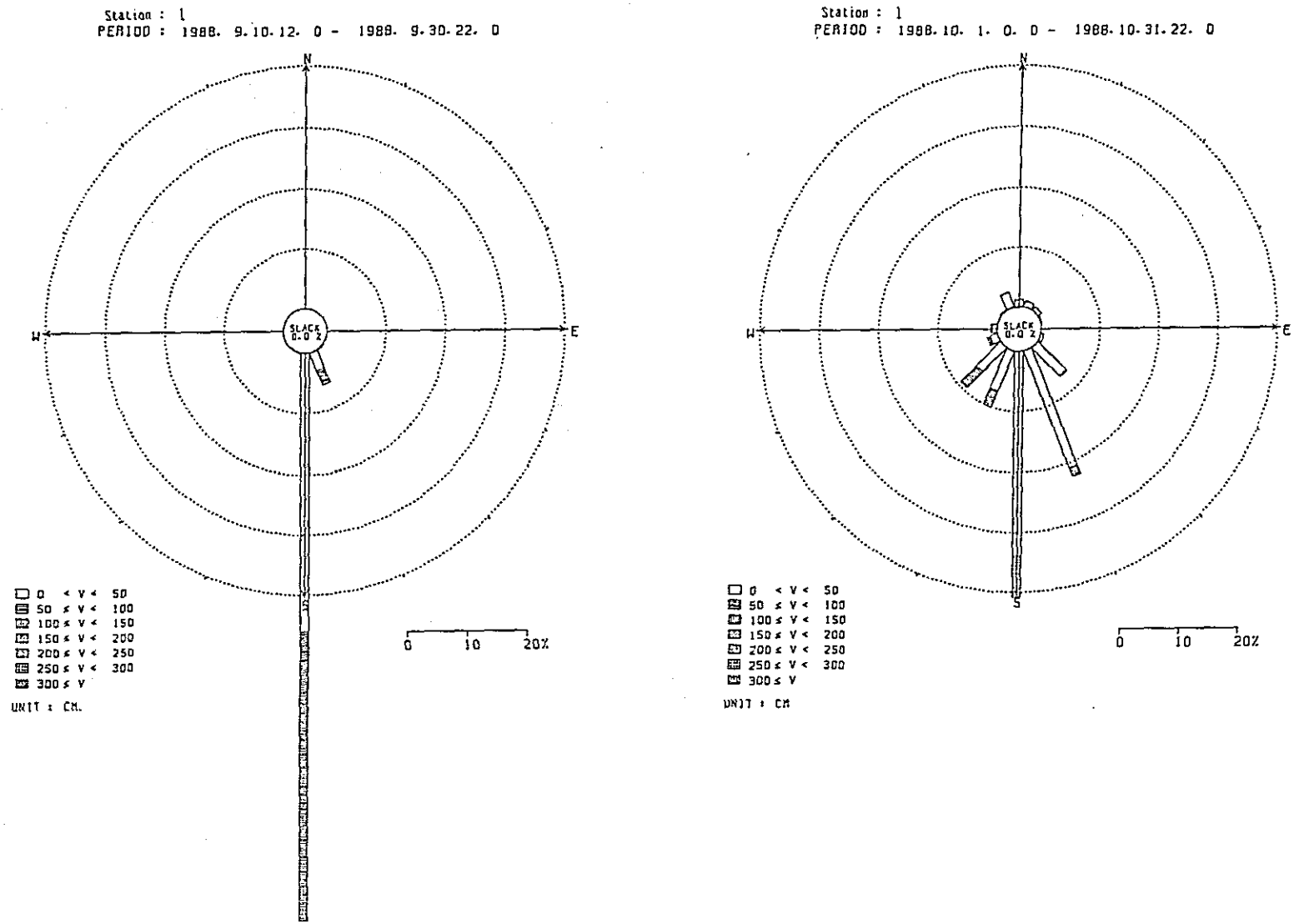
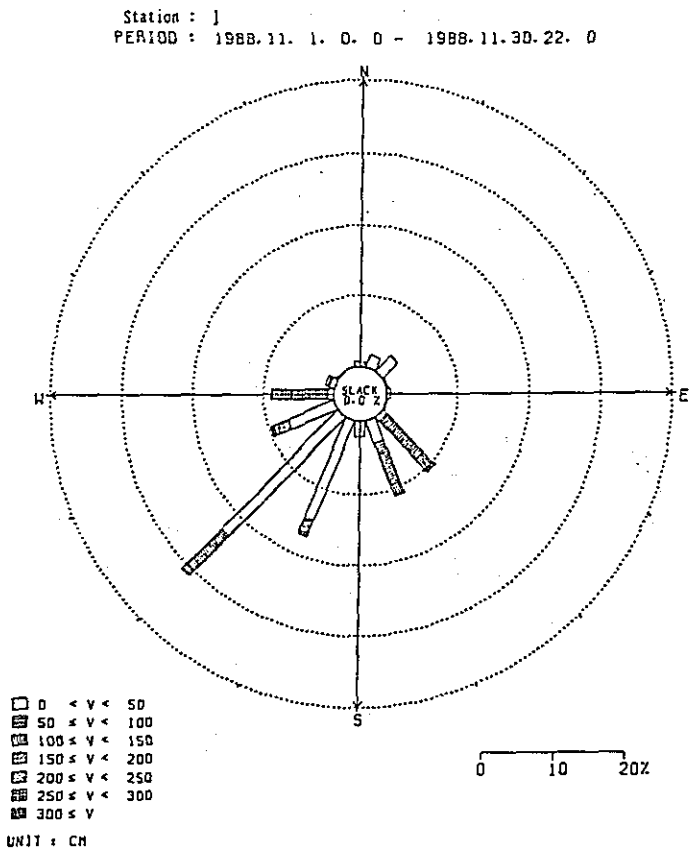


Fig. 1. 3-5 (1) Frequency Distribution of Wave Height by Wave Direction (Every Month)



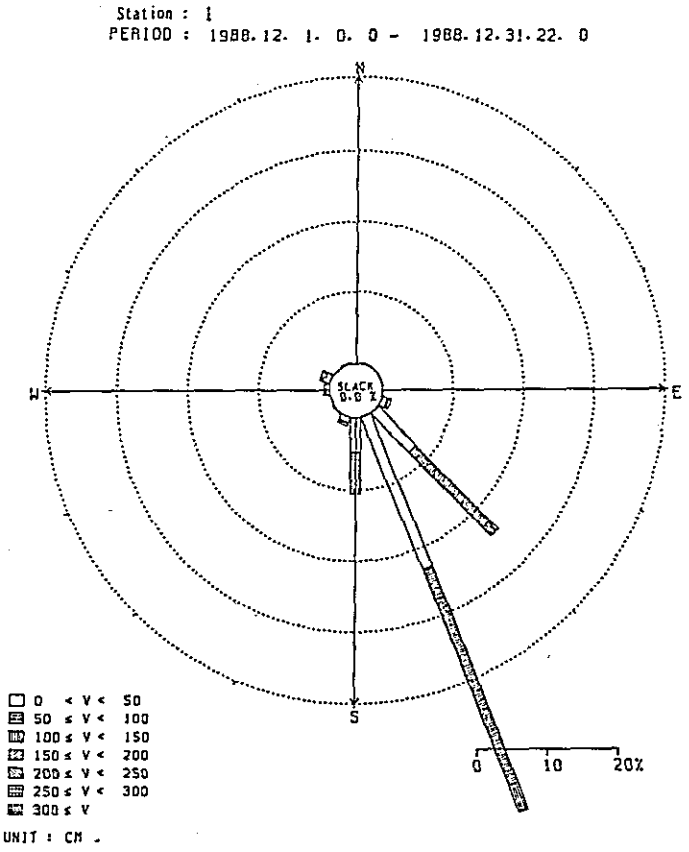


Fig. 1. 3-5 (2) Frequency Distribution of Wave Height by Wave Direction (Every Month)

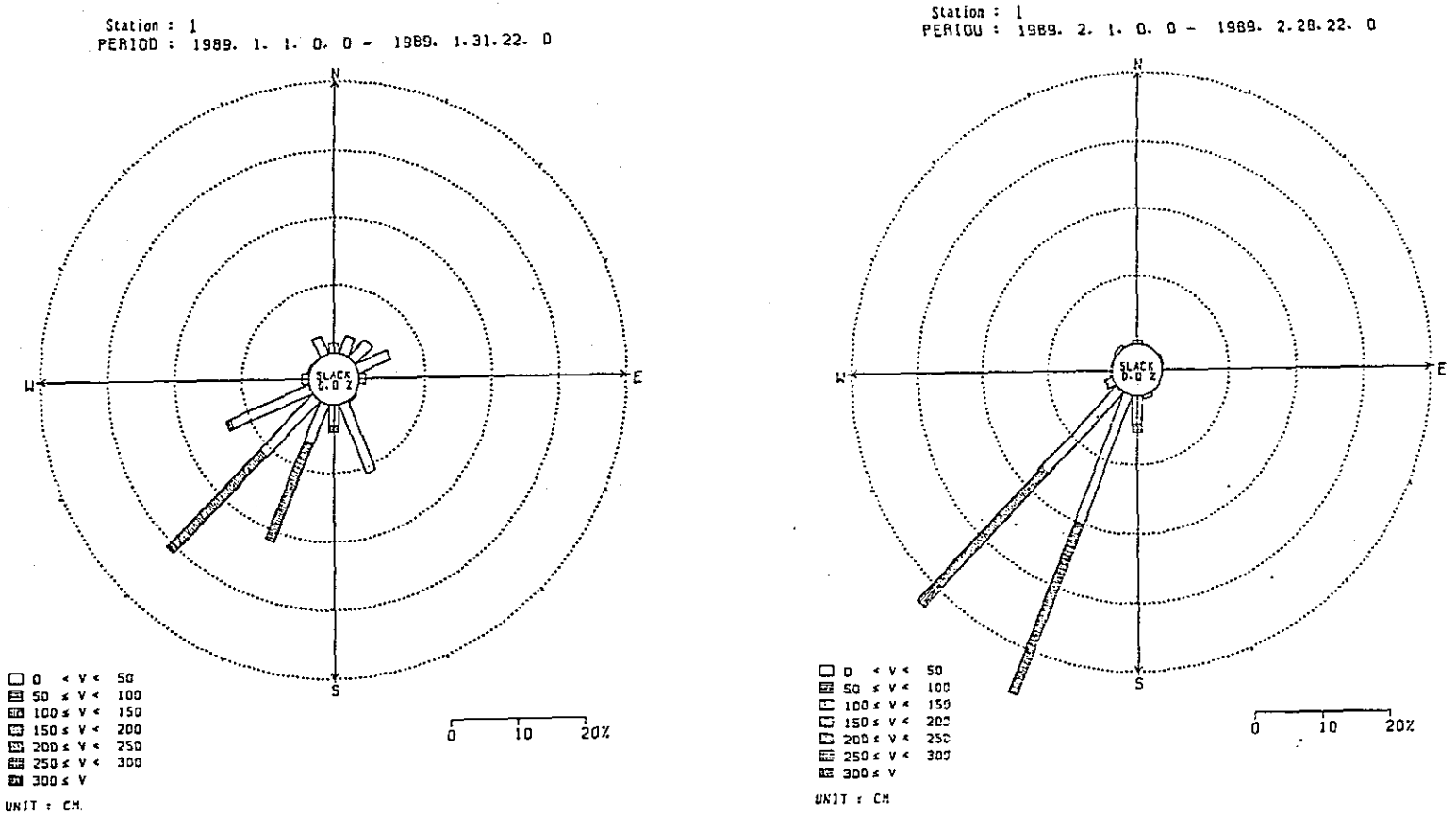


Fig. 1. 3-5 (3) Frequency Distribution of Wave Height by Wave Direction (Every Month)

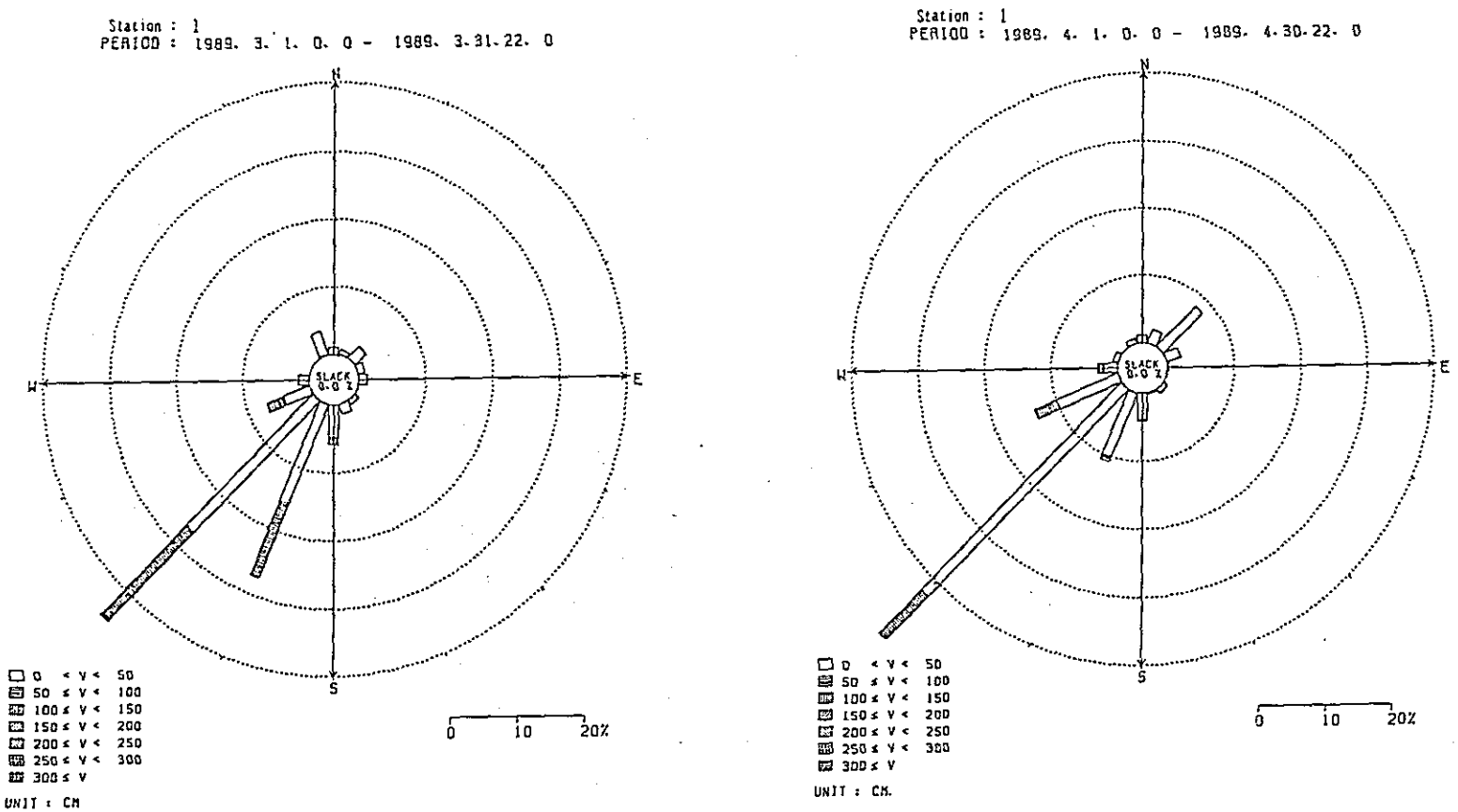
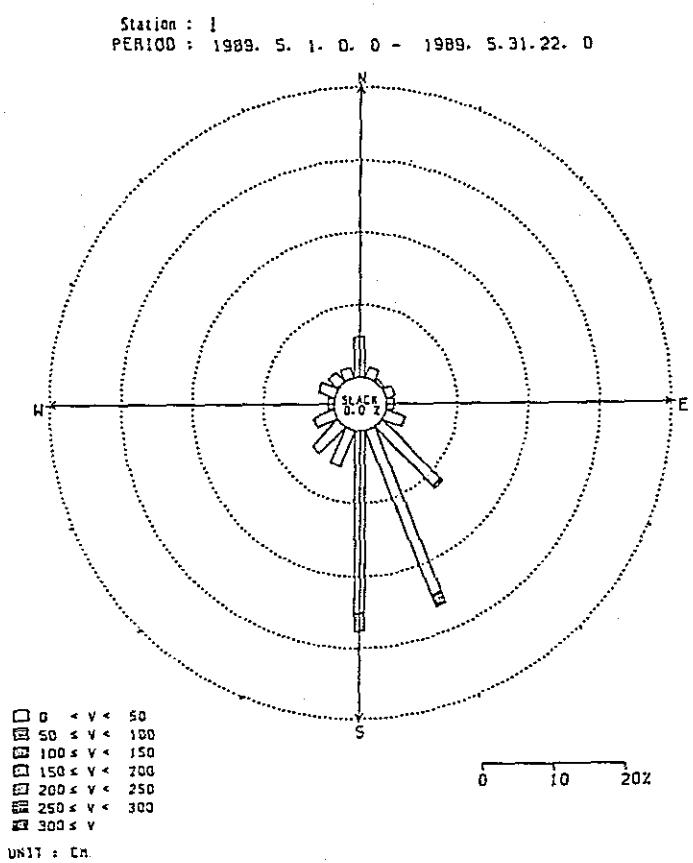


Fig. 1. 3-5 (4) Frequency Distribution of Wave Height by Wave Direction (Every Month)



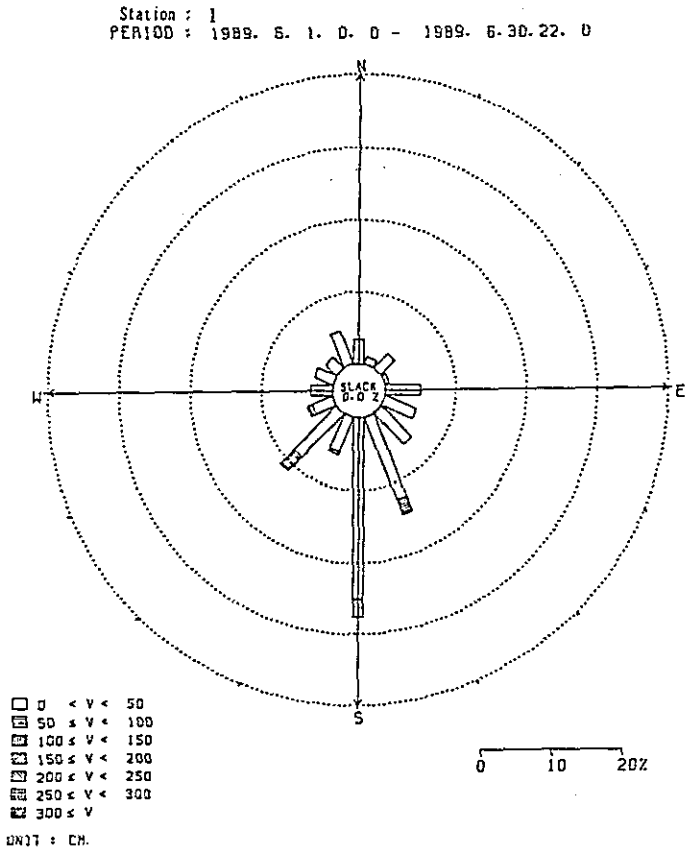


Fig. I. 3-5 (5) Frequency Distribution of Wave Height by Wave Direction (Every Month)

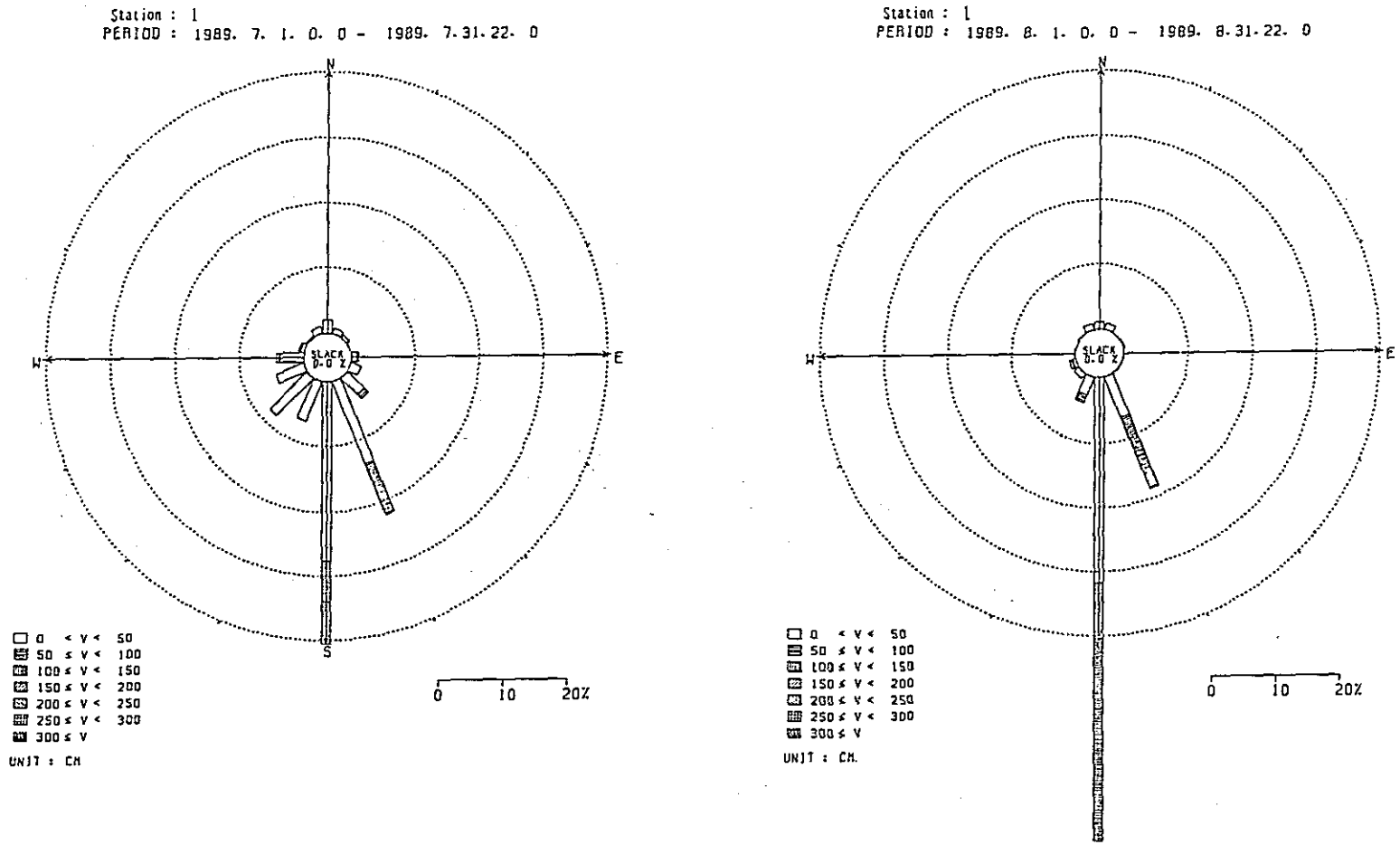


Fig. 1. 3-5 (6) Frequency Distribution of Wave Height by Wave Direction (Every Month)

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

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

Obtained Data	246
Short Data	2(0.8%)

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<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 % .

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

Obtained Data	372
Short Data	3(0.8%)

Duration: 1st Oct. ~ 31th Oct. 1988
St. : 1

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	4 (1.1)	4 (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)						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)

Obtained Data	360
Short Data	2(0.6%)

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

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	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)

Obtained Data	372
Short Data	1(0.3%)

Duration: 1st Dec. ~ 31th Dec. 1988
St. : 1

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm								3 (0.8)									3 (0.8)
25~ 49						3 (0.8)	28 (7.5)	82 (22.1)	17 (4.6)	3 (0.8)	1 (0.3)		2 (0.5)	1 (0.3)		1 (0.3)	138 (37.2)
50~ 74						2 (0.5)	47 (12.7)	87 (23.5)	11 (3.0)	2 (0.5)			1 (0.3)	4 (1.1)			154 (41.5)
75~ 99							8 (2.2)	34 (9.2)	8 (2.2)					1 (0.3)			51 (13.7)
100~ 124							3 (0.8)	10 (2.7)	3 (0.8)								16 (4.3)
125~ 149							4 (1.1)	5 (1.3)									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 (0.0)	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)	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)

Obtained Data	372
Short Data	98(26.3%)

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

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	4 (1.5)	8 (2.9)	9 (3.3)	12 (4.4)	2 (0.7)			9 (3.3)	6 (2.2)	6 (2.2)	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)		1 (0.4)	21 (7.7)	3 (1.1)	11 (4.0)	12 (4.4)	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 (6.6)						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)	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. 3-2 (6) Frequency Distribution of Wave Height by Wave Direction (Every Month)

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

Obtained Data	336
Short Data	12(3.6%)

Dir. / Height	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)							9 (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)	324 (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)

Obtained Data	372
Short Data	0(0.0%)

Duration: 1st Mar. ~ 31th Mar. 1989
St. : 1

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<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)	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~ 49	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~ 74									1 (0.3)	3 (0.8)	31 (8.6)	8 (2.2)	2 (0.6)				45 (12.5)
75~ 99											1 (0.3)	4 (1.1)	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	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)

Obtained Data	372
Short Data	1(0.3%)

Duration: 1st May ~ 31th May 1989
St. : 1

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<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)	180 (48.5)
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 (0.8)	171 (46.1)
50~ 74							2 (0.5)	7 (1.9)	10 (2.7)			1 (0.3)					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	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 (100.0)

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)

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

Obtained Data	360
Short Data	3 (0.8%)

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	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 (3.4)	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 1. 3-2 (11) Frequency Distribution of Wave Height by Wave Direction (Every Month)

Obtained Data	372
Short Data	27(7.3%)

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

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	2 (0.6)	3 (0.9)	2 (0.6)		2 (0.6)	1 (0.3)	5 (1.4)	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)

Obtained Data	372
Short Data	1(0.3%)

Duration: 1st Aug. ~ 31th Aug. 1989
St. : 1

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	3 (0.8)	2 (0.5)						4 (1.1)	20 (5.4)	1 (0.3)	3 (0.8)						33 (8.9)
25~ 49	1 (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)	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 % .

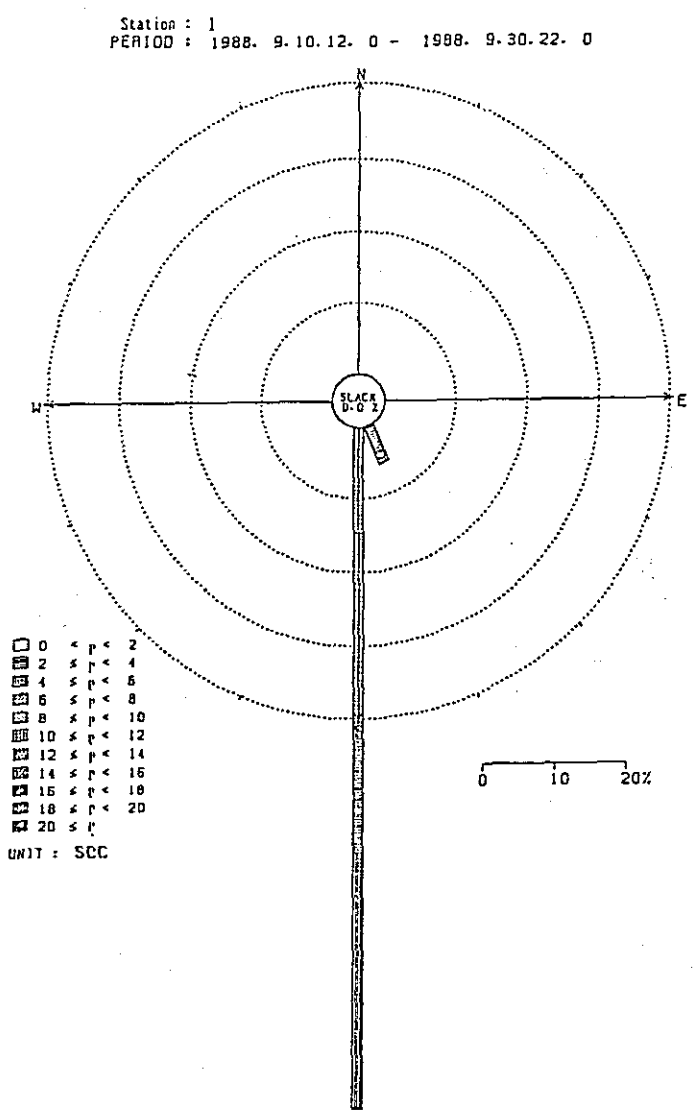
Table 1. 3-2 (13) Frequency Distribution of Wave Height by Wave Direction (Every Month)

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

Obtained Data	360
Short Data	248(68.9%)

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm																	0 (0.0)
25~ 49								3 (2.7)	17 (15.2)								20 (17.9)
50~ 74								12 (10.7)	57 (50.9)								69 (61.6)
75~ 99								6 (5.4)	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 (18.8)	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 % .



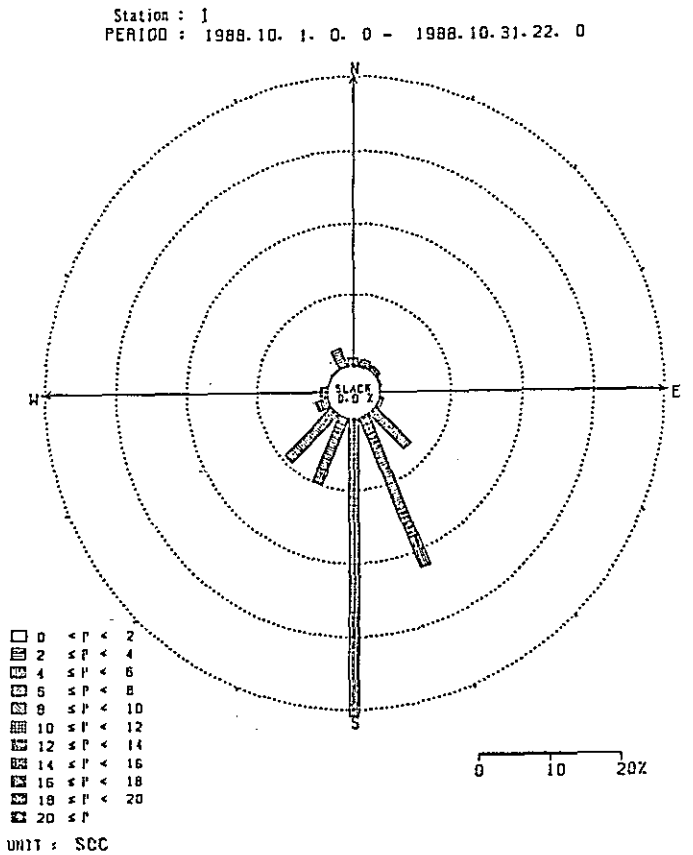


Fig. 1. 3-6 (1) Frequency Distribution of Wave Period by Wave Direction (Every Month)

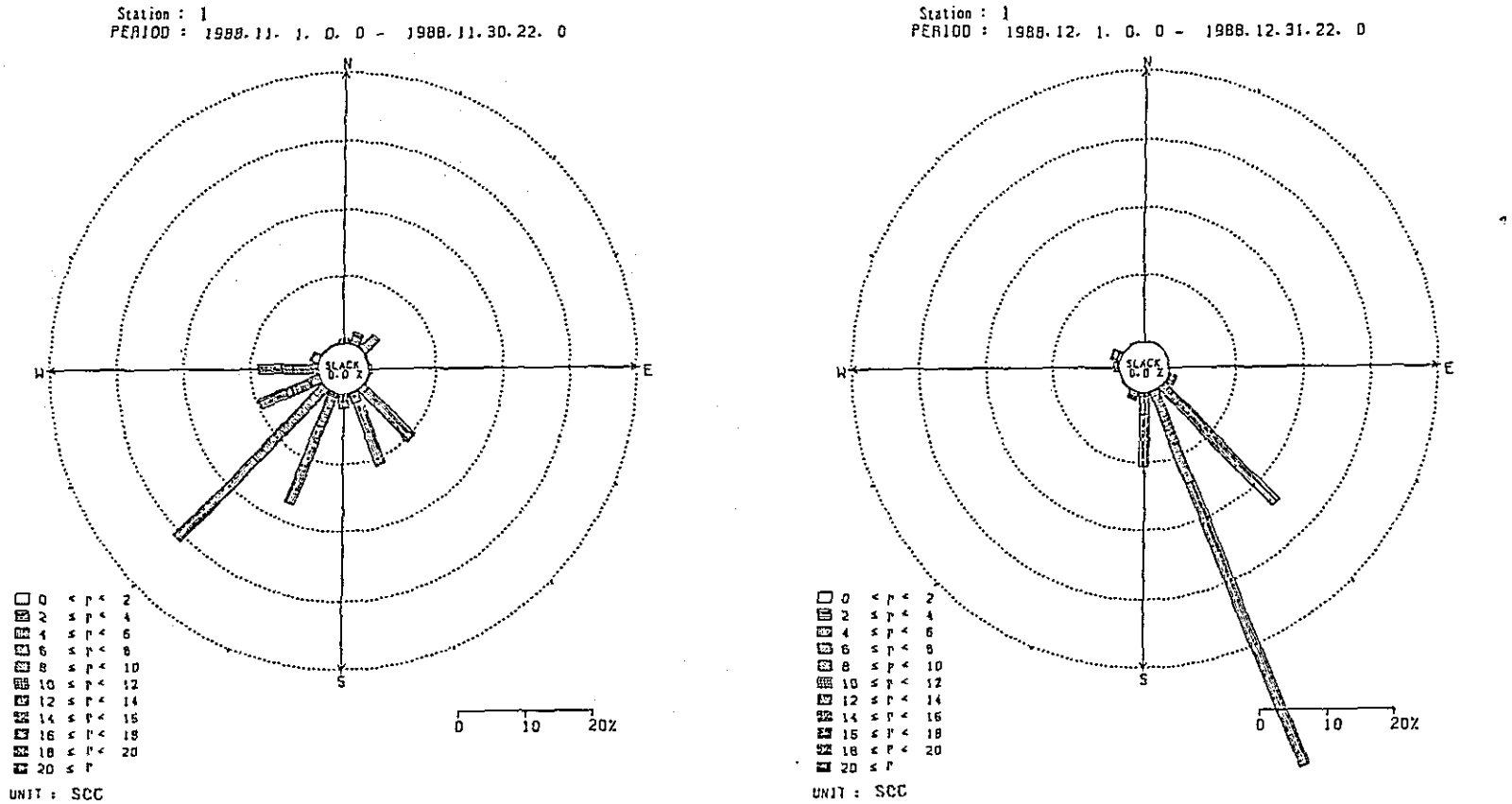


Fig. I. 3-6 (2) Frequency Distribution of Wave Period by Wave Direction (Every Month)

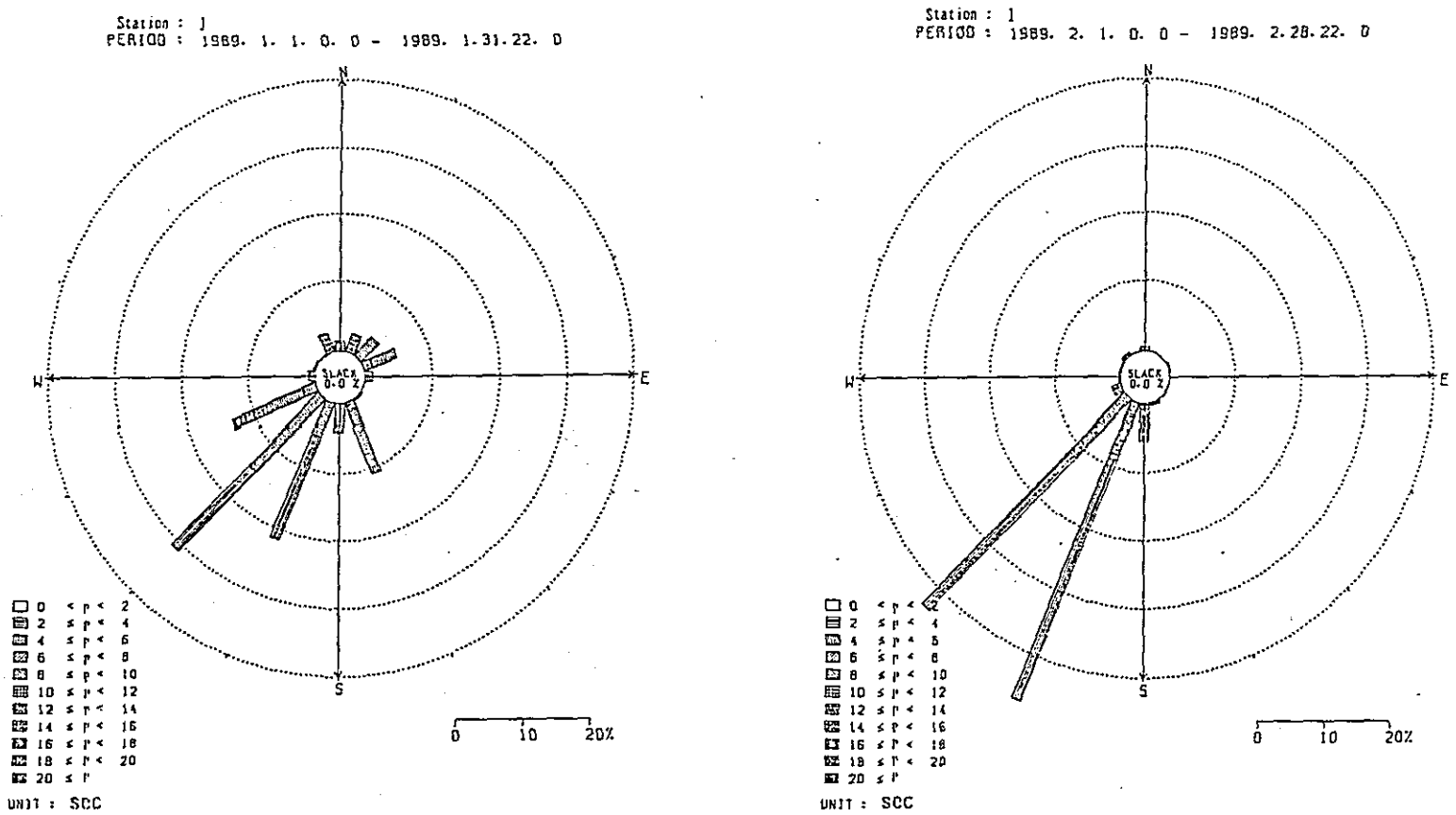


Fig. 1. 3-6 (3) Frequency Distribution of Wave Period by Wave Direction (Every Month)

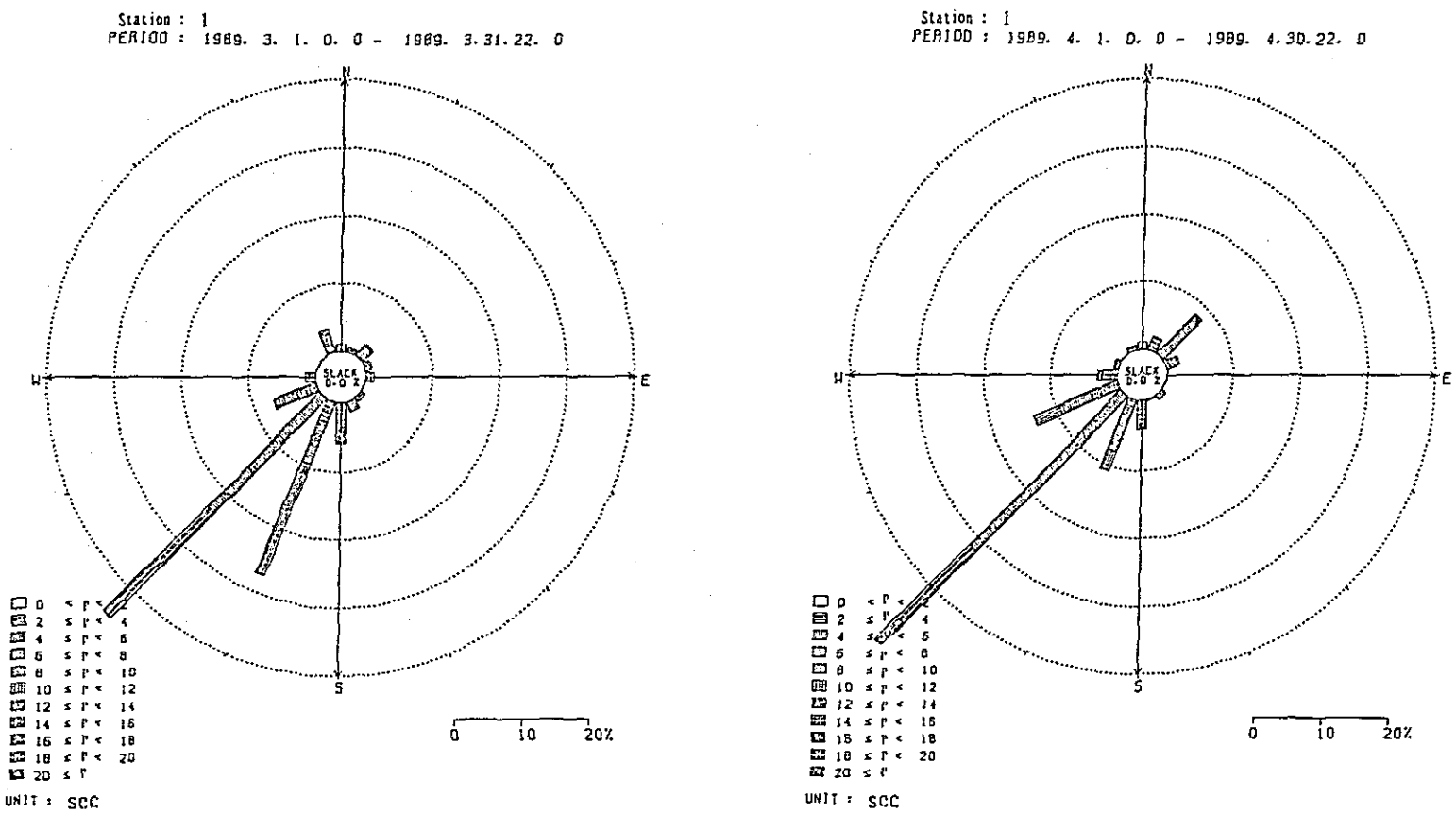


Fig. 1. 3-6 (4) Frequency Distribution of Wave Period by Wave Direction (Every Month)

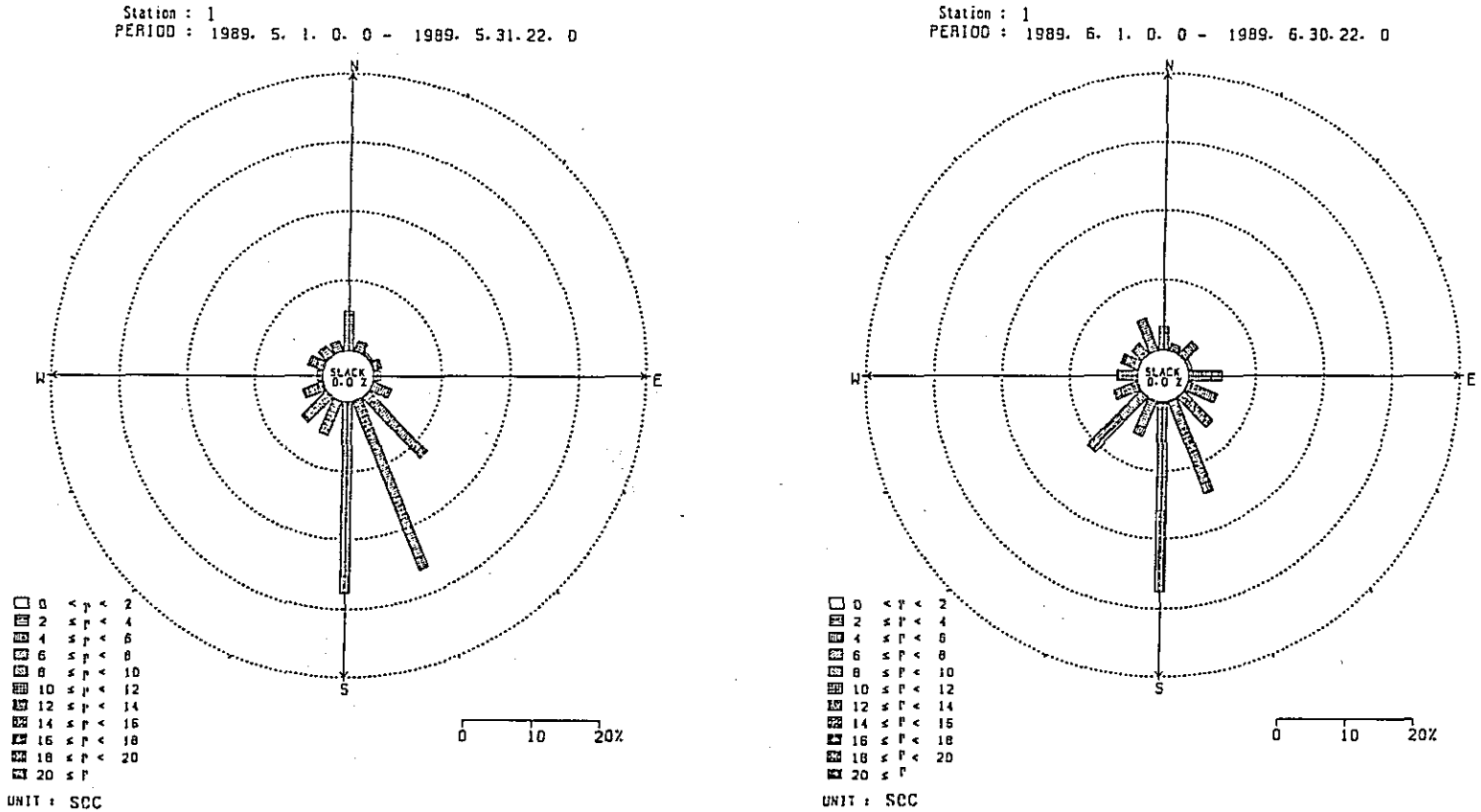


Fig. 1. 3-6 (5) Frequency Distribution of Wave Period by Wave Direction (Every Month)

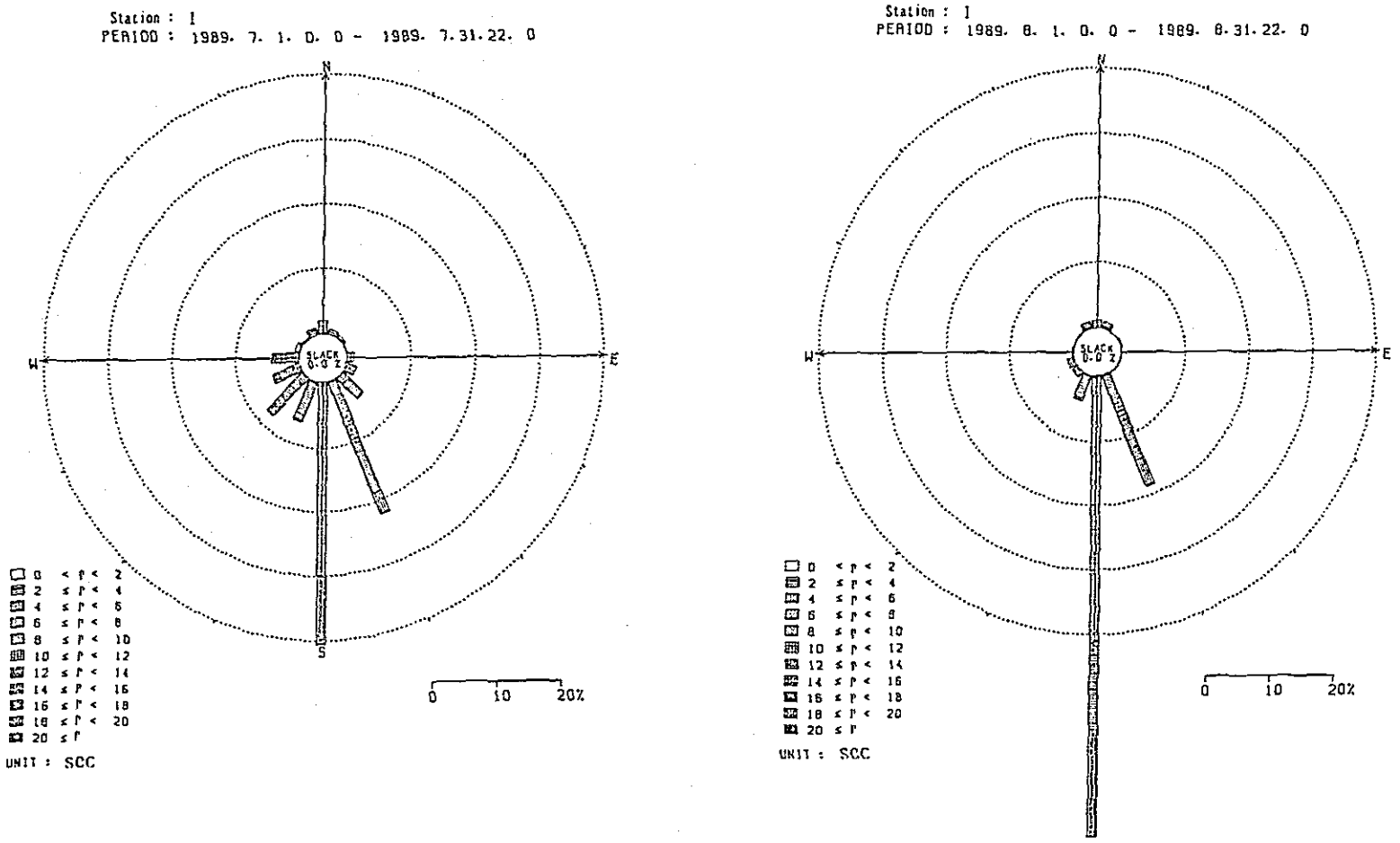


Fig. 1. 3-6 (6) Frequency Distribution of Wave Period by Wave Direction (Every Month)

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

Obtained Data	372
Short Data	3(0.8%)

Duration: 1st Oct. ~ 31th Oct. 1988
St. : 1

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

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

Obtained Data	360
Short Data	2(0.6%)

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	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)

Obtained Data	372
Short Data	1(0.3%)

Duration: 1st Dec. ~ 31th Dec. 1988
St. : 1

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								1 (0.3)	1 (0.3)							1 (0.3)	3 (0.8)
3.0~ 3.9						1 (0.3)	13 (3.5)	52 (14.0)	11 (3.0)	3 (0.8)			1 (0.3)	2 (0.5)			83 (22.4)
4.0~ 4.9						4 (1.1)	63 (17.0)	149 (40.2)	25 (6.7)	2 (0.5)	1 (0.3)		2 (0.5)	4 (1.1)			250 (67.4)
5.0~ 5.9							14 (3.8)	19 (5.1)	2 (0.5)								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)
20.0sec~																	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 (59.8)	39 (10.5)	5 (1.3)	1 (0.3)	0 (0.0)	3 (0.8)	6 (1.6)	0 (0.0)	1 (0.3)	371 (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. ~ 31th 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	4 (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)

Obtained Data	336
Short Data	12(3.6%)

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

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	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 (23.8)
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)

Duration: 1st Mar. ~ 31th Mar. 1989
St. : 1

Obtained Data	372
Short Data	0(0.0%)

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 (1.1)	3 (0.8)	9 (2.4)	4 (1.1)	5 (1.3)		3 (0.8)	4 (1.1)	6 (1.6)	6 (1.6)	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 (45.2)	26 (7.0)	6 (1.6)	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)

Obtained Data	360
Short Data	0(0.0%)

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

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 (1.1)	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							2 (0.6)		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)	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. 3-3 (9) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Duration: 1st May ~ 31th May 1989
St. : 1

Obtained Data	372
Short Data	1(0.3%)

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	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)	6 (1.6)	154 (41.5)
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)
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	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 (100.0)

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
St. : 1

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	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 (11) Frequency Distribution of Wave Period by Wave Direction (Every Month)

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

Obtained Data	372
Short Data	27 (7.3%)

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	7 (2.0)	3 (0.9)	2 (0.6)		4 (1.2)	4 (1.2)	3 (0.9)	5 (1.4)	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)			222 (64.3)
4.0~ 4.9							1 (0.3)	13 (3.8)	34 (9.9)	4 (1.2)	11 (3.2)	4 (1.2)	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)	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. 3-3 (12) Frequency Distribution of Wave Period by Wave Direction (Every Month)

Duration: 1st Aug. ~ 31th Aug. 1989
St. : 1

Obtained Data	372
Short Data	1(0.3%)

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 (1.1)	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)	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 1. 3-3 (13) Frequency Distribution of Wave Period by Wave Direction (Every Month)

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

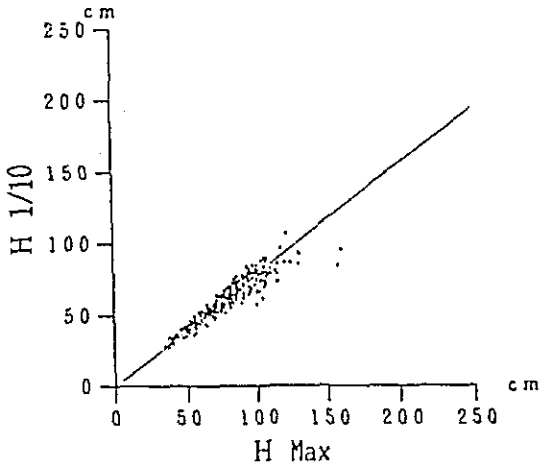
Obtained Data	360
Short Data	248(68.9%)

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								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 (18.8)	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)

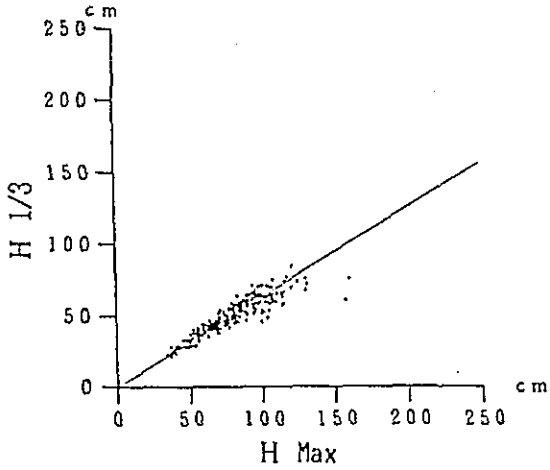
Note : Upper layer shows Frequencies and Lower layer shows Frequencies in % .

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

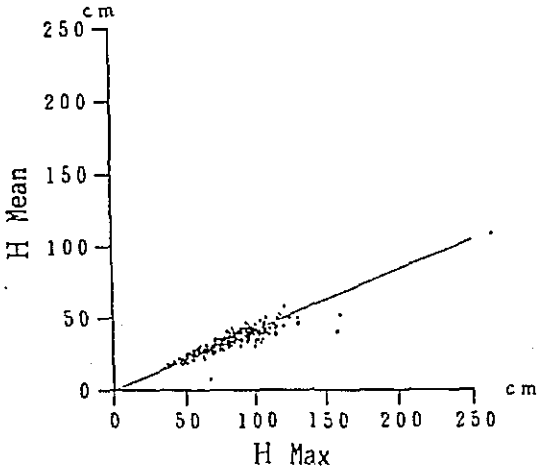
r= 0.928 n= 246
Y= 0.775X



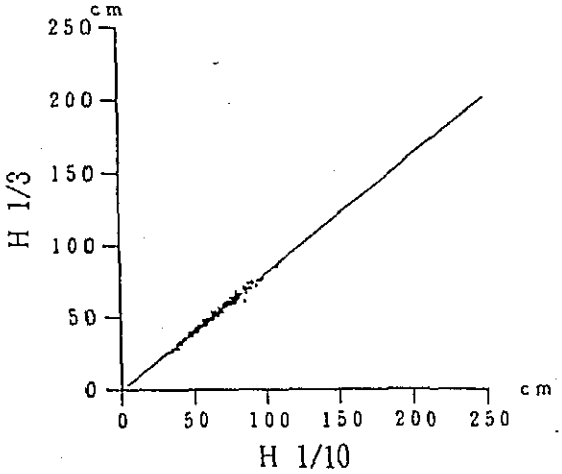
r= 0.907 n= 246
Y= 0.624X



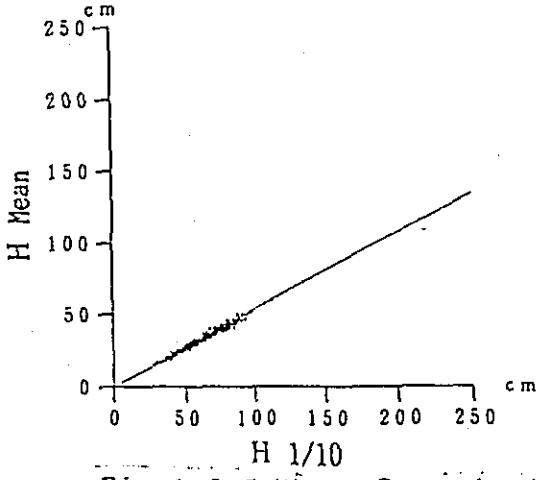
r= 0.900 n= 246
Y= 0.416X



r= 0.993 n= 246
Y= 0.806X



r= 0.985 n= 246
Y= 0.537X



r= 0.995 n= 246
Y= 0.666X

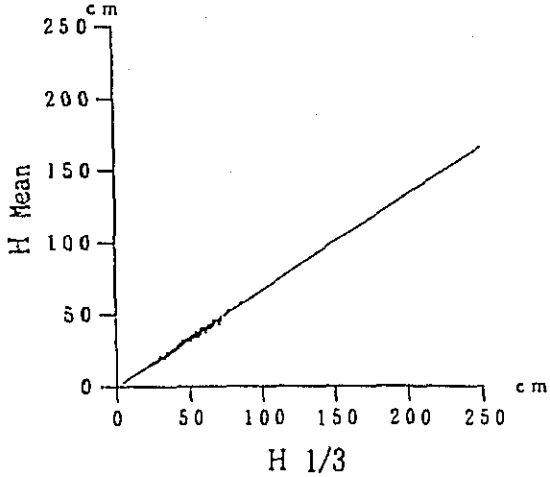
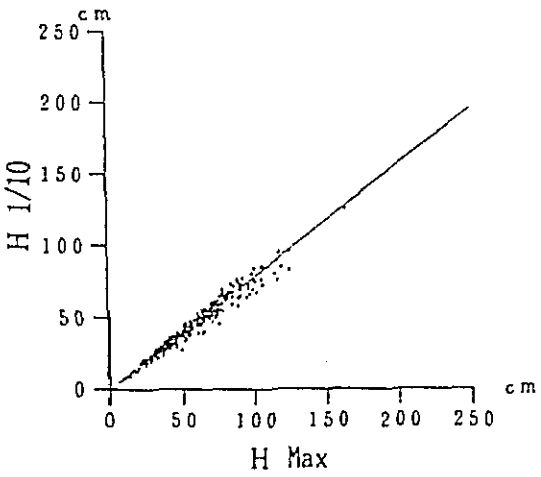


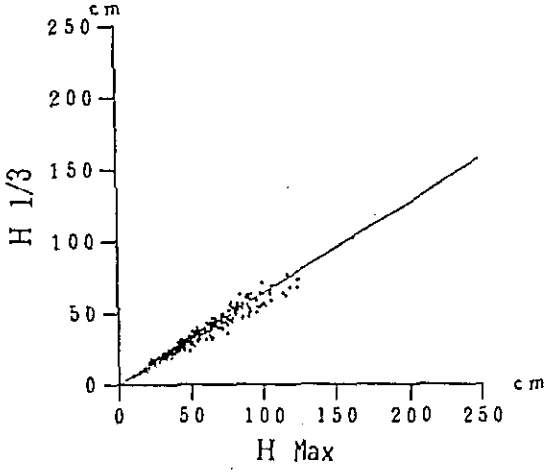
Fig. 1. 3-7 (1) Correlations among Various Wave Heights (Every Month)

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

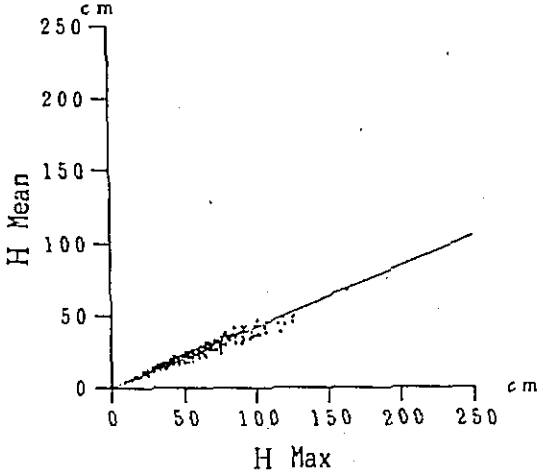
r= 0.981 n= 371
Y= 0.782X



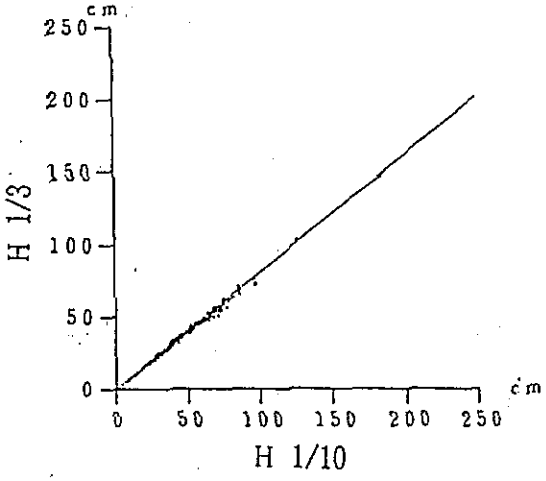
r= 0.975 n= 371
Y= 0.631X



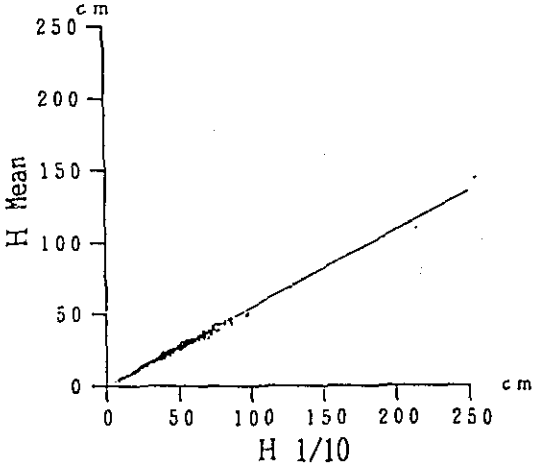
r= 0.971 n= 371
Y= 0.423X



r= 0.997 n= 371
Y= 0.807X



r= 0.993 n= 371
Y= 0.541X



r= 0.997 n= 371
Y= 0.670X

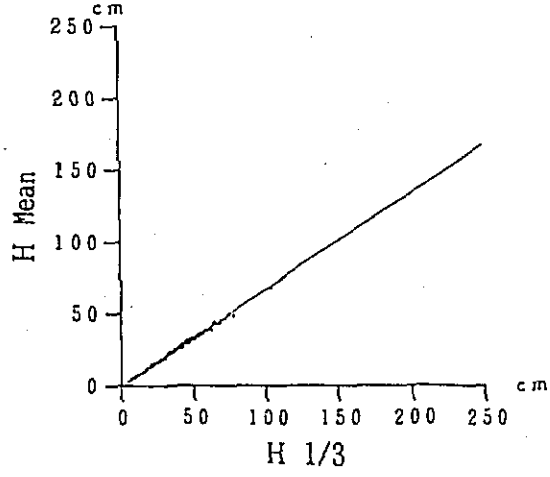


Fig. 1. 3-7 (2) Correlations among Various Wave Heights (Every Month)

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

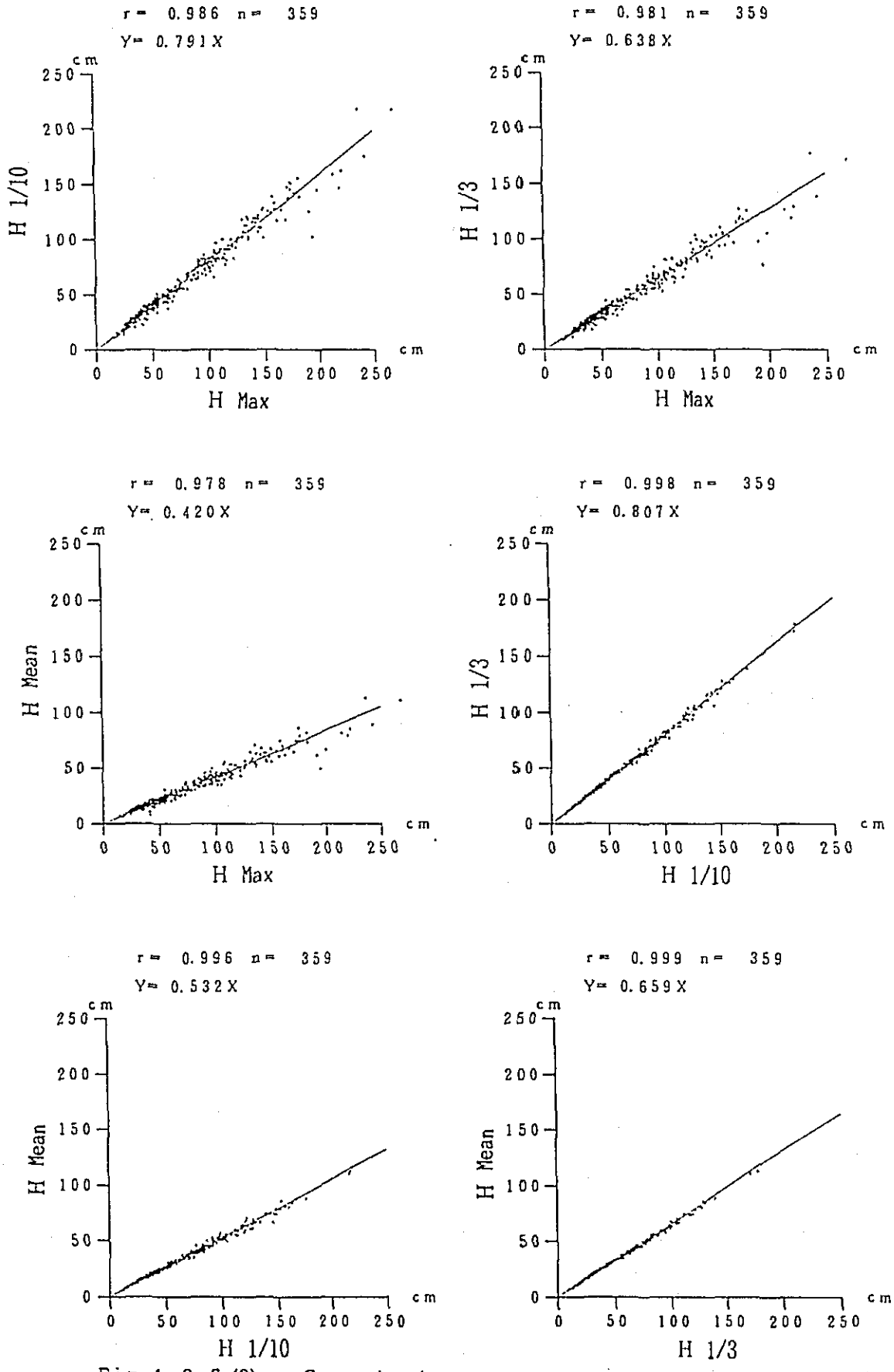


Fig. 1. 3-7 (3) Correlations among Various Wave Heights (Every Month)

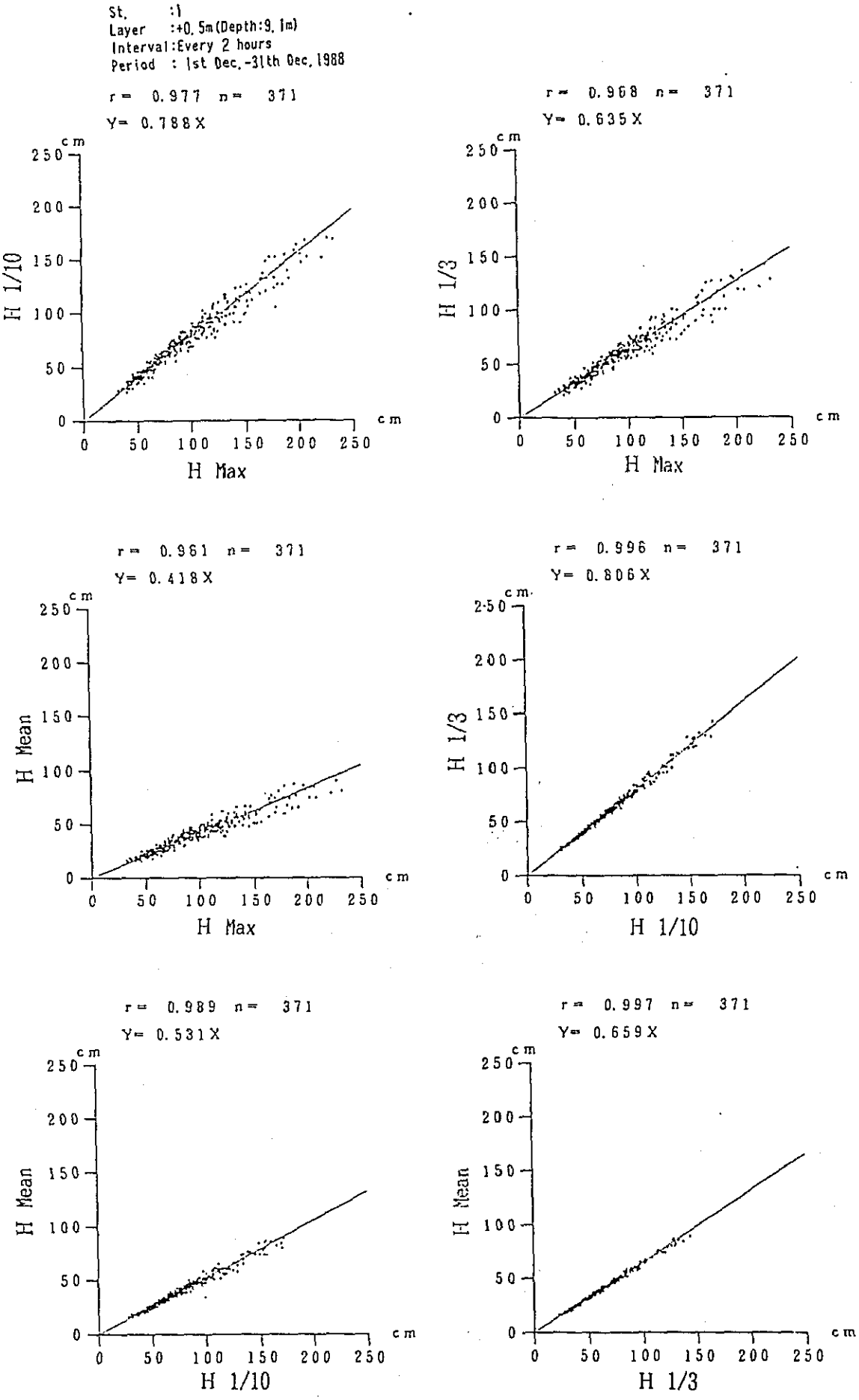


Fig. 1. 3-7 (4) Correlations among Various Wave Heights (Every Month)

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

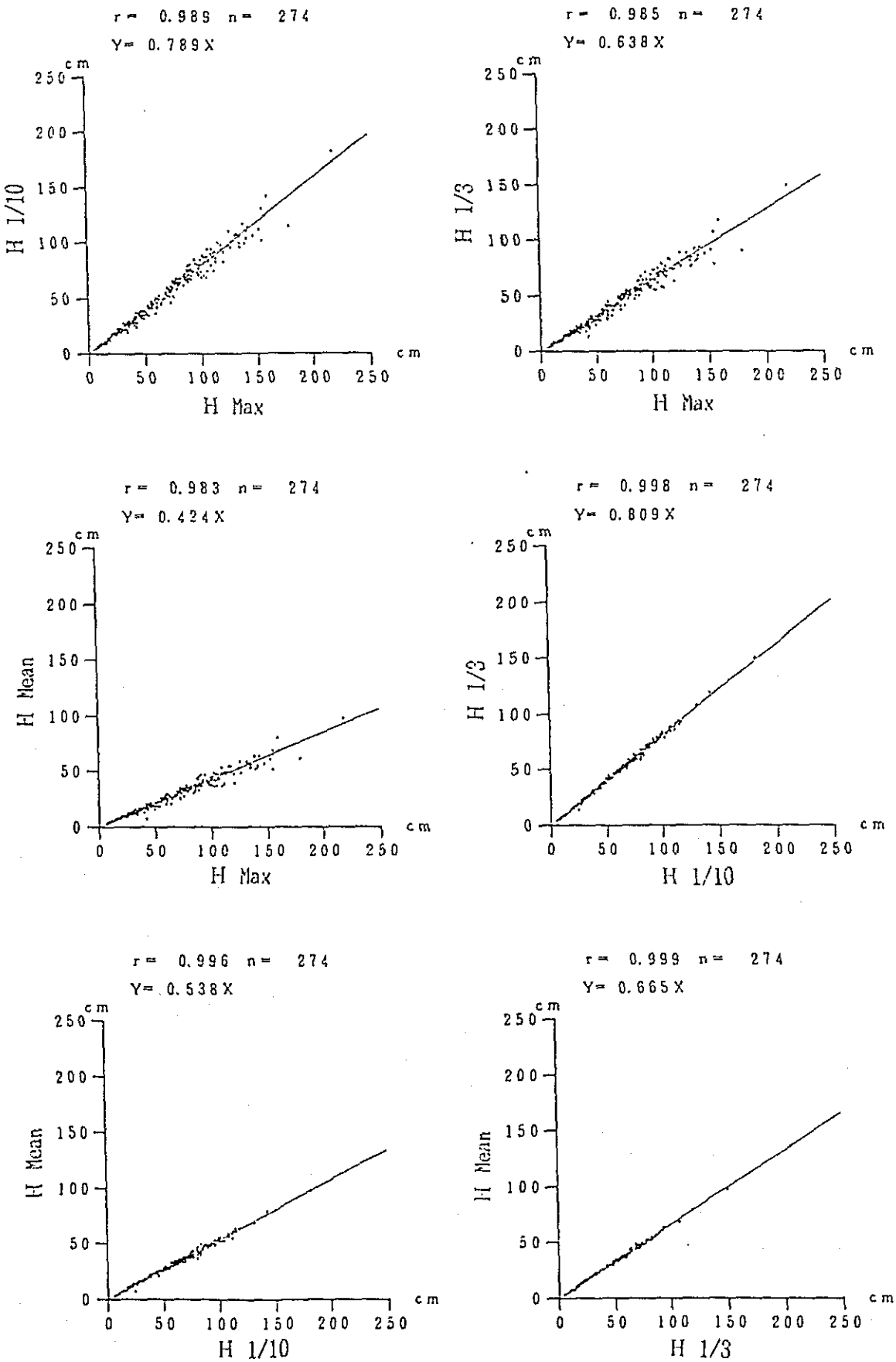


Fig. 1. 3-7 (5) Correlations among Various Wave Heights (Every Month)

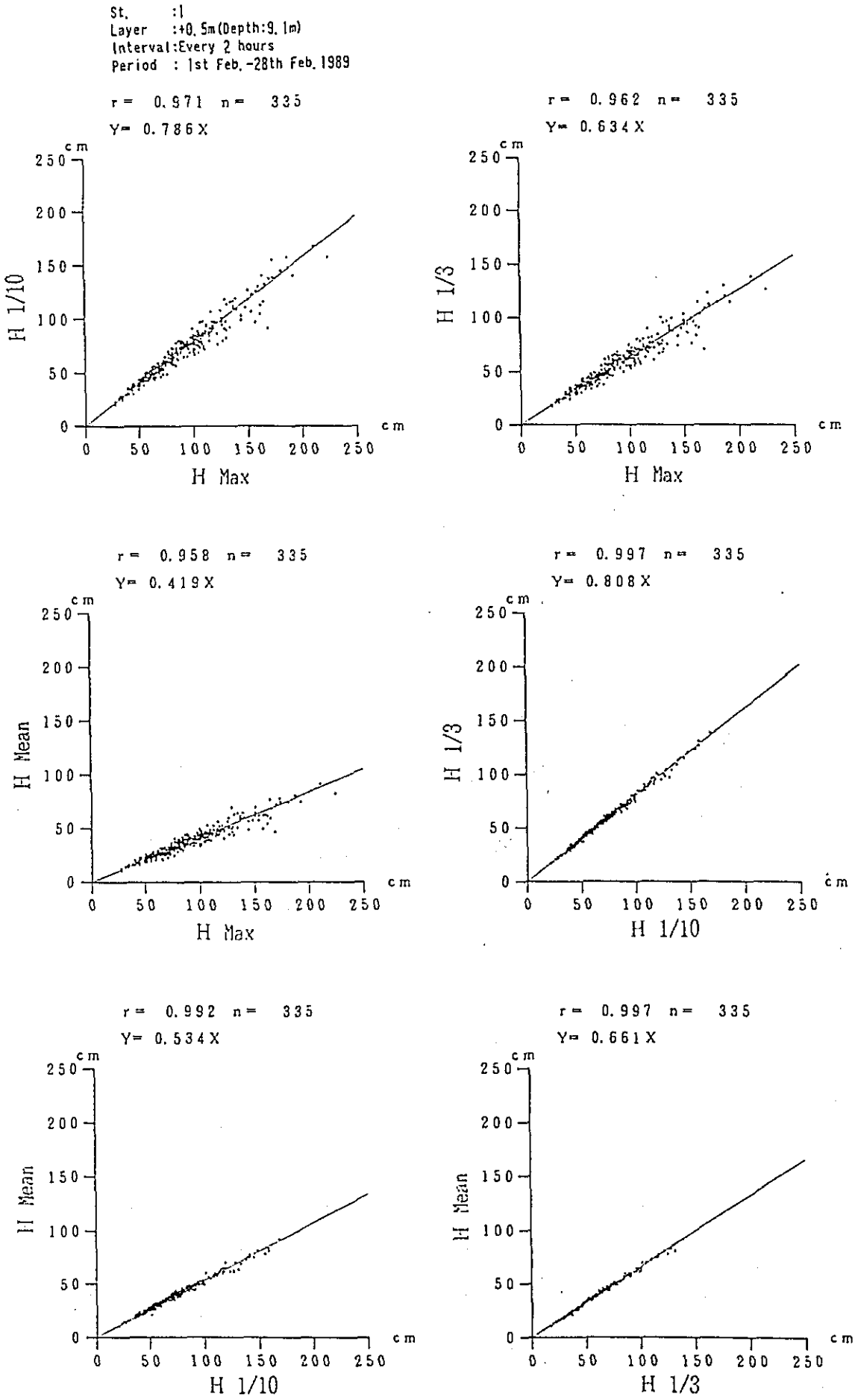
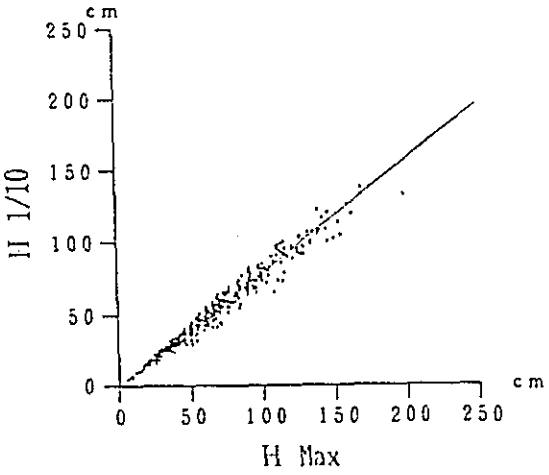


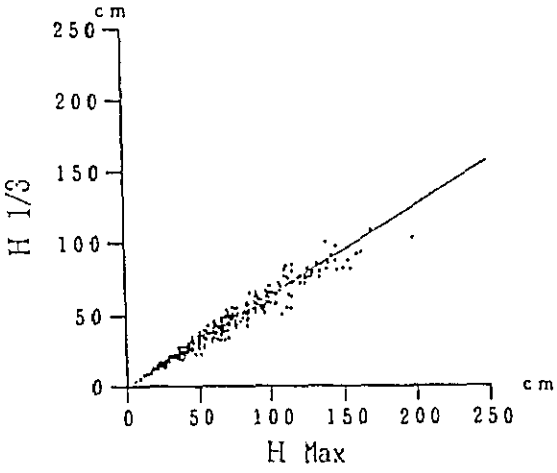
Fig. 1. 3-7 (6) Correlations among Various Wave Heights (Every Month)

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

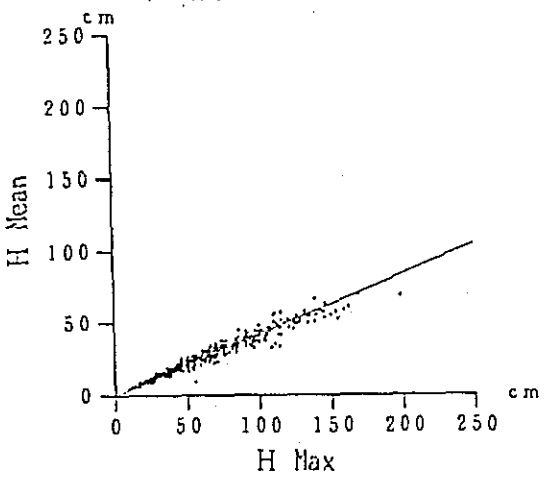
r= 0.984 n= 372
Y= 0.783X



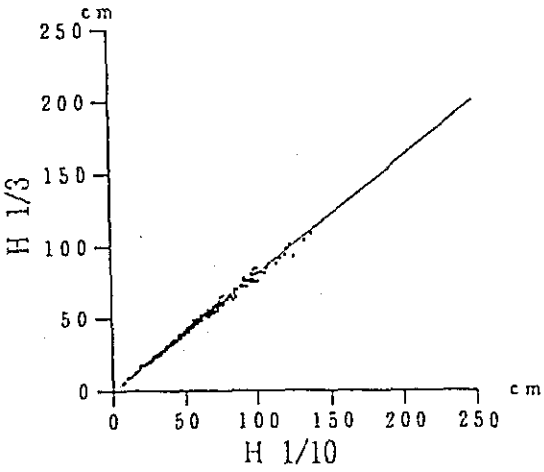
r= 0.978 n= 372
Y= 0.629X



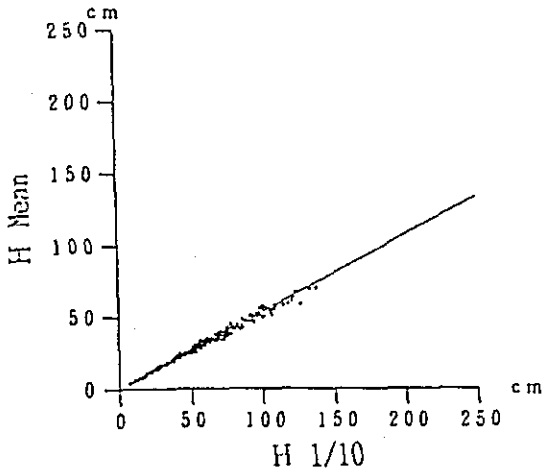
r= 0.972 n= 372
Y= 0.417X



r= 0.997 n= 372
Y= 0.803X



r= 0.993 n= 372
Y= 0.534X



r= 0.998 n= 372
Y= 0.665X

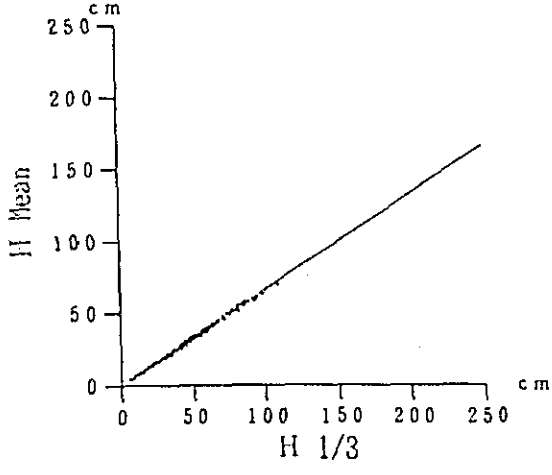


Fig. 1. 3-7 (7) Correlations among Various Wave Heights (Every Month)

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

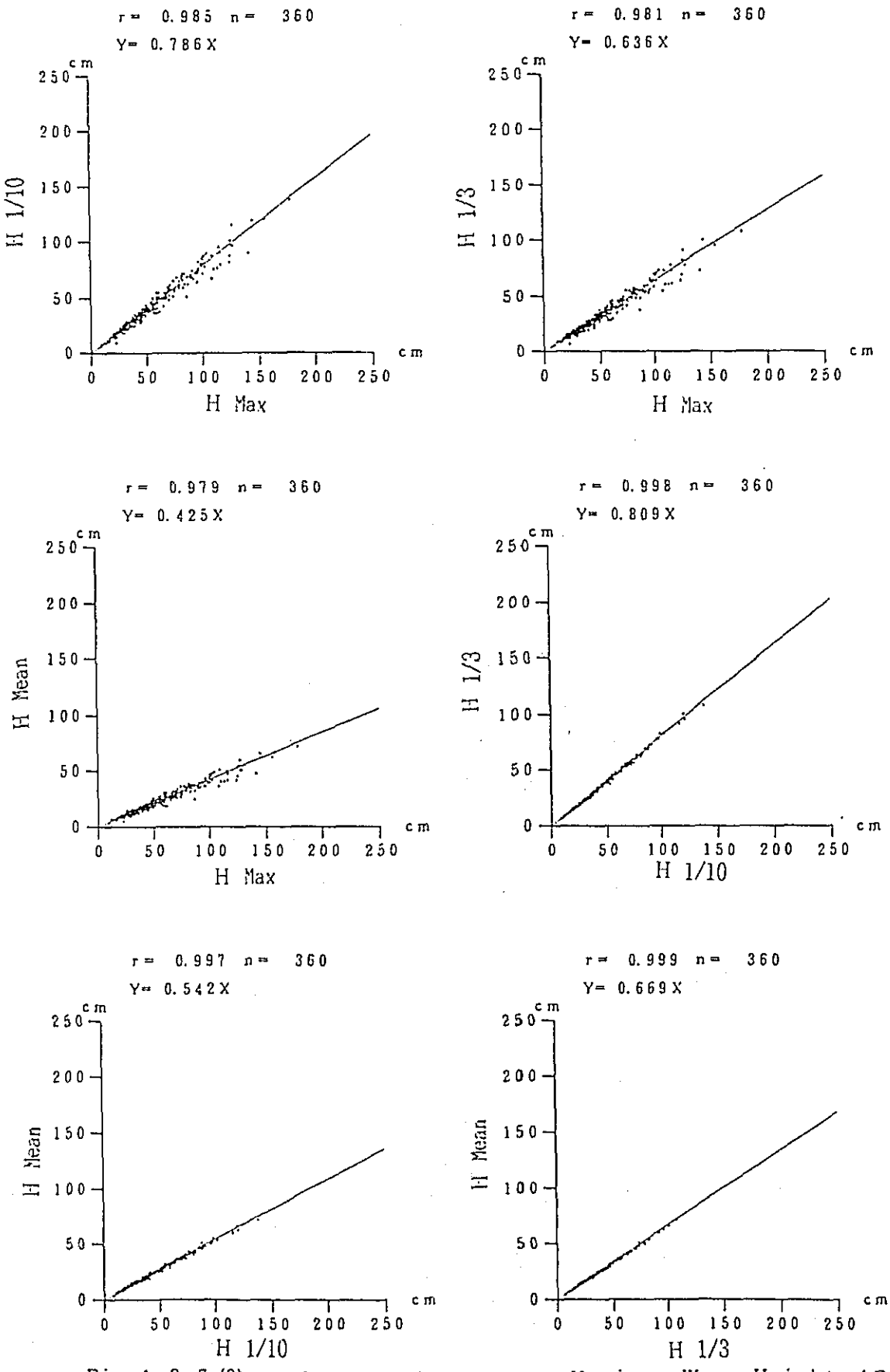


Fig. 1. 3-7 (8) Correlations among Various Wave Heights (Every Month)

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

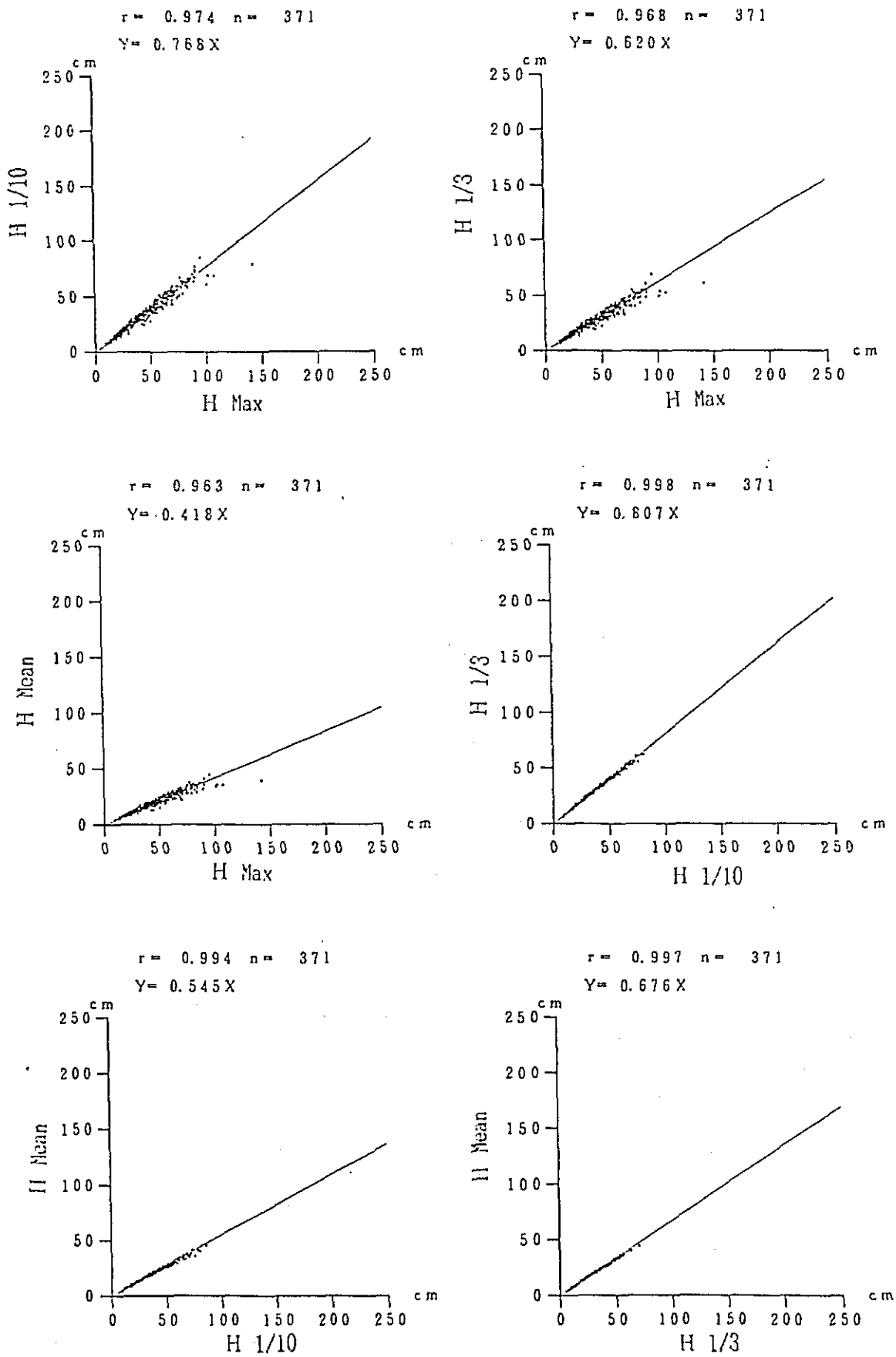
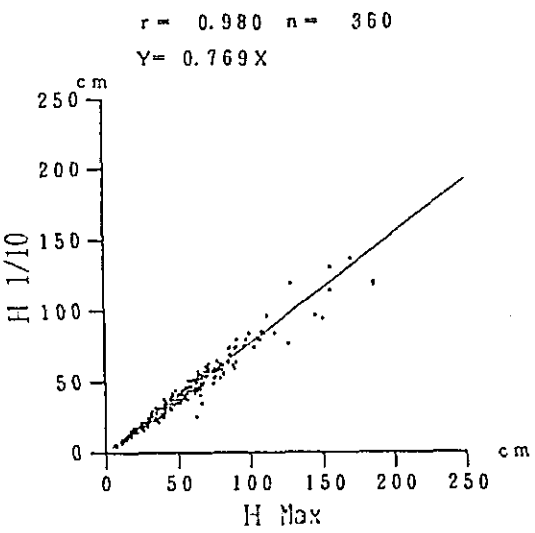
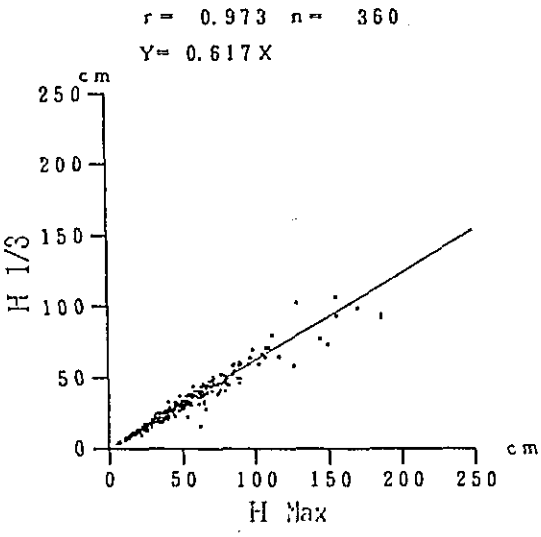
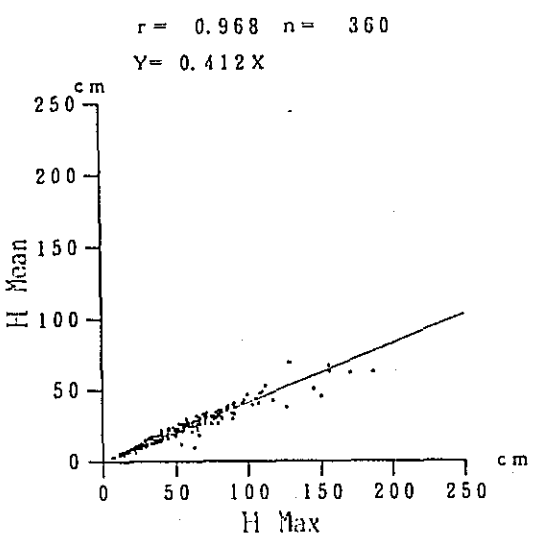


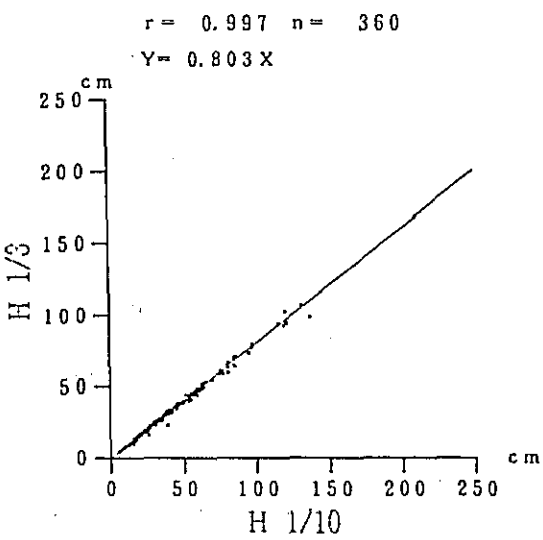
Fig. 1. 3-7 (9) Correlations among Various Wave Heights (Every Month)

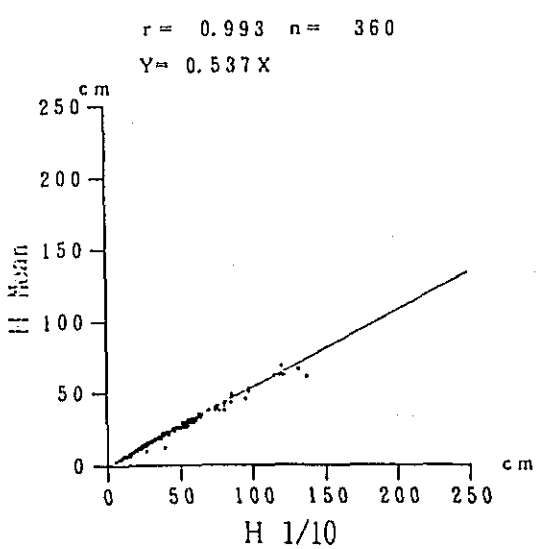
St. :1
Layer :+0.5m(Depth:9.1m)
Interval:Every 2 hours
Period : 1st Jun.-30th Jun. 1989











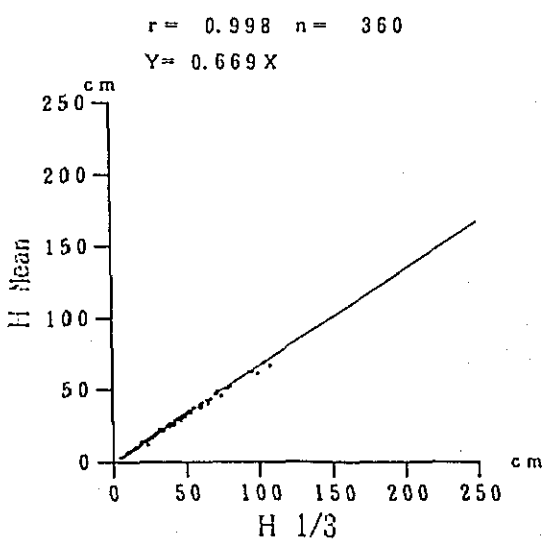
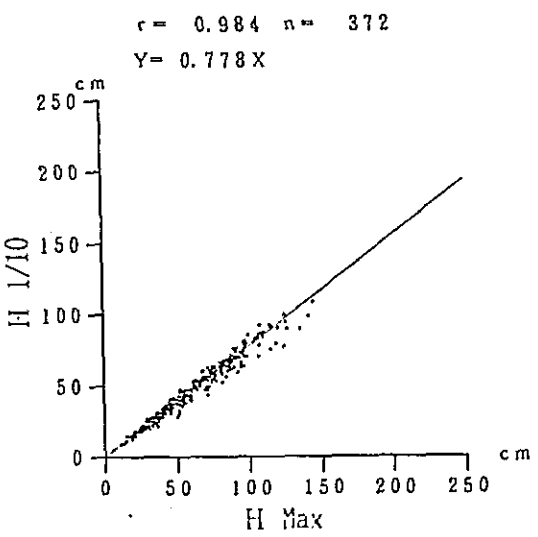
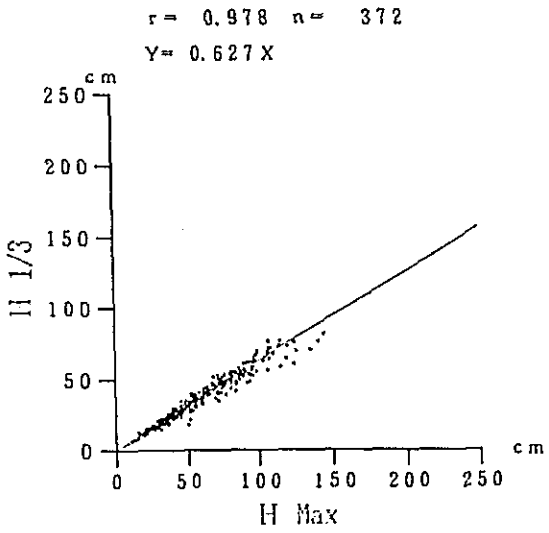
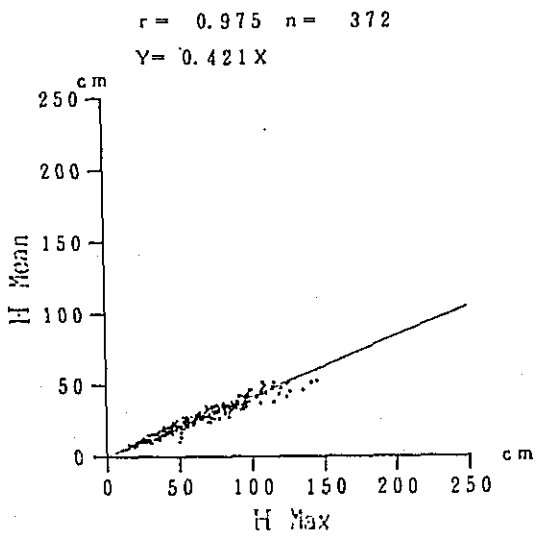


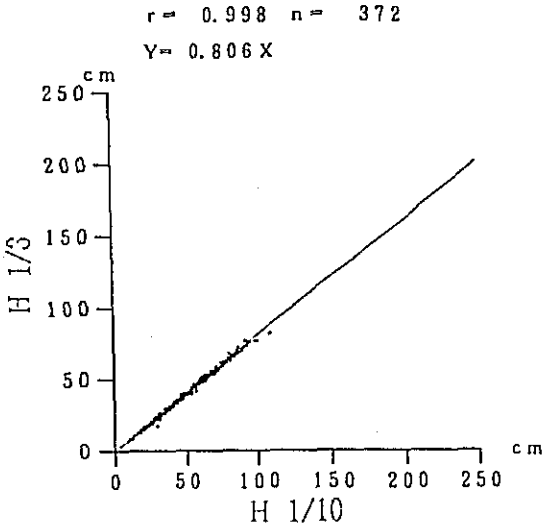
Fig. 1. 3-7 (10) Correlations among Various Wave Heights (Every Month)

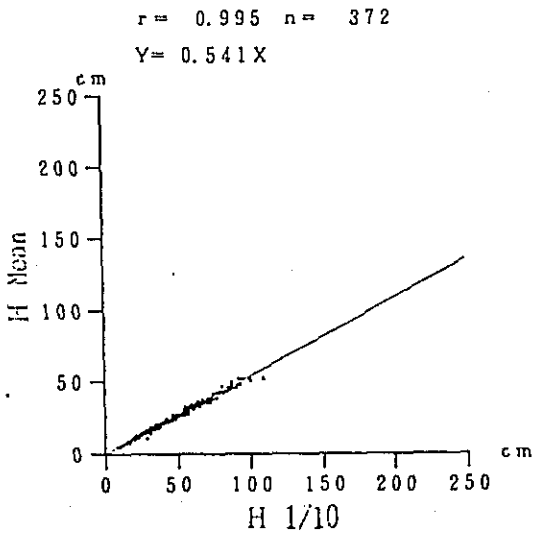
St. :1
Layer :+0.5m(Depth:9.1m)
Interval:Every 2 hours
Period : 1st Jul.-31th Jul. 1989











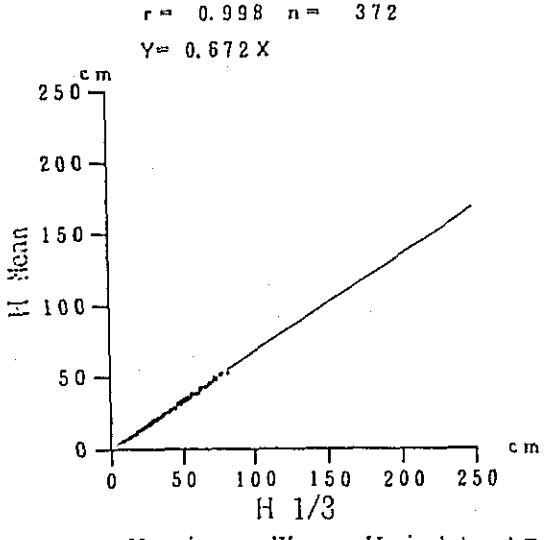
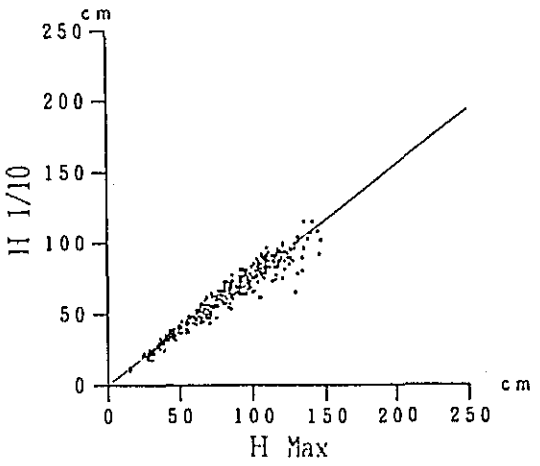


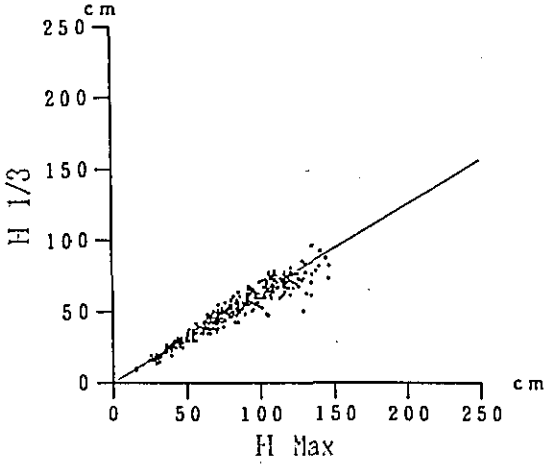
Fig. 1. 3-7 (11) Correlations among Various Wave Heights (Every Month)

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

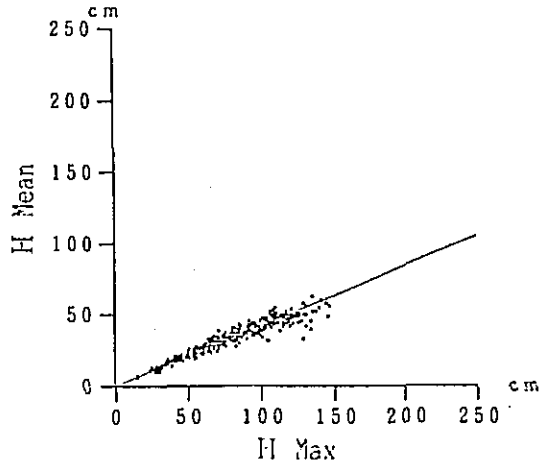
r= 0.966 n= 372
Y= 0.776X



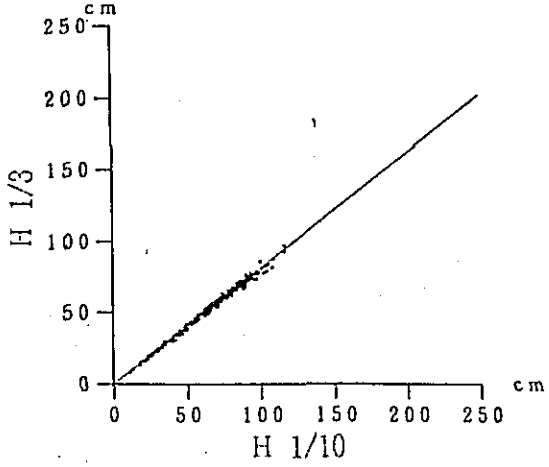
r= 0.957 n= 372
Y= 0.628X



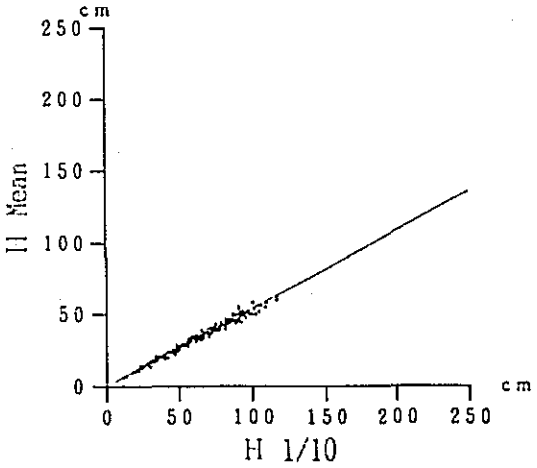
X:MAX ( )
Y:MEAN ( )
r= 0.951 n= 372
Y= 0.420X



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



X:1/3 ( )
Y:MEAN ( )
r= 0.992 n= 372
Y= 0.541X



r= 0.997 n= 372
Y= 0.669X

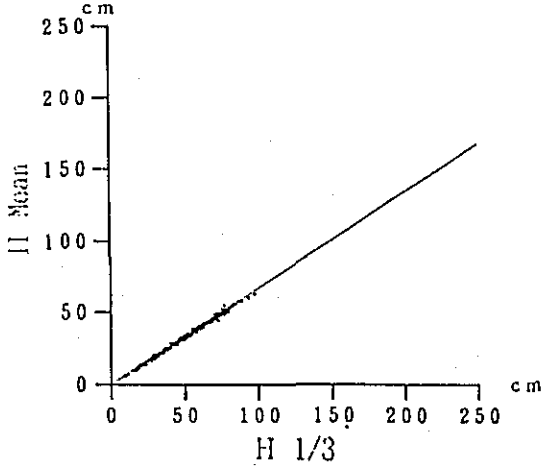


Fig. 1. 3-7 (12) Correlations among Various Wave Heights (Every Month)

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

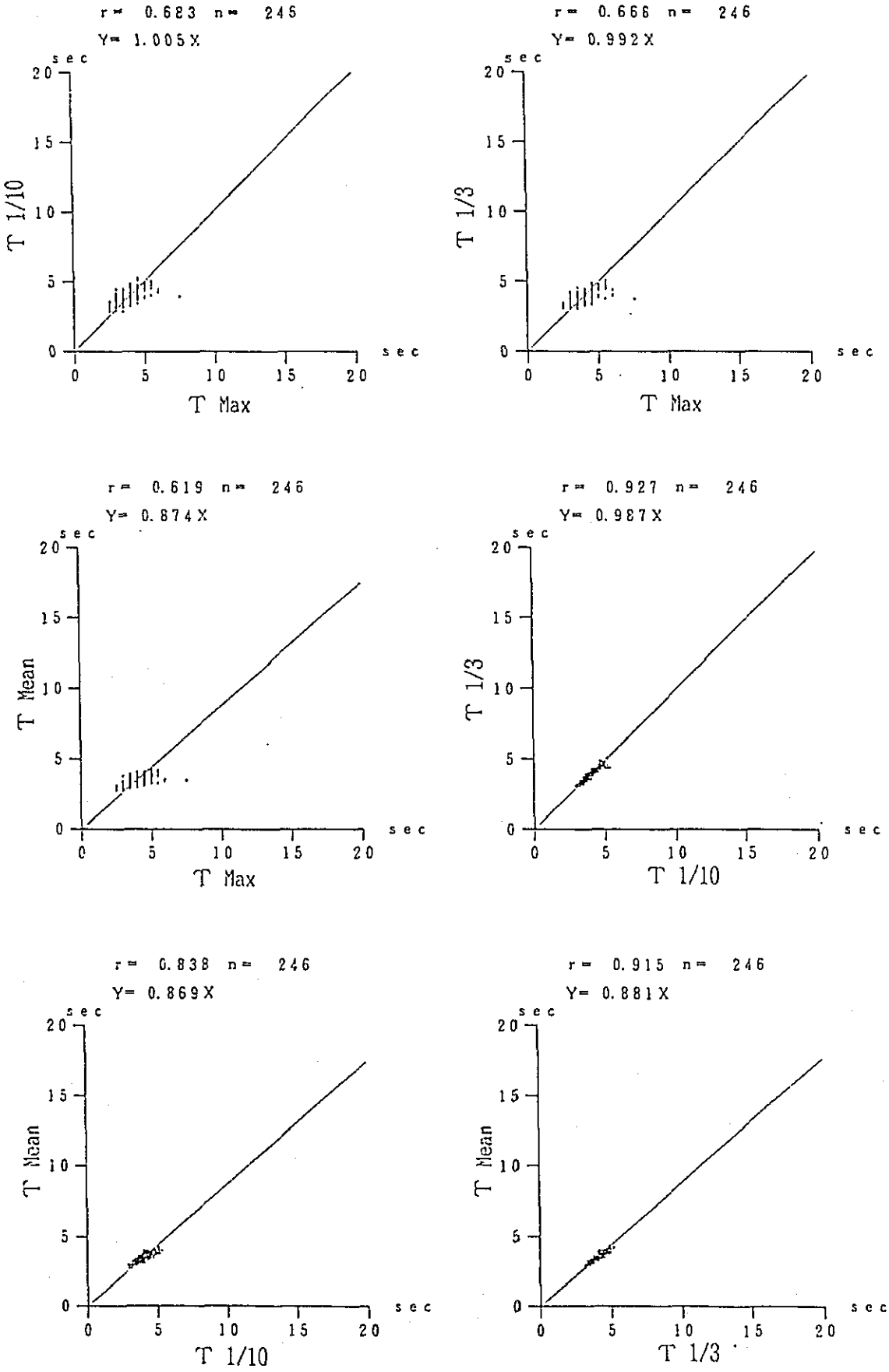
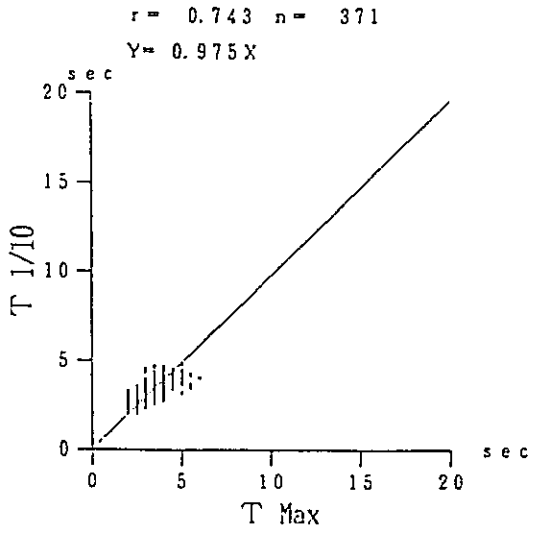
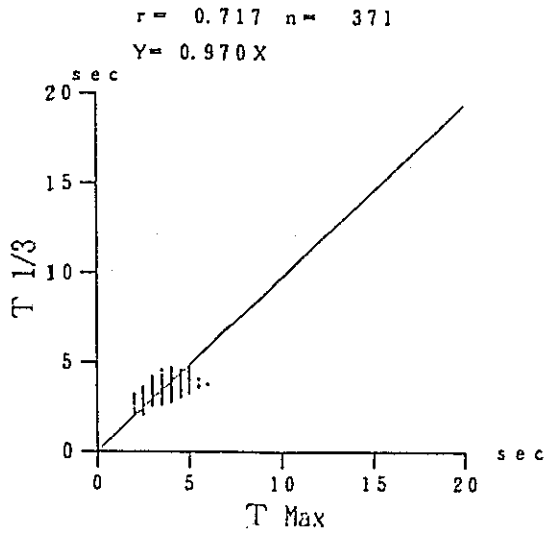
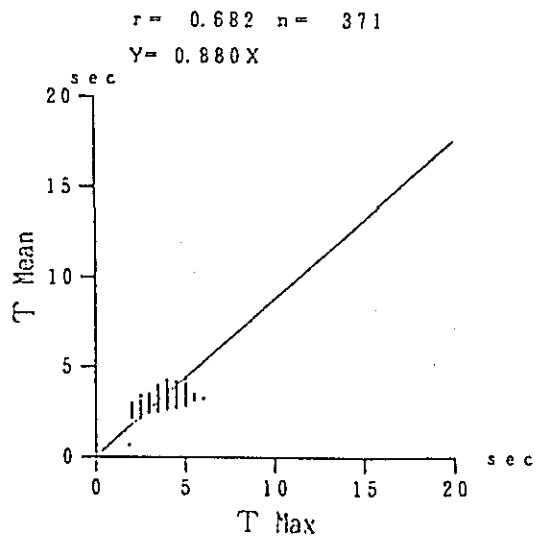


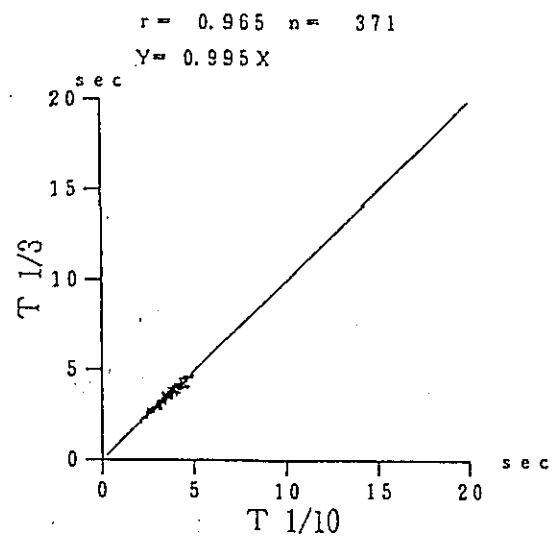
Fig. 1. 3-8 (1) Correlations among Various Wave Periods (Every Month)

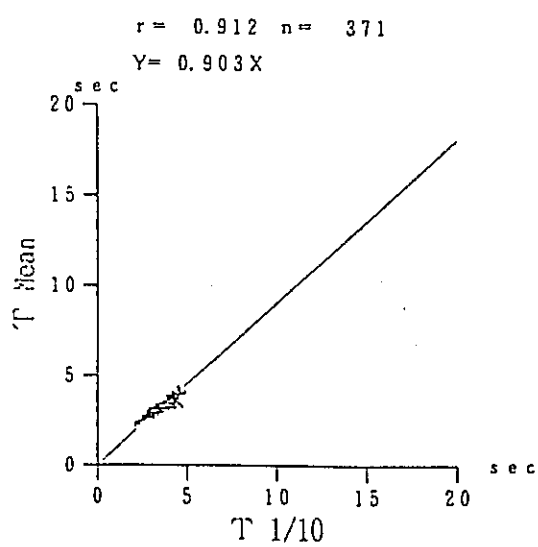
St. :1
Layer :+0.5m(Depth:9.1m)
Interval:Every 2 hours
Period : 1st Oct.-31th Oct.1988











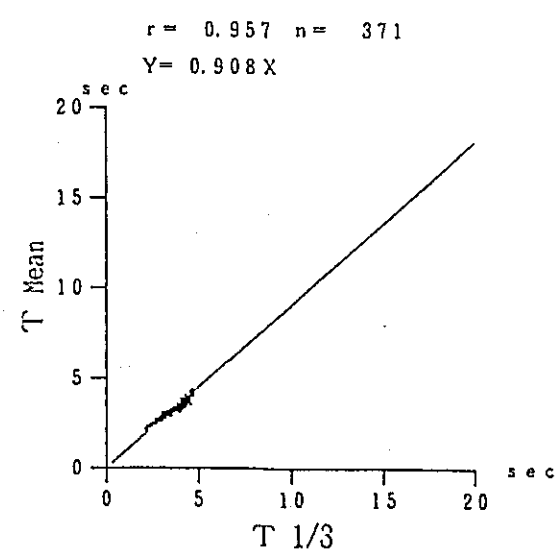
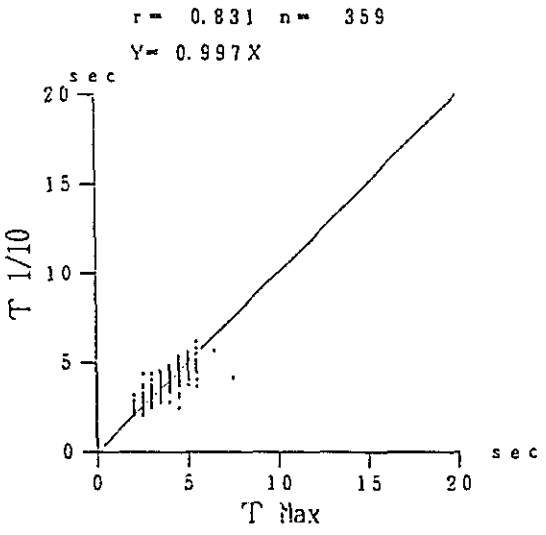
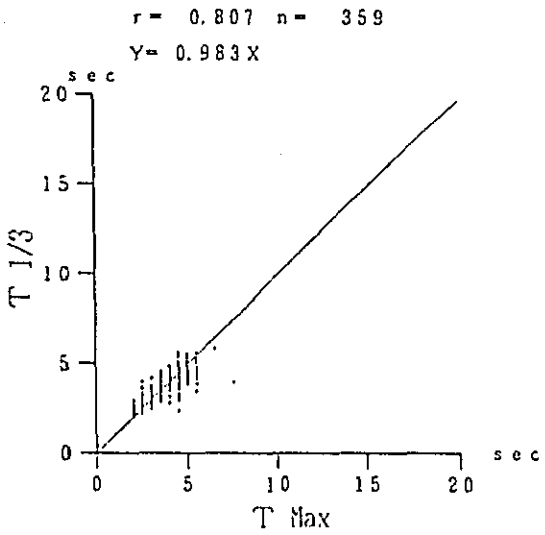
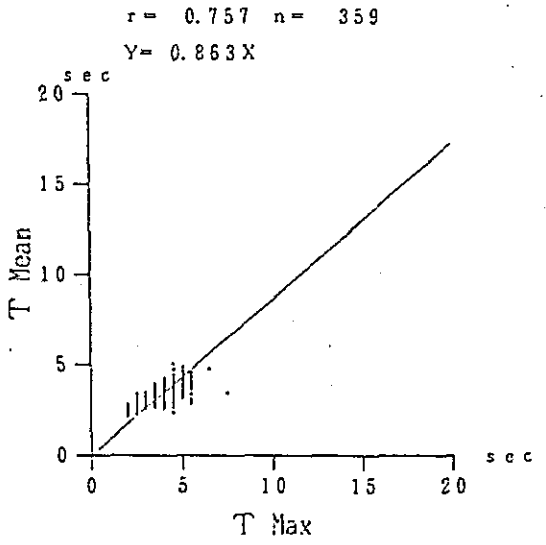


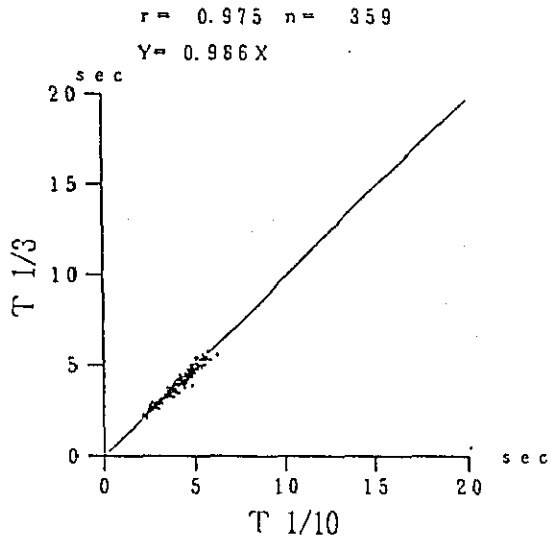
Fig. 1. 3-8 (2) Correlations among Various Wave Periods (Every Month)

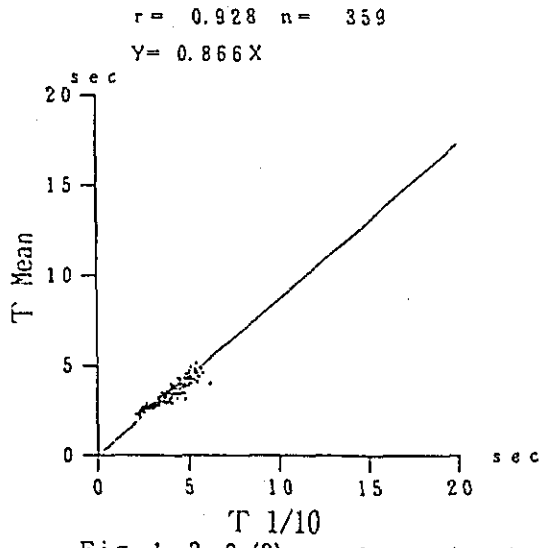
St. :1
Layer :+0.5m(Depth:9.1m)
Interval:Every 2 hours
Period : 1st Nov.-30th Nov.1988











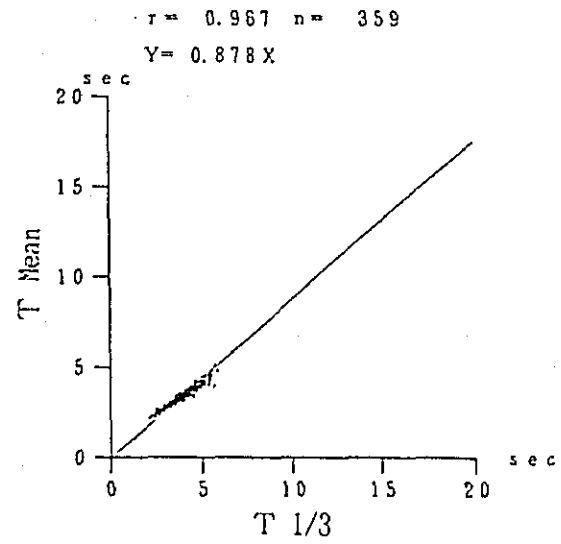


Fig. 1. 3-8 (3) Correlations among Various Wave Periods (Every Month)

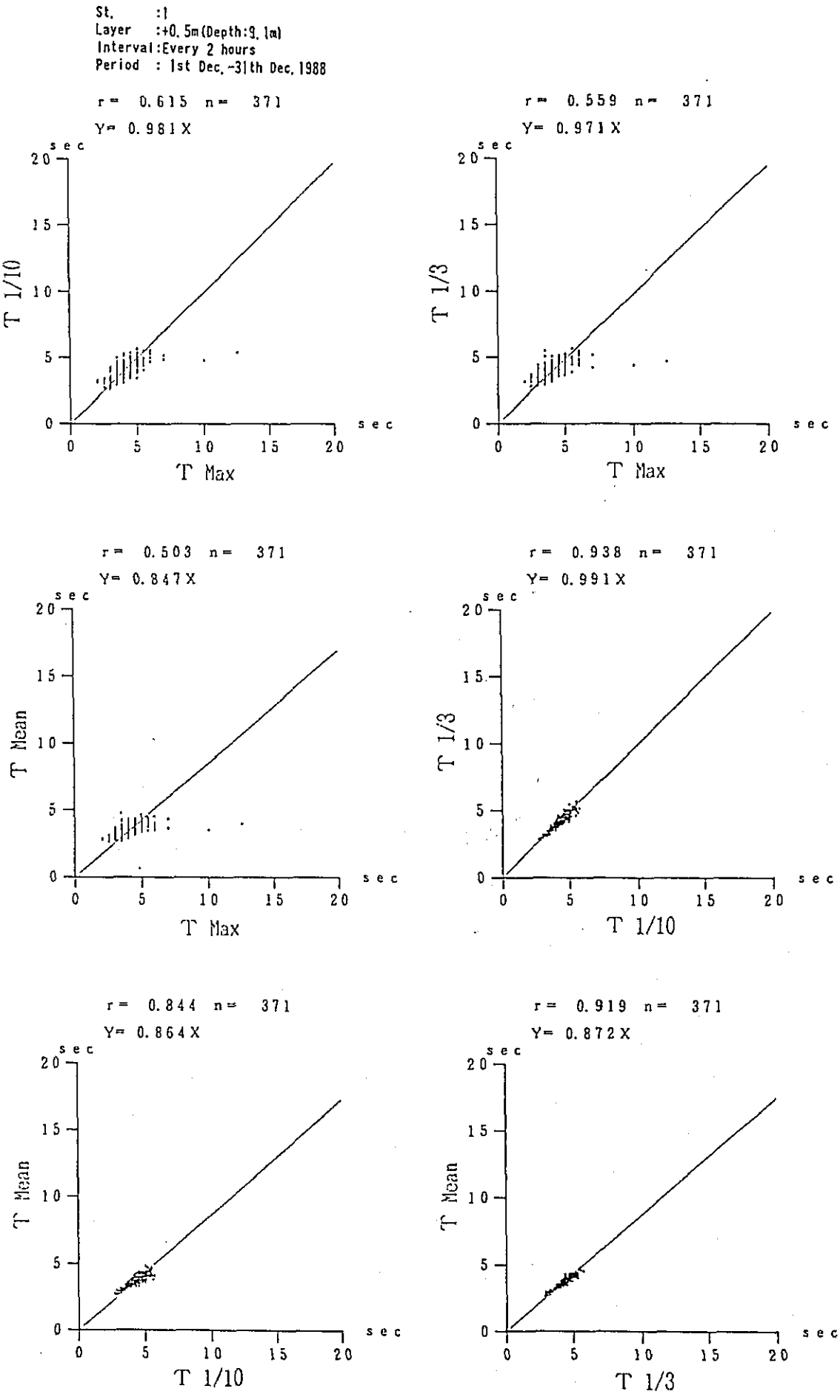
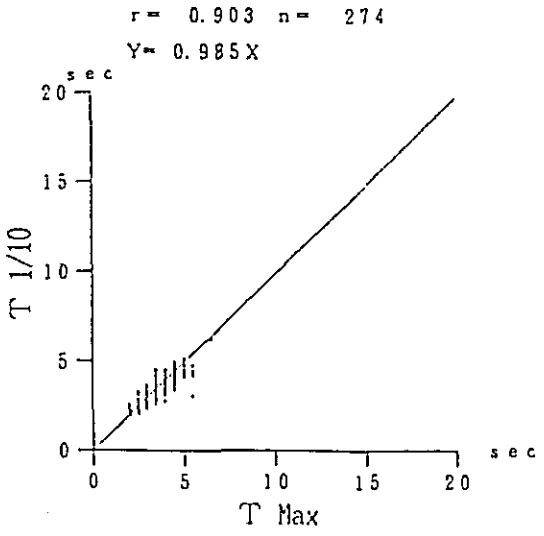
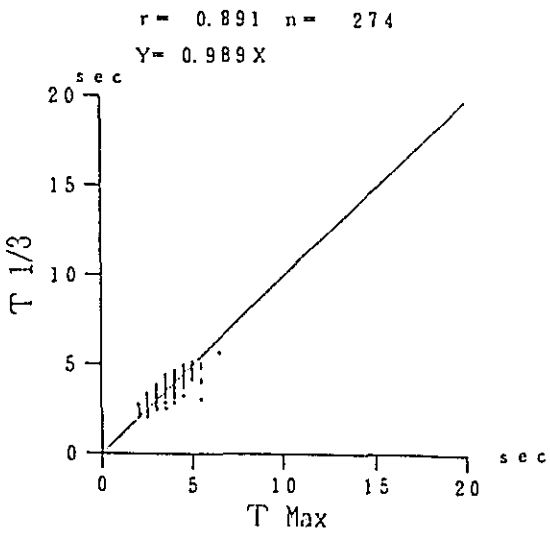
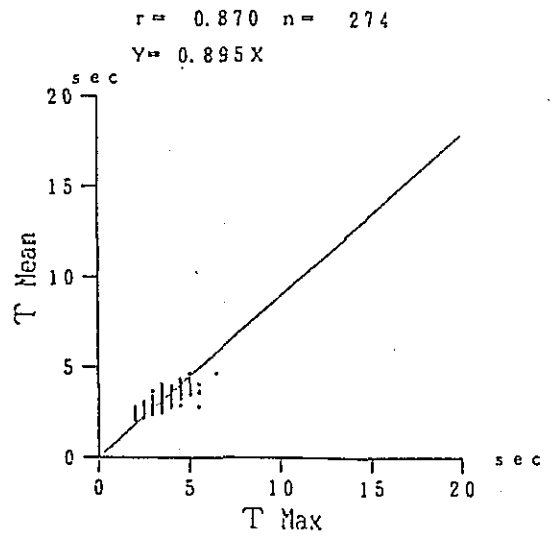


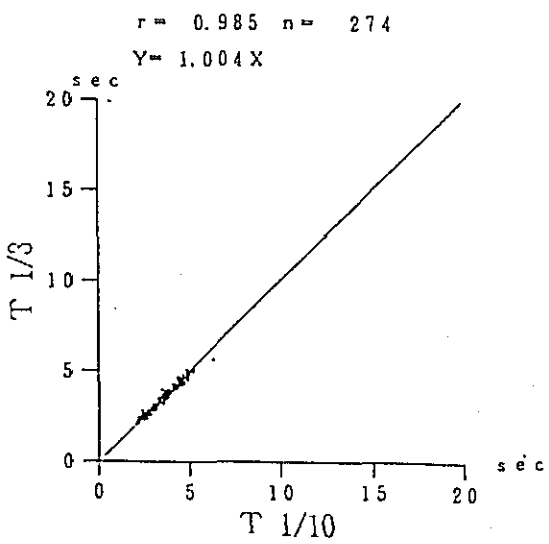
Fig. 1. 3-8 (4) Correlations among Various Wave Periods (Every Month)

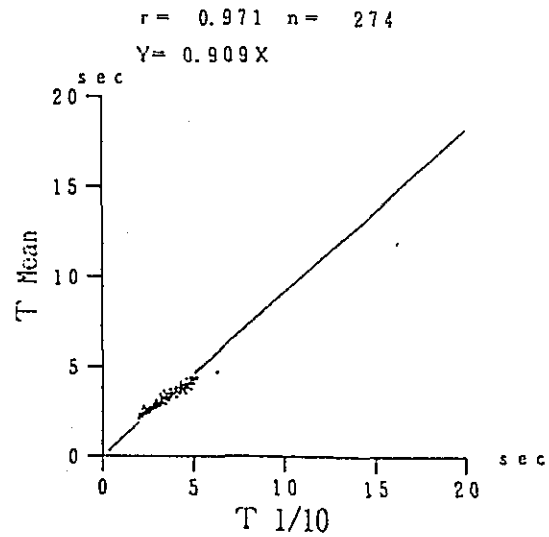
St. :1
Layer :+0.5m(Depth:9.1m)
Interval:Every 2 hours
Period : 1st Jan.-31th Jan. 1989











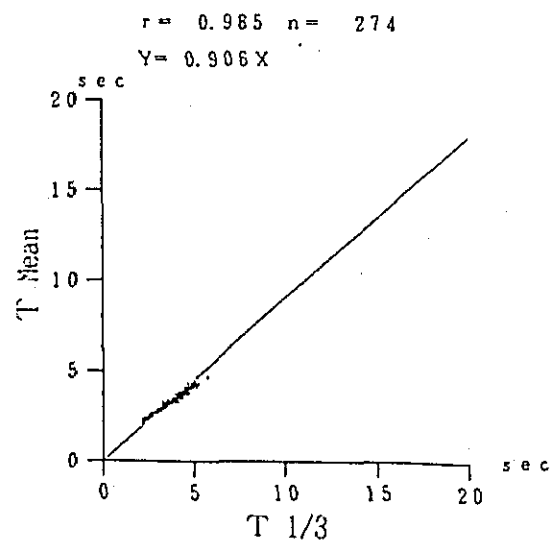


Fig. 1. 3-8 (5) Correlations among Various Wave Periods(Every Month)

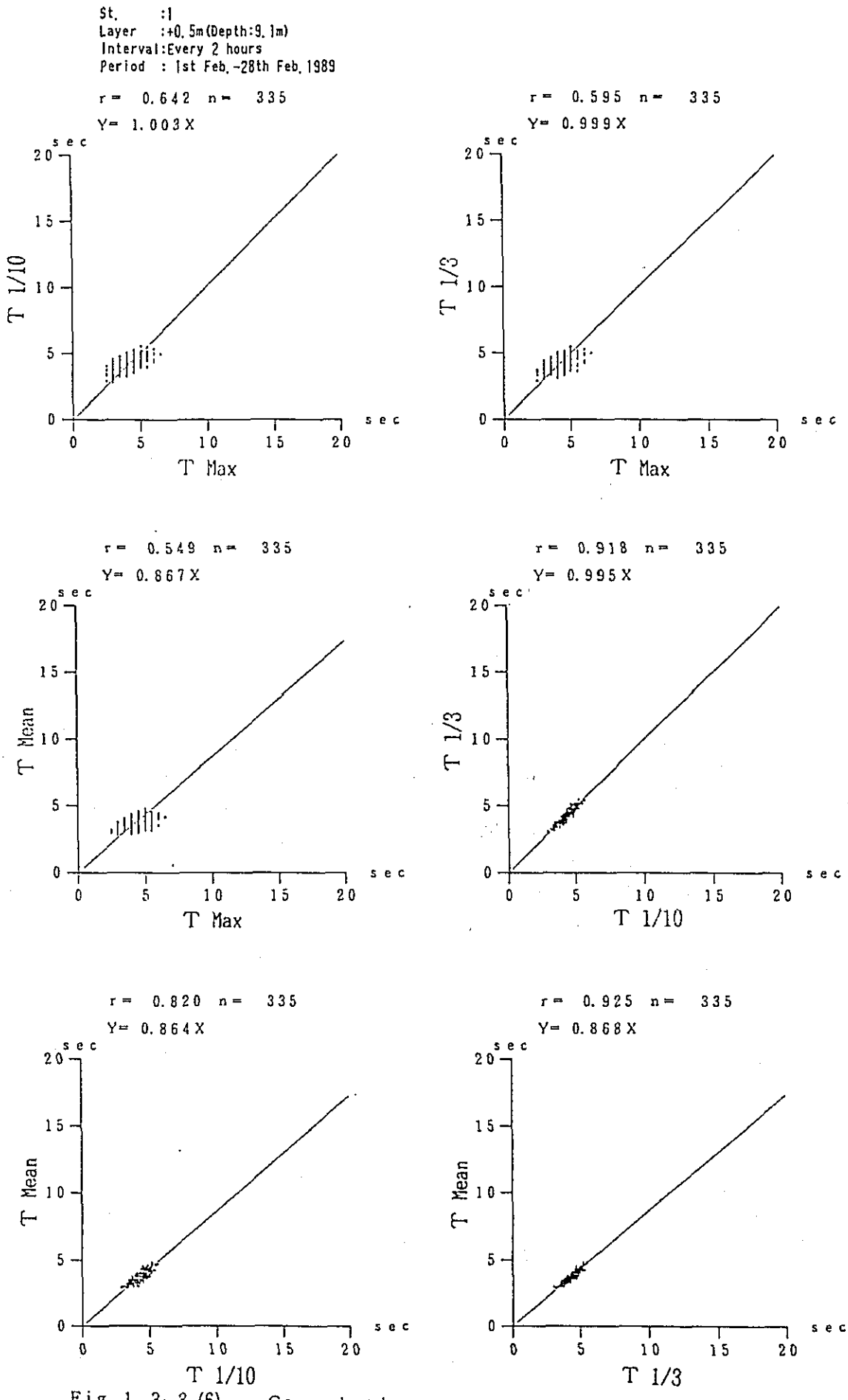
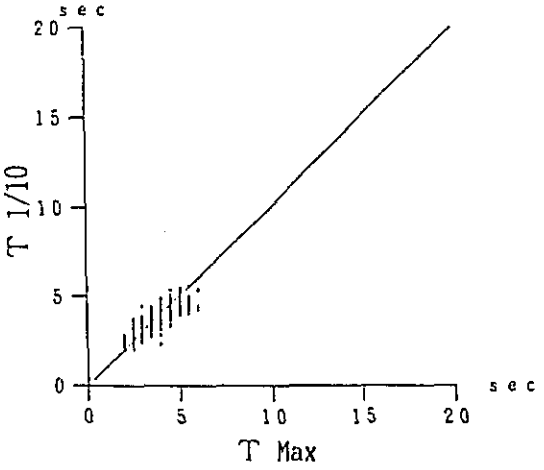


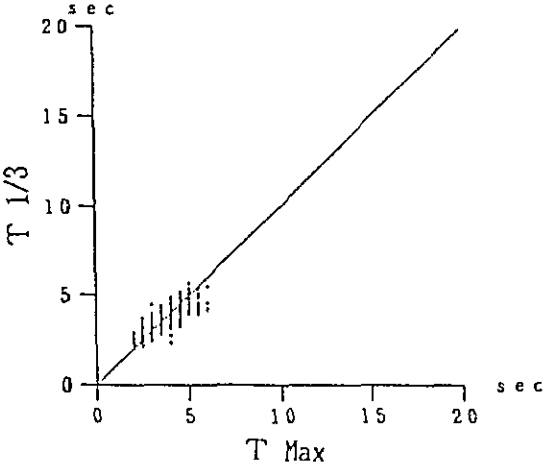
Fig. 1. 3-8 (6) Correlations among Various Wave Periods (Every Month)

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

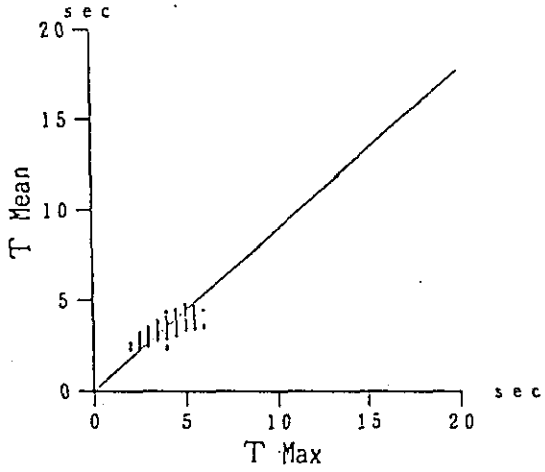
r= 0.837 n= 372
Y= 1.001X



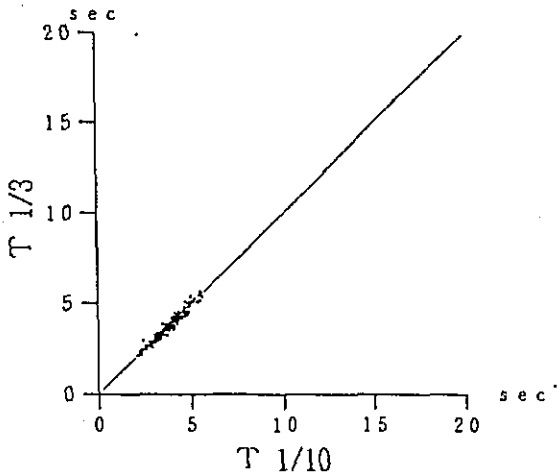
r= 0.824 n= 372
Y= 0.995X



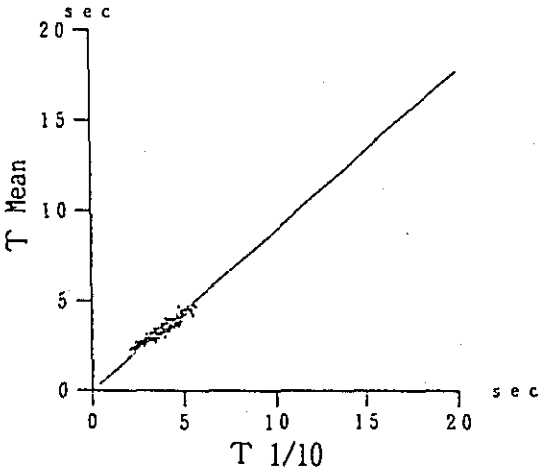
r= 0.797 n= 372
Y= 0.887X



r= 0.978 n= 372
Y= 0.994X



r= 0.950 n= 372
Y= 0.886X



r= 0.975 n= 372
Y= 0.892X

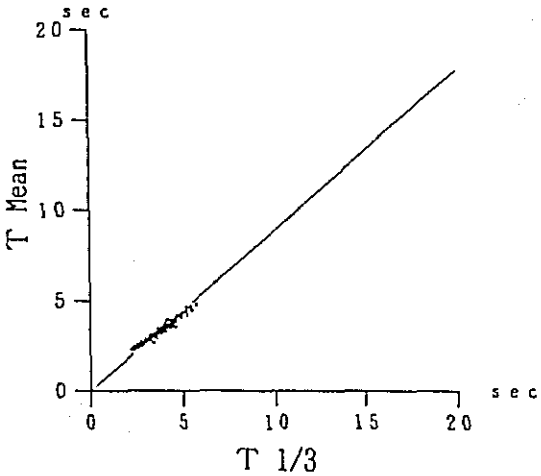


Fig. 1. 3-8 (7) Correlations among Various Wave Periods (Every Month)

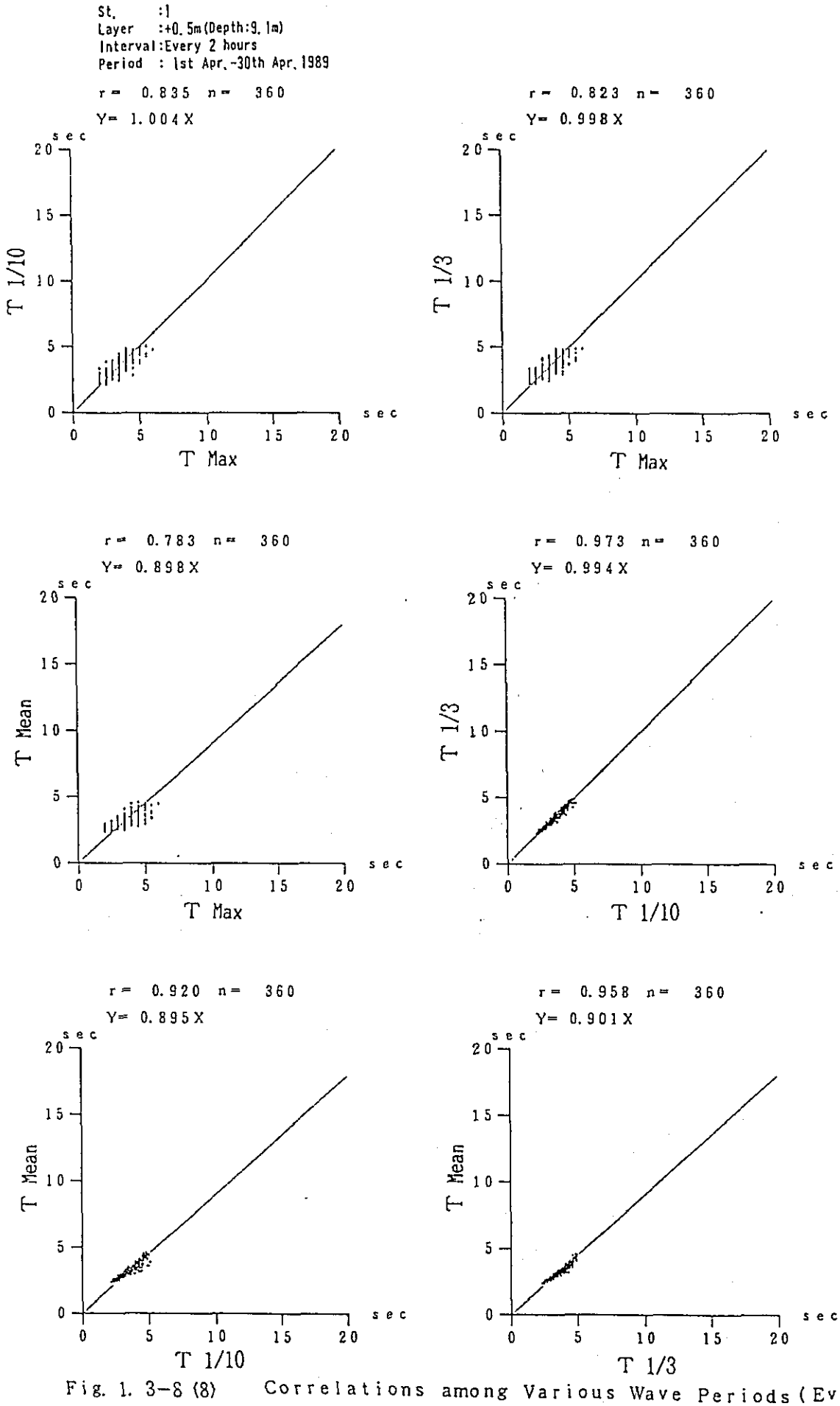
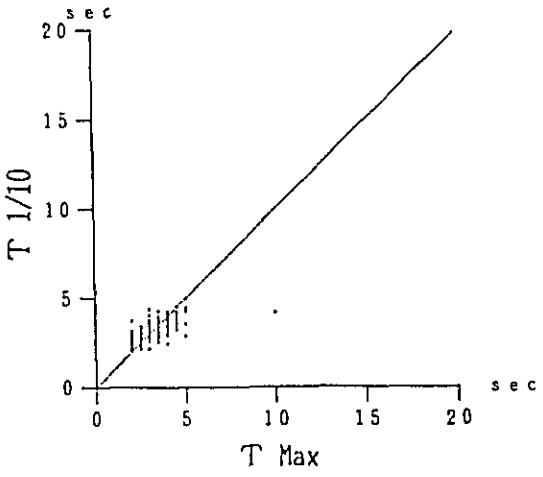


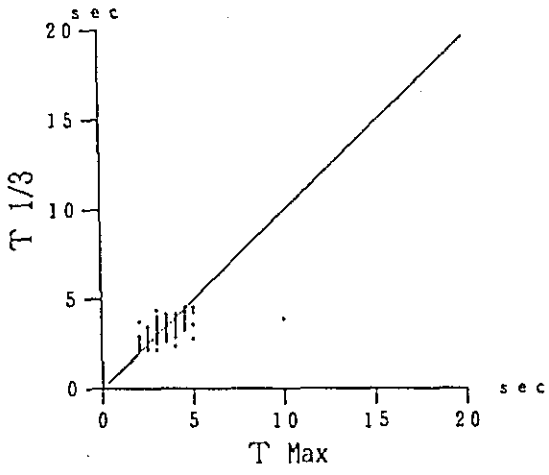
Fig. 1. 3-8 (8) Correlations among Various Wave Periods (Every Month)

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

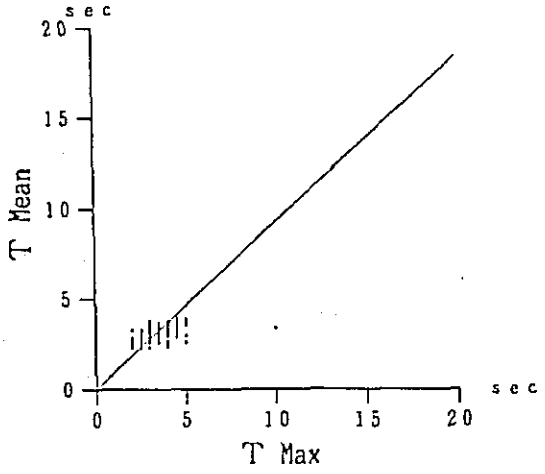
r= 0.714 n= 371
Y= 0.988X



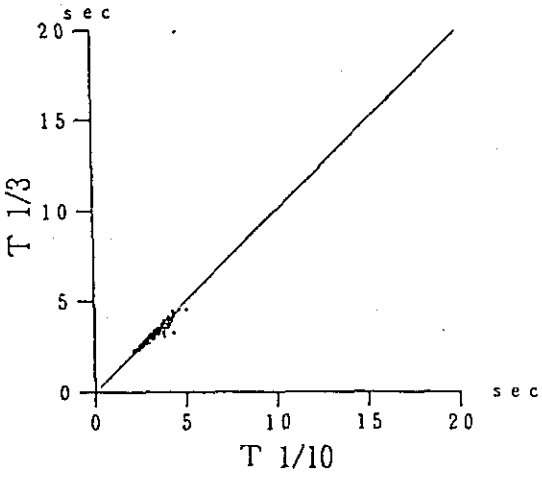
r= 0.680 n= 371
Y= 0.986X



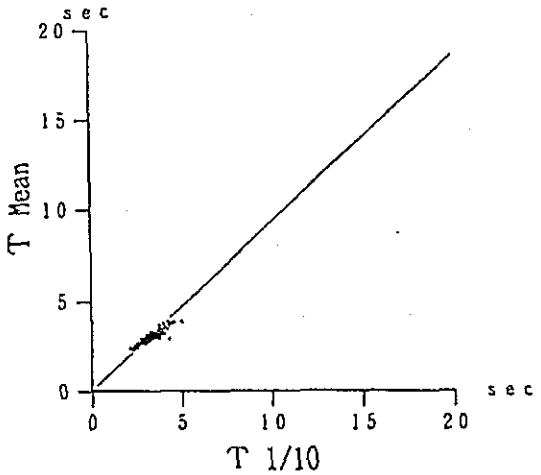
r= 0.644 n= 371
Y= 0.919X



r= 0.962 n= 371
Y= 0.998X



r= 0.921 n= 371
Y= 0.930X



r= 0.967 n= 371
Y= 0.933X

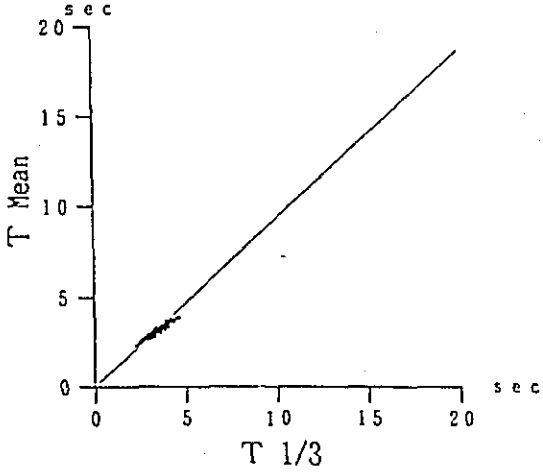


Fig. 1. 3-8 (9) Correlations among Various Wave Periods(Every Month)

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

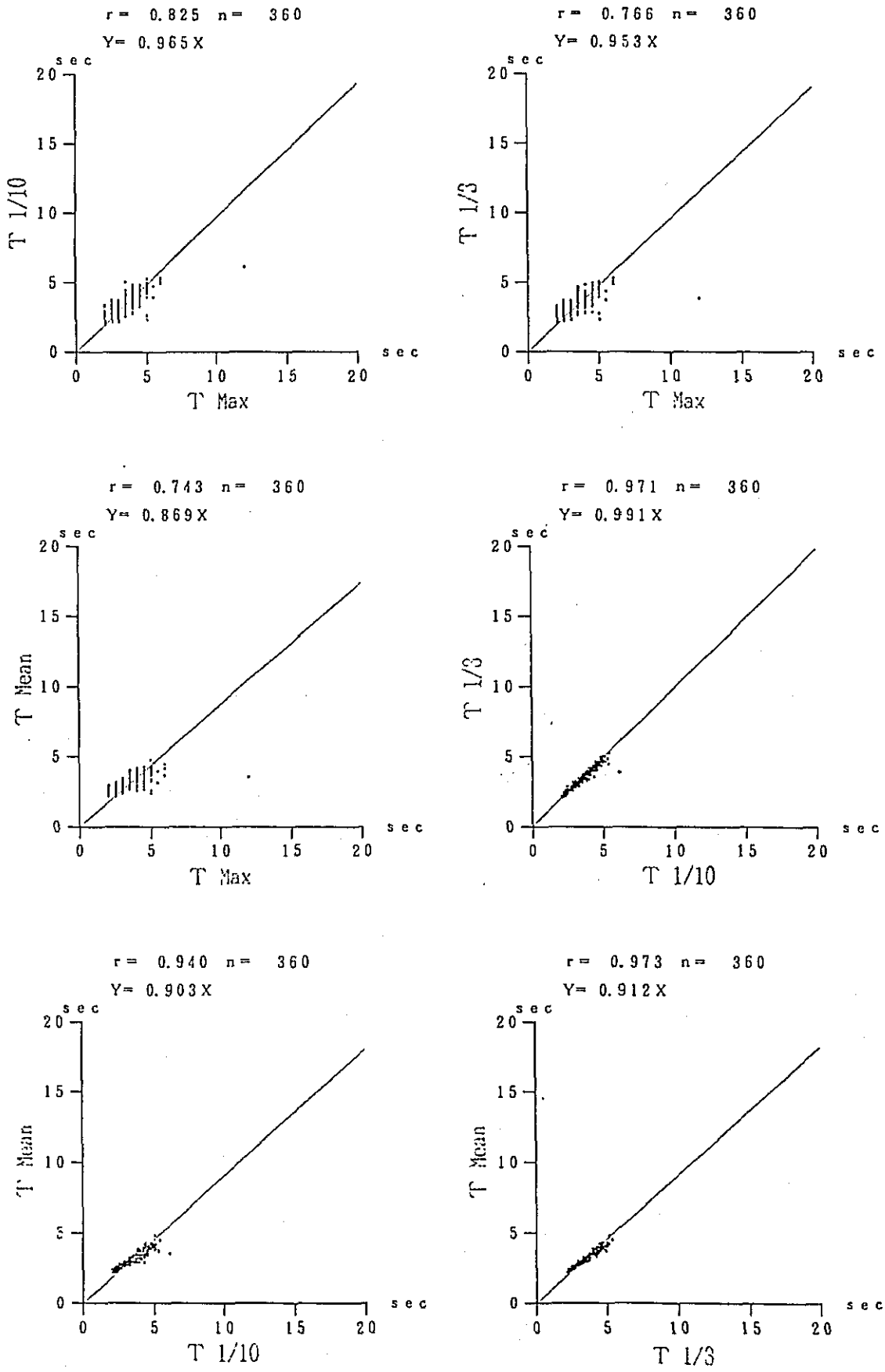


Fig. 1. 3-8 (10) Correlations among Various Wave Periods(Every Month)

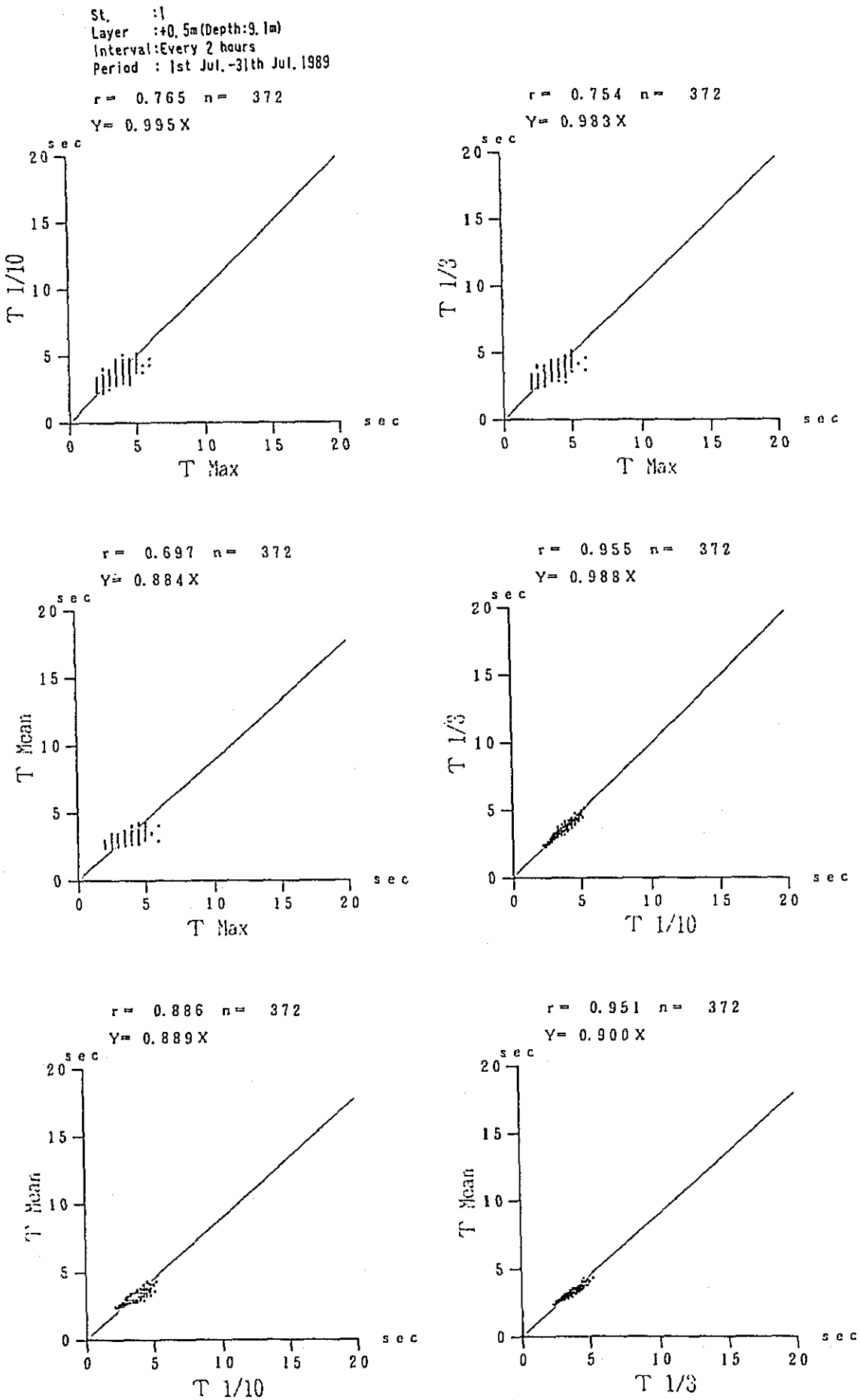


Fig. 1. 3-8 (11) Correlations among Various Wave Periods (Every Month

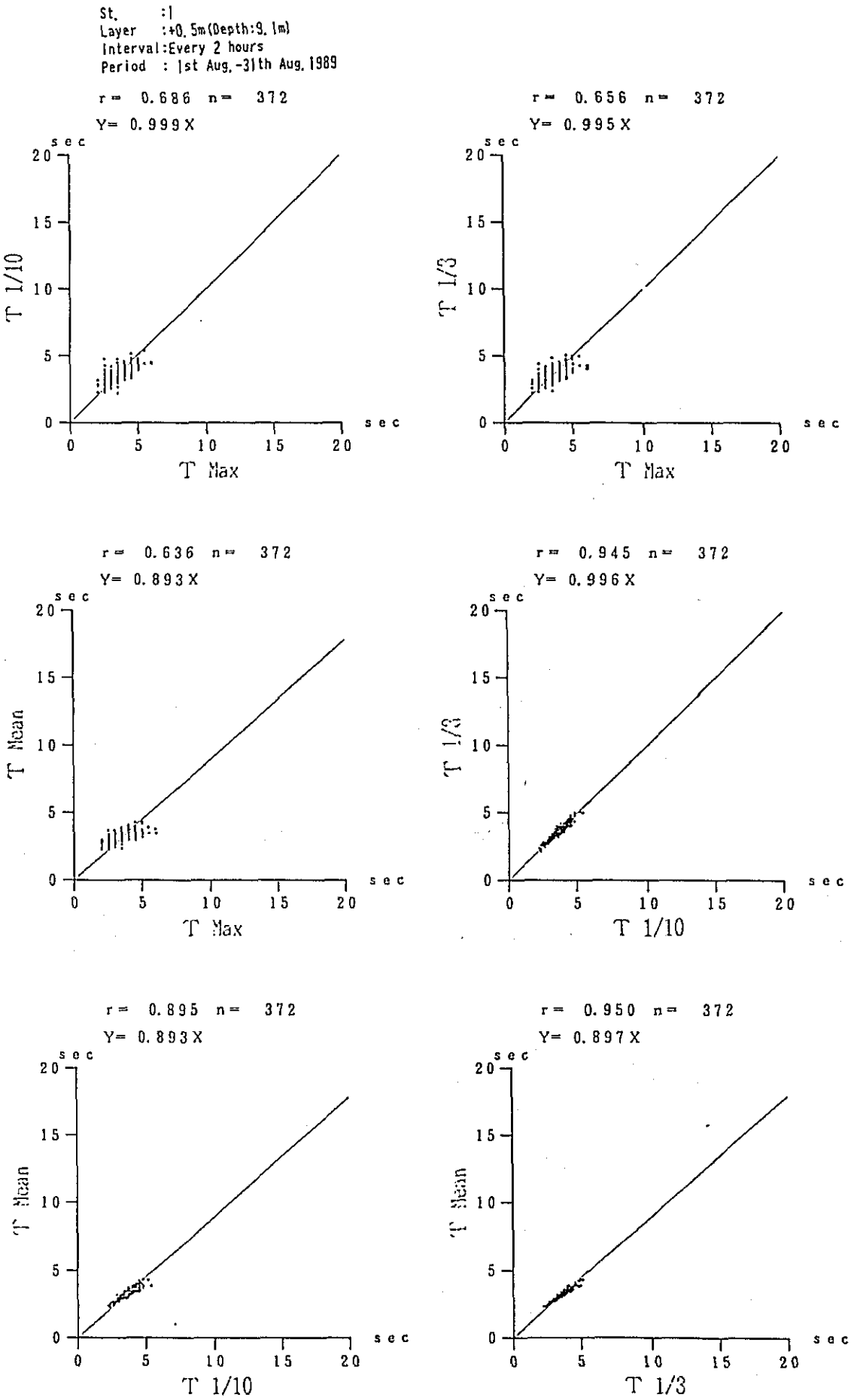


Fig. 1. 3-8 (12) Correlations among Various Wave Periods (Every Month)

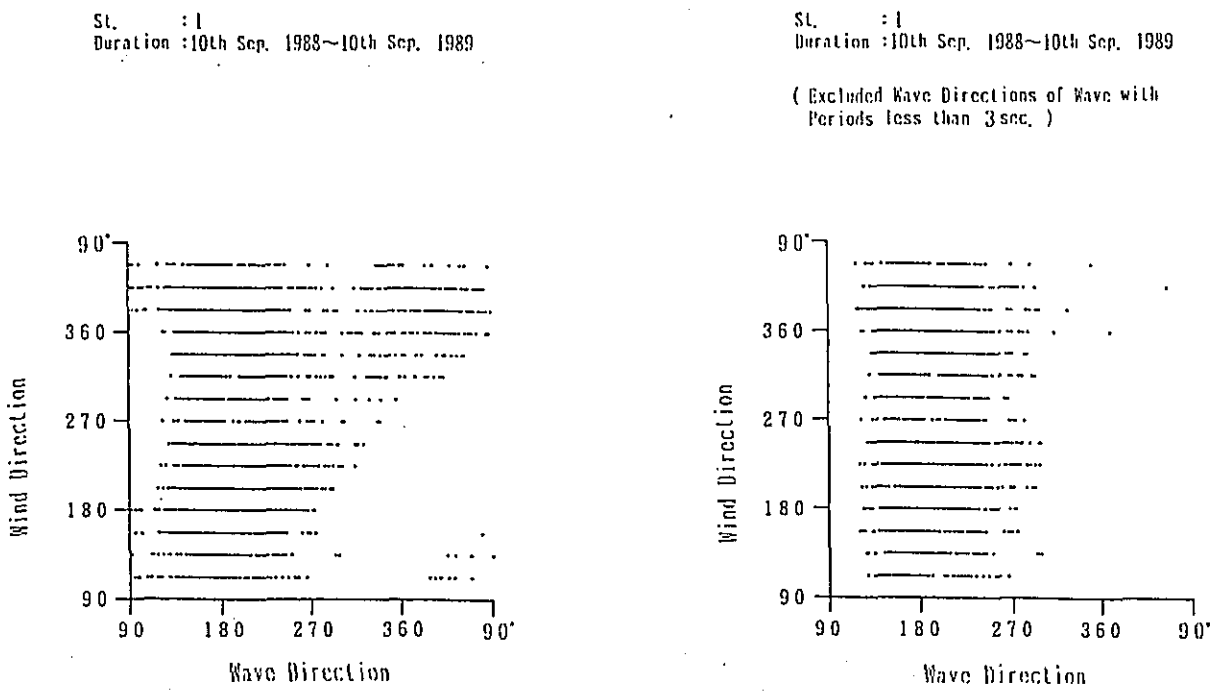
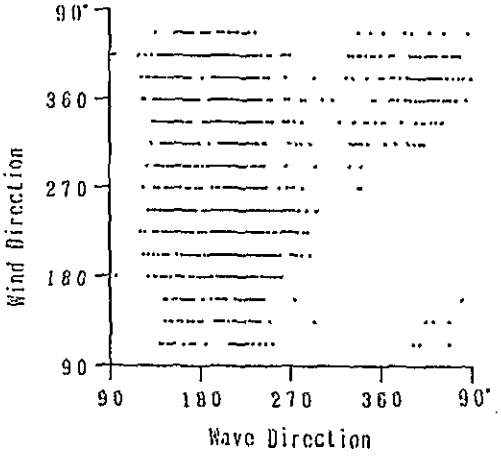


Fig. I. 3- 9 (1) Correlation between Dominant Wave Direction and Wind Direction (All Seasons)

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.)

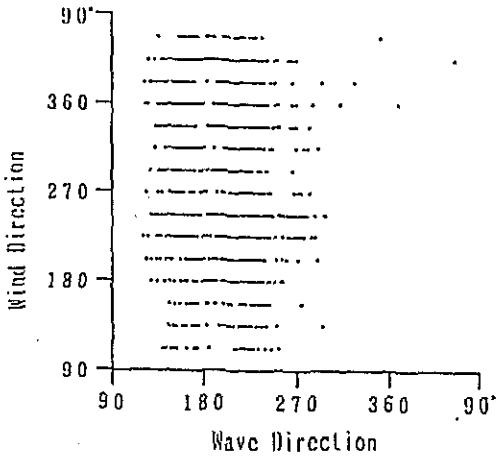
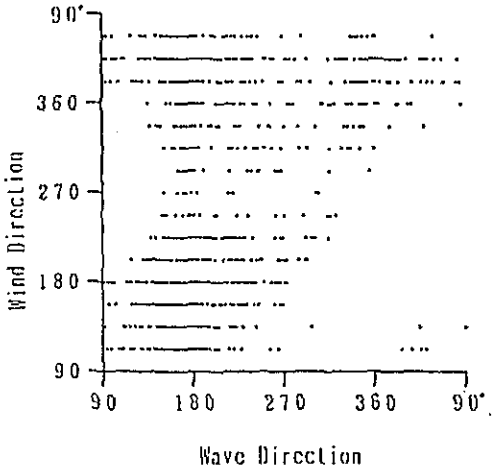


Fig. I. 3- 9 (2) Correlation between Dominant Wave Direction and Wind Direction (Rainy Season)

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.)

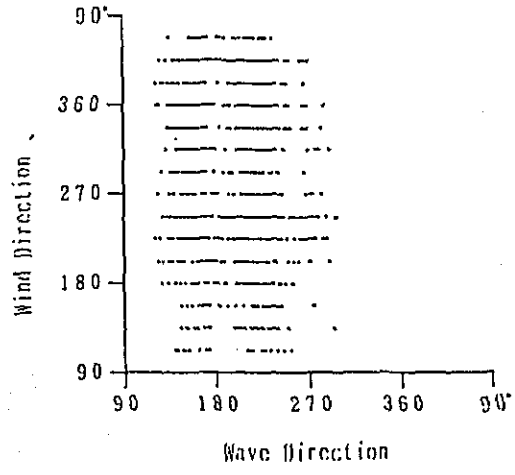
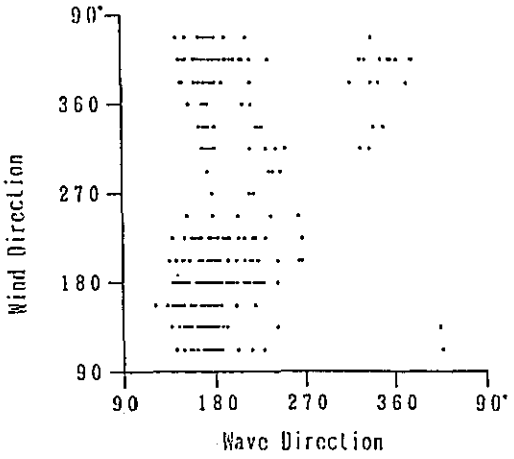


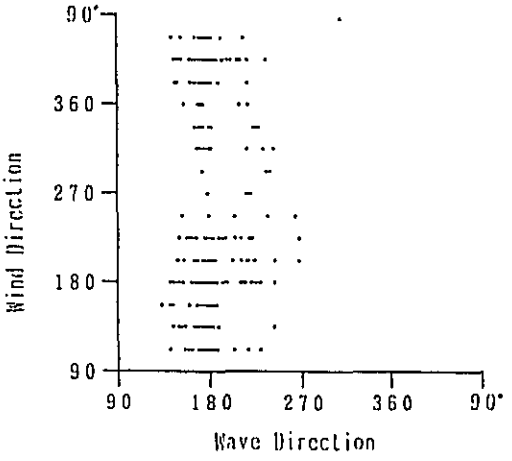
Fig. I. 3-- 9 (3) Correlation between Dominant Wave Direction and Wind Direction (Combined Two Dry Seasons)

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

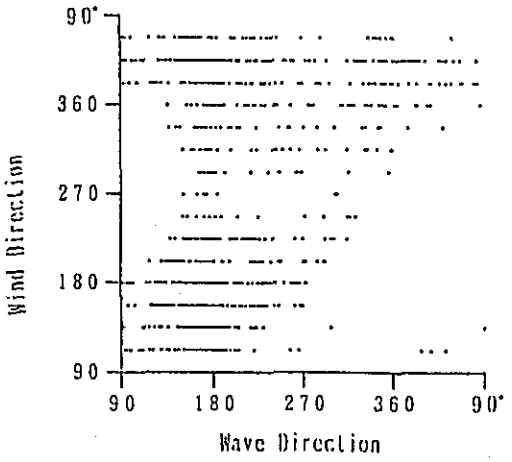


St. : 1
Duration : 10th Sep. 1988~31th Oct. 1988 (1st Dry Season

(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.)

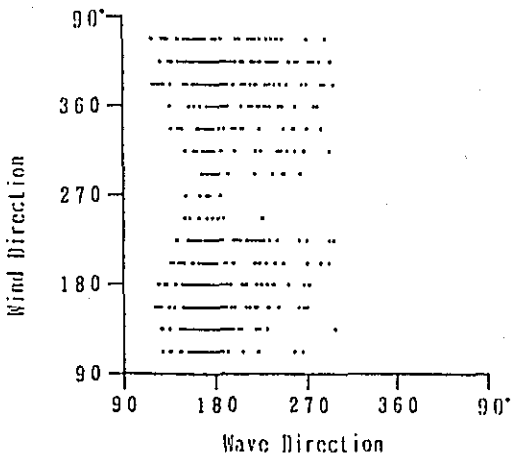
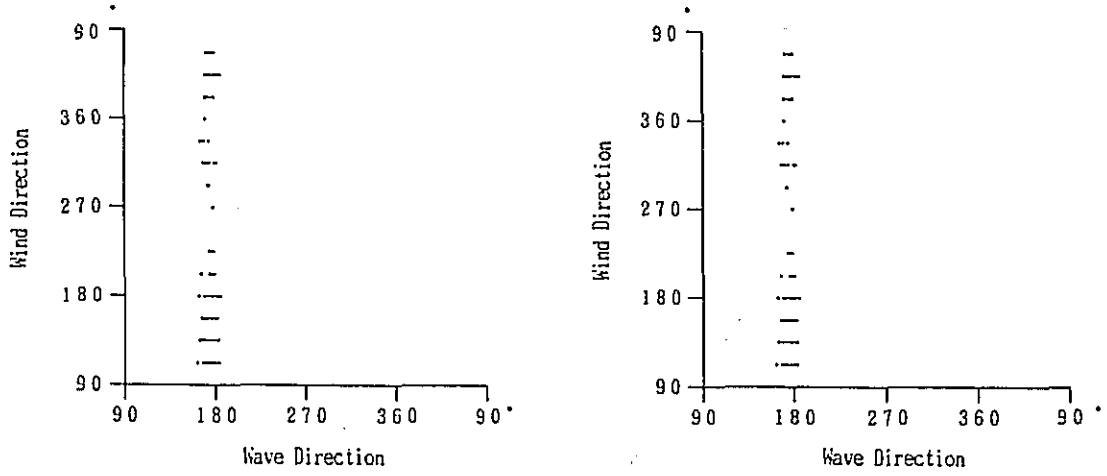


Fig. 1. 3- 9(4) Correlation between Dominant Wave Direction and Wind Direction (1st and 2nd Dry Season)

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.)

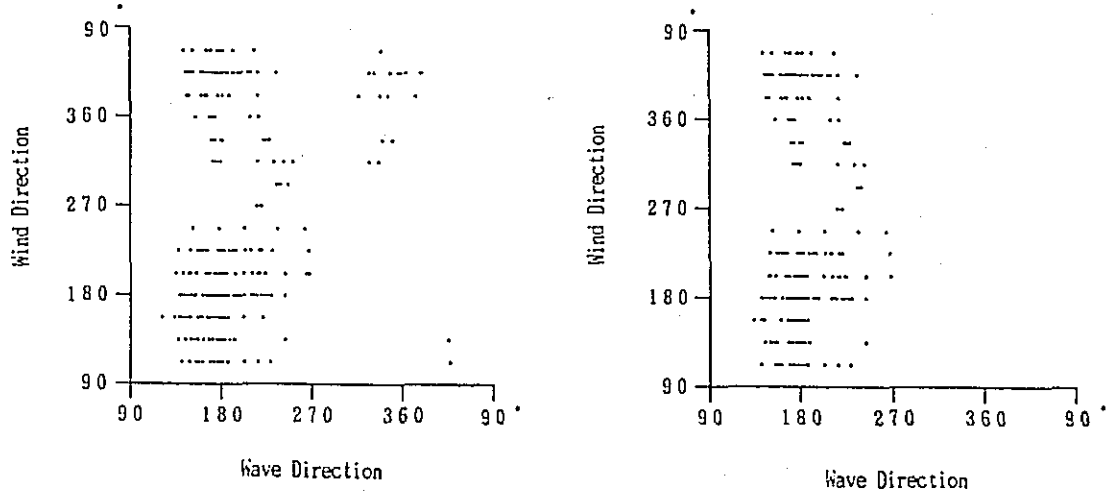
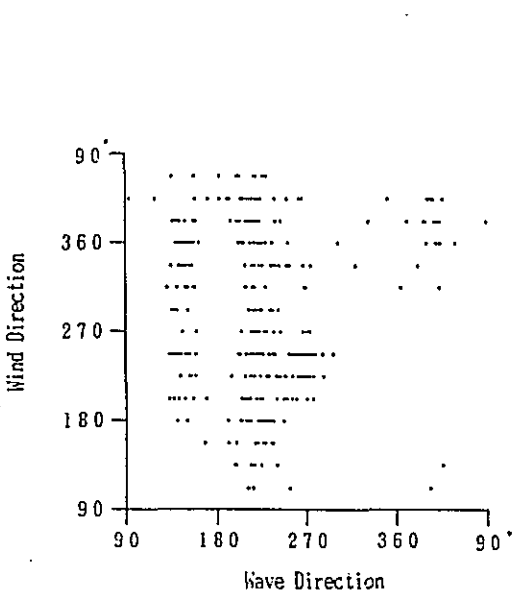
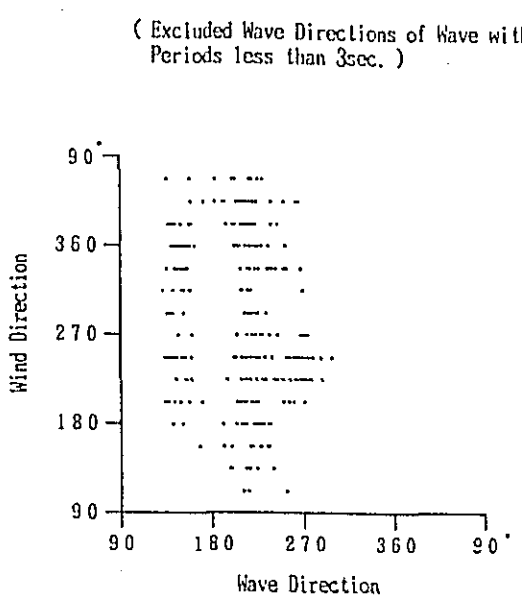


Fig. 1.3-10(1) Correlation between Dominant Wave Direction and Wind Direction (Every Month)

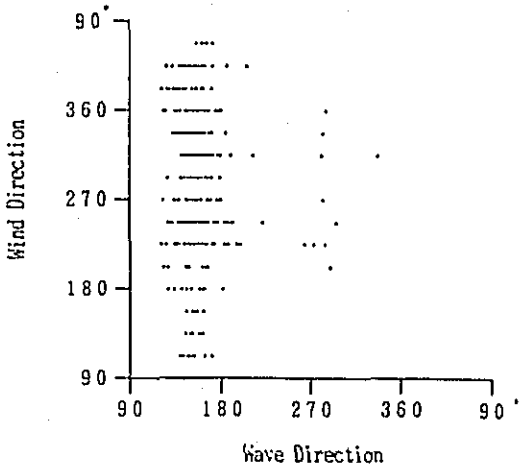
St :1
Duration:1st Nov. 1988~1st Dec. 1988



(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.)

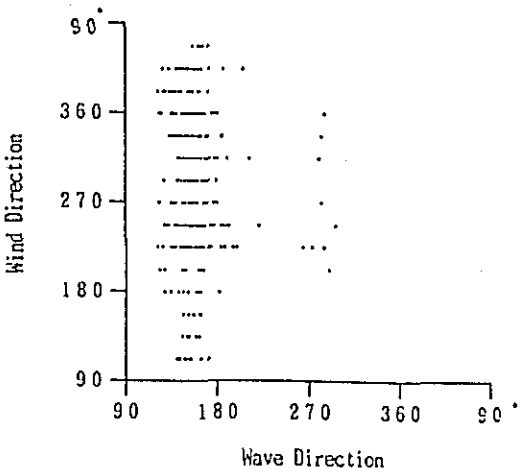
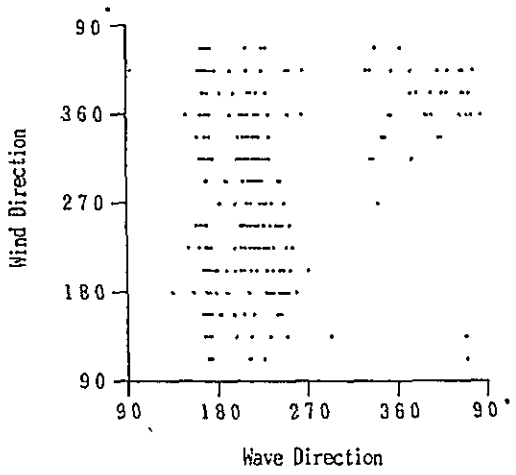
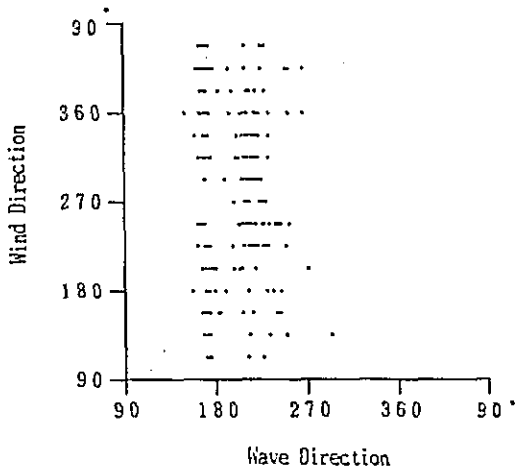


Fig. 1.3-10(2) Correlation between Dominant Wave Direction and Wind Direction (Every Month)

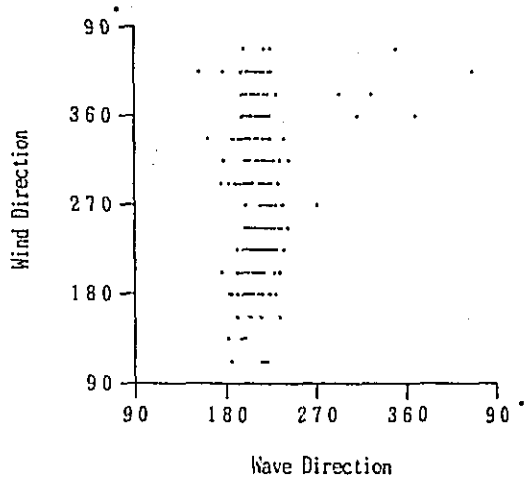
St :1
Duration:1st Jan. 1989~1st Feb. 1989



(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.)

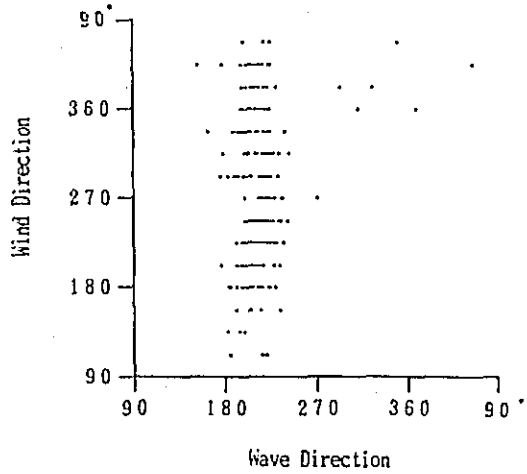
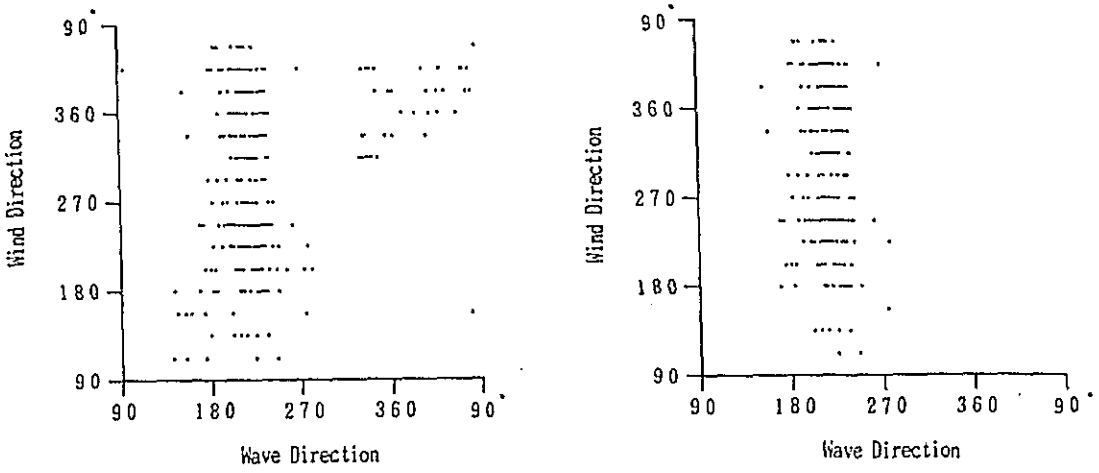


Fig. 1.3-10(3) Correlation between Dominant Wave Direction and Wind Direction (Every Month)

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.)

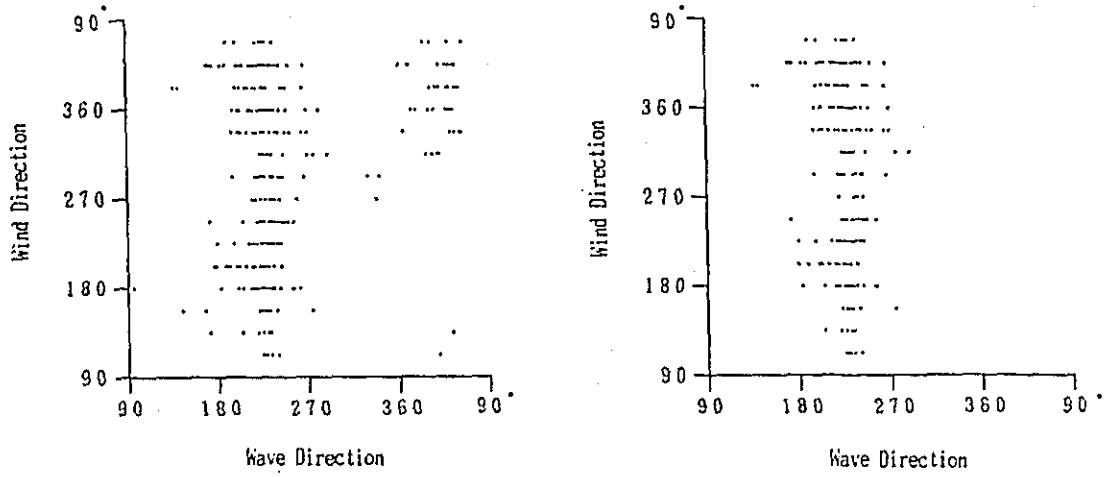
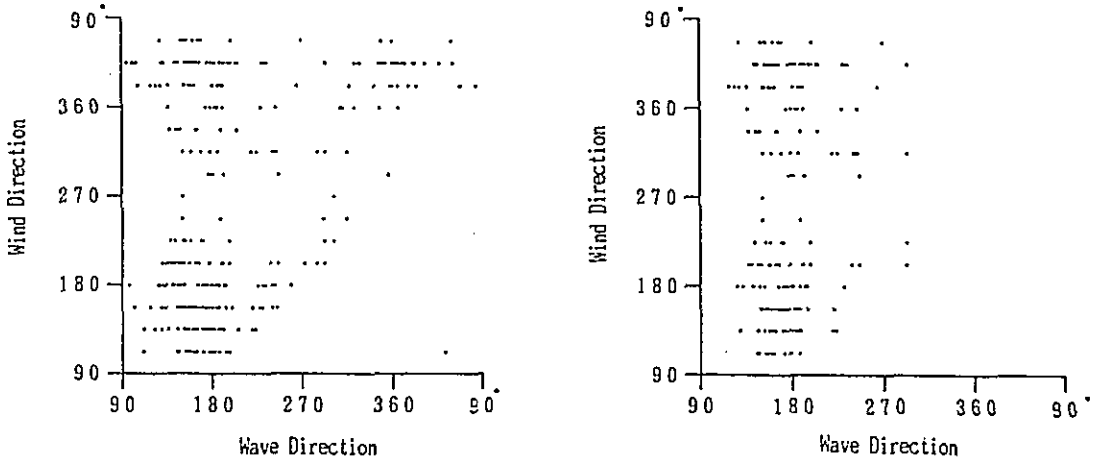


Fig. 1.3-10(4) Correlation between Dominant Wave Direction and Wind Direction (Every Month)

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.)

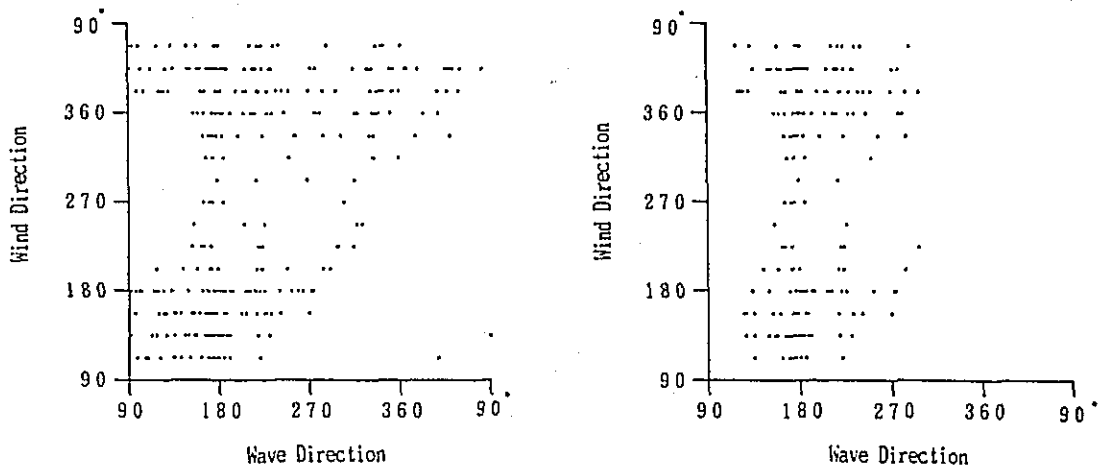
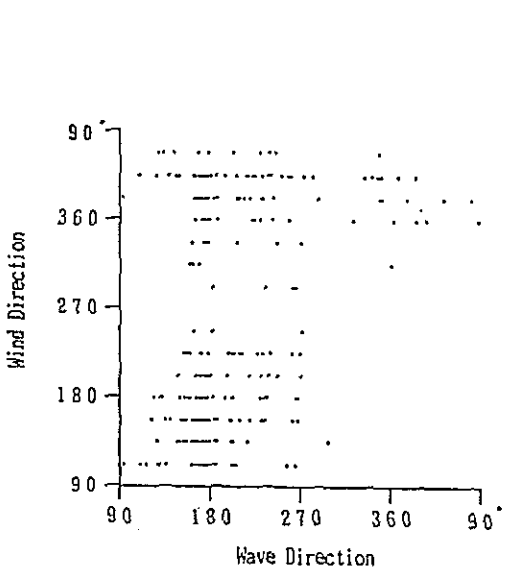
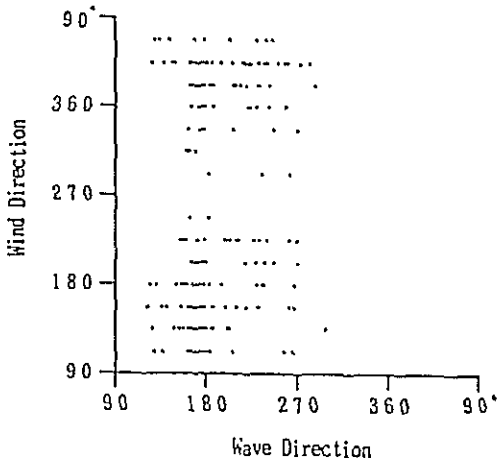


Fig. 1.3-10(5) Correlation between Dominant Wave Direction and Wind Direction (Every Month)

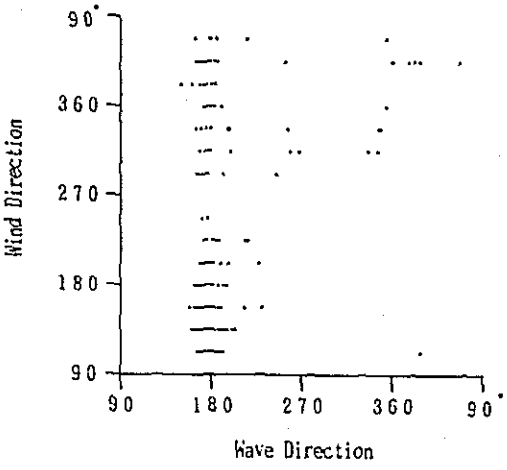
St :1
Duration:1st Jul. 1989~1st Aug. 1989



(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.)

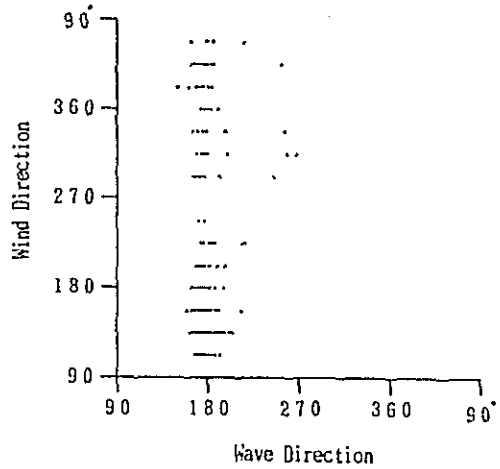


Fig. 1.3-10(6) Correlation between Dominant Wave Direction and Wind Direction (Every Month)

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

Obtained Data	246
Short Data	0(0.0%)

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

Period / Height	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				3 (1.2)	1 (0.4)													4 (1.6)
25~ 49				63 (25.6)	55 (22.4)													118 (48.0)
50~ 74				89 (36.2)	29 (11.8)	1 (0.4)												119 (48.4)
75~ 99				2 (0.8)	3 (1.2)													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)	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 1. 3-4 (2) Frequency Distribution of Wave Height by Wave Period (Every Month)

Obtained Data	372
Short Data	1 (0.3%)

Duration: 1st Oct. ~ 31th Oct. 1988
St. : 1

Period / Height	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			33	42	26													101
			(8.9)	(11.3)	(7.0)													(27.2)
25~ 49			43	127	40													210
			(11.6)	(34.2)	(10.8)													(56.6)
50~ 74			1	43	14													58
			(0.3)	(11.6)	(3.8)													(15.6)
75~ 99				1														1
				(0.3)														(0.3)
100~ 124				1														1
				(0.3)														(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	77	214	80	0	0	0	0	0	0	0	0	0	0	0	0	371
	(0.0)	(0.0)	(20.8)	(57.7)	(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)	(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)

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

Obtained Data	360
Short Data	1(0.3%)

Period / Height	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			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				3 (0.8)	35 (9.7)													38 (10.6)
100~ 124				1 (0.3)	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)												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)	0 (0.0)	54 (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 1. 3-4 (4) Frequency Distribution of Wave Height by Wave Period (Every Month)

Duration: 1st Dec. ~ 31th Dec. 1988
St. : 1

Obtained Data	372
Short Data	1 (0.3%)

Period / Height	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				2 (0.5)	1 (0.3)													3 (0.8)
25~ 49			3 (0.8)	50 (13.5)	77 (20.8)	8 (2.2)												138 (37.2)
50~ 74				27 (7.3)	111 (29.9)	16 (4.3)												154 (41.5)
75~ 99				4 (1.1)	44 (11.9)	3 (0.8)												51 (13.7)
100~ 124					12 (3.2)	4 (1.1)												16 (4.3)
125~ 149					5 (1.3)	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 (0.0)	3 (0.8)	83 (22.4)	250 (67.4)	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)	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)

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

Obtained Data	372
Short Data	98(26.3%)

Period / Height	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			75 (27.4)	26 (9.5)	1 (0.4)													102 (37.2)
25~ 49			22 (8.0)	34 (12.4)	12 (4.4)	4 (1.5)												72 (26.3)
50~ 74			1 (0.4)	18 (6.6)	51 (18.6)	3 (1.1)												73 (26.6)
75~ 99				2 (0.7)	22 (8.0)													24 (8.8)
100~ 124					1 (0.4)	1 (0.4)												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	0 (0.0)	0 (0.0)	98 (35.8)	80 (29.2)	87 (31.8)	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)	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)

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

Obtained Data	336
Short Data	1 (0.3%)

Period / Height	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				10 (3.0)	1 (0.3)													11 (3.3)
25~ 49				44 (13.1)	82 (24.5)	13 (3.9)												139 (41.5)
50~ 74				30 (9.0)	96 (28.7)	8 (2.4)												134 (40.0)
75~ 99				2 (0.6)	33 (9.9)	1 (0.3)												36 (10.7)
100~ 124					10 (3.0)	2 (0.6)												12 (3.6)
125~ 149					1 (0.3)	2 (0.6)												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)	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)

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)

Duration: 1st Mar. ~ 31th Mar. 1989
St. : 1

Obtained Data	372
Short Data	0(0.0%)

Period / Height	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)	33 (8.9)	11 (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)	0 (0.0)	68 (18.3)	146 (39.2)	142 (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)

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

Obtained Data	360
Short Data	0 (0.0%)

Period / Height	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			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)	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)	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)

Duration: 1st May ~ 31th May 1989
St. : 1

Obtained Data	372
Short Data	1(0.3%)

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

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

Obtained Data	360
Short Data	0 (0.0%)

Period / Height	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 (23.1)	64 (17.8)	20 (5.6)	2 (0.6)												169 (46.9)
25~ 49			54 (15.0)	64 (17.8)	38 (10.6)	2 (0.6)												158 (43.9)
50~ 74			1 (0.3)	9 (2.5)	13 (3.6)	2 (0.6)												25 (6.9)
75~ 99				1 (0.3)	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)	0 (0.0)	138 (38.3)	138 (38.3)	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)

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

Obtained Data	372
Short Data	0(0.0%)

Period / Height	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			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)	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 (12) Frequency Distribution of Wave Height by Wave Period (Every Month)

Obtained Data	372
Short Data	0(0.0%)

Duration: 1st Aug. ~ 31th Aug. 1989
St. : 1

Period / Height	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			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)	0 (0.0)	29 (7.8)	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)

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

Obtained Data	360
Short Data	248(68.9%)

Period / Height	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																		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)	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)

Obtained Data	4378
Short Data	150(3.4%)

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

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	44 (1.0)	36 (0.9)	54 (1.3)	28 (0.7)	24 (0.6)	22 (0.5)	52 (1.2)	120 (2.8)	191 (4.5)	106 (2.5)	184 (4.4)	82 (1.9)	27 (0.6)	19 (0.4)	11 (0.3)	38 (0.9)	1038 (24.6)
25~ 49	22 (0.5)	11 (0.3)	23 (0.5)	9 (0.2)	12 (0.3)	18 (0.4)	89 (2.1)	311 (7.4)	539 (12.7)	225 (5.3)	339 (8.0)	75 (1.8)	25 (0.6)	11 (0.3)	9 (0.2)	31 (0.7)	1749 (41.4)
50~ 74					1 (0.0)	2 (0.0)	75 (1.8)	201 (4.8)	403 (9.5)	166 (3.9)	197 (4.7)	31 (0.7)	26 (0.6)	6 (0.1)			1108 (26.2)
75~ 99							12 (0.3)	61 (1.4)	53 (1.3)	35 (0.8)	73 (1.7)	12 (0.3)	10 (0.2)	2 (0.0)			258 (6.1)
100~ 124							8 (0.2)	14 (0.3)	4 (0.1)	2 (0.0)	20 (0.5)	5 (0.1)	2 (0.0)				55 (1.3)
125~ 149							6 (0.1)	7 (0.2)		1 (0.0)	3 (0.1)						17 (0.4)
150~ 174							1 (0.0)				1 (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	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)	4228 (100.0)

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

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

Obtained Data	2172
Short Data	113(5.2%)

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

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	13 (0.6)	18 (0.9)	41 (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~ 49	4 (0.2)	8 (0.4)	19 (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~ 74						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~ 99							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~ 124							8 (0.4)	14 (0.7)	3 (0.1)	2 (0.1)	18 (0.9)	5 (0.2)	2 (0.1)				52 (2.5)
125~ 149							6 (0.3)	7 (0.3)		1 (0.0)	3 (0.1)						17 (0.8)
150~ 174							1 (0.0)				1 (0.0)						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	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. 3-5 (3) Frequency Distribution of Wave Height by Wave Direction (Combined Two Dry Seasons)

Obtained Data	2206
Short Data	37(1.7%)

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

Dir. / Height	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 (8.8)	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 (44.8)
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)	1 (0.0)				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)

Obtained Data	618
Short Data	5(0.8%)

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

Dir. / Height	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Total
<25cm	4 (0.7)	4 (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)

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

Obtained Data	1588
Short Data	32(2.0%)

Dir. / Height	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)

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

Obtained Data	4378
Short Data	150(3.4%)

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	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)	4228 (100.0)

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)

Obtained Data	2172
Short Data	113(5.2%)

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

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	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)	93 (4.5)	184 (8.9)	54 (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)
20.0sec~																	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)

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

Obtained Data	2206
Short Data	37 (1.7%)

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

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

Obtained Data	618
Short Data	5(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	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)
20.0sec~																	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. 3-6 (5) Frequency Distribution of Wave Period by Wave Direction (2nd Dry Season)

Duration: 1st May ~ 10th Sep. 1989
St. : 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	NW	NNW	Total
<1.0sec																	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)	33 (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)
20.0sec~																	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)

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

Obtained Data	4378
Short Data	103(2.4%)

Period / Height	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			438 (10.2)	434 (10.2)	170 (4.0)	14 (0.3)												1056 (24.7)
25~ 49			331 (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)	8 (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)	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)	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)

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

Obtained Data	2172
Short Data	101 (4.7%)

Period / Height	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			200 (9.7)	174 (8.4)	68 (3.3)	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)	169 (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)	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)	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)

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

Obtained Data	2206
Short Data	2(0.1%)

Period / Height	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			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)	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)	2204 (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)

Obtained Data	618
Short Data	1(0.2%)

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

Period / Height	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			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)	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)

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

Obtained Data	1588
Short Data	1(0.1%)

Period / Height	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			205 (12.9)	215 (13.5)	75 (4.7)	6 (0.4)												501 (31.6)
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)	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 % .