ANNEX A
TROPICAL CYCLONE TRACK AND FIX DATA

1. WESTERN NORTH PACIFIC CYCLONE DATA

TROPICAL STORM ELSIE
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
010600Z	4.1	156.1	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.
010606Z	4.5	155.6	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.
010612Z	4.9	155.1	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.
010618Z	5.4	154.6	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.
010700Z	5.9	154.1	30	5.9	154.1	30.	0.	0.	7.4	150.8	45.	199.	15.	9.2	147.3	60.	484.	40.	0.0	0.0	0.	-0.	0.
010706Z	6.7	153.2	35	6.1	153.8	35.	51.	0.	7.5	151.3	50.	317.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
010712Z	8.0	152.0	40	7.4	152.5	40.	47.	0.	9.2	149.8	55.	298.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
010718Z	9.2	150.9	35	9.3	150.9	40.	6.	5.	14.7	147.5	55.	59.	35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
010800Z	10.5	149.6	30	10.6	149.8	30.	13.	0.	15.8	146.6	40.	133.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
010806Z	12.0	148.5	25	11.8	148.7	25.	17.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
010812Z	13.8	147.9	25	13.4	148.0	25.	25.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
010818Z	15.5	148.1	20	14.8	147.4	25.	58.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
010900Z	17.2	148.4	20	16.8	147.8	20.	42.	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.	201.	484.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	12.	58.	155.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	25.	40.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	1.	25.	40.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	9	5	1	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 976. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 14. KNOTS

TROPICAL STORM ELSIE
FIX POSITIONS FOR CYCLONE NO. 1

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	060000	3.8N 155.9E	PCN 6	T0.5/0.5	INIT OBS	PGTW
2	060300	4.4N 155.8E	PCN 6			PGTW
3	060600	3.9N 155.2E	PCN 6			PGTW
4	060900	4.6N 154.4E	PCN 6		ULCC FIX	PGTW
* 5	061200	5.0N 153.9E	PCN 6		ULCC FIX	PGTW
* 6	061600	5.6N 153.0E	PCN 6	T1.0/1.0	INIT OBS	PGTW
* 7	062100	6.0N 152.5E	PCN 6			PGTW
8	070000	5.8N 154.1E	PCN 6			PGTW
9	070300	6.0N 153.9E	PCN 6	T2.0/2.0 /D1.5/27HRS		PGTW
10	070600	6.3N 153.5E	PCN 6		ULCC FIX	PGTW
11	070900	6.6N 153.0E	PCN 6		ULCC FIX	PGTW
12	071200	8.5N 152.1E	PCN 6			PGTW
13	071600	9.9N 150.7E	PCN 6	T2.0/2.0 /D1.0/24HRS		PGTW
* 14	071800	10.4N 150.0E	PCN 6			PGTW
15	072041	10.8N 149.9E	PCN 6			PGTW
16	080000	10.1N 148.8E	PCN 6			PGTW
17	080047	10.2N 149.0E	PCN 5	T2.0/2.0 /S0.0/22HRS		PGTW
18	080300	11.0N 148.5E	PCN 6			PGTW
19	080600	12.1N 147.8E	PCN 6			PGTW
20	080900	12.9N 147.6E	PCN 6		ULCC FIX	PGTW
21	080921	13.0N 148.2E	PCN 6		ULCC FIX	PGTW
22	081200	13.9N 148.1E	PCN 6		ULCC FIX	PGTW
23	082020	16.2N 149.4E	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	062238	5.8N 154.4E	1500FT		1002	25 330 70	050 33 330 70	10 5			+25 +25 +24 28	1
2	072128	10.3N 150.4E	1500FT		1003	30 170 94	230 29 170 94	6 10			+23 +25 +34 26	2
3	072355	10.2N 149.6E	1500FT		1003	30 050 90	120 32 060 95	10 10			+24 +24 +20 27	2

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	CONMENTS
* 1	070600	6.0N 154.0E	035	045	91339 91334 91348

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

TROPICAL STORM FABIAN
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
010806Z	12.4 134.0	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.
010812Z	12.1 134.2	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.
010818Z	11.8 134.4	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.
010900Z	11.3 134.6	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.
010906Z	10.5 135.2	55	10.7 135.0	50.	17.	-5.	10.7 135.0	50.	199.	5.	10.7 135.0	50.	224.	10.	10.7 135.0	50.	242.	20.
010912Z	9.9 135.9	50	10.6 135.0	55.	68.	5.	10.6 135.0	55.	210.	15.	10.6 135.0	50.	242.	15.	10.6 135.0	45.	229.	20.
010918Z	9.4 136.7	45	10.6 135.0	55.	124.	10.	10.6 135.0	55.	213.	15.	10.6 135.0	50.	251.	15.	10.6 135.0	45.	212.	20.
011000Z	9.2 137.5	45	9.0 137.5	45.	12.	0.	9.4 138.7	40.	22.	0.	10.1 139.0	35.	54.	5.	10.1 139.0	35.	81.	15.
011006Z	9.2 138.0	45	9.4 138.4	45.	27.	0.	10.6 139.6	40.	68.	0.	11.3 139.9	35.	142.	5.	0.0 0.0	0.	-0.	0.
011012Z	9.3 138.3	40	9.6 138.6	45.	25.	5.	10.2 139.3	40.	35.	5.	11.0 139.6	35.	123.	10.	0.0 0.0	0.	-0.	0.
011018Z	9.4 138.4	40	9.6 138.7	50.	21.	10.	10.0 139.4	45.	35.	10.	10.7 139.9	40.	131.	15.	0.0 0.0	0.	-0.	0.
011100Z	9.7 138.5	40	9.5 138.5	45.	12.	5.	9.7 138.8	40.	32.	10.	10.4 139.1	40.	97.	20.	0.0 0.0	0.	-0.	0.
011106Z	9.9 138.7	40	9.7 138.4	45.	21.	5.	10.5 138.1	45.	88.	15.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
011112Z	9.7 139.0	35	9.9 138.1	45.	55.	10.	10.4 137.4	50.	101.	25.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
011118Z	9.5 139.1	35	9.5 138.3	40.	47.	5.	9.5 138.3	40.	18.	15.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
011200Z	9.2 139.0	30	9.0 138.8	30.	17.	0.	9.6 138.0	25.	19.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
011206Z	9.2 138.8	30	9.1 138.9	30.	8.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
011212Z	9.2 138.6	25	9.1 138.9	30.	19.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
011218Z	9.2 138.3	25	9.1 138.9	25.	36.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
011300Z	9.3 137.9	20	9.2 138.8	20.	54.	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	35.	87.	158.	191.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	7.	30.	51.	25.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	10.	12.	19.	0.	0.	0.	0.
AVG INTENSITY BIAS	3.	10.	12.	19.	0.	0.	0.	0.
NUMBER OF FORECASTS	16	12	8	4	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 507. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 4. KNOTS

TROPICAL STORM FABIAN
FIX POSITIONS FOR CYCLONE NO. 2

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	040000	4.2N 131.2E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	040300	4.7N 130.8E	PCN 6			PGTW
3	040600	4.9N 130.1E	PCN 6			PGTW
4	040900	4.8N 129.8E	PCN 6			PGTW
* 5	041200	8.0N 131.1E	PCN 6		ULCC FIX	PGTW
* 6	041600	8.9N 129.4E	PCN 6	T2.5/2.5	INIT OBS	PGTW
* 7	041800	9.4N 128.9E	PCN 6			PGTW
* 8	042230	8.5N 127.4E	PCN 5		ULCC FIX	PGTW
9	042230	9.8N 128.2E	PCN 5	T3.0/3.0	INIT OBS ULCC FIX	RODN
* 10	050000	10.4N 127.7E	PCN 6	T2.0/2.0 /D1.0/24HRS		PGTW
* 11	050300	10.8N 128.3E	PCN 6			PGTW
* 12	050600	11.7N 128.3E	PCN 6			PGTW
13	050734	7.8N 130.0E	PCN 6		EXP LLCC ULCC 12.5N 127.2E	PGTW
14	050900	7.9N 129.9E	PCN 6		ULCC 11.9N 128.5E	PGTW
15	051025	8.0N 129.7E	PCN 6			PGTW
* 16	051109	12.1N 128.1E	PCN 6		ULCC FIX	RODN
17	051200	8.3N 129.8E	PCN 6			PGTW
* 18	051428	12.9N 129.9E	PCN 6		ULCC FIX	RODN
* 19	051600	13.9N 132.9E	PCN 6	T1.5/2.5 /W1.0/24HRS	ULCC FIX	PGTW
* 20	051800	14.4N 133.3E	PCN 6			PGTW
* 21	052206	12.8N 132.1E	PCN 5		SCNDRY CIRCLTN 15.0N 134.8E	PGTW
* 22	060000	14.8N 132.9E	PCN 6	T3.0/3.0-/D1.0/24HRS		PGTW
* 23	060128	14.9N 133.5E	PCN 5			PGTW
* 24	060300	14.6N 133.2E	PCN 6			PGTW
* 25	060600	12.8N 132.8E	PCN 6		ULCC FIX	PGTW
* 26	061003	12.9N 133.7E	PCN 5		ULCC FIX	PGTW
* 27	061200	13.6N 134.1E	PCN 6		ULCC FIX	PGTW
* 28	061408	14.4N 134.7E	PCN 6			PGTW
29	061600	11.2N 135.0E	PCN 6	T2.5/2.5 /D1.0/24HRS	ULCC 15.4N 135.6E	PGTW
30	070000	12.1N 135.3E	PCN 6	T2.5/2.5+/W0.5/24HRS		PGTW
31	070107	9.8N 133.6E	PCN 5	T2.5/2.5	INIT OBS	RODN
32	070300	11.2N 134.9E	PCN 6			PGTW
33	070600	10.4N 135.1E	PCN 6		ULCC FIX	PGTW
* 34	071020	9.8N 132.5E	PCN 6		ULCC FIX	RODN
35	071600	10.0N 136.5E	PCN 6	T1.5/2.0 /W1.0/24HRS	ULCC 12.9N 136.3E	PGTW
36	071800	10.0N 136.3E	PCN 6		ULAC 14.0N 136.3E	PGTW
37	072258	14.1N 134.7E	PCN 5	T3.0/3.0 /D0.5/22HRS		RODN
38	080047	12.4N 133.8E	PCN 5	T2.5/2.5 /S0.0/25HRS		PGTW
39	080300	12.6N 133.9E	PCN 6			PGTW
40	080600	12.3N 134.1E	PCN 6			PGTW
41	080956	11.7N 134.4E	PCN 6		ULCC FIX	PGTW
42	082234	11.7N 134.2E	PCN 6			PGTW
43	090027	11.1N 134.4E	PCN 5			PGTW
44	090300	10.6N 134.9E	PCN 4		EXP LLCC	PGTW
45	090600	10.4N 135.0E	PCN 4			PGTW
46	090643	10.3N 134.9E	PCN 3			PGTW
* 47	090900	10.9N 134.8E	PCN 3			PGTW
* 48	091200	10.4N 133.5E	PCN 6		ULCC FIX	PGTW
* 49	091307	10.7N 137.8E	PCN 5			PGTW
* 50	091600	10.6N 134.3E	PCN 6	T3.0/3.0	INIT OBS ULCC FIX	PGTW
* 51	091800	16.4N 134.4E	PCN 6		ULCC FIX	PGTW
52	100007	9.0N 137.6E	PCN 5	T3.0/3.0 /D0.5/24HRS	EXP LLCC	PGTW
53	100300	9.3N 137.8E	PCN 4		EXP LLCC	PGTW
54	100600	9.4N 138.2E	PCN 4		EXP LLCC	PGTW
55	100631	9.5N 138.3E	PCN 3		EXP LLCC	PGTW
56	100900	9.5N 138.0E	PCN 6			PGTW
57	101200	9.7N 138.6E	PCN 4			PGTW
58	101247	9.5N 138.8E	PCN 3			PGTW
59	101800	9.5N 138.7E	PCN 6	T3.5/3.5 /D0.5/26HRS		PGTW
60	102118	9.5N 139.1E	PCN 6		ULCC 09.2N 136.4E	PGTW
61	110000	9.4N 138.6E	PCN 6	T3.0/3.0 /S0.0/24HRS	ULCC 09.4N 136.0E	PGTW
62	110128	9.4N 138.5E	PCN 5			PGTW
63	110442	9.6N 138.4E	PCN 5			PGTW
64	110600	9.7N 138.6E	PCN 6			PGTW
65	110618	9.5N 138.7E	PCN 5			PGTW
66	110959	9.7N 137.9E	PCN 5			PGTW

* 67	111200	9.6N	137.0E	PCN 6				PGTW
* 68	111227	9.2N	137.4E	PCN 5				PGTW
* 69	111600	9.2N	137.3E	PCN 6	T3.0/3.5 /W0.5/22HRS			PGTW
* 70	111727	9.3N	137.6E	PCN 6		ULCC FIX		PGTW
* 71	111800	9.3N	137.7E	PCN 6		ULCC FIX		PGTW
72	112057	9.1N	138.8E	PCN 4				PGTW
73	120107	8.9N	139.3E	PCN 3	T1.5/2.0 /W1.5/25HRS	EXP LLCC		PGTW
74	120300	9.0N	139.4E	PCN 4		EXP LLCC		PGTW
75	120431	9.2N	139.2E	PCN 3		EXP LLCC		PGTW
76	120605	9.1N	138.8E	PCN 3				PGTW
77	121717	9.1N	138.9E	PCN 6		ULCC FIX		PGTW
78	121717	9.7N	138.8E	PCN 5				RODN
79	122036	9.2N	138.6E	PCN 5				PGTW
80	130047	9.2N	138.3E	PCN 3	T1.5/1.5 /S0.0/24HRS	EXP LLCC		PGTW
81	130300	9.2N	137.7E	PCN 4		EXP LLCC		PGTW
82	130420	9.3N	137.8E	PCN 3		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	070142	11.2N 134.9E	1500FT		1000	35 300 45	010 38 240 45	3 10			+29 +27 +24	3
2	090423	10.4N 135.0E	1500FT		989	60 240 25	310 60 240 25	10 5			+24 +28 +25 27	6
3	092355	9.0N 137.4E	1500FT		992	25 320 55	050 25 320 55	8 3			+24 +25 +25 28	7
4	100247	9.3N 137.8E	1500FT		990	45 220 90	280 47 230 115	3 2			+24 +25 +25	7
5	102217	9.3N 138.6E	1500FT		992	45 220 50	270 50 220 50	10 2			+25 +25	8
6	102344	9.4N 138.5E	1500FT		992	35 110 30	340 25 220 95	10 2			+25 +25 28	8
7	112312	9.0N 138.8E	1500FT		1000	20 140 120	250 31 140 120	8 4			+26	10

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	101200	9.9N 138.7E	045	045	91413 91203
2	110000	9.9N 138.7E	045	045	91413 91203
3	110600	9.7N 138.4E	045	035	91413
4	110900	10.0N 138.0E	045	035	91413
5	111000	10.0N 138.2E	045	040	91413
6	111200	9.9N 138.8E	045	045	91413 91203
7	111500	9.6N 139.0E	040	055	91413
8	121200	9.0N 138.7E	030	050	91413

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

TYPHOON GAY
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
052000Z	11.5	131.9	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.
052006Z	11.9	132.0	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.
052012Z	12.3	132.0	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.
052018Z	12.7	132.1	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.
052100Z	13.1	132.1	35	13.0	131.8	35.	19.	0.	14.5	131.1	45.	63.	0.	16.2	129.9	45.	98.	-20.	17.8	128.7	40.	174.	-50.
052106Z	13.6	132.1	35	13.3	131.7	40.	29.	5.	14.9	130.8	50.	72.	0.	16.6	129.6	50.	120.	-15.	18.3	128.3	45.	199.	-55.
052112Z	14.1	132.1	35	14.2	132.0	45.	8.	10.	16.2	131.1	55.	18.	5.	18.0	129.4	50.	60.	-20.	19.6	128.2	45.	196.	-55.
052118Z	14.5	132.1	40	14.6	132.0	45.	8.	5.	16.6	130.9	55.	36.	0.	18.4	129.3	50.	75.	-30.	20.1	128.2	45.	245.	-50.
052200Z	14.9	132.1	45	14.6	132.1	45.	18.	0.	15.5	131.3	50.	152.	-15.	16.7	130.0	50.	249.	-40.	18.4	128.4	50.	433.	-40.
052206Z	15.6	131.8	50	15.2	132.1	45.	30.	-5.	16.6	131.5	45.	162.	-20.	18.5	129.9	45.	184.	-55.	20.0	128.1	45.	464.	-35.
052212Z	16.3	131.4	50	16.1	131.7	45.	21.	-5.	17.8	130.4	45.	95.	-25.	19.2	128.9	40.	202.	-60.	20.3	127.6	40.	600.	-35.
052218Z	17.2	130.8	55	17.1	130.8	45.	6.	-10.	19.1	129.0	55.	31.	-25.	20.6	126.9	50.	274.	-45.	22.5	127.0	45.	657.	-20.
052300Z	17.8	130.2	65	17.8	130.3	55.	6.	-10.	20.1	127.8	65.	67.	-25.	22.2	126.8	65.	326.	-25.	0.0	0.0	0.	-0.	0.
052306Z	18.6	129.6	65	18.7	129.8	55.	13.	-10.	21.5	126.8	65.	134.	-35.	23.9	127.5	65.	345.	-15.	0.0	0.0	0.	-0.	0.
052312Z	19.0	129.3	70	19.2	129.3	65.	12.	-5.	21.8	127.2	80.	160.	-20.	24.3	128.2	70.	422.	-5.	0.0	0.0	0.	-0.	0.
052318Z	19.6	128.9	80	19.8	128.8	70.	13.	-10.	22.5	127.2	80.	206.	-15.	25.5	129.4	65.	447.	0.	0.0	0.0	0.	-0.	0.
052400Z	20.7	128.8	90	20.6	128.6	85.	13.	-5.	23.5	128.2	85.	222.	-5.	25.9	131.2	65.	463.	5.	0.0	0.0	0.	-0.	0.
052406Z	21.5	129.2	100	21.5	129.0	100.	11.	0.	24.5	130.5	90.	181.	10.	27.7	133.8	65.	362.	10.	0.0	0.0	0.	-0.	0.
052412Z	22.4	130.0	100	22.4	130.1	100.	6.	0.	25.9	134.4	85.	109.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052418Z	23.4	130.8	95	23.2	130.9	95.	13.	0.	26.6	135.4	75.	162.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052500Z	24.8	132.0	90	24.7	132.0	85.	6.	-5.	31.0	138.4	55.	42.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052506Z	26.0	133.4	80	25.8	133.0	75.	25.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052512Z	27.6	135.1	75	27.4	134.8	70.	20.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052518Z	29.0	136.8	65	28.9	137.1	65.	17.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052600Z	30.3	138.4	60	30.5	138.7	60.	20.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052606Z	30.7	139.8	55	31.6	140.1	60.	56.	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	17.	112.	259.	371.	17.	112.	259.	371.
AVG RIGHT ANGLE ERROR	9.	55.	79.	65.	9.	55.	79.	65.
AVG INTENSITY MAGNITUDE ERROR	5.	13.	25.	43.	5.	13.	25.	43.
AVG INTENSITY BIAS	-2.	-9.	-23.	-43.	-2.	-9.	-23.	-43.
NUMBER OF FORECASTS	22	17	14	8	22	17	14	8

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1464. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS. 10. KNOTS

TYPHOON GAY
FIX POSITIONS FOR CYCLONE NO. 3

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	161800	8.3N 136.4E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
2	170000	8.6N 135.3E	PCN 6	T1.0/1.0	INIT OBS ULCC 8.7N 134.9E	PGTW
3	181200	9.3N 131.9E	PCN 6		ULCC FIX	PGTW
4	181600	9.1N 131.7E	PCN 6		ULCC FIX	PGTW
5	181800	9.1N 131.8E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
6	182100	9.1N 132.1E	PCN 6		ULCC FIX	PGTW
7	190000	8.8N 131.0E	PCN 6		ULCC 8.8N 1324E	PGTW
8	190300	9.8N 131.0E	PCN 6	T2.0/2.0	INIT OBS ULCC 9.0N 133.1E	PGTW
9	190529	8.5N 131.4E	PCN 5	T2.0/2.0	INIT OBS	RPMK
10	190600	9.3N 132.3E	PCN 6			PGTW
11	190900	9.2N 132.5E	PCN 6			PGTW
12	191052	8.8N 131.4E	PCN 5			RPMK
13	191200	9.0N 132.8E	PCN 6			PGTW
14	191309	8.9N 131.7E	PCN 6			RODN
15	191600	9.2N 131.2E	PCN 6	T1.0/1.0+/S0.0/22HRS	ULCC 9.1N 132.1E	PGTW
16	191800	9.1N 132.2E	PCN 6			PGTW
17	192111	8.9N 132.8E	PCN 6			RODN
* 18	200000	10.3N 132.3E	PCN 6		ULCC FIX	PGTW
* 19	200150	12.3N 132.8E	PCN 5			RODN
20	200150	11.5N 132.2E	PCN 3	T2.0/2.0 /S0.0/20HRS		RPMK
* 21	200300	13.1N 132.9E	PCN 6	T2.0/2.0 /S0.0/24HRS	ULCC 10.5N 132.2E	PGTW
22	200518	12.7N 131.7E	PCN 5			PGTW
23	200518	12.5N 131.9E	PCN 4	T2.0/2.0 /S0.0/24HRS	EXP LLCC	RPMK
* 24	200600	13.0N 131.7E	PCN 6		ULCC 10.9N 132.6E	PGTW
* 25	200900	13.4N 131.8E	PCN 6		ULCC 10.9N 131.9E	PGTW
26	200951	12.3N 131.6E	PCN 3		EXP LLCC	RPMK
27	201200	12.0N 132.6E	PCN 6			PGTW
28	201600	12.5N 132.2E	PCN 6	T2.0/2.0-/D1.0/24HRS		PGTW
* 29	201804	13.1N 133.1E	PCN 5			RODN
30	201804	12.8N 132.5E	PCN 6			PGTW
* 31	202049	12.5N 130.3E	PCN 6			RPMK
32	202306	13.4N 131.8E	PCN 5			PGTW
33	202306	12.9N 131.8E	PCN 3			RPMK
34	210000	12.8N 131.9E	PCN 6	T2.5/2.5 /D0.5/21HRS		PGTW
35	210130	13.1N 131.6E	PCN 3	T2.5/2.5 /D0.5/24HRS		RPMK
36	210300	13.0N 131.9E	PCN 6			PGTW
37	210507	13.3N 131.8E	PCN 5			RPMK
38	210600	13.5N 132.5E	PCN 6			PGTW
39	210900	13.4N 132.5E	PCN 6			PGTW
40	210929	14.7N 132.0E	PCN 6			RPMK
41	211003	13.8N 132.2E	PCN 6			PGTW
42	211003	14.2N 131.7E	PCN 5			RPMK
43	211200	14.1N 132.3E	PCN 6			PGTW
44	211600	14.5N 132.5E	PCN 6		ULCC FIX	PGTW
45	211753	14.8N 131.9E	PCN 4			RODN
46	211800	14.5N 132.2E	PCN 6	T2.5/2.5 /D0.5/26HRS	ULCC FIX	PGTW
47	212242	14.7N 131.1E	PCN 5	T4.0/4.0 /D1.0/21HRS		RODN
48	212242	14.1N 131.9E	PCN 5			PGTW
49	220000	14.4N 132.1E	PCN 6	T3.0/3.0 /D0.5/24HRS	ULCC FIX	PGTW
50	220109	15.5N 132.0E	PCN 3			RODN
51	220110	14.8N 132.2E	PCN 5	T2.5/2.5 /S0.0/24HRS		RPMK
52	220300	14.8N 132.2E	PCN 6		EXP LLCC	PGTW
53	220456	15.1N 132.1E	PCN 6		ULCC FIX	PGTW
54	220600	15.6N 131.8E	PCN 6		ULCC FIX	PGTW
55	220900	15.9N 131.7E	PCN 6		ULCC FIX	PGTW
* 56	220908	14.9N 131.8E	PCN 6			RPMK
57	220939	15.8N 131.9E	PCN 6		ULCC FIX	PGTW
58	221200	16.1N 131.6E	PCN 6		ULCC FIX	PGTW
* 59	221350	15.7N 132.2E	PCN 5			RPMK

60	221600	16.7N	131.5E	PCN 6	T3.0/3.0 /D0.5/22HRS	ULCC FIX		PGTW
61	221742	17.5N	130.5E	PCN 6		ULCC FIX		PGTW
62	221742	16.7N	130.7E	PCN 5				RPMK
63	222100	17.5N	130.6E	PCN 6		ULCC FIX		PGTW
64	222148	17.8N	131.0E	PCN 3	T4.0/4.0 /S0.0/23HRS			RODN
65	222217	17.4N	130.5E	PCN 5				PGTW
66	230000	18.0N	130.2E	PCN 6	T4.0/4.0-/D1.0/24HRS	ULCC FIX		PGTW
67	230049	18.1N	130.9E	PCN 3	T3.5/3.5-/D1.0/24HRS			RPMK
68	230300	18.5N	130.0E	PCN 6		ULCC FIX		PGTW
69	230446	18.5N	129.8E	PCN 2				PGTW
70	230600	18.5N	129.8E	PCN 4		ULCC FIX		PGTW
71	230900	18.7N	129.8E	PCN 4		RGD EYE		PGTW
72	230915	18.7N	129.5E	PCN 2		WELL DEFINED EYE		PGTW
73	231028	18.9N	129.6E	PCN 4				RODN
74	231200	19.2N	129.4E	PCN 4				PGTW
75	231330	19.3N	129.3E	PCN 4		ULCC FIX		RSKO
76	231600	19.2N	129.2E	PCN 6	T4.0/4.0 /D1.0/24HRS	ULCC FIX		PGTW
77	231731	19.9N	128.9E	PCN 2				RSKO
78	231800	19.5N	129.7E	PCN 6		ULCC FIX		PGTW
79	232100	19.8N	128.9E	PCN 6		ULCC FIX		PGTW
80	232127	20.2N	128.7E	PCN 1	T4.0/4.0 /D0.5/21HRS			RPMK
81	232153	20.2N	129.2E	PCN 2				PGTW
82	240000	20.4N	129.0E	PCN 2	T5.0/5.0-/D1.0/24HRS	60 PCT EYEWALL		PGTW
83	240029	20.4N	128.7E	PCN 2	T5.0/5.0-/D1.0/27HRS	EYE FIX		RODN
84	240300	21.0N	129.0E	PCN 2		EYE FIX		PGTW
85	240600	21.5N	129.2E	PCN 2		EYE FIX		PGTW
86	240617	21.6N	128.8E	PCN 1	T4.5/4.5-/D1.0/29HRS	EYE FIX		RPMK
87	240900	21.8N	129.8E	PCN 2		EYE FIX		PGTW
* 88	241032	22.1N	130.5E	PCN 4		EYE FIX		PGTW
89	241200	22.4N	130.1E	PCN 4				PGTW
90	241309	22.6N	129.9E	PCN 2		EYE FIX		RSKO
91	241600	22.7N	130.6E	PCN 4	T5.0/5.0-/D1.0/24HRS	ULCC FIX		PGTW
92	241720	23.0N	130.7E	PCN 4		ULCC FIX		PGTW
93	241720	23.3N	130.8E	PCN 4		ULCC FIX		RSKO
94	242100	23.4N	131.4E	PCN 6		ULCC FIX		PGTW
95	242105	24.5N	132.1E	PCN 3	T4.0/5.0 /W1.0/24HRS			RODN
96	242310	24.5N	132.3E	PCN 5				RODN
97	250000	24.7N	132.1E	PCN 6	T3.5/4.5 /W1.5/24HRS			PGTW
98	250150	25.2N	133.0E	PCN 5	T3.5/4.5 /W1.0/24HRS			RPMK
99	250300	25.2N	132.6E	PCN 6				PGTW
100	250424	25.4N	132.6E	PCN 5		ULCC 25.8N 133.1E		PGTW
101	250600	25.6N	132.8E	PCN 6				PGTW
102	250900	27.1N	134.1E	PCN 6				PGTW
103	250945	27.3N	134.8E	PCN 2		EYEWALL OPN SE-S-SW		RSKO
104	251007	27.4N	134.2E	PCN 6				PGTW
105	251200	27.8N	135.3E	PCN 6		ULCC FIX		PGTW
106	251249	27.9N	135.1E	PCN 3				RSKO
107	251600	29.0N	137.0E	PCN 6	T4.0/5.0 /W1.0/24HRS	ULCC FIX		PGTW
*108	251710	29.4N	137.7E	PCN 6		ULCC FIX		PGTW
109	251710	30.0N	138.1E	PCN 4		ULCC FIX		RSKO
*110	251800	29.7N	137.9E	PCN 6		ULCC FIX LLCC 28.6N 136.6E		PGTW
111	252044	29.4N	137.9E	PCN 3				RODN
112	252100	29.3N	138.1E	PCN 6				PGTW
113	252246	30.0N	138.1E	PCN 3				PGTW
114	260000	30.5N	139.0E	PCN 6				PGTW
115	260413	30.8N	139.1E	PCN 3		EXP LLCC		PGTW
116	260600	30.8N	139.5E	PCN 6				PGTW
117	260900	30.9N	140.9E	PCN 6				PGTW
118	260924	30.7N	140.3E	PCN 5				RODN
119	260943	30.9N	140.6E	PCN 6				PGTW
120	261200	31.1N	141.7E	PCN 6				PGTW
121	261600	30.3N	140.9E	PCN 4				PGTW
122	261800	30.6N	141.5E	PCN 4				PGTW
123	262221	29.9N	143.2E	PCN 4				PGTW
124	270000	30.0N	143.6E	PCN 6				PGTW
125	270300	30.0N	144.5E	PCN 6				PGTW
126	270600	30.0N	144.9E	PCN 6				PGTW
127	280300	29.2N	147.4E	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	230830	18.8N 129.6E	700MB	2832	971	65 030 10	120 72 030 15	4 2	CIRCULAR	15	+11 +16 + 9	1
2	232103	20.1N 128.8E	700MB	2729		50 030 8	330 86 190 12	4 3	CIRCULAR	15	+11 +18 +12	2
3	232311	20.5N 128.7E	700MB	2706	957	90 280 7	110 90 030 15	4 3	CIRCULAR	18	+13 +18 +12	2
4	240548	21.5N 129.2E	700MB	2656		100 250 10	330 101 250 10	5 5	CIRCULAR	13	+17 +19 +12	3
5	240818	21.9N 129.7E	700MB	2661	952	100 330 10	360 79 330 10	5 5	ELLIPTICAL	20 10 360	+18 +15 +13	3
6	242059	24.1N 131.2E	700MB	2833		90 220 7	300 80 190 28	3 2			+11 +22 +12	4
7	242334	24.7N 131.9E	700MB	2844		80 300 30	310 80 230 22	3 2			+12 +20 + 7	4
8	250901	27.1N 133.9E	700MB	2855	974	100 270 40	190 74 110 30	10 5			+11 +16 + 9	5
9	251139	27.0N 135.0E	700MB	2873	979		170 65 040 45	10 5			+ 9 +14 +12	5
10	252327	30.6N 138.4E	700MB	2900	983	50 250 70	320 55 250 72	5 10			+10 +12 +10	6

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

TROPICAL DEPRESSION 04
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	
061700Z	16.6 112.6	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.	
061706Z	16.3 112.3	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.	
061712Z	16.0 111.5	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.	
061718Z	16.0 110.9	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.	
061800Z	16.0 110.5	30	16.7 110.2	30.	45.	0.		17.6 108.1	40.	161.	10.		18.7 106.3	40.	228.	10.		0.0 0.0	0.	-0.	0.	
061806Z	16.2 110.2	30	16.5 109.9	30.	25.	0.		17.1 107.9	40.	184.	10.		18.1 106.1	30.	198.	5.		0.0 0.0	0.	-0.	0.	
061812Z	16.4 110.1	30	16.5 109.3	30.	46.	0.		17.2 106.9	30.	247.	0.		0.0 0.0	0.	-0.	0.		0.0 0.0	0.	-0.	0.	
061818Z	16.6 110.4	30	16.5 109.1	30.	75.	0.		16.5 108.4	30.	183.	0.		0.0 0.0	0.	-0.	0.		0.0 0.0	0.	-0.	0.	
061900Z	16.6 110.7	30	16.5 110.0	30.	41.	0.		16.5 109.4	30.	164.	0.		0.0 0.0	0.	-0.	0.		0.0 0.0	0.	-0.	0.	
061906Z	16.9 111.1	30	17.2 110.6	30.	34.	0.		17.5 110.0	30.	121.	5.		0.0 0.0	0.	-0.	0.		0.0 0.0	0.	-0.	0.	
061912Z	17.6 111.2	30	17.3 110.8	30.	29.	0.		0.0 0.0	0.	-0.	0.		0.0 0.0	0.	-0.	0.		0.0 0.0	0.	-0.	0.	
061918Z	18.4 110.9	30	17.5 110.8	30.	54.	0.		0.0 0.0	0.	-0.	0.		0.0 0.0	0.	-0.	0.		0.0 0.0	0.	-0.	0.	
062000Z	19.1 110.3	30	18.0 110.5	30.	67.	0.		0.0 0.0	0.	-0.	0.		0.0 0.0	0.	-0.	0.		0.0 0.0	0.	-0.	0.	
062006Z	19.4 109.3	25	19.4 110.4	25.	62.	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	48.	177.	213.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	27.	110.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	0.	4.	8.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	4.	8.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	10	6	2	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 441. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

TROPICAL DEPRESSION TD04W
FIX POSITIONS FOR CYCLONE NO. 4

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	170000	16.8N 112.5E	PCN 4	T1.5/1.5	INIT OBS	PGTW
2	170231	15.9N 112.4E	PCN 3	T1.5/1.5	INIT OBS EXP LLCC	RPMK
3	170300	16.0N 112.4E	PCN 4		EXP LLCC	PGTW
4	170600	16.6N 112.3E	PCN 6			PGTW
5	171055	16.1N 112.6E	PCN 5			RPMK
* 6	171055	15.4N 108.1E	PCN 6			RODN
* 7	171511	15.8N 110.0E	PCN 5	T1.5/1.5	INIT OBS	RPMK
8	171600	15.4N 110.2E	PCN 6	T1.5/1.5	INIT OBS ULCC FIX	PGTW
9	171800	16.6N 111.1E	PCN 6			PGTW
10	172243	16.8N 110.3E	PCN 6	T2.0/2.0 /D0.5/20HRS		RPMK
11	180000	16.5N 110.8E	PCN 6	T2.5/2.5-/D1.0/24HRS		PGTW
12	180210	16.4N 110.4E	PCN 3		EXP LLCC	RPMK
13	180210	16.4N 110.4E	PCN 3	T2.5/2.5	INIT OBS	RODN
14	180300	16.2N 110.2E	PCN 6			PGTW
15	180600	16.4N 109.9E	PCN 6			PGTW
16	180900	16.8N 109.7E	PCN 6			PGTW
* 17	181122	15.9N 108.2E	PCN 6		ULCC FIX	RODN
* 18	181200	16.7N 108.6E	PCN 6		ULCC FIX	PGTW
* 19	181451	16.8N 107.8E	PCN 5			RPMK
20	181800	16.2N 110.4E	PCN 6			PGTW
21	181939	16.5N 110.5E	PCN 3		EXP LLCC	RPMK
22	182100	16.8N 110.6E	PCN 4			PGTW
23	182221	16.6N 110.4E	PCN 3	T2.0/2.0 /S0.0/20HRS	EXP LLCC	RPMK
24	182309	16.8N 110.5E	PCN 3	T1.0/1.0	INIT OBS	RKSO
25	190000	17.0N 110.9E	PCN 6		EXP LLCC	PGTW
26	190150	17.2N 110.5E	PCN 5			RKSO
27	190300	17.1N 110.7E	PCN 6	T2.0/2.5 /W0.5/27HRS	EXP LLCC	PGTW
28	190600	17.6N 111.0E	PCN 6			PGTW
29	190642	16.6N 111.5E	PCN 5	T2.5/2.5 /S0.0/28HRS		RODN
30	190900	17.7N 111.3E	PCN 6			PGTW
31	191101	17.2N 111.5E	PCN 4		EXP LLCC	RPMK
32	191101	18.1N 111.1E	PCN 5			RODN
33	191148	17.0N 111.6E	PCN 3			RPMK
* 34	191928	19.4N 109.1E	PCN 4		EXP LLCC	RPMK
* 35	192200	17.1N 111.6E	PCN 6			RKSO
36	200000	19.2N 110.6E	PCN 6		EXP LLCC	PGTW
37	200026	19.2N 110.3E	PCN 3	T1.5/2.0 /W0.5/26HRS	EXP LLCC	RPMK
38	200300	18.9N 110.2E	PCN 6			PGTW
39	200600	19.2N 110.2E	PCN 6			PGTW
* 40	200631	19.2N 111.4E	PCN 6			RKSO

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	170600	16.0N 112.0E	020	030	59985 59981
2	170900	16.2N 111.8E	020	015	59985 59981
3	171200	16.3N 111.3E	020	015	59985 59981
4	171800	16.5N 111.0E	020	045	59985 59981

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

TYPHOON HAL
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
061906Z	14.2	133.5	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.
061912Z	14.3	132.5	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.
061918Z	14.5	131.5	35	14.5	132.5	30.	58.	-5.	16.2	129.1	55.	68.	-20.	19.2	125.3	65.	145.	-30.	22.1	123.7	80.	289.	-10.
062000Z	14.8	130.6	45	15.1	130.8	45.	21.	0.	18.5	126.7	65.	138.	-20.	23.1	124.0	85.	287.	0.	27.0	124.6	100.	518.	0.
062006Z	15.1	129.8	65	15.4	129.8	55.	18.	-10.	18.6	126.2	90.	121.	0.	22.9	124.1	110.	300.	30.	26.9	124.7	115.	535.	20.
062012Z	15.4	129.0	65	15.6	129.1	65.	13.	0.	18.0	126.1	90.	92.	-5.	21.5	123.9	110.	262.	30.	25.4	123.0	115.	441.	25.
062018Z	15.8	128.0	75	16.2	128.3	70.	30.	-5.	18.6	125.2	90.	137.	-5.	22.2	123.3	105.	271.	15.	26.2	122.7	110.	470.	25.
062100Z	16.2	126.7	85	16.3	126.9	85.	13.	0.	19.2	123.1	105.	108.	20.	22.8	121.2	105.	216.	5.	27.1	120.9	65.	420.	-15.
062106Z	16.7	125.5	90	16.9	125.7	90.	17.	0.	20.3	122.0	105.	107.	25.	24.2	119.9	85.	232.	-10.	29.0	122.0	60.	519.	-15.
062112Z	17.8	124.5	95	17.7	124.5	95.	6.	0.	21.2	121.3	105.	132.	25.	25.6	120.9	80.	357.	-10.	29.7	124.3	65.	621.	15.
062118Z	18.7	122.8	95	18.8	122.7	95.	8.	0.	23.7	119.9	90.	211.	0.	28.8	123.5	70.	600.	-15.	33.2	129.3	60.	940.	20.
062200Z	19.1	121.2	85	19.3	121.2	90.	12.	5.	23.4	118.3	90.	152.	-10.	28.6	123.2	70.	571.	-10.	33.3	131.3	50.	1030.	20.
062206Z	19.2	120.5	80	19.4	120.1	95.	26.	15.	24.1	118.7	90.	187.	-5.	29.3	124.1	75.	614.	0.	34.0	133.3	45.	1145.	20.
062212Z	19.6	119.7	80	19.7	119.7	85.	6.	5.	22.9	118.3	90.	144.	0.	28.7	123.3	75.	544.	25.	0.0	0.0	0.	-0.	0.
062218Z	20.3	118.9	90	20.5	119.0	90.	13.	0.	24.1	118.8	90.	224.	5.	28.9	123.5	75.	549.	35.	0.0	0.0	0.	-0.	0.
062300Z	20.9	117.9	100	21.1	117.9	100.	12.	0.	25.1	115.5	40.	174.	-40.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062306Z	21.4	117.0	95	21.4	116.9	100.	6.	5.	24.5	113.7	35.	135.	-40.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062312Z	21.5	116.2	90	21.7	116.1	90.	13.	0.	24.5	113.1	35.	136.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062318Z	21.8	115.6	85	21.9	115.1	80.	28.	-5.	24.2	112.5	25.	146.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062400Z	22.2	115.4	80	22.1	115.2	80.	13.	0.	22.9	113.6	35.	93.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062406Z	22.8	115.3	75	22.8	115.3	50.	0.	-25.	24.9	116.1	25.	97.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062412Z	23.3	115.2	50	23.3	115.2	50.	0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062418Z	23.7	115.1	40	23.8	115.1	40.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062500Z	24.0	114.8	30	23.9	115.1	30.	18.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
062506Z	24.2	114.5	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 WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	15.	137.	380.	630.	15.	142.	380.	528.
AVG RIGHT ANGLE ERROR	11.	109.	347.	591.	11.	112.	347.	490.
AVG INTENSITY MAGNITUDE ERROR	4.	13.	17.	17.	4.	15.	17.	16.
AVG INTENSITY BIAS	-1.	-5.	5.	10.	-1.	-6.	5.	7.
NUMBER OF FORECASTS	22	19	13	11	21	17	13	9

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1305. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TYPHOON HAL
FIX POSITIONS FOR CYCLONE NO. 5

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	131800	5.5N 151.5E	PCN 6	T0.0/0.0	INIT OBS	PGTW
2	132100	5.3N 151.1E	PCN 6			PGTW
3	140000	4.5N 151.7E	PCN 6			PGTW
4	140300	4.8N 151.4E	PCN 6			PGTW
5	140600	5.2N 150.8E	PCN 6	T1.0/1.0	INIT OBS	PGTW
6	140900	5.1N 151.0E	PCN 6			PGTW
7	141200	4.4N 147.4E	PCN 6			PGTW
8	141600	3.3N 147.4E	PCN 6		ULCC FIX	PGTW
* 9	150000	5.8N 140.8E	PCN 6		ULCC FIX	PGTW
* 10	150130	17.3N 137.5E	PCN 5	T1.0/1.0	INIT OBS	RPMK
* 11	150543	5.1N 140.4E	PCN 5			RPMK
12	160000	6.3N 146.9E	PCN 6	T1.0/1.0 /S0.0/24HRS		PGTW
13	160900	8.1N 144.3E	PCN 6		ULCC FIX	PGTW
14	161200	7.1N 144.2E	PCN 6			PGTW
15	170900	11.0N 139.7E	PCN 6			PGTW
16	171200	10.3N 139.7E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
17	171600	10.6N 139.4E	PCN 6		ULCC FIX	PGTW
18	171800	11.0N 139.0E	PCN 6		ULCC FIX	PGTW
19	172100	11.4N 139.1E	PCN 6		ULCC FIX	PGTW
20	180028	12.4N 139.1E	PCN 5	T1.5/1.5	INIT OBS	RODN
21	180600	12.6N 138.4E	PCN 6	T1.0/1.0	INIT OBS	PGTW
22	180941	13.7N 139.1E	PCN 5			RODN
23	181309	12.8N 138.3E	PCN 5			RPMK
24	181600	13.4N 136.1E	PCN 6	T2.0/2.0 /D1.0/28HRS	ULCC FIX	PGTW
25	182040	12.6N 137.0E	PCN 6			RPMK
26	182100	15.9N 135.9E	PCN 6		ULCC FIX	PGTW
27	182128	15.8N 136.1E	PCN 6			PGTW
28	190000	15.2N 134.9E	PCN 6			PGTW
29	190008	16.3N 134.4E	PCN 5	T2.0/2.0 /D0.5/24HRS		RODN
30	190600	13.4N 133.5E	PCN 6	T2.0/2.0 /D1.0/24HRS		PGTW
* 31	190900	13.6N 132.0E	PCN 6			PGTW
32	190920	14.0N 133.2E	PCN 5			RODN
33	191007	14.0N 132.6E	PCN 6		ULCC FIX	PGTW
34	191200	13.9N 132.3E	PCN 6			PGTW
35	191600	13.7N 132.3E	PCN 6	T2.5/2.5+/D0.5/24HRS	PSBL SCNDRY 14.3N 132.8E	PGTW
36	191746	14.0N 132.3E	PCN 5		ULCC FIX	PGTW
* 37	192100	15.1N 132.6E	PCN 6			PGTW
38	192245	15.0N 131.1E	PCN 5			PGTW
39	200000	14.5N 130.9E	PCN 6			PGTW
40	200129	15.1N 130.0E	PCN 3	T3.0/3.0 /D1.0/25HRS		RODN
* 41	200300	15.9N 130.2E	PCN 4	T3.0/3.0 /D1.0/21HRS	EXP LLCC	PGTW
42	200449	14.9N 130.5E	PCN 5			PGTW
43	200600	15.5N 129.9E	PCN 6			PGTW
44	200900	15.7N 129.9E	PCN 6			PGTW
45	201200	15.7N 129.2E	PCN 6			PGTW
46	201410	15.7N 129.5E	PCN 4			RODN
47	201735	16.2N 128.2E	PCN 5			RPMK
48	201800	16.2N 128.3E	PCN 4	T3.5/3.5 /D1.0/26HRS		PGTW
49	202100	16.2N 127.4E	PCN 6		ULCC FIX	PGTW
50	202221	16.3N 127.3E	PCN 4			PGTW
51	210100	16.6N 126.6E	PCN 4			PGTW
* 52	210109	16.8N 126.0E	PCN 1	T4.5/4.5 /D1.5/24HRS		RODN
53	210300	16.6N 126.2E	PCN 4	T4.0/4.0 /D1.0/24HRS		PGTW
54	210600	16.5N 125.7E	PCN 4			PGTW
55	210621	16.7N 125.9E	PCN 3	T5.0/5.0	INIT OBS	RPMK
* 56	210621	17.4N 125.3E	PCN 1	T4.5/4.5	INIT OBS	RSKO
57	211019	18.0N 125.0E	PCN 1	T4.5/4.5 /D1.5/28HRS		RODN
58	211059	18.1N 124.8E	PCN 3			RKSO
* 59	211100	16.8N 124.8E	PCN 3			RPMK
60	211200	17.8N 124.2E	PCN 4	T4.5/4.5 /D1.0/18HRS		PGTW
61	211600	18.1N 123.7E	PCN 6			PGTW

62	211906	19.4N	122.0E	PCN 3				RODN
63	212100	19.6N	122.1E	PCN 6			ULCC FIX	PGTW
64	212118	19.0N	121.9E	PCN 1	T5.0/5.0 /D0.5/15HRS			RKSO
65	212350	18.4N	123.8E	PCN 3				RKSO
66	220000	19.4N	121.1E	PCN 4				PGTW
67	220230	19.0N	121.0E	PCN 1	T5.0/5.0 /D0.5/25HRS		LLCC WITHIN EYE	RODN
68	220230	19.1N	120.9E	PCN 3	T5.0/5.0 /S0.0/20HRS		OPN EYE	RPMK
69	220300	19.0N	120.8E	PCN 2	T5.5/5.5 /D1.5/24HRS		RGD EYE	PGTW
70	220610	19.2N	120.2E	PCN 3			RGD EYE	PGTW
* 71	220610	19.7N	119.4E	PCN 3			LLCC WITHIN EYE	RPMK
72	220900	19.3N	120.3E	PCN 4				PGTW
73	220957	19.1N	120.5E	PCN 4				PGTW
74	220957	19.3N	120.0E	PCN 3				RKSO
75	221200	19.6N	119.7E	PCN 6				PGTW
76	221511	19.9N	119.5E	PCN 1				RODN
77	221600	20.1N	119.7E	PCN 6	T5.0/5.0-/D0.5/28HRS			PGTW
78	221800	20.7N	119.0E	PCN 6				PGTW
79	221855	20.4N	118.6E	PCN 3			RGD EYE	RPMK
80	222233	20.5N	117.7E	PCN 5	T4.5/5.0 /W0.5/25HRS			RKSO
81	222313	21.0N	118.1E	PCN 2	T5.0/5.5 /W0.5/20HRS		EYE FIX	PGTW
82	222313	21.0N	117.8E	PCN 1	T5.5/5.5 /D0.5/21HRS			RODN
83	222313	20.9N	117.8E	PCN 1	T5.0/5.0-/S0.0/21HRS			RPMK
84	230300	21.2N	117.5E	PCN 4				PGTW
85	230559	21.2N	116.7E	PCN 1				RPMK
86	230559	21.5N	116.8E	PCN 1	T5.0/5.0 /D0.5/07HRS		LLCC WITHIN EYE	RKSO
87	230600	21.4N	116.9E	PCN 2				PGTW
88	230900	21.5N	116.3E	PCN 2			EYE FIX	PGTW
89	231010	21.2N	115.7E	PCN 3				RPMK
* 90	231117	21.5N	115.2E	PCN 1			LLCC WITHIN EYE	RODN
91	231117	21.7N	116.1E	PCN 2			LLCC WITHIN EYE	RKSO
92	231200	21.5N	116.0E	PCN 4			RGD EYE	PGTW
93	231451	21.7N	116.0E	PCN 2			LLCC WITHIN EYE	RKSO
94	231600	21.7N	115.7E	PCN 4	T4.5/5.0 /W0.5/24HRS			PGTW
95	231800	21.8N	115.4E	PCN 4				PGTW
96	231845	21.9N	115.6E	PCN 3				RPMK
97	232100	21.8N	115.2E	PCN 4				PGTW
98	232216	22.0N	115.4E	PCN 1	T4.0/5.0-/W1.0/23HRS			RODN
99	232249	21.9N	115.4E	PCN 2				PGTW
100	232249	21.9N	114.7E	PCN 5	T4.5/5.0-/W0.5/17HRS			RKSO
101	240000	22.0N	115.3E	PCN 2				PGTW
*102	240149	22.5N	114.0E	PCN 3				RODN
103	240300	22.4N	115.1E	PCN 4	T3.0/4.0-/W2.0/28HRS			PGTW
104	240548	22.9N	115.4E	PCN 5				PGTW
105	240548	23.0N	115.5E	PCN 3	T3.5/4.5 /W1.5/31HRS			RPMK
106	240900	22.7N	115.3E	PCN 4				PGTW
107	241056	22.5N	115.4E	PCN 4				RODN
108	241127	23.3N	115.1E	PCN 5				RKSO
109	241200	23.1N	115.3E	PCN 4				PGTW
110	241430	23.7N	115.1E	PCN 5				RKSO
111	241600	23.6N	115.1E	PCN 6	T3.0/4.0-/W1.5/24HRS			PGTW
112	241800	23.8N	115.2E	PCN 6				PGTW
*113	241833	25.2N	115.2E	PCN 5			ULCC FIX	RPMK
114	242100	23.7N	115.0E	PCN 6				PGTW
115	250000	24.2N	115.0E	PCN 6				PGTW
116	250006	23.9N	115.6E	PCN 5				RODN
117	250006	23.9N	115.6E	PCN 5				RPMK
118	250130	23.9N	114.6E	PCN 5				RKSO
119	250600	23.8N	113.7E	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-TATION	EYE DIAM	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	192313	15.0N 130.7E	1500FT		984	55 100 160	180 50 100 160	5 4				+25 +25 +24 28	4
2	200615	15.2N 129.8E	1500FT		979	65 080 90	160 68 080 120	8 3				+25 +25 +25	5
3	200851	15.0N 129.8E	1500FT		976	65 280 105	320 65 280 105	8 4				+26 +26 +25	5
4	202137	16.0N 127.3E	700MB	2817		65 120 120	180 84 100 84	8 2				+15 +16 + 9	7
5	202344	16.2N 126.8E	700MB	2824	969	65 330 70	050 56 310 64	10 2				+15 +16 +15	7
6	210900	17.0N 125.2E	700MB	2767	964	90 030 130	150 105 040 75	5 2				+13 +20 +12	8
7	211132	17.8N 124.3E	700MB	2774			060 95 320 34	10 7	CIRCULAR	80		+12 +17 +10	8
8	212056	19.0N 121.6E	700MB	2732		65 040 40	140 76 040 54	5 15				+12 +19 +10	9
9	212333	19.1N 121.4E	700MB	2738	961	65 280 15	040 80 320 95	2 3				+12 +18 +12	9
10	220841	19.0N 120.2E	700MB	2766		75 180 12	270 77 180 38	10 8				+12 +17 +12	10
11	221128	19.7N 119.8E	700MB	2768	961	80 030 25	040 62 310 37	10 8				+16 +19 +13	10
12	221931	20.4N 118.8E	700MB	2809			230 80 150 69	6 15	CONCENTRIC	10 80		+15 +18 +14	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	220700	19.5N 120.4E	LAND				4//// 50000		16.3N 120.6E	98321
2	220800	19.5N 120.3E	LAND				4//// 42805		16.3N 120.6E	98321
3	220800	19.5N 120.5E	LAND				60/2/ 5////		22.6N 120.3E	46744
4	220900	19.6N 120.4E	LAND				65/2/ 53006		22.6N 120.3E	46744
5	221000	19.5N 120.1E	LAND				4//// 53012		16.3N 120.6E	98321
* 6	221000	19.5N 121.0E	LAND				5//// 53515		18.4N 121.6E	98231
7	221000	19.6N 120.3E	LAND				65/// 53006		22.6N 120.3E	46744
8	221100	19.6N 119.7E	LAND				4////		16.3N 120.6E	98321
9	221100	19.6N 120.1E	LAND				///// 35315		18.4N 121.6E	98231
10	221100	20.1N 119.2E	LAND				6///4 72914		23.4N 116.7E	59316
11	221100	19.6N 120.2E	LAND				65/// 53006		22.6N 120.3E	46744
12	221300	19.8N 119.9E	LAND				65/// 53208		22.6N 120.3E	46744
13	221400	19.9N 119.8E	LAND				65/// 53209		22.6N 120.3E	46744
14	221500	19.9N 119.5E	LAND				65/// 53209		22.6N 120.3E	46744
15	221600	19.9N 119.5E	LAND				65/// 53202		22.6N 120.3E	46744
16	221700	20.4N 118.8E	LAND				5///3 72920		23.4N 116.7E	59316
17	221700	20.1N 119.4E	LAND				65/// 53202		22.6N 120.3E	46744
18	221800	20.2N 119.3E	LAND				6//// 53409		22.6N 120.3E	46744
19	222000	20.7N 118.5E	LAND				24843 52913		23.4N 116.7E	59316
20	222100	20.7N 118.4E	LAND				21873 52906		23.4N 116.7E	59316
21	222200	20.7N 118.4E	LAND				24934 50000		23.4N 116.7E	59316
22	222200	20.9N 118.6E	LAND				6//// 53009		22.6N 120.3E	46744
23	222300	20.9N 118.1E	LAND				20973 53313		23.4N 116.7E	59316
24	222300	21.0N 118.4E	LAND				6//// 53013		22.6N 120.3E	46744
25	230000	21.0N 118.0E	LAND				20913 53313		23.4N 116.7E	59316
26	230000	21.2N 118.1E	LAND				6//// 53219		22.6N 120.3E	46744
27	230100	21.1N 117.9E	LAND				20913 52906		23.4N 116.7E	59316
28	230100	20.9N 117.9E	LAND				6//// 52916		22.6N 120.3E	46744
29	230200	21.2N 117.7E	LAND				10983 52913		23.4N 116.7E	59316
* 30	230200	22.1N 117.7E	LAND				6//// 53017		22.6N 120.3E	46744
31	230300	21.2N 117.4E	LAND				6//// 53017		22.6N 120.3E	46744
32	230500	21.0N 117.3E	LAND				30802 /////		22.3N 114.2E	45005
33	230600	21.6N 117.0E	LAND				10924 53011		23.4N 116.7E	59316
34	230600	21.2N 117.0E	LAND				30912 /////		22.3N 114.2E	45005
35	230600	21.5N 116.9E	LAND				5//// 53112		22.6N 120.3E	46744
36	230700	21.4N 116.8E	LAND				31972 63111		22.3N 114.2E	45005
* 37	230700	21.6N 118.0E	LAND				07714 53011		23.4N 116.7E	59316
38	230800	21.4N 116.7E	LAND				21972 63110		22.3N 114.2E	45005
39	230900	21.4N 116.6E	LAND				21913 73009		22.3N 114.2E	45005
40	230900	21.5N 116.5E	LAND				10913 52709		23.4N 116.7E	59316
41	231000	21.5N 116.5E	LAND				21912 73008		22.3N 114.2E	45005

42	231100	21.5N	116.3E	LAND	31942	73008	22.3N	114.2E	45005
43	231200	21.5N	116.2E	LAND	31914	/////	22.3N	114.2E	45005
44	231300	21.3N	116.1E	LAND	30914	72508	22.3N	114.2E	45005
45	231300	21.6N	116.1E	LAND	10912	52706	23.4N	116.7E	59316
46	231400	21.4N	116.0E	LAND	30914	72607	22.3N	114.2E	45005
47	231400	21.7N	116.0E	LAND	10973	53006	23.4N	116.7E	59316
48	231500	21.6N	115.8E	LAND	31974	72807	22.3N	114.2E	45005
49	231600	21.6N	115.6E	LAND	30974	72910	22.3N	114.2E	45005
50	231600	21.8N	115.9E	LAND	10913	53006	23.4N	116.7E	59316
51	231700	21.7N	115.5E	LAND	30974	43010	22.3N	114.2E	45005
52	231700	21.8N	115.8E	LAND	10923	53006	23.4N	116.7E	59316
53	231800	21.7N	115.5E	LAND	30944	73007	22.3N	114.2E	45005
54	231800	21.9N	115.7E	LAND	10913	53007	23.4N	116.7E	59316
55	231900	21.8N	115.5E	LAND	30972	73506	22.3N	114.2E	45005
56	231900	21.9N	115.7E	LAND	10913	53007	23.4N	116.7E	59316
57	232000	21.9N	115.5E	LAND	30912	73606	22.3N	114.2E	45005
58	232000	22.0N	115.4E	LAND	10914	53006	23.4N	116.7E	59316
59	232100	22.0N	115.4E	LAND	30912	73408	22.3N	114.2E	45005
60	232200	21.9N	115.3E	LAND	30912	73007	22.3N	114.2E	45005
61	232200	22.2N	115.4E	LAND	10914	53005	23.4N	116.7E	59316
62	232300	22.1N	115.3E	LAND	20912	73105	22.3N	114.2E	45005
63	240000	22.1N	115.3E	LAND	20912	73104	22.3N	114.2E	45005
64	240000	22.2N	115.5E	LAND	10914	50000	23.4N	116.7E	59316
65	240100	22.3N	115.4E	LAND	20912	73605	22.3N	114.2E	45005
66	240200	22.4N	115.4E	LAND	20912	73606	22.3N	114.2E	45005
67	240300	22.5N	115.4E	LAND	20914	73608	22.3N	114.2E	45005
68	240400	22.7N	115.4E	LAND	20914	73607	22.3N	114.2E	45005
69	240500	22.7N	115.3E	LAND	20914	73407	22.3N	114.2E	45005
70	240600	22.8N	115.4E	LAND	24854	73405	22.3N	114.2E	45005
71	240700	22.8N	115.4E	LAND	24154	83505	22.3N	114.2E	45005
72	240800	22.9N	115.4E	LAND	25114	83605	22.3N	114.2E	45005
73	240900	23.1N	115.4E	LAND	21114	83606	22.3N	114.2E	45005
74	241000	23.3N	115.3E	LAND	3////	83506	22.3N	114.2E	45005
75	241100	23.2N	115.1E	LAND	2////	83405	22.3N	114.2E	45005
76	241300	23.2N	115.0E	LAND	5////	83206	22.3N	114.2E	45005
77	241500	23.3N	114.9E	LAND	5////	82905	22.3N	114.2E	45005
78	241800	23.6N	114.9E	LAND	5////	83405	22.3N	114.2E	45005
79	242100	23.6N	114.8E	LAND	5////	83405	22.3N	114.2E	45005

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	240900	23.0N 115.2E	040	018	59501 59293 59117 45005
2	241200	23.2N 115.1E	030	030	59501 59293 59117 45005
3	241500	23.8N 115.2E	030	045	59501 59293 59117 45005
4	241800	23.9N 114.7E	060	040	59501 59293 59117 45005

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

TYPHOON IRMA
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
062412Z	8.1 135.9	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.
062418Z	8.8 134.9	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.
062500Z	9.4 134.0	40	9.8 133.9	35.	25.	-5.	12.0 130.5	55.	66.	-5.	15.0 126.0	75.	244.	15.	19.0 122.0	90.	437.	15.
062506Z	9.9 133.2	45	10.0 133.0	50.	13.	5.	12.4 129.0	70.	117.	10.	15.9 124.1	90.	341.	25.	19.2 120.6	90.	522.	10.
062512Z	10.4 132.5	50	10.6 132.0	55.	32.	5.	13.0 127.7	75.	170.	15.	16.8 122.9	95.	391.	20.	19.9 119.6	85.	584.	5.
062518Z	11.0 132.0	55	11.3 130.7	60.	79.	5.	14.2 126.1	80.	245.	20.	18.2 121.3	85.	475.	10.	21.3 118.5	90.	646.	5.
062600Z	11.5 131.5	60	11.5 131.3	60.	12.	0.	13.8 128.7	70.	109.	10.	17.0 126.2	70.	227.	-5.	20.3 122.8	60.	474.	-30.
062606Z	12.3 131.0	60	12.4 130.9	60.	8.	0.	15.7 128.9	60.	64.	-5.	19.4 126.5	50.	190.	-30.	23.5 124.7	50.	328.	-40.
062612Z	13.1 130.6	60	13.2 130.4	55.	13.	-5.	16.5 128.5	50.	70.	-25.	20.5 126.7	45.	186.	-35.	25.2 125.0	45.	315.	-40.
062618Z	13.9 130.3	60	14.3 130.2	60.	25.	0.	18.2 128.5	75.	70.	0.	22.9 126.3	65.	205.	-20.	28.2 125.5	55.	291.	-25.
062700Z	14.9 130.2	60	14.8 130.1	60.	8.	0.	18.4 129.3	75.	33.	0.	23.3 129.0	70.	89.	-20.	28.3 129.7	65.	133.	-10.
062706Z	15.8 130.0	65	15.7 129.9	60.	8.	-5.	19.4 129.2	75.	49.	-5.	24.3 129.1	70.	103.	-20.	29.3 130.3	65.	187.	-10.
062712Z	16.7 129.7	75	16.7 129.5	75.	11.	0.	20.5 128.9	90.	74.	10.	25.5 129.2	75.	114.	-10.	30.4 130.6	65.	278.	-10.
062718Z	17.7 129.6	75	17.8 129.3	75.	18.	0.	21.8 128.8	90.	90.	5.	26.5 129.1	75.	144.	-5.	31.4 131.0	65.	437.	0.
062800Z	18.8 129.7	75	18.7 129.6	75.	8.	0.	22.9 129.3	90.	100.	0.	27.6 130.3	75.	137.	0.	31.5 135.2	55.	518.	-5.
062806Z	20.0 129.8	80	19.8 129.5	80.	21.	0.	24.3 129.4	95.	95.	5.	28.8 131.2	80.	170.	5.	32.2 136.8	60.	667.	5.
062812Z	21.3 129.9	80	21.4 129.9	80.	6.	0.	26.4 131.0	90.	45.	5.	31.2 137.0	75.	105.	0.	0.0 0.0	0.	-0.	0.
062818Z	22.8 130.0	85	22.8 130.0	85.	0.	0.	28.1 132.3	80.	69.	0.	32.3 139.3	70.	153.	5.	0.0 0.0	0.	-0.	0.
062900Z	24.4 130.1	90	24.3 130.2	90.	8.	0.	29.6 134.4	80.	131.	5.	33.6 143.1	65.	248.	5.	0.0 0.0	0.	-0.	0.
062906Z	25.7 130.2	90	25.8 130.3	90.	8.	0.	30.9 135.3	80.	98.	5.	34.2 144.8	60.	363.	5.	0.0 0.0	0.	-0.	0.
062912Z	27.0 130.5	85	27.0 130.6	85.	5.	0.	31.7 135.0	75.	49.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
062918Z	28.2 131.0	80	28.3 131.0	80.	6.	0.	32.4 136.2	70.	191.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
063000Z	29.4 131.9	75	29.5 131.9	75.	6.	0.	33.3 138.7	60.	323.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
063006Z	30.9 133.4	75	30.9 133.3	75.	5.	0.	34.7 141.9	60.	391.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
063012Z	32.4 135.5	75	32.3 135.5	75.	6.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
063018Z	34.8 138.7	65	34.9 138.8	65.	8.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070100Z	37.7 142.5	60	37.7 142.8	60.	14.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
070106Z	40.1 146.5	55	39.9 145.8	55.	34.	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.	120.	216.	416.	15.	120.	216.	416.
AVG RIGHT ANGLE ERROR	11.	71.	173.	273.	11.	71.	173.	273.
AVG INTENSITY MAGNITUDE ERROR	1.	6.	13.	15.	1.	6.	13.	15.
AVG INTENSITY BIAS	0.	3.	-3.	-9.	0.	3.	-3.	-9.
NUMBER OF FORECASTS	26	22	18	14	26	22	18	14

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2413. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 15. KNOTS

TYPHOON IRMA
FIX POSITIONS FOR CYCLONE NO. 6

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	231800	7.8N 136.2E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	232100	7.6N 134.8E	PCN 6		ULCC FIX	PGTW
3	240000	7.1N 137.3E	PCN 6		ULCC FIX	PGTW
4	240300	7.4N 136.6E	PCN 6	T1.5/1.5	INIT OBS ULCC FIX	PGTW
5	240548	8.0N 136.1E	PCN 5		ULCC FIX	PGTW
6	240548	7.8N 135.5E	PCN 5	T1.0/1.0	INIT OBS	RPMK
7	240900	8.6N 135.8E	PCN 6		ULCC FIX	PGTW
8	241249	8.4N 134.7E	PCN 6		ULCC FIX	PGTW
9	241600	9.1N 134.8E	PCN 6	T2.0/2.0+/D1.0/21HRS	ULCC FIX	PGTW
10	241800	9.2N 134.7E	PCN 6		ULCC FIX	PGTW
11	242100	9.8N 134.0E	PCN 6			PGTW
12	242155	9.5N 134.2E	PCN 3	T3.0/3.0	INIT OBS	RODN
13	242225	9.6N 134.1E	PCN 5			PGTW
14	250000	9.6N 133.5E	PCN 6	T2.5/2.5 /D1.0/21HRS		PGTW
15	250129	10.0N 134.3E	PCN 3		ULCC FIX	RODN
16	250300	9.7N 132.8E	PCN 6			PGTW
17	250537	10.0N 133.1E	PCN 5			PGTW
18	250537	9.8N 133.0E	PCN 5	T2.5/2.5 /D1.5/24HRS		RPMK
19	250900	10.5N 132.6E	PCN 6		ULCC FIX	PGTW
20	251200	10.8N 131.7E	PCN 6		ULCC FIX	PGTW
* 21	251600	11.1N 130.9E	PCN 6	T3.0/3.0 /D0.1/24HRS	ULCC FIX	PGTW
* 22	251800	11.8N 130.5E	PCN 6		ULCC FIX	PGTW
* 23	251823	11.3N 130.5E	PCN 6		ULCC FIX	PGTW
* 24	251823	10.8N 130.6E	PCN 5			RPMK
25	252100	10.8N 131.4E	PCN 6			PGTW
26	252134	10.7N 131.5E	PCN 5	T3.5/3.5+/D0.5/24HRS		RODN
27	260000	11.5N 130.9E	PCN 4	T3.0/3.0 /D0.5/24HRS		PGTW
28	260109	11.6N 130.9E	PCN 3			PGTW
29	260300	12.0N 130.8E	PCN 6			PGTW
30	260527	12.4N 130.8E	PCN 3			PGTW
31	260527	12.0N 131.8E	PCN 6	T3.0/3.0 /D0.5/24HRS		RPMK
32	260900	12.8N 130.6E	PCN 6			PGTW
33	261014	13.0N 130.5E	PCN 6		ULCC 13.0N 131.5E	PGTW
34	261038	12.9N 131.5E	PCN 6			RODN
35	261200	13.2N 130.3E	PCN 6		ULCC 13.0N 130.9E	PGTW
36	261350	13.4N 130.7E	PCN 6		ULCC FIX	PGTW
37	261600	14.2N 130.8E	PCN 6	T4.0/4.0 /D1.0/24HRS	ULCC FIX	PGTW
38	261800	14.3N 130.6E	PCN 4		ULCC FIX	PGTW
39	261812	14.5N 130.5E	PCN 4			PGTW
40	261812	14.4N 130.5E	PCN 6			RODN
41	262100	14.7N 130.4E	PCN 6			PGTW
42	262112	14.9N 130.5E	PCN 5			PGTW
43	262317	15.2N 130.2E	PCN 3			RODN
44	270000	15.0N 130.2E	PCN 6	T4.0/4.0 /D1.0/24HRS	EYE FIX	PGTW
45	270049	15.3N 130.3E	PCN 5			PGTW
46	270049	15.2N 130.0E	PCN 1	T4.0/4.0 /D0.5/26HRS	EYE FIX	RODN
47	270300	15.2N 130.1E	PCN 6			PGTW
48	270516	15.7N 130.2E	PCN 3		EYE FIX	PGTW
49	270516	15.9N 130.0E	PCN 3	T4.0/4.0 /D1.0/24HRS		RPMK
50	270600	15.8N 130.0E	PCN 4		EYE FIX	PGTW
51	270952	16.4N 129.6E	PCN 4			PGTW
52	271014	16.6N 129.7E	PCN 3		ULCC FIX	RPMK
53	271200	16.9N 129.5E	PCN 2		EYEWALL 30 NM DIA	PGTW
54	271327	17.2N 129.4E	PCN 4			PGTW
55	271600	17.5N 129.3E	PCN 2	T4.5/4.5 /D0.5/24HRS	EYE FIX	PGTW

56	271801	17.7N	129.2E	PCN	4			PGTW
57	271801	17.9N	129.6E	PCN	1			RKSO
58	272051	18.2N	129.2E	PCN	1	T4.0/4.0 /D0.5/27HRS	EYE FIX	RODN
59	272100	18.3N	129.7E	PCN	6			PGTW
60	272253	19.1N	130.0E	PCN	5			PGTW
61	280000	18.5N	129.9E	PCN	6	T4.5/4.5 /D0.5/24HRS		PGTW
62	280028	19.0N	129.4E	PCN	1	T4.5/4.5 /D0.5/24HRS	EYE FIX	RODN
63	280029	18.9N	129.9E	PCN	6			PGTW
64	280300	19.2N	129.9E	PCN	6			PGTW
65	280505	19.5N	129.9E	PCN	2	T5.0/5.0 /D1.0/24HRS	EYE FIX	RPMK
66	280600	20.0N	130.0E	PCN	6			PGTW
67	280900	20.7N	130.0E	PCN	4		EYE FIX EYE DIA .5 DEG	PGTW
68	280931	20.8N	129.9E	PCN	2		RAGGED EYE	PGTW
69	280950	20.8N	129.5E	PCN	4		EYE FIX	RPMK
70	281200	21.4N	130.1E	PCN	2		EYE FIX	PGTW
71	281309	21.5N	130.1E	PCN	2		EYE FIX	PGTW
72	281600	22.3N	130.1E	PCN	4	T4.5/4.5-/S0.0/24HRS	RAGGED EYE	PGTW
73	281751	23.0N	130.1E	PCN	2		EYE FIX	RPMK
74	281751	22.8N	130.0E	PCN	2		RAGGED EYE	PGTW
75	282100	23.4N	130.1E	PCN	2			PGTW
76	282221	24.0N	130.5E	PCN	6			RKSO
77	282228	24.0N	130.5E	PCN	3		RAGGED EYE	PGTW
78	290000	24.3N	130.5E	PCN	4		EYE FIX	PGTW
79	290008	24.2N	130.2E	PCN	5	T4.5/4.5	INIT OBS	RKSO
* 80	290149	24.8N	131.0E	PCN	1	T5.0/5.0-/D1.0/24HRS		RODN
* 81	290300	24.3N	130.7E	PCN	4			PGTW
82	290454	25.3N	130.5E	PCN	4	T5.0/5.0-/D0.5/23HRS	EYE FIX	PGTW
83	290600	25.8N	130.5E	PCN	4			PGTW
84	290900	26.5N	130.5E	PCN	4		EYE FIX	PGTW
85	290926	26.0N	130.2E	PCN	4	T4.5/4.5 /D0.5/28HRS	EYE FIX	RPMK
86	291051	26.8N	130.5E	PCN	5		ULCC FIX	RODN
87	291200	26.9N	130.6E	PCN	4		ULCC 26.9N 130.8E	PGTW
88	291430	27.5N	131.0E	PCN	2		EYE FIX	RODN
89	291600	27.8N	131.0E	PCN	4	T3.5/4.5 /W1.0/24HRS		PGTW
90	291740	28.4N	131.0E	PCN	4			PGTW
91	291741	28.3N	131.2E	PCN	1		EYE FIX	RKSO
92	292100	28.9N	131.6E	PCN	4		RAGGED EYE	PGTW
* 93	292204	28.4N	131.3E	PCN	1	T4.0/4.5 /W0.5/22HRS		RKSO
94	300000	29.4N	132.1E	PCN	4		EYE FIX	PGTW
95	300300	30.0N	132.8E	PCN	4			PGTW
96	300443	30.4N	133.2E	PCN	4	T4.0/4.5 /W1.0/24HRS		PGTW
97	300600	30.8N	133.5E	PCN	4			PGTW
98	300901	31.3N	134.5E	PCN	2		EYE FIX	PGTW
99	301200	32.4N	135.6E	PCN	4		EYE FIX	PGTW
100	301600	33.9N	137.6E	PCN	6	T3.0/4.0 /W0.5/24HRS		PGTW
101	301729	34.9N	138.3E	PCN	6			PGTW
102	301729	34.6N	138.2E	PCN	3			RKSO
103	301800	35.1N	138.2E	PCN	6			PGTW
104	302100	36.0N	140.2E	PCN	6		ULCC FIX	PGTW
105	302140	36.2N	140.8E	PCN	6		ULCC FIX	PGTW
106	010000	37.7N	143.0E	PCN	6		ULCC FIX	PGTW
107	010300	39.0N	145.3E	PCN	6		ULCC FIX	PGTW
108	010600	40.0N	146.7E	PCN	6	T3.0/4.0 /W1.0/26HRS	ULCC FIX	PGTW
109	010837	42.8N	146.3E	PCN	5			RKSO
110	010900	42.6N	150.3E	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	EYE ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	200722	5.5N 148.6E	1500FT		1002	25 010 10	090 15 010 30	5 3				+27 +23 28	1
2	250516	9.9N 133.1E	700MB	3047		65 120 55	270 55 190 35	10 10				+12 +10	2
3	252049	11.2N 131.7E	700MB	3036	991	45 290 30	090 37 330 35	8 2				+15 +15 + 8	3
4	252335	11.5N 131.5E	700MB	3047	994	90 160 57	230 53 150 57	3 5				+12 +15 +10	3
5	260552	12.4N 131.0E	1500FT		992	40 040 45	150 61 040 45	5 4				+13 +27 +22	4
6	260849	12.8N 130.8E	1500FT		991	55 110 54	190 55 110 60	5 4				+27 +26 +24 28	4
7	262035	14.5N 130.4E	700MB	2979	988	45 270 42	150 68 100 63	10 5	CIRCULAR	15		+10 +13 + 9	5
8	262339	14.8N 130.1E	700MB	3002	989	55 180 60	250 67 170 121	10 5	CIRCULAR	50		+10 +14 + 8	5
9	270838	16.2N 129.6E	700MB	2915		95 030 30	120 75 030 120	5 5				+13 +15 +13	6
10	271114	16.6N 129.5E	700MB	2900			040 61 310 58	10 7	CIRCULAR	40		+11 +14 + 8	6
11	272045	18.4N 129.8E	700MB	2802		55 360 42	090 60 360 18	8 2	CIRCULAR	60		+12 +17 +12	7
12	272322	18.7N 129.7E	700MB	2813	967	85 140 20	270 74 170 24	8 4	CIRCULAR	60		+13 +18 +12	7
13	280846	20.7N 130.0E	700MB	2775	963	45 240 90	330 75 240 22	10 4	CIRCULAR	40		+11 +14 +10	8
14	281116	21.4N 129.8E	700MB	2766	962	45 290 90	270 77 190 54	15 5	CIRCULAR	38		+12 +14 +11	8
15	282047	23.6N 130.3E	700MB	2739	958	75 030 90	140 89 030 72	7 5	ELLIPTICAL	50 40	140	+12 +16 +14	9
16	282340	24.2N 130.0E	700MB	2744	960	50 260 80	330 75 260 20	4 5	ELLIPTICAL	50 40	010	+13 + 7 + 5	9
17	290530	25.6N 130.2E	700MB	2721		50 250 20	320 81 250 28	5 8	ELLIPTICAL	60 45	060	+13 +17 +12	10
18	290801	26.1N 130.1E	700MB	2721	957	65 120 14	280 83 180 24	3 8	CIRCULAR	40		+11 +16 +11	10
19	292034	28.8N 130.2E	700MB	2774	964		240 71 130 102	3 5	CIRCULAR	58		+13 +15 +13	11
20	292316	29.6N 131.8E	700MB	2822	970	50 260 90	140 71 030 100	5 3	CIRCULAR	60		+13 +15 +14	11
21	300545	31.1N 133.1E	700MB	2808	968	45 180 150	270 81 180 58	5 7				+11 +14 +13	12
22	300817	31.6N 134.1E	700MB	2807	968	75 060 20	150 58 030 64	3 10	ELLIPTICAL	50 30	010	+11 +14 +12	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	282300	24.1N 130.2E	LAND				65//3 53616		26.2N 127.8E	47937
2	290000	24.4N 130.2E	LAND				65//3 53616		26.2N 127.8E	47937
3	290200	24.9N 130.2E	LAND				54973 53616		26.2N 127.8E	47937
4	290300	25.1N 130.2E	LAND				54912 53616		26.2N 127.8E	47937
5	290400	25.4N 130.2E	LAND				54912 53516		26.2N 127.8E	47937
6	290500	25.6N 130.2E	LAND				10933 53311		28.4N 129.5E	47909
7	290500	25.6N 130.2E	LAND				10933 53311		26.2N 127.8E	47937
8	290600	25.8N 130.2E	LAND				11933 53611		28.4N 129.5E	47909
9	290600	25.8N 130.2E	LAND				54912 53608		26.2N 127.8E	47937
10	290700	26.0N 130.2E	LAND				52912 53614		26.2N 127.8E	47937
11	290900	26.4N 130.4E	LAND				10912 50211		28.4N 129.5E	47909
12	290900	26.3N 130.4E	LAND				51912 50411		26.2N 127.8E	47937
13	291000	26.6N 130.4E	LAND				10912 53611		28.4N 129.5E	47909
14	291000	26.5N 130.4E	LAND				51911 70208		26.2N 127.8E	47937
15	291100	26.7N 130.4E	LAND				10912 53605		28.4N 129.5E	47909
16	291200	26.8N 130.5E	LAND				10912 50211		28.4N 129.5E	47909
17	291200	26.7N 130.5E	LAND				64942 70208		26.2N 127.8E	47937
18	291300	27.1N 130.6E	LAND				10912 50216		28.4N 129.5E	47909
19	291300	27.0N 130.6E	LAND				64931 50211		26.2N 127.8E	47937
20	291400	27.3N 130.6E	LAND				10962 53611		28.4N 129.5E	47909
21	291500	27.6N 130.8E	LAND				35961 50319		28.4N 129.5E	47909
22	291600	27.8N 130.8E	LAND				35911 53611		28.4N 129.5E	47909
23	291700	28.1N 130.9E	LAND				55911 40119		28.4N 129.5E	47909
24	291800	28.2N 130.9E	LAND				55911 53611		28.4N 129.5E	47909
25	291900	28.5N 131.0E	LAND				55911 50116		28.4N 129.5E	47909
26	292000	28.7N 131.2E	LAND				55911 50316		28.4N 129.5E	47909
27	292000	28.7N 131.2E	LAND				21912 50216		30.6N 131.0E	47869
28	292100	29.0N 131.4E	LAND				55911 50322		28.4N 129.5E	47909
29	292100	28.5N 131.3E	LAND						31.3N 131.9E	
30	292100	29.0N 131.4E	LAND				21912 50219		30.6N 131.0E	47869
31	292200	29.0N 131.4E	LAND						31.3N 131.9E	
32	292200	29.2N 131.5E	LAND				55911 50111		28.4N 129.5E	47909

33	292200	29.2N	131.5E	LAND		21912	50314	30.6N	131.0E	47869
34	292300	29.2N	131.7E	LAND		55911	50711	28.4N	129.5E	47909
35	292300	29.1N	131.5E	LAND	/			31.3N	131.9E	
36	292300	29.4N	131.6E	LAND		10722	50314	30.6N	131.0E	47869
37	300000	29.3N	131.9E	LAND		65941	50711	28.4N	129.5E	47909
38	300000	29.5N	131.8E	LAND		20612	50514	30.6N	131.0E	47869
39	300100	29.4N	132.1E	LAND		65941	50413	28.4N	129.5E	47909
40	300100	29.8N	132.0E	LAND		11512	50316	30.6N	131.0E	47869
41	300200	29.5N	132.5E	LAND	/			31.3N	131.9E	
42	300200	30.0N	132.3E	LAND		51962	50522	30.6N	131.0E	47869
43	300300	30.3N	132.5E	LAND		55/62	50422	30.6N	131.0E	47869
44	300400	30.2N	132.4E	LAND	/			31.3N	131.9E	
45	300400	30.4N	132.7E	LAND		65/42	50416	30.6N	131.0E	47869
46	300500	30.3N	132.5E	LAND	/			31.3N	131.9E	
47	300500	30.8N	133.0E	LAND		65/42	50424	30.6N	131.0E	47869
48	300600	30.5N	133.1E	LAND	/			31.3N	131.9E	
49	300600	30.9N	133.4E	LAND		65///	50622	30.6N	131.0E	47869
50	300700	31.0N	133.8E	LAND		65///	50722	30.6N	131.0E	47869
51	300700	31.1N	133.7E	LAND		55///	/////	33.3N	134.2E	47899
52	300715	31.0N	133.3E	LAND	/			31.3N	131.9E	
53	300800	31.0N	134.1E	LAND		65///	50816	30.6N	131.0E	47869
54	300800	31.1N	134.0E	LAND	/			31.3N	131.9E	
55	300800	31.3N	133.9E	LAND		55//2	50524	33.3N	134.2E	47899
56	300900	31.4N	134.2E	LAND	/			31.3N	131.9E	
57	300900	31.6N	134.4E	LAND		55//2	50524	33.3N	134.2E	47899
58	301000	31.6N	134.5E	LAND	/			31.3N	131.9E	
59	301000	31.9N	134.7E	LAND		55//2	50422	33.3N	134.2E	47899
60	301100	31.9N	135.0E	LAND		75//4	50516	35.3N	138.7E	47639
61	301100	32.2N	135.1E	LAND		55//2	50624	33.3N	134.2E	47899
62	301200	32.3N	135.3E	LAND		65//4	50632	35.3N	138.7E	47639
63	301200	32.5N	135.4E	LAND		55//2	50427	33.3N	134.2E	47899
64	301300	32.9N	135.8E	LAND		65//4	50338	35.3N	138.7E	47639
65	301300	32.8N	135.9E	LAND		55//2	50527	33.3N	134.2E	47899
66	301400	33.0N	136.3E	LAND		65//3	50630	35.3N	138.7E	47639
67	301400	33.1N	136.3E	LAND		55///	50527	33.3N	134.2E	47899
68	301500	33.5N	136.7E	LAND	/			33.6N	135.8E	
69	301500	33.7N	136.6E	LAND		65//3	50427	35.3N	138.7E	47639
70	301600	33.5N	136.9E	LAND		6///4	50622	35.3N	138.7E	47639
71	301700	34.1N	138.2E	LAND	/			33.6N	135.8E	
72	301700	34.2N	138.1E	LAND		30941	50638	35.3N	138.7E	47639
73	301800	34.9N	138.6E	LAND		6///4	50443	35.3N	138.7E	47639
74	301900	35.3N	139.6E	LAND		6///3	50643	35.3N	138.7E	47639
75	302000	35.8N	140.1E	LAND		6///3	50549	35.3N	138.7E	47639
76	302100	36.6N	140.6E	LAND		/////	/////	37.7N	138.8E	47572
77	302100	36.2N	140.9E	LAND		6///3	50649	35.3N	138.7E	47639
78	302200	36.6N	141.6E	LAND		6///3	50543	35.3N	138.7E	47639
79	302300	37.1N	142.3E	LAND		6////	50546	35.3N	138.7E	47639
80	302300	37.6N	141.9E	LAND		65///	50450	38.3N	140.9E	47590
81	010000	38.2N	142.8E	LAND		6////	50365	35.3N	138.7E	47639
* 82	010000	38.8N	142.2E	LAND		65///	50455	38.3N	140.9E	47590
* 83	010100	39.5N	142.3E	LAND		65///	50255	38.3N	140.9E	47590

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

TYPHOON JEFF
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
072100Z	19.4	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.
072106Z	20.4	146.2	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.
072112Z	21.2	146.3	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.
072118Z	22.1	146.2	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.
072200Z	22.7	146.1	35	22.3	145.8	30.	29.	-5.	24.6	140.7	45.	270.	-10.	25.8	135.4	65.	642.	10.	26.0	130.0	90.	806.	45.
072206Z	23.1	145.8	35	23.2	145.1	30.	39.	-5.	24.5	142.4	50.	268.	-10.	26.0	138.3	65.	491.	10.	26.7	133.9	80.	560.	35.
072212Z	23.3	145.3	40	23.7	144.6	30.	45.	-10.	25.8	141.8	50.	266.	-10.	27.7	138.9	65.	414.	10.	29.0	136.0	30.	385.	-10.
072218Z	23.5	145.2	45	23.5	145.5	45.	17.	0.	24.5	144.3	65.	177.	5.	26.2	141.3	30.	268.	30.	28.3	137.4	90.	247.	55.
072300Z	24.0	145.6	55	23.8	145.4	50.	16.	-5.	25.5	144.3	70.	175.	15.	28.9	142.9	90	116.	45.	32.7	145.4	85	417.	55.
072306Z	24.7	146.2	60	24.7	146.2	60.	0.	0.	28.2	149.1	65.	102.	10.	31.9	153.7	50.	542.	5.	35.4	159.5	40.	1151.	15.
072312Z	25.5	146.7	60	25.7	146.9	65.	16.	5.	29.6	149.7	70.	179.	15.	33.8	153.9	60.	654.	20.	37.9	159.9	45.	1295.	20.
072318Z	26.0	147.1	60	26.4	147.8	65.	45.	5.	30.2	151.4	65.	317.	15.	34.3	156.0	55.	824.	20.	38.3	161.9	40.	1488.	10.
072400Z	26.6	147.3	55	26.6	147.4	60.	5.	5.	29.5	149.2	50.	241.	5.	33.8	151.6	40	696.	10.	38.4	156.2	25.	1344.	-15.
072406Z	27.6	147.3	55	27.2	147.8	55.	36.	0.	30.3	149.8	45.	319.	0.	34.6	152.3	35.	810.	10.	0.0	0.0	0.	-0.	0.
072412Z	28.2	146.7	55	28.4	147.1	50.	24.	-5.	31.1	145.9	35.	238.	-5.	33.8	145.3	30.	566.	5.	0.0	0.0	0.	-0.	0.
072418Z	28.2	145.8	50	28.0	145.6	50.	16.	0.	27.6	143.2	35.	64.	0.	26.6	141.2	25.	285.	-5.	0.0	0.0	0.	-0.	0.
072500Z	28.1	144.9	45	27.9	144.8	45.	13.	0.	27.2	142.5	35.	107.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072506Z	28.0	144.3	45	28.1	144.5	45.	12.	0.	27.6	142.5	35.	178.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072512Z	27.9	143.2	40	28.1	143.3	45.	13.	5.	28.1	140.7	35.	173.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072518Z	27.6	142.0	35	28.1	141.5	40.	40.	5.	28.5	136.2	35.	121.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072600Z	27.2	140.5	30	27.3	140.4	30.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072606Z	27.1	139.2	25	27.3	139.2	25.	12.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072612Z	27.0	137.7	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.
072618Z	26.5	135.9	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.
072700Z	25.8	134.2	40	26.0	133.7	35.	30.	-5.	25.5	126.6	60.	123.	10.	25.9	121.7	75	190.	10.	27.0	118.0	40.	241.	-30.
072706Z	25.3	132.8	50	25.6	132.4	45.	28.	-5.	25.4	126.2	65.	87.	15.	26.4	122.0	80.	140.	10.	28.1	118.9	40.	163.	-35.
072712Z	24.9	131.3	50	24.8	131.2	45.	8.	-5.	24.7	128.3	65.	28.	10.	26.0	122.6	80.	65.	10.	27.5	119.5	45.	104.	-30.
072718Z	24.9	130.0	50	24.7	130.2	40.	16.	-10.	24.8	125.6	55.	17.	-5.	26.1	122.3	70.	52.	0.	27.6	119.2	35.	104.	-25.
072800Z	25.0	128.8	50	25.0	129.0	55.	11.	5.	25.6	124.4	70.	48.	5.	27.2	121.3	70	67.	0.	0.0	0.0	0.	-0.	0.
072806Z	24.9	127.7	50	24.9	127.6	55.	5.	5.	25.4	123.0	70.	76.	0.	27.2	119.5	60	129.	-15.	0.0	0.0	0.	-0.	0.
072812Z	24.8	126.8	55	24.7	126.7	55.	8.	0.	25.4	122.4	65.	81.	-5.	28.1	119.7	45.	91.	-30.	0.0	0.0	0.	-0.	0.
072818Z	24.9	125.9	60	25.0	126.0	55.	8.	-5.	25.7	122.4	65.	60.	-5.	28.0	119.9	45.	60.	-15.	0.0	0.0	0.	-0.	0.
072900Z	25.1	125.1	65	25.1	125.0	65.	5.	0.	26.3	121.4	60.	69.	-10.	28.8	119.4	30.	70.	-15.	0.0	0.0	0.	-0.	0.
072906Z	25.5	124.4	70	25.3	124.1	70.	20.	0.	26.4	120.8	60.	88.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072912Z	25.9	123.8	70	25.9	123.8	70.	0.	0.	27.4	121.7	75.	34.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072918Z	26.4	123.2	70	26.2	123.1	70.	13.	0.	28.7	120.3	30.	27.	-30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073000Z	26.9	122.5	70	26.8	122.6	70.	8.	0.	29.2	120.2	25.	22.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073006Z	27.5	121.9	75	27.5	121.8	65.	5.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073012Z	27.9	121.4	75	28.1	121.5	65.	13.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073018Z	28.6	120.8	60	28.5	121.0	50.	12.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073100Z	29.3	120.6	45	29.4	120.5	35.	8.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
073106Z	30.0	120.5	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.
073112Z	30.7	120.4	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.
073118Z	31.5	120.4	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.
080100Z	32.4	120.6	30	32.5	120.6	35.	6.	5.	36.4	123.1	55.	67.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080106Z	33.4	121.0	35	33.2	120.9	40.	13.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080112Z	34.4	121.7	45	34.0	121.7	45.	24.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080118Z	35.9	122.2	50	35.1	122.5	50.	50.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080200Z	37.5	122.9	45	36.9	123.2	40.	39.	-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	18.	132.	342.	639.	19.	130.	283.	439.
AVG RIGHT ANGLE ERROR	13.	80.	170.	345.	13.	85.	135.	177.
AVG INTENSITY MAGNITUDE ERROR	4.	9.	14.	29.	4.	9.	15.	31.
AVG INTENSITY BIAS	-2.	1.	6.	7.	-2.	-0.	6.	-1.
NUMBER OF FORECASTS	40	30	21	13	37	26	17	9

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2668. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TYPHOON JEFF
FIX POSITIONS FOR CYCLONE NO. 7

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	202100	18.1N 149.6E	PCN 6	T2.0/2.0	INIT OBS	PGTW
* 2	202327	18.4N 150.5E	PCN 5			PGTW
* 3	210000	18.4N 150.7E	PCN 6			PGTW
* 4	210300	19.2N 150.0E	PCN 6	T1.5/1.5	INIT OBS	PGTW
* 5	210420	19.9N 149.2E	PCN 5			PGTW
* 6	210600	20.2N 149.3E	PCN 6			PGTW
* 7	210807	20.7N 147.8E	PCN 6		ULCC FIX	PGTW
8	210906	20.7N 146.7E	PCN 6		ULCC FIX	PGTW
9	211208	21.4N 146.6E	PCN 6		ULCC FIX	PGTW
10	211600	20.8N 146.5E	PCN 6	T2.0/2.0 /S0.0/16HRS	ULCC FIX	PGTW
11	211706	21.0N 145.9E	PCN 5		ULCC FIX	PGTW
* 12	212047	20.8N 145.8E	PCN 6			PGTW
13	212100	22.2N 146.9E	PCN 6		ULCC FIX	PGTW
* 14	212145	20.7N 147.0E	PCN 5			PGTW
15	220000	22.4N 146.0E	PCN 6			PGTW
16	220049	22.5N 145.6E	PCN 5			PGTW
17	220300	23.4N 146.6E	PCN 4	T2.5/2.5 /D1.0/24HRS	EXP LLCC	PGTW
18	220600	23.2N 145.3E	PCN 6			PGTW
19	220927	23.5N 145.0E	PCN 6			PGTW
20	221025	23.5N 144.8E	PCN 6			PGTW
21	221200	23.6N 144.6E	PCN 6		ULCC 23.5N 145.2E	PGTW
22	221329	23.5N 145.0E	PCN 6			PGTW
23	221600	23.5N 144.4E	PCN 6	T2.0/2.0+/S0.0/24HRS		PGTW
24	221655	23.7N 144.2E	PCN 6			PGTW
25	221800	23.8N 144.5E	PCN 6			PGTW
26	222025	23.4N 145.5E	PCN 6			PGTW
27	222304	23.9N 145.2E	PCN 5	T2.5/2.5	INIT OBS	RODN
28	222305	23.5N 145.2E	PCN 5			PGTW
29	230000	23.5N 145.2E	PCN 6			PGTW
30	230359	24.5N 145.8E	PCN 5	T3.5/3.5 /D1.0/24HRS		PGTW
31	230600	24.5N 146.2E	PCN 6			PGTW
32	230905	25.3N 146.5E	PCN 6			PGTW
33	231003	25.5N 146.9E	PCN 6		ULAC 25.6N 146.5E	PGTW
34	231200	25.8N 146.8E	PCN 6			PGTW
35	231309	25.9N 147.2E	PCN 6			PGTW
36	231600	26.2N 147.5E	PCN 6			PGTW
37	231644	25.8N 147.6E	PCN 6		ULCC FIX	PGTW

38	231800	25.7N	147.9E	PCN 6	T3.5/3.5 /D1.5/26HRS			PGTW
* 39	232004	25.8N	148.3E	PCN 6		ULAC 26.3N 147.9E		PGTW
40	232242	26.3N	147.7E	PCN 6		EXP LLCC ULAC 27.0N 147.4E		PGTW
41	240008	26.4N	147.7E	PCN 4		EXP LLCC ULAC 27.1N 148.0E		PGTW
42	240347	26.7N	147.8E	PCN 4	T2.5/3.0-/W1.0/24HRS	EXP LLCC ULAC 28.0N 148.0E		PGTW
43	240600	27.6N	147.5E	PCN 6				PGTW
44	240900	28.1N	147.8E	PCN 6		ULCC FIX		PGTW
45	240941	28.4N	147.9E	PCN 6				RODN
46	241200	28.3N	147.8E	PCN 6		ULCC FIX		PGTW
* 47	241248	28.2N	148.2E	PCN 6				RKSO
48	241600	28.3N	147.0E	PCN 6	T2.5/3.5 /W1.0/22HRS	ULCC FIX		PGTW
49	241634	28.9N	146.6E	PCN 4				PGTW
* 50	241800	29.2N	146.6E	PCN 6				PGTW
51	241943	28.0N	146.0E	PCN 6				PGTW
52	242100	28.5N	145.3E	PCN 6		PSBL EXP LLCC		PGTW
53	242221	28.0N	145.0E	PCN 3		EXP LLCC		PGTW
54	242347	28.0N	144.8E	PCN 3	T1.5/1.5	INIT OBS		RODN
55	242348	28.0N	144.9E	PCN 3		EXP LLCC		PGTW
56	250000	28.0N	144.8E	PCN 4				PGTW
57	250337	28.3N	144.8E	PCN 4	T2.5/2.5-/S0.0/24HRS			PGTW
58	250600	28.3N	144.5E	PCN 6				PGTW
59	250823	28.0N	144.4E	PCN 6				PGTW
60	250900	27.9N	144.3E	PCN 6				PGTW
61	250919	28.3N	144.1E	PCN 6				PGTW
62	251200	28.5N	143.9E	PCN 6				PGTW
63	251228	27.9N	142.5E	PCN 3	T1.5/1.5	INIT OBS		RODN
64	251228	28.0N	142.6E	PCN 5		EXP LLCC		PGTW
65	251600	28.0N	142.0E	PCN 6	T1.5/2.5 /W1.0/24HRS			PGTW
66	251804	27.8N	140.9E	PCN 6				PGTW
67	251805	27.0N	142.9E	PCN 5				RKSO
68	252159	27.4N	140.7E	PCN 3		EXP LLCC		PGTW
69	252327	27.4N	140.6E	PCN 3		EXP LLCC		PGTW
70	252327	27.3N	140.5E	PCN 3	T1.5/1.5 /S0.0/24HRS			RODN
71	260109	27.3N	140.4E	PCN 3				PGTW
72	260300	27.4N	139.8E	PCN 4	T0.0/1.0 /W2.5/24HRS			PGTW
73	260508	27.3N	139.4E	PCN 3		EXP LLCC		PGTW
74	260508	27.1N	139.3E	PCN 3	T1.5/1.5	INIT OBS		RPMK
75	260943	27.6N	138.5E	PCN 4		EXP LLCC		PGTW
76	261039	26.7N	138.4E	PCN 5				RKSO
77	261200	27.2N	137.9E	PCN 6		EXP LLCC		PGTW
78	261600	26.9N	136.7E	PCN 6	T1.5/1.5 /S0.0/24HRS			PGTW
79	261754	27.0N	136.6E	PCN 6		PSBL SCNDRY LLCC 26.0N 133.6E		PGTW
* 80	261754	27.8N	136.9E	PCN 5				RKSO
81	262100	26.1N	134.7E	PCN 6		ULAC 25.8N 134.6E		PGTW
82	262318	26.3N	133.5E	PCN 5				PGTW
83	270048	25.5N	133.5E	PCN 3	T3.0/3.0 /D1.5/25HRS			RODN
84	270048	25.9N	133.2E	PCN 5	T2.5/2.5 /D2.5/22HRS			PGTW
85	270300	25.6N	133.1E	PCN 6				PGTW
86	270458	25.3N	132.5E	PCN 5				PGTW
87	270600	25.4N	132.8E	PCN 6				PGTW
88	270921	24.9N	132.0E	PCN 5		ULCC FIX		RODN
89	270921	24.8N	131.6E	PCN 3		ULAC 24.6N 131.4E		PGTW
90	271017	25.0N	131.8E	PCN 4		ULAC 24.6N 131.4E		PGTW
91	271200	24.6N	131.3E	PCN 6		ULCC FIX		PGTW
92	271329	24.6N	131.5E	PCN 5				PGTW
93	271600	24.4N	130.8E	PCN 6		ULCC FIX		PGTW
94	271743	24.9N	129.9E	PCN 2		EYE FIX		RODN
95	271743	24.7N	130.7E	PCN 6	T2.5/2.5 /D1.0/25HRS			PGTW
96	272100	25.5N	130.0E	PCN 6				PGTW
97	272256	25.3N	129.0E	PCN 3	T3.0/3.0+/S0.0/23HRS			RODN
98	272256	25.0N	129.0E	PCN 6				PGTW
99	280000	25.1N	129.0E	PCN 6				PGTW
100	280028	24.9N	128.5E	PCN 3				PGTW
101	280210	24.9N	128.3E	PCN 3	T3.0/3.0	INIT OBS EXP LLCC		RPMK
102	280300	24.7N	128.5E	PCN 6				PGTW
103	280600	24.8N	127.4E	PCN 6	T3.0/3.0 /D0.5/29HRS			PGTW
104	280900	24.7N	127.2E	PCN 6		ULCC FIX		PGTW
105	281136	24.6N	126.7E	PCN 3		EXP LLCC		RPMK
106	281136	25.4N	126.4E	PCN 6				RKSO
107	281200	25.0N	126.7E	PCN 6		ULCC FIX		PGTW
108	281450	24.6N	126.6E	PCN 6		ULCC FIX		RKSO
109	281600	24.8N	126.3E	PCN 6	T3.5/3.5-/D1.0/23HRS	ULCC FIX		PGTW
110	281800	25.1N	126.2E	PCN 6		ULCC FIX		PGTW
111	282100	25.4N	125.4E	PCN 6				PGTW
112	282140	24.9N	125.3E	PCN 6				PGTW
113	290000	25.4N	125.0E	PCN 6				PGTW
114	290016	25.5N	124.9E	PCN 3	T4.0/4.0-/D1.0/24HRS	PSBL EYE FORMING		RODN
115	290016	25.3N	124.7E	PCN 5	T3.5/3.5	INIT OBS		RKSO
116	290149	25.5N	124.7E	PCN 3				RODN
117	290300	25.2N	124.5E	PCN 6				PGTW
118	290600	25.6N	124.2E	PCN 2	T4.5/4.5-/D1.5/24HRS	RAGGED EYE FIX		PGTW
119	290618	25.1N	124.3E	PCN 3				RODN
120	290900	25.5N	124.0E	PCN 4				PGTW
121	291020	25.8N	123.9E	PCN 4				PGTW
122	291114	25.8N	123.5E	PCN 3				RPMK
123	291114	25.7N	123.9E	PCN 4		ULCC FIX		RODN
124	291200	25.9N	123.8E	PCN 4				PGTW
125	291430	26.0N	123.5E	PCN 1				RPMK
126	291600	26.1N	123.2E	PCN 6	T4.0/4.0-/D0.5/24HRS			PGTW
127	291800	26.2N	123.1E	PCN 6		ULCC FIX		PGTW
128	292100	26.6N	122.7E	PCN 6		ULCC FIX		PGTW
129	292118	26.6N	123.1E	PCN 6				PGTW
130	292354	26.9N	122.6E	PCN 3	T4.0/4.0	INIT OBS EYE FIX EYE OPN WEST		RPMK
131	292354	26.8N	122.4E	PCN 1	T4.5/4.5 /D1.0/24HRS	EYE FIX EYE OPN SW		RKSO
132	300000	26.9N	122.5E	PCN 6		ULCC FIX		PGTW
133	300300	27.3N	122.0E	PCN 2		EYE FIX		PGTW
134	300600	27.6N	121.7E	PCN 6	T4.5/4.5 /S0.0/24HRS			PGTW
135	300607	27.4N	122.0E	PCN 1		EYE FIX		RPMK
136	300900	27.5N	121.8E	PCN 6		ULCC FIX		PGTW
137	300959	27.4N	121.5E	PCN 4				PGTW
138	301052	27.9N	121.6E	PCN 6				PGTW
139	301200	28.1N	121.7E	PCN 6				PGTW
140	301409	28.0N	121.4E	PCN 1		EYE FIX		PGTW
141	301600	28.3N	121.0E	PCN 6				PGTW
142	301800	28.5N	121.1E	PCN 6				PGTW
143	301853	28.3N	121.0E	PCN 6		ULCC FIX		RKSO
144	302100	28.4N	121.4E	PCN 6		ULCC FIX		PGTW
145	302239	28.8N	121.2E	PCN 4	T3.5/3.5	INIT OBS		RODN
146	302339	29.4N	121.0E	PCN 3				RODN
147	310000	29.4N	120.7E	PCN 6		ULCC FIX		PGTW
148	310108	29.5N	120.4E	PCN 3				PGTW
149	310109	29.3N	120.7E	PCN 5		ULCC FIX		RPMK
150	310300	29.9N	120.5E	PCN 6		ULCC FIX		PGTW
151	310556	30.3N	120.7E	PCN 5				RPMK
152	310556	30.2N	120.6E	PCN 3				RKSO
153	310600	30.3N	120.6E	PCN 6				PGTW
154	310900	30.3N	120.9E	PCN 6				PGTW

155	311119	30.2N	120.0E	PCN 6			RODN
156	311200	30.5N	120.6E	PCN 6			PGTW
157	311349	30.8N	120.2E	PCN 5			PGTW
158	311600	31.1N	120.5E	PCN 6			PGTW
159	311800	31.0N	120.4E	PCN 6			PGTW
160	312100	32.6N	120.6E	PCN 6		ULCC FIX	PGTW
161	010000	32.5N	120.9E	PCN 6		ULCC FIX	PGTW
162	010051	32.6N	121.7E	PCN 5		ULCC FIX	RODN
163	010230	32.1N	121.6E	PCN 5			RPMK
164	010300	32.8N	120.8E	PCN 6			PGTW
165	010600	32.9N	121.1E	PCN 6			PGTW
166	010900	33.6N	122.3E	PCN 6		ULCC FIX	PGTW
167	011008	34.0N	122.7E	PCN 5	T3.0/3.0	INIT OBS ULCC FIX	RKSO
*168	011200	34.3N	123.4E	PCN 6		ULCC FIX	PGTW
*169	011600	35.6N	123.8E	PCN 6	T3.5/3.5	INIT OBS	PGTW
*170	011800	36.2N	124.6E	PCN 6		ULCC FIX	PGTW
*171	012100	36.9N	125.2E	PCN 6			PGTW
*172	012156	36.8N	126.7E	PCN 5		ULCC FIX	RPMK
173	020000	37.4N	123.1E	PCN 6			PGTW
*174	020209	36.9N	123.2E	PCN 3	T3.0/3.0	INIT OBS	RPMK
175	020300	37.8N	123.3E	PCN 6	T3.0/3.0	INIT OBS	PGTW
*176	020535	38.4N	124.0E	PCN 3			RPMK
177	020600	38.6N	123.4E	PCN 4		PARTIALLY EXP LLCC	PGTW
178	020900	39.6N	125.0E	PCN 6			PGTW
*179	020946	41.6N	128.1E	PCN 6			RODN
180	021036	40.2N	125.4E	PCN 3		EXP LLCC	RKSO

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	272100	25.0N 129.6E	LAND				55//3	52708		26.2N 127.8E	47937
2	272200	25.0N 129.3E	LAND				65//3	72611		26.2N 127.8E	47837
3	280100	25.0N 128.6E	LAND				55//3	72712		26.2N 127.8E	47937
4	280200	25.0N 128.4E	LAND				55//3	72714		26.2N 127.8E	47937
5	280300	24.9N 128.2E	LAND				55//2	72611		26.2N 127.8E	47937
6	280400	24.7N 127.7E	LAND				35//3	5////		24.8N 125.3E	47927
7	280400	25.0N 128.0E	LANt				55//1	72711		26.2N 127.8E	47937
8	280425	25.3N 128.0E	LAND	POOR						26.4N 127.8E	47931
9	280500	25.1N 127.8E	LAND				55//1	72811		26.2N 127.8E	47937
10	280500	24.8N 127.5E	LAND				35//4	52914		24.8N 125.3E	47927
11	280515	24.8N 127.9E	LAND	GOOD		25				26.1N 127.7E	47937
12	280600	24.6N 127.5E	LAND				35//3	51814		24.8N 125.3E	47927
13	280600	25.0N 127.6E	LAND				55//1	72811		26.2N 127.8E	47937
14	280700	24.8N 127.4E	LAND				35//4	53322		24.8N 125.3E	47927
15	280700	24.8N 127.4E	LAND				55//1	72512		26.2N 127.8E	47937
16	280715	24.8N 127.3E	LAND	GOOD		25				26.1N 127.7E	47937
17	280800	24.7N 127.3E	LAND				65//2	72312		26.2N 127.8E	47937
18	280800	24.8N 127.0E	LAND				35//4	52722		24.8N 125.3E	47927
19	280900	24.7N 127.2E	LAND				65//2	72308		26.2N 127.8E	47937
20	280900	24.7N 126.9E	LAND				65//4	52310		24.8N 125.3E	47927
21	280901	25.0N 127.0E	LAND	POOR		25			YOZADAKE 280900Z	26.1N 127.7E	47937
22	281000	24.5N 126.4E	LAND				65//3	52219		24.8N 125.3E	47927
23	281000	24.7N 127.2E	LAND				65//2	72404		26.2N 127.8E	47937
24	281100	24.6N 126.8E	LAND				65//3	5////		24.8N 125.3E	47927
25	281100	24.7N 126.9E	LAND				65//1	72716		26.2N 127.8E	47937
26	281101	24.5N 126.5E	LAND	FAIR		50			YOZADAKE 281100Z	26.1N 127.7E	47937
27	281200	24.6N 126.8E	LAND				6//13	40000		24.3N 124.2E	47918
28	281200	24.7N 126.8E	LAND				65//3	50104		24.8N 125.3E	47927
29	281200	24.7N 126.8E	LAND				65//1	72709		26.2N 127.8E	47937
30	281300	24.8N 126.7E	LAND				65//3	53211		24.8N 125.3E	47927
31	281300	24.7N 126.7E	LAND				65//2	72709		26.2N 127.8E	47937
32	281400	24.8N 126.5E	LAND				65//3	52711		24.8N 125.3E	47927
33	281400	24.8N 126.5E	LAND				65//1	72908		26.2N 127.8E	47937
34	281500	24.7N 126.2E	LAND				6//13	72811		24.3N 124.2E	47918
35	281500	25.0N 126.4E	LAND				65//1	73111		26.2N 127.8E	47937
36	281500	24.8N 126.3E	LAND				55//3	52908		24.8N 125.3E	47927
37	281600	24.8N 126.2E	LAND				65//1	72809		26.2N 127.8E	47937
38	281600	24.8N 126.2E	LAND				6///3	52511		24.8N 125.3E	47927
39	281700	24.9N 126.1E	LAND				65//2	72908		26.2N 127.8E	47937
40	281700	24.9N 126.1E	LAND				5///3	53108		24.8N 125.3E	47927
41	281800	25.0N 125.9E	LAND				6//13	42916		24.3N 124.2E	47918
42	281800	24.9N 125.9E	LAND				5///3	52911		24.8N 125.3E	47927
43	281800	25.0N 125.9E	LAND				65//2	72808		26.2N 127.8E	47937
44	281900	24.9N 125.8E	LAND				6//14	52208		24.3N 124.2E	47918
45	281900	25.2N 125.6E	LAND				65//2	73113		26.2N 127.8E	47937
46	281900	25.0N 125.7E	LAND				6///3	52811		24.8N 125.3E	47927
47	282000	24.8N 125.5E	LAND				6//14	52618		24.3N 124.2E	47918
48	282000	25.0N 125.5E	LAND				5///3	52711		24.8N 125.3E	47927
49	282000	25.2N 125.4E	LAND				65//2	73014		26.2N 127.8E	47937
50	282100	25.0N 125.4E	LAND				6//13	72708		24.3N 124.2E	47918
51	282100	25.1N 125.4E	LAND				65//2	72809		26.2N 127.8E	47937
52	282100	25.0N 125.5E	LAND				5///3	50000		24.8N 125.3E	47927
53	282200	25.1N 125.3E	LAND				6//13	73009		24.3N 124.2E	47918
54	282200	24.9N 125.3E	LAND				35//3	52516		24.8N 125.3E	47927
55	282200	25.2N 125.4E	LAND				65//2	72704		26.2N 127.8E	47937
56	282300	25.2N 125.4E	LAND				6//23	73508		24.3N 124.2E	47918
57	282300	25.3N 125.3E	LAND				65//3	73204		26.2N 127.8E	47937
58	282300	25.2N 125.3E	LAND				25//3	50114		24.8N 125.3E	47927
59	290000	25.3N 125.2E	LAND				65//1	73204		26.2N 127.8E	47937
60	290000	25.1N 125.1E	LAND				35//3	52410		24.8N 125.3E	47927
61	290100	25.2N 125.1E	LAND				35//3	73205		24.8N 125.3E	47927
62	290200	25.3N 124.9E	LAND				65//3	72709		24.3N 124.2E	47918
63	290200	25.3N 124.9E	LAND				55//3	53111		24.8N 125.3E	47927
64	290200	25.3N 125.0E	LAND				6///2	27805		26.2N 127.8E	47937
65	290400	25.4N 124.5E	LAND				65//3	52708		24.3N 124.2E	47918
* 66	290400	25.4N 125.6E	LAND				75//2	52712		26.2N 127.8E	47937
67	290400	25.6N 124.4E	LAND				35//3	52916		24.8N 125.3E	47927
68	290500	25.5N 124.5E	LAND				65//3	73110		24.3N 124.2E	47918
69	290500	25.6N 124.4E	LAND				35//3	50000		24.8N 125.3E	47927
70	290600	25.6N 124.1E	LAND				6////	54963		24.0N 121.6E	46699
71	290600	25.5N 124.3E	LAND				35//3	50000		24.8N 125.3E	47927
72	290600	25.4N 124.3E	LAND				65//3	72708		24.3N 124.2E	47918
73	290700	25.6N 124.3E	LAND				65//3	50000		24.8N 125.3E	47927
74	290700	25.6N 124.2E	LAND	GOOD		40			MOV 302E	26.3N 126.8E	47929
75	290700	25.4N 124.3E	LAND				65//3	72705		24.3N 124.2E	47918
76	290720	25.6N 124.0E	LAND				6////	52809		25.1N 121.6E	46696
77	290800	25.7N 124.2E	LAND				65//3	53011		24.8N 125.3E	47927
78	290800	25.3N 124.2E	LAND				6///3	72402		24.3N 124.2E	47918
79	290800	25.7N 124.3E	LAND				34933	50411		24.0N 121.6E	46699
80	290830	25.7N 124.3E	LAND				6////	5////		25.1N 121.6E	46696
81	290900	25.7N 124.0E	LAND				25//4	52711		24.8N 125.3E	47927
82	290900	25.7N 124.1E	LAND	FAIR		60			MOV 3515	26.3N 126.8E	47929
83	290900	25.8N 124.0E	LAND				22923	53016		24.0N 121.6E	46699
84	290930	25.8N 124.3E	LAND				6////	52909		25.1N 121.6E	46696
85	291000	25.7N 124.2E	LAND	FAIR		40				26.3N 126.8E	47929
86	291000	25.8N 123.9E	LAND				55//4	53108		24.8N 125.3E	47927
87	291030	25.2N 124.1E	LAND				6////	52807		25.1N 121.6E	46696
88	291100	25.9N 123.9E	LAND				55//2	53408		24.8N 125.3E	47927
89	291100	25.8N 124.0E	LAND				25923	52305		24.0N 121.6E	46699
90	291200	26.0N 123.7E	LAND				65//2	52808		24.8N 125.3E	47927
91	291200	26.0N 123.8E	LAND				22363	53106		24.0N 121.6E	46699
92	291300	26.0N 123.5E	LAND				65//2	52814		24.8N 125.3E	47927
* 93	291340	25.6N 124.1E	LAND				6////	53406		25.1N 121.6E	46696
94	291400	26.2N 123.3E	LAND				65//2	53311		24.8N 125.3E	47927
95	291430	26.3N 123.3E	LAND				6////	53203		25.1N 121.6E	46696
96	291500	26.2N 123.2E	LAND				65//2	52808		24.8N 125.3E	47927
97	291600	26.4N 122.9E	LAND				35963	53414		24.0N 121.6E	46699
98	302214	26.7N 122.7E	ACFT	FAIR						26.6N 123.5E	
99	273335	25.5N 129.2E	LAND	POOR						26.4N 127.8E	47931

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	301800	28.6N 120.7E	050	020	58653 58659 58646 58666
2	302100	29.0N 120.7E	040	015	58653 58556 58549
3	310000	29.3N 120.8E	040	015	58556 58653 58549
4	310300	29.7N 120.5E	030	020	58556 58457 58549
5	310600	30.0N 120.5E	030	025	58457 58556 58549
6	310900	30.5N 120.5E	030	015	58457 58464 58358 58445
7	311200	30.8N 120.2E	030	030	58457 58445 58358 58345
8	311800	31.6N 120.3E	030	040	58345 58367 58265 58251
9	312100	32.0N 120.6E	030	015	58259 58343 58358 58251
10	010000	32.3N 120.8E	030	015	58259 58251 58343
11	010300	32.8N 121.0E	020	030	58251 58265 58150
12	010600	33.2N 121.0E	020	030	58251 58259 58150

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

TYPHOON KIT
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
073106Z	20.8	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.
073112Z	20.8	145.0	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.
073118Z	20.9	144.1	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.
080100Z	21.3	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.
080106Z	21.7	142.0	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.
080112Z	22.3	140.7	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.
080118Z	23.0	139.2	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.
080200Z	23.7	137.7	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.
080206Z	24.5	136.6	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.
080212Z	25.0	135.8	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.
080218Z	25.5	135.2	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.
080300Z	25.9	134.7	25	25.9	134.5	25.	11.	0.	28.3	132.6	45.	58.	10.	32.2	132.7	55.	249.	5.	37.4	134.5	40.	524.	-20.
080306Z	26.4	134.2	30	27.2	134.1	30.	48.	0.	31.5	133.5	45.	231.	5.	36.0	135.2	30.	490.	-25.	0.0	0.0	0.	-0.	0.
080312Z	26.8	133.9	30	27.9	133.9	30.	66.	0.	32.7	133.9	40.	302.	-5.	37.9	137.1	30.	619.	-25.	0.0	0.0	0.	-0.	0.
080318Z	27.3	133.6	30	28.3	133.5	30.	60.	0.	32.9	133.9	40.	311.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080400Z	27.5	133.2	35	27.6	133.0	35.	12.	0.	29.9	131.4	50.	112.	0.	34.4	131.3	50.	333.	-10.	39.2	134.6	50.	604.	-30.
080406Z	27.7	132.8	40	27.8	132.7	40.	8.	0.	30.0	131.5	55.	105.	0.	34.4	132.0	45.	324.	-20.	39.3	135.0	45.	597.	-35.
080412Z	27.8	132.6	45	27.8	132.3	40.	16.	-5.	29.6	130.8	55.	91.	0.	34.5	131.7	35.	326.	-35.	39.4	136.5	35.	611.	-45.
080418Z	27.9	132.3	45	27.9	132.1	45.	11.	0.	30.2	130.6	55.	116.	0.	35.2	132.4	35.	360.	-40.	40.0	137.6	35.	666.	-45.
080500Z	28.1	132.0	50	28.1	131.9	50.	5.	0.	30.3	130.7	60.	111.	0.	33.6	131.3	35.	264.	-45.	38.6	135.6	35.	552.	-45.
080506Z	28.3	132.0	55	28.4	131.9	55.	8.	0.	30.8	131.3	75.	118.	10.	34.6	132.2	40.	300.	-40.	39.5	135.5	35.	597.	-50.
080512Z	28.5	132.0	55	28.6	131.9	55.	8.	0.	30.0	131.6	75.	68.	5.	32.0	131.6	65.	120.	-15.	37.5	134.5	35.	477.	-50.
080518Z	28.7	132.0	55	28.7	131.9	55.	5.	0.	30.4	131.6	70.	83.	-5.	33.3	131.7	45.	184.	-35.	38.1	135.2	35.	531.	-45.
080600Z	28.9	132.1	60	29.0	132.1	60.	6.	0.	30.4	132.1	70.	68.	-10.	33.2	132.7	65.	203.	-15.	37.9	136.3	35.	570.	-40.
080606Z	29.0	132.2	65	29.1	132.3	65.	8.	0.	30.1	132.3	70.	30.	-10.	32.1	132.7	65.	177.	-20.	35.8	134.5	45.	441.	-30.
080612Z	29.1	132.4	70	29.1	132.7	75.	16.	5.	29.9	133.9	85.	115.	5.	31.8	134.7	85.	305.	0.	33.6	135.0	85.	442.	10.
080618Z	29.2	132.4	75	29.2	132.5	75.	5.	0.	29.8	133.3	85.	123.	5.	31.6	134.2	85.	317.	5.	33.6	134.8	85.	429.	15.
080700Z	29.3	132.4	80	29.3	132.3	80.	5.	0.	30.0	133.0	90.	143.	10.	31.8	134.1	85.	357.	10.	33.7	134.6	80.	415.	15.
080706Z	29.6	132.3	80	29.5	132.4	80.	8.	0.	30.5	132.9	85.	171.	0.	32.3	134.2	85.	390.	10.	34.2	134.8	80.	396.	20.
080712Z	30.0	131.7	80	30.0	131.8	80.	5.	0.	32.8	130.6	60.	137.	-25.	36.6	131.6	50.	335.	-25.	0.0	0.0	0.	-0.	0.
080718Z	30.3	131.0	80	30.2	131.0	80.	6.	0.	33.0	129.5	65.	118.	-15.	37.1	131.3	55.	322.	-15.	0.0	0.0	0.	-0.	0.
080800Z	30.5	130.3	80	30.5	130.3	80.	0.	0.	33.3	128.8	75.	112.	0.	37.6	131.3	55.	306.	-10.	0.0	0.0	0.	-0.	0.
080806Z	30.8	129.6	85	30.8	129.5	85.	5.	0.	33.5	127.2	90.	64.	15.	38.7	131.2	60.	286.	0.	0.0	0.0	0.	-0.	0.
080812Z	31.1	128.8	85	31.0	128.8	85.	6.	0.	33.7	126.7	85.	39.	10.	39.0	130.2	50.	155.	10.	0.0	0.0	0.	-0.	0.
080818Z	31.5	128.0	80	31.5	127.9	85.	5.	5.	35.0	126.9	75.	85.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080900Z	32.1	127.1	75	32.1	127.1	75.	0.	0.	36.2	127.7	50.	123.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080906Z	32.6	126.5	75	32.6	126.6	75.	5.	0.	37.2	128.7	45.	139.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080912Z	33.2	126.2	75	33.1	126.3	75.	8.	0.	36.9	128.2	45.	27.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080918Z	33.7	126.2	70	34.0	126.1	75.	19.	5.	38.4	128.3	50.	100.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081000Z	34.5	126.3	65	34.3	126.4	65.	13.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081006Z	35.4	126.9	60	35.4	126.7	60.	10.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081012Z	36.7	128.7	40	36.8	128.5	45.	11.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081018Z	39.0	130.3	45	38.4	130.2	45.	36.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081100Z	40.8	132.3	45	41.1	131.5	40.	40.	-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.	118.	305.	523.	10.	118.	305.	523.
AVG RIGHT ANGLE ERROR	9.	56.	156.	259.	6.	56.	156.	259.
AVG INTENSITY MAGNITUDE ERROR	1.	7.	19.	33.	1.	7.	19.	33.
AVG INTENSITY BIAS	0.	-1.	-15.	-25.	0.	-1.	-15.	-25.
NUMBER OF FORECASTS	33	28	22	15	29	28	22	15

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1953. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 8. KNOTS

TYPHOON KIT
FIX POSITIONS FOR CYCLONE NO. 8

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	310300	20.9N 145.5E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	310600	20.8N 146.0E	PCN 6			PGTW
3	310900	21.1N 145.9E	PCN 6			PGTW
4	311200	21.3N 145.9E	PCN 5			PGTW
5	311600	20.8N 144.2E	PCN 6	T1.5/1.5	INIT OBS ULCC FIX	PGTW
6	311700	21.2N 144.5E	PCN 6			PGTW
7	311800	20.6N 144.5E	PCN 6		ULCC FIX	PGTW
8	312036	20.3N 143.5E	PCN 6			PGTW
9	312129	21.0N 143.8E	PCN 6			PGTW
10	010048	21.7N 143.1E	PCN 5			PGTW
11	010300	21.9N 142.9E	PCN 6	T1.5/1.5 /D0.5/24HRS		PGTW
* 12	010403	20.8N 140.9E	PCN 5	T2.0/2.0	INIT OBS	PGTW
13	010916	22.2N 141.0E	PCN 6			RODN
14	011008	22.1N 141.0E	PCN 6			PGTW
15	011200	22.8N 140.2E	PCN 6			PGTW
16	011329	22.5N 141.3E	PCN 5			PGTW
17	011600	22.9N 139.3E	PCN 6	T1.5/1.5 /S0.0/24HRS		PGTW
18	011649	23.0N 139.2E	PCN 6			PGTW
19	011800	23.0N 138.7E	PCN 6			PGTW
20	012056	22.7N 138.2E	PCN 6			PGTW
21	012248	23.5N 138.1E	PCN 5			PGTW
22	020028	24.1N 137.7E	PCN 3			PGTW
23	020300	24.8N 137.4E	PCN 4	T1.5/1.5 /S0.0/24HRS		PGTW
24	020535	24.5N 137.1E	PCN 5			PGTW
25	020855	24.9N 136.2E	PCN 6		EXP LLCC	PGTW
26	021308	25.4N 135.8E	PCN 6			PGTW
27	021600	25.8N 135.8E	PCN 6			PGTW
28	021820	25.6N 135.3E	PCN 6	T2.0/2.0 /D0.5/24HRS		PGTW
29	022135	26.3N 135.3E	PCN 6			PGTW
30	022226	26.3N 134.7E	PCN 6			PGTW
31	030000	26.7N 134.6E	PCN 6			PGTW
32	030300	27.1N 134.5E	PCN 6	T2.0/2.0 /D0.5/24HRS		PGTW
33	030524	27.3N 134.2E	PCN 5			PGTW
* 34	030900	28.0N 134.5E	PCN 6			PGTW
* 35	030924	27.9N 134.0E	PCN 6			PGTW
36	031015	27.7N 134.3E	PCN 5	T2.0/2.0	INIT OBS	PGTW
37	031106	28.0N 134.0E	PCN 6			RPMK
* 38	031200	28.1N 134.0E	PCN 6			RPMK
39	031430	28.0N 133.2E	PCN 5			PGTW
40	031600	28.1N 134.0E	PCN 6	T2.0/2.0 /S0.0/24HRS		RODN
41	031810	28.0N 133.4E	PCN 5			PGTW
42	031810	27.9N 132.8E	PCN 5			PGTW
43	032114	27.8N 133.4E	PCN 3			RPMK
44	032345	27.5N 133.3E	PCN 3			PGTW
						RPMK

45	032345	27.7N	133.1E	PCN 5	T2.0/2.0	INIT OBS EXP LLCC	RODN
46	040129	27.4N	132.9E	PCN 5			PGTW
47	040129	28.2N	133.0E	PCN 5	T1.5/1.5	INIT OBS ULCC FIX	RKSO
48	040300	27.7N	132.5E	PCN 6	T2.5/2.5 /D0.5/24HRS		PGTW
49	040513	28.0N	132.9E	PCN 5		ULCC FIX	PGTW
50	040600	27.9N	132.8E	PCN 6		ULCC FIX	PGTW
51	040900	28.0N	132.9E	PCN 6			PGTW
52	040954	27.8N	132.6E	PCN 5			PGTW
53	041044	27.7N	133.0E	PCN 3		PARTIALLY EXP LLCC	RPMK
54	041200	27.9N	133.0E	PCN 6			PGTW
55	041600	27.9N	132.7E	PCN 6	T2.0/2.0 /S0.0/24HRS		PGTW
56	041759	27.5N	132.7E	PCN 5			PGTW
57	041759	27.9N	132.1E	PCN 5			RKSO
58	042053	28.2N	132.0E	PCN 5			RKSO
59	042100	28.2N	131.3E	PCN 6			PGTW
60	042323	28.4N	132.1E	PCN 5			PGTW
61	042323	28.4N	132.0E	PCN 5	T3.5/3.5 /D2.0/22HRS		RKSO
62	050000	28.3N	131.9E	PCN 6			PGTW
63	050108	28.4N	132.0E	PCN 5			PGTW
64	050108	28.1N	132.1E	PCN 5	T3.5/3.5 /D1.5/25HRS		RODN
65	050300	28.4N	132.1E	PCN 6	T3.5/3.5-/D1.0/24HRS		PGTW
66	050502	28.3N	131.6E	PCN 5			PGTW
67	050502	28.4N	131.7E	PCN 3			RODN
68	050600	28.5N	131.9E	PCN 6			PGTW
69	050932	28.4N	131.4E	PCN 6		ULCC FIX	PGTW
70	051021	28.6N	131.8E	PCN 4			RODN
71	051022	28.6N	131.1E	PCN 6		ULCC FIX	PGTW
72	051200	28.6N	131.5E	PCN 6		ULCC FIX	PGTW
73	051349	28.7N	131.7E	PCN 5		ULCC FIX	PGTW
74	051600	29.4N	131.4E	PCN 6	T2.5/2.5 /D0.5/24HRS	ULCC FIX	PGTW
75	051748	29.0N	131.6E	PCN 6		EYE FIX	PGTW
76	051749	28.9N	131.9E	PCN 5		ULCC FIX	RKSO
77	052031	29.1N	132.0E	PCN 6		ULCC FIX	PGTW
78	052100	29.3N	132.1E	PCN 6		ULCC FIX	PGTW
79	052301	28.8N	132.0E	PCN 3	T3.5/3.5 /S0.0/24HRS		RODN
80	052301	28.9N	132.0E	PCN 5	T3.5/3.5 /S0.0/24HRS		RKSO
81	060000	28.9N	132.2E	PCN 2	T4.0/4.0 /D0.5/21HRS		PGTW
82	060048	28.9N	132.2E	PCN 3	T3.5/3.5	INIT OBS	RPMK
83	060300	29.0N	132.3E	PCN 2			PGTW
84	060451	29.0N	132.2E	PCN 1		EYE FIX	RODN
85	060600	29.0N	132.6E	PCN 2			PGTW
86	060911	29.2N	132.4E	PCN 1		EYE OPN SW	RKSO
87	061052	28.9N	132.8E	PCN 1		EYE FIX 5NM	RODN
88	061200	29.0N	132.7E	PCN 2		EYE FIX EYE DIA 3NM	PGTW
89	061329	29.1N	132.5E	PCN 1		EYE FIX EYE DIA 3NM	PGTW
90	061329	29.2N	132.5E	PCN 1		EYE FIX	RKSO
91	061600	29.2N	132.5E	PCN 2	T4.0/4.0 /D1.5/24HRS	EYE FIX	PGTW
92	061737	29.2N	132.5E	PCN 1		EYE FIX	RKSO
93	061800	29.3N	132.5E	PCN 2		EYE FIX	PGTW
94	062010	29.2N	132.1E	PCN 4		POOR EYE DEFINITION	PGTW
95	062100	29.3N	132.2E	PCN 4		POOR EYE DEFINITION	PGTW
96	062239	29.2N	132.2E	PCN 1	T4.5/4.5 /D1.0/23HRS	EYE FIX	RODN
97	070028	29.3N	132.4E	PCN 1		EYE FIX	PGTW
98	070300	29.5N	132.4E	PCN 2	T4.5/4.5 /D0.5/27HRS		PGTW
99	070440	29.7N	132.1E	PCN 1		EYE FIX 10NM	RODN
100	070600	29.7N	132.3E	PCN 2		EYE FIX	PGTW
101	070900	29.9N	132.1E	PCN 2		EYE FIX	PGTW
102	070938	29.9N	131.8E	PCN 2			RODN
103	071031	30.0N	132.2E	PCN 1		EYE FIX	RPMK
104	071200	30.1N	131.9E	PCN 2		EYE FIX	PGTW
105	071308	30.0N	131.3E	PCN 1		EYE FIX	PGTW
106	071726	30.1N	130.8E	PCN 2	T4.5/4.5 /D0.5/26HRS	EYE FIX	PGTW
107	071726	30.2N	131.1E	PCN 5		ULCC FIX	RKSO
108	072100	30.2N	130.6E	PCN 2			PGTW
109	072130	30.3N	130.9E	PCN 3	T4.0/4.0	INIT OBS	RPMK
110	072359	30.4N	130.1E	PCN 3	T4.0/4.0 /W0.5/25HRS		RODN
111	072359	30.5N	130.5E	PCN 1	T4.0/4.0	INIT OBS RGD EYE FIX	RKSO
112	080000	30.4N	130.4E	PCN 4			PGTW
113	080008	30.4N	130.0E	PCN 5			PGTW
114	080300	30.6N	129.9E	PCN 6			PGTW
115	080430	30.6N	129.3E	PCN 1		EYE FIX	RODN
116	080430	30.8N	129.6E	PCN 1	T4.5/4.5 /S0.0/25HRS	EYE FIX	PGTW
117	080600	30.7N	129.6E	PCN 4		VIS EYE (POORLY DEFINED)	PGTW
118	080900	31.0N	129.1E	PCN 6			PGTW
119	081010	30.9N	129.1E	PCN 1		EYE FIX	PGTW
120	081057	31.0N	129.1E	PCN 1		EYE FIX	RPMK
121	081200	30.9N	128.9E	PCN 2		EYE FIX	PGTW
122	081430	31.2N	128.7E	PCN 2		EYE FIX	RKSO
123	081600	31.1N	128.2E	PCN 6	T4.5/4.5 /S0.0/23HRS		PGTW
124	081800	31.2N	127.8E	PCN 6			PGTW
125	081858	31.4N	127.8E	PCN 5			RKSO
126	082100	31.4N	127.5E	PCN 6			PGTW
127	082109	31.9N	127.0E	PCN 3	T3.0/4.0 /W1.0/21HRS	PARTIALLY EXP LLCC	RODN
128	082109	31.8N	127.1E	PCN 1	T4.0/4.0-/S0.0/24HRS	RGD EYE FIX	RPMK
129	082337	32.2N	127.0E	PCN 3			RODN
130	082337	32.3N	127.0E	PCN 3		PARTIALLY EXP LLCC	RPMK
131	090000	32.0N	127.2E	PCN 6			PGTW
132	090129	32.4N	127.0E	PCN 3	T4.0/4.0 /S0.0/25HRS		RKSO
133	090300	32.0N	126.7E	PCN 6			PGTW
134	090600	32.3N	126.6E	PCN 6			PGTW
135	090601	32.5N	127.2E	PCN 1		EYE FIX	RODN
136	090948	32.5N	126.3E	PCN 4	T4.5/4.5-/S0.0/29HRS		PGTW
137	091200	33.0N	126.5E	PCN 2			PGTW
138	091409	33.2N	126.2E	PCN 1		EYEWALL OPN ESE	RKSO
139	091600	33.5N	129.5E	PCN 6	T3.5/4.5 /W1.0/24HRS		PGTW
140	091800	33.7N	125.9E	PCN 6			PGTW
141	091847	33.1N	126.3E	PCN 5		ULCC FIX	RKSO
142	092100	33.7N	126.1E	PCN 6			PGTW
143	092314	33.9N	125.8E	PCN 3	T3.0/3.0-/W0.5/26HRS		RODN
144	100000	34.3N	126.4E	PCN 2		EYE FIX OPN SW	PGTW
145	100108	34.3N	125.1E	PCN 3	T3.0/4.0 /W1.0/26HRS		RPMK
146	100300	35.1N	126.5E	PCN 4	T3.5/4.5 /W1.0/18HRS	EXP LLCC	PGTW
147	100550	35.2N	127.6E	PCN 3			RPMK
148	100550	35.5N	127.9E	PCN 5			RODN
149	100600	35.5N	127.3E	PCN 6			PGTW
150	100900	35.9N	128.1E	PCN 6		ULCC FIX	PGTW
151	101013	36.7N	128.8E	PCN 6			RODN
152	101109	36.1N	129.5E	PCN 6			RODN
153	101109	37.0N	128.4E	PCN 5			RKSO
154	101200	36.9N	128.6E	PCN 6		ULCC FIX	PGTW
155	101349	37.2N	129.9E	PCN 6			RODN
156	101600	38.1N	129.5E	PCN 6	T2.5/3.0 /W1.0/24HRS		PGTW
157	101800	39.0N	130.2E	PCN 6			PGTW
158	101836	39.2N	130.5E	PCN 5			RKSO
159	102026	40.4N	131.1E	PCN 5			RKSO
160	102100	40.6N	131.6E	PCN 6			PGTW
161	102253	41.0N	131.2E	PCN 5			RKSO
162	110000	40.9N	132.1E	PCN 6			PGTW

163	110048	41.7N 133.7E	PCN 5				RODN
164	110300	41.0N 133.6E	PCN 6	T2.5/3.0 /W1.0/24HRS	PARTIALLY EXP LLCC		PGTW
165	110600	42.5N 133.6E	PCN 6				PGTW

TYPHOON KIT
FIX POSITIONS FOR CYCLONE NO. 8

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	020516	24.1N 136.6E	1500FT		1005	20 110 86	170 30 110 86	8 15			+25 +26 +23 24	2
2	022204	25.8N 134.6E	1500FT		1000	22 270 30	290 28 200 45	5 3			+26 +27 +25	3
3	030040	25.9N 134.5E	1500FT		1000	25 070 30	290 28 180 32	5 3			+27 +26 +25 28	3
4	030645	26.3N 134.1E	1500FT		998	35 180 12	240 28 180 14	5 10			+27 +26 +26 27	4
5	030944	26.5N 134.1E	1500FT		998	40 340 20	110 32 060 66	5 5			+27 +26 +26 27	4
6	032221	27.4N 133.2E	1500FT		999	40 360 10	100 35 360 34	8 3			+25 +26 +26 29	5
7	040027	27.5N 133.1E	1500FT		999	35 100 15	180 37 100 35	10 3	CIRCULAR	35	+24 +26 +26 37	5
8	040637	27.7N 132.8E	1500FT		994	35 230 50	230 34 140 25	10 4	CIRCULAR	25	+25 +24 +24	6
9	040927	27.5N 132.5E	1500FT		994	40 060 40	120 46 060 30	5 3	CIRCULAR	14	+25 +24 +24	6
10	042110	28.0N 132.1E	1500FT		993	50 110 12	220 47 110 10	5 5	CIRCULAR	12	+26 +26 +25 30	7
11	050020	28.1N 131.9E	1500FT		994	65 100 20	170 41 070 12	5 5	CIRCULAR	13	+25 +27 +25 33	7
12	050639	28.4N 132.0E	1500FT		990	60 270 10	340 54 270 15	10 2	CIRCULAR	15	+27 +28 +27 28	8
13	050935	28.5N 132.0E	700MB	2973	984	60 300 12	150 44 040 23	8 2	CONCENTRIC	4 .20	+13 +14 +14	8
14	052137	28.8N 132.1E	700MB	2963		60 130 15	220 57 130 25	6 1	CIRCULAR	10	+12 +14 +12	9
15	060034	28.8N 132.2E	700MB	2945	983	60 010 15	130 59 010 17	5 2	CIRCULAR	12	+12 +14 +10	9
16	060634	29.0N 132.5E	700MB	2838	970	50 290 10	230 71 120 10	5 5	CIRCULAR	8	+14 +16 +14	10
17	060940	29.1N 132.6E	700MB	2781	961	70 130 4	030 78 140 8	5 5	CIRCULAR	10	+15 +18 +13 29	10
18	062135	29.3N 132.4E	700MB	2733		90 300 6	260 83 170 6	5 1	ELLIPTICAL	12 8 360	+13 +15 +11	11
19	070030	29.3N 132.3E	700MB	2776	966	80 270 6	350 74 090 16	4 1	ELLIPTICAL	15 10 330	+14 +14 +13	11
20	070630	29.6N 132.4E	700MB	2782		70 260 10	230 70 130 15	10 1	CIRCULAR	10	+11 +15 +12	12
21	070913	29.9N 132.0E	700MB	2792	966	85 030 10	130 77 030 8	5 1	CIRCULAR	10	+12 +16 +12	12
22	072142	30.4N 130.6E	700MB	2793		65 060 8	330 76 230 6	5 5	CIRCULAR	10	+13 +15 +15	13
23	080048	30.6N 130.2E	700MB	2785	965	75 060 30	130 72 060 16	3 5	ELLIPTICAL	13 10 90	+14 +16 +16 22	13
24	080611	30.8N 129.5E	700MB	2748	960	65 230 20	240 79 110 10	5 2	ELLIPTICAL	13 10 110	+11 +17 +12	14
25	080858	30.9N 129.1E	700MB	2729	959	50 120 30	150 86 090 12	5 2	CIRCULAR	10	+12 +17 +12	14
26	082136	31.9N 127.5E	700MB	2853		65 210 20	270 59 170 13	10 1	CIRCULAR	12	+15 +18 +15	15
27	090027	32.2N 127.1E	700MB	2853	971	55 140 45	200 55 140 20	10 2	CIRCULAR	12	+12 +18 +14	15
28	090651	32.6N 126.6E	700MB	2809	966	75 050 55	150 75 060 28	5 5	CIRCULAR	25	+10 +18 +12 27	16
29	090923	32.8N 126.6E	700MB	2827	968	75 300 20	330 74 230 17	5 5	CIRCULAR	25	+11 +19 +11 26	16

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	040300	28.1N 132.7E	LAND				65//1 /////		28.4N 129.5E	47909
* 2	040400	28.2N 132.7E	LAND				65//2 53605		28.4N 129.5E	47909
* 3	040500	28.2N 132.7E	LAND				65//1 50000		28.4N 129.5E	47909
4	040700	27.8N 132.5E	LAND				65//1 5////		28.4N 129.5E	47909
5	041100	27.8N 132.6E	LAND				65//2 50000		28.4N 129.5E	47909
6	041200	27.8N 132.6E	LAND				65//2 50000		28.4N 129.5E	47909
7	041300	27.9N 132.6E	LAND				65//2 50305		28.4N 129.5E	47909
8	041400	27.9N 132.0E	LAND				65//2 52732		28.4N 129.5E	47909
9	041500	27.9N 131.9E	LAND				/5//3 /2705		28.4N 129.5E	47909
10	041800	27.6N 132.1E	LAND				65//3 51205		28.4N 129.5E	47909
11	041900	27.8N 131.9E	LAND				65//3 53116		28.4N 129.5E	47909
12	042000	28.1N 132.0E	LAND				65//3 50216		28.4N 129.5E	47909
13	042100	27.9N 132.1E	LAND				65//3 51511		28.4N 129.5E	47909
14	042200	27.8N 132.1E	LAND				65//3 51805		28.4N 129.5E	47909
15	042300	27.9N 132.1E	LAND				30973 50000		28.4N 129.5E	47909
16	050000	28.0N 132.0E	LAND				30783 50000		28.4N 129.5E	47909
17	050100	28.0N 132.0E	LAND				55/63 50000		28.4N 129.5E	47909
18	050200	28.1N 132.0E	LAND				55/63 50000		28.4N 129.5E	47909
19	050300	28.2N 132.0E	LAND				558/3 53605		28.4N 129.5E	47909
20	050300	28.2N 131.9E	LAND				55/// 53211		30.6N 131.0E	47869
21	050400	28.2N 132.0E	LAND				65//3 50000		28.4N 129.5E	47909
22	050400	28.3N 131.9E	LAND				5//// 53605		30.6N 131.0E	47869
23	050500	28.3N 132.0E	LAND				65//3 53605		28.4N 129.5E	47909
24	050500	28.3N 131.9E	LAND				5//// 50000		30.6N 131.0E	47869
25	050600	28.4N 132.0E	LAND				65//3 53603		28.4N 129.5E	47909
26	050600	28.4N 131.9E	LAND				5//// 53605		30.6N 131.0E	47869
27	050700	28.5N 132.2E	LAND				65//3 50608		28.4N 129.5E	47909
28	050700	28.4N 131.9E	LAND				5//// 50000		30.6N 131.0E	47869
29	050800	28.5N 132.0E	LAND				65/// 52805		28.4N 129.5E	47909
30	050800	28.5N 132.0E	LAND				5//// 50305		30.6N 131.0E	47869
31	050900	28.5N 132.0E	LAND				55//1 53204		28.4N 129.5E	47909
32	050900	28.5N 132.0E	LAND				5//// 50000		30.6N 131.0E	47869
33	051000	28.5N 132.0E	LAND				5//// 50000		30.6N 131.0E	47869
34	051400	28.7N 131.9E	LAND				65//1 53605		28.4N 129.5E	47909
35	051400	28.6N 131.9E	LAND				5//// 50000		30.6N 131.0E	47869
36	051600	28.7N 131.9E	LAND				65//2 50000		28.4N 129.5E	47909
37	051600	28.6N 131.9E	LAND				5//// 50000		30.6N 131.0E	47869
38	051700	28.7N 131.9E	LAND				65//2 50000		28.4N 129.5E	47909
39	051700	28.7N 131.8E	LAND				5//// 53308		30.6N 131.0E	47869
40	051800	28.7N 131.8E	LAND				55//2 50000		28.4N 129.5E	47909
41	051800	28.7N 131.8E	LAND				5//// 50000		30.6N 131.0E	47869
42	051900	28.7N 131.8E	LAND				55//2 50000		28.4N 129.5E	47909
43	051900	28.7N 131.8E	LAND				5//// 50000		30.6N 131.0E	47869
44	052000	28.7N 131.9E	LAND				55//2 50000		28.4N 129.5E	47909
45	052000	28.8N 131.9E	LAND				5//// 50408		30.6N 131.0E	47869
46	052100	28.7N 132.0E	LAND				51202 50905		28.4N 129.5E	47909
47	052100	28.8N 131.9E	LAND				5//// 50000		30.6N 131.0E	47869
48	052200	28.8N 132.1E	LAND				52332 43608		28.4N 129.5E	47909
49	052200	28.8N 132.0E	LAND				21401 50505		30.6N 131.0E	47869
50	052300	28.8N 132.1E	LAND				52312 40905		28.4N 129.5E	47909
51	052300	28.8N 132.1E	LAND				10321 50905		30.6N 131.0E	47869
52	060000	28.9N 132.2E	LAND				50312 50505		28.4N 129.5E	47909
53	060000	30.8N 129.4E	LAND	GOOD		15		MOV 3005 SEBURI	33.4N 130.4E	
54	060000	28.8N 132.1E	LAND				10211 50000		30.6N 131.0E	47869
55	060100	28.8N 132.2E	LAND				50312 50000		28.4N 129.5E	47909
56	060100	28.9N 132.1E	LAND				10311 53605		30.6N 131.0E	47869
57	060200	28.9N 132.4E	LAND				50312 50311		28.4N 129.5E	47909
58	060200	28.9N 132.2E	LAND				10592 50905		30.6N 131.0E	47869
59	060300	29.0N 132.4E	LAND				5///2 50305		28.4N 129.5E	47909
60	060300	28.9N 132.2E	LAND				20632 50000		30.6N 131.0E	47869
61	060400	29.0N 132.4E	LAND				5///2 50000		28.4N 129.5E	47909
62	060400	28.9N 132.3E	LAND				10281 50000		30.6N 131.0E	47869
63	060500	29.0N 132.4E	LAND				50372 50000		28.4N 129.5E	47909
64	060500	28.9N 132.3E	LAND				10331 50000		30.6N 131.0E	47869
65	060600	29.0N 132.5E	LAND				52412 50000		28.4N 129.5E	47909
66	060600	29.0N 132.4E	LAND				10311 50605		30.6N 131.0E	47869
67	060700	29.1N 132.6E	LAND				50412 50505		28.4N 129.5E	47909
68	060700	29.1N 132.4E	LAND				10311 53610		30.6N 131.0E	47869
69	060800	29.1N 132.6E	LAND				50412 50000		28.4N 129.5E	47909
70	060800	29.0N 132.5E	LAND				10311 51405		30.6N 131.0E	47869
71	060900	29.2N 132.7E	LAND				40412 50505		28.4N 129.5E	47909
72	060900	29.0N 132.5E	LAND				10311 50000		30.6N 131.0E	47869
73	061000	29.0N 132.7E	LAND				50412 50000		28.4N 129.5E	47909
74	061000	29.0N 132.5E	LAND				10312 50000		30.6N 131.0E	47869
75	061100	29.0N 132.7E	LAND				50312 50000		28.4N 129.5E	47909
76	061100	29.0N 132.5E	LAND				/0211 50000		30.6N 131.0E	47869
77	061200	29.1N 132.7E	LAND				50412 50000		28.4N 129.5E	47909
78	061200	29.1N 132.5E	LAND				10211 53605		30.6N 131.0E	47869
79	061300	29.1N 132.6E	LAND				50412 50000		28.4N 129.5E	47909
80	061300	29.1N 132.5E	LAND				10311 50000		30.6N 131.0E	47869
81	061400	29.1N 132.6E	LAND				50412 50000		28.4N 129.5E	47909
82	061400	29.1N 132.4E	LAND				10221 52705		30.6N 131.0E	47869
83	061600	29.1N 132.5E	LAND				50322 50000		28.4N 129.5E	47909
84	061600	29.1N 132.4E	LAND				10211 50000		30.6N 131.0E	47869
85	061700	29.2N 132.4E	LAND				50312 53205		28.4N 129.5E	47909
86	061700	29.2N 132.3E	LAND				10211 35005		30.6N 131.0E	47869
87	061800	29.2N 132.4E	LAND				50312 50000		28.4N 129.5E	47909
88	061800	29.2N 132.3E	LAND				10211 50000		30.6N 131.0E	47869
89	061900	29.3N 132.5E	LAND				50312 50000		28.4N 129.5E	47909

90	061900	29.2N	132.3E	LAND			10212 50000				30.6N	131.0E	47869
91	062000	29.3N	132.4E	LAND			50312 50000				28.4N	129.5E	47909
92	062000	29.2N	132.3E	LAND			10212 50000				30.6N	131.0E	47869
93	062100	29.3N	132.4E	LAND			50312 50000				28.4N	129.5E	47909
94	062100	29.2N	132.3E	LAND			10212 50000				30.6N	131.0E	47869
95	062200	29.3N	132.3E	LAND			50312 50000				28.4N	129.5E	47909
96	062200	29.2N	132.3E	LAND			10311 50000				30.6N	131.0E	47869
97	062300	29.3N	132.3E	LAND			50313 50000				28.4N	129.5E	47909
98	062300	29.2N	132.3E	LAND			10311 50000				30.6N	131.0E	47869
99	070000	29.3N	132.4E	LAND	GOOD	30					31.3N	131.9E	47743
100	070000	29.3N	132.4E	LAND			22515 50000				28.4N	129.5E	47909
101	070000	30.8N	129.5E	LAND	GOOD	20		MOV	2915	SEBURI	33.4N	130.4E	
102	070000	29.3N	132.3E	LAND			10311 53405				30.6N	131.0E	47869
103	070100	29.3N	132.4E	LAND			22713 20000				28.4N	129.5E	47909
104	070100	29.4N	132.3E	LAND	GOOD	30		MOV	3410		31.3N	131.9E	47743
105	070100	29.3N	132.2E	LAND			10311 52705				30.6N	131.0E	47869
106	070300	29.5N	132.4E	LAND	GOOD	30		MOV	0205		31.3N	131.9E	47743
107	070300	29.5N	132.4E	LAND			20713 50000				28.4N	129.5E	47909
108	070300	29.5N	132.3E	LAND			10512 53508				30.6N	131.0E	47869
109	070400	29.6N	132.3E	LAND			20514 50000				28.4N	129.5E	47909
110	070400	29.5N	132.4E	LAND	GOOD	30					31.3N	131.9E	47743
111	070400	29.6N	132.2E	LAND			10512 53405				30.6N	131.0E	47869
112	070500	29.7N	132.3E	LAND	GOOD			MOV	3405		31.3N	131.9E	47743
113	070500	29.6N	132.3E	LAND			20514 50000				28.4N	129.5E	47909
114	070500	29.6N	132.2E	LAND			10412 53303				30.6N	131.0E	47869
115	070600	29.7N	132.2E	LAND			20614 53105				28.4N	129.5E	47909
116	070600	29.7N	132.3E	LAND	GOOD	20		MOV	3505		31.3N	131.9E	47743
117	070600	29.7N	132.2E	LAND			10412 53605				30.6N	131.0E	47869
118	070700	29.8N	132.3E	LAND	GOOD	15		MOV	3110		31.3N	131.9E	47743
119	070700	29.8N	132.2E	LAND			20514 53305				28.4N	129.5E	47909
120	070700	29.8N	132.1E	LAND			10412 53005				30.6N	131.0E	47869
121	070800	29.9N	132.2E	LAND	GOOD	15		MOV	3210		31.3N	131.9E	47743
122	070800	29.9N	132.1E	LAND			11512 53508				30.6N	131.0E	47869
123	070900	29.9N	132.1E	LAND	GOOD	15		MOV	2905		31.3N	131.9E	47743
124	070900	29.9N	132.1E	LAND			20413 50000				28.4N	129.5E	47909
125	070900	29.9N	132.0E	LAND			10412 52705				30.6N	131.0E	47869
126	071000	29.9N	131.9E	LAND			20413 53011				28.4N	129.5E	47909
127	071000	29.9N	132.0E	LAND	GOOD	15		MOV	3010		31.3N	131.9E	47743
128	071000	29.9N	131.9E	LAND			11512 53008				30.6N	131.0E	47869
129	071100	29.9N	131.8E	LAND	GOOD	30		MOV	2710		31.3N	131.9E	47743
130	071100	29.9N	131.9E	LAND			20412 50000				28.4N	129.5E	47909
131	071100	29.9N	131.9E	LAND			11512 52705				30.6N	131.0E	47869
132	071200	30.0N	131.7E	LAND			20442 53105				28.4N	129.5E	47909
133	071200	29.9N	131.7E	LAND	GOOD	20		MOV	2810		31.3N	131.9E	47743
134	071200	30.0N	131.7E	LAND			11512 53008				30.6N	131.0E	47869
135	071300	30.0N	131.5E	LAND	GOOD	20		MOV	2910		31.3N	131.9E	47743
136	071300	30.0N	131.6E	LAND			20412 52911				28.4N	129.5E	47909
137	071300	30.0N	131.5E	LAND			11632 52711				30.6N	131.0E	47869
138	071400	30.0N	131.4E	LAND			20412 42708				28.4N	129.5E	47909
139	071400	30.0N	131.4E	LAND	GOOD	20		MOV	2905		31.3N	131.9E	47743
140	071400	30.0N	131.3E	LAND			11512 53008				30.6N	131.0E	47869
141	071500	30.0N	131.3E	LAND	GOOD	30		MOV	2910		31.3N	131.9E	47743
142	071500	30.0N	131.3E	LAND			20311 52705				28.4N	129.5E	47909
143	071500	30.0N	131.5E	LAND			5//// 52705				30.6N	131.0E	47869
144	071600	30.0N	131.2E	LAND			5//// 52803				30.6N	131.0E	47869
145	071700	30.1N	131.1E	LAND	GOOD	30		MOV	3010		31.3N	131.9E	47743
146	071700	30.1N	131.1E	LAND			20312 53105				28.4N	129.5E	47909
147	071700	30.1N	131.2E	LAND			5//// 53408				30.6N	131.0E	47869
148	071800	30.2N	131.0E	LAND	GOOD	30		MOV	3010		31.3N	131.9E	47743
149	071800	30.2N	131.0E	LAND			20512 53011				28.4N	129.5E	47909
150	071800	30.2N	131.1E	LAND			4//// 53011				30.6N	131.0E	47869
151	071900	30.2N	130.9E	LAND	GOOD	20		MOV	3010		31.3N	131.9E	47743
152	071900	30.2N	130.9E	LAND			20412 52905				28.4N	129.5E	47909
153	071900	30.2N	130.9E	LAND			51572 52708				30.6N	131.0E	47869
154	072000	30.2N	130.8E	LAND			20412 53005				28.4N	129.5E	47909
155	072000	30.3N	130.8E	LAND	GOOD	20		MOV	3010		31.3N	131.9E	47743
156	072000	30.3N	130.8E	LAND			10412 53005				30.6N	131.0E	47869
157	072100	30.3N	130.8E	LAND			20412 53008				28.4N	129.5E	47909
158	072100	30.4N	130.7E	LAND			14412 53308				30.6N	131.0E	47869
159	072200	30.4N	130.8E	LAND			20322 53208				28.4N	129.5E	47909
160	072200	30.4N	130.6E	LAND	GOOD	20		MOV	3010		31.3N	131.9E	47743
161	072200	30.4N	130.5E	LAND			10312 53011				30.6N	131.0E	47869
162	072300	30.5N	130.5E	LAND	GOOD	20		MOV	3010		31.3N	131.9E	47743
163	072300	30.5N	130.5E	LAND			20312 52908				28.4N	129.5E	47909
164	072300	30.5N	130.4E	LAND			11312 52908				30.6N	131.0E	47869
165	080000	30.5N	130.4E	LAND			20313 53108				28.4N	129.5E	47909
166	080000	30.5N	130.3E	LAND	GOOD	20		MOV	3010		31.3N	131.9E	47743
167	080000	30.5N	130.3E	LAND			10212 53011				30.6N	131.0E	47869
168	080100	30.5N	130.2E	LAND	GOOD	20		MOV	2715		31.3N	131.9E	47743
169	080100	30.6N	130.2E	LAND			20312 53011				28.4N	129.5E	47909
170	080100	30.6N	130.1E	LAND			11312 53011				30.6N	131.0E	47869
171	080200	30.6N	130.1E	LAND			20432 52705				28.4N	129.5E	47909
172	080200	30.6N	130.1E	LAND	GOOD	20		MOV	3010		31.3N	131.9E	47743
173	080200	30.7N	130.0E	LAND			11213 53208				30.6N	131.0E	47869
174	080300	30.7N	129.9E	LAND			20432 53011				28.4N	129.5E	47909
175	080300	30.8N	129.9E	LAND			10213 53108				30.6N	131.0E	47869
176	080300	30.6N	130.0E	LAND			10411 /////				33.4N	130.3E	47806
177	080400	30.8N	129.7E	LAND			10213 52911				30.6N	131.0E	47869
178	080400	30.7N	129.7E	LAND			20412 53008				28.4N	129.5E	47909
179	080500	30.8N	129.7E	LAND	GOOD	15		MOV	3015		31.3N	131.9E	47743
180	080500	30.8N	129.6E	LAND			10213 52708				30.6N	131.0E	47869
181	080500	30.7N	129.8E	LAND	GOOD	30		MOV	3010		34.2N	130.8E	47762
182	080600	30.8N	129.5E	LAND	GOOD	15		MOV	3015		31.3N	131.9E	47743
183	080600	30.8N	129.5E	LAND			20412 53008				28.4N	129.5E	47909
184	080600	30.9N	129.5E	LAND			10213 53008				30.6N	131.0E	47869
185	080600	30.8N	129.5E	LAND	GOOD	15		MOV	3015		34.2N	130.8E	47762
186	080700	30.8N	129.5E	LAND			20412 50000				28.4N	129.5E	47909
187	080700	30.8N	129.5E	LAND	GOOD	20		MOV	2915		31.3N	131.9E	47743
188	080700	30.9N	129.4E	LAND			10313 52705				30.6N	131.0E	47869
189	080700	30.8N	129.4E	LAND	GOOD	20		MOV	2915		34.2N	130.8E	47762
190	080800	30.8N	129.3E	LAND	GOOD	20		MOV	2906		34.2N	130.8E	47762
191	080800	30.8N	129.4E	LAND	GOOD			MOV	2707		31.3N	131.9E	47743
192	080800	30.9N	129.3E	LAND			10318 52705				30.6N	131.0E	47869
193	080800	30.9N	129.3E	LAND			20412 52905				28.4N	129.5E	47909
194	080900	30.9N	129.2E	LAND	GOOD	20		MOV	2915		34.2N	130.8E	47762
195	080900	31.1N	129.1E	LAND			20412 53116				28.4N	129.5E	47909
196	080900	30.9N	129.2E	LAND			10313 52908				30.6N	131.0E	47869
197	080900	30.9N	129.2E	LAND	GOOD	20		MOV	3015		31.3N	131.9E	47743
198	081000	31.0N	129.0E	LAND			20412 50000				28.4N	129.5E	47909
199	081000	30.9N	129.0E	LAND	GOOD	20		MOV	3015		34.2N	130.8E	47762
200	081000	31.0N	129.0E	LAND			10213 53011				30.6N	131.0E	47869
201	081000	30.9N	129.1E	LAND	GOOD	20		MOV	2915		31.3N	131.9E	47743
202	081100	31.0N	129.0E	LAND	GOOD	15		MOV	3010		31.3N	131.9E	47743
203	081100	30.9N	128.9E	LAND	GOOD	20		MOV	2915		34.2N	130.8E	47762
204	081100	31.0N	128.9E	LAND			11313 52705				30.6N	131.0E	47869
205	081100	31.0N	128.9E	LAND			22612 52705				28.4N	129.5E	47909
206	081200	31.0N	128.9E	LAND	GOOD	20		MOV	3015		31.3N	131.9E	47743
207	081200	31.0N	128.7E	LAND			5//62 53011				28.4N	129.5E	47909
208	081200	31.0N	128.7E	LAND			5//63 52808				30.6N	131.0E	47869
209	081200	31.0N	128.8E	LAND	GOOD	20		MOV	3015		34.2N	130.8E	47762
210	081300	31.0N	128.5E	LAND			6///2 52708				28.4N	129.5E	47909
211	081300	31.1N	128.6E	LAND			5//6/ 53108				30.6N	131.0E	47869
212	081300	31.0N	128.7E	LAND	GOOD	20		MOV	3015		34.2N	130.8E	47762
213	081400	31.2N	128.4E	LAND			6//6/ 53011				30.6N	131.0E	47869
214	081400	31.1N	128.5E	LAND	GOOD	20		MOV	3015		34.2N	130.8E	47762
215	081500	31.2N	128.3E	LAND			62/6/ 53005				30.6N	131.0E	47869
216	081500	31.2N	128.2E	LAND	GOOD	20		MOV	3215		34.2N	130.8E	47762
217	081600	31.3N	128.2E	LAND			65/4/ 53111				30.6N	131.0E	47869
218	081600	31.3N	128.2E	LAND	GOOD	20		MOV	3210		34.2N	130.8E	47762
219	081700	31.3N	128.1E	LAND			6//// 52805				30.6N	131.0E	47869
220	081700	31.4N	128.1E	LAND	GOOD	20		MOV	3220		34.2N	130.8E	47762
221	081800	31.4N	128.0E	LAND			6//// 53211				30.6N	131.0E	47869
222	081800	31.5N	127.9E	LAND	GOOD	20		MOV	3120		34.2N	130.8E	47762
223	081900	31.6N	127.6E	LAND	GOOD	15		MOV	3120		34.2N	130.8E	47762
224	082000	31.6N	127.5E	LAND	GOOD	15		MOV	3015		34.2N	130.8E	47762
225	082100	31.8N	127.4E	LAND	POOR	15		MOV	3115		34.2N	130.8E	47762
226	082200	31.9N	127.4E	LAND	POOR	20		MOV	3215		34.2N	130.8E	47762
227	082300	32.0N	127.4E	LAND	POOR	30		MOV	3215		34.2N	130.8E	47762
228	090000	32.1N	127.1E	LAND	POOR	25		MOV	3320		34.2N	130.8E	47762
229	090100	32.2N	127.0E	LAND	POOR	30		MOV	2915		34.2N	130.8E	47762
230	090200	32.2N	126.8E	LAND	POOR	30		MOV	2910		34.2N	130.8E	47762
231	090300	32.3N	126.8E	LAND	POOR	30		MOV	3315		34.2N	130.8E	47762
232	090400	32.3N	126.7E	LAND	GOOD	35		MOV	2610		34.2N	130.8E	47762
233	090400	32.3N	126.7E	LAND	GOOD	35		MOV	3010		32.7N	128.8E	47844
234	090500	32.5N	126.7E	LAND	GOOD	35		MOV	3610		34.2N	130.8E	47762
235	090500	32.5N	126.7E	LAND	GOOD	35		MOV	3610		32.7N	128.8E	47844

236	090600	32.6N	126.6E	LAND	GOOD	35	MOV 3010	34.2N	130.8E	47768
237	090800	32.8N	126.5E	LAND	GOOD	35	MOV 3510	32.7N	128.8E	47844
238	091000	32.8N	126.4E	LAND	GOOD	30	MOV 3410	32.7N	128.8E	47844
239	091200	32.9N	126.3E	LAND	GOOD	30	MOV 3410	32.7N	128.8E	47844
240	091500	33.2N	126.0E	LAND	POOR	20	MOV 3415	32.7N	128.8E	47844
241	091505	33.8N	126.5E	LAND	POOR			35.9N	126.6E	47141
242	091535	33.9N	126.4E	LAND	POOR			35.9N	126.6E	47141
*243	091605	34.1N	126.0E	LAND	POOR			35.9N	126.6E	47141
244	091630	33.5N	126.0E	LAND	FAIR		SPRL BARL BANA	35.1N	126.8E	47158
245	091635	34.1N	126.0E	LAND	POOR			35.9N	126.6E	47141
*246	091735	34.3N	125.7E	LAND	POOR			35.9N	126.6E	47141
247	091735	33.5N	127.0E	LAND	FAIR		SPRL BAND AREA	35.1N	126.8E	47158
248	091835	34.5N	125.8E	LAND	POOR			35.9N	126.6E	47141
249	091835	33.5N	127.0E	LAND	FAIR		SPRL BAND AREA	35.1N	126.8E	47158
250	091905	34.5N	126.0E	LAND	POOR			35.9N	126.6E	47141
*251	091935	34.5N	126.0E	LAND	POOR		EYE FIX DIFFUSE	35.9N	126.6E	47141
252	091950	33.9N	126.0E	LAND	FAIR		SPRL BAND AREA	35.1N	126.8E	47158
253	092035	34.1N	126.3E	LAND	FAIR		SPRL BAND AREA	35.1N	126.8E	47158
254	092100	33.8N	126.1E	LAND	POOR	20	MOV 3620	32.7N	128.8E	47844
255	092130	34.2N	126.3E	LAND	POOR		SPRL BAND AREA	35.1N	126.8E	47158
256	092230	34.3N	126.4E	LAND	POOR		SPRL BAND AREA	35.1N	126.8E	47158

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	080400	30.8N 129.8E	LAND				10411 53113		33.4N 130.3E	47806
2	080500	30.8N 129.6E	LAND				1041/ 52711		33.4N 130.3E	47806
3	080600	30.8N 129.5E	LAND				1041/ 52705		33.4N 130.3E	47806
4	080700	30.8N 129.4E	LAND				1041/ 52805		33.4N 130.3E	47806
5	080800	30.9N 129.4E	LAND				1041/ 53005		33.4N 130.3E	47806
6	080900	30.9N 129.1E	LAND				1041/ 52711		33.4N 130.3E	47806
7	081000	30.9N 129.0E	LAND				1061/ 52708		33.4N 130.3E	47806
8	081100	30.9N 128.9E	LAND				1061/ 52805		33.4N 130.3E	47806
9	081200	31.0N 128.7E	LAND				2064/ 53011		33.4N 130.3E	47806
10	081300	31.1N 128.6E	LAND				2071/ 52705		33.4N 130.3E	47806
11	081400	31.1N 128.4E	LAND				2071/ 52911		33.4N 130.3E	47806
12	081500	31.2N 128.3E	LAND				2171/ 53011		33.4N 130.3E	47806
13	081600	31.2N 128.2E	LAND				2162/ 53005		33.4N 130.3E	47806
14	081700	31.4N 128.1E	LAND				2154/ 53011		33.4N 130.3E	47806
15	081800	31.5N 127.9E	LAND				45/// 53113		33.4N 130.3E	47806
16	081900	31.6N 127.8E	LAND				55/// 53108		33.4N 130.3E	47806
17	082000	31.6N 127.6E	LAND				55/// 52708		33.4N 130.3E	47806
18	082100	31.7N 127.6E	LAND				55/// 53508		33.4N 130.3E	47806
19	082200	31.9N 127.4E	LAND				55/// 53413		33.4N 130.3E	47806
20	082300	32.0N 127.3E	LAND				65/// 53411		33.4N 130.3E	47806
21	090000	32.1N 127.1E	LAND				65/// 53211		33.4N 130.3E	47806
22	090100	32.2N 126.9E	LAND				65/// 53011		33.4N 130.3E	47806
23	090200	32.2N 126.7E	LAND				65/// 52711		33.4N 130.3E	47806
24	090300	32.3N 126.6E	LAND				65/// 53111		33.4N 130.3E	47806
25	090400	32.4N 126.6E	LAND				55/// 50211		33.4N 130.3E	47806
26	090500	32.6N 126.7E	LAND				55/// 50111		33.4N 130.3E	47806
27	090600	32.6N 126.6E	LAND				54/// 53305		33.4N 130.3E	47806
28	090700	32.6N 126.6E	LAND				55/// 50000		33.4N 130.3E	47806
29	090800	32.6N 126.6E	LAND				55/// 53005		33.4N 130.3E	47806
30	090900	32.6N 126.5E	LAND				55/// 53505		33.4N 130.3E	47806
31	091000	32.9N 126.3E	LAND				55/// 53411		33.4N 130.3E	47806
32	091100	33.0N 126.3E	LAND				65/// 53408		33.4N 130.3E	47806
33	091200	33.1N 126.3E	LAND				65/// 53605		33.4N 130.3E	47806

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	092100	34.2N 126.2E	065	036	47165 47158 47182 47189
2	100000	34.5N 126.6E	065	015	47165 47156 47182 47189
3	100600	35.4N 126.8E	060	015	47158 47165 47133 47129
4	100900	36.4N 128.0E	045	015	47133 47135 47143

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

TROPICAL STORM LEE
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
081006Z	22.7 131.3	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.
081012Z	22.8 131.1	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.
081018Z	23.0 130.8	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.
081100Z	23.1 130.5	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.
081106Z	23.4 130.2	35	23.5 130.2	30.	6.	-5.	24.2 128.5	50.	132.	0.	26.4 126.6	65.	275.	5.	29.1 126.3	75.	620.	30.
081112Z	23.9 129.7	40	23.8 129.8	40.	8.	0.	24.8 127.8	65.	168.	15.	27.2 126.2	35.	308.	25.	30.5 126.0	95.	694.	70.
081118Z	24.7 129.1	45	24.8 129.1	45.	6.	0.	27.7 127.3	70.	67.	15.	30.7 126.2	90.	231.	30.	0.0 0.0	0.	-0.	0.
081200Z	25.5 128.7	50	25.6 128.6	50.	8.	0.	28.7 125.8	65.	65.	5.	32.2 124.9	30.	253.	25.	0.0 0.0	0.	-0.	0.
081206Z	26.4 128.6	50	26.8 127.9	50.	45.	0.	30.6 126.3	65.	40.	5.	33.8 126.3	65.	339.	20.	0.0 0.0	0.	-0.	0.
081212Z	27.6 128.0	50	27.8 127.8	50.	16.	0.	32.0 126.7	65.	92.	5.	36.1 127.5	55.	354.	30.	0.0 0.0	0.	-0.	0.
081218Z	28.8 127.1	55	28.8 127.5	55.	21.	0.	33.0 126.9	65.	149.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
081300Z	29.7 126.3	60	30.0 126.1	60.	21.	0.	34.4 125.0	65.	122.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
081306Z	30.9 125.6	60	31.4 125.3	60.	34.	0.	36.5 124.9	60.	176.	15.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
081312Z	32.2 124.9	60	32.1 125.3	60.	21.	0.	37.5 125.8	55.	282.	30.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
081318Z	34.2 124.3	60	34.0 124.4	60.	13.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
081400Z	36.4 124.5	55	36.3 124.2	55.	16.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
081406Z	39.4 125.4	45	39.5 125.1	40.	15.	-5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
081412Z	42.0 127.6	25	41.8 127.1	25.	25.	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	18.	129.	293.	657.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	12.	51.	77.	17.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	11.	23.	50.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	11.	23.	50.	0.	0.	0.	0.
NUMBER OF FORECASTS	14	10	6	2	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1307. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. K'SUT$

TROPICAL STORM LEE
FIX POSITIONS FOR CYCLONE NO. 9

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	092315	23.5N 129.7E	PCN 5	T1.0/1.0	INIT OBS PART EXP LLCC	PGTW
2	100300	23.7N 129.8E	PCN 6			PGTW
* 3	100550	23.6N 130.6E	PCN 5			PGTW
4	101013	23.3N 131.5E	PCN 6	T1.0/1.0	INIT OBS	RPMK
* 5	101349	23.3N 132.0E	PCN 6			PGTW
6	101600	23.3N 131.8E	PCN 6	T1.5/1.5	INIT OBS	PGTW
7	102253	23.4N 130.2E	PCN 5			PGTW
8	110048	23.5N 130.3E	PCN 3	T1.5/1.5	INIT OBS	RODN
9	110048	23.0N 130.1E	PCN 5		ULAC 21.0N 129.1E	PGTW
10	110300	23.4N 130.1E	PCN 6	T1.5/1.5 /D0.5/27HRS	ULAC 21.0N 130.1E	PGTW
11	110539	23.1N 131.3E	PCN 5			PGTW
12	110900	23.8N 130.7E	PCN 6			PGTW
13	110951	23.3N 130.3E	PCN 6			PGTW
14	111047	22.9N 130.2E	PCN 6			RPMK
15	111200	23.1N 129.6E	PCN 6			PGTW
* 16	111329	23.2N 129.1E	PCN 6			PGTW
17	111600	23.8N 128.9E	PCN 6	T2.5/2.5 /D1.0/24HRS		PGTW
* 18	111825	23.1N 129.3E	PCN 5			RKSO
19	111825	24.1N 129.7E	PCN 6			PGTW
* 20	112100	24.1N 127.9E	PCN 6			PGTW
* 21	112146	24.0N 128.6E	PCN 5			PGTW
22	120028	25.7N 128.7E	PCN 5			PGTW
23	120300	25.4N 127.9E	PCN 6			PGTW
24	120529	26.1N 128.4E	PCN 5	T2.5/2.5 /D1.0/26HRS		PGTW
25	120529	26.2N 128.0E	PCN 5	T2.5/2.5	INIT OBS	RPMK
* 26	120900	26.0N 128.4E	PCN 6		ULCC FIX	PGTW
27	121026	26.7N 127.6E	PCN 6			RPMK
28	121111	27.6N 128.7E	PCN 5			RKSO
29	121111	27.5N 128.4E	PCN 6			RODN
30	121200	27.3N 127.9E	PCN 6			PGTW
* 31	121450	27.0N 128.7E	PCN 6			RODN
32	121600	27.5N 127.9E	PCN 6	T3.5/3.5 /D1.0/24HRS		PGTW
33	121800	27.8N 127.5E	PCN 6			PGTW
* 34	121814	22.8N 128.3E	PCN 6			PGTW
35	122350	29.9N 127.3E	PCN 5			RKSO
36	122350	30.2N 126.0E	PCN 5	T2.5/2.5	INTI OBS	RODN
37	130000	30.2N 125.8E	PCN 4	T3.0/3.0-/D0.5/19HRS	PART EXP LLCC	PGTW
38	130149	29.4N 126.1E	PCN 5	T3.0/3.0	INIT OBS	RKSO
39	130300	31.2N 125.7E	PCN 6			PGTW
40	130518	31.4N 125.3E	PCN 5			PGTW
41	130518	30.7N 125.1E	PCN 3		PART EXP LLCC	RKSO
* 42	130900	30.5N 125.0E	PCN 6		ULAC 32.3N 127.0E	PGTW
43	131005	30.7N 125.1E	PCN 6		PART EXP LLCC	PGTW
44	131200	31.7N 125.8E	PCN 6		PART EXP LLCC	PGTW
45	131429	33.4N 124.1E	PCN 6			RODN
46	131600	33.3N 125.1E	PCN 6	T3.5/3.5-/S0.0/24HRS	PART EXP LLCC	PGTW
47	131804	34.5N 123.6E	PCN 4		PART EXP LLCC	PGTW
48	131804	34.2N 123.2E	PCN 6			RODN
49	132100	35.7N 124.3E	PCN 6		ULCC FIX	PGTW
50	132329	36.3N 123.6E	PCN 3	T3.5/3.5-/D1.0/18HRS	EXP LLCC	RPMK
51	140000	36.6N 124.5E	PCN 6			PGTW
52	140129	37.2N 125.0E	PCN 5	T3.0/3.0 /S0.0/24HRS		RKSO
53	140300	37.9N 125.2E	PCN 6			PGTW
54	140507	40.1N 125.4E	PCN 5			RODN
55	140600	40.1N 126.3E	PCN 6			PGTW
56	140900	40.3N 126.5E	PCN 6			PGTW
57	140943	41.4N 126.4E	PCN 5			RKSO
* 58	141027	42.7N 127.6E	PCN 6			RKSO
* 59	141125	43.1N 128.1E	PCN 6		ULCC FIX	RKSO
60	141200	41.8N 127.7E	PCN 6			PGTW
61	141600	42.6N 128.6E	PCN 6			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MELP	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	100650	22.8N 131.3E	1500FT		997	10 040 45	120 23 040 45	10 30			+26 +26 +24	1
* 2	110010	22.1N 130.6E	700MB	3053	997	6 330 80	250 27 230 100	20 30			+12 +12 + 5	2
3	110655	23.6N 130.2E	1500FT		992	40 350 80	300 39 220 153	8 12			+28 +27 +26 28	3
4	110933	24.9N 129.9E	1500FT		991	15 310 70	310 27 270 150	8 12			+27 +27 +26 28	3
5	112203	25.3N 128.8E	1500FT		990	50 060 60	140 51 060 60	10 13			+27 +26 +26 28	4
6	120034	25.7N 128.5E	1500FT		990	50 120 90	180 51 120 90	10 4			+26 +26 +26 28	4
* 7	120642	27.5N 127.6E	700MB	3015		45 040 48	130 41 040 48	2 5			+13 +15 + 6	5
8	120940	27.4N 128.0E	1500FT		989	25 190 90	290 36 190 90	1 4			+25 +26 +25	5
9	122146	29.2N 126.3E	700MB	2984		60 080 72	140 63 080 72	15 10			+14 +15 + 8	6
10	130021	29.8N 126.0E	1500FT			40 360 65	100 50 360 65	15 3			+24 +26 +25	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	120300	26.1N 128.9E	LAND				5///3 /////		26.2N 127.8E	47937
2	120400	26.1N 128.9E	LAND				5///3 50000		26.2N 127.8E	47937
3	120500	26.2N 128.8E	LAND	POOR		35		MOV 0215	26.3N 126.8E	47929
4	120500	26.2N 128.9E	LAND				55//3 53611		26.2N 127.8E	47937
5	120500	26.1N 128.8E	LAND				6///1 50000		28.4N 129.5E	47909
6	120600	26.3N 128.9E	LAND				55//2 73604		26.2N 127.8E	47937
7	120600	26.2N 128.9E	LAND				6///2 50305		28.4N 129.5E	47909
8	120607	26.2N 128.8E	LAND	POOR					26.4N 127.8E	47931
9	120700	26.4N 128.9E	LAND				55//3 73608		26.2N 127.8E	47937
10	120700	26.4N 128.8E	LAND				6///2 53411		28.4N 129.5E	47909
11	120800	27.1N 128.9E	LAND				65//3 73616		26.2N 127.8E	47937
12	120800	26.6N 128.8E	LAND				6///2 53610		28.4N 129.5E	47909
* 13	120900	27.3N 128.9E	LAND				65//3 73620		26.2N 127.8E	47937
14	120900	27.2N 128.6E	LAND				6///2 53532		28.4N 129.5E	47909
15	121000	27.6N 128.4E	LAND				6///2 53427		28.4N 129.5E	47909
16	121100	28.1N 128.1E	LAND				6///2 53330		28.4N 129.5E	47909
* 17	121200	28.5N 127.5E	LAND				6///2 53132		28.4N 129.5E	47909
18	122100	29.0N 127.2E	LAND				5///5 53528		26.2N 127.8E	47937
* 19	130800	32.5N 125.1E	LAND				6//// 73317		31.2N 121.5E	58367
20	132130	35.0N 124.9E	LAND	FAIR					35.9N 126.6E	47141
21	132205	36.0N 124.9E	LAND	FAIR					35.9N 126.6E	47141
22	132230	36.2N 125.0E	LAND	POOR					35.9N 126.6E	47141
23	132305	36.3N 125.0E	LAND	POOR					35.9N 126.6E	47141
24	132335	36.3N 125.0E	LAND	POOR					35.9N 126.6E	47141
25	140005	36.5N 125.0E	LAND	POOR					35.9N 126.6E	47141
26	140035	36.8N 125.2E	LAND	POOR					35.9N 126.6E	47141
27	140105	36.9N 125.2E	LAND	POOR					35.9N 126.6E	47141
28	140135	37.0N 125.2E	LAND	POOR					35.9N 126.6E	47141

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

TYPHOON MAMIE
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
081506Z	25.2	124.4	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.
081512Z	25.7	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.
081518Z	26.0	125.7	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.
081600Z	26.6	125.9	45	26.4	126.1	45.	16.	0.	28.1	126.4	65.	68.	0.	29.8	124.5	75.	123.	5.	31.6	121.9	65.	260.	15.
081606Z	27.1	126.0	50	26.8	126.3	50.	24.	0.	28.6	125.9	70.	68.	5.	30.6	123.5	75.	121.	10.	33.7	121.4	60.	227.	20.
081612Z	27.6	125.9	50	27.4	126.2	50.	20.	0.	29.6	125.3	70.	68.	0.	32.3	124.6	75.	195.	10.	35.9	124.8	75.	259.	35.
081618Z	28.8	125.7	60	27.8	126.0	55.	29.	-5.	29.7	125.2	70.	98.	0.	32.4	124.5	80.	237.	20.	36.4	124.7	75.	316.	45.
081700Z	28.7	125.3	65	28.0	125.3	65.	18.	0.	32.7	124.2	80.	138.	10.	37.3	125.4	65.	268.	15.	0.0	0.0	0.	-0.	0.
081706Z	29.2	124.8	65	29.5	124.7	70.	19.	5.	33.0	123.7	75.	128.	10.	38.0	125.7	55.	254.	15.	0.0	0.0	0.	-0.	0.
081712Z	29.7	124.0	70	29.6	124.2	70.	12.	0.	32.1	123.0	75.	121.	10.	36.9	125.0	60.	223.	20.	0.0	0.0	0.	-0.	0.
081718Z	30.2	123.4	70	30.0	123.8	70.	24.	0.	32.1	122.5	75.	168.	15.	36.6	124.2	60.	299.	30.	0.0	0.0	0.	-0.	0.
081800Z	30.9	122.5	70	30.6	122.9	70.	27.	0.	33.3	121.9	75.	167.	25.	38.3	124.7	50.	338.	35.	0.0	0.0	0.	-0.	0.
081806Z	31.8	121.6	65	31.7	122.1	65.	26.	0.	36.9	123.0	55.	128.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081812Z	32.9	120.8	65	33.2	121.1	65.	23.	0.	38.7	123.6	55.	111.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081818Z	34.2	120.3	60	33.9	120.8	60.	31.	0.	39.4	123.2	45.	126.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081900Z	35.7	120.2	50	35.0	119.8	50.	46.	0.	41.3	123.7	25.	175.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081906Z	37.4	120.4	40	36.8	119.8	40.	46.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081912Z	39.2	121.3	40	39.1	121.3	40.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081918Z	41.5	123.0	30	41.3	122.4	30.	30.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082000Z	43.9	125.5	25	43.3	125.2	25.	38.	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	+4-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	26.	120.	229.	266.	25.	115.	203.	249.
AVG RIGHT ANGLE ERROR	14.	70.	147.	122.	13.	73.	139.	91.
AVG INTENSITY MAGNITUDE ERROR	1.	9.	18.	29.	1.	10.	14.	23.
AVG INTENSITY BIAS	0.	9.	18.	29.	0.	10.	14.	23.
NUMBER OF FORECASTS	17	13	9	4	15	11	7	3

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1335. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 12. KNOTS

TYPHOON MAMIE
FIX POSITIONS FOR CYCLONE NO. 10

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	150600	25.8N 125.2E	PCN 6	T1.5/1.5	INIT OBS	RODN
2	150900	26.2N 124.5E	PCN 6	T1.0/1.0	INIT OBS	PGTW
3	151200	25.8N 125.0E	PCN 6			PGTW
4	151349	26.0N 125.5E	PCN 6			PGTW
5	151600	25.8N 125.4E	PCN 6			PGTW
6	151800	25.8N 125.4E	PCN 6			PGTW
7	152100	26.0N 126.0E	PCN 6			PGTW
8	152245	26.4N 126.3E	PCN 3		PARTIALLY EXP LLCC	PGTW
9	160000	26.5N 126.3E	PCN 6			PGTW
10	160026	26.3N 126.7E	PCN 5			RODN
11	160026	26.3N 126.6E	PCN 5	T2.5/2.5	INIT OBS	RPMK
12	160048	26.3N 126.6E	PCN 5			PGTW
13	160300	26.9N 126.0E	PCN 6	T2.5/2.5	INIT OBS	PGTW
14	160600	26.8N 126.3E	PCN 6			PGTW
15	160627	27.0N 126.2E	PCN 5	T2.5/2.5 /D1.0/24HRS		RODN
16	160900	27.3N 126.2E	PCN 6			PGTW
17	161042	27.3N 126.0E	PCN 3			RODN
* 18	161124	26.8N 126.1E	PCN 5		ULCC FIX	RKSO
19	161124	26.8N 125.4E	PCN 5			RPMK
20	161200	27.4N 126.1E	PCN 6	T2.5/2.5 /D1.5/27HRS		PGTW
21	161328	27.2N 126.2E	PCN 5			PGTW
22	161600	27.5N 125.8E	PCN 6			PGTW
23	161800	27.7N 125.7E	PCN 6			PGTW
24	161913	27.7N 126.1E	PCN 5			RKSO
25	162100	28.6N 125.8E	PCN 6			PGTW
26	162141	28.3N 125.4E	PCN 3		WELL DEFINED CENTER	PGTW
27	170000	28.4N 125.8E	PCN 6			PGTW
28	170004	28.9N 125.4E	PCN 3			RODN
29	170004	28.3N 125.9E	PCN 3	T3.5/3.5-/D1.0/24HRS	PARTIALLY EXP LLCC	RPMK
30	170028	28.2N 125.5E	PCN 5			PGTW
31	170300	29.1N 125.0E	PCN 4	T3.0/3.0 /D0.5/24HRS	PARTIALLY EXP LLCC	PGTW
32	170600	29.0N 124.6E	PCN 6			PGTW
33	170617	29.0N 124.6E	PCN 3	T3.0/3.0	INIT OBS PARTIALLY EXP LLCC	RKSO
34	170900	29.3N 124.3E	PCN 6			PGTW
35	171021	29.3N 124.1E	PCN 4			PGTW
36	171102	29.2N 124.5E	PCN 3			RKSO
37	171200	29.4N 123.9E	PCN 6			PGTW
38	171450	29.7N 123.7E	PCN 4			RKSO
39	171600	29.5N 123.3E	PCN 6	T3.0/3.0-/D0.5/28HRS		PGTW
40	171800	29.5N 123.1E	PCN 6			PGTW
41	171902	30.2N 123.0E	PCN 3			RODN
42	172100	29.9N 123.1E	PCN 6			PGTW
43	172342	31.2N 122.3E	PCN 3	T4.0/4.0	INIT OBS	RODN
44	180000	30.6N 122.6E	PCN 6			PGTW
45	180149	31.4N 122.3E	PCN 3	T4.5/4.5-/D1.0/25HRS		RPMK
46	180300	31.4N 122.2E	PCN 4	T4.0/4.0-/D1.0/24HRS		PGTW
47	180600	31.7N 122.0E	PCN 6			PGTW
48	180606	32.1N 121.5E	PCN 3			RPMK
49	180900	32.3N 121.2E	PCN 6			PGTW
50	181000	32.6N 121.0E	PCN 3			PGTW
51	181040	32.5N 120.9E	PCN 4			RODN
52	181200	33.0N 121.2E	PCN 6			PGTW
53	181429	33.5N 120.8E	PCN 4			RODN
54	181600	33.7N 120.9E	PCN 6			PGTW
55	181800	34.2N 120.5E	PCN 6	T2.0/3.0 /W1.0/26HRS		PGTW
56	181851	33.9N 120.8E	PCN 5			RSKO
57	182100	34.4N 119.7E	PCN 6			PGTW
58	182320	35.5N 120.6E	PCN 3	T2.5/2.5	INIT OBS	RKSO
59	190000	35.4N 120.1E	PCN 6			PGTW
60	190300	36.3N 119.5E	PCN 6	T2.0/2.5 /W2.0/24HRS	PARTIALLY EXP LLCC	PGTW
61	190555	37.6N 121.0E	PCN 5		ULCC FIX	RPMK
62	190600	37.5N 120.7E	PCN 6			PGTW

63	190900	38.8N 121.6E	PCN 6			PGTW
64	191200	40.2N 122.0E	PCN 6			PGTW
65	191409	39.9N 121.6E	PCN 5		EXP LLCC	RKSO
66	191600	41.6N 122.2E	PCN 6		ULCC FIX	PGTW
67	191841	42.4N 123.6E	PCN 6		ULCC FIX	RKSO
68	200000	43.3N 125.0E	PCN 6			PGTW
69	200039	44.2N 125.4E	PCN 5			RKSO
70	200108	44.1N 126.4E	PCN 5			RKSO

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	152340	26.4N 126.1E	1500FT		996	55 100 10	160 52 050 60	5 5				
2	162049	28.6N 125.6E	700MB	2986	983	65 090 70	170 69 090 60	15 4			+26 +27 +25	1
											+10 +19 + 9	2

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	160200	26.7N 125.5E	LAND				6///2 73008		26.2N 127.8E	47937
2	160300	26.9N 125.5E	LAND				6///3 73409		26.2N 127.8E	47937
3	160400	27.0N 125.5E	LAND				6///3 73409		26.2N 127.8E	47937
4	160500	27.1N 125.5E	LAND				6///3 73609		26.2N 127.8E	47937
5	160500	26.9N 125.9E	LAND				6///6 5////		24.8N 125.3E	47927
6	171500	29.5N 123.9E	LAND				34//3 73208	STA LAT/LONG UNK	****N *****E	58760
7	171501	29.6N 123.7E	LAND				12323 53010	1500 FIX TIME STA LAT/LONG UNK	****N *****E	58760
8	172000	30.3N 123.1E	LAND				34764 53112	STA LAT/LONG UNK	****N *****E	58760
9	172100	30.5N 123.0E	LAND				34894 53112		****N *****E	58760

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	181200	33.1N 121.1E	065	055	58150 58251
2	181500	33.4N 120.3E	065	015	58150 58251
3	181800	34.1N 120.0E	060	030	58150 58040
4	182100	34.8N 119.8E	050	030	58040 58150
5	190900	38.9N 120.9E	030	040	58656 58662 58454 58539
6	191200	39.0N 121.3E	035	020	58662 58656
7	192100	43.0N 125.3E	025	040	54157 54259 54273 54172

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

TYPHOON NELSON
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
081612Z	16.9 143.6	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.
081618Z	17.5 142.8	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.
081700Z	18.1 142.1	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.
081706Z	18.8 141.7	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.
081712Z	19.6 141.4	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.
081718Z	20.4 140.9	30	20.3 141.0	30.	8.	0.	22.0 138.6	55.	58.	-5.	23.0 135.3	70.	83.	0.	24.0 131.0	90.	42.	10.
081800Z	21.2 140.0	40	21.0 139.6	40.	25.	0.	22.7 135.4	60.	61.	-5.	23.8 131.3	75.	108.	5.	25.0 128.0	90.	131.	10.
081806Z	21.8 139.4	45	21.4 139.3	45.	25.	0.	23.2 135.8	70.	18.	0.	24.6 132.1	85.	91.	10.	26.1 128.5	95.	129.	5.
081812Z	22.3 138.7	55	22.2 138.3	55.	23.	0.	24.4 134.8	80.	84.	15.	25.9 130.7	90.	175.	15.	26.7 126.4	95.	178.	5.
081818Z	22.5 137.7	60	22.8 137.5	65.	21.	5.	24.5 133.6	90.	108.	20.	26.6 129.8	95.	208.	15.	28.1 125.7	100.	234.	5.
081900Z	22.7 136.5	65	22.6 136.5	65.	6.	0.	23.3 132.2	85.	65.	15.	26.0 128.6	95.	152.	15.	28.7 125.4	100.	253.	10.
081906Z	22.9 135.8	70	22.8 135.8	75.	6.	5.	23.7 131.8	90.	45.	15.	25.4 127.4	100.	121.	10.	28.3 123.6	105.	230.	20.
081912Z	23.0 134.8	65	23.1 134.9	70.	8.	5.	24.0 131.2	90.	58.	15.	25.6 126.6	105.	118.	15.	27.4 121.4	95.	207.	10.
081918Z	23.0 133.8	70	23.2 133.7	70.	13.	0.	24.5 129.4	90.	114.	10.	26.2 124.3	105.	173.	10.	27.7 119.2	85.	245.	5.
082000Z	23.1 133.1	70	23.1 133.1	70.	0.	0.	23.8 129.0	90.	55.	10.	25.5 124.5	110.	89.	20.	27.9 121.0	100.	150.	20.
082006Z	23.1 132.3	75	23.2 132.2	75.	8.	0.	24.0 128.3	90.	38.	0.	25.8 123.7	110.	90.	25.	28.2 120.2	70.	158.	0.
082012Z	23.1 131.6	75	23.1 131.5	75.	6.	0.	23.5 128.0	95.	36.	5.	25.4 123.1	110.	57.	25.	27.9 118.5	60.	152.	-10.
082018Z	23.3 131.0	80	23.1 130.8	80.	16.	0.	23.6 127.1	100.	47.	5.	25.8 122.3	110.	45.	30.	28.3 117.5	45.	180.	-5.
082100Z	23.8 130.0	80	23.8 130.1	80	5.	0.	25.0 126.9	100.	72.	10.	27.4 122.8	110.	126.	30.	29.8 119.3	35.	262.	0.
082106Z	24.0 129.0	90	24.1 129.0	85	6.	-5.	25.5 125.4	105.	66.	20.	27.8 121.7	105.	142.	35.	0.0 0.0	0.	-0.	0.
082112Z	24.1 128.0	90	24.2 127.9	90.	8.	0.	25.7 123.7	105.	60.	20.	29.2 120.0	45	217.	-25.	0.0 0.0	0.	-0.	0.
082118Z	24.3 126.7	95	24.2 126.8	90.	8.	-5.	25.6 122.4	105.	32.	25.	29.6 118.0	30.	249.	-20.	0.0 0.0	0.	-0.	0.
082200Z	24.5 125.7	90	24.5 125.7	80.	0.	-10.	26.5 121.5	70.	62.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082206Z	24.6 124.7	85	24.8 124.7	80.	12.	-5.	27.0 120.6	65.	84.	-5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082212Z	24.7 123.8	85	24.7 123.7	80.	5.	-5.	26.6 119.9	65.	61.	-5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082218Z	25.2 122.8	80	25.2 122.7	75.	5.	-5.	26.5 118.7	40.	60.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082300Z	25.5 121.8	80	25.6 121.8	70.	6.	-10.	27.5 118.1	25.	111.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082306Z	25.6 120.7	70	25.7 120.9	70.	12.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082312Z	25.6 119.7	70	25.7 119.8	70.	8.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082318Z	25.5 118.7	50	25.6 118.6	50	8.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082400Z	25.7 117.6	35	25.5 117.5	35.	13.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
082406Z	26.1 116.7	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.

	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	10.	64.	132.	182.	10.	64.	132.	182.
AVG RIGHT ANGLE ERROR	9.	47.	88.	148.	9.	47.	88.	148.
AVG INTENSITY MAGNITUDE ERROR	2.	11.	18.	8.	2.	11.	18.	8.
AVG INTENSITY BIAS	-1.	6.	13.	6.	-1.	6.	13.	6.
NUMBER OF FORECASTS	26	22	17	14	25	22	17	14

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1676. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TYPHOON NELSON
FIX POSITIONS FOR CYCLONE NO. 11

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	152245	13.2N 142.1E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	160300	15.8N 142.2E	PCN 6	T1.0/1.0	INIT OBS	PGTW
3	160901	17.1N 143.6E	PCN 6			PGTW
4	160943	17.2N 143.7E	PCN 6			PGTW
5	161200	17.4N 143.7E	PCN 6			PGTW
6	161328	17.3N 143.4E	PCN 5			PGTW
7	161731	17.4N 143.5E	PCN 6	T1.5/1.5	INIT OBS	PGTW
* 8	162100	16.7N 142.7E	PCN 6		INIT OBS	RPMK
* 9	162223	17.4N 143.3E	PCN 5	T1.0/1.0	SCNDRY LLCC 16.0N 140.1E	PGTW
10	170028	18.6N 142.4E	PCN 6			PGTW
11	170435	19.4N 142.5E	PCN 5	T1.5/1.5 /D0.5/24HRS		PGTW
12	170600	19.6N 141.8E	PCN 6			PGTW
13	170900	19.9N 141.5E	PCN 6			PGTW
14	171200	20.1N 141.3E	PCN 6			PGTW
15	171600	20.0N 141.5E	PCN 6	T2.5/2.5+/D1.0/22HRS		PGTW
16	171720	20.2N 141.1E	PCN 6			PGTW
17	172120	20.5N 140.1E	PCN 6		ULAC 20.8N 140.2E	PGTW
18	172201	20.5N 139.7E	PCN 5			PGTW
19	180007	20.5N 139.8E	PCN 5			PGTW
20	180423	21.5N 140.0E	PCN 5	T2.5/2.5+/D1.0/24HRS		PGTW
21	180600	21.3N 139.9E	PCN 6			PGTW
22	180900	22.4N 139.0E	PCN 6			PGTW
23	181000	22.4N 138.7E	PCN 5			PGTW
24	181200	22.5N 138.5E	PCN 6			PGTW
25	181248	22.5N 138.1E	PCN 6			PGTW
26	181600	22.7N 137.7E	PCN 6	T4.0/4.0 /D1.5/24HRS		PGTW
27	181709	22.6N 137.6E	PCN 6			RODN
28	181709	22.6N 137.6E	PCN 5			PGTW
29	182058	22.4N 136.9E	PCN 6			PGTW
30	182100	22.3N 136.4E	PCN 6			RPMK
31	182320	22.3N 136.8E	PCN 5	T3.0/3.0	INIT OBS	PGTW
32	182320	22.5N 136.5E	PCN 5			PGTW
33	190128	22.3N 136.2E	PCN 5			PGTW
34	190300	22.8N 136.1E	PCN 6	T4.5/4.5 /D2.0/24HRS	PSBL EYE FORMING	RPMK
35	190555	22.6N 136.1E	PCN 5	T4.0/4.0	INIT OBS	PGTW
36	190555	23.0N 135.9E	PCN 3			RODN
37	190555	23.0N 135.7E	PCN 3	T4.5/4.5	INIT OBS	PGTW
38	190938	23.1N 135.0E	PCN 6			PGTW
39	191018	23.2N 134.9E	PCN 6			RPMK
40	191018	22.9N 135.2E	PCN 5	T4.0/4.0	INIT OBS	PGTW
41	191200	23.1N 134.0E	PCN 6			PGTW
42	191409	22.8N 134.3E	PCN 6		ULCC FIX	PGTW
43	191600	23.0N 133.8E	PCN 6	T4.0/4.0+/S0.0/24HRS	ULCC FIX	PGTW
44	191800	22.9N 133.7E	PCN 6		ULCC FIX	RPMK
45	191841	22.8N 133.3E	PCN 6			PGTW
46	192037	23.0N 133.5E	PCN 5			PGTW
47	192258	23.0N 133.3E	PCN 5			PGTW
48	200000	22.9N 133.2E	PCN 6			PGTW
49	200544	23.1N 132.4E	PCN 4	T4.5/4.5+/S0.0/26HRS		RKSO
50	200544	23.2N 132.2E	PCN 3	T4.5/4.5	INIT OBS	PGTW
51	200917	23.0N 131.9E	PCN 4			

52	200957	23.2N 131.7E	PCN 4					PGTW
53	201200	23.4N 131.8E	PCN 4					PGTW
54	201349	23.0N 131.2E	PCN 4			I	DEVELOPING EYE WALL	PGTW
55	201600	23.0N 131.5E	PCN 6	T4.5/4.5 /D0.5/24HRS		I		PGTW
56	201830	23.3N 130.9E	PCN 5					RPMK
57	201830	23.0N 130.7E	PCN 6			I		PGTW
58	202100	23.4N 130.8E	PCN 6			I		PGTW
59	202157	23.6N 130.7E	PCN 5			B		PGTW
60	202236	23.7N 130.3E	PCN 3	T4.5/4.5			INIT OBS WELL DEFINED EYE	RODN
61	210048	24.0N 129.9E	PCN 1				BANDING EYE	RKSO
62	210048	23.9N 130.0E	PCN 5			B		PGTW
63	210300	24.0N 129.6E	PCN 2	T4.5/4.5+/S0.0/22HRS		B	BANDING EYE	PGTW
64	210533	24.1N 129.0E	PCN 3			B	POORLY DEFINED EYE	PGTW
65	210533	24.1N 129.1E	PCN 1	T5.0/5.0			INIT OBS RAGGED EYE FIX	RPMK
66	210533	24.2N 129.0E	PCN 1	T4.5/4.5 /S0.0/24HRS				RKSO
67	210900	24.1N 128.4E	PCN 4			I	POSSIBLE EYE WALL	PGTW
68	211037	23.9N 128.6E	PCN 2				RAGGED EYE	RPMK
69	211116	24.0N 128.0E	PCN 1					RKSO
70	211116	24.1N 128.5E	PCN 1				RAGGED EYE 6NM DIA	RPMK
71	211200	24.1N 128.1E	PCN 4			I		PGTW
72	211328	24.0N 127.6E	PCN 4			I		PGTW
73	211600	24.2N 127.2E	PCN 2	T5.0/5.0-/D0.5/24HRS		I	ILL DEFINED EYE 15NM	PGTW
74	211819	24.5N 126.7E	PCN 3					RPMK
75	211819	24.0N 126.6E	PCN 4			I	ILL DEFINED EYE	PGTW
76	212100	24.3N 126.5E	PCN 2			I	RAGGED ELONGATED EYE	PGTW
77	212136	24.4N 126.2E	PCN 1			B	ELONGATED BANDING EYE	PGTW
78	212356	24.6N 126.0E	PCN 3					RKSO
79	212356	24.2N 126.1E	PCN 1				EYE FIX	RPMK
80	220000	24.4N 125.7E	PCN 4					PGTW
81	220028	24.3N 125.7E	PCN 3					PGTW
82	220209	24.5N 125.6E	PCN 1	T5.5/5.5-/D0.5/21HRS			EYE FIX	RPMK
83	220523	24.9N 124.7E	PCN 1	T4.5/4.5 /S0.0/24HRS			RAGGED EYE FIX	RKSO
84	220523	24.7N 124.8E	PCN 3	T4.5/4.5 /S0.0/26HRS				PGTW
85	221016	24.6N 124.0E	PCN 2				RAGGED EYE 12NM DIA	PGTW
86	221054	24.6N 123.9E	PCN 2				RAGGED EYE 12NM DIA	PGTW
87	221200	24.6N 123.7E	PCN 4					PGTW
88	221449	24.9N 123.9E	PCN 1				RAGGED EYE FIX	RPMK
89	221600	24.9N 123.1E	PCN 4	T5.0/5.0-/S0.0/24HRS				PGTW
90	221808	25.3N 122.8E	PCN 3					PGTW
91	222114	25.3N 122.1E	PCN 6					PGTW
92	222334	25.3N 121.9E	PCN 1				RAGGED EYE FIX	RKSO
93	222334	25.3N 121.8E	PCN 3					PGTW
94	230149	25.4N 121.3E	PCN 1	T5.0/5.0-/W0.5/24HRS			20NM RAGGED EYE	RPMK
95	230149	25.4N 121.6E	PCN 1	T5.0/5.0			INIT OBS 25 NM RAGGED EYE FI	RODN
96	230300	25.5N 121.3E	PCN 2				RAGGED EYE FIX	PGTW
97	230512	25.6N 120.8E	PCN 1	T4.5/4.5-/S0.0/24HRS				PGTW
* 98	230512	25.5N 120.3E	PCN 1				RAGGED EYE	RODN
99	230900	25.7N 120.6E	PCN 2				EYE FIX	PGTW
100	230957	25.6N 120.4E	PCN 1				EYE FIX	PGTW
101	231032	25.6N 120.1E	PCN 2				EYE FIX	PGTW
102	231135	25.4N 120.3E	PCN 2				EYE FIX	RODN
103	231136	25.4N 120.3E	PCN 3					RPMK
104	231200	25.6N 119.8E	PCN 4					PGTW
105	231429	25.5N 119.1E	PCN 3					RPMK
106	231600	25.3N 119.0E	PCN 4					PGTW
107	231800	25.5N 118.2E	PCN 6					PGTW
108	231940	25.1N 117.9E	PCN 5					RPMK
109	232100	25.8N 117.3E	PCN 6					PGTW
110	232235	25.7N 117.9E	PCN 6					RKSO
111	240000	26.0N 117.4E	PCN 6					PGTW
*112	240052	24.5N 116.9E	PCN 5					RODN
113	240600	26.3N 116.5E	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-TATION	EYE DIAM	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
* 1	162357	16.7N 139.8E	1500FT		1002	20 120 150	230 11 040 60	8 50				+24 +24 +23	1
2	172131	20.6N 140.7E	700MB	2991	989	45 150 84	080 40 150 72	10 3				+ +25 +25	29 2
3	172337	20.8N 139.7E	1500FT		990	55 050 90	140 55 050 30	10 1				+24 +26 +26	29 2
4	180752	21.9N 139.4E	1500FT		990	60 050 72	150 56 050 60	15 2				+25 +26 +	3
5	181022	22.2N 139.0E	700MB	2988	984		280 55 160 140	20 15				+11 +16 + 3	3
6	182115	22.4N 137.0E	700MB	2930	981	55 030 30	120 55 030 30	5 5				+10 +13 +12	5
7	182346	22.6N 136.6E	700MB	2912	979	75 130 55	220 62 130 45	3 3				+11 +15 +10	5
8	190855	23.1N 135.7E	700MB	2903		65 150 50	230 54 150 67	10 2				+13 +19 +14	6
9	191135	23.1N 135.0E	700MB	2933	981		320 57 210 96	10 3				+13 +17 +11	6
10	192129	23.0N 133.5E	700MB	2860		70 040 18	130 72 040 30	10 3				+14 +16 +11	7
11	192359	23.1N 133.1E	700MB	2865	971	50 040 32	040 58 300 32	10 3				+14 +20 +11	7
12	200835	23.1N 132.2E	700MB	2852		50 230 60	120 73 030 50	6 10				+ +14 +10	8
13	201140	23.0N 131.7E	700MB	2841	971		250 61 170 78	5 20				+14 +15 +10	8
14	210058	23.9N 131.0E	700MB	2837	968	80 140 78	080 68 140 72	5 3				+15 +15 +12	9
15	210856	24.1N 128.5E	700MB	2798	966	50 150 40	130 68 040 115	5 10	CIRCULAR	20		+13 +15 +10	10
16	211140	24.2N 128.0E	700MB	2799	965		120 73 010 60	4 10	CIRCULAR	15		+13 +16 +10	10
17	212038	24.3N 126.4E	700MB	2803	963	55 040 120	120 62 040 84	4 6				+15 +16 +10	11
18	212344	24.5N 125.8E	700MB	2783	963	50 230 60	040 62 290 60	10 6	CIRCULAR	20		+15 +16 + 7	11
19	220833	24.7N 124.4E	700MB	2714		65 190 60	160 71 050 30	5 3				+13 +16 +14	12
20	221105	24.6N 123.8E	700MB	2721		65 040 90	100 81 040 72	5 2				+13 +17 +14	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	210300	24.1N 129.5E	LAND				5///2 /////		26.2N 127.8E	47937
2	210400	24.1N 129.2E	LAND @				5///2 52816		26.2N 127.8E	47937
3	210500	24.1N 129.0E	LAND				5///2 52611		26.2N 127.8E	47937
4	210600	24.1N 128.9E	LAND				5///2 72709		26.2N 127.8E	47937
5	210700	24.1N 128.8E	LAND				5///2 72608		26.2N 127.8E	47937
6	210800	24.1N 128.7E	LAND				5///2 72707		26.2N 127.8E	47937
7	210900	24.0N 128.5E	LAND	FAIR		30		MOV 2720	26.3N 126.8E	47929
8	210900	24.1N 128.4E	LAND				5///3 72709		26.2N 127.8E	47937
9	211000	24.2N 128.2E	LAND	POOR				MOV 2930	26.3N 126.8E	47929
10	211000	24.1N 128.3E	LAND				5///3 72709		26.2N 127.8E	47937
11	211100	24.2N 128.1E	LAND	POOR		20		MOV 2720	26.3N 126.8E	47929
12	211100	24.1N 128.0E	LAND				6///3 5////		24.8N 125.3E	47927
13	211100	24.1N 128.2E	LAND				5//13 72709		26.2N 127.8E	47937
14	211200	24.1N 128.0E	LAND				6///3 50000		24.8N 125.3E	47927
15	211200	24.1N 127.9E	LAND	POOR				MOV 2720	26.3N 126.8E	47929
16	211200	24.1N 128.1E	LAND				5///2 72705		26.2N 127.8E	47937
17	211300	24.2N 127.8E	LAND	POOR		40		MOV 2920	26.3N 126.8E	47929
18	211300	24.1N 127.9E	LAND				6///3 52705		24.8N 125.3E	47927
19	211300	24.1N 127.9E	LAND				35/11 72706		26.2N 127.8E	47937
20	211400	24.1N 127.7E	LAND				6///3 52716		24.8N 125.3E	47927
21	211400	24.2N 127.6E	LAND	POOR		40		MOV 2720	26.3N 126.8E	47929
22	211400	24.1N 127.6E	LAND				5///2 72511		26.2N 127.8E	47937
23	211500	24.1N 127.4E	LAND				25903 52712		24.8N 125.3E	47927
24	211500	24.1N 127.4E	LAND				5///2 72712		26.2N 127.8E	47937
25	211600	24.2N 127.3E	LAND				20874 53012		24.8N 125.3E	47927
26	211600	24.2N 127.2E	LAND	POOR		40		MOV 2720	26.3N 126.8E	47929

27	211600	24.2N	127.2E	LAND				5///2	72812			26.2N	127.8E	47937
28	211700	24.2N	127.0E	LAND	POOR	40				MOV	2720	26.3N	126.8E	47929
29	211700	24.3N	127.1E	LAND				65//3	/////			24.3N	124.2E	47918
30	211800	24.2N	126.9E	LAND	POOR	40				MOV	2720	26.3N	126.8E	47929
31	211800	24.2N	126.8E	LAND				31913	52511			24.3N	124.2E	47918
32	211900	24.2N	126.7E	LAND	POOR	50				MOV	2720	26.3N	126.8E	47929
33	211900	24.2N	126.8E	LAND				21883	50000			24.3N	124.2E	47918
34	212000	24.6N	126.3E	LAND	POOR	40				MOV	2720	26.3N	126.8E	47929
35	212000	24.4N	126.6E	LAND				21813	53012			24.8N	125.3E	47927
36	212000	24.3N	126.5E	LAND				5///2	72807			26.2N	127.8E	47937
37	212100	24.5N	126.5E	LAND	POOR	40				MOV	3020	26.3N	126.8E	47929
38	212100	24.3N	126.5E	LAND				55/63	52916			24.3N	124.2E	47918
39	212200	24.3N	126.2E	LAND	POOR	40				MOV	3020	26.3N	126.8E	47929
40	212200	24.4N	126.2E	LAND				55/13	52919			24.3N	124.2E	47918
41	212300	24.5N	126.2E	LAND	POOR	40				MOV	3020	26.3N	126.8E	47929
42	212300	24.4N	126.0E	LAND				21883	72815			24.3N	124.2E	47918
43	220000	24.5N	125.9E	LAND				2//13	52705			24.8N	125.3E	47927
44	220000	24.3N	127.0E	LAND	GOOD	35				MOV	2830	24.8N	125.3E	47927
45	220000	24.3N	125.8E	LAND				50933	72715			24.3N	124.2E	47918
46	220000	24.5N	126.8E	LAND	POOR	40				MOV	2920	26.3N	126.8E	47929
47	220000	24.5N	125.9E	LAND				5///2	72809			26.2N	127.8E	47937
48	220100	24.5N	125.8E	LAND				50723	72707			24.3N	124.2E	47918
49	220100	24.5N	125.8E	LAND	POOR	30				MOV	2810	24.8N	125.3E	47927
50	220100	24.5N	125.7E	LAND	GOOD	20				MOV	2810	26.3N	126.8E	47929
51	220100	24.5N	125.7E	LAND				12722	52711			24.8N	125.3E	47927
52	220100	24.5N	125.7E	LAND				5///2	72810			26.2N	127.8E	47937
53	220200	24.5N	125.5E	LAND				12712	52714			24.8N	125.3E	47927
54	220200	24.5N	125.6E	LAND				50814	73009			24.3N	124.2E	47918
55	220200	24.6N	125.5E	LAND	GOOD	20				MOV	2810	26.3N	126.8E	47929
56	220200	24.6N	125.5E	LAND				5/972	72912			26.2N	127.8E	47937
57	220300	24.6N	125.2E	LAND	GOOD	20				MOV	2710	26.3N	126.8E	47929
58	220300	24.7N	125.3E	LAND				50812	73011			24.3N	124.2E	47918
59	220300	24.6N	125.3E	LAND				25//2	53016			24.8N	125.3E	47927
60	220300	24.6N	125.2E	LAND				5///3	72812			26.2N	127.8E	47937
61	220400	24.6N	125.0E	LAND	GOOD	25				MOV	2720	26.3N	126.8E	47929
62	220400	24.6N	125.1E	LAND				35/12	52711			24.8N	125.3E	47927
63	220400	24.6N	125.1E	LAND				20892	72812			24.3N	124.2E	47918
64	220400	24.6N	125.0E	LAND				5///3	72812			26.2N	127.8E	47937
65	220500	24.6N	124.9E	LAND				25//2	52711			24.8N	125.3E	47927
66	220500	24.8N	124.8E	LAND	FAIR	45				MOV	2720	26.3N	126.8E	47929
67	220500	24.6N	124.9E	LAND				51552	72811			24.3N	124.2E	47918
68	220500	24.6N	124.8E	LAND				5///2	72709			26.2N	127.8E	47937
69	220600	24.7N	124.8E	LAND				55/52	72809			24.3N	124.2E	47918
70	220600	24.7N	124.7E	LAND	FAIR	20				MOV	2720	26.3N	126.8E	47929
71	220600	24.6N	124.6E	LAND				25//2	52816			24.8N	125.3E	47927
72	220600	24.7N	124.7E	LAND				6///2	72811			26.2N	127.8E	47937
73	220700	24.7N	124.6E	LAND				65//2	72809			24.3N	124.2E	47918
74	220700	24.6N	124.4E	LAND				2.//3	52711			24.8N	125.3E	47927
75	220700	24.8N	124.5E	LAND	POOR	20				MOV	3020	26.3N	126.8E	47929
76	220800	24.9N	124.4E	LAND	POOR					MOV	3020	26.3N	126.8E	47929
77	220800	24.7N	124.4E	LAND				22573	53605			24.8N	125.3E	47927
78	220800	24.7N	124.5E	LAND				55/12	72809			24.3N	124.2E	47918
79	220800	24.7N	124.5E	LAND				24823	51705			24.0N	121.6E	46699
80	220900	24.7N	124.2E	LAND				20714	52911			24.8N	125.3E	47927
81	220900	24.7N	124.3E	LAND				55/12	72709			24.3N	124.2E	47918
82	220900	24.8N	124.3E	LAND				35965	528//			24.0N	121.6E	46699
83	221000	24.8N	124.2E	LAND				55/12	72909			24.3N	124.2E	47918
84	221000	24.8N	124.2E	LAND	GOOD	20				MOV	2720	24.8N	125.3E	47927
85	221000	24.7N	124.1E	LAND				22834	52511			24.8N	125.3E	47927
86	221100	24.8N	124.1E	LAND	GOOD	20				MOV	2720	24.8N	125.3E	47927
87	221100	24.8N	124.1E	LAND				55/12	72809			24.3N	124.2E	47911
88	221100	24.7N	124.0E	LAND				55/43	52705			24.8N	125.3E	47927
89	221200	24.8N	123.9E	LAND				52813	72909			24.3N	124.2E	47918
90	221200	24.8N	123.8E	LAND	GOOD	30				MOV	2730	24.8N	125.3E	47927
91	221200	24.8N	123.8E	LAND				55/43	53111			24.8N	125.3E	47927
92	221200	24.9N	124.0E	LAND				24852	53309			24.0N	121.6E	46699
93	221300	24.8N	123.7E	LAND				22993	72809			24.3N	124.2E	47918
94	221300	24.7N	123.6E	LAND				55/44	52411			24.8N	125.3E	47927
95	221300	24.8N	123.8E	LAND	GOOD	30				MOV	2720	24.8N	125.3E	47927
96	221400	24.8N	123.6E	LAND	GOOD	30				MOV	2720	24.8N	125.3E	47927
97	221400	24.9N	123.5E	LAND				55/43	53215			24.8N	125.3E	47927
98	221400	24.9N	123.6E	LAND				22913	72808			24.3N	124.2E	47918
99	221500	25.1N	123.4E	LAND				22912	73011			24.3N	124.2E	47918
100	221500	25.0N	123.4E	LAND				5///4	53308			24.8N	125.3E	47927
101	221500	25.0N	123.4E	LAND	GOOD	30				MOV	2720	24.8N	125.3E	47927
102	221600	25.2N	123.2E	LAND	GOOD	55				MOV	2920	24.8N	125.3E	47927
103	221700	25.2N	122.7E	LAND				11972	50911			****N	*****E	58760
104	221700	25.4N	123.1E	LAND	GOOD	55				MOV	2920	24.8N	125.3E	47927
105	221700	25.4N	123.1E	LAND				5///4	53219			24.8N	125.3E	47927
106	221700	25.4N	123.1E	LAND				52962	73209			24.3N	124.2E	47918
107	221800	25.3N	122.5E	LAND				11912	52911			****N	*****E	58760
108	221800	25.4N	122.9E	LAND				6///2	52808			24.8N	125.3E	47927
109	221800	25.4N	122.8E	LAND	GOOD	55				MOV	2720	24.8N	125.3E	47927
110	221800	25.5N	122.8E	LAND				62962	73022			24.3N	124.2E	47918
111	221800	25.5N	122.7E	LAND				20994	52821			24.0N	121.6E	46699
112	221900	25.5N	122.7E	LAND				62912	73112			24.3N	124.2E	47918
113	221900	25.4N	122.5E	LAND	GOOD	55				MOV	2720	24.8N	125.3E	47927
114	221900	25.5N	122.7E	LAND				6///3	52912			24.8N	125.3E	47927
115	221900	25.4N	122.3E	LAND				10922	52912			27.1N	119.6E	58749
116	221900	25.5N	122.6E	LAND				24994	52806			24.0N	121.6E	46699
117	222000	25.5N	122.4E	LAND				6///3	52819			24.8N	125.3E	47927
118	222000	25.4N	122.1E	LAND				10822	52912			****N	*****E	58760
119	222000	25.5N	122.2E	LAND	GOOD	55				MOV	2920	24.8N	125.3E	47927
120	222000	25.5N	122.4E	LAND				62913	72812			24.3N	124.2E	47918
121	222100	25.4N	121.9E	LAND				10822	52912			****N	*****E	58760
122	222100	25.6N	122.0E	LAND	FAIR	40				MOV	2820	24.8N	125.3E	47927
123	222100	25.7N	122.2E	LAND				6////	5////			25.1N	121.6E	46696
124	222100	25.5N	122.2E	LAND				61912	72811			24.3N	124.2E	47918
125	222200	25.7N	121.8E	LAND				6////	5////			25.1N	121.6E	46696
126	222200	25.5N	121.9E	LAND				61913	72714			24.3N	124.2E	47918
127	222300	25.4N	121.8E	LAND				65/62	72611			24.3N	124.2E	47918
128	222300	25.4N	121.6E	LAND				11812	52912			****N	*****E	58760
129	230000	25.4N	121.6E	LAND				21812	52615			24.3N	124.2E	47918
130	230000	25.4N	121.4E	LAND				10822	52812			****N	*****E	58760
131	230000	25.4N	121.5E	LAND				6////	52306			24.0N	121.6E	46699
132	230100	25.5N	121.4E	LAND				21933	62811			24.3N	124.2E	47918
133	230200	25.4N	121.3E	LAND				21923	72709			24.3N	124.2E	47918
134	230300	25.5N	120.9E	LAND				10812	52812			****N	*****E	58760
135	230400	25.5N	120.8E	LAND				10812	52812			****N	*****E	58760
136	230500	25.6N	120.6E	LAND				10812	52811			****N	*****E	58760
137	230700	25.6N	120.4E	LAND				10812	52811			****N	*****E	58760
138	230800	25.6N	120.2E	LAND				10812	52811			****N	*****E	58760
139	230900	25.6N	120.1E	LAND				10713	52811			****N	*****E	58760
140	231200	25.7N	119.7E	LAND				10712	52811			****N	*****E	58760
141	231400	25.7N	119.4E	LAND				24542	52710			****N	*****E	58760

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	220600	24.5N 124.7E	080	035	47927 47918

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

TYPHOON ODESSA
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
082300Z	13.4	141.1	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.
082306Z	18.0	141.6	25	18.5	141.6	25.	30.	0.	19.2	141.1	45.	172.	0.	20.0	140.2	65.	216.	-5.	20.8	138.2	90.	390.	10.
082312Z	17.6	142.0	30	18.5	141.5	30.	61.	0.	19.4	140.8	50.	189.	0.	20.7	139.2	70.	253.	-5.	21.8	136.0	90.	444.	5.
082318Z	17.2	142.5	35	18.4	141.5	30.	92.	-5.	19.1	140.9	45.	185.	-10.	20.0	140.0	50.	283.	-25.	21.0	138.3	65.	427.	-20.
082400Z	17.0	143.1	40	16.9	143.1	45.	6.	5.	17.1	145.0	60.	238.	-5.	19.0	143.3	70.	369.	-10.	20.6	140.8	85.	438.	0.
082406Z	17.6	143.6	45	17.4	143.4	50.	17.	5.	19.3	143.9	65.	164.	-5.	20.6	141.7	75.	332.	-5.	21.6	138.9	90.	407.	0.
082412Z	18.5	144.0	50	17.9	143.9	55.	36.	5.	19.8	143.8	70.	197.	-5.	21.5	141.3	80.	326.	-5.	22.6	138.5	95.	353.	5.
082418Z	19.7	144.1	55	19.7	144.2	55.	6.	0.	22.7	143.5	70.	90.	-5.	24.4	141.1	85.	187.	0.	25.9	138.5	100.	154.	15.
082500Z	20.9	143.8	65	21.0	144.0	70.	13.	5.	24.2	142.7	100.	55.	20.	25.9	140.2	110.	129.	25.	27.5	137.5	110.	76.	25.M
082506Z	22.0	143.4	70	22.0	143.6	75.	11.	5.	24.7	141.2	100.	103.	20.	26.3	138.5	110.	160.	20.	27.7	135.8	110.	110.	20.
082512Z	23.0	143.0	75	22.9	142.8	75.	13.	0.	25.5	139.8	95.	141.	10.	26.9	137.1	100.	180.	10.	28.3	134.3	100.	137.	10.
082518Z	24.0	142.7	75	23.7	142.2	70.	33.	-5.	26.0	138.9	90.	166.	5.	27.4	136.2	95.	183.	10.	28.7	133.4	100.	137.	10.
082600Z	25.1	142.5	80	25.1	142.5	80.	0.	0.	27.9	141.1	90.	0.	5.	29.2	138.3	100.	64.	15.	29.2	135.1	100.	16.	15.
082606Z	26.1	142.3	80	26.0	142.2	90.	8.	10.	28.4	140.4	100.	16.	10.	29.2	137.2	105.	68.	15.	29.0	134.1	100.	45.	15.
082612Z	26.9	141.9	85	26.8	141.9	80.	6.	-5.	28.9	139.6	90.	45.	0.	29.4	136.4	100.	71.	10.	29.4	133.2	100.	77.	15.
082618Z	27.5	141.5	85	27.6	141.5	85.	6.	0.	29.2	138.8	90.	65.	5.	29.5	135.6	100.	58.	10.	29.5	132.4	100.	139.	15.
082700Z	27.9	141.1	85	28.0	141.1	85.	6.	0.	29.3	138.4	95.	68.	10.	29.4	135.4	95.	36.	10.	29.4	132.1	90.	212.	5.
082706Z	28.2	140.6	90	28.4	140.6	95.	12.	5.	29.3	138.8	95.	84.	5.	29.3	135.3	85.	91.	0.	29.0	131.7	80.	272.	-5.
082712Z	28.3	140.1	90	28.3	140.1	85.	0.	-5.	28.9	138.0	85.	68.	-5.	29.0	134.7	75.	158.	-10.	28.8	131.6	70.	329.	-10.
082718Z	28.3	139.5	85	28.3	139.5	85.	0.	0.	28.3	136.8	75.	46.	-15.	28.2	133.7	70.	235.	-15.	27.8	130.6	60.	306.	-10.
082800Z	28.2	138.7	85	28.2	138.7	75.	0.	-10.	27.8	135.0	50.	72.	-35.	28.3	129.6	30.	146.	-55.	0.0	0.0	0.	-0.	0.
082806Z	28.2	137.8	90	28.2	137.7	75.	5.	-15.	27.9	133.7	75.	102.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082812Z	28.3	136.9	90	28.2	137.0	80.	8.	-10.	28.2	132.8	55.	118.	-30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082818Z	28.6	136.0	90	28.4	136.0	80.	12.	-10.	28.2	131.6	45.	154.	-40.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082900Z	29.0	134.9	85	28.9	135.0	80.	8.	-5.	29.9	130.9	80.	143.	-5.	30.3	126.6	80.	22.	20.	31.3	122.7	80.	512.	40.
082906Z	29.6	133.6	85	29.6	133.7	80.	5.	-5.	31.0	128.5	70.	102.	-15.	31.3	124.3	70.	160.	15.	31.3	120.7	60.	738.	20.
082912Z	30.0	131.9	85	30.0	132.0	80.	5.	-5.	30.0	126.4	70.	55.	-10.	30.0	122.8	70.	347.	20.	0.0	0.0	0.	-0.	0.
082918Z	30.3	129.9	85	30.3	129.9	80.	0.	-5.	29.7	124.0	70.	77.	0.	30.0	121.3	55.	513.	10.	0.0	0.0	0.	-0.	0.
083000Z	30.4	128.2	85	30.2	128.2	80.	12.	-5.	30.1	122.0	75.	218.	15.	30.7	118.3	35.	727.	-5.	0.0	0.0	0.	-0.	0.
083006Z	30.3	126.7	85	30.2	126.5	85.	12.	0.	30.3	121.0	70.	334.	15.	30.7	118.2	30.	868.	-10.	0.0	0.0	0.	-0.	0.
083012Z	29.7	125.4	80	29.9	125.7	80.	20.	0.	29.0	123.4	65.	353.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083018Z	30.1	125.4	70	29.7	125.1	70.	29.	0.	29.5	122.8	40.	467.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083100Z	30.4	126.2	60	30.2	126.0	70.	16.	10.	31.7	127.6	70.	303.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083106Z	31.1	127.4	55	30.8	127.0	70.	27.	15.	34.1	130.5	55.	236.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083112Z	32.5	128.9	50	32.5	128.9	50.	0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083118Z	34.2	130.1	45	34.1	129.9	50.	12.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090100Z	35.5	131.6	40	35.5	131.5	40.	0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090106Z	36.8	134.0	40	36.9	133.7	40.	16.	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	15.	146.	238.	272.	13.	146.	238.	272.
AVG RIGHT ANGLE ERROR	8.	66.	111.	128.	8.	66.	111.	128.
AVG INTENSITY MAGNITUDE ERROR	4.	12.	13.	13.	5.	12.	13.	13.
AVG INTENSITY BIAS	-1.	-1.	2.	9.	-1.	-1.	2.	9.
NUMBER OF FORECASTS	37	33	26	21	35	33	26	21

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2328. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TYPHOON ODESSA
FIX POSITIONS FOR CYCLONE NO. 12

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	230007	18.5N 141.2E	PCN 5	T1.0/1.0	INIT OBS	PGTW
2	230512	18.4N 141.8E	PCN 6			PGTW
3	230512	18.2N 141.6E	PCN 5	T1.5/1.5	INIT OBS	RODN
4	230954	18.5N 142.0E	PCN 6			PGTW
5	231032	18.2N 141.8E	PCN 6			PGTW
* 6	231200	18.5N 141.0E	PCN 6			PGTW
* 7	231248	18.5N 141.3E	PCN 6			PGTW
* 8	231600	18.4N 142.0E	PCN 6	T1.0/1.0	INIT OBS	PGTW
* 9	231757	18.7N 142.3E	PCN 6			PGTW
* 10	231757	18.3N 143.0E	PCN 5			RODN
11	232053	16.7N 142.6E	PCN 6			PGTW
12	232312	17.1N 142.7E	PCN 6			PGTW
13	240000	16.6N 142.7E	PCN 6			PGTW
14	240300	16.9N 143.3E	PCN 6	T2.5/2.5 /D1.5/24HRS		PGTW
15	240501	17.0N 143.4E	PCN 4			PGTW
16	240501	17.2N 143.0E	PCN 6	T2.0/2.0	INIT OBS	RPMK
17	240900	17.4N 143.6E	PCN 6			PGTW
18	240933	17.5N 143.6E	PCN 6			PGTW
19	241010	17.6N 144.0E	PCN 5			PGTW
20	241200	17.7N 143.9E	PCN 6			PGTW
21	241227	17.7N 144.1E	PCN 6			PGTW
22	241600	17.9N 144.0E	PCN 6	T2.5/2.5 /D1.5/24HRS		PGTW
23	241747	18.6N 143.6E	PCN 5			PGTW
24	241747	19.6N 144.2E	PCN 6		ULCC FIX	RPMK
25	242032	20.7N 143.9E	PCN 6			PGTW
26	242250	21.1N 144.0E	PCN 4			PGTW
27	242327	21.0N 143.9E	PCN 4			PGTW
28	250450	22.0N 143.9E	PCN 3	T4.0/4.0 /D1.5/26HRS		PGTW
29	250600	22.2N 143.6E	PCN 6			PGTW
30	250912	22.4N 143.2E	PCN 4			PGTW
31	250948	22.5N 143.2E	PCN 6			PGTW
32	251207	22.7N 142.9E	PCN 4			PGTW
33	251348	22.7N 142.8E	PCN 4			PGTW
34	251600	23.6N 142.4E	PCN 6	T3.5/3.5+/D1.0/24HRS		PGTW
35	251736	24.0N 142.5E	PCN 6			PGTW
36	251736	23.8N 142.8E	PCN 6			RODN
37	252011	24.3N 142.4E	PCN 4		ULAC 24.4N 142.2E	PGTW
38	252100	24.4N 142.5E	PCN 4			PGTW
39	252228	24.9N 142.7E	PCN 1		EYE 6 NM	PGTW
40	260048	25.4N 142.6E	PCN 1		EYE 6 NM	PGTW
41	260439	25.7N 142.3E	PCN 3	T5.0/5.0 /D1.0/24HRS	EYE 12 NM	PGTW
42	260851	26.4N 142.1E	PCN 2		10 NM RAGGED EYE	PGTW
43	260926	26.5N 142.0E	PCN 2		ELONGATED RAGGED EYE	PGTW
44	261200	27.0N 142.0E	PCN 2		RAGGED EYE	PGTW
45	261328	27.0N 141.9E	PCN 1		ELONGATED EYE	PGTW
* 46	261600	27.2N 141.7E	PCN 2	T5.0/5.0-/D1.5/24HRS	EYE WIDTH 13NM LENGTH 18NM	PGTW
* 47	261800	27.5N 141.6E	PCN 2		EYE WIDTH 12NM LENGTH 15NM	PGTW
48	261949	27.2N 141.1E	PCN 4		RAGGED EYE	PGTW
49	262100	27.7N 141.5E	PCN 4		EYE FIX	PGTW

50	262206	27.7N	141.8E	PCN 1		EYE WIDTH 12 NM LENGTH 15 NM	PGTW
51	270027	27.9N	141.1E	PCN 1		EYE 12 NM DIA	PGTW
52	270300	28.0N	141.0E	PCN 2	T5.5/5.5-/D0.5/23HRS	EYE 12 NM	PGTW
53	270429	28.2N	140.8E	PCN 2		EYE 12 NM	PGTW
54	270600	28.3N	140.7E	PCN 2		CIRCULAR EYE	PGTW
55	270900	28.5N	140.4E	PCN 2		EYE FIX	PGTW
56	271011	28.5N	140.2E	PCN 1	T5.0/5.0	INIT OBS EYE FIX	RPMK
57	271200	28.3N	140.0E	PCN 2		EYE FIX	PGTW
58	271308	28.2N	139.9E	PCN 2		ELONGATED EYE	RKSO
59	271600	28.1N	139.6E	PCN 2	T5.0/5.0 /S0.0/24HRS	EYE FIX	PGTW
60	271714	28.2N	139.5E	PCN 1		EYE FIX	RKSO
61	271714	28.3N	139.1E	PCN 1		EYE FIX	RODN
62	271800	28.2N	139.5E	PCN 2		EYE FIX	PGTW
63	272100	28.2N	139.1E	PCN 2		EYE FIX	PGTW
64	272109	28.1N	139.2E	PCN 1		EYE FIX	RODN
65	272303	29.0N	135.3E	PCN 1	T4.5/4.5	INIT OBS EYE FIX	RKSO
66	272325	28.1N	139.0E	PCN 1	T5.0/5.0	INIT OBS EYE 20 NM	RODN
67	272325	28.0N	139.2E	PCN 1	T4.5/4.5	INIT OBS	RPMK
68	280000	28.2N	138.8E	PCN 2		EYE FIX	PGTW
69	280300	28.3N	138.3E	PCN 2	T5.0/5.5 /W0.5/24HRS	EYE FIX	PGTW
70	280417	28.2N	137.8E	PCN 1		EYE FIX	RODN
71	280600	28.2N	137.9E	PCN 2		EYE FIX	PGTW
72	280900	28.3N	137.5E	PCN 2		EYE FIX	PGTW
73	280949	28.2N	137.4E	PCN 1		EYE FIX	PGTW
74	281200	28.4N	137.0E	PCN 2		EYE FIX	PGTW
75	281248	28.3N	136.5E	PCN 1		EYE FIX	PGTW
76	281600	28.5N	136.3E	PCN 2	T5.0/5.0-/S0.0/24HRS	EYE FIX	PGTW
77	281800	28.6N	136.1E	PCN 2		EYE FIX	PGTW
78	282048	28.8N	135.6E	PCN 1		EYE FIX	PGTW
79	282303	28.9N	135.2E	PCN 1		EYE FIX	PGTW
80	282347	28.9N	134.8E	PCN 1		EYE FIX	PGTW
81	290128	29.3N	135.1E	PCN 1	T5.0/5.0 /S0.0/26HRS	EYE 12 NM DIA	RODN
82	290128	29.3N	134.9E	PCN 1	T4.5/4.5 /S0.0/26HRS	EYE FIX	RPMK
83	290300	29.3N	134.4E	PCN 2		EYE FIX	PGTW
84	290407	29.5N	134.2E	PCN 1	T4.5/5.0 /W0.5/25HRS	EYE FIX	PGTW
85	290549	29.7N	133.6E	PCN 1		EYE FIX	RPMK
86	290600	29.6N	133.8E	PCN 2		EYE FIX	PGTW
87	290928	29.9N	132.6E	PCN 1		EYE FIX	PGTW
88	291002	30.0N	132.6E	PCN 1		EYE 5 NM	PGTW
89	291200	30.0N	132.1E	PCN 4			PGTW
90	291600	30.2N	130.6E	PCN 6	T4.0/5.0 /W1.0/24HRS		PGTW
91	291800	30.4N	130.0E	PCN 6		ULCC FIX	PGTW
92	292100	30.8N	129.1E	PCN 6			PGTW
93	292208	30.4N	128.7E	PCN 3			RODN
94	292241	30.4N	128.4E	PCN 5	T3.5/3.5 /W1.0/21HRS		RODN
95	300000	30.4N	128.2E	PCN 4			PGTW
96	300108	30.4N	128.0E	PCN 5			PGTW
97	300538	30.3N	126.6E	PCN 5	T3.5/4.5 /W1.0/28HRS		RPMK
98	300600	30.3N	126.6E	PCN 6	T4.5/4.5 /S0.0/26HRS		PGTW
99	300900	29.9N	126.2E	PCN 4		PART EXP LLCC	PGTW
100	301048	30.0N	125.7E	PCN 1		EYE FIX	RKSO
101	301121	30.2N	125.9E	PCN 3			RKSO
102	301121	29.8N	125.6E	PCN 5			RODN
103	301200	29.9N	125.7E	PCN 6			PGTW
104	301348	29.8N	125.0E	PCN 5			PGTW
105	301600	29.7N	125.0E	PCN 6	T3.0/4.0-/W1.0/24HRS		PGTW
106	301824	29.7N	125.3E	PCN 6			PGTW
107	301824	29.8N	125.3E	PCN 5			RPMK
108	302100	29.9N	125.7E	PCN 6			PGTW
109	310001	29.7N	126.1E	PCN 5	T2.5/3.5-/W1.0/23HRS		RODN
110	310001	30.4N	125.7E	PCN 5	T3.0/3.0	INIT OBS	RKSO
111	310001	30.1N	126.1E	PCN 5			RPMK
112	310048	30.1N	126.3E	PCN 3			RKSO
113	310048	30.1N	126.3E	PCN 6			PGTW
114	310300	30.5N	126.7E	PCN 6			PGTW
115	310527	30.7N	127.2E	PCN 6			PGTW
116	310527	30.9N	127.6E	PCN 5	T2.5/3.5 /W1.0/24HRS		RPMK
117	310900	32.2N	128.2E	PCN 6			PGTW
118	311027	32.5N	129.0E	PCN 6			RODN
119	311059	32.3N	128.8E	PCN 5			RPMK
120	311200	32.4N	129.0E	PCN 6			PGTW
121	311328	32.5N	129.2E	PCN 4			PGTW
122	311600	33.3N	129.3E	PCN 6	T2.5/3.0 /W0.5/24HRS		PGTW
123	311800	34.4N	129.3E	PCN 6			PGTW
124	311813	34.3N	129.8E	PCN 5			RPMK
125	312100	34.9N	130.3E	PCN 6		ULCC FIX	PGTW
126	312339	35.4N	131.7E	PCN 5	T2.0/2.5 /W0.5/24HRS		RODN
127	010000	35.5N	131.3E	PCN 6		ULCC FIX	PGTW
128	010027	35.7N	132.2E	PCN 5			RODN
129	010300	36.2N	132.9E	PCN 6		ULCC FIX	PGTW
130	010517	36.6N	133.6E	PCN 5			RODN
131	010600	36.7N	133.6E	PCN 6	T1.5/2.5 /W1.0/29HRS	ULCC FIX	PGTW
132	011005	37.8N	136.0E	PCN 3			RKSO
133	011037	37.7N	136.2E	PCN 5			RODN
134	011037	38.0N	136.3E	PCN 3			RKSO
135	011200	37.6N	136.7E	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	232249	16.9N 143.1E	1500FT		1000	55 120 30	190 55 120 03	4 2			+25 +28 +24	1
2	240735	17.6N 143.6E	1500FT		993	45 160 10		5 1			+25 +25 +19	2
3	240836	17.6N 143.6E	1500FT		992	50 020 15		5 1			+24 +25 +20	2
4	242055	20.3N 144.1E	700MB	2979		65 040 30	290 61 180 26	5 1	CIRCULAR	20	+11 +15 + 8	3
5	242340	20.9N 143.9E	700MB	2955		80 130 10	200 77 130 10	5 2	CIRCULAR	15	+11 +14 + 8	3
6	250530	21.9N 143.5E	700MB	2924	978	70 170 20	110 77 030 10	8 10			+ +18 +10	5
7	250806	22.2N 143.4E	700MB	2910	978	70 180 15	300 51 200 20	10 5	CIRCULAR	10	+11 +16 +10	5
8	252115	24.6N 142.6E	700MB	2916		80 180 10	240 78 190 7	2 2	CIRCULAR	30	+14 +16 +10	6
9	252347	25.0N 142.5E	700MB	2884	974	85 150 10	050 58 120 11	2 5	CIRCULAR	30	+ 9 +17 +10	6
10	260909	26.4N 142.2E	700MB	2810		30 200 17	300 64 200 17	1 4	ELLIPTICAL	20 15 050	+12 +18 + 6	8
11	261148	26.8N 142.0E	700MB	2809	967		200 60 290 10	1 1	CIRCULAR	23	+10 +16 + 9	8
12	262150	27.8N 141.3E	700MB	2762		45 040 40	210 90 140 16	12 2	CIRCULAR	14	+ +17 + 7	9
13	262354	27.8N 141.1E	700MB	2783	965	60 060 5	290 60 220 12	15 2	CIRCULAR	13	+11 +17 + 5	9
14	270857	28.3N 140.4E	700MB	2772		70 100 5	160 55 080 35	5 2	CIRCULAR	10	+11 +16 + 4	10
15	271152	28.2N 140.1E	700MB	2785			080 55 010 50	5 5	ELLIPTICAL	20 10 360	+11 +14 + 5	10
16	272018	28.3N 139.4E	700MB	2791		40 040 30	130 57 040 15	10 2	CIRCULAR	10	+11 +14 + 9	11
17	272331	28.2N 138.8E	700MB	2799	967	65 140 8	050 60 340 15	7 2	CIRCULAR	15	+11 +14 + 7	11
18	280830	28.2N 137.5E	700MB	2749	960	90 170 2	320 57 270 30	10 1	CIRCULAR	10	+12 +17 + 7	12
19	281101	28.3N 137.1E	700MB	2752	961		130 83 030 30	8 5	CIRCULAR	14	+12 +15 + 7	12
20	282232	28.8N 135.3E	700MB	2695	957	80 180 8	300 88 240 1	5 5	CIRCULAR	10	+11 +15 +13	13
21	290607	29.7N 133.6E	700MB	2750	959	45 210 40	270 71 210 15	5 2	CONCENTRIC	08 20	+12 +14 +10	14
22	292035	30.3N 129.0E	700MB	2772		50 030 60	130 90 060 15	4 2	CIRCULAR	10	+11 +18 +12	15
23	292311	30.3N 128.3E	700MB	2768	959	90 090 10	170 86 090 10	3 2	CIRCULAR	10	+11 +22 +10	15
24	300605	30.3N 126.5E	700MB	2810		90 090 5	280 71 200 25	5 2	CIRCULAR	30	+12 +17 +11	16
25	300841	30.2N 126.1E	700MB	2848		70 120 5	110 88 030 10	5 1			+11 +20 +10	16
26	310909	31.7N 127.8E	700MB	3024		40 180 30	160 32 060 60	5 2	CIRCULAR	20	+12 +15 +10	17
27	311148	32.5N 128.7E	700MB	3041	986		230 44 140 60	3 5			+13 +14 +10	17

28	312107	34.9N 130.7E	700MB	3040	35 180	5	210	60 060	60	5	2	+11 +12 + 8	18
29	312318	35.4N 131.5E	700MB	3052	35 300	15	170	40 040	45	5	4	+10 +11 + 7	18
30	010523	36.9N 133.5E	700MB	3097	45 170	60	190	51 100	50	2	20	+10 + 9 + 9	19
31	010821	37.2N 135.3E	700MB	3086	40 190	35	380	47 180	50	2	20	+ 9 + 9 + 9	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	290400	29.4N 134.1E	LAND				20311 53116		30.6N 131.0E	47869
2	290500	29.4N 133.7E	LAND				20311 52819		30.6N 131.0E	47869
3	290600	29.5N 133.6E	LAND				20311 52911		30.6N 131.0E	47869
4	290700	29.6N 133.3E	LAND				20311 52916		30.6N 131.0E	47869
5	290800	29.7N 133.1E	LAND				20311 52916		30.6N 131.0E	47869
6	290800	29.8N 133.1E	LAND	GOOD		30		MOV 2825	31.3N 131.9E	
7	290900	29.8N 132.8E	LAND				20311 52916		30.6N 131.0E	47869
8	290900	29.8N 132.9E	LAND				10301 52816		28.4N 129.5E	47909
9	290900	29.8N 133.0E	LAND	GOOD		25		MOV 3025	31.3N 131.9E	
10	291000	29.9N 132.6E	LAND				10311 52916		28.4N 129.5E	47909
11	291000	29.9N 132.5E	LAND				20432 52816		30.6N 131.0E	47869
12	291000	29.9N 132.5E	LAND	GOOD		25		MOV 3040	31.3N 131.9E	
13	291100	29.9N 132.1E	LAND				20411 52819		30.6N 131.0E	47869
14	291100	30.0N 132.2E	LAND				10311 52819		28.4N 129.5E	47909
15	291100	30.0N 132.2E	LAND	GOOD		20		MOV 2930	31.3N 131.9E	
16	291200	30.0N 131.9E	LAND				10311 52816		28.4N 129.5E	47909
17	291200	30.0N 131.8E	LAND				20512 52816		30.6N 131.0E	47869
18	291200	30.0N 131.9E	LAND	GOOD		20		MOV 2830	31.3N 131.9E	
19	291300	30.1N 131.4E	LAND				20322 52922		30.6N 131.0E	47869
20	291300	30.1N 131.6E	LAND				10311 52819		28.4N 129.5E	47909
21	291300	30.1N 131.5E	LAND	GOOD		20		MOV 2930	31.3N 131.9E	
22	291400	30.1N 131.2E	LAND				10341 52722		28.4N 129.5E	47909
23	291400	30.1N 131.0E	LAND				20311 52722		30.6N 131.0E	47869
24	291400	30.1N 131.2E	LAND	GOOD		20		MOV 2835	31.3N 131.9E	
25	291500	30.1N 130.7E	LAND				20311 52816		30.6N 131.0E	47869
26	291500	30.1N 130.8E	LAND				10311 52722		28.4N 129.5E	47909
27	291500	30.1N 130.8E	LAND	GOOD		15		MOV 2830	31.3N 131.9E	
28	291600	30.2N 130.5E	LAND				25/51 52922		28.4N 129.5E	47909
29	291600	30.2N 130.3E	LAND				20311 52922		30.6N 131.0E	47869
30	291600	30.3N 130.4E	LAND	GOOD		10		MOV 2940	31.3N 131.9E	
31	291700	30.3N 130.0E	LAND				20311 52819		30.6N 131.0E	47869
32	291700	30.3N 130.1E	LAND				20141 52822		28.4N 129.5E	47909
33	291700	30.3N 130.0E	LAND	GOOD		5		MOV 2730	31.3N 131.9E	
34	291800	30.3N 129.7E	LAND				20311 52816		30.6N 131.0E	47869
35	291800	30.4N 129.5E	LAND	GOOD		20		MOV 2940	34.2N 130.8E	47762
36	291300	30.3N 129.8E	LAND				10271 52716		28.4N 129.5E	47909
37	291900	30.3N 129.5E	LAND				10212 52719		28.4N 129.5E	47909
38	291900	30.2N 129.4E	LAND	GOOD		10		MOV 2830	34.2N 130.8E	47762
39	291900	30.3N 129.4E	LAND				20312 52716		30.6N 131.0E	47869
40	292000	30.3N 129.2E	LAND	GOOD		10		MOV 2830	34.2N 130.8E	47762
41	292100	30.4N 128.8E	LAND				20312 52816		30.6N 131.0E	47869
42	292100	30.3N 128.9E	LAND	GOOD		20		MOV 2830	34.2N 130.8E	47762
43	292200	30.4N 128.5E	LAND				20312 52714		30.6N 131.0E	47869
44	292200	30.3N 128.5E	LAND	GOOD		20		MOV 2830	34.2N 130.8E	47762
45	292200	30.3N 128.6E	LAND				21311 52716		28.4N 129.5E	47909
46	292300	30.5N 128.3E	LAND				21311 53016		28.4N 129.5E	47909
47	292300	30.3N 128.2E	LAND	GOOD		20		MOV 2830	34.2N 130.8E	47762
48	292300	30.4N 128.2E	LAND				20432 52716		30.6N 131.0E	47869
49	300000	30.4N 127.9E	LAND				20412 52716		30.6N 131.0E	47869
50	300000	30.3N 128.0E	LAND	GOOD		15		MOV 2820	34.2N 130.8E	47762
51	300000	30.4N 128.0E	LAND				20612 52519		28.4N 129.5E	47909
52	300100	30.4N 127.7E	LAND				22612 52713		28.4N 129.5E	47909
53	300100	30.3N 127.7E	LAND	GOOD		30		MOV 2820	34.2N 130.8E	47762
54	300100	30.4N 127.5E	LAND				20532 52719		30.6N 131.0E	47869
55	300200	30.3N 127.4E	LAND				22612 52616		28.4N 129.5E	47909
56	300200	30.4N 127.1E	LAND				20432 52722		30.6N 131.0E	47869
57	300200	30.3N 127.4E	LAND	GOOD		35		MOV 2720	32.7N 128.8E	47844
58	300300	30.4N 127.0E	LAND				20512 52708		30.6N 131.0E	47869
59	300300	30.4N 127.2E	LAND				21512 52811		28.4N 129.5E	47909
60	300300	30.3N 127.1E	LAND	GOOD		35		MOV 2725	32.7N 128.8E	47844
61	300400	30.4N 127.0E	LAND				52511 52711		28.4N 129.5E	47909
62	300400	30.3N 127.0E	LAND	GOOD		30		MOV 2720	32.7N 128.8E	47844
63	300500	30.4N 126.7E	LAND				52711 52813		28.4N 129.5E	47909
64	300500	30.3N 126.8E	LAND	GOOD		30		MOV 2720	32.7N 128.8E	47844
65	300600	30.3N 126.5E	LAND				50411 52611		28.4N 129.5E	47909
66	300600	30.2N 126.6E	LAND	FAIR		30		MOV 2820	32.7N 128.8E	47844
67	310900	31.8N 128.2E	LAND				2061/ 50613		33.4N 130.3E	47806
68	310900	31.8N 128.2E	LAND				2061/ 50613		30.6N 131.0E	47869
69	311000	31.9N 128.6E	LAND				2286/ 50719		33.4N 130.3E	47806
70	311000	31.9N 128.6E	LAND				2286/ 50719		30.6N 131.0E	47869
71	311100	32.3N 128.7E	LAND				25/// 50222		33.4N 130.3E	47806
72	311100	32.4N 128.7E	LAND				55/41 50322		30.6N 131.0E	47869
73	311200	32.6N 128.8E	LAND				6//// 50222		33.4N 130.3E	47806
74	311200	32.5N 128.8E	LAND				25/41 50611		30.6N 131.0E	47869
75	311300	32.7N 129.0E	LAND				6//// 50511		33.4N 130.3E	47806
76	311300	32.9N 129.1E	LAND				55/61 50327		30.6N 131.0E	47869
77	311400	32.9N 129.2E	LAND				6//// 50316		33.4N 130.3E	47806
78	311500	33.2N 129.5E	LAND				6//// 50522		33.4N 130.3E	47806
79	311600	33.6N 129.7E	LAND				225/1 5////		34.3N 132.6E	47792
80	311600	33.6N 129.6E	LAND				6//// 50124		33.4N 130.3E	47806
81	311700	34.0N 129.6E	LAND				22831 53619		34.3N 132.6E	47792
82	311700	33.8N 129.7E	LAND				2031/ 50116		33.4N 130.3E	47806
83	311705	34.0N 129.7E	LAND	FAIR					33.8N 130.3E	47803
84	311800	34.1N 130.0E	LAND				2151/ 50422		33.4N 130.3E	47806
85	311800	34.1N 130.1E	LAND				22871 50622		34.3N 132.6E	47792
86	311810	34.1N 130.0E	LAND	FAIR					33.8N 130.3E	47803
87	311900	34.5N 130.2E	LAND				12871 50222		34.3N 132.6E	47792
88	311900	34.3N 130.2E	LAND				2251/ 50422		33.4N 130.3E	47806
89	311910	34.3N 130.3E	LAND	FAIR					33.8N 130.3E	47803
90	312000	34.6N 130.4E	LAND	FAIR					33.8N 130.3E	47803
91	312000	34.5N 130.4E	LAND				24/// 50416		33.4N 130.3E	47806
92	312000	34.6N 130.4E	LAND				12811 50511		34.3N 132.6E	47792
93	312000	34.5N 130.6E	LAND				32901 /////		35.5N 133.1E	47791
94	312100	34.7N 130.7E	LAND	FAIR					33.8N 130.3E	47803
95	312100	34.7N 130.7E	LAND				24/1/ 50522		33.4N 130.3E	47806
96	312100	34.7N 130.7E	LAND				24651 50314		35.5N 133.1E	47791
97	312100	34.8N 130.7E	LAND				12811 50519		34.3N 132.6E	47792
98	312200	35.0N 131.0E	LAND				12811 50519		34.3N 132.6E	47792
99	312200	34.9N 131.0E	LAND				11791 50522		35.5N 133.1E	47791
100	312200	34.9N 131.0E	LAND				24/1/ 50519		33.4N 130.3E	47806
101	312300	35.2N 131.4E	LAND				12811 50522		34.3N 132.6E	47792
102	312300	35.2N 131.4E	LAND				2//1/ 50524		33.4N 130.3E	47806
103	010000	35.4N 131.8E	LAND				12871 50524		34.3N 132.6E	47792
104	010000	35.4N 131.8E	LAND				2183/ 50627		33.4N 130.3E	47806
105	010000	35.4N 131.7E	LAND				11721 50522		35.5N 133.1E	47791
106	010000	35.3N 131.8E	LAND	GOOD		25		MOV 0450	35.6N 133.2E	47743
107	010100	35.7N 132.1E	LAND				12521 50419		34.3N 132.6E	47792
108	010100	35.6N 132.0E	LAND				11811 50422		35.5N 133.1E	47791
109	010100	36.2N 132.9E	LAND				3284/ 50522		36.2N 136.2E	47705
110	010100	35.6N 132.1E	LAND				3284/ 50522		33.4N 130.3E	47806
111	010200	35.7N 132.7E	LAND				65/// 50838		35.5N 133.1E	47791
112	010200	35.9N 132.4E	LAND				12521 50519		34.3N 132.6E	47792
113	010200	36.6N 133.5E	LAND				6///1 50538		36.2N 136.2E	47705
114	010200	35.9N 132.5E	LAND				6//// 50524		33.4N 130.3E	47806
115	010300	35.9N 132.8E	LAND				65/// 50316		35.5N 133.1E	47791
116	010300	36.0N 132.8E	LAND	GOOD		25		MOV 0450	35.6N 133.2E	47743
117	010300	36.0N 133.1E	LAND				6//// 50727		33.4N 130.3E	47806
118	010300	36.1N 132.8E	LAND				10411 50519		34.3N 132.6E	47792
119	010300	35.9N 132.8E	LAND				5///3 /////		36.2N 136.2E	47705
120	010400	36.1N 133.4E	LAND				5///3 50630		36.2N 136.2E	47705
121	010400	36.2N 132.8E	LAND				///// 40622		34.6N 135.7E	47773
122	010400	36.1N 133.4E	LAND				5///3 50630		35.5N 133.1E	47791
123	010400	36.2N 133.3E	LAND				10411 50622		34.3N 132.6E	47792
124	010500	36.5N 133.8E	LAND				20341 50622		34.3N 132.6E	47792
125	010500	36.5N 133.5E	LAND				///// 40532		34.6N 135.7E	47773
126	010500	36.4N 133.7E	LAND				65/// 50632		35.5N 133.1E	47791
127	010500	36.3N 133.8E	LAND				5///1 50725		36.2N 136.2E	47705
128	010600	36.8N 134.2E	LAND				75//1 50524		34.3N 132.6E	47792
129	010600	36.6N 134.2E	LAND				///// 50727		34.6N 135.7E	47773

130	010600	36.5N	134.5E	LAND		5///1	50730	36.2N	136.2E	47705
131	010600	36.4N	134.3E	LAND		65///	50922	35.5N	133.1E	47791
132	010600	36.7N	133.9E	LAND	POOR			35.8N	135.3E	
133	010700	36.5N	134.5E	LAND		65///	50716	35.5N	133.1E	47791
134	010700	36.8N	134.8E	LAND		/////	50632	34.6N	135.7E	47773
135	010700	36.5N	134.9E	LAND		5///1	60725	36.2N	136.2E	47705
136	010800	36.8N	134.9E	LAND		65///	50527	35.5N	133.1E	47791
137	010900	37.1N	135.5E	LAND		/////	/////	37.7N	138.8E	47572
138	011000	37.2N	136.0E	LAND		/////	/////	37.7N	138.8E	47572
139	011100	37.3N	136.4E	LAND		/////	/////	37.7N	138.8E	47572
140	011200	37.6N	137.0E	LAND		/////	/////	37.7N	138.8E	47572
141	011300	37.6N	137.2E	LAND		/////	/////	37.7N	138.8E	47572
142	011400	37.6N	137.6E	LAND		/////	/////	37.7N	138.8E	47572
143	011500	37.7N	138.4E	LAND		/////	/////	37.7N	138.8E	47572
144	313200	35.2N	131.4E	LAND		12811	50624	35.5N	133.1E	47791

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

TYPHOON PAT
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
082700Z	21.3	125.8	45	21.3	126.2	45.	22.	0.	22.1	125.2	65.	204.	5.	22.9	123.8	75.	355.	-5.	23.2	121.6	85.	541.	0.
082706Z	21.6	126.6	55	21.3	126.2	55.	29.	0.	21.9	125.5	75.	223.	10.	22.5	124.4	85.	347.	5.	23.1	123.3	90.	485.	0.
082712Z	21.9	127.4	55	21.8	127.1	55.	18.	0.	22.8	128.8	75.	53.	5.	24.3	127.3	90.	191.	10.	25.2	124.8	90.	383.	-5.
082718Z	22.3	128.2	55	22.0	127.7	60.	33.	5.	23.4	128.6	80.	72.	5.	24.5	126.7	90.	230.	5.	25.5	124.2	90.	457.	-5.
082800Z	22.8	128.8	60	22.7	128.9	60.	8.	0.	25.4	129.8	80.	110.	0.	27.0	127.3	90.	217.	5.	27.4	124.2	90.	463.	5.
082806Z	23.1	129.3	65	23.2	129.4	65.	8.	0.	25.9	129.8	85.	126.	5.	27.5	127.3	90.	198.	0.	28.4	124.3	90.	539.	15.
082812Z	23.3	129.6	70	23.4	130.0	70.	23.	0.	25.6	131.1	85.	80.	5.	27.8	129.2	90.	100.	-5.	30.0	126.6	90.	542.	20.
082818Z	23.4	129.9	75	23.6	130.5	70.	35.	-5.	26.3	130.7	80.	91.	-5.	28.4	128.6	90.	174.	-5.	30.5	126.0	90.	702.	30.
082900Z	23.6	130.2	80	23.6	130.2	70.	0.	-10.	24.7	131.0	80.	66.	-5.	26.8	130.2	90.	384.	5.	0.0	0.0	0.	-0.	0.
082906Z	23.9	130.5	80	23.8	130.4	75.	8.	-5.	25.2	130.8	90.	120.	0.	27.3	129.6	95.	496.	20.	0.0	0.0	0.	-0.	0.
082912Z	24.3	130.8	80	24.4	130.9	75.	8.	-5.	27.0	130.6	90.	103.	-5.	29.3	128.1	95.	546.	25.	0.0	0.0	0.	-0.	0.
082918Z	24.8	130.9	85	24.7	131.1	80.	12.	-5.	27.0	130.7	90.	235.	-5.	28.4	129.2	95.	736.	35.	0.0	0.0	0.	-0.	0.
083000Z	25.8	131.1	85	25.8	131.2	80.	5.	-5.	28.3	129.2	90.	298.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083006Z	27.2	131.0	90	27.1	130.8	80.	12.	-10.	30.0	127.2	90.	377.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083012Z	28.7	130.8	95	28.7	130.7	90.	5.	-5.	35.0	130.6	75.	182.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083018Z	30.9	130.3	95	30.9	130.3	105.	0.	10.	37.5	134.2	65.	140.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083100Z	33.2	130.1	85	33.0	130.1	95.	12.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083106Z	35.5	130.8	75	35.4	130.7	85.	8.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083112Z	37.7	132.3	70	37.5	131.9	75.	22.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083118Z	39.8	134.7	60	39.5	133.8	70.	45.	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	16.	155.	331.	514.	16.	155.	331.	514.
AVG RIGHT ANGLE ERROR	8.	44.	122.	259.	8.	44.	122.	259.
AVG INTENSITY MAGNITUDE ERROR	5.	5.	10.	10.	5.	5.	10.	10.
AVG INTENSITY BIAS	0.	3.	8.	8.	0.	3.	8.	8.
NUMBER OF FORECASTS	20	16	12	8	20	16	12	8

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1337. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 12. KNOTS

TYPHOON PAT
FIX POSITIONS FOR CYCLONE NO. 13

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	241747	23.0N 123.5E	PCN 5	T1.0/1.0	INIT OBS	PGTW
2	250108	23.3N 124.4E	PCN 6			PGTW
3	251348	23.5N 122.8E	PCN 4	T1.0/1.0 /S0.0/20HRS	EXP LLCC	PGTW
4	252152	23.1N 122.0E	PCN 5	T1.5/1.5	INIT OBS	RPMK
5	252152	23.1N 122.0E	PCN 5	T1.5/1.5	INIT OBS	RODN
6	260009	22.7N 121.9E	PCN 5			RPMK
7	260009	22.7N 121.9E	PCN 5			RODN
8	260229	22.3N 122.1E	PCN 5			RPMK
9	260229	22.3N 122.1E	PCN 5			RODN
10	261328	21.3N 124.9E	PCN 6			PGTW
11	261907	20.6N 126.0E	PCN 6		ULCC FIX	RODN
12	262131	21.6N 126.0E	PCN 5	T2.5/2.5	INIT OBS	RODN
13	262347	21.4N 126.0E	PCN 5	T2.5/2.5 /D1.0/26HRS		RPMK
14	270000	21.1N 125.9E	PCN 6			PGTW
15	270209	21.1N 126.1E	PCN 5		EXP LLCC	RPMK
16	270300	21.0N 126.3E	PCN 6	T3.0/3.0	INIT OBS	PGTW
17	270600	21.4N 126.3E	PCN 6			PGTW
18	270611	21.6N 126.7E	PCN 5			RPMK
19	270900	21.8N 127.1E	PCN 6			PGTW
20	271011	21.9N 127.5E	PCN 5			RPMK
21	271200	22.1N 127.5E	PCN 6			PGTW
22	271449	22.0N 127.4E	PCN 5			RKSO
23	271600	21.7N 128.1E	PCN 6	T3.0/3.0	INIT OBS	PGTW
24	271800	22.0N 128.1E	PCN 6			PGTW
25	271856	22.4N 128.0E	PCN 5			RKSO
26	272009	22.5N 129.1E	PCN 3		EXP LLCC	RODN
27	272100	22.8N 128.3E	PCN 6			PGTW
28	272325	23.1N 129.3E	PCN 3	T3.5/3.5 /D1.0/24HRS		RPMK
29	272325	22.7N 129.3E	PCN 5	T3.5/3.5 /D1.0/26HRS		RODN
30	280000	22.7N 129.3E	PCN 6			PGTW
31	280149	23.1N 129.3E	PCN 3			RPMK
32	280300	23.1N 129.2E	PCN 4	T4.0/4.0 /D1.0/24HRS		PGTW
33	280600	22.9N 129.5E	PCN 5		EYE FORMING	RPMK
34	280600	23.0N 129.4E	PCN 3	T3.5/3.5	INIT OBS	RKSO
35	280600	23.0N 129.6E	PCN 4			PGTW
36	280900	23.5N 129.8E	PCN 4			PGTW
37	280949	23.1N 129.8E	PCN 3		DEVELPNG EYE	PGTW
38	281200	23.2N 129.9E	PCN 4			PGTW
39	281429	23.1N 129.9E	PCN 5		PARTIAL EYEWALL	RPMK
40	281429	23.1N 129.9E	PCN 5		PSBL EYEWALL	RODN
41	281600	23.3N 130.2E	PCN 6	T4.0/4.0 /D1.0/24HRS		PGTW
42	281800	23.3N 130.3E	PCN 4			PGTW
43	282048	23.4N 130.4E	PCN 5			PGTW
44	282303	23.5N 130.1E	PCN 5			PGTW
45	282303	23.5N 129.8E	PCN 2			RKSO
46	290128	23.6N 130.4E	PCN 3		BANDING EYE FORMING	PGTW
47	290128	23.7N 130.4E	PCN 1	T4.5/4.5 /D1.0/26HRS	RAGGED EYE LARGE EYEWALL	RPMK
48	290128	23.7N 130.5E	PCN 1	T4.0/4.0 /D0.5/26HRS	EYE FORMING	RODN
49	290300	23.8N 130.4E	PCN 2		BANDING EYE	PGTW
50	290549	23.8N 130.4E	PCN 1		RAGGED EYE	RPMK
51	290549	23.8N 130.4E	PCN 1	T4.5/4.5 /D0.5/27HRS	BANDING EYE	PGTW
52	290549	23.8N 130.4E	PCN 1			RODN
53	290928	24.0N 130.5E	PCN 2		EYE FIX	PGTW
54	291002	24.1N 130.7E	PCN 1		18 NM RAGGED EYE	PGTW
55	291200	24.3N 130.8E	PCN 2			PGTW
56	291409	24.4N 130.8E	PCN 1		19 NM EYE	PGTW
57	291600	24.5N 130.9E	PCN 2	T4.5/4.5 /D0.5/24HRS	STADIUM EYE 25NM INNER EYE 6N	PGTW
58	291834	24.8N 131.1E	PCN 1			PGTW
59	292100	25.3N 131.2E	PCN 2		EYE FIX	PGTW
60	292208	25.4N 131.4E	PCN 1	T4.0/4.0 /D0.5/24HRS	EYE FIX	RODN
61	292241	25.6N 130.7E	PCN 1	T5.5/5.5 /D1.5/21HRS	SMALL EYE FIX	RODN

62	300000	26.0N 131.2E	PCN 4					PGTW
63	300108	26.2N 131.3E	PCN 1	T4.5/4.5+/S0.0/19HRS		BANDING EYE		PGTW
64	300300	26.6N 131.2E	PCN 2			EYE FIX		PGTW
65	300538	27.2N 131.1E	PCN 2					PGTW
66	300538	27.1N 131.2E	PCN 1	T5.0/5.0 /D0.5/28HRS		RAGGED EYE		RPMK
67	300900	27.9N 131.0E	PCN 2					PGTW
68	300940	28.1N 130.8E	PCN 1					PGTW
69	301048	28.3N 131.0E	PCN 1			EXP LLCC WITHIN EYE		RKSO
70	301121	28.6N 131.0E	PCN 1					RKSO
71	301121	28.6N 131.1E	PCN 1					RODN
72	301200	28.4N 131.0E	PCN 2					PGTW
73	301348	29.3N 130.8E	PCN 1					PGTW
74	301600	30.0N 130.6E	PCN 2	T6.0/6.0-/D1.5/24HRS		EYE FIX		PGTW
75	301823	31.0N 130.4E	PCN 2					PGTW
76	301824	31.0N 130.1E	PCN 1					RPMK
77	302100	31.8N 130.6E	PCN 4					PGTW
78	310000	32.7N 130.1E	PCN 4					PGTW
79	310001	33.4N 130.4E	PCN 3	T5.0/5.0		INIT OBS EYEWALL		RKSO
80	310001	33.1N 130.7E	PCN 6					RPMK
81	310001	33.2N 130.7E	PCN 3					RODN
82	310048	33.6N 130.2E	PCN 5			ULCC FIX		RKSO
83	310300	34.1N 130.7E	PCN 6					PGTW
84	310527	35.4N 131.1E	PCN 6	T5.0/5.0-/S0.0/24HRS		ULCC FIX		RPMK
85	310527	35.6N 131.1E	PCN 5			ULCC FIX		RKSO
86	310900	36.0N 131.7E	PCN 6					PGTW
87	311027	37.7N 132.7E	PCN 6					RODN
88	311059	37.6N 132.7E	PCN 6					RPMK
* 89	311200	37.8N 134.2E	PCN 6					PGTW
90	311328	38.0N 133.2E	PCN 6					PGTW
91	311813	39.2N 134.0E	PCN 5			EXP LLCC		RKSO
92	311813	39.2N 134.0E	PCN 5			EXP LLCC		RPMK
93	312100	41.5N 137.3E	PCN 6			ULCC FIX		PGTW
94	312338	41.6N 136.8E	PCN 3	T2.0/2.0		INIT OBS EXP LLCC		RKSO
95	312339	41.6N 136.8E	PCN 3					RODN
96	010000	42.0N 138.9E	PCN 6			ULCC FIX		PGTW
97	010027	41.5N 137.7E	PCN 3			EXP LLCC		RKSO
98	010027	41.5N 137.7E	PCN 3					RODN
99	010600	42.0N 139.6E	PCN 6	T1.5/1.5		INIT OBS EXP LLCC		PGTW
100	011005	43.0N 144.1E	PCN 5					RKSO
101	011200	42.5N 148.0E	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	260114	21.3N 126.1E	1500FT		987	70 360 25	050 68 360 25	5 3			+26 +26 +25	2
2	272143	22.8N 128.3E	700MB	2961		55 110 80	300 60 200 30	6 20			+11 +11 +11	3
3	280012	22.8N 128.8E	700MB	2951	983	45 360 50	080 45 020 60	10 2			+13 +14 +12 24	3
4	280614	23.2N 129.4E	1500FT		976	60 320 35	070 65 320 35	7 2	CIRCULAR	35	+25 +27 +25	4
5	280910	23.3N 129.7E	1500FT		978	75 360 35	080 68 360 35	5 3	CIRCULAR	35	+26 +27 +25	4
6	290024	23.6N 130.1E	700MB	2885	976	70 060 20	140 62 060 28	5 10	CIRCULAR	30	+11 +14 +10	5
7	290258	23.7N 130.3E	700MB	2879		65 200 10	260 57 320 35	5 5	CIRCULAR	30	+11 +14 +11	5
8	290803	23.9N 130.6E	700MB	2867		55 030 40	100 56 030 40	15 3	CIRCULAR	35	+13 +13 + 7	6
9	291005	24.2N 130.9E	700MB	2868	975	40 200 75	330 62 260 30	6 3	CIRCULAR	35	+12 +14 + 6	6
10	292149	25.5N 131.1E	700MB	2851	971	65 040 60	140 85 040 60	10 4	ELLIPTICAL	40 25 170	+11 +15 + 8	7
11	300023	25.9N 131.1E	700MB	2849	972	70 120 50	350 75 280 35	5 5	ELLIPTICAL	35 25 180	+12 +17 + 8	7
12	300857	28.0N 130.9E	700MB	2767		60 230 40	150 83 060 30	4 3	CIRCULAR	35	+14 +17 +14	8
13	301035	28.4N 130.7E	700MB	2761	961		240 65 130 30	4 2	CIRCULAR	35	+13 +16 +14	8
14	302133	32.1N 130.0E	700MB	2843		65 320 110	250 75 150 10	1 2	CIRCULAR	30	+11 +18 +10	9
15	302335	32.9N 130.2E	700MB	2885		45 240 40	240 83 210 10	2 5			+10 +15 +11	9
16	310836	36.2N 131.0E	700MB	2931	978	75 080 66	210 85 080 60	5 3			+17 +19 + 9	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	270000	21.5N 125.5E	LAND				6///3 42608		24.3N 124.2E	47918
2	270300	21.6N 126.1E	LAND				6///2 70811		24.3N 124.2E	47918
3	281900	23.7N 129.8E	LAND				5///1 52111		26.2N 127.8E	47937
4	282000	23.7N 130.0E	LAND				5///2 50911		26.2N 127.8E	47937
5	282100	23.7N 130.1E	LAND				5///2 71304		26.2N 127.8E	47937
6	282200	23.7N 130.1E	LAND				5///2 70905		26.2N 127.8E	47937
7	282300	23.8N 130.2E	LAND				5///2 70604		26.2N 127.8E	47937
8	290000	23.8N 130.3E	LAND				6///2 70505		26.2N 127.8E	47937
9	290100	23.8N 130.4E	LAND				6///2 70506		26.2N 127.8E	47937
10	291500	24.5N 130.9E	LAND				5///1 /////		26.2N 127.8E	47937
11	291600	24.7N 130.9E	LAND				5///3 53410		26.2N 127.8E	47937
12	291900	25.0N 130.9E	LAND				25//3 73606		26.2N 127.8E	47937
13	292100	25.3N 131.0E	LAND				25//2 73611		26.2N 127.8E	47937
14	292200	25.5N 131.0E	LAND				4///2 70111		26.2N 127.8E	47937
15	292300	25.7N 131.1E	LAND				35//2 70112		26.2N 127.8E	47937
16	300000	25.8N 131.1E	LAND				209/2 70111		26.2N 127.8E	47937
17	300100	26.1N 131.1E	LAND				10972 73612		26.2N 127.8E	47937
18	300200	26.4N 131.1E	LAND				10812 73513		26.2N 127.8E	47937
19	300300	26.6N 131.1E	LAND				10912 73515		26.2N 127.8E	47937
20	300400	26.8N 131.0E	LAND				10912 73615		26.2N 127.8E	47937
21	300500	27.0N 131.0E	LAND				20942 73513		26.2N 127.8E	47937
22	300600	27.2N 131.1E	LAND				20912 73612		26.2N 127.8E	47937
23	300700	27.4N 131.1E	LAND				12812 53619		28.4N 129.5E	47909
24	300700	27.6N 130.9E	LAND				20822 73516		26.2N 127.8E	47937
25	300800	27.6N 131.0E	LAND				10913 53516		28.4N 129.5E	47909
26	300800	27.7N 131.1E	LAND				354/2 70115		26.2N 127.8E	47937
27	300900	28.0N 130.8E	LAND				10912 5////		30.6N 131.0E	47869
28	300900	27.9N 130.9E	LAND				10913 53516		28.4N 129.5E	47909
29	300900	28.0N 131.1E	LAND				6///2 73616		26.2N 127.8E	47937
30	301000	28.2N 130.9E	LAND				10913 53616		28.4N 129.5E	47909
31	301000	28.2N 130.8E	LAND				10912 53616		30.6N 131.0E	47869
32	301100	28.5N 130.9E	LAND				10913 53519		28.4N 129.5E	47909
33	301100	28.5N 130.8E	LAND				10912 53616		30.6N 131.0E	47869
34	301200	28.8N 130.8E	LAND				10913 53522		28.4N 129.5E	47909
35	301200	28.8N 130.7E	LAND				10912 53516		30.6N 131.0E	47869
36	301200	28.8N 130.8E	LAND	GOOD		40		MOV 3525	31.3N 131.9E	
37	301300	29.2N 130.6E	LAND				10912 53522		30.6N 131.0E	47869
38	301300	29.1N 130.8E	LAND				10913 53516		28.4N 129.5E	47909
39	301400	29.5N 130.6E	LAND				10912 53619		30.6N 131.0E	47869
40	301400	29.5N 130.7E	LAND				10913 53522		28.4N 129.5E	47909
41	301400	29.4N 130.7E	LAND	GOOD		40		MOV 3525	31.3N 131.9E	
42	301500	29.8N 130.7E	LAND	GOOD		40		MOV 3630	31.3N 131.9E	
43	301600	30.2N 130.5E	LAND				22962 53622		30.6N 131.0E	47869
44	301600	30.2N 130.5E	LAND				11913 53522		28.4N 129.5E	47909
45	301600	30.0N 130.5E	LAND	GOOD		40		MOV 3530	31.3N 131.9E	
46	301700	30.6N 130.5E	LAND				10913 53524		28.4N 129.5E	47909
47	301700	30.6N 130.4E	LAND				10982 53524		30.6N 131.0E	47869
48	301700	30.5N 130.4E	LAND	GOOD		40		MOV 3535	31.3N 131.9E	
49	301800	30.9N 130.3E	LAND				219// /////		33.4N 130.3E	47806
50	301800	30.9N 130.4E	LAND				11912 53619		30.6N 131.0E	47869
51	301800	30.9N 130.4E	LAND				10913 53516		28.4N 129.5E	47909
52	301800	30.9N 130.4E	LAND	GOOD		40		MOV 3640	31.3N 131.9E	
53	301900	31.3N 130.3E	LAND				11912 53522		30.6N 131.0E	47869
54	301900	31.3N 130.3E	LAND				1292/ 53624		33.4N 130.3E	47806
55	301900	31.4N 130.4E	LAND				10913 53530		28.4N 129.5E	47909

56	301900	31.3N	130.3E	LAND	GOOD	40		MOV 3635	31.3N	131.9E	
57	302000	31.7N	130.3E	LAND			20942 53522		28.4N	129.5E	47909
58	302000	31.7N	130.3E	LAND			2182/ 53624		33.4N	130.3E	47806
59	302000	31.7N	130.3E	LAND			11912 53622		30.6N	131.0E	47869
60	302000	31.6N	130.2E	LAND	GOOD	40		MOV 3540	31.3N	131.9E	
61	302100	32.0N	130.2E	LAND			2455/ 53522		33.4N	130.3E	47806
62	302100	32.1N	130.3E	LAND			65/62 53622		30.6N	131.0E	47869
63	302200	32.6N	130.2E	LAND			23/5/ 53632		33.4N	130.3E	47806
64	302300	32.9N	130.2E	LAND			20401 /3622		34.3N	132.6E	47792
65	302300	32.7N	130.1E	LAND			5//// 53319		33.4N	130.3E	47806
66	310000	33.1N	130.2E	LAND			20411 53611		34.3N	132.6E	47792
67	310100	33.8N	130.2E	LAND			20//1 43627		34.3N	132.6E	47792
68	310100	33.5N	130.1E	LAND			5//// 5////		33.4N	130.3E	47806
69	310200	34.0N	130.3E	LAND			229/1 50314		34.3N	132.6E	47792
70	310200	33.9N	130.2E	LAND			6//// 50222		33.4N	130.3E	47806
71	310200	34.0N	130.2E	LAND	POOR				33.8N	130.3E	47803
72	310300	34.3N	130.3E	LAND			6//// 50122		33.4N	130.3E	47806
73	310300	34.3N	130.4E	LAND			60/61 53622		34.3N	132.6E	47792
74	310300	34.1N	130.0E	LAND	FAIR				33.8N	130.3E	47803
75	310400	34.6N	130.4E	LAND			65/41 53622		34.3N	132.6E	47792
76	310400	34.6N	130.3E	LAND			6//// 51024		33.4N	130.3E	47806
77	310400	34.8N	130.7E	LAND			65/// /////		35.5N	133.1E	47791
78	310400	34.5N	130.2E	LAND	FAIR				33.8N	130.3E	47803
79	310500	35.1N	130.7E	LAND			65/// 53616		35.5N	133.1E	47791
80	310500	35.0N	130.4E	LAND			6//// 50222		33.4N	130.3E	47806
81	310600	35.4N	130.7E	LAND			65/// 53619		35.5N	133.1E	47791
82	310600	35.4N	130.7E	LAND			6//// 50324		33.4N	130.3E	47806
83	310800	36.2N	131.2E	LAND			55//2 54038		35.5N	133.1E	47791
84	310800	36.2N	131.4E	LAND			50432 45317		33.4N	130.3E	47806
85	310900	36.5N	131.3E	LAND			55//2 50219		35.5N	133.1E	47791
86	311000	36.8N	131.5E	LAND			55//2 50322		35.5N	133.1E	47791
87	311100	37.2N	131.8E	LAND			55//2 50327		35.5N	133.1E	47791
88	311200	37.6N	132.0E	LAND			55//2 50327		35.5N	133.1E	47791

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	010600	41.8N 141.1E	025	006	47431 47544 47423

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

TROPICAL STORM RUBY
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
082700Z	21.6	139.0	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.
082706Z	22.0	140.0	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.
082712Z	22.3	141.2	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.
082718Z	22.9	142.7	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.
082800Z	23.7	143.6	50	23.8	143.7	50.	8.	0.	27.5	144.7	70.	114.	15.	30.4	143.3	85.	193.	35.	32.1	140.7	85.	330.	40.
082806Z	24.7	143.9	50	24.7	144.1	55.	11.	5.	28.5	144.3	75.	130.	20.	31.1	142.3	85.	192.	35.	32.6	139.5	85.	424.	40.
082812Z	25.7	143.9	50	25.7	144.0	55.	5.	5.	29.3	143.5	80.	120.	25.	31.5	141.6	90.	214.	40.	0.0	0.0	0.	-0.	0.
082818Z	26.8	143.3	55	26.7	143.5	60.	12.	5.	29.7	141.8	80.	92.	25.	31.5	139.3	90.	279.	50.	0.0	0.0	0.	-0.	0.
082900Z	27.9	142.6	55	27.8	142.7	60.	8.	5.	30.6	139.4	65.	97.	15.	31.8	136.2	65.	421.	20.	0.0	0.0	0.	-0.	0.
082906Z	29.0	141.9	55	28.9	142.0	55.	8.	0.	31.3	137.7	65.	170.	15.	32.4	133.3	65.	609.	20.	0.0	0.0	0.	-0.	0.
082912Z	29.9	141.3	55	29.7	141.0	50.	20.	-5.	31.7	136.2	65.	252.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082918Z	30.9	140.7	55	30.9	140.5	50.	10.	-5.	34.0	136.4	60.	221.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083000Z	32.1	140.1	50	32.2	139.9	50.	12.	0.	34.2	134.9	50.	360.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083006Z	33.5	139.8	50	33.5	139.4	55.	20.	5.	38.0	140.9	35.	107.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083012Z	34.7	139.7	50	34.7	139.6	55.	5.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083018Z	36.1	140.1	40	36.0	140.0	45.	8.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083100Z	37.6	141.0	45	37.8	140.7	45.	19.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
083106Z	39.2	142.6	45	39.5	142.3	45.	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 WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	12.	166.	318.	377.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	11.	110.	137.	27.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	17.	33.	40.	0.	0.	0.	0.
AVG INTENSITY BIAS	2.	15.	33.	40.	0.	0.	0.	0.
NUMBER OF FORECASTS	14	10	6	2	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1310. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

TROPICAL STORM RUBY
FIX POSITIONS FOR CYCLONE NO. 14

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	270429	22.0N 139.4E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	270600	22.2N 139.5E	PCN 6			PGTW
3	271200	21.8N 140.4E	PCN 6			PGTW
4	271600	22.2N 141.9E	PCN 6	T1.5/1.5	INIT OBS	PGTW
5	271714	22.0N 142.8E	PCN 5			RKSO
6	271800	21.8N 142.9E	PCN 6			PGTW
* 7	272100	21.3N 143.3E	PCN 6			PGTW
8	272109	22.5N 143.8E	PCN 5			RODN
9	280000	24.0N 143.8E	PCN 6			PGTW
10	280300	24.0N 143.6E	PCN 6	T2.5/2.5 /D1.5/24HRS		PGTW
11	280417	24.4N 144.0E	PCN 5	T2.5/2.5	INIT OBS	RODN
12	280600	24.5N 143.5E	PCN 6			PGTW
13	280900	25.1N 144.3E	PCN 6			PGTW
14	280949	25.7N 144.3E	PCN 6			PGTW
15	281200	25.4N 144.0E	PCN 6			PGTW
16	281248	26.2N 143.5E	PCN 6			PGTW
17	281600	26.3N 143.4E	PCN 6	T3.0/3.0 /D1.5/24HRS	PART EXP LLCC	PGTW
18	281800	26.7N 142.9E	PCN 6			PGTW
19	282048	27.0N 142.9E	PCN 5			PGTW
20	282303	27.5N 142.8E	PCN 5			PGTW
21	282303	27.2N 143.1E	PCN 5	T3.5/3.5	INIT OBS	RKSO
22	282326	32.0N 140.1E	PCN 3	T3.5/3.5	INIT OBS EYE FORMING	RODN
23	282347	27.7N 142.6E	PCN 5			PGTW
24	290407	28.2N 142.7E	PCN 5	T3.0/3.0 /D0.5/25HRS		PGTW
25	290600	28.9N 142.0E	PCN 6			PGTW
26	290928	29.6N 141.3E	PCN 4		EXP LLCC	PGTW
27	291002	29.4N 141.4E	PCN 6			PGTW
28	291227	29.8N 141.0E	PCN 6			PGTW
29	291653	30.5N 140.4E	PCN 5	T2.5/2.5+/S0.0/24HRS		PGTW
30	291800	30.7N 140.4E	PCN 6		ULCC FIX	PGTW
31	292100	31.5N 140.0E	PCN 6			PGTW
32	300000	32.0N 140.2E	PCN 6			PGTW
33	300356	32.9N 139.8E	PCN 5	T3.5/3.5-/D0.5/24HRS		PGTW
34	300538	33.8N 139.7E	PCN 5	T3.0/3.0	INIT OBS	RPMK
35	300600	33.8N 140.0E	PCN 6			PGTW
36	300900	33.8N 139.6E	PCN 6			PGTW
37	300940	34.1N 139.5E	PCN 3		ULCC FIX	PGTW
38	301200	34.7N 139.5E	PCN 6		ULCC FIX	PGTW
39	301600	35.6N 140.0E	PCN 6		ULCC FIX	PGTW
40	301800	36.0N 140.2E	PCN 6		ULCC FIX	PGTW
41	302005	36.8N 140.7E	PCN 6		ULCC FIX	PGTW
42	310000	38.1N 141.0E	PCN 6		ULCC FIX	PGTW
43	310300	38.8N 141.6E	PCN 6			PGTW
44	310600	39.3N 142.5E	PCN 6	T2.5/3.5 /W1.0/26HRS		PGTW
45	310900	39.6N 143.5E	PCN 6			PGTW
46	311200	39.8N 144.7E	PCN 6			PGTW
47	311600	40.2N 146.7E	PCN 6	T2.5/2.5	INIT OBS	PGTW
48	311800	40.4N 148.3E	PCN 6			PGTW
49	311813	40.7N 148.8E	PCN 6		ULCC FIX	RKSO
50	311944	40.5N 149.9E	PCN 6		ULCC FIX	RKSO
51	010000	41.5N 150.3E	PCN 6		EXP LLCC	PGTW
52	010600	42.1N 155.7E	PCN 6	T1.5/2.5 /W1.0/24HRS	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-TATION	EYE DIAM	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	280020	23.9N 143.7E	700MB	2943	982	65 320 10	320 44 320 15	10 5	ELLIPTICAL	090	15 10	+ +15 +10	1
2	282105	27.3N 142.9E	700MB	3003		07 020 15	190 64 090 29	4 3				+11 +19 + 9	2
3	282347	27.8N 142.7E	700MB	3051	992	45 310 50	300 37 210 73	6 4				+15 +19 + 8	2
4	290532	28.9N 142.0E	700MB	3044		40 320 60	090 38 320 60	10 4				+12 +15 +10	3

5	290811	29.2N 141.6E	1500FT		995	45 080	45	160	55 080	45	8	5				+26	+24	+25	25	3
6	292150	31.7N 140.3E	700MB	3110	998	65 030	30	130	60 030	64	5	3				+26	+27	+27		4
7	292336	32.2N 140.0E	700MB	3041		45 130	10	100	36 320	62	5	1	CIRCULAR	30		+14	+17	+12		4
8	300848	34.1N 139.7E	850MB			55 070	47	160	69 060	12	2	3				+17	+21	+21		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	292200	31.7N 140.5E	LAND				20711	53519		35.3N 138.7E	47639
2	292300	32.0N 140.4E	LAND				55/42	53417		35.3N 138.7E	47639
3	292330	32.1N 140.2E	LAND	GOOD		20			MOV 3320	35.2N 140.1E	
4	300000	32.3N 140.2E	LAND				11772	53319		35.3N 138.7E	47639
5	300100	32.4N 139.9E	LAND				11482	53016		35.3N 138.7E	47639
6	300200	32.6N 140.0E	LAND				11741	51016		35.3N 138.7E	47639
7	300300	32.9N 139.9E	LAND				11832	53619		35.3N 138.7E	47639
8	300400	33.1N 139.9E	LAND				10611	53616		35.3N 138.7E	47639
9	300430	31.2N 139.8E	LAND	GOOD		20			MOV 0930	35.2N 140.1E	
10	300500	33.3N 139.7E	LAND	GOOD		20			MOV 3430	35.2N 140.1E	
11	300500	33.3N 139.8E	LAND				11612	53316		35.3N 138.7E	47639
12	300600	33.5N 139.7E	LAND	GOOD		20			MOV 3630	35.2N 140.1E	
13	300600	33.5N 139.7E	LAND				65//2	53511		35.3N 138.7E	47639
14	300700	33.7N 139.7E	LAND	GOOD		10			MOV 3620	35.2N 140.1E	
15	300700	33.7N 139.7E	LAND				////1	53616		35.3N 138.7E	47639
16	300800	33.9N 139.7E	LAND				////1	53611		35.3N 138.7E	47639
17	300830	34.0N 139.7E	LAND	GOOD		20			MOV 3620	35.2N 140.1E	
18	300900	34.2N 139.6E	LAND				65//2	53516		35.3N 138.7E	47639
19	301000	34.3N 139.6E	LAND	GOOD		40			MOV 3625	35.2N 140.1E	
20	301000	34.3N 139.5E	LAND				55//1	53411		35.3N 138.7E	47639
21	301035	34.5N 139.6E	LAND	FAIR					MOV 1715	35.7N 139.3E	47642
22	301100	34.4N 139.4E	LAND	FAIR		40			MOV 3425	35.2N 140.1E	
23	301100	34.5N 139.5E	LAND				55//2	53614		35.3N 138.7E	47639
24	301200	34.7N 139.7E	LAND				6///2	50216		35.3N 138.7E	47639
25	301235	35.0N 139.6E	LAND	FAIR		28			MOV 1810	35.7N 139.3E	47642
26	301300	34.9N 139.7E	LAND				45//3	53611		35.3N 138.7E	47639
27	301400	35.2N 139.8E	LAND				45//3	50216		35.3N 138.7E	47639
28	301435	35.3N 139.7E	LAND	POOR					MOV 1815	35.7N 139.3E	47642
29	301500	35.5N 139.9E	LAND	FAIR					MOV 0240	36.2N 140.4E	47715
30	301500	35.6N 140.0E	LAND				6///2	50227		35.3N 138.7E	47639
31	301535	35.6N 139.8E	LAND	FAIR					MOV 2015	35.7N 139.3E	47642
32	301600	35.7N 139.9E	LAND				45//2	53408		35.3N 138.7E	47639
33	301600	35.7N 139.8E	LAND				75///	/////		37.7N 138.8E	47572
34	301700	36.0N 140.2E	LAND				45//2	50322		35.3N 138.7E	47639
35	301700	36.1N 140.1E	LAND				75///	/////		37.7N 138.8E	47572
36	301800	36.4N 140.2E	LAND				6///2	50122		35.3N 138.7E	47639
37	301800	36.3N 140.3E	LAND				75///	/////		37.7N 138.8E	47572
38	301900	36.6N 140.4E	LAND				6///2	50316		35.3N 138.7E	47639
39	301900	36.5N 140.4E	LAND				75///	/////		37.7N 138.8E	47572
40	301900	36.6N 140.5E	LAND				65//2	536//		38.3N 140.9E	47590
41	301930	37.0N 140.6E	LAND	POOR					MOV 1920	35.7N 139.3E	47642
42	302000	36.7N 140.7E	LAND				75///	/////		37.7N 138.8E	47572
43	302000	37.0N 140.5E	LAND				6///2	50122		35.3N 138.7E	47639
44	302000	36.8N 140.5E	LAND				20272	50222		38.3N 140.9E	47590
45	302033	36.6N 140.7E	LAND	POOR		10			MOV 2120	35.7N 139.3E	47642
46	302100	37.3N 140.8E	LAND				10212	50227		38.3N 140.9E	47590
47	302200	37.4N 141.0E	LAND				75///	/////		37.7N 138.8E	47572
48	302200	37.4N 141.0E	LAND				75///	/////		38.3N 140.9E	47590
49	310000	38.1N 141.1E	LAND				10392	50227		38.3N 140.9E	47590
50	310200	38.6N 141.4E	LAND				55/62	50222		38.3N 140.9E	47590
51	310300	38.9N 141.6E	LAND				55/42	50322		38.3N 140.9E	47590
52	310400	39.1N 141.9E	LAND				54512	50320		38.3N 140.9E	47590

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

TYPHOON SKIP02C
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	POSIT		WIND	DST	POSIT		WIND	DST	POSIT		WIND	DST
083018Z	12.8	180.8	35	12.8	180.5	30.	18.	-5.	13.0	174.5	45.	191.	-10.	13.5	169.6	50.	402.	-20.	14.0	164.6	60.	554.	10.
083100Z	13.6	178.9	35	12.9	179.3	30.	48.	-5.	13.8	174.3	45.	168.	-10.	14.0	168.8	55.	415.	-5.	13.8	163.2	70.	608.	20.
083106Z	14.4	177.5	40	14.5	177.7	35.	13.	-5.	16.2	173.1	50.	162.	-10.	15.0	167.5	60.	434.	10.	14.2	161.5	75.	666.	25.
083112Z	15.1	176.8	45	15.2	176.7	40.	3.	-5.	17.0	172.2	50.	201.	-15.	16.4	166.9	60.	403.	10.	15.4	161.6	75.	621.	25.
083118Z	15.6	176.4	55	15.6	176.2	50.	12.	-5.	17.3	172.9	65.	143.	-5.	17.8	168.3	70.	275.	20.	17.0	162.8	80.	514.	35.
090100Z	16.0	176.1	55	15.8	175.9	55.	17.	0.	16.9	172.8	70.	131.	10.	17.0	167.3	80.	312.	30.	16.1	161.8	90.	589.	45.
090106Z	16.5	175.9	60	15.8	175.9	55.	42.	-5.	17.0	172.7	75.	111.	25.	17.0	167.1	85.	302.	35.	16.0	161.3	95.	630.	55.
090112Z	16.9	175.7	65	17.2	175.6	65.	19.	0.	18.1	173.3	65.	23.	15.	17.4	168.7	80.	204.	30.	17.1	164.5	95.	467.	50.
090118Z	17.2	175.4	70	17.6	175.3	65.	25.	-5.	18.1	172.8	70.	21.	20.	17.5	168.7	80.	206.	35.	17.2	164.5	95.	524.	50.
090200Z	17.5	175.0	60	17.8	174.8	70.	21.	10.	17.8	171.4	75.	79.	25.	17.4	167.3	85.	281.	40.	17.2	163.2	95.	662.	50.
090206Z	17.7	174.5	50	17.7	174.4	60.	6.	10.	17.7	171.3	70.	82.	20.	17.3	166.8	85.	326.	45.	17.1	161.5	95.	809.	50.
090212Z	18.1	173.7	50	18.0	173.3	60.	24.	10.	18.5	169.3	75.	141.	25.	17.9	164.8	85.	426.	40.	17.6	160.0	95.	900.	45.
090218Z	18.3	173.1	50	18.2	172.9	55.	13.	5.	18.8	169.3	65.	131.	20.	18.3	164.5	75.	492.	30.	18.0	159.5	85.	934.	30.
090300Z	18.6	172.5	50	18.4	172.4	50.	13.	0.	19.4	170.4	50.	72.	5.	20.7	168.4	60.	310.	15.	20.7	164.1	65.	642.	10.
090306Z	18.9	172.0	50	18.9	172.0	50.	0.	0.	20.3	170.2	50.	62.	10.	21.0	167.4	60.	412.	15.	20.8	163.6	65.	688.	10.
090312Z	19.4	171.6	50	19.2	171.4	50.	17.	0.	20.5	169.5	55.	117.	10.	21.1	167.2	60.	442.	10.	21.1	163.8	65.	704.	5.
090318Z	19.9	171.3	45	19.8	171.1	50.	13.	5.	21.4	169.4	50.	173.	5.	22.1	167.4	55.	427.	0.	22.2	164.8	60.	668.	-5.
090400Z	20.4	171.1	45	20.5	171.5	50.	23.	5.	22.9	171.1	50.	161.	5.	24.9	170.9	45.	202.	-10.	27.9	172.4	40.	198.	-40.
090406Z	20.9	171.1	40	21.0	171.4	50.	18.	10.	23.0	171.1	45.	195.	0.	25.2	171.2	40.	197.	-15.	28.7	173.4	30.	233.	-45.
090412Z	21.5	171.3	45	21.4	171.4	45.	8.	0.	23.4	171.3	40.	187.	-10.	26.2	171.4	35.	192.	-25.	0.0	0.0	0.	-0.	0.
090418Z	21.6	172.5	45	21.7	172.9	50.	23.	5.	23.2	175.8	40.	99.	-15.	25.1	178.7	40.	292.	-25.	27.2	181.2	40.	484.	-25.
090500Z	21.9	173.8	45	22.0	173.7	50.	8.	5.	23.4	176.5	40.	154.	-15.	25.4	179.3	40.	364.	-40.	0.0	0.0	0.	-0.	0.
090506Z	22.6	174.6	45	22.7	174.6	50.	6.	5.	26.2	177.1	40.	129.	-15.	30.5	179.5	40.	191.	-35.	0.0	0.0	0.	-0.	0.
090512Z	23.6	174.7	50	23.7	175.1	50.	23.	0.	27.7	177.4	50.	142.	-10.	32.4	179.9	45.	144.	-25.	0.0	0.0	0.	-0.	0.
090518Z	24.5	174.7	55	24.7	175.2	55.	30.	0.	28.8	177.6	50.	143.	-15.	33.4	180.4	45.	125.	-20.	0.0	0.0	0.	-0.	0.
090600Z	25.3	174.6	55	25.2	174.6	60.	6.	5.	28.9	174.5	50.	84.	-30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090606Z	26.1	174.7	55	26.0	174.5	60.	12.	5.	29.6	174.8	50.	148.	-25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090612Z	27.2	174.8	60	27.3	174.7	60.	8.	0.	31.5	176.5	50.	121.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090618Z	28.6	174.9	65	28.4	174.9	55.	12.	-10.	32.6	177.4	45.	160.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090700Z	30.2	175.1	80	30.2	175.0	65.	5.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090706Z	31.8	176.1	75	31.9	175.7	70.	21.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090712Z	33.4	177.3	70	33.3	177.3	70.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090718Z	35.0	178.8	65	35.0	178.9	65.	5.	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	16.	129.	311.	605.	16.	129.	311.	605.
AVG RIGHT ANGLE ERROR	12.	85.	248.	473.	12.	85.	248.	473.
AVG INTENSITY MAGNITUDE ERROR	4.	14.	23.	32.	4.	14.	23.	32.
AVG INTENSITY BIAS	0.	-1.	6.	20.	0.	-1.	6.	20.
NUMBER OF FORECASTS	33	29	25	20	33	29	25	20

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1822. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TYPHOON SKIP02C
FIX POSITIONS FOR CYCLONE NO. 2

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	301800	12.9N 179.9E	PCN 6		ULCC FIX	PGTW
2	301824	12.9N 179.3W	PCN 6	T2.5/2.5 /D1.5/25HRS	ULAC 12.6N 179.4W	KGWC
3	302100	13.3N 179.3E	PCN 6		ULCC FIX	PGTW
4	310000	13.7N 178.8E	PCN 4	T2.5/2.5	INIT OBS ULAC 13.7N 178.9E	PGTW
5	310300	14.2N 178.0E	PCN 6			PGTW
6	310600	14.7N 177.6E	PCN 6			PGTW
7	310704	14.4N 177.3E	PCN 6		ULAC 14.8N 177.6E	KGWC
8	310900	14.9N 177.3E	PCN 6			PGTW
9	311005	15.0N 176.9E	PCN 6			KGWC
10	311200	15.2N 176.9E	PCN 6			PGTW
11	311448	15.6N 176.4E	PCN 2		PART EYE WALL ULAC 15.6 177.6	KGWC
12	311600	15.4N 176.7E	PCN 6	T3.5/3.5	INIT OBS	PGTW
13	311800	15.6N 176.5E	PCN 6			PGTW
14	311802	15.6N 176.1E	PCN 6			KGWC
15	312100	15.5N 176.3E	PCN 6		ULCC FIX	PGTW
16	312245	15.7N 176.1E	PCN 2	T3.5/3.5 /D1.0/28HRS	EYE FIX	KGWC
17	312246	15.7N 176.0E	PCN 4		DEVLOPNG EYE	PGTW
18	010000	15.8N 176.0E	PCN 6			PGTW
19	010152	16.0N 176.1E	PCN 2		EYE FIX	KGWC
20	010300	15.8N 176.0E	PCN 6			PGTW
21	010600	16.0N 176.2E	PCN 6	T3.5/3.5 /D1.0/30HRS		PGTW
22	010642	16.6N 175.4E	PCN 6			KGWC
23	010900	16.8N 175.7E	PCN 6			PGTW
24	011126	17.0N 175.9E	PCN 2		EYE FIX	PGTW
25	011126	16.9N 176.0E	PCN 4	T4.5/4.5	INIT OBS PSBL EYE	KGWC
26	011438	17.1N 175.5E	PCN 6			KGWC
27	011600	17.0N 175.5E	PCN 6	T4.5/4.5 /D1.0/24HRS		PGTW
* 28	011741	17.3N 174.4E	PCN 2			KGWC
29	011800	17.2N 175.3E	PCN 6			PGTW
30	012100	17.5N 175.3E	PCN 6			PGTW
31	012225	17.3N 174.6E	PCN 6		ULAC 18.8N 175.3E	KGWC
32	020000	17.4N 175.1E	PCN 4	T4.0/4.0 /D0.5/18HRS		PGTW
33	020300	17.5N 174.8E	PCN 4		EXP LLCC	PGTW
34	020324	17.7N 174.6E	PCN 6		EXP LLCC	PGTW
35	020600	17.8N 174.6E	PCN 4			PGTW
36	020621	17.4N 173.5E	PCN 6			KGWC
37	020900	18.1N 174.3E	PCN 6			PGTW
38	021106	18.1N 173.7E	PCN 6	T4.0/4.5 /W0.5/24HRS		KGWC
39	021200	18.1N 173.8E	PCN 6			PGTW
40	021427	18.1N 173.5E	PCN 6		ULAC 18.7N 173.8E	KGWC
41	021600	18.2N 173.2E	PCN 6			PGTW
42	021800	18.2N 172.8E	PCN 6	T3.5/4.5+/W1.0/26HRS		PGTW
43	021901	18.3N 172.8E	PCN 4		PART EXP LLCC	PGTW
44	022114	18.3N 172.5E	PCN 4		PART EXP LLCC	PGTW
45	022205	18.3N 172.6E	PCN 4	T2.5/2.5 /S0.0/24HRS	EXP LLCC ULAC 19.6N 172.9E	KGWC
46	030000	18.4N 172.5E	PCN 6			PGTW
47	030312	18.8N 172.1E	PCN 6	T3.0/4.0 /W1.0/27HRS		PGTW
48	030312	18.8N 172.2E	PCN 6			KGWC
49	030600	18.9N 172.1E	PCN 4			PGTW
50	030741	19.1N 171.5E	PCN 6		ULAC 20.0N 174.9E	KGWC
51	030900	19.0N 171.8E	PCN 6			PGTW
52	031045	18.7N 171.8E	PCN 6	T4.0/4.0 /S0.0/24HRS	ULAC 18.8N 172.0E	KGWC
53	031200	19.2N 171.4E	PCN 6			PGTW
54	031558	19.3N 170.8E	PCN 6	T3.5/3.5 /S0.0/22HRS		PGTW
55	031558	19.0N 170.7E	PCN 6		ULAC 20.0N 172.4E	KGWC

56	031840	19.3N	171.0E	PCN	6			KGWC
57	032052	20.0N	171.5E	PCN	4			PGTW
58	032144	20.9N	170.5E	PCN	6	T3.0/3.0 /W1.0/24HRS		KGWC
59	040000	20.9N	171.1E	PCN	6	T3.0/3.0+/S0.0/21HRS		PGTW
60	040300	21.3N	171.5E	PCN	6			PGTW
61	040302	20.9N	171.1E	PCN	4		EXP LLCC ULAC 21.2N 172.5E	KGWC
62	040600	21.0N	171.2E	PCN	6			PGTW
63	040720	20.8N	171.2E	PCN	4		EXP LLCC ULAC 21.4N 173.0E	KGWC
64	040900	21.2N	171.5E	PCN	6			PGTW
65	041025	21.1N	170.4E	PCN	6	T3.5/4.0 /W0.5/24HRS	ULAC 21.7N 172.5E	KGWC
66	041200	21.2N	171.6E	PCN	6			PGTW
67	041547	21.9N	171.4E	PCN	6		ULAC 22.0N 174.4E	KGWC
68	041600	21.3N	172.2E	PCN	6	T3.5/3.5 /S0.0/24HRS		PGTW
69	041800	21.3N	172.7E	PCN	6			PGTW
70	041818	22.0N	172.0E	PCN	6		ULAC 22.0N 173.3E	KGWC
71	042306	21.7N	173.5E	PCN	5			PGTW
72	042306	21.6N	173.5E	PCN	6	T3.0/3.0 /S0.0/25HRS	ULAC 22.0N 174.3E	KGWC
73	050000	21.9N	173.6E	PCN	6			PGTW
74	050251	22.0N	173.6E	PCN	4		EXP LLCC ULAC 22.4N 174.2E	KGWC
75	050300	22.4N	174.0E	PCN	4	T3.5/3.5-/D0.5/27HRS		PGTW
76	050600	22.4N	174.4E	PCN	6			PGTW
77	050658	22.3N	174.5E	PCN	4		PART EXP LLCC ULAC 22.6N 175.	KGWC
78	050900	23.1N	174.5E	PCN	6			PGTW
* 79	051005	23.0N	173.3E	PCN	6	T3.0/3.5 /W0.5/24HRS	ULAC 23.9N 172.8E	KGWC
80	051147	23.5N	174.5E	PCN	6			PGTW
81	051536	24.2N	174.7E	PCN	6		ULAC 24.8N 174.3E	KGWC
82	051600	23.9N	174.7E	PCN	6	T3.5/3.5-/S0.0/24HRS		PGTW
83	051757	24.4N	174.6E	PCN	6		ULAC 24.6N 174.1E	KGWC
84	051800	24.3N	174.6E	PCN	6			PGTW
85	052100	24.8N	174.8E	PCN	6			PGTW
86	052245	25.0N	174.5E	PCN	6	T2.5/3.0 /W0.5/24HRS		KGWC
87	052246	25.4N	174.4E	PCN	4		EXP LLCC	PGTW
88	060000	25.3N	174.6E	PCN	6			PGTW
89	060240	25.6N	174.4E	PCN	6			KGWC
90	060300	25.7N	174.7E	PCN	4	T4.0/4.0-/D0.5/24HRS		PGTW
91	060600	26.0N	174.8E	PCN	6			PGTW
92	060637	26.1N	174.6E	PCN	2		EYE FIX	KGWC
93	060900	26.7N	174.9E	PCN	6		ULCC FIX	PGTW
94	061126	26.8N	175.0E	PCN	4	T2:5/3.0 /W0.5/25HRS	PART EXP LLCC ULAC 27.2N 174.	KGWC
95	061200	27.3N	174.8E	PCN	6			PGTW
96	061526	27.8N	174.8E	PCN	6			KGWC
97	061600	28.3N	174.8E	PCN	4	T3.5/3.5-/S0.0/24HRS	ULCC FIX PSBL EYE	PGTW
98	061736	28.2N	174.3E	PCN	6		PSBL BANDING EYE	KGWC
99	061800	28.6N	175.0E	PCN	6		ULCC FIX	PGTW
100	062100	29.6N	174.9E	PCN	6			PGTW
101	062226	29.8N	175.1E	PCN	2	T4.5/4.5 /D2.0/24HRS	EYE FIX	KGWC
102	070000	30.1N	175.7E	PCN	2	T5.0/5.0-/D1.0/21HRS	20 NM CIRCULR EYE	PGTW
103	070229	31.3N	175.6E	PCN	2		EYE 24 NM DIA	KGWC
104	070300	30.9N	175.7E	PCN	2		EYE FIX	PGTW
105	070600	31.8N	176.3E	PCN	2		EYE FIX	PGTW
106	070616	31.8N	176.2E	PCN	2		EYE 24 NM DIA	KGWC
107	070900	32.5N	176.7E	PCN	2		EYE FIX	PGTW
*108	071105	32.6N	176.2E	PCN	2	T4.5/4.5 /D2.0/24HRS	EYE 24NM DIA	KGWC
109	071200	33.4N	177.3E	PCN	4		EYE FIX	PGTW
110	071515	34.1N	178.0E	PCN	2		RAGGED EYE FIX	KGWC
111	071600	34.7N	178.5E	PCN	4	T3.5/3.5-/S0.0/24HRS		PGTW
112	071800	35.0N	178.7E	PCN	6		ULCC FIX	PGTW
113	072100	36.1N	179.4E	PCN	6		ULCC 36.4N 179.2E	PGTW
114	072205	36.4N	179.8E	PCN	6	T3.0/4.0 /W1.5/24HRS		KGWC
115	080000	36.8N	179.7W	PCN	6		ULAC 37.2N 180.0E	PGTW
116	080219	38.2N	179.4W	PCN	6			KGWC
117	080300	37.6N	179.7W	PCN	6	T3.0/4.0+/W2.0/27HRS		PGTW
118	081046	39.0N	178.8W	PCN	4		EXP LLCC	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 DIAM	ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	011153	17.2N 175.6E	700MB	2930	979		300 69 040 10	10 5	CIRCULAR	20		+10 +19 +10	2
2	012051	17.5N 175.2E	700MB	3050	992	75 050 10	300 48 220 10	8 3				+ 9 +19 + 3	3
3	012158	17.5N 175.1E	700MB	3053		75 040 10	150 52 040 18	8 2				+ 8 +17 + 3	3
4	020733	17.8N 174.4E	700MB	3072	996	35 210 40	320 43 210 44	8 5				+13 +17 + 8	4
5	021004	18.1N 173.7E	700MB	3062			120 54 070 35	8 5				+10 +17 +12	4
6	021824	18.3N 173.0E	1500FT		994	55 040 15	130 57 040 8	8 1				+ +25 +24 27	5
7	022112	18.3N 172.6E	1500FT		994	50 320 15	020 54 320 10	8 1				+24 +25 +25 27	5
8	030657	18.9N 171.9E	1500FT		994	50 330 20	040 51 330 15	12 2				+25 +27 +25 32	6
9	031818	20.0N 171.5E	1500FT		998	45 040 40	130 60 040 20	10 3				+ +29 +28 28	7
10	032103	20.2N 171.5E	1500FT		998	50 300 8	210 48 110 11	10 2				+ +28 +25 28	7
11	040532	20.9N 171.4E	1500FT		996	35 010 30	080 38 010 23	8 1				+25 +26 +26 27	8
12	040805	21.1N 170.7E	700MB	3113	1010		340 36 110 30	8 4				+10 +11 + 7	8
13	042032	21.6N 173.6E	1500FT		998	55 050 15	210 57 060 22	7 1				+25 +28 +25 28	9
14	042328	21.6N 173.6E	1500FT		1002	35 300 30	280 34 040 25	6 2				+25 +25 +25 28	9
15	050615	22.7N 174.7E	1500FT		994	55 040 15	180 42 040 16	12 1				+23 +26 +25 26	10
16	050815	23.4N 174.8E	700MB	2982	986		150 57 130 15	8 2	CIRCULAR	30		+ 8 +16 + 4	10
17	052121	24.3N 174.6E	1500FT		989	60 170 25	130 77 020 20	5 3	CIRCULAR	60		+24 +26 +22	11
18	052303	25.1N 174.5E	700MB	2997	990	55 280 15	280 59 210 20	6 2	ELLIPTICAL	60 40	030	+11 +14 + 4	11
19	062039	29.4N 174.9E	700MB	2888		80 060 25	170 92 060 30	8 2	CIRCULAR	16		+10 +16	13
20	062310	30.1N 175.0E	700MB	2870	974	80 330 10	330 75 060 10	12 3	CIRCULAR	15		+10 +15	13

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

TYPHOON TESS
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
083118Z	15.0	134.0	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.
090100Z	15.0	132.8	30	15.0	132.7	30.	6.	0.	16.6	129.6	45.	217.	-5.	18.0	125.3	65.	195.	0.	19.1	120.4	90.	136.	40.
090106Z	15.1	131.1	35	15.5	132.0	30.	57.	-5.	17.2	128.7	45.	255.	-10.	18.6	124.3	65.	178.	-5.	19.4	119.4	90.	144.	35.
090112Z	15.3	129.2	40	15.8	129.3	35.	31.	-5.	17.4	124.3	55.	156.	0.	19.1	120.4	75.	117.	40.	20.8	117.5	90.	153.	35.
090118Z	15.1	127.6	45	15.3	127.1	45.	31.	0.	16.0	120.3	55.	191.	-5.	18.5	117.0	70.	145.	30.	20.9	114.9	90.	109.	30.
090200Z	14.7	126.4	50	14.7	126.2	50.	12.	0.	15.5	120.9	50.	111.	-15.	18.1	117.7	65.	29.	15.	21.2	114.8	65.	119.	0.
090206Z	14.6	125.2	55	14.7	125.3	55.	8.	0.	15.8	120.5	50.	104.	-20.	18.1	117.5	65.	41.	10.	22.2	115.7	65.	188.	-5.
090212Z	14.8	124.3	55	14.7	124.2	55.	8.	0.	16.6	119.6	50.	101.	15.	18.9	116.8	70.	62.	15.	23.0	115.2	60.	189.	-15.
090218Z	15.2	123.5	60	14.8	123.1	60.	33.	0.	16.9	119.0	55.	53.	15.	19.8	116.1	75.	90.	15.	24.2	115.1	40.	227.	-35.
090300Z	15.8	122.8	65	15.6	122.8	65.	12.	0.	16.4	119.8	40.	142.	-10.	18.5	115.5	65.	106.	0.	22.2	113.0	65.	51.	15.
090306Z	16.4	122.2	70	16.5	122.3	70.	8.	0.	17.4	118.0	55.	92.	0.	19.2	113.8	65.	56.	-5.	21.6	110.4	60.	94.	35.
090312Z	17.3	121.2	35	17.2	121.6	50.	24.	15.	18.5	117.7	55.	116.	0.	20.1	113.3	70.	34.	-5.	0.0	0.0	0.	-0.	0.
090318Z	17.7	119.4	40	17.9	120.1	40.	42.	0.	18.9	116.0	65.	75.	5.	21.0	112.0	75.	36.	0.	0.0	0.0	0.	-0.	0.
090400Z	18.2	118.2	50	19.1	118.2	50.	54.	0.	21.0	113.5	75.	99.	10.	23.2	111.0	30.	107.	-20.	0.0	0.0	0.	-0.	0.
090406Z	18.6	117.0	55	18.7	116.9	55.	8.	0.	20.8	112.2	70.	78.	0.	23.3	109.0	30.	155.	5.	0.0	0.0	0.	-0.	0.
090412Z	18.9	115.7	55	19.3	115.7	55.	24.	0.	21.1	111.4	65.	95.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090418Z	19.1	114.7	60	19.4	114.5	60.	21.	0.	21.5	110.9	50.	97.	-25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090500Z	19.4	113.9	65	19.4	113.9	65.	0.	0.	20.6	110.6	75.	115.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090506Z	20.0	113.3	70	19.9	113.3	70.	6.	0.	21.5	110.5	75.	94.	50.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090512Z	20.6	113.0	75	20.5	112.9	70.	8.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090518Z	21.2	112.6	75	21.3	112.6	75.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090600Z	21.8	112.2	50	22.0	112.0	65.	16.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
090606Z	22.6	111.7	25	22.7	111.7	45.	6.	20.	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	19.	122.	97.	141.	21.	123.	92.	146.
AVG RIGHT ANGLE ERROR	15.	70.	56.	115.	15.	68.	56.	118.
AVG INTENSITY MAGNITUDE ERROR	3.	12.	12.	25.	2.	10.	12.	23.
AVG INTENSITY BIAS	2.	1.	7.	14.	1.	-2.	7.	11.
NUMBER OF FORECASTS	22	18	14	10	20	17	13	9

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1470. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 11. KNOTS

TYPHOON TESS
FIX POSITIONS FOR CYCLONE NO. 15

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	301348	16.4N 138.6E	PCN 5	T1.0/1.0	INIT OBS ULCC FIX	PGTW
2	301800	14.3N 138.8E	PCN 6		ULCC FIX	PGTW
* 3	310048	10.9N 136.2E	PCN 5			PGTW
* 4	310527	10.5N 134.9E	PCN 5	T1.0/1.0	INIT OBS	PGTW
* 5	311059	12.0N 133.2E	PCN 6			PGTW
6	311600	15.3N 133.8E	PCN 6			PGTW
7	311813	14.6N 133.1E	PCN 6	T2.0/2.0 /D1.0/28HRS		PGTW
8	312100	15.7N 132.5E	PCN 6			PGTW
9	010027	15.1N 131.8E	PCN 6			PGTW
10	010300	15.4N 131.6E	PCN 6			PGTW
11	010600	15.5N 130.4E	PCN 6	T1.5/1.5 /D0.5/25HRS		PGTW
12	010900	15.1N 129.9E	PCN 6			PGTW
13	011005	15.4N 129.6E	PCN 6			PGTW
14	011037	15.6N 129.3E	PCN 6			PGTW
15	011200	15.5N 129.2E	PCN 6			PGTW
16	011308	15.5N 128.6E	PCN 6			PGTW
17	011600	15.3N 127.8E	PCN 6	T3.0/3.0 /D1.0/22HRS		PGTW
18	011800	15.0N 126.9E	PCN 6			PGTW
19	011802	15.0N 126.9E	PCN 6			PGTW
20	012100	14.7N 126.9E	PCN 6			PGTW
21	012317	14.6N 126.1E	PCN 4			PGTW
22	020000	14.6N 125.9E	PCN 4	T3.5/3.5-/D2.0/18HRS		PGTW
23	020148	14.6N 125.3E	PCN 3	T3.5/3.5	INIT OBS	RODN
24	020300	14.5N 125.7E	PCN 6			PGTW
25	020506	14.5N 126.1E	PCN 6	T3.5/3.5	INIT OBS	RPMK
26	020600	14.6N 125.3E	PCN 4			PGTW
27	020900	14.7N 124.5E	PCN 6			PGTW
28	020944	14.7N 124.4E	PCN 6			PGTW
29	021200	14.9N 124.1E	PCN 6			PGTW
30	021429	14.7N 123.4E	PCN 5		ULCC FIX	RPMK
31	021600	14.9N 123.5E	PCN 6	T4.0/4.0-/D1.0/24HRS		PGTW
32	021751	14.8N 123.2E	PCN 5			RPMK
33	021751	15.0N 123.1E	PCN 6			PGTW
34	022100	15.2N 122.7E	PCN 6			PGTW
35	022224	14.9N 122.9E	PCN 6	T3.5/3.5 /S0.0/18HRS		RPMK
36	022255	15.5N 122.5E	PCN 5		ULCC FIX	PGTW
37	030000	15.4N 122.5E	PCN 6			PGTW
38	030128	15.2N 122.7E	PCN 5	T3.5/3.5 /S0.0/20HRS		RPMK
39	030128	15.4N 122.4E	PCN 5	T3.5/3.5 /S0.0/25HRS	ULCC FIX	PGTW
40	030128	15.7N 122.0E	PCN 6	T4.0/4.0 /D0.5/24HRS	ULCC FIX	RODN
41	030600	16.5N 122.4E	PCN 6		ULCC FIX	PGTW
42	030636	16.5N 122.1E	PCN 5			RODN
43	030900	16.8N 122.4E	PCN 6			PGTW
44	031104	17.6N 121.6E	PCN 4			RODN
45	031134	17.1N 121.2E	PCN 5			RPMK
46	031409	17.3N 120.0E	PCN 6			PGTW
47	031600	17.1N 119.8E	PCN 6			PGTW
48	031800	17.2N 119.3E	PCN 6	T3.0/4.0+/W1.0/26HRS		PGTW
49	031923	17.7N 120.0E	PCN 5			RPMK
50	032100	17.6N 119.2E	PCN 6			PGTW
51	040000	18.0N 118.5E	PCN 6		ULCC FIX	PGTW
52	040014	17.9N 118.5E	PCN 5	T3.5/3.5+/S0.0/24HRS		RPMK
53	040108	18.1N 118.7E	PCN 6	T3.0/3.5+/W0.5/24HRS		PGTW
54	040249	18.2N 117.7E	PCN 6			RPMK
55	040300	18.2N 118.0E	PCN 6			PGTW
56	040600	18.7N 116.8E	PCN 6		ULCC FIX	PGTW
57	040900	18.9N 116.7E	PCN 6			PGTW
58	041043	19.3N 116.2E	PCN 6			RPMK
59	041113	19.2N 115.9E	PCN 5			RKSO
60	041200	19.3N 115.7E	PCN 6			PGTW
61	041530	19.0N 115.3E	PCN 4		EXP LLCC	RODN

62	041600	19.1N 114.9E	PCN 6	T4.0/4.0-/D1.0/22HRS			PGTW
63	041800	19.2N 114.7E	PCN 6				PGTW
64	041912	19.4N 114.6E	PCN 4				RPMK
65	042100	19.2N 114.5E	PCN 6				PGTW
66	042352	19.3N 114.0E	PCN 1	T4.0/4.0	INIT OBS EYE FIX		RKSO
67	042352	19.3N 113.8E	PCN 1	T5.0/5.0 /S0.0/24HRS	EYE 14 NM DIA		RODN
68	050000	19.3N 114.0E	PCN 4				PGTW
69	050229	19.5N 113.9E	PCN 3	T4.0/4.0-/D0.5/26HRS	OPN EYE		RPMK
70	050300	19.5N 113.9E	PCN 4	T4.5/4.5 /D1.5/26HRS			PGTW
71	050600	19.9N 113.4E	PCN 4		PSBL EYE		PGTW
72	050615	20.0N 113.5E	PCN 1		EYE 30 NM DIA		RODN
73	050900	20.2N 113.2E	PCN 4				PGTW
74	051200	20.7N 113.1E	PCN 4		PSBL EYE		PGTW
75	051509	20.9N 113.1E	PCN 1		RAGGED EYE FIX		RODN
76	051600	21.1N 112.7E	PCN 4	T4.5/4.5-/D0.5/24HRS			PGTW
77	051800	21.3N 112.6E	PCN 4		RAGGED EYE		PGTW
78	051901	21.5N 112.5E	PCN 2		EYE FIX		RKSO
79	052100	21.6N 112.4E	PCN 4		PSBL EYE		PGTW
80	052302	21.6N 112.1E	PCN 2		RAGGED EYE		RPMK
81	060000	21.8N 112.2E	PCN 4		PSBL EYE		PGTW
82	060209	22.2N 111.9E	PCN 6				RPMK
83	060300	22.3N 111.8E	PCN 6				PGTW
84	060600	22.9N 111.7E	PCN 6				PGTW
85	060900	23.2N 111.1E	PCN 6		ULCC FIX		PGTW
86	070300	24.9N 109.3E	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	010126	15.1N 132.6E	1500FT		1003	35 030 20	170 40 060 5	12 4			+24 +25 +24 27	2
2	012238	14.7N 126.6E	1500FT		995	50 220 15	280 36 210 60	6 2			+25 +26 +20 27	4
3	020030	14.7N 126.3E	1500FT		993	50 140 10	210 42 140 10	6 2			+25 +26 +21 27	4
4	020544	14.8N 125.4E	1500FT		989	50 340 14	040 50 340 14	10 2			+26 +28 +26 25	5
5	020826	14.7N 124.9E	1500FT		987	45 090 50	190 47 090 50	10 1			+26 +27 +25 25	5
6	022104	15.7N 123.5E	700MB	2933		50 140 20	260 53 140 20	15 2			+15 +12 + 7	6
7	022351	15.6N 123.0E	700MB	2938	983	65 360 10	100 62 360 11	2 4			+12 +13 + 5	6
8	030515	16.3N 122.4E	700MB	2940		65 030 20	130 65 030 30	3 5	CIRCULAR	10	+25 +15 +12	7
* 9	032134	19.0N 119.1E	700MB	3015		31 310 90	040 47 310 120	8 10			+11 +13 +13	8
* 10	040027	19.5N 118.0E	1500FT		992	48 060 90	140 54 060 90	10 10			+24 +24 +24	8
11	040645	18.8N 116.7E	700MB	2988		50 080 60	160 61 080 36	10 10			+14 +16 +11	9
12	040918	18.9N 116.4E	700MB	2965		50 040 60	150 43 040 60	10 10			+12 +16 +11	9

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	021730	15.1N 124.2E	LAND			4		SPRL OVERLAY	16.3N 120.6E	98321
2	021800	15.1N 124.3E	LAND				1060/ 4////	EYE 90 PRCNT CIRCLR OPN S	16.3N 120.6E	98321
3	021830	15.2N 124.1E	LAND				1061/ 42905	EYE 90 PRCNT CIRCLR DIA 35 KMS	16.3N 120.6E	98321
4	021900	15.2N 124.0E	LAND				1061/ 52910	EYE 90 PRCNT CIRCLR DIA 35 KMS	16.3N 120.6E	98321
5	021930	15.2N 123.9E	LAND				1161/ 43206	EYE ELPTICL DIA 30-35 KMS	16.3N 120.6E	98321
6	022000	15.4N 123.6E	LAND				1052/ 53215	EYE 100 PRCNT CIRCLR DIA 30KMS	18.4N 121.6E	98231
7	022000	15.3N 123.8E	LAND				1161/ 53214	EYE ELPTICL DIA 25-35 KMS	16.3N 120.6E	98321
8	030000	15.7N 123.1E	LAND				1052/ 42902	EYE 100 PRCNT CIRCULR DIA 30KM	16.3N 120.6E	98321
9	030200	15.8N 123.0E	LAND				12726 4////	ELIPTICAL EYE	16.3N 120.6E	98321
10	030400	16.2N 122.9E	LAND				1042/ 43505	EYE 90 PRCNT CIRCULR DIA 20 KM	16.3N 120.6E	98321
11	030430	16.3N 122.7E	LAND				1241/ 43511	EYE ELPTICL DIA 15/30 KM	16.3N 120.6E	98321
12	030500	16.4N 122.6E	LAND				1042/ 43410	EYE 100 PRCNT CIRCULR DIA 20KM	16.3N 120.6E	98321
13	030530	16.6N 122.4E	LAND				10351 43412	EYE 100 PRCNT CIRCULR DIA 20KM	16.3N 120.6E	98321
14	030600	16.4N 122.1E	LAND				11501 /////	EYE 100 PRCNT ELIPTCAL	18.4N 121.6E	98231
15	030600	16.4N 122.1E	LAND				11501 /////	100 PRCNT ELPTCL DIA 15/25 KMS	16.3N 120.6E	98321
16	030630	17.6N 122.3E	LAND				1235/ 53412	EYE ELPTCL DIA 15/35 DIA KMS	16.3N 120.6E	98321
17	030700	16.4N 122.2E	LAND				10571 40904	EYE 80 PRCNT CIRCLR OPN EYE	18.4N 121.6E	98231
18	030700	16.8N 122.2E	LAND				1048/ 43310	EYE 100 PRCNT CIRCLR MOVNG NW	16.3N 120.6E	98321
19	030800	16.7N 121.8E	LAND				11671 42903	EYE 90 PRCNT ELPTCAL	18.4N 121.6E	98231
20	030800	16.9N 121.9E	LAND				1041/ 43006	EYE 100 PRCNT CIRCLR MOVNG WNW	16.3N 120.6E	98321
21	030900	17.1N 121.9E	LAND				11581 43604	EYE 100 PRCNT ELPTCAL	18.4N 121.6E	98231
22	031000	17.5N 121.8E	LAND				11581 43604	EYE 90 PCT ELIPTICAL	18.4N 121.6E	98231
23	031300	15.8N 123.0E	LAND				10526 5////	EYE 100 PRCNT CIRCLR DIA 30KMS	16.3N 120.6E	98321
24	031930	18.0N 118.9E	LAND				4//// /////		16.3N 120.6E	98321
25	032000	18.1N 118.8E	LAND				10/// 43205		16.3N 120.6E	98321
26	032030	18.2N 118.8E	LAND				10/// 43310		16.3N 120.6E	98321
* 27	040200	19.3N 118.0E	LAND				1064/ 43208	EYE 50 PCT OPN NW FAIR	16.3N 120.6E	98321
28	040230	19.2N 118.0E	LAND				1067/ 63422	EYE 70 PCT CIR GOOD	16.3N 120.6E	98321
29	050000	19.5N 114.0E	LAND				5///3 /////		22.3N 114.2E	45005
30	050100	19.4N 113.9E	LAND				50973 /////		22.3N 114.2E	45005
31	050200	19.5N 113.9E	LAND				5//03 /////	EYE FORMING	22.3N 114.2E	45005
32	050300	19.6N 113.7E	LAND				20973 /////		22.3N 114.2E	45005
33	050400	19.8N 113.6E	LAND				20973 /////		22.3N 114.2E	45005
34	050500	19.9N 113.5E	LAND				20914 73111		22.3N 114.2E	45005
35	050600	19.9N 113.4E	LAND				20914 73110		22.3N 114.2E	45005
36	050700	20.0N 113.4E	LAND				20914 83208		22.3N 114.2E	45005
37	050800	20.1N 113.4E	LAND				20914 83208		22.3N 114.2E	45005
38	050900	20.2N 113.3E	LAND				21914 83208		22.3N 114.2E	45005
39	051000	20.3N 113.3E	LAND				20914 83306		22.3N 114.2E	45005
40	051100	20.5N 113.2E	LAND				21914 83306		22.3N 114.2E	45005
41	051200	20.6N 113.1E	LAND				21914 83308		22.3N 114.2E	45005
42	051300	20.6N 113.0E	LAND				20914 83207		22.3N 114.2E	45005
43	051400	20.7N 112.9E	LAND				20913 83308		22.3N 114.2E	45005
44	051500	20.8N 112.7E	LAND				21983 83308		22.3N 114.2E	45005
45	051600	20.9N 112.7E	LAND				10983 83208		22.3N 114.2E	45005
46	051800	21.3N 112.7E	LAND				10884 83309		22.3N 114.2E	45005
47	051900	21.4N 112.5E	LAND				10844 83409		22.3N 114.2E	45005
48	052000	21.6N 112.5E	LAND				10844 83409		22.3N 114.2E	45005
49	052100	21.7N 112.3E	LAND				20814 83409		22.3N 114.2E	45005
50	052200	21 7N 112.2E	LAND				10714 83310		22.3N 114.2E	45005
51	052300	21.8N 112.1E	LAND				10624 83210		22.3N 114.2E	45005
52	060000	21.9N 112.0E	LAND				11644 83110		22.3N 114.2E	45005
53	060100	22.2N 112.0E	LAND				30253 83210		22.3N 114.2E	45005
54	060200	22.3N 111.8E	LAND				45343 83210		22.3N 114.2E	45005

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

TROPICAL STORM VAL
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
091306Z	14.2	141.7	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.
091312Z	14.7	140.8	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.
091318Z	15.4	139.7	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.
091400Z	16.2	138.5	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.
091406Z	17.4	137.4	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.
091412Z	18.4	136.1	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.
091418Z	18.2	133.9	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.
091500Z	18.1	132.0	35	18.0	131.9	35.	8.	0.	18.2	124.7	55.	192.	10.	18.9	118.8	65.	181.	20.	19.7	113.3	90.	249.	70.
091506Z	19.5	130.6	40	19.5	131.0	35.	23.	-5.	19.5	124.7	55.	132.	10.	19.5	118.7	65.	143.	25.	0.0	0.0	0.	-0.	0.
091512Z	20.6	129.0	40	20.2	129.3	45.	29.	5.	21.9	123.3	60.	84.	10.	20.5	117.9	70.	91.	35.	0.0	0.0	0.	-0.	0.
091518Z	21.2	127.0	45	20.9	127.7	45.	43.	0.	21.0	121.6	65.	29.	15.	21.9	116.6	30.	56.	50.	0.0	0.0	0.	-0.	0.
091600Z	21.4	124.9	45	21.5	125.4	45.	29.	0.	22.9	117.9	50.	175.	5.	24.8	113.5	30.	175.	10.	0.0	0.0	0.	-0.	0.
091606Z	21.2	123.2	45	21.3	123.2	45.	6.	0.	23.0	115.3	50.	269.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091612Z	21.2	122.0	50	21.2	121.4	50.	34.	0.	22.3	114.8	65.	231.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091618Z	21.3	121.2	50	21.3	119.9	50.	73.	0.	22.3	114.1	55.	195.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091700Z	21.4	120.6	45	21.5	119.2	45.	78.	0.	22.5	113.7	45.	131.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091706Z	21.6	119.9	40	21.6	120.0	45.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091712Z	21.7	118.9	35	21.8	119.2	40.	18.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091718Z	22.0	117.6	30	21.8	118.3	40.	41.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091800Z	23.0	116.0	20	22.9	115.8	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	31.	160.	129.	249.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	10.	84.	104.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	16.	28.	70.	0.	0.	0.	0.
AVG INTENSITY BIAS	2.	16.	28.	70.	0.	0.	0.	0.
NUMBER OF FORECASTS	13	9	5	1	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1630. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 14. KNOTS

TROPICAL STORM VAL
FIX POSITIONS FOR CYCLONE NO. 16

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	122100	11.4N 146.9E	PCN 6	T1.0/1.0	INIT OBS	PGTW
* 2	122346	9.4N 144.5E	PCN 5			PGTW
* 3	130300	9.0N 143.6E	PCN 6	T1.0/1.0	INIT OBS	PGTW
4	130449	14.2N 141.6E	PCN 5			PGTW
5	130600	14.4N 141.2E	PCN 6			PGTW
6	130912	14.4N 141.4E	PCN 6			PGTW
7	131200	14.6N 141.4E	PCN 6			PGTW
8	131600	15.3N 140.0E	PCN 6	T1.5/1.5	INIT OBS	PGTW
9	131734	15.2N 139.9E	PCN 6			PGTW
10	132011	15.0N 139.8E	PCN 6			PGTW
11	132100	15.3N 139.5E	PCN 6			PGTW
12	140000	16.3N 138.6E	PCN 6			PGTW
13	140107	16.7N 138.3E	PCN 5			PGTW
14	140300	16.4N 137.6E	PCN 6	T1.5/1.5 /D0.5/24HRS		PGTW
15	140438	17.1N 137.2E	PCN 5			PGTW
16	140600	17.4N 137.1E	PCN 6			PGTW
17	140900	17.9N 136.8E	PCN 6		ULCC FIX	PGTW
18	141200	19.1N 136.4E	PCN 6		ULCC FIX	PGTW
19	141348	18.7N 136.2E	PCN 5		ULCC FIX	PGTW
20	141724	18.7N 135.6E	PCN 5		ULCC FIX	PGTW
21	141800	18.8N 134.5E	PCN 6	T2.0/2.0 /D0.5/26HRS	ULCC FIX	PGTW
22	142100	17.9N 134.0E	PCN 6		ULAC FIX	PGTW
23	142131	17.6N 133.5E	PCN 6		ULAC FIX	PGTW
24	150000	17.7N 132.2E	PCN 6		ULAC FIX	PGTW
25	150047	18.0N 131.2E	PCN 4			PGTW
26	150300	18.8N 131.1E	PCN 6	T2.5/2.5+/D1.0/24HRS		PGTW
27	150600	20.4N 130.6E	PCN 6		ULAC FIX	PGTW
28	150609	20.4N 130.4E	PCN 6			PGTW
29	150900	20.2N 129.8E	PCN 6		ULCC FIX	PGTW
30	151011	20.3N 130.0E	PCN 5		ULCC FIX	PGTW
31	151200	20.6N 129.4E	PCN 6		ULCC FIX	PGTW
32	151328	20.9N 129.1E	PCN 5		ULCC FIX	PGTW
33	151600	21.0N 127.9E	PCN 6	T3.0/3.0 /D1.0/22HRS	ULCC FIX	PGTW
34	151800	21.2N 127.5E	PCN 6		ULCC FIX	PGTW
35	151855	21.7N 127.2E	PCN 5			RPMK
36	151855	22.0N 127.2E	PCN 5		ULCC FIX	RODN
37	152110	20.9N 126.8E	PCN 6		ULCC FIX	PGTW
* 38	160000	22.2N 125.8E	PCN 6		ULCC FIX	PGTW
39	160208	21.4N 124.3E	PCN 3	T3.5/3.5	INIT OBS EXP LLCC	RPMK
40	160208	21.3N 124.6E	PCN 3		EXP LLCC	RODN
41	160300	21.3N 124.1E	PCN 4	T2.5/2.5-/S0.0/24HRS	EXP LLCC	PGTW
42	160558	21.2N 123.3E	PCN 4		EXP LLCC	PGTW
43	160558	21.1N 123.0E	PCN 3		EXP LLCC	RPMK
44	160900	21.0N 122.6E	PCN 6			PGTW
45	160950	21.0N 122.4E	PCN 6			PGTW
46	161200	21.0N 121.9E	PCN 6			PGTW
47	161449	21.2N 121.0E	PCN 6			RODN
48	161600	21.1N 121.0E	PCN 6	T3.0/3.0 /S0.0/24HRS		PGTW
49	161800	21.2N 120.3E	PCN 6			PGTW
50	162100	20.9N 121.1E	PCN 6		EXP LLCC	PGTW
51	170000	21.4N 121.0E	PCN 6			PGTW
52	170148	21.6N 121.1E	PCN 3	T3.5/3.5 /S0.0/24HRS		RPMK
53	170300	21.6N 120.4E	PCN 6	T3.0/3.0-/D0.5/24HRS		PGTW
54	170548	22.2N 120.2E	PCN 6			RPMK
55	170548	21.6N 120.1E	PCN 4		EXP LLCC	PGTW
56	170600	21.5N 120.0E	PCN 4		EXP LLCC	PGTW
57	170900	21.7N 119.8E	PCN 6			PGTW
58	171110	21.6N 118.9E	PCN 5			RPMK
59	171200	21.5N 119.6E	PCN 6			PGTW
* 60	171428	27.7N 117.1E	PCN 6			RODN
61	171600	21.8N 118.7E	PCN 6	T1.5/3.0 /W1.5/24HRS		PGTW
62	171800	21.8N 118.4E	PCN 6			PGTW
63	172100	21.9N 116.8E	PCN 6		EXP LLCC	PGTW
64	180011	23.1N 116.2E	PCN 5			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	150007	17.9N 131.9E	1500FT		1004	45 060 13	120 47 070 150	8 10				+25 +26 +23	3
2	150736	19.2N 130.0E	1500FT		1002	45 080 60	140 48 080 30	16 3				+23 +23 +23	5
3	160230	21.3N 124.3E	1500FT		999	35 300 20	150 42 040 90	4 1			26	+25 +26 +26	7

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

TROPICAL STORM WINONA
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
091900Z	14.8	115.0	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.
091906Z	15.5	114.7	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.
091912Z	16.2	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.
091918Z	16.7	113.3	25	16.4	113.2	25.	19.	0.	18.3	110.3	40.	85.	5.	20.3	108.3	30	129.	-15.	0.0	0.0	0.	-0.	0.
092000Z	17.3	112.7	30	16.6	113.0	30.	45.	0.	17.7	110.4	40.	128.	0.	19.0	108.3	35.	170.	-5.	0.0	0.0	0.	-0.	0.
092006Z	17.9	112.4	30	17.8	112.3	30.	8.	0.	19.3	109.9	25.	95.	-25.	20.9	108.0	30.	122.	-5.	0.0	0.0	0.	-0.	0.
092012Z	18.4	112.0	30	18.5	111.7	30.	18.	0.	20.7	109.6	30.	81.	-20.	0.0	0.0	0	-0.	0.	0.0	0.0	0.	-0.	0.
092018Z	18.8	111.7	35	19.1	111.2	30.	34.	-5.	21.0	109.3	30.	68.	-15.	0.0	0.0	0	-0.	0.	0.0	0.0	0.	-0.	0.
092100Z	19.5	111.6	40	19.5	111.4	40	11.	0.	21.8	110.8	40.	49.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092106Z	20.0	111.4	50	20.1	111.6	45.	13.	-5.	22.6	111.6	35.	104.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092112Z	20.4	111.0	50	20.5	111.4	50.	23.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092118Z	20.9	110.5	45	20.7	110.8	45.	21.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092200Z	21.2	110.2	40	21.3	110.3	40.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092206Z	21.7	110.0	35	21.7	110.0	35.	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	18.	87.	140.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	14.	69.	136.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	9.	8.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	-8.	-8.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	11	7	3	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 518. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL STORM WINONA
FIX POSITIONS FOR CYCLONE NO. 17

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	180300	10.6N 114.6E	PCN 6	T1.0/1.0		PGTW
2	190000	14.6N 114.8E	PCN 6		ULCC FIX	PGTW
3	190249	15.6N 114.9E	PCN 5	T1.0/1.0	INIT OBS	RPMK
4	190300	15.2N 115.0E	PCN 6	T2.5/2.5	INIT OBS	PGTW
5	190600	15.9N 114.4E	PCN 6			PGTW
6	190900	16.2N 113.9E	PCN 6		ULCC FIX	PGTW
7	191200	15.9N 113.8E	PCN 6		ULCC FIX	PGTW
8	191600	16.3N 113.3E	PCN 6	T2.5/2.5	INIT OBS ULCC FIX	PGTW
9	191800	16.6N 113.2E	PCN 6		ULCC FIX	PGTW
10	192100	16.4N 112.8E	PCN 6		ULCC FIX	PGTW
11	192307	16.5N 113.3E	PCN 5	T2.0/2.0 /D1.0/20HRS	ULCC FIX	RPMK
12	192307	16.5N 113.2E	PCN 5	T2.5/2.5	INIT OBS	RODN
13	200000	16.5N 112.9E	PCN 6		ULCC FIX	PGTW
14	200228	17.6N 112.7E	PCN 3			RPMK
15	200300	17.6N 112.7E	PCN 4	T2.5/2.5-/S0.0/24HRS		PGTW
16	200600	17.8N 112.3E	PCN 4			PGTW
17	200900	18.1N 112.2E	PCN 6			PGTW
18	201200	18.5N 111.8E	PCN 6		EXP LLCC	PGTW
19	201600	18.9N 111.4E	PCN 6	T2.0/2.5-/W0.5/25HRS		PGTW
20	201800	19.1N 111.4E	PCN 6			PGTW
21	201942	19.2N 112.0E	PCN 6			RODN
22	202100	19.4N 111.5E	PCN 6			PGTW
23	210000	19.4N 111.6E	PCN 4			PGTW
24	210046	19.8N 112.0E	PCN 6			RODN
25	210208	19.4N 110.9E	PCN 3	T3.0/3.0 /D1.0/24HRS		RPMK
26	210300	19.5N 111.9E	PCN 6	T3.5/3.5-/D1.0/24HRS		PGTW
27	210600	20.0N 111.7E	PCN 6			PGTW
28	210646	20.2N 111.5E	PCN 3			RODN
29	210900	20.2N 111.5E	PCN 6			PGTW
30	211126	20.4N 110.6E	PCN 5			RPMK
31	211126	20.5N 111.3E	PCN 4		PSBL EYE	RODN
32	211200	20.4N 111.2E	PCN 6			PGTW
33	211449	20.9N 111.0E	PCN 3			RPMK
34	211600	20.4N 110.8E	PCN 6	T3.0/3.0-/D1.0/24HRS		PGTW
35	211800	20.5N 110.8E	PCN 6			PGTW
36	211932	21.3N 110.5E	PCN 4			RODN
37	212100	20.7N 110.6E	PCN 6			PGTW
38	212225	21.2N 110.3E	PCN 5			RPMK
39	220000	21.2N 110.5E	PCN 6			PGTW
40	220024	21.7N 110.6E	PCN 5			RPMK
41	220148	20.9N 109.9E	PCN 5			RKSO
42	220300	21.3N 110.2E	PCN 6			PGTW
43	220600	21.6N 110.1E	PCN 6			PGTW
44	220636	21.6N 110.0E	PCN 5		ULCC FIX	RKSO
45	220900	21.9N 110.2E	PCN 6		ULCC FIX	PGTW
46	221105	22.3N 110.1E	PCN 5		ULCC FIX	RKSO
47	230000	22.7N 110.6E	PCN 6			PGTW

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	192100	16.9N 112.7E	LAND				21442	52906		16.8N 112.3E	59981
2	192200	16.9N 112.6E	LAND				21442	52906		16.8N 112.3E	59981
3	192300	17.2N 112.6E	LAND				21442	53006		16.8N 112.3E	59981
4	200000	17.3N 112.5E	LAND				21562	52906		16.8N 112.3E	59981
5	200100	17.4N 112.4E	LAND				21522	53206		16.8N 112.3E	59981
6	200200	17.5N 112.3E	LAND				10422	53406		16.8N 112.3E	59981
7	200300	17.6N 112.3E	LAND				10422	53506		16.8N 112.3E	59981
8	200400	17.7N 112.3E	LAND				24352	53506		16.8N 112.3E	59981
9	200500	17.8N 112.2E	LAND				24542	53006		16.8N 112.3E	59981
10	200600	17.8N 112.2E	LAND				24542	53302		16.8N 112.3E	59981
11	200700	17.8N 112.3E	LAND				24512	53502		16.8N 112.3E	59981
12	200900	17.9N 112.4E	LAND				24512	53604		16.8N 112.3E	59981
13	201100	18.2N 112.2E	LAND				24665	53406		16.8N 112.3E	59981
14	201200	18.3N 112.1E	LAND				34763	53406		16.8N 112.3E	59981
15	201200	18.3N 112.3E	LAND				6///2	43403		20.0N 110.4E	59758
16	201400	18.6N 111.9E	LAND				12883	53406		16.8N 112.3E	59981
17	201500	18.7N 111.9E	LAND				12873	53306		16.8N 112.3E	59981
18	201700	19.0N 111.9E	LAND				24643	53408		16.8N 112.3E	59981
19	201800	19.0N 111.8E	LAND				24459	83306		16.8N 112.3E	59981

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	211800	20.7N 110.5E	040	030	56658 59647 59754
2	220000	21.2N 110.2E	040	010	59658 59647
3	220600	21.6N 110.2E	035	025	59658 59446

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

TYPHOON ANDY
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
092700Z	18.4 117.3	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.
092706Z	18.6 116.6	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.
092712Z	18.7 116.0	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.
092718Z	18.9 115.5	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.
092800Z	19.2 115.0	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.
092806Z	19.2 114.4	35	19.5 114.4	30.	18.	-5.	20.5 112.3	45.	117.	-20.	20.5 110.2	45	156.	-20.	20.2 108.2	40.	157.	-25.
092812Z	19.0 113.7	40	19.3 114.0	40.	25.	0.	19.6 111.9	50.	87.	-20.	19.6 109.8	50.	120.	-15.	19.5 107.7	50.	129.	0.
092818Z	18.8 112.9	45	18.9 113.0	45.	8.	0.	19.1 110.4	55.	40.	-10.	19.2 108.3	50	72.	-20.	19.2 106.6	50.	101.	10.
092900Z	18.7 112.2	55	18.6 112.2	50.	6.	-5.	18.5 109.9	60.	31.	-5.	18.6 107.8	50.	42.	-20.	18.9 106.1	60.	93.	35.
092906Z	18.7 111.5	65	18.6 111.5	65.	6.	0.	18.7 109.2	60.	35.	-5.	18.9 107.0	70	57.	5.	0.0 0.0	0.	-0.	0.
092912Z	18.7 110.7	70	18.8 110.9	65.	13.	-5.	18.9 108.5	55.	48.	-10.	18.8 106.1	65.	61.	15.	0.0 0.0	0.	-0.	0.
092918Z	18.5 110.1	65	18.5 110.0	65.	6.	0.	18.4 107.1	70.	44.	0.	18.5 104.2	40	103.	0.	0.0 0.0	0.	-0.	0.
093000Z	18.3 109.4	65	18.3 109.4	65.	0.	0.	18.4 106.8	70.	26.	0.	18.5 104.3	30.	87.	5.	0.0 0.0	0.	-0.	0.
093006Z	18.2 108.9	65	18.2 108.7	65.	11.	0.	18.2 106.3	70.	26.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
093012Z	18.1 108.4	65	18.1 108.3	65.	6.	0.	17.9 106.3	70.	6.	20.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
093018Z	18.1 107.8	70	18.0 107.9	70.	8.	0.	17.7 105.9	50.	6.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100100Z	18.2 107.2	70	18.1 107.1	70.	8.	0.	18.1 104.5	30.	63.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100106Z	18.0 106.7	65	18.1 106.5	65.	13.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100112Z	17.8 106.3	50	17.9 106.2	50.	8.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100118Z	17.7 105.8	40	17.7 105.8	40.	0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
100200Z	17.5 105.4	25	17.6 105.3	25.	8.	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	9.	44.	87.	120.	9.	42.	87.	129.
AVG RIGHT ANGLE ERROR	6.	30.	63.	84.	6.	30.	63.	91.
AVG INTENSITY MAGNITUDE ERROR	1.	9.	13.	18.	1.	10.	14.	18.
AVG INTENSITY BIAS	-1.	-3.	-6.	5.	-1.	-3.	-8.	-5.
NUMBER OF FORECASTS	16	12	8	4	15	11	7	3

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 705. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

TYPHOON ANDY
FIX POSITIONS FOR CYCLONE NO. 18

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	251849	16.4N 122.9E	PCN 5			RKSO
2	270000	18.4N 116.9E	PCN 6	T2.0/2.0	INIT OBS	PGTW
3	270300	18.5N 116.8E	PCN 6		PART EXP LLCC	PGTW
4	270542	18.4N 116.4E	PCN 6		PART EXP LLCC	PGTW
5	270600	18.5N 116.5E	PCN 4		PART EXP LLCC	PGTW
* 6	271100	19.1N 113.9E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	RPMK
7	271827	18.6N 114.9E	PCN 5			RKSO
8	272158	19.0N 115.4E	PCN 3	T1.5/1.5 /D0.5/11HRS		RPMK
9	272354	19.2N 115.3E	PCN 3	T2.5/2.5	INIT OBS PART EXP LLCC	RODN
10	280127	19.6N 114.6E	PCN 5	T3.0/3.0 /D1.0/26HRS		PGTW
11	280127	19.6N 115.2E	PCN 3	T2.0/2.0	INIT OBS	RKSO
12	280300	19.3N 114.5E	PCN 6		ULCC FIX	PGTW
13	280600	18.7N 114.2E	PCN 6		ULCC FIX	PGTW
14	280713	18.5N 114.2E	PCN 5	T2.0/2.0 /D1.0/20HRS	ULCC FIX	RPMK
15	280900	18.6N 113.8E	PCN 6		ULCC FIX	PGTW
16	281038	19.4N 114.8E	PCN 5			RODN
17	281200	19.0N 113.7E	PCN 6		ULCC FIX	PGTW
18	281408	19.0N 113.2E	PCN 5			RODN
19	281600	18.8N 112.8E	PCN 6	T3.5/3.5	INIT OBS ULCC FIX	PGTW
20	281800	18.7N 112.7E	PCN 6		ULCC FIX	PGTW
21	281959	18.4N 112.5E	PCN 3			RPMK
22	282100	18.7N 112.7E	PCN 6			PGTW
23	290000	18.6N 112.2E	PCN 4			PGTW
24	290248	18.7N 112.1E	PCN 1	T4.0/4.0 /D1.5/27HRS	EYE FIX	RODN
25	290300	18.6N 111.7E	PCN 4	T4.0/4.0 /D1.0/26HRS		PGTW
26	290600	18.6N 111.5E	PCN 4			PGTW
27	290721	18.9N 111.5E	PCN 1		EYE FIX	RODN
28	290900	18.9N 111.0E	PCN 2		EYE FIX	PGTW
29	291200	18.8N 110.9E	PCN 2		EYE FIX	PGTW
30	291529	18.6N 110.4E	PCN 1		EYE FIX	RODN
31	291600	18.6N 110.2E	PCN 2	T4.5/4.5-/D1.0/24HRS	EYE FIX	PGTW
32	291800	18.5N 110.2E	PCN 2		EYE FIX	PGTW
33	291948	18.6N 109.9E	PCN 1		EYE FIX	RODN
34	292100	18.4N 109.7E	PCN 2		EYE FIX	PGTW
35	300000	18.3N 109.4E	PCN 2		EYE FIX	PGTW
36	300228	18.1N 109.2E	PCN 1	T4.5/4.5	INIT OBS EYE FIX	RPMK
37	300300	18.2N 109.2E	PCN 2	T4.5/4.5-/D0.5/24HRS	EYE FIX	PGTW
38	300600	18.2N 108.7E	PCN 2		EYE FIX	PGTW
39	300608	18.1N 108.7E	PCN 3			RPMK
40	300900	18.4N 108.4E	PCN 6		ULCC FIX	PGTW
41	301137	18.1N 108.5E	PCN 3		EYE FIX	RPMK
42	301137	18.1N 109.1E	PCN 3			RODN
43	301200	18.1N 108.5E	PCN 4			PGTW
44	301508	17.9N 108.2E	PCN 4			RODN
45	301600	18.1N 108.2E	PCN 6		ULCC FIX	PGTW
46	301800	18.0N 108.1E	PCN 6	T4.0/4.5-/W0.5/26HRS		PGTW
47	301936	18.1N 107.9E	PCN 5			RODN
48	302100	18.4N 107.8E	PCN 6			PGTW
49	302235	18.3N 107.2E	PCN 5			RODN
50	010000	18.1N 107.3E	PCN 6			PGTW
51	010208	18.3N 107.2E	PCN 5	T3.5/4.5 /W1.0/24HRS	ULCC FIX	RPMK
52	010300	18.0N 107.1E	PCN 6	T3.0/3.5 /W1.5/24HRS		PGTW
53	010600	18.2N 106.5E	PCN 6			PGTW
54	010640	18.2N 106.9E	PCN 5			RPMK
55	010900	18.0N 106.4E	PCN 6		ULCC FIX	PGTW
56	011115	17.9N 106.4E	PCN 5			RODN
57	011116	17.6N 106.7E	PCN 5		PART EXP LLCC	RPMK
58	011200	17.8N 106.3E	PCN 6		ULCC FIX	PGTW
59	011448	17.6N 106.6E	PCN 5		ULCC FIX	RPMK
60	011926	16.9N 106.1E	PCN 5			RODN

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	260200	17.7N 122.0E	LAND				1096/ 532//	EYE 50 PRCNT CIRCLR OPN S	16.3N 120.6E	98321
2	281400	18.8N 112.8E	LAND				21382 32811		16.8N 112.3E	59981
3	281500	18.8N 112.7E	LAND				21632 52706		16.8N 112.3E	59981
4	281800	18.7N 112.5E	LAND				11482 53206		16.8N 112.3E	59981
5	281900	18.7N 112.4E	LAND				24542 53206		16.8N 112.3E	59981
6	282100	18.6N 112.2E	LAND				12412 52806		16.8N 112.3E	59981
7	282300	18.5N 112.0E	LAND				11184 52707		16.8N 112.3E	59981
8	290100	18.6N 111.8E	LAND				10384 52806		16.8N 112.3E	59981
9	290200	18.6N 111.7E	LAND				11375 52706		16.8N 112.3E	59981
10	290500	18.7N 111.5E	LAND				24832 52806		16.8N 112.3E	59981
11	290600	18.8N 111.4E	LAND				10522 52806		16.8N 112.3E	59981
12	290700	18.8N 111.3E	LAND				14512 52808		16.8N 112.3E	59981
13	290900	18.8N 110.9E	LAND				22641 52810		16.8N 112.3E	59981
14	291000	18.8N 110.8E	LAND				22641 52708		16.8N 112.3E	59981

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	281200	18.2N 113.3E	040	040	59981 AND SHIPS
2	291500	18.5N 110.4E	065	055	59948 59855 59981 59838 59845

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

TYPHOON BRENDA
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
092906Z	16.7	132.9	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.
092912Z	16.5	132.3	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.
092918Z	16.4	131.6	25	16.5	131.6	25.	6.	0.	16.8	128.8	40.	81.	-5.	17.3	125.4	60.	185.	-5.	18.2	122.1	80.	245.	0.
093000Z	16.1	131.0	25	16.4	130.9	25.	19.	0.	16.6	128.1	45.	104.	-10.	17.3	124.8	65.	236.	-5.	18.3	121.6	80.	224.	-5.
093006Z	16.0	130.7	30	16.0	130.2	30.	29.	0.	16.1	127.3	50.	153.	-10.	17.0	123.6	70.	276.	-5.	19.0	120.0	75.	259.	-15.
093012Z	16.1	130.4	35	15.8	129.6	35.	50.	0.	15.9	127.1	60.	166.	0.	16.7	123.5	70.	251.	-10.	18.4	119.7	55.	283.	-35.
093018Z	16.3	130.1	45	15.8	130.0	40.	31.	-5.	15.7	128.5	55.	120.	-10.	16.2	125.2	65.	185.	-15.	17.5	121.5	60.	341.	-30.
100100Z	16.7	129.9	55	16.0	129.9	50.	42.	-5.	16.2	128.1	65.	106.	-5.	16.7	124.9	70.	175.	-15.	18.1	121.0	60.	401.	-30.
100106Z	17.4	129.6	60	17.1	129.3	55.	25.	-5.	18.2	127.9	70.	21.	-5.	18.6	124.9	90.	119.	0.	18.9	121.2	75.	433.	-15.
100112Z	17.9	129.1	60	18.0	129.2	55.	8.	-5.	19.3	126.2	75.	69.	-5.	20.2	122.4	90.	101.	0.	22.8	119.0	95.	377.	10.
100118Z	17.7	128.6	65	17.7	128.9	60.	17.	-5.	18.8	126.6	80.	25.	0.	19.3	122.9	90.	222.	0.	20.5	118.8	90.	627.	10.
100200Z	17.8	128.9	70	17.7	129.7	70.	13.	0.	18.4	126.7	85.	107.	0.	19.5	123.0	90.	306.	0.	21.3	119.4	90.	722.	20.
100206Z	18.4	128.2	75	18.1	128.2	70.	18.	-5.	19.1	126.5	90.	150.	0.	20.5	123.0	90.	331.	0.	21.6	118.8	85.	879.	20.
100212Z	18.8	127.3	80	18.8	127.2	75.	6.	-5.	20.4	124.3	95.	88.	5.	23.3	121.9	95.	279.	10.	0.0	0.0	0.	-0.	0.
100218Z	19.1	126.3	80	19.4	126.4	75.	19.	-5.	21.6	123.4	95.	87.	5.	25.2	121.7	95.	303.	15.	0.0	0.0	0.	-0.	0.
100300Z	19.6	125.3	85	19.5	125.6	85.	18.	0.	21.8	122.8	105.	168.	15.	25.7	121.7	95.	430.	25.	0.0	0.0	0.	-0.	0.
100306Z	20.5	124.3	90	20.5	124.3	90.	0.	0.	25.5	121.9	95.	48.	5.	30.7	124.0	85.	275.	20.	0.0	0.0	0.	-0.	0.
100312Z	21.6	123.4	90	21.5	123.5	90.	8.	0.	26.4	121.9	90.	109.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100318Z	23.0	123.0	90	22.7	123.0	90.	18.	0.	28.0	123.2	90.	117.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100400Z	24.6	122.7	90	24.5	122.7	90.	6.	0.	31.7	125.8	75.	12.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100406Z	26.0	122.6	90	26.3	122.6	90.	18.	0.	33.5	127.5	70.	31.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100412Z	27.8	123.2	85	27.8	123.1	90.	5.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100418Z	29.7	124.3	80	29.4	124.2	85.	19.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100500Z	31.8	126.0	70	31.9	126.1	70.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100506Z	33.8	128.0	65	33.8	128.2	65.	10.	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	17.	93.	245.	436.	17.	93.	245.	436.
AVG RIGHT ANGLE ERROR	12.	43.	106.	230.	12.	43.	106.	230.
AVG INTENSITY MAGNITUDE ERROR	2.	6.	8.	17.	3.	6.	8.	17.
AVG INTENSITY BIAS	-1.	0.	1.	-6.	-2.	0.	1.	-6.
NUMBER OF FORECASTS	23	19	15	11	20	19	15	11

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1551. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 11. KNOTS

TYPHOON BRENDA
FIX POSITIONS FOR CYCLONE NO. 19

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	251600	5.3N 156.6E	PCN 6	T0.5/0.5	INIT OBS	PGTW
2	260300	8.3N 150.3E	PCN 6	T1.5/1.5	INIT OBS	PGTW
3	261200	9.9N 152.3E	PCN 6		ULCC FIX	PGTW
4	261656	10.8N 145.9E	PCN 6		ULCC FIX	PGTW
5	262038	13.4N 144.2E	PCN 6		ULCC FIX	PGTW
6	270359	15.1N 143.1E	PCN 6	T1.0/1.5+/W0.5/24HRS	ULCC FIX	PGTW
7	271247	14.9N 141.7E	PCN 5		ULCC FIX	PGTW
8	272213	14.5N 140.2E	PCN 5		ULCC FIX	PGTW
9	272346	15.0N 140.2E	PCN 6		ULCC FIX	PGTW
10	280000	15.3N 139.7E	PCN 6		ULCC FIX	PGTW
11	280300	16.9N 139.0E	PCN 6	T1.5/1.5 /D0.5/23HRS	ULCC FIX	PGTW
12	280900	16.9N 138.9E	PCN 6		ULCC FIX	PGTW
13	282100	16.5N 137.4E	PCN 6			PGTW
14	290000	16.6N 137.3E	PCN 6			PGTW
15	290107	16.5N 137.1E	PCN 5			PGTW
16	290300	17.1N 134.4E	PCN 6	T1.5/1.5+/S0.0/24HRS		PGTW
17	290520	16.3N 133.5E	PCN 5			PGTW
18	290900	17.0N 132.9E	PCN 6			PGTW
19	291017	17.1N 132.9E	PCN 6			PGTW
20	291200	16.9N 132.4E	PCN 6	T1.5/1.5	INIT OBS	PGTW
21	291347	16.9N 132.3E	PCN 5			PGTW
22	291600	17.0N 131.5E	PCN 6			PGTW
23	291806	16.7N 131.7E	PCN 6			PGTW
24	292116	17.0N 131.5E	PCN 5			PGTW
25	300047	16.3N 130.8E	PCN 5			PGTW
26	300300	16.0N 130.2E	PCN 6	T2.5/2.5 /D1.0/24HRS		PGTW
27	300509	16.0N 130.1E	PCN 5			PGTW
* 28	300509	16.8N 129.8E	PCN 6	T1.5/1.5	INIT OBS	RPMK
29	300956	15.7N 129.9E	PCN 5			PGTW
30	301200	16.1N 129.3E	PCN 6	T2.5/2.5 /D1.0/24HRS		PGTW
* 31	301327	15.9N 129.1E	PCN 5			PGTW
* 32	301600	16.2N 128.7E	PCN 6		ULCC FIX	PGTW
* 33	301754	16.2N 128.7E	PCN 5		ULCC FIX	PGTW
34	301755	15.8N 128.6E	PCN 5			RODN
35	302100	16.5N 129.0E	PCN 6			PGTW
36	010000	16.1N 129.4E	PCN 6			PGTW
37	010026	16.5N 130.2E	PCN 4		EXP LLCC	PGTW
38	010208	15.9N 129.8E	PCN 5	T2.5/2.5 /D1.0/21HRS		RPMK
39	010300	16.4N 129.8E	PCN 4	T3.5/3.5 /D1.0/24HRS	PART EXP LLCC	PGTW
40	010458	17.0N 129.8E	PCN 4		EXP LLCC	PGTW
41	010600	17.5N 129.4E	PCN 6			PGTW
42	011307	18.0N 129.5E	PCN 3	T3.0/3.0 /D0.5/25HRS	EXP LLCC	PGTW
43	011600	18.5N 129.3E	PCN 6			PGTW
44	011744	18.5N 129.1E	PCN 6			PGTW
* 45	011744	18.0N 127.2E	PCN 6		ULCC FIX	RODN
46	012100	17.8N 128.5E	PCN 6			PGTW
47	012214	18.1N 129.9E	PCN 5	T3.5/3.5	INIT OBS	RODN
48	020000	17.8N 128.5E	PCN 6			PGTW
49	020147	18.0N 128.3E	PCN 5			PGTW
50	020147	17.4N 128.6E	PCN 5	T3.5/3.5 /D1.0/24HRS		RPMK
51	020300	18.3N 128.1E	PCN 6	T4.0/4.0+/D0.5/24HRS		PGTW
52	020447	18.5N 128.0E	PCN 5			PGTW
53	020630	17.6N 127.8E	PCN 5			RPMK
54	020900	18.9N 127.7E	PCN 6			PGTW
55	021054	18.4N 127.2E	PCN 5			RPMK
56	021105	19.1N 127.3E	PCN 5			PGTW
57	021200	19.0N 127.0E	PCN 6			PGTW

58	021428	19.3N	126.8E	PCN 5				RODN
59	021600	19.0N	126.5E	PCN 6	T3.5/3.5 /D0.5/27HRS			PGTW
60	021800	19.3N	126.2E	PCN 6				PGTW
61	022153	19.6N	126.0E	PCN 6		EXP LLCC ULAC 19.1N 125.4E		PGTW
* 62	030127	20.5N	125.1E	PCN 1	T5.0/5.0 /D1.5/27HRS			RODN
63	030127	20.4N	125.1E	PCN 4	T4.5/4.5 /D0.5/22HRS			PGTW
64	030300	20.2N	124.7E	PCN 6		DEVELOPING EYE		PGTW
65	030600	20.7N	124.3E	PCN 4		RAGGED EYE		PGTW
66	030619	20.6N	123.7E	PCN 1	T5.0/5.0 /D1.5/29HRS	RAGGED EYE		RPMK
67	030900	21.0N	123.7E	PCN 4		POORLY DEFINED EYE		PGTW
68	031033	21.2N	123.6E	PCN 2		90 PRCNT CLOSD EYEWL OPN SW		RPMK
69	031044	21.2N	123.5E	PCN 6		POORLY DEFINED EYE		PGTW
70	031200	21.4N	123.3E	PCN 4		RAGGED EYE		PGTW
71	031407	21.9N	123.2E	PCN 3		RAGGED EYE		PGTW
72	031600	22.2N	123.1E	PCN 2	T4.5/4.5 /D1.0/24HRS	EYE FIX		PGTW
73	031800	22.6N	123.2E	PCN 4		EYE FIX		PGTW
* 74	031904	23.1N	123.6E	PCN 1		RAGGED EYE		RODN
75	032132	23.8N	122.3E	PCN 2				PGTW
76	040107	24.8N	122.7E	PCN 4	T5.0/5.0-/D0.5/24HRS			PGTW
77	040300	25.5N	122.4E	PCN 6		POORLY DEFINED EYE		PGTW
78	040600	26.1N	122.1E	PCN 4				PGTW
79	040608	25.9N	122.8E	PCN 3	T4.5/4.5	INIT OBS		RKSO
80	040900	26.8N	123.0E	PCN 4				PGTW
81	041012	27.0N	123.2E	PCN 4				PGTW
82	041022	27.2N	123.1E	PCN 2		EYE FIX		RKSO
83	041200	27.7N	123.4E	PCN 4				PGTW
84	041347	28.0N	123.8E	PCN 4				PGTW
85	041600	28.6N	124.2E	PCN 6	T4.0/4.5-/W0.5/24HRS			PGTW
86	041800	29.3N	124.2E	PCN 6		PART EXP LLCC		PGTW
87	041854	30.0N	124.8E	PCN 3		PART EXP LLCC		RPMK
88	042100	30.6N	125.0E	PCN 6		ULCC 30.9N 126.1E		PGTW
89	042301	31.7N	126.1E	PCN 3	T3.5/3.5	INIT OBS		RODN
90	042302	31.2N	125.8E	PCN 5		ULCC 31.5N 126.3E		PGTW
91	050000	31.9N	126.0E	PCN 6		ULCC 32.3N 126.4E		PGTW
92	050046	32.0N	126.3E	PCN 6	T3.5/4.5 /W1.5/24HRS			PGTW
* 93	050557	35.2N	129.9E	PCN 5	T3.0/4.0 /W1.5/24HRS	ULCC FIX		RKSO
94	050600	33.2N	128.2E	PCN 6				PGTW
* 95	050900	33.5N	129.8E	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	290329	16.7N 133.2E	1500FT		1003	15 350 48	080 17 350 48	2 10			+26 +25 +25	4
2	292159	16.3N 131.4E	1500FT		1000	25 310 120	040 22 130 30	4 20			+25 +25 +22 26	5
3	300038	16.1N 130.9E	1500FT		1001	15 210 85	330 25 210 85	4 20			+23 +25 +21	5
4	300623	15.8N 130.5E	1500FT		995	30 090 110	140 36 090 106	12 8			+26 +26 +20 28	7
5	300857	15.9N 130.4E	1500FT		995	35 300 85	020 41 300 11	6 6			+26 +26 +19 28	7
6	302212	15.7N 130.0E	700MB	3029		50 040 60	200 43 100 32	5 5			+13 +15 + 5	8
7	010050	16.5N 129.9E	700MB	3022	990	65 150 30	050 27 300 56	5 5			+13 +15 + 7	8
8	010620	17.4N 129.5E	700MB	3036		70 220 50	200 50 140 125	4 5			+ +12 +12	10
9	010835	17.8N 129.4E	700MB	3019	986	65 080 50	170 45 070 50	4 5	CIRCULAR	50	+13 +13 +12	10
10	012041	17.5N 128.7E	700MB	2937	981	60 170 120	260 65 170 110	10 2			+ +16 +11	11
11	012337	17.5N 128.9E	700MB	2935	985	78 060 30	150 70 060 91	7 2			+15 +15 + 6	11
12	020545	18.4N 128.2E	700MB	2931	980	60 140 140	200 58 130 68	10 4			+13 +16 +12	12
13	020820	18.5N 127.7E	700MB	2925	980	80 050 60	140 65 050 154	10 5			+13 +15 +12	12
14	022030	19.3N 125.2E	700MB	2800			220 75 130 110	5 10	CIRCULAR	40	+14 +13 +12	13
15	022345	19.5N 125.7E	700MB	2783	965	90 030 130	050 71 320 09	4 4	CIRCULAR	40	+15 +17 +13	13
16	030557	20.6N 124.3E	700MB	2799	966	80 110 80	230 88 120 46	3 5			+ +16 +12	14
17	030852	21.0N 123.9E	700MB	2785	964	75 040 90	130 86 040 60	5 2			+14 +17 +13	14
18	032101	23.8N 122.5E	700MB	2738		70 070 120	170 97 070 60	5 7			+13 +18 + 7	15
19	032336	24.6N 122.8E	700MB	2747		70 150 120	060 81 320 24	5 7			+11 +17 + 5	15
20	042110	31.4N 125.2E	700MB	2898	980	60 100 105	230 91 160 65	15 2			+ +14 + 7	17
21	042346	32.4N 126.6E	700MB	2940		60 160 100	160 92 050 98	6 15			+ 9 +10 + 8	17

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	030600	20.9N 124.1E	LAND				6///4 43219		24.3N 124.2E	47918
2	030900	21.4N 123.9E	LAND				65/14 73411		24.3N 124.2E	47918
3	031000	21.6N 123.6E	LAND				65/15 53022		24.3N 124.2E	47918
4	031100	21.7N 123.5E	LAND				65/14 63114		24.3N 124.2E	47918
5	031200	21.7N 123.4E	LAND				65/15 73011		24.3N 124.2E	47918
6	031300	21.9N 123.3E	LAND				65/14 73107		24.3N 124.2E	47918
7	031400	20.0N 123.3E	LAND				21904 73308		24.3N 124.2E	47918
8	031500	22.1N 123.0E	LAND				20974 52702		24.0N 121.6E	46699
9	031500	22.1N 123.2E	LAND				21914 73310		24.3N 124.2E	47918
10	031600	22.3N 123.3E	LAND				22214 53418		24.0N 121.6E	46699
11	031600	22.3N 123.2E	LAND				21914 73310		24.3N 124.2E	47918
12	031600	22.3N 123.2E	LAND				6///4 5////		24.8N 125.3E	47927
13	031700	22.6N 123.0E	LAND				20914 73412		24.3N 124.2E	47918
14	031700	22.5N 123.2E	LAND				10974 53612		24.0N 121.6E	46699
15	031700	22.5N 123.0E	LAND				6//5 53416		24.8N 125.3E	47927
16	031800	22.8N 123.2E	LAND				14984 53619		24.0N 121.6E	46699
17	031800	22.8N 123.0E	LAND				20914 53411		24.3N 124.2E	47918
18	031900	23.1N 123.1E	LAND				14984 53317		24.0N 121.6E	46699
19	031900	23.1N 123.0E	LAND				20913 53611		24.3N 124.2E	47918
20	031900	23.0N 122.9E	LAND				6///4 53616		24.8N 125.3E	47927
21	032000	23.4N 123.0E	LAND				20913 73616		24.3N 124.2E	47918
22	032000	23.0N 123.0E	LAND				14923 53416		24.0N 121.6E	46699
23	032000	23.2N 123.0E	LAND				6//5 50215		24.8N 125.3E	47927
24	032100	23.7N 122.8E	LAND				22914 73519		24.3N 124.2E	47918
25	032100	23.6N 123.0E	LAND				6///4 53622		24.8N 125.3E	47927
26	032200	24.0N 122.8E	LAND				21914 73519		24.3N 124.2E	47918
27	032200	24.0N 123.0E	LAND	GOOD		70		MOV 3640	24.8N 125.3E	47927
28	032200	23.9N 123.0E	LAND				10922 53617		24.0N 121.6E	46699
29	032200	23.9N 123.0E	LAND				6///4 50119		24.8N 125.3E	47927
30	032300	24.2N 122.8E	LAND	GOOD		70		MOV 3420	24.8N 125.3E	47927
31	032300	24.2N 122.8E	LAND				21914 73516		24.3N 124.2E	47918
32	032300	24.1N 122.9E	LAND				30974 53415		24.8N 125.3E	47927
33	040000	24.6N 122.8E	LAND				20915 73617		24.3N $24.2E	47918
34	040000	24.5N 122.9E	LAND				30914 53623		24.8N 125.3E	47927
35	040100	25.1N 122.7E	LAND				22935 73622		24.3N 124.2E	47918
36	040100	25.0N 123.0E	LAND				22952 53627		24.0N 121.6E	46699
37	040100	25.0N 123.0E	LAND	GOOD		90		MOV 3640	24.8N 125.3E	47927
38	040100	24.9N 122.7E	LAND				6///4 53427		24.8N 125.3E	47927
39	040200	25.3N 122.7E	LAND	FAIR		50		MOV 3440	24.8N 125.3E	47927
40	040200	25.3N 122.7E	LAND				24953 53324		24.0N 121.6E	46699
41	040200	25.5N 122.6E	LAND				65945 73527		24.3N 124.2E	47918
42	040200	25.4N 122.7E	LAND				6///4 53527		24.8N 125.3E	47927
43	040300	25.7N 122.7E	LAND	POOR				MOV 3640	24.8N 125.3E	47927
44	040300	25.7N 122.3E	LAND				65//5 73423		24.3N 124.2E	47918
45	040400	25.7N 122.3E	LAND				///// /////		25.1N 121.6E	46696
46	040400	26.0N 123.0E	LAND				35963 53323		24.0N 121.6E	46699
47	040500	25.8N 122.3E	LAND				///// /////		25.1N 121.6E	46696
48	040500	26.2N 122.4E	LAND				35654 50210		24.0N 121.6E	46699
49	040600	25.9N 122.5E	LAND				6//// 5////		25.1N 121.6E	46696
50	040600	25.9N 122.5E	LAND				6//// 5////		24.0N 121.6E	46699
51	040700	26.3N 122.6E	LAND				6//// 5////		25.1N 121.6E	46696
52	040800	26.5N 122.8E	LAND				6//// 5////		25.1N 121.6E	46696
53	040900	26.7N 122.8E	LAND				6//// 5////		25.1N 121.6E	46696
* 54	041400	28.5N 124.2E	LAND				34962 70520	STA LAT AND LONG UNK	****N ******E	58760
55	050200	32.7N 127.1E	LAND				65//4 /////		33.4N 130.3E	47806
56	050300	33.1N 127.4E	LAND				55//4 50424		33.4N 130.3E	47806
57	050400	33.6N 127.8E	LAND				65/// 50432		33.4N 130.3E	47806

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	050600	34.0N 128.1E	055	050	47168 47162 47800 47182 47805 47843
2	050900	34.7N 128.9E	050	040	47168 47800 47805 47843 47182
3	051200	35.3N 130.1E	045	050	47152 47138 47800 47755
4	051500	36.3N 131.2E	040	075	47115 47138 47152 47755 47740

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

TYPHOON CECIL
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
101206Z	10.7	120.3	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.
101212Z	11.1	119.0	35	10.5	118.9	30.	36.	-5.	10.6	114.1	45.	160.	-15.	11.9	109.7	60	268.	-20.	13.9	106.2	20.	238.	-80.
101218Z	11.4	117.9	40	10.8	118.0	35.	36.	-5.	11.0	113.2	55.	172.	-10.	12.5	109.0	55	256.	-30.	0.0	0.0	0.	-0.	0.
101300Z	11.7	117.1	45	11.8	116.9	50.	13.	5.	11.5	112.4	70.	181.	0.	12.5	108.2	45	264.	-50.	0.0	0.0	0.	-0.	0.
101306Z	12.2	116.5	55	12.0	116.2	55.	21.	0.	12.0	112.3	75.	163.	0.	12.5	108.4	45	241.	-55.	0.0	0.0	0.	-0.	0.
101312Z	12.6	115.9	60	12.4	116.0	55.	13.	-5.	13.3	113.3	75.	67.	-5.	14.1	109.3	65	144.	-35.	15.5	106.3	20.	154.	-10.
101318Z	13.0	115.3	65	12.7	115.4	60.	19.	-5.	13.7	112.5	75.	67.	-10.	14.6	108.5	45	135.	-55.	0.0	0.0	0.	-0.	0.
101400Z	13.4	114.8	70	13.4	114.9	70.	6.	0.	14.7	112.1	90.	43.	-5.	15.5	107.6	45	104.	-45.	0.0	0.0	0.	-0.	0.
101406Z	13.9	114.3	75	14.0	114.1	75.	13.	0.	15.3	110.7	95.	36.	-5.	16.6	106.3	50	57.	0	0.0	0.0	0.	-0.	0.
101412Z	14.4	113.5	80	14.4	113.5	80.	0	0.	16.3	109.6	95.	21.	-5.	19.1	105.5	75	141.	45.	0.0	0.0	0.	-0.	0.
101418Z	14.8	112.7	85	14.8	112.7	80.	0.	-5.	16.9	108.9	95.	52.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101500Z	15.3	111.7	95	15.3	111.7	90.	0.	-5.	17.6	108.0	95.	83.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101506Z	15.9	110.6	100	16.0	110.7	100.	8.	0.	18.7	106.6	95.	123.	45.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101512Z	16.5	109.3	100	16.7	109.4	100.	13.	0.	20.1	105.0	50.	186.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101518Z	16.8	108.0	100	17.0	108.2	100.	17.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101600Z	17.0	106.7	90	17.2	106.5	90.	17.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101606Z	17.0	105.4	50	17.1	105.5	50.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101612Z	17.1	104.2	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	14.	104.	179.	196.	14.	97.	184.	238.
AVG RIGHT ANGLE ERROR	11.	93.	159.	139.	11.	85.	163.	187.
AVG INTENSITY MAGNITUDE ERROR	2.	10.	37.	45.	2.	9.	36.	80.
AVG INTENSITY BIAS	-2.	1.	-27.	-45.	-2.	-1.	-36.	-80.
NUMBER OF FORECASTS	16	13	9	2	16	12	8	1

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1034. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TYPHOON CECIL
FIX POSITIONS FOR CYCLONE NO. 20

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	081800	5.8N 138.8E	PCN 6	T1.5/1.5	INIT OBS ULCC FIX	PGTW
2	091200	5.3N 135.4E	PCN 6		ULCC FIX	PGTW
3	100000	7.3N 132.3E	PCN 6			PGTW
4	100400	7.6N 130.9E	PCN 6			PGTW
5	101200	8.1N 131.7E	PCN 6			PGTW
6	101600	8.6N 130.2E	PCN 6	T1.5/1.5	INIT OBS	PGTW
7	101800	8.6N 129.7E	PCN 6			PGTW
8	111600	9.5N 121.4E	PCN 6	T2.0/2.0 /D0.5/24HRS		PGTW
9	111800	9.6N 121.1E	PCN 6			PGTW
10	120147	10.7N 119.8E	PCN 6	T1.5/1.5	INIT OBS	PGTW
11	120400	10.6N 120.9E	PCN 6			PGTW
12	120600	10.9N 120.4E	PCN 6			PGTW
13	120617	11.2N 120.0E	PCN 5	T1.5/1.5	INIT OBS	RODN
14	120900	10.4N 119.2E	PCN 6		ULCC FIX	PGTW
15	121044	11.2N 119.8E	PCN 6		ULCC FIX	RPMK
16	121200	10.6N 119.1E	PCN 6			PGTW
17	121428	11.0N 118.8E	PCN 6		ULCC FIX	RPMK
18	121600	10.7N 118.6E	PCN 6	T2.5/2.5 /D0.5/24HRS		PGTW
19	121800	10.9N 118.2E	PCN 6			PGTW
20	121909	11.3N 117.9E	PCN 5			RODN
21	122100	11.8N 117.2E	PCN 6		ULCC FIX	PGTW
22	130000	12.0N 117.0E	PCN 4	T3.5/3.5 /D2.0/23HRS		PGTW
23	130127	12.1N 116.7E	PCN 3	T3.5/3.5	INIT OBS	RPMK
24	130400	12.0N 116.6E	PCN 4		PSBL EYE ULCC FIX	PGTW
25	130600	11.9N 116.5E	PCN 4		PSBL EYE	PGTW
26	130612	12.1N 116.7E	PCN 3	T3.0/3.0 /D1.5/25HRS	ULCC FIX	RODN
27	131200	12.2N 115.7E	PCN 6			PGTW
28	131208	12.2N 116.0E	PCN 5			RPMK
29	131600	12.5N 115.6E	PCN 6	T3.5/3.5 /D1.0/24HRS		PGTW
30	131800	12.7N 115.5E	PCN 6			PGTW
31	131858	13.6N 115.2E	PCN 5		ULCC FIX	RODN
32	132303	13.8N 115.1E	PCN 5			RPMK
33	140000	13.3N 115.1E	PCN 4	T4.5/4.5 /D1.0/24HRS	ULCC FIX	PGTW
34	140248	13.9N 114.8E	PCN 1	T4.5/4.5 /D1.0/25HRS	SMALL EYE	RPMK
35	140300	13.7N 114.5E	PCN 2		SMALL EYE	PGTW
36	140600	13.9N 114.1E	PCN 2		EYE	PGTW
37	140612	14.0N 114.4E	PCN 3		EYE FIX	RPMK
38	140900	14.1N 113.7E	PCN 2		SMALL EYE	PGTW
39	141146	14.1N 113.6E	PCN 5		ULCC FIX	RPMK
40	141200	14.4N 113.4E	PCN 2		RAGGED EYE	PGTW
41	141528	14.0N 113.4E	PCN 5		ULCC FIX	RPMK
42	141600	14.6N 113.0E	PCN 4	T4.5/4.5 /D1.0/24HRS		PGTW
43	141800	14.8N 112.8E	PCN 2		SMALL EYE	PGTW
44	141848	15.2N 112.6E	PCN 1		DEVLPNG EYE	RODN
45	142100	15.1N 112.4E	PCN 2		EYE FIX	PGTW
46	142241	15.3N 111.8E	PCN 1	T5.5/5.0-/D1.0/20HRS	EYE FIX	RPMK
47	150000	15.4N 111.7E	PCN 2	T5.5/5.5 /D1.0/24HRS	EYE FIX	PGTW
48	150026	15.3N 111.2E	PCN 1	T5.5/5.5	INIT OBS	RODN
49	150227	15.5N 111.4E	PCN 1	T5.5/5.5-/D1.0/24HRS	SMALL EYE	RPMK
50	150227	15.5N 110.9E	PCN 1		RAGGED EYE 30 NM	RODN
51	150300	15.7N 111.1E	PCN 2		EYE FIX	PGTW
52	150600	16.0N 110.7E	PCN 2		EYE FIX	PGTW
53	150733	15.9N 110.3E	PCN 1		.4 DEG EYE	RPMK
54	150845	16.4N 109.2E	PCN 2		30 NM EYE	RPMK
55	150900	16.4N 110.1E	PCN 2		EYE FIX	PGTW
56	151121	16.7N 109.5E	PCN 2		EYE 30 NM	RODN
57	151200	16.6N 109.6E	PCN 2		EYE FIX	PGTW
58	151508	16.7N 108.5E	PCN 1		30 NM EYE	RPMK
59	151600	16.7N 108.4E	PCN 2	T5.5/5.5 /D1.0/24HRS	EYE FIX	PGTW
60	151800	16.8N 108.1E	PCN 2		EYE FIX	PGTW
61	152100	16.9N 107.4E	PCN 4			PGTW
62	152220	17.1N 106.9E	PCN 4			RODN
63	160000	16.8N 106.6E	PCN 3			RPMK
64	160000	17.1N 106.8E	PCN 4			PGTW
65	160207	16.8N 106.2E	PCN 4			RPMK
66	160207	17.0N 106.2E	PCN 3			RODN

67	160300	17.0N 106.0E	PCN 4			PGTW
68	160600	16.6N 104.9E	PCN 6			PGTW
69	160722	17.2N 105.5E	PCN 5	ULCC FIX		RODN
70	161448	17.1N 102.2E	PCN 4			RKSO

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	110222	9.4N 128.3E	1500FT		1006	22 360 19	070 30 360 19	3 15				+24	+24	+23 28	1
2	130000	11.8N 117.0E	700MB	2990	990	60 310 45	060 52 310 45	5 10	CIRCULAR	40		+12	+14	+10	3
3	130156	12.0N 116.8E	700MB	2987		80 030 50	130 38 060 90	5 10				+10	+13	+13	3
4	130824	12.4N 116.4E	700MB	2954	984	65 140 120	230 39 140 60	2 10	CIRCULAR	20		+11	+13	+ 3	4
5	132115	13.3N 115.1E	700MB	2886	975	45 320 95	140 64 090 10	10 5				+13	+13	+13	5
6	140044	13.4N 114.9E	700MB	2874	974	75 150 15	210 67 150 15	5 5	ELLIPTICAL	40 20	030	+13	+15	+13	5
7	140618	13.9N 114.2E	700MB	2821	968	80 950 18	160 62 950 18	8 5	CIRCULAR	20		+15	+15	+ 6	6
8	140851	14.0N 114.0E	700MB	2775	963	60 110 60	180 90 110 30	8 5	ELLIPTICAL	15 5	100	+11	+17	+ 6	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	150300	15.5N 110.9E	LAND				108/2	/////		16.8N 112.3E	59981
2	150400	15.5N 110.8E	LAND				10785	53108		16.8N 112.3E	59981
3	150500	15.7N 110.7E	LAND				10772	53208		16.8N 112.3E	59981
4	150600	15.8N 110.5E	LAND				10772	53109		16.8N 112.3E	59981
5	150700	15.9N 110.4E	LAND				10782	5309/		16.8N 112.3E	59981
6	150900	16.3N 109.8E	LAND				10772	53111		16.8N 112.3E	59981
7	151000	16.4N 109.5E	LAND				10862	53011		16.8N 112.3E	59981
8	161000	17.0N 105.0E	LAND				/6///	/////		17.1N 104.1E	48356

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

SUPER TYPHOON DOT
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
101118Z	7.0	155.5	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.
101200Z	8.0	154.3	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.
101206Z	8.7	152.9	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.
101212Z	9.4	151.4	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.
101218Z	10.0	149.9	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.
101300Z	10.5	148.3	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.
101306Z	10.9	146.6	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.
101312Z	11.2	145.0	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.
101318Z	11.4	143.6	45	11.5	143.6	40.	6.	-5.	12.5	137.8	65.	71.	0.	13.4	132.5	80.	131.	-45.	14.5	127.7	95.	128.	-55.
101400Z	11.6	142.4	50	11.6	142.3	50.	6.	0.	12.3	137.4	70.	56.	-5.	13.4	132.2	85.	97.	-55.	14.9	127.1	100.	83.	-50.
101406Z	11.8	141.2	55	11.8	141.0	55.	12.	0.	12.7	136.1	75.	55.	-15.	13.8	131.4	95.	72.	-50.	15.2	126.7	110.	55.	-35.
101412Z	12.2	140.1	60	12.0	140.3	60.	17.	0.	12.5	136.5	80.	84.	-30.	13.2	131.7	100.	89.	-50.	14.3	126.2	115.	6.	-25.
101418Z	12.7	139.0	65	12.5	138.9	65.	13.	0.	13.8	134.1	105.	35.	-20.	15.1	128.6	115.	79.	-35.	16.5	123.5	120.	168.	-15.
101500Z	13.1	137.9	75	13.1	137.8	75.	6.	0.	14.0	132.8	105.	53.	-35.	14.3	127.1	130.	83.	-20.	15.7	121.6	115.	172.	-15.
101506Z	13.4	136.7	90	13.5	136.7	90.	6.	0.	14.1	131.3	125.	68.	-20.	14.2	125.7	135.	95.	-10.	15.9	120.7	105.	172.	-15.
101512Z	13.6	135.6	110	13.7	135.6	110.	6.	0.	14.4	130.8	135.	26.	-15.	14.7	125.1	140.	74.	0.	16.2	119.8	100.	159.	-10.
101518Z	13.8	134.7	125	13.8	134.5	125.	12.	0.	14.4	129.8	145.	19.	-5.	14.7	124.5	135.	52.	0.	16.3	119.4	90.	99.	5.
101600Z	14.1	133.7	140	14.1	133.7	135.	0.	-5.	14.5	129.2	150.	41.	0.	14.7	123.5	135.	48.	5.	16.6	119.0	90.	64.	25.
101606Z	14.5	132.4	145	14.4	132.7	145.	18.	0.	14.6	127.8	150.	30.	5.	15.2	122.1	130.	81.	10.	17.7	118.1	95.	118.	25.
101612Z	14.6	131.2	150	14.6	131.2	145.	0.	-5.	15.2	126.4	150.	54.	10.	15.7	121.0	100.	83.	-10.	18.2	116.7	100.	133.	25.
101618Z	14.7	129.9	150	14.8	130.0	150.	8.	0.	15.1	125.3	145.	48.	10.	15.9	120.5	100.	33.	15.	18.6	116.4	105.	121.	25.
101700Z	14.6	128.5	150	14.8	128.6	150.	13.	0.	15.1	123.4	145.	63.	15.	16.8	118.8	105.	80.	40.	19.7	114.8	115.	171.	30.
101706Z	14.5	127.3	145	14.7	127.2	155.	13.	10.	15.2	122.1	140.	81.	20.	17.4	117.7	105.	109.	35.	20.6	113.8	115.	199.	30.
101712Z	14.3	126.3	140	14.4	126.2	145.	8.	5.	15.3	121.4	125.	53.	15.	17.5	117.0	105.	88.	30.	19.9	112.2	115.	135.	25.
101718Z	14.3	125.3	135	14.3	125.2	140.	6.	5.	14.9	120.7	90.	38.	5.	16.9	116.1	110.	39.	30.	19.9	111.1	110.	120.	20.
101800Z	14.5	124.3	130	14.4	124.2	130.	8.	0.	14.9	120.1	90.	58.	25.	16.5	115.4	110.	24.	25.	19.1	110.7	115.	92.	35.
101806Z	14.7	123.4	120	14.5	123.3	120.	13.	0.	15.2	119.3	90.	54.	20.	16.8	114.9	110.	55.	25.	19.4	110.7	115.	179.	45.
101812Z	15.1	122.3	110	15.0	122.4	110.	8.	0.	16.2	118.7	85.	58.	10.	16.9	114.1	110.	93.	20.	17.9	109.2	100.	190.	40.
101818Z	15.5	120.9	85	15.5	120.9	95.	0.	10.	16.5	117.0	90.	18.	10.	17.3	112.4	110.	83.	20.	18.5	108.0	95.	183.	55.
101900Z	15.6	119.4	65	15.5	119.2	80.	13.	15.	16.6	113.9	110.	88.	25.	17.6	109.5	95.	36.	15.	0.0	0.0	0.	-0.	0.
101906Z	15.8	118.6	70	15.8	118.4	85.	12.	15.	16.9	114.0	110.	25.	25.	17.9	109.6	95.	114.	25.	0.0	0.0	0.	-0.	0.
101912Z	16.2	117.7	75	16.1	117.6	75.	8.	0.	16.9	113.0	100.	51.	10.	18.1	108.1	95.	127.	35.	0.0	0.0	0.	-0.	0.
101918Z	16.6	116.7	80	16.3	116.5	80.	21.	0.	17.2	111.9	105.	62.	15.	18.3	107.1	90.	136.	50.	0.0	0.0	0.	-0.	0.
102000Z	16.9	115.4	85	17.0	115.6	80.	13.	-5.	18.8	111.9	100.	147.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102006Z	17.3	114.1	85	17.5	114.6	85.	31.	0.	19.6	110.6	85.	177.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102012Z	17.7	112.7	90	17.6	112.7	85.	6.	-5.	18.7	107.4	70.	80.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102018Z	17.9	111.1	90	17.9	111.2	85.	6.	-5.	19.2	106.9	65.	120.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102100Z	18.2	109.4	80	18.3	109.5	85.	8.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102106Z	18.5	107.7	70	18.6	107.7	80.	6.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102112Z	18.8	106.0	60	18.8	106.0	70.	0.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102118Z	18.9	104.8	40	19.0	105.3	55.	29.	15.	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	10.	63.	80.	131.	10.	63.	80.	131.
AVG RIGHT ANGLE ERROR	8.	32.	31.	68.	8.	32.	31.	68.
AVG INTENSITY MAGNITUDE ERROR	4.	15.	26.	29.	4.	15.	26.	29.
AVG INTENSITY BIAS	2.	5.	4.	8.	2.	5.	4.	8.
NUMBER OF FORECASTS	33	29	25	21	33	29	25	21

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 3074. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

SUPER TYPHOON DOT
FIX POSITIONS FOR CYCLONE NO. 21

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	111200	5.5N 155.9E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	111600	6.7N 155.5E	PCN 6			PGTW
3	111800	6.9N 155.2E	PCN 6			PGTW
4	120006	8.7N 153.8E	PCN 6	T1.5/1.5	INIT OBS	PGTW
5	120400	8.5N 153.0E	PCN 6			PGTW
6	120600	8.6N 153.0E	PCN 6			PGTW
7	120900	8.8N 152.8E	PCN 6			PGTW
8	121200	9.0N 151.5E	PCN 6		ULCC FIX	PGTW
9	121246	8.5N 151.2E	PCN 6		ULCC FIX	PGTW
10	121600	9.6N 150.5E	PCN 6	T1.5/1.5 /D0.5/28HRS		PGTW
11	121800	9.4N 150.0E	PCN 6		ULCC FIX	PGTW
* 12	122100	9.7N 150.6E	PCN 6		ULCC FIX	PGTW
13	130000	10.5N 148.8E	PCN 6	T2.5/2.5 /D1.0/24HRS		PGTW
14	130400	11.4N 147.5E	PCN 6		ULCC FIX	PGTW
15	130431	11.1N 147.7E	PCN 5		ULCC FIX	RODN
16	130600	10.9N 146.3E	PCN 6		ULCC FIX	PGTW
17	130900	10.1N 145.9E	PCN 6		ULCC FIX	PGTW
18	131027	11.1N 145.2E	PCN 4			RODN
19	131200	11.3N 145.1E	PCN 6		ULCC FIX	PGTW
20	131600	11.4N 143.6E	PCN 6	T2.0/2.0+/D0.5/24HRS	ULCC FIX	PGTW
21	131716	11.9N 143.4E	PCN 5			RPMK
22	131800	11.5N 143.4E	PCN 6		ULCC FIX	PGTW
23	132307	11.8N 142.5E	PCN 4	T3.5/3.5	INIT OBS	RODN
24	140000	11.9N 142.6E	PCN 4	T3.5/3.5+/D1.0/24HRS		PGTW
25	140300	11.8N 141.5E	PCN 4		PSBL IR EYE	PGTW
26	140600	11.7N 140.8E	PCN 4			PGTW
27	140900	11.9N 140.7E	PCN 4			PGTW
28	141200	12.0N 140.6E	PCN 4			PGTW
29	141600	12.5N 139.7E	PCN 6	T4.0/4.0+/D2.0/24HRS		PGTW
30	141705	12.6N 138.9E	PCN 4			RODN
31	141800	13.1N 139.0E	PCN 6			PGTW
32	142100	13.1N 138.5E	PCN 2		RAGGED EYE	PGTW
33	142100	13.2N 138.1E	PCN 1		EYE 30 NM DIA RAGGED EYE	RODN
34	142245	13.1N 138.1E	PCN 1	T4.5/4.5+/D1.0/25HRS	EYE FIX	RODN
35	150000	13.2N 138.0E	PCN 2	T5.0/5.0 /D1.5/24HRS	RAGGED EYE	PGTW
36	150046	13.1N 137.5E	PCN 2	T4.5/4.5	INIT OBS 12 NM DIA RAGGED EYE	RPMK
37	150300	13.2N 137.2E	PCN 2		EYE FIX	PGTW
38	150551	13.4N 136.4E	PCN 2		EYE .5 DEG	RPMK
39	150600	13.3N 136.7E	PCN 2		EYE FIX	PGTW
40	150900	13.7N 136.2E	PCN 2		WELL DEFINED EYE	PGTW
41	150940	13.6N 136.1E	PCN 2		EYE 30 NM DIA	RPMK
42	151200	13.7N 135.7E	PCN 2		WELL DEFINED EYE	PGTW
43	151600	13.6N 135.1E	PCN 2	T6.5/6.5 /D2.5/24HRS	WELL DEFINED EYE	PGTW
44	151655	14.0N 134.1E	PCN 2		EYE FIX	RODN
45	151800	13.6N 134.9E	PCN 2		WELL DEFINED EYE	PGTW
46	152039	13.6N 133.9E	PCN 2		EYE FIX	RPMK
47	152100	13.8N 134.5E	PCN 2		EYE FIX	PGTW
48	152223	13.9N 133.9E	PCN 2	T5.5/5.5 /D1.0/23HRS	WELL DEFINED 20 NM DIA EYE	RPMK
49	160000	14.0N 133.9E	PCN 2	T7.5/7.5-/D2.5/24HRS		PGTW

50	160026	14.2N	133.6E	PCN 1	T7.0/7.0 /D2.5/25HRS	WELL DEFINED EYE	RODN
51	160300	14.3N	133.3E	PCN 2		EYE FIX	PGTW
52	160540	14.2N	132.4E	PCN 2		20 NM DIA EYE	RPMK
53	160540	14.2N	132.6E	PCN 1		20 NM EYE	RODN
54	160600	14.6N	132.6E	PCN 2		EYE FIX	PGTW
55	160900	14.6N	132.1E	PCN 2		WELL DEFINED EYE	PGTW
56	160918	14.6N	131.3E	PCN 2		20 NM EYE	RODN
57	161102	14.6N	131.6E	PCN 1		SMALL EYE	RPMK
58	161200	14.6N	131.3E	PCN 2		EYE LOWLVL 6NM UPPER LVL 18NM	PGTW
59	161600	14.7N	130.3E	PCN 2	T7.0/7.0 /D0.5/24HRS	WELL DEFINED EYE	PGTW
60	161800	14.7N	130.0E	PCN 2		WELL DEFINED EYE	PGTW
61	161826	14.8N	129.7E	PCN 1			RKSO
62	162100	14.7N	129.4E	PCN 2		WELL DEFINED 18 NM EYE	PGTW
63	162159	14.8N	129.0E	PCN 1	T7.0/7.0	INIT OBS EYE FIX	RKSO
64	162342	14.8N	128.7E	PCN 1		EYE FIX	RKSO
65	170000	14.8N	128.7E	PCN 2		18 NM EYE	PGTW
66	170147	14.7N	128.4E	PCN 1	T7.0/7.0-/D1.5/27HRS		RPMK
67	170147	14.5N	128.3E	PCN 1	T7.5/7.5 /D0.5/25HRS	EYE FIX	RODN
68	170300	14.7N	128.0E	PCN 2	T7.5/7.0-/S0.0/24HRS	WELL DEFINED EYE	PGTW
69	170529	14.4N	127.7E	PCN 1		SCNDRY EYEWL 20NM DIA APPROX.	RPMK
70	170600	14.6N	127.4E	PCN 2		16NM ELLIPTICAL EYE	PGTW
71	170900	14.5N	126.8E	PCN 2			PGTW
72	171039	14.3N	126.7E	PCN 1			RODN
73	171200	14.3N	126.3E	PCN 2			PGTW
74	171427	14.3N	126.0E	PCN 1		WELL DEFINED EYE	RODN
75	171600	14.3N	125.4E	PCN 2	T7.0/7.0-/S0.0/24HRS	EYE FIX	PGTW
76	171800	14.3N	125.1E	PCN 2			PGTW
77	171815	14.4N	125.3E	PCN 2			RKSO
78	172100	14.3N	124.7E	PCN 2		ILL DEFINED EYE	PGTW
79	172137	14.3N	124.5E	PCN 2	T6.5/7.0 /W0.5/24HRS		RKSO
80	180000	14.4N	124.1E	PCN 2		RAGGED EYE	PGTW
81	180126	14.4N	123.8E	PCN 1		16NM EYE	PGTW
82	180126	14.5N	124.1E	PCN 1	T7.0/7.0-/W0.5/24HRS	EYE OPN SE	RODN
83	180127	14.5N	124.3E	PCN 2		EYE FIX	RPMK
84	180300	14.3N	123.8E	PCN 4	T6.5/7.0 /W1.0/24HRS	ILL DEFINED EYE	PGTW
85	180518	14.5N	123.1E	PCN 3			PGTW
86	180518	14.7N	123.0E	PCN 3			RODN
87	180900	14.7N	123.0E	PCN 6			PGTW
88	181017	14.8N	122.7E	PCN 4			PGTW
89	181017	15.0N	122.6E	PCN 3			RODN
90	181200	15.0N	122.6E	PCN 6			PGTW
91	181407	15.0N	121.8E	PCN 4			PGTW
92	181600	15.5N	121.4E	PCN 6			PGTW
93	181804	15.2N	120.1E	PCN 6			RKSO
94	181804	15.5N	120.0E	PCN 6	T5.5/6.5+/W1.5/26HRS		PGTW
95	182100	15.3N	119.7E	PCN 6		ULCC FIX	PGTW
96	190000	15.6N	118.8E	PCN 6			PGTW
97	190106	15.6N	118.6E	PCN 4			PGTW
98	190300	16.0N	119.1E	PCN 4	T4.5/5.5+/W2.0/24HRS		PGTW
99	190600	16.2N	118.6E	PCN 4			PGTW
100	190900	15.9N	118.0E	PCN 6			
101	191137	15.9N	118.2E	PCN 5		RAGGED 20NM EYE	RPMK
102	191137	16.1N	118.3E	PCN 4			RODN
103	191200	16.1N	117.8E	PCN 6			PGTW
104	191347	16.6N	117.3E	PCN 6			PGTW
105	191600	16.5N	116.9E	PCN 6	T4.5/5.5+/W1.0/22HRS		PGTW
106	191800	16.5N	116.6E	PCN 6			PGTW
107	191935	16.9N	116.0E	PCN 6			RODN
108	192100	16.6N	115.2E	PCN 4		PSBL DEVELPNG EYE	PGTW
109	192236	17.4N	115.8E	PCN 4			RPMK
110	192352	17.5N	115.6E	PCN 3	T4.5/4.5	INIT OBS	RPMK
111	192352	17.2N	115.5E	PCN 3	T4.5/4.5	INIT OBS	RODN
112	200000	17.1N	115.3E	PCN 4			PGTW
113	200227	17.2N	115.1E	PCN 3			RPMK
114	200300	17.3N	114.9E	PCN 4	T5.5/5.5 /D1.0/24HRS		PGTW
115	200600	17.3N	114.1E	PCN 4			PGTW
116	200639	17.7N	114.1E	PCN 1		12NM EYE	RPMK
117	200900	17.2N	113.0E	PCN 4			PGTW
118	201049	17.6N	112.9E	PCN 2		EYE WALL	RKSO
119	201116	17.7N	113.2E	PCN 1		EYE FIX	RPMK
120	201116	17.7N	112.8E	PCN 1		ILL DEFINED EYE	RODN
121	201200	17.6N	112.9E	PCN 2		24 NM EYE POORLY DEFINED	PGTW
122	201508	17.7N	112.2E	PCN 1		SMALL EYE	PGTW
123	201508	17.7N	112.2E	PCN 1			RODN
124	201600	17.8N	111.9E	PCN 2	T5.5/5.5-/D1.0/24HRS		PGTW
125	201800	18.0N	111.2E	PCN 4			PGTW
126	201923	18.2N	110.8E	PCN 3		PSBL SMALL EYE	RPMK
127	202100	18.2N	110.5E	PCN 2		SMALL EYE	PGTW
128	202215	18.1N	109.5E	PCN 3			RODN
129	202328	18.5N	108.8E	PCN 4			RPMK
130	210000	18.4N	109.4E	PCN 4		ULCC FIX	PGTW
131	210200	18.1N	108.2E	PCN 3	T4.0/4.5-/W0.5/28HRS		RODN
132	210207	18.4N	108.5E	PCN 3	T4.0/4.5-/W0.5/26HRS		RPMK
133	210300	18.4N	108.5E	PCN 6	T4.0/5.0-/W1.5/24HRS		PGTW
134	210600	18.4N	107.6E	PCN 6		ULCC FIX	PGTW
135	210628	18.2N	107.2E	PCN 3			RODN
136	210900	18.5N	106.6E	PCN 6			PGTW
137	211055	18.4N	105.7E	PCN 3			RPMK
138	211200	18.8N	106.0E	PCN 6		PART EXP LLCC	PGTW
*139	211447	18.1N	104.5E	PCN 3			RODN
140	211600	18.9N	105.6E	PCN 6	T3.5/4.0-/W1.5/24HRS	ULCC FIX	PGTW
141	211800	18.8N	105.6E	PCN 6		PART EXP LLCC	PGTW
142	211914	19.0N	104.7E	PCN 6			RPMK
143	212100	18.9N	104.5E	PCN 6		ULCC FIX	PGTW
144	212335	19.0N	103.3E	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 DIAM/	ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	132204	11.5N 142.7E	1500FT		992	50 070 25	070 67 070 25	10 3				+24 +27 +26	2
2	140027	11.6N 142.2E	1500FT		992	50 310 20	360 60 310 20	7 1	CIRCULAR	15		+25 +28 +26	2
3	140530	11.8N 141.3E	700MB	2975		65 060 40	120 55 060 43	10 3				+13 +15 +10	4
4	140804	11.9N 141.0E	700MB	2976	982	45 190 30	260 54 190 20	10 4				+11 +16 + 9	4
5	142130	13.0N 138.4E	700MB	2865	975	70 300 28	080 60 180 72	2 3	CONCENTRIC	10	30	+12 +14 +13	5
6	150022	13.1N 137.8E	700MB	2827	969	80 130 10	220 70 130 17	2 2	CIRCULAR	25		+13 +16 + 8	5
7	150615	13.5N 136.7E	700MB	2669		95 060 8	130 88 060 18	10 1	CIRCULAR	25		+ 9 +17 +11	7
8	150853	13.4N 136.2E	700MB	2598	941		240 92 170 15	10 2	CIRCULAR	20		+ 9 +20 + 8	7
9	152102	14.0N 134.4E	700MB	2268		130 320 12	130 145 090 24	8 1	CIRCULAR	15		+14 +30 +11	8
10	152342	14.1N 133.7E	700MB	2243	969	110 270 6	010 117 310 10	10 1	CIRCULAR	18		+13 +30 + 8	8
11	160959	14.6N 131.6E	700MB	2157			160 115 110 25	4 1	CONCENTRIC	25	15	+13 +28 +10	10
12	161214	14.6N 131.1E	700MB	2193	897		110 108 350 24	4 1	CONCENTRIC	15	25	+11 +27 + 5	10
13	162307	14.7N 128.6E	700MB	2178	897	130 270 10	360 98 270 13	5 10	CIRCULAR	10		+12 +22 + 6	11
14	170905	14.4N 126.7E	700MB	2282		110 080 9	360 106 250 12	15 2	CIRCULAR	15		+13 +20 +16	12
15	171208	14.3N 126.3E	700MB	2283	908		060 109 330 12	10 1	CIRCULAR	12		+13 +18 +17	12
16	172116	14.4N 124.8E	700MB	2312		45 130 90	020 93 130 30	10 1	CIRCULAR	13		+18 +21 +16	13
17	172353	14.4N 124.3E	700MB	2352	915	100 270 10	340 102 270 30	10 2	ELLIPTICAL	15	10 330	+13 +20 +16	13
18	180534	14.7N 123.5E	700MB	2440	926	100 360 8	080 99 360 8	5 4	ELLIPTICAL	15	10 360	+14 +18 +16	14
19	180828	14.8N 123.2E	700MB	2455		50 040 106	120 99 360 8	4 5	CIRCULAR	15		+12 +16 +16	14

20	190915	15.9N	118.4E	700MB	2894	979	50	340	50	070	61	340	55	10	2	CIRCULAR	30			+12	+14	+11	15
21	191152	16.2N	117.6E	700MB	2905					160	64	080	77	10	2	CONCENTRIC	10	40		+12	+15	+13	15
22	192111	16.5N	116.3E	700MB	2831					140	76	050	80	10	3	ELLIPTICAL	15	10	280	+13	+15	+12	16
23	192335	17.0N	114.8E	700MB	2821	970	70	120	95	180	79	160	44	10	2	ELLIPTICAL	15	5	360	+11	+16	+11	16
24	200831	17.3N	113.7E	700MB	2755	962	75	040	21	190	66	110	60	5	5	ELLIPTICAL	15	10	160	+14	+14	+ 9	17

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	171200	14.3N 126.3E	LAND				10623	52510		14.0N 124.3E	98447
2	171500	14.4N 125.8E	LAND				10613	52813	EYE CIRCULAR OPN 50 PRCNT	14.0N 124.3E	98447
3	171600	14.3N 125.6E	LAND				10613	52619		14.0N 124.3E	98447
4	171700	14.4N 125.3E	LAND				10422	52910		14.0N 124.3E	98447
5	171700	14.7N 125.2E	LAND				20612	52712		14.1N 123.0E	98440
6	171800	14.8N 125.3E	LAND				10412	52709		14.0N 124.3E	98447
7	172100	14.6N 124.9E	LAND				20572	52709		14.1N 123.0E	98440
8	172200	14.4N 124.7E	LAND				10512	52511		14.0N 124.3E	98447
9	172300	14.6N 124.4E	LAND				20481	52712		14.1N 123.0E	98440
10	180000	14.5N 124.4E	LAND				20412	52712		14.1N 123.0E	98440
11	180300	14.6N 123.9E	LAND				/0403	52714		14.1N 123.0E	98440
12	180300	14.6N 124.4E	LAND				4////	4////		16.3N 120.6E	98321
13	180600	14.7N 123.9E	LAND				2041/	42911		16.3N 120.6E	98321
14	180700	14.9N 123.7E	LAND				2041/	52911	EYE 100 PRCNT CIR EYEWL SE GOOD	16.3N 120.6E	98321
15	180800	14.9N 123.6E	LAND				2041/	52912	EYE 100 PRCNT CIR EYEWL SE GOOD	16.3N 120.6E	98321
16	180830	15.0N 123.5E	LAND				2041/	52910		16.3N 120.6E	98321
17	180900	15.0N 123.4E	LAND				20415	52910		16.3N 120.6E	98321
18	181000	15.0N 122.8E	LAND				20212	53218		14.1N 123.0E	98440
19	181100	15.1N 122.5E	LAND				20212	52916		14.1N 123.0E	98440
20	181125	15.0N 122.5E	LAND	POOR						15.2N 120.6E	98327
21	181200	15.3N 122.8E	LAND				1021/	42806		16.3N 120.6E	98321
22	181200	15.1N 122.3E	LAND				20233	52912		14.1N 123.0E	98440
23	181210	15.0N 122.4E	LAND	FAIR						15.2N 120.6E	98327
24	181235	15.1N 122.2E	LAND	FAIR						15.2N 120.6E	98327
25	181300	15.3N 122.5E	LAND				1021/	42809		16.3N 120.6E	98321
26	181335	15.2N 122.1E	LAND	POOR						15.2N 120.6E	98327
27	181400	15.2N 122.0E	LAND				30/41	53211		14.1N 123.0E	98440
28	181400	15.3N 122.4E	LAND				1021/	42707		16.3N 120.6E	98321
29	181410	15.3N 122.0E	LAND	POOR						15.2N 120.6E	98327
30	181435	15.3N 121.8E	LAND	FAIR						15.2N 120.6E	98327
31	181510	15.4N 121.6E	LAND	FAIR						15.2N 120.6E	98327
32	181535	15.5N 121.5E	LAND	FAIR						15.2N 120.6E	98327
33	181638	15.5N 121.1E	LAND	FAIR						15.2N 120.6E	98327
34	181828	15.6N 120.5E	LAND	GOOD						15.2N 120.6E	98327
35	181900	15.4N 120.6E	LAND				4////	52614		16.3N 120.6E	98321
36	182000	15.3N 120.1E	LAND				1021/	42610		16.3N 120.6E	98321
37	182030	15.3N 119.9E	LAND				1021/	42712		16.3N 120.6E	98321
38	182100	15.4N 119.8E	LAND				15///	42906		16.3N 120.6E	98321
39	182200	15.4N 119.7E	LAND				1020/	42704		16.3N 120.6E	98321
40	190000	15.4N 119.3E	LAND				2033/	62714		16.3N 120.6E	98321
41	190100	15.4N 119.0E	LAND				2023/	42705		16.3N 120.6E	98321
42	190200	15.4N 118.9E	LAND				2042/	42704		16.3N 120.6E	98321
43	190700	15.5N 118.3E	LAND				1061/	32994		16.3N 120.6E	98321
44	190800	15.8N 118.2E	LAND				1061/	43408		16.3N 120.6E	98321
45	190900	15.9N 118.1E	LAND				1061/	43204		16.3N 120.6E	98321
46	191000	15.9N 118.2E	LAND				1061/			16.3N 120.6E	98321
47	191200	16.1N 117.4E	LAND				1061/	42712		16.3N 120.6E	98321
48	200500	17.2N 114.0E	LAND				11184	73210		16.8N 112.3E	59981
49	200600	17.3N 113.9E	LAND				12294	52911		16.8N 112.3E	59981
50	200700	17.3N 113.8E	LAND				12274	52910		16.8N 112.3E	59981
51	200800	17.4N 113.6E	LAND				12274	53010		16.8N 112.3E	59981
52	201213	17.7N 112.9E	ACFT	GOOD					15 NM EYE	17.6N 114.4E	
53	201500	17.8N 111.8E	LAND				10183	52812		16.8N 112.3E	59981
54	201800	18.0N 111.0E	LAND				10173	52911		16.8N 112.3E	59981
55	201900	18.1N 110.8E	LAND				10173	52912		16.8N 112.3E	59981
56	202000	18.1N 110.4E	LAND				10173	52814		16.8N 112.3E	59981
57	202100	18.2N 110.2E	LAND				34362	52814		16.8N 112.3E	59981

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

TROPICAL STORM ELLIS
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
101400Z	6.1	159.0	10	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101406Z	6.6	158.0	10	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101412Z	7.1	157.1	10	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101418Z	7.6	156.1	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.
101500Z	8.1	155.4	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.
101506Z	8.5	154.7	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.
101512Z	8.8	154.0	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.
101518Z	9.3	153.3	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.
101600Z	10.1	152.8	35	9.9	152.9	35.	13.	0.	11.5	150.1	55.	59.	15.	12.8	145.3	75	343.	25.	13.6	140.1	100.	621.	60.
101606Z	10.6	152.0	35	10.7	151.9	40.	8.	5.	12.8	148.6	60.	168.	15.	14.1	144.2	80	458.	30.	15.3	139.5	100.	715.	60.
101612Z	10.8	151.5	35	11.3	151.2	40.	35.	5.	13.1	148.2	55.	199.	10.	14.1	144.3	70.	460.	20.	15.2	139.9	95.	681.	55.
101618Z	10.8	151.2	35	10.8	151.3	40.	6.	5.	11.7	149.9	55.	103.	10.	12.9	147.3	75.	324.	30.	13.6	143.7	90.	464.	55.
101700Z	10.8	150.8	40	10.9	150.9	45.	8.	5.	11.7	149.2	60.	150.	10.	12.6	146.3	80.	351.	40.	12.9	142.5	95.	435.	65.
101706Z	10.7	150.5	45	10.9	150.6	45.	13.	0.	11.5	148.7	65.	178.	15.	12.3	145.7	85.	364.	45.	0.0	0.0	0.	-0.	0.
101712Z	10.5	150.3	45	11.0	150.3	45.	30.	0.	11.7	148.2	65.	220.	15.	12.5	145.0	85.	388.	45.	0.0	0.0	0.	-0.	0.
101718Z	10.0	150.1	45	10.0	149.8	55.	18.	10.	10.7	148.8	80.	180.	35.	11.2	145.9	100.	295.	65.	0.0	0.0	0.	-0.	0.
101800Z	9.3	149.9	50	9.5	149.8	55.	13.	5.	10.3	148.6	80.	193.	40.	10.9	145.6	100.	283.	70.	0.0	0.0	0.	-0.	0.
101806Z	8.7	149.7	50	9.5	149.5	60.	49.	10.	9.6	147.9	80.	180.	40.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101812Z	8.2	149.3	50	8.4	149.6	55.	21.	5.	8.6	146.7	65.	135.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101818Z	7.7	148.8	45	8.0	148.8	55.	18.	10.	8.6	145.5	70.	146.	35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101900Z	7.1	148.3	40	7.2	148.3	50.	6.	10.	6.4	144.8	60.	32.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101906Z	6.6	147.8	40	6.6	147.8	50.	0.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101912Z	6.4	147.2	40	6.2	147.2	45.	12.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101918Z	6.3	146.3	35	6.3	146.4	45.	6.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
102000Z	6.2	145.3	30	6.3	145.2	35.	8.	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	16.	149.	363.	583.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	10.	117.	311.	430.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	6.	23.	41.	59.	0.	0.	0.	0.
AVG INTENSITY BIAS	6.	23.	41.	59.	0.	0.	0.	0.
NUMBER OF FORECASTS	17	13	9	5	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1046. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL STORM ELLIS
FIX POSITIONS FOR CYCLONE NO. 22

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	150000	8.2N 155.4E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	150300	8.5N 155.1E	PCN 6			PGTW
* 3	151200	7.7N 152.8E	PCN 6			PGTW
4	151600	8.7N 153.7E	PCN 6	T1.5/1.5	INIT OBS	PGTW
* 5	151800	8.1N 153.3E	PCN 6			PGTW
6	152039	8.8N 153.3E	PCN 6	T2.0/2.0	INIT OBS	RPMK
7	152100	9.3N 153.4E	PCN 6			PGTW
8	152223	8.7N 154.2E	PCN 6	T1.5/1.5	INIT OBS	RPMK
9	160000	9.9N 152.9E	PCN 4	T2.5/2.5 /D1.5/24HRS	EXP LLCC	PGTW
10	160026	10.2N 152.9E	PCN 3	T3.0/3.0	INIT OBS EXP LLCC	RODN
11	160300	10.4N 152.2E	PCN 4		EXP LLCC	PGTW
12	160600	10.8N 152.1E	PCN 4		EXP LLCC	PGTW
13	160900	10.8N 151.8E	PCN 6			PGTW
14	161200	11.0N 151.6E	PCN 6			PGTW
15	161600	11.1N 150.9E	PCN 6	T2.5/2.5-/D1.0/24HRS		PGTW
* 16	161644	11.6N 150.8E	PCN 4		EXP LLCC	RODN
17	161800	11.3N 150.9E	PCN 6			PGTW
18	162100	11.0N 150.8E	PCN 6			PGTW
19	162201	10.9N 151.2E	PCN 6	T2.5/2.5 /W1.0/26HRS		RODN
20	170000	10.3N 150.4E	PCN 6			PGTW
21	170300	10.7N 150.7E	PCN 4	T3.0/3.0+/D0.5/24HRS	PART EXP LLCC	PGTW
22	170600	10.5N 150.6E	PCN 6			PGTW
23	170857	10.8N 151.5E	PCN 5			RPMK
24	170900	10.7N 150.6E	PCN 6			PGTW
25	171200	10.8N 150.4E	PCN 6			PGTW
26	171600	10.2N 150.0E	PCN 6	T3.0/3.0+/D0.5/24HRS		PGTW
27	171800	10.3N 149.9E	PCN 6			PGTW
28	171956	10.0N 150.7E	PCN 6		ULCC FIX	PGTW
29	172100	9.7N 150.7E	PCN 6		ULCC FIX	PGTW
30	180000	9.4N 150.8E	PCN 6		ULCC FIX	PGTW
31	180300	9.3N 149.5E	PCN 6	T3.5/3.5 /D0.5/24HRS		PGTW
32	180519	9.3N 149.3E	PCN 6			PGTW
33	180600	9.5N 149.5E	PCN 6			PGTW
34	180836	8.6N 149.6E	PCN 6			PGTW
35	181225	8.5N 149.6E	PCN 6			RODN
36	181225	8.4N 149.6E	PCN 5			PGTW
37	181622	8.1N 148.9E	PCN 5	T3.5/3.5 /D0.5/24HRS		PGTW
38	181800	7.8N 148.6E	PCN 6			PGTW
39	182100	7.7N 148.4E	PCN 6		ULCC FIX	PGTW
40	182325	7.4N 148.5E	PCN 6			PGTW
41	190300	7.7N 148.3E	PCN 6	T3.5/3.5 /S0.0/24HRS		PGTW
42	190508	6.9N 148.1E	PCN 6			PGTW
43	190600	6.8N 148.0E	PCN 6			PGTW
44	190815	7.3N 147.6E	PCN 6			PGTW
45	190932	7.0N 147.5E	PCN 5			PGTW
46	191205	7.0N 147.3E	PCN 5			PGTW
47	191611	7.4N 146.6E	PCN 6	T3.5/3.5 /S0.0/24HRS		PGTW
48	191800	6.9N 146.5E	PCN 6			PGTW
49	192030	6.7N 146.7E	PCN 6			PGTW
50	192055	6.8N 146.4E	PCN 6			PGTW
51	200000	6.2N 145.7E	PCN 6			PGTW
* 52	200300	7.0N 145.9E	PCN 6	T2.5/3.0+/W1.0/24HRS		PGTW
* 53	200457	7.6N 145.9E	PCN 6			PGTW
* 54	200600	7.9N 145.9E	PCN 6			PGTW
* 55	200908	8.0N 145.8E	PCN 6		ULCC FIX	PGTW
* 56	201200	8.1N 145.5E	PCN 6			PGTW
57	202034	9.7N 140.8E	PCN 6		ULCC FIX	PGTW
58	210000	10.4N 139.5E	PCN 6		ULCC FIX	PGTW
59	210025	10.4N 139.2E	PCN 5	T2.5/2.5	INIT OBS	RODN
60	210025	9.7N 139.6E	PCN 5		ULCC FIX	PGTW
61	210300	10.2N 138.9E	PCN 6	T2.5/2.5 /S0.0/24HRS	ULCC FIX	PGTW

62	210600	10.6N 138.4E	PCN 6	ULCC FIX	PGTW
63	210900	11.5N 138.2E	PCN 6	ULCC FIX	PGTW
64	210915	11.5N 135.2E	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	160458	10.7N 152.1E	1500FT		1000	45 040 15	170 35 070 50	2 2			+24 +25 +23 25	1
2	170532	10.7N 150.6E	1500FT		995	40 280 40	300 39 220 10	10 5	CIRCULAR	20	+26 +27 +23 28	3
3	170755	10.7N 150.5E	1500FT		997	45 170 25	270 44 120 12	8 2	CIRCULAR	15	+25 +27 +23 28	3
4	172200	9.4N 150.0E	1500FT		997	65 360 30	070 75 360 32	4 1			+26 +26 +22 28	5
5	172345	9.3N 149.8E	700MB	3075	999	60 240 30	170 52 120 40	4 1			+11 +14 + 4	5
6	180900	8.5N 150.1E	700MB	3071			100 38 360 26	10 10			+ 9 +11 +10	7
7	181159	8.3N 149.3E	700MB	3081	1000		150 49 750 51	8 8	ELLIPTICAL	60 40 010	+ 9 +15 + 6	7
8	182045	7.4N 148.5E	1500FT		997	45 350 40	320 51 230 19	7 3			+26 +27 +24 29	8
9	182323	7.2N 148.3E	1500FT		997	30 060 20	140 42 060 30	8 2			+25 +27 +24	8
10	190626	6.5N 147.9E	1500FT		998	45 340 50	060 42 350 34	4 2			+24 +27 +25	9
11	190858	6.4N 147.5E	700MB	3119	1002		160 38 080 20	2 4			+11 +13 + 9	9
12	192120	6.2N 145.5E	700MB	3153	1008	35 010 90	140 44 010 90	5 5			+10 +10 + 6	11
13	192350	6.2N 145.2E	1500FT		1007	10 140 60	190 27 140 18	5 10			+24 +26 +21 28	11
14	210307	8.9N 138.8E	1500FT		1007	15 060 50	170 15 160 30	5 10			+26 +26 +24 25	14

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	140000	6.5N 159.0E	010	060	91353 91348
2	141200	6.9N 157.0E	010	070	91348 91338 91353 91334
3	150000	7.9N 154.8E	020	170	91338 91334 91348 91353 91426 UYDO JJQL

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

TYPHOON FAYE
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	18.8 125.9	30	13.1 125.4	30.	34.	0.	13.4 122.8	25	108.	-20.	14.2 119.2	35	264.	0.	15.1 115.1	55.	310.	15.
102306Z	13.5 124.9	30	13.1 125.5	30.	42.	0.	13.5 123.0	25.	173.	-10.	14.3 119.2	35	237.	-5.	15.3 115.2	55.	336.	20.
102312Z	14.1 124.0	35	14.3 123.9	30.	13.	-5.	16.3 119.9	25.	42.	5.	16.2 115.9	45	203.	5.	17.3 111.9	60.	516.	25.
102318Z	14.6 123.0	40	15.0 122.7	35.	30.	-5.	16.3 118.2	35.	125.	10.	16.4 114.0	50	313.	10.	19.1 109.9	55.	663.	15.
102400Z	15.1 122.2	45	15.2 122.0	45.	13.	0.	16.3 118.2	35.	145.	0.	16.7 114.5	50	298.	10.	19.1 111.6	60.	601.	15.
102406Z	15.8 121.2	35	15.5 121.5	34.	25.	-1.	16.2 117.8	35.	127.	-5.	17.1 113.9	55	258.	20.	19.6 110.8	60.	650.	10.
102412Z	16.7 120.5	20	16.1 120.7	20.	38.	0.	16.4 117.0	40.	145.	0.	17.8 113.6	55	414.	20.	20.4 111.0	60.	651.	10.
102418Z	17.6 119.9	25	17.3 120.0	25.	19.	0.	19.7 116.2	45.	199.	5.	20.7 112.2	55	535.	15.	20.9 107.9	45.	837.	-5.
102500Z	18.6 119.0	35	18.2 119.1	35.	25.	0.	19.8 116.7	50.	189.	10.	20.8 114.8	60	427.	15.	21.3 112.7	55.	582.	5.
102506Z	18.2 118.5	40	18.2 118.5	35.	0.	-5.	18.9 115.3	45.	268.	10.	19.8 113.3	45	509.	-5.	20.3 111.3	40.	666.	-15.
102512Z	18.0 118.9	40	18.3 118.9	40.	18.	0.	18.3 118.9	45.	112.	10.	18.6 117.2	45	304.	-5.	18.7 115.4	45.	458.	-15.
102518Z	18.0 119.2	40	18.3 119.2	40.	18.	0.	18.3 119.2	45.	145.	5.	18.3 117.5	45	304.	-5.	18.1 115.8	45.	471.	-20.
102600Z	18.1 119.5	40	18.0 119.5	35.	6.	-5.	18.0 119.5	35.	172.	-10.	17.8 117.8	40	309.	-10.	17.7 116.3	40.	470.	-35.
102606Z	18.5 120.0	35	18.6 120.2	45.	13.	10.	19.6 120.6	50.	97.	0.	20.3 119.2	50	223.	-5.	20.6 117.5	55.	388.	-25.
102612Z	18.8 120.8	35	18.6 120.9	35.	13.	0.	19.7 122.7	35.	21.	-15.	20.7 124.5	30	82.	-30.	21.8 126.2	30.	78.	-60.
102618Z	19.1 121.6	40	18.9 121.7	35.	13.	-5.	19.8 124.0	30.	76.	-20.	21.0 126.1	30	138.	-35.	22.5 128.1	30.	150.	-65.
102700Z	19.3 122.2	45	19.2 122.3	45.	8.	0.	20.6 125.0	45.	133.	-5.	21.7 127.2	40	191.	-35.	23.0 129.4	35.	188.	-65.
102706Z	19.4 122.3	50	19.5 122.6	50.	18.	0.	20.4 124.1	60.	70.	5.	21.4 125.9	50	85.	-30.	22.5 128.2	40.	108.	-55.
102712Z	19.4 122.5	50	19.6 122.8	50.	21.	0.	20.4 124.2	45.	58.	-15.	21.4 126.0	45	69.	-45.	22.7 128.7	40.	110.	-50.
102718Z	19.5 122.7	50	19.6 123.2	50.	29.	0.	20.3 124.7	45.	51.	-20.	21.3 126.5	45	86.	-50.	22.4 129.3	40.	147.	-45.
102800Z	19.6 122.9	50	19.5 122.8	50.	8.	0.	19.9 123.7	45.	45.	-30.	20.3 124.9	40	168.	-60.	21.2 126.8	40.	295.	-40.
102806Z	19.7 123.1	55	19.5 123.1	50.	12.	-5.	19.5 123.1	50.	126.	-30.	20.2 124.1	50	234.	-45.	21.4 125.2	45.	409.	-20.
102812Z	19.8 123.4	60	19.8 123.5	65.	6.	5.	20.2 124.3	75.	94.	-15.	20.9 125.3	80	225.	-10.	21.8 126.7	85.	420.	25.
102818Z	20.2 123.8	65	19.9 123.7	65.	19.	0.	20.4 124.7	75.	121.	-20.	21.2 125.6	80	261.	-5.	22.2 126.9	85.	490.	30.
102900Z	20.6 124.0	75	20.6 123.9	75.	6.	0.	22.1 124.1	60.	116.	-40.	24.0 124.8	65	275.	-15.	25.0 126.7	60.	519.	10.
102906Z	21.2 124.4	80	21.2 124.3	80.	6.	0.	25.8 125.7	70.	150.	-25.	29.4 130.4	65	211.	0.	32.1 139.0	55.	246.	10.
102912Z	21.7 124.8	90	21.6 124.9	90.	8.	0.	24.7 127.3	85.	56.	-5.	27.7 131.9	75	69.	15.	0.0 0.0	0.	-0.	0.
102918Z	22.3 125.4	95	22.2 125.3	90.	8.	-5.	25.2 127.8	85.	44.	0.	28.1 132.6	75	100.	20.	0.0 0.0	0.	-0.	0.
103000Z	22.9 126.0	100	22.9 126.0	100.	0.	0.	25.8 129.1	95.	36.	15.	28.6 133.5	80	140.	30.	0.0 0.0	0.	-0.	0.
103006Z	23.4 126.5	95	23.4 126.5	100.	0.	5.	25.8 129.2	90.	87.	25.	28.8 134.0	75	215.	30.	0.0 0.0	0.	-0.	0.
103012Z	24.1 127.4	90	24.1 127.4	90.	0.	0.	27.2 131.4	70.	60.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
103018Z	24.7 128.4	85	24.7 128.4	85.	0.	0.	27.7 133.4	70.	52.	15.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
103100Z	25.4 129.6	80	25.4 129.7	85.	5.	5.	28.1 134.7	65.	70.	15.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
103106Z	25.9 130.8	65	26.1 131.4	65.	35.	0.	29.1 138.0	45.	60.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
103112Z	26.6 132.3	60	26.7 132.8	60.	27.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
103118Z	27.1 134.1	55	27.0 134.0	55.	8.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
110100Z	27.6 135.9	50	27.5 136.0	50.	8.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
110106Z	28.1 138.0	45	28.1 138.1	45.	5.	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.	104.	242.	414.	12.	106.	242.	414.
AVG RIGHT ANGLE ERROR	7.	58.	136.	231.	7.	57.	136.	231.
AVG INTENSITY MAGNITUDE ERROR	2.	13.	20.	27.	2.	13.	20.	27.
AVG INTENSITY BIAS	-0.	-4.	-7.	-13.	-0.	-5.	-7.	-13.
NUMBER OF FORECASTS	38	34	30	26	34	32	30	26

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1849. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 8. KNOTS

TYPHOON FAYE
FIX POSITIONS FOR CYCLONE NO. 23

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	221332	13.1N 125.4E	PCN 6	T1.5/1.5	INIT OBS	PGTW
2	230000	13.4N 125.0E	PCN 6			PGTW
3	230126	13.1N 125.4E	PCN 5			PGTW
4	230300	13.4N 124.9E	PCN 6			PGTW
5	230607	13.6N 125.2E	PCN 5			PGTW
6	230900	14.1N 124.1E	PCN 6			PGTW
7	231012	13.9N 124.3E	PCN 6			PGTW
8	231200	14.6N 124.1E	PCN 6			PGTW
9	231407	14.7N 123.3E	PCN 3			PGTW
10	231600	14.7N 123.3E	PCN 4	T2.5/2.5	INIT OBS	PGTW
11	231800	14.9N 122.5E	PCN 4			PGTW
12	231852	14.7N 122.7E	PCN 3			RPMK
13	232111	15.0N 121.9E	PCN 6			PGTW
14	232215	15.1N 121.7E	PCN 5			PGTW
15	240000	15.1N 121.7E	PCN 6	T2.5/2.5-/D1.0/26HRS		PGTW
16	240106	15.0N 122.0E	PCN 3			PGTW
17	240107	15.1N 121.3E	PCN 5			RPMK
18	240300	15.1N 121.7E	PCN 6			PGTW
19	240556	15.6N 121.6E	PCN 5			PGTW
20	240556	15.8N 122.1E	PCN 5	T2.0/2.0	INIT OBS	RODN
21	240556	15.6N 121.4E	PCN 5			RPMK
22	240951	16.3N 121.1E	PCN 6		ULCC FIX	PGTW
23	241200	16.4N 120.9E	PCN 6		ULCC FIX	PGTW
24	241346	17.1N 120.4E	PCN 5		ULCC FIX	PGTW
25	241600	17.5N 120.2E	PCN 6	T1.0/2.0+/W1.5/24HRS	ULCC FIX	PGTW
26	241841	17.5N 119.9E	PCN 6		ULCC FIX	PGTW
27	242100	18.4N 120.1E	PCN 6		ULCC FIX	PGTW
28	242231	17.7N 119.9E	PCN 6	T1.0/1.0	INIT OBS	RPMK
29	242331	18.6N 118.8E	PCN 3			RODN
30	242331	18.2N 119.5E	PCN 5			RPMK
31	250000	18.5N 118.8E	PCN 4		PART EXP LLCC	PGTW
32	250227	18.0N 118.9E	PCN 3	T2.5/2.5 /D0.5/22HRS		RODN
33	250300	17.7N 118.5E	PCN 4	T2.5/2.5 /S0.0/27HRS	PART IXP LLCC	PGTW
34	250545	17.7N 118.8E	PCN 3		PART EXP LLCC	PGTW
35	250545	17.7N 118.7E	PCN 5	T2.5/2.5	INIT OBS EXP LLCC	RKSO
36	251029	18.4N 118.6E	PCN 6		ULCC FIX	PGTW
37	251111	18.4N 119.8E	PCN 5		ULCC FIX	RPMK
38	251111	18.3N 119.3E	PCN 5		ULCC FIX	RODN
39	251507	18.2N 119.9E	PCN 5			RODN
* 40	251600	19.4N 120.1E	PCN 6	T3.0/3.0-/D2.0/24HRS	ULCC FIX	PGTW
41	251831	18.2N 119.8E	PCN 6		ULCC FIX	PGTW
42	252100	18.1N 119.5E	PCN 6			PGTW
43	252210	18.5N 119.2E	PCN 6			PGTW
* 44	252307	18.4N 120.6E	PCN 5			RKSO
45	260000	18.5N 119.4E	PCN 6			PGTW
* 46	260206	19.2N 121.8E	PCN 5	T2.5/2.5 /S0.0/24HRS		RODN
47	260300	18.5N 120.4E	PCN 6	T3.0/3.0 /D0.5/24HRS		PGTW
48	260534	18.1N 120.2E	PCN 5			PGTW
49	260534	18.2N 121.1E	PCN 5	T2.5/2.5 /S0.0/24HRS	EXP LLCC	RKSO

50	260900	18.9N	120.9E	PCN 6				PGTW
51	261004	18.8N	121.1E	PCN 6				PGTW
52	261050	18.8N	121.7E	PCN 5				RPMK
53	261200	18.8N	121.3E	PCN 6				PGTW
54	261447	18.9N	121.4E	PCN 5				RPMK
55	261600	18.9N	122.0E	PCN 6	T2.5/3.0+/W0.5/24HRS			PGTW
56	261820	18.9N	122.3E	PCN 5				RPMK
57	261820	19.0N	122.1E	PCN 5				PGTW
58	262100	19.0N	122.2E	PCN 6				PGTW
59	262148	19.0N	122.3E	PCN 5				PGTW
60	262243	19.0N	122.5E	PCN 5				PGTW
61	270000	19.0N	122.6E	PCN 6				PGTW
62	270146	19.1N	122.3E	PCN 6	T3.5/3.5 /D0.5/23HRS			PGTW
63	270300	19.2N	122.5E	PCN 6				PGTW
64	270523	19.2N	122.5E	PCN 4				PGTW
65	270600	19.4N	122.6E	PCN 4				PGTW
66	270900	19.6N	122.7E	PCN 4				PGTW
67	270940	19.5N	122.5E	PCN 4				PGTW
68	271028	19.6N	122.6E	PCN 3				PGTW
69	271200	19.6N	122.8E	PCN 4				PGTW
70	271427	19.0N	122.8E	PCN 3	T2.5/2.5 /S0.0/12HRS			RODN
71	271600	19.4N	123.0E	PCN 6	T3.0/3.0-/D0.5/24HRS			PGTW
72	271809	19.4N	123.3E	PCN 5				PGTW
73	271809	19.3N	123.0E	PCN 5		EXP LLCC		RKSO
74	272127	19.5N	123.6E	PCN 5				PGTW
75	272218	19.6N	123.5E	PCN 6				PGTW
76	280000	19.4N	123.2E	PCN 6				PGTW
77	280126	19.5N	123.0E	PCN 4	T3.5/3.5-/S0.0/24HRS	PSBL EYE		PGTW
78	280300	19.5N	123.1E	PCN 4				PGTW
79	280512	19.5N	123.0E	PCN 4				PGTW
80	280512	19.8N	123.2E	PCN 5	T3.5/3.5	INIT OBS		RPMK
81	280900	19.6N	123.7E	PCN 6				PGTW
82	281007	19.6N	123.8E	PCN 6				PGTW
83	281057	20.0N	124.0E	PCN 6				RODN
* 84	281200	19.7N	123.6E	PCN 6				PGTW
85	281406	20.0N	123.7E	PCN 4				PGTW
86	281600	20.0N	124.0E	PCN 6	T3.5/3.5 /D0.5/24HRS			PGTW
87	281758	20.0N	123.9E	PCN 6				RKSO
88	281800	20.0N	124.1E	PCN 6				PGTW
89	282100	20.2N	124.1E	PCN 6		ULCC FIX		PGTW
90	282335	20.7N	124.2E	PCN 3	T4.5/4.5	INIT OBS ULCC FIX		RODN
91	290000	20.5N	124.2E	PCN 4		ULCC FIX		PGTW
92	290106	20.8N	124.3E	PCN 3	T4.0/4.0-/D0.5/24HRS	ULCC FIX		PGTW
93	290300	20.9N	124.2E	PCN 4		ULCC FIX		PGTW
94	290600	21.2N	124.4E	PCN 4				PGTW
95	290900	21.0N	124.3E	PCN 6				PGTW
96	290946	21.1N	124.6E	PCN 4				PGTW
97	291033	21.5N	124.7E	PCN 3				RODN
98	291200	21.2N	124.8E	PCN 6				PGTW
99	291346	21.2N	125.0E	PCN 2		EYE 15NM		PGTW
100	291600	22.0N	125.1E	PCN 6	T4.5/4.5 /D1.0/24HRS			PGTW
101	291747	22.5N	125.5E	PCN 4		ILLDEFINED EYE		PGTW
102	291747	22.2N	125.8E	PCN 2		EYE 12 NM		RKSO
103	292100	22.6N	125.7E	PCN 2		EYE FIX		PGTW
104	292311	22.7N	126.2E	PCN 1	T4.5/4.5 /D0.5/24HRS	RAGGED EYE		RODN
105	292311	22.7N	126.1E	PCN 2		RAGGED EYE		RPMK
106	300000	22.8N	126.0E	PCN 2	T5.0/5.0-/D1.0/23HRS	EYE FIX		PGTW
107	300045	22.8N	125.9E	PCN 1		RAGGED EYE		PGTW
108	300300	23.3N	126.2E	PCN 4				PGTW
109	300451	23.3N	126.3E	PCN 1				PGTW
110	300600	23.6N	126.6E	PCN 4				PGTW
111	300633	23.5N	126.4E	PCN 3	T3.5/4.0 /W0.5/25HRS			RPMK
112	300900	23.8N	127.0E	PCN 6		ULCC FIX		PGTW
113	301008	23.5N	127.0E	PCN 6		ULCC FIX		PGTW
114	301008	23.8N	127.4E	PCN 5				RODN
115	301106	23.9N	127.6E	PCN 4				RPMK
116	301200	24.1N	127.7E	PCN 6		ULCC FIX		PGTW
117	301326	24.2N	127.6E	PCN 4		PSBL EYE		PGTW
118	301600	24.2N	127.6E	PCN 6	T5.0/5.0-/D0.5/24HRS	ULCC FIX		PGTW
119	301800	24.7N	128.1E	PCN 6		ULCC FIX		PGTW
120	301919	24.8N	128.0E	PCN 5				RKSO
121	302100	25.6N	128.9E	PCN 6				PGTW
122	302204	25.6N	129.8E	PCN 5	T5.0/5.0-/D0.5/23HRS			RODN
123	302247	25.6N	129.5E	PCN 5				PGTW
124	310000	25.1N	129.4E	PCN 6	T4.0/5.0 /W1.0/24HRS			PGTW
125	310025	25.2N	129.4E	PCN 5				PGTW
126	310300	25.4N	130.1E	PCN 6				PGTW
127	310440	25.3N	130.2E	PCN 3		EXP LLCC		PGTW
128	310600	25.6N	130.7E	PCN 4		EXP LLCC		PGTW
129	310900	25.5N	130.9E	PCN 6				PGTW
*130	311044	27.0N	133.6E	PCN 4				RPMK
131	311200	26.3N	132.4E	PCN 6				PGTW
132	311305	26.1N	133.1E	PCN 6				PGTW
133	311600	26.5N	133.2E	PCN 6	T3.5/4.0 /W1.5/24HRS			PGTW
134	311726	27.7N	134.4E	PCN 6				RODN
135	311726	26.7N	133.1E	PCN 6				PGTW
136	312100	27.1N	134.7E	PCN 6				PGTW
137	312143	27.7N	135.6E	PCN 5				RKSO
138	312222	27.1N	135.3E	PCN 5		EXP LLCC		PGTW
139	010005	27.2N	136.3E	PCN 3	T2.5/3.5 /W1.5/24HRS	EXP LLCC		PGTW
140	010300	27.5N	136.9E	PCN 4		EXP LLCC		PGTW
141	010429	27.6N	137.6E	PCN 4		EXP LLCC		PGTW
142	010600	27.7N	138.2E	PCN 4		EXP LLCC		PGTW
143	010919	28.0N	139.9E	PCN 6				PGTW
144	011245	28.3N	141.4E	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 DIAM/	ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	230100	12.9N 125.8E	1500FT		1004	35 090 10	140 27 070 60	6 5				+23 +25 + 28	2
2	232123	14.3N 122.2E	700MB	3035		25 050 40	170 46 050 31	5 2	CIRCULAR	20		+10 +12 + 5	3
3	240044	15.2N 122.1E	700MB	3041	995	30 020 50	120 56 030 18	5 3	CIRCULAR	30		+ 9 +13 + 8	3
4	242140	18.5N 119.4E	700MB	3067		45 350 63	080 30 350 63	5 3				+11 +13 + 8	4
5	242339	18.3N 119.1E	700MB	3057	1003	40 310 68	360 40 270 40	7 5				+12 +14 + 8	4
6	250605	17.9N 118.7E	1500FT		1001	40 050 64	150 47 050 64	10 1				+24 +24 + 28	5
7	250904	18.0N 118.9E	1500FT		1000	40 320 70	040 47 320 81	10 1				+23 +25 + 29	5
8	252058	18.1N 119.8E	700MB	3067	1001	20 310 145	070 35 330 44	10 3				+ 9 +11 +10	6
9	252345	18.0N 119.6E	1500FT		998	35 120 10	230 35 140 15	10 2				+24 +25 +23 27	6
10	262150	19.1N 122.5E	700MB	3056		45 080 30	130 42 090 65	4 2				+ 8 +12 + 9	8
11	270058	19.3N 122.4E	1500FT		996	55 170 17	250 52 170 17	7 1				+23 +25 +24	8
12	270615	19.5N 122.6E	700MB	3015	992	55 170 28	230 58 170 28	10 1				+21 +25 +23 27	9
13	270919	19.5N 122.5E	700MB	2977	988	30 010 100	090 57 360 55	5 2	ELLIPTICAL	25 15	030	+ 8 +11 + 8	9
14	272115	19.4N 123.2E	700MB	2989		35 090 120	340 47 260 32	10 2	CIRCULAR	30		+14 +15 +10	10
15	272351	19.5N 122.9E	700MB	3026	992	55 010 57	070 52 010 57	8 2	CIRCULAR	30		+10 +17 + 7	10

16	280523	19.5N	123.1E	700MB	2984		40	180	60	260	70	150	23	4	1	CIRCULAR	32	+10	+15	+ 9		11
17	280827	19.8N	123.4E	700MB	2959	985	70	300	10	290	72	190	9	4	1	CIRCULAR	30	+10	+14	+10		11
18	282109	20.5N	123.9E	700MB	2928		40	090	50	160	45	080	35	10	2	CIRCULAR	25	+ 9	+15	+ 8		12
19	290021	20.6N	123.9E	700MB	2937	979	80	030	8	300	66	270	15	5	1			+ 9	+17	+ 4		12
20	290613	21.3N	124.4E	700MB	2882		80	220	13	180	85	080	17	5	2	CIRCULAR	30	+13	+19	+ 7		13
21	290907	21.5N	124.6E	700MB	2859	972	90	100	7	250	90	180	7	10	2	CIRCULAR	20	+10	+19	+ 7		13
22	292111	22.7N	125.7E	700MB	2777		20	040	120	140	109	030	13	10	1	CIRCULAR	25	+10	+19	+ 9		14
23	300016	22.5N	125.9E	700MB	2797	963	110	230	6	240	103	180	8	10	1	CIRCULAR	25	+10	+21	+ 8		14
24	300607	23.4N	126.5E	700MB	2821	967	100	240	20	180	96	070	23	5	1	CIRCULAR	30	+12	+20	+ 9		15
25	300857	23.7N	126.9E	700MB	2841	969	60	320	15	270	85	260	24	5	1	CIRCULAR	20	+11	+22	+ 7		15
26	302135	25.0N	129.1E	700MB	3062		90	220	9	190	62	020	7	10	2	CIRCULAR	10	+12	+20	+		16
27	310020	25.2N	129.1E	700MB	3108	997	65	260	15	200	44	090	90	5	3			+14	+18	+		16
28	310611	26.0N	130.6E	1500FT		996	60	080	20	140	60	080	23	10	1			+	+25	+23	26	17
29	310823	26.0N	131.2E	1500FT		994	55	320	10	070	42	350	24	6	1			+	+26	+23	25	17
30	010240	27.6N	136.7E	1500FT		1003	55	150	30	290	54	140	35	5	3			+	+22	+20	26	19
31	010537	28.0N	137.9E	1500FT		1004	40	220	15	330	40	220	15	9	2			+	+23	+22	24	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	231600	14.6N 123.4E	LAND				4////	4////		16.3N 120.6E	98321
2	231730	14.8N 123.4E	LAND				4////	53403		16.3N 120.6E	98321
3	231800	14.9N 123.3E	LAND				1060/	53012		16.3N 120.6E	98321
4	231800	14.7N 122.7E	LAND				11120	53217		14.1N 123.0E	98440
5	231830	14.9N 123.1E	LAND				1067/	52715		16.3N 120.6E	98321
6	231900	14.9N 122.9E	LAND				1079/	52716		16.3N 120.6E	98321
7	231900	14.9N 122.3E	LAND				21430	53218		14.1N 123.0E	98440
8	231930	14.9N 122.8E	LAND				1077/	52715		16.3N 120.6E	98321
9	232000	14.8N 122.7E	LAND				1071/	52612		16.3N 120.6E	98321
10	232030	14.8N 122.6E	LAND				1065/	52711		16.3N 120.6E	98321
11	232100	14.8N 122.5E	LAND				1061/	52612		16.3N 120.6E	98321
12	232100	14.6N 122.2E	LAND				21330	53021	EYE OPN SW	14.1N 123.0E	98440
13	232130	14.8N 122.6E	LAND				1065/	52711		16.3N 120.6E	98321
14	232200	14.8N 122.5E	LAND				1061/	5////	EYE 70 PCT CIR OPN SE	16.3N 120.6E	98321
15	232200	14.8N 122.2E	LAND				21230	53108	EYE OPN W	14.1N 123.0E	98440
16	232230	14.9N 122.4E	LAND				10561	52905	EYE 70 PCT CIR OPN SE	16.3N 120.6E	98321
17	232300	15.0N 122.3E	LAND				1163/	53210	100 PCT ELIP DIA 40/20	16.3N 120.6E	98321
18	232330	15.1N 122.3E	LAND				1067/	53211	EYE 80 PCT CIR OPN NE	16.3N 120.6E	98321
19	240000	15.0N 122.0E	LAND				21230	53211	EYE OPN NE	14.1N 123.0E	98440
20	240000	15.0N 122.0E	LAND				21230	53211	EYE OPN NW	10.3N 124.0E	98646
21	240030	15.2N 122.2E	LAND				1083/	53210	EYE 80 PCT CIR OPN NE	16.3N 120.6E	98321
22	240300	15.3N 121.9E	LAND				21420	53212	EYE ELIP OPN NW	14.1N 123.0E	98440
23	240300	15.6N 122.0E	LAND				1091/	53616	EYE 100 PCT CIR GOOD	16.3N 120.6E	98321
24	240330	15.6N 122.0E	LAND				1091/	53617		16.3N 120.6E	98321
25	240400	15.9N 122.0E	LAND				1091/	53620		16.3N 120.6E	98321
26	240430	16.0N 122.0E	LAND				1091/	53618		16.3N 120.6E	98321
27	240800	16.8N 122.1E	LAND				1041/	63619		16.3N 120.6E	98321
28	240830	17.1N 121.8E	LAND				1061/	53225		16.3N 120.6E	98321
29	241400	18.1N 121.1E	LAND				4////	63625		16.3N 120.6E	98321
30	250600	18.4N 118.7E	LAND				4////	4////		16.3N 120.6E	98321
31	260600	18.8N 120.1E	LAND				4////	70524		16.3N 120.6E	98321
32	260630	18.5N 120.6E	ACFT	FAIR						18.8N 119.9E	
33	260907	18.5N 120.7E	ACFT	FAIR						18.3N 119.5E	
34	290600	21.2N 124.3E	LAND				51913	40119		24.3N 124.2E	47918
35	290700	21.4N 124.3E	LAND				20883	50308		24.3N 124.2E	47918
36	290800	21.4N 124.4E	LAND				20913	50903		24.3N 124.2E	47918
37	290900	21.4N 124.5E	LAND				20814	70605		24.3N 124.2E	47918
38	291000	21.5N 124.7E	LAND				65/02	5////		24.8N 125.3E	47927
39	291000	21.5N 124.7E	LAND				21912	70707		24.3N 124.2E	47918
40	291100	21.6N 124.9E	LAND				65//4	56014		24.8N 125.3E	47927
41	291100	21.6N 124.8E	LAND				21912	70609		24.3N 124.2E	47918
42	291200	21.6N 124.9E	LAND				65//2	50000		24.8N 125.3E	47927
43	291200	21.6N 124.8E	LAND				21813	70607		24.3N 124.2E	47918
44	291300	21.7N 125.0E	LAND				65//2	54008		24.8N 125.3E	47927
45	291300	21.6N 125.0E	LAND				20814	70607		24.3N 124.2E	47918
46	291400	21.8N 125.1E	LAND							24.8N 125.3E	47927
47	291400	21.7N 125.1E	LAND				21914	70607		24.3N 124.2E	47918
48	291500	21.9N 125.2E	LAND				20874	50506		24.8N 125.3E	47927
49	291500	21.9N 125.0E	LAND				20624	70307		24.3N 124.2E	47918
50	291600	21.9N 125.2E	LAND				30813	50000		24.8N 125.3E	47927
51	291600	22.0N 125.1E	LAND				20815	70107		24.3N 124.2E	47918
52	291700	22.1N 125.4E	LAND				3//43	50514		24.8N 125.3E	47927
53	291700	22.1N 125.3E	LAND				21913	72008		24.3N 124.2E	47918
54	291800	22.2N 125.4E	LAND				21722	70509		24.3N 124.2E	47918
55	291800	22.2N 125.4E	LAND				3//13	50111		24.8N 125.3E	47927
56	291800	22.2N 125.4E	LAND	POOR		50			MOV 0420	24.8N 125.3E	47927
57	291900	22.3N 125.7E	LAND	POOR		50			MOV 0420	24.8N 125.3E	47927
58	291900	22.3N 125.5E	LAND				21914	50311		24.8N 125.3E	47927
59	291900	22.3N 125.5E	LAND				20813	70510		24.3N 124.2E	47918
60	292000	22.4N 125.7E	LAND				21813	70610		24.3N 124.2E	47918
61	292000	22.4N 125.7E	LAND				21814	50611		24.8N 125.3E	47927
62	292000	22.4N 125.7E	LAND	POOR		50			MOV 3610	24.8N 125.3E	47927
63	292100	22.6N 125.8E	LAND	POOR		50			MOV 0120	24.8N 125.3E	47927
64	292100	22.5N 125.7E	LAND				21913	50108		24.8N 125.3E	47927
65	292100	22.5N 125.8E	LAND				20823	70407		24.3N 124.2E	47918
66	292200	22.5N 125.8E	LAND				21813	70407		24.3N 124.2E	47918
67	292200	22.6N 125.9E	LAND				21813	50510		24.8N 125.3E	47927
68	292200	22.6N 125.8E	LAND	POOR		50			MOV 0910	24.8N 125.3E	47927
69	292300	22.7N 125.9E	LAND	POOR		50			MOV 0515	24.8N 125.3E	47927
70	292300	22.7N 125.9E	LAND				21873	50108		24.8N 125.3E	47927
71	292300	22.7N 125.9E	LAND				20813	70307		24.3N 124.2E	47918
72	300000	22.7N 125.9E	LAND				20813	70407		24.3N 124.2E	47918
73	300000	22.8N 126.0E	LAND				21914	50308		24.8N 125.3E	47927
74	300000	22.8N 126.0E	LAND	POOR		50			MOV 0320	24.8N 125.3E	47927
75	300100	23.0N 126.0E	LAND	GOOD		60			MOV 0320	24.8N 125.3E	47927
76	300100	22.9N 126.1E	LAND				11914	50311		24.8N 125.3E	47927
77	300100	22.8N 126.0E	LAND				21813	70306		24.3N 124.2E	47918
78	300200	22.9N 126.1E	LAND				22913	70306		24.3N 124.2E	47918
79	300200	23.0N 126.2E	LAND				11934	50608		24.8N 125.3E	47927
80	300200	23.0N 126.1E	LAND	GOOD		50			MOV 0320	24.8N 125.3E	47927
81	300300	23.2N 126.3E	LAND				6///1	/////		26.2N 127.8E	47937
82	300300	23.1N 126.1E	LAND				22912	70511		24.3N 124.2E	47918
83	300300	23.1N 126.3E	LAND	POOR		50			MOV 0315	24.8N 125.3E	47927
84	300300	23.1N 126.3E	LAND				25/43	50412		24.8N 125.3E	47927
85	300400	23.1N 126.3E	LAND				22912	70409		24.3N 124.2E	47918
86	300400	23.3N 126.4E	LAND				6///1	50408		26.2N 127.8E	47937
87	300400	23.2N 126.3E	LAND				22913	50108		24.8N 125.3E	47927
88	300500	23.3N 126.5E	LAND				6///1	60506		26.2N 127.8E	47937
89	300500	23.3N 126.5E	LAND				11913	50708		24.8N 125.3E	47927
90	300500	23.2N 126.5E	LAND				22913	70509		24.3N 124.2E	47918
91	300500	23.3N 126.5E	LAND	GOOD		50			MOV 0320	24.8N 125.3E	47927
92	300600	23.4N 126.7E	LAND	GOOD		50			MOV 0320	24.8N 125.3E	47927
93	300700	23.5N 126.8E	LAND				6///1	70608		26.2N 127.8E	47937
94	300700	23.5N 126.8E	LAND	POOR		50			MOV 0620	24.8N 125.3E	47927
95	300700	23.4N 126.8E	LAND				22913	70611		24.3N 124.2E	47918
96	300700	23.5N 126.8E	LAND				55/43	50711		24.8N 125.3E	47927
97	300800	23.5N 127.0E	LAND				6///1	70710		26.2N 127.8E	47937
98	300800	23.5N 127.0E	LAND	POOR		50			MOV 0620	24.8N 125.3E	47927
99	300800	23.5N 127.0E	LAND				65//3	50714		24.8N 125.3E	47927
100	300800	23.4N 127.0E	LAND				22812	70611		24.3N 124.2E	47918
101	300900	23.6N 127.1E	LAND				55//1	70711		26.2N 127.8E	47937
102	300900	23.7N 127.0E	LAND				3//72	53611		24.8N 125.3E	47927
103	300900	23.7N 127.2E	LAND	POOR		50			MOV 0320	24.8N 125.3E	47927
104	300900	23.5N 127.1E	LAND				21912	70608		24.3N 124.2E	47918
105	301000	23.7N 127.2E	LAND				55//1	70610		26.2N 127.8E	47937
106	301000	23.7N 127.4E	LAND				3//42	70612		24.3N 124.2E	47918
107	301000	23.7N 127.3E	LAND	POOR		50			MOV 0710	24.8N 125.3E	47927
108	301000	23.8N 127.3E	LAND				6///2	50616		24.8N 125.3E	47927
109	301100	23.9N 127.4E	LAND	POOR		50			MOV 0520	24.8N 125.3E	47927
110	301100	23.9N 127.3E	LAND				55//1	70409		26.2N 127.8E	47937
111	301100	23.9N 127.5E	LAND				3///2	50715		24.8N 125.3E	47927
112	301200	24.0N 127.6E	LAND	POOR		50			MOV 0820	24.8N 125.3E	47927
113	301235	24.0N 127.8E	LAND	POOR						26.4N 127.8E	47931
114	301335	24.2N 127.8E	LAND	POOR						26.4N 127.8E	47931
115	301400	24.2N 127.8E	LAND				3///1	50000		24.8N 125.3E	47927
116	301400	24.2N 127.7E	LAND				65//1	70509		26.2N 127.8E	47937
117	301400	24.3N 128.2E	LAND	POOR		50			MOV 0530	26.1N 127.7E	47937

118	301435	24.4N	128.0E	LAND	POOR					26.4N	127.8E	47931
119	301500	24.3N	127.9E	LAND			55//1	70511		26.2N	127.8E	47937
120	301500	24.4N	128.0E	LAND			3///1	50415		24.8N	125.3E	47927
121	301535	24.5N	128.0E	LAND	POOR					26.4N	127.8E	47931
122	301600	24.4N	128.4E	LAND	GOOD	45				26.3N	126.8E	47929
123	301635	24.5N	128.5E	LAND	POOR					26.4N	127.8E	47931
124	301700	24.5N	128.3E	LAND			65//1	70612		26.2N	127.8E	47937
125	301700	24.6N	128.4E	LAND			3///0	50522		24.8N	125.3E	47927
126	301735	24.6N	128.5E	LAND	POOR					26.4N	127.8E	47931
127	301800	24.6N	128.5E	LAND			65//1	70612		26.2N	127.8E	47937
128	301800	24.8N	128.8E	LAND	GOOD	45			MOV 0320	26.1N	127.7E	47937
129	301835	24.8N	128.8E	LAND	POOR					26.4N	127.8E	47931
130	301900	24.8N	128.9E	LAND	GOOD	45			MOV 0330	26.1N	127.7E	47937
131	302000	25.0N	129.1E	LAND			6///1	70518		26.2N	127.8E	47937
132	302100	25.2N	129.4E	LAND			6///1	70519		26.2N	127.8E	47937
133	302300	25.6N	129.7E	LAND			52341	50411		28.4N	129.5E	47909
*134	310000	25.5N	130.1E	LAND			65/40	50922		28.4N	129.5E	47909
135	310300	25.7N	130.7E	LAND			6//40	50605		28.4N	129.5E	47909
136	310400	25.8N	130.7E	LAND			6//40	50305		28.4N	129.5E	47909
137	310500	25.9N	130.7E	LAND			6//40	50208		28.4N	129.5E	47909
138	310600	25.9N	130.9E	LAND			6///0	50911		28.4N	129.5E	47909
139	310700	25.9N	131.0E	LAND			6///0	50805		28.4N	129.5E	47909

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

TROPICAL STORM GORDON
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
111918Z	6.8 108.1	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.
112000Z	8.0 109.2	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.
112006Z	8.2 110.2	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.
112012Z	8.1 111.0	30	9.1	110.4	30.	70.	0.	10.6	109.7	40.	220.	5.	11.6	108.5	45.	275.	15.	12.0	107.3	25.	321.	-5.
112018Z	8.0 111.6	35	9.4	110.4	30.	110.	-5.	10.7	109.7	40.	218.	10.	11.7	108.5	45.	261.	15.	0.0	0.0	0.	-0.	0.
112100Z	8.0 112.1	35	8.2	112.0	30.	13.	-5.	9.2	113.0	35.	27.	5.	10.5	112.0	45.	61.	15.	11.2	110.5	50.	114.	15.
112106Z	8.1 112.3	35	8.7	112.5	35.	38.	0.	10.3	112.1	40.	82.	10.	11.0	110.7	45.	119.	15.	11.6	109.2	50.	189.	15.
112112Z	8.3 112.6	35	9.6	112.5	35.	78.	0.	11.0	110.8	40.	148.	10.	11.8	109.1	45.	220.	15.	12.4	107.2	30.	296.	-5.
112118Z	8.6 112.7	30	10.2	112.7	35.	96.	5.	11.6	111.0	45.	155.	15.	12.8	109.4	50.	228.	15.	13.9	108.2	30.	231.	-10.
112200Z	8.8 112.8	30	10.8	113.0	35.	121.	5.	12.6	111.8	40.	187.	10.	14.1	109.8	35.	250.	0.	16.4	109.0	30.	278.	-15.
112206Z	9.0 112.5	30	9.3	112.8	30.	25.	0.	10.5	112.9	25.	55.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112212Z	9.1 112.4	30	9.3	112.8	30.	27.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112218Z	9.3 112.2	30	9.3	112.8	25.	36.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112300Z	9.5 112.2	30	9.3	112.3	25.	19.	-5.	10.0	111.6	20.	67.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112306Z	9.8 112.3	30	9.5	112.2	35.	19.	5.	10.2	110.8	40.	115.	5.	11.0	108.3	45.	136.	5.	0.0	0.0	0.	-0.	0.
112312Z	10.1 112.4	30	9.7	112.4	40.	24.	10.	10.5	111.8	45.	81.	10.	11.5	110.0	50.	75.	15.	0.0	0.0	0.	-0.	0.
112318Z	10.4 112.4	35	10.3	112.2	40.	13.	5.	11.4	110.7	50.	72.	10.	11.8	108.7	35.	72.	5.	0.0	0.0	0.	-0.	0.
112400Z	10.8 112.4	35	10.7	112.0	40.	24.	5.	12.1	110.7	50.	19.	5.	13.1	109.0	35.	47.	15.	0.0	0.0	0.	-0.	0.
112406Z	11.3 112.4	35	11.0	112.4	45.	18.	10.	12.4	111.7	50.	88.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112412Z	11.8 112.2	35	11.7	112.4	45.	13.	10.	13.5	111.2	55.	118.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112418Z	12.1 111.7	40	11.8	112.3	45.	40.	5.	13.2	111.6	55.	164.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112500Z	12.2 111.0	45	12.1	111.6	40.	36.	-5.	13.2	110.3	50.	118.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112506Z	12.3 110.2	40	12.3	110.4	45.	12.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112512Z	12.6 109.4	35	12.6	109.4	30.	0.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112518Z	13.0 108.8	30	13.0	108.6	25.	12.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112600Z	13.5 108.3	20	13.3	108.5	20.	17.	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	37.	114.	159.	238.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	16.	51.	58.	80.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	12.	12.	11.	0.	0.	0.	0.
AVG INTENSITY BIAS	1.	9.	12.	-1.	0.	0.	0.	0.
NUMBER OF FORECASTS	23	17	11	6	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 797. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 5. KNOTS

TROPICAL STORM GORDON
FIX POSITIONS FOR CYCLONE NO. 24

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	200205	7.8N 110.2E	PCN 5	T2.5/2.5	INIT OBS	RODN
2	200208	9.3N 111.3E	PCN 6			KGWC
3	200300	8.2N 109.4E	PCN 6	T2.0/2.0	INIT OBS	PGTW
4	200600	8.4N 110.3E	PCN 6			PGTW
5	200900	8.8N 110.5E	PCN 6			PGTW
* 6	201200	9.2N 110.5E	PCN 6			PGTW
7	201445	8.8N 110.8E	PCN 6		ULAC 09.1N 110.1E	KGWC
* 8	201600	9.3N 110.5E	PCN 6	T2.0/2.0	INIT OBS	PGTW
* 9	201800	9.4N 110.4E	PCN 6			PGTW
* 10	201855	9.4N 110.8E	PCN 6		ULAC 09.6N 110.1E	KGWC
* 11	201855	9.8N 109.9E	PCN 5			RODN
* 12	202100	9.8N 110.3E	PCN 6			PGTW
13	202303	8.0N 112.0E	PCN 4		ULAC 10.0N 110.3E	KGWC
14	202303	8.0N 112.0E	PCN 4			RODN
15	210000	8.0N 112.1E	PCN 4		EXP LLCC	PGTW
16	210145	8.0N 112.2E	PCN 3	T2.5/2.5 /D0.5/24HRS		KGWC
17	210145	8.0N 112.2E	PCN 3	T2.5/2.5 /D0.5/24HRS		RODN
18	210300	8.6N 112.2E	PCN 4	T2.5/2.5 /D0.5/24HRS	PART EXP LLCC	PGTW
19	210600	8.8N 112.5E	PCN 6			PGTW
* 20	210740	9.2N 113.1E	PCN 5			KGWC
* 21	210900	9.4N 112.6E	PCN 6			PGTW
* 22	211143	10.0N 113.7E	PCN 6		ULAC 10.1N 111.7E	KGWC
* 23	211200	9.8N 112.1E	PCN 6		ULAC 10.1N 111.0E	PGTW
* 24	211425	9.9N 113.2E	PCN 4		EXP LLCC	KGWC
* 25	211426	10.3N 112.7E	PCN 5			RODN
* 26	211600	10.4N 112.4E	PCN 6	T2.5/2.5 /D0.5/24HRS		PGTW
* 27	211800	10.2N 112.8E	PCN 6			PGTW
* 28	211844	10.3N 113.4E	PCN 6		ULCC 11.5N 111.9E	KGWC
* 29	211844	11.1N 112.6E	PCN 5			RODN
* 30	212242	10.6N 113.5E	PCN 6			KGWC
31	220000	9.9N 112.6E	PCN 6		ULCC FIX	PGTW
32	220300	9.1N 113.3E	PCN 6	T1.5/2.5+/W1.0/24HRS		PGTW
33	220306	8.9N 113.5E	PCN 3	T2.5/2.5 /S0.0/25HRS	PART EXP LLCC ULAC 10.3N 113.	KGWC
34	220600	9.0N 112.9E	PCN 6			PGTW
* 35	220730	9.3N 113.3E	PCN 5			KGWC
36	220900	9.2N 112.8E	PCN 6			PGTW
* 37	221055	9.7N 114.5E	PCN 6			RODN
38	221122	9.0N 113.1E	PCN 6		ULAC 08.9N 111.7E	KGWC
39	221200	9.2N 112.5E	PCN 6			PGTW
* 40	221405	8.3N 113.4E	PCN 4		EXP LLCC	KGWC
41	221600	9.0N 112.5E	PCN 6	T1.5/2.5 /W1.0/24HRS		PGTW
42	221800	9.2N 112.6E	PCN 6			PGTW
* 43	221833	8.5N 113.1E	PCN 4		ULAC 08.8N 112.0E	KGWC
* 44	222220	8.6N 113.0E	PCN 6		ULAC 08.6N 111.2E	KGWC
* 45	222220	9.7N 110.8E	PCN 6			RODN
46	230000	9.2N 112.1E	PCN 4		EXP LLCC	PGTW
47	230245	9.0N 112.4E	PCN 5	T2.5/2.5 /S0.0/24HRS	ULAC 09.0N 111.3E	KGWC
48	230246	9.2N 113.2E	PCN 6	T2.0/2.0	INIT OBS	RODN
49	230300	8.9N 112.4E	PCN 6	T2.0/2.0 /D0.5/24HRS	EXP LLCC	PGTW
50	230600	9.4N 112.6E	PCN 4		EXP LLCC	PGTW
51	230719	9.5N 112.9E	PCN 3		EXP LLCC ULAC 09.9N 111.4E	KGWC
52	230900	9.6N 112.8E	PCN 6			PGTW
53	231031	10.7N 111.8E	PCN 6		ULCC FIX	RODN
54	231100	10.1N 112.6E	PCN 4		EXP LLCC ULAC 11.0N 111.9E	KGWC
55	231101	9.8N 112.7E	PCN 5		EXP LLCC	RODN
56	231200	9.8N 112.6E	PCN 6		ULCC 10.7N 111.9E	PGTW
57	231526	10.5N 112.1E	PCN 4	T2.5/2.5	INIT OBS EXP LLCC	KGWC
58	231600	10.2N 112.5E	PCN 6		ULCC 11.2N 111.8E	PGTW
59	231800	10.6N 112.4E	PCN 6	T2.5/2.5 /D1.0/26HRS	ULCC 11.6N 111.7E	PGTW

60	232100	10.7N	112.3E	PCN 6			EXP LLCC	PGTW
61	232159	10.6N	112.2E	PCN 4			EXP LLCC ULAC 11.0N 111.6E	KGWC
62	232200	10.6N	112.2E	PCN 4			EXP LLCC	PGTW
63	240000	10.8N	112.3E	PCN 4			EXP LLCC	PGTW
64	240225	10.8N	112.3E	PCN 3	T2.5/2.5	/S0.0/24HRS	EXP LLCC ULAC 11.3N 110.9E	KGWC
65	240225	10.8N	112.8E	PCN 3	T2.5/2.5	/D0.5/24HRS		RODN
66	240300	10.9N	112.4E	PCN 4	T2.5/2.5	/D0.5/24HRS	EXP LLCC	PGTW
67	240600	11.2N	112.8E	PCN 6				PGTW
68	240708	11.1N	112.9E	PCN 3			PART EXP LLCC ULAC 11.2N 111.	KGWC
69	240708	11.4N	112.2E	PCN 3				RODN
70	240900	11.5N	112.5E	PCN 6				PGTW
71	241039	11.7N	112.3E	PCN 3				RODN
72	241200	11.9N	112.0E	PCN 6			EXP LLCC	PGTW
73	241200	11.5N	112.3E	PCN 6			ULCC 12.0N 111.0E	PGTW
74	241506	11.5N	112.3E	PCN 5				RODN
75	241600	11.6N	112.2E	PCN 6	T2.5/2.5	/S0.0/22HRS		PGTW
76	241800	11.8N	112.2E	PCN 6			ULCC 12.2N 110.8E	PGTW
77	250000	12.2N	111.5E	PCN 4			EXP LLCC	PGTW
78	250205	11.3N	110.3E	PCN 5	T3.0/3.0	/D0.5/24HRS		RODN
79	250300	12.3N	110.6E	PCN 6	T3.0/3.0-	/D0.5/24HRS		PGTW
80	250600	12.4N	110.2E	PCN 6				PGTW
81	250900	12.3N	109.8E	PCN 6			ULCC FIX	PGTW
82	251200	13.0N	108.6E	PCN 6			ULCC FIX	PGTW
* 83	251446	13.9N	108.0E	PCN 5			ULCC FIX	RODN
84	251943	12.3N	108.0E	PCN 5			ULCC FIX	RODN
85	252100	12.9N	108.8E	PCN 6				PGTW
86	260000	13.5N	108.9E	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	220454	9.3N 112.5E	1500FT		1006	25 270 42	190 27 090 78	2 23			+24 +24 +24 26	1
2	230116	9.4N 112.4E	1500FT		1003	35 130 90	250 43 130 110	0 15			+23 +24 +22 27	2
3	240159	10.8N 112.4E	1500FT		1002	45 220 30	250 37 170 45	2 3			+26 +26 +26 26	3

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

TYPHOON HOPE
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
121700Z	9.2	140.0	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.
121706Z	9.4	139.4	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.
121712Z	9.7	138.8	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.
121718Z	10.1	138.3	35	10.6	138.4	30.	31.	-5.	12.1	135.6	40.	71.	-20.	12.4	132.0	40.	184.	-45.	11.7	128.0	35.	176.	-55.
121800Z	10.4	137.8	40	10.4	137.6	40.	12.	0.	11.0	135.1	50.	105.	-15.	11.5	132.3	60.	152.	-35.	11.6	129.2	60.	132.	-25.
121806Z	10.7	137.3	50	10.6	137.0	50.	19.	0.	11.2	134.3	65.	139.	0.	11.5	131.2	70.	144.	-30.	11.9	127.1	70.	131.	-5.
121812Z	11.2	136.9	55	10.9	136.9	55.	18.	0.	11.7	135.0	65.	108.	-10.	12.3	132.2	70.	99.	-30.	12.7	128.6	70.	109.	5.
121818Z	11.6	136.7	60	11.3	136.3	60.	30.	0.	11.8	134.4	70.	112.	-15.	12.4	131.6	80.	113.	-10.	12.6	128.0	90.	147.	25.
121900Z	12.1	136.5	65	12.0	136.5	65.	6.	0.	13.8	134.9	75.	76.	-20.	15.2	131.8	70.	173.	-15.	15.3	127.6	60.	105.	-5.
121906Z	12.7	136.1	65	12.7	136.1	70.	0.	5.	15.0	134.0	75.	125.	-25.	15.9	130.7	65.	192.	-10.	16.3	126.5	50.	52.	-15.
121912Z	13.4	135.6	75	13.3	135.8	75.	13.	0.	15.1	133.8	75.	168.	-25.	15.9	130.1	60.	207.	-5.	16.3	126.0	45.	30.	-20.
121918Z	13.6	134.9	85	13.8	135.3	80.	26.	-5.	15.4	133.1	70.	197.	-20.	16.0	129.3	55.	198.	-10.	16.2	125.2	45.	89.	-20.
122000Z	13.7	133.6	95	13.6	133.7	95.	8.	0.	14.0	130.1	90.	54.	5.	15.1	126.6	75.	46.	10.	17.4	124.2	65.	143.	-5.
122006Z	13.6	132.4	100	13.6	132.5	100.	6.	0.	14.1	128.4	90.	21.	15.	15.7	125.0	75.	42.	10.	19.0	123.3	65.	222.	-10.
122012Z	13.7	131.3	100	13.6	131.3	100.	6.	0.	14.1	127.1	85.	13.	20.	15.7	123.9	70.	120.	5.	19.4	123.7	60.	289.	-10.
122018Z	13.7	130.2	90	13.8	130.2	95.	6.	5.	14.5	126.3	80.	6.	15.	16.4	123.2	70.	177.	5.	20.3	125.4	55.	292.	-5.
122100Z	13.8	129.2	85	13.8	129.2	95.	0.	10.	14.8	125.4	80.	29.	15.	17.5	123.0	70.	209.	0.	20.7	126.1	55.	305.	5.
122106Z	13.8	128.2	75	14.0	128.2	85.	12.	10.	15.2	124.7	70.	71.	5.	18.2	123.2	70.	230.	-5.	0.0	0.0	0.	-0.	0.
122112Z	13.9	127.2	65	13.9	127.1	75.	6.	10.	15.0	123.5	60.	163.	-5.	18.0	123.6	50.	303.	-20.	0.0	0.0	0.	-0.	0.
122118Z	14.4	126.3	65	14.0	126.2	75.	25.	10.	15.2	123.4	60.	204.	-5.	17.4	123.2	50.	405.	-10.	0.0	0.0	0.	-0.	0.
122200Z	15.1	125.8	65	14.6	125.5	70.	35.	5.	15.8	122.7	55.	263.	-15.	16.3	120.2	35.	618.	-15.	0.0	0.0	0.	-0.	0.
122206Z	15.9	125.7	65	15.8	125.2	70.	29.	5.	18.7	124.0	60.	182.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122212Z	16.7	125.7	65	16.7	125.4	65.	17.	0.	20.2	125.6	55.	192.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122218Z	17.4	126.1	65	17.5	125.6	65.	29.	0.	20.8	126.9	50.	232.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122300Z	18.1	126.6	70	18.1	126.7	75.	6.	5.	20.6	129.3	65.	167.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122306Z	18.7	127.2	75	18.9	126.9	75.	21.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122312Z	19.1	128.8	70	19.3	128.3	75.	31.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122318Z	18.5	130.2	60	19.9	129.5	70.	93.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122400Z	18.2	130.8	50	18.1	130.8	50.	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	19.	123.	201.	159.	19.	123.	201.	159.
AVG RIGHT ANGLE ERROR	15.	83.	124.	102.	15.	83.	124.	102.
AVG INTENSITY MAGNITUDE ERROR	3.	14.	15.	15.	3.	14.	15.	15.
AVG INTENSITY BIAS	3.	-6.	-12.	-10.	3.	-6.	-12.	-10.
NUMBER OF FORECASTS	26	22	18	14	26	22	18	14

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1444. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TYPHOON HOPE
FIX POSITIONS FOR CYCLONE NO. 25

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	162100	7.9N 138.3E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	170123	9.3N 139.5E	PCN 6			PGTW
3	170441	9.2N 140.4E	PCN 6	T2.0/2.0	INIT OBS	PGTW
4	170600	9.6N 139.7E	PCN 6			PGTW
5	170900	9.8N 139.2E	PCN 6			PGTW
6	171200	10.2N 138.6E	PCN 6		ULCC 10.3N 137.6E	PGTW
7	171600	10.8N 138.3E	PCN 6	T2.0/2.0-/D1.0/19HRS		PGTW
8	172100	10.8N 137.7E	PCN 6			PGTW
9	180000	10.5N 137.3E	PCN 6			PGTW
10	180103	10.7N 137.9E	PCN 6	T2.0/2.0	INIT OBS	RPMK
11	180300	10.5N 137.1E	PCN 6	T3.0/3.0 /D1.0/22HRS		PGTW
12	180600	10.6N 137.0E	PCN 6			PGTW
13	180900	10.8N 137.2E	PCN 6			PGTW
14	181200	11.2N 137.1E	PCN 6			PGTW
15	181344	11.0N 137.2E	PCN 6			PGTW
16	181716	11.3N 136.5E	PCN 5	T4.0/4.0 /D2.0/25HRS		PGTW
17	182100	11.4N 136.5E	PCN 6			PGTW
18	190000	11.6N 136.8E	PCN 4			PGTW
19	190300	12.4N 136.3E	PCN 2	T4.5/4.5-/D1.5/24HRS	BANDNG TYPE EYE	PGTW
20	190600	12.8N 136.2E	PCN 2		BANDNG TYPE EYE	PGTW
21	190601	12.8N 136.2E	PCN 3	T4.5/4.5	INIT OBS	RODN
22	190900	12.8N 136.0E	PCN 4			PGTW
23	191013	13.1N 135.8E	PCN 4			RPMK
24	191200	13.2N 135.9E	PCN 2		DEVLPNG EYE	PGTW
25	191323	14.2N 135.7E	PCN 5	T4.5/4.5	INIT OBS DEVLPNG EYE	RODN
26	191600	13.7N 135.5E	PCN 6	T4.5/4.5 /D0.5/23HRS		PGTW
27	191800	13.7N 135.3E	PCN 4			PGTW
28	192100	13.7N 134.5E	PCN 4			PGTW
29	192112	13.7N 134.1E	PCN 4		EYE	PGTW
30	192112	14.1N 134.7E	PCN 4			RPMK
31	200000	14.0N 133.5E	PCN 4		BANDNG EYE	PGTW
32	200022	13.8N 133.6E	PCN 4		EYE 30NM	PGTW
33	200022	14.0N 133.2E	PCN 2	T4.0/4.0	INIT OBS BANDNG EYE	RPMK
34	200300	13.9N 133.0E	PCN 2	T5.0/5.0 /D0.5/24HRS	EYE 35NM	PGTW
35	200600	13.6N 132.5E	PCN 2		RGD EYE	PGTW
36	200900	13.7N 132.1E	PCN 4			PGTW
37	200952	13.7N 131.5E	PCN 2		RGD EYE	PGTW
38	201200	13.8N 131.3E	PCN 6			PGTW
39	201303	13.8N 130.7E	PCN 6			PGTW
40	201600	13.9N 130.5E	PCN 6	T4.5/4.5 /S0.0/24HRS		PGTW
41	201836	14.1N 130.2E	PCN 4			PGTW
42	201836	13.9N 130.0E	PCN 4		DVLPNG EYE	RODN
43	202100	13.8N 130.6E	PCN 6			PGTW
44	210000	13.4N 129.8E	PCN 6			PGTW
45	210143	13.6N 128.4E	PCN 5			PGTW
46	210300	13.8N 128.3E	PCN 6	T4.5/5.0 /W0.5/24HRS		PGTW
47	210540	13.7N 127.9E	PCN 5			PGTW
48	210600	13.8N 128.1E	PCN 6			PGTW
49	210900	14.3N 127.9E	PCN 6			PGTW
50	211200	14.1N 127.1E	PCN 6		ULCC FIX	PGTW
51	211424	14.5N 126.5E	PCN 5			RPMK
52	211600	14.5N 126.5E	PCN 6	T3.5/4.5 /W1.0/24HRS	ULCC FIX	PGTW
53	211800	14.5N 126.4E	PCN 6		ULCC FIX	PGTW
54	211826	14.4N 126.2E	PCN 6			RODN
55	212100	14.6N 126.0E	PCN 6			PGTW
56	212211	15.0N 125.7E	PCN 4	T3.0/4.0 /W1.0/21HRS		RPMK

57	220000	15.0N	125.9E	PCN	6			PGTW
58	220123	15.3N	125.9E	PCN	3			RPMK
59	220123	15.4N	125.9E	PCN	5	T3.5/3.5	INIT OBS	RODN
60	220300	15.6N	126.0E	PCN	6	T3.5/4.5 /W1.0/24HRS		PGTW
61	220529	15.9N	125.6E	PCN	5			RODN
62	220600	16.0N	126.0E	PCN	6			PGTW
63	220900	16.3N	125.9E	PCN	6			PGTW
64	221050	16.3N	125.9E	PCN	6			RPMK
65	221200	16.7N	125.6E	PCN	6			PGTW
66	221405	16.1N	126.1E	PCN	6			RPMK
67	221600	17.3N	125.9E	PCN	6	T3.0/4.0 /W0.5/24HRS		PGTW
68	221800	17.5N	125.8E	PCN	6			PGTW
69	221815	17.5N	125.3E	PCN	6			RODN
70	222100	17.8N	126.2E	PCN	6			PGTW
71	222149	17.9N	126.3E	PCN	4			RPMK
72	230000	18.2N	126.6E	PCN	6			PGTW
73	230103	18.2N	126.6E	PCN	3	T3.5/3.5-/D0.5/27HRS		RPMK
74	230300	18.5N	126.7E	PCN	6	T3.5/3.5-/S0.0/24HRS		PGTW
75	230518	18.8N	126.6E	PCN	3	T4.0/4.0-/D0.5/28HRS		RODN
76	230600	18.7N	126.9E	PCN	6			PGTW
77	230900	18.7N	127.5E	PCN	6			PGTW
78	231029	19.3N	127.3E	PCN	5	T3.5/3.5	INIT OBS ULCC FIX	RODN
79	231200	19.7N	128.0E	PCN	6			PGTW
80	231343	18.2N	128.9E	PCN	6		EXP LLCC	RPMK
* 81	231600	20.4N	129.3E	PCN	6	T2.5/3.5-/W0.5/24HRS	ULCC FIX	PGTW
* 82	231800	20.5N	130.2E	PCN	6			PGTW
* 83	231804	22.3N	132.0E	PCN	5		ULCC FIX	RODN
84	232128	18.7N	130.8E	PCN	4	T2.0/3.5 /W1.5/21HRS	EXP LLCC ULCC 22.0N 133.3E	RPMK
85	240000	17.8N	130.8E	PCN	4		EXP LLCC	PGTW
86	240042	18.0N	130.9E	PCN	3	T1.5/1.5	INIT OBS	RKSO
87	240300	18.0N	131.2E	PCN	4			PGTW
88	240600	17.9N	131.5E	PCN	4		EXP LLCC	PGTW
89	240900	17.6N	131.6E	PCN	4		EXP LLCC	PGTW
90	241200	17.6N	131.8E	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	180003	10.3N	137.7E	1500FT		996	50 330 60	020 50 330 60	3 1			+25 +25 +25	1
2	180229	10.5N	137.5E	1500FT		992	40 200 35	300 36 200 35	4 1			+25 +26 +25	1
3	182100	11.7N	136.8E	700MB	2877	975	60 350 30	090 55 350 23	6 1	CIRCULAR	19	+12 +14 +12	2
4	182337	11.9N	136.5E	700MB	2881	976	70 290 25	260 67 180 75	7 3	CIRCULAR	25	+13 +13 +12	2
5	190653	12.8N	136.1E	700MB	2789	964	65 090 80	190 74 090 103	10 2	ELLIPTICAL	20 10 170	+13 +17 +12	3
6	190923	13.0N	135.9E	700MB	2789	964	55 270 90	320 58 270 65	10 2	ELLIPTICAL	25 20 030	+13 +14 +14	3
7	192123	13.6N	134.3E	700MB	2753		100 080 15	160 105 080 20	3 1	ELLIPTICAL	50 40 140	+ +20 +11	5
8	200022	13.6N	133.7E	700MB	2743	958	95 040 20	240 78 190 20	3 1	ELLIPTICAL	60 50 140	+12 +24 + 9	5
9	200602	13.5N	132.4E	700MB	2654	948	100 080 15	100 107 020 30	9 1	CIRCULAR	45	+12 +20 +12	6
10	200835	13.5N	131.9E	700MB	2684	950	90 170 15	350 86 270 43	8 1			+11 +21 + 9	6
11	202103	13.6N	129.6E	700MB	2753			060 108 310 30	10 3			+12 +15 +15	7
12	210604	13.8N	128.2E	700MB	2794		70 090 40	100 86 350 35	10 2			+21 +23 + 5	8
13	210842	13.8N	127.8E	700MB	2846	971	70 160 40	360 63 260 55	10 10			+15 +16 +12	8
14	222157	17.9N	122.6E	700MB	2896		45 030 90	140 66 030 50	6 5			+11 +16 +11	12
15	230029	17.9N	126.6E	700MB	2903	978	100 160 35	250 85 160 35	6 10			+11 +16 +11	12
16	230926	18.9N	128.2E	700MB	2993		80 250 50	360 60 250 50	10 4			+14 +17 + 8	13
17	232305	18.2N	130.7E	1500FT		999	70 350 110	350 35 240 15	12 20			+25 + +	14

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

TROPICAL STORM IRVING
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
121606Z	7.6	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.
121612Z	7.5	114.9	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.
121618Z	7.5	115.2	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.
121700Z	7.6	115.5	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.
121706Z	7.9	115.5	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.
121712Z	8.0	115.2	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.
121718Z	8.0	114.9	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.
121800Z	7.8	114.6	55	7.9	114.7	60.	8.	5.	8.1	113.7	70.	32.	20.	8.5	112.1	75.	77.	30.	9.4	110.4	65.	127.	30.
121806Z	7.6	114.4	60	7.9	114.5	60.	19.	0.	8.1	113.6	70.	27.	25.	8.5	112.0	75.	120.	30.	9.5	110.2	65.	154.	35.
121812Z	7.3	114.3	55	8.0	113.9	60.	48.	5.	8.4	112.0	70.	27.	25.	9.1	109.7	70.	25.	30.	9.7	107.5	65.	127.	35.
121818Z	7.2	113.9	55	8.0	113.7	60.	49.	5.	8.1	112.8	65.	83.	20.	8.6	110.5	55.	112.	20.	9.5	107.3	50.	167.	20.
121900Z	7.6	113.5	50	7.5	113.5	50.	6.	0.	7.2	112.6	50.	148.	5.	7.4	111.4	45.	208.	10.	7.6	110.3	45.	277.	20.
121906Z	8.3	113.2	45	7.7	113.4	45.	38.	0.	7.8	112.6	45.	170.	0.	7.9	111.8	40.	233.	10.	0.0	0.0	0.	-0.	0.
121912Z	8.6	112.4	45	7.9	113.1	45.	59.	0.	8.1	111.9	40.	168.	0.	8.2	110.7	35.	211.	5.	0.0	0.0	0.	-0.	0.
121918Z	8.8	111.6	45	8.0	112.6	45.	76.	0.	8.7	110.7	40.	120.	5.	9.4	109.0	35.	211.	5.	0.0	0.0	0.	-0.	0.
122000Z	9.0	110.9	45	8.5	111.4	45.	42.	0.	9.5	109.2	45.	61.	10.	10.5	107.1	40.	273.	15.	0.0	0.0	0.	-0.	0.
122006Z	9.2	110.1	45	9.3	109.7	45.	24.	0.	11.7	106.0	30.	233.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122012Z	9.4	109.4	40	9.6	109.2	45.	17.	5.	11.3	105.8	30.	237.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122018Z	9.4	108.8	35	9.7	108.5	40.	25.	5.	11.2	105.3	25.	275.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122100Z	9.0	108.3	35	9.7	108.1	35.	44.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122106Z	8.3	107.9	30	8.8	107.6	30.	35.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122112Z	7.6	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.
122118Z	6.8	106.6	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.
122200Z	6.1	105.9	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.

	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	35.	132.	163.	170.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	18.	73.	41.	51.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	10.	17.	28.	0.	0.	0.	0.
AVG INTENSITY BIAS	2.	9.	17.	28.	0.	0.	0.	0.
NUMBER OF FORECASTS	14	12	9	5	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 806. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

TROPICAL STORM IRVING
FIX POSITIONS FOR CYCLONE NO. 26

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	160600	7.6N 114.5E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	160900	7.6N 114.6E	PCN 6			PGTW
3	161200	7.4N 115.1E	PCN 6			PGTW
4	161600	7.5N 114.7E	PCN 6	T1.5/1.5	INIT OBS	PGTW
5	161800	7.6N 114.9E	PCN 6			PGTW
6	162100	7.6N 115.3E	PCN 6			PGTW
7	170000	7.6N 115.5E	PCN 6			PGTW
8	170600	7.9N 115.1E	PCN 6	T2.5/2.5-/D1.5/24HRS		PGTW
9	170900	7.8N 115.0E	PCN 6			PGTW
10	171056	7.8N 115.6E	PCN 3	T3.0/3.0	INIT OBS	RODN
11	171200	7.9N 115.2E	PCN 6			PGTW
12	171404	8.2N 115.5E	PCN 5		PART EXP LLCC	RODN
13	171600	8.1N 115.2E	PCN 6	T2.5/2.5-/D1.0/24HRS		PGTW
14	171909	7.9N 115.2E	PCN 5			RODN
15	172100	8.6N 114.6E	PCN 6			PGTW
16	180000	8.1N 114.6E	PCN 6			PGTW
17	180300	8.1N 114.3E	PCN 6	T3.0/3.0 /D0.5/21HRS		PGTW
18	180600	8.1N 114.3E	PCN 6			PGTW
19	180613	8.0N 114.2E	PCN 5	T3.5/3.5	INIT OBS	RODN
20	180900	8.1N 114.1E	PCN 6			PGTW
21	181200	8.0N 113.9E	PCN 6			PGTW
22	181800	7.9N 113.8E	PCN 6	T3.0/3.0-/D0.5/26HRS		PGTW
* 23	181858	9.2N 113.8E	PCN 3	T3.0/3.0	INIT OBS	RODN
24	182100	7.7N 113.5E	PCN 6			PGTW
25	182314	8.1N 113.6E	PCN 6			RPMK
26	190000	8.2N 113.6E	PCN 6			PGTW
27	190300	8.2N 113.6E	PCN 6	T2.5/3.0 /W0.5/24HRS		PGTW
28	190600	8.6N 113.3E	PCN 6			PGTW
29	190900	8.7N 111.9E	PCN 6		ULCC FIX	PGTW
30	191013	8.7N 113.2E	PCN 4			RPMK
31	191200	8.8N 112.6E	PCN 6			PGTW
32	191600	8.6N 112.0E	PCN 6	T2.5/3.0 /W0.5/22HRS		PGTW
33	191800	8.6N 112.1E	PCN 6			PGTW
34	191847	9.0N 112.1E	PCN 5	T2.5/3.0 /W0.5/24HRS		RODN
35	192100	8.9N 111.4E	PCN 6			PGTW
36	192253	9.0N 111.5E	PCN 4	T2.5/3.0 /W0.5/20HRS		RPMK
37	200000	9.3N 111.4E	PCN 6			PGTW
38	200204	9.0N 109.9E	PCN 5			RPMK
39	200300	9.3N 110.3E	PCN 4	T3.0/3.0-/D0.5/24HRS		PGTW
40	200600	9.5N 110.0E	PCN 6			PGTW
41	200900	9.4N 109.8E	PCN 6			PGTW
42	201133	9.3N 109.8E	PCN 5			RPMK
43	201200	9.6N 109.3E	PCN 6			PGTW
44	201444	9.1N 109.2E	PCN 5		PART EXP LLCC	RPMK
45	201600	9.4N 109.2E	PCN 6	T2.5/2.5 /S0.0/24HRS		PGTW
46	201800	9.4N 108.7E	PCN 6			PGTW
47	202100	9.6N 108.8E	PCN 6			PGTW
48	202232	9.3N 108.5E	PCN 4	T2.0/2.5 /W0.5/24HRS	PART EXP LLCC	RPMK
49	210000	9.5N 108.8E	PCN 6			PGTW
50	210300	8.1N 108.3E	PCN 4	T2.0/2.5 /W1.0/24HRS	EXP LLCC	PGTW
51	210325	8.3N 108.1E	PCN 3		PART EXP LLCC	RPMK
52	210600	7.8N 108.0E	PCN 4		EXP LLCC	PGTW
53	210900	7.9N 107.9E	PCN 6		EXP LLCC	PGTW
54	211200	7.4N 107.5E	PCN 6		EXP LLCC	PGTW
55	211424	7.3N 106.1E	PCN 5			RPMK
56	211600	6.8N 106.7E	PCN 6	T2.0/2.5 /W0.5/24HRS	EXP LLCC	PGTW
57	211800	6.7N 106.5E	PCN 6		EXP LLCC	PGTW
58	212100	6.5N 106.1E	PCN 6			PGTW
59	220600	5.0N 104.8E	PCN 6	T0.0/1.0 /W2.0/27HRS	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	180114	7.9N 114.6E	1500FT		994	60 060 14	150 70 060 14	2 2			+24 +27 +24	1
2	182116	7.2N 114.7E	700MB	3044			090 43 070 45	50 10			+14 +18 + 7	2
3	182321	7.5N 113.5E	700MB	3023		50 050 45	100 41 070 10	2 1			+ + +	2

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

2. NORTH INDIAN OCEAN CYCLONE DATA

TROPICAL CYCLONE 01B
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	
052218Z	16.2	87.8	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	0.0	0.	-0.	0.	0.0	0.0
052300Z	16.6	88.1	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	0.0
052306Z	17.1	88.4	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	0.0
052312Z	17.7	88.8	40	17.3	88.0	40.	52.	0.	18.7	88.6	55.	148.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0
052318Z	18.3	89.3	45	17.8	88.9	45.	38.	0.	19.3	89.7	65.	143.	5.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0
052400Z	19.0	89.7	45	18.5	88.6	50.	69.	5.	20.3	89.5	70.	163.	10.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0
052406Z	19.7	90.0	50	19.8	90.0	50.	6.	0.	22.7	90.9	60.	82.	30.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0
052412Z	20.5	90.4	55	20.5	90.2	55.	11.	0.	0.0	0.0	0.	-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	21.4	90.9	60	21.0	90.4	60.	37.	0.	0.0	0.0	0.	-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	22.5	91.2	60	22.4	91.2	60.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0
052506Z	23.9	91.6	30	23.2	91.4	40.	43.	10.	0.0	0.0	0.	-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	33.	134.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	14.	29.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	11.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	2.	11.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	8	4	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 515. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TROPICAL CYCLONE 01B
FIX POSITIONS FOR CYCLONE NO. 1

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	211800	13.7N	89.1E	PCN 6	T1.5/1.5	INIT OBS	PGTW
2	220432	15.2N	89.6E	PCN 5		ULAC 15.5N 89.9E INIT OBS	KGWC
3	221712	15.5N	87.2E	PCN 6	T2.5/2.5	INIT OBS	KGWC
4	221800	16.9N	87.9E	PCN 6	T2.0/2.0 /D0.5/24HRS		PGTW
5	222106	16.6N	87.8E	PCN 6			KGWC
6	230110	16.6N	87.5E	PCN 6			KGWC
7	230442	16.9N	87.9E	PCN 5	T3.0/3.0 /D1.5/24HRS		KGWC
8	230600	16.9N	87.7E	PCN 6			PGTW
9	230809	17.2N	88.4E	PCN 5			KGWC
* 10	231200	17.5N	87.6E	PCN 6			PGTW
* 11	231209	17.6N	87.6E	PCN 6		ULAC 17.4N 087.2E	KGWC
* 12	231600	17.5N	87.5E	PCN 6		ULCC FIX	PGTW
13	231652	17.8N	89.7E	PCN 4	T3.0/3.0 /D0.5/24HRS	ULAC 16.8N 89.1E	KGWC
* 14	231800	17.5N	87.4E	PCN 6	T2.5/2.5 /D0.5/24HRS		PGTW
* 15	232100	18.2N	88.1E	PCN 6		ULCC FIX	PGTW
* 16	240000	18.5N	88.5E	PCN 6			PGTW
17	240049	19.4N	90.2E	PCN 6		ULAC 18.4N 89.3E	KGWC
18	240300	19.6N	90.2E	PCN 6			PGTW
19	240351	19.5N	89.6E	PCN 6	T3.0/3.0 /S0.0/24HRS		KGWC
20	240600	19.7N	90.0E	PCN 6			PGTW
21	240759	20.0N	90.1E	PCN 6		ULAC 19.1N 90.0E	KGWC
22	240900	19.9N	89.5E	PCN 6			PGTW
23	241148	20.3N	90.3E	PCN 6		ULAC FIX	KGWC
24	241200	20.1N	89.7E	PCN 6		ULCC 18.4N 90.0E	PGTW
25	241600	20.6N	90.9E	PCN 6			PGTW
26	241632	20.7N	90.0E	PCN 6	T3.5/3.5 /D0.5/24HRS	ULAC 21.0N 90.3E	KGWC
27	241800	20.9N	91.3E	PCN 6	T3.5/3.5-/D1.0/24HRS		PGTW
28	242044	22.3N	91.0E	PCN 6			KGWC
29	242100	21.1N	91.4E	PCN 6			PGTW
30	250000	22.9N	91.3E	PCN 6			PGTW
* 31	250028	21.2N	90.7E	PCN 6		ULAC 22.6N 091.4E	KGWC
32	250300	23.5N	91.3E	PCN 5			PGTW
33	250331	23.3N	91.4E	PCN 5			KGWC
34	250600	24.0N	91.6E	PCN 6			PGTW
35	250748	24.0N	92.3E	PCN 6			KGWC
36	251308	24.5N	93.7E	PCN 6			KGWC

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

TROPICAL CYCLONE 02A
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	
052806Z	15.1	67.4	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	0.0
052812Z	15.8	67.5	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	0.0
052818Z	16.5	67.6	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	0.0	0.	-0.	0.	0.0	0.0
052900Z	17.2	67.7	45	17.4	67.5	45.	17.	0.	20.9	67.9	65.	59.	15.	24.2	71.8	30.	205.	-10.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
052906Z	17.9	67.8	45	18.7	67.9	50.	48.	5.	22.2	70.3	45.	135.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
052912Z	18.6	68.1	50	18.6	67.9	50.	11.	0.	21.3	68.8	60.	29.	15.	24.3	70.8	30.	112.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
052918Z	19.3	68.3	50	18.8	67.6	50.	50.	0.	21.1	68.1	60.	61.	20.	24.2	70.2	30.	67.	5.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
053000Z	20.1	68.5	50	19.5	68.0	50.	46.	0.	22.0	68.8	60.	53.	20.	24.3	70.8	45.	77.	25.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
053006Z	20.8	68.4	45	20.8	68.3	50.	6.	5.	23.7	69.9	50.	81.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
053012Z	21.4	68.3	45	21.9	68.5	50.	32.	5.	24.6	70.0	30.	78.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
053018Z	22.1	68.3	40	22.3	68.5	45.	16.	5.	24.8	69.7	30.	45.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
053100Z	22.8	68.4	40	22.7	68.3	45.	8.	5.	24.7	69.4	35.	8.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
053106Z	23.3	68.5	35	23.5	68.4	45.	13.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
053112Z	23.9	68.8	30	24.0	68.4	35.	23.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
053118Z	24.4	69.0	25	24.6	68.8	30.	16.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0
060100Z	24.8	69.5	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	0.0

	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	24.	61.	115.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	14.	38.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	12.	10.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	4.	12.	5.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	12	9	4	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 609. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL CYCLONE 02A
FIX POSITIONS FOR CYCLONE NO. 2

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	260634	11.1N	64.6E	PCN 5	T1.5/1.5	INIT OBS	KGWC
2	261733	12.0N	66.4E	PCN 6			KGWC
3	270617	13.1N	69.0E	PCN 5	T1.0/1.5 /W0.5/24HRS		KGWC
4	271712	14.6N	69.5E	PCN 6			KGWC
5	280553	15.0N	67.1E	PCN 3	T2.0/2.0 /D1.0/24HRS	EXP LLCC ULAC 14.9N 66.0E	KGWC
6	281345	16.0N	67.0E	PCN 4		EXP LLCC ULAC 15.2N 65.5E	KGWC
7	281833	16.5N	67.8E	PCN 3	T3.0/3.0	INIT OBS ULAC 15.9N 62.6E	KGWC
8	282143	17.1N	67.6E	PCN 6			KGWC
* 9	290225	18.3N	68.4E	PCN 5			KGWC
10	290533	17.9N	68.1E	PCN 5	T3.0/3.0 /D1.0/24HRS	ULAC 17.4N 67.5E	KGWC
11	291029	18.4N	67.5E	PCN 5		ULAC 18.2N 66.5E	KGWC
12	291324	18.3N	67.4E	PCN 6			KGWC
13	291813	19.4N	68.6E	PCN 3	T3.0/3.0 /S0.0/24HRS	ULAC 19.0N 67.1E	KGWC
14	292132	19.9N	68.8E	PCN 6			KGWC
15	300205	20.5N	68.8E	PCN 5		ULAC 20.0N 67.7E	KGWC
16	300512	21.4N	68.3E	PCN 5	T2.0/3.0 /W1.0/24HRS	ULAC 20.9N 67.4E	KGWC
17	301018	21.3N	68.0E	PCN 5		ULAC 20.6N 65.5E	KGWC
18	301444	21.6N	68.6E	PCN 5		ULAC 21.1N 66.8E	KGWC
19	301753	22.0N	68.1E	PCN 3	T1.5/2.5 /W1.5/24HRS	EXP LLCC	KGWC
20	302303	22.8N	68.7E	PCN 5			KGWC
21	310143	23.3N	68.4E	PCN 5			KGWC
22	310452	23.2N	68.3E	PCN 3	T1.0/2.0 /W1.0/24HRS	EXP LLCC	KGWC
23	311423	24.1N	69.1E	PCN 6			KGWC
24	311838	24.6N	68.7E	PCN 5			KGWC
25	010432	24.9N	70.2E	PCN 5			KGWC

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

TROPICAL CYCLONE 03B
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
100818Z	11.8	90.4	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.
100900Z	12.8	90.8	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.
100906Z	13.8	90.1	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.
100912Z	14.2	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.
100918Z	14.6	86.9	35	14.3	87.4	35.	34.	0.	15.9	83.8	50.	78.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101000Z	15.1	85.7	40	14.9	85.6	40.	13.	0.	17.0	80.7	30.	160.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101006Z	15.8	85.0	45	16.1	84.1	45.	55.	0.	18.8	79.6	25.	184.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101012Z	16.4	84.3	45	16.3	84.2	45.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101018Z	17.2	83.7	50	17.1	83.2	50.	29.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101100Z	18.0	83.3	50	17.8	82.7	45.	36.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101106Z	18.4	82.8	35	18.5	82.9	35.	8.	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.	141.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	20.	42.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	10.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	-10.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	7	3	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 667. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 11. KNOTS

TROPICAL CYCLONE 03B
FIX POSITIONS FOR CYCLONE NO. 3

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	081600	11.3N	91.5E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
2	081800	11.3N	91.3E	PCN 6		ULCC FIX	PGTW
* 3	090000	11.4N	90.2E	PCN 6			PGTW
* 4	090300	11.7N	88.9E	PCN 6			PGTW
5	090429	13.6N	91.4E	PCN 5	T1.5/1.5	INIT OBS ULAC 13.5N 089.2E	KGWC
* 6	090600	11.9N	89.4E	PCN 6	T1.5/1.5	INIT OBS	PGTW
7	090838	13.9N	89.9E	PCN 6		ULCC 13.8N 087.9E	KGWC
8	090900	13.8N	88.8E	PCN 6		ULCC FIX	PGTW
9	091200	13.7N	88.4E	PCN 6		ULCC FIX	PGTW
10	091329	14.6N	88.4E	PCN 6		ULCC 14.2N 088.2E	KGWC
11	091709	14.3N	87.1E	PCN 6	T2.5/2.5	INIT OBS ULAC 14.4N 086.8E	KGWC
12	091800	14.3N	86.4E	PCN 6	T2.5/2.5 /D1.5/26HRS	ULCC FIX	PGTW
13	092100	14.5N	86.7E	PCN 6			PGTW
14	100027	16.0N	85.6E	PCN 6		ULAC 15.8N 085.0E	KGWC
15	100409	15.8N	84.5E	PCN 5	T2.5/2.5 /D1.0/24HRS	ULAC 15.7N 084.6E	KGWC
16	100827	16.2N	84.8E	PCN 3		PART EXP LLCC ULAC 16.3N 083.	KGWC
17	101307	16.5N	84.1E	PCN 6		ULAC 16.2N 083.1E	KGWC
18	101649	17.5N	83.2E	PCN 6	T3.5/3.5 /D1.0/24HRS	ULAC 16.4N 082.4E	KGWC
19	110006	18.1N	83.4E	PCN 6		ULAC 18.6N 080.1E	KGWC
20	110348	18.1N	82.9E	PCN 6		ULAC 18.6N 080.1E	KGWC
21	110816	20.2N	79.1E	PCN 6			KGWC
22	111246	20.8N	78.8E	PCN 3			KGWC
23	111629	20.5N	78.2E	PCN 5			KGWC
24	112101	20.8N	78.4E	PCN 5			KGWC

25	120126	22.0N	78.4E	PCN 5	KGWC
26	120509	22.3N	77.6E	PCN 5	KGWC

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

TROPICAL CYCLONE 04B
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	
101500Z	18.9	89.1	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.
101506Z	19.3	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	0.0	0.0	0.	-0.	0.	0.
101512Z	19.7	88.0	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	0.0	0.0	0.	-0.	0.	0.
101518Z	20.2	87.4	45	19.8	87.9	45.	37.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.
101600Z	20.6	86.8	50	20.5	86.9	50.	8.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.
101606Z	21.3	86.2	40	21.3	85.8	40.	22.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	0.
101612Z	22.4	85.5	25	22.4	85.4	25.	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	18.	0.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	8.	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 296. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 8. KNOTS

TROPICAL CYCLONE 04B
FIX POSITIONS FOR CYCLONE NO. 4

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	090900	9.8N 116.2E	PCN 6		ULCC FIX	PGTW
2	091200	9.4N 116.4E	PCN 6	T0.5/0.5	INIT OBS ULCC FIX	PGTW
3	100000	9.8N 111.8E	PCN 6		ULCC FIX	PGTW
4	100400	9.1N 109.6E	PCN 6		ULCC FIX	PGTW
5	100600	10.8N 111.5E	PCN 6	T0.5/0.5	INIT OBS	PGTW
6	100900	11.1N 111.4E	PCN 6			PGTW
7	122100	13.9N 97.6E	PCN 6		ULCC FIX	PGTW
8	130304	14.4N 96.5E	PCN 5	T1.5/1.5	INIT OBS	KGWC
9	130754	15.3N 95.1E	PCN 5	T1.5/1.5	INIT OBS ULAC 14.8N 091.6E	KGWC
* 10	141200	17.5N 87.1E	PCN 6	T1.5/1.5	INIT OBS	PGTW
11	141709	18.9N 89.1E	PCN 6	T1.0/1.5 /W0.5/25HRS		KGWC
* 12	141800	17.0N 86.2E	PCN 6			PGTW
13	150408	19.4N 88.4E	PCN 5	T1.0/1.0 /S0.0/24HRS		KGWC
14	151649	20.0N 87.2E	PCN 6	T2.5/2.5	INIT OBS ULAC 19.7N 086.7E	KGWC
15	152018	20.2N 87.1E	PCN 6		ULAC 20.0N 086.5E	KGWC
16	160001	21.1N 87.7E	PCN 6			KGWC
17	160348	21.7N 85.8E	PCN 5			KGWC
18	160904	21.9N 85.8E	PCN 5			KGWC
19	161241	22.6N 85.5E	PCN 6		ULAC 22.7N 084.9E	KGWC
20	161628	23.3N 85.0E	PCN 6			KGWC

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

TROPICAL CYCLONE 05B
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	
111306Z	12.0	81.9	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.
111312Z	12.1	82.5	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	0.0	0.0	0.	-0.	0.	0.
111318Z	12.1	83.1	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	0.0	0.0	0.	-0.	0.	0.
111400Z	12.0	83.9	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.
111406Z	11.8	84.7	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.
111412Z	11.8	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	0.0	0.0	0.	-0.	0.	0.
111418Z	12.0	86.2	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.
111500Z	12.5	86.4	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.
111506Z	12.8	85.9	35	12.9	86.4	35.	30.	0.	13.5	87.8	45.	244.	0.	14.2	88.9	50.	512.	-5.	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	0.
111512Z	12.8	85.5	35	12.8	86.7	40.	70.	5.	13.4	88.1	50.	299.	0.	14.1	89.0	55.	539.	10.	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	0.
111518Z	12.7	85.0	35	12.8	85.1	40.	8.	5.	13.0	83.4	45.	85.	-5.	13.2	82.2	50.	224.	15.	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	0.
111600Z	12.6	84.4	40	12.8	84.4	45.	12.	5.	13.1	81.8	55.	67.	5.	13.6	79.9	65.	200.	40.	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	0.
111606Z	12.7	83.7	45	12.7	83.9	45.	12.	0.	12.8	81.8	60.	151.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	0.
111612Z	13.0	83.0	50	12.1	83.1	55.	54.	5.	11.8	80.6	65.	221.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	0.
111618Z	13.4	82.0	50	12.6	83.2	55.	85.	5.	12.3	81.0	60.	243.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	0.
111700Z	13.9	81.0	50	13.0	82.2	55.	88.	5.	13.8	79.7	60.	190.	35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	0.
111706Z	14.7	80.1	55	13.8	80.8	55.	68.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	0.
111712Z	15.4	79.8	45	15.0	79.6	50.	27.	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.
111718Z	16.2	79.9	35	15.8	79.4	35.	38.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	0.
111800Z	16.9	80.4	25	16.5	79.2	25.	73.	0.	0.0	0.0	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	47.	188.	369.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	16.	71.	109.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	12.	18.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	3.	11.	15.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	12	8	4	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 843. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL CYCLONE 05B
FIX POSITIONS FOR CYCLONE NO. 5

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	130427	11.8N	81.6E	PCN 3	T1.5/1.5	INIT OBS EXP LLCC	KGWC
2	131708	11.8N	82.6E	PCN 6			KGWC
3	132153	12.8N	82.8E	PCN 6			KGWC
4	132351	12.3N	83.3E	PCN 6			KGWC
5	140407	11.8N	84.4E	PCN 3	T1.0/1.5 /W0.5/24HRS	EXP LLCC	KGWC
6	140856	11.8N	85.3E	PCN 3		EXP LLCC	KGWC
7	141231	11.6N	85.7E	PCN 6			KGWC
8	141647	11.9N	86.0E	PCN 6			KGWC
9	142142	12.3N	86.3E	PCN 5		ULAC 14.1N 086.7E	KGWC
10	150111	12.7N	86.4E	PCN 5		ULAC 13.4N 086.7E	KGWC
11	150347	12.8N	86.2E	PCH 5	T2.5/2.5 /D1.5/24HRS	ULAC 13.1N 086.3E	KGWC
12	150846	12.6N	86.5E	PCN 5			KGWC
13	150846	12.6N	86.3E	PCN 5	T2.5/2.5 /D1.0/24HRS		KGWC
14	151209	12.2N	86.1E	PCN 6			FJDG
15	151627	12.8N	85.1E	PCN 6	T2.5/2.5	INIT OBS	KGWC
16	152131	12.4N	84.1E	PCN 6			KGWC
17	160050	12.7N	84.4E	PCN 6		ULAC 12.0N 085.6E	KGWC
18	160326	12.5N	83.9E	PCN 6	T3.0/3.0 /D0.5/24HRS	ULAC 11.9N 085.1E	KGWC
19	160829	12.0N	82.9E	PCN 5			FJDG
20	160835	12.4N	84.0E	PCN 5		ULAC 12.5N 084.3E	KGWC
21	161329	12.9N	83.6E	PCN 5		ULAC 12.5N 084.3E	KGWC
22	161607	13.2N	83.0E	PCN 6	T3.0/3.0 /D0.5/24HRS	ULAC 12.2N 084.0E	KGWC
23	162120	13.6N	81.6E	PCN 6		ULAC 12.8N 082.5E	KGWC
24	170028	13.8N	80.6E	PCN 6		ULAC 13.2N 081.8E	KGWC
25	170447	14.5N	81.0E	PCN 5	T4.0/4.0 /D1.0/24HRS	ULAC 14.9N 081.5E	KGWC
26	170824	15.2N	79.9E	PCN 5		ULAC 15.2N 080.5E	KGWC
27	171308	15.4N	79.7E	PCN 6		ULAC 15.4N 079.8E	KGWC
28	171728	16.5N	79.6E	PCN 5			KGWC
29	172107	16.4N	79.5E	PCN 5			KGWC
30	180007	17.1N	81.0E	PCN 5		ULAC PSBL 17.0N 082.1E	KGWC

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

TROPICAL CYCLONE 06B
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
120906Z	4.2	90.0	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.
120912Z	4.5	90.3	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.
120918Z	4.8	90.5	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.
121000Z	5.2	90.6	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.
121006Z	5.5	90.7	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.
121012Z	6.0	90.7	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.
121018Z	6.7	90.4	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.
121100Z	7.2	89.8	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.
121106Z	7.7	89.0	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.
121112Z	8.5	87.8	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.
121118Z	9.3	86.5	40	9.3	86.3	40.	12.	0.	12.0	81.1	55.	126.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121200Z	9.9	85.6	40	10.3	85.2	40.	34.	0.	13.6	80.1	55.	155.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121206Z	10.4	84.7	45	10.7	84.3	45.	30.	0.	13.5	79.7	45.	130.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121212Z	10.9	84.0	45	10.5	83.5	45.	38.	0.	13.5	79.4	45.	99.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121218Z	11.6	83.2	50	11.4	82.6	50.	37.	0.	14.2	78.4	30.	116.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121300Z	12.3	82.4	50	12.4	82.1	50.	19.	0.	14.9	78.8	25.	53.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121306Z	12.8	81.8	50	12.8	81.6	50.	12.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121312Z	13.6	81.1	45	13.5	80.8	50.	18.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121318Z	14.2	80.4	45	14.1	80.2	45.	13.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121400Z	14.8	79.7	40	14.8	79.9	45.	12.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121406Z	15.5	79.0	30	15.4	79.0	35.	6.	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	21.	113.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	16.	57.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	8.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	1.	-4.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	11	6	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1025. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TROPICAL CYCLONE 06B
FIX POSITIONS FOR CYCLONE NO. 6

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	080801	4.0N	87.1E	PCN 5	T1.5/1.5	INIT OBS	FJDG
2	090406	4.2N	89.9E	PCN 5	T1.5/1.5	INIT OBS ULAC 03.7N 090.4E	KGWC
3	090600	4.6N	90.3E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
4	091200	4.3N	90.2E	PCN 6		ULCC FIX	PGTW
5	091600	4.5N	90.1E	PCN 6	T1.0/1.0	INIT OBS	PGTW
6	091646	3.9N	90.5E	PCN 6		ULCC 04.0N 089.7E	KGWC
7	091800	4.9N	90.0E	PCN 6			PGTW
8	092035	4.5N	91.3E	PCN 6		ULCC 04.9N 091.3E	KGWC
9	092100	4.3N	90.7E	PCN 6			PGTW
10	100000	4.6N	90.7E	PCN 6			PGTW
11	100045	5.2N	90.8E	PCN 5		ULAC 05.0N 091.2E	KGWC
12	100300	5.2N	90.7E	PCN 6	T2.0/2.0 /D1.0/20HRS		PGTW
13	100345	5.5N	90.2E	PCN 5	T2.5/2.5 /D1.0/24HRS	ULAC 05.2N 090.7E	KGWC
14	100600	5.4N	90.8E	PCN 6			PGTW
15	100900	5.7N	90.7E	PCN 6			PGTW

* 16	100921	5.9N	89.0E	PCN 6			ULAC 05.6N 089.7E	KGWC
17	101143	5.4N	90.4E	PCN 6			ULAC 05.3N 089.6E	KGWC
18	101200	5.9N	90.6E	PCN 6				PGTW
19	101600	6.2N	90.5E	PCN 6	T2.0/2.0 /D1.0/24HRS			PGTW
20	101626	6.3N	90.8E	PCN 6	T2.5/2.5		INIT OBS ULAC 05.6N 090.4E	KGWC
21	101800	6.5N	90.4E	PCN 6				PGTW
22	102024	6.9N	90.6E	PCN 6			ULAC 06.3N 090.3E	KGWC
23	102100	6.5N	90.2E	PCN 6				PGTW
24	110000	6.6N	89.4E	PCN 6				PGTW
25	110023	7.7N	90.2E	PCN 5			ULAC 06.8N 090.0E	KGWC
26	110300	7.2N	89.2E	PCN 6				PGTW
27	110325	7.9N	89.5E	PCN 5	T2.0/2.5 /W0.5/24HRS		ULAC 07.1N 089.4E	KGWC
28	110600	7.7N	89.3E	PCN 6	T2.0/2.0 /S0.0/27HRS			PGTW
29	110900	7.8N	88.3E	PCN 6				PGTW
30	110902	8.5N	89.0E	PCN 5	T3.5/3.5+/D2.0/27HRS			FJDG
31	110910	8.2N	88.4E	PCN 3			PART EXP LLCC ULAC 07.9N 088.	KGWC
32	111200	8.3N	87.5E	PCN 6			ULCC FIX	PGTW
33	111303	8.9N	87.4E	PCN 5			ULAC 08.2N 087.1E	KGWC
34	111600	8.9N	86.8E	PCN 6	T2.5/2.5 /D0.5/24HRS			PGTW
35	111605	9.4N	86.7E	PCN 5	T3.0/3.0 /D0.5/24HRS		ULAC 08.8N 086.4E	KGWC
36	111800	8.9N	86.4E	PCN 6			ULCC FIX	PGTW
* 37	112156	10.8N	85.6E	PCN 6			ULAC 10.5N 084.7E	KGWC
38	120000	9.5N	85.2E	PCN 6				PGTW
39	120002	10.3N	85.3E	PCN 5			ULAC 09.6N 085.1E	KGWC
40	120446	10.0N	84.9E	PCN 5	T3.0/3.0 /D1.0/25HRS		ULAC 09.3N 084.5E	KGWC
41	120600	10.0N	85.0E	PCN 6				PGTW
42	120808	11.5N	84.5E	PCN 5	T3.5/3.5 /S0.0/24HRS			FJDG
43	120859	10.4N	84.0E	PCN 5			ULAC 10.0N 083.9E	KGWC
44	120900	9.8N	84.2E	PCN 6				PGTW
45	121200	10.4N	84.1E	PCN 6			ULCC FIX	PGTW
46	121242	11.4N	84.0E	PCN 5			ULAC 11.1N 083.7E	KGWC
47	121600	10.9N	83.2E	PCN 6			ULCC FIX	PGTW
48	121727	11.9N	83.7E	PCN 5	T2.5/3.0 /W0.5/24HRS		ULAC 11.0N 083.6E	KGWC
49	122145	12.4N	83.0E	PCN 6			ULAC 11.3N 082.5E	KGWC
50	130122	12.3N	82.3E	PCN 6				KGWC
51	130426	12.6N	82.0E	PCN 5	T3.0/3.0 /W0.0/24HRS			KGWC
52	130848	13.1N	81.6E	PCN 6			ULAC 13.9N 081.6E	KGWC
53	130849	12.5N	81.0E	PCN 5				FJDG
54	131221	13.8N	81.3E	PCN 6			ULAC 13.4N 080.6E	KGWC
55	131706	14.1N	80.6E	PCN 5	T3.0/3.0 /D0.5/24HRS		ULAC 14.0N 080.7E	KGWC
56	132134	14.6N	80.5E	PCN 6			ULAC 15.0N 080.3E	KGWC
57	140405	14.8N	78.8E	PCN 5				KGWC
58	140838	15.6N	79.0E	PCN 5				FJDG

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

3. SOUTH PACIFIC and SOUTH INDIAN OCEAN CYCLONE DATA

TROPICAL CYCLONE 01S
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	
110906Z	7.8	80.9	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.
110918Z	8.6	78.8	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.	0.	-0.	0.	0.
111006Z	9.1	76.6	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.	0.	-0.	0.	0.
111018Z	9.4	74.2	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.	0.	-0.	0.	0.
111106Z	9.9	71.9	45	10.0	72.1	35.	13.	-10.	10.3	67.7	50.	53.	5.	10.3	63.5	65.	190.	25.	0.0	0.0	0.	-0.	0.	0.	-0.	0.	0.
111118Z	10.4	69.7	45	10.5	68.8	40.	53.	-5.	11.2	63.4	55.	75.	10.	11.8	59.3	70.	130.	35.	0.0	0.0	0.	-0.	0.	0.	-0.	0.	0.
111206Z	11.1	67.3	45	11.2	67.7	50.	24.	5.	12.6	63.7	60.	159.	20.	13.9	59.9	75.	263.	45.	0.0	0.0	0.	-0.	0.	0.	-0.	0.	0.
111218Z	11.6	64.6	45	12.0	65.8	60.	74.	15.	13.4	61.7	80.	234.	45.	15.8	58.5	95.	282.	65.	0.0	0.0	0.	-0.	0.	0.	-0.	0.	0.
111306Z	12.3	61.0	40	12.0	61.7	45.	45.	5.	13.7	56.3	35.	60.	5.	16.0	51.9	30.	34.	0.	0.0	0.0	0.	-0.	0.	0.	-0.	0.	0.
111318Z	13.3	57.7	35	13.1	58.1	40.	26.	5.	15.3	52.9	30.	50.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.	-0.	0.	0.
111406Z	14.2	55.4	30	14.5	54.9	35.	34.	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.
111418Z	15.0	53.7	30	16.7	51.8	25.	150.	-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.
111506Z	15.7	52.4	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.
111518Z	16.8	51.4	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.	0.	-0.	0.	0.
111606Z	17.8	50.6	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.
111618Z	18.6	49.9	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.
111706Z	19.1	49.2	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.

	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	53.	105.	180.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	18.	38.	78.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	7.	14.	34.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	2.	14.	34.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	8	6	5	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2026. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 11. KNOTS

TROPICAL CYCLONE 01S
FIX POSITIONS FOR CYCLONE NO. 1

SATELLITE FIXES

	FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
	1	050600	6.4S	85.0E	PCN 5	T1.5/1.5	INIT OBS	PGTW
	2	080427	6.1S	84.8E	PCN 5	T1.0/1.0	INIT OBS	KGWC
	3	081707	5.9S	81.7E	PCN 5		ULAC 06.6S 080.7E	KGWC
	4	090407	6.9S	81.2E	PCN 6	T2.0/2.0 /D1.0/24HRS	EXP LLCC ULAC 08.1S 080.5E	KGWC
	5	091647	8.9S	78.5E	PCN 5		ULAC 09.5S 078.5E	KGWC
*	6	092203	10.1S	76.6E	PCN 5			FJDG
	7	100041	8.3S	77.3E	PCN 6		ULAC 08.5S 077.0E	KGWC
	8	100528	8.5S	76.7E	PCN 4	T2.0/2.0 /S0.0/25HRS	ULAC 09.7S 076.2E	KGWC
*	9	101048	10.4S	74.5E	PCN 5	T2.0/2.0	INIT OBS	FJDG
	10	101321	9.3S	75.4E	PCN 5			KGWC
*	11	101627	9.6S	73.3E	PCN 5		ULAC 10.2S 073.9E	KGWC
	12	102332	9.2S	73.4E	PCN 6			KGWC
	13	110201	9.7S	72.8E	PCN 6			KGWC
	14	110211	10.0S	72.5E	PCN 5			FJDG
	15	110508	9.4S	72.0E	PCN 6	T4.0/4.0+/D2.0/24HRS		KGWC
	16	111035	10.7S	70.8E	PCN 5	T3.0/3.0 /D1.0/24HRS		FJDG
	17	111035	10.0S	70.1E	PCN 5			KGWC
	18	111300	10.4S	69.9E	PCN 5			KGWC
	19	111748	10.6S	69.8E	PCN 5			KGWC
	20	112320	11.0S	69.0E	PCN 5	T2.5/2.5 /D0.1/24HRS		FJDG
	21	120140	11.2S	68.4E	PCN 5			KGWC
	22	120629	11.6S	68.0E	PCN 5	T2.5/3.5 /W1.5/24HRS		KGWC
	23	121204	12.0S	66.5E	PCN 5	T4.0/4.0		FJDG
	24	121204	11.9S	66.2E	PCN 5			KGWC
	25	121420	11.3S	66.4E	PCN 6			KGWC
	26	121728	11.6S	65.1E	PCN 6			KGWC
	27	122307	11.5S	63.3E	PCN 5			KGWC
	28	122308	11.7S	63.4E	PCN 5	T2.5/2.5 /D1.0/24HRS		FJDG
	29	130300	12.0S	62.7E	PCN 6			KGWC
	30	130608	12.8S	61.7E	PCN 6	T2.0/2.5 /W0.5/24HRS	ULAC 11.8S 063.1E	KGWC
*	31	131152	11.6S	61.8E	PCN 5	T1.5/1.5		FJDG
	32	131152	13.2S	59.4E	PCN 4		ULAC 11.0S 060.1E	KGWC
	33	131359	13.2S	58.6E	PCN 4		ULAC 11.9S 060.5E	KGWC
	34	140239	14.1S	55.7E	PCN 6		ULAC 13.1S 057.3E	KGWC
	35	140730	14.5S	55.7E	PCN 5	T1.5/2.0 /W0.5/25HRS	ULAC 12.9S 056.5E	KGWC
*	36	141829	17.5S	51.0E	PCN 6		ULAC 15.1S 052.6E	KGWC
	37	150709	15.6S	51.6E	PCN 3	T1.5/1.5 /S0.0/25HRS	EXP LLCC	KGWC
	38	151809	17.5S	51.1E	PCN 6			KGWC
	39	160649	18.3S	50.9E	PCN 3	T2.0/2.0 /D0.5/24HRS	EXP LLCC ULAC 19.8S 051.2E	KGWC
	40	161930	18.0S	49.8E	PCN 6			KGWC
	41	170629	19.3S	49.2E	PCN 3	T0.5/1.5 /W1.5/24HRS	EXP LLCC	KGWC

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

TROPICAL CYCLONE 02S
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
120206Z	10.8	82.1	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.
120218Z	12.0	81.0	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.
120306Z	13.2	79.4	40	13.0	80.2	35.	48.	-5.	14.8	79.2	45.	232.	-5.	17.1	78.0	55.	328.	0.	0.0	0.0	0.	-0.	0.
120318Z	14.4	77.2	45	15.0	77.0	50.	38.	5.	17.3	73.9	80.	99.	25.	19.0	71.0	90.	90.	35.	0.0	0.0	0.	-0.	0.
120406Z	14.9	75.2	50	15.3	75.2	60.	24.	10.	16.5	71.6	80.	42.	25.	17.2	67.9	90.	142.	45.	0.0	0.0	0.	-0.	0.
120418Z	15.7	73.5	55	15.9	73.2	65.	30.	10.	16.0	69.1	80.	146.	25.	17.1	65.1	90.	250.	50.	0.0	0.0	0.	-0.	0.
120506Z	16.7	72.3	55	15.8	72.1	55.	55.	0.	16.8	68.5	65.	128.	20.	18.2	65.0	75.	171.	45.	0.0	0.0	0.	-0.	0.
120518Z	17.5	71.1	55	17.5	71.0	55.	6.	0.	19.5	68.0	60.	64.	20.	21.2	64.8	65.	78.	40.	0.0	0.0	0.	-0.	0.
120606Z	18.3	70.1	45	18.6	70.2	50.	19.	5.	20.1	68.9	40.	81.	10.	21.9	67.7	30.	208.	10.	0.0	0.0	0.	-0.	0.
120618Z	19.0	69.0	40	19.3	69.2	45.	21.	5.	21.2	67.6	35.	115.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120706Z	19.8	67.5	30	19.9	67.3	35.	13.	5.	21.2	63.8	20.	37.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120718Z	20.3	65.8	25	20.4	65.1	25.	40.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
120806Z	20.7	64.2	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.

	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.	105.	181.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	22.	76.	121.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	5.	16.	32.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	4.	14.	32.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	10	9	7	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1208. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 8. KNOTS

TROPICAL CYCLONE 02S
FIX POSITIONS FOR CYCLONE NO. 2

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	280428	6.0S	90.3E	PCN 5	T1.0/1.0	INIT OBS ULAC 06.8S 089.5E	KGWC
2	281200	7.6S	88.4E	PCN 6	T1.5/1.5	INIT OBS	PGTW
3	281527	7.1S	89.9E	PCN 6		ULAC 08.0S 088.8E	KGWC
4	281600	8.2S	89.2E	PCN 6			PGTW
5	281800	8.1S	90.6E	PCN 6			PGTW
6	290300	7.5S	88.6E	PCN 6	T1.5/1.5	INIT OBS ULCC FIX	PGTW
7	290408	6.7S	89.5E	PCN 5	T1.5/1.5 /D0.5/24HRS		KGWC
8	290600	7.2S	88.7E	PCN 6		ULCC FIX	PGTW
9	291648	7.6S	90.0E	PCN 5	T1.5/1.5	INIT OBS	KGWC
10	300347	8.1S	89.3E	PCN 5	T1.5/1.5 /S0.0/24HRS		KGWC
11	301628	8.1S	84.7E	PCN 6			KGWC
12	010300	9.3S	82.6E	PCN 6	T1.5/1.5	INIT OBS ULCC FIX	PGTW
13	010509	9.8S	82.8E	PCN 6	T2.5/2.5 /D1.0/25HRS	ULAC 09.8S 081.6E	KGWC
14	010600	9.7S	81.7E	PCN 6		ULCC FIX	PGTW
15	010900	9.5S	81.6E	PCN 6			PGTW
16	011240	9.9S	83.1E	PCN 6		ULAC 10.5S 079.8E	KGWC
17	011600	10.4S	81.6E	PCN 6	T1.5/1.5	INIT OBS	PGTW
18	011608	9.5S	82.5E	PCN 6		ULAC 10.3S 081.0E	KGWC
19	012100	10.6S	81.3E	PCN 6		ULCC FIX	PGTW
20	012233	11.7S	82.0E	PCN 5	T2.0/2.0	INIT OBS	FJDG
21	020000	10.8S	81.5E	PCN 6			PGTW
22	020120	10.2S	82.9E	PCN 6		ULAC 09.9S 081.2E	KGWC
23	020448	10.5S	82.1E	PCN 6	T2.0/2.5 /W0.5/24HRS	ULAC 11.3S 080.3E	KGWC
24	021117	12.0S	81.5E	PCN 5	T2.5/2.5 /W0.5/24HRS		FJDG
25	021200	12.0S	81.3E	PCN 6		ULCC FIX	PGTW
26	021219	11.2S	82.2E	PCN 6		ULAC 10.8S 080.0E	KGWC
27	021547	11.8S	81.0E	PCN 6		ULAC 11.8S 081.9E	KGWC
28	021600	12.1S	81.1E	PCN 6	T1.0/1.5+/W0.5/24HRS		PGTW
29	021800	12.2S	80.9E	PCN 6		ULCC FIX	PGTW
30	030000	12.8S	80.6E	PCN 6			PGTW
31	030059	12.1S	80.6E	PCN 6		ULAC 12.1S 078.8E	KGWC
* 32	030140	13.6S	81.8E	PCN 5	T2.5/2.5 /D0.5/14HRS		FJDG
33	030428	12.6S	80.1E	PCN 6	T2.5/2.5 /D0.5/24HRS	ULAC 13.8S 079.7E	KGWC
34	031104	13.5S	78.6E	PCN 5			KGWC
35	031105	13.6S	78.6E	PCN 3	T4.0/4.0+/D1.5/11HRS		FJDG
36	031339	14.7S	77.9E	PCN 5		ULAC 14.8S 078.3E	KGWC
37	031709	14.7S	77.1E	PCN 5			KGWC
38	032207	14.9S	76.1E	PCN 6		ULAC 15.1S 076.2E	KGWC
39	032208	15.2S	76.9E	PCN 5			FJDG
40	040219	14.7S	75.7E	PCN 6		ULAC 14.0S 076.0E	KGWC
41	040549	15.0S	75.4E	PCN 6	T3.0/3.0 /D0.5/25HRS		KGWC
42	041052	15.2S	74.1E	PCN 5			KGWC
* 43	041052	16.5S	73.8E	PCN 5	T2.5/2.5 /S0.0/24HRS		FJDG
44	041318	15.0S	74.2E	PCN 6		ULAC 16.0S 073.5E	KGWC
45	041648	14.9S	73.7E	PCN 4	T3.0/3.0	INIT OBS EXP LLCC	KGWC
46	042337	15.4S	73.5E	PCN 6		ULAC 16.4S 073.0E	KGWC
47	050158	16.8S	72.7E	PCN 2		EYE FIX ULAC 16.9S 073.0E	KGWC
48	050237	17.4S	73.0E	PCN 4	T3.5/3.5 /S0.0/16HRS		FJDG
49	050529	17.0S	73.0E	PCN 6	T3.5/3.5 /D0.5/24HRS		KGWC
50	051039	17.9S	71.9E	PCN 6			KGWC
51	051628	17.3S	71.0E	PCN 6		ULAC 17.9S 071.2E	KGWC
52	060137	17.8S	70.9E	PCN 6		EXP LLCC ULAC 19.4S 071.3E	KGWC
* 53	060213	19.8S	72.0E	PCN 3	T2.5/2.5 /S0.0/14HRS		FJDG
54	060509	18.2S	70.4E	PCN 4	T2.0/3.0 /W1.5/24HRS	EXP LLCC ULAC 20.0S 071.7E	KGWC
55	061235	18.7S	69.5E	PCN 4		EXP LLCC	KGWC
56	061451	19.2S	70.0E	PCN 5	T2.0/2.5-/W0.5/11HRS		FJDG
57	061749	18.8S	69.0E	PCN 4		EXP LLCC	KGWC
58	070115	19.3S	67.5E	PCN 4		EXP LLCC	KGWC
59	070630	19.6S	67.6E	PCN 4	T0.5/1.5 /W1.5/25HRS	EXP LLCC	KGWC
60	071355	20.1S	66.0E	PCN 4		EXP LLCC	KGWC
61	071729	20.1S	65.5E	PCN 4		EXP LLCC	KGWC
62	080235	20.8S	64.4E	PCN 3		EXP LLCC	KGWC
63	080610	20.4S	64.3E	PCN 3		EXP LLCC	KGWC

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

TROPICAL CYCLONE 03S
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
120806Z	8.4	98.5	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.					
120818Z	9.7	100.6	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.					
120906Z	10.8	102.2	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.					
120918Z	11.9	103.7	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.					
121006Z	13.0	105.1	35	12.5	104.8	35.	35.	0.	13.7	107.2	55.	192.	10.	14.8	109.5	65.	468.	25.	0.0	0.0	0.	-0.	0.					
121018Z	14.1	106.8	45	14.1	106.8	45.	0.	0.	15.5	110.2	65.	204.	20.	16.8	113.3	35.	388.	60.	0.0	0.0	0.	-0.	0.					
121106Z	15.9	109.6	45	15.3	109.3	45.	40.	0.	18.0	114.3	55.	141.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.					
121118Z	18.0	112.6	45	18.1	112.2	45.	24.	0.	22.4	117.7	30.	57.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.					
121206Z	20.0	115.6	40	20.4	115.3	45.	29.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.					
121218Z	21.5	118.0	25	22.6	117.9	20.	66.	-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	32.	148.	428.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	19.	46.	67.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	13.	43.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	13.	43.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	6	4	2	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1375. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

TROPICAL CYCLONE 03S
FIX POSITIONS FOR CYCLONE NO. 3

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	080000	7.9S 97.9E	PCN 6		ULCC FIX	PGTW
2	080300	8.4S 98.2E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
3	080600	8.7S 98.2E	PCN 6		ULCC FIX	PGTW
4	081200	9.6S 99.7E	PCN 6			PGTW
5	081600	9.7S 100.0E	PCN 6			PGTW
6	081800	9.6S 100.1E	PCN 6	T1.0/1.0	INIT OBS	PGTW
7	090000	10.3S 100.9E	PCN 6		ULCC FIX	PGTW
8	090300	10.6S 101.8E	PCN 6		ULCC FIX	PGTW
* 9	090408	10.7S 103.7E	PCN 5	T1.0/1.0	INIT OBS ULAC 10.3S 102.8E	KGWC
10	090600	10.8S 102.7E	PCN 6	T1.5/1.5 /D0.5/27HRS	ULCC FIX	PGTW
11	090900	11.4S 102.8E	PCN 6		ULCC FIX	PGTW
12	091200	11.2S 103.3E	PCN 6		ULCC FIX	PGTW
* 13	091507	11.3S 105.1E	PCN 6		ULAC 10.7S 103.8E	KGWC
14	091800	11.9S 103.8E	PCN 6	T2.0/2.0 /D1.0/24HRS	ULCC FIX	PGTW
15	092100	12.5S 104.2E	PCN 6		ULCC FIX	PGTW
16	100000	12.6S 104.0E	PCN 6			PGTW
17	100300	12.5S 104.1E	PCN 6	T2.5/2.5 /D1.0/21HRS		PGTW
18	100348	12.5S 105.4E	PCN 5	T2.5/2.5 /D1.5/24HRS	ULAC 12.2S 105.6E	KGWC
19	100600	12.6S 104.5E	PCN 6		ULCC FIX	PGTW
20	100900	12.8S 105.2E	PCN 6		ULCC FIX	PGTW
* 21	100937	13.7S 104.3E	PCN 5		ULAC 14.4S 105.2E	KGWC
22	101110	13.9S 105.9E	PCN 6		ULAC 13.0S 105.6E	KGWC
23	101200	13.5S 106.4E	PCN 6		ULCC FIX	PGTW
24	101447	14.1S 106.7E	PCN 5	T3.0/3.0	INIT OBS ULAC 13.4S 106.3E	KGWC
25	101600	13.8S 106.7E	PCN 6	T3.0/3.0 /D1.0/22HRS	ULCC FIX	PGTW
26	101800	13.8S 107.0E	PCN 6		ULCC FIX	PGTW
27	102039	14.0S 108.0E	PCN 6		ULAC 13.2S 107.6E	KGWC
28	102100	14.1S 107.4E	PCN 6		ULCC FIX	PGTW
29	102350	14.8S 108.5E	PCN 6			KGWC
30	110000	14.1S 107.7E	PCN 6		ULCC FIX	PGTW
31	110328	15.4S 109.5E	PCN 6	T3.5/3.5 /D1.0/24HRS		KGWC
32	110600	15.7S 109.2E	PCN 6	T2.5/2.5 /S0.0/27HRS		PGTW
33	110900	16.6S 109.9E	PCN 6			PGTW
34	110924	16.7S 109.8E	PCN 6			KGWC
35	111049	16.7S 111.3E	PCN 6			KGWC
36	111200	16.9S 110.6E	PCN 6		ULCC FIX	PGTW
37	111427	17.8S 112.5E	PCN 6	T2.5/3.5 /W0.5/24HRS		KGWC
38	111600	17.4S 111.3E	PCN 6	T3.0/3.0+/S0.0/24HRS	ULCC FIX	PGTW
39	111800	18.1S 112.0E	PCN 6		ULCC FIX	PGTW
40	112027	19.2S 113.6E	PCN 6		ULAC 18.5S 111.0E	KGWC
41	112100	18.9S 112.9E	PCN 6		ULCC FIX	PGTW
42	112329	18.8S 114.0E	PCN 3		ULAC 19.6S 115.1E	KGWC
43	120000	19.3S 113.9E	PCN 6			PGTW
44	120300	19.7S 115.0E	PCN 6			PGTW
45	120307	19.4S 114.8E	PCN 3	T2.5/3.5 /W1.0/24HRS	ULAC 22.0S 116.9E	KGWC
46	120900	20.2S 116.9E	PCN 6			PGTW
47	121200	20.9S 117.4E	PCN 6			PGTW
48	130000	21.7S 118.9E	PCN 4			PGTW

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	121800	22.6S 117.9E	020	130	94312 94300

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

TROPICAL CYCLONE 04P
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
120806Z	10.1	131.7	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.
120818Z	10.3	130.5	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.
120906Z	11.1	130.3	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.
120918Z	11.5	131.1	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.
121006Z	11.5	132.2	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.
121018Z	11.7	133.3	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.
121106Z	12.8	135.7	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.
121118Z	13.8	138.6	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.
121206Z	14.3	139.2	35	14.1	139.7	35.	31.	0.	14.8	143.3	25.	290.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121218Z	15.0	138.6	30	14.2	139.1	30.	56.	0.	15.2	139.8	40.	189.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121306Z	15.8	138.4	25	15.7	138.9	30.	29.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121318Z	16.7	138.2	20	16.4	138.5	20.	25.	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	35.	209.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	19.	152.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	10.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	1.	10.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	4	2	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 845. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

TROPICAL CYCLONE 04P
FIX POSITIONS FOR CYCLONE NO. 4

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	070126	9.3S 135.2E	PCN 6	T1.0/1.0	INIT OBS ULAC 09.2S 134.7E	KGWC
2	070600	10.0S 133.3E	PCN 6	T0.0/0.0	INIT OBS	PGTW
3	071406	9.9S 131.7E	PCN 6		ULAC 10.0S 132.4E	KGWC
4	071800	9.8S 131.5E	PCN 6			PGTW
5	080000	10.2S 131.6E	PCN 6		ULCC FIX	PGTW
6	080105	10.5S 129.2E	PCN 5	T1.5/1.5 /D0.5/24HRS		KGWC
7	080300	10.3S 131.8E	PCN 6	T1.0/1.0-/D1.0/21HRS	ULCC FIX	PGTW
8	081200	10.3S 131.5E	PCN 6			PGTW
9	081600	10.4S 131.6E	PCN 6	T2.0/2.0	INIT OBS	PGTW
10	081800	10.5S 131.4E	PCN 6			PGTW
11	090000	10.8S 131.0E	PCN 6		ULCC FIX	PGTW
12	090045	10.8S 130.5E	PCN 5	T2.5/2.5 /D1.0/24HRS	ULAC 11.9S 132.5E	KGWC
13	090300	10.9S 130.1E	PCN 6	T1.5/1.5 /D0.5/24HRS	ULCC FIX	PGTW
14	091200	10.8S 131.1E	PCN 6	T1.5/2.0 /W0.5/26HRS	ULCC FIX	PGTW
* 15	091326	10.7S 129.4E	PCN 5			KGWC
16	100000	11.0S 132.5E	PCN 6			PGTW
17	100206	11.2S 132.5E	PCN 5	T2.5/2.5 /S0.0/25HRS	ULAC 11.3S 134.1E	KGWC
18	100300	11.1S 132.6E	PCN 6	T2.0/2.0 /D0.5/24HRS		PGTW
19	100929	11.0S 131.8E	PCN 5			KGWC
20	101306	11.1S 132.8E	PCN 6	T2.0/2.0	INIT OBS ULAC 12.0S 134.6E	KGWC
* 21	101600	11.6S 131.4E	PCN 6	T1.0/1.5 /W0.5/24HRS		PGTW
22	101857	11.0S 133.1E	PCN 6			KGWC
* 23	102209	11.2S 133.0E	PCN 6			KGWC
* 24	110000	12.6S 136.1E	PCN 6			PGTW
25	110146	12.9S 134.9E	PCN 5			KGWC
26	111200	13.5S 137.6E	PCN 6		ULCC FIX	PGTW
27	111245	12.9S 137.0E	PCN 6			KGWC
28	111600	13.6S 138.2E	PCN 6	T2.0/2.0-/D1.0/24HRS	ULCC FIX	PGTW
29	111845	13.8S 139.7E	PCN 6			KGWC
30	112148	14.0S 139.7E	PCN 6		ULAC 14.0S 140.3E	KGWC
31	120000	14.2S 139.6E	PCN 6			PGTW
32	120126	13.7S 138.7E	PCN 5	T3.0/3.0	INIT OBS ULAC 13.3S 139.1E	KGWC
33	120300	14.0S 139.1E	PCN 6	T2.0/2.0	INIT OBS	PGTW
34	120846	13.9S 139.2E	PCN 6			KGWC
35	120900	13.9S 139.6E	PCN 6		ULCC FIX	PGTW
36	121200	14.1S 140.0E	PCN 6		ULCC FIX	PGTW
37	121225	13.8S 138.2E	PCN 6	T2.5/2.5	INIT OBS ULAC 12.9S 139.3E	KGWC
38	121600	13.9S 138.2E	PCN 6	T1.5/2.0+/W0.5/24HRS	ULCC FIX	PGTW
39	121800	14.1S 138.1E	PCN 6			PGTW
* 40	121832	12.6S 138.0E	PCN 6		ULAC 12.6S 139.1E	KGWC
41	122100	14.1S 137.3E	PCN 6		ULCC FIX	PGTW
* 42	122126	14.8S 135.4E	PCN 6		EXP LLCC ULAC 12.0S 130.4E	KGWC
43	130000	14.9S 138.8E	PCN 6			PGTW
44	130106	15.3S 137.5E	PCN 5	T2.5/3.0 /W0.5/24HRS	ULAC 15.8S 140.8E	KGWC
* 45	130300	14.3S 138.5E	PCN 6	T1.5/2.0 /W0.5/24HRS		PGTW
46	130600	16.3S 138.9E	PCN 6			PGTW
* 47	130717	17.4S 136.2E	PCN 6		ULAC 18.4S 136.5E	KGWC
* 48	130825	15.3S 135.3E	PCN 6			KGWC
49	130900	16.1S 138.9E	PCN 6			PGTW
* 50	131308	16.8S 136.8E	PCN 6			KGWC
51	140045	18.0S 137.3E	PCN 5			KGWC

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

TROPICAL CYCLONE 05S
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
122212Z	17.5	122.9	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.
122300Z	17.6	121.7	30	17.6	121.8	40.	6.	10.	18.5	120.2	55.	64.	5.	19.7	118.0	65.	132.	-5.	0.0	0.0	0.	-0.	0.
122312Z	17.7	120.7	40	18.2	120.6	50.	31.	10.	19.4	118.4	60.	108.	0.	20.8	115.7	70.	207.	-5.	0.0	0.0	0.	-0.	0.
122400Z	17.6	119.6	50	17.9	119.8	55.	21.	5.	18.3	117.8	65.	48.	-5.	19.5	115.6	75.	130.	0.	0.0	0.0	0.	-0.	0.
122412Z	17.6	118.5	60	17.7	118.3	75.	13.	15.	18.1	115.7	100.	104.	25.	18.7	113.2	110.	263.	45.	0.0	0.0	0.	-0.	0.
122500Z	17.5	117.8	70	17.6	117.5	80.	18.	10.	18.1	115.2	100.	132.	25.	19.4	112.7	100.	333.	50.	0.0	0.0	0.	-0.	0.
122512Z	17.8	117.5	75	17.8	116.6	80.	51.	5.	18.8	114.7	75.	178.	10.	19.9	112.9	65.	381.	35.	0.0	0.0	0.	-0.	0.
122600Z	18.3	117.5	75	18.5	117.3	70.	17.	-5.	19.8	117.8	65.	53.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122612Z	19.3	117.8	65	19.2	117.8	65.	6.	0.	20.4	119.0	50.	66.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122700Z	20.4	118.5	50	20.1	118.7	60.	21.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122712Z	21.4	119.5	30	21.6	118.9	30.	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 WRNG	24-HR	48-HR	72-HR	TYPHOONS WHILE OVER 35 KTS WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	22.	94.	241.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	19.	66.	180.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	7.	13.	23.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	6.	12.	20.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	10	8	6	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 569. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 5. KNOTS

TROPICAL CYCLONE 5S
FIX POSITIONS FOR CYCLONE NO. 5

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	220600	17.2S 123.0E	PCN 6			PGTW
2	220900	17.5S 122.8E	PCN 6			PGTW
3	221600	17.7S 122.6E	PCN 6			PGTW
4	221800	17.4S 122.6E	PCN 6			PGTW
5	230000	17.3S 121.6E	PCN 6	T2.0/2.0	INIT OBS ULCC 17.4S 122.4E	PGTW
6	230248	17.3S 121.8E	PCN 5	T1.5/1.5	INIT OBS ULAC 17.3S 121.3E	KGWC
7	230300	17.5S 121.2E	PCN 6			PGTW
8	230600	17.6S 121.0E	PCN 6		ULCC 17.7S 120.9E	PGTW
9	230835	17.7S 120.8E	PCN 5		ULAC 17.8S 120.6E	KGWC
10	230900	18.0S 120.8E	PCN 6			PGTW
11	231200	17.9S 120.7E	PCN 6			PGTW
12	231347	17.7S 120.4E	PCN 5			KGWC
13	231937	17.4S 120.4E	PCN 6			KGWC
14	232237	18.0S 120.6E	PCN 5			KGWC
15	240000	17.7S 119.8E	PCN 6			PGTW
16	240227	17.6S 119.3E	PCN 5	T2.5/2.5 /D1.0/24HRS		KGWC
17	240300	17.6S 119.2E	PCN 6	T3.5/3.5 /D1.5/27HRS		PGTW
18	240600	17.5S 119.0E	PCN 2		EYE FIX	PGTW
19	240822	17.3S 118.7E	PCN 5			KGWC
20	240900	17.7S 118.6E	PCN 4			PGTW
21	241200	17.8S 118.3E	PCN 4			PGTW
22	241326	17.6S 118.3E	PCN 6	T3.0/3.0	INIT OBS	KGWC
23	241600	17.8S 118.3E	PCN 4	T4.0/4.0	INIT OBS	PGTW
24	241800	18.0S 118.1E	PCN 6			PGTW
25	241925	17.6S 118.1E	PCN 5			KGWC
26	242100	17.6S 117.9E	PCN 6			PGTW
27	242215	17.7S 117.5E	PCN 1		EYE FIX	KGWC
28	250000	17.4S 117.6E	PCN 2		EYE FIX	PGTW
29	250207	17.4S 117.6E	PCN 1	T4.0/4.0 /D1.5/24HRS		KGWC
30	250300	17.4S 117.4E	PCN 2	T4.5/4.5 /D1.0/24HRS	EYE DIA 24NM	PGTW
31	250600	17.6S 117.1E	PCN 2		EYE FIX	PGTW
32	250810	17.5S 117.1E	PCN 5			KGWC
33	250900	17.8S 116.9E	PCN 4			PGTW
34	251200	18.1S 116.9E	PCN 4			PGTW
35	251448	17.9S 117.6E	PCN 6	T2.5/3.0 /W1.0/25HRS		KGWC
36	251600	18.2S 116.9E	PCN 6	T4.5/4.5-/D0.5/24HRS		PGTW
37	251800	18.2S 117.1E	PCN 6			PGTW
38	251912	18.1S 117.2E	PCN 6			KGWC
39	252100	18.5S 116.7E	PCN 6			PGTW
40	252335	18.3S 117.9E	PCN 2		EYE DIA 18NM	KGWC
41	260000	18.3S 117.4E	PCN 2		EYE DIA 10NM ULCC FIX	PGTW
42	260300	18.7S 117.6E	PCN 2	T4.5/4.5 /S0.0/24HRS	EYE DIA 06NM	PGTW
43	260328	18.7S 117.9E	PCN 5	T3.5/4.0 /W0.5/25HRS		KGWC
44	260600	18.9S 117.5E	PCN 4			PGTW
45	260757	19.1S 117.5E	PCN 5			KGWC
46	260900	19.2S 117.4E	PCN 4		ULCC FIX	PGTW
47	261034	19.3S 117.5E	PCN 5			KGWC
48	261055	17.8S 117.2E	PCN 5			KGWC
49	261200	19.3S 118.0E	PCN 4		ULCC FIX	PGTW
50	261427	19.6S 118.1E	PCN 6	T2.0/2.5 /W0.5/24HRS		KGWC
51	261600	19.7S 118.4E	PCN 6	T3.5/4.5 /W1.0/24HRS	ULCC FIX	PGTW
52	261800	19.9S 118.3E	PCN 6		ULCC FIX	PGTW
53	261900	20.0S 118.1E	PCN 6			KGWC
54	262100	19.9S 118.7E	PCN 6		ULCC FIX	PGTW
55	262314	20.3S 119.5E	PCN 6			KGWC
56	270000	20.3S 118.4E	PCN 6			PGTW
57	270300	20.5S 118.2E	PCN 4		EXP LLCC	PGTW
58	270308	20.7S 118.7E	PCN 5			KGWC
59	270600	20.9S 118.5E	PCN 4		EXP LLCC	PGTW
60	270744	21.8S 119.3E	PCN 5			KGWC
61	270900	21.2S 118.6E	PCN 4		EXP LLCC	PGTW
62	271013	21.6S 118.8E	PCN 5			KGWC
63	271200	21.4S 118.9E	PCN 4		EXP LLCC	PGTW
64	272100	21.0S 120.2E	PCN 4		EXP LLCC	PGTW

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	232200	17.5S 119.9E	LAND						17.9S 122.6E	94203
2	240400	17.6S 119.1E	LAND				1/4// /2707		20.4S 118.6E	94312
3	241000	17.6S 118.5E	LAND				31111 /2705		20.4S 118.6E	94312
4	241600	17.6S 118.1E	LAND				2/8// /2704		20.4S 118.6E	94312
5	242200	17.4S 117.6E	LAND				2//// /2904		20.4S 118.6E	94312
6	260100	18.6S 117.3E	LAND				2//// /1504		20.4S 118.6E	94312
7	260800	19.3S 117.5E	LAND				1/3// /1710		20.4S 118.6E	94312
8	261600	19.5S 117.7E	LAND				1/9// //405		20.4S 118.6E	94312

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	240600	17.6S 118.8E	060	010	94207

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

TROPICAL CYCLONE 06P
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	
122612Z	8.4 178.6	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.	
122700Z	8.0 180.0	40	8.4 179.9	40.	25.	0.	8.6	181.9	55.	199.	15.	9.0	183.9	65.	235.	40.	0.0	0.0	0.	-0.	0.	
122712Z	9.7 180.5	45	9.1 180.8	40.	40.	-5.	10.0	182.0	30.	186.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
122800Z	11.8 181.0	40	10.7 181.1	35.	65.	-5.	12.6	182.3	25.	19.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
122812Z	13.1 181.9	35	11.7 181.5	35.	87.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
122900Z	12.7 182.6	25	12.7 182.5	30.	6.	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	45.	135.	235.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	26.	90.	206.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	7.	40.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	3.	40.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	5	3	1	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 464. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 8. KNOTS

TROPICAL CYCLONE 06P
FIX POSITIONS FOR CYCLONE NO. 6

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	260000	8.8S 177.9E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	260300	9.0S 177.9E	PCN 6			PGTW
3	260600	9.1S 178.1E	PCN 6		ULCC FIX	PGTW
4	260900	9.0S 177.9E	PCN 6		ULCC FIX	PGTW
5	261200	8.7S 178.6E	PCN 6		ULCC FIX	PGTW
6	261600	8.7S 178.9E	PCN 6		ULCC FIX	PGTW
7	261800	8.1S 179.1E	PCN 6	T2.5/2.5	INIT OBS ULCC FIX	PGTW
8	262100	8.1S 179.4E	PCN 6			PGTW
9	262200	8.1S 179.8W	PCN 6	T1.5/1.5	INIT OBS ULAC 07.8S 179.4E	KGWC
10	270000	8.3S 179.9E	PCN 6	T3.0/3.0 /D2.0/24HRS		PGTW
11	270300	8.6S 179.8W	PCN 4			PGTW
12	270600	8.8S 179.7W	PCN 6		ULCC FIX 07.7S 179.9E	PGTW
13	270600	8.2S 179.8W	PCN 6		ULAC 07.8S 179.8E	KGWC
* 14	270900	7.5S 179.7W	PCN 6		ULCC FIX	PGTW
* 15	271000	7.5S 179.6W	PCN 6		ULAC 07.1S 180.0E	KGWC
* 16	271200	7.5S 179.7W	PCN 6			PGTW
* 17	272100	9.9S 179.7W	PCN 6		ULCC FIX	PGTW
* 18	272100	9.5S 179.8W	PCN 5	T1.5/1.5 /S0.0/24HRS		KGWC
19	280000	12.2S 179.0W	PCN 4	T3.0/3.0 /S0.0/24HRS	EXP LLCC	PGTW
20	280300	12.8S 178.6W	PCN 4		EXP LLCC	PGTW
21	280600	13.2S 178.7W	PCN 4		ULCC 11.7S 178.7W	PGTW
* 22	280900	11.8S 178.8W	PCN 6		ULCC FIX	PGTW
* 23	281000	11.7S 178.1W	PCN 6			KGWC
* 24	281200	11.6S 178.3W	PCN 6		ULCC FIX	PGTW
25	282300	12.7S 177.8W	PCN 6	T0.0/1.0 /W1.5/26HRS		KGWC

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	261200	8.4S 178.9E	045	010	WMO 91643
2	261800	8.8S 178.8E	035	030	WMO 91643

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

TROPICAL CYCLONE 07P
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
122518Z	12.7	145.	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.
122606Z	13.8	147.8	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.
122618Z	15.2	150.5	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.
122706Z	16.6	152.8	50	16.1	152.9	45.	31.	-5.	18.6	157.7	65.	104.	0.	21.4	161.6	30.	255.	40.	0.0	0.0	0.	-0.	0.
122718Z	18.4	155.3	65	18.2	154.2	50.	64.	-15.	21.4	158.0	70.	167.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122806Z	20.3	158.1	65	19.5	156.4	60.	107.	-5.	22.2	160.7	75.	255.	35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122818Z	22.1	160.9	55	22.0	161.0	55.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0	-0.	0.	0.0	0.0	0.	-0.	0.
122906Z	25.0	164.2	40	25.0	164.1	40.	5.	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	43.	176.	259.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	22.	48.	57.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	5.	17.	40.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-5.	17.	40.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	5	3	1	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1322. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 16. KNOTS

TROPICAL CYCLONE 07P
FIX POSITIONS FOR CYCLONE NO. 7

SATELLITE FIXES

	FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
	1	251200	12.1S 143.8E	PCN 6			PGTW
	2	251600	12.3S 144.3E	PCN 6			PGTW
	3	251800	12.6S 144.6E	PCN 6	T1.5/1.5	INIT OBS	PGTW
	4	252100	13.0S 145.4E	PCN 6			PGTW
	5	260000	13.0S 146.6E	PCN 6		ULCC FIX	PGTW
*	6	260005	12.0S 148.0E	PCN 5	T1.0/1.0	INIT OBS ULAC 13.3S 149.4E	KGWC
	7	260300	13.3S 146.7E	PCN 6	T1.5/1.5	INIT OBS	PGTW
	8	260600	13.9S 147.2E	PCN 6		ULCC 15.1S 148.7E	PGTW
*	9	260853	13.0S 147.8E	PCN 6		ULAC 14.1S 148.4E	KGWC
	10	260900	14.8S 148.7E	PCN 6		ULCC FIX	PGTW
	11	261200	15.0S 149.0E	PCN 6		ULCC FIX	PGTW
*	12	261246	13.0S 148.5E	PCN 6			KGWC
	13	261600	15.1S 149.9E	PCN 6		ULCC FIX	PGTW
	14	261718	14.3S 149.9E	PCN 6		ULAC 17.0S 151.6E	KGWC
	15	261800	16.1S 150.4E	PCN 6	T2.5/2.5 /D1.0/24HRS	ULCC FIX	PGTW
	16	261952	14.9S 150.5E	PCN 5		ULAC 17.2S 151.2E	KGWC
*	17	262100	15.0S 149.0E	PCN 6		ULCC FIX	PGTW
	18	262345	15.5S 151.6E	PCN 5	T2.5/2.5 /D1.5/24HRS	ULAC 16.9S 151.2E	KGWC
	19	270000	16.0S 150.6E	PCN 6		ULCC FIX	PGTW
	20	270300	15.9S 152.4E	PCN 4	T3.0/3.0 /D1.5/24HRS		PGTW
	21	270600	16.1S 152.8E	PCN 6			PGTW
	22	270832	17.4S 152.9E	PCN 6		ULAC 17.4S 152.3E	KGWC
	23	270900	16.6S 153.2E	PCN 6		ULCC FIX	PGTW
	24	271200	17.5S 153.0E	PCN 6		ULCC FIX	PGTW
	25	271226	17.1S 153.3E	PCN 6	T3.0/3.0	INIT OBS ULAC 17.3S 153.0S	KGWC
	26	271705	17.9S 154.3E	PCN 6		ULAC 18.5S 153.7E	KGWC
	27	271800	18.1S 154.3E	PCN 6	T3.5/3.5 /D1.0/24HRS	ULCC FIX	PGTW
	28	272100	18.5S 155.1E	PCN 6			PGTW
	29	272325	18.8S 155.8E	PCN 6	T3.5/3.5 /D1.0/24HRS		KGWC
	30	280000	18.9S 156.2E	PCN 6		ULCC FIX	PGTW
	31	280300	18.9S 156.4E	PCN 6	T4.0/4.0 /D1.0/24HRS		PGTW
	32	280600	19.5S 157.7E	PCN 6		ULCC FIX	PGTW
	33	280810	21.3S 158.4E	PCN 6			PGTW
	34	280900	20.7S 159.3E	PCN 6		ULCC FIX	PGTW
	35	281024	21.9S 159.1E	PCN 6	T2.5/3.0 /W0.5/22HRS		KGWC
	36	281200	21.3S 160.3E	PCN 6		ULCC FIX	PGTW
*	37	281600	22.5S 162.4E	PCN 6	T3.5/3.5-/S0.0/22HRS	ULCC FIX	PGTW
*	38	281653	23.4S 162.3E	PCN 6			KGWC
*	39	281800	23.2S 163.1E	PCN 6		ULCC FIX	PGTW
	40	282305	22.6S 161.8E	PCN 4	T2.0/3.0 /W1.5/24HRS		KGWC
	41	290749	25.9S 164.8E	PCN 6			PGTW
	42	291004	27.3S 161.7E	PCN 6			KGWC
	43	300026	31.2S 161.9E	PCN 3		EXP LLCC	KGWC

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

TROPICAL CYCLONE 08P
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
122612Z	11.4 165.0	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.
122700Z	12.1 166.4	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.
122712Z	13.7 167.3	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.
122800Z	15.4 168.3	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.
122812Z	17.2 169.6	40	17.1	169.2	40.	24.	0.	21.5	171.5	60.	170.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122900Z	18.9 171.7	45	18.9	171.5	45.	11.	0.	23.8	174.4	40.	220.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122912Z	20.2 174.2	40	20.4	173.9	45.	21.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
123000Z	21.2 177.2	25	21.4	176.6	30.	36.	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	23.	195.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	20.	167.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	18.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	3.	18.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	4	2	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 948. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 11. KNOTS

TROPICAL CYCLONE 08P
FIX POSITIONS FOR CYCLONE NO. 8

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	260000	11.0S 164.2E	PCN 6	T0.0/0.0	INIT OBS	PGTW
2	260300	11.2S 164.0E	PCN 6			PGTW
3	260600	11.2S 165.4E	PCN 6		ULCC FIX	PGTW
4	260900	11.4S 165.5E	PCN 6		ULCC FIX	PGTW
5	261200	11.3S 164.8E	PCN 6		ULCC FIX	PGTW
* 6	261600	10.9S 163.7E	PCN 6		ULCC FIX	PGTW
7	261800	11.5S 165.1E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
8	262100	12.1S 166.0E	PCN 6		ULCC FIX	PGTW
9	262345	11.9S 166.6E	PCN 5	T1.5/1.5	INIT OBS ULAC 12.6S 166.4E	KGWC
10	270000	11.6S 166.4E	PCN 6	T2.0/2.0 /D2.0/24HRS	ULCC FIX	PGTW
11	270300	12.4S 166.7E	PCN 6		ULCC FIX	PGTW
12	270600	12.7S 167.0E	PCN 6			PGTW
13	270900	13.0S 167.2E	PCN 6		ULCC FIX	PGTW
14	271044	13.6S 166.4E	PCN 6		ULAC 13.4S 166.6E	KGWC
15	271200	13.3S 167.3E	PCN 6			PGTW
16	271800	14.9S 167.8E	PCN 6			PGTW
17	271930	14.9S 168.6E	PCN 6		ULAC 14.8S 167.9E	KGWC
18	272100	14.9S 167.8E	PCN 6			PGTW
19	272325	15.8S 168.9E	PCN 6	T1.5/1.5 /S0.0/24HRS	ULAC 15.0S 168.3E	KGWC
20	280000	15.7S 168.3E	PCN 6	T2.5/2.5-/D0.5/24HRS		PGTW
21	280300	15.5S 168.6E	PCN 6		ULCC FIX	PGTW
22	280408	15.8S 168.8E	PCN 6			KGWC
23	280600	15.9S 168.9E	PCN 6		ULCC FIX	PGTW
24	280629	15.9S 168.4E	PCN 6			KGWC
25	280900	16.9S 169.0E	PCN 6		ULCC FIX	PGTW
* 26	281024	17.3S 167.9E	PCN 6		ULAC 17.4S 168.4E	KGWC
27	281200	17.2S 169.4E	PCN 6		ULCC FIX	PGTW
28	281600	17.6S 169.6E	PCN 6	T3.0/3.0	INIT OBS ULCC FIX	PGTW
29	281653	18.5S 169.7E	PCN 6		ULAC 18.9S 170.3E	KGWC
30	281800	17.8S 170.1E	PCN 6		ULCC FIX	PGTW
31	281909	18.0S 171.7E	PCN 5		ULAC 18.6S 171.6E	KGWC
32	282100	18.4S 171.2E	PCN 6		ULCC FIX	PGTW
33	282305	18.4S 172.0E	PCN 6	T3.0/3.0 /D1.5/24HRS	ULAC 18.8S 171.5E	KGWC
34	290000	19.2S 172.3E	PCN 6	T3.0/3.0-/D0.5/24HRS		PGTW
35	290300	19.7S 172.7E	PCN 6			PGTW
36	290600	19.6S 173.3E	PCN 6			PGTW
37	290608	19.8S 173.3E	PCN 6		ULAC 19.4S 167.7E	KGWC
38	290900	19.9S 173.3E	PCN 6			PGTW
39	291004	20.2S 173.4E	PCN 6	T3.0/3.0	INIT OBS	KGWC
40	291200	20.2S 173.8E	PCN 6		ULCC FIX	PGTW
41	291600	20.5S 174.6E	PCN 6		ULCC 21.1S 174.9E	PGTW
42	291640	20.1S 174.8E	PCN 6			KGWC
43	291800	20.8S 175.0E	PCN 6	T1.5/2.5 /W1.5/26HRS		PGTW
44	291848	20.6S 175.6E	PCN 6		ULAC 21.5S 175.4E	KGWC
45	292244	21.0S 177.0E	PCN 4	T2.5/3.0 /W0.5/24HRS	EXP LLCC	KGWC
46	300944	19.7S 179.2W	PCN 6			KGWC
47	302224	18.4S 177.5W	PCN 4		EXP LLCC	KGWC

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

TROPICAL CYCLONE 09P
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
011000Z	11.4	184.1	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.
011012Z	12.0	184.7	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.
011100Z	13.2	185.0	35	12.4	184.6	35.	53.	0.	14.4	183.8	45.	158.	0.	16.8	184.0	55	183.	10.	0.0	0.0	0.	-0.	0.
011112Z	14.7	185.3	40	14.4	184.8	40.	34.	0.	16.7	184.5	45.	108.	-5.	19.1	186.8	55	40.	15.	0.0	0.0	0.	-0.	0.
011200Z	16.2	185.8	45	16.1	186.0	40.	13.	-5.	17.9	186.4	40.	31.	-5.	18.9	188.0	35.	95.	5.	0.0	0.0	0.	-0.	0.
011212Z	17.2	186.3	50	17.5	186.5	50.	21.	0.	18.5	187.0	45.	41.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
011300Z	18.1	186.9	45	16.4	187.2	40.	103.	-5.	17.7	189.0	30.	156.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
011312Z	19.0	187.5	40	19.8	186.0	35.	98.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
011400Z	20.3	188.8	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.

	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	54.	99.	106.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	37.	62.	57.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	3.	10.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-3.	-1.	10.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	6	5	3	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 612. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

TROPICAL CYCLONE 09P
FIX POSITIONS FOR CYCLONE NO. 9

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	092015	11.5S 177.0W				PHNL
2	092225	11.2S 176.2W	PCN 6	T1.5/1.5	INIT OBS ULAC 11.5S 175.7W	KGWC
3	100215	11.9S 175.5W				PHNL
4	100924	11.1S 174.9W	PCN 6		ULAC 11.6S 174.2W	KGWC
5	102204	12.2S 175.2W	PCN 6	T2.5/2.5 /D1.0/24HRS	ULAC 12.9S 175.1W	KGWC
6	110903	14.1S 175.2W	PCN 6			KGWC
7	111743	15.5S 174.6W	PCN 6			KGWC
8	112144	15.8S 174.0W	PCN 6	T3.5/3.5 /D1.0/24HRS		KGWC
9	120215	16.5S 174.2W				PHNL
10	120614	16.8S 173.9W	PCN 6			KGWC
11	120827	17.0S 174.0W				PHNL
* 12	122020	16.0S 175.0W				PHNL
13	122124	17.6S 173.4W	PCN 4	T2.5/2.5 /W1.0/24HRS	EXP LLCC ULAC 16.0S 172.8W	KGWC
14	130215	18.0S 172.7W				PHNL
15	130553	18.3S 172.5W	PCN 6		EXP LLCC	KGWC
* 16	131004	19.5S 174.1W	PCN 6		EXP LLCC	KGWC
17	131833	19.5S 172.0W	PCN 6	T3.0/3.0 /D0.5/21HRS		KGWC
18	132045	19.5S 171.5W				PHNL
19	132104	19.9S 172.1W	PCN 4	T1.5/2.5 /W1.5/24HRS		KGWC
20	140944	22.3S 168.2W	PCN 4			KGWC

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

TROPICAL CYCLONE 10S
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
011006Z	10.9	65.7	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.
011018Z	11.4	64.4	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.
011106Z	12.0	62.9	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.
011118Z	12.7	61.2	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.
011206Z	13.8	59.7	45	13.5	59.5	40.	21.	-5.	16.3	55.3	70.	92.	10.	20.1	52.8	80.	161.	25.	0.0	0.0	0.	-0.	0.
011218Z	15.0	58.3	55	14.9	57.8	50.	30.	-5.	17.7	54.2	75.	88.	10.	21.9	53.7	85.	164.	35.	0.0	0.0	0.	-0.	0.
011306Z	16.2	56.9	60	16.5	57.4	60.	34.	0.	19.6	55.0	80.	78.	25.	22.4	56.2	80.	210.	30.	0.0	0.0	0.	-0.	0.
011318Z	17.4	55.7	65	17.8	55.7	65.	24.	0.	20.6	53.5	75.	93.	25.	22.3	52.3	45.	114.	-10.	0.0	0.0	0.	-0.	0.
011406Z	18.3	54.9	55	19.2	54.1	65.	71.	10.	22.2	51.7	55.	182.	5.	24.4	50.4	40.	244.	-15.	0.0	0.0	0.	-0.	0.
011418Z	19.2	54.2	50	19.0	54.2	50.	12.	0.	20.7	52.7	40.	39.	-15.	22.4	50.9	30.	200.	-25.	0.0	0.0	0.	-0.	0.
011506Z	19.8	53.7	50	20.0	53.5	45.	16.	-5.	21.5	52.3	35.	79.	-20.	23.4	50.7	25.	283.	-30.	0.0	0.0	0.	-0.	0.
011518Z	20.7	53.4	55	20.7	53.1	55.	17.	0.	22.6	52.0	35.	141.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
011606Z	21.7	53.7	55	21.2	52.6	55.	68.	0.	23.0	51.5	50.	235.	-5.	24.8	50.8	45.	325.	5.	0.0	0.0	0.	-0.	0.
011618Z	22.2	54.5	55	21.7	54.6	40.	31.	-15.	22.9	58.3	30.	134.	-25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
011706Z	22.4	55.7	55	22.7	57.1	45.	80.	-10.	24.3	61.5	30.	387.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
011718Z	21.8	56.2	55	22.1	56.3	55.	19.	0.	22.9	56.1	55.	131.	20.	25.1	55.1	50.	208.	10.	0.0	0.0	0.	-0.	0.
011806Z	21.3	55.3	40	22.0	55.0	50.	45.	10.	22.0	55.0	50.	66.	15.	24.1	57.1	35.	239.	-5.	0.0	0.0	0.	-0.	0.
011818Z	21.3	54.5	35	21.7	54.7	45.	26.	10.	22.7	54.5	40.	74.	0.	24.3	54.5	30.	93.	-5.	0.0	0.0	0.	-0.	0.
011906Z	21.6	53.9	35	21.4	53.4	45.	30.	10.	21.5	51.2	35.	135.	-5.	21.6	49.0	25.	335.	-10.	0.0	0.0	0.	-0.	0.
011918Z	22.0	53.4	40	22.1	51.7	40.	95.	0.	22.5	49.7	30.	205.	-5.	22.7	48.4	25.	388.	-10.	0.0	0.0	0.	-0.	0.
012006Z	23.1	52.9	40	22.1	53.2	40.	62.	0.	22.3	51.8	35.	224.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
012018Z	24.4	52.8	35	23.5	52.4	35.	58.	0.	24.7	52.0	35.	177.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
012106Z	25.9	52.9	35	24.7	54.0	35.	94.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
012118Z	27.4	53.3	35	27.4	53.0	30.	16.	-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	42.	142.	228.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	27.	85.	110.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	12.	17.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-0.	0.	-0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	20	18	13	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1692. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

TROPICAL CYCLONE 10S
FIX POSITIONS FOR CYCLONE NO. 10

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	100510	11.0S	66.0E	PCN 6	T1.0/1.0	INIT OBS	KGWC
2	110631	11.8S	63.3E	PCN 6	T2.0/2.0 /D1.0/25HRS		KGWC
* 3	111730	12.9S	60.1E	PCN 6		ULAC 13.1S 61.0E	KGWC
4	120201	14.8S	59.7E	PCN 6			KGWC
5	120611	14.1S	59.6E	PCN 6	T3.5/3.5 /D1.5/24HRS		KGWC
* 6	121115	15.0S	60.9E	PCN 5	T3.5/3.5	INIT OBS	FJDG
7	121441	15.1S	58.8E	PCN 6		ULAC 15.4S 058.4E	KGWC
8	121852	15.0S	58.4E	PCN 6	T3.5/3.5	ULAC 15.1S 058.3E	KGWC
9	122355	15.7S	57.8E	PCN 6			KGWC
10	130321	15.9S	57.8E	PCN 6			KGWC
11	130551	16.2S	56.9E	PCN 6	T3.5/3.5 /S0.0/24HRS	EYE FIX	KGWC
12	131240	16.8S	56.0E	PCN 2		EYE FIX	KGWC
13	131420	17.2S	56.0E	PCN 2			KGWC
14	131831	17.1S	55.5E	PCN 6	T4.0/4.0 /D0.5/24HRS		KGWC
15	140300	18.2S	55.5E	PCN 6			KGWC
16	140712	18.6S	54.9E	PCN 6	T2.5/3.5 /W1.0/24HRS	EXP LLCC ULAC 18.9S 055.2E	KGWC
17	141058	19.0S	55.0E	PCN 5	T3.5/3.5 /D0.5/24HRS		FJDG
18	141358	19.4S	54.0E	PCN 6		ULAC 19.5S 053.3E	KGWC
19	141811	19.3S	53.9E	PCN 6		ULAC 19.0S 053.9E	KGWC
20	150238	19.8S	54.1E	PCN 6			KGWC
21	150652	20.0S	53.7E	PCN 5	T3.0/3.0 /D0.5/24HRS		KGWC
22	151047	20.8S	53.2E	PCN 5	T3.5/3.5 /D0.5/24HRS		FJDG
23	151215	19.9S	53.4E	PCN 6		ULAC 20.0S 053.0E	KGWC
24	151337	20.1S	53.2E	PCN 6		ULAC 20.2S 053.0E	KGWC
25	151751	20.1S	53.8E	PCN 6	T3.5/3.5 /D0.5/24HRS	ULAC 21.0S 052.7E	KGWC
* 26	160217	20.7S	54.5E	PCN 6		ULAC 20.9S 53.9E	KGWC
27	160632	20.9S	53.7E	PCN 5	T3.0/3.0 /S0.0/24HRS	ULAC 21.6S 053.7E	KGWC
28	161036	22.3S	53.5E	PCN 5	T3.0/3.0 /D0.5/24HRS		FJDG
29	161202	21.4S	54.7E	PCN 6			KGWC
30	161457	22.0S	54.7E	PCN 6			KGWC
31	161731	21.8S	55.4E	PCN 6	T3.5/3.5 /S0.0/24HRS		KGWC
32	170337	22.2S	56.6E	PCN 5			KGWC
33	170611	22.3S	56.2E	PCN 5	T4.5/4.5 /D1.5/24HRS		KGWC
* 34	171026	23.0S	57.1E	PCN 5	T3.0/3.0 /S0.0/24HRS		FJDG
35	171150	21.9S	56.3E	PCN 6			KGWC
36	171436	21.7S	56.3E	PCN 6			KGWC
37	171825	22.1S	56.5E	PCN 6	T4.5/4.5 /D1.0/25HRS		KGWC
38	180316	20.7S	54.9E	PCN 5		EXP LLCC	KGWC
39	180733	20.9S	55.4E	PCN 5	T2.5/3.5 /W2.0/25HRS	EXP LLCC ULAC 23.2S 054.6E	KGWC
40	181015	21.0S	56.0E	PCN 5	T2.5/3.5 /W2.0/25HRS		FJDG
41	181415	21.5S	54.5E	PCN 4		EXP LLCC ULAC 22.4S 054.5E	KGWC
* 42	181832	22.2S	54.3E	PCN 4		EXP LLCC	KGWC
43	190022	21.8S	53.7E	PCN 4		EXP LLCC	KGWC
44	190255	21.5S	53.5E	PCN 4		EXP LLCC ULAC 23.2S 054.3E	KGWC
45	190712	22.2S	53.5E	PCN 4	T2.0/2.5 /W0.5/24HRS	ULAC 22.2S 054.8E	KGWC
* 46	191306	22.4S	51.8E	PCN 4			KGWC
47	191811	22.0S	53.2E	PCN 4			KGWC
48	200233	22.2S	53.4E	PCN 4		ULAC 23.8S 054.7E	KGWC
49	200652	23.5S	53.1E	PCN 3	T2.5/2.5 /D0.5/24HRS	ULAC 25.0S 052.8E	KGWC
50	201254	24.0S	52.7E	PCN 3		ULAC 24.7S 052.2E	KGWC
51	201751	24.2S	53.5E	PCN 4	T2.0/2.5 /W0.5/12HRS	ULAC 24.5S 051.8E	KGWC
* 52	210353	24.8S	54.5E	PCN 6		ULAC 25.5S 52.8E	KGWC
53	210632	25.9S	53.4E	PCN 3	T0.5/1.5 /W2.0/24HRS		KGWC
54	211452	26.8S	52.4E	PCN 3			KGWC
55	211731	27.1S	54.1E	PCN 6	T2.5/2.5 /D0.5/24HRS	ULAC 26.5S 053.7E	KGWC
56	220332	29.0S	56.0E	PCN 4			KGWC

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION		INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	180600	21.4S	55.2E	050	025	61980 61984

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

TROPICAL CYCLONE 11P 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
011200Z	15.9 161.1	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.
011212Z	15.6 161.6	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.
011300Z	15.6 162.2	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.
011312Z	15.5 163.0	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.
011400Z	15.5 163.8	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.
011412Z	15.4 165.0	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.
011500Z	15.4 166.1	40	16.3 166.2	45.	54.	5.	18.0 169.1	65.	132.	5.	21.3 172.8	45.	279.	-45.	0.0 0.0	0.	-0.	0.
011512Z	15.5 167.8	50	15.5 167.6	55.	12.	5.	16.6 170.2	75.	94.	0.	18.9 173.6	60.	255.	-40.	0.0 0.0	0.	-0.	0.
011600Z	15.9 169.8	60	15.8 169.2	55.	35.	-5.	17.5 172.2	75.	131.	-15.	19.8 175.5	65.	451.	-25.	0.0 0.0	0.	-0.	0.
011612Z	16.3 171.8	75	16.3 171.3	65.	29.	-10.	18.6 174.7	85.	190.	-15.	20.9 177.7	70.	656.	-5.	0.0 0.0	0.	-0.	0.
011700Z	16.9 174.4	90	16.9 174.6	85.	11.	-5.	19.3 180.3	90.	186.	0.	22.3 185.8	70.	556.	10.	0.0 0.0	0.	-0.	0.
011712Z	18.1 178.0	100	18.0 177.9	90.	8.	-10.	20.7 184.6	70.	278.	-5.	23.7 191.2	55	661.	10.	0.0 0.0	0.	-0.	0.
011800Z	20.0 183.5	90	20.0 182.5	75.	56.	-15.	24.0 190.5	50.	285.	-10.	27.5 198.7	35.	710.	5.	0.0 0.0	0.	-0.	0.
011812Z	21.9 189.4	75	21.8 189.0	90.	23.	15.	23.5 194.0	75.	526.	30.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
011900Z	24.1 195.7	60	23.7 195.0	60.	45.	0.	29.3 206.4	30.	333.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
011912Z	27.4 202.7	45	27.2 202.5	40.	16.	-5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
012000Z	33.6 210.5	30	33.7 211.5	30.	50.	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.	239.	510.	0.	29.	228.	476.	0.
AVG RIGHT ANGLE ERROR	22.	58.	145.	0.	22.	59.	148.	0.
AVG INTENSITY MAGNITUDE ERROR	7.	9.	20.	0.	8.	10.	23.	0.
AVG INTENSITY BIAS	-2.	-1.	-13.	0.	-3.	-1.	-16.	0.
NUMBER OF FORECASTS	11	9	7	0	10	8	6	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 3030. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 16. KNOTS

TROPICAL CYCLONE 11P
FIX POSITIONS FOR CYCLONE NO. 11

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	110617	14.3S 152.8E	PCN 5	T1.0/1.0	INIT OBS	KGWC
2	112326	15.4S 161.3E	PCN 6	T2.0/2.0 /D1.0/17HRS	ULAC 14.6S 161.3E	KGWC
3	121025	15.2S 161.3E	PCN 6		ULAC 15.3S 164.1E	KGWC
* 4	121200	15.8S 163.4E	PCN 6			PGTW
5	121600	15.6S 162.5E	PCN 6		ULCC FIX	PGTW
6	122100	15.3S 162.4E	PCN 6			PGTW
7	122305	15.5S 162.2E	PCN 6	T2.0/2.0 /S0.0/24HRS		KGWC
8	130000	15.6S 162.6E	PCN 6	T1.0/1.0	INIT OBS	PGTW
9	130600	15.5S 162.0E	PCN 6			PGTW
* 10	131146	17.2S 162.8E	PCN 6		ULAC 16.3S 163.1E	KGWC
* 11	131600	16.4S 162.5E	PCN 6	T1.5/1.5		PGTW
12	132245	15.9S 163.3E	PCN 6	T2.0/2.0 /S0.0/24HRS		KGWC
* 13	140000	15.7S 161.8E	PCN 6	T2.0/2.0 /D1.0/24HRS		PGTW
* 14	140300	15.8S 162.1E	PCN 6			PGTW
* 15	140713	16.9S 162.5E	PCN 6			KGWC
16	140900	14.9S 163.8E	PCN 6			PGTW
17	141125	15.8S 163.9E	PCN 6		ULAC 15.0S 164.6E	KGWC
18	141200	15.5S 165.0E	PCN 6			PGTW
19	141600	15.9S 165.4E	PCN 6	T2.5/2.5 /D1.0/24HRS		PGTW
20	141642	15.8S 164.7E	PCN 6		ULAC 15.6S 165.7E	KGWC
21	141800	16.1S 165.8E	PCN 6			PGTW
* 22	141953	14.2S 167.8E	PCN 6		ULAC 13.5S 167.8E	KGWC
23	142100	16.1S 165.6E	PCN 6			PGTW
24	150000	16.2S 166.2E	PCN 6	T3.0/3.0 /D1.0/24HRS		PGTW
25	150006	14.7S 166.4E	PCN 6	T3.5/3.5 /D1.5/25HRS		KGWC
* 26	150300	16.5S 166.9E	PCN 6			PGTW
27	150600	15.2S 166.7E	PCN 6		ULCC 15.2S 167.5E	PGTW
* 28	150652	14.2S 167.6E	PCN 6			KGWC
29	150900	14.9S 168.0E	PCN 6		ULCC FIX	PGTW
30	151105	14.8S 168.1E	PCN 6	T3.5/3.5	INIT OBS	KGWC
31	151200	14.7S 168.5E	PCN 6			PGTW
32	151630	15.8S 167.3E	PCN 6		ULAC 15.7S 167.3E	KGWC
33	151800	15.4S 168.6E	PCN 6	T3.5/3.5 /D1.0/26HRS		PGTW
34	151932	16.1S 169.0E	PCN 6			KGWC
35	152346	15.9S 169.7E	PCN 5	T3.5/3.5 /S0.0/24HRS		KGWC
36	160000	15.7S 169.1E	PCN 6	T4.0/4.0-/D1.0/24HRS		PGTW
37	160300	16.0S 169.8E	PCN 6		ULCC FIX	PGTW
* 38	160600	16.3S 170.0E	PCN 6		ULCC FIX	PGTW
39	160630	16.4S 170.6E	PCN 6		ULAC 17.0S 169.4E	KGWC
40	160900	16.0S 170.3E	PCN 6		ULCC FIX	PGTW
41	161045	16.4S 171.5E	PCN 6	T4.5/4.5 /D1.0/24HRS		KGWC
42	161200	16.2S 170.9E	PCN 6		ULCC FIX	PGTW
43	161600	16.1S 171.0E	PCN 6	T3.5/3.5 /S0.0/22HRS		PGTW
44	161617	16.4S 172.8E	PCN 6		EYE FIX	KGWC
45	161910	16.5S 172.7E	PCN 6			KGWC
46	162326	17.0S 174.3E	PCN 2	T5.5/5.5 /D2.0/24HRS	EYE FIX	KGWC
47	170000	16.9S 174.6E	PCN 2			PGTW
48	170300	17.3S 175.4E	PCN 2	T5.0/5.0-/D1.0/27HRS		PGTW
49	170600	17.5S 176.3E	PCN 4			PGTW
50	170609	17.5S 176.1E	PCN 2			KGWC
51	171025	18.3S 178.0E	PCN 2	T5.5/5.5 /D1.0/24HRS	EYE FIX	KGWC
52	171200	17.8S 178.0E	PCN 4			PGTW
* 53	171605	18.7S 178.8W	PCN 6			KGWC
54	171849	19.4S 178.6W	PCN 2			KGWC
55	172305	20.2S 177.0W	PCN 2	T4.0/5.0 /W1.5/24HRS		KGWC
56	180548	21.0S 172.9W	PCN 6		ULAC 21.2S 172.6W	KGWC
* 57	180823	21.8S 171.0W	PCN 6	T3.5/5.0 /W2.0/22HRS	ULAC 22.1S 170.4W	KGWC
58	182104	23.1S 165.9W	PCN 4	T2.0/3.0 /W2.0/22HRS		KGWC
59	190803	26.2S 159.3W	PCN 4		EXP LLCC	KGWC
60	191625	29.5S 154.1W	PCN 6			KGWC
61	192044	32.3S 151.6W	PCN 6		EXP LLCC	KGWC

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

TROPICAL CYCLONE 12S
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
011206Z	10.8	84.7	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.
011218Z	11.7	86.0	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.
011306Z	12.6	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.
011318Z	13.5	86.5	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.
011406Z	14.0	86.2	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.
011418Z	14.6	85.8	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.
011506Z	14.9	85.4	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.
011518Z	15.5	84.8	35	16.4	85.1	35.	57.	0.	17.1	82.9	55.	104.	20.	17.8	79.6	70.	165.	45.	0.0	0.0	0.	-0.	0.
011606Z	16.2	83.2	35	16.8	84.0	35.	58.	0.	17.5	81.5	45.	158.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
011618Z	17.3	81.1	35	16.5	81.0	35.	48.	0.	16.6	76.1	30.	153.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
011706Z	18.4	78.9	30	17.8	79.1	30.	38.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
011718Z	19.0	77.0	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				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	50.	138.	165.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	47.	33.	22.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	0.	13.	45.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	13.	45.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	4	3	1	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 874. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL CYCLONE 12S
FIX POSITIONS FOR CYCLONE NO. 12

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	140531	14.0S	83.6E	PCN 4	T1.5/1.5 /S0.0/25HRS		KGWC
2	141600	13.9S	85.0E	PCN 6	T1.5/1.5	INIT OBS	PGTW
3	141630	14.5S	85.8E	PCN 6		ULAC 13.2S 085.7E	KGWC
4	141800	13.8S	85.4E	PCN 6			PGTW
5	142100	14.5S	85.2E	PCN 6			PGTW
6	150000	14.2S	86.2E	PCN 6		ULCC FIX	PGTW
7	150300	13.8S	86.2E	PCN 6	T2.0/2.0	INIT OBS ULCC FIX	PGTW
* 8	150510	14.8S	87.0E	PCN 6	T2.5/2.5 /D1.0/24HRS	ULAC 13.8S 086.0E	KGWC
9	150600	13.8S	85.5E	PCN 6		ULCC 14.2S 085.9E	PGTW
* 10	151033	16.1S	86.2E	PCN 6		ULAC 14.8S 085.7E	KGWC
* 11	151156	16.3S	86.2E	PCN 6			KGWC
12	151200	15.0S	85.5E	PCN 6	T2.5/2.5 /D1.0/20HRS	ULCC FIX	PGTW
13	151609	15.6S	85.2E	PCN 6	T2.5/2.5	INIT OBS	KGWC
14	151800	15.0S	84.7E	PCN 6			PGTW
15	160036	15.9S	84.0E	PCN 6		ULAC 16.2S 085.0E	KGWC
16	160450	15.8S	83.4E	PCN 4	T2.0/2.5 /W0.5/24HRS	ULAC 17.6S 086.8E	KGWC
17	160600	16.1S	83.0E	PCN 6	T1.5/2.0 /W0.5/27HRS	EXP LLCC	PGTW
18	160854	16.2S	82.7E	PCN 5	T2.5/2.5 /D0.5/24HRS	EXP LLCC	FJDG
19	161020	16.4S	82.6E	PCN 4		ULAC 17.5S 082.3E	KGWC
20	161316	16.7S	81.7E	PCN 4			KGWC
21	161731	16.3S	81.0E	PCN 6		EXP LLCC	KGWC
22	162305	17.8S	80.3E	PCN 4			KGWC
23	170156	18.4S	80.1E	PCN 4			KGWC
24	170430	18.5S	79.1E	PCN 4	T3.0/3.0 /D1.0/24HRS		KGWC
25	171150	18.7S	77.5E	PCN 4		EXP LLCC	KGWC
26	171254	18.7S	77.6E	PCN 4		EXP LLCC	KGWC
27	171710	18.7S	77.3E	PCN 4		EXP LLCC	KGWC
28	180551	20.0S	75.9E	PCN 4	T0.5/1.5 /W2.5/24HRS		KGWC
29	190531	20.3S	68.8E	PCN 4	T0.5/0.5 /S0.0/24HRS		KGWC

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

TROPICAL CYCLONE 13P
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
011400Z	16.4	150.9	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.
011412Z	16.5	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.
011500Z	16.6	152.9	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.
011512Z	16.3	154.5	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.
011600Z	16.1	156.1	35	16.1 155.7	35.	23.	0.	16.4	158.6	50.	171.	-15.	16.8	161.8	65.	359.	-15.	0.0	0.0	0.	-0.	0.
011612Z	16.0	158.7	50	16.1 158.3	50.	24.	0.	16.4	162.6	70.	125.	-5.	17.8	167.0	80.	267.	-10.	0.0	0.0	0.	-0.	0.
011700Z	15.8	161.5	65	15.9 161.5	65.	6.	0.	16.3	167.4	90.	51.	10.	17.6	173.5	105.	114.	0.	0.0	0.0	0.	-0.	0.
011712Z	15.6	164.6	75	15.6 164.5	75.	6.	0.	16.0	171.1	105.	8.	15.	17.4	177.7	100.	143.	15.	0.0	0.0	0.	-0.	0.
011800Z	15.6	167.9	80	15.0 167.9	80.	0.	0.	16.5	174.9	105.	29.	0.	18.8	182.9	90.	121.	20.	0.0	0.0	0.	-0.	0.
011812Z	15.9	171.2	90	15.9 171.1	90.	6.	0.	17.5	178.5	100.	98.	15.	20.7	186.7	75.	143.	35.	0.0	0.0	0.	-0.	0.
011900Z	16.8	175.3	105	16.9 175.1	100.	13.	-5.	20.1	183.6	80.	88.	20.	24.3	193.0	50.	208.	20.	0.0	0.0	0.	-0.	0.
011912Z	18.1	180.1	85	18.3 179.9	90.	17.	5.	22.3	189.7	65.	123.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
012000Z	19.5	184.9	60	19.5 185.0	80.	6.	20.	24.0	195.5	50.	257.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
012012Z	20.3	189.2	40	20.8 189.3	60.	31.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
012100Z	20.9	192.3	30	22.0 191.0	55.	98.	25.	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.	105.	193.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	17.	43.	58.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	7.	14.	16.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	6.	9.	9.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	11	9	7	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2414. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 14. KNOTS

TROPICAL CYCLONE 13P
FIX POSITIONS FOR CYCLONE NO. 13

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	130047	16.5S	150.0E	PCN 6	T1.0/1.0	INIT OBS	KGWC
2	131800	16.2S	152.1E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
3	140000	16.5S	151.9E	PCN 6	T1.0/1.0	INIT OBS	PGTW
4	140026	16.6S	151.5E	PCN 6	T2.5/2.5 /D1.5/24HRS		KGWC
5	140300	16.6S	151.7E	PCN 6		ULCC FIX	PGTW
6	140600	16.5S	151.0E	PCN 6			PGTW
7	140713	16.5S	151.7E	PCN 6			KGWC
8	140900	16.5S	151.2E	PCN 6			PGTW
9	141125	16.9S	152.8E	PCN 6	T1.5/1.5	INIT OBS	KGWC
10	141600	17.0S	152.6E	PCN 6			PGTW
11	141800	17.2S	152.9E	PCN 6	T1.0/1.0 /S0.0/24HRS		PGTW
12	141824	16.8S	151.5E	PCN 6			KGWC
* 13	141953	17.5S	156.0E	PCN 6			KGWC
14	142100	17.1S	153.1E	PCN 6			PGTW
15	150000	16.4S	152.4E	PCN 6	T1.0/1.0 /S0.0/24HRS		PGTW
16	150006	16.2S	152.5E	PCN 5	T1.5/2.5 /W1.0/24HRS	ULAC 16.6S 153.0E	KGWC
17	150300	16.5S	152.8E	PCN 6			PGTW

18	150600	16.5S	153.0E	PCN 6		ULCC 16.2S 153.5E	PGTW
19	150833	16.5S	154.1E	PCN 6			KGWC
20	150900	16.1S	154.1E	PCN 6		ULCC FIX	PGTW
21	151105	16.2S	154.0E	PCN 5	T1.5/1.5 /S0.0/24HRS	ULAC 16.4S 154.0E	KGWC
22	151200	16.0S	154.8E	PCN 6		ULCC FIX	PGTW
23	151800	16.3S	155.4E	PCN 6	T2.0/2.0 /D1.0/24HRS		PGTW
24	151812	15.8S	155.3E	PCN 6		ULAC 16.2S 154.5E	KGWC
25	151932	15.6S	155.1E	PCN 6		ULAC 15.8S 154.6E	KGWC
26	152346	15.9S	156.1E	PCN 5	T3.0/3.0 /D1.5/24HRS		KGWC
27	160000	16.3S	155.7E	PCN 6	T2.5/2.5 /D1.5/24HRS		PGTW
28	160300	16.2S	156.2E	PCN 6			PGTW
29	160600	16.1S	157.0E	PCN 6		ULCC FIX	PGTW
30	160812	16.0S	158.2E	PCN 6		ULAC 16.3S 158.3E	KGWC
31	160900	16.2S	157.7E	PCN 6		ULCC FIX	PGTW
32	161045	16.1S	157.0E	PCN 6	T3.5/3.5	INIT OBS	KGWC
33	161200	16.1S	158.1E	PCN 6		ULCC FIX	PGTW
34	161600	15.8S	158.9E	PCN 6	T3.0/3.0 /D1.0/22HRS	ULCC FIX	PGTW
35	161759	16.0S	160.1E	PCN 6			KGWC
36	161910	15.7S	161.0E	PCN 6			KGWC
37	162326	15.7S	161.4E	PCN 2	T4.0/4.0 /D1.0/24HRS	EYE FIX	KGWC
38	170000	15.8S	161.5E	PCN 2			PGTW
39	170300	15.8S	162.2E	PCN 2	T4.0/4.0 /D1.5/27HRS		PGTW
40	170600	15.7S	163.0E	PCN 2		EYE FIX	PGTW
41	171025	15.4S	163.9E	PCN 2	T5.0/5.0 /D1.5/24HRS	EYE FIX	KGWC
42	171200	15.5S	164.5E	PCN 2		EYE FIX	PGTW
43	171605	15.4S	165.5E	PCN 2		EYE FIX	KGWC
44	171800	15.5S	166.1E	PCN 2	T4.5/4.5 /D1.5/26HRS	EYE FIX	PGTW
45	171849	15.6S	166.4E	PCN 2		EYE FIX	KGWC
46	172100	15.4S	166.9E	PCN 4			PGTW
47	172305	15.7S	167.5E	PCN 2	T4.5/4.5 /D0.5/24HRS	EYE FIX	KGWC
48	180000	15.6S	167.9E	PCN 4		ULCC FIX	PGTW
49	180300	15.7S	168.5E	PCN 2	T4.5/4.5 /D0.5/24HRS		PGTW
50	180600	15.8S	169.4E	PCN 2		EYE FIX	PGTW
51	180729	15.8S	170.1E	PCN 2		EYE FIX	KGWC

TROPICAL CYCLONE 14P
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
011618Z	14.8	146.3	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.
011706Z	14.8	149.0	45	14.8	148.6	40.	23.	-5.	14.9	153.5	70.	63.	-10.	15.2	158.8	90.	64.	-10.	0.0	0.0	0.	-0.	0.
011718Z	14.8	151.8	65	14.8	151.8	65.	0.	0.	15.2	157.8	95.	99.	5.	15.9	164.3	105.	172.	15.	0.0	0.0	0.	-0.	0.
011806Z	15.5	154.4	80	15.4	154.5	80.	8.	0.	16.8	160.6	105.	132.	5.	18.7	168.0	105.	209.	30.	0.0	0.0	0.	-0.	0.
011818Z	16.0	156.3	90	16.0	156.3	90.	0.	0.	17.1	161.0	115.	38.	25.	18.9	167.9	100.	46.	45.	0.0	0.0	0.	-0.	0.
011906Z	16.2	158.4	100	16.4	158.3	105.	13.	5.	17.8	162.9	115.	119.	40.	20.3	169.6	115.	125.	75.	0.0	0.0	0.	-0.	0.
011918Z	16.6	161.4	90	16.5	161.3	95.	8.	5.	17.6	167.4	80.	71.	25.	19.9	173.3	70.	104.	45.	0.0	0.0	0.	-0.	0.
012006Z	17.0	164.8	75	17.3	165.0	70.	21.	-5.	20.1	173.3	50.	105.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
012018Z	18.3	168.4	55	18.1	168.6	60.	17.	5.	22.0	177.1	45.	156.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
012106Z	21.0	171.7	40	20.6	172.5	45.	51.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
012118Z	21.3	174.4	25	22.9	176.1	30.	135.	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.	98.	120.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	14.	42.	55.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	18.	37.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	2.	15.	33.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	10	8	6	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1701. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 14. KNOTS

TROPICAL CYCLONE 14P
FIX POSITIONS FOR CYCLONE NO. 14

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	150300	13.3S	140.9E	PCN 6	T1.5/1.5	INIT OBS	PGTW
2	151200	13.4S	142.5E	PCN 6		ULCC FIX	PGTW
3	151600	13.8S	142.9E	PCN 6			PGTW
4	151800	13.8S	142.9E	PCN 6			PGTW
5	160900	15.5S	144.1E	PCN 6			PGTW
6	170000	14.6S	147.3E	PCN 6			PGTW
7	170300	14.8S	148.0E	PCN 6	T3.0/3.0	INIT OBS	PGTW
8	170600	14.8S	149.1E	PCN 2			PGTW
9	170644	14.4S	149.1E	PCN 5			KGWC
10	170750	15.2S	149.6E	PCN 5	T2.5/2.5 /D1.0/12HRS	ULAC 14.6 149.0E	KGWC
11	171200	14.8S	150.6E	PCN 6			PGTW
12	171206	13.9S	150.6E	PCN 6	T3.0/3.0	INIT OBS	KGWC
13	171747	14.8S	151.9E	PCN 1		EYE FIX	KGWC
14	171800	14.8S	151.7E	PCN 2	T4.0/4.0	INIT OBS EYE FIX	PGTW
15	172031	15.0S	152.4E	PCN 2		EYE FIX	KGWC
16	172100	14.9S	152.4E	PCN 2			PGTW
17	180000	15.0S	153.1E	PCN 2	T4.5/4.5 /D1.5/21HRS		PGTW
18	180047	15.1S	152.9E	PCN 1	T4.5/4.5 /D2.0/20HRS	EYE FIX	KGWC
19	180300	15.4S	153.7E	PCN 2			PGTW
20	180600	15.5S	154.4E	PCN 2		EYE FIX	PGTW
21	180729	15.7S	154.4E	PCN 2		EYE FIX	KGWC
22	180900	15.7S	155.0E	PCN 2		EYE FIX	PGTW
23	181146	15.8S	155.1E	PCN 2	T4.5/4.5 /D1.5/24HRS	EYE FIX	KGWC
24	181200	15.8S	155.3E	PCN 2		EYE FIX	PGTW
25	181600	16.0S	155.9E	PCN 2			PGTW
26	181734	16.0S	156.4E	PCN 2		EYE FIX	KGWC
27	181800	15.0S	156.3E	PCN 2	T5.0/5.0 /D1.0/24HRS		PGTW
28	182009	16.1S	156.5E	PCN 2		EYE FIX	KGWC
29	182100	16.1S	156.7E	PCN 2			PGTW
30	190000	16.2S	157.2E	PCN 4	T5.5/5.5 /D1.0/24HRS		PGTW
31	190027	16.1S	157.3E	PCN 1	T5.5/5.5 /D1.0/24HRS	EYE FIX	KGWC
32	190300	16.2S	157.6E	PCN 4			PGTW
33	190600	16.2S	158.3E	PCN 2		EYE FIX	PGTW
34	190708	15.9S	158.5E	PCN 2		EYE FIX	KGWC
35	190900	16.3S	159.0E	PCN 2		EYE FIX	PGTW
36	191126	16.3S	159.5E	PCN 2	T5.0/5.0 /D0.5/24HRS		KGWC
37	191200	16.3S	159.7E	PCN 2		EYE FIX	PGTW

38	191600	16.5S	161.0E	PCN 2				PGTW
39	191721	16.9S	161.8E	PCN 4				KGWC
40	191800	16.7S	161.4E	PCN 4	T4.5/5.0 /W0.5/24HRS			PGTW
41	191948	16.8S	162.4E	PCN 4				KGWC
42	192100	16.7S	162.6E	PCN 4				PGTW
43	200000	17.4S	163.8E	PCN 6	T3.5/4.5 /W2.0/24HRS			PGTW
44	200006	17.1S	163.5E	PCN 4		ULAC 17.8S 163.8E		KGWC
45	200300	17.0S	164.2E	PCN 4		EXP LLCC		PGTW
46	200600	16.9S	164.9E	PCN 4		EXP LLCC		PGTW
47	200647	17.2S	165.0E	PCN 6		ULAC 18.5S 165.8E		KGWC
48	200900	17.0S	165.4E	PCN 6				PGTW
49	201105	17.5S	166.1E	PCN 6	T3.5/4.5 /W1.5/24HRS			KGWC
50	201200	17.2S	166.3E	PCN 6				PGTW
51	201600	17.9S	167.3E	PCN 6	T2.5/3.5+/W2.0/22HRS			PGTW
52	201709	18.3S	168.4E	PCN 6				KGWC
* 53	201927	18.6S	170.0E	PCN 6				KGWC
* 54	202346	19.4S	172.7E	PCN 6	T2.5/3.5 /W1.0/24HRS			KGWC
55	210000	19.7S	170.2E	PCN 6	T1.5/2.5 /W2.0/24HRS			PGTW
56	210300	20.2S	171.3E	PCN 6				PGTW
57	210600	20.5S	172.3E	PCN 6				PGTW
58	210625	20.0S	171.6E	PCN 4		EXP LLCC		KGWC
59	210900	20.9S	173.2E	PCN 6				PGTW
60	211045	20.5S	172.2E	PCN 4		EXP LLCC		KGWC
* 61	211800	23.0S	176.0E	PCN 6	T0.0/0.5 /W2.5/26HRS			PGTW
62	211905	21.0S	174.3E	PCN 4		EXP LLCC		KGWC
63	212326	21.6S	175.2E	PCN 4	T0.5/1.5 /W2.0/24HRS	EXP LLCC		KGWC
64	220000	21.7S	176.0E	PCN 6	T0.5/1.0 /W1.0/24HRS	EXP LLCC		PGTW
65	220300	21.9S	176.1E	PCN 4				PGTW

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

TROPICAL CYCLONE 15S
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
012600Z	12.7	68.3	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.
012612Z	14.0	67.3	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.
012700Z	15.0	66.7	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.
012712Z	15.9	66.3	45	16.0	66.6	35.	18.	-10.	18.0	65.2	55.	63.	-10.	20.1	63.3	60.	95.	-10.	0.0	0.0	0.	-0.	0.
012800Z	16.7	66.2	55	16.2	66.5	50.	35.	-5.	17.6	65.0	65.	58.	-5.	19.4	63.5	70.	25.	5.	0.0	0.0	0.	-0.	0.
012812Z	17.4	66.1	65	16.6	65.7	55.	53.	-10.	17.6	64.2	65.	93.	-5.	19.1	62.3	70.	84.	15.	0.0	0.0	0.	-0.	0.
012900Z	18.3	65.7	70	18.4	65.8	70.	8.	0.	20.4	64.9	65.	82.	0.	23.3	64.9	55.	245.	10.	0.0	0.0	0.	-0.	0.
012912Z	19.1	64.6	70	19.3	65.2	60.	36.	-10.	21.7	64.5	55.	143.	0.	24.7	64.5	45.	211.	10.	0.0	0.0	0.	-0.	0.
013000Z	19.8	63.6	65	20.0	63.2	60.	26.	-5.	22.7	61.0	55.	33.	10.	25.5	60.6	45.	212.	15.	0.0	0.0	0.	-0.	0.
013012Z	20.5	62.3	55	20.3	62.2	50.	13.	-5.	22.3	60.4	40.	187.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
013100Z	22.3	60.6	45	21.5	60.9	45.	51.	0.	24.0	59.4	30.	322.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
013112Z	25.4	60.7	35	25.6	60.7	35.	12.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
020100Z	28.7	62.3	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.

	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.	122.	145.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	16.	59.	90.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	5.	4.	11.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-5.	-1.	8.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	9	8	6	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1154. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 8. KNOTS

TROPICAL CYCLONE 15S
FIX POSITIONS FOR CYCLONE NO. 15

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	251751	11.9S	68.8E	PCN 6	T1.0/1.0	INIT OBS	KGWC
2	260632	13.4S	68.0E	PCN 5	T2.5/2.5 /D1.5/24HRS		KGWC
3	261138	14.0S	67.4E	PCN 6		ULAC 13.9S 068.1E	KGWC
4	261306	14.0S	66.8E	PCN 6		ULAC 14.0S 067.8E	KGWC
5	261731	14.5S	66.7E	PCN 6		ULAC 15.2S 068.2E	KGWC
* 6	270612	15.9S	67.4E	PCN 6	T3.0/3.0 /D0.5/24HRS	ULAC 15.9S 067.5E	KGWC
* 7	271020	16.2S	68.0E	PCN 5	T2.5/2.5 /D1.0/24HRS		FJDG
8	271426	16.4S	66.2E	PCN 6			KGWC
9	271711	16.1S	65.6E	PCN 6	T3.5/3.5	INIT OBS ULAC 15.9S 065.2E	KGWC
10	280010	16.6S	66.2E	PCN 6		ULAC 16.5S 065.5E	KGWC
11	280306	16.4S	65.9E	PCN 6			KGWC
12	280551	16.3S	65.8E	PCN 6	T3.5/3.5 /D0.5/24HRS	ULAC 16.5S 065.3E	KGWC
* 13	281009	16.5S	64.6E	PCN 5	T3.5/3.5 /D0.5/24HRS		FJDG
14	281113	16.7S	66.5E	PCN 6			KGWC
15	281405	17.4S	66.1E	PCN 4			KGWC
16	281605	17.8S	66.1E	PCN 6	T4.5/4.5 /D1.0/24HRS		KGWC
17	282358	18.1S	66.0E	PCN 4			KGWC
18	290245	18.4S	65.6E	PCN 6		ULAC 19.0S 064.3E	KGWC
19	290531	18.5S	64.7E	PCN 6	T3.0/3.5 /W0.5/24HRS	ULAC 19.4S 064.8E	KGWC
20	290958	19.4S	65.0E	PCN 5	T4.0/4.0 /D0.5/24HRS		FJDG
21	291243	19.4S	63.7E	PCN 6			KGWC
22	291343	19.6S	63.9E	PCN 6		RGD EYE OPN N	KGWC
23	291812	19.6S	63.6E	PCN 6	T4.5/4.5 /S0.0/25HRS		KGWC
24	292345	20.6S	63.5E	PCN 6			KGWC
25	300223	20.6S	63.4E	PCN 6		ULAC 20.5S 062.9E	KGWC
26	300652	20.0S	62.6E	PCN 5	T3.0/3.5 /S0.0/25HRS	ULAC 21.2S 063.0E	KGWC
27	301322	20.1S	62.7E	PCN 6		ULAC 20.1S 062.7E	KGWC
28	301751	21.1S	61.2E	PCN 4	T2.5/3.5 /W1.0/24HRS	EXP LLCC ULAC 23.4S 062.6E	KGWC
29	302333	21.9S	60.6E	PCN 4		EXP LLCC	KGWC
30	310202	22.5S	60.3E	PCN 4		EXP LLCC	KGWC
31	310632	23.7S	60.8E	PCN 3	T1.0/2.0 /W2.0/24HRS	EXP LLCC	KGWC
32	311100	26.0S	62.8E			EXP LLCC	NPOC
33	311731	26.9S	61.0E	PCN 3		ULAC 27.8S 061.7E	KGWC
34	010612	30.7S	63.9E	PCN 4	T1.5/1.5 /D0.5/24HRS	EXP LLCC ULAC 31.7S 066.1E	KGWC
35	011711	34.4S	67.0E	PCN 5		ULAC 36.0S 070.4E	KGWC
36	020552	36.2S	74.5E	PCN 6	T0.0/1.0 /W1.5/24HRS		KGWC

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

HURRICANE 16P
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
0124122	15.0	203.4	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.
0125002	15.9	202.7	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.
0125122	16.8	201.7	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.
0126002	17.7	200.3	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.
0126122	19.4	198.4	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.
0127002	20.7	196.3	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.
0127122	22.1	194.1	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.
0128002	23.8	191.7	60	23.4	192.3	55.	41.	-5.	29.0	187.5	80.	30.	5.	37.0	189.0	70.	226.	20.	0.0	0.0	0.	-0.	0.
0128122	25.8	189.2	75	25.8	189.2	60.	0.	-15.	34.7	188.3	40.	229.	-25.	40.8	190.8	30.	493.	-5.	0.0	0.0	0.	-0.	0.
0129002	28.5	187.6	75	28.5	188.0	65.	21.	-10.	32.9	186.9	50.	271.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0129122	30.9	187.8	65	30.8	189.1	65.	67.	0.	35.8	195.1	40.	215.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0130002	34.2	192.1	50	34.7	192.1	30.	30.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0130122	36.2	199.5	35	37.3	198.2	40.	91.	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	42.	187.	359.	0.	42.	187.	359.	0.
AVG RIGHT ANGLE ERROR	23.	71.	305.	0.	23.	71.	305.	0.
AVG INTENSITY MAGNITUDE ERROR	9.	9.	13.	0.	9.	9.	13.	0.
AVG INTENSITY BIAS	-8.	-4.	8.	0.	-8.	-4.	8.	0.
NUMBER OF FORECASTS	6	4	2	0	6	4	2	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2035. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 14. KNOTS

HURRICANE 16P
FIX POSITIONS FOR CYCLONE NO. 16

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	232104	14.2S 157.1W	PCN 6	T1.0/1.0	INIT OBS ULAC 12.5S 156.9W	KGWC
2	242044	15.5S 156.4W	PCN 3	T2.0/2.0 /D1.0/24HRS	ULAC 14.5S 157.0W	KGWC
3	252023	17.2S 159.2W	PCN 4	T2.5/2.5 /D0.5/24HRS		KGWC
4	260439	18.1S 160.4W	PCN 4	T2.5/2.5 /D0.5/24HRS	ULAC 17.9S 160.2W	KGWC
* 5	260904	19.0S 162.2W	PCN 4		ULAC 18.2S 161.5W	KGWC
6	262005	20.3S 162.0W				PHNL
7	262145	20.1S 162.7W	PCN 6	T2.0/2.5 /W0.5/24HRS	ULAC 20.5S 162.5W	KGWC
8	270215	20.5S 163.5W				PHNL
9	272124	23.4S 166.7W	PCN 2	T3.5/3.5 /D1.5/24HRS		KGWC
10	280215	24.6S 169.1W				PHNL
11	280243	24.3S 168.9W	PCN 2	T3.5/3.5 /D1.5/24HRS	EYE FIX	KGWC
12	280538	25.1S 169.7W	PCN 2		EYE FIX	KGWC
13	280823	25.2S 170.5W	PCN 2	T4.5/4.5 /D2.0/47HRS	EYE FIX	KGWC
14	281528	26.5S 171.5W	PCN 2		EYE FIX	KGWC
15	281818	27.1S 171.6W	PCN 2		EYE FIX	KGWC
16	282246	28.1S 172.1W	PCN 1	T3.0/4.0 /W0.5/25HRS		KGWC
17	282300	28.4S 173.0W				NPOC
18	290230	29.0S 172.5W				PHNL
19	290517	29.5S 172.4W	PCN 2		EYE FIX	KGWC
20	290945	30.6S 173.7W	PCN 4	T3.5/4.0 /W1.0/24HRS		KGWC
21	291515	32.0S 170.5W	PCN 4		EXP LLCC	KGWC
22	292225	33.8S 168.7W	PCN 3	T3.0/4.0 /S0.0/24HRS	ULAC 34.0S 167.6W	KGWC
23	300455	35.5S 164.9W	PCN 6		ULAC 35.0S 163.8W	KGWC
24	300743	35.7S 163.0W	PCN 6	T1.5/2.5 /W1.5/24HRS	ULAC 35.4S 162.1W	KGWC
* 25	301200	35.0S 168.0W				NPOC
26	302204	37.0S 154.5W	PCN 6			KGWC

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

TROPICAL CYCLONE 17S
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
0129002	18.1	120.6	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.
0129122	18.3	119.1	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.
0130002	18.2	118.0	45	18.3	118.1	35.	8.	-10.	19.3	115.5	45.	104.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0130122	18.5	117.1	55	18.4	116.8	50.	18.	-5.	19.6	114.8	55.	200.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0131002	20.3	117.0	45	20.0	116.5	50.	33.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0131122	22.3	116.9	35	22.2	116.7	50.	13.	15.	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	18.	152.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	19.	104.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	9.	10.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	1.	10.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	4	2	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 432. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL CYCLONE 17S
FIX POSITIONS FOR CYCLONE NO. 17

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	290208	18.2S 120.0E	PCN 5	T1.5/1.5	INIT OBS ULAC 17.8S 118.1E	KGWC
2	290737	18.7S 119.8E	PCN 5		ULAC 18.4S 117.5E	KGWC
3	291021	18.7S 119.5E	PCN 5		ULAC 18.9S 118.5E	KGWC
4	291307	18.6S 118.9E	PCN 6		ULAC 18.0S 118.2E	KGWC
5	292021	17.7S 118.5E	PCN 6			KGWC
6	292301	18.0S 118.2E	PCN 5			KGWC
7	300148	18.4S 117.8E	PCN 1	T3.5/3.5 /D2.0/24HRS		KGWC
8	300300	20.8S 116.9E	PCN 6	T4.0/4.0	INIT OBS	PHIK
9	300906	18.4S 117.0E	PCN 1		RGD EYE	KGWC
10	300959	18.4S 117.1E	PCN 1		RGD EYE	KGWC
11	301429	18.9S 117.4E	PCN 4	T3.5/3.5	INIT OBS	KGWC
12	302009	19.6S 117.3E	PCN 6			KGWC
13	302239	20.1S 117.1E	PCN 6			KGWC
14	310309	21.1S 117.1E	PCN 1		EYE DIA .6 NM	KGWC
15	310958	22.0S 116.7E	PCN 3			KGWC
16	311200	22.2S 116.8E	PCN 6			PHIK
17	311408	22.8S 117.1E	PCN 4			KGWC

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

TROPICAL CYCLONE 18P
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
020200Z	11.6 156.7	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.
020212Z	13.5 156.0	35	12.5 156.0	35.	60.	0.	12.6 152.7	60.	109.	25.	14.8 150.2	75.	178.	40.	0.0 0.0	0.	-0.	0.
020300Z	14.4 153.8	35	13.9 154.2	40.	38.	5.	14.2 151.6	45.	97.	10.	16.0 149.5	50.	258.	15.	0.0 0.0	0.	-0.	0.
020312Z	14.2 151.8	35	14.1 152.0	45.	13.	10.	15.2 149.2	50.	146.	15.	16.8 147.0	50.	249.	15.	0.0 0.0	0.	-0.	0.
020400Z	13.5 150.1	35	14.2 150.4	40.	45.	5.	15.2 147.7	50.	146.	15.	16.5 144.7	35.	191.	5.	0.0 0.0	0.	-0.	0.
020412Z	13.4 147.5	35	13.9 148.0	35.	42.	0.	14.8 144.2	30.	95.	-5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
020500Z	13.6 145.8	35	13.4 144.8	35.	60.	0.	13.6 140.9	35.	158.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
020512Z	13.3 144.7	35	13.5 143.0	30.	100.	-5.	14.1 138.9	50.	270.	25.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
020600Z	13.5 143.6	30	13.3 142.2	30.	83.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
020612Z	14.7 143.5	25	14.7 143.6	25.	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	50.	146.	219.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	32.	124.	142.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	14.	19.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	2.	13.	19.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	9	7	4	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 941. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TROPICAL CYCLONE 18P
FIX POSITIONS FOR CYCLONE NO. 18

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	311800	15.3S 161.8E	PCN 5			PHIK
2	011800	15.3S 160.8E	PCN 6			PHIK
* 3	012306	12.8S 156.2E	PCN 6	T1.0/1.0	INIT OBS ULAC 13.2S 160.2E	KGWC
* 4	020000	13.2S 160.2E	PCN 6			PHIK
* 5	020300	12.7S 158.6E	PCN 6	T3.0/3.0	INIT OBS	PHIK
6	020714	12.3S 156.0E	PCN 6		ULAC 13.4S 156.2E	KGWC
7	020900	13.0S 156.9E	PCN 4			RODN
8	021146	13.3S 155.8E	PCN 6		ULAC 14.2S 155.5E	KGWC
* 9	021200	14.8S 155.8E	PCN 6			PHIK
10	021749	13.8S 155.8E	PCN 6		ULAC 14.2S 154.7E	KGWC
11	021800	14.4S 155.1E	PCN 6			PHIK
12	021954	13.9S 154.2E	PCN 6		ULAC 13.7S 155.0E	KGWC
13	030000	14.2S 154.5E	PCN 6			PHIK
14	030027	14.0S 153.9E	PCN 5	T2.5/2.5 /D1.5/25HRS	ULAC 14.2S 154.4E	KGWC
* 15	030300	14.5S 154.6E	PCN 6	T2.0/2.0 /W1.0/24HRS		PHIK
16	030730	14.2S 151.5E	PCN 4	T2.5/2.5	INIT OBS	RODN
17	030834	13.7S 152.7E	PCN 6		ULAC 14.0S 153.2E	KGWC
18	031126	13.8S 152.0E	PCN 6	T2.5/2.5	INIT OBS ULAC 13.4S 152.8E	KGWC
* 19	031200	14.8S 153.7E	PCN 6			PHIK
20	031600	14.2S 150.7E	PCN 6	T2.0/2.0	INIT OBS ULCC FIX	PGTW
21	031600	14.3S 150.8E	PCN 6			RPMK
22	031736	13.9S 150.8E	PCN 6		ULAC 13.0S 150.1E	KGWC
* 23	031800	14.7S 153.1E	PCN 6			PHIK
24	031800	13.9S 150.5E	PCN 6		ULCC FIX	PGTW
25	032100	14.5S 151.1E	PCN 6			RPMK
26	032114	13.5S 150.6E	PCN 6		ULAC 14.0S 151.1E	KGWC
27	040000	13.8S 150.2E	PCN 6			PGTW
28	040007	13.0S 149.6E	PCN 5	T2.5/2.5 /S0.0/24HRS	ULAC 12.9S 151.5E	KGWC
29	040300	13.0S 149.8E	PCN 6	T2.5/2.5	INIT OBS	PGTW
30	040600	12.8S 149.3E	PCN 6			PGTW
31	040813	13.1S 147.7E	PCN 6		ULAC 12.0S 149.7E	KGWC
32	040900	13.4S 148.1E	PCN 6			PGTW
33	041200	13.4S 147.6E	PCN 6			PGTW
34	041247	13.7S 146.8E	PCN 5	T2.0/2.5 /W0.5/24HRS	ULAC 14.5S 148.0E	KGWC
35	041724	14.4S 146.2E	PCN 6		ULAC 13.4S 147.5E	KGWC
* 36	042053	12.4S 145.2E	PCN 6			KGWC
37	042100	14.0S 145.8E	PCN 6		ULCC FIX	PGTW
38	050128	13.8S 146.1E	PCN 5	T3.0/3.0 /D0.5/25HRS		KGWC
39	050300	13.4S 145.1E	PCN 6	T2.5/2.5+/S0.0/24HRS		PGTW
40	050752	12.9S 146.4E	PCN 6			KGWC
41	051200	13.6S 144.9E	PCN 6		ULCC FIX	PGTW

42	051227	13.0S	144.5E	PCN 4				KGWC
43	051600	13.4S	144.1E	PCN 6	T1.5/1.5	INIT OBS ULCC FIX		PGTW
44	051800	13.2S	143.7E	PCN 6		ULCC FIX		PGTW
45	051853	12.8S	143.5E	PCN 6		ULAC 13.5S 143.6E		KGWC
46	052032	13.1S	144.0E	PCN 6		ULAC 13.0S 143.7E		KGWC
47	060000	13.3S	143.7E	PCN 6				PGTW
* 48	060108	14.8S	140.9E	PCN 5				KGWC
49	060300	14.1S	143.6E	PCN 6	T1.5/1.5	INIT OBS		PGTW
50	060600	14.7S	143.5E	PCN 6				PGTW
* 51	060738	15.1S	140.3E	PCN 5				KGWC
52	060900	14.6S	143.5E	PCN 6				PGTW
* 53	060912	15.2S	145.3E	PCN 6		EXP LLCC		KGWC
54	061200	14.8S	143.2E	PCN 6				PGTW
55	061207	14.8S	144.2E	PCN 6		ULAC 14.2S 137.6E		KGWC
56	061841	14.9S	145.1E	PCN 6		ULAC 15.1S 145.7E		KGWC
57	062011	15.2S	145.3E	PCN 5		ULAC 15.3S 146.0E		KGWC
58	070047	14.8S	145.8E	PCN 5	T1.0/1.0 /S0.0/24HRS	ULAC 15.3S 148.8E		KGWC
59	071147	15.4S	145.8E	PCN 5				KGWC
60	080027	14.5S	149.1E	PCN 5		ULAC 14.0S 149.5E		KGWC
61	080600	14.0S	148.8E	PCN 6		ULCC FIX		PGTW
62	081126	13.8S	149.2E	PCN 6				KGWC
63	090007	15.0S	152.6E	PCN 5	T1.5/1.5 /D0.5/24HRS	ULAC 14.3S 151.7E		KGWC
64	090300	14.7S	149.8E	PCN 6	T1.5/1.5	INIT OBS		PGTW
65	091106	15.5S	156.0E	PCN 5				KGWC
66	092342	16.1S	152.7E	PCN 5	T0.5/1.5 /W1.0/24HRS			KGWC

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

TROPICAL CYCLONE 19S
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
020506Z	12.3	70.1	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.
020518Z	13.4	68.9	35	13.1	68.3	35.	39.	0.	13.8	65.1	50.	107.	20.	14.9	62.0	60.	142.	30.	0.0	0.0	0.	-0.	0.
020606Z	14.4	67.4	30	13.9	66.5	40.	60.	10.	15.3	62.8	60.	68.	35.	16.3	59.6	75.	122.	40.	0.0	0.0	0.	-0.	0.
020618Z	15.4	65.9	30	15.9	64.9	35.	65.	5.	18.3	61.5	45.	131.	15.	20.3	59.0	50.	307.	10.	0.0	0.0	0.	-0.	0.
020706Z	14.9	63.9	25	15.5	64.4	35.	46.	10.	16.8	62.5	25.	288.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
020718Z	16.5	60.2	30	16.0	62.3	30.	125.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
020806Z	16.6	57.5	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.
020818Z	16.5	55.4	40	16.9	56.0	35.	42.	-5.	17.9	50.7	40.	11.	-10.	20.0	48.7	30.	173.	10.	0.0	0.0	0.	-0.	0.
020906Z	16.7	53.1	50	17.0	53.8	40.	44.	-10.	18.7	49.8	35.	97.	5.	20.3	48.6	25.	264.	10.	0.0	0.0	0.	-0.	0.
020918Z	17.9	50.5	50	18.5	50.3	50.	38.	0.	21.5	48.5	35.	209.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021006Z	18.8	48.1	30	18.5	50.3	35.	126.	5.	19.2	49.5	30.	306.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021018Z	19.1	45.8	20	19.9	46.1	30.	51.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021106Z	19.1	44.1	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	64.	152.	201.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	37.	67.	91.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	6.	16.	20.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	3.	11.	20.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	10	8	5	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1612. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 11. KNOTS

TROPICAL CYCLONE 19S
FIX POSITIONS FOR CYCLONE NO. 19

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	041752	13.2S	68.8E	PCN 6	T1.5/1.5	INIT OBS ULAC 13.7S 070.5E	KGWC
2	050157	13.6S	68.7E	PCN 6			KGWC
3	050632	12.8S	70.1E	PCN 3	T2.0/2.0 /D0.5/12HRS	EXP LLCC	KGWC
4	051114	12.5S	69.3E	PCN 4		EXP LLCC	KGWC
5	051256	12.9S	69.1E	PCN 4		EXP LLCC	KGWC
6	051731	13.0S	68.8E	PCN 4		EXP LLCC	KGWC
7	052359	13.4S	67.3E	PCN 6			KGWC
8	060612	14.8S	67.5E	PCN 5	T1.5/1.5 /S0.0/24HRS	EXP LLCC	KGWC
* 9	061014	14.8S	64.0E	PCN 5	T2.5/2.5 /D1.0/24HRS		FJDG
* 10	061102	16.2S	67.6E	PCN 4		EXP LLCC	KGWC
11	061416	15.8S	66.3E	PCN 4		EXP LLCC	KGWC
12	061711	15.5S	65.5E	PCN 4		EXP LLCC ULAC 14.5S 062.1E	KGWC
13	062346	15.9S	65.4E	PCN 3		EXP LLCC	KGWC
14	070256	14.4S	64.2E	PCN 3		EXP LLCC	KGWC
15	070552	14.7S	64.0E	PCN 4	T1.5/1.5 /S0.0/24HRS	EXP LLCC	KGWC
* 16	071003	14.3S	60.0E	PCN 5	T2.5/2.5 /S0.0/24HRS		FJDG
17	071231	16.5S	61.9E	PCN 4		EXP LLCC	KGWC
18	071355	15.8S	61.2E	PCN 4		EXP LLCC ULAC 15.0S 059.5E	KGWC
19	071832	16.5S	60.6E	PCN 4		EXP LLCC ULAC 15.1S 058.4E	KGWC
20	080235	16.4S	57.4E	PCN 6		ULAC 16.0S 056.9E	KGWC
* 21	080713	16.1S	55.7E	PCN 5	T2.5/2.5 /D1.0/25HRS	ULAC 16.3S 055.7E	KGWC
22	081812	15.7S	53.0E	PCN 6	T3.0/3.0	INIT OBS ULAC 16.1S 052.0E	KGWC
* 23	090103	17.0S	52.0E	PCN 5			KGWC
* 24	090355	17.5S	51.3E	PCN 6		ULAC 17.8S 051.8E	KGWC
* 25	090653	18.4S	51.1E	PCN 5	T3.5/3.5 /D1.0/24HRS	ULAC 18.2S 051.1E	KGWC
* 26	091123	17.5S	55.4E	PCN 5			FJDG
27	091206	17.4S	51.8E	PCN 6			KGWC
28	091453	18.4S	50.9E	PCN 5			KGWC
29	091752	18.4S	49.7E	PCN 5	T4.0/4.0 /D1.0/24HRS		KGWC
* 30	100334	17.5S	50.3E	PCN 6		ULAC 16.0S 050.1E	KGWC
31	100632	19.1S	47.8E	PCN 6			KGWC
* 32	101113	17.7S	45.0E	PCN 5			FJDG
33	101335	19.4S	46.2E	PCN 5			KGWC
34	101425	19.6S	45.7E	PCN 6			KGWC
35	101913	19.1S	44.9E	PCN 6			KGWC
36	110753	19.4S	43.9E	PCN 5	T0.5/0.5+	INIT OBS	KGWC

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION		INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	081800	16.9S	56.0E	035	090	61976 61995 SHIP
2	090000	16.8S	55.3E	040	070	61976 61995 61984
3	090600	17.0S	53.8E	035	080	61976 61995 61984

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

TROPICAL CYCLONE 20S
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
021018Z	14.5	127.2	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.
021106Z	14.5	126.0	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.
021118Z	14.7	124.3	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.
021206Z	15.1	122.6	35	15.1	122.2	35.	23.	0.	16.2	118.0	45.	13.	-10.	17.8	115.1	55.	234.	0.	0.0	0.0	0.	-0.	0.
021218Z	15.9	120.4	45	16.0	120.7	45.	18.	0.	17.7	116.9	65.	140.	10.	19.7	113.2	70.	333.	15.	0.0	0.0	0.	-0.	0.
021306Z	16.3	117.8	55	16.6	117.6	55.	21.	0.	18.8	113.2	75.	139.	20.	21.0	109.1	95.	314.	45.	0.0	0.0	0.	-0.	0.
021318Z	16.9	114.6	55	16.8	114.6	55.	6.	0.	18.8	108.7	55.	74.	0.	21.3	104.3	50.	255.	10.	0.0	0.0	0.	-0.	0.
021406Z	17.8	111.0	55	18.0	110.8	50.	17.	-5.	20.5	104.5	40.	66.	-10.	22.7	99.9	35.	317.	0.	0.0	0.0	0.	-0.	0.
021418Z	18.8	107.4	55	19.2	107.5	65.	25.	10.	22.5	102.3	55.	201.	15.	25.8	99.9	45.	578.	15.	0.0	0.0	0.	-0.	0.
021506Z	19.7	103.7	50	19.5	103.8	60.	19.	10.	22.3	97.6	45.	230.	10.	25.9	94.2	35.	483.	10.	0.0	0.0	0.	-0.	0.
021518Z	20.0	99.9	40	20.5	101.5	45.	95.	5.	23.0	98.1	35.	389.	5.	26.1	95.3	25.	566.	5.	0.0	0.0	0.	-0.	0.
021606Z	18.7	96.2	35	18.5	96.0	40.	17.	5.	19.7	89.1	35.	91.	10.	23.8	84.8	30.	291.	10.	0.0	0.0	0.	-0.	0.
021618Z	18.5	93.1	30	18.3	93.1	35.	12.	5.	20.4	87.4	30.	80.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021706Z	18.7	90.3	25	18.5	90.5	30.	17.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021718Z	19.3	88.2	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.
021806Z	19.1	86.1	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.

	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	24.	142.	375.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	17.	89.	229.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	10.	12.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	3.	6.	12.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	11	10	9	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2408. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

TROPICAL CYCLONE 20S
FIX POSITIONS FOR CYCLONE NO. 20

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	101800	14.5S	127.3E	PCN 6			PGTW
2	102100	14.5S	126.8E	PCN 6			PGTW
3	110000	14.3S	126.6E	PCN 6		ULCC 14.4S 126.2E	PGTW
4	110249	14.0S	126.4E	PCN 3		EXP LLCC	KGWC
5	110300	14.1S	125.9E	PCN 6		ULCC FIX	PGTW
6	110600	14.8S	126.2E	PCN 4		EXP LLCC ULCC 13.9S 125.6E	PGTW
7	110817	14.3S	125.3E	PCN 6			KGWC
8	110900	15.3S	126.0E	PCN 6		ULCC 13.9S 125.2E	PGTW
9	110907	14.2S	125.2E	PCN 6			KGWC
10	111200	14.5S	125.5E	PCN 6			PGTW
11	111348	14.6S	124.6E	PCN 6		ULAC 13.9S 123.6E	KGWC
12	111600	14.3S	124.9E	PCN 6	T2.0/2.0	INIT OBS	PGTW
13	111800	14.4S	124.6E	PCN 6			PGTW
14	111920	15.2S	124.2E	PCN 6		ULAC 13.6S 124.3E	KGWC
15	112100	14.4S	124.2E	PCN 6			PGTW
16	112147	15.0S	123.6E	PCN 5		ULAC 12.8S 123.4E	KGWC
17	120000	15.1S	123.2E	PCN 6			PGTW
18	120229	14.9S	122.4E	PCN 5	T1.5/1.5	INIT OBS ULAC 13.7S 122.2E	KGWC
19	120300	15.0S	123.0E	PCN 6	T2.0/2.0	INIT OBS	PGTW
20	120600	15.0S	122.4E	PCN 6			PGTW
21	120804	15.2S	121.4E	PCN 5		ULAC 15.5S 122.5E	KGWC
22	120900	15.2S	122.0E	PCN 6			PGTW
23	121027	15.2S	121.8E	PCN 6		ULAC 15.9S 122.5E	KGWC
24	121200	15.4S	121.6E	PCN 6			PGTW
* 25	121328	16.6S	120.6E	PCN 6	T2.5/2.5	INIT OBS ULCC 15.5S 121.1E	KGWC
26	121600	15.8S	121.0E	PCN 6	T3.0/3.0 /D1.0/24HRS		PGTW
27	121800	15.8S	120.8E	PCN 6			PGTW
28	121907	16.8S	119.9E	PCN 6		ULAC 15.3S 121.0E	KGWC
29	122100	16.0S	120.1E	PCN 6			PGTW
30	122307	16.4S	119.0E	PCN 6		ULAC 15.3S 119.9E	KGWC
31	130000	16.0S	119.2E	PCN 6		ULCC FIX	PGTW
32	130209	16.1S	118.9E	PCN 5	T2.5/2.5 /D1.0/24HRS		KGWC
33	130300	16.0S	118.3E	PCN 6	T3.5/3.5 /D1.5/24HRS	ULCC FIX	PGTW
34	130600	16.3S	117.6E	PCN 6		ULCC FIX	PGTW
35	130752	16.4S	117.4E	PCN 5			KGWC
36	130900	16.5S	116.8E	PCN 6		ULCC FIX	PGTW
37	131006	16.3S	116.5E	PCN 2		EYE FIX	KGWC
38	131200	16.6S	116.1E	PCN 6		ULCC FIX	PGTW
39	131449	16.5S	115.5E	PCN 6	T3.0/3.0 /D0.5/25HRS		KGWC
40	131600	16.7S	115.1E	PCN 6	T3.0/3.0 /S0.0/24HRS		PGTW
41	131800	17.9S	114.6E	PCN 6			PGTW
42	132036	16.7S	113.4E	PCN 6			KGWC
43	132246	17.2S	112.5E	PCN 5			KGWC
44	140000	17.4S	112.6E	PCN 6		ULCC FIX	PGTW
45	140300	17.8S	111.5E	PCN 6	T3.0/3.5 /W0.5/24HRS		PGTW
46	140330	17.6S	111.9E	PCN 5	T3.5/3.5 /D0.5/25HRS		KGWC
47	140600	18.0S	110.6E	PCN 6			PGTW
48	140900	18.2S	110.0E	PCN 6		ULCC FIX	PGTW
49	140921	18.1S	109.6E	PCN 5			KGWC
50	141126	17.8S	109.3E	PCN 6			KGWC
51	141200	18.5S	109.3E	PCN 6			PGTW
52	141429	18.8S	108.5E	PCN 6	T4.0/4.0 /D1.0/24HRS		KGWC
53	142024	19.9S	107.1E	PCN 6			KGWC
54	150000	19.1S	105.4E	PCN 6			PGTW

55	150006	19.3S	105.7E	PCN 6				KGWC
56	150300	19.2S	104.4E	PCN 6	T3.0/3.0 /S0.0/24HRS			PGTW
57	150310	19.5S	104.8E	PCN 5	T3.5/3.5 /S0.0/24HRS			KGWC
58	150600	19.4S	103.6E	PCN 6				PGTW
59	150837	21.0S	101.7E	PCN 5	T1.5/1.5	INIT OBS		FJDG
60	150900	19.7S	103.1E	PCN 6				PGTW
61	150908	20.1S	103.2E	PCN 5				KGWC
* 62	151200	20.0S	103.2E	PCN 6				PGTW
63	151550	20.5S	100.5E	PCN 6	T2.5/3.5 /W1.5/25HRS			KGWC
* 64	151600	20.5S	102.0E	PCN 6	T1.5/1.5	INIT OBS		PGTW
* 65	151800	20.2S	101.7E	PCN 6				PGTW
* 66	152011	21.1S	100.0E	PCN 6				KGWC
67	152153	19.5S	98.4E	PCN 6		EXP LLCC		KGWC
68	152315	18.8S	97.9E	PCN 4		EXP LLCC		KGWC
69	160300	18.7S	97.0E	PCN 4	T2.0/3.0 /W1.0/24HRS			PGTW
70	160431	18.6S	96.8E	PCN 4	T0.0/1.0 /W2.5/25HRS	EXP LLCC		KGWC
71	160600	18.5S	96.1E	PCN 4				PGTW
72	160819	18.5S	95.5E	PCN 5	T1.0/1.5 /W0.5/24HRS			FJDG
73	160900	18.4S	95.2E	PCN 6				PGTW
74	161038	18.5S	94.5E	PCN 4		EXP LLCC		KGWC
75	161200	18.4S	94.8E	PCN 6		EXP LLCC		PGTW
76	161225	18.4S	95.0E	PCN 4		EXP LLCC		KGWC
77	161530	18.3S	93.8E	PCN 4		EXP LLCC		KGWC
78	161600	18.3S	93.7E	PCN 4	T1.5/1.5	INIT OBS	EXP LLCC	PGTW
79	162140	18.5S	93.0E	PCN 4		EXP LLCC		KGWC
80	170105	18.6S	92.0E	PCN 4		EXP LLCC		KGWC
81	170300	18.9S	91.1E	PCN 6				PGTW
82	170411	18.3S	91.2E	PCN 4	T1.5/1.5 /D1.5/24HRS	EXP LLCC		KGWC
83	170600	19.1S	90.4E	PCN 6	T0.5/1.0 /W1.5/24HRS			PGTW
84	170815	18.5S	90.4E	PCN 5	T0.5/1.0 /W0.5/24HRS			FJDG
85	171510	19.8S	89.4E	PCN 6				KGWC
86	180350	18.7S	86.6E	PCN 6	T0.0/1.0 /W1.5/24HRS	EXP LLCC		KGWC
87	180947	19.2S	84.9E	PCN 5	T0.0/0.5 /D0.5/24HRS	EXP LLCC		FJDG

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

TROPICAL CYCLONE 21S
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
021312Z	15.0	44.1	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.
021400Z	15.0	45.1	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.
021412Z	14.9	46.1	40	15.0	45.8	40.	18.	0.	14.9	46.7	40.	106.	-5.	14.7	47.5	35.	171.	-10.	0.0	0.0	0.	-0.	0.
021500Z	14.3	46.2	40	14.8	46.8	40.	46.	0.	14.6	48.5	30.	209.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021512Z	13.5	45.6	45	14.1	46.3	40.	54.	-5.	14.1	46.3	40.	115.	-5.	13.8	47.0	40.	83.	5.	0.0	0.0	0.	-0.	0.
021600Z	12.7	45.5	50	12.5	44.8	40.	43.	-10.	11.2	43.9	45.	179.	5.	10.2	43.2	45.	321.	10.	0.0	0.0	0.	-0.	0.
021612Z	12.2	46.1	45	12.2	45.6	40.	29.	-5.	10.9	45.2	45.	166.	10.	10.0	44.7	45.	295.	15.	0.0	0.0	0.	-0.	0.
021700Z	12.1	46.8	40	12.1	46.1	45.	41.	5.	11.4	46.6	45.	124.	10.	10.5	47.5	40.	232.	20.	0.0	0.0	0.	-0.	0.
021712Z	12.5	47.5	35	12.3	47.5	40.	12.	5.	11.7	48.6	40.	125.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021800Z	13.1	47.8	35	13.2	47.8	35.	54.	0.	12.0	48.6	30.	140.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021812Z	13.7	48.0	30	13.3	48.3	35.	30.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021900Z	14.3	48.2	20	14.3	48.2	25.	0.	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	33.	145.	220.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	19.	65.	129.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	9.	12.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	2.	8.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	10	8	5	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 511. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 4. KNOTS

TROPICAL CYCLONE 21S
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
021406Z	15.0	45.6	40	14.8	46.2	40.	37.	0.	14.6	48.1	30.	135.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021418Z	14.6	46.3	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.
021506Z	13.9	45.9	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.
021518Z	13.1	45.5	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.
021606Z	12.4	45.8	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.

	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	37.	135.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	5.	105.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	0.	15.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	-15.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	1	1	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 194. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 4. KNOTS

TROPICAL CYCLONE 21S
FIX POSITIONS FOR CYCLONE NO. 21

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	130713	15.0S	43.6E	PCN 5	T1.5/1.5	INIT OBS	KGWC
2	131258	14.8S	44.6E	PCN 5			KGWC
3	131510	15.0S	44.6E	PCN 5			KGWC
4	131812	15.1S	43.7E	PCN 6			KGWC
5	140000	15.1S	45.8E	PCN 4		EXP LLCC	KGWC
6	140350	14.8S	46.1E	PCN 6		ULAC 14.8S 045.5E	KGWC
7	140653	15.2S	45.1E	PCN 5	T2.5/2.5 /D1.0/24HRS	ULAC 14.9S 045.1E	KGWC
8	141245	14.8S	45.7E	PCN 5			KGWC
9	141448	14.4S	46.3E	PCN 5			KGWC
10	141933	15.2S	46.5E	PCN 6	T2.5/2.5	INIT OBS ULAC 14.9S 046.5E	KGWC

11	150130	14.7S	46.3E	PCN 6			ULAC 14.8S 046.1E	KGWC
12	150329	14.3S	46.3E	PCN 3			EXP LLCC ULAC 14.2S 046.2E	KGWC
13	150632	13.8S	45.7E	PCN 4	T3.0/3.0	/D0.5/24HRS		KGWC
14	151232	13.5S	45.6E	PCN 6				KGWC
15	151427	13.4S	45.0E	PCN 5				KGWC
16	151853	12.4S	46.6E	PCN 4	T3.0/3.5	/W0.5/24HRS	EXP LLCC	KGWC
17	151913	13.1S	45.5E	PCN 5	T3.5/3.5	/D1.0/24HRS	ULAC 13.2S 045.7E	KGWC
18	160114	12.6S	45.6E	PCN 6			ULAC 11.8S 043.7E	KGWC
19	160307	12.5S	45.5E	PCN 5			ULAC 12.2S 044.3E	KGWC
20	160745	12.5S	45.9E	PCN 3	T2.5/3.0	/W0.5/25HRS	EXP LLCC ULAC 11.5S 042.5E	KGWC
21	161547	12.3S	46.6E	PCN 4			EXP LLCC ULAC 13.9S 044.8E	KGWC
22	170104	12.4S	47.4E	PCN 4				KGWC
23	170246	12.0S	47.0E	PCN 4			EXP LLCC	KGWC
24	170733	12.4S	47.3E	PCN 5	T2.5/2.5	/S0.0/24HRS		KGWC
25	171526	12.4S	47.0E	PCN 6				KGWC
* 26	171832	13.2S	46.2E	PCN 6	T2.0/2.5	/W0.5/24HRS		KGWC
* 27	180052	13.1S	46.6E	PCN 6				KGWC
28	180406	13.1S	48.1E	PCN 6				KGWC
29	180713	13.4S	48.0E	PCN 5	T1.5/2.5	/W1.0/24HRS		KGWC
* 30	181127	14.4S	52.7E	PCN 5	T2.0/2.0		INIT OBS	FJDG
31	181505	13.8S	47.9E	PCN 6				KGWC
32	181812	14.0S	48.0E	PCN 6				KGWC

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION		INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
* 1	180000	12.1S	47.7E	035	045	61968

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

TROPICAL CYCLONE 22S
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
021306Z	12.1	101.2	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.
021318Z	12.8	99.7	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.
021406Z	13.3	100.8	40	13.0	100.2	35.	39.	-5.	13.8	97.7	50.	290.	10.	14.9	93.7	65.	659.	20.	0.0	0.0	0.	-0.	0.
021418Z	13.1	101.6	40	14.4	99.4	40.	150.	0.	17.5	98.8	45.	392.	0.	21.2	100.3	35.	476.	-15.	0.0	0.0	0.	-0.	0.
021506Z	13.0	102.6	40	13.1	100.1	40.	146.	0.	13.7	99.3	35.	332.	-10.	14.0	98.5	35.	351.	-10.	0.0	0.0	0.	-0.	0.
021518Z	13.1	103.8	45	14.0	100.9	40.	178.	-5.	14.7	101.4	35.	238.	-15.	15.4	101.8	35.	113.	-10.	0.0	0.0	0.	-0.	0.
021606Z	13.9	105.0	45	13.8	105.1	45.	8.	0.	16.0	106.7	55.	144.	10.	18.2	104.9	45.	175.	0.	0.0	0.0	0.	-0.	0.
021618Z	15.0	105.5	50	14.8	106.3	50.	48.	0.	17.3	106.4	60.	192.	15.	18.9	104.0	65.	188.	20.	0.0	0.0	0.	-0.	0.
021706Z	16.0	104.2	45	15.9	104.5	45.	18.	0.	17.9	101.2	45.	44.	0.	19.0	96.4	40.	203.	0.	0.0	0.0	0.	-0.	0.
021718Z	16.8	103.1	45	17.2	103.2	45.	25.	0.	18.7	101.3	40.	35.	-5.	20.1	98.2	40.	67.	0.	0.0	0.0	0.	-0.	0.
021806Z	17.6	101.9	45	17.9	101.2	45.	44.	0.	19.6	98.3	40.	91.	0.	20.8	96.1	35.	132.	-5.	0.0	0.0	0.	-0.	0.
021818Z	18.6	100.7	45	18.5	100.5	45.	13.	0.	20.5	98.5	35.	41.	-5.	22.6	96.7	30.	56.	-5.	0.0	0.0	0.	-0.	0.
021906Z	19.7	99.9	40	19.5	99.6	45.	21.	5.	21.1	98.2	35.	42.	-5.	22.8	97.1	35.	239.	5.	0.0	0.0	0.	-0.	0.
021918Z	20.7	99.2	40	20.6	99.7	40.	29.	0.	22.7	100.9	35.	253.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022006Z	21.8	98.2	40	21.8	98.8	40.	33.	0.	24.1	98.3	30.	236.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022018Z	23.5	96.4	35	23.7	97.2	30.	46.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022106Z	26.0	94.5	30	25.8	94.6	30.	13.	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	54.	179.	242.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	26.	94.	130.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	6.	8.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	-0.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	15	13	11	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1416. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL CYCLONE 22S
FIX POSITIONS FOR CYCLONE NO. 22

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE		COMMENTS	SITE
1	130000	11.4S	102.6E	PCN 6			ULCC FIX	PGTW
2	130300	11.5S	101.4E	PCN 6	T1.5/1.5		INIT OBS ULCC FIX	PGTW
3	130900	12.1S	101.1E	PCN 6			ULCC FIX	PGTW
4	131200	12.2S	100.2E	PCN 6			ULCC FIX	PGTW
5	131449	12.7S	99.9E	PCN 6	T1.5/1.5		INIT OBS ULAC 12.2S 099.7E	KGWC
6	131600	12.5S	99.4E	PCN 6	T1.5/1.5		INIT OBS	PGTW
7	131800	12.7S	98.8E	PCN 6				PGTW
8	132036	12.9S	98.8E	PCN 6				KGWC
9	140000	13.3S	101.1E	PCN 6				PGTW
10	140027	12.5S	99.8E	PCN 6			ULAC 12.5S 100.6E	KGWC
11	140300	13.3S	100.9E	PCN 6	T3.0/3.0	/D1.5/24HRS	ULCC FIX	PGTW
12	140330	12.6S	100.0E	PCN 5	T1.5/1.5		INIT OBS ULAC 12.7S 100.1E	KGWC
13	140600	13.6S	101.2E	PCN 6				PGTW
14	140900	14.0S	101.3E	PCN 6				PGTW
* 15	140921	12.5S	99.7E	PCN 5				KGWC
* 16	141126	13.2S	99.6E	PCN 6				KGWC
* 17	141429	13.9S	99.9E	PCN 6				KGWC
* 18	142024	13.6S	99.8E	PCN 6				KGWC
19	150000	12.2S	102.1E	PCN 6				PGTW
* 20	150006	13.4S	100.0E	PCN 6				KGWC
21	150300	12.8S	102.4E	PCN 4	T2.5/3.0	/W0.5/24HRS	EXP LLCC	PGTW
* 22	150310	13.1S	100.0E	PCN 5	T1.0/1.5	/W0.5/24HRS	ULAC 12.6S 100.4E	KGWC
23	150600	13.0S	102.6E	PCN 4			EXP LLCC	PGTW
24	150900	12.9S	102.4E	PCN 6				PGTW
* 25	150908	12.5S	99.9E	PCN 5				KGWC
26	151200	12.9S	103.0E	PCN 6				PGTW
* 27	151550	13.8S	102.0E	PCN 6	T2.5/2.5		ULAC 12.7S 103.3E	KGWC
28	151600	13.0S	103.6E	PCN 6	T3.0/3.0		INIT OBS	PGTW
29	151800	13.1S	103.9E	PCN 6				PGTW
30	152010	13.0S	103.6E	PCN 6				KGWC
31	152100	13.3S	104.1E	PCN 6				PGTW

32	152153	13.5S	103.6E	PCN 6					KGWC
33	152315	12.9S	103.5E	PCN 6					KGWC
34	160249	13.6S	105.0E	PCN 5	T2.5/2.5	/D1.5/24HRS			KGWC
35	160300	13.7S	104.9E	PCN 6	T3.0/3.0	/D0.5/24HRS			PGTW
36	160600	14.1S	105.2E	PCN 6					PGTW
* 37	160819	14.5S	103.7E	PCN 5	T2.5/2.5		INIT OBS		FJDG
38	160856	14.0S	104.5E	PCN 6					KGWC
39	160900	14.5S	105.3E	PCN 6					PGTW
40	161200	14.6S	105.8E	PCN 6					PGTW
41	161530	15.5S	104.4E	PCN 6	T3.0/3.0	/D0.5/24HRS	ULAC 15.3S	105.1E	KGWC
42	161600	15.5S	106.1E	PCN 6	T3.0/3.0	/S0.0/24HRS			PGTW
43	162140	16.2S	105.0E	PCN 6			ULAC 15.9S	103.7E	KGWC
44	162323	16.2S	104.7E	PCN 6					KGWC
45	170000	15.6S	104.5E	PCN 6					PGTW
46	170300	15.9S	104.0E	PCN 6	T2.5/3.0	/W0.5/24HRS			PGTW
47	170411	15.6S	104.7E	PCN 4	T2.5/2.5	/S0.0/25HRS	ULAC 15.0S	104.7E	KGWC
48	170600	15.8S	103.6E	PCN 6					PGTW
49	170815	16.5S	103.5E	PCN 5					FJDG
50	170843	15.8S	103.7E	PCN 5			ULAC 16.0S	103.8E	KGWC
51	170900	15.9S	103.2E	PCN 6			ULCC FIX		PGTW
52	171023	16.2S	103.5E	PCN 6					KGWC
53	171200	16.5S	102.8E	PCN 6					PGTW
54	171510	17.1S	103.8E	PCN 6	T3.0/3.0	/S0.0/25HRS			KGWC
55	171600	17.1S	103.0E	PCN 6	T2.5/3.0	/W0.5/24HRS			PGTW
56	171800	17.3S	103.6E	PCN 6					PGTW
57	172304	17.3S	102.4E	PCN 6					KGWC
58	180000	17.5S	102.4E	PCN 6					PGTW
59	180300	17.6S	101.9E	PCN 6	T3.0/3.0	/D0.5/24HRS			PGTW
60	180350	17.4S	102.6E	PCN 6	T3.5/3.5	/D1.0/24HRS			KGWC
61	180600	17.8S	101.2E	PCN 6					PGTW
62	180900	17.6S	100.8E	PCN 6					PGTW
63	181013	17.9S	101.6E	PCN 2					KGWC
64	181142	17.8S	101.8E	PCN 2					KGWC
65	181200	17.6S	100.7E	PCN 6					PGTW
66	181449	18.6S	101.6E	PCN 6	T3.0/3.0	/S0.0/24HRS	ULAC 18.1S	100.9E	KGWC
67	181600	18.2S	100.8E	PCN 6	T2.5/2.5	/S0.0/24HRS			PGTW
68	181800	18.6S	100.7E	PCN 6					PGTW
69	182100	18.9S	100.6E	PCN 6					PGTW
70	190022	19.3S	101.3E	PCN 6			ULAC 19.2S	100.9E	KGWC
71	190300	19.0S	99.8E	PCN 6	T3.0/3.0	/S0.0/24HRS			PGTW
72	190330	19.0S	100.6E	PCN 5	T2.0/3.0	/W1.5/24HRS	ULAC 19.5S	101.3E	KGWC
73	190600	19.6S	99.5E	PCN 6					PGTW
74	190753	19.0S	100.0E	PCN 5			ULAC 19.6S	100.2E	KGWC
75	191121	19.3S	99.7E	PCN 6			ULAC 20.1S	099.0E	KGWC
76	191200	20.0S	99.5E	PCN 6					PGTW
77	191600	20.7S	99.7E	PCN 6	T2.5/2.5	/S0.0/24HRS			PGTW
78	191800	20.7S	99.8E	PCN 6					PGTW
79	191856	20.9S	99.7E	PCN 6					KGWC
80	192100	21.0S	99.5E	PCN 6					PGTW
81	200000	21.0S	99.1E	PCN 6					PGTW
82	200001	20.6S	98.4E	PCN 4					KGWC
83	200300	21.3S	98.1E	PCN 6	T2.5/3.0	/W0.5/24HRS			PGTW
84	200310	21.0S	98.1E	PCN 3	T2.0/2.0	/S0.0/24HRS	EXP LLCC		KGWC
85	200600	21.7S	97.3E	PCN 6					PGTW
86	200742	21.9S	98.2E	PCN 3			EXP LLCC		KGWC
* 87	201100	23.3S	97.0E	PCN 4			EXP LLCC		KGWC
88	201550	23.4S	96.6E	PCN 6					KGWC
89	202340	24.4S	95.6E	PCN 4			EXP LLCC		KGWC
90	210300	25.2S	94.7E	PCN 6	T2.0/2.5	/W0.5/24HRS			PGTW
91	210431	25.6S	95.1E	PCN 4	T0.5/1.5	/W1.5/24HRS	EXP LLCC		KGWC
92	210600	25.6S	94.2E	PCN 6					PGTW

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

TROPICAL CYCLONE 23S 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
021300Z	18.2	60.1	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.
021312Z	18.9	59.1	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.
021400Z	17.8	58.5	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.
021412Z	16.4	58.0	35	16.8	58.5	35.	37.	0.	17.2	59.6	55.	172.	15.	18.0	58.4	65.	182.	20.	0.0	0.0	0.	-0.	0.
021500Z	16.0	57.3	35	15.0	56.5	40.	76.	5.	14.7	54.9	50.	182.	10.	14.6	53.2	65.	171.	20.	0.0	0.0	0.	-0.	0.
021512Z	16.2	56.8	40	16.0	58.5	40.	99.	0.	17.1	57.9	35.	133.	-10.	16.9	56.6	35.	105.	-10.	0.0	0.0	0.	-0.	0.
021600Z	16.3	56.2	40	16.8	56.8	40.	46.	0.	17.2	55.1	35.	45.	-10.	17.5	53.3	35.	70.	-10.	0.0	0.0	0.	-0.	0.
021612Z	16.4	55.7	45	16.3	55.7	45.	6.	0.	16.4	53.5	50.	76.	5.	16.9	51.9	50.	86.	10.	0.0	0.0	0.	-0.	0.
021700Z	16.5	55.4	45	16.0	54.3	45.	70.	0.	16.0	52.2	50.	123.	5.	16.3	50.2	50.	154.	10.	0.0	0.0	0.	-0.	0.
021712Z	16.6	54.8	45	16.5	55.5	40.	41.	-5.	16.5	54.6	50.	71.	10.	16.5	53.3	50.	76.	10.	0.0	0.0	0.	-0.	0.
021800Z	16.7	54.2	45	17.1	54.6	35.	33.	-10.	17.5	53.4	30.	50.	-10.	17.9	52.2	25.	34.	-20.	0.0	0.0	0.	-0.	0.
021812Z	16.8	53.4	40	17.8	53.6	40.	61.	0.	18.9	52.3	35.	102.	-5.	20.0	51.8	35.	93.	-15.	0.0	0.0	0.	-0.	0.
021900Z	16.9	52.8	40	18.2	52.8	35.	78.	-5.	19.1	51.4	35.	92.	-10.	20.3	50.0	30.	48.	-25.	0.0	0.0	0.	-0.	0.
021912Z	17.2	52.2	40	17.3	52.8	35.	35.	-5.	17.8	50.9	30.	42.	-20.	19.2	49.4	30.	98.	-30.	0.0	0.0	0.	-0.	0.
022000Z	17.6	51.7	45	16.4	51.7	40.	72.	-5.	16.7	50.4	35.	174.	-20.	17.8	49.9	35.	234.	-30.	0.0	0.0	0.	-0.	0.
022012Z	18.5	50.8	50	17.2	51.2	40.	81.	-10.	17.7	50.4	35.	181.	-25.	18.2	49.7	35.	256.	-25.	0.0	0.0	0.	-0.	0.
022100Z	19.6	50.4	55	19.0	50.3	50.	36.	-5.	20.1	49.5	45.	102.	-20.	20.9	49.1	35.	156.	-20.	0.0	0.0	0.	-0.	0.
022112Z	20.7	50.1	60	20.8	50.4	45.	18.	-15.	22.4	50.4	40.	6.	-20.	23.6	50.3	35.	68.	-15.	0.0	0.0	0.	-0.	0.
022200Z	21.7	50.1	65	21.6	50.2	70.	8.	5.	23.2	49.9	65.	58.	10.	24.4	49.8	50.	151.	5.	0.0	0.0	0.	-0.	0.
022212Z	22.4	50.5	60	22.8	50.4	70.	25.	10.	24.6	50.6	65.	92.	15.	26.2	50.8	55.	157.	15.	0.0	0.0	0.	-0.	0.
022300Z	22.9	50.9	55	23.1	50.5	55.	25.	0.	24.7	50.9	45.	100.	0.	26.2	51.3	40.	101.	5.	0.0	0.0	0.	-0.	0.
022312Z	23.3	51.5	50	23.7	51.2	45.	29.	-5.	25.2	51.8	35.	77.	-5.	26.6	52.6	30.	28.	0.	0.0	0.0	0.	-0.	0.
022400Z	23.9	52.5	45	23.5	51.9	45.	41.	0.	24.3	52.8	35.	54.	0.	25.3	53.7	30.	102.	0.	0.0	0.0	0.	-0.	0.
022412Z	24.4	52.9	40	24.5	53.2	40.	17.	0.	25.7	54.6	35.	93.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022500Z	25.2	52.8	35	25.4	54.1	40.	72.	5.	27.2	55.7	35.	102.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022512Z	26.3	53.0	30	25.6	53.3	30.	45.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022600Z	27.0	53.8	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.

	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.	94.	119.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	31.	53.	58.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	11.	15.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-2.	-3.	-5.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	23	22	20	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1298. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 4. KNOTS

TROPICAL CYCLONE 23S
FIX POSITIONS FOR CYCLONE NO. 23

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	120552	16.3S	62.9E	PCN 6	T1.5/1.5	INIT OBS	KGWC
2	121832	17.5S	60.4E	PCN 6			KGWC
3	130013	18.2S	59.9E	PCN 6		ULAC 18.1S 059.3E	KGWC
4	130713	19.1S	59.0E	PCN 5	T1.0/1.5 /W0.5/24HRS		KGWC
5	131258	18.4S	59.3E	PCN 5			KGWC
6	131328	18.2S	59.8E	PCN 6			KGWC
* 7	131812	19.3S	59.8E	PCN 6			KGWC
8	140000	18.7S	58.6E	PCN 6			KGWC
9	140209	17.9S	59.0E	PCN 6			KGWC
10	140653	16.2S	57.7E	PCN 5	T1.5/1.5 /D0.5/25HRS		KGWC
* 11	141030	15.5S	56.0E	PCN 5	T1.0/1.0	INIT OBS	FJDG
12	141245	15.4S	58.1E	PCN 5		ULAC 15.1S 057.2E	KGWC
13	141448	15.3S	57.7E	PCN 6			KGWC
14	141752	15.7S	57.3E	PCN 6	T2.5/2.5	INIT OBS	KGWC
15	142348	16.0S	56.9E	PCN 6		ULAC 15.0S 056.6E	KGWC
16	150329	16.2S	57.8E	PCN 6			KGWC
17	150632	15.9S	57.9E	PCN 4	T1.5/1.5 /S0.0/24HRS	EXP LLCC	KGWC
18	151019	16.1S	57.9E	PCN 5	T1.5/1.5 /W0.5/24HRS		FJDG
19	151230	16.3S	57.5E	PCN 6		ULAC 15.9S 057.8E	KGWC
20	151427	16.5S	56.5E	PCN 6			KGWC
21	151732	16.5S	56.0E	PCN 6	T2.5/2.5 /S0.0/24HRS		KGWC
22	152335	15.9S	55.8E	PCN 6		ULAC 15.6S 055.5E	KGWC
23	160515	16.0S	55.9E	PCN 5		ULAC 15.6S 055.7E	KGWC
24	160612	15.8S	55.7E	PCN 6	T3.0/3.0 /D1.5/24HRS	ULAC 15.2S 055.6E	KGWC
* 25	161008	15.2S	54.0E	PCN 5			FJDG
* 26	161220	15.4S	54.8E	PCN 6		ULAC 15.3S 055.2E	KGWC
* 27	161406	15.3S	54.6E	PCN 6			KGWC
28	161853	16.7S	55.3E	PCN 6	T2.5/2.5 /S0.0/25HRS		KGWC
29	162322	16.9S	55.6E	PCN 6			KGWC
30	170246	16.3S	56.0E	PCN 4		EXP LLCC	KGWC
31	170733	16.7S	55.7E	PCN 5	T2.0/3.0 /W1.0/24HRS		KGWC
32	171207	16.9S	55.6E	PCN 6		ULAC 16.7S 053.7E	KGWC
* 33	171832	17.5S	55.0E	PCN 4	T1.5/2.5 /W1.0/24HRS	EXP LLCC ULAC 17.0S 052.0E	KGWC
34	180052	17.7S	54.6E	PCN 4		EXP LLCC ULAC 16.9S 051.9E	KGWC
* 35	180225	18.0S	53.9E	PCN 6			KGWC
36	180713	17.6S	53.7E	PCN 5	T1.5/2.0 /W0.5/24HRS	ULAC 16.0S 051.8E	KGWC
* 37	181505	17.9S	53.1E	PCN 5		ULAC 15.6S 052.1E	KGWC
38	181812	16.2S	52.9E	PCN 6	T2.5/2.5 /D1.0/24HRS	ULAC 15.3S 050.4E	KGWC
39	182231	17.4S	52.5E	PCN 6		ULAC 15.9S 052.4E	KGWC
40	190345	16.9S	52.8E	PCN 6		ULAC 15.3S 051.7E	KGWC
41	190653	16.9S	52.8E	PCN 5		ULAC 16.0S 052.3E	KGWC
42	191117	16.9S	52.3E	PCN 5		ULAC 16.9S 052.0E	KGWC
* 43	191117	15.8S	52.2E	PCN 5	T2.0/2.0 /S0.0/24HRS		FJDG
* 44	191443	16.3S	52.2E	PCN 1		EYE FIX ULAC 16.4S 052.6E	KGWC
* 45	191752	16.0S	52.5E	PCN 6	T3.0/3.0 /D0.5/24HRS	ULAC 16.2S 052.2E	KGWC
46	200324	17.4S	52.2E	PCN 6			KGWC
47	200633	17.8S	51.9E	PCN 6	T2.5/2.5 /S0.0/24HRS	ULAC 18.3S 052.3E	KGWC
48	201106	18.9S	50.6E	PCN 5			KGWC
49	201108	18.1S	51.7E	PCN 5	T2.5/2.5 /S0.0/24HRS		FJDG
50	201423	18.5S	50.5E	PCN 6			KGWC
51	201913	19.3S	50.2E	PCN 6	T3.5/3.5 /D0.5/25HRS		KGWC
52	202210	20.0S	51.0E	PCN 6			KGWC
53	210302	20.8S	50.5E	PCN 6			KGWC
54	210754	20.6S	50.8E	PCN 5	T3.0/3.0 /D0.5/25HRS		KGWC
55	211056	21.4S	50.1E	PCN 4		EYE FIX	KGWC
56	211058	20.4S	49.5E	PCN 5			FJDG
57	211401	21.4S	48.8E	PCN 4		EYE FIX	KGWC
58	211853	21.3S	50.0E	PCN 5	T4.5/4.5 /D1.0/24HRS	EYE FIX	KGWC
59	220241	21.8S	50.1E	PCN 6			KGWC
60	220733	22.6S	50.8E	PCN 5	T3.0/3.0 /S0.0/24HRS		KGWC
61	221045	22.6S	50.7E	PCN 6			KGWC
62	221521	22.5S	52.2E	PCN 6		ULAC 22.5S 052.2E	KGWC
63	221833	22.1S	50.9E	PCN 6	T2.5/3.5 /W2.0/24HRS	EXP LLCC ULAC 22.5S 053.0E	KGWC
* 64	222148	21.8S	53.1E	PCN 6		ULAC 22.7S 054.2E	KGWC
65	230410	22.4S	50.6E	PCN 5		ULAC 23.8S 051.8E	KGWC
66	230713	22.8S	51.3E	PCN 5	T2.5/3.0 /W0.5/24HRS	ULAC 23.0S 051.5E	KGWC
* 67	231034	22.7S	52.4E	PCN 6		ULAC 24.0S 052.1E	KGWC
68	231500	23.0S	51.6E	PCN 5		ULAC 24.0S 052.2E	KGWC
69	231812	23.2S	52.5E	PCN 6	T3.0/3.0 /D0.5/24HRS	ULAC 24.6S 052.2E	KGWC
70	232320	23.4S	53.2E	PCN 6		ULAC 24.5S 052.6E	KGWC
71	240340	24.3S	52.6E	PCN 6			KGWC
72	240653	24.3S	53.0E	PCN 5	T2.5/2.5 /S0.0/24HRS	ULAC 24.6S 054.3E	KGWC
73	241023	24.4S	53.2E	PCN 6		ULAC 24.8S 054.6E	KGWC
74	241024	24.6S	53.0E	PCN 5	T2.5/2.5	INIT OBS	FJDG
75	241438	24.3S	53.8E	PCN 6			KGWC
* 76	241752	25.4S	54.6E	PCN 6			KGWC
* 77	242127	26.1S	53.9E	PCN 6		ULAC 27.0S 055.6E	KGWC
78	250319	25.2S	53.0E	PCN 3		EXP LLCC	KGWC
79	250633	25.4S	52.8E	PCN 3	T1.0/2.0 /W1.5/24HRS	EXP LLCC	KGWC
80	251155	25.6S	52.6E	PCN 3		EXP LLCC	KGWC
81	251732	25.9S	53.0E	PCN 4		EXP LLCC	KGWC
* 82	260612	26.6S	53.8E	PCN 6	T2.0/2.0 /D1.0/24HRS		KGWC
83	261712	27.5S	55.0E	PCN 6			KGWC
84	270734	30.3S	54.2E	PCN 6	T1.0/2.0 /W1.0/25HRS		KGWC
85	271833	30.7S	53.2E	PCN 4			KGWC
86	280713	32.6S	53.1E	PCN 3		EXP LLCC	KGWC

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

TROPICAL CYCLONE 24S
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
021812Z	11.9	75.7	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.
021900Z	12.8	77.6	35	14.0	73.4	35.	255.	0.	16.3	70.0	55.	627.	25.	17.7	67.0	70.1	1124.	45.	0.0	0.0	0.	-0.	0.
021912Z	13.8	79.1	35	13.4	79.4	35.	30.	0.	16.8	80.4	45.	167.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022000Z	15.2	80.8	30	15.4	80.4	35.	26.	5.	18.3	79.2	35.	427.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022012Z	17.0	83.3	25	16.7	81.1	30.	128.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022100Z	18.6	86.7	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.

	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	110.	407.	1124.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	76.	239.	613.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	18.	45.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	3.	18.	45.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	4	3	1	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 756. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

TROPICAL CYCLONE 24S
FIX POSITIONS FOR CYCLONE NO. 24

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	170552	13.0S	73.6E	PCN 6	T1.5/1.5	INIT OBS	KGWC
2	170958	12.7S	71.3E	PCN 5	T1.5/1.5	INIT OBS	KGWC
3	171651	12.2S	70.0E	PCN 6		ULAC 11.9S 089.8E	KGWC
4	180532	12.3S	75.3E	PCN 4	T2.5/2.5 /D1.0/24HRS	ULAC 11.5S 073.2E	KGWC
5	180947	11.5S	76.2E	PCN 5	T2.0/2.0 /D0.5/24HRS		KGWC
6	181155	11.9S	75.6E	PCN 4		ULAC 12.2S 073.4E	KGWC
7	181323	11.8S	75.9E	PCN 6		ULAC 12.1S 073.8E	KGWC
* 8	181631	13.8S	74.2E	PCN 6	T2.6/2.6	INIT OBS ULAC 12.0S 74.9E	KGWC
9	190204	13.4S	77.4E	PCN 4		ULAC 13.3S 074.6E	KGWC
* 10	190511	13.7S	73.1E	PCN 6	T3.5/3.5 /D1.0/24HRS	ULAC 13.4S 74.0E	KGWC
* 11	190935	13.9S	79.9E	PCN 4		ULAC 12.4S 71.7E	KGWC
12	190935	13.5S	79.2E	PCN 5	T3.5/3.5 /D1.5/24HRS		KGWC
* 13	191302	14.4S	80.3E	PCN 4		EXP LLCC ULAC 13.6S 71.8E	KGWC
14	191611	15.0S	79.9E	PCN 4	T1.5/2.5 /W1.0/27HRS	EXP LLCC	KGWC
15	200142	15.2S	80.5E	PCN 4		EXP LLCC	KGWC
16	200451	16.4S	81.8E	PCN 4	T0.5/1.5 /W2.5/24HRS	EXP LLCC	KGWC
17	200924	16.3S	82.5E	PCN 4		EXP LLCC	KGWC
* 18	200925	15.2S	81.2E	PCN 5	T1.5/2.5 /W1.5/24HRS		KGWC
19	201241	16.6S	83.8E	PCN 4		EXP LLCC	FJDG
20	201550	18.4S	84.9E	PCN 6			KGWC
21	210431	18.7S	88.2E	PCN 6	T0.5/1.0 /W0.5/24HRS		KGWC

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

TROPICAL CYCLONE 25S
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
021606Z	12.7	124.3	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.	0.0	0.0	0.	-0.	0.
021618Z	13.5	122.3	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.	0.0	0.0	0.	-0.	0.
021706Z	13.9	120.8	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.	0.0	0.0	0.	-0.	0.
021718Z	14.1	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.
021806Z	14.5	117.9	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.
021818Z	15.1	116.9	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.
021906Z	15.3	115.6	45	15.4	115.3	40.	18.	-5.	16.5	112.6	55.	62.	-10.	18.6	110.0	65.	170.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
021918Z	15.4	114.0	55	15.3	113.7	45.	18.	-10.	15.9	110.6	55.	12.	-20.	17.2	106.7	65.	49.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022006Z	15.5	112.3	65	15.9	112.1	65.	27.	0.	17.1	109.1	75.	68.	10.	18.7	106.2	85.	149.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022018Z	15.7	110.6	75	16.0	110.4	75.	21.	0.	17.5	107.0	90.	72.	30.	19.5	102.4	75.	98.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022106Z	16.0	108.8	65	16.0	108.9	70.	6.	5.	17.0	105.4	65.	63.	10.	18.6	101.8	55.	54.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022118Z	16.4	106.5	60	16.5	106.5	60.	6.	0.	17.9	101.1	55.	91.	0.	19.9	97.3	45.	135.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022206Z	17.0	104.3	55	17.0	104.4	55.	6.	0.	18.6	100.1	50.	75.	-5.	20.8	95.3	45.	176.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022218Z	17.9	102.7	55	18.0	102.2	55.	29.	0.	20.3	97.8	45.	99.	-10.	23.2	94.7	40.	116.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022306Z	19.3	101.2	55	19.6	101.0	55.	21.	0.	22.0	97.8	45.	57.	-10.	24.5	94.5	40.	179.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022318Z	21.0	99.4	55	21.3	99.2	50.	21.	-5.	24.8	95.7	40.	6.	-10.	28.2	93.2	30.	174.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022406Z	22.9	97.5	55	22.8	97.0	55.	28.	0.	26.3	93.4	45.	121.	-5.	30.6	91.3	40.	367.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022418Z	24.9	95.7	50	24.8	95.7	50.	6.	0.	28.6	92.4	45.	197.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022506Z	27 4	95.3	50	27.4	95.7	55.	21.	5.	32.0	98.8	45.	113.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022518Z	30.0	95.8	45	29.3	95.8	45.	42.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022606Z	33.6	97.6	45	33.8	98.0	45.	23.	0.	0.0	0.0	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	20.	80.	152.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	14.	66.	113.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	9.	10.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	-2.	-0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	15	13	11	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2422. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TROPICAL CYCLONE 25S
FIX POSITIONS FOR CYCLONE NO. 25

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	170000	14.3S	121.5E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	170229	14.4S	121.3E	PCN 6	T1.5/1.5	INIT OBS ULAC 12.8S 121.1E	KGWC
* 3	170843	14.0S	118.7E	PCN 5			KGWC
4	170900	14.4S	119.4E	PCN 6			PGTW
5	171022	13.0S	120.5E	PCN 6		ULAC 14.1S 117.4E	KGWC
6	171200	13.5S	119.9E	PCN 6			PGTW
7	171328	13.9S	119.3E	PCN 6		ULAC 13.3S 118.5E	KGWC
8	171600	13.8S	119.5E	PCN 6	T1.0/1.0	INIT OBS	PGTW
9	171800	14.0S	119.4E	PCN 6			PGTW
10	171946	14.0S	119.4E	PCN 6		ULAC 13.5S 118.5E	KGWC
11	172302	14.7S	118.1E	PCN 6		ULAC 15.4S 116.3E	KGWC
* 12	180000	15.2S	117.4E	PCN 6			PGTW
13	180209	13.9S	118.2E	PCN 5	T1.5/1.5 /S0.0/24HRS		KGWC
* 14	180300	15.4S	116.7E	PCN 6	T1.0/1.0 /S0.0/27HRS		PGTW
15	180831	14.8S	117.8E	PCN 6			KGWC

16	181001	14.5S	117.5E	PCN 6			ULAC 14.4S 116.3E	KGWC
* 17	181200	15.6S	115.8E	PCN 6				PGTW
18	181449	15.4S	117.9E	PCN 6			ULAC 14.0S 115.9E	KGWC
* 19	181600	15.6S	115.6E	PCN 6	T2.0/2.0	/D1.0/24HRS		PGTW
* 20	181800	15.3S	115.3E	PCN 6				PGTW
* 21	182100	15.8S	114.8E	PCN 6				PGTW
22	182241	15.3S	116.8E	PCN 6			ULAC 14.5S 117.2E	KGWC
23	190000	14.9S	116.2E	PCN 6				PGTW
24	190300	15.1S	115.7E	PCN 6	T3.0/3.0	/D2.0/24HRS		PGTW
25	190330	14.9S	116.8E	PCN 5	T3.5/3.5	/D2.0/25HRS	ULAC 15.4S 113.9E	KGWC
26	190600	15.1S	115.2E	PCN 6				PGTW
27	190611	15.0S	115.1E	PCN 5			ULAC 14.1S 114.9E	KGWC
28	190900	15.3S	115.0E	PCN 4				PGTW
* 29	190939	14.9S	113.9E	PCN 6			ULAC 14.5S 114.2E	KGWC
30	191200	15.3S	114.3E	PCN 6				PGTW
* 31	191429	17.1S	113.3E	PCN 6	T3.5/3.5		INIT OBS ULAC 16.5S 113.8E	KGWC
32	191600	15.3S	114.0E	PCN 6	T3.5/3.5	/D1.5/24HRS		PGTW
33	191800	15.3S	113.8E	PCN 6				PGTW
* 34	191856	16.8S	112.8E	PCN 6			ULAC 15.0S 112.6E	KGWC
35	192100	15.2S	113.1E	PCN 6				PGTW
36	192220	14.8S	112.5E	PCN 6				KGWC
37	200000	15.5S	112.4E	PCN 6				PGTW
38	200300	16.0S	113.0E	PCN 6	T4.0/4.0-/D1.0/24HRS			PGTW
39	200310	14.8S	112.7E	PCN 5	T3.5/3.5	/S0.0/24HRS		KGWC
40	200600	15.8S	112.2E	PCN 6				PGTW
41	200742	15.1S	112.0E	PCN 5				KGWC
42	200900	15.8S	111.7E	PCN 6			ULCC FIX	PGTW
43	201100	16.0S	111.3E	PCN 6			ULAC 16.3S 112.0E	KGWC
44	201200	16.1S	111.3E	PCN 6				PGTW
45	201600	15.9S	110.8E	PCN 6	T4.5/4.5	/D1.0/24HRS		PGTW
46	201800	15.9S	110.4E	PCN 6				PGTW
* 47	201846	17.0S	111.1E	PCN 6				KGWC
48	202100	15.7S	110.0E	PCN 6				PGTW
49	202340	16.0S	110.2E	PCN 6			ULAC 16.8S 110.2E	KGWC
50	210000	16.0S	109.7E	PCN 6			ULCC FIX	PGTW
51	210249	16.0S	109.9E	PCN 5	T3.0/3.5	/W0.5/24HRS		KGWC
52	210300	15.7S	109.1E	PCN 6	T3.5/4.0	/W0.5/24HRS	ULCC FIX	PGTW
53	210600	16.1S	108.9E	PCN 6			ULCC FIX	PGTW
54	210731	16.0S	108.9E	PCN 5				KGWC
55	210900	16.2S	108.3E	PCN 6			ULCC FIX	PGTW
56	211038	15.8S	108.1E	PCN 6				KGWC
57	211200	16.2S	107.7E	PCN 6			ULCC FIX	PGTW
58	211530	16.9S	107.0E	PCN 6	T3.5/3.5	/S0.0/48HRS	ULAC 16.6S 107.5E	KGWC
59	211600	16.1S	106.7E	PCN 6	T3.0/3.5	/W1.5/24HRS	ULCC FIX	PGTW
60	211800	16.3S	106.1E	PCN 6			ULCC FIX	PGTW
61	211835	16.6S	106.5E	PCN 6				KGWC
62	212100	16.1S	105.6E	PCN 6			ULCC FIX	PGTW
63	212349	17.0S	105.4E	PCN 5				KGWC
64	220000	16.0S	105.2E	PCN 6			ULCC FIX	PGTW
65	220229	17.3S	105.2E	PCN 6	T3.5/3.5	/D0.5/24HRS		KGWC
66	220300	16.8S	104.8E	PCN 6	T3.5/3.5	/S0.0/24HRS	ULCC FIX	PGTW
67	220600	17.1S	104.4E	PCN 6			ULCC FIX	PGTW
68	220721	17.5S	103.4E	PCN 6				KGWC
69	220900	17.0S	103.5E	PCN 6			ULCC FIX	PGTW
70	221017	17.4S	104.1E	PCN 6			ULAC 17.3S 103.5E	KGWC
71	221200	17.0S	102.9E	PCN 6			ULCC FIX	PGTW
72	221510	18.4S	103.0E	PCN 6	T3.0/3.5	/W0.5/24HRS	ULAC 17.4S 102.7E	KGWC
73	221600	17.3S	102.2E	PCN 6	T3.0/3.5	/S0.0/24HRS		PGTW
74	221800	17.4S	101.6E	PCN 6			ULCC FIX	PGTW
75	221824	18.8S	103.2E	PCN 6			ULAC 18.0S 102.3E	KGWC
* 76	222100	17.8S	101.0E	PCN 6			ULCC FIX	PGTW
77	230000	18.7S	102.6E	PCN 4			EXP LLCC	PGTW
78	230039	19.0S	102.4E	PCN 4			EXP LLCC	KGWC
79	230300	18.9S	101.8E	PCN 4	T2.5/3.5	/W1.0/24HRS	EXP LLCC	PGTW
80	230350	19.0S	101.9E	PCN 3	T2.5/3.5	/W1.0/25HRS	EXP LLCC	KGWC
81	230600	19.3S	101.4E	PCN 4			EXP LLCC	PGTW
82	230710	19.4S	101.6E	PCN 5			EXP LLCC ULAC 18.6S 101.7E	KGWC
83	230900	19.5S	100.9E	PCN 6			EXP LLCC	PGTW
84	231137	20.5S	100.1E	PCN 6				KGWC
85	231200	19.8S	100.2E	PCN 6				PGTW
86	231449	21.1S	99.4E	PCN 6	T2.5/3.0	/W0.5/24HRS	ULAC 20.4S 099.0E	KGWC
87	231800	20.6S	99.1E	PCN 6			EXP LLCC	PGTW
88	231955	21.1S	99.8E	PCN 6				KGWC
89	240000	22.0S	98.1E	PCN 4			EXP LLCC	PGTW
90	240017	22.3S	98.6E	PCN 2				KGWC
91	240300	22.6S	97.5E	PCN 6	T3.5/3.5	/D1.0/24HRS		PGTW
92	240330	22.5S	97.8E	PCN 5	T3.5/3.5	/D1.0/24HRS		KGWC
93	240600	23.0S	96.9E	PCN 6				PGTW
94	240841	23.2S	96.9E	PCN 6				KGWC
95	240841	23.2S	96.8E	PCN 5	T3.5/3.5		INIT OBS	FJDG
96	240900	23.3S	96.7E	PCN 6				PGTW
97	241116	23.7S	96.5E	PCN 6				KGWC
98	241200	23.4S	95.9E	PCN 6			ULCC FIX	PGTW
99	241429	24.6S	96.2E	PCN 6	T2.5/2.5	/S0.0/24HRS		KGWC
100	241600	24.5S	95.7E	PCN 6			ULCC FIX	PGTW
101	241800	24.7S	95.4E	PCN 6			ULCC FIX	PGTW
102	241945	25.1S	96.4E	PCN 6			ULAC 25.9S 095.5E	KGWC
103	242100	25.1S	94.9E	PCN 6			ULCC FIX	PGTW
104	242356	25.7S	95.7E	PCN 6			ULAC 25.9S 095.5E	KGWC
105	250000	26.0S	95.4E	PCN 6			ULCC FIX	PGTW
106	250300	26.6S	95.5E	PCN 6	T3.5/3.5	/S0.0/24HRS	ULCC FIX	PGTW
107	250451	26.7S	96.0E	PCN 4	T2.5/3.5	/W1.0/25HRS	EXP LLCC	KGWC
108	250600	27.4S	95.3E	PCN 6				PGTW
109	250830	27.5S	95.5E	PCN 4			EXP LLCC	KGWC
110	250900	28.2S	95.5E	PCN 6			ULCC FIX	PGTW
111	251055	28.2S	95.2E	PCN 4			EXP LLCC	KGWC
112	251200	28.6S	94.7E	PCN 6			ULCC FIX	PGTW
113	251550	28.7S	95.3E	PCN 6	T2.0/2.5	/W0.5/25HRS		KGWC
*114	251800	29.0S	94.4E	PCN 6				PGTW
115	251934	30.0S	95.8E	PCN 6				KGWC
116	252336	31.3S	96.0E	PCN 6				KGWC
117	260431	33.5S	97.7E	PCN 6	T1.5/2.5	/W0.5/24HRS	ULAC 35.0S 100.3E	KGWC
118	260600	34.2S	97.7E	PCN 6	T2.5/3.0	/W1.0/27HRS		PGTW
119	261033	35.4S	98.2E	PCN 6				KGWC
120	261530	36.0S	99.6E	PCN 6			EXP LLCC	KGWC
121	270411	37.5S	102.8E	PCN 4			EXP LLCC	KGWC

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

TROPICAL CYCLONE 26P
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
021906Z	12.8	145.2	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.
021918Z	14.1	145.9	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.
022006Z	15.5	146.7	35	15.2	146.7	40.	18.	5.	17.2	149.6	60.	164.	20.	20.5	150.7	70.	188.	40.	0.0	0.0	0.	-0.	0.
022018Z	17.7	148.0	45	17.4	147.5	45.	34.	0.	21.4	150.0	55.	70.	20.	24.1	152.9	50.	61.	25.	0.0	0.0	0.	-0.	0.
022106Z	20.4	149.5	40	20.3	149.5	40.	6.	0.	24.8	153.0	35.	100.	5.	28.3	155.0	30.	271.	10.	0.0	0.0	0.	-0.	0.
022118Z	22.3	150.8	35	23.4	151.6	35.	79.	0.	28.5	155.5	25.	282.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022206Z	23.4	152.0	30	23.3	151.7	35.	18.	5.	24.8	153.2	30.	167.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022218Z	24.0	154.0	25	24.4	153.6	25.	32.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
022306Z	23.9	156.1	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.

	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.	157.	173.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	16.	86.	110.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	11.	25.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	2.	11.	25.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	6	5	3	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 978. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 10. KNOTS

TROPICAL CYCLONE 26P
FIX POSITIONS FOR CYCLONE NO. 26

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	170048	12.1S 137.8E	PCN 5	T1.5/1.5	INIT OBS	KGWC
2	171328	15.0S 138.0E	PCN 6		ULAC 15.1S 136.8E	KGWC
3	190300	12.4S 145.2E	PCN 6	T1.0/1.0	INIT OBS	PGTW
4	190600	12.7S 145.3E	PCN 6			PGTW
5	191600	13.9S 145.5E	PCN 6			PGTW
6	191800	14.3S 145.9E	PCN 6		INIT OBS	PGTW
7	192100	14.3S 146.3E	PCN 6			PGTW
8	200000	14.4S 146.4E	PCN 6	T2.5/2.5 /D1.5/21HRS		PGTW
9	200128	14.6S 146.9E	PCN 6	T2.5/2.5	INIT OBS	KGWC
10	200300	14.9S 146.6E	PCN 4		ULCC FIX	PGTW
11	200418	14.8S 146.5E	PCN 6			KGWC
12	200600	15.5S 146.5E	PCN 4		ULCC FIX	PGTW
13	200900	16.0S 146.9E	PCN 4		ULCC FIX	PGTW
14	201200	16.4S 147.3E	PCN 6			PGTW
15	201227	16.8S 147.4E	PCN 6	T2.5/2.5	INIT OBS ULAC 16.8S 147.0E	KGWC
16	201600	17.2S 147.4E	PCN 6	T3.0/3.0 /D1.5/22HRS		PGTW
17	201704	17.0S 147.5E	PCN 6			KGWC
18	201800	17.5S 147.5E	PCN 6			PGTW
19	202017	18.3S 148.5E	PCN 2			KGWC
20	202100	17.9S 148.0E	PCN 6			PGTW
21	210000	18.5S 148.3E	PCN 6		ULCC FIX	PGTW
22	210108	19.3S 148.9E	PCN 5	T2.5/2.5 /S0.0/24HRS		KGWC
23	210300	19.5S 149.0E	PCN 6	T2.5/2.5-/S0.0/24HRS	ULCC FIX	PGTW
24	210407	19.9S 149.2E	PCN 6			KGWC
25	210600	20.3S 149.5E	PCN 6		ULCC FIX	PGTW
26	210900	21.4S 150.2E	PCN 6		ULCC FIX	PGTW
27	211200	22.4S 150.7E	PCN 6		ULCC FIX	PGTW
* 28	211207	23.1S 151.5E	PCN 6	T2.5/2.5 /S0.0/24HRS		KGWC
* 29	211511	23.3S 152.6E	PCN 6			KGWC
* 30	211600	24.6S 151.9E	PCN 6			PGTW
* 31	211800	25.2S 152.7E	PCN 6			PGTW
32	211956	23.2S 151.2E	PCN 6			KGWC
33	220000	23.1S 151.1E	PCN 4		EXP LLCC	PGTW
34	220048	23.2S 151.3E	PCN 3	T1.0/2.0 /W1.5/24HRS	EXP LLCC	KGWC
35	220300	23.2S 151.4E	PCN 4	T1.0/2.0 /W1.5/24HRS		PGTW
36	220600	23.5S 151.9E	PCN 4			PGTW
37	220836	24.3S 152.4E	PCN 4		EXP LLCC	KGWC
38	221200	23.5S 153.2E	PCN 6		EXP LLCC	PGTW
39	221600	24.0S 153.7E	PCN 6	T0.0/0.0	INIT OBS EXP LLCC	PGTW
40	221642	24.1S 153.0E	PCN 6			KGWC
41	222116	24.9S 154.3E	PCN 4		EXP LLCC	KGWC
42	230028	23.8S 155.1E	PCN 3	T0.0/1.0 /W1.0/24HRS	EXP LLCC	KGWC
43	230300	23.7S 155.6E	PCN 4	T0.0/1.0 /W1.0/24HRS	EXP LLCC	PGTW
44	230600	23.9S 156.2E	PCN 4		EXP LLCC	PGTW
45	240300	23.9S 158.7E	PCN 4	T0.0/0.0 /S0.0/24HRS	EXP LLCC	PGTW
46	250000	22.2S 160.9E	PCN 4		EXP LLCC	PGTW

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

TROPICAL CYCLONE 27P
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
030406Z	16.7	170.7	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.
030418Z	17.6	172.0	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.
030506Z	19.5	173.3	35	19.7	172.9	35.	26.	0.	23.1	175.4	45.	72.	0.	26.7	179.3	35.	130.	-20.	0.0	0.0	0.	-0.	0.
030518Z	21.4	174.9	40	21.8	175.3	35.	33.	-5.	25.7	178.7	45.	91.	-5.	29.9	181.3	35.	234.	-15.	0.0	0.0	0.	-0.	0.
030606Z	23.1	176.7	45	24.5	176.5	45.	85.	0.	29.7	179.7	35.	288.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
030618Z	24.2	179.0	50	25.8	178.2	45.	105.	-5.	30.1	180.8	35.	253.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
030706Z	25.0	180.8	55	26.6	180.1	50.	103.	-5.	30.0	182.4	45.	171.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
030718Z	26.1	182.3	50	26.2	182.9	50.	33.	0.	30.2	186.2	40.	346.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
030806Z	29.4	185.6	45	28.4	185.5	45.	60.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
030818Z	34.3	191.0	40	35.1	191.5	40.	54.	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	62.	203.	182.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	56.	131.	159.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	7.	18.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-2.	-7.	-18.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	8	6	2	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1539. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 14. KNOTS

TROPICAL CYCLONE 27P
FIX POSITIONS FOR CYCLONE NO. 27

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	020900	14.6S 172.0E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	021600	14.4S 169.4E	PCN 6		ULCC FIX	PGTW
3	022327	16.6S 171.4E	PCN 4	T1.5/1.5	INIT OBS EXP LLCC	KGWC
4	030000	17.6S 170.9E	PCN 4	T1.5/1.5	INIT OBS EXP LLCC	PGTW
5	030300	17.4S 170.7E	PCN 4		EXP LLCC	PGTW
6	030401	15.8S 170.6E	PCN 5			KGWC
7	030600	16.7S 170.7E	PCN 6			PGTW
8	030706	15.8S 169.3E	PCN 6			KGWC
9	030900	16.8S 170.6E	PCN 6			PGTW
10	031026	15.8S 169.1E	PCN 6		ULAC 16.9S 172.9E	KGWC
11	031505	15.8S 168.8E	PCN 6		ULAC 17.0S 172.0E	KGWC
12	031946	16.2S 169.4E	PCN 6		ULAC 16.8S 171.5E	KGWC
13	032307	16.8S 170.4E	PCN 5	T2.5/2.5 /D1.0/24HRS		KGWC
14	040000	17.2S 169.3E	PCN 6	T1.5/1.5 /S0.0/24HRS		PGTW
15	040300	17.5S 168.5E	PCN 6			PGTW
* 16	040600	17.2S 168.9E	PCN 6		ULCC 16.9S 171.4E	PGTW
17	040900	16.8S 171.2E	PCN 6		ULCC FIX	PGTW
18	041006	16.1S 171.3E	PCN 6	T2.5/2.5	INIT OBS ULAC 15.8S 171.3E	KGWC
19	041600	16.8S 171.6E	PCN 6		ULCC FIX	PGTW
20	042246	18.1S 172.7E	PCN 5	T3.0/3.0 /D0.5/24HRS	ULAC 18.5S 172.5E	KGWC
21	050000	19.1S 172.5E	PCN 6	T2.5/2.5 /D1.0/24HRS	ULCC FIX	PGTW
22	050300	19.3S 172.7E	PCN 6		ULCC FIX	PGTW
23	050600	19.8S 173.4E	PCN 6		ULCC FIX	PGTW
24	050623	20.3S 173.6E	PCN 6			KGWC
25	050945	20.7S 174.3E	PCN 6	T2.5/2.5 /S0.0/24HRS		KGWC
* 26	051443	19.8S 173.9E	PCN 6			KGWC
27	051800	21.6S 175.6E	PCN 6	T2.0/2.0	INIT OBS	PGTW
28	051903	20.6S 174.6E	PCN 6		ULAC 20.6S 174.9E	KGWC
29	052226	21.7S 175.4E	PCN 6	T3.0/3.0 /S0.0/24HRS	ULAC 21.8S 176.3E	KGWC
30	060000	22.8S 175.8E	PCN 6	T3.0/3.0 /D0.5/24HRS		PGTW
31	060300	23.9S 176.2E	PCN 6			PGTW
* 32	060329	21.7S 176.5E	PCN 6			KGWC
* 33	060600	24.7S 176.5E	PCN 6		ULCC 23.5S 178.0E	PGTW
34	060602	22.3S 176.6E	PCN 6		ULAC 23.5S 176.9E	KGWC
* 35	060900	25.3S 176.9E	PCN 6		ULCC 23.9S 177.6E	PGTW
36	060925	22.8S 177.1E	PCN 6	T3.5/3.5 /D1.0/24HRS		KGWC
37	061200	24.0S 178.2E	PCN 6		ULCC FIX	PGTW
38	061432	23.3S 178.4E	PCN 4		RGD EYE DIA 1 DEG	KGWC
39	061600	24.3S 179.0E	PCN 6	T2.5/2.5-/D0.5/22HRS	ULCC FIX	PGTW
40	062100	24.3S 179.6E	PCN 6		ULCC FIX	PGTW
41	062206	24.3S 179.4W	PCN 5	T3.5/3.5 /D0.5/24HRS	ULAC 24.7S 180.0E	KGWC
42	070000	25.0S 180.0E	PCN 4	T3.5/3.5-/D0.5/24HRS		PGTW
43	070318	24.3S 179.8E	PCN 6		ULAC 16.9S 172.9E	KGWC
44	070400	24.6S 180.0E	PCN 6		ULCC FIX	PGTW
45	070540	24.3S 179.8W	PCN 6			KGWC
46	070600	24.5S 179.8W	PCN 6		ULCC FIX	PGTW
47	070900	24.6S 179.0W	PCN 6		ULCC FIX	PGTW
48	070905	24.4S 179.1W	PCN 6	T3.5/3.5 /S0.0/24HRS	ULAC 24.9S 179.4W	KGWC
49	071200	25.2S 178.4W	PCN 6		ULCC FIX	PGTW
50	071422	25.4S 177.8W	PCN 6			KGWC
51	071821	26.2S 177.2W	PCN 6			KGWC
52	072146	26.9S 176.4W	PCN 6	T2.5/3.5 /W1.0/24HRS		KGWC
53	080307	28.9S 176.2W	PCN 6			KGWC
54	080519	28.8S 174.7W	PCN 6		ULAC 28.8S 173.7W	KGWC
55	080845	30.9S 172.5W	PCN 6	T3.0/3.5 /W0.5/24HRS	ULAC 30.2S 172.4W	KGWC
56	081411	32.0S 171.3W	PCN 6			KGWC
57	081759	35.1S 168.5W	PCN 6			KGWC
58	082125	36.0S 167.0W	PCN 4	T0.0/1.5 /W2.5/24HRS	EXP LLCC	KGWC

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

TROPICAL CYCLONE 28S
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
030612Z	11.5	93.5	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	0.0	0.	-0.	0.	0.
030700Z	12.1	91.8	45	12.0	90.8	35.	59.	-10.	13.6	86.7	45.	111.	-30.	14.8	84.5	55.	71.	-50.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
030712Z	12.9	90.2	55	12.7	90.8	45.	37.	-10.	14.6	87.3	55.	59.	-40.	16.3	84.4	65.	67.	-45.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
030800Z	13.6	88.6	75	13.9	88.1	60.	34.	-15.	15.2	84.3	70.	93.	-35.	15.6	80.3	90.	238.	-25.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
030812Z	13.7	86.9	95	13.9	86.6	65.	21.	-30.	14.2	82.6	85.	149.	-25.	14.6	78.6	95.	375.	-20.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
030900Z	14.3	85.6	105	13.7	85.0	90.	50.	-15.	14.0	80.9	100.	251.	-15.	14.5	76.8	115.	518.	10.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
030912Z	15.3	84.9	110	15.2	84.9	105.	6.	-5.	16.2	82.9	125.	122.	10.	16.9	79.6	125.	353.	35.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
031000Z	16.6	84.3	115	16.3	84.1	120.	21.	5.	18.0	81.5	125.	181.	20.	18.7	77.8	125.	457.	50.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
031012Z	17.8	84.2	115	17.6	84.3	125.	13.	10.	19.6	84.3	125.	41.	35.	21.6	84.3	115.	106.	50.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
031100Z	19.0	84.5	105	19.4	85.2	120.	46.	15.	22.3	87.3	100.	135.	25.	25.5	89.9	100.	252.	45.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
031112Z	19.8	85.0	90	19.8	85.0	90.	0.	0.	21.3	85.9	70.	21.	5.	23.1	86.7	60.	65.	10.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
031200Z	20.7	85.6	75	20.6	85.5	70.	8.	-5.	22.3	86.6	50.	13.	-5.	24.1	87.5	40.	89.	-5.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
031212Z	21.5	86.2	65	20.9	86.0	55.	38.	-10.	22.3	87.3	45.	77.	-5.	23.9	89.1	35.	189.	-5.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
031300Z	22.4	86.8	55	22.3	86.6	55.	13.	0.	24.4	87.6	45.	82.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
031312Z	23.5	87.8	50	24.0	88.0	50.	32.	0.	26.9	90.7	40.	76.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
031400Z	24.4	89.1	45	24.9	88.9	45.	32.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	-0.	0.	0.
031412Z	26.0	91.7	40	26.3	91.5	40.	21.	0.	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	27.	101.	232.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	16.	68.	161.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	8.	18.	29.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-4.	-4.	4.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	16	14	12	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1389. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL CYCLONE 28S
FIX POSITIONS FOR CYCLONE NO. 28

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	040411	10.6S	98.8E	PCN 6	T1.5/1.5	INIT OBS	KGWC
2	041510	10.5S	99.2E	PCN 6		ULAC 12.0S 098.0E	KGWC
3	060330	11.3S	95.1E	PCN 6	T3.0/3.0 /D0.5/24HRS		KGWC
4	060600	11.2S	94 3E	PCN 6	T1.5/1.5	INIT OBS	PGTW
5	060828	11.4S	93.1E	PCN 5	T2.5/2.5 /D1.0/24HRS		FJDG
6	061450	10.3S	97.3E	PCN 6	T2.5/2.5	INIT OBS	KGWC
7	061600	11.2S	92.2E	PCN 6	T2.0/2.0	INIT OBS ULCC FIX	PGTW
8	061611	12.0S	93.4E	PCN 6	T3.0/3.0 /D0.5/25HRS	ULAC 12.3S 092.4E	KGWC
9	061800	11.5S	91.9E	PCN 6		ULCC FIX	PGTW
10	062100	11.8S	91.6E	PCN 6		ULCC FIX	PGTW
11	062346	11.9S	91.8E	PCN 6			KGWC
12	070400	12.7S	91.8E	PCN 6	T3.0/3.0 /D1.5/22HRS		PGTW
13	070451	12.0S	91.5E	PCN 6	T3.5/3.5 /D0.5/25HRS		KGWC
14	070600	12.6S	91.7E	PCN 6		ULCC 12.1S 091.0E	PGTW
* 15	070818	10.7S	90.2E	PCN 5	T3.0/3.0 /D0.5/24HRS		FJDG
16	070824	12.2S	91.0E	PCN 6		ULAC 12.4S 091.0E	KGWC
17	070900	12.5S	91.2E	PCN 6		ULCC FIX	PGTW
18	071200	12.8S	90.9E	PCN 6		ULCC FIX	PGTW
19	071226	12.9S	90.7E	PCN 6			KGWC
20	071551	13.4S	89.7E	PCN 2	T4.5/4.5 /D1.5/24HRS	EYE FIX	KGWC
21	071600	13.1S	89.7E	PCN 6		ULCC FIX	PGTW
22	071800	13.4S	89.4E	PCN 6		ULCC FIX	PGTW
23	071928	13.8S	89.5E	PCN 4		EYE FIX	KGWC
24	072100	13.6S	88.7E	PCN 6		ULCC FIX	PGTW
25	080000	13.6S	87.5E	PCN 6			PGTW
26	080106	13.4S	88.6E	PCN 2		EYE FIX	KGWC
27	080400	13.5S	87.0E	PCN 2			PGTW
28	080431	13.5S	87.9E	PCN 2	T4.0/4.0 /D0.5/24HRS	EYE FIX	KGWC
29	080814	13.5S	87.5E	PCN 2		EYE FIX	KGWC
30	080814	13.1S	86.2E	PCN 5	T4.5/4.5 /D1.0/24HRS		FJDG
31	080900	13.5S	86.7E	PCN 6			PGTW
32	081200	13.8S	86.4E	PCN 6			PGTW
* 33	081205	12.9S	87.0E	PCN 4		EYE FIX	KGWC
34	081530	13.6S	86.4E	PCN 2	T5.5/5.5 /D1.0/25HRS	EYE FIX	KGWC
35	081600	14.0S	86.1E	PCN 6			PGTW
36	081800	14.0S	85.5E	PCN 6			PGTW
37	082059	14.3S	86.0E	PCN 6		EYE FIX	KGWC
38	082100	13.8S	85.3E	PCN 6			PGTW
39	090000	13.8S	84.7E	PCN 6			PGTW
40	090045	14.5S	85.5E	PCN 2		EYE DIA .5 DEG	KGWC
41	090400	14.5S	85.2E	PCN 2			PGTW
42	090411	14.6S	85.8E	PCN 2	T5.0/5.0 /D1.0/24HRS	EYE DIA .7 DEG	KGWC
43	090600	14.7S	85.1E	PCN 2			PGTW
44	090803	14.7S	85.3E	PCN 2		EYE DIA .6 DEG	KGWC
45	090945	15.1S	84.9E	PCN 1	T5.0/5.0 /D0.5/24HRS	EYE FIX	FJDG
46	091143	15.1S	85.0E	PCN 2		EYE DIA .7 DEG	KGWC
47	091200	15.4S	85.0E	PCN 2		EYE FIX	PGTW
48	091651	15.6S	84.9E	PCN 2	T6.5/6.5 /D1.0/25HRS	EYE DIA 3/4 DEG	KGWC
49	092048	16.5S	84.6E	PCN 2		EYE DIA 1/2 DEG	KGWC
50	092100	16.2S	84.6E	PCN 2		EYE FIX	PGTW
51	100000	16.7S	84.4E	PCN 2			PGTW
52	100023	16.7S	84.9E	PCN 2		EYE DIA .6 DEG	KGWC
53	100400	17.0S	84.1E	PCN 2			PGTW
54	100532	17.1S	84.8E	PCN 2	T6.5/6.5 /D1.5/25HRS		KGWC
55	100600	17.1S	84.0E	PCN 2			PGTW
56	100900	17.4S	83.9E	PCN 6			PGTW
57	100934	17.6S	84.4E	PCN 2			KGWC
58	100934	17.2S	84.2E	PCN 1	T6.0/6.0 /D1.0/24HRS	EYE FIX	FJDG
59	101302	17.9S	84.9E	PCN 2			KGWC
60	101600	18.5S	84.6E	PCN 6			PGTW
61	101631	18.4S	84.8E	PCN 6	T5.5/6.5 /W1.0/24HRS		KGWC
62	101800	18.6S	84.7E	PCN 6			PGTW
63	102038	18.8S	84.1E	PCN 6			KGWC
64	102100	18.9S	84.7E	PCN 2		EYE FIX	PGTW
65	110000	19.4S	85.3E	PCN 4			PGTW
66	110144	19.3S	84.4E	PCN 6			KGWC
67	110400	19.8S	85.0E	PCN 6		ULCC FIX	PGTW
68	110512	19.3S	84.7E	PCN 6	T4.0/5.0 /W2.5/24HRS		KGWC
69	110600	19.7S	85.5E	PCN 6		ULCC FIX	PGTW
70	110900	19.9S	85.5E	PCN 6		ULCC FIX	PGTW
71	110923	19.4S	85.1E	PCN 6			KGWC
72	111200	20.2S	86.1E	PCN 6			PGTW
73	111242	19.5S	85.1E	PCN 6		ULAC 21.2S 086.2E	KGWC
74	111600	21.3S	86.3E	PCN 6		ULCC FIX	PGTW
75	111611	20.1S	85.5E	PCN 4	T3.0/4.0 /W2.5/24HRS	EXP LLCC ULAC 22.3S 086.9E	KGWC
76	111800	22.1S	86.4E	PCN 6		ULCC FIX	PGTW
77	112027	20.4S	85.5E	PCN 4		EXP LLCC	KGWC
78	120122	20.3S	85.5E	PCN 4		EXP LLCC	KGWC
79	120400	20.3S	84.7E	PCN 6		EXP LLCC	PGTW
80	120452	20.5S	85.7E	PCN 4	T2.0/3.0 /W2.0/24HRS		KGWC
81	120600	20.9S	84.6E	PCN 6	T2.5/2.5	INIT OBS	PGTW
82	121221	20.8S	85.9E	PCN 6			KGWC
83	121550	21.7S	86.0E	PCN 6	T3.0/3.0 /S0.0/24HRS	ULAC 17.0S 087.1E	KGWC
84	122016	22.2S	86.6E	PCN 6		ULAC 22.6S 086.9E	KGWC
85	130101	22.6S	87.2E	PCN 4		EXP LLCC ULAC 22.8S 087.3E	KGWC
86	130300	22.1S	85.5E				PGTW
87	130431	23.3S	87.5E	PCN 4	T2.5/2.5 /D0.5/24HRS	EXP LLCC ULAC 23.3S 088.0E	KGWC
88	130902	23.9S	87.9E	PCN 6		ULAC 23.9S 087.2E	KGWC
89	131200	23.5S	87.4E	PCN 6		ULAC 24.0S 088.0E	KGWC
90	131530	23.8S	88.2E	PCN 6	T2.5/3.0 /W0.5/24HRS	ULAC 24.5S 088.9E	KGWC
91	132005	24.1S	89.2E	PCN 6		ULAC 25.4S 090.8E	KGWC
92	140040	24.4S	89.3E	PCN 4		EXP LLCC ULAC 26.3S 091.4E	KGWC
93	140411	25.0S	90.5E	PCN 4	T1.5/2.5 /W1.0/24HRS	EXP LLCC	KGWC
94	140852	26.0S	91.0E	PCN 5	T1.5/1.5 /W1.0/24HRS		FJDG
95	141138	25.6S	91.6E	PCN 4		EXP LLCC ULAC 27.2S 093.3E	KGWC
96	141510	26.0S	93.0E	PCN 4	T1.5/2.5 /W1.0/24HRS	EXP LLCC	KGWC
97	141954	26.4S	94.5E	PCN 4		EXP LLCC	KGWC
98	150351	26.7S	95.6E	PCN 3		EXP LLCC	KGWC

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

TROPICAL CYCLONE 29S
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
030806Z	12.4 117.7	35	11.9 117.0	40.	51.	5.	13.7 116.1	65.	280.	10.	15.3 115.0	30.	565.	35.	0.0	0.0	0.	-0.	0.			
030818Z	13.6 119.2	45	12.8 118.0	45.	85.	0.	14.9 118.6	65.	266.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.		
030906Z	15.6 120.5	55	16.0 120.8	55.	30.	0.	21.7 122.6	30.	108.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.		
030918Z	18.2 121.7	55	18.5 121.7	50.	18.	-5.	0.0 0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.		
031006Z	20.1 123.5	45	20.2 123.7	45.	13.	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	39.	218.	565.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	23.	99.	235.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	12.	35.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	2.	35.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	5	3	1	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 579. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 12. KNOTS

TROPICAL CYCLONE 29S
FIX POSITIONS FOR CYCLONE NO. 29

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	080000	12.0S 117.1E	PCN 6			PGTW
2	080250	12.0S 118.9E	PCN 5	T1.0/1.0	INIT OBS	KGWC
3	080400	11.7S 117.4E	PCN 6	T3.0/3.0	INIT OBS	PGTW
4	080600	11.9S 116.8E	PCN 6			PGTW
5	080632	13.1S 118.5E	PCN 5		ULAC 12.7S 117.3E	KGWC
6	081023	12.8S 118.5E	PCN 5		ULAC 13.1S 116.8E	KGWC
7	081200	11.9S 118.4E	PCN 6			PGTW
8	081349	13.3S 118.8E	PCN 5	T2.5/2.5	INIT OBS ULAC 13.0S 117.9E	KGWC
9	081735	13.7S 119.3E	PCN 5		ULAC 13.8S 118.7E	KGWC
10	081800	12.6S 118.9E	PCN 6	T3.0/3.0	INIT OBS	PGTW
11	082100	13.2S 119.5E	PCN 6			PGTW
12	082303	14.0S 120.2E	PCN 5		ULAC 13.9S 119.5E	KGWC
13	090000	14.4S 119.9E	PCN 6			PGTW
14	090230	14.7S 120.4E	PCN 5	T2.5/2.5 /D1.5/24HRS	ULAC 15.0S 120.4E	KGWC
15	090400	15.4S 120.4E	PCN 6	T3.5/3.5-/D0.5/24HRS		PGTW
16	090600	16.1S 120.5E	PCN 6			PGTW
17	090900	16.8S 120.8E	PCN 6			PGTW
18	091002	17.4S 120.8E	PCN 5			KGWC
19	091200	17.5S 121.1E	PCN 6			PGTW
20	091329	17.7S 121.0E	PCN 5	T3.5/3.5 /D1.0/24HRS		KGWC
21	091600	18.1S 121.5E	PCN 6			PGTW
22	091724	18.3S 122.5E	PCN 6			KGWC
23	092100	18.8S 122.0E	PCN 6			PGTW
24	092242	19.2S 123.0E	PCN 5			KGWC
25	100000	19.3S 122.3E	PCN 6			PGTW
26	100209	19.5S 123.1E	PCN 5			KGWC
27	100400	19.6S 123.0E	PCN 6			PGTW
28	100600	20.0S 123.5E	PCN 6			PGTW
29	101308	22.7S 125.2E	PCN 5		ULAC 23.9S 123.8E	KGWC
30	110149	24.4S 126.7E	PCN 5			KGWC

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

TROPICAL CYCLONE 30P
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
031200Z	14.7 170.4	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.		
031212Z	14.9 167.9	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.		
031300Z	14.1 166.1	40	14.4 165.9	40.	21.	0.	14.5 162.4	55.	176.	-5.	15.0 160.0	65.	460.	-35.	0.0	0.0	0.	-0.	0.			
031312Z	13.3 165.0	50	12.9 164.9	45.	25.	-5.	12.0 162.3	55.	212.	-25.	12.9 160.0	65.	550.	-55.	0.0	0.0	0.	-0.	0.			
031400Z	12.5 164.6	60	13.0 164.6	55.	30.	-5.	12.4 163.5	75.	224.	-25.	12.0 161.5	90.	646.	-40.	0.0	0.0	0.	-0.	0.			
031412Z	11.8 165.9	80	11.4 165.6	65.	30.	-15.	10.0 168.3	90.	180.	-30.	10.0 171.6	110.	432.	-25.	0.0	0.0	0.	-0.	0.			
031500Z	12.1 167.3	100	11.7 167.4	80.	25.	-20.	11.8 170.7	110.	177.	-20.	12.4 173.8	125.	461.	15.	0.0	0.0	0.	-0.	0.			
031512Z	12.8 169.4	120	12.8 169.4	110.	0.	-10.	14.8 173.0	130.	150.	-5.	19.1 175.1	130.	385.	40.	0.0	0.0	0.	-0.	0.			
031600Z	14.3 172.3	130	14.2 172.3	125.	6.	-5.	18.3 177.4	135.	60.	25.	22.6 182.4	120.	400.	50.	0.0	0.0	0.	-0.	0.			
031612Z	16.4 175.0	135	16.3 175.1	140.	8.	5.	21.8 180.7	110.	163.	20.	28.8 186.5	80.	245.	30.	0.0	0.0	0.	-0.	0.			
031700Z	19.3 177.3	110	19.1 177.4	125.	13.	15.	26.2 182.4	95.	189.	25.	34.7 186.4	70.	115.	35.	0.0	0.0	0.	-0.	0.			
031712Z	24.2 179.3	90	23.6 179.2	115.	36.	25.	32.5 183.2	75.	66.	25.	0.0 0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
031800Z	29.2 181.3	70	30.5 182.9	85.	114.	15.	34.9 191.6	50.	164.	15.	0.0 0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
031812Z	32.5 184.5	50	33.0 185.0	55.	39.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.			
031900Z	35.7 188.4	35	35.5 187.9	35.	27.	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.	160.	410.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	18.	94.	184.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	10.	20.	36.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	0.	2.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	13	11	9	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2469. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 15. KNOTS

TROPICAL CYCLONE 30P
FIX POSITIONS FOR CYCLONE NO. 30

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	102226	16.6S 174.9E	PCN 1	T1.5/1.5		KGWC
2	111107	17.5S 172.8E	PCN 6	T1.5/1.5	INIT OBS	KGWC
3	111800	14.7S 171.8E	PCN 6	T1.5/1.5	INIT OBS	PGTW
4	112100	14.5S 171.7E	PCN 6			PGTW
5	112346	15.1S 170.8E	PCN 6	T2.0/2.0 /D0.5/25HRS		KGWC
6	120000	13.9S 170.6E	PCN 6		ULCC FIX	PGTW
7	120400	14.7S 169.5E	PCN 6	T1.5/1.5	INIT OBS	PGTW
8	120600	15.3S 169.0E	PCN 6		ULCC 15.1S 168.3E	PGTW
9	120900	14.9S 168.2E	PCN 6		ULCC FIX	PGTW
10	121046	14.9S 169.2E	PCN 6			KGWC
11	121200	15.0S 168.1E	PCN 6	T2.0/2.0 /D0.5/18HRS	ULCC FIX	PGTW
12	121510	14.8S 167.1E	PCN 6			KGWC
13	121600	14.7S 167.6E	PCN 6			PGTW
14	121800	14.7S 167.2E	PCN 6			PGTW
15	121957	14.5S 166.7E	PCN 5			KGWC
16	122100	14.6S 166.4E	PCN 6			PGTW
17	122326	14.0S 166.5E	PCN 6	T3.0/3.0 /D1.0/24HRS		KGWC
18	130000	14.2S 165.9E	PCN 6	T3.0/3.0-/D1.5/20HRS	ULCC FIX	PGTW
19	130300	13.7S 165.4E	PCN 6		ULCC FIX	PGTW
20	130600	13.3S 165.1E	PCN 6			PGTW
21	130656	13.5S 166.1E	PCN 6		ULAC 13.4S 164.8E	KGWC
22	130900	13.3S 164.8E	PCN 6			PGTW
23	131025	12.9S 164.9E	PCN 6	T3.0/3.0	INIT OBS ULAC 12.4S 164.7E	KGWC
24	131200	12.9S 164.5E	PCN 6	T2.0/2.0 /S0.0/24HRS		PGTW
25	131459	13.1S 164.7E	PCN 6		ULAC 13.2S 165.0E	KGWC
26	131600	13.3S 164.7E	PCN 6			PGTW
27	131936	13.0S 164.8E	PCN 6		ULAC 12.6S 164.8E	KGWC
28	132100	13.3S 164.9E	PCN 6			PGTW
29	132306	12.6S 164.7E	PCN 6	T4.0/4.0 /D1.0/24HRS	ULAC 12.3S 164.6E	KGWC
30	140000	12.7S 164.5E	PCN 6		ULCC FIX	PGTW
31	140300	12.4S 165.2E	PCN 6	T4.0/4.0 /D1.0/27HRS		PGTW
32	140345	12.4S 164.9E	PCN 6		ULAC 12.4S 164.8E	KGWC
33	140600	12.0S 165.4E	PCN 6			PGTW
34	140643	12.5S 164.2E	PCN 6		ULAC 12.1S 164.2E	KGWC
35	140900	11.8S 165.7E	PCN 6			PGTW
36	141200	11.2S 166.0E	PCN 6	T4.5/4.5 /D2.5/24HRS		PGTW
37	141448	12.1S 166.3E	PCN 6		ULAC 11.8S 166.9E	KGWC
38	141600	12.2S 166.6E	PCN 6			PGTW
39	141800	12.3S 166.7E	PCN 6			PGTW
40	141914	11.9S 166.5E	PCN 2		EYE DIA 16 NM	KGWC
41	142100	12.2S 167.0E	PCN 2		EYE FIX	PGTW
42	142247	12.0S 167.0E	PCN 1	T5.5/5.5 /D1.5/24HRS		KGWC
43	150000	12.2S 167.4E	PCN 2		EYE FIX	PGTW
44	150300	12.4S 167.8E	PCN 2	T5.5/5.5 /D1.5/24HRS	EYE FIX	PGTW
45	150600	12.4S 168.3E	PCN 2			PGTW
46	150613	12.2S 167.8E	PCN 2		EYE FIX	KGWC
47	150900	12.6S 168.3E	PCN 2			PGTW
48	151127	12.7S 169.1E	PCN 2	T6.5/6.5 /D3.5/49HRS	EYE DIA .2 DEG	KGWC
49	151200	12.8S 169.5E	PCN 2	T6.0/6.0 /D1.5/25HRS		PGTW
50	151427	13.1S 170.4E	PCN 2	T5.5/5.5 /D1.5/24HRS	EYE DIA 12 NM	KGWC
51	151600	13.4S 170.5E	PCN 2		EYE DIA 40 NM	PGTW
52	151800	13.6S 170.9E	PCN 2		EYE FIX	PGTW
53	151853	13.7S 171.1E	PCN 2		EYE DIA 15 NM	KGWC
54	152226	14.1S 172.1E	PCN 2	T6.5/6.5 /D1.0/24HRS	EYE DIA .2 DEG	KGWC
55	160000	14.3S 172.3E	PCN 2		EYE FIX	PGTW
56	160300	14.9S 172.9E	PCN 2	T6.5/6.5 /D1.0/24HRS	EYE FIX	PGTW
57	160323	14.8S 172.6E	PCN 2		EYE DIA .2 DEG	KGWC
58	160552	15.2S 173.5E	PCN 2		EYE FIX	KGWC
59	160600	15.1S 173.8E	PCN 2			PGTW
60	160900	15.7S 174.5E	PCN 2			PGTW
61	160925	15.7S 174.0E	PCN 2		EYE DIA .2 DEG	KGWC
62	161107	16.2S 174.8E	PCN 2	T6.5/6.5 /S0.0/24HRS	EYE FIX	KGWC
63	161200	16.4S 175.1E	PCN 2	T7.0/7.0-/D1.0/24HRS		PGTW
64	161427	16.8S 175.5E	PCN 2		EYE FIX	KGWC
65	161600	17.4S 175.8E	PCN 2		EYE FIX	PGTW
66	161800	17.8S 176.1E	PCN 2		EYE FIX	PGTW
67	161832	17.9S 176.3E	PCN 2		EYE DIA 12 NM	KGWC
68	162100	18.4S 176.7E	PCN 2			PGTW
69	162206	18.6S 176.8E	PCN 2	T6.0/6.5 /W0.5/24HRS	EYE DIA 12 NM	KGWC
70	170000	19.3S 177.4E	PCN 2			PGTW
71	170300	20.5S 178.1E	PCN 6			PGTW
72	170312	20.8S 177.6E	PCN 6			KGWC
73	170530	21.5S 178.0E	PCN 6			KGWC
74	170600	21.5S 178.4E	PCN 2	T5.5/6.5 /W1.0/27HRS	EYE FIX	PGTW
75	170900	22.8S 178.7E	PCN 2		EYE FIX	PGTW
76	170905	23.0S 178.3E	PCN 6	T5.0/6.0 /W1.5/22HRS		KGWC
77	171200	24.1S 179.4E	PCN 6	T5.0/6.0 /W2.0/24HRS		PGTW
78	171416	25.6S 179.6E	PCN 6			KGWC
79	171600	27.0S 179.9W	PCN 6			PGTW
80	171800	27.7S 179.4W	PCN 6			PGTW
81	171811	27.9S 179.8E	PCN 6			KGWC
* 82	172100	29.3S 178.2W	PCN 6			PGTW
83	172146	28.9S 179.7W	PCN 6	T3.5/4.5 /W2.5/24HRS	ULAC 29.3S 178.8W	KGWC
84	180000	28.9S 178.3W	PCN 4		EXP LLCC	PGTW
85	180300	30.5S 177.5W	PCN 4	T3.0/4.0 /W2.5/21HRS	EXP LLCC	PGTW
86	180301	30.7S 178.0W	PCN 6			KGWC
87	180509	31.7S 177.3W	PCN 6			KGWC
88	180845	31.7S 175.7W	PCN 6	T2.5/3.5 /W2.5/24HRS		KGWC
89	181405	32.9S 174.4W	PCN 6			KGWC
90	182125	34.6S 173.1W	PCN 6			KGWC

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

TROPICAL CYCLONE 31P
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
031906Z	13.7 138.3	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.
031918Z	14.1 139.1	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.
032006Z	14.2 139.8	40	14.0 139.7	35.	13.	-5.	14.5 140.7	45.	118.	-15.	15.3 141.4	55.	186.	-35.	0.0 0.0	0.	-0.	0.
032018Z	13.8 139.5	50	14.3 140.2	40.	51.	-10.	15.0 140.8	50.	164.	-25.	16.1 140.4	55.	129.	-50.	0.0 0.0	0.	-0.	0.
032106Z	13.6 138.9	60	13.7 139.4	60.	30.	0.	13.2 138.3	75.	34.	-15.	13.0 136.7	75.	169.	-45.	0.0 0.0	0.	-0.	0.
032118Z	13.3 138.6	75	13.6 138.2	65.	29.	-10.	14.0 136.4	70.	148.	-35.	14.5 134.8	50.	166.	-60.	0.0 0.0	0.	-0.	0.
032206Z	13.5 138.8	90	13.5 138.5	90.	18.	0.	13.7 137.9	110.	97.	-10.	14.3 137.0	120.	67.	20.	0.0 0.0	0.	-0.	0.
032218Z	14.5 138.9	105	14.5 138.9	100.	0.	-5.	16.5 139.1	110.	113.	0.	18.2 139.8	90.	313.	20.	0.0 0.0	0.	-0.	0.
032306Z	15.2 138.5	120	15.3 138.6	115.	8.	-5.	17.3 138.4	85.	162.	-15.	19.3 138.8	45.	366.	-5.	0.0 0.0	0.	-0.	0.
032318Z	15.4 137.5	110	15.5 137.5	110.	6.	0.	16.3 135.6	75.	78.	5.	17.2 133.8	50.	168.	20.	0.0 0.0	0.	-0.	0.
032406Z	15.3 136.5	100	15.6 136.5	100.	18.	0.	16.1 134.5	50.	84.	0.	17.2 132.8	30.	186.	10.	0.0 0.0	0.	-0.	0.
032418Z	15.0 135.5	70	15.0 135.0	70.	29.	0.	14.6 132.1	30.	88.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
032506Z	14.7 134.6	50	14.6 134.2	45.	24.	-5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
032518Z	14.4 133.6	30	14.5 133.5	30.	8.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
032606Z	14.1 132.8	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.
033018Z	14.0 124.0	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.
033106Z	14.2 121.1	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.
033118Z	15.1 117.6	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.
040106Z	15.5 114.5	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.
040118Z	15.6 112.4	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.
040206Z	15.6 111.2	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.
040218Z	15.6 109.5	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.
040306Z	15.4 107.4	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.
040318Z	15.2 104.5	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	20.	109.	194.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	9.	68.	132.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	12.	29.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-3.	-11.	-14.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	12	10	9	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2306. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 8. KNOTS

TROPICAL CYCLONE 31P
FIX POSITIONS FOR CYCLONE NO. 31

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	180600	12.5S 139.3E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	181800	13.2S 138.9E	PCN 6	T0.5/0.5	INIT OBS ULCC FIX	PGTW
3	190000	13.5S 138.8E	PCN 6			PGTW
4	190048	13.6S 137.2E	PCN 5	T1.5/1.5	INIT OBS ULAC 13.5S 137.0E	KGWC
5	190300	13.7S 138.0E	PCN 6			PGTW
6	190600	13.7S 139.0E	PCN 6	T2.0/2.0 /D1.0/24HRS		PGTW
7	190900	13.8S 139.5E	PCN 6			PGTW
8	191200	14.1S 138.8E	PCN 6			PGTW
* 9	191329	14.2S 137.5E	PCN 6		ULAC 14.7S 138.3E	KGWC
10	191600	13.9S 138.7E	PCN 6	T2.0/2.0 /D1.5/22HRS		PGTW
* 11	191718	14.3S 137.5E	PCN 6		ULAC 14.9S 138.1E	KGWC
12	191800	13.7S 139.0E	PCN 6			PGTW
* 13	192051	14.4S 137.8E	PCN 6		ULAC 14.8S 137.6E	KGWC
14	200000	13.8S 139.7E	PCN 6			PGTW
15	200028	14.7S 138.5E	PCN 5	T2.5/2.5 /D1.0/24HRS		KGWC
16	200300	14.3S 139.3E	PCN 6	T2.5/2.5 /D0.5/22HRS		PGTW
17	200600	13.9S 139.7E	PCN 6			PGTW
18	200604	14.1S 139.7E	PCN 5			KGWC
19	200900	13.8S 140.1E	PCN 6			PGTW
20	200931	14.1S 139.6E	PCN 6			KGWC
21	201200	13.9S 140.4E	PCN 6			PGTW
22	201309	13.9S 139.2E	PCN 6	T2.5/2.5	INIT OBS ULAC 13.6S 140.5E	KGWC
23	201600	14.1S 140.3E	PCN 6	T3.0/3.0-/D1.0/24HRS		PGTW
24	201708	14.0S 138.7E	PCN 6		ULAC 13.6S 139.9E	KGWC
25	201800	14.4S 140.1E	PCN 6			PGTW
26	202100	14.3S 139.2E	PCN 6			PGTW
27	202211	14.0S 138.9E	PCN 3			KGWC
28	210000	13.9S 138.6E	PCN 6		ULCC FIX	PGTW
29	210149	13.4S 139.3E	PCN 5	T3.5/3.5 /D1.0/25HRS	ULAC 13.2S 138.7E	KGWC
30	210300	13.5S 139.0E	PCN 6	T3.5/3.0 /D1.0/24HRS	ULCC FIX	PGTW
31	210600	13.4S 139.0E	PCN 6			PGTW
32	210900	13.5S 138.6E	PCN 6			PGTW
33	210909	13.7S 138.8E	PCN 6		ULAC 13.6S 138.1E	KGWC
34	211200	13.4S 138.5E	PCN 6			PGTW
35	211248	13.7S 138.7E	PCN 6	T4.5/4.5 /D2.0/24HRS	ULAC 13.5S 138.7E	KGWC
36	211600	13.7S 138.4E	PCN 2	T4.0/4.0 /D1.0/24HRS		PGTW
37	211657	13.2S 138.6E	PCN 2			KGWC
38	211800	13.7S 138.2E	PCN 6			PGTW
39	212150	13.2S 138.7E	PCN 5			KGWC
40	220000	13.4S 138.7E	PCN 2			PGTW
41	220129	13.3S 138.9E	PCN 1	T5.0/5.0 /D1.5/24HRS	EYE FIX	KGWC
42	220300	13.4S 138.9E	PCN 2	T5.0/5.0 /D1.5/24HRS	EYE DIA .5 DEG	PGTW
43	220600	13.7S 138.8E	PCN 2		EYE FIX	PGTW
44	220848	13.5S 138.5E	PCN 2		EYE DIA 24 NM	KGWC
45	220900	13.7S 138.8E	PCN 2		EYE FIX	PGTW
46	221200	14.0S 138.9E	PCN 2		EYE FIX	PGTW
47	221228	13.9S 138.8E	PCN 2	T6.5/6.5 /D2.0/24HRS	EYE DIA 18 NM	KGWC
48	221600	14.4S 138.9E	PCN 2	T5.5/5.5 /D1.5/24HRS	EYE FIX	PGTW
49	221646	14.2S 138.9E	PCN 2		EYE FIX	KGWC
50	221800	14.5S 138.9E	PCN 2			PGTW
51	222100	14.7S 138.8E	PCN 2		EYE FIX	PGTW
52	222128	14.6S 139.1E	PCN 1		EYE FIX	KGWC
53	230000	14.8S 138.8E	PCN 2			PGTW
54	230109	14.7S 138.8E	PCN 1	T4.5/5.0 /W0.5/24HRS		KGWC
55	230300	15.1S 138.6E	PCN 2	T6.0/6.0-/D1.0/24HRS		PGTW
56	230600	15.2S 138.5E	PCN 2			PGTW
57	230827	15.2S 137.9E	PCN 2		EYE DIA 18 NM	KGWC
58	230900	15.7S 138.3E	PCN 4			PGTW
59	231200	15.7S 137.8E	PCN 6			PGTW

* 60	231208	15.4S 137.2E	PCN 2	T5.0/6.0 /W1.5/24HRS	EYE FIX	KGWC
61	231600	15.7S 137.6E	PCN 4	T6.0/6.0-/D0.5/24HRS		PGTW
62	231635	15.5S 137.9E	PCN 2		EYE FIX	KGWC
63	231800	15.5S 137.5E	PCN 4			PGTW
64	232100	15.5S 137.2E	PCN 6			PGTW
65	232107	15.5S 137.5E	PCN 2			KGWC
66	240000	15.6S 137.0E	PCN 2			PGTW
67	240048	15.7S 136.9E	PCN 1	T4.0/4.5 /W0.5/24HRS	EYE FIX	KGWC
68	240600	15.4S 136.4E	PCN 4	T4.5/5.5 /W1.5/26HRS		PGTW
69	240900	15.2S 136.1E	PCN 4			PGTW
70	240947	15.4S 136.0E	PCN 2		EYE FIX	KGWC
71	241200	15.2S 135.8E	PCN 6			PGTW
72	241329	15.1S 135.4E	PCN 6		ULAC 15.2S 135.7E	KGWC
73	241624	15.0S 135.5E	PCN 6		ULAC 15.3S 136.0E	KGWC
74	242046	14.9S 133.7E	PCN 6		ULAC 15.8S 134.7E	KGWC
75	250000	14.8S 134.6E	PCN 6			PGTW
76	250209	14.4S 134.9E	PCN 5			KGWC
77	250510	14.3S 134.5E	PCN 5			KGWC
78	250600	15.0S 134.2E	PCN 6			PGTW
79	250900	15.4S 134.8E	PCN 6		ULCC FIX	PGTW
80	250926	14.5S 134.2E	PCN 6			KGWC
81	251200	14.8S 134.2E	PCN 6			PGTW
82	251309	14.5S 134.1E	PCN 5			KGWC
83	251600	14.5S 133.5E	PCN 6			PGTW
84	251756	14.5S 133.7E	PCN 5		ULAC 15.3S 134.6E	KGWC
85	251800	14.4S 133.3E	PCN 6			PGTW
86	260000	14.1S 133.4E	PCN 6			PGTW
87	260600	14.1S 133.0E	PCN 6			PGTW
88	310300	13.4S 121.8E	PCN 6	T1.0/1.0	INIT OBS	PGTW
89	310600	13.3S 121.5E	PCN 6			PGTW
* 90	010000	14.8S 117.7E	PCN 6	T2.0/2.0+/D1.0/21HRS		PGTW
91	010310	14.9S 115.7E	PCN 5	T1.5/1.5	INIT OBS ULAC 15.5S 114.6E	KGWC
* 92	010600	15.8S 113.1E	PCN 6		ULCC FIX	PGTW
* 93	010900	16.4S 112.9E	PCN 6		ULCC FIX	PGTW
94	011019	15.0S 113.2E	PCN 6		ULAC 15.3S 111.3E	KGWC
* 95	011200	16.7S 112.3E	PCN 6	T2.0/2.0	INIT OBS ULCC FIX	PGTW
96	011410	14.7S 113.0E	PCN 5		ULAC 14.9S 110.0E	KGWC
97	011800	16.2S 111.7E	PCN 6			PGTW
98	011822	15.0S 112.6E	PCN 6			KGWC
99	012100	15.2S 112.2E	PCN 6			PGTW
100	012300	14.9S 112.2E	PCN 3			KGWC
101	020000	14.8S 112.2E	PCN 6	T2.0/2.0 /S0.0/24HRS		PGTW
102	020250	15.8S 112.0E	PCN 5	T1.5/1.5 /S0.0/24HRS		KGWC
103	020300	15.2S 110.5E	PCN 6			PGTW
104	020600	15.5S 110.2E	PCN 6			PGTW
105	020900	15.6S 110.2E	PCN 6		ULCC 19.0S 111.7E	PGTW
*106	020958	18.2S 112.0E	PCN 6		ULAC 18.3S 112.1E	KGWC
107	021200	15.9S 110.4E	PCN 6	T1.5/2.0 /W0.5/24HRS	ULCC 19.4S 112.4E	PGTW
*108	021349	19.2S 112.0E	PCN 5			KGWC
109	021600	16.4S 110.3E	PCN 6		ULCC 16.2S 110.8E	PGTW
110	021800	15.5S 110.0E	PCN 6			PGTW
*111	022100	15.9S 110.1E	PCN 6			PGTW
112	022238	15.0S 109.3E	PCN 6		ULAC 15.5S 109.8E	KGWC
113	030230	15.3S 108.8E	PCN 5	T1.5/1.5 /S0.0/24HRS	ULAC 16.6S 109.2E	KGWC
114	030300	15.7S 108.9E	PCN 6			PGTW
115	031510	15.2S 104.9E	PCN 3		EXP LLCC	KGWC
116	040351	14.7S 103.0E	PCN 6	T0.5/1.5 /W1.0/24HRS	EXP LLCC	KGWC

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

TROPICAL CYCLONE 32P
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
032812Z	13.4 150.4	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.
032900Z	13.7 149.4	35	13.7 148.7	35.	41.	0.	14.3 146.6	60.	51.	5.	15.3 144.9	55.	93.	-5.	0.0 0.0	0.	-0.	0.
032912Z	13.8 148.3	45	13.6 147.7	45.	37.	0.	14.7 145.3	65.	79.	5.	15.7 143.5	45.	123.	-10.	0.0 0.0	0.	-0.	0.
033000Z	13.8 147.3	55	14.0 147.0	60.	21.	5.	14.8 145.0	65.	62.	5.	15.7 143.7	35.	105.	-10.	0.0 0.0	0.	-0.	0.
033012Z	13.8 146.3	60	13.9 146.0	60.	18.	0.	14.1 143.9	65.	29.	10.	14.6 142.5	35.	13.	5.	0.0 0.0	0.	-0.	0.
033100Z	13.8 145.3	60	13.9 144.5	65.	47.	5.	13.9 144.5	55.	70.	10.	13.9 143.3	40.	103.	20.	0.0 0.0	0.	-0.	0.
033112Z	13.8 144.3	55	13.9 144.3	65.	6.	10.	13.9 143.1	40.	42.	10.	14.2 141.5	35.	63.	15.	0.0 0.0	0.	-0.	0.
040100Z	14.0 143.3	45	13.8 143.3	55.	12.	10.	13.8 141.7	30.	60.	10.	13.8 140.6	45.	72.	20.	0.0 0.0	0.	-0.	0.
040112Z	14.4 142.6	30	14.0 142.3	25.	30.	-5.	14.2 140.2	35.	59.	15.	14.5 138.1	45.	55.	20.	0.0 0.0	0.	-0.	0.
040200Z	14.8 141.8	20	14.0 140.6	30.	85.	10.	14.2 138.2	50.	83.	25.	14.4 135.7	55.	110.	30.	0.0 0.0	0.	-0.	0.
040212Z	15.0 140.8	20	15.0 140.7	20.	6.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
040300Z	14.5 139.6	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.
040312Z	13.8 138.7	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.
040400Z	13.3 137.2	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.
040412Z	13.3 135.1	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.

	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	30.	60.	82.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	16.	34.	58.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	5.	11.	15.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	4.	11.	9.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	10	9	9	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 935. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

TROPICAL CYCLONE 32P
FIX POSITIONS FOR CYCLONE NO. 32

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	271800	12.4S 151.4E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
2	272100	13.0S 151.5E	PCN 6			PGTW
3	280000	13.8S 151.5E	PCN 6	T1.0/1.0	INIT OBS	PGTW
4	280109	12.9S 150.9E	PCN 5	T2.0/2.0	INIT OBS	KGWC
5	280300	14.0S 151.7E	PCN 6			PGTW
6	280600	11.3S 152.6E	PCN 6		ULCC FIX	PGTW
7	280822	12.9S 150.0E	PCN 6			KGWC
8	280900	11.9S 152.4E	PCN 6		ULCC FIX	PGTW
* 9	281200	12.4S 152.0E	PCN 6		ULCC FIX	PGTW

10	281208	13.4S	150.5E	PCN 6	T2.5/2.5	INIT OBS ULAC 13.0S 150.0E		KGWC
11	281541	13.5S	150.1E	PCN 6		ULAC 13.0S 149.6E		KGWC
12	281800	13.3S	149.1E	PCN 6	T2.0/2.0 /D1.0/24HRS			PGTW
13	282100	13.8S	149.0E	PCN 6				PGTW
* 14	282102	12.5S	150.2E	PCN 6		ULAC 11.7S 149.3E		KGWC
15	290000	13.3S	148.6E	PCN 6	T2.5/2.5 /D1.5/24HRS	ULCC 14.2S 149.0E		PGTW
16	290048	13.0S	149.2E	PCN 5	T2.5/2.5 /D1.0/24HRS			KGWC
17	290300	13.5S	148.9E	PCN 6		ULCC 13.9S 149.1E		PGTW
18	290427	13.4S	149.2E	PCN 6		ULAC 13.2S 147.9E		KGWC
19	290600	13.4S	148.5E	PCN 6		ULCC 13.7S 148.7E		PGTW
20	290801	13.7S	148.9E	PCN 6		ULAC 13.9S 148.0E		KGWC
21	290900	13.5S	148.1E	PCN 6				PGTW
* 22	291148	14.8S	148.8E	PCN 6	T3.0/3.0 /D0.5/24HRS	ULAC 13.8S 147.7E		KGWC
23	291200	13.9S	147.8E	PCN 6	T3.0/3.0 /D1.0/18HRS			PGTW
* 24	291530	14.2S	149.2E	PCN 6				KGWC
25	291600	13.8S	147.6E	PCN 6				PGTW
26	291800	14.1S	147.5E	PCN 6				PGTW
* 27	292041	14.4S	148.6E	PCN 6		ULAC 13.8S 147.5E		KGWC
28	292100	14.0S	147.3E	PCN 6				PGTW
29	300000	13.9S	147.1E	PCN 6	T3.5/3.5-/D1.0/24HRS			PGTW
30	300028	13.9S	146.7E	PCN 5	T3.5/3.5 /D1.0/24HRS	ULAC 13.6S 146.9E		KGWC
31	300300	13.9S	146.9E	PCN 6				PGTW
32	300600	13.7S	146.5E	PCN 6				PGTW
* 33	300739	12.9S	145.6E	PCN 6		ULAC 13.1S 146.3E		KGWC
34	300900	13.7S	146.2E	PCN 6				PGTW
35	301127	13.0S	145.8E	PCN 6	T3.5/3.5 /D0.5/24HRS			KGWC
36	301200	13.7S	145.9E	PCN 6	T3.5/3.5-/D0.5/24HRS			PGTW
37	301600	13.9S	145.7E	PCN 6		ULCC FIX		PGTW
38	301702	13.1S	146.4E	PCN 6				KGWC
39	301800	14.0S	145.6E	PCN 6		ULCC FIX		PGTW
40	302019	13.1S	146.2E	PCN 6				KGWC
41	302100	13.9S	145.6E	PCN 6		ULCC FIX		PGTW
42	310000	14.0S	145.5E	PCN 6	T4.0/4.0-/D0.5/24HRS			PGTW
* 43	310008	12.7S	146.1E	PCN 5	T3.5/3.5 /S0.0/24HRS	ULAC 13.5S 150.0E		KGWC
44	310300	14.1S	145.1E	PCN 6				PGTW
45	310600	13.8S	144.8E	PCN 6				PGTW
46	310859	13.1S	145.4E	PCN 6		ULAC 12.8S 144.8E		KGWC
47	310900	13.7S	144.6E	PCN 6				PGTW
48	311200	13.8S	144.3E	PCN 6	T3.5/3.5-/S0.0/24HRS	ULCC FIX		PGTW
* 49	311248	13.2S	145.4E	PCN 6	T3.5/3.5 /S0.0/25HRS			KGWC
50	311600	13.8S	143.9E	PCN 6		ULCC FIX		PGTW
51	311651	13.2S	144.2E	PCN 6		ULAC 11.8S 143.4E		KGWC
52	311800	13.7S	143.7E	PCN 6		ULCC FIX		PGTW
53	312100	13.9S	143.3E	PCN 6		ULCC FIX		PGTW
54	312139	12.9S	143.4E	PCN 6				KGWC
55	010000	13.5S	143.0E	PCN 6				PGTW
56	010129	13.7S	142.6E	PCN 5				KGWC
* 57	010300	13.4S	142.0E	PCN 6		ULCC FIX		PGTW
* 58	010600	13.2S	140.3E	PCN 6		ULCC FIX		PGTW
* 59	010838	14.4S	140.4E	PCN 6		ULAC FIX		KGWC
* 60	010900	13.2S	139.2E	PCN 6		ULCC FIX		PGTW
* 61	011228	15.3S	140.4E	PCN 6		ULAC FIX		KGWC
62	011640	14.3S	141.2E	PCN 6		ULAC FIX		KGWC
* 63	012100	14.4S	140.8E	PCN 6				PGTW
* 64	012118	15.2S	143.9E	PCN 6				KGWC
* 65	020000	13.9S	140.3E	PCN 6	T2.0/2.0	SCNDRY LLCC 15.8S 142.3E		PGTW
* 66	020109	15.7S	142.9E	PCN 5				KGWC
* 67	020300	14.2S	143.9E	PCN 6				PGTW
* 68	020600	14.3S	139.1E	PCN 6		ULCC FIX		PGTW
69	020817	15.5S	141.0E	PCN 6		ULAC 15.0S 141.5E		KGWC
70	021200	15.5S	141.5E	PCN 6	T0.0/0.0	INIT OBS		PGTW
71	021208	15.1S	140.7E	PCN 5				KGWC
72	021600	15.2S	140.4E	PCN 6				PGTW
73	021800	15.0S	140.2E	PCN 6				PGTW
74	022100	14.6S	139.6E	PCN 6				PGTW
75	030000	14.4S	139.7E	PCN 6	T2.0/2.0 /S0.0/24HRS			PGTW
* 76	030048	13.8S	140.7E	PCN 5	T1.5/1.5	INIT OBS		KGWC
77	030300	14.2S	139.5E	PCN 6				PGTW
78	030600	14.0S	139.1E	PCN 6				PGTW
79	030900	13.8S	139.1E	PCN 6	T1.5/1.5 /D1.5/24HRS			PGTW
80	031200	13.8S	139.1E	PCN 6				PGTW
81	031329	13.4S	138.8E	PCN 5				KGWC
82	040000	13.4S	137.6E	PCN 6	T2.0/2.0-/S0.0/24HRS			PGTW
83	040028	13.1S	136.6E	PCN 5	T1.5/1.5 /S0.0/24HRS			KGWC
84	040600	13.5S	137.1E	PCN 6				PGTW
85	041309	13.3S	134.3E	PCN 5				KGWC
86	050149	13.4S	134.2E	PCN 3		EXP LLCC		KGWC

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	011100	14.0S 142.3E	025	045	91184

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

TROPICAL CYCLONE 33S
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
041012Z	11.5	72.8	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.
041100Z	11.9	71.2	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.
041112Z	12.8	69.9	45	11.6	69.9	35.	72.	-10.	11.8	67.1	55.	199.	-20.	12.2	64.3	65.	319.	-35.	0.0	0.0	0.	-0.	0.
041200Z	13.9	68.8	60	13.0	69.2	50.	59.	-10.	14.3	66.7	70.	160.	-20.	15.6	64.0	85.	163.	-25.	0.0	0.0	0.	-0.	0.
041212Z	15.1	67.4	75	15.0	67.4	65.	6.	-10.	17.8	65.0	90.	65.	-10.	19.9	63.8	80.	60.	-20.	0.0	0.0	0.	-0.	0.
041300Z	16.6	65.3	90	16.7	65.8	75.	29.	-15.	20.0	63.6	80.	110.	-30.	24.0	63.1	70.	344.	-20.	0.0	0.0	0.	-0.	0.
041312Z	17.5	63.9	100	17.5	63.6	95.	17.	-5.	20.1	60.5	100.	195.	0.	23.7	59.9	90.	421.	15.	0.0	0.0	0.	-0.	0.
041400Z	18.2	63.2	110	18.3	62.7	105.	29.	-5.	20.3	60.6	90.	243.	0.	23.6	60.2	70.	379.	15.	0.0	0.0	0.	-0.	0.
041412Z	18.9	63.7	100	19.1	63.1	115.	36.	15.	21.4	62.5	95.	239.	20.	25.0	62.8	80.	553.	40.	0.0	0.0	0.	-0.	0.
041500Z	18.4	64.4	90	19.0	64.1	100.	40.	10.	19.9	65.7	80.	319.	25.	21.9	68.5	60.	759.	30.	0.0	0.0	0.	-0.	0.
041512Z	17.5	63.4	75	17.6	63.9	80.	29.	5.	19.0	63.3	60.	307.	20.	20.2	64.5	45.	627.	15.	0.0	0.0	0.	-0.	0.
041600Z	17.3	60.8	55	17.4	61.0	50.	13.	-5.	17.4	56.6	30.	78.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
041612Z	16.7	58.5	40	17.0	58.2	40.	25.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
041700Z	16.1	56.6	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.
041712Z	15.3	54.8	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.
041800Z	14.7	52.8	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.
041812Z	15.4	50.4	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.
041900Z	17.2	50.8	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.

	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	32.	192.	403.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	21.	110.	243.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	8.	15.	24.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-3.	-2.	2.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	11	10	9	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1769. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 9. KNOTS

TROPICAL CYCLONE 33S
FIX POSITIONS FOR CYCLONE NO. 33

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	COMMENTS	SITE
1	100512	11.4S	73.2E	PCN 6	T1.0/1.0	INIT OBS ULAC 11.7S 074.2E	KGWC
2	100857	11.4S	72.2E	PCN 6	T1.5/1.5	INIT OBS	FJDG
3	101753	12.1S	72.1E	PCN 6	T2.5/2.5	INIT OBS ULAC 12.0S 071.7E	KGWC
4	102151	11.6S	72.0E	PCN 6		ULAC 11.5S 071.5E	KGWC
* 5	110233	11.6S	72.2E	PCN 6			KGWC
6	110452	11.7S	70.7E	PCN 5	T2.5/2.5 /D1.5/25HRS		KGWC
7	111037	12.1S	69.9E	PCN 6			KGWC
8	111038	12.5S	69.8E	PCN 5	T3.0/3.0 /D1.5/24HRS		FJDG
9	111332	12.5S	68.9E	PCN 6			KGWC
10	111733	13.4S	69.5E	PCN 6	T3.5/3.5 /D1.0/24HRS		KGWC
11	112140	13.7S	69.1E	PCN 6			KGWC
12	120212	14.0S	68.9E	PCN 2			KGWC
13	120613	14.5S	68.4E	PCN 1	T4.0/4.0 /D1.5/25HRS	EYE FIX	KGWC
14	121026	15.1S	67.4E	PCN 2		EYE FIX	KGWC
15	121027	15.0S	67.4E	PCN 6	T3.5/3.5 /D0.5/24HRS		FJDG
16	121311	15.4S	67.1E	PCN 2		EYE FIX	KGWC
17	121712	15.6S	66.6E	PCN 2	T5.0/5.0 /D1.5/24HRS	EYE FIX	KGWC
18	122130	16.4S	66.3E	PCN 6			KGWC
19	130151	16.7S	65.2E	PCN 2			KGWC
20	130553	17.0S	64.8E	PCN 2	T5.5/5.5 /D1.5/24HRS	EYE DIA 12 NM	KGWC
21	131015	17.2S	64.1E	PCN 2		EYE DIA 12 NM	KGWC
22	131016	17.3S	63.8E	PCN 5	T5.0/5.0 /D1.5/24HRS	EYE FIX	FJDG
23	131431	17.7S	63.7E	PCN 2		EYE FIX	KGWC
24	131652	17.7S	63.4E	PCN 2	T6.0/6.0 /D1.0/24HRS	EYE FIX	KGWC
25	132119	18.1S	62.9E	PCN 2		EYE FIX	KGWC
26	140311	18.2S	63.5E	PCN 2		EYE FIX	KGWC
27	140533	18.5S	63.5E	PCN 2	T6.0/6.0 /D0.5/24HRS	EYE DIA 15 NM	KGWC
28	141004	18.9S	63.4E	PCN 2		EYE DIA 15 NM OPN SW	KGWC
29	141005	19.0S	64.0E	PCN 5	T5.5/5.5 /D1.0/24HRS		FJDG
30	141409	18.8S	63.4E	PCN 6		ULAC 18.9S 063.7E	KGWC
31	141813	18.8S	63.8E	PCN 6	T4.5/5.5 /W1.5/24HRS		KGWC
32	142108	18.8S	64.2E	PCN 6		ULAC 19.1S 064.9E	KGWC
33	150250	18.2S	64.5E	PCN 5		ULAC 18.6S 064.3E	KGWC
34	150654	17.9S	64.4E	PCN 5	T4.0/5.0 /W2.0/24HRS	ULAC 18.4S 064.7E	KGWC
35	150954	17.5S	64.0E	PCN 6		ULAC 18.1S 064.5E	KGWC
* 36	150954	18.7S	63.5E	PCN 5	T4.5/4.5 /W1.5/24HRS		FJDG
37	151348	17.5S	63.1E	PCN 6		ULAC 17.4S 064.6E	KGWC
38	151753	17.7S	62.0E	PCN 6	T2.0/3.0 /W2.5/24HRS		KGWC
39	160228	17.3S	60.5E	PCN 4		EXP LLCC	KGWC
40	160633	17.0S	58.9E	PCN 3	T2.0/3.0 /W2.0/24HRS	EXP LLCC	KGWC
41	161125	16.9S	58.7E	PCN 3		EXP LLCC	KGWC
42	161733	16.5S	59.2E	PCN 4		EXP LLCC	KGWC
43	170613	15.8S	56.1E	PCN 3	T1.0/2.0 /W1.0/23HRS	EXP LLCC	KGWC
44	171854	15.1S	54.0E	PCN 6	T2.5/2.5	INIT OBS	KGWC
45	172218	14.4S	53.9E	PCN 6		ULAC 13.9S 054.4E	KGWC
46	180327	14.6S	52.0E	PCN 5			KGWC
47	180734	14.8S	51.6E	PCN 5	T1.5/1.5 /D0.5		KGWC
48	181103	15.2S	50.4E	PCN 5			KGWC
49	181426	15.7S	50.3E	PCN 6			KGWC
50	181833	16.4S	50.2E	PCN 5			KGWC
51	190714	17.9S	51.6E	PCN 5			KGWC

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

TROPICAL CYCLONE 34S
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
041106Z	10.5	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.
041118Z	10.5	134.0	35	10.5 133.7	35.	18.	0.	11.0 129.8	50.	107.	5.	12.5 125.2	70.	280.	35.	0.0 0.0	0.	-0.	0.
041206Z	11.0	132.5	45	10.8 132.6	45.	13.	0.	11.5 129.7	55.	88.	15.	13.2 126.0	65.	183.	35.	0.0 0.0	0.	-0.	0.
041218Z	12.0	131.3	45	11.8 130.9	55.	26.	10.	14.1 128.1	65.	101.	30.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
041306Z	12.8	130.4	40	13.2 130.1	45.	30.	5.	15.8 128.1	40.	115.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
041318Z	13.8	129.8	35	14.8 129.9	45.	60.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
041406Z	14.1	129.0	30	14.0 129.5	30.	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	30.	102.	231.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	18.	94.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	15.	35.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	4.	15.	35.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	6	4	2	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 483. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL CYCLONE 34S
FIX POSITIONS FOR CYCLONE NO. 34

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS.	SITE
1	090600	9.8S 143.9E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	091200	11.2S 143.4E	PCN 6			PGTW
3	092100	10.8S 143.4E	PCN 6			PGTW
4	100600	11.1S 142.0E	PCN 6	T1.0/1.0 /S0.0/24HRS		PGTW
5	101600	10.6S 137.3E	PCN 6			PGTW
6	101800	10.9S 137.4E	PCN 6	T1.5/1.5	INIT OBS	PGTW
7	102100	10.5S 136.5E	PCN 6			PGTW
8	110000	10.1S 136.1E	PCN 6			PGTW
9	110129	10.9S 136.0E	PCN 5	T1.5/1.5	INIT OBS ULAC 10.6S 135.7E	KGWC
10	110300	10.6S 135.6E	PCN 6	T2.0/2.0 /D1.0/21HRS		PGTW
11	110600	10.7S 135.5E	PCN 6			PGTW
12	110828	10.3S 135.0E	PCN 6		ULAC 10.1S 134.7E	KGWC
13	110900	10.5S 135.1E	PCN 6			PGTW
14	111200	10.5S 134.7E	PCN 6			PGTW
15	111228	10.3S 133.3E	PCN 6	T2.5/2.5	INIT OBS	KGWC
16	111600	10.5S 134.3E	PCN 6	T2.5/2.5 /D1.0/22HRS		PGTW
17	111634	10.7S 133.8E	PCN 6			KGWC
18	111800	10.7S 134.1E	PCN 6			PGTW
19	112100	10.6S 133.8E	PCN 6			PGTW
20	112108	10.3S 133.6E	PCN 6			KGWC
21	120000	10.4S 133.4E	PCN 6		ULCC FIX	PGTW
22	120109	10.3S 133.2E	PCN 5	T3.0/3.0 /D1.5/24HRS		KGWC
23	120300	10.8S 132.9E	PCN 6	T3.0/3.0-/D1.0/24HRS		PGTW
24	120520	10.9S 133.0E	PCN 5			KGWC
25	120600	11.0S 132.5E	PCN 6		ULCC FIX	PGTW
26	120900	11.3S 132.1E	PCN 6		ULCC FIX	PGTW
27	120948	11.6S 132.8E	PCN 6			KGWC
28	121200	11.1S 131.7E	PCN 6			PGTW
* 29	121349	11.6S 132.8E	PCN 6			KGWC
30	121600	11.5S 131.3E	PCN 6			PGTW
31	121800	12.2S 130.8E	PCN 6	T3.5/3.5-/D1.0/26HRS		PGTW
32	121805	12.0S 131.6E	PCN 5			KGWC
33	122100	12.6S 130.7E	PCN 6			PGTW
34	122228	12.8S 131.0E	PCN 5			KGWC
35	130000	12.5S 130.6E	PCN 6		ULCC FIX	PGTW
36	130049	12.8S 130.3E	PCN 5			KGWC
37	130300	13.2S 130.5E	PCN 6		ULCC FIX	PGTW
38	130509	13.3S 130.3E	PCN 5			KGWC
39	130600	13.5S 130.0E	PCN 6		ULCC FIX	PGTW
40	130900	13.7S 130.4E	PCN 6		ULCC FIX	PGTW
41	130927	13.7S 130.2E	PCN 5			KGWC
42	131200	13.7S 130.0E	PCN 6		ULCC FIX	PGTW
43	131329	14.2S 130.7E	PCN 5		ULAC 14.9S 130.8E	KGWC
44	131600	14.4S 129.5E	PCN 6			PGTW
* 45	131755	14.8S 130.3E	PCN 5		ULCC 14.4S 129.8E	KGWC
46	131800	14.8S 129.7E	PCN 6			PGTW
* 47	132100	15.0S 129.8E	PCN 6			PGTW
* 48	132207	15.2S 130.3E	PCN 5			KGWC
* 49	140000	15.3S 129.8E	PCN 6		ULCC FIX	PGTW
* 50	140210	15.6S 131.0E	PCN 5			KGWC
51	140300	14.0S 129.4E	PCN 6		ULCC 15.5S 129.8E	PGTW
52	140600	14.0S 129.2E	PCN 4	T0.0/0.0	INIT OBS EXP LLCC	PGTW
53	150000	14.1S 127.5E	PCN 6	T0.0/0.0 /S0.0/18HRS	EXP LLCC	PGTW

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	121200	11.8S 138.9E	LAND				40//0 42408		12.4S 130.8E	94120
2	121400	11.6S 131.7E	LAND				4///0 62087		12.4S 130.8E	94120
3	122300	12.5S 130.4E	LAND				45150 52613		12.4S 130.8E	94120
4	130200	12.6S 130.4E	LAND				5///2 52304		12.4S 130.8E	94120
5	130400	12.7S 130.0E	LAND				4//32 52412		12.4S 130.8E	94120
6	130800	12.8S 130.2E	LAND				45/// 71204		12.4S 130.8E	94120
7	131000	13.2S 129.8E	LAND				40/// 62110		12.4S 130.8E	94120
8	131400	13.5S 129.8E	LAND				45//2 72009		12.4S 130.8E	94120

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	140000	14.0S 129.5E	035	020	WMO 94111

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

TROPICAL CYCLONE 35S
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	
041206Z	8.8	100.3	35	9.0	100.6	35.	21.	0.	10.1	96.2	55.	177.	5.	11.7	92.5	70.	517.	5.	0.0	0.0	0.	-0.	0.				
041218Z	9.2	99.0	45	9.2	98.5	45.	30.	0.	10.3	94.6	65.	339.	5.	12.2	91.1	80.	705.	10.	0.0	0.0	0.	-0.	0.				
041306Z	10.1	99.2	50	9.5	99.4	55.	38.	5.	10.0	98.5	65.	211.	0.	11.1	96.8	80.	572.	20.	0.0	0.0	0.	-0.	0.				
041318Z	11.1	100.3	60	10.9	99.9	65.	26.	5.	12.4	100.5	75.	182.	5.	13.9	99.1	85.	518.	30.	0.0	0.0	0.	-0.	0.				
041406Z	12.2	101.3	65	11.8	101.3	65.	24.	0.	14.2	103.1	75.	160.	15.	17.3	103.7	85.	314.	35.	0.0	0.0	0.	-0.	0.				
041418Z	14.2	103.0	70	14.0	102.8	70.	17.	0.	17.2	105.5	90.	104.	35.	20.0	108.5	100.	105.	60.	0.0	0.0	0.	-0.	0.				
041506Z	15.5	105.5	60	15.3	105.3	70.	17.	10.	17.7	109.8	70.	75.	20.	19.6	113.5	75.	162.	45.	0.0	0.0	0.	-0.	0.				
041518Z	17.4	107.3	55	17.0	107.3	50.	24.	-5.	20.1	110.2	40.	60.	0.	23.4	112.8	30.	335.	0.	0.0	0.0	0.	-0.	0.				
041606Z	18.7	109.0	50	19.2	109.5	45.	41.	-5.	23.5	112.8	35.	309.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.				
041618Z	19.1	110.1	40	19.6	110.2	35.	31.	-5.	20.7	111.9	25.	167.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.				
041706Z	18.7	110.8	30	19.3	110.9	30.	36.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.				
041718Z	18.2	110.6	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.				
041806Z	17.8	110.3	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.				
041818Z	17.5	110.0	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				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	28.	178.	404.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	21.	119.	237.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	10.	26.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	0.	9.	26.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	11	10	8	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1111. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TROPICAL CYCLONE 35S
FIX POSITIONS FOR CYCLONE NO. 35

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	101200	8.8S 109.3E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	101600	8.6S 107.2E	PCN 6			PGTW
3	101800	8.5S 106.9E	PCN 6			PGTW
4	102100	9.0S 106.3E	PCN 6			PGTW
5	111800	9.2S 105.7E	PCN 6	T1.5/1.5 /D0.5/30HRS		PGTW
6	112100	9.9S 104.9E	PCN 6			PGTW
7	120250	9.2S 101.2E	PCN 5	T1.5/1.5	INIT OBS ULAC 09.3S 101.9E	KGWC
8	120300	8.7S 100.9E	PCN 6	T2.5/2.5	INIT OBS ULCC FIX	PGTW
9	120600	8.8S 100.3E	PCN 6		ULCC FIX	PGTW
10	120702	8.6S 101.2E	PCN 5		ULAC 09.2S 102.1E	KGWC
11	120900	9.0S 99.9E	PCN 6		ULCC FIX	PGTW
12	121129	9.0S 99.8E	PCN 6		ULAC 09.4S 099.5E	KGWC
13	121200	9.0S 99.4E	PCN 6			PGTW
14	121531	9.0S 99.9E	PCN 6	T3.0/3.0	INIT OBS ULAC 09.2S 099.5E	KGWC
15	121600	9.0S 99.0E	PCN 6			PGTW
16	121800	9.0S 98.7E	PCN 6	T3.0/3.0 /D1.5/24HRS		PGTW
17	121947	9.2S 99.6E	PCN 6		ULAC 09.3S 099.2E	KGWC
18	122100	9.3S 98.6E	PCN 6			PGTW
19	130000	9.3S 99.3E	PCN 6			PGTW
20	130009	9.5S 99.3E	PCN 6		ULAC 09.6S 098.8E	KGWC
21	130300	9.5S 99.5E	PCN 6	T3.5/3.5-/D1.0/24HRS	ULCC FIX	PGTW
22	130411	10.2S 99.6E	PCN 6	T2.5/2.5 /D1.0/25HRS	ULAC 09.6S 099.4E	KGWC
23	130600	9.8S 99.5E	PCN 6		ULCC FIX	PGTW
24	130833	10.4S 99.4E	PCN 6		ULAC 10.2S 098.7E	KGWC
25	130834	10.4S 99.7E	PCN 5	T1.5/1.5	INIT OBS	FJDG
26	130900	10.2S 99.3E	PCN 6			PGTW
27	131108	11.0S 99.1E	PCN 6			KGWC
28	131200	10.6S 99.5E	PCN 6			PGTW
29	131531	11.1S 99.8E	PCN 6	T3.5/3.5 /D0.5/24HRS		KGWC
30	131600	11.1S 99.9E	PCN 6	T4.0/4.0 /D1.0/22HRS		PGTW
31	131800	11.1S 100.6E	PCN 6			PGTW
32	131932	11.1S 100.8E	PCN 6		ULAC 11.0S 100.4E	KGWC
33	132100	11.1S 101.3E	PCN 6			PGTW
34	132348	11.6S 100.9E	PCN 6		ULAC 11.1S 100.4E	KGWC
35	140000	11.4S 100.8E	PCN 6			PGTW
36	140300	11.6S 101.1E	PCN 6			PGTW
37	140352	11.5S 101.5E	PCN 6	T3.5/3.5 /D1.0/24HRS	ULAC 11.3S 101.3E	KGWC
38	140600	11.9S 101.4E	PCN 6	T4.0/4.0 /D0.5/27HRS		PGTW
39	140822	12.5S 101.6E	PCN 6		ULAC 13.1S 100.9E	KGWC
40	140823	12.7S 101.2E	PCN 5			FJDG
41	141047	12.6S 101.7E	PCN 6		ULAC 12.6S 101.9E	KGWC
42	141200	13.1S 101.4E	PCN 6			PGTW
43	141450	13.4S 102.3E	PCN 6	T3.0/3.5 /W0.5/24HRS	ULAC 13.4S 103.1E	KGWC
44	141600	14.2S 103.2E	PCN 6	T4.5/4.5 /D0.5/24HRS		PGTW
45	141800	14.3S 103.0E	PCN 4			PGTW
46	141926	14.2S 103.7E	PCN 6			KGWC
47	142100	14.3S 103.6E	PCN 6			PGTW
48	142327	14.8S 104.8E	PCN 6			KGWC
49	150000	14.8S 104.3E	PCN 6			PGTW
50	150300	14.7S 104.9E	PCN 6	T4.0/4.0-/S0.0/21HRS		PGTW
51	150331	15.3S 105.3E	PCN 6	T3.0/3.5 /W0.5/23HRS		KGWC
52	150600	15.7S 105.8E	PCN 6		ULCC 15.1S 105.2E	PGTW
53	150811	15.9S 106.0E	PCN 6		ULAC 16.1S 105.6E	KGWC
54	150900	16.4S 106.2E	PCN 6		ULCC FIX	PGTW
55	151200	16.8S 106.9E	PCN 6		ULCC FIX	PGTW
56	151439	16.9S 106.9E	PCN 6	T2.5/3.0 /W0.5/24HRS	EXP LLCC ULAC 17.9S 107.4E	KGWC
57	151915	17.6S 108.0E	PCN 6			KGWC
58	152336	18.4S 108.2E	PCN 6		EXP LLCC ULAC 19.1S 108.9E	KGWC
59	160311	18.6S 109.0E	PCN 3	T2.5/3.0 /W0.5/24HRS	EXP LLCC ULAC 19.4S 109.6E	KGWC
60	160600	18.7S 109.3E	PCN 6	T3.0/4.0 /W1.0/27HRS		PGTW
61	160801	19.0S 108.8E	PCN 4		EXP LLCC ULAC 20.3S 109.4E	KGWC
62	160900	18.7S 109.7E	PCN 6			PGTW
63	161004	18.8S 109.2E	PCN 4		EXP LLCC	KGWC
64	161200	19.2S 109.9E	PCN 6			PGTW
65	161410	18.6S 109.4E	PCN 4	T1.5/2.0 /W1.0/24HRS	EXP LLCC	KGWC
66	161600	19.5S 110.3E	PCN 6			PGTW
67	161904	18.8S 110.5E	PCN 4		EXP LLCC	KGWC
68	162100	18.8S 110.6E	PCN 4		EXP LLCC	PGTW
69	162244	18.7S 110.6E	PCN 4		EXP LLCC	KGWC
70	170000	18.9S 110.8E	PCN 4		EXP LLCC	PGTW
71	170250	18.8S 110.9E	PCN 3		EXP LLCC	KGWC
72	170600	18.7S 110.9E	PCN 6	T1.5/2.5 /W1.5/24HRS	EXP LLCC	PGTW
73	170750	18.4S 110.5E	PCN 3		EXP LLCC	KGWC
74	170900	18.7S 110.9E	PCN 6			PGTW
75	171349	17.9S 110.5E	PCN 4		EXP LLCC	KGWC
76	180000	18.0S 110.5E	PCN 4		EXP LLCC	PGTW
77	180230	17.7S 110.0E	PCN 3			KGWC
78	180600	17.8S 110.1E	PCN 4	T1.0/1.5 /W0.5/24HRS		PGTW
79	181511	17.8S 110.5E	PCN 4		EXP LLCC	KGWC
80	181600	17.4S 110.1E	PCN 6	T1.0/1.0	INIT OBS	PGTW
81	181800	17.5S 110.0E	PCN 6			PGTW
82	190000	17.4S 109.8E	PCN 4		EXP LLCC	PGTW
83	190300	17.4S 110.4E	PCN 4		EXP LLCC	PGTW
84	190351	17.4S 110.4E	PCN 3	T1.0/1.0 /D1.0/24HRS	EXP LLCC ULAC 17.5S 111.2E	KGWC
85	190600	18.1S 110.8E	PCN 4	T1.0/1.0 /S0.0/24HRS		PGTW
86	191450	17.7S 112.6E	PCN 6		ULAC 18.1S 113.8E	KGWC
87	200331	18.6S 111.6E	PCN 5	T1.0/1.0 /S0.0/24HRS	ULAC 18.4S 114.5E	KGWC

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