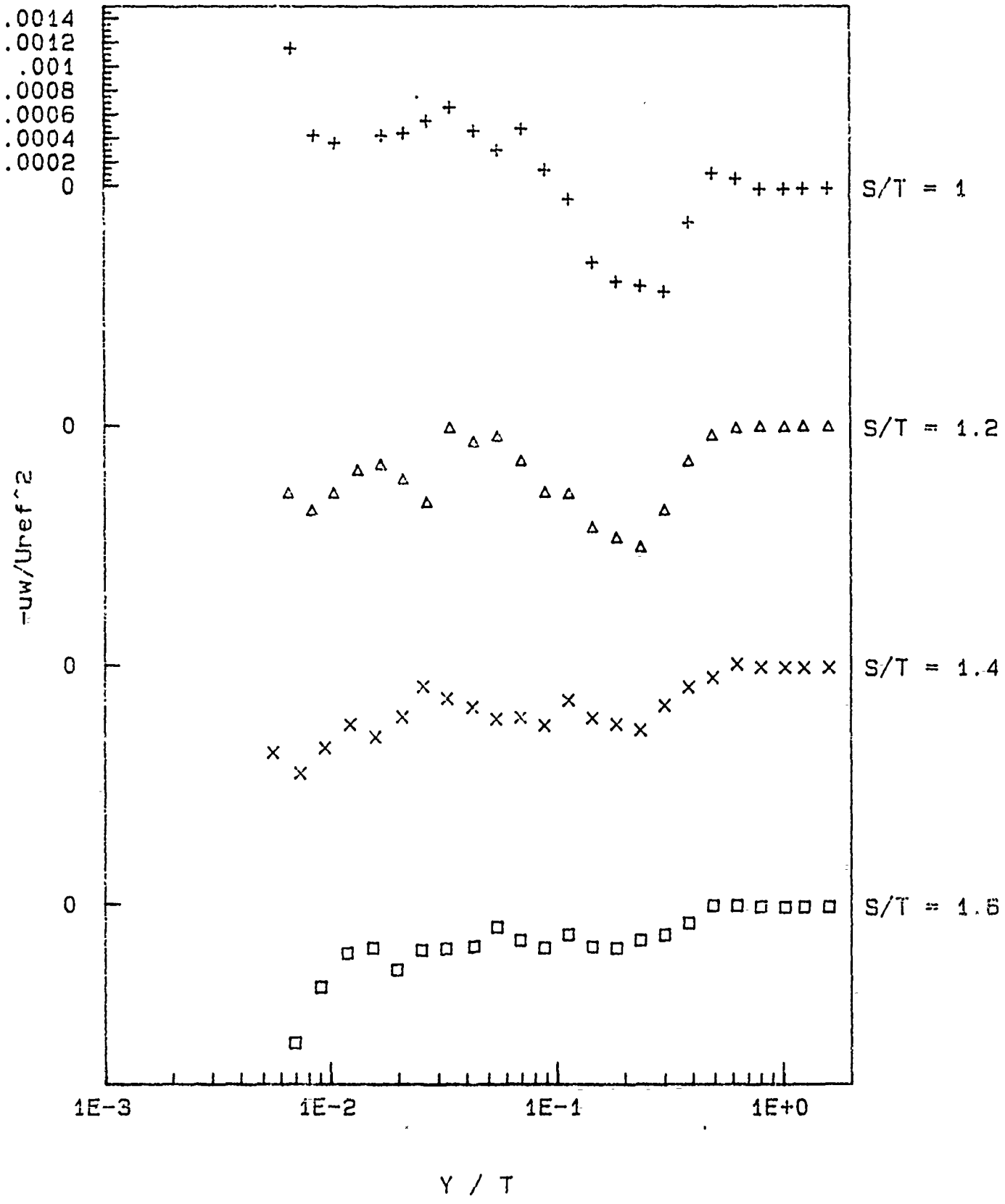


Figure F.6-8(a) Profiles of UW Reynolds shear stress, plane 10.

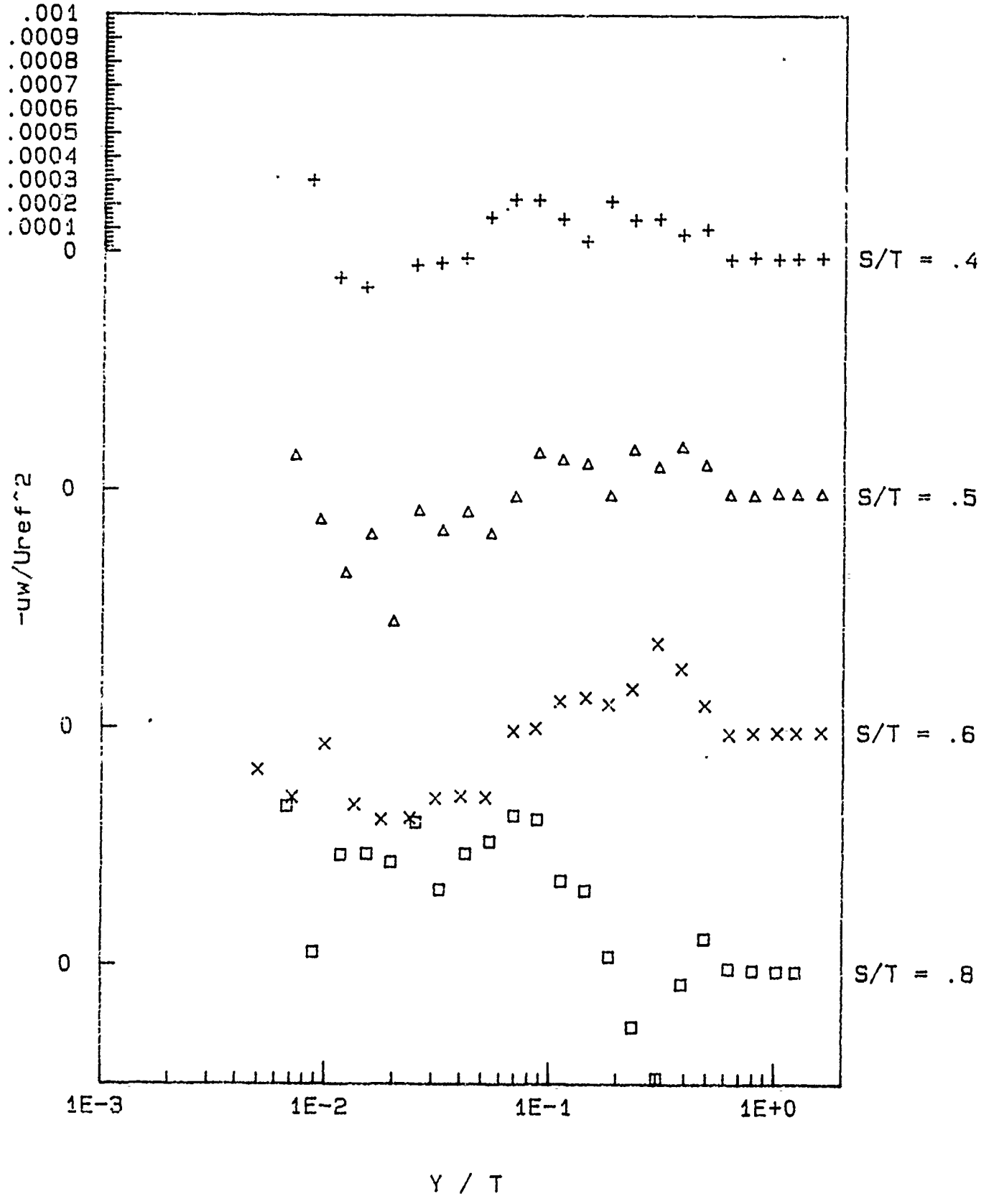


Figure F.6-8(b) Profiles of UW Reynolds shear stress, plane 10.

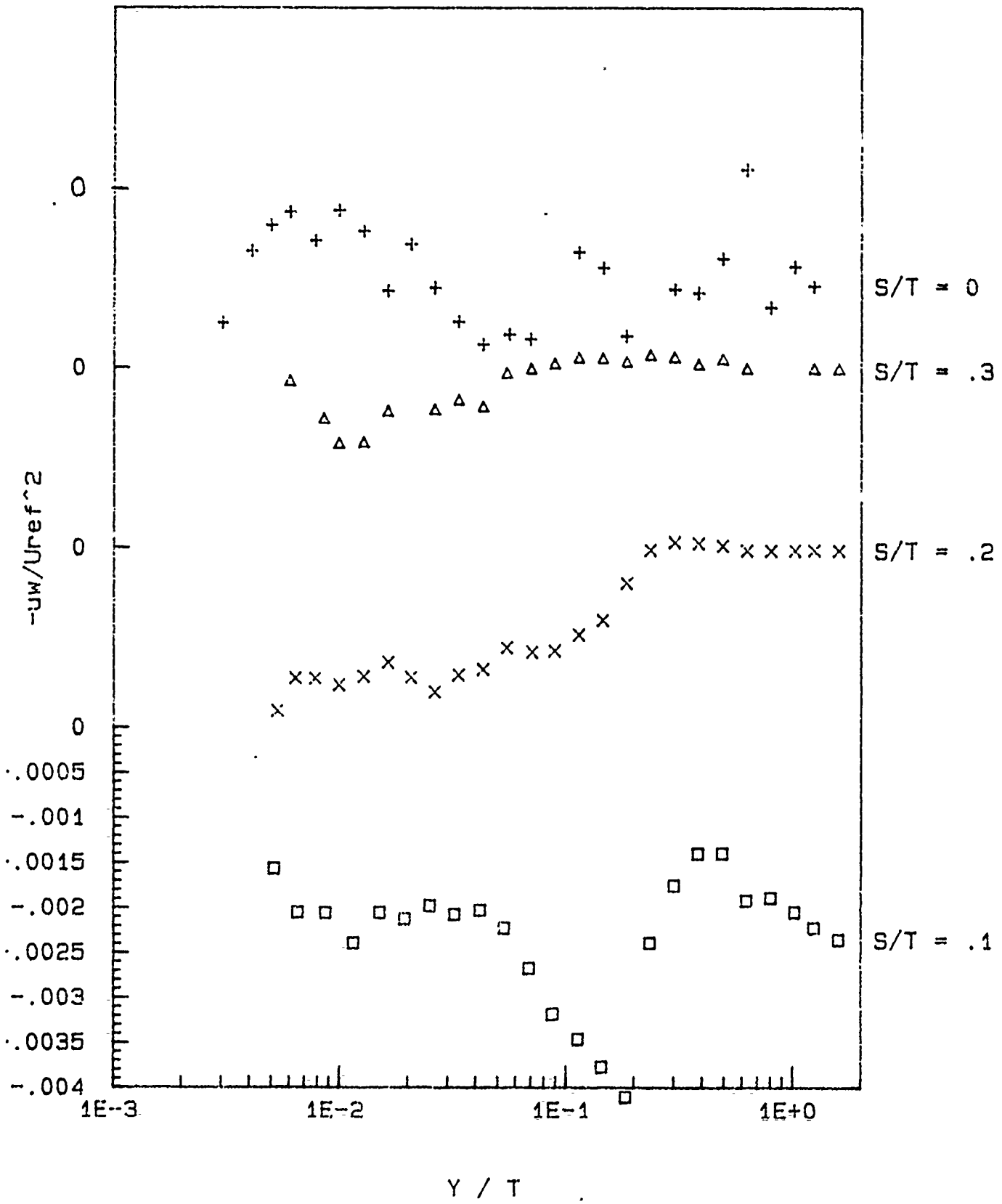


Figure F.6-8(c) Profiles of UW Reynolds shear stress, plane 10.

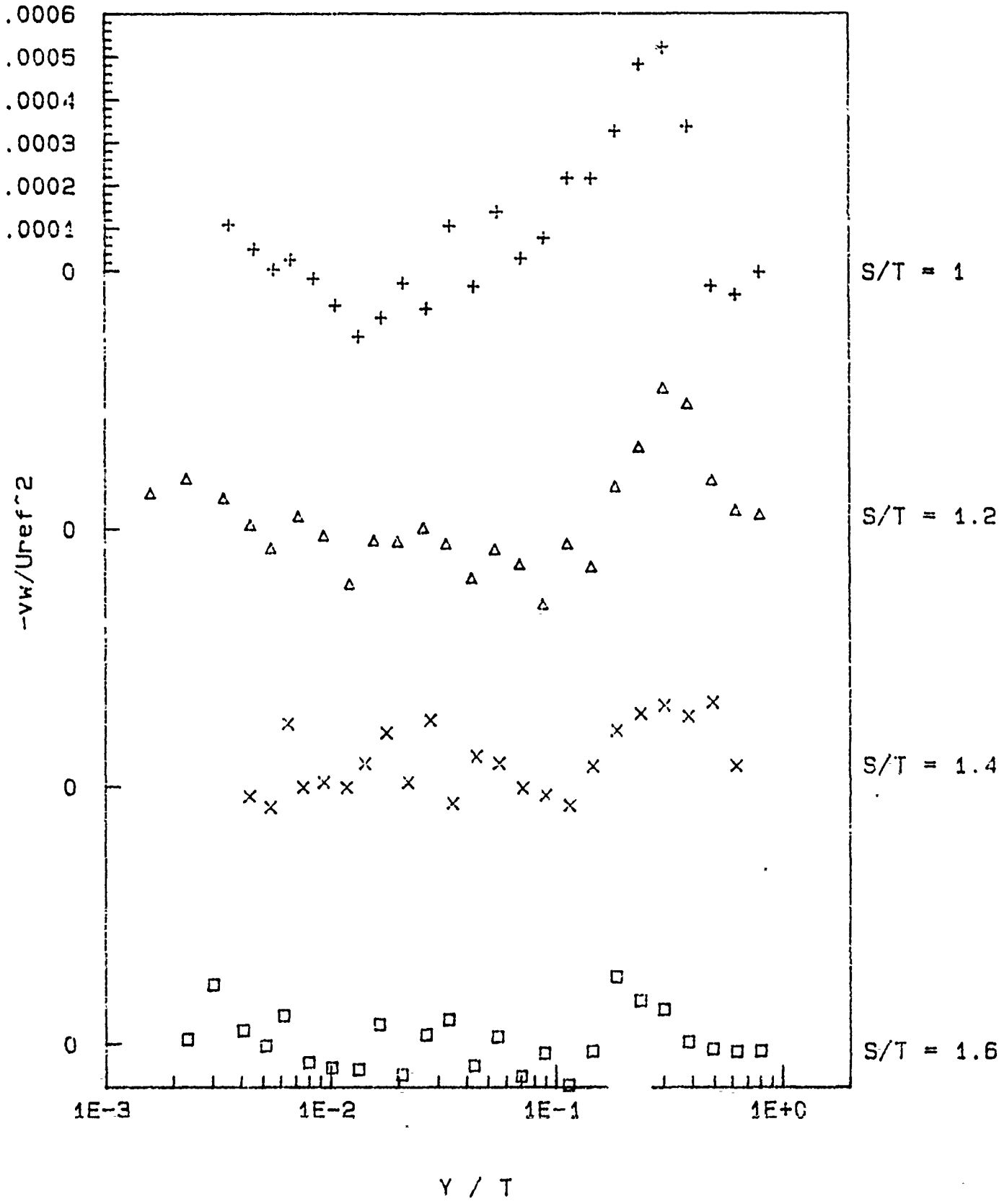


Figure F.6-9(a) Profiles of VW Reynolds shear stress, plane 10.

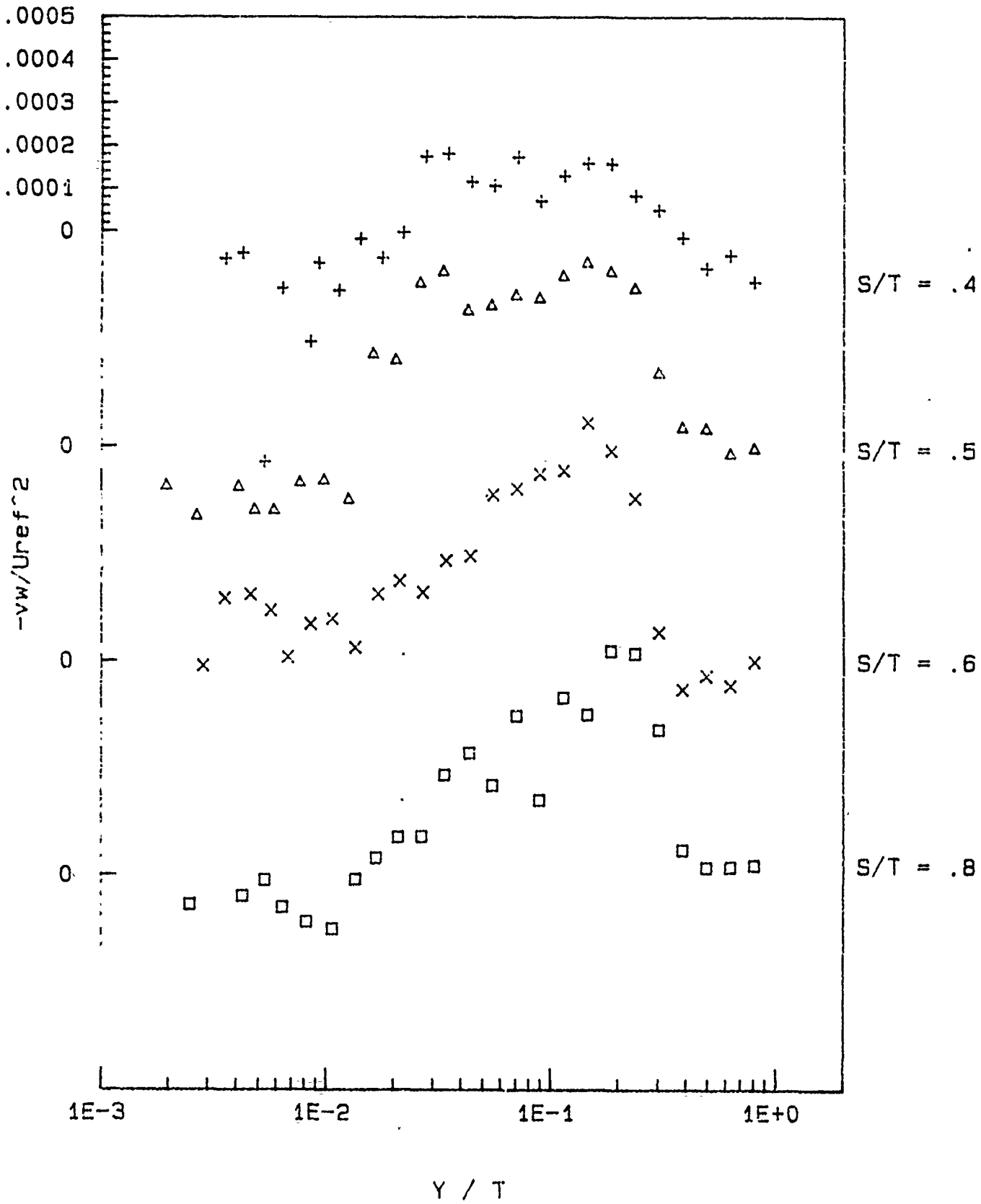


Figure F.6-9(b) Profiles of VW Reynolds shear stress, plane 10.

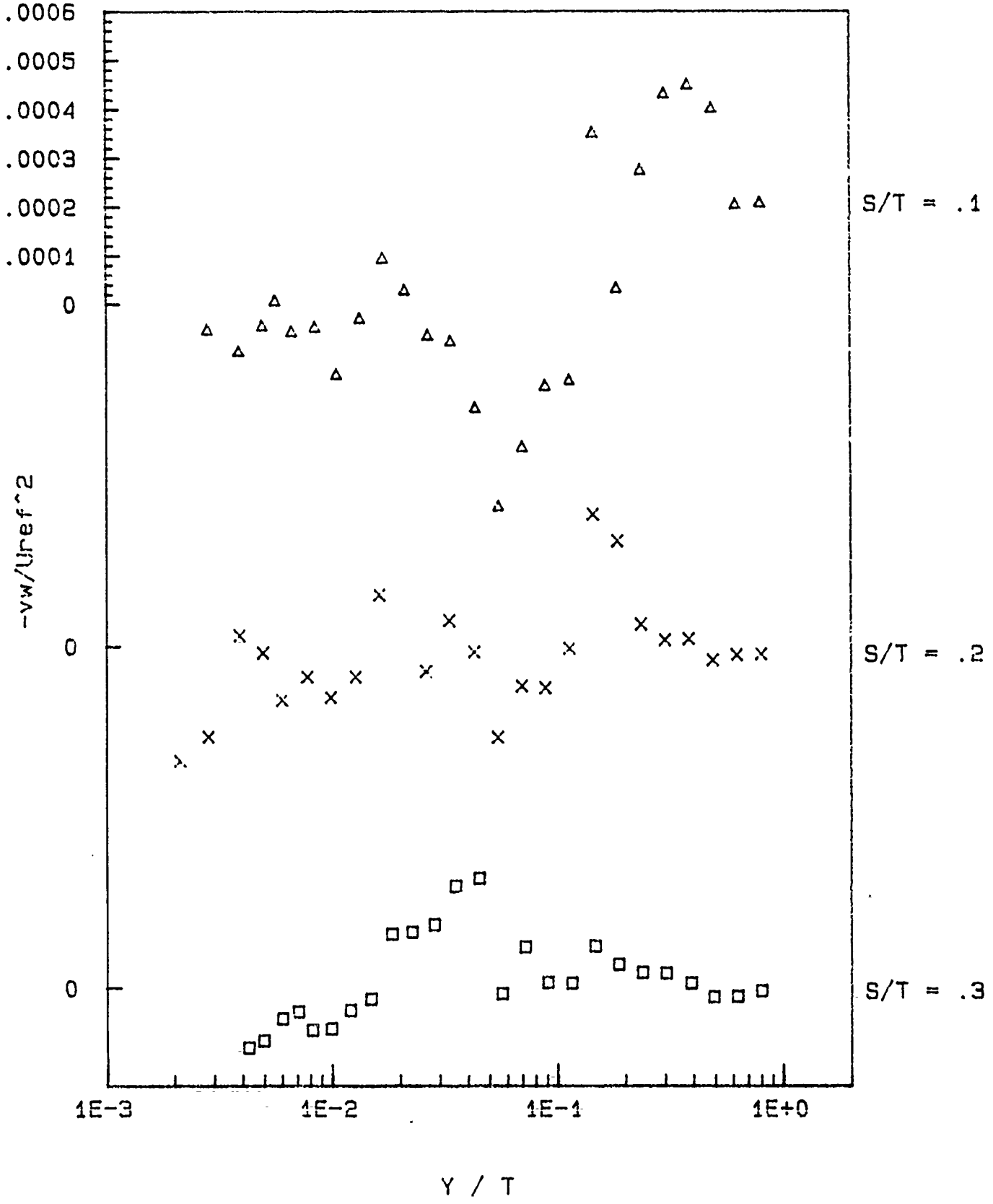


Figure F.6-9(c) Profiles of VW Reynolds shear stress, plane 10.

File E574770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.3
density (kilograms per meter cubed) = 1.11159
viscosity (meters squared per second) = 1.64902E-05
Atmospheric pressure (Pascals) = 94890
Velocity of undisturbed free stream (Uref, in m/s) = 27.64205
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091209E-03
Estimated momentum thickness Reynolds number = 6857.977
Location of traverse: X/T = 4.4618 Z/T =-1.6 (Plane 10 , S/T = 1.60)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	2.0042E-01	9.9223E-03			-1.9571E-03	9.0861E-05	-1.0330E-01	1.4346E+00	
2.1246E-02	2.3938E-01	1.0483E-02			-1.9538E-03	1.8382E-04	-5.9168E-02	1.3321E+00	
3.8952E-03	3.6388E-01	8.7575E-03			-6.5227E-04	4.5267E-04	-1.5072E-01	1.0672E+00	
6.0198E-03	4.2297E-01	8.1417E-03	-7.1584E-02	4.6643E-01	3.3252E-05	8.2066E-04	-7.3528E-02	7.4857E-01	-8.6948E-04
8.8527E-03					1.2601E-04	1.2063E-03	-1.9019E-02	3.2486E-01	
1.2394E-02	4.9813E-01	7.2915E-03	6.3128E-03	-1.6548E-01	1.2667E-03	1.4748E-03	8.2397E-02	1.5236E-01	-1.0401E-03
1.6643E-02	5.1778E-01	7.0420E-03	7.8079E-02	-2.0406E-01	1.3164E-03	1.6374E-03	6.2582E-02	1.9158E-02	-1.1048E-03
2.2309E-02	5.4222E-01	7.2424E-03	5.4637E-02	-3.1127E-01	1.9285E-03	1.7957E-03	5.4327E-02	4.5211E-02	-1.1731E-03
2.9391E-02	5.6097E-01	6.9928E-03	9.3324E-02	-3.3902E-01	2.1929E-03	1.8181E-03	6.6871E-02	-7.1325E-02	-1.3346E-03
3.8952E-02	5.9191E-01	6.9947E-03	1.5828E-02	-3.1369E-01	4.2024E-03	1.9165E-03	7.0833E-02	-5.2796E-02	-1.1040E-03
5.0637E-02	6.2130E-01	6.9356E-03	-1.3188E-02	-4.1220E-01	4.7003E-03	1.8367E-03	8.9091E-02	-1.1119E-01	-1.4842E-03
6.5864E-02	6.5021E-01	6.5027E-03	-5.4639E-02	-4.0949E-01	6.2193E-03	1.7867E-03	1.7068E-01	-1.4481E-01	-1.6297E-03
8.4986E-02					6.9139E-03	1.6893E-03	1.8238E-01	3.6078E-03	
1.0977E-01	7.1784E-01	5.4221E-03	-1.3041E-01	-3.3282E-01	8.0990E-03	1.6405E-03	1.4987E-01	-6.4365E-02	-1.1523E-03
1.4093E-01	7.5083E-01	4.6187E-03	-1.5361E-01	-2.5019E-01	9.2890E-03	1.5147E-03	1.5320E-01	-1.8196E-02	-9.0925E-04
1.8059E-01	7.8744E-01	3.9668E-03	-8.3946E-02	-3.0082E-01	1.0038E-02	1.4160E-03	8.0272E-02	6.2006E-03	-8.8441E-04
2.3159E-01	8.2084E-01	3.6893E-03	-9.0220E-02	-3.2744E-01	1.1478E-02	1.3335E-03	1.0542E-01	-1.3247E-01	-8.6519E-04
2.9674E-01	8.6569E-01	3.3151E-03	-2.3232E-01	-3.3864E-01	1.5538E-02	1.2128E-03	1.7937E-01	-1.8040E-01	-7.7015E-04
3.7996E-01	9.1522E-01	2.4567E-03	-4.6389E-01	-6.6297E-02	1.7932E-02	9.9476E-04	3.6482E-01	9.6365E-02	-5.5554E-04
4.8690E-01	9.6961E-01	1.2798E-03	-8.6768E-01	4.6611E-01	2.1530E-02	6.0653E-04	6.0767E-01	5.6503E-01	-3.6691E-04
6.2217E-01	1.0048E+00	1.7389E-04	-8.7229E-01	2.3427E+00	1.6889E-02	1.6594E-04	1.1054E+00	2.3163E+00	-4.5890E-05
7.9603E-01	1.0096E+00	2.0890E-05	6.0578E-02	-9.4585E-02	1.2942E-02	2.4473E-05	-7.4067E-02	-1.3204E-01	8.0107E-06
1.0166E+00	1.0100E+00	1.4721E-05	-6.4255E-02	-1.9802E-01	1.0951E-02	1.5128E-05	-1.0977E-01	-1.0867E-01	7.9682E-06
1.2359E+00	1.0097E+00	1.2704E-05	-9.8420E-02	-1.6646E-01	7.6884E-03	1.4938E-05	1.0542E-02	-2.2789E-01	7.5592E-06
1.5899E+00	1.0089E+00	1.2125E-05	-9.5470E-02	-2.1254E-01	7.0529E-03	1.3759E-05	-3.9344E-02	-1.8245E-01	6.7869E-06

Table F.6-1 Velocity measurements made at S/T = 1.60 with the UV system of the laser anemometer, plane 10

File E575770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 25.2
density (kilograms per meter cubed) = 1.184615
viscosity (meters squared per second) = 1.663302E-05
Atmospheric pressure (Pascals) = 94580
Velocity of undisturbed free stream (Uref, in m/s) = 27.67929
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090107E-03
Estimated momentum thickness Reynolds number = 6806.415
Location of traverse: X/T = 4.4618 Z/T =-1.4 (Plane 10 , S/T = 1.40)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
8.8527E-04	1.7544E-01	7.8012E-03			-1.7954E-04	2.6377E-05	-3.7366E-01	2.7087E+00	
1.9476E-03	2.1408E-01	8.8883E-03			-4.3098E-04	6.9478E-05	-9.8444E-02	1.5784E+00	
3.0099E-03	2.8333E-01	7.6635E-03			-1.7269E-04	1.7541E-04	1.9339E-02	1.1666E+00	
4.0722E-03	3.5177E-01	6.6145E-03			-8.0650E-04	3.7681E-04	-2.9325E-01	1.1166E+00	
5.8428E-03	4.0014E-01	7.3126E-03			-1.2292E-04	6.2695E-04	-3.0722E-02	5.9354E-01	
7.9674E-03	4.3658E-01	7.4690E-03	-4.9932E-02	1.7410E-01	-3.4296E-04	1.0182E-03	-4.9803E-02	5.2878E-01	-6.6925E-04
1.0800E-02	4.6307E-01	6.8966E-03	6.5459E-02	-1.0406E-01	3.8563E-04	1.3812E-03	8.2931E-03	2.3214E-01	-9.6265E-04
1.4341E-02	4.7941E-01	6.8600E-03	8.0615E-02	-1.9356E-01	9.2405E-04	1.5573E-03	2.2472E-02	1.1453E-01	-1.0174E-03
1.8591E-02	5.0162E-01	6.5643E-03	9.2219E-02	-2.6967E-01	1.9133E-03	1.6821E-03	1.0440E-01	-1.9891E-02	-1.1743E-03
2.4256E-02	5.2103E-01	6.8595E-03	1.2134E-01	-3.3554E-01	1.0307E-03	1.7727E-03	5.3902E-02	-2.7843E-02	-1.1911E-03
3.1339E-02	5.4220E-01	6.7474E-03	1.1390E-01	-3.1195E-01	2.8878E-03	1.8629E-03	1.1521E-01	-5.3362E-02	-1.1936E-03
4.0899E-02	5.6795E-01	6.8668E-03	6.2607E-02	-3.4566E-01	4.0196E-03	1.9247E-03	1.5106E-02	-6.3818E-02	-1.0755E-03
5.2585E-02	5.9210E-01	6.5506E-03	4.7614E-02	-3.8082E-01	4.5846E-03	1.8791E-03	8.8321E-02	-1.4955E-01	-1.4078E-03
6.7812E-02	6.2429E-01	6.4769E-03	3.2533E-02	-3.6855E-01	7.3968E-03	1.9158E-03	1.1110E-01	-2.1761E-02	-1.2750E-03
8.6579E-02	6.5565E-01	6.2327E-03	-1.8325E-02	-3.4571E-01	8.0427E-03	1.8538E-03	1.9089E-01	6.2933E-02	-9.9814E-04
1.1127E-01	6.8910E-01	5.6134E-03	-6.1799E-02	-3.0069E-01	1.0071E-02	1.6813E-03	1.8492E-01	-3.3080E-02	-1.0267E-03
1.4253E-01	7.2755E-01	4.7608E-03	-1.0610E-01	-2.4287E-01	1.3272E-02	1.5656E-03	1.0345E-01	-2.4279E-02	-1.0172E-03
1.8254E-01	7.6883E-01	4.1785E-03	-3.2597E-02	-3.4144E-01	1.3746E-02	1.4850E-03	7.5954E-02	-7.4811E-02	-7.0958E-04
2.3460E-01	8.0336E-01	3.8008E-03	-5.3712E-02	-3.7458E-01	1.6147E-02	1.4355E-03	3.3579E-02	-9.5397E-02	-8.3956E-04
2.9904E-01	8.4890E-01	3.5485E-03	-2.1393E-01	-3.4169E-01	2.0047E-02	1.3002E-03	1.3737E-01	-1.3437E-01	-8.7457E-04
3.8191E-01	9.0280E-01	2.7161E-03	-4.4644E-01	-1.0459E-01	1.8999E-02	1.0490E-03	4.6213E-01	3.2515E-01	-6.3075E-04
4.8814E-01	9.5894E-01	1.3987E-03	-7.5956E-01	2.0058E-01	2.1239E-02	6.6191E-04	5.8957E-01	4.5632E-01	-3.5789E-04
6.2411E-01	1.0009E+00	1.7133E-04	-1.1666E+00	3.7286E+00	1.9115E-02	1.9992E-04	1.2283E+00	2.7046E+00	-6.2359E-05
7.9727E-01	1.0031E+00	2.2763E-05	7.1860E-02	-2.0334E-01	1.2166E-02	2.5785E-05	1.6078E-02	-1.9432E-01	9.5860E-06
1.0186E+00	1.0044E+00	3.1163E-05	1.3321E-01	7.7232E-02	1.0235E-02	3.0621E-05	1.9648E-01	9.7866E-02	2.5138E-05
1.2378E+00	1.0051E+00	1.3855E-05	8.6920E-03	-2.7288E-01	6.7191E-03	1.3013E-05	6.6174E-02	-1.8144E-01	9.4219E-06
1.5919E+00	1.0046E+00	2.8517E-05	1.5977E-01	1.5991E-01	3.8389E-03	2.7294E-05	1.7010E-01	6.9619E-02	2.3961E-05

Table F.6-2 Velocity measurements made at S/T = 1.40 with the UV system of the laser anemometer, plane 10

File E576770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.,04655
viscosity (meters squared per second) = 1.662383E-05
Atmospheric pressure (Pascals) = 94520
Velocity of undisturbed free stream (Uref, in m/s) = 27.66453
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090543E-03
Estimated momentum thickness Reynolds number = 6707.272
Location of traverse: X/T = 4.4618 Z/T =-1.2 (Plane 10 , S/T = 1.20)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	1.7107E-01	6.0765E-03			-1.7813E-03	7.7313E-05	-5.4385E-01	2.0305E+00	
2.3017E-03	2.2158E-01	7.1115E-03			-1.1394E-03	1.1878E-04	-1.0798E-01	1.2481E+00	
3.1870E-03	2.7757E-01	5.9101E-03			-1.2164E-03	2.2745E-04	-2.0369E-01	1.3912E+00	
5.1346E-03	3.5797E-01	7.6988E-03	2.0105E-03	1.2140E-01	-8.0488E-04	5.5886E-04	-1.4564E-01	8.9947E-01	-8.1199E-04
7.0822E-03	3.9563E-01	7.0978E-03	1.6708E-03	2.3986E-01	-8.2464E-04	8.8206E-04	-1.5382E-01	5.1092E-01	-7.8586E-04
1.0269E-02	4.2718E-01	6.9000E-03	7.5939E-02	-1.8273E-01	-1.4510E-04	1.2323E-03	1.6531E-02	1.7840E-01	-8.7772E-04
1.3456E-02	4.4794E-01	6.7770E-03	8.5632E-02	-1.7905E-01	3.7653E-04	1.4796E-03	-6.7177E-03	1.2445E-01	-9.5197E-04
1.7705E-02	4.6337E-01	6.5834E-03	1.5761E-01	-2.5019E-01	6.9460E-04	1.6595E-03	1.1590E-01	1.0428E-01	-8.9422E-04
3.0453E-02	4.9363E-01	6.6253E-03	1.6914E-01	-2.7392E-01	1.3212E-03	1.8148E-03	3.6321E-02	4.3268E-02	-1.2482E-03
4.0014E-02	5.3182E-01	6.6878E-03	6.9781E-02	-3.0742E-01	4.1775E-03	2.0303E-03	5.6829E-02	-6.7042E-02	-1.4782E-03
5.1700E-02	5.5483E-01	6.9247E-03	6.2136E-02	-2.7996E-01	3.9844E-03	2.0863E-03	5.9762E-02	-1.4243E-01	-1.2448E-03
6.6926E-02	5.8661E-01	6.8096E-03	4.5160E-02	-3.4617E-01	6.4959E-03	2.1128E-03	9.3853E-02	-1.6796E-01	-1.2038E-03
8.5694E-02	6.1921E-01	6.6188E-03	5.0676E-03	-3.5074E-01	8.2133E-03	2.1356E-03	1.2510E-01	-1.3295E-01	-1.2636E-03
1.1084E-01	6.5304E-01	6.3258E-03	-6.4839E-02	-2.9432E-01	1.0927E-02	2.1087E-03	1.2293E-01	-9.7343E-02	-1.1680E-03
1.4271E-01	6.9364E-01	5.9187E-03	-1.0324E-01	-2.5315E-01	1.2771E-02	1.9759E-03	1.2006E-01	3.1622E-02	-1.0428E-03
1.8166E-01	7.2945E-01	5.2994E-03	-1.0031E-01	-2.0040E-01	1.5002E-02	1.8566E-03	1.0364E-01	2.3530E-02	-9.9890E-04
2.3300E-01	7.7087E-01	5.0498E-03	-2.0273E-01	-1.0970E-01	1.8428E-02	1.7433E-03	9.6727E-02	-5.2675E-02	-1.0933E-03
2.9780E-01	8.2156E-01	4.3945E-03	-2.5789E-01	-2.3509E-01	2.3567E-02	1.6232E-03	1.1565E-01	-8.1349E-02	-9.7421E-04
3.8102E-01	8.8285E-01	3.3503E-03	-4.8049E-01	-2.1340E-02	2.3866E-02	1.2422E-03	3.8635E-01	1.0403E-01	-7.7630E-04
4.8796E-01	9.4957E-01	1.5699E-03	-7.5378E-01	2.4777E-01	2.5579E-02	8.1577E-04	5.8790E-01	5.1941E-01	-4.5884E-04
6.2323E-01	9.9551E-01	1.7956E-04	-9.2228E-01	2.6035E+00	2.1886E-02	2.2941E-04	1.1108E+00	1.9159E+00	-8.4002E-05
7.9639E-01	9.9861E-01	2.1558E-05	1.7716E-01	-1.9886E-02	1.2665E-02	2.9955E-05	1.3633E-01	4.9587E-02	9.3184E-06
1.0177E+00	9.9961E-01	1.3201E-05	1.0762E-01	-1.2337E-01	1.0578E-02	1.6325E-05	1.5567E-02	-2.3589E-01	8.7352E-06
1.2369E+00	9.9931E-01	1.0962E-05	1.7031E-02	-1.4568E-01	6.3645E-03	1.3801E-05	1.3534E-01	-1.5920E-01	8.1130E-06
1.5910E+00	9.9991E-01	1.0293E-05	6.0234E-02	-2.0451E-01	4.6196E-03	1.2485E-05	1.3107E-01	-1.2815E-01	7.4638E-06

Table F.6-3 Velocity measurements made at S/T = 1.20 with the UV system of the laser anemometer, plane 10

File E577770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.6
density (kilograms per meter cubed) = 1.105086
viscosity (meters squared per second) = 1.660914E-05
Atmospheric pressure (Pascals) = 94430
Velocity of undisturbed free stream (Uref, in m/s) = 27.66679
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090477E-03
Estimated momentum thickness Reynolds number = 6817.434
Location of traverse; X/T = 4.4618 Z/T =-1 (Plane 10 , S/T = 1.00)

Y/T	U/Uref	uE/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	1.5531E-01	4.5528E-03			-1.8381E-04	1.0652E-05	-1.1670E-01	1.3952E+00	
2.1246E-03	1.9326E-01	6.0717E-03			-8.4980E-04	3.2214E-05	-3.2132E-01	2.7141E+00	
2.8329E-03	2.4547E-01	6.3850E-03			-1.5530E-03	9.2892E-05	-3.1571E-01	1.5988E+00	
3.5411E-03	2.9285E-01	6.4534E-03			-1.9950E-03	2.0133E-04	-3.1846E-01	1.6472E+00	
4.9575E-03	3.3561E-01	8.1713E-03	1.6557E-01	-2.5318E-02	-2.1810E-03	3.9633E-04	-2.8691E-01	9.6460E-01	-7.0656E-05
6.3739E-03	3.6749E-01	7.8043E-03	1.0340E-01	-1.7915E-01	-1.9985E-03	6.6905E-04	-1.6836E-01	5.7708E-01	-4.9393E-04
7.4363E-03	3.8105E-01	7.2180E-03	1.5823E-01	-1.3433E-01	-1.6680E-03	8.6189E-04	-1.9031E-01	5.7499E-01	-6.8733E-04
9.5609E-03	4.0266E-01	7.1866E-03	1.7760E-01	-1.6364E-01	-1.1985E-03	1.1001E-03	-8.1074E-02	3.1469E-01	-9.2021E-04
1.2394E-02	4.1677E-01	6.9477E-03	2.1348E-01	-2.1839E-01	-1.1448E-03	1.3724E-03	-5.0970E-03	2.8530E-01	-7.8081E-04
1.5935E-02	4.3806E-01	6.9271E-03	2.5259E-01	-1.7327E-01	-9.2251E-04	1.4960E-03	-2.2863E-02	-4.5553E-02	-9.4601E-04
2.0184E-02	4.5655E-01	7.0593E-03	2.4616E-01	-2.7353E-01	2.8894E-03	1.6726E-03	6.6635E-02	6.9534E-02	-9.6089E-04
2.5850E-02	4.6884E-01	7.1981E-03	2.7982E-01	-3.2272E-01	4.7191E-03	1.8679E-03	3.7711E-03	-2.8991E-02	-1.0658E-03
3.2932E-02	4.8857E-01	7.3510E-03	2.9178E-01	-3.2036E-01	6.4563E-03	1.9637E-03	2.6200E-02	1.5728E-02	-1.0687E-03
4.2493E-02	5.0787E-01	7.7619E-03	2.4194E-01	-3.9805E-01	8.7166E-03	2.0872E-03	4.9241E-02	1.9463E-02	-1.0752E-03
5.5595E-02	5.3497E-01	7.6480E-03	1.7441E-01	-4.3417E-01	1.3739E-02	2.1586E-03	2.2069E-02	-5.2722E-02	-1.2750E-03
6.9405E-02	5.5598E-01	7.6318E-03	1.2080E-01	-4.1245E-01	1.7126E-02	2.1650E-03	2.8443E-02	-6.9054E-02	-1.2982E-03
8.8173E-02	5.8100E-01	7.3732E-03	7.5313E-02	-4.3158E-01	2.2700E-02	2.3315E-03	4.9058E-02	-1.4619E-01	-9.3449E-04
1.1296E-01	6.0813E-01	6.7475E-03	2.1293E-02	-4.5128E-01	2.8135E-02	2.3374E-03	4.8311E-02	-1.3550E-01	-1.0625E-03
1.4412E-01	6.3565E-01	6.2095E-03	7.3575E-02	-2.7189E-01	3.1651E-02	2.4988E-03	6.7754E-02	-1.3805E-01	-9.1713E-04
1.8414E-01	6.6574E-01	6.1853E-03	1.0688E-01	-2.9834E-01	3.7624E-02	2.6347E-03	3.6457E-02	-2.0887E-01	
2.3513E-01	7.0693E-01	6.6798E-03	8.9200E-02	-4.1504E-01	3.7089E-02	2.7484E-03	1.0340E-01	-1.9197E-01	-1.5328E-03
3.0028E-01	7.7144E-01	7.3044E-03	-2.4561E-01	-4.3732E-01	3.3342E-02	2.6380E-03	2.8050E-01	-1.0363E-01	-1.7305E-03
3.8350E-01	8.5596E-01	5.2295E-03	-6.5756E-01	2.6905E-01	3.1295E-02	2.0732E-03	5.2048E-01	3.7447E-01	-1.2436E-03
4.8973E-01	9.4329E-01	1.9172E-03	-8.8594E-01	6.1296E-01	2.9532E-02	1.0543E-03	7.2704E-01	8.5723E-01	-3.6595E-04
6.2571E-01	9.9254E-01	1.5445E-04	-4.9777E-01	2.1491E+00	2.1441E-02	2.4782E-04	1.1364E+00	2.0418E+00	-6.4239E-05
7.9887E-01					1.2267E-02	2.9766E-05	1.3764E-01	-4.4745E-02	
1.0234E+00	9.9546E-01	1.6028E-05	-1.2851E-02	-1.4854E-01	8.0889E-03	1.8496E-05	-3.7192E-02	-3.2010E-01	9.6596E-06
1.2394E+00	9.9690E-01	1.4187E-05	-4.4030E-02	-2.2811E-01	6.6523E-03	1.4983E-05	-8.8839E-02	-1.7943E-01	1.0300E-05
1.5935E+00	9.9511E-01	1.2767E-05	-4.2402E-02	-3.4847E-01	1.5249E-03	1.3074E-05	8.4594E-03	-2.5963E-01	8.8501E-06

Table F.6-4 Velocity measurements made at S/T = 1.00 with the UV system of the laser anemometer, plane 10

File E579770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.5
density (kilograms per meter cubed) = 1.105341
viscosity (meters squared per second) = 1.659204E-05
Atmospheric pressure (Pascals) = 94420
Velocity of undisturbed free stream (Uref, in m/s) = 27.64707
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09106E-03
Estimated momentum thickness Reynolds number = 6816.874
Location of traverse: X/T = 4.4618 Z/T =-.8 (Plane 10 , S/T = 0.80)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.0623E-03	2.1538E-01	1.1102E-02			-8.9161E-04	1.2871E-05	-1.6074E-01	6.9244E-01	
2.1246E-03	2.7584E-01	1.2751E-02			-2.0930E-03	5.3395E-05	-4.3566E-01	2.4535E+00	
3.1870E-03	3.6594E-01	9.6440E-03			-4.1539E-03	2.5256E-04	-3.6973E-01	1.4089E+00	
4.6034E-03	4.3696E-01	8.6377E-03			-4.8159E-03	5.2462E-04	-1.9604E-01	7.6054E-01	
6.7280E-03	4.7672E-01	9.3024E-03	-2.4114E-01	-7.0306E-02	-5.5694E-03	8.7319E-04	-7.7256E-02	5.5402E-01	-9.6427E-04
8.4986E-03	5.0607E-01	8.3974E-03	-2.2570E-01	3.7169E-02	-5.7466E-03	1.2127E-03	-3.7664E-02	3.8601E-01	-1.0393E-03
1.4673E-02	5.6148E-01	7.6036E-03	-1.9175E-01	-2.1833E-01	-3.8797E-03	1.7715E-03	1.4660E-01	1.5347E-02	-1.0252E-03
1.9476E-02	5.8537E-01	7.3168E-03	-2.4312E-01	-2.1120E-01	-2.7526E-03	1.8361E-03	2.0000E-01	-1.7171E-03	-1.0976E-03
2.4788E-02	6.1338E-01	6.9209E-03	-2.6862E-01	-2.2916E-01	-2.8371E-03	1.8732E-03	2.1614E-01	6.5652E-02	-1.0240E-03
3.2224E-02	6.3300E-01	6.9639E-03	-3.5823E-01	-2.0677E-01	-3.1946E-03	1.8229E-03	1.7662E-01	-7.2002E-04	-1.1453E-03
4.1431E-02	6.6354E-01	6.0658E-03	-3.9892E-01	-3.0217E-02	-3.1813E-04	1.8198E-03	2.6357E-01	8.8772E-02	-1.2421E-03
5.3116E-02	6.8819E-01	5.7329E-03	-4.9644E-01	2.2125E-01	1.0528E-03	1.8139E-03	2.0618E-01	1.3564E-01	-9.0631E-04
6.8343E-02	7.0348E-01	5.1376E-03	-5.1536E-01	3.5197E-01	2.5178E-03	1.8984E-03	9.2472E-02	9.8291E-02	-7.7132E-04
8.7110E-02	7.1724E-01	4.3796E-03	-3.0677E-01	1.5298E-01	4.5970E-03	2.1052E-03	4.7696E-02	3.5064E-02	-4.1460E-04
1.1225E-01	7.1592E-01	4.0147E-03	-1.7887E-01	-8.0318E-03	4.3479E-03	2.4861E-03	-1.1992E-01	-9.0456E-02	-2.0765E-04
1.4306E-01	7.0644E-01	3.9666E-03	2.9226E-02	-1.8074E-01	6.9544E-03	2.8577E-03	-1.0395E-01	-1.4980E-01	-3.0750E-05
1.8414E-01	7.0503E-01	4.3775E-03	1.6703E-01	-1.8596E-01	8.7075E-03	3.0744E-03	-5.5754E-02	-2.1538E-01	-3.9607E-04
2.3407E-01	7.1730E-01	5.4483E-03	1.7080E-01	-3.6006E-01	1.1385E-02	3.1375E-03	8.4334E-02	-2.1737E-01	-1.1970E-03
2.9922E-01	7.7000E-01	6.6331E-03	-1.0655E-01	-5.7921E-01	1.4460E-02	2.8305E-03	2.4079E-01	-2.1134E-01	-1.5096E-03
3.8244E-01	8.6151E-01	5.0058E-03	-6.1739E-01	4.2537E-02	1.8549E-02	2.1325E-03	5.5633E-01	4.6186E-01	-1.2998E-03
4.8867E-01	9.4706E-01	1.5560E-03	-9.6282E-01	8.9553E-01	2.0791E-02	9.3667E-04	7.4515E-01	8.4840E-01	-3.9268E-04
6.2465E-01	9.8500E-01	1.0721E-04	1.1695E-02	9.9261E-01	1.2949E-02	2.0080E-04	1.1079E+00	2.2730E+00	5.9521E-06
7.9780E-01	9.8487E-01	2.1183E-05	1.0868E-01	-2.8115E-01	8.2998E-03	2.7948E-05	1.3897E-01	-1.1314E-01	8.3548E-06
1.0191E+00	9.8450E-01	1.5147E-05	-4.6942E-02	-2.7039E-01	6.5532E-03	1.8433E-05	-3.0217E-02	-3.1873E-01	9.1879E-06
1.2383E+00	9.8566E-01	1.4294E-05	-4.4623E-02	-2.5071E-01	4.9484E-03	1.6967E-05	-1.0520E-01	-2.1036E-01	9.6796E-06
1.5924E+00	9.8541E-01	1.4761E-05	-7.0245E-02	-2.3196E-01	1.2862E-03	1.4766E-05	-1.5084E-01	-1.3032E-01	9.0607E-06

Table F.6-5 Velocity measurements made at S/T = 0.80 with the UV system of the laser anemometer, plane 10

File E579770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.2
density (kilograms per meter cubed) = 1.109035
viscosity (meters squared per second) = 1.652392E-05
Atmospheric pressure (Pascals) = 94640
Velocity of undisturbed free stream (Uref, in m/s) = 27.62788
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091628E-03
Estimated momentum thickness Reynolds number = 6641.176
Location of traverse: X/T = 4.4618 Z/T =-.6 (Plane 10 , S/T = 0.60)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
7.0822E-04	2.3698E-01	1.3504E-02			-3.1406E-03	9.1152E-05	-4.4752E-01	1.5956E+00	
1.7705E-03	2.6284E-01	1.3545E-02			-4.0737E-03	1.7680E-04	-2.2500E-01	1.5271E+00	
3.8952E-03	4.2016E-01	1.1465E-02			-5.5323E-03	5.3489E-04	-2.7146E-01	9.3139E-01	
5.6657E-03	4.9540E-01	8.0425E-03			-5.9118E-03	9.4896E-04	-1.4430E-01	4.5299E-01	
8.4986E-03	5.3981E-01	7.3786E-03	-1.9526E-01	3.5135E-01	-5.7407E-03	1.5378E-03	2.0045E-02	2.9051E-01	-1.4551E-03
1.2040E-02	5.7297E-01	7.1466E-03	-1.2790E-01	-9.5547E-02	-4.2549E-03	1.8167E-03	1.2097E-01	2.9876E-02	-1.2178E-03
1.6997E-02	6.0671E-01	6.6336E-03	-1.1330E-01	-3.0438E-01	-4.0310E-03	1.9532E-03	1.7491E-01	-2.7256E-03	-1.3501E-03
2.1955E-02	6.3170E-01	6.4436E-03	-1.3945E-01	-2.4494E-01	-4.2654E-03	1.9185E-03	1.7222E-01	5.2185E-02	-1.1225E-03
2.9037E-02	6.6735E-01	5.8751E-03	-2.0691E-01	-2.6000E-01	-1.5959E-03	1.8300E-03	2.4843E-01	2.9055E-02	-1.2179E-03
3.8598E-02	7.0207E-01	5.5954E-03	-3.0567E-01	-1.3640E-01	-1.2823E-03	1.7665E-03	2.9284E-01	1.1326E-01	-7.4627E-04
5.0992E-02	7.3403E-01	4.5708E-03	-3.1005E-01	6.2337E-02	-1.7543E-03	1.6328E-03	2.3517E-01	2.4617E-01	-6.2818E-04
6.6926E-02	7.5899E-01	3.5638E-03	-2.3176E-01	2.5982E-02	-5.8800E-04	1.5651E-03	1.4034E-01	2.0056E-01	-2.7282E-04
8.4278E-02	7.6911E-01	3.1017E-03	-7.8464E-02	-1.2106E-01	-3.2786E-03	1.5662E-03	-4.2147E-02	8.1391E-02	5.9259E-05
1.0907E-01	7.7432E-01	2.9959E-03	-5.6420E-02	-1.5802E-01	-4.9517E-03	1.8157E-03	-1.8003E-01	8.1504E-02	6.9668E-05
1.4023E-01	7.7862E-01	3.5081E-03	-8.1528E-02	-1.5522E-01	-4.9588E-03	1.9149E-03	-1.0867E-01	-1.8504E-01	-4.5035E-05
1.8024E-01	7.8202E-01	4.1193E-03	-1.4735E-01	-3.4310E-01	-7.4959E-03	1.9932E-03	-2.9908E-02	-4.6702E-02	-2.4461E-04
2.3123E-01	8.0166E-01	4.6061E-03	-2.9496E-01	-2.6812E-01	-5.6420E-03	1.7961E-03	1.1636E-01	2.8665E-02	-6.9839E-04
2.9639E-01	8.4049E-01	4.1160E-03	-4.5988E-01	-1.6217E-01	-6.7421E-04	1.4697E-03	2.5751E-01	1.8817E-01	-7.9086E-04
3.7996E-01	8.9569E-01	2.5145E-03	-7.1660E-01	2.7423E-01	6.3373E-03	1.0157E-03	5.0673E-01	6.9506E-01	-5.8178E-04
4.8584E-01	9.4114E-01	8.3058E-04	-1.0772E+00	1.0514E+00	1.3077E-02	4.9858E-04	7.0514E-01	7.5771E-01	-1.9948E-04
6.2161E-01	9.6106E-01	5.1146E-05	2.9182E-01	3.5875E-01	6.4216E-03	8.5459E-05	9.9272E-01	2.2484E+00	1.0466E-05
7.9497E-01	9.6235E-01	1.9093E-05	2.8987E-02	-8.2372E-02	6.3744E-03	2.2946E-05	1.6127E-01	-1.2204E-01	6.5198E-06
1.0163E+00	9.6209E-01	1.3967E-05	-3.6254E-02	-2.3407E-01	6.6340E-03	1.6015E-05	1.4892E-01	-1.3600E-01	7.5421E-06
1.2355E+00	9.6318E-01	1.0249E-05	-1.5467E-01	-1.3343E-01	5.3275E-03	1.3262E-05	1.8325E-01	-1.2515E-01	5.8135E-06
1.5896E+00	9.6159E-01	9.7395E-06	-1.5572E-01	-1.0599E-01	4.2807E-03	1.2880E-05	1.6820E-01	-2.0738E-01	5.5742E-06

Table F.6-6 Velocity measurements made at S/T = 0.60 with the UV system of the laser anemometer, plane 10

File E591770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.7
density (kilograms per meter cubed) = 1.183019
viscosity (meters squared per second) = 1.663556E-05
Atmospheric pressure (Pascals) = 94285
Velocity of undisturbed free stream (Uref, in m/s) = 27.60389
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092339E-03
Estimated momentum thickness Reynolds number = 6790.543
Location of traverse: X/T = 4.4616 Z/T =-.5 (Plane 10 , S/T = 0.50)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	2.5119E-01	1.3064E-02			-3.3519E-03	1.0405E-04	-3.9010E-01	1.0152E+00	
2.4786E-03	2.9158E-01	1.1260E-02			-3.7267E-03	1.9160E-04	-3.2112E-01	1.2192E+00	
3.5411E-03	4.0915E-01	7.4001E-03			-4.1248E-03	4.9259E-04	-1.5300E-01	9.3987E-01	
5.3116E-03	4.8364E-01	7.9491E-03			-3.8292E-03	9.1358E-04	-1.5484E-01	5.7488E-01	
7.7904E-03	5.1787E-01	9.4759E-03	-2.1026E-01	-1.7449E-01	-3.0193E-03	1.2901E-03	-8.2865E-02	3.1065E-01	-1.0118E-03
1.0269E-02	5.4713E-01	8.0600E-03	-1.8694E-01	-6.1585E-02	-2.5063E-03	1.6260E-03	4.1384E-02	9.4547E-02	-1.4857E-03
1.4164E-02	5.8300E-01	7.1791E-03	-1.6358E-01	-2.8364E-01	-1.5323E-03	1.8936E-03	1.8193E-01	2.1150E-02	-1.5380E-03
1.8059E-02					-1.0637E-03	1.9696E-03	1.9318E-01	2.4753E-02	
2.3725E-02	6.4081E-01	6.9215E-03	-1.5370E-01	-2.7661E-01	-4.1420E-04	1.9914E-03	1.6882E-01	-6.8090E-02	-1.3836E-03
3.0807E-02	6.7086E-01	6.3460E-03	-2.3037E-01	-2.7029E-01	-1.7334E-03	1.8511E-03	2.2227E-01	2.0512E-02	-1.2691E-03
4.0368E-02	7.0860E-01	5.9101E-03	-3.4887E-01	-1.0644E-01	2.1544E-03	1.7224E-03	3.1317E-01	1.5847E-01	
5.2054E-02	7.4236E-01	4.7053E-03	-4.0408E-01	1.1041E-01	1.4149E-03	1.5083E-03	3.1920E-01	2.8053E-01	-7.7871E-04
6.7280E-02	7.6768E-01	3.8329E-03	-3.4257E-01	2.3624E-01	4.1888E-03	1.3840E-03	2.9199E-01	3.5335E-01	-2.4193E-04
8.6048E-02	7.8128E-01	2.8793E-03	-1.4461E-01	6.8501E-02	1.1821E-03	1.3293E-03	2.2104E-02	1.9127E-01	-1.1567E-04
1.1084E-01	7.8354E-01	2.5474E-03	-6.4437E-03	-2.5592E-01	1.7616E-03	1.4279E-03	-1.1639E-01	-2.8297E-02	-5.2745E-05
1.4200E-01	7.8681E-01	2.6955E-03	-3.0578E-02	-2.8341E-01	1.4080E-03	1.5979E-03	-1.2877E-01	-3.0922E-02	-1.0415E-04
1.8237E-01	7.9603E-01	3.0191E-03	-1.1626E-01	-2.8414E-01	-2.0888E-03	1.5529E-03	-3.8727E-02	-3.4541E-02	-3.5886E-04
2.3300E-01	8.1802E-01	3.2615E-03	-2.7332E-01	-2.8476E-01	-1.8762E-03	1.4122E-03	2.1736E-02	-5.3466E-02	-5.5426E-04
2.9816E-01	8.4816E-01	3.0744E-03	-4.5831E-01	-1.3720E-01	2.3941E-03	1.1376E-03	3.0649E-01	2.7972E-01	-4.4867E-04
3.8137E-01	8.9142E-01	2.0918E-03	-7.3666E-01	3.2135E-01	5.4070E-03	7.6218E-04	4.6240E-01	4.9188E-01	-3.8265E-04
4.8761E-01	9.3425E-01	7.8428E-04	-1.1525E+00	1.4751E+00	1.0864E-02	3.7402E-04	7.3135E-01	1.0727E+00	-2.3296E-04
6.2358E-01	9.5125E-01	6.5478E-05	1.9049E-01	3.4238E-01	6.0583E-03	7.9158E-05	7.3467E-01	1.4825E+00	1.4256E-05
7.9674E-01	9.5129E-01	1.0382E-04	1.2465E-02	-3.5884E-02	5.9279E-03	2.4523E-05	9.5817E-02	-2.5514E-01	
1.0181E+00	9.5108E-01	2.4854E-05	-7.2112E-02	-4.6079E-02	6.4983E-03	1.7095E-05	8.6367E-02	-2.4859E-01	1.3623E-05
1.2373E+00	9.5135E-01	2.4878E-05	-1.6434E-02	-3.9334E-02	6.5345E-03	1.5783E-05	8.6572E-02	-2.1537E-01	
1.5914E+00	9.5142E-01	1.9763E-05	-6.7720E-02	-5.0511E-02	2.4851E-03	1.4085E-05	1.4966E-01	-2.0809E-01	1.0542E-05

Table F.6-7 Velocity measurements made at S/T = 0.50 with the UV system of the laser anemometer, plane 10

File E592770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.8
density (kilograms per meter cubed) = 1.105748
viscosity (meters squared per second) = 1.659881E-05
Atmospheric pressure (Pascals) = 94550
Velocity of undisturbed free stream (Uref, in m/s) = 27.64484
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.091126E-03
Estimated momentum thickness Reynolds number = 6813.652
Location of traverse: X/T = 4.4618 Z/T =-.4 (Plane 10 , S/T = 0.40)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
7.0822E-04	2.4680E-01	1.2200E-02			-4.1430E-03	1.5310E-04	-1.8909E-01	1.5560E+00	
1.7705E-03	2.9098E-01	1.3168E-02			-2.9663E-03	1.7151E-04	-3.0308E-01	1.8206E+00	
3.5411E-03	4.5886E-01	9.0162E-03			-4.4195E-03	5.0283E-04	-3.3866E-01	1.2525E+00	
5.6657E-03	5.2646E-01	8.1907E-03			-4.3618E-03	1.1257E-03	-1.9882E-01	4.5155E-01	
8.4986E-03	5.6463E-01	7.7976E-03	-2.3677E-01	2.2536E-01	-3.7329E-03	1.6792E-03	1.6505E-02	1.9628E-01	-1.4572E-03
1.2040E-02	5.9945E-01	7.3894E-03	-1.6025E-01	-1.3625E-01	-2.5505E-03	2.0527E-03	1.3527E-01	-9.4156E-02	-1.3211E-03
1.6289E-02	6.3077E-01	7.1475E-03	-1.3566E-01	-2.7620E-01	-1.7412E-03	2.0688E-03	2.3626E-01	7.2901E-03	-1.4487E-03
2.1955E-02	6.6069E-01	7.0396E-03	-2.2433E-01	-2.4170E-01	-2.6998E-03	2.0502E-03	2.7325E-01	6.1866E-02	-1.1931E-03
2.9037E-02	6.9230E-01	6.7376E-03	-3.4659E-01	-1.8319E-01	-1.3960E-03	1.8550E-03	3.3776E-01	1.5691E-01	-1.0302E-03
3.8598E-02	7.3294E-01	5.7902E-03	-4.2549E-01	-5.6142E-02	7.2886E-04	1.5922E-03	4.4218E-01	4.1320E-01	-8.8019E-04
5.0283E-02	7.6634E-01	4.3462E-03	-4.6533E-01	3.0174E-01	-8.7866E-05	1.2759E-03	4.0378E-01	3.6706E-01	-6.2221E-04
6.5510E-02	7.8840E-01	3.1911E-03	-2.7609E-01	1.1476E-01	2.7320E-03	1.0964E-03	2.3194E-01	1.9909E-01	-1.7003E-04
8.4278E-02	7.9625E-01	2.5181E-03	-5.0462E-02	-2.0336E-01	2.1010E-03	1.0883E-03	6.2010E-02	1.4785E-01	-4.4091E-06
1.0907E-01	7.9543E-01	2.2771E-03	1.5722E-03	-3.0540E-01	1.5028E-03	1.1887E-03	-1.1666E-01	-1.8063E-02	-7.4103E-07
1.4023E-01	7.9451E-01	2.3492E-03	-7.5821E-02	-3.4378E-01	1.5805E-03	1.2539E-03	-6.0010E-02	-1.1792E-01	-6.3197E-05
1.8024E-01	8.0195E-01	2.5639E-03	-8.9969E-02	-3.4498E-01	-4.3972E-04	1.2146E-03	4.2813E-02	-1.1772E-01	-3.0124E-04
2.3123E-01	8.2101E-01	2.6252E-03	-2.2629E-01	-3.9831E-01	5.2777E-05	1.1027E-03	1.6595E-01	-2.0595E-02	-4.2573E-04
2.9639E-01	8.5020E-01	2.3939E-03	-4.3264E-01	-1.9705E-01	2.2630E-03	8.9727E-04	2.8148E-01	1.6038E-01	-4.4771E-04
3.7960E-01	8.8708E-01	1.6370E-03	-7.4063E-01	2.8017E-01	4.8127E-03	6.5081E-04	3.6500E-01	4.2341E-01	-3.6690E-04
4.8584E-01	9.2496E-01	5.8342E-04	-1.2081E+00	1.6795E+00	6.0438E-03	3.0364E-04	7.6110E-01	1.4374E+00	-1.4748E-04
6.2181E-01	9.3985E-01	5.8336E-05	1.7258E-01	4.0461E-01	4.4236E-03	6.4279E-05	4.6977E-01	8.6104E-01	7.0215E-06
7.9533E-01	9.4042E-01	3.2227E-05	2.4523E-02	-9.5359E-02	5.0048E-03	2.5193E-05	1.5809E-01	-1.5608E-01	1.5574E-05
1.0163E+00	9.4103E-01	2.3610E-05	-1.2588E-01	-1.5858E-01	4.4734E-03	1.6568E-05	1.1537E-01	-2.3281E-01	1.1637E-05
1.2355E+00	9.4074E-01	2.2271E-05	-1.4260E-02	-1.1793E-01	3.0117E-03	1.4499E-05	1.1357E-01	-1.8382E-01	1.1239E-05
1.5896E+00	9.4187E-01	2.5697E-05	-1.0806E-01	3.1034E-02	1.8037E-03	1.2848E-05	6.4157E-02	-1.6934E-01	1.2568E-05

Table F.6-8 Velocity measurements made at S/T = 0.40 with the UV system of the laser anemometer, plane 10

File E593770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 25.5
density (kilograms per meter cubed) = 1.099886
viscosity (meters squared per second) = 1.671745E-05
Atmospheric pressure (Pascals) = 94270
Velocity of undisturbed free stream (Uref, in m/s) = 27.63355
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09146E-03
Estimated momentum thickness Reynolds number = 6763.088
Location of traverse: X/T = 4.4618 Z/T =-.3 (Plane 10 , S/T = 0.30)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
8.8527E-04	2.4984E-01	1.0492E-02			-5.3436E-03	1.8916E-04	-2.4870E-01	1.6395E+00	
1.7705E-03	3.0795E-01	1.3074E-02			-5.8326E-03	2.6631E-04	-2.8042E-01	1.1656E+00	
2.6329E-03	4.0554E-01	1.0700E-02			-6.0751E-03	5.1723E-04	-2.3175E-01	8.6129E-01	
3.8952E-03	4.7950E-01	8.9324E-03			-6.0077E-03	8.8830E-04	-1.7254E-01	5.5479E-01	
5.6657E-03	5.3416E-01	8.4524E-03	-3.0940E-01	9.0963E-01	-5.0398E-03	1.4365E-03	-5.4484E-02	3.4620E-01	-1.8643E-03
7.7904E-03	5.6855E-01	8.0227E-03	-2.4531E-01	2.4810E-01	-4.7070E-03	1.7837E-03	-1.6528E-03	1.4004E-01	-1.5957E-03
1.0523E-02	6.0019E-01	7.5480E-03	-2.6128E-01	-1.0035E-01	-3.5680E-03	2.0991E-03	1.4116E-01	3.5027E-02	-1.7566E-03
1.4164E-02	6.3106E-01	7.6803E-03	-1.7825E-01	-2.5397E-01	-3.1422E-03	2.1555E-03	2.1737E-01	-7.3079E-02	-1.5383E-03
1.8414E-02	6.6063E-01	7.1964E-03	-2.0392E-01	-2.3586E-01	-2.6407E-03	2.1723E-03	2.9215E-01	1.6389E-02	-1.5188E-03
2.4079E-02	6.8846E-01	6.7979E-03	-2.9384E-01	-2.1065E-01	-5.1905E-03	1.9890E-03	2.9877E-01	-1.7027E-02	-1.6827E-03
3.1161E-02	7.2475E-01	6.0889E-03	-4.3946E-01	-2.1689E-02	-3.3603E-03	1.7724E-03	4.2214E-01	3.1954E-01	-9.5989E-04
4.0722E-02	7.6619E-01	4.5678E-03	-4.6982E-01	2.1796E-01	-1.9927E-03	1.4361E-03	4.5090E-01	5.6049E-01	-6.9268E-04
5.2408E-02	7.8996E-01	3.4202E-03	-4.1875E-01	2.5652E-01	-4.2144E-03	1.1729E-03	4.1696E-01	6.6273E-01	-3.2709E-04
6.7635E-02	8.0644E-01	2.5902E-03	-2.3886E-01	2.6619E-02	-3.6622E-03	9.4221E-04	5.8683E-02	1.4477E-01	-1.0418E-04
8.6402E-02	8.1163E-01	2.3064E-03	-7.8293E-02	-2.6740E-01	-4.2996E-03	9.4956E-04	-6.1796E-02	6.0896E-02	-9.9112E-05
1.1119E-01	8.1247E-01	2.2240E-03	-9.5641E-02	-2.9346E-01	-5.3325E-03	9.7036E-04	-5.6720E-02	-3.3237E-02	-9.0321E-05
1.4235E-01	8.1328E-01	2.2713E-03	-1.2409E-01	-3.4124E-01	-3.9413E-03	9.8439E-04	-4.6482E-02	4.9667E-02	-2.2500E-04
1.8237E-01	8.1905E-01	2.3414E-03	-2.1072E-01	-3.0635E-01	-4.8127E-03	9.6134E-04	4.4114E-02	1.2526E-02	-2.2595E-04
2.3336E-01	8.3279E-01	2.2915E-03	-3.6641E-01	-1.6662E-01	-4.1090E-03	9.2355E-04	4.9928E-02	1.1697E-01	-3.2084E-04
2.9851E-01	8.5908E-01	1.9361E-03	-5.6274E-01	-2.3062E-02	-1.0525E-03	7.4764E-04	2.9995E-01	2.5297E-01	-2.9438E-04
3.8173E-01	8.8979E-01	1.3201E-03	-8.8576E-01	6.2652E-01	-2.4692E-04	5.2932E-04	4.3984E-01	4.1963E-01	-2.1143E-04
4.8796E-01	9.2048E-01	4.0783E-04	-1.3068E+00	2.6222E+00	1.8937E-03	2.6304E-04	7.3882E-01	1.5345E+00	-8.7180E-05
6.2394E-01	9.3006E-01	6.2062E-05	1.0547E-01	1.5342E-01	2.1468E-03	5.4625E-05	2.8821E-01	3.5636E-01	1.0666E-05
7.9710E-01	9.2961E-01	1.0382E-04	6.8482E-02	-5.7593E-02	2.8228E-03	4.0979E-05	-2.5787E-02	-1.4026E-01	5.6389E-05
1.0184E+00	9.3032E-01	5.2404E-05	-3.9303E-02	-1.9624E-01	4.3484E-03	4.6857E-05	-5.1708E-02	7.1802E-03	2.6511E-05
1.2376E+00	9.2937E-01	3.1294E-05	-5.6541E-02	- .6475E-01					
1.5917E+00	9.2988E-01	2.5705E-05	-1.1363E-01	-1.1766E-01	1.1659E-03	1.5694E-05	7.4264E-03	-1.5727E-01	1.1008E-05

Table F.6-9 Velocity measurements made at S/T = 0.30 with the UV system of the laser anemometer, plane 10

File E594770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 23.8
density (kilograms per meter cubed) = .118626
viscosity (meters squared per second) = 1.636524E-05
Atmospheric pressure (Pascals) = 95330
Velocity of undisturbed free stream (Uref, in m/s) = 27.67027
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090375E-03
Estimated momentum thickness Reynolds number = 6915.975
Location of traverse: X/T = 4.4618 Z/T =-.2 (Plane 10 S/T = 0.20)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
6.8527E-04	2.3838E-01	1.0734E-02			-2.0623E-03	4.7114E-05	-7.8602E-01	3.0318E+00	
1.9476E-03	2.9562E-01	1.1016E-02			-2.8593E-03	1.0796E-04	-3.0836E-01	1.6168E+00	
3.0099E-03	3.7215E-01	8.7172E-03			-3.2772E-03	2.4030E-04	-2.0822E-01	1.2375E+00	
4.2493E-03	4.1877E-01	9.9610E-03	-6.9659E-02	2.6290E-01	-3.9121E-03	4.8840E-04	-2.9220E-01	1.2187E+00	-1.3893E-03
5.8428E-03	4.8008E-01	8.4144E-03	-1.6442E-01	6.3322E-01	-3.6220E-03	1.0937E-03	-1.5005E-01	6.0606E-01	-1.6142E-03
7.9674E-03	5.1987E-01	8.0893E-03	-1.9374E-01	1.3937E-01	-3.9525E-03	1.6535E-03	-2.3344E-02	2.7502E-01	-1.6854E-03
1.0800E-02	5.4941E-01	7.9936E-03	-1.3880E-01	-1.0647E-01	-3.9887E-03	1.9978E-03	9.4957E-02	3.5173E-02	-1.5324E-03
1.4341E-02	5.8199E-01	7.6908E-03	-1.8440E-01	-1.4751E-01	-3.1088E-03	2.2627E-03	1.5391E-01	5.5790E-03	-1.4259E-03
1.8591E-02	6.0809E-01	7.8389E-03	-2.0532E-01	-1.5159E-01	-3.4455E-03	2.4233E-03	2.2677E-01	1.1373E-01	-1.3650E-03
2.4256E-02	6.3882E-01	7.1586E-03	-2.3106E-01	-2.2825E-01	-4.2215E-03	2.3759E-03	2.7134E-01	1.1042E-01	-1.4228E-03
3.1339E-02	6.4802E-01	6.9819E-03	-2.3444E-01	-2.0680E-01	-6.9669E-03	2.2195E-03	1.8851E-01	-8.7399E-02	-1.0956E-03
4.0899E-02	6.8766E-01	6.0750E-03	-3.4365E-01	-1.5626E-01	-6.4866E-03	2.0649E-03	2.0882E-01	7.6824E-02	-7.7714E-04
5.2585E-02	7.2505E-01	5.3082E-03	-4.1962E-01	4.0105E-02	-7.6845E-03	2.1095E-03	1.3381E-01	2.4877E-01	-3.5147E-05
6.7812E-02	7.5183E-01	4.2123E-03	-3.7291E-01	-2.4709E-02	-7.8063E-03	2.1554E-03	8.4538E-02	6.4521E-02	-3.4810E-04
8.6579E-02	7.6256E-01	4.0959E-03	-3.7452E-01	1.9838E-02	-1.0463E-02	2.3751E-03	8.8051E-02	1.1092E-01	-2.7219E-04
1.1137E-01	7.7581E-01	3.9836E-03	-4.2815E-01	2.1223E-02	-1.3518E-02	2.5157E-03	2.2615E-01	1.9510E-01	-5.2346E-04
1.4253E-01	7.9627E-01	3.8706E-03	-5.3956E-01	2.3785E-01	-1.2158E-02	2.1654E-03	4.5278E-01	3.7133E-01	-6.2641E-04
1.8254E-01	8.2476E-01	2.7675E-03	-4.9373E-01	9.5963E-02	-1.3451E-02	1.4532E-03	4.9425E-01	5.2346E-01	-7.8218E-04
2.3353E-01	8.4995E-01	2.0060E-03	-5.0236E-01	1.9431E-01	-1.2143E-02	9.5273E-04	4.0320E-01	7.2669E-01	-2.1042E-04
2.9869E-01	8.7590E-01	1.3258E-03	-7.3623E-01	5.9415E-01	-9.8519E-03	5.6463E-04	2.2488E-01	3.7571E-01	-1.0102E-04
3.8191E-01	8.9425E-01	7.9870E-04	-9.1200E-01	9.9610E-01	-6.4615E-03	3.8862E-04	4.3461E-01	6.6435E-01	-1.2674E-04
4.8814E-01	9.1282E-01	2.2327E-04	-3.7244E-01	1.0398E+00	-5.4277E-03	1.8199E-04	6.5647E-01	1.4519E+00	-3.9723E-05
6.2411E-01	9.1393E-01	1.0234E-04	2.1146E-01	-8.6640E-02	-4.4550E-03	7.6140E-05	9.9801E-02	2.9686E-02	1.7555E-05
7.9727E-01	9.1354E-01	9.1843E-05	2.0206E-01	-5.4108E-02	8.8369E-04	5.6005E-05	-8.0902E-02	3.6225E-02	1.4461E-05
1.0186E+00	9.1309E-01	9.0598E-05	2.4607E-01	-8.6013E-02	2.0652E-03	5.8763E-05	-1.4944E-01	1.1721E-01	1.0051E-05
1.2378E+00	9.1350E-01	9.4296E-05	1.8313E-01	5.5758E-02	-7.9585E-05	5.1462E-05	-1.0050E-01	2.5407E-02	1.7041E-05
1.5919E+00	9.1409E-01	9.9482E-05	2.2250E-01	5.8807E-02	-8.8473E-05	5.0658E-05	-7.1262E-02	8.7405E-02	1.7928E-05

Table F.6-10 Velocity measurements made at S/T = 0.20 with the UV system of the laser anemometer, plane 10

File E595770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.6
density (kilograms per meter cubed) = 1.116321
viscosity (meters squared per second) = 1.643308E-05
Atmospheric pressure (Pascals) = 95390
Velocity of undisturbed free stream (Uref, in m/s) = 27.65011
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09097E-03
Estimated momentum thickness Reynolds number = 6883.419
Location of traverse; X/T = 4.4818 Z/T =-.1 (Plane 10 , S/T = 0.10)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.2394E-03	1.4453E-01	5.2677E-03			-2.4966E-03	7.3553E-05	-5.1082E-01	1.8515E+00	
1.9476E-03	1.7407E-01	4.8623E-03			-3.1902E-03	1.2340E-04	-3.9133E-01	1.8431E+00	
3.0099E-03	2.6231E-01	6.1344E-03			-5.1316E-03	3.2201E-04	-4.0413E-01	1.3503E+00	
4.0722E-03	3.1230E-01	6.8377E-03			-6.1161E-03	6.0765E-04	-2.9639E-01	7.8725E-01	
5.1346E-03	3.4133E-01	7.6307E-03	1.2876E-01	2.8965E-01	-7.2541E-03	1.0520E-03	-2.9180E-01	7.3144E-01	-5.6236E-04
6.9051E-03	3.7585E-01	7.7234E-03	1.8120E-02	-4.2099E-02	-8.6308E-03	1.7162E-03	-2.3030E-01	4.0741E-01	-1.1107E-03
9.0297E-03	4.0332E-01	8.0334E-03	1.4154E-02	-2.5624E-01	-8.8141E-03	2.2956E-03	-8.1745E-02	-3.5739E-02	-1.2531E-03
1.1863E-02	4.1767E-01	8.4795E-03	-5.3819E-02	-2.6461E-01	-8.9603E-03	2.8478E-03	-1.2338E-02	2.4550E-02	-1.3238E-03
1.5404E-02	4.3852E-01	8.8327E-03	-8.7368E-02	-3.1929E-01	-8.9227E-03	3.1896E-03	7.2722E-02	3.9549E-02	-1.3069E-03
1.9653E-02	4.5929E-01	8.7012E-03	-1.2287E-01	-2.5931E-01	-8.3257E-03	3.2360E-03	7. 498E-02	-1.0190E-01	-1.3944E-03
2.5319E-02	4.9050E-01	8.6562E-03	-1.8902E-01	-2.2740E-01	-9.4917E-03	3.4187E-03	2.5635E-02	-7.6366E-02	-1.1613E-03
3.2401E-02	5.2024E-01	8.0860E-03	-1.9998E-01	-2.1734E-01	-8.3900E-03	3.6862E-03	5.3851E-02	1.2517E-01	-1.0244E-03
4.1962E-02	5.5261E-01	8.2418E-03	-2.1177E-01	-1.8287E-01	-1.0977E-02	3.8883E-03	-6.1272E-02	1.6677E-01	-1.5780E-04
5.3647E-02	5.6711E-01	8.0139E-03	-2.6081E-01	-1.6763E-01	-1.1559E-02	4.2002E-03	-9.7965E-02	7.3290E-02	5.2077E-04
6.8874E-02	5.7397E-01	9.0266E-03	-2.3127E-01	-2.3016E-01	-1.6564E-02	4.9991E-03	-2.4976E-01	1.3793E-01	1.0734E-03
8.7642E-02	5.5184E-01	1.0642E-02	-1.9268E-01	-2.7855E-01	-1.8961E-02	5.6515E-03	-2.4707E-01	-9.9230E-02	4.1183E-04
1.1278E-01	5.3517E-01	1.0717E-02	-3.3740E-02	-4.0932E-01	-2.1574E-02	6.4889E-03	-1.6992E-01	-2.0537E-01	-5.0944E-04
1.4359E-01	5.4107E-01	1.2439E-02	-7.9167E-02	-3.7153E-01	-1.9323E-02	7.1861E-03	-8.4443E-02	-1.1038E-01	-1.1355E-03
1.8566E-01	5.9920E-01	1.3955E-02	-2.4536E-01	-4.2131E-01	-1.4327E-02	7.0123E-03	2.4264E-02	-1.5185E-01	-1.7744E-03
2.3460E-01	6.6875E-01	1.1358E-02	-4.5331E-01	-1.7389E-01	-1.5495E-02	6.1140E-03	6.7302E-02	-3.7265E-02	-1.3397E-03
2.9975E-01	7.2322E-01	8.4655E-03	-5.1519E-01	-7.9594E-02	-1.5061E-02	5.1867E-03	9.0866E-02	3.8564E-02	-3.8902E-04
3.8297E-01	7.4656E-01	6.9600E-03	-5.1928E-01	9.3317E-04	-1.0635E-02	4.4287E-03	4.8116E-02	2.4873E-02	6.8231E-05
4.8920E-01	7.2803E-01	6.7053E-03	-3.4848E-01	-2.8053E-01	-4.7225E-03	4.5792E-03	-3.7632E-02	-2.0469E-02	5.9553E-04
6.2518E-01	6.7539E-01	7.8806E-03	-2.9217E-01	-2.8761E-01	-2.0138E-04	5.2601E-03	-4.4915E-02	-1.8859E-01	8.2693E-04
7.9834E-01	6.6650E-01	7.8752E-03	-2.8868E-01	-2.9356E-01	4.1009E-04	5.3587E-03	-7.0193E-02	-1.4654E-01	5.5017E-04
1.0197E+00	6.5909E-01	7.8552E-03	-2.4478E-01	-2.4784E-01	5.2572E-04	5.5754E-03	1.1507E-02	-1.2866E-01	5.4334E-04
1.2388E+00	6.5352E-01	7.8275E-03	-2.1830E-01	-3.4535E-01	3.6326E-04	5.5230E-03	-2.1502E-02	-2.5730E-01	6.2468E-04
1.5930E+00	6.7196E-01	7.6049E-03	-2.4741E-01	-2.5579E-01	-5.1600E-03	5.4245E-03	-6.5053E-02	-1.6872E-01	5.6326E-04

Table F.6-11 Velocity measurements made at S/T = 0.10 with the UV system of the laser anemometer, plane 10

File E596770.RES
Non-redundant U and V component velocity measurements obtained with the UV optical system of the laser anemometer
Flow temperature (degrees centigrade) = 24.5
density (kilograms per meter cubed) = 1.116462
viscosity (meters squared per second) = 1.642676E-05
Atmospheric pressure (Pascals) = 95370
Velocity of undisturbed free stream (Uref, in m/s) = 27.67396
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090265E-03
Estimated momentum thickness Reynolds number = 6890.817
Location of traverse; X/T = 4.4618 Z/T = 0 (Plane 10 , S/T = 0.00)

Y/T	U/Uref	u2/Uref2	U-skewness	U-kurtosis	V/Uref	v2/Uref2	V-skewness	V-kurtosis	uv/Uref2
1.4164E-03	1.1466E-01	3.6219E-03			5.4950E-04	1.3034E-05	-1.8317E-01	4.9413E-01	
2.4788E-03	1.2829E-01	4.1219E-03			-3.3181E-04	4.2676E-05	-9.6098E-01	3.2177E+00	
3.5411E-03	1.6537E-01	3.7502E-03			-6.1581E-04	9.1105E-05	-5.8169E-01	2.3164E+00	
4.6034E-03	2.0655E-01	3.1315E-03			-1.7863E-03	2.2411E-04	-7.2882E-01	1.9827E+00	
6.3739E-03	2.4172E-01	3.0426E-03			-3.5686E-03	4.7988E-04	-6.1174E-01	1.2252E+00	
8.4956E-03	2.6971E-01	3.5866E-03	3.6701E-01	3.3747E-01	-8.4081E-03	1.2340E-03	-4.8126E-01	4.7304E-01	-4.0309E-04
1.1331E-02	2.8440E-01	3.8191E-03	3.0926E-01	1.7924E-02	-1.3524E-02	1.9621E-03	-3.3353E-01	4.5584E-02	-5.0108E-04
1.4873E-02	2.9716E-01	4.1953E-03	3.3667E-01	-5.6568E-02	-1.6925E-02	2.5464E-03	-1.7980E-01	-5.6979E-02	-8.8704E-04
1.9122E-02	3.0691E-01	4.6988E-03	3.2967E-01	-6.3553E-02	-1.9954E-02	3.0998E-03	-1.3068E-01	-6.9757E-02	-8.9031E-04
2.4788E-02	3.1938E-01	5.1099E-03	3.1913E-01	-1.5113E-01	-1.8517E-02	3.2617E-03	-1.1528E-01	-8.2723E-02	-9.1942E-04
3.1870E-02	3.3212E-01	5.6009E-03	3.3252E-01	-1.4540E-01	-1.8367E-02	3.4691E-03	-9.4921E-02	-9.2231E-02	-9.9727E-04
4.1431E-02	3.5146E-01	6.2801E-03	3.1874E-01	-2.3324E-01	-1.5392E-02	3.6538E-03	-5.8897E-02	-1.1391E-01	-7.9658E-04
5.3116E-02	3.5845E-01	6.6658E-03	3.4012E-01	1.2893E-01	-7.6576E-03	3.8560E-03	-6.0544E-02	-6.9220E-02	-4.9382E-04
6.8343E-02	3.6740E-01	7.1947E-03	3.5580E-01	-2.0345E-01	8.3731E-04	4.1201E-03	-7.0502E-02	-1.1768E-01	-1.1460E-04
8.7110E-02	3.6571E-01	7.0222E-03	3.2504E-01	-2.7223E-01	5.0158E-03	4.5347E-03	-9.8151E-02	-9.5826E-02	3.5303E-04
1.1190E-01	3.4722E-01	6.5567E-03	4.7145E-01	-2.7703E-02	3.2934E-03	5.4014E-03	-9.0739E-02	4.0741E-02	7.6294E-04
1.4306E-01	3.3997E-01	5.9835E-03	5.0294E-01	-3.8211E-03	-2.5737E-02	6.3525E-03	-6.9858E-02	-1.7849E-01	-1.2097E-05
1.8307E-01	3.5741E-01	6.6871E-03	4.8601E-01	-1.1051E-01	-4.7667E-02	5.7355E-03	-1.2670E-02	-1.3770E-01	-1.2606E-03
2.3407E-01	3.9926E-01	7.1159E-03	4.4618E-01	-8.2907E-02	-5.1241E-02	5.4808E-03	1.0159E-02	-1.4443E-01	-6.7517E-04
2.9922E-01	4.2890E-01	7.2506E-03	4.3634E-01	-1.1953E-01	-3.9120E-02	5.6046E-03	5.4821E-02	-4.1279E-02	-1.8489E-04
3.8244E-01	4.4432E-01	6.9806E-03	3.8103E-01	-2.1704E-01	-2.2628E-02	5.0659E-03	-2.6209E-02	-9.7572E-02	-6.1379E-05
4.8867E-01					-6.6456E-03	4.6939E-03	7.5360E-03	-1.3607E-01	
6.2465E-01	3.9682E-01	6.0618E-03	4.4351E-01	-8.7256E-02	1.3107E-03	4.6440E-03	-5.4760E-03	-1.1087E-01	1.9089E-04
7.9780E-01	3.6399E-01	5.1143E-03	4.3109E-01	-1.4193E-01	2.9881E-03	4.3641E-03	1.3760E-02	-9.1996E-02	3.5196E-04
1.0191E+00	3.5493E-01	4.7212E-03	3.6366E-01	-2.9046E-01	-2.4490E-03	4.2430E-03	-2.4814E-03	-2.2264E-01	1.7090E-04
1.2383E+00					3.5582E-03	4.2005E-03	2.0515E-03	-1.7091E-01	
1.5924E+00					-3.6222E-03	4.0754E-03	-2.7898E-02	6.9080E-02	

Table F.6-12 Velocity measurements made at S/T = 0.00 with the UV system of the laser anemometer, plane 10

File E572770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24.4
density (kilograms per meter cubed) = 1.112095
viscosity (meters squared per second) = 1.648699E-05
Atmospheric pressure (Pascals) = 94965
Velocity of undisturbed free stream (Uref, in m/s) = 27.68115
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.090052E-03
Estimated momentum thickness Reynolds number = 6867.073
Location of traverse; X/T = 4.4618 Z/T =-1.6 (Plane 10 , S/T = 1.60)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.5935E-03	1.5249E-02	1.5026E-03	
2.1246E-03	1.6914E-02	1.6545E-03	
3.0099E-03	2.0093E-02	1.9297E-03	
4.0722E-03	2.1523E-02	2.2575E-03	
5.1346E-03	2.5095E-02	2.5964E-03	
6.9051E-03	3.2463E-02	3.2164E-03	1.1575E-03
9.0297E-03	3.5632E-02	3.4204E-03	6.8972E-04
1.1863E-02	4.0062E-02	3.5518E-03	4.0627E-04
1.5404E-02	4.2114E-02	3.5104E-03	3.6294E-04
1.9653E-02	4.4397E-02	3.4880E-03	5.4601E-04
2.5319E-02	4.6476E-02	3.4386E-03	3.7933E-04
3.2401E-02	4.9976E-02	3.3271E-03	3.6927E-04
4.3024E-02	5.1601E-02	3.0903E-03	3.4994E-04
5.4356E-02	5.2413E-02	2.9526E-03	1.8684E-04
6.8874E-02	5.2933E-02	2.9779E-03	2.9748E-04
8.7996E-02	5.2397E-02	2.6773E-03	3.6209E-04
1.1243E-01	5.1281E-02	2.5848E-03	2.5087E-04
1.4359E-01	4.9556E-02	2.3253E-03	3.5300E-04
1.8396E-01	5.1102E-02	2.1947E-03	3.6529E-04
2.3460E-01	5.3279E-02	2.0046E-03	2.9759E-04
2.9975E-01	5.4441E-02	1.7536E-03	2.5125E-04
3.8297E-01	5.7531E-02	1.2737E-03	1.5168E-04
4.9097E-01	5.9417E-02	6.3249E-04	8.2842E-06
6.2518E-01	6.2170E-02	9.6506E-05	8.4074E-06
7.9834E-01	6.2503E-02	2.2338E-05	1.7823E-05
1.0197E+00	6.3295E-02	2.5872E-05	2.1756E-05
1.2388E+00	6.3205E-02	2.7774E-05	1.8394E-05
1.5930E+00	6.1189E-02	1.9548E-05	1.7401E-05

Table F.6-13 Velocity measurements made at S/T = 1.60 with the UW system of the laser anemometer, plane 10

File E571770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24.65
density (kilograms per meter cubed) = 1.112974
viscosity (meters squared per second) = 1.648462E-05
Atmospheric pressure (Pascals) = 95120
Velocity of undisturbed free stream (Uref, in m/s) = 27.70107
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089464E-03
Estimated momentum thickness Reynolds number = 6872.012
Location of traverse; X/T = 4.4618 Z/T =-1.4 (Plane 10 , S/T = 1.40)

Y/T	W/Uref	w2/Uref2	uw/Uref2
9.5609E-04	1.0162E-02	1.2394E-03	
1.8059E-03	9.5981E-03	1.4456E-03	
2.7266E-03	1.2425E-02	1.7493E-03	
3.4348E-03	1.4774E-02	1.9941E-03	
4.4972E-03	1.7704E-02	2.3542E-03	
5.5595E-03	2.0510E-02	2.7282E-03	7.3106E-04
7.3300E-03	2.4430E-02	3.1416E-03	9.0514E-(
9.4547E-03	2.7032E-02	3.3053E-03	6.9004E-04
1.2288E-02	3.0740E-02	3.4541E-03	4.9687E-04
1.5829E-02	3.2669E-02	3.3789E-03	6.0199E-04
2.0786E-02	3.5105E-02	3.3453E-03	4.3287E-04
2.5744E-02	3.8067E-02	3.2630E-03	1.7527E-04
3.2826E-02	3.9361E-02	3.1965E-03	2.7993E-04
4.2387E-02	3.9863E-02	3.2528E-03	3.5396E-04
5.4072E-02	4.3143E-02	3.1345E-03	4.5247E-04
6.9299E-02	4.2092E-02	2.9499E-03	4.3517E-04
8.8067E-02	4.1787E-02	2.8443E-03	5.0512E-04
1.1285E-01	4.2236E-02	2.6249E-03	2.9166E-04
1.4402E-01	4.1330E-02	2.5110E-03	4.4170E-04
1.8403E-01	4.3182E-02	2.3003E-03	4.9448E-04
2.3502E-01	4.7265E-02	2.1542E-03	5.4391E-04
3.0018E-01	5.2244E-02	1.8619E-03	3.3647E-04
3.8339E-01	5.5816E-02	1.3595E-03	1.8098E-04
4.8962E-01	5.9161E-02	7.1353E-04	1.0236E-04
6.2560E-01	6.2628E-02	1.0102E-04	-1.1616E-05
7.9876E-01	6.2271E-02	2.3739E-05	1.6571E-05
1.0201E+00	6.2580E-02	2.0580E-05	1.9361E-05
1.2393E+00	6.1951E-02	2.0833E-05	2.0113E-05
1.5934E+00	6.0388E-02	2.0022E-05	1.7325E-05

Table F.6-14 Velocity measurements made at S/T = 1.40 with the UW system of the laser anemometer, plane 10

File E570770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24.7
density (kilograms per meter cubed) = 1.113957
viscosity (meters squared per second) = 1.647221E-05
Atmospheric pressure (Pascals) = 95220
Velocity of undisturbed free stream (Uref, in m/s) = 27.7059
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089322E-03
Estimated momentum thickness Reynolds number = 6878.151
Location of traverse: X/T = 4.4618 Z/T =-1.2 (Plane 10 , S/T = 1.20)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.9476E-03	7.4248E-03	1.5387E-03	
2.6558E-03	7.8860E-03	1.8257E-03	
3.3640E-03	9.1788E-03	2.0891E-03	
4.4263E-03	1.2569E-02	2.5996E-03	
5.4887E-03	1.3737E-02	2.9544E-03	
6.5510E-03	1.7680E-02	3.1809E-03	5.8178E-04
8.3215E-03	1.9791E-02	3.6171E-03	7.2438E-04
1.0446E-02	2.3218E-02	3.8953E-03	5.7858E-04
1.3279E-02	2.6937E-02	4.0232E-03	3.8877E-04
1.6820E-02	2.9018E-02	4.0612E-03	3.4359E-04
2.1069E-02	3.1115E-02	3.9982E-03	4.6132E-04
2.6735E-02	3.4189E-02	3.8859E-03	6.5606E-04
3.3994E-02	3.6643E-02	3.8993E-03	3.1474E-05
4.3378E-02	3.2787E-02	3.8598E-03	1.5011E-04
5.5064E-02	3.6900E-02	3.6128E-03	1.0742E-04
7.0290E-02	3.8286E-02	3.7043E-03	3.0798E-04
8.9412E-02	3.8582E-02	3.5988E-03	5.7277E-04
1.1385E-01	4.0391E-02	3.5699E-03	5.8280E-04
1.4501E-01	4.0326E-02	3.5248E-03	8.6522E-04
1.8502E-01	4.2347E-02	3.5153E-03	9.5097E-04
2.3601E-01	4.8767E-02	3.3013E-03	1.0278E-03
3.0117E-01	5.8070E-02	2.7525E-03	7.2261E-04
3.8438E-01	6.5950E-02	1.9186E-03	3.0935E-04
4.9062E-01	7.1964E-02	8.9007E-04	9.5269E-05
6.2659E-01	7.4007E-02	1.1300E-04	3.1432E-05
7.9975E-01	7.3150E-02	2.7202E-05	2.1992E-05
1.0211E+00	7.2228E-02	2.6048E-05	2.3618E-05
1.2403E+00	7.0275E-02	2.7649E-05	2.0460E-05
1.5944E+00	6.7720E-02	2.3143E-05	1.9985E-05

Table F.6-15 Velocity measurements made at S/T = 1.20 with the UW system of the laser anemometer, plane 10

File E558770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.4
density (kilograms per meter cubed) = 1.105859
viscosity (meters squared per second) = 1.662291E-05
Atmospheric pressure (Pascals) = 94750
Velocity of undisturbed free stream (Uref, in m/s) = 27.44282
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097132E-03
Estimated momentum thickness Reynolds number = 6763.972
Location of traverse; X/T = 4.4618 Z/T =-1 (Plane 10 , S/T = 1.00)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.8329E-03	-1.9822E-02	1.9361E-03	
3.5411E-03	-2.2443E-02	2.0837E-03	
4.6034E-03	-2.2862E-02	2.3980E-03	
5.6657E-03	-2.5526E-02	2.6659E-03	
6.7280E-03	-2.4211E-02	2.7719E-03	-1.1501E-03
8.4986E-03	-2.2895E-02	2.9628E-03	-4.2066E-04
1.0623E-02	-2.3408E-02	3.3291E-03	-3.5872E-04
1.3456E-02	-2.1520E-02	3.3894E-03	
1.6997E-02	-2.1742E-02	3.4620E-03	-4.1851E-04
2.1246E-02	-1.8788E-02	3.6233E-03	-4.4280E-04
2.6912E-02	-1.6771E-02	3.6781E-03	-5.4443E-04
3.3994E-02	-1.7186E-02	3.7933E-03	-6.5826E-04
4.3555E-02	-1.6101E-02	3.8616E-03	-4.5899E-04
5.5241E-02	-1.1288E-02	3.9860E-03	-2.9751E-04
7.0467E-02	-1.5637E-02	3.9522E-03	-4.8074E-04
8.9589E-02	-1.2656E-02	3.9355E-03	-1.3414E-04
1.1402E-01	-1.2452E-02	3.7323E-03	1.1167E-04
1.4518E-01	-7.8805E-03	3.7349E-03	6.4101E-04
1.8520E-01	6.0403E-04	3.6748E-03	8.0166E-04
2.3619E-01	1.2399E-02	3.3342E-03	8.3496E-04
3.0135E-01	2.2646E-02	2.9849E-03	8.8850E-04
3.8562E-01	2.8959E-02	2.0621E-03	3.0452E-04
4.9079E-01	2.9784E-02	8.4415E-04	-1.0591E-04
6.2677E-01	2.8054E-02	9.4811E-05	-6.2986E-05
7.9993E-01	2.5147E-02	2.8057E-05	2.6493E-05
1.0212E+00	2.3510E-02	2.0965E-05	2.7510E-05
1.2404E+00	2.0326E-02	1.9746E-05	2.1101E-05
1.5945E+00	1.6716E-02	1.9296E-05	2.0113E-05

Table F.6-16 Velocity measurements made at S/T = 1.00 with the UW system of the laser anemometer, plane 10

File E557770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.5
density (kilograms per meter cubed) = 1.184846
viscosity (meters squared per second) = 1.664242E-05
Atmospheric pressure (Pascals) = 94695
Velocity of undisturbed free stream (Uref, in m/s) = 27.45801
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.096678E-03
Estimated momentum thickness Reynolds number = 6759.029
Location of traverse; X/T = 4.4618 Z/T =-.8 (Plane 10 , S/T = 0.80)

Y/T	V/Uref	v2/Uref2	uv/Uref2
1.0623E-03	-3.3863E-02	2.2922E-03	
1.7705E-03	-3.4902E-02	2.4105E-03	
3.1870E-03	-3.4224E-02	2.3394E-03	
3.8952E-03	-3.8104E-02	2.6633E-03	
4.9575E-03	-4.0161E-02	3.0991E-03	
6.7280E-03	-4.4033E-02	3.6735E-03	-6.6857E-04
8.8527E-03	-4.1703E-02	3.7875E-03	-5.3246E-05
1.1686E-02	-4.1395E-02	3.9470E-03	-4.6366E-04
1.5227E-02	-3.6647E-02	3.7752E-03	-4.6836E-04
1.9476E-02	-3.3239E-02	3.6561E-03	-4.3307E-04
2.5142E-02	-2.9361E-02	3.4285E-03	-6.0155E-04
3.2224E-02	-2.9209E-02	3.2421E-03	-3.1695E-04
4.1785E-02	-2.5281E-02	2.7896E-03	-4.6869E-04
5.3824E-02	-1.9245E-02	2.7651E-03	-5.2020E-04
6.8697E-02	-1.4757E-02	2.3979E-03	-6.3009E-04
8.7465E-02	-7.3554E-03	2.4102E-03	-6.1416E-04
1.1225E-01	6.5015E-03	2.5702E-03	-3.5391E-04
1.4341E-01	2.5769E-02	2.8039E-03	-3.1418E-04
1.8378E-01	4.8528E-02	3.0934E-03	-3.5509E-05
2.3442E-01	7.2180E-02	3.1831E-03	2.6007E-04
3.0028E-01	9.0868E-02	3.0844E-03	4.7510E-04
3.8492E-01	9.8022E-02	2.0881E-03	7.7549E-05
4.8902E-01	9.9191E-02	6.9572E-04	-1.1336E-04
6.2500E-01	9.4309E-02	6.8527E-05	1.1974E-05
7.9851E-01	8.7584E-02	2.4059E-05	2.0894E-05
1.0195E+00	8.5534E-02	2.1467E-05	2.4801E-05
1.2387E+00	8.1628E-02	2.1166E-05	2.5566E-05
1.5928E+00	7.9851E-02	1.8560E-05	

Table F.6-17 Velocity measurements made at S/T = 0.80 with the UW system of the laser anemometer, plane 10

File E556770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.2
density (kilograms per meter cubed) = 1.107301
viscosity (meters squared per second) = 1.659267E-05
Atmospheric pressure (Pascals) = 94810
Velocity of undisturbed free stream (Uref, in m/s) = 27.42816
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.09757E-03
Estimated momentum thickness Reynolds number = 6773.399
Location of traverse: X/T = 4.4518 Z/T =-.6 (Plane 10 , S/T = 0.60)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.0623E-03	-3.5966E-02	2.2537E-03	
2.1246E-03	-3.9577E-02	2.5356E-03	
3.1870E-03	-4.0868E-02	2.8265E-03	
4.9575E-03	-4.5420E-02	3.4562E-03	1.7626E-04
7.0822E-03	-4.2942E-02	3.6981E-03	2.9373E-04
9.9150E-03	-3.7677E-02	3.8008E-03	6.9423E-05
1.3456E-02	-3.4886E-02	3.6867E-03	3.2365E-04
1.7705E-02	-3.0152E-02	3.6340E-03	3.8675E-04
2.3725E-02	-2.6836E-02	3.4116E-03	3.8052E-04
3.0807E-02	-2.0969E-02	3.1476E-03	2.9767E-04
4.0014E-02	-1.7257E-02	2.8476E-03	2.8879E-04
5.1700E-02	-9.2657E-03	2.4754E-03	2.9411E-04
6.8343E-02	-2.8063E-03	2.1508E-03	1.3081E-05
8.5694E-02	4.3650E-03	1.9559E-03	7.1068E-07
1.1048E-01	1.3485E-02	1.9523E-03	-1.1257E-04
1.4377E-01	2.6976E-02	1.9904E-03	-1.2854E-04
1.8166E-01	4.1381E-02	2.1502E-03	-9.9999E-05
2.3265E-01	5.7730E-02	2.2994E-03	-1.6520E-04
2.9816E-01	7.1408E-02	1.9005E-03	-3.5720E-04
3.8102E-01	8.0547E-02	1.1861E-03	-2.5107E-04
4.8725E-01	8.0506E-02	3.6744E-04	-9.5964E-05
6.2323E-01	7.6353E-02	3.8738E-05	2.6534E-05
7.9674E-01	6.9019E-02	2.0995E-05	2.1360E-05
1.0177E+00	6.6527E-02	1.5462E-05	1.9332E-05
1.2369E+00	6.3337E-02	1.6303E-05	1.9735E-05
1.5910E+00	6.0060E-02	1.4848E-05	1.5875E-05

Table F.6-18 Velocity measurements made at S/T = 0.60 with the UW system of the laser anemometer, plane 10

File E555770.SES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.35
density (kilograms per meter cubed) = 1.106628
viscosity (meters squared per second) = 1.66092E-05
Atmospheric pressure (Pascals) = 94800
Velocity of undisturbed free stream (Uref, in m/s) = 27.37594
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.099132E-03
Estimated momentum thickness Reynolds number = 6756.35
Location of traverse; X/T = 4.4618 Z/T =-.5 (Plane 10 , S/T = 0.50)

Y/T	W/Uref	w2/Uref2	uw/Uref2
8.8527E-04	-3.7486E-02	1.5827E-03	
1.5935E-03	-4.0868E-02	1.9392E-03	
2.6556E-03	-4.6774E-02	2.4283E-03	
4.0722E-03	-5.1436E-02	2.9049E-03	
5.1346E-03	-5.7654E-02	3.4511E-03	
6.1969E-03	-5.5807E-02	3.7087E-03	
7.2592E-03	-5.5529E-02	3.9147E-03	-1.3760E-04
9.3839E-03	-5.1617E-02	4.0354E-03	1.3250E-04
1.2217E-02	-4.6865E-02	4.0430E-03	3.5575E-04
1.5758E-02	-4.2672E-02	3.8945E-03	1.9331E-04
2.0007E-02	-3.8509E-02	3.7457E-03	5.5953E-04
2.5673E-02	-3.7356E-02	3.5908E-03	9.1752E-05
3.2755E-02	-3.0667E-02	3.1924E-03	1.7702E-04
4.2316E-02	-2.3639E-02	2.8414E-03	9.7865E-05
5.4001E-02	-1.7469E-02	2.4244E-03	1.8887E-04
6.9228E-02	-1.0040E-02	1.9496E-03	3.2112E-05
8.8350E-02	-2.1123E-03	1.7886E-03	-1.5134E-04
1.1278E-01	8.4496E-03	1.6780E-03	-1.2242E-04
1.4501E-01	1.8870E-02	1.6783E-03	-1.0619E-04
1.8396E-01	2.9222E-02	1.7682E-03	2.7805E-05
2.3495E-01	4.1092E-02	1.7499E-03	-1.6501E-04
3.0152E-01	5.1381E-02	1.5534E-03	-9.3026E-05
3.8332E-01	5.8345E-02	9.6840E-04	-1.7657E-04
4.8955E-01	6.0669E-02	2.9280E-04	-1.0026E-04
6.2553E-01	5.6956E-02	3.7325E-05	2.3308E-05
7.9869E-01	5.0910E-02	2.1280E-05	2.7147E-05
1.0200E+00	4.7560E-02	1.8723E-05	1.7753E-05
1.2392E+00	4.5180E-02	1.9610E-05	2.2253E-05
1.5933E+00	4.3342E-02	1.9725E-05	2.0662E-05

Table F.6-19 Velocity measurements made at S/T = 0.50 with the UW system of the laser anemometer, plane 10

File E554770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.107927
viscosity (meters squared per second) = 1.657473E-05
Atmospheric pressure (Pascals) = 94800
Velocity of undisturbed free stream (Uref, in m/s) = 27.42097
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097785E-03
Estimated momentum thickness Reynolds number = 6779.31
Location of traverse; X/T = 4.4618 Z/T =-.4 (Plane 10 , S/T = 0.40)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.4164E-03	-5.6327E-02	2.1649E-03	
2.4788E-03	-6.1116E-02	2.5837E-03	
3.5411E-03	-6.6660E-02	3.2273E-03	
4.7805E-03	-7.1693E-02	3.6146E-03	
6.7280E-03	-7.0641E-02	4.1898E-03	
8.4986E-03	-7.0208E-02	4.1757E-03	-3.0392E-04
1.13[illegible]-02	-6.3786E-02	4.0982E-03	1.0857E-04
1.487[illegible]E-02	-5.9259E-02	4.0467E-03	1.4868E-04
1.9122E-02	-5.4449E-02	3.9067E-03	
2.4788E-02	-4.9447E-02	3.4794E-03	5.3657E-05
3.1870E-02	-4.0561E-02	2.9625E-03	4.4564E-05
4.1431E-02	-3.4903E-02	2.4700E-03	2.3997E-05
5.3116E-02	-2.6143E-02	1.9880E-03	-1.4919E-04
6.8343E-02	-1.9332E-02	1.6035E-03	-2.2526E-04
8.7110E-02	-9.9869E-03	1.4216E-03	-2.2362E-04
1.1190E-01	-1.7036E-03	1.3690E-03	-1.4205E-04
1.4306E-01	7.9870E-03	1.3709E-03	-4.9088E-05
1.8307E-01	1.5954E-02	1.3772E-03	-2.1788E-04
2.3407E-01	2.4876E-02	1.3455E-03	-1.3926E-04
3.0099E-01	3.3283E-02	1.1393E-03	-1.4487E-04
3.8385E-01	3.9193E-02	7.1026E-04	-7.7255E-05
4.8867E-01	4.1510E-02	2.1732E-04	-1.0063E-04
6.2465E-01	3.5635E-02	3.2467E-05	2.7233E-05
7.9780E-01	3.1346E-02	1.9020E-05	1.7584E-05
1.0191E+00	2.6468E-02	2.0934E-05	2.5649E-05
1.2383E+00	2.5054E-02	2.6643E-05	2.3436E-05
1.5924E+00	2.5007E-02	2.4371E-05	1.9794E-05

Table F.6-20 Velocity measurements made at S/T = 0.40 with the UW system of the laser anemometer, plane 10

File E553770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.5
density (kilograms per meter cubed) = 1.099363
viscosity (meters squared per second) = 1.672544E-05
Atmospheric pressure (Pascals) = 94225
Velocity of undisturbed free stream (Uref, in m/s) = 27.44803
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.096976E-03
Estimated momentum thickness Reynolds number = 6723.528
Location of traverse: X/T = 4.4618 Z/T =-.3 (Plane 10 , S/T = 0.30)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.4164E-03	-4.1188E-02	2.2966E-03	
2.1246E-03	-4.9826E-02	2.7967E-03	
2.8329E-03	-5.1590E-02	3.3030E-03	
3.8952E-03	-5.3666E-02	3.6633E-03	
4.9575E-03	-5.4758E-02	4.0491E-03	
6.0198E-03	-5.3044E-02	4.1698E-03	1.6536E-04
8.4986E-03	-4.8277E-02	4.3650E-03	5.8488E-04
9.9150E-03	-4.1653E-02	4.4744E-03	8.6211E-04
1.2748E-02	-3.5504E-02	4.3731E-03	8.4920E-04
1.6289E-02	-2.9312E-02	4.0375E-03	5.0180E-04
2.6204E-02	-1.4732E-02	3.2966E-03	4.8285E-04
3.3286E-02	-3.3613E-03	2.6471E-03	3.7597E-04
4.2847E-02	4.4390E-03	2.1021E-03	4.5122E-04
5.4533E-02	1.1982E-02	1.5162E-03	7.3100E-05
6.9759E-02	1.9843E-02	1.2358E-03	2.7696E-05
8.8527E-02	2.6196E-02	1.1530E-03	-3.1343E-05
1.1331E-01	3.2047E-02	1.1306E-03	-9.7855E-05
1.4448E-01	3.9356E-02	1.1558E-03	-8.8724E-05
1.8484E-01	4.8268E-02	1.0912E-03	-5.2843E-05
2.3548E-01	5.7138E-02	1.0384E-03	-1.3013E-04
3.0064E-01	6.3911E-02	8.5343E-04	-1.0360E-04
3.8385E-01	7.1027E-02	5.2563E-04	-2.1952E-05
4.9044E-01	7.1303E-02	1.5820E-04	-7.9668E-05
6.2606E-01	6.5948E-02	3.0637E-05	2.2799E-05
1.2397E+00	5.8846E-02	2.5803E-05	2.5461E-05
1.5938E+00	5.9045E-02	2.6825E-05	2.7920E-05

Table F.6-21 Velocity measurements made at S/T = 0.30 with the UW system of the laser anemometer, plane 10

File E552770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25
density (kilograms per meter cubed) = 1.101207
viscosity (meters squared per second) = 1.667588E-05
Atmospheric pressure (Pascals) = 94225
Velocity of undisturbed free stream (Uref, in m/s) = 27.47628
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.096133E-03
Estimated momentum thickness Reynolds number = 6749.061
Location of traverse: X/T = 4.4618 Z/T =-.2 (Plane 10 , S/T = 0.20)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.4164E-03	-3.4717E-02	2.3903E-03	
3.1246E-03	-3.7726E-02	2.7257E-03	
2.8329E-03	-4.2239E-02	3.0169E-03	
3.8952E-03	-4.5038E-02	3.8997E-03	
5.3116E-03	-4.6546E-02	4.4201E-03	1.8170E-03
6.3739E-03	-4.5566E-02	4.8505E-03	1.4483E-03
7.7904E-03	-4.2880E-02	4.9695E-03	1.4525E-03
9.9150E-03	-3.6147E-02	5.1074E-03	1.5254E-03
1.2748E-02	-2.4503E-02	5.1149E-03	1.4297E-03
1.6289E-02	-1.7826E-02	4.9900E-03	1.2727E-03
2.0538E-02	-4.4975E-03	4.5690E-03	1.4406E-03
2.6204E-02	7.6229E-03	4.1528E-03	1.6026E-03
3.3286E-02	2.0387E-02	3.3049E-03	1.4124E-03
4.2847E-02	2.8319E-02	2.8355E-03	1.3491E-03
5.4533E-02	3.6822E-02	2.2770E-03	1.1059E-03
7.0467E-02	4.2365E-02	2.2013E-03	1.1561E-03
8.8527E-02	4.1110E-02	2.2555E-03	1.1422E-03
1.1331E-01	3.9390E-02	2.2791E-03	9.6382E-04
1.4448E-01	5.2640E-02	2.1556E-03	8.0367E-04
1.8449E-01	5.2544E-02	1.6532E-03	3.8706E-04
2.3548E-01	6.3115E-02	1.0787E-03	1.9841E-05
3.0064E-01	7.3068E-02	6.8683E-04	-6.7551E-05
3.8385E-01	7.6008E-02	3.7968E-04	-5.2009E-05
4.9009E-01	7.3232E-02	1.1722E-04	-2.4399E-05
6.2606E-01	6.8612E-02	8.3081E-05	2.4745E-05
7.9958E-01	6.8206E-02	8.8228E-05	2.8082E-05
1.0205E+00	6.6321E-02	8.3944E-05	2.7530E-05
1.2397E+00	6.2494E-02	9.3702E-05	2.4289E-05
1.5938E+00	6.3870E-02	1.0337E-04	2.8413E-05

Table F.6-22 Velocity measurements made at S/T = 0.20 with the UW system of the laser anemometer, plane 10

File E551770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 25.6
density (kilograms per meter cubed) = 1.10401
viscosity (meters squared per second) = 1.665935E-05
Atmospheric pressure (Pascals) = 94655
Velocity of undisturbed free stream (Uref, in m/s) = 27.42464
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.097675E-03
Estimated momentum thickness Reynolds number = 6745.596
Location of traverse: X/T = 4.4618 Z/T =-.1 (Plane 10 , S/T = 0.10)

Y/T	W/Uref	w2/Uref2	uw/Uref2
1.1331E-03	-2.8705E-02	2.7686E-03	
1.9476E-03	-3.2121E-02	3.3282E-03	
3.0099E-03	-3.3697E-02	3.9432E-03	
4.0722E-03	-3.5615E-02	4.4105E-03	
5.1346E-03	-3.5586E-02	4.6645E-03	1.5717E-03
6.5510E-03	-3.2322E-02	5.1325E-03	2.0525E-03
8.6756E-03	-2.5745E-02	5.2977E-03	2.0612E-03
1.1508E-02	-1.5287E-02	5.5549E-03	2.3966E-03
1.5050E-02	-5.9389E-03	5.2280E-03	2.0557E-03
1.9299E-02	5.6759E-03	5.0455E-03	2.1280E-03
2.4965E-02	2.1571E-02	4.5660E-03	1.9790E-03
3.2047E-02	2.9650E-02	4.2034E-03	2.0760E-03
4.1608E-02	3.7181E-02	3.6439E-03	2.0297E-03
5.3293E-02	4.2446E-02	3.2714E-03	2.2262E-03
6.8520E-02	3.9269E-02	3.7279E-03	2.6769E-03
8.7289E-02	2.7213E-02	4.4147E-03	3.1864E-03
1.1278E-01	1.2909E-02	5.1944E-03	3.4666E-03
1.4324E-01	1.6375E-02	5.5049E-03	3.7722E-03
1.8325E-01	3.0200E-02	5.4485E-03	4.1038E-03
2.3495E-01	4.7854E-02	4.1994E-03	2.3876E-03
2.9940E-01	5.1800E-02	2.8046E-03	1.7528E-03
3.8261E-01	5.1976E-02	2.1021E-03	1.3989E-03
4.8885E-01	4.9126E-02	2.2219E-03	1.3970E-03
6.2482E-01	4.1180E-02	2.9310E-03	1.9209E-03
7.9798E-01	4.2240E-02	3.1169E-03	1.8883E-03
1.0193E+00	4.3927E-02	2.9788E-03	2.0479E-03
1.2385E+00	3.7003E-02	3.4181E-03	2.2251E-03
1.5926E+00	3.8500E-02	3.4655E-03	2.3545E-03

Table F.6-23 Velocity measurements made at S/T = 0.10 with the UW system of the laser anemometer, plane 10

File E550770.RES
Non-redundant measurements obtained with the UW optical system of the LDV
Flow temperature (degrees centigrade) = 24.2
density (kilograms per meter cubed) = 1.112609
viscosity (meters squared per second) = 1.647083E-05
Atmospheric pressure (Pascals) = 94945
Velocity of undisturbed free stream (Uref, in m/s) = 37.45418
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.096793E-03
Estimated momentum thickness Reynolds number = 6828.683
Location of traverse; X/T = 4.4618 Z/T = 0 (Plane 10 , S/T = 0.00)

Y/T	W/Uref	w2/Uref2	uw/Uref2
2.1246E-03	3.5675E-04	1.9150E-03	
3.0099E-03	-5.9708E-03	1.6821E-03	1.5030E-03
4.0722E-03	-5.0425E-03	2.3588E-03	7.0437E-04
4.9575E-03	-7.5263E-03	2.5752E-03	4.1519E-04
6.0198E-03	-7.8102E-03	3.1161E-03	2.6712E-04
7.7904E-03	-7.4331E-03	3.9854E-03	5.8958E-04
9.9150E-03	-6.0837E-03	4.3620E-03	2.5082E-04
1.2748E-02	-6.1451E-03	4.7869E-03	4.8361E-04
1.6285E-02	-6.0287E-03	5.2090E-03	1.1478E-03
2.0538E-02	-2.6698E-03	5.3063E-03	6.2879E-04
2.6204E-02	-3.2061E-03	5.8202E-03	1.1127E-03
3.3286E-02	-5.0943E-04	6.5697E-03	1.4912E-03
4.2847E-02	-4.1445E-03	7.0832E-03	1.7413E-03
5.5949E-02	-3.2583E-03	7.3774E-03	1.6302E-03
6.9405E-02	-5.6201E-03	7.5162E-03	1.6831E-03
8.8527E-02	-1.2306E-02		
1.1331E-01	-1.2018E-02	5.9802E-03	7.1401E-04
1.4518E-01	-8.4526E-03	5.3272E-03	8.8806E-04
1.8449E-01	-6.0734E-03	6.5714E-03	1.6457E-03
2.3548E-01	-7.2189E-04	8.6350E-03	
3.0170E-01	-1.7218E-02	7.7746E-03	1.1268E-03
3.8385E-01	-2.2050E-02	7.2744E-03	1.1682E-03
4.9079E-01	-1.8140E-02	6.7691E-03	7.8345E-04
6.2606E-01	-2.0891E-02	6.3683E-03	-2.0635E-04
7.9922E-01	-1.7094E-02	7.0105E-03	1.3283E-03
1.0205E+00	-1.7020E-02	6.5863E-03	8.7241E-04
1.2397E+00	-1.7441E-02	6.5120E-03	1.0914E-03

Table F.6-24 Velocity measurements made at S/T = 0.00 with the UW system of the laser anemometer, plane 10

File E616770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 22.6
density (kilograms per meter cubed) = 1.123344
viscosity (meters squared per second) = 1.624566E-05
Atmospheric pressure (Pascals) = 95345
Velocity of undisturbed free stream (Uref, in m/s) = 27.5926
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.092674E-03
Estimated momentum thickness Reynolds number = 6951.243
Location of traverse: X/T = 4.4618 Z/T =-1.6 (Plane 10 , S/T = 1.60)

Y/T	vw/Uref2
2.3017E-03	-1.1211E-05
3.0099E-03	-1.3843E-04
4.0722E-03	-3.1821E-05
5.1346E-03	4.4013E-06
6.1969E-03	-6.6200E-05
7.9674E-03	4.2975E-05
1.0092E-02	5.5005E-05
1.3279E-02	5.9604E-05
1.6466E-02	-4.5981E-05
2.0715E-02	7.1369E-05
2.6381E-02	-2.2319E-05
3.3463E-02	-5.7409E-05
4.3024E-02	4.9991E-05
5.4710E-02	-1.7309E-05
6.9936E-02	7.5417E-05
8.8704E-02	2.1131E-05
1.1349E-01	9.5357E-05
1.4465E-01	1.6551E-05
1.8467E-01	-1.5700E-04
2.3566E-01	-1.0179E-04
3.0081E-01	-8.1375E-05
3.8403E-01	-4.8515E-06
4.9026E-01	1.1598E-05
6.2624E-01	1.6709E-05
7.9940E-01	1.5809E-05

Table F.6-25 Velocity measurements made at S/T = 1.60 with the VW system of the laser anemometer, plane 10

File E619770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 21.8
density (kilograms per meter cubed) = 1.129525
viscosity (meters squared per second) = 1.6123E-05
Atmospheric pressure (Pascals) = 95610
Velocity of undisturbed free stream (Uref, in m/s) = 27.68408
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089966E-03
Estimated momentum thickness Reynolds number = 7022.699
Location of traverse; X/T = 4.4618 Z/T =-1.4 (Plane 10 , S/T = 1.40)

Y/T	vw/Uref2
4.3555E-03	2.2274E-05
5.4178E-03	4.8462E-05
6.4802E-03	-1.4637E-04
7.5425E-03	1.3448E-06
9.3130E-03	-1.0317E-05
1.1792E-02	2.0904E-06
1.4271E-02	-5.3584E-05
1.7812E-02	-1.2560E-04
2.2061E-02	-9.9927E-06
2.7727E-02	-1.5468E-04
3.4609E-02	3.9397E-05
4.4370E-02	-7.0607E-05
5.6055E-02	-5.4784E-05
7.1282E-02	3.6435E-06
9.0050E-02	2.0485E-05
1.1484E-01	4.3531E-05
1.4600E-01	-4.7477E-05
1.8601E-01	-1.3048E-04
2.3700E-01	-1.7012E-04
3.0216E-01	-1.8925E-04
3.8538E-01	-1.6352E-04
4.9161E-01	-1.9633E-04
6.2759E-01	-4.8845E-05

Table F.6-26 Velocity measurements made at S/T = 1.40 with the VW system of the laser anemometer, plane 10

File E620770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.126278
viscosity (meters squared per second) = 1.617791E-05
Atmospheric pressure (Pascals) = 95400
Velocity of undisturbed free stream (Uref, in m/s) = 27.5486
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.093981E-03
Estimated momentum thickness Reynolds number = 6971.447
Location of traverse; X/T = 4.4618 Z/T =-1.2 (Plane 10 , S/T = 1.20)

Y/T	vw/Uref2
1.5935E-03	-7.9386E-05
2.3017E-03	-1.1274E-04
3.3640E-03	-6.8067E-05
4.4263E-03	-5.1317E-06
5.4887E-03	5.0236E-05
7.2592E-03	-2.5418E-05
9.3839E-03	1.9822E-05
1.2217E-02	1.3360E-04
1.5758E-02	3.1158E-05
2.0007E-02	3.3221E-05
2.6027E-02	1.5246E-06
3.2755E-02	3.8985E-05
4.2316E-02	1.1936E-04
5.4001E-02	5.1348E-05
6.9228E-02	6.6694E-05
8.7996E-02	1.8019E-04
1.1278E-01	3.8269E-05
1.4394E-01	9.2178E-05
1.8396E-01	-9.4323E-05
2.3495E-01	-1.8665E-04
3.0011E-01	-3.2404E-04
3.8332E-01	-2.8683E-04
4.8955E-01	-1.0885E-04
6.2553E-01	-3.9414E-05
7.9869E-01	-2.8726E-05

Table F.6-27 Velocity measurements made at S/T = 1.20 with the VW system of the laser anemometer, plane 10

File E606770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23
density (kilograms per meter cubed) = 1.112236
viscosity (meters squared per second) = 1.642502E-05
Atmospheric pressure (Pascals) = 94530
Velocity of undisturbed free stream (Uref, in m/s) = 27.68324
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.08999E-03
Estimated momentum thickness Reynolds number = 6893.395
Location of traverse; X/T = 4.4618 Z/T =-1 (Plane 10 , S/T = 1.00)

Y/T	vw/Uref2
3.5411E-03	-1.0950E-04
4.6034E-03	-5.1680E-05
5.6657E-03	-3.9444E-06
6.7280E-03	-2.6403E-05
8.4926E-03	1.7484E-05
1.0623E-02	8.0136E-05
1.3456E-02	1.5282E-04
1.6997E-02	1.0816E-04
2.1246E-02	2.7350E-05
2.6912E-02	8.7714E-05
3.3994E-02	-1.0575E-04
4.3555E-02	3.5776E-05
5.5241E-02	-1.3893E-04
7.0822E-02	-2.9298E-05
8.9235E-02	-7.7916E-05
1.1402E-01	-2.1754E-04
1.4518E-01	-2.1623E-04
1.8520E-01	-3.2709E-04
2.3619E-01	-4.8219E-04
3.0135E-01	-5.2170E-04
3.8456E-01	-3.3708E-04
4.9079E-01	3.4735E-05
6.2677E-01	5.5043E-05
7.9993E-01	2.6951E-06

Table F.6-28 Velocity measurements made at S/T = 1.00 with the VW system of the laser anemometer, plane 10

File E621770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 22.2
density (kilograms per meter cubed) = 1.125279
viscosity (meters squared per second) = 1.620078E-05
Atmospheric pressure (Pascals) = 95380
Velocity of undisturbed free stream (Uref, in m/s) = 27.33612
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.100325E-03
Estimated momentum thickness Reynolds number = 6918.615
Location of traverse; X/T = 4.4618 Z/T =-.8 (Plane 10 , S/T = 0.80)

Y/T	vw/Uref2
2.4788E-03	6.8851E-05
4.2493E-03	4.8826E-05
5.3116E-03	1.2245E-05
6.3739E-03	7.5031E-05
8.1445E-03	1.0944E-04
1.0623E-02	1.2583E-04
1.3456E-02	9.9598E-06
1.6643E-02	-3.9636E-05
2.0892E-02	-8.8810E-05
2.6558E-02	-9.0484E-05
3.3640E-02	-2.3373E-04
4.3201E-02	-2.8430E-04
5.4887E-02	-2.0876E-04
7.0113E-02	-3.7137E-04
8.8881E-02	-1.7485E-04
1.1367E-01	-4.1394E-04
1.4483E-01	-3.7432E-04
1.8484E-01	-5.2301E-04
2.3584E-01	-5.1727E-04
3.0099E-01	-3.3886E-04
3.8421E-01	-5.8416E-05
4.9044E-01	-1.7985E-05
6.2642E-01	-1.8853E-05
7.9958E-01	-2.3479E-05

Table F.6-29 Velocity measurements made at S/T = 0.80 with the VW system of the laser anemometer, plane 10

File E604770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 22
density (kilograms per meter cubed) = 1.129347
viscosity (meters squared per second) = 1.613394E-05
Atmospheric pressure (Pascals) = 95660
Velocity of undisturbed free stream, in m/s) = 27.77713
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087222E-03
Estimated momentum thickness Reynolds number = 7036.799
Location of traverse; X/T = 4.4618 Z/T =-.6 (Plane 10 , S/T = 0.60)

Y/T	vw/Uref2
2.8329E-03	1.1621E-05
3.5411E-03	-1.4521E-04
4.6034E-03	-1.5445E-04
5.6657E-03	-1.1678E-04
6.7280E-03	-8.0048E-06
8.4986E-03	-8.5127E-05
1.0623E-02	-9.7717E-05
1.3456E-02	-3.0694E-05
1.6997E-02	-1.5514E-04
2.1246E-02	-1.8631E-04
2.6912E-02	-1.5972E-04
3.3994E-02	-2.3378E-04
4.3555E-02	-2.4400E-04
5.5241E-02	-3.8657E-04
7.0467E-02	-4.0085E-04
8.9235E-02	-4.3613E-04
1.1402E-01	-4.4352E-04
1.4518E-01	-5.5491E-04
1.8520E-01	-4.8944E-04
2.3619E-01	-3.7865E-04
3.0135E-01	-6.6780E-05
3.8456E-01	6.6279E-05
4.9079E-01	3.4129E-05
6.2677E-01	5.6851E-05
7.9993E-01	4.1297E-07

Table F.6-30 Velocity measurements made at S/T = 0.60 with the VW system of the laser anemometer, plane 10

File E603770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.3
density (kilograms per meter cubed) = 1.11017
viscosity (meters squared per second) = 1.646846E-05
Atmospheric pressure (Pascals) = 94450
Velocity of undisturbed free stream (Uref, in m/s) = 27.76312
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.087635E-03
Estimated momentum thickness Reynolds number = 6891.082
Location of traverse; X/T = 4.4618 Z/T =-.5 (Plane 10 , S/T = 0.50)

Y/T	v²/Uref2
1.9476E-03	9.4650E-05
2.6558E-03	1.6472E-04
4.0722E-03	9.6366E-05
4.7805E-03	1.5082E-04
5.8486E-03	1.5141E-04
7.6133E-03	6.6786E-05
9.7380E-03	8.1241E-05
1.2571E-02	1.2642E-04
1.6112E-02	-2.1325E-04
2.0361E-02	-1.9861E-04
2.6027E-02	-3.7835E-04
3.3109E-02	-4.0509E-04
4.2670E-02	-3.1361E-04
5.4356E-02	-3.2571E-04
6.9562E-02	-3.4967E-04
8.8704E-02	-3.4313E-04
1.1314E-01	-3.9452E-04
1.4430E-01	-4.2566E-04
1.8431E-01	-4.0468E-04
2.3530E-01	-3.6530E-04
3.0046E-01	-1.6859E-04
3.8368E-01	-4.1375E-05
4.8991E-01	-3.8601E-05
6.2589E-01	1.9291E-05
7.9904E-01	7.4365E-06

Table F.6-31 Velocity measurements made at S/T = 0.50 with the VW system of the laser anemometer, plane 10

File E602770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.2
density (kilograms per meter cubed) = 1.110192
viscosity (meters squared per second) = 1.646384E-05
Atmospheric pressure (Pascals) = 94420
Velocity of undisturbed free stream (Uref, in m/s) = 27.78608
Estimated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.086958E-03
Estimated momentum thickness Reynolds number = 6897.574
Location of traverse; X/T = 4.4618 Z/T =-.4 (Plane 10 , S/T = 0.40)

Y/T	vw/Uref2
3.5411E-03	6.3392E-05
4.2493E-03	4.9690E-05
5.3116E-03	5.3773E-04
6.3739E-03	1.3258E-04
8.4986E-03	2.5738E-04
9.2068E-03	7.3280E-05
1.1331E-02	1.3733E-04
1.4164E-02	1.6694E-05
1.7705E-02	6.1600E-05
2.1955E-02	1.3186E-06
2.7620E-02	-1.7544E-04
3.4703E-02	-1.8272E-04
4.4263E-02	-1.1626E-04
5.5949E-02	-1.0670E-04
7.1176E-02	-1.7407E-04
8.9943E-02	-7.2153E-05
1.1473E-01	-1.3032E-04
1.4589E-01	-1.5996E-04
1.8591E-01	-1.5863E-04
2.3690E-01	-8.4186E-05
3.0205E-01	-5.0962E-05
3.8527E-01	1.4168E-05
4.9150E-01	8.5195E-05
6.2748E-01	5.4491E-05
8.0064E-01	1.1724E-04

Table F.6-32 Velocity measurements made at S/T = 0.40 with the VW system of the laser anemometer, plane 10

File S601770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.9
density (kilograms per meter cubed) = 1.110624
viscosity (meters squared per second) = 1.648742E-05
Atmospheric pressure (Pascals) = 94680
Velocity of undisturbed free stream (Uref, in m/s) = 27.70713
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.089285E-03
Estimated momentum thickness Reynolds number = 6872.048
Location of traverse: X/T = 4.4618 Z/T =-.3 (Plane 10 , S/T = 0.30)

Y/T	vw/Uref2
4.2493E-03	1.2209E-04
4.9575E-03	1.0740E-04
6.0198E-03	6.1985E-05
7.0822E-03	4.8101E-05
8.1445E-03	8.5804E-05
9.9150E-03	8.2631E-05
1.2040E-02	4.4939E-05
1.4873E-02	2.2063E-05
1.8414E-02	-1.1146E-04
2.2663E-02	-1.1531E-04
2.8329E-02	-1.3056E-04
3.5411E-02	-2.0888E-04
4.4972E-02	-2.2550E-04
5.6657E-02	1.1180E-05
7.1884E-02	-8.5099E-05
9.0652E-02	-1.1968E-05
1.1544E-01	-1.0466E-05
1.4660E-01	-8.7107E-05
1.8661E-01	-4.8703E-05
2.3761E-01	-3.2492E-05
3.0276E-01	-3.0811E-05
3.9129E-01	-1.0535E-05
4.9221E-01	1.7899E-05
6.2819E-01	1.6649E-05
8.0135E-01	5.4412E-06

Table F.6-33 Velocity measurements made at S/T = 0.30 with the VW system of the laser anemometer, plane 10

File E600770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 23.4
density (kilograms per meter cubed) = 1.115905
viscosity (meters squared per second) = 1.638807E-05
Atmospheric pressure (Pascals) = 94970
Velocity of undisturbed free stream (Uref, in m/s) = 27.71825
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.088957E-03
Estimated momentum thickness Reynolds number = 6915.928
Location of traverse; X/T = 4.4618 Z/T =-.2 (Plane 10 , S/T = 0.20)

Y/T	vw/Uref2
2.1246E-03	2.3464E-04
2.8329E-03	1.8477E-04
3.8952E-03	-2.2846E-05
4.9575E-03	1.2588E-05
6.0198E-03	1.1007E-04
7.7904E-03	6.2003E-05
9.9150E-03	1.0434E-04
1.2748E-02	6.2277E-05
1.6289E-02	-1.0571E-04
2.6204E-02	5.0780E-05
3.3286E-02	-5.2902E-05
4.2847E-02	1.0867E-05
5.4533E-02	1.8612E-04
6.9759E-02	8.0606E-05
8.8527E-02	8.4244E-05
1.1331E-01	3.6287E-06
1.4448E-01	-2.7094E-04
1.8520E-01	-2.1566E-04
2.3548E-01	-4.5465E-05
3.0064E-01	-1.3195E-05
3.8385E-01	-1.6073E-05
4.9009E-01	2.7885E-05
6.2606E-01	1.6885E-05
7.9922E-01	1.5123E-05

Table F.6-34 Velocity measurements made at S/T = 0.20 with the VW system of the laser anemometer, plane 10

File E599770.RES
Non-redundant measurements obtained with the VW optical system of the LDV
Flow temperature (degrees centigrade) = 22.2
density (kilograms per meter cubed) = 1.116548
viscosity (meters squared per second) = 1.632746E-05
Atmospheric pressure (Pascals) = 94640
Velocity of undisturbed free stream (Uref, in m/s) = 27.71725
Estmated momentum thickness at X/T = -2.146, Z/T=0 (m) = 4.088986E-03
Estimated momentum thickness Reynolds number = 6941.401
Location of traverse: X/T = 4.4618 Z/T =-.1 (Plane 10 , S/T = 0.10)

Y/T	vw/Uref^2
2.8329E-03	5.4407E-05
3.8952E-03	9.8479E-05
4.9575E-03	4.6367E-05
5.6657E-03	-4.8623E-06
6.7280E-03	5.8296E-05
8.4986E-03	4.5432E-05
1.0628E-02	1.4604E-04
1.3452E-02	3.1080E-05
1.6957E-02	-9.2327E-05
2.1246E-02	-2.6644E-05
2.6912E-02	6.5932E-05
3.3994E-02	7.7886E-05
4.3555E-02	2.1453E-04
5.5241E-02	4.1627E-04
7.0467E-02	2.9404E-04
8.9235E-02	1.6842E-04
1.1402E-01	1.5707E-04
1.4518E-01	-3.4958E-04
1.8520E-01	-3.0950E-05
2.3619E-01	-2.7293E-04
3.0135E-01	-4.2973E-04
3.8456E-01	-4.4806E-04
4.9079E-01	-4.0034E-04
6.2677E-01	-2.0310E-04
7.9993E-01	-2.0647E-04

Table F.6-35 Velocity measurements made at S/T = 0.10 with the VW system of the laser anemometer, plane 10