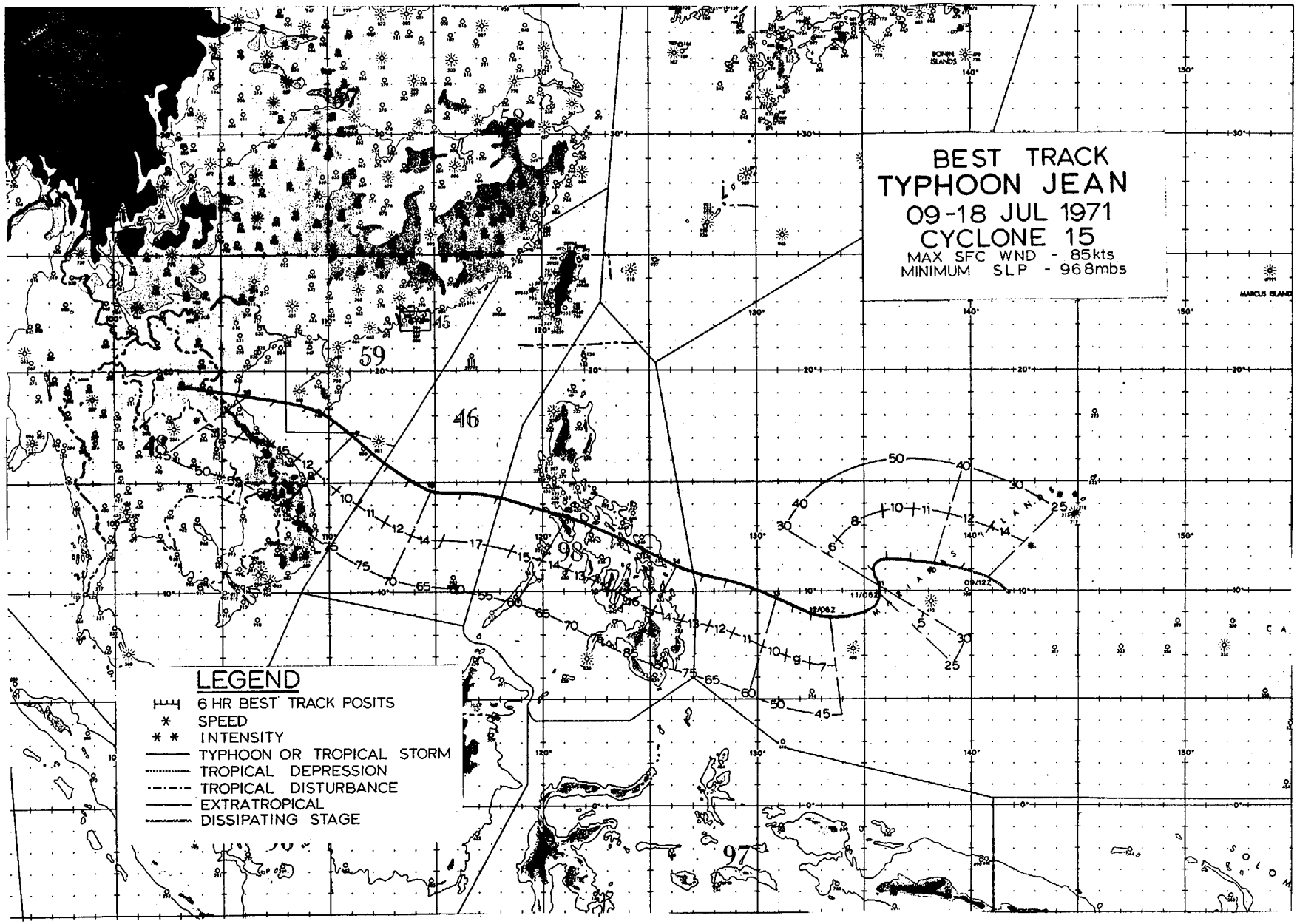
BEST TRACK
TYPHOON JEAN
09-18 JUL 1971
CYCLONE 15
MAX SFC WND - 85kts
MINIMUM SLP - 968mbs
LEGEND
6 HR BEST TRACK POSITS
SPEED
INTENSITY
TYPHOON OR TROPICAL STORM
TROPICAL DEPRESSION
TROPICAL DISTURBANCE
EXTRATROPICAL
DISSIPATING STAGE
BONIN ISLANDS
MARCUS ISLAND

JEAN

As Jean came onto the scene, the Philippines and Vietnam became the target of July's second typhoon. From her incipient stage, a weak circulation southeast of Guam on the 9th, Jean spent her nine-day lifetime describing a track similar to Gilda and Harriet's.

Attaining 50-kt winds on the 10th, Jean weakened to depression status and described an erratic track for a 24-hour period, while the center showed a southward displacement. Regaining tropical storm strength north of the Palau Islands on the 11th, Jean commenced on a west-northwest track gradually increasing in forward speed (Figure 5-19).

The United Kingdom vessel SIMON BURN passed near the center the morning of the 13th reporting force-10 winds (48-55 kt), very high seas and a minimum sea level pressure of 987 mb.

Attaining typhoon strength that afternoon about 270 n mi east of Leyte, Jean reached a peak of 85 kt a few hours before striking Samar the following day. Jean cut across the central Philippines on the 14th and 15th with her winds dropping below typhoon strength as she emerged into the South China Sea near Lubang Island.

Highest winds reported in the archipelago were 65 kt at Catbalogan located on the western coast of Samar while gusts of 70 kt were measured at Virac on Catanduanes. Winds up to 38 kt were also experienced in high and exposed areas of the greater Manila area. Over 7 inches of rain fell in a two-day period in Samar. No reports of casualties and damage are available; however, low-lying areas of Manila encountered local flooding.

Regaining typhoon winds over open water about 24 hours later (Figure 5-20), the storm changed course to a northwesterly heading as she approached a weakness in the subtropical ridge. Skirting southern Hainan Island on the 17th, Jean's winds dropped to storm status. Bending back to a westerly course across the Gulf of Tonkin, the storm struck shore near Vinh on the Indochina coast on the 18th. The system dissipated over the mountainous terrain of Laos later that day.

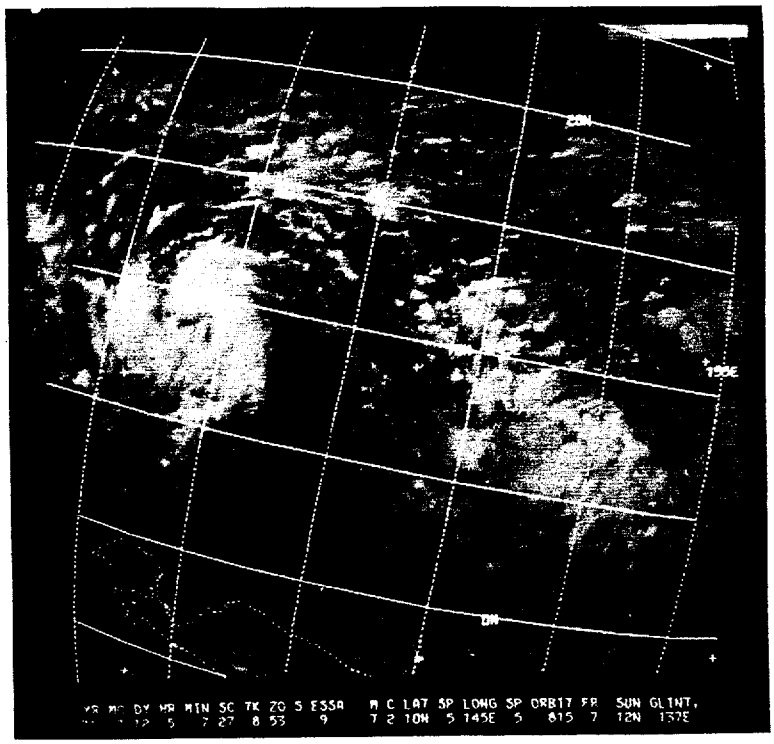

FIGURE 5-19. TROPICAL STORM STAGE OF JEAN AS SEEN ON 12 JULY BY ESSA-9.

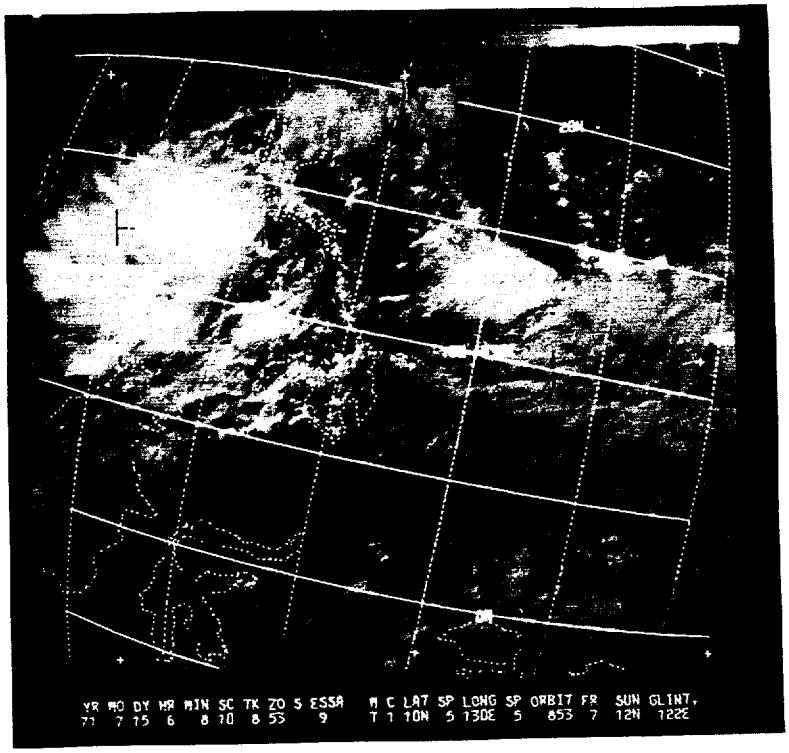

FIGURE 5-20. AS A MINIMAL TYPHOON, JEAN IS SIGHTED BY ESSA-9 ON 15 JULY AFTER CROSSING THE PHILIPPINES.

TYPHOON JEAN

EYE FIXES FOR CYCLONE NO. 15

09 JUL - 18 JUL 71

FIX NO.	TIME	POSIT	UNIT-METHOD -ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TI/TO	EYE FORM	ORIEN-TATION	EYE DIA	THKN WALL CLD	REMARKS	POSIT OF RADAR
1	090602Z	10.5N 138.5E	SATELIT---	STG B										FIRST SAT BLTN	
2	100139Z	11.2N 137.8E	VQ-P- 3---	300M	45	45	1003	----	27/23	CIRC		20	--	NO WC-WK FBS	
3	100345Z	11.3N 137.4E	VQ-P- 3---	300M	60	60	1005	----	26/22	CIRC		18	--	WC OPEN E	
4	101000Z	11.3N 136.7E	54-P- 5- 3	700MB	49	35	998	3063	11/07	----	-----	--	--	WC FORMING	
5	101545Z	11.2N 135.3E	54-P- 2-15	700MB	50	----	1001	3070	09/08	----	-----	--	--	RDR PRES POOR	
6	110425Z	10.0N 136.0E	54-P- 1-19	700MB	40	20	1001	3072	09/08	----	-----	--	--	NEG RDR PRES	
7	110609Z	10.0N 135.0E	SATELIT---	STG B										BANDS TO S	
8	120159Z	8.9N 134.0E	VQ-P- 5-40	300M	----	45	998	----	27/25	----	-----	--	--	WC OPEN SW	
9	120507Z	9.0N 137.0E	SATELIT---	STG C+										STRONGER	
10	121033Z	8.9N 132.9E	54-P-15---	700MB	34	----	993	3024	12/11	CIRC		10	--	POORLY DEFINED	
11	121540Z	9.2N 132.0E	54-P-20---	700MB	42	----	993	3005	13/11	----	-----	--	--	NO WC	
12	122229Z	9.5N 131.2E	VQ-R- 8---	700MB	----	----	---*	----	--/--	CIRC		5	2	WC OPEN N	10.0N 131.4E
13	130304Z	9.8N 130.2E	VQ-R- 5- 3	700MB	----	----	---*	----	--/--	CIRC		5	4	CLSD WC	10.6N 130.1E
14	130606Z	10.0N 129.0E	SATELIT---	STG C+										LITTLE CHG	
15	131000Z	10.5N 129.2E	54-P- 5---	700MB	65	75	986	2987	18/12	CIRC		18	--	WC OPEN SW-N	
16	131600Z	10.6N 127.9E	54-P- 5- 4	700MB	40	----	983	2951	16/13	CIRC		25	10	CLSD WC	
17	131751Z	10.7N 127.5E	54-P- 5- 4	700MB	35	----	984	2932	16/12	CIRC		25	--	CLSD WC	
18	132200Z	11.0N 126.8E	54-P- 3- 2	700MB	80	85	977	2899	18/12	ELIP	E-W	30X25	--	CLSD WC	
19	140425Z	11.5N 124.6E	VQ-R-10---	700MB	45	50	---*	----	--/--	----	-----	--	--	NO WC-MDT FBS	
20	140505Z	11.8N 124.8E	VQ-P-10---	700MB	----	----	968	2819	14/11	----	-----	--	--	NO WC	
21	140705Z	12.0N 125.0E	SATELIT---	STG X	DIA	2	CAT 2.0							STRONGER	
22	140708Z	12.0N 124.8E	VQ-P- 2---	700MB	105	----	983	3001	17/12	----	-----	--	--	NO WC	
23	140935Z	12.2N 124.2E	VQ-P- 5---	700MB	86	----	984	2996	16/15	----	-----	--	--	NO WC	
24	141315Z	12.6N 123.4E	54-P- 1-40	500MB	55	----	---*	----	--/--	----	-----	--	--	NO WC	
25	141600Z	12.7N 123.1E	54-R- 5-45	500MB	55	----	---*	----	--/-1	----	-----	--	--	NO WC	12.3N 123.0E
26	141820Z	12.6N 122.2E	54-R-10-40	500MB	40	----	---*	----	--/--	----	-----	--	--	FBS BGNG TO FORM	12.6N 121.3E
27	141900Z	12.7N 121.9E	LND RDR---							----	-----	--	--	ADCC RDR	15.2N 120.0E
28	142222Z	13.8N 120.8E	VQ-R-15---	300M	----	----	---*	----	--/--	CIRC		11	3	CLSD WC	13.5N 119.5E
29	150121Z	13.5N 119.6E	VQ-R- 3---	300M	----	----	---*	----	--/--	CIRC		8	--	CLSD WC	14.0N 119.2E
30	150345Z	13.4N 118.9E	VQ-R-10---	300M	----	----	---*	----	--/--	CIRC		8	2	WC OPEN W-MANY WATERSPOUTS NE	13.7N 118.8E
31	150608Z	13.0N 118.0E	SATELIT---	STG X	DIA	3	CAT 2.5								
32	150759Z	13.6N 118.7E	54-R-15---	700MB	55	----	---*	----	--/--	CIRC		30	18	MDT FBS	14.0N 119.7E
33	151015Z	14.1N 118.4E	54-P- 3- 5	700MB	55	45	982	2981	15/11	CIRC		10	--	NO WC-SFC CNTR 25 NM NE	
34	151300Z	14.4N 117.6E	54-P- 3---	700MB	110	----	989	2972	15/11	CIRC		8	10	WC OPEN N	
35	151555Z	14.4N 116.8E	54-P- 3- 5	700MB	100	----	985	2957	15/11	CIRC		10	8	WC OPEN E	
36	152200Z	14.6N 115.2E	54-P- 1- 9	700MB	50	70	983	2940	13/12	ELIP	E-W	30X20	5	POOR RDR PRES	
37	152230Z	14.5N 114.9E	SHP RDR---							----	-----	--	--	USS HORNE	
38	152330Z	14.5N 114.8E	SHP RDR---							----	-----	--	--	USS HORNE	
39	160030Z	14.3N 114.9E	SHP RDR---							----	-----	--	--	USS HORNE	
40	160130Z	14.3N 114.5E	SHP RDR---							----	-----	--	--	USS HORNE	
41	160230Z	14.3N 114.5E	SHP RDR---							----	-----	--	--	USS HORNE	
42	160330Z	14.4N 114.4E	SHP RDR---							----	-----	--	--	USS HORNE	
43	160400Z	14.7N 114.5E	54-P- 1- 9	700MB	60	70	979	2905	16/13	CIRC		40	5	WC OPEN NW	
44	160706Z	15.0N 114.0E	SATELIT---	STG X	DIA	2	CAT 2.5							MAIN CLD MASS SW	
45	161025Z	15.5N 113.2E	VQ-P- 5---	240M	----	110	977	----	27/26	CIRC		18	6	WC OPEN N-SST 29C	
46	161300Z	15.7N 112.4E	SHP RDR---							----	-----	--	--	USS HORNE	15.2N 109.8E
47	161315Z	15.8N 112.7E	VQ-P- 5---	260M	----	100	977	----	27/25	CIRC		22	6	WC OPEN E-NW	
48	161330Z	15.8N 112.5E	SHP RDR---							----	-----	--	--	USS HORNE	15.1N 109.9E

TYPHOON JEAN
EYE FIXES FOR CYCLONE NO. 15
09 JUL - 18 JUL 71

FIX NO.	TIME	POSIT	UNIT-METHOD -ACCY	FLT LVL	FLT LVL WND	OBS SFC WND	OBS MIN SLP	MIN 700MB HGT	FLT LVL TI/TO	EYE FORM	ORIEN-TATION	EYE DIA	THKN WALL CLD	REMARKS	POSIT OF RADAR
49	161400Z	15.8N 112.5E	SHP RDR---							----	-----	--	--	USS HORNE	15.0N 109.9E
50	161430Z	15.8N 112.5E	SHP RDR---							----	-----	--	--	USS HORNE	14.8N 109.9E
51	161500Z	16.0N 112.2E	VO-W- 5---	700MB	----	90	----	----	--/13	ELIP	E-W	18X13	A	WC OPEN NW	16.7N 112.9E
52	161900Z	16.6N 111.8E	D4-P- 1- 9	700MB	50	----	9/5	2896	16/12	----	-----	--	--	NFG RADAR PRFS	
53	162200Z	16.7N 111.4E	D4-P-10---	700MB	52	----	9/0	2896	15/12	----	-----	--	--	NFG RADAR PRFS	
54	170100Z	17.1N 111.5E	D4-P- 2-2A	700MB	58	65	----	----	--/--	----	-----	--	--	NFG RADAR PRFS	
55	170528Z	17.2N 110.2E	VO-W-15-12	-----	----	----	----	----	--/--	ELIP	N-S	12X 8	--	V POOR RDR PRFS	16.1N 110.1E
56	170614Z	17.5N 110.0E	SATELLI---	STG A	DIA	3	CAT 3.0							EYE FAINTLY VSBL	
57	170700Z	18.1N 110.1E	VO-W- 5- 5	-----	----	----	----	----	--/--	CIRC		12	--	EXC RDR PRES	16.6N 110.0E

TYPHOON JEAN

1200Z 9 JUL TO 0000Z 18 JUL

	BEST TRACK		WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
					ERRORS				ERRORS				ERRORS				ERRORS	
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
091200Z	10.5N 140.8E	25	10.2N 137.0E	30	224	5	11.8N 132.4E	55	219	5	--.- ---.-	--	--	--	--.- ---.-	--	--	--
091800Z	11.0N 139.4E	30	10.5N 136.0E	30	202	0	12.0N 132.0E	55	210	15	--.- ---.-	--	--	--	--.- ---.-	--	--	--
100000Z	11.2N 138.2E	40	11.0N 138.0E	45	17	5	13.4N 133.6E	70	222	40	--.- ---.-	--	--	--	15.0N 121.7E	100	618	40
100600Z	11.3N 137.1E	50	11.5N 137.1E	50	12	0	13.6N 133.0E	85	276	60	14.8N 127.3E	100	501	55	--.- ---.-	--	--	--
101200Z	11.3N 136.1E	50	11.7N 136.5E	50	33	0	--.- ---.-	--	--	--	14.8N 127.6E	100	453	55	15.0N 121.5E	110	503	35
101800Z	10.9N 135.4E	40	11.5N 135.0E	50	43	10	--.- ---.-	--	--	--	13.5N 125.2E	100	461	50	--.- ---.-	--	--	--
110000Z	10.3N 135.7E	30	11.1N 134.2E	50	100	20	--.- ---.-	--	--	--	12.2N 125.5E	90	345	30	13.5N 120.0E	80	387	-5
110600Z	9.8N 135.7E	25	10.0N 136.0E	25	21	0	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--
120600Z	8.8N 133.3E	45	9.0N 133.7E	45	26	0	9.7N 131.8E	60	120	-5	11.5N 128.2E	70	200	-5	--.- ---.-	--	--	--
121200Z	9.0N 132.6E	45	8.9N 132.6E	50	6	5	9.3N 129.3E	60	77	-15	11.0N 125.6E	80	139	10	13.8N 120.5E	70	153	10
121800Z	9.3N 131.8E	50	9.2N 131.7E	50	8	0	10.5N 127.6E	70	19	-10	12.6N 122.8E	75	29	10	--.- ---.-	--	--	--
130000Z	9.7N 130.8E	60	9.7N 131.0E	55	12	-5	11.1N 127.4E	75	71	-10	13.1N 122.8E	70	100	10	15.4N 117.5E	75	163	5
130600Z	10.1N 129.8E	65	10.1N 129.8E	65	0	0	11.9N 125.5E	80	41	5	14.1N 120.7E	70	66	15	--.- ---.-	--	--	--
131200Z	10.5N 128.8E	75	10.6N 128.8E	70	6	-5	12.5N 124.4E	75	41	5	14.8N 119.1E	70	78	10	16.8N 114.2E	85	104	10
131800Z	10.8N 127.5E	80	11.0N 127.7E	75	17	-5	13.1N 123.1E	75	42	10	15.4N 117.8E	75	107	10	--.- ---.-	--	--	--
140000Z	11.2N 126.2E	85	11.3N 126.5E	80	19	-5	13.3N 121.7E	70	35	10	15.7N 116.8E	80	133	10	17.3N 112.1E	85	53	15
140600Z	11.9N 124.8E	75	12.0N 124.7E	80	8	5	14.5N 119.5E	75	42	20	16.6N 114.5E	85	101	10	--.- ---.-	--	--	--
141200Z	12.4N 123.7E	70	12.4N 123.7E	80	0	10	14.9N 118.8E	80	67	20	16.8N 113.8E	90	87	15	18.3N 108.8E	90	13	35
141800Z	12.9N 122.4E	65	12.8N 122.7E	75	18	10	15.3N 118.0E	80	114	15	17.0N 113.4E	90	90	15	--.- ---.-	--	--	--
150000Z	13.4N 121.1E	60	13.9N 120.7E	75	38	15	16.1N 115.8E	85	107	15	17.5N 111.0E	95	26	25	18.8N 107.0E	85	52	40
150600Z	13.8N 119.6E	55	13.5N 118.6E	75	61	20	16.2N 114.6E	85	84	10	17.7N 110.3E	90	6	25	--.- ---.-	--	--	--
151200Z	14.2N 117.9E	60	14.5N 118.1E	75	21	15	16.3N 113.2E	85	43	10	17.7N 109.3E	90	53	35	--.- ---.-	--	--	--
151800Z	14.5N 116.2E	65	14.7N 116.3E	75	13	10	16.3N 111.7E	90	17	15	17.7N 107.7E	90	67	40	--.- ---.-	--	--	--
160000Z	14.6N 114.8E	70	14.8N 114.8E	75	12	5	16.7N 110.1E	90	67	20	18.3N 106.3E	80	43	35	--.- ---.-	--	--	--
160600Z	15.1N 113.7E	75	14.8N 114.1E	75	29	0	15.9N 109.4E	80	125	15	--.- ---.-	--	--	--	--.- ---.-	--	--	--
161200Z	15.7N 112.8E	75	15.5N 112.8E	80	12	5	16.4N 108.0E	80	136	25	--.- ---.-	--	--	--	--.- ---.-	--	--	--
161800Z	16.3N 112.0E	75	16.2N 111.9E	80	8	5	17.4N 107.8E	80	85	30	--.- ---.-	--	--	--	--.- ---.-	--	--	--
170000Z	17.1N 111.2E	70	16.8N 111.0E	70	21	0	19.2N 107.6E	60	86	15	--.- ---.-	--	--	--	--.- ---.-	--	--	--
170600Z	17.8N 110.3E	65	17.3N 110.1E	70	32	5	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--
171200Z	18.5N 108.9E	55	18.4N 109.9E	60	57	5	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--
171800Z	18.8N 107.5E	50	19.6N 108.0E	55	55	5	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--
180000Z	19.0N 106.1E	45	20.3N 107.3E	50	103	5	--.- ---.-	--	--	--	--.- ---.-	--	--	--	--.- ---.-	--	--	--

	TYPHOONS WHILE WIND OVER 35KTS				ALL FORECASTS			
	WARNING	24-HR	48-HR	72-HR	WARNING	24-HR	48-HR	72-HR
AVERAGE FORECAST ERROR	25NM	84NM	154NM	227NM	39NM	98NM	154NM	227NM
AVERAGE RIGHT ANGLE ERROR	18NM	63NM	67NM	51NM	22NM	74NM	67NM	51NM
AVERAGE MAGNITUDE OF WIND ERROR	6KTS	14KTS	24KTS	22KTS	6KTS	17KTS	24KTS	22KTS
AVERAGE BIAS OF WIND ERROR	4KTS	10KTS	23KTS	21KTS	5KTS	13KTS	23KTS	21KTS
NUMBER OF FORECASTS	28	22	20	9	32	24	20	9