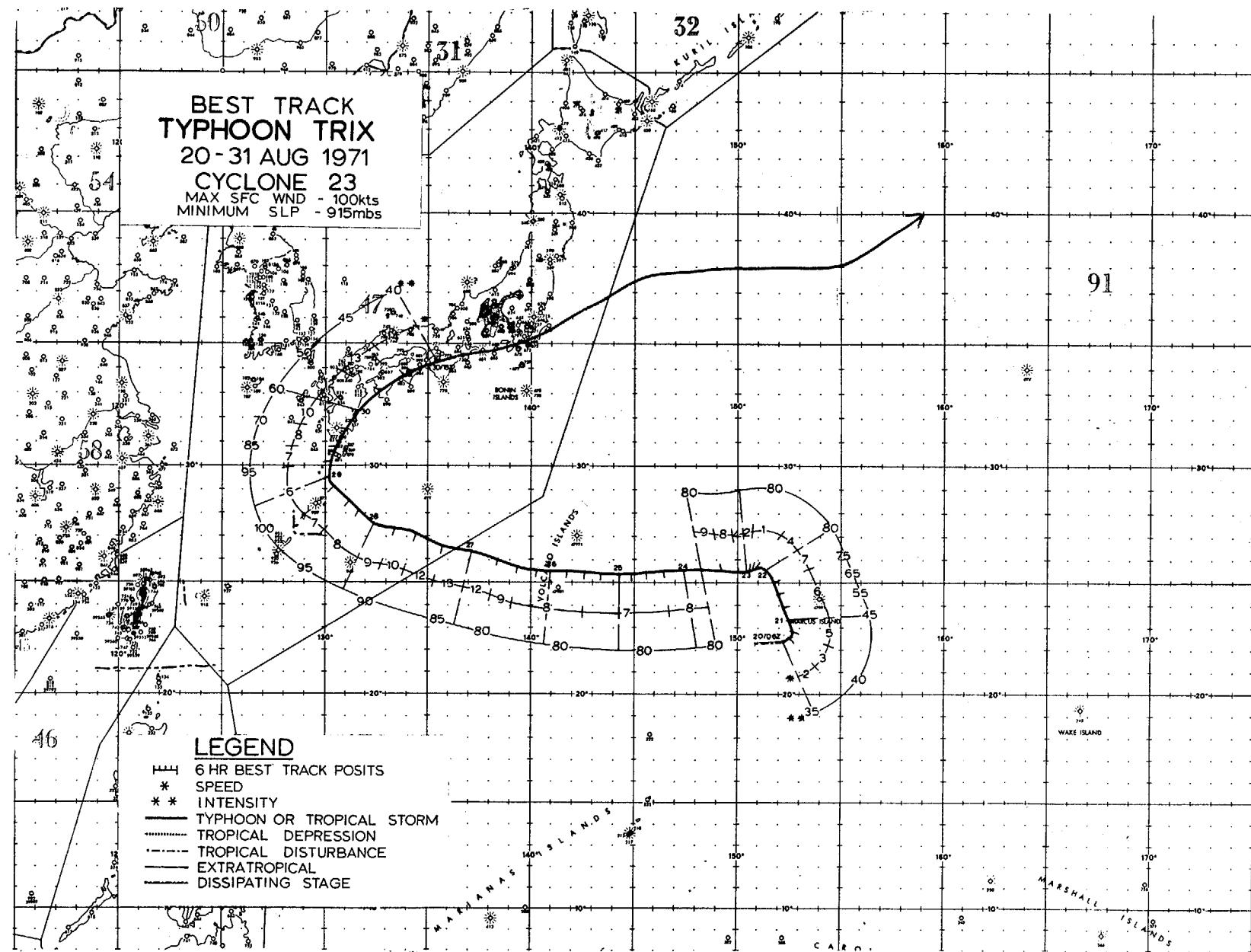


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TRIX

A disturbance created by an upper-level circulation in the mid-Pacific trough gave birth to a surface circulation, later to be Trix, some 200 n mi southwest of Marcus Island on the 19th. By the following day, winds of tropical-storm force were being generated in the system.

A stationary short-wave trough in the westerlies over the Kuril Islands had broken down the subtropical ridge in the general longitude of the typhoon, thus providing little steering current to Trix. The storm drifted northward at 6-7 kt (Figure 5-35) attaining typhoon-force strength the night of the 21st 100 n mi west of Marcus Island.

On the 22nd the storm remained nearly stationary for 24 hours, then in response to strengthening of the ridge, Trix began a westward track on a heading that took her near Iwo Jima on the morning of the 26th. Winds of 35 kt with gusts to 45 kt were recorded on the island as the typhoon passed 40 n mi to the north.

The storm then took aim for the northern Ryukyus and began a slow intensification on the 27th. Prior to recurvature, Trix slowed to 8 kt (Figure 5-36) and her central pressure began to plummet some 30 mb in 24 hours--an unusual phenomena for a typhoon at such a relatively high latitude. About 30 miles south of Yaku-Shima Island aircraft reconnaissance measured a minimum pressure of 915 mb within a tight 8 n mi eye. In spite of the abnormally low pressure, maximum sustained winds did not appear to exceed the 100-kt level as determined by aircraft. Maximum-observed wind in the Ryukyus was reported by Yaku-Shima station with 66 kt gusting to 96 kt as the center of Trix passed 20 n mi to its west.

Following three weeks after Olive, Trix struck Kyushu at Cape Sata in the early morning of the 30th. She then paralleled the Japan coast line emerging from the Boso Peninsula as an extratropical system. The typhoon brought torrential rains to the Japanese islands with as much as 43 inches recorded in the mountainous terrain of Kyushu (Yangitake, Miyazaki prefecture). The huge rainfall flooded many rivers and streams and caused numerous landslides. In addition the weather halted the National Railways in Kyushu and paralyzed the nation's air and surface transport systems.

Fourty-four deaths were reported, over 1,000 dwellings were partially or completely destroyed and over 120,000 homes were flooded. A total of 50.6 million dollars (U.S.) was lost in damages sustained to the rice, fruit and vegetable crops. In addition, a series of tornadoes swept through the coastal part of Chiba City accounting for one death as the weakened extratropical stages of Trix passed back out to sea.

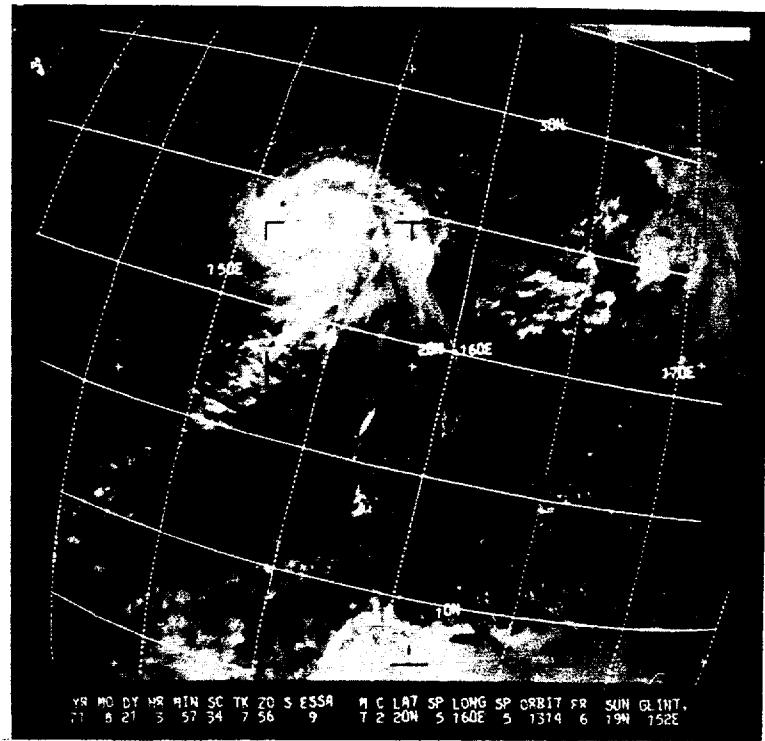


FIGURE 5-35. TRIX AS SIGHTED BY ESSA-9 WHILE A TROPICAL STORM JUST WEST OF MARCUS ISLAND ON 21 AUGUST.

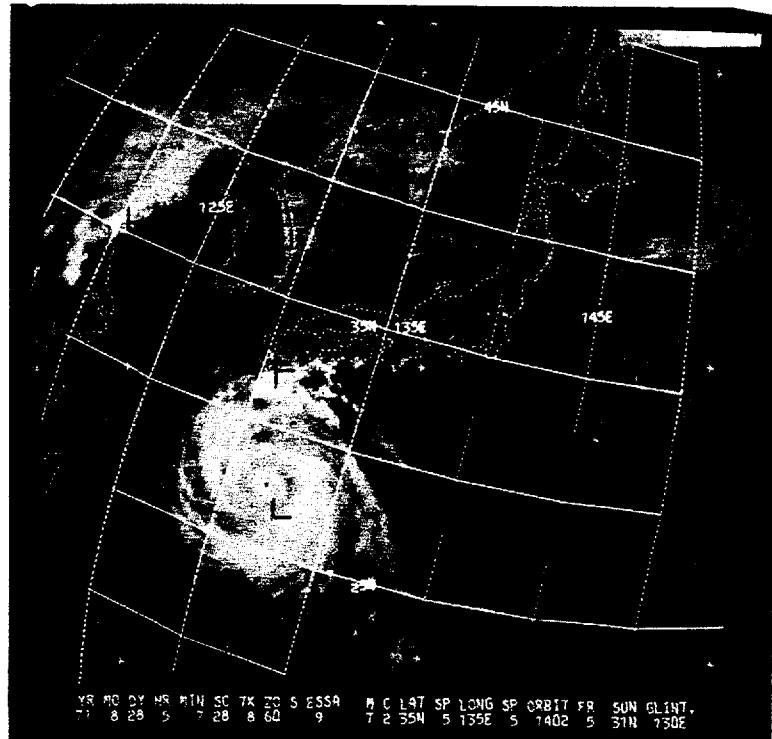


FIGURE 5-36. ESSA-9 PHOTO OF TYPHOON TRIX EAST OF THE RYUKYU CHAIN ON 28 AUGUST.

TYPHOON TRIX
EYE FIXES FOR CYCLONE NO. 23
20 AUG - 31 AUG 71

FIX NO.	TIME	POSIT	UNIT- METHOD	FLT	LVL	OBS	OBS	MIN	FLT	EYE	ORIEN- TATION	EYE	THKN	WALL	POSS OF RADAR	
			-ACCY	LVL	WND	SFC	MIN	700MB	LVL	TI/T0	FORM	DIA	CLOUD	RFMARKS		
			-	STG	C	SLP	HGT									
1	200250Z	22.4N 152.1E	54-P- 7- 2	700MB	38	35	996	3042	12/10	CIRC		20	--	SPIRALING SC		
2	200454Z	22.5N 152.5E	SATELIT---	STG C											COMMA SHAPED CLD	
3	202120Z	23.1N 152.7E	54-P-12---	700MB	30	40	994	3002	11/09	----	----	--	--	VISUAL SFC CNTR		
4	202200Z	23.1N 152.6E	54-P-12---	700MB	30	40	994	3000	11/09	----	----	--	--	VISUAL SFC CNTR		
5	210330Z	23.6N 152.2E	54-P-11---	700MB	33	45	987	2984	13/10	----	----	--	--	WC FORMING-700		
6	210350Z	23.5N 152.0E	SATELIT---	STG C										BETTER ORGANIZED		
7	211020Z	24.3N 152.0E	VQ-P- 3---	----	----	45	985	----	26/23	ELIP	SE-NW	35X30	--	WC FORMING		
8	211520Z	24.7N 152.0E	VQ-P- 3---	----	----	65	978	----	27/23	CIRC		30	10	WC OPEN N		
9	220200Z	25.5N 151.1E	54-P- 5---	700MB	65	70	970	2841	14/12	CIRC		30	--	WC OPEN NW-SFC		
10	220410Z	25.6N 151.0E	54-P- 3---	700MB	70	60	970	2841	17/13	ELIP	NE-SW	25X10	--	WC WEAKENING		
11	220456Z	25.5N 151.5E	SATELIT---	STG X DIA 2 CAT 3.0										SMALL EYE VISIBLE		
12	221930Z	25.5N 150.6E	54-P- 5--	700MB	66	70	967	2813	15/10	CIRC		20	--	WC OPEN W		
13	222248Z	25.8N 150.7E	54-P---	700MB	----	----	----	2792	14/-	----	----	--	--			
14	230210Z	25.3N 150.4E	54-P-10---	700MB	70	75	963	2780	14/10	ELIP	NE-SW	35X20	--	CLSD WC		
15	230404Z	25.5N 150.0E	SATELIT---	STG X DIA 2 CAT 3.5										SMALL EYE VISIBLE		
16	231105Z	25.5N 149.1E	VQ-R- 8- 7	----	----	----	----	----	----	ELIP	E-W	40X34	9	CLSD WC	26.0N 150.0E	
17	231545Z	25.3N 148.4E	VQ-P- 6- 2	700MB	----	80	967	2819	25/22	CIRC		30	--	WC OPEN N		
18	232145Z	25.4N 147.6E	54-P- 5- 5	700MB	60	----	962	2771	15/11	CIRC		25	--	WEAK RDR PRES		
19	240320Z	25.4N 146.8E	54-P-10- 2	700MB	75	65	961	2762	16/13	CIRC		30	--	CLSD WC		
20	240458Z	25.5N 146.5E	SATELIT---	STG X DIA 2 CAT 2.5												
21	241545Z	25.3N 145.3E	VQ-P- 3- 3	700MB	----	964	2795	13/09	CIRC			32	10	CLSD WC		
22	242200Z	25.2N 144.4E	54-P- 5--	700MB	65	----	959	2726	14/12	CIRC		30	--	CLSD WC-FL CNTR		
23	250406Z	25.0N 144.0E	SATELIT---	STG X DIA 2 CAT 3.5										EYE VISIBLE		
24	250410Z	25.2N 143.9E	54-P- 5- 3	700MB	85	80	962	2765	16/10	CIRC		30	--	CLSD WC		
25	250930Z	25.8N 143.1E	VQ-R- 5- 5	----	----	----	----	----	----	CIRC		17	6	POOR RDR PRES	25.7N 144.2E	
26	251555Z	25.6N 142.1E	VQ-P- 2- 4	700MB	----	955	2804	18/14	CIRC			22	--	HOLE IN SEA RETRN		
27	252200Z	25.4N 141.2E	54-P- 2- 2	700MB	43	75	963	2752	13/12	CIRC		15	3	WC OPEN W SEMIC-		
														700 CNTR 1NM S		
28	260300Z	25.4N 140.5E	54-P- 4- 2	700MB	69	55	961	2749	13/10	----	----	--	--	BCMG DISORG		
29	260500Z	25.5N 140.2E	SATELIT---	STG X DIA 2 CAT 3.0										EYE FAINTLY VSBL		
30	260950Z	25.6N 139.7E	VQ-R- 2--	----	----	----	----	----	----	CIRC		15	10	WC OPEN N SEMIC	26.1N 139.5E	
31	261520Z	25.7N 138.6E	VQ-P- 3--	700MB	----	967	2782	14/10	CIRC			12	8	WC OPEN NW SEMIC		
32	262155Z	26.2N 137.7E	54-P- 2-13	700MB	40	70	966	2783	15/13	CIRC			20	3	POORLY DEFINED-	
														700 CNTR 5NM S		
33	262345Z	26.2N 137.6E	54-P-----	700MB	----	----	----	2865	13/-	----	----	--	--			
34	270206Z	26.5N 136.5E	54-P- 2-13	700MB	60	90	960	2752	14/14	CIRC		10	5	POORLY DEFINED		
35	270310Z	26.5N 136.3E	54-P- 2-18	700MB	60	90	962	2752	14/13	CIRC		10	5	POORLY DEFINED		
36	270555Z	26.5N 136.0E	SATELIT---	STG X DIA 2 CAT 3.5										EYE VSBL LTL CHG		
														700MB FIX		
37	270930Z	26.7N 135.3E	VQ-R- 5--	----	----	----	----	----	----	CIRC		12	8	CLSD WC	26.5N 134.0E	
38	271537Z	27.3N 133.8E	VQ-P- 5--	700MB	----	955	2697	17/13	ELIP	N-S	14X11	10	CLSD WC			
39	272130Z	27.5N 132.0E	VQ-R- 8--	----	----	----	----	----	----	CIRC		13	10	WC OPEN NE QUAD	28.2N 132.1E	
40	272200Z	27.5N 132.6E	LND RDR---	----	----	----	----	----	----					STN 47909	28.4N 129.5E	
41	272300Z	27.5N 132.5E	LND RDR---	----	----	----	----	----	----					STN 47909	28.4N 129.5E	
42	280000Z	27.6N 132.4E	LND RDR---	----	----	----	----	----	----					STN 47909	28.4N 129.5E	
43	280100Z	27.6N 132.3E	LND RDR---	----	----	----	----	----	----					STN 47909	28.4N 129.5E	
44	280100Z	27.6N 131.8E	LND RDR---	----	----	----	----	----	----					OKINAWA RDR		
45	280125Z	27.7N 132.2E	VQ-P- 5--	700MB	----	----	953	2694	16/10	CIRC		18	8	WC OPEN NE QUAD		

TYPHOON TRIX
EYE FIXES FOR CYCLONE NO. 23
20 AUG - 31 AUG 71

FIX NO.	TIME	POSIT	UNIT- METHOU -ACCY	FLT LVL	OBS LVL WND	OBS SFC WND	MIN SLP	FLT LVL HGT TI/TO	EYE FORM	ORIEN- TATION	EYE DIA	THKN WALL CLD	REMARKS	POSIT OF RADAR
46	280200Z	27.6N 132.2E	LND RDR---									--	STN 47909	28.4N 129.5E
47	280300Z	27.7N 132.0E	LND RDR---									--	STN 47909	28.4N 129.5E
48	280357Z	27.9N 131.9E	VQ-P- 3--	700MB	----	----	953	2690 15/12	CIRC	20	8	CLSD WC		
49	280400Z	27.8N 132.0E	LND RDR---									--	STN 47909	28.4N 129.5E
50	280400Z	27.7N 131.6E	LND RDR---									--	OKINAWA RDR	
51	280500Z	27.9N 131.9E	LND RDR---									--	STN 47909	28.4N 129.5E
52	280500Z	27.8N 131.6E	LND RDR---									--	OKINAWA RDR	
53	280507Z	27.5N 132.0E	SATELLIT--		STA X DIA 2 CAT 3.5								EYE VSBL LTL CHG	
54	280600Z	28.0N 131.8E	LND RDR---									--	STN 47909	28.4N 129.5E
55	280600Z	28.1N 131.7E	LND RDR---									--	OKINAWA RDR	
56	280700Z	28.1N 131.7E	LND RDR---									--	STN 47909	28.4N 129.5E
57	280700Z	28.1N 131.7E	LND RDR---									--	OKINAWA RDR	
58	280700Z	28.3N 131.7E	LND RDR---									--	STN 47869	
59	280717Z	28.2N 131.6E	54-P- 1-14	700MB	32	85	942	2591 16/12	CIRC	25	5	CLSD WC-700 CNTR ON WEDGE OF WC	30.6N 131.0E	
60	280800Z	28.3N 131.6E	LND RDR---									--	STN RJFF	33.6N 130.4E
61	280800Z	28.2N 131.6E	LND RDR---									--	STN 47909	28.4N 129.5E
62	280800Z	28.4N 131.6E	LND RDR---									--	STN 47869	30.6N 131.0E
63	280800Z	28.2N 131.8E	LND RDR---									--	OKINAWA RDR	
64	280900Z	28.4N 131.6E	LND RDR---									--	STN 47909	28.4N 129.5E
65	280900Z	28.5N 131.6E	LND RDR---									--	STN 47869	30.6N 131.0E
66	280900Z	28.2N 131.7E	LND RDR---									--	OKINAWA RDR	
67	280937Z	28.4N 131.4E	54-P- 1-9	700MB	40	80	941	2566 17/14	CIRC	20	5	WC OPEN SF		
68	281000Z	28.5N 131.6E	LND RDR---									--	STN RJFF	33.6N 130.4E
69	281000Z	28.2N 131.3E	LND RDR---									--	OKINAWA RDR	
70	281000Z	28.7N 131.4E	LND RDR---									--	STN 47869	30.6N 131.0E
71	281000Z	28.5N 131.4E	LND RDR---									--	STN 47909	28.4N 129.5E
72	281100Z	28.7N 131.3E	LND RDR---									--	STN RJFF	33.6N 130.4E
73	281100Z	28.6N 131.2E	LND RDR---									--	STN 47909	28.4N 129.5E
74	281100Z	28.8N 131.3E	LND RDR---									--	STN 47869	30.6N 131.0E
75	281200Z	28.7N 131.1E	LND RDR---									--	STN 47909	28.4N 129.5E
76	281200Z	28.9N 131.1E	LND RDR---									--	STN 47869	30.6N 131.0E
77	281200Z	28.8N 131.1E	LND RDR---									--	STN RJFF	33.6N 130.4E
78	281300Z	28.8N 131.0E	LND RDR---									--	STN RJFF	33.6N 130.4E
79	281300Z	28.8N 131.0E	LND RDR---									--	STN 47909	28.4N 129.5E
80	281300Z	29.0N 131.0E	LND RDR---									--	STN 47869	30.6N 131.0E
81	281300Z	28.8N 131.0E	54-P- 1-9	700MB	75	----	927	2536 18/15	CIRC	20	5	CLSD WC-FL FIX		
82	281400Z	29.0N 130.8E	LND RDR---									--	STN RJFF	33.6N 130.4E
83	281400Z	29.1N 130.8E	LND RDR---									--	STN 47869	30.6N 131.0E
84	281400Z	28.9N 130.8E	LND RDR---									--	STN 47909	28.4N 129.5E
85	281500Z	29.2N 130.6E	LND RDR---									--	STN 47869	30.6N 131.0E
86	281500Z	29.0N 130.7E	LND RDR---									--	STN 47909	28.4N 129.5E
87	281510Z	29.0N 130.6E	54-P- 1-9	700MB	65	----	936	2539 19/16	CIRC	20	5	CLSD WC-FL FIX		
88	281600Z	29.1N 130.5E	LND RDR---									--	STN RJFF	33.6N 130.4E
89	281800Z	29.3N 130.3E	LND RDR---									--	STN RJFF	33.6N 130.4E
90	281800Z	29.3N 130.3E	LND RDR---									--	STN 47909	28.4N 129.5E
91	281800Z	29.3N 130.3E	LND RDR---									--	STN 47869	30.6N 131.0E
92	281900Z	29.3N 130.2E	LND RDR---									--	STN RJFF	33.6N 130.4E
93	281900Z	29.4N 130.2E	LND RDR---									--	STN 47869	30.6N 131.0E
94	281900Z	29.3N 130.2E	LND RDR---									--	STN 47909	28.4N 129.5E

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TYphoon TRIX
EYE FIXES FOR CYCLONE NO. 23
20 AUG - 31 AUG 71

FIX NO.	TIME	POSIT	UNIT- METHOD	FLT	OBS	OBS	MIN	700MB	LVL	FLT	EYE	ORIEN- TATION	EYE	THKN WALL	REMARKS	POSIT OF RADAR
95	281920Z	29.6N 130.3E	54-P- 5- 5	700MB	90	---	921	2414	24/13		CIRC	10	--	5	CLSD WC	33.6N 130.4E
96	282010Z	29.4N 130.0E	LND RDR---										--	STN RJFF		30.6N 131.0E
97	282100Z	29.4N 130.1E	LND RDR---										--	STN 47869		33.6N 130.4E
98	282110Z	29.4N 130.0E	LND RDR---										--	STN RJFF		30.6N 131.0E
99	282200Z	29.5N 130.1E	LND RDR---										--	STN 47869		33.6N 130.4E
100	282200Z	29.4N 130.0E	LND RDR---										--	STN 47909		30.6N 131.0E
101	282210Z	29.4N 130.0E	LND RDR---										--	STN RJFF		28.4N 129.5E
102	282200Z	29.5N 129.7E	54-P- 5- 5	700MB	105	65	910	2359	21/14		CIRC	10	5	CLSD WC		33.6N 130.4E
103	282300Z	29.5N 130.0E	LND RDR---										--	STN RJFF		33.6N 130.4E
104	282300Z	29.5N 130.1E	LND RDR---										--	STN 47869		30.6N 131.0E
105	282300Z	29.5N 130.1E	LND RDR---										--	STN 47909		28.4N 129.5E
106	290002Z	29.5N 130.1E	54-P- 5- 5	700MB	97	90	914	2377	22/14		CIRC	10	5	CLSD WC		33.6N 130.4E
107	290010Z	29.6N 130.0E	LND RDR---										--	STN RJFF		30.6N 131.0E
108	290100Z	29.6N 130.1E	LND RDR---										--	STN 47909		28.4N 129.5E
109	290100Z	29.6N 130.1E	LND RDR---										--	STN 47869		33.6N 130.4E
110	290105Z	29.6N 130.1E	LND RDR---										--	STN RJFF		30.6N 131.0E
111	290200Z	29.7N 130.2E	LND RDR---										--	STN 47909		28.4N 129.5E
112	290200Z	29.8N 130.2E	LND RDR---										--	STN 47869		30.6N 131.0E
113	290210Z	29.7N 130.3E	LND RDR---										--	STN RJFF		33.6N 130.4E
114	290340Z	29.8N 130.2E	VQ-P- 5---	700MB	----	75	915	2402	21/14		CIRC	11	3	CLSD WC		33.6N 130.4E
115	290400Z	29.9N 130.2E	LND RDR---										--	STN RJFF		30.6N 131.0E
116	290400Z	29.9N 130.3E	LND RDR---										--	STN 47909		28.4N 129.5E
117	290400Z	30.0N 130.3E	LND RDR---										--	STN 47869		30.6N 131.0E
118	290430Z	29.9N 130.2E	LND RDR---										--	STN RJFF		33.6N 130.4E
119	290600Z	30.2N 130.2E	LND RDR---										--	STN 47909		28.4N 129.5E
120	290600Z	30.3N 130.3E	LND RDR---										--	STN RJFF		33.6N 130.4E
121	290606Z	30.2N 130.2E	SATELIT---												EYE VISIBLE	
122	290642Z	30.2N 130.1E	VQ-P- 1---	700MB	----	75	916	2408	23/13		CIRC	11	6	CLSD WC		33.4N 130.3E
123	290900Z	30.5N 130.2E	LND RDR---										--	STN 47806		28.4N 129.5E
124	290900Z	30.6N 130.4E	LND RDR---										--	STN 47909		30.6N 131.0E
125	290900Z	30.6N 130.3E	LND RDR---										--	STN 47869		33.6N 130.4E
126	290925Z	30.5N 130.2E	VQ-P- 1---	700MB	----	65	918	2499	21/14		CIRC	8	5	CLSD WC		33.6N 130.4E
127	291000Z	30.6N 130.3E	LND RDR---										--	STN RJFF		30.6N 131.0E
128	291000Z	30.6N 130.3E	LND RDR---										--	STN 47869		28.4N 129.5E
129	291000Z	30.6N 130.4E	LND RDR---										--	STN 47909		33.6N 130.3E
130	291000Z	30.6N 130.2E	LND RDR---										--	STN 47806		28.4N 129.5E
131	291200Z	30.7N 130.5E	LND RDR---										--	STN RJFF		33.6N 130.4E
132	291200Z	30.6N 130.3E	LND RDR---										--	STN 47806		33.6N 130.3E
133	291200Z	30.7N 130.5E	LND RDR---										--	STN 47869		30.6N 131.0E
134	291200Z	30.7N 130.5E	LND RDR---										--	STN 47909		28.4N 129.5E
135	291255Z	30.8N 130.5E	VQ-R- 3---	----	----	----	----	----	----		CIRC	10	5	CLSD WC		30.7N 129.9E
136	291300Z	30.8N 130.6E	LND RDR---										--	STN 47869		30.6N 131.0E
137	291300Z	30.7N 130.4E	LND RDR---										--	STN 47806		33.4N 130.3E
138	291300Z	30.7N 130.6E	LND RDR---										--	STN 47909		28.4N 129.5E
139	291400Z	30.9N 130.7E	LND RDR---										--	STN 47869		30.6N 131.0E
140	291400Z	30.9N 130.7E	LND RDR---										--	STN 47909		28.4N 129.5E
141	291500Z	31.1N 130.8E	LND RDR---										--	STN 47869		30.6N 131.0E
142	291500Z	31.1N 130.7E	LND RDR---										--	STN 47806		33.4N 130.3E
143	291500Z	31.1N 130.8E	LND RDR---										--	STN RJFF		33.6N 130.4E
144	291600Z	31.2N 130.7E	LND RDR---										--	STN 47806		33.4N 130.3E

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TYPHOON TRIX
EYE FIXES FOR CYCLONE NO. 23
20 AUG - 31 AUG 71

FIX NO.	TIME	POSIT	UNIT- METHOD -ACCY	FLT	LVL	SPC	WIND	SLP	MIN	700MB	LVL	HGT	TI/TO	FLT	EYE	ORIEN- TATION	EYE	THKN	WALL	REMARKS	POSI
																					OF HAUAR
145	291600Z	31.2N 130.9E	VO-R- 5---	----	----	----	----	----	----	500MB	45	-----	---	2830	02/00	CIRC	15	--	WC OPFN W SEMTC	30.6N 130.7E	
146	291600Z	31.2N 130.8E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 131.0E	
147	291700Z	31.3N 130.9E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 131.0E	
148	291700Z	31.3N 130.7E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.7E	
149	291700Z	31.3N 130.7E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.7E	
150	291800Z	31.4N 130.9E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.7E	
151	291800Z	31.4N 130.9E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.7E	
152	291850Z	31.5N 131.0E	VO-R- 8---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	15	--	WK WC E SEMIC	30.6N 130.5E	
153	291900Z	31.5N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
154	291900Z	31.6N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
155	292000Z	31.6N 131.2E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
156	292000Z	31.7N 131.1E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
157	292100Z	31.8N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
158	292100Z	31.8N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
159	292100Z	31.8N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
160	292200Z	32.0N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
161	292200Z	31.9N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
162	292210Z	32.0N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
163	292210Z	32.1N 131.0E	54-P- U-10	500MB	45	----	----	----	----	500MB	45	-----	---	2830	02/00	CIRC	25	--	Poorly Defined	30.6N 130.5E	
164	292300Z	32.3N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
165	292300Z	32.3N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
166	292300Z	32.3N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
167	300100Z	32.6N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	45	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
168	300115Z	32.5N 131.0E	54-P-1U-10	500MB	35	----	----	----	----	500MB	35	-----	---	2840	00/01	CIRC	25	5	Poorly Defined	30.6N 130.5E	
169	300200Z	32.3N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	35	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
170	300200Z	32.3N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	35	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
171	300300Z	32.4N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	35	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
172	300313Z	32.5N 131.0E	54-P- 1- 9	500MB	35	----	----	----	----	500MB	35	-----	---	2820	01/01	CIRC	30	--	Poorly Defined	30.6N 130.5E	
173	300400Z	32.6N 131.0E	LNU RDM---	----	----	----	----	----	----	500MB	35	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
174	300400Z	32.5N 132.0E	LNU RDM---	----	----	----	----	----	----	500MB	35	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
175	300425Z	32.4N 132.0E	LNU RDM---	----	----	----	----	----	----	500MB	35	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
176	300500Z	32.5N 132.0E	LNU RDM---	----	----	----	----	----	----	500MB	35	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
177	300500Z	33.0N 132.0E	SATELII--	----	----	----	----	----	----	500MB	35	-----	---	----	----	----	----	--	WFAKFR	30.6N 130.5E	
178	300700Z	32.9N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
179	300800Z	33.0N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
180	300800Z	33.0N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
181	300900Z	33.2N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
182	300900Z	33.2N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
183	300900Z	32.5N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
184	301000Z	33.5N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
185	301000Z	34.1N 133.0E	54-P- J-10	500MB	42	----	----	----	----	500MB	42	-----	---	2660	01/02	----	----	500MB WIND CNTR	30.6N 130.5E		
186	301100Z	33.5N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
187	301100Z	33.4N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
188	301100Z	33.6N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
189	301100Z	33.6N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
190	301100Z	33.8N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
191	301200Z	33.8N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
192	301200Z	33.7N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
193	301200Z	33.6N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	
194	301200Z	33.8N 133.0E	LNU RDM---	----	----	----	----	----	----	500MB	42	-----	---	----	----	----	----	--	STN 47869	30.6N 130.5E	

TYphoon TRIX
EYE FIXES FOR CYCLONE NO. 23
20 AUG - 31 AUG 71

FIX NO.	TIME	POSIT -ACCT	UNIT- METHOD	FLT LVL	UBS WIND	OBS KND	MIN SLP	700MB HGT	FLT LVL	EYE FORM	WHEN- TATTON	EYE DIA	THRN CLD	WALL REMARKS	POSSIT OF RADAR
195	301300Z	34.0N 134.1E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47899	33.2N 139.2F
196	301300Z	33.9N 134.2E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47771	34.0N 137.7F
197	301300Z	33.9N 134.1E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47639	35.3N 137.7F
198	301300Z	34.0N 134.1E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47792	34.0N 134.0F
199	301300Z	33.9N 134.1E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47791	35.5N 137.1F
200	301400Z	34.1N 134.4E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47792	34.0N 136.0F
201	301400Z	34.0N 134.4E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47773	34.0N 137.7F
202	301400Z	34.1N 134.4E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47791	35.5N 137.1F
203	301500Z	34.2N 134.6E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47773	34.0N 137.7F
204	301500Z	34.1N 134.6E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47639	35.5N 137.1F
205	301500Z	34.2N 134.6E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47791	35.5N 137.1F
206	301500Z	34.2N 134.6E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47792	34.0N 136.0F
207	301500Z	34.2N 134.5E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47899	33.2N 139.2F
208	301600Z	34.4N 134.5E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47639	35.3N 137.7F
209	301600Z	34.6N 134.5E	S4-P- 5---	500MB	25	----	----	2675	01/02	----	----	----	--	POORLY DEFINED	34.0N 136.0F
210	301600Z	34.5N 134.7E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47792	34.0N 136.0F
211	301600Z	34.5N 134.7E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47773	34.6N 137.7F
212	301700Z	34.5N 134.0E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47636	35.2N 137.0F
213	301700Z	34.7N 134.9E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47792	34.0N 136.0F
214	301800Z	34.7N 134.9E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47773	34.0N 137.7F
215	301800Z	34.8N 134.8E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47636	35.2N 137.0F
216	302000Z	34.3N 135.0E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47639	35.0N 137.7F
217	302100Z	34.4N 135.0E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47636	35.2N 137.0F
218	302100Z	34.5N 135.0E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47639	35.3N 137.7F
219	302226Z	34.6N 135.4E	VQ-R- 5-10	----	----	----	----	----	----	----	----	8	--	POORLY DEFINED	33.1N 137.4F
220	310100Z	34.3N 136.9E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47636	35.2N 137.0F
221	310200Z	34.4N 137.2E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47636	35.2N 137.0F
222	310300Z	34.5N 137.6E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47636	35.2N 137.0F
223	310400Z	34.7N 137.6E	LNU RDH---	----	----	----	----	----	----	----	----	----	--	STN 47636	35.2N 137.0F

51
106

5
1
107

TYPHOON TRIX

0600Z 20 AUG TO 0600Z 31 AUG

BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST			
POSIT	WIND	POSIT	WIND	DST WIND	POSIT	WIND	DST WIND	POSIT	WIND	DST WIND	POSIT	WIND	DST WIND		
200600Z 22.5N 152.2E	35 22.4N 152.2E	30 6 -5	22.8N 151.8E	35 69 -20	--	--	--	--	--	--	--	--	--	--	
201200Z 22.6N 152.4E	40 22.4N 152.2E	30 16 -10	22.9N 151.7E	35 91 -30	--	--	--	--	--	--	--	--	--	--	
201800Z 22.8N 152.6E	40 22.4N 152.2E	30 33 -10	23.0N 150.5E	45 139 -30	--	--	--	--	--	--	--	--	--	--	
210000Z 23.3N 152.6E	45 23.3N 152.6E	40 0 -5	24.8N 152.2E	50 64 -30	26.9N 150.6E	55 90 -25	29.2N 148.7E	60 237 -26							
210600Z 23.9N 152.2E	55 23.9N 152.1E	45 5 -10	25.8N 149.9E	55 55 -25	27.7N 147.0E	65 219 -15	--	--	--	--	--	--	--	--	
211200Z 24.4N 152.0E	65 24.3N 151.8E	45 12 -20	26.5N 150.3E	55 60 -25	28.7N 148.3E	65 203 -15	32.3N 147.6E	65 430 -16							
211800Z 25.0N 151.8E	75 24.9N 151.8E	60 6 -15	26.9N 150.7E	80 78 0	29.5N 149.6E	85 256 5	--	--	--	--	--	--	--	--	
220000Z 25.5N 151.3E	80 25.5N 150.9E	60 22 -20	27.5N 149.1E	70 146 -10	29.9N 147.5E	80 269 0	35.4N 150.2E	45 683 -36							
220600Z 25.6N 150.9E	80 25.8N 150.9E	70 12 -10	27.6N 149.1E	80 147 0	29.6N 147.6E	80 258 0	--	--	--	--	--	--	--	--	
221200Z 25.6N 150.8E	80 25.7N 151.0E	75 12 -5	26.0N 150.2E	85 65 5	27.1N 147.8E	90 156 10	30.0N 146.0E	90 325 16							
221800Z 25.6N 150.7E	80 25.7N 151.0E	80 17 0	26.3N 149.7E	90 97 10	27.4N 147.4E	90 183 10	--	--	--	--	--	--	--	--	
230000Z 25.4N 150.5E	80 25.8N 150.7E	80 26 0	27.4N 149.3E	90 157 10	29.4N 147.9E	90 319 10	32.3N 147.6E	75 533 -6							
230600Z 25.3N 150.1E	80 25.6N 150.7E	80 37 0	26.3N 150.2E	80 206 0	27.2N 149.5E	80 346 0	--	--	--	--	--	--	--	--	
231200Z 25.4N 149.2E	80 25.5N 149.0E	80 12 0	25.6N 148.4E	90 52 10	27.2N 141.6E	95 123 15	29.3N 139.5E	95 215 15							
231800Z 25.4N 148.2E	80 25.2N 148.0E	80 16 0	25.9N 149.3E	90 65 10	27.4N 141.0E	95 138 15	--	--	--	--	--	--	--	--	
240000Z 25.4N 147.4E	80 25.6N 147.4E	80 12 0	25.8N 144.4E	85 37 5	26.5N 141.4E	85 63 5	27.9N 138.7E	90 119 5							
240600Z 25.4N 146.5E	80 25.4N 146.4E	80 5 0	25.4N 142.8E	85 33 5	25.5N 139.3E	90 43 10	--	--	--	--	--	--	--	--	
241200Z 25.3N 145.7E	80 25.3N 145.4E	80 16 0	25.4N 141.7E	85 54 5	25.6N 138.1E	90 65 10	26.3N 134.7E	90 49 10							
241800Z 25.3N 144.9E	80 25.3N 145.0F	80 5 0	25.4N 141.5E	85 17 5	25.6N 137.9E	90 32 10	--	--	--	--	--	--	--	--	
250000Z 25.2N 144.2E	80 25.2N 144.1F	85 5 5	25.2N 140.5E	85 32 5	25.6N 136.9E	90 55 5	26.5N 133.5E	90 88 8							
250600Z 25.3N 143.4E	80 25.2N 143.7E	85 17 5	25.2N 140.4E	90 24 10	25.6N 136.9E	95 92 10	--	--	--	--	--	--	--	--	
251200Z 25.4N 142.7E	80 25.2N 142.9E	85 16 5	25.3N 139.6E	95 29 15	25.7N 136.2E	100 124 10	26.6N 133.2E	100 168 5							
251800Z 25.5N 141.8E	80 25.5N 141.8E	85 0 5	25.5N 139.3E	95 30 15	26.1N 134.8E	100 104 10	--	--	--	--	--	--	--	--	
260000Z 25.5N 141.0E	80 25.4N 140.8F	80 12 0	25.8N 137.0E	85 42 0	26.4N 133.6E	90 96 0	27.3N 130.2E	95 137 5							
260600Z 25.5N 140.1E	80 25.5N 140.0F	80 5 0	25.8N 139.5E	85 69 0	26.5N 133.1E	85 121 -10	--	--	--	--	--	--	--	--	
261200Z 25.7N 139.3E	80 25.6N 139.2F	80 8 0	26.0N 135.7E	85 92 -5	26.7N 132.3E	90 135 -5	27.8N 129.1E	90 186 5							
261800Z 26.0N 138.3E	80 25.6N 138.2F	80 24 0	26.3N 134.8E	85 96 -5	26.9N 131.3E	90 144 -10	--	--	--	--	--	--	--	--	
270000Z 26.5N 137.1E	85 26.0N 137.3E	75 32 -10	27.4N 134.0E	70 86 -20	29.3N 131.1E	70 55 -30	31.6N 129.3E	65 122 5							
270600Z 26.7N 135.7E	85 26.7N 135.9E	80 11 -5	28.3N 132.5E	75 44 -20	30.4N 130.1E	70 19 -25	--	--	--	--	--	--	--	--	
271200Z 27.1N 134.5E	90 26.9N 135.0F	80 29 -10	28.7N 132.0E	75 47 -20	30.7N 129.9E	70 26 -15	33.8N 129.0E	65 243 20							
271800Z 27.3N 133.4E	90 27.5N 133.5F	80 13 -10	29.8N 130.1E	75 41 -25	32.8N 129.0E	70 131 0	--	--	--	--	--	--	--	--	
280000Z 27.6N 132.4E	90 27.8N 132.2F	85 16 -5	30.1N 128.5E	75 88 -25	32.7N 127.4E	65 214 5	--	--	--	--	--	--	--	--	
280600Z 28.1N 131.7E	95 28.1N 131.7F	85 0 -10	30.2N 129.2E	75 52 -20	32.7N 128.3E	65 217 15	--	--	--	--	--	--	--	--	
281200Z 28.7N 131.1E	95 28.7N 131.2F	80 5 -15	31.0N 129.2E	70 64 -15	34.4N 129.4E	60 225 15	--	--	--	--	--	--	--	--	
281800Z 29.2N 130.5E	100 29.3N 130.4F	80 8 -20	32.0N 129.0E	70 108 0	36.0N 130.8E	55 249 15	--	--	--	--	--	--	--	--	
290000Z 29.6N 130.1E	100 29.7N 129.6E	95 27 -5	32.4N 129.0E	75 132 15	--	--	--	--	--	--	--	--	--	--	
290600Z 30.1N 130.2E	95 30.0N 129.9E	90 17 -5	32.0N 129.4E	70 174 20	--	--	--	--	--	--	--	--	--	--	
291200Z 30.7N 130.4E	85 30.8N 130.2E	90 12 5	33.2N 119.3E	70 183 25	--	--	--	--	--	--	--	--	--	--	
291800Z 31.4N 131.0E	70 31.4N 130.9E	80 5 10	34.3N 112.0E	60 168 20	--	--	--	--	--	--	--	--	--	--	
300000Z 32.2N 131.6E	60 32.5N 131.7F	70 19 10	--	--	--	--	--	--	--	--	--	--	--	--	
300600Z 33.1N 132.6E	50 33.3N 132.3F	65 19 15	--	--	--	--	--	--	--	--	--	--	--	--	
301200Z 33.8N 133.9E	45 33.7N 134.3F	55 21 10	--	--	--	--	--	--	--	--	--	--	--	--	
301800Z 34.2N 135.4E	40 34.7N 135.2E	50 31 10	--	--	--	--	--	--	--	--	--	--	--	--	

TYPHOONS WHILE WIND OVER 35KTS					ALL FORECASTS				
WARNING	24-HR	48-HR	72-HR		WARNING	24-HR	48-HR	72-HR	
AVERAGE FORECAST ERROR	15NM	43NM	149NM	253NM	15NM	83NM	149NM	253NM	
AVERAGE RIGHT ANGLE ERROR	9NM	61NM	107NM	200NM	9NM	51NM	107NM	200NM	
AVERAGE MAGNITUDE OF WIND ERROR	7KTS	13KTS	10KTS	10KTS	7KTS	13KTS	10KTS	10KTS	
AVERAGE BIAS OF WIND ERROR	-3KTS	-3KTS	1KTS	-1KTS	-3KTS	-3KTS	1KTS	-1KTS	
NUMBER OF FORECASTS	43	39	32	14	43	39	32	14	