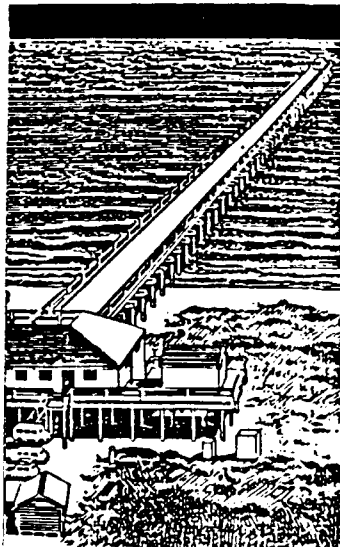




US Army Corps
of Engineers



TECHNICAL REPORT CERC-88-11

UNIDIRECTIONAL SPECTRAL WAVE GENERATION AND ANALYSIS IN WAVE BASINS

Volume II

APPENDIXES B THROUGH H

by

Michael J. Briggs

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DEPARTMENT OF THE ARMY
Waterways Experiment Station, Corps of Engineers
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September 1988

Final Report

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US Army Corps of Engineers
Washington, DC 20314-1000

Under Laboratory Simulation of Spectral and
Directional Spectral Waves Work Unit 31762

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19 ABSTRACT (Continue on reverse if necessary and identify by block number) A series of 36 unidirectional spectral waves was generated to determine the relationship between wave generator control signal and measured response at seven locations in the model basin. Control signals consisted of combinations of three peak periods ranging from 1.0 to 2.0 sec, two zero-moment wave heights from 1 to 3 in., three spectral peak enhancement factors from 3.3 to 15, and two peak directions of 0 and -30 deg. Seven resistance or capacitance wave gages were centrally located 20 ft in front of the wave generator about its center line in a combination cross and 2-3-1-7 linear array. Descriptions of the spectral simulation and generation, time series and spectral analysis, frequency response, and wave grouping analysis are presented. Comparisons of predicted and measured peak period, zero-moment wave height, peak wave direction, frequency spectra, and directional spreading are presented and discussed. Frequency response and wave grouping statistics are calculated for each test case. This report consists of two volumes: Volume I consisting of the main text and Appendix A and Volume II consisting of Appendixes B-H.			
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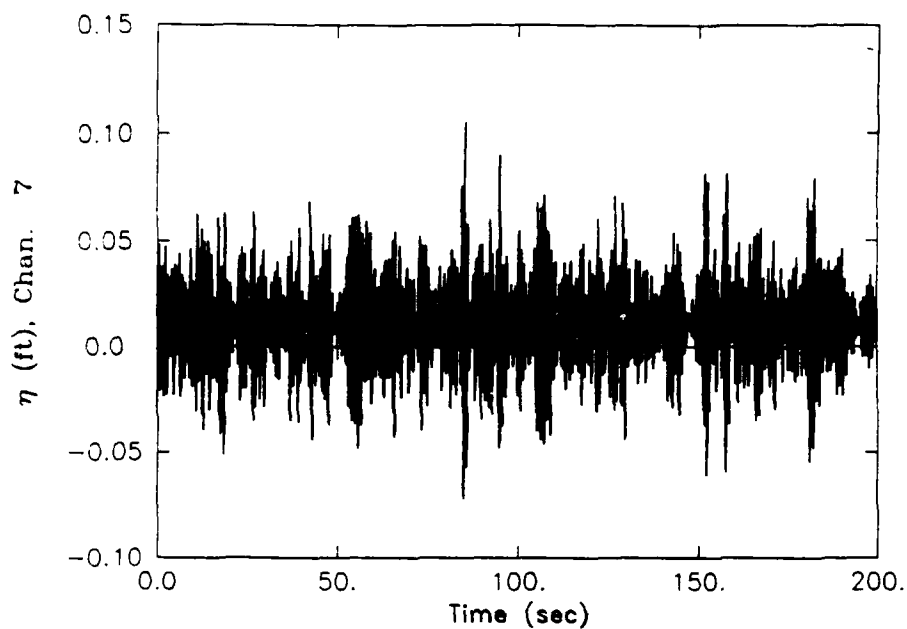
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All other editions are obsolete

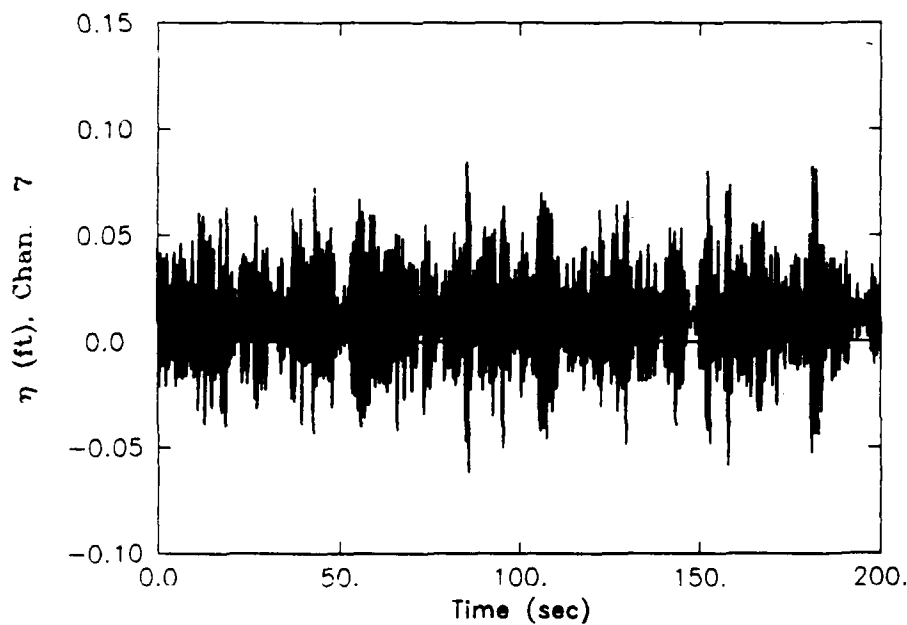
SECURITY CLASSIFICATION OF THIS PAGE

Unclassified

APPENDIX B: WAVE ELEVATION TIME SERIES



MEASURED WAVE ELEVATION TIME SERIES
CASE 1, $T_p=1.0$, $H_{m0}=1$, $G=3.3$, $D=0$



MEASURED WAVE ELEVATION TIME SERIES
CASE 2, $T_p=1.0$, $H_{m0}=1$, $G=7.0$, $D=0$



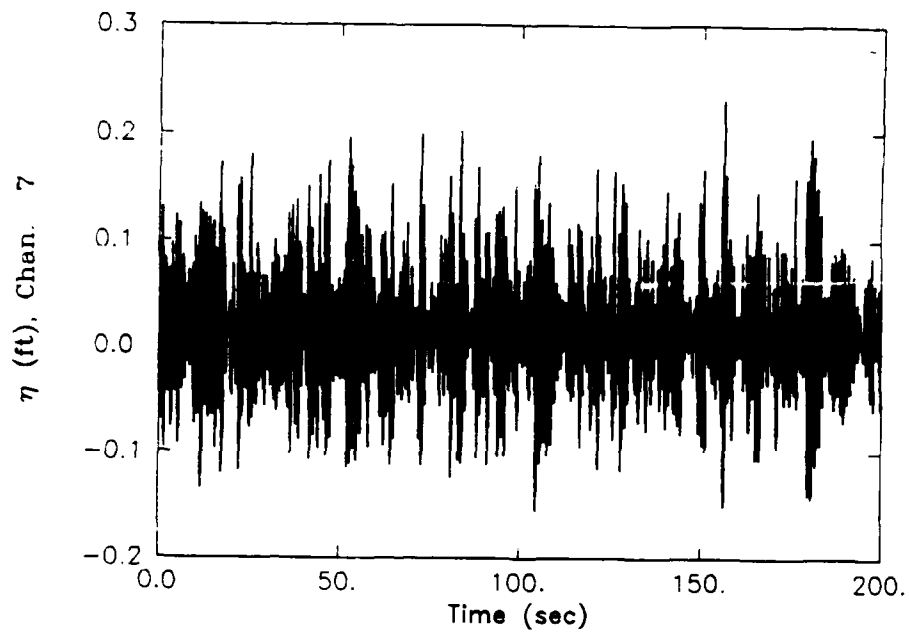
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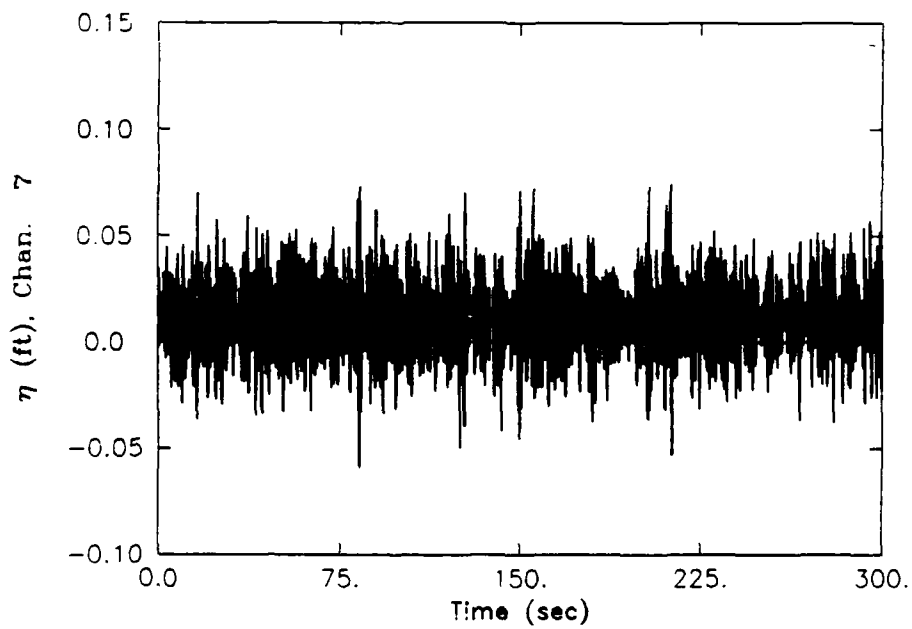
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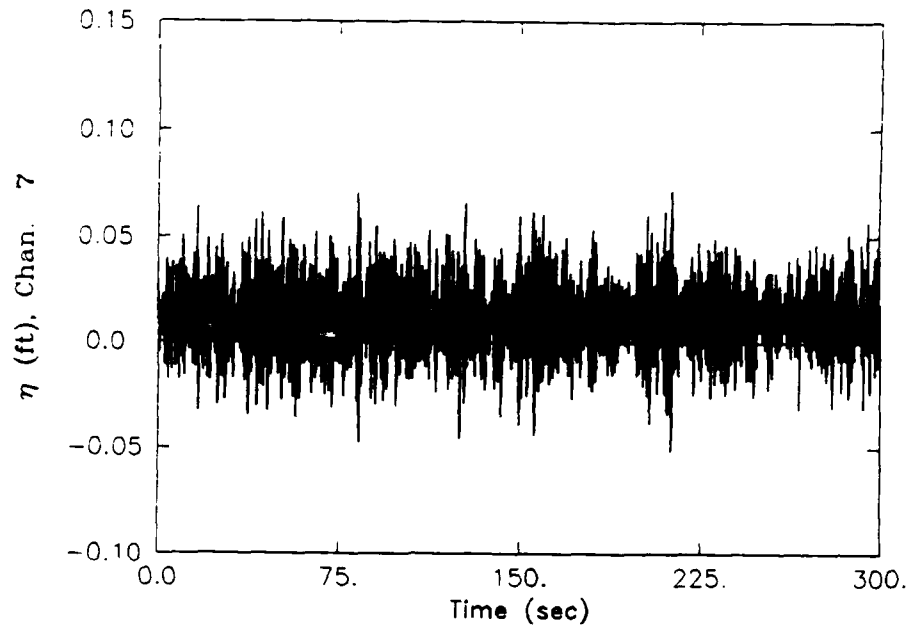
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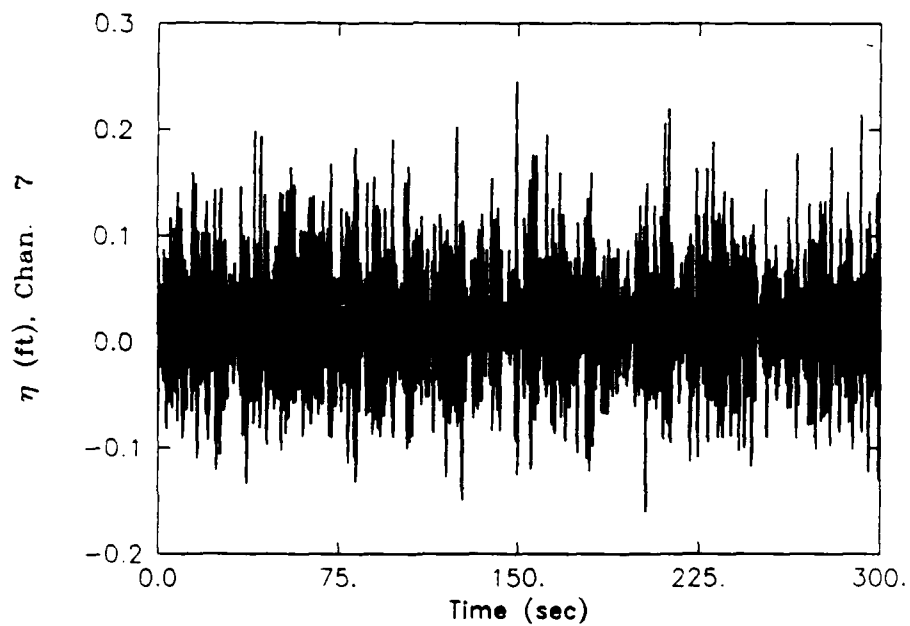
MEASURED WAVE ELEVATION TIME SERIES
CASE 3, $T_p=1.0$, $H_{m0}=3$, $G=3.3$, $D=0$



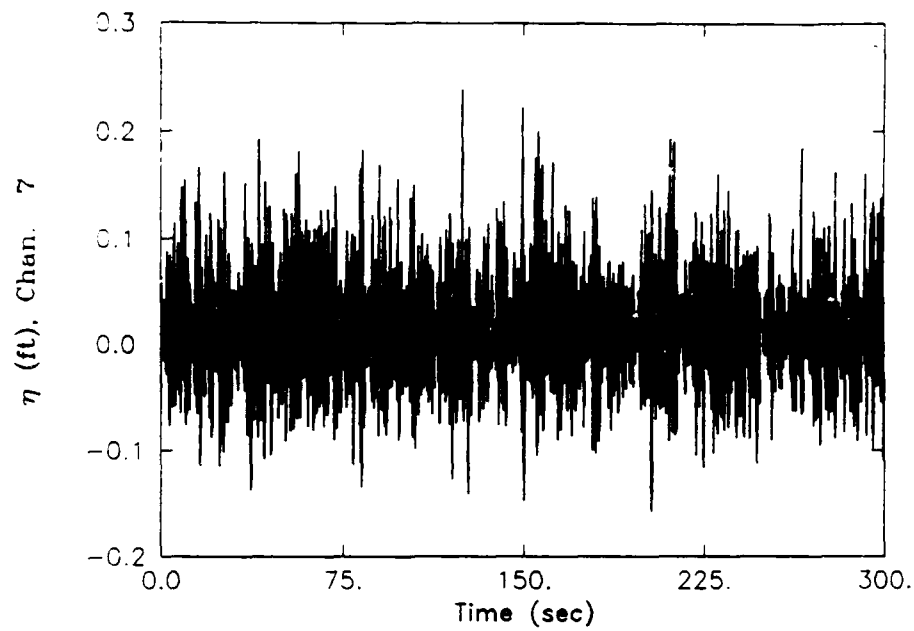
MEASURED WAVE ELEVATION TIME SERIES
CASE 5, $T_p=1.5$, $H_{m0}=1$, $G=3.3$, $D=0$



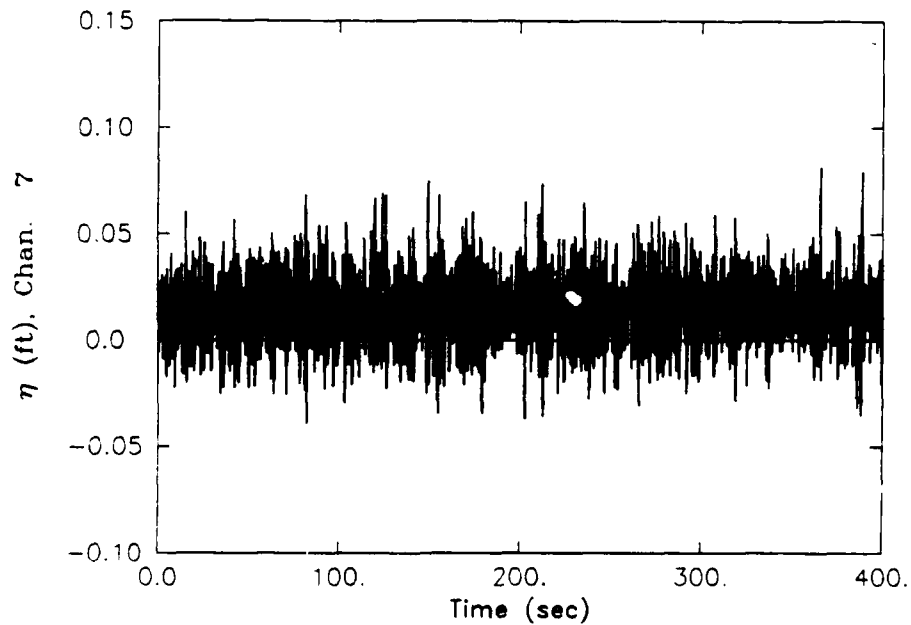
MEASURED WAVE ELEVATION TIME SERIES
CASE 6, $T_p=1.5$, $H_{m0}=1$, $G=7.0$, $D=0$



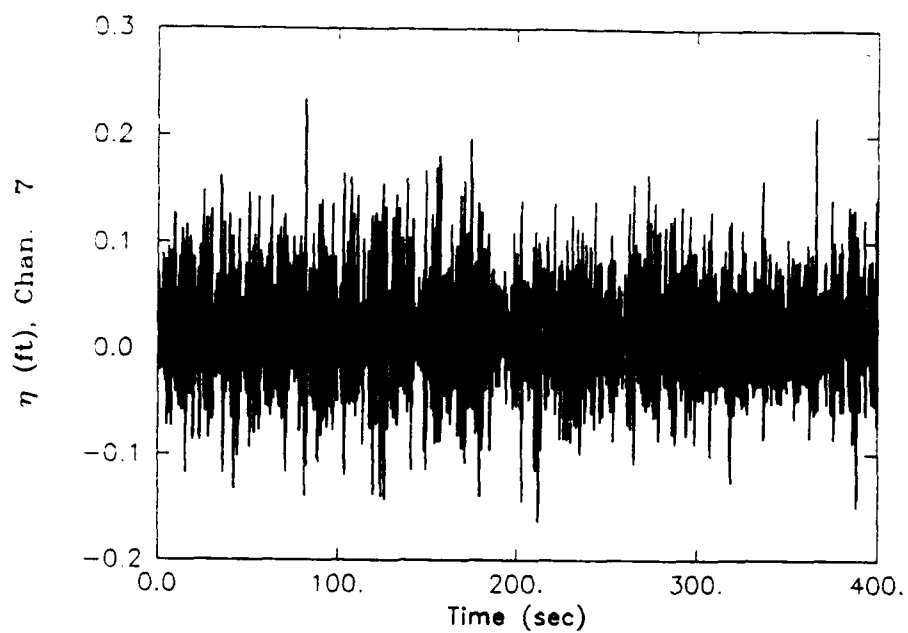
MEASURED WAVE ELEVATION TIME SERIES
CASE 7, $T_p=1.5$, $H_{m0}=3$, $G=3.3$, $D=0$



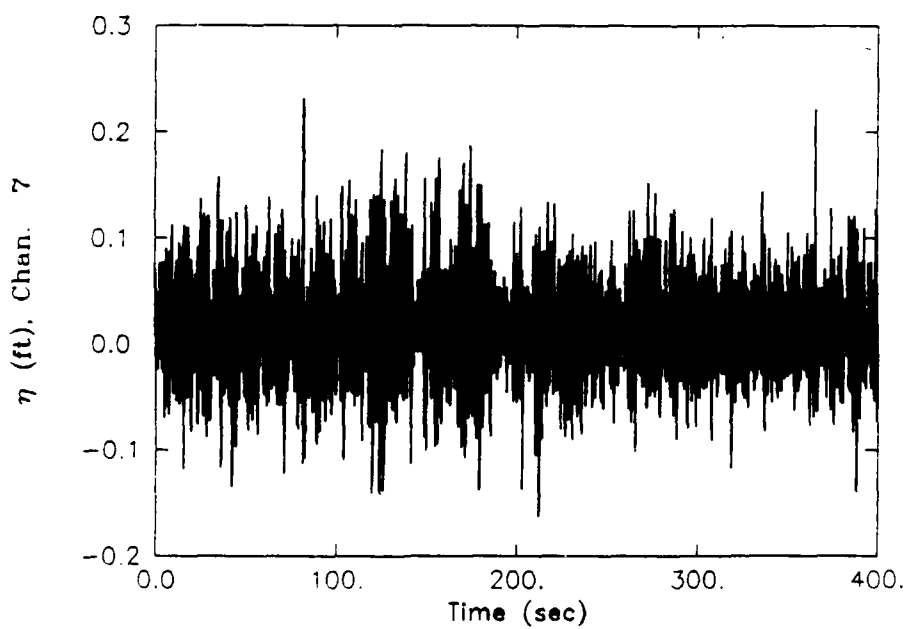
MEASURED WAVE ELEVATION TIME SERIES
CASE 8, $T_p=1.5$, $H_{m0}=3$, $G=7.0$, $D=0$



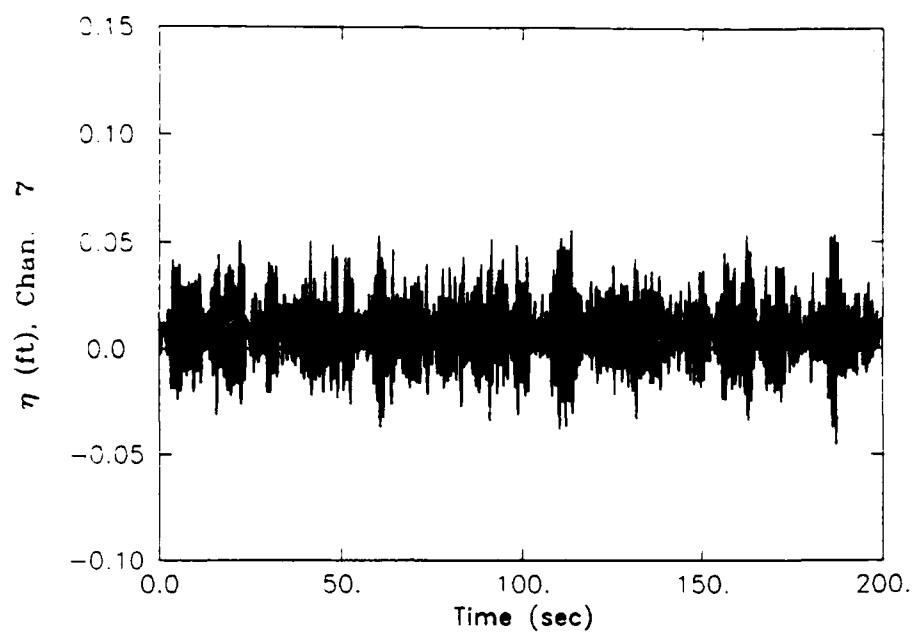
MEASURED WAVE ELEVATION TIME SERIES
CASE 9, $T_p=2.0$, $H_{m0}=1$, $G=3.3$, $D=0$



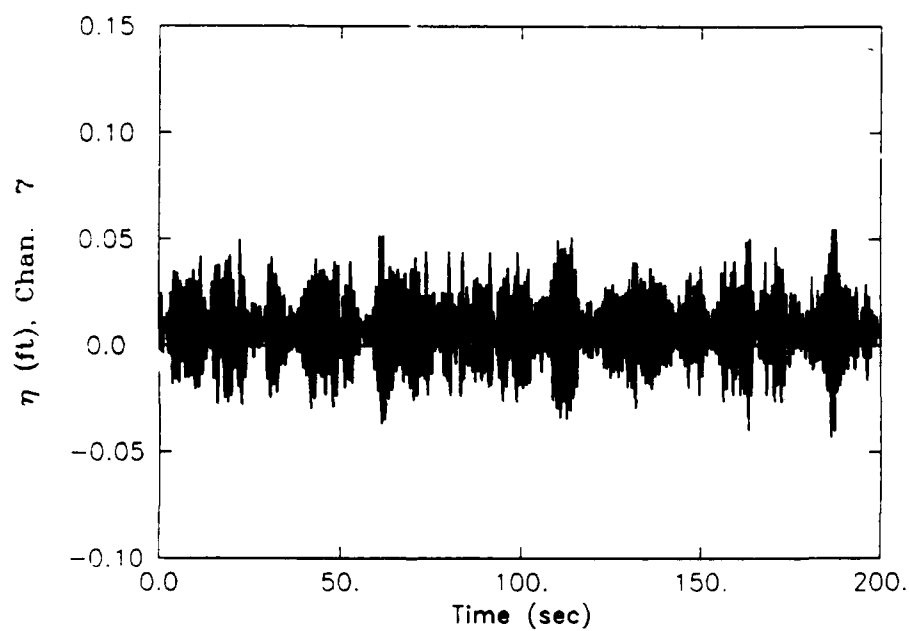
MEASURED WAVE ELEVATION TIME SERIES
CASE 11, $T_p=2.0$, $H_{m0}=3$, $G=3.3$, $D=0$



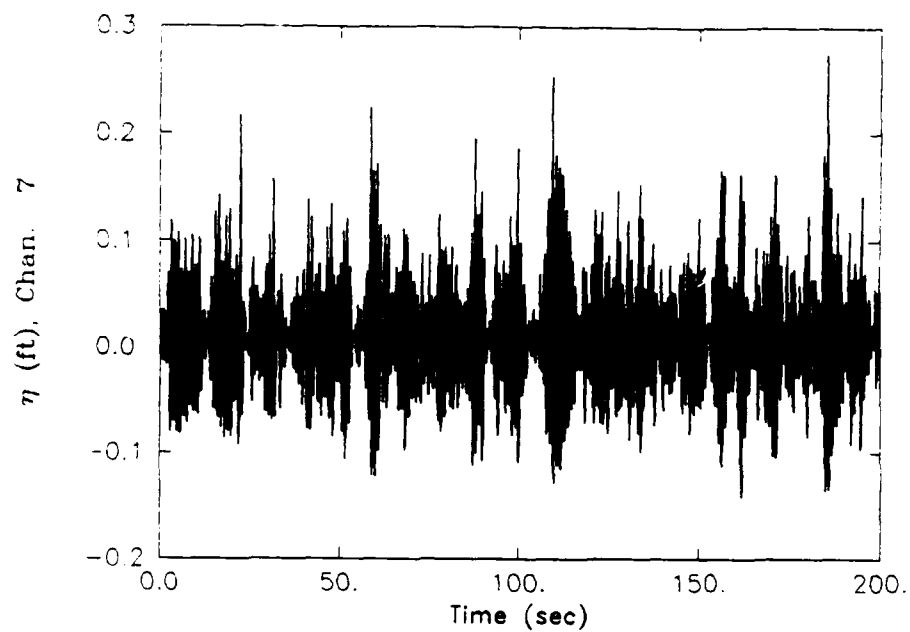
MEASURED WAVE ELEVATION TIME SERIES
CASE 12, $T_p=2.0$, $H_{m0}=3$, $G=7.0$, $D=0$



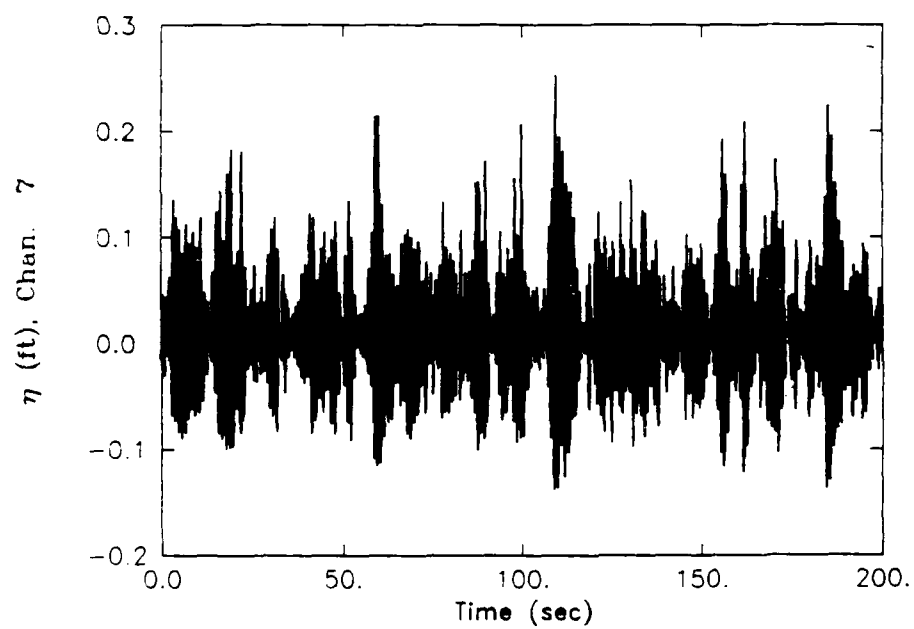
MEASURED WAVE ELEVATION TIME SERIES
CASE 13, $T_p=1.0$, $H_{m0}=1$, $G=3.3$, $D=-30$



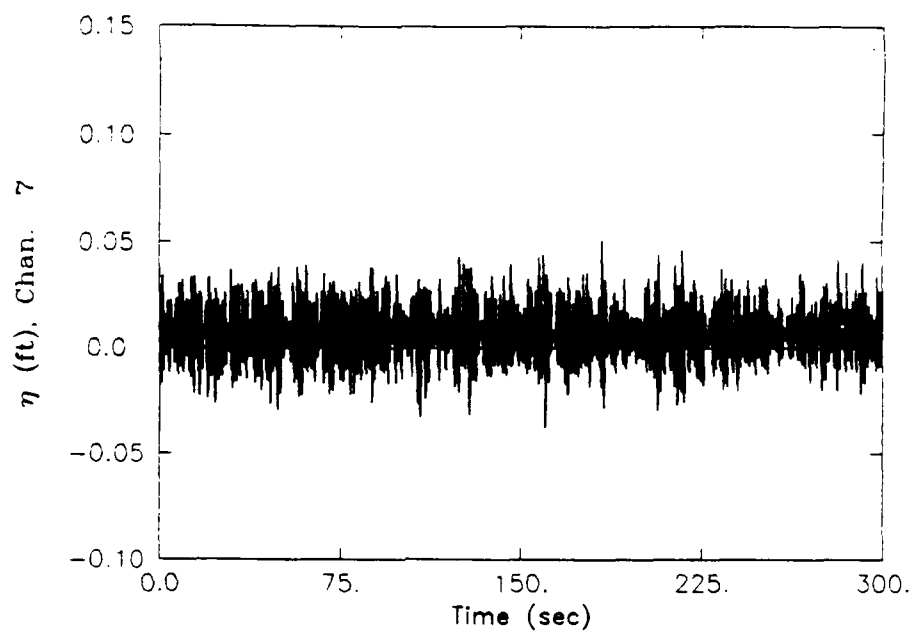
MEASURED WAVE ELEVATION TIME SERIES
CASE 14, $T_p=1.0$, $H_{m0}=1$, $G=7.0$, $D=-30$



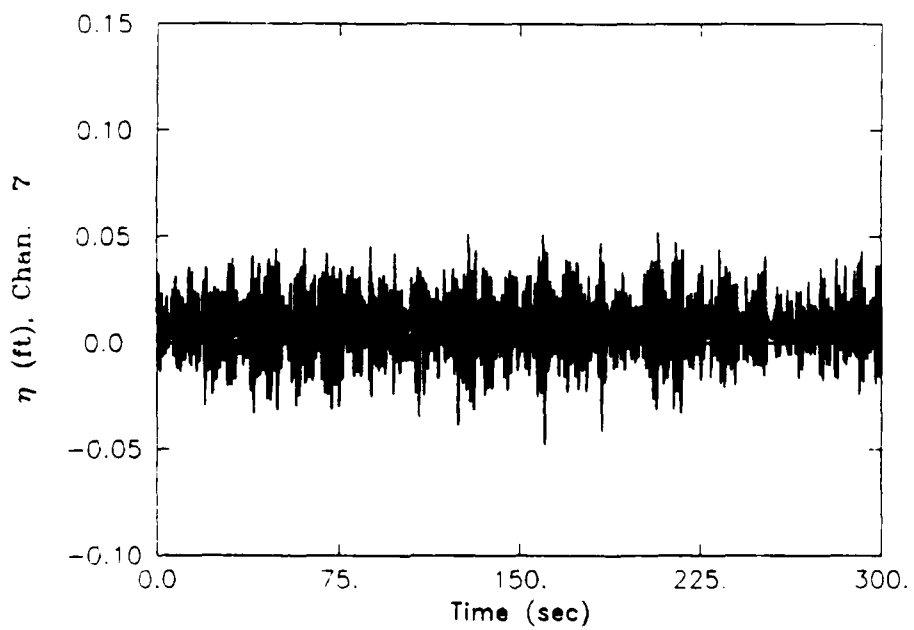
MEASURED WAVE ELEVATION TIME SERIES
CASE 15, $T_p=1.0$, $H_{m0}=3$, $G=3.3$, $D=-30$



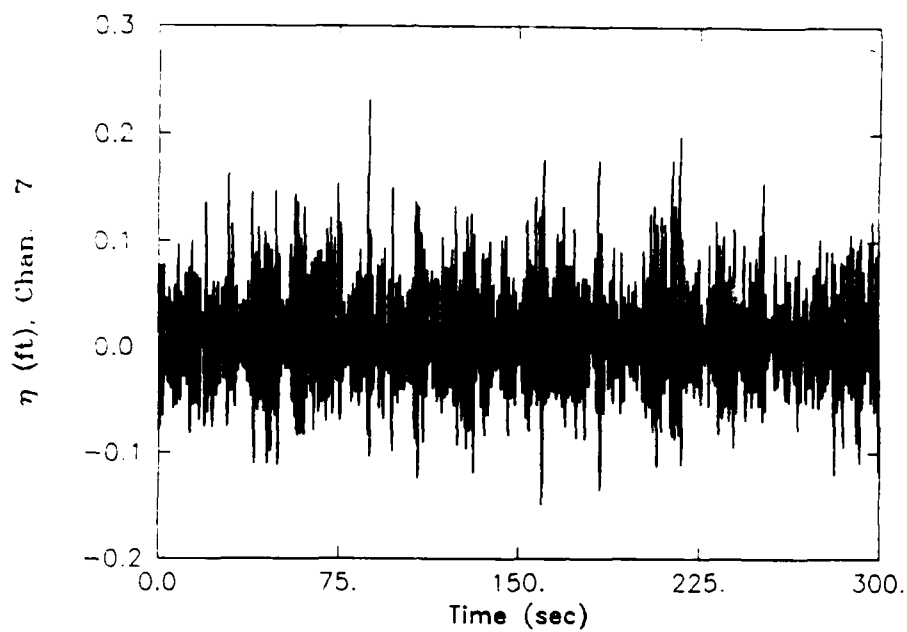
MEASURED WAVE ELEVATION TIME SERIES
CASE 16, $T_p=1.0$, $H_{m0}=3$, $G=7.0$, $D=-30$



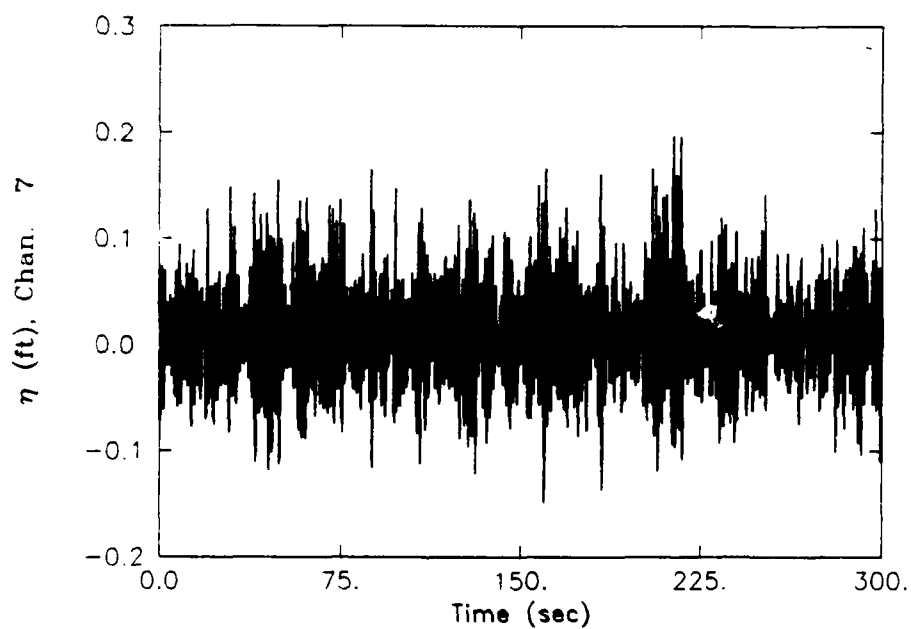
MEASURED WAVE ELEVATION TIME SERIES
CASE 17, $T_p=1.5$, $H_{m0}=1$, $G=3.3$, $D=-30$



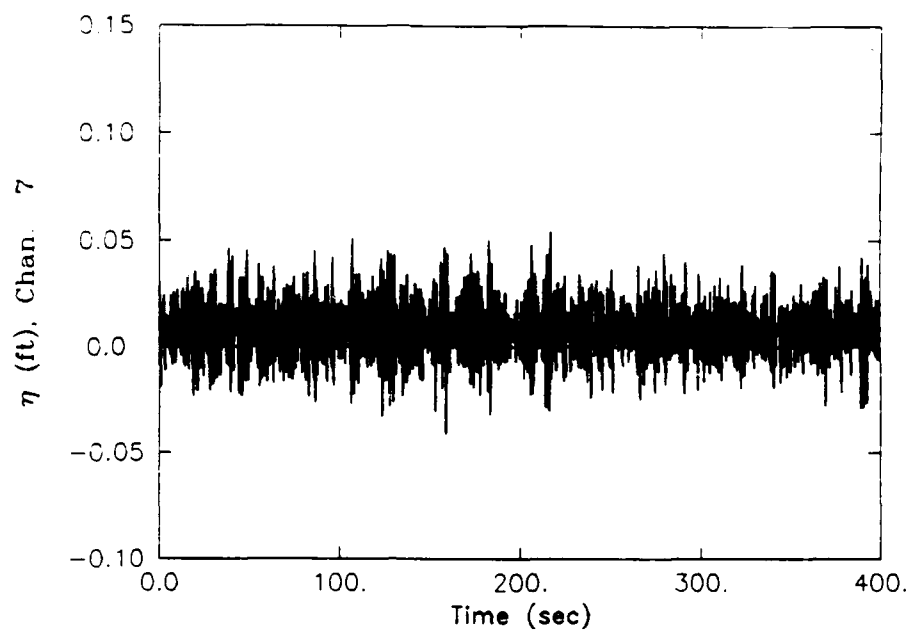
MEASURED WAVE ELEVATION TIME SERIES
CASE 18, $T_p=1.5$, $H_{m0}=1$, $G=7.0$, $D=-30$



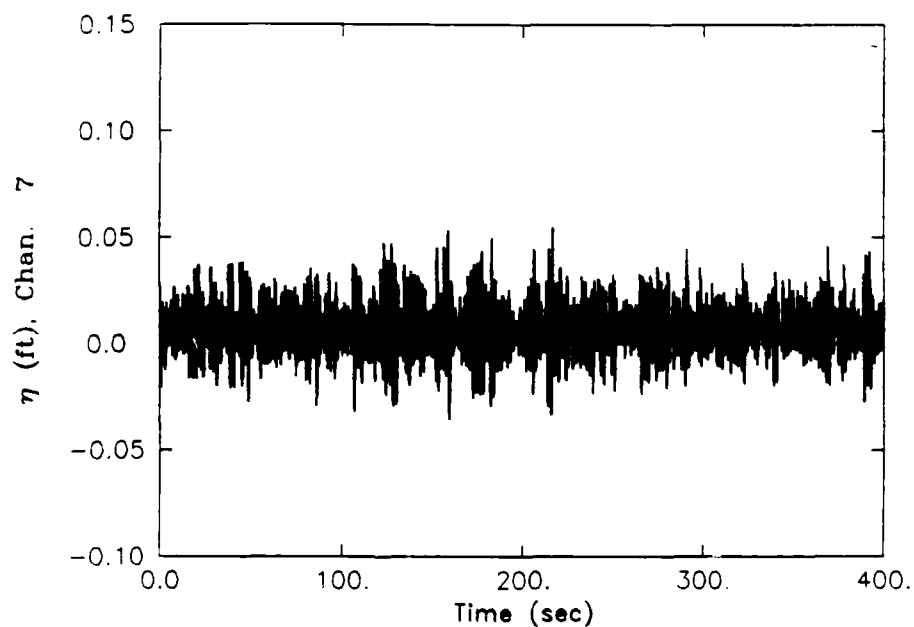
MEASURED WAVE ELEVATION TIME SERIES
CASE 19, $T_p=1.5$, $H_{m0}=3$, $G=3.3$, $D=-30$



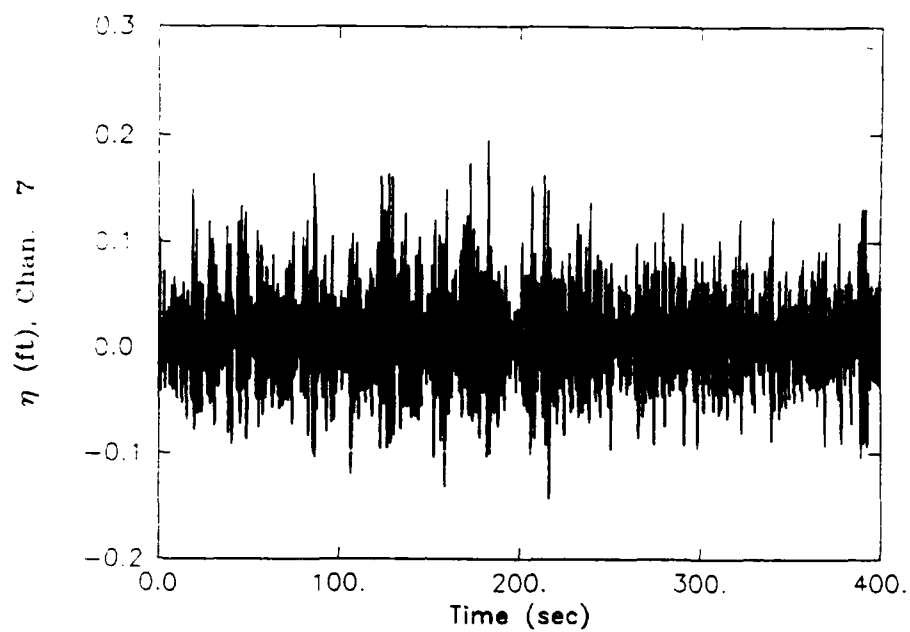
MEASURED WAVE ELEVATION TIME SERIES
CASE 20, $T_p=1.5$, $H_{m0}=3$, $G=7.0$, $D=-30$



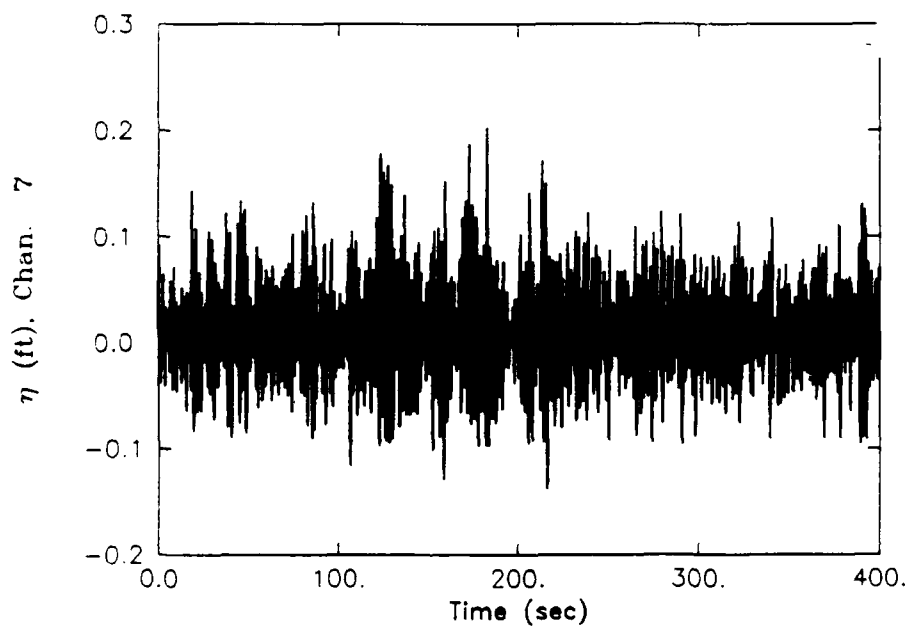
MEASURED WAVE ELEVATION TIME SERIES
CASE 21, $T_p=2.0$, $H_{m0}=1$, $G=3.3$, $D=-30$



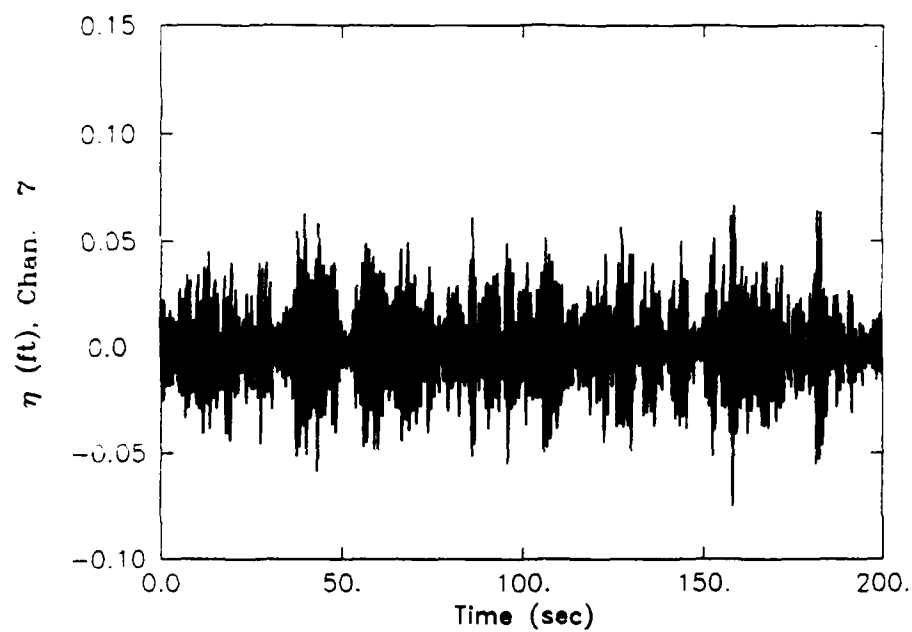
MEASURED WAVE ELEVATION TIME SERIES
CASE 22, $T_p=2.0$, $H_{m0}=1$, $G=7.0$, $D=-30$



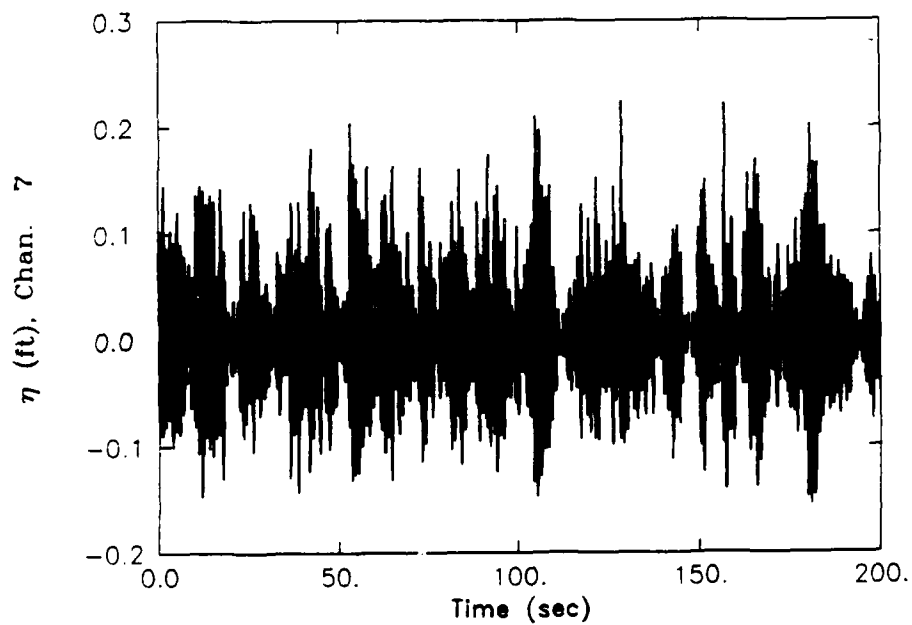
MEASURED WAVE ELEVATION TIME SERIES
CASE 23, $T_p=2.0$, $H_{m0}=3$, $G=3.3$, $D=-30$



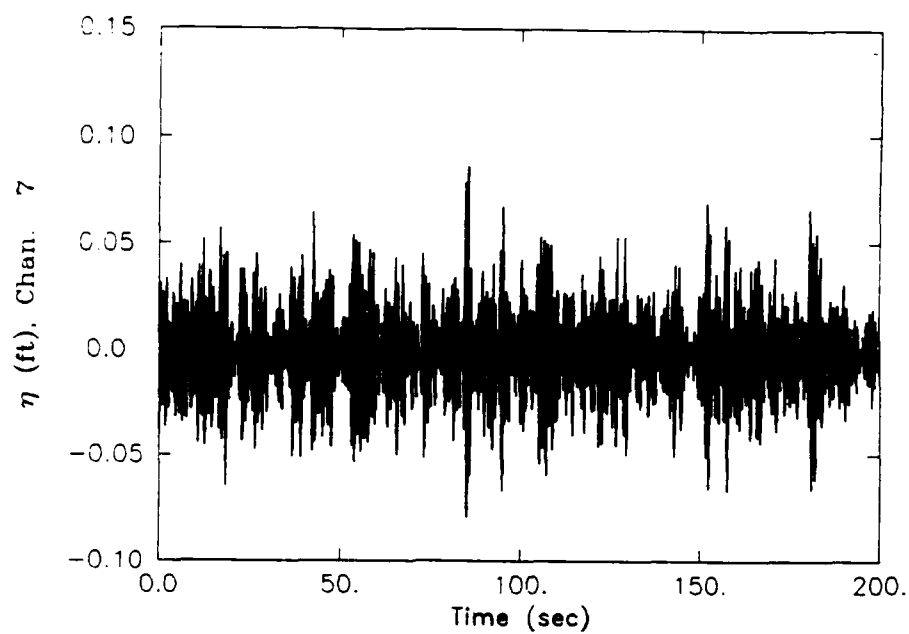
MEASURED WAVE ELEVATION TIME SERIES
CASE 24, $T_p=2.0$, $H_{m0}=3$, $G=7.0$, $D=-30$



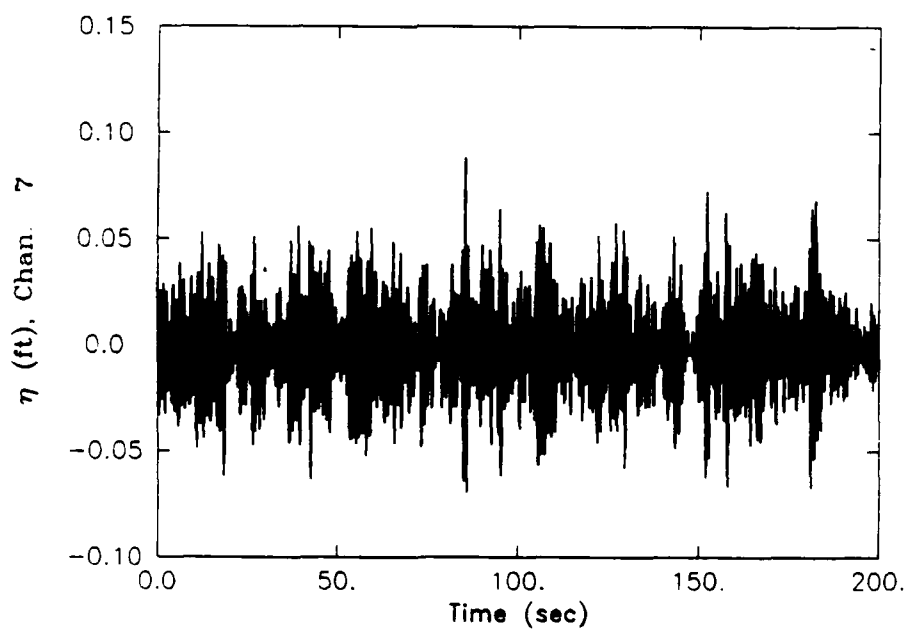
MEASURED WAVE ELEVATION TIME SERIES
CASE 25, $T_p=1.0$, $H_{m0}=1$, $G=15.0$, $D=0$



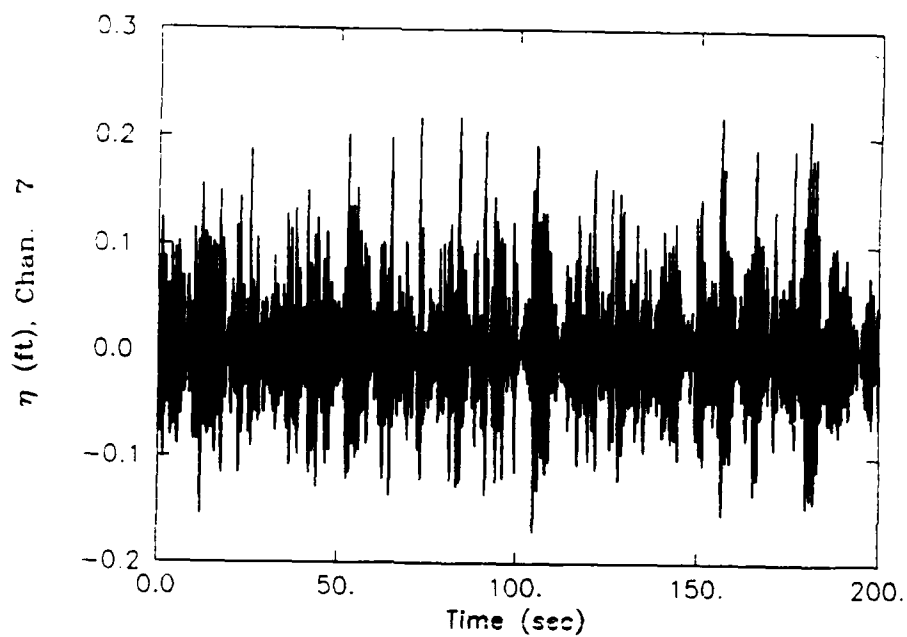
MEASURED WAVE ELEVATION TIME SERIES
CASE 26, $T_p=1.0$, $H_{m0}=3$, $G=15.0$, $D=0$



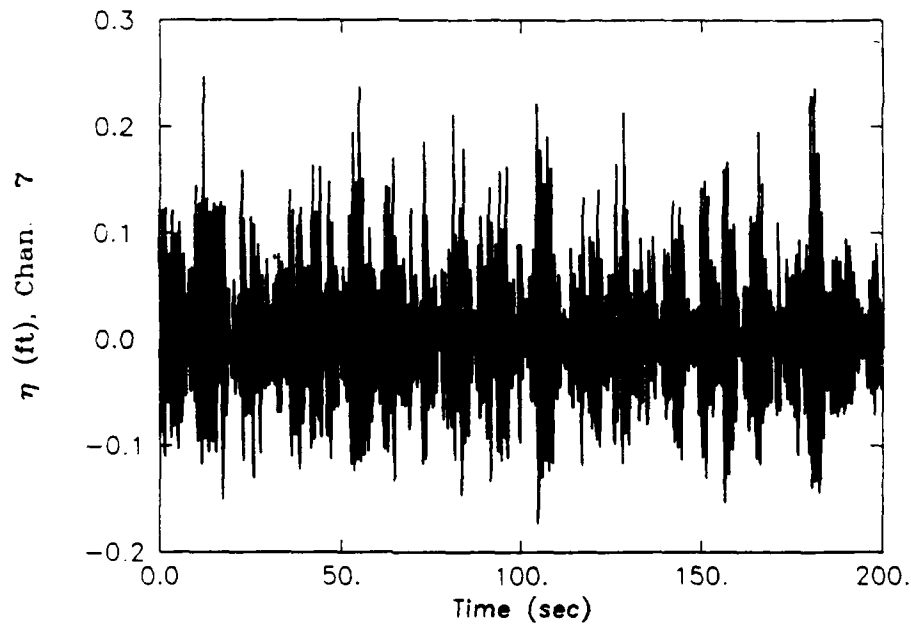
MEASURED WAVE ELEVATION TIME SERIES
CASE 27, $T_p=1.0$, $H_{m0}=1$, $G=3.3$, $D=0$



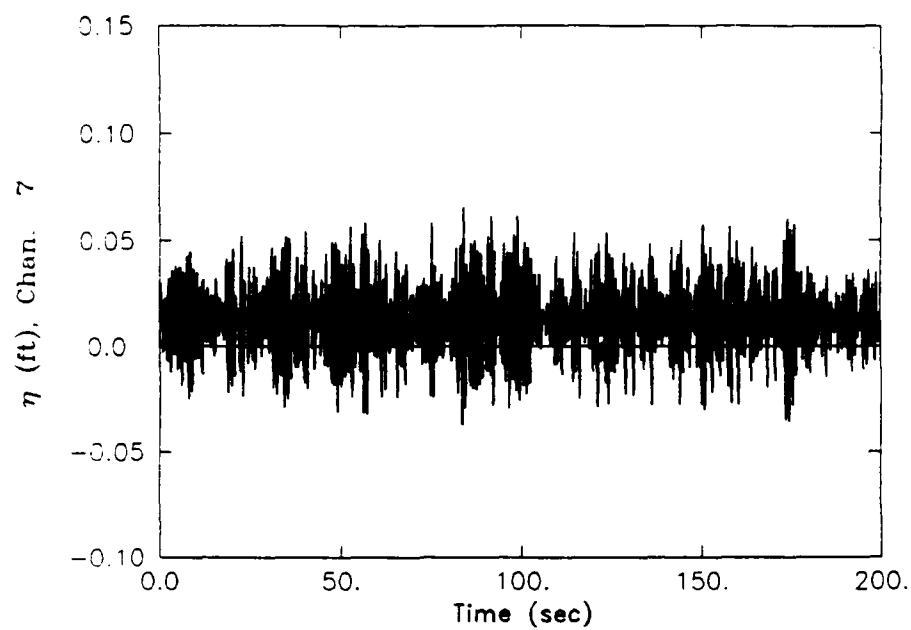
MEASURED WAVE ELEVATION TIME SERIES
CASE 28, $T_p=1.0$, $H_{m0}=1$, $G=7.0$, $D=0$



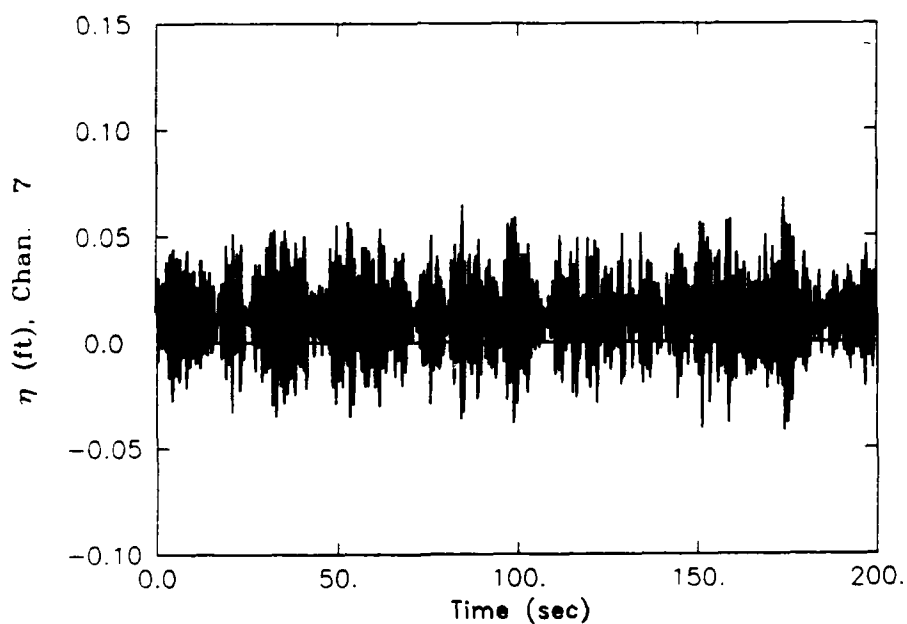
MEASURED WAVE ELEVATION TIME SERIES
CASE 29, $T_p=1.0$, $H_{m0}=3$, $G=3.3$, $D=0$



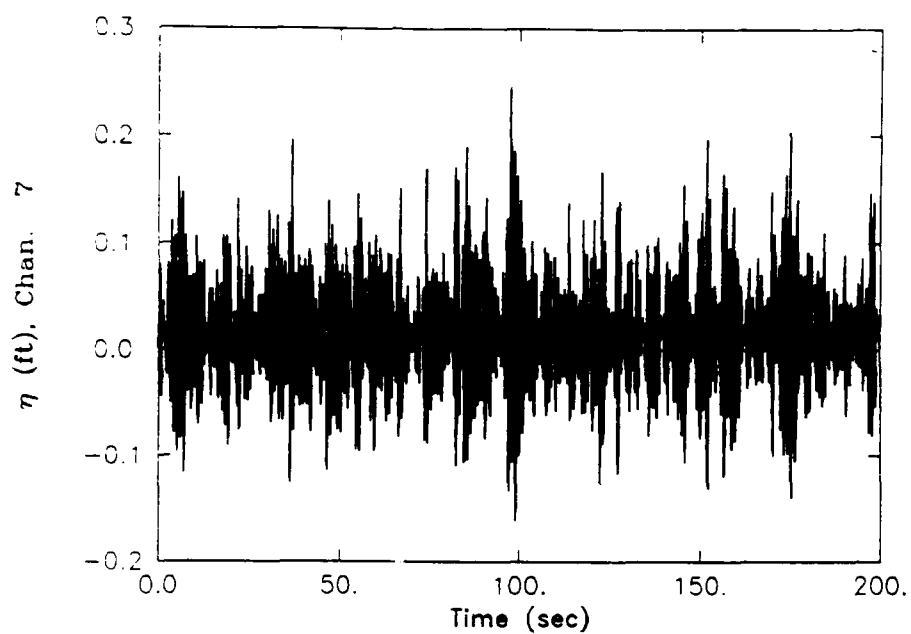
MEASURED WAVE ELEVATION TIME SERIES
CASE 30, $T_p=1.0$, $H_{m0}=3$, $G=7.0$, $D=0$



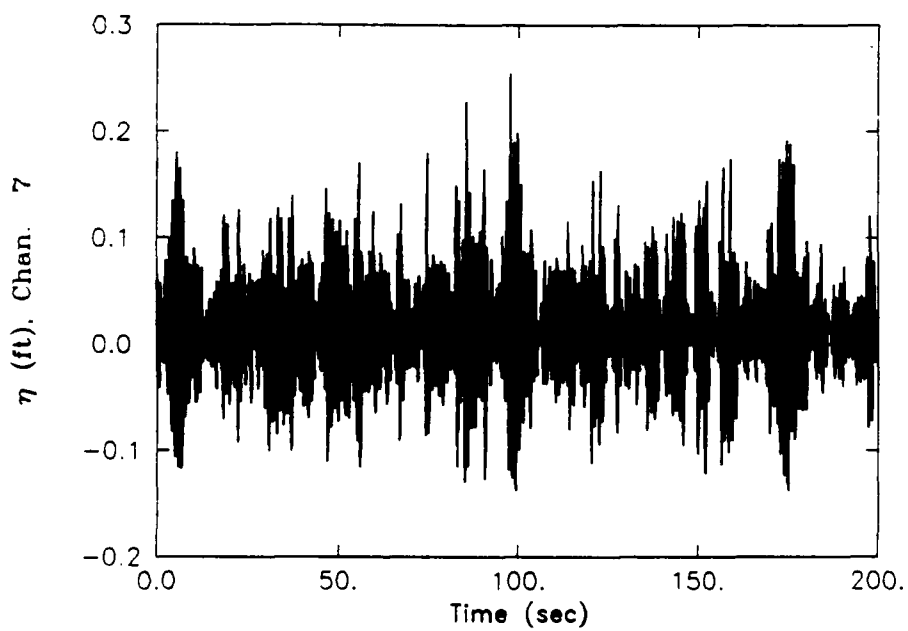
MEASURED WAVE ELEVATION TIME SERIES
CASE 31, $T_p=1.0$, $H_{m0}=1$, $G=3.3$, $D=30$



MEASURED WAVE ELEVATION TIME SERIES
CASE 32, $T_p=1.0$, $H_{m0}=1$, $G=7.0$, $D=30$



MEASURED WAVE ELEVATION TIME SERIES
CASE 33, $T_p=1.0$, $H_{m0}=3$, $G=3.3$, $D=30$



MEASURED WAVE ELEVATION TIME SERIES
CASE 34, $T_p=1.0$, $H_{m0}=3$, $G=7.0$, $D=30$

APPENDIX C: LISTING OF RESULTS

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE # 1 (U11111) : Tp = 1.0 Hm0 = 1.0 Gamma = 3.3 S = 1.0 D = 0

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.99500	0.99500	1.12000	1.01500	0.99500	0.99500	1.12000	1.03357
HMO	0.09370	0.09043	0.09215	0.09231	0.10870	0.10150	0.09168	0.09578
OPG	3.38000	3.10700	3.32400	2.95400	3.36300	3.14000	3.02200	3.18429
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	245.00000	245.00000	250.00000	255.00000	239.00000	250.00000	254.00000	248.28572
T1/3	0.87800	0.87420	0.87420	0.85440	0.91390	0.87820	0.86200	0.87641
H1/3	0.08780	0.08326	0.08576	0.08471	0.10220	0.09469	0.08429	0.08896
HBAR	0.05473	0.05350	0.05358	0.05307	0.06384	0.05819	0.05320	0.05574
HMAX	0.17410	0.16810	0.17500	0.17210	0.19200	0.18930	0.17710	0.17810
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.43870	0.39040	0.43510	0.40770	0.43490	0.43900	0.42850	0.42490
K1	0.68130	0.64400	0.67870	0.65760	0.67850	0.68160	0.67370	0.67077
J1M1	2.60780	2.48640	2.62050	2.55000	2.60450	2.59500	2.58334	2.58334
J2M1	5.61050	5.34140	5.57510	5.42040	5.56750	5.60650	5.54610	5.52390
J1S1	1.57130	1.51520	1.56140	1.50670	1.55470	1.54940	1.54930	1.54400
J2S1	14.81500	13.42320	15.10930	15.32540	14.69340	15.96880	15.19300	14.93259
RHH2	0.10480	0.04570	0.14110	0.03840	0.11860	0.01450	0.00910	0.06746
RHH3	0.06080	0.00000	0.04360	0.00000	0.00850	0.00000	0.00000	0.01613
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.38300	0.40200	0.38200	0.39200	0.38400	0.38200	0.38500	0.38714
PHRM2	0.23600	0.24000	0.23600	0.23800	0.23700	0.23600	0.23700	0.23714
PHRM3	0.14600	0.14400	0.14600	0.14500	0.14600	0.14600	0.14600	0.14557
PHRM4	0.09000	0.08600	0.09000	0.08800	0.09000	0.09000	0.08900	0.08900
PHRM5	0.05500	0.05100	0.05600	0.05400	0.05500	0.05600	0.05500	0.05457
PHRM6	0.03400	0.03100	0.03500	0.03300	0.03400	0.03400	0.03400	0.03357
PHRM7	0.02100	0.01800	0.02100	0.02000	0.02100	0.02100	0.02100	0.02043
PHRM8	0.01300	0.01100	0.01300	0.01200	0.01300	0.01300	0.01300	0.01257
PHRM9	0.00800	0.00700	0.00800	0.00700	0.00800	0.00800	0.00800	0.00771
PHRS1	0.63600	0.66000	0.64000	0.66400	0.64300	0.64500	0.64500	0.64757
PHRS2	0.23100	0.22400	0.23000	0.22300	0.22900	0.22900	0.22900	0.22786
PHRS3	0.08400	0.07600	0.08300	0.07500	0.08200	0.08100	0.08100	0.08029
PHRS4	0.03100	0.02600	0.03000	0.02500	0.02900	0.02900	0.02843	0.02843
PHRS5	0.01100	0.00900	0.01100	0.00800	0.01000	0.01000	0.01000	0.00986
PHRS6	0.00400	0.00300	0.00400	0.00300	0.00400	0.00400	0.00371	0.00371
PHRS7	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
PHRS8	0.00100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE # 2 (U11211) : Tp = 1.0 Hm0 = 1.0 Gamma = 7.0 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	1.01500	1.01500	1.01500	1.01500	1.01500	1.01500	1.01500	1.01500
HMO	0.08832	0.08928	0.08866	0.09226	0.10260	0.09327	0.09030	0.09210
QPG	4.02500	4.08900	3.97700	4.18000	4.32700	3.83800	3.92200	4.10829
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	237.00000	234.00000	232.00000	229.00000	224.00000	233.00000	233.00000	231.71428
T1/3	0.90680	0.91000	0.90350	0.90010	0.90720	0.90390	0.90430	0.90511
H1/3	0.08314	0.08352	0.08323	0.08612	0.09678	0.08766	0.08333	0.08625
HBAR	0.05186	0.05298	0.05287	0.05538	0.06243	0.05572	0.05415	0.05506
HMAX	0.14100	0.13410	0.13500	0.13740	0.14500	0.14660	0.13500	0.13916
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.46450	0.48450	0.50570	0.50710	0.51990	0.49750	0.50700	0.49803
K1	0.70040	0.71480	0.72960	0.73060	0.73940	0.72390	0.73050	0.72417
J1M1	2.63400	2.64130	2.72890	2.68180	2.62520	2.72200	2.69170	2.67499
J2M1	5.71970	5.78390	5.92160	5.91690	5.90510	5.90840	5.91730	5.86641
J1S1	1.55110	1.53550	1.57960	1.56320	1.50920	1.59900	1.56790	1.55793
J2S1	15.09930	14.69150	14.92340	14.44430	13.99980	14.75420	14.47740	14.62713
RHH2	0.10160	0.15470	0.19440	0.16740	0.16840	0.14920	0.17760	0.15904
RHH3	0.01420	0.04280	0.03480	0.03440	0.01480	0.04530	0.03490	0.03160
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00410	0.01430	0.00263
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.38000	0.37900	0.36600	0.37300	0.38100	0.36700	0.37200	0.37400
PHRM2	0.23600	0.23500	0.23200	0.23400	0.23600	0.23200	0.23300	0.23400
PHRM3	0.14600	0.14600	0.14700	0.14700	0.14600	0.14700	0.14700	0.14657
PHRM4	0.09100	0.09100	0.09300	0.09200	0.09000	0.09300	0.09200	0.09171
PHRM5	0.05600	0.05600	0.05900	0.05800	0.05600	0.05900	0.05800	0.05743
PHRM6	0.03500	0.03500	0.03700	0.03600	0.03500	0.03700	0.03600	0.03586
PHRM7	0.02200	0.02200	0.02400	0.02300	0.02100	0.02400	0.02300	0.02271
PHRM8	0.01300	0.01400	0.01500	0.01400	0.01300	0.01500	0.01400	0.01400
PHRM9	0.00800	0.00800	0.01000	0.00900	0.00800	0.00900	0.00900	0.00871
PHRS1	0.64500	0.65100	0.63300	0.64000	0.66300	0.62500	0.63800	0.64214
PHRS2	0.22900	0.22700	0.23200	0.23000	0.22400	0.23400	0.23100	0.22957
PHRS3	0.08100	0.07900	0.08500	0.08300	0.07500	0.08800	0.08400	0.08214
PHRS4	0.02900	0.02800	0.03100	0.03000	0.02500	0.03300	0.03000	0.02943
PHRS5	0.01000	0.01000	0.01100	0.01100	0.00900	0.01200	0.01100	0.01057
PHRS6	0.00400	0.00300	0.00400	0.00400	0.00300	0.00500	0.00400	0.00386
PHRS7	0.00100	0.00100	0.00200	0.00100	0.00100	0.00200	0.00100	0.00129
PHRS8	0.00000	0.00000	0.00100	0.00100	0.00000	0.00100	0.00100	0.00057
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

CASE # 3 (U12111) : T_p = 1.0 Hm0 = 3.0 Gamma = 3.3 S = 1.0 D = 0

DESCRIPTION	CHANNEL NUMBER							AVG
	1	2	3	4	5	6	7	
FREQUENCY DOMAIN ANALYSIS								
FPC	1.04500	0.98500	0.98500	0.98500	0.98500	0.98500	0.98500	0.99357
HMO	0.24040	0.23910	0.23350	0.24640	0.28320	0.23480	0.23300	0.24434
QPG	3.37000	3.42800	3.13500	3.11500	3.37700	3.11500	3.12400	3.23771
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	227.00000	228.00000	229.00000	229.00000	223.00000	231.00000	238.00000	229.28572
T1/3	0.89840	0.91150	0.90540	0.90530	0.91840	0.91510	0.89710	0.90731
H1/3	0.23400	0.23000	0.22870	0.24000	0.27820	0.22830	0.22410	0.23761
HBAR	0.14700	0.14520	0.14140	0.14890	0.17520	0.14040	0.13850	0.14809
HMAX	0.33050	0.34800	0.34070	0.37950	0.43390	0.33900	0.33570	0.35819
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.36190	0.39450	0.38690	0.32080	0.42520	0.38910	0.35050	0.37556
K1	0.62070	0.64730	0.64110	0.58530	0.67110	0.64290	0.61110	0.63136
J1M1	2.21930	2.34560	2.33310	2.27960	2.45010	2.35770	2.27040	2.32226
J2M1	4.97380	5.22460	5.19550	4.92980	5.42080	5.19330	5.03160	5.13837
J1S1	1.32070	1.40660	1.40270	1.37540	1.49740	1.39030	1.34430	1.39106
J2S1	11.83540	12.38180	12.33860	11.80480	12.01710	12.91830	12.99870	12.32782
RHH2	0.09200	0.12700	0.03410	0.01400	0.06530	0.05800	0.03330	0.06053
RHH3	0.02410	0.04000	0.02300	0.02300	0.02350	0.02350	0.01580	0.01580
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.45100	0.42600	0.42900	0.43900	0.40800	0.42400	0.44000	0.43100
PHRM2	0.24800	0.24500	0.24500	0.24600	0.24200	0.24400	0.24600	0.24514
PHRM3	0.13600	0.14000	0.14000	0.13800	0.14300	0.14100	0.13800	0.13943
PHRM4	0.07500	0.08000	0.08000	0.07800	0.08500	0.08100	0.07700	0.07943
PHRM5	0.04100	0.04600	0.04600	0.04400	0.05000	0.04700	0.04300	0.04529
PHRM6	0.02300	0.02600	0.02600	0.02400	0.03000	0.02700	0.02400	0.02571
PHRM7	0.01200	0.01500	0.01500	0.01400	0.01800	0.01500	0.01400	0.01471
PHRM8	0.00700	0.00900	0.00900	0.00800	0.01000	0.00900	0.00800	0.00857
PHRM9	0.00400	0.00500	0.00500	0.00400	0.00600	0.00500	0.00400	0.00471
PHRS1	0.75700	0.71100	0.71300	0.72700	0.66800	0.71900	0.74400	0.71986
PHRS2	0.18400	0.20500	0.20500	0.19800	0.22200	0.20200	0.19100	0.20100
PHRS3	0.04500	0.05900	0.05900	0.05400	0.07400	0.05700	0.04900	0.05671
PHRS4	0.01100	0.01700	0.01700	0.01500	0.02400	0.01600	0.01200	0.01600
PHRS5	0.00300	0.00500	0.00500	0.00400	0.00600	0.00400	0.00300	0.00457
PHRS6	0.00100	0.00100	0.00100	0.00100	0.00300	0.00100	0.00100	0.00129
PHRS7	0.00000	0.00000	0.00000	0.00000	0.00100	0.00000	0.00000	0.00014
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE # 4 (U12211) : T_p = 1.0 Hm0 = 3.0 Gamma = 7.0 S = 1.0 D = 0

DESCRIPTION	1	2	3	CHANNEL NUMBER			6	7	AVG
				4	5				
FREQUENCY DOMAIN ANALYSIS									
FPC	0.99500	0.99500	0.97500	0.97500	0.97500	0.97500	0.97500	0.97500	0.98071
HMO	0.24000	0.23760	0.23450	0.24850	0.28040	0.23950	0.24460	0.24656	0.24656
QPG	4.14700	4.34400	4.04900	4.22800	4.45000	4.03700	4.35600	4.23014	4.23014
DOWNCROSSING WAVE GROUP ANALYSIS									
# WAVES	221.00000	227.00000	232.00000	226.00000	224.00000	229.00000	223.00000	226.00000	226.00000
T1/3	0.92970	0.93030	0.93930	0.92290	0.94370	0.92950	0.94000	0.93363	0.93363
H1/3	0.23560	0.22640	0.22720	0.24430	0.27430	0.23560	0.23720	0.24009	0.24009
HBAR	0.14730	0.14330	0.13720	0.15030	0.17120	0.14390	0.14930	0.14893	0.14893
HMAX	0.37520	0.33460	0.33870	0.38290	0.43540	0.34850	0.37360	0.36984	0.36984
KIMUR WAVE GROUP ANALYSIS									
RHH1	0.49070	0.46820	0.49140	0.42330	0.45670	0.41180	0.52950	0.46737	0.46737
K1	0.71910	0.70300	0.71960	0.66970	0.69470	0.66090	0.74580	0.70183	0.70183
J1M1	2.67980	2.48320	2.64900	2.49450	2.55830	2.40790	2.75920	2.57599	2.57599
J2M1	5.81780	5.58630	5.78520	5.41800	5.62460	5.31250	6.09250	5.66241	5.66241
J1S1	1.60170	1.43880	1.49210	1.48920	1.54100	1.41720	1.62910	1.51559	1.51559
J2S1	13.27360	13.74640	15.63010	12.92140	13.06280	13.15090	14.23710	13.71747	13.71747
RHH2	0.19840	0.18950	0.20010	0.13700	0.19620	0.17810	0.20280	0.18601	0.18601
RHH3	0.02570	0.07190	0.06980	0.07810	0.03040	0.03850	0.04520	0.05137	0.05137
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.37300	0.40300	0.37800	0.40100	0.39100	0.41500	0.36200	0.38900	0.38900
PHRM2	0.23400	0.24100	0.23500	0.24000	0.23800	0.24300	0.23100	0.23743	0.23743
PHRM3	0.14700	0.14400	0.14600	0.14400	0.14500	0.14200	0.14700	0.14500	0.14500
PHRM4	0.09200	0.08600	0.09100	0.08600	0.08800	0.08300	0.09400	0.08857	0.08857
PHRM5	0.05800	0.05100	0.05700	0.05200	0.05400	0.04900	0.06000	0.05443	0.05443
PHRM6	0.03600	0.03100	0.03500	0.03100	0.03300	0.02800	0.03800	0.03314	0.03314
PHRM7	0.02300	0.01800	0.02200	0.01900	0.02000	0.01700	0.02400	0.02043	0.02043
PHRM8	0.01400	0.01100	0.01400	0.01100	0.01200	0.01000	0.01600	0.01257	0.01257
PHRM9	0.00900	0.00700	0.00900	0.00700	0.00700	0.00600	0.01000	0.00786	0.00786
PHRS1	0.62400	0.69500	0.67000	0.67200	0.64900	0.70600	0.61400	0.66143	0.66143
PHRS2	0.23500	0.21200	0.22100	0.22100	0.22000	0.20800	0.23700	0.22314	0.22314
PHRS3	0.08800	0.06500	0.07300	0.07200	0.08000	0.06100	0.09200	0.07586	0.07586
PHRS4	0.03300	0.02000	0.02400	0.02400	0.02000	0.01800	0.03500	0.02600	0.02600
PHRS5	0.01200	0.00600	0.00800	0.00800	0.01000	0.00500	0.01400	0.00900	0.00900
PHRS6	0.00500	0.00200	0.00300	0.00300	0.00300	0.00200	0.00500	0.00329	0.00329
PHRS7	0.00200	0.00100	0.00100	0.00100	0.00100	0.00000	0.00200	0.00114	0.00114
PHRS8	0.00100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00100	0.00029	0.00029
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE # 5 (U21111) : Tp = 1.5 Hm0 = 1.0 Gamma = 3.3 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.67000	0.72330	0.66000	0.66000	0.72330	0.72330	0.71670	0.69666
HMO	0.07302	0.07011	0.07201	0.07712	0.08334	0.07558	0.07413	0.07504
QPG	1.86700	1.89700	1.86100	1.84300	1.91100	1.83400	1.86400	1.86814
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	331.00000	328.00000	339.00000	332.00000	329.00000	331.00000	333.00000	331.85715
T1/3	1.02800	1.06200	1.04900	1.07200	1.07900	1.07700	1.03900	1.05800
H1/3	0.06778	0.06415	0.06555	0.07034	0.07646	0.06876	0.06871	0.06882
HBAR	0.04325	0.04144	0.04184	0.04554	0.04803	0.04447	0.04387	0.04418
HMAX	0.13690	0.13040	0.12900	0.12790	0.14060	0.13420	0.13220	0.13303
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.13340	0.10220	0.17370	0.10250	0.16940	0.17710	0.13050	0.14126
K1	0.38010	0.33310	0.43300	0.33350	0.42780	0.43720	0.37600	0.38867
J1M1	2.02960	1.98110	2.09070	1.96630	2.05890	2.08730	2.01870	2.03323
J2M1	4.35250	4.26930	4.46720	4.26080	4.45490	4.47890	4.34250	4.37516
J1S1	1.22950	1.20060	1.24610	1.19130	1.24100	1.25840	1.22400	1.22727
J2S1	11.11670	11.00710	12.43340	11.11610	12.05070	11.81810	11.10670	11.52126
RHH2	0.09140	0.01980	0.02530	0.00000	0.00480	0.01650	0.00000	0.02254
RHH3	0.05890	0.00280	0.00660	0.00920	0.01980	0.07360	0.00000	0.03584
RHH4	0.00000	0.01340	0.02420	0.00710	0.00000	0.00000	0.03450	0.01131
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.49300	0.50500	0.47800	0.50900	0.48600	0.47900	0.49500	0.49214
PHRM2	0.25000	0.25000	0.25000	0.25000	0.25000	0.25000	0.25000	0.25000
PHRM3	0.12700	0.12400	0.13000	0.12300	0.12800	0.13000	0.12600	0.12686
PHRM4	0.06400	0.06100	0.06800	0.06000	0.06600	0.06800	0.06400	0.06443
PHRM5	0.03300	0.03000	0.03500	0.03000	0.03400	0.03500	0.03200	0.03271
PHRM6	0.01700	0.01500	0.01800	0.01500	0.01700	0.01800	0.01600	0.01657
PHRM7	0.00800	0.00700	0.01000	0.00700	0.00900	0.01000	0.00800	0.00843
PHRM8	0.00400	0.00400	0.00300	0.00400	0.00500	0.00500	0.00400	0.00443
PHRM9	0.00200	0.00200	0.00300	0.00200	0.00200	0.00300	0.00200	0.00229
PHRS1	0.81300	0.83300	0.80200	0.83900	0.80600	0.79500	0.81700	0.81500
PHRS2	0.15200	0.13900	0.15800	0.13500	0.15600	0.16300	0.15000	0.15043
PHRS3	0.02800	0.02300	0.03100	0.02200	0.03000	0.03400	0.02700	0.02786
PHRS4	0.00500	0.00400	0.00600	0.00300	0.00600	0.00700	0.00500	0.00514
PHRS5	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
PHRS6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE # 6 (U21211) : Tp = 1.5 Hm0 = 1.0 Gamma = 7.0 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.66330	0.66330	0.66330	0.66330	0.66330	0.66330	0.66330	0.66330
Hm0	0.06994	0.06746	0.06886	0.07325	0.08193	0.07259	0.07254	0.07237
QPG	2.34800	2.42700	2.22000	2.35600	2.25200	2.03600	2.31500	2.27914
DOWNCROSSING TSA TIME DOMAIN ANALYSIS								
# WAVES	297.00000	305.00000	316.00000	303.00000	308.00000	314.00000	304.00000	306.71429
T1/3	1.17500	1.16900	1.15000	1.18000	1.17500	1.15000	1.13300	1.16171
H1/3	0.06407	0.06180	0.06269	0.06734	0.07552	0.06658	0.06751	0.06650
HBAR	0.04251	0.04007	0.04030	0.04364	0.04828	0.04300	0.04395	0.04311
HMAX	0.11970	0.11340	0.11180	0.11450	0.13430	0.11250	0.12350	0.11853
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.17090	0.08150	0.11340	0.14780	0.16000	0.16220	0.19790	0.14767
KI	0.42970	0.29770	0.35070	0.39980	0.41580	0.41870	0.46180	0.39631
JIM1	2.06430	1.95850	1.99360	2.01110	2.05060	2.01750	2.09440	2.02714
J2M2	4.45100	4.20060	4.28000	4.36480	4.41330	4.41170	4.53960	4.38014
J1S1	1.27330	1.18190	1.19330	1.22390	1.23660	1.22810	1.29410	1.23303
J2S1	10.38990	10.63220	11.48400	10.93790	11.48250	11.35710	10.72630	11.00140
RHH2	0.07000	0.04810	0.04400	0.07370	0.04110	0.02500	0.03750	0.04849
RHH3	0.07770	0.01450	0.05920	0.02220	0.01480	0.00000	0.00000	0.02089
RHH4	0.00000	0.00760	0.05000	0.09880	0.05600	0.04470	0.01190	0.03643
RHH5	0.03940	0.02280	0.00740	0.01600	0.00000	0.00270	0.07030	0.02256
PHRM1	0.48400	0.51100	0.50200	0.49700	0.48800	0.49600	0.47700	0.49357
PHRM2	0.25000	0.25000	0.25000	0.25000	0.25000	0.25000	0.24900	0.24986
PHRM3	0.12900	0.12200	0.12500	0.12600	0.12800	0.12600	0.13000	0.12657
PHRM4	0.06600	0.06000	0.06200	0.06300	0.06600	0.06400	0.06800	0.06414
PHRM5	0.03400	0.02900	0.03100	0.03200	0.03400	0.03200	0.03600	0.03257
PHRM6	0.01800	0.01400	0.01500	0.01600	0.01700	0.01600	0.01900	0.01640
PHRM7	0.00900	0.00700	0.00800	0.00800	0.00900	0.00800	0.01000	0.00843
PHRM8	0.00500	0.00300	0.00400	0.00400	0.00500	0.00400	0.00500	0.00429
PHRM9	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00300	0.00214
PHRS1	0.78500	0.84600	0.83800	0.81700	0.80900	0.81400	0.77300	0.81171
PHRS2	0.16900	0.13000	0.13600	0.14900	0.15500	0.15100	0.17600	0.15229
PHRS3	0.03600	0.02000	0.02200	0.02700	0.03000	0.02800	0.04000	0.02900
PHRS4	0.00800	0.00300	0.00400	0.00500	0.00600	0.00500	0.00900	0.00571
PHRS5	0.00200	0.00000	0.00100	0.00100	0.00100	0.00100	0.00200	0.00114
PHRS6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE # 7 (U22111) : Tp = 1.5 Hm0 = 3.0 Gamma = 3.3 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.72000	0.72000	0.72000	0.66330	0.72000	0.72000	0.72000	0.71190
HMO	0.22280	0.22030	0.22100	0.23380	0.26300	0.22690	0.22270	0.23007
QPG	1.89900	1.89100	1.84200	1.89100	1.90000	1.76900	1.76200	1.85057
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	309.00000	310.00000	313.00000	305.00000	306.00000	315.00000	321.00000	311.28571
T1/3	1.10400	1.10000	1.10700	1.14200	1.13300	1.13700	1.07000	1.11329
H1/3	0.20990	0.20740	0.21020	0.22080	0.25010	0.21460	0.21120	0.21774
HBAR	0.13390	0.13290	0.13320	0.14130	0.15860	0.13650	0.13260	0.13843
HMAX	0.41200	0.36990	0.41690	0.35140	0.48380	0.38140	0.33860	0.39343
KINUR WAVE GROUP ANALYSIS								
RHH1	0.11740	0.13790	0.14110	0.13110	0.13860	0.19840	0.08760	0.13601
K1	0.35670	0.38630	0.39080	0.37680	0.38740	0.46240	0.30850	0.38127
JIM1	2.00490	2.01360	2.02650	1.97070	2.02920	2.10520	1.93450	2.01209
J2M1	4.30670	4.35350	4.38050	4.29630	4.36750	4.53320	4.19540	4.34759
J1S1	1.22410	1.23650	1.25210	1.21000	1.24600	1.28580	1.17260	1.23250
J2S1	10.49650	10.41290	10.37780	10.24580	10.46930	11.05440	10.67150	10.53260
RHH2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00393
RHH3	0.04270	0.02060	0.00000	0.00000	0.00000	0.00000	0.09510	0.01969
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.49900	0.49700	0.49300	0.50700	0.49300	0.47500	0.51700	0.49729
PHRM2	0.25000	0.25000	0.25000	0.25000	0.25000	0.24900	0.25000	0.24986
PHRM3	0.12500	0.12500	0.12700	0.12300	0.12700	0.13100	0.12100	0.12571
PHRM4	0.06300	0.06300	0.06400	0.06100	0.06400	0.06900	0.05800	0.06314
PHRM5	0.03100	0.03200	0.03200	0.03000	0.03300	0.03600	0.02800	0.03171
PHRM6	0.01600	0.01600	0.01600	0.01500	0.01700	0.01900	0.01400	0.01614
PHRM7	0.00800	0.00800	0.00800	0.00700	0.00800	0.01000	0.00700	0.00800
PHRM8	0.00400	0.00400	0.00400	0.00400	0.00400	0.00500	0.00300	0.00400
PHRM9	0.00200	0.00200	0.00200	0.00200	0.00200	0.00300	0.00200	0.00214
PHRS1	0.81700	0.80900	0.79900	0.82600	0.80300	0.77800	0.85300	0.81214
PHRS2	0.15000	0.15500	0.16100	0.14300	0.15800	0.17300	0.12600	0.15229
PHRS3	0.02700	0.03000	0.03200	0.02500	0.03100	0.03800	0.01800	0.02871
PHRS4	0.00500	0.00600	0.00700	0.00400	0.00600	0.00900	0.00300	0.00571
PHRS5	0.00100	0.00100	0.00100	0.00100	0.00100	0.00200	0.00000	0.00100
PHRS6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE # 8 (U22211) : Tp = 1.5 Hm0 = 3.6 Gamma = 7.0 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.71000	0.69670	0.66330	0.66330	0.71000	0.70670	0.71000	0.69429
Hm0	0.21590	0.21070	0.21460	0.23360	0.25150	0.21950	0.21580	0.22309
QPG	2.10400	2.21400	2.06400	2.27100	2.27200	2.03700	1.97700	2.13414
DOWNCROSSING TSA TIME DOMAIN ANALYSIS								
# WAVES	306.00000	300.00000	307.00000	305.00000	288.00000	303.00000	304.00000	301.85715
T1/3	1.17400	1.17100	1.17200	1.16900	1.21800	1.16300	1.16400	1.17586
H1/3	0.20210	0.19820	0.20290	0.21990	0.23860	0.20950	0.20500	0.21089
H8AR	0.12770	0.12640	0.12770	0.13830	0.15210	0.13270	0.12980	0.13353
HMAX	0.36460	0.32730	0.35380	0.36310	0.37090	0.35070	0.31710	0.34964
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.18320	0.10900	0.20000	0.15820	0.24990	0.18440	0.11420	0.17127
K1	0.4460	0.34300	0.46430	0.41350	0.51800	0.44600	0.35200	0.42603
J1M1	2.07660	1.96860	2.10780	2.01750	2.10110	2.06550	1.93940	2.03950
J2M2	4.49610	4.25120	4.53490	4.39880	4.65080	4.47330	4.24630	4.43591
J1S1	1.26060	1.19570	1.27480	1.22400	1.28500	1.26630	1.19000	1.24234
J2S1	11.67380	10.51310	11.55640	11.42480	11.27420	10.68800	10.31090	11.06274
RHH2	0.01070	0.06910	0.09160	0.04580	0.04890	0.03850	0.00000	0.04351
RHH3	0.07300	0.00000	0.01070	0.00000	0.00000	0.00000	0.01700	0.01439
RHH4	0.00000	0.00000	0.00910	0.00000	0.00000	0.00000	0.00000	0.00130
RHH5	0.00000	0.01960	0.00000	0.00000	0.00000	0.00000	0.00000	0.00280
PHRM1	0.48200	0.50800	0.47400	0.49600	0.47600	0.48400	0.51600	0.49086
PHRM2	0.25000	0.25000	0.24900	0.25000	0.24900	0.25000	0.25000	0.24971
PHRM3	0.12900	0.12300	0.13100	0.12600	0.13100	0.12900	0.12100	0.12714
PHRM4	0.06700	0.06100	0.05900	0.06400	0.06900	0.06600	0.05900	0.06500
PHRM5	0.03500	0.03000	0.03600	0.03200	0.03600	0.03400	0.02800	0.03300
PHRM6	0.01800	0.01500	0.01900	0.01600	0.01900	0.01800	0.01400	0.01700
PHRM7	0.00900	0.00700	0.01000	0.00800	0.01000	0.00900	0.00700	0.00857
PHRM8	0.00500	0.00400	0.00500	0.00400	0.00500	0.00500	0.00300	0.00443
PHRM9	0.00300	0.00200	0.00300	0.00200	0.00300	0.00200	0.00200	0.00243
PHRS1	0.79300	0.83600	0.78400	0.81700	0.77800	0.79000	0.84000	0.80543
PHRS2	0.16400	0.13700	0.16900	0.15000	0.17300	0.16600	0.13400	0.15614
PHRS3	0.03400	0.02200	0.03600	0.02700	0.03800	0.03500	0.02100	0.03043
PHRS4	0.00700	0.00400	0.00800	0.00500	0.00800	0.00700	0.00300	0.00600
PHRS5	0.00100	0.00100	0.00200	0.00100	0.00200	0.00200	0.00100	0.00143
PHRS6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE # 9 (J31111) : Tp = 2.0 Hm0 = 1.0 Gamma = 3.3 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.52000	0.53250	0.53250	0.53250	0.50750	0.50750	0.51750	0.52143
HMO	0.06305	0.06217	0.06344	0.06702	0.07661	0.06849	0.06582	0.06666
QPG	1.59000	1.66700	1.62500	1.56900	1.60800	1.75700	1.61000	1.63229
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	390.00000	377.00000	386.00000	387.00000	367.00000	372.00000	393.00000	381.71429
T1/3	1.27300	1.25400	1.24800	1.26200	1.34800	1.35300	1.26500	1.28614
H1/3	0.05748	0.05676	0.05686	0.06032	0.06991	0.06240	0.05966	0.06048
HBAR	0.03655	0.03759	0.03718	0.03931	0.04524	0.03973	0.03777	0.03905
HMAX	0.10200	0.09058	0.10110	0.10300	0.11350	0.10450	0.11450	0.10417
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.06120	0.01390	0.05760	0.10570	0.05240	0.07170	0.12530	0.06969
K1	0.25820	0.12300	0.25040	0.33860	0.23900	0.27930	0.36850	0.26529
J1M1	1.92390	1.83610	1.91900	1.95730	1.88180	1.91780	2.01000	1.92084
J2M1	4.15240	4.01480	4.13820	4.25180	4.11180	4.16910	4.32950	4.16680
J1S1	1.14730	1.13070	1.15000	1.17980	1.14320	1.15050	1.19660	1.15687
J2S1	11.70020	9.53400	11.14250	11.36090	10.68860	11.60150	12.53250	11.22403
RHH2	0.02300	0.02740	0.03170	0.04190	0.07700	0.04510	0.00000	0.03520
RHH3	0.02120	0.00120	0.03630	0.00000	0.04920	0.01300	0.00000	0.01727
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.02630	0.00000	0.00000	0.00000	0.00000	0.00000	0.00376
PHRM1	0.52000	0.54500	0.52100	0.51100	0.53100	0.52100	0.49800	0.52100
PHRM2	0.25000	0.24800	0.25000	0.25000	0.24900	0.25000	0.25000	0.24957
PHRM3	0.12000	0.11300	0.12000	0.12200	0.11700	0.11900	0.12600	0.11957
PHRM4	0.05800	0.05100	0.05700	0.06000	0.05500	0.05700	0.06300	0.05729
PHRM5	0.02800	0.02300	0.02700	0.02900	0.02600	0.02700	0.03200	0.02743
PHRM6	0.01300	0.01100	0.01300	0.01400	0.01200	0.01300	0.01600	0.01314
PHRM7	0.00600	0.00500	0.00600	0.00700	0.00600	0.00600	0.00800	0.00629
PHRM8	0.00300	0.00200	0.00300	0.00300	0.00300	0.00300	0.00400	0.00300
PHRM9	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00200	0.00129
PHRS1	0.87200	0.88400	0.87000	0.84800	0.87500	0.86900	0.83600	0.86486
PHRS2	0.11200	0.10200	0.11300	0.12900	0.11000	0.11400	0.13700	0.11671
PHRS3	0.01400	0.01200	0.01500	0.02000	0.01400	0.01500	0.02300	0.01614
PHRS4	0.00200	0.00100	0.00200	0.00300	0.00200	0.00200	0.00400	0.00229
PHRS5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE #10 (U31211) : Tp = 2.0 Hm0 = 1.0 Gamma = 7.0 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.52250	0.53500	0.53250	0.50250	0.51250	0.51250	0.52250	0.52000
HMO	0.06012	0.05948	0.05963	0.06276	0.07682	0.06820	0.06252	0.06422
OPG	2.08200	2.07700	2.12600	2.00700	2.25300	2.56600	2.29300	2.20057
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	351.00000	371.00000	358.00000	352.00000	353.00000	351.00000	348.00000	354.85715
T1/3	1.39300	1.34800	1.45000	1.45600	1.45500	1.48500	1.49200	1.43986
H1/3	0.05412	0.05298	0.05398	0.05711	0.06975	0.06182	0.05750	0.05818
HBAR	0.03489	0.03393	0.03419	0.03672	0.04478	0.03922	0.03625	0.03714
HMAX	0.09813	0.10360	0.09413	0.09998	0.11090	0.10680	0.10010	0.10195
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.19130	0.16570	0.26630	0.25200	0.26510	0.18470	0.21370	0.21994
K1	0.45420	0.42310	0.53430	0.52090	0.53320	0.44640	0.47970	0.48454
J2M1	2.09390	2.06460	2.18870	2.16750	2.13900	2.07680	2.10620	2.11953
J2M1	4.51360	4.44900	4.77780	4.72050	4.71300	4.48400	4.59180	4.60711
J2S1	1.24740	1.22280	1.29910	1.30370	1.26780	1.22830	1.26270	1.26169
J2S1	12.72760	13.42110	13.95910	12.70600	13.10670	13.12130	12.91170	13.13621
RHH2	0.07580	0.03840	0.09540	0.02510	0.10290	0.16400	0.05020	0.08026
RHH3	0.09810	0.02110	0.00000	0.00000	0.00000	0.00170	0.03790	0.02269
RHH4	0.00000	0.00660	0.00000	0.00000	0.00000	0.00000	0.00330	0.00141
RHH5	0.00000	0.00000	0.01340	0.00000	0.00000	0.06030	0.00000	0.01053
PHRM1	0.47800	0.48400	0.45700	0.46100	0.46800	0.48200	0.47500	0.47214
PHRM2	0.24900	0.25000	0.24800	0.24900	0.24900	0.25000	0.24900	0.24914
PHRM3	0.13000	0.12900	0.13500	0.13400	0.13300	0.12900	0.13100	0.13157
PHRM4	0.06800	0.06600	0.07300	0.07200	0.07100	0.06700	0.06900	0.06943
PHRM5	0.03600	0.03400	0.04000	0.03800	0.03500	0.03500	0.03600	0.03686
PHRM6	0.01900	0.01800	0.02200	0.02100	0.02000	0.01800	0.01900	0.01957
PHRM7	0.01000	0.00900	0.01200	0.01100	0.01100	0.00900	0.01000	0.01029
PHRM8	0.00500	0.00500	0.00600	0.00600	0.00600	0.00500	0.00500	0.00543
PHRM9	0.00300	0.00200	0.00300	0.00300	0.00300	0.00300	0.00300	0.00286
PHRS1	0.80200	0.81800	0.77000	0.76700	0.78900	0.81400	0.79200	0.79314
PHRS2	0.15900	0.14900	0.17700	0.17900	0.16700	0.15100	0.16500	0.16386
PHRS3	0.03200	0.02700	0.04100	0.04200	0.03500	0.02800	0.03400	0.03414
PHRS4	0.00600	0.00500	0.00900	0.01000	0.00700	0.00500	0.00700	0.00700
PHRS5	0.00100	0.00100	0.00200	0.00200	0.00200	0.00100	0.00100	0.00143
PHRS6	0.00000	0.00000	0.00000	0.00100	0.00000	0.00000	0.00000	0.00014
PHRS7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE #11 (U32111) : Tp = 2.0 Hm0 = 3.0 Gamma = 3.3 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	CHANNEL NUMBER							AVG
	1	2	3	4	5	6	7	
FREQUENCY DOMAIN ANALYSIS								
FPC	0.52250	0.49750	0.49750	0.50000	0.50750	0.50750	0.51500	0.50679
HM0	0.20050	0.19300	0.19700	0.21040	0.25160	0.22280	0.20590	0.21160
QPG	1.52500	1.47700	1.49200	1.44100	1.60600	1.63900	1.60500	1.54071
DOWNCROSSING TSA TIME DOMAIN ANALYSIS								
# WAVES	370.00000	380.00000	377.00000	376.00000	360.00000	369.00000	378.00000	372.85715
T1/3	1.32400	1.30400	1.30200	1.27400	1.34500	1.31000	1.30400	1.30900
H1/3	0.10730	0.17810	0.18270	0.19630	0.24010	0.20870	0.18920	0.19749
HBAR	0.11950	0.11390	0.11640	0.12620	0.15210	0.13430	0.11930	0.12596
HMAX	0.34200	0.33710	0.36900	0.36010	0.41280	0.36290	0.37300	0.36527
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.10730	0.08510	0.09220	0.09350	0.15680	0.05250	0.15660	0.10629
K1	0.34120	0.30410	0.31640	0.31870	0.41180	0.23920	0.41140	0.33469
JIM1	1.97410	1.95370	1.98010	1.96610	2.03220	1.90660	2.06220	1.98214
J2M2	4.27680	4.22090	4.23800	4.23580	4.40210	4.12750	4.41880	4.27427
JIS1	1.20600	1.18260	1.19140	1.19880	1.24790	1.16630	1.23110	1.20344
J2S1	10.65170	10.95970	11.00240	10.34760	10.56350	9.90550	12.34830	10.82553
RHH2	0.01860	0.07530	0.06380	0.01390	0.00000	0.08720	0.07800	0.04811
RHH3	0.00690	0.01160	0.00000	0.00500	0.02390	0.00340	0.07180	0.01751
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.50700	0.51200	0.50500	0.50900	0.49200	0.52400	0.48500	0.50486
PHRM2	0.25000	0.25000	0.25000	0.25000	0.25000	0.24900	0.25000	0.24986
PHRM3	0.12300	0.12200	0.12400	0.12300	0.12700	0.11900	0.12900	0.12386
PHRM4	0.06100	0.06000	0.06100	0.06000	0.06400	0.05600	0.06600	0.06114
PHRM5	0.03000	0.02900	0.03000	0.03000	0.03300	0.02700	0.03400	0.03043
PHRM6	0.01500	0.01400	0.01500	0.01500	0.01700	0.01300	0.01800	0.01529
PHRM7	0.00700	0.00700	0.00700	0.00700	0.00800	0.00600	0.00900	0.00729
PHRM8	0.00400	0.00300	0.00400	0.00400	0.00400	0.00300	0.00500	0.00386
PHRM9	0.00200	0.00200	0.00200	0.00200	0.00200	0.00100	0.00200	0.00186
PHRS1	0.82900	0.84600	0.83900	0.83400	0.80100	0.85700	0.81200	0.83114
PHRS2	0.14200	0.13100	0.13500	0.13800	0.15900	0.12200	0.15200	0.13986
PHRS3	0.02400	0.02000	0.02200	0.02300	0.03200	0.01700	0.02900	0.02386
PHRS4	0.00400	0.00300	0.00300	0.00400	0.00600	0.00200	0.00500	0.00386
PHRS5	0.00100	0.00000	0.00100	0.00100	0.00100	0.00000	0.00100	0.00071
PHRS6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE #12 (U32211) : Tp = 2.0 Hm0 = 3.0 Gamma = 7.0 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	CHANNEL NUMBER							AVG
	1	2	3	4	5	6	7	

FREQUENCY DOMAIN ANALYSIS

FPC	0.52250	0.49750	0.50000	0.50000	0.50750	0.50750	0.51500	0.50714
HM0	0.19460	0.18760	0.18970	0.20460	0.24960	0.21810	0.20030	0.20636
QPG	1.92300	1.81200	1.92800	1.76600	2.19100	2.44400	2.23300	2.04243

DOWNCROSSING TSA TIME DOMAIN ANALYSIS

# WAVES	350.00000	360.00000	354.00000	360.00000	336.00000	334.00000	355.00000	349.85715
T1/3	1.41000	1.41400	1.47400	1.34300	1.49500	1.52200	1.43300	1.44157
H1/3	0.18120	0.17230	0.17630	0.18810	0.23520	0.20570	0.18510	0.19199
HBR	0.11480	0.11020	0.11080	0.12050	0.14910	0.13080	0.11440	0.12151
HMAX	0.32060	0.32110	0.33430	0.34440	0.40070	0.33970	0.34370	0.34350

KIMUR WAVE GROUP ANALYSIS

RHH1	0.19990	0.13300	0.18630	0.11420	0.19260	0.23950	0.15270	0.17403
K1	0.46420	0.37950	0.44820	0.35200	0.45570	0.50730	0.40640	0.43047
J1M1	2.09500	2.01550	2.09020	1.99670	2.06710	2.13280	2.03850	2.06226
J2M2	4.54540	4.34720	4.51360	4.28880	4.51440	4.64860	4.41190	4.46713
J1S1	1.26900	1.21530	1.26200	1.20230	1.26450	1.29730	1.21510	1.24650
J2S1	11.92590	11.57490	12.15580	11.20080	11.33610	11.54770	12.98900	11.81860
RHH2	0.08000	0.04790	0.04760	0.06350	0.10550	0.16970	0.11810	0.09033
RHH3	0.03960	0.00000	0.00000	0.00000	0.04980	0.08020	0.02120	0.02726
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.47700	0.49600	0.47800	0.50100	0.48400	0.46900	0.49100	0.48514
PHRM2	0.24900	0.12600	0.25000	0.25000	0.25000	0.24900	0.25000	0.24971
PHRM3	0.13000	0.06300	0.13000	0.12500	0.12900	0.13200	0.12700	0.12843
PHRM4	0.06800	0.06300	0.06800	0.06200	0.06700	0.07000	0.06500	0.06614
PHRM5	0.03600	0.03200	0.03500	0.03100	0.03400	0.03700	0.03300	0.03400
PHRM6	0.01900	0.01600	0.01800	0.01600	0.01800	0.02000	0.01700	0.01771
PHRM7	0.01000	0.00800	0.01000	0.00800	0.00900	0.01100	0.00900	0.00929
PHRM8	0.00500	0.00400	0.00500	0.00400	0.00500	0.00600	0.00400	0.00471
PHRM9	0.00300	0.00200	0.00300	0.00200	0.00200	0.00300	0.00200	0.00243
PHRS1	0.78800	0.82300	0.79200	0.83200	0.79100	0.77100	0.82300	0.80286
PHRS2	0.16700	0.14600	0.16500	0.14000	0.16500	0.17700	0.14600	0.15800
PHRS3	0.03500	0.02600	0.03400	0.02400	0.03500	0.04000	0.02600	0.03143
PHRS4	0.00800	0.00500	0.00700	0.00400	0.00800	0.00900	0.00500	0.00643
PHRS5	0.00200	0.00100	0.00100	0.00100	0.00200	0.00200	0.00100	0.00143
PHRS6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE #13 (U11122) : Tp = 1.0 Hm0 = 1.0 Gamma = 3.3 S = 1.0 D = -30

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.99500	0.99500	0.99500	0.99500	0.99500	0.99500	0.99500	0.99500
HMO	0.08196	0.07389	0.06805	0.06733	0.06988	0.07792	0.06535	0.07205
QPG	5.35100	3.38000	4.95300	4.22300	4.04800	4.75000	3.89400	4.37129
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	219.00000	232.00000	219.00000	225.00000	225.00000	210.00000	230.00000	222.85715
T1/3	0.93610	0.88720	0.92260	0.92330	0.92800	0.94640	0.93340	0.92529
H1/3	0.07837	0.06958	0.06516	0.06336	0.06491	0.07398	0.06087	0.06803
HBAR	0.05054	0.04605	0.04218	0.04123	0.04209	0.04833	0.03988	0.04433
HMAX	0.13470	0.10530	0.11590	0.11880	0.10920	0.12700	0.09519	0.11516
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.62330	0.45300	0.59440	0.56070	0.45500	0.59350	0.53450	0.54491
K1	0.80610	0.69200	0.78810	0.76650	0.69350	0.78750	0.74920	0.75470
J1M1	3.21040	2.41780	3.12540	2.98620	2.59350	3.09340	2.71420	2.87727
J2M1	6.98800	5.46000	6.69900	6.44600	5.61220	6.64510	6.05870	6.27271
J1S1	1.93400	1.45180	1.50690	1.83730	1.54400	1.86280	1.58020	1.73100
J2S1	15.52650	11.96400	14.56010	14.52570	13.43580	14.37410	14.02010	14.05800
RHH2	0.24540	0.18580	0.22290	0.23770	0.11820	0.15510	0.24460	0.20139
RHH3	0.04790	0.00000	0.00760	0.06730	0.01940	0.00000	0.02870	0.02441
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.31100	0.41400	0.32000	0.33500	0.38600	0.32300	0.36800	0.35100
PHRM2	0.21400	0.24300	0.21800	0.22300	0.23700	0.21900	0.23300	0.22671
PHRM3	0.14800	0.14200	0.14800	0.14800	0.14600	0.14800	0.14700	0.14671
PHRM4	0.10200	0.08300	0.10100	0.09900	0.08900	0.10000	0.09300	0.09529
PHRM5	0.07000	0.04900	0.06800	0.06600	0.05500	0.06800	0.05900	0.06214
PHRM6	0.04800	0.02900	0.04700	0.04400	0.03400	0.04600	0.03700	0.04071
PHRM7	0.03300	0.01700	0.03200	0.02900	0.02100	0.03100	0.02300	0.02657
PHRM8	0.02300	0.01000	0.02200	0.01900	0.01300	0.02100	0.01500	0.01757
PHRM9	0.01600	0.00600	0.01500	0.01300	0.00800	0.01400	0.00900	0.01157
PHRS1	0.51700	0.68900	0.52400	0.54400	0.64800	0.53700	0.63300	0.58457
PHRS2	0.25000	0.21400	0.24900	0.24800	0.22800	0.24900	0.23200	0.23857
PHRS3	0.12100	0.06700	0.11900	0.11300	0.08000	0.11500	0.08500	0.10000
PHRS4	0.05800	0.02100	0.05600	0.05200	0.02800	0.05300	0.03100	0.04271
PHRS5	0.02800	0.00600	0.02700	0.02300	0.01000	0.02500	0.01200	0.01871
PHRS6	0.01400	0.00200	0.01300	0.01100	0.00400	0.01100	0.00400	0.00843
PHRS7	0.00700	0.00100	0.00600	0.00500	0.00100	0.00500	0.00200	0.00386
PHRS8	0.00300	0.00000	0.00300	0.00200	0.00000	0.00200	0.00100	0.00157
PHRS9	0.00200	0.00000	0.00100	0.00100	0.00000	0.00100	0.00000	0.00071

CASE #14 (U11222) : Tp = 1.0 Hm0 = 1.0 Gamma = 7.0 S = 1.0 D = -3.0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	1.01500	1.01500	1.01500	1.01500	1.01500	1.01500	1.01500	1.01500
HMO	0.08667	0.07251	0.07067	0.06864	0.07259	0.08165	0.06540	0.07402
QPG	6.83200	4.49600	6.27300	5.80600	5.75900	6.22200	5.39000	5.82543
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	212.00000	228.00000	213.00000	217.00000	216.00000	209.00000	218.00000	216.14285
T1/3	0.92960	0.92240	0.93370	0.93060	0.95050	0.95490	0.94080	0.93750
H1/3	0.08334	0.06752	0.06737	0.06487	0.06777	0.07730	0.06161	0.06997
HBAR	0.05382	0.04449	0.04370	0.04187	0.04428	0.05061	0.04011	0.04555
HMAX	0.14010	0.11560	0.11390	0.12360	0.11880	0.13190	0.09778	0.12024
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.62260	0.45700	0.62840	0.61450	0.61230	0.61850	0.63920	0.59893
K1	0.80570	0.69490	0.80920	0.80070	0.79930	0.80310	0.81570	0.78980
J1M1	3.19530	2.60030	3.23640	3.25130	3.17930	3.16720	3.17670	3.11521
J2M1	6.94520	5.62530	6.99560	6.93640	6.86420	6.91320	7.03650	6.75949
J1S1	1.91480	1.82640	1.92280	1.98150	1.90220	1.90570	1.82640	1.89711
J2S1	15.17420	15.87440	15.50860	15.80080	15.54310	15.08140	15.87440	15.55099
RHH2	0.30190	0.17980	0.26680	0.24400	0.31590	0.26010	0.29110	0.26566
RHH3	0.10470	0.06240	0.09020	0.05080	0.12870	0.01120	0.12130	0.08133
RHH4	0.00850	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00494
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.31300	0.38500	0.30900	0.30800	0.31500	0.31600	0.31500	0.32300
PHRM2	0.21500	0.23700	0.21400	0.21300	0.21600	0.21600	0.21600	0.21814
PHRM3	0.14800	0.14600	0.14800	0.14700	0.14800	0.14800	0.14800	0.14757
PHRM4	0.10100	0.09000	0.10200	0.10200	0.10100	0.10100	0.10100	0.09971
PHRM5	0.07000	0.05500	0.07000	0.07100	0.06900	0.06900	0.06900	0.06757
PHRM6	0.04800	0.03400	0.04900	0.04900	0.04800	0.04700	0.04800	0.04614
PHRM7	0.03300	0.02100	0.03400	0.03400	0.03300	0.03200	0.03300	0.03143
PHRM8	0.02300	0.01300	0.02300	0.02300	0.02200	0.02200	0.02200	0.02114
PHRM9	0.01616	0.00800	0.01600	0.01600	0.01500	0.01500	0.01500	0.01445
PHRS1	0.52200	0.63900	0.52000	0.50500	0.52600	0.52500	0.54800	0.54071
PHRS2	0.25000	0.23100	0.25000	0.25000	0.24900	0.24900	0.24800	0.24671
PHRS3	0.11900	0.08300	0.12000	0.12400	0.11800	0.11900	0.11200	0.11357
PHRS4	0.05700	0.03000	0.05700	0.06100	0.05600	0.05600	0.05100	0.05257
PHRS5	0.02700	0.01100	0.02800	0.03000	0.02700	0.02700	0.02300	0.02471
PHRS6	0.01300	0.00400	0.01300	0.01500	0.01300	0.01300	0.01000	0.01157
PHRS7	0.00600	0.00100	0.00600	0.00700	0.00600	0.00600	0.00500	0.00529
PHRS8	0.00300	0.00100	0.00300	0.00400	0.00300	0.00300	0.00200	0.00271
PHRS9	0.00100	0.00000	0.00100	0.00200	0.00100	0.00100	0.00100	0.00100

CASE #15 (U12122) : Tp = 1.0 Hm0 = 3.0 Gamma = 3.3 S = 1.0 D = -30

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	CHANNEL NUMBER							AVG
	1	2	3	4	5	6	7	
FREQUENCY DOMAIN ANALYSIS								
FPC	1.04500	0.96500	1.04500	0.98500	1.04500	0.97000	1.04500	1.01429
HMO	0.23060	0.21100	0.20830	0.22310	0.23170	0.23380	0.21900	0.22250
QPG	4.38100	3.93500	4.14400	4.11400	3.92500	4.10200	4.05600	4.09386
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	225.00000	223.00000	220.00000	225.00000	225.00000	219.00000	221.00000	222.57143
T1/3	0.91950	0.92790	0.93450	0.94410	0.93340	0.94230	0.94250	0.93489
H1/3	0.22760	0.20110	0.20430	0.21580	0.22480	0.22890	0.21400	0.21664
HBAR	0.13880	0.13200	0.12700	0.13280	0.14130	0.14350	0.13450	0.13570
HMAX	0.40240	0.32020	0.39030	0.41940	0.37370	0.36240	0.41130	0.38281
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.59520	0.50520	0.59460	0.54270	0.53460	0.56940	0.54970	0.55591
K1	0.78860	0.72930	0.78820	0.75470	0.74930	0.77220	0.75930	0.76309
JIM1	3.15550	2.66710	3.17500	2.95170	2.83360	2.93670	2.97310	2.95610
J2M1	6.73730	5.85460	6.74430	6.31030	6.18760	6.39900	6.36120	6.37061
J1S1	1.89940	1.60470	1.94200	1.78840	1.70650	1.72760	1.84650	1.78787
J2S1	15.92300	12.49360	15.43030	15.53520	14.24240	14.58490	14.11160	14.61729
RHH2	0.26510	0.19060	0.27960	0.19460	0.19710	0.22550	0.17500	0.21821
RHH3	0.00430	0.00720	0.01820	0.00000	0.00000	0.00000	0.00000	0.00424
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.31700	0.37500	0.31500	0.33900	0.35300	0.34100	0.33600	0.33943
PHRM2	0.21600	0.23400	0.21600	0.22400	0.22800	0.22500	0.22300	0.22371
PHRM3	0.14800	0.14600	0.14800	0.14800	0.14800	0.14800	0.14800	0.14771
PHRM4	0.10100	0.09200	0.10100	0.09800	0.09600	0.09800	0.09800	0.09771
PHRM5	0.06900	0.05700	0.06900	0.06500	0.06200	0.06400	0.06500	0.06443
PHRM6	0.04700	0.03600	0.04800	0.04300	0.04000	0.04200	0.04300	0.04271
PHRM7	0.03200	0.02200	0.03300	0.02800	0.02600	0.02800	0.02900	0.02829
PHRM8	0.02200	0.01400	0.02200	0.01900	0.01700	0.01800	0.01900	0.01871
PHRM9	0.01500	0.00900	0.01500	0.01200	0.01100	0.01200	0.01300	0.01243
PHRS1	0.52600	0.62300	0.51500	0.55900	0.58600	0.57900	0.54200	0.56143
PHRS2	0.24900	0.23500	0.25000	0.24700	0.24300	0.24400	0.24800	0.24514
PHRS3	0.11800	0.08800	0.12100	0.10900	0.10000	0.10300	0.11400	0.10757
PHRS4	0.05600	0.03300	0.05900	0.04800	0.04200	0.04300	0.05200	0.04757
PHRS5	0.02600	0.01300	0.02900	0.02100	0.01700	0.01800	0.02400	0.02114
PHRS6	0.01300	0.00500	0.01400	0.00900	0.00700	0.00800	0.01100	0.00957
PHRS7	0.00600	0.00200	0.00700	0.00400	0.00300	0.00300	0.00500	0.00429
PHRS8	0.00300	0.00100	0.00300	0.00200	0.00100	0.00100	0.00200	0.00186
PHRS9	0.00100	0.00000	0.00200	0.00100	0.00100	0.00100	0.00100	0.00100

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE #16 (U:2222) : Tp = 1.0 Hm0 = 3.0 Gamma = 7.0 S = 1.0 D = -3.0

DESCRIPTION	CHANNEL NUMBER							AVG
	1	2	3	4	5	6	7	
FREQUENCY DOMAIN ANALYSIS								
FPC	0.99000	0.97500	0.97500	0.97500	0.97500	0.97500	0.97500	0.97714
HMO	0.24310	0.21450	0.21770	0.23000	0.23790	0.23780	0.22560	0.22951
QPG	5.74200	5.22300	5.57400	5.50400	5.10300	5.26500	5.29000	5.38586
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	216.00000	213.00000	214.00000	213.00000	219.00000	209.00000	217.00000	214.42857
T1/3	0.95740	0.93700	0.95000	0.95560	0.95880	0.96120	0.96840	0.95549
H1/3	0.23920	0.20980	0.21480	0.22480	0.23190	0.23580	0.21860	0.22499
HBAR	0.14980	0.13620	0.13310	0.14130	0.14520	0.14890	0.13730	0.14169
HMAX	0.47690	0.33200	0.44860	0.46580	0.37210	0.38120	0.39000	0.40951
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.69320	0.63060	0.67430	0.68010	0.62240	0.65510	0.65670	0.65891
K1	0.84760	0.81060	0.83660	0.84000	0.80550	0.82530	0.82620	0.82740
J1M1	3.74760	3.13460	3.61510	3.65560	3.17380	3.34990	3.44680	3.44620
J2M1	7.89130	6.94400	7.64890	7.71950	6.92690	7.27990	7.40010	7.40151
J1S1	2.29350	1.88290	2.22920	2.24430	1.85120	2.00330	2.07830	2.08324
J2S1	17.52050	14.11800	16.96100	17.23110	16.08770	15.42870	16.96140	16.32977
RHH2	0.34610	0.33930	0.33510	0.32410	0.27920	0.29780	0.28460	0.31517
RHH3	0.08740	0.07720	0.04930	0.07720	0.05010	0.04940	0.02370	0.05919
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.26700	0.31900	0.27700	0.27400	0.31500	0.29900	0.29000	0.29157
PHRM2	0.19600	0.21700	0.20000	0.19900	0.21600	0.20900	0.20600	0.20614
PHRM3	0.14300	0.14800	0.14500	0.14400	0.14800	0.14700	0.14600	0.14586
PHRM4	0.10500	0.10100	0.10500	0.10500	0.10100	0.10300	0.10400	0.10343
PHRM5	0.07700	0.06900	0.07600	0.07600	0.06900	0.07200	0.07400	0.07329
PHRM6	0.05700	0.04700	0.05500	0.05500	0.04700	0.05100	0.05200	0.05200
PHRM7	0.04100	0.03200	0.04000	0.04000	0.03300	0.03600	0.03700	0.03700
PHRM8	0.03000	0.02200	0.02900	0.02900	0.02200	0.02500	0.02600	0.02614
PHRM9	0.02200	0.01500	0.02100	0.02100	0.01500	0.01800	0.01900	0.01871
PHRS1	0.43600	0.53100	0.44900	0.44600	0.54000	0.49900	0.48100	0.48314
PHRS2	0.24600	0.24900	0.24700	0.24700	0.24800	0.25000	0.25000	0.24814
PHRS3	0.13900	0.11700	0.13600	0.13700	0.11400	0.12500	0.13000	0.12829
PHRS4	0.07800	0.05500	0.07500	0.07600	0.05300	0.06300	0.06700	0.06671
PHRS5	0.04400	0.02600	0.04100	0.04200	0.02400	0.03100	0.03500	0.03471
PHRS6	0.02500	0.01200	0.02300	0.02300	0.01100	0.01600	0.01800	0.01829
PHRS7	0.01400	0.00600	0.01300	0.01300	0.00500	0.00800	0.00900	0.00971
PHRS8	0.00800	0.00300	0.00700	0.00700	0.00200	0.00400	0.00500	0.00514
PHRS9	0.00400	0.00100	0.00400	0.00400	0.00100	0.00200	0.00300	0.00271

CASE #17 (U21122) : Tp = 1.5 Hm0 = 1.0 Gamma = 3.3 S = 1.0 D = -30

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.68670	0.70000	0.68670	0.68670	0.68670	0.68670	0.65330	0.68383
HMO	0.05509	0.05065	0.04893	0.05310	0.05910	0.06410	0.05231	0.05475
QPG	2.18900	2.07700	2.28700	2.46400	2.60000	2.38000	2.37800	2.33929
DOWNCROSSING WAVE GROUP ANALYSIS								
* WAVES	290.00000	324.00000	278.00000	276.00000	277.00000	276.00000	283.00000	286.28571
T1/3	1.15900	1.06200	1.24000	1.28100	1.24400	1.20400	1.27000	1.20857
H1/3	0.05143	0.04719	0.04518	0.04949	0.05583	0.06096	0.04888	0.05128
HBAR	0.03288	0.03137	0.02957	0.03181	0.03484	0.03865	0.03129	0.03292
HMAX	0.09206	0.08493	0.07367	0.08156	0.08868	0.10890	0.07313	0.08613
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.20300	0.09190	0.27110	0.37150	0.30490	0.29230	0.30920	0.26341
K1	0.46770	0.31590	0.53910	0.62870	0.57100	0.55930	0.57490	0.52237
J1M1	4.54890	4.22170	4.73290	5.17010	4.87180	4.86410	4.83000	4.74850
J1S1	1.28440	1.21580	1.31500	1.41860	1.32920	1.38370	1.29060	1.31961
J2S1	11.35790	9.26800	11.41270	12.81710	12.85670	11.75320	12.24790	11.67336
RHH2	0.01030	0.00000	0.00220	0.00000	0.00000	0.00000	0.09380	0.02661
RHH3	0.00000	0.01700	0.00100	0.00000	0.00000	0.00000	0.00000	0.00257
RHH4	0.00000	0.00180	0.00000	0.00000	0.00000	0.00000	0.00000	0.00026
RHH5	0.05360	0.00000	0.04410	0.03580	0.00970	0.03530	0.00000	0.02550
PHRM1	0.47300	0.51100	0.46300	0.42200	0.44600	0.44000	0.46500	0.46000
PHRM2	0.24900	0.25000	0.24900	0.24400	0.24700	0.24600	0.24900	0.24771
PHRM3	0.13100	0.12200	0.13400	0.14100	0.13700	0.13800	0.13300	0.13371
PHRM4	0.06900	0.06000	0.07200	0.08200	0.07600	0.07700	0.07180	0.07243
PHRM5	0.03600	0.02900	0.03900	0.04700	0.04200	0.04300	0.03800	0.03914
PHRM6	0.01900	0.01400	0.02100	0.02700	0.02300	0.02400	0.02000	0.02114
PHRM7	0.01000	0.00700	0.01100	0.01600	0.01300	0.01400	0.01100	0.01171
PHRM8	0.00500	0.00300	0.00600	0.00900	0.00700	0.00800	0.00600	0.00629
PHRM9	0.00300	0.00200	0.00300	0.00500	0.00400	0.00400	0.00300	0.00343
PHRS1	0.77900	0.82200	0.76000	0.70500	0.75200	0.72300	0.77500	0.75943
PHRS2	0.17200	0.14600	0.18200	0.20800	0.18600	0.20000	0.17400	0.18114
PHRS3	0.03800	0.02600	0.04400	0.06100	0.04600	0.05600	0.03900	0.04429
PHRS4	0.00800	0.00500	0.01000	0.01800	0.01100	0.01500	0.00900	0.01086
PHRS5	0.00200	0.00100	0.00300	0.00500	0.00300	0.00400	0.00200	0.00286
PHRS6	0.00000	0.00000	0.00000	0.00200	0.00100	0.00100	0.00000	0.00071
PHRS7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE #18 (U21222) : Tp = 1.5 Hm0 = 1.0 Gamma = 7.0 S = 1.0 D = -30

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.66330	0.66330	0.66330	0.66330	0.66330	0.66330	0.66330	0.66330
HMO	0.06044	0.05374	0.05588	0.05929	0.06285	0.06503	0.06073	0.05971
OPG	3.22900	3.26600	3.64500	3.77300	3.54100	3.01500	3.92600	3.48500
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	265.00000	271.00000	249.00000	257.00000	248.00000	263.00000	248.00000	257.28571
T1/3	1.32100	1.31300	1.35800	1.37100	1.35200	1.29300	1.38500	1.34186
H1/3	0.05545	0.05037	0.05207	0.05459	0.05967	0.06082	0.05658	0.05565
HBAR	0.03585	0.03290	0.03430	0.03517	0.03842	0.03881	0.03660	0.03601
HMAX	0.10220	0.07334	0.08829	0.08854	0.09901	0.10250	0.09043	0.09204
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.37290	0.41050	0.47380	0.49960	0.46090	0.40250	0.47750	0.44253
K1	0.62980	0.65980	0.70710	0.72530	0.69770	0.65360	0.70980	0.68330
J1M1	2.44480	2.28010	2.63350	2.66550	2.58330	2.46230	2.58870	2.52260
J2M1	5.21960	5.19940	5.72580	5.89230	5.66010	5.34320	5.71760	5.53686
J1S1	1.46520	1.35170	1.58740	1.54190	1.56140	1.47180	1.52010	1.49993
J2S1	13.27720	12.26170	13.01860	15.22710	13.06340	13.30620	13.98400	13.44832
RHH2	0.09270	0.14580	0.11500	0.11810	0.06800	0.02490	0.11670	0.10947
RHH3	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.02530	0.00361
RHH4	0.01500	0.00000	0.00000	0.00000	0.01950	0.00240	0.00000	0.00527
RHH5	0.00390	0.00000	0.00260	0.00300	0.00830	0.11050	0.05420	0.04481
PHRM1	0.40900	0.43900	0.33000	0.37500	0.38700	0.40600	0.38600	0.39743
PHRM2	0.24200	0.24600	0.23600	0.23400	0.23700	0.24100	0.23700	0.23900
PHRM3	0.14300	0.13800	0.14600	0.14600	0.14500	0.14300	0.14500	0.14371
PHRM4	0.08400	0.07800	0.09100	0.09200	0.08900	0.08500	0.08900	0.08686
PHRM5	0.05000	0.04400	0.05600	0.05700	0.05500	0.05100	0.05500	0.05257
PHRM6	0.02900	0.02400	0.03500	0.03600	0.03300	0.03000	0.03400	0.03157
PHRM7	0.01700	0.01400	0.02200	0.02200	0.02100	0.01800	0.02100	0.01929
PHRM8	0.01000	0.00800	0.01300	0.01400	0.01300	0.01100	0.01300	0.01171
PHRM9	0.00600	0.00400	0.00800	0.00900	0.00800	0.00600	0.00800	0.00700
PHRS1	0.68200	0.74000	0.63000	0.64900	0.64000	0.67900	0.65800	0.66829
PHRS2	0.21700	0.19300	0.23300	0.22800	0.23000	0.21800	0.22500	0.22057
PHRS3	0.06900	0.05000	0.06600	0.06800	0.06300	0.02200	0.07700	0.07357
PHRS4	0.02200	0.01300	0.03200	0.02800	0.03000	0.00700	0.02600	0.02471
PHRS5	0.00700	0.00300	0.01200	0.01100	0.01100	0.00700	0.00900	0.00843
PHRS6	0.00200	0.00100	0.00400	0.00300	0.00400	0.00200	0.00300	0.00271
PHRS7	0.00100	0.00000	0.00200	0.00100	0.00100	0.00100	0.00100	0.00100
PHRS8	0.00000	0.00000	0.00100	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE #19 (U22122) : T_p = 1.5 Hm0 = 3.0 Gamma = 3.3 S = 1.0 D = -30

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.65000	0.72000	0.65000	0.65000	0.72000	0.65000	0.65000	0.67000
HMO	0.19250	0.17670	0.18010	0.19600	0.21030	0.20180	0.19590	0.19333
QPG	2.67600	2.04400	2.69000	2.51700	2.17200	2.14000	2.53500	2.39629
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	263.00000	294.00000	258.00000	257.00000	280.00000	275.00000	260.00000	269.57144
T1/3	1.31800	1.16700	1.33600	1.31500	1.25200	1.23500	1.31200	1.27643
H1/3	0.18240	0.16680	0.17120	0.18650	0.19930	0.19640	0.18770	0.18433
HBAR	0.11530	0.10940	0.10850	0.12130	0.12520	0.12170	0.12040	0.11740
HMAX	0.31080	0.25600	0.28520	0.34470	0.36140	0.35120	0.32540	0.31924
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.41450	0.20190	0.40290	0.38130	0.24300	0.23670	0.33600	0.31661
K1	0.66290	0.46640	0.65390	0.63660	0.51090	0.50430	0.63040	0.58077
J1M1	2.50430	2.01390	2.44860	2.44840	2.16890	2.16700	2.40060	2.30739
J2M1	5.41860	4.45760	5.35180	5.27060	4.70070	4.67260	5.21950	5.01306
J1S1	1.50560	1.25520	1.48240	1.52400	1.32860	1.32950	1.48550	1.41583
J2S1	13.27970	9.90360	12.04670	11.69900	11.69960	11.33510	11.78160	11.79219
RHH2	0.03850	0.12520	0.08300	0.03530	0.00000	0.00000	0.10290	0.05499
RHH3	0.00000	0.02390	0.00000	0.00000	0.00000	0.00000	0.00000	0.00341
RHH4	0.00000	0.01960	0.00000	0.00000	0.00000	0.00000	0.00000	0.00280
RHH5	0.05180	0.01880	0.02430	0.03390	0.00000	0.00000	0.00600	0.01926
PHRM1	0.39900	0.49700	0.40800	0.40800	0.46100	0.46100	0.41700	0.43586
PHRM2	0.24000	0.25000	0.24200	0.24200	0.24800	0.24900	0.24300	0.24486
PHRM3	0.14400	0.12600	0.14300	0.14300	0.13400	0.13400	0.14200	0.13800
PHRM4	0.08700	0.06300	0.08500	0.08500	0.07200	0.07200	0.08300	0.07814
PHRM5	0.05200	0.03200	0.05000	0.05000	0.03900	0.03900	0.04800	0.04429
PHRM6	0.03100	0.01600	0.03000	0.03000	0.02100	0.02100	0.02800	0.02529
PHRM7	0.01900	0.00800	0.01800	0.01800	0.01100	0.01100	0.01600	0.01443
PHRM8	0.01100	0.00400	0.01000	0.01000	0.00600	0.00600	0.01000	0.00814
PHRM9	0.00700	0.00200	0.00600	0.00600	0.00300	0.00300	0.00600	0.00471
PHRS1	0.66400	0.79700	0.67500	0.65600	0.75300	0.75200	0.67300	0.71000
PHRS2	0.22300	0.16200	0.22000	0.22600	0.18600	0.18600	0.22000	0.20329
PHRS3	0.07500	0.03300	0.07100	0.07800	0.04600	0.04600	0.07200	0.06014
PHRS4	0.02500	0.00700	0.02300	0.02700	0.01100	0.01100	0.02400	0.01829
PHRS5	0.00800	0.00100	0.00800	0.00900	0.00300	0.00300	0.00800	0.00571
PHRS6	0.00300	0.00000	0.00200	0.00300	0.00100	0.00100	0.00300	0.00186
PHRS7	0.00100	0.00000	0.00100	0.00100	0.00000	0.00000	0.00100	0.00057
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

CASE #20 (U22222) : Tp = 1.5 Hm0 = 3.0 Gamma = 7.0 S = 1.0 D = -30

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.65000	0.71000	0.65000	0.65000	0.65000	0.65000	0.65000	0.65857
HMO	0.19700	0.17310	0.18470	0.19970	0.21310	0.20110	0.20050	0.19560
QPG	3.69800	2.50100	3.60600	3.41800	2.74900	2.65200	3.33800	3.13743
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	243.00000	279.00000	245.00000	248.00000	263.00000	269.00000	248.00000	256.42856
T1/3	1.39400	1.25600	1.38400	1.37200	1.31600	1.27500	1.35100	1.33543
H1/3	0.18850	0.16250	0.17570	0.19130	0.20250	0.19300	0.19010	0.18623
HBAR	0.12040	0.10690	0.11130	0.12190	0.12810	0.11870	0.12120	0.11836
HMAX	0.30630	0.25420	0.29510	0.32020	0.34810	0.29920	0.31390	0.30529
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.52900	0.26850	0.48910	0.48290	0.36370	0.25510	0.45320	0.40679
K1	0.74550	0.53650	0.71800	0.71360	0.62720	0.52330	0.69210	0.65090
J1M1	2.78690	2.11270	2.69510	2.66850	2.41110	2.14920	2.58270	2.48660
J2M1	6.09770	4.69140	5.85680	5.80930	5.19050	4.67990	5.60890	5.41921
J1S1	1.65330	1.31060	1.60680	1.61220	1.45120	1.28500	1.53790	1.49386
J2S1	14.12320	10.49400	14.17280	13.37780	12.81920	12.23180	13.47140	12.95574
RHH2	0.10310	0.21540	0.11610	0.10790	0.04090	0.02580	0.15480	0.10914
RHH3	0.00000	0.05950	0.00000	0.00000	0.00000	0.00000	0.00000	0.00850
RHH4	0.03310	0.06690	0.00760	0.00000	0.03130	0.00000	0.00000	0.01984
RHH5	0.10920	0.04010	0.09390	0.06340	0.07840	0.00000	0.05070	0.06224
PHRM1	0.35900	0.47300	0.37100	0.37500	0.41500	0.46500	0.38700	0.40643
PHRM2	0.23000	0.24900	0.23300	0.23400	0.24300	0.24900	0.23700	0.23929
PHRM3	0.14800	0.13100	0.14700	0.14700	0.14200	0.13300	0.14500	0.14186
PHRM4	0.09500	0.06900	0.09200	0.09200	0.08300	0.07100	0.08900	0.08443
PHRM5	0.06100	0.03600	0.05800	0.05700	0.04900	0.03800	0.05500	0.05057
PHRM6	0.03900	0.01900	0.03700	0.03600	0.02800	0.02000	0.03300	0.03029
PHRM7	0.02500	0.01000	0.02300	0.02200	0.01700	0.01100	0.02100	0.01843
PHRM8	0.01600	0.00500	0.01400	0.01400	0.01000	0.00600	0.01300	0.01114
PHRM9	0.01000	0.00300	0.00900	0.00900	0.00600	0.00300	0.00800	0.00686
PHRS1	0.60500	0.76300	0.62200	0.62000	0.68900	0.77800	0.65000	0.67529
PHRS2	0.23900	0.18100	0.23500	0.23600	0.21400	0.17300	0.22700	0.21500
PHRS3	0.09400	0.04300	0.08900	0.08900	0.06700	0.03800	0.08000	0.07143
PHRS4	0.03700	0.01000	0.03400	0.03400	0.02100	0.00800	0.02800	0.02457
PHRS5	0.01500	0.00200	0.01300	0.01300	0.00600	0.00200	0.01000	0.00871
PHRS6	0.00600	0.00100	0.00500	0.00500	0.00200	0.00000	0.00300	0.00314
PHRS7	0.00200	0.00000	0.00200	0.00200	0.00100	0.00000	0.00100	0.00114
PHRS8	0.00100	0.00000	0.00100	0.00100	0.00000	0.00000	0.00000	0.00043
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE #21 (U31122) : Tp = 2.0 Hm0 = 1.0 Gamma = 3.3 S = 1.0 D = -30

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.50750	0.50750	0.50750	0.50750	0.52250	0.53250	0.51750	0.51464
HMO	0.05832	0.04455	0.05214	0.05467	0.05724	0.05769	0.05405	0.05409
OPG	2.34400	1.86800	2.46400	2.36200	2.16800	1.87300	2.41600	2.21357
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	312.00000	359.00000	300.00000	297.00000	313.00000	341.00000	309.00000	318.71429
T1/3	1.64500	1.40300	1.64900	1.65100	1.55700	1.47000	1.60700	1.56886
H1/3	0.05381	0.04067	0.04905	0.05216	0.05404	0.05354	0.05074	0.05057
HBAR	0.03369	0.02688	0.03080	0.03247	0.03373	0.03371	0.03139	0.03181
HMAX	0.09754	0.06442	0.08495	0.09041	0.10020	0.10020	0.08440	0.08887
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.38500	0.15980	0.32960	0.34480	0.25470	0.21950	0.29230	0.28367
K1	0.63960	0.41560	0.59310	0.60630	0.52290	0.48600	0.55930	0.54611
J1M1	2.46410	1.97930	2.32800	2.36060	2.20070	2.14830	2.24790	2.24699
J2M1	5.29400	4.35570	5.01890	5.09100	4.74430	4.61570	4.85260	4.85317
J1S1	1.45130	1.21150	1.39150	1.42140	1.33390	1.28880	1.32900	1.34677
J2S1	14.97580	10.67670	13.19150	12.97550	12.34940	12.56530	13.45270	12.88384
RHH2	0.02530	0.00000	0.01400	0.00000	0.00000	0.00000	0.00000	0.00561
RHH3	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.05530	0.00000	0.06290	0.01750	0.04090	0.03080	0.04060	0.03543
PHRM1	0.40600	0.50500	0.43000	0.42400	0.45400	0.46500	0.44500	0.44700
PHRM2	0.24100	0.25000	0.24500	0.24400	0.24800	0.24900	0.24700	0.24629
PHRM3	0.14300	0.12400	0.14000	0.14100	0.13500	0.13300	0.13700	0.13614
PHRM4	0.08500	0.06100	0.08000	0.08100	0.07400	0.07100	0.07600	0.07543
PHRM5	0.05100	0.03000	0.04500	0.04700	0.04000	0.03800	0.04200	0.04186
PHRM6	0.03000	0.01500	0.02600	0.02700	0.02200	0.02000	0.02300	0.02329
PHRM7	0.01800	0.00700	0.01500	0.01600	0.01200	0.01100	0.01300	0.01314
PHRM8	0.01100	0.00400	0.00800	0.00900	0.00700	0.00600	0.00700	0.00743
PHRM9	0.00600	0.00200	0.00500	0.00500	0.00400	0.00300	0.00400	0.00414
PHRS1	0.68900	0.82500	0.71900	0.70400	0.75000	0.77600	0.75200	0.74500
PHRS2	0.21400	0.14400	0.20200	0.20900	0.18800	0.17400	0.18600	0.18814
PHRS3	0.06700	0.02500	0.05700	0.06200	0.04700	0.03900	0.04600	0.04900
PHRS4	0.02100	0.00400	0.01600	0.01800	0.01200	0.00900	0.01100	0.01300
PHRS5	0.00600	0.00100	0.00500	0.00500	0.00300	0.00200	0.00300	0.00357
PHRS6	0.00200	0.00000	0.00100	0.00200	0.00100	0.00000	0.00100	0.00100
PHRS7	0.00100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00014
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE #22 (U31222) : Tp = 2.0 Hm0 = 1.0 Gamma = 7.0 S = 1.0 D = -30

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.51250	0.51250	0.51000	0.51000	0.52250	0.52250	0.51250	0.51464
HMO	0.05812	0.04491	0.05200	0.05403	0.05653	0.05579	0.05341	0.05354
QPG	3.50500	2.33900	3.73200	3.43400	2.95100	2.30700	3.62800	3.12800
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	283.00000	343.00000	278.00000	276.00000	292.00000	323.00000	269.00000	294.85715
T1/3	1.79000	1.52200	1.79700	1.75900	1.67200	1.54300	1.80400	1.69814
H1/3	0.05513	0.04104	0.04959	0.05190	0.05307	0.05257	0.05049	0.05054
H8AR	0.03390	0.02663	0.03055	0.03183	0.03340	0.03239	0.03202	0.03153
HMAX	0.09474	0.07107	0.08496	0.08724	0.09829	0.09240	0.08788	0.08808
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.46700	0.17410	0.50070	0.43210	0.33580	0.19600	0.44640	0.36459
K1	0.70220	0.43350	0.72610	0.67640	0.59850	0.45960	0.68710	0.61191
J2M1	2.65310	2.04850	2.77460	2.56050	2.34930	2.09460	2.58040	2.43729
J2M1	5.75260	4.44910	5.95290	5.52340	5.07350	4.53700	5.62360	5.27316
J1S1	1.56250	1.24300	1.62040	1.45590	1.43900	1.29630	1.55910	1.45374
J2S1	15.56580	11.41170	15.86000	17.17080	12.45460	10.87510	18.79880	14.59097
RHH2	0.08040	0.12800	0.14980	0.06270	0.04760	0.06450	0.17640	0.10134
RHH3	0.00000	0.06630	0.00000	0.00000	0.00000	0.00000	0.06000	0.01804
RHH4	0.00000	0.00000	0.00000	0.00180	0.02220	0.00000	0.00000	0.00469
RHH5	0.04040	0.00000	0.00000	0.00740	0.02390	0.00000	0.00000	0.01596
PHRM1	0.37700	0.48800	0.36000	0.39100	0.42600	0.47700	0.38800	0.41529
PHRM2	0.23500	0.25000	0.23100	0.23800	0.24400	0.24900	0.23700	0.24057
PHRM3	0.14600	0.12800	0.14700	0.14500	0.14000	0.13000	0.14500	0.14014
PHRM4	0.09100	0.06500	0.09400	0.08800	0.08100	0.06800	0.08900	0.08229
PHRM5	0.05700	0.03400	0.06000	0.05400	0.04600	0.03600	0.05500	0.04886
PHRM6	0.03500	0.01700	0.03900	0.03300	0.02700	0.01900	0.03300	0.02900
PHRM7	0.02200	0.00900	0.02500	0.02000	0.01500	0.01000	0.02000	0.01729
PHRM8	0.01400	0.00400	0.01600	0.01200	0.00900	0.00500	0.01300	0.01043
PHRM9	0.00900	0.00200	0.01000	0.00700	0.00500	0.00300	0.00800	0.00629
PHRS1	0.64000	0.80400	0.61700	0.68700	0.69500	0.77100	0.64100	0.69357
PHRS2	0.23000	0.15700	0.23600	0.21500	0.21200	0.17600	0.23000	0.20800
PHRS3	0.08300	0.03100	0.09000	0.06700	0.06500	0.04000	0.08200	0.06543
PHRS4	0.03000	0.00600	0.03500	0.02100	0.02000	0.00900	0.03000	0.02157
PHRS5	0.01100	0.00100	0.01300	0.00700	0.00600	0.00200	0.01100	0.00729
PHRS6	0.00400	0.00000	0.00500	0.00200	0.00200	0.00000	0.00400	0.00243
PHRS7	0.00100	0.00000	0.00200	0.00100	0.00100	0.00000	0.00100	0.00086
PHRS8	0.00100	0.00000	0.00100	0.00000	0.00000	0.00000	0.00000	0.00029
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE #23 (U32122) : Tp = 2.0 Hm0 = 3.0 Gamma = 3.3 S = 1.0 D = -30

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.49750	0.50750	0.50750	0.50750	0.52250	0.52250	0.51250	0.51107
HMO	0.19430	0.15210	0.17470	0.18560	0.19020	0.18070	0.18140	0.17986
QPG	2.49400	1.88000	2.50200	2.23300	1.95100	1.80000	2.31500	2.16786
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	290.00000	358.00000	284.00000	296.00000	319.00000	338.00000	302.00000	312.42856
T1/3	1.69400	1.40500	1.71100	1.67600	1.51500	1.47000	1.64300	1.58771
H1/3	0.18380	0.13860	0.16630	0.17500	0.17860	0.16870	0.17130	0.16890
HBAR	0.11540	0.08904	0.10550	0.10960	0.11310	0.10450	0.10590	0.10615
HMAX	0.34100	0.21400	0.27470	0.28680	0.34510	0.30220	0.29870	0.29464
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.38120	0.18820	0.34300	0.38370	0.22980	0.22710	0.30420	0.29389
K1	0.63660	0.45050	0.60470	0.63860	0.49710	0.49420	0.57030	0.55600
JIM1	2.44740	2.01740	2.30800	2.39660	2.16770	2.15860	2.26980	2.25221
J2M1	5.29100	4.43690	5.06180	5.25580	4.65520	4.63570	4.93140	4.89540
J1S1	1.48490	1.20520	1.40690	1.42600	1.32110	1.28120	1.36120	1.35521
J2S1	13.49690	12.18350	12.17720	13.72740	11.70360	13.22720	13.42890	12.84924
RHH2	0.01670	0.09210	0.00000	0.00000	0.00000	0.00000	0.01910	0.01856
RHH3	0.00000	0.08750	0.00000	0.00000	0.00000	0.00000	0.00000	0.01250
RHH4	0.00000	0.09650	0.00000	0.00000	0.00000	0.00000	0.00000	0.01379
RHH5	0.01000	0.00000	0.03190	0.01460	0.02710	0.02640	0.01200	0.01743
PHRM1	0.40900	0.49600	0.43300	0.41700	0.46100	0.46300	0.44100	0.44571
PHRM2	0.24200	0.25000	0.24600	0.24300	0.24900	0.24900	0.24600	0.24643
PHRM3	0.14300	0.12600	0.13900	0.14200	0.13400	0.13300	0.13800	0.13643
PHRM4	0.08500	0.06400	0.07900	0.08300	0.07200	0.07200	0.07700	0.07600
PHRM5	0.05000	0.03200	0.04500	0.04800	0.03900	0.03800	0.04300	0.04214
PHRM6	0.03000	0.01600	0.02500	0.02800	0.02100	0.02100	0.02400	0.02357
PHRM7	0.01700	0.00800	0.01400	0.01600	0.01100	0.01100	0.01400	0.01300
PHRM8	0.01000	0.00400	0.00800	0.01000	0.00600	0.00600	0.00800	0.00743
PHRM9	0.00600	0.00200	0.00500	0.00600	0.00300	0.00300	0.00400	0.00414
PHRS1	0.67300	0.83000	0.71100	0.70100	0.75700	0.78100	0.73500	0.74114
PHRS2	0.22000	0.14100	0.20600	0.20900	0.17100	0.17100	0.19500	0.18943
PHRS3	0.07200	0.02400	0.05900	0.06300	0.04500	0.03800	0.05200	0.05043
PHRS4	0.02300	0.00400	0.01700	0.01900	0.01100	0.00800	0.01400	0.01371
PHRS5	0.00800	0.00100	0.00500	0.00600	0.00300	0.00200	0.00400	0.00414
PHRS6	0.00300	0.00000	0.00100	0.00200	0.00100	0.00000	0.00100	0.00114
PHRS7	0.00100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00014
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE #24 (U32222) : Tp = 2.0 Hm0 = 3.0 Gamma = 7.0 S = 1.0 D = -30

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.49750	0.50750	0.50750	0.49750	0.51250	0.49750	0.51250	0.50464
HMO	0.20010	0.15270	0.17880	0.18750	0.18910	0.17740	0.18390	0.18136
QPG	3.67100	2.75500	3.77500	3.26100	2.88100	2.50000	3.49000	3.19043
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	279.00000	332.00000	278.00000	275.00000	296.00000	310.00000	278.00000	292.57144
T1/3	1.81100	1.57000	1.77900	1.76200	1.70300	1.65200	1.74600	1.71757
H1/3	0.18910	0.13900	0.16870	0.17730	0.17850	0.16710	0.17350	0.17047
HBAR	0.11560	0.08836	0.10420	0.11190	0.11220	0.10330	0.10890	0.10635
HMAX	0.35340	0.22720	0.28890	0.30630	0.30780	0.28150	0.29930	0.29491
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.47030	0.32280	0.40680	0.35300	0.35250	0.25960	0.42370	0.36981
K1	0.70460	0.58710	0.65700	0.61320	0.61280	0.52770	0.67000	0.62463
JIM1	2.69420	2.25790	2.49030	2.36790	2.37620	2.19340	2.52440	2.41490
J2M1	5.79750	4.96870	5.40020	5.12340	5.11610	4.73580	5.49080	5.23321
J1S1	1.59720	1.32700	1.46860	1.42830	1.42450	1.30370	1.51270	1.43743
J2S1	16.03600	14.21560	14.88280	12.87950	13.42290	13.10730	14.05150	14.02560
RHH2	0.14980	0.24010	0.05350	0.00800	0.02600	0.01400	0.20350	0.09927
RHH3	0.07940	0.17570	0.00000	0.00000	0.00000	0.00000	0.05890	0.04486
RHH4	0.08060	0.10570	0.00070	0.00000	0.00000	0.00000	0.05790	0.03499
RHH5	0.06840	0.08030	0.07240	0.08210	0.08870	0.02810	0.05510	0.06787
PHRM1	0.37100	0.44300	0.40200	0.42200	0.42100	0.45600	0.39600	0.41586
PHRM2	0.23300	0.24700	0.24000	0.24400	0.24400	0.24800	0.23900	0.24214
PHRM3	0.14700	0.13700	0.14400	0.14100	0.14100	0.13500	0.14400	0.14129
PHRM4	0.09200	0.07700	0.08600	0.08100	0.08200	0.07300	0.08700	0.08257
PHRM5	0.05800	0.04300	0.05200	0.04700	0.04700	0.04000	0.05300	0.04857
PHRM6	0.03600	0.02400	0.03100	0.02700	0.02700	0.02200	0.03200	0.02843
PHRM7	0.02300	0.01300	0.01800	0.01600	0.01600	0.01200	0.01900	0.01671
PHRM8	0.01400	0.00700	0.01100	0.00900	0.00900	0.00600	0.01200	0.00971
PHRM9	0.00900	0.00400	0.00700	0.00500	0.00500	0.00400	0.00700	0.00586
PHRS1	0.62600	0.75400	0.68100	0.70000	0.70200	0.76700	0.66100	0.69871
PHRS2	0.23400	0.18600	0.21700	0.21000	0.20900	0.17900	0.22400	0.20843
PHRS3	0.08800	0.04600	0.06900	0.06300	0.06200	0.04200	0.07600	0.06371
PHRS4	0.03300	0.01100	0.02200	0.01900	0.01900	0.01000	0.02600	0.02000
PHRS5	0.01200	0.00300	0.00700	0.00600	0.00600	0.00200	0.00900	0.00643
PHRS6	0.00500	0.00100	0.00200	0.00200	0.00200	0.00100	0.00300	0.00229
PHRS7	0.00200	0.00000	0.00100	0.00100	0.00100	0.00000	0.00100	0.00071
PHRS8	0.00100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00014
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE #25 (U11311) : $T_p = 1.0$ $H_m0 = 1.0$ $\Gamma_{m0} = 15.0$ $S = 1.0$ $D = 0$

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	1.01500	1.02000	1.02000	1.02000	1.02000	1.02000	1.02000	1.01929
HMO	0.08672	0.08589	0.08589	0.08706	0.08783	0.08875	0.08488	0.08813
QPG	6.71000	7.57900	7.11100	6.35300	7.26100	5.40700	5.71500	6.59086
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	220.00000	218.00000	222.00000	224.00000	220.00000	223.00000	221.00000	221.14285
T1/3	0.91870	0.91120	0.93500	0.94210	0.94210	0.92840	0.93380	0.93019
H1/3	0.09097	0.08011	0.07961	0.08083	0.08204	0.08253	0.07927	0.08219
HBAR	0.05939	0.05303	0.05174	0.05242	0.05318	0.05356	0.05163	0.05354
HMAX	0.14770	0.12520	0.14000	0.13490	0.14310	0.13610	0.14160	0.13894
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.55250	0.56230	0.59160	0.58310	0.59000	0.52860	0.55210	0.56574
K1	0.76110	0.76760	0.78630	0.78090	0.78580	0.74520	0.76090	0.76969
J1M1	2.85000	2.84340	3.07330	2.98820	3.09460	2.79710	2.94600	2.94180
J2M1	6.25000	6.30000	6.68900	6.56700	6.64900	6.08150	6.33180	6.40999
J1S1	1.67200	1.68100	1.82370	1.74770	1.82350	1.63200	1.77090	1.73583
J2S1	14.31720	13.94050	16.08390	15.75900	15.84900	14.65200	14.69070	15.04177
RHH2	0.25060	0.22620	0.23840	0.21900	0.23520	0.17090	0.21120	0.22164
RHH3	0.05200	0.01030	0.02170	0.00000	0.05820	0.00000	0.00070	0.02184
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.35200	0.35100	0.32500	0.33500	0.32300	0.35800	0.33900	0.34043
PHRM2	0.22800	0.22800	0.22000	0.22300	0.21900	0.22400	0.22400	0.22457
PHRM3	0.14800	0.14800	0.14800	0.14800	0.14800	0.14800	0.14800	0.14800
PHRM4	0.09600	0.09600	0.10000	0.09900	0.10000	0.09500	0.09800	0.09771
PHRM5	0.05200	0.05200	0.06700	0.06600	0.06800	0.06100	0.06500	0.06443
PHRM6	0.04000	0.04000	0.04500	0.04400	0.04600	0.03900	0.04300	0.04243
PHRM7	0.02600	0.02600	0.03100	0.02900	0.03100	0.02500	0.02800	0.02800
PHRM8	0.01700	0.01700	0.02100	0.01900	0.02100	0.01600	0.01900	0.01857
PHRM9	0.01100	0.01100	0.01400	0.01300	0.01400	0.01200	0.01200	0.01214
PHRS1	0.59500	0.59500	0.54800	0.57200	0.54800	0.61300	0.56500	0.57700
PHRS2	0.24000	0.24100	0.24800	0.24500	0.24800	0.23700	0.24600	0.24357
PHRS3	0.09700	0.09800	0.11200	0.10500	0.11200	0.09200	0.10700	0.10329
PHRS4	0.04300	0.04300	0.05100	0.04500	0.05100	0.03600	0.04414	0.04700
PHRS5	0.01600	0.01600	0.02300	0.01900	0.02300	0.01400	0.02000	0.01871
PHRS6	0.00500	0.00500	0.01000	0.00800	0.01000	0.00500	0.00900	0.00771
PHRS7	0.00300	0.00300	0.00500	0.00400	0.00500	0.00200	0.00400	0.00371
PHRS8	0.00100	0.00100	0.00200	0.00200	0.00200	0.00100	0.00200	0.00157
PHRS9	0.00000	0.00000	0.00100	0.00100	0.00200	0.00000	0.00100	0.00057

CASE #26 (U12311) : T_p = 1.0 Hmθ = 3.0 Gamma = 15.0 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.98500	0.98500	0.98500	0.98500	1.00500	0.98500	0.98500	0.98786
HMO	0.26830	0.24100	0.23740	0.24550	0.24270	0.24770	0.24520	0.24683
OPG	6.10200	6.24200	5.65800	5.98000	5.85000	5.98900	5.59900	5.91714
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	218.00000	219.00000	216.00000	214.00000	216.00000	213.00000	214.00000	215.71428
T1/3	0.93670	0.94100	0.94770	0.94940	0.94240	0.95150	0.94450	0.94474
H1/3	0.25560	0.23390	0.23300	0.24120	0.23830	0.24220	0.24030	0.24064
HBAR	0.16380	0.14750	0.14850	0.15300	0.15270	0.15450	0.15140	0.15306
HMAX	0.39480	0.38090	0.37980	0.39880	0.34570	0.39050	0.35030	0.37726
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.51940	0.60070	0.56380	0.61220	0.56510	0.60940	0.59480	0.58077
K1	0.73900	0.79210	0.76850	0.79920	0.76940	0.79750	0.78840	0.77916
J1M1	2.68660	3.09760	2.92190	3.13320	2.71990	3.08900	2.87960	2.93254
J2M1	5.95830	6.70400	6.37490	6.85440	6.19460	6.78310	6.48990	6.47989
J1S1	1.56530	1.82450	1.76630	1.90640	1.59240	1.84610	1.64560	1.73523
J2S1	13.96960	15.26790	13.72140	14.58060	13.17000	14.66550	14.50650	14.26893
RHH2	0.20180	0.36550	0.27700	0.34170	0.27080	0.33180	0.32200	0.30151
RHH3	0.11660	0.13450	0.07670	0.12030	0.09570	0.12850	0.08620	0.10836
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.37200	0.32300	0.34200	0.31900	0.36800	0.32400	0.34700	0.34214
PHRM2	0.23400	0.21900	0.22500	0.21700	0.23200	0.21900	0.22700	0.22471
PHRM3	0.14700	0.14800	0.14800	0.14800	0.14700	0.14800	0.14800	0.14771
PHRM4	0.09200	0.10000	0.09700	0.10100	0.09300	0.10000	0.09700	0.09714
PHRM5	0.05800	0.06800	0.06400	0.06900	0.05900	0.06800	0.06300	0.06414
PHRM6	0.03600	0.04600	0.04200	0.04700	0.03700	0.04600	0.04100	0.04214
PHRM7	0.02300	0.03100	0.02800	0.03200	0.02400	0.03100	0.02700	0.02800
PHRM8	0.01400	0.02100	0.01800	0.02200	0.01500	0.02100	0.01800	0.01843
PHRM9	0.00900	0.01400	0.01200	0.01500	0.00900	0.01400	0.01100	0.01200
PHRS1	0.63900	0.54800	0.56600	0.52500	0.62800	0.54200	0.60800	0.57943
PHRS2	0.23100	0.24800	0.24600	0.24900	0.23400	0.24800	0.23800	0.24200
PHRS3	0.08300	0.11200	0.10700	0.11900	0.08700	0.11400	0.09400	0.10229
PHRS4	0.03000	0.05100	0.04600	0.05600	0.03200	0.05200	0.03700	0.04343
PHRS5	0.01100	0.02300	0.02000	0.02700	0.01200	0.02400	0.01400	0.01871
PHRS6	0.00400	0.01000	0.00900	0.01300	0.00400	0.01100	0.00600	0.00814
PHRS7	0.00100	0.00500	0.00400	0.00600	0.00200	0.00500	0.00200	0.00357
PHRS8	0.00100	0.00200	0.00200	0.00300	0.00100	0.00200	0.00100	0.00171
PHRS9	0.00000	0.00100	0.00100	0.00100	0.00000	0.00100	0.00000	0.00057

CASE #27 (U111115) : Tp = 1.0 Hm0 = 1.0 Gamma = 3.3 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.99500	0.99500	1.01500	0.99500	1.01500	0.99500	0.99500	1.00071
HMO	0.10100	0.09144	0.08923	0.09239	0.09321	0.08940	0.08910	0.09225
OPG	2.98600	3.00900	3.04700	3.02400	3.05100	2.89900	2.96200	2.99686
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	249.00000	258.00000	249.00000	252.00000	248.00000	254.00000	248.00000	251.14285
T1/3	0.87280	0.85560	0.85730	0.86900	0.85810	0.85780	0.86860	0.86274
H1/3	0.09499	0.08433	0.08343	0.08622	0.08740	0.08325	0.08323	0.08612
HBAR	0.05862	0.05225	0.05191	0.05340	0.05431	0.05153	0.05239	0.05349
HMAX	0.18350	0.17370	0.16580	0.17270	0.18410	0.17120	0.16550	0.17379
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.37710	0.35620	0.40590	0.38980	0.37260	0.37130	0.43430	0.38689
K1	0.63330	0.61590	0.65700	0.64350	0.62950	0.62850	0.67800	0.64081
J1M1	2.46910	2.43000	2.59500	2.51690	2.45420	2.45920	2.61230	2.50017
J2M1	5.26290	5.16390	5.40570	5.31850	5.25360	5.24000	5.56950	5.31630
J1S1	1.46500	1.43390	1.51130	1.48830	1.47680	1.46160	1.56820	1.48644
J2S1	14.65560	14.95030	14.94710	14.73710	14.12750	14.70880	14.54100	14.66677
RHH2								
RHH3								
RHH4								
RHH5								
PHRM1	0.40500	0.41200	0.39100	0.39700	0.40700	0.40700	0.38300	0.40029
PHRM2	0.24100	0.24200	0.23800	0.23900	0.24100	0.24100	0.23600	0.23971
PHRM3	0.14300	0.14300	0.14500	0.14400	0.14300	0.14300	0.14600	0.14386
PHRM4	0.08500	0.08400	0.08800	0.08700	0.08500	0.08500	0.09000	0.08629
PHRM5	0.05100	0.04900	0.05400	0.05200	0.05000	0.05000	0.05600	0.05171
PHRM6	0.03000	0.02900	0.03300	0.03200	0.03000	0.03000	0.03400	0.03114
PHRM7	0.01800	0.01700	0.02000	0.01900	0.01800	0.01800	0.02100	0.01871
PHRM8	0.01100	0.01000	0.01200	0.01100	0.01000	0.01100	0.01300	0.01114
PHRM9	0.00600	0.00600	0.00700	0.00700	0.00600	0.00600	0.00800	0.00657
PHRS1	0.68300	0.69700	0.66200	0.67200	0.67000	0.68400	0.63800	0.67329
PHRS2	0.21700	0.21100	0.22400	0.22000	0.21900	0.21600	0.23100	0.21971
PHRS3	0.06900	0.06400	0.07600	0.07200	0.07100	0.06800	0.08400	0.07200
PHRS4	0.02200	0.01900	0.02600	0.02400	0.02300	0.02200	0.03000	0.02371
PHRS5	0.00700	0.00600	0.00900	0.00800	0.00700	0.00700	0.01100	0.00786
PHRS6	0.00200	0.00200	0.00300	0.00300	0.00200	0.00200	0.00400	0.00257
PHRS7	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
PHRS8	0.00100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00100	0.00029
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE #28 (U112114) : Tp = 1.0 Hm0 = 1.0 Gamma = 7.0 S = 1.0 D = 0

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	1.01500	1.01500	1.01500	1.01500	1.01500	1.01500	1.01500	1.01500
HMO	0.10350	0.08454	0.09053	0.09538	0.08546	0.08727	0.08953	0.09089
QPG	3.85000	4.20300	3.83700	3.59600	4.27200	3.79900	3.63600	3.88471
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	237.00000	234.00000	241.00000	244.00000	228.00000	240.00000	238.00000	237.42857
T1/3	0.89490	0.89580	0.89440	0.88300	0.91040	0.89580	0.90150	0.89654
H1/3	0.09763	0.07937	0.08450	0.08975	0.08051	0.08127	0.08406	0.08530
HBAR	0.06128	0.05046	0.05278	0.05612	0.05156	0.05091	0.05341	0.05379
HMAX	0.18120	0.12840	0.14590	0.15420	0.13090	0.13580	0.15230	0.14696
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.42290	0.46120	0.44210	0.39100	0.49680	0.46780	0.45930	0.44873
K1	0.66940	0.69800	0.68390	0.64440	0.72340	0.70280	0.69660	0.68836
J1M1	2.55710	2.59720	2.58160	2.46970	2.69430	2.65660	2.65430	2.60154
J2M1	5.50530	5.62830	5.59320	5.29620	5.85570	5.70630	5.69990	5.61213
J1S1	1.54270	1.51100	1.52020	1.46440	1.58440	1.52970	1.59930	1.53596
J2S1	14.06840	14.27820	15.13540	13.79440	14.01250	15.61410	14.02150	14.41779
RHH2								
RHH3								
RHH4								
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.39100	0.38500	0.38700	0.40500	0.37100	0.37600	0.37700	0.38457
PHRM2	0.23800	0.23700	0.23700	0.24100	0.23300	0.23500	0.23500	0.23657
PHRM3	0.14500	0.14600	0.14500	0.14300	0.14700	0.14600	0.14600	0.14543
PHRM4	0.08800	0.09000	0.08900	0.08500	0.09200	0.09100	0.09100	0.08943
PHRM5	0.05400	0.05500	0.05500	0.05100	0.05800	0.05700	0.05700	0.05529
PHRM6	0.03300	0.03400	0.03300	0.03000	0.03600	0.03500	0.03500	0.03371
PHRM7	0.02000	0.02100	0.02000	0.01800	0.02300	0.02200	0.02200	0.02086
PHRM8	0.01200	0.01300	0.01300	0.01100	0.01400	0.01400	0.01400	0.01300
PHRM9	0.00700	0.00800	0.00800	0.00600	0.00900	0.00900	0.00900	0.00800
PHRS1	0.64800	0.66200	0.65800	0.60300	0.63100	0.65400	0.62500	0.65157
PHRS2	0.22800	0.22400	0.22500	0.21700	0.23300	0.22600	0.23400	0.22671
PHRS3	0.08000	0.07600	0.07700	0.06900	0.08600	0.07800	0.08800	0.07914
PHRS4	0.02800	0.02600	0.02600	0.02200	0.03200	0.02700	0.03300	0.02771
PHRS5	0.01000	0.00900	0.00900	0.00700	0.01200	0.00900	0.01200	0.00971
PHRS6	0.00300	0.00300	0.00300	0.00200	0.00400	0.00300	0.00500	0.00329
PHRS7	0.00100	0.00100	0.00100	0.00100	0.00200	0.00100	0.00200	0.00129
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00100	0.00100	0.00100	0.00043
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE #29 (U121115) : Tp = 1.0 Hm0 = 3.0 Gamma = 3.3 S = 1.0 0 = 0

DESCRIPTION	1	2	3	CHANNEL NUMBER				7	AVG
FREQUENCY DOMAIN ANALYSIS									
FPC	0.99500	1.04500	1.04500	0.98500	1.04500	0.98500	0.98500	0.98500	1.01214
HMO	0.26810	0.22690	0.23600	0.24320	0.23620	0.23610	0.23940	0.23940	0.24084
QPG	3.13600	3.44100	3.19000	3.52300	3.11300	3.45500	3.38800	3.38800	3.32086
DOWNCROSSING WAVE GROUP ANALYSIS									
# WAVES	229.00000	228.00000	230.00000	228.00000	232.00000	229.00000	232.00000	229.71428	
T1/3	0.89590	0.92010	0.91730	0.93270	0.90680	0.93310	0.92660	0.92660	0.91893
H1/3	0.26400	0.22330	0.23020	0.23640	0.23150	0.23010	0.23350	0.23350	0.23557
HBAR	0.16180	0.13860	0.14130	0.14520	0.14400	0.14000	0.14320	0.14320	0.14487
HMAX	0.36760	0.36150	0.36200	0.36580	0.36070	0.36560	0.36380	0.36380	0.36386
KIMUR WAVE GROUP ANALYSIS									
RHH1	0.34920	0.38920	0.39520	0.45380	0.35320	0.44310	0.37200	0.37200	0.39367
K1	0.61000	0.64300	0.64780	0.69260	0.61340	0.68470	0.62900	0.62900	0.64579
J1M1	2.20740	2.42410	2.43430	2.55390	2.32020	2.56530	2.36200	2.36200	2.40960
J2M1	4.93810	5.26630	5.27490	5.58680	5.06220	5.54930	5.16680	5.16680	5.26349
J1S1	1.30470	1.47330	1.44840	1.49750	1.40900	1.50900	1.41270	1.41270	1.43637
J2S1	12.29090	12.26290	12.95950	13.97070	11.71860	14.07500	12.81410	12.81410	12.87024
RHH2									
RHH3									
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.45300	0.41300	0.41100	0.39200	0.43100	0.39000	0.42300	0.42300	0.41614
PHRM2	0.24800	0.24200	0.24200	0.23800	0.24500	0.23800	0.24400	0.24400	0.24243
PHRM3	0.13600	0.14200	0.14300	0.14500	0.14000	0.14500	0.14100	0.14100	0.14171
PHRM4	0.07400	0.08400	0.08400	0.08800	0.07900	0.08900	0.08100	0.08100	0.08271
PHRM5	0.04100	0.04900	0.05000	0.05400	0.04500	0.05400	0.04700	0.04700	0.04857
PHRM6	0.02200	0.02900	0.02900	0.03300	0.02600	0.03300	0.02700	0.02700	0.02843
PHRM7	0.01200	0.01700	0.01700	0.02000	0.01500	0.02000	0.01600	0.01600	0.01671
PHRM8	0.00700	0.01000	0.01000	0.01200	0.00800	0.01200	0.00900	0.00900	0.00971
PHRM9	0.00400	0.00600	0.00600	0.00700	0.00500	0.00700	0.00500	0.00500	0.00571
PHRS1	0.76600	0.67900	0.69000	0.66800	0.71000	0.66300	0.70800	0.70800	0.69771
PHRS2	0.17900	0.21800	0.21400	0.22200	0.20600	0.22400	0.20700	0.20700	0.21000
PHRS3	0.04200	0.07000	0.06600	0.07400	0.06000	0.07500	0.06000	0.06000	0.06386
PHRS4	0.01000	0.02300	0.02000	0.02400	0.01700	0.02500	0.01800	0.01800	0.01957
PHRS5	0.00200	0.00700	0.00600	0.00800	0.00500	0.00900	0.00500	0.00500	0.00600
PHRS6	0.00100	0.00200	0.00200	0.00300	0.00100	0.00300	0.00200	0.00200	0.00257
PHRS7	0.00000	0.00100	0.00100	0.00100	0.00000	0.00100	0.00000	0.00000	0.00057
PHRS8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
CASE #30 (U122114) : Tp = 1.0 Hm0 = 3.0 Gamma = 7.0 S = 1.0 D = 0

DESCRIPTION	1	2	3	CHANNEL NUMBER			6	7	AVG
FREQUENCY DOMAIN ANALYSIS									
FPC	0.99500	0.99500	0.97500	0.97500	0.99500	0.97500	0.97500	0.97500	0.98357
HMO	0.27800	0.23790	0.24570	0.25930	0.23470	0.24630	0.25140	0.25059	0.25059
QPG	4.16600	4.86500	4.11800	4.68800	4.08200	4.53800	4.40100	4.40829	4.40829
DOWNCROSSING WAVE GROUP ANALYSIS									
# WAVES	227.00000	227.00000	225.00000	224.00000	228.00000	222.00000	220.00000	224.71428	224.71428
T1/3	0.92130	0.93260	0.93770	0.94660	0.93210	0.93950	0.93650	0.93519	0.93519
H1/3	0.27350	0.23160	0.24110	0.25480	0.22850	0.24180	0.25030	0.24583	0.24583
HBAR	0.16900	0.14220	0.15090	0.15690	0.14190	0.14960	0.15690	0.15249	0.15249
HMAX	0.45200	0.37240	0.39410	0.38220	0.32960	0.38140	0.37660	0.38404	0.38404
KIMUR WAVE GROUP ANALYSIS									
RHH1	0.38440	0.52010	0.41750	0.51020	0.43430	0.48240	0.50860	0.46536	0.46536
K1	0.63920	0.73940	0.66520	0.73270	0.67800	0.71330	0.73160	0.69991	0.69991
J1M1	2.44560	2.79610	2.48350	2.68910	2.39150	2.63280	2.65360	2.58460	2.58460
J2M1	5.24560	6.05010	5.42070	5.89390	5.38800	5.78670	5.87180	5.66514	5.66514
J1S1	1.47240	1.63010	1.51920	1.56030	1.40320	1.57330	1.59060	1.53559	1.53559
J2S1	12.56730	15.17450	12.31930	14.00940	13.12350	13.62480	12.64410	13.35184	13.35184
RHH2									
RHH3									
RHH4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
RHH5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
PHRM1	0.40900	0.35800	0.40300	0.37200	0.41800	0.38000	0.37700	0.38814	0.38814
PHRM2	0.24200	0.23000	0.24100	0.23400	0.24300	0.23600	0.23500	0.23729	0.23729
PHRM3	0.14300	0.14800	0.14400	0.14700	0.14200	0.14600	0.14600	0.14514	0.14514
PHRM4	0.08400	0.09500	0.08600	0.09200	0.08200	0.09100	0.09100	0.08871	0.08871
PHRM5	0.05000	0.06100	0.05100	0.05800	0.04800	0.05600	0.05700	0.05443	0.05443
PHRM6	0.03000	0.03900	0.03100	0.03600	0.02800	0.03500	0.03500	0.03343	0.03343
PHRM7	0.01700	0.02500	0.01800	0.02300	0.01600	0.02200	0.02200	0.02043	0.02043
PHRM8	0.01000	0.01600	0.01100	0.01400	0.00900	0.01300	0.01400	0.01243	0.01243
PHRM9	0.00600	0.01000	0.00700	0.00900	0.00500	0.00800	0.00900	0.00771	0.00771
PHRS1	0.67900	0.61300	0.65800	0.64100	0.71300	0.63600	0.62900	0.65271	0.65271
PHRS2	0.21800	0.23700	0.22500	0.23000	0.20500	0.23200	0.23300	0.22571	0.22571
PHRS3	0.07000	0.09200	0.07700	0.08300	0.05900	0.08400	0.08700	0.07886	0.07886
PHRS4	0.02200	0.03500	0.02600	0.03000	0.01700	0.03100	0.03200	0.02757	0.02757
PHRS5	0.00700	0.01400	0.00900	0.01100	0.00500	0.01100	0.01200	0.00986	0.00986
PHRS6	0.00200	0.00500	0.00300	0.00400	0.00100	0.00400	0.00400	0.00329	0.00329
PHRS7	0.00100	0.00200	0.00100	0.00100	0.00000	0.00100	0.00200	0.00114	0.00114
PHRS8	0.00100	0.00100	0.00000	0.00000	0.00000	0.00100	0.00100	0.00057	0.00057
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE #31 (U11121) : Tp = 1.0 Hm0 = 1.0 Gamma = 3.3 S = 1.0 D = 30

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	0.99500	0.99500	1.01500	0.99500	0.99500	0.99500	0.99500	0.99786
HMO	0.07160	0.07224	0.06923	0.07214	0.08412	0.07424	0.07143	0.07357
QPG	3.78700	5.08400	3.57000	3.67100	4.56200	3.83700	3.88900	4.05714
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	242.00000	218.00000	241.00000	244.00000	228.00000	225.00000	235.00000	233.28572
T1/3	0.87920	0.92910	0.87750	0.88040	0.90770	0.91190	0.89960	0.89791
H1/3	0.06740	0.06837	0.06440	0.06752	0.07927	0.07020	0.06610	0.06904
HBAR	0.04257	0.04472	0.04141	0.04229	0.05026	0.04476	0.04256	0.04408
HMAX	0.10290	0.11520	0.09460	0.09710	0.12870	0.10560	0.10290	0.10671
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.35900	0.49740	0.40430	0.41990	0.47850	0.46340	0.44500	0.43021
K1	0.61830	0.72380	0.65490	0.66710	0.71040	0.69960	0.68610	0.68003
J1M1	2.28130	2.70780	2.30870	2.34300	2.62360	2.49160	2.47300	2.46129
J2M1	5.06900	5.07640	5.20330	5.29500	5.76740	5.56820	5.50080	5.46859
J1S1	1.35110	1.64260	1.34270	1.33320	1.54220	1.44620	1.43630	1.44204
J2S1	13.03290	12.90030	13.25300	14.52580	14.49670	13.70440	14.08260	13.71367
RHH2	0.06710	0.17610	0.14300	0.15450	0.23930	0.18280	0.15920	0.16029
RHH3	0.11310	0.08130	0.10980	0.10330	0.15150	0.09600	0.09060	0.10651
RHH4	0.01520	0.06820	0.00280	0.03050	0.06390	0.00000	0.00370	0.02633
RHH5	0.00000	0.05540	0.00000	0.00000	0.00000	0.00000	0.04750	0.01470
PHRM1	0.43800	0.36900	0.43300	0.42700	0.38100	0.40100	0.40400	0.40757
PHRM2	0.24600	0.23300	0.24600	0.24500	0.23500	0.24000	0.24100	0.24100
PHRM3	0.13800	0.14700	0.13900	0.14000	0.14600	0.14400	0.14300	0.14243
PHRM4	0.07800	0.09300	0.07900	0.08000	0.09000	0.08600	0.08500	0.08443
PHRM5	0.04400	0.05800	0.04500	0.04600	0.05600	0.05200	0.05100	0.05029
PHRM6	0.02500	0.03700	0.02500	0.02600	0.03500	0.03100	0.03000	0.02986
PHRM7	0.01400	0.02300	0.01400	0.01500	0.02100	0.01800	0.01800	0.01757
PHRM8	0.00800	0.01500	0.00800	0.00900	0.01300	0.01100	0.01100	0.01071
PHRM9	0.00400	0.00900	0.00500	0.00500	0.00800	0.00700	0.00600	0.00629
PHRS1	0.74000	0.60900	0.74500	0.75000	0.64800	0.69100	0.69600	0.69700
PHRS2	0.19200	0.23800	0.19000	0.18700	0.22800	0.21300	0.21100	0.20843
PHRS3	0.05000	0.09300	0.04900	0.04700	0.08000	0.06600	0.06400	0.06414
PHRS4	0.01300	0.03600	0.01200	0.01200	0.02000	0.02000	0.02000	0.02014
PHRS5	0.00300	0.01400	0.00300	0.00300	0.01000	0.00600	0.00600	0.00643
PHRS6	0.00100	0.00600	0.00100	0.00100	0.00300	0.00200	0.00200	0.00229
PHRS7	0.00000	0.00200	0.00000	0.00000	0.00100	0.00100	0.00100	0.00071
PHRS8	0.00000	0.00100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00014
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE #32 (U11221) : SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS
 Tp = 1.0 Hm0 = 1.0 Gamma = 7.0 S = 1.0 D = 30

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	1.01500	1.01500	1.01500	1.01500	1.01500	0.99000	1.01500	1.01143
HMO	0.07172	0.07552	0.06852	0.07273	0.08614	0.07559	0.07390	0.07487
QPG	5.81100	7.26100	5.60300	5.97100	6.46500	5.53000	6.13900	6.11143
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	223.00000	214.00000	222.00000	219.00000	220.00000	220.00000	219.00000	219.57143
T1/3	0.91840	0.94620	0.92310	0.91690	0.92810	0.93470	0.93420	0.92880
H1/3	0.06750	0.07105	0.06415	0.06842	0.08110	0.07115	0.06915	0.07036
HBAR	0.04342	0.04682	0.04162	0.04448	0.05327	0.04589	0.04558	0.04587
HMAX	0.10020	0.10670	0.09735	0.10310	0.12680	0.11580	0.10080	0.10725
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.51380	0.62260	0.49540	0.51660	0.47530	0.45390	0.54440	0.51743
K1	0.73510	0.80570	0.72240	0.73710	0.70820	0.69260	0.75580	0.73670
J1M1	2.60110	2.97530	2.58080	2.61380	2.53860	2.54780	2.58860	2.63503
J2M1	5.84510	6.70740	5.73680	5.87640	5.65000	5.59640	5.99850	5.91580
J1S1	1.48440	1.66780	1.48400	1.51100	1.51420	1.52490	1.48340	1.52424
J2S1	14.10030	14.96280	13.78010	13.70120	12.65710	13.15670	13.68240	13.72009
RHH2	0.25970	0.29630	0.22920	0.19250	0.13430	0.17240	0.28830	0.22467
RHH3	0.16950	0.18380	0.18260	0.09530	0.03500	0.11980	0.13600	0.13171
RHH4	0.09520	0.14800	0.10710	0.08230	0.00000	0.00000	0.01650	0.06416
RHH5	0.09670	0.09760	0.11190	0.09830	0.00000	0.03450	0.02110	0.06573
PHRM1	0.38400	0.33600	0.38700	0.38300	0.39400	0.39300	0.38600	0.38043
PHRM2	0.23700	0.22300	0.23700	0.23600	0.23900	0.23800	0.23700	0.23529
PHRM3	0.14600	0.14800	0.14500	0.14600	0.14500	0.14500	0.14500	0.14571
PHRM4	0.09000	0.09800	0.08900	0.09000	0.08800	0.08800	0.08900	0.09029
PHRM5	0.05500	0.06500	0.05500	0.05600	0.05300	0.05300	0.05500	0.05600
PHRM6	0.03400	0.04300	0.03300	0.03400	0.03200	0.03200	0.03400	0.03457
PHRM7	0.02100	0.02900	0.02000	0.02100	0.02000	0.02000	0.02100	0.02171
PHRM8	0.01300	0.01900	0.01300	0.01300	0.01200	0.01200	0.01300	0.01357
PHRM9	0.00800	0.01300	0.00800	0.00800	0.00700	0.00700	0.00800	0.00843
PHRS1	0.67400	0.60000	0.67400	0.66200	0.66000	0.65600	0.67400	0.65714
PHRS2	0.22000	0.24000	0.22000	0.22400	0.22400	0.22600	0.22000	0.22486
PHRS3	0.07200	0.09600	0.07200	0.07600	0.07600	0.07800	0.07200	0.07743
PHRS4	0.02300	0.03800	0.02300	0.02600	0.02600	0.02700	0.02300	0.02657
PHRS5	0.00800	0.01500	0.00800	0.00900	0.00900	0.00900	0.00800	0.00943
PHRS6	0.00200	0.00600	0.00200	0.00300	0.00300	0.00300	0.00200	0.00300
PHRS7	0.00100	0.00200	0.00100	0.00100	0.00100	0.00100	0.00100	0.00114
PHRS8	0.00000	0.00100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00014
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE #33 (U12121) : Tp = 1.0 Hm0 = 3.0 Gamma = 3.3 S = 1.0 D = 30

SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

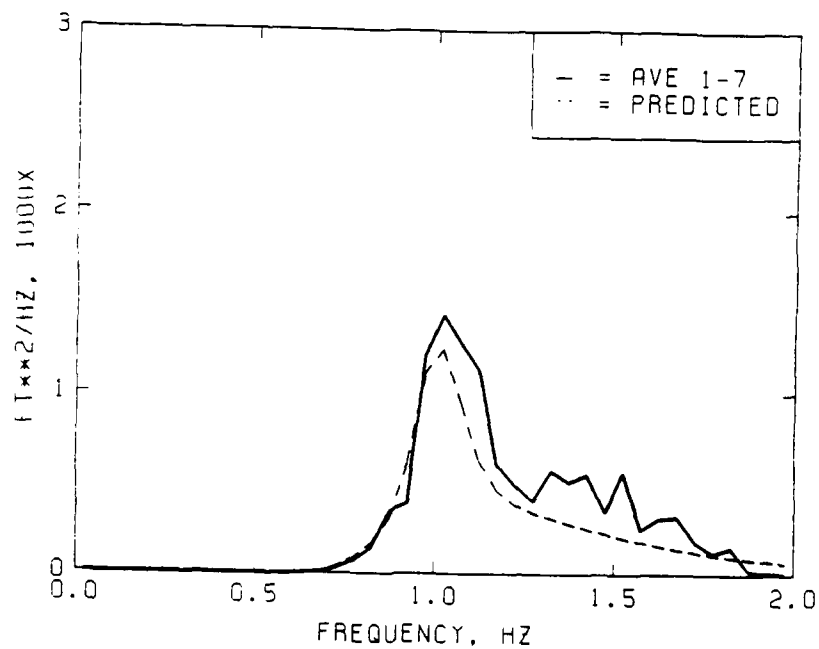
DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	1.00000	1.00000	1.00000	1.00000	1.00000	0.98500	0.99500	0.99714
HMO	0.19400	0.20160	0.19560	0.20250	0.23780	0.21530	0.21460	0.20877
QPG	3.39000	4.20600	3.41900	3.57400	3.95400	3.80500	3.95800	3.75800
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	239.00000	223.00000	236.00000	239.00000	230.00000	228.00000	231.00000	232.28572
T1/3	0.90000	0.92990	0.89450	0.90760	0.91610	0.91760	0.93270	0.91406
H1/3	0.18770	0.19960	0.18890	0.19710	0.21330	0.20780	0.20740	0.20283
HBAR	0.11150	0.12380	0.11640	0.12040	0.14330	0.13090	0.12840	0.12547
HMAX	0.34530	0.30560	0.30450	0.30830	0.40060	0.34250	0.37860	0.34077
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.40300	0.51510	0.41000	0.44090	0.47130	0.40050	0.47610	0.44527
K1	0.65400	0.73610	0.65940	0.68300	0.70530	0.65200	0.70880	0.68551
JM1	2.52800	2.70250	2.46690	2.52900	2.67450	2.44350	2.71320	2.57977
J2M1	5.38540	5.96410	5.38170	5.53280	5.77170	5.33300	5.81780	5.59807
J1S1	1.52000	1.60050	1.46990	1.49320	1.61930	1.48510	1.64750	1.54793
J2S1	13.73300	13.67570	13.56110	13.89960	13.82130	12.52980	14.08640	13.61527
RHH2	0.03070	0.14450	0.01120	0.05680	0.13450	0.13180	0.06520	0.08210
RHH3	0.00000	0.03030	0.00000	0.01410	0.06100	0.00000	0.01330	0.01696
RHH4	0.00000	0.00000	0.00000	0.00000	0.00390	0.00000	0.02910	0.00471
RHH5	0.00000	0.00000	0.02780	0.00000	0.00000	0.00000	0.00000	0.00397
PHRM1	0.39500	0.37000	0.40500	0.39500	0.37400	0.40900	0.36900	0.38814
PHRM2	0.23900	0.23300	0.24100	0.23900	0.23400	0.24200	0.23300	0.23729
PHRM3	0.14500	0.14700	0.14300	0.14500	0.14700	0.14300	0.14700	0.14529
PHRM4	0.08700	0.09300	0.08500	0.08700	0.09200	0.08400	0.09300	0.08871
PHRM5	0.05300	0.05800	0.05100	0.05300	0.05700	0.05000	0.05900	0.05443
PHRM6	0.03200	0.03700	0.03300	0.03200	0.03600	0.02900	0.03700	0.03329
PHRM7	0.01900	0.02300	0.01800	0.01900	0.02300	0.01700	0.02300	0.02029
PHRM8	0.01200	0.01500	0.01100	0.01200	0.01400	0.01000	0.01500	0.01271
PHRM9	0.00700	0.00900	0.00600	0.00700	0.00900	0.00600	0.00900	0.00757
PHRS1	0.65800	0.62500	0.68000	0.67000	0.61800	0.67300	0.60700	0.64729
PHRS2	0.22500	0.23400	0.21700	0.22100	0.23600	0.22000	0.23900	0.22743
PHRS3	0.07700	0.08800	0.07000	0.07300	0.09000	0.07200	0.09400	0.08057
PHRS4	0.02600	0.03300	0.02700	0.02400	0.03500	0.02300	0.03700	0.02857
PHRS5	0.00900	0.01200	0.00800	0.00800	0.01300	0.00800	0.01400	0.01014
PHRS6	0.00300	0.00500	0.00200	0.00300	0.00500	0.00300	0.00600	0.00386
PHRS7	0.00100	0.00200	0.00100	0.00100	0.00200	0.00100	0.00200	0.00143
PHRS8	0.00000	0.00100	0.00000	0.00000	0.00100	0.00000	0.00100	0.00043
PHRS9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

CASE #34 (U12221) : Tp = 1.0 Hm0 = 3.0 Gamma = 7.0 S = 1.0 D = 30

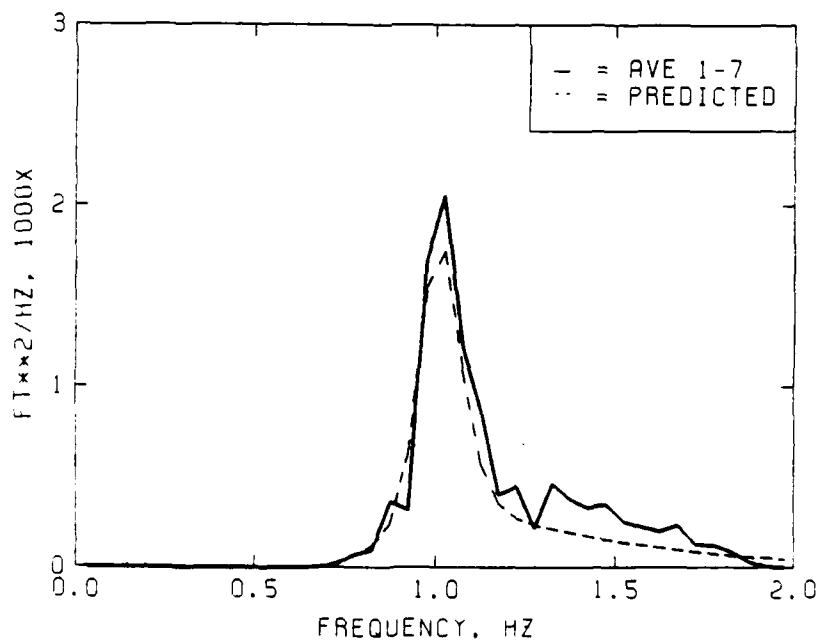
SUMMARY OF TIME & FREQUENCY DOMAIN ANALYSIS RESULTS

DESCRIPTION	1	2	3	4	5	6	7	AVG
FREQUENCY DOMAIN ANALYSIS								
FPC	1.00500	1.00500	0.97500	1.00500	0.99500	0.97500	0.97500	0.99071
HMO	0.19680	0.20660	0.20040	0.20420	0.24510	0.21730	0.21760	0.21257
QPG	4.90400	6.38100	5.10500	5.03500	5.51700	5.36400	5.85700	5.45186
DOWNCROSSING WAVE GROUP ANALYSIS								
# WAVES	224.00000	214.00000	226.00000	234.00000	219.00000	217.00000	213.00000	221.00000
T1/3	0.93310	0.95200	0.94000	0.92320	0.93630	0.95410	0.94960	0.94119
H1/3	0.19230	0.20350	0.19560	0.19650	0.24140	0.21540	0.21610	0.20869
H8AR	0.11990	0.12830	0.12000	0.12010	0.15120	0.13320	0.13460	0.12961
HMAX	0.35180	0.32360	0.33140	0.32950	0.41950	0.34370	0.37300	0.35321
KIMUR WAVE GROUP ANALYSIS								
RHH1	0.54920	0.60940	0.55990	0.52510	0.49510	0.54310	0.57860	0.55149
K1	0.75900	0.79750	0.76600	0.74280	0.72220	0.75490	0.77810	0.76007
J1M1	2.96010	3.10870	2.98910	2.83440	2.77050	2.84200	3.07250	2.93961
J2M1	6.34550	6.75760	6.39190	6.13380	5.90070	6.22930	6.54970	6.32979
J1S1	1.80950	1.84150	1.76750	1.65510	1.69820	1.70130	1.86710	1.76289
J2S1	14.63650	14.69300	15.58790	16.21560	12.95450	14.21900	14.45160	14.67973
RHH2	0.24220	0.27850	0.21750	0.18650	0.24030	0.29100	0.30920	0.25217
RHH3	0.10970	0.11930	0.05390	0.09040	0.12320	0.09670	0.13960	0.10469
RHH4	0.00000	0.00420	0.00000	0.00060	0.00000	0.00000	0.02860	0.00477
RHH5	0.00000	0.00150	0.00000	0.00000	0.00000	0.00000	0.00000	0.00021
PHRM1	0.33800	0.32200	0.33500	0.35300	0.36100	0.35200	0.32500	0.34086
PHRM2	0.22400	0.21800	0.22300	0.22800	0.23100	0.22800	0.22000	0.22457
PHRM3	0.14800	0.14000	0.14800	0.14800	0.14700	0.14800	0.14800	0.14786
PHRM4	0.09800	0.10000	0.09900	0.09600	0.09400	0.09600	0.10000	0.09757
PHRM5	0.06500	0.06800	0.06600	0.06200	0.06000	0.06200	0.06700	0.06429
PHRM6	0.04300	0.04600	0.04400	0.04000	0.03800	0.04000	0.04500	0.04229
PHRM7	0.02800	0.03100	0.02900	0.02600	0.02500	0.02600	0.03100	0.02800
PHRM8	0.01900	0.02100	0.01900	0.01700	0.01600	0.01700	0.02100	0.01857
PHRM9	0.01200	0.01400	0.01300	0.01100	0.01000	0.01100	0.01400	0.01214
PHRS1	0.55300	0.54300	0.56600	0.60400	0.58900	0.58800	0.53600	0.56843
PHRS2	0.24700	0.24800	0.24600	0.23900	0.24200	0.24200	0.24900	0.24471
PHRS3	0.11100	0.11300	0.10700	0.09500	0.10000	0.10000	0.11600	0.10600
PHRS4	0.04900	0.05200	0.04600	0.03700	0.04100	0.04100	0.05400	0.04571
PHRS5	0.02200	0.02400	0.02200	0.01500	0.01700	0.01700	0.02500	0.02000
PHRS6	0.01000	0.01100	0.00900	0.00600	0.00700	0.00700	0.01200	0.00886
PHRS7	0.00400	0.00500	0.00400	0.00200	0.00300	0.00300	0.00500	0.00371
PHRS8	0.00200	0.00200	0.00200	0.00100	0.00100	0.00100	0.00200	0.00157
PHRS9	0.00100	0.00100	0.00100	0.00000	0.00000	0.00000	0.00100	0.00057

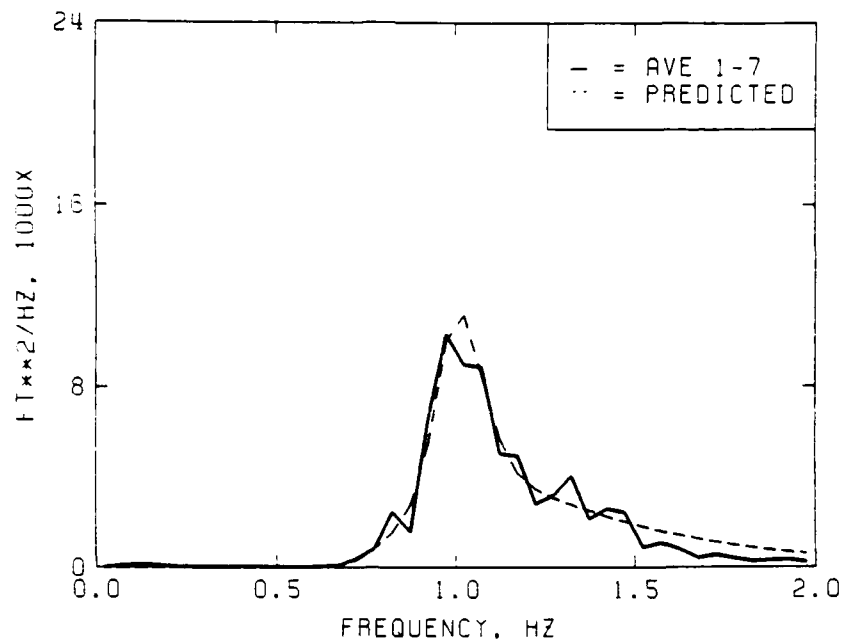
APPENDIX D: FREQUENCY SPECTRA



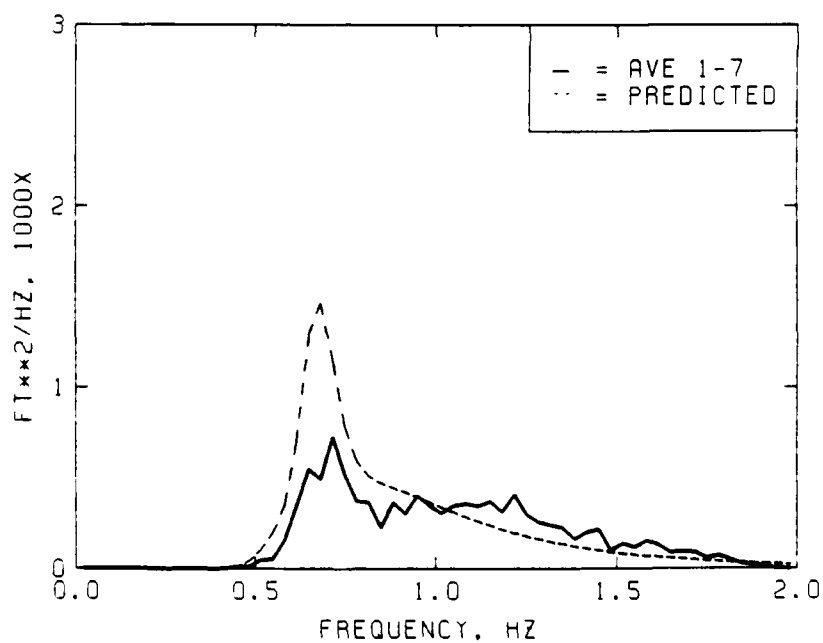
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=3.3, D=0, BW=.05



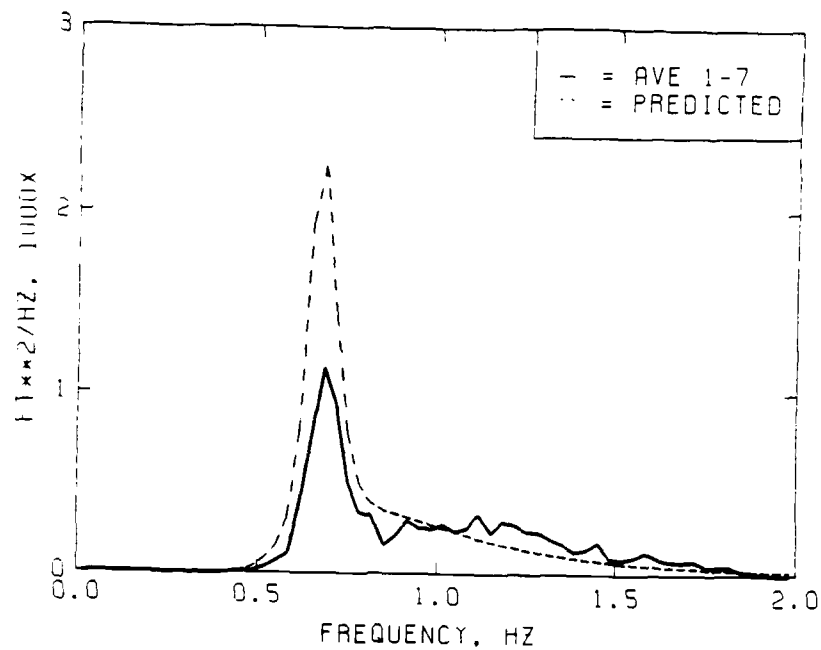
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=7.0, D=0, BW=.05



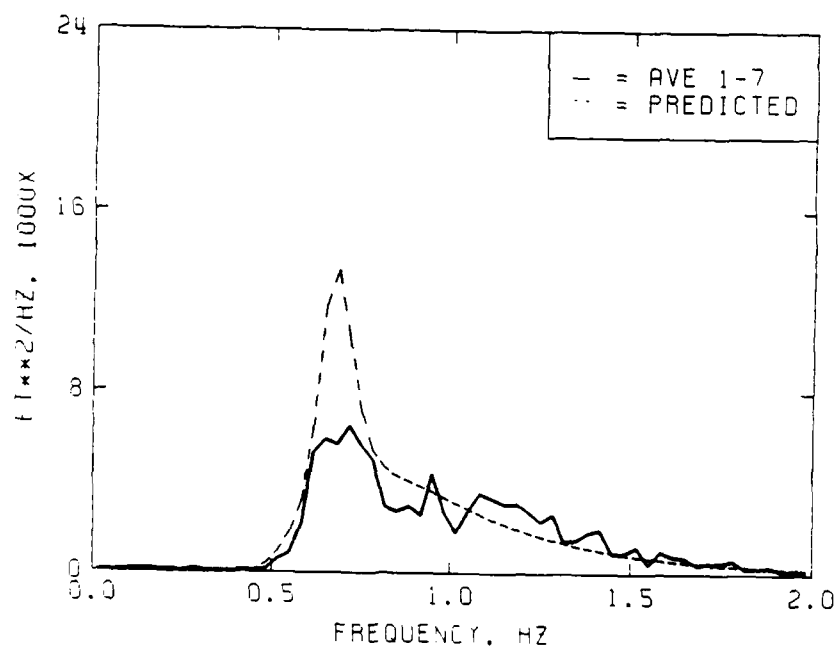
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=3.00, G=3.3, D=0, BW=.05



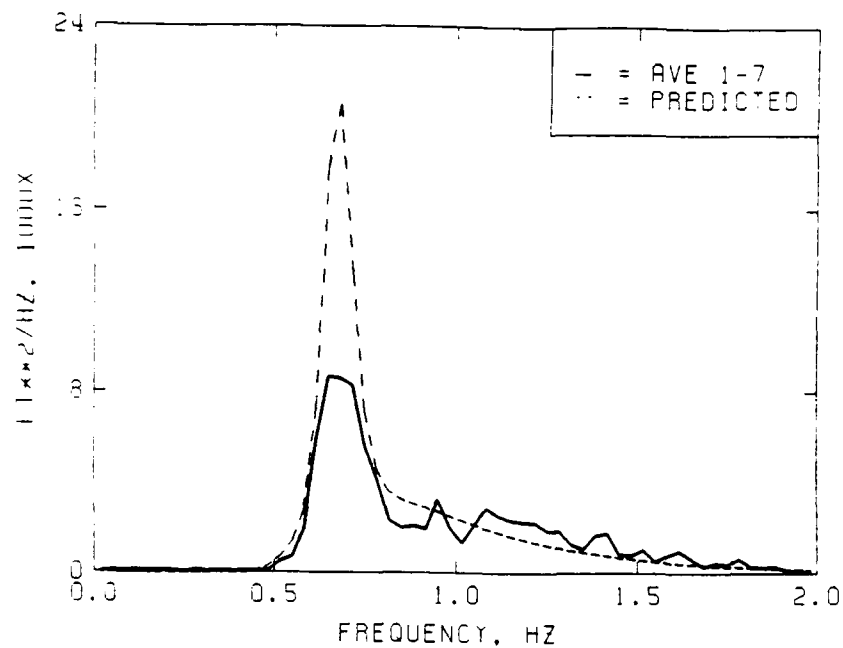
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.50, HMO=1.00, G=3.3, D=0, BW=.0333



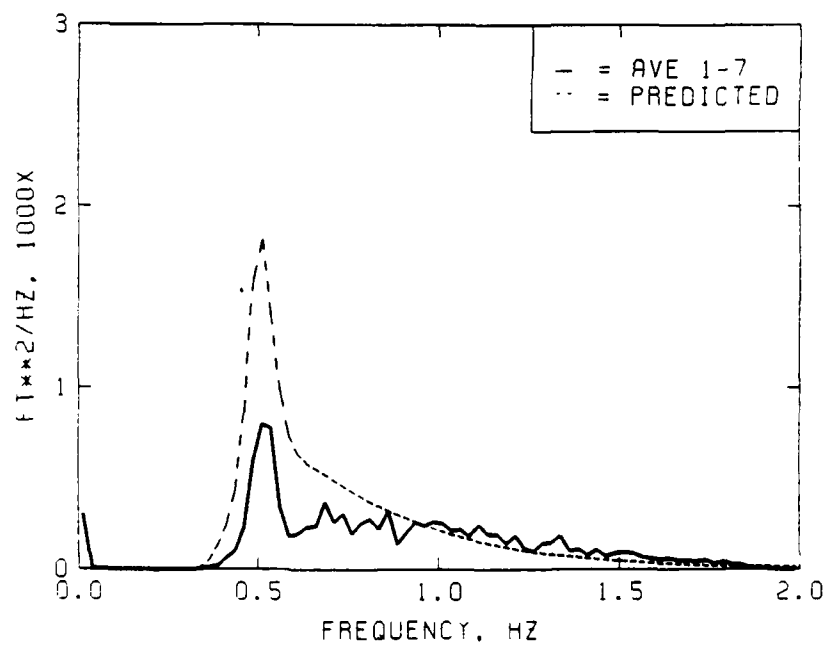
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.50, HMO=1.00, G=7.0, D=0, BW=.0333



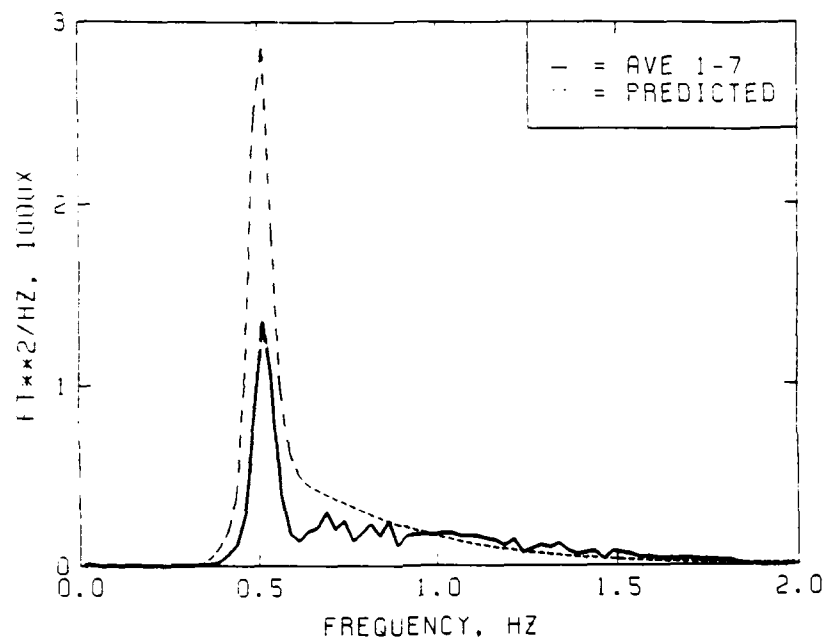
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.50, HMO=3.00, G=3.3, D=0, BW=.0333



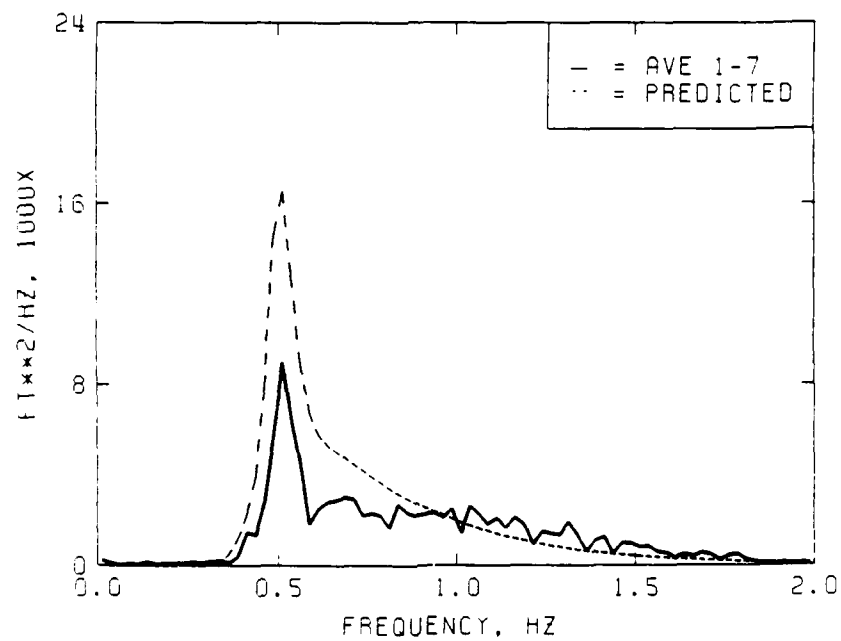
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.50, HMO=3.00, G=7.0, D=0, BW=.0333



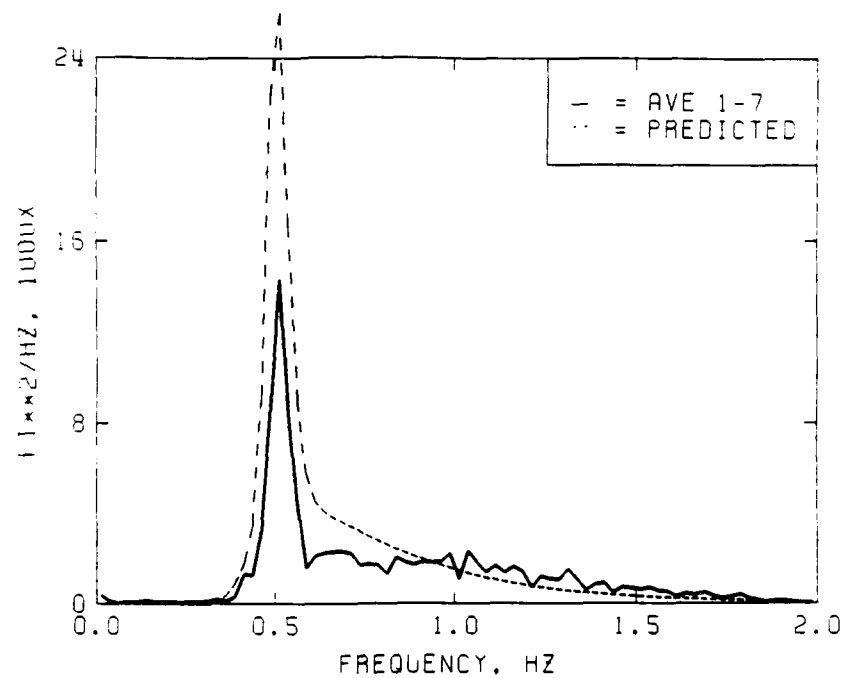
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=2.00, HMO=1.00, G=3.3, D=0, BW=.025



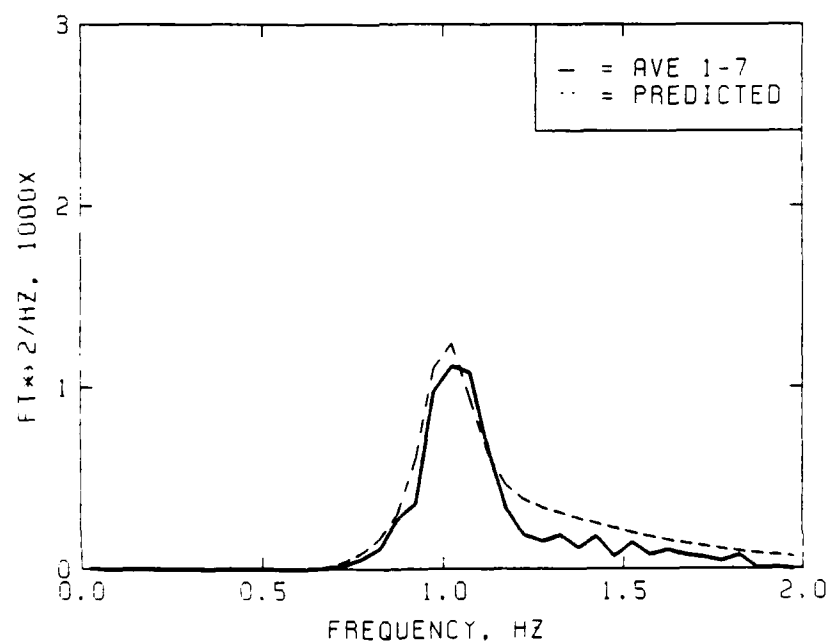
MEASURED VS. PREDICTED FREQUENCY SPECTRA
TP=2.00, HMO=1.00, G=7.0, D=0, BW=.025



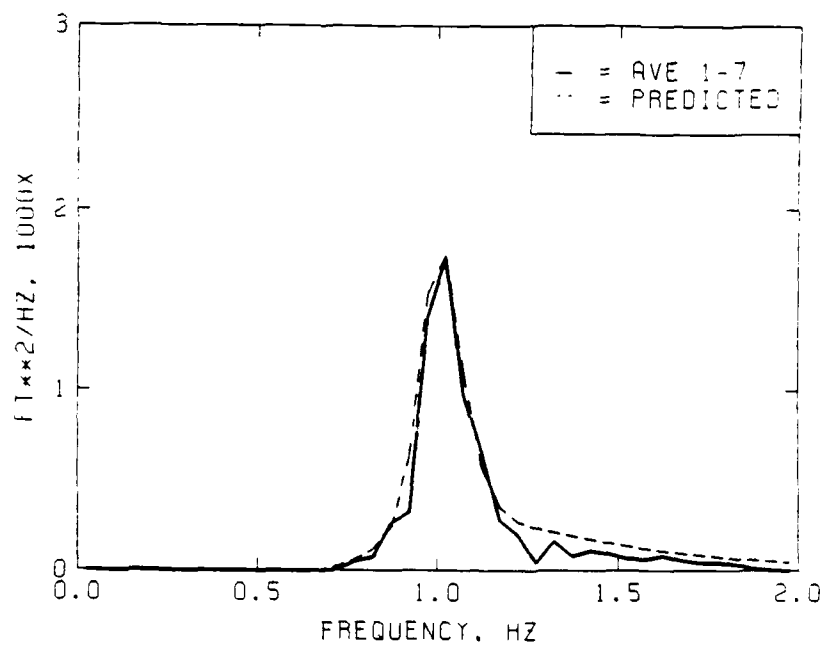
MEASURED VS. PREDICTED FREQUENCY SPECTRA
TP=2.00, HMO=3.00, G=3.3, D=0, BW=.025



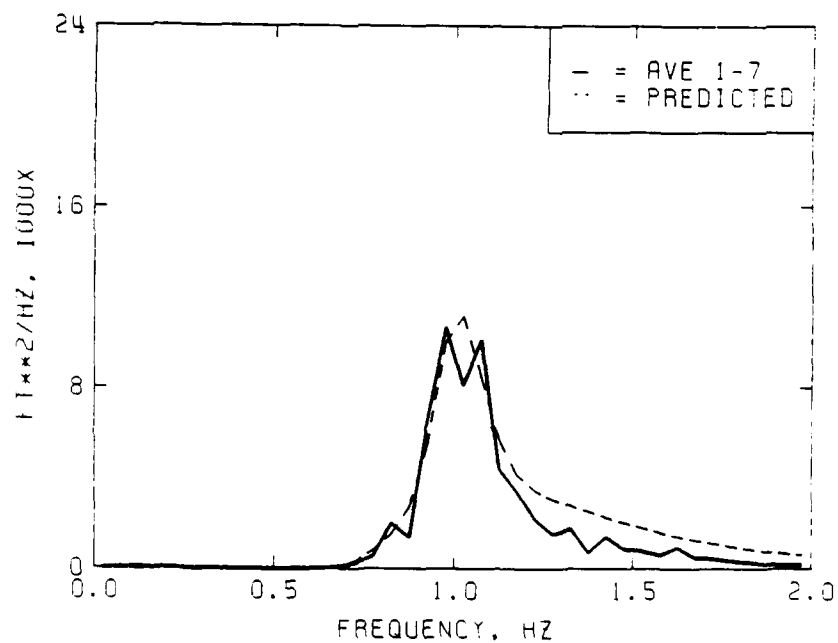
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=2.00, HMO=3.00, G=7.0, D=0, BW=.025



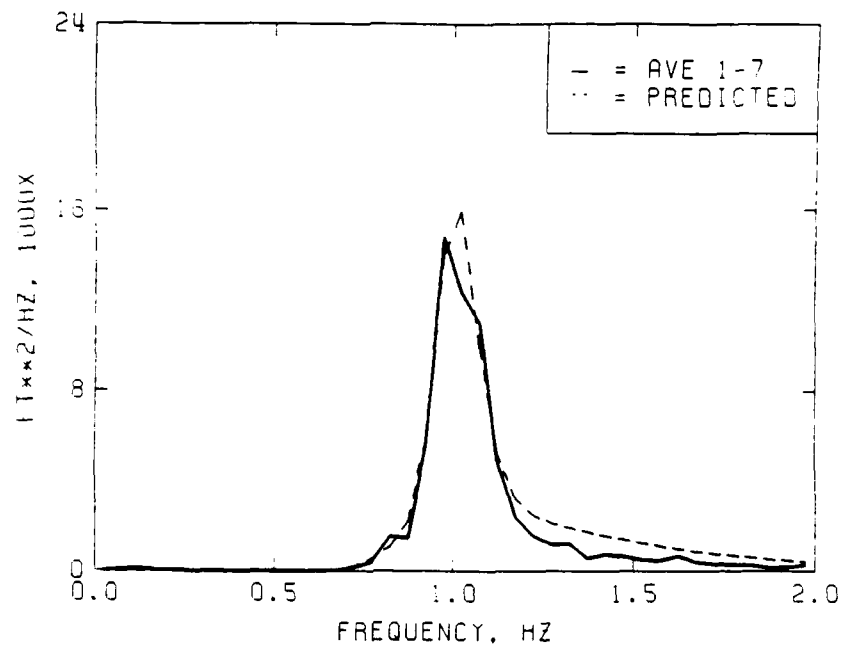
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=3.3, D=-30, BW=.05



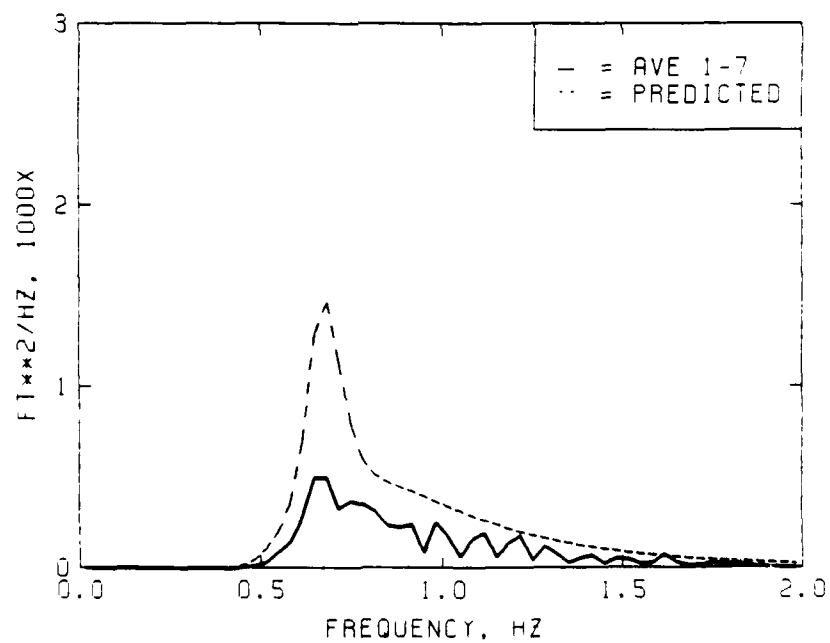
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=7.0, D=-30, BW=.05



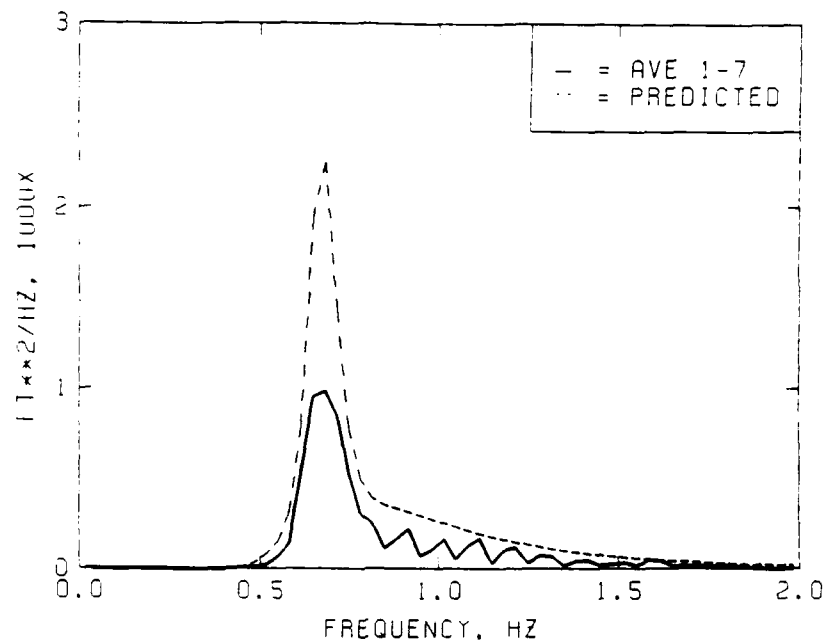
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=3.00, G=3.3, D=-30, BW=.05



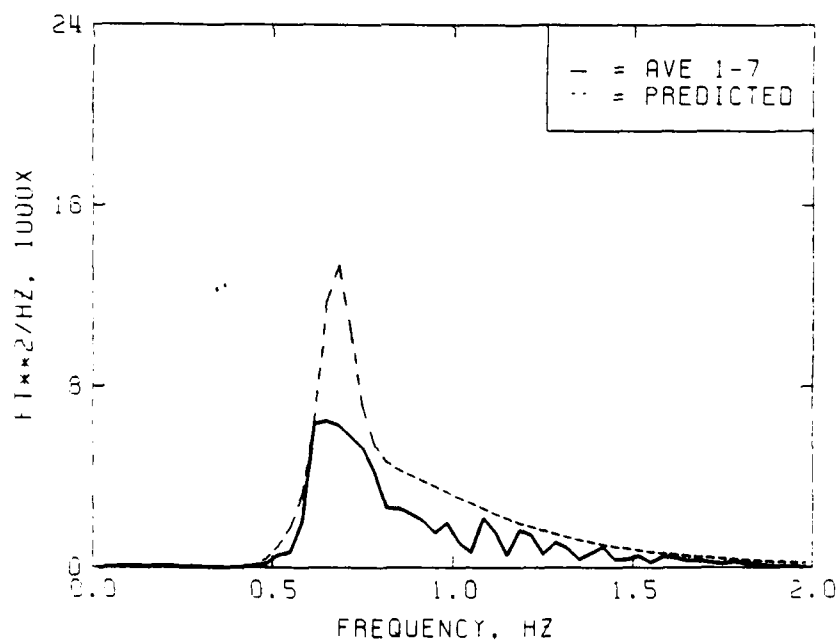
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=3.00, G=7.0, D=-30, BW=.05



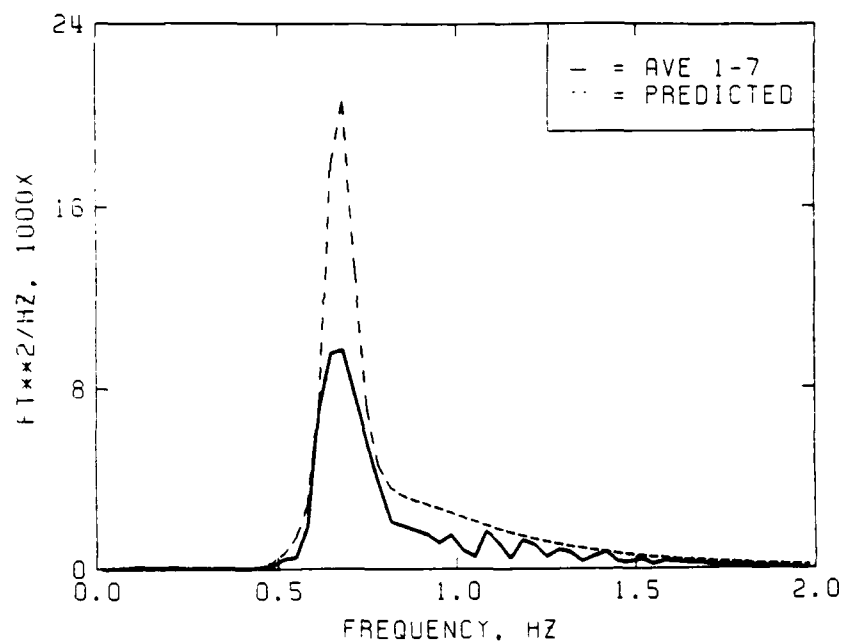
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.50, HMO=1.00, G=3.3, D=-30, BW=.03



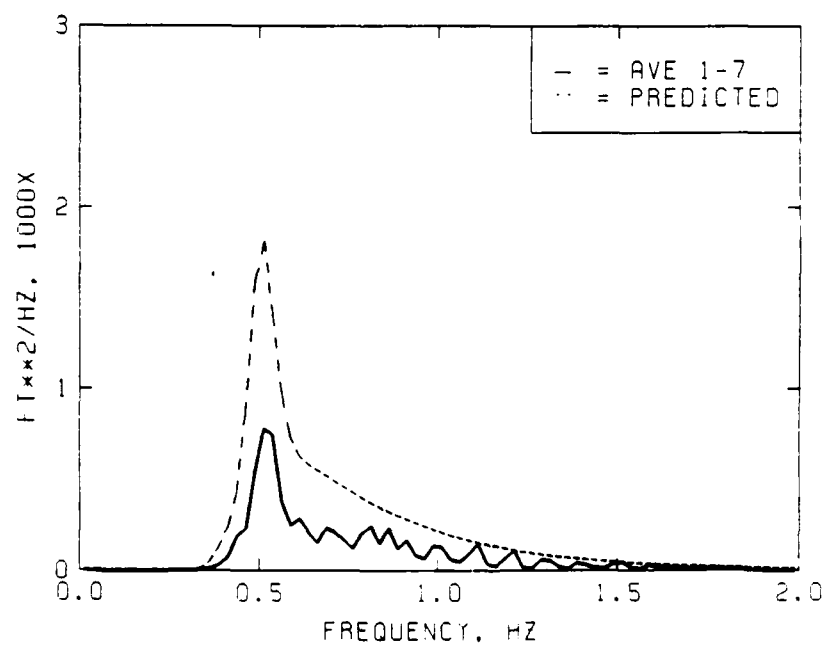
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.50, HMO=1.00, G=7.0, D=-30, BW=.03



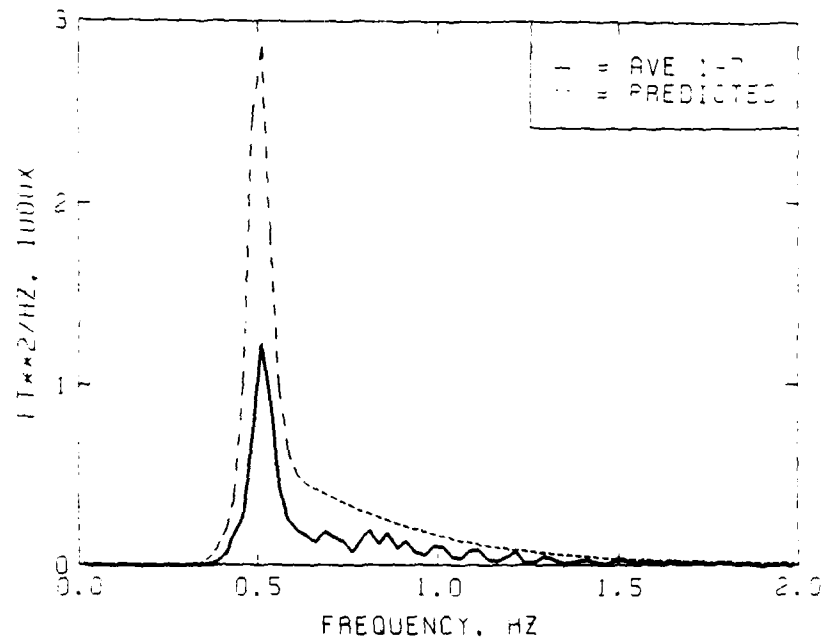
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.50, HMO=3.00, G=3.3, D=-30, BW=.03



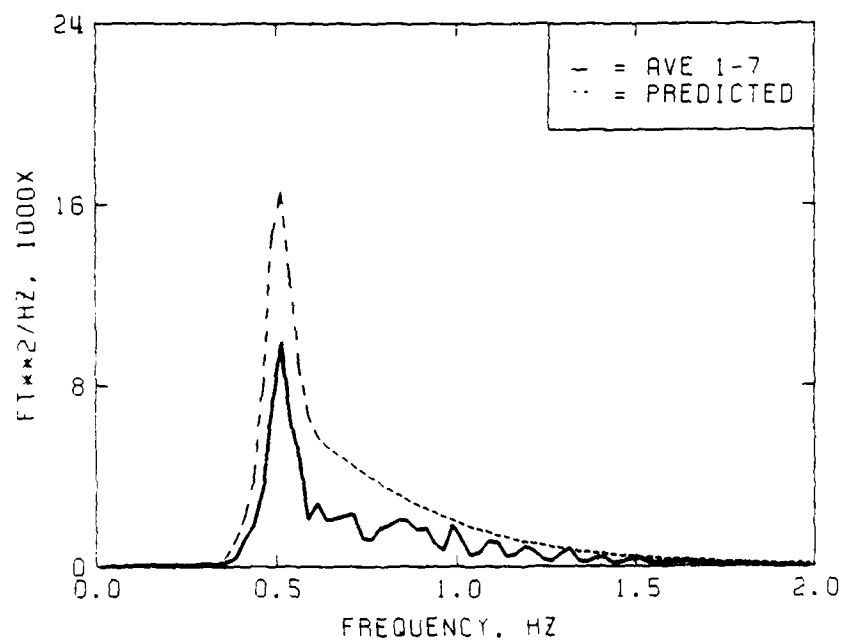
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.50, HMO=3.00, G=7.0, D=-30, BW=.03



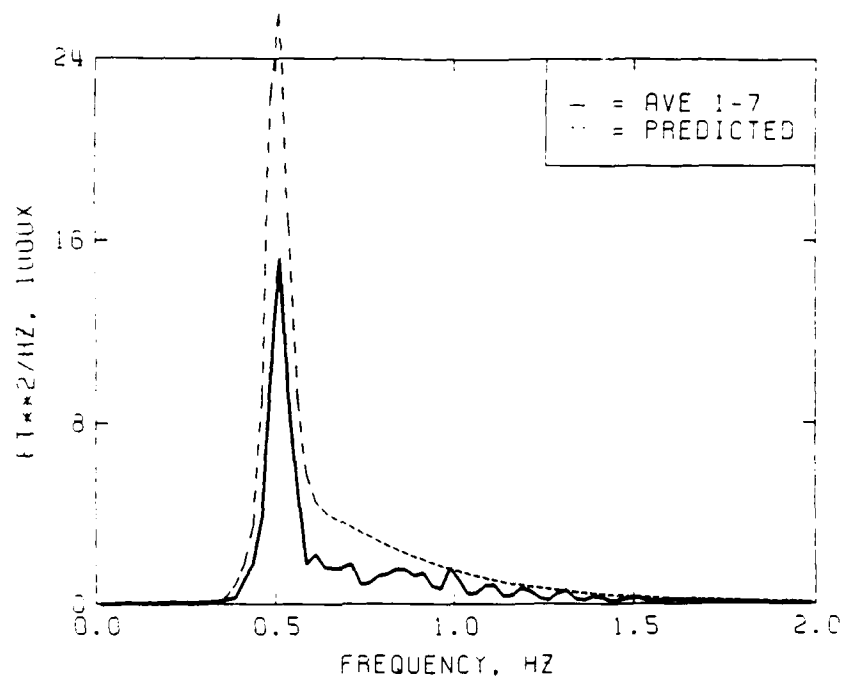
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=2.00, HMO=1.00, G=3.3, D=-30, BW=.02



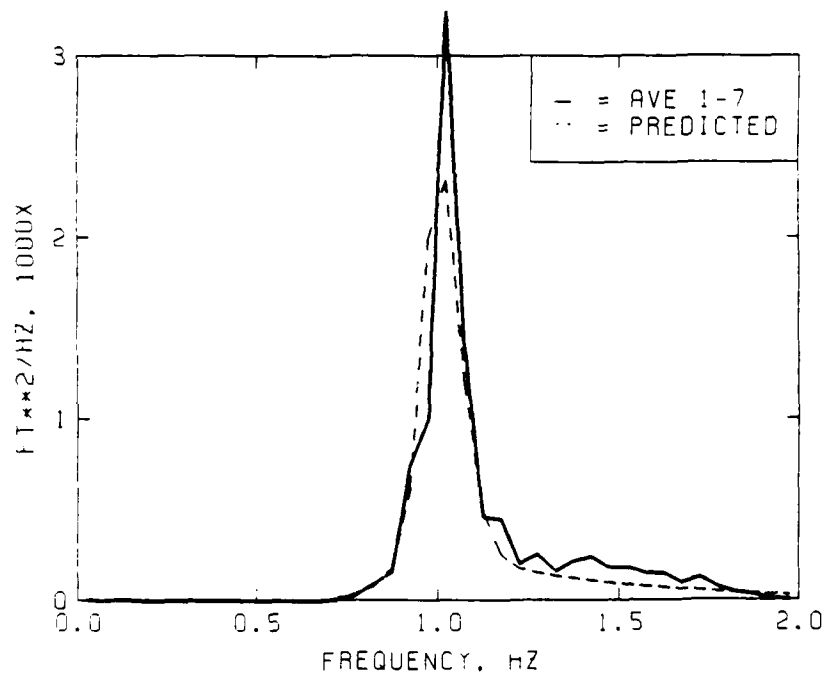
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=2.00, HMO=1.00, G=7.0, D=-30, BW=.02



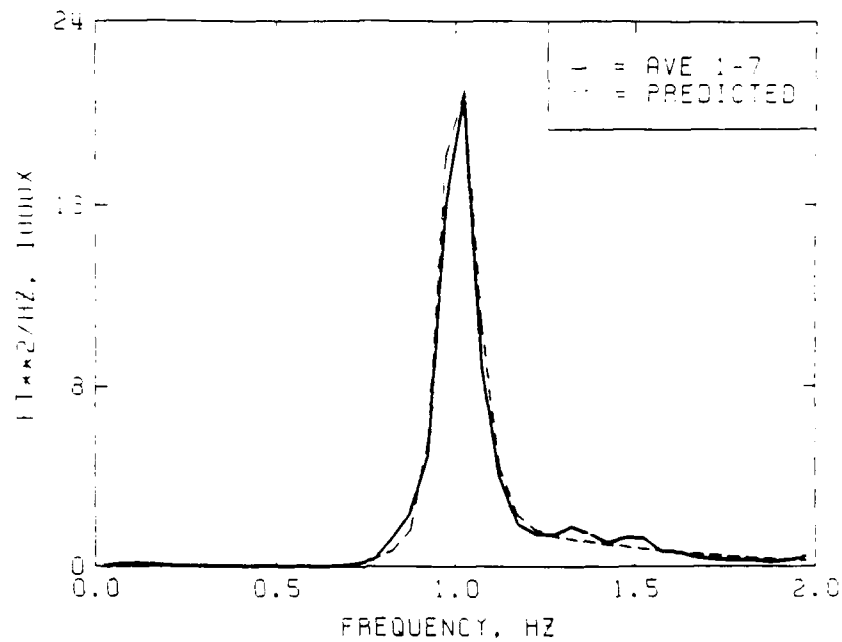
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=2.00, HMO=3.00, G=3.3, D=-30, BW=.02



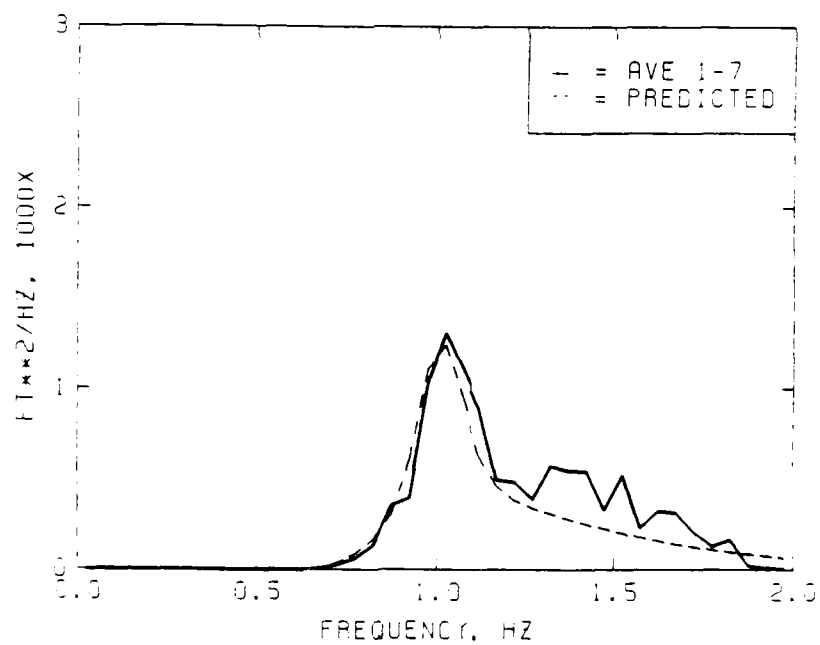
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=2.00, HMO=3.00, G=7.0, D=-30, BW=.02



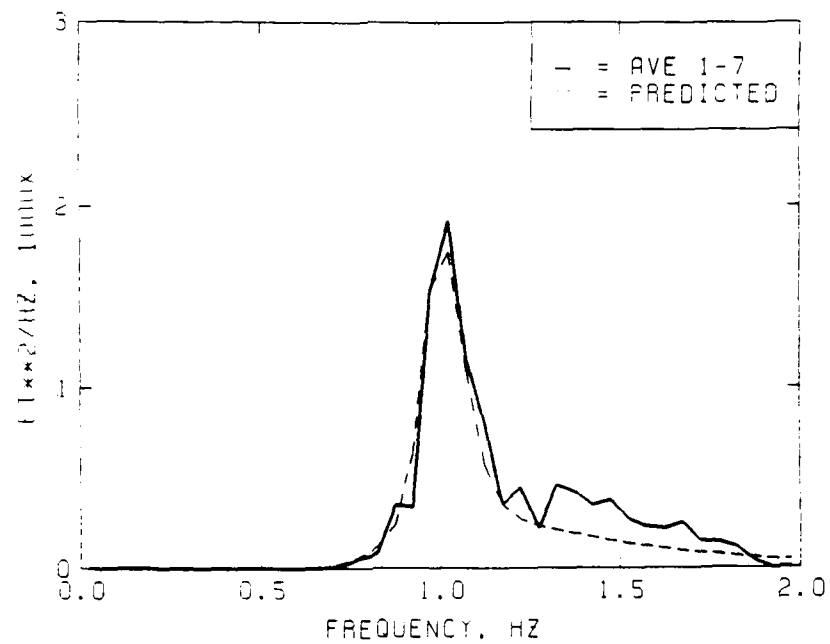
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=15.0, D=0, BW=.05



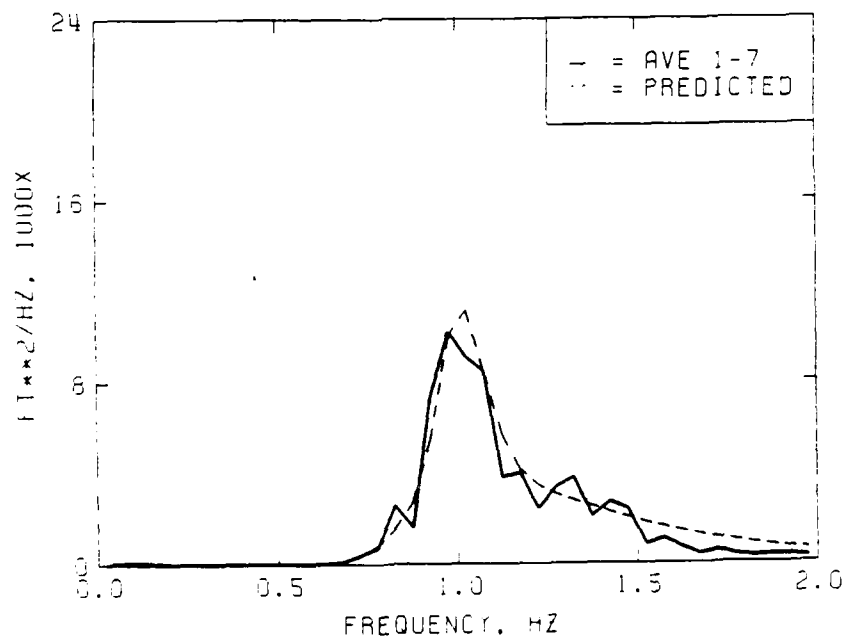
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=3.00, G=15.0, D=0, BW=.05



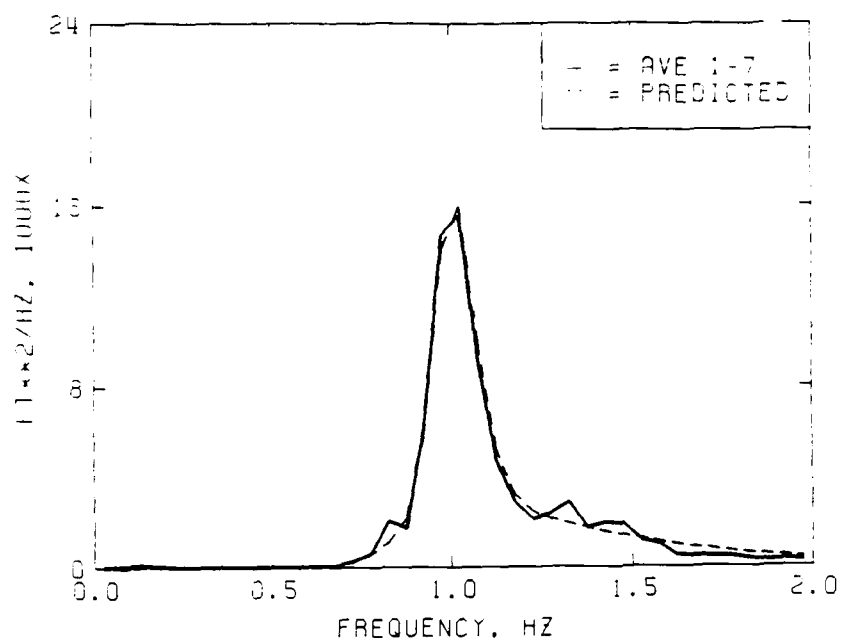
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=3.3, D=0, BW=.05



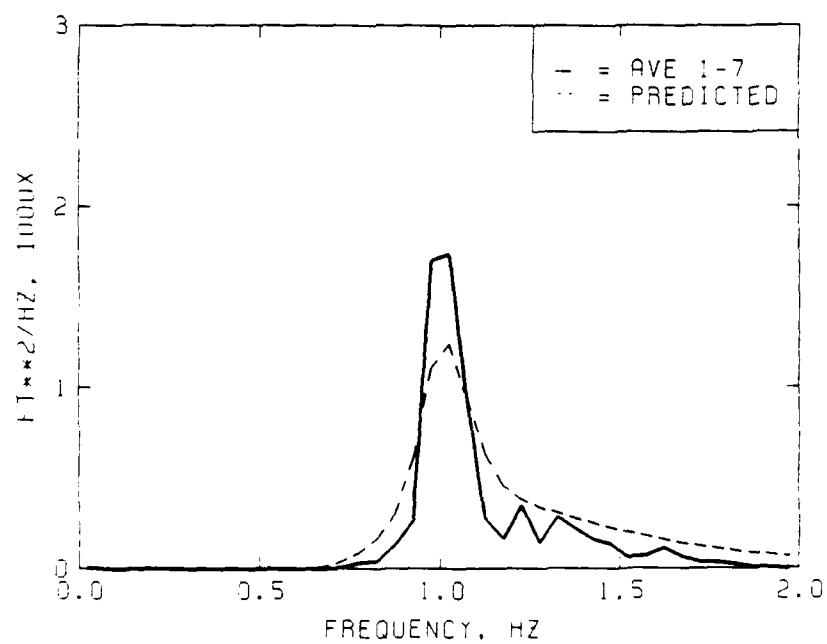
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=7.0, D=0, BW=.05



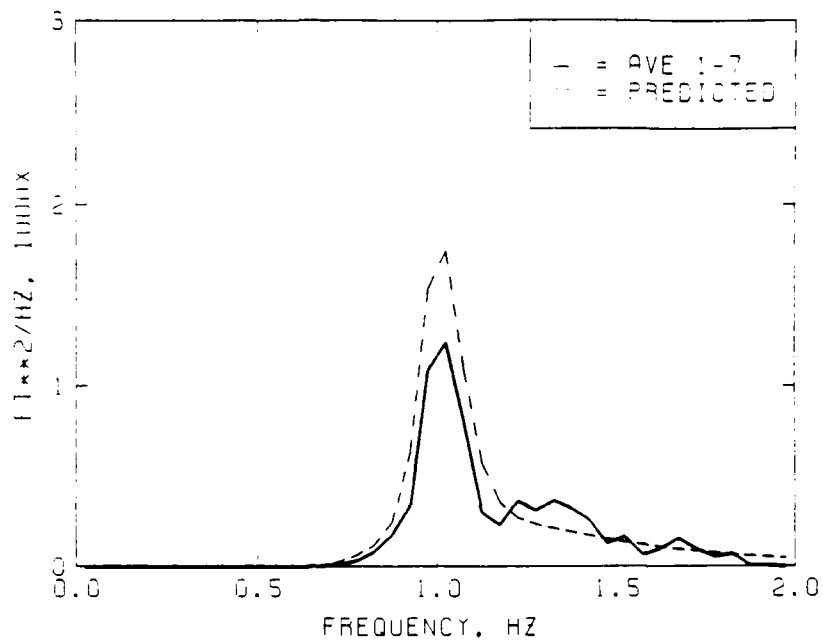
MEASURED VS. PREDICTED FREQUENCY SPECTRA
 TP=1.00, HMO=3.00, G=3.3, D=0, BW=.05



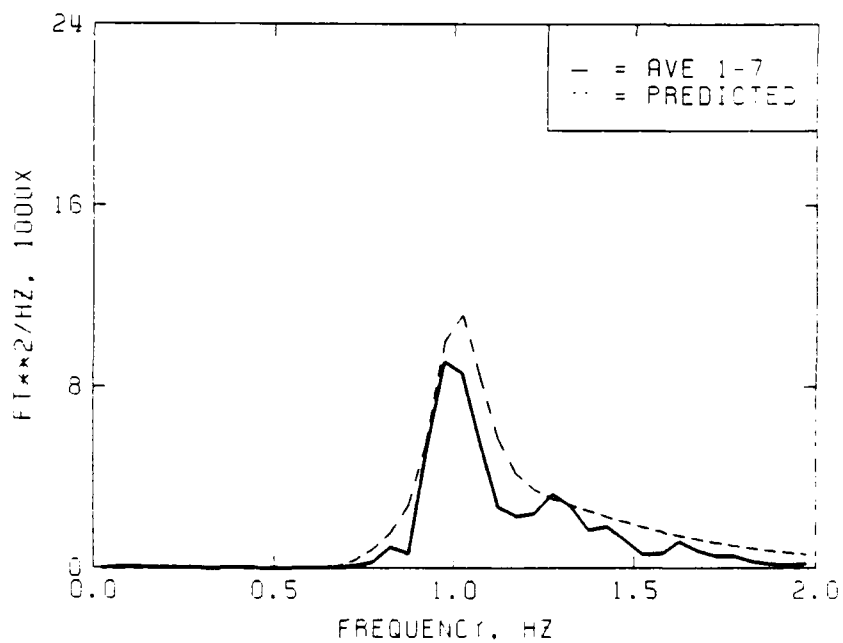
MEASURED VS. PREDICTED FREQUENCY SPECTRA
TP=1.00, HMO=3.00, G=7.0, D=0, BW=.05



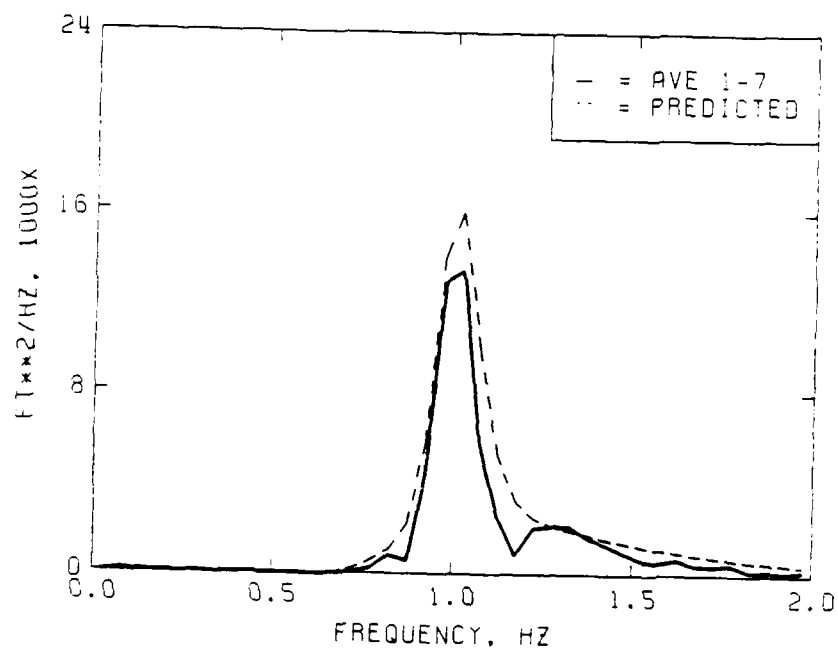
MEASURED VS. PREDICTED FREQUENCY SPECTRA
TP=1.00, HMO=1.00, G=3.3, D=30, BW=.05



MEASURED VS. PREDICTED FREQUENCY SPECTRA
TP=1.00, HMO=1.00, G=7.0, D=30, BW=.05

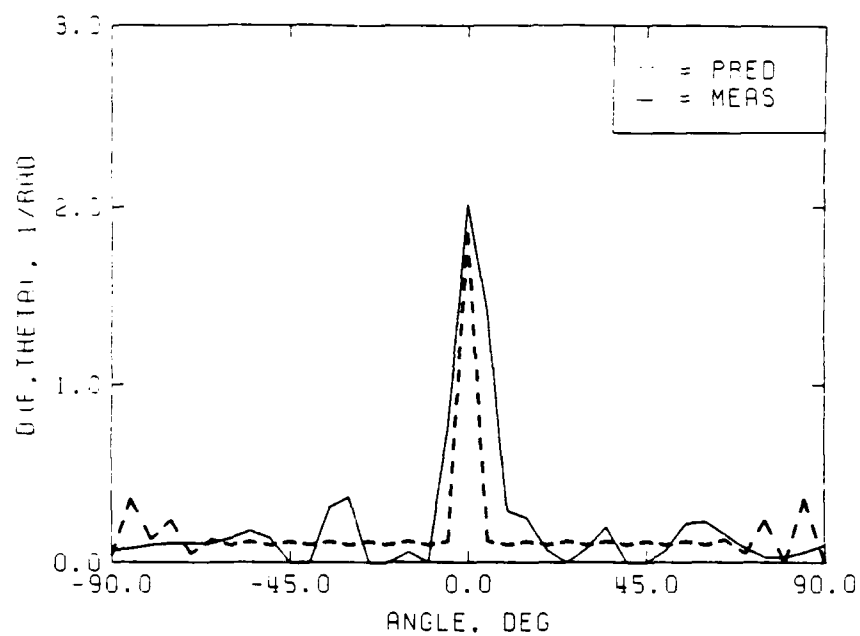


MEASURED VS. PREDICTED FREQUENCY SPECTRA
TP=1.00, HMO=3.00, G=3.3, D=30, BW=.05

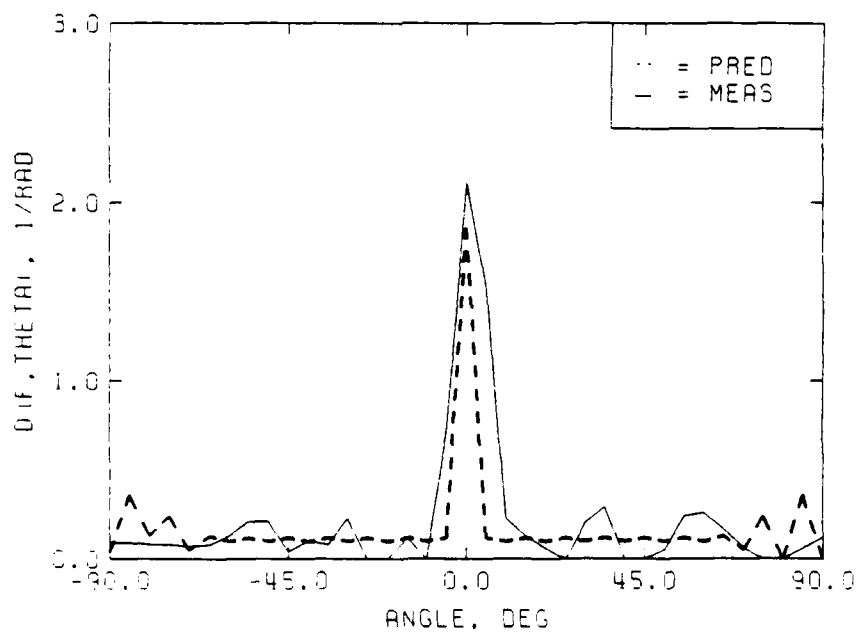


MEASURED VS. PREDICTED FREQUENCY SPECTRA
TP=1.00, HMQ=3.00, G=7.0, D=30, BW=.05

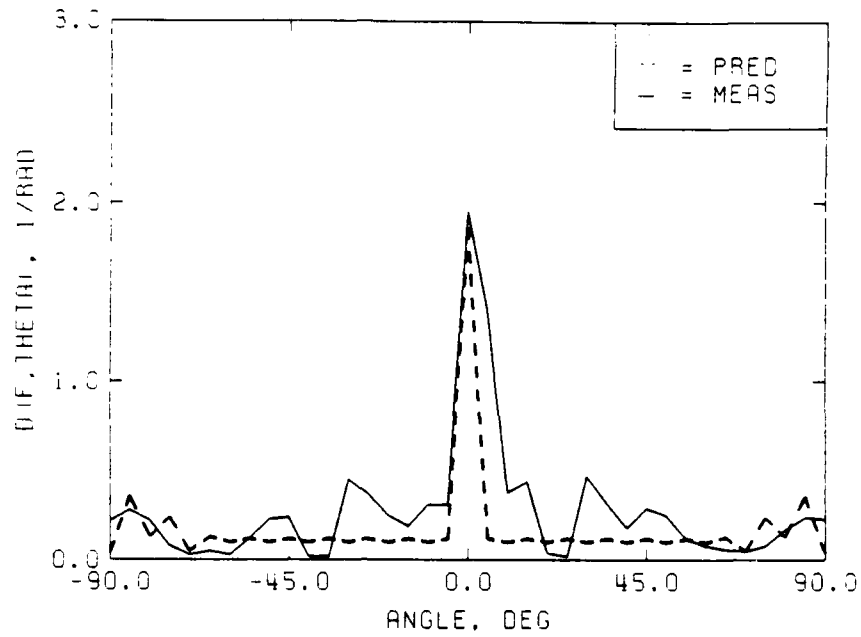
APPENDIX E: DIRECTIONAL SPREADING FUNCTIONS



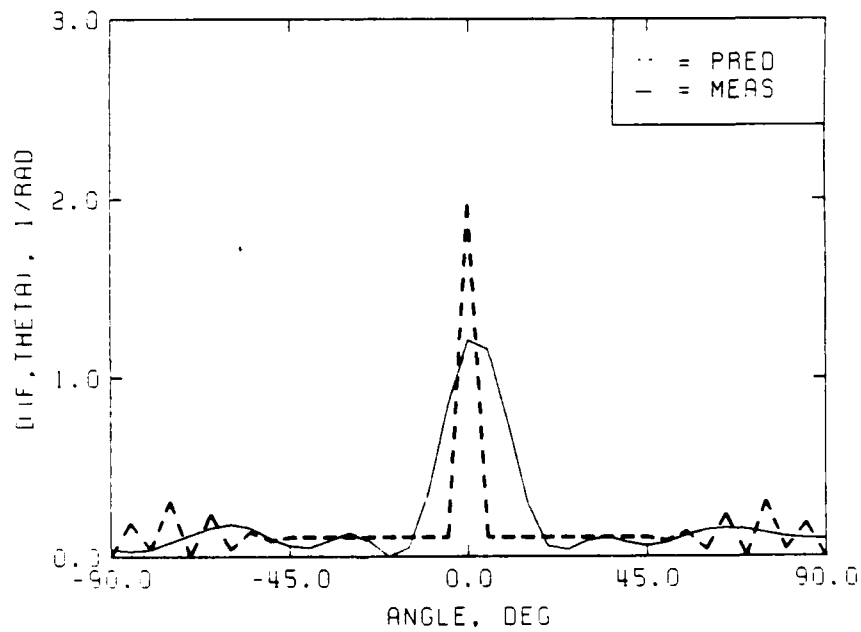
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 1: U11111, FP=1.00, HMO=1, G=3.3, D=0, S=1



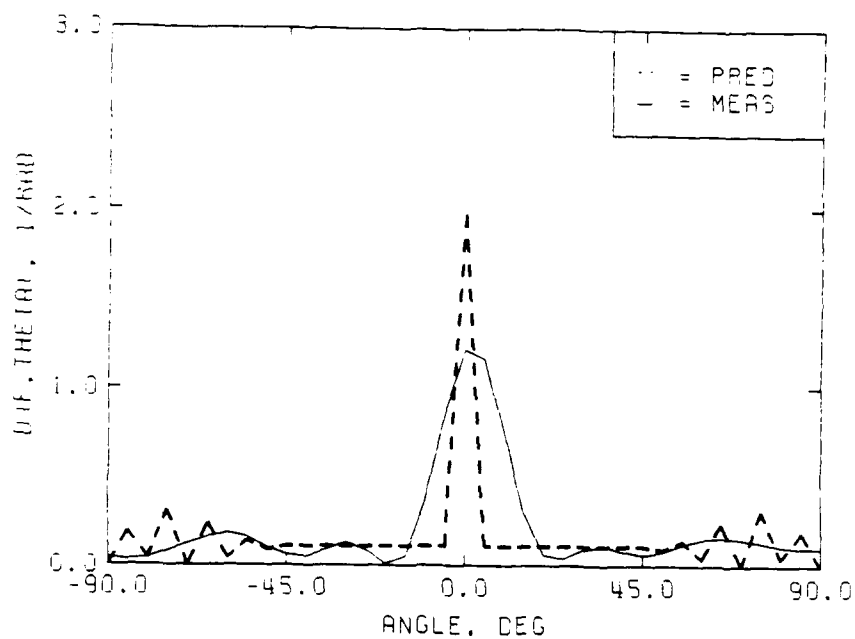
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 2: U11211, FP=1.00, HMO=1, G=7.0, D=0, S=1



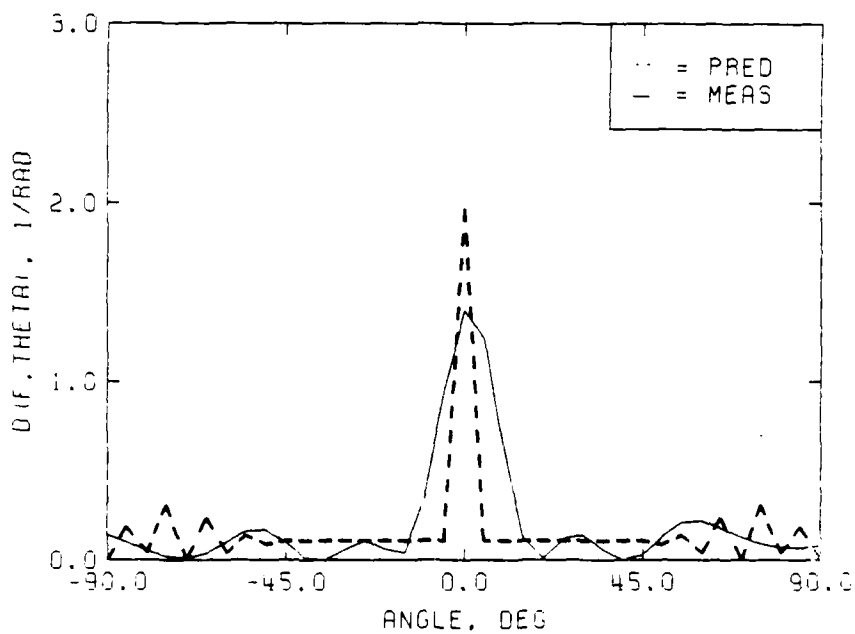
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 3: U12111, FP=1.00, HMO=3, G=3.3, D=0, S=1



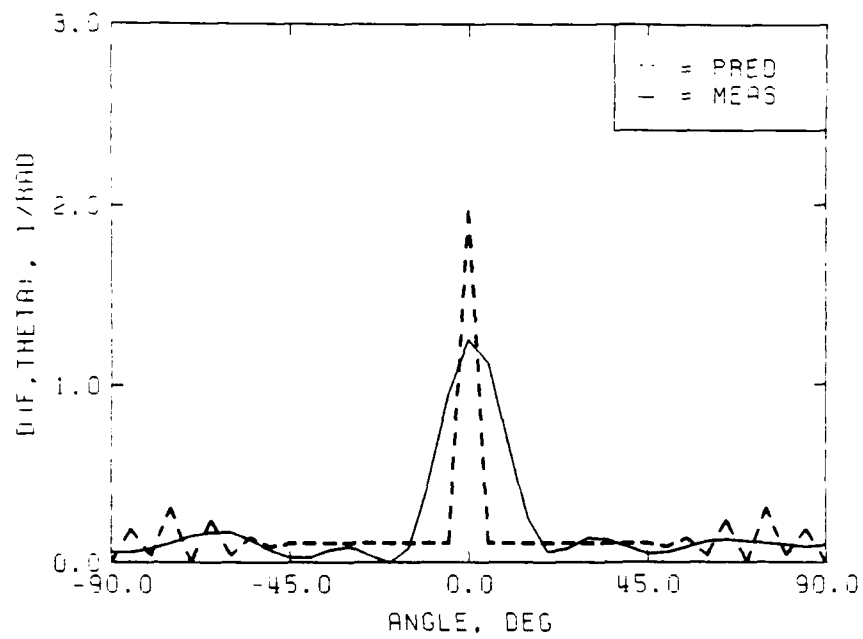
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 5: U21111, FP=0.67, HMO=1, G=3.3, D=0, S=1



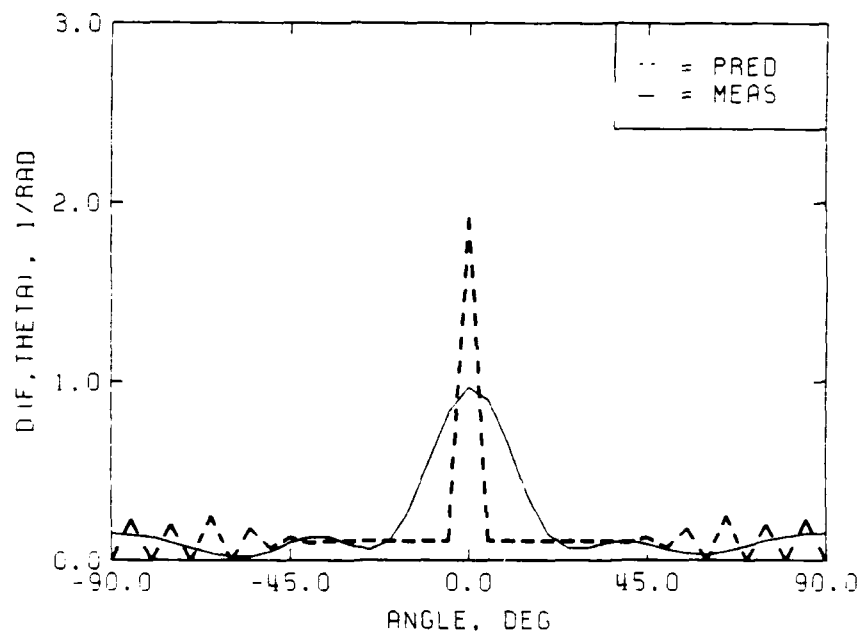
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 6: U21211, FP=0.67, HMO=1, G=7.0, D=0, S=1



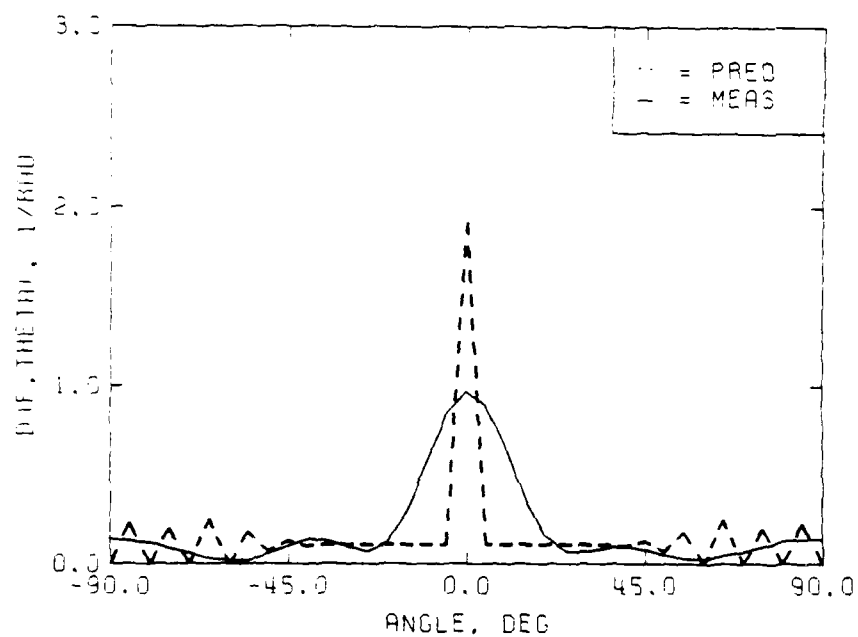
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 7: U22111, FP=0.67, HMO=3, G=3.3, D=0, S=1



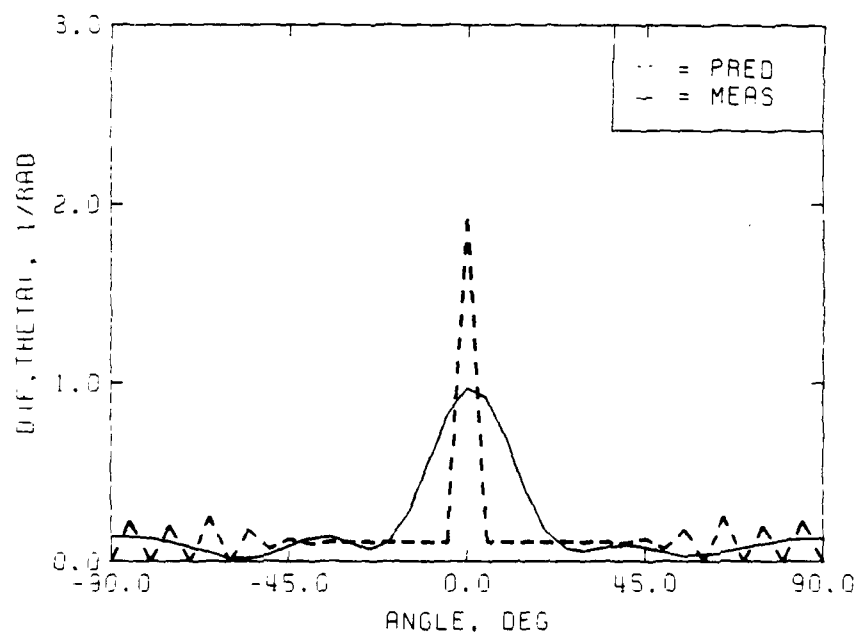
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 8: U22211, FP=0.67, HMO=3, G=7.0, D=0, S=1



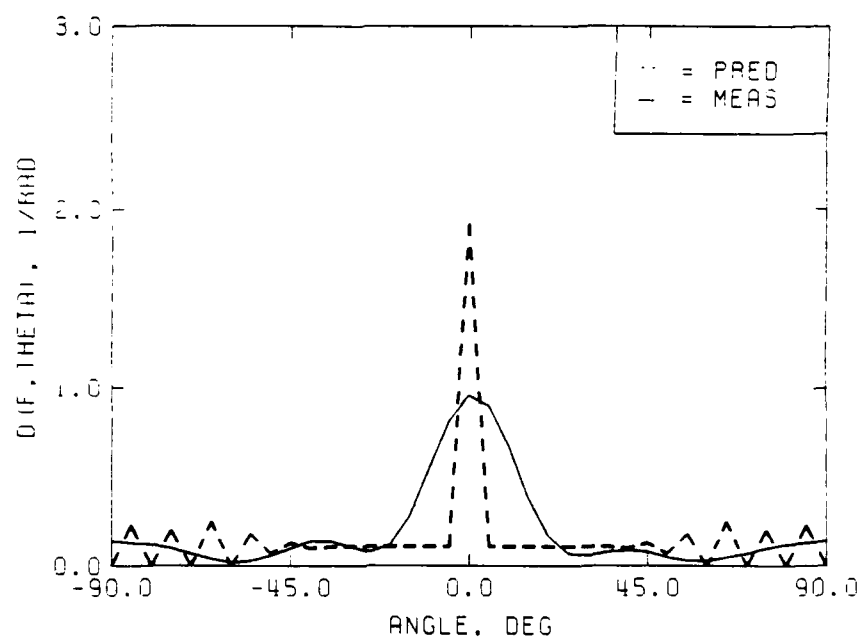
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 9: U31111, FP=0.50, HMO=1, G=3.3, D=0, S=1



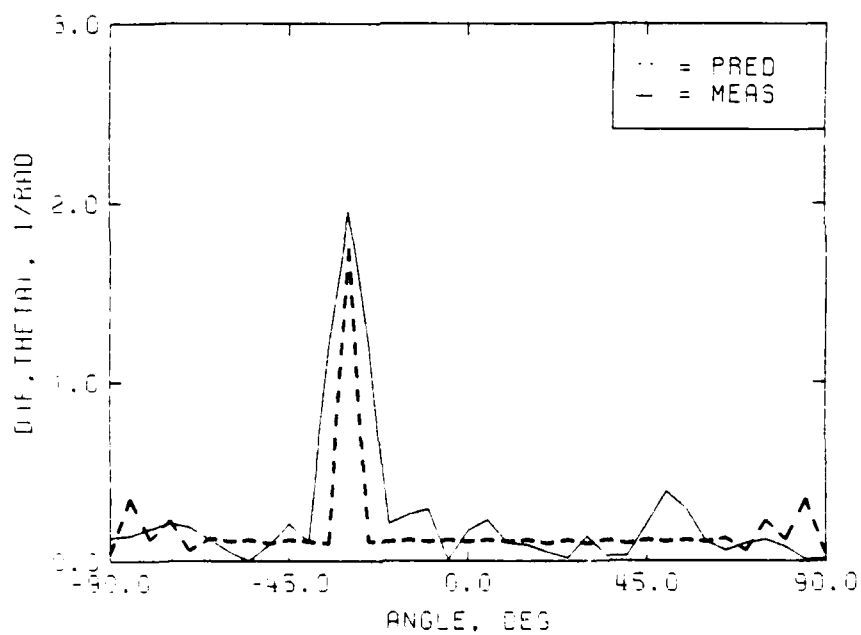
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 10: U31211, FP=0.50, HMO=1, G=7.0, D=0, S=1



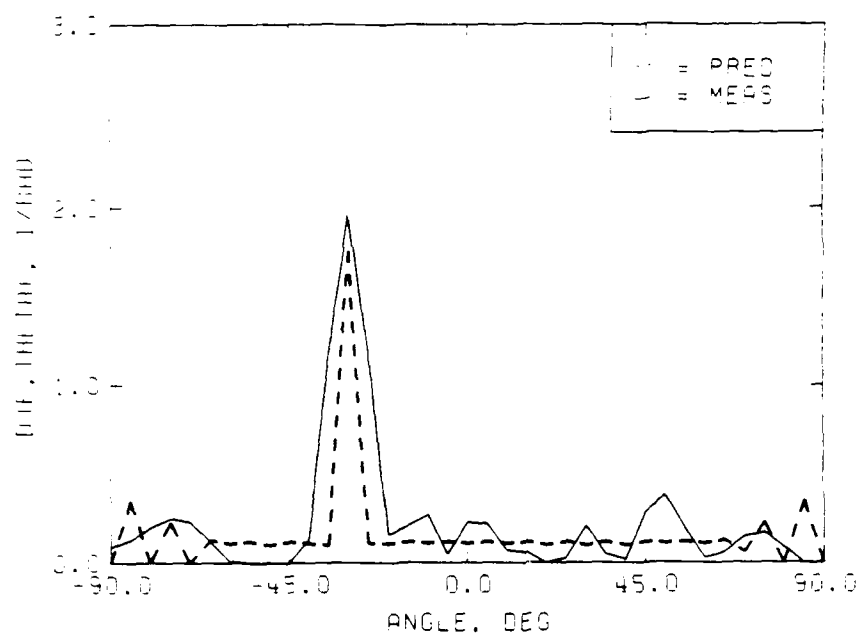
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 11: U32111, FP=0.50, HMO=3, G=3.3, D=0, S=1



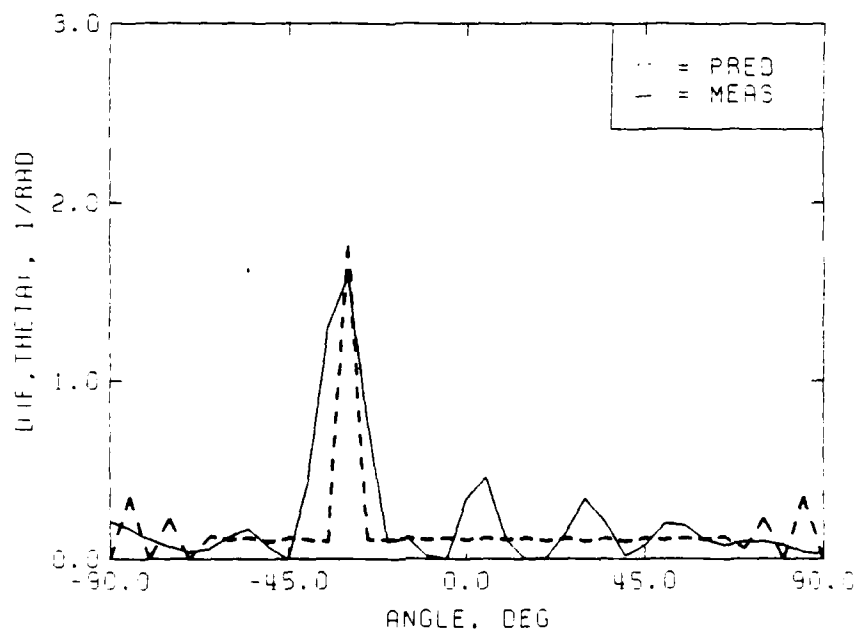
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 12: U32211, FP=0.50, HMO=1, G=3.3, D=0, S=1



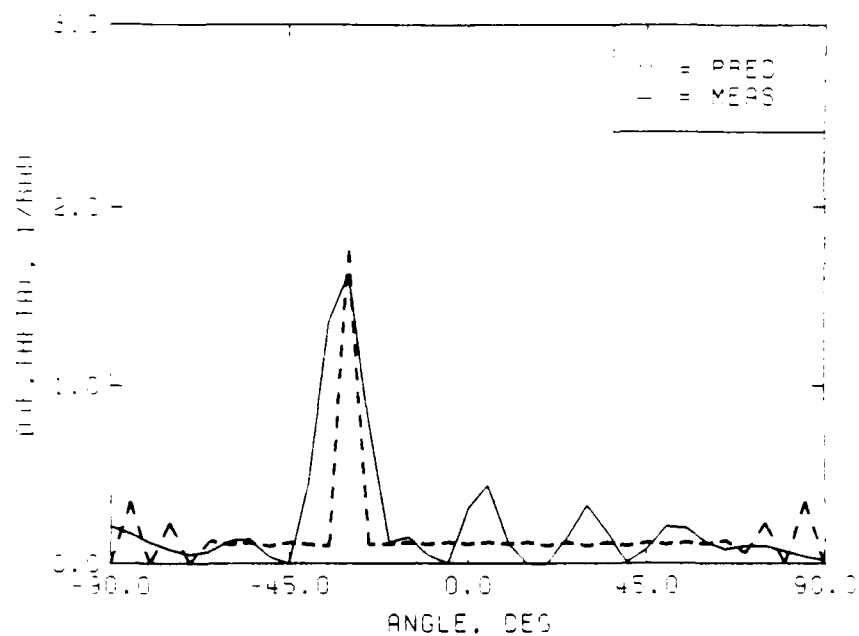
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 13: U11122, FP=1.00, HMO=1, G=3.3, D=-30, S=



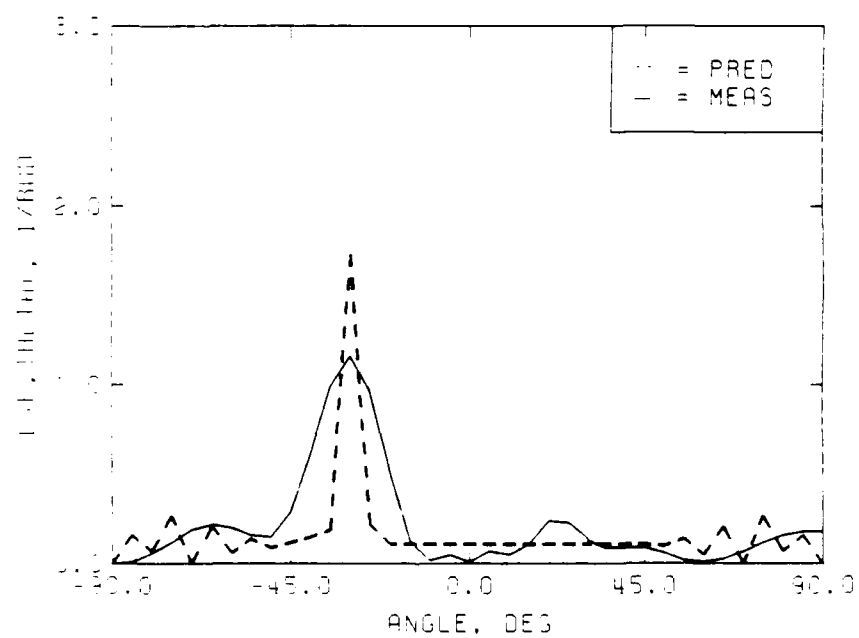
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 14: U11222, FP=1.00, HMO=1, G=7.0, D=-30, S=



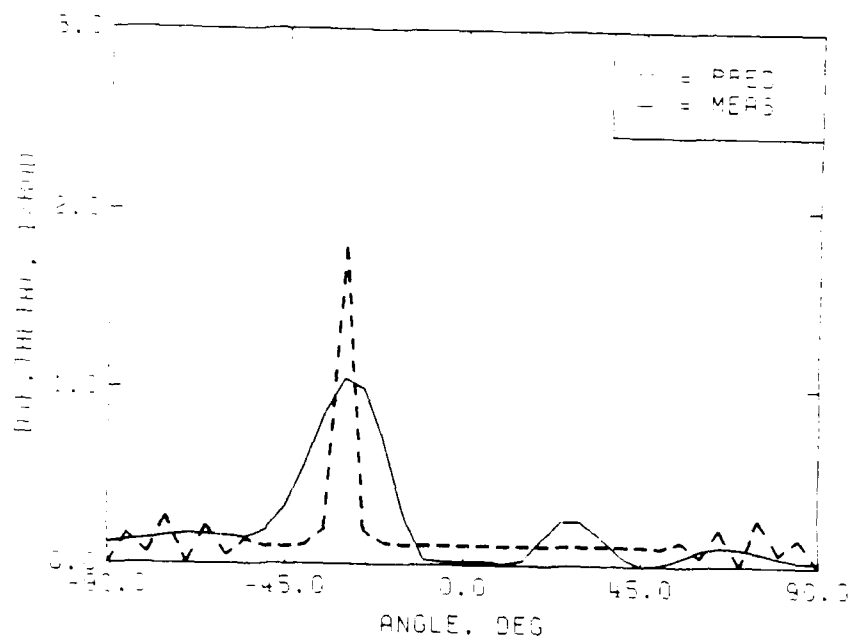
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 15: U12122, FP=1.00, HMO=3, G=3.3, D=-30, S=



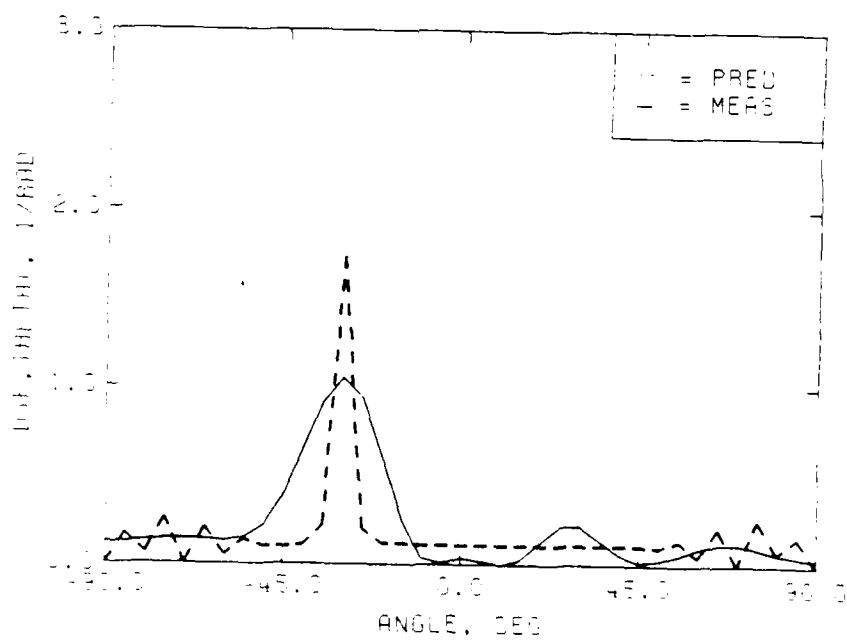
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 16: U12222, FP=1.00, HMO=3, G=7.0, D=-30, S=



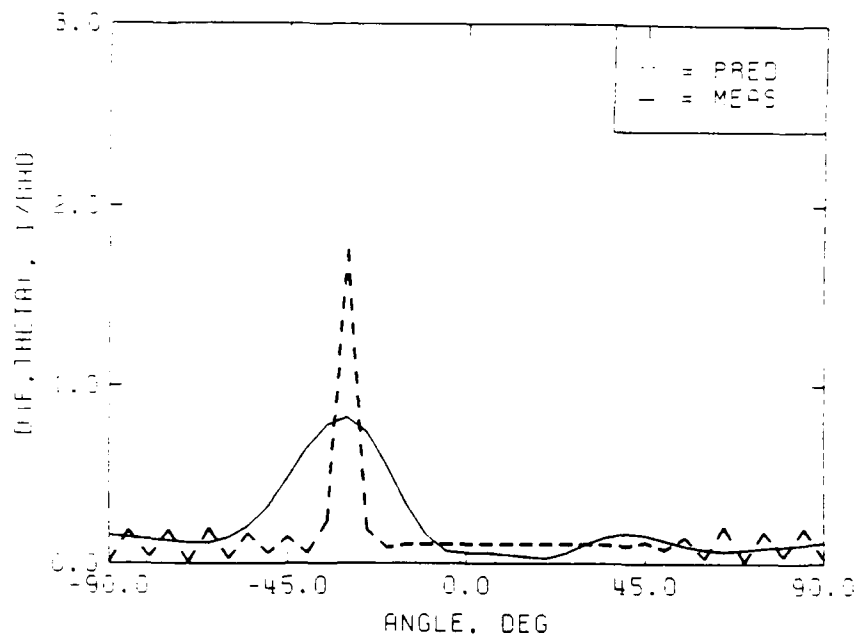
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 17: U21122, FP=.67, HMO=1, G=3.3, D=-30, S=1



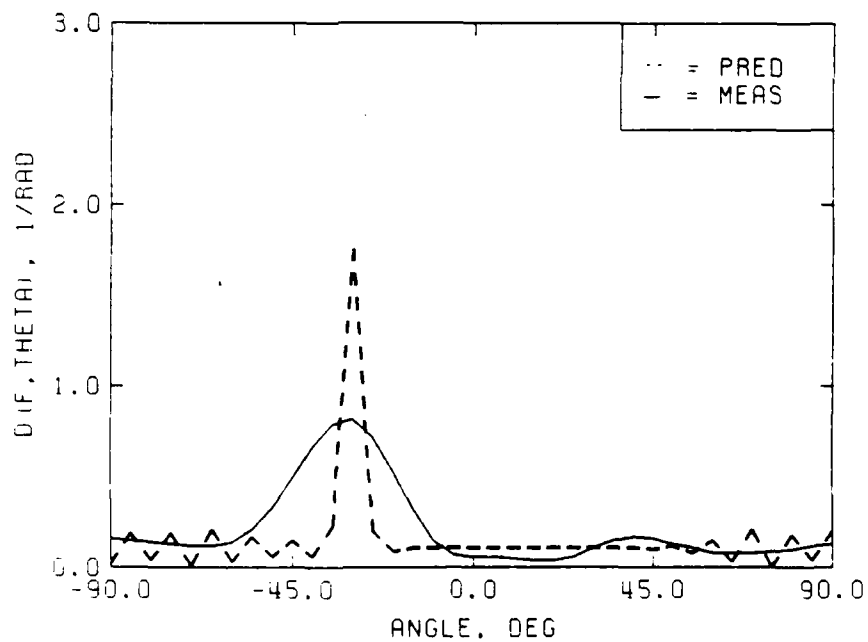
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 18: U21222, FP=.67, HMO=1, G=7.0, D=-30, S=1



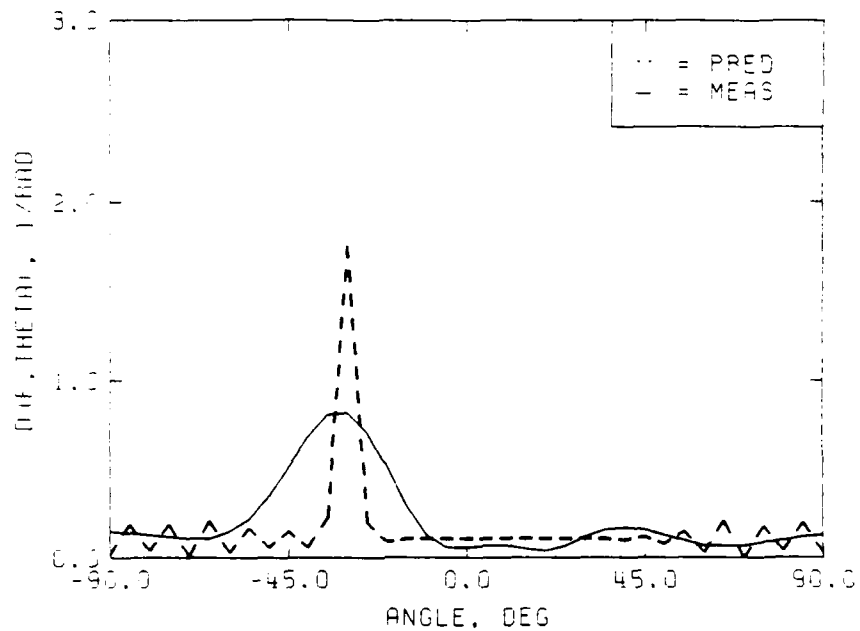
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 19: U22122, FP=.67, HMO=3, G=3.3, D=-30, S=1



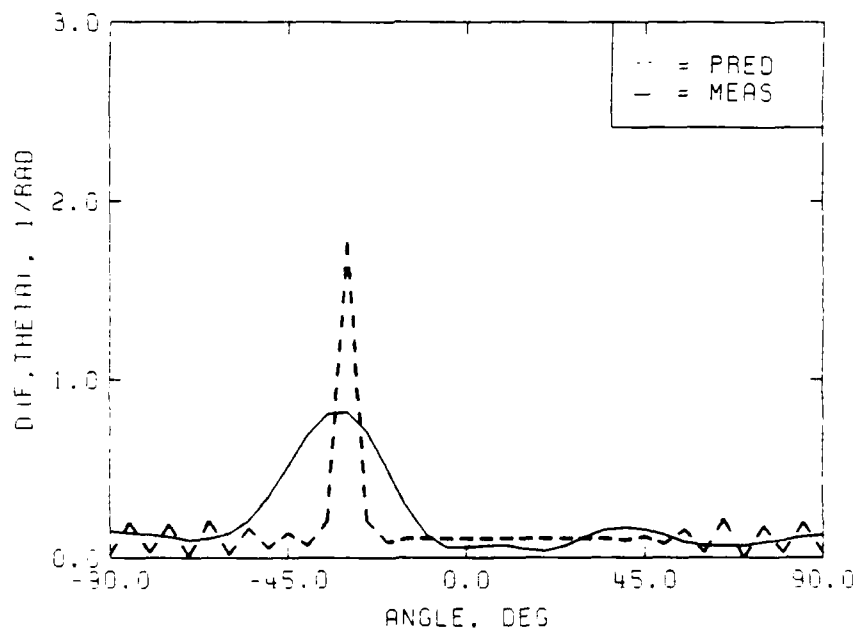
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 21: U31122, $\Gamma P=.50$, $HMO=1$, $G=3.3$, $D=-30$, $S=1$



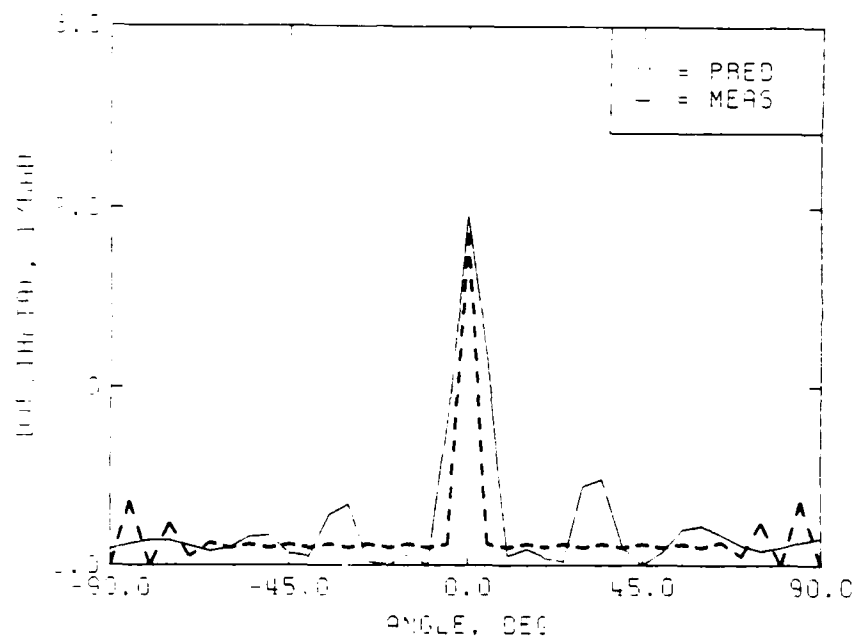
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 22: U31222, $\Gamma P=.50$, $HMO=1$, $G=7.0$, $D=-30$, $S=1$



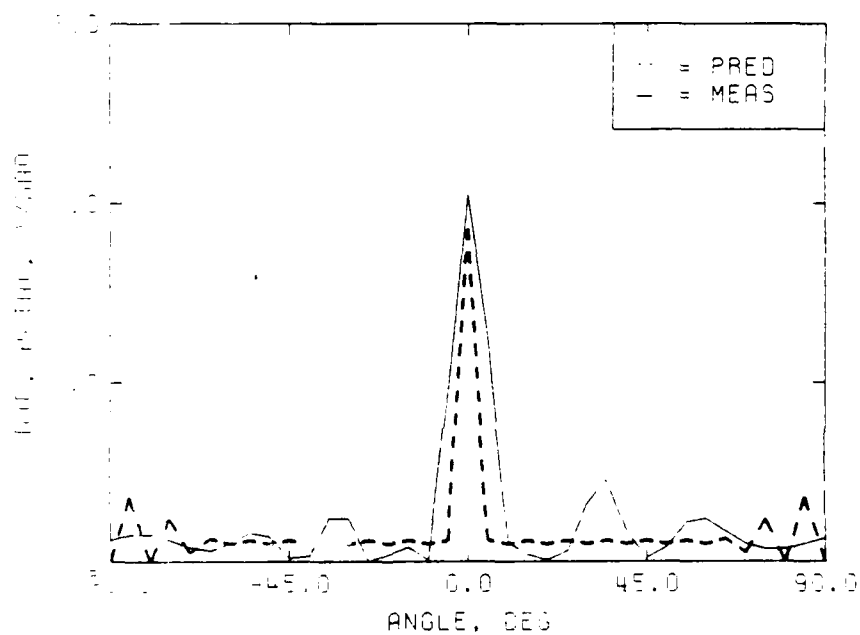
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 23: U32122, FP=.50, HMO=3, G=3.3, D=-30, S=1



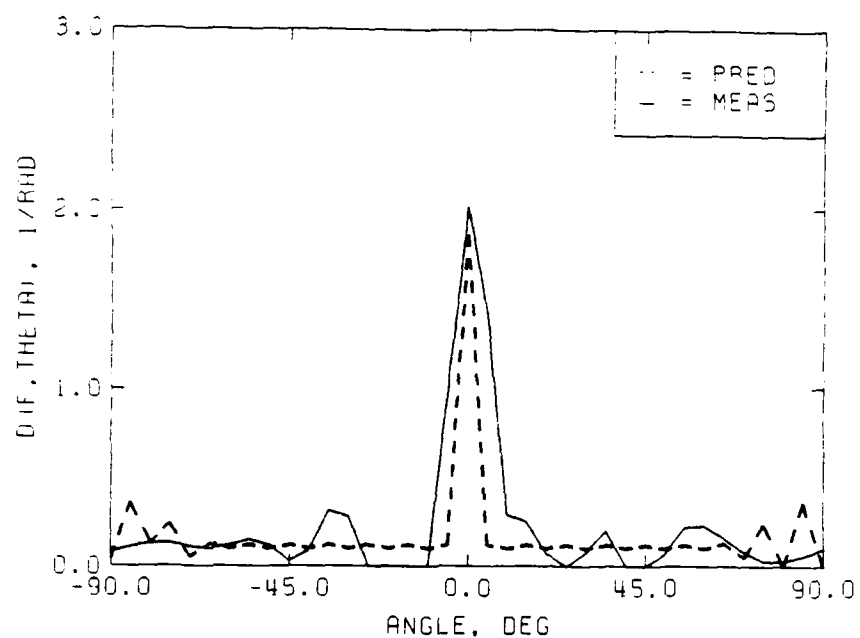
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 24: U32222, FP=.50, HMO=3, G=7.0, D=-30, S=1



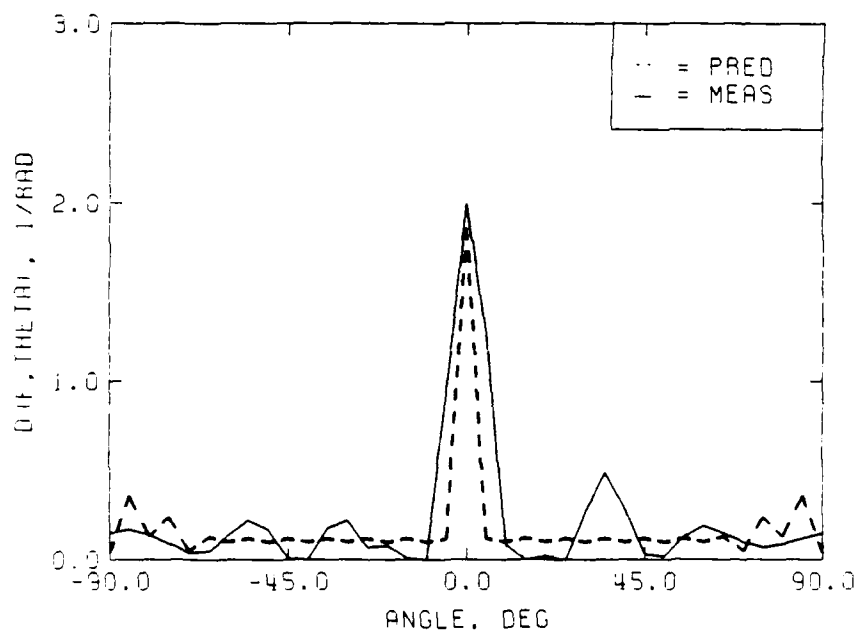
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 25: U11311, FP=1.00, HM0=1, G=15.0, D=0, S=1



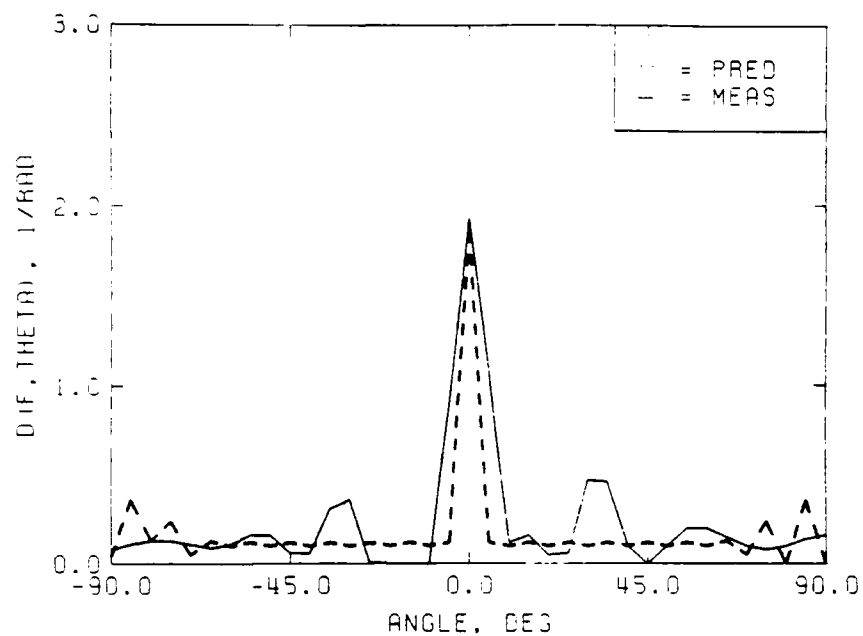
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 26: U12311, FP=1.00, HM0=3, G=15.0, D=0, S=1



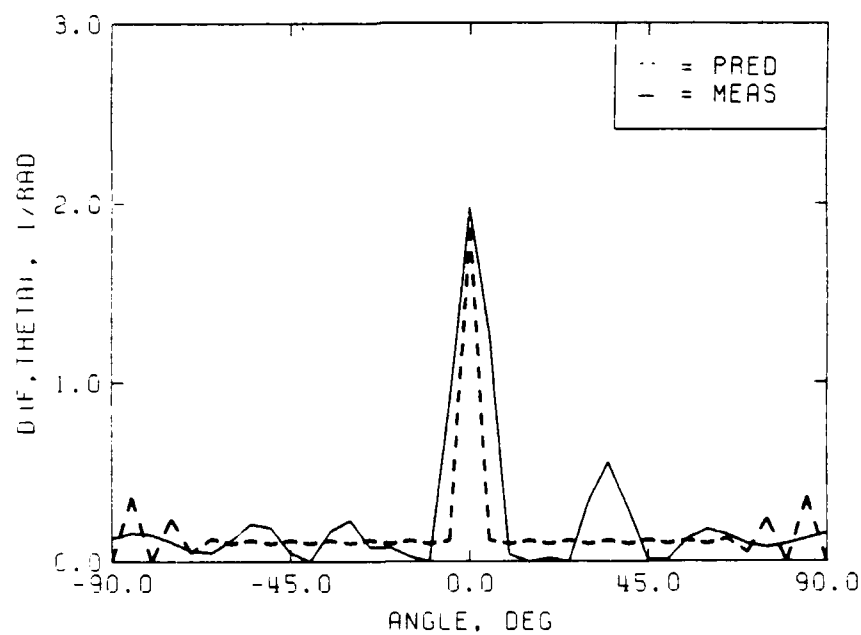
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 27: U111115, FP=1.00, HMO=1, G=3.3, D=0, S=1



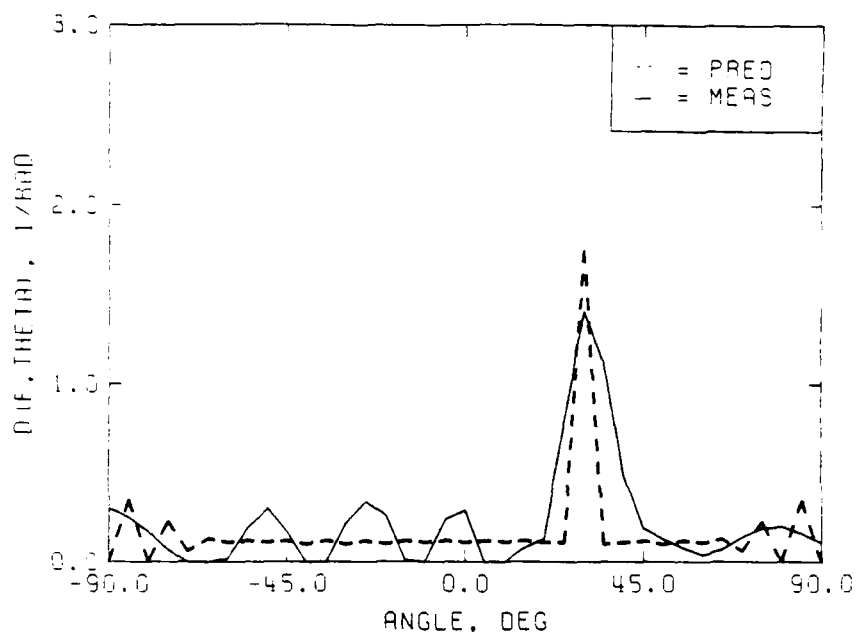
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 28: U121115, FP=1.00, HMO=3, G=3.3, D=0, S=1



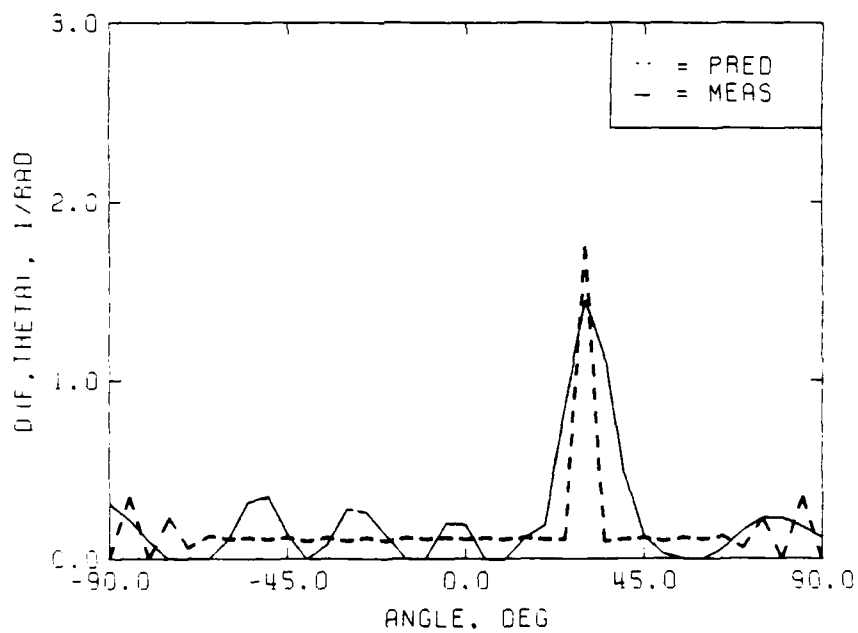
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 29: U112114, FP=1.00, HMO=1, G=7.0, D=0, S=1



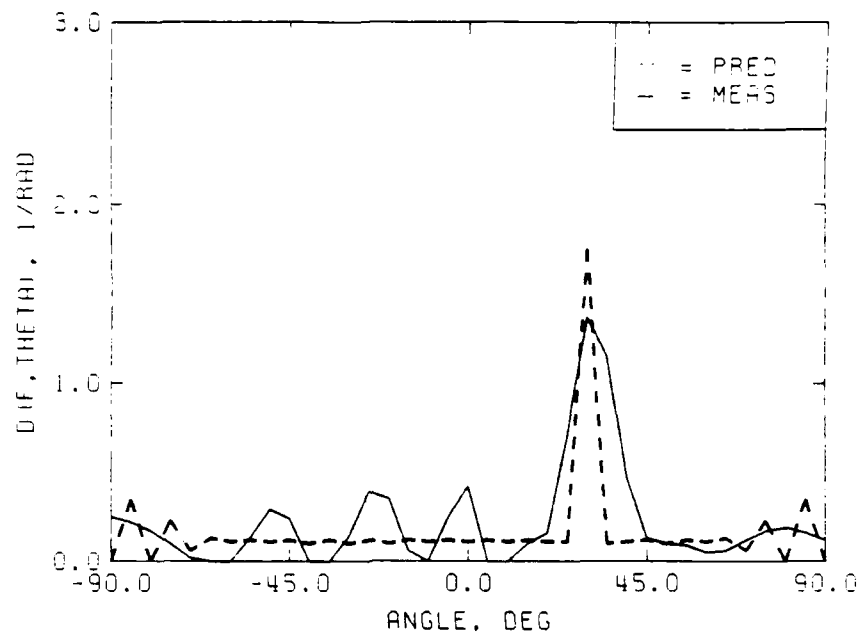
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 30: U122114, FP=1.00, HMO=3, G=7.0, D=0, S=1



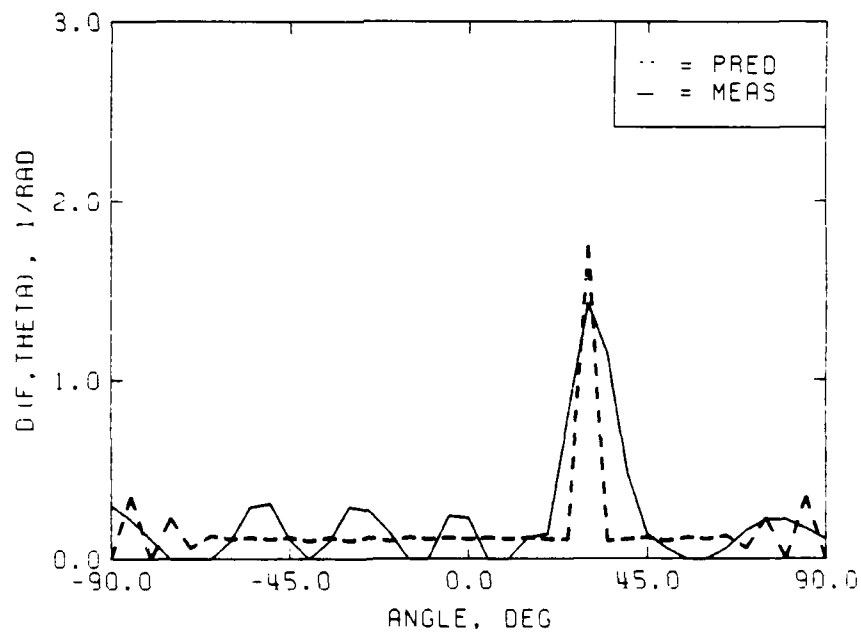
MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 31: U11121, FP=1.00, HMO=1, G=3.3, D=30, S=1



MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 32: U12121, FP=1.00, HMO=3, G=3.3, D=30, S=1

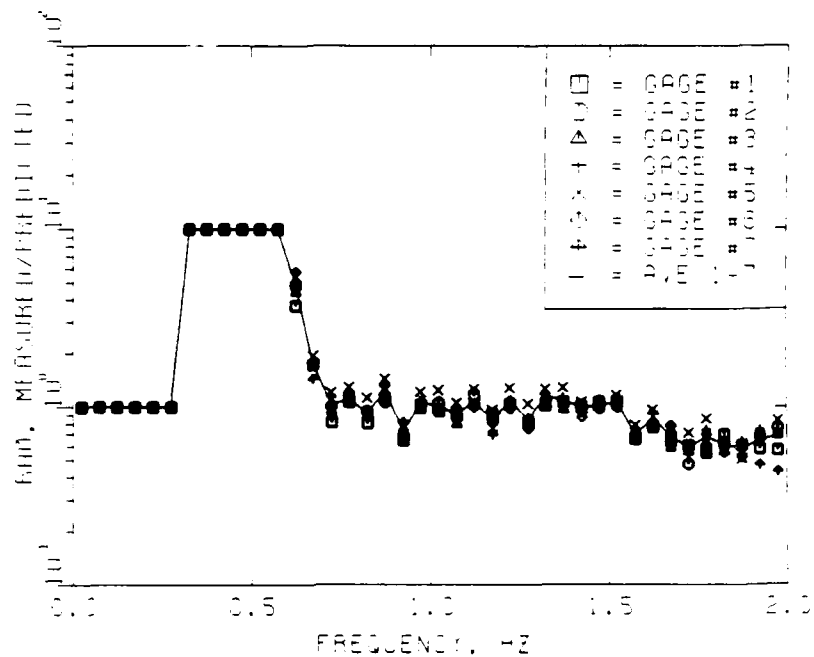


MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 33: U11221, FP=1.00, HMO=1, G=7.0, D=30, S=1

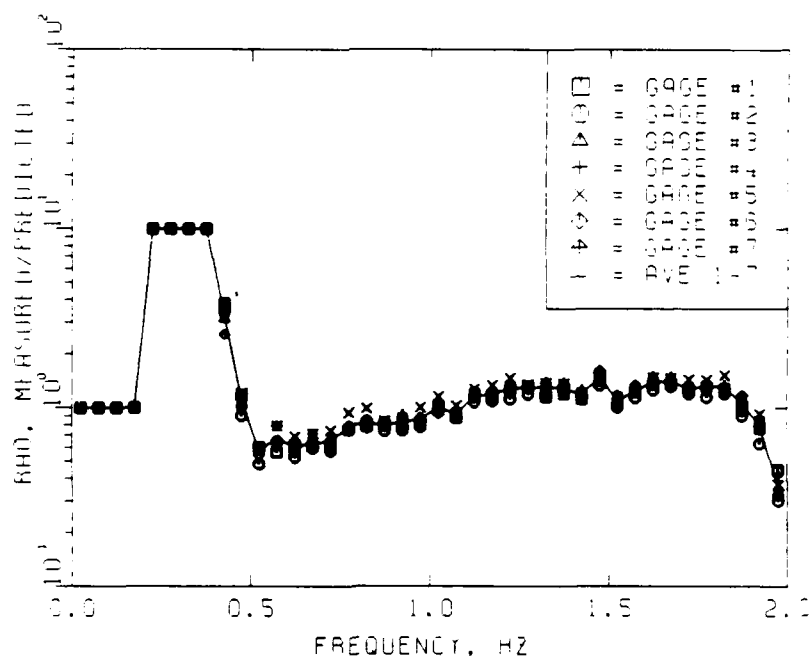


MEASURED VS PREDICTED DIRECTIONAL SPREADING
CASE 34: U12221, FP=1.00, HMO=3, G=7.0, D=30, S=1

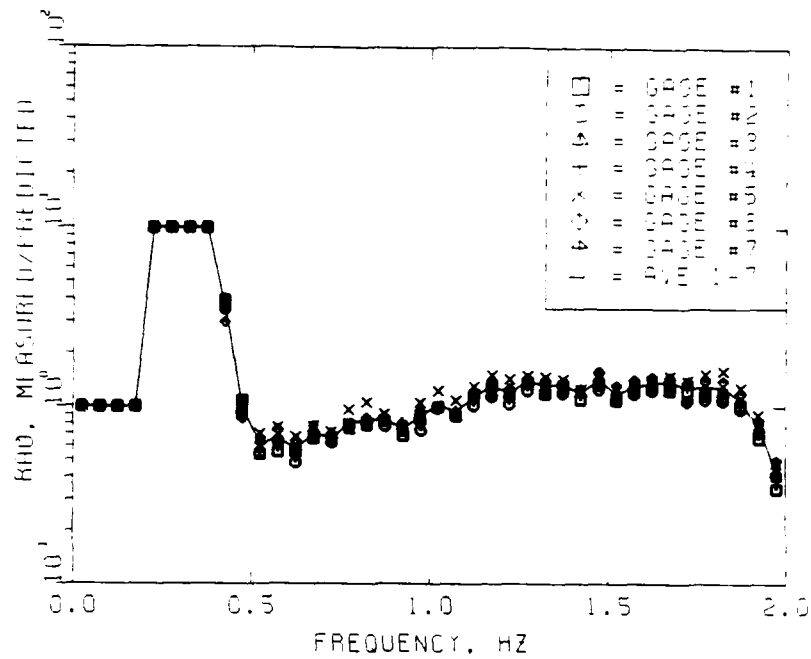
APPENDIX F: FREQUENCY RESPONSE FUNCTIONS



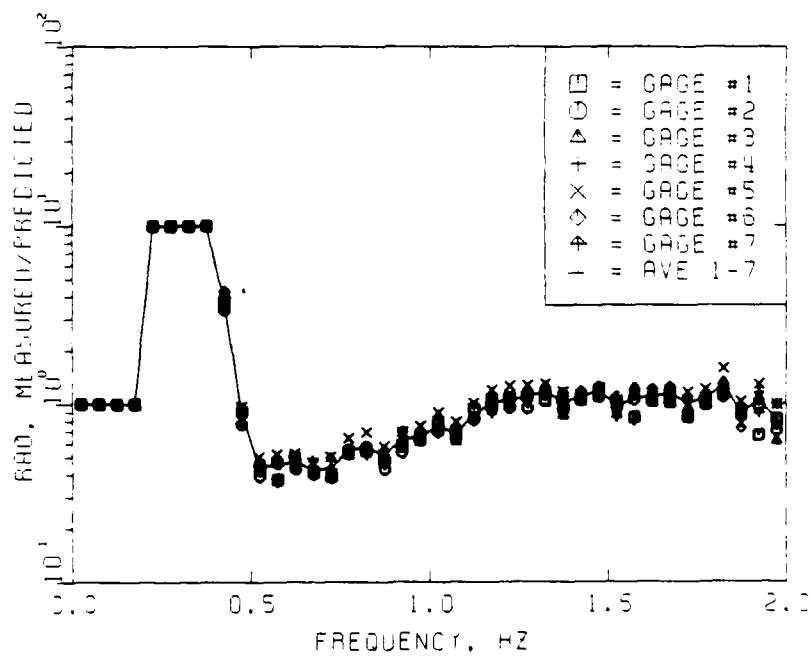
RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.00, HMO=3.00, G=3.3, D=0, BW=.05



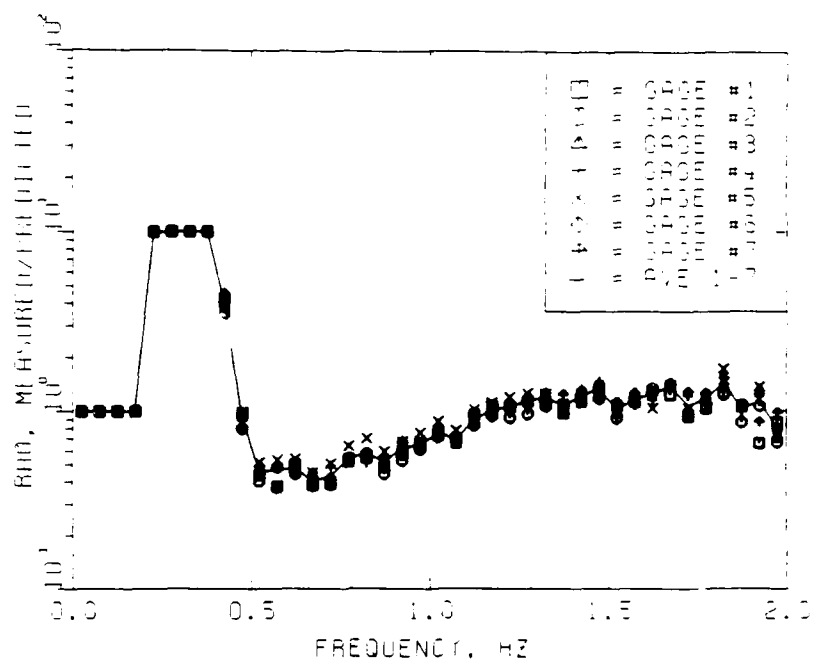
RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.50, HMO=1.00, G=3.3, D=0, BW=.05



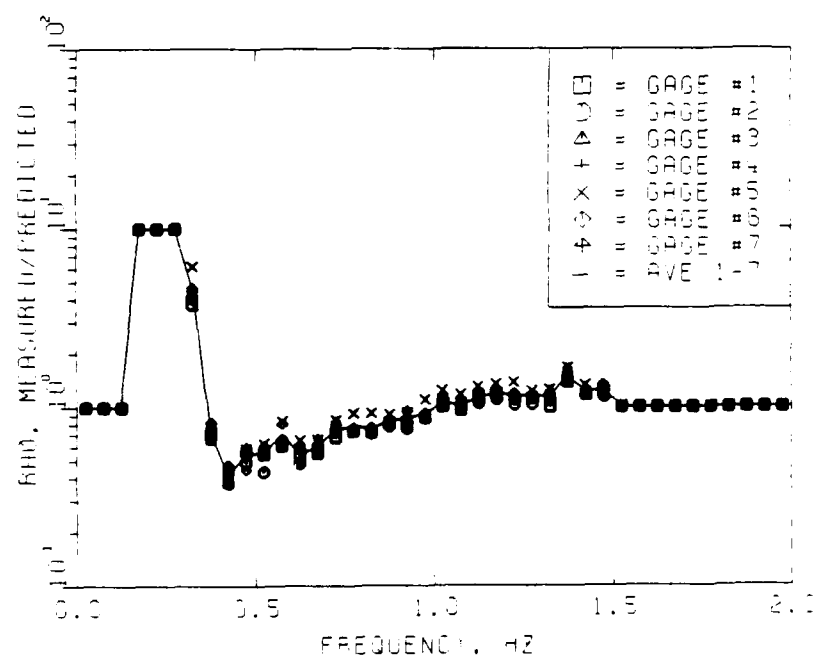
RAO FROM MEASURED FREQUENCY SPECTRA
TP=1.50, HMO=1.00, G=7.0, D=0, BW=.05



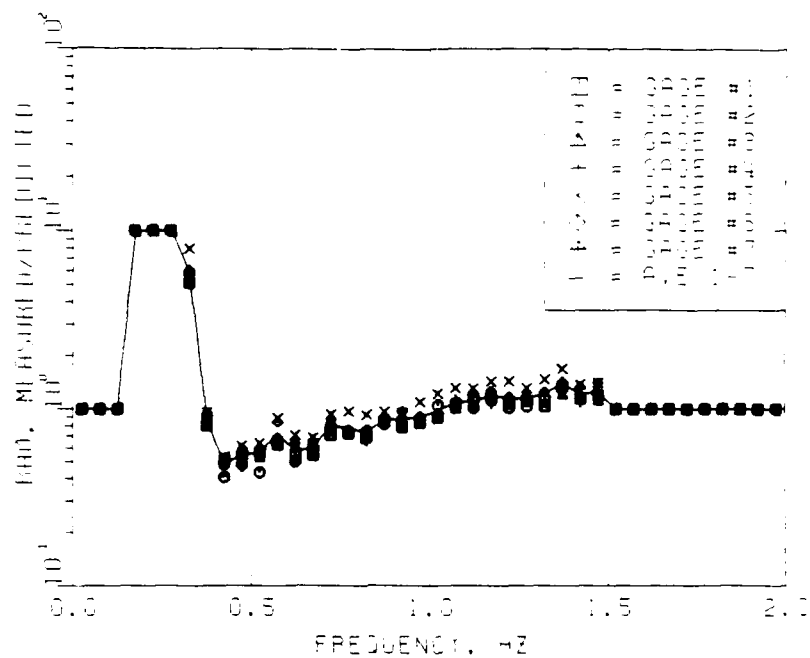
RAO FROM MEASURED FREQUENCY SPECTRA
TP=1.50, HMO=3.00, G=3.3, D=0, BW=.05



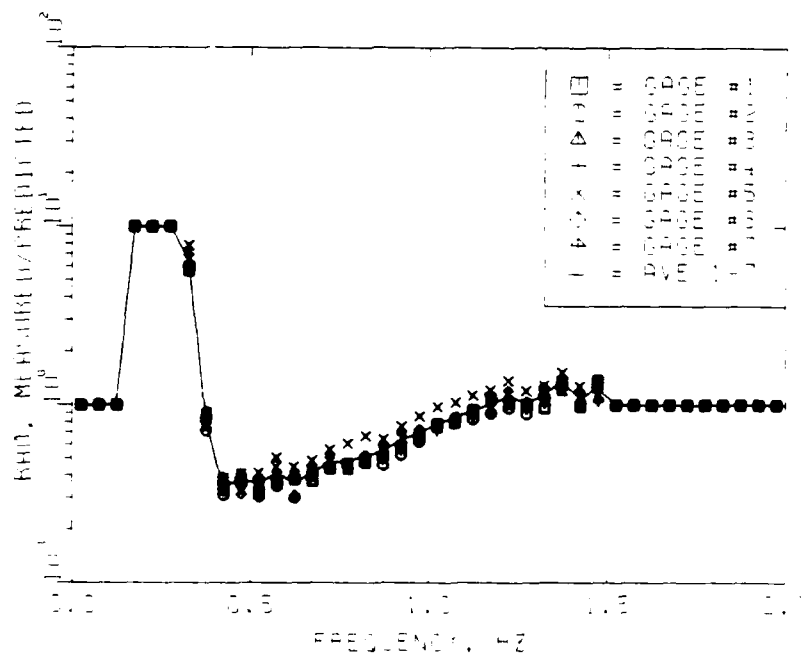
RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.50, HMO=3.00, G=7.0, D=0, BW=.05



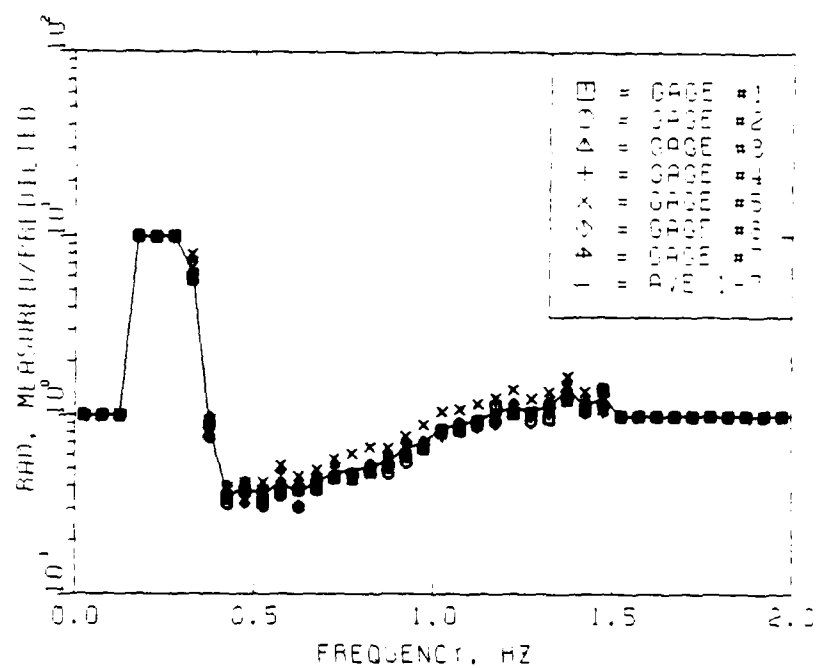
RAO FROM MEASURED FREQUENCY SPECTRA
 TP=2.00, HMO=1.00, G=3.3, D=0, BW=.05



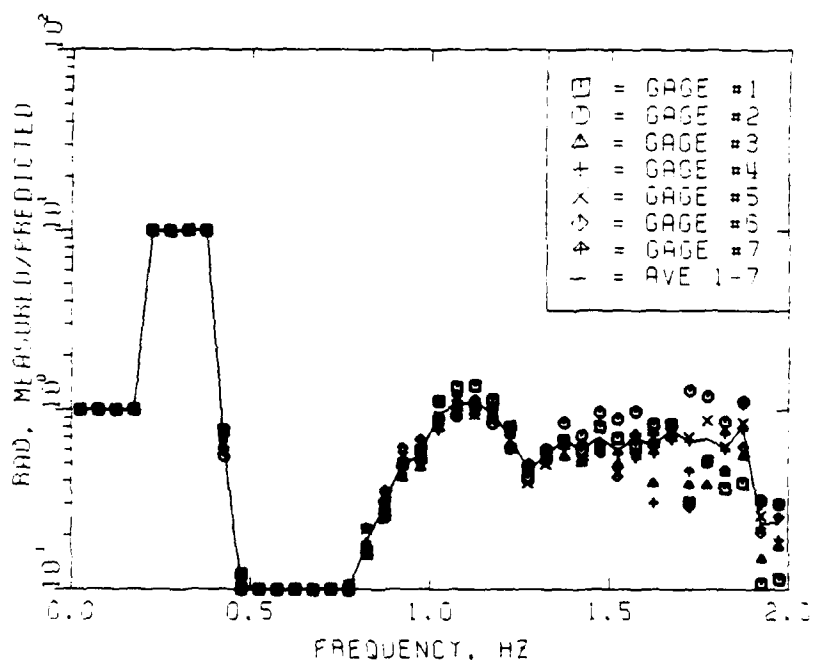
RAO FROM MEASURED FREQUENCY SPECTRA
 TP=2.00, HMO=1.00, G=7.0, D=0, BW=.05



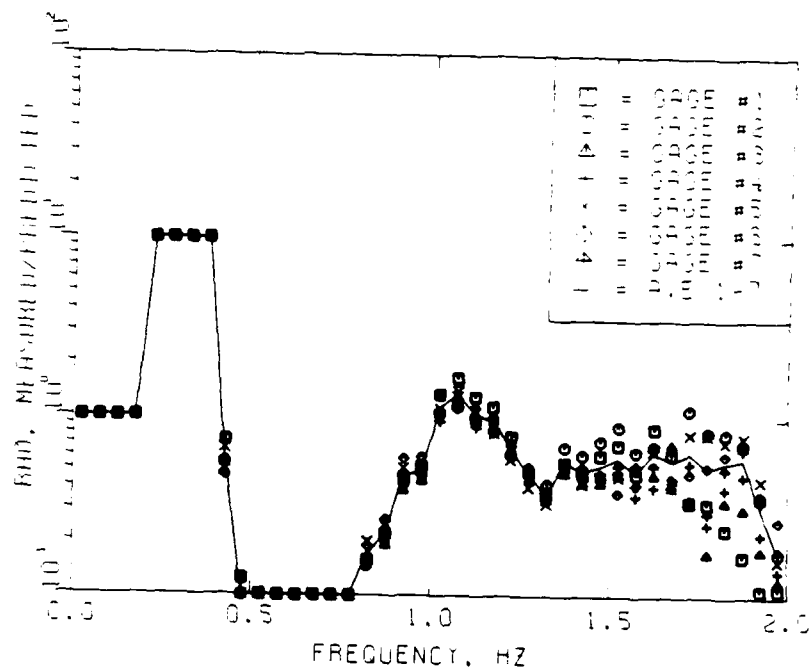
RAO FROM MEASURED FREQUENCY SPECTRA
 TP=2.00, HMO=3.00, G=3.3, D=0, BW=.05



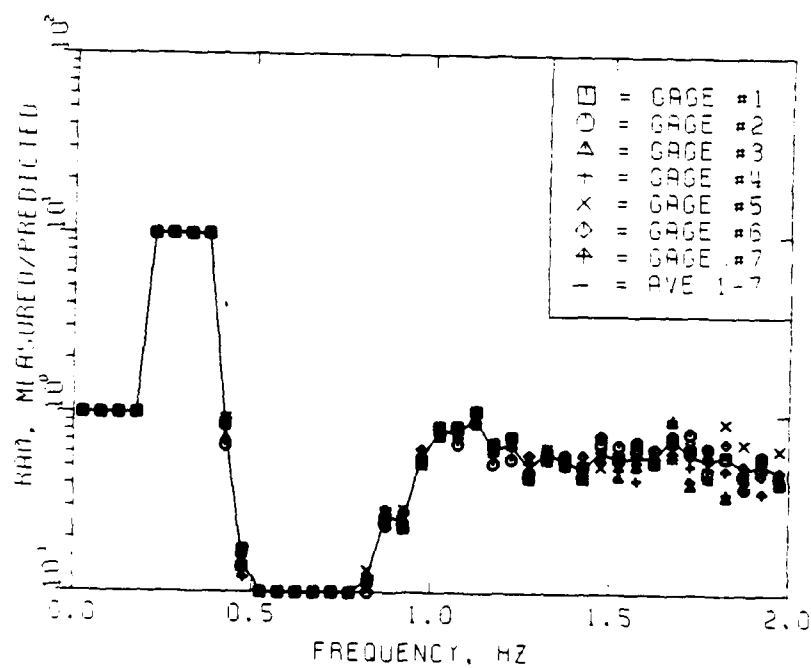
RAD FROM MEASURED FREQUENCY SPECTRA
 TP=2.00, HMO=3.00, G=7.0, D=0, BW=.05



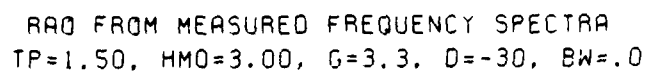
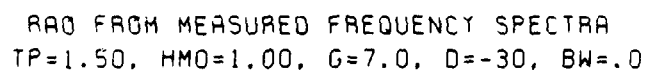
RAD FROM MEASURED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=3.3, D=-30, BW=.0

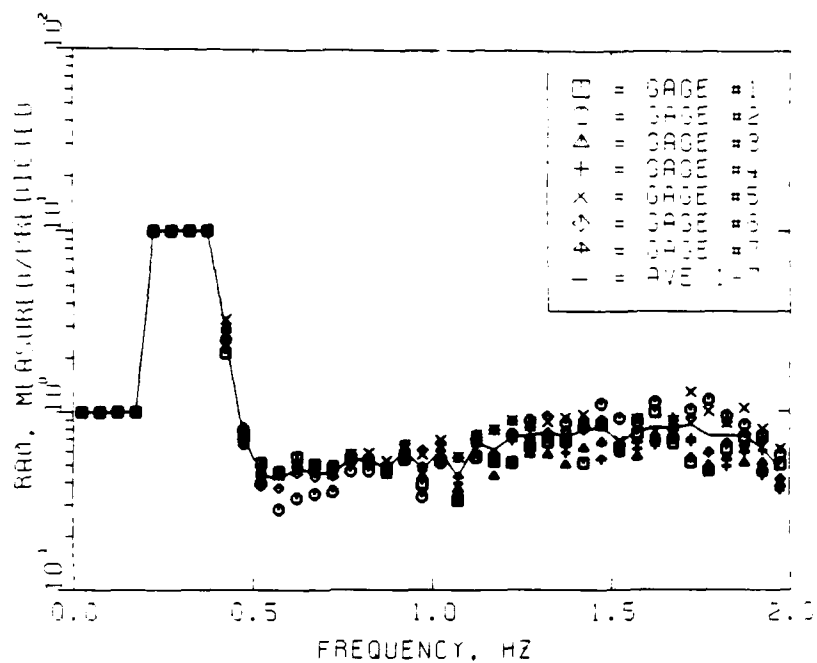


RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=7.0, D=-30, BW=.0

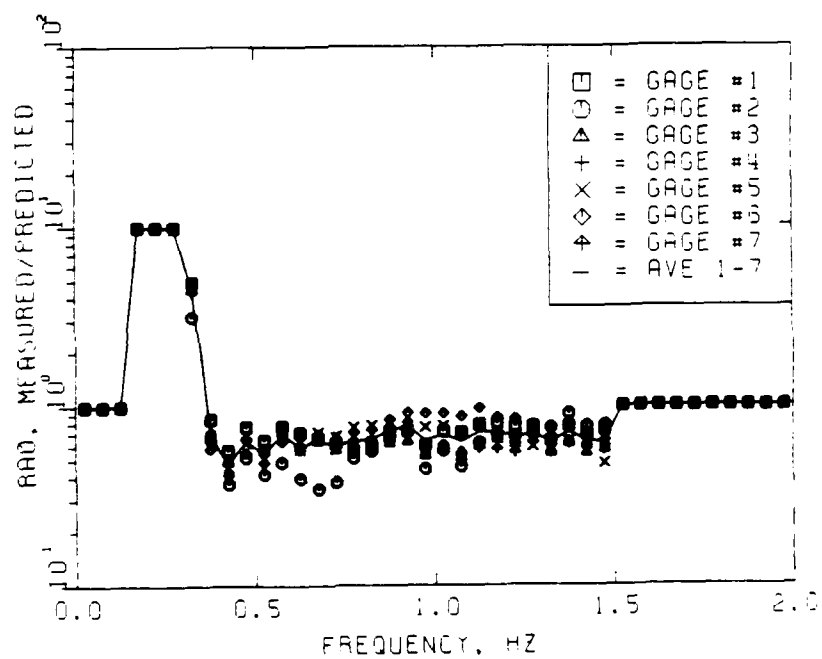


RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.00, HMO=3.00, G=3.3, D=-30, BW=.0

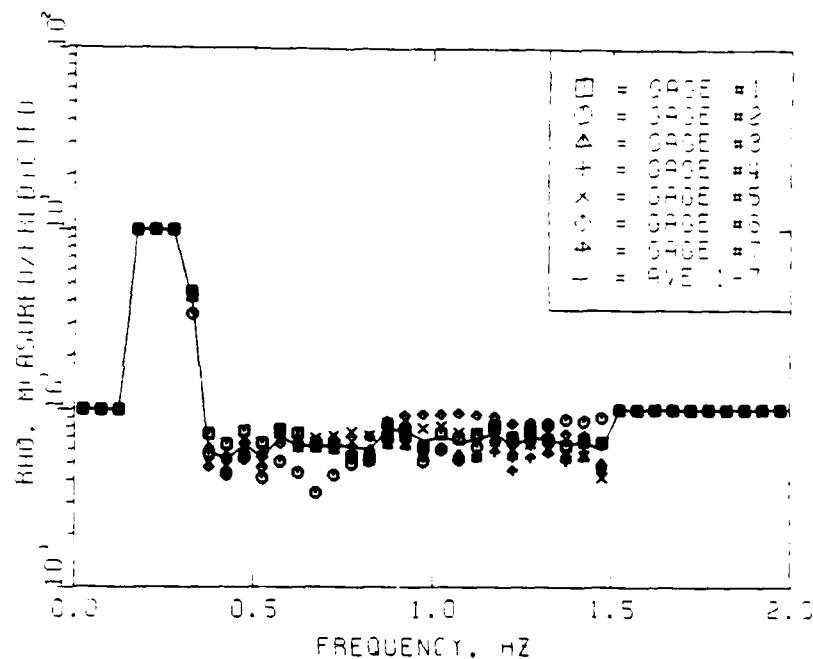




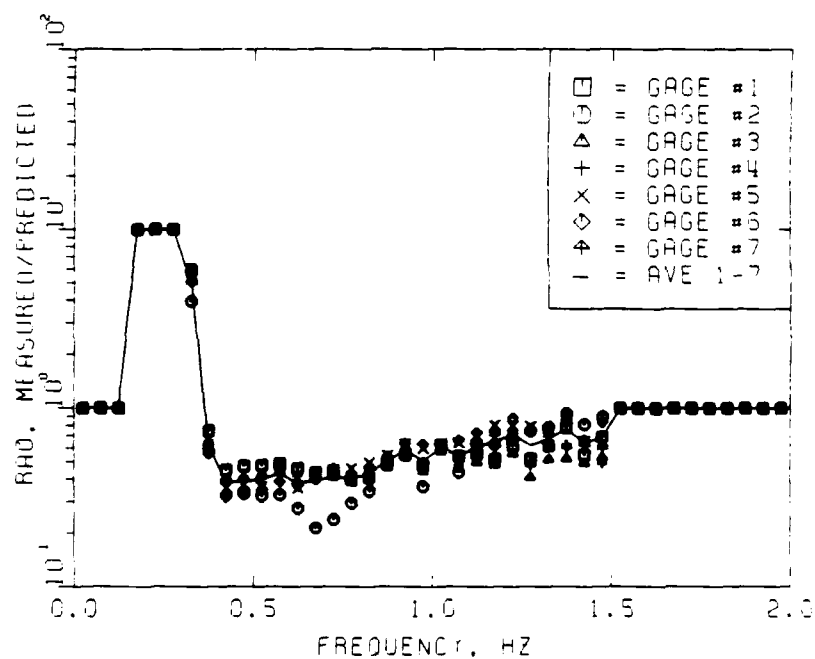
RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.50, HMO=3.00, G=7.0, D=-30, BW=.0



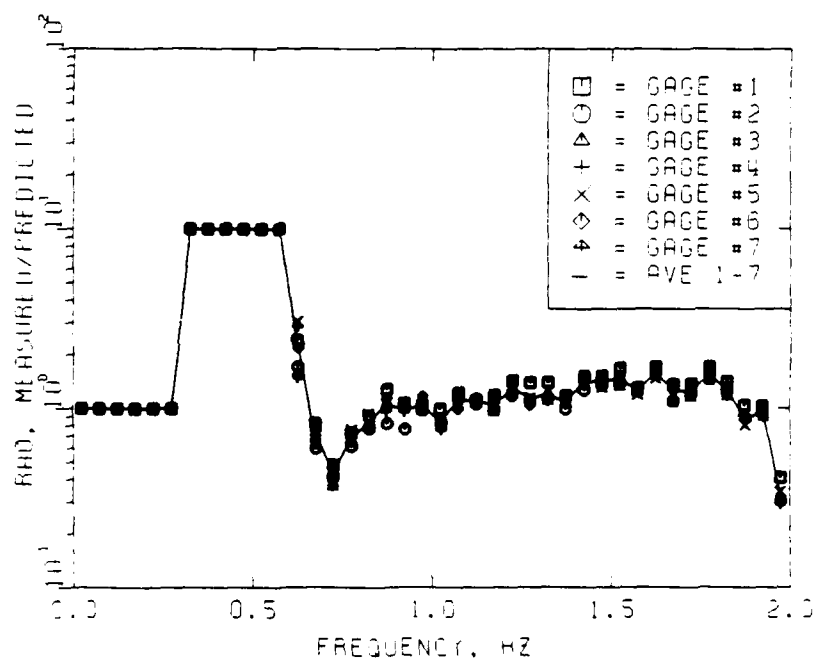
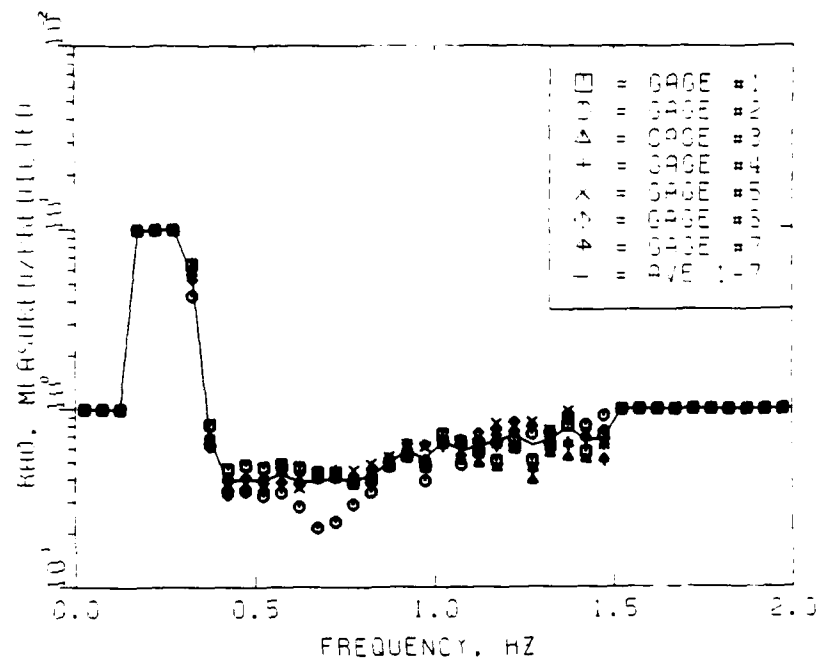
RAO FROM MEASURED FREQUENCY SPECTRA
 TP=2.00, HMO=1.00, G=3.3, D=-30, BW=.0

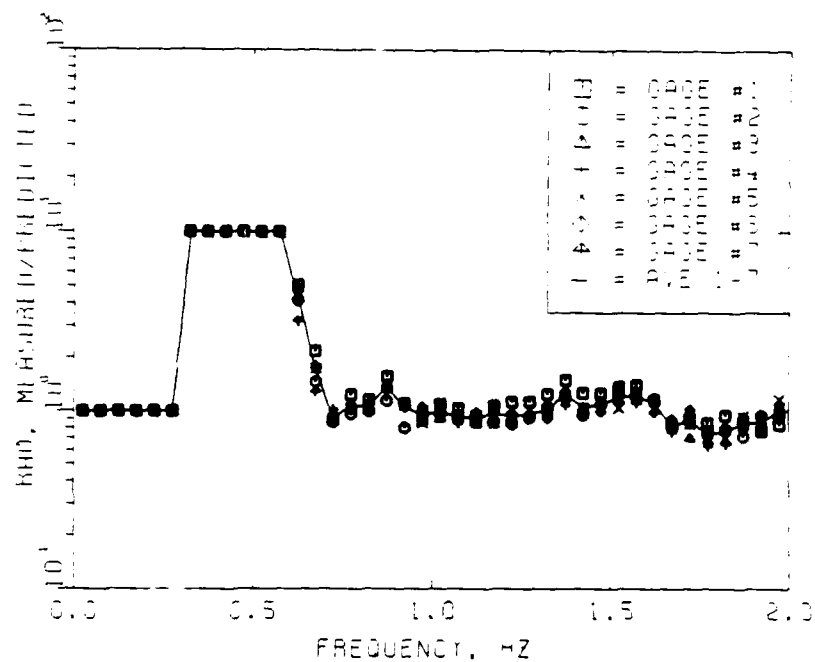


RAO FROM MEASURED FREQUENCY SPECTRA
 TP=2.00, HMO=1.00, G=7.0, D=-30, BW=.0

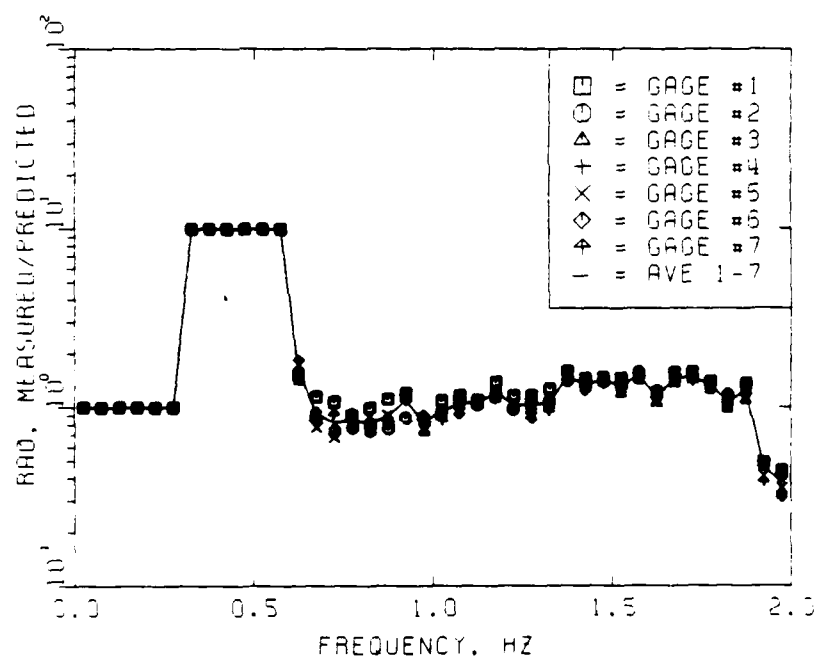


RAO FROM MEASURED FREQUENCY SPECTRA
 TP=2.00, HMO=3.00, G=3.3, D=-30, BW=.0

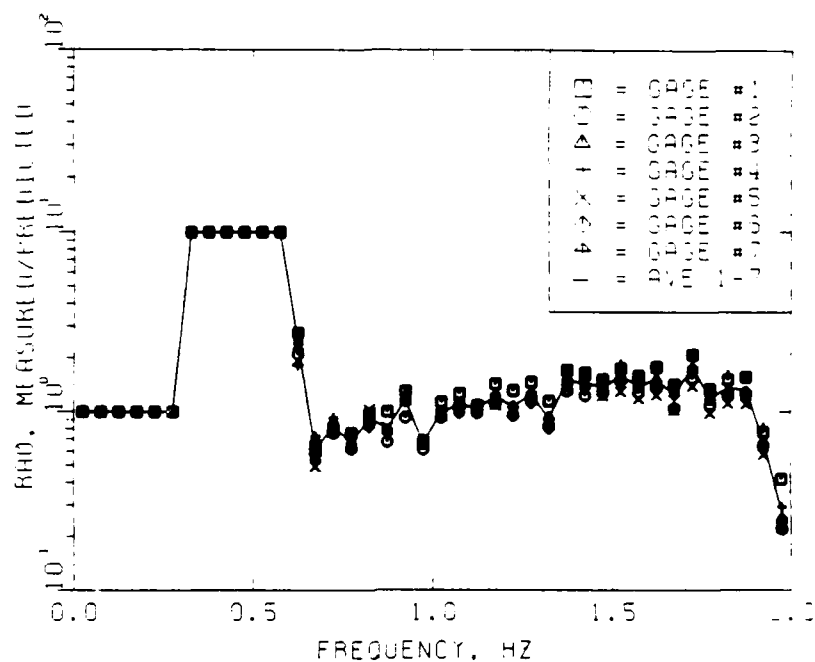




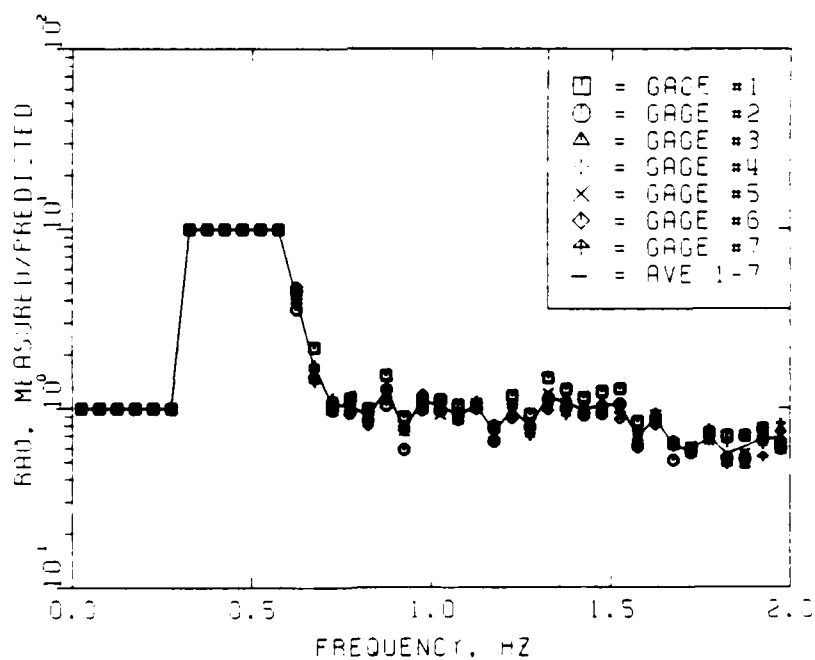
RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.00, HMO=3.00, G=15.0, D=0, BW=.05



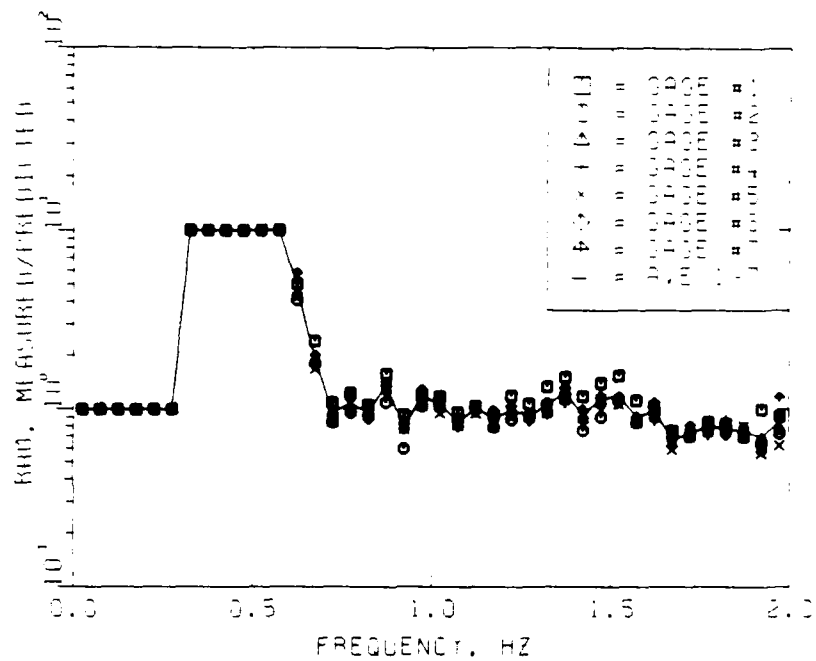
RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=3.3, D=0, BW=.05



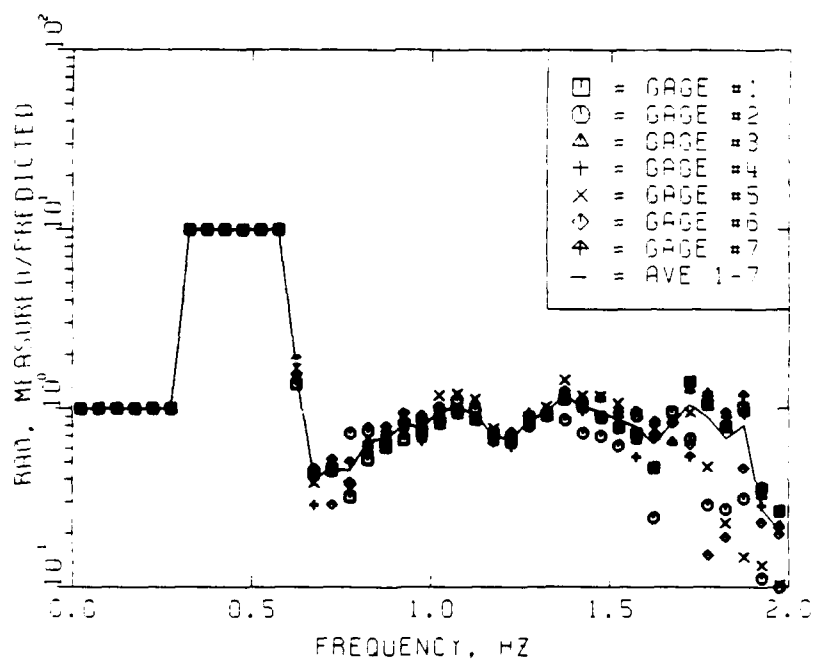
RAO FROM MEASURED FREQUENCY SPECTRA
TP=1.00, HMO=1.00, G=7.0, D=0, BW=.05



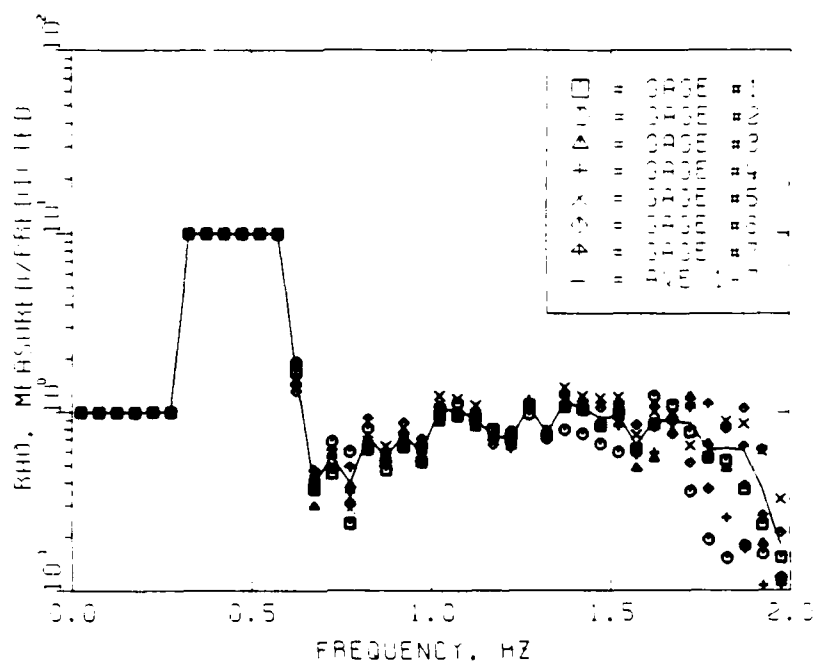
RAO FROM MEASURED FREQUENCY SPECTRA
TP=1.00, HMO=3.00, G=3.3, D=0, BW=.05



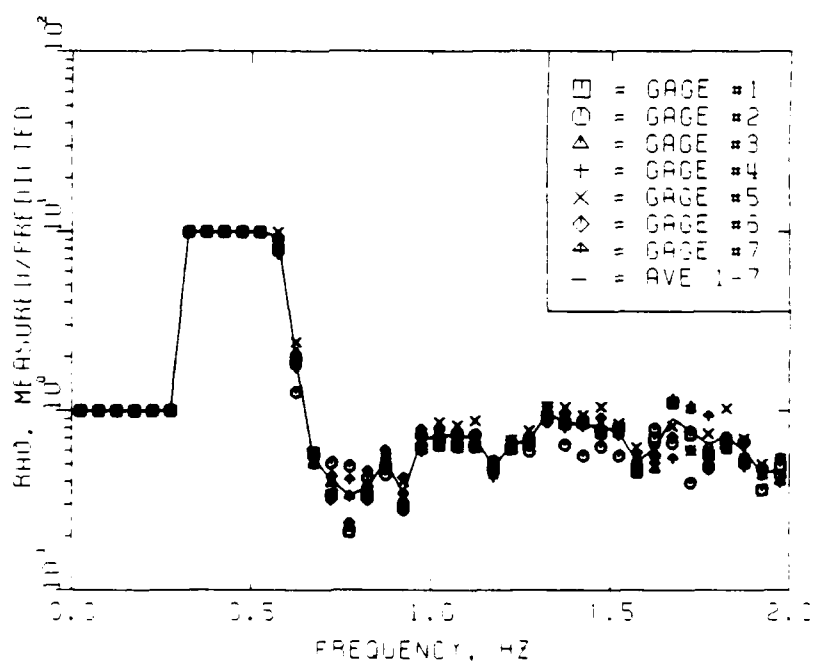
RAO FROM MEASURED FREQUENCY SPECTRA
TP=1.00, HMO=3.00, G=7.0, D=0, BW=.05



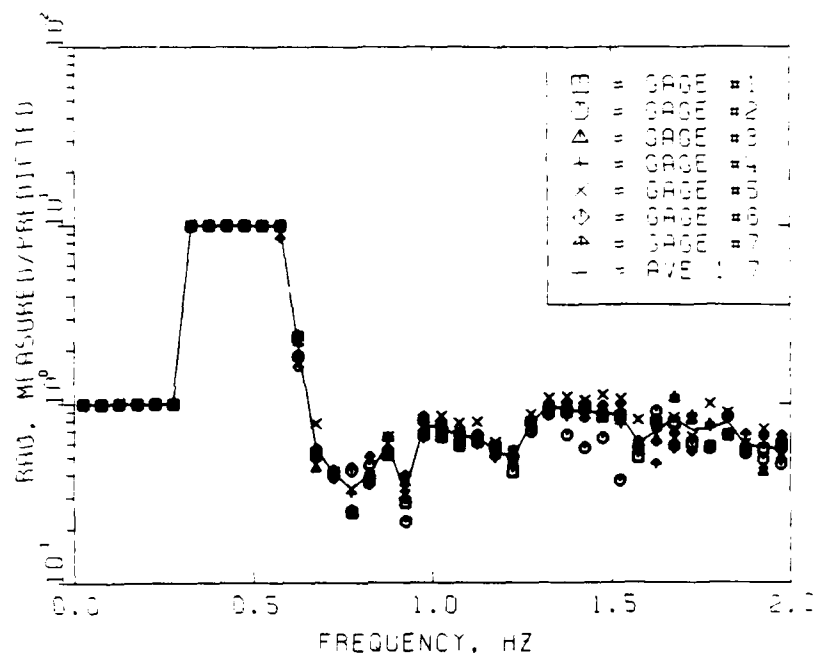
RAO FROM MEASURED FREQUENCY SPECTRA
TP=1.00, HMO=1.00, G=3.3, D=30, BW=.05



RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.00, HMO=1.00, G=7.0, D=30, BW=.05

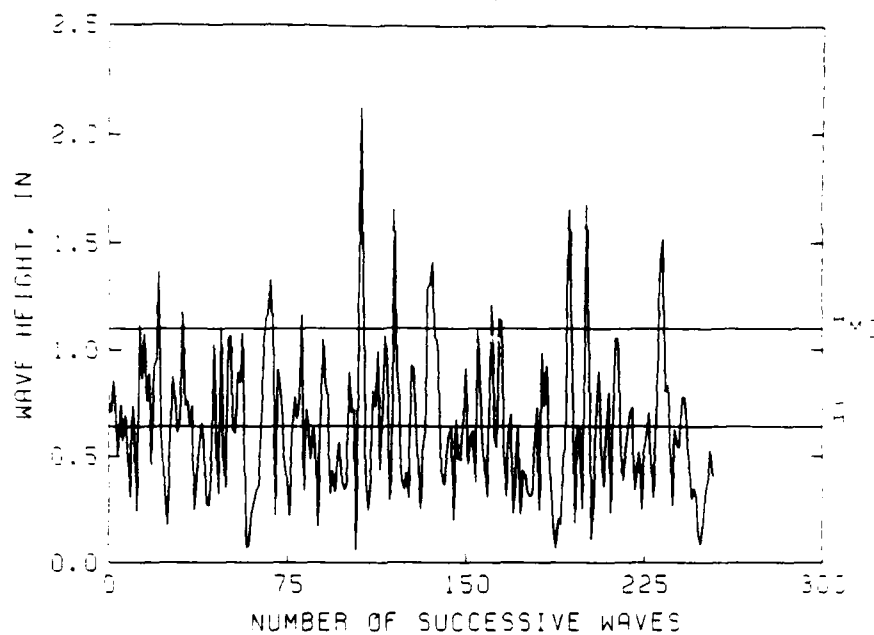


RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.00, HMO=3.00, G=3.3, D=30, BW=.05

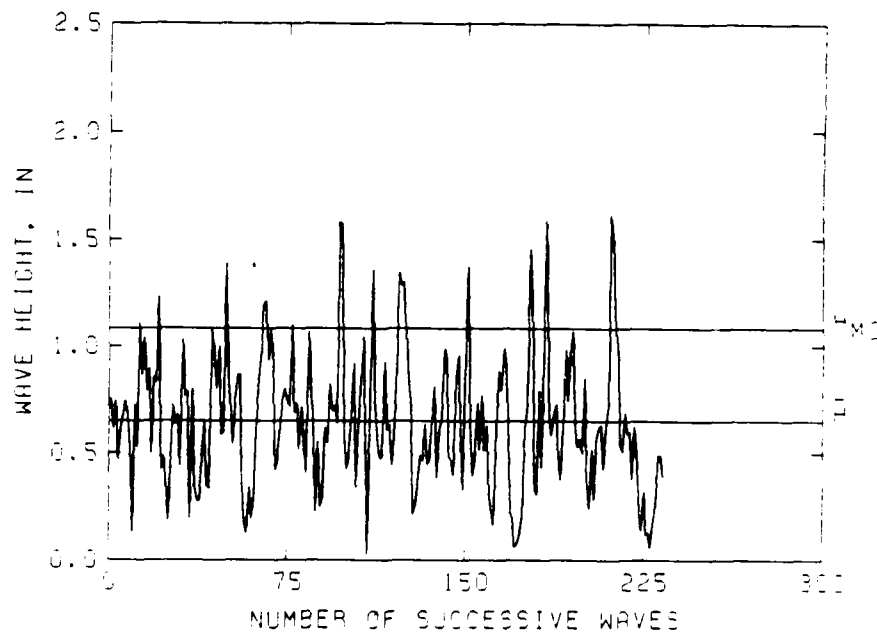


RAO FROM MEASURED FREQUENCY SPECTRA
 TP=1.00, HMO=3.00, G=7.0, D=30, BW=.05

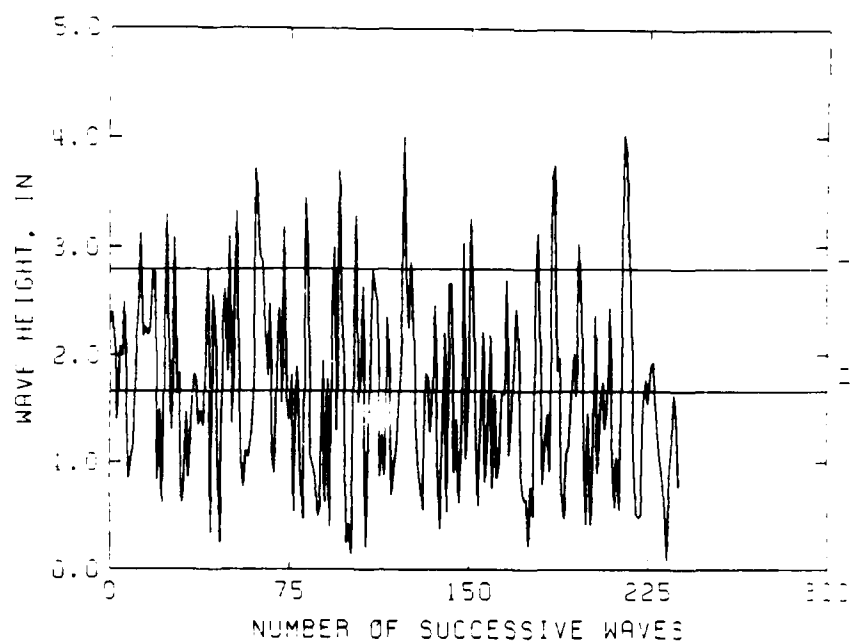
APPENDIX G: WAVE HEIGHT TIME SERIES



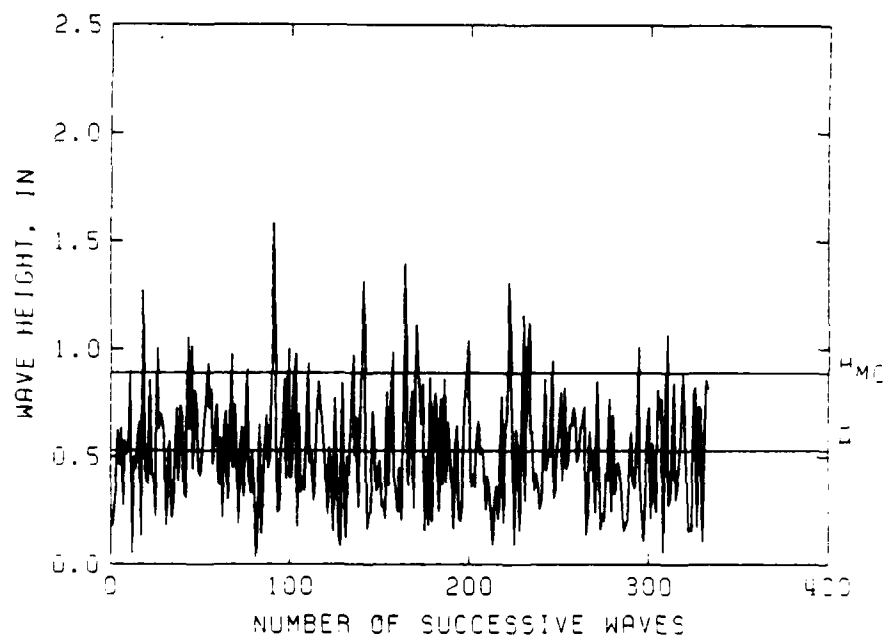
U11111. 4. FP=1.00. HMO=1.0. G=3.3. D=0. S=1. V=1
CHANNEL NUMBER = 7



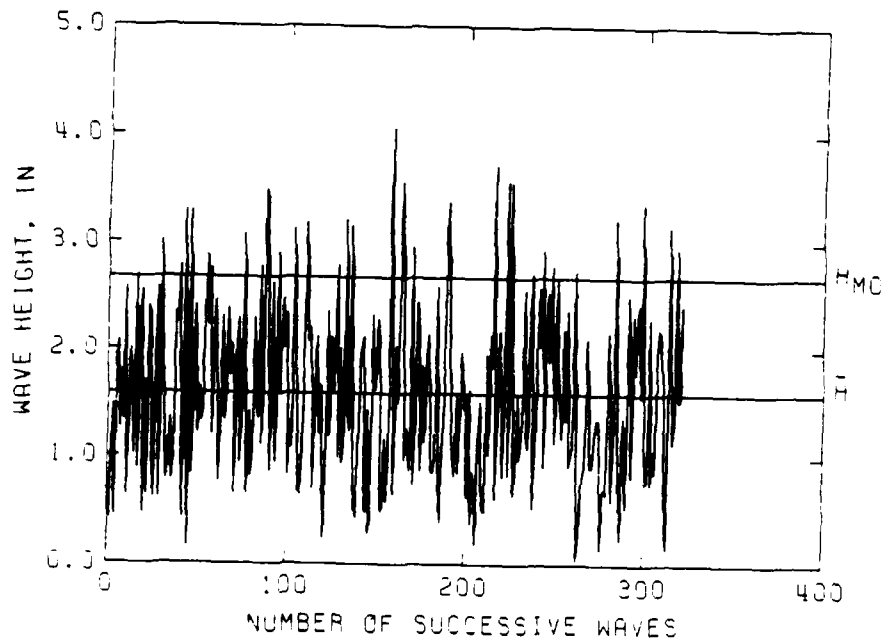
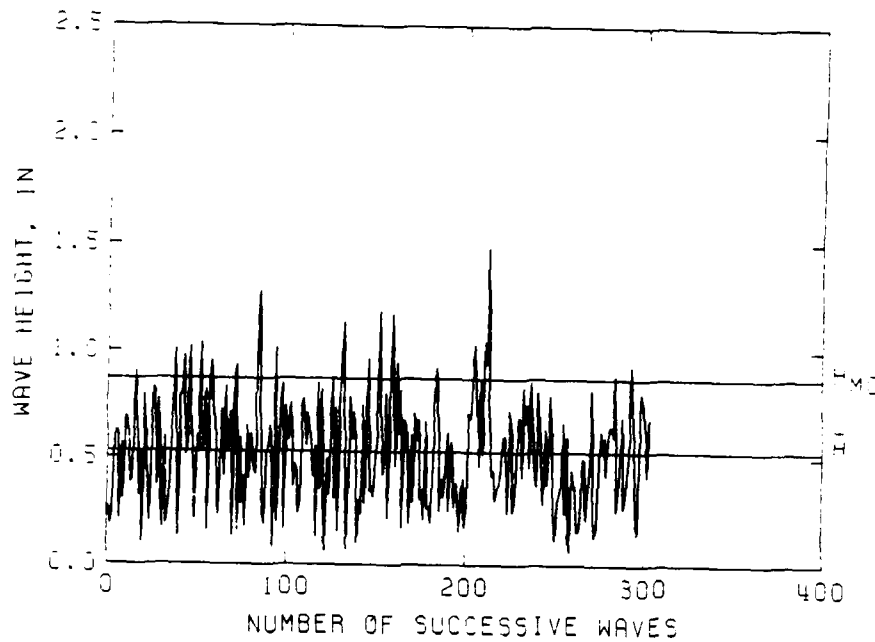
U11211. 3. FP=1.00. HMO=1.0. G=7.0. D=0. S=1. V=1
CHANNEL NUMBER = 7

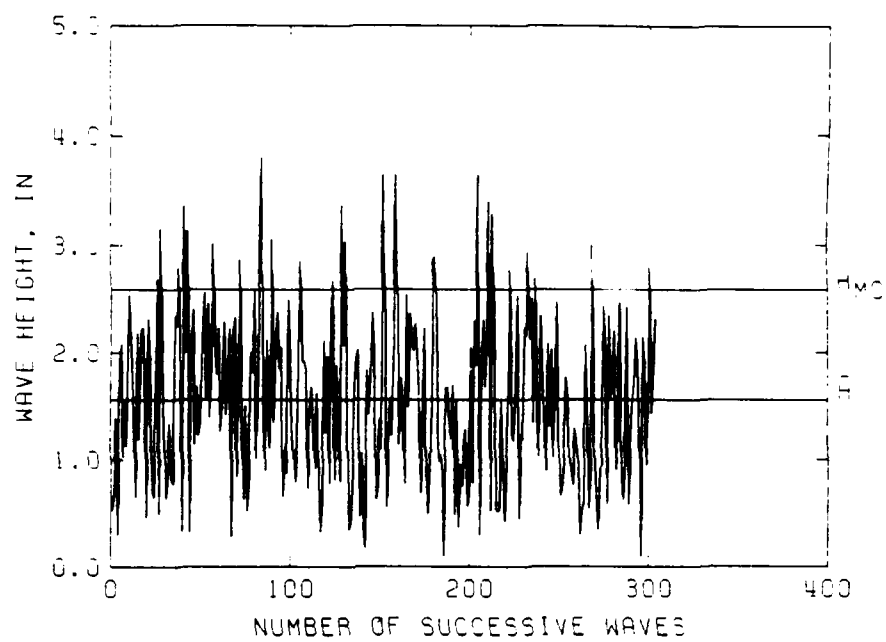


U121111, 4, FP=1.00, HMO=3.0, G=3.3, D=0, S=1, V=1
CHANNEL NUMBER = 7

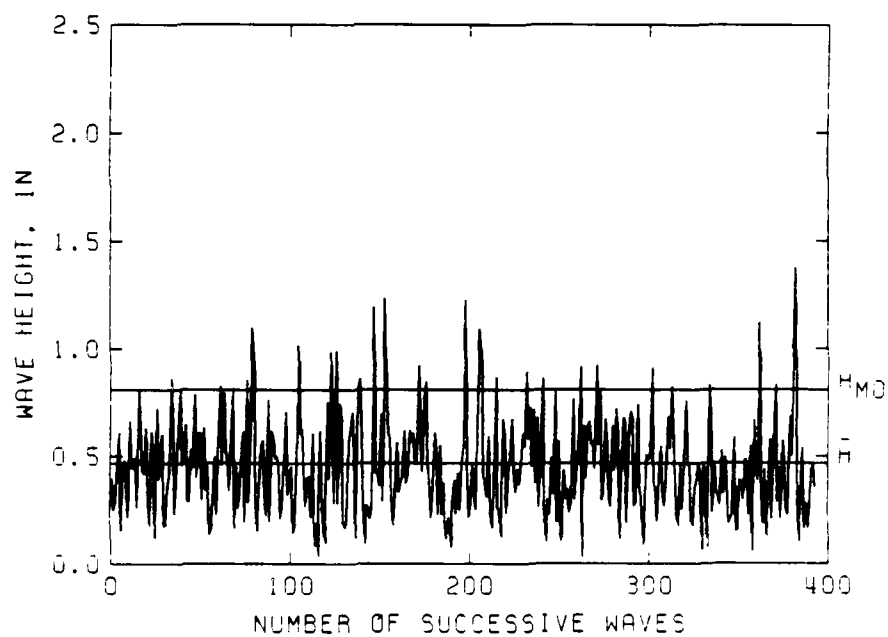


U211111, 2, FP=.67, HMO=1.0, G=3.3, D=0, S=1, V=1
CHANNEL NUMBER = 7

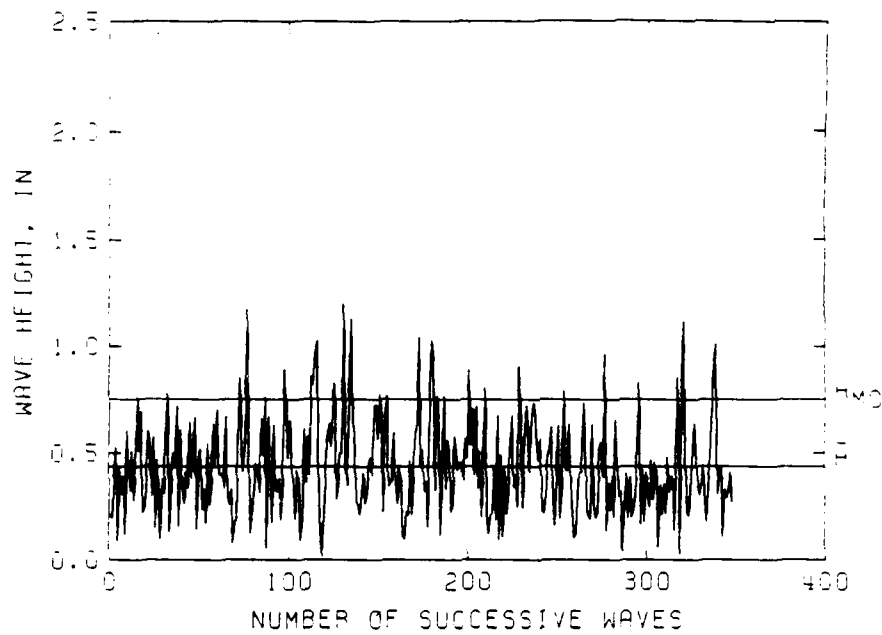




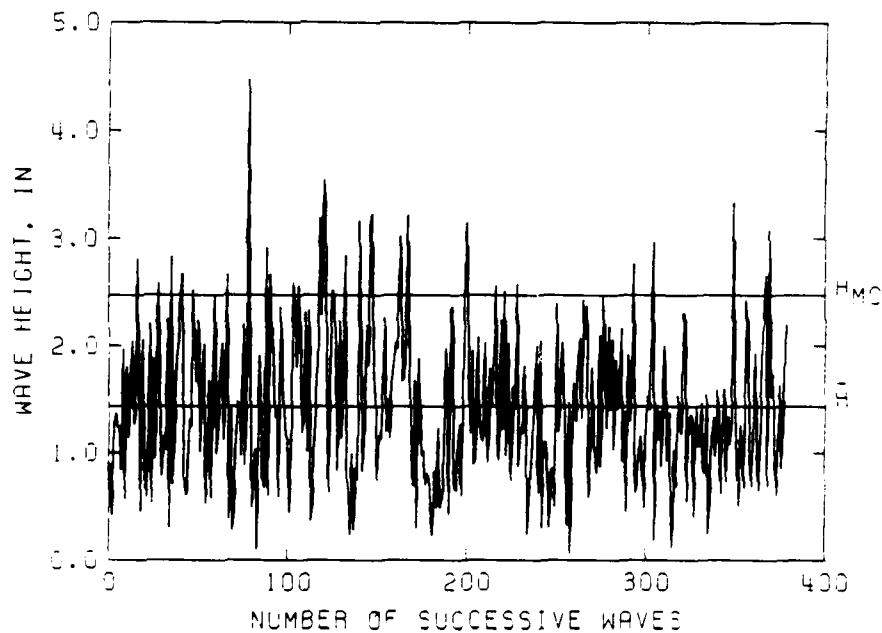
U22211, 1, FP=.67, HMO=3.0, G=7.0, D=0, S=1, V=1
CHANNEL NUMBER = 7



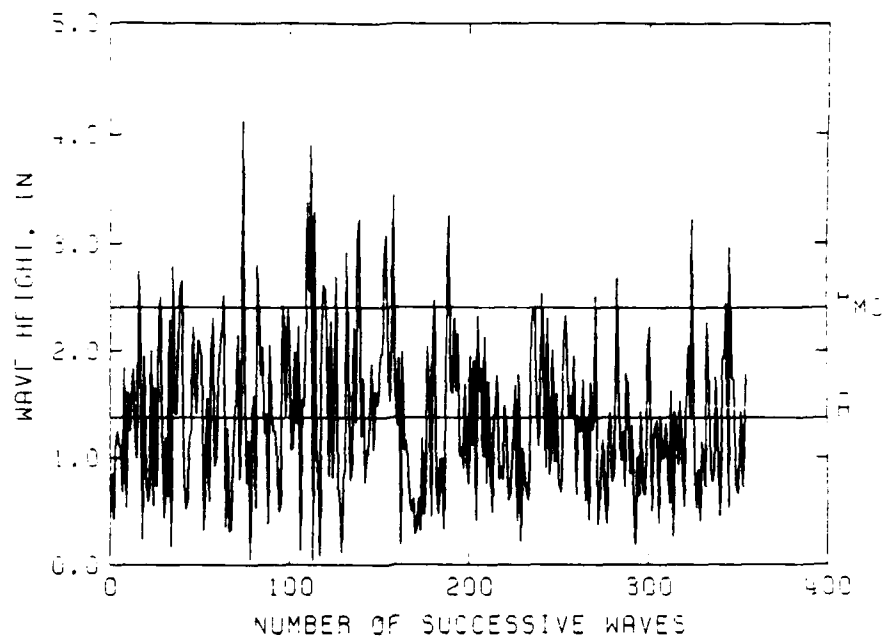
U31111, 1, FP=.5, HMO=1.0, G=3.3, D=0, S=1, V=1
CHANNEL NUMBER = 7



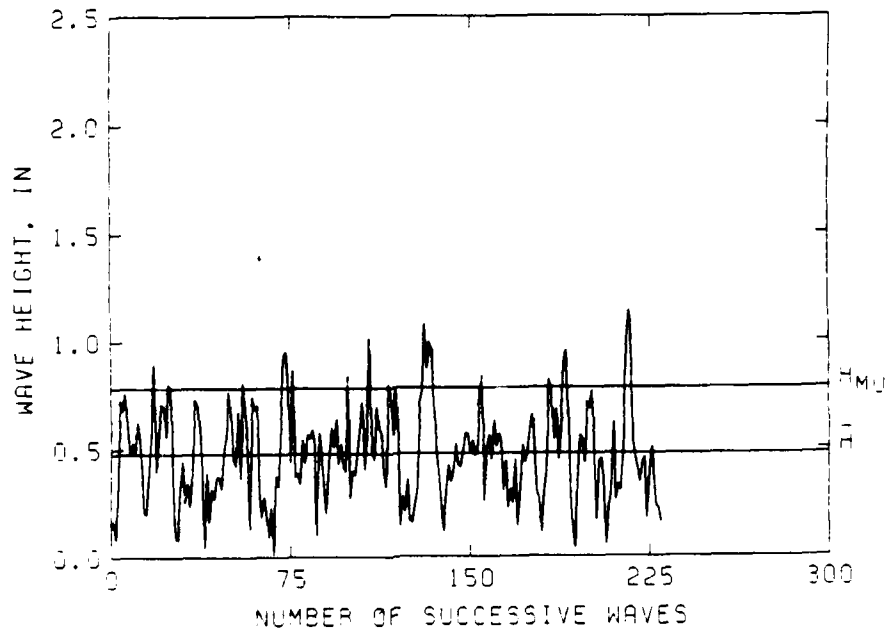
U312111. 1. FP=.5. HMO=1.0. G=7.0. D=0. S=1. V=1
CHANNEL NUMBER = 7



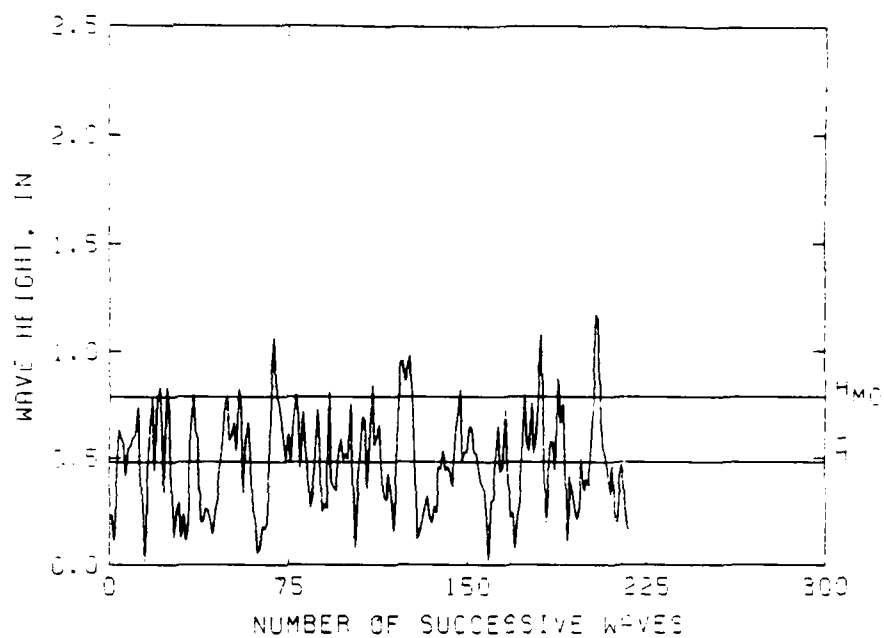
U321111. 1. FP=.5. HMO=3.0. G=3.3. D=0. S=1. V=1
CHANNEL NUMBER = 7



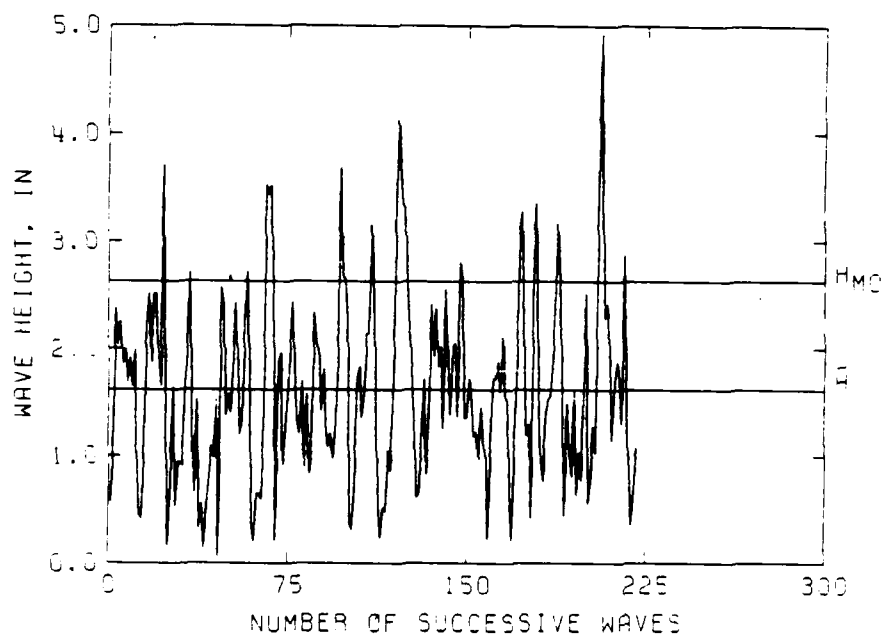
U32211, 1, FP=.5, HMO=3.0, G=7.0, D=0, S=1, V=1
CHANNEL NUMBER = 7



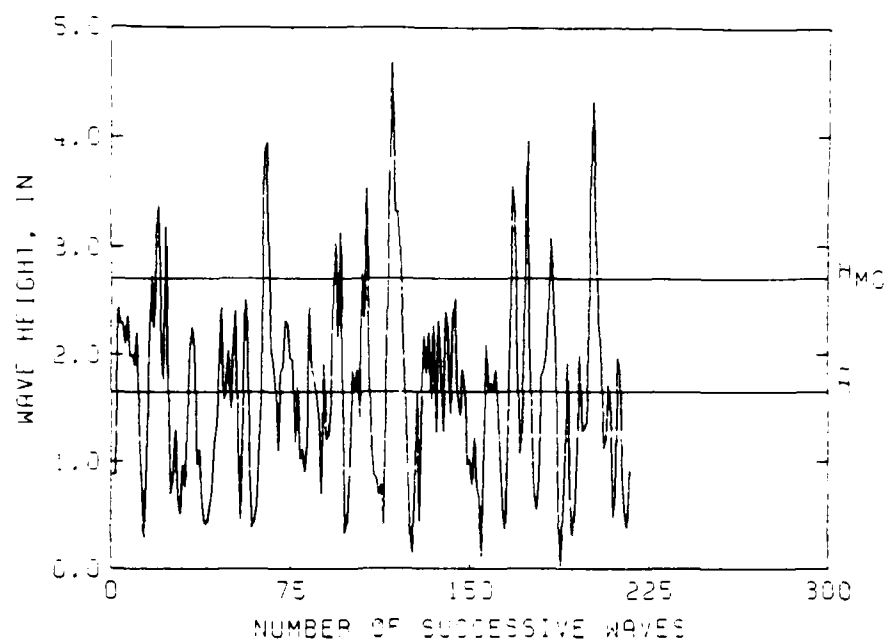
U11122, 2, FP=1.0, HMO=1.0, G=3.3, D=-30, S=1, V=1
CHANNEL NUMBER = 7



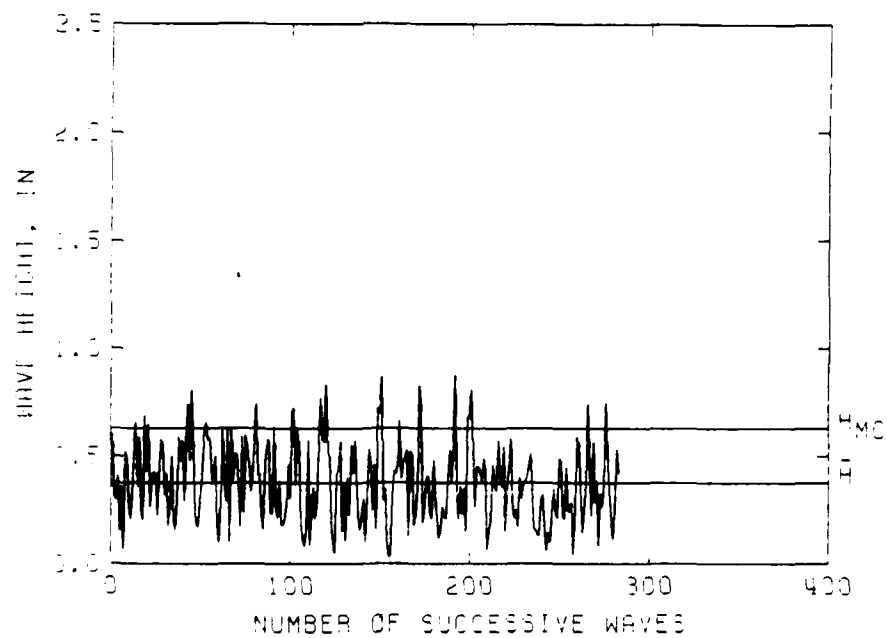
U11222, 1, FP=1.0, HMO=1.0, G=7.0, D=-30, S=1, V=1
CHANNEL NUMBER = 7



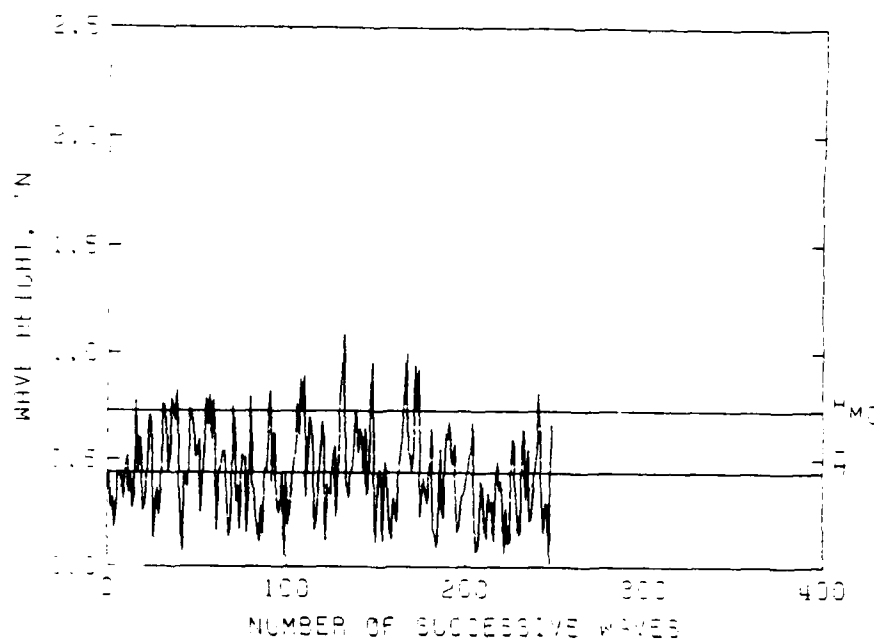
U12122, 1, FP=1.0, HMO=3.0, G=3.3, D=-30, S=1, V=1
CHANNEL NUMBER = 7



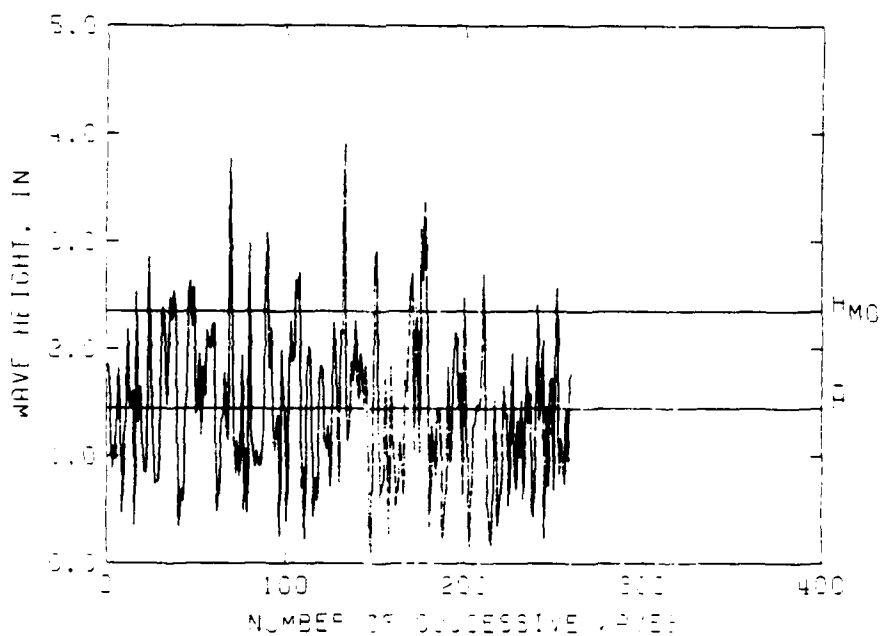
U12222. 1, FP=1.0, HM0=3.0, G=7.0, D=-30, S=1, V=1
CHANNEL NUMBER = 7



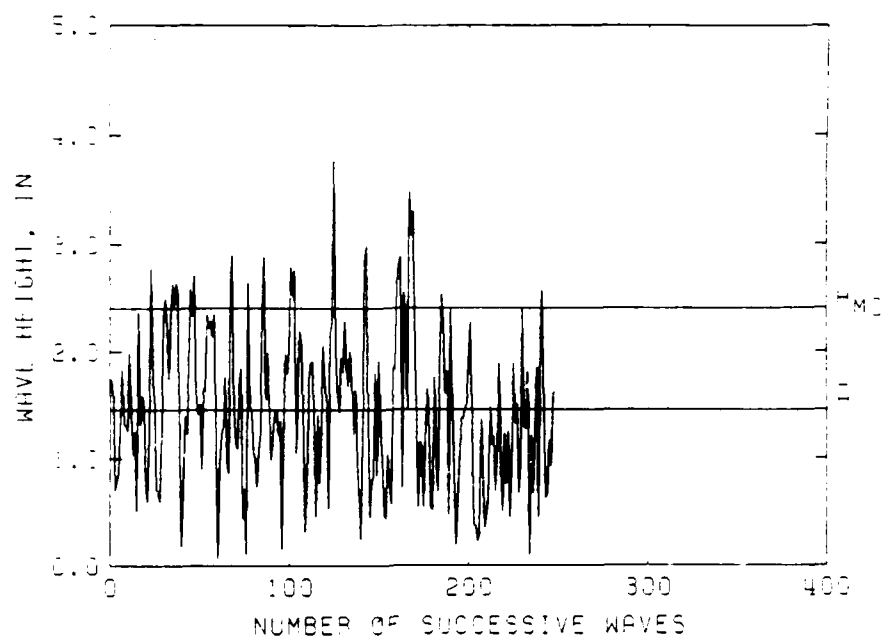
U21122. 2, FP=0.67, HM0=1.0, G=3.3, D=-30, S=1, V=1
CHANNEL NUMBER = 7



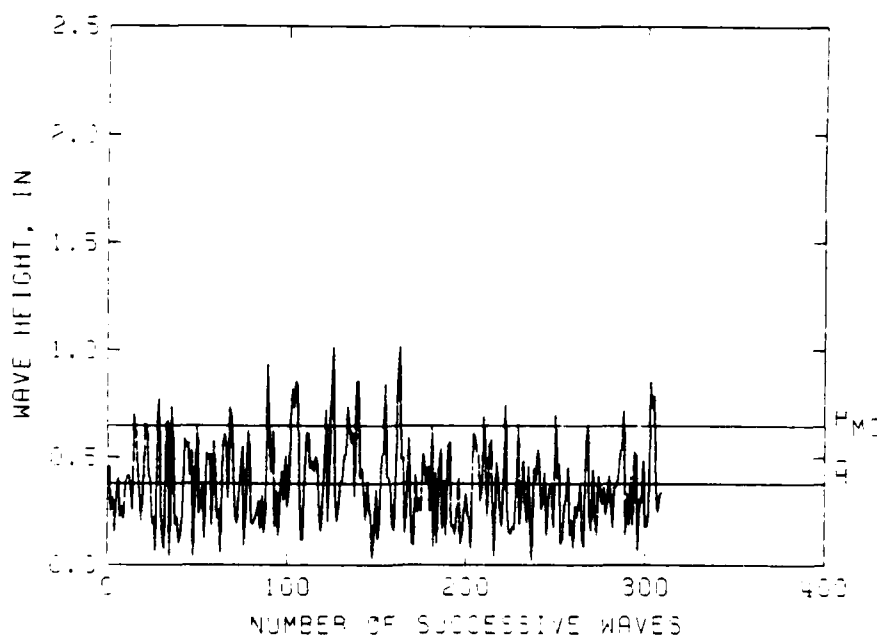
U21222, 2, FP=0.67, HMO=1.0, G=7.0, D=-30, S=1, V=
CHANNEL NUMBER = 7



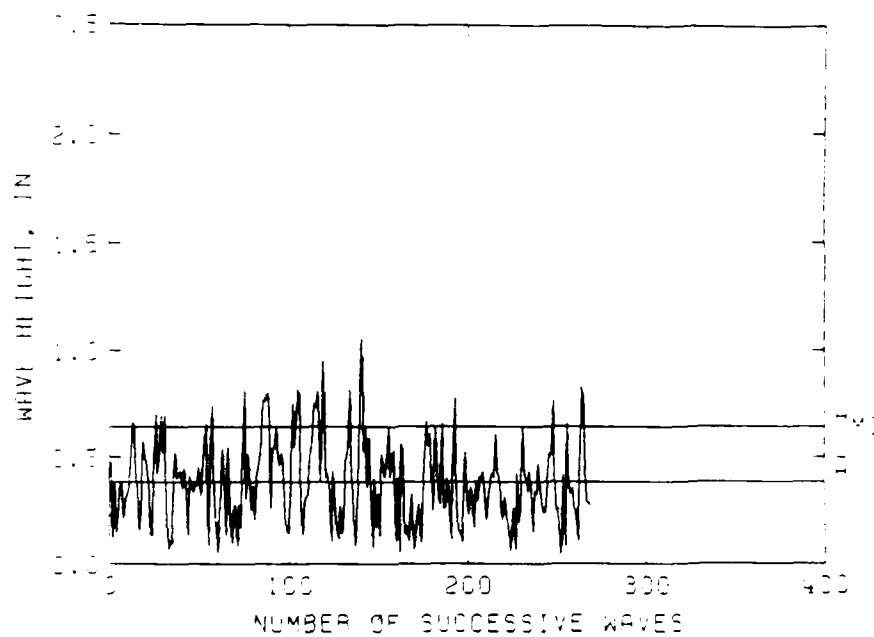
U22122, 2, FP=0.67, HMO=3.0, G=3.3, D=-30, S=1, V=
CHANNEL NUMBER = 7



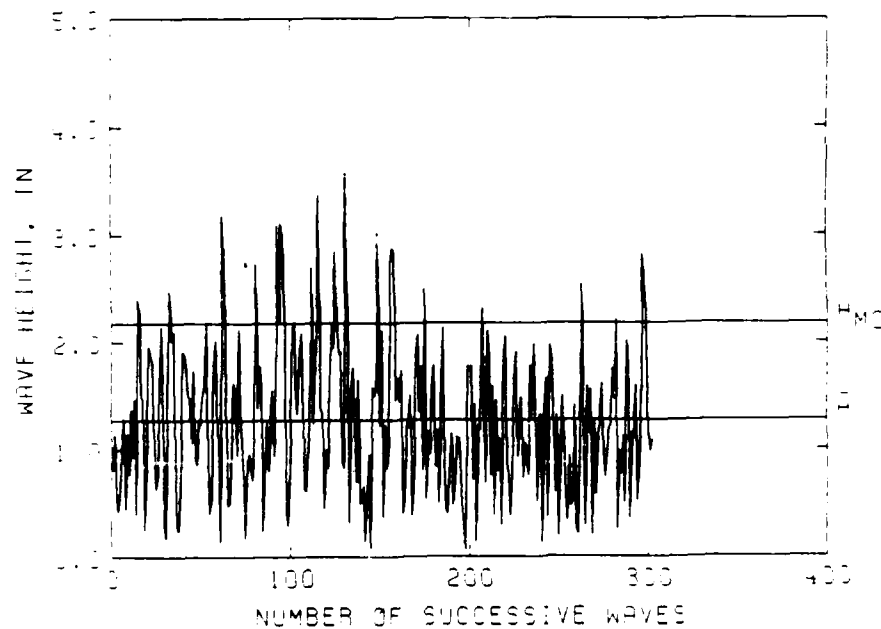
U22222, 2, FP=0.67, HMO=3.0, G=7.0, D=-30, S=1, V=
CHANNEL NUMBER = 7



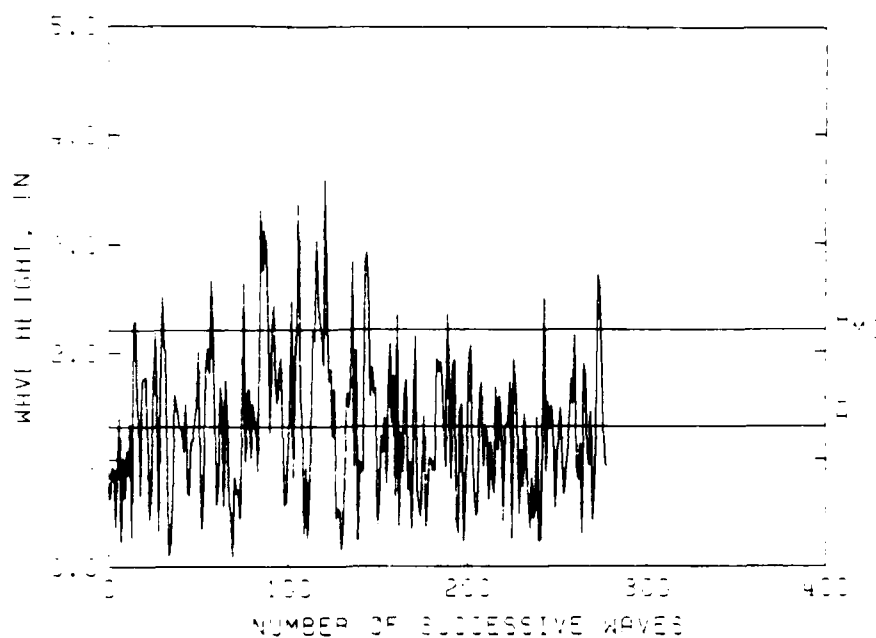
U31122, 2, FP=0.5, HMO=1.0, G=3.3, D=-30, S=1, V=
CHANNEL NUMBER = 7



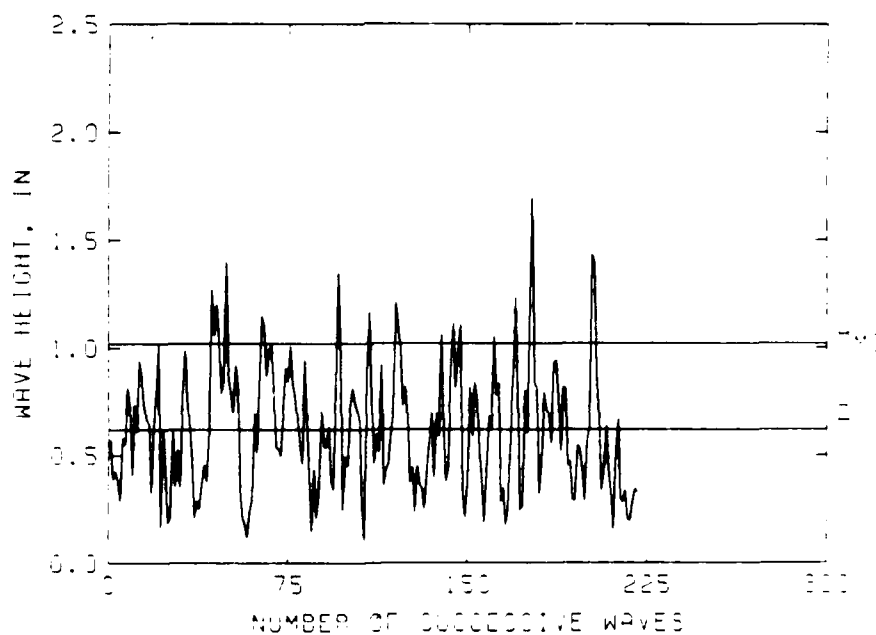
U31222, 2, FP=0.5, HMO=1.0, G=7.0, D=-30, S=1, V=1
CHANNEL NUMBER = 7



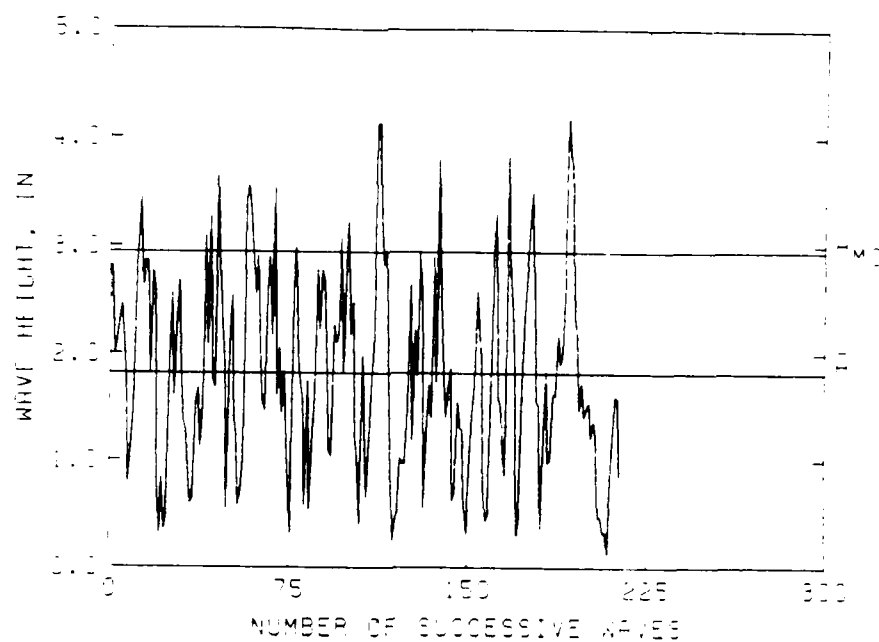
U32122, 2, FP=0.5, HMO=3.0, G=3.3, D=-30, S=1, V=1
CHANNEL NUMBER = 7



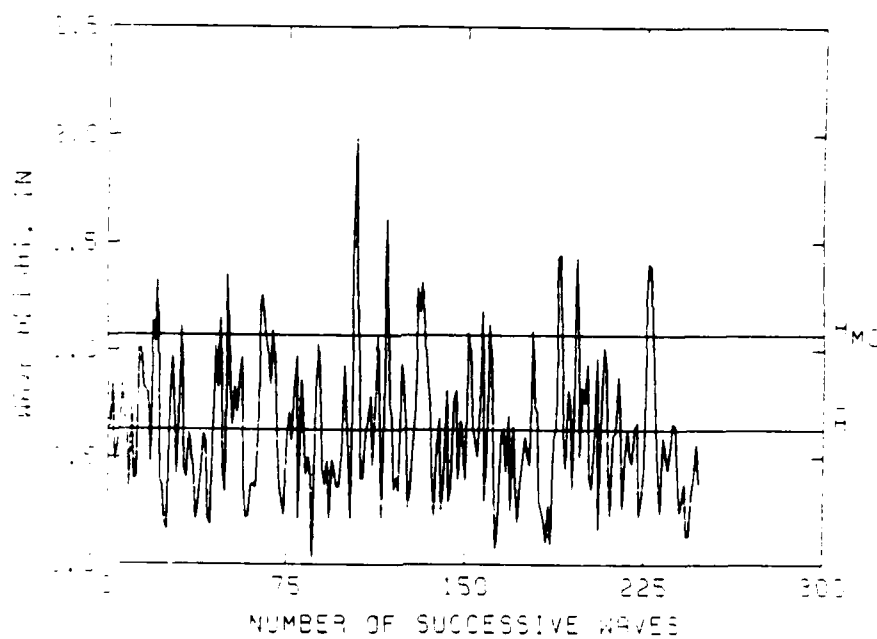
U32222, 2, FP=0.5, HMO=3.0, G=7.0, D=-30, S=1, V=1
CHANNEL NUMBER = 7



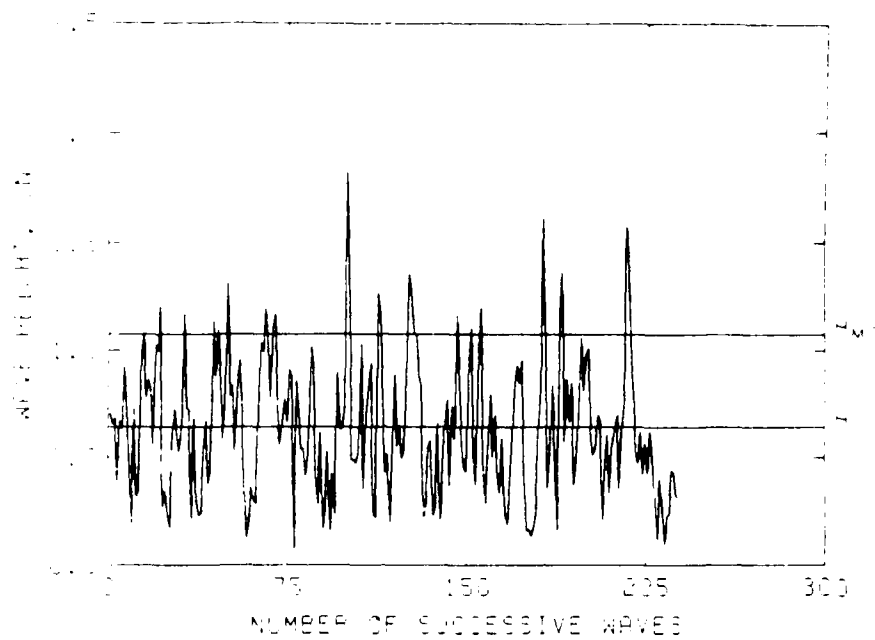
U11311, 1, FP=1.0, HMO=1.0, G=15.0, D=0, S=1, V=1
CHANNEL NUMBER = 7



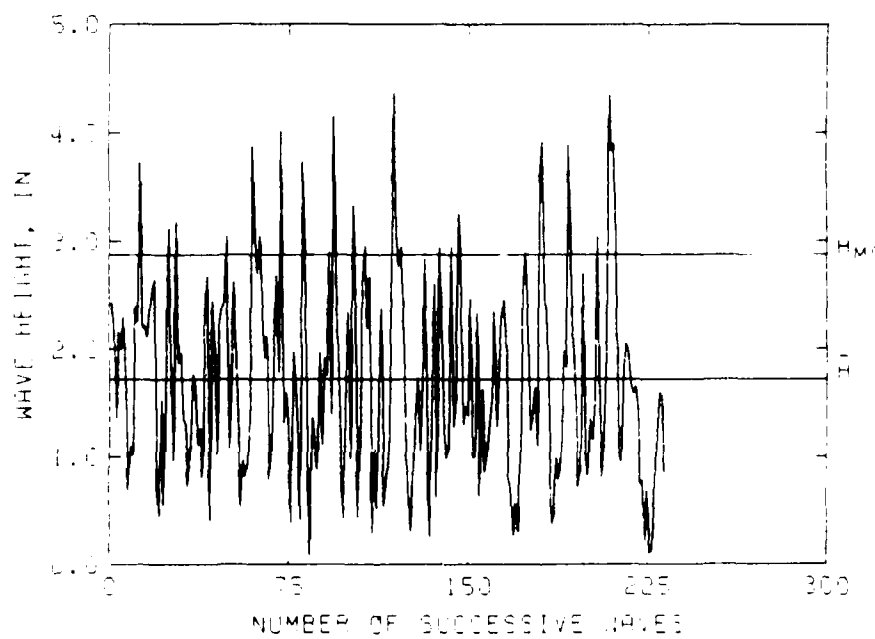
U12311. 1, FP=1.0, HMO=3.0, G=15.0, D=0, S=1, V=1
CHANNEL NUMBER = 7



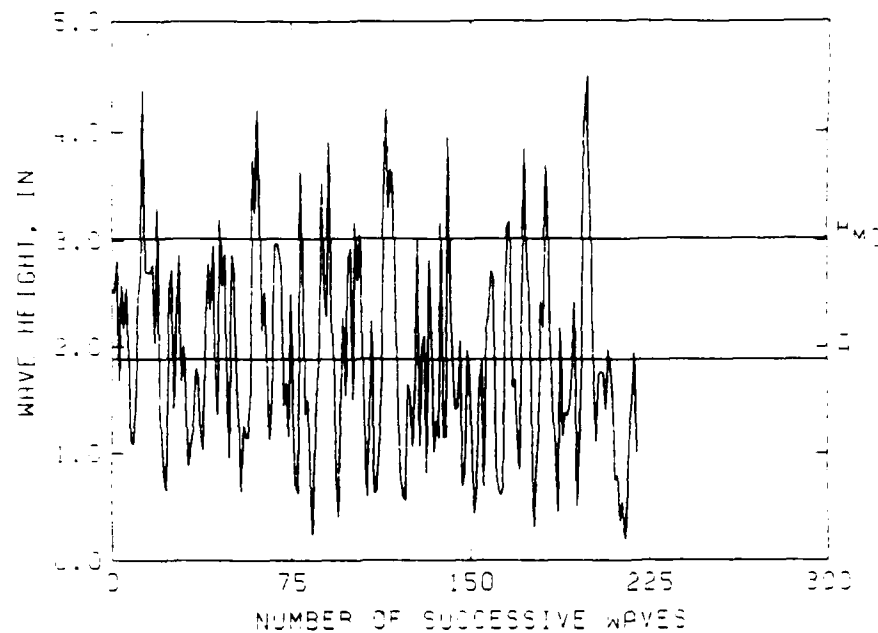
U12311. 5, FP=1.0, HMO=1.0, G=3.3, D=0, S=1, V=1
CHANNEL NUMBER = 7



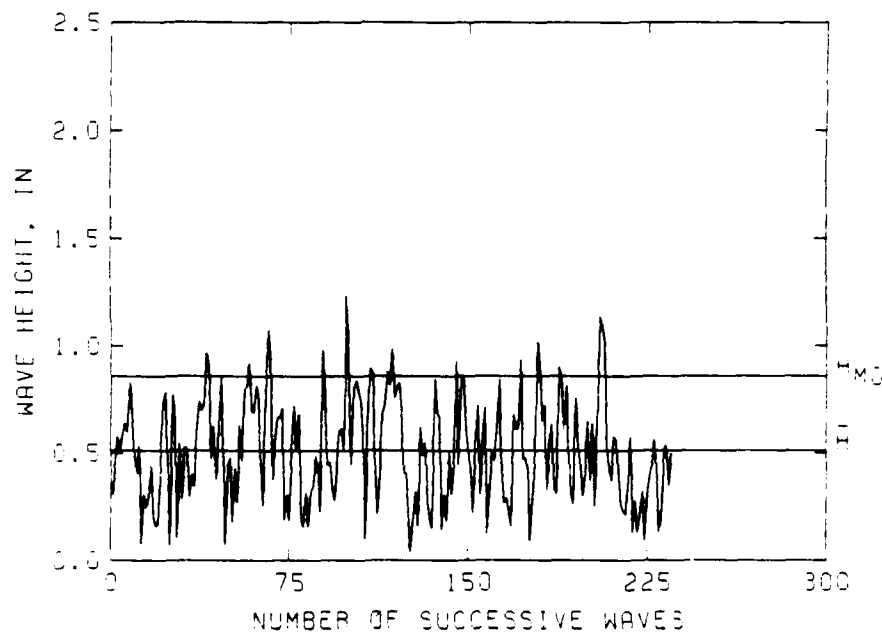
U12111. 4. FP=1.0, HMO=1.0, G=7.0, D=0, S=1, V=1
CHANNEL NUMBER = 7



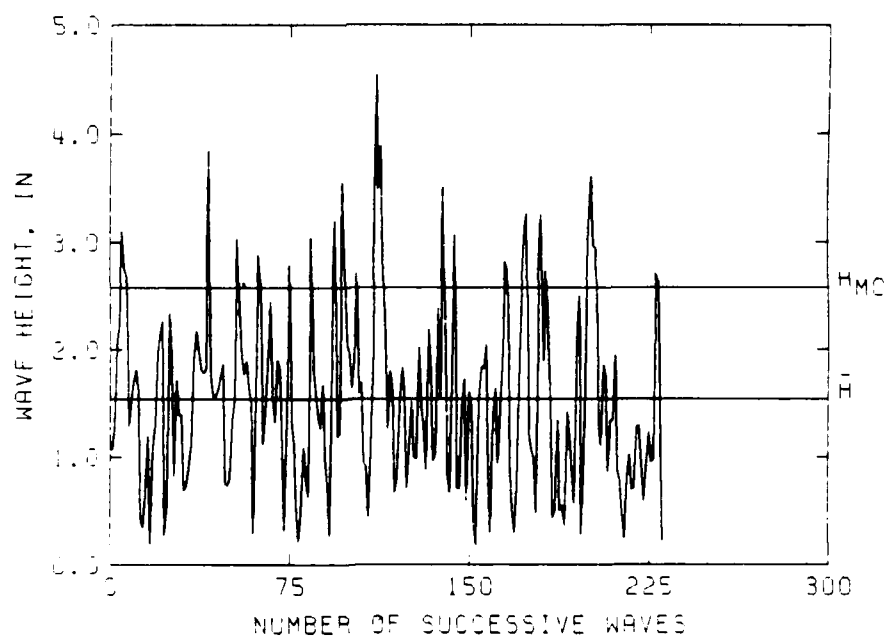
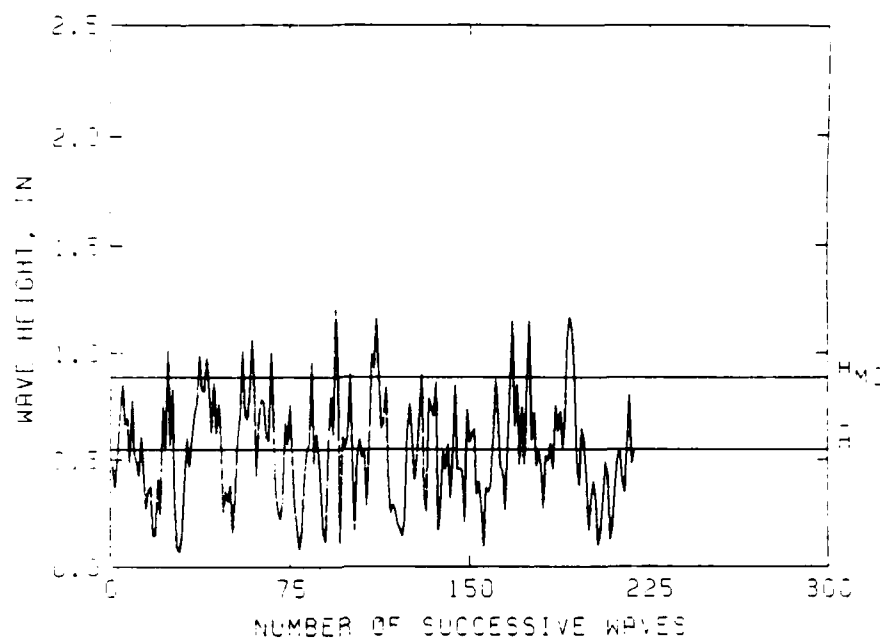
U12111. 5. FP=1.0, HMO=3.0, G=3.3, D=0, S=1, V=1
CHANNEL NUMBER = 7

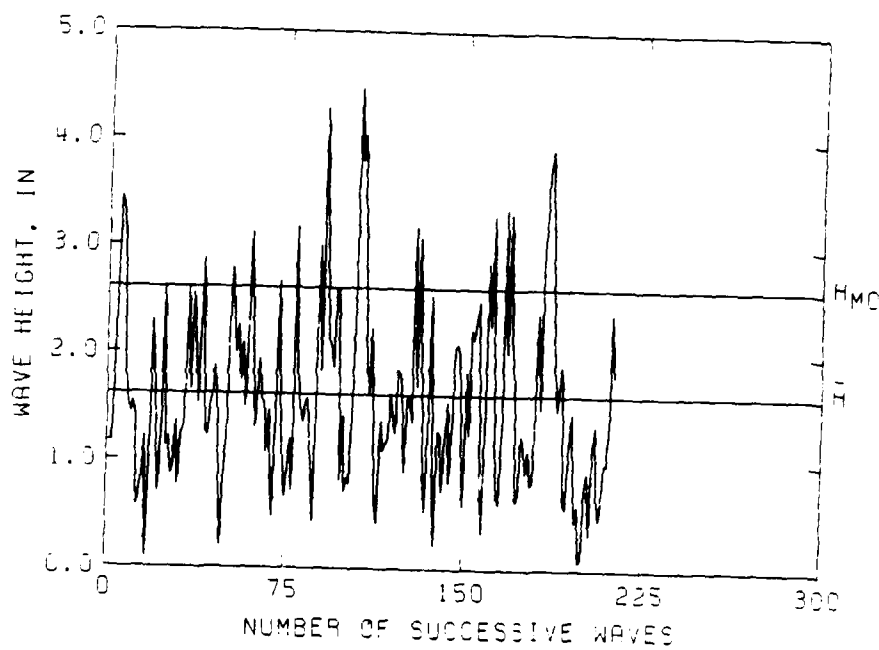


U12211. 4, FP=1.0, HMO=3.0, G=7.0, D=0, S=1, V=1
CHANNEL NUMBER = 7



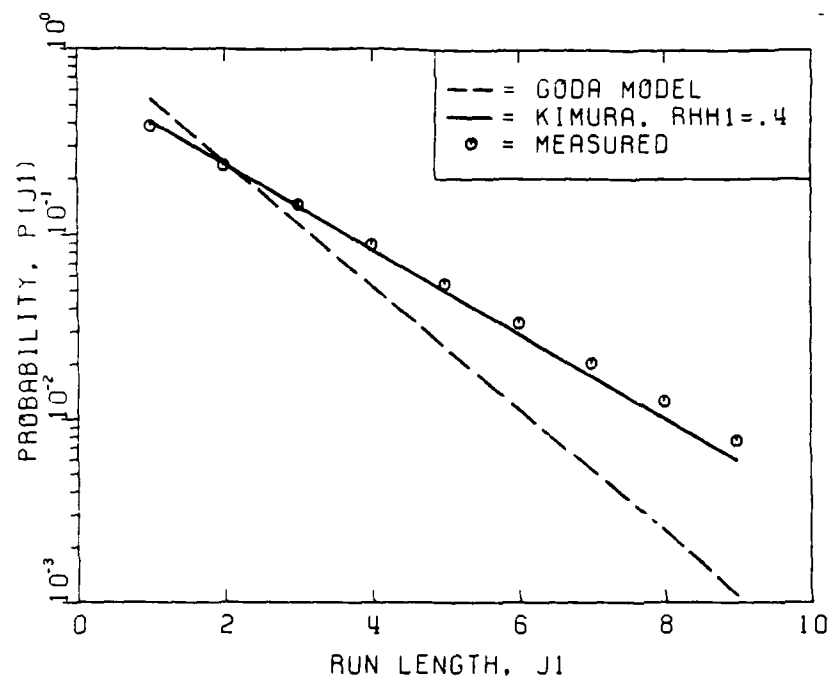
U11121, 1, FP=1.0, HMO=1.0, G=3.3, D=30, S=1, V=1
CHANNEL NUMBER = 7



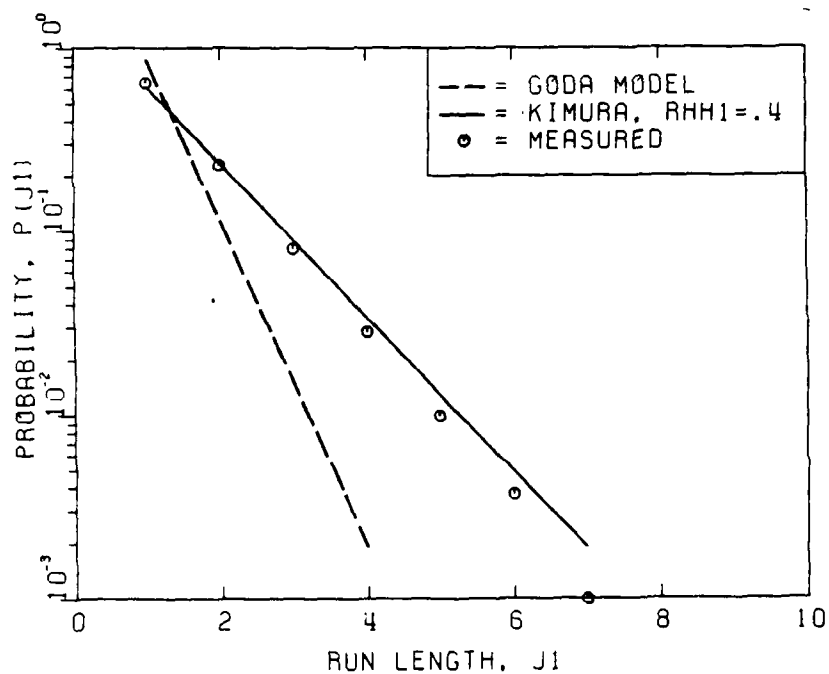


U12221. 1. FP=1.0. HMO=3.0. G=7.0. D=30. S=1. V=1
CHANNEL NUMBER = 7

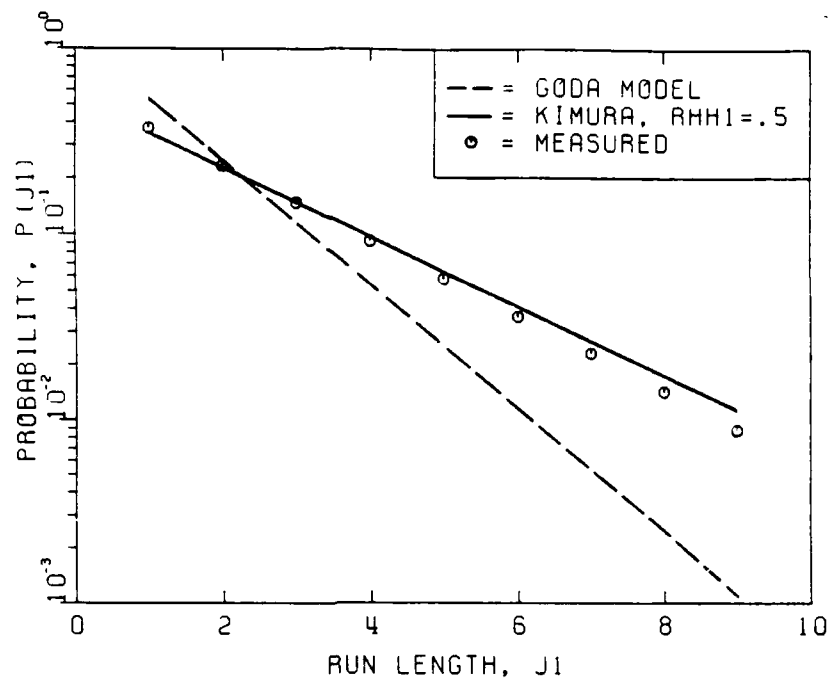
APPENDIX H: PROBABILITY DISTRIBUTIONS



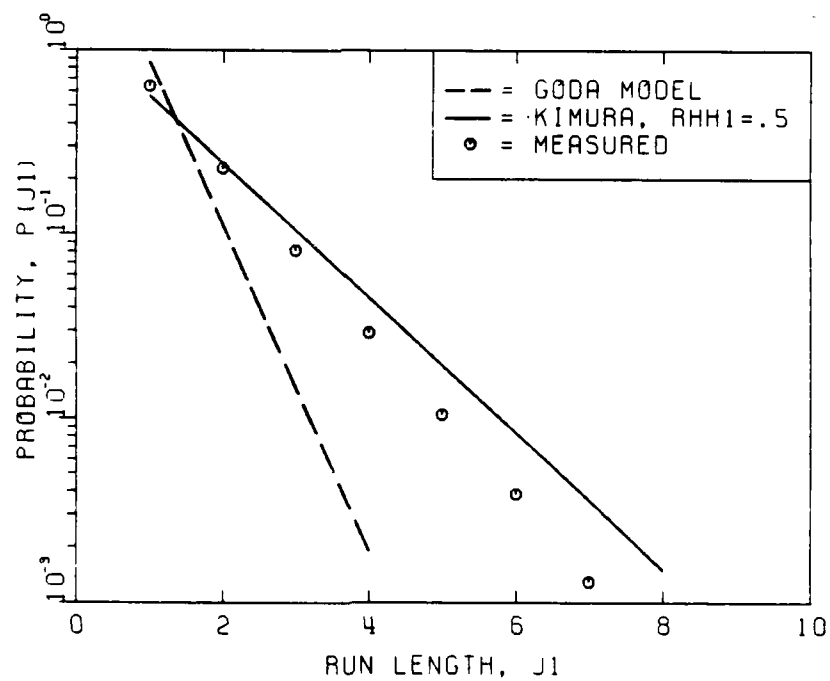
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 1: $TP = 1.0$, $HMO = 1$, $G = 3.3$, $D = 0$



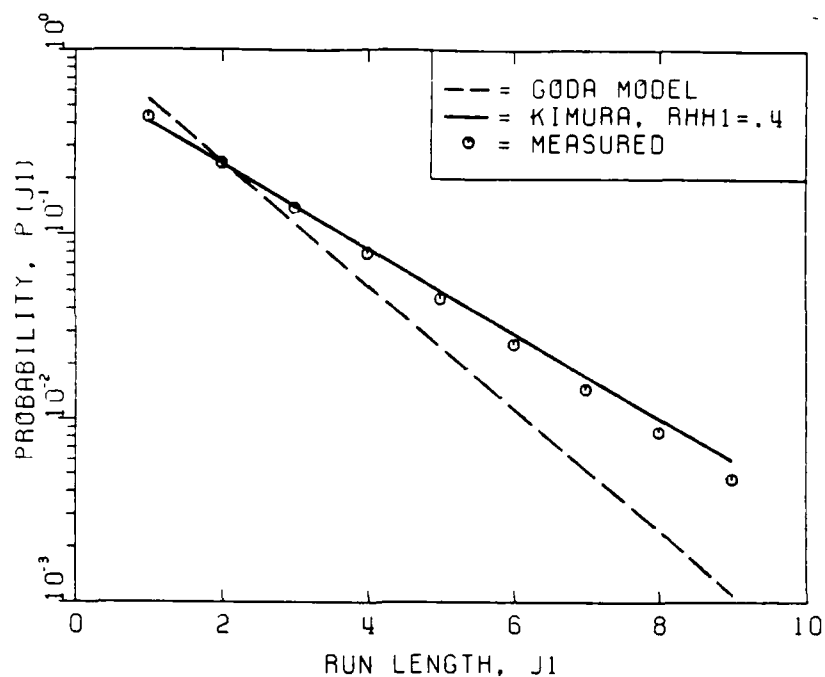
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 1: $TP = 1.0$, $HMO = 1$, $G = 3.3$, $D = 0$



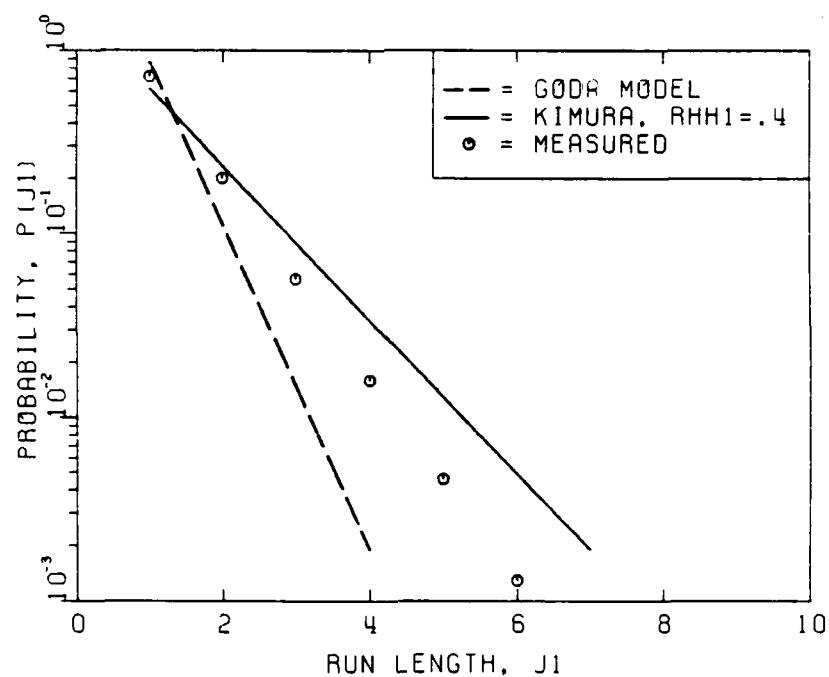
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 2: $TP = 1.0$, $HMO = 1$, $G = 7.0$, $D = 0$



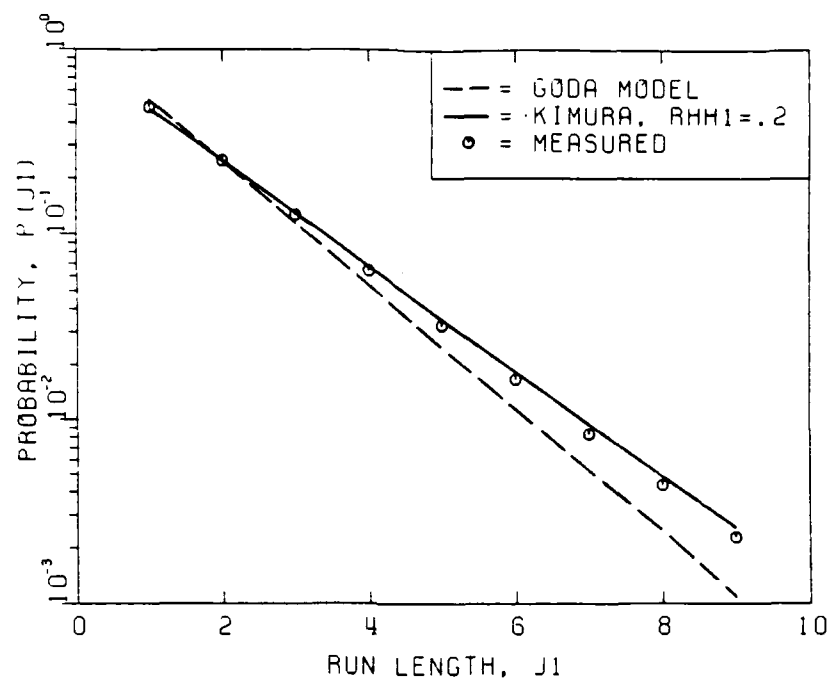
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 2: $TP = 1.0$, $HMO = 1$, $G = 7.0$, $D = 0$



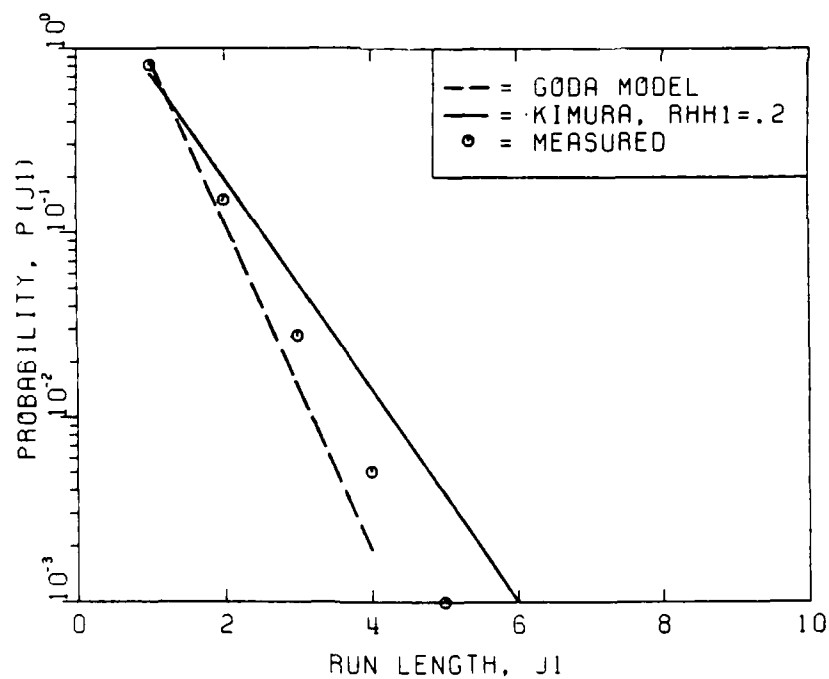
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 3: TP = 1.0, HMO = 3, G = 3.3, D = 0



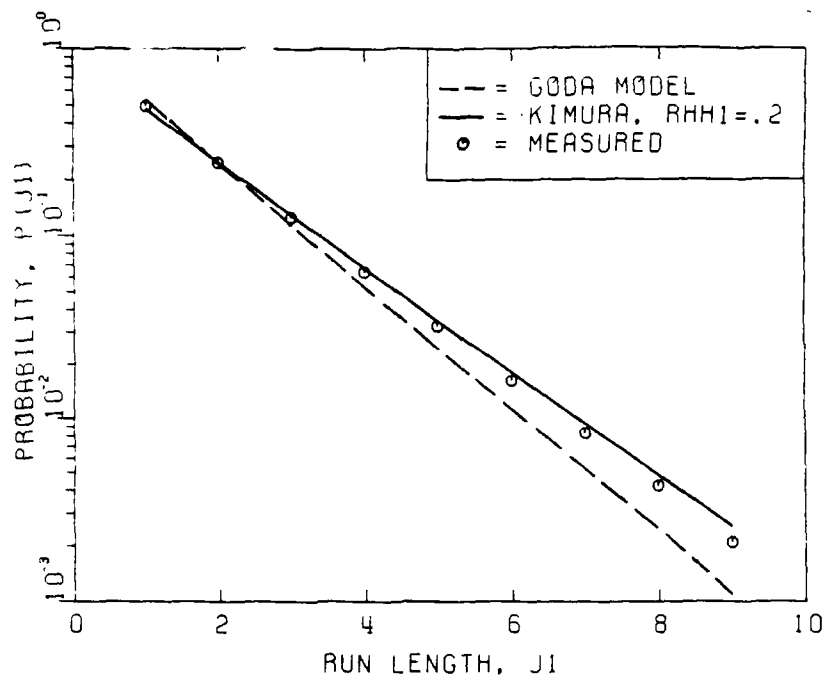
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 3: TP = 1.0, HMO = 3, G = 3.3, D = 0



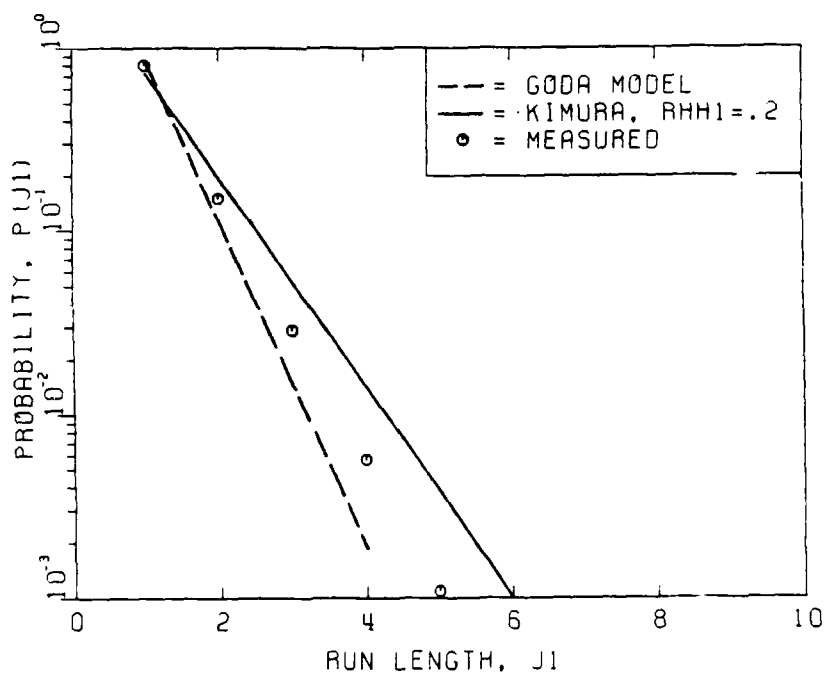
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 5: $TP = 1.5$, $HMO = 1$, $G = 3.3$, $D = 0$



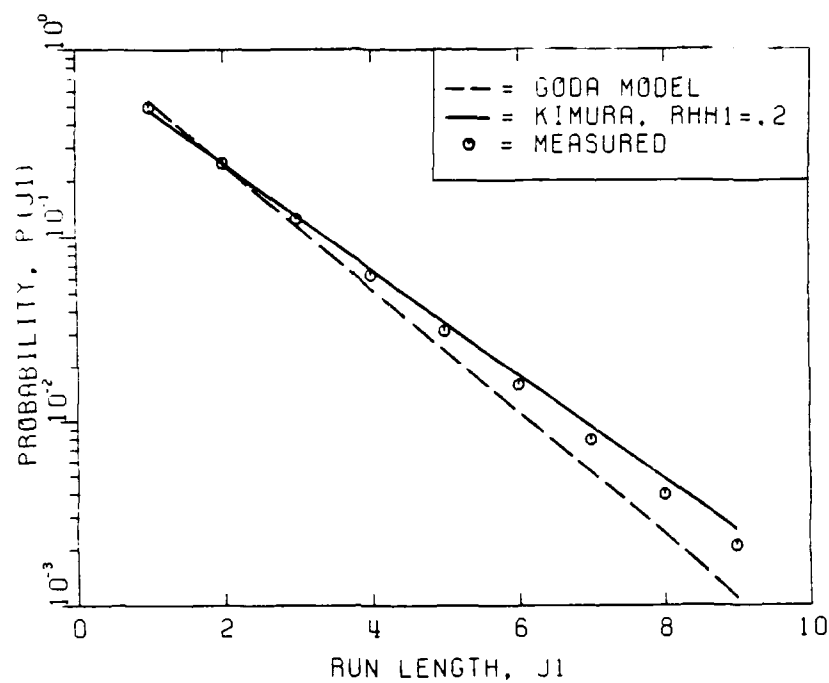
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 5: $TP = 1.5$, $HMO = 1$, $G = 3.3$, $D = 0$



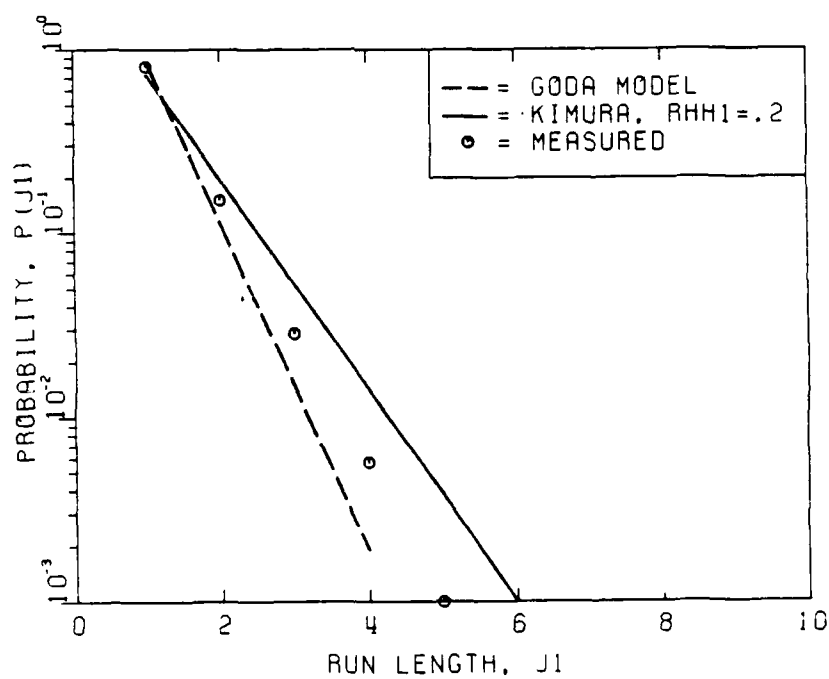
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 6: $TP = 1.5$, $HMO = 1$, $G = 7.0$, $D = 0$



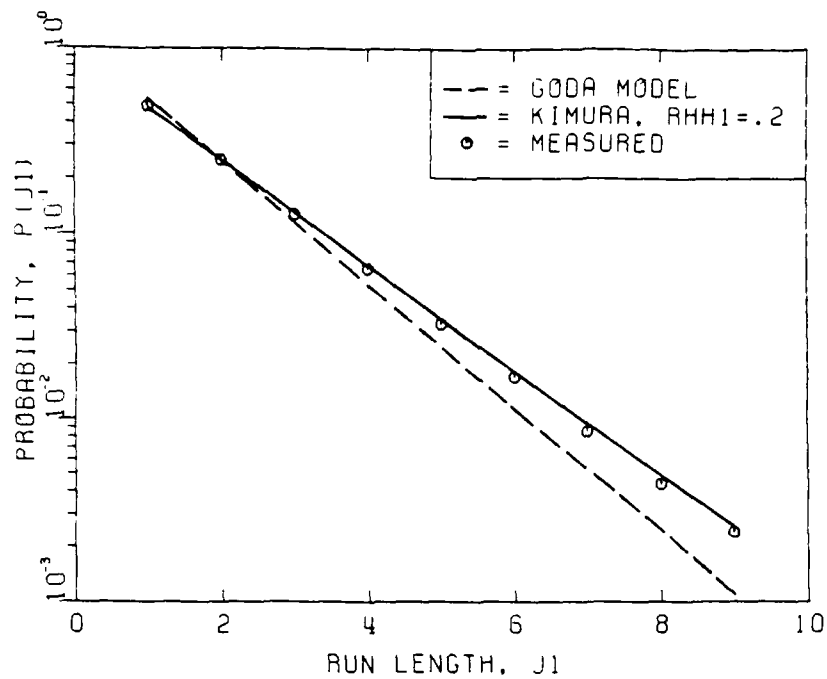
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 6: $TP = 1.5$, $HMO = 1$, $G = 7.0$, $D = 0$



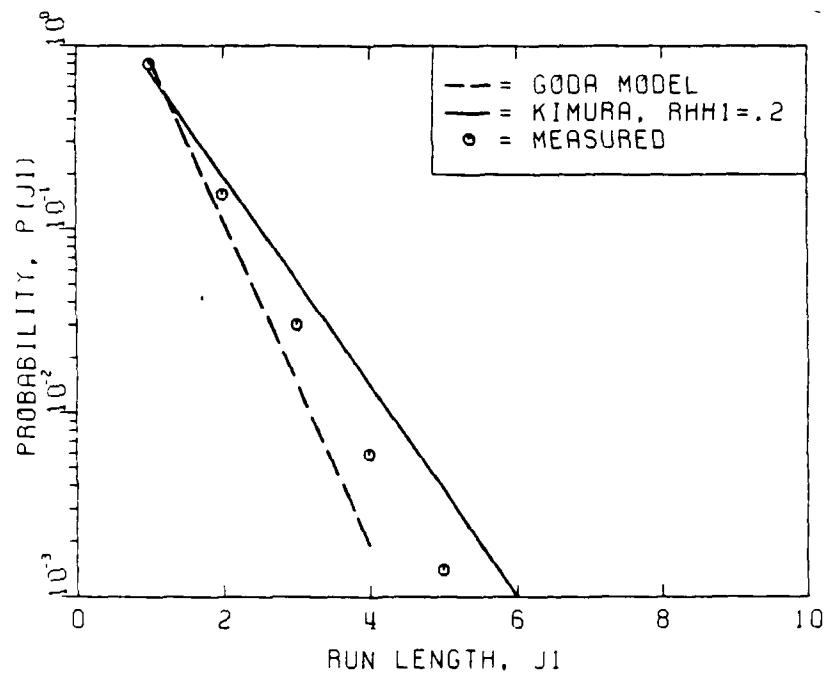
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 7: $TP = 1.5$, $HMO = 3$, $G = 3.3$, $D = 0$



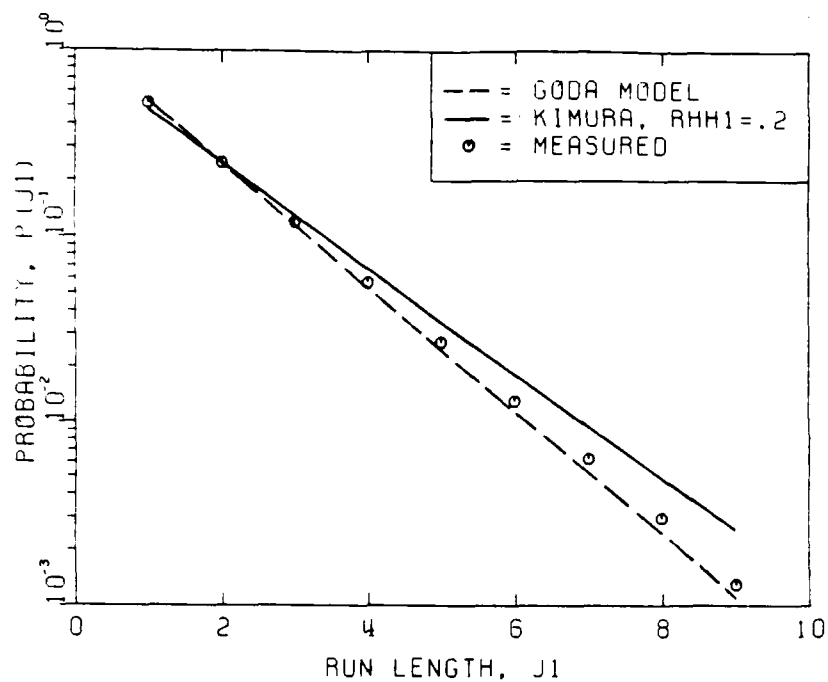
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 7: $TP = 1.5$, $HMO = 3$, $G = 3.3$, $D = 0$



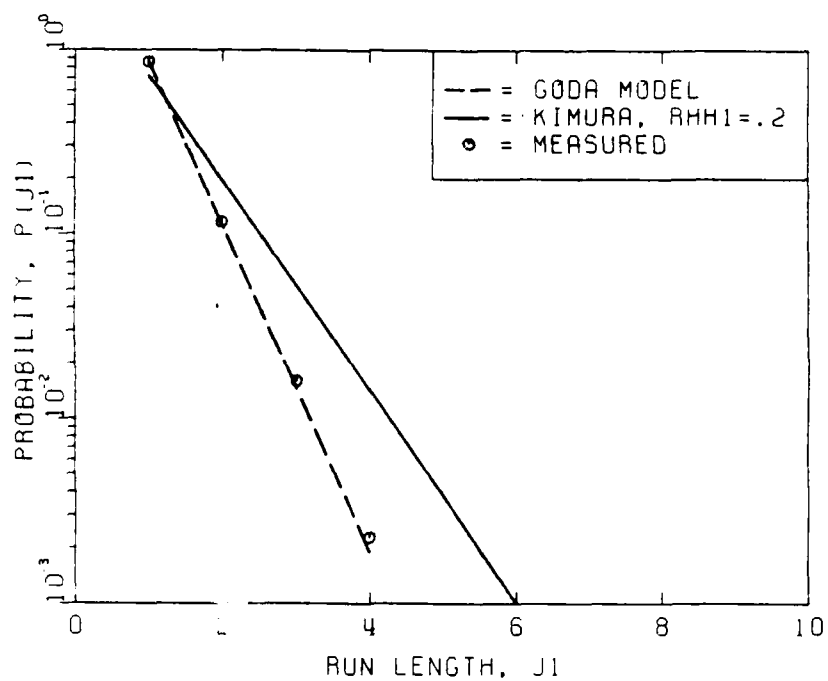
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 8: $TP = 1.5$, $HMO = 3$, $G = 7.0$, $D = 0$



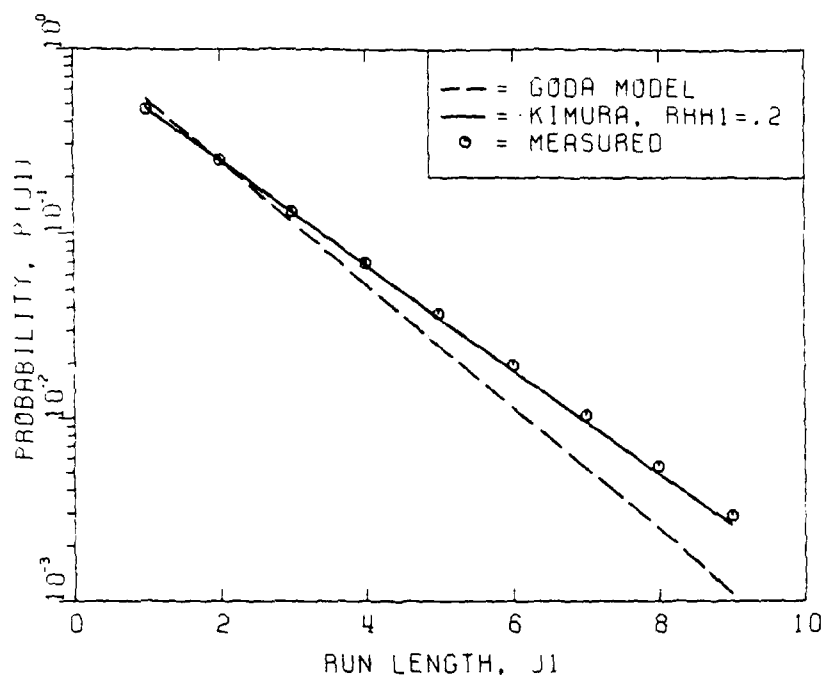
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 8: $TP = 1.5$, $HMO = 3$, $G = 7.0$, $D = 0$



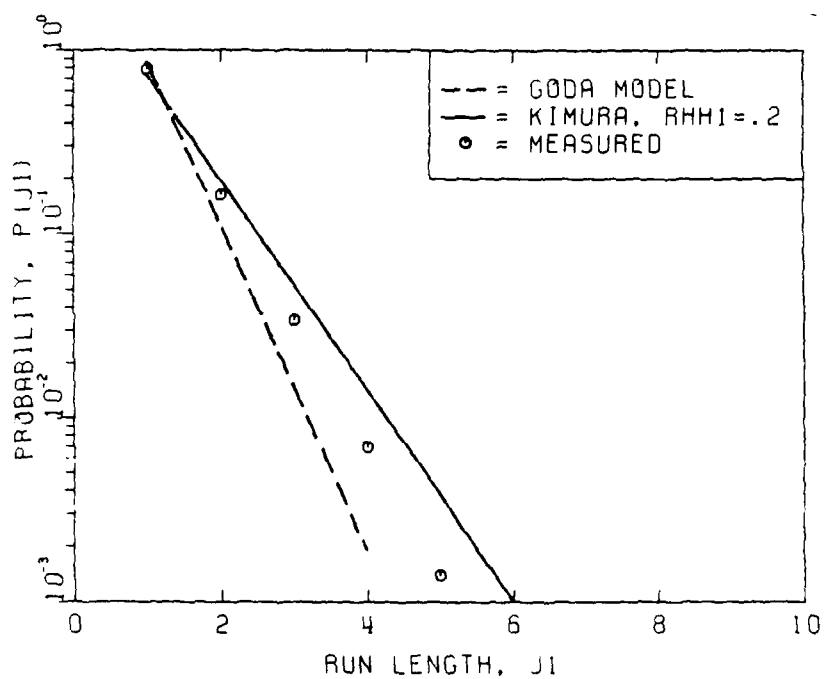
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 9: $TP = 2.0$, $HMO = 1$, $G = 3.3$, $D = 0$



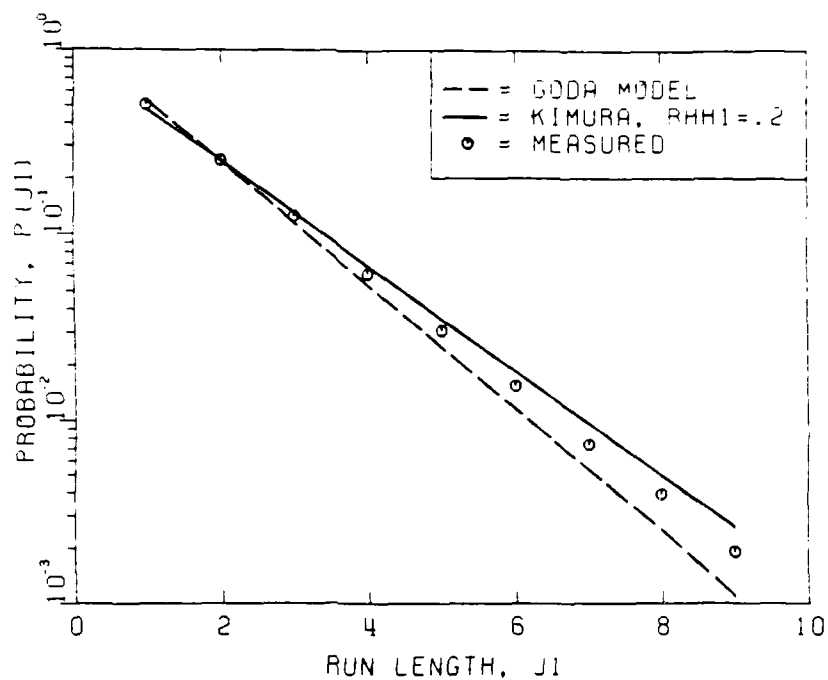
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 9: $TP = 2.0$, $HMO = 1$, $G = 3.3$, $D = 0$



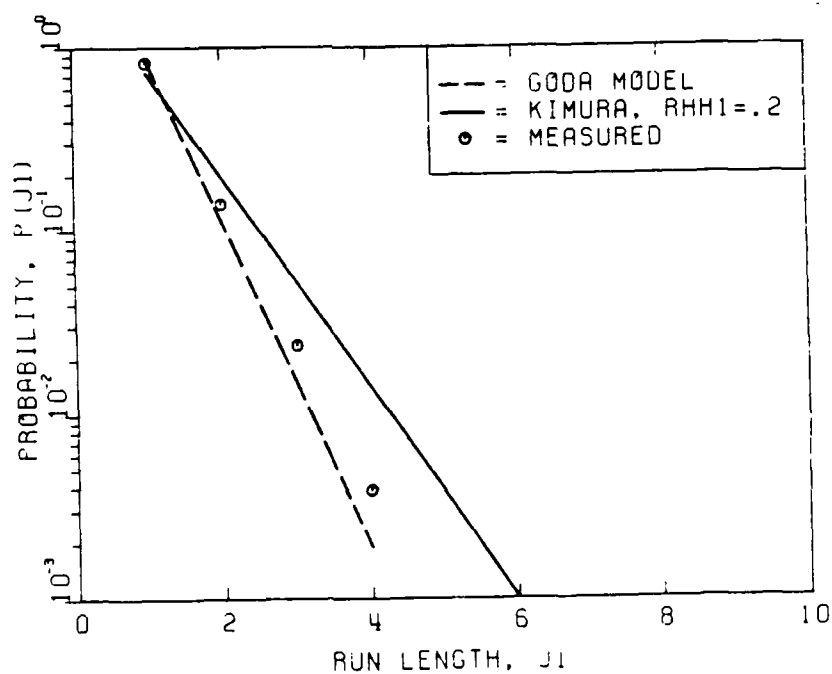
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 10: TP = 2.0, HMO = 1, G = 7.0, D = 0



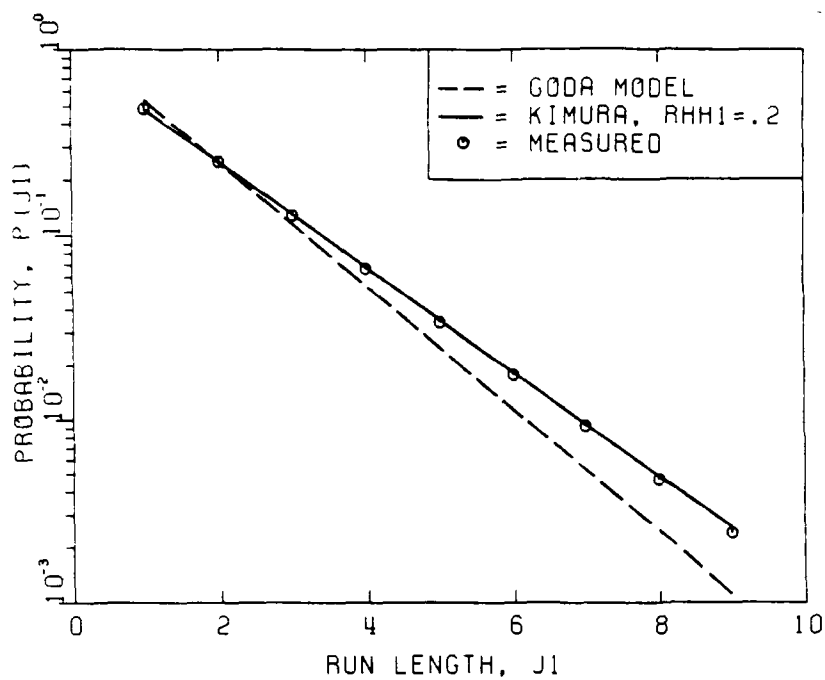
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 10: TP = 2.0, HMO = 1, G = 7.0, D = 0



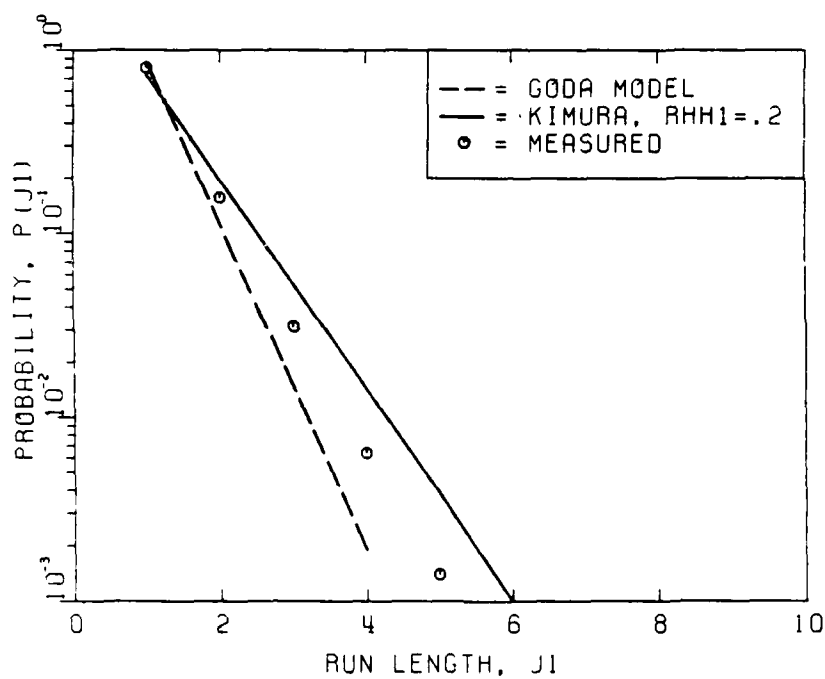
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 11: $TP = 2.0$, $HMO = 3$, $G = 3.3$, $D = 0$



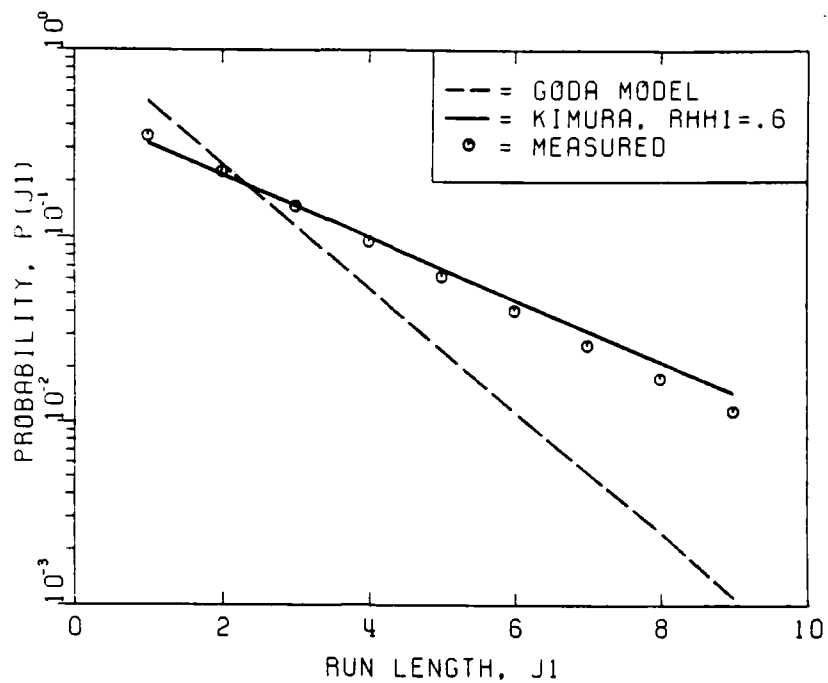
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 11: $TP = 2.0$, $HMO = 3$, $G = 3.3$, $D = 0$



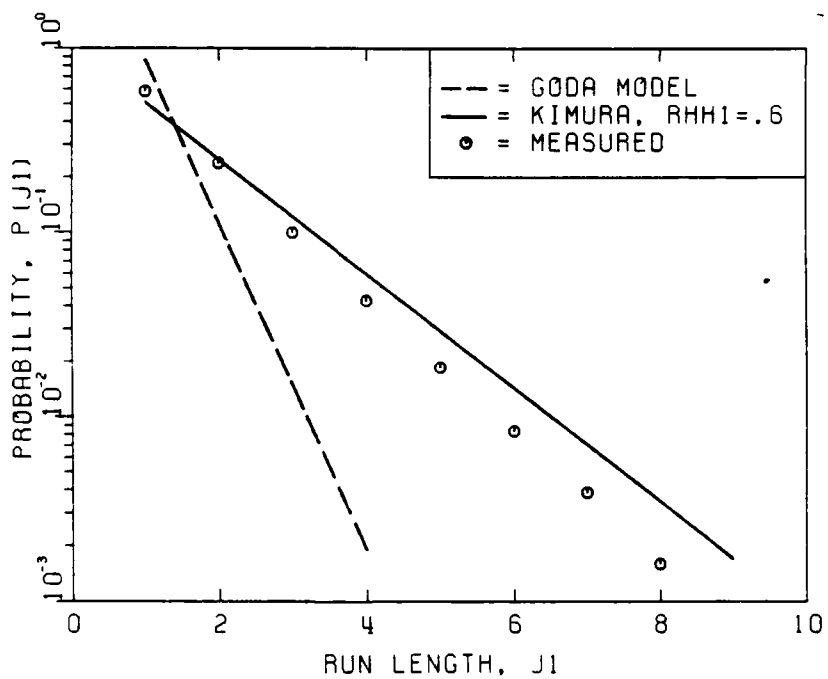
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 12: $TP = 2.0$, $HMO = 3$, $G = 7.0$, $D = 0$



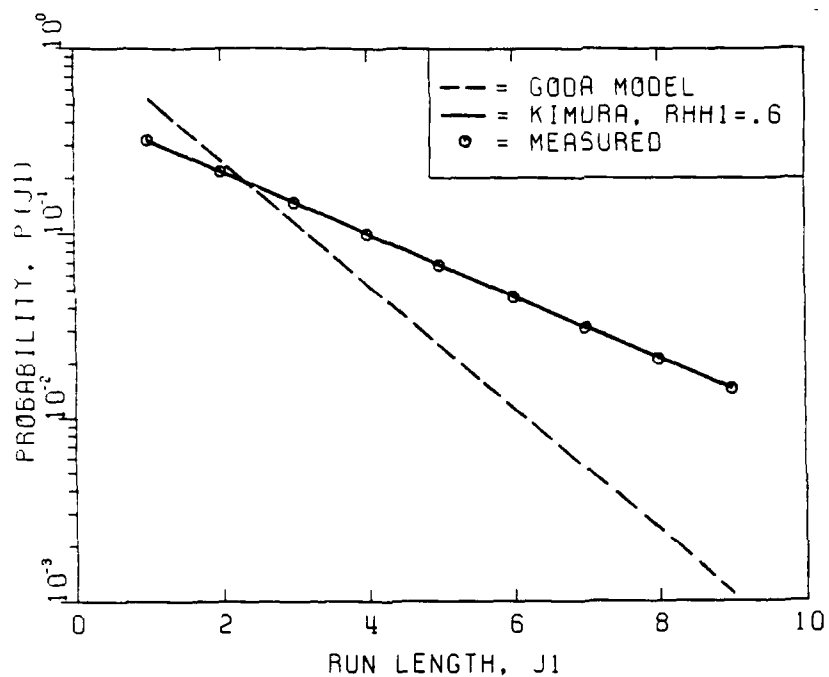
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 12: $TP = 2.0$, $HMO = 3$, $G = 7.0$, $D = 0$



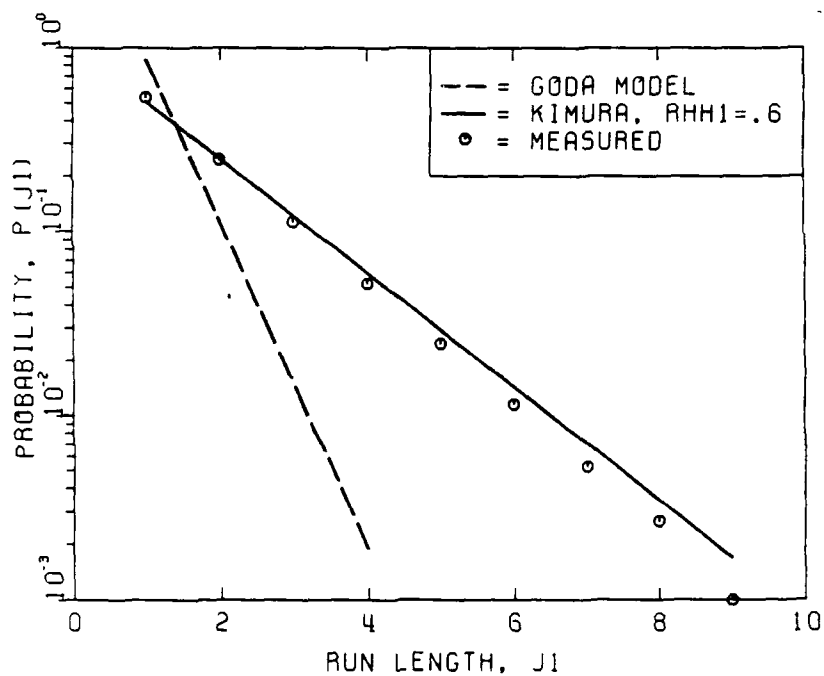
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 13: $TP = 1.0$, $HMO = 1$, $G = 3.3$, $D = -30$



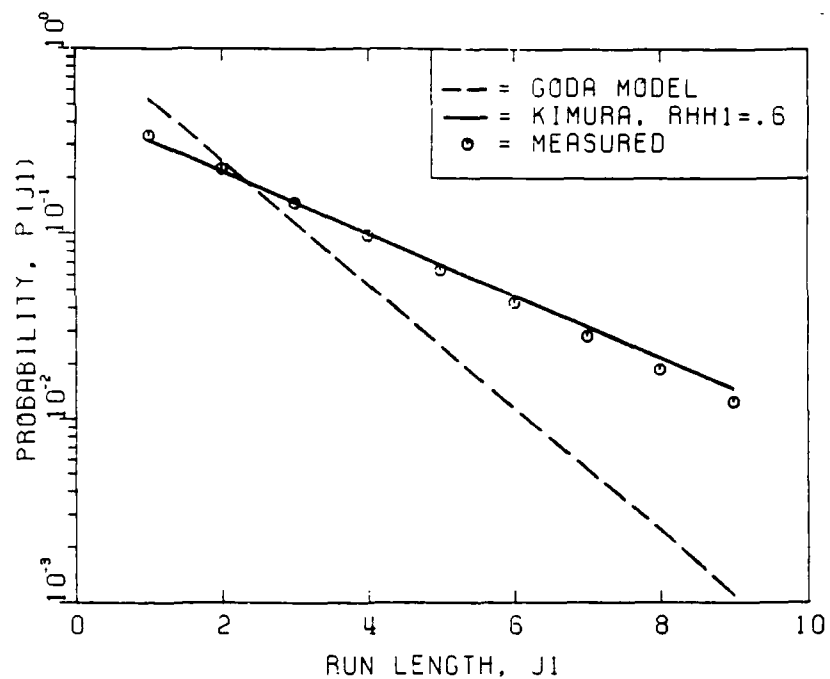
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 13: $TP = 1.0$, $HMO = 1$, $G = 3.3$, $D = -30$



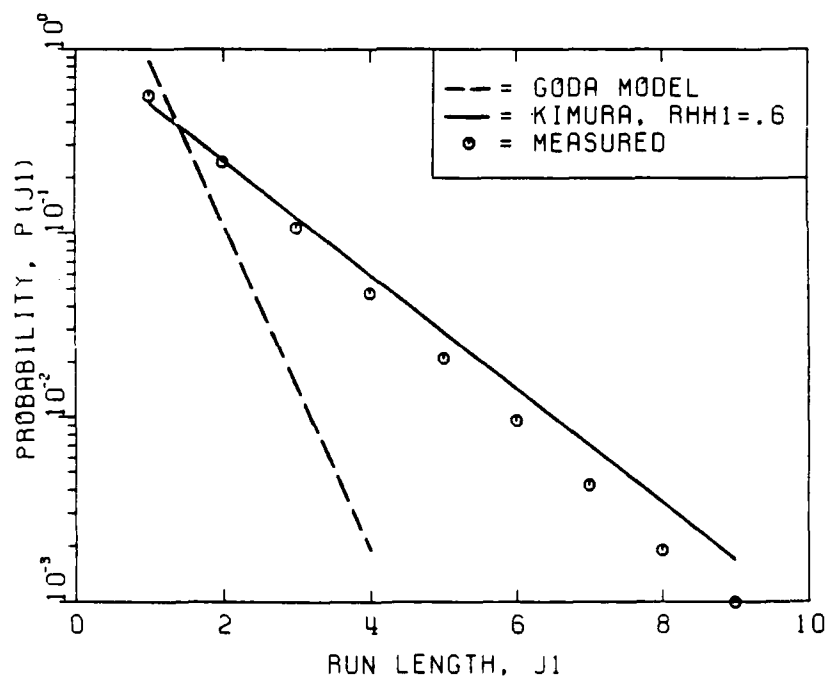
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 14: $TP = 1.0$, $HMO = 1$, $G = 7.0$, $D = -30$



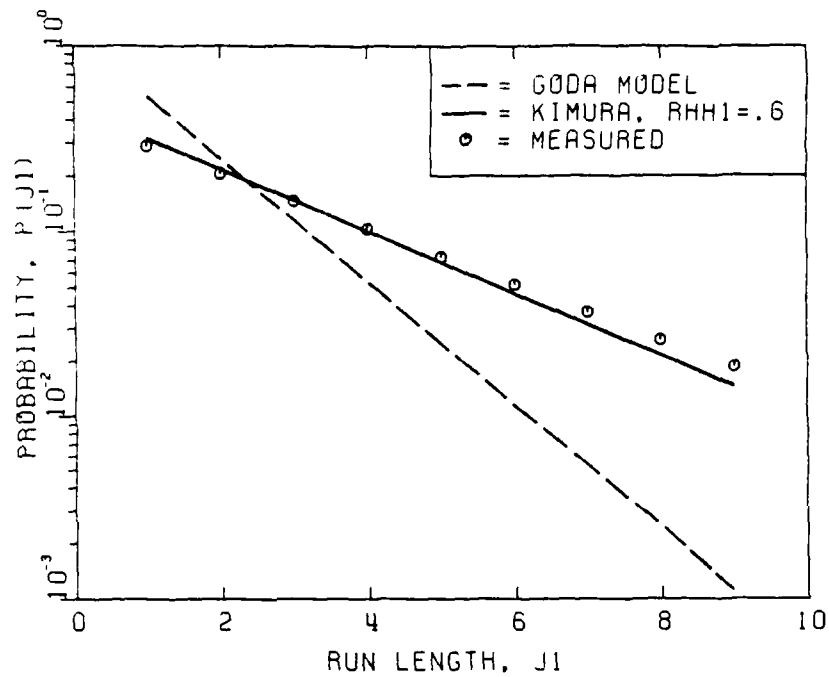
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 14: $TP = 1.0$, $HMO = 1$, $G = 7.0$, $D = -30$



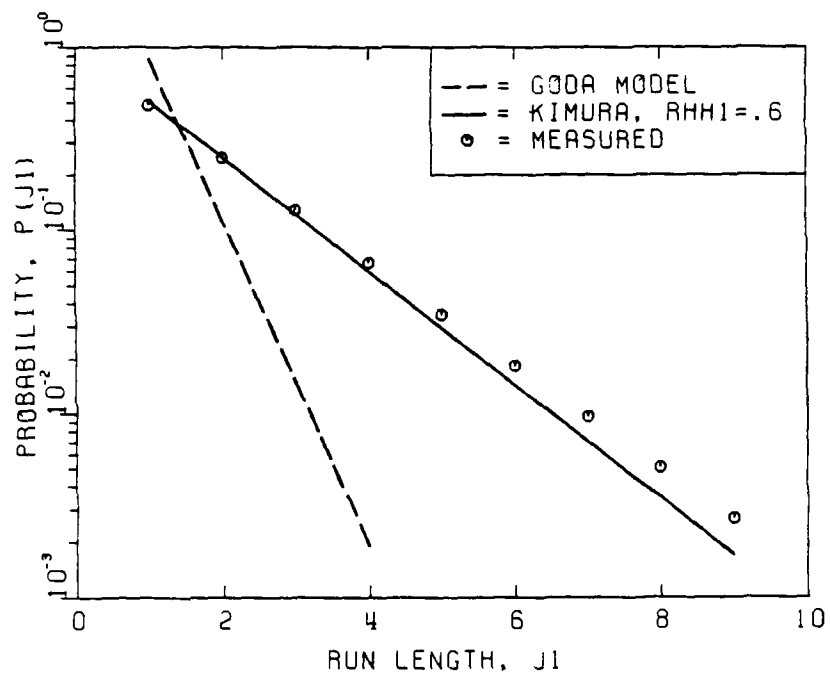
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 15: $TP = 1.0$, $HMO = 3$, $G = 3.3$, $D = -30$



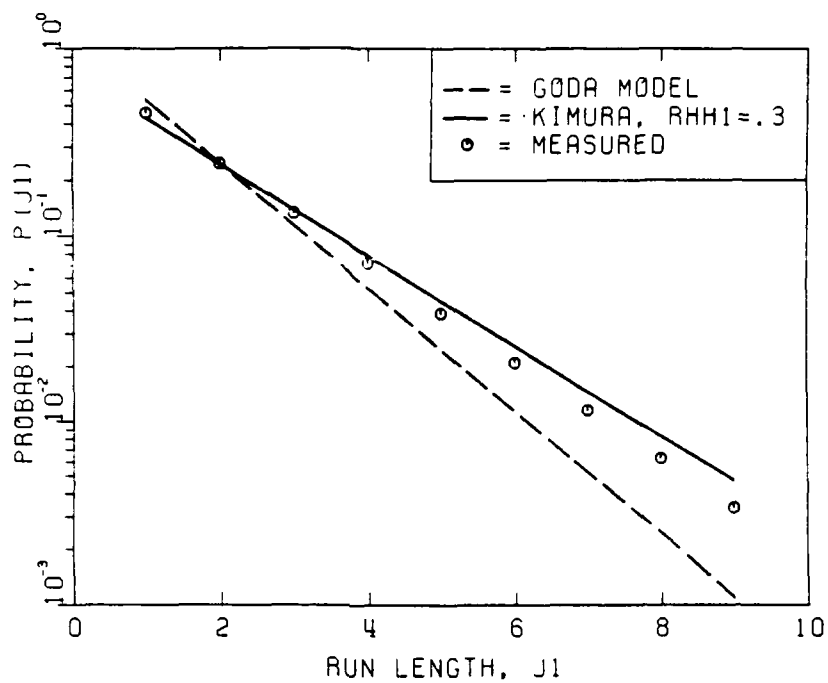
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 15: $TP = 1.0$, $HMO = 3$, $G = 3.3$, $D = -30$



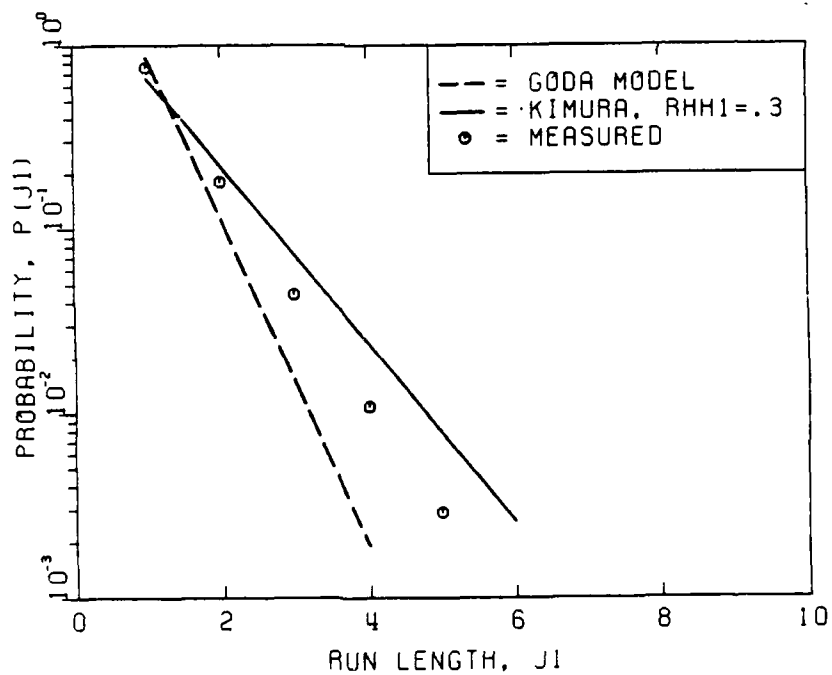
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 16: $TP = 1.0$, $HMO = 3$, $G = 7.0$, $D = -30$



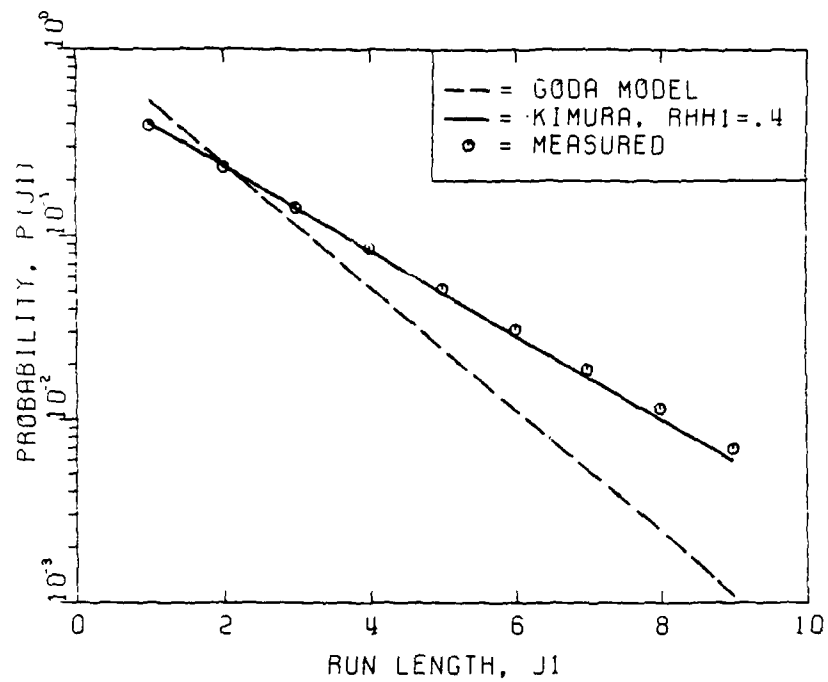
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 16: $TP = 1.0$, $HMO = 3$, $G = 7.0$, $D = -30$



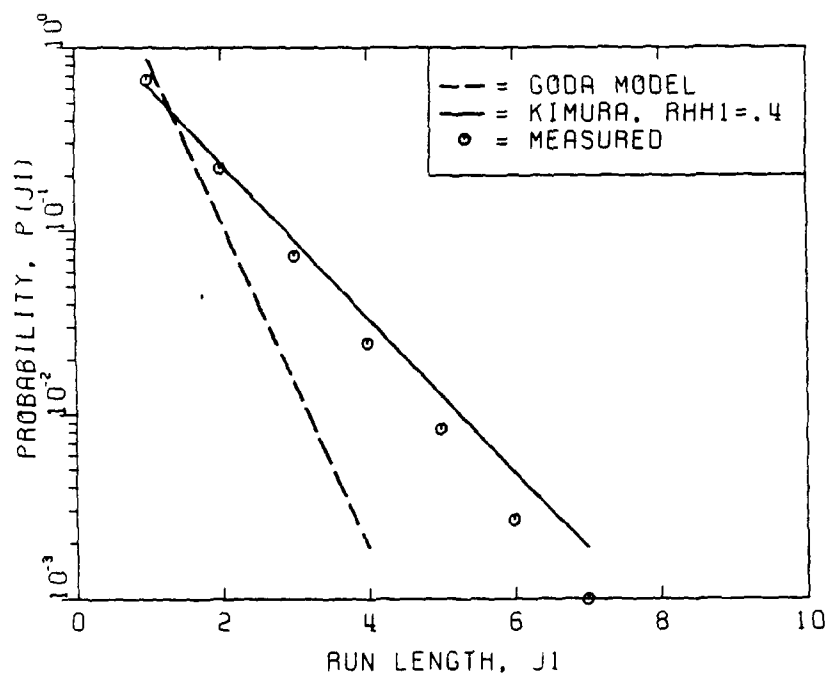
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 17: $TP = 1.5$, $HMO = 1$, $G = 3.3$, $D = -30$



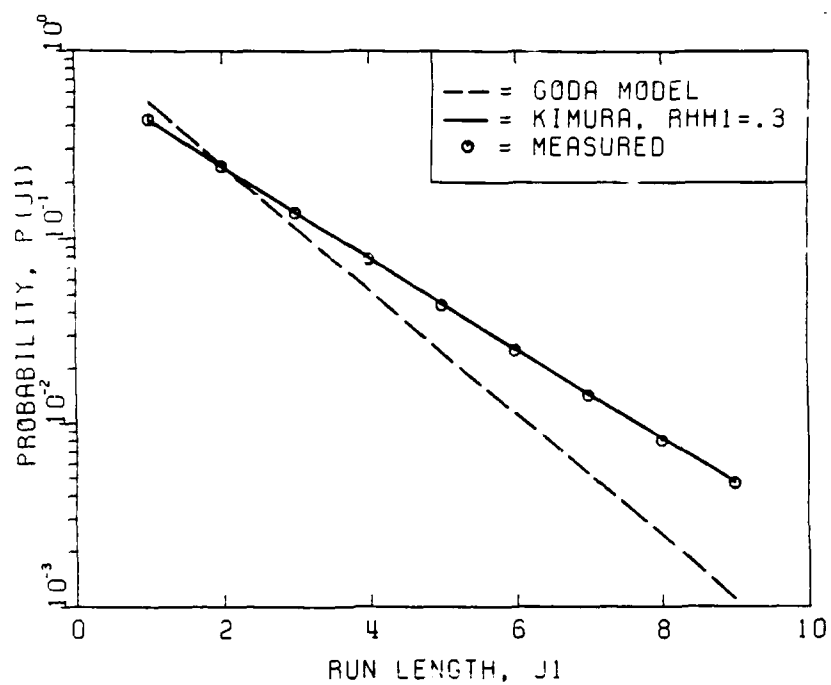
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 17: $TP = 1.5$, $HMO = 1$, $G = 7.0$, $D = -30$



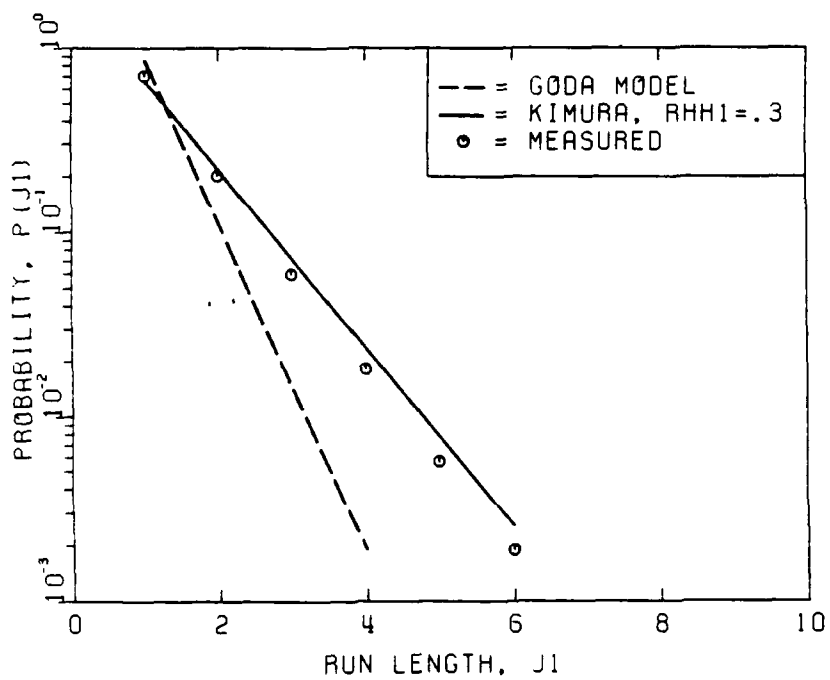
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 18: $TP = 1.5$, $HMO = 1$, $G = 7.0$, $D = -30$



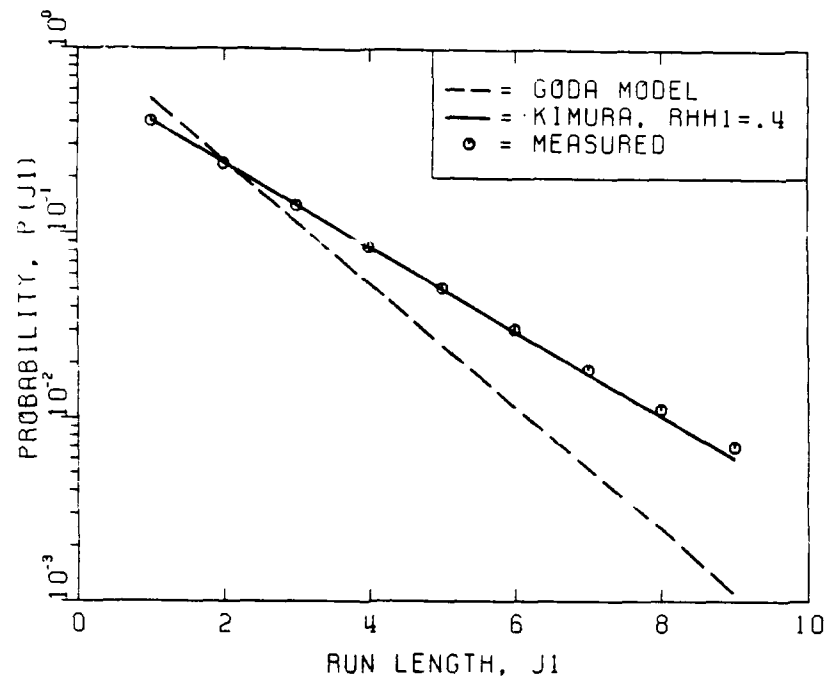
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 18: $TP = 1.5$, $HMO = 1$, $G = 7.0$, $D = -30$



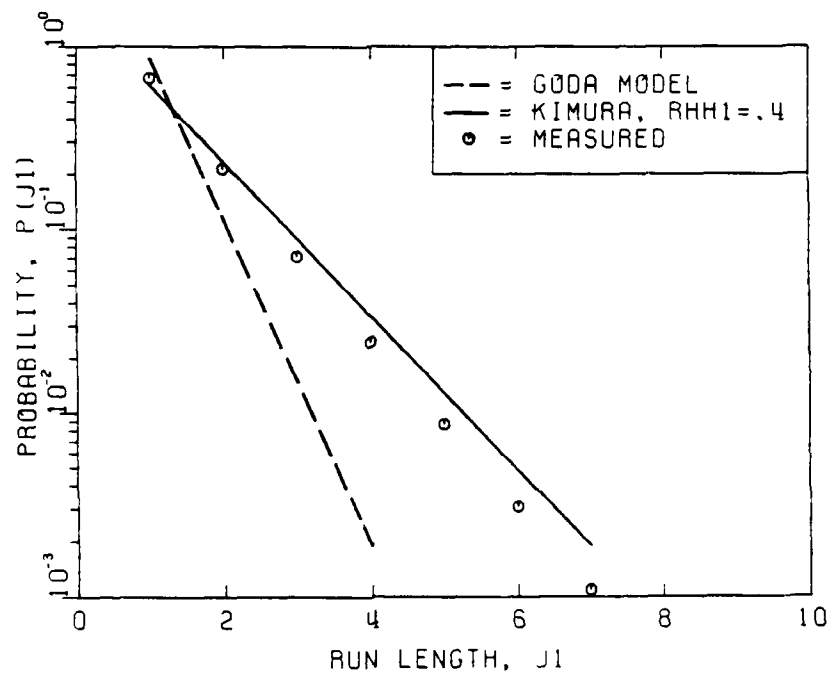
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 19: $TP = 1.5$, $HMO = 3$, $G = 3.3$, $D = -30$



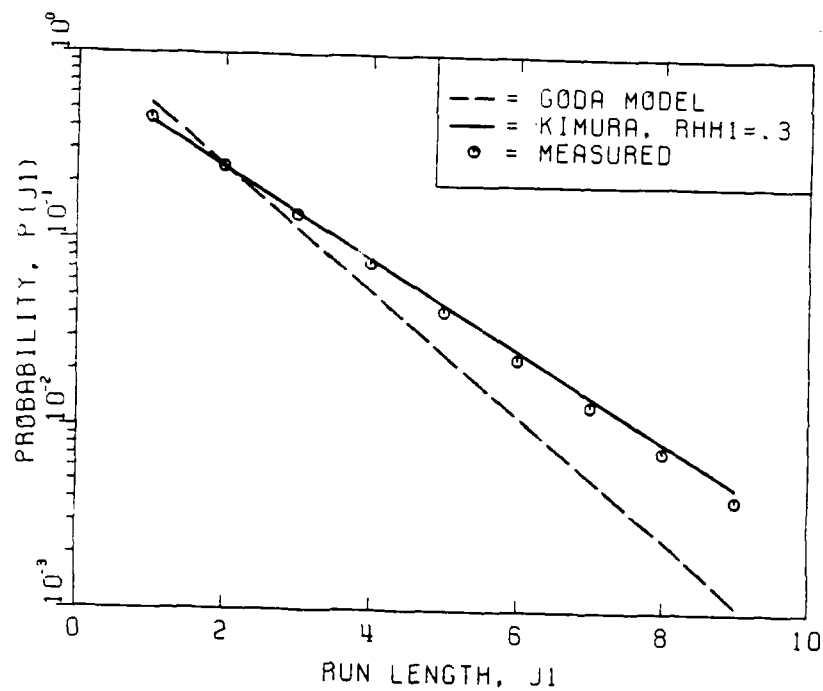
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 19: $TP = 1.5$, $HMO = 3$, $G = 3.3$, $D = -30$



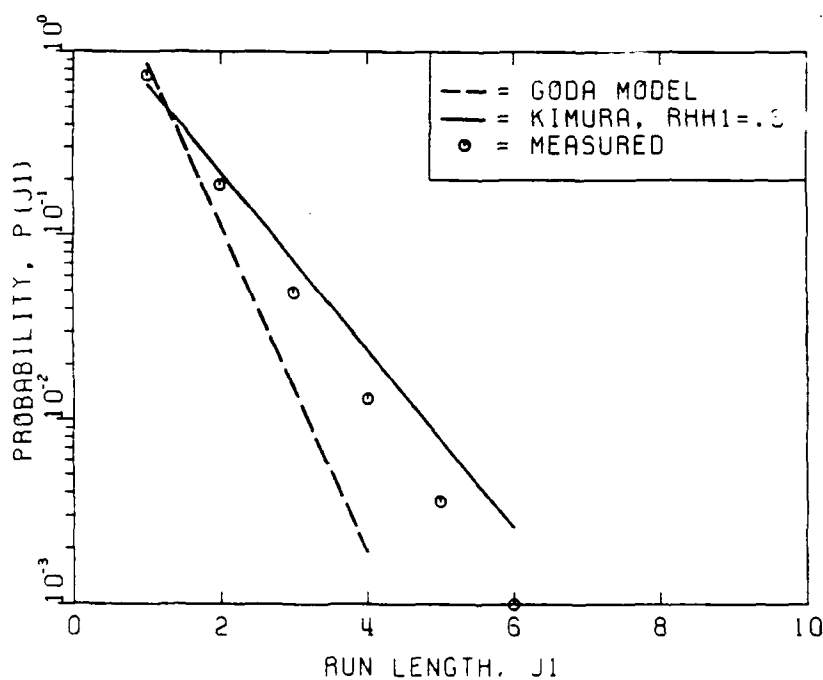
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 20: $TP = 1.5$, $HMO = 3$, $G = 7.0$, $D = -30$



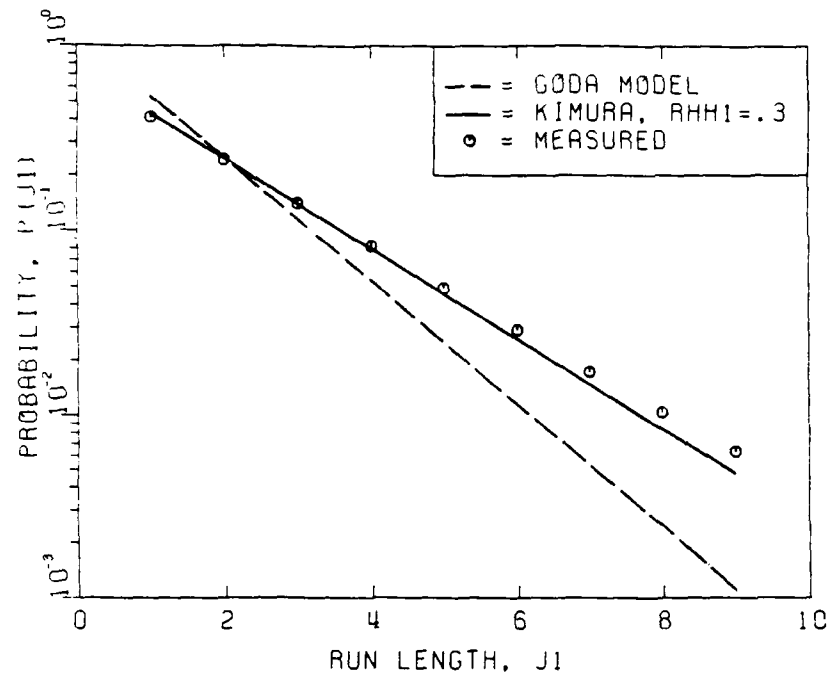
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 20: $TP = 1.5$, $HMO = 3$, $G = 7.0$, $D = -30$



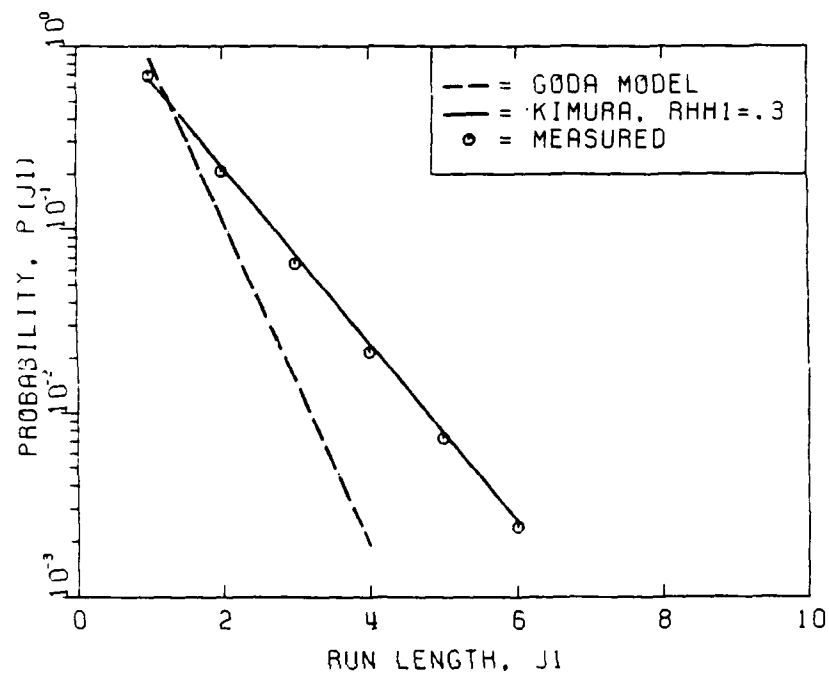
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 21: $TP = 2.0$, $HMO = 1$, $G = 3.3$, $D = -30$



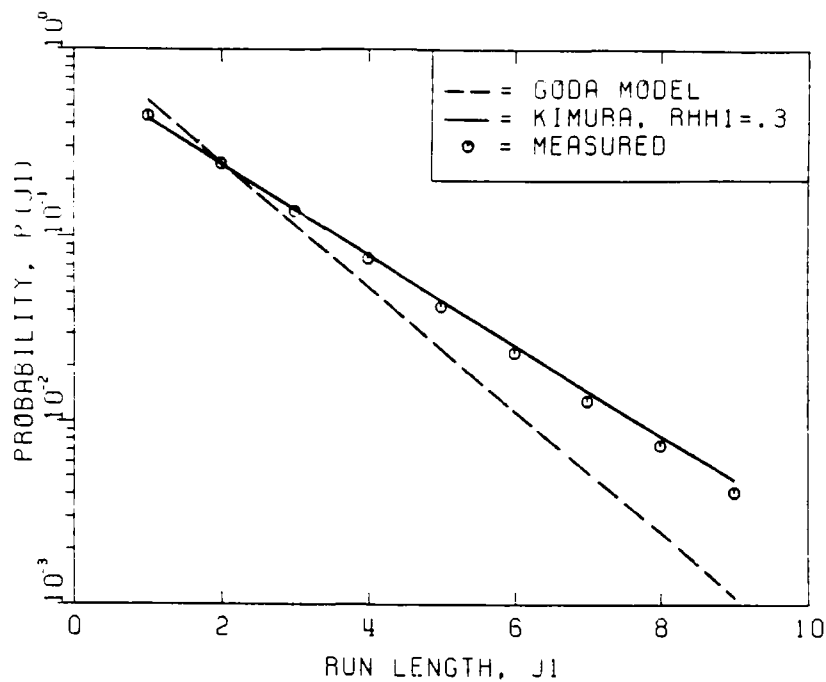
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 21: $TP = 2.0$, $HMO = 1$, $G = 3.3$, $D = -30$



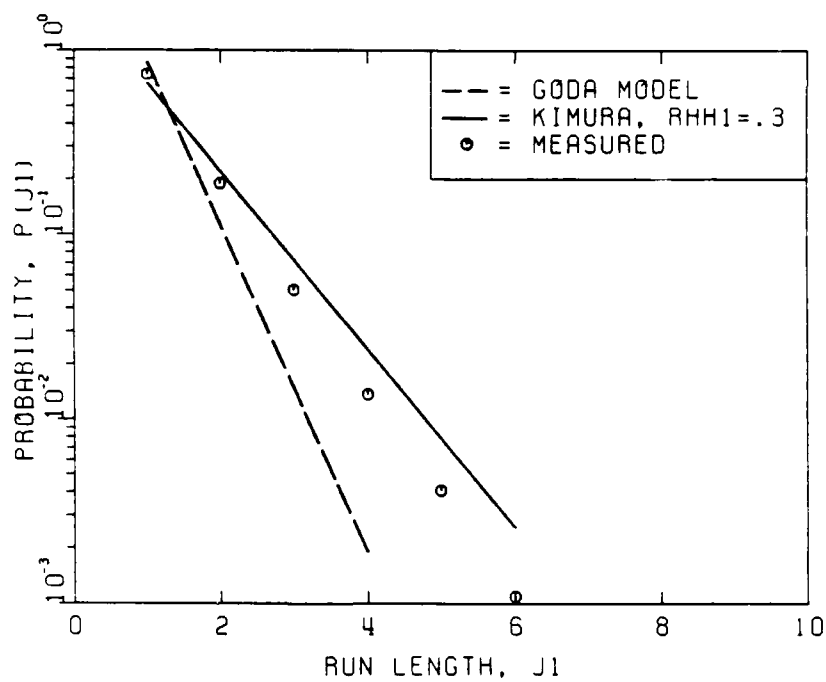
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 22: $TP = 2.0$, $HMO = 1$, $G = 7.0$, $D = -30$



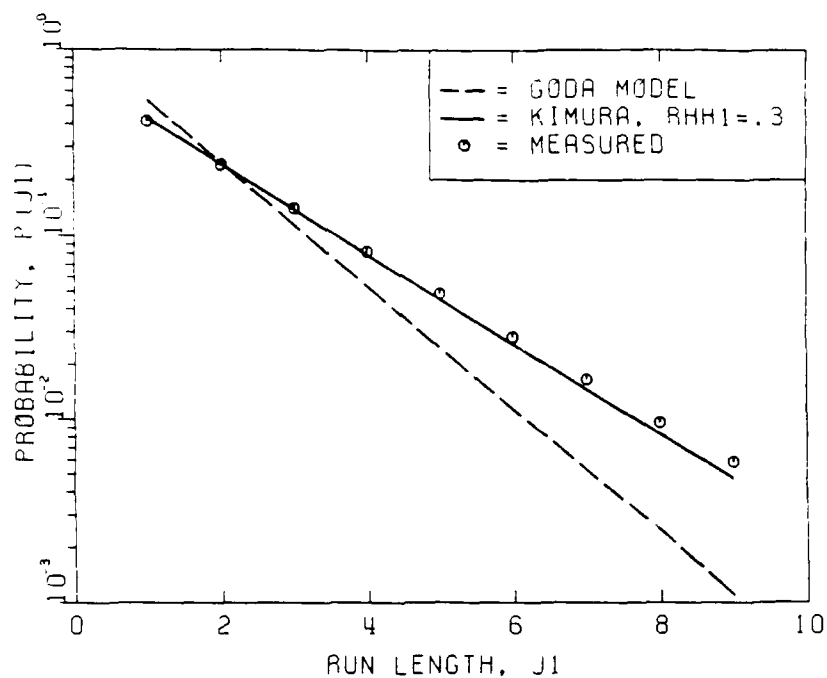
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 22: $TP = 2.0$, $HMO = 1$, $G = 7.0$, $D = -30$



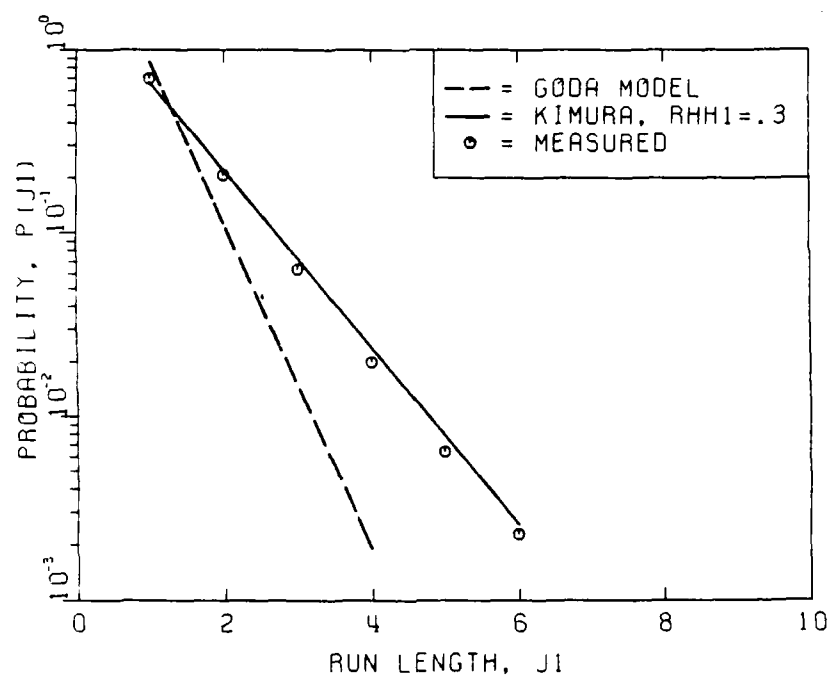
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 23: $TP = 2.0$, $HMC = 3$, $G = 3.3$, $D = -30$



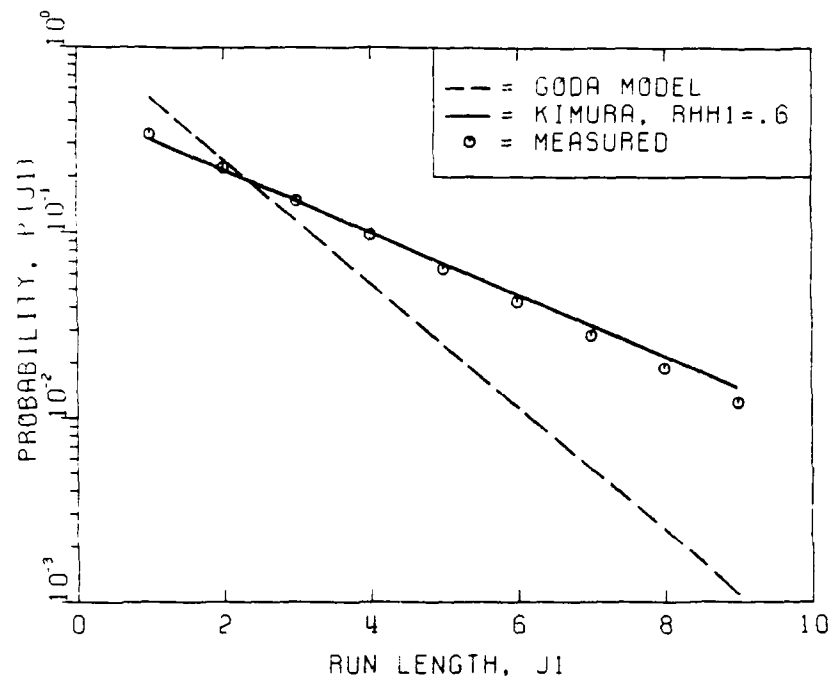
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 23: $TP = 2.0$, $HMO = 3$, $G = 3.3$, $D = -30$



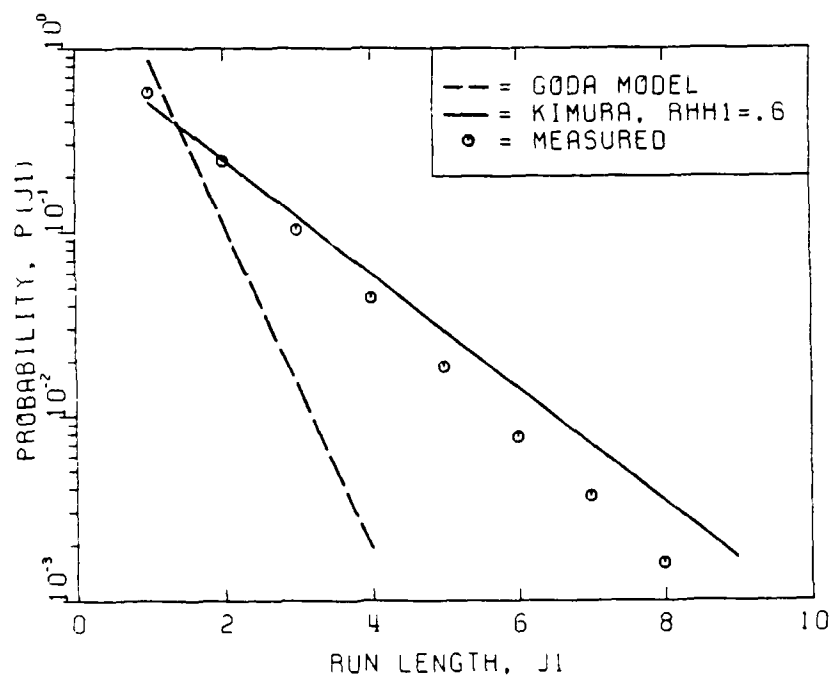
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 24: TP = 2.0, HMO = 3, G = 7.0, D = -30



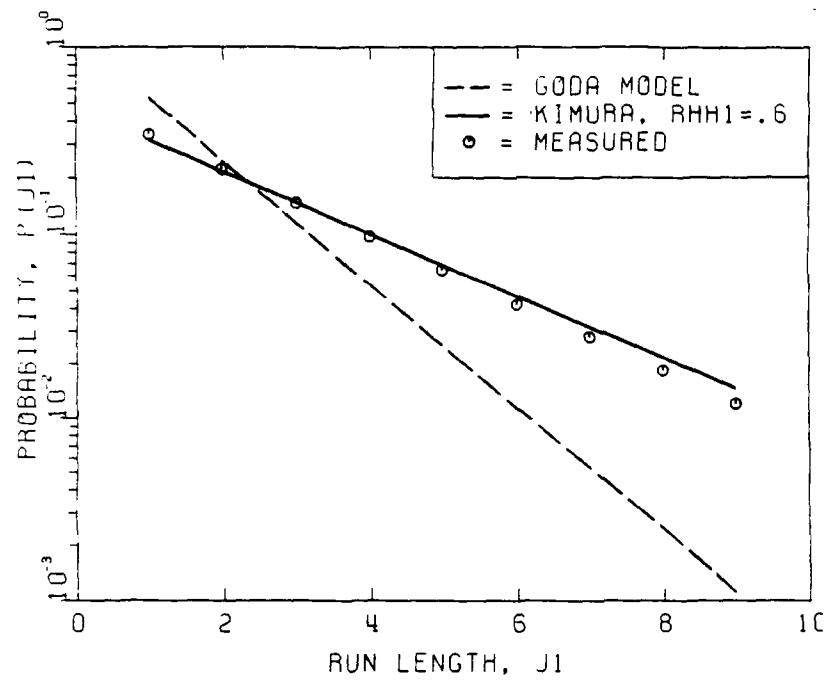
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 24: TP = 2.0, HMO = 3, G = 7.0, D = -30



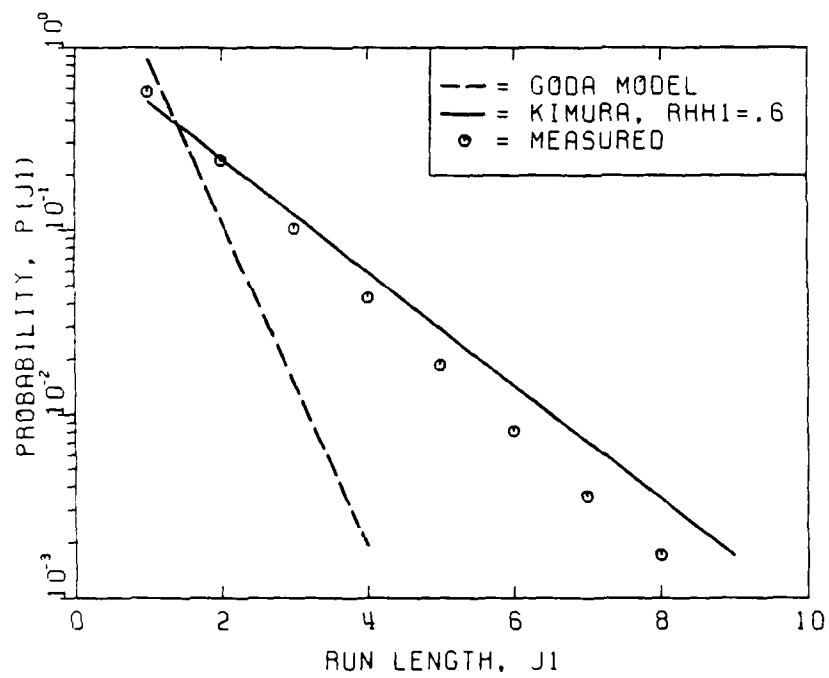
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 25: $TP = 1.0$, $HMO = 1$, $G = 15.0$, $D = 0$



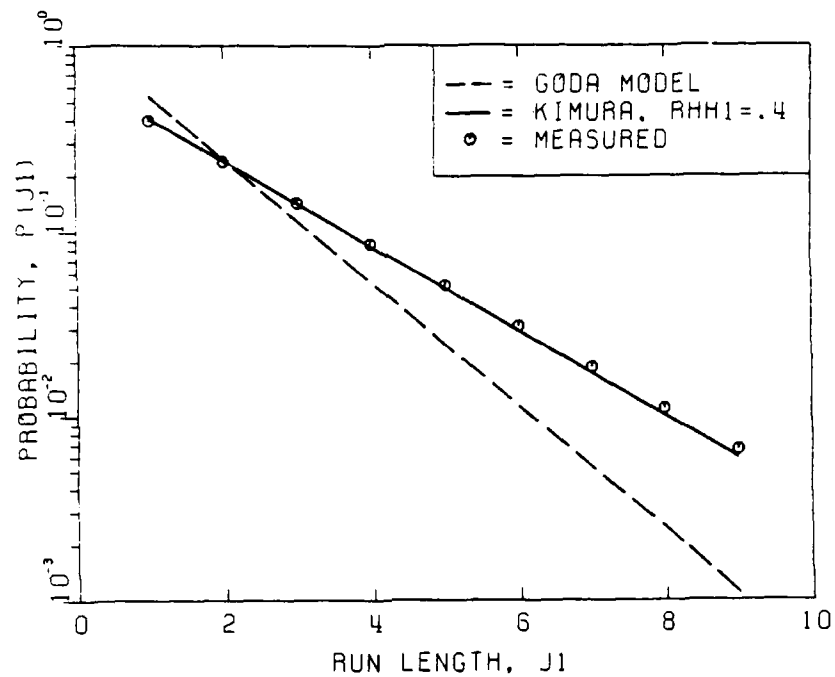
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 25: $TP = 1.0$, $HMO = 1$, $G = 15.0$, $D = 0$



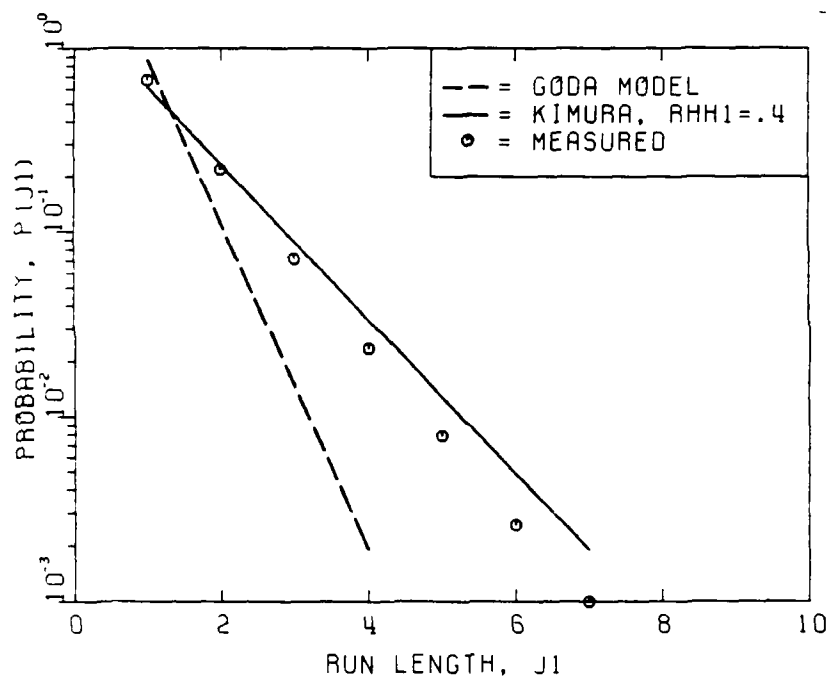
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 26: $TP = 1.0$, $HMO = 3$, $G = 15.0$, $D = 0$



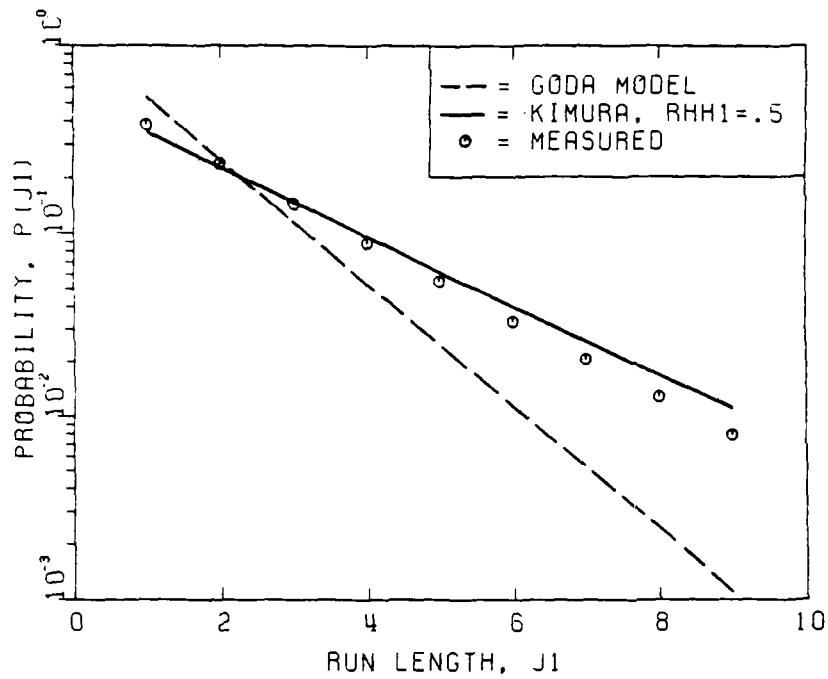
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 26: $TP = 1.0$, $HMO = 3$, $G = 15.0$, $D = 0$



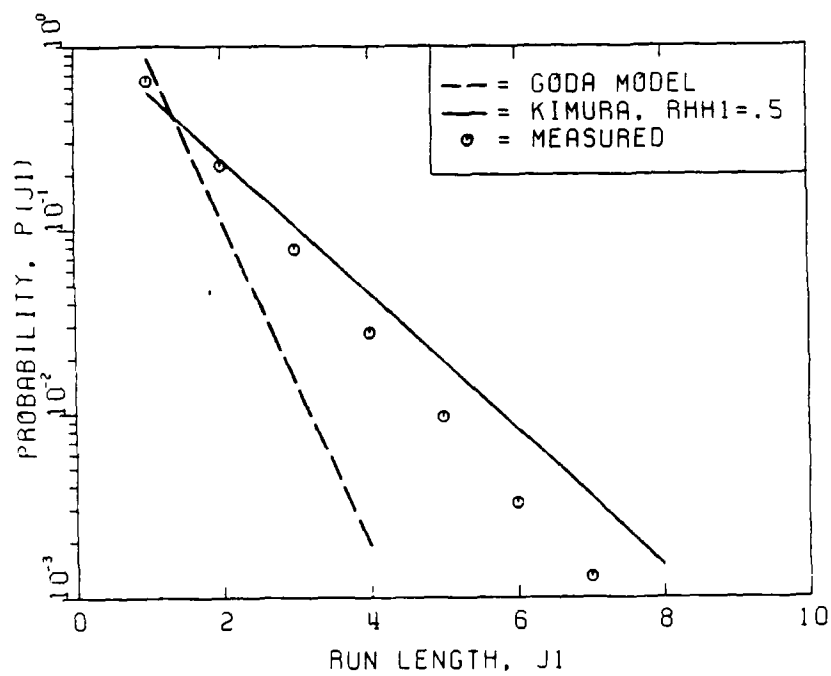
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 27: $TP = 1.0$, $HMO = 1$, $G = 3.3$, $D = 0$



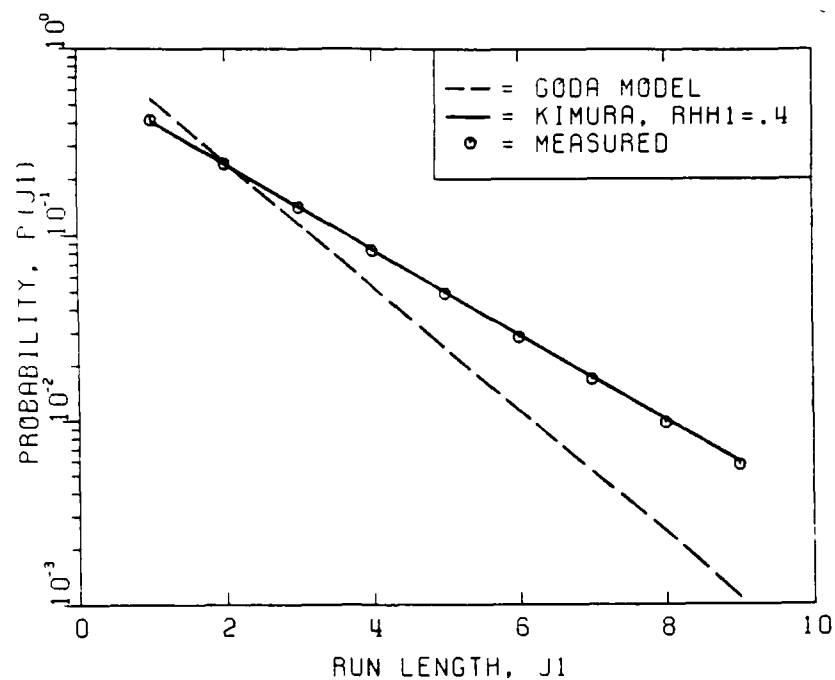
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 27: $TP = 1.0$, $HMO = 1$, $G = 3.3$, $D = 0$



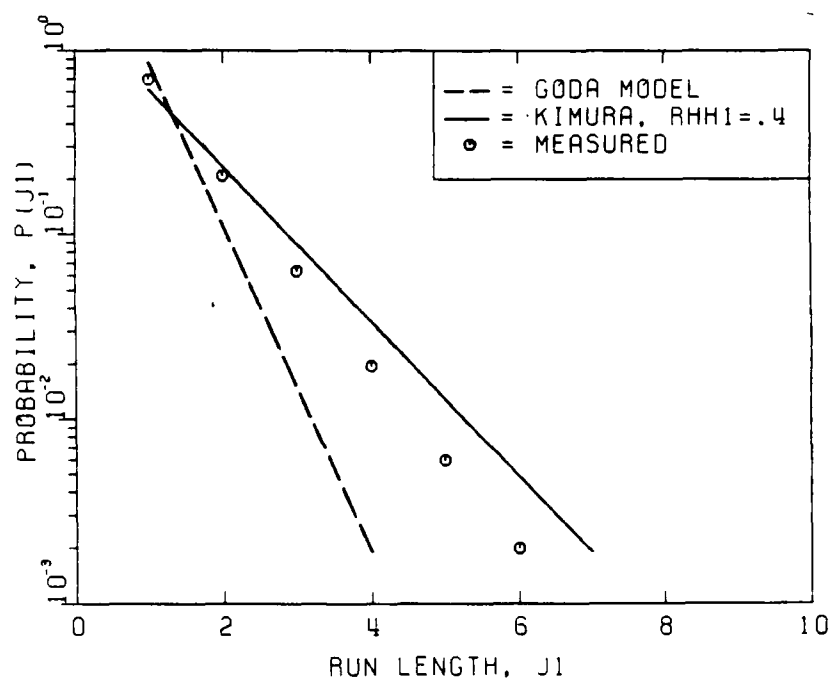
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 28: $TP = 1.0$, $HMO = 1$, $G = 7.0$, $D = 0$



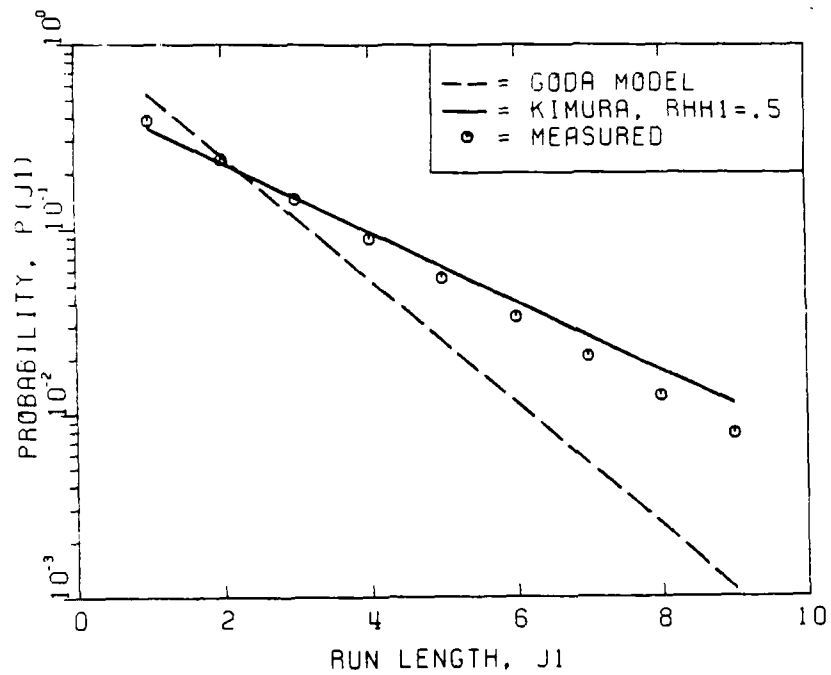
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 28: $TP = 1.0$, $HMO = 1$, $G = 7.0$, $D = 0$



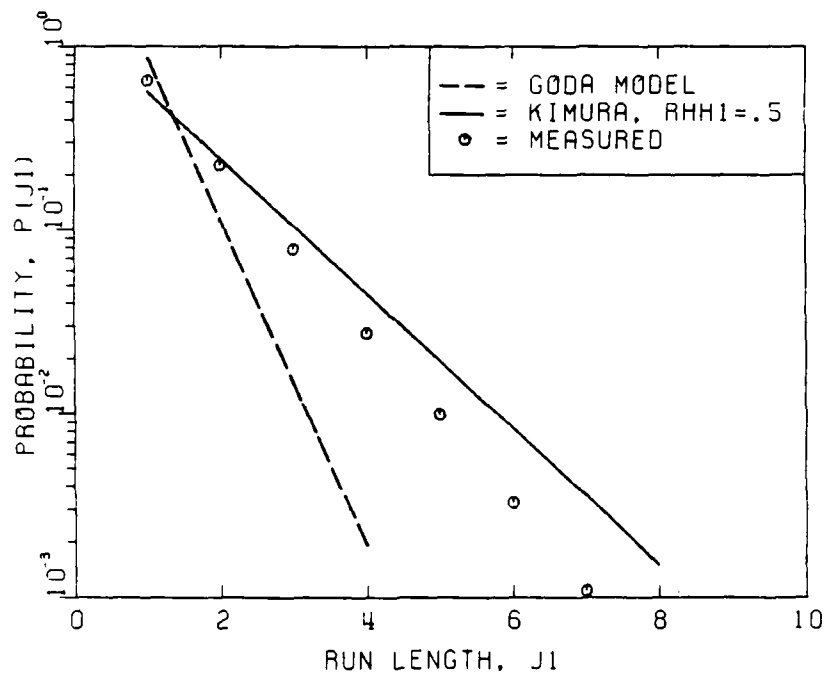
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 29: $TP = 1.0$, $HMO = 3$, $G = 3.3$, $D = 0$



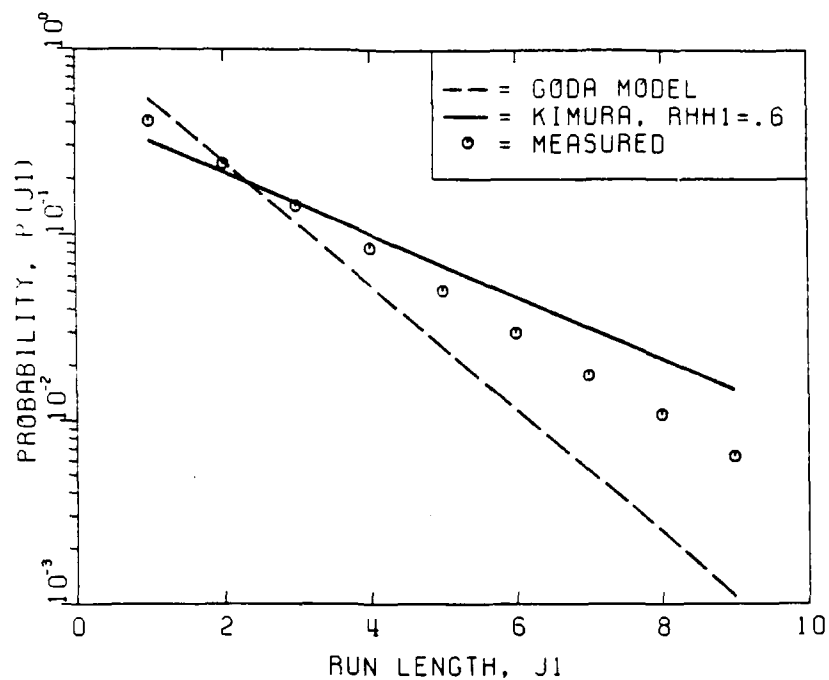
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 29: $TP = 1.0$, $HMO = 3$, $G = 3.3$, $D = 0$



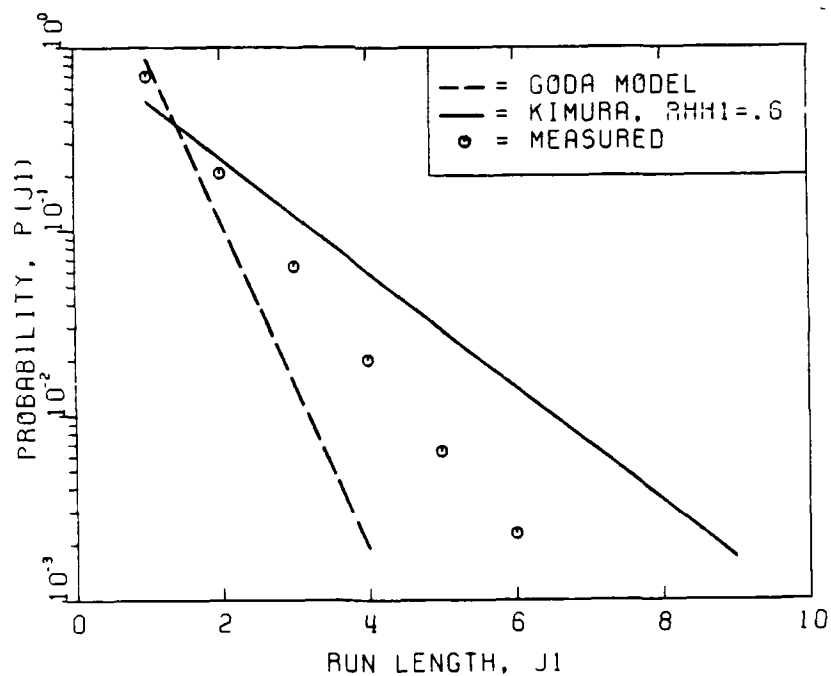
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 30: $TP = 1.0$, $HMO = 3$, $G = 7.0$, $D = 0$



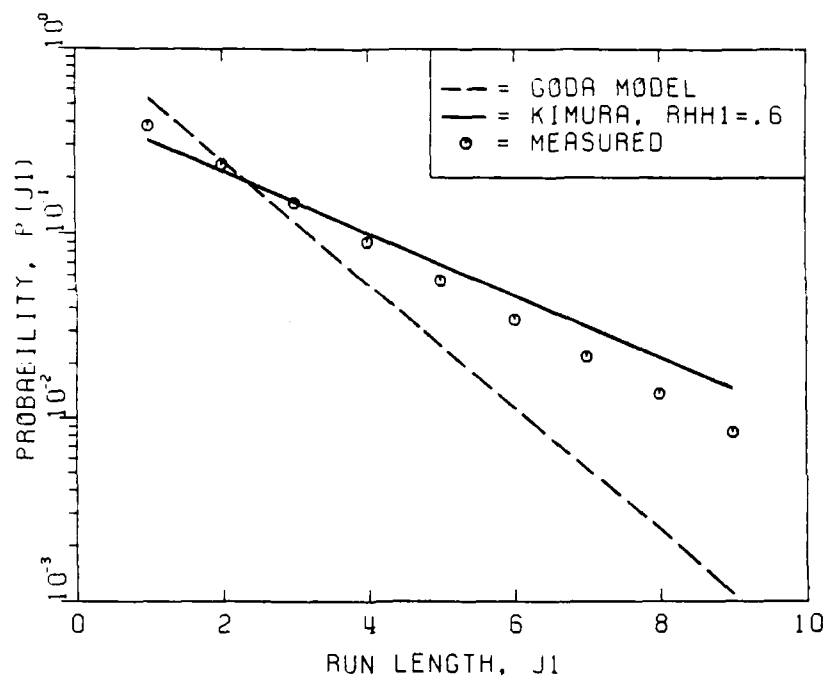
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 30: $TP = 1.0$, $HMO = 3$, $G = 7.0$, $D = 0$



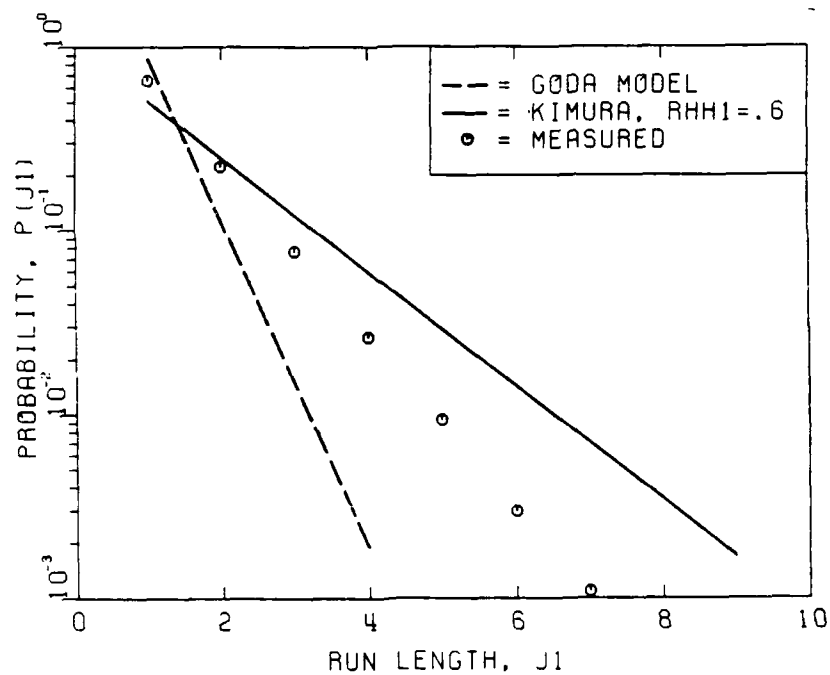
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
CASE 31: $TP = 1.0$, $HMO = 1$, $G = 3.3$, $D = 30$



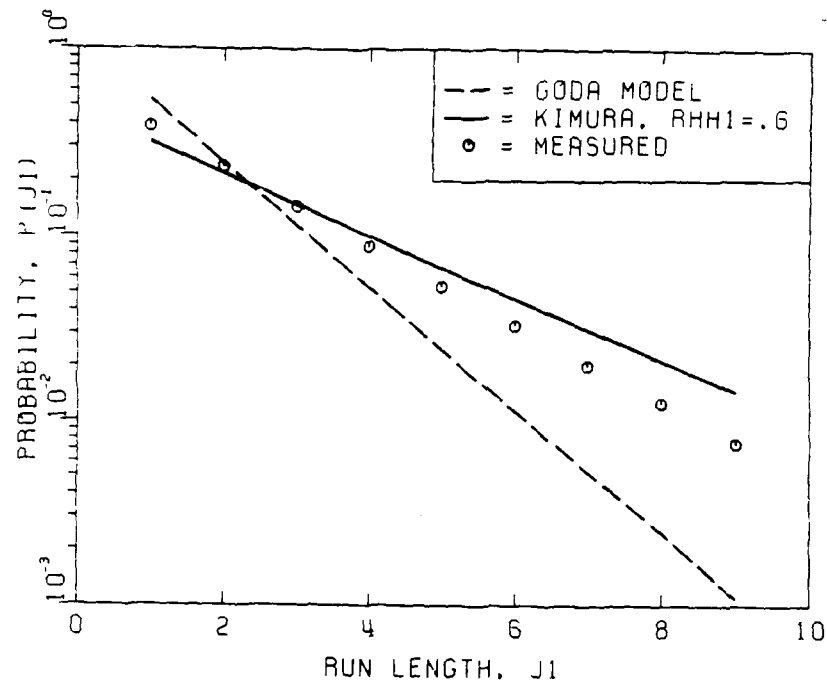
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
CASE 31: $TP = 1.0$, $HMO = 1$, $G = 3.3$, $D = 30$



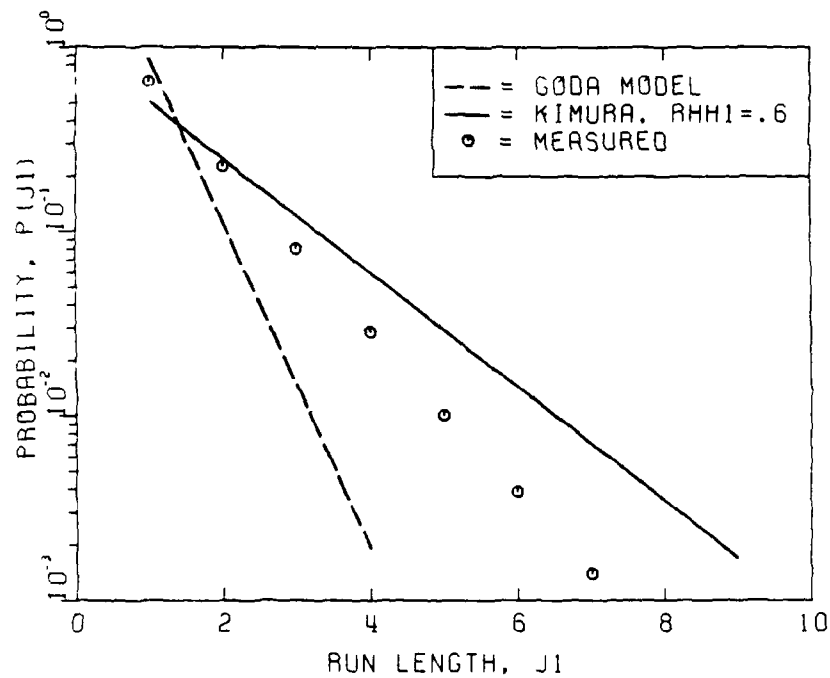
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 32: $TP = 1.0$, $HMO = 1$, $G = 7.0$, $D = 30$



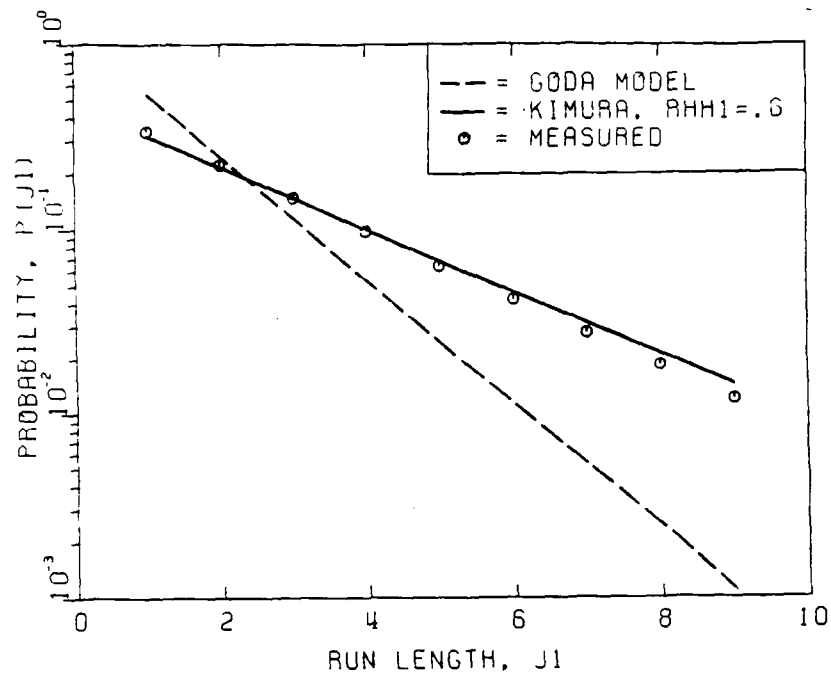
PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 32: $TP = 1.0$, $HMO = 1$, $G = 7.0$, $D = 30$



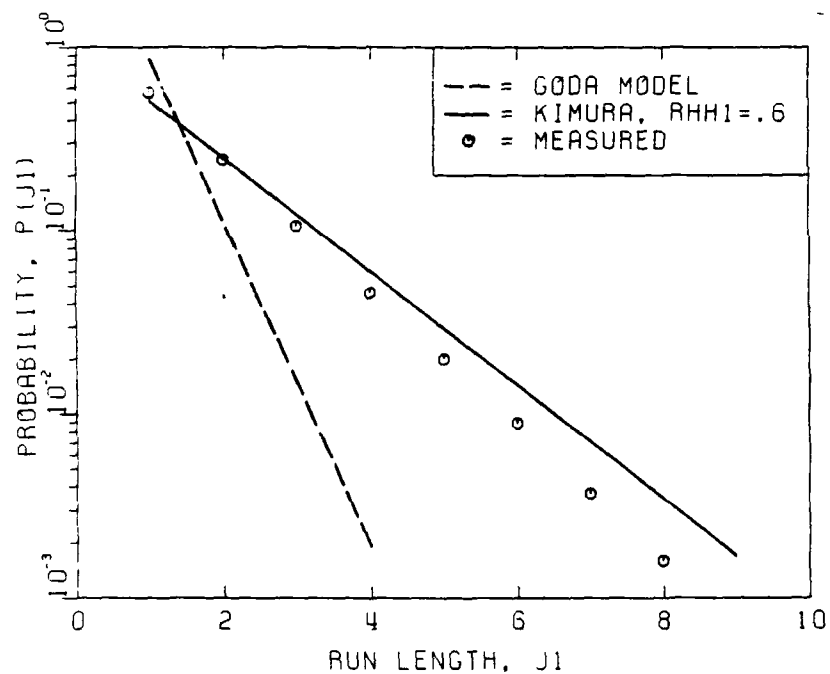
PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 33: $TP = 1.0$, $HMO = 3$, $G = 3.3$, $D = 30$



PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 33: $TP = 1.0$, $HMO = 3$, $G = 3.3$, $D = 30$



PROBABILITY VS. RUN LENGTH, HM THRESHOLD
 CASE 34: $TP = 1.0$, $HMO = 3$, $G = 7.0$, $D = 30$



PROBABILITY VS. RUNLENGTH, HMO THRESHOLD
 CASE 34: $TP = 1.0$, $HMO = 3$, $G = 7.0$, $D = 30$