ANNEX A
TROPICAL CYCLONE TRACK AND FIX DATA

1. WESTERN NORTH PACIFIC CYCLONE DATA

TROPICAL STORM VERNON
BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS					ERRORS	
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
060718Z	11.9	114.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
060800Z	12.1	114.2	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
060806Z	12.3	113.7	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
060812Z	12.6	113.3	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
060818Z	13.0	113.0	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
060900Z	13.4	112.7	30	13.3	112.6	30.	8.	0.	15.0	111.1	40.	38.	5.	16.9	109.6	50.	147.	25.	0.0	0.0	0.	-0.	0.
060906Z	14.2	112.2	35	14.0	112.2	35.	12.	0.	16.4	110.6	45.	105.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
060912Z	14.9	111.9	40	14.9	111.7	40.	12.	0.	17.4	109.1	45.	89.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
060918Z	15.5	111.1	40	15.5	111.2	40.	6.	0.	18.1	109.0	45.	135.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
061000Z	15.9	109.9	35	16.2	110.4	40.	34.	5.	19.0	108.1	35.	166.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
061006Z	16.1	108.8	35	16.5	109.1	35.	30.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
061012Z	16.2	108.2	30	17.1	108.4	35.	55.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
061018Z	16.3	107.6	30	17.8	107.7	30.	90.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
061100Z	16.4	107.1	25	17.0	107.0	25.	36.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	31.	116.	147.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	28.	86.	55.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	11.	25.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	1.	11.	25.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	9	5	1	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 556. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL STORM VERNON
FIX POSITIONS FOR CYCLONE NO. 1

SATELLITE FIXES

	FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
	1	070215	12.1N 114.7E	PCN 5	T1.5/1.5	ULAC 9.6N 113.8E	RPMK
	2	080155	11.8N 114.1E	PCN 5	T2.0/2.0 /D0.5/24HRS		RPMK
*	3	080729	11.4N 114.4E	PCN 5	T1.0/1.0	INIT OBS	PGTW
	4	080729	12.6N 113.6E	PCN 5			RPMK
	5	081435	12.9N 113.6E	PCN 5			RPMK
*	6	082014	12.0N 113.7E	PCN 5			RODN
	7	082100	13.4N 112.8E	PCN 6			PGTW
	8	082356	13.3N 111.5E	PCN 5	T2.0/2.0	INIT OBS	RODN
	9	090000	13.4N 112.5E	PCN 5	T2.0/2.0	INIT OBS	PGTW
	10	090135	13.4N 112.9E	PCN 5	T2.0/2.0-/S0.0/24HRS	EXP LLCC	RPMK
	11	090300	14.1N 112.5E	PCN 4		EXP LLCC	PGTW
	12	090316	14.3N 112.5E	PCN 3	T2.5/2.5-/D0.5/23HRS	EXP LLCC	RPMK
	13	090716	14.4N 112.1E	PCN 3		EXP LLCC	PGTW
	14	091025	14.7N 111.8E	PCN 5			PGTW
*	15	091235	15.6N 113.0E	PCN 6			RPMK
	16	091500	14.9N 111.7E	PCN 6			PGTW
	17	091800	15.4N 111.2E	PCN 6			PGTW
	18	092001	14.8N 109.2E	PCN 5			RODN
	19	092100	16.0N 111.0E	PCN 6			PGTW
	20	092306	15.8N 109.6E	PCN 6	T2.0/2.5 /W0.5/20HRS		RPMK
	21	100000	15.8N 110.0E	PCN 6	T2.5/2.5-/D0.5/24HRS		PGTW
	22	100256	15.9N 109.3E	PCN 5	T2.0/2.5 /W0.5/24HRS		RPMK
	23	100300	16.1N 109.2E	PCN 4		EXP LLCC	PGTW
*	24	101214	16.7N 107.2E	PCN 5			RPMK
	25	102243	16.7N 107.1E	PCN 6			RPMK
	26	110000	16.2N 107.2E	PCN 6			PGTW

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL STORM WYNNE
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		WIND	WARNING POSIT		WIND	WARNING ERRORS DST	WIND	24 HOUR FORECAST POSIT		WIND	24 HOUR FORECAST ERRORS DST	WIND	48 HOUR FORECAST POSIT		WIND	48 HOUR FORECAST ERRORS DST	WIND	72 HOUR FORECAST POSIT		WIND	72 HOUR FORECAST ERRORS DST	WIND
061806Z	20.5	135.1	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
061812Z	20.6	134.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
061818Z	20.6	134.1	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
061900Z	20.8	133.4	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
061906Z	21.2	132.8	30	21.1	132.5	30.	18.	0.	23.2	130.9	40.	66.	0.	25.6	130.5	45.	233.	0.	28.2	130.5	40.	415.	-10.
061912Z	21.3	132.2	30	21.1	131.5	35.	41.	5.	22.2	129.2	45.	28.	0.	23.9	126.8	60.	106.	10.	25.9	124.6	60.	226.	10.
061918Z	21.7	131.6	35	21.2	130.7	35.	59.	0.	22.2	128.2	50.	46.	5.	23.8	125.7	65.	126.	15.	25.7	123.4	70.	228.	20.
062000Z	22.0	131.0	35	21.9	130.9	35.	8.	0.	23.2	128.7	55.	49.	10.	24.5	126.5	65.	134.	15.	26.0	124.5	70.	236.	15.
062006Z	22.2	130.4	40	22.1	130.3	45.	8.	5.	23.5	127.3	60.	67.	15.	25.0	125.2	70.	177.	20.	27.3	123.4	80.	313.	25.
062012Z	22.3	129.7	45	22.4	129.8	45.	8.	0.	23.6	127.6	60.	73.	10.	25.2	125.0	70.	179.	20.	27.4	123.1	80.	338.	25.
062018Z	22.4	129.0	45	22.4	129.0	50.	0.	5.	23.0	126.1	65.	79.	15.	24.5	123.5	75.	161.	25.	26.3	121.2	80.	265.	30.
062100Z	22.4	128.5	45	22.5	128.3	45.	13.	0.	23.4	125.4	65.	106.	15.	25.8	122.5	75.	235.	20.	28.4	121.5	75.	411.	25.
062106Z	22.4	128.1	45	22.5	128.0	45.	8.	0.	22.9	125.7	55.	57.	5.	24.7	122.8	65.	156.	10.	26.8	120.9	70.	375.	20.
062112Z	22.4	127.8	50	22.5	127.7	50.	8.	0.	22.7	126.1	60.	29.	10.	23.5	124.2	65.	164.	10.	24.8	122.6	65.	433.	10.
062118Z	22.3	127.3	50	22.5	127.3	50.	12.	0.	22.7	125.7	60.	49.	10.	23.7	123.8	65.	203.	15.	25.1	122.2	65.	475.	5.
062200Z	22.3	126.9	50	22.3	126.9	50.	0.	0.	22.4	125.3	55.	80.	0.	23.1	123.2	60.	253.	10.	24.5	121.6	60.	505.	0.
062206Z	22.3	126.5	50	22.3	126.5	50.	0.	0.	22.5	124.9	55.	108.	0.	23.3	122.9	60.	337.	10.	24.8	121.3	60.	547.	5.
062212Z	22.3	125.8	50	22.3	125.9	50.	6.	0.	22.6	124.3	55.	145.	0.	22.8	122.7	60.	396.	5.	22.5	120.5	45.	548.	0.
062218Z	22.2	125.0	50	22.3	125.1	50.	8.	0.	22.5	122.5	60.	106.	10.	22.5	120.0	45.	305.	-15.	23.4	117.5	45.	485.	10.
062300Z	22.1	123.9	55	22.2	124.1	50.	13.	-5.	22.3	120.8	45.	113.	-5.	22.9	117.4	35.	255.	-25.	24.0	114.6	25.	431.	-5.
062306Z	22.1	123.0	55	22.1	123.3	55.	17.	0.	22.4	120.0	40.	168.	-10.	23.1	116.8	35.	280.	-20.	0.0	0.0	0.	-0.	0.
062312Z	21.9	121.8	55	22.1	122.3	55.	41.	0.	22.7	119.5	40.	225.	-15.	23.4	116.2	30.	326.	-15.	0.0	0.0	0.	-0.	0.
062318Z	21.9	120.7	50	21.8	121.0	50.	18.	0.	23.2	117.2	40.	184.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062400Z	22.0	118.8	50	22.1	119.1	50.	18.	0.	22.9	114.4	35.	122.	-25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062406Z	21.6	117.1	50	21.8	117.2	50.	13.	0.	22.0	111.9	35.	51.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062412Z	21.2	115.8	55	21.0	115.6	50.	16.	-5.	20.1	110.2	40.	89.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062418Z	21.2	114.7	60	21.1	114.6	50.	8.	-10.	20.8	109.9	40.	86.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062500Z	21.2	113.2	60	21.2	113.4	55.	11.	-5.	21.7	109.0	35.	117.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062506Z	21.2	112.0	55	21.2	112.3	55.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062512Z	21.5	110.7	45	21.3	110.7	50.	12.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062518Z	21.9	108.9	35	21.8	109.0	45.	8.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062600Z	22.3	107.0	30	22.4	107.0	30.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	14.	93.	224.	389.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	10.	44.	114.	224.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	9.	14.	13.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	1.	6.	12.	0.	0.	0.	0.
NUMBER OF FORECASTS	28	24	18	16	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1609. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TROPICAL STORM WYNNE
FIX POSITIONS FOR CYCLONE NO. 2

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	180000	20.0N 135.5E	PCN 6	T0.0/0.0	INIT OBS	PGTW
2	180706	20.9N 135.3E	PCN 6			PGTW
3	181200	20.6N 134.8E	PCN 6			PGTW
4	181500	20.6N 134.1E	PCN 6			PGTW
5	182136	20.6N 132.9E	PCN 6			PGTW
6	190000	21.0N 132.8E	PCN 6			PGTW
7	190136	20.9N 132.4E	PCN 5	T0.5/0.5 /D0.5/26HRS		PGTW
8	190136	20.9N 133.1E	PCN 5	T0.5/0.5	INIT OBS	RPMK
9	190300	20.8N 132.1E	PCN 5			PGTW
10	190653	20.9N 132.3E	PCN 5			PGTW
11	191016	20.7N 131.8E	PCN 6			PGTW
12	191200	20.8N 131.5E	PCN 6			PGTW
13	191416	20.8N 131.2E	PCN 6			PGTW
* 14	191500	20.8N 131.1E	PCN 6	T2.5/2.5 /D1.5/24HRS		PGTW
* 15	191800	21.0N 130.8E	PCN 6			PGTW
* 16	191938	21.1N 130.6E	PCN 5			PGTW
17	192114	21.6N 131.2E	PCN 5			PGTW
18	200115	21.5N 130.2E	PCN 5	T2.0/2.0 /D1.5/24HRS		RPMK
19	200116	22.1N 130.8E	PCN 3	T2.5/2.5 /D2.0/24HRS		PGTW
20	200300	22.4N 130.7E	PCN 6			PGTW
21	200641	21.9N 130.2E	PCN 5			PGTW
22	200641	22.1N 130.3E	PCN 5			RPMK
23	200900	22.2N 129.8E	PCN 6			PGTW
24	201200	22.4N 129.8E	PCN 6		ULCC FIX	PGTW
25	201356	22.2N 129.2E	PCN 3			RODN
26	201800	22.3N 128.9E	PCN 4	T3.0/3.0 /D0.5/27HRS		PGTW
27	201925	22.5N 129.3E	PCN 5			RPMK
28	202053	22.3N 128.7E	PCN 3	T2.5/2.5	INIT OBS	RODN
29	202100	22.5N 128.6E	PCN 6			PGTW
30	210000	22.1N 128.2E	PCN 6		ULCC FIX	PGTW
31	210055	22.5N 128.1E	PCN 3	T3.0/3.0 /D1.0/24HRS		RPMK
32	210300	22.6N 128.2E	PCN 4	T3.0/3.0-/D0.5/23HRS		PGTW
33	210600	22.7N 127.8E	PCN 4			PGTW
34	210628	22.4N 127.9E	PCN 3			RPMK
35	210628	22.3N 128.1E	PCN 3			RODN
36	210900	22.6N 127.8E	PCN 6			PGTW
37	210933	22.3N 127.7E	PCN 4			RPMK
38	211200	22.4N 127.6E	PCN 6			PGTW
39	211335	22.4N 127.6E	PCN 6		ULCC FIX	PGTW
40	211500	22.3N 127.5E	PCN 6	T3.0/3.0 /S0.0/21HRS	ULCC FIX	PGTW
41	211800	22.4N 127.2E	PCN 6		ULCC FIX	PGTW
42	212100	22.2N 126.9E	PCN 6		ULCC FIX	PGTW
43	212213	22.3N 127.2E	PCN 6	T3.0/3.0 /S0.0/22HRS		RPMK
44	212221	22.2N 126.4E	PCN 3	T2.5/2.5 /S0.0/24HRS		RODN
45	220000	22.5N 126.8E	PCN 6			PGTW
46	220035	22.4N 126.5E	PCN 3	T3.0/3.0 /S0.0/22HRS		PGTW
47	220035	22.4N 126.8E	PCN 5			RODN
* 48	220217	22.9N 126.2E	PCN 3	T3.5/3.5	INIT OBS	RSKO
49	220300	22.6N 126.6E	PCN 6			PGTW
50	220600	22.2N 126.2E	PCN 6		ULCC FIX	PGTW
51	220615	22.3N 126.2E	PCN 3			PGTW
52	220616	22.2N 126.2E	PCN 5			RPMK
53	220900	22.2N 126.0E	PCN 6		ULCC FIX	PGTW
54	221053	22.4N 126.1E	PCN 5			RODN
55	221200	22.0N 125.7E	PCN 6			PGTW
56	221457	22.0N 125.2E	PCN 6			RPMK
57	221600	22.0N 125.0E	PCN 6	T3.5/3.5 /D0.5/24HRS		PGTW
58	221800	22.0N 124.6E	PCN 6			PGTW
59	221900	21.9N 124.3E	PCN 6			PGTW
60	222152	22.1N 124.0E	PCN 5	T3.0/3.0 /S0.0/24HRS		RPMK
61	230000	22.0N 124.0E	PCN 6			PGTW
62	230156	21.8N 124.0E	PCN 5	T3.0/3.0	INIT OBS	RODN
63	230300	22.2N 123.7E	PCN 6	T3.5/3.5-/D0.5/27HRS		PGTW
64	230600	22.2N 123.1E	PCN 6			PGTW
65	230900	21.7N 122.8E	PCN 6		ULCC FIX	PGTW
66	231032	22.0N 122.8E	PCN 5	T3.5/3.5-	INIT OBS	RSKO
67	231200	21.7N 121.7E	PCN 6			PGTW
68	231437	21.9N 121.4E	PCN 6			RPMK
69	231800	21.8N 120.7E	PCN 6	T3.5/3.5-/S0.0/26HRS		PGTW
70	232100	22.0N 119.6E	PCN 6			PGTW
71	232330	22.3N 119.8E	PCN 6			RODN
72	240000	22.0N 118.8E	PCN 6			PGTW
73	240136	21.9N 118.3E	PCN 5			PGTW
* 74	240136	21.0N 117.5E	PCN 5	T3.0/3.0 /S0.0/27HRS		RPMK
75	240300	21.6N 117.8E	PCN 6	T3.0/3.5-/W0.5/24HRS		PGTW

76	240600	21.6N 117.2E	PCN 6				PGTW
77	240733	22.0N 116.2E	PCN 5	T3.0/3.0	INIT OBS		RODN
78	240900	21.7N 116.2E	PCN 6				PGTW
79	241011	21.8N 115.9E	PCN 6				PGTW
80	241011	22.0N 116.1E	PCN 5	T3.5/3.5-/S0.0/24HRS			RSKO
81	241200	21.2N 115.6E	PCN 6				PGTW
82	241417	21.3N 114.3E	PCN 6	T3.0/3.0 /S0.0/24HRS			RPMK
83	241800	21.3N 115.0E	PCN 6	T2.5/3.5 /W1.0/24HRS	ULCC FIX		PGTW
84	242017	21.2N 113.5E	PCN 6				RODN
85	242100	21.3N 114.5E	PCN 6		ULCC FIX		PGTW
86	242251	20.5N 113.5E	PCN 6				RODN
87	242251	21.1N 113.5E	PCN 4	T3.0/3.0-/S0.0/21HRS			RPMK
88	250000	21.2N 113.4E	PCN 6				PGTW
89	250257	21.1N 112.9E	PCN 3	T3.0/3.0-/S0.0/24HRS			RPMK
90	250300	21.0N 112.7E	PCN 4	T3.5/3.5-/D0.5/24HRS			PGTW
91	250600	21.2N 112.2E	PCN 4				PGTW
92	250720	21.8N 111.8E	PCN 5	T3.5/3.5 /D0.5/24HRS			RODN
93	250900	21.1N 111.5E	PCN 4				PGTW
94	251131	21.7N 110.4E	PCN 5				RODN
95	251200	21.4N 110.7E	PCN 4				PGTW
96	251500	21.6N 109.8E	PCN 4				PGTW
97	251800	21.9N 108.9E	PCN 6		ULCC FIX		PGTW
98	252005	21.9N 107.6E	PCN 5				RODN
99	252100	22.3N 108.2E	PCN 6		ULCC FIX		PGTW
100	252230	21.9N 107.1E	PCN 5				RODN
101	260000	21.6N 106.6E	PCN 6				PGTW
102	260300	22.1N 105.1E	PCN 6				PGTW
103	260600	21.5N 103.8E	PCN 6				PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN- DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	182337	20.8N 133.6E	1500FT		998	20 190 30	220 27 190 30	6 3			+25 +26 +23 29	1
2	190542	21.3N 132.9E	1500FT		1001	35 040 24	240 33 120 60	7 10			+26 +25 +24	2
3	190831	21.6N 132.7E	1500FT		1000	10 310 30	360 18 250 10	5 10			+25 +26 +26 28	2
4	192031	21.9N 131.4E	700MB	3042	995	30 270 20	140 29 030 30	11 5				3
5	192325	22.2N 131.2E	1500FT		992	35 090 15	200 35 090 15	12 3			+26 +27 +27	3
6	200533	22.2N 130.6E	1500FT		989	45 120 10	240 43 120 13	10 2				4
7	200919	22.4N 130.2E	1500FT		990	35 230 45	130 45 030 30	10 3			+26 29	4
8	202033	22.2N 128.5E	700MB	3050		35 280 20	320 31 290 58	8 10			+10 +11 +10	5
9	202328	22.7N 128.5E	1500FT		992	40 240 26	350 44 240 25	5 3			+25 +26 +25 28	5
10	210530	22.6N 128.2E	1500FT		996	45 050 25	120 44 020 26	9 4			+24 +27 +27 29	6
11	210812	22.4N 128.1E	1500FT		998	50 140 45	170 50 120 42	4 2			+24 +27 +27 30	6
12	211212	22.3N 127.7E	700MB	2983			060 56 030 30	12 15				7
13	211437	22.3N 127.5E	700MB	2983	986		220 42 140 32	8 5			+11 +16 +12	7
14	212054	22.2N 127.2E	700MB	2972	985	40 300 30	050 38 300 24	10 5			+12 +16 +11	8
15	212322	22.3N 126.8E	1500FT		986	50 050 25	150 50 060 38	7 2			+25 +26 +24 31	8
16	220535	22.4N 126.6E	1500FT		986	45 060 25	140 47 060 28	9 3			+24 +25 +25 30	9
17	220835	22.3N 126.3E	1500FT		986	40 190 25	240 45 190 35	5 3			+24 +25 +26 30	9
18	221159	22.2N 125.8E	700MB	2980			120 51 040 31	5 4				10
19	221435	22.3N 125.4E	700MB	2980	988		240 44 130 70	10 4			+12 +15 +15	10
20	222042	22.1N 124.6E	700MB	2975		25 220 30	160 38 060 60	13 10				11
21	222333	22.3N 124.2E	1500FT		985	50 130 45	210 60 130 45	8 10	ELLIPTICAL	20 10 180	+25 +26 +24 28	11
22	230543	22.0N 123.4E	1500FT		982	55 310 30	030 50 310 30	10 3				12
23	230824	21.9N 123.0E	1500FT		982	55 090 6	190 55 090 6	10 3			+24 +27 +26 30	12

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO
* 1	220300	22.1N 126.0E	LAND				35//2 5////		24.8N 125.3E	47927
* 2	220400	22.1N 126.0E	LAND				6///3 50000		24.8N 125.3E	47927
3	221200	22.2N 125.7E	LAND				52912 73009		24.3N 124.2E	47918
4	221500	22.4N 125.4E	LAND				6//12 72905		24.3N 124.2E	47918
5	221600	22.5N 125.2E	LAND				6//12 53011		24.3N 124.2E	47918
6	221900	22.1N 124.5E	LAND				5//13 72415		24.3N 124.2E	47918
7	222000	21.9N 124.4E	LAND				6//13 72212		24.3N 124.2E	47918
8	222100	22.2N 124.3E	LAND				6//12 72808		24.3N 124.2E	47918
9	222200	21.9N 124.0E	LAND				6//12 72509		24.3N 124.2E	47918
10	222300	21.9N 124.2E	LAND				6//13 72804		24.3N 124.2E	47918
11	230000	21.8N 124.1E	LAND				6//12 72107		24.3N 124.2E	47918
12	230100	21.8N 123.9E	LAND				6//12 72202		24.3N 124.2E	47918
13	230200	21.9N 123.7E	LAND				6///2 72810		24.3N 124.2E	47918
14	230300	21.9N 123.4E	LAND				6///2 72812		24.3N 124.2E	47918
15	230400	21.9N 123.1E	LAND				5//12 72816		24.3N 124.2E	47918
16	230500	21.8N 123.0E	LAND				3//12 72614		24.3N 124.2E	47918
17	240720	21.4N 116.9E	LAND				20510 /////		22.3N 114.2E	45005
18	241100	21.2N 116.3E	LAND				20814 32508		22.3N 114.2E	45005
19	241200	21.1N 116.0E	LAND				20811 72406		22.3N 114.2E	45005
20	241300	21.2N 115.9E	LAND				20911 72708		22.3N 114.2E	45005
21	241700	21.2N 115.0E	LAND				20971 72616		22.3N 114.2E	45005
22	241800	21.2N 114.8E	LAND				20941 32615		22.3N 114.2E	45005
23	241900	21.1N 114.5E	LAND				20911 72714		22.3N 114.2E	45005
24	242000	21.2N 114.4E	LAND				20971 32811		22.3N 114.2E	45005
25	242100	21.3N 114.2E	LAND				20911 72810		22.3N 114.2E	45005
26	242200	21.2N 113.8E	LAND				20911 72812		22.3N 114.2E	45005
27	242310	21.1N 113.5E	LAND				20911 72612		22.3N 114.2E	45005
28	250000	21.1N 113.4E	LAND				20911 62612		22.3N 114.2E	45005
29	250100	21.1N 113.1E	LAND				20911 72614		22.3N 114.2E	45005
30	250210	21.2N 112.9E	LAND				20911 32710		22.3N 114.2E	45005
31	250300	21.2N 112.7E	LAND				20941 72713		22.3N 114.2E	45005
32	250350	21.2N 112.5E	LAND				20912 72913		22.3N 114.2E	45005
33	250500	21.2N 112.4E	LAND				60941 72809		22.3N 114.2E	45005
34	250600	21.3N 112.3E	LAND				60942 72712		22.3N 114.2E	45005
35	250700	21.4N 112.0E	LAND				60912 32810		22.3N 114.2E	45005
36	251000	21.4N 111.3E	LAND				60912 62812		22.3N 114.2E	45005
37	251100	21.4N 111.1E	LAND				60/// 72812		22.3N 114.2E	45005

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	231200	21.8N 121.7E	055	015	RCVD AFTER WARNING TIME, NOT USED IN WARNING.4672
2	231500	21.9N 121.3E	055	018	STN 46762 22.02N 121.33E
3	240900	21.0N 116.6E	055	025	STN RCLM 59810 16.60N 112.20E

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON ALEX
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT	BEST TRACK WIND	WARNING POSIT	WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT	24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT	48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT	72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
070100Z	16.1 124.5	30	16.1 124.6	25.	6.	-5. 15.9	121.3	30.	157.	-15. 16.2	118.8	35.	366.	-35. 16.9	116.4	50.	706.	-10.
070106Z	16.1 124.2	30	16.1 123.6	30.	35.	0. 16.0	120.5	30.	204.	-25. 16.4	118.1	40.	456.	-35. 17.2	115.8	50.	814.	0.
070112Z	16.3 124.0	35	16.0 122.8	30.	71.	-5. 16.2	119.2	30.	286.	-30. 16.8	116.8	40.	529.	-25. 17.7	114.6	50.	914.	5.
070118Z	16.8 123.8	40	16.0 122.5	40.	89.	0. 16.0	119.4	30.	319.	-35. 16.7	117.1	40.	603.	-25. 17.6	114.8	50.	1033.	10.
070200Z	17.3 123.6	45	16.9 122.8	40.	52.	-5. 18.5	121.5	30.	192.	-40. 19.8	120.0	35.	484.	-25. 21.4	118.7	50.	828.	15.
070206Z	18.1 123.3	55	18.2 123.2	55.	8.	0. 21.6	121.2	75.	103.	0. 25.2	119.4	60.	293.	10. 29.2	119.9	40.	525.	10.
070212Z	19.3 123.0	60	19.1 123.1	60.	13.	0. 22.8	121.8	75.	122.	10. 26.9	122.5	70.	252.	25. 0.0	0.0	0.	-0.	0.
070218Z	20.6 122.2	65	20.3 122.7	65.	33.	0. 24.6	122.1	70.	111.	5. 29.1	123.7	65.	222.	25. 0.0	0.0	0.	-0.	0.
070300Z	21.7 121.6	70	21.8 121.6	80.	6.	10. 27.6	122.6	70.	75.	10. 31.6	125.5	65.	145.	30. 0.0	0.0	0.	-0.	0.
070306Z	23.3 121.5	75	23.3 121.5	80.	0.	5. 29.0	123.3	70.	86.	20. 32.8	127.2	60.	156.	30. 0.0	0.0	0.	-0.	0.
070312Z	24.7 121.0	65	24.6 121.5	75.	28.	10. 28.7	122.0	65.	147.	20. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0.
070318Z	26.1 120.9	65	25.8 121.2	70.	24.	5. 29.9	122.6	60.	185.	20. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0.
070400Z	27.8 121.2	60	27.0 121.3	55.	48.	-5. 32.3	123.4	45.	133.	10. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0.
070406Z	29.6 121.8	50	29.4 121.5	45.	20.	-5. 34.9	126.4	35.	49.	5. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0.
070412Z	31.1 122.6	45	31.2 122.4	45.	12.	0. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0.
070418Z	32.8 123.8	40	32.8 123.4	40.	20.	0. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0.
070500Z	34.0 125.1	35	34.1 125.2	35.	8.	0. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0.
070506Z	35.4 127.2	30	35.4 127.1	35.	5.	5. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0. 0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	27.	155.	351.	803.	29.	163.	372.	859.
AVG RIGHT ANGLE ERROR	23.	93.	197.	328.	24.	99.	205.	376.
AVG INTENSITY MAGNITUDE ERROR	3.	18.	27.	8.	3.	18.	26.	8.
AVG INTENSITY BIAS	1.	-3.	-3.	5.	1.	-4.	-6.	4.
NUMBER OF FORECASTS	18	14	10	6	15	13	9	5

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1320. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

TYPHOON ALEX
FIX POSITIONS FOR CYCLONE NO. 3

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	292105	18.7N 127.7E	PCN 3	T1.0/1.0	INIT OBS	PGTW
2	292301	19.0N 127.6E	PCN 3		EXP LLCC	PGTW
3	300600	16.1N 126.8E	PCN 6		ULCC FIX	PGTW
4	010056	16.2N 124.3E	PCN 5	T2.0/2.0-	INIT OBS	PGTW
5	010056	16.1N 124.2E	PCN 3	T2.5/2.5-	INIT OBS	RPMK
6	010600	16.2N 123.5E	PCN 6			PGTW
7	011100	15.7N 123.2E	PCN 6			PGTW
* 8	011115	14.8N 123.3E	PCN 6			RPMK
* 9	011337	15.4N 123.2E	PCN 6		ULCC FIX	PGTW
10	011700	15.7N 123.3E	PCN 6	T3.0/3.0-	INIT OBS	PGTW
11	012204	16.8N 123.1E	PCN 4		EXP LLCC	PGTW
12	012300	17.2N 123.1E	PCN 6	T3.0/3.0-/D1.0/23HRS		PGTW
13	012354	17.0N 123.0E	PCN 5	T3.0/3.0 /D0.5/23HRS		RPMK
14	012354	17.1N 123.1E	PCN 5	T3.0/3.0	INIT OBS	RODN
15	020217	17.2N 123.1E	PCN 5			RPMK
16	020217	18.0N 123.6E	PCN 5			RODN
17	020600	17.9N 123.3E	PCN 4			PGTW
18	021044	18.9N 123.2E	PCN 4			RODN
19	021050	18.9N 123.3E	PCN 6		ULCC FIX	PGTW
20	021200	18.5N 123.1E	PCN 6		ULCC FIX	PGTW
21	021800	20.0N 122.0E	PCN 6	T3.5/3.5-/D0.5/25HRS		PGTW
22	022142	21.4N 121.4E	PCN 2			PGTW
23	022329	21.5N 121.6E	PCN 1	T4.0/4.0 /D1.0/24HRS		RPMK
24	022329	21.7N 121.6E	PCN 1	T4.0/4.0 /D1.0/24HRS		PGTW
25	030157	22.4N 121.7E	PCN 1	T4.5/4.5 /D1.5/26HRS	12NM EYE	RPMK
26	030157	22.3N 121.6E	PCN 3			PGTW
27	030722	23.5N 121.4E	PCN 5			PGTW
28	031026	24.4N 120.9E	PCN 5		ULCC FIX	PGTW
29	031438	25.1N 120.7E	PCN 5		ULCC FIX	RPMK
30	032007	25.7N 120.5E	PCN 5			RODN
31	032121	26.6N 121.1E	PCN 6			PGTW
32	032305	27.6N 121.6E	PCN 5	T2.0/3.0-/W2.0/24HRS		PGTW
33	032305	26.8N 120.6E	PCN 5			RPMK
34	040137	28.8N 121.7E	PCN 3	T3.0/4.0 /W1.5/24HRS		RPMK
35	040137	28.7N 120.7E	PCN 3	T2.0/2.0	INIT OBS	RODN
36	040709	29.8N 122.2E	PCN 3		EXP LLCC	RPMK
37	041001	30.1N 122.4E	PCN 5			PGTW
38	041954	32.9N 124.8E	PCN 3			RPMK
39	050117	34.2N 125.3E	PCN 3	T2.0/3.0 /W1.0/24HRS		RPMK
40	051200	36.8N 131.7E	PCN 6			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN- DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	302327	16.1N 124.6E	1500FT		1000	30 100 60	110 35 090 30	10 5			+26 +24 +23	1
2	020351	17.7N 123.5E	700MB	2964		65 040 15	140 68 030 25	15 5			+ 9 +11 +11	2
3	020549	18.0N 123.3E	700MB	2952	984	65 180 10	060 38 340 38	18 5	ELLIPTICAL	30 20 030	+10 +13 + 9	2
4	022045	21.2N 121.5E	700MB	2772		55 090 30	130 92 100 16	12 3	CIRCULAR	15		3
5	022337	21.6N 121.6E	700MB	2779	962	80 050 10	120 69 030 20	13 1	CIRCULAR	12	+10 +16 +16	3

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR	TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	011900	16.6N 123.9E	LAND				11320	63515	EYE 100 PCT ELIP	15.7N 121.6E	98333
2	020330	17.6N 123.5E	LAND				10301	////		18.4N 121.6E	98231
3	020600	18.1N 123.4E	LAND				10991	60406		18.4N 121.6E	98231
4	020800	18.6N 123.2E	LAND				10971	63430		18.4N 121.6E	98231
5	020900	18.7N 123.2E	LAND				11922	43506		18.4N 121.6E	98231
6	021600	20.5N 122.4E	LAND				10612	43510	EYE 80 PCT CIR OPN N	18.4N 121.6E	98231
7	021600	20.3N 122.3E	LAND				35350	53230		20.4N 121.8E	98136
8	021700	20.4N 122.3E	LAND				35/50	53230	EYE ILL DEFINED	20.4N 121.8E	98136
9	021730	20.7N 122.3E	LAND				10552	43320	EYE 60 PCT CIR OPN N	18.4N 121.6E	98231
10	021800	20.8N 122.2E	LAND				10512	43418	EYE 60 PCT CIR OPN N	18.4N 121.6E	98231
11	021800	20.6N 122.2E	LAND				35/50	53231	EYE ILL DEFINED	20.4N 121.8E	98136
12	022000	21.8N 121.8E	LAND				6////	53510		22.0N 120.7E	46752
13	022100	21.3N 121.6E	LAND				6////	53018		22.6N 120.3E	46744
14	022100	21.3N 121.7E	LAND				6////	53610		22.0N 120.7E	46752
15	022200	21.5N 121.6E	LAND				45///	53610		22.5N 120.5E	59553
16	030100	22.1N 121.6E	LAND				5//44	43516		24.3N 124.2E	47918
17	030100	22.0N 121.6E	LAND				255//	53616		22.6N 120.3E	46744
18	030100	21.8N 121.7E	LAND				6////	53608		22.0N 120.7E	46752
19	030100	22.0N 121.8E	LAND				10332	50119		23.8N 121.6E	46699
20	030200	22.4N 121.6E	LAND				11714	53616		24.3N 124.2E	47918
21	030300	22.5N 121.5E	LAND				11713	53511		24.3N 124.2E	47918
22	030300	22.5N 121.5E	LAND				25///	53411		22.6N 120.3E	46744
23	030300	22.5N 121.6E	LAND				10222	53518		23.8N 121.6E	46699
24	030300	22.6N 121.6E	LAND				6////	53614		22.0N 120.7E	46752

25	030400	22.7N 121.6E	LAND	12212 53612	23.8N 121.6E	46699
26	030400	22.9N 121.5E	LAND	22413 73615	24.3N 124.2E	47918
27	030400	22.8N 121.5E	LAND	6//// 53614	22.0N 120.7E	46752
28	030500	23.2N 121.6E	LAND	4/533 53615	23.8N 121.6E	46699
29	030500	23.0N 121.4E	LAND	645// 53514	22.6N 120.3E	46744
30	030500	23.2N 121.5E	LAND	6//// 53614	22.0N 120.7E	46752
31	030500	23.1N 121.5E	LAND	25/13 73615	24.3N 124.2E	47918
32	030600	23.3N 121.4E	LAND	65/13 73516	24.3N 124.2E	47918
33	030700	23.5N 121.5E	LAND	35/13 73612	24.3N 124.2E	47918
34	030800	23.8N 121.5E	LAND	65//3 73615	24.3N 124.2E	47918

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	040600	29.4N 121.6E	045	035	58556 58562 58569
2	040900	29.8N 122.0E	045	030	58562 58474 58569
3	041200	31.3N 122.9E	045	030	58472 58477 58367

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL STORM BETTY
BEST TRACK DATA

	BEST TRACK		WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
					ERRORS				ERRORS				ERRORS				ERRORS	
MO/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
070418Z	14.7 126.3	25	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070500Z	14.5 125.0	25	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070506Z	14.6 123.8	25	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070512Z	14.8 122.8	25	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070518Z	15.1 121.8	25	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070600Z	15.5 120.9	20	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070606Z	15.9 120.2	20	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070612Z	16.3 119.4	25	16.4 119.0	25.	24.	0.	18.3 115.6	40.	58.	5.	20.6 112.1	50.	111.	0.	23.1 109.8	30.	42.	-5.
070618Z	16.8 118.6	25	17.2 118.3	30.	30.	5.	19.3 115.1	45.	75.	5.	21.8 111.8	60.	98.	5.	24.4 109.8	30.	125.	5.
070700Z	17.2 117.9	30	17.4 117.8	30.	13.	0.	19.4 115.3	50.	33.	5.	21.9 112.4	60.	36.	5.	0.0 0.0	0.	-0.	0.
070706Z	17.6 117.3	30	17.5 117.2	30.	8.	0.	19.1 115.0	45.	30.	-5.	21.6 112.9	55.	109.	5.	0.0 0.0	0.	-0.	0.
070712Z	18.1 116.6	35	18.0 116.5	30.	8.	-5.	20.0 114.5	45.	29.	-5.	23.2 112.7	30.	173.	-5.	0.0 0.0	0.	-0.	0.
070718Z	18.6 116.2	40	18.5 115.9	30.	18.	-10.	20.8 113.9	45.	45.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070800Z	19.0 115.7	45	19.0 115.5	45.	11.	0.	21.3 113.6	55.	73.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070806Z	19.6 115.0	50	19.8 115.0	50.	12.	0.	22.5 112.8	50.	104.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070812Z	20.1 114.0	50	20.2 114.1	50.	8.	0.	23.2 111.9	40.	131.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070818Z	20.7 113.1	55	20.8 113.2	55.	8.	0.	23.6 110.9	25.	143.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070900Z	21.3 112.3	55	21.3 112.2	55.	6.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070906Z	22.0 111.0	50	22.1 111.0	50.	6.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070912Z	22.4 109.7	35	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070918Z	22.7 108.5	25	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	13.	72.	105.	83.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	9.	42.	46.	80.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	4.	4.	5.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	0.	2.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	12	10	5	2	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1157. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TROPICAL STORM BETTY
FIX POSITIONS FOR CYCLONE NO. 4

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	012023	18.8N 146.4E	PCN 5	T0.0/0.0	INIT OBS	PGTW
2	020902	16.1N 140.5E	PCN 5			PGTW
3	021800	11.8N 136.4E	PCN 6		ULCC FIX	PGTW
4	031027	9.8N 131.0E	PCN 5	T1.0/1.0	INIT OBS	PGTW
5	032121	9.6N 130.0E	PCN 6			PGTW
6	032305	14.6N 128.0E	PCN 5	T1.5/1.5	INIT OBS	PGTW
7	040137	15.0N 128.0E	PCN 5	T1.5/1.5	INIT OBS	RPMK
8	040709	14.6N 127.1E	PCN 5			PGTW
9	040709	16.1N 128.0E	PCN 5			RPMK
10	041001	15.5N 127.5E	PCN 5			PGTW
11	041200	15.2N 127.7E	PCN 6			PGTW
12	041417	14.8N 127.4E	PCN 6			PGTW
13	041800	15.1N 127.1E	PCN 6	T0.5/0.5	INIT OBS	PGTW
14	042241	15.1N 126.4E	PCN 5			PGTW
15	050117	14.0N 123.8E	PCN 3	T1.0/1.0-	INIT OBS	PGTW
16	050117	14.7N 125.0E	PCN 5	T1.5/1.5 /S0.0/24HRS		RPMK
17	050657	14.4N 123.8E	PCN 5			PGTW
18	051119	14.7N 123.4E	PCN 6			RPMK
19	051200	14.9N 123.2E	PCN 6			PGTW
20	051357	15.2N 122.0E	PCN 6			PGTW
21	051800	15.2N 122.0E	PCN 6	T1.0/1.0+/D0.5/24HRS		PGTW
22	051942	15.3N 121.4E	PCN 6			PGTW
23	052220	15.4N 121.4E	PCN 5	T2.0/2.0	INIT OBS	RODN
24	052358	15.3N 120.6E	PCN 5	T1.5/1.5+/S0.0/23HRS		RPMK
25	060000	15.6N 120.8E	PCN 6			PGTW
26	060644	15.8N 119.7E	PCN 5			PGTW
27	061055	16.5N 119.4E	PCN 6		ULCC FIX	PGTW
28	061200	17.1N 119.6E	PCN 6			PGTW
29	061800	17.6N 118.5E	PCN 6			PGTW
30	061920	17.0N 117.9E	PCN 5	T2.5/2.5 /D1.5/24HRS		PGTW
31	062333	17.5N 118.2E	PCN 5			PGTW
32	062335	17.3N 118.1E	PCN 3	T2.0/2.0 /S0.0/25HRS	EXP LLCC	RODN
33	070218	17.7N 118.2E	PCN 5	T1.5/1.5+/S0.0/26HRS		RPMK
34	070600	17.4N 116.8E	PCN 6	T2.0/2.0	INIT OBS ULCC FIX	PGTW
35	070814	17.9N 116.3E	PCN 5	T2.0/2.0+/D0.5/32HRS		RPMK
36	071030	17.7N 116.5E	PCN 6			PGTW
37	071200	18.0N 116.6E	PCN 6			PGTW
38	071458	18.4N 115.3E	PCN 5			RODN
39	071800	18.3N 115.7E	PCN 6	T2.0/2.5+/W0.5/23HRS		PGTW
40	072059	18.3N 115.0E	PCN 6	T2.0/2.0 /D0.5/26HRS		RPMK
41	072138	18.5N 115.3E	PCN 5			PGTW
42	072249	19.1N 115.9E	PCN 6	T3.0/3.0 /D1.0/24HRS		RODN
43	072309	18.5N 115.2E	PCN 5			PGTW
44	080000	18.6N 115.3E	PCN 6		ULCC FIX	PGTW
45	080157	19.6N 115.3E	PCN 5	T3.0/3.0 /D1.0/20HRS		PGTW
46	080600	20.0N 114.7E	PCN 6			PGTW
47	080801	20.0N 114.7E	PCN 4	T3.0		RPMK
48	081017	20.4N 114.2E	PCN 6		ULCC FIX	PGTW
49	081147	20.3N 114.0E	PCN 4			RODN
50	081148	20.1N 114.1E	PCN 6			RPMK
51	081200	20.1N 113.9E	PCN 6		ULCC FIX	PGTW
52	08143B	20.6N 113.1E	PCN 3			RPMK
53	081800	20.5N 112.7E	PCN 6	T3.0/3.0-/D1.0/24HRS		PGTW
54	082046	21.3N 112.5E	PCN 3			RODN
55	090000	21.5N 112.3E	PCN 6			PGTW
56	090026	21.4N 112.4E	PCN 3	T3.0/3.0	INIT OBS	RPMK
57	090137	21.8N 111.9E	PCN 3			PGTW
58	090600	22.0N 111.4E	PCN 6			PGTW
59	090749	22.0N 109.7E	PCN 5			RODN
60	091127	22.1N 109.8E	PCN 5			RSKO
* 61	091138	22.0N 107.2E	PCN 6			RODN
62	091138	22.6N 109.9E	PCN 6			RPMK

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-TATION	EYE DIAM	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	080034	19.2N 115.6E	1500FT		997	60 050 30	170 61 080 95	20 5				+23 +23 31	6
2	080251	19.7N 115.5E	700MB	3038	997	55 050 60	150 51 060 49	20 5				+10 +11 + 9	6

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
* 1	051500	15.8N 123.6E	LAND				21900 5////	EYE 90 PCT ELIP	15.8N 121.6E	98333
2	070230	17.3N 118.2E	LAND				4//// 43406		16.3N 120.6E	98321
* 3	070900	19.0N 120.6E	LAND				1020/ /////		16.3N 120.6E	98321

4	080300	19.2N	115.3E	LAND	3//// /////	22.3N	114.2E	45005
5	080500	19.3N	115.3E	LAND	6//// /////	22.3N	114.2E	45005
6	080540	19.6N	114.6E	LAND	5//// /////	22.3N	114.2E	45005
7	080600	19.6N	114.6E	LAND	6//// /////	22.3N	114.2E	45005
8	080700	19.7N	114.6E	LAND	5//// /////	22.3N	114.2E	45005
9	080800	19.8N	114.4E	LAND	5//// 63107	22.3N	114.2E	45005
10	080900	19.9N	114.3E	LAND	5//// 73107	22.3N	114.2E	45005
11	081000	20.0N	114.1E	LAND	5//// /////	22.3N	114.2E	45005
12	081100	20.0N	114.2E	LAND	5//// /////	22.3N	114.2E	45005
13	081200	20.2N	113.7E	LAND	6//// /////	22.3N	114.2E	45005
14	081300	20.2N	113.6E	LAND	5//// /////	22.3N	114.2E	45005
15	081400	20.2N	113.5E	LAND	5//// /////	22.3N	114.2E	45005
16	081500	20.2N	113.4E	LAND	5///1 72806	22.3N	114.2E	45005
17	081600	20.3N	113.3E	LAND	5///1 73006	22.3N	114.2E	45005
18	081700	20.8N	113.0E	LAND	5///1 /////	22.3N	114.2E	45005
19	081800	20.6N	112.9E	LAND	5///1 73012	22.3N	114.2E	45005
20	081900	20.8N	112.8E	LAND	5///1 73112	22.3N	114.2E	45005
21	082000	20.8N	112.6E	LAND	5///1 /////	22.3N	114.2E	45005
22	082100	20.9N	112.6E	LAND	5///1 73110	22.3N	114.2E	45005
23	082200	21.0N	112.5E	LAND	5///1 /////	22.3N	114.2E	45005
24	082300	21.2N	112.4E	LAND	5///3 73310	22.3N	114.2E	45005
25	090000	21.1N	112.2E	LAND	6///3 73008	22.3N	114.2E	45005
26	090100	21.2N	112.1E	LAND	5//// 73110	22.3N	114.2E	45005
27	090200	21.4N	112.0E	LAND	5///3 83209	22.3N	114.2E	45005
28	090300	21.6N	111.7E	LAND	5///3 73114	22.3N	114.2E	45005
29	090400	21.8N	111.5E	LAND	5///4 83210	22.3N	114.2E	45005
30	090500	21.9N	111.2E	LAND	6//// 83113	22.3N	114.2E	45005
31	090600	21.9N	110.8E	LAND	6///3 53109	20.0N	110.4E	59758

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON CARY
BEST TRACK DATA

	BEST TRACK				WARNING				24 HOUR FORECAST						48 HOUR FORECAST						72 HOUR FORECAST					
						ERRORS						ERRORS						ERRORS						ERRORS		
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND		POSIT		WIND	DST	WIND		POSIT		WIND	DST	WIND	
070506Z	16.5	152.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
070512Z	16.7	152.0	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
070518Z	16.8	151.2	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
070600Z	16.9	150.3	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
070606Z	17.1	149.5	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
070612Z	17.3	148.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
070618Z	17.6	147.7	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
070700Z	18.0	146.9	25	17.8	146.5	25.	26.	0.	17.8	141.5	35.	285.	-15.	18.3	137.4	40.	474.	-20.	19.3	133.4	50.	642.	-40.			
070706Z	18.6	146.6	30	18.6	146.2	30.	23.	0.	20.2	144.9	40.	52.	-10.	21.1	143.0	45.	114.	-15.	21.2	140.8	50.	212.	-40.			
070712Z	19.0	146.4	35	19.5	146.1	30.	34.	-5.	21.2	144.7	40.	56.	-10.	22.7	143.3	45.	95.	-20.	24.2	141.6	50.	204.	-30.			
070718Z	19.5	146.2	40	19.4	145.9	30.	18.	-10.	20.8	144.4	40.	59.	-15.	22.1	142.9	50.	95.	-25.	23.3	141.3	60.	210.	-15.			
070800Z	19.9	146.0	50	20.0	145.8	45.	13.	-5.	21.7	144.7	60.	17.	0.	23.7	143.1	70.	133.	-20.	25.9	142.2	75.	242.	5.			
070806Z	20.4	145.8	50	20.3	145.8	50.	6.	0.	21.9	144.9	60.	6.	0.	24.0	143.4	70.	135.	-20.	26.3	142.3	75.	255.	10.			
070812Z	20.8	145.6	50	20.7	145.5	50.	8.	0.	22.6	145.0	65.	51.	0.	25.0	144.7	70.	168.	-10.	27.4	145.1	65.	191.	0.			
070818Z	21.3	145.3	55	21.3	145.3	60.	0.	5.	23.7	144.5	70.	108.	-5.	25.7	144.3	75.	196.	0.	28.3	146.0	65.	206.	-5.			
070900Z	21.7	145.0	60	21.9	145.0	60.	12.	0.	24.2	144.6	70.	138.	-20.	27.0	144.9	75.	236.	5.	31.1	147.5	55.	326.	-15.			
070906Z	21.8	144.9	60	22.0	144.9	60.	12.	0.	24.3	144.5	75.	138.	-15.	27.7	145.2	80.	239.	15.	31.7	148.2	60.	321.	-15.			
070912Z	21.8	144.7	55	22.0	144.8	65.	13.	0.	23.6	144.4	90.	85.	10.	26.8	145.0	95.	164.	30.	31.0	147.7	65.	266.	-10.			
070918Z	21.9	144.6	75	22.0	144.5	75.	8.	0.	23.5	144.2	95.	75.	20.	27.0	145.3	85.	161.	15.	31.5	148.2	60.	263.	-15.			
071000Z	21.9	144.5	90	21.9	144.5	85.	0.	-5.	22.7	144.0	95.	81.	25.	24.7	144.1	105.	225.	35.	28.3	145.9	115.	280.	45.			
071006Z	22.0	144.5	90	22.0	144.4	90.	6.	0.	22.9	144.0	105.	128.	40.	25.0	144.1	115.	278.	40.	28.7	145.8	120.	316.	55.			
071012Z	22.2	144.6	80	22.0	144.4	80.	16.	0.	23.4	144.4	95.	150.	30.	26.5	145.0	105.	264.	30.	30.0	147.2	105.	267.	45.			
071018Z	22.5	145.0	75	22.2	144.7	80.	25.	5.	23.4	144.8	90.	175.	20.	25.7	145.2	95.	306.	20.	28.8	146.4	95.	332.	40.			
071100Z	23.1	145.4	70	23.1	145.4	70.	0.	0.	26.0	147.3	65.	47.	-5.	29.2	149.1	55.	123.	-15.	33.7	151.1	50.	216.	5.			
071106Z	23.8	146.1	65	23.8	146.1	70.	0.	5.	26.9	148.3	65.	48.	-10.	31.2	150.7	55.	144.	-10.	36.4	152.9	45.	324.	5.			
071112Z	24.6	146.8	65	24.6	146.8	70.	0.	5.	27.7	149.0	65.	64.	-10.	32.0	151.3	55.	159.	-5.	0.0	0.0	0.	-0.	0.			
071118Z	25.1	147.4	70	25.2	147.5	65.	8.	-5.	28.2	149.9	55.	48.	-20.	32.5	152.3	45.	151.	-10.	0.0	0.0	0.	-0.	0.			
071200Z	25.7	148.1	70	25.6	148.2	65.	8.	-5.	28.6	150.3	55.	51.	-15.	32.7	152.0	45.	144.	0.	0.0	0.0	0.	-0.	0.			
071206Z	26.4	149.0	75	26.2	148.9	75.	13.	0.	29.8	151.2	65.	57.	0.	34.0	152.7	55.	180.	15.	0.0	0.0	0.	-0.	0.			
071212Z	27.0	149.9	75	26.9	149.8	75.	8.	0.	30.7	152.8	60.	77.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
071218Z	27.6	150.5	75	27.7	150.7	75.	12.	0.	31.8	153.7	55.	122.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
071300Z	28.3	151.2	70	28.4	151.4	70.	12.	0.	32.2	154.2	50.	130.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
071306Z	29.0	151.8	65	29.2	152.0	65.	16.	0.	33.0	154.7	55.	151.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
071312Z	29.5	152.3	60	29.9	152.8	60.	35.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
071318Z	30.0	152.6	55	30.3	152.9	55.	24.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
071400Z	30.4	152.8	45	30.4	152.7	40.	5.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
071406Z	31.0	152.9	40	30.5	153.0	40.	30.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	13.	92.	190.	282.	12.	92.	190.	282.
AVG RIGHT ANGLE ERROR	7.	56.	149.	246.	6.	56.	149.	246.
AVG INTENSITY MAGNITUDE ERROR	2.	12.	17.	22.	2.	12.	17.	22.
AVG INTENSITY BIAS	-1.	1.	2.	1.	-1.	1.	2.	1.
NUMBER OF FORECASTS	30	26	22	18	28	26	22	18

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1355. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

TYPHOON CARY
FIX POSITIONS FOR CYCLONE NO. 5

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	050759	16.7N 152.7E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	052039	16.3N 150.9E	PCN 5			PGTW
3	060000	16.4N 150.3E	PCN 6			PGTW
4	060502	17.7N 150.5E	PCN 5	T2.0/2.0 /D1.0/21HRS	ULCC FIX	PGTW
5	060919	17.7N 149.7E	PCN 6			PGTW
* 6	061156	18.3N 149.1E	PCN 6			PGTW
* 7	061747	19.0N 148.7E	PCN 5	T2.0/2.0	INIT OBS	PGTW
8	062018	17.9N 147.0E	PCN 5			PGTW
9	062152	17.6N 146.9E	PCN 3		EXP LLCC	PGTW
10	070000	17.9N 147.1E	PCN 4		EXP LLCC	PGTW
11	070036	17.8N 147.2E	PCN 4		EXP LLCC	PGTW
12	070449	18.2N 146.7E	PCN 6	T2.0/2.0 /S0.2/23HRS	ULCC 18.9N 147.1E	PGTW
13	070600	18.7N 146.9E	PCN 6		ULCC FIX	PGTW
14	070857	19.2N 146.4E	PCN 5		ULCC FIX	PGTW
15	071200	19.7N 146.2E	PCN 6			PGTW
16	071317	18.6N 146.5E	PCN 5			PGTW
17	071735	18.9N 146.0E	PCN 5	T2.5/2.5 /D0.5/24HRS		PGTW
18	071957	19.4N 146.1E	PCN 5			PGTW
19	072128	19.7N 145.8E	PCN 5			PGTW
20	080016	20.0N 145.6E	PCN 3			PGTW
21	080016	19.8N 145.4E	PCN 5	T3.0/3.0	INIT OBS	RODN
22	080619	20.2N 145.6E	PCN 5	T3.5/3.5-/D1.5/26HRS		PGTW
23	080836	20.5N 145.1E	PCN 5		ULCC FIX	PGTW
24	081200	20.5N 145.3E	PCN 6		ULCC FIX	PGTW
25	081257	20.7N 145.2E	PCN 6			PGTW
26	081800	21.5N 145.2E	PCN 6	T4.0/4.0 /D1.5/24HRS	EYEWALL OPN TO NE AND WSW	PGTW
27	082104	21.6N 145.0E	PCN 6			PGTW
28	082356	21.8N 145.0E	PCN 3			PGTW
29	090607	21.9N 144.9E	PCN 3	T4.0/4.0 /D0.5/24HRS		PGTW
30	090815	22.0N 144.8E	PCN 4			PGTW
31	090943	21.7N 144.7E	PCN 3			PGTW
32	091200	22.0N 144.5E	PCN 2		EYE DIA 24NM	PGTW
33	091236	21.8N 144.3E	PCN 2			PGTW
34	091800	21.7N 144.5E	PCN 2	T4.5/4.5 /D0.5/24HRS		PGTW
35	091852	22.2N 144.4E	PCN 2			PGTW
36	092055	21.8N 144.7E	PCN 1			PGTW
37	092221	22.0N 144.5E	PCN 1			PGTW
38	092336	21.9N 144.5E	PCN 1			PGTW
39	092336	21.9N 144.4E	PCN 3	T5.0/5.0	INIT OBS	RODN
40	100554	22.0N 144.4E	PCN 1	T5.0/5.0 /D1.0/24HRS		PGTW
41	100554	22.0N 144.4E	PCN 1	T5.5/5.5	INIT OBS	RPMK
42	100918	22.0N 144.6E	PCN 1			PGTW
43	101200	22.1N 144.5E	PCN 3			PGTW
44	101216	22.1N 144.6E	PCN 4			PGTW
45	101800	22.2N 144.8E	PCN 6	1.0/4.5 /W0.5/24HRS		PGTW
46	101839	22.4N 144.9E	PCN 2			PGTW
47	102034	22.8N 145.0E	PCN 3			PGTW
48	102157	23.0N 145.2E	PCN 3			PGTW
49	102315	21.3N 145.3E	PCN 3			PGTW
50	110056	23.2N 145.6E	PCN 3			PGTW
51	110057	23.9N 145.6E	PCN 4	T4.0/4.[illegible]	INIT OBS	RSKO
52	110542	23.8N 146.1E	PCN 3	T4.0/5.0-/[illegible]1 [illegible]/24HRS		PGTW
53	110542	23.7N 146.4E	PCN 2	T5.0/5.5 /W[illegible].5/24HRS		RPMK
54	110914	24.2N 146.3E	PCN 1		EYE DIA 30NM	PGTW
55	111156	24.6N 146.9E	PCN 4		EYE DIS 30NM	PGTW
56	111200	24.5N 146.9E	PCN 4			PGTW
57	111811	25.6N 147.6E	PCN 2			RSKO
58	111826	25.1N 147.4E	PCN 2	T4.5/4.5-/D0.5/24HRS		PGTW
59	112013	25.3N 147.6E	PCN 2			PGTW
60	112132	25.4N 147.9E	PCN 2			PGTW
61	120037	25.8N 148.4E	PCN 1			PGTW
62	120529	26.2N 149.2E	PCN 1	T5.0/5.0-/D1.0/24HRS		PGTW
63	120529	26.3N 149.0E	PCN 3	T4.0/4.0	INIT OBS	RODN
64	121200	27.0N 149.9E	PCN 2			PGTW
65	121317	27.0N 150.2E	PCN 1		40NM EYE	PGTW

66	121800	27.7N	150.7E	PCN 2	T4.5/4.5-/S0.0/24HRS		PGTW
67	121814	27.9N	150.7E	PCN 2			RODN
68	121952	27.7N	150.3E	PCN 2			PGTW
69	122108	28.0N	151.1E	PCN 1		S0NM EYE	PGTW
70	130016	28.2N	151.3E	PCN 1			PGTW
71	130600	29.2N	151.5E	PCN 2	T4.0/4.0-/W1.0/24HRS		PGTW
72	130832	29.2N	152.2E	PCN 4			PGTW
* 73	131200	29.6N	153.2E	PCN 4			PGTW
74	131257	29.7N	152.9E	PCN 3			PGTW
75	131802	30.0N	152.2E	PCN 3	T3.0/3.0 /W1.5/24HRS		PGTW
76	131931	29.8N	152.6E	PCN 4		EXP LLCC	PGTW
77	132356	30.1N	152.9E	PCN 3			PGTW
78	140504	30.3N	153.1E	PCN 3	T3.0/3.0 /W1.0/23HRS		PGTW
79	140811	31.5N	152.8E	PCN 4			PGTW
80	141200	30.6N	153.1E	PCN 4			PGTW
81	141237	31.7N	152.8E	PCN 3		EXP LLCC	PGTW
82	150931	31.9N	152.9E	PCN 3		EXP LLCC	PGTW
83	152029	31.4N	151.6E	PCN 3			PGTW
84	160909	30.7N	151.0E	PCN 2			PGTW
85	171947	29.9N	145.2E	PCN 4			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	062257	17.6N 146.9E	1500FT		1004	25 050 10	140 20 050 10	3 1			+23 +23 +22 30	1
2	070652	18.9N 146.7E	1500FT		1002	40 040 60	090 35 010 5					2
3	070845	18.9N 146.3E	1500FT		999	40 020 5	040 40 330 15	5 1			+21 +24 +24	3
4	072128	19.9N 146.0E	700MB	3035		50 240 25	330 58 280 30	5 10				3
5	080004	20.0N 146.0E	1500FT		991	50 010 20	020 35 300 60	5 5			+23 +25 +25	3
6	080530	20.3N 146.0E	1500FT		987	55 220 25	100 63 360 40	7 2			+22 +26 +24 29	4
7	080807	20.6N 145.9E	1500FT		989	45 090 30	170 50 090 30	5 2			+22 +26 +24 29	4
8	082353	21.8N 145.1E	700MB	2964		45 180 35	250 44 180 60	5 2			+12 +14 +12	6
9	090245	21.8N 144.9E	700MB	2942	981	45 330 70	030 44 330 60	5 2			+11 +24 +24	6
10	090836	21.8N 144.7E	700MB	2894	977	45 180 10	140 51 010 55	5 10				8
11	091125	21.9N 144.7E	700MB	2887	975		310 71 220 25	5 10	CIRCULAR	30	+10 +14 +11	8
12	092100	21.8N 144.5E	700MB	2721		65 360 60	080 88 360 35	7 5			+10 +19 + 9	10
13	092332	21.9N 144.5E	700MB	2723	955	90 270 45	360 82 270 40	6 5	CIRCULAR	25	+13 +18 +10	10
14	100855	22.1N 144.5E	700MB	2791	967	50 180 60	330 78 240 18	12 3			+15 +12	11
15	101130	22.1N 144.6E	700MB	2820	971		330 70 100 25	12 2	CIRCULAR	10	+11 +14 +12	11
16	101953	22.7N 145.2E	700MB	2855		50 290 15	270 70 180 10	10 4			+10 +14 + 9	13
17	102323	23.0N 145.5E	700MB	2875	974	60 040 47	160 65 050 80	7 12			+10 +12 +11	13
18	110837	24.4N 146.6E	700MB	2912	982	60 100 60	190 63 100 30	8 5			+22 +12	14
19	111118	24.5N 146.7E	700MB	2915	982		360 64 240 20	8 5	CIRCULAR	40	+10 +11 +11	14
20	112032	25.4N 147.5E	700MB	2859		50 050 70	310 74 230 44	10 5			+13 +14 +11	15
21	112314	25.2N 148.2E	700MB	2855	974	60 290 75	350 71 320 55	12 5	ELLIPTICAL	30 10 090	+11 +14 +11	15
22	120847	26.7N 149.4E	700MB	2831		50 360 5	240 78 140 30	5 10	CIRCULAR	40	+10 +13 +10	16
23	121141	26.9N 149.8E	700MB	2820			110 60 050 35	5 10	CIRCULAR	40	+ 9 +13 +10	16
24	122053	27.9N 151.0E	700MB	2776		55 230 25	220 82 110 33	10 4	CIRCULAR	35	+11 +14 +10	17
25	122329	28.2N 151.2E	700MB	2777		60 300 60	090 70 360 23	15 3	CIRCULAR	35	+11 +14 +12	17
26	130532	29.1N 151.6E	700MB	2755		55 120 30	210 90 120 65	15 7			+12 +16 +13	18
27	130805	29.3N 152.1E	700MB	2802	965	60 300 75	040 65 300 65	10 6			+13 +15 +11	18
28	132056	30.1N 152.6E	700MB	2876		45 320 40	060 39 340 40	5 15			+12 +10	19
29	132328	30.3N 152.7E	700MB	2889	980	40 050 85	180 46 050 120	5 10			+10 +11 +10	19

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON DINAH
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		BEST TRACK WIND	WARNING POSIT		WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT		24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT		48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT		72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
072118Z	21.0	162.2	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072200Z	21.0	161.3	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072206Z	21.0	160.9	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072212Z	20.9	160.4	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072218Z	20.7	159.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072300Z	20.4	159.1	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072306Z	20.5	158.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072312Z	21.0	158.2	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072318Z	21.3	157.8	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072400Z	21.6	157.3	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072406Z	21.7	156.4	30	21.9	156.7	30.	21.	0.	23.4	154.6	40.	225.	-10.	26.5	152.4	50.	429.	-25.	30.2	150.3	55.	582.	-25.
072412Z	21.3	155.4	35	21.9	155.9	30.	46.	-5.	22.8	154.0	44.	222.	-11.	24.0	152.0	50.	267.	-30.	25.3	150.3	60.	277.	-15.
072418Z	21.0	154.7	40	21.5	155.0	35.	34.	-5.	22.6	152.3	45.	200.	-15.	23.9	150.5	55.	235.	-30.	25.4	149.1	65.	297.	-15.
072500Z	20.6	153.9	45	20.9	154.0	45.	19.	0.	20.4	149.9	65.	107.	-5.	22.6	146.8	75.	235.	-10.	24.9	145.1	80.	424.	-5.
072506Z	20.0	152.9	50	20.4	152.9	50.	24.	0.	20.7	148.8	70.	134.	-5.	23.1	145.9	75.	300.	-5.	25.6	144.5	80.	497.	-20.
072512Z	19.5	152.2	55	19.7	152.1	60.	13.	5.	20.5	148.5	75.	115.	-5.	22.6	146.3	80.	271.	5.	24.7	145.0	85.	472.	-30.
072518Z	19.3	151.8	60	19.5	151.1	65.	41.	5.	20.3	147.7	75.	142.	-10.	22.6	145.9	80.	309.	0.	24.8	144.7	85.	502.	-35.
072600Z	19.3	151.4	70	19.4	151.3	70.	8.	0.	19.5	149.9	75.	51.	-10.	20.2	148.9	75.	154.	-10.	21.3	148.4	75.	313.	-50.
072606Z	19.5	150.8	75	19.5	150.8	75.	0.	0.	20.5	149.0	80.	84.	0.	22.2	148.0	85.	234.	-15.	24.0	147.1	95.	395.	-20.
072612Z	19.8	150.4	80	20.0	150.4	85.	12.	5.	21.7	149.0	105.	112.	30.	24.3	147.6	115.	337.	0.	27.0	146.9	115.	429.	10.
072618Z	20.0	150.2	85	20.2	150.2	90.	12.	5.	22.2	148.6	110.	163.	30.	24.9	147.3	115.	374.	-5.	27.7	146.7	115.	442.	15.
072700Z	20.3	150.2	85	20.2	150.1	90.	8.	5.	21.6	149.2	75.	134.	-10.	24.2	147.9	75.	335.	-50.	26.8	146.6	75.	459.	-20.
072706Z	20.5	150.5	80	20.5	150.1	90.	22.	10.	22.1	149.3	75.	164.	-25.	24.5	148.0	75.	346.	-40.	26.9	146.3	80.	521.	-10.
072712Z	20.7	150.7	75	20.7	150.5	80.	11.	5.	22.5	150.6	70.	140.	-45.	25.0	149.3	75.	288.	-30.	27.5	147.7	80.	490.	0.
072718Z	20.8	151.1	80	20.8	150.6	85.	28.	5.	22.6	150.6	75.	152.	-45.	25.1	149.3	75.	317.	-25.	27.5	147.5	80.	585.	10.
072800Z	21.0	151.5	85	21.0	151.4	80.	6.	-5.	22.2	152.7	90.	71.	-35.	24.2	153.6	95.	248.	0.	26.3	153.6	100.	534.	40.
072806Z	21.0	152.0	100	21.1	152.0	115.	6.	15.	22.5	153.7	125.	96.	10.	24.5	154.3	135.	325.	45.	26.5	153.8	145.	622.	95.
072812Z	21.1	152.6	115	21.1	152.6	120.	0.	5.	21.6	155.0	135.	217.	30.	24.8	155.5	140.	391.	60.	28.8	155.5	140.	559.	95.
072818Z	21.8	153.2	120	21.4	153.0	125.	26.	5.	23.4	154.9	135.	198.	35.	26.9	155.6	140.	366.	70.	30.8	156.1	130.	570.	85.
072900Z	22.8	153.8	125	22.8	153.7	125.	6.	0.	26.7	153.7	135.	112.	40.	30.2	151.9	140.	395.	80.	33.6	149.6	130.	884.	85.
072906Z	24.0	154.3	115	24.2	154.2	115.	13.	0.	28.7	153.2	120.	142.	30.	31.9	150.4	115.	510.	65.	34.9	147.3	100.	1130.	60.
072912Z	25.2	154.6	105	25.2	154.4	105.	11.	0.	29.2	154.2	85.	157.	5.	32.4	154.9	80.	412.	35.	34.2	155.9	75.	969.	35.
072918Z	26.7	154.9	100	26.4	154.5	100.	28.	0.	30.4	154.6	80.	191.	10.	33.5	155.1	70.	500.	25.	36.3	157.0	60.	1009.	20.
073000Z	28.1	155.1	95	28.2	155.0	100.	8.	5.	31.2	154.6	75.	254.	15.	34.8	155.8	65.	578.	20.	0.0	0.0	0.	-0.	0.
073006Z	29.8	155.6	90	29.7	155.4	95.	12.	5.	35.7	157.8	60.	88.	10.	41.2	164.8	30.	254.	-10.	0.0	0.0	0.	-0.	0.
073012Z	31.3	156.0	80	31.3	156.0	80.	0.	0.	36.9	159.2	50.	106.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073018Z	32.9	156.9	70	32.7	156.9	70.	12.	0.	39.2	162.2	45.	116.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073100Z	34.4	157.9	60	34.4	157.9	65.	0.	5.	40.1	164.2	40.	126.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073106Z	35.6	159.6	50	35.8	159.6	55.	12.	5.	39.2	168.2	30.	107.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073112Z	36.7	161.4	45	36.6	162.4	50.	49.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073118Z	37.8	163.9	45	37.4	164.1	45.	26.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080100Z	39.1	166.6	45	38.7	165.5	40.	57.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080106Z	40.1	170.2	40	40.0	169.5	40.	33.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080112Z	41.1	174.4	40	41.0	175.0	40.	28.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080118Z	42.8	177.2	40	43.0	179.0	40.	80.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	20.	142.	336.	564.	20.	142.	336.	564.
AVG RIGHT ANGLE ERROR	11.	73.	178.	284.	11.	73.	178.	284.
AVG INTENSITY MAGNITUDE ERROR	3.	17.	28.	35.	3.	17.	28.	35.
AVG INTENSITY BIAS	2.	0.	5.	13.	2.	0.	5.	13.
NUMBER OF FORECASTS	35	29	25	23	34	29	25	23

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2826. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 11. KNOTS

TYPHOON DINAH
FIX POSITIONS FOR CYCLONE NO. 6

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	211800	21.1N 162.5E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	220000	20.9N 161.4E	PCN 6	T0.5/0.5	INIT OBS	PGTW
3	220600	21.2N 160.7E	PCN 6		ULCC FIX	PGTW
4	221200	20.4N 159.9E	PCN 6			PGTW
5	221800	20.6N 160.1E	PCN 6	T1.0/1.0+/S0.0/24HRS		PGTW
6	221942	20.3N 159.1E	PCN 5			PGTW
7	230000	20.4N 159.0E	PCN 6	T1.0/1.0 /D0.5/24HRS		PGTW
8	230600	20.4N 158.3E	PCN 6		ULCC FIX	PGTW
* 9	230822	22.3N 158.6E	PCN 5			PGTW
10	231921	21.8N 157.7E	PCN 5	T0.5/1.0+/W0.5/24HRS		PGTW
11	240000	21.4N 157.3E	PCN 6		ULCC FIX	PGTW
12	240441	21.5N 156.2E	PCN 6	T2.0/2.0 /D1.0/28HRS		PGTW
13	240600	21.6N 156.2E	PCN 6			PGTW
14	240801	21.8N 155.8E	PCN 6			PGTW
15	241200	20.7N 155.1E	PCN 6			PGTW
16	241726	20.7N 154.0E	PCN 6		ULCC FIX	PGTW
17	241800	21.0N 154.0E	PCN 6	T2.5/2.5	INIT OBS ULCC FIX	PGTW
18	241900	20.5N 153.7E	PCN 6			PGTW
19	242337	21.0N 153.9E	PCN 5			PGTW
20	242337	20.7N 154.0E	PCN 5	T2.5/2.5	INIT OBS	RODN
21	250600	20.4N 152.5E	PCN 6	T3.5/3.5 /D1.5/25HRS		PGTW
22	250818	20.0N 152.6E	PCN 6			PGTW
23	251200	19.5N 153.0E	PCN 6			PGTW
24	251217	19.6N 152.7E	PCN 6			PGTW
25	251217	19.6N 153.5E	PCN 5			RODN
26	251713	19.3N 151.7E	PCN 6			PGTW
27	251800	19.0N 151.9E	PCN 6	T4.0/4.0 /D1.5/24HRS		PGTW
28	252020	19.1N 151.4E	PCN 3		EYEWALL E-S-W OPN NW-NE	PGTW
29	252057	19.1N 151.3E	PCN 3			PGTW
30	252316	19.4N 151.3E	PCN 3			PGTW
31	260000	19.5N 151.4E	PCN 4			PGTW
32	260558	19.8N 150.8E	PCN 1	T4.5/4.5 /D1.5/24HRS		PGTW
33	260558	19.7N 150.9E	PCN 1	T5.0/5.0	INIT OBS	RODN
34	260900	19.7N 150.5E	PCN 2			PGTW
35	261157	19.8N 150.3E	PCN 2			PGTW
36	261800	20.2N 150.3E	PCN 2	T5.5/5.5-/D1.5/24HRS		PGTW
37	261843	20.2N 150.4E	PCN 2			PGTW
38	261959	19.9N 150.3E	PCN 2			PGTW
39	262214	20.1N 150.2E	PCN 2			PGTW
40	262214	20.2N 149.8E	PCN 2	T5.0/5.0	INIT OBS	RSKO
41	270038	20.3N 150.3E	PCN 1			PGTW
42	270545	20.3N 150.6E	PCN 1	T6.0/6.0 /D1.0/24HRS		RODN
43	270545	20.5N 150.5E	PCN 1	T5.5/5.5-/D1.0/24HRS	EYE FIX	PGTW
44	270911	20.5N 150.4E	PCN 4			PGTW
45	271200	20.5N 150.7E	PCN 2			PGTW
46	271318	20.4N 151.0E	PCN 2			PGTW
47	271830	20.7N 150.8E	PCN 2	T5.0/5.5-/W0.5/24HRS		PGTW
48	271937	20.7N 151.0E	PCN 2			PGTW
49	272149	20.8N 151.2E	PCN 4			PGTW
50	280017	20.9N 151.5E	PCN 1		EYE FIX	PGTW
51	280532	21.0N 151.9E	PCN 1	T6.0/6.0 /S0.0/24HRS	EYE FIX	RODN
52	280533	21.0N 152.0E	PCN 1	T6.0/6.0 /D0.5/24HRS		PGTW
53	280847	21.0N 152.0E	PCN 1		EYE DIA 15NM	PGTW
54	281258	20.9N 152.3E	PCN 2			PGTW
55	281818	22.1N 153.0E	PCN 2			RODN
56	281818	21.5N 152.6E	PCN 2	T6.5/6.5 /D0.5/24HRS		PGTW
57	282358	22.8N 153.8E	PCN 1		EYE DIA 12NM	RODN
58	290000	22.9N 153.8E	PCN 2	T5.5/5.5	INIT OBS	PGTW

59	290600	24.2N 154.3E	PCN 2				PGTW
60	291238	25.2N 154.6E	PCN 3				RODN
61	291800	26.7N 155.1E	PCN 6	T5.0/5.0	INIT OBS		PGTW
62	291805	26.7N 154.8E	PCN 4				RODN
63	292337	28.0N 154.9E	PCN 3	T5.0/6.0 /W1.0/24HRS			RODN
64	300000	28.3N 155.2E	PCN 4	T4.5/5.5 /W1.0/24HRS	EYEWALL OPN N-E-S		PGTW
65	300503	29.4N 155.7E	PCN 3				RODN
66	300600	29.8N 155.8E	PCN 4				PGTW
67	300915	30.5N 155.4E	PCN 3				RSKO
68	300916	30.1N 156.1E	PCN 4				PGTW
69	301217	31.1N 156.1E	PCN 3				PGTW
70	301218	31.3N 156.2E	PCN 4				RODN
71	301753	32.4N 156.4E	PCN 6	T3.5/4.5 /W1.5/24HRS	ULCC FIX		PGTW
72	301753	32.7N 156.8E	PCN 6				RODN
73	302015	33.4N 157.1E	PCN 3				PGTW
74	302316	34.3N 157.7E	PCN 4				PGTW
75	310455	35.6N 159.6E	PCN 4	T3.0/4.5 /W1.5/29HRS			PGTW
76	310355	36.1N 161.2E	PCN 6	T3.0/3.0	INIT OBS ULAC 36.2N 160.8E		KGWC
77	311157	36.2N 161.1E	PCN 6		ULAC 36.5N 161.0E		KGWC
78	311740	37.8N 163.8E	PCN 6		ULAC 38.4N 163.6E		KGWC
79	311812	37.7N 163.9E	PCN 6		ULAC 38.0N 163.6E		KGWC
80	312256	38.8N 166.2E	PCN 6	T3.0/3.0	INIT OBS		KGWC
81	010000	39.1N 166.3E	PCN 6	T3.0/3.0	INIT OBS ULCC FIX		PGTW
82	010600	39.9N 169.9E	PCN 6		ULCC FIX		PGTW
83	010652	39.9N 170.8E	PCN 6	T2.5/3.0 /W0.5/14HRS			KGWC
84	011137	40.7N 174.6E	PCN 6				KGWC
85	011727	42.9N 176.3E	PCN 6				KGWC

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN- DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	240250	21.7N 156.9E	1500FT		1000	30 070 40	160 38 070 40	5 0			+25 +25 +24 30	2
2	240537	21.8N 156.7E	1500FT		999	25 260 60	360 32 230 30	10 0			+25 +25	2
3	242057	20.8N 154.5E	700MB	3007	990	60 050 7	030 45 350 15	3 5	CIRCULAR	20		3
4	242352	20.8N 153.9E	700MB	3021	992	45 310 3	070 64 020 15	3 5	CIRCULAR	20	+14 +13 + 8	3
5	250624	20.1N 152.8E	700MB	3009	987	65 110 30	040 39 350 30	5 5			+12 +13 +13	4
6	250826	19.9N 152.6E	700MB	3002	990	65 040 10	110 72 040 10	7 5	CIRCULAR	25	+12 +15 + 8	4
7	252046	19.8N 151.7E	700MB	2923		50 130 15	230 68 130 20	5 2			+10 +15 + 9	5
8	252323	19.5N 151.5E	700MB	2906	976	75 310 20	110 86 020 15	5 1	CIRCULAR	30	+10 +16 + 9	5
9	260923	19.9N 150.7E	700MB	2731			300 73 220 15	5 10				7
10	261157	19.9N 150.5E	700MB	2719	958	30 290 60	130 97 050 13	3 5	CIRCULAR	13	+10 +16	7
11	262037	20.1N 150.3E	700MB	2689		80 230 45	290 67 230 30	10 5	CIRCULAR	12		8
12	262319	20.2N 150.2E	700MB	2697	956	110 030 10	240 80 310 10	10 5	CIRCULAR	13	+12 +16 +11	8
13	270831	20.7N 150.7E	700MB	2770		50 230 60	310 71 220 31	8 3	CIRCULAR	15	+11 +13 +13	9
14	271104	20.2N 150.7E	700MB	2790	967		030 62 300 30	8 2	CIRCULAR	10	+11 +14 +12	9
15	272139	20.9N 151.3E	700MB	2764	962	65 120 10	330 78 250 15	3 5	CIRCULAR	15		10
16	272350	21.0N 151.4E	700MB	2761	962	75 300 30	030 67 300 30	3 3	CIRCULAR	15	+11 +14 +12	10
17	280832	21.1N 152.0E	700MB	2470		120 240 10	310 105 240 10	4 3	CIRCULAR	15	+12 +21 + 8	11
18	281123	20.9N 152.6E	700MB	2382	917		350 116 300 10	6 3	CIRCULAR	12	+14 +25 +10	11
19	282042	22.3N 153.4E	700MB	2351		110 360 2	290 116 220 19	8 2	CIRCULAR	10	+14 +22 +14	12
20	282328	22.7N 153.6E	700MB	2349	916	100 040 7	130 97 020 10	8 2	CIRCULAR	10	+13 +22 +14	12
21	290845	24.4N 154.3E	700MB	2464	929	70 240 20	220 85 110 30	15 5	ELLIPTICAL	15 5 050	+12 +17 +15	13
22	291139	25.1N 154.4E	700MB	2521	935		150 82 080 28	15 5	ELLIPTICAL	20 10 050	+12 +16 +16	13
23	292116	27.6N 155.0E	700MB	2603		50 210 30	300 80 210 35	10 5			+15 +14	15
24	292326	28.0N 155.0E	700MB	2610	943	50 210 30	150 85 070 21	10 5	CIRCULAR	7	+11 +15 +15	15
25	300834	30.4N 155.9E	700MB	2686		65 200 50	250 68 180 8	10 2	CIRCULAR	8	+13 +14 +14	16
26	301032	31.0N 155.9E	700MB	2722	959		210 83 130 24	10 2	CIRCULAR	5	+14 +15 +15	16
27	302114	33.7N 157.4E	1500FT		967	45 280 90	360 41 270 120	10 10			+22 +24	17
28	302345	34.3N 157.9E	700MB	2826	970	45 050 120	140 60 050 120	10 10			+14 +16	17

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON ED
BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS					ERRORS	
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
072506Z	28.0	135.1	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072512Z	27.0	135.6	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072518Z	26.8	136.4	35	26.2	136.4	30.	0.	-5.	24.3	140.1	45.	129.	-5.	22.9	144.2	25.	457.	-40.	0.0	0.0	0.	-0.	0.
072600Z	25.9	137.5	45	25.8	137.3	55.	12.	10.	25.2	140.0	70.	114.	20.	24.6	142.4	55.	361.	-10.	21.7	145.2	45.	827.	-20.
072606Z	25.6	138.7	50	25.6	138.8	55.	5.	5.	24.4	143.0	40.	243.	-15.	21.8	146.1	25.	679.	-40.	0.0	0.0	0.	-0.	0.
072612Z	25.7	140.0	50	25.4	140.1	50.	19.	0.	23.8	144.1	35.	363.	-25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072618Z	26.4	140.6	50	25.8	141.0	50.	42.	0.	24.3	144.6	35.	412.	-30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072700Z	27.0	140.7	50	26.7	141.0	40.	24.	-10.	28.5	141.5	35.	197.	-30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072706Z	27.7	140.4	55	27.6	140.9	40.	27.	-15.	30.0	141.1	30.	233.	-35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072712Z	28.3	139.6	60	28.3	140.0	55.	21.	-5.	30.8	137.8	45.	139.	-25.	33.1	137.0	25.	374.	-65.	0.0	0.0	0.	-0.	0.
072718Z	28.7	138.7	65	28.7	138.8	60.	5.	-5.	30.7	135.1	40.	71.	-25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072800Z	29.0	137.8	65	29.0	137.9	60.	5.	-5.	30.1	134.5	60.	90.	-5.	31.4	130.5	60.	125.	-40.	33.3	128.2	45.	297.	-25.
072806Z	29.3	136.7	65	29.4	136.8	65.	8.	0.	30.6	132.9	70.	75.	-15.	31.3	129.9	45.	160.	-45.	32.4	126.9	45.	269.	-15.
072812Z	29.6	135.5	70	29.5	135.5	70.	6.	0.	30.8	131.4	65.	68.	-25.	31.7	128.0	50.	150.	-30.	31.8	124.8	40.	191.	-10.
072818Z	29.8	134.2	65	29.8	134.3	70.	5.	5.	31.0	130.0	55.	52.	-35.	31.3	125.8	45.	104.	-30.	30.8	122.2	35.	142.	-5.
072900Z	29.8	132.8	65	29.8	132.8	70.	0.	5.	30.3	128.2	50.	13.	-50.	30.6	124.1	45.	105.	-25.	30.8	120.0	30.	152.	0.
072906Z	29.8	131.8	85	29.8	131.7	95.	5.	10.	29.9	127.5	90.	81.	0.	30.0	124.0	80.	181.	20.	30.1	120.3	65.	216.	35.
072912Z	29.8	130.8	90	29.8	130.7	90.	5.	0.	30.0	126.8	80.	117.	0.	30.3	123.1	70.	162.	20.	31.0	120.0	60.	180.	35.
072918Z	30.2	129.6	90	30.1	129.5	90.	8.	0.	30.8	125.2	80.	86.	5.	31.8	121.7	65.	79.	25.	33.0	118.8	40.	93.	15.
073000Z	30.5	128.3	100	30.4	128.3	90.	6.	-10.	32.2	124.2	85.	85.	15.	33.7	120.0	75.	35.	45.	34.5	117.7	30.	95.	5.
073006Z	31.1	126.8	90	31.1	126.7	90.	5.	0.	33.6	121.1	75.	88.	15.	36.0	115.4	30.	278.	0.	0.0	0.0	0.	-0.	0.
073012Z	31.3	125.1	80	31.4	125.1	80.	6.	0.	33.8	119.5	60.	116.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073018Z	31.6	123.8	75	31.6	123.4	75.	20.	0.	33.4	118.0	45.	140.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073100Z	31.8	122.6	70	31.7	122.4	70.	12.	0.	33.5	117.7	35.	141.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073106Z	32.2	121.6	60	32.1	121.4	60.	12.	0.	34.2	117.2	25.	157.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073112Z	32.4	121.1	50	32.8	120.8	50.	28.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073118Z	32.8	120.7	40	33.2	120.3	40.	31.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080100Z	33.3	120.5	30	33.2	120.4	30.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080106Z	33.7	120.3	30	33.6	120.2	30.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080112Z	34.0	120.1	25	34.0	120.0	25.	5.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080118Z	34.3	119.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080200Z	34.7	119.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080206Z	35.0	119.4	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	12.	140.	232.	246.	13.	139.	245.	345.
AVG RIGHT ANGLE ERROR	9.	82.	117.	125.	9.	81.	126.	137.
AVG INTENSITY MAGNITUDE ERROR	3.	17.	31.	17.	4.	19.	33.	15.
AVG INTENSITY BIAS	-1.	-11.	-15.	2.	-1.	-12.	-22.	-15.
NUMBER OF FORECASTS	28	23	14	10	25	21	12	5

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1700. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TYPHOON ED
FIX POSITIONS FOR CYCLONE NO. 7

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	200000	26.6N 141.9E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	200600	27.0N 142.4E	PCN 6			PGTW
3	201200	26.4N 142.4E	PCN 6			PGTW
4	202025	27.7N 143.8E	PCN 3			PGTW
5	221942	28.5N 146.4E	PCN 5	T1.0/1.0	INIT OBS	PGTW
6	242041	29.7N 135.2E	PCN 3	T1.5/1.5	INIT OBS EXP LLCC	PGTW
7	250610	28.2N 135.2E	PCN 5	T2.0/2.0	INIT OBS	PGTW
8	250921	28.0N 134.9E	PCN 6			PGTW
9	251200	26.8N 136.0E	PCN 6			PGTW
* 10	251359	26.0N 136.8E	PCN 6		ULCC FIX	PGTW
11	251800	26.2N 136.3E	PCN 6	T2.5/2.5	INIT OBS	PGTW
12	251855	26.2N 135.8E	PCN 6		ULCC FIX	PGTW
13	252020	26.2N 136.1E	PCN 3			PGTW
14	252238	25.9N 136.8E	PCN 3			PGTW
15	260056	25.8N 137.8E	PCN 3			PGTW
16	260558	25.5N 138.7E	PCN 5	T3.5/3.5-/D1.5/24HRS		PGTW
17	260558	25.8N 138.7E	PCN 3	T3.0/3.0	INIT OBS	RSKO
18	260558	25.6N 138.7E	PCN 5	T3.5/3.5	INIT OBS	RODN
19	260900	25.5N 139.2E	PCN 6			PGTW
20	261200	25.4N 140.1E	PCN 6			PGTW
21	261338	25.6N 140.3E	PCN 6			PGTW
22	261800	26.3N 140.6E	PCN 6	T3.5/3.5-/D1.0/24HRS		PGTW
23	261843	26.4N 140.5E	PCN 6		ULCC FIX	PGTW
24	261959	26.2N 140.4E	PCN 6		ULCC FIX	PGTW
25	262214	26.2N 140.5E	PCN 5	T2.5/3.0+/W0.5/16HRS		RSKO
26	262214	26.6N 140.6E	PCN 6		ULCC FIX	PGTW
27	270038	27.0N 140.7E	PCN 3			PGTW
28	270545	27.6N 140.6E	PCN 3	T3.5/3.5-/D1.0/24HRS		PGTW
29	270545	27.5N 140.4E	PCN 3	T3.0/3.5 /W0.5/24HRS		RODN
30	270911	27.7N 140.5E	PCN 6			PGTW
31	271200	28.0N 140.2E	PCN 6			PGTW
32	271318	28.1N 139.6E	PCN 4			PGTW
33	271830	28.4N 138.4E	PCN 4	T4.0/4.0-/D0.5/24HRS		PGTW
34	272149	28.8N 137.9E	PCN 4			PGTW
35	280000	29.0N 137.6E	PCN 4			PGTW
36	280532	29.4N 136.2E	PCN 3	T4.0/4.0 /D1.0/24HRS		RODN
37	280533	29.3N 136.4E	PCN 3	T4.0/4.0-/D0.5/24HRS		PGTW
38	280959	29.4N 136.0E	PCN 1			PGTW
39	281258	29.5N 135.4E	PCN 2			PGTW
40	281800	29.6N 134.1E	PCN 2	T4.0/4.0-/S0.0/24HRS		PGTW
41	282357	29.8N 133.0E	PCN 1	T4.0/4.0	INIT OBS	RSKO
42	290000	29.8N 133.0E	PCN 2			PGTW
43	290139	29.7N 132.8E	PCN 1	T4.5/4.5 /D0.5/20HRS		RODN
44	290600	29.8N 131.7E	PCN 2	T4.0/4.0-/S0.0/24HRS		PGTW
45	290702	29.7N 131.8E	PCN 1			RSKO
46	290938	29.9N 131.2E	PCN 3	T5.0/5.0	INIT OBS EYE DIA 30NM	RPMK
47	291004	29.6N 131.1E	PCN 1			RSKO
48	291200	29.6N 130.8E	PCN 2	T5.0/5.0 /D1.0/18HRS		PGTW
49	291419	29.4N 130.6E	PCN 1		CIRCULAR EYE	RPMK
50	291847	30.3N 129.0E	PCN 1			RPMK
51	292036	30.0N 128.8E	PCN 1			RSKO
52	292242	30.2N 128.6E	PCN 1	T5.0/5.0 /D1.0/24HRS	12NM EYE	RSKO
53	300000	30.3N 128.4E	PCN 2			PGTW
54	300118	30.7N 128.2E	PCN 1	T4.5/5.0 /W0.5/16HRS		RPMK
55	300600	31.3N 126.4E	PCN 2	T5.0/5.0-/D1.0/24HRS		PGTW
56	300650	31.0N 126.7E	PCN 1			RSKO
57	300900	31.1N 125.7E	PCN 4			PGTW
58	300940	31.6N 125.7E	PCN 6			RPMK
59	301058	31.3N 125.5E	PCN 3			RSKO
60	301200	31.1N 125.3E	PCN 4			PGTW
61	301359	31.5N 124.6E	PCN 3			PGTW
62	301359	31.3N 124.8E	PCN 5			RPMK
63	301935	31.5N 123.2E	PCN 5	T3.5/4.5-/W1.5/30HRS		PGTW
64	302359	31.8N 123.0E	PCN 3	T4.0/4.5-/W0.5/23HRS		RPMK
65	310050	31.8N 122.6E	PCN 3			PGTW
66	310637	32.2N 121.7E	PCN 4			PGTW
67	311036	32.5N 122.0E	PCN 3	T4.0/5.0-/W1.0/09HRS	ULCC FIX	RSKO
68	311520	32.8N 121.0E	PCN 6		ULCC FIX	RPMK
69	312335	33.0N 120.9E	PCN 3	T2.5/3.5-/W1.5/23HRS		RSKO
70	312335	33.1N 120.6E	PCN 3	T4.0/4.0	INIT OBS	RODN
71	010000	33.0N 120.7E	PCN 4			PGTW
72	010038	33.3N 120.3E	PCN 4			PGTW

73	010214	33.3N	120.8E	PCN 3	T4.0/4.0	INIT OBS	RODN
74	010600	33.7N	120.3E	PCN 4			PGTW
75	010628	33.7N	120.7E	PCN 3			RSKO
76	011015	33.8N	120.1E	PCN 4			PGTW
77	011032	33.9N	119.9E	PCN 3		ULCC FIX	RSKO
78	011459	33.8N	120.6E	PCN 4			RPMK
79	020159	34.8N	119.6E	PCN 3	T2.5/2.5	INIT OBS	RPMK
80	020159	34.7N	119.8E	PCN 3			RODN
81	020600	35.0N	119.6E	PCN 4		EXP LLCC	PGTW
82	020616	35.1N	120.2E	PCN 3			RSKO

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM/ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	252219	26.2N 137.2E	1500FT		985	70 220 15	320 53 220 15	8 2	CIRCULAR	20	+26 +27 +23 30	1
2	260618	25.7N 139.0E	700MB	2984		50 140 25	250 53 140 39	12 3				2
3	260844	25.7N 139.5E	700MB	2983	986	25 270 10	010 30 330 54	12 4	ELLIPTICAL	18 10 090	+11 +14 +10	2
4	262218	26.9N 140.6E	700MB	2937		40 200 40	250 45 200 40					3
5	262341	26.9N 140.8E	700MB	2930	982	40 090 60	190 56 090 30	10 10	CIRCULAR	30	+12 +14 +11	3
6	270830	27.9N 140.1E	1500FT		976	40 210 34	200 60 110 20	3 3				4
7	271116	28.2N 139.6E	700MB	2888	974		110 61 040 45	8 5			+13 +17 +10	4
8	272038	28.8N 138.5E	700MB	2858		50 100 20	050 57 310 74	12 3				5
9	272324	28.9N 137.9E	700MB	2867	976	50 050 50	300 71 180 25	12 2			+12 +16	5
10	280837	29.3N 136.1E	700MB	2842	967	70 130 34	140 63 130 34	7 3	CIRCULAR	20		6
11	281112	29.6N 135.6E	700MB	2840			100 70 320 108	5 5	ELLIPTICAL	25 20 170	+13 +15 +12	6
12	282029	29.9N 133.3E	700MB	2806		65 310 12	140 92 050 24	4 2				7
13	282320	29.8N 133.0E	700MB	2818	968	65 120 40	200 67 140 19	10 4	ELLIPTICAL	35 25 050	+12 +15	7
14	290835	29.8N 131.6E	700MB	2622	945	100 050 15	120 84 050 15	5 7	ELLIPTICAL	25 20 320	+13 +17 +13	8
15	291114	29.8N 130.9E	700MB	2675	949		310 73 230 25	6 7	CIRCULAR	20	+14 +19 +12	8
16	292030	30.1N 129.3E	700MB	2658	947	90 240 60	330 80 250 20	6 5	CIRCULAR	20	+12 +17 +13	9
17	292321	30.4N 128.4E	700MB	2693	953	110 150 10	140 87 010 30	4 1	CIRCULAR	20	+12 +19 +12	9
18	300902	31.2N 123.0E	700MB	2734	958	65 030 42	130 87 050 28	10 2	CIRCULAR	15	+11 +17	10
19	301136	31.3N 125.2E	700MB	2771	965		150 87 070 33	10 2	CIRCULAR	20	+13 +16	10

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	290000	29.7N 132.7E	LAND				10712 52411		28.4N 129.5E	47909
2	290100	29.7N 132.5E	LAND				10712 52711		28.4N 129.5E	47909
3	290100	29.7N 132.5E	LAND				10771 52611		30.6N 131.0E	47869
4	290200	29.8N 132.4E	LAND				10713 52911		28.4N 129.5E	47909
5	290200	29.7N 132.3E	LAND				10711 52711		30.6N 131.0E	47869
6	290300	29.8N 132.2E	LAND				10712 52711		28.4N 129.5E	47909
7	290300	29.7N 132.3E	LAND				10711 52711		30.6N 131.0E	47869
8	290300	29.8N 132.4E	LAND	POOR		37		VMNT 3120	31.4N 131.3E	69952
9	290400	29.6N 132.0E	LAND				10612 52611		30.6N 131.0E	47869
10	290400	29.8N 132.2E	LAND	POOR		35		VMNT 3120	31.7N 129.8E	69956
11	290400	29.7N 132.1E	LAND				10712 52611		28.4N 129.5E	47909
12	290500	29.7N 131.9E	LAND				10712 52711		28.4N 129.5E	47909
13	290500	29.7N 131.8E	LAND				10612 52708		30.6N 131.0E	47869
14	290500	29.7N 132.0E	LAND	POOR		35		VMNT 2720	31.4N 131.3E	69952
15	290600	29.7N 131.7E	LAND				10612 52708		30.6N 131.0E	47869
16	290600	29.7N 131.8E	LAND				10812 52705		28.4N 129.5E	47909
17	290700	29.7N 131.6E	LAND				10612 52708		30.6N 131.0E	47869
18	290700	29.7N 131.6E	LAND				10712 52708		28.4N 129.5E	47909
19	290700	29.7N 131.7E	LAND	GOOD		30		VMNT 2715	31.4N 131.3E	69952
20	290800	29.7N 131.6E	LAND				10712 52703		28.4N 129.5E	47909
21	290800	29.7N 131.4E	LAND				10612 52708		30.6N 131.0E	47869
22	290800	29.7N 131.5E	LAND	GOOD		30		VMNT 2710	31.4N 131.3E	69952
23	290900	29.7N 131.3E	LAND				10522 52705		30.6N 131.0E	47869
24	290900	29.7N 131.4E	LAND				10712 52711		28.4N 129.5E	47909
25	291000	29.8N 131.1E	LAND				10512 52811		30.6N 131.0E	47869
26	291000	29.8N 131.2E	LAND				10712 53011		28.4N 129.5E	47909
27	291000	29.8N 131.2E	LAND	GOOD				VMNT 2910	31.4N 131.3E	69952
28	291100	29.8N 131.0E	LAND				10712 52811		28.4N 129.5E	47909
29	291100	29.8N 130.9E	LAND				10512 52711		30.6N 131.0E	47869
30	291100	29.8N 131.0E	LAND	GOOD		30		VMNT 2810	31.4N 131.3E	69952
31	291200	29.8N 130.7E	LAND				10512 52711		30.6N 131.0E	47869
32	291200	29.8N 130.8E	LAND				10712 52711		28.4N 129.5E	47909
33	291200	29.8N 130.8E	LAND	GOOD		25		VMNT 2712	31.4N 131.3E	69952
34	291300	29.8N 130.5E	LAND				10712 52813		28.4N 129.5E	47909
35	291300	29.8N 130.4E	LAND				10612 52716		30.6N 131.0E	47869
36	291300	29.8N 130.5E	LAND	GOOD		35		VMNT 2825	31.4N 131.3E	69952
37	291400	29.8N 130.3E	LAND				10513 52811		30.6N 131.0E	47869
38	291400	29.8N 130.3E	LAND				10712 52711		28.4N 129.5E	47909
39	291400	29.8N 130.3E	LAND	GOOD		35		VMNT 2722	31.4N 131.3E	69952
40	291500	29.9N 130.1E	LAND				10712 52811		28.4N 129.5E	47909
41	291500	29.9N 130.1E	LAND				10513 52811		30.6N 131.0E	47869
42	291500	29.9N 130.1E	LAND	GOOD		35		VMNT 2818	31.4N 131.3E	69952
43	291600	30.0N 129.9E	LAND				10513 52911		30.6N 131.0E	47869
44	291600	29.9N 130.0E	LAND				10712 53007		28.4N 129.5E	47909
45	291600	29.9N 130.0E	LAND	GOOD		35		VMNT 2918	31.4N 131.3E	69952
46	291700	29.9N 130.0E	LAND				10712 53011		28.4N 129.5E	47909
47	291700	30.1N 129.7E	LAND				10613 52911		30.6N 131.0E	47869
48	291700	30.1N 129.8E	LAND	GOOD		30		VMNT 3225	31.4N 131.3E	69952
49	291800	30.2N 129.5E	LAND				10613 52911		30.6N 131.0E	47869
50	291800	30.2N 129.5E	LAND				10612 53016		28.4N 129.5E	47909
51	291800	30.2N 129.5E	LAND	GOOD		30		VMNT 3130	31.4N 131.3E	69952
52	291900	30.2N 129.2E	LAND				10612 53011		28.4N 129.5E	47909
53	291900	30.3N 129.3E	LAND				10613 53011		30.6N 131.0E	47869
* 54	291900	30.8N 129.8E	LAND	GOOD		30		MVMNT 3015	31.4N 131.3E	69952
55	292000	30.3N 129.0E	LAND				10612 52814		30.6N 131.0E	47869
56	292000	30.2N 129.0E	LAND				10612 52711		28.4N 129.5E	47909
57	292000	29.2N 129.0E	LAND	GOOD		30		VMNT 2720	31.4N 131.3E	69952
58	292100	30.2N 128.9E	LAND				10512 52705		28.4N 129.5E	47909
59	292100	30.3N 128.9E	LAND				10612 52811		30.6N 131.0E	47869
60	292200	30.3N 128.7E	LAND				10512 53213		28.4N 129.5E	47909
61	292200	30.4N 128.7E	LAND				10612 53011		30.6N 131.0E	47869
62	292300	30.4N 128.5E	LAND				10862 52913		28.4N 129.5E	47909
63	292300	30.5N 128.5E	LAND				10612 53011		30.6N 131.0E	47869
64	300000	30.6N 128.2E	LAND				10342 53116		28.4N 129.5E	47909
65	300000	30.6N 128.3E	LAND				55//2 52911		30.6N 131.0E	47869
66	300100	30.6N 128.1E	LAND				65//2 52911		30.6N 131.0E	47869
67	300100	30.7N 128.0E	LAND				20513 53014		28.4N 129.5E	47909
68	300100	30.7N 128.1E	LAND	GOOD		30		VMNT 3120	31.7N 129.8E	69956
69	300200	30.8N 127.8E	LAND	GOOD		35		VMNT 3110	31.7N 129.8E	69956
70	300200	30.8N 127.7E	LAND				20633 53016		28.4N 129.8E	69956
71	300300	31.0N 127.3E	LAND				35/// 53027		28.4N 129.5E	47909
72	300400	30.8N 127.3E	LAND	GOOD		35		VMNT 3010	31.7N 129.8E	69956
73	300400	30.9N 127.1E	LAND				35/// 52511		28.4N 129.5E	47909
74	300500	30.8N 127.0E	LAND	POOR		35		VMNT 2710	31.7N 129.8E	69956
75	300500	31.0N 126.9E	LAND				35/// 53011		28.4N 129.5E	47909
76	300600	31.1N 126.5E	LAND				65/// 52922		28.4N 129.5E	47909
77	300700	31.0N 126.6E	LAND	GOOD		35		VMNT 2910	31.7N 129.8E	69956
78	301100	31.2N 125.8E	LAND				6///2 32812		31.2N 121.4E	58369
79	301400	31.3N 124.8E	LAND				5///2 72815		31.2N 121.4E	58369
* 80	301700	32.5N 123.8E	LAND				5///2 72815		31.2N 121.4E	58369
81	302300	31.8N 122.8E	LAND				4///2 62910		31.2N 121.4E	58369
82	310000	31.8N 122.6E	LAND				4///2 52910		31.2N 121.4E	58369
83	310100	31.9N 122.5E	LAND				4///2 52910		31.2N 121.4E	58369
84	310200	32.1N 122.4E	LAND				5///2 73110		31.2N 121.4E	58369
85	310300	32.2N 121.9E	LAND				24873 52921		33.8N 120.3E	58151
86	310300	32.2N 122.3E	LAND				5///2 53110		31.2N 121.4E	58369
87	310400	32.3N 121.8E	LAND				34842 52914		33.8N 120.3E	58151
88	310400	32.3N 122.2E	LAND				6///2 53110		31.2N 121.4E	58369
89	310500	32.3N 121.7E	LAND				22743 53012		33.8N 120.3E	58151
90	310500	32.3N 122.1E	LAND				5///2 73108		31.2N 121.4E	58369
91	310600	32.3N 121.7E	LAND				32743 53112		33.8N 120.3E	58151
92	310700	32.4N 121.7E	LAND				30412 53012		33.8N 120.3E	58151
93	310800	32.5N 121.6E	LAND				30713 53010		33.8N 120.3E	58151
94	310800	32.4N 121.7E	LAND				6///2 72809		31.2N 121.4E	58369
95	310900	32.4N 121.6E	LAND				113/2 52710		31.2N 121.4E	58369
96	311000	32.4N 121.4E	LAND				11312 52705		31.2N 212.4E	58369
97	311100	32.4N 121.5E	LAND				2//62 50000		31.2N 121.4E	58369
98	311200	32.4N 121.4E	LAND				2///2 52706		31.2N 121.4E	58369
99	311400	32.4N 121.2E	LAND				5///2 72706		31.2N 121.4E	58369

100	311700	32.8N	120.7E	LAND	30541	52805	33.8N	120.3E	58151
101	311900	32.8N	120.9E	LAND	20521	50000	33.8N	120.3E	58151
*102	312000	33.0N	120.7E	LAND	31452	53213	33.8N	120.3E	58151

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL STORM FREDA
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		WIND	WARNING POSIT		WIND	ERRORS DST	ERRORS WIND	24 HOUR FORECAST POSIT		WIND	ERRORS DST	ERRORS WIND	48 HOUR FORECAST POSIT		WIND	ERRORS DST	ERRORS WIND	72 HOUR FORECAST POSIT		WIND	ERRORS DST	ERRORS WIND
080400Z	11.3	132.4	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080406Z	12.2	131.5	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080412Z	13.7	130.6	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080418Z	14.9	129.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080500Z	15.8	128.3	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080506Z	16.9	127.2	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080512Z	18.0	126.8	30	17.8	126.3	30.	31.	0.	19.2	124.6	45.	141.	0.	21.3	122.5	65.	310.	10.	24.0	120.6	75.	408.	50.
080518Z	18.9	126.2	35	18.8	126.2	30.	6.	-5.	20.6	124.5	50.	144.	5.	22.7	122.5	70.	308.	25.	25.1	120.9	75.	432.	55.
080600Z	19.7	125.8	40	20.0	126.1	40.	25.	0.	24.0	125.3	55.	117.	0.	27.9	124.6	70.	323.	30.	31.8	126.0	85.	514.	65.
080606Z	20.4	125.5	40	20.4	125.3	45.	11.	5.	24.0	124.4	60.	180.	10.	27.6	123.8	75.	329.	45.	31.2	124.5	90.	481.	70.
080612Z	21.5	125.1	45	23.0	125.5	45.	93.	0.	26.0	124.6	65.	286.	10.	29.6	124.4	80.	386.	55.	33.5	125.4	80.	520.	60.
080618Z	23.0	124.6	45	23.6	124.8	50.	38.	5.	26.3	123.2	70.	208.	25.	29.9	122.3	80.	313.	60.	34.3	122.0	70.	332.	50.
080700Z	24.4	123.2	55	24.3	123.3	50.	8.	-5.	28.2	121.6	65.	165.	25.	32.2	121.8	45.	300.	25.	0.0	0.0	0.	-0.	0.
080706Z	25.0	121.3	50	25.0	121.9	50.	33.	0.	28.3	121.0	50.	175.	20.	32.2	122.2	40.	351.	20.	0.0	0.0	0.	-0.	0.
080712Z	26.1	120.4	55	25.8	121.1	50.	42.	-5.	28.9	118.8	25.	115.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080718Z	27.0	119.4	45	26.6	119.7	45.	29.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080800Z	28.0	118.5	40	28.2	119.0	40.	29.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080806Z	29.1	117.8	30	29.0	118.2	30.	22.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080812Z	30.0	117.0	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080818Z	31.1	116.4	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080900Z	32.2	115.9	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080906Z	33.5	115.4	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080912Z	35.2	115.1	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080918Z	36.9	116.0	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	30.	163.	328.	448.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	20.	81.	218.	283.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	11.	34.	58.	0.	0.	0.	0.
AVG INTENSITY BIAS	-0.	11.	34.	58.	0.	0.	0.	0.
NUMBER OF FORECASTS	12	9	8	6	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1894. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 14. KNOTS

TROPICAL STORM FREDA
FIX POSITIONS FOR CYCLONE NO. 8

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENT	SITE
* 1	040000	12.7N 133.7E	PCN 6	T1.0/1.0	INIT OBS	PGTW
* 2	040729	11.4N 132.0E	PCN 5			PGTW
* 3	040912	11.4N 130.6E	PCN 6			PGTW
* 4	041101	11.4N 131.7E	PCN 6			PGTW
* 5	041359	13.0N 131.5E	PCN 6	T1.5/1.5	INIT OBS	PGTW
6	042152	15.8N 129.5E	PCN 6		ULCC FIX	PGTW
7	050058	15.4N 127.4E	PCN 5			PGTW
8	050717	16.8N 126.2E	PCN 5	T2.0/2.0 /D1.0/31HRS		PGTW
9	051036	17.8N 126.7E	PCN 5			PGTW
10	051200	17.8N 126.4E	PCN 6			PGTW
11	051339	18.6N 126.8E	PCN 5			PGTW
12	051800	19.1N 126.5E	PCN 6	T2.5/2.5 /D1.0/28HRS		PGTW
13	052001	19.2N 126.2E	PCN 6			PGTW
14	052001	19.7N 126.2E	PCN 6			RODN
15	052131	19.4N 125.9E	PCN 5			PGTW
* 16	060038	21.3N 128.7E	PCN 5			PGTW
17	060220	20.2N 125.6E	PCN 5	T3.0/3.0	INIT OBS	RPMK
18	060704	20.4N 125.1E	PCN 6	T2.5/2.5 /D0.5/24HRS		PGTW
19	060704	20.1N 125.5E	PCN 5			RPMK
* 20	061010	23.3N 125.8E	PCN 3			PGTW
* 21	061200	23.1N 125.6E	PCN 6			PGTW
* 22	061500	23.7N 124.2E	PCN 4			RODN
23	061800	23.3N 124.5E	PCN 6			PGTW
24	062109	24.3N 123.1E	PCN 6	T3.0/3.0 /D0.5/27HRS		PGTW
25	062251	24.3N 123.2E	PCN 3			PGTW
26	070000	24.4N 122.8E	PCN 6			PGTW
27	070159	25.3N 122.4E	PCN 5	T3.5/3.5 /D0.5/24HRS		RPMK
28	070652	25.3N 121.1E	PCN 6	T3.0/3.0-/D0.5/24HRS		PGTW
29	070949	25.5N 121.2E	PCN 6			PGTW
* 30	071129	25.4N 121.2E	PCN 4			RODN
31	071129	26.0N 121.2E	PCN 3			RPMK
32	071440	26.2N 119.9E	PCN 3			RPMK
33	071800	26.9N 119.3E	PCN 6			PGTW
34	071936	27.5N 118.8E	PCN 5			PGTW
35	072229	28.7N 118.5E	PCN 5		ULCC FIX	RODN
36	080000	28.9N 118.2E	PCN 5		ULCC FIX	RODN
37	080000	28.2N 118.8E	PCN 6		ULCC FIX	PGTW
38	080008	27.4N 118.4E	PCN 5		ULCC FIX	RPMK
39	080600	29.0N 117.9E	PCN 6		ULCC FIX	PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM	ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	032240	11.0N 132.7E	1500FT		1005	25 260 35	060 30 330 110	4 10				+25 +25	32 2
2	060207	19.7N 125.4E	1500FT		993	50 160 125	270 47 160 150	3 1	CIRCULAR	20		+27 +25	33 5
3	060541	20.2N 125.5E	1500FT		991	40 130 120	220 36 130 30	13 10					6
* 4	060813	20.1N 125.4E	1500FT		989	35 040 122	010 28 310 30	10 10				+26 +26	6
5	070019	24.3N 123.0E	1500FT		988	45 100 55	170 45 100 55	1 5				+26 +25 +25	7

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
* 1	061700	21.6N 124.8E	LAND				3//13 53619		24.3N 124.2E	47918
* 2	061800	22.2N 124.8E					6//13 53632		24.3N 124.2E	47918
3	061900	23.0N 124.7E	LAND				6//13 53354		24.3N 124.2E	47918
4	062000	23.5N 124.4E	LAND				6//13 53432		24.3N 124.2E	47918
* 5	062200	23.4N 123.9E					6//12 53227		24.3N 124.2E	47918
6	062200	24.2N 124.1E	LAND				65//4 53178		24.8N 125.3E	47927
7	070000	24.7N 122.9E	LAND				6//12 52938		24.3N 124.2E	47918
8	070000	24.6N 122.8E	LAND				35//4 5////		24.8N 125.3E	47927
9	070100	24.8N 122.6E	LAND				6//12 72924		24.3N 124.2E	47918
10	070200	24.9N 122.2E	LAND				6//12 72928		24.3N 124.2E	47918
11	070200	24.7N 122.3E	LAND				35//3 52919		24.8N 125.3E	47927
* 12	070500	25.0N 120.8E					34574 53012		27.6N 121.1E	58760

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL DEPRESSION 09
BEST TRACK DATA

	BEST TRACK		WARNING						24 HOUR FORECAST						48 HOUR FORECAST						72 HOUR FORECAST					
						ERRORS					ERRORS						ERRORS						ERRORS			
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
080912Z	9.4	133.6	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080918Z	9.9	131.5	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081000Z	10.7	130.2	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081006Z	11.9	129.5	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081012Z	13.4	129.6	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081018Z	14.9	129.9	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081100Z	16.0	129.9	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081106Z	17.1	129.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081112Z	17.9	129.2	30	18.3	129.3	25.	25.	-5.	21.5	127.1	45.	111.	15.	24.8	123.3	60.	354.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081118Z	18.6	128.6	30	19.3	129.0	30.	49.	0.	22.7	126.4	50.	169.	20.	26.1	122.7	60.	486.	35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081200Z	19.2	127.8	30	20.2	127.8	25.	60.	-5.	23.4	124.5	35.	193.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081206Z	19.7	127.0	30	21.8	126.5	30.	129.	0.	26.2	123.0	45.	368.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081212Z	20.2	125.7	30	22.2	126.3	30.	125.	0.	26.5	123.2	45.	442.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081218Z	20.5	124.5	30	22.6	125.2	30.	132.	0.	26.5	122.4	45.	501.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081300Z	20.5	123.0	30	23.0	123.3	30.	151.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081306Z	20.2	121.6	30	22.8	121.9	30.	157.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081312Z	19.7	120.1	30	22.4	120.9	30.	168.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081318Z	18.8	118.9	25	22.3	120.5	30.	228.	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.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	122.	297.	420.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	105.	248.	296.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	15.	33.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	15.	33.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	10	6	2	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1328. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

TROPICAL DEPRESSION TD09W
FIX POSITIONS FOR CYCLONE NO. 9

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	050000	7.8N 147.2E	PCN 6	T0.5/0.5	INIT OBS	PGTW
2	072048	6.4N 139.4E	PCN 6	T1.0/1.0	INIT OBS	PGTW
3	080139	8.8N 138.2E	PCN 5			PGTW
4	080639	8.6N 139.4E	PCN 6		ULCC FIX	PGTW
5	081238	8.3N 134.4E	PCN 5			PGTW
6	082202	7.6N 136.8E	PCN 5	T1.0/1.0+/S0.0/25HRS		PGTW
7	090626	9.4N 135.6E	PCN 6			PGTW
8	091200	8.9N 133.7E	PCN 6			PGTW
9	091400	9.2N 133.4E	PCN 6			PGTW
10	091911	10.1N 130.7E	PCN 6	T1.0/1.0+/S0.0/24HRS	EXP LLCC	PGTW
11	092147	10.7N 129.6E	PCN 6			PGTW
12	100058	11.0N 129.4E	PCN 5		ULCC FIX	PGTW
13	100614	12.0N 128.4E	PCN 6	T0.0/0.0	INIT OCS ULCC FIX	PGTW
14	101339	13.7N 130.4E	PCN 6			PGTW
15	101859	15.5N 129.1E	PCN 6	T1.0/1.0+/S0.0/24HRS		PGTW
16	102255	15.6N 130.4E	PCN 5			PGTW
17	102255	15.5N 130.9E	PCN 5	T1.0/1.0	INIT OBS	RPMK
18	110039	15.1N 130.2E	PCN 5			PGTW
19	110600	17.6N 129.9E	PCN 6	T1.5/1.5 /D1.5/24HRS		PGTW
20	110743	17.5N 129.1E	PCN 5	T1.0/1.0	INIT OBS	RODN
21	111006	18.0N 129.9E	PCN 6			PGTW
22	111200	18.4N 130.0E	PCN 6		ULCC FIX	PGTW
23	111319	18.5N 130.2E	PCN 6		ULCC FIX	PGTW
* 24	111800	19.4N 129.4E	PCN 6	T2.5/2.5-/D1.5/23HRS	EXP LLCC	PGTW
25	111846	19.5N 129.2E	PCN 6			PGTW
* 26	112104	19.6N 129.2E	PCN 6			PGTW
* 27	112230	20.2N 128.8E	PCN 5			PGTW
* 28	120000	20.5N 127.2E	PCN 6			PGTW
* 29	120200	20.8N 127.2E	PCN 5			PGTW
* 30	120600	22.1N 126.6E	PCN 5			PGTW
* 31	120731	21.2N 128.4E	PCN 5	T2.0/2.0 /D1.0/33HRS		RPMK
* 32	120731	22.1N 126.3E	PCN 5	T1.5/1.5+/S0.0/25HRS		PGTW
* 33	120944	22.1N 126.1E	PCN 5			PGTW
34	121109	21.8N 126.6E	PCN 5		ULCC FIX	RPMK
35	121109	21.1N 126.6E	PCN 6			RSKO
* 36	121200	22.1N 126.2E	PCN 6			PGTW
* 37	121440	22.0N 126.2E	PCN 5			RPMK
* 38	121800	22.6N 124.9E	PCN 6	T1.0/1.5 /W0.5/11HRS		PGTW
39	122016	22.5N 123.7E	PCN 6			RODN
* 40	122225	23.3N 123.3E	PCN 6			RODN
* 41	122348	23.4N 122.8E	PCN 5	T1.0/1.0	INIT OBS	RODN
* 42	122348	23.0N 123.8E	PCN 5	T1.5/1.5	INIT OBS	RSKO
* 43	130140	22.9N 122.4E	PCN 5			PGTW
* 44	130718	22.7N 121.7E	PCN 5	T1.5/1.5-/S0.0/24HRS		PGTW
* 45	130718	23.0N 121.5E	PCN 5	T2.0/2.0 /S0.0/24HRS		RPMK
46	131045	23.0N 121.4E	PCN 5		ULCC FIX	PGTW
* 47	131104	23.5N 120.6E	PCN 6			RPMK
* 48	131105	23.5N 121.5E	PCN 6			RODN
49	131200	23.1N 121.6E	PCN 6			PGTW
50	131420	23.2N 121.2E	PCN 5			PGTW
51	131800	22.7N 121.0E	PCN 6	T1.0/1.0-/S0.0/24HRS		PGTW
52	132003	22.6N 120.6E	PCN 6			PGTW
53	132203	21.5N 120.5E	PCN 5			PGTW
54	132203	21.7N 120.6E	PCN 5	T2.5/2.5	INIT OBS	RODN
55	132323	21.9N 120.2E	PCN 5	T2.0/2.0-/D0.5/24HRS		RSKO
56	140119	21.8N 120.4E	PCN 6			PGTW
57	140706	22.8N 119.6E	PCN 6	T1.5/1.5-/S0.0/24HRS		PGTW
58	141043	23.3N 121.6E	PCN 5			RPMK
59	141200	23.2N 119.8E	PCN 6		ULCC 23.5N 121.4E	PGTW
60	141400	23.8N 120.9E	PCN 5		ULCC FIX	PGTW
61	141800	23.3N 119.2E	PCN 5	T0.0/0.0 /W1.0/24HRS		PGTW
62	142259	19.8N 118.5E	PCN 5			RODN
63	142259	24.3N 118.2E	PCN 5	T1.0/1.0	ULCC FIX	RPMK

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN- DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	110729	17.3N 129.5E	1500FT		1003	25 310 37	150 25 310 37	8 20			+26 +23 +22 89	3
* 2	120027	17.9N 126.6E	1500FT		1003	18 030 130	160 21 030 135	3 00			+25 +25 31	4

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL STORM GERALD
BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
					ERRORS					ERRORS					ERRORS					ERRORS		
MO/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
0815122	19.2 119.1	30	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
0815182	19.7 118.8	35	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
0816002	20.0 118.3	40	20.0 118.4	40.	6.	0.	21.7 117.3	55.	207.	5.	23.0 115.3	45.	277.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
0816062	20.1 117.6	40	20.3 118.2	40.	36.	0.	21.8 117.1	60.	199.	10.	23.4 115.2	45.	289.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
0816122	19.7 116.7	45	20.2 117.9	45.	74.	0.	21.1 116.8	55.	166.	5.	22.8 114.9	55.	273.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
0816182	19.0 116.1	45	20.3 116.8	45.	87.	0.	20.8 114.7	55.	148.	0.	21.6 112.6	55.	204.	0.	22.3 110.6	30.	215.	-20.				
0817002	18.4 116.2	50	18.5 116.2	50.	6.	0.	18.5 116.2	50.	85.	-5.	18.6 117.0	55.	264.	0.	19.2 119.0	45.	374.	0.				
0817062	18.6 116.2	50	18.5 116.2	50.	6.	0.	18.5 116.2	50.	120.	-5.	18.6 117.4	55.	302.	0.	19.3 119.3	45.	370.	0.				
0817122	18.5 115.8	50	18.5 116.3	50.	28.	0.	18.5 116.3	50.	171.	-5.	19.1 118.1	55.	347.	0.	20.8 119.3	60.	337.	15.				
0817182	18.4 115.3	55	18.6 116.0	50.	42.	-5.	18.3 116.6	55.	217.	0.	19.4 118.4	55.	358.	5.	21.1 119.6	65.	336.	20.				
0818002	18.5 114.7	55	18.4 114.9	55.	13.	0.	18.3 113.6	55.	69.	0.	18.3 112.3	60.	72.	15.	18.4 111.0	65.	280.	25.				
0818062	18.7 114.1	55	18.5 114.2	55.	13.	0.	18.6 112.1	60.	12.	5.	18.7 110.9	60.	133.	15.	18.8 109.6	60.	403.	25.				
0818122	18.5 113.3	55	18.9 113.1	55.	27.	0.	20.5 111.2	50.	117.	-5.	22.4 109.6	35.	230.	-10.	0.0 0.0	0.	-0.	0.				
0818182	18.2 112.8	55	19.2 112.6	55.	61.	0.	20.8 110.7	50.	134.	0.	22.6 109.1	35.	260.	-10.	0.0 0.0	0.	-0.	0.				
0819002	18.1 112.4	55	18.2 112.2	55.	13.	0.	18.3 109.6	50.	174.	5.	18.5 106.6	50.	482.	10.	0.0 0.0	0.	-0.	0.				
0819062	18.4 112.1	55	18.5 112.3	55.	13.	0.	19.1 110.2	45.	157.	0.	19.6 107.8	45.	464.	10.	0.0 0.0	0.	-0.	0.				
0819122	18.7 112.0	55	18.5 111.8	55.	17.	0.	18.8 110.1	50.	214.	5.	19.3 108.1	45.	506.	15.	0.0 0.0	0.	-0.	0.				
0819182	19.0 112.1	50	18.5 111.8	50.	35.	0.	18.5 110.9	45.	231.	0.	19.0 109.3	40.	512.	15.	0.0 0.0	0.	-0.	0.				
0820002	19.5 112.4	45	19.0 112.0	45.	38.	0.	19.0 112.0	45.	215.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.				
0820062	20.0 112.8	45	20.0 112.8	40.	0.	-5.	22.7 115.4	35.	13.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.				
0820122	20.7 113.3	45	20.9 113.4	45.	13.	0.	24.3 116.1	30.	33.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.				
0820182	21.4 113.6	45	21.5 113.6	40.	6.	-5.	25.0 114.8	20.	40.	-5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.				
0821002	21.8 114.4	40	21.7 114.0	40.	23.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.				
0821062	22.9 115.3	35	23.0 115.4	35.	8.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.				
0821122	24.2 115.5	30	24.2 115.7	30.	11.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.				
0821182	25.4 115.4	25	25.8 115.7	25.	29.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.				

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	25.	136.	311.	331.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	9.	57.	123.	170.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	3.	8.	15.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	1.	3.	9.	0.	0.	0.	0.
NUMBER OF FORECASTS	24	20	16	7	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1009. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL STORM GERALD
FIX POSITIONS FOR CYCLONE NO. 10

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	150241	20.0N 117.7E	PCN 5	T1.5/1.5	INIT OBS	RPMK
2	151022	19.0N 119.0E	PCN 6	T1.5/1.5	INIT OBS	PGTW
3	151800	19.6N 118.9E	PCN 6			PGTW
4	151938	20.0N 118.7E	PCN 5	T2.0/2.0	INIT OBS	PGTW
5	160016	19.8N 118.4E	PCN 5			RPMK
6	160220	19.9N 118.6E	PCN 3	T2.5/2.5 /D1.0/24HRS		RPMK
7	160600	20.3N 117.8E	PCN 6			PGTW
8	160823	20.0N 118.0E	PCN 5			RPMK
9	161113	20.1N 117.6E	PCN 5			RPMK
10	161113	20.4N 116.7E	PCN 5			RODN
11	161501	19.5N 116.3E	PCN 6			RODN
12	161800	19.6N 115.5E	PCN 6			PGTW
13	162241	18.4N 115.1E	PCN 5			RODN
14	162352	18.7N 115.9E	PCN 3			RPMK
15	170000	19.0N 116.1E	PCN 6			PGTW
16	170200	18.6N 116.0E	PCN 3	T3.0/3.0-/D0.5/24HRS	EXP LLCC	RPMK
17	170200	18.4N 116.3E	PCN 4	T3.0/3.0	INIT OBS	PGTW
18	170600	18.5N 116.3E	PCN 4		EXP LLCC	PGTW
19	171049	18.4N 116.1E	PCN 6			PGTW
20	171121	18.6N 116.5E	PCN 4			RPMK
21	171441	17.9N 116.1E	PCN 6			RSKO
22	171800	19.0N 115.1E	PCN 6	T3.5/3.5 /D1.5/22HRS		PGTW
23	172055	18.0N 115.0E	PCN 5		ULCC FIX	RPMK
24	172220	18.3N 115.2E	PCN 3			RODN
25	172328	18.2N 114.4E	PCN 3			PGTW
26	172328	18.0N 114.8E	PCN 5	T3.0/3.0	INIT OBS ULCC FIX	RSKO
27	180140	18.2N 114.2E	PCN 3			PGTW
28	180600	18.1N 114.0E	PCN 6	T3.5/3.5-/S0.0/12HRS		PGTW
29	180758	18.5N 113.8E	PCN 5	T3.5/3.5 /D0.5/30HRS		RPMK
30	181100	18.4N 113.2E	PCN 3			RPMK
31	181206	18.3N 113.1E	PCN 6			RPMK
32	182042	18.0N 112.9E	PCN 3			RODN
33	182159	18.2N 112.5E	PCN 4			PGTW
34	190000	18.1N 112.5E	PCN 6			PGTW
35	190045	18.2N 112.9E	PCN 5	T3.5/3.5-/S0.0/19HRS		RPMK
36	190301	18.6N 112.6E	PCN 3			RPMK
37	190600	18.6N 112.4E	PCN 4	T3.0/3.0	INIT OBS	PGTW
38	190745	12.5N 111.9E	PCN 5	T3.5/3.5 /D0.5/30HRS		RSKO
39	191039	18.4N 112.0E	PCN 4			PGTW
40	191141	18.3N 112.0E	PCN 3			RPMK
41	191800	18.5N 111.8E	PCN 6	T3.0/3.0-/S0.0/24HRS		PGTW
42	192010	19.2N 111.7E	PCN 6			RODN
43	192319	19.4N 111.8E	PCN 5	T3.0/3.5 /W0.5/23HRS		RPMK
44	200000	19.4N 112.5E	PCN 5			PGTW
45	200020	19.9N 112.0E	PCN 5	T2.0/2.0	INIT OBS	RODN
46	200600	20.1N 112.9E	PCN 6	T3.0/3.0 /S0.0/24HRS		PGTW
47	200733	20.3N 113.4E	PCN 3			RPMK
48	200733	20.2N 112.5E	PCN 5	T3.5/3.5-/S0.0/24HRS		RSKO
49	201017	20.8N 113.1E	PCN 5			PGTW
50	201117	21.0N 113.2E	PCN 3		EXP LLCC	RPMK
51	201117	20.5N 112.9E	PCN 6			RODN
52	201200	20.9N 113.4E	PCN 6			PGTW
53	201521	21.7N 112.8E	PCN 6			RPMK
54	201800	21.4N 113.5E	PCN 6	T3.0/3.0-/S0.0/24HRS		PGTW
55	202356	21.4N 114.8E	PCN 3	T2.5/3.0 /W0.5/24HRS		RPMK
* 56	202356	21.7N 112.7E	PCN 5			RODN
57	210000	21.8N 113.7E	PCN 6			PGTW
58	210221	22.5N 115.4E	PCN 3		EXP LLCC	RPMK
59	210720	23.6N 114.9E	PCN 5			PGTW
60	211137	24.1N 115.6E	PCN 6			RPMK
* 61	211137	24.2N 113.8E	PCN 5			RODN
62	211200	25.8N 114.5E	PCN 6			PGTW
63	211501	24.7N 115.6E	PCN 6			RPMK
64	212236	26.4N 114.9E	PCN 6			RODN
65	212332	26.8N 114.3E	PCN 5			RPMK
66	212332	26.3N 115.1E	PCN 6			PGTW
67	220200	26.7N 114.6E	PCN 5			RPMK
68	230000	22.8N 121.4E	PCN 6			PGTW

AIRCRAFT FIXES

FIX NO	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	152335	20.0N 118.4E	1500FT		991	40 300 15	030 42 300 20	7 3	CIRCULAR	10	+24 +26 +26	1
2	162042	18.8N 116.1E	700MB	2929	979		310 47 190 32	20 2			+15 +16 +13	2
3	162313	18.5N 116.2E	700MB	2931	980	50 100 15	240 44 120 65	15 2			+12 +16 +14	2
4	170831	18.5N 116.3E	700MB	2941	980	55 030 20	360 50 280 90	5 5	CIRCULAR	20	+15 +17 +11	3
5	171032	18.5N 116.2E	1500FT		981	50 210 60	340 46 210 30	5 10			+23 +26 +23 29	3
6	172042	18.4N 114.9E	700MB	2930	979		170 52 090 118	10 2			+13 +14	4
7	172316	18.5N 114.8E	700MB	2932	980	50 170 20	150 39 040 21	15 2			+13 +18	4
8	180614	18.7N 114.2E	700MB	2952		55 120 45	190 49 120 45	12 10				5
9	180844	18.8N 113.6E	1500FT		984	45 120 40	200 46 120 120	12 7			+25 +27 +26 26	5

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	180800	18.3N 113.8E	LAND				5///5 72706		16.8N 112.3E	59981
2	181700	18.0N 112.6E	LAND				10203 72606		16.8N 112.3E	59981
3	182100	18.1N 112.5E	LAND				12834 72706		16.8N 112.3E	59981
4	182200	18.1N 112.4E	LAND				1271/ 72706		16.8N 112.3E	59981
5	182300	18.1N 112.4E	LAND				11713 52706		16.8N 112.3E	59981
6	190000	18.1N 112.3E	LAND				11814 52704		16.8N 112.3E	59981
7	190100	18.1N 112.3E	LAND				11614 52702		16.8N 112.3E	59981
8	190200	18.2N 112.3E	LAND				11634 53006		16.8N 112.3E	59981
9	190500	18.5N 112.1E	LAND				11614 53208		16.8N 112.3E	59981
10	190600	18.5N 111.9E	LAND				11934 52808		16.8N 112.3E	59981
11	190700	18.5N 111.9E	LAND				21933 52808		16.8N 112.3E	59981
12	190900	18.6N 111.9E	LAND				11713 53104		16.8N 112.3E	59981
13	191100	18.7N 112.0E	LAND				11523 53402		16.8N 112.3E	59981
14	191200	18.7N 112.1E	LAND				11814 53602		16.8N 112.3E	59981
15	191300	18.7N 112.2E	LAND				11814 53602		16.8N 112.3E	59981
16	191400	18.8N 112.2E	LAND				21814 53602		16.8N 112.3E	59981
17	191500	18.8N 112.2E	LAND				21814 53602		16.8N 112.3E	59981
18	191600	18.8N 112.1E	LAND				21744 53402		16.8N 112.3E	59981
19	191600	18.8N 111.8E	LAND				5///3 52803		21.9N 112.0E	59663
20	191700	18.8N 112.1E	LAND				4////4 53402		16.8N 112.3E	59981
21	191800	18.8N 112.1E	LAND				4////4 53602		16.8N 112.3E	59981
22	192100	19.2N 112.3E	LAND				5////4 50208		16.8N 112.3E	59981
23	192300	19.5N 112.4E	LAND				5////4 50208		16.8N 112.3E	59981
24	200000	19.5N 112.4E	LAND				5////4 50202		16.8N 112.3E	59981
25	200100	19.5N 112.5E	LAND				5////4 50604		16.8N 112.3E	59981
26	200200	19.6N 112.9E	LAND				11523 53605		21.9N 112.0E	59663
27	200400	19.8N 112.7E	LAND				4//03 50406		16.8N 112.3E	59981
28	200500	19.9N 112.8E	LAND				4///1 50406		16.8N 112.3E	59981
29	200600	20.0N 112.8E	LAND				4///1 50306		16.8N 112.3E	59981
30	200800	20.2N 113.1E	LAND				6590/ /////		22.3N 114.2E	45005
31	200800	20.3N 113.1E	LAND				5///1 50406		16.8N 112.3E	59981
32	200900	20.2N 113.2E	LAND				2297/ /////		22.3N 114.2E	45005
33	200900	20.4N 113.2E	LAND				5///1 50306		16.8N 112.3E	59981
34	201000	20.4N 113.4E	LAND				35/6/ /////		22.3N 114.2E	45005
35	201100	20.6N 113.4E	LAND				3595/ 70310		22.3N 114.2E	45005
36	201100	20.5N 112.8E	LAND				6///1 63310		21.9N 112.0E	59663
37	201200	20.7N 113.4E	LAND				2097/ 70310	RDR ECHO OPN TO E	22.3N 114.2E	45005
38	201300	20.7N 113.3E	LAND				1097/ 70310		22.3N 114.2E	45005
39	201400	21.0N 113.5E	LAND				2091/ 70309		22.3N 114.2E	45005
40	201500	21.1N 113.6E	LAND				3191/ 70309		22.3N 114.2E	45005
41	201600	21.2N 113.5E	LAND				2594/ 70309		22.3N 114.2E	45005
42	201700	21.5N 113.6E	LAND				2091/ 70310		22.3N 114.2E	45005
43	201800	21.5N 113.6E	LAND				3594/ 70309		22.3N 114.2E	45005
44	201900	21.7N 113.5E	LAND				2594/ 73609		22.3N 114.2E	45005
45	202000	21.7N 113.6E	LAND				3594/ 73604		22.3N 114.2E	45005
46	202100	21.5N 113.8E	LAND				2594/ 73604		22.3N 114.2E	45005
47	202200	21.5N 113.9E	LAND				3594/ 70904		22.3N 114.2E	45005
48	202300	21.6N 114.1E	LAND				2582/ 60510		22.3N 114.2E	45005
49	210000	21.5N 114.6E	LAND				3591/ 80910		22.3N 114.2E	45005
50	210100	21.7N 114.4E	LAND				6594/ 70510		22.3N 114.2E	45005
51	210200	22.0N 114.6E	LAND				6594/ 70510		22.3N 114.2E	45005
52	210300	22.3N 114.7E	LAND				6594/ 80312		22.3N 114.2E	45005

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	210000	22.1N 114.5E	040	024	
2	210300	21.5N 115.1E	035	024	
3	210900	23.5N 115.9E	030	025	59317 59316 59303

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON HOLLY
BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
							ERRORS					ERRORS					ERRORS					ERRORS	
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
081412Z	19.3	137.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081418Z	19.6	136.8	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081500Z	20.0	135.8	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081506Z	20.3	134.8	35	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081518Z	21.1	134.1	35	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081518Z	21.9	133.4	40	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081600Z	22.6	132.6	40	22.5	132.6	40.	6.	0.	25.3	129.5	60.	147.	5.	27.2	125.6	80.	258.	15.	31.1	122.7	65.	344.	-5.
081606Z	22.8	131.8	45	22.8	132.3	40.	28.	-5.	25.8	128.5	60.	182.	0.	27.8	124.7	80.	257.	15.	32.2	122.5	65.	380.	-5.
081612Z	22.8	131.1	45	22.8	131.2	45.	6.	0.	25.2	127.7	65.	153.	5.	27.9	124.4	85.	214.	20.	31.2	121.8	70.	323.	-5.
081618Z	22.8	130.5	50	22.8	130.5	50.	0.	0.	23.9	127.3	70.	88.	10.	26.0	123.9	90.	131.	25.	28.3	120.4	80.	312.	5.
081700Z	22.9	130.0	55	22.7	129.6	60.	25.	5.	23.5	126.2	75.	110.	10.	25.1	122.3	90.	216.	20.	26.9	118.3	50.	446.	-25.
081706Z	22.9	129.5	60	22.8	129.5	60.	6.	0.	23.2	126.6	80.	91.	15.	24.9	122.7	90.	225.	20.	26.6	118.8	50.	449.	-25.
081712Z	23.0	129.1	60	23.1	128.4	60.	39.	0.	23.9	125.6	80.	109.	15.	25.4	122.6	90.	251.	15.	27.8	119.2	60.	430.	-15.
081718Z	23.2	128.7	60	23.3	127.7	60.	55.	0.	24.5	124.9	80.	105.	15.	26.3	121.9	90.	272.	15.	28.7	118.4	40.	478.	-30.
081800Z	23.6	128.2	65	23.4	128.2	60.	12.	-5.	24.5	126.1	75.	102.	5.	26.8	123.7	90.	209.	15.	30.1	121.3	50.	375.	-15.
081806Z	24.4	127.6	65	24.0	127.5	60.	25.	-5.	25.8	125.1	75.	88.	5.	28.1	122.7	90.	226.	15.	31.5	120.2	50.	467.	-10.
081812Z	25.2	127.0	65	25.2	126.9	60.	5.	-5.	28.1	124.5	60.	109.	-15.	31.0	122.0	50.	231.	-25.	34.5	120.6	40.	485.	-15.
081818Z	25.7	126.3	65	25.9	126.4	60.	13.	-5.	28.9	124.1	60.	117.	-15.	32.2	122.4	50.	230.	-20.	35.8	122.3	45.	492.	-5.
081900Z	26.2	126.1	70	26.2	126.1	70.	0.	0.	28.8	124.4	75.	103.	0.	32.7	123.2	65.	233.	0.	37.4	123.8	50.	524.	5.
081906Z	26.8	126.3	70	26.8	126.0	70.	16.	0.	29.4	125.5	70.	65.	-5.	33.0	125.4	60.	189.	0.	0.0	0.0	0.	-0.	0.
081912Z	27.7	126.5	75	27.5	126.6	75.	13.	0.	30.3	126.6	75.	48.	0.	33.5	127.1	60.	199.	5.	0.0	0.0	0.	-0.	0.
081918Z	28.6	126.3	75	28.5	126.5	75.	12.	0.	32.0	126.7	70.	16.	0.	35.3	128.0	55.	232.	5.	0.0	0.0	0.	-0.	0.
082000Z	29.5	126.2	75	29.5	126.4	75.	10.	0.	33.2	126.7	70.	57.	5.	37.1	128.0	45.	332.	0.	0.0	0.0	0.	-0.	0.
082006Z	30.3	126.2	75	30.3	126.4	75.	10.	0.	33.7	126.7	65.	114.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082012Z	31.1	126.5	75	31.2	126.5	75.	6.	0.	35.3	127.2	55.	157.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082018Z	31.8	126.9	70	32.0	126.1	70.	19.	0.	36.3	128.2	50.	205.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082100Z	33.0	127.8	65	33.1	127.9	65.	8.	0.	36.9	131.9	45.	165.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082106Z	34.2	128.9	60	33.9	128.9	60.	18.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082112Z	35.4	130.4	55	35.1	130.2	55.	20.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082118Z	36.8	132.4	50	36.6	132.8	50.	23.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082200Z	38.4	134.8	45	38.5	135.0	45.	11.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS			
	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	16.	111.	230.	423.
AVG RIGHT ANGLE ERROR	11.	73.	149.	316.
AVG INTENSITY MAGNITUDE ERROR	1.	6.	14.	13.
AVG INTENSITY BIAS	-1.	3.	8.	-11.
NUMBER OF FORECASTS	25	21	17	13

	TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	16.	111.	230.	423.
AVG RIGHT ANGLE ERROR	11.	73.	149.	316.
AVG INTENSITY MAGNITUDE ERROR	1.	6.	14.	13.
AVG INTENSITY BIAS	-1.	3.	8.	-11.
NUMBER OF FORECASTS	25	21	17	13

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1718. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TYPHOON HOLLY
FIX POSITIONS FOR CYCLONE NO. 11

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	121800	17.9N 140.8E	PCN 6	T0.0/0.0	INIT OBS	PGTW
2	122043	17.5N 138.6E	PCN 6		ULCC FIX	PGTW
3	130923	17.3N 139.0E	PCN 5	T0.5/0.5	INIT OBS	PGTW
4	140902	19.0N 138.3E	PCN 6	T1.0/1.0 /D0.5/24HRS		PGTW
5	141200	19.7N 137.1E	PCN 6			PGTW
6	141400	19.8N 136.9E	PCN 5			PGTW
7	141800	19.6N 136.8E	PCN 6	T2.0/2.0 /D1.0/09HRS		PGTW
8	142142	20.0N 136.4E	PCN 5			PGTW
* 9	142259	19.5N 138.0E	PCN 3	T1.5/1.5	INIT OBS	RODN
10	150000	19.3N 136.0E	PCN 6		ULCC FIX	PGTW
11	150653	20.3N 133.8E	PCN 6			RODN
12	150956	19.9N 134.4E	PCN 6			RSKO
13	151022	20.0N 134.1E	PCN 6		ULCC FIX	PGTW
14	151340	21.5N 133.9E	PCN 5			PGTW
15	151800	22.2N 133.8E	PCN 6			PGTW
16	151938	22.0N 133.5E	PCN 5	T2.5/2.5 /D0.5/26HRS		PGTW
17	152235	23.0N 132.1E	PCN 3		EXP LLCC	PGTW
18	160038	23.3N 132.1E	PCN 4		EXP LLCC	PGTW
* 19	160641	21.8N 132.7E	PCN 6	T3.0/3.0	ULCC FIX	PGTW
* 20	160641	21.9N 132.7E	PCN 5	T3.0/3.0	INIT OBS	RODN
* 21	161001	22.0N 132.6E	PCN 6		ULCC FIX	PGTW
22	161319	22.6N 131.0E	PCN 5		ULCC FIX	PGTW
23	161926	22.6N 130.5E	PCN 5	T3.5/3.5 /D1.0/24HRS		PGTW
24	162100	22.8N 130.3E	PCN 5			PGTW
25	162211	22.9N 130.0E	PCN 5			PGTW
26	170000	22.8N 129.5E	PCN 6			PGTW
27	170200	22.7N 129.5E	PCN 6		ULCC FIX	PGTW
28	170628	23.1N 128.7E	PCN 5	T3.5/3.5 /D0.5/24HRS		PGTW
29	170940	23.2N 128.3E	PCN 6		ULCC FIX	PGTW
30	171049	23.2N 128.3E	PCN 6			PGTW
31	171441	22.5N 128.3E	PCN 3			RSKO
32	171913	23.4N 127.7E	PCN 6	T3.5/3.5+/S0.0/24HRS		PGTW
33	172038	22.9N 128.1E	PCN 4			PGTW
34	172328	23.3N 127.7E	PCN 3	T4.0/4.0	INIT OBS	RSKO
35	172328	23.2N 128.3E	PCN 5			PGTW
36	180140	23.6N 127.9E	PCN 3			PGTW
37	180615	24.3N 127.6E	PCN 3	T2.5/3.5+/W1.0/24HRS		PGTW
38	180918	24.8N 127.4E	PCN 5		ULCC FIX	PGTW
39	181025	24.8N 127.3E	PCN 5		ULCC FIX	PGTW
* 40	181100	24.5N 122.9E	PCN 5		ULCC FIX	RPMK
41	181900	26.0N 125.5E	PCN 6	T3.5/3.5 /S0.0/24HRS	ULCC FIX	PGTW
42	182042	26.0N 126.1E	PCN 5			RODN
43	182159	25.8N 125.7E	PCN 4		EYEWALL OPN NE	PGTW
44	182303	26.4N 125.4E	PCN 3	T4.0/4.0 /S0.0/24HRS		RSKO
45	182303	26.0N 126.0E	PCN 4			PGTW
46	190120	26.1N 126.0E	PCN 3			PGTW
47	190600	26.7N 126.3E	PCN 4	T3.5/3.5 /D1.0/24HRS		PGTW
48	190745	26.8N 125.8E	PCN 5			RSKO
49	191039	26.9N 126.4E	PCN 4			PGTW
50	191200	27.5N 126.7E	PCN 4			PGTW
51	191400	28.2N 126.3E	PCN 5		ULCC FIX	PGTW
52	191800	28.4N 126.1E	PCN 6	T4.0/4.0-/D0.5/23HRS	ULCC FIX	PGTW
53	192010	28.8N 125.6E	PCN 4			RODN
54	192137	28.7N 125.8E	PCN 3			PGTW
55	192239	28.8N 125.9E	PCN 3		PARTIAL EYEWALL S-SE	PGTW
56	200059	29.6N 126.3E	PCN 3			PGTW
57	200600	30.0N 126.1E	PCN 4	T4.0/4.0-/D0.5/24HRS		PGTW
58	200733	30.1N 126.5E	PCN 3	T4.0/4.0 /S0.0/31HRS		RSKO
59	200733	30.0N 126.2E	PCN 3	T4.0/4.0	INIT OBS	RPMK
60	200900	30.4N 126.2E	PCN 6		ULCC FIX	PGTW
61	201117	31.2N 126.2E	PCN 4			RODN
62	201200	31.1N 126.4E	PCN 4			PGTW
63	201340	31.1N 126.5E	PCN 4			PGTW
64	201800	31.7N 126.9E	PCN 4	T3.0/4.0-/W1.0/24HRS		PGTW
65	202017	32.0N 127.1E	PCN 4			RODN
66	202116	32.1N 127.2E	PCN 6			PGTW
67	202356	32.6N 128.4E	PCN 3			RODN
68	202356	32.7N 128.2E	PCN 3	T3.5/4.0-/W0.5/25HRS		RPMK
69	210039	33.3N 128.1E	PCN 5		ULCC FIX	PGTW
70	210720	34.6N 129.3E	PCN 5	T2.5/3.5-/W1.5/24HRS		RSKO
71	210956	35.0N 129.7E	PCN 5	T2.5/3.5-/W1.5/27HRS		PGTW
72	211053	35.0N 130.1E	PCN 6			RSKO
73	211200	35.2N 130.4E	PCN 6		ULCC FIX	PGTW

74	211320	35.3N	131.2E	PCN 6			PGTW
75	212005	37.3N	132.4E	PCN 6			RSKO
76	212332	38.7N	133.8E	PCN 5			RSKO
77	220000	38.6N	134.7E	PCN 6			PGTW
78	220526	40.7N	135.7E	PCN 3			RODN
* 79	220526	38.5N	138.2E	PCN 6			PGTW
80	220935	41.4N	136.4E	PCN 3	ULCC FIX		RSKO
81	230000	42.3N	139.7E	PCN 4	EXP LLCC		PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	160225	23.0N 132.3E	1500FT		992	55 210 130	270 52 210 130	3 3			+25 +25 +24 29	2
2	160620	22.5N 132.0E	1500FT		990	25 080 32	080 15 090 55	10 10			+25 +25	3
3	160856	22.6N 131.3E	1500FT		987	50 160 20	280 42 220 70	10 2			+25 +26	3
4	162055	22.8N 130.3E	700MB	2951		57 040 90	060 53 340 70	20 30			+16 +13 +11	4
5	162330	22.5N 129.7E	700MB	2942		70 350 60	100 65 350 15	10 20			+13 +13 +12	4
6	170653	22.9N 129.6E	700MB	2892		70 350 80	090 62 350 75	10 10			+14 +14	5
7	170833	23.0N 129.2E	700MB	2892	977	70 350 145	070 70 350 107	5 5			+13 +13	5
8	172036	23.3N 128.3E	700MB	2856	970	65 080 70	200 74 090 110	10 30			+13 +15 +10	6
9	172343	23.6N 128.3E	700MB	2863	973	60 350 90	250 75 170 120	5 15	CIRCULAR	60	+15 +15 +11	6
10	180900	25.1N 127.3E	700MB	2855		40 210 120	130 67 030 100	5 10			+15 +16 +13	7
11	181134	25.2N 127.0E	700MB	2845			220 61 120 115	2 15			+15 +17 +15	7
12	182344	26.0N 126.3E	700MB	2811	964	50 220 30	230 39 290 93	5 5	CIRCULAR	5	+13 +16 +12	8
13	190226	26.4N 126.2E	700MB	2799	963	45 310 90	240 57 150 120	5 5				8
14	190832	26.9N 126.6E	700MB	2818		75 050 90	260 75 170 58	5 3	CIRCULAR	15	+14 +16 +15	9
15	191127	27.7N 126.8E	700MB	2814	966	40 290 130	280 40 220 120	5 3	CIRCULAR	15	+15 +16 +15	9
16	192142	29.2N 126.2E	700MB	2804		75 130 120	220 72 120 87	12 2			+14 +16 +12	10
17	192338	29.5N 126.4E	700MB	2812	965	60 050 45	160 61 050 65	12 3			+16 +16 +16	10
18	200850	30.7N 126.3E	700MB	2797	965	70 130 60	220 73 140 140	10 10			+15 +16	11
19	201125	31.2N 126.7E	700MB	2806			280 78 210 135	15 10			+14 +16	11
20	202045	32.5N 127.3E	700MB	2853	973		270 70 180 60	10 5				12
21	202330	33.1N 127.7E	700MB	2862	975		230 56 140 125	5 5	CIRCULAR	25	+14 +13 +13	12

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO
* 1	170500	23.6N 128.7E	LAND				54512 5////		26.2N 127.8E	47937
2	180800	25.0N 127.5E	LAND				6///5 5////		24.8N 125.3E	47927
3	180900	25.0N 127.5E	LAND				6///6 50000		24.8N 125.3E	47927
4	181000	25.3N 127.4E	LAND				6///5 53519		24.8N 125.3E	47927
5	181100	25.4N 127.1E	LAND				6///4 52919		24.8N 125.3E	47927
6	181200	25.0N 127.3E	LAND				64//3 5////		26.2N 127.8E	47937
7	181200	25.5N 127.0E	LAND				6///4 53008		24.8N 125.3E	47927
8	181300	25.1N 127.1E	LAND				64/12 53111		26.2N 127.8E	47937
9	181400	25.1N 127.0E	LAND				54/02 52704		26.2N 127.8E	47937
10	181400	25.1N 127.1E	LAND				6///4 5////		24.8N 125.3E	47927
11	181500	25.2N 127.1E	LAND				54/13 50308		26.2N 127.8E	47937
12	181500	25.3N 127.1E	LAND				5///4 53615		24.8N 125.3E	47927
13	181600	25.5N 127.1E	LAND				54/12 73608		26.2N 127.8E	47937
14	181600	25.5N 127.1E	LAND				5///4 53611		24.8N 125.3E	47927
15	181600	25.4N 126.3E	LAND				6///3 53012		27.6N 121.1E	58760
16	181700	25.8N 127.0E	LAND				54/12 73614		26.2N 127.8E	47937
17	181700	25.5N 126.2E	LAND				6///3 53012		27.6N 121.1E	58760
18	181700	25.7N 127.2E	LAND	POOR		60		MOV 3620	26.2N 127.7E	47936
19	181800	26.1N 126.8E	LAND				6///4 53019		24.8N 125.3E	47927
20	181800	25.7N 126.1E	LAND				6///3 53212		27.6N 121.1E	58760
21	181800	26.1N 126.8E	LAND				54/32 73416		26.2N 127.8E	47937
22	181800	26.0N 126.7E	LAND	POOR		60		MOV 3250	26.2N 127.7E	47936
23	181900	25.9N 125.9E	LAND				6///3 5////		27.6N 121.1E	58760
* 24	181900	26.4N 126.5E	LAND				6///4 53222		24.8N 125.3E	47927
25	181900	26.2N 126.3E	LAND				54/12 73219		26.2N 127.8E	47937
26	181900	26.2N 126.3E	LAND	POOR		60		MOV 3140	26.2N 127.7E	47936
27	182000	26.2N 125.8E	LAND				54/12 72923		26.2N 127.8E	47937
* 28	182100	16.3N 125.6E	LAND				6///3 53215		27.6N 121.1E	58760
29	182100	26.1N 125.8E	LAND				54/12 72718		26.2N 127.8E	47937
30	182200	25.7N 126.1E	LAND				10282 72011		26.2N 127.8E	47937
31	182200	25.8N 126.1E	LAND				6///4 5////		24.8N 125.3E	47927
32	182300	25.9N 126.2E	LAND				20442 71410		26.2N 127.8E	47937
33	182300	25.9N 126.1E	LAND				35//3 50///		24.8N 125.3E	47927
34	190000	26.0N 126.2E	LAND				54/52 50105		26.2N 127.8E	47937
35	190000	26.2N 126.1E	LAND				3///4 53614		24.8N 125.3E	47927
36	190100	26.2N 126.1E	LAND				54/12 73610		26.2N 127.8E	47937
* 37	190200	27.0N 125.8E	LAND				5///2 52410		27.6N 121.1E	58760
38	190200	26.3N 126.1E	LAND				65//2 73609		26.2N 127.8E	47937
39	190300	26.6N 126.2E	LAND				6///4 73608		24.8N 125.3E	47927
40	190300	26.5N 126.1E	LAND				65//2 73510		26.2N 127.8E	47937
41	190400	26.5N 126.1E	LAND				64//2 73608		26.2N 127.8E	47937
42	190400	26.5N 126.1E	LAND				6///3 51905		24.8N 125.3E	47927
* 43	190400	27.0N 125.8E	LAND				5///2 53405		27.6N 121.1E	58760
44	190500	26.3N 126.1E	LAND				5///4 51812		24.8N 125.3E	47927
45	190500	26.5N 126.1E	LAND				64/13 73608		26.2N 127.8E	47937
* 46	190500	27.0N 125.8E	LAND				5///3 53405		27.6N 121.1E	58760
47	190600	26.6N 126.0E	LAND				6///3 53422		24.8N 125.3E	47927
48	190600	26.6N 126.2E	LAND				64/13 70302		26.2N 127.8E	47937
49	190700	26.7N 126.2E	LAND				64/13 70204		26.2N 127.8E	47937
50	190700	26.7N 125.9E	LAND				6///3 52805		24.8N 125.3E	47927
51	190700	27.0N 125.8E	LAND				5///3 53405		27.6N 121.1E	58760
52	190800	27.0N 125.8E	LAND				5///3 50000		27.6N 121.1E	58760
53	190800	26.8N 126.2E	LAND				64/12 70306		26.2N 127.8E	47937
54	190900	27.1N 126.4E	LAND				54/12 70210		26.2N 127.8E	47937
* 55	191000	27.0N 125.8E	LAND				5///3 50000		27.6N 121.1E	58760
* 56	191100	27.2N 125.7E	LAND				5///4 53408		27.6N 121.1E	58760
57	191100	27.3N 126.6E	LAND				64/12 70215		26.2N 127.8E	47937
58	191200	27.7N 126.5E	LAND				54/73 70112		26.2N 127.8E	47937
* 59	191300	27.5N 125.5E	LAND				5///4 53408		27.6N 121.1E	58760
60	191300	27.9N 126.5E	LAND				64/14 73611		26.2N 127.8E	47937
61	191400	28.3N 126.5E	LAND				35/04 5////		28.4N 129.5E	47909
62	191400	28.4N 126.6E	LAND				65//3 73617		26.2N 127.8E	47937
* 63	191400	27.7N 125.5E	LAND				5///4 53408		27.6N 121.1E	58760
* 64	191500	28.8N 126.6E	LAND				75//3 73621		26.2N 127.8E	47937
65	191500	28.6N 126.5E	LAND				35//4 53616		28.4N 129.5E	47909
* 66	191500	27.8N 125.5E	LAND				5///4 53408		27.6N 121.1E	58760
* 67	191600	28.0N 125.5E	LAND				5///4 53409		27.6N 121.1E	58760
68	191600	28.9N 126.5E	LAND				35//4 53616		28.4N 129.5E	47909
* 69	191700	28.1N 125.5E	LAND				5///4 53409		27.6N 121.1E	58760
* 70	191800	28.2N 125.5E	LAND				5///4 53409		27.6N 121.1E	58760
71	191900	28.3N 125.5E	LAND				6///4 53409		27.6N 121.1E	58760
72	192000	28.5N 126.3E	LAND				65/04 5////		28.4N 129.5E	47909
* 73	192100	28.6N 125.5E	LAND				6///4 53412		27.6N 121.1E	58760
74	192100	28.8N 126.2E	LAND				65/04 53516		28.4N 129.5E	47909
* 75	192200	28.8N 125.5E	LAND				6///4 53412		27.6N 121.1E	58760
76	192200	29.0N 126.2E	LAND				65//5 53611		28.4N 129.5E	47909
77	192300	29.2N 126.2E	LAND				65//5 53613		28.4N 129.5E	47909
* 78	200000	29.2N 125.6E	LAND				6///4 53612		27.6N 121.1E	58760
79	200000	29.6N 126.2E	LAND				65//5 50224		28.4N 129.5E	47909
80	200100	29.4N 125.6E	LAND				6///4 53612		27.6N 121.1E	58760
81	200200	29.7N 125.8E	LAND				6///4 50112		27.6N 121.1E	58760
82	200300	30.0N 126.0E	LAND				7///3 50212		27.6N 121.1E	58760
83	202300	32.7N 127.5E	LAND				6///3 /////		33.4N 130.4E	47806
84	210000	33.0N 127.7E	LAND				6///3 50319		33.4N 130.4E	47806
85	210100	33.2N 128.0E	LAND				6///3 50519		33.4N 130.4E	47806
86	210200	33.4N 128.2E	LAND				6///3 50416		33.4N 130.4E	47806
87	210300	33.6N 128.4E	LAND				6///3 50416		33.4N 130.4E	47806
88	210400	33.8N 128.6E	LAND				6///3 50411		33.4N 130.4E	47806
89	210500	33.9N 128.8E	LAND				6///2 50411		33.4N 130.4E	47806
90	210600	34.0N 129.0E	LAND				6///2 50513		33.4N 130.4E	47806
91	210700	34.4N 129.2E	LAND				20403 50222		33.4N 130.4E	47806
92	210800	34.5N 129.4E	LAND				21443 50413		33.4N 130.4E	47806
93	210900	34.6N 129.7E	LAND				21323 50716		33.4N 130.4E	47806
94	210900	34.5N 129.8E	LAND				35/52 5////		34.3N 132.6E	47792
95	211000	34.6N 130.2E	LAND				21313 50924		33.4N 130.4E	47806
96	211000	34.7N 129.8E	LAND				65/52 5////		34.3N 132.6E	47792
97	211100	34.6N 130.5E	LAND				25462 50916		33.4N 130.4E	47806
98	211100	35.2N 130.4E	LAND				65//1 5////		35.5N 133.1E	47791

99	211300	35.6N	131.2E	LAND	65/51 50422	34.3N	132.6E	47792
100	211300	35.6N	131.1E	LAND	304/1 50327	33.4N	130.4E	47806
101	211300	35.6N	131.2E	LAND	65/// 50527	35.5N	133.1E	47791
102	211400	35.8N	131.4E	LAND	55//1 50522	33.4N	130.4E	47806
103	211400	35.9N	131.4E	LAND	65/51 50422	34.3N	132.6E	47792
104	211400	35.9N	131.3E	LAND	55/// 50322	35.5N	133.1E	47791
105	211500	36.1N	131.8E	LAND	65/1/ 50622	34.3N	132.6E	47792
106	211500	36.2N	131.6E	LAND	5///1 50322	33.4N	130.4E	47806
107	211500	36.2N	131.5E	LAND	55/// 50322	35.5N	133.1E	47791
108	211600	36.5N	131.8E	LAND	65/// 50622	35.5N	133.1E	47791
109	211700	36.7N	133.2E	LAND	65/// 50622	35.5N	133.1E	47791
110	211800	36.8N	132.7E	LAND	65/// 50724	35.5N	133.1E	47791
111	211900	37.0N	133.2E	LAND	65/// 50727	35.5N	133.1E	47791
112	212000	37.2N	133.6E	LAND	65/// 50527	35.5N	133.1E	47791
113	212100	37.5N	134.0E	LAND	65/// 50527	35.5N	133.1E	47791
114	212200	37.6N	134.5E	LAND	65/// 50622	35.5N	133.1E	47791
115	212300	37.9N	134.9E	LAND	75/// 50622	35.5N	133.1E	47791
*116	220100	38.7N	137.7E	LAND	6//// /////	37.7N	138.8E	47572
*117	220200	39.2N	137.0E	LAND	///// /////	37.7N	138.8E	47572

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	181800	25.8N 126.3E	060	040	47929 47936 47927

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL DEPRESSION 12
BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS				ERRORS					ERRORS					ERRORS		
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
082300Z	19.1	142.7	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082306Z	19.5	141.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082312Z	19.7	140.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082318Z	20.0	139.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082400Z	20.3	138.7	20	20.4	139.0	25.	18.	5.	21.2	135.9	45.	204.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082406Z	20.8	137.4	20	20.7	137.5	30.	8.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082412Z	21.4	136.1	20	21.0	136.8	25.	46.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082418Z	22.2	134.5	20	21.0	136.8	25.	147.	5.	0.0	0.0	0.	-0.	0.	0.0.	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082500Z	23.3	133.0	20	23.5	133.1	25.	13.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	46.	204.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	8.	16.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	6.	25.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	6.	25.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	5	1	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 605. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

TROPICAL DEPRESSION TD12W
FIX POSITIONS FOR CYCLONE NO. 12

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	212151	17.0N 142.0E	PCN 6	T1.0/1.0	INIT OBS	PGTW
* 2	220000	16.7N 143.2E	PCN 6		ULCC FIX	PGTW
* 3	220526	17.0N 138.2E	PCN 6		ULCC FIX	PGTW
4	222034	19.1N 143.5E	PCN 6			PGTW
* 5	222359	19.8N 142.4E	PCN 5	T1.5/1.5 /D0.5/26HRS		PGTW
* 6	230600	20.3N 140.8E	PCN 6			PGTW
7	230914	19.0N 141.4E	PCN 6		ULCC FIX	PGTW
* 8	231005	19.7N 142.4E	PCN 6		ULCC FIX	PGTW
9	231239	20.4N 141.1E	PCN 6		ULCC FIX SCNDRY 18.6N 142.3E	PGTW
* 10	231758	19.2N 141.4E	PCN 6	T2.0/2.0	INIT OBS	PGTW
11	232012	19.5N 140.6E	PCN 6			PGTW
12	240000	20.5N 139.4E	PCN 6		ULCC FIX	PGTW
13	240120	20.5N 139.2E	PCN 6	T2.0/2.0 /D0.5/25HRS	ULCC FIX	PGTW
14	240642	21.5N 137.6E	PCN 6		ULCC 24.4N 136.9E	PGTW
15	240852	21.6N 137.5E	PCN 6		ULCC FIX	PGTW
* 16	240941	19.5N 139.1E	PCN 6		ULCC FIX SCNDRY 25.3N 136.1E	PGTW
* 17	241927	17.0N 138.3E	PCN 5			PGTW
* 18	242133	17.5N 137.9E	PCN 5			PGTW
* 19	242219	17.8N 137.7E	PCN 5			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN- DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	240010	20.3N 138.4E	1500FT		999	20 100 90	160 20 100 90	15 40			+26 +25	2
2	240708	20.3N 137.2E	1500FT		995	20 140 150	160 20 030 90	10 60			+25 +25 +23	3

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON IKE
BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS				ERRORS					ERRORS					ERRORS		
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
082600Z	8.2	146.0	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082606Z	8.8	145.9	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082612Z	9.4	145.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082618Z	10.2	145.5	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082700Z	10.8	144.9	35	10.8	145.1	30.	12.	-5.	13.5	143.7	45.	67.	-15.	15.9	141.5	60.	227.	-10.	17.8	138.8	75.	411.	15.
082706Z	11.4	144.4	40	11.4	144.6	40.	12.	0.	14.0	143.0	60.	74.	0.	16.3	140.1	70.	248.	0.	17.7	136.2	80.	429.	20.
082712Z	11.9	143.9	50	11.9	143.8	45.	6.	-5.	14.1	141.7	65.	61.	5.	16.5	138.3	85.	273.	20.	18.3	134.1	90.	491.	25.
082718Z	12.5	143.3	60	12.5	143.2	50.	6.	-10.	14.9	140.6	70.	139.	10.	17.0	137.2	85.	333.	25.	19.1	133.0	95.	546.	30.
082800Z	13.2	142.6	60	13.1	142.5	60.	8.	0.	15.4	139.6	70.	190.	0.	18.0	136.3	80.	430.	20.	20.2	132.3	90.	618.	20.
082806Z	13.6	141.8	60	13.7	141.8	60.	6.	0.	16.1	138.8	70.	239.	0.	18.7	135.0	80.	501.	20.	20.6	130.3	90.	659.	10.
082812Z	13.2	141.2	60	14.2	140.9	60.	62.	0.	16.5	137.8	75.	279.	10.	18.9	134.0	80.	527.	15.	20.7	129.3	90.	668.	5.
082818Z	12.6	140.9	60	13.5	140.0	60.	75.	0.	14.8	136.6	75.	222.	15.	16.2	132.8	80.	385.	15.	18.0	128.1	90.	526.	-5.
082900Z	12.3	140.3	70	12.2	140.3	70.	6.	0.	12.3	138.4	90.	83.	30.	13.7	136.5	100.	249.	30.	16.1	134.7	110.	494.	5.
082906Z	12.2	139.6	70	12.2	139.9	70.	18.	0.	12.7	137.3	90.	127.	30.	14.4	134.6	100.	275.	20.	17.0	131.6	110.	500.	-5.
082912Z	12.0	139.0	65	12.1	139.0	70.	6.	5.	12.9	136.1	90.	150.	25.	14.7	132.9	105.	292.	20.	17.4	129.3	115.	502.	-10.
082918Z	11.6	138.5	60	12.0	138.8	65.	30.	5.	12.4	136.6	80.	144.	15.	13.9	133.8	90.	316.	-5.	16.2	130.3	105.	472.	-10.
083000Z	11.0	137.9	60	11.0	137.9	60.	0.	0.	10.6	134.6	70.	32.	0.	12.0	129.9	85.	146.	-20.	13.7	125.3	100.	239.	5.
083006Z	10.6	137.1	60	10.6	137.0	60.	6.	0.	10.6	133.6	70.	40.	-10.	11.7	129.3	85.	155.	-30.	12.9	124.6	100.	182.	25.
083012Z	10.4	136.3	65	10.5	136.3	65.	6.	0.	10.7	132.9	75.	67.	-10.	11.7	129.0	85.	189.	-40.	13.1	124.7	100.	210.	35.
083018Z	10.3	135.4	65	10.4	135.4	65.	6.	0.	10.5	131.9	80.	89.	-15.	11.3	128.0	95.	168.	-20.	12.7	123.3	110.	149.	55.
083100Z	10.1	134.4	70	10.2	134.4	70.	6.	0.	10.4	130.6	95.	81.	-10.	12.0	126.0	115.	169.	20.	14.2	120.5	90.	121.	45.
083106Z	10.0	133.3	80	10.3	133.5	80.	22.	0.	10.7	129.4	105.	109.	-10.	12.7	124.0	105.	156.	30.	15.3	118.8	85.	148.	30.
083112Z	9.9	132.1	85	10.1	132.1	85.	12.	0.	11.0	127.2	110.	99.	-15.	13.2	121.9	90.	144.	25.	15.5	117.5	75.	115.	10.
083118Z	9.6	130.7	95	9.8	130.7	90.	12.	-5.	10.4	125.0	115.	51.	0.	12.5	119.8	90.	109.	35.	15.3	115.4	95.	126.	20.
090100Z	9.6	129.5	105	9.7	129.5	100.	8.	-5.	10.7	124.1	110.	48.	15.	13.0	119.0	85.	90.	40.	16.1	115.1	85.	93.	0.
090106Z	9.4	128.1	115	9.5	128.1	115.	6.	0.	10.4	122.2	90.	48.	15.	13.4	117.3	85.	126.	30.	17.3	114.4	85.	102.	-5.
090112Z	9.4	126.8	125	9.4	126.8	125.	0.	0.	11.6	121.3	100.	63.	35.	16.2	117.4	95.	155.	30.	21.0	113.4	95.	263.	-5.
090118Z	9.8	125.6	115	9.6	125.5	115.	13.	0.	11.3	121.5	100.	18.	45.	14.4	116.8	90.	35.	15.	18.7	112.1	85.	95.	-30.
090200Z	9.9	124.1	95	10.0	124.1	100.	6.	5.	11.8	119.6	75.	48.	30.	14.8	116.2	90.	27.	5.	18.4	112.9	100.	40.	0.
090206Z	10.3	123.0	75	10.4	122.7	85.	19.	10.	12.5	118.1	80.	80.	25.	15.4	115.2	90.	32.	0.	18.6	112.7	100.	92.	20.
090212Z	10.8	122.0	65	10.8	121.8	80.	12.	15.	12.8	117.8	85.	69.	20.	15.5	114.2	90.	72.	-10.	18.8	110.9	100.	83.	30.
090218Z	11.3	121.2	55	11.0	121.3	80.	19.	25.	13.3	117.5	85.	72.	10.	16.3	113.5	90.	74.	-25.	19.6	109.7	100.	74.	40.
090300Z	12.2	120.3	45	12.0	120.4	50.	13.	5.	14.5	116.9	75.	51.	-10.	17.5	112.9	85.	62.	-15.	20.3	108.8	85.	78.	35.
090306Z	12.9	119.4	55	12.6	119.4	55.	18.	0.	15.2	115.9	80.	51.	-10.	18.1	111.9	90.	77.	10.	21.4	107.5	75.	72.	35.
090312Z	13.8	118.4	65	13.8	118.5	65.	6.	0.	17.2	114.7	90.	38.	-10.	20.6	110.5	70.	31.	0.	23.8	106.6	35.	63.	5.
090318Z	14.5	117.4	75	14.4	117.4	75.	6.	0.	17.8	113.3	100.	19.	-15.	21.2	109.0	65.	33.	5.	0.0	0.0	0.	-0.	0.
090400Z	15.2	116.4	85	15.1	116.5	85.	8.	0.	18.3	112.4	75.	11.	-25.	21.8	108.1	50.	46.	0.	0.0	0.0	0.	-0.	0.
090406Z	15.9	115.4	90	16.0	115.5	90.	8.	0.	19.3	111.1	70.	8.	-10.	22.9	107.2	35.	50.	-5.	0.0	0.0	0.	-0.	0.
090412Z	16.7	114.3	100	16.7	114.4	95.	6.	-5.	19.9	110.3	70.	13.	0.	23.9	107.4	30.	61.	0.	0.0	0.0	0.	-0.	0.
090418Z	17.5	113.2	115	17.5	113.2	115.	0.	0.	21.0	109.2	75.	16.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090500Z	18.3	112.2	100	18.4	112.2	110.	6.	10.	21.9	108.6	70.	25.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090506Z	19.2	111.2	80	19.3	111.2	80.	6.	0.	23.0	108.2	30.	32.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090512Z	20.1	110.4	70	20.2	110.2	70.	13.	0.	23.9	107.8	30.	68.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090518Z	20.8	109.4	60	21.0	109.2	65.	16.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090600Z	21.6	108.9	50	21.8	108.8	50.	13.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090606Z	22.5	108.0	40	22.3	108.0	40.	12.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090612Z	22.9	107.2	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	13.	80.	179.	279.	13.	80.	182.	287.
AVG RIGHT ANGLE ERROR	10.	63.	149.	242.	10.	63.	149.	242.
AVG INTENSITY MAGNITUDE ERROR	3.	14.	17.	19.	3.	14.	18.	20.
AVG INTENSITY BIAS	1.	5.	7.	15.	1.	5.	7.	15.
NUMBER OF FORECASTS	42	39	35	31	42	38	34	30

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2806. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TYPHOON IKE
FIX POSITIONS FOR CYCLONE NO. 13

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	260000	8.2N 146.0E	PCN 6	T0.0/0.0	INIT OBS	PGTW
2	260617	8.8N 145.7E	PCN 5			PGTW
3	261800	9.6N 145.2E	PCN 6	T1.0/1.0	INIT OBS	PGTW
4	262050	10.5N 145.3E	PCN 4			PGTW
5	262131	10.4N 145.4E	PCN 3			PGTW
6	270019	10.9N 145.0E	PCN 5	T2.0/2.0 /D2.0/24HRS		PGTW
7	270605	11.4N 144.4E	PCN 5			PGTW
8	270930	11.0N 144.5E	PCN 6			PGTW
9	271200	12.0N 143.9E	PCN 6	T3.0/3.0	INIT OBS ULCC 11.0N 143.7E	PGTW
10	271300	11.9N 143.8E	PCN 6			PGTW
11	271800	12.5N 143.2E	PCN 6			PGTW
12	271850	12.4N 142.9E	PCN 6		ULCC FIX	PGTW
13	272029	12.8N 142.5E	PCN 6		ULCC FIX	PGTW
14	272359	13.0N 142.3E	PCN 3	T3.5/3.5 /D1.5/24HRS		PGTW
15	280909	13.6N 141.2E	PCN 5			PGTW
16	281200	13.4N 140.8E	PCN 6	T3.5/3.5 /D0.5/24HRS		PGTW
17	281240	13.1N 140.7E	PCN 6		ULCC FIX	PGTW
18	281837	13.2N 140.3E	PCN 6		ULCC FIX	PGTW
19	282008	12.0N 140.0E	PCN 6		ULCC FIX	PGTW
20	290120	12.2N 140.4E	PCN 3	T3.5/3.5+/S0.0/25HRS		PGTW
21	290540	12.2N 139.9E	PCN 3			PGTW
22	290540	11.2N 139.4E	PCN 5			RODN
23	290921	11.9N 139.6E	PCN 5			PGTW
24	291219	12.3N 139.2E	PCN 5	T3.5/3.5-/S0.0/24HRS		PGTW
25	291825	11.8N 138.8E	PCN 6			PGTW
26	291825	12.2N 138.3E	PCN 5		ULCC FIX	RODN
27	292128	11.8N 138.2E	PCN 6			PGTW
28	292159	11.6N 137.9E	PCN 6			PGTW
29	300100	11.4N 137.7E	PCN 5	T3.5/3.5+/S0.0/24HRS		PGTW
30	300709	10.6N 136.9E	PCN 4		FRMG EYEWALL	PGTW
31	301008	10.5N 136.7E	PCN 4		FRMG EYEWALL	PGTW
32	301038	10.5N 136.4E	PCN 4			PGTW
33	301200	10.6N 136.4E	PCN 6	T4.5/4.5 /D1.0/24HRS		PGTW
34	301812	10.3N 135.3E	PCN 4		FRMG EYEWALL	PGTW
35	302107	10.3N 134.9E	PCN 3		FRMG EYEWALL W-S-E	PGTW
36	310040	10.2N 134.2E	PCN 4			PGTW
37	310657	10.4N 133.3E	PCN 2	T5.0/5.0 /D1.5/30HRS	EYE FIX	PGTW
38	310947	9.9N 132.4E	PCN 2			PGTW
39	311013	10.0N 132.3E	PCN 3			PGTW
40	311320	9.9N 131.6E	PCN 1		EYE DIA 12NM	PGTW
41	311800	9.6N 130.6E	PCN 4			PGTW
42	311941	9.6N 130.3E	PCN 1	T6.0/6.0 /D1.5/32HRS		PGTW
43	312045	9.6N 130.0E	PCN 1			PGTW
44	312252	9.7N 129.7E	PCN 1		EYE DIA 9NM	PGTW
45	010201	9.7N 129.1E	PCN 1			PGTW
46	010201	9.7N 129.1E	PCN 1	T6.0/6.0-	INIT OBS	RPMK
47	010600	9.5N 128.0E	PCN 2			PGTW
48	010644	9.5N 128.0E	PCN 2	T5.5/5.5-/D0.5/24HRS		PGTW
49	010925	9.3N 127.4E	PCN 4			PGTW
50	011200	9.4N 126.8E	PCN 3		EYE DIA 12NM	PGTW
51	011442	9.7N 126.5E	PCN 3			RPMK
52	011800	9.5N 125.5E	PCN 4			PGTW
53	011929	9.9N 125.1E	PCN 3	T5.0/6.0+/W1.0/24HRS		PGTW
54	012205	9.9N 124.4E	PCN 3	T5.0/6.0-/W1.0/20HRS		RPMK

55	012228	9.9N	124.4E	PCN 3				PGTW
56	020000	9.9N	124.1E	PCN 4				PGTW
57	020141	10.1N	123.6E	PCN 4				PGTW
58	020600	10.7N	122.7E	PCN 6	T4.5/5.5+/W1.0/23HRS			PGTW
59	020814	10.5N	122.3E	PCN 3	T4.5/5.5+/W1.5/26HRS			RPMK
60	021045	10.3N	121.5E	PCN 4				RPMK
61	021106	10.2N	121.9E	PCN 6				RODN
62	021421	11.0N	121.8E	PCN 4				PGTW
63	021916	10.8N	121.4E	PCN 6	T3.5/4.5+/W1.5/24HRS			PGTW
64	022144	12.2N	120.5E	PCN 4				PGTW
* 65	022344	12.5N	121.1E	PCN 3	T4.5/4.5	INTI OBS		RODN
66	022345	12.0N	120.7E	PCN 3	T4.5/5.0+/W1.0/26HRS			RPMK
67	030121	12.3N	119.9E	PCN 3				PGTW
68	030121	12.2N	119.8E	PCN 3				RPMK
69	030246	15.1N	116.9E	PCN 3				RPMK
70	030600	12.9N	119.5E	PCN 2	T5.0/5.5 /D0.5/24HRS			PGTW
71	030801	13.1N	119.2E	PCN 1	T4.5/5.0+/S0.0/24HRS	EYE FIX		RPMK
* 72	030801	13.2N	120.4E	PCN 3				RODN
73	031024	13.5N	118.9E	PCN 1				PGTW
74	031042	13.5N	118.9E	PCN 4		ULCC FIX		PGTW
75	031200	13.8N	118.5E	PCN 2		EYE FIX		PGTW
76	031401	14.0N	118.1E	PCN 2				PGTW
77	031800	14.4N	117.3E	PCN 2	T5.5/5.5	INIT OBS EYE FIX		PGTW
78	032304	15.0N	116.8E	PCN 4				RODN
79	032320	15.0N	116.4E	PCN 3				PGTW
80	032320	15.2N	116.3E	PCN 3	T5.0/5.0 /D0.5/24HRS			RPMK
81	040242	15.6N	116.2E	PCN 3				RPMK
82	040600	16.1N	115.5E	PCN 2	T5.5/5.5 /D0.5/24HRS			PGTW
83	040748	16.2N	115.1E	PCN 1	T5.5/5.5	INIT OBS		RODN
84	041003	16.5N	114.8E	PCN 2				PGTW
85	041158	17.2N	114.4E	PCN 2				RODN
86	041159	16.8N	114.8E	PCN 2				RPMK
87	041200	16.8N	114.3E	PCN 2		EYE DIA 25NM		PGTW
* 88	041523	17.6N	114.9E	PCN 2				RPMK
89	041800	17.5N	113.1E	PCN 2	T6.5/6.5-/D1.0/24HRS			PGTW
90	042033	17.8N	112.6E	PCN 1				RODN
91	042243	18.0N	112.7E	PCN 1				RODN
92	050000	18.4N	112.0E	PCN 2		EYE DIA 12NM		PGTW
93	050037	18.2N	112.4E	PCN 3	T5.5/5.5-/D0.5/25HRS			RPMK
94	050222	18.5N	111.9E	PCN 3				RPMK
95	050600	19.3N	111.5E	PCN 4	T3.5/3.5	INIT OBS		PGTW
96	050736	19:3N	111.2E	PCN 3	T4.5/4.5	INIT OBS		RSKO
97	051134	18.3N	110.7E	PCN 4		ULCC 19.4N 109.4E		RODN
98	051134	20.1N	110.5E	PCN 3				RPMK
99	051200	20.0N	110.6E	PCN 6				PGTW
100	051502	20.2N	110.1E	PCN 4				RODN
101	051800	20.9N	109.3E	PCN 4	T4.0/5.0-/W2.5/24HRS			PGTW
102	052021	20.9N	109.1E	PCN 4				RSKO
103	060000	21.6N	109.0E	PCN 6				PGTW
104	060013	21.8N	108.6E	PCN 3				RPMK
105	060013	21.8N	109.0E	PCN 3				RODN
106	060724	22.4N	107.8E	PCN 3				PGTW
107	061102	22.5N	107.3E	PCN 4				PGTW
108	061102	22.5N	107.3E	PCN 4				RSKO
109	061110	22.5N	107.2E	PCN 5				RPMK
110	061200	22.6N	106.8E	PCN 6				PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM	ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	270510	11.3N 144.5E	1500FT		997	35 330 17	060 42 330 17	9 2				+26 +25	1
2	270713	11.4N 144.2E	1500FT		999	50 120 40	220 51 120 40	8 1				+24 +25	1
3	272120	12.8N 142.6E	1500FT		997	50 040 20	010 54 320 23	6 2				+23 +24 +24 28	2
4	280007	13.2N 142.4E	700MB	3077		65 140 20	310 61 240 6	10 2					2
5	280531	13.7N 141.8E	700MB			60 110 10	210 56 110 12	10 1				+14 + 8	3
6	280844	13.7N 141.6E	700MB			25 290 60	340 34 280 50	8 1	CIRCULAR	5		+10 +11 + 6	3
7	282111	12.4N 140.7E	1500FT		990	65 210 30	250 65 210 30	7 5					4
8	282341	12.3N 140.4E	1500FT		991	75 140 11	170 75 090 10	5 5	CIRCULAR	20		+26 +25 +23 30	4
9	290845	12.1N 139.5E	700MB	2971		45 090 35	150 51 080 39	5 5				+ 9 +16 + 7	6
10	291118	12.1N 139.0E	700MB	3006	989		220 48 140 55	8 3	CIRCULAR	20		+10 +15 + 9	6
11	292035	11.3N 138.3E	700MB	2969	985		140 66 070 15	10 1	CIRCULAR	25		+ 8 +15 +10	7
12	292322	11.0N 138.0E	700MB	2978		60 140 15	190 48 120 25	10 1	ELLIPTICAL	30 25	030	+10 +17 +10	7
13	300917	10.7N 136.7E	700MB	2932		50 120 40	090 84 350 30	9 2	ELLIPTICAL	45 30	180	+11 +16 +10	9
14	301120	10.6N 136.4E	700MB	2915			340 71 240 30	12 2	ELLIPTICAL	45 35	050	+ 9 +16 +10	9
15	302040	10.3N 135.0E	700MB	2872	973		040 87 310 30	7 5					10
16	302310	10.2N 134.6E	700MB	2851		75 120 30	180 77 120 10						10
17	310837	10.1N 132.8E	700MB	2775	961	85 080 10	040 110 320 21	5 3	ELLIPTICAL	25 20	170	+12 +18 + 7	12
18	311111	9.9N 132.2E	700MB	2757	960		280 68 190 15	15 2	CIRCULAR	18		+ 9 +18 + 8	12
19	312356	9.7N 129.6E	700MB	2670	953	100 300 30	030 102 290 22	10 5	CIRCULAR	15		+10 +20 +18	13
20	010246	9.5N 128.8E	700MB	2656		120 360 15	250 74 140 15	6 5				+ 9 +19 +11	13
21	010845	9.4N 127.7E	700MB	2630	947	130 040 12	100 117 040 12	7 2	CIRCULAR	25		+12 +16 +12	14
22	011118	9.3N 126.9E	700MB	2651	949		080 103 030 17	7 5	CIRCULAR	30		+ 9 +21 +12	14
23	011222	9.4N 126.7E	700MB	2659	951		070 110 350 10	8 5	CIRCULAR	25		+10 +16 +13	14
24	021144	10.9N 122.0E	700MB	3063			360 69 280 14	7 7				+ 8 + 6 + 6	15
25	021417	10.9N 121.8E	700MB	3042			130 64 020 30	7 7				+ 9 +10 +10	15
26	022055	12.0N 120.8E	700MB	2986	990		020 41 280 36	4 5	CIRCULAR	35		+10 +15 + 6	16
27	022339	12.0N 120.4E	700MB	3022	992	45 150 30	210 47 150 38	4 5	CIRCULAR	40		+11 +15 + 7	16
28	030843	13.2N 119.1E	700MB	2962		65 040 30	110 68 040 27	7 7	CIRCULAR	30		+13 +13 + 7	17
29	031132	13.8N 118.4E	700MB	2978	989		080 65 100 21	7 6				+15 + 8	17
30	032033	14.7N 116.4E	700MB	2937	984		040 66 340 16	10 6	CIRCULAR	20		+10 +12	18
31	032338	15.1N 116.5E	700MB	2913	981	70 030 15	130 90 030 32	8 6	CIRCULAR	20		+10 +12 +10 24	18
32	040839	16.3N 115.1E	700MB	2789	965	80 010 15	090 88 020 14	12 8	CIRCULAR	20		+12 +16	19
33	041112	16.6N 114.5E	700MB	2747	961	50 100 105	100 99 360 18	13 5	CIRCULAR	20		+18 +17 + 6	19

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR	RADOB-CODE TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO
1	270735	11.4N 144.5E	LAND	POOR						13.6N 144.9E	91218
2	270935	11.4N 144.5E	LAND	POOR						13.6N 144.9E	91218
3	271043	11.4N 144.5E	LAND	POOR					MOV 1805	13.6N 144.9E	91218
4	271235	11.6N 143.7E	LAND	POOR					MOV 0608	13.6N 144.9E	91218
5	271335	11.6N 143.5E	LAND	FAIR	CIRCULAR				MOV 0810 EYE OPN ERN QUADS	13.6N 144.9E	91218
6	271435	12.5N 143.1E	LAND	POOR						13.6N 144.9E	91218
7	271835	13.0N 142.7E	LAND	POOR						13.6N 144.9E	91218
8	272155	11.7N 142.8E	LAND	POOR						13.6N 144.9E	91218
9	011400	9.3N 126.5E	LAND				10801	42710		10.3N 124.0E	98646
10	011500	9.8N 126.3E	LAND				10611	42815		10.3N 124.0E	98646
11	011600	9.9N 126.1E	LAND				11891	42815		10.3N 124.0E	98646
12	011700	9.8N 125.7E	LAND				10482	42615		10.3N 124.0E	98646
13	011800	9.8N 125.5E	LAND				14382	42612		10.3N 124.0E	98646
14	030700	13.5N 118.6E	LAND				5////	331//		14.8N 120.3E	98426
15	030800	13.2N 119.0E	LAND				5////	331//		14.8N 120.3E	98426
16	030900	13.5N 118.8E	LAND				51670	53308		14.8N 120.3E	98426
17	031000	13.7N 118.7E	LAND				2258/	43208		14.8N 120.3E	98426
18	031100	13.9N 118.6E	LAND				3564/	43308		14.8N 120.3E	98426
19	031200	14.0N 118.6E	LAND				//////	43303		14.8N 120.3E	98426
20	031200	13.3N 118.7E	LAND				10502	42910		16.3N 120.6E	98321
21	031300	13.5N 118.4E	LAND				10612	42912		16.3N 120.6E	98321
22	031500	13.6N 118.0E	LAND				10763	42718		16.3N 120.6E	98321
23	041000	16.6N 114.7E	LAND				10426	53112		16.8N 112.3E	59981
24	041300	17.0N 114.0E	LAND				10315	53014		16.8N 112.3E	59981
25	041500	17.3N 113.6E	LAND				10316	53114		16.8N 112.3E	59981
26	041600	17.4N 113.4E	LAND				10315	53114		16.8N 112.3E	59981
27	041700	17.5N 113.2E	LAND				10315	53014		16.8N 112.3E	59981
28	041800	17.6N 113.0E	LAND				10315	53014		16.8N 112.3E	59981
29	041900	17.7N 112.3E	LAND				10315	53014		16.8N 112.3E	59981
30	042000	17.9N 112.6E	LAND				10314	53114		16.8N 112.3E	59981
31	050000	18.4N 112.0E	LAND				21434	53011		16.8N 112.3E	59981
32	050200	18.6N 111.6E	LAND				21414	53011		16.8N 112.3E	59981
33	050300	18.7N 111.5E	LAND				21414	53111		16.8N 112.3E	59981
34	050400	18.8N 111.3E	LAND				21464	53012		16.8N 112.3E	59981
35	050500	19.1N 111.1E	LAND				3///4	53214		16.8N 112.3E	59981
36	050600	19.2N 110.9E	LAND				3//54	53114		16.8N 112.3E	59981
37	050700	19.4N 110.8E	LAND				4///4	53214		16.8N 112.3E	59981
38	060100	21.7N 108.6E	LAND				21812	63211		16.8N 112.3E	59981

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	051200	20.2N 110.2E	070	017	59758 59658 59355 59845
2	051800	21.0N 109.2E	065	010	59647 59644 59653 59632
3	060600	22.3N 108.0E	040	025	59431 59417

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL STORM JUNE
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT	BEST TRACK WIND	WARNING POSIT	WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT	24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT	48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT	72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
082800Z	17.7 125.3	45	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082806Z	17.9 124.2	45	17.9 124.5	45.	17.	0.	19.2 121.6	55.	117.	5.	21.0 118.2	70.	45.	10.	0.0 0.0	0.	-0.	0.
082812Z	17.9 122.9	55	18.0 124.0	50.	63.	-5.	19.2 121.6	60.	149.	10.	20.9 118.3	70.	112.	10.	0.0 0.0	0.	-0.	0.
082818Z	18.2 121.6	45	18.0 122.8	50.	69.	5.	19.6 119.2	60.	28.	5.	22.3 115.6	70.	65.	25.	0.0 0.0	0.	-0.	0.
082900Z	18.6 120.6	45	17.7 121.4	45.	71.	0.	18.7 116.3	70.	157.	10.	21.3 112.0	80.	278.	55.	0.0 0.0	0.	-0.	0.
082906Z	18.7 119.6	50	18.2 119.4	50.	32.	0.	19.7 115.3	75.	145.	15.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082912Z	18.9 119.0	50	18.5 118.7	50.	29.	0.	20.5 114.8	70.	131.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082918Z	19.6 118.7	55	18.9 117.7	55.	71.	0.	21.3 113.6	75.	189.	30.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
083000Z	20.4 118.4	60	20.9 118.8	60.	37.	0.	24.6 116.8	40.	53.	15.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
083006Z	21.1 117.4	60	21.9 117.4	60.	48.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
083012Z	21.9 116.6	60	24.1 115.2	40.	153.	-20.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
083018Z	23.1 116.4	45	25.3 114.3	25.	175.	-20.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
083100Z	24.1 116.0	25	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	70.	121.	185.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	28.	104.	85.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	5.	13.	25.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-4.	13.	25.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	11	8	4	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 738. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TROPICAL STORM JUNE
FIX POSITIONS FOR CYCLONE NO. 14

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	250630	18.1N 136.3E	PCN 6	T0.5/0.5	INIT OBS	PGTW
2	250916	18.1N 136.0E	PCN 6		ULCC FIX	PGTW
3	260617	19.7N 133.0E	PCN 5	T0.0/0.5 /W0.5/24HRS		PGTW
4	270201	19.6N 126.3E	PCN 5			PGTW
5	270605	18.1N 128.8E	PCN 5	T1.0/1.0 /D1.0/24HRS		PGTW
6	271200	18.4N 129.4E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
7	271800	19.0N 128.9E	PCN 6		ULCC FIX	PGTW
8	271850	19.2N 128.8E	PCN 6		ULCC FIX	PGTW
9	272247	19.4N 126.1E	PCN 6		ULCC FIX	PGTW
10	280141	17.4N 124.5E	PCN 5			PGTW
* 11	280141	18.0N 123.8E	PCN 5	T2.5/2.5	INIT OBS	RPMK
12	280734	18.3N 124.6E	PCN 5	T2.5/2.5 /D1.5/25HRS		PGTW
13	280734	17.5N 124.4E	PCN 5			RPMK
14	280734	18.0N 125.1E	PCN 5	T2.5/2.5		RODN
15	281126	17.8N 123.5E	PCN 5			RPMK
16	281126	17.8N 123.0E	PCN 6			RODN
* 17	281200	18.1N 124.1E	PCN 6	T2.5/2.5 /D1.5/24HRS		PGTW
18	281421	17.7N 122.9E	PCN 6		ULCC FIX	PGTW
19	281800	17.5N 122.4E	PCN 6		ULCC FIX	PGTW
* 20	282019	17.5N 122.4E	PCN 5			RPMK
21	282019	17.9N 120.4E	PCN 5			RODN
* 22	282149	17.5N 121.6E	PCN 5	T3.0/3.0 /D0.5/20HRS		RPMK
* 23	282149	17.2N 121.7E	PCN 6			PGTW
24	290004	18.2N 119.7E	PCN 5			RODN
25	290005	17.7N 121.0E	PCN 5	T3.5/3.5-/D1.0/22HRS		RPMK
26	290120	18.2N 120.2E	PCN 5			PGTW
27	290722	18.1N 118.5E	PCN 5	T3.5/3.5 /D1.0/24HRS		PGTW
* 28	291029	18.0N 118.2E	PCN 6			PGTW
29	291102	18.5N 118.8E	PCN 5			RPMK
30	291401	18.9N 118.2E	PCN 6			PGTW
* 31	291800	19.0N 117.7E	PCN 6	T3.0/3.0 /D0.5/30HRS		PGTW
* 32	292128	19.4N 117.4E	PCN 6			PGTW
33	292340	21.1N 118.8E	PCN 3			RPMK
* 34	300242	18.5N 117.3E	PCN 6		ULCC FIX	RPMK
* 35	300709	22.7N 116.3E	PCN 4	T2.5/3.5-/W1.0/24HRS		PGTW
36	301008	23.8N 115.6E	PCN 6			PGTW
37	301200	24.2N 115.2E	PCN 6			PGTW
38	302316	23.5N 116.1E	PCN 5			RPMK
39	302316	23.4N 116.1E	PCN 6			PGTW
40	302316	23.0N 115.3E	PCN 5	T2.5/2.5	INIT OBS	RODN
41	310221	23.7N 115.3E	PCN 5			RODN
42	310839	24.7N 114.7E	PCN 5			RPMK
43	311013	25.9N 115.0E	PCN 5			PGTW
44	311127	24.1N 119.4E	PCN 5			RODN
45	311155	25.5N 114.4E	PCN 5			RPMK
46	311502	26.0N 114.5E	PCN 5			RSKO

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	270651	17.5N 129.7E	1500FT		993	30 220 90	260 35 270 149	7 15			+26 +24 +24 27	1
2	272341	17.5N 124.9E	1500FT		990	45 150 65	250 50 150 65	13 1			+25 +25	2
3	280540	18.0N 124.6E	1500FT		986	45 080 100	170 35 080 100	10 20				3
4	280820	17.9N 124.2E	1500FT		986	55 230 65	040 44 310 100	10 10			+26 +26	3
5	290627	18.2N 119.3E	700MB	2972		50 180 30	250 42 180 30	10 10				4
6	290838	18.7N 119.6E	1500FT		986	40 300 70	250 60 160 30	10 10			+26 +25	4
7	292305	20.7N 118.9E	700MB	2939	983	65 080 60	210 45 130 90	6 7			+13 +14 +12	5

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR	RADOB-CODE TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
* 1	281200	17.1N 122.6E	LAND				20351	73418		18.4N 121.6E	98231
2	301000	21.4N 116.9E	LAND				7///4	73007		23.4N 116.7E	59316
3	301100	21.4N 116.8E	LAND				7///4	43008		23.4N 116.7E	59316
4	301200	21.5N 116.8E	LAND				6///3	53008		23.4N 116.7E	59316
5	301200	21.7N 116.6E	LAND				55///	/////		22.3N 114.2E	45005
6	301300	21.6N 116.6E	LAND				557//	/////		22.3N 114.2E	45005
7	301400	21.6N 116.6E	LAND				56///	/////		22.3N 114.2E	45005
8	301500	22.4N 116.2E	LAND				55/7/	73318		22.3N 114.2E	45005
9	301600	22.3N 116.1E	LAND				55/7/	73318		22.3N 114.2E	45005
10	301700	22.5N 116.1E	LAND				2091/	73318		22.3N 114.2E	45005
* 11	301800	22.5N 116.0E	LAND				55/7/	83310		22.3N 114.2E	45005
* 12	302000	22.8N 115.9E	LAND				25///	73310		22.3N 114.2E	45005
13	302100	22.8N 115.7E	LAND				35/1/	/////		22.3N 114.2E	45005
* 14	302200	23.3N 115.1E	LAND				/////	/////		22.3N 114.2E	45005

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON KELLY
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		BEST TRACK WIND	WARNING POSIT		WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT		24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT		48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT		72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
091300Z	22.4	171.5	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091306Z	21.9	170.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091312Z	20.8	171.0	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091318Z	20.6	171.8	35	22.0	169.8	30.	140.	-5.	22.9	167.2	55.	271.	10.	25.2	164.7	65.	375.	-5.	28.9	163.0	75.	219.	0.
091400Z	21.2	172.1	40	21.3	171.3	40.	45.	0.	21.6	169.9	60.	232.	10.	23.2	166.5	70.	436.	0.	25.9	162.2	85.	411.	15.
091406Z	22.0	172.0	45	21.7	171.7	40.	25.	-5.	22.3	170.6	60.	250.	0.	24.2	167.2	75.	408.	5.	27.3	163.1	85.	374.	25.
091412Z	22.9	172.0	45	21.7	171.8	45.	73.	0.	22.8	170.8	65.	300.	0.	25.4	168.6	75.	380.	5.	28.6	166.0	85.	304.	35.
091418Z	23.9	172.0	45	23.7	171.6	45.	25.	0.	25.1	170.8	65.	68.	-5.	31.5	169.1	80.	174.	5.	33.9	167.9	90.	32.	50.
091500Z	25.1	171.7	50	25.0	171.7	45.	6.	-5.	29.2	170.2	60.	99.	-10.	33.2	168.0	65.	149.	-5.	36.4	166.8	65.	126.	30.
091506Z	26.4	171.4	60	26.2	171.5	55.	13.	-5.	30.2	169.7	65.	133.	-5.	34.3	167.6	70.	112.	10.	0.0	0.0	0.	-0.	0.
091512Z	27.8	171.1	65	27.3	171.1	60.	30.	-5.	31.5	169.5	70.	164.	0.	35.7	168.1	70.	137.	20.	0.0	0.0	0.	-0.	0.
091518Z	29.1	170.2	70	29.0	170.2	70.	6.	0.	35.4	167.7	75.	243.	0.	41.2	170.4	60.	422.	20.	0.0	0.0	0.	-0.	0.
091600Z	30.2	168.7	70	30.2	168.9	70.	10.	0.	36.2	166.1	60.	243.	-10.	42.4	171.7	40.	424.	5.	0.0	0.0	0.	-0.	0.
091606Z	31.0	167.3	70	31.3	167.2	70.	19.	0.	37.3	163.4	50.	288.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091612Z	31.4	166.3	70	31.5	166.5	65.	12.	-5.	34.5	162.9	50.	211.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091618Z	31.7	165.7	75	31.8	165.7	65.	12.	-10.	34.7	161.6	50.	322.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091700Z	32.2	165.3	70	32.1	165.1	55.	12.	-15.	33.7	163.0	35.	326.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091706Z	33.0	166.0	60	32.9	166.1	50.	8.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091712Z	33.6	167.0	50	33.7	167.2	45.	12.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091718Z	34.4	168.1	40	34.7	168.6	40.	31.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091800Z	35.6	169.2	35	35.8	169.4	35.	15.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	27.	225.	302.	244.	27.	225.	302.	244.
AVG RIGHT ANGLE ERROR	14.	121.	159.	201.	14.	121.	159.	201.
AVG INTENSITY MAGNITUDE ERROR	4.	5.	8.	26.	4.	5.	8.	26.
AVG INTENSITY BIAS	-4.	-1.	6.	26.	-4.	-1.	6.	26.
NUMBER OF FORECASTS	18	14	10	6	18	14	10	6

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1297. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 11. KNOTS

TYPHOON KELLY
FIX POSITIONS FOR CYCLONE NO. 15

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	121800	21.5N 173.3E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	122158	22.6N 171.5E	PCN 4	T1.5/1.5	INIT OBS EXP LLCC	KGWC
3	130000	22.4N 171.5E	PCN 4	T2.0/2.0	INIT OBS EXP LLCC	PGTW
4	130600	22.1N 171.0E	PCN 6			PGTW
5	130651	22.6N 170.7E	PCN 4		EXP LLCC ULAC 21.7N 171.5E	KGWC
* 6	131039	22.5N 170.4E	PCN 6		ULAC 21.3N 171.5E	KGWC
7	131200	20.5N 172.0E	PCN 6			PGTW
* 8	131658	21.6N 169.4E	PCN 6		ULAC 20.6N 172.6E	KGWC
9	131800	20.4N 172.3E	PCN 6	T2.5/2.5 /D1.5/24HRS		PGTW
* 10	132138	21.8N 170.4E	PCN 4	T2.5/2.5 /D1.0/24HRS	ULAC 21.0N 172.8E	KGWC
11	140000	21.2N 172.5E	PCN 6			PGTW
12	140401	21.9N 173.0E	PCN 6		ULAC 22.0N 173.3E	KGWC
13	140600	22.0N 172.3E	PCN 6	T3.0/3.0 /D1.0/30HRS		PGTW
14	140630	22.3N 171.6E	PCN 6		ULAC 22.5N 172.2E	KGWC
15	140756	21.7N 172.5E	PCN 6		ULCC FIX	PGTW
16	141018	22.3N 171.8E	PCN 6		ULAC 22.5N 173.0E	KGWC
17	141645	23.2N 172.4E	PCN 6		ULAC 23.6N 172.1E	KGWC
18	141800	23.2N 172.4E	PCN 6	T3.5/3.5 /D1.0/24HRS		PGTW
19	141910	24.3N 172.0E	PCN 2		ULAC 24.4N 172.4E	KGWC
20	141911	24.2N 172.2E	PCN 6		ULCC FIX	PGTW
21	142035	24.3N 172.1E	PCN 6		ULCC FIX	PGTW
22	142259	24.8N 172.4E	PCN 6	T3.5/3.5 /D1.0/25HRS		KGWC
23	142300	24.7N 171.8E	PCN 3	T3.0/3.0 /S0.0/17HRS		PGTW
24	150348	25.6N 171.6E	PCN 2			KGWC
25	150600	26.3N 171.3E	PCN 4			PGTW
26	150750	26.4N 171.2E	PCN 6		ULAC 26.5N 171.6E	KGWC
* 27	151139	27.0N 171.5E	PCN 2			KGWC
28	151200	27.3N 171.1E	PCN 6			PGTW
29	151633	28.8N 170.7E	PCN 2			KGWC
30	151800	28.8N 170.5E	PCN 4	T3.5/3.5-/S0.0/24HRS		PGTW
* 31	151849	28.9N 170.8E	PCN 2			KGWC
32	152239	30.4N 169.1E	PCN 2	T4.0/4.0 /D0.5/24HRS		KGWC
33	160000	30.2N 168.8E	PCN 6	T3.5/3.5-/D0.5/25HRS		PGTW
34	160600	31.5N 167.4E	PCN 4			PGTW
35	160729	31.0N 167.3E	PCN 4		ULAC 31.7N 167.5E	KGWC
36	161119	31.7N 166.7E	PCN 6		ULAC 31.2N 166.5E	KGWC
37	161200	31.4N 167.4E	PCN 6	T3.0/3.5 /W0.5/18HRS	ULCC 31.6N 166.8E	PGTW
38	161620	32.2N 166.0E	PCN 2			KGWC
39	161800	31.7N 165.7E	PCN 6		ULCC 32.2N 165.7E	PGTW
40	161828	32.2N 165.6E	PCN 6	T4.0/4.0 /D0.5/24HRS	ULAC 32.0N 165.5E	KGWC
41	162219	31.5N 165.3E	PCN 6	T3.5/4.0 /W0.5/24HRS		KGWC
42	170000	32.1N 165.3E	PCN 6	T2.5/3.0 /W1.0/24HRS	ULCC FIX	PGTW
43	170505	32.4N 166.0E	PCN 6			KGWC
44	170600	32.9N 166.3E	PCN 6		ULCC FIX	PGTW
45	170708	32.6N 165.9E	PCN 6			KGWC
46	171059	33.4N 166.8E	PCN 6			KGWC
47	171200	33.5N 167.3E	PCN 6	T2.0/2.5 /W1.0/24HRS		PGTW
48	171750	34.2N 168.1E	PCN 4		EXP LLCC ULAC 35.3N 168.0E	KGWC
49	171800	34.5N 168.0E	PCN 6			PGTW
* 50	171807	35.0N 169.2E	PCN 4		EXP LLCC ULAC 35.3N 170.0E	KGWC
51	172158	35.4N 168.9E	PCN 4	T2.0/3.5 /W1.5/24HRS	EXP LLCC	KGWC
52	180000	35.8N 169.2E	PCN 6	T2.5/2.5	INIT OBS	PGTW
53	180600	37.2N 171.1E	PCN 6			PGTW
54	180858	37.6N 171.9E	PCN 6			KGWC
55	181039	38.0N 172.5E	PCN 4		ULAC 38.2N 172.7E	KGWC
56	182138	39.4N 178.2E	PCN 6	T0.5/1.5 /W1.5/24HRS	ULAC 40.5N 177.9E	KGWC
57	190000	40.4N 179.0E	PCN 6			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN- DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	141921	24.2N 172.0E	700MB	2981	989	45 100 14	270 26 190 35	10 5			+12 +14 +10	2
2	150531	26.2N 171.5E	1500FT		978	60 030 14	120 55 030 10	10 2			+26 +26 +19 28	4
3	150304	26.8N 171.3E	700MB	2905	977		070 39 320 50	12 5			+14 +16 + 8	4
4	151813	29.2N 170.0E	700MB	2835	970	70 030 60	140 72 030 60	10 4	CIRCULAR	40	+12 +14 +14	5
5	152107	29.5N 169.4E	700MB	2806	970	70 270 10	220 44 230 90	10 3	CIRCULAR	75	+13 +17 +13	5
6	160534	30.9N 167.4E	700MB	2811		60 040 114	130 66 040 65	10 10			+15 +15 +11	7
7	160808	31.1N 167.0E	700MB	2813	969		060 60 320 126	10 10			+13 +15 +12	7
8	161801	31.7N 165.6E	700MB	2784		35 050 120	140 60 040 90	10 5	CIRCULAR	10	+13 +14 +14	8
9	162037	31.8N 165.4E	700MB	2799	986	40 320 90	030 60 320 60	10 5	CIRCULAR	15	+11 +14 +14 23	8
10	170540	32.8N 166.0E	700MB	2817		45 190 103	280 49 190 103	10 3			+12 +13 +12	9
11	170827	33.3N 166.3E	700MB	2828	972		320 47 230 120	10 3			+13 +13 +12	9

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL STORM LYNN
BEST TRACK DATA

	BEST TRACK		WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
					ERRORS				ERRORS				ERRORS				ERRORS	
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
092400Z	18.6	115.7	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.0	0.
092406Z	18.5	115.2	30	18.5	115.0	30.	11.	0.	19.5	111.7	50.	130.	15.	21.1	108.3	40.	346.	15.	22.9	105.1	25.	486.	0.
092412Z	18.4	114.6	30	18.7	114.7	30.	19.	0.	19.4	112.7	50.	136.	20.	20.6	110.4	60.	300.	35.	22.3	108.4	30.	397.	10.
092418Z	18.2	114.1	35	18.8	114.3	30.	38.	-5.	19.4	112.2	40.	149.	10.	20.2	109.8	40.	288.	15.	21.5	107.2	30.	324.	15.
092500Z	18.0	113.5	40	18.3	113.5	35.	18.	-5.	18.7	111.2	40.	138.	15.	20.1	108.8	30.	284.	5.	0.0	0.0	0.	-0.	0.
092506Z	17.6	112.8	35	17.6	112.9	35.	6.	0.	16.9	110.8	30.	66.	5.	16.5	107.9	25.	72.	0.	0.0	0.0	0.	-0.	0.
092512Z	17.2	112.1	30	17.2	112.3	30.	11.	0.	16.2	109.4	25.	68.	0.	15.8	106.4	20.	93.	0.	0.0	0.0	0.	-0.	0.
092518Z	17.0	111.5	30	16.9	111.7	30.	13.	0.	16.0	108.3	25.	99.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092600Z	16.4	111.0	25	16.6	110.9	25.	13.	0.	15.9	107.4	20.	119.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092606Z	15.8	110.7	25	16.0	110.0	25.	42.	0.	15.3	107.0	20.	93.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092612Z	15.6	110.4	25	16.0	110.0	25.	33.	0.	16.0	110.0	20.	117.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092618Z	15.4	109.9	25	16.0	110.0	25.	36.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092700Z	15.4	109.4	25	14.7	109.4	25.	42.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092706Z	15.5	108.6	25	15.0	109.0	25.	38.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092712Z	15.7	108.0	20	15.1	108.4	20.	43.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092718Z	16.1	107.4	15	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	26.	112.	231.	402.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	21.	63.	178.	362.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	8.	12.	8.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	6.	12.	8.	0.	0.	0.	0.
NUMBER OF FORECASTS	14	10	6	3	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 553. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

TROPICAL STORM LYNN
FIX POSITIONS FOR CYCLONE NO. 16

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	161131	15.1N 111.8E	PCN 5			RPMK
2	230600	18.8N 119.5E	PCN 6	T1.5/1.5	INIT OBS	PGTW
3	231005	19.2N 118.8E	PCN 6			PGTW
4	231800	19.4N 117.3E	PCN 6	T1.5/1.5	INIT OBS ULCC FIX	PGTW
5	232245	20.0N 117.9E	PCN 5	T1.5/1.5	INIT OBS	RPMK
6	232341	20.1N 118.0E	PCN 5			RPMK
7	240000	18.1N 115.4E	PCN 4			PGTW
8	240243	18.9N 115.7E	PCN 5	T2.0/2.0	INIT OBS	RODN
9	240600	18.6N 115.0E	PCN 6	T2.5/2.5 /D1.0/24HRS		PGTW
10	241039	18.7N 114.8E	PCN 5			PGTW
* 11	241125	19.7N 116.1E	PCN 5			RODN
12	241200	18.8N 114.8E	PCN 6			PGTW
13	241523	19.3N 115.3E	PCN 5		ULCC FIX	RPMK
14	242317	18.0N 113.6E	PCN 3	T2.0/2.0 /D0.5/25HRS		RPMK
15	242317	18.1N 113.7E	PCN 5	T2.5/2.5 /S0.0/18HRS		PGTW
* 16	242317	19.2N 114.3E	PCN 5	T3.0/3.0	INIT OBS	RSKO
17	250223	17.8N 113.5E	PCN 3			RPMK
18	250600	17.4N 112.9E	PCN 4			PGTW
19	250831	17.4N 112.6E	PCN 3	T0.5/1.5 /W1.5/24HRS		RODN
20	251103	17.3N 111.9E	PCN 3			RPMK
21	252116	16.8N 111.5E	PCN 5			RPMK
22	252203	16.6N 110.8E	PCN 3	T1.5/2.5 /W1.0/23HRS		PGTW
23	252203	17.0N 111.1E	PCN 5	T2.5/3.0 /W0.5/23HRS		RSKO
24	260034	17.2N 111.4E	PCN 5			RODN
25	260203	16.7N 111.0E	PCN 3	T1.0/1.5 /W1.0/24HRS		RPMK
26	260203	16.2N 110.2E	PCN 5			PGTW
27	260600	15.8N 110.2E	PCN 6			PGTW
* 28	260818	15.8N 111.0E	PCN 5	T0.5/0.5 /S0.0/24HRS		RODN
29	261131	15.7N 110.6E	PCN 6			RODN
* 30	261200	15.7N 111.5E	PCN 6	T2.5/2.5-/D1.0/14HRS		PGTW
* 31	261443	15.7N 111.2E	PCN 5			RODN
* 32	261800	16.0N 110.9E	PCN 6			PGTW
* 33	262103	15.5N 109.9E	PCN 5		ULCC FIX	RPMK
* 34	270009	14.5N 109.3E	PCN 5			RODN
35	270010	14.8N 109.7E	PCN 5	T1.0/1.5 /S0.0/22HRS		RPMK
* 36	270324	15.5N 110.6E	PCN 3			RPMK
37	270600	15.8N 108.8E	PCN 6	T1.0/1.0-	INIT OBS	PGTW
38	271200	15.8N 108.3E	PCN 6			PGTW
39	271203	15.6N 108.8E	PCN 6			RPMK
40	271600	16.2N 107.6E	PCN 6			PGTW
41	271800	16.3N 107.2E	PCN 6			PGTW

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
* 1	251200	16.4N 113.0E	020	040	BASED ON 59985 AND 59981 AND SHIP
2	251800	16.7N 111.9E	020	020	BASED ON 59985 AND 59981

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL STORM MAURY
BEST TRACK DATA

	BEST TRACK				WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS						ERRORS					ERRORS					ERRORS		
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
092712Z	24.6	152.3	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092718Z	24.4	152.2	35	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092800Z	24.3	152.0	45	23.8	151.9	50.	30.	5.	27.3	154.5	60.	269.	5.	30.6	157.2	70.	432.	10.	33.6	160.2	60.	447.	20.
092806Z	24.2	151.8	50	23.9	152.1	50.	24.	0.	25.8	152.6	60.	146.	0.	28.8	153.3	70.	234.	15.	0.0	0.0	0.	-0.	0.
092812Z	24.1	151.6	50	23.8	152.1	50.	33.	0.	24.2	152.1	60.	140.	0.	26.1	152.7	55.	455.	5.	0.0	0.0	0.	-0.	0.
092818Z	24.1	151.3	55	23.8	152.1	50.	47.	-5.	24.9	151.7	60.	149.	0.	27.7	151.8	60.	440.	15.	0.0	0.0	0.	-0.	0.
092900Z	24.3	150.8	55	24.2	150.7	50.	8.	-5.	25.6	147.0	50.	202.	-10.	29.0	144.8	45.	543.	5.	0.0	0.0	0.	-0.	0.
092906Z	24.7	150.2	60	25.0	150.3	50.	19.	-10.	27.8	149.6	45.	157.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092912Z	25.4	149.9	60	25.3	149.9	55.	6.	-5.	27.7	149.0	45.	318.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092918Z	26.6	149.7	60	26.6	149.8	50.	5.	-10.	29.7	149.7	45.	313.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
093000Z	28.2	149.4	60	27.9	149.6	55.	21.	-5.	32.2	152.9	45.	237.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
093006Z	30.4	149.2	55	29.4	149.8	50.	68.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
093012Z	33.0	149.1	50	32.5	149.5	50.	36.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
093018Z	34.9	150.2	45	35.2	150.1	45.	19.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100100Z	36.0	151.6	40	35.5	150.7	45.	53.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	28.	215.	421.	447.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	18.	87.	221.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	4.	10.	20.	0.	0.	0.	0.
AVG INTENSITY BIAS	-3.	-2.	10.	20.	0.	0.	0.	0.
NUMBER OF FORECASTS	13	9	5	1	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 863. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TROPICAL STORM MAURY
FIX POSITIONS FOR CYCLONE NO. 17

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	271800	22.7N 151.5E	PCN 6	T1.5/1.5	INIT OBS	PGTW
2	271939	24.1N 151.9E	PCN 4			PGTW
3	272204	24.3N 152.2E	PCN 4			PGTW
4	272341	24.8N 152.0E	PCN 4	T2.5/2.5	INIT OBS	PGTW
5	280000	24.5N 152.1E	PCN 6			PGTW
6	280430	24.0N 152.0E	PCN 6			PGTW
7	280600	23.8N 152.5E	PCN 6		ULCC FIX	PGTW
* 8	280819	22.7N 152.8E	PCN 6			PGTW
9	281221	23.8N 151.9E	PCN 5			PGTW
10	281800	24.0N 151.5E	PCN 6	T2.5/2.5 /D1.0/26HRS		PGTW
11	282140	23.9N 151.2E	PCN 5			PGTW
12	282321	24.0N 150.9E	PCN 5			PGTW
13	290300	24.8N 150.4E	PCN 4	T1.5/2.5 /W1.0/28HRS	EXP LLCC	PGTW
14	290600	24.9N 150.5E	PCN 6			PGTW
15	291201	25.3N 149.8E	PCN 2			PGTW
16	291600	26.3N 149.6E	PCN 6			PGTW
17	291844	26.7N 149.9E	PCN 5	T3.0/3.0-/D0.5/25HRS		PGTW
18	292116	27.3N 150.0E	PCN 6			PGTW
19	292301	27.3N 149.4E	PCN 3		EXP LLCC	PGTW
20	300042	28.3N 149.6E	PCN 3		EXP LLCC	PGTW
21	300300	29.0N 149.7E	PCN 6			PGTW
22	301322	32.9N 150.0E	PCN 6			PGTW
23	301831	34.9N 151.2E	PCN 6			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	280303	24.0N 151.8E	700MB	3027	992	50 060 30	130 55 060 30	10 5			+14 +11	1
2	282049	24.0N 151.1E	1500FT		994	55 020 40	130 64 020 40	6 5				2
3	282330	24.2N 150.7E	1500FT		995	55 140 65	230 44 130 35	2 3			+24 +25 +25 25	2
4	290540	24.8N 150.6E	1500FT		995	65 040 35	120 64 040 25	8 15				3
5	290823	24.8N 150.3E	700MB	3058		45 050 35	120 64 060 36	8 8			+13 +13 + 8	3
6	292105	27.3N 149.7E	1500FT		997	70 020 37	130 77 020 37	4 5			+26 +28 +25	4
7	292337	28.0N 149.6E	1500FT		998	45 230 15	260 53 230 13	4 5			+26 +28 +24 31	4
8	301011	32.3N 149.0E	700MB	3065	996		230 45 120 45	12 5				5
9	301143	33.1N 149.1E	700MB	3055			210 59 130 70	12 5			+14 +17 +10	5
10	302038	35.2N 150.6E	700MB	2986		60 080 25	200 45 080 90	10 5				6
11	302212	35.3N 150.9E	700MB	2986		45 050 10	200 45 090 78	5 6			+ 9 +13	6
12	010537	33.9N 152.7E	1500FT		994	70 130 60	220 77 130 46	5 2			+24 +26 +22 30	7
13	010819	34.3N 153.9E	700MB	3012	996		360 42 300 90	13 7			+12 +14 + 9	7

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL STORM NINA
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		BEST TRACK WIND	WARNING POSIT		WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT		24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT		48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT		72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
092712Z	22.3	141.3	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092718Z	23.2	141.1	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092800Z	23.8	140.9	35	24.5	141.4	40.	50.	5.	27.0	141.3	60.	98.	15.	29.7	142.2	70.	130.	40.	32.7	145.2	65.	233.	10.
092806Z	24.2	140.8	40	25.2	141.0	45.	61.	5.	28.0	140.9	60.	120.	20.	31.1	142.0	70.	161.	40.	34.0	145.3	65.	373.	10.
092812Z	24.6	140.7	45	24.4	140.6	50.	13.	5.	25.6	140.5	60.	56.	20.	27.6	140.5	70.	242.	35.	29.5	140.8	70.	840.	20.
092818Z	25.0	140.7	45	24.8	140.6	50.	13.	5.	25.9	140.6	60.	69.	25.	27.9	140.6	70.	385.	25.	0.0	0.0	0.	-0.	0.
092900Z	25.5	140.6	45	25.5	140.6	45.	0.	0.	27.6	140.8	30.	43.	0.	29.6	141.2	25.	475.	-30.	0.0	0.0	0.	-0.	0.
092906Z	26.0	140.7	40	26.1	140.7	45.	6.	5.	28.3	140.9	30.	101.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092912Z	26.5	140.8	40	26.5	140.6	45.	11.	5.	28.4	141.0	30.	197.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092918Z	27.0	141.0	35	27.0	140.7	40.	16.	5.	29.0	141.0	30.	336.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
093000Z	27.6	141.6	30	27.3	141.5	30.	19.	0.	28.5	144.0	20.	384.	-35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
093006Z	28.5	142.8	30	27.9	142.5	30.	39.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
093012Z	29.6	144.5	35	28.9	143.0	30.	89.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
093018Z	31.1	147.0	45	30.4	145.5	30.	88.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100100Z	32.5	149.8	55	32.5	149.8	50.	0.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100106Z	33.9	152.8	55	34.2	152.7	50.	19.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100112Z	35.1	156.0	50	35.0	155.5	45.	25.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	30.	156.	279.	482.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	12.	37.	85.	146.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	5.	15.	34.	13.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	3.	22.	13.	0.	0.	0.	0.
NUMBER OF FORECASTS	15	9	5	3	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1201. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

TROPICAL STORM NINA
FIX POSITIONS FOR CYCLONE NO. 18

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	270840	22.6N 141.1E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	271200	22.5N 141.6E	PCN 6			PGTW
3	271600	22.3N 141.7E	PCN 6	T1.5/1.5	INIT OBS	PGTW
4	271800	22.4N 141.5E	PCN 6			PGTW
5	271939	23.8N 141.6E	PCN 6		EXP LLCC TO NW	PGTW
6	272204	24.1N 141.6E	PCN 6			PGTW
* 7	280000	24.8N 141.9E	PCN 6		ULCC FIX	PGTW
* 8	280300	25.4N 141.9E	PCN 6		ULCC FIX	PGTW
9	280612	24.2N 140.2E	PCN 4	T2.0/2.0 /D1.0/22HRS		PGTW
10	282059	25.3N 140.9E	PCN 4		EXP LLCC	PGTW
11	282140	25.5N 140.8E	PCN 3		EXP LLCC	PGTW
12	290102	25.8N 140.5E	PCN 3		EXP LLCC	PGTW
13	290559	26.1N 140.7E	PCN 3	T1.5/2.0 /W0.5/24HRS	EXP LLCC	PGTW
14	290559	26.0N 140.8E	PCN 5	T1.5/1.5	INIT OBS	RPMK
15	290939	25.9N 140.2E	PCN 5			PGTW
16	291200	26.1N 140.3E	PCN 6			PGTW
17	291343	26.8N 140.4E	PCN 3		EXP LLCC	PGTW
18	291844	27.1N 141.0E	PCN 5	T2.0/2.0	INIT OBS	PGTW
19	292032	27.4N 140.7E	PCN 3		EXP LLCC	PGTW
20	300042	26.9N 141.5E	PCN 5		EXP LLCC	PGTW
21	300300	27.5N 142.0E	PCN 4		EXP LLCC	PGTW
22	300600	28.5N 142.9E	PCN 6	T1.0/1.5 /W0.5/24HRS		PGTW
23	301322	29.8N 145.0E	PCN 6			PGTW
24	301800	30.4N 146.6E	PCN 6	T2.0/2.0-/S0.0/24HRS		PGTW
25	302233	31.9N 148.6E	PCN 6			PGTW
26	010022	32.4N 149.7E	PCN 5			PGTW
27	010534	33.7N 152.4E	PCN 5	T2.5/2.5-/D1.5/24HRS		PGTW
28	010856	34.2N 154.4E	PCN 6			PGTW
29	011200	34.7N 155.4E	PCN 6			PGTW
30	011600	35.6N 158.2E	PCN 6			PGTW
31	011800	36.3N 159.3E	PCN 6	T3.5/3.5-/D1.5/24HRS		PGTW
32	012100	36.5N 161.5E	PCN 5			PGTW
33	020000	35.8N 163.4E	PCN 4			PGTW
34	020300	36.0N 164.9E	PCN 6			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN- DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	292249	27.5N 141.5E	1500FT		994	25 330 40	030 38 330 40	5 15			+26 +26 +24 29	4
2	302341	32.6N 149.8E	700MB	2982		75 230 20	350 25 320 50	8 7	CIRCULAR	10	+ 7 +11	6

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	281200	24.6N 141.0E	0				50022 RJAW	WMO 47981		
* 2	301926	32.1N 147.2E	ACFT							

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON OGDEN
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT	BEST TRACK WIND	WARNING POSIT	WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT	24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT	48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT	72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
100700Z	18.1 152.3	25	18.5 152.4	25.	25.	0.	21.8 151.2	35.	183.	-10.	26.6 150.9	50.	417.	-20.	0.0 0.0	0.	-0.	0.
100706Z	19.1 152.1	30	19.0 152.0	30.	8.	0.	22.1 151.1	40.	276.	-10.	26.5 150.9	50.	560.	-15.	0.0 0.0	0.	-0.	0.
100712Z	20.4 152.2	30	19.6 151.6	30.	59.	0.	22.8 150.6	40.	347.	-15.	27.2 150.7	50.	702.	-15.	0.0 0.0	0.	-0.	0.
100718Z	21.9 152.7	35	20.4 151.6	35.	109.	0.	23.6 151.0	45.	394.	-15.	28.0 151.5	55.	802.	-5.	0.0 0.0	0.	-0.	0.
100800Z	23.8 153.7	45	24.0 153.3	40.	25.	-5.	32.5 160.9	45.	235.	-25.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100806Z	25.4 154.6	50	25.8 155.0	50.	32.	0.	35.4 162.8	50.	298.	-15.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100812Z	26.5 155.5	55	26.6 155.6	50.	8.	-5.	31.8 158.9	50.	201.	-15.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100818Z	27.8 156.6	60	27.6 156.4	50.	16.	-10.	32.5 160.2	50.	279.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100900Z	29.4 158.1	70	29.1 157.7	70.	28.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100906Z	30.9 160.3	65	30.7 159.8	65.	28.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100912Z	32.4 162.8	65	32.2 162.8	65.	12.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100918Z	33.9 165.5	60	33.9 165.8	60.	15.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	30.	277.	620.	0.	30.	277.	620.	0.
AVG RIGHT ANGLE ERROR	15.	100.	219.	0.	15.	100.	219.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	14.	14.	0.	2.	14.	14.	0.
AVG INTENSITY BIAS	-2.	-14.	-14.	0.	-2.	-14.	-14.	0.
NUMBER OF FORECASTS	12	8	4	0	9	8	4	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1236. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 19. KNOTS

TYPHOON OGDEN
FIX POSITIONS FOR CYCLONE NO. 19

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	051800	12.4N 151.2E	PCN 6	T0.0/0.0	INIT OBS	PGTW
* 2	060000	13.5N 152.5E	PCN 6			PGTW
* 3	060300	17.9N 154.4E	PCN 6	T1.0/1.0	INIT OBS	PGTW
* 4	060600	18.1N 155.1E	PCN 6		ULCC FIX	PGTW
* 5	060900	18.5N 155.0E	PCN 6		ULCC FIX	PGTW
* 6	061200	18.7N 155.1E	PCN 6			PGTW
* 7	061600	18.5N 155.0E	PCN 6	T1.5/1.5 /D1.5/22HRS		PGTW
* 8	061800	18.6N 154.8E	PCN 6			PGTW
* 9	061950	18.6N 155.0E	PCN 6			PGTW
* 10	062100	18.4N 154.8E	PCN 6			PGTW
11	070002	18.4N 152.9E	PCN 5			PGTW
12	070300	19.0N 151.6E	PCN 4	T1.0/1.0 /S0.0/24HRS	EXP LLCC	PGTW
13	070601	18.9N 152.3E	PCN 3			PGTW
14	070830	19.0N 151.6E	PCN 6			PGTW
* 15	071242	19.9N 153.5E	PCN 6			PGTW
* 16	071600	20.2N 153.6E	PCN 6	T2.0/2.0 /D0.5/24HRS		PGTW
* 17	071800	20.8N 154.1E	PCN 6			PGTW
* 18	072124	21.9N 152.9E	PCN 6		ULCC 23.0N 155.5E	PGTW
19	072342	24.5N 153.3E	PCN 4	T2.5/2.5-/D1.5/21HRS		PGTW
20	072342	24.2N 153.8E	PCN 3	T3.5/3.5	INIT OBS	RODN
* 21	080300	25.6N 154.6E	PCN 4	T3.5/3.5 /D2.5/24HRS		PGTW
22	080542	25.7N 154.8E	PCN 3			PGTW
23	080542	25.3N 154.8E	PCN 3			RODN
24	080821	26.0N 155.1E	PCN 4			PGTW
25	081222	26.6N 155.6E	PCN 3			PGTW
* 26	081222	26.9N 154.5E	PCN 4			RODN
27	081600	27.2N 156.1E	PCN 6	T3.0/3.0-/D1.0/24HRS		PGTW
28	081833	27.6N 156.5E	PCN 5			PGTW
29	082100	28.4N 157.3E	PCN 6			PGTW
30	082321	29.2N 158.1E	PCN 3			PGTW
31	090300	29.8N 159.2E	PCN 4	T4.0/4.0-/D0.5/24HRS		PGTW
32	090536	30.5N 160.7E	PCN 4			PGTW
33	090900	31.4N 161.6E	PCN 6			PGTW
34	091200	32.2N 162.7E	PCN 6		ULCC FIX	PGTW
35	091600	33.5N 164.8E	PCN 6	T4.5/4.5 /D1.5/24HRS		PGTW
36	091638	33.1N 165.1E	PCN 6			KGWC
37	091800	34.0N 165.7E	PCN 6		ULCC FIX	PGTW
38	091820	34.3N 166.0E	PCN 5			RODN
39	091846	34.3N 166.0E	PCN 6		ULAC 34.7N 167.1E	KGWC
40	092301	35.5N 169.5E	PCN 6			KGWC
41	100000	35.8N 169.3E	PCN 6			PGTW
42	100400	37.7N 172.8E	PCN 6	T4.0/4.0-/S0.0/25HRS		PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM	ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	062227	18.4N 152.2E	1500FT		999	15 340 70	160 16 030 70	10 3				+26 +26 +25 26	2
2	070533	18.8N 152.2E	1500FT		997	45 130 140	210 38 130 125	10 25				+29 +29 +25 26	3
3	070821	19.9N 152.6E	700MB	3080	1000		180 29 080 54	13 7				+16 +16 + 9	3
* 4	072046	22.1N 152.2E	1500FT		998	25 040 105	340 30 220 82	45 15				+29 +29 +20 27	5
5	072359	23.8N 154.0E	1500FT		993	45 100 25	240 24 180 45	15 5				+29 +30 +23 28	5
6	080540	25.5N 154.7E	700MB	2976		50 150 15	220 58 130 60	12 15				+12 +13 +13	6
7	080817	25.8N 155.0E	700MB	2961	986	40 040 60	130 51 040 90	10 10				+13 +13 +11	6
8	082132	29.0N 157.6E	700MB	2945	983	70 250 30	310 76 250 28	5 1				+12 +15 +14	7
9	082312	29.2N 158.0E	700MB	2942	982	40 280 90	170 68 060 70	5 5	CIRCULAR	40		+13 +14 +14	7

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON PHYLLIS
BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
							ERRORS					ERRORS					ERRORS					ERRORS	
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
100912Z	18.4	151.3	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100918Z	18.7	151.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101000Z	19.1	151.9	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101006Z	19.2	152.1	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101012Z	19.4	152.2	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101018Z	19.6	152.3	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101100Z	19.7	152.4	35	19.5	152.2	30.	16.	-5.	20.0	151.5	50.	126.	-15.	22.0	150.0	75.	252.	5.	26.0	149.3	75.	498.	40.
101106Z	20.1	152.4	45	19.9	152.3	45.	13.	0.	21.1	151.7	70.	112.	0.	24.0	150.3	80.	231.	15.	0.0	0.0	0.	-0.	0.
101112Z	20.7	152.1	55	20.6	152.1	55.	6.	0.	22.5	151.4	75.	85.	-5.	26.4	151.7	80.	186.	25.	0.0	0.0	0.	-0.	0.
101118Z	21.4	151.7	60	21.4	151.7	55.	0.	-5.	26.0	150.8	75.	77.	-5.	30.3	155.2	65.	196.	20.	0.0	0.0	0.	-0.	0.
101200Z	22.1	151.3	65	22.2	151.3	65.	6.	0.	26.8	151.2	85.	49.	15.	30.3	156.8	70.	299.	35.	0.0	0.0	0.	-0.	0.
101206Z	22.9	151.2	70	22.9	150.9	70.	17.	0.	26.4	150.8	80.	87.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101212Z	23.9	151.2	80	23.7	150.8	85.	25.	5.	27.3	151.3	75.	132.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101218Z	24.8	151.3	80	24.7	150.7	90.	33.	10.	29.1	150.7	115.	159.	70.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101300Z	26.0	151.4	70	25.9	151.2	80.	12.	10.	30.7	151.5	65.	194.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101306Z	27.7	151.5	65	27.7	151.4	70.	5.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101312Z	29.5	151.5	55	29.6	151.2	65.	17.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101318Z	31.6	151.7	45	31.7	151.3	60.	21.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101400Z	33.8	152.6	35	34.0	152.2	35.	23.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	15.	113.	233.	498.	15.	113.	233.	498.
AVG RIGHT ANGLE ERROR	12.	23.	120.	113.	12.	23.	120.	113.
AVG INTENSITY MAGNITUDE ERROR	5.	19.	20.	40.	5.	19.	20.	40.
AVG INTENSITY BIAS	3.	14.	20.	40.	3.	14.	20.	40.
NUMBER OF FORECASTS	13	9	5	1	13	9	5	1

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 972. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TYPHOON PHYLLIS
FIX POSITIONS FOR CYCLONE NO. 20

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	072124	13.7N 146.9E	PCN 6	T0.0/0.0	INIT OBS	PGTW
2	091202	18.8N 150.7E	PCN 6	T0.5/0.5	INIT OBS	PGTW
* 3	092028	20.2N 152.5E	PCN 6		ULCC FIX	PGTW
4	092301	18.6N 152.1E	PCN 6	T1.5/1.5	INIT OBS	PGTW
5	100400	19.7N 152.3E	PCN 6		ULCC 20.7N 152.3E	PGTW
* 6	100600	20.5N 152.6E	PCN 6			PGTW
* 7	100900	20.3N 152.8E	PCN 6			PGTW
8	101141	20.1N 152.7E	PCN 6			PGTW
9	101600	19.8N 152.4E	PCN 6	T2.0/2.0	INIT OBS	PGTW
10	101800	20.0N 152.3E	PCN 6		ULCC FIX	PGTW
11	102007	19.6N 152.4E	PCN 4			PGTW
12	102152	19.4N 152.0E	PCN 4			PGTW
13	110022	19.5N 152.5E	PCN 5	T2.5/2.5 /D1.0/25HRS		PGTW
14	110511	19.8N 152.3E	PCN 3			PGTW
15	110847	20.3N 152.3E	PCN 4			PGTW
16	111200	20.6N 152.0E	PCN 6			PGTW
17	111303	20.7N 152.1E	PCN 3			PGTW
18	111600	21.2N 151.7E	PCN 4			PGTW
19	111755	21.6N 151.3E	PCN 4	T3.5/3.5 /D1.5/26HRS		PGTW
20	112128	21.8N 151.6E	PCN 3			PGTW
21	120000	22.0N 151.4E	PCN 3	T4.0/4.0 /D1.5/24HRS		PGTW
22	120458	22.6N 151.1E	PCN 3			PGTW
23	120600	22.8N 150.9E	PCN 4			PGTW
24	120825	23.1N 151.1E	PCN 4			PGTW
25	121243	23.9N 151.3E	PCN 4			PGTW
26	121600	24.5N 151.0E	PCN 4			PGTW
27	121743	24.7N 150.8E	PCN 2	T5.0/5.0 /D1.5/24HRS		PGTW
28	121924	25.0N 150.7E	PCN 4			PGTW
29	122104	25.3N 151.2E	PCN 3			PGTW
30	122342	26.1N 151.8E	PCN 4	T3.5/4.0-/W0.5/24HRS		PGTW
31	130400	26.7N 151.4E	PCN 6			PGTW
32	130445	27.2N 151.5E	PCN 6			PGTW
33	130600	27.8N 151.9E	PCN 6		ULCC FIX	PGTW
34	131222	29.7N 151.1E	PCN 4		EXP LLCC	PGTW
35	131222	29.2N 151.9E	PCN 6		ULCC FIX	RODN
* 36	132321	35.5N 154.0E	PCN 5	T2.0/2.0	INIT OBS	RODN
* 37	132322	34.9N 153.5E	PCN 6			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM	ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	110401	20.0N 152.4E	1500FT		989	50 240 10	330 50 240 10 8 4		CIRCULAR	10		+30 +30 28	1
2	112042	21.7N 151.6E	700MB	2986	985	65 270 5	160 60 030 20 12 1		CIRCULAR	10		+11 +17 +10	2
3	112322	22.1N 151.3E	700MB	2953	983	95 180 10	240 57 150 20 12 1		CIRCULAR	15		+17 +18 +12	2
4	120855	23.3N 151.2E	700MB	2920	975		260 91 220 20 10 5		CIRCULAR	15		+16 +24 +10	3
5	121128	23.8N 151.1E	700MB	2927	974		320 74 230 12 8 2		CIRCULAR	10		+14 +27 +10	3
6	122032	25.1N 151.3E	700MB	2950		70 110 8	260 65 110 10 10 5		CIRCULAR	30		+15 +24 +12	4
7	122304	25.8N 151.2E	700MB	2973	988	65 050 50	140 55 050 50 10 5		CIRCULAR	30		+16 +24	4
8	130645	28.0N 151.5E	700MB	3056		65 200 60	150 65 040 15 15 10					+17 +23 +10	5
9	130831	28.5N 151.4E	700MB	3085	997		260 50 130 60 15 15					+18 +22 + 7	5
10	132327	33.7N 152.4E	1500FT		999	35 150 30	260 43 180 77 8 4					+26 +26 +18 25	6

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL STORM ROY
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		BEST TRACK WIND	WARNING POSIT		WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT		24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT		48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT		72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
100918Z	9.3	140.1	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101000Z	9.8	141.0	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101006Z	10.4	141.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101012Z	11.0	142.4	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101018Z	11.8	143.0	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101100Z	12.7	143.2	30	12.7	143.2	30.	0.	0.	16.3	143.0	50.	68.	25.	19.4	141.0	60.	207.	50.	0.0	0.0	0.	-0.	0.
101106Z	13.6	143.2	35	13.8	143.1	35.	13.	0.	17.8	142.0	55.	129.	35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101112Z	14.2	143.2	30	14.7	142.8	40.	38.	10.	18.9	141.0	60.	186.	40.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101118Z	14.8	143.2	25	16.2	142.0	40.	109.	15.	23.9	142.1	45.	326.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101200Z	15.2	143.3	25	15.2	143.2	30.	6.	5.	17.8	143.2	35.	154.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101206Z	16.2	143.5	20	16.2	143.5	30.	0.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101212Z	17.3	143.8	20	17.4	143.7	30.	8.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101218Z	18.8	144.1	15	18.7	143.9	30.	13.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101300Z	20.0	144.6	10	20.0	144.5	20.	6.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	21.	173.	207.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	18.	87.	179.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	8.	31.	50.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	8.	31.	50.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	9	5	1	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 735. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TROPICAL STORM ROY
FIX POSITIONS FOR CYCLONE NO. 21

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	091820	9.7N 140.1E	PCN 6		ULCC FIX	PGTW
2	092028	10.5N 140.7E	PCN 6		ULCC FIX	PGTW
3	100400	10.0N 142.2E	PCN 6	T1.5/1.5	INIT OBS	PGTW
4	100600	10.4N 142.0E	PCN 6			PGTW
5	100908	10.8N 141.3E	PCN 6			PGTW
6	101200	11.5N 141.8E	PCN 6		ULCC FIX	PGTW
7	101322	11.0N 142.8E	PCN 6			PGTW
8	101600	11.3N 143.1E	PCN 6	T1.5/1.5	INIT OBS	PGTW
9	101800	11.5N 143.1E	PCN 6		ULCC FIX	PGTW
10	102007	12.0N 143.4E	PCN 6			PGTW
11	102152	12.1N 143.2E	PCN 3			PGTW
12	110022	12.7N 143.2E	PCN 3			PGTW
13	110400	13.3N 143.2E	PCN 4			PGTW
14	110652	13.8N 143.0E	PCN 5	T2.5/2.5 /D1.0/27HRS		PGTW
15	110847	14.3N 142.9E	PCN 6			PGTW
16	111200	14.6N 142.7E	PCN 6			PGTW
17	111303	14.6N 142.6E	PCN 5			PGTW
* 18	111800	16.8N 141.8E	PCN 6	T1.0/1.5 /W0.5/26HRS		PGTW
19	112128	14.8N 143.0E	PCN 5			PGTW
20	120000	15.2N 143.4E	PCN 3		EXP LLCC	PGTW
21	120400	16.0N 143.6E	PCN 4			PGTW
22	120640	16.1N 143.8E	PCN 3	T2.0/2.5 /W0.5/24HRS		PGTW
23	120825	16.7N 143.7E	PCN 4		EXP LLCC	PGTW
24	121007	17.1N 143.8E	PCN 5			PGTW
25	121243	17.5N 143.6E	PCN 6			PGTW
26	122342	20.0N 144.6E	PCN 4			PGTW

AIRCRAFT FIXES

* FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	110046	12.8N 143.3E	1500FT		1000	30 140 20	230 29 140 20	5 10			+30 +31 +21 28	1
2	110536	13.6N 143.1E	1500FT		999	40 110 23	080 44 020 37	9 2			+26 +27 +26	2
3	110829	14.1N 143.1E	1500FT		998	25 240 30	360 22 240 41	8 3			+26 +27 +26	2
4	112327	15.2N 143.3E	1500FT		1000	30 140 20	260 40 140 20	4 2			+31 +31 +28 27	3
5	120531	16.2N 143.5E	1500FT		996	20 160 40	240 28 160 85	7 2			+25 +27 +25	4
6	120824	16.8N 143.6E	1500FT		998	10 200 30	230 23 220 53	8 2			+27 +27 +27	4

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL STORM SUSAN
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		BEST TRACK WIND	WARNING POSIT		WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT		24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT		48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT		72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
101106Z	11.5	116.2	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101112Z	11.4	114.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101118Z	11.9	113.0	30	12.0	112.5	30.	30.	0.	13.0	108.3	30.	47.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101200Z	12.1	111.6	35	12.2	111.5	35.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101206Z	12.5	110.1	40	12.5	110.1	40.	0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101212Z	12.5	108.6	30	12.3	108.5	30.	13.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101218Z	13.0	107.5	25	12.9	107.3	25.	13.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101300Z	13.6	106.9	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	13.	47.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	9.	25.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	0.	5.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	5.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	5	1	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 576. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 14. KNOTS

TROPICAL STORM SUSAN
FIX POSITIONS FOR CYCLONE NO. 22

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	100600	11.2N 116.1E	PCN 4	T1.5/1.5	INIT OBS	PGTW
* 2	101200	12.8N 112.7E	PCN 6			PGTW
* 3	101600	13.7N 112.5E	PCN 6			PGTW
* 4	101800	13.6N 112.6E	PCN 6	T1.0/1.0	INTI OBS ULCC FIX	PGTW
5	110400	11.4N 116.8E	PCN 6	T1.5/1.5+/S0.0/22HRS		PGTW
6	110600	11.4N 116.5E	PCN 6			PGTW
7	110834	11.5N 116.6E	PCN 5	T1.5/1.5	INIT OBS	RPMK
8	111028	11.0N 115.4E	PCN 5			PGTW
9	111200	11.0N 115.0E	PCN 6			PGTW
10	111444	11.6N 113.7E	PCN 5			RPMK
11	111600	12.2N 112.6E	PCN 6	T2.5/2.5 /D1.5/22HRS		PGTW
* 12	111800	11.8N 111.2E	PCN 6			PGTW
13	112100	11.8N 112.2E	PCN 6			PGTW
14	112309	12.3N 112.1E	PCN 5			PGTW
15	112309	12.3N 111.7E	PCN 5			RPMK
16	120000	12.2N 111.4E	PCN 6			PGTW
17	120400	12.5N 110.7E	PCN 6	T3.0/3.0-/D1.5/24HRS		PGTW
18	120600	12.8N 110.1E	PCN 6			PGTW
19	120822	12.3N 109.2E	PCN 5	T2.0/2.0-/D0.5/24HRS		RPMK
20	120900	12.5N 109.2E	PCN 6			PGTW
21	121147	12.6N 108.3E	PCN 6			RODN
22	121200	12.4N 108.6E	PCN 6			PGTW
23	121600	13.0N 107.8E	PCN 6			PGTW
24	122107	12.8N 107.6E	PCN 5			RPMK
25	122247	13.1N 107.2E	PCN 5			RPMK
26	130026	13.6N 107.1E	PCN 5			RPMK

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL DEPRESSION 23
BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
					ERRORS					ERRORS					ERRORS					ERRORS		
MO/DA/HR	POSIT	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
101618Z	7.6 150.2	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101700Z	8.2 149.4	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101706Z	8.7 148.6	25	8.7	148.5	25.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101712Z	9.3 147.7	25	9.1	147.5	25.	17.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101718Z	9.8 146.9	25	9.5	146.6	25.	25.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101800Z	10.3 146.2	20	10.3	146.3	20.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	13.	0.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	16.	0.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	0.	0.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	0.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	4	0	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 287. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TROPICAL DEPRESSION TD23W
FIX POSITIONS FOR CYCLONE NO. 23

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	141800	12.6N 155.8E	PCN 6	T1.5/1.5	INIT OBS	PGTW
2	142023	12.3N 154.1E	PCN 5			PGTW
3	152002	11.6N 153.2E	PCN 5	T0.5/0.5	INIT OBS EXP LLCC	PGTW
4	160300	11.5N 152.2E	PCN 6	T1.5/1.5	INIT OBS	PGTW
5	161600	7.1N 150.4E	PCN 6	T1.0/1.0	INIT OBS	PGTW
6	161800	7.4N 150.2E	PCN 6			PGTW
* 7	162100	7.4N 151.4E	PCN 6			PGTW
8	170821	9.1N 148.1E	PCN 6			PGTW
* 9	171200	6.9N 147.6E	PCN 6		ULCC FIX	PGTW
* 10	171243	6.8N 147.7E	PCN 6		ULCC FIX	PGTW
11	171822	9.6N 146.3E	PCN 6	T1.0/1.0-/S0.0/26HRS	ULCC FIX	PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN- DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	170600	8.7N 148.5E	1500FT		998	25 170 30	230 28 170 30	1 5			+27 +27 +20 25	1

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON THAD
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT	BEST TRACK WIND	WARNING POSIT	WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT	24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT	48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT	72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
101806Z	8.7 150.1	20	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
101812Z	9.7 149.6	25	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
101818Z	10.8 149.1	30	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
101900Z	11.9 148.5	30	11.2 147.2	25.	87.	-5.	14.0 142.7	50.	255.	-5.	15.8 137.9	65.	487.	-35.	16.4 132.9	90.	900.	-30.
101906Z	13.1 147.9	35	13.0 147.9	35.	6.	0.	15.8 143.6	50.	166.	-15.	16.8 138.6	65.	456.	-45.	17.5 133.4	90.	951.	-30.
101912Z	14.3 147.4	40	14.1 147.1	45.	21.	5.	16.9 142.7	60.	182.	-15.	18.7 138.0	70.	438.	-45.	20.7 134.2	95.	935.	-20.
101918Z	15.5 146.7	45	15.4 146.1	45.	35.	0.	18.9 141.5	60.	179.	-30.	21.3 137.0	70.	447.	-50.	24.9 135.0	90.	911.	-20.
102000Z	16.7 146.1	55	16.7 145.9	55.	11.	0.	21.0 143.3	70.	49.	-30.	25.6 143.2	70.	112.	-50.	29.9 147.6	65.	308.	-35.
102006Z	17.8 145.6	65	17.8 145.7	65.	6.	0.	22.0 144.2	75.	50.	-35.	26.0 144.5	80.	150.	-40.	30.2 149.2	75.	383.	-15.
102012Z	19.0 145.0	75	19.0 145.4	70.	23.	-5.	23.2 144.4	80.	49.	-35.	26.4 145.2	85.	241.	-30.	31.2 152.4	70.	369.	-10.
102018Z	20.3 144.3	90	20.3 144.5	80.	11.	-10.	24.3 143.4	85.	52.	-35.	29.3 147.0	80.	219.	-30.	33.2 155.9	65.	328.	-10.
102100Z	21.6 143.9	100	21.8 144.0	100.	13.	0.	25.9 146.7	80.	191.	-40.	35.2 153.8	70.	212.	-30.	0.0 0.0	0.	-0.	0.
102106Z	22.7 143.7	110	22.9 143.6	95.	13.	-15.	28.2 144.8	75.	124.	-45.	33.0 151.7	65.	202.	-25.	0.0 0.0	0.	-0.	0.
102112Z	23.7 143.7	115	23.6 143.7	95.	6.	-20.	28.0 145.8	80.	173.	-35.	33.6 153.6	60.	251.	-20.	0.0 0.0	0.	-0.	0.
102118Z	24.9 144.1	120	24.8 144.0	120.	8.	0.	29.7 147.9	90.	168.	-20.	34.9 157.7	75.	212.	0.	0.0 0.0	0.	-0.	0.
102200Z	26.1 145.2	120	26.0 145.1	115.	8.	-5.	31.9 152.9	85.	19.	-15.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
102206Z	27.3 146.9	120	27.2 146.7	110.	12.	-10.	33.0 155.6	80.	25.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
102212Z	28.6 149.0	115	28.6 149.0	100.	0.	-15.	34.1 160.1	75.	85.	-5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
102218Z	30.1 151.1	110	30.2 151.2	95.	8.	-15.	35.7 163.1	65.	59.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
102300Z	31.7 153.2	100	31.5 153.0	110.	16.	10.	37.1 164.5	70.	110.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
102306Z	33.4 155.7	90	33.2 155.2	100.	28.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
102312Z	34.6 158.5	80	34.8 157.9	90.	32.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
102318Z	35.3 162.0	75	35.9 161.1	75.	57.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
102400Z	35.5 165.6	70	35.5 165.5	75.	5.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	19.	114.	286.	635.	16.	114.	286.	635.
AVG RIGHT ANGLE ERROR	18.	86.	178.	319.	14.	86.	178.	319.
AVG INTENSITY MAGNITUDE ERROR	7.	22.	33.	21.	7.	22.	33.	21.
AVG INTENSITY BIAS	-3.	-22.	-33.	-21.	-3.	-22.	-33.	-21.
NUMBER OF FORECASTS	21	17	12	8	20	17	12	8

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2362. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 17. KNOTS

TYPHOON THAD
FIX POSITIONS FOR CYCLONE NO. 24

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	172342	8.0N 150.4E	PCN 5	T1.0/1.0	INIT OBS ULCC FIX	PGTW
2	180525	9.0N 149.7E	PCN 6			PGTW
3	180759	8.7N 150.2E	PCN 6		ULCC FIX	PGTW
4	181200	9.2N 149.7E	PCN 6		ULCC FIX	PGTW
5	181223	9.6N 149.5E	PCN 6		ULCC FIX	PGTW
6	181809	10.5N 148.8E	PCN 6	T2.0/2.0 /D1.0/24HRS	ULCC FIX	PGTW
* 7	182039	10.5N 147.5E	PCN 6		ULCC FIX	PGTW
* 8	182201	10.5N 147.2E	PCN 6		ULCC FIX	PGTW
9	182321	11.9N 147.5E	PCN 6		ULCC FIX	PGTW
* 10	190103	11.5N 146.5E	PCN 5	T2.0/2.0 /D1.0/25HRS		PGTW
* 11	190600	13.3N 146.6E	PCN 6			PGTW
12	190919	13.8N 147.0E	PCN 6			PGTW
13	191202	13.8N 146.8E	PCN 4			PGTW
14	191600	15.1N 146.4E	PCN 6			PGTW
15	191757	16.2N 146.4E	PCN 4	T3.0/3.0 /D1.0/24HRS		PGTW
16	192018	16.4N 146.2E	PCN 4			PGTW
17	192137	16.7N 145.6E	PCN 3			PGTW
18	200043	16.8N 146.2E	PCN 3	T3.5/3.5 /D1.5/24HRS		PGTW
19	200300	17.2N 145.9E	PCN 4			PGTW
20	200641	17.8N 145.9E	PCN 3			PGTW
21	200858	18.5N 145.5E	PCN 4			PGTW
22	201200	18.9N 145.4E	PCN 4			PGTW
23	201304	19.1N 145.1E	PCN 4			PGTW
24	201600	20.1N 144.5E	PCN 4			PGTW
25	201800	20.3N 143.7E	PCN 4	T5.0/5.0 /D2.0/24HRS		PGTW
26	201957	20.9N 144.0E	PCN 2			PGTW
27	202112	21.1N 144.0E	PCN 2			PGTW
28	210000	21.6N 143.9E	PCN 2			PGTW
29	210023	21.6N 143.8E	PCN 1	T5.5/5.5-/D2.0/24HRS		PGTW
30	210300	22.2N 143.7E	PCN 2			PGTW
31	210600	22.8N 143.6E	PCN 2			PGTW
32	210629	22.8N 143.7E	PCN 2			PGTW
33	210837	23.1N 143.5E	PCN 2			PGTW
34	210950	23.4N 143.8E	PCN 4			PGTW
35	211200	23.6N 143.8E	PCN 2		EYE DIA 30NM	PGTW
36	211303	23.7N 143.7E	PCN 1			PGTW
37	211600	24.3N 144.0E	PCN 2			PGTW
38	211800	24.9N 144.2E	PCN 2	T6.5/6.5-/D1.5/24HRS		PGTW
39	211914	25.1N 144.4E	PCN 1			PGTW
40	212100	25.6N 144.6E	PCN 2			PGTW
41	212223	25.6N 145.0E	PCN 2			PGTW
42	220003	26.0N 145.3E	PCN 2	T6.0/6.0-/D0.5/24HRS	EYE FIX	PGTW
43	220300	26.6N 145.7E	PCN 2			PGTW
44	220600	27.2N 146.7E	PCN 2			PGTW
45	220616	27.3N 147.0E	PCN 2			PGTW
46	220815	27.4N 147.2E	PCN 2			PGTW
47	220900	27.8N 147.8E	PCN 2			PGTW
48	220926	28.1N 148.1E	PCN 2			PGTW
49	221200	28.6N 149.2E	PCN 4			PGTW
50	221243	28.8N 149.1E	PCN 1		EYE FIX	PGTW
51	221600	29.4N 150.5E	PCN 6		ULCC FIX	PGTW
52	221800	30.3N 151.3E	PCN 6	T4.5/5.5 /W1.5/24HRS		PGTW
* 53	222204	32.0N 153.6E	PCN 6		ULCC FIX	PGTW
54	222342	31.9N 153.0E	PCN 5	T4.5/6.0 /W1.5/24HRS		PGTW
55	222342	32.6N 153.1E	PCN 3	T3.5/3.5	INIT OBS	RODN
56	230300	33.4N 154.5E	PCN 6			PGTW
57	231600	34.9N 160.9E	PCN 6		EXP LLCC	PGTW
58	231800	35.2N 161.8E	PCN 6		EXP LLCC	PGTW
59	232141	35.5N 164.3E	PCN 4			PGTW
60	232322	35.5N 165.3E	PCN 5	T3.5/4.5 /W1.0/24HRS		PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM	ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	190728	13.6N 147.9E	1500FT		990	45 120 72	310 30 210 70	10 2				+24 +25 +24	2
2	192305	16.4N 146.2E	1500FT		981	60 320 10	180 59 090 10	6 1	CIRCULAR	15		+24 +25 +25	3
3	200154	17.0N 145.9E	700MB	2917	978	75 310 10	180 57 0 17	10 2	CIRCULAR	20		+11 +18 + 9	3
4	200543	17.7N 145.8E	700MB	2879		70 020 10	170 49 070 27	5 4	CIRCULAR	20		+ 6 +17 +12	4
5	200800	18.2N 145.5E	700MB	2866		90 020 15	100 46 010 37	3 5				+ 6 +15 +11	4
6	202039	20.8N 144.2E	700MB	2718	957	100 110 15	190 79 070 64	15 1	CIRCULAR	10		+16 +16 +12	6
7	202313	21.6N 144.0E	700MB	2662	948	100 220 10	210 75 360 10	10 1	CIRCULAR	8		+17 +19 +15	6
8	210743	22.9N 143.9E	700MB	2535	936	90 160 20	210 90 110 10	20 10	CONCENTRIC	10	25	+16 +18	7
9	211025	23.3N 143.6E	700MB	2536			080 76 350 12	10 10	CONCENTRIC	10	30	+16 +21	7
10	212052	25.5N 144.5E	700MB	2544		120 180 10	190 95 130 36	15 8	ELLIPTICAL	20	15 060	+13 +20 +14	8
11	212338	26.0N 145.1E	700MB	2552	935	110 110 10	320 99 240 30	6 8	CIRCULAR	20		+18 +17 +14	8
12	220536	27.2N 146.6E	700MB	2526	925	110 180 15	200 107 080 17	9 1	CIRCULAR	15		+19 +22	9
13	220806	27.8N 147.5E	700MB	2581	941		300 80 260 33	10 1	CIRCULAR	20		+17 +20	9
14	222310	31.4N 152.8E	700MB	2895	979	120 160 36	280 85 160 36	10 1				+19 +21 + 8	10

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

SUPER TYPHOON VANESSA
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		BEST TRACK WIND	WARNING POSIT		WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT		24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT		48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT		72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
102200Z	7.5	159.2	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102206Z	8.1	157.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102212Z	8.6	156.4	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102218Z	9.1	154.9	30	9.5	154.3	30.	43.	0.	11.9	148.8	45.	91.	-15.	14.0	144.2	65.	155.	-20.	17.5	142.2	90.	419.	-40.
102300Z	9.4	153.4	35	9.4	153.9	30.	30.	-5.	11.5	148.9	50.	98.	-20.	13.9	144.3	70.	237.	-25.	17.5	142.3	90.	496.	-50.
102306Z	9.8	152.0	40	9.7	152.1	35.	8.	-5.	11.9	146.6	55.	59.	-20.	14.4	142.2	70.	212.	-40.	17.0	139.1	90.	377.	-60.
102312Z	10.1	150.5	50	10.2	150.7	45.	13.	-5.	12.3	145.3	65.	82.	-15.	14.4	140.7	75.	210.	-45.	16.2	137.0	90.	306.	-65.
102318Z	10.4	149.0	60	10.7	149.0	55.	18.	-5.	12.9	143.9	75.	106.	-10.	14.6	139.4	90.	227.	-40.	16.4	135.8	115.	282.	-35.
102400Z	10.8	147.4	70	10.6	147.6	70.	17.	0.	12.4	142.7	90.	137.	-5.	14.7	138.5	105.	263.	-35.	17.0	135.0	115.	270.	-30.
102406Z	11.3	145.8	75	11.2	146.1	75.	19.	0.	12.8	140.2	95.	95.	-15.	15.3	135.5	110.	164.	-40.	17.8	132.3	120.	143.	-20.
102412Z	11.8	144.0	80	12.0	144.1	75.	13.	-5.	14.1	137.7	95.	35.	-25.	16.1	133.0	110.	75.	-45.	18.4	129.3	120.	25.	-15.
102418Z	12.3	142.2	85	12.4	142.1	85.	8.	0.	14.9	135.7	105.	13.	-25.	16.9	131.1	115.	27.	-35.	18.6	127.1	125.	141.	-10.
102500Z	12.8	140.4	95	12.8	140.4	90.	0.	-5.	14.8	134.7	100.	50.	-40.	16.7	130.5	115.	32.	-30.	19.6	128.7	130.	75.	0.
102506Z	13.4	138.7	110	13.4	138.8	110.	6.	0.	15.3	133.1	120.	33.	-30.	17.7	129.7	130.	13.	-10.	20.5	128.7	135.	95.	10.
102512Z	14.1	137.1	120	14.0	137.3	125.	13.	5.	15.6	132.6	140.	57.	-15.	18.4	128.7	130.	46.	-5.	23.0	128.6	120.	147.	0.
102518Z	14.8	135.5	130	15.0	135.6	130.	13.	0.	17.8	130.4	140.	83.	-10.	21.2	128.0	130.	116.	-5.	25.2	131.0	120.	158.	5.
102600Z	15.3	134.0	140	15.5	134.0	140.	12.	0.	18.9	128.8	140.	133.	-5.	23.3	128.4	125.	173.	-5.	27.5	133.8	105.	241.	-5.
102606Z	15.7	132.7	150	16.2	132.6	140.	31.	-10.	19.7	128.1	140.	145.	0.	24.1	129.1	125.	171.	0.	28.4	134.6	105.	263.	-5.
102612Z	16.0	131.7	155	16.3	131.6	155.	19.	0.	18.8	127.8	145.	91.	10.	23.3	128.5	130.	158.	10.	28.2	134.2	115.	276.	10.
102618Z	16.5	130.9	150	16.7	130.8	155.	13.	5.	19.2	127.6	145.	101.	10.	23.7	128.8	130.	204.	15.	28.2	136.0	115.	251.	20.
102700Z	17.2	130.3	145	17.1	130.3	145.	6.	0.	20.0	128.0	130.	92.	0.	24.6	130.0	115.	234.	5.	29.2	137.6	100.	289.	20.
102706Z	17.9	129.8	140	17.9	129.8	140.	0.	0.	21.1	127.9	130.	124.	5.	25.5	131.2	115.	273.	5.	29.8	138.9	100.	401.	30.
102712Z	18.8	129.4	135	18.6	129.3	135.	13.	0.	22.7	128.2	125.	164.	5.	26.7	133.0	110.	289.	5.	0.0	0.0	0.	-0.	0.
102718Z	19.7	129.3	135	19.6	129.1	135.	13.	0.	23.8	129.1	125.	190.	10.	27.8	135.0	110.	293.	15.	0.0	0.0	0.	-0.	0.
102800Z	20.6	129.5	130	20.6	129.3	135.	11.	5.	24.8	130.7	120.	202.	10.	28.7	136.8	105.	328.	25.	0.0	0.0	0.	-0.	0.
102806Z	21.4	130.1	125	21.3	130.2	125.	8.	0.	25.2	135.1	110.	78.	0.	28.7	143.0	100.	208.	30.	0.0	0.0	0.	-0.	0.
102812Z	22.2	131.1	120	22.3	131.2	120.	8.	0.	26.7	138.0	110.	90.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102818Z	22.9	132.4	115	23.2	132.4	115.	18.	0.	27.8	140.4	100.	78.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102900Z	23.5	134.1	110	23.5	134.2	120.	6.	10.	25.7	143.3	95.	157.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102906Z	24.2	136.0	110	24.2	136.2	115.	11.	5.	27.2	147.2	90.	183.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102912Z	25.2	138.1	105	25.1	138.0	105.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102918Z	26.5	140.3	95	26.4	140.3	95.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103000Z	28.3	143.0	80	28.0	143.1	90.	19.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103006Z	30.2	146.6	70	30.3	147.0	75.	22.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	14.	102.	179.	245.	13.	102.	179.	245.
AVG RIGHT ANGLE ERROR	11.	68.	106.	165.	10.	68.	106.	165.
AVG INTENSITY MAGNITUDE ERROR	3.	13.	21.	23.	3.	13.	21.	23.
AVG INTENSITY BIAS	0.	-6.	-12.	-13.	0.	-6.	-12.	-13.
NUMBER OF FORECASTS	31	27	23	19	30	27	23	19

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 3125. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 16. KNOTS

SUPER TYPHOON VANESSA
FIX POSITIONS FOR CYCLONE NO. 25

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	201200	3.9N 162.5E	PCN 6			PGTW
2	201600	4.1N 162.4E	PCN 6			PGTW
3	210000	4.4N 162.2E	PCN 6	T1.0/1.0	INIT OBS	PGTW
4	210300	4.9N 162.4E	PCN 6		ULCC FIX	PGTW
5	210600	5.2N 161.7E	PCN 6			PGTW
6	220003	7.4N 159.1E	PCN 6	T2.0/2.0 /D1.0/24HRS		PGTW
7	220300	7.7N 158.6E	PCN 6		ULCC FIX	PGTW
8	220600	8.1N 158.1E	PCN 6		ULCC FIX	PGTW
9	220816	8.3N 157.6E	PCN 6		ULCC FIX	PGTW
10	221200	8.8N 156.0E	PCN 6			PGTW
11	221243	8.7N 155.7E	PCN 5			PGTW
12	221600	9.4N 154.6E	PCN 6	T2.5/2.5	INIT OBS	PGTW
* 13	221719	9.2N 153.7E	PCN 6			PGTW
* 14	221800	9.1N 153.8E	PCN 6			PGTW
15	222024	9.5N 154.4E	PCN 4			PGTW
16	222342	9.0N 153.8E	PCN 5	T3.0/3.0 /D1.0/24HRS		PGTW
17	230300	9.6N 153.0E	PCN 6			PGTW
18	230604	9.8N 152.0E	PCN 5			PGTW
19	230754	9.8N 151.4E	PCN 4			PGTW
20	230902	10.1N 151.2E	PCN 4			PGTW
21	231223	10.2N 150.6E	PCN 3			PGTW
22	231600	10.5N 149.6E	PCN 4	T4.0/4.0 /D1.5/24HRS		PGTW
23	231849	10.7N 148.7E	PCN 3			PGTW
24	232035	10.4N 147.9E	PCN 3			PGTW
25	232322	10.5N 147.5E	PCN 5			PGTW
26	240300	11.4N 147.2E	PCN 4	T5.0/5.0 /D2.0/24HRS		PGTW
27	240551	11.5N 145.9E	PCN 3			PGTW
28	240551	11.7N 145.3E	PCN 3	T4.0/4.0	INIT OBS	RODN
29	240838	11.9N 145.0E	PCN 4			PGTW
30	240915	11.8N 145.1E	PCN 4			PGTW
31	241203	12.0N 144.0E	PCN 4			PGTW
32	241600	12.2N 142.7E	PCN 4			PGTW
33	241836	12.4N 141.8E	PCN 4	T5.0/5.0 /D1.0/26HRS		PGTW
* 34	241836	13.1N 142.1E	PCN 4			RPMK
35	242013	12.3N 141.3E	PCN 3			PGTW
36	242117	12.4N 141.0E	PCN 3			PGTW
37	250043	12.8N 140.2E	PCN 2	T5.5/5.5 /D0.5/21HRS		PGTW
38	250300	13.1N 139.7E	PCN 2			PGTW
39	250539	13.7N 138.4E	PCN 2			PGTW
40	250900	13.6N 138.0E	PCN 2			PGTW
41	250955	14.0N 138.0E	PCN 2			PGTW
42	251200	14.3N 137.5E	PCN 2			PGTW
43	251323	14.3N 136.9E	PCN 2			PGTW
44	251600	14.7N 136.1E	PCN 2	T6.5/6.5 /D1.5/22HRS		PGTW
45	251800	14.9N 135.6E	PCN 2			PGTW
46	251823	15.1N 135.3E	PCN 2			RODN
47	251823	14.8N 135.6E	PCN 2			PGTW
48	252100	15.2N 135.0E	PCN 2			PGTW
49	252133	15.2N 134.8E	PCN 2			PGTW
50	252233	15.2N 134.5E	PCN 2			PGTW
51	260023	15.5N 133.5E	PCN 1	T7.0/7.0	INIT OBS	RODN
52	260023	15.5N 133.8E	PCN 1	T7.0/7.0 /D1.5/24HRS		PGTW
53	260300	15.8N 133.3E	PCN 2			PGTW
54	260703	15.9N 132.6E	PCN 1			PGTW
55	260900	16.0N 132.2E	PCN 2			PGTW
56	260931	16.0N 131.9E	PCN 1			PGTW
57	261200	16.0N 131.8E	PCN 2			PGTW
58	261304	16.0N 131.6E	PCN 2			PGTW
59	261600	16.2N 131.3E	PCN 2	T7.0/7.0-/D0.5/24HRS		PGTW
60	261800	16.4N 131.1E	PCN 2			PGTW
61	262100	16.8N 130.8E	PCN 2			RODN
62	262100	16.7N 130.8E	PCN 2			PGTW
63	262112	16.8N 130.8E	PCN 2			RODN
64	262112	16.7N 130.8E	PCN 2			PGTW
65	262209	17.0N 130.7E	PCN 2			PGTW
66	270000	17.3N 130.4E	PCN 2			PGTW
67	270144	17.4N 130.5E	PCN 2			RODN
68	270144	17.4N 130.3E	PCN 1	T7.0/7.0-/S0.0/25HRS	EYE DIA 9NM	PGTW
69	270300	17.6N 130.1E	PCN 2		EYE DIA 9NM	PGTW
70	270656	18.0N 129.8E	PCN 1			PGTW
71	270952	18.4N 129.5E	PCN 2			PGTW
72	271048	18.6N 129.4E	PCN 2			PGTW
73	271200	18.8N 129.5E	PCN 2			PGTW
74	271425	18.9N 129.4E	PCN 2			PGTW

75	271600	19.4N 129.4E	PCN 2	T6.5/7.0 /W0.5/24HRS			
76	271800	19.7N 129.4E	PCN 2				PGTW
77	271940	20.0N 129.3E	PCN 2				PGTW
78	271940	20.0N 129.5E	PCN 2				PGTW
79	272051	20.0N 129.2E	PCN 1				RPMK
80	272326	20.6N 129.5E	PCN 2				PGTW
81	272326	20.5N 129.6E	PCN 2	T6.5/6.5			PGTW
82	280124	20.7N 129.6E	PCN 1	T5.5/6.5 /W1.5/24HRS	INIT OBS		RODN
83	280124	20.8N 129.6E	PCN 1		EYE DIA 6NM		PGTW
84	280300	20.9N 129.8E	PCN 2				RODN
85	280643	21.4N 130.3E	PCN 1		EYE DIA 18NM		PGTW
86	280931	21.9N 130.8E	PCN 1		EYE DIA 12NM		PGTW
87	281023	22.3N 131.0E	PCN 1				PGTW
88	281200	22.4N 131.1E	PCN 2				PGTW
89	281405	22.5N 131.5E	PCN 1				PGTW
90	281600	22.8N 131.9E	PCN 2	T5.0/6.0 /W1.5/24HRS			PGTW
91	281800	23.0N 132.4E	PCN 2				PGTW
92	281928	23.0N 132.8E	PCN 1				PGTW
93	282100	23.4N 133.2E	PCN 2				PGTW
94	282301	23.3N 133.9E	PCN 6	T5.0/6.0 /W1.5/22HRS			PGTW
95	282302	23.4N 133.9E	PCN 1				RODN
96	290000	23.4N 134.0E	PCN 2				PGTW
97	290104	23.5N 134.5E	PCN 1	T4.5/5.5 /W1.0/24HRS			PGTW
98	290300	23.8N 134.9E	PCN 2				PGTW
99	290630	24.2N 136.3E	PCN 2				PGTW
100	290900	24.6N 137.0E	PCN 4				PGTW
101	290910	24.6N 137.0E	PCN 4		ULCC FIX		PGTW
102	290959	24.8N 137.5E	PCN 4				PGTW
103	291200	25.1N 138.1E	PCN 4				PGTW
104	291344	25.5N 139.0E	PCN 3				PGTW
105	291600	26.5N 139.5E	PCN 6		ULCC FIX		PGTW
106	291800	26.7N 140.2E	PCN 6	T4.0/5.0 /W1.0/26HRS			PGTW
107	291915	26.8N 140.7E	PCN 5		ULCC FIX		PGTW
108	292000	26.9N 141.3E	PCN 3				PGTW
109	292237	27.5N 142.5E	PCN 4				PGTW
110	300044	28.3N 143.3E	PCN 4	T3.5/4.5 /W1.0/24HRS			PGTW
111	300618	30.5N 147.4E	PCN 4		ULCC 31.2N 147.7E		PGTW
112	300848	31.0N 147.8E	PCN 6				PGTW
113	301200	32.7N 151.2E	PCN 6		ULCC 34.7N 152.3E		PGTW
114	301800	34.5N 154.5E	PCN 6				PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM/	ORIEN-TATION	EYE TEMP (C) OUT/	IN/	DP/SST	MSN NO.
1	230518	9.6N 152.3E	1500FT		996	35 120 40	050 35 350 40	6 2				+25	+25	+22	1
2	230751	9.8N 151.6E	1500FT		996	35 060 30	080 56 300 90	10 2				+24	+25	+22	1
3	232054	10.5N 148.2E	700MB	2971		65 320 20	200 60 140 15	6 5	CIRCULAR	45		+18	+21	+10	3
4	232345	10.6N 147.6E	700MB	2971	984	80 250 15	150 60 040 30	8 5	CIRCULAR	45		+15	+21	+11	3
5	240547	11.2N 146.0E	700MB	2963	985	55 130 30	080 55 340 100	4 3	CIRCULAR	20		+13	+14	+11	4
6	240825	11.7N 145.1E	700MB	2953	983	75 060 30	130 75 060 56	4 5	ELLIPTICAL	40 20	090	+12	+14	+10	4
7	242032	12.3N 141.5E	700MB	2797	967	90 040 26	140 74 040 32	10 8	CIRCULAR	35		+12	+14		5
8	250556	13.3N 138.8E	700MB	2500	934	120 330 10	360 100 230 10	6 1	ELLIPTICAL	25 20	360	+12	+25	+ 6	6
9	250833	13.5N 138.2E	700MB	2365	916	130 060 10	180 110 110 28	6 1	CIRCULAR	15		+16	+28	+ 5	6
10	252318	15.4N 134.2E	700MB	2160	892	130 300 8	030 81 310 13	5 3	CIRCULAR	10		+13	+31		7
11	260049	15.5N 133.9E	700MB	2107		130 040 07	200 107 100 10	10 2	CIRCULAR	10		+14	+29		7
12	260841	15.8N 132.2E	700MB	2026	883	130 030 10	100 115 020 19	6 1	CIRCULAR	10		+13	+30	+ 7	9
13	261114	15.9N 131.8E	700MB	2022	879		200 115 130 10	5 1	CIRCULAR	10		+16	+29	+ 8	9
14	262031	16.6N 130.6E	700MB	2096	887	45 320 90	080 122 020 15	8 1	CONCENTRIC	10 40		+16	+20	+16	10
15	262326	17.1N 130.4E	700MB	2164	894	75 120 90	280 110 210 04	6 5	CONCENTRIC	10 30		+17	+12	+17	10
16	270830	18.3N 129.6E	700MB	2244		50 090 16	290 109 220 43	3 2	CIRCULAR	20		+16	+19	+18	11
17	271106	18.6N 129.3E	700MB	2237	904		190 100 120 60	10 1	CONCENTRIC	20 40		+15	+18	+18	11
18	280218	20.7N 129.6E	700MB	2338	915	65 240 60	310 98 240 7	10 5	CIRCULAR	15		+12	+18	+18	13
19	280831	21.8N 130.7E	700MB	2380	919	50 300 120	010 75 300 9	10 1	CIRCULAR	30		+17	+20	+16	14
20	281135	22.3N 131.0E	700MB	2454	929		230 105 120 70	10 2	CIRCULAR	20		+16	+19	+13	14
21	282032	23.3N 133.2E	700MB	2356			090 80 020 8	8 2	CIRCULAR	15		+13	+17	+14	15
22	282334	23.5N 134.1E	700MB	2418	923	90 160 30	330 110 270 17	6 1	CIRCULAR	15		+13	+15	+15	15
23	290910	24.6N 137.2E	700MB	2528	936	110 150 54	220 111 150 49	8 2				+13	+16	+15	16
24	291156	25.2N 138.0E	700MB	2572	940		210 97 250 25	8 2				+16	+19	+15	16
25	292049	27.2N 141.3E	700MB	2730	957	90 250 23	240 105 160 57	5 10	CIRCULAR	50		+14	+22		17
26	292352	28.3N 142.9E	700MB	2761	961	90 210 30	300 78 030 12	7 10				+14	+19		17
27	301054	32.3N 150.2E	700MB	2867			260 92 220 115	10 10				+14	+22		19

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	240226	11.5N 146.1E	LAND						13.5N 144.9E	
2	240235	11.3N 146.7E	LAND	GOOD				MOV 1220	13.6N 144.9E	91218
3	240306	11.7N 145.7E	LAND					MOVG NW	13.5N 144.8E	91212
4	240400	11.5N 145.8E	LAND						13.5N 144.8E	91212
5	240615	11.6N 145.9E	LAND		CIRCULAR	30		EYE MOSTLY OPN	13.6N 144.9E	91218
6	240735	11.5N 145.8E	LAND	GOOD					13.6N 144.9E	91218
7	240835	11.6N 145.3E	LAND	FAIR					13.6N 144.9E	91218
8	240935	11.7N 145.3E	LAND	FAIR					13.6N 144.9E	91218
9	241035	11.9N 144.6E	LAND	FAIR					13.6N 144.9E	91218
10	241235	12.2N 143.9E	LAND	FAIR					13.6N 144.9E	91218
11	241335	12.1N 143.7E	LAND	GOOD	ELLIPTICAL	40			13.6N 144.9E	91218
12	241435	12.0N 143.5E	LAND	GOOD	ELLIPTICAL	35			13.6N 144.9E	91218
13	241535	12.1N 143.3E	LAND	FAIR					13.6N 144.9E	91218

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON WARREN
BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS					ERRORS		
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
102300Z	11.1	116.0	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102306Z	11.6	116.2	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102312Z	12.0	116.3	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102318Z	12.4	116.3	35	12.2	115.9	30.	26.	-5.	12.9	114.8	50.	83.	0.	13.3	113.2	55.	140.	-5.	13.9	111.1	60.	216.	-5.
102400Z	12.9	116.2	35	12.8	115.7	30.	30.	-5.	13.2	115.0	45.	50.	-5.	13.8	114.0	55.	63.	-5.	14.4	112.4	60.	134.	-5.
102406Z	13.6	116.1	40	13.4	116.2	45.	13.	5.	14.1	115.7	60.	18.	5.	14.8	114.8	70.	13.	5.	15.5	113.2	80.	105.	15.
102412Z	14.2	115.7	45	14.5	116.1	50.	48.	5.	14.6	115.6	60.	12.	5.	15.9	114.5	70.	48.	5.	16.8	112.7	80.	192.	15.
102418Z	14.2	115.3	50	14.3	115.3	55.	6.	5.	15.4	113.5	70.	110.	10.	16.6	111.3	80.	211.	15.	18.0	109.3	80.	435.	15.
102500Z	13.8	115.6	50	14.0	115.5	60.	13.	10.	15.0	114.5	70.	27.	10.	15.8	113.2	80.	91.	15.	16.9	111.4	80.	339.	15.
102506Z	14.2	116.0	55	14.5	115.8	60.	21.	5.	15.4	114.8	70.	32.	5.	16.4	113.5	75.	109.	10.	17.4	111.6	80.	373.	15.
102512Z	14.6	115.8	55	14.9	115.2	60.	39.	5.	16.5	114.0	70.	91.	5.	18.1	112.1	75.	263.	10.	19.5	110.0	75.	521.	10.
102518Z	14.6	115.2	60	15.0	115.0	55.	27.	-5.	16.0	113.8	45.	71.	-20.	16.9	112.3	45.	251.	-20.	17.5	111.2	45.	431.	-20.
102600Z	14.6	114.7	60	15.3	115.3	55.	55.	-5.	16.4	114.8	45.	79.	-20.	17.4	114.1	45.	207.	-20.	18.2	113.2	45.	333.	-15.
102606Z	14.9	114.6	65	14.6	114.4	65.	21.	0.	15.1	113.3	70.	99.	5.	15.7	112.3	75.	318.	10.	16.3	111.2	80.	385.	25.
102612Z	15.1	114.6	65	15.0	114.3	65.	18.	0.	15.0	114.3	65.	85.	0.	16.2	112.9	75.	307.	10.	16.8	112.3	75.	306.	20.
102618Z	15.1	114.6	65	15.5	114.3	65.	30.	0.	16.1	114.1	70.	138.	5.	17.2	113.8	70.	284.	5.	18.0	113.4	75.	259.	25.
102700Z	15.1	114.6	65	15.0	114.9	65.	18.	0.	16.1	114.6	70.	149.	5.	16.9	114.2	70.	247.	10.	17.5	113.6	75.	218.	30.
102706Z	15.3	115.0	65	15.5	115.0	65.	12.	0.	15.9	115.0	70.	163.	5.	16.9	114.4	76.	216.	21.	17.6	113.4	75.	213.	30.
102712Z	15.4	115.7	65	15.5	115.3	65.	24.	0.	16.5	116.1	70.	130.	5.	17.6	116.5	75.	142.	20.	18.7	116.6	75.	212.	35.
102718Z	15.5	116.4	65	15.6	115.5	65.	52.	0.	16.6	116.1	70.	148.	5.	17.8	116.5	75.	147.	25.	18.7	116.6	75.	245.	35.
102800Z	15.5	117.2	65	15.2	117.7	65.	39.	0.	16.3	121.9	45.	220.	-15.	20.0	125.3	55.	564.	10.	23.4	129.0	65.	989.	30.
102806Z	15.6	117.8	65	15.5	117.9	55.	8.	-10.	15.9	121.2	40.	199.	-15.	17.1	124.9	45.	506.	0.	19.9	129.4	55.	974.	25.
102812Z	15.7	118.2	65	15.7	118.1	55.	6.	-10.	16.7	119.3	45.	134.	-10.	18.0	118.6	50.	237.	10.	18.9	116.7	55.	373.	25.
102818Z	15.5	118.4	65	15.6	118.0	60.	24.	-5.	16.5	118.2	65.	96.	15.	17.4	116.7	65.	181.	25.	17.6	114.7	70.	286.	45.
102900Z	15.4	118.2	60	15.6	118.0	60.	17.	0.	16.0	118.0	65.	83.	20.	17.0	116.3	70.	183.	35.	17.6	114.4	75.	311.	50.
102906Z	15.4	117.8	55	15.5	117.8	60.	6.	5.	16.0	117.4	65.	73.	20.	16.2	115.4	70.	158.	40.	16.5	113.4	75.	259.	50.
102912Z	15.4	117.4	55	15.5	117.3	55.	8.	0.	15.7	115.5	50.	25.	10.	15.8	113.5	45.	118.	15.	0.0	0.0	0.	-0.	0.
102918Z	15.4	117.2	50	15.4	116.5	55.	29.	5.	15.6	114.7	50.	36.	10.	15.6	112.7	45.	127.	20.	0.0	0.0	0.	-0.	0.
103000Z	15.4	116.7	45	15.4	116.6	50.	6.	5.	15.4	115.0	45.	63.	10.	15.9	113.0	45.	182.	20.	0.0	0.0	0.	-0.	0.
103006Z	15.4	116.3	45	15.4	116.2	50.	6.	5.	15.5	114.5	45.	92.	15.	16.0	113.0	45.	221.	20.	0.0	0.0	0.	-0.	0.
103012Z	15.3	115.6	40	15.4	115.8	45.	13.	5.	15.5	114.1	45.	121.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103018Z	15.0	114.8	40	15.4	115.3	45.	38.	5.	15.5	113.3	40.	137.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103100Z	14.8	114.1	35	14.7	114.1	30.	6.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103106Z	14.4	113.4	30	14.4	113.4	25.	0.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103112Z	14.0	112.7	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103118Z	13.6	112.0	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110100Z	13.3	111.4	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110106Z	13.0	110.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	21.	95.	205.	353.	22.	93.	215.	328.
AVG RIGHT ANGLE ERROR	9.	53.	128.	219.	9.	54.	139.	207.
AVG INTENSITY MAGNITUDE ERROR	4.	10.	15.	24.	4.	9.	13.	20.
AVG INTENSITY BIAS	0.	4.	11.	20.	1.	3.	9.	15.
NUMBER OF FORECASTS	31	29	27	23	30	26	22	18

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1111. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 5. KNOTS

TYPHOON WARREN
FIX POSITIONS FOR CYCLONE NO. 26

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	230300	11.5N 115.7E	PCN 4	T1.0/1.0	INIT OBS EXP LLCC	PGTW
2	230600	11.5N 116.1E	PCN 4		EXP LLCC	PGTW
3	230743	11.7N 116.4E	PCN 3	T1.5/1.5	INIT OBS EXP LLCC	RPMK
4	231200	12.0N 116.5E	PCN 6			PGTW
5	231600	12.2N 116.2E	PCN 6			PGTW
6	231800	12.4N 116.6E	PCN 6	T2.5/2.5	INIT OBS	PGTW
7	232030	12.5N 116.0E	PCN 5		ULCC FIX	RPMK
8	232100	12.6N 115.8E	PCN 6		ULCC FIX	PGTW
9	232216	12.7N 116.0E	PCN 3	T3.0/3.0	INIT OBS	RODN
10	232321	12.7N 115.3E	PCN 5			RODN
11	232322	12.6N 116.2E	PCN 5			RPMK
12	240245	13.0N 116.0E	PCN 5	T2.5/2.5 /D1.0/19HRS		RPMK
13	240300	13.2N 116.4E	PCN 4	T3.5/3.5 /D2.5/24HRS		PGTW
14	240722	13.1N 115.9E	PCN 3	T3.0/3.0 /D1.5/24HRS		RPMK
15	240733	13.4N 115.7E	PCN 6			PGTW
16	240900	13.7N 115.9E	PCN 6			PGTW
17	241056	13.8N 115.9E	PCN 5			RODN
18	241200	13.3N 115.2E	PCN 5			RPMK
19	241200	14.1N 115.8E	PCN 6			PGTW
* 20	241526	13.2N 115.1E	PCN 5			RPMK
21	241600	14.3N 115.3E	PCN 6			PGTW
22	241800	14.4N 115.0E	PCN 6	T4.0/4.0 /D1.5/24HRS		PGTW
23	242018	14.0N 115.1E	PCN 5			RPMK
24	242258	13.8N 115.4E	PCN 6			PGTW
* 25	250224	14.7N 116.5E	PCN 3	T4.0/4.0 /D1.0/28HRS		RODN
26	250721	14.8N 115.8E	PCN 4			PGTW
27	250721	14.8N 115.8E	PCN 3	T3.0/3.0+/S0.0/24HRS	EXP LLCC	RPMK
28	251034	14.6N 115.6E	PCN 3			RPMK
* 29	251136	14.9N 114.9E	PCN 3		EXP LLCC	RPMK
* 30	251136	14.0N 113.7E	PCN 4			RODN
31	251200	14.8N 115.3E	PCN 6			PGTW
* 32	251505	14.7N 114.5E	PCN 3			RODN
33	251600	15.0N 115.0E	PCN 6	T3.0/4.0+/W1.0/22HRS		PGTW
* 34	252005	15.0N 112.3E	PCN 5		ULCC FIX	RPMK
* 35	252315	15.3N 115.6E	PCN 3			RPMK
36	260000	14.6N 115.0E	PCN 6		EXP LLCC	PGTW
37	260205	14.5N 114.9E	PCN 3	T3.0/3.0 /S0.0/19HRS	EXP LLCC	RPMK
38	260300	14.8N 114.8E	PCN 6	T3.0/3.5 /S0.0/20HRS	EXP LLCC	PGTW
39	260600	15.0N 114.7E	PCN 4			PGTW
40	260900	15.6N 113.8E	PCN 6			PGTW
41	261112	15.0N 114.9E	PCN 3			RPMK
* 42	261112	13.9N 113.3E	PCN 6		ULCC FIX	RODN
43	261445	15.2N 115.2E	PCN 5			RPMK
44	261600	15.4N 115.6E	PCN 6	T2.5/3.0 /W0.5/24HRS		PGTW
45	261800	15.6N 115.0E	PCN 6			PGTW
* 46	262253	15.4N 115.4E	PCN 4	T3.5/4.0 /W0.5/21HRS	EXP LLCC	RODN
47	262350	15.0N 115.1E	PCN 3		EXP LLCC	RPMK
48	270144	15.2N 115.0E	PCN 3		EXP LLCC	PGTW
49	270144	15.2N 114.9E	PCN 4		EXP LLCC	RODN
50	270300	15.3N 115.2E	PCN 4	T3.0/3.0+/S0.0/24HRS	EXP LLCC	PGTW
51	270600	15.5N 115.0E	PCN 4		EXP LLCC	PGTW
52	270835	15.0N 115.1E	PCN 3		EXP LLCC	RPMK
53	270900	15.6N 115.4E	PCN 6		EXP LLCC	PGTW
54	271048	15.4N 115.7E	PCN 6			PGTW
55	271134	15.0N 115.0E	PCN 5	T3.0/3.0 /S0.0/31HRS		RPMK
* 56	272326	15.2N 117.9E	PCN 3	T3.5/3.5 /D0.5/15HRS		RPMK
57	272326	15.3N 117.0E	PCN 6			PGTW
58	272326	15.2N 117.6E	PCN 6			RODN
59	280124	15.3N 118.2E	PCN 5			PGTW
* 60	280124	15.3N 118.1E	PCN 3			RPMK
61	280300	15.4N 117.9E	PCN 6	T4.0/4.0-/D1.0/24HRS		PGTW
62	280600	15.8N 118.2E	PCN 6			PGTW
63	280825	15.4N 118.0E	PCN 5	T3.5/3.5-/D0.5/24HRS		RPMK

64	281112	15.6N 118.3E	PCN 5					RPMK
65	281112	15.3N 118.3E	PCN 4					RODN
66	281405	15.5N 118.0E	PCN 5					RPMK
67	281800	15.5N 118.3E	PCN 6	T4.0/4.0		INIT OBS		PGTW
68	281805	15.4N 118.1E	PCN 4					RPMK
69	281928	15.5N 118.4E	PCN 5					RPMK
70	282100	15.4N 118.3E	PCN 6					PGTW
71	282302	15.2N 117.5E	PCN 3	T4.0/4.0 /D0.5/24HRS				RPMK
72	282302	15.3N 117.7E	PCN 5					PGTW
* 73	290000	15.2N 116.9E	PCN 6					PGTW
74	290245	15.2N 117.6E	PCN 3					RPMK
75	290245	15.3N 117.9E	PCN 3					RODN
76	290300	15.4N 117.6E	PCN 6	T4.0/4.0 /S0.0/24HRS				PGTW
77	290600	15.5N 117.5E	PCN 6			ULCC FIX		PGTW
78	290812	15.4N 117.0E	PCN 3	T4.5/4.5 /D1.0/24HRS				RPMK
79	290900	15.9N 117.0E	PCN 6			ULCC FIX		PGTW
80	291140	15.2N 117.0E	PCN 5					RPMK
81	291140	15.5N 116.9E	PCN 6					RODN
82	291200	15.4N 116.8E	PCN 6					PGTW
83	291250	15.5N 116.8E	PCN 4					PGTW
84	291525	15.3N 116.8E	PCN 5					RPMK
85	291600	15.5N 116.6E	PCN 6	T3.5/4.0 /W0.5/22HRS				PGTW
86	291800	15.5N 116.2E	PCN 6					PGTW
87	292057	15.5N 115.9E	PCN 5					RPMK
88	300000	15.4N 116.9E	PCN 4					PGTW
89	300018	15.4N 116.6E	PCN 5	T3.5/3.5 /S0.0/22HRS				RODN
90	300019	15.6N 115.9E	PCN 5					RPMK
91	300225	15.5N 116.1E	PCN 3	T3.0/4.0+/W1.0/24HRS				RPMK
92	300600	15.4N 116.0E	PCN 4	T3.0/4.0 /W1.0/26HRS		EXP LLCC		PGTW
93	300759	15.3N 115.8E	PCN 3			EXP LLCC		RODN
94	300800	15.3N 115.9E	PCN 3	T3.0/4.0 /W1.0/30HRS		EXP LLCC		RPMK
95	300900	15.3N 115.9E	PCN 4			EXP LLCC		PGTW
96	301115	15.4N 115.9E	PCN 3					RPMK
97	301116	15.1N 115.4E	PCN 6					RODN
98	301505	15.2N 115.5E	PCN 3					RPMK
99	301600	15.2N 115.3E	PCN 6	T2.5/3.0 /W1.0/24HRS				PGTW
100	301800	15.1N 115.5E	PCN 6					PGTW
101	302044	15.2N 114.4E	PCN 5			EXP LLCC		RODN
102	302354	14.8N 114.5E	PCN 3					RPMK
103	310204	14.8N 113.6E	PCN 3	T2.5/3.5 /W1.0/26HRS				RODN
104	310205	14.9N 114.0E	PCN 3	T2.5/3.0 /W0.5/24HRS				RPMK
*105	310300	15.2N 114.7E	PCN 4					PGTW
106	310600	14.6N 113.6E	PCN 4	T1.5/2.5 /W1.5/24HRS				PGTW
107	312100	14.3N 112.0E	PCN 6					PGTW
108	010000	13.5N 111.5E	PCN 5					PGTW
109	010145	13.1N 111.1E	PCN 3	T1.5/2.0 /W1.0/24HRS		EXP LLCC		RPMK
110	010300	12.9N 111.0E	PCN 4			EXP LLCC		PGTW
111	011800	13.5N 109.7E	PCN 6					PGTW
112	020600	14.0N 105.0E	PCN 6			ULCC FIX		PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	250216	14.0N 115.8E	1500FT		985	50 360 40	230 47 180 24	12 5			+29 +29	1
2	260316	14.7N 114.5E	1500FT		980	65 200 90	100 60 050 37	4 5			+24 +26 +26	2
3	260551	14.5N 114.4E	700MB	2951	982	75 130 40	220 55 120 60	4 5			+17 +20 + 8	2
4	270032	14.9N 114.7E	700MB	2977		70 080 30	220 77 120 56	4 4			+21 +21	3
5	270302	15.3N 114.8E	700MB	2951	979	40 010 90	320 57 040 83	6 5				3
6	270951	15.4N 115.2E	1500FT		983	45 050 60	270 68 190 60	5 5			+22 +25 +19	4
7	271227	15.2N 115.5E	700MB	2892	976		240 59 130 86	5 5			+ 9 +18 +12	4
8	280257	15.5N 117.4E	700MB	2905	976	50 290 30	010 53 300 20	15 3			+24 +25	5
9	280601	15.7N 117.8E	700MB	2902		65 090 20	200 58 100 60	10 2			+ 7 +18	5
10	280957	15.7N 118.3E	700MB	2918		30 070 50	210 51 100 95	5 7			+12 +15 +13	6
11	281135	15.7N 118.1E	700MB	2929	976		310 60 240 15	8 10	CIRCULAR	35	+12 +17 +11	6
12	290941	15.5N 117.5E	1500FT		990	45 070 30	070 55 130 50	5 5			+22 +25 +23	7
13	291143	15.5N 117.3E	700MB	3003	984		290 52 220 75	5 5			+ 9 +15 +15	7
14	292045	15.4N 116.7E	700MB	3004			310 40 050 90	8 10			+13 +16 + 7	8
15	292333	15.3N 116.7E	1500FT		994	50 030 130	120 51 030 48	8 5			+23 +26 +23 28	8
16	300233	15.5N 116.0E	700MB	3071	995	50 330 105	070 44 330 55	5 5			+24 +25 +22 28	8
17	300856	15.4N 116.0E	1500FT		992	40 070 60	140 40 070 60	10 8			+24 +26 +24	9
18	301129	15.3N 115.3E	700MB	3056			100 42 360 100	10 10			+12 +15 + 6	9
19	301410	15.2N 115.1E	700MB	3057			200 42 110 45	10 10			+12 +15 + 8	9
20	302232	14.9N 114.4E	1500FT			25 180 30	240 39 180 15	15 7			+23 +23 +22	10
21	310128	14.6N 113.9E	1500FT			25 030 60	120 34 030 60	10 5			+23 +23 +23	10
22	310545	14.4N 113.5E	1500FT		999	30 060 45	290 34 020 60	6 10			+20 +24 +20 28	11

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	280500	15.2N 117.5E	LAND				1041/ /////		16.3N 120.6E	98321
2	280600	15.3N 117.8E	LAND				1042/ 57020		16.3N 120.6E	98321
3	280900	15.5N 118.0E	LAND				10412 49005	EYE 60 PCT OPN	16.3N 120.6E	98321
4	281200	16.1N 118.2E	LAND				///// /////		16.6N 120.3E	
5	281500	15.6N 117.8E	LAND				10212 42305	EYE 60 PCT CIR OPN NNW	16.3N 120.6E	98321
* 6	281800	15.6N 117.8E	LAND				///// /////		16.3N 120.6E	98321
7	281800	15.8N 118.4E	LAND				///// /////		16.6N 120.3E	
8	281900	15.5N 117.8E	LAND				10412 42405		16.3N 120.6E	98321
* 9	290100	15.4N 116.9E	LAND				4//// 52705		16.3N 120.6E	98321
* 10	290300	15.4N 117.3E	LAND				4//// 42704		16.3N 120.6E	98321
* 11	290400	15.4N 117.2E	LAND				10312 42705	EYE 60 PCT CIR OPN E	16.3N 120.6E	98321
* 12	290800	15.4N 116.9E	LAND				4//// 52705		16.3N 120.6E	98321

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	251800	15.0N 115.0E	055	005	SHIP

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON AGNES
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		WIND	WARNING POSIT		WIND	ERRORS DST	WIND	24 HOUR FORECAST POSIT		WIND	ERRORS DST	WIND	48 HOUR FORECAST POSIT		WIND	ERRORS DST	WIND	72 HOUR FORECAST POSIT		WIND	ERRORS DST	WIND
103012Z	3.0	146.1	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103018Z	3.3	145.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103100Z	3.6	145.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103106Z	3.9	145.3	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103112Z	4.4	144.9	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
103118Z	4.8	144.5	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110100Z	5.4	143.8	35	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110106Z	5.9	143.0	45	5.8	143.0	45.	6.	0.	7.8	139.6	65.	77.	5.	9.5	133.9	90.	8.	-10.	10.0	128.0	105.	56.	-10.
110112Z	6.8	141.8	50	6.7	141.7	50.	8.	0.	8.5	136.0	70.	77.	5.	9.0	130.1	90.	158.	-20.	9.0	124.1	100.	223.	-15.
110118Z	7.4	140.4	55	7.5	140.3	55.	8.	0.	9.6	134.7	75.	106.	-5.	10.2	128.7	95.	161.	-15.	10.3	122.6	80.	196.	-40.
110200Z	7.8	139.4	55	8.0	139.2	55.	17.	0.	9.7	133.7	75.	96.	-15.	10.3	127.0	95.	183.	-15.	11.7	121.8	80.	130.	-20.
110206Z	8.3	138.4	60	8.4	138.3	60.	8.	0.	9.8	133.3	80.	48.	-20.	10.4	126.8	100.	118.	-15.	11.8	121.6	80.	49.	-5.
110212Z	8.6	137.3	65	8.6	137.3	60.	0.	-5.	9.7	132.8	80.	8.	-30.	10.6	127.3	105.	13.	-10.	11.8	122.2	80.	82.	10.
110218Z	8.8	136.3	80	8.7	136.3	70.	6.	-10.	9.8	131.8	105.	24.	-5.	10.5	126.2	115.	48.	-5.	11.0	121.3	80.	130.	0.
110300Z	9.1	135.2	90	9.2	135.2	90.	6.	0.	10.3	130.3	125.	17.	15.	11.2	125.9	135.	113.	35.	12.2	121.5	80.	223.	-10.
110306Z	9.4	134.0	100	9.5	133.9	100.	8.	0.	10.6	128.9	130.	8.	15.	11.4	124.5	120.	124.	35.	12.6	120.2	75.	258.	-20.
110312Z	9.6	132.7	110	9.6	132.6	110.	6.	0.	10.7	127.8	130.	24.	15.	11.9	122.7	105.	112.	35.	13.2	118.9	65.	287.	-35.
110318Z	9.8	131.4	110	9.8	131.5	110.	8.	0.	10.9	126.4	130.	40.	10.	12.1	121.8	90.	141.	10.	13.7	117.5	70.	304.	-30.
110400Z	10.1	130.1	110	10.0	130.2	115.	8.	5.	11.1	125.5	125.	91.	25.	12.3	121.2	80.	205.	-10.	14.3	116.4	75.	299.	-25.
110406Z	10.5	128.8	115	10.4	128.9	115.	8.	0.	11.5	124.0	105.	94.	20.	12.8	119.7	70.	229.	-25.	13.8	114.4	80.	245.	-20.
110412Z	10.8	127.4	115	10.8	127.5	115.	6.	0.	12.0	123.1	100.	136.	30.	13.3	118.3	75.	252.	-25.	14.4	113.4	85.	256.	0.
110418Z	11.2	125.8	120	11.2	126.0	125.	12.	5.	12.7	120.5	70.	74.	-10.	13.9	115.8	80.	207.	-20.	14.8	111.1	95.	194.	45.
110500Z	11.5	124.0	100	11.6	124.2	110.	13.	10.	13.5	118.2	70.	83.	-20.	15.9	113.2	80.	172.	-20.	18.0	108.0	90.	223.	65.
110506Z	11.6	122.4	85	11.7	122.2	90.	13.	5.	13.3	116.3	80.	56.	-15.	15.7	111.3	90.	125.	-10.	18.3	106.3	100.	197.	80.
110512Z	11.8	120.8	70	11.9	120.8	75.	6.	5.	13.6	115.2	90.	82.	-10.	16.2	110.4	100.	145.	15.	19.0	105.6	110.	186.	95.
110518Z	12.1	119.4	80	12.2	119.5	90.	8.	10.	13.9	114.1	105.	111.	5.	16.7	109.4	110.	171.	60.	0.0	0.0	0.	-0.	0.
110600Z	12.2	117.7	90	12.2	117.7	80.	0.	-10.	13.6	112.2	90.	53.	-10.	14.9	108.1	70.	111.	45.	0.0	0.0	0.	-0.	0.
110606Z	12.5	115.8	95	12.6	116.1	85.	19.	-10.	13.6	110.7	95.	34.	-5.	14.2	106.8	50.	128.	30.	0.0	0.0	0.	-0.	0.
110612Z	12.9	114.0	100	12.9	114.1	95.	6.	-5.	14.3	107.0	50.	116.	-35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110618Z	13.3	112.3	100	13.2	112.4	90.	8.	-10.	14.7	106.7	40.	68.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110700Z	13.7	111.3	100	13.6	111.4	95.	8.	-5.	14.6	108.4	40.	128.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110706Z	13.9	110.2	100	13.8	110.3	100.	8.	0.	14.7	107.2	25.	138.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110712Z	14.2	109.0	85	14.2	109.1	85.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110718Z	14.3	107.8	50	14.2	108.1	60.	18.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110800Z	14.7	106.2	25	14.4	107.5	25.	78.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110806Z	15.3	104.9	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110812Z	16.3	104.0	15	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	11.	72.	139.	197.	9.	66.	141.	195.
AVG RIGHT ANGLE ERROR	7.	23.	54.	69.	7.	23.	56.	59.
AVG INTENSITY MAGNITUDE ERROR	4.	14.	22.	29.	4.	15.	21.	19.
AVG INTENSITY BIAS	-0.	-1.	3.	4.	-0.	-2.	-1.	-12.
NUMBER OF FORECASTS	28	25	21	18	27	23	19	15

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2666. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 12. KNOTS

TYPHOON AGNES
FIX POSITIONS FOR CYCLONE NO. 27

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	300848	2.8N 146.3E	PCN 6		ULCC FIX	PGTW
2	310300	3.8N 145.5E	PCN 6	T1.5/1.5	INIT OBS	PGTW
3	310600	3.8N 145.4E	PCN 6			PGTW
4	310827	4.3N 144.9E	PCN 5			PGTW
5	311200	4.4N 144.9E	PCN 6			PGTW
6	311600	4.9N 144.8E	PCN 6	T1.0/1.0	INIT OBS	PGTW
7	311800	5.2N 144.7E	PCN 6			PGTW
8	312107	5.3N 144.0E	PCN 5			PGTW
9	010003	5.4N 144.1E	PCN 5			PGTW
10	010300	5.8N 143.8E	PCN 6	T2.5/2.5 /D1.0/24HRS		PGTW
11	010553	5.7N 142.8E	PCN 5			PGTW
12	010846	6.5N 142.4E	PCN 6			PGTW
13	011200	6.9N 141.8E	PCN 4			PGTW
14	011243	6.9N 141.2E	PCN 6			RODN
15	011600	7.4N 141.0E	PCN 6			PGTW
16	011838	7.5N 140.3E	PCN 3	T3.5/3.5 /D2.5/27HRS		PGTW
17	012046	7.6N 140.0E	PCN 3			PGTW
18	020124	7.7N 139.7E	PCN 3	T3.5/3.5	INIT OBS	RPMK
19	020124	8.0N 139.3E	PCN 3		EYEWALL FRMG N-E-SE	PGTW
20	020300	8.1N 138.9E	PCN 4	T4.0/4.0 /D1.5/24HRS		PGTW
21	020722	8.5N 138.2E	PCN 3			PGTW
22	020926	8.4N 137.6E	PCN 4			PGTW
23	021003	8.6N 137.7E	PCN 6			PGTW
24	021200	8.5N 137.3E	PCN 6		ULCC FIX	PGTW
25	021224	8.6N 137.2E	PCN 6			PGTW
26	021600	8.6N 136.7E	PCN 2	T5.0/5.0 /D1.5/22HRS		PGTW
27	021800	8.6N 136.3E	PCN 2			PGTW
28	021825	8.7N 136.2E	PCN 4			PGTW
29	022025	9.1N 135.6E	PCN 4		ULCC FIX	PGTW
30	022242	9.2N 135.3E	PCN 2			PGTW
31	030104	9.3N 135.0E	PCN 1	T4.5/4.5 /D1.0/24HRS		RPMK
32	030104	9.2N 135.0E	PCN 1			PGTW
33	030300	9.4N 134.5E	PCN 4	T5.0/5.0 /D1.0/24HRS		PGTW
34	030710	9.4N 133.7E	PCN 1			PGTW
35	030905	9.5N 133.1E	PCN 1			PGTW
36	030939	9.6N 133.0E	PCN 2			PGTW
37	031200	9.5N 132.6E	PCN 2			PGTW
38	031345	9.5N 132.3E	PCN 2			PGTW
39	031600	9.5N 131.9E	PCN 2	T5.5/5.5 /D0.5/24HRS		PGTW
40	031800	9.7N 131.5E	PCN 2			PGTW
41	031954	9.8N 131.2E	PCN 2			PGTW
42	032100	9.9N 130.8E	PCN 2			PGTW
43	032145	9.9N 130.7E	PCN 2			PGTW
44	032217	10.0N 130.5E	PCN 1			PGTW
45	040044	10.0N 129.9E	PCN 1		EYE DIA 6NM	PGTW
46	040300	10.3N 129.5E	PCN 2	T5.5/5.5-/D0.5/24HRS	EYE FIX	PGTW
47	040600	10.5N 128.9E	PCN 2		EYE FIX	PGTW
48	040657	10.5N 128.6E	PCN 1	T6.0/6.0 /D1.5/30HRS	EYE DIA 6NM	RPMK
49	040657	10.6N 128.7E	PCN 1		EYE FIX	PGTW
50	040900	10.7N 128.2E	PCN 2		EYE DIA 11NM	PGTW
51	041025	10.7N 127.8E	PCN 1		EYE DIA 8NM	PGTW
52	041056	10.8N 127.8E	PCN 1		EYE FIX	RPMK
53	041056	10.8N 127.7E	PCN 1		EYE FIX	PGTW
54	041200	10.8N 127.5E	PCN 2		EYE DIA 6NM	PGTW
55	041325	11.1N 127.0E	PCN 2		EYE DIA 78NM	PGTW
56	041800	11.3N 125.7E	PCN 2	T6.5/6.5-/D1.0/26HRS	EYE DIA 12NM	PGTW
57	041942	11.3N 125.1E	PCN 1		EYE FIX	PGTW
58	042124	11.4N 124.5E	PCN 3			PGTW
59	042334	11.4N 124.2E	PCN 3			RPMK
60	042334	11.4N 123.9E	PCN 3	T5.0/5.0	INIT OBS	RODN
61	050000	11.5N 124.0E	PCN 4			PGTW
62	050205	11.5N 123.3E	PCN 1		EYE FIX	PGTW
63	050205	11.6N 123.5E	PCN 1	T5.0/6.0 /W1.0/19HRS	EYE DIA 25NM	RPMK
64	050300	11.7N 123.1E	PCN 2	T5.0/5.5+/W0.5/24HRS		PGTW

65	050645	11.6N 122.0E	PCN 3			PGTW
66	050645	11.4N 122.5E	PCN 3			RPMK
67	051004	11.8N 121.3E	PCN 3			PGTW
68	051200	11.9N 120.9E	PCN 4			PGTW
69	051446	11.9N 120.0E	PCN 3			RPMK
70	051600	12.1N 119.9E	PCN 4			PGTW
71	051800	12.3N 119.5E	PCN 4	T5.0/5.5+/W1.5/24HRS		PGTW
72	051928	12.5N 118.8E	PCN 3			PGTW
73	052100	12.6N 118.4E	PCN 4			PGTW
74	052244	12.4N 117.9E	PCN 1	T5.0/5.0+/S0.0/23HRS	EYE FIX	RODN
75	052310	12.4N 117.8E	PCN 1	T5.0/5.0 /S0.0/21HRS	EYE DIA 30NM	RPMK
76	052310	12.5N 117.8E	PCN 1			PGTW
77	060145	12.5N 117.3E	PCN 1	T5.0/5.0 /S0.0/27HRS	EYE FIX	RPMK
78	060145	12.6N 117.2E	PCN 1			PGTW
79	060300	12.5N 116.9E	PCN 2	T5.0/5.0 /S0.0/24HRS		PGTW
80	060600	12.7N 115.8E	PCN 2			PGTW
81	060814	12.8N 115.1E	PCN 1		EYE FIX	RPMK
82	060814	12.5N 115.6E	PCN 1		EYE FIX	RODN
83	060900	12.9N 114.9E	PCN 2			PGTW
84	061124	12.9N 113.9E	PCN 3			RPMK
85	061124	13.0N 114.5E	PCN 3			RODN
86	061200	12.8N 113.9E	PCN 2			PGTW
87	061426	13.0N 113.6E	PCN 4			PGTW
88	061800	13.4N 112.5E	PCN 4	T4.5/5.0-/W0.5/24HRS		PGTW
89	062059	13.4N 112.4E	PCN 3			RPMK
90	062223	13.5N 111.8E	PCN 3			RPMK
91	070000	13.6N 111.5E	PCN 2			PGTW
92	070027	13.8N 111.3E	PCN 2			RODN
93	070300	13.7N 111.1E	PCN 2	T5.5/5.5-/D0.5/24HRS		PGTW
94	070306	13.8N 110.9E	PCN 1	T5.5/5.5-/D0.5/25HRS	EYE DIA 30NM	RPMK
95	070600	13.8N 110.4E	PCN 2			PGTW
96	070801	14.0N 109.7E	PCN 3			RPMK
97	070900	14.1N 109.9E	PCN 2			PGTW
98	071103	14.4N 109.1E	PCN 1			RPMK
99	071200	14.2N 109.1E	PCN 2			PGTW
100	071547	14.2N 108.8E	PCN 5			RPMK
101	071600	14.0N 108.0E	PCN 4			PGTW
102	071800	14.2N 108.0E	PCN 6		ULCC FIX	PGTW
103	072046	14.2N 107.0E	PCN 6		ULCC FIX	RODN
104	072100	14.3N 106.5E	PCN 6		ULCC FIX	PGTW
105	080000	14.6N 106.0E	PCN 6		ULCC FIX	PGTW
106	080003	15.4N 106.2E	PCN 5			RPMK
107	080300	15.4N 105.2E	PCN 6			PGTW
108	081200	16.5N 103.8E	PCN 6			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN- DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	010513	5.8N 143.0E	700MB	3015	996	50 030 5	170 48 090 10	9 1	CIRCULAR	15	+10 +13 +10	1
2	012032	7.5N 140.0E	700MB	3021			130 56 060 29	5 5	ELLIPTICAL	30 20 240	+10 +14 + 7	3
3	012325	7.7N 139.5E	700MB	3025	993	55 340 15	050 60 340 30	4 5	ELLIPTICAL	15 10 250	+14 + 7	3
4	020535	8.2N 138.5E	700MB	2994	988	60 360 10	060 65 360 11	10 10				5
5	020831	8.4N 138.0E	1500FT		987	60 260 10	280 28 220 33	10 10	CIRCULAR	20	+26 +28 +27	5
6	022117	9.0N 135.7E	700MB	2913	980	90 360 20		10 5	CIRCULAR	15	+15 +17 +10	6
7	022321	9.1N 135.3E	700MB	2889	978	100 330 10		10 1	CIRCULAR	10	+13 +16 +10	6
8	030532	9.4N 134.0E	700MB	2692	956	100 030 5	150 92 070 27	5 1	CIRCULAR	10	+16 +19 +10	7
9	030746	9.5N 133.5E	700MB	2666	951	110 330 5	240 37 160 25	8 1	CIRCULAR	10	+12 +18 +10	7
10	032005	9.9N 131.0E	700MB	2542			150 95 090 12	10 1	CIRCULAR	8	+11 +19 +10	8
11	032303	10.0N 130.3E	700MB	2445	926	100 200 6	050 93 300 10	10 1	CIRCULAR	6	+ 9 +21 +10	8
12	040850	10.7N 128.1E	700MB	2513		100 090 10	190 106 070 14	5 1	CONCENTRIC	10 30	+ 8 +15 +14	9
13	041127	10.8N 127.5E	700MB	2433	925		060 106 330 22	4 1	CONCENTRIC	08 25	+ 8 +19 +12	9
14	050900	11.5N 121.8E	700MB	2913		35 300 90	030 51 270 06	1 5			+ 4 + 7 + 2	10
15	051154	11.7N 120.9E	700MB	2909	977		050 70 300 54	10 5	CIRCULAR	15	+ 3 + 6	10
16	052048	12.1N 118.4E	700MB	2853			060 72 360 40	10 5			+ 8 +15 + 6	11
17	052324	12.1N 117.9E	700MB	2852	973	90 020 20	140 95 020 30	10 5	CIRCULAR	20	+ 9 +15 + 7	11
18	060843	12.7N 115.3E	700MB	2790		100 060 20	150 96 060 16	5 5	CIRCULAR	50	+11 +18 + 8	12
19	061136	12.9N 114.1E	700MB	2801	966		070 89 350 04	6 5	CIRCULAR	45	+11 +16 + 9	12

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR	TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	050200	11.5N 123.4E	LAND				20963	52730		14.0N 124.3E	98447
* 2	050300	11.4N 123.8E	LAND				10802	4////		14.0N 124.3E	98447
3	050400	11.5N 122.9E	LAND				10782	52730		14.0N 124.3E	98447
4	050600	11.8N 122.5E	LAND				25/52	53037	EYE BECOMING LESS DISTINCT	14.0N 124.3E	98447

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON BILL
BEST TRACK DATA

	BEST TRACK		WARNING				ERRORS		24 HOUR FORECAST		ERRORS		48 HOUR FORECAST		ERRORS		72 HOUR FORECAST		ERRORS	
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
110800Z	14.3	153.9	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110806Z	14.4	153.7	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110812Z	14.1	153.5	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110818Z	13.9	153.5	35	13.9	153.5	30.	0.	-5.	14.2	152.1	45.	105.	0.	14.5	150.1	65.	180.	5.	15.2	146.3	85.	249.	15.
110900Z	13.9	153.7	35	13.9	153.6	35.	6.	0.	14.3	152.3	50.	87.	0.	14.8	149.6	70.	187.	5.	15.3	145.5	90.	233.	20.
110906Z	13.9	153.8	40	14.1	153.7	40.	13.	0.	14.4	152.5	55.	70.	5.	15.1	149.6	75.	153.	10.	15.6	145.5	95.	184.	20.
110912Z	14.0	153.9	40	14.1	153.8	40.	8.	0.	14.4	152.5	55.	58.	0.	15.1	149.6	75.	116.	5.	15.6	145.5	95.	172.	15.
110918Z	14.2	153.9	45	14.0	153.8	45.	13.	0.	14.1	153.0	60.	27.	0.	14.2	150.9	75.	46.	5.	14.3	146.8	95.	168.	10.
111000Z	14.3	153.8	50	14.0	153.8	50.	18.	0.	14.3	153.0	55.	17.	-10.	14.5	150.7	75.	119.	5.	14.5	146.3	100.	257.	10.
111006Z	14.4	153.7	50	14.2	153.8	55.	13.	5.	14.3	152.8	65.	41.	0.	14.5	149.1	80.	113.	5.	14.6	144.1	105.	247.	15.
111012Z	14.5	153.5	55	14.2	153.7	55.	21.	0.	14.3	152.7	65.	82.	-5.	14.5	149.0	80.	197.	0.	14.6	144.0	105.	350.	10.
111018Z	14.5	153.2	60	14.2	153.6	55.	29.	-5.	14.4	152.0	65.	107.	-5.	14.5	148.3	80.	253.	-5.	14.5	143.2	105.	385.	5.
111100Z	14.5	152.8	65	14.3	152.7	70.	13.	5.	14.3	148.6	95.	59.	25.	14.3	142.1	115.	97.	25.	15.3	135.7	115.	152.	5.
111106Z	14.3	152.1	65	14.6	152.2	75.	19.	10.	14.6	148.0	100.	81.	25.	14.3	141.5	115.	121.	25.	16.1	135.2	115.	184.	-5.
111112Z	14.1	151.3	70	14.3	151.4	65.	13.	-5.	14.3	147.0	75.	104.	-5.	14.3	140.3	75.	155.	-20.	15.0	134.2	85.	138.	-40.
111118Z	13.7	150.3	70	13.9	150.4	65.	13.	-5.	13.0	145.8	75.	94.	-10.	13.2	139.4	80.	151.	-20.	14.6	133.4	85.	142.	-45.
111200Z	13.4	149.0	70	13.6	149.2	70.	17.	0.	12.9	143.7	80.	83.	-10.	13.5	137.2	85.	119.	-25.	15.5	131.4	90.	92.	-40.
111206Z	13.3	147.6	75	13.3	147.7	75.	6.	0.	12.9	141.2	85.	50.	-5.	14.1	134.9	90.	76.	-30.	17.2	129.3	90.	81.	-40.
111212Z	12.8	146.1	80	12.8	146.0	75.	6.	-5.	12.6	139.2	85.	47.	-10.	14.7	132.9	95.	78.	-30.	18.1	128.2	105.	99.	-20.
111218Z	13.1	144.2	85	13.0	144.1	75.	8.	-10.	13.5	136.4	90.	61.	-10.	15.4	131.7	100.	83.	-30.	18.9	127.1	110.	120.	-15.
111300Z	12.7	142.3	90	13.0	142.1	85.	21.	-5.	14.1	134.2	95.	101.	-15.	17.6	129.0	100.	164.	-30.	21.5	127.4	95.	257.	-25.
111306Z	12.6	140.4	90	12.9	140.5	90.	19.	0.	13.5	134.9	95.	60.	-25.	15.3	131.0	100.	127.	-30.	18.4	127.8	95.	131.	-25.
111312Z	12.5	138.4	95	12.7	138.5	90.	13.	-5.	14.0	132.0	100.	38.	-25.	17.1	128.2	95.	43.	-30.	21.0	127.8	90.	261.	-25.
111318Z	12.6	136.9	100	12.8	137.0	95.	13.	-5.	14.5	131.2	105.	21.	-25.	17.6	127.8	95.	54.	-30.	21.6	128.4	85.	325.	-25.
111400Z	12.8	135.3	110	12.8	135.3	100.	0.	-10.	14.2	130.8	110.	71.	-20.	16.9	127.9	110.	84.	-10.	20.3	126.2	110.	198.	10.
111406Z	13.3	133.9	120	13.3	134.0	100.	6.	-20.	15.0	129.8	110.	75.	-20.	17.3	127.5	110.	104.	-10.	20.3	126.2	110.	205.	20.
111412Z	13.5	132.4	125	13.7	132.3	115.	13.	-10.	15.8	128.1	125.	45.	0.	18.4	126.1	120.	85.	5.	22.3	128.5	110.	379.	20.
111418Z	14.2	131.0	130	14.3	131.0	115.	6.	-15.	16.7	127.4	125.	17.	0.	19.3	126.2	120.	141.	10.	22.6	129.4	110.	424.	30.
111500Z	15.0	129.9	130	15.0	129.6	130.	17.	0.	17.9	126.5	140.	36.	20.	20.6	127.0	130.	244.	30.	24.9	132.8	115.	631.	35.
111506Z	15.9	128.9	130	15.8	128.8	120.	8.	-10.	18.9	126.4	125.	93.	5.	21.8	127.9	115.	333.	25.	26.0	135.2	100.	759.	30.
111512Z	16.5	127.8	125	16.6	127.9	115.	8.	-10.	19.7	126.3	105.	147.	-10.	22.9	129.5	95.	444.	5.	27.4	137.7	85.	900.	20.
111518Z	16.9	127.2	125	17.0	127.4	120.	13.	-5.	19.8	127.2	105.	205.	-5.	23.0	132.1	95.	573.	15.	27.7	140.7	80.	1040.	20.
111600Z	17.3	126.5	120	17.4	126.6	115.	8.	-5.	19.0	125.0	105.	96.	5.	22.6	128.6	95.	365.	15.	27.4	137.2	80.	865.	25.
111606Z	17.5	125.7	120	17.6	126.0	110.	13.	-10.	19.1	124.6	95.	94.	5.	22.5	128.4	85.	334.	15.	27.2	136.8	75.	855.	25.
111612Z	17.7	124.8	115	17.5	124.9	90.	13.	-25.	19.4	122.3	75.	11.	-15.	22.5	125.7	60.	192.	-5.	26.5	134.2	50.	747.	0.
111618Z	17.9	124.2	110	17.9	124.2	90.	0.	-20.	19.9	122.3	75.	6.	-5.	23.0	127.1	60.	262.	0.	27.6	136.3	50.	889.	5.
111700Z	18.1	123.6	100	18.2	123.6	95.	6.	-5.	19.5	120.8	85.	110.	5.	21.1	119.3	75.	289.	20.	22.6	118.8	65.	626.	20.
111706Z	18.7	123.0	90	18.7	123.0	95.	0.	5.	20.1	120.8	85.	119.	15.	21.6	119.8	75.	348.	25.	23.3	119.8	60.	644.	20.
111712Z	19.4	122.5	90	19.5	122.8	105.	18.	15.	21.5	121.8	100.	115.	35.	23.7	122.7	90.	449.	40.	24.9	125.0	80.	612.	40.
111718Z	19.9	122.4	80	20.0	122.3	105.	8.	25.	22.0	121.7	95.	164.	35.	23.7	123.4	85.	483.	40.	24.8	125.7	75.	626.	45.
111800Z	20.2	122.6	80	20.2	122.6	95.	0.	15.	21.3	122.4	90.	149.	35.	23.0	123.3	80.	491.	35.	24.2	125.6	70.	620.	40.
111806Z	20.3	122.9	70	20.4	122.7	95.	13.	25.	21.7	122.9	85.	236.	35.	23.2	124.2	75.	507.	35.	24.3	126.4	65.	568.	35.
111812Z	20.2	123.3	65	20.5	123.6	90.	25.	25.	21.6	126.1	70.	289.	20.	22.6	129.8	65.	461.	25.	0.0	0.0	0.	-0.	0.
111818Z	20.0	123.7	60	20.5	123.5	85.	32.	25.	21.2	125.9	55.	306.	10.	22.3	129.5	50.	460.	20.	0.0	0.0	0.	-0.	0.
111900Z	19.4	124.1	55	19.5	124.0	65.	8.	10.	17.9	127.9	40.	147.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111906Z	18.2	124.8	50	18.2	123.7	45.	63.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111912Z	16.8	125.8	50	17.0	125.0	30.	47.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111918Z	16.1	126.2	45	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112000Z	15.6	127.0	45	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112006Z	15.3	127.4	40	15.0	128.1	40.	44.	0.	15.1	130.1	55.	52.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112012Z	15.1	128.0	40	15.2	128.1	45.	8.	5.	15.5	130.2	55.	107.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112018Z	14.7	128.5	30	15.2	128.5	50.	30.	20.	15.5	130.3	60.	158.	35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112100Z	14.4	129.1	30	14.3	129.2	30.	8.	0.	15.4	131.1	40.	267.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112106Z	15.2	129.2	30	14.5	129.0	30.	44.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112112Z	15.1	128.4	25	14.5	129.0	30.	50.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112118Z	14.1	128.0	25	14.4	129.2	30.	72.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112200Z	12.9	127.3	25	14.4	129.2	20.	143.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	20.	98.	226.	406.	15.	93.	220.	389.
AVG RIGHT ANGLE ERROR	9.	50.	141.	297.	9.	48.	136.	298.
AVG INTENSITY MAGNITUDE ERROR	8.	14.	18.	22.	8.	12.	18.	21.
AVG INTENSITY BIAS	-0.	3.	4.	7.	-1.	1.	3.	4.
NUMBER OF FORECASTS	52	46	41	39	46	42	40	36

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2892. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TYPHOON BILL
FIX POSITIONS FOR CYCLONE NO. 28

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	072323	13.5N 154.5E	PCN 5	T1.5/1.5	INIT OBS	PGTW
2	080300	14.0N 154.2E	PCN 6			PGTW
* 3	080607	13.9N 154.7E	PCN 5			PGTW
4	080900	14.1N 154.6E	PCN 5			PGTW
5	081204	14.7N 154.2E	PCN 5		ULCC 14.1N 155.8E	PGTW
* 6	081600	14.1N 155.3E	PCN 6		ULCC FIX	PGTW
7	081800	14.6N 153.6E	PCN 6	T1.5/1.5	INIT OBS ULCC 14.0N 155.3E	PGTW
8	081959	14.2N 153.9E	PCN 5		ULCC 14.2N 155.1E	PGTW
9	082303	14.0N 154.1E	PCN 5	T3.0/3.0 /D1.5/24HRS		PGTW
10	090300	14.1N 153.6E	PCN 6			PGTW
11	090554	14.2N 153.7E	PCN 5			PGTW
12	090839	14.0N 153.9E	PCN 5			PGTW
13	091143	14.3N 154.0E	PCN 6			PGTW
14	091600	14.3N 154.3E	PCN 6	T3.0/3.0 /D1.5/22HRS	ULCC 14.9N 154.9E	PGTW
15	091839	14.2N 154.3E	PCN 5			PGTW
16	091937	14.3N 154.5E	PCN 6			PGTW
17	092133	14.4N 153.8E	PCN 5			PGTW
18	100024	14.0N 154.2E	PCN 3	T3.0/3.0+/S0.0/25HRS		PGTW
19	100300	14.1N 153.7E	PCN 6			PGTW
20	100542	14.2N 153.8E	PCN 3			PGTW
21	100817	14.3N 153.7E	PCN 6			PGTW
* 22	101200	15.5N 153.2E	PCN 6		ULCC FIX	PGTW
23	101600	14.7N 153.3E	PCN 6	T3.0/3.0+/S0.0/24HRS		PGTW
24	101800	14.2N 153.1E	PCN 6		ULCC FIX	PGTW
25	101916	14.2N 152.8E	PCN 6		ULCC FIX	PGTW
26	102109	14.3N 152.4E	PCN 5			PGTW
27	110004	14.2N 152.5E	PCN 3	T4.0/4.0 /D1.0/24HRS		PGTW
28	110300	14.6N 152.7E	PCN 2			PGTW
29	110529	14.7N 152.3E	PCN 2			PGTW
30	110756	14.2N 151.7E	PCN 4			PGTW
31	111244	14.3N 150.9E	PCN 3			PGTW
32	111600	14.0N 150.5E	PCN 6	T3.5/3.5 /D0.5/24HRS		PGTW
33	111814	13.8N 150.3E	PCN 6			PGTW
34	112036	13.8N 149.9E	PCN 6		ULCC 14.8N 150.5E	PGTW
35	112100	13.8N 150.1E	PCN 6			PGTW
36	112344	13.7N 149.2E	PCN 3	T3.5/4.0+/W0.5/24HRS		PGTW
37	120300	13.6N 148.5E	PCN 4			PGTW
38	120517	13.4N 147.7E	PCN 5			PGTW
39	120916	13.2N 146.7E	PCN 3			PGTW
40	121224	12.8N 145.6E	PCN 4			PGTW
41	121600	13.1N 144.8E	PCN 4	T4.5/4.5 /D1.0/24HRS		PGTW
42	121301	13.1N 144.0E	PCN 4			PGTW
43	122015	13.1N 143.5E	PCN 4			PGTW
44	130105	12.8N 141.8E	PCN 3	T4.5/4.5 /D1.0/25HRS		PGTW
45	130300	12.8N 141.3E	PCN 2			PGTW
46	130646	12.7N 140.3E	PCN 3			PGTW

47	130855	12.7N	139.4E	PCN 3			
48	131200	12.7N	138.5E	PCN 4			PGTW
49	131345	12.5N	138.1E	PCN 3			PGTW
50	131600	12.6N	137.4E	PCN 2	T5.0/5.0 /D0.5/24HRS		PGTW
51	131800	12.8N	137.0E	PCN 2			PGTW
52	131931	12.7N	136.6E	PCN 1		EYE FIX	PGTW
53	132135	12.7N	136.0E	PCN 1		EYE FIX	PGTW
54	140000	12.9N	135.4E	PCN 2		EYE FIX	PGTW
55	140044	12.9N	135.0E	PCN 2	T6.0/6.0 /D1.5/24HRS		PGTW
56	140300	12.9N	134.7E	PCN 2			PGTW
57	140600	13.2N	134.0E	PCN 2			PGTW
58	140634	13.5N	133.9E	PCN 2			PGTW
59	140634	13.4N	133.4E	PCN 1	T5.5/5.5		PGTW
60	140900	13.3N	133.1E	PCN 2		INIT OBS EYE DIA 18NM	RPMK
61	141015	13.4N	132.9E	PCN 2			PGTW
62	141200	13.7N	132.4E	PCN 2			PGTW
63	141325	13.6N	131.9E	PCN 2			PGTW
64	141600	14.0N	131.4E	PCN 2			PGTW
65	141800	14.3N	131.0E	PCN 2	T6.0/6.0 /D1.0/26HRS		PGTW
66	141918	14.6N	130.3E	PCN 2			PGTW
67	142100	14.8N	130.4E	PCN 2			PGTW
68	142254	14.9N	130.1E	PCN 1			PGTW
69	150000	15.0N	129.9E	PCN 2			PGTW
70	150300	15.4N	129.5E	PCN 4	T5.0/6.0 /W1.0/25HRS		PGTW
71	150600	15.9N	129.0E	PCN 2			PGTW
72	150621	16.1N	128.7E	PCN 2			PGTW
73	150900	16.4N	128.5E	PCN 4			PGTW
74	150951	16.5N	128.3E	PCN 4			PGTW
75	151200	16.5N	127.7E	PCN 4			PGTW
76	151305	16.5N	127.6E	PCN 2			PGTW
77	151600	16.8N	127.6E	PCN 2	T6.5/6.5-/D0.5/22HRS		PGTW
78	151800	17.0N	127.3E	PCN 2			PGTW
79	151906	17.1N	127.0E	PCN 2			PGTW
80	152100	17.2N	127.0E	PCN 2			PGTW
81	152230	17.3N	126.7E	PCN 1			PGTW
82	160000	17.5N	126.5E	PCN 4			PGTW
83	160145	17.3N	126.4E	PCN 3			PGTW
84	160145	17.3N	126.5E	PCN 3	T6.0/6.0	INIT OBS	PGTW
85	160300	17.5N	126.1E	PCN 4	T4.5/5.0 /W0.5/24HRS		RPMK
86	160600	17.5N	125.8E	PCN 4			PGTW
87	160750	17.3N	125.9E	PCN 1			PGTW
88	160933	17.4N	125.3E	PCN 6			RPMK
89	161108	17.4N	125.5E	PCN 5			PGTW
90	161108	17.7N	125.4E	PCN 3			RPMK
91	161426	17.7N	125.0E	PCN 5			RODN
92	161800	18.0N	124.3E	PCN 6	T5.0/6.5 /W1.5/26HRS		PGTW
93	162035	18.0N	124.0E	PCN 1			PGTW
94	162100	17.9N	123.8E	PCN 6			RPMK
95	162212	18.2N	123.9E	PCN 1		EYE FIX	PGTW
96	162346	18.2N	123.6E	PCN 1	T5.0/5.0	INIT OBS EYE FIX	RODN
97	162347	18.0N	123.6E	PCN 3	T5.0/6.0 /W1.0/22HRS		RODN
98	170125	18.1N	123.3E	PCN 1			RPMK
99	170125	18.2N	123.5E	PCN 1		EYE FIX	RPMK
100	170300	18.4N	123.3E	PCN 2		EYE FIX	PGTW
101	170600	18.8N	123.1E	PCN 2			PGTW
102	170738	18.9N	123.0E	PCN 1			PGTW
103	170738	18.9N	123.0E	PCN 1	T6.0/6.0-/D1.5/28HRS	EYE FIX	RPMK
104	171044	19.3N	122.8E	PCN 1		EYE DIA 12NM	PGTW
105	171052	19.4N	122.6E	PCN 1		EYE DIA 18NM	PGTW
106	171200	19.4N	122.8E	PCN 2		EYE FIX	RODN
107	171406	19.8N	122.5E	PCN 3		EYE FIX	PGTW
108	171800	20.0N	122.2E	PCN 4	T4.5/5.5 /W0.5/24HRS		PGTW
109	172023	20.0N	122.7E	PCN 1			PGTW
110	172100	20.0N	122.7E	PCN 2		EYE FIX	RPMK
111	172322	20.2N	122.7E	PCN 1	T4.5/5.0 /W0.5/24HRS	EYE DIA 12NM	PGTW
112	180000	20.2N	122.7E	PCN 4			RODN
113	180105	20.1N	122.6E	PCN 2	T5.0/5.0 /S0.0/24HRS		PGTW
114	180300	20.3N	122.7E	PCN 4	T4.0/5.0+/W2.0/20HRS		RPMK
115	180600	20.3N	122.9E	PCN 4		ULCC FIX	PGTW
116	180725	20.4N	123.2E	PCN 3			PGTW
117	180900	20.5N	123.2E	PCN 6			RPMK
118	181020	20.3N	123.1E	PCN 3			PGTW
119	181020	20.2N	123.2E	PCN 3			RPMK
120	181031	20.3N	123.1E	PCN 4			RODN
121	181200	20.3N	123.5E	PCN 6		ULCC FIX	RSKO
122	181346	20.2N	123.6E	PCN 5			PGTW
123	181600	20.2N	123.3E	PCN 6			RPMK
124	181800	20.1N	123.0E	PCN 6	T4.0/4.5-/W0.5/22HRS		PGTW
125	182010	20.5N	123.5E	PCN 5			PGTW
126	182100	20.2N	123.6E	PCN 6			RPMK
127	182130	20.1N	123.7E	PCN 6		ULCC FIX	PGTW
128	182130	19.8N	123.7E	PCN 6			RPMK
*129	182258	19.8N	124.9E	PCN 3			PGTW
*130	182258	19.6N	125.0E	PCN 6		EXP LLCC	RPMK
131	182258	20.4N	123.6E	PCN 5		ULCC 20.2N 123.5E	PGTW
132	190045	19.3N	124.3E	PCN 6			RSKO
133	190045	20.3N	124.5E	PCN 5	T3.5/3.5		PGTW
134	190713	17.8N	123.1E	PCN 5	T2.0/3.0 /W2.0/28HRS	INIT OBS ULCC FIX	RSKO
135	191200	16.7N	125.2E	PCN 6			PGTW
*136	191600	15.9N	124.5E	PCN 6			PGTW
137	200000	16.2N	127.0E	PCN 6			PGTW
138	200205	16.2N	127.5E	PCN 5		ULCC FIX	PGTW
139	200300	16.3N	127.4E	PCN 6	T2.0/2.0+/S0.0/20HRS	ULCC FIX	RODN
*140	200600	16.3N	127.8E	PCN 6		ULCC FIX	PGTW
141	200700	15.7N	127.9E	PCN 6			PGTW
142	201200	15.8N	127.2E	PCN 6			PGTW
143	201305	15.9N	127.5E	PCN 6			PGTW
144	201600	15.4N	128.3E	PCN 6	T1.5/1.5		PGTW
145	201800	15.4N	128.5E	PCN 6		INIT OBS	PGTW
146	201945	15.4N	128.5E	PCN 5			PGTW
147	202048	15.6N	128.4E	PCN 5			PGTW
148	202210	14.6N	129.1E	PCN 5			PGTW
149	210000	15.2N	129.3E	PCN 6			PGTW
*150	210146	14.5N	129.2E	PCN 5		ULCC FIX	PGTW
151	210300	15.2N	129.4E	PCN 6		ULCC FIX	PGTW
152	210648	14.6N	128.9E	PCN 5	T2.0/2.0-/S0.0/27HRS		PGTW
153	210928	15.1N	128.4E	PCN 5			PGTW
154	211048	15.4N	128.0E	PCN 5			PGTW
155	211200	15.2N	128.1E	PCN 6			PGTW
156	211426	14.9N	128.6E	PCN 5			PGTW
157	211600	14.9N	128.5E	PCN 6			PGTW
*158	211800	14.8N	129.1E	PCN 6	T1.5/1.5-/S0.0/26HRS		PGTW
159	211932	13.9N	127.9E	PCN 5			PGTW
160	212208	13.4N	127.3E	PCN 5			PGTW
161	212326	14.8N	129.8E	PCN 5	T1.0/1.0	INIT OBS	RODN
162	212326	14.8N	129.8E	PCN 5	T1.0/1.0	INIT OBS	RPMK
163	220125	12.8N	127.4E	PCN 5			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM	ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	080735	14.4N 153.6E	850MB			20 240 90	280 30 220 60	8 10				+21 +20 +16	1
2	082142	13.9N 153.6E	1500FT		1000	40 320 40	050 40 320 49	12 2				+24 +25 +23	2
3	082348	13.8N 153.7E	1500FT		999	45 350 40	060 48 350 40	12 2				+24 +25 +23	2
4	090555	14.2N 153.9E	700MB	3070		40 260 45	220 31 140 103	8 10					4
5	090826	14.2N 153.8E	700MB	3071	998		150 37 040 65	12 10				+13 +15 + 9	4
6	092102	14.3N 153.9E	700MB	3037	990	50 260 30	340 56 260 33	8 4				+21 +21	5
7	092332	14.3N 153.8E	1500FT		990	50 360 30	120 50 360 14	8 1				+26 +27 +26	5
8	100601	14.3N 153.7E	700MB	3004		65 240 20	300 55 230 17	10 1				+18 +23 +10	7
9	100835	14.3N 153.7E	700MB	3038			180 48 060 30	10 2				+19 +22 + 7	7
10	102042	14.3N 153.1E	700MB	3046		50 270 20	260 39 180 20	15 2				+13 +17 + 7	8
11	102323	14.6N 152.9E	700MB	2964	986	100 350 40	080 57 350 10	10 2	CIRCULAR	15		+12 +17 + 9	8
12	110832	14.3N 151.8E	700MB	3019	993		150 33 130 140	4 3				+17 +19 + 7	10
13	111036	14.2N 151.6E	700MB	3021	992		080 60 010 60	10 5				+15 +19 + 6	10
14	112050	13.4N 149.9E	700MB	3019		70 270 4	080 64 320 58	10 2				+12 +19 +10	11
15	112331	13.4N 149.1E	700MB	3009	991	70 030 30	140 47 030 120	6 2	CIRCULAR	17		+13 +17 + 9	11
16	121213	12.7N 146.0E	700MB	2923	981		350 65 320 150	5 1	ELLIPTICAL	25 8	070	+11 +14 + 8	13
17	121641	13.0N 144.6E	700MB	2859	973		080 78 330 45	7 2	CIRCULAR	10		+16 +20 + 2	14
18	122300	12.8N 142.5E	700MB	2841	969	100 310 10	090 76 330 90	12 1	CONCENTRIC	4 8		+14 +17 +11	15
19	130741	12.7N 139.7E	700MB	2817	967	80 280 10	030 69 280 30	6 2	CONCENTRIC	10 20		+12 +15 +13	16
20	131019	12.5N 138.9E	700MB	2792	966		090 90 360 20	6 2	CIRCULAR	15		+11 +15 +12	16

21	132038	12.6N	136.2E	700MB	2566					340	90	240	7	10	1	ELLIPTICAL	30	23	180	+12	+18	+12		18
22	132312	12.8N	135.5E	700MB	2511	932	100	220	10	220	110	130	17	10	1	ELLIPTICAL	23	18	130	+12	+21	+10		18
23	140831	13.4N	133.2E	700MB	2336	913	100	270	10	010	105	270	14	7	2	CIRCULAR	10			+18	+26			19
24	141103	13.6N	132.5E	700MB	2334	912				190	133	110	14	7	2	CIRCULAR	15			+17	+27			19
25	142030	14.5N	130.3E	700MB	2325					030	105	290	17	5	2	CONCENTRIC	8	13		+17	+25	+ 5		21
26	142234	14.8N	130.0E	700MB	2288	909	120	120	16	190	126	110	13	5	2	CIRCULAR	20			+14	+24	+13		21
27	150838	16.2N	128.3E	700MB	2540	937	110	180	15	240	98	180	13	13	2	CIRCULAR	25			+17	+19	+15		23
28	151110	16.5N	127.9E	700MB	2554	939				150	127	020	12	10	2	CIRCULAR	30			+17	+20	+15		23
29	152030	17.1N	127.0E	700MB	2528					060	114	330	15	5	2	ELLIPTICAL	30	20	120	+12	+22	+12		24
30	152309	17.2N	126.6E	700MB	2388	941	125	140	20	170	125	040	16	3	3	ELLIPTICAL	30	20	120	+14	+23	+11		24
31	160835	17.4N	125.4E	700MB	2641		100	220	27	090	110	350	20	4	2	CIRCULAR	25			+12	+19	+13		25
32	161137	17.5N	124.9E	700MB	2669	951				220	85	140	18	4	8	CIRCULAR	20			+13	+23	+ 8		25
33	162030	17.9N	124.0E	700MB	2977					090	100	030	21	15	3	CIRCULAR	23			15	22	12		26
34	162306	18.0N	123.5E	700MB	2670	951	110	120	15	200	104	270	15	15	3	CIRCULAR	21			+17	+20	+13		26
35	170543	18.8N	123.0E	700MB	2536	936	90	160	10	240	90	160	4	9	2	ELLIPTICAL	20	10	150	+11	+20	+10		27
36	170828	19.0N	123.0E	700MB	2548	936	90	270	10	150	107	090	10	8	2	CIRCULAR	19			+12	+16	+12		27
37	172100	20.0N	122.8E	700MB	2661					040	92	290	16	4	1	CIRCULAR	8			+13	+17	+13		28
38	172343	20.2N	122.6E	700MB	2676	953	80	230	20	190	99	130	25	4	8	CONCENTRIC	15	40		+14	+21	+ 9		28
39	180842	20.3N	123.2E	700MB	2766	962	90	230	10	130	100	020	16	15	2	CIRCULAR	18			+14	+24	+11		29
40	182045	20.0N	123.5E	700MB	2963					320	64	280	15	10	5	ELLIPTICAL	16	10	240	+12	+19	+ 6		30
41	182326	19.4N	123.7E	700MB	3014	987	50	010	8	290	49	220	27	12	3					+11	+20	+10		30
42	191130	16.9N	125.6E	700MB	3059	997				080	28	330	55	10	20					+16	+18	+ 8		31
43	192315	15.8N	127.1E	1500FT		1000	55	200	30	010	67	200	30	4	4					+27	+27	+24		32
44	200205	15.3N	127.3E	1500FT		999	55	100	14	190	44	120	40	3	2					+28	+27	+24		32
45	202117	15.5N	128.8E	700MB	3100		30	270	90	320	19	270	15	12	5					+12	+14	+16		33
46	202325	14.4N	129.1E	1500FT		1002	30	270	10	330	30	210	38	12	1					+28	+30	+23		33

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR	TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO
1	120635	13.3N 147.2E	LAND	FAIR	CIRCULAR	12			WALL CLD OPN E	13.6N 144.9E	91218
2	120735	13.1N 147.1E	LAND	POOR	CIRCULAR	12			MOV 0810 WALL CLD OPN E	13.6N 144.9E	91218
3	120835	13.1N 146.8E	LAND	GOOD	CIRCULAR	14			MOV 0820 WALL CLD OPN NE	13.6N 144.9E	91218
4	121035	13.0N 146.2E	LAND	GOOD	ELLIPTICAL				MOV 0818 MAJOR AXIS 12/6	13.6N 144.9E	91218
5	121135	12.8N 146.0E	LAND	GOOD	CIRCULAR	10			MOV 0512 WALL CLD OPN NNW	13.6N 144.9E	91218
6	121235	12.9N 145.8E	LAND	GOOD	CIRCULAR	11			MOV 1210	13.6N 144.9E	91218
7	121335	13.0N 145.6E	LAND	GOOD	CIRCULAR	9			MOV 1114 WALL CLD OPN SSN	13.6N 144.9E	91218
8	121445	13.0N 145.5E	LAND	GOOD	CIRCULAR	9			MOV 1015	13.6N 144.9E	91218
9	121535	13.1N 145.0E	LAND	GOOD	CIRCULAR	9			MOV 1017	13.6N 144.9E	91218
10	121635	13.0N 144.8E	LAND	GOOD		9			MOV 0710	13.6N 144.9E	91218
11	121735	13.0N 144.2E	LAND							13.6N 144.9E	91218
12	121835	13.0N 143.8E	LAND	GOOD		9			WALL CLD OPN SW	13.6N 144.9E	91218
13	121935	13.0N 143.6E	LAND	GOOD		10				13.6N 144.9E	91218
14	122135	13.0N 143.3E	LAND	POOR						13.6N 144.9E	91218
* 15	130035	11.8N 141.5E	LAND	POOR						13.6N 144.9E	91218
16	162100	17.7N 124.0E	LAND				4////	/////	SPIR OVRLY 015 DEG	16.3N 120.6E	98321
17	170000	18.1N 123.7E	LAND				/////	43308		16.3N 120.6E	98321
18	170300	18.3N 123.5E	LAND				4////	40000		16.3N 120.6E	98321
19	170500	18.7N 123.4E	LAND				4////	53610		16.3N 120.6E	98321
20	170700	19.2N 123.0E	LAND				/////	/////		18.4N 121.6E	98231
21	170700	19.1N 123.2E	LAND				40000	43512	SPIR OVRLY 015 DEG	16.3N 120.6E	98321
22	170800	19.2N 122.9E	LAND				11812	52902	EYE 60 PCT ELIP OPN NE	18.4N 121.6E	98231
23	170800	19.3N 123.0E	LAND				4////	43508	SPIR OVRLY 015 DEG	16.3N 120.6E	98321
24	171100	19.5N 122.8E	LAND				11782	/////		18.4N 121.6E	98231
25	171200	19.6N 122.7E	LAND				/////	43208		18.4N 121.6E	98231
26	171600	19.8N 122.5E	LAND				11742	43605	EYE 60 PCT CIR OPN NE-SE-S	18.4N 121.6E	98231
27	171700	19.8N 122.5E	LAND				10672	43460		18.4N 121.6E	98231
28	171900	19.9N 122.7E	LAND				10791	40703	EYE 70 PCT CIR OPN SW	18.4N 121.6E	98231
29	172000	20.0N 122.7E	LAND				10681	40403	EYE 75 PCT CIR OPN SW	18.4N 121.6E	98231
30	172100	20.2N 122.8E	LAND				11861	40210	EYE 60 PCT ELIP OPN SE	18.4N 121.6E	98231
31	180700	20.5N 123.2E	LAND				11850	52704	EYE 50 PCT ELIP	18.4N 121.6E	98231
32	180800	20.5N 123.2E	LAND				/////	/////		18.4N 121.6E	98231
33	180900	20.5N 123.4E	LAND				11741	50904		18.4N 121.6E	98231
34	181100	20.5N 123.6E	LAND				45///	60908		18.4N 121.6E	98231
35	181200	20.5N 123.6E	LAND				25//1	50000		18.4N 121.6E	98231
36	181300	20.4N 123.7E	LAND				45///	51204		18.4N 121.6E	98231
37	181300	20.5N 123.7E	LAND				45///	51204		16.3N 120.6E	98321
38	181400	20.5N 123.7E	LAND				55//0	50201		16.3N 120.6E	98321
39	181500	20.5N 123.7E	LAND				55//0	50000		16.3N 120.6E	98321
* 40	190600	18.7N 123.4E	LAND				5////	/////		18.4N 121.6E	98231
* 41	190700	18.7N 123.3E	LAND				5////	52504		18.4N 121.6E	98231
* 42	190800	18.7N 123.4E	LAND				5////	50902		18.4N 121.6E	98231
* 43	190900	18.7N 123.3E	LAND				5////	52502	SPIR OVRLY 10 DEG	18.4N 121.6E	98231
* 44	191100	18.5N 123.3E	LAND				5////	62010		18.4N 121.6E	98231

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TYPHOON CLARA
BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
					ERRORS					ERRORS					ERRORS					ERRORS		
MO/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND		POSIT	WIND	DST	WIND		POSIT	WIND	DST	WIND		POSIT	WIND	DST	WIND	
111400Z	5.4 156.4	20	0.0 0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
111406Z	5.7 155.4	25	5.6 155.5	25.	8.	0.	6.0	152.3	35.	176.	0.	6.7	148.5	55.	283.	-10.	7.5	143.5	75.	360.	-10.	
111412Z	6.1 154.4	25	6.1 154.0	30.	24.	5.	7.2	149.3	50.	78.	5.	8.0	144.6	60.	152.	-10.	8.9	139.9	75.	227.	-20.	
111418Z	6.7 153.1	25	6.9 152.6	40.	32.	15.	8.7	148.3	55.	68.	0.	10.0	143.8	65.	148.	-10.	11.2	139.1	80.	200.	-25.	
111500Z	7.2 151.7	30	7.3 152.0	35.	19.	5.	9.4	147.8	55.	108.	-5.	11.5	143.3	65.	209.	-15.	13.5	138.7	80.	241.	-30.	
111506Z	7.7 149.9	35	7.8 150.9	35.	60.	0.	10.2	146.5	55.	122.	-10.	11.9	141.8	65.	203.	-20.	12.7	136.8	80.	178.	-30.	
111512Z	7.9 148.2	45	8.6 148.9	35.	59.	-10.	11.0	143.4	60.	80.	-10.	12.5	137.4	75.	63.	-20.	15.1	131.8	90.	100.	-10.	
111518Z	8.4 147.2	55	9.1 147.3	40.	42.	-15.	11.6	142.0	65.	94.	-10.	13.9	136.3	80.	118.	-25.	16.7	130.9	95.	146.	5.	
111600Z	9.1 146.0	60	9.2 145.9	60.	8.	0.	11.3	140.3	75.	53.	-5.	14.1	134.9	95.	97.	-15.	16.8	130.3	105.	130.	25.	
111606Z	9.4 144.6	65	9.5 144.6	60.	6.	-5.	11.1	139.4	75.	54.	-10.	13.4	134.6	95.	48.	-15.	16.4	130.1	105.	143.	15.	
111612Z	9.8 142.8	70	9.9 142.9	60.	8.	-10.	11.9	136.8	75.	30.	-20.	14.7	132.3	95.	63.	-5.	18.1	128.2	105.	247.	5.	
111618Z	10.2 141.3	75	10.4 141.1	60.	17.	-15.	12.9	135.2	75.	64.	-30.	15.8	130.8	95.	120.	5.	19.5	127.0	105.	322.	-5.	
111700Z	10.5 139.9	80	10.5 140.3	70.	24.	-10.	12.6	135.6	90.	53.	-20.	15.9	131.4	100.	58.	20.	20.3	129.4	110.	221.	5.	
111706Z	10.9 138.5	85	11.0 138.6	75.	8.	-10.	13.7	133.4	95.	38.	-15.	17.5	130.4	105.	115.	15.	21.9	129.2	110.	289.	10.	
111712Z	11.5 137.1	95	11.5 137.3	85.	12.	-10.	15.0	132.6	105.	67.	5.	19.9	131.3	115.	103.	15.	23.9	133.2	110.	157.	20.	
111718Z	12.0 135.8	105	12.4 135.8	90.	24.	-15.	16.3	132.2	110.	83.	20.	20.4	131.3	120.	89.	10.	24.3	133.1	110.	279.	35.	
111800Z	12.5 134.7	110	12.5 134.7	110.	0.	0.	16.2	130.9	130.	87.	50.	20.1	130.1	130.	185.	25.	23.7	133.9	120.	376.	45.	
111806Z	13.2 133.8	110	13.3 133.5	115.	19.	5.	17.2	130.4	130.	115.	40.	21.2	130.8	130.	206.	30.	24.2	134.5	115.	483.	45.	
111812Z	14.0 133.1	100	13.9 133.1	115.	6.	15.	17.5	131.3	130.	95.	30.	20.8	131.6	130.	290.	40.	23.4	133.9	115.	677.	55.	
111818Z	15.0 132.7	90	15.0 132.7	120.	0.	30.	18.8	132.0	130.	67.	20.	21.8	133.0	120.	335.	45.	0.0	0.0	0.	-0.	0.	
111900Z	16.0 132.4	80	15.9 132.4	95.	6.	15.	19.9	132.2	85.	82.	-20.	22.8	133.7	80.	408.	5.	0.0	0.0	0.	-0.	0.	
111906Z	17.3 132.4	90	17.3 132.3	85.	6.	-5.	22.1	133.1	70.	73.	-30.	25.7	135.0	65.	434.	-5.	0.0	0.0	0.	-0.	0.	
111912Z	18.6 132.5	100	18.6 132.4	95.	6.	-5.	24.8	134.6	90.	114.	0.	30.6	140.7	80.	336.	20.	0.0	0.0	0.	-0.	0.	
111918Z	19.7 132.7	110	19.9 132.7	100.	12.	-10.	25.8	135.3	90.	171.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
112000Z	20.8 133.3	105	20.8 133.1	105.	11.	0.	25.6	135.8	95.	249.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
112006Z	22.0 134.4	100	22.1 134.6	100.	13.	0.	27.1	142.3	85.	48.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
112012Z	23.4 136.0	90	23.6 136.0	95.	12.	5.	29.7	144.7	70.	165.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
112018Z	24.7 138.2	75	25.0 137.7	80.	33.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
112100Z	25.8 140.4	75	26.0 140.5	80.	13.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
112106Z	26.6 143.0	70	27.2 143.9	70.	60.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
112112Z	27.1 145.7	60	27.2 146.9	60.	64.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	20.	94.	185.	265.	20.	94.	185.	265.
AVG RIGHT ANGLE ERROR	13.	61.	93.	131.	14.	61.	93.	131.
AVG INTENSITY MAGNITUDE ERROR	8.	16.	17.	22.	8.	16.	17.	22.
AVG INTENSITY BIAS	-1.	2.	4.	8.	-2.	2.	4.	8.
NUMBER OF FORECASTS	30	26	22	18	26	26	22	18

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2709. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 15. KNOTS

TYPHOON CLARA
FIX POSITIONS FOR CYCLONE NO. 29

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	130600	4.7N 157.1E	PCN 6	T0.0/0.0	INIT OBS	PGTW
* 2	131200	6.0N 156.9E	PCN 6			PGTW
* 3	131600	5.8N 156.2E	PCN 6	T1.5/1.5	INIT OBS	PGTW
* 4	131800	6.0N 155.7E	PCN 6			PGTW
* 5	131954	5.7N 155.3E	PCN 6			PGTW
* 6	132303	5.4N 155.0E	PCN 6			PGTW
7	140452	5.5N 155.7E	PCN 6			PGTW
8	140600	5.4N 155.7E	PCN 6	T2.0/2.0 /D0.5/10HRS		PGTW
9	140834	6.0N 155.0E	PCN 6		ULCC FIX	PGTW
* 10	141144	7.2N 153.3E	PCN 6			PGTW
* 11	141600	8.5N 152.1E	PCN 6	T3.5/3.5	INIT OBS	PGTW
* 12	141736	7.7N 152.3E	PCN 6			PGTW
* 13	141933	8.4N 151.1E	PCN 6			PGTW
* 14	142113	7.9N 151.4E	PCN 5			PGTW
* 15	150000	8.2N 150.9E	PCN 6		ULCC FIX	PGTW
16	150024	7.6N 150.5E	PCN 6		ULCC FIX	PGTW
17	150300	7.9N 150.1E	PCN 6	T3.0/3.0 /D1.0/21HRS	ULCC FIX	PGTW
18	150600	7.8N 149.7E	PCN 6			PGTW
19	150621	7.9N 149.6E	PCN 6		ULCC FIX	PGTW
20	150812	7.8N 149.1E	PCN 6		ULCC FIX	PGTW
21	150951	8.0N 149.1E	PCN 6		ULCC FIX	PGTW
22	151200	8.3N 147.7E	PCN 6			PGTW
23	151305	7.7N 147.6E	PCN 6			PGTW
24	151600	8.5N 147.4E	PCN 6			PGTW
25	151800	8.9N 147.0E	PCN 6	T3.0/3.5 /W0.5/26HRS		PGTW
26	151906	9.1N 146.9E	PCN 6			PGTW
27	152053	8.9N 146.1E	PCN 6			PGTW
28	160004	9.1N 145.3E	PCN 5			PGTW
29	160300	9.3N 145.4E	PCN 4	T3.5/3.5 /D0.5/24HRS		PGTW
30	160609	9.6N 144.7E	PCN 3			PGTW
31	160933	9.6N 143.5E	PCN 6			PGTW
32	161244	9.8N 142.5E	PCN 6			PGTW
33	161853	10.4N 140.9E	PCN 6	T3.5/3.5 /D0.5/24HRS		PGTW
34	162031	10.6N 140.3E	PCN 6			PGTW
35	162205	10.1N 140.5E	PCN 5			PGTW
36	170125	10.5N 140.0E	PCN 6			PGTW
37	170300	10.6N 139.6E	PCN 6			PGTW
38	170556	11.0N 138.3E	PCN 5	T4.5/4.5 /D1.0/27HRS		PGTW
39	170556	11.0N 138.6E	PCN 6	T4.0/4.0	INIT OBS	RODN
40	170911	11.2N 137.9E	PCN 6			PGTW
41	171200	11.8N 137.0E	PCN 6			PGTW
42	171800	12.6N 135.8E	PCN 6	T5.0/5.0 /D1.5/24HRS		PGTW
43	172100	12.5N 135.1E	PCN 6			PGTW
44	180000	12.3N 134.4E	PCN 4			PGTW
45	180105	12.6N 134.6E	PCN 2	T5.0/5.0	INIT OBS	RPMK
46	180300	12.9N 134.1E	PCN 2	T5.5/5.5 /D1.0/20HRS		PGTW
47	180600	13.4N 133.7E	PCN 4			PGTW
48	180725	13.0N 133.6E	PCN 3			RPMK
49	181020	14.1N 133.2E	PCN 3			RPMK
50	181020	13.5N 133.2E	PCN 5			RODN
51	181200	14.2N 133.1E	PCN 6		ULCC FIX	PGTW
52	181346	14.5N 132.9E	PCN 5			RPMK
53	181600	14.6N 133.1E	PCN 6	T5.5/5.5 /D0.5/22HRS		PGTW
54	181800	15.3N 132.9E	PCN 6			PGTW
55	182010	15.0N 132.3E	PCN 4			RPMK
56	182100	15.8N 132.8E	PCN 6			PGTW
57	182130	15.5N 132.5E	PCN 4		ULCC FIX	PGTW
58	182130	15.2N 132.3E	PCN 4			RPMK
59	182258	15.8N 132.3E	PCN 4			PGTW
60	182258	15.3N 132.6E	PCN 4			RPMK
61	190045	16.3N 132.1E	PCN 1			PGTW
62	190045	15.7N 132.2E	PCN 2	T6.0/6.0	INIT OBS	RSKO
63	190300	16.8N 132.2E	PCN 2	T5.0/5.0 /W0.5/24HRS		PGTW
64	190713	17.6N 132.5E	PCN 3			PGTW
65	190900	18.1N 132.1E	PCN 2			PGTW
66	191010	17.8N 132.2E	PCN 2			PGTW
67	191200	18.7N 132.3E	PCN 2			PGTW
68	191325	19.2N 132.5E	PCN 1			PGTW
69	191600	19.5N 132.6E	PCN 2	T6.0/6.0-/D0.5/24HRS		PGTW

70	191800	19.9N 132.7E	PCN 2				PGTW
71	192100	20.2N 132.9E	PCN 2				PGTW
72	192109	20.3N 132.9E	PCN 2				PGTW
73	192234	20.4N 133.1E	PCN 2				PGTW
74	200024	20.8N 133.3E	PCN 1				PGTW
75	200300	21.4N 133.8E	PCN 2	T5.0/5.0-/S0.0/24HRS			PGTW
76	200600	22.1N 134.6E	PCN 2			EYE FIX	PGTW
77	200700	22.3N 135.0E	PCN 1			EYE FIX	PGTW
78	200931	23.1N 135.5E	PCN 1			EYE FIX	PGTW
79	201200	23.4N 136.2E	PCN 4				PGTW
80	201305	23.7N 136.6E	PCN 3				PGTW
81	201600	24.5N 137.2E	PCN 6	T3.5/4.5 /W2.5/24HRS			PGTW
82	201800	24.9N 137.7E	PCN 6				PGTW
83	201945	25.1N 138.9E	PCN 5				PGTW
84	202048	25.4N 139.7E	PCN 5				PGTW
85	202210	25.6N 140.1E	PCN 5				PGTW
86	210004	26.1N 140.6E	PCN 5				PGTW
* 87	210300	26.8N 143.0E	PCN 6	T3.5/4.0 /W1.5/21HRS			PGTW
* 88	210600	25.2N 143.2E	PCN 6				PGTW
89	211245	27.3N 146.0E	PCN 5				PGTW
90	211800	27.8N 148.0E	PCN 6				PGTW
91	212027	27.9N 149.5E	PCN 5			EXP LLCC	PGTW
92	220000	27.1N 150.7E	PCN 6				PGTW
* 93	220300	27.0N 151.5E	PCN 6				PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	140454	5.6N 155.6E	1500FT		1001	15 300 40	300 20 300 40	10 5			+24 +25 +23 27	1
2	142053	6.8N 152.4E	850MB			25 090 25	020 23 340 30	10 20			+18 +19 +18	2
3	142244	7.1N 152.3E	1500FT		1003	30 040 15	150 27 040 30	10 5			+24 +23 +23	2
4	150829	8.2N 149.7E	1500FT		996	35 090 25	200 40 090 25	12 10			+24 +26 26	3
5	151043	7.5N 148.6E	700MB	3087			020 30 280 50	15 15				3
6	151943	8.8N 146.9E	850MB			50 130 30	210 36 130 30	8 4			+19 +23 +18	4
7	152316	9.1N 146.1E	700MB	3010	988	70 350 30	170 58 090 20	8 1			+14 +16 + 9	4
8	160532	9.4N 144.7E	1500FT		982	55 360 20	070 49 360 31	10 3	CIRCULAR	40	+26 +27 +25 26	5
9	160854	9.7N 143.8E	700MB	2993			050 54 310 30	10 5			+12 +15 +13	5
10	161031	9.7N 143.1E	700MB	3000			090 61 350 30	10 5	CIRCULAR	40	+14 +16 +11	5
11	162036	10.2N 141.0E	700MB	2865		65 350 15	070 70 350 15	8 5	ELLIPTICAL	30 20 050	+16 +17 +15	6
12	162321	10.4N 140.5E	700MB	2880	974	80 050 10	150 84 050 10	8 3	ELLIPTICAL	40 30 070	+13 +17 +14	6
13	170541	10.9N 138.7E	700MB	2822	967	90 090 15	060 60 340 55	20 3	CIRCULAR	27	+15 +18 +10	7
14	170800	11.0N 138.1E	700MB	2818	965	110 050 30	180 100 050 30	20 5	CIRCULAR	20	+18 +21 + 9	7
15	172041	12.2N 135.2E	700MB	2703		55 300 60	110 126 050 10	10 5	CIRCULAR	20	+13 +23 +14	9
16	172312	12.3N 134.8E	700MB	2740	960	120 300 10	350 88 300 40	10 2	ELLIPTICAL	20 15 010	+13 +20 +18	9
17	181101	13.9N 133.2E	700MB	2720	956		060 96 330 21	10 2	ELLIPTICAL	30 20 020	+13 +19 +13	10
18	181347	14.3N 132.9E	700MB	2734			230 92 230 21	12 2			+18 +12	10
19	182048	15.3N 132.5E	700MB	2722	957	65 360 60	170 82 090 18	10 5	CIRCULAR	30	+16 +20 +11	11
20	182333	15.7N 132.4E	700MB	2742	958	80 160 10	260 78 170 34	10 3	CIRCULAR	30	+18 +19 +10	11
21	190832	17.9N 132.3E	700MB	2630		80 090 10	100 87 090 10	8 4	CIRCULAR	15	+12 +20 +13	12
22	191105	18.4N 132.5E	700MB	2631	948		220 112 120 25	10 5	CIRCULAR	20	+13 +19 +13	12
23	192021	20.3N 132.8E	700MB	2598	942		020 111 020 10	6 6	ELLIPTICAL	25 20 360	+22 +19 +11	13
24	192337	20.7N 133.1E	700MB	2603	943	75 330 55	060 113 330 10	6 6	ELLIPTICAL	25 20 360	+14 +20 +11	13
25	200833	22.7N 135.1E	700MB	2681	952	110 250 10	200 105 100 24	7 1	CIRCULAR	20	+14 +16 +10	14
26	201113	23.4N 135.8E	700MB	2724			290 84 220 30	8 1			+10 +17 +11	14
27	202040	24.9N 139.0E	700MB	2949			200 62 040 5	15 15			+10 +16 +10	15
28	212356	27.9N 151.1E	1500FT		1003	35 110 60	250 50 120 30	5 3	CIRCULAR	5	+23 +22 +21	1[illegible]

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	141200	6.3N 153.9E	030	055	SYNOP STATIONS 91334 AND 91338
2	150900	8.3N 149.7E	035	065	SYNOP STATIONS 91324 AND 91334

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES

TYPHOON DOYLE
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		BEST TRACK WIND	WARNING POSIT		WARNING WIND	WARNING ERRORS DST	WARNING ERRORS WIND	24 HOUR FORECAST POSIT		24 HOUR FORECAST WIND	24 HOUR FORECAST ERRORS DST	24 HOUR FORECAST ERRORS WIND	48 HOUR FORECAST POSIT		48 HOUR FORECAST WIND	48 HOUR FORECAST ERRORS DST	48 HOUR FORECAST ERRORS WIND	72 HOUR FORECAST POSIT		72 HOUR FORECAST WIND	72 HOUR FORECAST ERRORS DST	72 HOUR FORECAST ERRORS WIND
120206Z	6.3	149.2	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120212Z	6.4	148.1	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120218Z	6.6	146.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120300Z	6.9	145.4	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120306Z	7.0	144.1	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120312Z	7.2	142.9	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120318Z	7.4	141.9	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120400Z	7.5	141.0	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120406Z	7.7	140.2	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120412Z	8.0	139.2	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120418Z	8.3	138.3	35	8.5	138.4	30.	13.	-5.	9.4	134.6	55.	63.	5.	10.5	130.7	65.	214.	0.	11.7	126.8	65.	375.	-40.
120500Z	8.6	137.5	40	8.8	137.4	35.	13.	-5.	9.8	133.5	55.	97.	5.	11.2	129.3	70.	265.	-10.	12.7	124.7	60.	447.	-50.
120506Z	9.1	136.7	45	9.0	136.8	45.	8.	0.	9.9	133.1	65.	119.	15.	11.2	128.9	80.	294.	-10.	12.8	124.2	65.	463.	-50.
120512Z	9.6	136.0	50	9.6	135.8	50.	12.	0.	11.0	132.6	65.	101.	10.	12.4	129.2	70.	239.	-20.	13.2	125.2	65.	395.	-50.
120518Z	10.2	135.3	50	10.1	135.0	55.	19.	5.	12.0	131.6	65.	118.	0.	13.3	127.8	70.	272.	-35.	13.9	123.5	65.	456.	-55.
120600Z	10.8	134.8	50	11.0	134.9	50.	13.	0.	13.7	132.4	65.	41.	-15.	15.1	129.0	65.	162.	-45.	16.3	125.5	55.	290.	-70.
120606Z	11.5	134.3	50	11.9	134.5	55.	27.	5.	14.1	132.1	65.	39.	-25.	15.3	129.1	60.	141.	-55.	16.3	125.3	50.	296.	-70.
120612Z	12.2	133.8	55	12.2	133.8	50.	0.	-5.	14.5	131.5	50.	55.	-40.	16.0	128.0	55.	181.	-60.	16.9	124.0	50.	359.	-45.
120618Z	12.9	133.4	65	12.9	133.2	45.	12.	-20.	15.0	130.8	55.	70.	-50.	16.2	127.3	55.	201.	-65.	16.9	123.1	50.	412.	-15.
120700Z	13.6	133.1	80	13.5	133.1	75.	6.	-5.	15.6	131.2	100.	31.	-10.	16.4	128.8	105.	113.	-20.	16.6	125.8	110.	315.	65.
120706Z	14.4	132.7	90	14.5	132.9	95.	13.	5.	16.3	131.2	120.	17.	5.	16.8	129.7	115.	81.	-5.	17.0	127.5	110.	281.	70.
120712Z	15.0	132.3	90	15.1	132.5	90.	13.	0.	16.5	131.0	100.	6.	-15.	17.0	129.0	90.	117.	-5.	17.0	126.9	80.	382.	40.
120718Z	15.5	131.9	105	15.6	132.2	100.	18.	-5.	16.8	130.8	105.	13.	-15.	17.0	128.7	95.	149.	30.	17.0	126.6	85.	478.	50.
120800Z	15.8	131.7	110	15.7	131.9	110.	13.	0.	16.4	130.6	110.	67.	-15.	17.7	128.9	100.	149.	55.	19.5	127.1	90.	439.	60.
120806Z	16.1	131.4	115	16.1	131.4	110.	0.	-5.	17.0	129.3	105.	80.	-15.	18.2	127.7	100.	218.	60.	19.8	126.3	90.	568.	65.
120812Z	16.5	131.1	115	16.5	131.1	115.	0.	0.	17.7	129.7	105.	62.	10.	19.3	128.2	95.	230.	55.	0.0	0.0	0.	-0.	0.
120818Z	17.0	130.7	120	16.5	130.7	105.	6.	-15.	18.9	129.3	90.	35.	25.	21.2	128.6	80.	230.	45.	0.0	0.0	0.	-0.	0.
120900Z	17.5	130.4	125	17.5	130.4	100.	0.	-25.	20.4	128.8	80.	79.	35.	25.2	130.1	65.	196.	35.	0.0	0.0	0.	-0.	0.
120906Z	18.1	130.1	120	18.4	130.1	100.	18.	-20.	22.6	129.1	75.	130.	35.	27.7	132.4	60.	223.	35.	0.0	0.0	0.	-0.	0.
120912Z	18.7	130.0	95	18.7	129.8	90.	11.	-5.	22.7	129.2	65.	121.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120918Z	19.2	129.9	65	19.7	130.2	80.	34.	15.	24.4	133.0	55.	98.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121000Z	19.9	130.1	45	20.1	130.1	45.	12.	0.	25.0	134.0	25.	74.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121006Z	20.8	130.4	40	21.0	130.6	40.	16.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121012Z	21.9	131.2	40	21.4	131.3	40.	31.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121018Z	22.9	132.3	35	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121100Z	23.9	133.4	30	23.9	133.5	30.	5.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121106Z	24.8	135.0	25	25.0	134.5	25.	30.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	13.	69.	193.	397.	13.	69.	192.	381.
AVG RIGHT ANGLE ERROR	10.	58.	161.	310.	9.	59.	156.	329.
AVG INTENSITY MAGNITUDE ERROR	6.	18.	34.	53.	6.	19.	34.	52.
AVG INTENSITY BIAS	-3.	-1.	-1.	-6.	-4.	-0.	-5.	-17.
NUMBER OF FORECASTS	26	22	19	15	24	21	17	13

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1960. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TYPHOON DOYLE
FIX POSITIONS FOR CYCLONE NO. 30

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	020857	6.6N 148.4E	PCN 5	T1.0/1.0	INIT OBS	PGTW
2	021200	6.8N 148.2E	PCN 6			PGTW
3	021600	7.0N 147.7E	PCN 6	T1.0/1.0	INIT OBS	PGTW
4	021800	7.2N 147.5E	PCN 6			PGTW
* 5	021955	7.3N 147.4E	PCN 5			PGTW
6	030000	7.1N 144.7E	PCN 6			PGTW
7	030300	7.2N 145.6E	PCN 6	T1.5/1.5 /D0.5/24HRS	ULCC 7.2N 144.7E	PGTW
8	030600	7.5N 143.9E	PCN 6		ULCC FIX	PGTW
9	030835	7.5N 143.3E	PCN 5		ULCC FIX	PGTW
10	031200	7.9N 142.9E	PCN 6		ULCC FIX	PGTW
11	031600	7.6N 142.3E	PCN 6	T1.0/1.0+/S0.0/24HRS	ULCC FIX	PGTW
12	031800	7.4N 141.8E	PCN 6		ULCC FIX	PGTW
13	031844	7.5N 141.9E	PCN 6		ULCC FIX	PGTW
14	032115	8.3N 140.8E	PCN 6		ULCC FIX	PGTW
15	040000	8.3N 142.4E	PCN 6		ULCC FIX	PGTW
16	040045	8.3N 141.9E	PCN 5			PGTW
* 17	040300	8.5N 141.7E	PCN 6	T2.0/2.0 /D0.5/24HRS		PGTW
* 18	040546	8.6N 141.7E	PCN 6			PGTW
19	040855	8.2N 140.0E	PCN 5			PGTW
* 20	040900	8.7N 141.5E	PCN 6			PGTW
21	041200	8.0N 139.6E	PCN 6		ULCC FIX	PGTW
22	041326	8.1N 139.3E	PCN 5		ULCC FIX	PGTW
23	041600	8.5N 138.7E	PCN 6	T2.5/2.5 /D1.5/24HRS	ULCC FIX	PGTW
24	041800	8.5N 138.3E	PCN 6		ULCC FIX	PGTW
25	042054	8.9N 137.6E	PCN 5		ULCC FIX	PGTW
26	050000	8.7N 137.5E	PCN 6			PGTW
27	050300	9.0N 136.7E	PCN 6	T3.0/3.0 /D1.0/24HRS		PGTW
28	050600	9.2N 136.6E	PCN 6			PGTW
29	050716	9.6N 136.5E	PCN 6			RODN
30	050900	9.4N 136.2E	PCN 6			PGTW
* 31	050934	9.9N 135.2E	PCN 4			RODN
32	051012	9.9N 135.7E	PCN 5			RPMK
33	051200	9.7N 135.6E	PCN 6			PGTW
34	051305	10.0N 135.5E	PCN 3			RPMK
35	051600	10.4N 135.4E	PCN 6	T3.5/3.5-/D1.0/24HRS		PGTW
36	051800	10.8N 134.6E	PCN 6			PGTW
37	051819	10.1N 134.8E	PCN 4			RODN
* 38	052033	10.7N 134.1E	PCN 4			RODN
39	052100	10.6N 134.7E	PCN 6			PGTW
40	052250	10.2N 135.0E	PCN 3	T3.0/3.0	INIT OBS	RPMK
41	060000	11.1N 135.1E	PCN 4			PGTW
* 42	060146	11.7N 134.1E	PCN 3	T3.5/3.5	INIT OBS	RODN
43	060300	11.5N 135.0E	PCN 4	T3.5/3.5 /D0.5/24HRS		PGTW
44	060600	11.9N 134.2E	PCN 4			PGTW
45	060900	11.7N 133.9E	PCN 4			PGTW
46	060913	11.7N 133.9E	PCN 4			RODN
47	060947	11.9N 133.5E	PCN 4			RODN
48	061200	12.2N 133.6E	PCN 4			PGTW
49	061600	12.4N 133.0E	PCN 4	T4.0/4.0 /D0.5/24HRS		PGTW
50	061800	13.1N 133.4E	PCN 4			PGTW
51	062100	13.4N 133.5E	PCN 6			PGTW
52	062226	13.2N 133.4E	PCN 3	T4.0/4.0 /D1.0/24HRS		RPMK
53	070000	13.5N 133.1E	PCN 4			PGTW
54	070126	13.9N 133.2E	PCN 1	T5.0/5.0+/D1.5/24HRS	40 PCT EYEWALL E-SW	RODN
55	070300	14.1N 133.1E	PCN 2	T5.0/5.0 /D1.5/24HRS	EYE DIA 5NM	PGTW
56	070600	14.6N 132.9E	PCN 2		EYE FIX	PGTW
57	070900	14.8N 132.6E	PCN 2		EYE FIX	PGTW
58	070923	14.8N 132.5E	PCN 2		EYE FIX	RODN
59	071033	15.5N 131.9E	PCN 3			RPMK
60	071200	15.1N 132.4E	PCN 2		EYE FIX	PGTW
61	071407	15.2N 132.5E	PCN 1			RPMK
62	071600	15.3N 132.3E	PCN 2	T5.5/5.5 /D1.5/24HRS		PGTW
63	071800	15.6N 132.2E	PCN 2			PGTW
64	072100	15.6N 131.9E	PCN 2			PGTW
65	072131	15.6N 131.7E	PCN 2			RODN

66	072132	15.5N	132.2E	PCN 1	T5.0/5.0 /D1.0/24HRS	EYE FIX	RPMK
67	072202	15.7N	131.7E	PCN 2		EYE FIX 50 PCT EYEWALL	RODN
68	080000	15.7N	131.9E	PCN 2			PGTW
69	080106	15.7N	131.8E	PCN 1			RPMK
70	080300	16.0N	131.6E	PCN 2	T5.5/5.5-/D0.5/24HRS		PGTW
71	080600	16.1N	131.4E	PCN 2			PGTW
72	080900	16.2N	131.3E	PCN 2			PGTW
73	081011	16.3N	131.0E	PCN 2		EYE FIX	RODN
74	081040	16.5N	131.7E	PCN 1		EYE FIX	RPMK
75	081200	16.5N	131.2E	PCN 2			PGTW
76	081347	16.5N	131.2E	PCN 1		EYE FIX	RPMK
77	081600	16.8N	130.9E	PCN 4	T5.0/5.5 /W0.5/24HRS		PGTW
78	081800	17.0N	130.7E	PCN 4			PGTW
79	082111	16.5N	130.5E	PCN 4			RODN
80	082319	17.1N	130.8E	PCN 4			RODN
81	082319	17.1N	131.1E	PCN 3	T5.0/5.0-/S0.0/26HRS		RPMK
82	090000	17.5N	130.6E	PCN 4			PGTW
83	090046	17.3N	130.5E	PCN 3			RPMK
84	090300	17.9N	130.3E	PCN 4	T4.5/5.5 /W1.0/24HRS		PGTW
85	090600	18.4N	130.1E	PCN 4		ULCC FIX	PGTW
86	090626	17.8N	130.1E	PCN 5			RPMK
87	090900	18.7N	129.9E	PCN 6			PGTW
88	090951	18.8N	129.9E	PCN 6			RODN
89	091016	18.8N	129.9E	PCN 6			RODN
90	091200	19.1N	130.1E	PCN 6			PGTW
* 91	091326	20.0N	131.2E	PCN 5			RPMK
92	091600	19.5N	130.8E	PCN 6	T3.0/4.0+/W2.0/24HRS		PGTW
93	091800	20.0N	131.3E	PCN 6		ULCC FIX	PGTW
94	091910	20.1N	131.5E	PCN 6			RPMK
95	092049	20.0N	130.7E	PCN 6			RODN
96	092100	20.1N	132.0E	PCN 6		ULCC FIX	PGTW
97	092254	20.3N	131.3E	PCN 6		ULCC FIX	RODN
98	100000	20.4N	130.5E	PCN 6		ULCC FIX	PGTW
99	100026	20.2N	130.6E	PCN 6	T3.5/4.5 /W1.5/25HRS		RPMK
100	100300	20.5N	130.3E	PCN 6	T3.0/4.0 /W1.5/24HRS		PGTW
101	100600	21.4N	130.7E	PCN 6		ULCC FIX	PGTW
*102	100626	21.4N	131.2E	PCN 3			RPMK
103	100900	21.4N	130.8E	PCN 6		ULCC FIX	PGTW
104	101200	21.2N	131.1E	PCN 6		ULCC 21.4N 132.8E	PGTW
*105	101600	23.2N	133.5E	PCN 6		ULCC FIX	PGTW
106	101800	23.1N	134.1E	PCN 6			PGTW
107	101857	23.0N	133.2E	PCN 6			RODN
108	102100	23.2N	134.7E	PCN 6			PGTW
109	102230	22.8N	135.0E	PCN 6		ULCC FIX	RODN
110	110000	23.8N	133.6E	PCN 4	T1.5/2.5 /W1.5/21HRS	EXP LLCC	PGTW
111	110005	23.2N	133.0E	PCN 6	T1.5/1.5	INIT OBS	RODN
112	110005	23.2N	133.3E	PCN 6	T1.5/1.5	INIT OBS	RSKO
113	110600	24.6N	135.0E	PCN 4			PGTW
114	110601	24.4N	135.4E	PCN 3	T1.5/2.5 /W2.0/30HRS	EXP LLCC	RPMK
115	120300	29.9N	144.9E	PCN 6			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION		FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM	ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	050129	8.7N	137.3E	1500FT		994	40 180 5	280 35 180 5	5 2				+23 +27 +23	4
2	050533	9.1N	137.0E	1500FT		993	45 200 15	110 41 010 86	6 2				+27 +29 +26	5
3	052030	10.6N	135.3E	700MB	2955		40 350 40	160 47 110 35	10 10	CIRCULAR	70		+14 +15 + 8	6
4	052336	11.1N	135.1E	1500FT		991	50 140 30	250 48 150 5	10 10	CIRCULAR	60		+25 +27 +25 30	6
5	060852	11.8N	134.0E	700MB	2997	989	50 070 50	140 45 060 60	10 5	CIRCULAR	20		+15 +17 +11	7
6	061124	12.0N	133.8E	700MB	2998	991		290 35 230 60	8 5				+14 +17 +12	7
7	062034	13.1N	133.5E	700MB	2910	978		090 62 010 14	12 5	ELLIPTICAL	15 10	080	+16 +19 +12	8
8	062336	13.5N	133.2E	700MB	2876	973	90 360 10	280 74 190 08	10 5	CIRCULAR	20		+15 +19 +12	8
9	070932	14.8N	132.6E	700MB	2676			150 89 060 20	8 2	CIRCULAR	8		+14 +19 +13	9
10	071137	15.1N	132.4E	700MB	2685	953		260 89 170 14	10 2	CIRCULAR	12		+15 +18 +14	9
11	072047	15.6N	131.8E	700MB	2526	935	45 310 120	080 99 020 10	5 2	ELLIPTICAL	15 10	210	+14 +19 +14	10
12	072329	15.8N	131.8E	700MB	2570	940	110 240 10	190 95 120 30	5 3	ELLIPTICAL	15 10	280	+14 +20 +13	10
13	080835	16.2N	131.2E	700MB	2585	944	120 090 15	140 113 030 10	5 3	CIRCULAR	20		+11 +16 +15	11
14	081106	16.4N	131.2E	700MB	2562			260 101 180 10	3 5	CIRCULAR	20		+ 9 +17 +15	11
15	082044	17.2N	130.5E	700MB	2642			180 110 120 23	8 5	CIRCULAR	20		+13 +21 +12	12
16	082339	17.4N	130.5E	700MB	2675	951	130 090 5	190 125 160 20	8 5	CIRCULAR	20		+13 +21 +11	12
17	090843	18.4N	130.1E	700MB	2891	972	120 100 24	100 74 360 69	10 1	CIRCULAR	40		+18 +21 + 4	13
18	091123	18.8N	129.8E	700MB	3011	987		280 40 190 35	8 5				+22 +24 + 3	13
19	092037	19.4N	130.3E	700MB	3041	993		150 50 010 60	5 5				+22 +21 + 7	14
20	092337	20.1N	130.0E	1500FT		993	50 130 50	300 43 200 72	5 5				+28 +27 +25	14
21	100559	20.9N	130.6E	1500FT		993	50 020 30	230 38 150 67	5 5				+24 +24 +24	15
22	100835	21.2N	130.8E	1500FT		996	85 280 35	350 35 280 35	15 5				+24 +24 +24	15
23	102212	23.5N	133.0E	1500FT		1002	40 140 50	220 49 140 78	8 5				+27 +29 +24	16
24	110059	24.2N	133.5E	1500FT		1004	15 340 10	350 31 260 25	8 2				26+ 27+ 24	16

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

2. NORTH INDIAN OCEAN CYCLONE DATA

TROPICAL CYCLONE 01-84
BEST TRACK DATA

	BEST TRACK			WARNING						24 HOUR FORECAST						48 HOUR FORECAST						72 HOUR FORECAST					
							ERRORS					ERRORS					ERRORS							ERRORS			
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
052312Z	10.7	56.2	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052318Z	10.9	56.0	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052400Z	11.1	55.7	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052406Z	11.3	55.5	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052412Z	11.5	55.3	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052418Z	11.7	55.2	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052500Z	11.9	54.9	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052506Z	12.1	54.7	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052512Z	12.2	54.4	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052518Z	12.4	53.9	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052600Z	12.7	53.4	35	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052606Z	13.0	53.0	35	13.2	53.0	35.	12.	0.	14.8	50.1	45.	126.	0.	15.4	46.5	20.	347.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052612Z	13.2	52.4	40	13.7	52.4	40.	30.	0.	15.0	49.4	35.	193.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052618Z	13.5	51.7	40	13.4	51.9	40.	13.	0.	13.8	49.5	55.	249.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052700Z	13.5	50.4	45	13.7	51.2	45.	48.	0.	14.2	48.5	40.	294.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052706Z	13.0	49.0	45	13.7	49.8	45.	63.	0.	13.8	46.7	30.	265.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052712Z	12.3	47.6	40	13.3	48.0	45.	64.	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.
052718Z	11.6	45.9	35	11.6	46.3	40.	24.	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.
052800Z	10.9	44.8	35	11.1	44.5	40.	21.	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.
052806Z	10.0	44.4	30	10.0	44.3	30.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	31.	225.	347.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	19.	79.	195.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	6.	10.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	2.	4.	-10.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	9	5	1	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 819. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TC01A
FIX POSITIONS FOR CYCLONE NO. 1

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS		SITE
1	231444	10.9N	56.2E	PCN 5	T1.0/1.0	INIT OBS		KGWC
2	232333	6.0N	54.0E	PCN 6				FJDG
3	240658	11.2N	55.3E	PCN 5	T1.5/1.5 /D0.5/16HRS	ULAC 10.8N	54.4E	KGWC
4	250638	12.5N	55.4E	PCN 5	T1.5/1.5 /S0.0/24HRS	ULAC 11.4N	55.8E	KGWC
5	251918	12.2N	53.7E	PCN 6				KGWC
6	260050	12.9N	53.1E	PCN 5		ULAC 12.3N	53.4E	KGWC
7	260241	13.0N	53.4E	PCN 5		ULAC 12.6N	53.6E	KGWC
8	260617	13.3N	53.1E	PCN 5	T2.5/2.5 /D1.0/24HRS	ULAC 12.8N	53.2E	KGWC
9	261153	13.2N	52.6E	PCN 5		ULAC 12.9N	52.7E	KGWC
10	261521	13.1N	52.1E	PCN 5		ULAC 12.6N	52.4E	KGWC
11	261858	13.6N	51.6E	PCN 5		ULAC 13.1N	51.7E	KGWC
12	270037	13.4N	50.4E	PCN 5		ULAC 13.2N	50.1E	KGWC
13	270220	13.5N	49.9E	PCN 5	T2.5/2.5 /S0.0/22HRS	ULAC 13.0N	49.3E	KGWC
14	271140	12.1N	47.7E	PCN 5		ULAC 11.8N	47.7E	KGWC
15	271500	11.7N	46.7E	PCN 5		ULAC 11.9N	47.0E	KGWC
16	271838	11.6N	45.3E	PCN 5		ULAC 11.4N	45.3E	KGWC
17	280025	11.2N	44.7E	PCN 6		ULAC 11.2N	45.0E	KGWC
18	280340	9.9N	44.9E	PCN 5				KGWC

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL CYCLONE 02-84
BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
							ERRORS					ERRORS					ERRORS					ERRORS	
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
101012Z	16.8	88.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101018Z	17.5	88.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101100Z	17.7	88.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101106Z	18.0	88.6	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101112Z	18.2	88.6	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101118Z	18.4	88.6	35	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101200Z	18.7	88.6	35	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101206Z	19.0	88.6	40	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101212Z	19.2	88.5	40	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101218Z	19.5	88.4	45	19.5	88.8	45.	23.	0.	22.3	88.3	50.	113.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101300Z	19.7	88.3	45	19.8	88.3	45.	6.	0.	21.5	87.7	60.	37.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101306Z	19.9	88.1	45	19.2	87.8	55.	45.	10.	20.9	86.8	60.	43.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101312Z	20.2	87.9	40	19.9	88.3	45.	29.	5.	21.2	87.1	35.	90.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101318Z	20.5	87.7	35	20.3	87.9	45.	16.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101400Z	21.0	87.3	35	20.6	87.8	40.	37.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101406Z	21.6	86.6	35	21.0	87.0	40.	42.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101412Z	22.2	85.9	30	21.7	86.3	30.	37.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	29.	71.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	13.	40.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	18.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	4.	18.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	8	4	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 380. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 4. KNOTS

TC02B
FIX POSITIONS FOR CYCLONE NO. 2

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	101200	16.9N	89.5E	PCN 6		ULCC FIX	PGTW
* 2	101600	18.0N	90.0E	PCN 6		ULCC FIX	PGTW
3	101645	17.0N	87.8E	PCN 5	T1.5/1.5	INIT OBS ULAC 18.0N 90.3E	KGWC
4	101800	18.1N	89.0E	PCN 6	T2.0/2.0	INIT OBS	PGTW
5	102100	18.5N	88.8E	PCN 6		ULCC FIX	PGTW
6	110345	17.5N	88.5E	PCN 5	T1.5/1.5 /D0.5/11HRS	ULAC 18.9N 89.8E	KGWC
* 7	111016	18.4N	89.7E	PCN 6		ULAC 19.0N 089.7E	KGWC
* 8	111200	19.0N	87.6E	PCN 6			PGTW
9	111200	19.4N	88.1E	PCN 5		ULAC 19.1N 89.1E	KGWC
10	111600	18.6N	87.9E	PCN 6			PGTW
11	111625	19.1N	88.7E	PCN 5		ULAC 19.1N 89.6E	KGWC
12	111800	18.4N	88.5E	PCN 6	T2.0/2.0 /S0.0/24HRS		PGTW
13	112100	18.8N	88.7E	PCN 6			PGTW
* 14	112300	20.2N	89.4E	PCN 6			KGWC
* 15	120049	19.6N	90.1E	PCN 5			KGWC
* 16	120324	18.7N	89.8E	PCN 5	T2.0/2.0 /D0.5/24HRS	ULAC 18.8N 088.0E	KGWC
* 17	121003	18.7N	89.8E	PCN 4		ULAC 18.0N 089.0E	KGWC
18	121329	19.1N	88.9E	PCN 6		ULAC 20.1N 88.0E	KGWC
19	121600	19.0N	88.5E	PCN 6			PGTW
20	121605	19.1N	88.8E	PCN 6		ULAC 21.0N 87.6E	KGWC
21	121800	19.4N	88.3E	PCN 6	T3.0/3.0 /D1.0/24HRS		PGTW
22	122248	20.0N	88.0E	PCN 5			KGWC
23	130000	19.7N	87.9E	PCN 6			PGTW
24	130028	19.9N	88.4E	PCN 5		ULAC 18.9N 88.2E	KGWC
* 25	130400	19.0N	87.0E	PCN 6		ULCC FIX	PGTW
26	130446	19.3N	89.2E	PCN 5	T3.0/3.0 /D1.0/25HRS	ULAC 18.8N 89.1E	KGWC
27	130600	19.2N	87.9E	PCN 6		ULCC FIX	PGTW
28	130900	19.8N	87.5E	PCN 6		ULCC FIX	PGTW
* 29	130951	19.8N	88.7E	PCN 2		EXP LLCC ULAC 19.9N 085.5E	KGWC
* 30	131200	19.6N	87.0E	PCN 6		ULCC FIX	PGTW
31	131308	20.4N	88.5E	PCN 6			KGWC
32	131545	20.2N	88.2E	PCN 6			KGWC
33	131600	20.3N	87.5E	PCN 6	T2.5/3.0-/W0.5/22HRS	ULCC FIX	PGTW
* 34	132100	19.9N	86.9E	PCN 6			PGTW
* 35	132235	20.9N	88.7E	PCN 6			KGWC
* 36	140000	20.0N	86.9E	PCN 6		ULCC FIX	PGTW
37	140007	21.7N	87.7E	PCN 6		ULAC 20.4N 86.9E	KGWC
38	140400	21.0N	86.6E	PCN 6		ULCC FIX	PGTW
39	140425	20.9N	86.2E	PCN 5			KGWC
40	140600	21.2N	86.7E	PCN 6		ULCC FIX	PGTW

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION		INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	140300	21.0N	87.2E	040	045	42895 42973 42977
2	141200	21.7N	86.3E	030	030	42895 42971 42798

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL CYCLONE 03-84
BEST TRACK DATA

MO/DA/HR	BEST TRACK POSIT		WIND	WARNING POSIT		WIND	ERRORS DST	WIND	24 HOUR FORECAST POSIT		WIND	ERRORS DST	WIND	48 HOUR FORECAST POSIT		WIND	ERRORS DST	WIND	72 HOUR FORECAST POSIT		WIND	ERRORS DST	WIND
110900Z	8.8	88.0	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110906Z	9.0	87.3	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110912Z	9.3	86.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110918Z	9.6	86.2	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111000Z	9.9	85.6	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111006Z	10.0	85.0	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111012Z	10.2	84.2	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111018Z	10.3	83.6	35	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111100Z	10.4	82.8	40	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111106Z	10.5	82.1	50	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111112Z	10.8	81.4	60	10.6	81.2	40.	17.	-20.	10.9	78.6	30.	164.	-50.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111118Z	11.1	81.0	70	10.9	80.6	50.	26.	-20.	11.2	78.1	30.	206.	-55.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111200Z	11.6	80.7	75	11.7	80.4	55.	19.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111206Z	12.2	80.7	80	12.5	80.6	80.	19.	0.	14.8	79.2	45.	122.	-40.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111212Z	12.8	80.6	80	13.0	80.6	75.	12.	-5.	15.2	78.9	30.	150.	-55.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111218Z	13.5	80.7	85	13.5	80.3	65.	23.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111300Z	13.9	80.8	85	14.0	80.6	70.	13.	-15.	15.9	79.8	30.	129.	-50.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111306Z	13.6	80.9	85	14.7	80.7	70.	67.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111312Z	13.4	80.7	85	14.3	80.7	70.	54.	-15.	15.5	80.7	60.	95.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111318Z	13.5	80.4	85	14.0	80.7	70.	35.	-15.	15.1	80.7	65.	67.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111400Z	13.8	80.3	80	13.8	80.3	90.	0.	10.	16.0	79.3	50.	123.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111406Z	14.0	80.3	75	13.9	79.9	80.	24.	5.	16.1	79.1	30.	133.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111412Z	14.0	80.2	70	14.3	79.9	75.	25.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111418Z	14.1	80.2	60	14.5	80.3	65.	25.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111500Z	14.1	80.1	45	13.7	80.0	50.	25.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111506Z	14.1	80.1	35	13.6	80.0	35.	31.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	26.	132.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	16.	107.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	11.	31.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-7.	-28.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	16	9	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 719. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 5. KNOTS

TC03B
FIX POSITIONS FOR CYCLONE NO. 3

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	090300	9.4N	87.3E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	090407	8.6N	87.5E	PCN 5	T1.5/1.5	INIT OBS	KGWC
3	090600	9.0N	87.0E	PCN 6			PGTW
4	090900	9.3N	86.5E	PCN 6			PGTW
5	091600	9.7N	87.2E	PCN 6	T1.0/1.0	INIT OBS	PGTW
* 6	091647	9.3N	87.8E	PCN 5		ULAC 10.1N 087.5E	KGWC
7	100346	10.4N	85.6E	PCN 5	T2.0/2.0 /D0.5/24HRS	ULAC 09.5N 085.9E	KGWC
8	110020	10.3N	82.3E	PCN 6		ULAC 09.8N 082.6E	KGWC
9	110508	10.4N	82.6E	PCN 5	T3.5/3.5 /D1.5/25HRS		KGWC
10	111035	10.8N	81.3E	PCN 5			KGWC
11	111300	11.0N	87.5E	PCN 5		ULAC 11.3N 081.7E	KGWC
12	111607	11.2N	81.1E	PCN 5			KGWC
13	112359	11.7N	80.5E	PCN 5			KGWC
14	120148	13.0N	81.0E	PCN 6	T2.5/2.5	INIT OBS	FJDG
15	120447	12.4N	80.8E	PCN 1	T5.0/5.0 /D1.5/24HRS	EYE DIA 6NM	KGWC
16	121022	12.8N	80.9E	PCN 1			KGWC
17	121238	12.8N	80.4E	PCN 1		EYE FIX	KGWC
18	121728	13.4N	80.7E	PCN 1		EYE FIX	KGWC
19	122307	13.7N	80.7E	PCN 1		EYE FIX	KGWC
20	122308	13.5N	81.0E	PCN 5	T4.5/4.5 /D2.0/24HRS		FJDG
21	130119	14.0N	81.0E	PCN 2		EYE DIA 15NM	KGWC
22	130427	14.8N	80.7E	PCN 1	T5.5/5.5 /D0.5/24HRS	EYE FIX	KGWC
23	131010	13.4N	80.7E	PCN 1			KGWC
24	131359	13.3N	80.9E	PCN 1		EYE FIX	KGWC
25	131708	13.4N	80.3E	PCN 1		EYE FIX	KGWC
26	132254	14.0N	80.2E	PCN 1		EYE FIX	KGWC
27	140057	13.9N	80.4E	PCN 1		EYE FIX	KGWC
28	140407	13.7N	79.9E	PCN 1			KGWC
29	140957	14.2N	80.2E	PCN 1			KGWC
30	141337	13.8N	80.8E	PCN 5		ULAC 13.3N 080.4E	KGWC
31	141647	14.0N	80.9E	PCN 5		ULAC 13.8N 080.6E	KGWC
32	142242	13.7N	80.0E	PCN 5			KGWC
33	150036	14.0N	80.4E	PCN 5			KGWC
34	150528	13.4N	80.1E	PCN 5			KGWC
35	150944	13.8N	80.3E	PCN 5			KGWC
36	151627	13.6N	80.4E	PCN 5			KGWC
37	160508	14.1N	80.0E	PCN 5			KGWC

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION		INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	130300	13.8N	80.5E	070	050	STATIONS 43245 AND 43279
2	130900	13.7N	80.2E	070	045	STATIONS 43245 AND 43279
3	142100	13.7N	80.0E	030	030	STATIONS 43245 AND 43279

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.

TROPICAL CYCLONE 04-84
BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS					ERRORS		
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
112706Z	8.4	85.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112712Z	8.6	85.5	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112718Z	8.8	85.2	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112800Z	9.0	84.9	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112806Z	9.3	84.7	35	9.4	85.0	35.	19.	0.	10.4	83.5	50.	113.	5.	11.6	81.3	65.	214.	5.	12.4	79.3	40.	126.	-35.
112812Z	9.7	84.6	40	9.8	84.6	40.	6.	0.	11.2	83.0	60.	178.	10.	12.5	81.0	70.	216.	5.	13.4	79.3	35.	102.	-30.
112818Z	10.2	84.7	40	10.3	84.4	40.	19.	0.	11.7	82.8	55.	206.	5.	12.9	80.2	65.	190.	0.	13.4	78.8	35.	102.	5.
112900Z	10.3	85.1	45	10.7	84.5	45.	43.	0.	11.7	83.0	55.	173.	0.	12.4	80.6	70.	136.	0.	12.7	78.2	30.	134.	10.
112906Z	10.2	85.4	45	10.3	85.0	45.	24.	0.	11.3	83.5	55.	103.	-5.	12.3	81.2	70.	95.	-5.	12.7	78.8	35.	270.	15.
112912Z	9.7	85.6	50	10.1	84.6	45.	64.	-5.	11.0	83.4	55.	51.	-10.	11.9	81.1	70.	101.	5.	12.2	78.8	35.	359.	15.
112918Z	9.3	85.3	50	10.1	84.6	50.	63.	0.	10.6	83.6	65.	42.	0.	11.3	81.3	70.	210.	40.	12.0	79.0	35.	468.	10.
113000Z	9.5	84.9	55	9.7	84.7	55.	17.	0.	9.4	83.7	75.	124.	5.	9.3	81.7	80.	363.	60.	9.7	78.9	50.	542.	20.
113006Z	9.9	84.5	60	9.6	84.8	60.	25.	0.	9.4	83.8	75.	201.	0.	9.4	81.8	80.	453.	60.	9.7	79.0	55.	618.	25.
113012Z	10.3	83.9	65	9.7	84.2	60.	40.	-5.	10.7	82.2	75.	175.	10.	11.9	80.0	60.	426.	40.	13.2	78.5	35.	656.	5.
113018Z	10.5	82.9	65	10.3	82.8	65.	13.	0.	12.3	79.8	65.	119.	35.	14.0	78.0	35.	442.	10.	0.0	0.0	0.	-0.	0.
120100Z	10.6	82.0	70	10.2	82.0	70.	24.	0.	11.6	78.9	50.	165.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120106Z	10.8	80.7	75	10.3	81.1	75.	38.	0.	11.3	78.2	30.	224.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120112Z	11.7	79.4	65	10.9	79.8	65.	53.	0.	12.5	76.6	25.	238.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120118Z	12.0	77.8	30	11.7	78.2	50.	30.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120200Z	11.8	76.1	20	12.3	76.6	20.	42.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120206Z	11.4	74.4	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120212Z	11.1	72.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120218Z	11.0	71.1	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120300Z	10.9	69.8	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120306Z	10.9	68.6	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120312Z	10.8	67.6	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120318Z	10.7	66.5	35	11.3	66.0	35.	47.	0.	12.3	61.2	55.	150.	0.	13.8	57.4	75.	347.	15.	15.3	54.4	75.	464.	20.
120400Z	10.5	65.5	40	11.4	64.7	40.	72.	0.	12.7	60.1	60.	185.	5.	14.1	56.5	75.	377.	15.	15.2	53.6	75.	462.	25.
120406Z	10.3	64.3	45	11.3	64.2	45.	60.	0.	11.8	60.9	65.	185.	5.	13.0	57.5	75.	377.	15.	14.2	54.0	60.	441.	25.
120412Z	10.1	63.3	50	10.4	62.9	45.	30.	-5.	10.6	59.3	65.	156.	5.	11.5	56.7	75.	321.	15.	12.4	54.9	65.	467.	35.
120418Z	10.0	62.2	55	10.3	62.2	55.	18.	0.	10.4	58.8	75.	217.	15.	10.9	56.1	75.	320.	20.	11.8	54.4	65.	514.	40.
120500Z	9.7	60.8	55	10.3	61.4	55.	51.	0.	10.3	58.2	65.	251.	5.	10.7	55.4	70.	317.	20.	11.3	52.7	75.	477.	55.
120506Z	9.2	59.2	60	9.9	59.9	60.	59.	0.	10.1	55.9	70.	186.	10.	10.2	51.9	70.	172.	35.	0.0	0.0	0.	-0.	0.
120512Z	8.7	57.5	60	8.8	58.0	60.	30.	0.	8.2	54.4	60.	113.	0.	8.0	49.7	35.	67.	5.	0.0	0.0	0.	-0.	0.
120518Z	8.2	55.9	60	8.4	55.8	60.	13.	0.	7.6	49.4	35.	128.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120600Z	8.1	54.6	60	8.0	54.0	60.	36.	0.	7.5	48.0	20.	169.	-30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120606Z	8.1	53.5	60	7.6	53.0	60.	42.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120612Z	8.1	52.5	60	8.0	52.2	60.	19.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120618Z	8.1	51.5	55	7.9	50.9	55.	38.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120700Z	8.0	50.8	50	8.1	50.1	50.	42.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120706Z	7.8	50.3	35	7.9	50.4	40.	8.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120712Z	7.0	49.2	30	7.7	50.0	35.	63.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120718Z	5.7	48.3	25	7.0	49.2	25.	95.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120800Z	5.0	47.8	20	4.6	47.3	20.	38.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120806Z	4.7	47.0	15	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	38.	160.	271.	388.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	17.	60.	123.	159.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	9.	19.	23.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	4.	19.	15.	0.	0.	0.	0.
NUMBER OF FORECASTS	34	24	19	16	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2662. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TC04B
FIX POSITIONS FOR CYCLONE NO. 4

SATELLITE FIXES

	FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
	1	270448	8.3N	85.9E	PCN 5	T1.0/1.0	INIT OBS ULAC 08.4N 084.4E	KGWC
	2	271729	9.3N	84.9E	PCN 6			KGWC
*	3	271800	8.9N	83.9E	PCN 6	T1.5/1.5	INIT OBS	PGTW
*	4	272140	9.5N	88.3E	PCN 4		ULAC 09.1N 086.3E	KGWC
	5	280000	9.6N	85.2E	PCN 6			PGTW
*	6	280104	9.4N	88.1E	PCN 6			KGWC
	7	280300	8.8N	84.8E	PCN 6	T2.0/2.0	INIT OBS ULAC 09.8N 084.8E	PGTW
	8	280428	9.6N	85.6E	PCN 5	T2.5/2.5 /D1.5/24HRS	ULAC 10.2N 084.6E	KGWC
	9	280600	9.0N	84.7E	PCN 6			PGTW
	10	280900	9.8N	84.8E	PCN 6		ULCC FIX	PGTW
	11	281025	9.8N	84.6E	PCN 5			KGWC
	12	281200	10.2N	84.7E	PCN 6			PGTW
	13	281203	10.4N	84.3E	PCN 5			KGWC
	14	281600	10.3N	84.4E	PCN 6			PGTW
	15	281708	10.6N	84.3E	PCN 5			KGWC
	16	281800	10.4N	84.9E	PCN 6	T2.5/2.5 /D1.0/24HRS		PGTW
	17	282100	10.4N	85.1E	PCN 6			PGTW
	18	282310	10.0N	84.4E	PCN 5			KGWC
	19	290000	10.6N	84.8E	PCN 6			PGTW
	20	290043	10.1N	85.6E	PCN 6		ULAC 09.7N 084.9E	KGWC
	21	290300	10.1N	84.6E	PCN 6	T3.0/3.0 /D1.0/24HRS	ULCC FIX	PGTW
	22	290408	9.4N	85.5E	PCN 5	T3.0/3.0 /D0.5/24HRS		KGWC
	23	290600	10.2N	84.5E	PCN 6		ULCC FIX	PGTW
	24	290900	10.1N	84.3E	PCN 6		ULCC FIX	PGTW
	25	291013	9.5N	85.2E	PCN 5		ULAC 09.7N 085.4E	KGWC
	26	291200	9.6N	84.6E	PCN 6			PGTW
	27	291323	9.2N	86.4E	PCN 5			KGWC
	28	291600	9.6N	85.1E	PCN 6			PGTW
	29	291648	9.7N	85.7E	PCN 6			KGWC
	30	291800	9.9N	85.1E	PCN 6	T3.5/3.5 /D1.0/24HRS		PGTW
	31	292100	10.0N	84.8E	PCN 6			PGTW
	32	292258	9.7N	84.9E	PCN 5	T3.5/3.5 /D1.0/24HRS		FJDG
	33	300000	9.6N	84.6E	PCN 6		ULCC FIX	PGTW
	34	300021	9.7N	85.2E	PCN 5			KGWC
	35	300300	9.6N	84.8E	PCN 6	T4.0/4.0 /D1.0/24HRS		PGTW
	36	300347	9.5N	84.9E	PCN 5	T3.5/3.5 /D0.5/24HRS		KGWC
	37	300600	9.6N	84.8E	PCN 6			PGTW
	38	300900	9.6N	84.1E	PCN 6			PGTW
	39	301000	10.0N	84.4E	PCN 6			KGWC
	40	301200	10.2N	83.6E	PCN 6			PGTW
	41	301301	10.4N	83.7E	PCN 6			KGWC
	42	301622	10.7N	82.8E	PCN 6			KGWC
	43	010000	10.0N	81.7E	PCN 2			KGWC
	44	010000	10.7N	82.1E	PCN 6			PGTW
	45	010300	10.3N	81.4E	PCN 6	T4.5/4.5 /D0.5/24HRS		PGTW
	46	010506	10.6N	81.2E	PCN 5			KGWC
	47	010600	10.3N	81.1E	PCN 6		ULCC FIX	PGTW
	48	010900	10.5N	80.3E	PCN 6		ULCC FIX	PGTW
	49	010948	11.3N	79.1E	PCN 6			KGWC
	50	011200	10.8N	80.1E	PCN 6		ULCC FIX	PGTW
	51	011240	11.6N	78.4E	PCN 6			KGWC
*	52	011749	12.9N	77.3E	PCN 5			KGWC
	53	012232	14.2N	75.7E	PCN 6			KGWC
	54	020128	13.2N	74.9E	PCN 5			KGWC
	55	020448	11.3N	74.2E	PCN 5	T0.0/1.5 /W3.5/24HRS		KGWC
	56	021400	11.2N	72.0E	PCN 5			KGWC
	57	021729	11.4N	71.1E	PCN 5			KGWC
	58	030002	10.2N	69.7E	PCN 5			FJDG
	59	030059	11.0N	69.5E	PCN 5		ULAC 10.9N 070.2E	KGWC

60	030609	11.0N	69.4E	PCN 5	T2.5/2.5 /D2.5/25HRS	ULAC 10.4N 069.4E	KGWC
61	031104	11.1N	68.0E	PCN 5			KGWC
62	031105	11.2N	67.9E	PCN 3	T2.0/2.0+/S0.5/11HRS		FJDG
63	031339	11.2N	67.4E	PCN 5		ULAC 11.0N 067.8E	KGWC
64	031709	11.1N	66.1E	PCN 5			KGWC
65	032349	10.8N	65.6E	PCN 5			KGWC
66	040219	10.2N	65.7E	PCN 5			KGWC
67	040549	9.7N	64.0E	PCN 5	T3.0/3.0 /D0.5/24HRS	ULAC 10.0N 064.1E	KGWC
68	041052	9.9N	63.3E	PCN 5			KGWC
69	041052	10.6N	62.5E	PCN 5			FJDG
70	041457	9.9N	62.7E	PCN 5			KGWC
71	041830	9.9N	62.2E	PCN 5	T3.5/3.5	INIT OBS ULAC 09.1N 061.8E	KGWC
72	042337	10.0N	61.2E	PCN 5		ULAC 09.6N 061.3E	KGWC
73	042338	11.0N	59.0E	PCN 4	T3.0/3.0		FJDG
74	050158	9.3N	60.0E	PCN 5			KGWC
75	050529	9.0N	59.3E	PCN 5	T4.0/4.0 /D1.0/24HRS		KGWC
76	051224	8.2N	57.3E	PCN 5			KGWC
77	051438	8.1N	56.6E	PCN 5			KGWC
* 78	051515	9.7N	56.6E	PCN 5			FJDG
79	051810	8.5N	55.1E	PCN 5			KGWC
80	060318	7.5N	54.4E	PCN 5			KGWC
81	060650	8.6N	53.4E	PCN 5	T3.5/4.0 /W0.5/24HRS	ULAC 08.0N 053.7E	KGWC
82	061417	8.1N	51.5E	PCN 5			KGWC
83	061931	8.2N	51.2E	PCN 5	T3.0/4.0 /W1.0/25HRS		KGWC
84	070257	8.2N	49.7E	PCN 5		ULAC 08.1N 049.6E	KGWC
85	070630	7.6N	50.4E	PCN 3	T1.5/2.5 /W1.5/24HRS	EXP LLCC ULAC 08.1N 048.3E	KGWC
86	071537	6.2N	48.9E	PCN 5		EXP LLCC ULAC 09.2N 047.1E	KGWC
87	071911	5.5N	47.9E	PCN 5		EXP LLCC ULAC 10.0N 047.0E	KGWC
88	080235	5.1N	46.8E	PCN 5		EXP LLCC	KGWC
89	080751	5.1N	46.7E	PCN 5			KGWC

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION		INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	011200	11.5N	79.2E	065	060	43344 43295 43279
2	011500	12.1N	78.8E	060	090	43295 43279 42245
3	011800	11.5N	77.8E	050	060	43321 43344 43279 43295
4	020000	12.2N	77.0E	020	040	43295 43284 43279 43201

NOTICE - THE ASTERISKS (*) INDICATE FIXES UNREPRESENTATIVE AND NOT USED FOR BEST TRACK PURPOSES.