

84-B5/57

COPY 2

WIND-TUNNEL STUDY OF DYNAMIC WIND LOADS  
ON JENKINS/EMPIRE BUILDING, PITTSBURGH

by

S. T. Thoroddsen<sup>1</sup>  
J. A. Peterka<sup>2</sup> and J. E. Cermak<sup>2</sup>



**FLUID MECHANICS AND  
WIND ENGINEERING PROGRAM**

**COLLEGE OF ENGINEERING**

**COLORADO STATE UNIVERSITY  
FORT COLLINS, COLORADO**

CER84-85STT-JAP-JEC57

WIND-TUNNEL STUDY OF DYNAMIC WIND LOADS  
ON JENKINS/EMPIRE BUILDING, PITTSBURGH

by

S. T. Thoroddsen<sup>1</sup>  
J. A. Peterka<sup>2</sup> and J. E. Cermak<sup>2</sup>

for

The Stubbins Associates, Inc.  
1033 Massachusetts Avenue  
Cambridge, Massachusetts 02138

Fluid Mechanics and Wind Engineering Program  
Fluid Dynamics and Diffusion Laboratory  
Department of Civil Engineering  
Colorado State University  
Fort Collins, Colorado 80523

CSU Project 2-96160

May 1985

---

<sup>1</sup>Graduate Research Assistant

<sup>2</sup>Professor, Fluid Mechanics and Wind  
Engineering Program

## TABLE OF CONTENTS

<u>Chapter</u>		<u>Page</u>
	LIST OF FIGURES . . . . .	ii
	LIST OF TABLES . . . . .	iii
	LIST OF SYMBOLS . . . . .	iv
1	INTRODUCTION . . . . .	1
	1.1 General . . . . .	1
	1.2 The Wind-Tunnel Test . . . . .	3
2	EXPERIMENTAL CONFIGURATION . . . . .	4
	2.1 Wind Tunnel . . . . .	4
	2.2 Dynamic Model . . . . .	4
	2.3 Model Environment . . . . .	4
3	INSTRUMENTATION AND DATA ACQUISITION . . . . .	6
	3.1 Wind Velocity . . . . .	6
	3.2 Force Balance . . . . .	6
	3.3 Signal Processing . . . . .	7
	3.4 Scaling of the Data . . . . .	9
4	RESULTS . . . . .	10
	4.1 Mean Base Moments . . . . .	10
	4.2 Dynamic Base Moments . . . . .	10
	4.3 Equivalent Static Load versus Height . . . . .	12
	4.4 Accelerations . . . . .	12
	REFERENCES . . . . .	14
	FIGURES . . . . .	15
	TABLES . . . . .	31
	APPENDICES . . . . .	39
	APPENDIX A - TEST RESULTS . . . . .	A-1
	APPENDIX B - ACCELERATION CALCULATIONS . . . . .	B-1
	APPENDIX C - SPECTRAL ANALYSIS . . . . .	C-1

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Fluid Dynamics and Diffusion Laboratory, Colorado State University . . . . .	16
2	Wind-Tunnel Configuration . . . . .	17
3	Coordinate System . . . . .	18
4	Force Balance . . . . .	19
5	Mechanical and Filter Admittance . . . . .	20
6	Comparison between Pressure and Force Balance Measurements . . . . .	21
7	Maximum Base Moments . . . . .	23
8	Zones for Equivalent Static Loads . . . . .	29
9	Acceleration vs. Return Period for 270-degree Wind . .	30

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1	Wind Velocities and Wind Directionality Factors . . . .	32
2	Gradient Level Velocities for 5-, 10-, 50- and 100-year Return Winds . . . . .	33
3	Equivalent Static Loads vs. Height . . . . .	34
4	Acceleration Levels . . . . .	35

## LIST OF SYMBOLS

<u>Symbol</u>	<u>Definition</u>
$\underline{a}$	Acceleration vector
$a_x, a_y$	x and y components of acceleration
A	Reference area
D	Reference dimension
f	Frequency Hz
$f_0$	Natural frequency Hz
$H(f)^2$	Mechanical admittance (transfer function)
L	Reference length
$M_x, M_y, M_z$	Resultant base moment of applied wind load about x,y,z-axes
q	Reference dynamic pressure, $\rho U_\infty^2/2$
$S_{( )}(f)$	Power spectral density of ( )
U	Local mean velocity
$U_\infty$	Reference mean velocity outside the boundary layer
$U_{rms}$	Root-mean-square of fluctuating velocity
x, y	Horizontal coordinates
$\ddot{x}, \ddot{y}$	Acceleration due to translation along x,y-axis
$\sigma_a$	Standard deviation of acceleration
$\ddot{\theta}$	Angular acceleration
$\zeta$	Critical damping ratio

## 1. INTRODUCTION

### 1.1 General

A significant characteristic of modern building design is lighter cladding and more flexible frames. These features produce an increased vulnerability of glass and cladding to wind damage and result in larger deflections of the building frame.

The building geometry itself may substantially influence the wind loading on the structure. Wind forces may be modified by nearby structures which can produce beneficial shielding or adverse increases in loading. Overestimating loads results in uneconomical design; underestimating may result in cladding or glazing failures. In flexible structures, wind-induced motion may cause occupant discomfort if not anticipated during the design phase.

Techniques have been developed for wind-tunnel modeling of proposed structures which allow the prediction of overall structural loading and top floor accelerations. Accurate knowledge of the base moments permits adequate but economical design of cladding strength to meet selected maximum design winds and overall wind loads for the design of the frame for flexural control.

Modeling of the aerodynamic loading on a structure requires special consideration of flow conditions in order to guarantee similitude between model and prototype. A detailed discussion of the similarity requirements and their wind-tunnel implementation can be found in references [1], [2], and [3]. In general, the requirements are that the model and prototype be geometrically similar, that the approach mean velocity at the building site have a vertical profile shape similar to the full-scale flow, that the turbulence characteristics of the flows be

similar, and that the Reynolds number for the model and prototype be equal. For the velocity profiles and turbulence intensities see previous report reference [4].

These criteria are satisfied by constructing a scale model of the structure and its surroundings and performing the wind tests in a wind tunnel specifically designed to model atmospheric boundary-layer flows. Reynolds number similarity requires that the quantity  $UD/\nu$  be similar for model and prototype. Since  $\nu$ , the kinematic viscosity of air, is identical for both, Reynolds numbers cannot be made equal with reasonable wind velocities. To accomplish this the air velocity in the wind tunnel would have to be as large as the model scale factor times the prototype wind velocity, a velocity which would introduce unacceptable compressibility effects. However, for sufficiently high Reynolds numbers ( $>2 \times 10^4$ ) the pressure coefficient at any location on the structure will be essentially constant for a large range of Reynolds numbers. Typical values encountered are  $10^7$ - $10^8$  for the full scale and  $10^5$ - $10^6$  for the wind-tunnel model. In this range acceptable flow similarity is achieved without precise Reynolds number equality.

Modeling of the building's dynamic response required that dynamic tests of the structure be performed. For the dynamic tests, a rigid model was supported on a force balance with high natural frequencies of the three degrees of freedom of the model. The natural frequencies of the balance were significantly higher than the frequencies in the aerodynamic loading spectrum of the wind-induced forces. This enables direct measurement of the fluctuating wind loads on the building. Mathematical computation using dynamic properties of the full-scale building in combination with wind-tunnel measurements of loading spectra allows the building response to be determined.



## 1.2 The Wind-Tunnel Test

The wind engineering study was performed on the Jenkins/Empire building modeled at a scale of 1:400. The structure was modeled in detail to provide accurate flow patterns in the wind passing over the building surfaces. To achieve similarity in wind effects, the area surrounding the test building was also modeled.

The building and its surroundings were mounted on a turntable which could be rotated to get wind from different wind directions. The entire 360-degree range was covered at 10-degree intervals.

Data were recorded, analyzed and processed by an on-line computerized data-acquisition system. Using wind data applicable for the building site, representative wind velocities were selected for each wind directionality sector (see Table 1).

The dynamic loading information obtained by the high-frequency dynamic balance was used to estimate the maximum base moment response for two natural periods and two damping ratios of the real prototype building.

The following pages discuss in greater detail the procedures followed and the equipment and data collecting and processing methods used. In addition, the data presentation format is explained and the implications of the data are discussed.

## 2. EXPERIMENTAL CONFIGURATION

### 2.1 Wind Tunnel

Wind engineering studies are performed in the Fluid Dynamics and Diffusion Laboratory at Colorado State University (Figure 1). Three large wind tunnels are available for wind loading studies depending on the detailed requirements of the study. The wind tunnel used for this investigation is the Industrial Aerodynamics Wind Tunnel shown in Figure 2. The tunnel has a flexible roof adjustable in height to maintain a zero pressure gradient along the test section. The mean velocity can be adjusted continuously in the tunnel to the maximum velocity available.

### 2.2 Dynamic Model

The dynamic model was designed to study the dynamic loading of the fundamental mode of vibration of the building in three independent components; translation in two orthogonal directions and rotation about a vertical axis. The position of the coordinate axis is shown in Figure 3. The model was built up by styrofoam and cored through the center to accept a 1 1/2-in. diameter aluminum tube. This tube was bolted to the force balance to provide the high rigidity required to give the system a high enough natural frequency. The force balance system is described in Section 3.2.

### 2.3 Model Environment

A circular area of 1300 ft (400 m) in radius surrounding the building was modeled in detail. Structures within the modeled region were made from styrofoam and cut to the individual building geometries. The model and its surroundings were mounted on a turntable near the

downwind end of the test section. Any significant buildings or terrain features which did not fit on the turntable were placed on removable pieces and placed upwind of the turntable for appropriate wind directions. A plan view of the building and its surroundings is shown in reference [4], Figure 7. This environment was used both for the pressure model and the dynamic model.

The region upstream from the modeled area was covered with a randomized roughness constructed using various sized cubes placed on the floor of the wind tunnel. Spires were installed at the test-section entrance to provide a thicker boundary layer than would otherwise be available. The thicker boundary layer permitted a somewhat larger scale model than would otherwise be possible. The spires were approximately triangularly-shaped pieces of 1/2-in. (1.3 cm) thick plywood 6 in. (15 cm) wide at the base and 1 in. (2.5 cm) wide at the top, extending from the floor to the top of the test section. They were placed so that the broad side intercepted the flow. A barrier approximately 8 in. (20 cm) high was placed on the test-section floor downstream of the spires to aid in development of the boundary-layer flow.

The distribution of the roughness cubes and the spires in the roughened area was designed to provide a boundary-layer thickness of approximately 4 ft (1.2 m), and a velocity profile power-law exponent similar to that expected to occur in the region approaching the modeled area for each wind direction. The wind-tunnel ceiling was adjusted after placement of the model to obtain a zero pressure gradient along the test section.

### 3. INSTRUMENTATION AND DATA ACQUISITION

#### 3.1 Wind Velocity

Mean velocity and turbulence intensity profiles were measured upstream of the model, using a hot-film anemometer, to confirm that an approach boundary-layer flow appropriate to the site had been established. The profiles are shown in reference [4], Figures 7-8. Tests were made at one wind velocity in the tunnel. This velocity was well above that required to satisfy Reynolds number similarity between the model and the prototype as discussed in Section 1.1.

A pitot tube was placed in the middle of the wind tunnel at 36-in. height, which corresponds to the gradient height. This pitot tube is meant to monitor the gradient wind velocity during test runs, but that velocity is used to nondimensionalize the data.

#### 3.2 Force Balance

The force balance used in this project is shown in Figure 4. Basically, it is a strain-sensing apparatus consisting of three main parts: a heavy steel reaction or inertia ring, a steel sprung plate supported by steel cross-beams, and a stem of aluminum tubing. The reaction ring is bolted to the wind-tunnel turntable just below the floor level. The entire balance rotates along with the model on the turntable, and thus defines a body-centered coordinate system. This right-handed coordinate system (Figure 3) is oriented with the z-axis coinciding with the model and force balance vertical axis, and the x and y axes in the horizontal plane. The bending moments are the result of wind forces on the entire building model.

The strain gages are attached to necked-down segments of the steel cross-members which connect the sprung portion of the balance to the

reaction base. The dynamic balance spring deformations are very small, so semiconductor gages, which have high sensitivity, were used. All strain gages are p-type silicon semiconductor electrical resistance gages, having a nominal gage factor of about 140. The gages are type SPB3-20-35 by BLH. Gage excitation and amplification were provided by Accudata Model 218 gage control/amplifiers, manufactured by Honeywell.

The balance was designed to have a high natural frequency of vibration to permit the measurement of dynamic loading without excessive resonant amplification.

Calibration of the entire force balance system was performed in the wind tunnel using the same electronics and data-acquisition system used during testing. Weights and a fish line were used to pull on the stem at certain positions and the output was monitored at the same time. The resulting calibration curves are extremely linear.

The strain-gage output has a tendency to drift as the tunnel temperature changes. To minimize this drift, a zero measurement was taken before and after each wind-tunnel run. If an unusual drift was observed the test was repeated.

### 3.3 Signal Processing

The analog signal processing system consists of three parts: gage amplifiers, low-pass filters, and the pressure measurement system. The analog signals from the strain gages are increased by gage amplifiers to approximately  $\pm 10$  volts full scale.

The analog filter system, which is used to roll off mechanical resonant amplification in the force balance, and to minimize aliasing in the digital spectral calculations, was adjusted to accommodate the mechanical properties of the building model. The first filter, part of

the Accudata 218 gage amplifier, was a 2-pole (12 dB/octave) Butterworth low-pass filter set to a cut-off frequency (-3 dB) of 100 Hz. Secondly, a Wavetek Model 852 8-pole (48 dB/octave) Butterworth low-pass filter was used, primarily for anti-aliasing, although it also helped compensate for force balance resonance. It was set to a cut-off frequency (-3 dB) of 90 Hz for these tests.

The frequency response of the complete filter system was determined from actual measurements using a sine-wave generator, frequency counter, and rms amplitude calculations on the laboratory data acquisition system. The mechanical admittance of the force balance is the analytical function,

$$|H(f)|^2 = \frac{1}{[1-(f/f_0)^2]^2 + (2\zeta f/f_0)^2}$$

This function is plotted in Figure 5 assuming a low damping ( $\zeta = 0.01$ ), along with the filter admittance curve. The balance-model system had a natural frequency of 173 Hz (see Figure 5). The resultant spectral window also shown in Figure 5 is the product (or sum, in terms of decibels) of these two curves. The resultant response is within  $\pm 0.5$  dB bounds up to 60 Hz, and within  $\pm 1.0$  dB bounds up to 90 Hz.

The sampling rate of the A/D conversion system for the study was 223 samples/second.

The reference pressure is measured by a pitot-static tube located along the tunnel centerline at the gradient height (1200 ft full scale). The total and static pressure tubes from this sensor were routed to a differential pressure transducer, which provides an output signal proportional to the dynamic pressure  $\cdot 1/2 \rho U^2$ . The transducer and a dedicated gage control/amplifier are maintained and calibrated together

as a unit, and produce a high-level signal precisely related to the reference pressure.

The analog to digital conversion is accomplished by a Preston Scientific 12-bit, 50 kHz, 16-channel AD. The computer software involved was developed by ERC-FDDL personnel. The main computer is an HP 1000 21MX E-series. It includes a disc drive, printer, plotter and tape drive.

### 3.4 Scaling of the Data

The dynamic force balance measured the wind loading in base moments in lb-in model scale. These results were then scaled and expressed in moment coefficients, defined as

$$C_M = \frac{M}{q A L}$$

where  $q$  is the dynamic reference pressure  $\rho U_\infty^2/2$ ,  $A$  is a reference area, and  $L$  is a characteristic reference length such as the height of the building. Measured coefficients are applicable to both the model and prototype.

The spectral plots presented herein are in these coefficient units.

## 4. RESULTS

### 4.1 Mean Base Moments

The mean base moments measured by the dynamic force balance were compared to the moment values obtained by the pressure integration, which are reported in reference [4]. The agreement between the two methods is very good, reinforcing each other. The comparison is shown in Figures 6a and 6b. The mean torque is so small that comparison is neither meaningful nor important. The sign of the moments was established by the right-hand rule about the axes.

To estimate the mean, 8,192 samples were taken of the dynamic moments at 223 samples per second which corresponds to about 36-sec test duration.

### 4.2 Dynamic Base Moments

A longer time series was required to calculate the load spectra than to get the mean. A time series containing 32,768 samples was taken for each load-component. At 223 samples per second, this corresponds to 2 1/2 minutes running time. The sample duration time was selected based on the repeatability of sampling runs and required resolution of the load spectra. This data was stored on magnetic tape. To calculate the load-spectra this time series was divided into 8 segments of 4,096 samples each. The spectra were then calculated for each segment and all 8 spectra averaged together. The load spectra for  $M_x$  and  $M_y$  are presented on pages A-3 to A-110. The  $M_z$  spectra are shown on pages A-111 to A-155. Printouts of the spectra accompany the plots. The torsional load spectra have some noise in them at high frequencies, because of the very low torsional signal. This noise does not affect the response calculation, because the integration of Eq. (C.9)



was only carried out up to reduced frequency of 0.425. This does not result in loss of accuracy because almost all the response energy is at lower reduced frequencies.

The moments are multiplied by the load-factors for each wind direction, because gradient height wind speed varies and the probability of wind coming from each wind direction is different (see Table 1).

From the raw wind-tunnel data it is evident that wind coming from 150 degrees results in the highest dynamic loading (see load-spectra on A-48). This is caused by vortex shedding from the tall glass building which stands upwind for this wind direction, but fortunately wind does not come very often from this direction.

From the information contained in the load spectra it is possible to calculate the rms response of the proposed structure, given some reasonable assumptions about the structure. For a detailed explanation of that process, see Appendix C. As described in Appendix C the moment at the base of the structure is treated as the fundamental response parameter. The "total" base moment is the sum of the mean and fluctuating parts. By using a so-called "peak factor,"  $g$ , as explained in Appendix C, the maximum (or minimum) expected peak response can be estimated. The peak factor ( $g$ ) for  $M_x$  and  $M_y$  turns out to be 3.83 and for  $M_z$ , 4.02. The peak factors are considered independent of wind direction.

As described in Appendix C, the rms response can be calculated for many different building characteristics, by integration of the response spectra. The only important properties for this phase of the study are the natural period (or frequency) of vibration of the building and its critical damping ratio. The natural period  $T$  and mass distribution

with height was specified by the personnel of Lev Zetlin Associates, Inc.

Figures 7a to 7f show the expected maximum base moments for the 100-year mean recurrence wind velocity. The plots show results for two natural periods, 4.5 seconds and 5 seconds. The damping ratio in the structure,  $\zeta$ , is assumed to be 0.01 (1 percent of critical), which is considered a reasonable lower limit for this type of skyscraper. The peak values shown may be interpreted as "the expected value of the largest peak excursion occurring in a 1-hour period during the most severe wind storm which occurs, on the average, every 100 years."

#### 4.3 Equivalent Static Loads versus Height

Structural frame loads in the form of pressures on 7 zones of the tower were calculated. Based on the peak base moments for each wind direction and incorporating a plausible vertical distribution of pressure the structural pressures were estimated. This distribution of structural pressures approximates the equivalent static loads. The equivalent static loads could be calculated more precisely using the exact building mode shape and generalized mass, which were not available. The loads presented herein should be quite close to the equivalent static loads. Figure 8 shows the zones used for the calculations. Table 3 shows the resulting pressures for each of those zones.

#### 4.4 Accelerations

The building acceleration is primarily studied because of the possible discomfort felt by the building's occupants. The acceleration increases linearly with height but since the highest office level is at 403 ft, that is the height at which the acceleration was calculated.

Since the discomfort is felt over a long time, the rms acceleration is considered a better indicator than the peak acceleration. Because the acceleration caused by the torsional component was negligibly small compared to the other two, the rms acceleration was calculated using only moment around the x and y axes.

The wind directions were split into 8 wind directionality sectors and one wind direction in each sector selected to represent that sector.

The rms values were calculated for two different natural periods of vibration of the building, 4.5 and 5 seconds, and for two critical damping ratios, 1 and 1.5 percent. For each one of these cases, wind velocities for return periods of 5, 10, 50 and 100 years were studied. The corresponding gradient wind velocities are shown in Table 2. Table 4 shows the rms levels of acceleration calculated for each case. It is evident that wind coming from the seventh sector causes the highest accelerations. Figure 9 shows that sector in more detail. All the different cases shown are below the recommended highest value from the Canadian Building Code [5], for 10-year recurrence wind. For an explanation of calculation procedures see Appendix B.

For further information about the effect of acceleration on humans see references [6,7].

## REFERENCES

1. Cermak, J. E., "Laboratory Simulation of the Atmospheric Boundary Layer," AIAA Jl., Vol. 9, September 1981.
2. Cermak, J. E., "Applications of Fluid Mechanics to Wind Engineering," A Freeman Scholar Lecture, ASME Jl. of Fluids Engineering, Vol. 97, No. 1, March 1975.
3. Cermak, J. E., "Aerodynamics of Buildings," Annual Review of Fluid Mechanics, Vol. 8, 1976, pp. 75-106.
4. Peterka, J. A., and Cermak, J. E., "Wind-Tunnel Study of Wind Loads on Jenkins/Empire Building, Pittsburgh," CSU Technical Report for The Stubbins Associates, Inc., Cambridge, MA, CSU Report CER84-85 JAP-JEC38.
5. National Building Code of Canada 1977, National Research Council of Canada. Associate Committee on the National Building Code, Ottawa, NRCC No. 15555.
6. Hanson, R. J., Reed, J. W., and Vanmarcke, E. H., "Human Response to Wind-Induced Motion of Buildings," Jl. of the Structural Division, ASCE, Vol. 99, No. ST7, Proc. Paper 9868, July 1973, pp. 1589-1605.
7. Chen, P. W., and Robertson, L. E., "Human Perception Thresholds of Horizontal Motion," Jl. of the Structural Division, ASCE, Vol. 98, No. ST8, Proc. Paper 9142, August 1972, pp. 1681-1695.

FIGURES

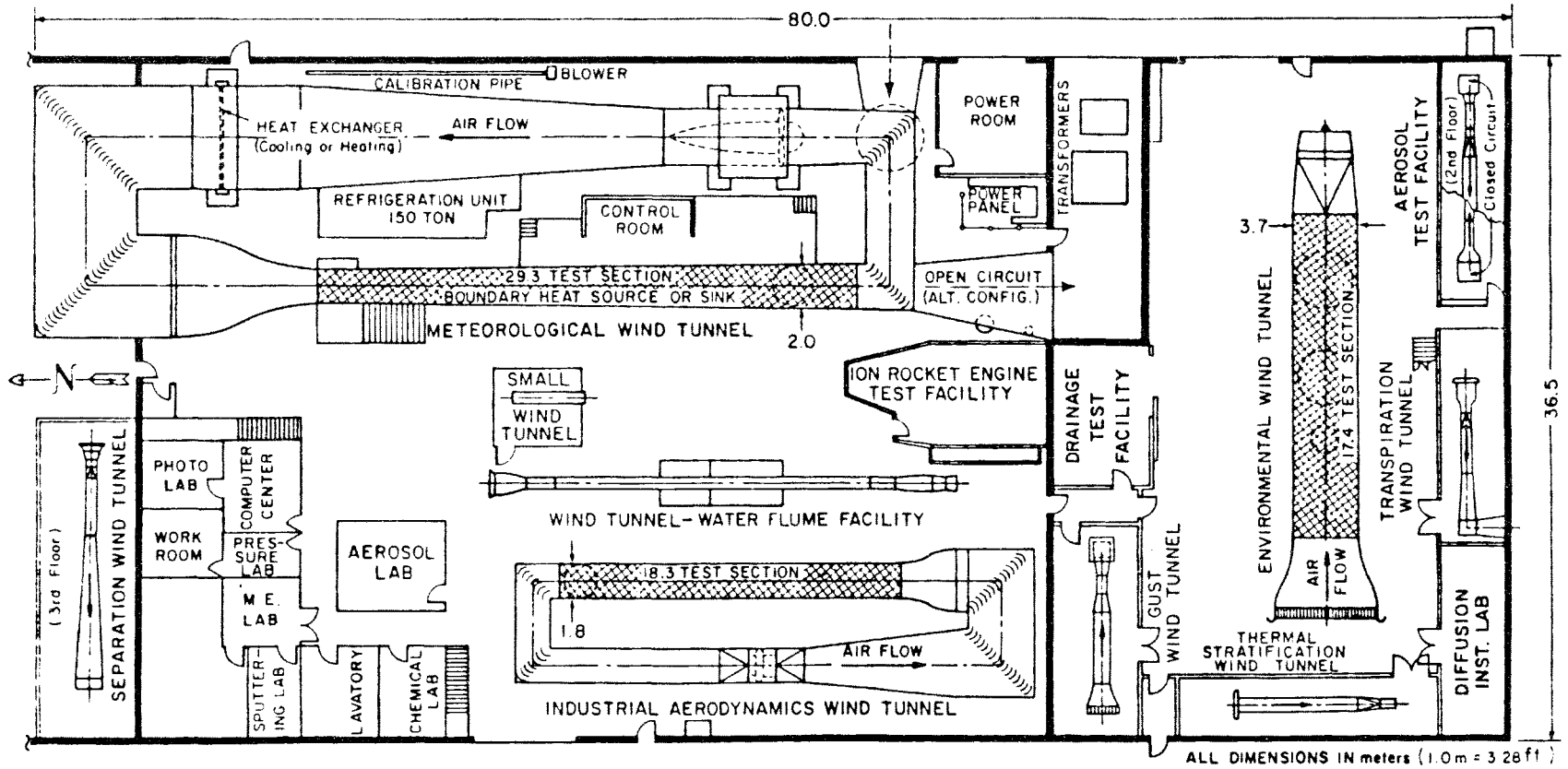
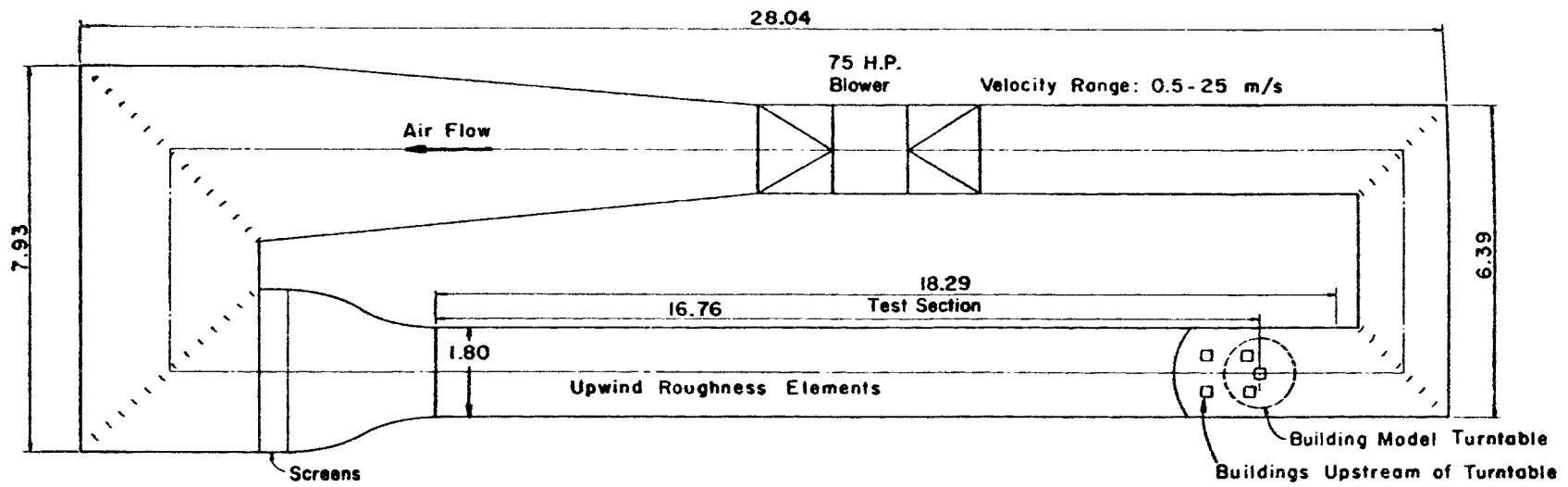
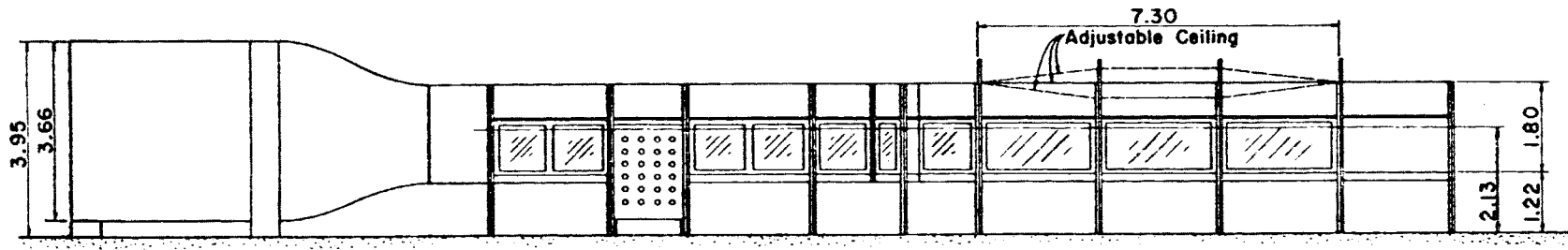
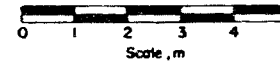


Figure 1. Fluid Dynamics and Diffusion Laboratory, Colorado State University



PLAN



All Dimensions in m

ELEVATION

INDUSTRIAL AERODYNAMICS WIND TUNNEL

Figure 2. Wind-Tunnel Configuration

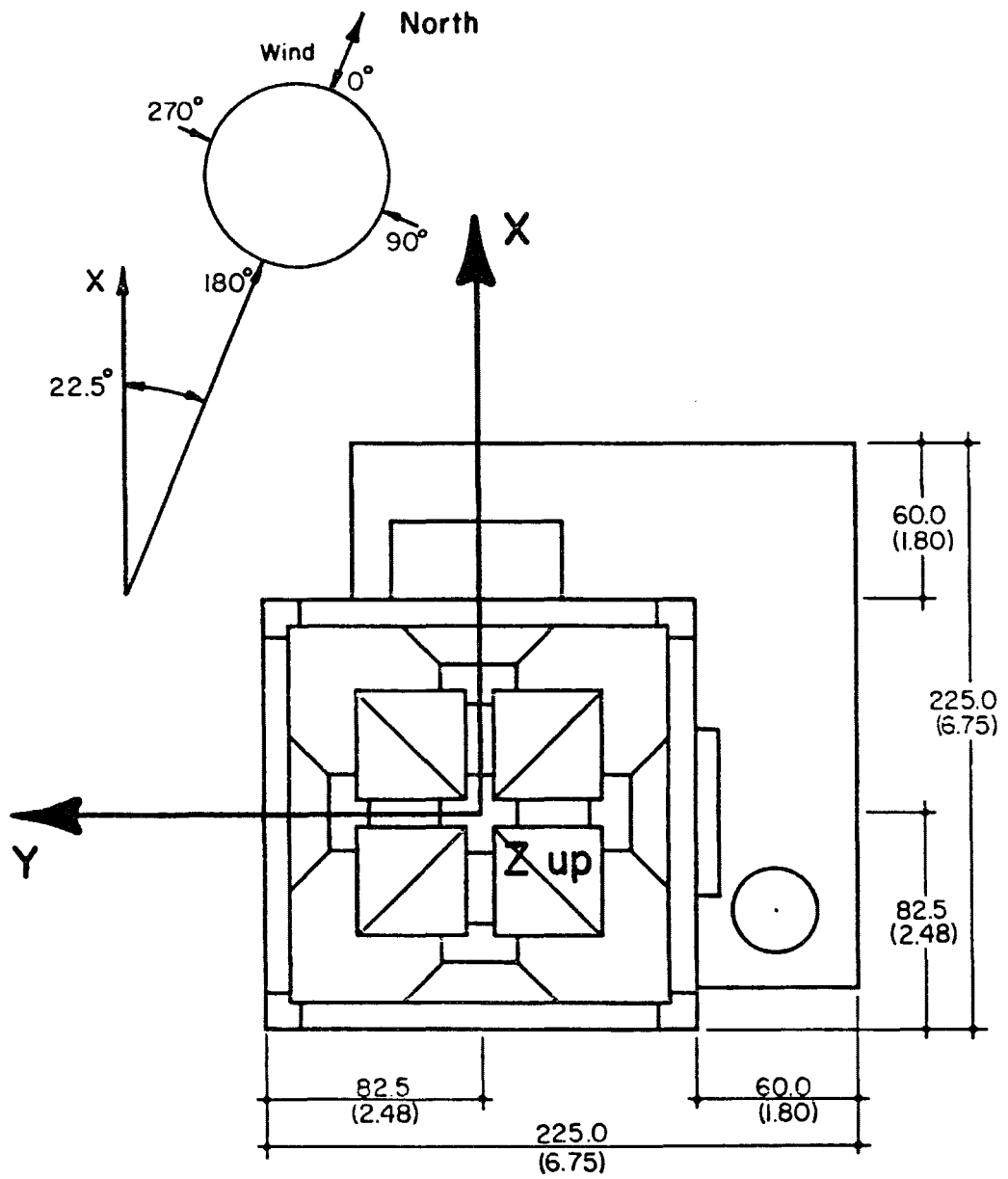
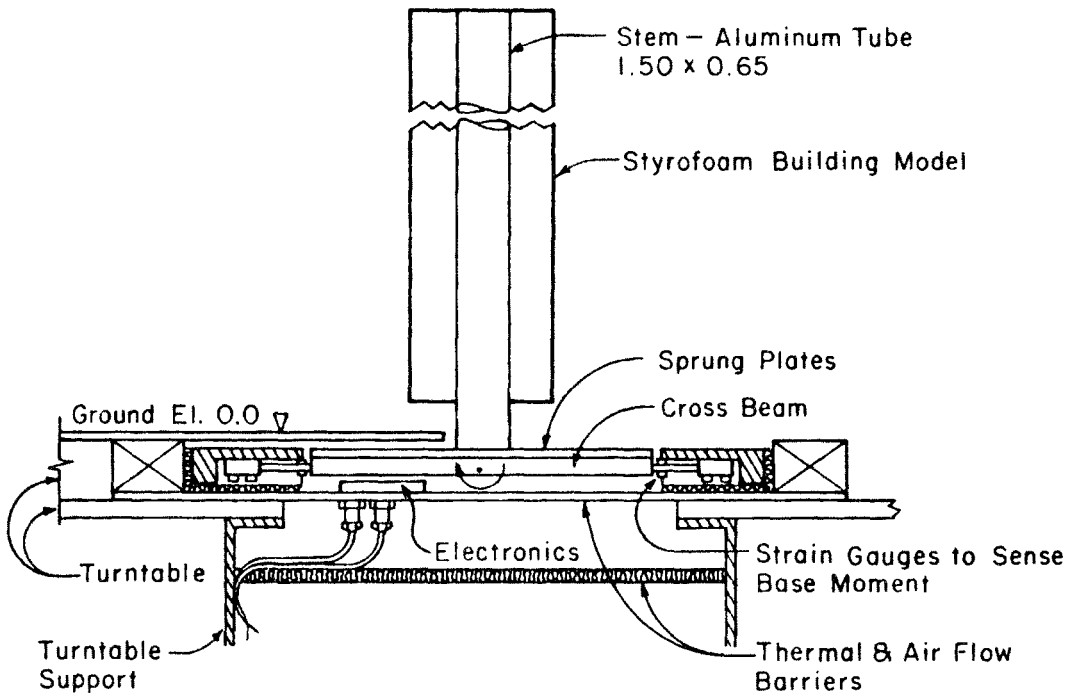
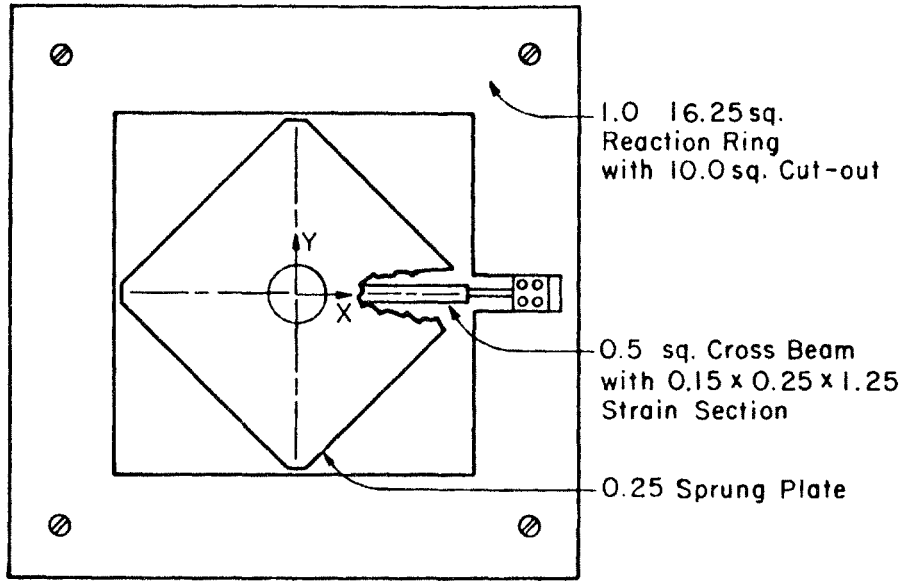


Figure 3. Coordinate System





All Dimensions in inches

Figure 4. Force Balance

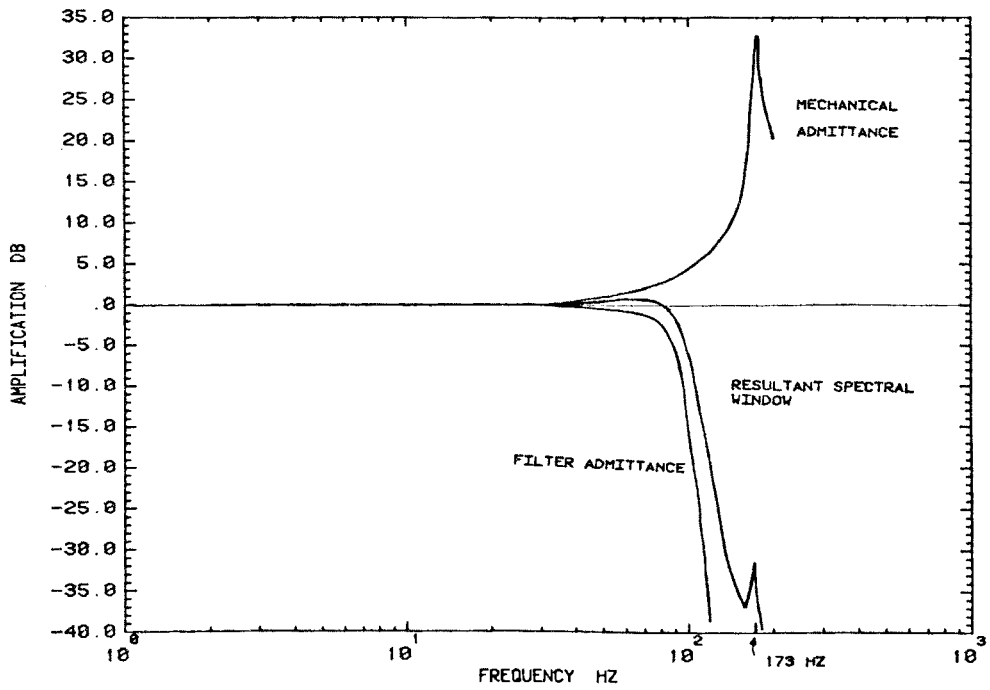
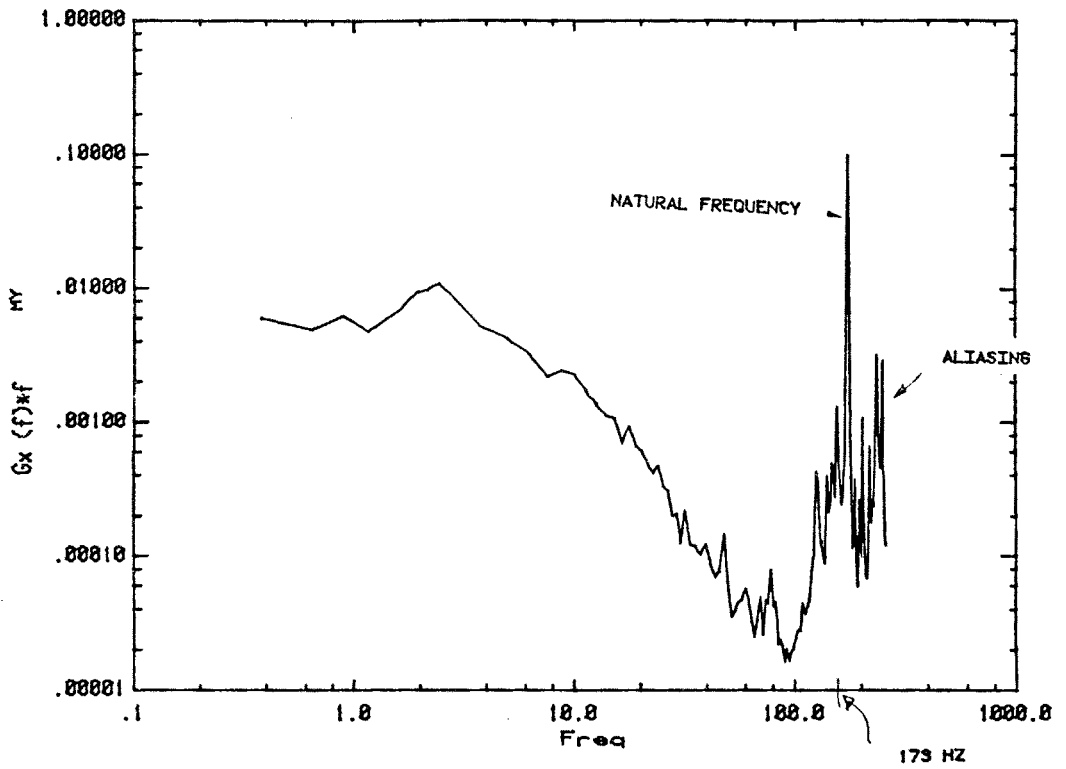


Figure 5. Mechanical and Filter Admittance

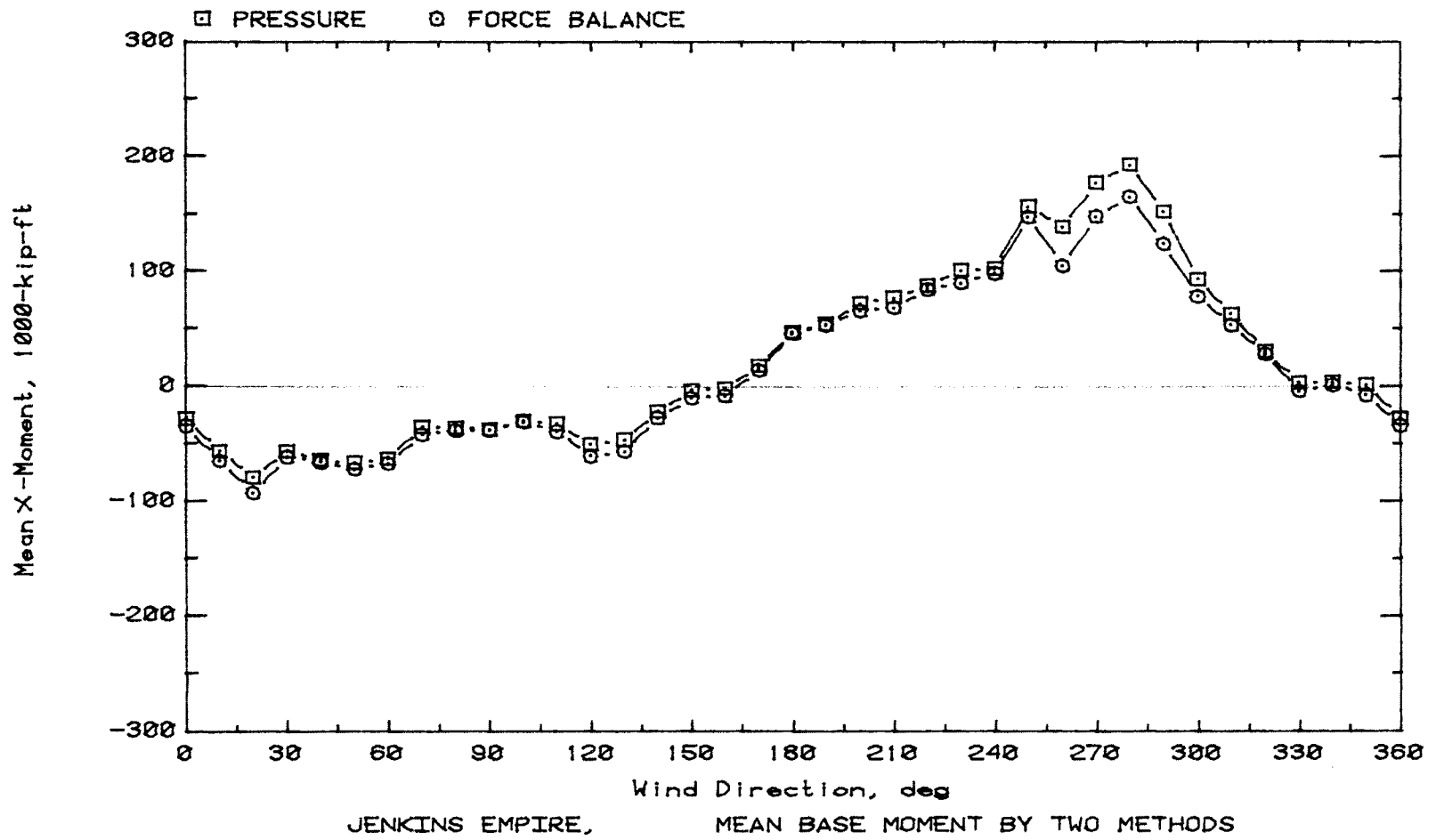


Figure 6a. Comparison between Pressure and Force Balance Measurements

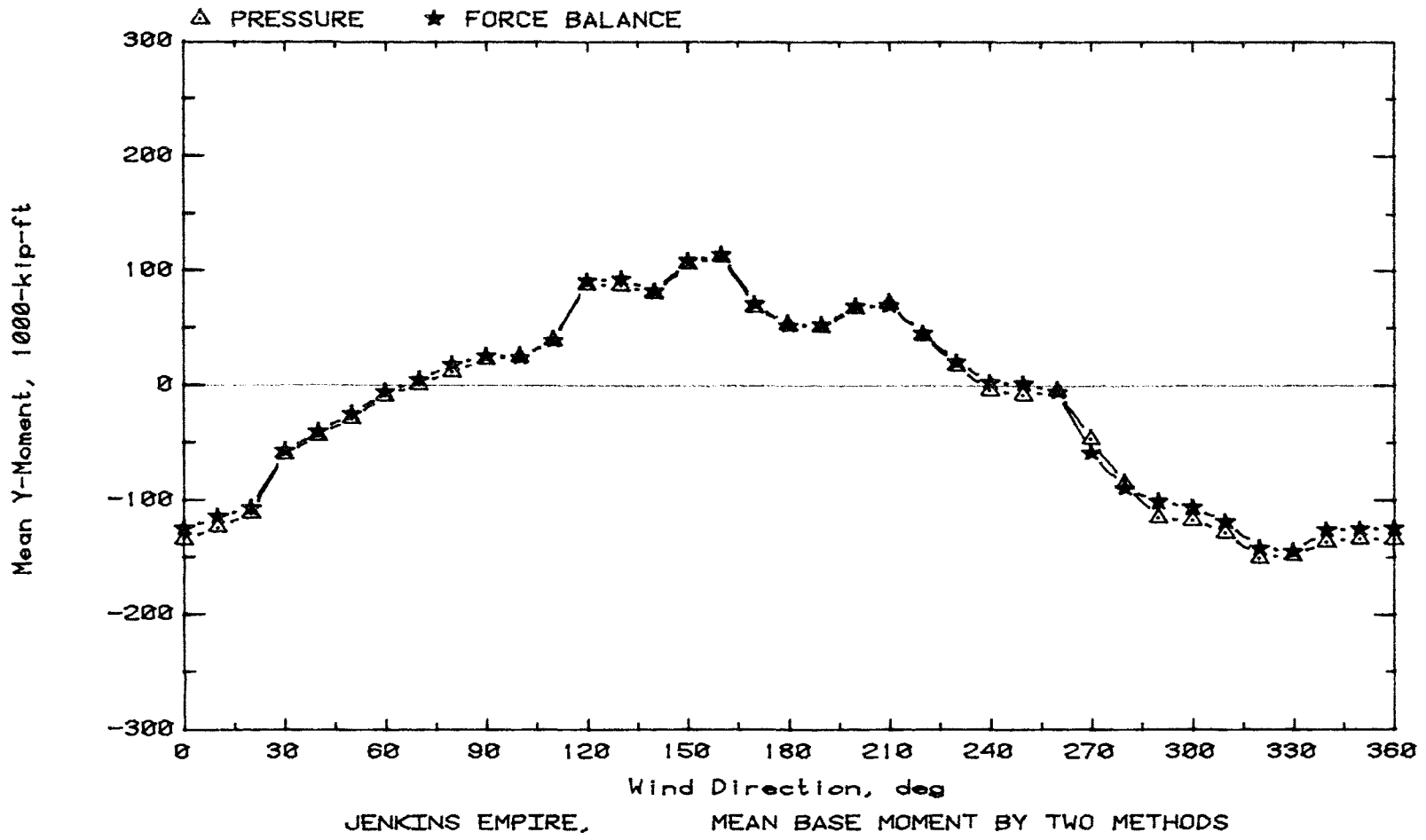


Figure 6b. Comparison between Pressure and Force Balance Measurements

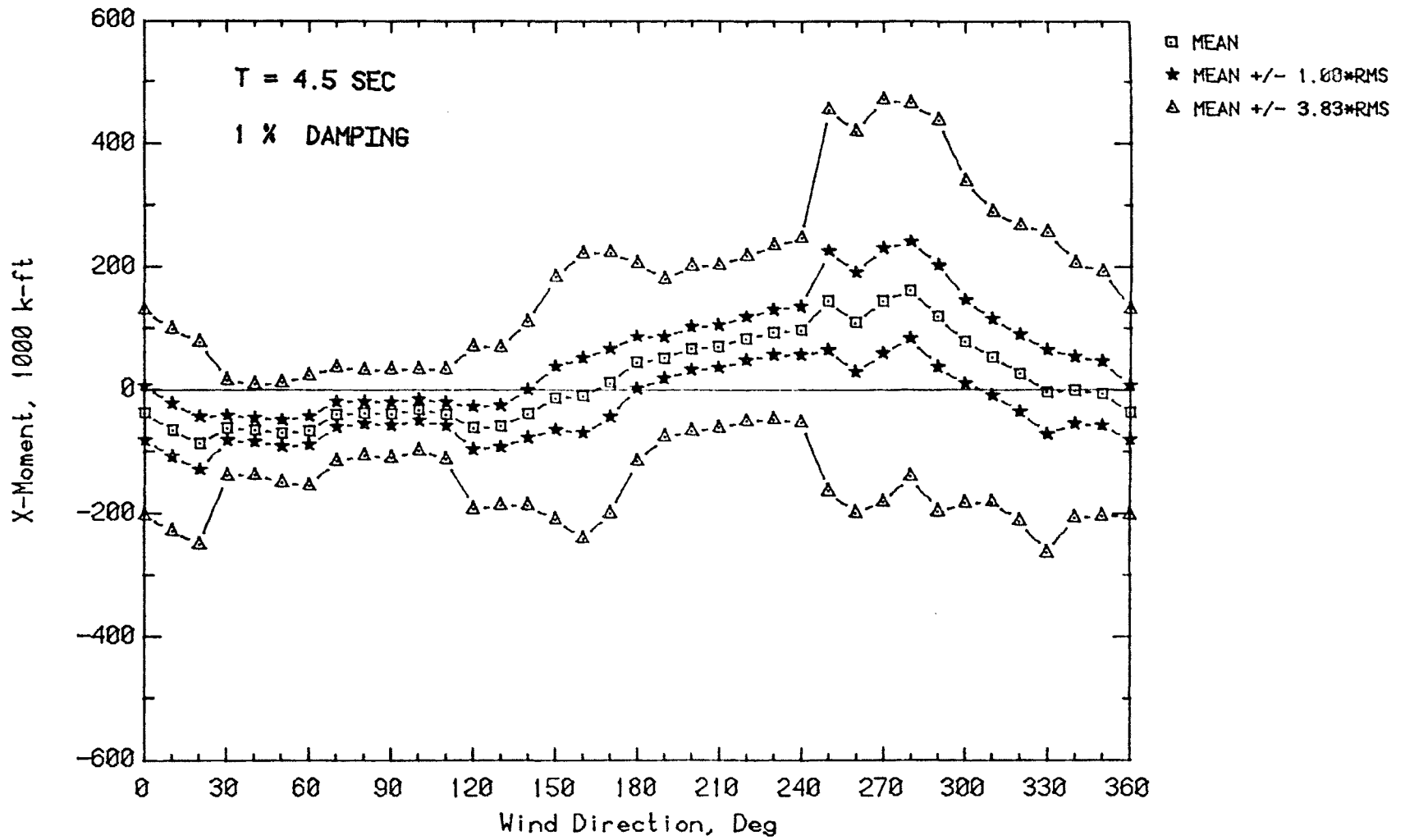


Figure 7a. Maximum Base Moments

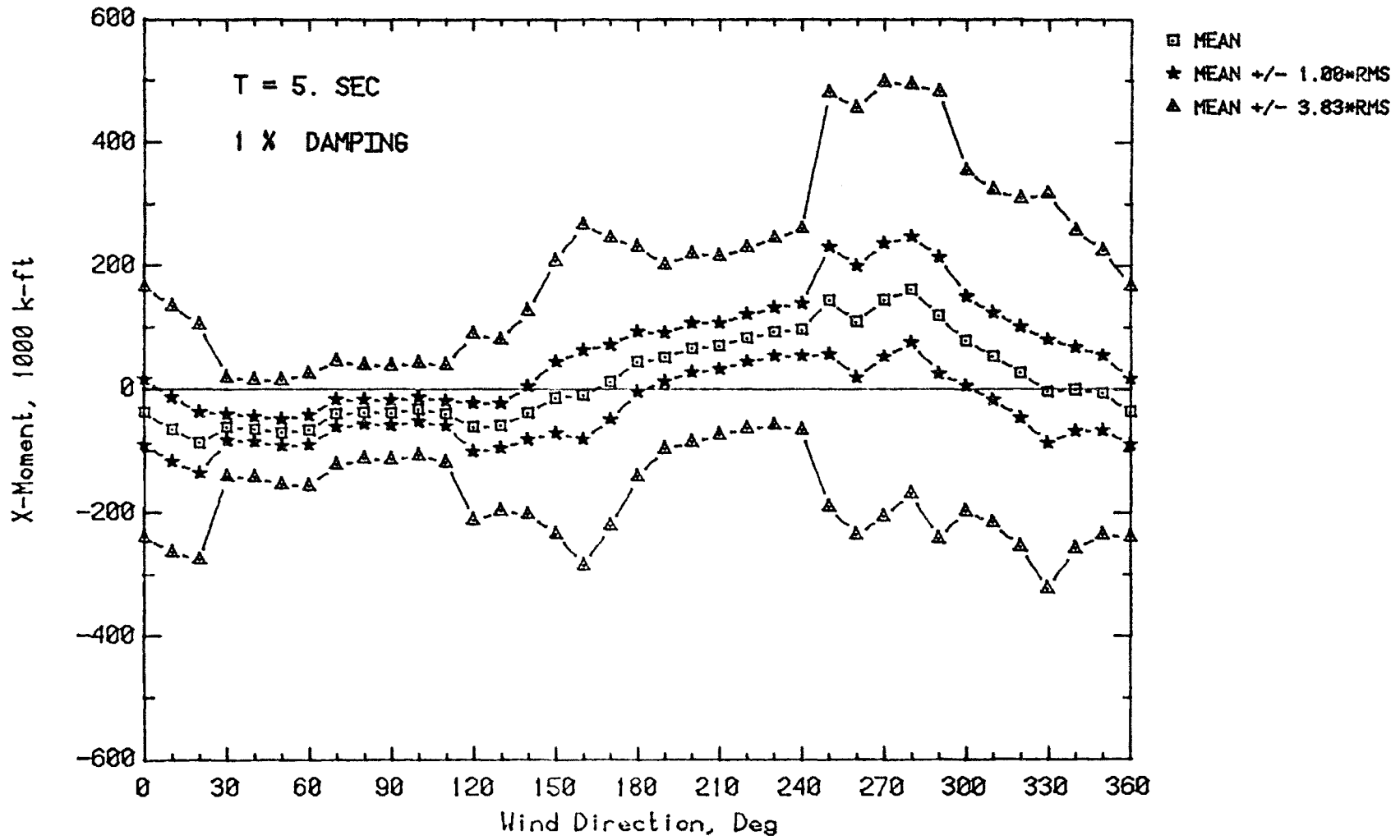


Figure 7b. Maximum Base Moments

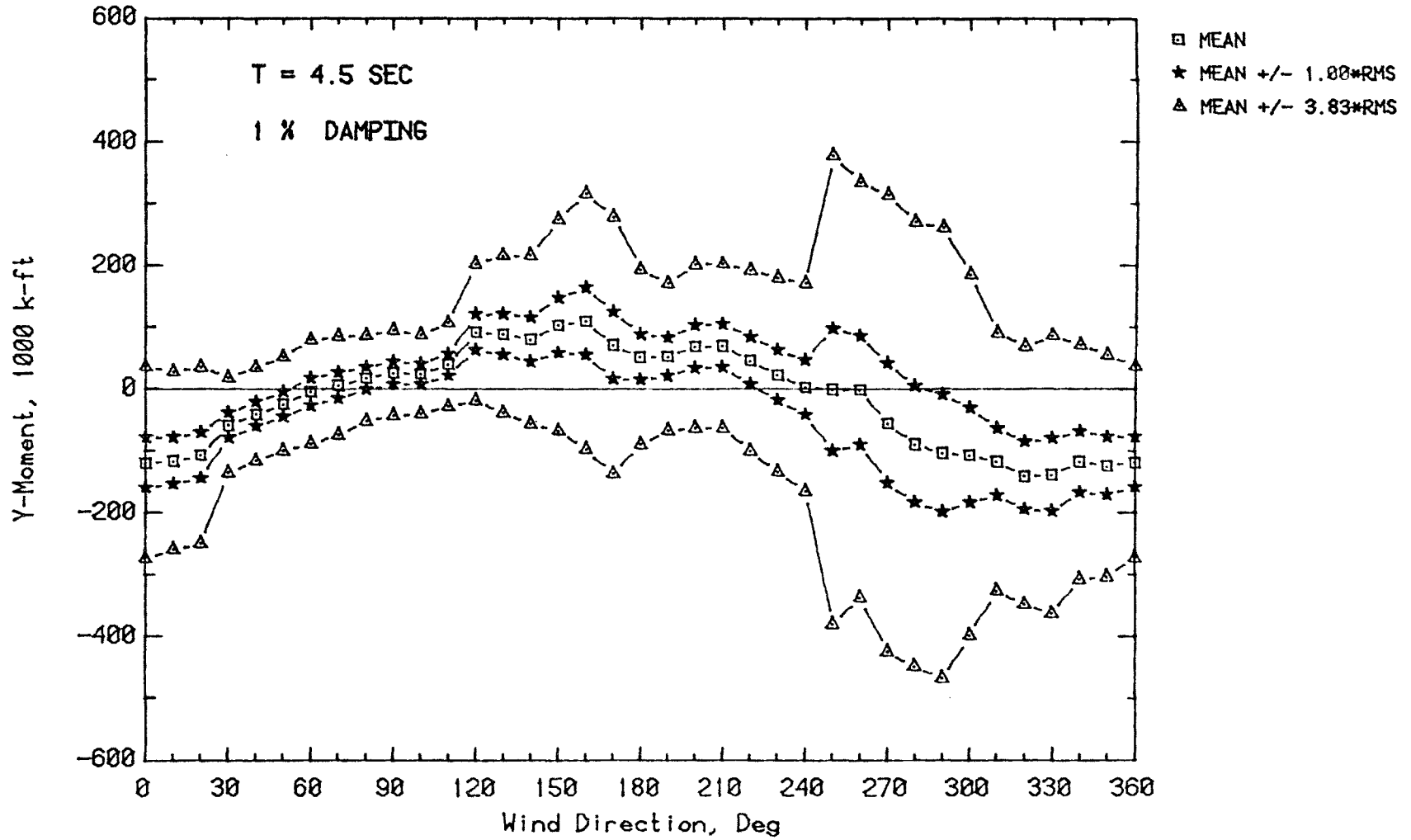


Figure 7c. Maximum Base Moments

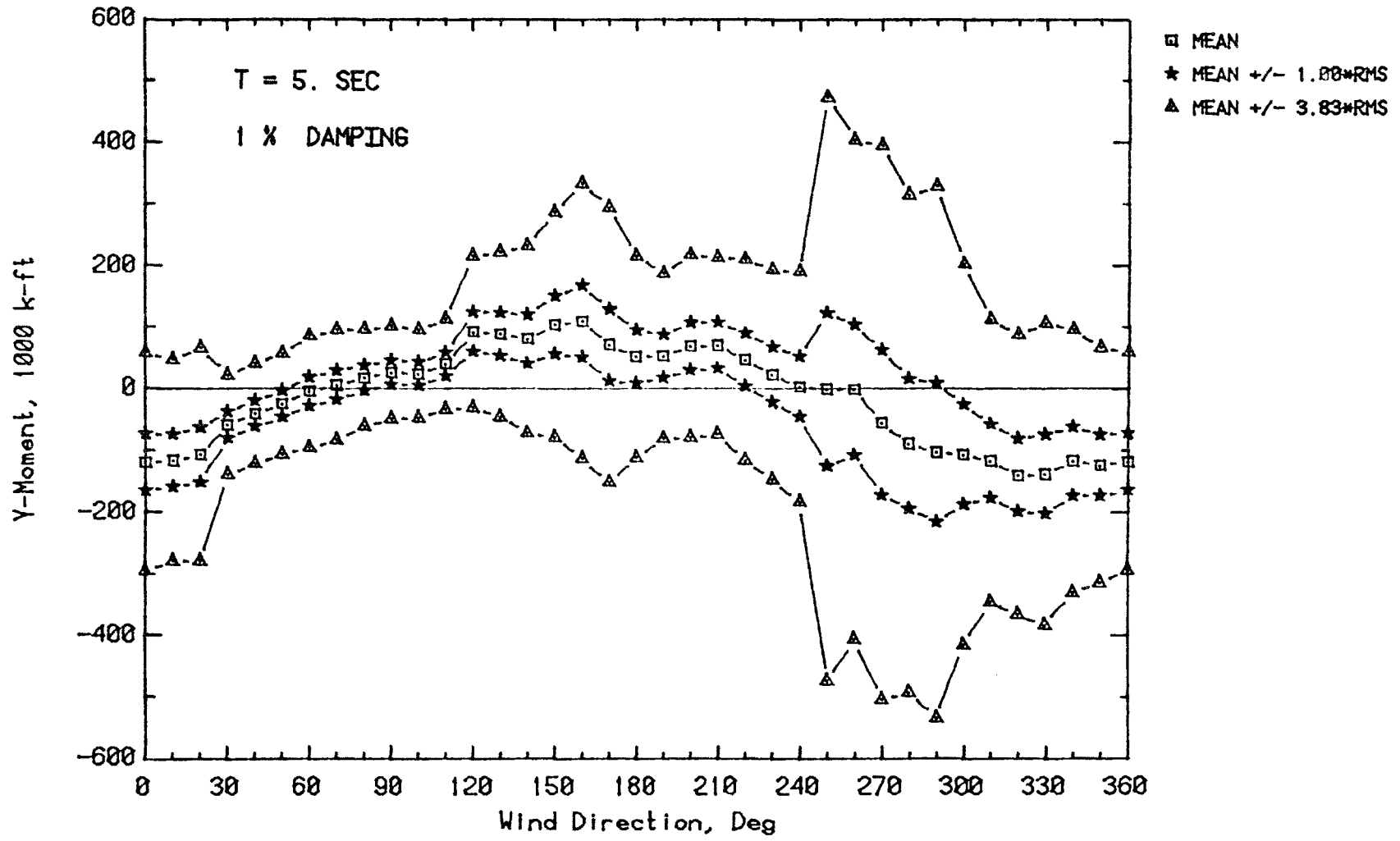


Figure 7d. Maximum Base Moments



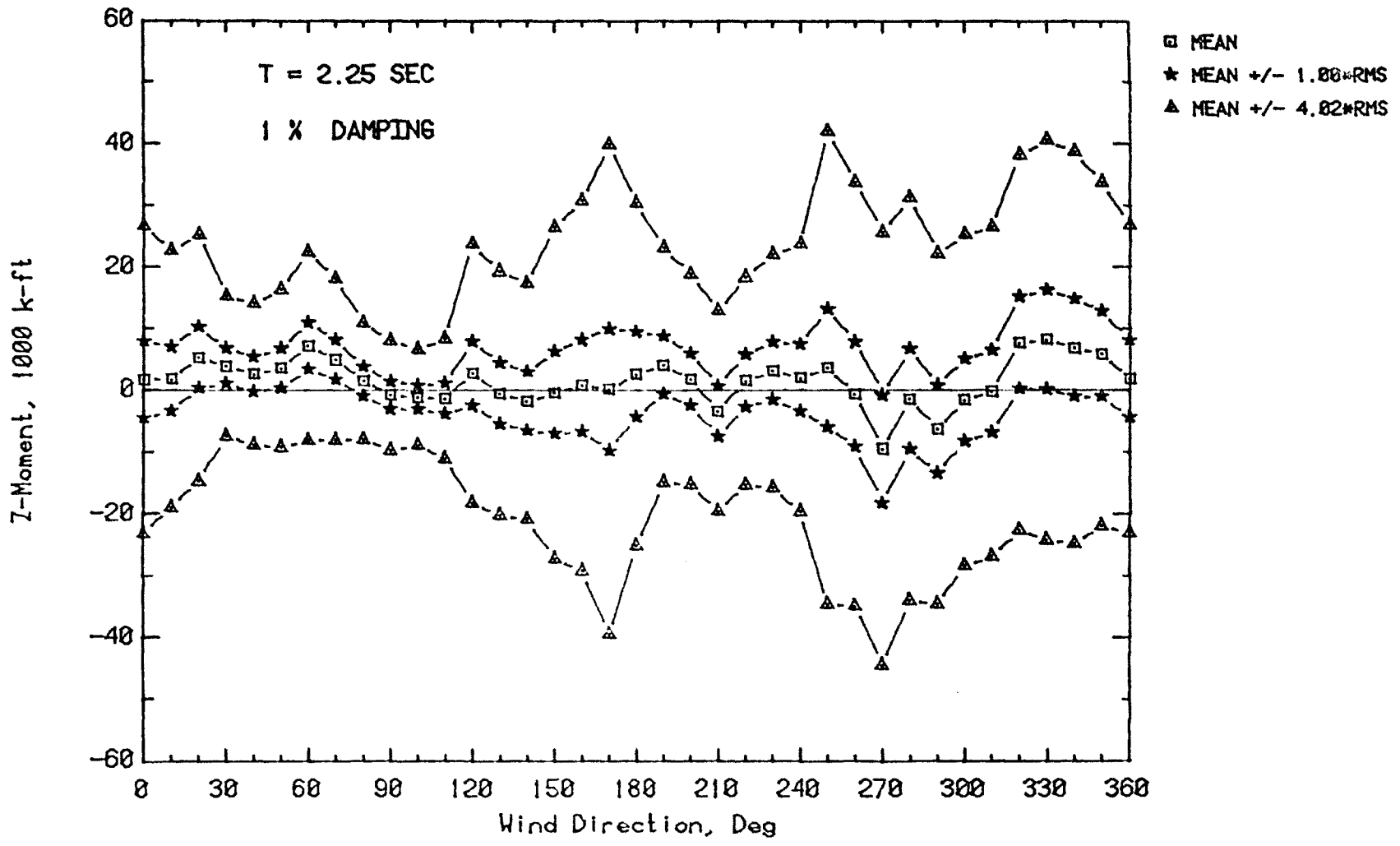


Figure 7e. Maximum Base Moments

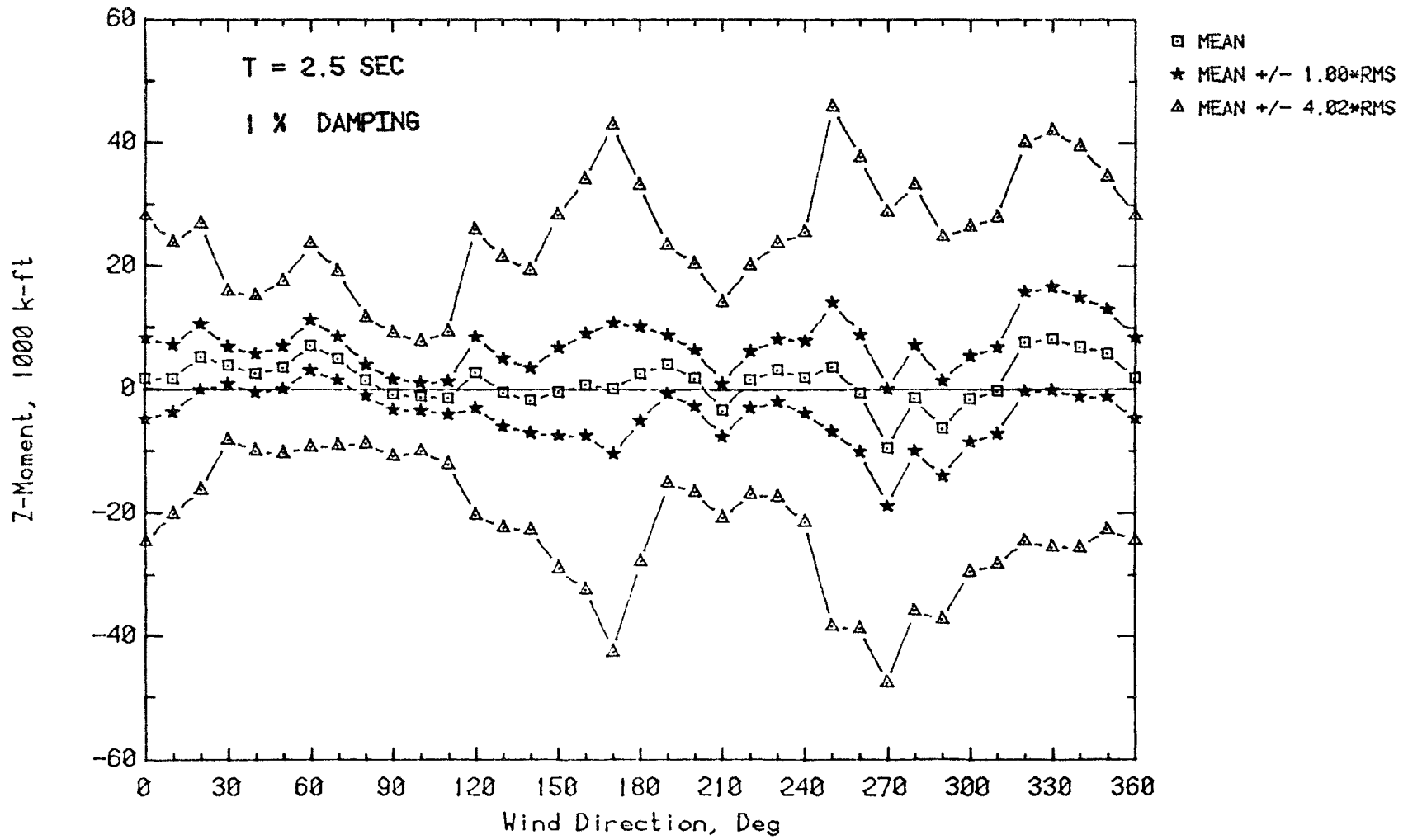


Figure 7f. Maximum Base Moments

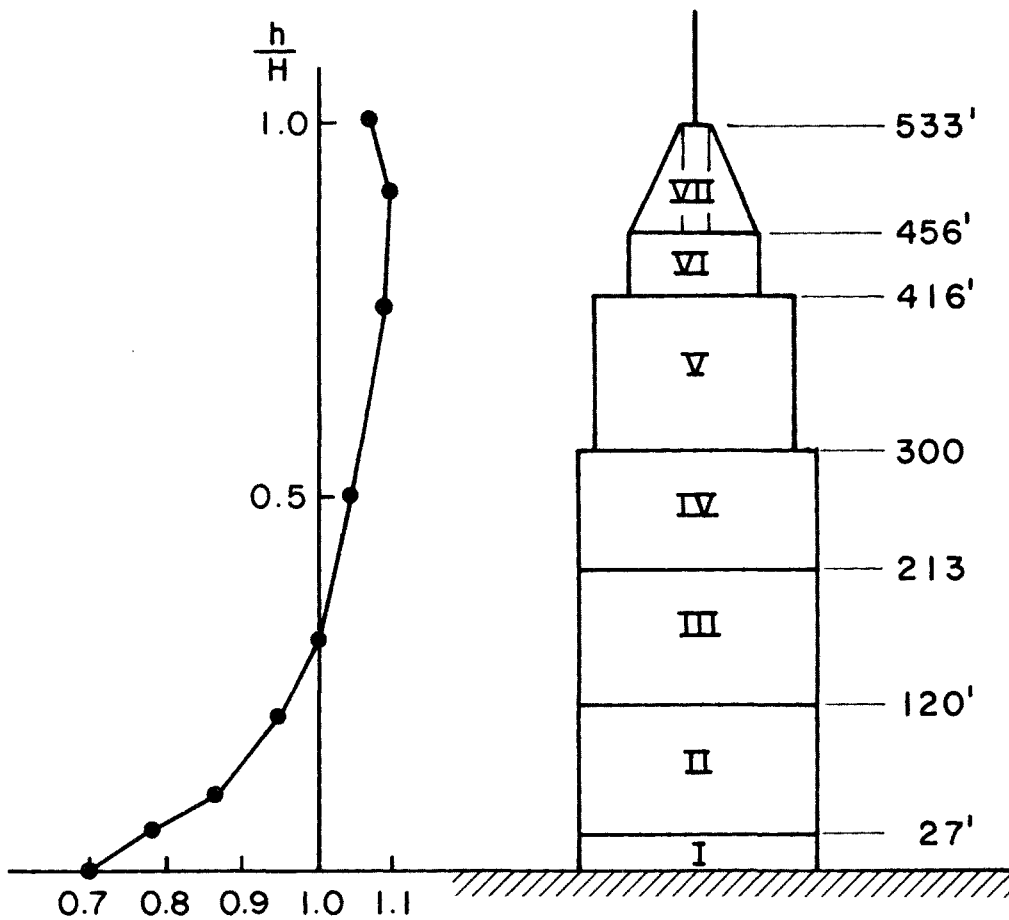


Figure 8. Zones for Equivalent Static Loads

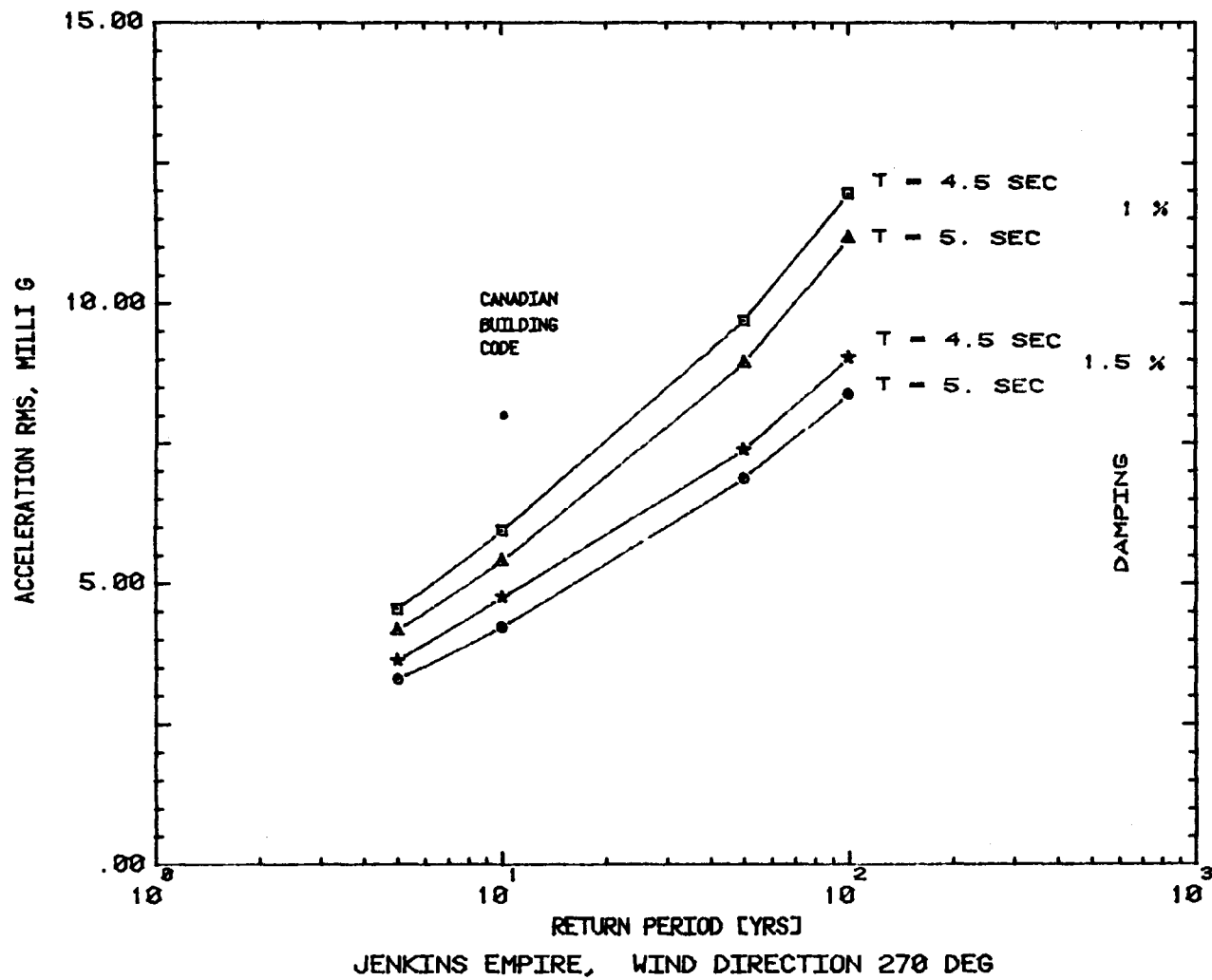


Figure 9. Acceleration vs. Return Period for 270-degree Wind

**TABLES**

Table 1. Wind Velocities and Wind Directionality Factors

Wind Speeds by Direction for Pittsburgh Airport*:			
Wind Direction	100-yr Fastest Mile Wind, 33 ft (mph)	Gradient Wind Speed (ws) mph	Load Factor (ws/max ws)
N	55	79	0.71
NE	42	61	0.42
E	40	59	0.39
SE	44	65	0.48
S	51	74	0.62
SW	51	74	0.62
W	66	94	1.00
NW	59	84	0.80

\*Data obtained from National Climatic Data Center,  
Asheville, NC.

Table 2. Gradient Level Velocities for 5-, 10-, 50- and 100-year Return Winds

	5	10	50	100
N	51	58	73	79
NE	42	47	57	61
E	42	47	55	59
SE	47	52	61	65
S	51	56	69	74
SW	60	63	71	74
W	69	75	88	94
NW	61	67	79	84

Table 3. Equivalent Static Loads vs. Height

JENKINS/EMPIRE															
STRUCTURAL LOADS CORRESPONDING TO PEAK EQUIVALENT STATIC BASE MOMENTS															
WD	X-PRESSURE [PSF]							Y PRESSURE [PSF]							
	I	II	III	IV	V	VI	VII	I	II	III	IV	V	VI	VII	
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	-11.0	-11.0	-13.0	-13.0	-14.0	-14.0	-14.0	-12.0	-14.0	-16.0	-17.0	-17.0	-17.0	-17.0	
20	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
30	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
40	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
50	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
60	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
70	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
80	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
90	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
100	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
110	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
120	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
130	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
140	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
150	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
160	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
170	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
180	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
190	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
200	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
210	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
220	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
230	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
240	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
250	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
260	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
270	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
280	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
290	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
300	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
310	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
320	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
330	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
340	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	
350	-11.0	-13.0	-14.0	-15.0	-15.0	-16.0	-16.0	-11.5	-13.0	-15.0	-16.0	-16.0	-16.0	-16.0	



Table 4. Acceleration Levels

NATURAL PER. [SEC] 4.5  
DAMPING RATIO .015

RETURN PERIOD [YRS] 100

WD	VEL. F/S	X	Y	AC [MG]
0	115.9	2.86	2.34	3.70
50	89.5	1.99	1.18	1.54
90	86.5	1.00	1.12	1.51
140	95.3	2.57	2.23	3.40
170	108.5	3.54	3.42	4.92
230	108.5	3.08	2.67	3.38
270	137.9	5.86	6.87	9.01
310	123.2	4.25	3.33	5.40

RETURN PERIOD [YRS] 50

WD	VEL. F/S	X	Y	AC [MG]
0	107.1	2.28	1.87	2.95
50	83.6	1.86	1.23	1.32
90	80.7	1.84	1.23	1.25
140	89.5	1.91	1.74	2.60
170	101.2	2.94	2.82	4.12
230	104.1	1.77	1.31	2.21
270	129.1	4.70	5.70	7.32
310	115.9	3.36	2.55	4.22

RETURN PERIOD [YRS] 10

WD	VEL. F/S	X	Y	AC [MG]
0	85.1	1.11	.89	1.42
50	68.9	.45	.51	.68
90	67.5	.46	.53	.70
140	76.3	1.19	1.08	1.51
170	82.1	1.49	1.35	2.01
230	92.4	1.24	1.63	2.05
270	110.0	2.88	3.72	4.76
310	98.3	1.76	1.42	2.26

RETURN PERIOD [YRS] 5

WD	VEL. F/S	X	Y	AC [MG]
0	74.8	.76	.61	.98
50	61.6	.42	.36	.48
90	61.6	.43	.41	.53
140	68.9	.88	.78	1.17
170	74.8	1.08	1.04	1.50
230	88.0	1.05	1.37	1.72
270	101.2	2.19	2.82	3.62
310	89.5	1.33	1.02	1.72

Table 4. Acceleration Levels

NATURAL PER. [SEC] 4.5  
DAMPING RATIO .010

RETURN PERIOD [YRS] 100

WD	VEL. F/S	X	Y	AC [MG]
0	115.9	3.64	2.90	4.70
50	89.5	1.22	1.45	1.89
90	86.5	1.40	1.54	2.00
140	95.6	3.27	2.83	4.33
170	108.5	5.67	5.12	7.63
230	108.5	3.62	3.36	4.26
270	137.9	5.78	5.07	11.25
310	123.2	5.52	4.32	7.01

RETURN PERIOD [YRS] 50

WD	VEL. F/S	X	Y	AC [MG]
0	107.1	2.94	2.41	3.80
50	83.6	1.08	1.23	1.64
90	80.7	1.06	1.16	1.57
140	89.5	2.32	2.13	3.15
170	101.2	3.75	3.69	5.26
230	104.1	2.27	2.27	3.74
270	129.1	6.10	5.48	9.70
310	115.9	4.34	3.29	5.45

RETURN PERIOD [YRS] 10

WD	VEL. F/S	X	Y	AC [MG]
0	85.1	1.39	1.11	1.78
50	68.9	.56	.63	.84
90	67.5	.57	.65	.87
140	76.3	1.44	1.31	1.95
170	82.1	1.86	1.68	2.50
230	92.4	1.57	2.07	2.60
270	110.0	3.42	4.86	5.94
310	98.3	2.22	1.79	2.85

RETURN PERIOD [YRS] 5

WD	VEL. F/S	X	Y	AC [MG]
0	74.8	.95	.76	1.21
50	61.6	.38	.45	.59
90	61.6	.41	.50	.65
140	68.9	1.09	.96	1.45
170	74.8	1.34	1.30	1.87
230	88.0	1.30	1.71	2.15
270	101.2	2.73	3.63	4.55
310	89.5	1.67	1.38	2.16

Table 4. Acceleration Levels

NATURAL PER. [SEC] 5.0  
DAMPING RATIO .010

RETURN PERIOD [YRS] 100

WD	VEL. F/S	X	Y	AC ENGJ
0	115.9	3.76	2.93	4.77
50	89.5	1.15	1.37	1.79
90	84.5	1.16	1.29	1.73
140	95.0	3.02	2.67	4.03
170	108.5	4.29	4.05	5.70
230	108.5	2.50	3.18	4.05
270	137.9	6.73	8.89	11.15
310	123.2	5.18	3.95	6.51

RETURN PERIOD [YRS] 50

WD	VEL. F/S	X	Y	AC ENGJ
0	107.1	2.75	2.24	3.54
50	83.6	.93	1.11	1.45
90	80.7	.89	1.01	1.44
140	89.5	2.45	2.13	3.24
170	101.2	3.52	3.34	4.05
230	104.1	2.10	2.61	3.45
270	129.1	5.65	6.93	8.34
310	115.9	4.18	3.29	5.32

RETURN PERIOD [YRS] 10

WD	VEL. F/S	X	Y	AC ENGJ
0	85.1	1.22	.99	1.57
50	68.9	.52	.62	.80
90	67.5	.51	.59	.78
140	76.3	1.37	1.29	1.89
170	82.1	1.66	1.64	2.33
230	92.4	1.44	1.87	2.66
270	110.0	3.36	4.24	5.41
310	98.3	2.17	1.67	2.74

RETURN PERIOD [YRS] 5

WD	VEL. F/S	X	Y	AC ENGJ
0	74.8	.80	.66	1.04
50	61.6	.36	.42	.55
90	61.6	.36	.44	.55
140	68.9	1.01	.92	1.37
170	74.8	1.29	1.18	1.75
230	88.0	1.25	1.60	2.03
270	101.2	2.53	3.32	4.17
310	89.5	1.61	1.29	2.07

Table 4. Acceleration Levels

NATURAL PER. [SEC] 5.0  
DAMPING RATIO .015

RETURN PERIOD [YRS] 100

WD	VEL. F/S	X	Y	AC [MG]
0	115.9	2.88	2.25	3.66
50	89.5	.92	1.10	1.43
90	86.5	.92	1.03	1.33
140	95.3	2.37	2.10	3.17
170	108.5	3.31	3.13	4.56
230	108.5	1.93	2.46	3.13
270	137.9	5.06	6.68	8.38
310	123.2	3.97	3.04	5.00

RETURN PERIOD [YRS] 50

WD	VEL. F/S	X	Y	AC [MG]
0	107.1	2.13	1.73	2.75
50	83.6	.75	.89	1.16
90	80.7	.71	.81	1.00
140	89.5	1.95	1.70	2.59
170	101.2	2.76	2.62	3.81
230	104.1	1.63	2.03	2.61
270	129.1	4.34	5.34	6.88
310	115.9	3.15	2.48	4.01

RETURN PERIOD [YRS] 10

WD	VEL. F/S	X	Y	AC [MG]
0	85.1	.99	.80	1.27
50	68.9	.42	.50	.65
90	67.5	.41	.48	.63
140	76.3	1.11	1.03	1.51
170	82.1	1.32	1.30	1.85
230	92.4	1.13	1.46	1.85
270	110.0	2.63	3.31	4.23
310	98.3	1.73	1.33	2.18

RETURN PERIOD [YRS] 5

WD	VEL. F/S	X	Y	AC [MG]
0	74.8	.65	.54	.85
50	61.5	.29	.34	.45
90	61.6	.31	.30	.40
140	68.9	.82	.74	1.10
170	74.8	1.02	.94	1.40
230	88.0	.98	1.26	1.60
270	101.2	2.00	2.62	3.30
310	89.5	1.27	1.02	1.62

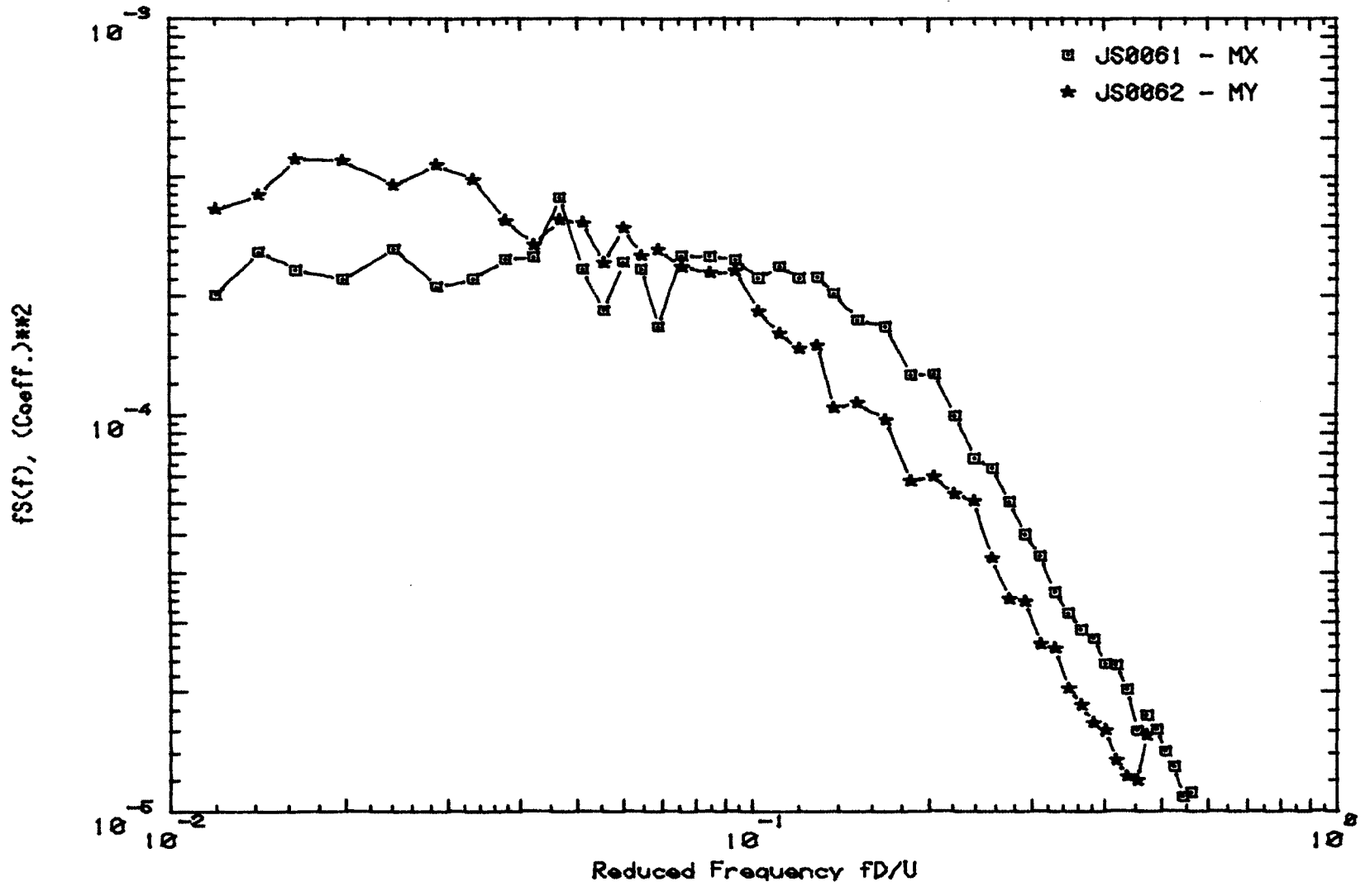
**APPENDICES**

**APPENDIX A**  
**TEST RESULTS**

## LIST OF LOAD SPECTRA

<u>Wind Direction</u>	<u>Run No.</u>	<u>Components M<sub>x</sub> and M<sub>y</sub></u>	<u>Page</u>
0	6	↓ M <sub>z</sub> ↓	A-3
10	13		A-6
20	14		A-9
30	15		A-12
40	16		A-15
50	17		A-18
60	18		A-21
70	19		A-24
80	20		A-27
90	21		A-30
100	22		A-33
110	23		A-36
120	42		A-39
130	43		A-42
140	40		A-45
150	38		A-48
160	30		A-51
170	29		A-54
180	28		A-57
190	36		A-60
200	37		A-63
210	33		A-66
220	32		A-69
230	31		A-72
240	25		A-75
250	26		A-78
260	27		A-81
270	44		A-84
280	45		A-87
290	46		A-90
300	47		A-93
310	1		A-96
320	2		A-99
330	3		A-102
340	4		A-105
350	5	A-108	
0-20	6, 13, 14	A-111	
30-50	15, 16, 17	A-115	
60-80	18, 19, 20	A-119	
90-110	21, 22, 23	A-123	
120-140	42, 43, 40	A-127	
150-170	38, 30, 29	A-131	
180-200	28, 36, 37	A-135	
220-230	33, 32, 31	A-139	
240-260	25, 26, 27	A-143	
270-290	44, 45, 46	A-147	
300-320	47, 1, 2	A-151	
330-350	3, 4, 5	A-155	

RUN NO. 6 WIND DIRECTION  $\theta$  Deg. VEL. U = 40.7 fps





POWER SPECTRAL FILE JS0061

TIME 4:17 DAY 29 OF 1985

CONFIGURATION A WIND VEL : 40.70 FPS RUN NO. 6  
 DIRECTION: 0 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.70 FPS  
 Q\*A = .8742 LBS  
 Q\*A\*L = 13.99 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.5247E-01 RMS = .2930E-01 ROOT(AREA) = .2915E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.421E-01	.250E-03	.223	.994E-04	.544	.109E-04
.558E-03	.572E-05	.466E-01	.354E-03	.241	.775E-04	.562	.112E-04
.112E-02	.106E-04	.511E-01	.233E-03	.259	.732E-04	.589	.984E-05
.167E-02	.279E-04	.555E-01	.183E-03	.277	.603E-04	.607	.910E-05
.251E-02	.430E-04	.600E-01	.243E-03	.294	.500E-04	.660	.805E-05
.363E-02	.670E-04	.645E-01	.233E-03	.312	.441E-04	.678	.622E-05
.474E-02	.845E-04	.689E-01	.166E-03	.330	.357E-04	.732	.592E-05
.586E-02	.913E-04	.756E-01	.252E-03	.348	.315E-04	.750	.555E-05
.698E-02	.680E-04	.845E-01	.251E-03	.366	.287E-04	.803	.582E-05
.809E-02	.718E-04	.935E-01	.246E-03	.384	.273E-04	.821	.638E-05
.977E-02	.104E-03	.102	.221E-03	.402	.235E-04	.875	.445E-05
.120E-01	.201E-03	.111	.236E-03	.419	.234E-04	.893	.329E-05
.142E-01	.250E-03	.120	.221E-03	.437	.203E-04	.946	.187E-05
.165E-01	.232E-03	.129	.222E-03	.455	.160E-04	.964	.718E-06
.198E-01	.219E-03	.138	.202E-03	.473	.175E-04	1.02	.448E-06
.243E-01	.262E-03	.152	.173E-03	.491	.161E-04	1.04	.330E-06
.287E-01	.210E-03	.169	.167E-03	.509	.142E-04	1.09	.273E-06
.332E-01	.220E-03	.187	.126E-03	.527	.130E-04	1.11	.249E-06
.377E-01	.247E-03	.205	.126E-03				

POWER SPECTRAL FILE JS0062

TIME 4:17 DAY 99 OF 1985

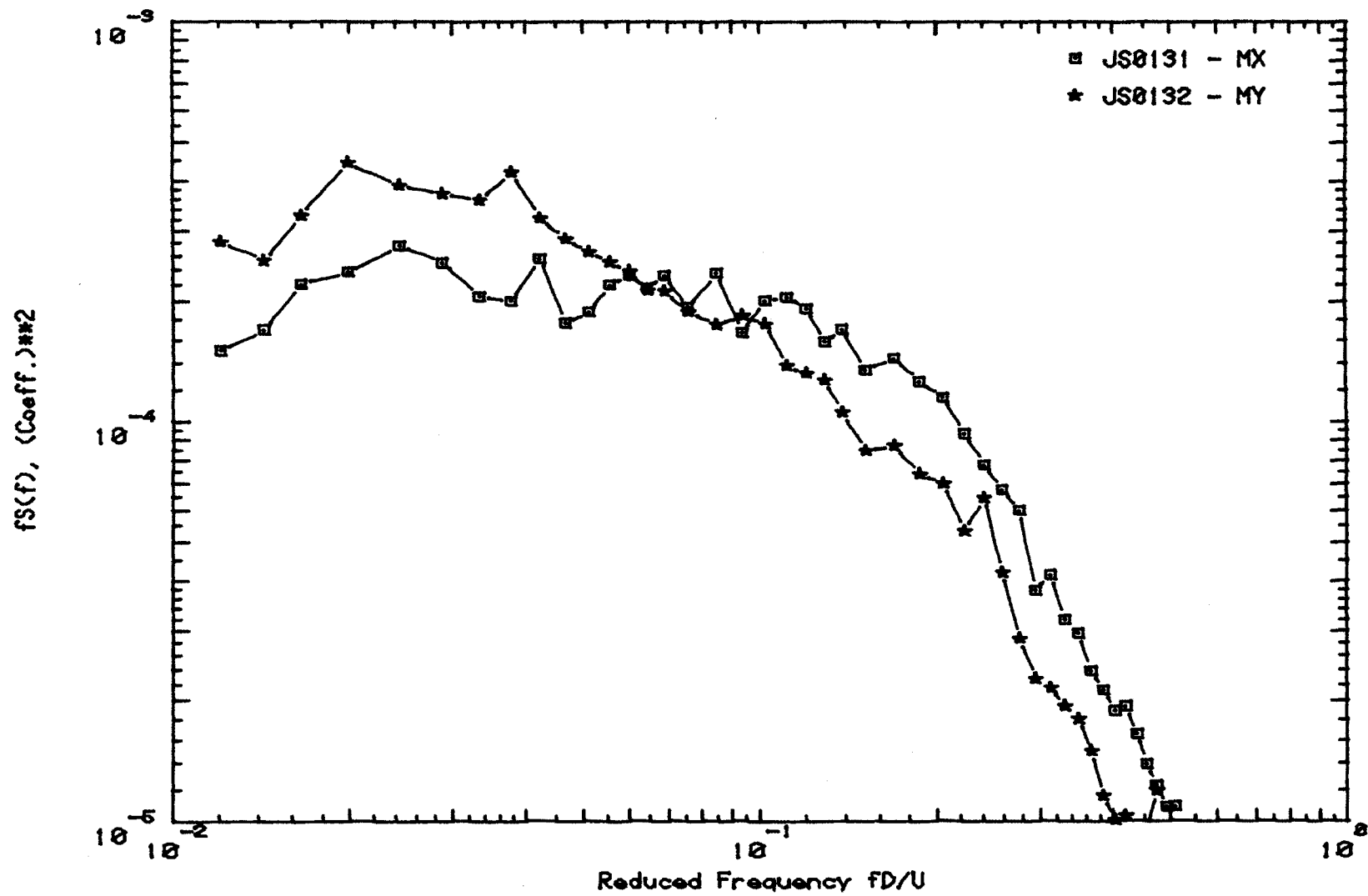
CONFIGURATION A WIND VEL : 40.70 FPS RUN NO. 6  
 DIRECTION: 0 CHANNEL MY IN Coeff. UNITS  
 NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.70 FPS  
 Q\*A = .8742 LBS  
 Q\*A\*L = 13.99 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1694 RMS = .3676E-01 ROOT(AREA) = .3630E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.421E-01	.263E-03	.223	.630E-04	.544	.736E-05
.558E-03	.275E-04	.466E-01	.310E-03	.241	.605E-04	.562	.811E-05
.112E-02	.855E-04	.511E-01	.305E-03	.259	.435E-04	.589	.682E-05
.167E-02	.411E-04	.555E-01	.241E-03	.277	.343E-04	.607	.630E-05
.251E-02	.116E-03	.600E-01	.296E-03	.294	.330E-04	.660	.568E-05
.363E-02	.153E-03	.645E-01	.252E-03	.312	.264E-04	.678	.539E-05
.474E-02	.207E-03	.689E-01	.261E-03	.330	.250E-04	.732	.500E-05
.586E-02	.128E-03	.754E-01	.236E-03	.348	.203E-04	.750	.539E-05
.698E-02	.384E-03	.845E-01	.229E-03	.366	.185E-04	.803	.595E-05
.809E-02	.384E-03	.935E-01	.230E-03	.384	.167E-04	.821	.618E-05
.977E-02	.377E-03	.102	.182E-03	.402	.160E-04	.875	.367E-05
.120E-01	.330E-03	.111	.160E-03	.419	.135E-04	.893	.150E-05
.142E-01	.359E-03	.120	.147E-03	.437	.122E-04	.946	.856E-06
.165E-01	.441E-03	.129	.150E-03	.455	.120E-04	.964	.605E-06
.198E-01	.437E-03	.138	.104E-03	.473	.154E-04	1.02	.519E-06
.243E-01	.379E-03	.152	.107E-03	.491	.893E-05	1.04	.336E-06
.287E-01	.427E-03	.169	.970E-04	.509	.849E-05	1.09	.281E-06
.332E-01	.392E-03	.187	.679E-04	.527	.756E-05	1.11	.262E-06
.377E-01	.308E-03	.205	.699E-04				

RUN NO. 13 WIND DIRECTION 10 Deg. VEL. U = 40.6 fps



POWER SPECTRAL FILE JS0131

TIME 18:54 DAY 22 OF 1985

CONFIGURATION A WIND VEL : 40.56 FPS  
DIRECTION: 10

RUN NO. 13  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.56 FPS  
Q\*A = .8681 LBS  
Q\*A\*L = 13.09 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.9215E-01 RMS = .2822E-01 ROOT(AREA) = .2764E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.256E-03	.224	.732E-04	.546	.701E-05
.560E-03	.565E-05	.468E-01	.176E-03	.242	.777E-04	.564	.744E-05
.112E-02	.155E-04	.512E-01	.180E-03	.260	.675E-04	.591	.624E-05
.168E-02	.162E-04	.557E-01	.220E-03	.277	.599E-04	.609	.636E-05
.252E-02	.401E-04	.602E-01	.232E-03	.295	.377E-04	.663	.497E-05
.364E-02	.346E-04	.647E-01	.215E-03	.313	.413E-04	.681	.426E-05
.476E-02	.709E-04	.692E-01	.232E-03	.331	.317E-04	.734	.393E-05
.588E-02	.661E-04	.759E-01	.193E-03	.349	.295E-04	.752	.417E-05
.700E-02	.653E-04	.848E-01	.235E-03	.367	.237E-04	.806	.368E-05
.812E-02	.854E-04	.938E-01	.167E-03	.385	.213E-04	.824	.420E-05
.980E-02	.156E-03	.103	.200E-03	.403	.187E-04	.878	.364E-05
.120E-01	.150E-03	.112	.205E-03	.421	.194E-04	.896	.198E-05
.143E-01	.170E-03	.121	.192E-03	.439	.165E-04	.949	.160E-05
.165E-01	.221E-03	.130	.158E-03	.457	.139E-04	.967	.104E-05
.199E-01	.236E-03	.139	.170E-03	.475	.123E-04	1.02	.336E-06
.244E-01	.275E-03	.152	.134E-03	.493	.109E-04	1.04	.231E-06
.288E-01	.249E-03	.170	.144E-03	.510	.102E-04	1.09	.185E-06
.333E-01	.205E-03	.188	.126E-03	.528	.978E-05	1.11	.173E-06
.378E-01	.200E-03	.206	.115E-03				

POWER SPECTRAL FILE JS0132

TIME 18:54 DAY 29 OF 1985

CONFIGURATION A WIND VEL : 40.56 FPS RUN NO. 13  
 DIRECTION: 10 CHANNEL MY IN Coeff. UNITS

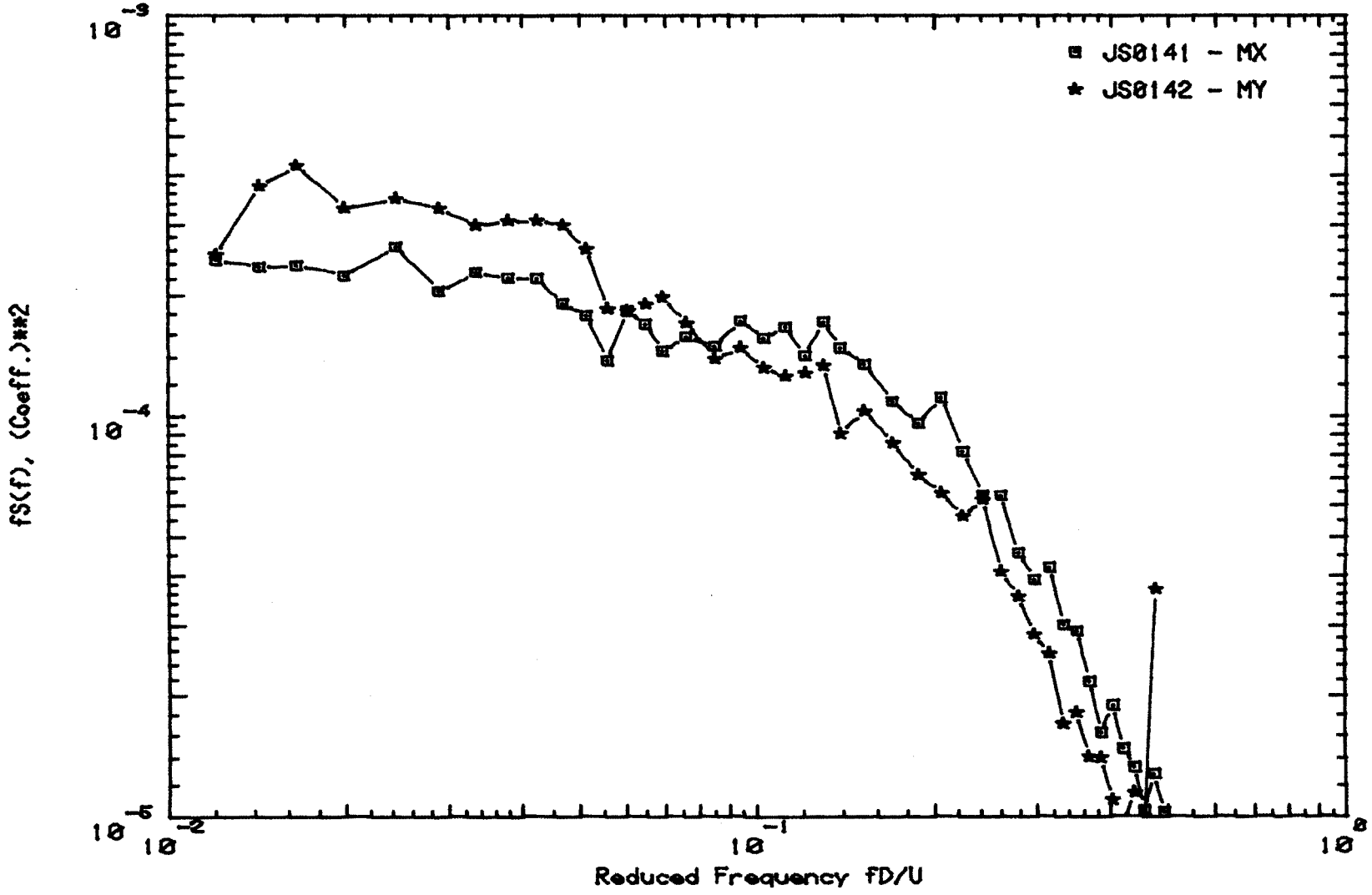
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.56 FPS  
 Q\*A = .8681 LBS  
 Q\*A\*L = 13.09 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1655 RMS = .3426E-01 ROOT(AREA) = .3403E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.322E-03	.224	.531E-04	.546	.542E-05
.560E-03	.186E-04	.468E-01	.286E-03	.242	.644E-04	.564	.560E-05
.112E-02	.780E-04	.512E-01	.266E-03	.260	.417E-04	.591	.471E-05
.168E-02	.589E-04	.557E-01	.250E-03	.277	.286E-04	.609	.424E-05
.252E-02	.756E-04	.602E-01	.238E-03	.295	.227E-04	.663	.451E-05
.364E-02	.885E-04	.647E-01	.213E-03	.313	.215E-04	.681	.361E-05
.476E-02	.205E-03	.692E-01	.211E-03	.331	.193E-04	.734	.370E-05
.588E-02	.265E-03	.759E-01	.188E-03	.349	.180E-04	.752	.329E-05
.700E-02	.264E-03	.848E-01	.175E-03	.367	.150E-04	.806	.417E-05
.812E-02	.273E-03	.938E-01	.184E-03	.385	.116E-04	.824	.431E-05
.980E-02	.249E-03	.103	.175E-03	.403	.101E-04	.878	.401E-05
.120E-01	.281E-03	.112	.138E-03	.421	.103E-04	.896	.141E-05
.143E-01	.253E-03	.121	.132E-03	.439	.074E-05	.949	.669E-06
.165E-01	.328E-03	.130	.126E-03	.457	.949E-05	.967	.409E-06
.199E-01	.444E-03	.139	.105E-03	.475	.120E-04	1.02	.361E-06
.244E-01	.389E-03	.152	.843E-04	.493	.682E-05	1.04	.244E-06
.288E-01	.370E-03	.170	.860E-04	.510	.725E-05	1.09	.179E-06
.333E-01	.357E-03	.188	.736E-04	.528	.642E-05	1.11	.178E-06
.378E-01	.418E-03	.206	.698E-04				

RUN NO. 14 WIND DIRECTION 20 Deg. VEL. U = 40.6 fps



POWER SPECTRAL FILE JS0141

TIME 19: 0 DAY 99 OF 1985

WIND VEL : 40.57 FPS  
DIRECTION: 20

RUN NO. 14  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U :  
D = 5.000 IN.  
U = 40.57 FPS  
Q\*A = .8687 LBS  
Q\*A\*L = 13.90 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1229 RMS = .3036E-01 ROOT(AREA) = .2967E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.220E-03	.224	.813E-04	.546	.740E-05
.560E-03	.188E-04	.467E-01	.190E-03	.242	.632E-04	.564	.597E-05
.112E-02	.399E-04	.512E-01	.170E-03	.259	.632E-04	.591	.549E-05
.168E-02	.500E-04	.557E-01	.137E-03	.277	.455E-04	.609	.604E-05
.252E-02	.613E-04	.602E-01	.183E-03	.295	.390E-04	.663	.423E-05
.364E-02	.642E-04	.647E-01	.169E-03	.313	.419E-04	.680	.398E-05
.476E-02	.103E-03	.691E-01	.145E-03	.331	.301E-04	.734	.368E-05
.588E-02	.206E-03	.759E-01	.157E-03	.349	.290E-04	.752	.341E-05
.700E-02	.182E-03	.848E-01	.147E-03	.367	.217E-04	.806	.322E-05
.812E-02	.280E-03	.938E-01	.173E-03	.385	.162E-04	.824	.322E-05
.980E-02	.191E-03	.103	.156E-03	.403	.187E-04	.877	.243E-05
.120E-01	.244E-03	.112	.167E-03	.421	.148E-04	.895	.160E-05
.143E-01	.236E-03	.121	.141E-03	.439	.133E-04	.949	.130E-05
.165E-01	.238E-03	.130	.172E-03	.457	.104E-04	.967	.754E-06
.199E-01	.224E-03	.139	.140E-03	.474	.120E-04	1.02	.310E-06
.244E-01	.264E-03	.152	.135E-03	.492	.103E-04	1.04	.208E-06
.288E-01	.205E-03	.170	.109E-03	.510	.760E-05	1.09	.146E-06
.333E-01	.228E-03	.188	.958E-04	.528	.830E-05	1.11	.168E-06
.378E-01	.221E-03	.206	.111E-03				

POWER SPECTRAL FILE JS0142

TIME 19: 0 DAY 99 OF 1965

CONFIGURATION A WIND VEL : 40.57 FPS  
DIRECTION: 20

RUN NO. 14  
CHANNEL MY IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.57 FPS  
Q\*A = .8687 LBS  
Q\*A\*L = 13.90 LB\*IN

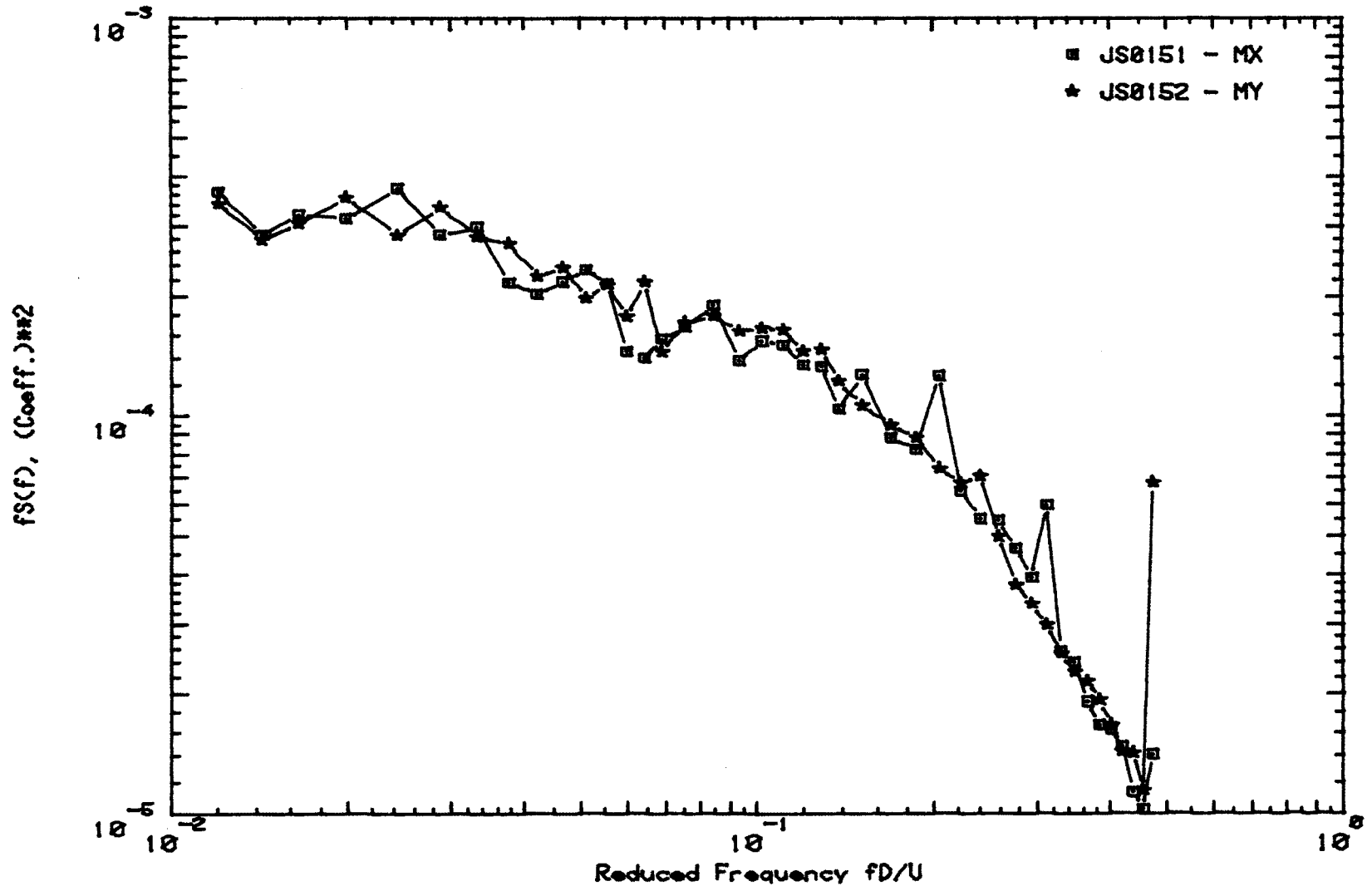
8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1523 RMS = .3352E-01 ROOT(AREA) = .3281E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.307E-03	.224	.562E-04	.546	.570E-05
.560E-03	.290E-04	.467E-01	.299E-03	.242	.618E-04	.564	.507E-05
.112E-02	.322E-04	.512E-01	.261E-03	.259	.400E-04	.591	.457E-05
.168E-02	.375E-04	.557E-01	.185E-03	.277	.354E-04	.609	.472E-05
.252E-02	.124E-03	.602E-01	.182E-03	.295	.284E-04	.663	.427E-05
.364E-02	.707E-04	.647E-01	.190E-03	.313	.256E-04	.680	.370E-05
.476E-02	.203E-03	.691E-01	.197E-03	.331	.170E-04	.734	.389E-05
.588E-02	.163E-03	.759E-01	.170E-03	.349	.182E-04	.752	.355E-05
.700E-02	.263E-03	.848E-01	.139E-03	.367	.141E-04	.806	.406E-05
.812E-02	.305E-03	.938E-01	.148E-03	.385	.140E-04	.824	.412E-05
.980E-02	.221E-03	.103	.132E-03	.403	.110E-04	.877	.302E-05
.120E-01	.253E-03	.112	.126E-03	.421	.966E-05	.895	.119E-05
.143E-01	.375E-03	.121	.120E-03	.439	.115E-04	.949	.549E-06
.165E-01	.421E-03	.130	.133E-03	.457	.877E-05	.967	.337E-06
.199E-01	.330E-03	.139	.902E-04	.474	.369E-04	1.02	.322E-06
.244E-01	.348E-03	.152	.103E-03	.492	.679E-05	1.04	.218E-06
.288E-01	.329E-03	.170	.854E-04	.510	.730E-05	1.09	.157E-06
.333E-01	.299E-03	.188	.711E-04	.528	.583E-05	1.11	.160E-06
.378E-01	.307E-03	.206	.642E-04				



RUN NO. 15 WIND DIRECTION 30 Deg. VEL. U = 40.6 fps



POWER SPECTRAL FILE JS0151

TIME 19: 8 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.61 FPS RUN NO. 15  
 DIRECTION: 30 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.61 FPS  
 Q\*A = .8705 LBS  
 Q\*A\*L = 13.93 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1482 RMS = .3438E-01 ROOT(AREA) = .3389E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.202E-03	.223	.646E-04	.546	.610E-05
.559E-03	.154E-04	.467E-01	.217E-03	.241	.552E-04	.563	.586E-05
.112E-02	.468E-04	.512E-01	.233E-03	.259	.540E-04	.590	.522E-05
.168E-02	.848E-04	.556E-01	.214E-03	.277	.465E-04	.608	.587E-05
.252E-02	.175E-03	.601E-01	.145E-03	.295	.392E-04	.662	.386E-05
.364E-02	.176E-03	.646E-01	.140E-03	.313	.597E-04	.680	.340E-05
.475E-02	.202E-03	.691E-01	.156E-03	.331	.256E-04	.733	.358E-05
.587E-02	.149E-03	.758E-01	.167E-03	.349	.240E-04	.751	.360E-05
.699E-02	.427E-03	.847E-01	.190E-03	.367	.191E-04	.805	.363E-05
.811E-02	.301E-03	.937E-01	.138E-03	.384	.167E-04	.823	.336E-05
.979E-02	.290E-03	.103	.154E-03	.402	.163E-04	.877	.269E-05
.120E-01	.365E-03	.112	.150E-03	.420	.148E-04	.894	.150E-05
.143E-01	.285E-03	.121	.134E-03	.438	.114E-04	.948	.120E-05
.165E-01	.321E-03	.129	.133E-03	.456	.103E-04	.966	.695E-06
.199E-01	.313E-03	.138	.104E-03	.474	.141E-04	1.02	.297E-06
.243E-01	.373E-03	.152	.127E-03	.492	.852E-05	1.04	.219E-06
.288E-01	.285E-03	.170	.880E-04	.510	.761E-05	1.09	.191E-06
.333E-01	.298E-03	.188	.824E-04	.528	.660E-05	1.11	.186E-06
.377E-01	.216E-03	.206	.126E-03				

POWER SPECTRAL FILE JS0152

TIME 19: 8 DAY 99 OF 1985

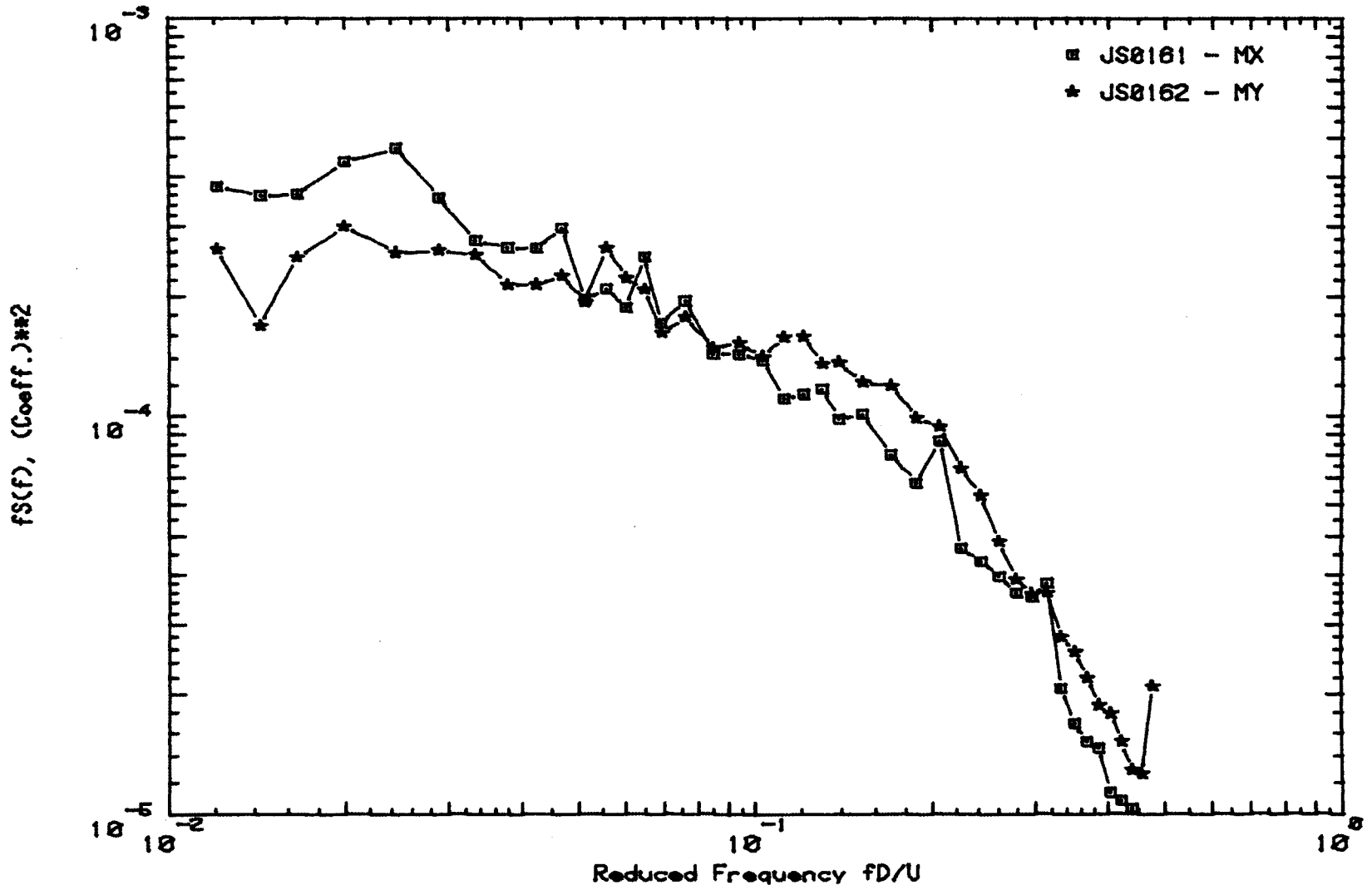
CONFIGURATION A WIND VEL : 40.61 FPS RUN NO. 15  
 DIRECTION: 30 CHANNEL MY IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*S(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.61 FPS  
 Q\*A = .8705 LBS  
 Q\*A\*L = 13.93 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.  
 MEAN = -.1407 RMS = .3308E-01 ROOT(AREA) = .3269E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.422E-01	.224E-03	.223	.677E-04	.546	.747E-05
.559E-03	.191E-04	.467E-01	.236E-03	.241	.706E-04	.563	.563E-05
.112E-02	.310E-04	.512E-01	.198E-03	.259	.499E-04	.590	.575E-05
.168E-02	.553E-04	.556E-01	.214E-03	.277	.375E-04	.608	.613E-05
.252E-02	.104E-03	.601E-01	.177E-03	.295	.337E-04	.662	.431E-05
.364E-02	.143E-03	.646E-01	.217E-03	.313	.298E-04	.680	.389E-05
.475E-02	.178E-03	.691E-01	.145E-03	.331	.252E-04	.733	.401E-05
.587E-02	.210E-03	.758E-01	.172E-03	.349	.227E-04	.751	.351E-05
.699E-02	.237E-03	.847E-01	.179E-03	.367	.215E-04	.805	.408E-05
.811E-02	.283E-03	.937E-01	.163E-03	.384	.192E-04	.823	.423E-05
.979E-02	.279E-03	.103	.166E-03	.402	.167E-04	.877	.296E-05
.120E-01	.341E-03	.112	.164E-03	.420	.144E-04	.894	.103E-05
.143E-01	.277E-03	.121	.145E-03	.438	.142E-04	.948	.510E-06
.165E-01	.305E-03	.129	.147E-03	.456	.114E-04	.966	.357E-06
.199E-01	.353E-03	.138	.122E-03	.474	.678E-04	1.02	.305E-06
.243E-01	.284E-03	.152	.106E-03	.492	.949E-05	1.04	.253E-06
.288E-01	.334E-03	.170	.946E-04	.510	.753E-05	1.09	.174E-06
.333E-01	.281E-03	.188	.881E-04	.528	.718E-05	1.11	.174E-06
.377E-01	.270E-03	.206	.737E-04				

RUN NO. 16 WIND DIRECTION 40 Deg. VEL. U = 40.5 fps



POWER SPECTRAL FILE JS0161

TIME 19:14 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.47 FPS RUN NO. 16  
 DIRECTION: 40 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.47 FPS  
 Q\*A = .8643 LBS  
 Q\*A\*L = 13.83 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1559 RMS = .3569E-01 ROOT(AREA) = .3528E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.265E-03	.224	.466E-04	.547	.519E-05
.561E-03	.442E-04	.469E-01	.297E-03	.242	.432E-04	.565	.494E-05
.112E-02	.498E-04	.514E-01	.197E-03	.260	.397E-04	.592	.464E-05
.168E-02	.762E-04	.558E-01	.209E-03	.278	.359E-04	.610	.519E-05
.253E-02	.160E-03	.603E-01	.187E-03	.296	.351E-04	.664	.414E-05
.365E-02	.125E-03	.648E-01	.251E-03	.314	.381E-04	.682	.358E-05
.477E-02	.206E-03	.693E-01	.171E-03	.332	.206E-04	.736	.346E-05
.589E-02	.300E-03	.760E-01	.195E-03	.350	.169E-04	.754	.350E-05
.702E-02	.318E-03	.850E-01	.143E-03	.368	.152E-04	.808	.388E-05
.814E-02	.300E-03	.940E-01	.143E-03	.386	.147E-04	.826	.365E-05
.982E-02	.315E-03	.103	.138E-03	.404	.114E-04	.880	.270E-05
.121E-01	.377E-03	.112	.111E-03	.422	.109E-04	.898	.163E-05
.143E-01	.357E-03	.121	.114E-03	.440	.104E-04	.952	.123E-05
.166E-01	.362E-03	.130	.117E-03	.458	.865E-05	.970	.698E-06
.199E-01	.436E-03	.139	.983E-04	.476	.990E-05	1.02	.357E-06
.244E-01	.470E-03	.152	.101E-03	.494	.650E-05	1.04	.278E-06
.289E-01	.353E-03	.170	.799E-04	.512	.676E-05	1.10	.234E-06
.334E-01	.276E-03	.188	.680E-04	.530	.591E-05	1.11	.221E-06
.379E-01	.265E-03	.206	.867E-04				

POWER SPECTRAL FILE JS0162

TIME 19:14 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.47 FPS RUN NO. 16  
DIRECTION: 40 CHANNEL NY IN Coeff. UNITS

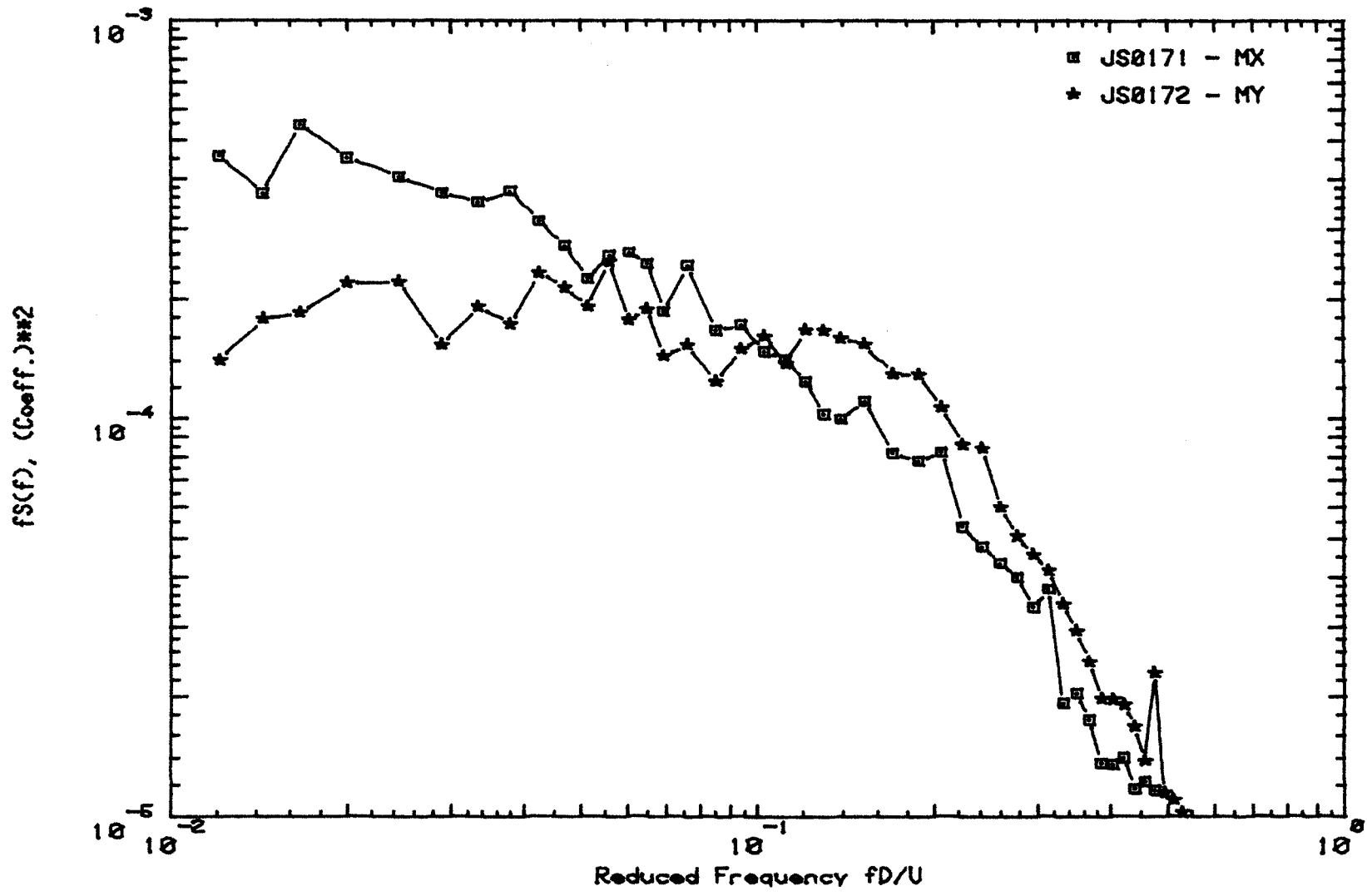
NON-DIMENSIONAL SPECTRUM F\*(F) OF NY VS. F\*D/U : D = 5.000 IN.  
U = 40.47 FPS  
Q\*A = .8643 LBS  
Q\*A\*L = 13.83 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.9658E-01 RMS = .3059E-01 ROOT(AREA) = .2974E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.214E-03	.224	.741E-04	.547	.892E-05
.561E-03	.954E-05	.469E-01	.225E-03	.242	.632E-04	.565	.686E-05
.112E-02	.209E-04	.514E-01	.194E-03	.260	.486E-04	.592	.605E-05
.168E-02	.374E-04	.558E-01	.265E-03	.278	.389E-04	.610	.587E-05
.253E-02	.548E-04	.603E-01	.222E-03	.296	.358E-04	.644	.428E-05
.365E-02	.854E-04	.648E-01	.208E-03	.314	.361E-04	.682	.464E-05
.477E-02	.172E-03	.693E-01	.162E-03	.332	.279E-04	.736	.457E-05
.589E-02	.140E-03	.760E-01	.177E-03	.350	.256E-04	.754	.403E-05
.702E-02	.105E-03	.850E-01	.148E-03	.368	.220E-04	.808	.455E-05
.814E-02	.180E-03	.940E-01	.153E-03	.386	.188E-04	.826	.453E-05
.982E-02	.272E-03	.103	.141E-03	.404	.179E-04	.880	.274E-05
.121E-01	.262E-03	.112	.158E-03	.422	.152E-04	.898	.111E-05
.143E-01	.168E-03	.121	.159E-03	.440	.130E-04	.952	.622E-06
.166E-01	.251E-03	.130	.135E-03	.458	.127E-04	.970	.364E-06
.199E-01	.299E-03	.139	.137E-03	.476	.210E-04	1.02	.335E-06
.244E-01	.257E-03	.152	.121E-03	.494	.852E-05	1.04	.320E-06
.289E-01	.261E-03	.170	.119E-03	.512	.951E-05	1.10	.226E-06
.334E-01	.253E-03	.188	.988E-04	.530	.826E-05	1.11	.219E-06
.379E-01	.214E-03	.206	.944E-04				

RUN NO. 17 WIND DIRECTION 50 Deg. VEL. U = 40.4 fps



POWER SPECTRAL FILE JS0171

TIME 19:19 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.45 FPS  
DIRECTION: 50

RUN NO. 17  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN,  
U = 40.45 FPS  
Q\*A = .8635 LBS  
Q\*A\*L = 13.82 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1683 RMS = .3982E-01 ROOT(AREA) = .3939E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.314E-03	.224	.536E-04	.548	.695E-05
.561E-03	.733E-04	.469E-01	.272E-03	.242	.477E-04	.566	.670E-05
.112E-02	.682E-04	.514E-01	.225E-03	.260	.433E-04	.593	.628E-05
.168E-02	.115E-03	.559E-01	.257E-03	.278	.399E-04	.611	.614E-05
.253E-02	.220E-03	.604E-01	.261E-03	.296	.336E-04	.665	.515E-05
.365E-02	.240E-03	.649E-01	.246E-03	.314	.373E-04	.682	.468E-05
.477E-02	.324E-03	.693E-01	.186E-03	.332	.192E-04	.736	.483E-05
.590E-02	.495E-03	.761E-01	.243E-03	.350	.203E-04	.754	.443E-05
.702E-02	.381E-03	.851E-01	.167E-03	.368	.175E-04	.808	.478E-05
.814E-02	.294E-03	.941E-01	.172E-03	.386	.136E-04	.826	.516E-05
.983E-02	.420E-03	.103	.147E-03	.404	.136E-04	.880	.373E-05
.121E-01	.456E-03	.112	.141E-03	.422	.141E-04	.898	.201E-05
.143E-01	.368E-03	.121	.124E-03	.440	.118E-04	.952	.165E-05
.166E-01	.546E-03	.130	.103E-03	.458	.123E-04	.970	.882E-06
.199E-01	.452E-03	.139	.995E-04	.476	.116E-04	1.02	.438E-06
.244E-01	.404E-03	.152	.111E-03	.494	.905E-05	1.04	.432E-06
.289E-01	.369E-03	.170	.820E-04	.512	.871E-05	1.10	.344E-06
.334E-01	.350E-03	.188	.781E-04	.530	.871E-05	1.11	.308E-06
.379E-01	.374E-03	.206	.826E-04				



POWER SPECTRAL FILE JS0172

TIME 19:19 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.45 FPS RUN NO. 17  
 DIRECTION: 50 CHANNEL MY IN Coeff. UNITS

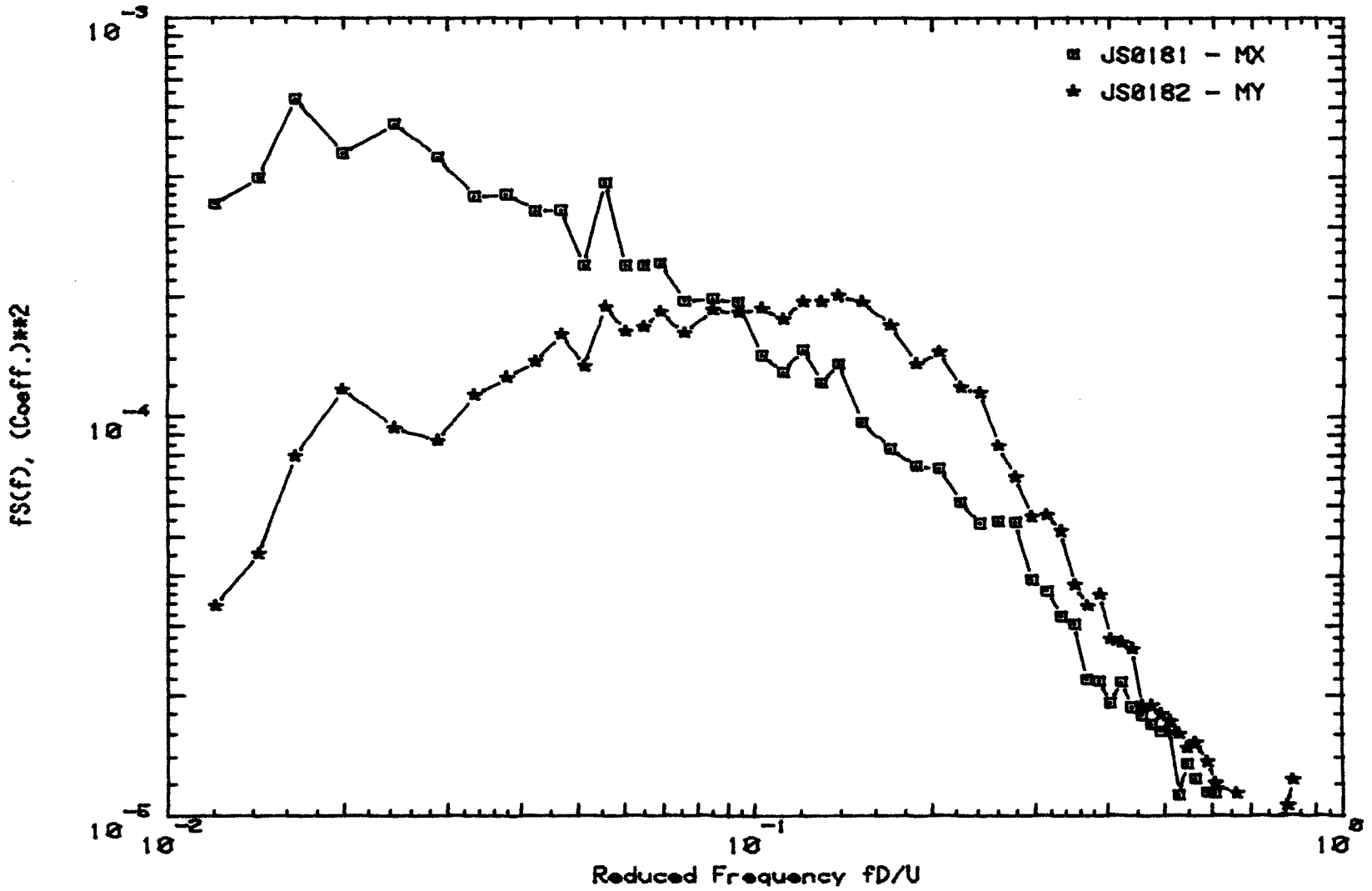
NON-DIMENSIONAL SPECTRUM F\*S(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.45 FPS  
 Q\*A = .8635 LBS  
 Q\*A\*L = 13.82 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.5860E-01 RMS = .2636E-01 ROOT(AREA) = .2621E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.424E-01	.232E-03	.224	.858E-04	.548	.918E-05
.561E-03	.478E-05	.469E-01	.213E-03	.242	.842E-04	.566	.972E-05
.112E-02	.213E-04	.514E-01	.192E-03	.260	.598E-04	.593	.880E-05
.168E-02	.274E-04	.559E-01	.248E-03	.278	.507E-04	.611	.754E-05
.253E-02	.315E-04	.604E-01	.177E-03	.296	.456E-04	.665	.672E-05
.365E-02	.554E-04	.649E-01	.188E-03	.314	.416E-04	.682	.622E-05
.477E-02	.613E-04	.693E-01	.144E-03	.332	.342E-04	.736	.559E-05
.590E-02	.914E-04	.761E-01	.153E-03	.350	.292E-04	.754	.586E-05
.702E-02	.674E-04	.851E-01	.124E-03	.368	.245E-04	.808	.705E-05
.814E-02	.815E-04	.941E-01	.149E-03	.386	.197E-04	.826	.676E-05
.983E-02	.962E-04	.103	.161E-03	.404	.196E-04	.880	.359E-05
.121E-01	.140E-03	.112	.137E-03	.422	.190E-04	.898	.143E-05
.143E-01	.178E-03	.121	.167E-03	.440	.169E-04	.952	.795E-06
.166E-01	.184E-03	.130	.167E-03	.458	.138E-04	.970	.573E-06
.199E-01	.219E-03	.139	.159E-03	.476	.230E-04	1.02	.505E-06
.244E-01	.221E-03	.152	.154E-03	.494	.115E-04	1.04	.478E-06
.289E-01	.153E-03	.170	.129E-03	.512	.110E-04	1.10	.344E-06
.334E-01	.191E-03	.188	.129E-03	.530	.102E-04	1.11	.326E-06
.379E-01	.173E-03	.206	.107E-03				

RUN NO. 18 WIND DIRECTION 60 Deg. VEL. U = 40.6 fps



POWER SPECTRAL FILE JS0181

TIME 19:27 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.58 FPS RUN NO. 18  
 DIRECTION: 60 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.58 FPS  
 Q\*A = .8691 LBS  
 Q\*A\*L = 13.91 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1587 RMS = .3989E-01 ROOT(AREA) = .3948E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.328E-03	.224	.611E-04	.546	.135E-04
.560E-03	.199E-04	.467E-01	.329E-03	.242	.540E-04	.564	.124E-04
.112E-02	.157E-03	.512E-01	.239E-03	.259	.547E-04	.591	.115E-04
.168E-02	.102E-03	.557E-01	.386E-03	.277	.545E-04	.609	.114E-04
.252E-02	.175E-03	.602E-01	.239E-03	.295	.389E-04	.662	.949E-05
.364E-02	.276E-03	.646E-01	.239E-03	.313	.366E-04	.680	.956E-05
.476E-02	.276E-03	.691E-01	.242E-03	.331	.316E-04	.734	.972E-05
.588E-02	.294E-03	.758E-01	.194E-03	.349	.301E-04	.752	.809E-05
.700E-02	.274E-03	.848E-01	.198E-03	.367	.220E-04	.806	.935E-05
.812E-02	.372E-03	.937E-01	.194E-03	.385	.218E-04	.824	.875E-05
.979E-02	.499E-03	.103	.142E-03	.403	.191E-04	.877	.632E-05
.120E-01	.341E-03	.112	.129E-03	.421	.216E-04	.895	.354E-05
.143E-01	.396E-03	.121	.147E-03	.439	.187E-04	.949	.306E-05
.165E-01	.625E-03	.130	.121E-03	.456	.179E-04	.967	.141E-05
.199E-01	.457E-03	.139	.135E-03	.474	.170E-04	1.02	.716E-06
.243E-01	.540E-03	.152	.966E-04	.492	.163E-04	1.04	.646E-06
.288E-01	.446E-03	.170	.829E-04	.510	.164E-04	1.09	.502E-06
.333E-01	.356E-03	.188	.749E-04	.528	.113E-04	1.11	.424E-06
.378E-01	.361E-03	.206	.743E-04				

POWER SPECTRAL FILE JS0182

TIME 19:27 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.58 FPS RUN NO. 18  
 DIRECTION: 60 CHANNEL MY IN Coeff. UNITS

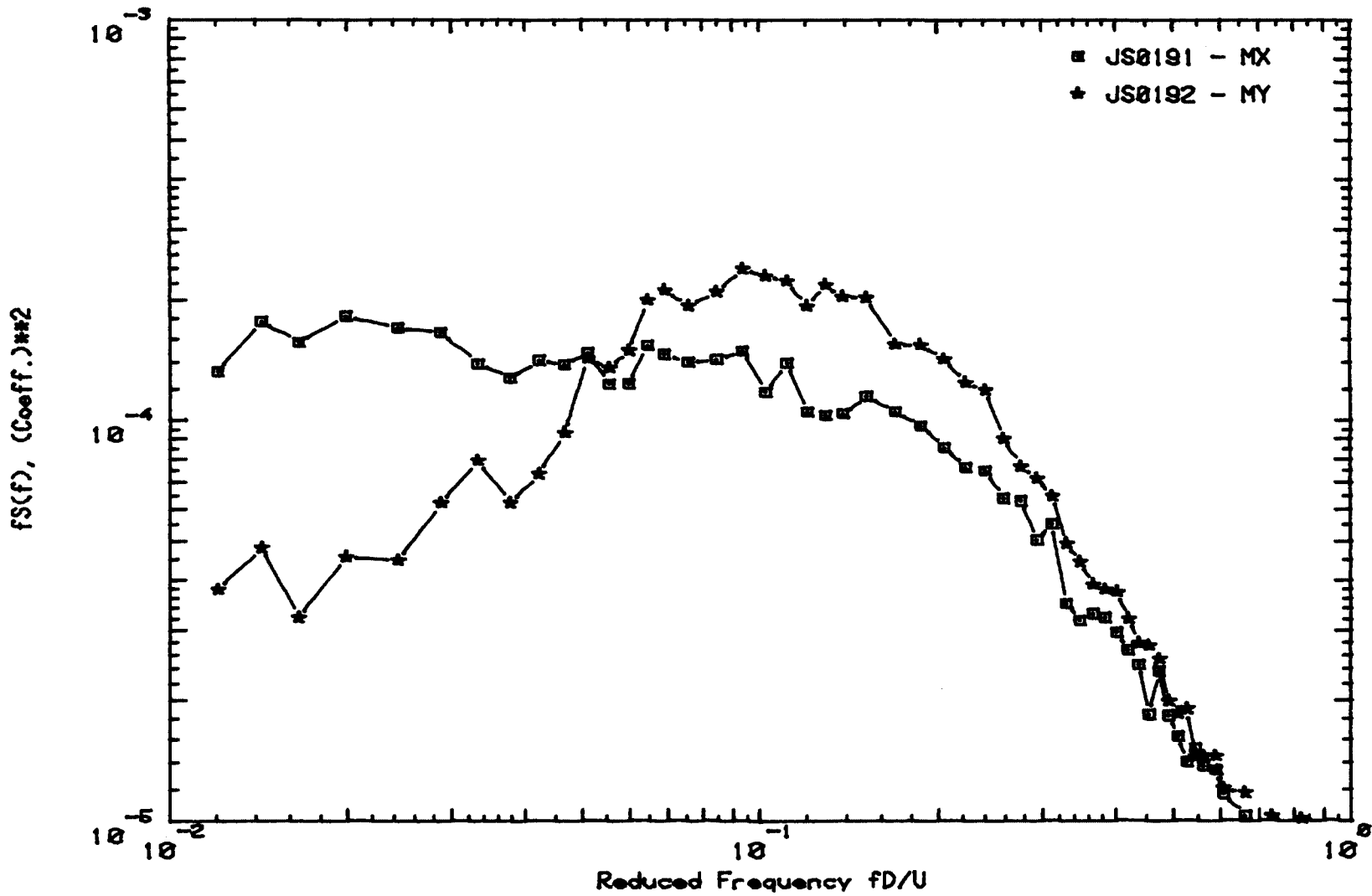
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.58 FPS  
 Q\*A = .8691 LBS  
 Q\*A\*L = 13.91 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1079E-01 RMS = .2231E-01 ROOT(AREA) = .2219E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.137E-03	.224	.118E-03	.546	.148E-04
.560E-03	.179E-05	.467E-01	.161E-03	.242	.115E-03	.564	.152E-04
.112E-02	.891E-05	.512E-01	.133E-03	.259	.844E-04	.591	.137E-04
.168E-02	.493E-05	.557E-01	.188E-03	.277	.705E-04	.609	.121E-04
.252E-02	.595E-05	.602E-01	.163E-03	.295	.562E-04	.662	.114E-04
.364E-02	.125E-04	.646E-01	.168E-03	.313	.567E-04	.680	.966E-05
.476E-02	.194E-04	.691E-01	.183E-03	.331	.517E-04	.734	.980E-05
.588E-02	.285E-04	.758E-01	.162E-03	.349	.378E-04	.752	.904E-05
.700E-02	.289E-04	.848E-01	.185E-03	.367	.335E-04	.806	.106E-04
.812E-02	.197E-04	.937E-01	.182E-03	.385	.358E-04	.824	.123E-04
.979E-02	.369E-04	.103	.186E-03	.403	.278E-04	.877	.666E-05
.120E-01	.336E-04	.112	.175E-03	.421	.272E-04	.895	.212E-05
.143E-01	.453E-04	.121	.194E-03	.439	.262E-04	.949	.124E-05
.165E-01	.794E-04	.130	.194E-03	.456	.188E-04	.967	.817E-06
.199E-01	.117E-03	.139	.201E-03	.474	.188E-04	1.02	.698E-06
.243E-01	.936E-04	.152	.193E-03	.492	.180E-04	1.04	.640E-06
.288E-01	.868E-04	.170	.169E-03	.510	.173E-04	1.09	.457E-06
.333E-01	.113E-03	.188	.135E-03	.528	.161E-04	1.11	.472E-06
.378E-01	.125E-03	.206	.145E-03				

RUN NO. 19 WIND DIRECTION 70 Deg. VEL. U = 40.6 fps



POWER SPECTRAL FILE JS0191

TIME 19:37 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.61 FPS RUN NO. 19  
 DIRECTION: 70 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.61 FPS  
 Q\*A = .8702 LBS  
 Q\*A\*L = 13.92 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1011 RMS = .2547E-01 ROOT(AREA) = .2523E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.141E-03	.223	.760E-04	.546	.152E-04
.559E-03	.194E-04	.467E-01	.138E-03	.241	.747E-04	.564	.137E-04
.112E-02	.200E-04	.512E-01	.148E-03	.259	.638E-04	.590	.134E-04
.168E-02	.228E-04	.557E-01	.123E-03	.277	.630E-04	.608	.117E-04
.252E-02	.452E-04	.601E-01	.123E-03	.295	.504E-04	.662	.103E-04
.364E-02	.599E-04	.646E-01	.154E-03	.313	.553E-04	.680	.953E-05
.475E-02	.539E-04	.691E-01	.146E-03	.331	.348E-04	.734	.814E-05
.587E-02	.107E-03	.758E-01	.140E-03	.349	.316E-04	.751	.811E-05
.699E-02	.147E-03	.847E-01	.142E-03	.367	.329E-04	.805	.883E-05
.811E-02	.112E-03	.937E-01	.149E-03	.385	.321E-04	.823	.831E-05
.979E-02	.120E-03	.103	.118E-03	.402	.296E-04	.877	.611E-05
.120E-01	.132E-03	.112	.139E-03	.420	.268E-04	.895	.363E-05
.143E-01	.176E-03	.121	.105E-03	.438	.246E-04	.948	.344E-05
.165E-01	.157E-03	.129	.103E-03	.456	.184E-04	.966	.149E-05
.199E-01	.182E-03	.138	.104E-03	.474	.237E-04	1.02	.770E-06
.243E-01	.170E-03	.152	.115E-03	.492	.183E-04	1.04	.671E-06
.288E-01	.165E-03	.170	.105E-03	.510	.163E-04	1.09	.549E-06
.333E-01	.139E-03	.188	.966E-04	.528	.141E-04	1.11	.462E-06
.378E-01	.128E-03	.206	.853E-04				

POWER SPECTRAL FILE JS0192

TIME 19:37 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.61 FPS  
DIRECTION: 70

RUN NO. 19  
CHANNEL MY IN Coeff. UNITS

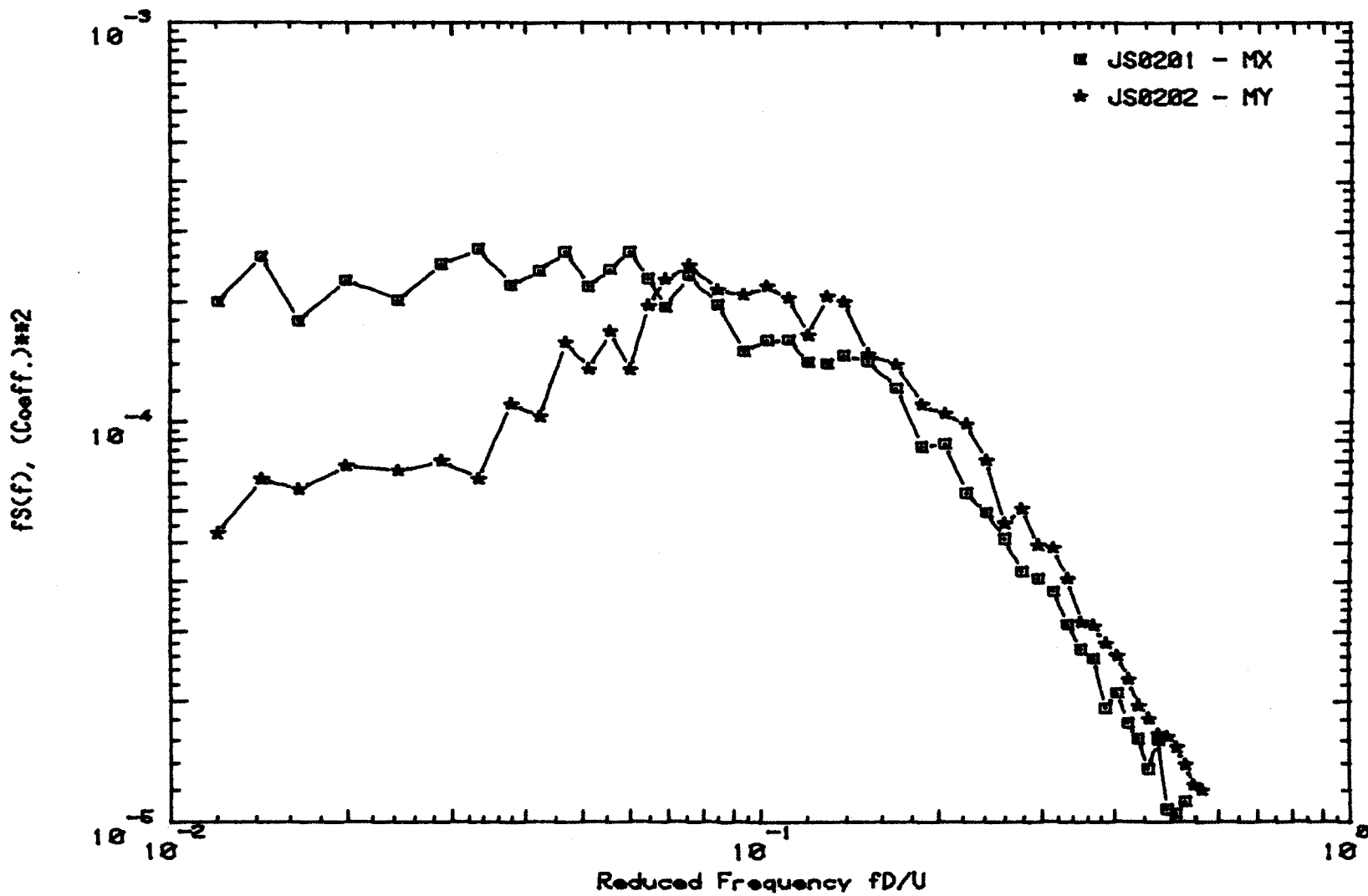
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.61 FPS  
Q\*A = .8702 LBS  
Q\*A\*L = 13.92 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1527E-01 RMS = .2083E-01 ROOT(AREA) = .2094E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.736E-04	.223	.124E-03	.546	.145E-04
.559E-03	.832E-06	.467E-01	.931E-04	.241	.119E-03	.564	.145E-04
.112E-02	.184E-05	.512E-01	.143E-03	.259	.899E-04	.590	.145E-04
.168E-02	.321E-05	.557E-01	.135E-03	.277	.766E-04	.608	.121E-04
.252E-02	.391E-05	.601E-01	.149E-03	.295	.715E-04	.662	.118E-04
.364E-02	.545E-05	.646E-01	.199E-03	.313	.647E-04	.680	.927E-05
.475E-02	.628E-05	.691E-01	.211E-03	.331	.493E-04	.734	.103E-04
.587E-02	.880E-05	.758E-01	.193E-03	.349	.442E-04	.751	.998E-05
.699E-02	.131E-04	.847E-01	.210E-03	.367	.389E-04	.805	.986E-05
.811E-02	.147E-04	.937E-01	.239E-03	.385	.378E-04	.823	.101E-04
.979E-02	.222E-04	.103	.229E-03	.402	.373E-04	.877	.582E-05
.120E-01	.378E-04	.112	.222E-03	.420	.319E-04	.895	.241E-05
.143E-01	.480E-04	.121	.192E-03	.438	.278E-04	.948	.151E-05
.165E-01	.322E-04	.129	.218E-03	.456	.274E-04	.966	.989E-06
.199E-01	.456E-04	.138	.203E-03	.474	.254E-04	1.02	.835E-06
.243E-01	.448E-04	.152	.202E-03	.492	.198E-04	1.04	.754E-06
.288E-01	.621E-04	.170	.155E-03	.510	.186E-04	1.09	.528E-06
.333E-01	.791E-04	.188	.154E-03	.528	.190E-04	1.11	.557E-06
.378E-01	.620E-04	.206	.142E-03				

RUN NO. 28 WIND DIRECTION 88 Deg. VEL. U = 48.7 fps





POWER SPECTRAL FILE JS0201

TIME 19:45 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.66 FPS  
DIRECTION: 80

RUN NO. 20  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN,  
U = 40.66 FPS  
Q\*A = .8724 LBS  
Q\*A\*L = 13.96 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.9545E-01 RMS = .2899E-01 ROOT(AREA) = .2876E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.239E-03	.223	.665E-04	.545	.925E-05
.559E-03	.100E-04	.466E-01	.267E-03	.241	.595E-04	.563	.853E-05
.112E-02	.252E-04	.511E-01	.219E-03	.259	.512E-04	.590	.813E-05
.168E-02	.182E-04	.556E-01	.241E-03	.277	.424E-04	.608	.820E-05
.251E-02	.605E-04	.601E-01	.267E-03	.295	.407E-04	.661	.637E-05
.363E-02	.762E-04	.645E-01	.229E-03	.313	.379E-04	.679	.623E-05
.475E-02	.904E-04	.690E-01	.194E-03	.330	.312E-04	.733	.640E-05
.587E-02	.106E-03	.757E-01	.232E-03	.348	.270E-04	.751	.599E-05
.698E-02	.159E-03	.846E-01	.197E-03	.366	.256E-04	.804	.609E-05
.810E-02	.137E-03	.936E-01	.150E-03	.384	.192E-04	.822	.523E-05
.978E-02	.161E-03	.103	.160E-03	.402	.210E-04	.876	.395E-05
.120E-01	.199E-03	.111	.160E-03	.420	.178E-04	.894	.240E-05
.142E-01	.259E-03	.120	.141E-03	.438	.162E-04	.947	.229E-05
.165E-01	.179E-03	.129	.140E-03	.456	.136E-04	.965	.111E-05
.198E-01	.226E-03	.138	.147E-03	.473	.161E-04	1.02	.679E-06
.243E-01	.201E-03	.152	.142E-03	.491	.108E-04	1.04	.521E-06
.288E-01	.248E-03	.170	.121E-03	.509	.105E-04	1.09	.414E-06
.332E-01	.271E-03	.187	.868E-04	.527	.113E-04	1.11	.390E-06
.377E-01	.220E-03	.205	.885E-04				

POWER SPECTRAL FILE JS0202

TIME 19:45 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.66 FPS  
DIRECTION: 80

RUN NO. 20  
CHANNEL MY IN Coeff. UNITS

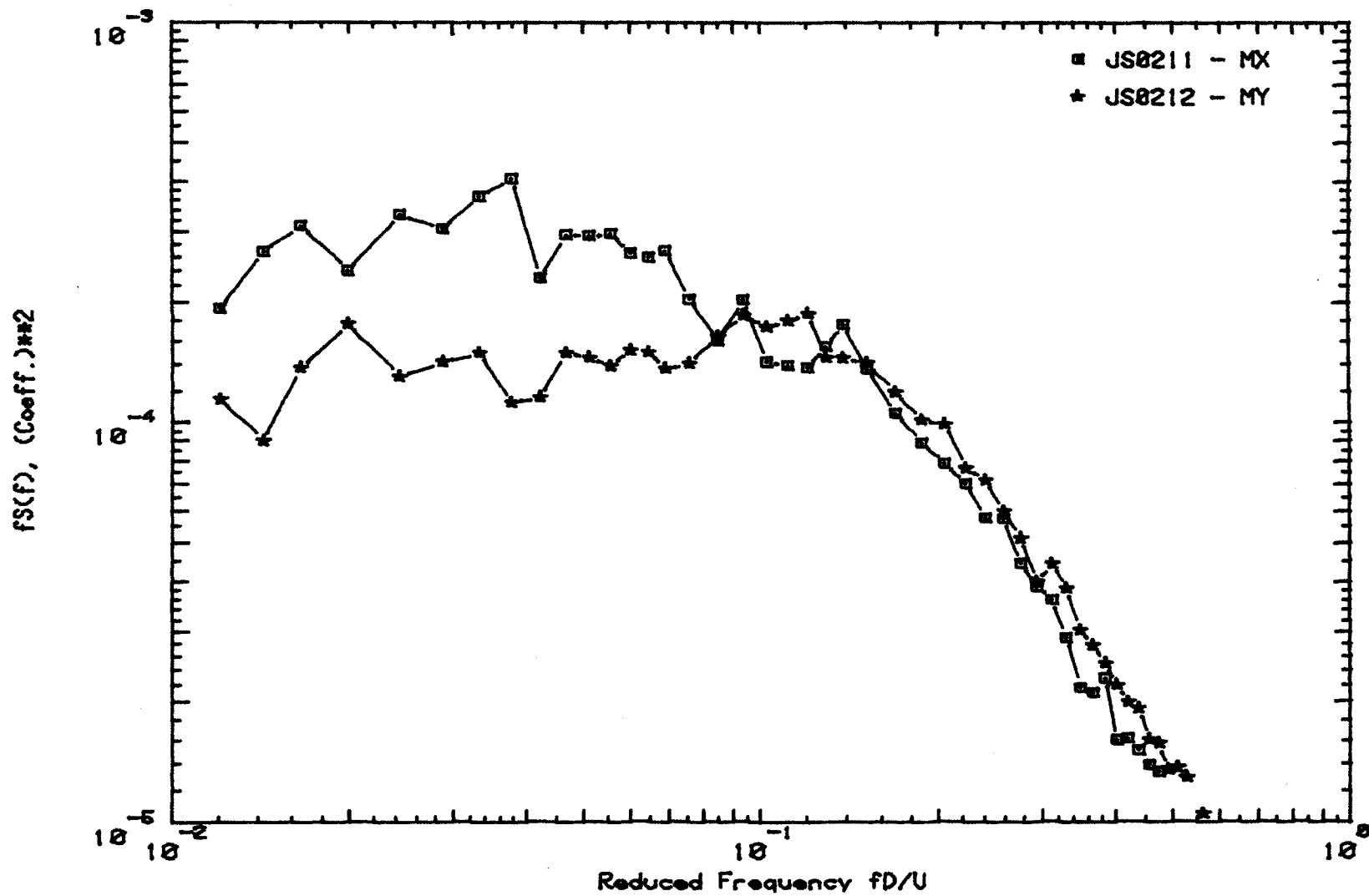
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.66 FPS  
Q\*A = .8724 LBS  
Q\*A\*L = 13.96 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .4671E-01 RMS = .2183E-01 ROOT(AREA) = .2178E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.103E-03	.223	.986E-04	.545	.124E-04
.559E-03	.168E-05	.466E-01	.158E-03	.241	.802E-04	.563	.120E-04
.112E-02	.477E-05	.511E-01	.135E-03	.259	.559E-04	.590	.974E-05
.168E-02	.975E-05	.556E-01	.168E-03	.277	.607E-04	.608	.933E-05
.251E-02	.962E-05	.601E-01	.135E-03	.295	.493E-04	.661	.870E-05
.363E-02	.160E-04	.645E-01	.195E-03	.313	.486E-04	.679	.780E-05
.475E-02	.162E-04	.690E-01	.227E-03	.330	.405E-04	.733	.693E-05
.587E-02	.254E-04	.757E-01	.246E-03	.348	.316E-04	.751	.632E-05
.698E-02	.385E-04	.846E-01	.214E-03	.366	.309E-04	.804	.718E-05
.810E-02	.316E-04	.936E-01	.207E-03	.384	.280E-04	.822	.830E-05
.978E-02	.372E-04	.103	.218E-03	.402	.260E-04	.876	.432E-05
.120E-01	.526E-04	.111	.204E-03	.420	.228E-04	.894	.178E-05
.142E-01	.719E-04	.120	.164E-03	.438	.195E-04	.947	.119E-05
.165E-01	.677E-04	.129	.206E-03	.456	.181E-04	.965	.778E-06
.198E-01	.776E-04	.138	.199E-03	.473	.166E-04	1.02	.631E-06
.243E-01	.753E-04	.152	.148E-03	.491	.163E-04	1.04	.544E-06
.288E-01	.798E-04	.170	.139E-03	.509	.154E-04	1.09	.423E-06
.332E-01	.718E-04	.187	.110E-03	.527	.139E-04	1.11	.420E-06
.377E-01	.111E-03	.205	.105E-03				

RUN NO. 21 WIND DIRECTION 90 Deg. VEL. U = 48.6 fps



POWER SPECTRAL FILE JS0211

TIME 19:53 DAY 29 OF 1985

CONFIGURATION A WIND VEL : 40.50 FPS RUN NO. 21  
 DIRECTION: 90 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F#D/U : D = 5.000 IN.  
 U = 40.50 FPS  
 Q\*A = .0672 LBS  
 Q\*A\*L = 13.91 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.0 SEC.

MEAN = -.9953E-01 RMS = .3172E-01 ROOT(AREA) = .3208E-01

F#D/U	F*(F)	F#D/U	F*(F)	F#D/U	F*(F)	F#D/U	F*(F)
0.00	0.00	.423E-01	.230E-03	.224	.702E-04	.546	.775E-05
.560E-03	.825E-05	.467E-01	.294E-03	.241	.575E-04	.564	.752E-05
.112E-02	.292E-04	.512E-01	.293E-03	.259	.574E-04	.591	.712E-05
.168E-02	.628E-04	.557E-01	.296E-03	.277	.443E-04	.609	.740E-05
.252E-02	.847E-04	.602E-01	.265E-03	.295	.388E-04	.662	.587E-05
.364E-02	.110E-03	.646E-01	.258E-03	.313	.359E-04	.680	.560E-05
.476E-02	.115E-03	.691E-01	.267E-03	.331	.288E-04	.734	.479E-05
.588E-02	.233E-03	.758E-01	.203E-03	.349	.217E-04	.752	.442E-05
.700E-02	.174E-03	.848E-01	.160E-03	.367	.210E-04	.806	.464E-05
.812E-02	.210E-03	.937E-01	.202E-03	.385	.229E-04	.824	.433E-05
.977E-02	.222E-03	.103	.141E-03	.403	.160E-04	.877	.354E-05
.120E-01	.192E-03	.112	.138E-03	.421	.162E-04	.895	.209E-05
.143E-01	.267E-03	.121	.137E-03	.439	.152E-04	.949	.170E-05
.165E-01	.309E-03	.130	.155E-03	.456	.139E-04	.967	.939E-06
.197E-01	.239E-03	.139	.176E-03	.474	.133E-04	1.02	.489E-06
.243E-01	.330E-03	.152	.136E-03	.492	.962E-05	1.04	.450E-06
.288E-01	.304E-03	.170	.105E-03	.510	.874E-05	1.09	.326E-06
.333E-01	.367E-03	.188	.884E-04	.528	.943E-05	1.11	.314E-06
.378E-01	.406E-03	.206	.788E-04				

POWER SPECTRAL FILE JS0212

TIME 19153 DAY 09 OF 1985

CONFIGURATION A WIND VEL : 40.58 FPS  
DIRECTION: 70

RUN NO. 21  
CHANNEL MY IN Coeff. UNITS

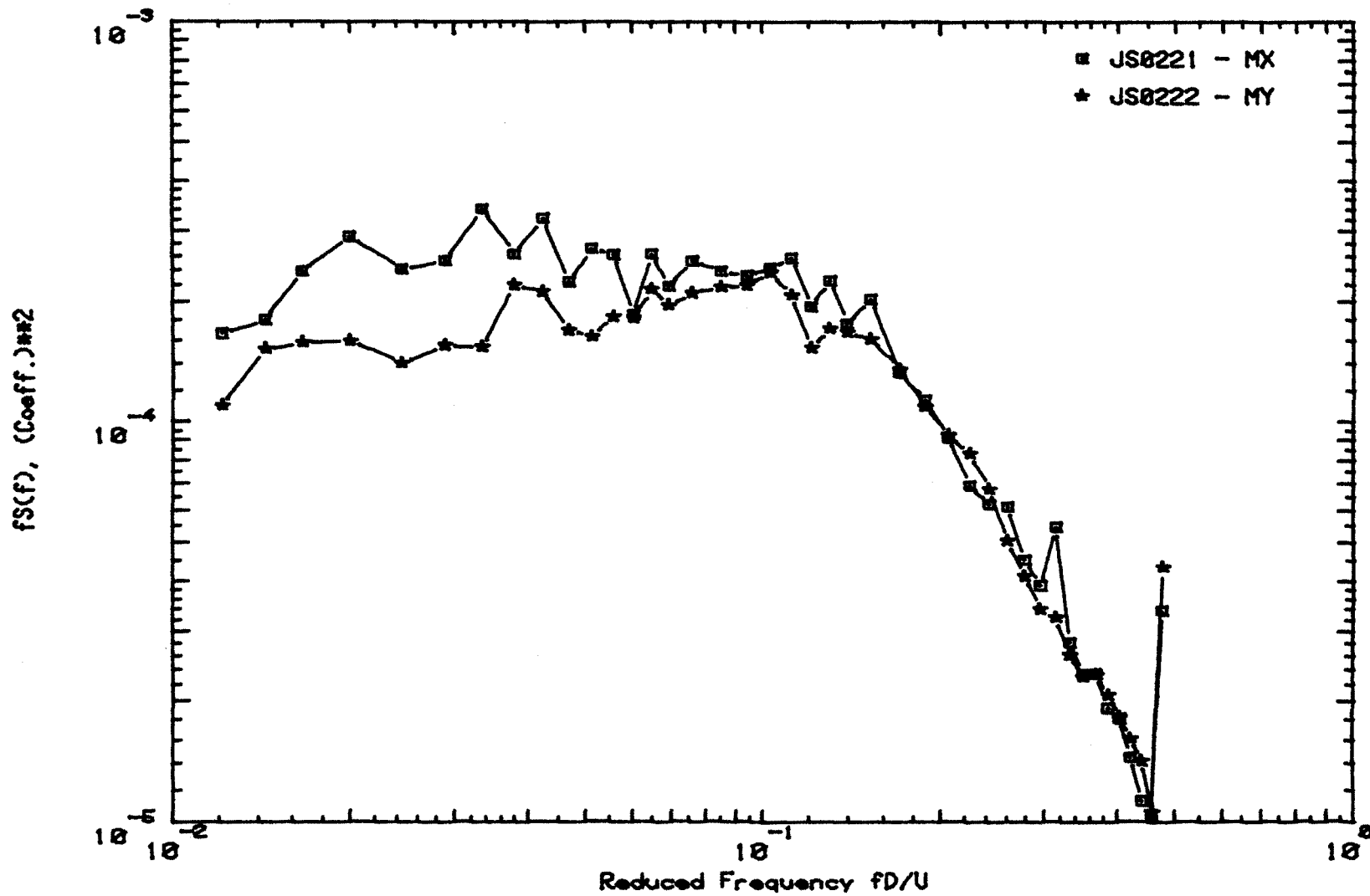
NON-DIMENSIONAL SPECTRUM F\*S(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.58 FPS  
Q\*A = .8692 LBS  
Q\*A\*L = 13.91 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 C/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .6903E-01 RMS = .2392E-01 ROOT(AREA) = .2376E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.423E-01	.115E-03	.224	.767E-04	.546	.981E-05
.560E-03	.437E-05	.467E-01	.149E-03	.241	.715E-04	.564	.105E-04
.112E-02	.881E-05	.512E-01	.145E-03	.259	.597E-04	.571	.933E-05
.168E-02	.177E-04	.557E-01	.138E-03	.277	.514E-04	.609	.791E-05
.252E-02	.371E-04	.602E-01	.152E-03	.295	.399E-04	.662	.600E-05
.364E-02	.379E-04	.646E-01	.149E-03	.313	.442E-04	.680	.650E-05
.476E-02	.511E-04	.671E-01	.136E-03	.331	.384E-04	.734	.593E-05
.588E-02	.652E-04	.758E-01	.140E-03	.349	.302E-04	.752	.600E-05
.700E-02	.806E-04	.848E-01	.164E-03	.367	.276E-04	.806	.630E-05
.812E-02	.748E-04	.937E-01	.185E-03	.385	.250E-04	.824	.616E-05
.979E-02	.916E-04	.103	.173E-03	.403	.220E-04	.877	.347E-05
.120E-01	.114E-03	.112	.179E-03	.421	.199E-04	.895	.167E-05
.143E-01	.900E-04	.121	.186E-03	.439	.192E-04	.949	.109E-05
.165E-01	.136E-03	.130	.145E-03	.456	.161E-04	.967	.731E-06
.199E-01	.176E-03	.139	.144E-03	.474	.157E-04	1.02	.542E-06
.243E-01	.130E-03	.152	.141E-03	.492	.135E-04	1.04	.417E-06
.280E-01	.141E-03	.170	.119E-03	.510	.137E-04	1.09	.312E-06
.333E-01	.149E-03	.188	.101E-03	.528	.130E-04	1.11	.319E-06
.378E-01	.112E-03	.206	.986E-04				

RUN NO. 22 WIND DIRECTION 100 Deg. VEL. U = 40.4 fps



POWER SPECTRAL FILE JC0221

TIME 20: 2 DAY 99 OF 1985

CONFIGURATION A

WIND VEL : 40.43 FPS  
DIRECTION: 100

RUN NO. 22  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.43 FPS  
Q\*A = .8625 LBS  
Q\*A\*L = 13.00 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.8390E-01 RMS = .3009E-01 ROOT(AREA) = .2762E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.322E-03	.224	.691E-04	.548	.654E-05
.562E-03	.780E-05	.469E-01	.223E-03	.242	.622E-04	.566	.674E-05
.112E-02	.137E-04	.514E-01	.271E-03	.260	.613E-04	.593	.610E-05
.169E-02	.179E-04	.559E-01	.261E-03	.278	.452E-04	.611	.636E-05
.253E-02	.557E-04	.604E-01	.185E-03	.296	.389E-04	.665	.439E-05
.365E-02	.806E-04	.649E-01	.263E-03	.314	.547E-04	.683	.392E-05
.478E-02	.722E-04	.674E-01	.218E-03	.332	.281E-04	.737	.405E-05
.590E-02	.110E-03	.761E-01	.252E-03	.350	.234E-04	.755	.345E-05
.702E-02	.812E-04	.851E-01	.237E-03	.368	.234E-04	.809	.325E-05
.815E-02	.133E-03	.941E-01	.231E-03	.386	.192E-04	.827	.302E-05
.983E-02	.107E-03	.103	.242E-03	.404	.181E-04	.881	.234E-05
.121E-01	.166E-03	.112	.256E-03	.422	.145E-04	.899	.158E-05
.143E-01	.179E-03	.121	.193E-03	.440	.113E-04	.953	.120E-05
.166E-01	.237E-03	.130	.225E-03	.458	.104E-04	.971	.651E-06
.199E-01	.290E-03	.139	.176E-03	.476	.337E-04	1.02	.390E-06
.244E-01	.240E-03	.153	.202E-03	.494	.290E-05	1.04	.330E-06
.289E-01	.252E-03	.171	.132E-03	.512	.815E-05	1.10	.251E-06
.334E-01	.339E-03	.188	.113E-03	.530	.839E-05	1.11	.286E-06
.379E-01	.262E-03	.206	.914E-04				

POWER SPECTRAL FILE JS0222

TIME 20: 2 DAY 09 OF 1905

CONFIGURATION A WIND VEL : 40.43 FPS  
DIRECTION: 100

RUN NO. 22  
CHANNEL HY IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HY VS. F#D/U : D = 5.000 IN.  
U = 40.43 FPS  
Q\*A = .0625 LBS  
Q\*A\*L = 13.00 LB\*IN

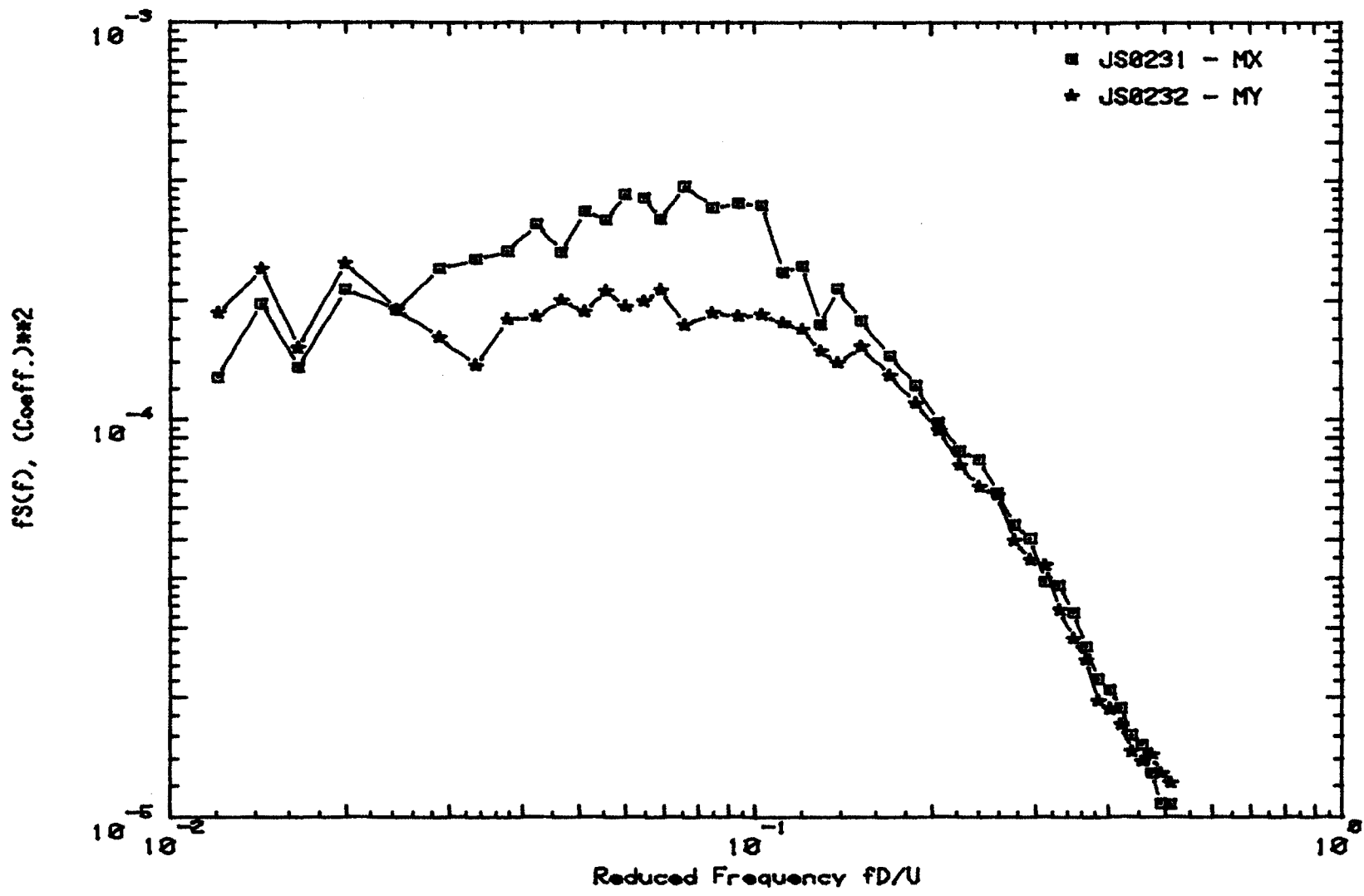
8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.0 SEC.

MEAN = .6269E-01 RMS = .2597E-01 ROOT(AREA) = .2560E-01

F#D/U	F*(F)	F#D/U	F*(F)	F#D/U	F*(F)	F#D/U	F*(F)
0.00	0.00	.424E-01	.211E-03	.224	.031E-04	.540	.000E-05
.562E-03	.814E-05	.469E-01	.169E-03	.242	.679E-04	.566	.625E-05
.112E-02	.106E-04	.514E-01	.163E-03	.260	.506E-04	.593	.643E-05
.169E-02	.209E-04	.559E-01	.183E-03	.278	.411E-04	.611	.502E-05
.253E-02	.447E-04	.604E-01	.182E-03	.296	.342E-04	.665	.467E-05
.365E-02	.583E-04	.649E-01	.215E-03	.314	.324E-04	.683	.327E-05
.478E-02	.412E-04	.694E-01	.195E-03	.332	.261E-04	.737	.410E-05
.590E-02	.918E-04	.761E-01	.210E-03	.350	.231E-04	.755	.404E-05
.702E-02	.465E-04	.851E-01	.217E-03	.368	.234E-04	.809	.434E-05
.815E-02	.797E-04	.941E-01	.219E-03	.386	.207E-04	.827	.443E-05
.983E-02	.811E-04	.103	.236E-03	.404	.183E-04	.881	.243E-05
.121E-01	.110E-03	.112	.207E-03	.422	.162E-04	.899	.106E-05
.143E-01	.152E-03	.121	.153E-03	.440	.142E-04	.953	.707E-06
.166E-01	.157E-03	.130	.171E-03	.458	.106E-04	.971	.519E-06
.199E-01	.159E-03	.139	.167E-03	.476	.433E-04	1.02	.451E-06
.244E-01	.140E-03	.153	.161E-03	.494	.298E-05	1.04	.362E-06
.289E-01	.155E-03	.171	.135E-03	.512	.221E-05	1.10	.230E-06
.334E-01	.153E-03	.188	.109E-03	.530	.065E-05	1.11	.253E-06
.379E-01	.219E-03	.206	.222E-04				



RUN NO. 23 WIND DIRECTION 110 Deg. VEL. U = 40.6 fps



POWER SPECTRAL FILE JS0231

TIME 20:10 DAY 29 OF 1985

CONFIGURATION A WIND VEL : 40.59 FPS  
DIRECTION: 110

RUN NO. 23  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.59 FPS  
Q\*A = .0626 LBS  
Q\*A\*L = 13.21 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.0 SEC.

MEAN = -.1023 RMS = .3121E-01 ROOT(AREA) = .3025E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.311E-03	.224	.032E-04	.546	.940E-05
.560E-03	.103E-04	.467E-01	.264E-03	.241	.723E-04	.564	.700E-05
.112E-02	.226E-04	.512E-01	.335E-03	.259	.654E-04	.521	.017E-05
.168E-02	.398E-04	.557E-01	.310E-03	.277	.545E-04	.608	.809E-05
.252E-02	.370E-04	.601E-01	.369E-03	.295	.504E-04	.662	.619E-05
.364E-02	.279E-04	.646E-01	.363E-03	.313	.371E-04	.680	.528E-05
.476E-02	.732E-04	.621E-01	.319E-03	.331	.383E-04	.734	.425E-05
.587E-02	.107E-03	.758E-01	.306E-03	.349	.327E-04	.752	.450E-05
.699E-02	.145E-03	.840E-01	.343E-03	.367	.269E-04	.805	.447E-05
.811E-02	.125E-03	.937E-01	.350E-03	.385	.222E-04	.823	.379E-05
.979E-02	.110E-03	.103	.345E-03	.403	.208E-04	.877	.265E-05
.120E-01	.128E-03	.112	.234E-03	.420	.188E-04	.895	.155E-05
.143E-01	.195E-03	.121	.243E-03	.438	.161E-04	.949	.134E-05
.165E-01	.135E-03	.130	.173E-03	.456	.152E-04	.967	.804E-06
.199E-01	.213E-03	.138	.214E-03	.474	.129E-04	1.02	.524E-06
.243E-01	.188E-03	.152	.177E-03	.492	.100E-04	1.04	.409E-06
.288E-01	.239E-03	.170	.144E-03	.510	.108E-04	1.09	.376E-06
.333E-01	.254E-03	.188	.121E-03	.528	.919E-05	1.11	.326E-06
.378E-01	.266E-03	.206	.903E-04				

POWER SPECTRAL FILE JS0232

TIME 20:10 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.59 FPS RUN NO. 23  
 DIRECTION: 110 CHANNEL HY IN Coeff. UNITS

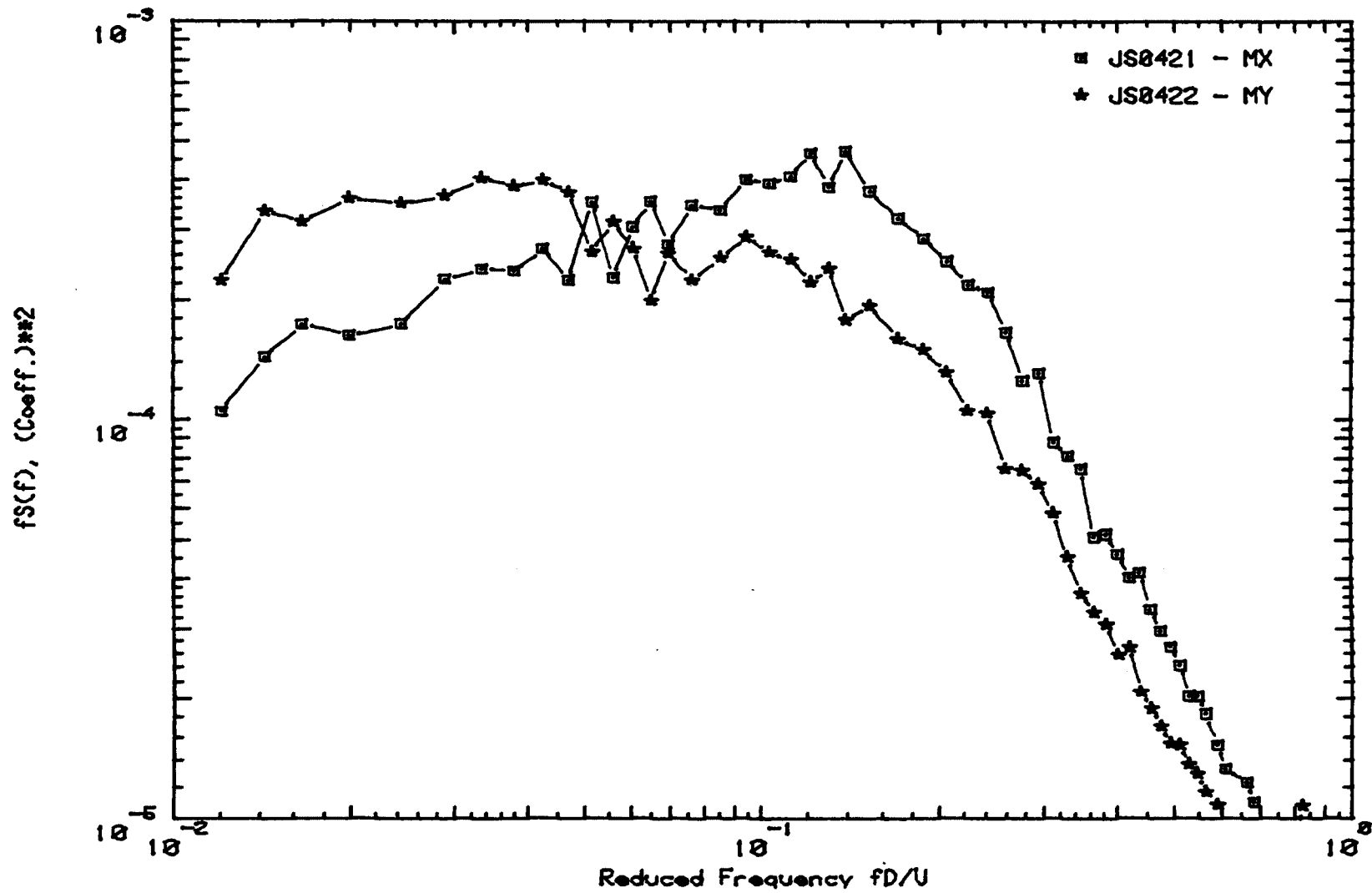
NON-DIMENSIONAL SPECTRUM F\*S(F) OF HY VS. F\*D/U : D = 5.000 IN.  
 U = 40.59 FPS  
 Q\*A = .8696 LBS  
 Q\*A\*L = 13.91 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1041 RMS = .2853E-01 ROOT(AREA) = .2759E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.422E-01	.182E-03	.224	.768E-04	.546	.856E-05
.560E-03	.139E-04	.467E-01	.179E-03	.241	.678E-04	.564	.856E-05
.112E-02	.309E-04	.512E-01	.187E-03	.259	.646E-04	.591	.816E-05
.168E-02	.507E-04	.557E-01	.211E-03	.277	.498E-04	.608	.669E-05
.252E-02	.413E-04	.601E-01	.172E-03	.295	.444E-04	.662	.566E-05
.364E-02	.400E-04	.646E-01	.198E-03	.313	.430E-04	.680	.536E-05
.476E-02	.654E-04	.691E-01	.212E-03	.331	.332E-04	.734	.482E-05
.587E-02	.954E-04	.758E-01	.173E-03	.349	.281E-04	.752	.532E-05
.699E-02	.128E-03	.848E-01	.185E-03	.367	.248E-04	.805	.452E-05
.811E-02	.159E-03	.937E-01	.181E-03	.385	.195E-04	.823	.555E-05
.979E-02	.170E-03	.103	.183E-03	.403	.186E-04	.877	.319E-05
.120E-01	.185E-03	.112	.175E-03	.420	.171E-04	.895	.137E-05
.143E-01	.239E-03	.121	.168E-03	.438	.146E-04	.949	.820E-06
.165E-01	.152E-03	.130	.148E-03	.456	.138E-04	.967	.593E-06
.199E-01	.247E-03	.138	.139E-03	.474	.144E-04	1.02	.528E-06
.243E-01	.189E-03	.152	.153E-03	.492	.129E-04	1.04	.405E-06
.288E-01	.160E-03	.170	.129E-03	.510	.122E-04	1.09	.306E-06
.333E-01	.137E-03	.188	.110E-03	.528	.951E-05	1.11	.278E-06
.378E-01	.178E-03	.206	.938E-04				

RUN NO. 42 WIND DIRECTION 120 Deg. VEL. U = 40.5 fps



POWER SPECTRAL FILE JS0421

TIME 22:33 DAY 100 OF 1905

CONFIGURATION A WIND VEL : 40.51 FPS  
DIRECTION: 120

RUN NO. 42  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.51 FPS  
Q\*A = .8663 LBS  
Q\*A\*L = 13.06 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1297 RMS = .3325E-01 ROOT(AREA) = .3252E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.260E-03	.224	.210E-03	.547	.202E-04
.561E-03	.751E-05	.468E-01	.223E-03	.242	.208E-03	.565	.183E-04
.112E-02	.211E-04	.513E-01	.351E-03	.260	.165E-03	.592	.153E-04
.168E-02	.275E-04	.558E-01	.227E-03	.278	.125E-03	.610	.133E-04
.252E-02	.567E-04	.603E-01	.305E-03	.296	.131E-03	.663	.123E-04
.364E-02	.788E-04	.647E-01	.353E-03	.314	.879E-04	.681	.110E-04
.477E-02	.730E-04	.672E-01	.275E-03	.332	.011E-04	.735	.958E-05
.589E-02	.104E-03	.760E-01	.345E-03	.350	.752E-04	.753	.954E-05
.701E-02	.102E-03	.849E-01	.335E-03	.367	.507E-04	.807	.922E-05
.813E-02	.583E-04	.939E-01	.400E-03	.385	.517E-04	.825	.892E-05
.981E-02	.143E-03	.103	.391E-03	.403	.460E-04	.879	.642E-05
.121E-01	.105E-03	.112	.407E-03	.421	.402E-04	.897	.349E-05
.143E-01	.144E-03	.121	.466E-03	.439	.414E-04	.950	.290E-05
.165E-01	.173E-03	.130	.382E-03	.457	.334E-04	.968	.236E-05
.199E-01	.162E-03	.139	.470E-03	.475	.295E-04	1.02	.127E-05
.244E-01	.174E-03	.152	.373E-03	.493	.270E-04	1.04	.848E-06
.289E-01	.224E-03	.170	.319E-03	.511	.242E-04	1.09	.746E-06
.334E-01	.239E-03	.188	.204E-03	.529	.202E-04	1.11	.655E-06
.378E-01	.236E-03	.206	.249E-03				

POWER SPECTRAL FILE JS0422

TIME 22:33 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.51 FPS  
DIRECTION: 120

RUN NO. 42  
CHANNEL MY IN Coeff. UNITS

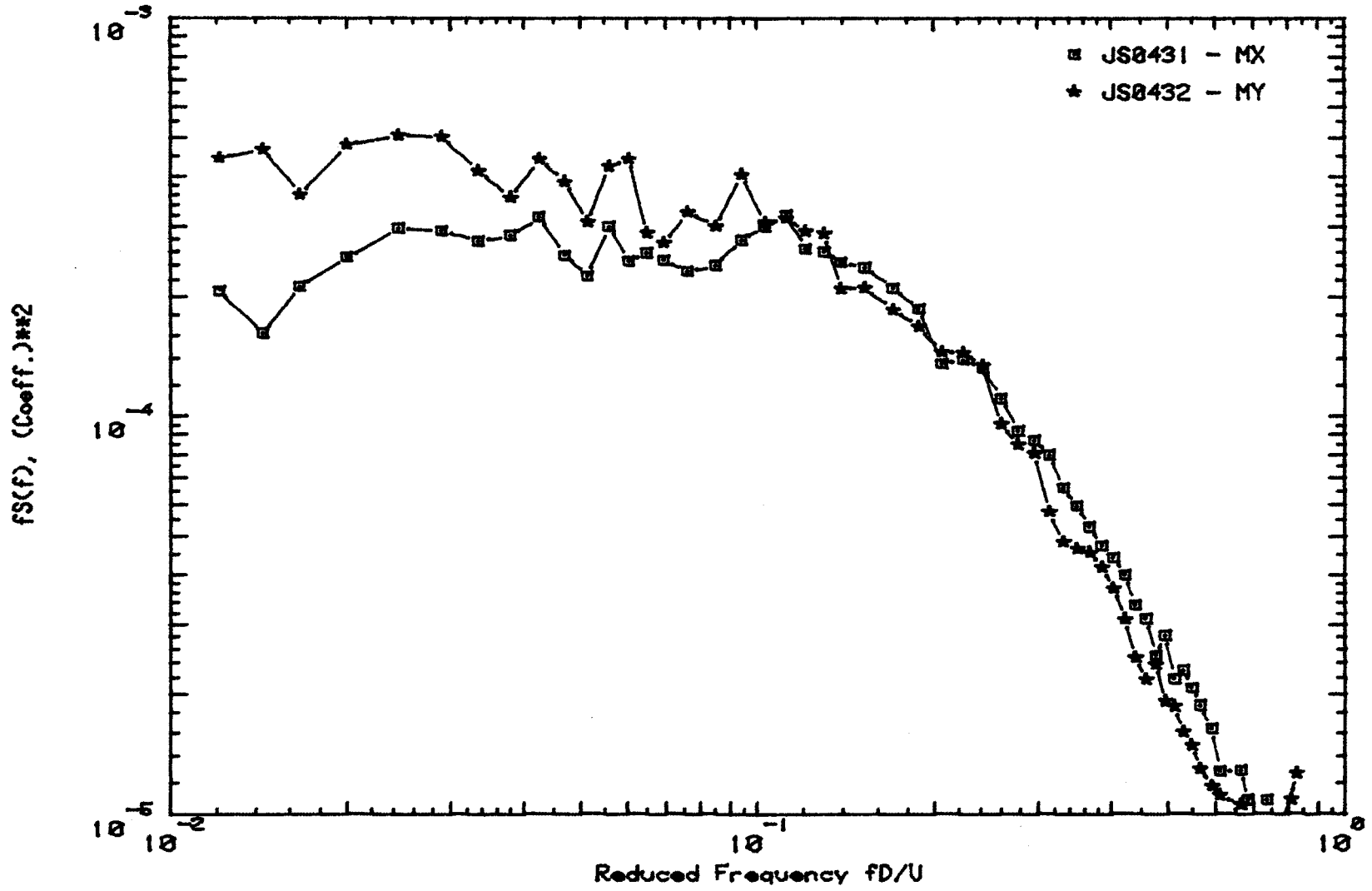
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.51 FPS  
Q\*A = .8663 LBS  
Q\*A\*L = 13.86 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1959 RMS = .3675E-01 ROOT(AREA) = .3623E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.399E-03	.224	.105E-03	.547	.130E-04
.561E-03	.246E-04	.468E-01	.371E-03	.242	.104E-03	.565	.117E-04
.112E-02	.609E-04	.513E-01	.263E-03	.260	.753E-04	.592	.108E-04
.168E-02	.689E-04	.558E-01	.313E-03	.278	.745E-04	.610	.947E-05
.252E-02	.956E-04	.603E-01	.267E-03	.296	.670E-04	.663	.921E-05
.364E-02	.219E-03	.647E-01	.199E-03	.314	.583E-04	.681	.858E-05
.477E-02	.150E-03	.692E-01	.261E-03	.332	.453E-04	.735	.850E-05
.589E-02	.226E-03	.760E-01	.224E-03	.350	.367E-04	.753	.827E-05
.701E-02	.236E-03	.847E-01	.254E-03	.367	.329E-04	.807	.916E-05
.813E-02	.188E-03	.939E-01	.287E-03	.385	.307E-04	.825	.108E-04
.981E-02	.369E-03	.103	.263E-03	.403	.257E-04	.879	.848E-05
.121E-01	.223E-03	.112	.251E-03	.421	.269E-04	.897	.346E-05
.143E-01	.332E-03	.121	.221E-03	.439	.203E-04	.950	.180E-05
.165E-01	.313E-03	.130	.239E-03	.457	.188E-04	.968	.117E-05
.199E-01	.358E-03	.139	.177E-03	.475	.171E-04	1.02	.906E-06
.244E-01	.348E-03	.152	.193E-03	.493	.154E-04	1.04	.702E-06
.289E-01	.363E-03	.170	.152E-03	.511	.153E-04	1.09	.646E-06
.334E-01	.402E-03	.188	.149E-03	.529	.137E-04	1.11	.499E-06
.378E-01	.384E-03	.206	.131E-03				

RUN NO. 43 WIND DIRECTION 130 Deg. VEL. U = 40.4 fps



POWER SPECTRAL FILE JS0431

TIME 22:40 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.40 FPS RUN NO. 43  
 DIRECTION: 130 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.40 FPS  
 Q\*A = .8614 LBS  
 Q\*A\*L = 13.78 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1239 RMS = .3148E-01 ROOT(AREA) = .3076E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.316E-03	.225	.130E-03	.548	.208E-04
.562E-03	.671E-05	.469E-01	.254E-03	.243	.132E-03	.566	.188E-04
.112E-02	.208E-04	.514E-01	.225E-03	.261	.111E-03	.593	.164E-04
.169E-02	.258E-04	.559E-01	.300E-03	.279	.917E-04	.611	.129E-04
.253E-02	.232E-04	.604E-01	.245E-03	.297	.868E-04	.665	.129E-04
.365E-02	.678E-04	.649E-01	.258E-03	.315	.798E-04	.683	.109E-04
.478E-02	.755E-04	.694E-01	.246E-03	.333	.660E-04	.737	.109E-04
.590E-02	.598E-04	.762E-01	.231E-03	.351	.594E-04	.755	.859E-05
.703E-02	.583E-04	.852E-01	.232E-03	.369	.520E-04	.809	.927E-05
.815E-02	.973E-04	.942E-01	.277E-03	.386	.473E-04	.827	.862E-05
.984E-02	.121E-03	.103	.298E-03	.404	.441E-04	.881	.707E-05
.121E-01	.206E-03	.112	.319E-03	.422	.399E-04	.899	.394E-05
.143E-01	.161E-03	.121	.262E-03	.440	.335E-04	.953	.283E-05
.166E-01	.212E-03	.130	.258E-03	.458	.310E-04	.971	.265E-05
.200E-01	.251E-03	.139	.243E-03	.476	.250E-04	1.03	.155E-05
.245E-01	.296E-03	.153	.236E-03	.494	.281E-04	1.04	.103E-05
.290E-01	.291E-03	.171	.202E-03	.512	.212E-04	1.10	.901E-06
.334E-01	.274E-03	.189	.186E-03	.530	.230E-04	1.12	.752E-06
.379E-01	.284E-03	.207	.135E-03				



POWER SPECTRAL FILE JS0432

TIME 22:40 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.40 FPS  
DIRECTION: 130

RUN NO. 43  
CHANNEL MY IN Coeff. UNITS

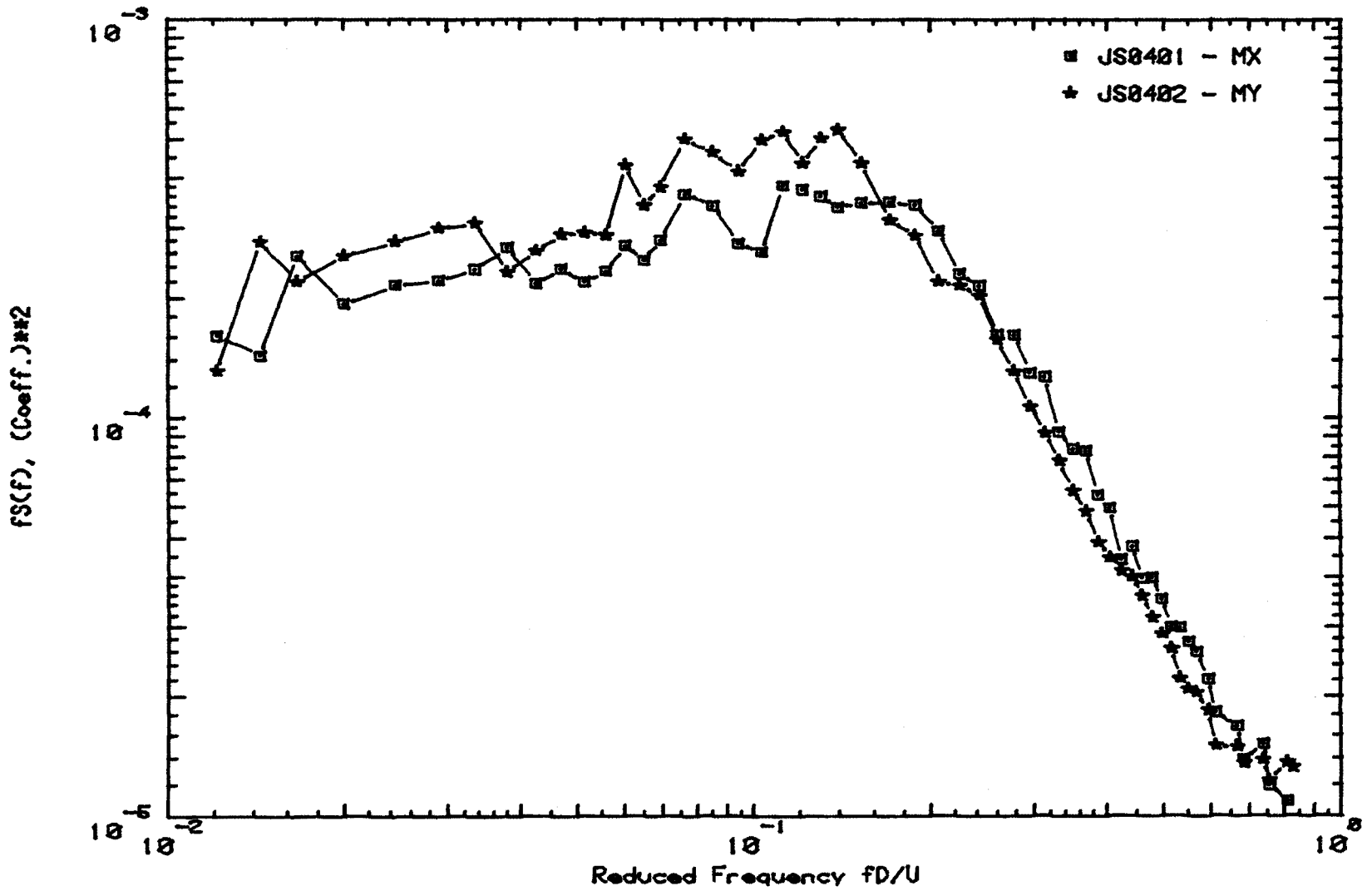
NON-DIMENSIONAL SPECTRUM F\*S(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.40 FPS  
Q\*A = .8614 LBS  
Q\*A\*L = 13.78 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1876 RMS = .3968E-01 ROOT(AREA) = .3948E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.424E-01	.442E-03	.225	.144E-03	.548	.149E-04
.562E-03	.247E-04	.469E-01	.387E-03	.243	.134E-03	.566	.130E-04
.112E-02	.589E-04	.514E-01	.307E-03	.261	.253E-04	.593	.118E-04
.169E-02	.785E-04	.559E-01	.423E-03	.279	.847E-04	.611	.112E-04
.253E-02	.832E-04	.604E-01	.442E-03	.297	.805E-04	.665	.106E-04
.365E-02	.199E-03	.649E-01	.288E-03	.315	.575E-04	.683	.889E-05
.478E-02	.218E-03	.694E-01	.272E-03	.333	.484E-04	.737	.955E-05
.590E-02	.152E-03	.762E-01	.325E-03	.351	.464E-04	.755	.850E-05
.703E-02	.213E-03	.852E-01	.300E-03	.369	.454E-04	.809	.109E-04
.815E-02	.253E-03	.942E-01	.403E-03	.386	.416E-04	.827	.127E-04
.984E-02	.356E-03	.103	.306E-03	.404	.369E-04	.861	.912E-05
.121E-01	.444E-03	.112	.314E-03	.422	.309E-04	.899	.385E-05
.143E-01	.467E-03	.121	.291E-03	.440	.247E-04	.953	.226E-05
.166E-01	.360E-03	.130	.287E-03	.458	.218E-04	.971	.161E-05
.200E-01	.480E-03	.139	.209E-03	.476	.238E-04	1.03	.128E-05
.245E-01	.507E-03	.153	.209E-03	.494	.191E-04	1.04	.101E-05
.290E-01	.501E-03	.171	.185E-03	.512	.186E-04	1.10	.848E-06
.334E-01	.412E-03	.189	.167E-03	.530	.161E-04	1.12	.703E-06
.379E-01	.354E-03	.207	.145E-03				

RUN NO. 40 WIND DIRECTION 140 Deg. VEL. U = 40.3 fps



POWER SPECTRAL FILE JS0401

TIME 21:33 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.34 FPS RUN NO. 40  
 DIRECTION: 140 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.34 FPS  
 Q\*A = .0589 LBS  
 Q\*A\*L = 13.74 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.8059E-01 RMS = .3205E-01 ROOT(AREA) = .3189E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.425E-01	.218E-03	.225	.229E-03	.549	.274E-04
.563E-03	.678E-05	.470E-01	.236E-03	.243	.214E-03	.567	.259E-04
.113E-02	.162E-04	.515E-01	.220E-03	.261	.162E-03	.594	.221E-04
.169E-02	.904E-05	.560E-01	.233E-03	.279	.161E-03	.612	.183E-04
.253E-02	.343E-04	.605E-01	.271E-03	.297	.129E-03	.666	.168E-04
.366E-02	.479E-04	.650E-01	.249E-03	.315	.127E-03	.684	.139E-04
.479E-02	.663E-04	.695E-01	.280E-03	.333	.922E-04	.738	.152E-04
.591E-02	.653E-04	.763E-01	.364E-03	.351	.836E-04	.756	.120E-04
.704E-02	.629E-04	.853E-01	.340E-03	.369	.825E-04	.810	.109E-04
.816E-02	.128E-03	.943E-01	.274E-03	.387	.641E-04	.828	.996E-05
.985E-02	.118E-03	.103	.260E-03	.405	.593E-04	.883	.720E-05
.121E-01	.160E-03	.112	.382E-03	.423	.442E-04	.901	.378E-05
.144E-01	.143E-03	.121	.374E-03	.441	.476E-04	.955	.336E-05
.166E-01	.254E-03	.130	.359E-03	.459	.396E-04	.973	.261E-05
.200E-01	.193E-03	.139	.330E-03	.477	.398E-04	1.03	.149E-05
.245E-01	.215E-03	.153	.346E-03	.495	.351E-04	1.04	.946E-06
.290E-01	.221E-03	.171	.348E-03	.513	.299E-04	1.10	.860E-06
.335E-01	.236E-03	.189	.341E-03	.531	.297E-04	1.12	.704E-06
.380E-01	.267E-03	.207	.294E-03				

POWER SPECTRAL FILE JS0402

TIME 21:33 DAY 100 OF

CONFIGURATION A WIND VEL : 40.34 FPS RUN NO. 40  
 DIRECTION: 140 CHANNEL MY IN Coeff. UNITS

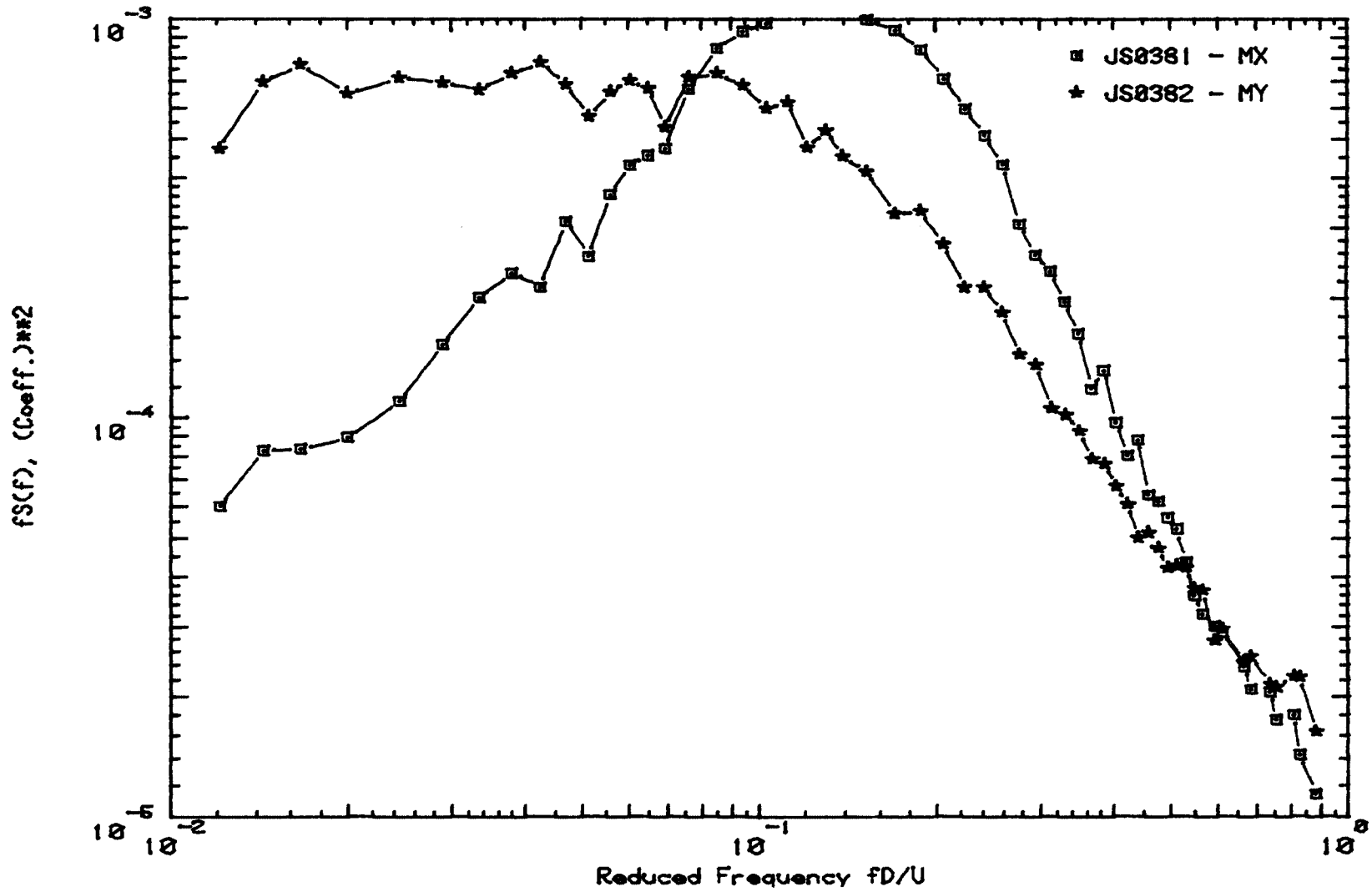
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.34 FPS  
 Q\*A = .8589 LBS  
 Q\*A\*L = 13.74 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1700 RMS = .3714E-01 ROOT(AREA) = .3646E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.425E-01	.263E-03	.225	.214E-03	.549	.208E-04
.563E-03	.893E-05	.470E-01	.288E-03	.243	.203E-03	.567	.204E-04
.113E-02	.269E-04	.515E-01	.291E-03	.261	.157E-03	.594	.184E-04
.169E-02	.711E-04	.560E-01	.288E-03	.279	.131E-03	.612	.151E-04
.253E-02	.590E-04	.605E-01	.431E-03	.297	.106E-03	.666	.149E-04
.366E-02	.128E-03	.650E-01	.341E-03	.315	.917E-04	.684	.136E-04
.479E-02	.110E-03	.695E-01	.379E-03	.333	.779E-04	.738	.139E-04
.591E-02	.115E-03	.763E-01	.500E-03	.351	.656E-04	.756	.123E-04
.704E-02	.188E-03	.853E-01	.463E-03	.369	.582E-04	.810	.137E-04
.816E-02	.148E-03	.943E-01	.415E-03	.387	.488E-04	.828	.133E-04
.985E-02	.221E-03	.103	.497E-03	.405	.446E-04	.883	.955E-05
.121E-01	.131E-03	.112	.521E-03	.423	.412E-04	.901	.375E-05
.144E-01	.276E-03	.121	.434E-03	.441	.399E-04	.955	.222E-05
.166E-01	.219E-03	.130	.502E-03	.459	.357E-04	.973	.144E-05
.200E-01	.255E-03	.139	.527E-03	.477	.315E-04	1.03	.116E-05
.245E-01	.276E-03	.153	.435E-03	.495	.287E-04	1.04	.912E-06
.290E-01	.298E-03	.171	.312E-03	.513	.264E-04	1.10	.753E-06
.335E-01	.308E-03	.189	.286E-03	.531	.222E-04	1.12	.549E-06
.380E-01	.232E-03	.207	.220E-03				

RUN NO. 38 WIND DIRECTION 150 Deg. VEL. U = 40.4 fps



POWER SPECTRAL FILE JS0381

TIME 21:17 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.40 FPS RUN NO. 38  
 DIRECTION: 150 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.40 FPS  
 Q\*A = .8614 LBS  
 Q\*A\*L = 13.78 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.2719E-01 RMS = .4180E-01 ROOT(AREA) = .4128E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.213E-03	.225	.594E-03	.548	.358E-04
.562E-03	.378E-05	.469E-01	.311E-03	.243	.510E-03	.566	.321E-04
.112E-02	.487E-05	.514E-01	.255E-03	.261	.431E-03	.593	.301E-04
.169E-02	.726E-05	.559E-01	.363E-03	.279	.305E-03	.611	.290E-04
.253E-02	.129E-04	.604E-01	.431E-03	.297	.255E-03	.665	.238E-04
.365E-02	.260E-04	.649E-01	.456E-03	.315	.232E-03	.683	.209E-04
.478E-02	.256E-04	.694E-01	.474E-03	.333	.195E-03	.737	.205E-04
.590E-02	.477E-04	.762E-01	.666E-03	.351	.162E-03	.755	.175E-04
.703E-02	.400E-04	.852E-01	.845E-03	.369	.110E-03	.809	.180E-04
.815E-02	.686E-04	.942E-01	.929E-03	.386	.131E-03	.827	.143E-04
.984E-02	.637E-04	.103	.973E-03	.404	.772E-04	.881	.114E-04
.121E-01	.599E-04	.112	.120E-02	.422	.804E-04	.899	.676E-05
.143E-01	.829E-04	.121	.125E-02	.440	.880E-04	.953	.557E-05
.166E-01	.836E-04	.130	.126E-02	.458	.641E-04	.971	.399E-05
.200E-01	.896E-04	.139	.121E-02	.476	.616E-04	1.03	.203E-05
.245E-01	.110E-03	.153	.994E-03	.494	.562E-04	1.04	.116E-05
.290E-01	.153E-03	.171	.934E-03	.512	.527E-04	1.10	.110E-05
.334E-01	.200E-03	.189	.835E-03	.530	.435E-04	1.12	.958E-06
.379E-01	.231E-03	.207	.707E-03				

POWER SPECTRAL FILE JS0382

TIME 21:17 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.40 FPS RUN NO. 38  
 DIRECTION: 150 CHANNEL MY IN Coeff. UNITS

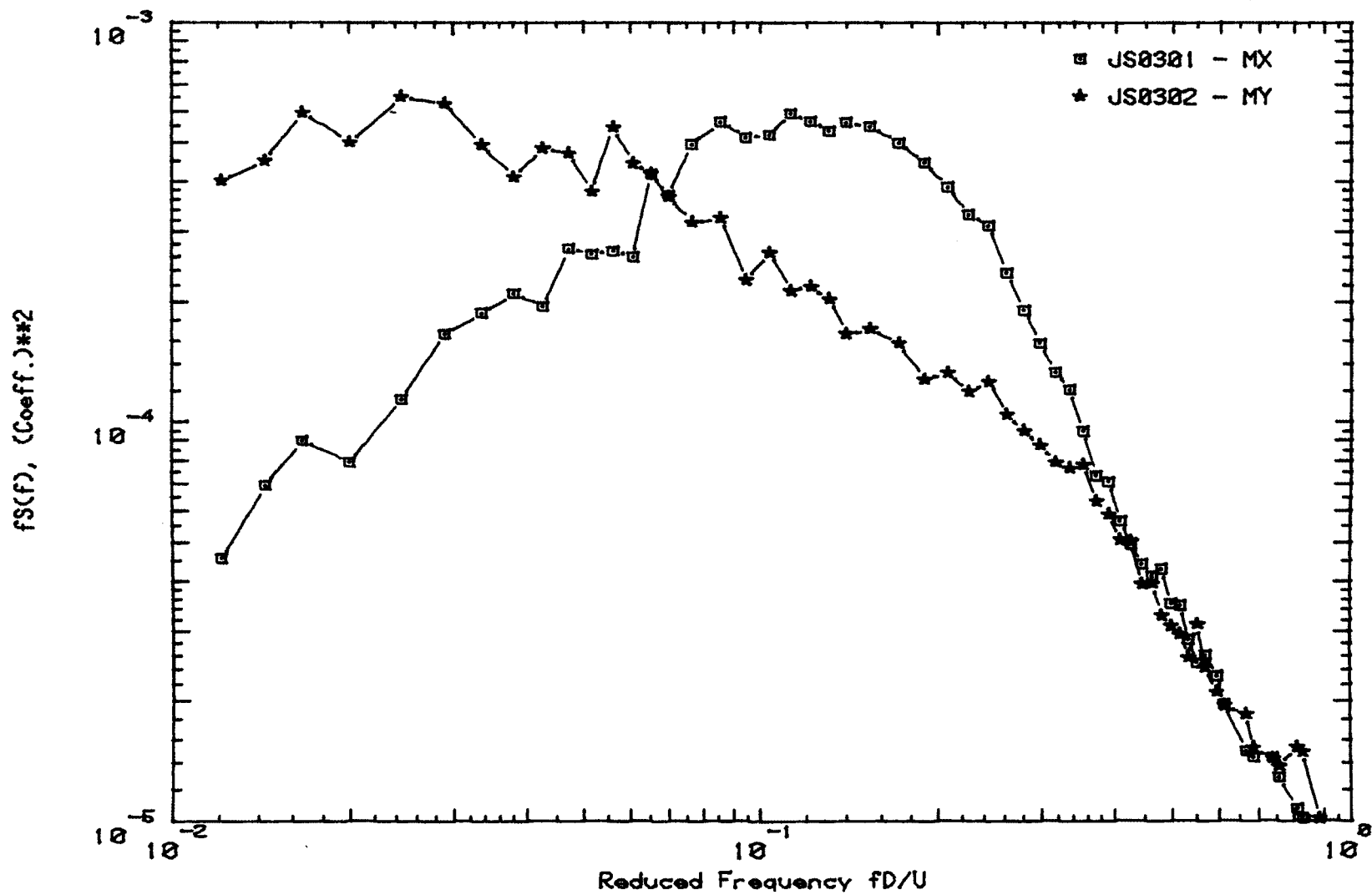
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.40 FPS  
 Q\*A = .8614 LBS  
 Q\*A\*L = 13.78 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .2199 RMS = .5164E-01 ROOT(AREA) = .5140E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.770E-03	.225	.212E-03	.548	.374E-04
.562E-03	.460E-04	.469E-01	.684E-03	.243	.212E-03	.566	.369E-04
.112E-02	.703E-04	.514E-01	.567E-03	.261	.184E-03	.593	.277E-04
.169E-02	.149E-03	.559E-01	.655E-03	.279	.144E-03	.611	.297E-04
.253E-02	.245E-03	.604E-01	.701E-03	.297	.136E-03	.665	.244E-04
.365E-02	.269E-03	.649E-01	.668E-03	.315	.106E-03	.683	.252E-04
.478E-02	.444E-03	.694E-01	.534E-03	.333	.102E-03	.737	.215E-04
.590E-02	.369E-03	.762E-01	.712E-03	.351	.925E-04	.755	.211E-04
.703E-02	.294E-03	.852E-01	.720E-03	.369	.780E-04	.809	.225E-04
.815E-02	.519E-03	.942E-01	.601E-03	.386	.766E-04	.827	.224E-04
.984E-02	.380E-03	.103	.595E-03	.404	.673E-04	.881	.163E-04
.121E-01	.472E-03	.112	.618E-03	.422	.608E-04	.899	.648E-05
.143E-01	.693E-03	.121	.475E-03	.440	.502E-04	.953	.368E-05
.166E-01	.767E-03	.130	.524E-03	.458	.516E-04	.971	.245E-05
.200E-01	.649E-03	.139	.452E-03	.476	.471E-04	1.03	.170E-05
.245E-01	.709E-03	.153	.414E-03	.494	.420E-04	1.04	.115E-05
.290E-01	.691E-03	.171	.325E-03	.512	.425E-04	1.10	.102E-05
.334E-01	.663E-03	.189	.330E-03	.530	.421E-04	1.12	.748E-06
.379E-01	.728E-03	.207	.273E-03				

RUN NO. 30 WIND DIRECTION 160 Deg. VEL. U = 40.3 fps





POWER SPECTRAL FILE JC0301

TIME 22:16 DAY 22 OF 1965

CONFIGURATION A WIND VEL : 40.31 FPS  
DIRECTION: 160

RUN NO. 30  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.31 FPS  
Q\*A = .0574 LBS  
Q\*A\*L = 13.72 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1454E-01 RMS = .3286E-01 ROOT(AREA) = .3270E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.425E-01	.194E-03	.225	.329E-03	.550	.249E-04
.564E-03	.435E-05	.471E-01	.271E-03	.243	.309E-03	.568	.261E-04
.113E-02	.863E-05	.516E-01	.263E-03	.261	.235E-03	.595	.231E-04
.169E-02	.558E-05	.561E-01	.268E-03	.279	.189E-03	.613	.196E-04
.254E-02	.109E-04	.606E-01	.258E-03	.297	.157E-03	.667	.150E-04
.366E-02	.208E-04	.651E-01	.416E-03	.315	.133E-03	.685	.144E-04
.479E-02	.251E-04	.696E-01	.368E-03	.333	.120E-03	.739	.145E-04
.592E-02	.266E-04	.764E-01	.494E-03	.351	.946E-04	.757	.129E-04
.704E-02	.402E-04	.854E-01	.562E-03	.369	.732E-04	.811	.108E-04
.817E-02	.519E-04	.944E-01	.515E-03	.387	.707E-04	.829	.102E-04
.986E-02	.464E-04	.103	.522E-03	.405	.566E-04	.883	.840E-05
.121E-01	.455E-04	.112	.590E-03	.423	.496E-04	.901	.439E-05
.144E-01	.694E-04	.121	.563E-03	.442	.440E-04	.955	.401E-05
.166E-01	.898E-04	.130	.534E-03	.460	.411E-04	.973	.323E-05
.200E-01	.792E-04	.139	.560E-03	.478	.428E-04	1.03	.168E-05
.245E-01	.114E-03	.153	.547E-03	.496	.350E-04	1.05	.993E-06
.290E-01	.166E-03	.171	.497E-03	.514	.347E-04	1.10	.791E-06
.335E-01	.187E-03	.189	.445E-03	.532	.285E-04	1.12	.767E-06
.380E-01	.209E-03	.207	.386E-03				

POWER SPECTRAL FILE JS0302

TIME 22:16 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.31 FPS RUN NO. 30  
 DIRECTION: 160 CHANNEL MY IN Coeff. UNITS

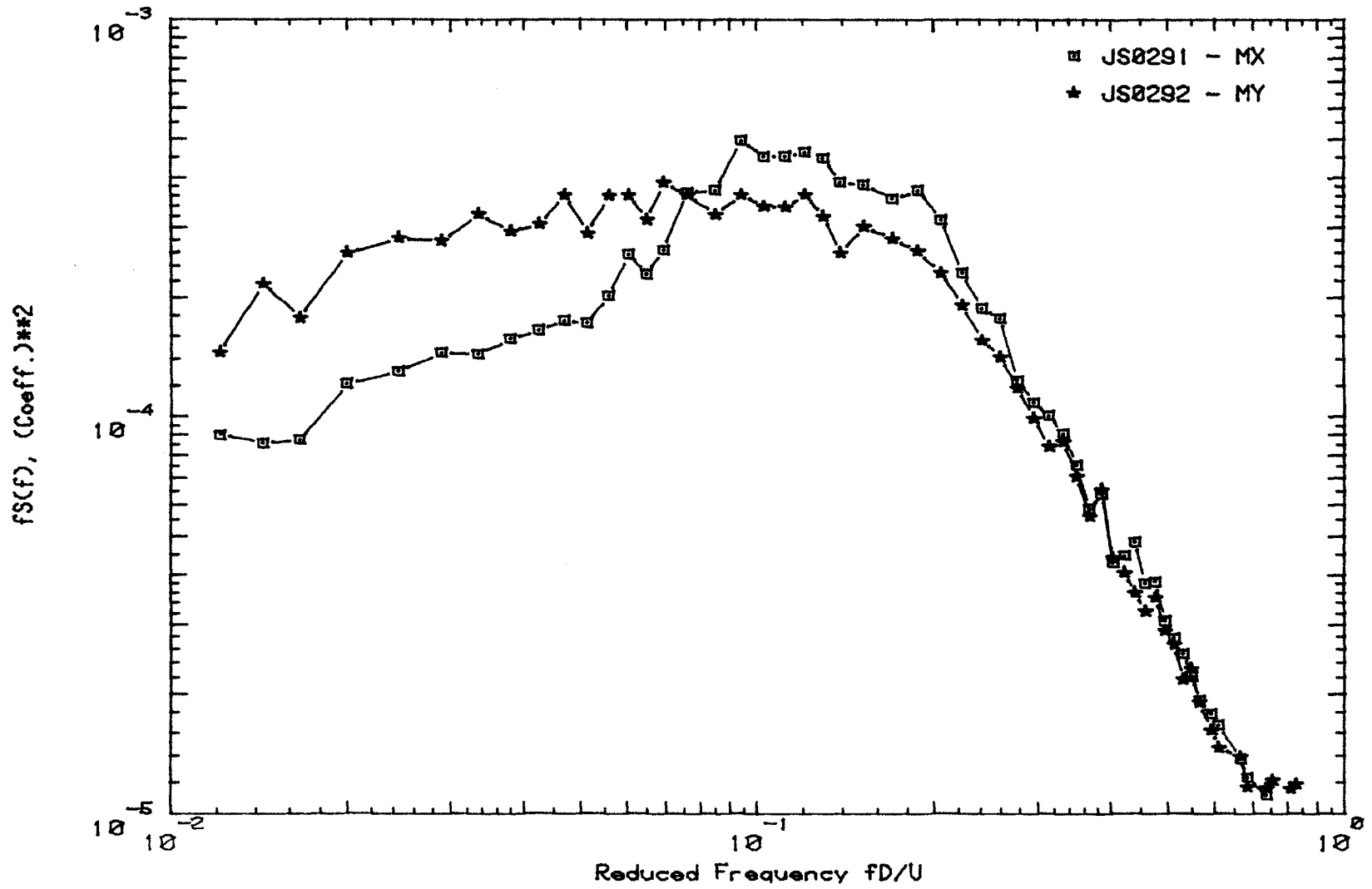
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.31 FPS  
 Q\*A = .8574 LBS  
 Q\*A\*L = 13.72 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1805 RMS = .4237E-01 ROOT(AREA) = .4217E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.425E-01	.483E-03	.225	.119E-03	.550	.312E-04
.564E-03	.261E-04	.471E-01	.469E-03	.243	.126E-03	.568	.243E-04
.113E-02	.304E-04	.516E-01	.377E-03	.261	.104E-03	.595	.211E-04
.169E-02	.964E-04	.561E-01	.545E-03	.279	.947E-04	.613	.194E-04
.254E-02	.784E-04	.606E-01	.443E-03	.297	.872E-04	.667	.105E-04
.366E-02	.102E-03	.651E-01	.418E-03	.315	.792E-04	.685	.153E-04
.479E-02	.270E-03	.696E-01	.365E-03	.333	.764E-04	.739	.144E-04
.592E-02	.220E-03	.764E-01	.316E-03	.351	.780E-04	.757	.138E-04
.704E-02	.391E-03	.854E-01	.323E-03	.369	.632E-04	.811	.153E-04
.817E-02	.729E-03	.944E-01	.226E-03	.387	.506E-04	.829	.149E-04
.986E-02	.473E-03	.103	.265E-03	.405	.500E-04	.883	.101E-04
.121E-01	.401E-03	.112	.212E-03	.423	.502E-04	.901	.414E-05
.144E-01	.450E-03	.121	.210E-03	.442	.393E-04	.955	.263E-05
.166E-01	.593E-03	.130	.203E-03	.460	.393E-04	.973	.160E-05
.200E-01	.500E-03	.139	.166E-03	.478	.327E-04	1.03	.123E-05
.245E-01	.649E-03	.153	.171E-03	.496	.308E-04	1.05	.800E-06
.290E-01	.623E-03	.171	.157E-03	.514	.294E-04	1.10	.635E-06
.335E-01	.492E-03	.189	.127E-03	.532	.257E-04	1.12	.575E-06
.380E-01	.408E-03	.207	.132E-03				

RUN NO. 29 WIND DIRECTION 170 Deg. VEL. U = 40.4 fps



POWER SPECTRAL FILE JS0291

TIME 22: 0 DAY 29 OF 1965

CONFIGURATION A WIND VEL : 40.41 FPS RUN NO. 29  
 DIRECTION: 170 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.41 FPS  
 Q\*A = .8620 LBS  
 Q\*A\*L = 13.79 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .2001E-01 RMS = .2980E-01 ROOT(AREA) = .2967E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.165E-03	.225	.229E-03	.548	.222E-04
.562E-03	.515E-05	.469E-01	.174E-03	.242	.187E-03	.566	.192E-04
.112E-02	.150E-04	.514E-01	.172E-03	.260	.176E-03	.593	.179E-04
.169E-02	.109E-04	.559E-01	.202E-03	.278	.123E-03	.611	.168E-04
.253E-02	.239E-04	.604E-01	.256E-03	.296	.108E-03	.665	.137E-04
.365E-02	.151E-04	.649E-01	.229E-03	.314	.100E-03	.683	.123E-04
.478E-02	.219E-04	.694E-01	.263E-03	.332	.906E-04	.737	.112E-04
.590E-02	.412E-04	.761E-01	.367E-03	.350	.753E-04	.755	.963E-05
.702E-02	.387E-04	.851E-01	.372E-03	.368	.584E-04	.809	.889E-05
.815E-02	.610E-04	.941E-01	.496E-03	.386	.638E-04	.827	.805E-05
.983E-02	.534E-04	.103	.451E-03	.404	.429E-04	.881	.591E-05
.121E-01	.898E-04	.112	.451E-03	.422	.447E-04	.899	.316E-05
.143E-01	.858E-04	.121	.462E-03	.440	.484E-04	.953	.277E-05
.166E-01	.872E-04	.130	.445E-03	.458	.379E-04	.971	.254E-05
.200E-01	.121E-03	.139	.389E-03	.476	.303E-04	1.02	.125E-05
.244E-01	.130E-03	.153	.383E-03	.494	.306E-04	1.04	.765E-06
.289E-01	.145E-03	.171	.354E-03	.512	.277E-04	1.10	.536E-06
.334E-01	.144E-03	.189	.371E-03	.530	.253E-04	1.11	.494E-06
.379E-01	.157E-03	.207	.313E-03				

POWER SPECTRAL FILE JS0292

TIME 22: 8 DAY 29 OF 1965

CONFIGURATION A WIND VEL : 40.41 FPS RUN NO. 29  
 DIRECTION: 170 CHANNEL MY IN Coeff. UNITS

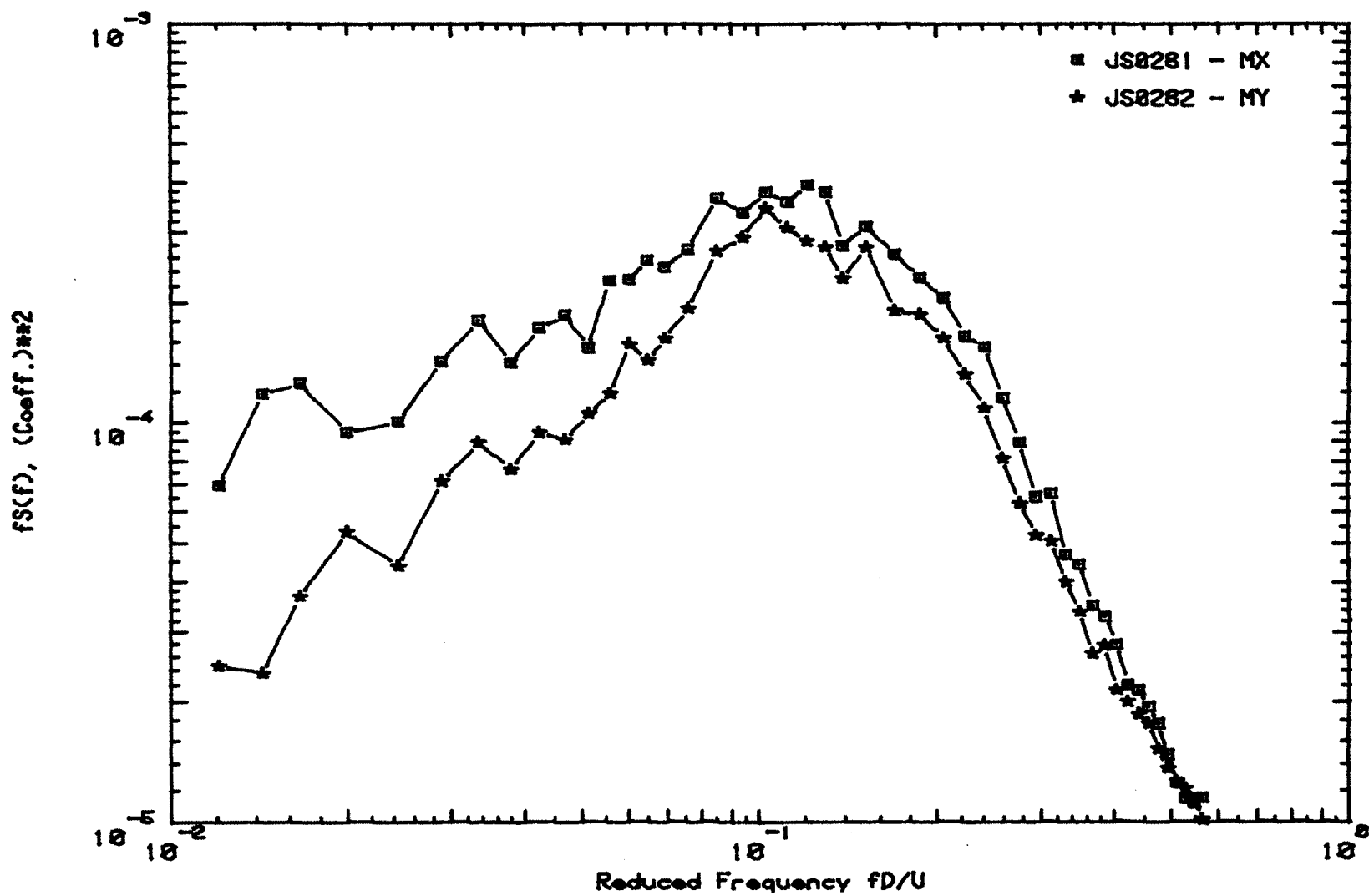
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.41 FPS  
 Q\*A = .0620 LBS  
 Q\*A\*L = 13.79 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1166 RMS = .3288E-01 ROOT(AREA) = .3224E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.305E-03	.225	.170E-03	.548	.231E-04
.562E-03	.362E-05	.469E-01	.360E-03	.242	.155E-03	.566	.190E-04
.112E-02	.112E-04	.514E-01	.290E-03	.260	.141E-03	.593	.162E-04
.169E-02	.775E-05	.559E-01	.360E-03	.278	.117E-03	.611	.147E-04
.253E-02	.288E-04	.604E-01	.360E-03	.296	.787E-04	.665	.139E-04
.365E-02	.348E-04	.649E-01	.313E-03	.314	.839E-04	.683	.117E-04
.478E-02	.465E-04	.694E-01	.380E-03	.332	.864E-04	.737	.116E-04
.590E-02	.696E-04	.761E-01	.361E-03	.350	.707E-04	.755	.121E-04
.702E-02	.619E-04	.851E-01	.322E-03	.368	.560E-04	.809	.116E-04
.815E-02	.730E-04	.941E-01	.362E-03	.386	.655E-04	.827	.119E-04
.983E-02	.945E-04	.103	.338E-03	.404	.440E-04	.881	.978E-05
.121E-01	.145E-03	.112	.336E-03	.422	.405E-04	.899	.350E-05
.143E-01	.215E-03	.121	.361E-03	.440	.352E-04	.953	.164E-05
.166E-01	.177E-03	.130	.318E-03	.458	.323E-04	.971	.122E-05
.200E-01	.258E-03	.139	.250E-03	.476	.350E-04	1.02	.812E-06
.244E-01	.281E-03	.153	.301E-03	.494	.288E-04	1.04	.592E-06
.289E-01	.277E-03	.171	.280E-03	.512	.266E-04	1.10	.422E-06
.334E-01	.323E-03	.189	.261E-03	.530	.217E-04	1.11	.392E-06
.379E-01	.292E-03	.207	.230E-03				

RUN NO. 28 WIND DIRECTION 180 Deg. VEL. U = 48.5 fps



POWER SPECTRAL FILE JS0201

TIME 22: 1 DAY 29 OF 1985

CONFIGURATION A

WIND VEL : 40.49 FPS  
DIRECTION: 180

RUN NO. 28  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U :

D = 5.000 IN.  
U = 40.49 FPS  
Q\*A = .8654 LBS  
Q\*A\*L = 13.85 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .7387E-01 RMS = .2819E-01 ROOT(AREA) = .2726E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.173E-03	.224	.165E-03	.547	.111E-04
.561E-03	.361E-05	.468E-01	.186E-03	.242	.154E-03	.565	.115E-04
.112E-02	.673E-05	.513E-01	.154E-03	.260	.115E-03	.592	.820E-05
.168E-02	.380E-05	.558E-01	.227E-03	.278	.894E-04	.610	.836E-05
.252E-02	.152E-04	.603E-01	.229E-03	.296	.653E-04	.664	.702E-05
.365E-02	.240E-04	.648E-01	.255E-03	.314	.664E-04	.682	.564E-05
.477E-02	.289E-04	.693E-01	.245E-03	.332	.466E-04	.736	.550E-05
.589E-02	.391E-04	.760E-01	.272E-03	.350	.440E-04	.754	.506E-05
.701E-02	.458E-04	.850E-01	.366E-03	.368	.348E-04	.807	.497E-05
.813E-02	.446E-04	.939E-01	.336E-03	.386	.327E-04	.825	.458E-05
.982E-02	.747E-04	.103	.379E-03	.404	.278E-04	.879	.331E-05
.121E-01	.693E-04	.112	.357E-03	.422	.221E-04	.897	.179E-05
.143E-01	.118E-03	.121	.395E-03	.439	.214E-04	.951	.155E-05
.165E-01	.125E-03	.130	.378E-03	.457	.194E-04	.969	.146E-05
.199E-01	.948E-04	.139	.277E-03	.475	.176E-04	1.02	.691E-06
.244E-01	.101E-03	.152	.310E-03	.493	.148E-04	1.04	.418E-06
.289E-01	.142E-03	.170	.264E-03	.511	.126E-04	1.09	.302E-06
.334E-01	.180E-03	.188	.230E-03	.529	.114E-04	1.11	.310E-06
.379E-01	.141E-03	.206	.205E-03				

POWER SPECTRAL FILE JC0202

TIME 22: 1 DAY 22 OF 1985

CONFIGURATION A WIND VEL : 40.49 FPS RUN NO. 28  
 DIRECTION: 180 CHANNEL MY IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.49 FPS  
 Q\*A = .8654 LBS  
 Q\*A\*L = 13.85 LB\*IN

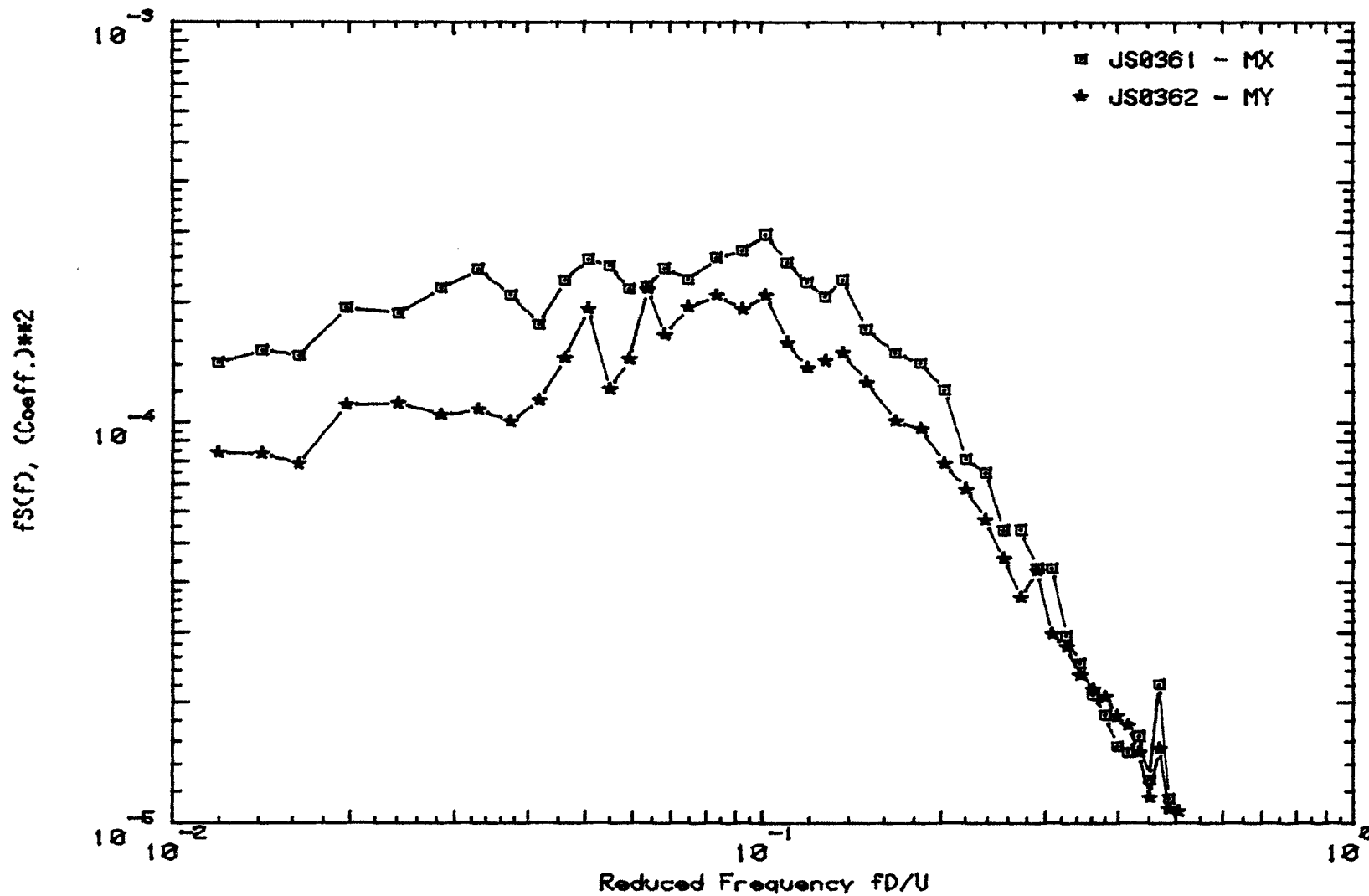
8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .8518E-01 RMS = .2238E-01 ROOT(AREA) = .2202E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.946E-04	.224	.132E-03	.547	.114E-04
.561E-03	.219E-05	.468E-01	.906E-04	.242	.108E-03	.565	.102E-04
.112E-02	.356E-05	.513E-01	.105E-03	.260	.812E-04	.592	.883E-05
.168E-02	.522E-05	.558E-01	.118E-03	.278	.628E-04	.610	.794E-05
.252E-02	.979E-05	.603E-01	.158E-03	.296	.523E-04	.664	.764E-05
.365E-02	.121E-04	.648E-01	.143E-03	.314	.506E-04	.682	.663E-05
.477E-02	.891E-05	.693E-01	.162E-03	.332	.398E-04	.736	.655E-05
.589E-02	.145E-04	.760E-01	.193E-03	.350	.335E-04	.754	.673E-05
.701E-02	.106E-04	.850E-01	.267E-03	.368	.264E-04	.807	.724E-05
.813E-02	.118E-04	.939E-01	.291E-03	.386	.276E-04	.825	.694E-05
.982E-02	.278E-04	.103	.344E-03	.404	.214E-04	.879	.525E-05
.121E-01	.246E-04	.112	.307E-03	.422	.199E-04	.897	.186E-05
.143E-01	.236E-04	.121	.285E-03	.439	.186E-04	.951	.906E-06
.165E-01	.367E-04	.130	.275E-03	.457	.176E-04	.969	.683E-06
.199E-01	.534E-04	.139	.229E-03	.475	.152E-04	1.02	.383E-06
.244E-01	.437E-04	.152	.274E-03	.493	.136E-04	1.04	.302E-06
.289E-01	.712E-04	.170	.190E-03	.511	.127E-04	1.09	.228E-06
.334E-01	.889E-04	.188	.186E-03	.529	.121E-04	1.11	.206E-06
.379E-01	.763E-04	.206	.163E-03				



RUN NO. 36 WIND DIRECTION 198 Deg. VEL. U = 41.0 fps



POWER SPECTRAL FILE JS0361

TIME 19:48

DAY 100 OF 1905

CONFIGURATION A WIND VEL : 41.00 FPS  
DIRECTION: 190

RUN NO. 36  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 41.00 FPS  
Q\*A = .8972 LBS  
Q\*A\*L = 14.19 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .8577E-01 RMS = .2957E-01 ROOT(AREA) = .2751E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.418E-01	.176E-03	.221	.811E-04	.540	.831E-05
.554E-03	.593E-05	.463E-01	.227E-03	.239	.740E-04	.558	.832E-05
.111E-02	.161E-04	.507E-01	.256E-03	.257	.540E-04	.585	.729E-05
.166E-02	.237E-04	.551E-01	.246E-03	.274	.541E-04	.602	.630E-05
.249E-02	.323E-04	.596E-01	.215E-03	.292	.434E-04	.656	.503E-05
.360E-02	.412E-04	.640E-01	.220E-03	.310	.433E-04	.673	.465E-05
.471E-02	.663E-04	.684E-01	.242E-03	.328	.293E-04	.727	.472E-05
.582E-02	.880E-04	.751E-01	.220E-03	.345	.250E-04	.744	.396E-05
.692E-02	.958E-04	.839E-01	.258E-03	.363	.209E-04	.797	.404E-05
.803E-02	.490E-04	.928E-01	.267E-03	.381	.186E-04	.815	.323E-05
.969E-02	.724E-04	.102	.295E-03	.399	.156E-04	.868	.245E-05
.119E-01	.141E-03	.111	.250E-03	.416	.151E-04	.886	.144E-05
.141E-01	.152E-03	.119	.224E-03	.434	.166E-04	.939	.124E-05
.163E-01	.147E-03	.128	.206E-03	.452	.127E-04	.957	.113E-05
.197E-01	.194E-03	.137	.228E-03	.469	.222E-04	1.01	.531E-06
.241E-01	.187E-03	.150	.171E-03	.487	.115E-04	1.03	.297E-06
.285E-01	.217E-03	.168	.149E-03	.505	.984E-05	1.08	.265E-06
.330E-01	.241E-03	.186	.141E-03	.523	.840E-05	1.10	.244E-06
.374E-01	.208E-03	.204	.120E-03				

POWER SPECTRAL FILE JS0362

TIME 19:48 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 41.00 FPS  
DIRECTION: 190

RUN NO. 36  
CHANNEL MY IN Coeff. UNITS

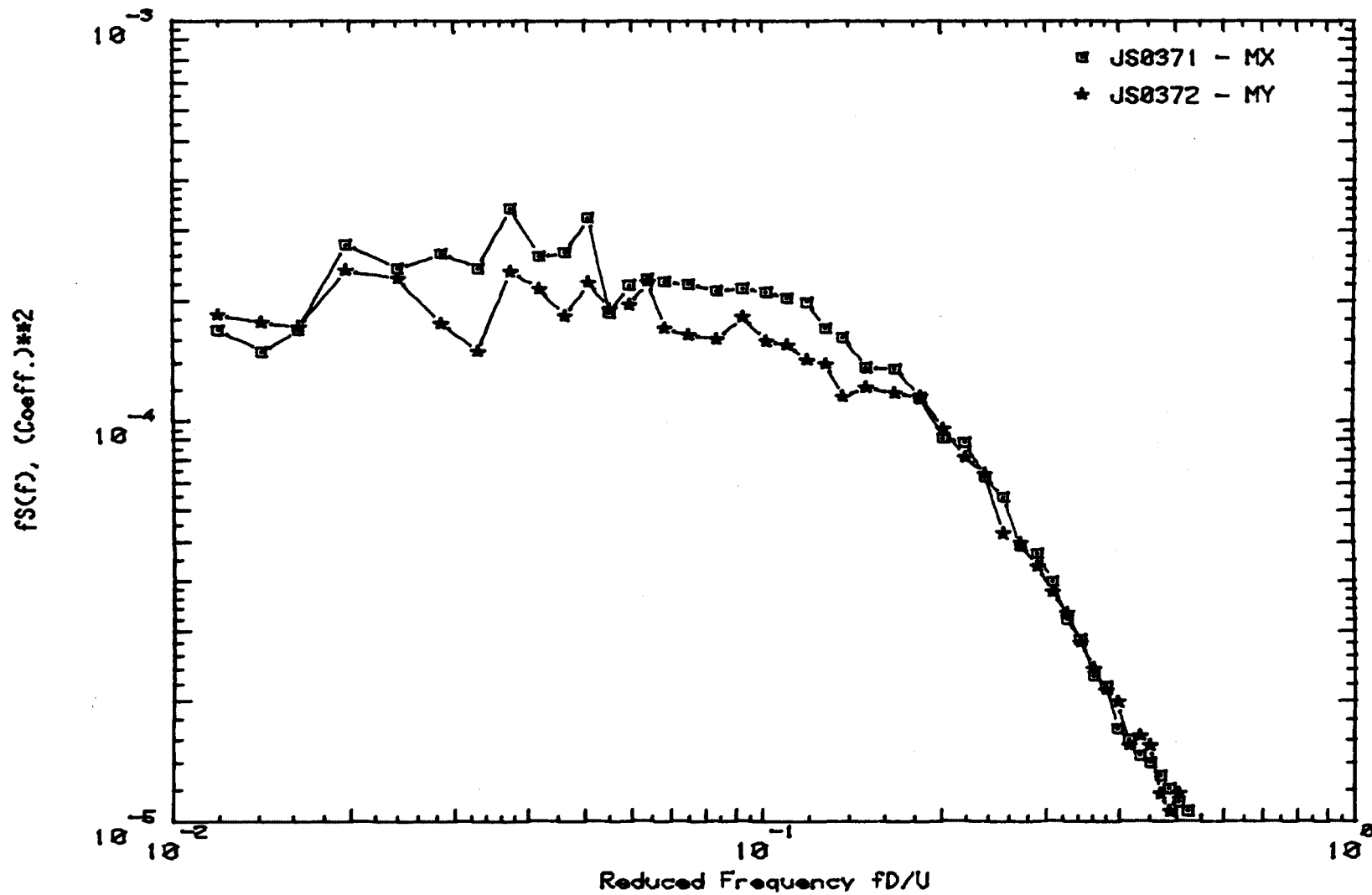
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 41.00 FPS  
Q\*A = .8072 LBS  
Q\*A\*L = 14.19 LB\*IN

B SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.0 SEC.

MEAN = .8655E-01 RMS = .2228E-01 ROOT(AREA) = .2205E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.418E-01	.114E-03	.221	.682E-04	.540	.970E-05
.554E-03	.373E-05	.463E-01	.145E-03	.239	.571E-04	.558	.772E-05
.111E-02	.957E-05	.507E-01	.193E-03	.257	.450E-04	.585	.740E-05
.166E-02	.142E-04	.551E-01	.121E-03	.274	.365E-04	.602	.695E-05
.249E-02	.209E-04	.596E-01	.144E-03	.292	.427E-04	.656	.607E-05
.360E-02	.247E-04	.640E-01	.216E-03	.310	.297E-04	.673	.593E-05
.471E-02	.345E-04	.684E-01	.165E-03	.328	.275E-04	.727	.559E-05
.582E-02	.544E-04	.751E-01	.194E-03	.345	.234E-04	.744	.520E-05
.692E-02	.606E-04	.839E-01	.200E-03	.363	.216E-04	.797	.469E-05
.803E-02	.283E-04	.928E-01	.192E-03	.381	.206E-04	.815	.494E-05
.969E-02	.488E-04	.102	.207E-03	.399	.185E-04	.868	.380E-05
.119E-01	.840E-04	.111	.158E-03	.416	.176E-04	.886	.159E-05
.141E-01	.835E-04	.119	.136E-03	.434	.150E-04	.739	.983E-06
.163E-01	.787E-04	.128	.143E-03	.452	.116E-04	.957	.656E-06
.197E-01	.111E-03	.137	.147E-03	.469	.154E-04	1.01	.499E-06
.241E-01	.111E-03	.150	.126E-03	.487	.109E-04	1.03	.311E-06
.285E-01	.104E-03	.168	.101E-03	.505	.107E-04	1.08	.218E-06
.330E-01	.108E-03	.186	.964E-04	.523	.914E-05	1.10	.167E-06
.374E-01	.100E-03	.204	.790E-04				

RUN NO. 37 WIND DIRECTION 200 Deg. VEL. U = 41.1 fps



POWER SPECTRAL FILE JS0371

TIME 20:40 DAY 100 OF 1985

CONFIGURATION A

WIND VEL : 41.05 FPS  
DIRECTION: 200

RUN NO. 37  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 41.05 FPS  
Q\*A = .8096 LBS  
Q\*A\*L = 14.23 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1104 RMS = .3097E-01 ROOT(AREA) = .2954E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.410E-01	.250E-03	.221	.086E-04	.540	.960E-05
.553E-03	.110E-04	.462E-01	.264E-03	.239	.723E-04	.557	.824E-05
.111E-02	.200E-04	.506E-01	.322E-03	.256	.644E-04	.584	.720E-05
.166E-02	.382E-04	.550E-01	.186E-03	.274	.488E-04	.602	.654E-05
.249E-02	.392E-04	.595E-01	.210E-03	.292	.466E-04	.655	.526E-05
.360E-02	.854E-04	.639E-01	.227E-03	.310	.397E-04	.672	.462E-05
.470E-02	.824E-04	.603E-01	.223E-03	.327	.319E-04	.726	.453E-05
.581E-02	.108E-03	.750E-01	.220E-03	.345	.284E-04	.743	.371E-05
.692E-02	.137E-03	.838E-01	.212E-03	.363	.231E-04	.796	.366E-05
.802E-02	.205E-03	.927E-01	.214E-03	.380	.218E-04	.814	.320E-05
.968E-02	.161E-03	.102	.210E-03	.398	.170E-04	.867	.274E-05
.119E-01	.168E-03	.110	.202E-03	.416	.161E-04	.885	.164E-05
.141E-01	.149E-03	.119	.198E-03	.433	.146E-04	.938	.142E-05
.163E-01	.169E-03	.128	.170E-03	.451	.140E-04	.956	.116E-05
.196E-01	.276E-03	.137	.161E-03	.469	.130E-04	1.01	.580E-06
.241E-01	.240E-03	.150	.136E-03	.487	.121E-04	1.03	.373E-06
.285E-01	.262E-03	.168	.135E-03	.504	.112E-04	1.08	.306E-06
.329E-01	.240E-03	.186	.114E-03	.522	.106E-04	1.10	.299E-06
.373E-01	.339E-03	.203	.904E-04				

POWER SPECTRAL FILE JS0372

TIME 20:40 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 41.05 FPS  
DIRECTION: 200

RUN NO. 37  
CHANNEL MY IN Coeff. UNITS

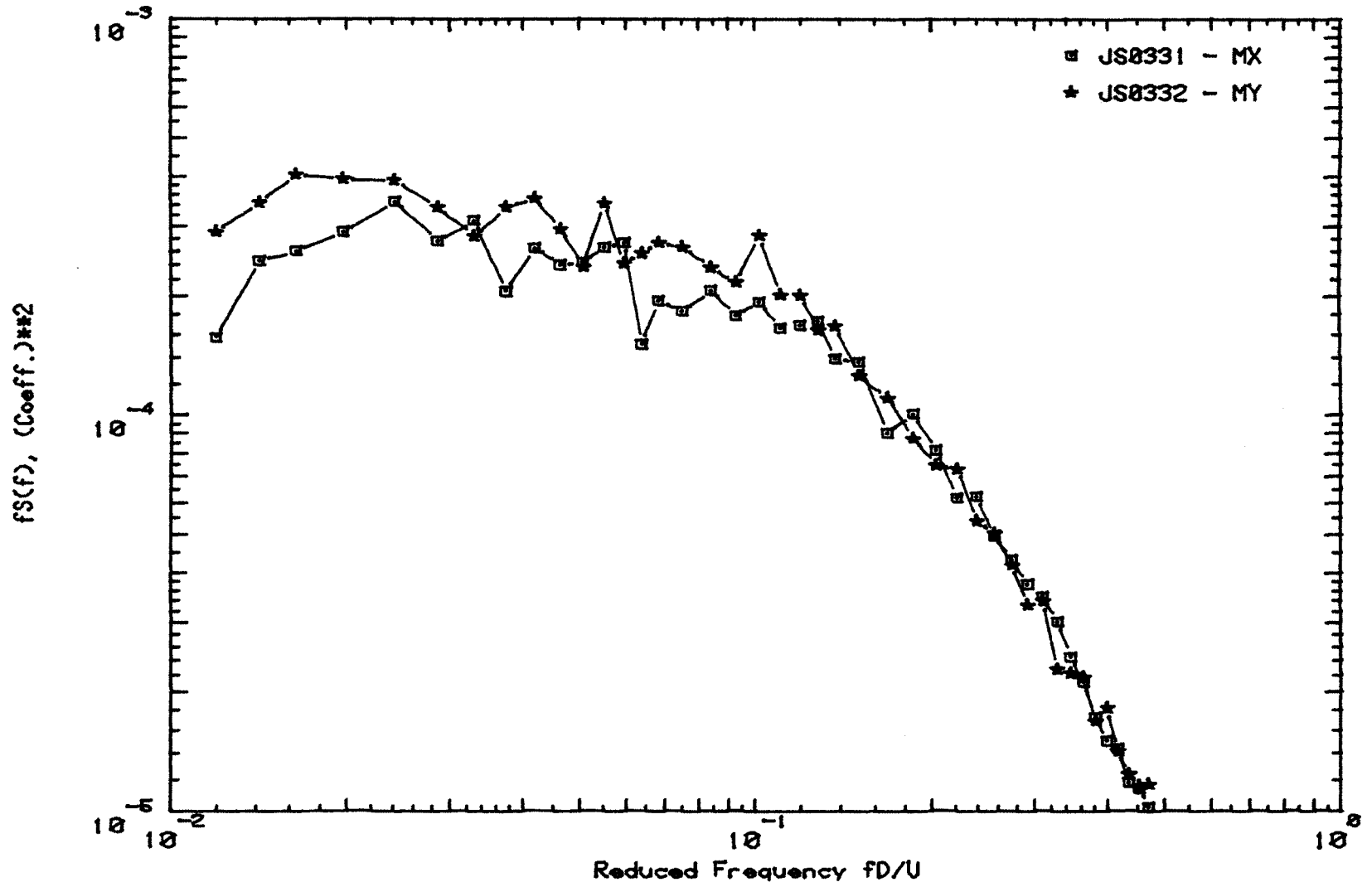
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 41.05 FPS  
Q\*A = .8896 LBS  
Q\*A\*L = 14.23 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1138 RMS = .2784E-01 ROOT(AREA) = .2787E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.418E-01	.213E-03	.221	.811E-04	.540	.976E-05
.553E-03	.135E-04	.462E-01	.182E-03	.239	.737E-04	.557	.918E-05
.111E-02	.317E-04	.506E-01	.222E-03	.256	.523E-04	.584	.756E-05
.166E-02	.475E-04	.550E-01	.190E-03	.274	.496E-04	.602	.715E-05
.249E-02	.313E-04	.595E-01	.195E-03	.292	.432E-04	.655	.652E-05
.360E-02	.699E-04	.639E-01	.222E-03	.310	.374E-04	.672	.563E-05
.470E-02	.843E-04	.683E-01	.170E-03	.327	.331E-04	.726	.562E-05
.581E-02	.125E-03	.750E-01	.163E-03	.345	.280E-04	.743	.442E-05
.692E-02	.912E-04	.838E-01	.160E-03	.363	.241E-04	.796	.523E-05
.802E-02	.214E-03	.927E-01	.182E-03	.380	.213E-04	.814	.468E-05
.968E-02	.193E-03	.102	.150E-03	.398	.190E-04	.867	.464E-05
.119E-01	.183E-03	.110	.155E-03	.416	.155E-04	.885	.182E-05
.141E-01	.176E-03	.119	.142E-03	.433	.164E-04	.938	.940E-06
.163E-01	.172E-03	.128	.138E-03	.451	.155E-04	.956	.647E-06
.196E-01	.237E-03	.137	.115E-03	.469	.117E-04	1.01	.446E-06
.241E-01	.227E-03	.150	.121E-03	.487	.106E-04	1.03	.296E-06
.285E-01	.174E-03	.168	.117E-03	.504	.110E-04	1.08	.234E-06
.329E-01	.149E-03	.186	.115E-03	.522	.967E-05	1.10	.189E-06
.373E-01	.236E-03	.203	.956E-04				

RUN NO. 33 WIND DIRECTION 210 Deg. VEL. U = 41.0 fps



POWER SPECTRAL FILE JS0331

TIME 10:39 DAY 100 OF 1985

CONFIGURATION A

WIND VEL : 40.96 FPS  
DIRECTION: 210

RUN NO. 33  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.96 FPS  
Q\*A = .0054 LBS  
Q\*A\*L = 14.17 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1160 RMS = .3187E-01 ROOT(AREA) = .2993E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.419E-01	.264E-03	.222	.610E-04	.541	.640E-05
.555E-03	.119E-04	.463E-01	.239E-03	.239	.621E-04	.559	.593E-05
.111E-02	.230E-04	.507E-01	.243E-03	.257	.490E-04	.585	.576E-05
.166E-02	.370E-04	.552E-01	.265E-03	.275	.432E-04	.603	.527E-05
.250E-02	.497E-04	.596E-01	.273E-03	.293	.373E-04	.656	.440E-05
.360E-02	.104E-03	.640E-01	.151E-03	.310	.348E-04	.674	.382E-05
.471E-02	.107E-03	.685E-01	.194E-03	.328	.301E-04	.727	.352E-05
.582E-02	.998E-04	.751E-01	.183E-03	.346	.245E-04	.745	.321E-05
.693E-02	.217E-03	.840E-01	.206E-03	.363	.212E-04	.798	.296E-05
.804E-02	.954E-04	.929E-01	.178E-03	.381	.173E-04	.816	.272E-05
.970E-02	.179E-03	.102	.193E-03	.399	.150E-04	.869	.231E-05
.119E-01	.157E-03	.111	.166E-03	.417	.144E-04	.887	.144E-05
.141E-01	.245E-03	.119	.160E-03	.434	.110E-04	.940	.116E-05
.164E-01	.259E-03	.128	.172E-03	.452	.114E-04	.950	.957E-06
.197E-01	.290E-03	.137	.139E-03	.470	.102E-04	1.01	.411E-06
.241E-01	.345E-03	.151	.136E-03	.488	.837E-05	1.03	.265E-06
.286E-01	.275E-03	.168	.900E-04	.505	.806E-05	1.00	.178E-06
.330E-01	.307E-03	.186	.100E-03	.523	.779E-05	1.10	.174E-06
.374E-01	.204E-03	.204	.814E-04				



POWER SPECTRAL FILE JS0332

TIME 18:39 DAY 100 OF 1985

CONFIGURATION A

WIND VEL : 40.96 FPS  
DIRECTION: 210

RUN NO. 33  
CHANNEL MY IN Coeff. UNITS

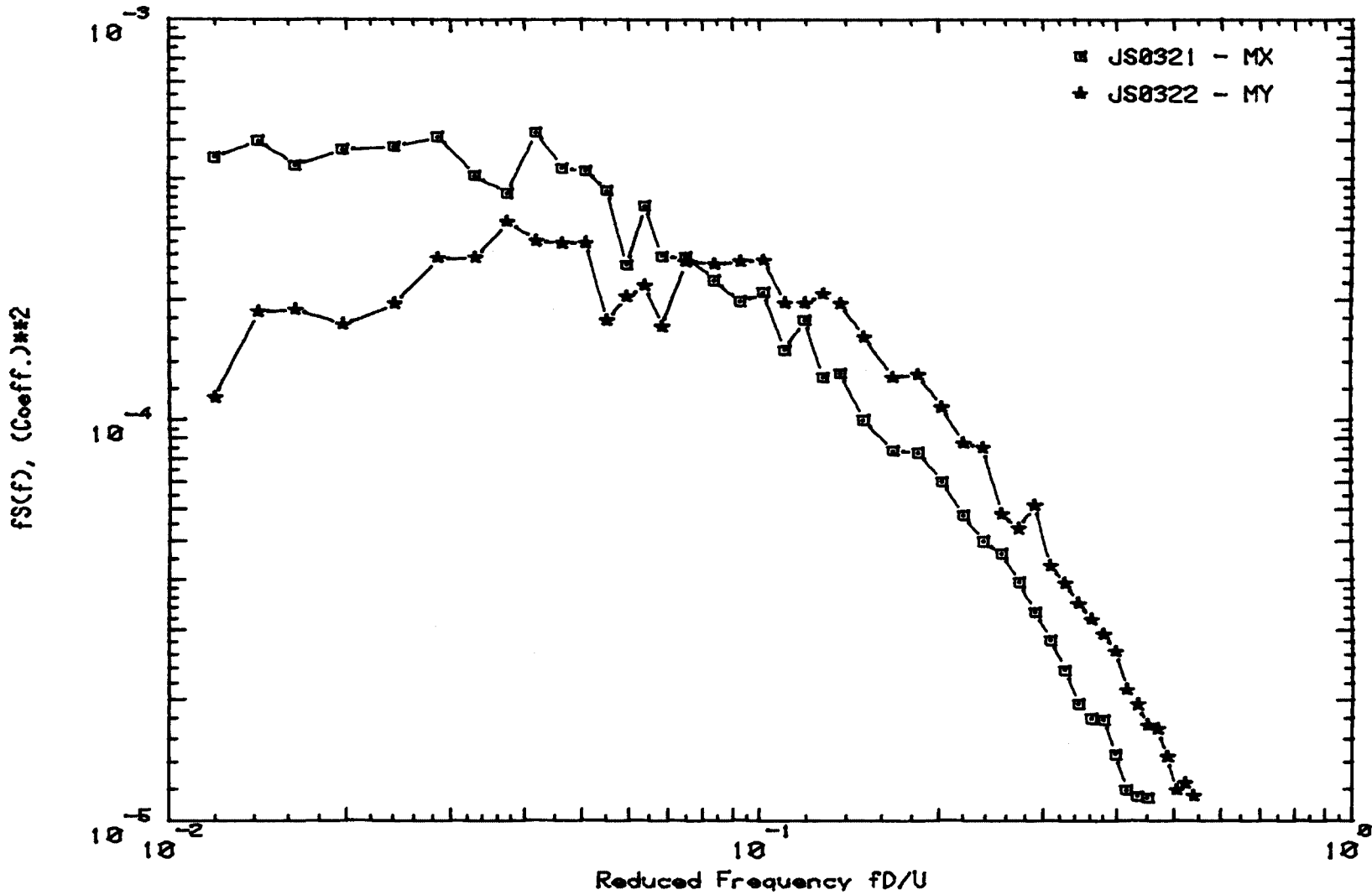
NON-DIMENSIONAL SPECTRUM F\*S(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.96 FPS  
Q\*A = .0054 LBS  
Q\*A\*L = 14.17 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1145 RMS = .3501E-01 ROOT(AREA) = .3442E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.417E-01	.352E-03	.222	.720E-04	.541	.706E-05
.555E-03	.108E-04	.463E-01	.294E-03	.239	.540E-04	.559	.688E-05
.111E-02	.519E-04	.507E-01	.237E-03	.257	.503E-04	.585	.677E-05
.166E-02	.439E-04	.552E-01	.342E-03	.275	.410E-04	.603	.573E-05
.250E-02	.671E-04	.596E-01	.241E-03	.293	.331E-04	.656	.536E-05
.360E-02	.103E-03	.640E-01	.256E-03	.310	.339E-04	.674	.426E-05
.471E-02	.150E-03	.605E-01	.272E-03	.328	.220E-04	.727	.372E-05
.582E-02	.119E-03	.751E-01	.265E-03	.346	.223E-04	.745	.361E-05
.693E-02	.316E-03	.840E-01	.236E-03	.363	.210E-04	.798	.356E-05
.804E-02	.265E-03	.929E-01	.216E-03	.381	.169E-04	.816	.400E-05
.970E-02	.339E-03	.102	.283E-03	.399	.182E-04	.869	.336E-05
.119E-01	.289E-03	.111	.201E-03	.417	.142E-04	.887	.144E-05
.141E-01	.343E-03	.119	.200E-03	.434	.124E-04	.940	.680E-06
.164E-01	.403E-03	.128	.164E-03	.452	.116E-04	.958	.478E-06
.197E-01	.393E-03	.137	.167E-03	.470	.117E-04	1.01	.363E-06
.241E-01	.389E-03	.151	.126E-03	.488	.926E-05	1.03	.228E-06
.286E-01	.334E-03	.168	.110E-03	.505	.099E-05	1.08	.153E-06
.330E-01	.282E-03	.186	.869E-04	.523	.748E-05	1.10	.121E-06
.374E-01	.334E-03	.204	.746E-04				

RUN NO. 32 WIND DIRECTION 220 Deg. VEL. U = 41.0 fps



POWER SPECTRAL FILE JS0321

TIME 10:31 DAY 100 OF 1205

CONFIGURATION A WIND VEL : 41.00 FPS RUN NO. 32  
 DIRECTION: 220 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F#D/U : D = 5.000 IN.  
 U = 41.00 FPS  
 Q\*A = .0074 LBS  
 Q\*A\*L = 14.20 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1366 RMS = .4048E-01 ROOT(AREA) = .3044E-01

F#D/U	F*(F)	F#D/U	F*(F)	F#D/U	F*(F)	F#D/U	F*(F)
0.00	0.00	.410E-01	.522E-03	.221	.577E-04	.540	.633E-05
.554E-03	.211E-04	.462E-01	.425E-03	.239	.499E-04	.558	.640E-05
.111E-02	.354E-04	.507E-01	.410E-03	.257	.463E-04	.585	.543E-05
.166E-02	.113E-03	.551E-01	.373E-03	.274	.393E-04	.602	.578E-05
.249E-02	.127E-03	.595E-01	.243E-03	.292	.331E-04	.656	.445E-05
.360E-02	.970E-04	.640E-01	.342E-03	.310	.282E-04	.673	.411E-05
.471E-02	.200E-03	.684E-01	.256E-03	.328	.237E-04	.726	.371E-05
.582E-02	.181E-03	.751E-01	.254E-03	.345	.195E-04	.744	.360E-05
.692E-02	.506E-03	.839E-01	.222E-03	.363	.180E-04	.797	.323E-05
.803E-02	.390E-03	.928E-01	.197E-03	.381	.179E-04	.815	.314E-05
.969E-02	.351E-03	.102	.208E-03	.399	.147E-04	.868	.268E-05
.119E-01	.452E-03	.111	.149E-03	.416	.119E-04	.886	.175E-05
.141E-01	.497E-03	.119	.177E-03	.434	.115E-04	.939	.138E-05
.163E-01	.431E-03	.128	.127E-03	.452	.114E-04	.957	.115E-05
.197E-01	.473E-03	.137	.130E-03	.469	.070E-05	1.01	.606E-06
.241E-01	.481E-03	.150	.998E-04	.487	.806E-05	1.03	.310E-06
.285E-01	.509E-03	.168	.837E-04	.505	.753E-05	1.08	.210E-06
.330E-01	.407E-03	.186	.828E-04	.523	.619E-05	1.10	.227E-06
.374E-01	.367E-03	.204	.701E-04				

POWER SPECTRAL FILE JS0322

TIME 10:31 DAY 100 OF 1905

CONFIGURATION A

WIND VEL : 41.00 FPS  
DIRECTION: 220

RUN NO. 32  
CHANNEL NY IN Coeff. UNITS

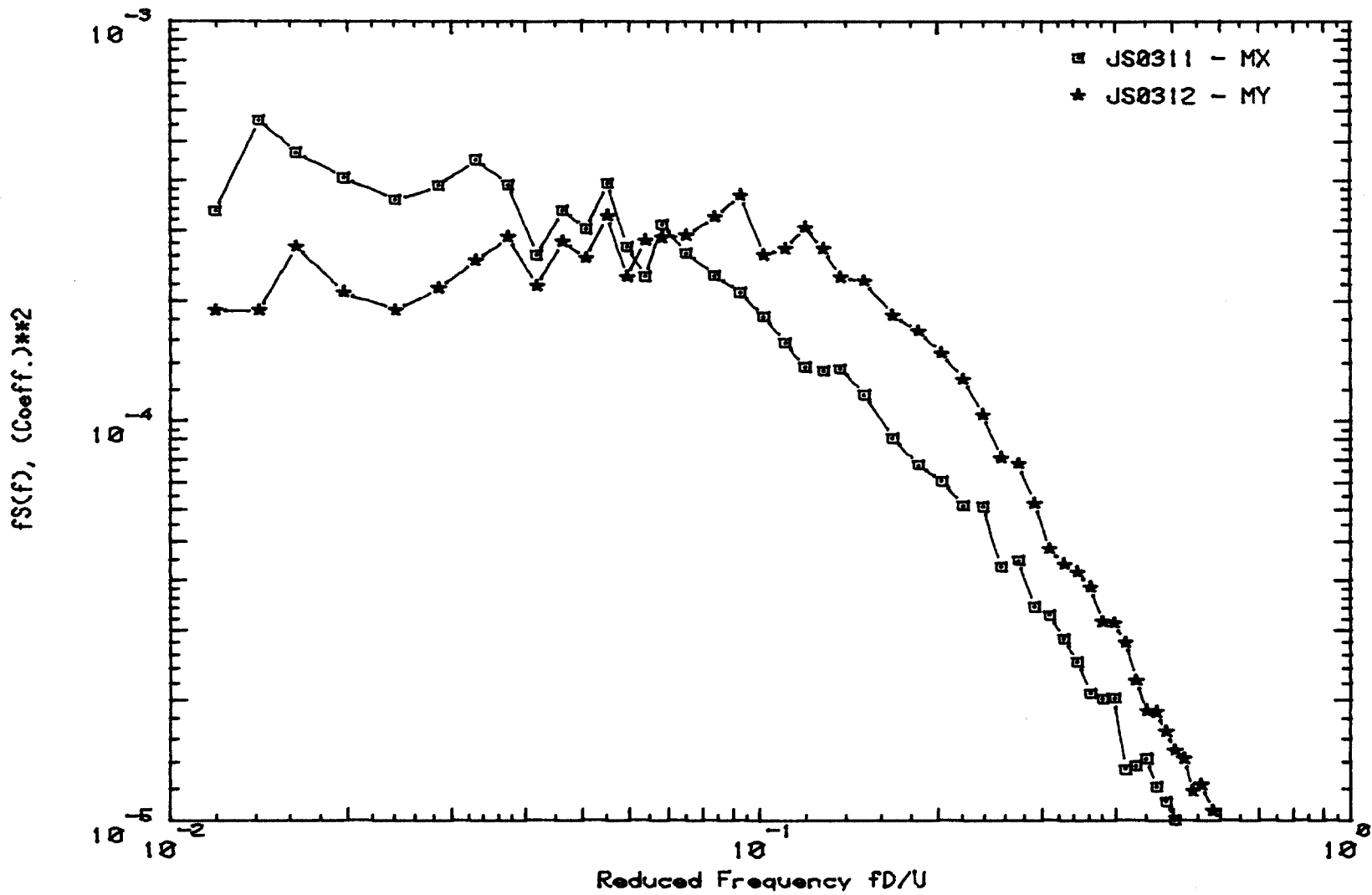
NON-DIMENSIONAL SPECTRUM F\*(F) OF NY VS. F\*D/U : D = 5.000 IN.  
U = 41.00 FPS  
Q\*A = .8874 LBS  
Q\*A\*L = 14.20 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .7636E-01 RMS = .2897E-01 ROOT(AREA) = .2856E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.410E-01	.279E-03	.221	.873E-04	.540	.115E-04
.554E-03	.294E-05	.462E-01	.276E-03	.239	.850E-04	.558	.900E-05
.111E-02	.220E-04	.507E-01	.277E-03	.257	.583E-04	.585	.805E-05
.166E-02	.335E-04	.551E-01	.177E-03	.274	.536E-04	.602	.705E-05
.249E-02	.419E-04	.595E-01	.203E-03	.292	.612E-04	.656	.652E-05
.360E-02	.814E-04	.640E-01	.216E-03	.310	.432E-04	.673	.583E-05
.471E-02	.845E-04	.684E-01	.170E-03	.328	.391E-04	.726	.522E-05
.582E-02	.848E-04	.751E-01	.248E-03	.345	.348E-04	.744	.514E-05
.692E-02	.132E-03	.839E-01	.244E-03	.363	.318E-04	.797	.492E-05
.803E-02	.112E-03	.928E-01	.248E-03	.381	.292E-04	.815	.513E-05
.969E-02	.903E-04	.102	.250E-03	.399	.264E-04	.868	.500E-05
.119E-01	.114E-03	.111	.195E-03	.416	.213E-04	.886	.228E-05
.141E-01	.186E-03	.119	.195E-03	.434	.194E-04	.939	.112E-05
.163E-01	.188E-03	.128	.206E-03	.452	.173E-04	.957	.661E-06
.197E-01	.172E-03	.137	.195E-03	.469	.162E-04	1.01	.494E-06
.241E-01	.195E-03	.150	.161E-03	.487	.144E-04	1.03	.303E-06
.285E-01	.253E-03	.168	.127E-03	.505	.119E-04	1.08	.182E-06
.330E-01	.254E-03	.186	.130E-03	.523	.124E-04	1.10	.180E-06
.374E-01	.312E-03	.204	.107E-03				

RUN NO. 31 WIND DIRECTION 230 Deg. VEL. U = 41.0 fps



POWER SPECTRAL FILE JS0311

TIME 10:23 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 41.03 FPS RUN NO. 31  
 DIRECTION: 230 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 41.03 FPS  
 Q\*A = .0083 LBS  
 Q\*A\*L = 14.21 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1533 RMS = .4004E-01 ROOT(AREA) = .3011E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.418E-01	.260E-03	.221	.614E-04	.540	.843E-05
.554E-03	.249E-04	.462E-01	.337E-03	.239	.610E-04	.558	.729E-05
.111E-02	.413E-04	.507E-01	.302E-03	.257	.431E-04	.584	.757E-05
.166E-02	.436E-04	.551E-01	.393E-03	.274	.447E-04	.602	.678E-05
.249E-02	.216E-03	.595E-01	.272E-03	.292	.343E-04	.655	.586E-05
.360E-02	.177E-03	.639E-01	.229E-03	.310	.327E-04	.673	.508E-05
.471E-02	.261E-03	.684E-01	.310E-03	.327	.284E-04	.726	.477E-05
.581E-02	.233E-03	.750E-01	.262E-03	.345	.249E-04	.744	.428E-05
.692E-02	.604E-03	.839E-01	.231E-03	.363	.208E-04	.797	.389E-05
.803E-02	.337E-03	.927E-01	.210E-03	.381	.201E-04	.815	.364E-05
.969E-02	.348E-03	.102	.182E-03	.398	.202E-04	.868	.300E-05
.119E-01	.334E-03	.110	.156E-03	.416	.135E-04	.885	.223E-05
.141E-01	.565E-03	.119	.136E-03	.434	.130E-04	.939	.152E-05
.163E-01	.469E-03	.128	.133E-03	.451	.143E-04	.956	.158E-05
.197E-01	.405E-03	.137	.135E-03	.469	.122E-04	1.01	.733E-06
.241E-01	.357E-03	.150	.116E-03	.487	.112E-04	1.03	.429E-06
.285E-01	.387E-03	.168	.902E-04	.505	.100E-04	1.08	.300E-06
.329E-01	.449E-03	.186	.774E-04	.522	.913E-05	1.10	.263E-06
.374E-01	.389E-03	.203	.707E-04				

POWER SPECTRAL FILE JS0312

TIME 18:23 DAY 100 OF 1985

CONFIGURATION A

WIND VEL : 41.03 FPS  
DIRECTION: 230

RUN NO. 31  
CHANNEL MY IN Coeff. UNITS

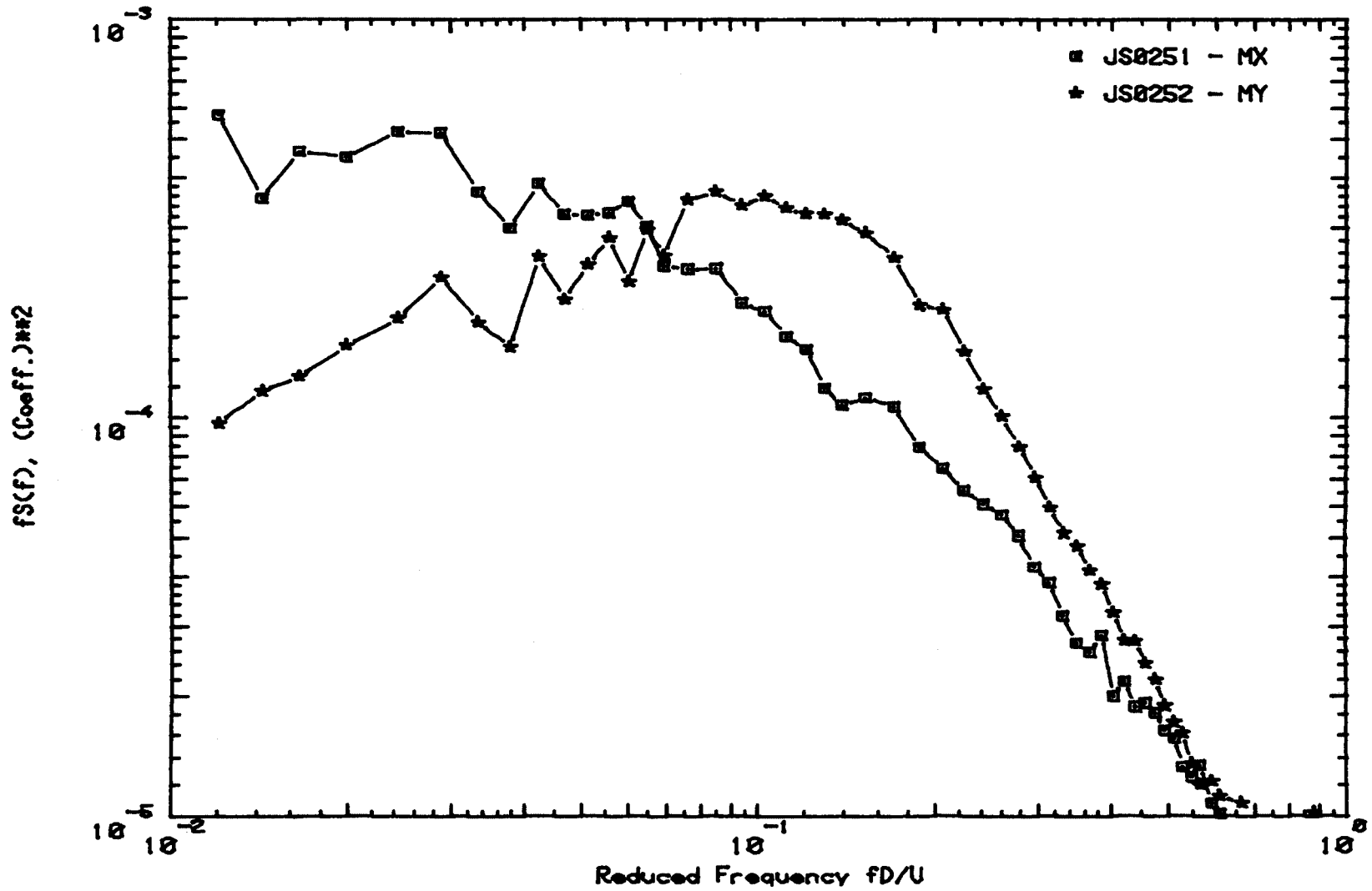
NON-DIMENSIONAL SPECTRUM F\*S(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 41.03 FPS  
Q\*A = .0083 LBS  
Q\*A\*L = 14.21 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .3762E-01 RMS = .3071E-01 ROOT(AREA) = .3002E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.418E-01	.217E-03	.221	.127E-03	.540	.119E-04
.554E-03	.833E-05	.462E-01	.281E-03	.239	.103E-03	.558	.123E-04
.111E-02	.119E-04	.507E-01	.255E-03	.257	.906E-04	.584	.106E-04
.166E-02	.184E-04	.551E-01	.326E-03	.274	.781E-04	.602	.843E-05
.249E-02	.302E-04	.595E-01	.229E-03	.292	.622E-04	.655	.730E-05
.360E-02	.331E-04	.639E-01	.283E-03	.310	.479E-04	.673	.676E-05
.471E-02	.620E-04	.684E-01	.287E-03	.327	.437E-04	.726	.654E-05
.581E-02	.764E-04	.750E-01	.291E-03	.345	.418E-04	.744	.685E-05
.692E-02	.658E-04	.832E-01	.324E-03	.363	.383E-04	.797	.645E-05
.803E-02	.119E-03	.927E-01	.367E-03	.381	.314E-04	.815	.746E-05
.969E-02	.113E-03	.102	.260E-03	.398	.311E-04	.868	.701E-05
.119E-01	.188E-03	.110	.269E-03	.416	.279E-04	.885	.365E-05
.141E-01	.189E-03	.119	.304E-03	.434	.224E-04	.939	.152E-05
.163E-01	.272E-03	.128	.270E-03	.451	.188E-04	.956	.872E-06
.197E-01	.209E-03	.137	.220E-03	.469	.186E-04	1.01	.610E-06
.241E-01	.188E-03	.150	.224E-03	.487	.167E-04	1.03	.372E-06
.285E-01	.214E-03	.168	.183E-03	.505	.150E-04	1.08	.267E-06
.329E-01	.251E-03	.186	.168E-03	.522	.143E-04	1.10	.208E-06
.374E-01	.288E-03	.203	.148E-03				

RUN NO. 25 WIND DIRECTION 240 Deg. VEL. U = 40.5 fps





POWER SPECTRAL FILE JC0251

TIME 21:30 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.48 FPS RUN NO. 25  
 DIRECTION: 240 CHANNEL HX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.48 FPS  
 Q\*A = .0649 LBS  
 Q\*A\*L = 13.04 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1589 RMS = .3880E-01 ROOT(AREA) = .3079E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.387E-03	.224	.656E-04	.547	.126E-04
.561E-03	.437E-04	.468E-01	.324E-03	.242	.607E-04	.565	.134E-04
.112E-02	.526E-04	.513E-01	.322E-03	.260	.572E-04	.592	.108E-04
.168E-02	.738E-04	.558E-01	.327E-03	.278	.508E-04	.610	.102E-04
.252E-02	.176E-03	.603E-01	.349E-03	.296	.422E-04	.664	.875E-05
.365E-02	.194E-03	.648E-01	.302E-03	.314	.386E-04	.682	.760E-05
.477E-02	.229E-03	.693E-01	.240E-03	.332	.319E-04	.736	.755E-05
.589E-02	.337E-03	.760E-01	.236E-03	.350	.272E-04	.754	.725E-05
.701E-02	.262E-03	.850E-01	.237E-03	.368	.258E-04	.808	.670E-05
.814E-02	.338E-03	.940E-01	.194E-03	.386	.205E-04	.826	.668E-05
.982E-02	.362E-03	.103	.185E-03	.404	.200E-04	.879	.480E-05
.121E-01	.574E-03	.112	.160E-03	.422	.210E-04	.897	.291E-05
.143E-01	.355E-03	.121	.140E-03	.440	.188E-04	.951	.210E-05
.166E-01	.464E-03	.130	.119E-03	.458	.193E-04	.969	.209E-05
.199E-01	.451E-03	.139	.107E-03	.475	.182E-04	1.02	.940E-06
.244E-01	.522E-03	.152	.112E-03	.493	.165E-04	1.04	.514E-06
.289E-01	.518E-03	.170	.107E-03	.511	.157E-04	1.09	.364E-06
.334E-01	.368E-03	.188	.840E-04	.529	.133E-04	1.11	.345E-06
.379E-01	.299E-03	.206	.745E-04				

POWER SPECTRAL FILE JS0252

TIME 21:30 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.48 FPS  
DIRECTION: 240

RUN NO. 25  
CHANNEL MY IN Coeff. UNITS

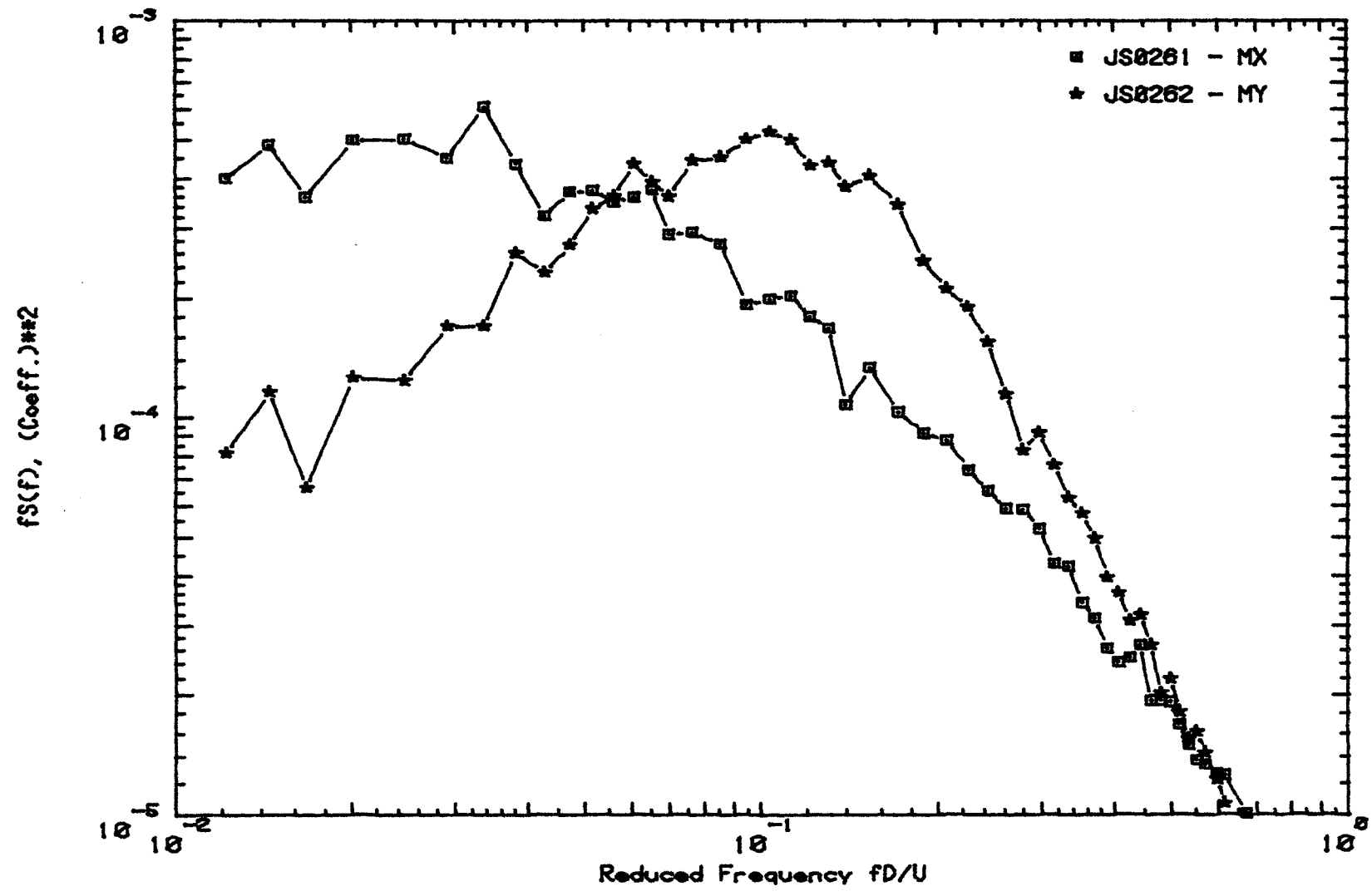
NON-DIMENSIONAL SPECTRUM F\*S(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.48 FPS  
Q\*A = .0649 LBS  
Q\*A\*L = 13.04 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .4832E-02 RMS = .2864E-01 ROOT(AREA) = .2062E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.424E-01	.253E-03	.224	.146E-03	.547	.136E-04
.561E-03	.375E-05	.468E-01	.198E-03	.242	.110E-03	.565	.120E-04
.112E-02	.531E-05	.513E-01	.242E-03	.260	.101E-03	.592	.123E-04
.168E-02	.930E-05	.558E-01	.282E-03	.278	.845E-04	.610	.112E-04
.252E-02	.265E-04	.603E-01	.219E-03	.296	.707E-04	.664	.100E-04
.365E-02	.422E-04	.648E-01	.297E-03	.314	.596E-04	.682	.903E-05
.477E-02	.351E-04	.693E-01	.255E-03	.332	.514E-04	.736	.899E-05
.589E-02	.519E-04	.760E-01	.353E-03	.350	.476E-04	.754	.920E-05
.701E-02	.532E-04	.850E-01	.367E-03	.368	.414E-04	.808	.991E-05
.814E-02	.612E-04	.940E-01	.341E-03	.386	.302E-04	.826	.947E-05
.982E-02	.642E-04	.103	.357E-03	.404	.324E-04	.879	.102E-04
.121E-01	.968E-04	.112	.336E-03	.422	.276E-04	.897	.482E-05
.143E-01	.117E-03	.121	.324E-03	.440	.276E-04	.951	.197E-05
.166E-01	.127E-03	.130	.324E-03	.458	.242E-04	.969	.985E-06
.199E-01	.152E-03	.139	.313E-03	.475	.220E-04	1.02	.637E-06
.244E-01	.177E-03	.152	.290E-03	.493	.189E-04	1.04	.409E-06
.289E-01	.225E-03	.170	.252E-03	.511	.173E-04	1.09	.304E-06
.334E-01	.173E-03	.188	.191E-03	.529	.162E-04	1.11	.293E-06
.379E-01	.150E-03	.206	.187E-03				

RUN NO. 26 WIND DIRECTION 250 Deg. VEL. U = 40.1 fps



POWER SPECTRAL FILE JS0261

TIME 21:45 DAY 99 OF 1905

CONFIGURATION A WIND VEL : 40.15 FPS  
DIRECTION: 250

RUN NO. 26  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.15 FPS  
Q\*A = .0506 LBS  
Q\*A\*L = 13.61 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1476 RMS = .3923E-01 ROOT(AREA) = .3852E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.427E-01	.322E-03	.226	.730E-04	.552	.138E-04
.566E-03	.302E-04	.472E-01	.370E-03	.244	.654E-04	.570	.134E-04
.113E-02	.181E-04	.518E-01	.373E-03	.262	.590E-04	.597	.127E-04
.170E-02	.854E-04	.563E-01	.348E-03	.280	.586E-04	.615	.126E-04
.255E-02	.163E-03	.608E-01	.360E-03	.298	.526E-04	.670	.101E-04
.368E-02	.190E-03	.653E-01	.375E-03	.317	.429E-04	.688	.898E-05
.481E-02	.131E-03	.699E-01	.290E-03	.335	.421E-04	.742	.720E-05
.594E-02	.203E-03	.767E-01	.292E-03	.353	.341E-04	.760	.734E-05
.707E-02	.472E-03	.857E-01	.274E-03	.371	.312E-04	.814	.672E-05
.820E-02	.226E-03	.948E-01	.193E-03	.389	.262E-04	.832	.671E-05
.990E-02	.314E-03	.104	.199E-03	.407	.242E-04	.887	.541E-05
.122E-01	.400E-03	.113	.203E-03	.425	.250E-04	.905	.347E-05
.144E-01	.487E-03	.122	.179E-03	.443	.260E-04	.959	.294E-05
.167E-01	.359E-03	.131	.168E-03	.461	.193E-04	.977	.213E-05
.201E-01	.501E-03	.140	.100E-03	.479	.193E-04	1.03	.992E-06
.246E-01	.503E-03	.154	.133E-03	.498	.192E-04	1.05	.523E-06
.291E-01	.450E-03	.172	.103E-03	.516	.169E-04	1.10	.374E-06
.337E-01	.605E-03	.190	.912E-04	.534	.150E-04	1.12	.314E-06
.382E-01	.434E-03	.208	.877E-04				

POWER SPECTRAL FILE JS0262

TIME 21:45 DAY 22 OF 1985

CONFIGURATION A WIND VEL : 40.15 FPS  
 DIRECTION: 250

RUN NO. 26  
 CHANNEL MY IN Coeff. UNITS

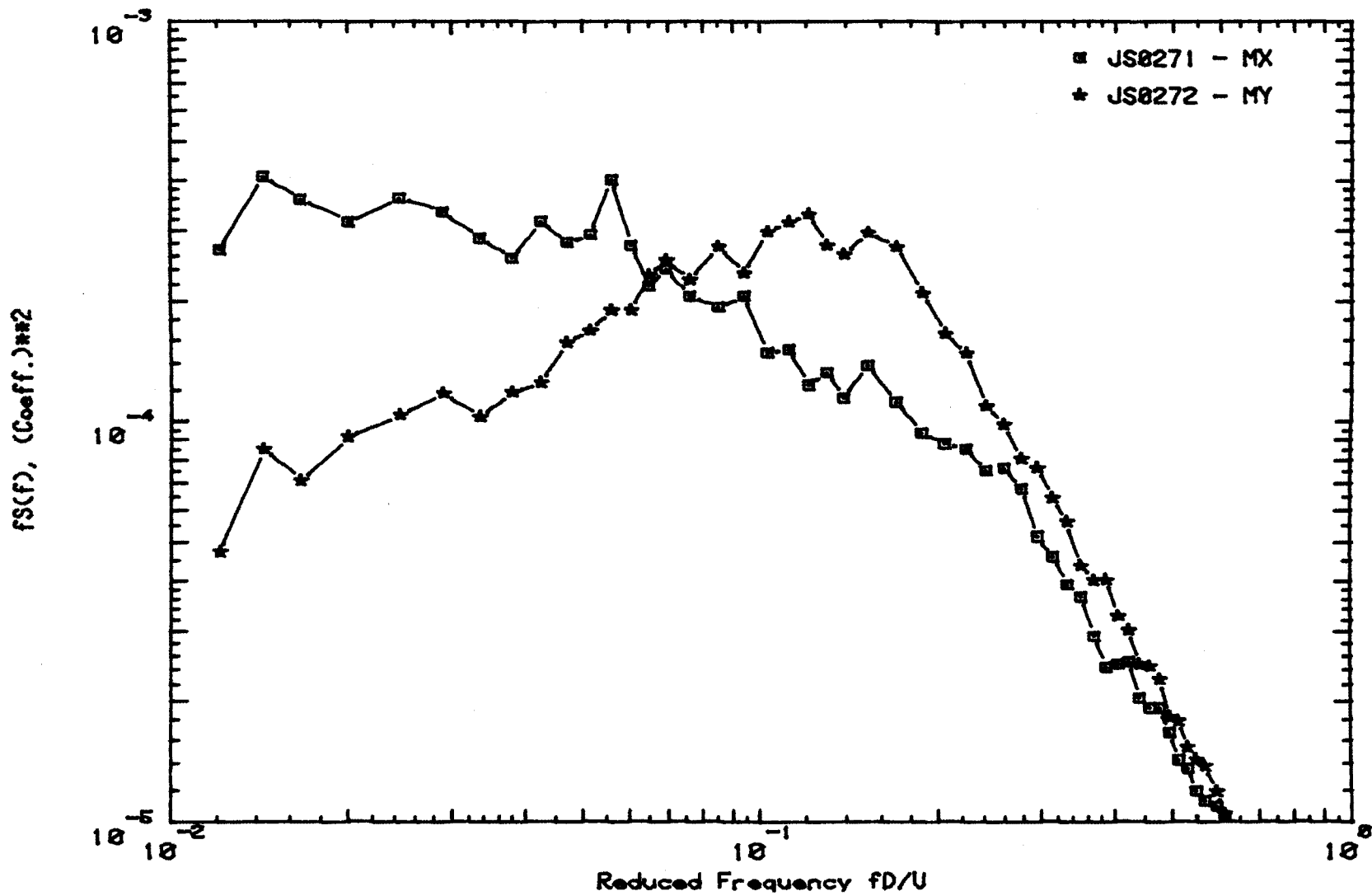
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.15 FPS  
 Q\*A = .0506 LBS  
 Q\*A\*L = 13.61 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.0 SEC.

MEAN = -.9784E-03 RMS = .3142E-01 ROOT(AREA) = .3118E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.427E-01	.232E-03	.226	.190E-03	.552	.162E-04
.566E-03	.327E-05	.472E-01	.272E-03	.244	.155E-03	.570	.143E-04
.113E-02	.112E-04	.510E-01	.335E-03	.262	.115E-03	.597	.123E-04
.170E-02	.126E-04	.563E-01	.361E-03	.280	.827E-04	.615	.107E-04
.255E-02	.679E-05	.600E-01	.435E-03	.298	.715E-04	.670	.966E-05
.368E-02	.395E-04	.653E-01	.392E-03	.317	.759E-04	.688	.980E-05
.481E-02	.370E-04	.699E-01	.360E-03	.335	.620E-04	.742	.790E-05
.594E-02	.438E-04	.767E-01	.443E-03	.353	.572E-04	.760	.802E-05
.707E-02	.599E-04	.857E-01	.452E-03	.371	.490E-04	.814	.767E-05
.820E-02	.766E-04	.948E-01	.502E-03	.389	.395E-04	.832	.835E-05
.990E-02	.953E-04	.104	.523E-03	.407	.363E-04	.887	.790E-05
.122E-01	.815E-04	.113	.499E-03	.425	.308E-04	.905	.373E-05
.144E-01	.116E-03	.122	.430E-03	.443	.310E-04	.959	.160E-05
.167E-01	.665E-04	.131	.438E-03	.461	.268E-04	.977	.106E-05
.201E-01	.126E-03	.140	.301E-03	.479	.201E-04	1.03	.641E-06
.246E-01	.124E-03	.154	.405E-03	.498	.220E-04	1.05	.402E-06
.291E-01	.170E-03	.172	.343E-03	.516	.102E-04	1.10	.327E-06
.337E-01	.170E-03	.190	.248E-03	.534	.155E-04	1.12	.301E-06
.382E-01	.260E-03	.208	.211E-03				

RUN NO. 27 WIND DIRECTION 260 Deg. VEL. U = 40.4 fps



POWER SPECTRAL FILE J00271

TIME 21:53 DAY 27 OF 1985

CONFIGURATION A WIND VEL : 40.38 FPS  
DIRECTION: 260

RUN NO. 27  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.38 FPS  
Q\*A = .0606 LBS  
Q\*A\*L = 13.77 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1115 RMS = .3331E-01 ROOT(AREA) = .3300E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.425E-01	.316E-03	.225	.052E-04	.549	.119E-04
.562E-03	.250E-04	.470E-01	.280E-03	.243	.753E-04	.567	.113E-04
.112E-02	.315E-04	.515E-01	.293E-03	.261	.763E-04	.594	.107E-04
.169E-02	.503E-04	.560E-01	.401E-03	.279	.679E-04	.612	.103E-04
.253E-02	.646E-04	.605E-01	.275E-03	.297	.517E-04	.666	.820E-05
.366E-02	.138E-03	.650E-01	.218E-03	.315	.459E-04	.684	.706E-05
.478E-02	.120E-03	.695E-01	.240E-03	.333	.390E-04	.738	.713E-05
.591E-02	.164E-03	.762E-01	.205E-03	.351	.364E-04	.756	.633E-05
.703E-02	.142E-03	.852E-01	.192E-03	.369	.290E-04	.810	.643E-05
.816E-02	.175E-03	.942E-01	.205E-03	.387	.243E-04	.828	.565E-05
.984E-02	.246E-03	.103	.140E-03	.405	.240E-04	.882	.451E-05
.121E-01	.268E-03	.112	.151E-03	.423	.251E-04	.900	.285E-05
.143E-01	.409E-03	.121	.123E-03	.441	.204E-04	.954	.256E-05
.166E-01	.358E-03	.130	.132E-03	.459	.193E-04	.972	.156E-05
.200E-01	.315E-03	.139	.114E-03	.477	.192E-04	1.03	.699E-06
.245E-01	.361E-03	.153	.138E-03	.495	.167E-04	1.04	.408E-06
.290E-01	.333E-03	.171	.111E-03	.513	.143E-04	1.10	.328E-06
.335E-01	.286E-03	.189	.935E-04	.531	.137E-04	1.12	.302E-06
.380E-01	.256E-03	.207	.082E-04				

POWER SPECTRAL FILE JS0272

TIME 21:53 DAY 22 OF 1985

CONFIGURATION A WIND VEL : 40.38 FPS RUN NO. 27  
 DIRECTION: 260 CHANNEL NY IN Coeff. UNITS

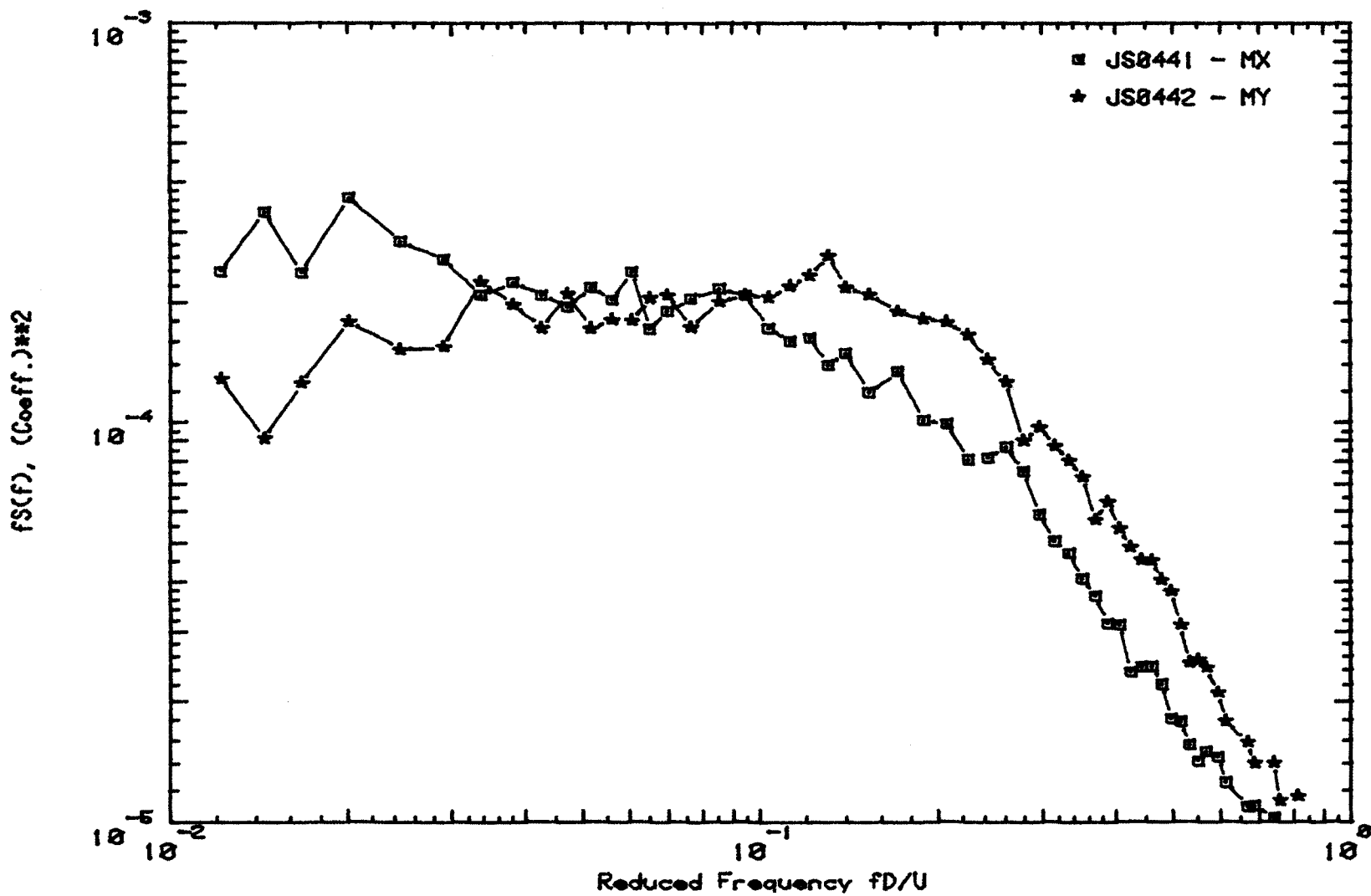
NON-DIMENSIONAL SPECTRUM F\*(F) OF NY VS. F\*D/U : D = 5.000 IN.  
 U = 40.38 FPS  
 Q\*A = .8606 LBS  
 Q\*A\*L = 13.77 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.0 SEC.  
 MEAN = -.1741E-02 RMS = .2520E-01 ROOT(AREA) = .2507E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.425E-01	.125E-03	.225	.147E-03	.549	.143E-04
.562E-03	.232E-05	.470E-01	.157E-03	.243	.109E-03	.567	.138E-04
.112E-02	.601E-05	.515E-01	.169E-03	.261	.900E-04	.594	.112E-04
.169E-02	.508E-05	.560E-01	.189E-03	.279	.806E-04	.612	.105E-04
.253E-02	.109E-04	.605E-01	.189E-03	.297	.766E-04	.666	.921E-05
.366E-02	.167E-04	.650E-01	.232E-03	.315	.643E-04	.684	.813E-05
.478E-02	.203E-04	.695E-01	.253E-03	.333	.561E-04	.738	.692E-05
.591E-02	.313E-04	.762E-01	.225E-03	.351	.436E-04	.756	.697E-05
.703E-02	.426E-04	.852E-01	.274E-03	.369	.401E-04	.810	.679E-05
.816E-02	.519E-04	.942E-01	.234E-03	.387	.402E-04	.828	.693E-05
.984E-02	.691E-04	.103	.297E-03	.405	.326E-04	.882	.550E-05
.121E-01	.472E-04	.112	.314E-03	.423	.302E-04	.900	.228E-05
.143E-01	.853E-04	.121	.320E-03	.441	.240E-04	.954	.125E-05
.166E-01	.712E-04	.130	.274E-03	.459	.245E-04	.972	.871E-06
.200E-01	.914E-04	.139	.261E-03	.477	.227E-04	1.03	.605E-06
.245E-01	.104E-03	.153	.296E-03	.495	.183E-04	1.04	.417E-06
.290E-01	.117E-03	.171	.272E-03	.513	.179E-04	1.10	.283E-06
.335E-01	.102E-03	.189	.209E-03	.531	.154E-04	1.12	.281E-06
.380E-01	.118E-03	.207	.165E-03				



RUN NO. 44 WIND DIRECTION 270 Deg. VEL. U = 40.2 fps



POWER SPECTRAL FILE JS0441

TIME 22:48 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.23 FPS  
DIRECTION: 270

RUN NO. 44  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.23 FPS  
Q\*A = .8543 LBS  
Q\*A\*L = 13.67 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1470 RMS = .3149E-01 ROOT(AREA) = .3071E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.426E-01	.208E-03	.226	.805E-04	.551	.142E-04
.565E-03	.179E-04	.471E-01	.194E-03	.244	.816E-04	.569	.150E-04
.113E-02	.283E-04	.517E-01	.218E-03	.262	.867E-04	.596	.146E-04
.169E-02	.265E-04	.562E-01	.202E-03	.280	.753E-04	.614	.126E-04
.254E-02	.476E-04	.607E-01	.238E-03	.298	.587E-04	.668	.110E-04
.367E-02	.667E-04	.652E-01	.171E-03	.316	.507E-04	.686	.110E-04
.480E-02	.166E-03	.697E-01	.190E-03	.334	.470E-04	.740	.103E-04
.593E-02	.149E-03	.765E-01	.204E-03	.352	.406E-04	.758	.933E-05
.706E-02	.199E-03	.855E-01	.216E-03	.370	.368E-04	.813	.974E-05
.819E-02	.151E-03	.946E-01	.208E-03	.388	.314E-04	.831	.849E-05
.988E-02	.249E-03	.104	.172E-03	.406	.312E-04	.885	.688E-05
.121E-01	.239E-03	.113	.159E-03	.424	.237E-04	.903	.482E-05
.144E-01	.336E-03	.122	.163E-03	.442	.245E-04	.957	.473E-05
.167E-01	.236E-03	.131	.139E-03	.460	.245E-04	.975	.314E-05
.200E-01	.365E-03	.140	.149E-03	.478	.221E-04	1.03	.123E-05
.246E-01	.283E-03	.153	.119E-03	.496	.181E-04	1.05	.712E-06
.291E-01	.255E-03	.171	.134E-03	.515	.179E-04	1.10	.587E-06
.336E-01	.208E-03	.189	.101E-03	.533	.156E-04	1.12	.510E-06
.381E-01	.223E-03	.207	.992E-04				

POWER SPECTRAL FILE JS0442

TIME 22:48 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.23 FPS  
DIRECTION: 270

RUN NO. 44  
CHANNEL NY IN Coeff. UNITS

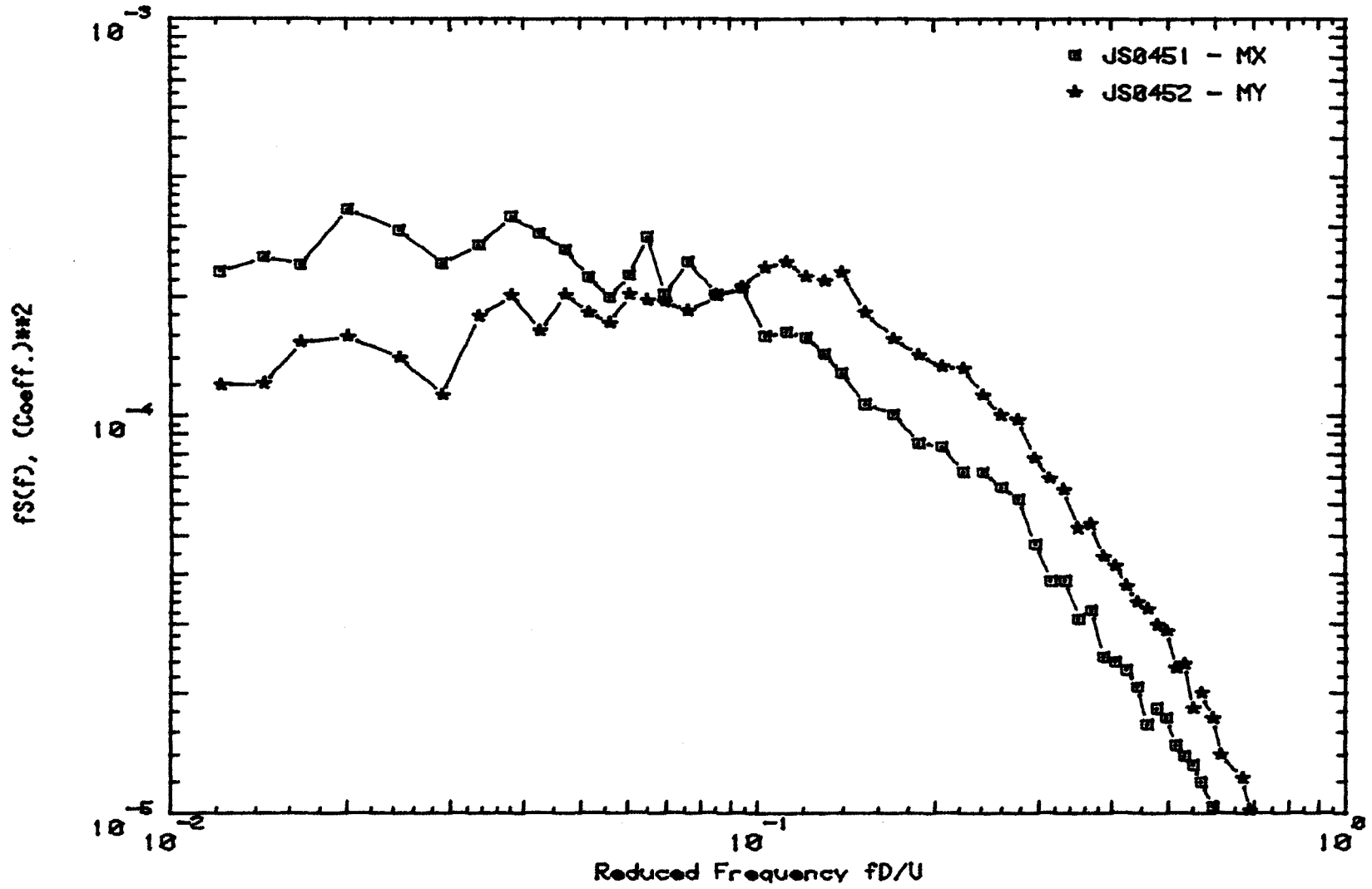
NON-DIMENSIONAL SPECTRUM F\*(F) OF NY VS. F\*D/U : D = 5.000 IN.  
U = 40.23 FPS  
Q\*A = .8543 LBS  
Q\*A\*L = 13.67 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.5613E-01 RMS = .2686E-01 ROOT(AREA) = .2672E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.426E-01	.172E-03	.226	.165E-03	.551	.254E-04
.565E-03	.656E-05	.471E-01	.210E-03	.244	.143E-03	.569	.243E-04
.113E-02	.163E-04	.517E-01	.172E-03	.262	.126E-03	.596	.210E-04
.169E-02	.772E-05	.562E-01	.180E-03	.280	.899E-04	.614	.179E-04
.254E-02	.158E-04	.607E-01	.180E-03	.298	.973E-04	.668	.158E-04
.367E-02	.393E-04	.652E-01	.205E-03	.316	.873E-04	.686	.140E-04
.480E-02	.458E-04	.697E-01	.208E-03	.334	.802E-04	.740	.141E-04
.593E-02	.424E-04	.765E-01	.173E-03	.352	.729E-04	.758	.113E-04
.706E-02	.659E-04	.855E-01	.201E-03	.370	.570E-04	.813	.116E-04
.819E-02	.775E-04	.946E-01	.208E-03	.388	.632E-04	.831	.948E-05
.988E-02	.840E-04	.104	.206E-03	.406	.544E-04	.885	.823E-05
.121E-01	.128E-03	.113	.219E-03	.424	.488E-04	.903	.362E-05
.144E-01	.911E-04	.122	.232E-03	.442	.452E-04	.957	.221E-05
.167E-01	.125E-03	.131	.261E-03	.460	.451E-04	.975	.157E-05
.200E-01	.179E-03	.140	.217E-03	.478	.404E-04	1.03	.100E-05
.246E-01	.152E-03	.153	.209E-03	.496	.378E-04	1.05	.727E-06
.291E-01	.155E-03	.171	.189E-03	.515	.312E-04	1.10	.517E-06
.336E-01	.224E-03	.189	.181E-03	.533	.251E-04	1.12	.483E-06
.381E-01	.197E-03	.207	.178E-03				

RUN NO. 45 WIND DIRECTION 280 Deg. VEL. U = 48.2 fps



POWER SPECTRAL FILE JS0451

TIME 22:55 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.23 FPS RUN NO. 45  
 DIRECTION: 280 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.23 FPS  
 Q\*A = .8541 LBS  
 Q\*A\*L = 13.67 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1647 RMS = .3409E-01 ROOT(AREA) = .3364E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.426E-01	.280E-03	.226	.722E-04	.551	.132E-04
.565E-03	.203E-04	.471E-01	.261E-03	.244	.720E-04	.569	.120E-04
.113E-02	.583E-04	.517E-01	.223E-03	.262	.660E-04	.596	.104E-04
.169E-02	.102E-03	.562E-01	.199E-03	.280	.617E-04	.614	.971E-05
.254E-02	.927E-04	.607E-01	.226E-03	.298	.475E-04	.668	.874E-05
.367E-02	.195E-03	.652E-01	.282E-03	.316	.384E-04	.686	.796E-05
.480E-02	.200E-03	.697E-01	.202E-03	.334	.385E-04	.740	.744E-05
.593E-02	.257E-03	.765E-01	.244E-03	.352	.308E-04	.759	.660E-05
.706E-02	.319E-03	.855E-01	.201E-03	.370	.324E-04	.813	.675E-05
.819E-02	.200E-03	.946E-01	.209E-03	.388	.247E-04	.831	.627E-05
.988E-02	.303E-03	.104	.150E-03	.406	.240E-04	.885	.514E-05
.121E-01	.230E-03	.113	.163E-03	.424	.229E-04	.903	.392E-05
.144E-01	.251E-03	.122	.157E-03	.442	.208E-04	.957	.338E-05
.167E-01	.240E-03	.131	.143E-03	.460	.167E-04	.975	.250E-05
.200E-01	.331E-03	.140	.120E-03	.478	.183E-04	1.03	.866E-06
.246E-01	.292E-03	.153	.107E-03	.497	.174E-04	1.05	.647E-06
.291E-01	.241E-03	.171	.101E-03	.515	.140E-04	1.10	.507E-06
.336E-01	.269E-03	.189	.852E-04	.533	.139E-04	1.12	.535E-06
.381E-01	.317E-03	.207	.837E-04				

POWER SPECTRAL FILE JS0452

TIME 22:55 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.23 FPS RUN NO. 45  
DIRECTION: 280 CHANNEL MY IN Coeff. UNITS

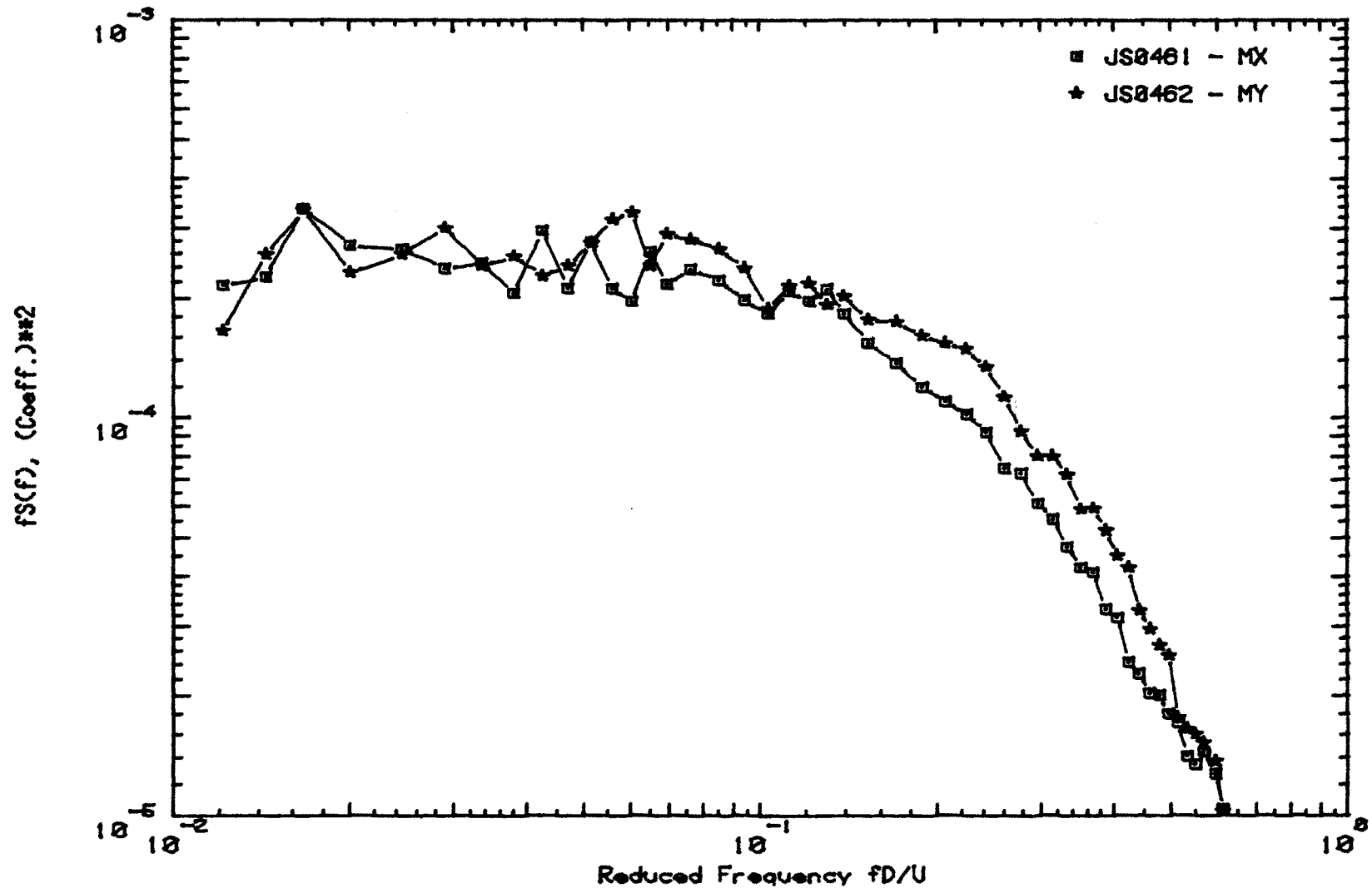
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.23 FPS  
Q\*A = .8541 LBS  
Q\*A\*L = 13.67 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.9085E-01 RMS = .2744E-01 ROOT(AREA) = .2724E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.426E-01	.163E-03	.226	.131E-03	.551	.184E-04
.565E-03	.876E-05	.471E-01	.201E-03	.244	.113E-03	.569	.200E-04
.113E-02	.156E-04	.517E-01	.182E-03	.262	.100E-03	.596	.173E-04
.169E-02	.396E-04	.562E-01	.171E-03	.280	.977E-04	.614	.141E-04
.254E-02	.240E-04	.607E-01	.202E-03	.298	.782E-04	.668	.122E-04
.367E-02	.839E-04	.652E-01	.195E-03	.316	.696E-04	.686	.102E-04
.480E-02	.829E-04	.697E-01	.193E-03	.334	.651E-04	.740	.926E-05
.593E-02	.941E-04	.745E-01	.183E-03	.352	.522E-04	.759	.781E-05
.706E-02	.109E-03	.855E-01	.201E-03	.370	.534E-04	.813	.823E-05
.819E-02	.985E-04	.946E-01	.210E-03	.388	.442E-04	.831	.761E-05
.988E-02	.117E-03	.104	.236E-03	.406	.419E-04	.885	.593E-05
.121E-01	.119E-03	.113	.243E-03	.424	.373E-04	.903	.293E-05
.144E-01	.120E-03	.122	.223E-03	.442	.339E-04	.957	.168E-05
.167E-01	.153E-03	.131	.218E-03	.460	.326E-04	.975	.126E-05
.200E-01	.158E-03	.140	.229E-03	.478	.297E-04	1.03	.909E-06
.246E-01	.140E-03	.153	.182E-03	.497	.287E-04	1.05	.557E-06
.291E-01	.113E-03	.171	.156E-03	.515	.232E-04	1.10	.534E-06
.336E-01	.178E-03	.189	.142E-03	.533	.237E-04	1.12	.450E-06
.381E-01	.201E-03	.207	.133E-03				

RUN NO. 46 WIND DIRECTION 290 Deg. VEL. U = 40.3 fps



POWER SPECTRAL FILE JS0461

TIME 23: 1 DAY 100 OF 1905

CONFIGURATION A WIND VEL : 40.26 FPS  
DIRECTION: 290

RUN NO. 46  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN,  
U = 40.26 FPS  
Q\*A = .8555 LBS  
Q\*A\*L = 13.69 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1219 RMS = .3093E-01 ROOT(AREA) = .3078E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.426E-01	.296E-03	.225	.102E-03	.550	.135E-04
.564E-03	.226E-04	.471E-01	.211E-03	.243	.919E-04	.568	.145E-04
.113E-02	.293E-04	.516E-01	.277E-03	.261	.745E-04	.595	.127E-04
.169E-02	.403E-04	.561E-01	.211E-03	.280	.725E-04	.613	.104E-04
.254E-02	.495E-04	.606E-01	.196E-03	.298	.608E-04	.668	.948E-05
.367E-02	.683E-04	.652E-01	.261E-03	.316	.557E-04	.686	.758E-05
.479E-02	.124E-03	.697E-01	.216E-03	.334	.474E-04	.740	.673E-05
.592E-02	.137E-03	.764E-01	.236E-03	.352	.420E-04	.758	.633E-05
.705E-02	.996E-04	.855E-01	.221E-03	.370	.409E-04	.812	.541E-05
.818E-02	.185E-03	.945E-01	.197E-03	.388	.330E-04	.830	.516E-05
.987E-02	.165E-03	.104	.182E-03	.406	.315E-04	.884	.444E-05
.121E-01	.215E-03	.113	.208E-03	.424	.243E-04	.902	.300E-05
.144E-01	.226E-03	.122	.196E-03	.442	.228E-04	.956	.275E-05
.166E-01	.335E-03	.131	.210E-03	.460	.203E-04	.974	.174E-05
.200E-01	.271E-03	.140	.182E-03	.478	.200E-04	1.03	.641E-06
.245E-01	.265E-03	.153	.154E-03	.496	.180E-04	1.05	.402E-06
.291E-01	.237E-03	.171	.137E-03	.514	.172E-04	1.10	.334E-06
.336E-01	.246E-03	.189	.119E-03	.532	.141E-04	1.12	.358E-06
.381E-01	.205E-03	.207	.110E-03				



POWER SPECTRAL FILE JS0462

TIME 23: 1 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.26 FPS  
DIRECTION: 290

RUN NO. 46  
CHANNEL MY IN Coeff. UNITS

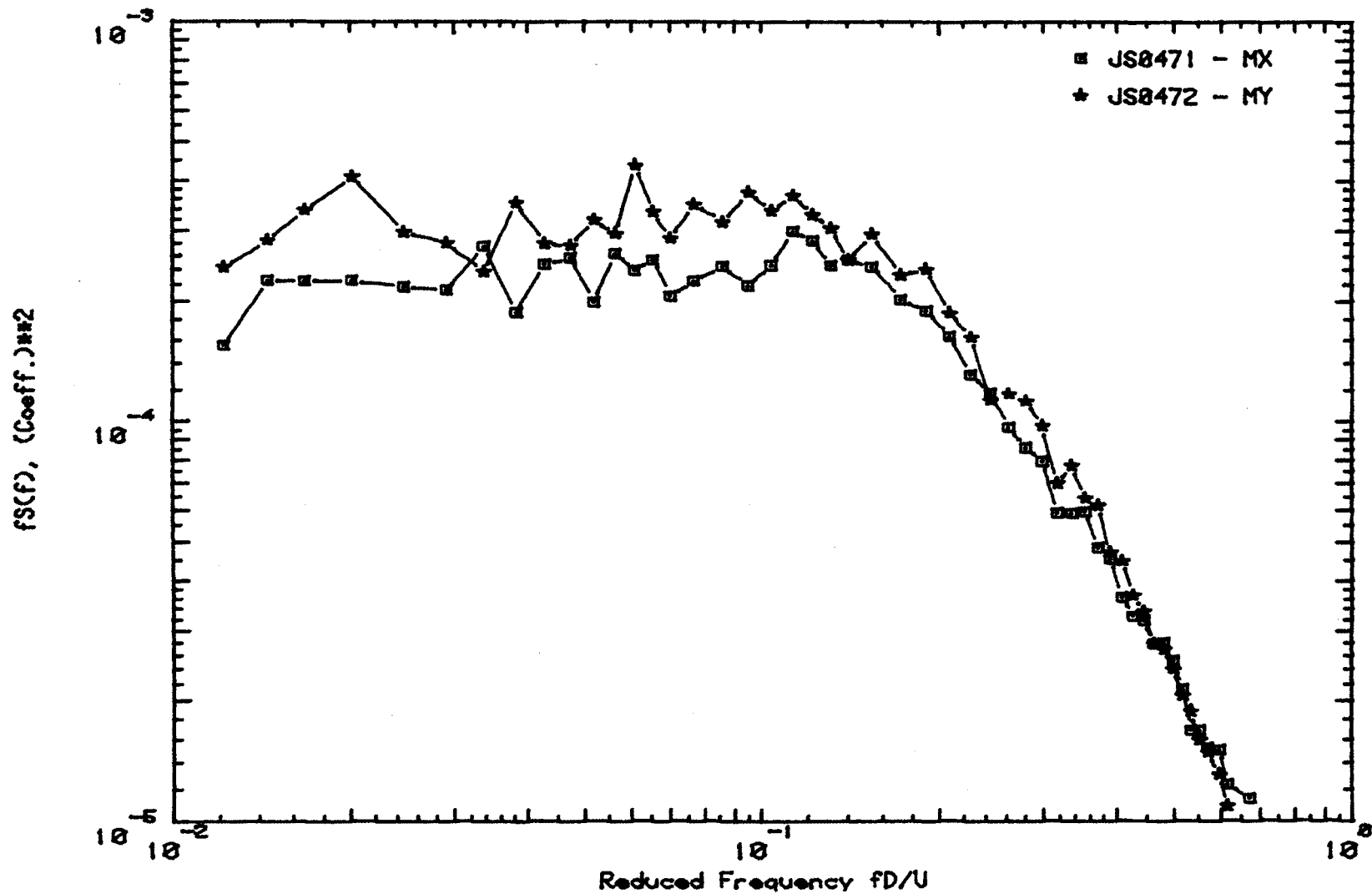
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.26 FPS  
Q\*A = .8555 LBS  
Q\*A\*L = 13.69 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1051 RMS = .3072E-01 ROOT(AREA) = .3086E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.426E-01	.220E-03	.225	.148E-03	.550	.161E-04
.564E-03	.111E-04	.471E-01	.241E-03	.243	.134E-03	.568	.152E-04
.113E-02	.157E-04	.516E-01	.276E-03	.261	.113E-03	.595	.137E-04
.169E-02	.209E-04	.561E-01	.315E-03	.280	.924E-04	.613	.103E-04
.254E-02	.471E-04	.606E-01	.320E-03	.298	.801E-04	.668	.970E-05
.367E-02	.640E-04	.652E-01	.241E-03	.316	.800E-04	.686	.875E-05
.479E-02	.731E-04	.697E-01	.290E-03	.334	.718E-04	.740	.745E-05
.592E-02	.611E-04	.764E-01	.280E-03	.352	.589E-04	.758	.710E-05
.705E-02	.823E-04	.855E-01	.266E-03	.370	.591E-04	.812	.685E-05
.818E-02	.182E-03	.945E-01	.237E-03	.388	.522E-04	.830	.581E-05
.987E-02	.132E-03	.104	.187E-03	.406	.450E-04	.884	.498E-05
.121E-01	.165E-03	.113	.214E-03	.424	.421E-04	.902	.211E-05
.144E-01	.258E-03	.122	.210E-03	.442	.329E-04	.956	.144E-05
.166E-01	.333E-03	.131	.192E-03	.460	.294E-04	.974	.863E-06
.200E-01	.231E-03	.140	.202E-03	.478	.268E-04	1.03	.586E-06
.245E-01	.257E-03	.153	.176E-03	.496	.253E-04	1.05	.420E-06
.291E-01	.299E-03	.171	.174E-03	.514	.177E-04	1.10	.338E-06
.336E-01	.241E-03	.189	.161E-03	.532	.166E-04	1.12	.304E-06
.381E-01	.254E-03	.207	.154E-03				

RUN NO. 47 WIND DIRECTION 300 Deg. VEL. U = 40.1 fps



POWER SPECTRAL FILE JS0471

TIME 23: 7 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.10 FPS  
DIRECTION: 300

RUN NO. 47  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.10 FPS  
Q\*A = .8488 LBS  
Q\*A\*L = 13.58 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .9921E-01 RMS = .3049E-01 ROOT(AREA) = .3053E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.428E-01	.247E-03	.226	.130E-03	.552	.169E-04
.566E-03	.123E-04	.473E-01	.256E-03	.244	.118E-03	.571	.153E-04
.113E-02	.217E-04	.518E-01	.197E-03	.262	.965E-04	.598	.151E-04
.170E-02	.181E-04	.563E-01	.262E-03	.281	.859E-04	.616	.124E-04
.255E-02	.587E-04	.609E-01	.238E-03	.299	.796E-04	.670	.114E-04
.368E-02	.685E-04	.654E-01	.254E-03	.317	.590E-04	.688	.946E-05
.481E-02	.823E-04	.699E-01	.206E-03	.335	.587E-04	.743	.912E-05
.595E-02	.120E-03	.767E-01	.225E-03	.353	.596E-04	.761	.719E-05
.708E-02	.135E-03	.858E-01	.244E-03	.371	.484E-04	.815	.711E-05
.821E-02	.103E-03	.949E-01	.218E-03	.389	.451E-04	.833	.641E-05
.991E-02	.199E-03	.104	.246E-03	.407	.363E-04	.888	.614E-05
.122E-01	.154E-03	.113	.298E-03	.426	.327E-04	.906	.403E-05
.144E-01	.224E-03	.122	.282E-03	.444	.317E-04	.960	.330E-05
.167E-01	.224E-03	.131	.245E-03	.462	.278E-04	.978	.227E-05
.201E-01	.224E-03	.140	.253E-03	.480	.280E-04	1.03	.807E-06
.246E-01	.216E-03	.154	.243E-03	.498	.252E-04	1.05	.598E-06
.292E-01	.213E-03	.172	.201E-03	.516	.214E-04	1.11	.523E-06
.337E-01	.273E-03	.190	.189E-03	.534	.169E-04	1.12	.415E-06
.382E-01	.187E-03	.208	.163E-03				

POWER SPECTRAL FILE JS0472

TIME 23: 7 DAY 100 OF 1985

CONFIGURATION A

WIND VEL : 40.10 FPS  
DIRECTION: 300

RUN NO. 47  
CHANNEL MY IN Coeff. UNITS

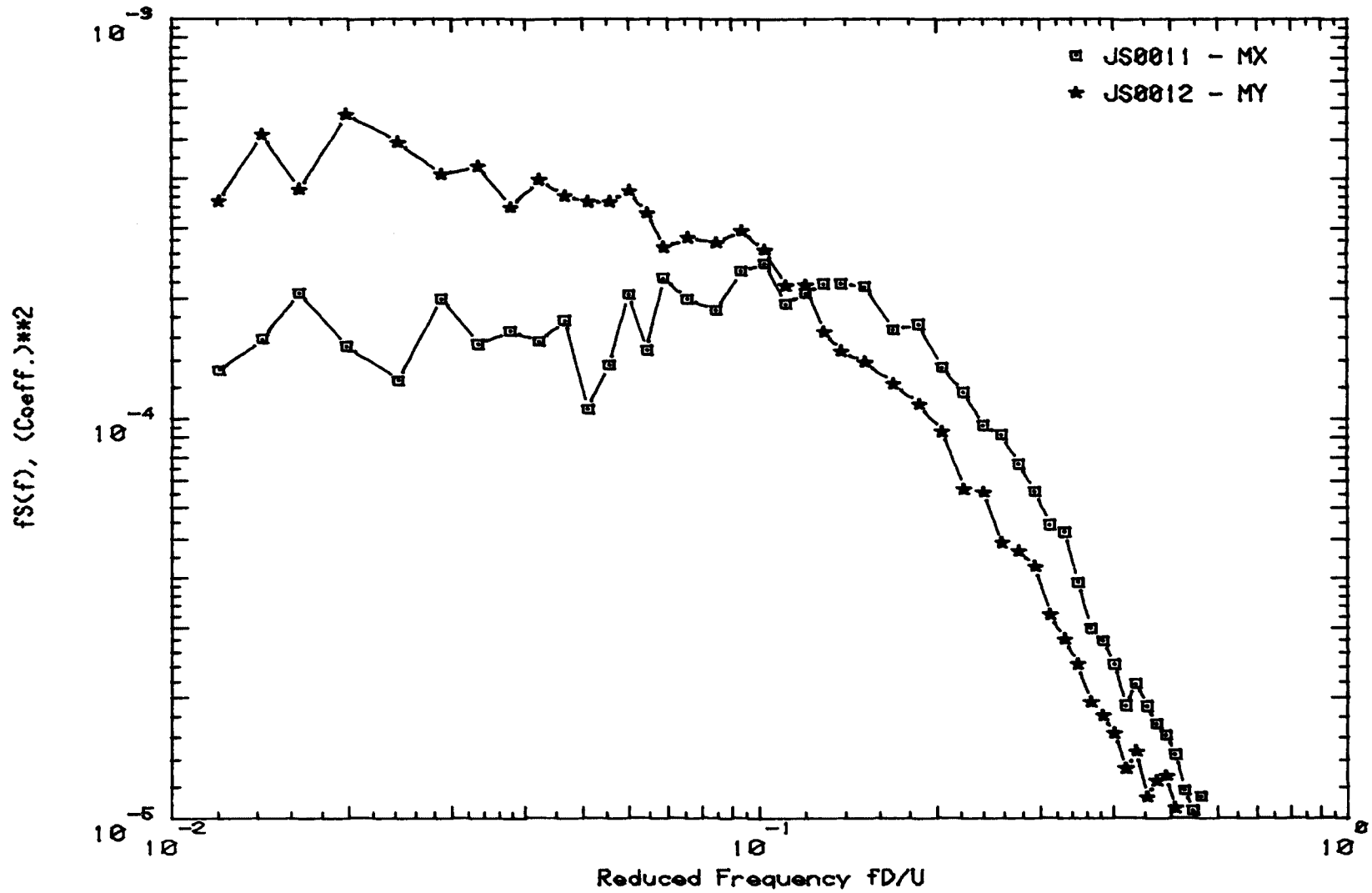
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
U = 40.10 FPS  
Q\*A = .8488 LBS  
Q\*A\*L = 13.58 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1356 RMS = .3571E-01 ROOT(AREA) = .3554E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.428E-01	.270E-03	.226	.162E-03	.552	.160E-04
.566E-03	.131E-04	.473E-01	.274E-03	.244	.113E-03	.571	.149E-04
.113E-02	.362E-04	.518E-01	.317E-03	.262	.117E-03	.598	.131E-04
.170E-02	.200E-04	.563E-01	.294E-03	.281	.112E-03	.616	.109E-04
.255E-02	.813E-04	.609E-01	.436E-03	.299	.971E-04	.670	.964E-05
.368E-02	.791E-04	.654E-01	.333E-03	.317	.699E-04	.688	.869E-05
.481E-02	.131E-03	.699E-01	.286E-03	.335	.773E-04	.743	.888E-05
.595E-02	.214E-03	.767E-01	.348E-03	.353	.641E-04	.761	.750E-05
.708E-02	.220E-03	.858E-01	.315E-03	.371	.614E-04	.815	.791E-05
.821E-02	.160E-03	.949E-01	.374E-03	.389	.469E-04	.833	.802E-05
.991E-02	.264E-03	.104	.335E-03	.407	.447E-04	.888	.575E-05
.122E-01	.242E-03	.113	.366E-03	.426	.368E-04	.906	.237E-05
.144E-01	.283E-03	.122	.328E-03	.444	.335E-04	.960	.154E-05
.167E-01	.337E-03	.131	.304E-03	.462	.277E-04	.978	.110E-05
.201E-01	.408E-03	.140	.252E-03	.480	.267E-04	1.03	.721E-06
.246E-01	.296E-03	.154	.293E-03	.498	.241E-04	1.05	.586E-06
.292E-01	.278E-03	.172	.231E-03	.516	.206E-04	1.11	.469E-06
.337E-01	.236E-03	.190	.240E-03	.534	.188E-04	1.12	.430E-06
.382E-01	.350E-03	.208	.186E-03				

RUN NO. 1 WIND DIRECTION 310 Deg. VEL. U = 40.6 fps



POWER SPECTRAL FILE JS0011

TIME 3:37 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.64 FPS  
DIRECTION: 310

RUN NO. 1  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.64 FPS  
Q\*A = .8718 LBS  
Q\*A\*L = 13.95 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .6792E-01 RMS = .2697E-01 ROOT(AREA) = .2673E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.156E-03	.223	.116E-03	.545	.105E-04
.559E-03	.974E-05	.467E-01	.176E-03	.241	.959E-04	.563	.113E-04
.112E-02	.102E-04	.511E-01	.106E-03	.259	.902E-04	.590	.993E-05
.168E-02	.352E-04	.556E-01	.136E-03	.277	.768E-04	.608	.905E-05
.251E-02	.388E-04	.601E-01	.205E-03	.295	.656E-04	.661	.777E-05
.363E-02	.438E-04	.645E-01	.148E-03	.313	.543E-04	.679	.667E-05
.475E-02	.513E-04	.690E-01	.225E-03	.331	.520E-04	.733	.609E-05
.587E-02	.502E-04	.757E-01	.199E-03	.348	.388E-04	.751	.552E-05
.699E-02	.599E-04	.847E-01	.186E-03	.366	.299E-04	.804	.561E-05
.810E-02	.121E-03	.936E-01	.234E-03	.384	.277E-04	.822	.552E-05
.978E-02	.156E-03	.103	.245E-03	.402	.243E-04	.876	.466E-05
.120E-01	.132E-03	.111	.193E-03	.420	.191E-04	.894	.377E-05
.143E-01	.158E-03	.120	.206E-03	.438	.218E-04	.947	.236E-05
.165E-01	.206E-03	.129	.218E-03	.456	.190E-04	.965	.983E-06
.198E-01	.152E-03	.138	.217E-03	.474	.172E-04	1.02	.544E-06
.243E-01	.124E-03	.152	.214E-03	.491	.162E-04	1.04	.393E-06
.288E-01	.200E-03	.170	.167E-03	.509	.145E-04	1.09	.300E-06
.333E-01	.154E-03	.187	.172E-03	.527	.118E-04	1.11	.268E-06
.377E-01	.166E-03	.205	.134E-03				

POWER SPECTRAL FILE JC0012

TIME 3:37 DAY 29 OF 1985

CONFIGURATION A WIND VEL : 40.64 FPS  
DIRECTION: 310

RUN NO. 1  
CHANNEL NY IN Coeff. UNITS

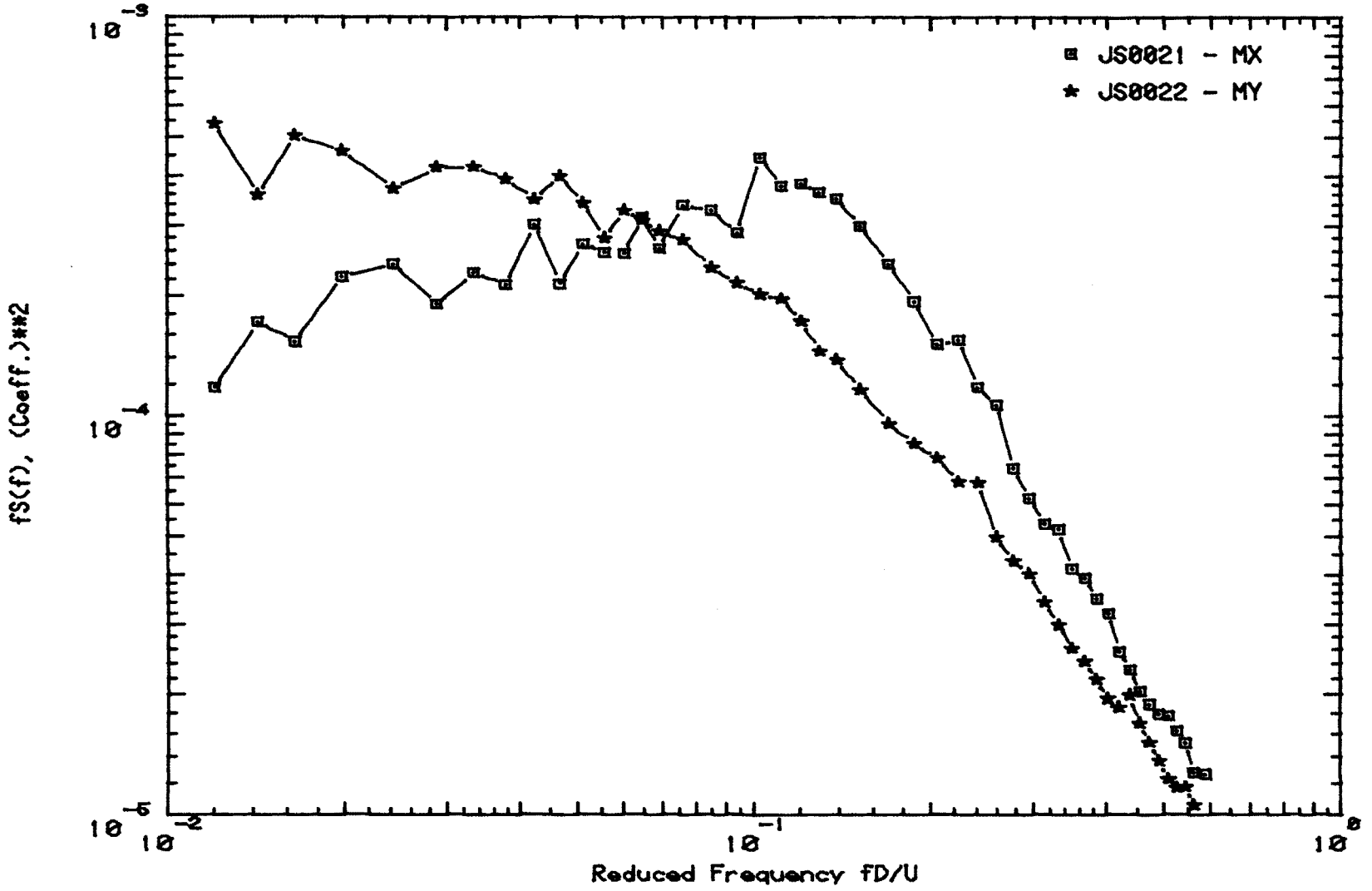
NON-DIMENSIONAL SPECTRUM F\*(F) OF NY VS. F\*D/U : D = 5.000 IN.  
U = 40.64 FPS  
Q\*A = .8713 LBS  
Q\*A\*L = 13.95 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1491 RMS = .3866E-01 ROOT(AREA) = .3081E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.396E-03	.223	.664E-04	.545	.889E-05
.559E-03	.328E-04	.467E-01	.360E-03	.241	.653E-04	.563	.790E-05
.112E-02	.402E-04	.511E-01	.349E-03	.259	.489E-04	.590	.663E-05
.168E-02	.134E-03	.556E-01	.349E-03	.277	.465E-04	.608	.701E-05
.251E-02	.134E-03	.601E-01	.371E-03	.295	.426E-04	.661	.544E-05
.363E-02	.111E-03	.645E-01	.327E-03	.313	.323E-04	.679	.574E-05
.475E-02	.224E-03	.690E-01	.260E-03	.331	.280E-04	.733	.536E-05
.587E-02	.113E-03	.757E-01	.283E-03	.348	.242E-04	.751	.547E-05
.699E-02	.235E-03	.847E-01	.275E-03	.366	.194E-04	.804	.520E-05
.810E-02	.352E-03	.936E-01	.295E-03	.384	.180E-04	.822	.522E-05
.978E-02	.570E-03	.103	.263E-03	.402	.163E-04	.876	.366E-05
.120E-01	.349E-03	.111	.214E-03	.420	.133E-04	.894	.169E-05
.143E-01	.512E-03	.120	.215E-03	.438	.147E-04	.947	.895E-06
.165E-01	.374E-03	.129	.165E-03	.456	.113E-04	.965	.694E-06
.198E-01	.575E-03	.138	.147E-03	.474	.124E-04	1.02	.466E-06
.243E-01	.490E-03	.152	.138E-03	.491	.127E-04	1.04	.354E-06
.288E-01	.400E-03	.170	.122E-03	.509	.106E-04	1.09	.282E-06
.333E-01	.427E-03	.187	.108E-03	.527	.992E-05	1.11	.254E-06
.377E-01	.337E-03	.205	.926E-04				

RUN NO. 2 WIND DIRECTION 320 Deg. VEL. U = 40.6 fps





POWER SPECTRAL FILE JS0021

TIME 3:45 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.62 FPS RUN NO. 2  
 DIRECTION: 320 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*S(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.62 FPS  
 R\*A = .8708 LBS  
 R\*A\*L = 13.93 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.0 SEC.

MEAN = .3476E-01 RMS = .3093E-01 ROOT(AREA) = .3075E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.422E-01	.302E-03	.223	.155E-03	.545	.151E-04
.559E-03	.732E-05	.467E-01	.214E-03	.241	.118E-03	.563	.127E-04
.112E-02	.991E-05	.512E-01	.270E-03	.259	.106E-03	.590	.126E-04
.168E-02	.334E-04	.556E-01	.257E-03	.277	.736E-04	.608	.978E-05
.252E-02	.274E-04	.601E-01	.255E-03	.295	.620E-04	.662	.929E-05
.363E-02	.467E-04	.646E-01	.315E-03	.313	.537E-04	.680	.905E-05
.475E-02	.697E-04	.691E-01	.262E-03	.331	.520E-04	.733	.768E-05
.587E-02	.477E-04	.758E-01	.337E-03	.349	.413E-04	.751	.808E-05
.699E-02	.785E-04	.847E-01	.328E-03	.367	.391E-04	.805	.761E-05
.811E-02	.115E-03	.937E-01	.287E-03	.384	.348E-04	.823	.696E-05
.979E-02	.168E-03	.103	.444E-03	.402	.319E-04	.876	.597E-05
.120E-01	.117E-03	.112	.376E-03	.420	.256E-04	.894	.438E-05
.143E-01	.171E-03	.120	.382E-03	.438	.231E-04	.948	.288E-05
.165E-01	.153E-03	.129	.363E-03	.456	.203E-04	.966	.107E-05
.199E-01	.223E-03	.138	.347E-03	.474	.182E-04	1.02	.619E-06
.243E-01	.239E-03	.152	.299E-03	.492	.178E-04	1.04	.469E-06
.288E-01	.190E-03	.170	.240E-03	.510	.177E-04	1.09	.410E-06
.333E-01	.228E-03	.188	.193E-03	.528	.163E-04	1.11	.280E-06
.377E-01	.213E-03	.205	.151E-03				

POWER SPECTRAL FILE JS0022

TIME 3:45 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.62 FPS  
DIRECTION: 320

RUN NO. 2  
CHANNEL HY IN Coeff. UNITS

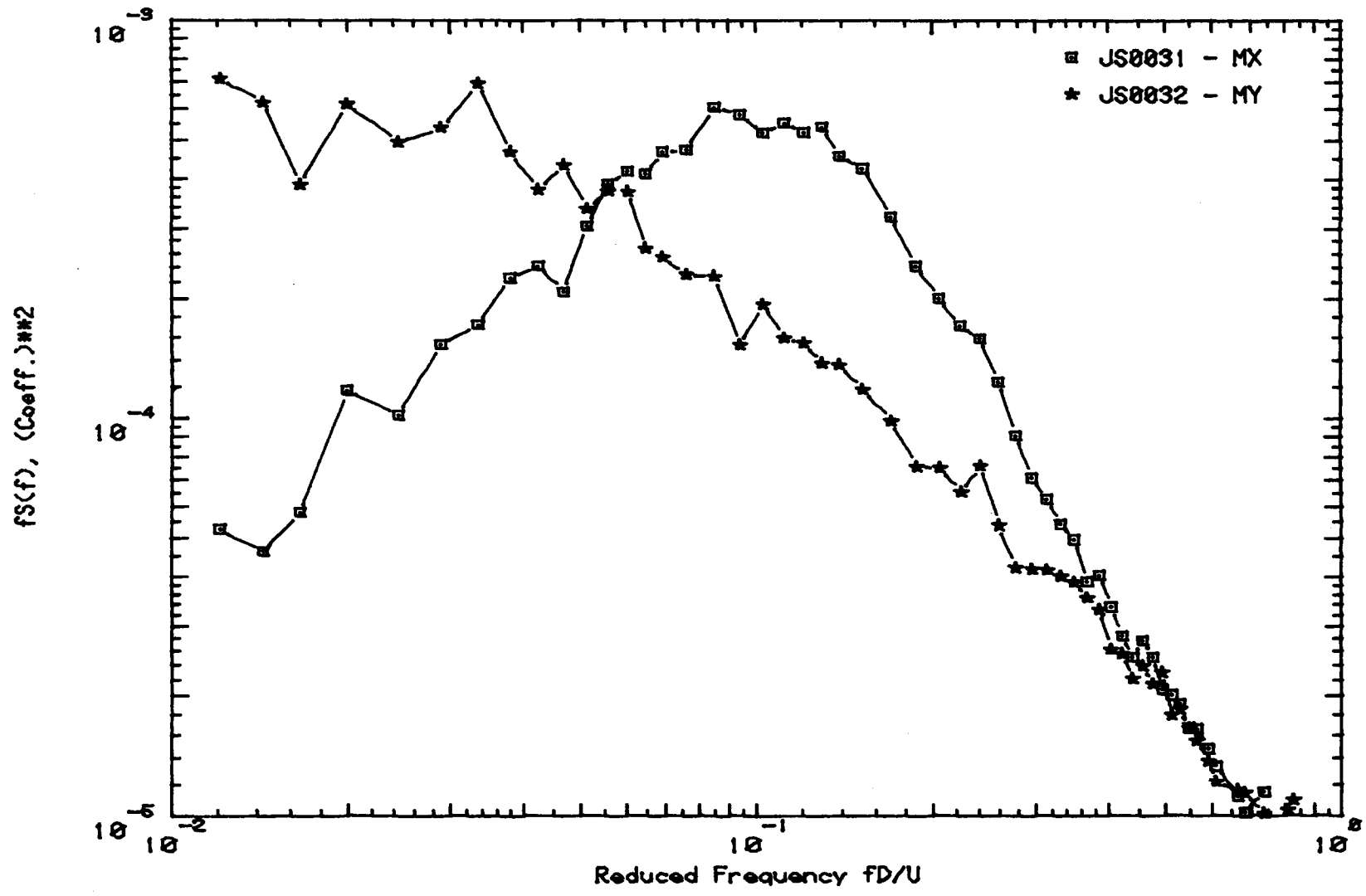
NON-DIMENSIONAL SPECTRUM F\*(F) OF HY VS. F\*D/U : D = 5.000 IN.  
U = 40.62 FPS  
Q\*A = .8708 LBS  
Q\*A\*L = 13.93 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1776 RMS = .3907E-01 ROOT(AREA) = .3887E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.349E-03	.223	.681E-04	.545	.118E-04
.559E-03	.374E-04	.467E-01	.399E-03	.241	.678E-04	.563	.106E-04
.112E-02	.872E-04	.512E-01	.341E-03	.259	.478E-04	.590	.950E-05
.168E-02	.425E-04	.556E-01	.279E-03	.277	.432E-04	.608	.833E-05
.252E-02	.129E-03	.601E-01	.327E-03	.295	.402E-04	.662	.794E-05
.363E-02	.175E-03	.646E-01	.309E-03	.313	.341E-04	.680	.743E-05
.475E-02	.280E-03	.691E-01	.290E-03	.331	.279E-04	.733	.720E-05
.587E-02	.293E-03	.758E-01	.275E-03	.349	.261E-04	.751	.692E-05
.699E-02	.352E-03	.847E-01	.235E-03	.367	.242E-04	.805	.755E-05
.811E-02	.402E-03	.937E-01	.215E-03	.384	.218E-04	.823	.694E-05
.979E-02	.411E-03	.103	.201E-03	.402	.195E-04	.876	.515E-05
.120E-01	.538E-03	.112	.196E-03	.420	.186E-04	.894	.211E-05
.143E-01	.357E-03	.120	.172E-03	.438	.199E-04	.948	.131E-05
.165E-01	.503E-03	.129	.145E-03	.456	.169E-04	.966	.827E-06
.199E-01	.460E-03	.138	.130E-03	.474	.152E-04	1.02	.582E-06
.243E-01	.371E-03	.152	.116E-03	.492	.136E-04	1.04	.410E-06
.288E-01	.419E-03	.170	.953E-04	.510	.123E-04	1.09	.355E-06
.333E-01	.420E-03	.189	.851E-04	.528	.117E-04	1.11	.294E-06
.377E-01	.392E-03	.205	.781E-04				

RUN NO. 3 WIND DIRECTION 330 Deg. VEL. U = 40.4 fps



POWER SPECTRAL FILE JS0031

TIME 3:52 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.42 FPS RUN NO. 3  
 DIRECTION: 330 CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*S(F) OF MX VS. F\*D/U : D = 5.000 IN.  
 U = 40.42 FPS  
 Q\*A = .0622 LBS  
 Q\*A\*L = 13.00 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.  
 MEAN = -.4128E-02 RMS = .3133E-01 ROOT(AREA) = .3077E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.424E-01	.242E-03	.224	.171E-03	.548	.167E-04
.562E-03	.182E-05	.469E-01	.208E-03	.242	.159E-03	.566	.165E-04
.112E-02	.224E-05	.514E-01	.305E-03	.260	.123E-03	.593	.147E-04
.169E-02	.423E-05	.559E-01	.389E-03	.278	.904E-04	.611	.134E-04
.253E-02	.111E-04	.604E-01	.410E-03	.296	.707E-04	.665	.112E-04
.365E-02	.770E-05	.649E-01	.413E-03	.314	.625E-04	.683	.102E-04
.478E-02	.261E-04	.694E-01	.467E-03	.332	.542E-04	.737	.115E-04
.590E-02	.223E-04	.761E-01	.473E-03	.350	.497E-04	.755	.937E-05
.702E-02	.210E-04	.851E-01	.605E-03	.368	.380E-04	.809	.960E-05
.815E-02	.404E-04	.941E-01	.580E-03	.386	.403E-04	.827	.972E-05
.983E-02	.585E-04	.103	.521E-03	.404	.334E-04	.881	.710E-05
.121E-01	.527E-04	.112	.553E-03	.422	.283E-04	.899	.543E-05
.143E-01	.462E-04	.121	.522E-03	.440	.251E-04	.953	.332E-05
.166E-01	.579E-04	.130	.539E-03	.458	.276E-04	.971	.137E-05
.199E-01	.117E-03	.139	.456E-03	.476	.250E-04	1.02	.765E-06
.244E-01	.101E-03	.153	.425E-03	.494	.207E-04	1.04	.652E-06
.289E-01	.154E-03	.171	.320E-03	.512	.201E-04	1.10	.455E-06
.334E-01	.172E-03	.189	.241E-03	.530	.191E-04	1.11	.422E-06
.379E-01	.226E-03	.207	.200E-03				

POWER SPECTRAL FILE JC0032

TIME 3:52 DAY 99 OF 1985

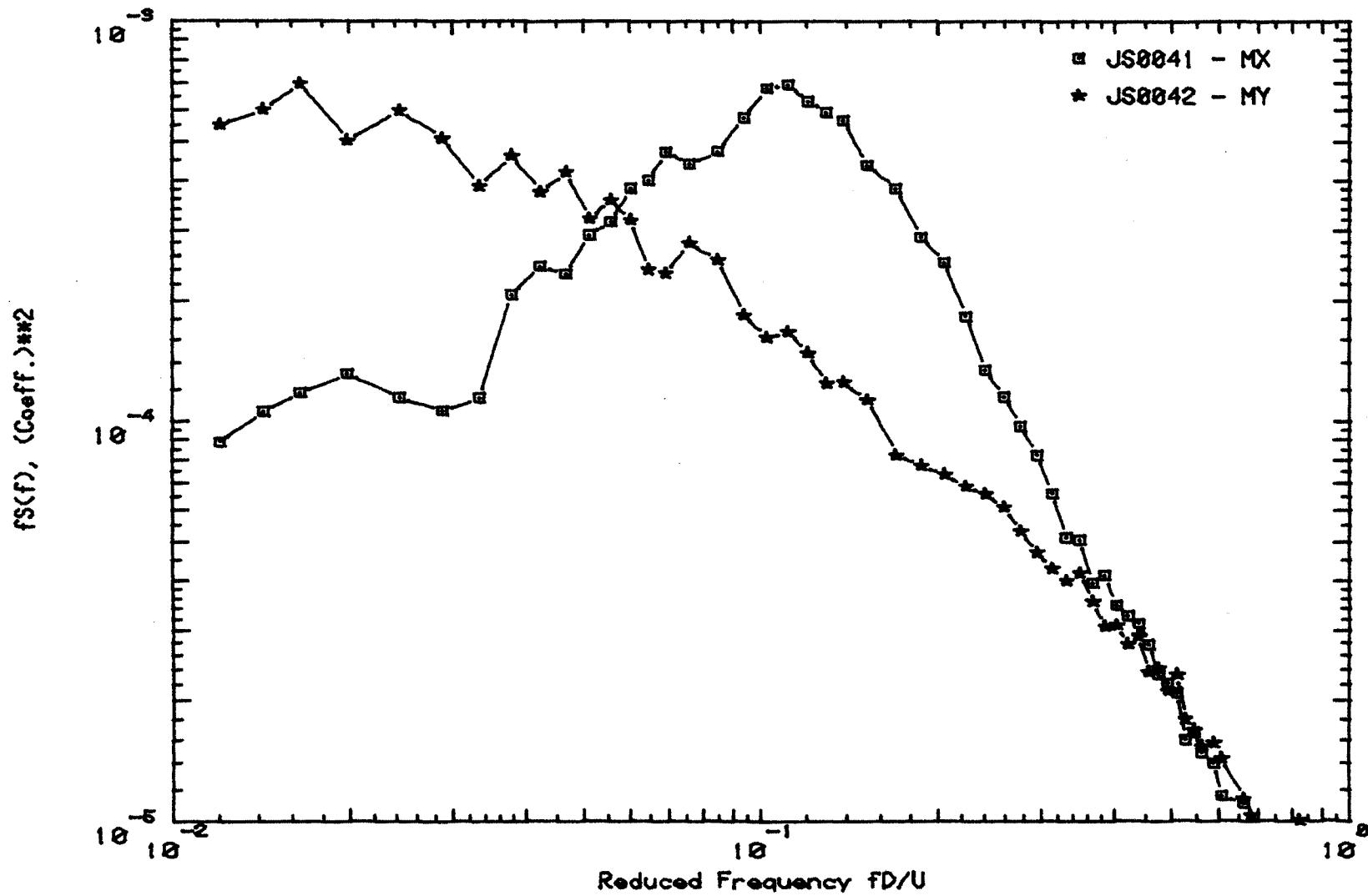
CONFIGURATION A WIND VEL : 40.42 FPS RUN NO. 3  
 DIRECTION: 330 CHANNEL HY IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.42 FPS  
 Q\*A = .8622 LBS  
 Q\*A\*L = 13.80 LD\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.  
 MEAN = -.1764 RMS = .4284E-01 ROOT(AREA) = .4270E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.376E-03	.224	.651E-04	.548	.166E-04
.562E-03	.360E-04	.469E-01	.433E-03	.242	.759E-04	.566	.154E-04
.112E-02	.420E-04	.514E-01	.337E-03	.260	.532E-04	.593	.137E-04
.169E-02	.114E-03	.559E-01	.374E-03	.278	.421E-04	.611	.122E-04
.253E-02	.224E-03	.604E-01	.371E-03	.296	.416E-04	.665	.116E-04
.365E-02	.232E-03	.649E-01	.268E-03	.314	.416E-04	.683	.114E-04
.478E-02	.403E-03	.694E-01	.254E-03	.332	.392E-04	.737	.101E-04
.590E-02	.354E-03	.741E-01	.230E-03	.350	.386E-04	.755	.936E-05
.702E-02	.300E-03	.851E-01	.227E-03	.368	.353E-04	.809	.103E-04
.815E-02	.659E-03	.941E-01	.153E-03	.386	.329E-04	.827	.109E-04
.983E-02	.430E-03	.103	.193E-03	.404	.262E-04	.881	.723E-05
.121E-01	.711E-03	.112	.159E-03	.422	.256E-04	.899	.321E-05
.143E-01	.619E-03	.121	.154E-03	.440	.221E-04	.953	.170E-05
.166E-01	.387E-03	.130	.137E-03	.458	.238E-04	.971	.117E-05
.199E-01	.614E-03	.139	.136E-03	.476	.214E-04	1.02	.827E-06
.244E-01	.493E-03	.153	.118E-03	.494	.229E-04	1.04	.628E-06
.289E-01	.536E-03	.171	.982E-04	.512	.172E-04	1.10	.432E-06
.334E-01	.691E-03	.189	.755E-04	.530	.185E-04	1.11	.394E-06
.379E-01	.466E-03	.207	.751E-04				

RUN NO. 4 WIND DIRECTION 340 Deg. VEL. U = 40.6 fps



POWER SPECTRAL FILE JS0041

TIME 4: 0 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.61 FPS  
DIRECTION: 340

RUN NO. 4  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.61 FPS  
Q\*A = .9704 LBS  
Q\*A\*L = 13.73 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.6948E-03 RMS = .3240E-01 ROOT(AREA) = .3210E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.244E-03	.223	.183E-03	.546	.167E-04
.559E-03	.294E-05	.467E-01	.233E-03	.241	.134E-03	.563	.148E-04
.112E-02	.350E-05	.512E-01	.293E-03	.259	.115E-03	.590	.140E-04
.168E-02	.160E-04	.556E-01	.315E-03	.277	.971E-04	.608	.116E-04
.252E-02	.209E-04	.601E-01	.382E-03	.295	.823E-04	.662	.111E-04
.364E-02	.342E-04	.646E-01	.400E-03	.313	.660E-04	.680	.978E-05
.475E-02	.494E-04	.671E-01	.472E-03	.331	.514E-04	.733	.954E-05
.587E-02	.376E-04	.758E-01	.439E-03	.349	.506E-04	.751	.804E-05
.699E-02	.444E-04	.847E-01	.473E-03	.367	.394E-04	.805	.929E-05
.811E-02	.412E-04	.937E-01	.574E-03	.384	.411E-04	.823	.850E-05
.979E-02	.716E-04	.103	.678E-03	.402	.347E-04	.877	.782E-05
.120E-01	.887E-04	.112	.694E-03	.420	.326E-04	.895	.532E-05
.143E-01	.106E-03	.121	.629E-03	.438	.313E-04	.948	.344E-05
.165E-01	.118E-03	.129	.591E-03	.456	.277E-04	.966	.145E-05
.199E-01	.131E-03	.138	.565E-03	.474	.233E-04	1.02	.704E-06
.243E-01	.114E-03	.152	.436E-03	.492	.221E-04	1.04	.527E-06
.288E-01	.106E-03	.170	.381E-03	.510	.209E-04	1.09	.464E-06
.333E-01	.114E-03	.188	.288E-03	.528	.160E-04	1.11	.396E-06
.378E-01	.207E-03	.206	.250E-03				

POWER SPECTRAL FILE JS0042

TIME 4: 0 DAY 29 OF 1965

CONFIGURATION A WIND VEL : 40.61 FPS RUN NO. 4  
 DIRECTION: 340 CHANNEL NY IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF NY VS. F\*D/U : D = 5.000 IN.  
 U = 40.61 FPS  
 Q\*A = .8704 LBS  
 Q\*A\*L = 13.93 LB\*IN

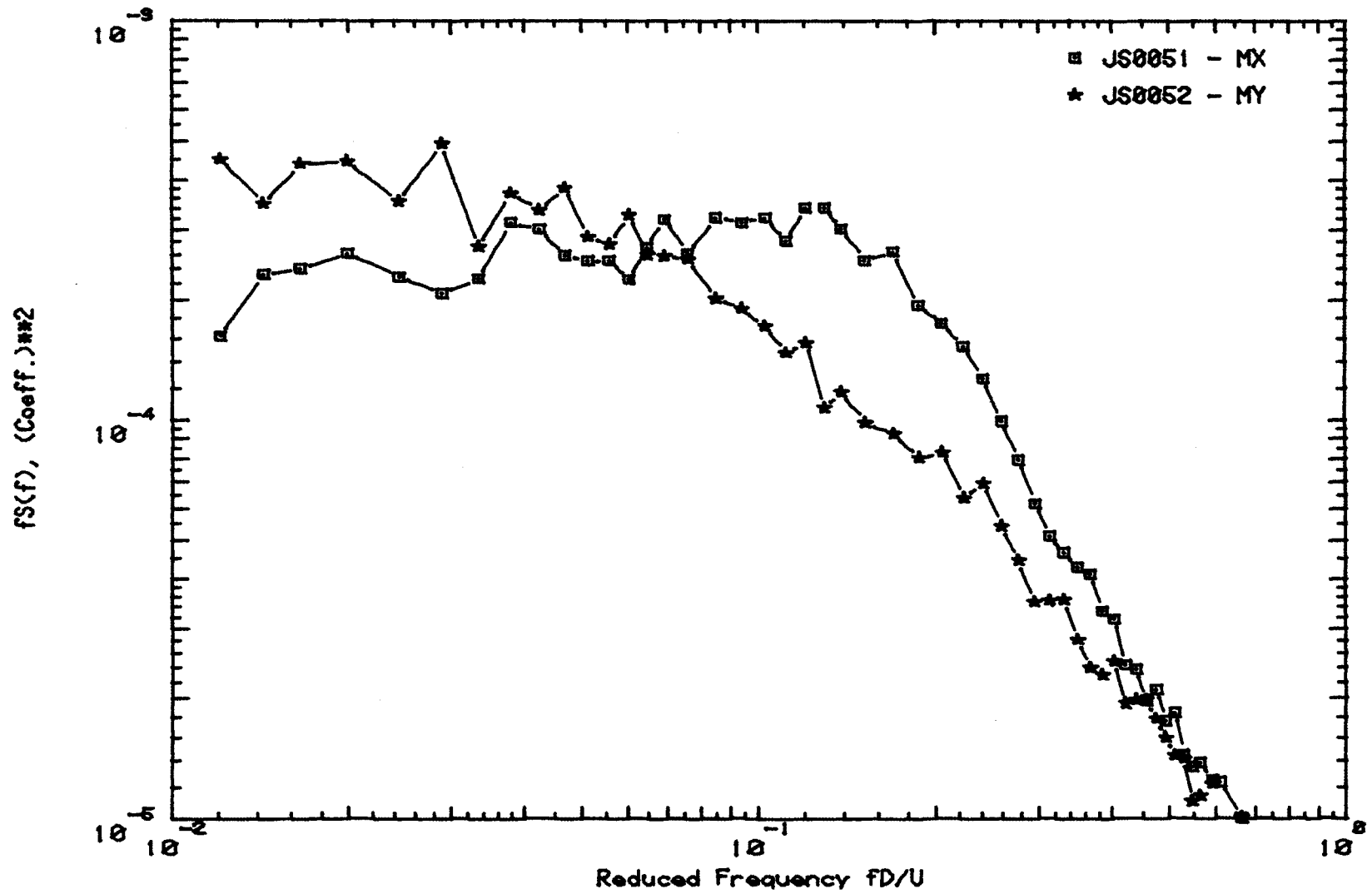
B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1682 RMS = .4220E-01 ROOT(AREA) = .4200E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.374E-03	.223	.687E-04	.546	.169E-04
.559E-03	.294E-04	.467E-01	.418E-03	.241	.657E-04	.563	.154E-04
.112E-02	.480E-04	.512E-01	.321E-03	.259	.609E-04	.590	.157E-04
.168E-02	.197E-03	.556E-01	.357E-03	.277	.532E-04	.608	.144E-04
.252E-02	.186E-03	.601E-01	.318E-03	.295	.469E-04	.662	.114E-04
.364E-02	.370E-03	.646E-01	.239E-03	.313	.428E-04	.680	.103E-04
.475E-02	.240E-03	.691E-01	.233E-03	.331	.399E-04	.733	.960E-05
.587E-02	.114E-03	.758E-01	.279E-03	.349	.417E-04	.751	.929E-05
.699E-02	.392E-03	.847E-01	.252E-03	.367	.353E-04	.805	.980E-05
.811E-02	.548E-03	.937E-01	.184E-03	.384	.306E-04	.823	.101E-04
.979E-02	.463E-03	.103	.162E-03	.402	.309E-04	.877	.707E-05
.120E-01	.550E-03	.112	.166E-03	.420	.277E-04	.895	.306E-05
.143E-01	.600E-03	.121	.140E-03	.438	.291E-04	.948	.159E-05
.165E-01	.695E-03	.129	.124E-03	.456	.236E-04	.966	.121E-05
.199E-01	.503E-03	.138	.125E-03	.474	.242E-04	1.02	.840E-06
.243E-01	.595E-03	.152	.113E-03	.492	.212E-04	1.04	.597E-06
.288E-01	.507E-03	.170	.822E-04	.510	.233E-04	1.09	.513E-06
.333E-01	.386E-03	.188	.774E-04	.528	.180E-04	1.11	.434E-06
.378E-01	.460E-03	.206	.735E-04				



RUN NO. 5 WIND DIRECTION 350 Deg. VEL. U = 40.5 fps



POWER SPECTRAL FILE JS0051

TIME 4: 9 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.47 FPS  
DIRECTION: 350

RUN NO. 5  
CHANNEL MX IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MX VS. F\*D/U : D = 5.000 IN.  
U = 40.47 FPS  
Q\*A = .8645 LBS  
Q\*A\*L = 13.03 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.8653E-02 RMS = .3189E-01 ROOT(AREA) = .3183E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.301E-03	.224	.152E-03	.547	.135E-04
.561E-03	.471E-05	.469E-01	.258E-03	.242	.127E-03	.565	.138E-04
.112E-02	.144E-04	.513E-01	.251E-03	.260	.791E-04	.592	.125E-04
.168E-02	.327E-04	.558E-01	.251E-03	.278	.793E-04	.610	.124E-04
.253E-02	.539E-04	.603E-01	.225E-03	.296	.616E-04	.664	.101E-04
.365E-02	.717E-04	.648E-01	.271E-03	.314	.512E-04	.682	.922E-05
.477E-02	.826E-04	.693E-01	.318E-03	.332	.465E-04	.736	.931E-05
.589E-02	.130E-03	.760E-01	.262E-03	.350	.426E-04	.754	.868E-05
.701E-02	.143E-03	.850E-01	.322E-03	.368	.410E-04	.808	.820E-05
.814E-02	.177E-03	.940E-01	.313E-03	.386	.331E-04	.826	.844E-05
.982E-02	.120E-03	.103	.321E-03	.404	.316E-04	.880	.764E-05
.121E-01	.162E-03	.112	.281E-03	.422	.243E-04	.898	.452E-05
.143E-01	.232E-03	.121	.340E-03	.440	.237E-04	.951	.336E-05
.166E-01	.239E-03	.130	.340E-03	.458	.198E-04	.969	.139E-05
.199E-01	.261E-03	.139	.302E-03	.476	.210E-04	1.02	.813E-06
.244E-01	.228E-03	.152	.251E-03	.494	.176E-04	1.04	.597E-06
.289E-01	.200E-03	.170	.264E-03	.512	.185E-04	1.10	.612E-06
.334E-01	.226E-03	.188	.194E-03	.529	.145E-04	1.11	.663E-06
.379E-01	.312E-03	.206	.174E-03				

POWER SPECTRAL FILE JS0052

TIME 4: 9 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.47 FPS RUN NO. 5  
 DIRECTION: 350 CHANNEL MY IN Coeff. UNITS

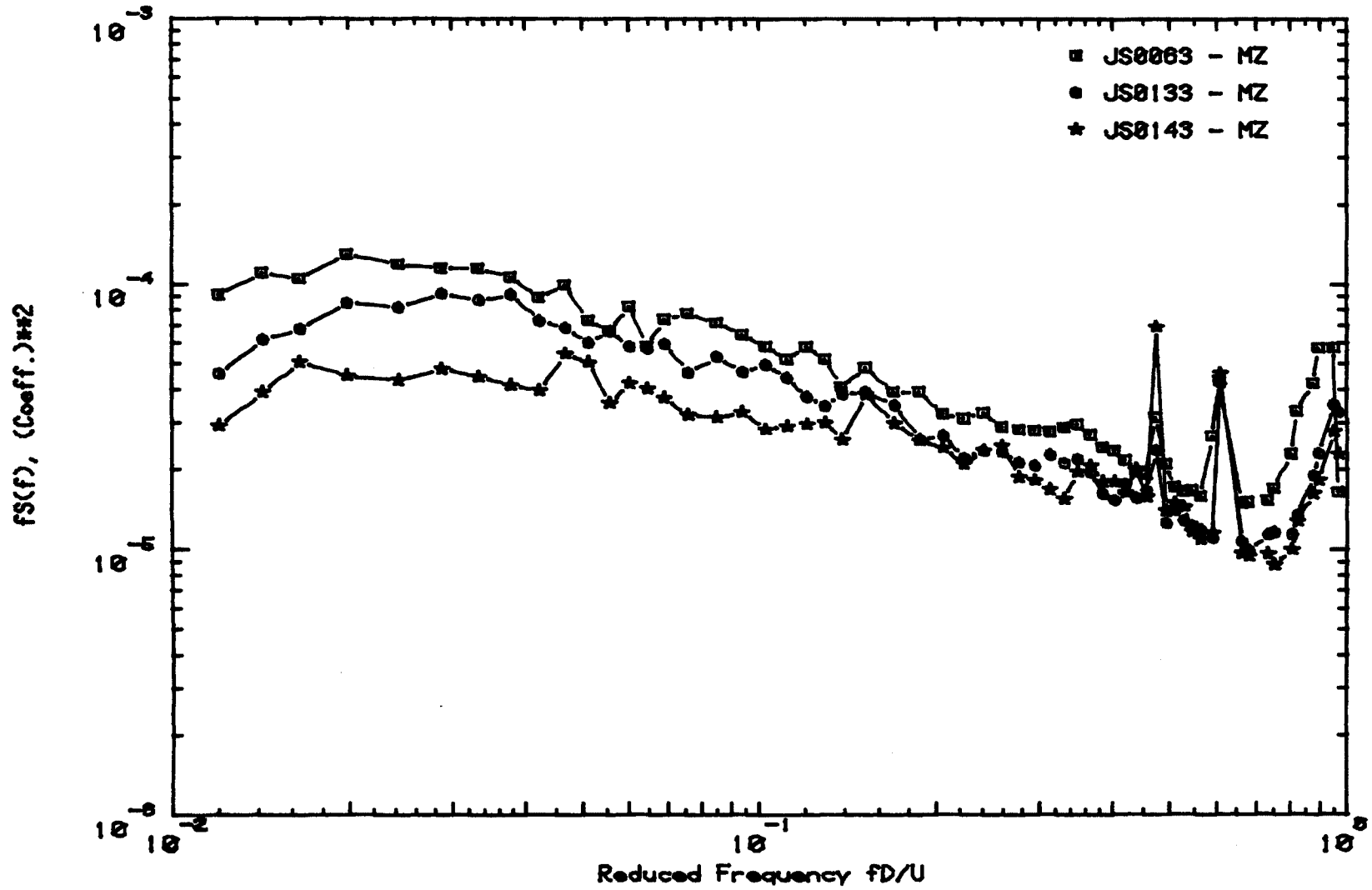
NON-DIMENSIONAL SPECTRUM F\*(F) OF MY VS. F\*D/U : D = 5.000 IN.  
 U = 40.47 FPS  
 Q\*A = .8645 LBS  
 Q\*A\*L = 13.03 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1773 RMS = .3756E-01 ROOT(AREA) = .3752E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.335E-03	.224	.636E-04	.547	.111E-04
.561E-03	.175E-04	.469E-01	.382E-03	.242	.691E-04	.565	.114E-04
.112E-02	.404E-04	.513E-01	.287E-03	.260	.542E-04	.592	.122E-04
.168E-02	.794E-04	.558E-01	.276E-03	.278	.445E-04	.610	.973E-05
.253E-02	.243E-03	.603E-01	.326E-03	.296	.349E-04	.664	.101E-04
.365E-02	.210E-03	.648E-01	.259E-03	.314	.353E-04	.682	.905E-05
.477E-02	.223E-03	.693E-01	.257E-03	.332	.353E-04	.736	.857E-05
.589E-02	.275E-03	.760E-01	.253E-03	.350	.281E-04	.754	.787E-05
.701E-02	.342E-03	.850E-01	.201E-03	.368	.239E-04	.808	.903E-05
.814E-02	.310E-03	.940E-01	.190E-03	.386	.229E-04	.826	.861E-05
.982E-02	.338E-03	.103	.172E-03	.404	.240E-04	.880	.634E-05
.121E-01	.450E-03	.112	.147E-03	.422	.194E-04	.898	.231E-05
.143E-01	.348E-03	.121	.156E-03	.440	.198E-04	.951	.145E-05
.166E-01	.437E-03	.130	.107E-03	.458	.197E-04	.969	.877E-06
.199E-01	.443E-03	.139	.117E-03	.476	.178E-04	1.02	.636E-06
.244E-01	.352E-03	.152	.983E-04	.494	.160E-04	1.04	.497E-06
.289E-01	.491E-03	.170	.722E-04	.512	.144E-04	1.10	.431E-06
.334E-01	.272E-03	.188	.801E-04	.529	.142E-04	1.11	.381E-06
.379E-01	.369E-03	.206	.828E-04				

RUN NO. 6 WIND DIRECTION 0 Deg. VEL. U = 40.7 fps



POWER SPECTRAL FILE JS0063

TIME 4:17 DAY 29 OF 1985

CONFIGURATION A WIND VEL : 40.70 FPS  
DIRECTION: 0

RUN NO. 6  
CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
U = 40.70 FPS  
Q\*A = .8742 LBS  
Q\*A\*L = 2.185 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1658E-01 RMS = .5294E-01 ROOT(AREA) = .2064E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.421E-01	.887E-04	.223	.311E-04	.544	.167E-04
.558E-03	.227E-04	.466E-01	.988E-04	.241	.327E-04	.562	.159E-04
.112E-02	.231E-04	.511E-01	.727E-04	.259	.289E-04	.589	.266E-04
.167E-02	.206E-04	.555E-01	.662E-04	.277	.282E-04	.607	.433E-04
.251E-02	.230E-04	.600E-01	.817E-04	.294	.280E-04	.660	.150E-04
.363E-02	.368E-04	.645E-01	.580E-04	.312	.279E-04	.678	.150E-04
.474E-02	.500E-04	.689E-01	.732E-04	.330	.280E-04	.732	.153E-04
.586E-02	.291E-04	.756E-01	.771E-04	.348	.294E-04	.750	.169E-04
.698E-02	.104E-03	.845E-01	.711E-04	.366	.270E-04	.803	.228E-04
.809E-02	.112E-03	.935E-01	.640E-04	.384	.242E-04	.821	.331E-04
.977E-02	.949E-04	.102	.581E-04	.402	.236E-04	.875	.422E-04
.120E-01	.909E-04	.111	.518E-04	.419	.217E-04	.893	.575E-04
.142E-01	.110E-03	.120	.579E-04	.437	.197E-04	.946	.577E-04
.165E-01	.104E-03	.129	.517E-04	.455	.191E-04	.964	.164E-04
.198E-01	.129E-03	.138	.409E-04	.473	.313E-04	1.02	.395E-05
.243E-01	.118E-03	.152	.481E-04	.491	.210E-04	1.04	.123E-05
.287E-01	.114E-03	.169	.391E-04	.509	.171E-04	1.09	.798E-06
.332E-01	.114E-03	.187	.391E-04	.527	.167E-04	1.11	.478E-06
.377E-01	.106E-03	.205	.323E-04				

A-112

POWER SPECTRAL FILE JS0133

TIME 18:54 DAY 27 OF 1985

CONFIGURATION A WIND VEL : 40.56 FPS  
 DIRECTION: 10

RUN NO. 13  
 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.56 FPS  
 Q\*A = .8681 LBS  
 Q\*A\*L = 2.170 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1712E-01 RMS = .4751E-01 ROOT(AREA) = .1705E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.723E-04	.224	.221E-04	.546	.123E-04
.560E-03	.714E-05	.468E-01	.680E-04	.242	.236E-04	.564	.118E-04
.112E-02	.186E-04	.512E-01	.600E-04	.260	.232E-04	.591	.110E-04
.168E-02	.202E-04	.557E-01	.663E-04	.277	.213E-04	.609	.423E-04
.252E-02	.144E-04	.602E-01	.578E-04	.295	.206E-04	.663	.107E-04
.364E-02	.230E-04	.647E-01	.570E-04	.313	.227E-04	.681	.990E-05
.476E-02	.441E-04	.692E-01	.591E-04	.331	.212E-04	.734	.114E-04
.588E-02	.381E-04	.759E-01	.462E-04	.349	.219E-04	.752	.116E-04
.700E-02	.474E-04	.848E-01	.530E-04	.367	.194E-04	.806	.114E-04
.812E-02	.447E-04	.938E-01	.465E-04	.385	.161E-04	.824	.134E-04
.980E-02	.566E-04	.103	.495E-04	.403	.154E-04	.878	.190E-04
.120E-01	.457E-04	.112	.442E-04	.421	.177E-04	.896	.230E-04
.143E-01	.618E-04	.121	.375E-04	.439	.156E-04	.949	.351E-04
.165E-01	.674E-04	.130	.346E-04	.457	.167E-04	.967	.329E-04
.199E-01	.845E-04	.139	.383E-04	.475	.236E-04	1.02	.738E-05
.244E-01	.814E-04	.152	.392E-04	.493	.125E-04	1.04	.189E-05
.288E-01	.916E-04	.170	.348E-04	.510	.141E-04	1.09	.697E-06
.333E-01	.867E-04	.188	.258E-04	.528	.128E-04	1.11	.498E-06
.378E-01	.908E-04	.206	.268E-04				

POWER SPECTRAL FILE JS0143

TIME 19: 0 DAY 99 OF 1985

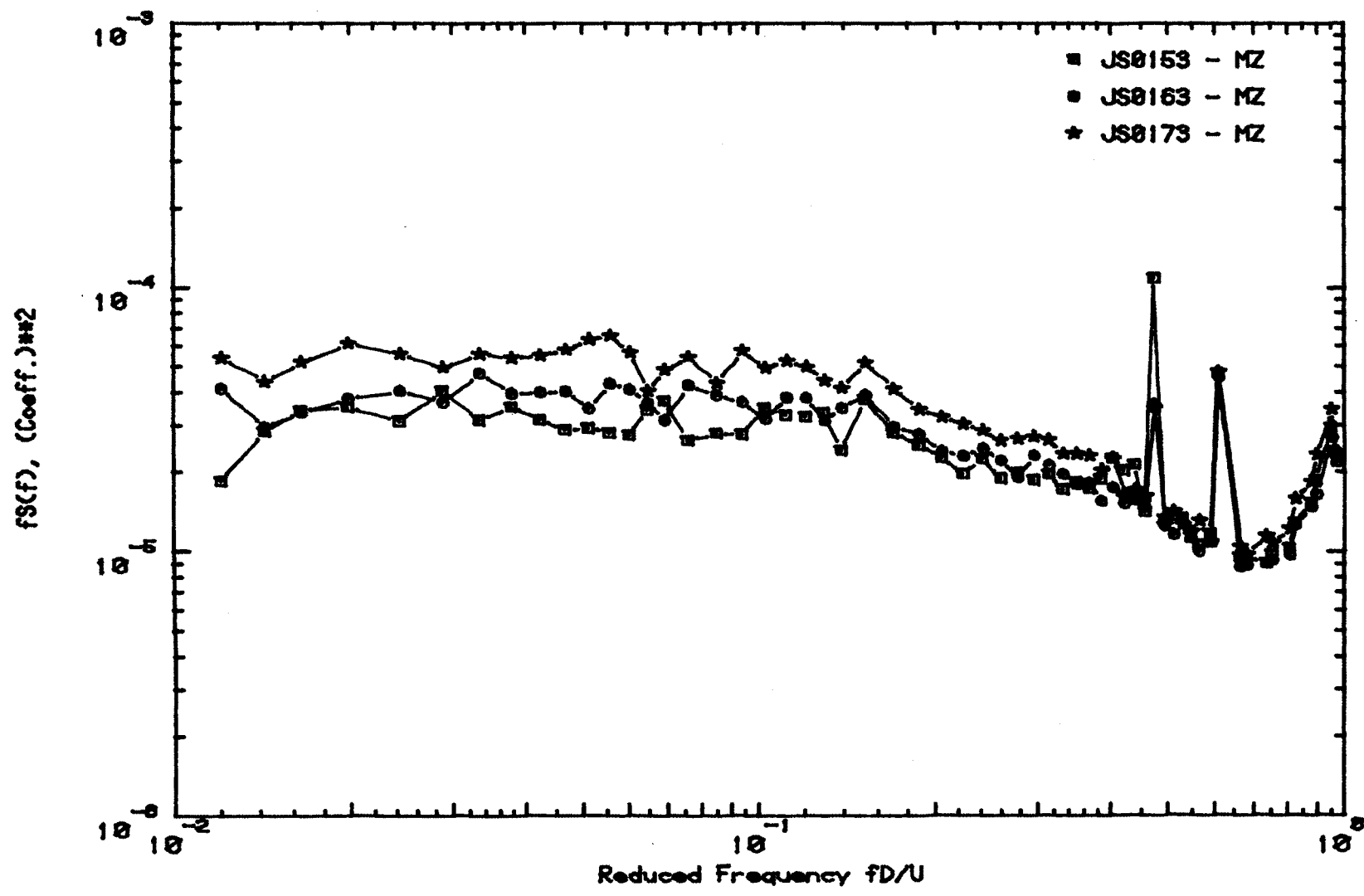
WIND VEL : 40.57 FPS RUN NO. 14  
 DIRECTION: 20 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN,  
 U = 40.57 FPS  
 Q\*A = .8687 LBS  
 Q\*A\*L = 2.172 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.  
 MEAN = .4908E-01 RMS = .5833E-01 ROOT(AREA) = .1351E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.395E-04	.224	.209E-04	.546	.117E-04
.560E-03	.122E-04	.467E-01	.545E-04	.242	.236E-04	.564	.109E-04
.112E-02	.463E-05	.512E-01	.504E-04	.259	.245E-04	.591	.115E-04
.168E-02	.588E-05	.557E-01	.354E-04	.277	.187E-04	.609	.460E-04
.252E-02	.752E-05	.602E-01	.421E-04	.295	.182E-04	.663	.963E-05
.364E-02	.706E-05	.647E-01	.401E-04	.313	.168E-04	.680	.941E-05
.476E-02	.143E-04	.691E-01	.371E-04	.331	.155E-04	.734	.965E-05
.588E-02	.163E-04	.759E-01	.319E-04	.349	.195E-04	.752	.875E-05
.700E-02	.198E-04	.848E-01	.312E-04	.367	.206E-04	.806	.998E-05
.812E-02	.283E-04	.938E-01	.327E-04	.385	.179E-04	.824	.128E-04
.980E-02	.149E-04	.103	.282E-04	.403	.180E-04	.877	.162E-04
.120E-01	.292E-04	.112	.290E-04	.421	.164E-04	.895	.182E-04
.143E-01	.390E-04	.121	.296E-04	.439	.201E-04	.949	.278E-04
.165E-01	.506E-04	.130	.299E-04	.457	.158E-04	.967	.228E-04
.199E-01	.450E-04	.139	.258E-04	.474	.687E-04	1.02	.534E-05
.244E-01	.432E-04	.152	.383E-04	.492	.140E-04	1.04	.147E-05
.288E-01	.476E-04	.170	.297E-04	.510	.149E-04	1.09	.546E-06
.333E-01	.444E-04	.188	.256E-04	.528	.145E-04	1.11	.422E-06
.378E-01	.414E-04	.206	.241E-04				

RUN NO. 15 WIND DIRECTION 30 Deg. VEL. U = 40.6 fps





POWER SPECTRAL FILE JS0153

TIME 19: 0 DAY 29 OF 1965

CONFIGURATION A

WIND VEL : 40.61 FPS  
DIRECTION: 30

RUN NO. 15  
CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U :

D = 5.000 IN.  
U = 40.61 FPS  
Q\*A = .8705 LBS  
Q\*A\*L = 2.176 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .6118E-01 RMS = .5541E-01 ROOT(AREA) = .1275E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.314E-04	.223	.197E-04	.546	.113E-04
.559E-03	.154E-04	.467E-01	.288E-04	.241	.223E-04	.563	.105E-04
.112E-02	.796E-05	.512E-01	.293E-04	.259	.189E-04	.590	.116E-04
.168E-02	.453E-05	.556E-01	.281E-04	.277	.199E-04	.608	.471E-04
.252E-02	.372E-05	.601E-01	.276E-04	.295	.186E-04	.662	.942E-05
.364E-02	.666E-05	.646E-01	.344E-04	.313	.196E-04	.680	.952E-05
.475E-02	.144E-04	.691E-01	.371E-04	.331	.171E-04	.733	.902E-05
.587E-02	.140E-04	.758E-01	.263E-04	.349	.182E-04	.751	.970E-05
.699E-02	.161E-04	.847E-01	.280E-04	.367	.172E-04	.805	.103E-04
.811E-02	.160E-04	.937E-01	.277E-04	.384	.188E-04	.823	.128E-04
.979E-02	.213E-04	.103	.348E-04	.402	.225E-04	.877	.152E-04
.120E-01	.185E-04	.112	.328E-04	.420	.202E-04	.894	.185E-04
.143E-01	.284E-04	.121	.324E-04	.438	.213E-04	.948	.293E-04
.165E-01	.342E-04	.129	.335E-04	.456	.141E-04	.966	.234E-04
.199E-01	.351E-04	.138	.241E-04	.474	.108E-03	1.02	.436E-05
.243E-01	.311E-04	.152	.377E-04	.492	.131E-04	1.04	.121E-05
.288E-01	.406E-04	.170	.280E-04	.510	.137E-04	1.09	.561E-06
.333E-01	.313E-04	.188	.252E-04	.528	.133E-04	1.11	.424E-06
.377E-01	.351E-04	.206	.227E-04				

POWER SPECTRAL FILE JS0163

TIME 19:14 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.47 FPS  
DIRECTION: 40

RUN NO. 16  
CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
U = 40.47 FPS  
Q\*A = .8643 LBS  
Q\*A\*L = 2.161 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .4078E-01 RMS = .4739E-01 ROOT(AREA) = .1376E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.399E-04	.224	.229E-04	.547	.113E-04
.561E-03	.123E-04	.469E-01	.402E-04	.242	.245E-04	.565	.995E-05
.112E-02	.629E-05	.514E-01	.347E-04	.260	.220E-04	.592	.108E-04
.168E-02	.513E-05	.558E-01	.431E-04	.278	.191E-04	.610	.457E-04
.253E-02	.722E-05	.603E-01	.410E-04	.296	.230E-04	.664	.872E-05
.365E-02	.136E-04	.648E-01	.365E-04	.314	.212E-04	.682	.886E-05
.477E-02	.176E-04	.693E-01	.313E-04	.332	.196E-04	.736	.903E-05
.589E-02	.224E-04	.760E-01	.424E-04	.350	.179E-04	.754	.929E-05
.702E-02	.305E-04	.850E-01	.391E-04	.368	.181E-04	.808	.972E-05
.814E-02	.326E-04	.940E-01	.368E-04	.386	.155E-04	.826	.126E-04
.982E-02	.405E-04	.103	.317E-04	.404	.174E-04	.880	.147E-04
.121E-01	.413E-04	.112	.382E-04	.422	.152E-04	.898	.164E-04
.143E-01	.295E-04	.121	.380E-04	.440	.156E-04	.952	.270E-04
.166E-01	.336E-04	.130	.312E-04	.458	.147E-04	.970	.217E-04
.199E-01	.379E-04	.139	.349E-04	.476	.360E-04	1.02	.419E-05
.244E-01	.405E-04	.152	.390E-04	.494	.125E-04	1.04	.125E-05
.289E-01	.365E-04	.170	.295E-04	.512	.116E-04	1.10	.520E-06
.334E-01	.472E-04	.188	.277E-04	.530	.129E-04	1.11	.393E-06
.379E-01	.396E-04	.206	.240E-04				

POWER SPECTRAL FILE JS0173

TIME 19:19 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.45 FPS RUN NO. 17  
DIRECTION: 50 CHANNEL MZ IN Coeff. UNITS

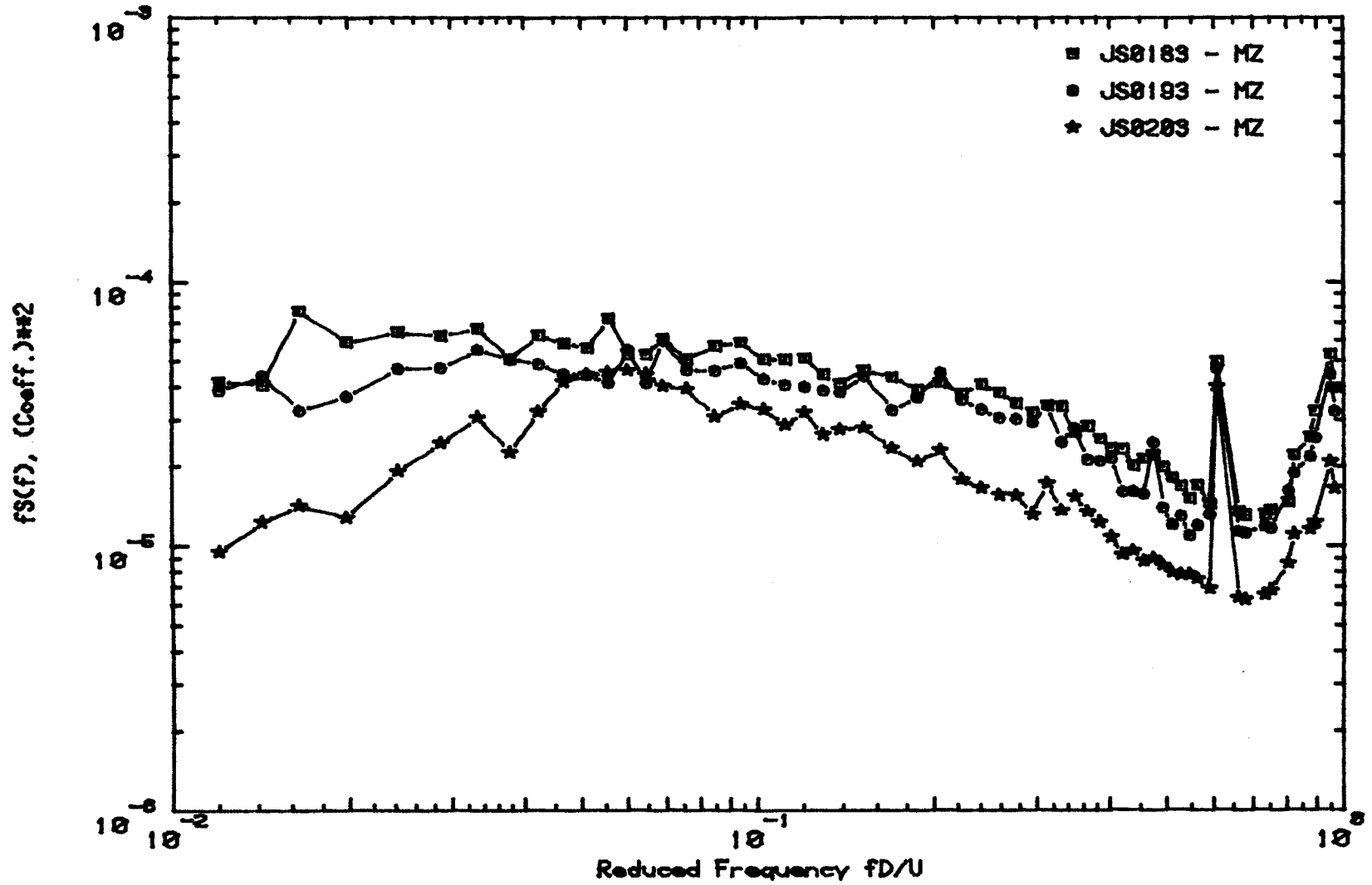
NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
U = 40.45 FPS  
Q\*A = .8635 LBS  
Q\*A\*L = 2.159 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .5598E-01 RMS = .4347E-01 ROOT(AREA) = .1585E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.548E-04	.224	.303E-04	.548	.118E-04
.561E-03	.110E-04	.469E-01	.577E-04	.242	.286E-04	.566	.130E-04
.112E-02	.106E-04	.514E-01	.634E-04	.260	.262E-04	.593	.108E-04
.168E-02	.836E-05	.559E-01	.654E-04	.278	.265E-04	.611	.476E-04
.253E-02	.107E-04	.604E-01	.565E-04	.296	.270E-04	.665	.104E-04
.365E-02	.289E-04	.649E-01	.403E-04	.314	.264E-04	.682	.969E-05
.477E-02	.258E-04	.693E-01	.485E-04	.332	.234E-04	.736	.114E-04
.590E-02	.446E-04	.761E-01	.544E-04	.350	.233E-04	.754	.107E-04
.702E-02	.312E-04	.851E-01	.433E-04	.368	.230E-04	.808	.122E-04
.814E-02	.311E-04	.941E-01	.575E-04	.386	.203E-04	.826	.158E-04
.983E-02	.376E-04	.103	.491E-04	.404	.225E-04	.880	.182E-04
.121E-01	.538E-04	.112	.524E-04	.422	.165E-04	.898	.232E-04
.143E-01	.438E-04	.121	.499E-04	.440	.170E-04	.952	.345E-04
.166E-01	.520E-04	.130	.442E-04	.458	.161E-04	.970	.237E-04
.199E-01	.611E-04	.139	.414E-04	.476	.349E-04	1.02	.524E-05
.244E-01	.557E-04	.152	.517E-04	.494	.126E-04	1.04	.152E-05
.289E-01	.494E-04	.170	.410E-04	.512	.142E-04	1.10	.588E-06
.334E-01	.558E-04	.188	.343E-04	.530	.126E-04	1.11	.436E-06
.379E-01	.538E-04	.206	.323E-04				

RUN NO. 18 WIND DIRECTION 60 Deg. VEL. U = 40.6 fps



POWER SPECTRAL FILE JS0183

TIME 19:27 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.58 FPS RUN NO. 18  
DIRECTION: 60 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
U = 40.58 FPS  
Q\*A = .8691 LBS  
Q\*A\*L = 2.173 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1115 RMS = .5394E-01 ROOT(AREA) = .1699E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.628E-04	.224	.375E-04	.546	.151E-04
.560E-03	.128E-04	.467E-01	.582E-04	.242	.407E-04	.564	.169E-04
.112E-02	.133E-04	.512E-01	.560E-04	.259	.379E-04	.591	.144E-04
.168E-02	.149E-04	.557E-01	.724E-04	.277	.345E-04	.609	.497E-04
.252E-02	.202E-04	.602E-01	.531E-04	.295	.318E-04	.662	.134E-04
.364E-02	.326E-04	.646E-01	.530E-04	.313	.340E-04	.680	.130E-04
.476E-02	.295E-04	.691E-01	.607E-04	.331	.335E-04	.734	.131E-04
.588E-02	.361E-04	.758E-01	.507E-04	.349	.266E-04	.752	.136E-04
.700E-02	.418E-04	.848E-01	.569E-04	.367	.283E-04	.806	.146E-04
.812E-02	.481E-04	.937E-01	.587E-04	.385	.253E-04	.824	.220E-04
.979E-02	.549E-04	.103	.507E-04	.403	.234E-04	.877	.257E-04
.120E-01	.417E-04	.112	.506E-04	.421	.233E-04	.895	.324E-04
.143E-01	.407E-04	.121	.512E-04	.439	.201E-04	.949	.529E-04
.165E-01	.771E-04	.130	.445E-04	.456	.213E-04	.967	.394E-04
.199E-01	.589E-04	.139	.411E-04	.474	.220E-04	1.02	.823E-05
.243E-01	.643E-04	.152	.462E-04	.492	.199E-04	1.04	.188E-05
.288E-01	.623E-04	.170	.434E-04	.510	.180E-04	1.09	.799E-06
.333E-01	.662E-04	.188	.388E-04	.528	.168E-04	1.11	.504E-06
.378E-01	.508E-04	.206	.414E-04				

A-120

POWER SPECTRAL FILE JS0193

TIME 19:37 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.61 FPS RUN NO. 19  
 DIRECTION: 70 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*S(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.61 FPS  
 Q\*A = .8702 LBS  
 Q\*A\*L = 2.176 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .8372E-01 RMS = .3896E-01 ROOT(AREA) = .1424E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.422E-01	.489E-04	.223	.355E-04	.546	.109E-04
.559E-03	.638E-05	.467E-01	.446E-04	.241	.328E-04	.564	.119E-04
.112E-02	.313E-05	.512E-01	.443E-04	.259	.305E-04	.590	.131E-04
.168E-02	.861E-05	.557E-01	.414E-04	.277	.302E-04	.608	.469E-04
.252E-02	.726E-05	.601E-01	.552E-04	.295	.292E-04	.662	.113E-04
.364E-02	.137E-04	.646E-01	.412E-04	.313	.338E-04	.680	.112E-04
.475E-02	.148E-04	.691E-01	.598E-04	.331	.247E-04	.734	.119E-04
.587E-02	.171E-04	.758E-01	.462E-04	.349	.278E-04	.751	.116E-04
.699E-02	.208E-04	.847E-01	.459E-04	.367	.212E-04	.805	.161E-04
.811E-02	.192E-04	.937E-01	.491E-04	.385	.209E-04	.823	.189E-04
.979E-02	.227E-04	.103	.426E-04	.402	.214E-04	.877	.217E-04
.120E-01	.387E-04	.112	.406E-04	.420	.160E-04	.895	.256E-04
.143E-01	.440E-04	.121	.398E-04	.438	.160E-04	.948	.445E-04
.165E-01	.325E-04	.129	.386E-04	.456	.157E-04	.966	.323E-04
.199E-01	.368E-04	.138	.380E-04	.474	.245E-04	1.02	.624E-05
.243E-01	.469E-04	.152	.439E-04	.492	.139E-04	1.04	.192E-05
.288E-01	.472E-04	.170	.326E-04	.510	.120E-04	1.09	.673E-06
.333E-01	.551E-04	.188	.364E-04	.528	.130E-04	1.11	.491E-06
.378E-01	.507E-04	.206	.452E-04				

POWER SPECTRAL FILE JS0203

TIME 19:45 DAY 99 OF 1985

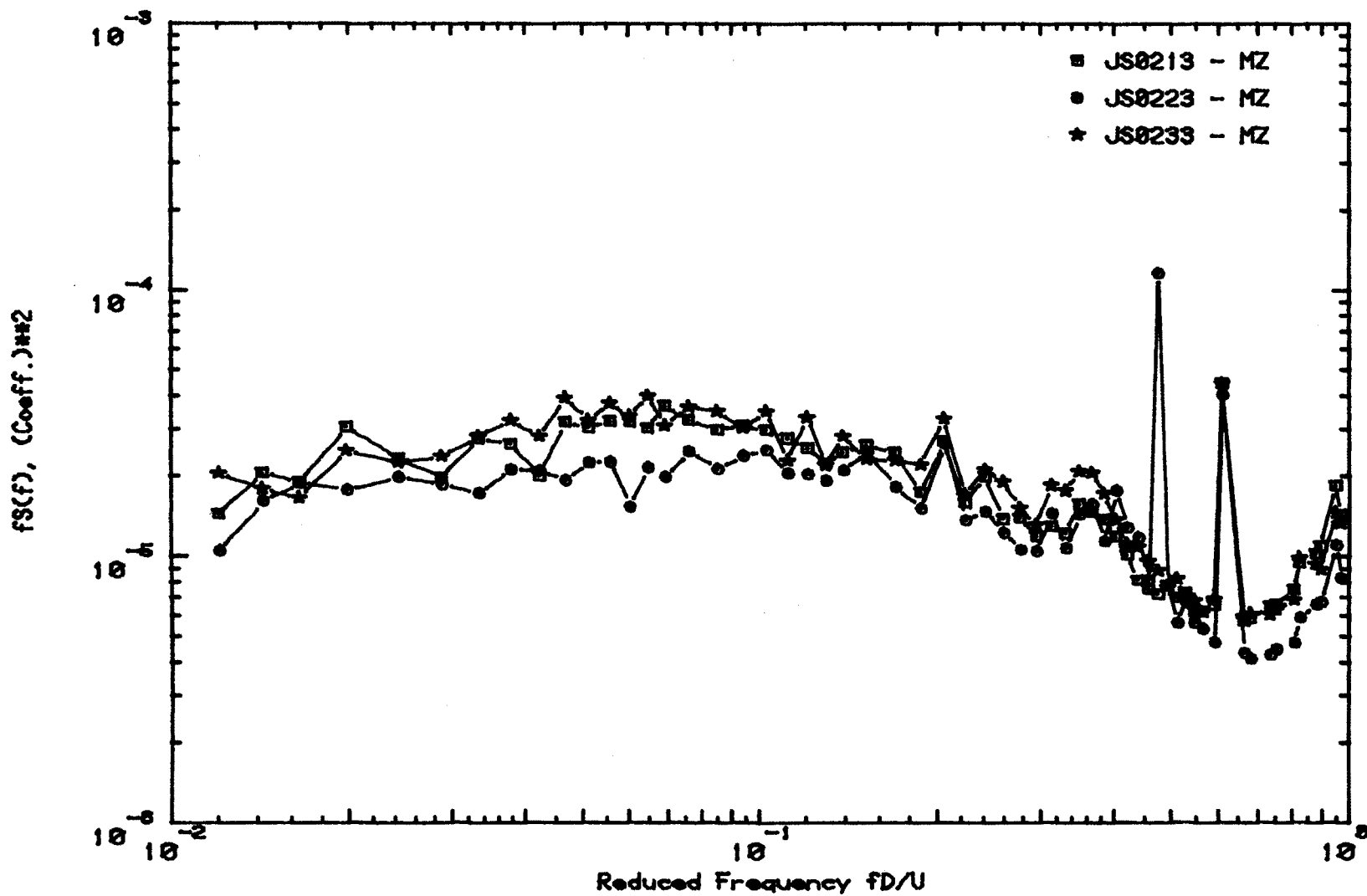
CONFIGURATION A WIND VEL : 40.66 FPS RUN NO. 20  
 DIRECTION: 80 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.66 FPS  
 Q\*A = .8724 LBS  
 Q\*A\*L = 2.181 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.  
 MEAN = .2574E-01 RMS = .1409E-01 ROOT(AREA) = .1056E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.321E-04	.223	.178E-04	.545	.780E-05
.559E-03	.240E-05	.466E-01	.418E-04	.241	.166E-04	.563	.750E-05
.112E-02	.261E-05	.511E-01	.444E-04	.259	.156E-04	.590	.689E-05
.168E-02	.181E-05	.556E-01	.454E-04	.277	.155E-04	.608	.403E-04
.251E-02	.359E-05	.601E-01	.461E-04	.295	.132E-04	.661	.637E-05
.363E-02	.381E-05	.645E-01	.445E-04	.313	.172E-04	.679	.625E-05
.475E-02	.498E-05	.690E-01	.402E-04	.330	.136E-04	.733	.650E-05
.587E-02	.393E-05	.757E-01	.392E-04	.348	.154E-04	.751	.676E-05
.698E-02	.626E-05	.846E-01	.308E-04	.366	.134E-04	.804	.859E-05
.810E-02	.932E-05	.936E-01	.344E-04	.384	.123E-04	.822	.111E-04
.978E-02	.514E-05	.103	.328E-04	.402	.108E-04	.876	.116E-04
.120E-01	.949E-05	.111	.287E-04	.420	.927E-05	.894	.123E-04
.142E-01	.123E-04	.120	.319E-04	.438	.959E-05	.947	.207E-04
.165E-01	.142E-04	.129	.263E-04	.456	.874E-05	.965	.165E-04
.198E-01	.128E-04	.138	.276E-04	.473	.896E-05	1.02	.410E-05
.243E-01	.192E-04	.152	.280E-04	.491	.842E-05	1.04	.128E-05
.288E-01	.245E-04	.170	.234E-04	.509	.790E-05	1.09	.535E-06
.332E-01	.306E-04	.187	.208E-04	.527	.778E-05	1.11	.397E-06
.377E-01	.226E-04	.205	.230E-04				

RUN NO. 21 WIND DIRECTION 90 Deg. VEL. U = 40.6 fps





POWER SPECTRAL FILE JS0213

TIME 19:53 DAY 22 OF 1985

CONFIGURATION A WIND VEL : 40.58 FPS  
DIRECTION: 90

RUN NO. 21  
CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN,  
U = 40.58 FPS  
Q\*A = .0692 LBS  
Q\*A\*L = 2.173 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1308E-01 RMS = .1863E-01 ROOT(AREA) = .1140E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.200E-04	.224	.150E-04	.546	.617E-05
.560E-03	.773E-05	.467E-01	.319E-04	.241	.199E-04	.564	.619E-05
.112E-02	.370E-05	.512E-01	.304E-04	.259	.139E-04	.591	.659E-05
.168E-02	.404E-05	.557E-01	.320E-04	.277	.139E-04	.609	.444E-04
.252E-02	.120E-04	.602E-01	.310E-04	.295	.119E-04	.662	.571E-05
.364E-02	.132E-04	.646E-01	.302E-04	.313	.130E-04	.680	.587E-05
.476E-02	.131E-04	.691E-01	.367E-04	.331	.122E-04	.734	.640E-05
.588E-02	.171E-04	.758E-01	.324E-04	.349	.157E-04	.752	.657E-05
.700E-02	.140E-04	.840E-01	.290E-04	.367	.145E-04	.806	.750E-05
.812E-02	.171E-04	.937E-01	.309E-04	.385	.137E-04	.824	.950E-05
.979E-02	.141E-04	.103	.296E-04	.403	.119E-04	.877	.102E-04
.120E-01	.144E-04	.112	.277E-04	.421	.101E-04	.925	.109E-04
.143E-01	.206E-04	.121	.254E-04	.439	.810E-05	.949	.104E-04
.165E-01	.189E-04	.130	.224E-04	.456	.753E-05	.967	.143E-04
.199E-01	.306E-04	.139	.245E-04	.474	.720E-05	1.02	.327E-05
.243E-01	.232E-04	.152	.260E-04	.492	.772E-05	1.04	.149E-05
.288E-01	.190E-04	.170	.246E-04	.510	.702E-05	1.09	.706E-06
.333E-01	.277E-04	.188	.173E-04	.528	.729E-05	1.11	.622E-06
.378E-01	.264E-04	.206	.269E-04				

POWER SPECTRAL FILE JS0223

TIME 20: 2 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.43 FPS RUN NO. 22  
 DIRECTION: 100 CHANNEL HZ IN Coeff. UNITS  
 NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.43 FPS  
 Q\*A = .0625 LBS  
 Q\*A\*L = 2.156 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.  
 MEAN = -.1847E-01 RMS = .1325E-01 ROOT(AREA) = .1007E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.202E-04	.224	.137E-04	.548	.563E-05
.562E-03	.399E-05	.469E-01	.193E-04	.242	.147E-04	.566	.534E-05
.112E-02	.603E-05	.514E-01	.225E-04	.260	.123E-04	.593	.476E-05
.169E-02	.336E-05	.559E-01	.226E-04	.278	.106E-04	.611	.405E-04
.253E-02	.495E-05	.604E-01	.153E-04	.296	.105E-04	.665	.434E-05
.365E-02	.730E-05	.649E-01	.215E-04	.314	.144E-04	.683	.413E-05
.478E-02	.721E-05	.694E-01	.198E-04	.332	.107E-04	.737	.427E-05
.590E-02	.403E-05	.761E-01	.247E-04	.350	.144E-04	.755	.449E-05
.702E-02	.135E-04	.851E-01	.212E-04	.368	.157E-04	.809	.473E-05
.815E-02	.141E-04	.941E-01	.238E-04	.386	.114E-04	.827	.588E-05
.983E-02	.144E-04	.103	.250E-04	.404	.176E-04	.881	.658E-05
.121E-01	.105E-04	.112	.204E-04	.422	.128E-04	.899	.673E-05
.143E-01	.161E-04	.121	.203E-04	.440	.118E-04	.953	.110E-04
.166E-01	.188E-04	.130	.192E-04	.458	.814E-05	.971	.825E-05
.199E-01	.177E-04	.139	.209E-04	.476	.116E-03	1.02	.222E-05
.244E-01	.198E-04	.153	.246E-04	.494	.782E-05	1.04	.145E-05
.289E-01	.183E-04	.171	.182E-04	.512	.562E-05	1.10	.752E-06
.334E-01	.172E-04	.188	.151E-04	.530	.706E-05	1.11	.776E-06
.379E-01	.212E-04	.206	.265E-04				

POWER SPECTRAL FILE JC0233

TIME 20:10 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.59 FPS  
DIRECTION: 110

RUN NO. 23  
CHANNEL HZ IN Coeff. UNITS

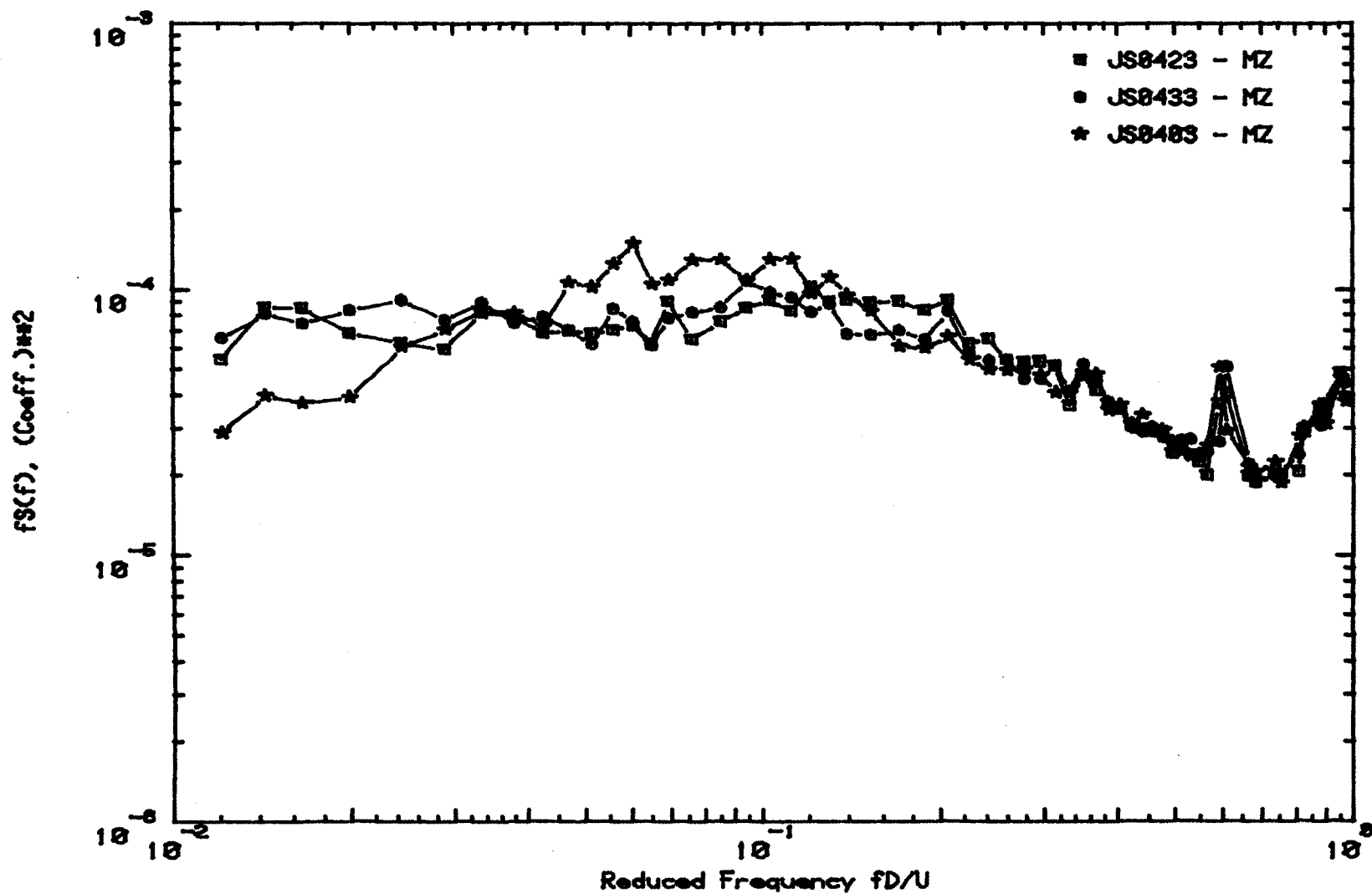
NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
U = 40.59 FPS  
Q\*A = .0696 LBS  
Q\*A\*L = 2.174 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.2213E-01 RMS = .1439E-01 ROOT(AREA) = .1151E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.281E-04	.224	.170E-04	.546	.601E-05
.560E-03	.710E-05	.467E-01	.392E-04	.241	.211E-04	.564	.614E-05
.112E-02	.442E-05	.512E-01	.324E-04	.259	.190E-04	.591	.620E-05
.168E-02	.239E-05	.557E-01	.374E-04	.277	.152E-04	.608	.445E-04
.252E-02	.790E-05	.601E-01	.335E-04	.295	.131E-04	.662	.591E-05
.364E-02	.113E-04	.646E-01	.400E-04	.313	.185E-04	.680	.606E-05
.476E-02	.132E-04	.691E-01	.308E-04	.331	.176E-04	.734	.603E-05
.587E-02	.127E-04	.758E-01	.364E-04	.349	.208E-04	.752	.632E-05
.699E-02	.150E-04	.840E-01	.350E-04	.367	.205E-04	.805	.605E-05
.811E-02	.142E-04	.937E-01	.302E-04	.385	.171E-04	.823	.906E-05
.979E-02	.142E-04	.103	.340E-04	.403	.136E-04	.877	.933E-05
.120E-01	.204E-04	.112	.228E-04	.420	.111E-04	.895	.889E-05
.143E-01	.179E-04	.121	.331E-04	.438	.107E-04	.949	.145E-04
.165E-01	.165E-04	.130	.219E-04	.456	.960E-05	.967	.133E-04
.199E-01	.249E-04	.138	.282E-04	.474	.884E-05	1.02	.297E-05
.243E-01	.225E-04	.152	.231E-04	.492	.766E-05	1.04	.110E-05
.288E-01	.237E-04	.170	.229E-04	.510	.824E-05	1.09	.574E-06
.333E-01	.281E-04	.188	.220E-04	.528	.608E-05	1.11	.463E-06
.378E-01	.323E-04	.206	.320E-04				

RUN NO. 42 WIND DIRECTION 120 Deg. VEL. U = 40.5 fps



POWER SPECTRAL FILE JS0423

TIME 22:33 DAY 100 OF 1905

CONFIGURATION A WIND VEL : 40.51 FPS  
DIRECTION: 120

RUN NO. 42  
CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
U = 40.51 FPS  
Q\*A = .8663 LBS  
Q\*A\*L = 2.166 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .3786E-01 RMS = .2781E-01 ROOT(AREA) = .1926E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.682E-04	.224	.623E-04	.547	.224E-04
.561E-03	.817E-05	.468E-01	.698E-04	.242	.648E-04	.565	.200E-04
.112E-02	.183E-04	.513E-01	.682E-04	.260	.543E-04	.592	.370E-04
.168E-02	.102E-04	.558E-01	.701E-04	.278	.532E-04	.610	.408E-04
.252E-02	.174E-04	.603E-01	.720E-04	.296	.535E-04	.663	.198E-04
.364E-02	.465E-04	.647E-01	.622E-04	.314	.514E-04	.681	.188E-04
.477E-02	.335E-04	.692E-01	.898E-04	.332	.366E-04	.735	.202E-04
.589E-02	.351E-04	.760E-01	.645E-04	.350	.476E-04	.753	.198E-04
.701E-02	.368E-04	.849E-01	.755E-04	.367	.416E-04	.807	.207E-04
.813E-02	.566E-04	.939E-01	.850E-04	.385	.367E-04	.825	.270E-04
.981E-02	.585E-04	.103	.908E-04	.403	.354E-04	.879	.360E-04
.121E-01	.546E-04	.112	.829E-04	.421	.309E-04	.897	.370E-04
.143E-01	.854E-04	.121	.102E-03	.439	.297E-04	.950	.483E-04
.165E-01	.847E-04	.130	.900E-04	.457	.291E-04	.968	.392E-04
.199E-01	.680E-04	.139	.915E-04	.475	.290E-04	1.02	.687E-05
.244E-01	.627E-04	.152	.892E-04	.493	.241E-04	1.04	.174E-05
.289E-01	.592E-04	.170	.902E-04	.511	.260E-04	1.09	.972E-06
.334E-01	.813E-04	.188	.831E-04	.529	.237E-04	1.11	.546E-06
.378E-01	.790E-04	.206	.910E-04				

A-128

POWER SPECTRAL FILE JS0433

TIME 22:40 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.40 FPS RUN NO. 43  
 DIRECTION: 130 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.40 FPS  
 Q\*A = .8614 LBS  
 Q\*A\*L = 2.154 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.6401E-02 RMS = .2202E-01 ROOT(AREA) = .1979E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.790E-04	.225	.571E-04	.548	.238E-04
.562E-03	.105E-04	.469E-01	.703E-04	.243	.538E-04	.566	.244E-04
.112E-02	.708E-05	.514E-01	.623E-04	.261	.541E-04	.593	.266E-04
.169E-02	.154E-04	.559E-01	.846E-04	.279	.459E-04	.611	.511E-04
.253E-02	.197E-04	.604E-01	.754E-04	.297	.458E-04	.665	.220E-04
.365E-02	.542E-04	.649E-01	.615E-04	.315	.514E-04	.683	.187E-04
.478E-02	.578E-04	.694E-01	.777E-04	.333	.413E-04	.737	.199E-04
.590E-02	.542E-04	.762E-01	.814E-04	.351	.523E-04	.755	.201E-04
.703E-02	.401E-04	.852E-01	.852E-04	.369	.454E-04	.809	.240E-04
.815E-02	.478E-04	.942E-01	.108E-03	.386	.378E-04	.827	.302E-04
.984E-02	.722E-04	.103	.972E-04	.404	.359E-04	.881	.306E-04
.121E-01	.654E-04	.112	.927E-04	.422	.301E-04	.899	.337E-04
.143E-01	.809E-04	.121	.820E-04	.440	.291E-04	.953	.476E-04
.166E-01	.740E-04	.130	.879E-04	.458	.303E-04	.971	.444E-04
.200E-01	.832E-04	.139	.678E-04	.476	.277E-04	1.03	.100E-04
.245E-01	.908E-04	.153	.673E-04	.494	.266E-04	1.04	.239E-05
.290E-01	.761E-04	.171	.700E-04	.512	.271E-04	1.10	.110E-05
.334E-01	.887E-04	.189	.645E-04	.530	.274E-04	1.12	.771E-06
.379E-01	.747E-04	.207	.823E-04				

POWER SPECTRAL FILE JS0403

TIME 21:33 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.34 FPS RUN NO. 40  
 DIRECTION: 140 CHANNEL MZ IN Coeff. UNITS

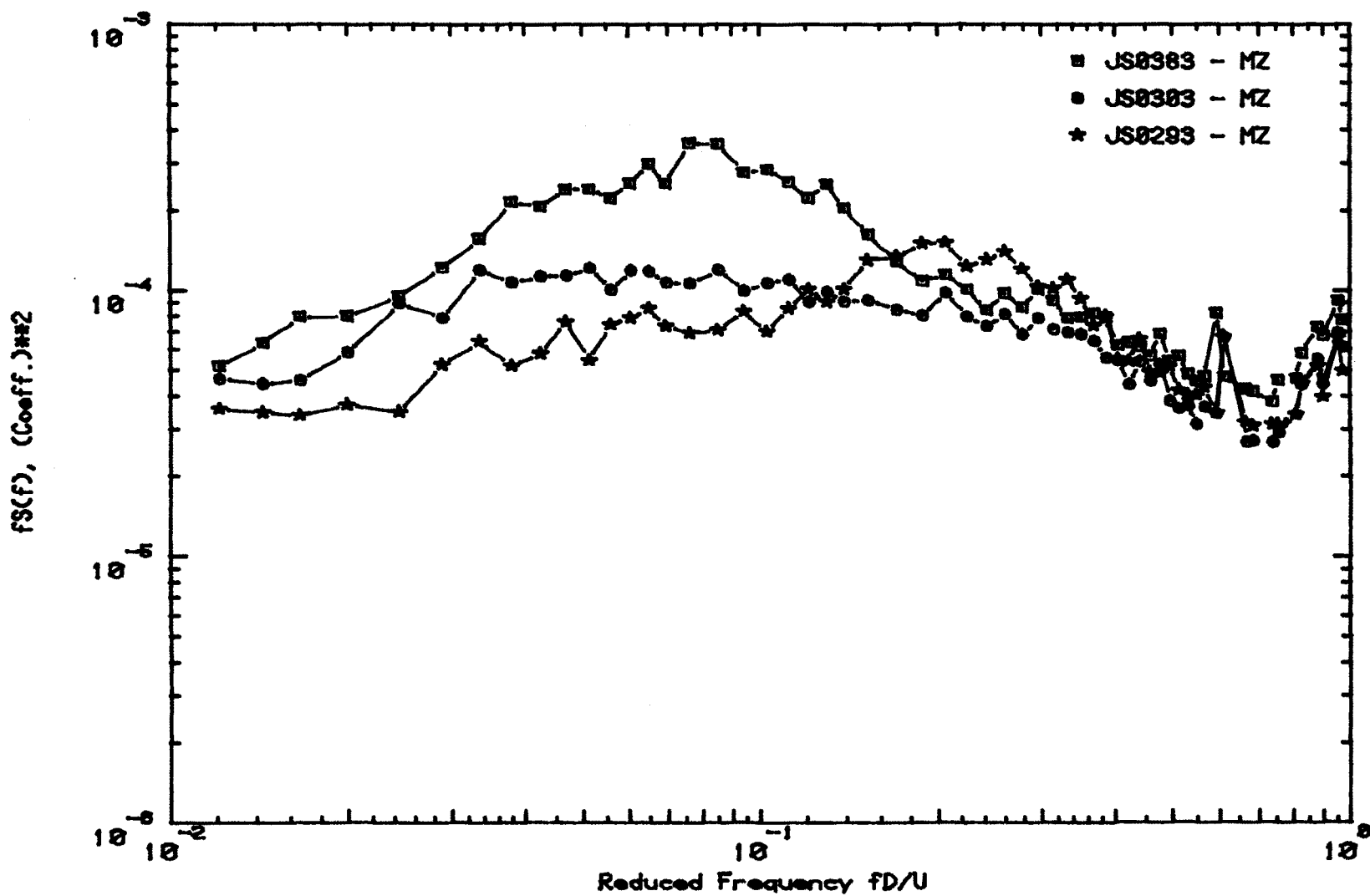
NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.34 FPS  
 Q\*A = .8589 LBS  
 Q\*A\*L = 2.147 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.2386E-01 RMS = .2843E-01 ROOT(AREA) = .1833E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.425E-01	.725E-04	.225	.541E-04	.549	.237E-04
.563E-03	.957E-05	.470E-01	.106E-03	.243	.498E-04	.567	.257E-04
.113E-02	.568E-05	.515E-01	.102E-03	.261	.492E-04	.594	.500E-04
.169E-02	.797E-05	.560E-01	.124E-03	.279	.501E-04	.612	.294E-04
.253E-02	.662E-05	.605E-01	.149E-03	.297	.474E-04	.666	.215E-04
.366E-02	.108E-04	.650E-01	.104E-03	.315	.407E-04	.684	.205E-04
.479E-02	.151E-04	.695E-01	.100E-03	.333	.407E-04	.738	.223E-04
.591E-02	.183E-04	.763E-01	.128E-03	.351	.469E-04	.756	.187E-04
.704E-02	.182E-04	.853E-01	.129E-03	.369	.481E-04	.810	.281E-04
.816E-02	.112E-04	.943E-01	.107E-03	.387	.352E-04	.828	.302E-04
.985E-02	.314E-04	.103	.129E-03	.405	.367E-04	.883	.337E-04
.121E-01	.288E-04	.112	.130E-03	.423	.311E-04	.901	.311E-04
.144E-01	.398E-04	.121	.963E-04	.441	.337E-04	.955	.465E-04
.166E-01	.373E-04	.130	.110E-03	.459	.294E-04	.973	.377E-04
.200E-01	.392E-04	.139	.951E-04	.477	.296E-04	1.03	.715E-05
.245E-01	.607E-04	.153	.827E-04	.495	.266E-04	1.04	.185E-05
.290E-01	.700E-04	.171	.600E-04	.513	.246E-04	1.10	.107E-05
.335E-01	.835E-04	.189	.600E-04	.531	.236E-04	1.12	.521E-06
.380E-01	.812E-04	.207	.660E-04				

RUN NO. 38 WIND DIRECTION 150 Deg. VEL. U = 40.4 fps





POWER SPECTRAL FILE JS0383

TIME 21:19 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.40 FPS  
DIRECTION: 150

RUN NO. 30  
CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
U = 40.40 FPS  
Q\*A = .0614 LBS  
Q\*A\*L = 2.154 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.4663E-02 RMS = .3793E-01 ROOT(AREA) = .2630E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.206E-03	.225	.100E-03	.548	.455E-04
.562E-03	.108E-04	.469E-01	.240E-03	.243	.841E-04	.566	.473E-04
.112E-02	.453E-05	.514E-01	.240E-03	.261	.971E-04	.593	.817E-04
.169E-02	.923E-05	.559E-01	.221E-03	.279	.860E-04	.611	.472E-04
.253E-02	.119E-04	.604E-01	.252E-03	.297	.100E-03	.665	.423E-04
.365E-02	.235E-04	.649E-01	.298E-03	.315	.910E-04	.683	.415E-04
.478E-02	.245E-04	.694E-01	.251E-03	.333	.782E-04	.737	.381E-04
.590E-02	.294E-04	.762E-01	.357E-03	.351	.707E-04	.755	.457E-04
.703E-02	.318E-04	.852E-01	.354E-03	.369	.015E-04	.809	.463E-04
.815E-02	.558E-04	.942E-01	.277E-03	.386	.786E-04	.827	.578E-04
.984E-02	.443E-04	.103	.283E-03	.404	.620E-04	.881	.724E-04
.121E-01	.517E-04	.112	.254E-03	.422	.635E-04	.899	.673E-04
.143E-01	.633E-04	.121	.222E-03	.440	.613E-04	.953	.911E-04
.166E-01	.792E-04	.130	.250E-03	.458	.565E-04	.971	.771E-04
.200E-01	.797E-04	.139	.203E-03	.476	.683E-04	1.03	.178E-04
.245E-01	.948E-04	.153	.161E-03	.494	.542E-04	1.04	.339E-05
.290E-01	.121E-03	.171	.127E-03	.512	.565E-04	1.10	.142E-05
.334E-01	.156E-03	.189	.108E-03	.530	.482E-04	1.12	.779E-06
.379E-01	.214E-03	.207	.114E-03				

POWER SPECTRAL FILE JS0303

TIME 22:16 DAY 22 OF 1985

CONFIGURATION A WIND VEL : 40.31 FPS RUN NO. 30  
 DIRECTION: 160 CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.31 FPS  
 Q\*A = .8574 LBS  
 Q\*A\*L = 2.143 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .8550E-02 RMS = .2242E-01 ROOT(AREA) = .1983E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.425E-01	.112E-03	.225	.795E-04	.550	.313E-04
.564E-03	.481E-05	.471E-01	.113E-03	.243	.731E-04	.568	.363E-04
.113E-02	.700E-05	.516E-01	.121E-03	.261	.610E-04	.595	.344E-04
.169E-02	.537E-05	.561E-01	.100E-03	.279	.680E-04	.613	.666E-04
.254E-02	.127E-04	.606E-01	.117E-03	.297	.782E-04	.667	.267E-04
.366E-02	.103E-04	.651E-01	.118E-03	.315	.711E-04	.685	.272E-04
.479E-02	.179E-04	.696E-01	.107E-03	.333	.691E-04	.739	.268E-04
.592E-02	.241E-04	.764E-01	.106E-03	.351	.679E-04	.757	.292E-04
.704E-02	.283E-04	.854E-01	.117E-03	.369	.641E-04	.811	.341E-04
.817E-02	.309E-04	.944E-01	.994E-04	.387	.557E-04	.829	.442E-04
.986E-02	.326E-04	.103	.106E-03	.405	.544E-04	.883	.552E-04
.121E-01	.464E-04	.112	.109E-03	.423	.442E-04	.901	.444E-04
.144E-01	.445E-04	.121	.903E-04	.442	.530E-04	.955	.693E-04
.166E-01	.460E-04	.130	.986E-04	.460	.455E-04	.973	.612E-04
.200E-01	.585E-04	.139	.905E-04	.478	.524E-04	1.03	.115E-04
.245E-01	.891E-04	.153	.917E-04	.496	.384E-04	1.05	.293E-05
.290E-01	.784E-04	.171	.846E-04	.514	.357E-04	1.10	.981E-06
.335E-01	.119E-03	.189	.805E-04	.532	.368E-04	1.12	.740E-06
.380E-01	.106E-03	.207	.981E-04				

POWER SPECTRAL FILE JS0293

TIME 22: 8 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.41 FPS RUN NO. 29  
 DIRECTION: 170 CHANNEL MZ IN Coeff. UNITS

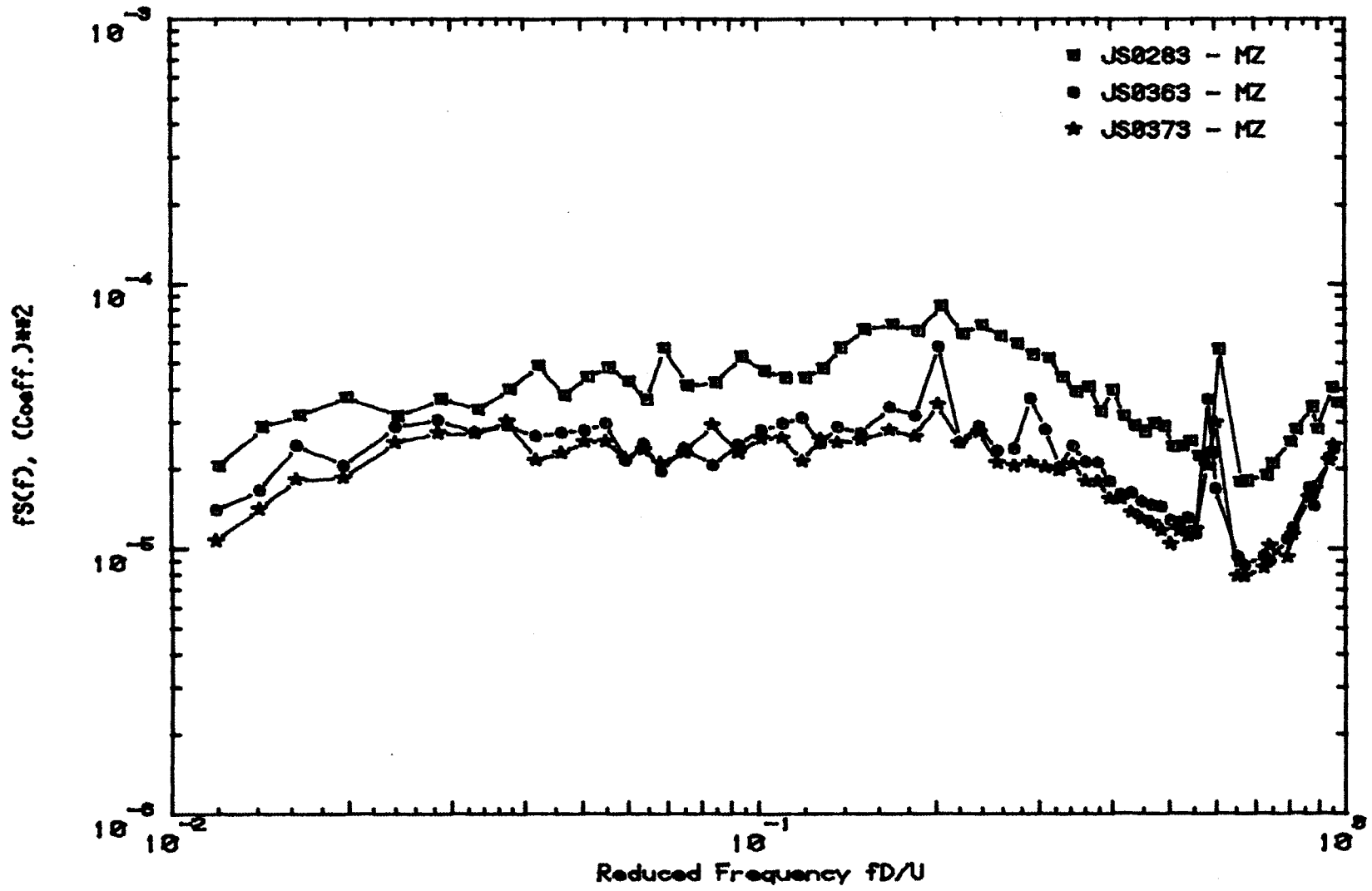
NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.41 FPS  
 Q\*A = .0620 LBS  
 Q\*A\*L = 2.155 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1974E-02 RMS = .2159E-01 ROOT(AREA) = .1871E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.577E-04	.225	.123E-03	.548	.402E-04
.562E-03	.253E-05	.469E-01	.760E-04	.242	.130E-03	.566	.431E-04
.112E-02	.488E-05	.514E-01	.544E-04	.260	.139E-03	.593	.346E-04
.169E-02	.618E-05	.559E-01	.741E-04	.278	.119E-03	.611	.668E-04
.253E-02	.793E-05	.604E-01	.784E-04	.296	.103E-03	.665	.310E-04
.365E-02	.117E-04	.649E-01	.853E-04	.314	.101E-03	.683	.309E-04
.478E-02	.111E-04	.694E-01	.731E-04	.332	.102E-03	.737	.314E-04
.590E-02	.133E-04	.761E-01	.686E-04	.350	.925E-04	.755	.312E-04
.702E-02	.234E-04	.851E-01	.704E-04	.368	.733E-04	.809	.340E-04
.815E-02	.306E-04	.941E-01	.832E-04	.386	.794E-04	.827	.446E-04
.983E-02	.187E-04	.103	.695E-04	.404	.551E-04	.881	.516E-04
.121E-01	.358E-04	.112	.850E-04	.422	.539E-04	.899	.397E-04
.143E-01	.347E-04	.121	.100E-03	.440	.654E-04	.953	.660E-04
.166E-01	.338E-04	.130	.901E-04	.458	.409E-04	.971	.496E-04
.200E-01	.371E-04	.139	.100E-03	.476	.487E-04	1.02	.113E-04
.244E-01	.348E-04	.153	.130E-03	.494	.518E-04	1.04	.277E-05
.289E-01	.524E-04	.171	.134E-03	.512	.420E-04	1.10	.102E-05
.334E-01	.639E-04	.189	.149E-03	.530	.404E-04	1.11	.674E-06
.379E-01	.517E-04	.207	.151E-03				

RUN NO. 28 WIND DIRECTION 180 Deg. VEL. U = 40.5 fps



POWER SPECTRAL FILE JS0283

TIME 22: 1 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.49 FPS RUN NO. 28  
 DIRECTION: 180 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.49 FPS  
 Q\*A = .3654 LBS  
 Q\*A\*L = 2.163 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .2771E-01 RMS = .2385E-01 ROOT(AREA) = .1463E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.423E-01	.487E-04	.224	.646E-04	.547	.255E-04
.561E-03	.477E-05	.468E-01	.378E-04	.242	.695E-04	.565	.223E-04
.112E-02	.225E-05	.513E-01	.446E-04	.260	.632E-04	.592	.229E-04
.168E-02	.271E-05	.558E-01	.492E-04	.278	.594E-04	.610	.565E-04
.252E-02	.531E-05	.603E-01	.428E-04	.296	.537E-04	.664	.178E-04
.365E-02	.115E-04	.648E-01	.366E-04	.314	.521E-04	.682	.180E-04
.477E-02	.782E-05	.693E-01	.571E-04	.332	.443E-04	.736	.189E-04
.589E-02	.102E-04	.760E-01	.413E-04	.350	.391E-04	.754	.210E-04
.701E-02	.106E-04	.850E-01	.424E-04	.368	.407E-04	.807	.253E-04
.813E-02	.158E-04	.939E-01	.531E-04	.386	.328E-04	.825	.281E-04
.982E-02	.203E-04	.103	.467E-04	.404	.375E-04	.879	.343E-04
.121E-01	.206E-04	.112	.442E-04	.422	.316E-04	.897	.282E-04
.143E-01	.289E-04	.121	.442E-04	.439	.292E-04	.951	.405E-04
.165E-01	.318E-04	.130	.480E-04	.457	.277E-04	.969	.354E-04
.199E-01	.373E-04	.139	.573E-04	.475	.296E-04	1.02	.812E-05
.244E-01	.316E-04	.152	.672E-04	.493	.289E-04	1.04	.195E-05
.289E-01	.367E-04	.170	.700E-04	.511	.243E-04	1.09	.686E-06
.334E-01	.335E-04	.188	.663E-04	.529	.244E-04	1.11	.494E-06
.379E-01	.400E-04	.206	.824E-04				

POWER SPECTRAL FILE JS0363

TIME 19:40 DAY 100 OF 1985

WIND VEL : 41.00 FPS  
 DIRECTION: 190

RUN NO. 36  
 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U :  
 D = 5.000 IN.  
 U = 41.00 FPS  
 Q\*A = .0072 LBS  
 Q\*A\*L = 2.218 LB\*IN

B SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .4303E-01 RMS = .4463E-01 ROOT(AREA) = .1124E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.418E-01	.266E-04	.221	.252E-04	.540	.131E-04
.554E-03	.409E-05	.463E-01	.275E-04	.239	.270E-04	.558	.114E-04
.111E-02	.252E-05	.507E-01	.279E-04	.257	.234E-04	.585	.365E-04
.166E-02	.446E-05	.551E-01	.297E-04	.274	.238E-04	.602	.168E-04
.249E-02	.319E-05	.596E-01	.215E-04	.292	.368E-04	.656	.933E-05
.360E-02	.459E-05	.640E-01	.249E-04	.310	.281E-04	.673	.864E-05
.471E-02	.661E-05	.684E-01	.196E-04	.328	.202E-04	.727	.938E-05
.582E-02	.745E-05	.751E-01	.240E-04	.345	.244E-04	.744	.901E-05
.692E-02	.637E-05	.839E-01	.207E-04	.363	.212E-04	.797	.108E-04
.803E-02	.981E-05	.928E-01	.248E-04	.381	.211E-04	.815	.120E-04
.969E-02	.134E-04	.102	.279E-04	.399	.179E-04	.868	.170E-04
.119E-01	.140E-04	.111	.297E-04	.416	.161E-04	.886	.145E-04
.141E-01	.166E-04	.119	.311E-04	.434	.163E-04	.939	.220E-04
.163E-01	.245E-04	.128	.249E-04	.452	.150E-04	.957	.238E-04
.197E-01	.205E-04	.137	.288E-04	.469	.146E-04	1.01	.583E-05
.241E-01	.289E-04	.150	.272E-04	.487	.144E-04	1.03	.138E-05
.285E-01	.306E-04	.168	.340E-04	.505	.127E-04	1.08	.704E-06
.330E-01	.275E-04	.186	.318E-04	.523	.125E-04	1.10	.406E-06
.374E-01	.292E-04	.204	.580E-04				

POWER SPECTRAL FILE JS0373

TIME 20:40 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 41.05 FPS  
DIRECTION: 200

RUN NO. 37  
CHANNEL HZ IN Coeff. UNITS

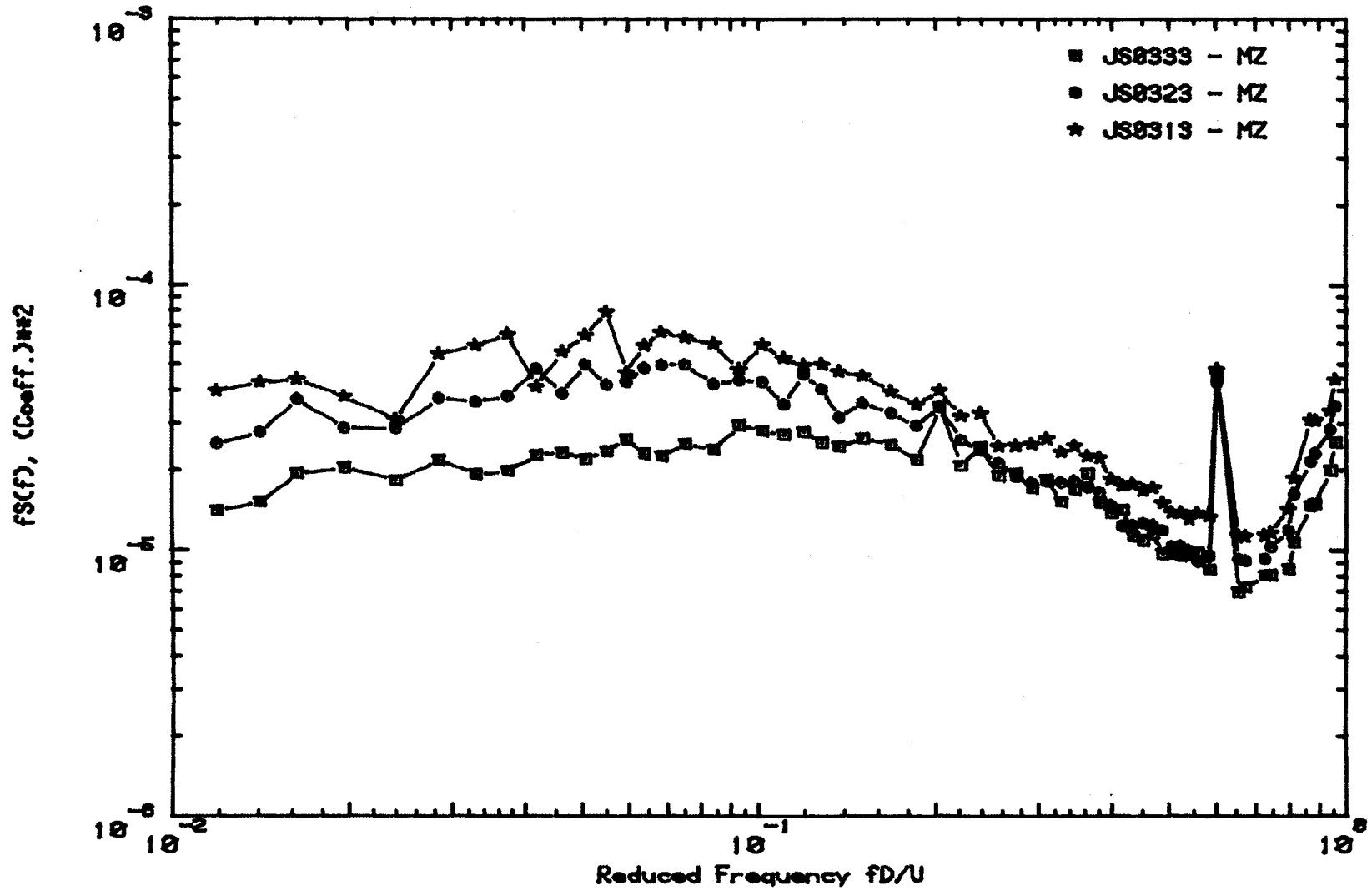
NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
U = 41.05 FPS  
Q\*A = .8096 LBS  
Q\*A\*L = 2.224 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1901E-01 RMS = .2200E-01 ROOT(AREA) = .1066E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.418E-01	.215E-04	.221	.250E-04	.540	.111E-04
.553E-03	.239E-05	.462E-01	.229E-04	.239	.275E-04	.557	.118E-04
.111E-02	.394E-05	.506E-01	.253E-04	.256	.210E-04	.584	.205E-04
.166E-02	.291E-05	.550E-01	.254E-04	.274	.205E-04	.602	.300E-04
.249E-02	.257E-05	.595E-01	.217E-04	.292	.212E-04	.655	.786E-05
.360E-02	.671E-05	.639E-01	.236E-04	.310	.203E-04	.672	.785E-05
.470E-02	.374E-05	.683E-01	.211E-04	.327	.197E-04	.726	.848E-05
.581E-02	.932E-05	.750E-01	.231E-04	.345	.208E-04	.743	.103E-04
.692E-02	.924E-05	.838E-01	.293E-04	.363	.179E-04	.796	.925E-05
.802E-02	.135E-04	.927E-01	.230E-04	.380	.179E-04	.814	.113E-04
.968E-02	.122E-04	.102	.261E-04	.398	.154E-04	.867	.156E-04
.119E-01	.108E-04	.110	.261E-04	.416	.154E-04	.885	.169E-04
.141E-01	.142E-04	.119	.214E-04	.433	.137E-04	.938	.215E-04
.163E-01	.182E-04	.128	.259E-04	.451	.130E-04	.956	.245E-04
.196E-01	.185E-04	.137	.250E-04	.469	.125E-04	1.01	.901E-05
.241E-01	.251E-04	.150	.257E-04	.487	.117E-04	1.03	.170E-05
.285E-01	.273E-04	.168	.280E-04	.504	.104E-04	1.08	.777E-06
.329E-01	.272E-04	.186	.265E-04	.522	.118E-04	1.10	.482E-06
.373E-01	.303E-04	.203	.351E-04				

RUN NO. 33 WIND DIRECTION 210 Deg. VEL. U = 41.0 fps





POWER SPECTRAL FILE JS0333

TIME 10:39 DAY 100 OF 1905

CONFIGURATION A WIND VEL : 40.96 FPS RUN NO. 33  
 DIRECTION: 210 CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.96 FPS  
 Q\*A = .0054 LBS  
 Q\*A\*L = 2.213 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.3531E-01 RMS = .1843E-01 ROOT(AREA) = .1038E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.419E-01	.228E-04	.222	.209E-04	.541	.956E-05
.555E-03	.516E-05	.463E-01	.233E-04	.239	.244E-04	.559	.900E-05
.111E-02	.425E-05	.507E-01	.220E-04	.257	.190E-04	.585	.841E-05
.166E-02	.284E-05	.552E-01	.236E-04	.275	.194E-04	.603	.452E-04
.250E-02	.308E-05	.596E-01	.261E-04	.293	.171E-04	.656	.696E-05
.360E-02	.168E-05	.640E-01	.230E-04	.310	.185E-04	.674	.724E-05
.471E-02	.347E-05	.685E-01	.226E-04	.328	.152E-04	.727	.805E-05
.582E-02	.622E-05	.751E-01	.251E-04	.346	.169E-04	.745	.807E-05
.693E-02	.740E-05	.840E-01	.239E-04	.363	.195E-04	.798	.846E-05
.804E-02	.800E-05	.929E-01	.294E-04	.381	.150E-04	.816	.107E-04
.970E-02	.919E-05	.102	.280E-04	.399	.139E-04	.869	.147E-04
.119E-01	.141E-04	.111	.272E-04	.417	.142E-04	.887	.149E-04
.141E-01	.152E-04	.119	.279E-04	.434	.113E-04	.940	.199E-04
.164E-01	.194E-04	.128	.253E-04	.452	.109E-04	.958	.253E-04
.197E-01	.205E-04	.137	.245E-04	.470	.116E-04	1.01	.712E-05
.241E-01	.183E-04	.151	.264E-04	.488	.970E-05	1.03	.200E-05
.286E-01	.218E-04	.168	.250E-04	.505	.969E-05	1.08	.689E-06
.330E-01	.193E-04	.186	.218E-04	.523	.947E-05	1.10	.471E-06
.374E-01	.199E-04	.204	.346E-04				

POWER SPECTRAL FILE JC0323

TIME 10:31 DAY 100 OF 1905

CONFIGURATION A WIND VEL : 41.00 FPS RUN NO. 32  
 DIRECTION: 220 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 41.00 FPS  
 Q\*A = .0074 LBS  
 Q\*A\*L = 2.219 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .1673E-01 RMS = .4661E-01 ROOT(AREA) = .1273E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.418E-01	.481E-04	.221	.260E-04	.540	.100E-04
.554E-03	.276E-05	.462E-01	.308E-04	.239	.238E-04	.550	.908E-05
.111E-02	.529E-05	.507E-01	.498E-04	.257	.213E-04	.505	.252E-05
.166E-02	.510E-05	.551E-01	.417E-04	.274	.190E-04	.602	.429E-04
.249E-02	.839E-05	.595E-01	.420E-04	.292	.179E-04	.656	.224E-05
.360E-02	.350E-05	.640E-01	.403E-04	.310	.182E-04	.673	.914E-05
.471E-02	.540E-05	.684E-01	.497E-04	.328	.180E-04	.726	.926E-05
.582E-02	.124E-04	.751E-01	.498E-04	.345	.102E-04	.744	.103E-04
.692E-02	.104E-04	.837E-01	.421E-04	.363	.172E-04	.797	.119E-04
.803E-02	.218E-04	.928E-01	.436E-04	.381	.165E-04	.815	.162E-04
.969E-02	.162E-04	.102	.429E-04	.399	.140E-04	.868	.215E-04
.119E-01	.252E-04	.111	.353E-04	.416	.123E-04	.886	.231E-04
.141E-01	.277E-04	.119	.450E-04	.434	.124E-04	.939	.285E-04
.163E-01	.369E-04	.128	.401E-04	.452	.126E-04	.957	.349E-04
.197E-01	.288E-04	.137	.315E-04	.469	.124E-04	1.01	.919E-05
.241E-01	.286E-04	.150	.358E-04	.487	.117E-04	1.03	.206E-05
.285E-01	.372E-04	.168	.320E-04	.505	.103E-04	1.08	.621E-06
.330E-01	.360E-04	.186	.294E-04	.523	.104E-04	1.10	.490E-06
.374E-01	.380E-04	.204	.347E-04				

POWER SPECTRAL FILE JC0313

TIME 10:23 DAY 100 OF 1905

CONFIGURATION A

WIND VEL : 41.03 FPS  
DIRECTION: 230

RUN NO. 31  
CHANNEL MZ IN Coeff. UNITS

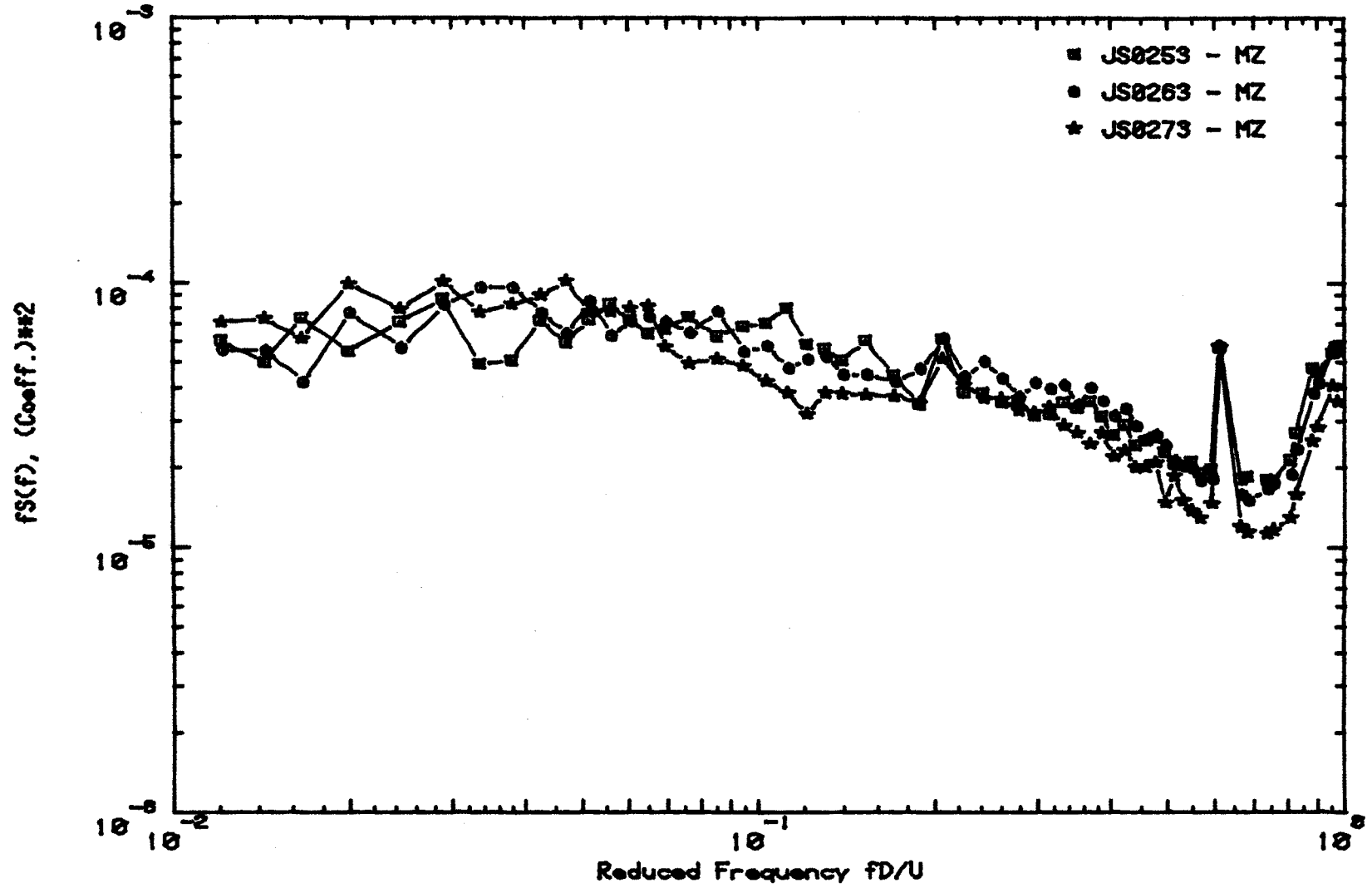
NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U :  
 D = 5.000 IN.  
 U = 41.03 FPS  
 Q\*A = .0083 LBS  
 Q\*A\*L = 2.221 LB\*IN

8 SEGMENTS OF 4076 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .3318E-01 RMS = .3651E-01 ROOT(AREA) = .1494E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.410E-01	.411E-04	.221	.319E-04	.540	.131E-04
.554E-03	.553E-05	.462E-01	.557E-04	.239	.326E-04	.550	.137E-04
.111E-02	.498E-05	.507E-01	.642E-04	.257	.246E-04	.584	.134E-04
.166E-02	.907E-05	.551E-01	.784E-04	.274	.246E-04	.602	.478E-04
.249E-02	.123E-04	.595E-01	.464E-04	.292	.250E-04	.655	.114E-04
.360E-02	.125E-04	.639E-01	.588E-04	.310	.262E-04	.673	.113E-04
.471E-02	.221E-04	.684E-01	.658E-04	.327	.234E-04	.726	.113E-04
.581E-02	.223E-04	.750E-01	.631E-04	.345	.247E-04	.744	.116E-04
.692E-02	.247E-04	.837E-01	.575E-04	.363	.226E-04	.797	.143E-04
.803E-02	.175E-04	.927E-01	.477E-04	.381	.222E-04	.815	.107E-04
.969E-02	.239E-04	.102	.591E-04	.398	.185E-04	.868	.308E-04
.119E-01	.396E-04	.110	.526E-04	.416	.175E-04	.895	.307E-04
.141E-01	.428E-04	.119	.494E-04	.434	.170E-04	.939	.334E-04
.163E-01	.438E-04	.128	.498E-04	.451	.168E-04	.956	.438E-04
.197E-01	.378E-04	.137	.460E-04	.469	.172E-04	1.01	.143E-04
.241E-01	.310E-04	.150	.452E-04	.487	.150E-04	1.03	.269E-05
.285E-01	.545E-04	.168	.395E-04	.505	.130E-04	1.08	.847E-06
.329E-01	.588E-04	.186	.352E-04	.522	.139E-04	1.10	.525E-06
.374E-01	.647E-04	.203	.398E-04				

RUN NO. 25 WIND DIRECTION 240 Deg. VEL. U = 40.5 fps



POWER SPECTRAL FILE JS0253

TIME 21:30 DAY 99 OF 1965

WIND VEL : 40.48 FPS  
DIRECTION: 240

RUN NO. 25  
CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
U = 40.48 FPS  
Q\*A = .0649 LBS  
Q\*A\*L = 2.162 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.0 SEC.

MEAN = .2130E-01 RMS = .1770E-01 ROOT(AREA) = .1721E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.424E-01	.719E-04	.224	.305E-04	.547	.211E-04
.561E-03	.917E-05	.468E-01	.594E-04	.242	.303E-04	.565	.171E-04
.112E-02	.754E-05	.513E-01	.720E-04	.260	.352E-04	.592	.197E-04
.168E-02	.855E-05	.558E-01	.832E-04	.278	.359E-04	.610	.567E-04
.252E-02	.169E-04	.603E-01	.720E-04	.296	.314E-04	.664	.181E-04
.365E-02	.266E-04	.648E-01	.639E-04	.314	.317E-04	.682	.186E-04
.477E-02	.264E-04	.693E-01	.665E-04	.332	.352E-04	.736	.100E-04
.589E-02	.285E-04	.760E-01	.742E-04	.350	.334E-04	.754	.179E-04
.701E-02	.273E-04	.850E-01	.620E-04	.368	.355E-04	.808	.214E-04
.814E-02	.327E-04	.940E-01	.682E-04	.386	.311E-04	.826	.269E-04
.982E-02	.316E-04	.103	.703E-04	.404	.265E-04	.879	.475E-04
.121E-01	.602E-04	.112	.800E-04	.422	.291E-04	.897	.458E-04
.143E-01	.497E-04	.121	.585E-04	.440	.244E-04	.951	.542E-04
.166E-01	.735E-04	.130	.562E-04	.458	.253E-04	.969	.574E-04
.199E-01	.550E-04	.139	.509E-04	.475	.261E-04	1.02	.146E-04
.244E-01	.709E-04	.152	.602E-04	.493	.229E-04	1.04	.323E-05
.289E-01	.864E-04	.170	.445E-04	.511	.207E-04	1.09	.943E-06
.334E-01	.491E-04	.188	.347E-04	.529	.204E-04	1.11	.594E-06
.379E-01	.506E-04	.206	.614E-04				

POWER SPECTRAL FILE JS0263

TIME 21:45 DAY 22 OF 1985

CONFIGURATION A WIND VEL : 40.15 FPS  
DIRECTION: 250

RUN NO. 26  
CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
U = 40.15 FPS  
Q\*A = .0506 LBS  
Q\*A\*L = 2.127 LD\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .2381E-01 RMS = .1815E-01 ROOT(AREA) = .1711E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.427E-01	.767E-04	.226	.441E-04	.552	.192E-04
.566E-03	.490E-05	.472E-01	.640E-04	.244	.503E-04	.570	.179E-04
.113E-02	.868E-05	.518E-01	.851E-04	.262	.434E-04	.597	.102E-04
.170E-02	.765E-05	.563E-01	.628E-04	.280	.370E-04	.615	.574E-04
.255E-02	.107E-04	.608E-01	.713E-04	.298	.418E-04	.670	.153E-04
.368E-02	.211E-04	.653E-01	.739E-04	.317	.397E-04	.688	.151E-04
.481E-02	.179E-04	.699E-01	.710E-04	.335	.409E-04	.742	.167E-04
.594E-02	.259E-04	.767E-01	.644E-04	.353	.345E-04	.760	.175E-04
.707E-02	.443E-04	.857E-01	.778E-04	.371	.401E-04	.814	.182E-04
.820E-02	.226E-04	.948E-01	.547E-04	.389	.357E-04	.832	.234E-04
.990E-02	.347E-04	.104	.576E-04	.407	.313E-04	.887	.382E-04
.122E-01	.555E-04	.113	.474E-04	.425	.334E-04	.905	.417E-04
.144E-01	.551E-04	.122	.513E-04	.443	.288E-04	.959	.574E-04
.167E-01	.419E-04	.131	.525E-04	.461	.255E-04	.977	.554E-04
.201E-01	.766E-04	.140	.450E-04	.479	.266E-04	1.03	.150E-04
.246E-01	.566E-04	.154	.449E-04	.498	.243E-04	1.05	.323E-05
.291E-01	.823E-04	.172	.422E-04	.516	.212E-04	1.10	.106E-05
.337E-01	.957E-04	.190	.473E-04	.534	.203E-04	1.12	.633E-06
.382E-01	.955E-04	.208	.617E-04				

POWER SPECTRAL FILE JS0273

TIME 21:53 DAY 27 OF 1995

CONFIGURATION A WIND VEL : 40.38 FPS RUN NO. 27  
 DIRECTION: 260 CHANNEL MZ IN Coeff. UNITS

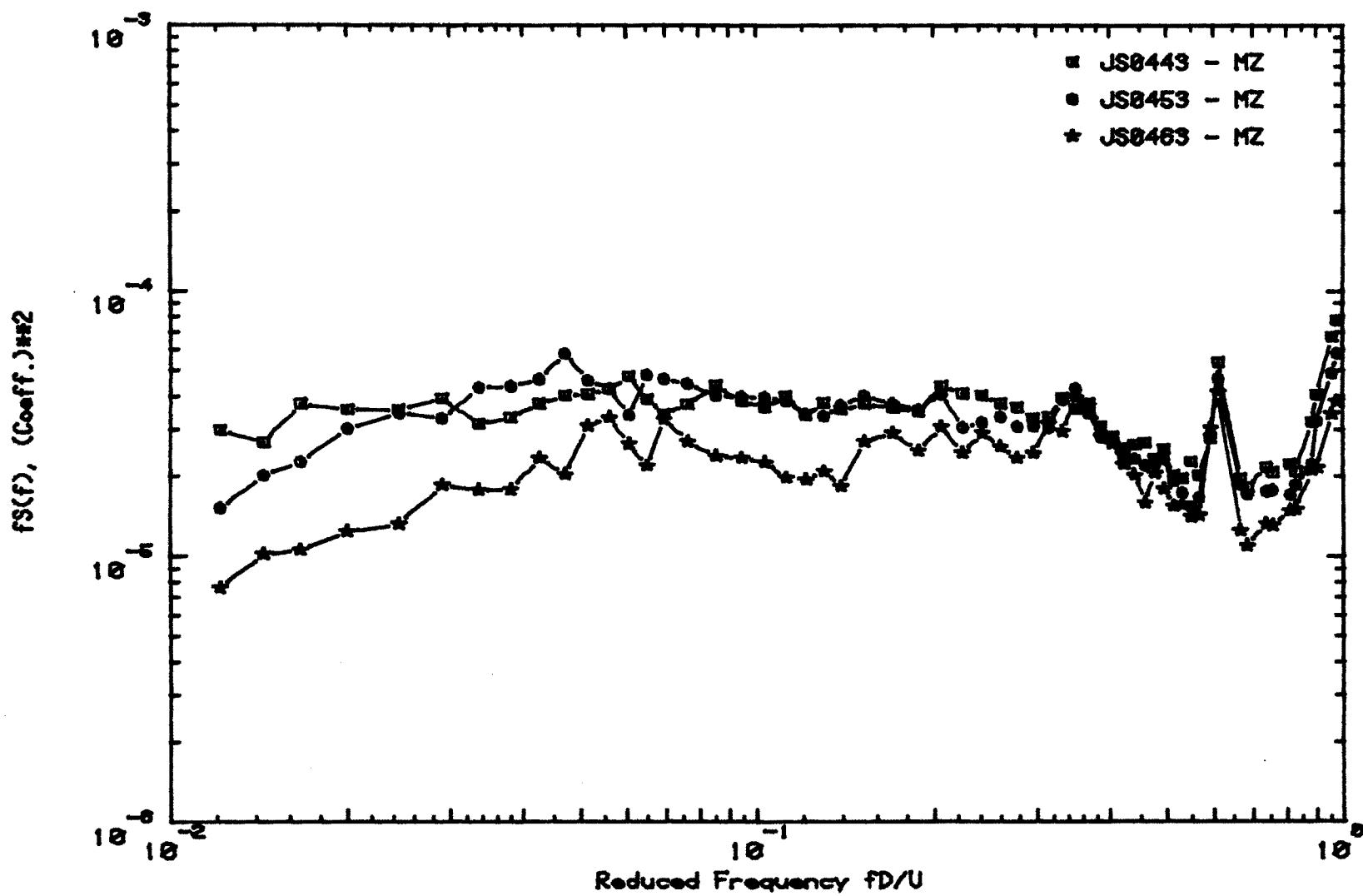
NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.38 FPS  
 Q\*A = .8606 LBS  
 Q\*A\*L = 2.152 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.4036E-02 RMS = .1866E-01 ROOT(AREA) = .1802E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.425E-01	.895E-04	.225	.413E-04	.549	.137E-04
.562E-03	.731E-05	.470E-01	.101E-03	.243	.366E-04	.567	.130E-04
.112E-02	.665E-05	.515E-01	.774E-04	.261	.363E-04	.594	.147E-04
.169E-02	.935E-05	.560E-01	.775E-04	.279	.329E-04	.612	.575E-04
.253E-02	.263E-04	.605E-01	.792E-04	.297	.322E-04	.666	.120E-04
.366E-02	.326E-04	.650E-01	.813E-04	.315	.337E-04	.684	.115E-04
.478E-02	.573E-04	.695E-01	.570E-04	.333	.287E-04	.738	.113E-04
.591E-02	.441E-04	.762E-01	.494E-04	.351	.270E-04	.756	.116E-04
.703E-02	.407E-04	.852E-01	.513E-04	.369	.245E-04	.810	.130E-04
.816E-02	.619E-04	.942E-01	.484E-04	.387	.269E-04	.828	.158E-04
.984E-02	.602E-04	.103	.423E-04	.405	.220E-04	.882	.251E-04
.121E-01	.706E-04	.112	.383E-04	.423	.233E-04	.900	.204E-04
.143E-01	.728E-04	.121	.318E-04	.441	.201E-04	.954	.400E-04
.166E-01	.612E-04	.130	.382E-04	.459	.202E-04	.972	.354E-04
.200E-01	.985E-04	.139	.372E-04	.477	.202E-04	1.03	.965E-05
.245E-01	.791E-04	.153	.375E-04	.495	.148E-04	1.04	.235E-05
.290E-01	.101E-03	.171	.371E-04	.513	.186E-04	1.10	.913E-06
.335E-01	.770E-04	.189	.352E-04	.531	.150E-04	1.12	.640E-06
.380E-01	.826E-04	.207	.514E-04				

RUN NO. 44 WIND DIRECTION 270 Deg. VEL. U = 40.2 fps





POWER SPECTRAL FILE JS0443

TIME 22:40 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.23 FPS RUN NO. 44  
 DIRECTION: 270 CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.23 FPS  
 Q\*A = .8543 LBS  
 Q\*A\*L = 2.136 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.6130E-01 RMS = .1832E-01 ROOT(AREA) = .1346E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.426E-01	.375E-04	.226	.410E-04	.551	.227E-04
.565E-03	.302E-05	.471E-01	.401E-04	.244	.403E-04	.569	.201E-04
.113E-02	.285E-05	.517E-01	.407E-04	.262	.374E-04	.596	.279E-04
.169E-02	.260E-05	.562E-01	.424E-04	.280	.363E-04	.614	.537E-04
.254E-02	.598E-05	.607E-01	.474E-04	.298	.330E-04	.668	.196E-04
.367E-02	.553E-05	.652E-01	.389E-04	.316	.334E-04	.686	.181E-04
.480E-02	.102E-04	.697E-01	.342E-04	.334	.394E-04	.740	.215E-04
.593E-02	.106E-04	.765E-01	.373E-04	.352	.358E-04	.758	.208E-04
.706E-02	.856E-05	.855E-01	.430E-04	.370	.376E-04	.813	.222E-04
.819E-02	.110E-04	.946E-01	.386E-04	.388	.308E-04	.831	.209E-04
.988E-02	.190E-04	.104	.362E-04	.406	.282E-04	.885	.318E-04
.121E-01	.297E-04	.113	.399E-04	.424	.254E-04	.903	.405E-04
.144E-01	.268E-04	.122	.339E-04	.442	.263E-04	.957	.669E-04
.167E-01	.375E-04	.131	.378E-04	.460	.266E-04	.975	.768E-04
.200E-01	.357E-04	.140	.356E-04	.478	.233E-04	1.03	.224E-04
.246E-01	.356E-04	.153	.373E-04	.496	.253E-04	1.05	.466E-05
.291E-01	.392E-04	.171	.363E-04	.515	.201E-04	1.10	.146E-05
.336E-01	.314E-04	.189	.349E-04	.533	.196E-04	1.12	.764E-06
.381E-01	.332E-04	.207	.437E-04				

POWER SPECTRAL FILE JS0453

TIME 22:55 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.23 FPS RUN NO. 45  
 DIRECTION: 280 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.23 FPS  
 Q\*A = .8541 LBS  
 Q\*A\*L = 2.135 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.8899E-02 RMS = .3212E-01 ROOT(AREA) = .1305E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.426E-01	.463E-04	.226	.305E-04	.551	.153E-04
.565E-03	.312E-05	.471E-01	.580E-04	.244	.318E-04	.569	.167E-04
.113E-02	.321E-05	.517E-01	.457E-04	.262	.334E-04	.596	.280E-04
.169E-02	.332E-05	.562E-01	.426E-04	.280	.307E-04	.614	.467E-04
.254E-02	.363E-05	.607E-01	.338E-04	.298	.308E-04	.668	.185E-04
.367E-02	.722E-05	.652E-01	.480E-04	.316	.305E-04	.686	.171E-04
.480E-02	.490E-05	.697E-01	.466E-04	.334	.388E-04	.740	.175E-04
.593E-02	.702E-05	.765E-01	.446E-04	.352	.427E-04	.759	.178E-04
.706E-02	.625E-05	.855E-01	.402E-04	.370	.345E-04	.813	.170E-04
.819E-02	.117E-04	.946E-01	.399E-04	.388	.280E-04	.831	.186E-04
.988E-02	.162E-04	.104	.396E-04	.406	.267E-04	.885	.222E-04
.121E-01	.152E-04	.113	.384E-04	.424	.236E-04	.903	.323E-04
.144E-01	.202E-04	.122	.344E-04	.442	.233E-04	.957	.488E-04
.167E-01	.226E-04	.131	.337E-04	.460	.219E-04	.975	.580E-04
.200E-01	.302E-04	.140	.362E-04	.478	.223E-04	1.03	.161E-04
.246E-01	.345E-04	.153	.402E-04	.497	.231E-04	1.05	.331E-05
.291E-01	.330E-04	.171	.374E-04	.515	.192E-04	1.10	.121E-05
.336E-01	.430E-04	.189	.357E-04	.533	.173E-04	1.12	.725E-06
.381E-01	.436E-04	.207	.407E-04				

POWER SPECTRAL FILE JS0463

TIME 23: 1 DAY 100 OF 1905

CONFIGURATION A

WIND VEL : 40.26 FPS  
DIRECTION: 290

RUN NO. 46  
CHANNEL HZ IN Coeff. UNITS

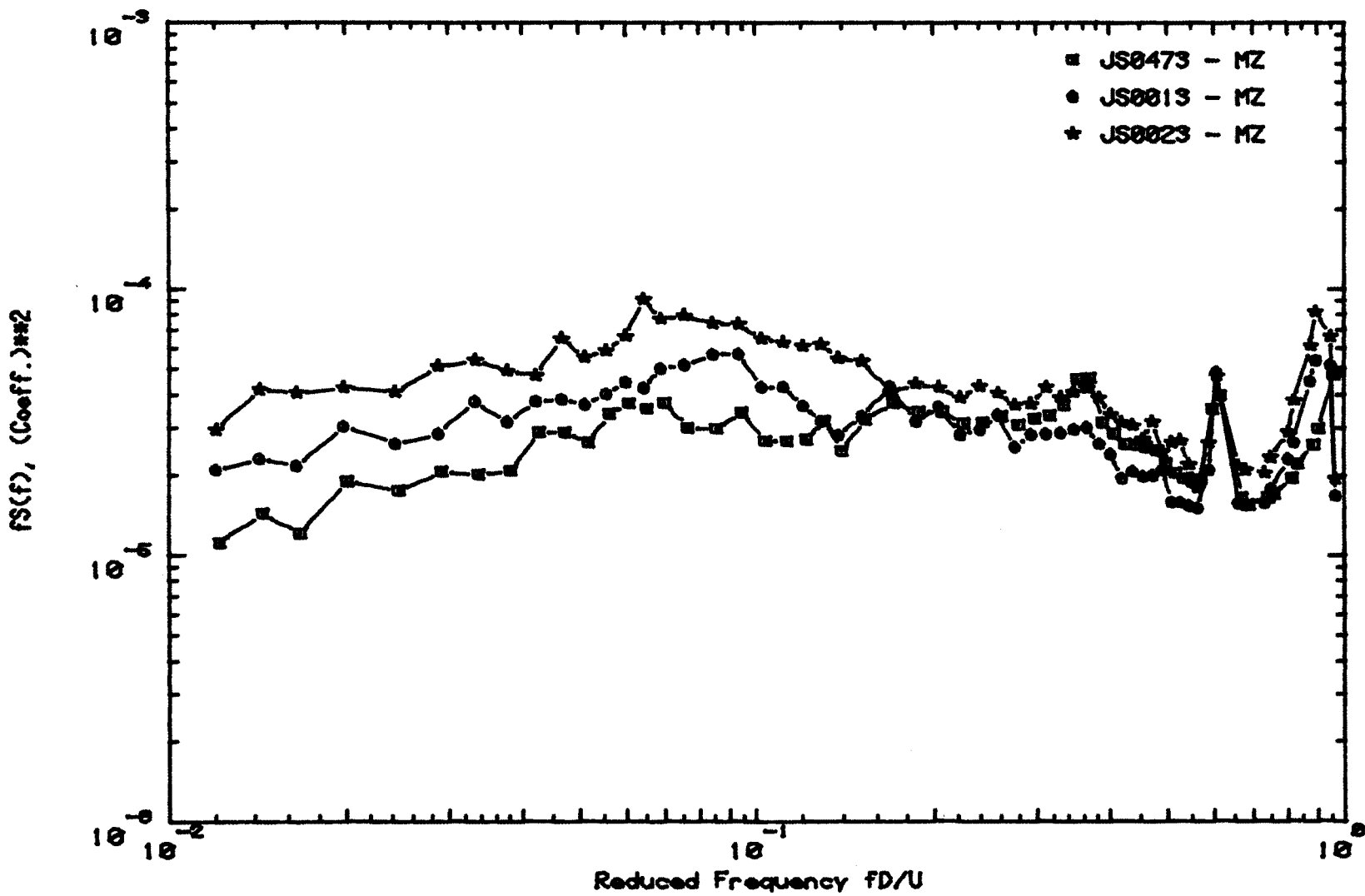
NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
U = 40.26 FPS  
Q\*A = .8555 LBS  
Q\*A\*L = 2.139 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.4101E-01 RMS = .1257E-01 ROOT(AREA) = .1049E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.426E-01	.234E-04	.225	.245E-04	.550	.140E-04
.564E-03	.311E-05	.471E-01	.203E-04	.243	.291E-04	.568	.142E-04
.113E-02	.188E-05	.516E-01	.302E-04	.261	.250E-04	.595	.303E-04
.169E-02	.494E-05	.561E-01	.332E-04	.280	.234E-04	.613	.417E-04
.254E-02	.304E-05	.606E-01	.263E-04	.298	.244E-04	.668	.125E-04
.367E-02	.433E-05	.652E-01	.218E-04	.316	.316E-04	.686	.109E-04
.479E-02	.287E-05	.697E-01	.320E-04	.334	.294E-04	.740	.132E-04
.592E-02	.615E-05	.764E-01	.270E-04	.352	.396E-04	.758	.130E-04
.705E-02	.458E-05	.855E-01	.230E-04	.370	.369E-04	.812	.148E-04
.818E-02	.688E-05	.945E-01	.234E-04	.388	.284E-04	.830	.150E-04
.987E-02	.746E-05	.104	.225E-04	.406	.264E-04	.884	.210E-04
.121E-01	.760E-05	.113	.197E-04	.424	.221E-04	.902	.215E-04
.144E-01	.102E-04	.122	.193E-04	.442	.202E-04	.956	.343E-04
.166E-01	.106E-04	.131	.208E-04	.460	.158E-04	.974	.381E-04
.200E-01	.124E-04	.140	.183E-04	.478	.205E-04	1.03	.112E-04
.245E-01	.132E-04	.153	.270E-04	.496	.178E-04	1.05	.248E-05
.291E-01	.184E-04	.171	.291E-04	.514	.154E-04	1.10	.108E-05
.336E-01	.177E-04	.189	.249E-04	.532	.157E-04	1.12	.634E-06
.381E-01	.178E-04	.207	.307E-04				

RUN NO. 47 WIND DIRECTION 300 Deg. VEL. U = 40.1 fps



POWER SPECTRAL FILE JS0473

TIME 23: 7 DAY 100 OF 1985

CONFIGURATION A WIND VEL : 40.10 FPS RUN NO. 47  
 DIRECTION: 300 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.10 FPS  
 Q\*A = .8488 LBS  
 Q\*A\*L = 2.122 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1262E-01 RMS = .1183E-01 ROOT(AREA) = .1168E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.428E-01	.290E-04	.226	.311E-04	.552	.187E-04
.566E-03	.279E-05	.473E-01	.288E-04	.244	.314E-04	.571	.193E-04
.113E-02	.136E-05	.518E-01	.265E-04	.262	.331E-04	.598	.352E-04
.170E-02	.187E-05	.563E-01	.337E-04	.281	.308E-04	.616	.397E-04
.255E-02	.315E-05	.609E-01	.371E-04	.299	.325E-04	.670	.164E-04
.368E-02	.389E-05	.654E-01	.353E-04	.317	.333E-04	.688	.154E-04
.481E-02	.109E-04	.699E-01	.372E-04	.335	.366E-04	.743	.165E-04
.595E-02	.696E-05	.767E-01	.301E-04	.353	.456E-04	.761	.170E-04
.708E-02	.657E-05	.858E-01	.297E-04	.371	.460E-04	.815	.194E-04
.821E-02	.102E-04	.949E-01	.345E-04	.389	.314E-04	.833	.221E-04
.991E-02	.164E-04	.104	.267E-04	.407	.285E-04	.888	.260E-04
.122E-01	.111E-04	.113	.267E-04	.426	.261E-04	.906	.298E-04
.144E-01	.143E-04	.122	.272E-04	.444	.260E-04	.960	.475E-04
.167E-01	.121E-04	.131	.319E-04	.462	.254E-04	.978	.486E-04
.201E-01	.189E-04	.140	.246E-04	.480	.248E-04	1.03	.132E-04
.246E-01	.174E-04	.154	.323E-04	.498	.221E-04	1.05	.304E-05
.292E-01	.206E-04	.172	.372E-04	.516	.203E-04	1.11	.136E-05
.337E-01	.200E-04	.190	.346E-04	.534	.194E-04	1.12	.756E-06
.382E-01	.207E-04	.208	.345E-04				

POWER SPECTRAL FILE JS0013

TIME 3:37 DAY 99 OF 1985

WIND VEL : 40.64 FPS  
DIRECTION: 310

RUN NO. 1  
CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
U = 40.64 FPS  
Q\*A = .0718 LBS  
Q\*A\*L = 2.172 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = -.1639E-02 RMS = .1296E-01 ROOT(AREA) = .1284E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.378E-04	.223	.282E-04	.545	.153E-04
.559E-03	.166E-05	.467E-01	.383E-04	.241	.295E-04	.563	.150E-04
.112E-02	.426E-05	.511E-01	.367E-04	.259	.335E-04	.590	.207E-04
.168E-02	.251E-05	.556E-01	.402E-04	.277	.253E-04	.608	.486E-04
.251E-02	.531E-05	.601E-01	.446E-04	.295	.283E-04	.661	.156E-04
.363E-02	.521E-05	.645E-01	.423E-04	.313	.285E-04	.679	.153E-04
.475E-02	.107E-04	.690E-01	.502E-04	.331	.287E-04	.733	.156E-04
.587E-02	.960E-05	.757E-01	.516E-04	.348	.295E-04	.751	.176E-04
.699E-02	.104E-04	.847E-01	.567E-04	.366	.301E-04	.804	.229E-04
.810E-02	.105E-04	.936E-01	.560E-04	.384	.262E-04	.822	.266E-04
.978E-02	.160E-04	.103	.427E-04	.402	.239E-04	.876	.449E-04
.120E-01	.200E-04	.111	.427E-04	.420	.194E-04	.894	.537E-04
.143E-01	.229E-04	.120	.363E-04	.438	.205E-04	.947	.516E-04
.165E-01	.216E-04	.129	.317E-04	.456	.197E-04	.965	.166E-04
.198E-01	.304E-04	.138	.282E-04	.474	.198E-04	1.02	.379E-05
.243E-01	.261E-04	.152	.332E-04	.491	.200E-04	1.04	.128E-05
.288E-01	.285E-04	.170	.430E-04	.509	.158E-04	1.09	.828E-06
.333E-01	.377E-04	.187	.316E-04	.527	.157E-04	1.11	.604E-06
.377E-01	.315E-04	.205	.361E-04				

A-153

POWER SPECTRAL FILE JS0023

TIME 3:45 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.62 FPS RUN NO. 2  
 DIRECTION: 320 CHANNEL HZ IN Coeff. UNITS

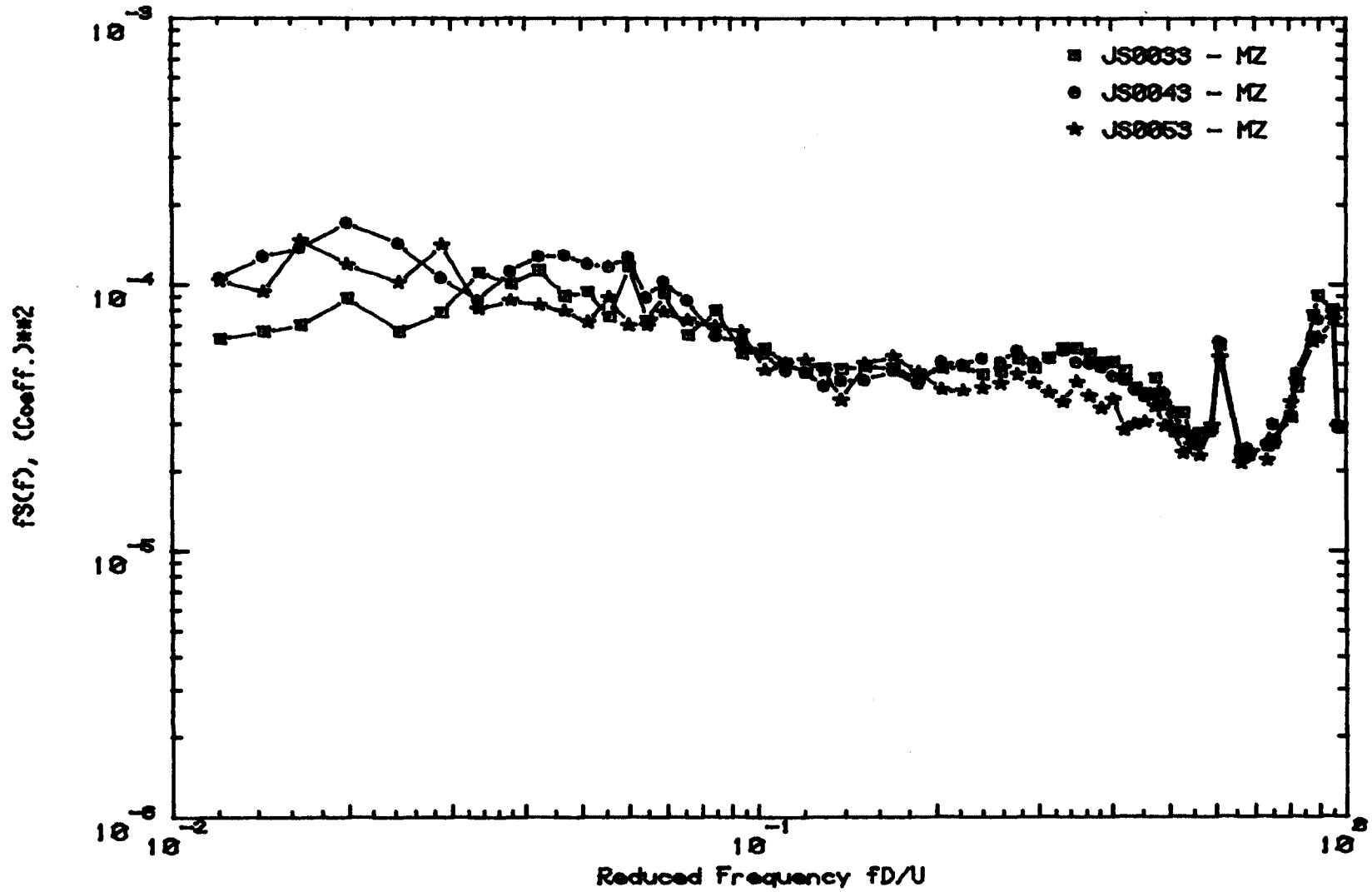
NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.62 FPS  
 Q\*A = .0708 LBS  
 Q\*A\*L = 2.177 LB\*IN

B SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.0 SEC.

MEAN = .6287E-01 RMS = .2885E-01 ROOT(AREA) = .1565E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.472E-04	.223	.389E-04	.545	.210E-04
.559E-03	.492E-05	.467E-01	.650E-04	.241	.430E-04	.563	.178E-04
.112E-02	.317E-05	.512E-01	.552E-04	.259	.404E-04	.590	.262E-04
.168E-02	.300E-05	.556E-01	.585E-04	.277	.365E-04	.608	.470E-04
.252E-02	.743E-05	.601E-01	.663E-04	.295	.360E-04	.662	.216E-04
.363E-02	.121E-04	.646E-01	.912E-04	.313	.426E-04	.680	.208E-04
.475E-02	.135E-04	.691E-01	.769E-04	.331	.389E-04	.733	.203E-04
.587E-02	.120E-04	.758E-01	.792E-04	.349	.407E-04	.751	.232E-04
.699E-02	.181E-04	.847E-01	.740E-04	.367	.423E-04	.805	.289E-04
.811E-02	.158E-04	.937E-01	.734E-04	.384	.388E-04	.823	.380E-04
.979E-02	.286E-04	.103	.640E-04	.402	.336E-04	.876	.611E-04
.120E-01	.294E-04	.112	.628E-04	.420	.315E-04	.894	.819E-04
.143E-01	.417E-04	.120	.607E-04	.438	.303E-04	.948	.661E-04
.165E-01	.405E-04	.129	.617E-04	.456	.271E-04	.966	.193E-04
.199E-01	.425E-04	.138	.540E-04	.474	.315E-04	1.02	.390E-05
.243E-01	.409E-04	.152	.533E-04	.492	.243E-04	1.04	.136E-05
.288E-01	.512E-04	.170	.408E-04	.510	.265E-04	1.09	.987E-06
.333E-01	.538E-04	.188	.439E-04	.528	.269E-04	1.11	.501E-06
.377E-01	.491E-04	.205	.425E-04				

RUN NO. 3 WIND DIRECTION 330 Deg. VEL. U = 40.4 fps





POWER SPECTRAL FILE JS0033

TIME 3:52 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.42 FPS RUN NO. 3  
 DIRECTION: 330 CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F#D/U : D = 5.000 IN.  
 U = 40.42 FPS  
 Q\*A = .9622 LBS  
 Q\*A\*L = 2.156 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .6640E-01 RMS = .5034E-01 ROOT(AREA) = .1875E-01

F#D/U	F*(F)	F#D/U	F*(F)	F#D/U	F*(F)	F#D/U	F*(F)
0.00	0.00	.424E-01	.113E-03	.224	.470E-04	.548	.269E-04
.562E-03	.581E-05	.469E-01	.905E-04	.242	.457E-04	.566	.275E-04
.112E-02	.123E-04	.514E-01	.739E-04	.260	.468E-04	.593	.280E-04
.169E-02	.121E-04	.559E-01	.755E-04	.278	.523E-04	.611	.591E-04
.253E-02	.176E-04	.604E-01	.117E-03	.296	.484E-04	.665	.222E-04
.365E-02	.223E-04	.649E-01	.728E-04	.314	.530E-04	.683	.229E-04
.478E-02	.325E-04	.694E-01	.929E-04	.332	.572E-04	.737	.247E-04
.590E-02	.264E-04	.761E-01	.646E-04	.350	.573E-04	.755	.260E-04
.702E-02	.295E-04	.851E-01	.795E-04	.368	.547E-04	.809	.317E-04
.815E-02	.397E-04	.941E-01	.548E-04	.386	.506E-04	.827	.412E-04
.983E-02	.502E-04	.103	.573E-04	.404	.510E-04	.881	.763E-04
.121E-01	.623E-04	.112	.505E-04	.422	.474E-04	.899	.906E-04
.143E-01	.666E-04	.121	.465E-04	.440	.408E-04	.953	.800E-04
.166E-01	.703E-04	.130	.484E-04	.458	.389E-04	.971	.289E-04
.199E-01	.887E-04	.139	.480E-04	.476	.443E-04	1.02	.604E-05
.244E-01	.664E-04	.153	.492E-04	.494	.351E-04	1.04	.187E-05
.289E-01	.787E-04	.171	.484E-04	.512	.270E-04	1.10	.900E-06
.334E-01	.111E-03	.189	.443E-04	.530	.330E-04	1.11	.620E-06
.379E-01	.100E-03	.207	.485E-04				

POWER SPECTRAL FILE JS004Z

TIME 4: 0 DAY 29 OF 1985

CONFIGURATION A WIND VEL : 40.61 FPS  
 DIRECTION: 340

RUN NO. 4  
 CHANNEL MZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF MZ VS. F\*D/U : D = 5.000 IN.  
 U = 40.61 FPS  
 Q\*A = .8704 LBS  
 Q\*A\*L = 2.176 LD\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .6299E-01 RMS = .5669E-01 ROOT(AREA) = .2165E-01

F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)	F*D/U	F*(F)
0.00	0.00	.422E-01	.120E-03	.223	.492E-04	.546	.269E-04
.559E-03	.182E-04	.467E-01	.129E-03	.241	.525E-04	.563	.251E-04
.112E-02	.272E-05	.512E-01	.119E-03	.259	.500E-04	.590	.280E-04
.168E-02	.152E-04	.556E-01	.117E-03	.277	.564E-04	.608	.609E-04
.252E-02	.238E-04	.601E-01	.127E-03	.295	.500E-04	.662	.237E-04
.364E-02	.464E-04	.646E-01	.894E-04	.313	.526E-04	.680	.241E-04
.475E-02	.549E-04	.691E-01	.103E-03	.331	.562E-04	.733	.251E-04
.587E-02	.577E-04	.758E-01	.871E-04	.349	.509E-04	.751	.297E-04
.699E-02	.487E-04	.847E-01	.637E-04	.367	.503E-04	.805	.321E-04
.811E-02	.656E-04	.937E-01	.610E-04	.384	.486E-04	.823	.465E-04
.979E-02	.802E-04	.103	.550E-04	.402	.450E-04	.877	.638E-04
.120E-01	.105E-03	.112	.473E-04	.420	.438E-04	.895	.740E-04
.143E-01	.127E-03	.121	.467E-04	.438	.400E-04	.948	.794E-04
.165E-01	.137E-03	.129	.415E-04	.456	.378E-04	.966	.295E-04
.199E-01	.171E-03	.138	.433E-04	.474	.386E-04	1.02	.712E-05
.243E-01	.142E-03	.152	.437E-04	.492	.391E-04	1.04	.213E-05
.288E-01	.106E-03	.170	.474E-04	.510	.331E-04	1.09	.113E-05
.333E-01	.871E-04	.188	.422E-04	.528	.272E-04	1.11	.700E-06
.378E-01	.112E-03	.206	.513E-04				

POWER SPECTRAL FILE JC0053

TIME 4: 9 DAY 99 OF 1985

CONFIGURATION A WIND VEL : 40.47 FPS  
DIRECTION: 350

RUN NO. 5  
CHANNEL HZ IN Coeff. UNITS

NON-DIMENSIONAL SPECTRUM F\*(F) OF HZ VS. F\*D/U : D = 5.000 IN.  
U = 40.47 FPS  
Q\*A = .8345 LBS  
Q\*A\*L = 2.161 LB\*IN

8 SEGMENTS OF 4096 SAMPLES AT 223.21 S/S TOTAL SAMPLE TIME = 146.8 SEC.

MEAN = .5363E-01 RMS = .6106E-01 ROOT(AREA) = .2123E-01

F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)	F*D/U	F*S(F)
0.00	0.00	.424E-01	.837E-04	.224	.397E-04	.547	.250E-04
.561E-03	.163E-04	.469E-01	.792E-04	.242	.407E-04	.565	.227E-04
.112E-02	.163E-04	.513E-01	.721E-04	.260	.420E-04	.592	.294E-04
.168E-02	.190E-04	.558E-01	.892E-04	.278	.457E-04	.610	.531E-04
.253E-02	.553E-04	.603E-01	.700E-04	.296	.422E-04	.664	.212E-04
.365E-02	.550E-04	.648E-01	.700E-04	.314	.392E-04	.682	.226E-04
.477E-02	.552E-04	.693E-01	.785E-04	.332	.360E-04	.736	.218E-04
.589E-02	.591E-04	.760E-01	.732E-04	.350	.428E-04	.754	.252E-04
.701E-02	.728E-04	.850E-01	.693E-04	.368	.379E-04	.808	.359E-04
.814E-02	.125E-03	.940E-01	.663E-04	.386	.340E-04	.826	.435E-04
.982E-02	.846E-04	.103	.474E-04	.404	.367E-04	.880	.600E-04
.121E-01	.103E-03	.112	.502E-04	.422	.282E-04	.898	.628E-04
.143E-01	.934E-04	.121	.510E-04	.440	.297E-04	.951	.735E-04
.166E-01	.146E-03	.130	.471E-04	.458	.303E-04	.969	.291E-04
.199E-01	.118E-03	.139	.360E-04	.476	.348E-04	1.02	.609E-05
.244E-01	.101E-03	.152	.503E-04	.494	.293E-04	1.04	.203E-05
.289E-01	.141E-03	.170	.535E-04	.512	.281E-04	1.10	.932E-06
.334E-01	.807E-04	.188	.467E-04	.529	.232E-04	1.11	.640E-06
.379E-01	.869E-04	.206	.402E-04				

**APPENDIX B**

**MEASUREMENT AND ANALYSIS OF ACCELERATION**

## APPENDIX B

## MEASUREMENT AND ANALYSIS OF ACCELERATION

This appendix deals with the acceleration of a given floor--say the top floor--of a tall building. It is assumed that the motion occurs entirely within the horizontal x-y plane. The motion of an arbitrary two-dimensional body is indicated in Figure B-1. At any given point P(x,y) the acceleration vector  $\underline{a}$  can be resolved into two orthogonal components of magnitude  $a_x$  and  $a_y$ :

$$\underline{a} = a_x \underline{i} + a_y \underline{j} \quad (\text{B.1})$$

Two accelerometers would be both necessary and sufficient to determine the acceleration at this given point. Since the body can rotate about the point 0 (its own z-axis), however, the two accelerometers are insufficient to determine the acceleration at any other point; that is,  $a_x$ ,  $a_y$ , and therefore  $\underline{a}$  are functions of x and y as well as of time.

The entire acceleration field can be specified using three variables  $\ddot{x}$ ,  $\ddot{y}$ , and  $\ddot{\theta}$ , as shown in Figure B-2:

$$\underline{a}(x,y) = \ddot{x} \underline{i} + \ddot{y} \underline{j} + r \ddot{\theta} \underline{t} \quad (\text{B.2})$$

where

$\underline{a}(x,y)$  = total acceleration at a point P(x,y) having distance

$$r = \sqrt{x^2 + y^2} \quad \text{from center of twist } 0$$

$\ddot{x}$  = acceleration due to translation of body along x-axis

$\ddot{y}$  = acceleration due to translation of body along y-axis

$\ddot{\theta}$  = angular acceleration (in radians/sec<sup>2</sup>) due rotation  
of body about z-axis (assumed center of twist)

$\underline{t}$  = unit tangent vector =  $-(y/r) \underline{i} + (x/r) \underline{j}$

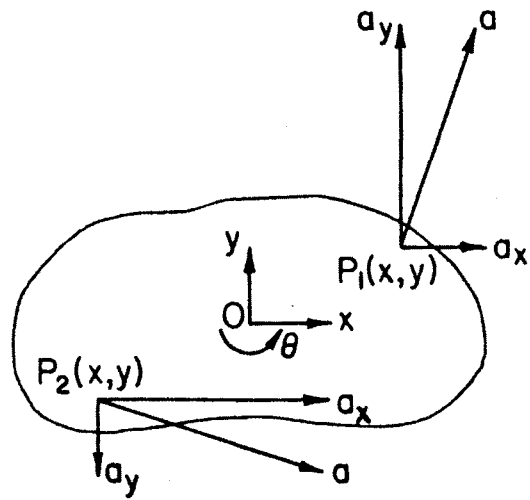


Figure B-1. Total Acceleration Vector at Various Points on a Two-dimensional Body

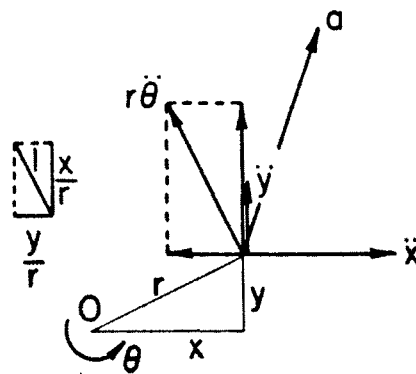


Figure B-2. Total Acceleration Vector as the Sum of Three Components in the X-Y Plane

This equation can be easily expanded to the form of Equation (B.1), which clearly indicates that  $a_x$  is due to both  $\ddot{x}$ ,  $\ddot{\theta}$ , and  $a_y$  is due to both  $\ddot{y}$ ,  $\ddot{\theta}$ :

$$\begin{aligned} \underline{a}(x,y) &= \ddot{x}\underline{i} + \ddot{y}\underline{j} - (y/r)(r\ddot{\theta})\underline{i} + (x/r)(r\ddot{\theta})\underline{j} \\ &= (\ddot{x}-y\ddot{\theta})\underline{i} + (\ddot{y}+x\ddot{\theta})\underline{j} = a_x\underline{i} + a_y\underline{j} \end{aligned}$$

Now the magnitude of the acceleration is given by

$$\begin{aligned} a^2 &= a_x^2 + a_y^2 = \ddot{x}^2 - 2y\ddot{x}\ddot{\theta} + y^2\ddot{\theta}^2 + \ddot{y}^2 + 2x\ddot{y}\ddot{\theta} + x^2\ddot{\theta}^2 \\ &= \ddot{x}^2 + \ddot{y}^2 + (x^2+y^2)\ddot{\theta}^2 - 2\ddot{\theta} - 2\ddot{\theta}(\ddot{x}y-x\ddot{y}) \end{aligned}$$

Statistics of the acceleration are determined by time-averaging this equation over a period  $T$  as follows:

$$\begin{aligned} \overline{a^2} &= \frac{1}{T} \int_0^T a^2 dt = \frac{1}{T} \int_0^T (\ddot{x}^2 + \ddot{y}^2 + r^2\ddot{\theta}^2 - \ddot{\theta}(\ddot{x}y-x\ddot{y})) dt \\ &= \overline{\ddot{x}^2} + \overline{\ddot{y}^2} + \overline{r^2\ddot{\theta}^2} + x\overline{\ddot{y}\ddot{\theta}} - y\overline{\ddot{x}\ddot{\theta}} \end{aligned}$$

If the rotational motion is assumed to be independent of the translational motions, then the cross-correlations vanish, resulting in

$$\sigma_a \sqrt{\overline{a^2}} = \sqrt{\sigma_{\ddot{x}}^2 + \sigma_{\ddot{y}}^2 + \sigma_{r\ddot{\theta}}^2} \quad (\text{B.3})$$

Now what we measure is the base moments which can be related to displacement at the highest office level by using the frame stiffness. The moment and therefore displacement can be decomposed into a sum of sine waves and for each of those waves

$$\ddot{x}(t) = x(t)\omega^2 \cdot \sin\omega t$$

so to get the variance of the acceleration we integrate over all important frequencies

$$\sigma_{\ddot{x}}^2 = \frac{4\pi^2}{K^*} \int_0^{\infty} f^2 S_m(f) df \cdot L$$

where  $K^*$  is the generalized stiffness and  $L$  is the height at which the acceleration is to be calculated.



APPENDIX C

MODAL ANALYSIS AND RANDOM VIBRATION

	<u>Page</u>
Reduction to SDOF System Using Modal Analysis . . . . .	C-2
Solution of the Governing Equation Using Random Vibration Theory .	C-4
Nomenclature . . . . .	C-7
References . . . . .	C-9

### Reduction to SDOF System Using Modal Analysis

A common analytical model of a tall building, suitable for the analysis of dynamic horizontal loading, is to consider it a chain of lumped masses, connected in series by beam elements. Displacements in the x-direction, y-direction, and rotations about the (vertical) z-axis are considered independently. For each of these components, the structural "frame" model will have  $n$  degrees of freedom, corresponding to the side-sway (or rotation) of each floor or lumped mass point. The system may then be described by an  $n \times n$  stiffness matrix  $[k]$ , with an "input"  $n$ -component load vector  $\{P\}$ , and an "output"  $n$ -component displacement vector  $\{x\}$ .

In a static system, these are related by the familiar equation

$$\{P\} = [k]\{x\}$$

When the loading varies with time and height, however, a complete description would be

$$[m]\{\ddot{x}\} + [c]\{\dot{x}\} + [k]\{x\} = \{P\}$$

where  $[m]$  is the matrix of lumped masses,  $[c]$  is a matrix of damping coefficients, and  $\{x\}$  and  $\{P\}$  are now functions of time. This represents a system of  $n$  simultaneous equations, which would be difficult to solve even if  $\{P\}$  could be determined. If a transformation to a system of "generalized coordinates" is applied, these simultaneous equations are simplified to  $n$  uncoupled equations. Each equation corresponds to one of the generalized coordinates,  $\xi_i$ , which also has an associated natural frequency  $f_i$  and mode shape  $\{\phi\}_i$ . Furthermore, due to the frequency distribution of wind energy, almost all of the excitation occurs in the fundamental mode associated with the lowest

natural frequency. It is then only necessary to consider the first of the generalized coordinate equations, which appears as

$$m^* \ddot{\xi} + c^* \dot{\xi} + k^* \xi = P^* \quad (C.1)$$

where

$$m^* = \{\phi\}^T [m] \{\phi\}$$

$$c^* = \{\phi\}^T [c] \{\phi\}$$

$$k^* = \{\phi\}^T [k] \{\phi\}$$

$$P^* = \{\phi\}^T \{P\}$$

These are referred to as the generalized mass, damping, stiffness, and load, respectively. This governing equation is that of a conventional single-degree of freedom system. The solution of the system,  $\xi$ , is related to the actual system by

$$\{x\} = \xi \{\phi\} . \quad (C.2)$$

It can be shown that the natural frequency of the system is

$$f_o = \frac{1}{2\pi} \sqrt{k^*/m^*} . \quad (C.3)$$

A further key property of tall structures is that the mode shape may be approximated by a straight line, that is  $\phi_i = \alpha z_i$  or  $\{\phi\} = \alpha \{z\}$ . Since the magnitude of a mode shape is arbitrary,  $\alpha$  may be taken as unity. The generalized mass then becomes

$$m^* = \{z\}^T [m] \{z\} = \sum_i m_i z_i^2 \quad (C.4)$$

which is approximately the mass moment of inertia,  $I$ , about the base.

The generalized load is

$$P^* = \{z\}^T \{P\} = \sum_i P_i z_i \quad (C.5)$$

which is the moment about the base,  $M$ . The displacement vector is

$$\{x\} = \xi\{z\}, \text{ or } x(z) = \xi z$$

which shows that  $\xi$  is the rotation of the structure (which remains a straight line by assumption) about its base,  $\theta$ . By analogy to the SDOF system the generalized stiffness  $k^*$  is equivalent to a simple rotational stiffness  $k_\theta$ . Introducing the critical damping ratio,

$$\begin{aligned} \zeta &= \frac{c}{c_{cr}} = \frac{c^*}{c_{cr}^*} = \frac{c^*}{2\sqrt{k^*m^*}} \\ &= 2m^*\omega_0 \end{aligned}$$

where  $\omega_0 = 2\pi f_0$  is the natural circular frequency, the governing equation (C.1) may be rewritten as

$$I\ddot{\theta} + 2I\zeta\omega_0\dot{\theta} + k_\theta\theta = M(t) \quad (C.6)$$

#### Solution of the Governing Equation Using Random Vibration Theory

Equation (C.6) is most easily solved in the frequency domain when the loading  $M(t)$  is random in time, since an arbitrary function of time can be described by a superposition of sinusoidal functions. For such a harmonic function at frequency  $f$ ,

$$M(t) = M_0 \sin(2\pi ft + \psi),$$

the solution is (in magnitude, ignoring phase)

$$\theta(t) = \frac{1}{k_\theta} H(f) \cdot M(t)$$

where the frequency response function  $H(f)$  is defined as

$$H(f) = \frac{1}{\sqrt{[1-(f/f_0)^2]^2 + (2\zeta f/f_0)^2}}$$

In terms of the spring load  $M$ , which is equal to

$$= k_\theta\theta,$$

the solution is simply

$$M(t) = H(f) \cdot M(t) .$$

Note that  $M(t)$  and  $M(t)$  are both moments, and that  $H(f)$  is dimensionless. If the driving frequency  $f$  is near the structure's natural frequency  $f_0$ , and the damping ratio  $\zeta$  is low, this function is an amplification factor describing a condition known as resonance.  $M(t)$  is properly described as an externally applied base moment, whereas  $M(t)$  is an internal or "response" base moment. Note that if  $M(t)$  were externally applied to the structure and a static analysis performed, the calculated response (displacement or internal forces) would be the same as the actual response due to the real fluctuating load  $M(t)$ . Thus  $M(t)$  is also referred to as a "static equivalent load."

When the loading  $M(t)$  is random in time, its statistical description as a superposition of harmonics is its "power spectral density," denoted  $S_M(f)$ . The response moment is then also described as a power spectral density,  $S_M(f)$ . The general result of random vibration theory is the relationship between these two, which is simply

$$S_M(f) = |H(f)|^2 \cdot S_M(f) \quad (C.7)$$

The relating function  $|H(f)|^2$  is just the square of the frequency response function, and is referred to in general as the transfer function:

$$|H(f)|^2 = \frac{1}{[1-(f/f_0)^2]^2 + (2\zeta f/f_0)^2} \quad (C.8)$$

This particular transfer function is also referred to as the "mechanical admittance."

The principal usefulness of the power spectral density of a function is that its variance may be computed as the area under the spectrum:

$$\sigma_M^2 = \int_0^{\infty} S_M(f) df \quad (C.9)$$

The integration of equation (C.9) was performed on the computer using numerical integration. Another accepted procedure in the present context is to use the so-called white noise approximation; then

$$\sigma_M^2 = S_M(f_o) \int_0^{\infty} |H(f)|^2 df$$

The integration can be performed analytically, with the result

$$\sigma_M^2 = \frac{\pi}{4\zeta} f_o S_M(f_o) \quad (C.10)$$

The square root of this is the desired rms dynamic response  $\sigma_M$ . Note that any value of natural frequency  $f_o$  and damping ratio  $\zeta$  may be incorporated after the test results,  $S_M(f)$ , are obtained. The results from the two techniques were compared and gave similar results. For quick estimates of the rms response one can read the coefficient  $C_f S_M(f_o)$  from the load-spectral graphs in Appendix A. To convert this coefficient to  $f_o S_M(f_o)$  which can be used in equation (C.10) x and y values have to be multiplied by 985 and z-values by 154. This can be done for any reduced natural frequency of the model.

The response is expected to be normally distributed (Gaussian) statistically, and thus can be completely described by its variance  $\sigma^2$  and mean value  $\bar{M}$  (note that the mean response  $\bar{M}$  is equal to the mean load  $\bar{M}$ ). Since the structural damping is very low, the response is also "narrow band," i.e., it can be loosely described as vibration at a

single frequency  $f_0$  with randomly varying amplitude. Each cycle of vibration has a maximum and negative "peak" value associated with it. It is this series of peaks which are of interest insofar as structural design for strength or stiffness is concerned. It can be shown that these peak values obey a Rayleigh probability distribution, which is easily obtained from  $\sigma_M^2$ . The expected value, variance, etc. of these peaks could be easily found from the Rayleigh distribution. What is more desirable, however, are statistics describing the largest peak which is likely to occur. Such an analysis is beyond the scope of this review, and the following result is simply stated:

$$\hat{M} = \bar{M} + g_p \sigma_M \quad (C.11)$$

Here  $\hat{M}$  is the expected value of the largest peak  $M$  occurring during a duration  $T$  of the loading  $M$ . The so-called "peak factor"  $g_p$  is calculated as follows [C3]

$$g_p = \mu + \frac{.5772\mu}{\mu^2 - 1} \quad (C.12)$$

where 
$$\mu = \sqrt{2\ell n\nu T} + \frac{\ell n\sqrt{2\ell n\nu T}}{\sqrt{2\ell n\nu T}}$$

$$v = f_0 \sqrt{8\xi}$$

Nomenclature

$[c]$	Damping matrix
$c^*$	Generalized damping
$f_0$	Natural cyclic frequency of fundamental mode
$g$	Peak factor
$ H(f) ^2$	Mechanical admittance (transfer function)
$I$	Mass moment of inertia of fundamental mode approximated by straight-line shape
$[k]$	Stiffness matrix
$k^*$	Generalized stiffness
$k_\theta$	Rotational stiffness of fundamental mode approximated by straight-line shape
$M$	Resultant base moment of externally-applied wind load
$M$	Response (internal, static equivalent) base moment
$[m]$	Mass matrix
$m^*$	Generalized mass
$m_i$	Mass lumped at floor $i$
$\{P\}$	Vector of $P_i$
$P_i$	Resultant force of wind load acting at floor $i$
$P^*$	Generalized load
$S_{( )}(f)$	Power spectral density of ( )
$\{x\}$	Vector of floor displacements
$\{z\}$	Vector of $z_i$
$z_i$	Height of floor $i$
$\zeta$	Critical damping ratio
$\theta$	Rotation of fundamental mode approximated by straight-line shape
$\xi$	Generalized coordinate
$\sigma_{( )}$	Standard deviation (fluctuating rms) of ( )



$\sigma^2$ ( )	Variance of ( )
{ $\phi$ }	Mode shape
$\psi$	Phase angle
$\omega_0$	Natural circular frequency
( $\bar{\quad}$ )	Temporal mean of ( )
( $\hat{\quad}$ )	Expected peak value of ( )

## APPENDIX C--REFERENCES

- C1. Clough, Ray W., and J. Penzien, Dynamics of Structures, McGraw-Hill Book Company, New York, 1975.
- C2. Crandall, Stephen H., and William D. Mark, Random Vibration in Mechanical Systems, Academic Press, New York, 1963.
- C3. Davenport, A. G., N. Isyumov, H. Rothman, and H. Tanaka, "Wind-Induced Response of Suspension Bridges - Wind Tunnel Model and Full Scale Observations," Wind Engineering, Proceedings of the Fifth International Conference, Cermak, J. E. (ed.), Fort Collins, Colorado, July 1979, Pergamon Press, Oxford, 1980, Vol. 2, pp. 807-824.