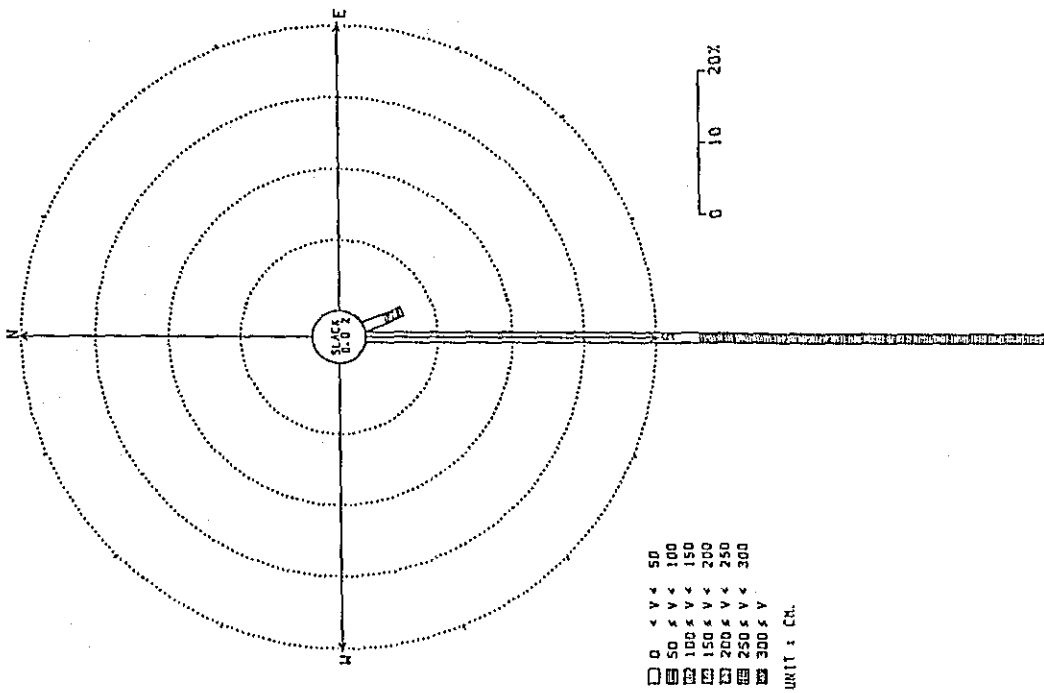


Station : 1
 PERIOD : 1988. 9.10.12. 0 - 1988. 9.30.22. 0



Station : 1
 PERIOD : 1988.10. 1. 0. 0 - 1988.10.31.22. 0

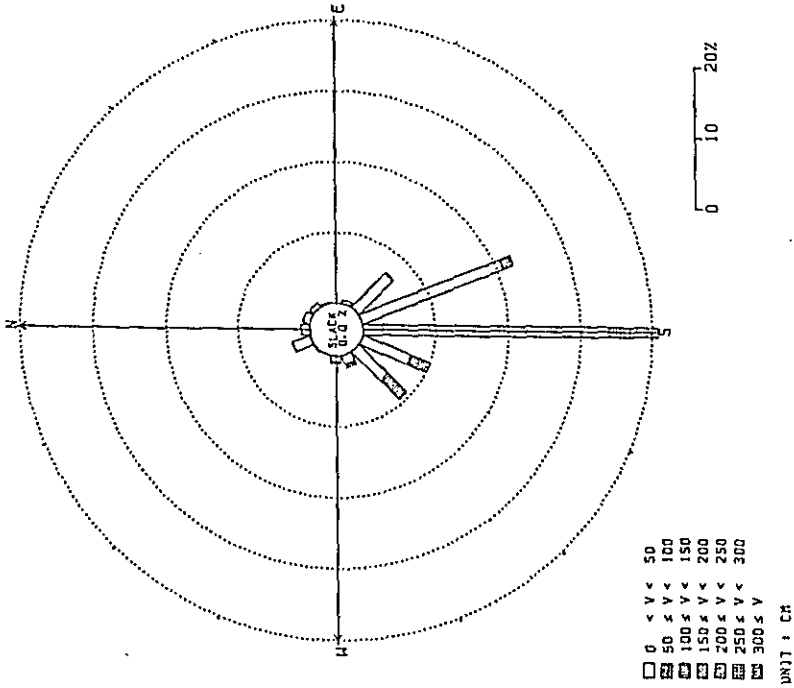
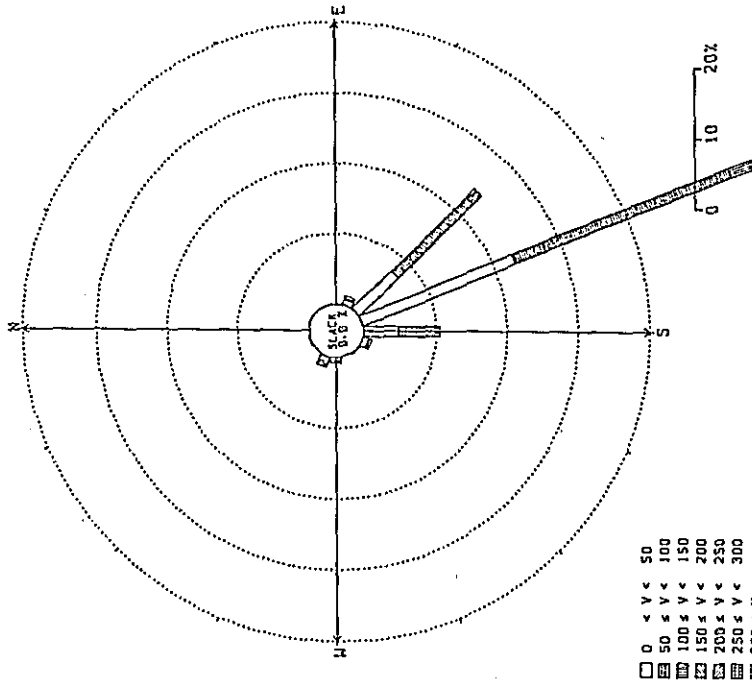


Fig. 1. 3-5 (I) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Station : I
 PERIOD : 1988.12.1.0.0 - 1988.12.31.22.0



Station : J
 PERIOD : 1988.11.1.0.0 - 1988.11.30.22.0

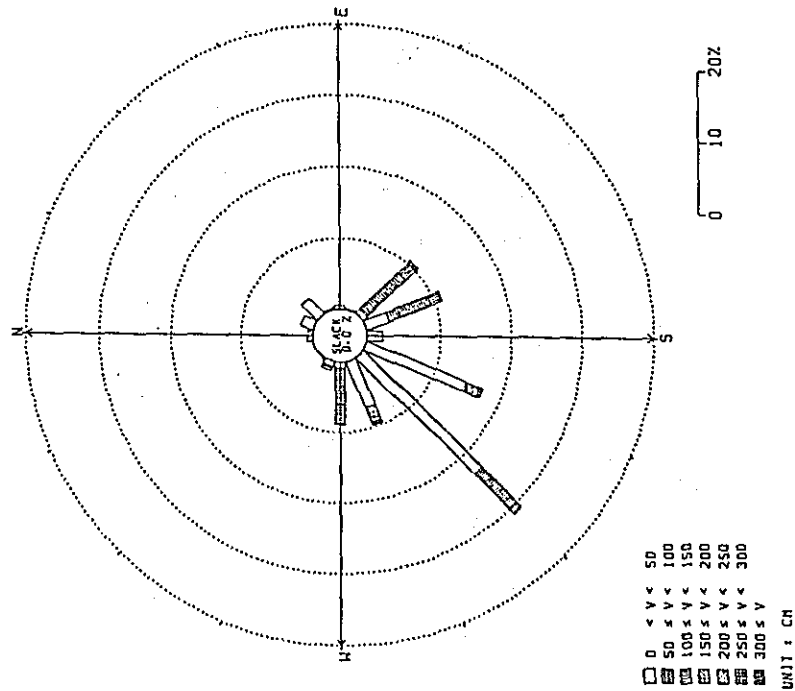
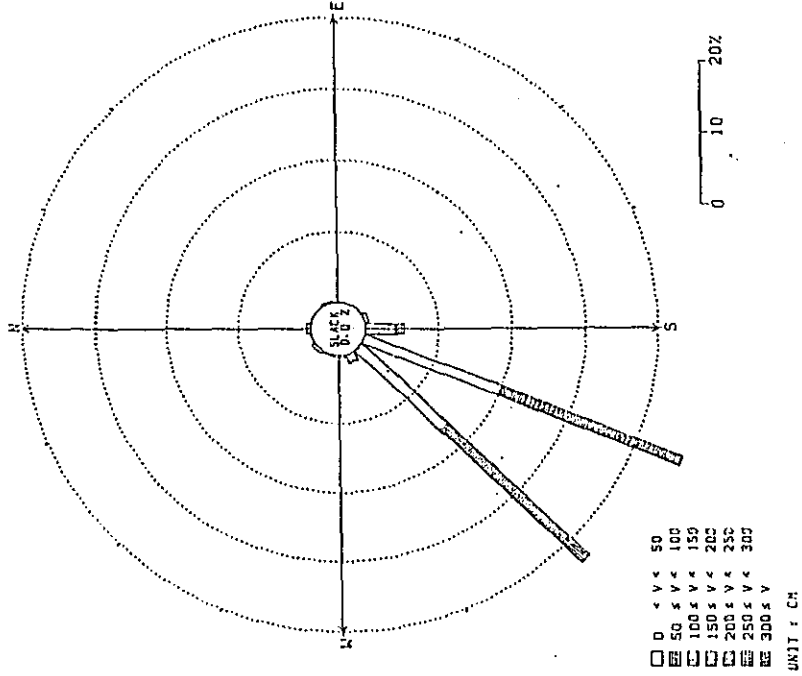


Fig. 1. 3-5 (2) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Station : 1
 PERIOD : 1989. 2. 1. 0. 0 - 1989. 2. 28. 22. 0



Station : 1
 PERIOD : 1989. 1. 1. 0. 0 - 1989. 1. 31. 22. 0

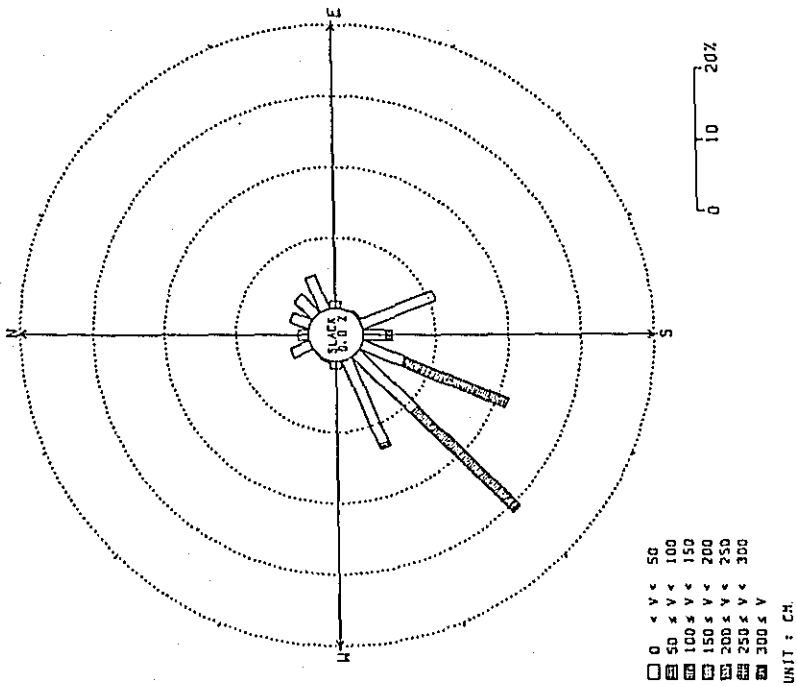
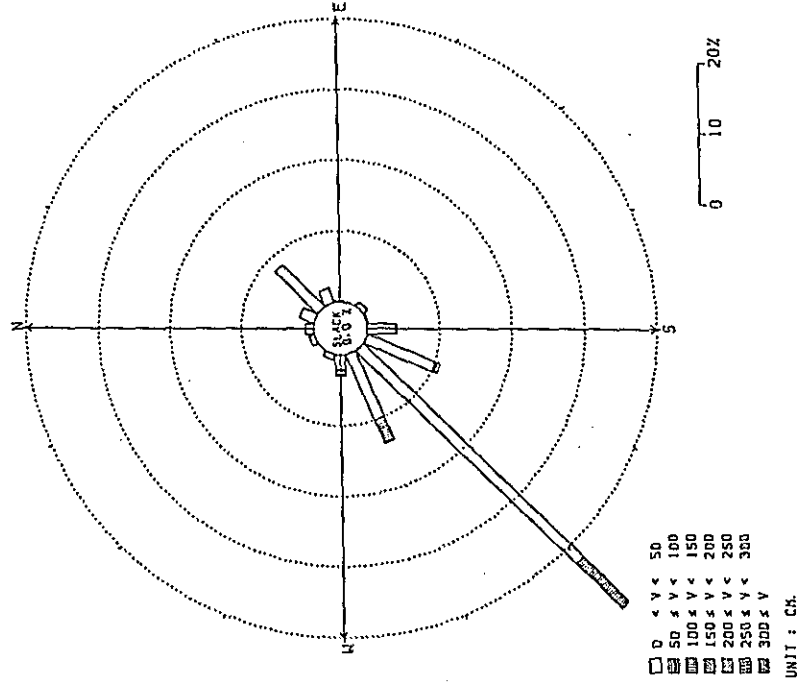


Fig. 1. 3-5 (3) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Station : 1
 PERIOD : 1989. 4. 1. 0 - 1989. 4. 30. 22. 0



Station : 1
 PERIOD : 1989. 3. 1. 0 - 1989. 3. 31. 22. 0

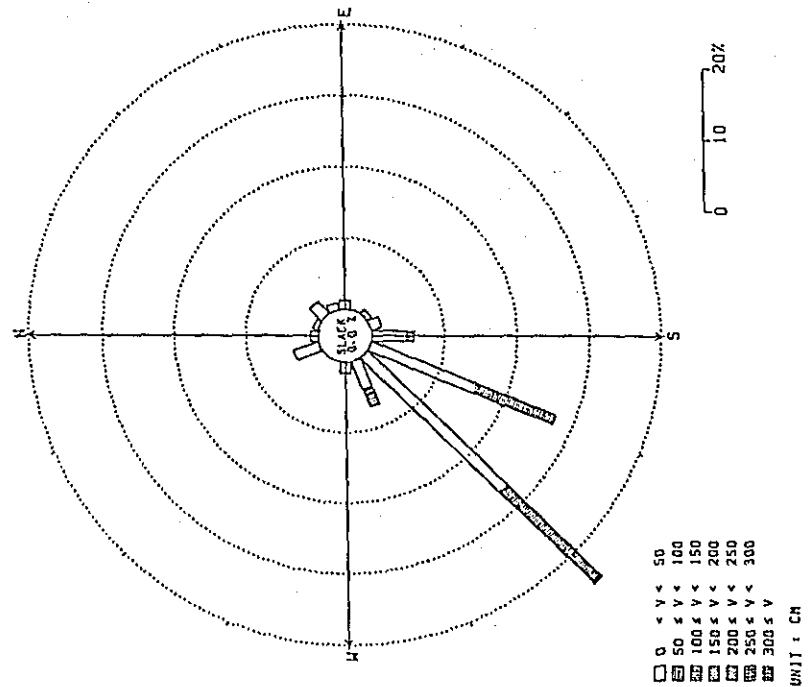
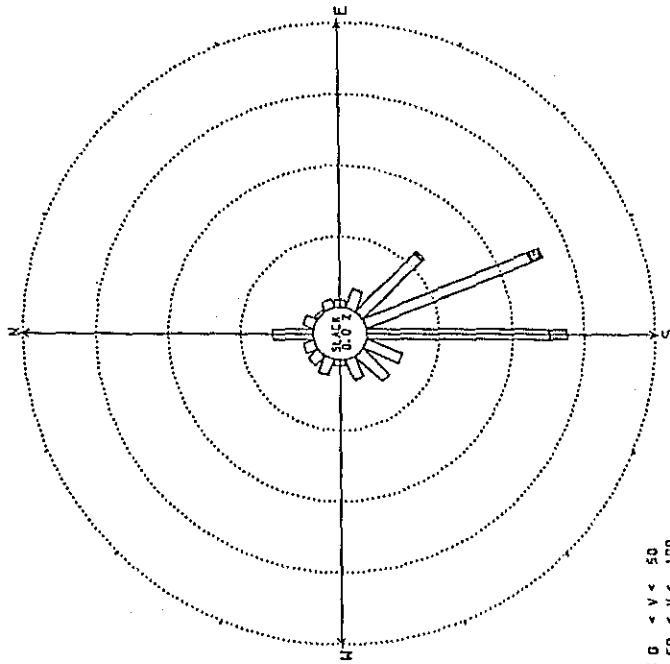


Fig. 1. 3-5 (4) Frequency Distribution of Wave Height by Wave Direction (Every Month)

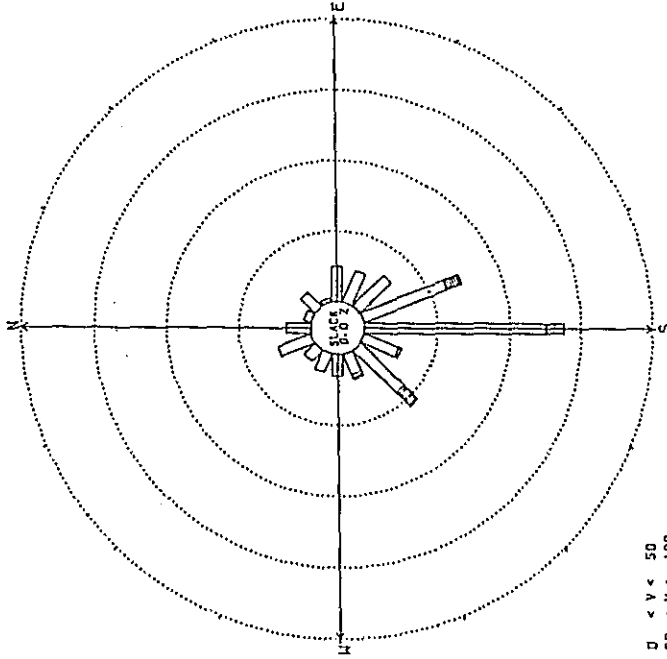
Station : I
 PERIOD : 1989. 5. 1. 0 - 1989. 5. 31. 22. 0



0 < V < 50
 50 ≤ V < 100
 100 ≤ V < 150
 150 ≤ V < 200
 200 ≤ V < 250
 250 ≤ V < 300
 300 ≤ V
 UNIT : CM.

0 10 20%

Station : I
 PERIOD : 1989. 5. 1. 0 - 1989. 5. 30. 22. 0

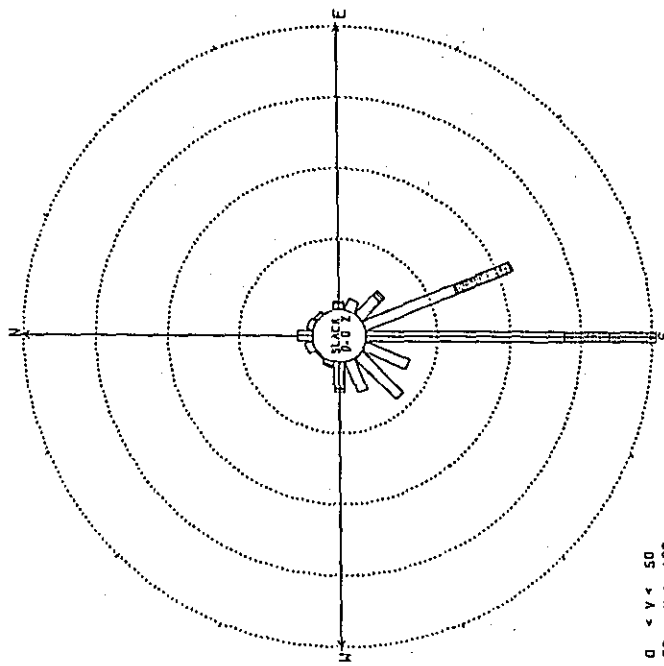


0 < V < 50
 50 ≤ V < 100
 100 ≤ V < 150
 150 ≤ V < 200
 200 ≤ V < 250
 250 ≤ V < 300
 300 ≤ V
 UNIT : CM.

0 10 20%

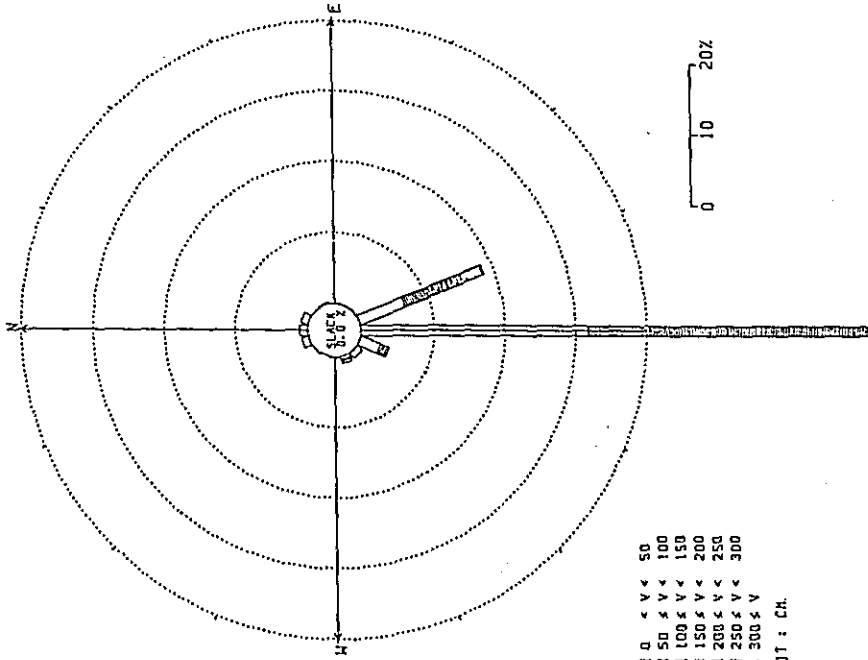
Fig. I. 3-5 (5) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Station : I
 PERIOD : 1989. 7. 1. 0 - 1989. 7. 31. 22. 0



□ 0 < V < 50
 ▨ 50 ≤ V < 100
 ▩ 100 ≤ V < 150
 ▪ 150 ≤ V < 200
 ▫ 200 ≤ V < 250
 ▬ 250 ≤ V < 300
 ■ 300 ≤ V
 UNIT : CM

Station : I
 PERIOD : 1989. 8. 1. 0 - 1989. 8. 31. 22. 0



□ 0 < V < 50
 ▨ 50 ≤ V < 100
 ▩ 100 ≤ V < 150
 ▪ 150 ≤ V < 200
 ▫ 200 ≤ V < 250
 ▬ 250 ≤ V < 300
 ■ 300 ≤ V
 UNIT : CM

Fig. 1. 3-5 (6) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Table 1.3-2 (1) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Obtained Data																Total
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
<25cm								1 (0.4)	3 (1.2)								4 (1.6)
25~49								7 (2.9)	110 (45.1)								117 (48.0)
50~74								5 (2.0)	113 (46.3)								118 (48.4)
75~99								1 (0.4)	4 (1.6)								5 (2.0)
100~124																	0 (0.0)
125~149																	0 (0.0)
150~174																	0 (0.0)
175~199																	0 (0.0)
200~224																	0 (0.0)
225~249																	0 (0.0)
250~274																	0 (0.0)
275~299																	0 (0.0)
300cm~																	0 (0.0)
Total	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	14 (5.7)	230 (94.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	244 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-2 (2) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Duration: 1st Oct. ~ 31st Oct. 1988																Obtained Data		Short Data	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total	372	5 (0.8%)	
<25cm	4 (1.1) (1.1)	4 (1.1) (1.1)	2 (0.5)			2 (0.5)	10 (2.7)	27 (7.3)	20 (5.4)	13 (3.5)	10 (2.7)	4 (1.1)			1 (0.3)	3 (0.8)	100 (27.1)			
25~49	1 (0.3)		1 (0.3)	1 (0.3)			15 (4.1)	50 (13.6)	105 (28.5)	14 (3.8)	11 (3.0)	1 (0.3)	3 (0.8)			7 (1.9)	209 (56.6)			
50~74							1 (0.3)	6 (1.6)	26 (7.0)	10 (2.7)	13 (3.5)	1 (0.3)	1 (0.3)				58 (15.7)			
75~99												1 (0.3)					1 (0.3)			
100~124																	1 (0.3)			
125~149																	0 (0.0)			
150~174																	0 (0.0)			
175~199																	0 (0.0)			
200~224																	0 (0.0)			
225~249																	0 (0.0)			
250~274																	0 (0.0)			
275~299																	0 (0.0)			
300cm~																	0 (0.0)			
Total	5 (1.4)	4 (1.1)	3 (0.8)	1 (0.3)	0 (0.0)	2 (0.5)	26 (7.0)	83 (22.5)	151 (40.9)	37 (10.0)	35 (9.5)	7 (1.9)	4 (1.1)	0 (0.0)	1 (0.3)	10 (2.7)	369 (100.0)			

Note: Upper layer shows Frequencies and Lower layer shows Frequencies in %.

Table 1. 3-2 (3) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Obtained Data																360	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSH	SH	MSW	W	WNW	NW	NNW	Total	
<25cm	2 (0.6)	1 (0.3)	3 (0.8)	1 (0.3)	2 (0.6)	1 (0.3)			5 (1.4)	20 (5.6)	24 (6.7)	9 (2.5)	2 (0.6)	2 (0.6)	1 (0.3)		73 (20.4)	
25~49	1 (0.3)	6 (1.7)	8 (2.2)				3 (0.8)	12 (3.4)	3 (0.8)	33 (9.2)	59 (16.5)	16 (4.5)	1 (0.3)	1 (0.3)		1 (0.3)	144 (40.2)	
50~74							22 (6.1)	15 (4.2)		4 (1.1)	11 (3.1)	6 (1.7)	20 (5.6)	1 (0.3)			79 (22.1)	
75~99							4 (1.1)	7 (2.0)		3 (0.8)	13 (3.6)	2 (0.6)	8 (2.2)	1 (0.3)			38 (10.6)	
100~124							5 (1.4)	4 (1.1)		1 (0.3)	4 (1.1)	2 (0.6)	1 (0.3)				17 (4.7)	
125~149							2 (0.6)	2 (0.6)		1 (0.3)							5 (1.4)	
150~174							1 (0.3)										1 (0.3)	
175~199							1 (0.3)										1 (0.3)	
200~224																	0 (0.0)	
225~249																	0 (0.0)	
250~274																	0 (0.0)	
275~299																	0 (0.0)	
300cm~																	0 (0.0)	
Total	3 (0.8)	7 (2.0)	11 (3.1)	1 (0.3)	2 (0.6)	1 (0.3)	38 (10.6)	40 (11.2)	8 (2.2)	62 (17.3)	111 (31.0)	35 (9.8)	32 (8.9)	5 (1.4)	1 (0.3)	1 (0.3)	358 (100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-2 (4) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Duration: 1st Dec. ~ 31st Dec. 1988																Obtained Data		Short Data		Total
	H	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	1	0.3%			
<25cm							3 (0.8)	28 (7.5)	82 (22.1)	17 (4.6)	3 (0.8)	1 (0.3)							3 (0.8)		
25~ 49						3 (0.8)	47 (12.7)	87 (23.5)	11 (3.0)	2 (0.5)			2 (0.5)	1 (0.3)	1 (0.3)				138 (37.2)		
50~ 74						2 (0.5)	8 (2.2)	34 (9.2)	8 (2.2)					1 (0.3)	4 (1.1)				154 (41.5)		
75~ 99							3 (0.8)	10 (2.7)	3 (0.8)										16 (4.3)		
100~ 124							4 (1.1)	5 (1.3)											9 (2.4)		
125~ 149																			0 (0.0)		
150~ 174																			0 (0.0)		
175~ 199																			0 (0.0)		
200~ 224																			0 (0.0)		
225~ 249																			0 (0.0)		
250~ 274																			0 (0.0)		
275~ 299																			0 (0.0)		
300cm~																			0 (0.0)		
Total	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (1.3)	90 (24.3)	221 (59.6)	39 (10.5)	5 (1.3)	1 (0.3)	0 (0.0)	3 (0.8)	6 (1.6)	0 (0.0)	0 (0.0)	1 (0.3)	371 (100.0)			

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1.3-2(5) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Duration: 1st Jan. ~ 31st Jan. 1989																Obtained Data		Short		Total	
	N	NNE	NE	ESE	E	ENE	E	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	372	98	(26.3%)			
<25cm	4 (1.5)	8 (2.9)	9 (3.3)	12 (4.4)	2 (0.7)	9 (3.3)	20 (7.3)	6 (2.2)	19 (6.9)	2 (0.7)	5 (1.8)	19 (6.9)	20 (7.3)	2 (0.7)	5 (1.8)	102 (37.2)						
25~49			1 (0.4)	2 (0.7)	1 (0.4)	2 (0.7)	3 (1.1)	11 (4.0)	12 (4.4)	1 (0.4)	3 (1.1)	15 (5.5)	1 (0.4)	1 (0.4)	3 (1.1)	72 (26.3)						
50~74								2 (0.7)	36 (13.1)	33 (12.0)	2 (0.7)					73 (26.6)						
75~99									6 (2.2)	18 (6.8)						24 (8.8)						
100~124										2 (0.7)						2 (0.7)						
125~149																0 (0.0)						
150~174														1 (0.4)		1 (0.4)						
175~199																0 (0.0)						
200~224																0 (0.0)						
225~249																0 (0.0)						
250~274																0 (0.0)						
275~299																0 (0.0)						
300cm~																0 (0.0)						
Total	4 (1.5)	8 (2.9)	10 (3.6)	14 (5.1)	3 (1.1)	9 (3.3)	37 (13.5)	11 (4.0)	59 (21.5)	11 (4.0)	85 (31.0)	37 (13.5)	3 (1.1)	1 (0.4)	0 (0.0)	8 (2.9)	372	98	(26.3%)			274 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in %.

Table I. 3-2 (6) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Duration: 1st Feb. ~ 28th Feb. 1989													336			
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	2 (0.6)			1 (0.3)				2 (0.6)	4 (1.2)								8 (2.8)
25~49							2 (0.6)	11 (3.4)	61 (18.8)	53 (16.4)		1 (0.3)	1 (0.3)	2 (0.6)			131 (40.4)
50~74								4 (1.2)	73 (22.5)	54 (16.7)	2 (0.6)						133 (41.0)
75~99									13 (4.0)	21 (6.5)	2 (0.6)						36 (11.1)
100~124									1 (0.3)	10 (3.1)	1 (0.3)						12 (3.7)
125~149										3 (0.9)							3 (0.9)
150~174																	0 (0.0)
175~199																	0 (0.0)
200~224																	0 (0.0)
225~249																	0 (0.0)
250~274																	0 (0.0)
275~299																	0 (0.0)
300cm~																	0 (0.0)
Total	2 (0.6)	0 (0.0)	0 (0.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.6)	17 (5.2)	152 (46.9)	141 (43.5)	5 (1.5)	1 (0.3)	1 (0.3)	2 (0.6)	0 (0.0)	326 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-2 (7) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Duration: 1st Mar. ~ 31st Mar. 1989																Obtained Data		Short Data		Total
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	372	0	(0.0%)		
<25cm	3 (0.8)	3 (0.8)	6 (1.6)	4 (1.1)	5 (1.3)		2 (0.5)	3 (0.8)	12 (3.2)	14 (3.8)	16 (4.3)	8 (2.2)	5 (1.3)			12 (3.2)				93 (25.0)	
25~ 49	1 (0.3)		3 (0.8)				1 (0.3)	3 (0.8)	6 (1.6)	44 (11.8)	84 (22.6)	8 (2.2)	1 (0.3)			2 (0.5)				153 (41.1)	
50~ 74								4 (1.1)	31 (8.3)	47 (12.6)	7 (1.9)									89 (23.9)	
75~ 99										13 (3.5)	19 (5.1)	2 (0.5)									34 (9.1)
100~ 124											2 (0.5)	1 (0.3)									3 (0.8)
125~ 149																					0 (0.0)
150~ 174																					0 (0.0)
175~ 199																					0 (0.0)
200~ 224																					0 (0.0)
225~ 249																					0 (0.0)
250~ 274																					0 (0.0)
275~ 299																					0 (0.0)
300cm~																					0 (0.0)
Total	4 (1.1)	3 (0.8)	9 (2.4)	4 (1.1)	5 (1.3)	0 (0.0)	3 (0.8)	6 (1.6)	22 (5.9)	102 (27.4)	168 (45.2)	26 (7.0)	6 (1.6)	0 (0.0)	0 (0.0)	14 (3.8)	0	0	0	372 (100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-2 (8) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Duration: 1st Apr. ~ 30th Apr. 1989
 St. 1

Obtained Data 360
 Short Data 0 (0.0%)

Dir. Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	2 (0.6)	6 (1.7)	23 (6.4)	3 (0.8)	1 (0.3)				12 (3.3)	19 (5.3)	78 (21.7)	19 (5.3)	3 (0.8)	1 (0.3)			167 (46.4)
25~	2 (0.6)	2 (0.6)	7 (1.9)	5 (1.4)			3 (0.8)	1 (0.3)	2 (0.6)	17 (4.7)	75 (20.8)	17 (4.7)	4 (1.1)	2 (0.6)		3 (0.8)	140 (38.9)
50~									1 (0.3)	3 (0.8)	31 (8.6)	8 (2.2)	2 (0.6)				45 (12.5)
75~											1 (0.3)	4 (1.1)	1 (0.3)				6 (1.7)
100~												1 (0.3)	1 (0.3)				2 (0.6)
125~																	0 (0.0)
150~																	0 (0.0)
175~																	0 (0.0)
200~																	0 (0.0)
225~																	0 (0.0)
250~																	0 (0.0)
275~																	0 (0.0)
300cm~																	0 (0.0)
Total	4 (1.1)	8 (2.2)	30 (8.3)	8 (2.2)	1 (0.3)	0 (0.0)	3 (0.8)	1 (0.3)	15 (4.2)	39 (10.8)	185 (51.4)	49 (13.6)	11 (3.1)	3 (0.8)	0 (0.0)	3 (0.8)	360 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-2 (9) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Duration: 1st May ~ 31st May 1989																Obtained Data		Total
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Short	I (0.3%)	
<25cm	14 (3.8)	6 (1.6)	1 (0.3)	5 (1.3)	4 (1.1)	7 (1.9)	25 (6.7)	32 (8.6)	40 (10.8)	13 (3.5)	8 (2.2)	8 (2.2)	3 (0.8)	7 (1.9)	4 (1.1)	3 (0.8)	372	372	0.3%
25~49	7 (1.9)		1 (0.3)			4 (1.1)	18 (4.9)	59 (15.9)	53 (14.3)	7 (1.9)	11 (3.0)	3 (0.8)		2 (0.5)	3 (0.8)	3	171	171	0.3%
50~74						2 (0.5)	7 (1.9)		10 (2.7)			1 (0.3)					20	20	0.3%
75~99																	0	0	0.0%
100~124																	0	0	0.0%
125~149																	0	0	0.0%
150~174																	0	0	0.0%
175~199																	0	0	0.0%
200~224																	0	0	0.0%
225~249																	0	0	0.0%
250~274																	0	0	0.0%
275~299																	0	0	0.0%
300cm~																	0	0	0.0%
Total	21 (5.7)	6 (1.6)	2 (0.5)	5 (1.3)	4 (1.1)	11 (3.0)	45 (12.1)	98 (26.4)	103 (27.8)	20 (5.4)	19 (5.1)	12 (3.2)	3 (0.8)	9 (2.4)	7 (1.9)	6 (1.6)	371	371	0.3%

Note: Upper layer shows Frequencies and Lower layer shows Frequencies in %.

Table 1. 3-2(10) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Obtained Data																360	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSH	SW	WSW	W	WNW	NW	NNW	Total	
<25cm	8 (2.2)	3 (0.8)	8 (2.2)	2 (0.6)	8 (2.2)	11 (3.1)	10 (2.8)	27 (7.6)	32 (9.0)	7 (2.0)	12 (3.4)	5 (1.4)	9 (2.5)	7 (2.0)	5 (1.4)	13 (3.6)	167 (46.8)	
25~49	4 (1.1)	1 (0.3)	2 (0.6)		10 (2.8)	6 (1.7)	12 (3.4)	17 (4.8)	57 (16.0)	11 (3.1)	18 (5.0)	6 (1.7)	2 (0.6)	3 (0.8)	3 (0.8)	5 (1.4)	157 (44.0)	
50~74								7 (2.0)	6 (1.7)	2 (0.6)	8 (2.2)	2 (0.6)					25 (7.0)	
75~99								1 (0.3)	3 (0.8)		1 (0.3)	1 (0.3)					6 (1.7)	
100~124									1 (0.3)		1 (0.3)						2 (0.6)	
125~149																	0 (0.0)	
150~174																	0 (0.0)	
175~199																	0 (0.0)	
200~224																	0 (0.0)	
225~249																	0 (0.0)	
250~274																	0 (0.0)	
275~299																	0 (0.0)	
300cm~																	0 (0.0)	
Total	12 (3.2)	4 (1.1)	10 (2.8)	2 (0.6)	18 (5.0)	17 (4.8)	22 (6.2)	52 (14.6)	99 (27.7)	20 (5.6)	40 (11.2)	14 (3.9)	11 (3.1)	10 (2.8)	8 (2.2)	18 (5.0)	357 (100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-2 (II) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Obtained Data													Total			
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSH	SW	WSW	W	WNW	NW	NNW	Total
<25cm	2 (0.6)	3 (0.9)	2 (0.6)		2 (0.6)	1 (0.3)	5 (1.5)	14 (4.1)	39 (11.3)	9 (2.6)	14 (4.1)	9 (2.6)	3 (0.9)	2 (0.6)		2 (0.6)	107 (31.0)
25~49	5 (1.4)				1 (0.3)	5 (1.4)	8 (2.3)	33 (9.6)	57 (16.5)	14 (4.1)	14 (4.1)	7 (2.0)	10 (2.9)		1 (0.3)	2 (0.6)	157 (45.5)
50~74					1 (0.3)		3 (0.9)	25 (7.2)	43 (12.5)				2 (0.6)	1 (0.3)			75 (21.7)
75~99								5 (1.4)	1 (0.3)								6 (1.7)
100~124																	0 (0.0)
125~149																	0 (0.0)
150~174																	0 (0.0)
175~199																	0 (0.0)
200~224																	0 (0.0)
225~249																	0 (0.0)
250~274																	0 (0.0)
275~299																	0 (0.0)
300cm~																	0 (0.0)
Total	7 (2.0)	3 (0.9)	2 (0.6)	0 (0.0)	4 (1.2)	6 (1.7)	16 (4.6)	77 (22.3)	140 (40.6)	23 (6.7)	28 (8.1)	16 (4.6)	15 (4.3)	3 (0.9)	1 (0.3)	4 (1.2)	345 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-2 (12) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Dir. Height	Obtained Data													Short Data		Total	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW		NNW
<25cm	3 (0.8)	2 (0.5)						4 (1.1)	20 (5.4)	1 (0.3)	3 (0.8)						33 (8.9)
25~	49 (0.3)	2 (0.5)		1 (0.3)				21 (5.7)	98 (26.4)	10 (2.7)	1 (0.3)	2 (0.5)				4 (1.1)	140 (37.7)
50~	74						37 (10.0)	126 (34.0)	5 (1.3)			2 (0.5)					170 (45.8)
75~	99						7 (1.9)	20 (5.4)					1 (0.3)				28 (7.5)
100~	124																0 (0.0)
125~	149																0 (0.0)
150~	174																0 (0.0)
175~	199																0 (0.0)
200~	224																0 (0.0)
225~	249																0 (0.0)
250~	274																0 (0.0)
275~	299																0 (0.0)
300cm~																	0 (0.0)
Total	4 (1.1)	4 (1.1)	0 (0.0)	1 (0.3)	0 (0.0)	0 (0.0)	69 (18.6)	264 (71.2)	16 (4.3)	4 (1.1)	4 (1.1)		1 (0.3)	0 (0.0)	0 (0.0)	4 (1.1)	371 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table I. 3-2 (13) Frequency Distribution of Wave Height by Wave Direction (Every Month)

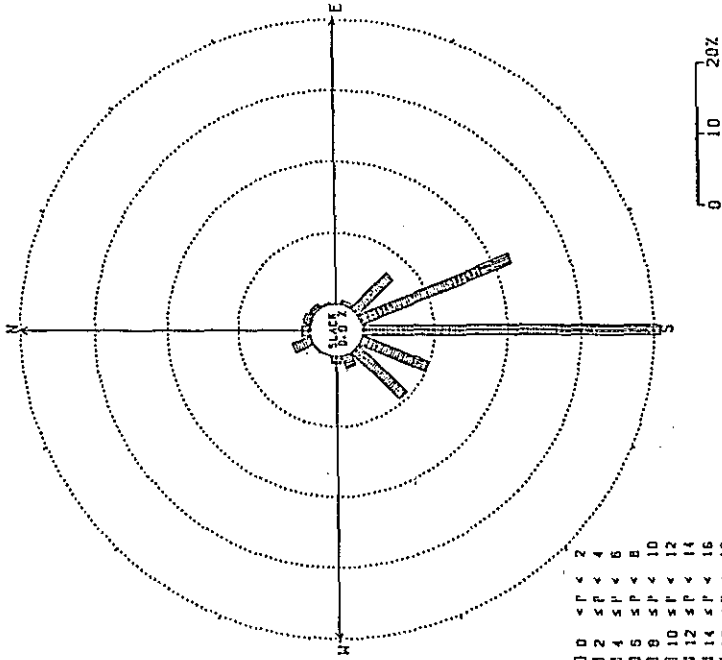
Obtained Data 350
Short Data 298 (68.9%)

Duration: 1st Sep. ~ 30th Sep. 1989
St. 1

Dir. Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSH	SW	WSW	W	WNW	NW	NNW	Total
<25cm																	0 (0.0)
25~ 49								3 (2.7) (15.2)	17 (15.2)								20 (17.9)
50~ 74								12 (10.7) (50.9)	57 (50.9)								69 (61.6)
75~ 99								6 (5.4) (15.2)	17 (15.2)								23 (20.5)
100~ 124																	0 (0.0)
125~ 149																	0 (0.0)
150~ 174																	0 (0.0)
175~ 199																	0 (0.0)
200~ 224																	0 (0.0)
225~ 249																	0 (0.0)
250~ 274																	0 (0.0)
275~ 299																	0 (0.0)
300cm~																	0 (0.0)
Total	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	21 (18.3)	91 (81.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	112 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Station : 1
 PERIOD : 1988.10.1.0.0 - 1988.10.31.22.0

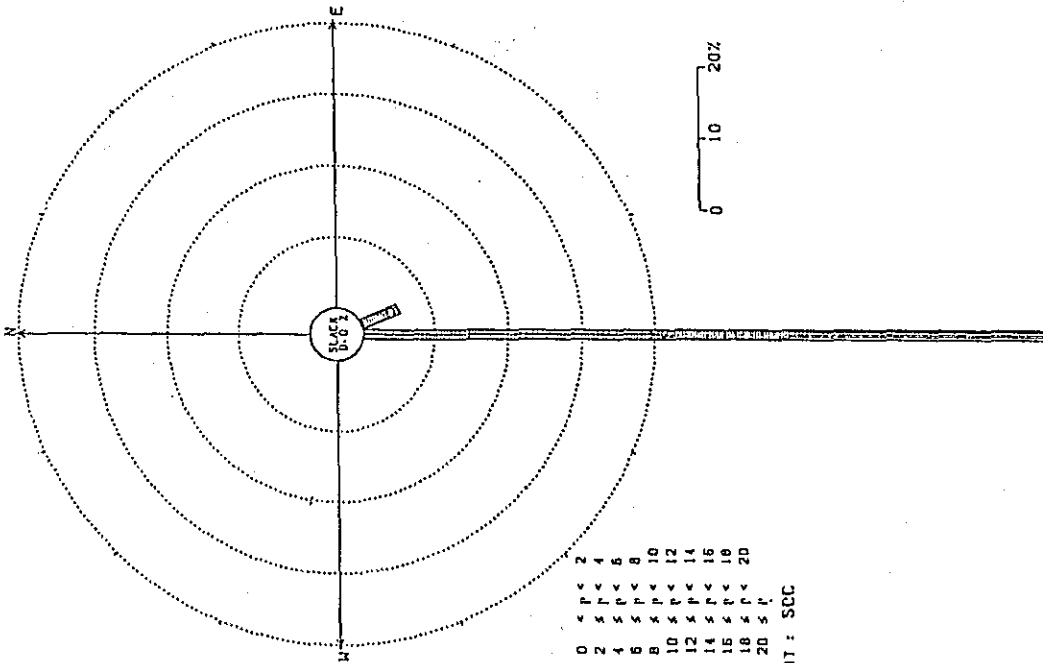


- 0 < P < 2
- 2 S P < 4
- 4 S P < 6
- 6 S P < 8
- 8 S P < 10
- 10 S P < 12
- 12 S P < 14
- 14 S P < 16
- 16 S P < 18
- 18 S P < 20
- 20 S P

UNIT : SCC

0 10 20%

Station : 1
 PERIOD : 1988.9.10.12.0.0 - 1988.9.30.22.0



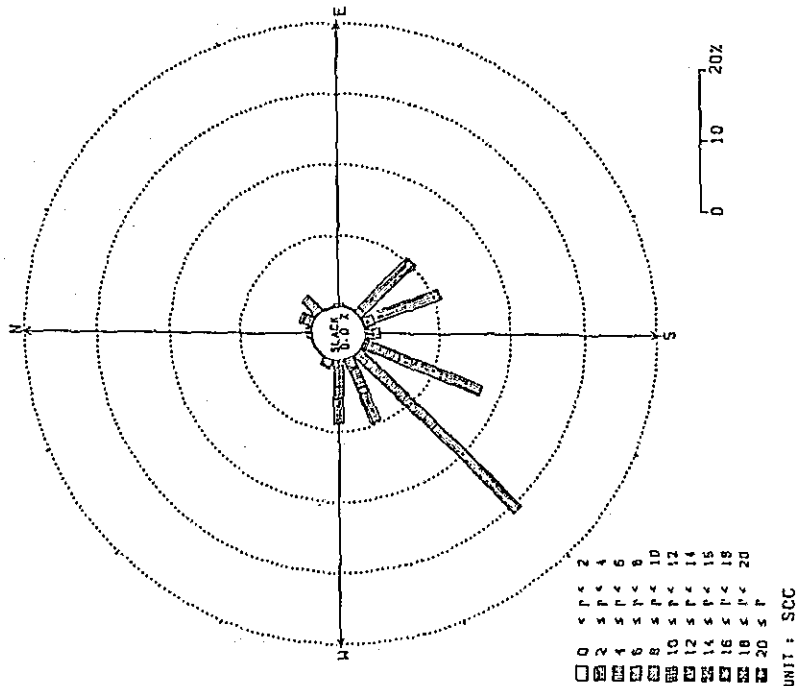
- 0 < P < 2
- 2 S P < 4
- 4 S P < 6
- 6 S P < 8
- 8 S P < 10
- 10 S P < 12
- 12 S P < 14
- 14 S P < 16
- 16 S P < 18
- 18 S P < 20
- 20 S P

UNIT : SCC

0 10 20%

Fig. 1.3-6 (1) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Station : 1
 PERIOD : 1988.11. 1. 0. 0 - 1988.11.30.22. 0



Station : 1
 PERIOD : 1988.12. 1. 0. 0 - 1988.12.31.22. 0

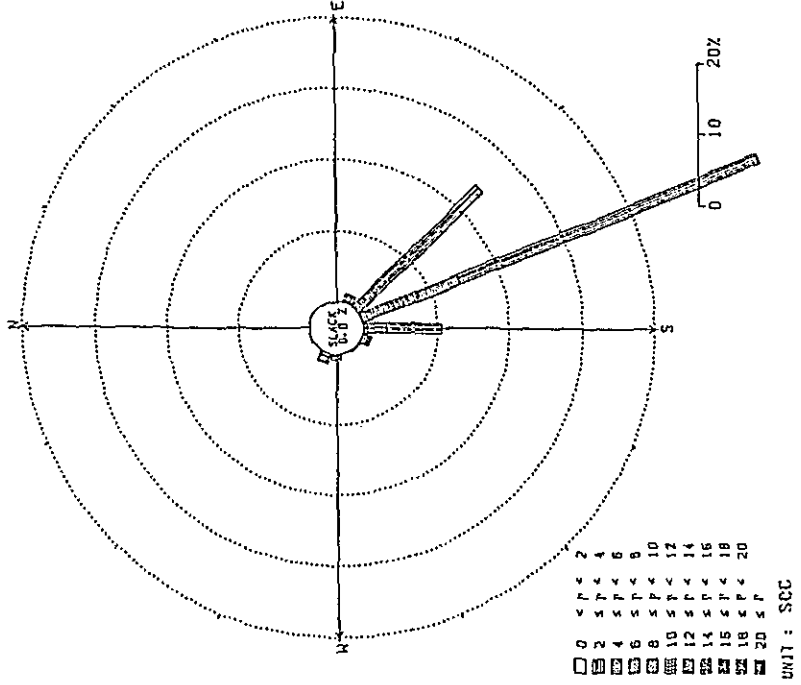


Fig. 1. 3-6 (2) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Station : J
 PERIOD : 1989. 1. 1. 0. 0 - 1989. 1. 31. 23. 0

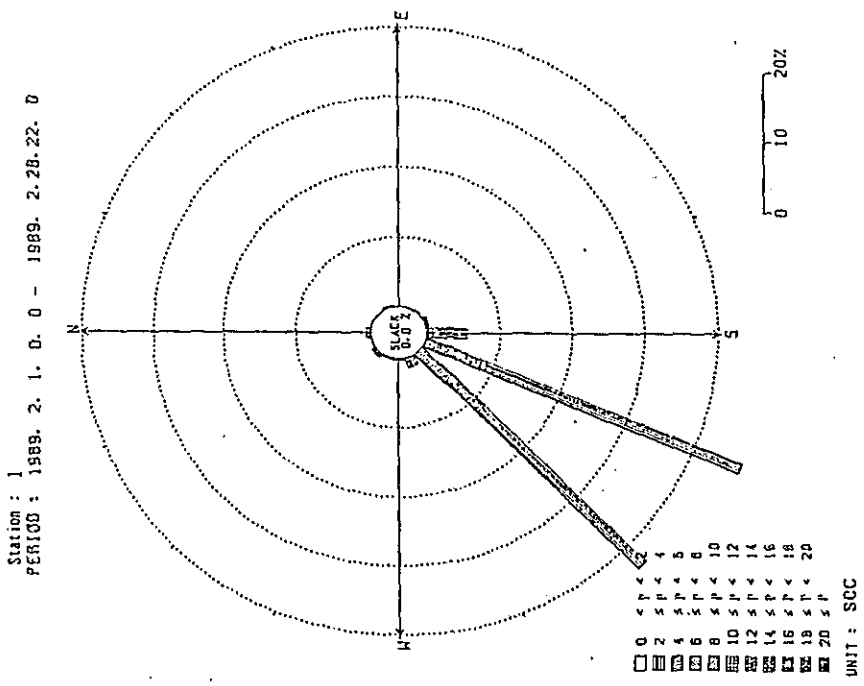
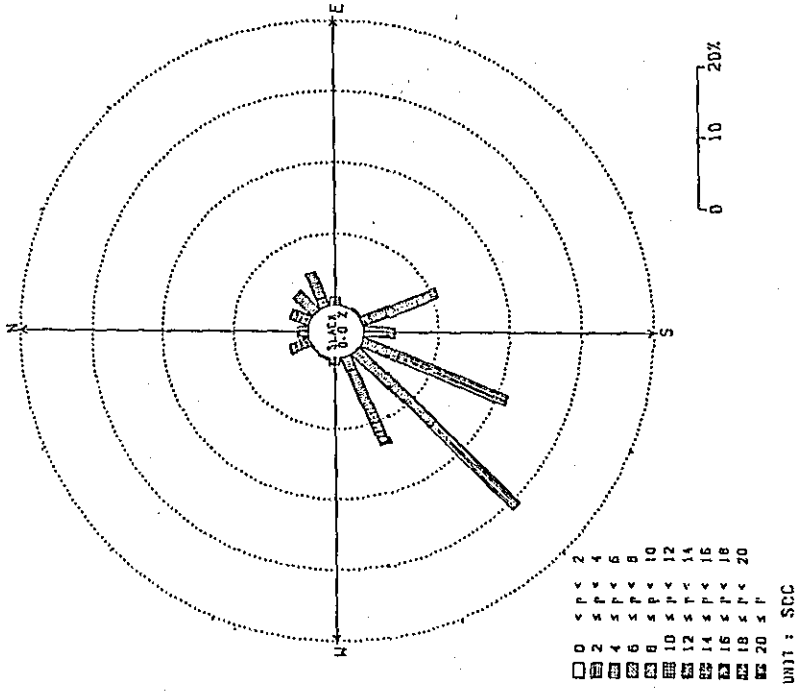
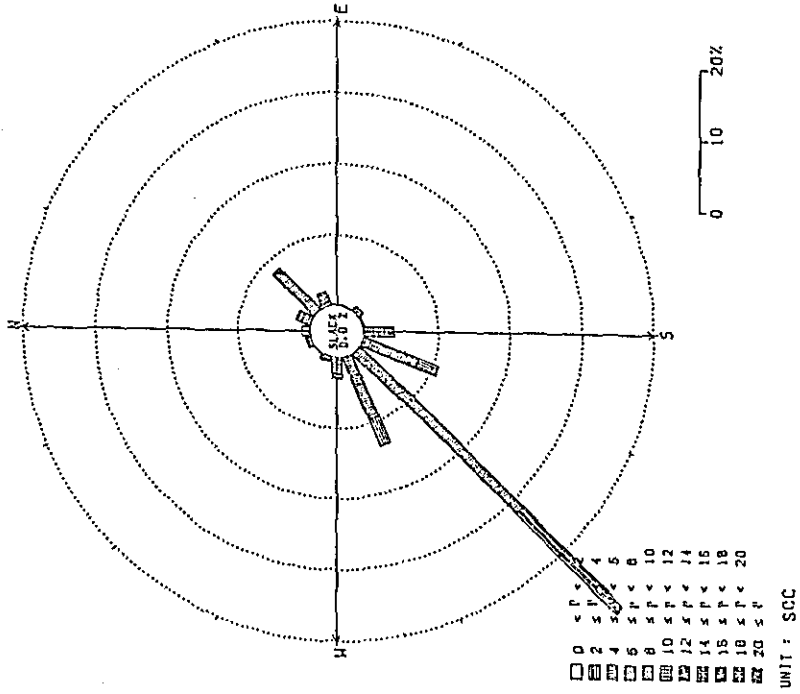


Fig. 1. 3-6 (3) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Station : I
 PERIOD : 1989. 4. 1. 0. 0 - 1989. 4. 30. 22. 0



Station : I
 PERIOD : 1989. 3. 1. 0. 0 - 1989. 3. 31. 22. 0

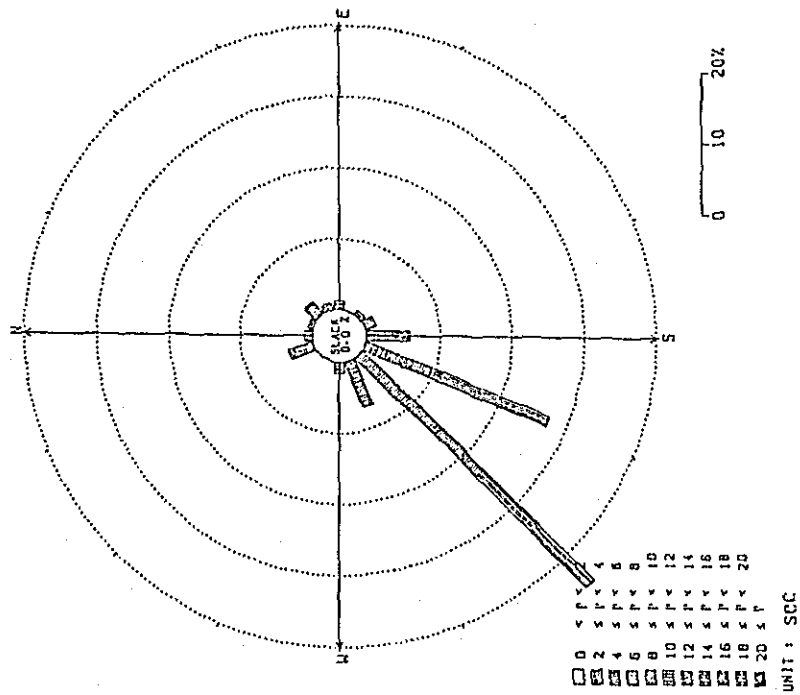
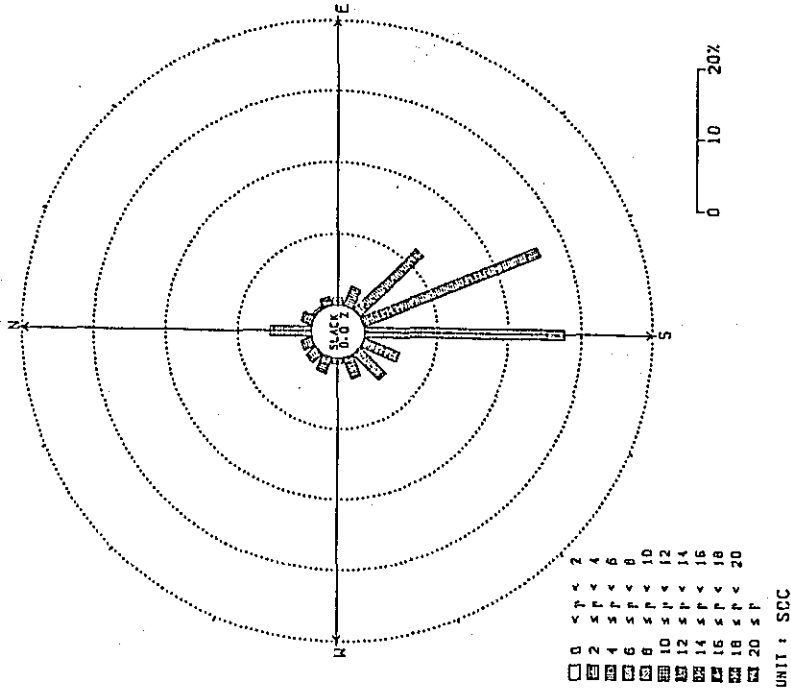


Fig. I. 3-6 (4) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Station : 1
 PERIOD : 1989. 5. 1. 0 - 1989. 5. 31. 22. 0



Station : 1
 PERIOD : 1989. 6. 1. 0 - 1989. 6. 30. 22. 0

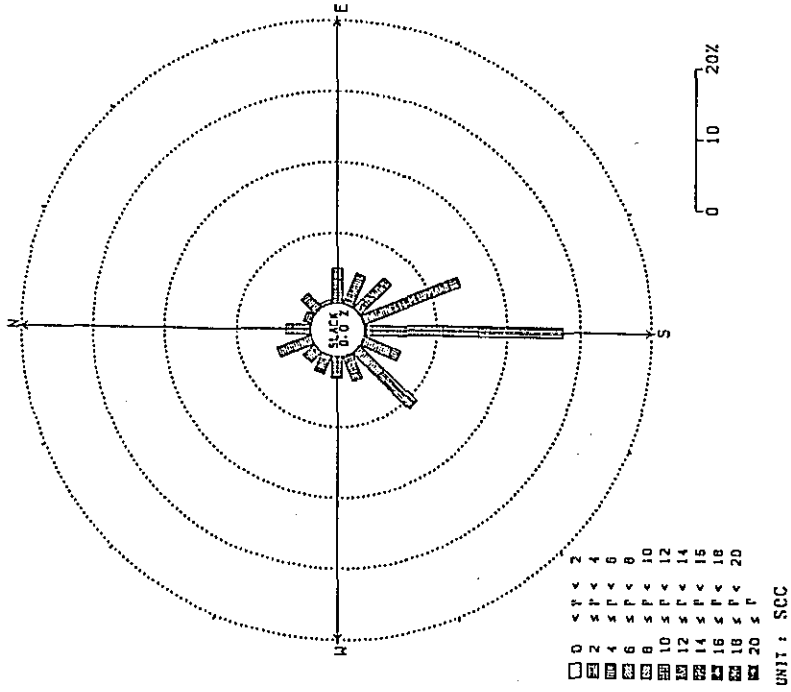
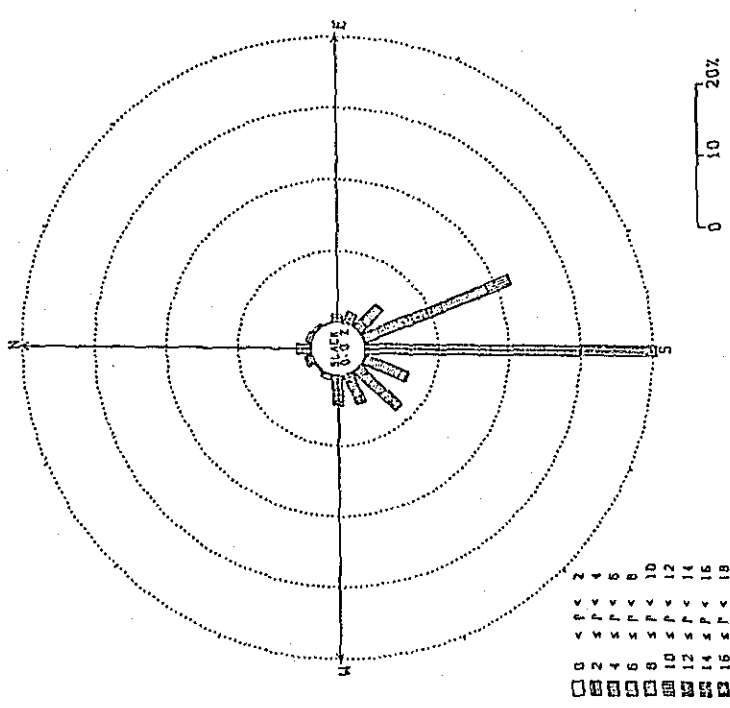


Fig. 1. 3--6 (5) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Station : I
 PERIOD : 1989. 7. 1. 0 - 1989. 7. 31. 22. 0



Station : I
 PERIOD : 1989. 8. 1. 0 - 1989. 8. 31. 22. 0

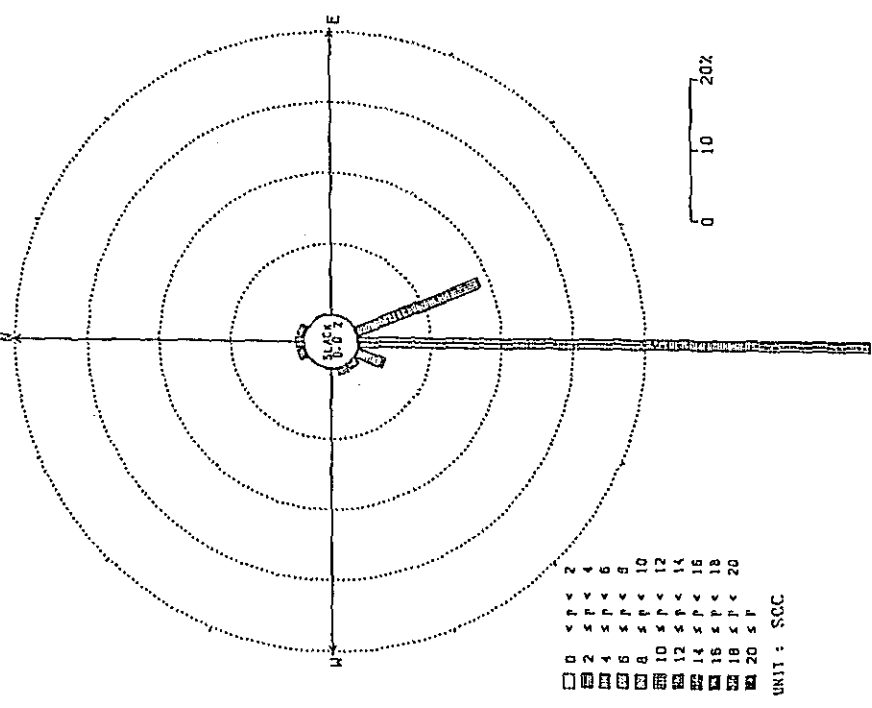


Fig. 1. 3-6 (6) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Table 1.3-3 (1) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Duration: 10th Sep. ~ 30th Sep. 1988
 St. : 1

Obtained Data 246
 Short Data 2 (0.8%)

Dir. Period	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<1.0sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9																	0 (0.0)
3.0~ 3.9								12 (4.9)	143 (58.6)								155 (63.5)
4.0~ 4.9								2 (0.8)	86 (35.2)								88 (36.1)
5.0~ 5.9									1 (0.4)								1 (0.4)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0sec~																	0 (0.0)
Total	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	14 (5.7)	230 (92.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	244 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-3 (2) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Dir. Period	Obtained Data													Total			
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W		WNW	NW	NNW
<1.0sec																	
1.0~ 1.9																	
2.0~ 2.9	5 (1.4)	4 (1.1)	3 (0.8)	1 (0.3)		2 (0.5)	11 (3.0)	20 (5.4)	6 (1.6)	7 (1.9)	4 (1.1)	2 (0.5)	1 (0.3)		1 (0.3)	10 (2.7)	77 (20.9)
3.0~ 3.9							15 (4.1)	46 (12.5)	92 (24.9)	22 (6.0)	30 (8.1)	5 (1.4)	3 (0.8)				213 (57.7)
4.0~ 4.9								17 (4.6)	53 (14.4)	8 (2.2)	1 (0.3)						79 (21.4)
5.0~ 5.9																	0 (0.0)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0sec~																	0 (0.0)
Total	5 (1.4)	4 (1.1)	3 (0.8)	1 (0.3)	0 (0.0)	2 (0.5)	26 (7.0)	81 (22.5)	151 (40.9)	37 (10.0)	35 (9.5)	7 (1.9)	4 (1.1)	0 (0.0)	1 (0.3)	10 (2.7)	369 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-3 (3) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Dir. Period	360																Total
	Obtained Data								Short								
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSN	SW	WSW	W	WNW	NW	NNW	
<1.0sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9	3 (0.8)	7 (2.0)	11 (3.1)	1 (0.3)	2 (0.6)	1 (0.3)				4 (1.1)	12 (3.4)	7 (2.0)	2 (0.6)	2 (0.6)	1 (0.3)	1 (0.3)	54 (15.1)
3.0~ 3.9							3 (0.8)	6 (1.7)	4 (1.1)	15 (4.2)	40 (11.2)	12 (3.4)	17 (4.7)	2 (0.6)			99 (27.7)
4.0~ 4.9							30 (8.4)	31 (8.7)	2 (0.6)	31 (8.7)	54 (15.1)	16 (4.5)	13 (3.6)	1 (0.3)			178 (49.7)
5.0~ 5.9							5 (1.4)	3 (0.8)	2 (0.6)	12 (3.4)	5 (1.4)						27 (7.5)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0sec~																	0 (0.0)
Total	3 (0.8)	7 (2.0)	11 (3.1)	1 (0.3)	2 (0.6)	1 (0.3)	38 (10.6)	40 (11.2)	8 (2.2)	62 (17.3)	111 (31.0)	35 (9.8)	32 (8.9)	5 (1.4)	1 (0.3)	1 (0.3)	358 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-3 (4) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Dir. Period	Obtained Data																372	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSH	SW	WSW	W	WNW	NW	NNW	Total	
<1.0 sec																	0	(0.0)
1.0~ 1.9																	0	(0.0)
2.0~ 2.9								1	(0.3)	1						1	3	(0.8)
3.0~ 3.9						1	13	52	11	3	1	2					83	(22.4)
4.0~ 4.9						4	63	149	25	2	1	4					250	(67.4)
5.0~ 5.9							14	19	2								35	(9.4)
6.0~ 6.9																	0	(0.0)
7.0~ 7.9																	0	(0.0)
8.0~ 8.9																	0	(0.0)
9.0~ 9.9																	0	(0.0)
10.0~ 10.9																	0	(0.0)
11.0~ 11.9																	0	(0.0)
12.0~ 12.9																	0	(0.0)
13.0~ 13.9																	0	(0.0)
14.0~ 14.9																	0	(0.0)
15.0~ 15.9																	0	(0.0)
16.0~ 16.9																	0	(0.0)
17.0~ 17.9																	0	(0.0)
18.0~ 18.9																	0	(0.0)
19.0~ 19.9																	0	(0.0)
20.0 sec ~																	0	(0.0)
Total	0	0	0	0	0	5	90	221	39	5	1	6	3	0	0	1	371	(100.0)
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(1.3)	(24.3)	(59.6)	(10.5)	(1.3)	(0.3)	(1.6)	(0.8)	(0.0)	(0.0)	(0.3)	(100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-3(5) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Duration: 1st Jan. ~ 31st Jan. 1989
 St. : 1

Obtained Data : 372
 Short Data : 98 (26.3%)

Dir. Period	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<1.0sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9	4 (1.5)	8 (2.9)	10 (3.6)	14 (5.1)	3 (1.1)		1 (0.4)	5 (1.8)	4 (1.5)	4 (1.5)	14 (5.1)	23 (8.4)				8 (2.9)	98 (35.8)
3.0~ 3.9								22 (8.0)	5 (1.8)	10 (3.6)	26 (9.5)	13 (4.7)	3 (1.1)	1 (0.4)			80 (29.2)
4.0~ 4.9								3 (1.1)	2 (0.7)	38 (13.9)	43 (15.7)	1 (0.4)					87 (31.8)
5.0~ 5.9										7 (2.6)	2 (0.7)						9 (3.3)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0sec~																	0 (0.0)
Total	6 (1.5)	8 (2.9)	10 (3.6)	14 (5.1)	3 (1.1)	0 (0.0)	1 (0.4)	30 (10.9)	11 (4.0)	59 (21.5)	85 (31.0)	37 (13.5)	3 (1.1)	1 (0.4)	0 (0.0)	8 (2.9)	274 (100.0)

Note : Upper layer shows Frequencies and lower layer shows Frequencies in % .

Table 1.3-3(6) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Duration: 1st Feb. ~ 28th Feb. 1989
 St. : 1

Obtained Data Short 336
 Data 12 (3.6%)

Dir. Period	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<1.0sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9																	0 (0.0)
3.0~ 3.9 (0.6)	2 (0.6)			1 (0.3)				1 (0.3)	3 (0.9)	29 (9.0)	38 (11.7)	2 (0.6)	1 (0.3)				77 (23.6)
4.0~ 4.9								1 (0.3)	13 (4.0)	109 (33.6)	92 (28.4)	3 (0.9)		1 (0.3)	2 (0.6)		221 (68.2)
5.0~ 5.9									1 (0.3)	14 (4.3)	11 (3.4)						26 (8.0)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0sec~																	0 (0.0)
Total	2 (0.6)	0 (0.0)	0 (0.0)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.6)	17 (5.2)	152 (46.9)	141 (43.5)	5 (1.5)	1 (0.3)	1 (0.3)	2 (0.6)	0 (0.0)	324 (100.0)

Note : Upper layer shows Frequencies and lower layer shows Frequencies in % .

Table 1. 3-3 (7) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Dir. Period	Duration: 1st Mar. ~ 31th Mar. 1989																Obtained Data	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSH	SH	MSW	H	HNW	NH	NNW	Total	
<1.0sec																	0	(0.0)
1.0~ 1.9																	0	(0.0)
2.0~ 2.9	4 (1.1)	3 (0.8)	9 (2.4)	4 (1.1)	5 (1.3)		3 (0.8)	4 (1.1)	6 (1.6)	4 (1.1)	4 (1.1)	4 (1.1)	2 (0.5)				14 (3.8)	68 (18.3)
3.0~ 3.9								2 (0.5)	9 (2.4)	29 (7.8)	83 (22.3)	19 (5.1)	4 (1.1)				146 (39.2)	
4.0~ 4.9									7 (1.9)	52 (14.0)	80 (21.5)	3 (0.8)					142 (38.2)	
5.0~ 5.9										15 (4.0)	1 (0.3)						16 (4.3)	
6.0~ 6.9																	0 (0.0)	
7.0~ 7.9																	0 (0.0)	
8.0~ 8.9																	0 (0.0)	
9.0~ 9.9																	0 (0.0)	
10.0~ 10.9																	0 (0.0)	
11.0~ 11.9																	0 (0.0)	
12.0~ 12.9																	0 (0.0)	
13.0~ 13.9																	0 (0.0)	
14.0~ 14.9																	0 (0.0)	
15.0~ 15.9																	0 (0.0)	
16.0~ 16.9																	0 (0.0)	
17.0~ 17.9																	0 (0.0)	
18.0~ 18.9																	0 (0.0)	
19.0~ 19.9																	0 (0.0)	
20.0sec~																	0 (0.0)	
Total	4 (1.1)	3 (0.8)	9 (2.4)	4 (1.1)	5 (1.3)	0 (0.0)	3 (0.8)	6 (1.6)	22 (5.9)	102 (27.4)	168 (43.2)	26 (7.0)	6 (1.6)	0 (0.0)	0 (0.0)	0 (0.0)	14 (3.8)	372 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-3 (8) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Dir. Period	Duration: 1st Apr. ~ 30th Apr. 1989																Obtained Data		360	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total			
<1.0sec																		0		(0.0)
1.0~ 1.9																		0		(0.0)
2.0~ 2.9	4 (1.1)	8 (2.2)	30 (8.3)	8 (2.2)	1 (0.3)		1 (0.3)	1 (0.3)	3 (0.8)	5 (1.4)	19 (5.3)	6 (1.7)	3 (0.8)	1 (0.3)			3 (0.8)	93		(25.8)
3.0~ 3.9									7 (1.9)	23 (6.4)	95 (26.4)	28 (7.8)	6 (1.7)	2 (0.6)				163		(45.3)
4.0~ 4.9									5 (1.4)	11 (3.1)	71 (19.7)	15 (4.2)	2 (0.6)				104		(28.9)	
5.0~ 5.9																	0		(0.0)	
6.0~ 6.9																	0		(0.0)	
7.0~ 7.9																	0		(0.0)	
8.0~ 8.9																	0		(0.0)	
9.0~ 9.9																	0		(0.0)	
10.0~ 10.9																	0		(0.0)	
11.0~ 11.9																	0		(0.0)	
12.0~ 12.9																	0		(0.0)	
13.0~ 13.9																	0		(0.0)	
14.0~ 14.9																	0		(0.0)	
15.0~ 15.9																	0		(0.0)	
16.0~ 16.9																	0		(0.0)	
17.0~ 17.9																	0		(0.0)	
18.0~ 18.9																	0		(0.0)	
19.0~ 19.9																	0		(0.0)	
20.0sec~																	0		(0.0)	
Total	4 (1.1)	8 (2.2)	30 (8.3)	8 (2.2)	1 (0.3)	0 (0.0)	3 (0.8)	1 (0.3)	15 (4.2)	39 (10.8)	195 (51.6)	49 (13.6)	11 (3.1)	3 (0.8)	0 (0.0)	3 (0.8)	360		(100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1.3-3(9) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Dir. Period	Duration: 1st May ~ 31st May 1989																Obtained Data Sheet		372 I (0.3%)			
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total					
<1.0sec																		0	(0.0)	0	(0.0)	
1.0~ 1.9																		0	(0.0)	0	(0.0)	
2.0~ 2.9	21 (5.7)	6 (1.6)	2 (0.5)	5 (1.3)	4 (1.1)	9 (2.4)	20 (5.4)	29 (7.8)	22 (5.9)	5 (1.3)	7 (1.9)	5 (1.3)	1 (0.3)	5 (1.3)	7 (1.9)	7 (1.9)	6 (1.5)	154	(41.5)	6	(1.5)	
3.0~ 3.9						2 (0.5)	21 (5.7)	62 (16.7)	72 (19.4)	14 (3.8)	10 (2.7)	7 (1.9)	2 (0.5)	4 (1.1)				194	(52.3)			
4.0~ 4.9							4 (1.1)	7 (1.9)	9 (2.4)	1 (0.3)	2 (0.5)							23	(6.2)			
5.0~ 5.9																		0	(0.0)	0	(0.0)	
6.0~ 6.9																		0	(0.0)	0	(0.0)	
7.0~ 7.9																		0	(0.0)	0	(0.0)	
8.0~ 8.9																		0	(0.0)	0	(0.0)	
9.0~ 9.9																		0	(0.0)	0	(0.0)	
10.0~ 10.9																		0	(0.0)	0	(0.0)	
11.0~ 11.9																		0	(0.0)	0	(0.0)	
12.0~ 12.9																		0	(0.0)	0	(0.0)	
13.0~ 13.9																		0	(0.0)	0	(0.0)	
14.0~ 14.9																		0	(0.0)	0	(0.0)	
15.0~ 15.9																		0	(0.0)	0	(0.0)	
16.0~ 16.9																		0	(0.0)	0	(0.0)	
17.0~ 17.9																		0	(0.0)	0	(0.0)	
18.0~ 18.9																		0	(0.0)	0	(0.0)	
19.0~ 19.9																		0	(0.0)	0	(0.0)	
20.0sec~																		0	(0.0)	0	(0.0)	
Total	21 (5.7)	6 (1.6)	2 (0.5)	5 (1.3)	4 (1.1)	9 (2.4)	45 (12.1)	98 (26.4)	103 (27.8)	20 (5.4)	19 (5.1)	12 (3.2)	3 (0.8)	9 (2.4)	7 (1.9)	6 (1.6)	371	(100.0)	6	(1.6)	7	(1.9)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1.3-3(10) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Obtained Data 360
Short Data 3 (0.8%)

Duration: 1st Jun. ~ 30th Jun. 1989

Dir. Period	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SH	HSH	W	WNW	NW	MNW	Total
<1.0sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9	12 (3.4)	4 (1.1)	10 (2.8)	2 (0.6)	18 (5.0)	14 (3.9)	9 (2.5)	16 (4.5)	8 (2.2)	4 (1.1)	3 (0.8)	5 (1.4)	3 (0.8)	3 (0.8)	8 (2.2)	18 (5.0)	137 (38.4)
3.0~ 3.9						3 (0.8)	13 (3.6)	30 (8.4)	49 (13.7)	11 (3.1)	14 (3.9)	5 (1.4)	7 (2.0)	5 (1.4)			137 (38.4)
4.0~ 4.9								5 (1.4)	40 (11.2)	5 (1.4)	20 (5.6)	4 (1.1)	1 (0.3)	2 (0.6)			77 (21.6)
5.0~ 5.9								1 (0.3)	2 (0.6)		3 (0.8)						6 (1.7)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0sec~																	0 (0.0)
Total	12 (3.4)	4 (1.1)	10 (2.8)	2 (0.6)	18 (5.0)	17 (4.8)	22 (6.2)	52 (14.6)	99 (27.7)	20 (5.6)	40 (11.2)	14 (3.9)	11 (3.1)	10 (2.8)	8 (2.2)	18 (5.0)	357 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table I. 3-3 (II) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Duration: 1st Jul. ~ 31st Jul. 1989
 St. 1

Obtained Data Short 372
 Date 27 (7.3%)

Dir. Period	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SH	WSW	W	WNW	NW	NNW	Total
<1.0sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9	7 (2.0)	3 (0.9)	2 (0.6)		6 (1.7)	4 (1.2)	3 (0.9)	5 (1.5)	8 (2.3)	5 (1.4)	3 (0.9)		3 (0.9)		1 (0.3)	4 (1.2)	52 (15.1)
3.0~ 3.9						2 (0.6)	12 (3.5)	59 (17.1)	96 (27.8)	14 (4.1)	14 (4.1)	12 (3.5)	10 (2.9)	3 (0.9)			223 (64.3)
4.0~ 4.9							1 (0.3)	13 (3.8)	34 (9.9)	4 (1.2)	11 (3.2)	6 (1.7)	2 (0.6)				69 (20.0)
5.0~ 5.9									2 (0.6)								2 (0.6)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0sec~																	0 (0.0)
Total	7 (2.0)	3 (0.9)	2 (0.6)	0 (0.0)	6 (1.7)	6 (1.7)	16 (4.6)	77 (22.3)	140 (40.8)	23 (6.7)	28 (8.1)	16 (4.6)	15 (4.3)	3 (0.9)	1 (0.3)	4 (1.2)	365 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1.3-3 (12) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Dir. Period	Obtained Data																Total
	H	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	
<1.0sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9	4 (1.1)	4 (1.1)		1 (0.3)			2 (0.5)	11 (3.0)	1 (0.3)	2 (0.5)						4 (1.1)	29 (7.8)
3.0~ 3.9							50 (13.5)	191 (51.5)	13 (3.5)	2 (0.5)	4 (1.1)						260 (70.1)
4.0~ 4.9							17 (4.6)	59 (15.9)	2 (0.5)				1 (0.3)				79 (21.3)
5.0~ 5.9								3 (0.8)									3 (0.8)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0sec~																	0 (0.0)
Total	4 (1.1)	4 (1.1)	0 (0.0)	1 (0.3)	0 (0.0)	0 (0.0)	69 (18.8)	264 (71.2)	16 (4.3)	4 (1.1)	4 (1.1)	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	4 (1.1)	371 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1.3-3(13) Frequency Distribution of Wave Period by Wave Direction (Every Month)

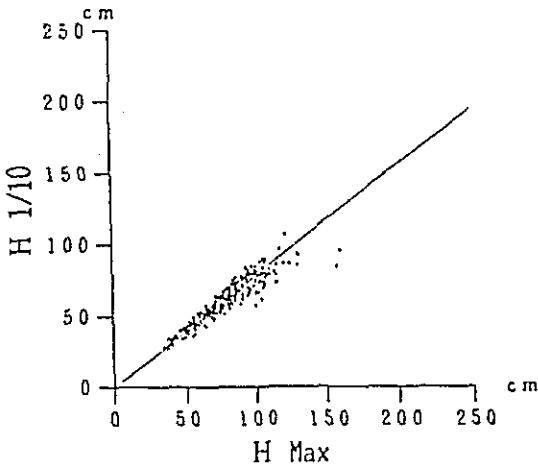
Dir. Period	Duration: 1st Sep. ~ 30th Sep. 1989													Obtained Data		Short Data		Total		
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	260		248 (68.9%)	
<1.0sec																			0	(0.0)
1.0~ 1.9																			0	(0.0)
2.0~ 2.9																			0	(0.0)
3.0~ 3.9								13 (11.6)	52 (46.4)									65	(58.0)	
4.0~ 4.9								8 (7.1)	39 (34.8)									47	(42.0)	
5.0~ 5.9																		0	(0.0)	
6.0~ 6.9																		0	(0.0)	
7.0~ 7.9																		0	(0.0)	
8.0~ 8.9																		0	(0.0)	
9.0~ 9.9																		0	(0.0)	
10.0~ 10.9																		0	(0.0)	
11.0~ 11.9																		0	(0.0)	
12.0~ 12.9																		0	(0.0)	
13.0~ 13.9																		0	(0.0)	
14.0~ 14.9																		0	(0.0)	
15.0~ 15.9																		0	(0.0)	
16.0~ 16.9																		0	(0.0)	
17.0~ 17.9																		0	(0.0)	
18.0~ 18.9																		0	(0.0)	
19.0~ 19.9																		0	(0.0)	
20.0sec~																		0	(0.0)	
Total	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	21 (18.5)	91 (81.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	112 (100.0)		

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Sep. - 30th Sep. 1988

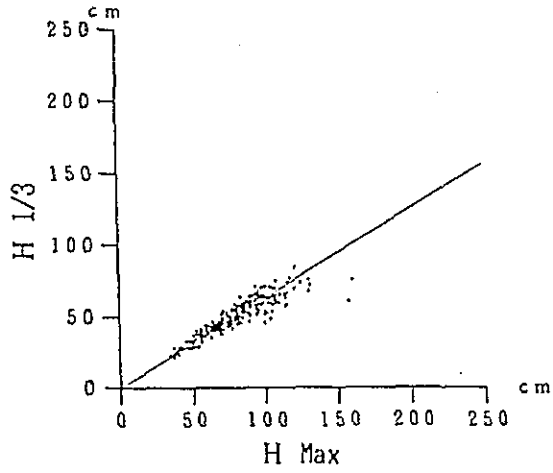
$r = 0.928$ $n = 246$

$Y = 0.775X$



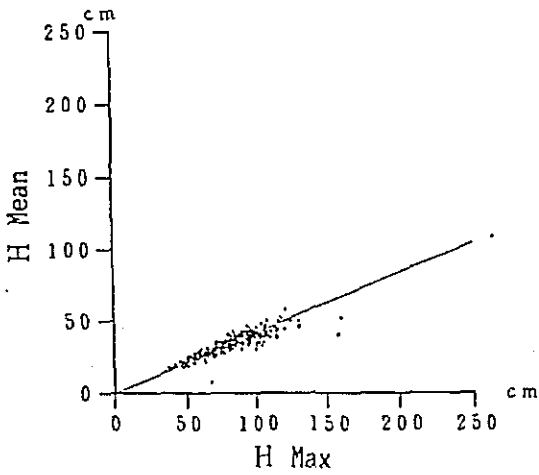
$r = 0.907$ $n = 246$

$Y = 0.624X$



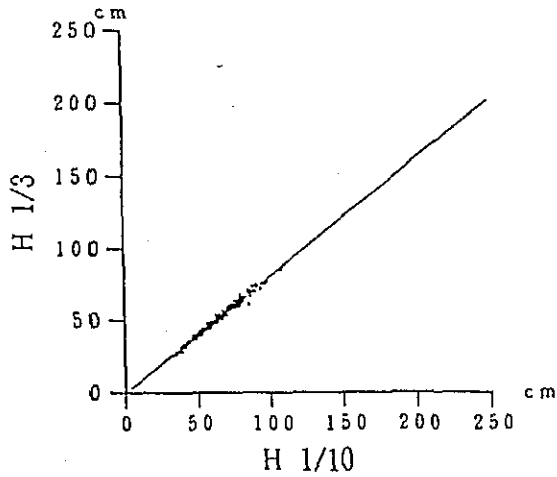
$r = 0.900$ $n = 246$

$Y = 0.416X$



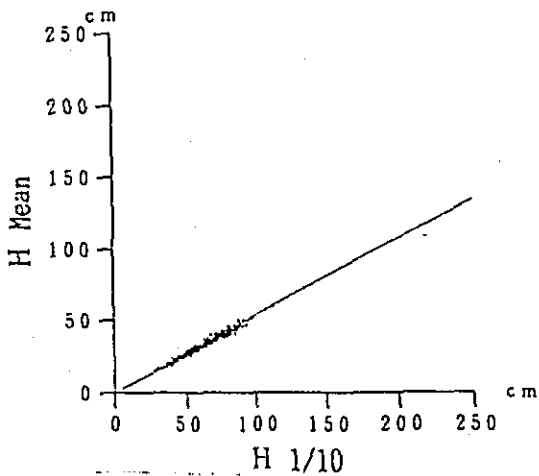
$r = 0.993$ $n = 246$

$Y = 0.806X$



$r = 0.985$ $n = 246$

$Y = 0.537X$



$r = 0.995$ $n = 246$

$Y = 0.666X$

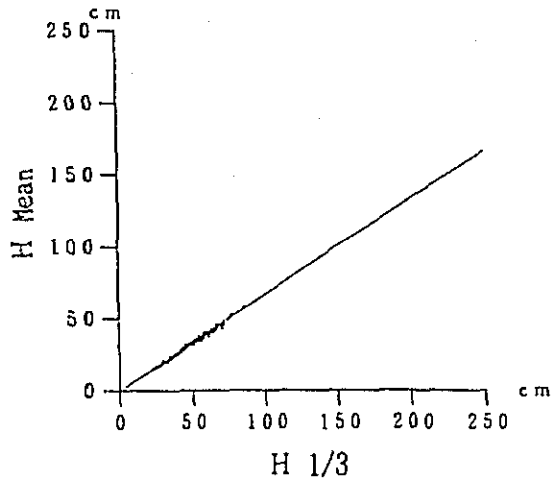
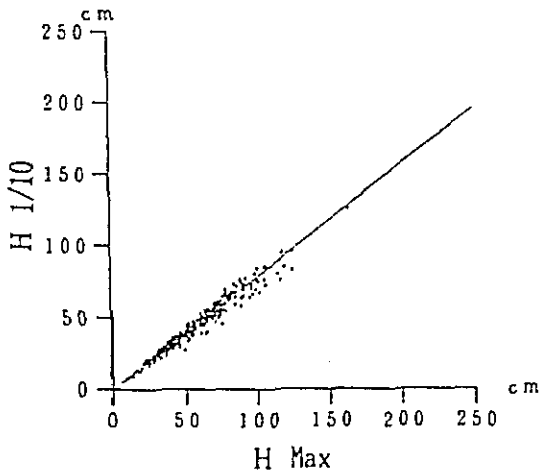


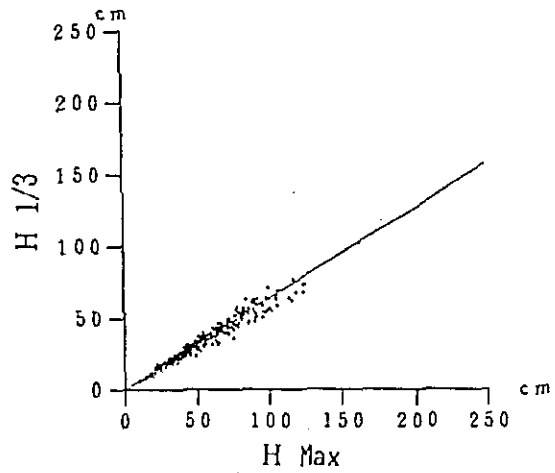
Fig. 1. 3-7 (1) Correlations among Various Wave Heights (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Oct. - 31st Oct, 1988

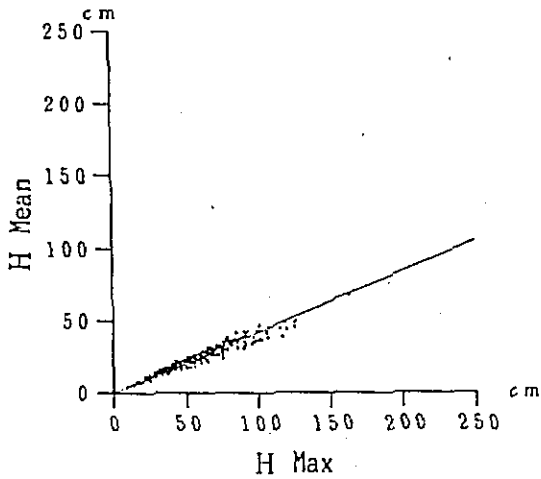
$r = 0.981$ $n = 371$
 $Y = 0.782X$



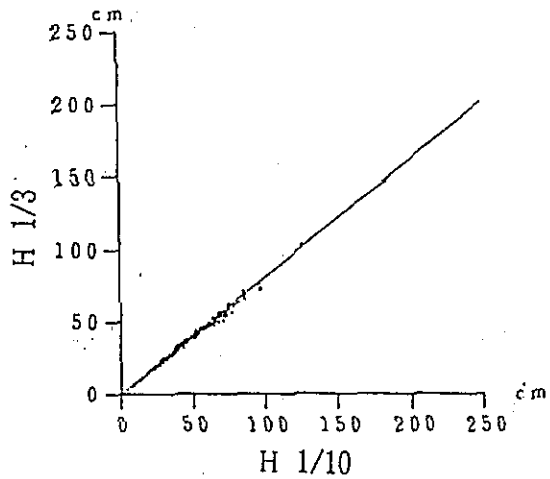
$r = 0.975$ $n = 371$
 $Y = 0.631X$



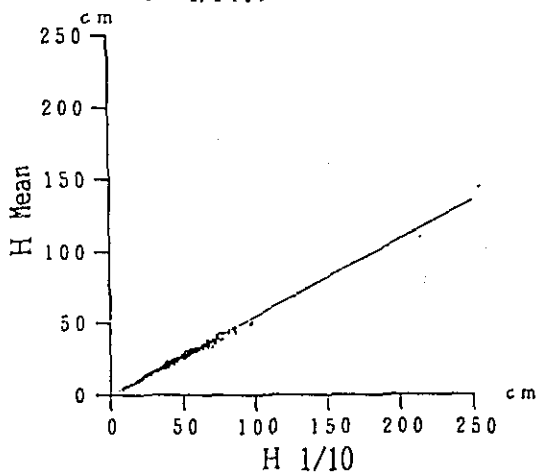
$r = 0.971$ $n = 371$
 $Y = 0.423X$



$r = 0.997$ $n = 371$
 $Y = 0.807X$



$r = 0.993$ $n = 371$
 $Y = 0.541X$



$r = 0.997$ $n = 371$
 $Y = 0.670X$

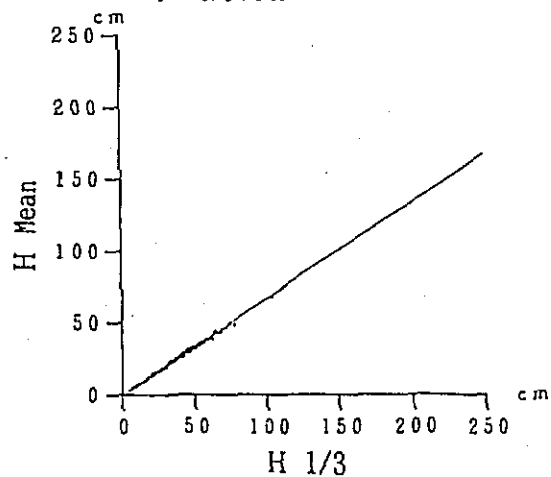
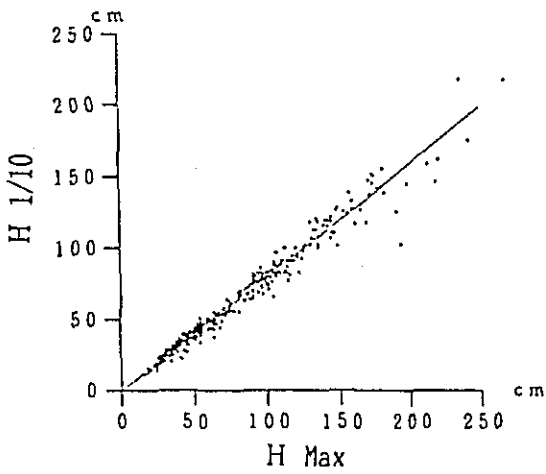


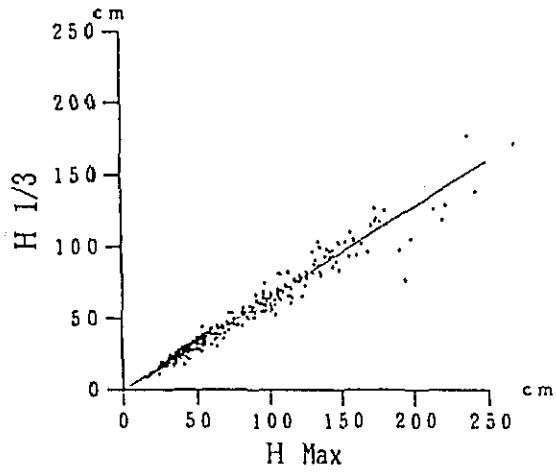
Fig. 1. 3-7 (2) Correlations among Various Wave Heights (Every Month)

St. :1
 Layer :+0.5m(Depth:9.1m)
 Interval:Every 2 hours
 Period : 1st Nov.-30th Nov.1988

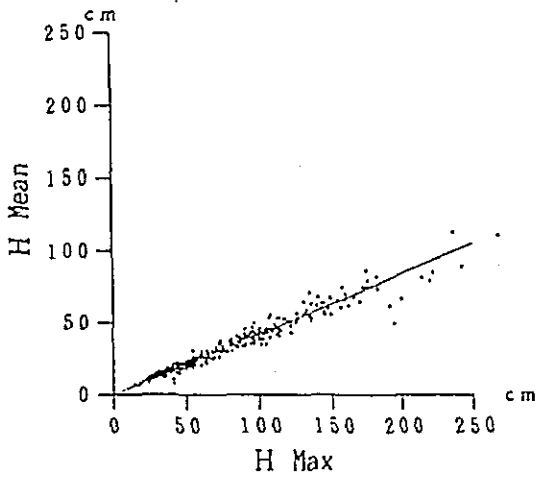
$r = 0.986$ $n = 359$
 $Y = 0.791X$



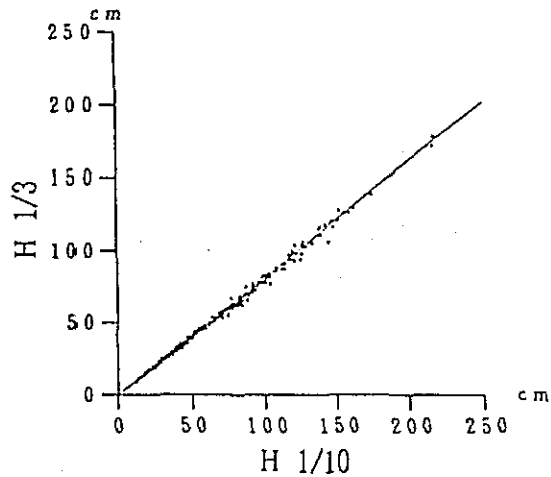
$r = 0.981$ $n = 359$
 $Y = 0.638X$



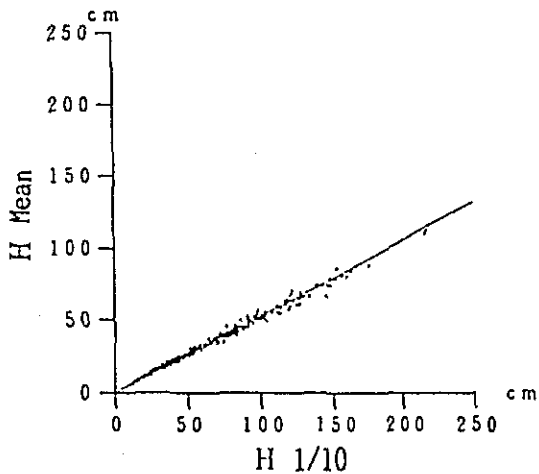
$r = 0.978$ $n = 359$
 $Y = 0.420X$



$r = 0.998$ $n = 359$
 $Y = 0.807X$



$r = 0.996$ $n = 359$
 $Y = 0.532X$



$r = 0.999$ $n = 359$
 $Y = 0.659X$

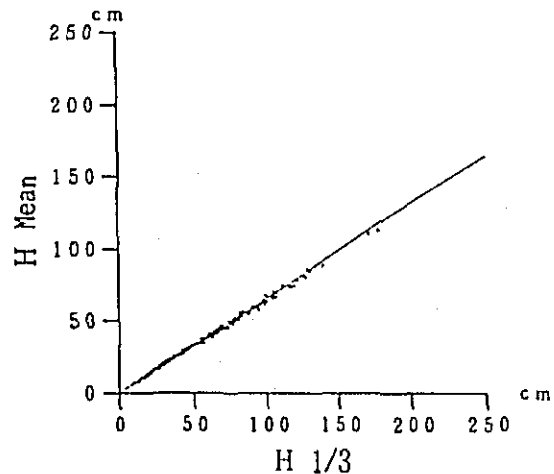
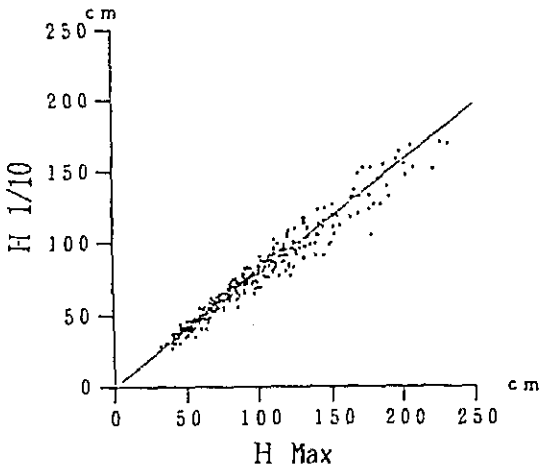


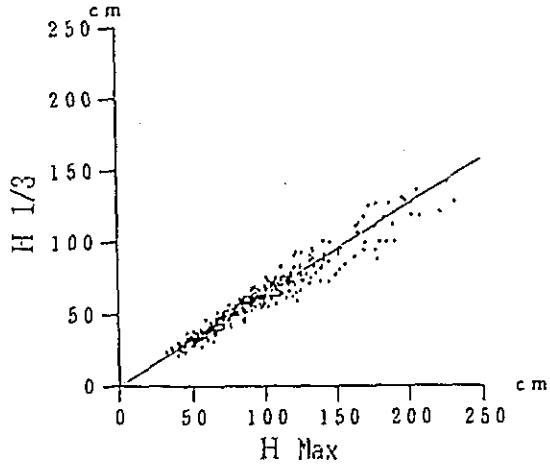
Fig. 1. 3-7 (3) Correlations among Various Wave Heights (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Dec. - 31st Dec. 1988

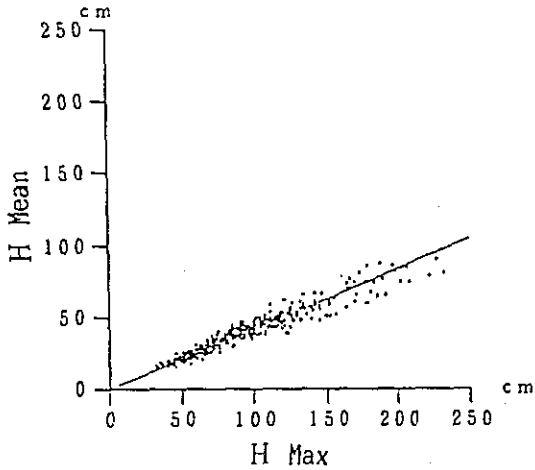
$r = 0.977$ $n = 371$
 $Y = 0.788X$



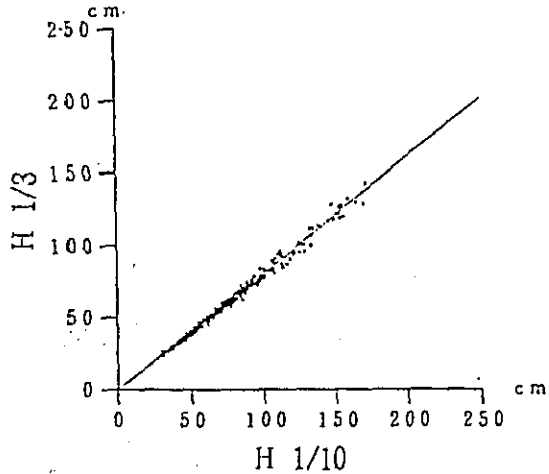
$r = 0.968$ $n = 371$
 $Y = 0.635X$



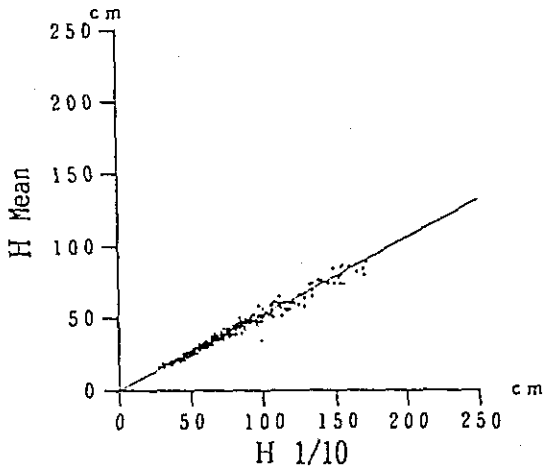
$r = 0.961$ $n = 371$
 $Y = 0.418X$



$r = 0.996$ $n = 371$
 $Y = 0.806X$



$r = 0.989$ $n = 371$
 $Y = 0.531X$



$r = 0.997$ $n = 371$
 $Y = 0.659X$

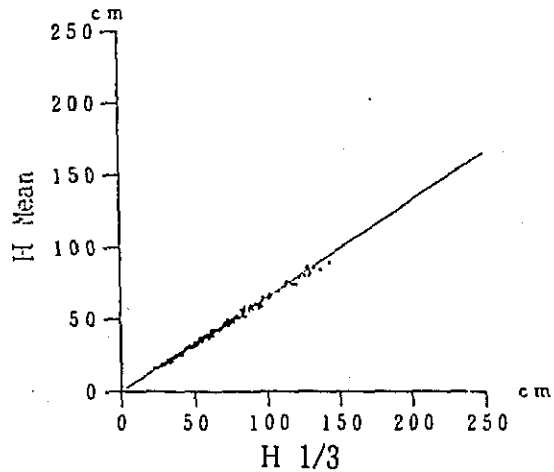
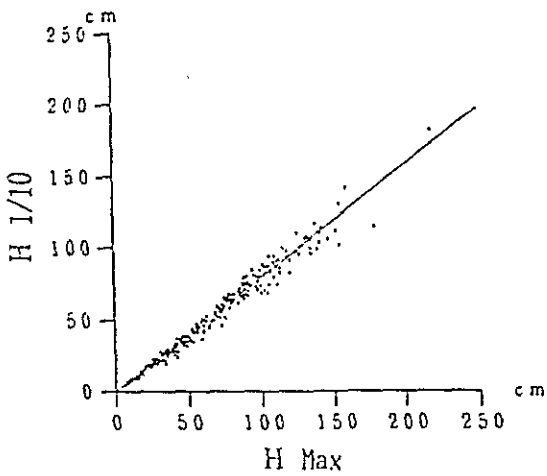


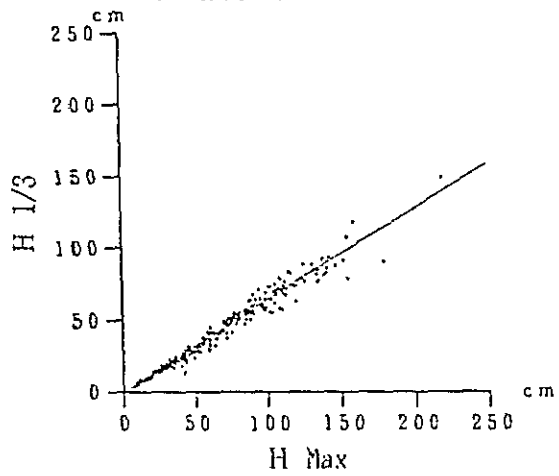
Fig. 1. 3-7 (4) Correlations among Various Wave Heights (Every Month)

St. : I
 Layer : +0.5m (Depth: 9.1m)
 Interval : Every 2 hours
 Period : 1st Jan. - 31st Jan. 1989

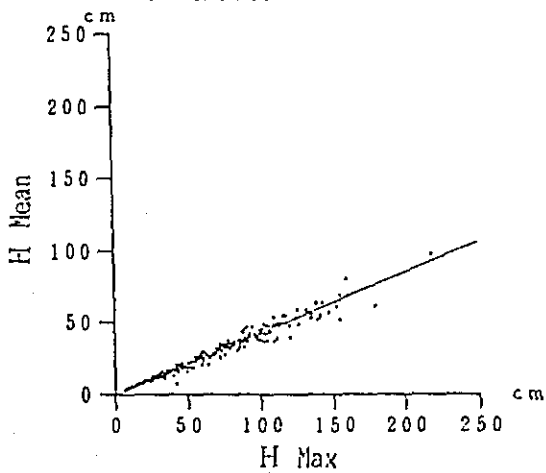
$r = 0.985$ $n = 274$
 $Y = 0.789X$



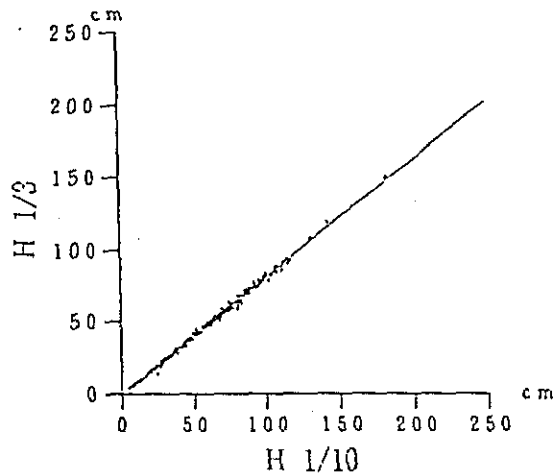
$r = 0.985$ $n = 274$
 $Y = 0.638X$



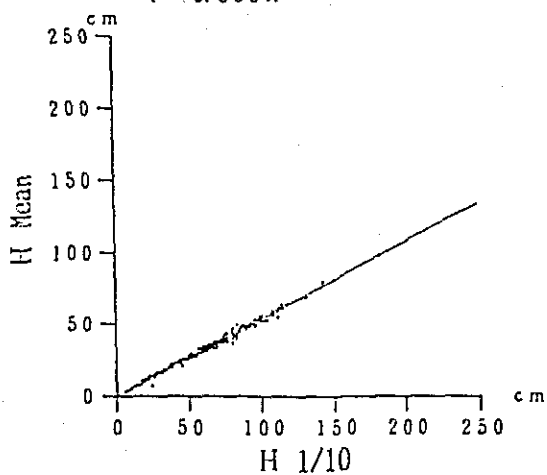
$r = 0.983$ $n = 274$
 $Y = 0.424X$



$r = 0.998$ $n = 274$
 $Y = 0.809X$



$r = 0.996$ $n = 274$
 $Y = 0.538X$



$r = 0.999$ $n = 274$
 $Y = 0.665X$

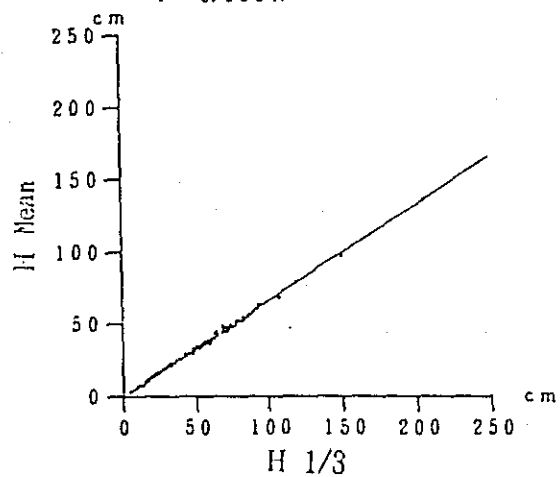
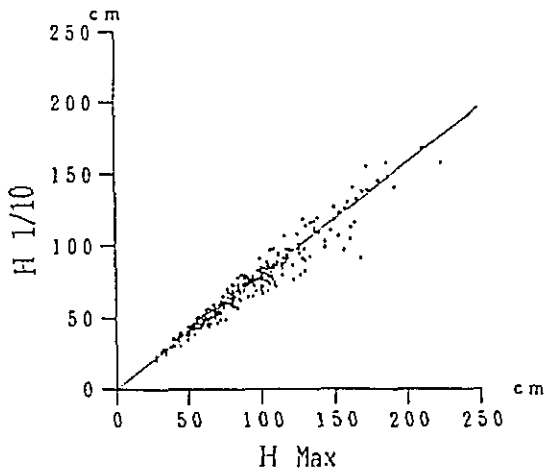


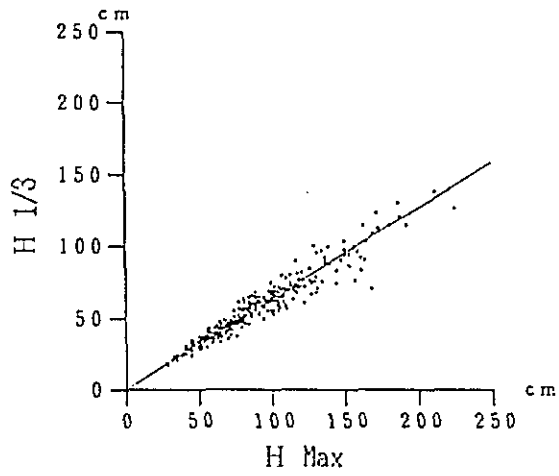
Fig. 1. 3-7 (5) Correlations among Various Wave Heights (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Feb. - 28th Feb. 1989

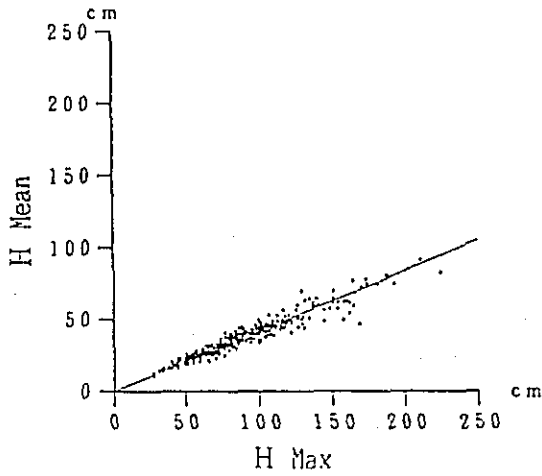
$r = 0.971$ $n = 335$
 $Y = 0.786X$



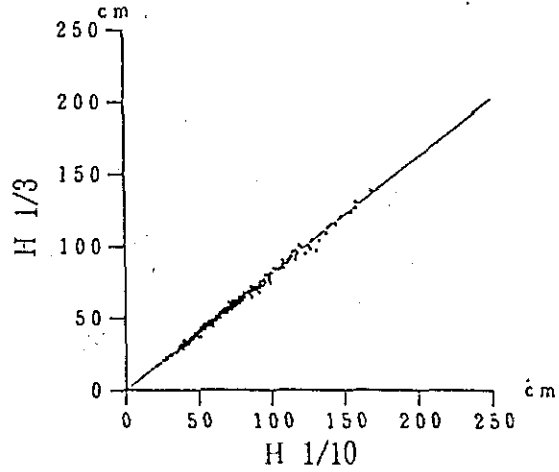
$r = 0.962$ $n = 335$
 $Y = 0.634X$



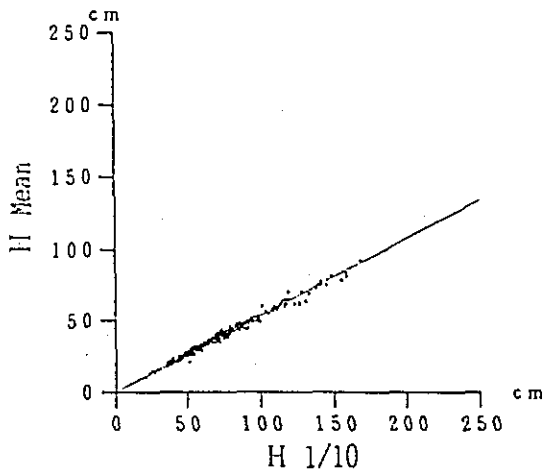
$r = 0.958$ $n = 335$
 $Y = 0.419X$



$r = 0.997$ $n = 335$
 $Y = 0.808X$



$r = 0.992$ $n = 335$
 $Y = 0.534X$



$r = 0.997$ $n = 335$
 $Y = 0.661X$

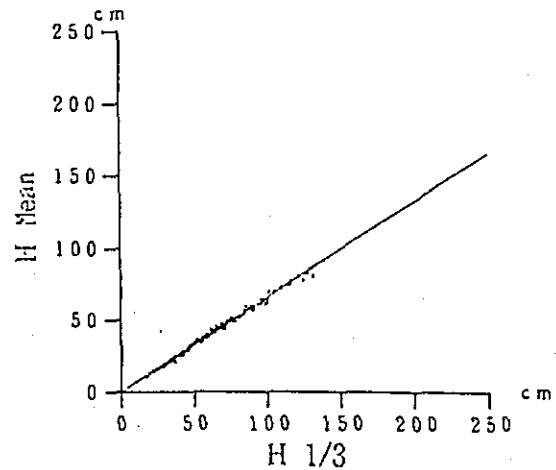
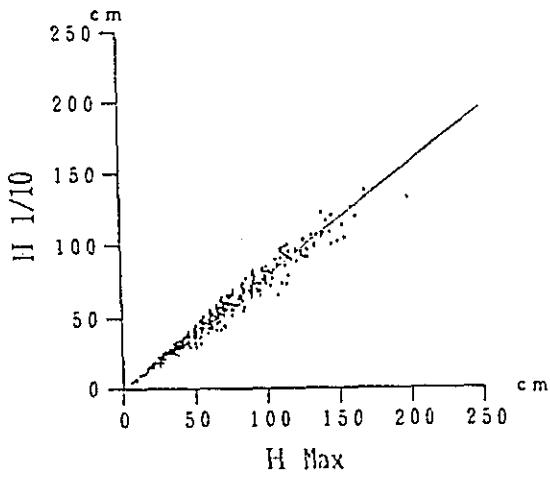


Fig. 1. 3-7 (6) Correlations among Various Wave Heights (Every Month)

St. : 1
 Layer : +0, 5m (Depth: 9, 1m)
 Interval: Every 2 hours
 Period : 1st Mar. - 31st Mar. 1989

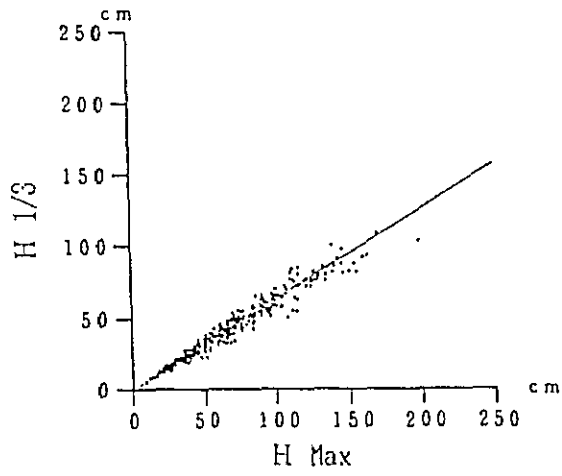
$r = 0.984$ $n = 372$

$Y = 0.783X$



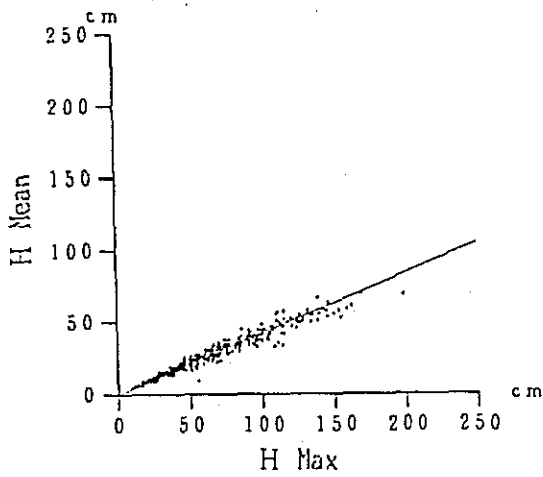
$r = 0.978$ $n = 372$

$Y = 0.629X$



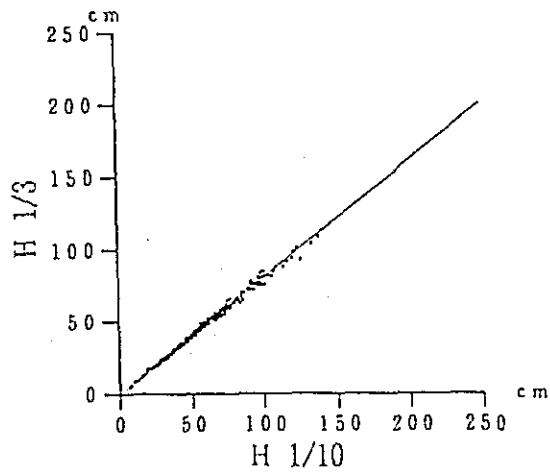
$r = 0.972$ $n = 372$

$Y = 0.417X$



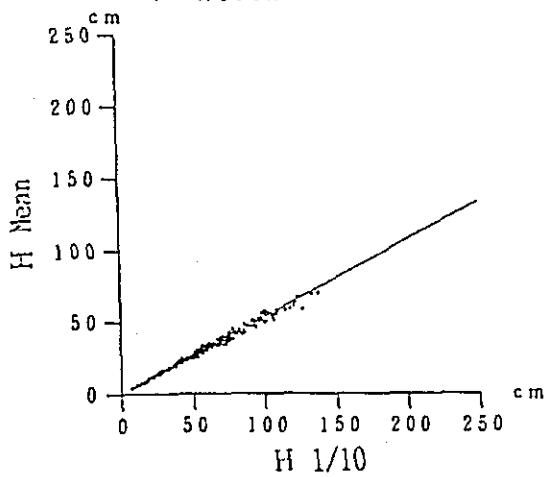
$r = 0.997$ $n = 372$

$Y = 0.803X$



$r = 0.993$ $n = 372$

$Y = 0.534X$



$r = 0.998$ $n = 372$

$Y = 0.665X$

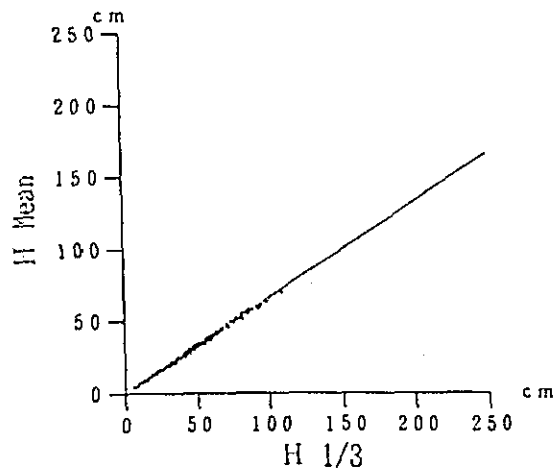
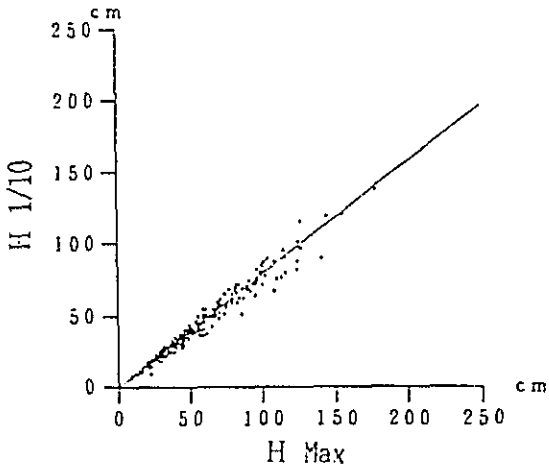


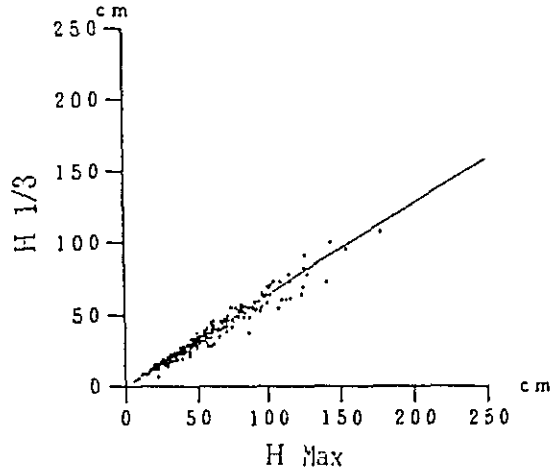
Fig. 1. 3-7 (7) Correlations among Various Wave Heights (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Apr. - 30th Apr. 1989

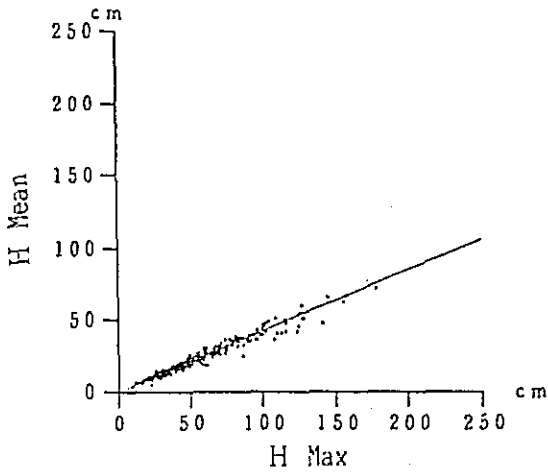
$r = 0.985$ $n = 360$
 $Y = 0.786X$



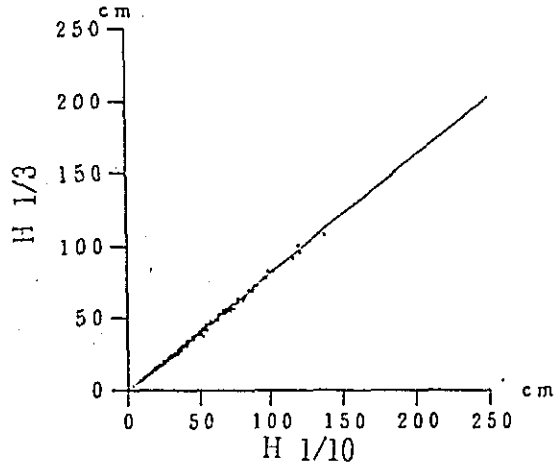
$r = 0.981$ $n = 360$
 $Y = 0.636X$



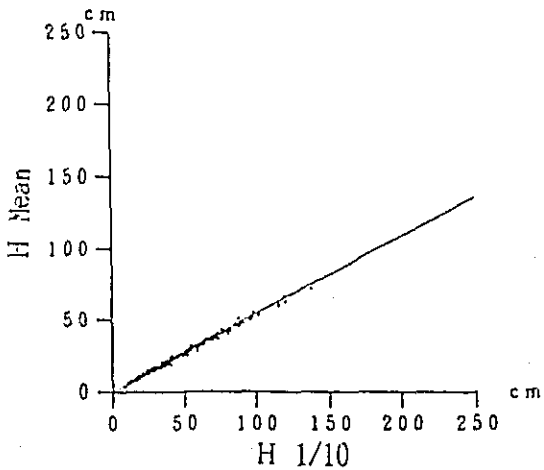
$r = 0.979$ $n = 360$
 $Y = 0.425X$



$r = 0.998$ $n = 360$
 $Y = 0.809X$



$r = 0.997$ $n = 360$
 $Y = 0.542X$



$r = 0.999$ $n = 360$
 $Y = 0.669X$

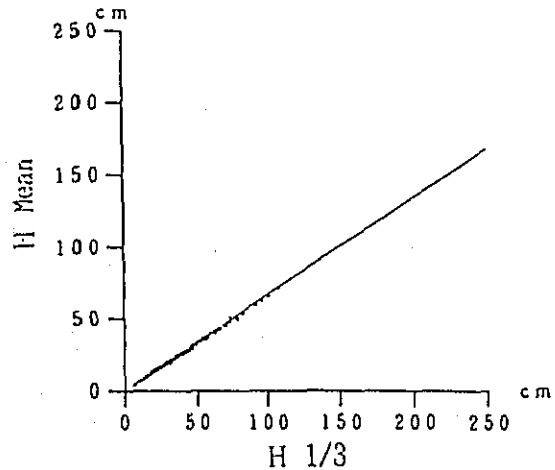
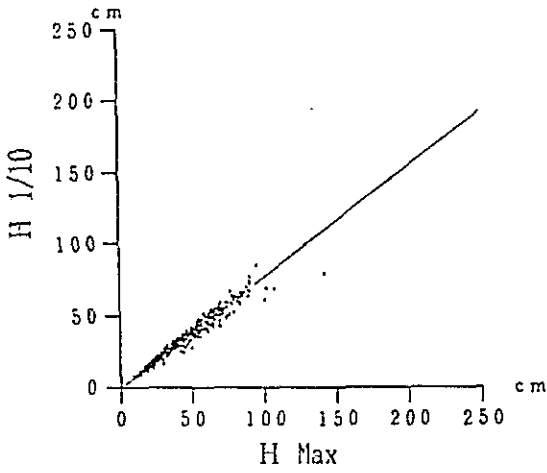


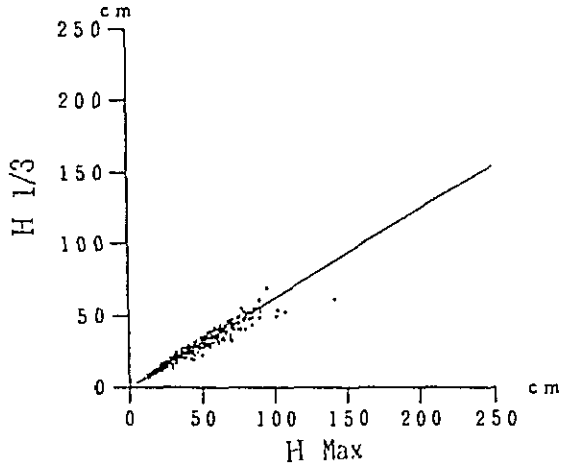
Fig. 1. 3-7 (8) Correlations among Various Wave Heights (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st May - 31st May 1989

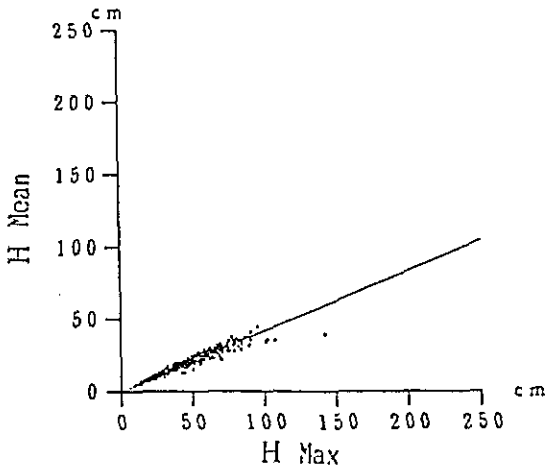
$r = 0.974$ $n = 371$
 $Y = 0.768X$



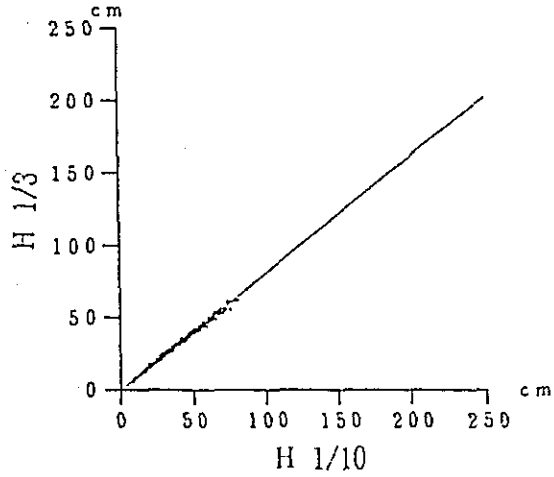
$r = 0.968$ $n = 371$
 $Y = 0.620X$



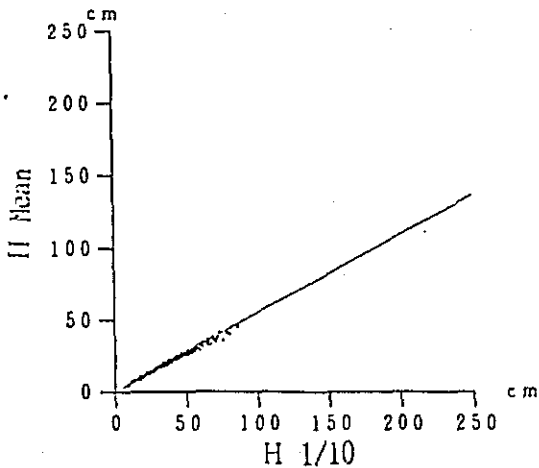
$r = 0.963$ $n = 371$
 $Y = 0.418X$



$r = 0.998$ $n = 371$
 $Y = 0.807X$



$r = 0.994$ $n = 371$
 $Y = 0.545X$



$r = 0.997$ $n = 371$
 $Y = 0.676X$

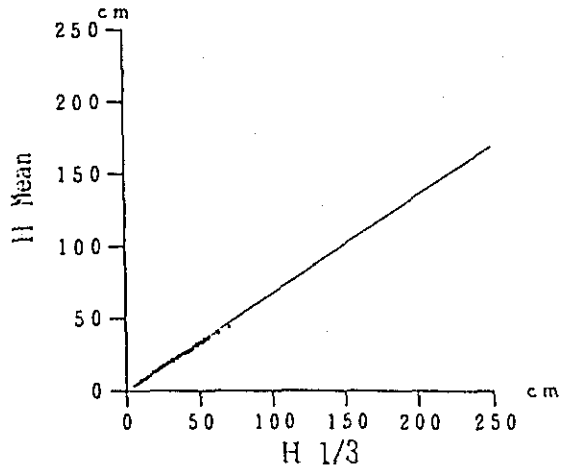
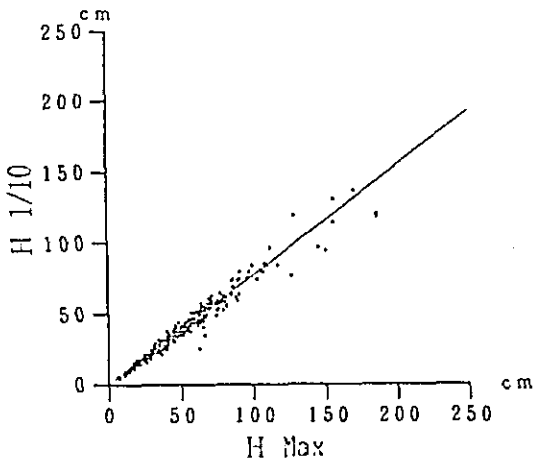


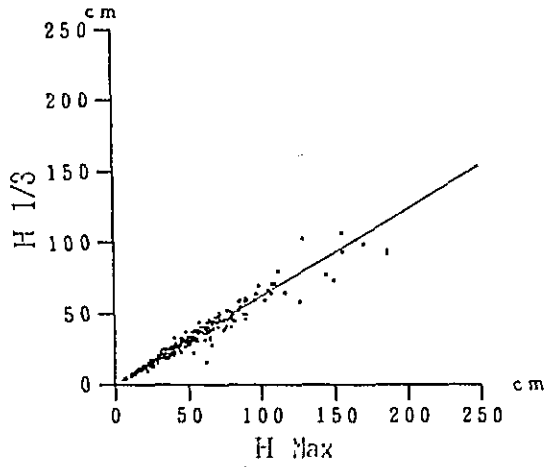
Fig. 1. 3-7 (9) Correlations among Various Wave Heights (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Jun, -30th Jun, 1989

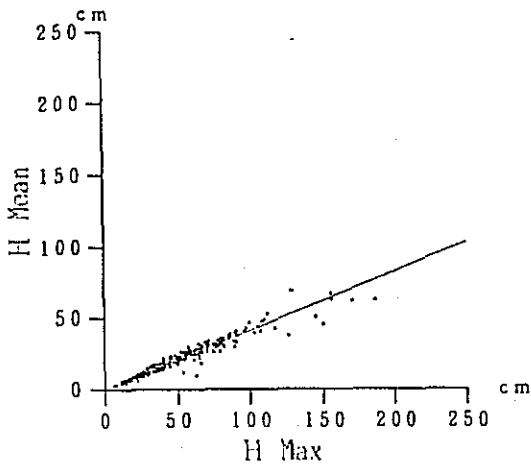
$r = 0.980$ $n = 360$
 $Y = 0.769 X$



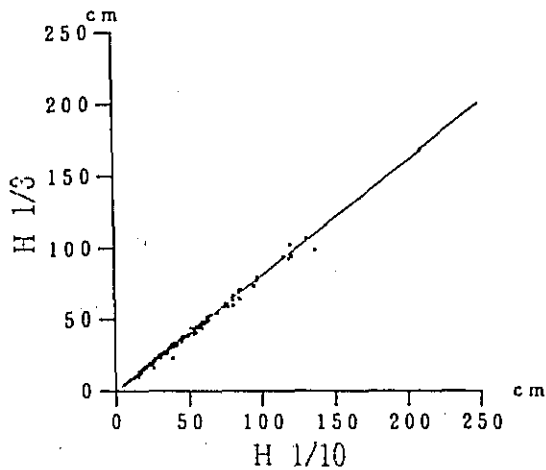
$r = 0.973$ $n = 360$
 $Y = 0.617 X$



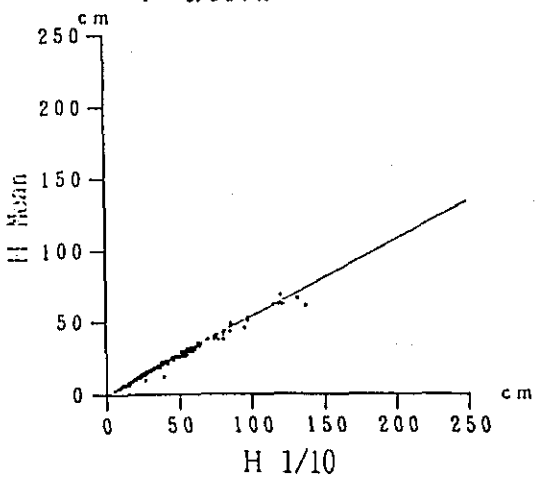
$r = 0.968$ $n = 360$
 $Y = 0.412 X$



$r = 0.997$ $n = 360$
 $Y = 0.803 X$



$r = 0.993$ $n = 360$
 $Y = 0.537 X$



$r = 0.998$ $n = 360$
 $Y = 0.669 X$

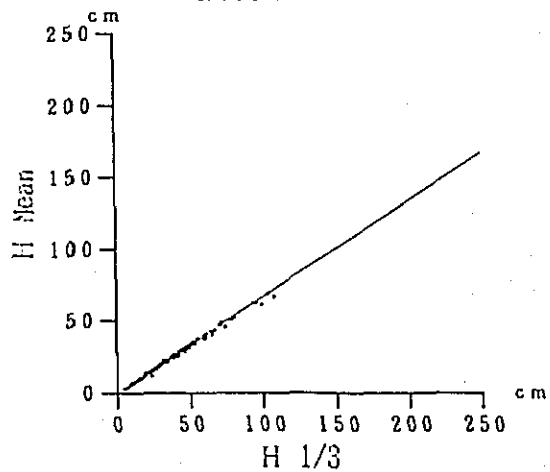
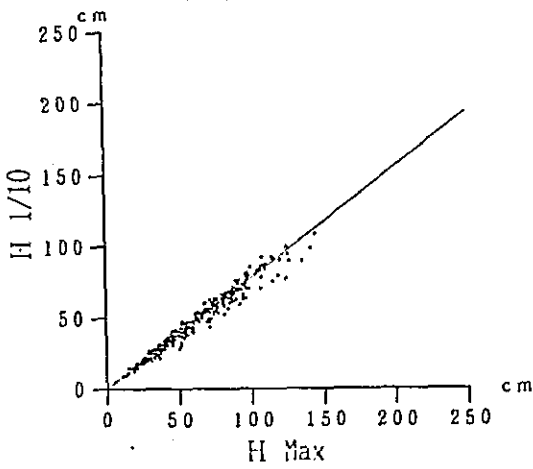


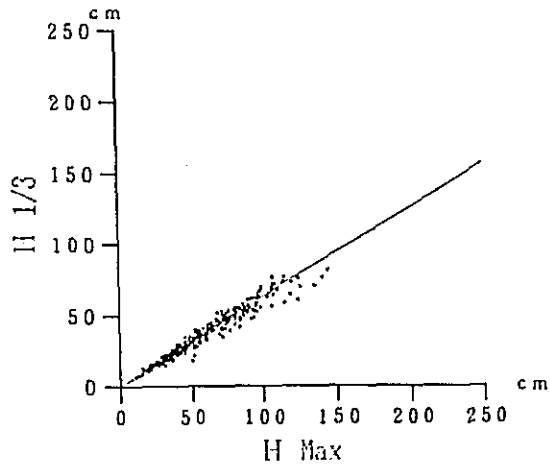
Fig. 1. 3-7 (10) Correlations among Various Wave Heights (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Jul. - 31st Jul, 1989

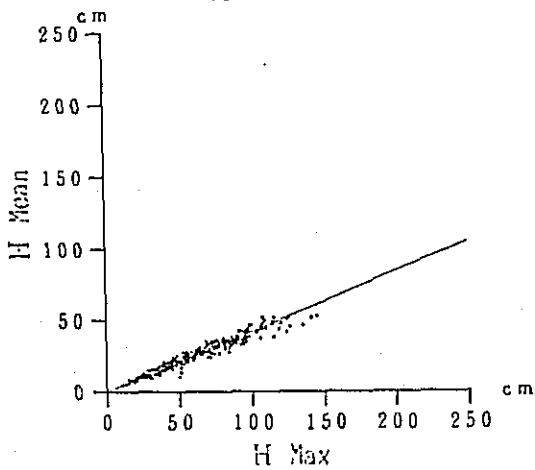
$r = 0.984$ $n = 372$
 $Y = 0.778 X$



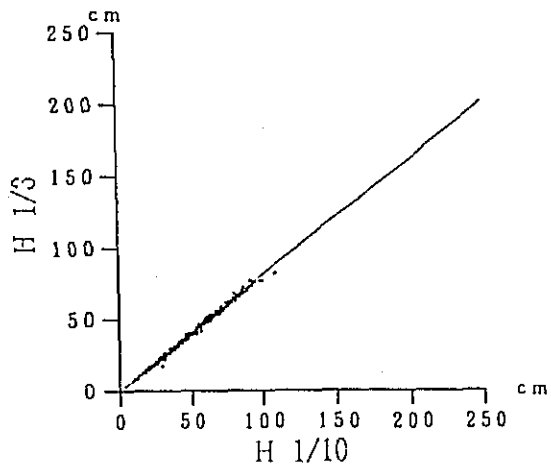
$r = 0.978$ $n = 372$
 $Y = 0.627 X$



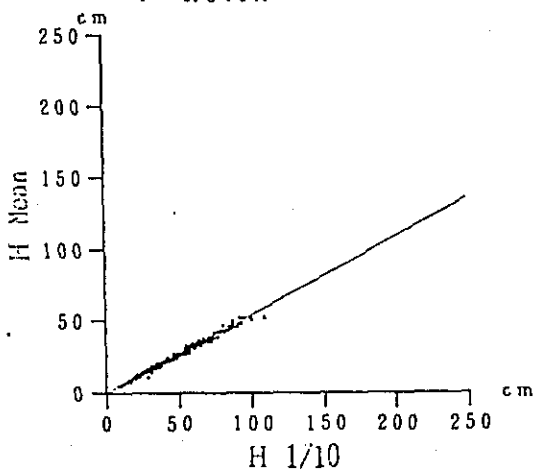
$r = 0.975$ $n = 372$
 $Y = 0.421 X$



$r = 0.998$ $n = 372$
 $Y = 0.806 X$



$r = 0.995$ $n = 372$
 $Y = 0.541 X$



$r = 0.998$ $n = 372$
 $Y = 0.672 X$

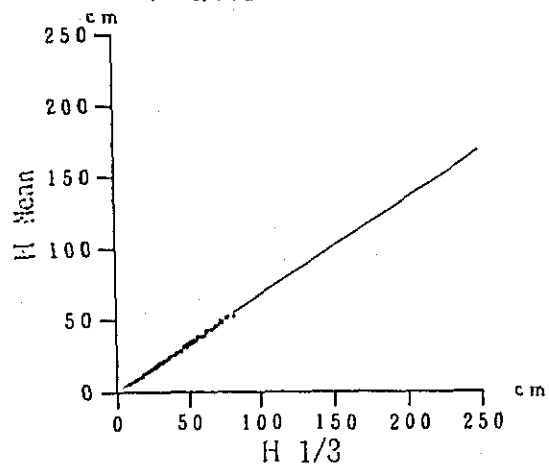
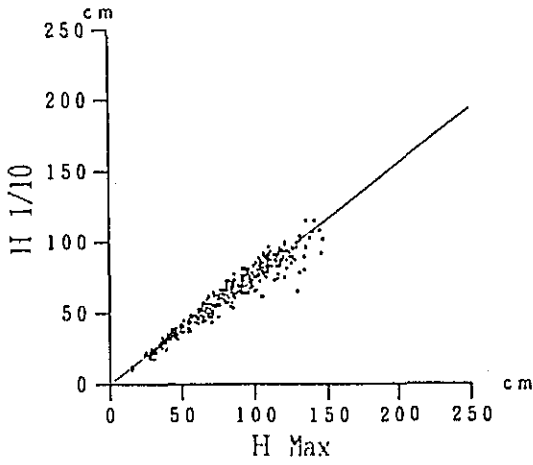


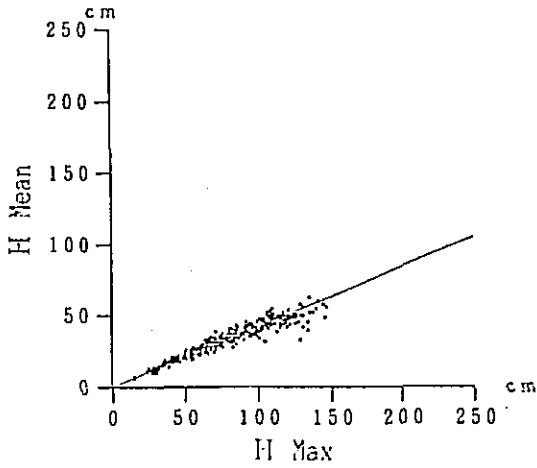
Fig. 1. 3-7 (II) Correlations among Various Wave Heights (Every Month)

St. :1
 Layer :+0.5m (Depth:9.1m)
 Interval:Every 2 hours
 Period : 1st Aug.-31st Aug. 1989

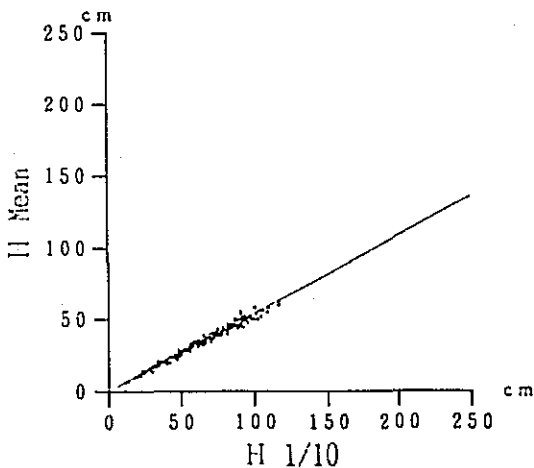
$r = 0.966$ $n = 372$
 $Y = 0.776 X$



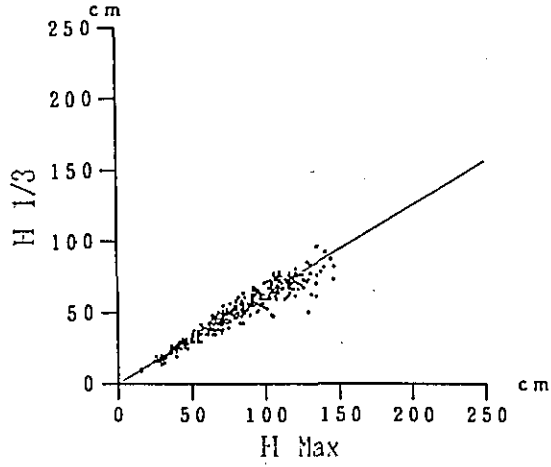
X:MAX ()
 Y:MEAN ()
 $r = 0.951$ $n = 372$
 $Y = 0.420 X$



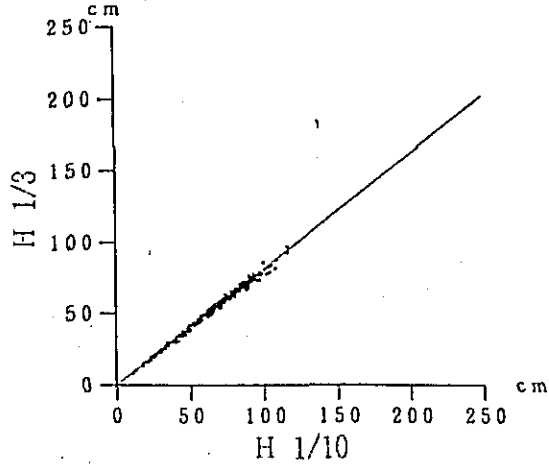
$r = 0.992$ $n = 372$
 $Y = 0.541 X$



$r = 0.957$ $n = 372$
 $Y = 0.628 X$



X:1/10 ()
 Y:1/3 ()
 $r = 0.997$ $n = 372$
 $Y = 0.810 X$



X:1/3 ()
 Y:MEAN ()
 $r = 0.997$ $n = 372$
 $Y = 0.669 X$

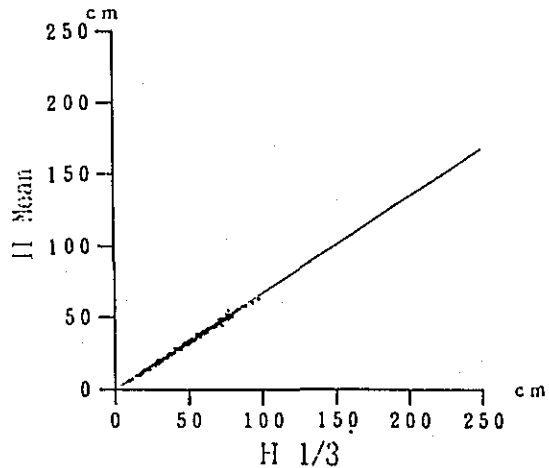
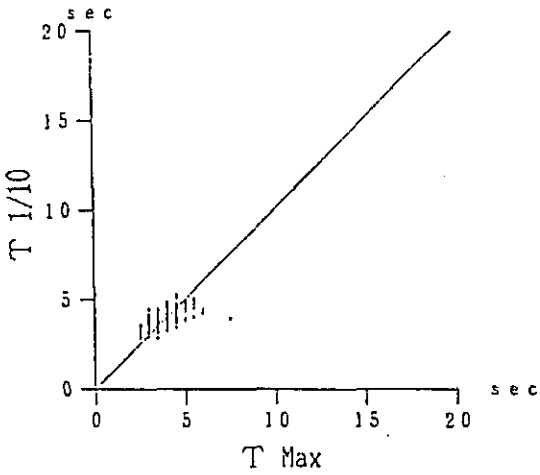


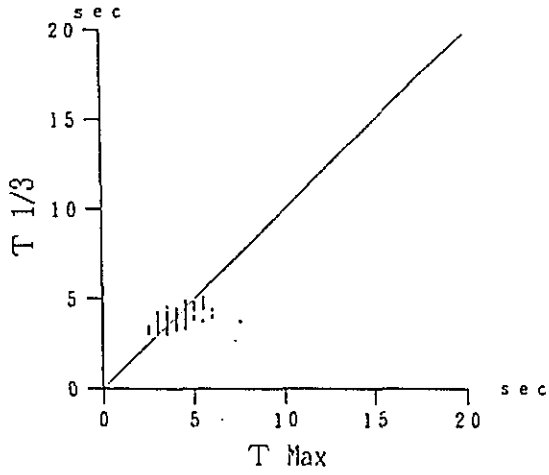
Fig. 1. 3-7 (12) Correlations among Various Wave Heights (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval : Every 2 hours
 Period : 1st Sep. - 30th Sep. 1968

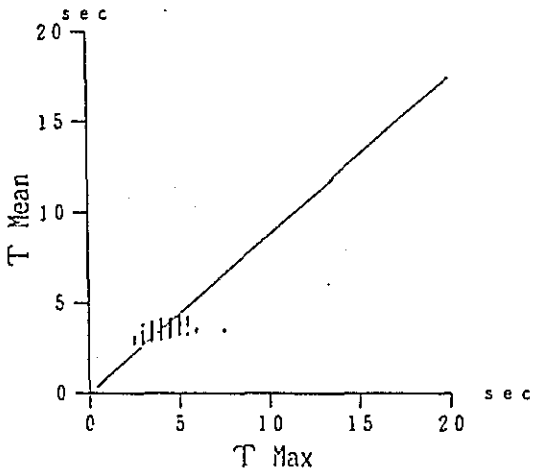
$r = 0.683$ $n = 246$
 $Y = 1.005X$



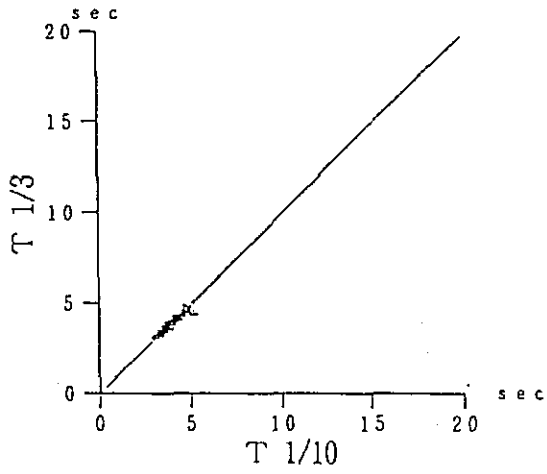
$r = 0.666$ $n = 246$
 $Y = 0.992X$



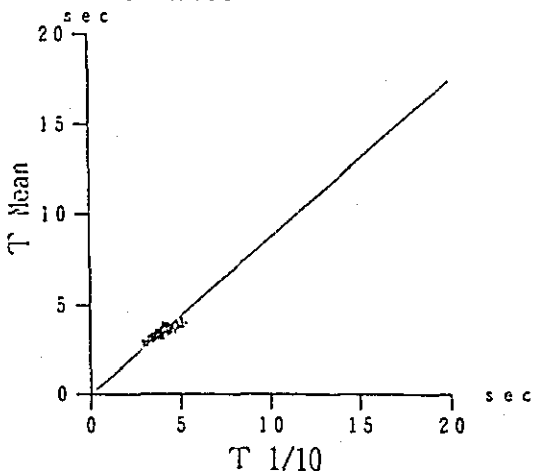
$r = 0.619$ $n = 246$
 $Y = 0.874X$



$r = 0.927$ $n = 246$
 $Y = 0.987X$



$r = 0.838$ $n = 246$
 $Y = 0.869X$



$r = 0.915$ $n = 246$
 $Y = 0.881X$

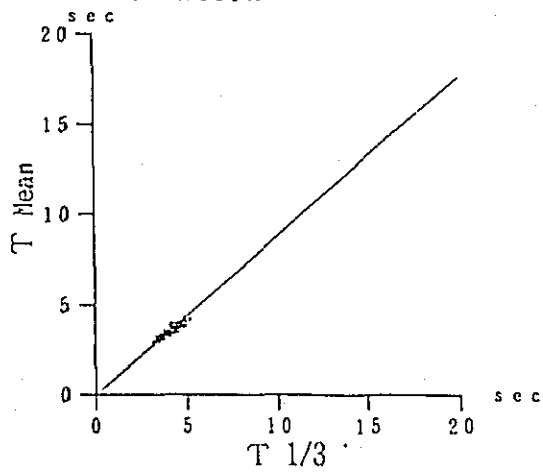
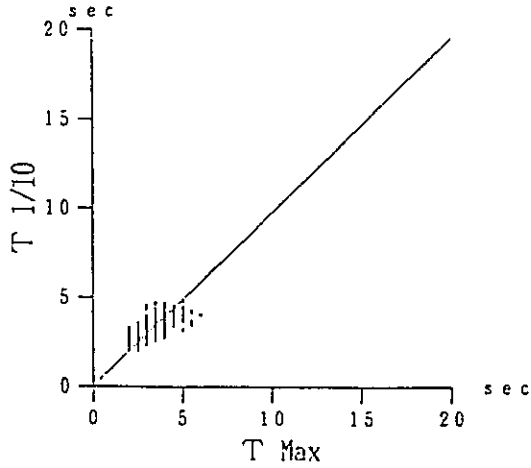


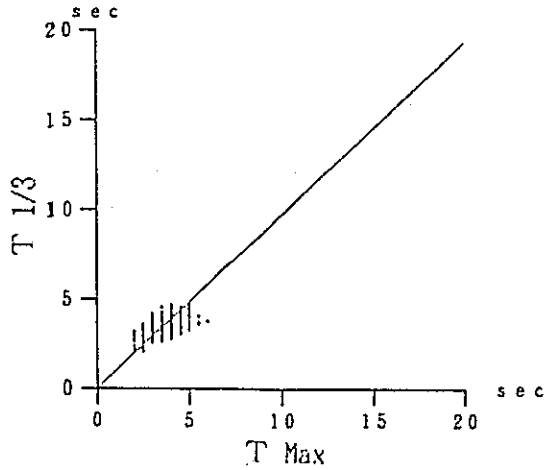
Fig. 1. 3-8 (1) Correlations among Various Wave Periods (Every Month)

St. :1
 Layer :+0.5m (Depth:9.1m)
 Interval:Every 2 hours
 Period : 1st Oct.-31st Oct, 1988

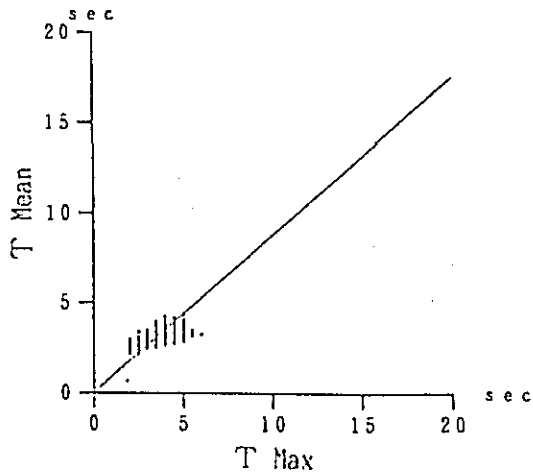
$r = 0.743$ $n = 371$
 $Y = 0.975X$



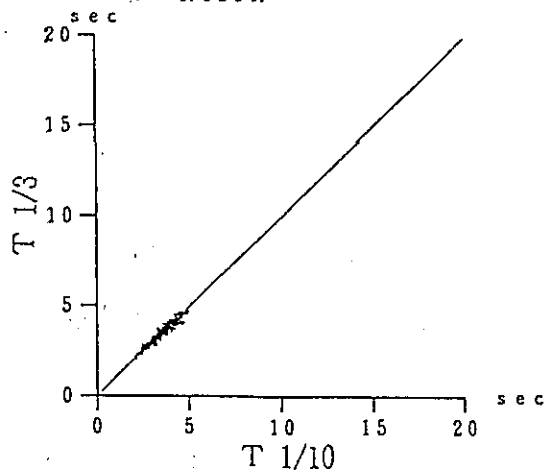
$r = 0.717$ $n = 371$
 $Y = 0.970X$



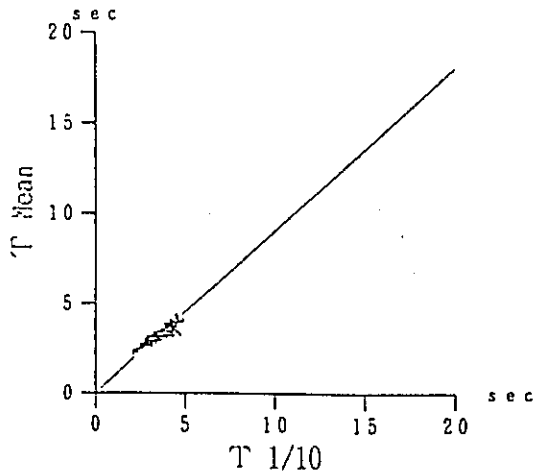
$r = 0.682$ $n = 371$
 $Y = 0.880X$



$r = 0.965$ $n = 371$
 $Y = 0.995X$



$r = 0.912$ $n = 371$
 $Y = 0.903X$



$r = 0.957$ $n = 371$
 $Y = 0.908X$

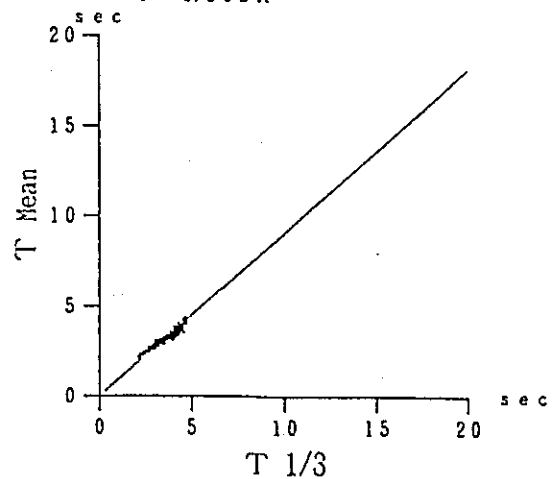
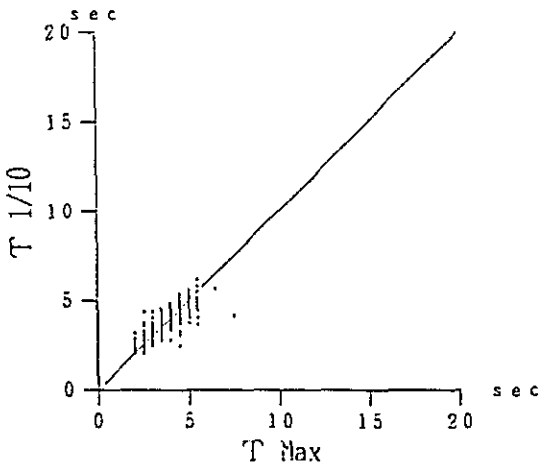


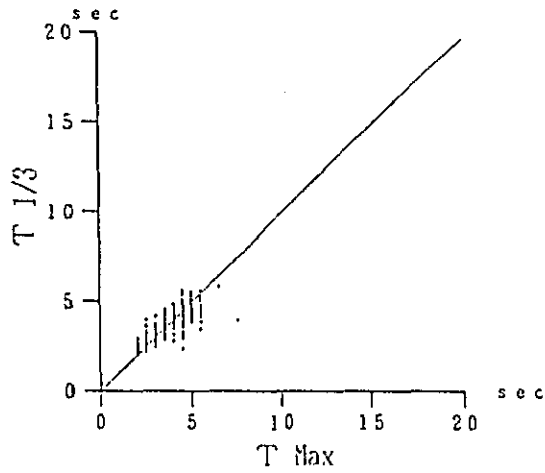
Fig. 1. 3-8 (2) Correlations among Various Wave Periods (Every Month)

St. : 1
 Layer : +0, 5m (Depth: 9, 1m)
 Interval: Every 2 hours
 Period : 1st Nov. - 30th Nov. 1988

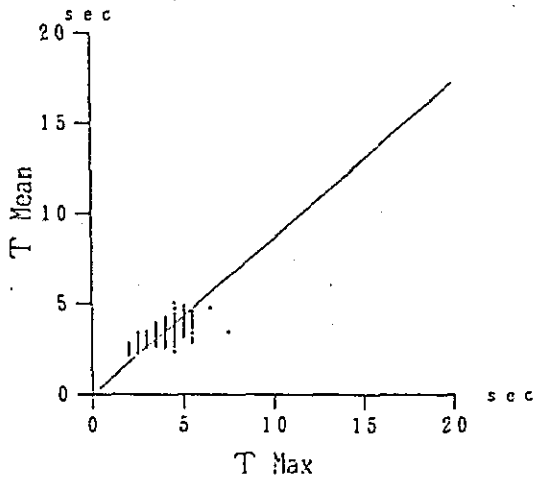
$r = 0.831$ $n = 359$
 $Y = 0.997X$



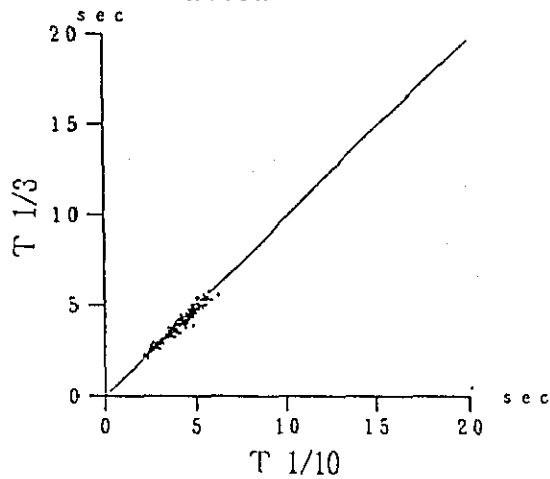
$r = 0.807$ $n = 359$
 $Y = 0.983X$



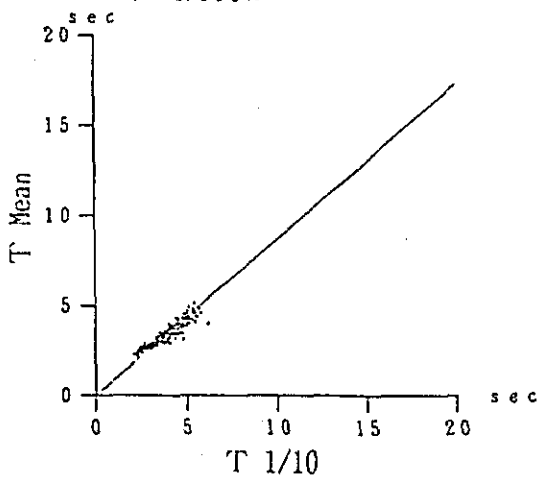
$r = 0.757$ $n = 359$
 $Y = 0.863X$



$r = 0.975$ $n = 359$
 $Y = 0.986X$



$r = 0.928$ $n = 359$
 $Y = 0.866X$



$r = 0.967$ $n = 359$
 $Y = 0.878X$

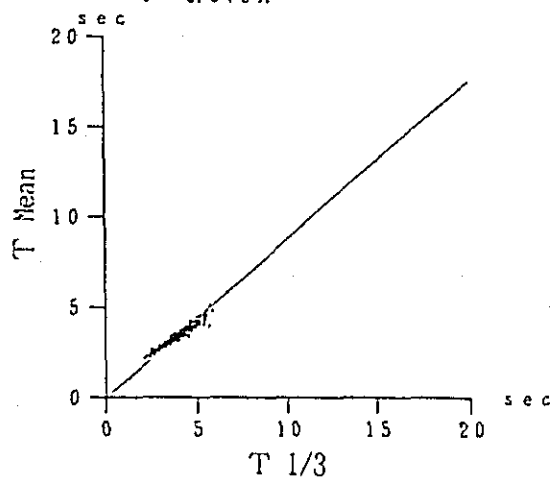
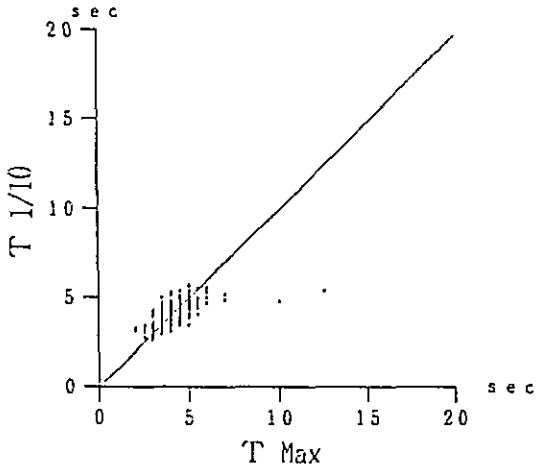


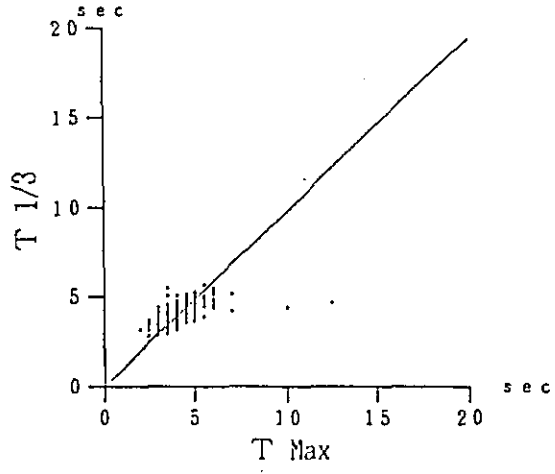
Fig. 1. 3-8 (3) Correlations among Various Wave Periods (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Dec, -31st Dec, 1988

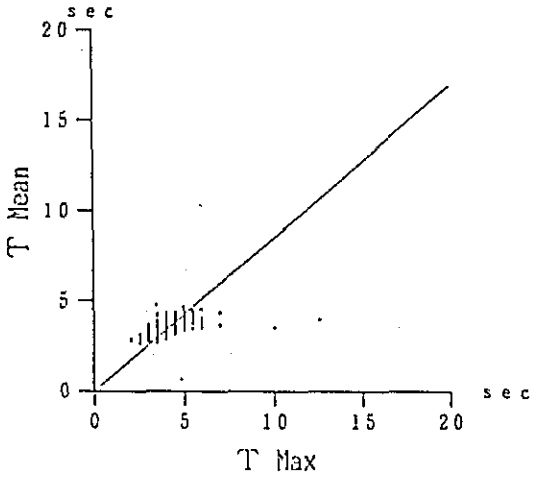
$r = 0.615$ $n = 371$
 $Y = 0.981X$



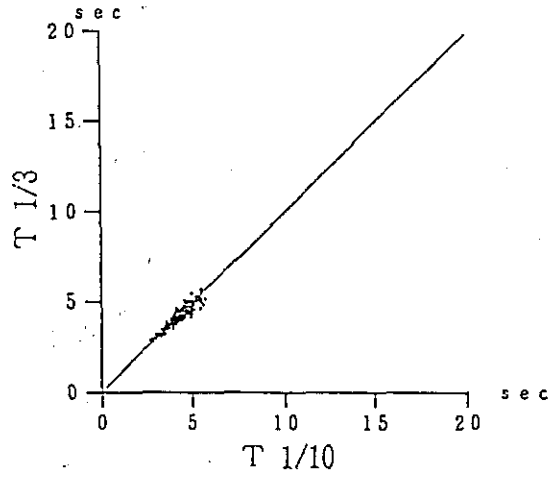
$r = 0.559$ $n = 371$
 $Y = 0.971X$



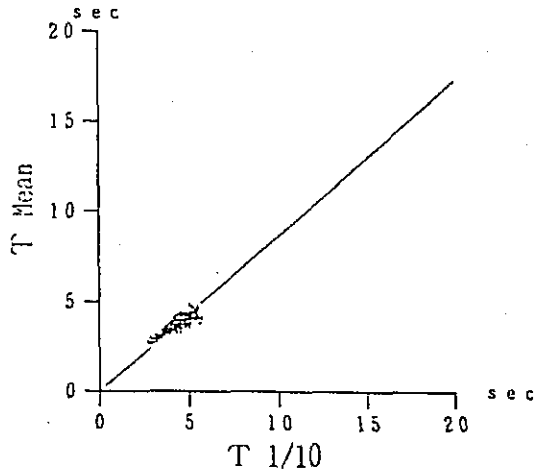
$r = 0.503$ $n = 371$
 $Y = 0.847X$



$r = 0.938$ $n = 371$
 $Y = 0.991X$



$r = 0.844$ $n = 371$
 $Y = 0.864X$



$r = 0.919$ $n = 371$
 $Y = 0.872X$

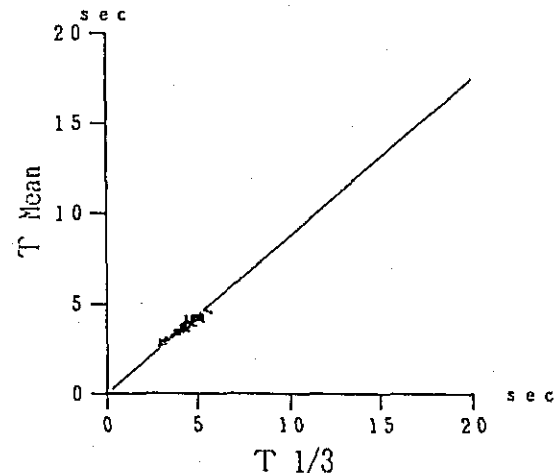
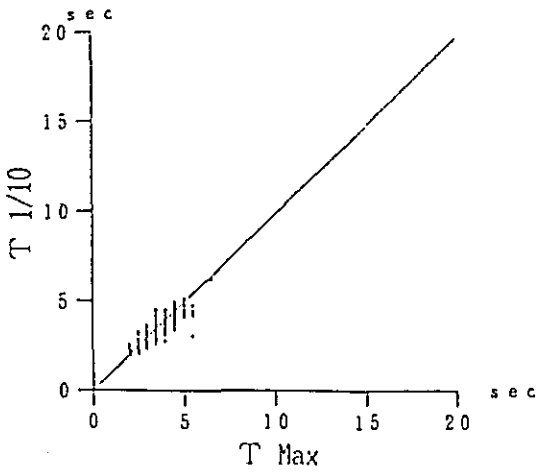


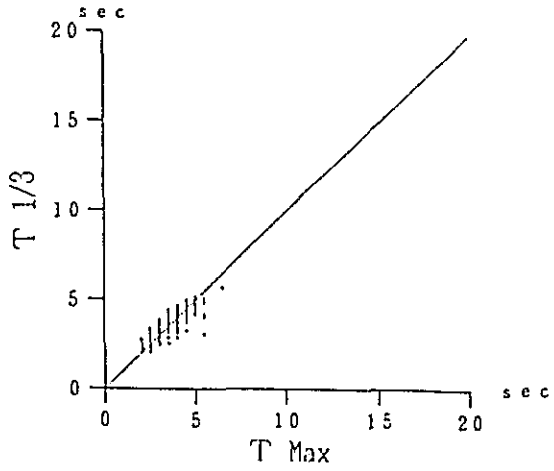
Fig. 1. 3-8 (4) Correlations among Various Wave Periods (Every Month)

St. : 1
 Layer : +0, 5m (Depth: 9, 1m)
 Interval: Every 2 hours
 Period : 1st Jan, -31th Jan, 1989

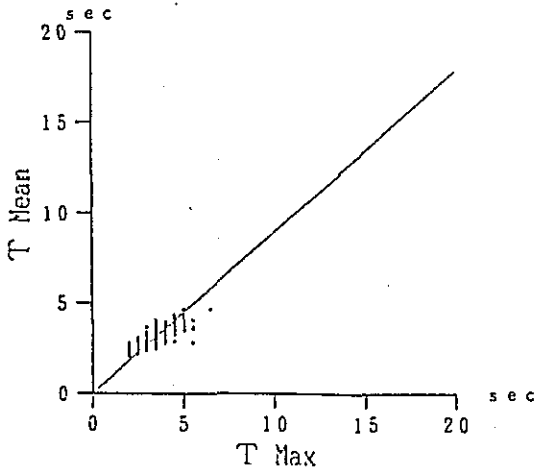
$r = 0.903$ $n = 274$
 $Y = 0.985X$



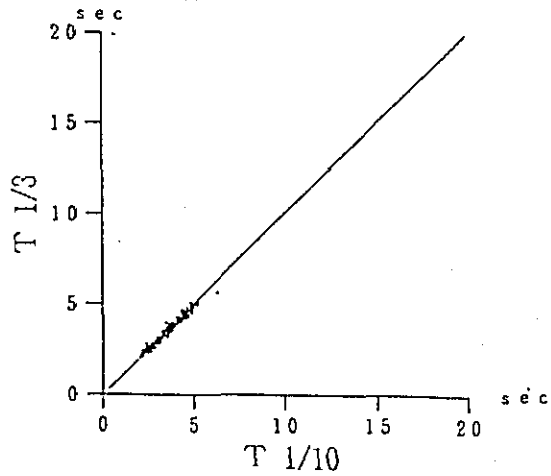
$r = 0.891$ $n = 274$
 $Y = 0.989X$



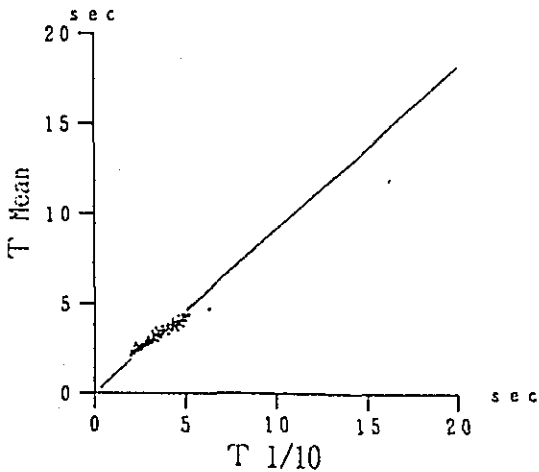
$r = 0.870$ $n = 274$
 $Y = 0.895X$



$r = 0.985$ $n = 274$
 $Y = 1.004X$



$r = 0.971$ $n = 274$
 $Y = 0.909X$



$r = 0.985$ $n = 274$
 $Y = 0.906X$

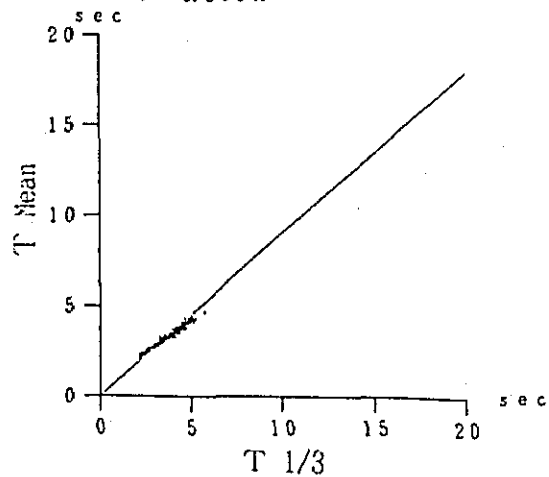
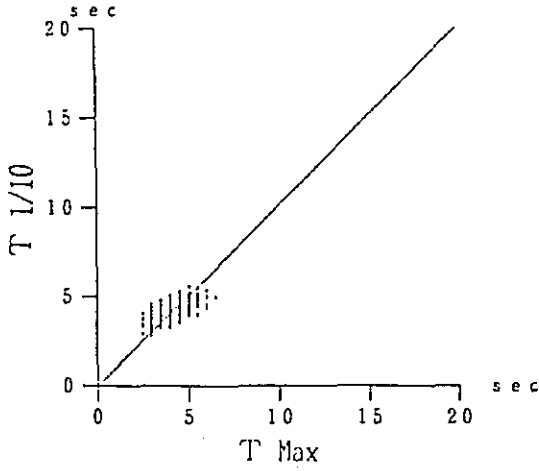


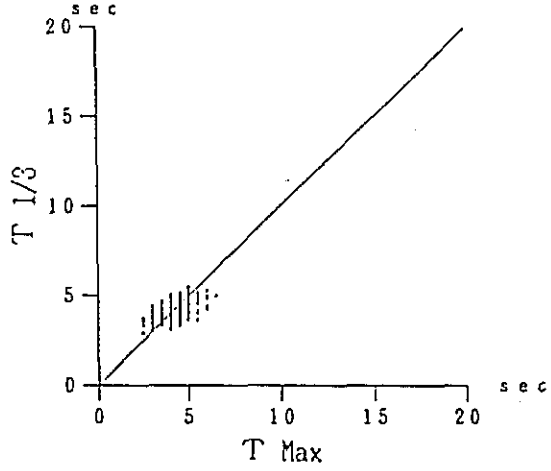
Fig. 1. 3-8 (5) Correlations among Various Wave Periods (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Feb. - 28th Feb, 1989

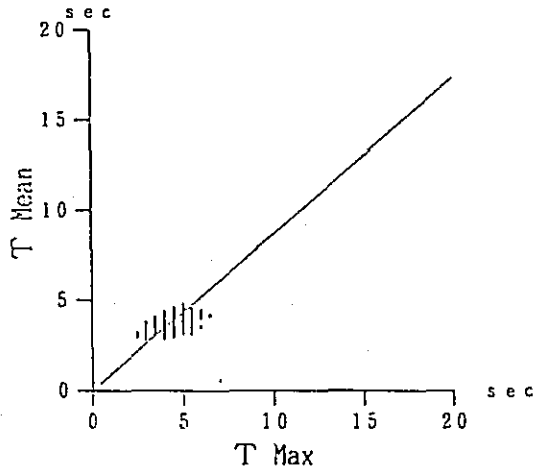
$r = 0.642$ $n = 335$
 $Y = 1.003 X$



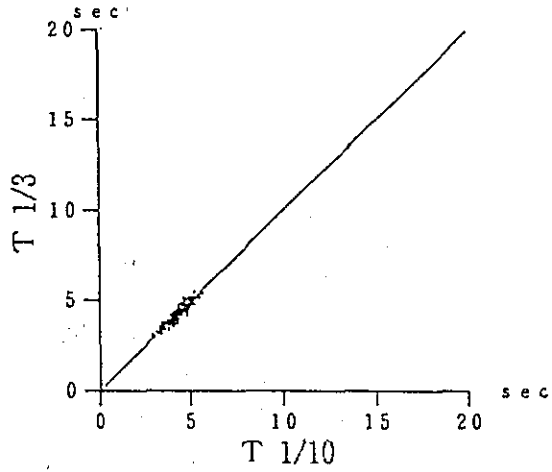
$r = 0.595$ $n = 335$
 $Y = 0.999 X$



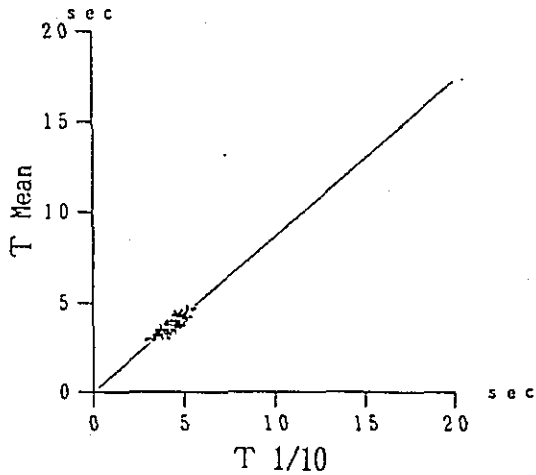
$r = 0.549$ $n = 335$
 $Y = 0.867 X$



$r = 0.918$ $n = 335$
 $Y = 0.995 X$



$r = 0.820$ $n = 335$
 $Y = 0.864 X$



$r = 0.925$ $n = 335$
 $Y = 0.868 X$

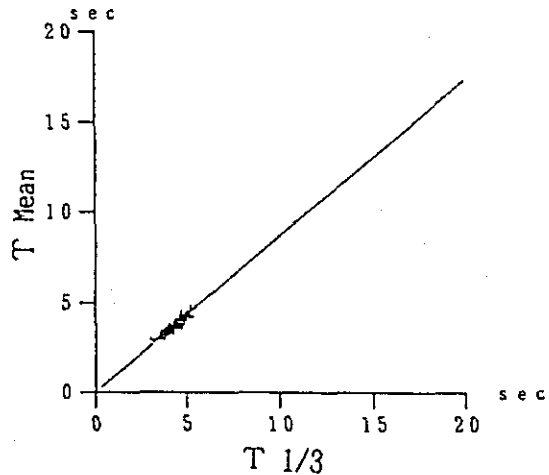
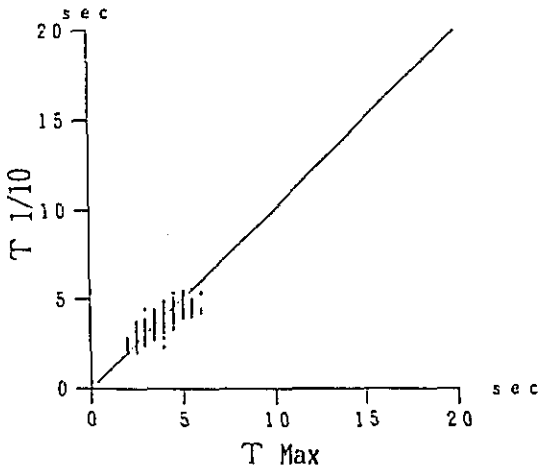


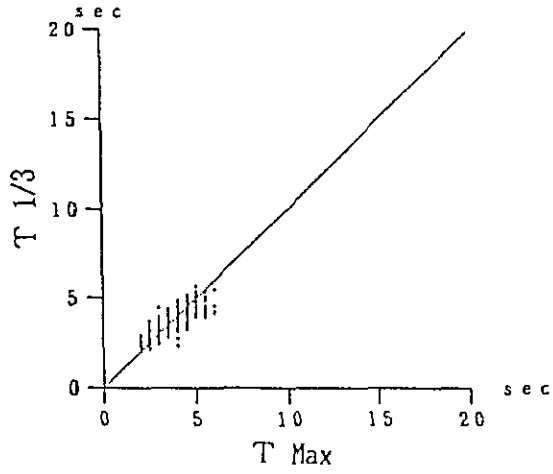
Fig. 1. 3-8 (6) Correlations among Various Wave Periods (Every Month)

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval : Every 2 hours
 Period : 1st Mar. - 31st Mar. 1989

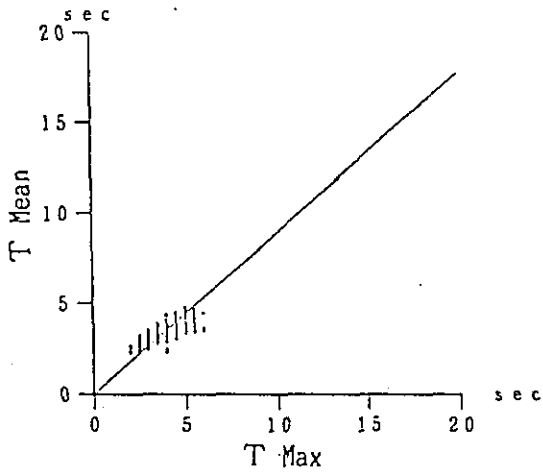
$r = 0.837$ $n = 372$
 $Y = 1.001X$



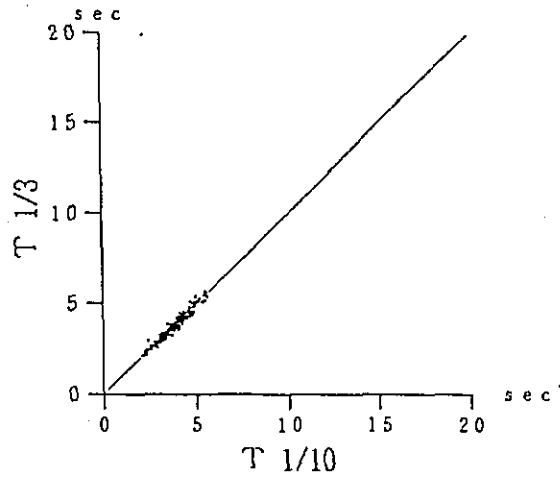
$r = 0.824$ $n = 372$
 $Y = 0.995X$



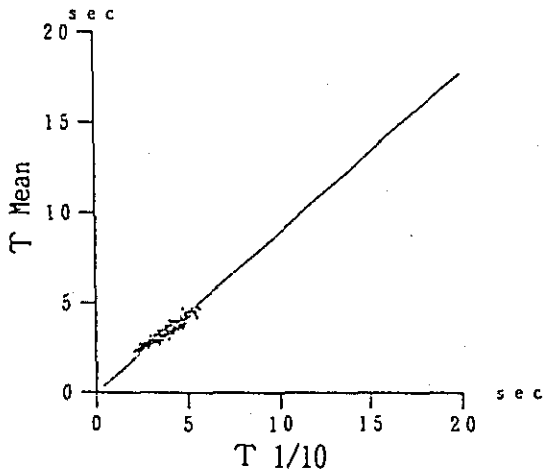
$r = 0.797$ $n = 372$
 $Y = 0.887X$



$r = 0.978$ $n = 372$
 $Y = 0.994X$



$r = 0.950$ $n = 372$
 $Y = 0.886X$



$r = 0.975$ $n = 372$
 $Y = 0.892X$

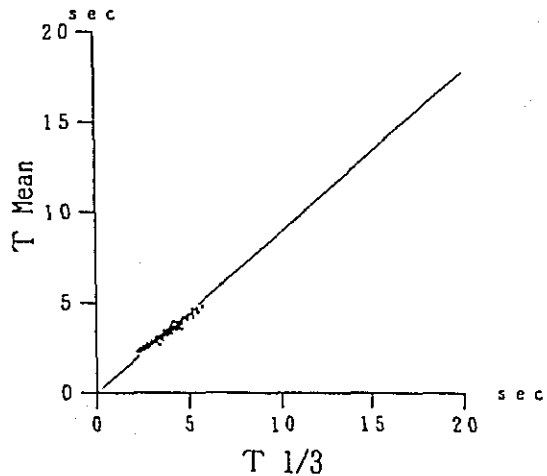
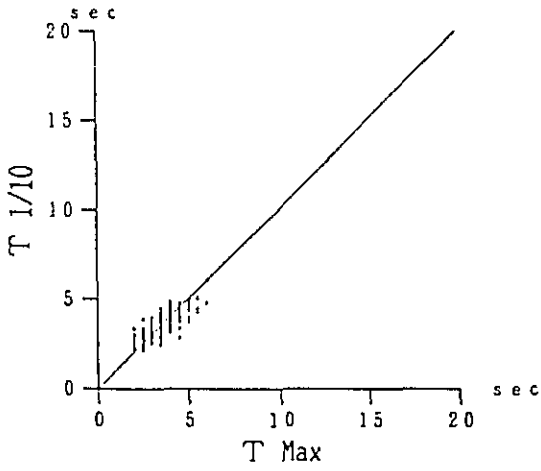


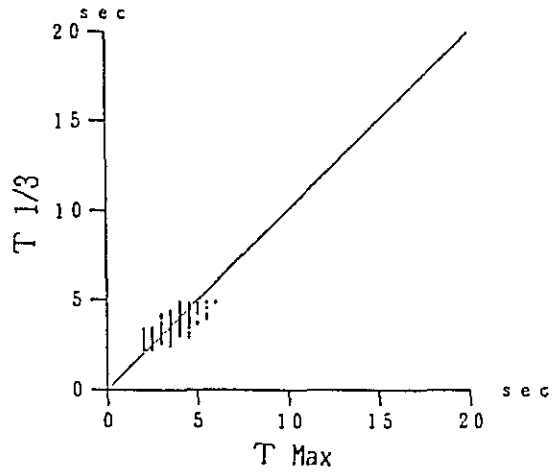
Fig. 1. 3-8 (7) Correlations among Various Wave Periods (Every Month)

St. :1
 Layer :+0.5m (Depth:9.1m)
 Interval:Every 2 hours
 Period : 1st Apr.-30th Apr, 1989

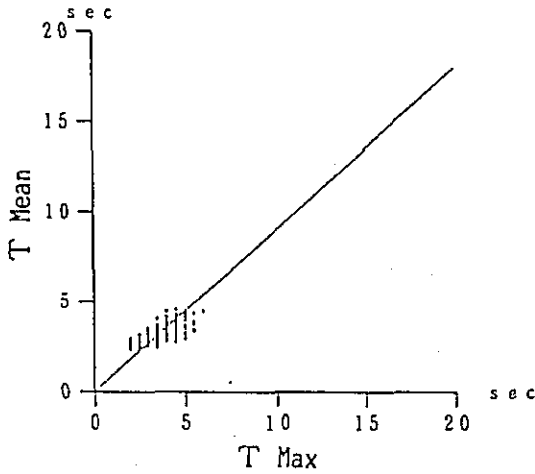
$r = 0.835$ $n = 360$
 $Y = 1.004 X$



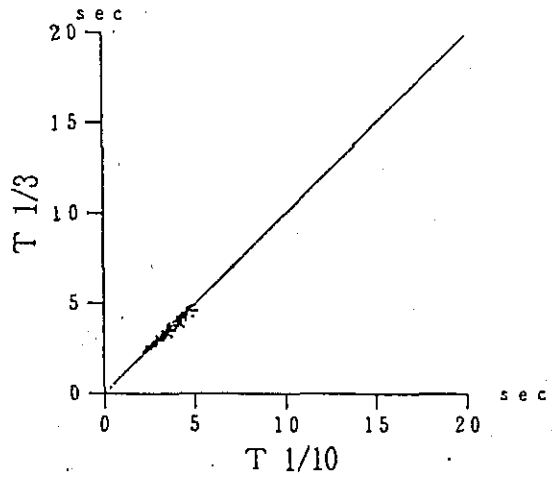
$r = 0.823$ $n = 360$
 $Y = 0.998 X$



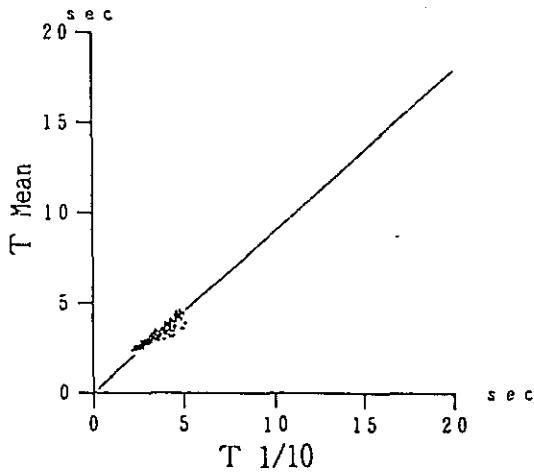
$r = 0.783$ $n = 360$
 $Y = 0.898 X$



$r = 0.973$ $n = 360$
 $Y = 0.994 X$



$r = 0.920$ $n = 360$
 $Y = 0.895 X$



$r = 0.958$ $n = 360$
 $Y = 0.901 X$

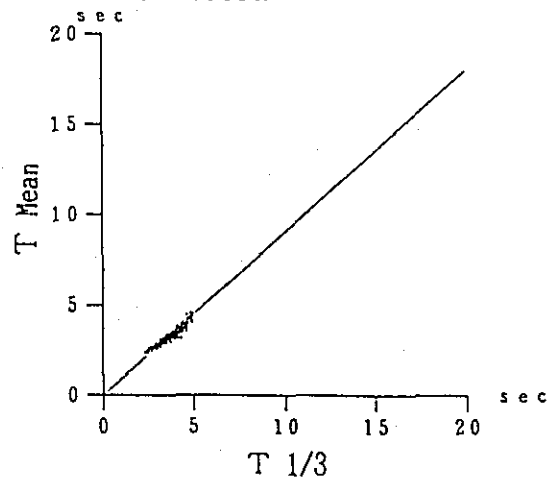
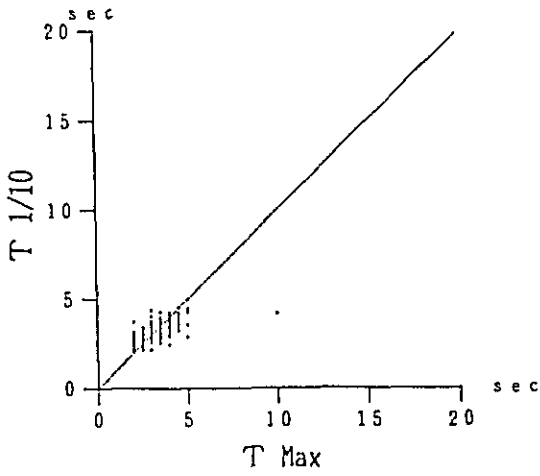


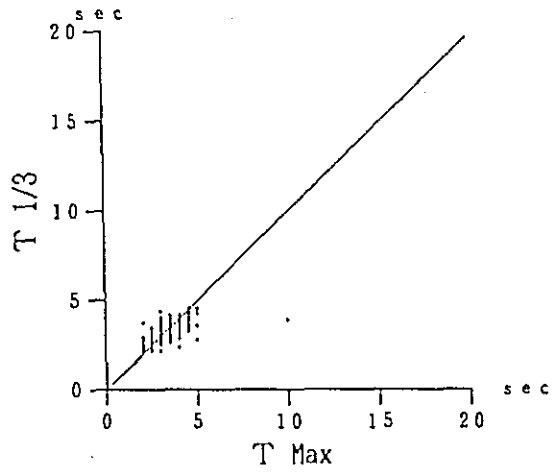
Fig. 1. 3-8 (8) Correlations among Various Wave Periods (Every Month)

St. :1
 Layer :+0.5m(Depth:9.1m)
 Interval:Every 2 hours
 Period : 1st May -31th May 1989

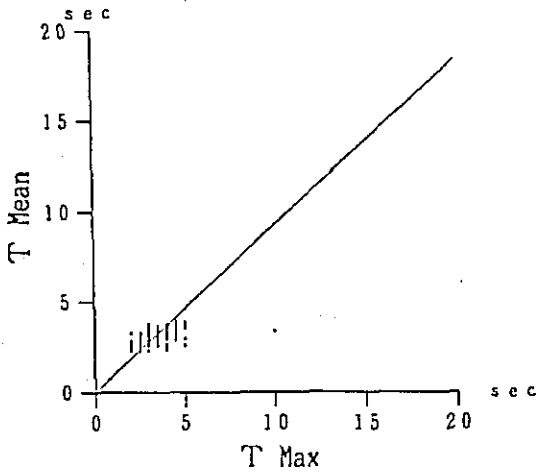
$r = 0.714$ $n = 371$
 $Y = 0.988X$



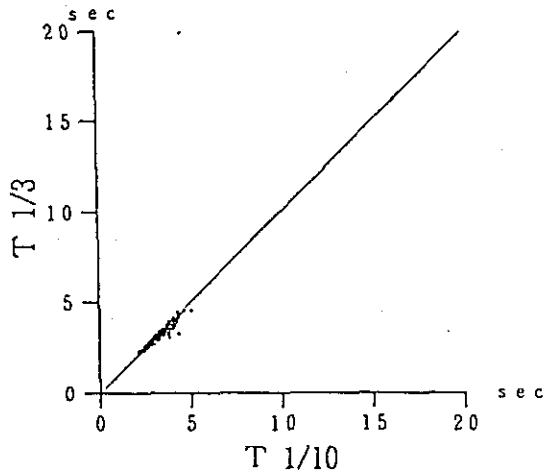
$r = 0.680$ $n = 371$
 $Y = 0.986X$



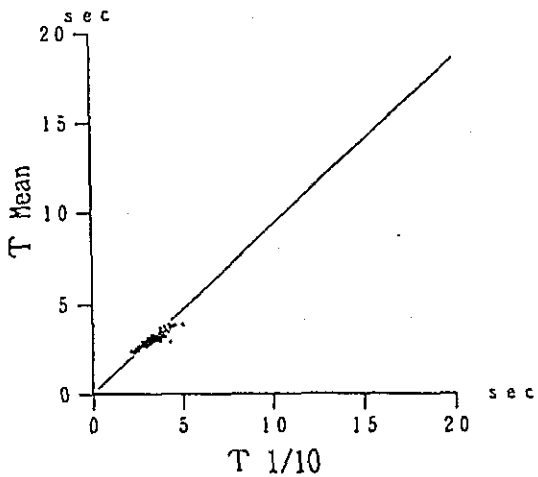
$r = 0.644$ $n = 371$
 $Y = 0.919X$



$r = 0.962$ $n = 371$
 $Y = 0.998X$



$r = 0.921$ $n = 371$
 $Y = 0.930X$



$r = 0.967$ $n = 371$
 $Y = 0.933X$

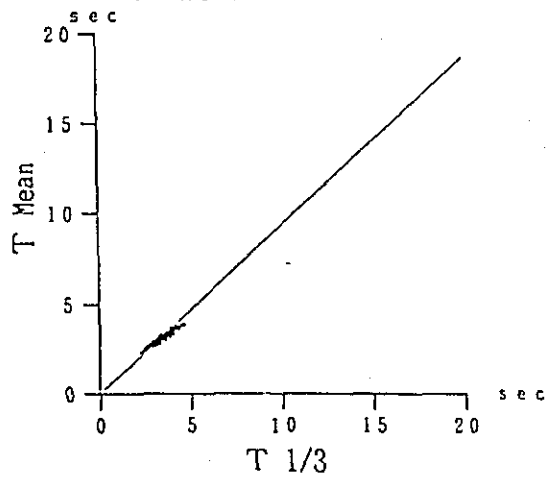


Fig. 1. 3-8 (9) Correlations among Various Wave Periods (Every Month)

St. : 1
 Layer : ±0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Jun. -30th Jun, 1989

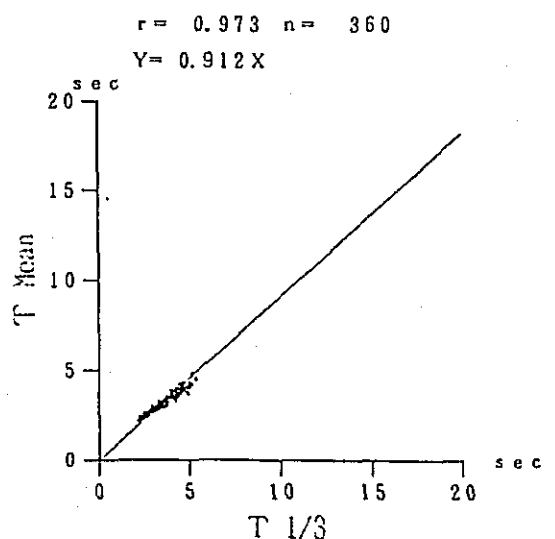
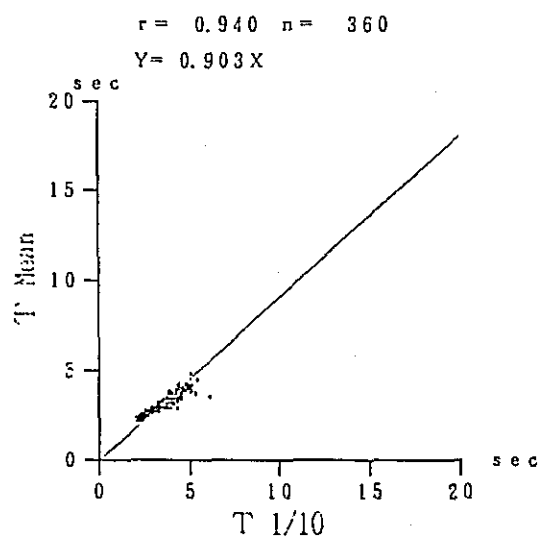
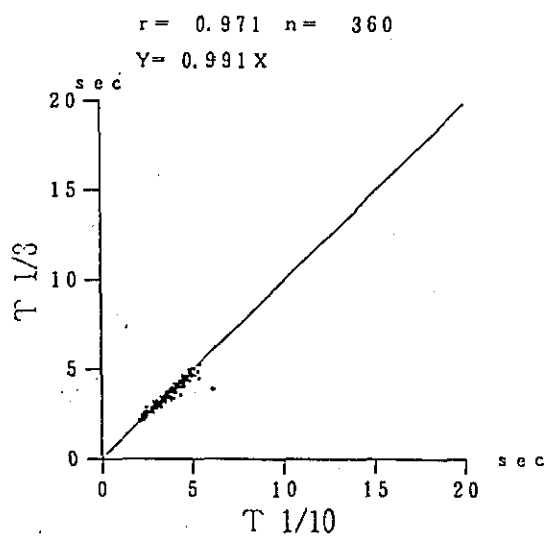
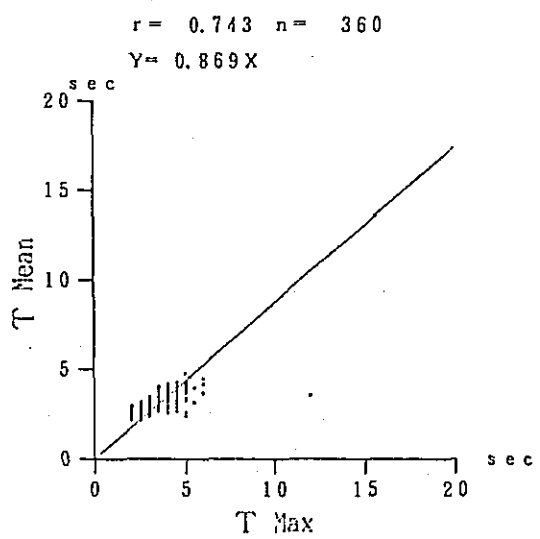
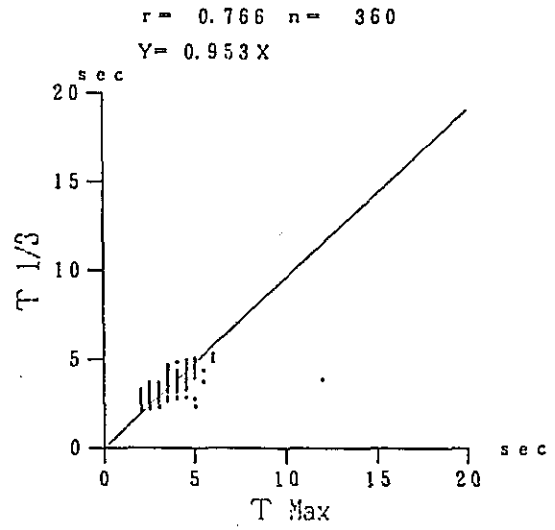
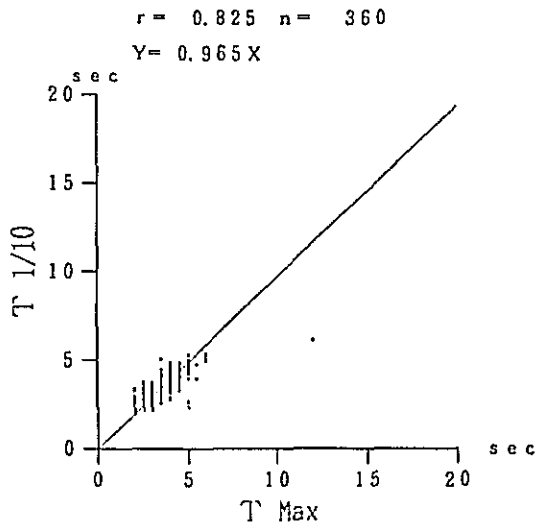
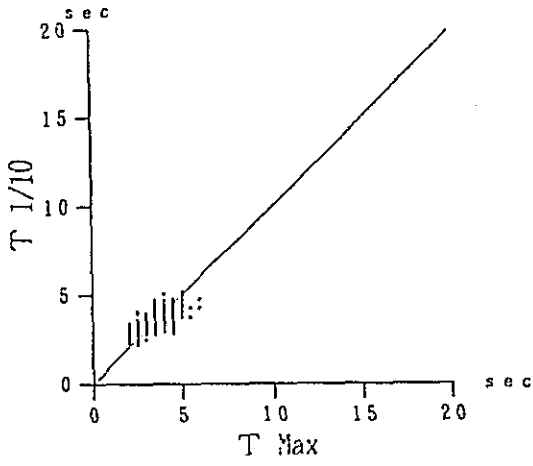


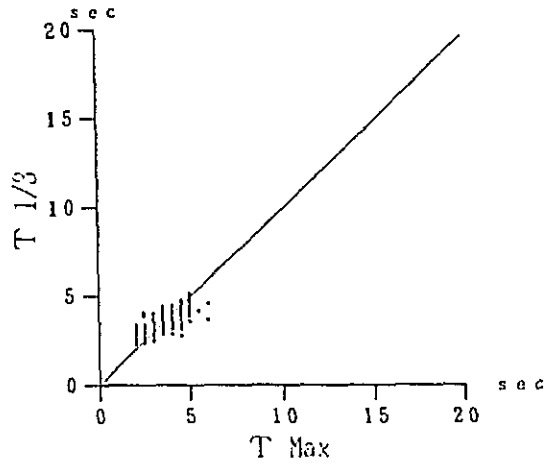
Fig. 1. 3-8 (10) Correlations among Various Wave Periods (Every Month)
 568

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Jul. - 31st Jul. 1989

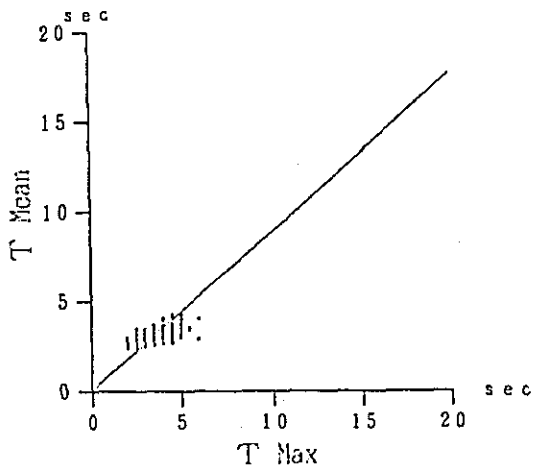
$r = 0.765$ $n = 372$
 $Y = 0.995 X$



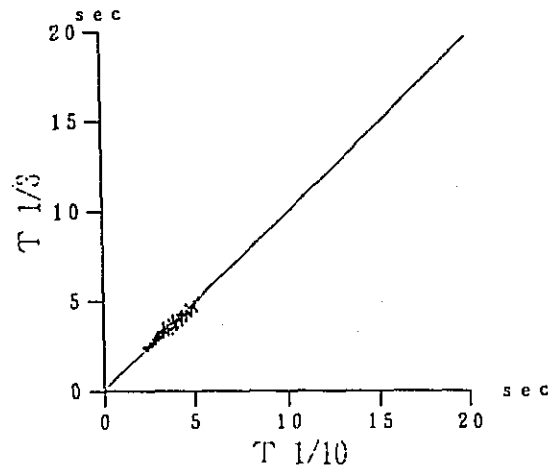
$r = 0.754$ $n = 372$
 $Y = 0.983 X$



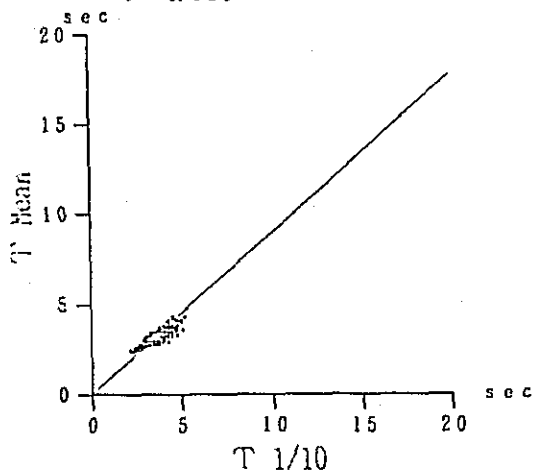
$r = 0.697$ $n = 372$
 $Y = 0.884 X$



$r = 0.955$ $n = 372$
 $Y = 0.988 X$



$r = 0.886$ $n = 372$
 $Y = 0.889 X$



$r = 0.951$ $n = 372$
 $Y = 0.900 X$

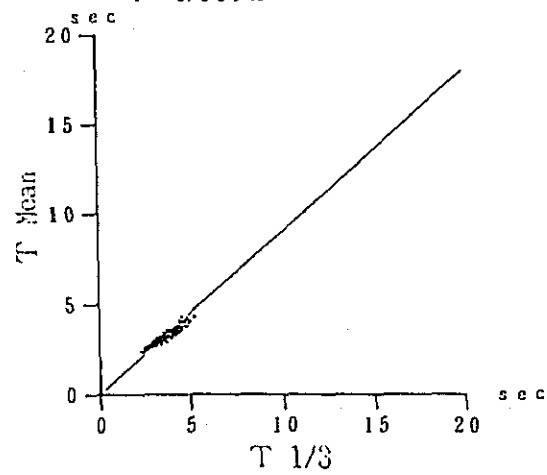
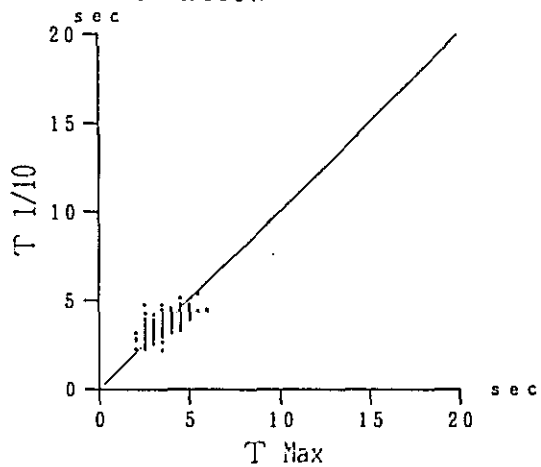


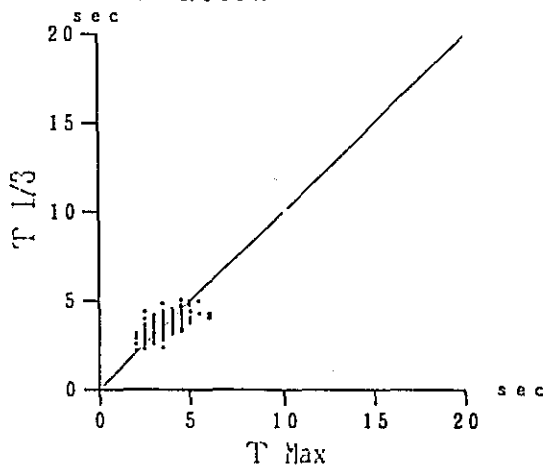
Fig. 1. 3-8 (11) Correlations among Various Wave Periods (Every Month

St. : 1
 Layer : +0.5m (Depth: 9.1m)
 Interval: Every 2 hours
 Period : 1st Aug. - 31st Aug. 1989

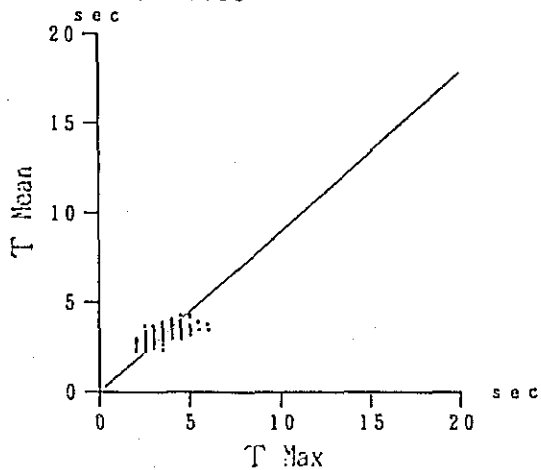
$r = 0.686$ $n = 372$
 $Y = 0.999X$



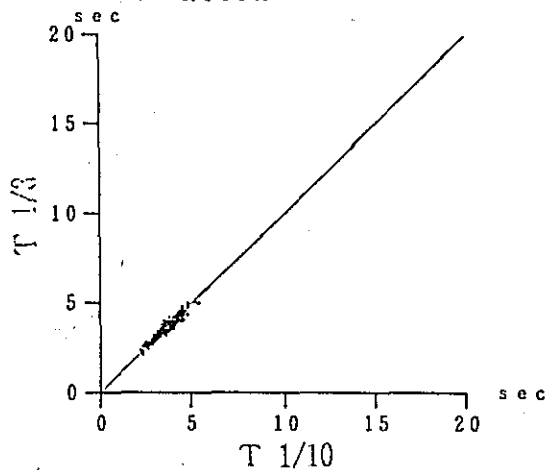
$r = 0.656$ $n = 372$
 $Y = 0.995X$



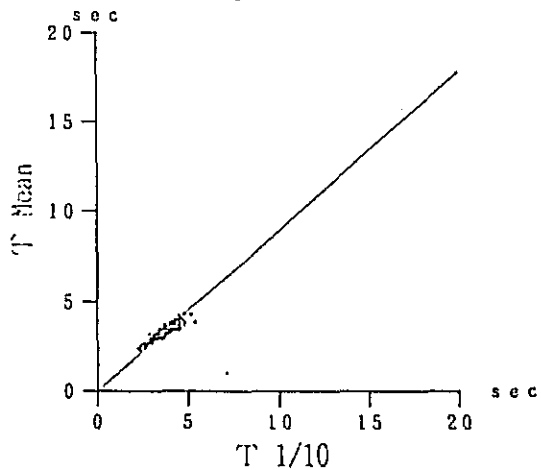
$r = 0.636$ $n = 372$
 $Y = 0.893X$



$r = 0.945$ $n = 372$
 $Y = 0.996X$



$r = 0.895$ $n = 372$
 $Y = 0.893X$



$r = 0.950$ $n = 372$
 $Y = 0.897X$

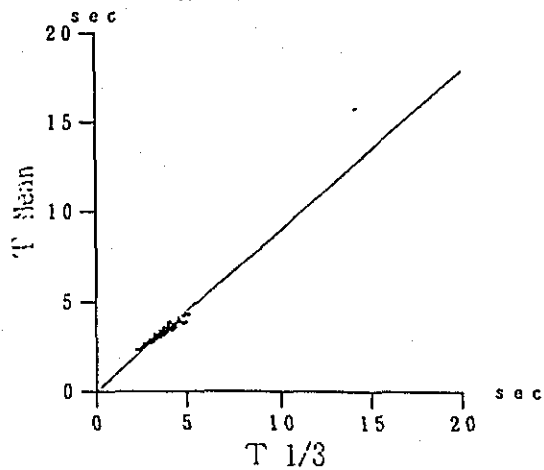


Fig. 1. 3-8 (12) Correlations among Various Wave Periods (Every Month)

St. : 1
Duration : 10th Sep. 1988~10th Sep. 1989

St. : 1
Duration : 10th Sep. 1988~10th Sep. 1989

(Excluded Wave Directions of Wave with
Periods less than 3sec.)

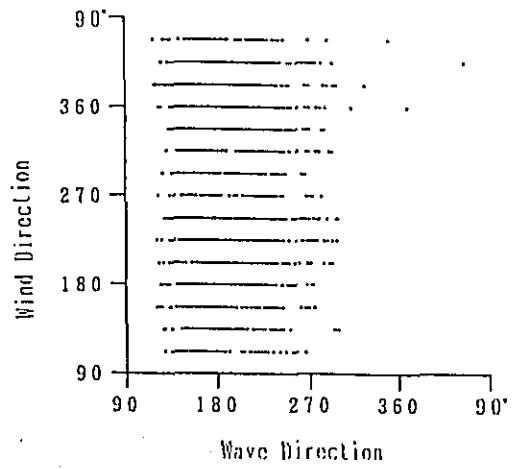
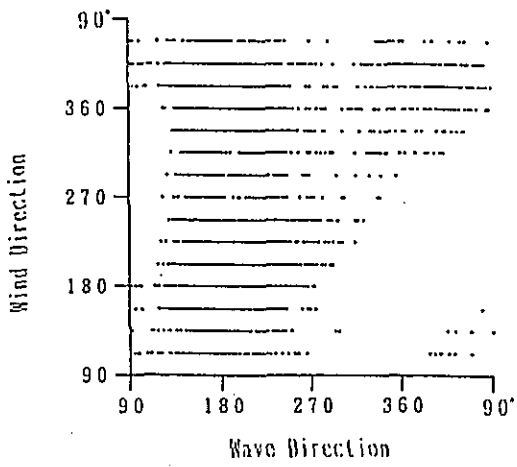


Fig. 1. 3- 9 (1)

Correlation between Dominant Wave Direction
and Wind Direction (All Seasons)

St. : 1
 Duration : 1st Nov. 1988~30th Apr. 1989

St. : 1
 Duration : 1st Nov. 1988~30th Apr. 1989

(Excluded Wave Directions of Wave with
 Periods less than 3sec.)

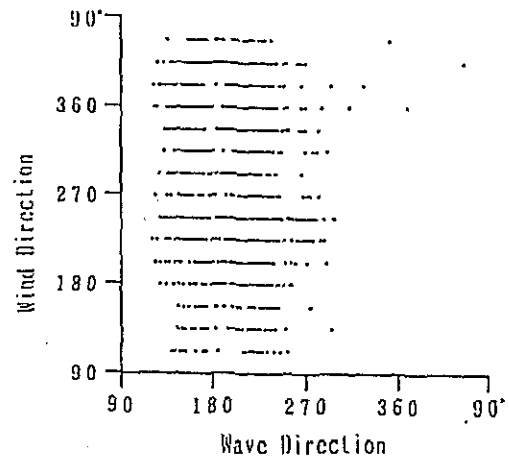
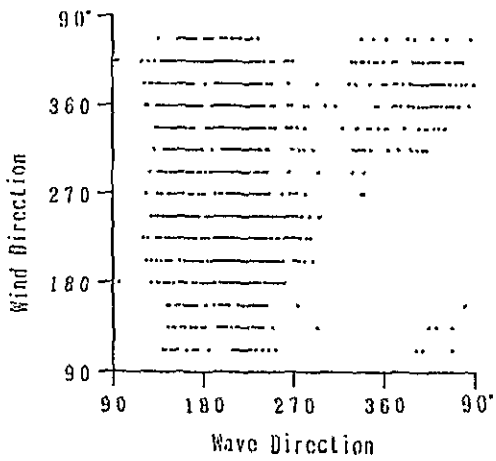


Fig. 1. 3- 9 (2) Correlation between Dominant Wave Direction and Wind Direction (Rainy Season)

St. : 1
 Duration : 10th Sep. 1988~31th Oct. 1988 (1st Dry Season)
 1st May. 1989~10th Sep. 1989 (2nd Dry Season)

St. : 1
 Duration : 10th Sep. 1988~31th Oct. 1988 (1st Dry Season)
 1st May. 1989~10th Sep. 1989 (2nd Dry Season)

(Excluded Wave Directions of Wave with
 Periods less than 3sec.)

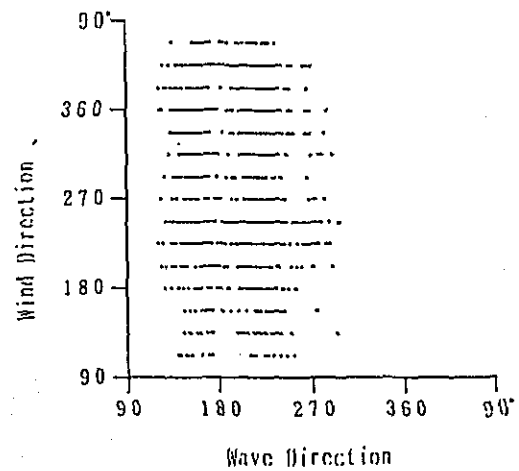
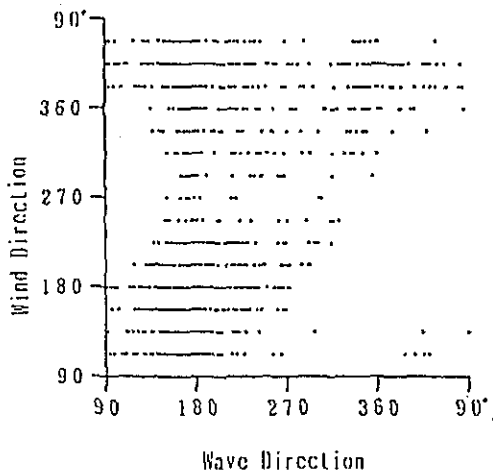
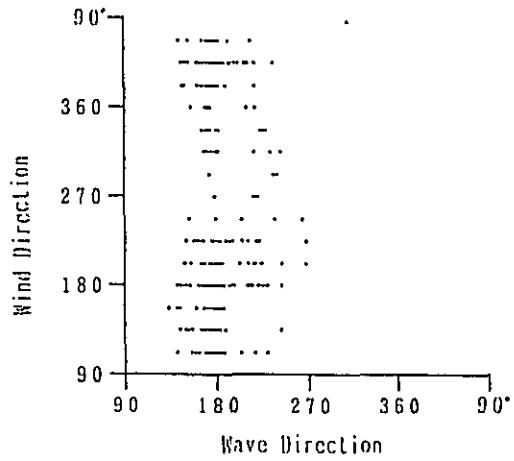
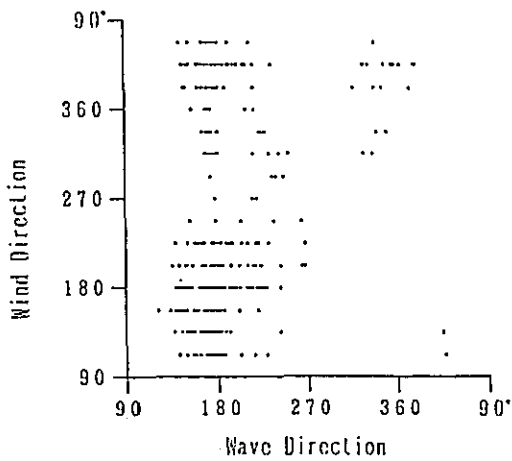


Fig. 1. 3- 9 (3) Correlation between Dominant Wave Direction and Wind Direction (Combined Two Dry Seasons)

St. : 1
 Duration : 10th Sep. 1988~31th Oct. 1988 (1st Dry Season)

St. : 1
 Duration : 10th Sep. 1988~31th Oct. 1988 (1st Dry Season)

(Excluded Wave Directions of Wave with
 Periods less than 3sec.)



St. : 1
 Duration : 1st May. 1989~10th Sep. 1989 (2nd Dry Season)

St. : 1
 Duration : 1st May. 1989~10th Sep. 1989 (2nd Dry Season)

(Excluded Wave Directions of Wave with
 Periods less than 3sec.)

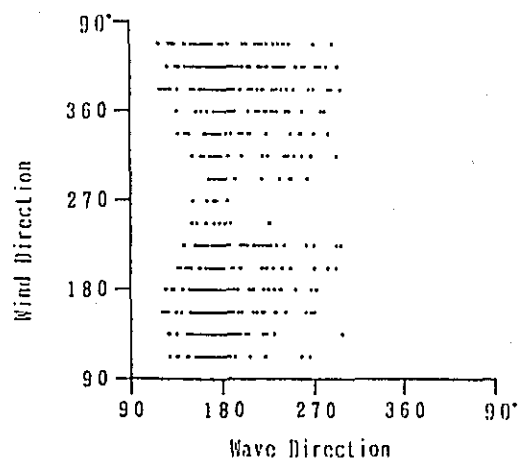
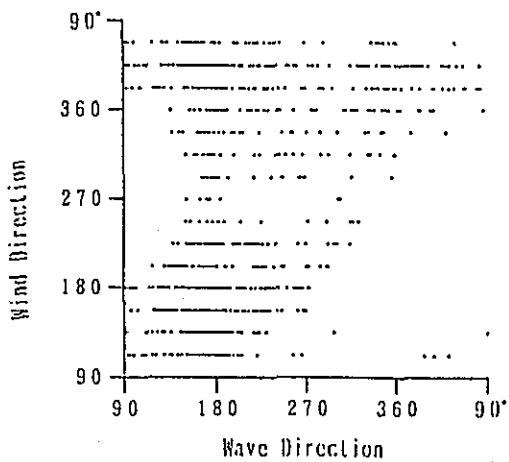
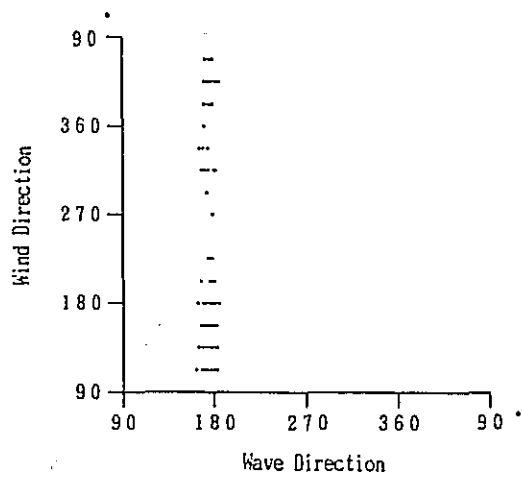
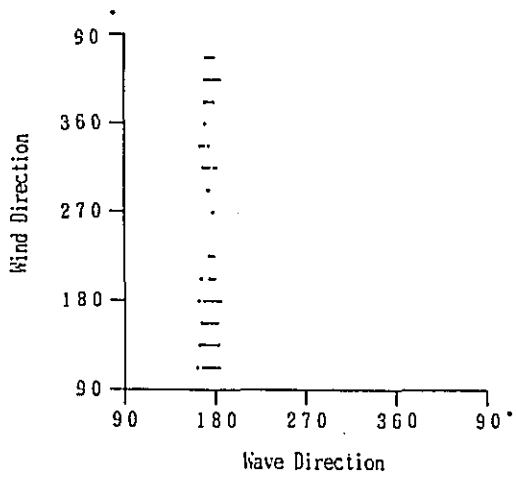


Fig. 1. 3- 9(4) Correlation between Dominant Wave Direction and Wind Direction (1st and 2nd Dry Season)

St :1
 Duration:1st Sep. 1988~1st Oct. 1988

(Excluded Wave Directions of Wave with
 Periods less than 3sec.)



St :1
 Duration:1st Oct. 1988~1st Nov. 1988

(Excluded Wave Directions of Wave with
 Periods less than 3sec.)

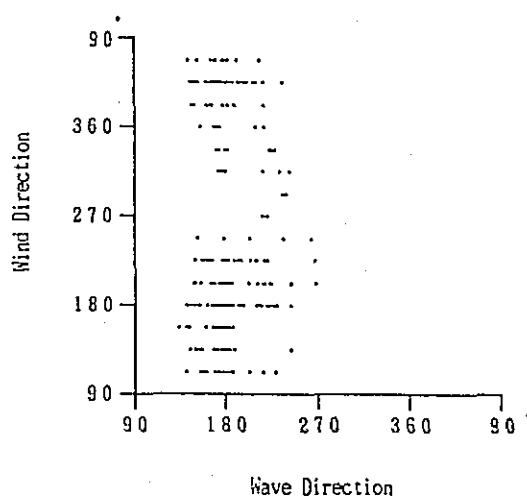
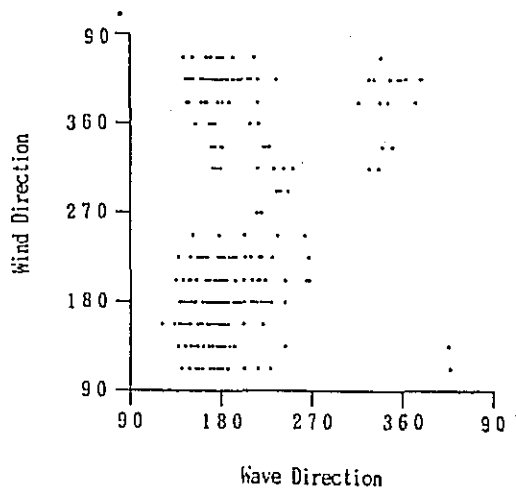
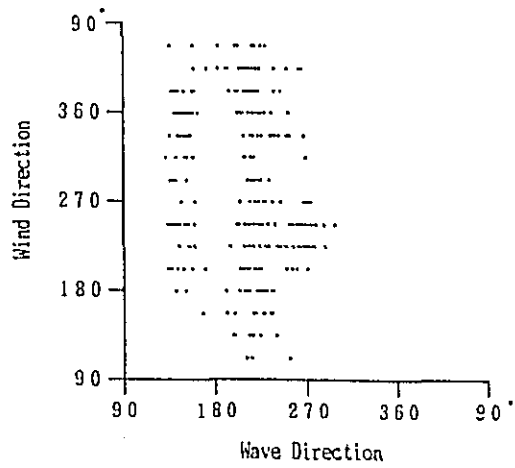
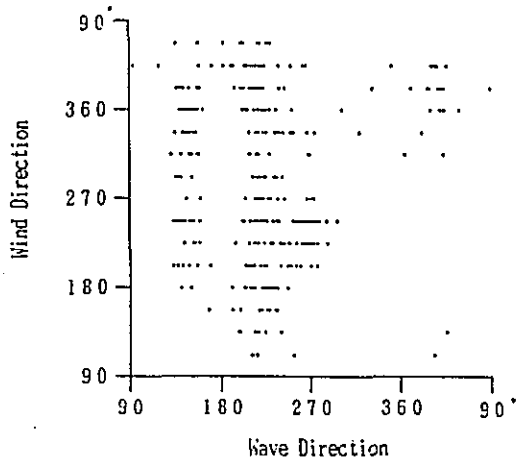


Fig. 1.3-10(1) Correlation between Dominant Wave Direction
 and Wind Direction (Every Month)

St :1
Duration:1st Nov. 1988~1st Dec. 1988

(Excluded Wave Directions of Wave with
Periods less than 3sec.)



St :1
Duration:1st Dec. 1988~1st Jan. 1989

(Excluded Wave Directions of Wave with
Periods less than 3sec.)

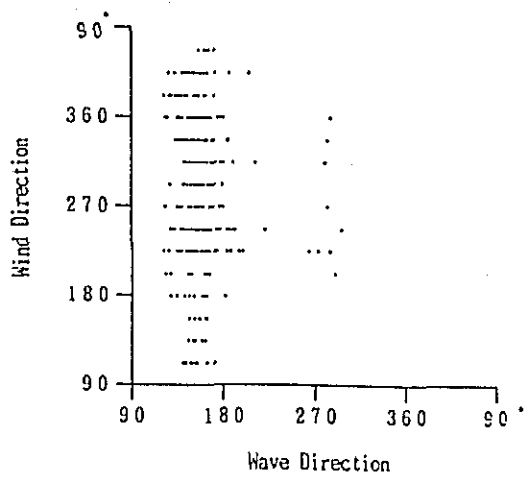
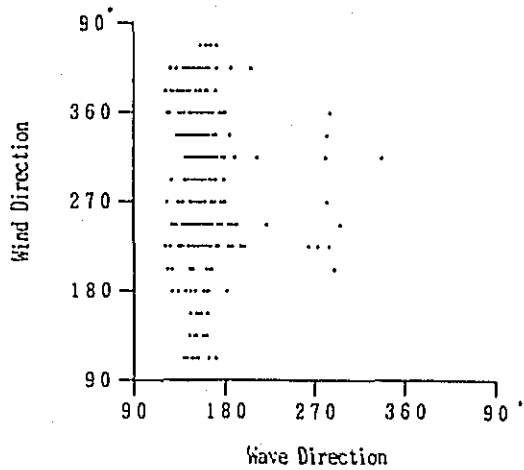
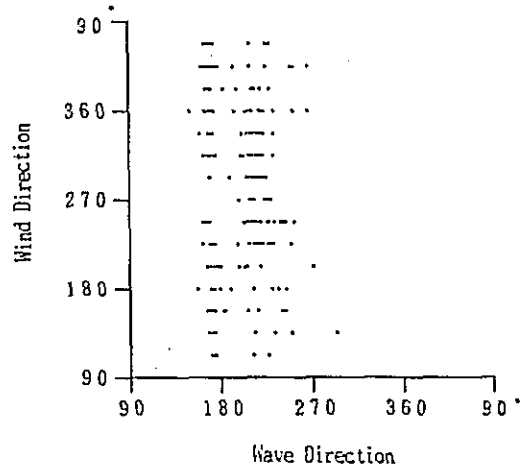
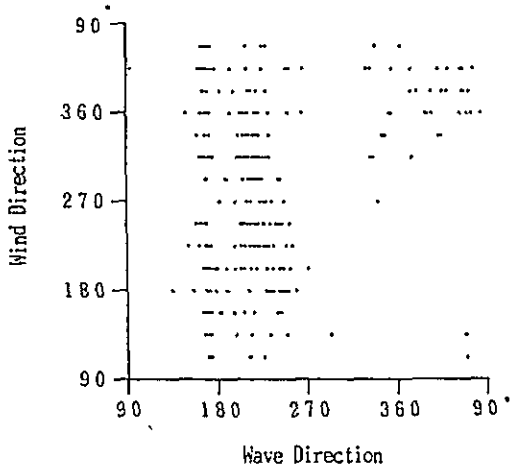


Fig. 1.3-10(2) Correlation between Dominant Wave Direction
and Wind Direction (Every Month)

St :1
Duration:1st Jan. 1989~1st Feb. 1989

(Excluded Wave Directions of Wave with
Periods less than 3sec.)



St :1
Duration:1st Feb. 1989~1st Mar. 1989

(Excluded Wave Directions of Wave with
Periods less than 3sec.)

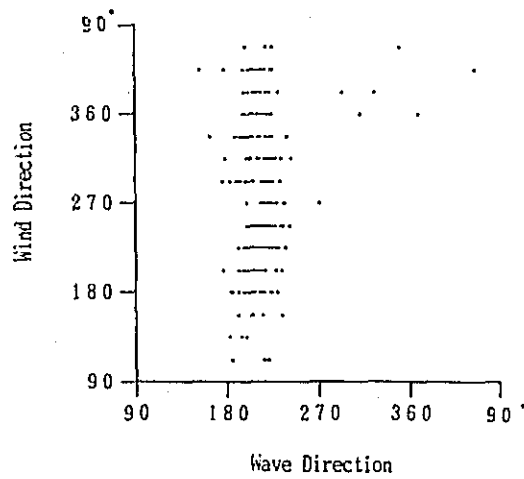
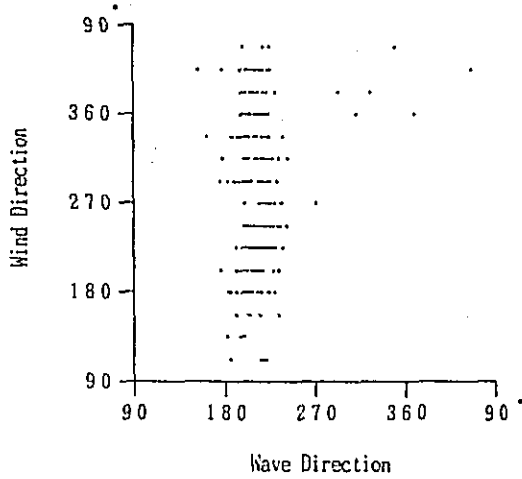
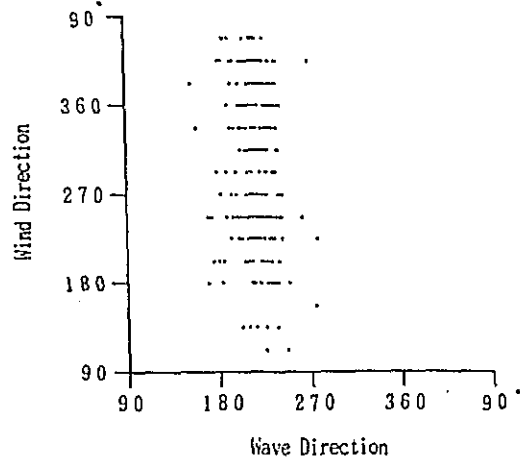
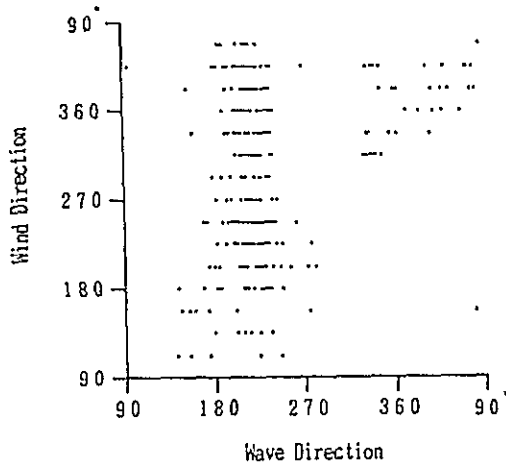


Fig. 1.3-10(3) Correlation between Dominant Wave Direction
and Wind Direction (Every Month)

St :1
Duration:1st Mar. 1989~1st Apr. 1989

(Excluded Wave Directions of Wave with
Periods less than 3sec.)



St :1
Duration:1st Apr. 1989~1st May. 1989

(Excluded Wave Directions of Wave with
Periods less than 3sec.)

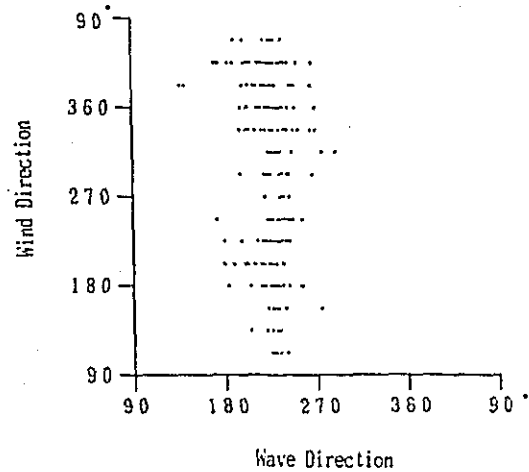
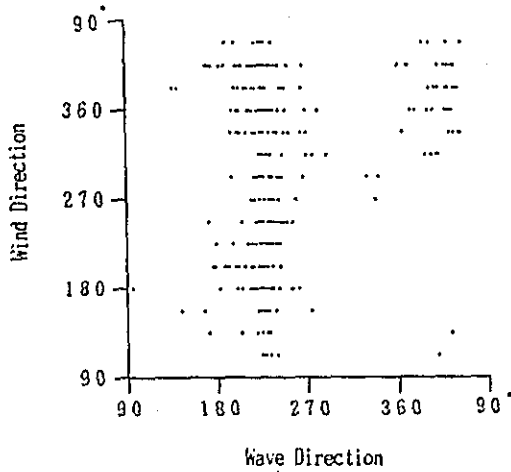
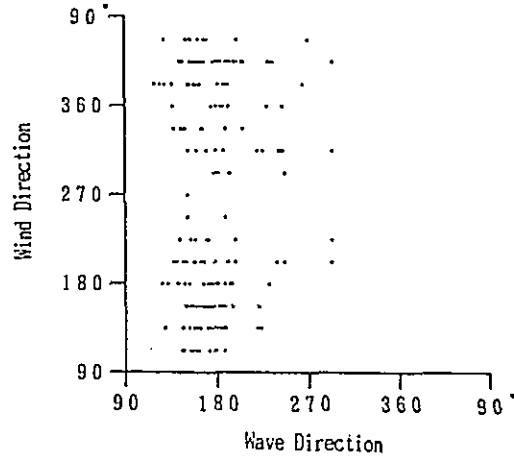
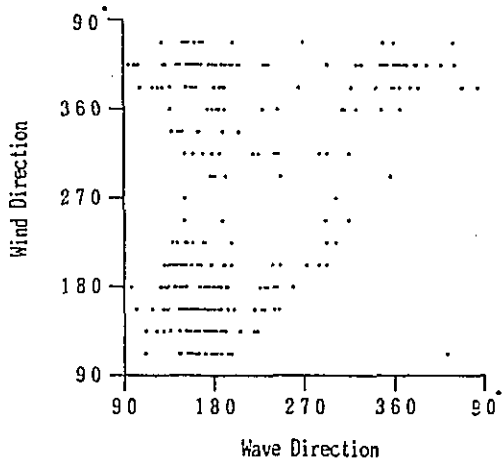


Fig. 1.3-10(4) Correlation between Dominant Wave Direction
and Wind Direction (Every Month)

St :1
Duration:1st May, 1989~1st Jun, 1989

(Excluded Wave Directions of Wave with
Periods less than 3sec.)



St :1
Duration:1st Jun, 1989~1st Jul, 1989

(Excluded Wave Directions of Wave with
Periods less than 3sec.)

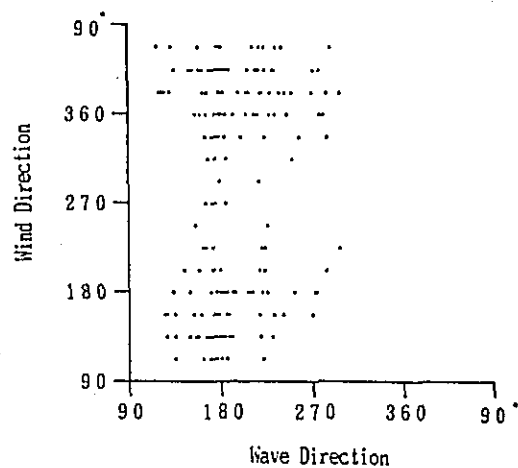
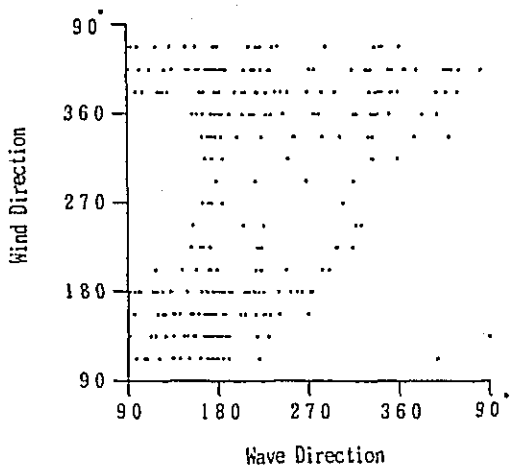
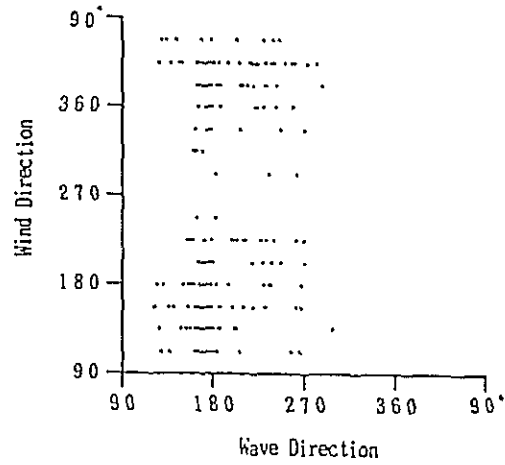
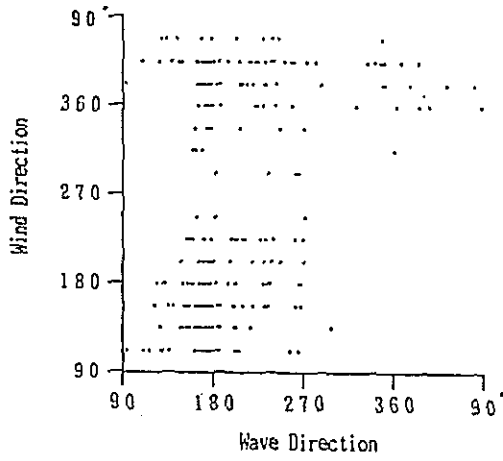


Fig. 1.3-10(5) Correlation between Dominant Wave Direction
and Wind Direction (Every Month)

St :1
Duration:1st Jul. 1989~1st Aug. 1989

(Excluded Wave Directions of Wave with
Periods less than 3sec.)



St :1
Duration:1st Aug. 1989~1st Sep. 1989

(Excluded Wave Directions of Wave with
Periods less than 3sec.)

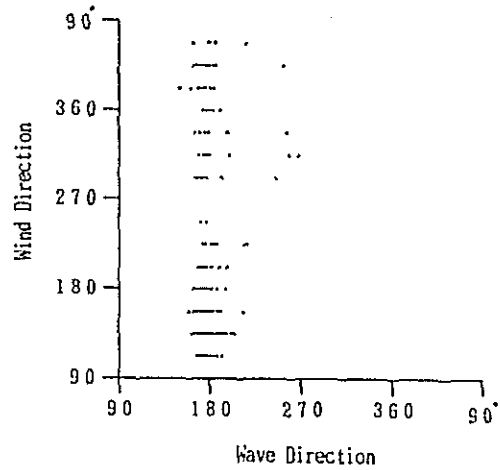
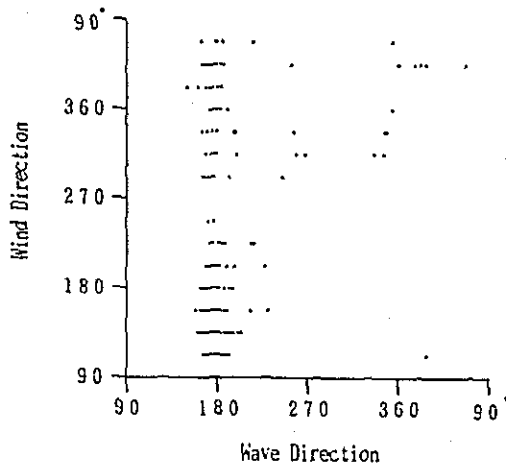


Fig. 1.3-10(6) Correlation between Dominant Wave Direction
and Wind Direction (Every Month)

Table 1.3-4 (1) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Obtained Data																Total
	1.0< 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0<	
<25cm			3 (1.2) (0.4)	1													4 (1.6)
25~ 49			63 (25.6) (22.4)	55													118 (48.0)
50~ 74			89 (36.2) (11.8) (0.4)	29	1												119 (48.4)
75~ 99			2 (0.8) (1.2)	3													5 (2.0)
100~ 124																	0 (0.0)
125~ 149																	0 (0.0)
150~ 174																	0 (0.0)
175~ 199																	0 (0.0)
200~ 224																	0 (0.0)
225~ 249																	0 (0.0)
250~ 274																	0 (0.0)
275~ 299																	0 (0.0)
300cm~																	0 (0.0)
Total	0 (0.0)	0 (0.0)	157 (63.8)	88 (35.8)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	246 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table I. 3-4 (2) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Duration: 1st Oct. ~ 31st Oct. 1988																372		
	1.0< s	1.0~ 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0< s	Total	Total
<25cm			33 (8.9) (11.3)	42 (11.3) (7.0)	26 (7.0)													101 (27.2)	372 (0.3%)
25~ 49			43 (11.0)	127 (34.2)	40 (10.8)													210 (56.6)	
50~ 74			1 (0.3)	43 (11.8)	16 (3.8)													58 (15.6)	
75~ 99				1 (0.3)														1 (0.3)	
100~ 124				1 (0.3)														1 (0.3)	
125~ 149																		0 (0.0)	
150~ 174																		0 (0.0)	
175~ 199																		0 (0.0)	
200~ 224																		0 (0.0)	
225~ 249																		0 (0.0)	
250~ 274																		0 (0.0)	
275~ 299																		0 (0.0)	
300cm~																		0 (0.0)	
Total	0 (0.0)	0 (0.0)	77 (20.8)	214 (57.7)	80 (21.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	371 (100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-4 (3) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Duration: 1st Nov. ~ 30th Nov. 1988																360		
	1.0< s 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0< s	Total	Obtained Data Short	Data I (0.3%)
<25cm		25 (7.0)	21 (5.8)	20 (5.6)	8 (2.2)												74 (20.6)		
25~ 49		29 (8.1)	50 (13.9)	54 (15.0)	11 (3.1)												144 (40.1)		
50~ 74			25 (7.0)	52 (14.5)	2 (0.6)												79 (22.0)		
75~ 99				35 (9.7)													38 (10.6)		
100~ 124				15 (4.2)	1 (0.3)												17 (4.7)		
125~ 149					2 (0.6)	3 (0.8)											5 (1.4)		
150~ 174						1 (0.3)											1 (0.3)		
175~ 199																	1 (0.3)		
200~ 224																	0 (0.0)		
225~ 249																	0 (0.0)		
250~ 274																	0 (0.0)		
275~ 299																	0 (0.0)		
300cm~																	0 (0.0)		
Total	0 (0.0)	56 (15.0)	100 (27.9)	178 (49.6)	27 (7.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	359 (100.0)		

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table I. 3-4 (4) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Obtained Data																Total
	1.0< 1.0~ 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0< s	
<25cm			2 (0.5) (0.3)	1													3 (0.8)
25~ 49		3 (0.8) (13.5)	50 (13.5) (20.8)	77 (20.8) (2.2)	8												138 (37.2)
50~ 74			27 (7.3) (29.9)	111 (29.9) (4.3)	16 (4.3)												154 (41.5)
75~ 99			4 (1.1) (11.9)	66 (11.9) (0.8)	3 (0.8)												71 (19.7)
100~ 124				12 (3.2) (1.1)	6 (1.1)												18 (4.9)
125~ 149				5 (1.3) (1.1)	4 (1.1)												9 (2.4)
150~ 174																	0 (0.0)
175~ 199																	0 (0.0)
200~ 224																	0 (0.0)
225~ 249																	0 (0.0)
250~ 274																	0 (0.0)
275~ 299																	0 (0.0)
300cm~																	0 (0.0)
Total	0 (0.0) (0.0)	3 (0.8) (0.8)	83 (22.4) (67.4)	250 (67.4) (9.4)	35 (9.4) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	371 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-4 (5) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Duration: 1st Jan. ~ 31st Jan. 1989																Obtained Data		
	1.0< 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0<	Total	372	98 (26.3%)
<25cm		75 (27.4) (9.5)	26 (9.5) (0.4)	1 (0.4)													102 (37.2)		
25~ 49		22 (8.0) (12.4)	34 (12.4) (4.4)	12 (4.4) (1.5)	4 (1.5)												72 (26.3)		
50~ 74		1 (0.4)	18 (6.6) (18.6)	51 (18.6) (1.1)	3 (1.1)												73 (26.6)		
75~ 99			2 (0.7) (8.0)	22 (8.0)													24 (8.8)		
100~ 124				1 (0.4) (0.4)													2 (0.7)		
125~ 149																	0 (0.0)		
150~ 174																	1 (0.4)		
175~ 199																	0 (0.0)		
200~ 224																	0 (0.0)		
225~ 249																	0 (0.0)		
250~ 274																	0 (0.0)		
275~ 299																	0 (0.0)		
300cm~																	0 (0.0)		
Total	0 (0.0)	98 (35.8) (29.2)	80 (29.2) (31.8)	87 (31.8) (3.3)	9 (3.3) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	0 (0.0) (0.0)	274 (100.0)		

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-4 (6) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Duration: 1st Feb. ~ 28th Feb. 1989																Obtained Data				
	1.0< s	1.0~ 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0< s	Total	336	1 (0.3%)	
<25cm				10 (3.0) (0.3)														11 (3.3)			
25~ 49				44 (13.1) (24.5) (3.9)	82 (24.5) (3.9)	13												139 (41.5)			
50~ 74				30 (9.0) (28.7) (2.4)	94 (28.7) (2.4)	8												134 (40.0)			
75~ 99				2 (0.6) (9.7) (0.3)	33 (9.7) (0.3)	1												36 (10.7)			
100~ 124					10 (3.0) (0.5)	2												12 (3.6)			
125~ 149					1 (0.3) (0.6)	2												3 (0.9)			
150~ 174																		0 (0.0)			
175~ 199																		0 (0.0)			
200~ 224																		0 (0.0)			
225~ 249																		0 (0.0)			
250~ 274																		0 (0.0)			
275~ 299																		0 (0.0)			
300cm~																		0 (0.0)			
Total	0 (0.0)	0 (0.0)	0 (0.0)	86 (25.7) (46.6)	223 (66.6)	26 (7.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	335 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)

Note : Upper layer shows Frequencies and lower layer shows Frequencies in % .

Table 1. 3-4 (7) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Duration: 1st Mar. ~ 31st Mar. 1989																Obtained Data	
	1.0< s 1.0~ 1.9	2.0 2.9	3.0 3.9	4.0 4.9	5.0 5.9	6.0 6.9	7.0 7.9	8.0 8.9	9.0 9.9	10.0 10.9	11.0 11.9	12.0 12.9	13.0 13.9	14.0 14.9	15.0 15.9	16.0< s	Total	
<25cm		49 (13.2) (8.9)	33 (3.0)	13 (3.0)													93 (25.0)	
25~ 49		19 (5.1)	82 (22.0)	43 (11.6)	9 (2.4)												153 (41.1)	
50~ 74			30 (8.1)	52 (14.0)	7 (1.9)												89 (23.9)	
75~ 99			1 (0.3)	33 (8.9)													34 (9.1)	
100~ 124				3 (0.8)													3 (0.8)	
125~ 149																	0 (0.0)	
150~ 174																	0 (0.0)	
175~ 199																	0 (0.0)	
200~ 224																	0 (0.0)	
225~ 249																	0 (0.0)	
250~ 274																	0 (0.0)	
275~ 299																	0 (0.0)	
300cm~																	0 (0.0)	
Total	0 (0.0)	68 (18.3)	146 (39.2)	182 (38.2)	16 (4.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	372 (100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table I. 3-4 (8) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Duration: 1st Apr. - 30th Apr. 1989																360 Days	
	1.0< 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0< Total	Obtained Data	Short Data
<25cm		51 (14.2)	82 (22.8)	34 (9.4)												167 (46.4)		
25~ 49		40 (11.1)	59 (16.4)	41 (11.4)												140 (38.9)		
50~ 74		2 (0.6)	18 (5.0)	25 (6.9)												45 (12.5)		
75~ 99			4 (1.1)	2 (0.6)												6 (1.7)		
100~ 124				2 (0.6)												2 (0.6)		
125~ 149																0 (0.0)		
150~ 174																0 (0.0)		
175~ 199																0 (0.0)		
200~ 224																0 (0.0)		
225~ 249																0 (0.0)		
250~ 274																0 (0.0)		
275~ 299																0 (0.0)		
300cm~																0 (0.0)		
Total	0 (0.0)	93 (25.8)	163 (45.3)	104 (28.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	360 (100.0)		

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-4 (9) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Duration: 1st May ~ 31st May 1989																Obtained Data	
	1.0< s 1.0~ 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0< s	Total	
<25cm		83 (22.4)	81 (21.8)	16 (4.3)													180 (48.5)	
25~ 49		71 (19.1)	93 (25.1)	7 (1.9)													171 (46.1)	
50~ 74			20 (5.4)														20 (5.4)	
75~ 99																	0 (0.0)	
100~ 124																	0 (0.0)	
125~ 149																	0 (0.0)	
150~ 174																	0 (0.0)	
175~ 199																	0 (0.0)	
200~ 224																	0 (0.0)	
225~ 249																	0 (0.0)	
250~ 274																	0 (0.0)	
275~ 299																	0 (0.0)	
300cm~																	0 (0.0)	
Total	0 (0.0)	154 (41.5)	194 (52.3)	23 (6.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	371 (100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-4 (10) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Duration: 1st Jun. ~ 30th Jun. 1989																Obtained Data		
	1.0< 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0<	Total	360	0.0%
<25cm		83 (23.1) (17.8)	64 (17.8) (10.6)	20 (5.6) (0.6)	2												169 (46.9)		
25~ 49		54 (15.0) (17.8)	64 (17.8) (10.6)	38 (10.6) (0.6)	2												158 (43.9)		
50~ 74		1 (0.3) (2.5)	9 (2.5) (3.6)	13 (3.6) (0.6)	2												25 (6.9)		
75~ 99			1 (0.3) (1.4)	5 (1.4)													6 (1.7)		
100~ 124				2 (0.6)													2 (0.6)		
125~ 149																	0 (0.0)		
150~ 174																	0 (0.0)		
175~ 199																	0 (0.0)		
200~ 224																	0 (0.0)		
225~ 249																	0 (0.0)		
250~ 274																	0 (0.0)		
275~ 299																	0 (0.0)		
300cm~																	0 (0.0)		
Total	0 (0.0)	138 (38.3)	118 (33.3)	78 (21.7)	6 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	360 (100.0)		

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-4 (II) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Duration: 1st Jul. ~ 31st Jul. 1989																Obtained Data		
	1.0< s	1.0~ 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0< s	372	0 (0.0%)
<25cm			28 (7.5)	59 (15.9)	30 (8.1)	2 (0.5)												119 (32.0)	
25~ 49			32 (8.6)	121 (32.5)	17 (4.6)													170 (45.7)	
50~ 74			2 (0.5)	53 (14.2)	22 (5.9)													77 (20.7)	
75~ 99				5 (1.3)	1 (0.3)													6 (1.6)	
100~ 124																		0 (0.0)	
125~ 149																		0 (0.0)	
150~ 174																		0 (0.0)	
175~ 199																		0 (0.0)	
200~ 224																		0 (0.0)	
225~ 249																		0 (0.0)	
250~ 274																		0 (0.0)	
275~ 299																		0 (0.0)	
300cm--																		0 (0.0)	
Total	0 (0.0)	0 (0.0)	62 (16.7)	238 (64.0)	70 (18.8)	2 (0.5)												372 (100.0)	0 (0.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1.3-4(12) Frequency Distribution of Wave Height by Wave Period (Every Month)

Period Height	Duration: 1st Aug. ~ 31st Aug. 1989																Obtained Data		
	1.0< 1.0~ s 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0< s	Total	372	0 (0.0%)
<25cm		11 (3.0)	11 (3.0)	9 (2.4)	2 (0.5)												33 (8.9)		
25~ 49		18 (4.8)	93 (25.0)	28 (7.5)	1 (0.3)												140 (37.6)		
50~ 74			147 (39.5)	24 (6.5)													171 (46.0)		
75~ 99			10 (2.7)	18 (4.8)													28 (7.5)		
100~ 124																	0 (0.0)		
125~ 149																	0 (0.0)		
150~ 174																	0 (0.0)		
175~ 199																	0 (0.0)		
200~ 224																	0 (0.0)		
225~ 249																	0 (0.0)		
250~ 274																	0 (0.0)		
275~ 299																	0 (0.0)		
300cm~																	0 (0.0)		
Total	0 (0.0)	28 (7.3)	261 (70.2)	79 (21.2)	3 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	372 (100.0)		

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-4 (13) Frequency Distribution of Wave Height by Wave Period (Every Month)

Obtained Data 360
Short Data 248 (68.9%)

Duration: 1st Sep. ~ 30th Sep. 1989
St. 1

Period Height	1.0< 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0< 5	Total
<25cm																	0 (0.0)
25~ 49			10 (8.9)	10 (8.9)													20 (17.9)
50~ 74			46 (41.1)	23 (20.5)													69 (61.6)
75~ 99			9 (8.0)	14 (12.5)													23 (20.5)
100~ 124																	0 (0.0)
125~ 149																	0 (0.0)
150~ 174																	0 (0.0)
175~ 199																	0 (0.0)
200~ 224																	0 (0.0)
225~ 249																	0 (0.0)
250~ 274																	0 (0.0)
275~ 299																	0 (0.0)
300cm~																	0 (0.0)
Total	0 (0.0)	0 (0.0)	65 (58.0)	47 (42.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	112 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-5 (1) Frequency Distribution of Wave Height by Wave Direction (All Seasons)

Dir. Height	Duration: 10th Sep. 1988 ~ 10th Sep. 1989													Obtained Data		4378	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	44 (1.0) (0.9)	36 (0.9) (1.3)	54 (1.3) (0.7)	28 (0.7) (0.6)	24 (0.6) (0.5)	22 (0.5) (1.2)	52 (1.2) (2.8)	120 (2.8) (4.5)	191 (4.5) (8.0)	106 (2.5) (4.4)	184 (4.4) (8.0)	82 (1.9) (3.5)	27 (0.6) (1.1)	19 (0.4) (0.7)	11 (0.3) (0.5)	38 (0.9) (1.3)	1038 (24.6) (41.4)
25~ 49	22 (0.5) (0.3)	11 (0.3) (0.5)	23 (0.5) (0.2)	9 (0.2) (0.3)	12 (0.3) (0.4)	18 (0.4) (2.1)	89 (2.1) (7.4)	311 (7.4) (12.7)	539 (12.7) (20.1)	225 (5.3) (9.5)	339 (8.0) (14.7)	75 (1.8) (3.1)	25 (0.6) (1.1)	11 (0.3) (0.5)	9 (0.2) (0.3)	31 (0.7) (1.0)	1749 (41.4) (66.2)
50~ 74					1 (0.0) (0.0)	2 (0.0) (0.8)	75 (1.8) (4.8)	201 (4.8) (9.5)	403 (9.5) (14.7)	166 (3.9) (6.6)	197 (4.7) (8.0)	31 (0.7) (1.1)	26 (0.6) (1.1)	6 (0.1) (0.2)			1108 (26.2) (41.4)
75~ 99							12 (0.3) (0.8)	61 (1.4) (2.1)	53 (1.3) (2.1)	35 (0.8) (1.3)	73 (1.7) (2.8)	12 (0.3) (0.5)	10 (0.2) (0.4)	2 (0.0) (0.1)			258 (6.1) (8.0)
100~ 124							8 (0.2) (0.5)	14 (0.3) (0.5)	4 (0.1) (0.2)	2 (0.0) (0.1)	20 (0.5) (0.8)	5 (0.1) (0.2)	2 (0.0) (0.1)				55 (1.3) (1.7)
125~ 149							6 (0.1) (0.2)	7 (0.2) (0.3)		1 (0.0) (0.1)	3 (0.1) (0.2)						17 (0.4) (0.5)
150~ 174							1 (0.0) (0.1)				1 (0.0) (0.1)						2 (0.0) (0.1)
175~ 199							1 (0.0) (0.1)										1 (0.0) (0.1)
200~ 224																	0 (0.0) (0.1)
225~ 249																	0 (0.0) (0.1)
250~ 274																	0 (0.0) (0.1)
275~ 299																	0 (0.0) (0.1)
300cm~																	0 (0.0) (0.1)
Total	66 (1.6) (1.1)	47 (1.1) (1.5)	77 (1.8) (1.2)	37 (0.9) (0.7)	37 (0.9) (0.8)	42 (1.0) (1.5)	244 (5.8) (16.9)	714 (16.9) (28.1)	1190 (28.1) (44.1)	535 (12.7) (19.3)	817 (19.3) (31.1)	205 (4.8) (8.0)	90 (2.1) (3.5)	38 (0.9) (1.3)	20 (0.5) (0.7)	67 (1.6) (2.2)	4228 (100.0) (130.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table I. 3-5 (2) Frequency Distribution of Wave Height by Wave Direction (Rainy Season)

Dir. Interval	Duration: 1st Nov. 1988 ~ 30th Apr. 1989													Obtained Data		2172			
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total	Short Data	5.2%
<25cm	13 (0.6)	18 (0.9)	43 (2.0)	21 (1.0)	10 (0.5)	1 (0.0)	2 (0.1)	15 (0.7)	37 (1.8)	63 (3.1)	137 (6.7)	56 (2.7)	12 (0.6)	3 (0.1)	1 (0.0)	17 (0.8)	447 (21.7)		
25~	4 (0.2)	8 (0.4)	38 (0.9)	7 (0.3)	1 (0.0)	3 (0.1)	36 (1.7)	121 (5.9)	42 (2.0)	169 (8.2)	284 (13.8)	56 (2.7)	10 (0.5)	6 (0.3)	2 (0.1)	10 (0.5)	778 (37.8)		
50~						2 (0.1)	69 (3.4)	102 (5.0)	22 (1.1)	149 (7.2)	176 (8.5)	25 (1.2)	23 (1.1)	5 (0.2)			573 (27.8)		
75~							12 (0.6)	41 (2.0)	8 (0.4)	35 (1.7)	72 (3.5)	10 (0.5)	9 (0.4)	2 (0.1)			189 (9.2)		
100~							8 (0.4)	16 (0.7)	3 (0.1)	2 (0.1)	18 (0.9)	5 (0.2)	2 (0.1)				52 (2.5)		
125~							6 (0.3)	7 (0.3)		1 (0.0)	3 (0.1)						17 (0.8)		
150~							1 (0.0)				2 (0.0)						2 (0.1)		
175~							1 (0.0)										1 (0.0)		
200~																	0 (0.0)		
225~																	0 (0.0)		
250~																	0 (0.0)		
275~																	0 (0.0)		
300cm~																	0 (0.0)		
Total	17 (0.8)	26 (1.3)	60 (2.9)	28 (1.4)	11 (0.5)	6 (0.3)	135 (6.6)	300 (14.6)	112 (5.4)	419 (20.3)	691 (33.6)	132 (7.4)	56 (2.7)	16 (0.8)	3 (0.1)	27 (1.3)	2059 (100.0)		

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-5 (3) Frequency Distribution of Wave Height by Wave Direction (Combined Two Dry Seasons)

Dir. Height	Duration: 10th Sep. 1988 ~ 10th Sep. 1989														Obtained Data		2206	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total	
<25cm	31 (1.4)	18 (0.8)	13 (0.6)	7 (0.3)	14 (0.6)	21 (1.0)	50 (2.3)	105 (4.8)	154 (7.1)	43 (2.0)	47 (2.2)	26 (1.2)	15 (0.7)	16 (0.7)	10 (0.5)	21 (1.0)	591 (27.2)	
25~ 49	18 (0.8)	3 (0.1)	4 (0.2)	2 (0.1)	11 (0.5)	15 (0.7)	53 (2.4)	190 (8.5)	497 (22.9)	56 (2.6)	55 (2.5)	19 (0.9)	15 (0.7)	5 (0.2)	7 (0.3)	21 (1.0)	971 (42.8)	
50~ 74					1 (0.0)		6 (0.3)	99 (4.6)	381 (17.6)	17 (0.8)	21 (1.0)	6 (0.3)	3 (0.1)	1 (0.0)			535 (24.7)	
75~ 99								20 (0.9)	45 (2.1)		1 (0.0)	2 (0.1)					69 (3.2)	
100~ 124									1 (0.0)		2 (0.1)						3 (0.1)	
125~ 149																	0 (0.0)	
150~ 174																	0 (0.0)	
175~ 199																	0 (0.0)	
200~ 224																	0 (0.0)	
225~ 249																	0 (0.0)	
250~ 274																	0 (0.0)	
275~ 299																	0 (0.0)	
300cm~																	0 (0.0)	
Total	49 (2.3)	21 (1.0)	17 (0.8)	9 (0.4)	26 (1.2)	36 (1.7)	109 (5.0)	414 (19.1)	1078 (49.7)	116 (5.3)	126 (5.8)	53 (2.4)	34 (1.6)	22 (1.0)	17 (0.8)	42 (1.9)	2169 (100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-5 (4) Frequency Distribution of Wave Height by Wave Direction (1st Dry Season)

Duration: 10th Sep. ~ 31th Oct. 1988
 St. : 1

Obtained Data
 Short Data

618
 5 (0.8%)

Dir. Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSH	SW	WSW	W	WNW	NW	NNW	Total
<25cm	6 (0.7)	6 (0.7)	2 (0.3)			2 (0.3)	10 (1.6)	28 (4.6)	23 (3.8)	13 (2.1)	10 (1.6)	4 (0.7)			1 (0.2)	3 (0.5)	104 (17.0)
25~ 49	1 (0.2)		1 (0.2)	1 (0.2)			15 (2.4)	57 (9.3)	215 (35.1)	14 (2.3)	11 (1.8)	1 (0.2)	3 (0.5)			7 (1.1)	326 (53.2)
50~ 74							1 (0.2)	11 (1.8)	139 (22.7)	10 (1.6)	13 (2.1)	1 (0.2)	1 (0.2)				176 (28.7)
75~ 99								1 (0.2)	4 (0.7)			1 (0.2)					6 (1.0)
100~ 124											1 (0.2)						1 (0.2)
125~ 149																	0 (0.0)
150~ 174																	0 (0.0)
175~ 199																	0 (0.0)
200~ 224																	0 (0.0)
225~ 249																	0 (0.0)
250~ 274																	0 (0.0)
275~ 299																	0 (0.0)
300cm~																	0 (0.0)
Total	5 (0.8)	4 (0.7)	3 (0.5)	1 (0.2)	0 (0.0)	2 (0.3)	26 (4.2)	97 (15.8)	381 (62.2)	37 (6.0)	35 (5.7)	7 (1.1)	4 (0.7)	0 (0.0)	1 (0.2)	10 (1.6)	613 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-5 (5) Frequency Distribution of Wave Height by Wave Direction (2nd Dry Season)

Dir. Height	Duration: 1st May ~ 10th Sep. 1989															Total	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	27 (1.7)	14 (0.9)	11 (0.7)	7 (0.4)	14 (0.9)	19 (1.2)	40 (2.6)	77 (4.9)	131 (8.4)	30 (1.9)	37 (2.4)	22 (1.4)	15 (1.0)	16 (1.0)	9 (0.6)	18 (1.2)	487 (31.3)
25~ 49	17 (1.1)	3 (0.2)	3 (0.2)	1 (0.1)	11 (0.7)	15 (1.0)	38 (2.4)	133 (8.5)	282 (18.1)	42 (2.7)	44 (2.8)	18 (1.2)	12 (0.8)	5 (0.3)	7 (0.4)	14 (0.9)	645 (41.5)
50~ 74					1 (0.1)		5 (0.3)	88 (5.7)	242 (15.6)	7 (0.4)	8 (0.5)	5 (0.3)	2 (0.1)	1 (0.1)			359 (23.1)
75~ 99								19 (1.2)	41 (2.6)		1 (0.1)	1 (0.1)	1 (0.1)				63 (4.0)
100~ 124									1 (0.1)		1 (0.1)						2 (0.1)
125~ 149																	0 (0.0)
150~ 174																	0 (0.0)
175~ 199																	0 (0.0)
200~ 224																	0 (0.0)
225~ 249																	0 (0.0)
250~ 274																	0 (0.0)
275~ 299																	0 (0.0)
300cm~																	0 (0.0)
Total	44 (2.8)	17 (1.1)	14 (0.9)	8 (0.5)	26 (1.7)	34 (2.2)	83 (5.3)	317 (20.4)	697 (44.8)	79 (5.1)	91 (5.8)	46 (3.0)	30 (1.9)	22 (1.4)	16 (1.0)	32 (2.1)	1556 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-6 (1) Frequency Distribution of Wave Period by Wave Direction (All Seasons)

Dir. Period	Duration: 10th Sep. 1988 ~ 10th Sep. 1989																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<1.0sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9	64 (1.5)	47 (1.1)	77 (1.8)	36 (0.9)	37 (0.9)	30 (0.7)	48 (1.1)	83 (2.0)	69 (1.6)	41 (1.0)	68 (1.6)	52 (1.2)	15 (0.4)	11 (0.3)	18 (0.4)	69 (1.6)	765 (18.1)
3.0~ 3.9	2 (0.0)			1 (0.0)		8 (0.2)	79 (1.9)	355 (8.4)	734 (17.4)	183 (4.3)	352 (8.3)	107 (2.5)	54 (1.3)	19 (0.4)			1894 (44.8)
4.0~ 4.9						4 (0.1)	98 (2.3)	253 (6.0)	374 (8.8)	263 (6.2)	375 (8.9)	46 (1.1)	21 (0.5)	8 (0.2)	2 (0.0)		1444 (34.2)
5.0~ 5.9							19 (0.4)	23 (0.5)	13 (0.3)	48 (1.1)	22 (0.5)						125 (3.0)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0sec~																	0 (0.0)
Total	66 (1.6)	47 (1.1)	77 (1.8)	37 (0.9)	37 (0.9)	42 (1.0)	244 (5.8)	714 (16.9)	1190 (28.1)	535 (12.7)	817 (19.3)	205 (4.8)	90 (2.1)	38 (0.9)	20 (0.5)	69 (1.6)	4328 (106.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1.3-6(2) Frequency Distribution of Wave Period by Wave Direction (Rainy Season)

Duration: 1st Nov. 1988 ~ 30th Apr. 1989
St. : 1

Obtained Data 2172
Shori Data 113 (5.2%)

Dir. Period	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<1.0 sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9	15 (0.7)	26 (1.3)	60 (2.9)	27 (1.3)	11 (0.5)	1 (0.0)	5 (0.2)	11 (0.5)	14 (0.7)	19 (0.9)	49 (2.4)	40 (1.9)	7 (0.3)	3 (0.1)	1 (0.0)	27 (1.3)	316 (15.3)
3.0~ 3.9	2 (0.1)			1 (0.0)		1 (0.0)	18 (0.9)	83 (4.0)	39 (1.9)	109 (5.3)	282 (13.7)	74 (3.6)	32 (1.6)	7 (0.3)			648 (31.5)
4.0~ 4.9						4 (0.2)	91 (4.5)	186 (8.9)	56 (2.6)	243 (11.8)	341 (16.6)	38 (1.8)	17 (0.8)	6 (0.3)	2 (0.1)		982 (47.7)
5.0~ 5.9							19 (0.9)	22 (1.1)	5 (0.2)	48 (2.3)	19 (0.9)						113 (5.5)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0 sec ~																	0 (0.0)
Total	17 (0.8)	26 (1.3)	60 (2.9)	28 (1.4)	11 (0.5)	6 (0.3)	135 (6.6)	300 (14.6)	112 (5.4)	419 (20.3)	691 (33.6)	152 (7.4)	56 (2.7)	16 (0.8)	3 (0.1)	27 (1.3)	2059 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-6 (3) Frequency Distribution of Wave Period by Wave Direction (Combined Two Dry Seasons)

Dir. Period	Duration: 10th Sep. 1988 ~ 10th Sep. 1989																Obtained Data		Short Data	
	H	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total			
<1.0sec																	0	(0.0)		
1.0~ 1.9																	0	(0.0)		
2.0~ 2.9	49 (2.3)	21 (1.0)	17 (0.8)	9 (0.4)	26 (1.2)	29 (1.3)	43 (2.0)	72 (3.3)	55 (2.5)	22 (1.0)	19 (0.9)	12 (0.6)	8 (0.4)	8 (0.4)	17 (0.8)	42 (1.9)	449 (20.7)			
3.0~ 3.9						7 (0.3)	61 (2.8)	272 (12.5)	695 (32.0)	74 (3.4)	70 (3.2)	33 (1.5)	22 (1.0)	12 (0.6)			1246 (57.4)			
4.0~ 4.9							5 (0.2)	69 (3.2)	320 (14.8)	20 (0.9)	34 (1.6)	8 (0.4)	4 (0.2)	2 (0.1)			462 (21.3)			
5.0~ 5.9								1 (0.0)	8 (0.4)		3 (0.1)						12 (0.6)			
6.0~ 6.9																	0 (0.0)			
7.0~ 7.9																	0 (0.0)			
8.0~ 8.9																	0 (0.0)			
9.0~ 9.9																	0 (0.0)			
10.0~ 10.9																	0 (0.0)			
11.0~ 11.9																	0 (0.0)			
12.0~ 12.9																	0 (0.0)			
13.0~ 13.9																	0 (0.0)			
14.0~ 14.9																	0 (0.0)			
15.0~ 15.9																	0 (0.0)			
16.0~ 16.9																	0 (0.0)			
17.0~ 17.9																	0 (0.0)			
18.0~ 18.9																	0 (0.0)			
19.0~ 19.9																	0 (0.0)			
20.0sec~																	0 (0.0)			
Total	49 (2.3)	21 (1.0)	17 (0.8)	9 (0.4)	26 (1.2)	29 (1.3)	109 (5.0)	414 (19.1)	1078 (49.7)	116 (5.3)	126 (5.8)	53 (2.4)	36 (1.6)	22 (1.0)	17 (0.8)	42 (1.9)	2169 (100.0)			

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in %

Table 1.3-6 (4) Frequency Distribution of Wave Period by Wave Direction (1st Dry Season)

Duration: 10th Sep. ~ 31th Oct. 1988
 St. : 1

Obtained Data Short Data 618 51 (0.8%)

Dir. Period	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<1.0 sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9	5 (0.8)	4 (0.7)	3 (0.5)	1 (0.2)		2 (0.3)	11 (1.8)	20 (3.3)	6 (1.0)	7 (1.1)	4 (0.7)	2 (0.3)	1 (0.2)		1 (0.2)	10 (1.6)	77 (12.6)
3.0~ 3.9							15 (2.4)	58 (9.5)	235 (38.3)	22 (3.6)	30 (4.9)	5 (0.8)	3 (0.5)				368 (60.0)
4.0~ 4.9								19 (3.1)	139 (22.7)	8 (1.3)	1 (0.2)						167 (27.2)
5.0~ 5.9									1 (0.2)								1 (0.2)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0 sec ~																	0 (0.0)
Total	5 (0.8)	4 (0.7)	3 (0.5)	1 (0.2)	0 (0.0)	2 (0.3)	26 (4.2)	97 (15.8)	381 (62.2)	37 (6.0)	35 (5.7)	7 (1.1)	6 (0.7)	0 (0.0)	1 (0.2)	10 (1.6)	613 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-6 (5) Frequency Distribution of Wave Period by Wave Direction (2nd Dry Season)

Duration: 1st May ~ 10th Sep. 1989
 SE. : 1

Obtained Data 1588
 Short Data 32 (2.0%)

Dir. Period	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	WW	WNW	Total
<1.0 sec																	0 (0.0)
1.0~ 1.9																	0 (0.0)
2.0~ 2.9	44 (2.8)	17 (1.1)	14 (0.9)	8 (0.5)	26 (1.7)	27 (1.7)	32 (2.1)	52 (3.3)	49 (3.1)	15 (1.0)	15 (1.0)	10 (0.6)	7 (0.4)	8 (0.5)	16 (1.0)	32 (2.1)	372 (23.9)
3.0~ 3.9						7 (0.4)	46 (3.0)	214 (13.8)	460 (29.6)	52 (3.3)	40 (2.6)	28 (1.8)	19 (1.2)	12 (0.8)			878 (56.4)
4.0~ 4.9							5 (0.3)	50 (3.2)	181 (11.6)	12 (0.8)	31 (2.1)	8 (0.5)	4 (0.3)	2 (0.1)			295 (19.0)
5.0~ 5.9								1 (0.1)	7 (0.4)		3 (0.2)						11 (0.7)
6.0~ 6.9																	0 (0.0)
7.0~ 7.9																	0 (0.0)
8.0~ 8.9																	0 (0.0)
9.0~ 9.9																	0 (0.0)
10.0~ 10.9																	0 (0.0)
11.0~ 11.9																	0 (0.0)
12.0~ 12.9																	0 (0.0)
13.0~ 13.9																	0 (0.0)
14.0~ 14.9																	0 (0.0)
15.0~ 15.9																	0 (0.0)
16.0~ 16.9																	0 (0.0)
17.0~ 17.9																	0 (0.0)
18.0~ 18.9																	0 (0.0)
19.0~ 19.9																	0 (0.0)
20.0 sec~																	0 (0.0)
Total	44 (2.8)	17 (1.1)	14 (0.9)	8 (0.5)	26 (1.7)	34 (2.2)	83 (5.3)	317 (20.4)	697 (44.8)	79 (5.1)	91 (5.8)	46 (3.0)	30 (1.9)	22 (1.4)	16 (1.0)	32 (2.1)	1556 (100.0)

Note : Upper layer shows frequencies and Lower layer shows frequencies in % .

Table 1. 3-7 (1) Frequency Distribution of Wave Height by Wave Period (All Seasons)

Period Height	Duration: 10th Sep. 1988 ~ 10th Sep. 1989																Obtained Data		Total
	1.0< 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0<	Short	Data	
<25cm		438 (10.2)	434 (10.2)	170 (4.0)	14 (0.3)													1056 (24.7)	
25~ 49		351 (7.7)	890 (20.8)	504 (11.8)	48 (1.1)													1773 (41.5)	
50~ 74		7 (0.2)	555 (13.0)	512 (12.0)	39 (0.9)													1113 (26.0)	
75~ 99			44 (1.0)	210 (4.9)	4 (0.1)													258 (6.0)	
100~ 124			2 (0.0)	45 (1.1)	0 (0.2)													55 (1.3)	
125~ 149				8 (0.2)	9 (0.2)													17 (0.4)	
150~ 174					2 (0.0)													2 (0.0)	
175~ 199					1 (0.0)													1 (0.0)	
200~ 224																		0 (0.0)	
225~ 249																		0 (0.0)	
250~ 274																		0 (0.0)	
275~ 299																		0 (0.0)	
300cm~																		0 (0.0)	
Total	0 (0.0)	776 (18.2)	1925 (45.0)	1449 (33.9)	125 (2.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4275 (100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1.3-7 (2) Frequency Distribution of Wave Height by Wave Period (Rainy Season)

Period Height	Duration: 1st Nov. 1988 - 30th Apr. 1989																Obtained Data		2172	
	1.0< 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0<	Short Data	Total		
<25cm		200 (9.7)	174 (8.4)	98 (3.5)	8 (0.4)													450 (21.7)		
25~ 49		113 (5.5)	319 (15.4)	309 (14.9)	45 (2.2)													786 (38.0)		
50~ 74		3 (0.1)	148 (7.1)	387 (18.7)	36 (1.7)													574 (27.7)		
75~ 99			16 (0.8)	189 (8.2)	4 (0.2)													189 (9.1)		
100~ 124			1 (0.0)	43 (2.1)	8 (0.4)													52 (2.5)		
125~ 149				8 (0.4)	9 (0.4)													17 (0.8)		
150~ 174					2 (0.1)													2 (0.1)		
175~ 199					1 (0.0)													1 (0.0)		
200~ 224																		0 (0.0)		
225~ 249																		0 (0.0)		
250~ 274																		0 (0.0)		
275~ 299																		0 (0.0)		
300cm~																		0 (0.0)		
Total	0 (0.0)	316 (15.3)	658 (31.8)	984 (47.5)	113 (5.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2071 (100.0)		

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1. 3-7 (3) Frequency Distribution of Wave Height by Wave Period (Combined Two Dry Seasons)

Period Height	Duration: 10th Sep. 1988 ~ 10th Sep. 1989																Obtained Data		Short Data		Total
	1.0< 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0<	s	2205	2(0.1%)		
<25cm		238 (10.8)	260 (11.8)	102 (4.6)	6 (0.3)															606 (27.5)	
25~ 49		218 (9.9)	571 (25.9)	195 (8.8)	3 (0.1)															987 (44.8)	
50~ 74		4 (0.2)	407 (18.5)	125 (5.7)	3 (0.1)															539 (24.5)	
75~ 99			28 (1.3)	41 (1.9)																69 (3.1)	
100~ 124			1 (0.0)	2 (0.1)																3 (0.1)	
125~ 149																				0 (0.0)	
150~ 174																				0 (0.0)	
175~ 199																				0 (0.0)	
200~ 224																				0 (0.0)	
225~ 249																				0 (0.0)	
250~ 274																				0 (0.0)	
275~ 299																				0 (0.0)	
300cm~																				0 (0.0)	
Total	0 (0.0)	460 (20.9)	1267 (57.5)	465 (21.1)	12 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2205 (100.0)	

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1.3-7 (4) Frequency Distribution of Wave Height by Wave Period (1st Dry Season)

Period Height	Obtained Data																Total
	1.0< 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0<	
<25cm		33 (5.3)	45 (7.3)	27 (4.4)													105 (17.0)
25~ 49		43 (7.0)	190 (30.8)	95 (15.4)													328 (53.2)
50~ 74		1 (0.2)	132 (21.4)	43 (7.0)	1 (0.2)												177 (28.7)
75~ 99			3 (0.5)	3 (0.5)													6 (1.0)
100~ 124			1 (0.2)														1 (0.2)
125~ 149																	0 (0.0)
150~ 174																	0 (0.0)
175~ 199																	0 (0.0)
200~ 224																	0 (0.0)
225~ 249																	0 (0.0)
250~ 274																	0 (0.0)
275~ 299																	0 (0.0)
300cm~																	0 (0.0)
Total	0 (0.0)	77 (12.5)	371 (60.1)	168 (27.2)	1 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	617 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

Table 1.3-7 (5) Frequency Distribution of Wave Height by Wave Period (2nd Dry Season)

Period Height	Duration: 1st May ~ 10th Sep. 1989																Total
	1.0< 1.9	2.0~ 2.9	3.0~ 3.9	4.0~ 4.9	5.0~ 5.9	6.0~ 6.9	7.0~ 7.9	8.0~ 8.9	9.0~ 9.9	10.0~ 10.9	11.0~ 11.9	12.0~ 12.9	13.0~ 13.9	14.0~ 14.9	15.0~ 15.9	16.0< s	
<25cm		205 (12.9)	215 (13.5)	75 (4.7)	6 (0.4)												301 (31.8)
25~ 49		175 (11.0)	381 (24.0)	100 (6.3)	3 (0.2)												659 (41.5)
50~ 74		3 (0.2)	275 (17.3)	82 (5.2)	2 (0.1)												362 (22.8)
75~ 99			25 (1.6)	38 (2.4)													63 (4.0)
100~ 124				2 (0.1)													2 (0.1)
125~ 149																	0 (0.0)
150~ 174																	0 (0.0)
175~ 199																	0 (0.0)
200~ 224																	0 (0.0)
225~ 249																	0 (0.0)
250~ 274																	0 (0.0)
275~ 299																	0 (0.0)
300cm~																	0 (0.0)
Total	0 (0.0)	383 (24.1)	896 (56.5)	297 (18.7)	11 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1587 (100.0)

Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .