ANNEX A TROPICAL CYCLONE DATA

1. WESTERN NORTH PACIFIC CYCLONE DATA

TROPICAL DEPRESSION 01

BEST TRACK DATA

	BEST TRACK		WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
					ERRORS				ERRORS				ERRORS					
MO/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
031800Z	6.4 140.9	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.
031806Z	16.8 140.5	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.
031812Z	7.6 139.7	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.
031818Z	8.2 139.0	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.
031900Z	8.7 138.3	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.
031906Z	8.8 137.9	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.
031912Z	9.0 137.3	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.
031918Z	9.0 136.7	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.
032000Z	9.0 136.2	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.
032006Z	9.0 135.6	25	9.2 135.1	25.	32.	0.	9.9 132.1	30.	101.	5.	11.2 129.7	35.	51.	10.	13.0 127.2	40.	90.	10.
032012Z	9.0 135.0	25	8.9 134.8	25.	13.	0.	9.4 132.4	35.	13.	10.	10.4 129.8	40.	69.	15.	12.3 127.7	40.	101.	10.
032018Z	9.1 134.6	25	9.2 134.2	30.	24.	5.	10.0 131.8	35.	59.	10.	11.2 129.3	40.	69.	15.	13.5 127.8	40.	179.	10.
032100Z	9.2 134.2	25	9.4 133.7	30.	32.	5.	10.2 131.2	35.	89.	10.	11.6 128.9	40.	79.	10.	13.3 127.0	40.	192.	10.
032106Z	9.3 133.7	25	9.1 133.7	30.	12.	5.	9.5 131.6	35.	153.	10.	10.7 128.3	40.	90.	10.	12.5 125.4	35.	202.	15.
032112Z	9.2 132.3	25	9.6 133.0	30.	40.	5.	10.6 130.0	35.	77.	10.	11.9 127.2	40.	70.	10.	13.3 124.6	35.	185.	15.
032118Z	10.1 130.8	25	9.9 132.1	30.	77.	5.	10.9 129.1	35.	53.	10.	12.3 126.2	40.	77.	10.	13.9 123.3	35.	152.	20.
032200Z	10.4 129.7	25	10.5 129.7	30.	6.	5.	12.5 125.3	30.	167.	0.	15.3 122.2	35.	150.	5.	0.0 0.0	0.	-0.	0.
032206Z	10.5 129.2	25	10.7 129.0	30.	17.	5.	12.6 125.2	30.	124.	0.	15.3 122.2	35.	90.	15.	0.0 0.0	0.	-0.	0.
032212Z	10.8 128.7	25	11.2 128.0	30.	47.	5.	13.5 124.0	30.	147.	0.	16.7 121.7	35.	162.	15.	0.0 0.0	0.	-0.	0.
032218Z	10.8 128.2	25	11.3 127.8	30.	38.	5.	12.7 125.1	30.	17.	0.	14.7 122.8	25.	125.	10.	0.0 0.0	0.	-0.	0.
032300Z	11.0 127.7	30	10.8 127.7	20.	12.	-10.	12.0 125.5	20.	124.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
032306Z	11.5 127.0	30	11.3 127.4	20.	26.	-10.	12.3 125.2	20.	196.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
032312Z	12.0 126.0	30	12.1 126.3	20.	19.	-10.	14.0 123.4	15.	110.	-5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
032318Z	12.5 124.9	30	12.5 125.0	20.	6.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
032400Z	13.1 123.7	30	13.3 123.8	20.	13.	-10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
032406Z	13.8 122.2	20	14.1 122.2	20.	10.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
032412Z	14.0 121.5	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.
032418Z	14.2 120.7	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.
032500Z	14.3 119.8	15	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	26.	102.	94.	157.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	12.	20.	53.	65.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	6.	6.	11.	13.	0.	0.	0.	0.
AVG INTENSITY BIAS	-0.	4.	11.	13.	0.	0.	0.	0.
NUMBER OF FORECASTS	17	14	11	7	0	0	0	0

DISTANCE TRAVELED BY STORM IS 2439. NM

AVERAGE SPEED OF STORM IS 15. KNOTS

TROPICAL DEPRESSION TD-01
FIX POSITIONS FOR CYCLONE NO. 1

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	162358	6.0N 147.5E	PCN 6	T0.0/0.0	DMSP39	INIT OBS	PGTW
2	170300	5.0N 146.6E	PCN 0		OTHER		PGTW
3	180121	8.5N 140.1E	PCN 5	T1.0/1.0 /D1.0/25HRS	DMSP39		PGTW
* 4	181007	10.0N 140.3E	PCN 6		NOAA6		PGTW
* 5	182247	8.0N 139.5E	PCN 5		NOAA6		PGTW
6	190101	8.0N 138.1E	PCN 3	T1.0/1.0 /S0.0/24HRS	DMSP39		PGTW
* 7	190945	10.6N 137.4E	PCN 5		NOAA6		PGTW
8	192225	9.1N 135.9E	PCN 3		NOAA6		PGTW
9	200041	9.1N 135.6E	PCN 3	T2.0/2.0 /D1.0/24HRS	DMSP39		PGTW
10	201104	9.4N 134.3E	PCN 6		NOAA6		PGTW
11	201600	9.7N 134.0E	PCN 0		OTHER		PGTW
12	202203	9.6N 133.7E	PCN 5		NOAA6	DATA EDGE	PGTW
13	210203	9.3N 133.5E	PCN 5	T2.0/2.0 /S0.0/26HRS	DMSP39		PGTW
14	210203	10.5N 132.5E	PCN 5	T2.0/2.0	DMSP39	INIT OBS	RPMK
* 15	210900	10.8N 131.9E	PCN 0		OTHER		PGTW

16	211043	11.1N 130.9E	PCN 5		NOAA6		PGTW
17	211600	12.0N 130.9E	PCN 0		OTHER		PGTW
18	212322	10.3N 130.4E	PCN 3		NOAA6	EXPOSED LLC	PGTW
19	220124	11.5N 128.2E	PCN 3	T1.0/1.0 /S0.0/24HRS	DMSP39		RODN
20	220144	10.9N 130.2E	PCN 5	T1.0/1.0	DMSP39	INIT OBS	RODN
21	220144	10.4N 130.1E	PCN 3	T1.0/2.0 /W1.0/24HRS	DMSP39		PGTW
22	220900	11.2N 129.1E	PCN 0		OTHER		PGTW
23	221021	11.0N 129.7E	PCN 5		NOAA6		PGTW
24	221600	11.3N 129.3E	PCN 0		OTHER		PGTW
25	222300	10.7N 128.3E	PCN 5		NOAA6		PGTW
26	230124	11.4N 128.1E	PCN 3	T1.0/1.0 /S0.0/24HRS	DMSP39		PGTW
27	230900	12.1N 126.9E	PCN 0		OTHER		PGTW
28	231600	12.3N 125.4E	PCN 0		OTHER		PGTW
29	232100	13.0N 124.4E	PCN 0		OTHER		PGTW
30	240000	12.8N 123.4E	PCN 0		OTHER		PGTW
31	240246	14.6N 121.9E	PCN 5	T2.0/2.0	DMSP39	INIT OBS	RPMK
32	240246	13.8N 122.5E	PCN 5	T1.0/1.0 /S0.0/25HRS	DMSP39		RODN
33	260206	11.8N 117.4E	PCN 5	T1.5/1.5	DMSP39	INIT OBS	PGTW
34	260300	12.1N 117.4E	PCN 0		OTHER		PGTW
35	261200	12.5N 116.8E	PCN 0		OTHER		PGTW
36	261215	12.3N 116.5E	PCN 6		NOAA6		RPMK
37	270147	11.8N 114.9E	PCN 5		DMSP39		PGTW
38	270300	12.2N 114.3E	PCN 0		OTHER		PGTW
39	270328	12.1N 115.0E	PCN 5		DMSP39	NO DVORAK	RPMK
40	271153	12.2N 113.7E	PCN 6		NOAA6		RPMK
41	280000	11.5N 112.8E	PCN 0		OTHER		PGTW
42	280309	11.0N 111.3E	PCN 5	T1.0/1.0	DMSP39	INIT OBS	RODN

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	180205	6.3N 140.6E	1500FT		1005	20 050 240	090 44 050 240	5 5			+23 +23 +22	1
2	190007	8.3N 138.9E	1500FT		1006	20 030 230	100 30 030 230	5 10			+22 +23 +23 28	2
3	200045	9.1N 135.7E	1500FT		1003	25 030 30	120 32 060 70	6 7			+25 24	3
4	200926	8.7N 135.1E	700MB	3123		35 020 120	130 22 020 120	5 10			+ 9 +13 + 8	4
5	210100	8.9N 134.1E	700MB	3097		25 010 65	130 20 040 120	6 8			+ 9 + 8	6
6	210635	9.4N 133.7E	700MB	3083		10 120 10	250 10 000 000	10 10			+11 + 9	6
7	212207	10.4N 130.0E	700MB	3101	1003	15 330 55	090 46 010 130	5 15			+12 +12 +11	8
8	221946	11.1N 128.5E	700MB	3104		20 120 100	090 42 010 150	10 15			+12 + 8	10
9	222315	10.6N 127.7E	700MB	3120	1005	15 090 60	160 32 100 80	4 45			+12 +12 + 8	10

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
* 1	230000	12.0N 128.0E	030	20	
* 2	231200	11.5N 127.0E	030	20	
3	231800	12.4N 125.0E	030	90	
4	232100	12.8N 124.5E	030	20	
5	240000	13.0N 124.0E	010	20	

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

TROPICAL STORM CARMEN

BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
					ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
040400Z	4.7 181.4	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.
040406Z	6.0 181.2	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	7.2 181.1	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.
040418Z	8.3 180.4	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.
040500Z	9.2 179.6	40	9.5	180.0	30.	30.	-10.	13.7	177.7	40.	56.	-20.	18.1	178.0	45.	70.	0.	20.9	181.9	35.	91.	0.
040506Z	10.1 178.5	45	10.0	178.9	30.	24.	-15.	13.6	176.2	40.	155.	-20.	17.0	176.4	40.	236.	-5.	20.0	180.3	30.	40.	-5.
040512Z	11.6 177.8	50	11.0	178.2	40.	45.	-10.	14.7	175.8	60.	184.	5.	18.5	177.9	55.	139.	15.	21.2	181.7	45.	38.	15.
040510Z	13.1 177.4	55	13.8	177.7	45.	45.	-10.	19.6	179.9	50.	136.	0.	22.8	186.5	50.	388.	10.	25.0	192.7	40.	050.	10.
040600Z	14.5 177.2	60	14.7	176.8	45.	26.	-15.	18.7	176.6	50.	136.	5.	21.9	183.4	35.	193.	0.	24.0	189.3	30.	431.	5.
040606Z	16.0 177.2	60	15.5	177.2	45.	30.	-15.	19.3	180.1	40.	23.	-5.	23.0	185.6	35.	312.	0.	0.0	0.0	0.	-0.	0.
040612Z	17.1 177.8	55	17.0	177.9	60.	8.	5.	20.9	182.8	45.	172.	5.	23.9	190.0	35.	523.	5.	0.0	0.0	0.	-0.	0.
040618Z	17.9 178.3	50	18.4	178.7	50.	30.	0.	22.0	184.4	35.	263.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
040700Z	18.8 179.0	45	18.5	179.8	50.	49.	5.	21.0	185.0	40.	260.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
040706Z	19.4 179.7	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.
040712Z	19.7 180.0	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.
040718Z	20.0 180.2	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.
040800Z	20.3 180.4	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.
040806Z	20.6 180.6	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.
040812Z	20.9 181.1	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.
040818Z	21.2 181.6	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.
040900Z	21.4 182.0	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	32.	154.	266.	250.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	19.	98.	179.	218.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	9.	8.	5.	7.	0.	0.	0.	0.
AVG INTENSITY BIAS	-7.	-3.	4.	5.	0.	0.	0.	0.
NUMBER OF FORECASTS	9	9	7	5	0	0	0	0

DISTANCE TRAVELED BY STORM IS 1179. NM

AVERAGE SPEED OF STORM IS 10. KNOTS

TROPICAL STORM CARMEN
FIX POSITIONS FOR CYCLONE NO. 2

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
* 1	310000	6.7N 174.3W	PCN 0		OTHER		PGTW
2	040015	4.5N 179.5W			GOES3		NESS
3	040900	6.9N 178.0W	PCN 0		OTHER		PGTW
* 4	041015	5.7N 179.9E			GOES3		NESS
5	041200	7.1N 178.3W	PCN 0		OTHER		PGTW
6	041515	7.4N 180.0E			GOES3	EST MAX WNDS 35 KTS	NESS
7	041530	7.5N 179.7E	PCN 6		NOAA6		KGWC
8	041600	8.0N 179.0W	PCN 0		OTHER		PGTW
* 9	041714	6.6N 180.0E	PCN 6		NOAA6		KGWC
10	041915	8.5N 179.9E			GOES3		NESS
11	041954	8.5N 179.7E	PCN 6	T2.5/2.5	NOAA6	INIT OBS	KGWC
12	041954	9.0N 179.9E	PCN 6		NOAA6		PHIK
13	042100	9.5N 179.2W	PCN 0		OTHER		PGTW
14	050000	9.7N 179.6E	PCN 0	T2.5/2.5	OTHER	INIT OBS	PGTW
15	050233	9.4N 179.1E	PCN 6	T2.5/2.5	TIROSN	INIT OBS	PHIK
16	050234	9.6N 178.4E	PCN 6		NOAA6		KGWC
17	050300	9.4N 179.0E	PCN 0		OTHER		PGTW
18	050653	9.4N 178.2E	PCN 6		NOAA6		PHIK
19	050900	11.3N 178.9E	PCN 0		OTHER		PGTW
20	051119	11.1N 177.5E			GOES3	EST MAX WNDS 45 KTS OVER WATER	NESS
21	051200	11.8N 178.3E	PCN 0		OTHER		PGTW
22	051519	13.0N 177.6E	PCN 4		TIROSN		PHIK
23	051600	13.5N 178.0E	PCN 0		OTHER		PGTW
* 24	051932	13.9N 177.3E	PCN 6		NOAA6		PHIK
25	051932	13.6N 177.2E	PCN 6	T3.5/3.5 /D1.0/24HRS	NOAA6		KGWC
26	052015	13.7N 177.0E			GOES3	EST MAX SFC WNDS 55 KTS	NESS
27	052100	14.1N 177.5E	PCN 0		OTHER		PGTW
28	052231	14.1N 177.0E	PCN 2	T4.5/4.5 /D2.0/20HRS	DMSP39		PHIK
29	060000	14.5N 177.4E	PCN C	T3.5/3.5 /D1.0/24HRS	OTHER		PGTW
30	060300	14.8N 177.7E	PCN 0		OTHER		PGTW
31	060450	15.0N 177.2E			GOES3	RGD EYE EST MAX WNDS 60 KTS	NESS
32	060600	16.1N 177.3E	PCN C		OTHER	RGD BNDG EYE	PGTW
33	060811	16.5N 177.2E	PCN 6		NOAA6		KGWC
34	060900	16.4N 177.7E	PCN C		OTHER	RGD EYE	PGTW
35	061200	16.8N 177.5E	PCN C		OTHER	PARTIALLY BNDING EYE	PGTW
36	061508	18.0N 178.4E	PCN 6		TIROSN		PHIK
37	061600	17.7N 178.2E	PCN C		OTHER	RGD EYE	PGTW
38	061615	17.4N 178.0E			GOES3	EST MAX WNDS 65 KTS	NESS
39	061800	18.0N 178.8E	PCN C		OTHER		PGTW
40	061910	18.4N 178.3E	PCN 5	T3.5/4.5 /W1.0/21HRS	NOAA6		PHIK
41	062100	18.0N 179.2E	PCN 0		OTHER		PGTW
42	062210	18.3N 179.0E	PCN 6	T3.5/4.5 /W1.0/24HRS	DMSP39		PHIK
43	070000	18.5N 179.2E	PCN 0	T2.5/3.5 /W1.0/24HRS	OTHER		PGTW

44	071115	19.5N	179.5W			GOES3		NESS
45	071915	20.0N	179.5W			GOES3		NESS
46	072151	20.1N	179.9W	PCN 6		DMSP39		PHIK
47	072315	20.1N	179.5W			GOES3		NESS
48	080615	20.6N	179.4W			GOES3		NESS
49	081200	20.6N	179.4W			GOES3		NESS
50	081800	21.0N	178.5W			GOES3		NESS
51	082131	21.3N	178.2W	PCN 3	T1.0/2.0 / W.	DMSP39	LLCC	PHIK
52	090000	21.4N	178.0W			GOES3		NESS

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

TYPHOON DOM

BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
					ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
050800Z	8.2	142.6	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.
050806Z	8.2	141.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
050812Z	8.1	140.9	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.
050818Z	7.9	140.2	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.
050900Z	7.7	139.2	25	7.8	140.1	30.	54.	5.	8.3	137.7	40.	164.	10.	9.2	135.3	50.	262.	10.	10.2	133.3	55.	426.	-5.
050906Z	8.3	138.2	25	7.8	138.7	30.	42.	5.	8.3	136.0	40.	139.	10.	9.3	133.8	50.	249.	5.	10.5	131.9	55.	411.	-10.
050912Z	9.1	137.4	25	8.1	137.3	30.	60.	5.	8.7	134.1	40.	139.	10.	9.4	131.3	45.	200.	-5.	10.1	129.0	45.	370.	-25.
050918Z	9.9	136.6	30	9.2	137.4	30.	63.	0.	11.3	135.3	40.	176.	5.	12.3	133.1	45.	300.	-10.	12.9	130.8	45.	410.	-30.
051000Z	10.2	135.7	30	10.0	137.0	30.	77.	0.	12.3	134.8	40.	199.	0.	14.1	132.6	50.	332.	-10.	15.8	130.8	50.	396.	-30.
051006Z	10.3	134.8	30	10.7	135.4	30.	43.	0.	13.0	132.4	45.	137.	0.	15.0	129.9	50.	237.	-15.	17.8	128.5	45.	294.	-45.
051012Z	11.0	133.7	30	11.6	133.5	30.	38.	0.	14.5	129.4	40.	132.	-10.	17.0	126.8	50.	163.	-20.	19.3	124.3	45.	171.	-40.
051018Z	11.3	132.3	35	12.2	132.3	30.	54.	-5.	14.8	128.6	40.	113.	-15.	17.0	125.8	50.	124.	-25.	19.2	123.2	40.	137.	-40.
051100Z	11.5	131.5	40	11.9	131.5	30.	24.	-10.	14.0	128.0	40.	68.	-20.	16.8	125.1	45.	87.	-35.	19.5	123.2	35.	139.	-40.
051106Z	11.8	130.4	45	12.0	129.8	40.	37.	-5.	13.5	124.7	50.	70.	-15.	15.3	122.2	45.	100.	-45.	18.3	122.5	40.	61.	-25.
051112Z	12.3	129.3	50	12.3	129.5	45.	12.	-5.	14.0	125.4	55.	59.	-15.	16.8	122.6	45.	42.	-40.	19.2	122.7	35.	102.	-20.
051118Z	13.0	128.0	55	13.5	128.4	50.	38.	-5.	16.2	125.4	50.	76.	-25.	18.2	124.0	60.	93.	-20.	20.8	124.6	35.	223.	-15.
051200Z	13.6	126.9	60	13.8	126.7	50.	17.	-10.	17.1	123.8	60.	72.	-20.	19.7	123.9	50.	162.	-25.	22.2	126.0	35.	322.	-10.
051206Z	14.1	125.9	65	14.5	125.4	55.	38.	-10.	18.2	123.5	60.	114.	-30.	19.7	123.9	50.	159.	-15.	23.0	126.1	35.	349.	-15.
051212Z	14.9	125.0	70	15.1	124.9	60.	13.	-10.	17.0	125.6	65.	74.	-20.	20.0	124.0	55.	172.	0.	23.6	126.3	40.	366.	-15.
051218Z	15.5	124.3	75	15.0	124.3	60.	18.	-15.	19.0	123.3	65.	126.	-15.	22.5	125.0	50.	322.	0.	25.7	128.8	40.	522.	-20.
051300Z	15.9	123.9	80	16.0	124.0	70.	8.	-10.	18.0	123.2	80.	53.	5.	21.2	123.9	65.	209.	20.	24.8	127.6	50.	414.	-15.
051306Z	16.3	123.6	90	16.3	123.8	70.	11.	-20.	18.1	123.3	80.	59.	15.	21.2	123.9	65.	193.	15.	24.8	127.4	50.	302.	-15.
051312Z	16.6	123.3	85	16.8	123.2	85.	13.	0.	19.4	122.7	85.	114.	30.	22.8	124.9	70.	284.	15.	25.9	128.9	50.	452.	-15.
051318Z	16.9	123.1	80	17.2	122.9	85.	21.	5.	19.6	122.9	80.	117.	30.	22.9	125.1	65.	266.	5.	26.0	129.0	45.	419.	-20.
051400Z	17.2	122.8	75	17.5	122.8	85.	18.	10.	19.5	122.6	75.	90.	30.	22.6	125.0	65.	224.	0.	26.2	129.2	45.	397.	-15.
051406Z	17.3	122.7	65	17.3	122.9	80.	11.	15.	19.2	123.0	65.	64.	15.	22.6	125.5	55.	215.	-10.	26.2	129.2	45.	367.	-15.
051412Z	17.5	122.5	55	17.6	122.6	75.	8.	20.	19.5	122.7	60.	55.	5.	22.3	125.2	45.	161.	-20.	26.1	129.0	30.	325.	-25.
051418Z	17.7	122.4	50	17.8	122.3	60.	8.	10.	19.7	122.3	55.	40.	-5.	22.5	124.8	45.	137.	-20.	8.0	0.0	0.	-0.	0.
051500Z	18.0	122.4	45	18.0	122.3	55.	6.	10.	19.8	122.6	45.	29.	-20.	22.6	124.8	40.	123.	-20.	0.0	0.0	0.	-0.	0.
051506Z	18.3	122.4	50	18.4	122.3	55.	8.	5.	20.3	122.9	45.	40.	-20.	23.5	125.6	40.	156.	-20.	0.0	0.0	0.	-0.	0.
051512Z	18.6	122.5	55	18.5	122.7	45.	13.	-10.	20.2	123.4	40.	33.	-25.	24.2	126.1	30.	100.	-25.	0.0	0.0	0.	-0.	0.
051518Z	19.1	122.6	60	19.0	122.7	45.	8.	-15.	21.7	124.0	40.	90.	-25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051600Z	19.4	122.9	65	19.0	122.7	40.	26.	-25.	21.0	124.0	30.	102.	-30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051606Z	19.7	123.2	65	20.1	123.4	60.	26.	-5.	24.0	126.0	50.	193.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051612Z	19.9	123.9	65	20.1	124.1	55.	16.	-10.	23.1	128.2	45.	151.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051618Z	20.2	124.7	65	20.4	124.8	55.	13.	-10.	23.5	129.0	45.	175.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051700Z	20.6	125.3	60	20.5	125.7	65.	23.	5.	24.2	132.2	35.	323.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051706Z	20.9	125.8	60	21.0	126.4	65.	34.	5.	22.0	129.9	45.	196.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051712Z	21.2	126.4	55	21.2	126.5	65.	6.	10.	24.3	131.3	35.	333.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051718Z	21.3	126.9	50	21.2	127.2	60.	18.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051800Z	21.1	127.4	45	21.3	127.1	55.	21.	10.	23.3	130.5	30.	286.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051806Z	20.8	127.1	40	21.2	127.8	55.	46.	15.	22.9	131.2	30.	315.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051812Z	20.7	126.7	35	21.1	128.0	50.	76.	15.	21.9	131.8	30.	324.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051818Z	20.6	126.4	30	21.1	129.0	45.	148.	15.	21.2	131.5	30.	295.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051900Z	20.8	126.1	30	20.9	126.2	40.	8.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051906Z	21.0	125.9	25	20.9	125.9	35.	6.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
051912Z	21.3	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.
051918Z	21.5	126.2	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.
052000Z	21.7	126.5	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.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	40-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	29.	137.	191.	324.	22.	115.	191.	324.
AVG RIGHT ANGLE ERROR	15.	106.	133.	238.	12.	88.	133.	238.
AVG INTENSITY MAGNITUDE ERROR	9.	14.	17.	22.	10.	15.	17.	22.
AVG INTENSITY BIAS	0.	-4.	-11.	-22.	0.	-6.	-11.	-22.
NUMBER OF FORECASTS	42	39	27	23	32	32	27	23

DISTANCE TRAVELED BY STORM IS 1938. NM

AVERAGE SPEED OF STORM IS 7. KNOTS

TYPHOON DOM
FIX POSITIONS FOR CYCLONE NO. 3

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
* 1	050918	8.6N 149.2E	PCN 6		NOAA6		PGTW
* 2	052158	10.1N 149.4E	PCN 5	T1.0/1.0	NOAA6	INIT OBS	PGTW
* 3	060029	10.1N 148.9E	PCN 5		DMSP39		PGTW
* 4	071015	9.0N 143.2E	PCN 6		NOAA6		PGTW
5	072137	8.8N 142.6E	PCN 5		DMSP37		PGTW
6	072255	8.7N 142.6E	PCN 5		NOAA6		PGTW
7	080131	8.8N 141.9E	PCN 5	T1.0/1.0	DMSP39		PGTW
8	080632	8.0N 142.1E	PCN 5		TIROSN	PSN SUSPECT	PGTW
* 9	080953	10.3N 142.5E	PCN 5		NOAA6		PGTW
* 10	081735	10.4N 141.7E	PCN 5		TIROSN		PGTW
* 11	082116	8.8N 140.3E	PCN 3		DMSP37		PGTW
12	082233	8.6N 140.3E	PCN 5		NOAA6		PGTW
13	090110	8.9N 140.4E	PCN 5	T2.5/2.5 /D1.5/24HRS	DMSP39		PGTW
* 14	090111	9.6N 140.0E	PCN 5	T1.5/1.5	DMSP39	INIT OBS	RPMK
15	090300	8.4N 140.0E	PCN 0		OTHER		PGTW
16	090930	9.0N 137.7E	PCN 5		NOAA6		PGTW
17	091600	10.1N 137.8E	PCN 0		OTHER		PGTW
18	092055	10.3N 136.8E	PCN 5		DMSP37		RODN
19	092100	10.0N 136.5E	PCN 0		OTHER		PGTW
20	092210	10.9N 136.3E	PCN 5		NOAA6		PGTW
21	100005	11.1N 135.9E	PCN 5	T2.5/2.5 /S0.0/24HRS	DMSP39		PGTW
22	100300	11.2N 135.2E	PCN 0		OTHER		PGTW
23	101050	11.7N 133.2E	PCN 5		NOAA6		PGTW
24	101600	11.9N 132.8E	PCN 0		OTHER		PGTW
25	102100	12.2N 131.7E	PCN 0		OTHER		PGTW
26	102215	11.6N 131.4E	PCN 5		DMSP37		PGTW
27	102330	11.5N 131.0E	PCN 5		NOAA6		PGTW
28	110213	11.8N 130.3E	PCN 5	T3.0/3.0	DMSP39	INIT OBS	RODN

29	110213	11.8N	130.4E	PCN 5	T2.5/2.5+/S0.0/25HRS	DMSP39		PGTW
30	110300	11.6N	130.1E	PCN 0		OTHER		PGTW
31	110600	11.9N	129.6E	PCN 0		OTHER		PGTW
32	110900	12.3N	129.7E	PCN 0		OTHER		PGTW
33	111028	12.3N	129.6E	PCN 3		NOAA6		PGTW
34	111600	13.1N	128.7E	PCN 0		OTHER		PGTW
35	112154	13.6N	127.6E	PCN 3		DMSP37		PGTW
36	112307	14.0N	127.3E	PCN 1		NOAA6		PGTW
37	120153	14.2N	126.6E	PCN 3	T3.5/3.5	DMSP39	INIT OBS	RPMK
38	120153	13.9N	126.5E	PCN 3	T3.5/3.5-/D1.0/24HRS	DMSP39		PGTW
39	120300	14.1N	126.4E	PCN C		OTHER		PGTW
40	120900	14.7N	125.6E	PCN C		OTHER		PGTW
41	121147	15.3N	125.2E	PCN 6		NOAA6		RODN
42	121200	15.3N	125.1E	PCN C		OTHER		PGTW
43	121600	15.7N	124.8E	PCN C		OTHER		PGTW
44	122133	16.2N	124.5E	PCN 5		DMSP37	ON DATA EDGE	PGTW
45	122245	16.0N	124.3E	PCN 3	T4.0/4.0 /D0.5/21HRS	NOAA6		PGTW
46	130134	16.2N	124.0E	PCN 1	T5.0/5.0	DMSP39	INIT OBS	RODN
47	130134	16.2N	123.8E	PCN 1		DMSP39		PGTW
48	130900	16.7N	123.6E	PCN E		OTHER		PGTW
49	131125	17.0N	123.2E	PCN 2		NOAA6		RPMK
50	131125	16.8N	123.3E	PCN 1		NOAA6		PGTW
51	131600	16.9N	123.1E	PCN E		OTHER		PGTW
52	140004	17.2N	122.9E	PCN 3	T4.0/5.0 /W0.5/25HRS	NOAA6		RODN
53	140114	17.2N	122.7E	PCN 5		DMSP39	DATA EDGE	RPMK
54	140255	17.2N	122.8E	PCN 3		DMSP39		RODN
55	140255	17.2N	122.7E	PCN 3	T4.5/4.5	DMSP39	INIT OBS	RPMK
56	140600	17.5N	122.3E	PCN E		OTHER		PGTW
57	140900	17.7N	122.3E	PCN 0		OTHER		PGTW
58	141102	17.6N	122.5E	PCN 1		NOAA6		PGTW
59	141600	17.6N	122.4E	PCN C		OTHER		PGTW
60	142234	17.8N	122.3E	PCN 3		DMSP37		RODN
61	142342	18.0N	122.4E	PCN 3	T3.5/3.5	NOAA6	INIT OBS	PGTW
62	150235	18.0N	122.3E	PCN 3	T4.0/4.5 /W0.5/26HRS	DMSP39		RODN
63	150236	18.1N	122.3E	PCN 5	T3.0/3.0 /W1.5/24HRS	DMSP39		RPMK
64	151040	18.6N	122.5E	PCN 3		NOAA6		PGTW
65	151600	18.9N	122.5E	PCN 0		OTHER		PGTW
66	151800	19.1N	123.1E	PCN 0		OTHER		PGTW
67	152100	19.1N	122.8E	PCN C		OTHER		PGTW
68	152211	19.1N	123.3E	PCN 3		DMSP37		PGTW
69	152320	19.4N	123.1E	PCN 3		NOAA6		PGTW
70	160216	19.6N	123.1E	PCN 3	T4.0/4.0-/D0.5/26HRS	DMSP39		PGTW
71	160216	19.5N	123.1E	PCN 3	T4.0/4.0-/D1.0/24HRS	DMSP39		RPMK
72	160900	19.8N	123.7E	PCN C		OTHER		PGTW
73	161018	19.8N	123.8E	PCN 3		NOAA6		PGTW
74	161600	20.0N	124.2E	PCN E		OTHER		PGTW
75	161800	20.0N	124.4E	PCN E		OTHER		PGTW
76	162150	20.4N	125.1E	PCN 3		DMSP37		PGTW
77	170156	20.8N	125.3E	PCN 3	T5.0/5.0	DMSP39	INIT OBS	RODN
78	170156	20.7N	125.4E	PCN 3	T4.0/4.0-/S0.0/24HRS	DMSP39		PGTW
79	170900	21.0N	126.1E	PCN E		OTHER		PGTW
80	171137	21.1N	126.4E	PCN 6		NOAA6	DATA EDGE	RPMK
81	171600	20.9N	126.6E	PCN 0		OTHER		PGTW
82	172100	21.0N	127.2E	PCN 0		OTHER		PGTW
83	172129	21.2N	126.9E	PCN 5		DMSP37		PGTW
84	172235	21.2N	126.9E	PCN 5		NOAA6		PGTW
85	180017	21.0N	127.7E	PCN 5		NOAA6		RODN
86	180136	20.8N	127.2E	PCN 5	T3.0/3.5 /W1.0/24HRS	DMSP39		PGTW
87	180136	21.0N	127.1E	PCN 5	T3.0/3.5 /W1.0/23HRS	DMSP39		RPMK
88	180300	21.1N	127.3E	PCN 0		OTHER		PGTW
89	180900	21.0N	128.0E	PCN 0		OTHER		PGTW
90	181200	20.8N	128.4E	PCN 0		OTHER		PGTW
91	181600	21.2N	128.6E	PCN 0		OTHER		PGTW
92	182100	21.0N	129.3E	PCN 0		OTHER		PGTW
93	182354	20.9N	126.2E	PCN 3	T2.0/3.0 /W1.0/23HRS	NOAA6		RPMK
94	190117	20.8N	126.2E	PCN 3	T1.5/2.5 /W1.5/24HRS	DMSP39		PGTW
95	190117	20.9N	126.1E	PCN 3		DMSP39		RPMK
96	191053	21.2N	125.9E	PCN 3		NOAA6		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/ORIENTATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	090122	7.7N 138.9E	1500FT		1007	35 360 165	090 40 360 165	3 20			+25 +25 +25 27	3
2	100300	10.3N 135.3E	700MB	3119	1005	30 080 130	170 40 080 130	5 53			+14 +12 +10	4
3	100603	10.3N 134.7E	700MB	3091		10 160 70	220 20 160 130	8 50				4
4	100800	11.0N 133.9E	700MB	3083		25 320 45	030 27 320 45	6 15			+13 +11 + 8	4
5	102136	11.6N 131.7E	700MB	3081		30 010 20	130 35 030 80	4 10			+10 +13 +10	5
6	110647	12.0N 130.4E	700MB	3034		45 080 40	180 65 080 40	5 5				6
7	110915	12.2N 129.9E	700MB	3022	991	55 350 10	270 40 230 40	5 3			+13 +14 +10	6
8	111925	13.2N 127.8E	700MB	2973			210 50 100 70	5 3				7
9	112200	13.4N 127.0E	700MB	2970	985	40 340 20	270 32 100 25	5 3			+12 +14 +10	7
10	120615	14.3N 125.8E	700MB	2910		55 010 45	150 64 040 90	6 4				8
11	120830	14.5N 125.3E	700MB	2889	976	55 350 35	070 64 350 65	12 3			+11 +14 +11	8
12	121932	15.7N 124.2E	700MB	2838			310 44 220 15	4 2				9
13	122151	15.8N 124.1E	700MB	2834	968	55 330 25	060 72 330 20	5 2			+11 +17 +10	9
14	130604	16.4N 123.6E	700MB	2751		45 360 10	300 59 260 35	7 3				10
15	130844	16.6N 123.3E	700MB	2730	956	50 350 60	070 80 350 40	13 3	CIRCULAR	30	+11 +21 + 8	10
16	131919	17.3N 123.0E	700MB	2760			250 90 160 20	5 2				11
17	132200	17.3N 122.9E	700MB	2767	963	75 310 15	060 90 310 20	5 2	CIRCULAR	30	+11 +22 + 6	11
18	140930	17.4N 122.6E	700MB	2944	983	70 020 10	270 44 190 70	4 2	CIRCULAR	40	+12 +16 +12	12
19	141900	17.8N 122.5E	700MB	2947	982		040 53 350 10	3 2	CIRCULAR	30	+10 +17 +11	14
20	150603	18.2N 122.6E	700MB	3000		35 150 35	240 66 150 15	4 3				15
21	160211	19.7N 123.0E	700MB	2900	977	55 100 60	220 59 080 70	5 5			+10 +16 + 8	16
22	161901	20.4N 124.8E	700MB	2885			290 62 200 50	5 5				17
23	162142	20.2N 125.0E	700MB	2871	974	65 240 20	320 87 230 15	5 3	CIRCULAR	50	+17 +17 +10	17
24	171449	21.0N 126.0E	700MB	2906			230 69 170 20	5 5			+13 +15 +12	18

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

TYPHOON ELLEN

BEST TRACK DATA

	BEST TRACK		WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
					ERRORS				ERRORS				ERRORS					
MO/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
051112Z	6.9 148.5	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.
051118Z	6.9 147.9	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.
051200Z	7.0 147.4	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.
051206Z	7.0 146.7	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.
051212Z	7.0 146.1	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.
051218Z	7.1 145.4	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.
051300Z	7.2 144.8	40	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
051306Z	7.3 144.2	45	7.2 144.1	40.	8.	-5.	7.8 141.2	50.	96.	0.	9.3 138.1	55.	239.	-20.	11.3 134.8	65.	386.	-45.
051312Z	7.5 143.8	45	7.6 142.9	50.	54.	5.	8.9 138.8	60.	202.	5.	11.2 135.0	65.	398.	-20.	13.8 131.5	75.	574.	-35.
051318Z	7.8 143.5	45	7.4 143.0	50.	38.	5.	8.3 140.2	60.	128.	0.	10.0 136.6	65.	314.	-35.	12.2 133.3	75.	468.	-35.
051400Z	8.1 143.2	50	8.2 143.2	45.	6.	-5.	9.6 141.0	55.	59.	-10.	11.2 137.3	60.	241.	-50.	12.2 133.5	75.	453.	-35.
051406Z	8.4 142.7	50	8.5 142.8	45.	8.	-5.	10.1 139.5	55.	140.	-20.	11.5 135.0	65.	372.	-45.	13.0 130.5	75.	623.	-35.
051412Z	8.6 142.2	55	8.5 142.0	45.	13.	-10.	9.8 139.6	55.	154.	-30.	11.7 136.0	65.	314.	-45.	14.2 131.8	75.	538.	-35.
051418Z	9.0 142.1	60	8.6 141.8	50.	30.	-10.	9.8 139.5	70.	168.	-30.	11.6 136.0	80.	318.	-30.	14.3 131.6	80.	533.	-25.
051500Z	9.5 142.0	65	9.6 141.8	65.	13.	0.	11.2 139.1	95.	142.	-15.	13.2 135.6	100.	326.	-10.	16.2 131.7	100.	507.	-5.
051506Z	10.4 142.0	75	10.4 142.0	75.	0.	0.	13.0 142.8	100.	94.	-10.	16.8 144.1	90.	249.	-20.	20.2 146.1	70.	412.	-35.
051512Z	11.2 141.8	85	11.2 141.9	80.	6.	-5.	14.5 142.8	100.	143.	-10.	18.1 144.8	90.	302.	-20.	21.2 147.3	70.	515.	-35.
051518Z	11.6 141.7	100	11.6 141.9	100.	12.	0.	14.5 142.7	110.	130.	0.	17.8 144.4	90.	266.	-15.	21.2 147.3	80.	525.	-20.
051600Z	12.2 141.3	110	12.3 141.5	110.	13.	0.	15.1 141.5	110.	109.	0.	17.8 143.0	90.	194.	-15.	21.2 145.3	80.	438.	-20.
051606Z	12.4 141.3	110	12.5 141.2	110.	8.	0.	14.7 140.9	95.	62.	-15.	17.3 141.9	85.	119.	-20.	20.3 144.1	70.	370.	-30.
051612Z	12.6 141.3	110	12.6 141.2	105.	6.	-5.	14.2 140.1	90.	61.	-20.	16.9 141.8	80.	137.	-25.	20.0 143.8	70.	365.	-25.
051618Z	12.8 141.3	110	13.0 141.3	105.	12.	-5.	14.7 141.3	190.	34.	85.	17.4 141.8	80.	165.	-20.	20.3 144.1	70.	417.	-25.
051700Z	13.3 141.2	110	13.3 141.2	110.	0.	0.	15.2 141.1	95.	42.	-10.	18.0 141.3	80.	170.	-20.	21.3 143.0	70.	412.	-15.
051706Z	13.7 141.2	110	13.7 141.2	110.	0.	0.	15.3 141.2	95.	87.	-10.	18.3 141.3	85.	207.	-15.	21.6 142.8	75.	421.	0.
051712Z	14.5 141.1	110	14.4 141.2	110.	8.	0.	17.1 141.1	95.	98.	-10.	19.8 141.8	85.	253.	-10.	22.8 143.6	75.	462.	10.
051718Z	15.0 140.8	105	14.4 141.2	110.	43.	5.	17.1 141.1	95.	127.	-5.	19.8 141.8	85.	299.	-10.	22.8 143.7	75.	506.	15.
051800Z	15.6 140.5	105	15.6 140.5	110.	0.	5.	18.0 139.8	95.	85.	-5.	21.1 140.8	85.	297.	0.	24.5 143.2	75.	453.	25.
051806Z	16.3 140.1	105	16.2 140.2	110.	8.	5.	18.6 139.8	95.	128.	-5.	21.7 141.0	85.	327.	10.	24.9 143.6	75.	478.	35.
051812Z	16.9 139.4	105	17.1 139.5	105.	13.	0.	20.5 138.2	90.	62.	-5.	23.7 138.7	80.	198.	15.	26.5 141.5	65.	466.	30.
051818Z	17.4 138.9	100	17.8 138.8	105.	25.	5.	20.1 136.0	90.	82.	-5.	23.8 134.7	80.	276.	20.	26.2 137.8	65.	828.	35.
051900Z	18.0 138.3	100	18.0 138.2	100.	6.	0.	20.7 135.6	85.	114.	0.	23.4 134.0	70.	409.	20.	0.0 0.0	0.	-0.	0.
051906Z	18.9 137.7	100	18.8 137.5	100.	13.	0.	22.0 134.7	85.	129.	10.	25.2 134.2	70.	457.	30.	0.0 0.0	0.	-0.	0.
051912Z	19.9 137.3	95	19.8 137.3	95.	6.	0.	23.2 135.2	80.	146.	15.	26.2 135.0	65.	583.	30.	0.0 0.0	0.	-0.	0.
051918Z	21.3 136.7	95	21.3 136.6	95.	6.	0.	26.0 135.2	80.	97.	20.	29.2 136.5	70.	682.	40.	0.0 0.0	0.	-0.	0.
052000Z	22.6 135.7	85	22.1 135.6	85.	30.	0.	25.9 134.3	55.	268.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
052006Z	24.0 135.6	75	23.4 135.2	75.	42.	0.	28.0 135.0	50.	296.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
052012Z	25.6 135.7	65	25.6 135.6	65.	5.	0.	31.7 140.9	40.	157.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
052018Z	27.5 135.9	60	27.1 135.8	65.	24.	5.	32.1 141.0	30.	410.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
052100Z	29.7 137.0	50	29.6 136.9	55.	8.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
052106Z	31.7 138.8	40	31.3 139.0	45.	26.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
052112Z	34.3 141.3	35	34.3 141.3	35.	0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
052118Z	38.1 145.1	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.

	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.	130.	308.	484.	14.	121.	286.	469.
AVG RIGHT ANGLE ERROR	10.	76.	201.	414.	10.	77.	207.	423.
AVG INTENSITY MAGNITUDE ERROR	3.	12.	23.	26.	3.	12.	22.	26.
AVG INTENSITY BIAS	-0.	-2.	-10.	-13.	0.	-2.	-12.	-15.
NUMBER OF FORECASTS	34	31	27	23	34	30	26	22

DISTANCE TRAVELED BY STORM IS 2423. NM

AVERAGE SPEED OF STORM IS 10. KNOTS

TYPHOON ELLEN
FIX POSITIONS FOR CYCLONE NO. 4

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	121006	7.9N 144.2E	PCN 5		NOAA6		PGTW
2	122133	7.0N 143.9E	PCN 5		DMSP37		PGTW
3	122245	6.9N 143.5E	PCN 5	T2.0/2.0	NOAA6	INIT OBS	PGTW
4	122352	7.0N 143.3E	PCN 5		DMSP39		PGTW
5	130944	6.4N 143.3E	PCN 5		NOAA6	CORRECTED FROM 7.4N	PGTW
6	131200	6.6N 143.3E	PCN 0		OTHER		PGTW
7	131600	6.8N 143.2E	PCN 0		OTHER		PGTW
8	132112	7.8N 143.5E	PCN 5		DMSP37		PGTW
9	132223	7.8N 143.2E	PCN 5	T3.0/3.0 /D1.0/24HRS	NOAA6		PGTW
10	140114	8.0N 143.2E	PCN 5		DMSP39		PGTW
11	140114	8.2N 143.0E	PCN 5	T2.0/2.0	DMSP39	INIT OBS	RPMK
12	140921	8.3N 142.2E	PCN 5		NOAA6		PGTW
13	141600	8.4N 141.9E	PCN 0		OTHER		PGTW
14	142051	9.2N 142.1E	PCN 4		DMSP37		PGTW
15	142201	9.5N 141.8E	PCN 3	T4.5/4.5 /D1.5/24HRS	NOAA6		PGTW
16	150054	9.6N 141.7E	PCN 1		DMSP39	EYE FIX	PGTW
17	150054	9.5N 142.1E	PCN 1	T3.5/3.5 /D1.5/24HRS	DMSP39		RPMK
18	150330	10.0N 141.9E	PCN E		OTHER		PGTW
19	150512	10.3N 141.8E	PCN 1		TIROSN	EYE FIX	PGTW
20	150600	10.4N 140.8E	PCN E		OTHER		PGTW
21	150900	10.8N 141.9E	PCN E		OTHER		PGTW
22	151040	11.2N 141.8E	PCN 1		NOAA6		PGTW
23	151200	11.1N 141.9E	PCN E		OTHER		PGTW
24	151600	11.5N 141.7E	PCN E		OTHER		PGTW
25	151757	11.7N 141.4E	PCN 1		TIROSN		PGTW
26	151800	11.7N 141.6E	PCN E		OTHER		PGTW
27	152029	11.8N 141.3E	PCN 2		DMSP37		PGTW

28	152100	12.0N	141.6E	PCN E		OTHER			PGTW
29	152139	12.0N	141.5E	PCN 1		NOAA6			PGTW
30	160034	12.1N	141.2E	PCN 2	T5.0/5.0	DMSP39	INIT OBS		RODN
31	160034	12.1N	141.3E	PCN 1	T5.5/5.5 /D1.0/26HRS	DMSP39			PGTW
32	160300	12.4N	141.3E	PCN E		OTHER			PGTW
33	160900	12.5N	141.2E	PCN E		OTHER			PGTW
34	161010	12.6N	141.3E	PCN 1		NOAA6			PGTW
35	161600	12.4N	141.2E	PCN E		OTHER			PGTW
36	161600	12.0N	141.4E	PCN 1		OTHER			PGTW
37	161800	13.0N	141.3E	PCN 1		OTHER			PGTW
38	162258	13.1N	141.3E	PCN 1		NOAA6			PGTW
39	170015	13.2N	141.3E	PCN 1	T6.0/6.0-/D0.5/24HRS	DMSP39			PGTW
40	170300	13.5N	141.2E	PCN C		OTHER	FULL DISC FIX		PGTW
41	170900	14.1N	141.3E	PCN C		OTHER			PGTW
42	170956	14.2N	141.3E	PCN 1		NOAA6			PGTW
43	171200	14.5N	141.3E	PCN E		OTHER			PGTW
44	171600	15.1N	141.0E	PCN E		OTHER			PGTW
45	172129	15.4N	140.7E	PCN 1		DMSP37			PGTW
46	172235	15.4N	140.5E	PCN 1		NOAA6			PGTW
47	180136	15.8N	140.5E	PCN 1	T6.0/6.0	DMSP39	INIT OBS		RPMK
48	180136	15.7N	140.4E	PCN 1	T5.5/6.0 /W0.5/25HRS	DMSP33			PGTW
49	180300	16.0N	140.3E	PCN E		OTHER			PGTW
50	180934	16.6N	139.6E	PCN 1		NOAA6			PGTW
51	181600	17.4N	139.0E	PCN E		OTHER			PGTW
52	182107	17.8N	138.4E	PCN 1		DMSP37			PGTW
53	182213	17.8N	138.4E	PCN 1		DMSP39			PGTW
54	190116	18.2N	138.3E	PCN 1	T6.0/6.0 /S0.0/24HRS	DMSP39			RPMK
55	190117	18.2N	138.1E	PCN 1	T6.0/6.0 /D0.5/24HRS	DMSP39			PGTW
56	190117	18.2N	138.1E	PCN 1	T5.0/5.0	DMSP39	INIT OBS		RODN
57	191053	19.9N	137.0E	PCN 5		NOAA6			PGTW
58	191600	20.8N	136.9E	PCN 0		OTHER			PGTW
59	192046	21.7N	136.5E	PCN 3		DMSP37			PGTW
60	192332	22.1N	136.0E	PCN 3		NOAA6			PGTW
61	200057	22.8N	135.5E	PCN 3	T4.0/5.0 /W2.0/24HRS	DMSP39			PGTW
62	200057	22.7N	135.7E	PCN 4	T3.5/4.5 /W1.5/23HRS	DMSP39			RODN
63	200600	23.8N	136.0E	PCN 1		OTHER			PGTW
64	201030	24.4N	137.5E	PCN 5		NOAA6	LLCC NEAR 24.5N 135.5E		PGTW
65	201600	26.4N	135.7E	PCN 0		OTHER			PGTW
66	202310	29.0N	137.1E	PCN 3		NOAA6			PGTW
67	210037	29.8N	137.1E	PCN 3	T2.5/3.5 /W1.5/24HRS	DMSP39			PGTW
68	210037	30.1N	136.8E	PCN 3	T3.0/3.5 /W0.5/24HRS	DMSP39			RODN
69	210210	30.4N	137.6E	PCN 3		DMSP39	NO DVORK		RPMK
70	210300	30.6N	138.0E	PCN 0		OTHER			PGTW
71	211002	33.2N	140.2E	PCN 3		NOAA6			RODN
72	211000	33.5N	140.4E	PCN 5		NOAA6			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	130422	7.2N 144.4E	700MB	3080	998	50 260 60	320 50 240 75	1 2				+14 +15 + 5	1
2	132120	8.0N 143.4E	700MB	3033		45 350 15	060 45 290 40	4 5				+10 +14 +10	2
3	140033	8.2N 143.2E	700MB	3029		55 050 27	110 62 040 30	4 4					2
4	140243	8.3N 142.9E	700MB	3022		55 350 23	120 55 030 25	4 3				+12 +14 +10	2
5	142350	9.5N 142.0E	700MB	2808	975	65 260 20	360 74 260 10	5 2	CIRCULAR	22		+12 +16 +10	3
6	150600	10.4N 142.1E	700MB	2812		80 050 10	080 75 050 15	4 3					4
7	150900	10.7N 142.1E	700MB	2766	963	80 350 10	170 70 080 20	4 6	ELLIPTICAL	15 10	050	+12 +18 +12	4
8	151040	11.1N 141.6E	700MB	2742			360 00 270 8	4 3					4
9	151736	11.5N 141.9E	700MB	2535			110 90 360 25	6 2	CIRCULAR	12		+12 +20 + 9	5
10	151945	11.7N 141.5E	700MB	2522	935		180 97 150 20	5 2					5
11	152120	11.9N 141.5E	700MB	2510	933	100 250 30	300 105 250 10	5 2	CIRCULAR	12		+ 8 +21 +13	5
12	160519	12.3N 141.2E	700MB	2582		100 090 15	150 97 090 8	5 4					6
13	161033	12.9N 141.4E	700MB	2492			310 89 270 12	9 5	CIRCULAR	22			7
14	162121	13.1N 141.2E	700MB	2497	931	60 330 30	040 90 320 15	6 5	CIRCULAR	21		+10 +21 +11	7
15	170630	13.8N 141.2E	700MB	2525		65 090 20	100 126 020 20	5 5					8
16	170905	14.1N 141.2E	700MB	2541	935	100 330 20	330 100 250 20	5 5	CIRCULAR	15		+11 +19 +11	8
17	171900	15.1N 140.8E	700MB	2551			230 105 130 16	5 1	CIRCULAR				9
18	172132	15.4N 140.5E	700MB	2560	939	100 180 5	310 92 240 11	5 1	CIRCULAR	13		+12 +17 +11	9
19	181842	17.7N 138.3E	700MB	2616			170 72 090 55	6 5	ELLIPTICAL	15 10	160		11
20	191830	21.4N 136.8E	700MB	2789			200 115 150 20	5 2					13
21	192115	21.9N 135.9E	700MB	2796	967	65 320 15	050 61 320 60	2 3				+17 +21 + 8	13
22	200655	24.1N 135.6E	700MB	2839		80 150 10	270 60 140 12	5 1					14
23	200905	24.8N 135.6E	700MB	2869	974	80 320 10	360 37 320 40	4 1				+11 +19 + 9	14
24	201836	28.2N 136.1E	700MB	2907			230 93 150 75	5 20					15
25	202100	28.9N 136.5E	700MB	2916	980	35 330 70	090 55 330 52	5 20				+ 8 +14 +11	15

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

TROPICAL STORM FORREST

BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
					ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
051900Z	6.4	154.6	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.
051906Z	6.7	153.9	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.
051912Z	6.8	153.2	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.
051918Z	6.9	152.4	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.
052000Z	7.2	151.4	30	6.7	151.4	35.	30.	5.	7.9	148.3	45.	218.	5.	9.5	145.3	55.	387.	10.	11.2	142.4	65.	586.	20.
052006Z	7.4	149.8	30	7.7	150.1	35.	25.	5.	10.0	146.2	45.	168.	0.	11.6	143.7	55.	366.	10.	14.2	142.1	65.	665.	20.
052012Z	8.0	148.1	35	7.7	147.8	35.	25.	0.	9.8	143.5	45.	100.	0.	11.8	140.9	55.	292.	10.	14.2	138.9	65.	569.	20.
052018Z	8.7	146.5	40	8.3	145.8	40.	48.	0.	10.2	140.2	50.	6.	5.	12.2	136.7	60.	174.	15.	13.8	133.8	70.	358.	20.
052100Z	9.3	144.9	40	9.2	145.2	40.	19.	0.	11.2	140.3	50.	97.	5.	12.9	136.7	60.	278.	15.	14.2	133.6	70.	428.	15.
052106Z	9.5	143.4	45	9.6	143.7	45.	19.	0.	12.0	138.0	65.	77.	20.	13.7	134.3	75.	239.	30.	16.0	132.0	80.	422.	25.
052112Z	9.7	141.8	45	9.6	142.1	45.	19.	0.	11.2	137.3	60.	78.	15.	12.8	133.6	70.	250.	25.	14.7	131.0	80.	413.	30.
052118Z	10.1	140.2	45	9.8	140.8	45.	40.	0.	11.0	136.2	60.	124.	15.	12.8	132.8	70.	289.	20.	15.2	130.6	80.	457.	30.
052200Z	10.5	138.8	45	10.6	138.6	40.	13.	-5.	12.7	132.3	45.	108.	0.	14.7	128.2	50.	159.	-5.	16.4	125.4	60.	217.	15.
052206Z	10.8	137.5	45	11.2	136.7	45.	53.	0.	13.5	130.2	55.	147.	10.	15.7	126.3	60.	151.	5.	18.0	124.0	60.	225.	30.
052212Z	10.9	136.0	45	11.0	136.0	45.	6.	0.	12.8	130.8	55.	104.	10.	15.2	127.0	60.	193.	10.	17.3	124.5	60.	269.	40.
052218Z	10.8	134.1	45	11.4	134.5	45.	43.	0.	13.8	129.0	55.	120.	5.	16.5	125.3	60.	184.	10.	19.1	123.2	60.	196.	40.
052300Z	10.9	132.4	45	10.8	132.2	50.	13.	5.	11.2	125.6	55.	101.	0.	12.7	121.3	45.	158.	0.	15.5	119.0	50.	202.	30.
052306Z	11.2	131.1	45	10.8	130.5	50.	43.	5.	11.0	124.4	50.	151.	-5.	13.0	120.5	45.	168.	15.	16.0	118.5	55.	344.	35.
052312Z	11.6	129.5	45	11.3	129.7	45.	21.	0.	12.2	124.6	35.	115.	-15.	13.4	121.1	30.	228.	10.	0.0	0.0	0.	-0.	0.
052318Z	12.1	127.9	50	11.5	127.8	45.	36.	-5.	12.8	122.8	35.	114.	-15.	14.3	119.5	30.	251.	10.	0.0	0.0	0.	-0.	0.
052400Z	12.7	126.4	55	12.7	126.3	50.	6.	-5.	15.1	121.7	45.	13.	0.	17.9	119.2	35.	145.	15.	0.0	0.0	0.	-0.	0.
052406Z	13.4	125.2	55	13.2	124.8	55.	26.	0.	15.7	120.6	40.	13.	10.	19.1	119.1	40.	176.	20.	0.0	0.0	0.	-0.	0.
052412Z	14.0	123.9	50	13.9	124.1	55.	13.	5.	16.0	120.2	40.	64.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052418Z	14.7	122.7	50	14.8	122.4	55.	18.	5.	17.3	119.0	40.	85.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052500Z	15.3	121.8	45	15.2	121.9	50.	8.	5.	18.0	119.6	35.	130.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052506Z	15.8	120.8	30	15.7	121.4	45.	35.	15.	18.2	119.7	35.	196.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052512Z	17.0	119.8	20	15.7	120.6	35.	90.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052518Z	18.5	119.8	20	16.2	119.5	35.	138.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052600Z	20.0	120.5	20	18.9	119.8	25.	77.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052606Z	21.0	121.5	20	19.9	120.5	20.	86.	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.	106.	227.	388.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	17.	56.	123.	227.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	4.	9.	13.	26.	0.	0.	0.	0.
AVG INTENSITY BIAS	3.	6.	13.	26.	0.	0.	0.	0.
NUMBER OF FORECASTS	26	22	18	14	0	0	0	0

DISTANCE TRAVELED BY STORM IS 2451. NM

AVERAGE SPEED OF STORM IS 14. KNOTS

TROPICAL STORM FORREST
FIX POSITIONS FOR CYCLONE NO. 5

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	181723	5.2N 155.7E	PCN 5		TIROSN		PGTW
2	182335	6.1N 155.1E	PCN 5	T1.0/1.0	DMSP39	INIT OBS	PGTW
3	190911	6.5N 154.1E	PCN 5		NOAA6		PGTW
4	191600	7.2N 151.6E	PCN 0		OTHER		PGTW
* 5	192046	7.5N 154.2E	PCN 5		DMSP37		PGTW
6	192151	6.9N 151.0E	PCN 5		NOAA6		PGTW
7	200057	6.8N 150.6E	PCN 5	T2.0/2.0 /D1.0/25HRS	DMSP39		PGTW
8	200600	7.5N 149.9E	PCN 0		OTHER		PGTW
9	200849	7.4N 149.7E	PCN 5		NOAA6		PGTW
10	200900	7.5N 148.7E	PCN 0		OTHER		PGTW
11	201200	8.0N 147.8E	PCN 0		OTHER		PGTW
12	201600	8.2N 146.5E	PCN 0		OTHER		PGTW
13	202015	8.9N 145.8E	PCN 5		DMSP37		PGTW
14	202129	8.6N 145.7E	PCN 5		NOAA6		PGTW
15	210037	9.2N 144.8E	PCN 5	T3.0/3.0	DMSP39	INIT OBS	RODN
16	210300	9.2N 144.0E	PCN 0		OTHER		PGTW
17	210900	9.2N 142.4E	PCN 0		OTHER		PGTW
18	211000	9.6N 142.0E	PCN 5		NOAA6		PGTW
19	211200	9.6N 141.1E	PCN 0		OTHER		PGTW
20	211600	9.7N 140.9E	PCN 0		OTHER		PGTW
21	212248	9.8N 138.9E	PCN 3		NOAA6		PGTW
* 22	220017	10.4N 137.8E	PCN 3	T3.5/3.5 /S0.0/24HRS	DMSP39		PGTW
* 23	220946	10.4N 135.4E	PCN 5		NOAA6		PGTW
24	221200	10.5N 135.0E	PCN 0		OTHER		PGTW
25	221600	10.7N 133.3E	PCN 0		OTHER		PGTW
* 26	222226	10.4N 132.0E	PCN 3		NOAA6		PGTW
* 27	222226	10.4N 132.0E	PCN 3		NOAA6		PGTW
28	230139	10.3N 131.8E	PCN 5	T3.0/3.5-/W0.5/25HRS	DMSP39		PGTW
29	230139	10.3N 131.8E	PCN 3	T4.0/4.0	DMSP39	INIT OBS	RODN
30	230600	11.2N 130.9E	PCN 3		OTHER	EXPOSED LLCC	PGTW
31	230900	11.5N 130.2E	PCN 0		OTHER		PGTW
32	231105	11.4N 129.4E	PCN 5		NOAA6		PGTW
33	231600	11.2N 128.1E	PCN 0		OTHER		PGTW
34	232345	12.4N 126.4E	PCN 5		NOAA6		PGTW
35	240119	12.6N 126.1E	PCN 5	T4.0/4.0-/D1.0/24HRS	DMSP39		PGTW
36	240119	12.7N 126.1E	PCN 3	T4.0/4.0 /S0.0/24HRS	DMSP39		RODN
37	241043	13.7N 124.3E	PCN 5		NOAA6		PGTW
38	241600	14.3N 122.9E	PCN 0		OTHER		PGTW
39	242223	14.5N 122.2E	PCN 5		DMSP37		PGTW
40	242322	15.2N 122.4E	PCN 5	T3.5/4.0-/W0.5/22HRS	NOAA6		PGTW
41	250241	15.4N 121.5E	PCN 5	T3.5/3.5	DMSP39	INIT OBS	RPMK
42	250241	15.5N 121.2E	PCN 5	T4.0/4.0 /S0.0/25HRS	DMSP39		RODN
43	250300	15.6N 120.4E	PCN 0		OTHER		PGTW
* 44	251200	15.9N 119.8E	PCN 0		OTHER		PGTW
* 45	251202	16.3N 118.6E	PCN 6		NOAA6		RODN

* 46	251600	16.0N 118.9E	PCN 0		OTHER		PGTW
* 47	260221	16.9N 118.1E	PCN 5	T1.5/2.0 /W2.0/27HRS	DMSP39		PGTW
* 48	260221	17.0N 118.0E	PCN 5		DMSP39		RODN

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	190102	6.4N 154.7E	700MB	3139	1007	25 040 10	120 24 070 10	4 2				+24 +25 +24 29	1
2	200024	6.7N 151.2E	1500FT		1002	45 270 10	090 55 090 20	3 2				+29 +26 +26 27	2
3	200315	7.3N 150.8E	700MB	3119	1001	25 140 10	170 39 140 10	5 2				+11 +14 + 6	2
4	202102	9.0N 145.9E	700MB	3114	1002	50 360 40	100 50 360 40	5 5				+11 +14 + 6	3
5	210311	9.3N 144.2E	700MB	3074	990	55 360 15	100 52 360 15	5 3	CIRCULAR	20		+10 +15 + 6	3
6	210952	9.0N 142.7E	700MB	3128	1009	40 360 60	100 47 020 90	2 5				+15 +11 +10	4
7	212136	10.4N 139.3E	700MB	3112	1002	40 030 20	160 48 070 45	5 3				+14 +12 + 9	5
8	220607	10.7N 137.5E	700MB	3082		45 040 45	120 40 040 45	10 20					6
9	220841	10.9N 136.8E	700MB	3079	999	30 200 60	220 30 190 60	5 10				+10 +13 +11	6
10	222136	10.8N 132.9E	700MB	3061	996	90 140 10	100 60 030 15	5 5				+14 +16 + 7	7
11	230820	11.3N 130.5E	700MB	3067	999	50 340 40	110 60 030 90	2 3				+12 +12 + 9	8
12	232121	12.4N 127.0E	700MB	3034		50 270 20	080 47 330 82	6 2					9
13	232242	12.6N 126.6E	700MB	3029	994	50 310 15	090 61 010 10	6 2	CIRCULAR	20		+10 +17 +13	9
14	240633	13.6N 125.1E	700MB	3014		50 350 30	050 59 350 30	5 5					10
15	240820	13.7N 124.7E	700MB					3 0	CIRCULAR	12			10
16	241930	14.9N 122.4E	700MB	3079	999		080 49 350 30	1 3					11
17	242220	15.1N 122.2E	700MB	3061	996	50 060 30	150 60 060 30	1 3				+12 +12 + 9	11
18	251945	18.2N 119.7E	700MB	3106		30 000 00							12
19	252138	19.3N 120.1E	700MB	3136		25 030 50	080 12 350 30	5 20				+14 +11 + 7	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	210013	9.1N 144.8E	ACFT					54WRS		
2	240828	13.6N 124.7E	ACFT	POOR	CIRCULAR	12		RDR EYE 13.7N 124.7E 54WRS		
3	250000	15.4N 121.9E	LAND						16.3N 120.6E	98321
4	250235	15.6N 121.8E	LAND					WELL DEFINED WALL CLOUD	15.2N 120.6E	98327
5	250300	15.6N 121.5E	LAND						16.3N 120.6E	98321
6	250305	15.7N 121.8E	LAND						15.2N 120.6E	98327
7	250400	15.7N 121.5E	LAND						14.1N 123.0E	98440

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

TROPICAL STORM GEORGIA

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
							ERRORS					ERRORS					ERRORS						
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
051912Z	15.5	115.0	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.
051918Z	15.3	114.4	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.
052000Z	15.0	114.0	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.
052006Z	14.4	114.4	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.
052012Z	14.0	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.
052018Z	13.9	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.
052100Z	14.5	116.4	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.
052106Z	15.0	116.4	30	15.3	116.6	30.	21.	0.	16.6	117.0	35.	156.	-15.	18.2	118.2	40.	229.	-15.	21.2	121.8	35.	305.	-10.
052112Z	15.5	116.1	30	15.5	116.7	30.	35.	0.	16.6	117.0	35.	145.	-15.	18.2	118.2	40.	259.	-15.	21.2	121.8	35.	293.	5.
052118Z	16.2	115.8	40	16.2	115.7	30.	6.	-10.	17.8	116.4	35.	113.	-15.	19.9	118.3	35.	204.	-20.	0.0	0.0	0.	-0.	0.
052200Z	16.7	115.4	45	16.0	115.8	30.	24.	-15.	18.2	116.3	35.	127.	-20.	19.9	118.0	40.	231.	-5.	0.0	0.0	0.	-0.	0.
052206Z	17.4	114.4	50	17.5	114.4	45.	6.	-5.	19.6	114.9	55.	74.	0.	22.0	116.5	60.	146.	15.	0.0	0.0	0.	-0.	0.
052212Z	18.0	114.9	50	17.9	114.8	45.	8.	-5.	20.0	116.2	60.	116.	5.	22.9	117.8	60.	123.	30.	0.0	0.0	0.	-0.	0.
052218Z	18.8	114.7	50	18.6	115.2	45.	31.	-5.	21.1	116.8	60.	101.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052300Z	19.6	114.6	55	19.2	115.0	50.	33.	-5.	21.5	115.7	65.	127.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052306Z	20.8	115.2	55	20.4	114.8	50.	33.	-5.	23.5	115.8	40.	100.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052312Z	21.9	115.8	55	21.4	115.4	55.	37.	0.	24.3	117.5	30.	56.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052318Z	22.7	116.2	55	22.2	116.0	55.	32.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052400Z	23.5	116.5	45	23.4	121.4	30.	269.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
052406Z	24.3	117.4	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.
052412Z	24.9	118.3	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	44.	112.	199.	299.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	29.	52.	140.	293.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	5.	10.	17.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-5.	-4.	-2.	-3.	0.	0.	0.	0.
NUMBER OF FORECASTS	12	10	6	2	0	0	0	0

DISTANCE TRAVELED BY STORM IS 993. NM

AVERAGE SPEED OF STORM IS 8. KNOTS

TROPICAL STORM GEORGIA
FIX POSITIONS FOR CYCLONE NO. 6

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	191200	16.6N 117.0E	PCN 0		OTHER		PGTW
2	201200	14.2N 115.7E	PCN 0		OTHER		PGTW
3	210218	15.2N 117.0E	PCN 5	T1.0/1.0	DMSP39	INIT OBS	PGTW
4	210218	15.2N 116.2E	PCN 5		DMSP39		RPMK
5	210900	15.5N 115.5E	PCN 0		OTHER		PGTW
6	211150	15.3N 116.4E	PCN 5		NOAA6		RPMK
7	211212	13.3N 116.4E	PCN 6		NOAA6		RPMK
8	211600	15.9N 115.6E	PCN 0		OTHER		PGTW
9	212100	16.5N 115.4E	PCN 0		OTHER		PGTW
10	220029	16.7N 115.9E	PCN 5	T2.0/2.0	NOAA6	INIT OBS	RPMK
11	220029	16.7N 115.7E	PCN 5	T1.0/1.0	NOAA6	INIT OBS	RODN
12	220159	16.8N 115.2E	PCN 5	T2.5/2.5 /D1.5/24HRS	DMSP39		PGTW
13	221127	17.8N 114.7E	PCN 5		NOAA6		RPMK
14	221200	18.4N 114.6E	PCN 0		OTHER		PGTW
15	221600	18.7N 114.8E	PCN 0		OTHER		PGTW
16	222002	18.9N 114.7E	PCN 3		TIROSN		RPMK
17	230000	19.6N 114.9E	PCN C		OTHER		PGTW
18	230006	19.6N 114.3E	PCN 5	T2.0/2.0 /S0.0/24HRS	NOAA6		RPMK
19	230320	20.3N 115.9E	PCN 3	T3.0/3.0 /D2.0/27HRS	DMSP39		RODN
20	230600	20.7N 115.2E	PCN C		OTHER		PGTW
21	230900	21.0N 115.4E	PCN 0		OTHER		PGTW
22	231105	21.7N 115.6E	PCN 5		NOAA6		PGTW
23	231600	21.9N 115.8E	PCN 0		OTHER		PGTW
24	231950	22.4N 116.2E	PCN 5		TIROSN		RODN
25	231950	22.4N 116.3E	PCN 3		TIROSN	EXPSD LLCC	ROD+
26	232345	22.8N 116.9E	PCN 5		NOAA6		PGTW
27	240301	22.4N 117.1E	PCN 3	T3.0/3.0 /S0.0/24HRS	DMSP39		RODN
28	241043	24.5N 117.6E	PCN 5		NOAA6		PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	DBS 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	220703	17.6N 114.4E	700MB	2996	986	50 110 75	190 57 110 110	10 5				12
2	220905	17.6N 114.6E	700MB	2986	987	30 330 65	120 59 360 77	10 10			+13 +10	16

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	190000	16.5N 117.5E	15	10	
2	191200	15.5N 115.0E	20	80	
3	200000	15.0N 114.0E	20	60	
4	210000	14.5N 116.5E	25	20	
5	211200	15.5N 115.0E	30	10	
6	221200	18.0N 115.0E	35	30	
7	240000	23.5N 116.5E	45	10	

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

TROPICAL STORM HERBERT

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	WIN		POSIT		WIND	DST	WIND
061900Z	6.0	141.8	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.
061906Z	6.3	141.0	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.
061912Z	6.7	140.0	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.
061918Z	7.0	139.3	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.
062000Z	7.2	138.5	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.
062006Z	7.6	137.9	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.
062012Z	7.8	137.1	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.
062018Z	8.1	136.2	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.
062100Z	8.3	135.2	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.
062106Z	8.6	134.1	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.
062112Z	8.9	133.0	15	0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.
062118Z	9.1	131.9	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.
062200Z	9.3	130.9	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.
062206Z	9.6	129.8	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.
062212Z	9.8	128.6	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.
062218Z	10.2	127.4	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.
062300Z	10.5	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.
062306Z	11.1	124.8	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.
062312Z	11.6	123.5	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.
062318Z	12.0	122.2	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.
062400Z	12.3	120.7	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.
062406Z	12.3	119.2	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.
062412Z	12.9	117.7	40	12.5	110.0	35.	30.	-5.		14.1	113.0	40.	84.	-10.		17.0	110.8	45.	62.	0.		19.5	109.5	45.	66.	0.
062418Z	13.6	116.4	40	13.1	116.7	35.	35.	-5.		15.1	112.3	40.	56.	-10.		18.4	110.6	45.	35.	0.		20.7	110.6	45.	2.	0.
062500Z	14.3	115.2	45	14.5	115.1	35.	13.	-10.		18.3	111.5	45.	96.	-5.		21.3	111.4	45.	167.	0.		0.0	0.0	0.	0.	0.
062506Z	15.0	114.0	50	15.1	113.4	40.	35.	-10.		18.8	110.0	45.	100.	-5.		22.0	110.6	30.	158.	-15.		0.0	0.0	0.	0.	0.
062512Z	15.5	112.8	50	16.0	113.3	45.	41.	-5.		18.8	112.0	55.	90.	10.		22.2	113.2	55.	233.	10.		0.0	0.0	0.	-0.	0.
062518Z	16.0	112.0	50	16.7	112.0	50.	42.	0.		19.3	110.4	0.	53.	-45.		21.0	111.3	0.	123.	-45.		0.0	0.0	0.	0.	0.
062600Z	16.7	111.3	50	17.0	111.0	45.	25.	-5.		20.7	110.1	35.	104.	-10.		22.5	111.0	25.	130.	-20		0.0	0.0	0.	0.	0.
062606Z	17.3	110.8	50	17.5	110.3	45.	31.	-5.		21.1	109.5	35.	96.	-10.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.
062612Z	18.0	110.5	45	18.5	110.6	40.	30.	-5.		21.2	109.7	30.	60.	-15.		0.0	0.0	0.	-0.	0		0.0	0.0	0.	-0.	0.
062618Z	18.5	110.0	45	18.9	110.1	40.	25.	-5.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0		0.0	0.0	0.	-0.	0.
062700Z	19.0	109.7	45	19.2	109.6	35.	13.	-10.		20.4	109.2	30.	42.	-15.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.
062706Z	19.5	109.7	45	19.7	109.5	35.	16.	-10.		20.8	109.0	30.	70.	-10.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.
062712Z	20.2	109.6	45	20.5	109.8	35.	21.	-10.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.
062718Z	20.6	109.5	45	21.0	109.6	30.	25.	-15.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.
062800Z	21.1	109.2	45	21.8	109.7	25.	50.	-20.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0		0.0	0.0	0.	-0.	0.
062806Z	21.7	108.2	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.
062812Z	21.9	106.9	20	0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.
062818Z	22.4	105.6	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.
062900Z	22.9	104.2	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.

	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.	78.	130.	64.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	19.	39.	102.	53.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	8.	13.	13.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-8.	-11.	-10.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	15	11	7	2	0	0	0	0

DISTANCE TRAVELED BY STORM IS 2521. NM

AVERAGE SPEED OF STORM IS 11. KNOTS

TROPICAL STORM HERBERT
FIX POSITIONS FOR CYCLONE NO. 7

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	210031	8.4N 135.1E	PCN 5	T0.5/0.5	DMSP39	INIT OBS	PGTW
2	211027	8.9N 133.3E	PCN 5		NOAA6		PGTW
3	211800	9.0N 132.2E	PCN 0		OTHER		PGTW
4	212307	9.3N 130.9E	PCN 6		NOAA6		PGTW
5	220152	9.4N 130.0E	PCN 5	T1.0/1.0 /D0.5/25HRS	DMSP39		PGTW
6	220300	9.5N 129.8E	PCN 0		OTHER		PGTW
7	221005	10.6N 129.0E	PCN 5		NOAA6	DATA EDGE	PGTW
* 8	222245	11.8N 124.9E	PCN 5		NOAA6	DATA EDGE	PGTW
9	230133	10.3N 125.5E	PCN 3	T2.0/2.0-/D1.0/24HRS	DMSP39		PGTW
* 10	231200	12.8N 120.6E	PCN 0		OTHER		PGTW
* 11	231800	12.8N 119.5E	PCN 0		OTHER		PGTW
* 12	240000	12.4N 119.4E	PCN 0		OTHER		PGTW
13	240000	12.4N 120.0E	PCN 0		OTHER		PGTW
14	240154	12.3N 120.0E	PCN 5	T2.0/2.0	DMSP39	INIT OBS	RPMK
* 15	240300	12.2N 119.2E	PCN 0		OTHER		PGTW
16	240900	12.6N 118.3E	PCN 0		OTHER		PGTW
17	241102	12.8N 117.7E	PCN 5		NOAA6		PGTW
18	241200	13.0N 117.5E	PCN 0		OTHER		PGTW
19	241600	13.2N 116.7E	PCN 0		OTHER		PGTW
* 20	242100	14.4N 114.4E	PCN E		OTHER		PGTW
21	242341	14.5N 114.8E	PCN 3	T3.5/3.5	NOAA6	INIT OBS	PGTW
* 22	250235	14.5N 112.4E	PCN 5	T3.0/3.0 /D1.0/24HRS	DMSP39		RPMK
* 23	250235	14.7N 113.7E	PCN 5	T3.0/3.0+	DMSP39	INIT OBS	RODN
24	250900	15.1N 113.2E	PCN 0		OTHER		PGTW
25	251200	15.4N 112.2E	PCN 0		OTHER		PGTW
26	251221	15.6N 112.7E	PCN 5		NOAA6		RPMK
27	251600	16.2N 112.0E	PCN 0		OTHER		PGTW
* 28	252100	17.1N 111.3E	PCN 0		OTHER		PGTW
29	252255	16.5N 111.2E	PCN 6		DMSP37		RPMK
30	260100	16.9N 111.0E	PCN 6	T3.5/3.5 /D0.5/22HRS	NOAA6		RPMK
31	260215	17.0N 111.0E	PCN 5	T2.5/3.5-/W1.0/26HRS	DMSP39		PGTW
32	260215	17.1N 110.8E	PCN 5	T2.5/3.0 /W0.5/24HRS	DMSP39		RODN
33	260600	17.6N 111.2E	PCN 0		OTHER		PGTW
34	260900	18.1N 111.0E	PCN 0		OTHER		PGTW
35	261159	17.8N 110.5E	PCN 5		NOAA6	280X1 CH3	RODN
36	261200	18.2N 110.4E	PCN 0		OTHER		PGTW

37	261600	18.5N 110.2E	PCN 0		OTHER			PGTW
38	262100	19.1N 110.0E	PCN 0		OTHER			PGTW
39	262234	18.8N 109.5E	PCN 6		DMSP37			RPMK
40	262234	19.0N 109.6E	PCN 3		DMSP37			RODN
41	270038	19.0N 109.4E	PCN 5	T4.0/4.0-/D0.5/24HRS	NOAA6			RPMK
42	270336	19.6N 109.7E	PCN 5		DMSP39			RPMK
43	270900	20.3N 110.1E	PCN 0		OTHER			PGTW
44	271136	20.1N 109.3E	PCN 5		NOAA6			RODN
45	271200	20.3N 110.2E	PCN 0		OTHER			PGTW
46	271600	20.8N 109.9E	PCN 0		OTHER			PGTW
47	272213	20.7N 109.3E	PCN 5		DMSP37	DATA EDGE		RODN
48	280000	21.5N 109.4E	PCN 0		OTHER			PGTW
49	280016	20.8N 109.2E	PCN 5	T3.0/3.0-	NOAA6	INIT OBS		RODN
50	280300	21.8N 108.7E	PCN 0		OTHER			PGTW
51	280316	21.4N 108.4E	PCN 3	T3.0/4.0-/W1.0/26HRS	DMSP39			RPMK
52	280316	21.6N 108.6E	PCN 5		DMSP39			RODN
53	280900	21.5N 107.1E	PCN 0		OTHER			PGTW
54	281200	21.8N 106.6E	PCN 0		OTHER			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	240717	12.4N 118.9E	1500FT		996	40 040 7	220 50 160 10	5 1			+24 +27 +24 27	2
2	242300	14.4N 115.2E	700MB	3061	998	25 050 30	160 40 050 5	5 5			+12 +12	3
3	250620	14.9N 113.8E	700MB	3051	996	35 090 20	140 49 090 10	5 3				4
4	250822	15.4N 113.7E	700MB	3028	992	45 050 10	150 42 050 10	6 3			+14 +12 +12	4

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	221200	10.5N 129.0E	25	15	
2	230000	11.0N 126.0E	25	40	
3	231200	11.5N 123.5E	20	30	
4	271200	20.0N 110.0E	30	20	
5	280000	21.1N 109.2E	45	20	

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

TROPICAL STORM IDA

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
070606Z	12.5	139.9	25	12.2	139.8	25.	19.	0.	13.6	135.8	35.	135.	-5.	14.8	131.8	45.	278.	-5.	15.8	128.6	55.	389.	0.
070612Z	13.2	138.8	30	12.9	139.7	25.	55.	-5.	14.5	136.0	40.	191.	0.	15.7	132.2	45.	339.	-10.	16.2	128.9	45.	452.	-5.
070618Z	13.9	137.6	30	13.7	138.7	30.	65.	0.	15.3	134.7	45.	201.	5.	16.4	130.5	45.	306.	-10.	17.1	126.9	45.	378.	-5.
070700Z	14.7	136.5	35	14.5	136.2	40.	21.	5.	16.4	131.7	55.	124.	10.	18.0	127.6	60.	197.	0.	20.2	123.8	70.	192.	20.
070706Z	15.8	135.3	40	15.5	135.4	40.	19.	0.	17.5	131.0	55.	145.	5.	19.6	126.9	65.	208.	10.	22.0	123.3	70.	207.	25.
070712Z	16.7	133.6	40	16.5	133.8	40.	17.	0.	19.6	129.2	50.	133.	-5.	21.4	125.0	60.	170.	10.	22.4	120.8	65.	100.	20.
070718Z	17.2	131.0	40	17.2	132.0	45.	11.	5.	19.6	126.9	55.	75.	0.	21.2	122.9	65.	89.	15.	22.5	119.0	65.	45.	20.
070800Z	17.8	130.1	45	18.0	130.2	45.	13.	0.	20.9	123.8	60.	101.	0.	22.9	118.8	55.	143.	5.	0.0	0.0	0.	-0.	0.
070806Z	18.3	128.6	50	18.3	128.6	50.	0.	0.	20.7	123.3	60.	54.	5.	23.4	110.2	50.	137.	5.	0.0	0.0	0.	-0.	0.
070812Z	18.6	127.1	55	18.8	127.0	55.	13.	0.	20.7	120.6	65.	93.	15.	24.1	116.9	50.	167.	5.	0.0	0.0	0.	-0.	0.
070818Z	18.9	125.8	55	19.2	125.0	55.	49.	0.	21.6	110.5	60.	170.	10.	25.2	116.0	30.	206.	-15.	0.0	0.0	0.	-0.	0.
070900Z	19.3	124.4	60	19.2	124.6	60.	13.	0.	20.8	119.7	60.	48.	10.	23.5	116.7	50.	77.	5.	0.0	0.0	0.	-0.	0.
070906Z	19.8	123.2	55	19.7	123.3	60.	8.	5.	21.4	118.6	60.	56.	15.	24.3	116.2	20.	102.	-25.	0.0	0.0	0.	-0.	0.
070912Z	20.3	122.2	50	20.3	122.2	60.	0.	10.	22.4	117.7	60.	71.	15.	25.2	115.9	15.	125.	-30.	0.0	0.0	0.	-0.	0.
070918Z	20.7	121.4	50	20.7	120.7	60.	39.	10.	23.2	116.7	50.	95.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071000Z	21.1	120.5	50	20.8	120.9	55.	29.	5.	22.2	118.5	45.	50.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071006Z	21.5	119.6	45	21.2	119.8	55.	21.	10.	22.8	116.8	45.	17.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071012Z	22.0	118.9	45	21.7	118.8	55.	19.	10.	23.8	115.8	30.	57.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071018Z	22.4	118.2	45	22.4	118.1	55.	6.	10.	24.6	116.1	25.	48.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071100Z	22.6	117.7	45	22.7	116.8	45.	50.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071106Z	22.8	117.1	45	22.7	117.1	45.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071112Z	23.2	116.6	45	23.0	116.6	45.	12.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071118Z	23.8	116.2	30	23.8	116.2	30.	0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	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.	98.	182.	253.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	11.	37.	73.	126.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	7.	11.	14.	0.	0.	0.	0.
AVG INTENSITY BIAS	3.	3.	-3.	11.	0.	0.	0.	0.
NUMBER OF FORECASTS	23	19	14	7	0	0	0	0

DISTANCE TRAVELED BY STORM IS 1527. NM

AVERAGE SPEED OF STORM IS 12. KNOTS

TROPICAL STORM IDA
FIX POSITIONS FOR CYCLONE NO. 8

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
* 1	050600	7.6N 144.8E	PCN 0		OTHER		PGTW
2	060037	11.8N 140.9E	PCN 3	T0.0/0.0	DMSP39	INIT OBS	PGTW
3	060529	12.1N 139.9E	PCN 5		TIROSN		PGTW
4	060957	12.9N 140.1E	PCN 5		NOAA6	LLCU LINES	PGTW
5	061600	14.1N 137.9E	PCN 0		OTHER		PGTW
6	062043	13.7N 136.7E	PCN 6		DMSP37	PSN BASED ON UL FEATURES	PGTW
7	062100	14.0N 137.4E	PCN 0		OTHER		PGTW
8	062236	14.0N 136.2E	PCN 5	T2.0/2.0 /D2.0/22HRS	NOAA6		PGTW
9	070158	14.9N 135.6E	PCN 5		DMSP39		PGTW
* 10	070159	15.5N 135.5E	PCN 5	T3.0/3.0	DMSP39	INIT OBS	RPMK
11	070300	15.3N 135.2E	PCN 0		OTHER		PGTW
12	071116	16.1N 133.5E	PCN 5		NOAA6		PGTW
13	071200	16.2N 133.4E	PCN E		OTHER		PGTW
14	071600	16.6N 132.4E	PCN 0		OTHER		PGTW
15	072355	17.6N 125.7E	PCN 5		NOAA6		PGTW
16	072355	17.9N 129.6E	PCN 5		NOAA6	DVORAK ON 39 PASS	RPMK
17	080139	17.6N 129.4E	PCN 5	T3.5/3.5 /D1.5/27HRS	DMSP39		PGTW
18	080139	17.8N 129.0E	PCN 5	T4.0/4.0 /D1.0/24HRS	DMSP39		RPMK
19	080139	17.7N 129.4E	PCN 5	T4.0/4.0+	DMSP39	INIT OBS	RODN
20	081053	18.6N 126.7E	PCN 5		NOAA6	PARTIALLY EXPOSED LLCC	PGTW
* 21	081600	19.4N 125.0E	PCN 0		OTHER		PGTW
22	082142	19.1N 124.5E	PCN 6		DMSP37		PGTW
23	082333	19.6N 124.5E	PCN 5		NOAA6		PGTW
24	090119	19.1N 124.0E	PCN 5	T4.0/4.0 /S0.0/24HRS	DMSP39		RPMK
25	090119	19.4N 124.2E	PCN 5	T3.5/3.5 /S0.0/24HRS	DMSP39		PGTW
26	090119	18.9N 124.1E	PCN 5	T4.0/4.0 /S0.0/24HRS	DMSP39		RODN
27	090300	19.5N 123.9E	PCN 0		OTHER		PGTW
28	091031	19.9N 121.8E	PCN 5		NOAA6		PGTW
29	091600	20.4N 120.6E	PCN 0		OTHER		PGTW
30	092310	21.0N 120.0E	PCN 5	T3.0/3.5 /W0.5/20HRS	NOAA6		PGTW
31	100241	21.0N 119.5E	PCN 5	T3.0/4.0 /W1.0/24HRS	DMSP39		RPMK
32	100241	21.0N 120.2E	PCN 5	T3.0/4.0-/W1.0/25HRS	DMSP39		RODN
33	100625	21.5N 119.8E	PCN 5		TIROSN		PGTW
34	100625	21.0N 119.6E	PCN 5	T4.0/4.0	TIROSN	INIT OBS	RKSO
35	100807	21.2N 119.3E	PCN 5		TIROSN		RPMK
36	101150	21.4N 118.6E	PCN 6		NOAA6		RPMK
37	101600	22.0N 118.5E	PCN 0		OTHER		PGTW
38	102100	22.2N 117.6E	PCN 0		OTHER		PGTW
* 39	102240	22.3N 116.7E	PCN 6		DMSP37		RPMK
40	110030	22.4N 117.7E	PCN 5	T3.0/3.0-/S0.0/22HRS	NOAA6		RODN
41	110220	22.0N 117.5E	PCN 3	T3.0/3.0-/S0.0/24HRS	DMSP39		RPMK
42	110221	22.6N 117.5E	PCN 3	T3.0/3.0-/S0.0/27HRS	DMSP39		PGTW
43	110221	22.0N 117.4E	PCN 3	T4.5/4.5-/D0.5/20HRS	DMSP39		RKSO
44	110756	23.2N 116.3E	PCN 5		TIROSN		RPMK
45	110900	23.3N 116.4E	PCN 0		OTHER		PGTW
46	111200	23.7N 116.3E	PCN 0		OTHER		PGTW
47	112219	24.2N 115.3E	PCN 5		DMSP37		RPMK
48	112220	23.3N 114.8E	PCN 6		DMSP37		RODN
49	120007	23.8N 114.6E	PCN 5	T2.5/3.0-/W0.5/24HRS	NOAA6		RODN
50	120201	24.0N 114.2E	PCN 5	T1.5/3.0-/W1.5/24HRS	DMSP39		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	060145	11.8N 140.9E	1500FT		1002	25 260 60	280 34 240 60	3 2				+24 +25 +24 26	1
2	062326	14.5N 136.5E	700MB	3060	998	50 090 60	190 46 080 62	3 5				+11 +11 +11	2
3	070615	15.6N 135.4E	700MB	3035		45 130 90	220 46 130 120	5 5					3
4	070915	16.3N 134.6E	700MB	3021	992	25 220 05	230 28 190 100	4 2				+13 +15 +10	3
5	072130	17.5N 130.8E	700MB	3031	992	35 090 15	170 45 090 100	10 2				+13 +14 + 9	4
6	080633	18.3N 128.5E	700MB	2975		60 070 90		15 9					5
7	080850	18.5N 127.8E	700MB	2961	998	55 010 35	120 55 010 35	10 9				+19 +10 + 9	5
8	082133	19.1N 125.1E	700MB	2911		65 050 60	100 53 020 40	5 5				+14 +16 +12	6
9	090735	19.9N 122.9E	700MB	2960		85 040 20	170 46 100 125	5 10					7
10	090903	20.2N 122.6E	700MB	2957	981	85 090 40	130 30 090 40	5 10				+15 +16 +10	7
11	091936	20.7N 121.3E	700MB	2965			360 35 210 120	3 5					8
12	092217	20.8N 121.0E	700MB	3000	998	45 130 70		2 12				+12 +16 +13	8

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

TYPHOON JOE

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
0716002	9.2	148.3	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.
0716062	10.1	147.2	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.
0716122	11.0	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.
0716182	11.9	145.1	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.
0717002	12.4	144.1	30	12.7	143.8	20.	25.	-10.	16.1	139.6	40.	166.	5.	19.5	135.4	55.	310.	0.	20.2	130.0	70.	330.	-1[illegible]
0717062	12.7	142.8	30	13.3	142.9	20.	36.	-10.	16.2	139.9	40.	154.	0.	18.8	134.9	55.	299.	-5.	20.3	130.4	70.	396.	-25.
0717122	12.9	141.6	30	13.0	142.5	20.	53.	-10.	15.2	138.2	45.	120.	0.	17.3	133.7	55.	243.	-10.	19.2	129.1	70.	347.	-35.
0717182	13.0	140.3	30	13.1	140.4	20.	0.	-10.	14.4	135.5	45.	40.	-5.	15.5	130.8	55.	150.	-20.	17.0	126.1	70.	223.	0.
0718002	13.4	138.9	35	13.2	139.0	25.	13.	-10.	14.2	134.2	50.	63.	-5.	15.5	129.6	60.	173.	-25.	17.3	125.1	70.	269.	1[illegible].
0718062	13.9	137.7	40	14.1	137.5	35.	17.	-5.	15.3	132.5	55.	60.	-5.	17.0	127.6	65.	158.	-30.	19.3	123.2	70.	254.	-[illegible].
0718122	14.2	136.4	45	14.2	136.3	40.	6.	-5.	15.7	131.2	60.	73.	-5.	17.8	126.2	70.	162.	-35.	20.4	121.7	70.	275.	-1[illegible].
0718182	14.4	134.8	50	14.4	135.1	45.	17.	-5.	16.1	130.1	65.	117.	-10.	18.2	125.2	70.	185.	0.	20.9	120.7	70.	316.	-20.
0719002	14.6	133.2	55	14.6	133.3	50.	6.	-5.	16.3	127.2	70.	54.	-15.	18.1	122.0	75.	116.	15.	20.5	117.6	85.	229.	-[illegible].
0719062	15.0	131.5	60	15.0	131.7	55.	12.	-5.	16.6	125.7	75.	50.	-20.	18.8	120.5	80.	104.	5.	21.5	116.3	85.	259.	5.
0719122	15.3	130.0	65	15.3	130.1	65.	6.	0.	17.2	123.9	90.	43.	-15.	19.7	118.7	110.	111.	25.	22.7	115.0	110.	300.	40.
0719182	15.4	128.2	75	15.8	128.8	70.	42.	-5.	18.0	123.0	95.	75.	25.	20.3	118.3	110.	178.	20.	23.3	114.8	90.	704.	[illegible]
0720002	15.6	126.6	85	15.7	126.7	80.	8.	-5.	17.3	119.4	60.	62.	0.	19.0	115.1	70.	83.	-20.	22.0	112.5	75.	331.	50.
0720062	16.1	125.0	95	16.0	125.0	85.	6.	-10.	17.5	118.6	65.	29.	-10.	19.3	114.8	70.	162.	-10.	0.0	0.0	0.	-0.	0.
0720122	16.5	123.7	105	16.4	123.3	90.	24.	-15.	17.8	118.1	70.	58.	-15.	19.6	114.4	70.	241.	0.	0.0	0.0	0.	-0.	0.
0720182	17.0	122.2	70	17.1	122.2	95.	6.	25.	16.0	117.5	70.	125.	-20.	20.1	113.9	70.	311.	5.	0.0	0.0	0.	-0.	0.
0721002	16.9	120.4	60	17.4	120.7	65.	34.	5.	18.6	116.1	80.	144.	-10.	21.2	113.1	80.	362.	55.	0.0	0.0	0.	-0.	0.
0721062	17.0	119.0	75	17.8	119.0	85.	0.	10.	20.3	113.7	70.	98.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0721122	18.4	117.3	85	18.7	117.5	75.	21.	-10.	22.0	113.1	70.	188.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0721182	18.9	115.5	90	19.2	115.3	75.	21.	-15.	23.2	112.1	15.	250.	-50.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0722002	19.4	113.7	90	19.9	113.7	70.	30.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	
0722062	19.9	112.0	80	20.2	112.0	80.	18.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	.
0722122	20.4	110.2	70	20.4	110.2	80.	0.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0722182	20.8	108.4	65	20.8	108.2	80.	11.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
0723002	21.2	106.6	25	21.3	106.9	55.	10.	30.	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.	99.	197.	301.	15.	99.	187.	299.
AVG RIGHT ANGLE ERROR	13.	61.	98.	184.	13.	61.	98.	189.
AVG INTENSITY MAGNITUDE ERROR	10.	11.	16.	19.	9.	11.	14.	17.
AVG INTENSITY BIAS	-2.	-8.	-2.	1.	0.	-0.	-5.	-3.
NUMBER OF FORECASTS	25	20	17	13	20	20	16	12

DISTANCE TRAVELED BY STORM IS 2541. NM

AVERAGE SPEED OF STORM IS 15. KNOTS

TYPHOON JOE
FIX POSITIONS FOR CYCLONE NO. 9

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	160936	10.6N 146.3E	PCN 6		NOAA6		PGTW
2	162216	12.1N 145.0E	PCN 5	T1.0/1.0	NOAA6	INIT OBS	PGTW
* 3	170022	12.2N 144.6E	PCN 5		DMSP39		PGTW
4	170300	12.5N 144.3E	PCN 0		OTHER		PGTW
5	170600	13.4N 142.7E	PCN 0		OTHER		PGTW
6	170900	13.5N 142.0E	PCN 0		OTHER		PGTW
7	171200	13.4N 141.4E	PCN 0		OTHER		PGTW
8	171600	13.7N 140.2E	PCN 0		OTHER		PGTW
9	171800	13.8N 139.8E	PCN 0		OTHER		PGTW
10	172154	13.6N 139.0E	PCN 5		NOAA6		PGTW
11	180143	14.1N 138.5E	PCN 5	T2.5/2.5 /D1.5/27HRS	DMSP39		PGTW
12	180143	13.5N 138.3E	PCN 5	T1.5/1.5	DMSP39	INIT OBS	RODN
13	180900	14.4N 136.9E	PCN 0		OTHER		PGTW
14	181033	14.3N 136.3E	PCN 5		NOAA6		PGTW
15	181200	14.5N 136.0E	PCN 0		OTHER		PGTW
16	181600	14.8N 135.4E	PCN 0		OTHER		PGTW
17	182132	14.4N 134.2E	PCN 5		DMSP37		PGTW
18	182312	14.6N 133.2E	PCN 5		NOAA6		PGTW
19	190123	14.6N 132.6E	PCN 3	T3.5/3.5 /D1.0/24HRS	DMSP39		PGTW
20	190123	14.8N 132.8E	PCN 3	T3.5/3.5 /D2.0/24HRS	DMSP39		RODN
21	190300	14.6N 132.1E	PCN 0		OTHER		PGTW
22	191011	14.9N 130.2E	PCN 3		NOAA6	WEAK THERMAL EYE	PGTW
23	191600	15.8N 129.4E	PCN 0		OTHER		PGTW
24	192250	15.7N 127.5E	PCN 3		NOAA6		PGTW
25	200103	15.8N 126.6E	PCN 3	T4.5/4.5-/D1.0/24HRS	DMSP39		PGTW
26	200103	15.5N 125.9E	PCN 3	T5.0/5.0-/D1.5/24HRS	DMSP39		RODN
27	200300	16.1N 126.1E	PCN E		OTHER		PGTW
28	200612	16.1N 125.2E	PCN 1		TIROSN		PGTW
29	201200	16.4N 123.8E	PCN E		OTHER		PGTW
30	201600	16.9N 122.7E	PCN E		OTHER		PGTW
31	201857	17.2N 121.2E	PCN C		TIROSN		PGTW
32	202100	17.2N 121.2E	PCN C		OTHER		PGTW
33	210009	17.2N 120.0E	PCN 5		NOAA6		RODN
34	210225	17.5N 119.8E	PCN 1	T4.0/4.0+/W0.5/25HRS	DMSP39		PGTW
35	210225	17.5N 119.7E	PCN 1	T5.0/5.0 /S0.0/25HRS	DMSP39		RODN
36	210225	17.4N 119.8E	PCN 1	T4.5/4.5+	DMSP39	INIT OBS	RKSO
37	211107	18.4N 117.6E	PCN 3		NOAA6		PGTW
38	211600	18.8N 115.7E	PCN C		OTHER		PGTW
39	212100	19.2N 114.5E	PCN C		OTHER		PGTW
40	212347	19.3N 114.0E	PCN 2		NOAA6		PGTW
41	220205	19.6N 113.0E	PCN 1	T5.5/5.5-/D0.5/24HRS	DMSP39		RODN
42	220205	19.5N 113.2E	PCN 1	T5.0/5.0-/D1.0/24HRS	DMSP39		PGTW
43	220900	20.2N 111.1E	PCN C		OTHER		PGTW
44	221226	20.8N 109.9E	PCN 6		NOAA6		RODN
45	221600	20.5N 108.8E	PCN C		OTHER		PGTW
46	222100	20.9N 107.6E	PCN E		OTHER		PGTW
47	230000	21.0N 106.6E	PCN C		OTHER		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	160525	9.8N 147.3E	1500FT		1006	15 230 25		4 5						27	1
2	162328	12.6N 143.9E	1500FT		1006	20 060 60	090 22 060 60	3 3				+23	+24	+24 27	2
3	170730	12.3N 143.1E	1500FT		1005	15 340 80	020 30 320 120	3 30				+24	+26	+24 27	2
4	171512	12.8N 141.1E	700MB	3107	1004		140 31 070 180	5 5				+12	+13	+ 7	3
5	171848	12.8N 140.3E	700MB	3095			170 28 060 25	5 10							3
6	180837	14.1N 137.1E	700MB	3035	991	40 090 10	180 35 090 10	6 2					+24	+24 28	4
7	182000	14.3N 133.7E	700MB	2947			140 65 040 10	2 2							5
8	182209	14.5N 133.6E	700MB	2938	983	50 330 30	040 61 330 20	2 2	ELLIPTICAL	20 15	090	+15	+15	+14	5
9	190828	15.1N 130.9E	700MB	2881	974	65 010 10	130 74 070 15	5 5	ELLIPTICAL	27 20	010	+15	+16	+16	6
10	192219	15.6N 127.2E	700MB	2741	958	80 240 5	160 89 090 15	6 2	ELLIPTICAL	20 10	150	+13	+19	+12	7
11	200600	16.0N 124.8E	700MB	2636		55 090 8	170 100 090 10	2 2	ELLIPTICAL	19 16	150				8
12	200900	16.2N 124.2E	700MB	2570	940	70 130 8	300 73 220 15	10 5	CIRCULAR	17			+20	+12	8
13	210853	18.2N 118.2E	700MB	2915	982	50 120 90	190 64 130 120	4 5				+13	+14	+11	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	201700	17.0N 122.6E	LAND					WALLACE AS	16.6N 120.3E	
2	202000	17.4N 121.7E	LAND					WALLACE AS	16.6N 120.3E	
3	210520	17.4N 119.6E	LAND		CIRCULAR	34			15.2N 120.6E	98327

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
* 1	141200	7.0N 155.0E	15	100	
2	231200	21.0N 102.0E	15	50	

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

TROPICAL DEPRESSION 10

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
071518Z	14.0	125.4	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.
071600Z	14.0	123.9	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.
071606Z	14.2	122.2	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.
071612Z	14.4	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.
071618Z	14.7	119.2	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.
071700Z	15.2	117.8	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.
071706Z	16.0	116.3	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071712Z	17.2	115.2	30	17.3	115.0	30.	13.	0.	21.1	111.3	45.	98.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071718Z	18.3	114.4	30	17.9	114.1	30.	29.	0.	21.9	110.5	40.	133.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071800Z	19.1	113.9	30	19.9	114.8	25.	70.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071806Z	19.9	113.5	30	20.7	113.9	25.	53.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071812Z	20.7	113.0	30	21.8	113.2	25.	67.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071818Z	21.3	112.8	30	21.9	113.1	20.	40.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071900Z	21.8	112.5	30	22.0	112.2	20.	20.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071906Z	22.6	112.3	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.

	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.	115.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	33.	92.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	5.	13.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-5.	13.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	7	2	0	0	0	0	0	0

DISTANCE TRAVELED BY STORM IS 1007. NM

AVERAGE SPEED OF STORM IS 12. KNOTS

TROPICAL DEPRESSION TD-10
FIX POSITIONS FOR CYCLONE NO. 10

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
* 1	150101	14.0N 133.9E	PCN 3	T1.0/1.0	DMSP39	INIT OBS	PGTW
* 2	150959	14.0N 132.0E	PCN 6		NOAA6		PGTW
3	160223	14.2N 112.2E	PCN 5	T1.0/1.0	DMSP39	INIT OBS	RODN
4	161112	14.3N 118.5E	PCN 6		NOAA6		RODN
* 5	161118	13.7N 117.6E	PCN 5		NOAA6		PGTW
6	162357	15.1N 118.0E	PCN 5	T1.5/1.5 /D0.5/22HRS	NOAA6		RODN
7	170203	15.7N 117.5E	PCN 5	T1.5/1.5	DMSP39	INIT OBS	PGTW
8	170300	15.8N 117.3E	PCN 0		OTHER		PGTW
9	170900	16.3N 115.2E	PCN 0		OTHER		PGTW
10	171055	16.5N 115.0E	PCN 5		NOAA6		PGTW
11	171200	16.3N 114.3E	PCN 0		OTHER		PGTW
12	171600	17.6N 114.2E	PCN 0		OTHER		PGTW
13	171800	17.7N 113.7E	PCN 0		OTHER		PGTW
14	172335	19.7N 114.3E	PCN 5	T1.0/1.5-/W0.5/21HRS	NOAA6	SECONDARY CTR AT 18.9N 114.2E	PGTW
15	180300	20.2N 113.3E	PCN 0		OTHER		PGTW
16	180324	20.1N 113.8E	PCN 5	T1.5/1.5 /S0.0/27HRS	DMSP39		RODN
* 17	180900	21.3N 113.2E	PCN 0		OTHER		PGTW
* 18	181200	21.8N 113.1E	PCN 0		OTHER		PGTW
* 19	181600	22.5N 113.2E	PCN 0		OTHER		PGTW

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	181200	21.0N 113.0E	30	100	
2	190000	21.5N 112.5E	30	15	
3	191200	23.5N 112.0E	5	15	

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

SUPER TYPHOON KIM

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
							ERRORS					ERRORS					ERRORS						
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
071900Z	7.5	155.2	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.
071906Z	7.8	153.8	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.
071912Z	8.1	152.5	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.
071918Z	8.2	151.1	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.
072000Z	8.3	149.7	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.
072006Z	0.3	148.5	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.
072012Z	8.5	147.3	30	8.3	147.4	30.	13.	0.	9.2	141.7	40.	127.	5.	11.9	135.8	50.	124.	0.	14.5	130.0	65.	112.	-5.
072018Z	9.1	145.6	30	8.8	145.6	30.	18.	0.	10.2	139.4	40.	66.	5.	12.9	132.7	55.	48.	5.	15.7	126.1	70.	117.	-10.
072100Z	9.5	143.9	30	9.5	143.9	30.	0.	0.	12.0	137.4	50.	72.	15.	14.2	130.9	60.	72.	0.	16.3	124.3	70.	154.	-20.
072106Z	10.0	141.8	30	9.9	142.3	30.	30.	0.	12.4	135.9	50.	80.	10.	14.7	129.5	60.	78.	-5.	16.8	122.9	70.	187.	-30.
072112Z	10.0	139.7	35	10.2	140.1	30.	26.	-5.	12.2	133.5	60.	38.	10.	14.8	126.3	65.	136.	-5.	17.8	121.2	65.	242.	-65.
072118Z	10.4	138.3	35	10.6	138.8	30.	32.	-5.	12.7	132.6	60.	35.	10.	15.2	126.3	65.	85.	-15.	17.8	121.2	65.	162.	-65.
072200Z	10.9	136.9	35	11.0	136.7	40.	13.	5.	13.3	130.6	55.	21.	-5.	15.6	124.9	75.	100.	-15.	17.7	119.6	65.	181.	-35.
072206Z	11.2	135.3	40	11.5	135.3	40.	18.	0.	13.8	129.2	60.	27.	-5.	16.3	123.5	75.	141.	-25.	18.3	118.7	65.	175.	-5.
072212Z	11.6	133.7	50	11.3	134.5	40.	50.	-10.	12.6	128.7	65.	64.	-5.	14.4	123.0	75.	110.	-55.	17.4	117.8	65.	157.	25.
072218Z	12.2	132.3	50	12.2	132.2	45.	6.	-5.	14.5	125.3	70.	108.	-10.	16.5	119.5	60.	230.	-70.	19.8	114.5	70.	298.	15.
072300Z	13.0	130.8	60	13.2	130.6	60.	17.	0.	16.2	123.5	75.	104.	-15.	18.7	118.1	60.	203.	-40.	21.8	112.8	60.	362.	10.
072306Z	13.4	129.4	65	14.1	129.0	65.	48.	0.	16.9	122.0	60.	232.	-40.	19.9	116.3	65.	330.	-5.	23.1	111.4	25.	434.	-25.
072312Z	13.6	128.3	70	13.7	128.0	70.	18.	0.	15.5	122.5	80.	121.	-50.	17.7	117.2	70.	188.	30.	21.4	113.1	80.	253.	30.
072318Z	14.0	127.1	80	14.0	126.9	70.	12.	-10.	15.5	122.2	80.	86.	-50.	17.3	117.8	70.	125.	15.	20.4	113.9	80.	171.	35.
072400Z	14.4	126.1	90	14.4	125.9	85.	12.	-5.	15.8	121.5	70.	83.	-30.	17.8	117.1	80.	127.	30.	21.2	113.2	80.	177.	35.
072406Z	14.8	125.4	100	14.9	124.8	90.	35.	-10.	16.5	120.2	65.	93.	-5.	18.6	115.8	85.	156.	35.	22.1	112.6	60.	100.	15.
072412Z	15.4	124.6	130	15.2	124.5	110.	13.	-20.	16.3	121.0	80.	100.	40.	17.8	116.8	85.	160.	35.	21.0	113.0	50.	208.	60.
072418Z	16.2	123.5	130	15.9	123.2	120.	25.	-10.	18.0	118.9	85.	50.	30.	20.1	114.4	90.	152.	45.	23.5	111.1	50.	237.	30.
072500Z	16.7	122.6	100	16.9	122.3	90.	21.	-10.	19.3	118.0	90.	39.	40.	21.3	113.5	90.	160.	45.	0.0	0.0	0.	-0.	0.
072506Z	17.3	121.6	70	17.1	121.3	65.	21.	-5.	19.2	117.2	80.	69.	30.	21.0	112.8	75.	195.	30.	0.0	0.0	0.	-0.	0.
072512Z	17.9	120.5	40	17.6	120.0	75.	34.	35.	19.6	115.3	80.	132.	30.	22.0	111.6	45.	235.	15.	0.0	0.0	0.	-0.	0.
072510Z	18.5	119.6	55	18.3	119.3	55.	21.	0.	20.4	115.3	75.	99.	30.	22.7	111.2	30.	240.	10.	0.0	0.0	0.	-0.	0.
072600Z	19.3	118.7	50	19.3	118.4	55.	17.	5.	21.3	114.0	75.	133.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072606Z	19.7	118.3	50	19.5	118.1	60.	16.	10.	21.3	114.4	75.	114.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072612Z	20.4	117.5	50	20.2	117.1	50.	25.	0.	23.0	112.1	30.	190.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072618Z	21.3	116.8	45	21.0	115.5	45.	75.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072700Z	21.9	116.3	45	22.1	115.6	45.	41.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072706Z	22.7	115.8	45	22.8	115.8	45.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072712Z	23.6	115.5	30	23.6	115.3	30.	11.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072718Z	24.5	115.3	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.

	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.	95.	159.	211.	25.	91.	150.	210.
AVG RIGHT ANGLE ERROR	16.	63.	109.	123.	18.	58.	96.	112.
AVG INTENSITY MAGNITUDE ERROR	5.	21.	24.	29.	6.	22.	25.	27.
AVG INTENSITY BIAS	-1.	4.	3.	-0.	0.	4.	2.	-6.
NUMBER OF FORECASTS	29	25	22	18	24	24	20	16

DISTANCE TRAVELED BY STORM IS 2661. NM

AVERAGE SPEED OF STORM IS 13. KNOTS

SUPER TYPHOON KIM
FIX POSITIONS FOR CYCLONE NO. 11

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	182100	5.5N 155.5E	PCN 0		OTHER		PGTW
2	182342	8.0N 154.7E	PCN 5	T1.0/1.0	DMSP39	INIT OBS	PGTW
3	190300	7.2N 154.2E	PCN 0		OTHER		PGTW
4	190600	7.2N 153.8E	PCN 0		OTHER		PGTW
5	191011	8.5N 151.2E	PCN 5		NOAA6		PGTW
6	200103	8.5N 147.8E	PCN 5	T1.0/1.0	DMSP39	INIT OBS	PGTW
7	200612	8.7N 148.0E	PCN 3		TIROSN	LLCU LINES	PGTW
8	200948	9.2N 147.1E	PCN 5		NOAA6		PGTW
9	201600	9.1N 146.2E	PCN 0		OTHER		PGTW
10	202050	9.3N 144.9E	PCN 6		DMSP39		PGTW
11	202228	9.5N 144.8E	PCN 3		NOAA6		PGTW
12	210044	9.9N 143.7E	PCN 3	T1.5/1.5 /D0.5/24HRS	DMSP39		PGTW
13	210044	9.7N 143.8E	PCN 5	T1.0/1.0	DMSP39	INIT OBS	RODN
14	210300	10.1N 143.4E	PCN 0		OTHER		PGTW
15	210926	10.0N 141.2E	PCN 5		NOAA6		PGTW
16	211600	10.4N 139.3E	PCN 0		OTHER		PGTW
17	212206	10.5N 137.9E	PCN 3	T2.5/2.5 /D1.0/22HRS	NOAA6		PGTW
18	220024	11.0N 136.8E	PCN 5	T2.5/2.5 /D1.5/24HRS	DMSP39		RODN
19	220300	11.2N 136.6E	PCN 0		OTHER		PGTW
20	220900	11.2N 134.6E	PCN 0		OTHER		PGTW
21	221045	11.5N 134.2E	PCN 5		NOAA6		PGTW
22	221600	11.6N 133.3E	PCN 0		OTHER		PGTW
23	222148	12.6N 131.2E	PCN 5		DMSP37	PSN BSD ON UL FEATURES	PGTW
24	222325	12.7N 130.7E	PCN 5		NOAA6	PSN BSD ON ULCC	PGTW
25	230145	13.3N 130.2E	PCN 3	T4.0/4.0 /D1.5/28HRS	DMSP39		PGTW
26	230145	13.3N 130.4E	PCN 3	T3.5/3.5 /D1.0/25HRS	DMSP39		RODN
27	230900	13.9N 128.6E	PCN 0		OTHER		PGTW
28	231025	13.8N 128.5E	PCN 5		NOAA6		PGTW
29	231600	14.1N 127.2E	PCN 0		OTHER		PGTW
30	232302	14.4N 126.2E	PCN 3		NOAA6	PSBL EYE FRMNG	PGTW
31	240125	14.5N 125.8E	PCN 6	T5.0/5.0-/D1.0/24HRS	DMSP39		PGTW
32	240900	15.3N 124.7E	PCN E		OTHER		PGTW
33	241135	15.1N 124.8E	PCN 6		NOAA6		RODN
34	241200	15.6N 124.3E	PCN E		OTHER		PGTW
35	250000	16.7N 122.3E	PCN C		OTHER		PGTW
36	250021	16.6N 122.3E	PCN 3	T5.0/5.0	NOAA6	INIT OBS	RODN
37	250247	16.8N 122.0E	PCN 3		DMSP39		RODN
38	250300	17.0N 121.8E	PCN C		OTHER		PGTW

39	250600	17.3N	121.4E	PCN 0		OTHER			PGTW
40	250656	17.4N	121.4E	PCN 3	T5.0/5.0+/S0.0/30HRS	TIROSN			PGTW
41	250900	17.8N	121.2E	PCN 0		OTHER			PGTW
42	251119	17.9N	120.8E	PCN 3		NOAA6			PGTW
43	251120	17.8N	120.5E	PCN 5		NOAA6			RODN
44	252225	18.4N	120.2E	PCN 3	T4.5/4.5+	DMSP37	INIT OBS		RKSO
45	252359	19.1N	119.0E	PCN 5	T4.0/5.0 /W1.0/24HRS	NOAA6			RODN
46	260227	19.3N	118.5E	PCN 5		DMSP39			RODN
47	260227	19.1N	118.5E	PCN 3	T3.5/4.5+/W1.5/21HRS	DMSP39			PGTW
48	260645	20.1N	117.8E	PCN 5		TIROSN			PGTW
49	260900	20.2N	117.3E	PCN 0		OTHER	PSN BSD ON CONSERV FEATURES		PGTW
50	261057	20.3N	117.6E	PCN 5		NOAA6			PGTW
51	261600	20.9N	116.0E	PCN 0		OTHER			PGTW
52	262100	21.8N	116.7E	PCN 0		OTHER			PGTW
53	262337	22.1N	116.6E	PCN 5		NOAA6			PGTW
54	270207	22.0N	116.0E	PCN 3	T4.0/4.5-/W0.5/28HRS	DMSP39			RKSO
55	270207	22.2N	116.5E	PCN 5	T3.5/3.5-/S0.0/24HRS	DMSP39			PGTW
56	270900	23.5N	115.6E	PCN 0		OTHER			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 ND.
1	192105	10.1N 149.6E	1500FT		1008	25 320 10	110 26 000 00	20 3			+26 +24 +24	2
2	200800	8.3N 148.3E	1500FT		1001	35 090 10	090 30 360 15	10 1			+23 +23 28	3
3	210610	10.0N 142.0E	700MB	3106		30 040 50	130 34 320 10	5 3				5
4	210733	9.9N 141.3E	700MB	3104	1004	25 160 5	120 31 000 00	5 3			+12 +12 + 9	5
5	211932	10.5N 137.5E	700MB	3060			130 61 040 30	10 1				6
6	212256	10.8N 137.1E	700MB	3100	1001	30 030 10	060 34 270 70	10 2			+13 +12 + 7	6
7	221127	10.9N 134.7E	700MB	3023	992		260 50 180 20	10 2	CIRCULAR	15	+10 +14 +10	8
8	221930	12.4N 131.7E	700MB	2989			160 59 020 15	5 3				9
9	222223	12.9N 131.2E	700MB	2964	982	65 070 20	130 18 050 15	5 2			+14 +16 +12	9
10	230703	13.4N 129.2E	700MB	2909		80 060 10	150 65 060 24	6 2	CIRCULAR	30		10
11	230848	13.5N 128.9E	700MB	2897	979	80 070 10	030 65 300 28	4 2	CIRCULAR	25	+10 +15 +12	10
12	231628	13.9N 127.5E	700MB	2825	967		280 58 190 5	10 5	CIRCULAR	20	+15 +17	11
13	231938	14.3N 126.8E	700MB	2778			190 85 090 10	7 5	CIRCULAR	15		11
14	232204	14.3N 126.3E	700MB	2723	958	85 360 5	040 80 330 10	10 2	CIRCULAR	15	+18 +19	11
15	240805	15.0N 125.1E	700MB	2356	916	110 270 5	260 115 160 5	5 2	CIRCULAR	7	+12 +20 +13	13
16	241603	15.8N 123.7E	700MB	2297	908		120 123 100 15	5 1	CIRCULAR	7	+13 +22 +15	14
17	241943	16.3N 123.1E	700MB	2338			210 105 140 15	5 1				14
18	242150	16.6N 122.7E	700MB	2377	918	100 020 5	090 78 020 15	10 2	CIRCULAR	6	+21 +21 +16	14
19	251555	18.2N 119.7E	700MB	2992	990		250 40 170 47	4 4			+12 +12	15
20	251931	18.9N 119.5E	700MB	2985			300 46 230 147	2 10				15
21	252240	19.1N 118.8E	700MB	2984	989	50 020 28	080 58 360 59	3 5			+12	15
22	260605	19.7N 118.3E	700MB	2993	989	45 140 145	200 50 140 148	5 5				16
23	260843	20.0N 117.7E	700MB	2982	987	35 280 60	340 37 280 60	12 6			+15 +16 +10	16

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

TYPHOON LEX

BEST TRACK DATA

	BEST TRACK		WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
					ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
072606Z	22.5	152.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072612Z	22.5	152.3	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.
072618Z	22.5	151.8	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.
072700Z	22.5	151.3	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072706Z	22.5	150.7	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.
072712Z	22.5	150.1	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
072718Z	22.5	149.6	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.
072800Z	22.7	149.0	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.
072806Z	22.8	148.5	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.
072812Z	23.0	148.0	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.
072818Z	23.4	148.2	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.
072900Z	23.7	148.4	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.
072906Z	24.2	148.4	30	24.0	148.5	30.	13.	0.	25.5	147.4	40.	108.	-5.	26.9	145.4	50.	173.	-15.	28.5	143.8	60.	285.	-5.
072912Z	24.7	149.3	30	24.6	148.3	30.	6.	0.	26.5	147.8	50.	88.	0.	28.9	147.7	55.	235.	-10.	31.3	149.9	50.	492.	-20.
072918Z	24.8	148.8	35	24.8	148.2	35.	33.	0.	26.8	147.8	55.	89.	0.	29.1	147.8	55.	265.	-10.	31.5	150.2	50.	536.	-20.
073000Z	25.0	149.5	40	25.1	149.3	45.	12.	5.	26.7	150.1	55.	128.	-5.	28.5	151.3	55.	347.	-10.	30.7	152.8	50.	616.	-25.
073006Z	25.6	149.4	45	25.6	149.8	50.	22.	5.	27.5	150.9	55.	203.	-10.	29.6	152.0	50.	450.	-15.	31.6	153.4	45.	665.	-30.
073012Z	25.4	148.9	50	25.3	149.2	55.	17.	5.	27.4	150.0	55.	211.	-10.	29.6	151.2	50.	448.	-20.	31.9	153.1	45.	637.	-30.
073018Z	25.5	148.6	55	25.7	149.3	55.	40.	0.	27.2	149.8	55.	204.	-10.	29.3	151.1	50.	463.	-20.	31.7	152.9	45.	579.	-30.
073100Z	25.3	148.3	60	25.2	148.6	60.	17.	0.	25.9	149.8	70.	154.	5.	28.1	148.8	70.	333.	-5.	30.3	148.7	65.	370.	-15.
073106Z	25.2	148.0	65	25.2	148.0	60.	0.	-5.	27.2	146.0	75.	179.	10.	30.2	146.2	65.	394.	-10.	32.8	148.2	50.	441.	-25.
073112Z	25.0	147.1	65	25.2	147.7	65.	35.	0.	27.5	144.7	75.	215.	5.	30.4	144.2	65.	359.	-10.	32.8	145.8	50.	366.	-25.
073118Z	24.7	147.2	65	24.9	146.6	65.	35.	0.	25.7	144.0	75.	126.	5.	28.0	143.1	65.	172.	-10.	31.2	144.4	50.	227.	-20.
080100Z	24.5	146.6	65	24.6	146.6	65.	6.	0.	25.2	143.7	60.	110.	-15.	27.2	141.2	55.	202.	-25.	30.7	141.1	40.	244.	-30.
080106Z	24.2	146.1	65	24.6	145.7	65.	32.	0.	25.9	142.2	55.	173.	-20.	29.0	140.7	50.	258.	-25.	32.2	141.8	40.	262.	-25.
080112Z	24.0	145.6	70	24.1	145.8	70.	12.	0.	24.2	142.8	65.	93.	-10.	26.1	140.2	60.	228.	-15.	29.3	139.1	55.	313.	-10.
080118Z	23.8	145.0	70	24.0	145.0	70.	12.	0.	24.5	142.2	65.	136.	-10.	26.5	139.9	60.	246.	-10.	29.8	138.9	50.	347.	-10.
080200Z	23.5	144.5	75	23.5	144.5	75.	0.	0.	22.6	141.8	80.	219.	0.	21.8	138.5	85.	488.	15.	21.1	135.2	90.	807.	30.
080206Z	23.8	144.4	75	23.3	143.9	75.	41.	0.	22.5	141.2	85.	261.	10.	21.7	138.0	90.	548.	25.	20.9	134.6	90.	982.	30.
080212Z	24.4	144.5	75	23.8	144.4	75.	36.	0.	23.6	142.4	85.	220.	10.	23.2	140.2	90.	444.	25.	22.3	137.0	90.	775.	30.
080218Z	25.4	144.5	75	24.3	144.0	80.	71.	5.	24.4	142.8	85.	199.	15.	24.7	141.1	85.	382.	25.	25.2	139.5	90.	608.	30.
080300Z	25.4	144.4	80	25.6	144.0	80.	25.	0.	26.7	141.8	75.	160.	5.	28.5	140.1	75.	338.	15.	30.5	139.2	70.	524.	10.
080306Z	26.2	144.4	75	26.2	144.4	80.	0.	5.	29.7	144.0	65.	75.	0.	34.0	146.2	55.	207.	-5.	0.0	0.0	0.	-0.	0.
080312Z	26.8	144.4	75	26.8	144.6	80.	11.	5.	30.3	145.1	65.	66.	0.	34.3	147.7	55.	197.	-5.	0.0	0.0	0.	-0.	0.
080318Z	27.4	144.4	70	27.6	144.3	75.	13.	5.	31.2	144.6	60.	103.	0.	35.1	147.9	45.	210.	-15.	0.0	0.0	0.	-0.	0.
080400Z	27.9	144.5	70	27.9	144.4	70.	5.	0.	31.0	145.0	55.	82.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080406Z	28.6	144.7	65	28.8	144.7	65.	12.	0.	28.8	144.7	55.	161.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080412Z	29.2	145.1	65	29.5	144.9	65.	21.	0.	29.4	144.9	50.	178.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080418Z	29.7	145.6	60	30.0	145.2	60.	27.	0.	33.5	147.2	45.	139.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080500Z	30.2	146.3	60	30.2	146.3	60.	0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080506Z	30.6	147.0	60	30.8	147.0	60.	12.	0.	32.9	149.8	55.	27.	-5.	35.0	152.5	45.	135.	5.	0.0	0.0	0.	-0.	0.
080512Z	31.0	147.8	60	31.0	147.5	60.	15.	0.	33.0	150.8	50.	37.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080518Z	31.5	148.6	60	31.4	148.5	60.	8.	0.	33.2	152.3	50.	47.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080600Z	32.1	149.3	60	32.2	149.5	60.	12.	0.	35.3	153.3	50.	62.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080606Z	32.6	150.2	60	32.7	149.9	60.	16.	0.	36.2	152.9	45.	102.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080612Z	33.2	151.5	55	33.2	151.3	55.	10.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080618Z	33.8	152.9	50	34.0	153.0	50.	13.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080700Z	34.8	154.4	50	34.7	154.5	50.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
080706Z	36.0	155.0	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.

	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.	137.	314.	499.	18.	137.	314.	499.
AVG RIGHT ANGLE ERROR	11.	97.	251.	421.	11.	97.	251.	421.
AVG INTENSITY MAGNITUDE ERROR	1.	7.	14.	23.	1.	7.	14.	23.
AVG INTENSITY BIAS	1.	-2.	-5.	-10.	0.	-2.	-5.	-10.
NUMBER OF FORECASTS	36	32	24	20	34	32	24	20

DISTANCE TRAVELED BY STORM IS 1810. NM

AVERAGE SPEED OF STORM IS 6. KNOTS

TYPHOON LEX
FIX POSITIONS FOR CYCLONE NO. 12

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	260916	22.5N 152.5E	PCN 5		NOAA6		PGTW
* 2	261600	23.8N 152.0E	PCN 0		OTHER		PGTW
3	262155	22.4N 151.3E	PCN 5	T0.5/0.5	NOAA6	INIT OBS ILL DEFINED CC	PGTW
* 4	270026	22.3N 151.3E	PCN 5		DMSP39	VERY LITTLE LLCU INFLOW	PGTW
* 5	270654	22.6N 149.2E	PCN 5		NOAA6		PGTW
6	280006	23.0N 149.0E	PCN 5	T0.5/0.5 /S0.0/24HRS	DMSP39	EXPOSED LLCU AT 27.0N 152.4E	PGTW
7	281013	22.9N 147.9E	PCN 5		NOAA6	ULCC CONVECTION IMPROVED	PGTW
8	281200	22.8N 148.1E	PCN 0		OTHER		PGTW
* 9	282316	24.8N 148.4E	PCN 5	T1.0/1.0 /D0.5/24HRS	DMSP39	UL 22.0N 147.9E	PGTW
10	290611	24.3N 148.4E	PCN 3		TIROSN	LLCU	PGTW
11	290900	24.3N 148.3E	PCN 0		OTHER		PGTW
12	290950	24.6N 148.2E	PCN 5		NOAA6	ULCC 23.6N 149.1E	PGTW
13	291600	24.7N 148.4E	PCN 0		OTHER		PGTW
14	292230	25.0N 149.5E	PCN 5		NOAA6		PGTW
15	300107	25.1N 149.6E	PCN 3	T2.5/2.5 /D1.5/25HRS	DMSP39		PGTW
16	300107	25.3N 149.9E	PCN 3	T4.0/4.0	DMSP39	INIT OBS	RODN
* 17	300300	25.7N 149.2E	PCN 0		OTHER		PGTW
18	300900	25.8N 149.5E	PCN 0		OTHER		PGTW
19	300928	25.6N 149.6E	PCN 5		NOAA6		PGTW
* 20	301600	25.7N 149.5E	PCN 0		OTHER		PGTW
21	302207	25.4N 148.8E	PCN 5	T3.5/3.5 /D1.0/21HRS	NOAA6		PGTW
22	310300	25.4N 149.9E	PCN 0		OTHER		PGTW
23	310906	25.0N 147.7E	PCN 3		NOAA6		PGTW
24	311600	24.5N 146.9E	PCN 0		OTHER		PGTW
25	312145	24.7N 146.6E	PCN 5		NOAA6		PGTW
26	010027	24.4N 146.2E	PCN 5	T4.0/4.0 /D0.5/26HRS	DMSP39		PGTW

27	010027	24.6N	145.9E	PCN 5	T4.0/4.0	DMSP39	INIT OBS		RODN
28	010300	24.3N	145.9E	PCN 0		OTHER			PGTW
29	010843	24.1N	145.3E	PCN 6		NOAA6			PGTW
30	011600	24.0N	145.2E	PCN 0		OTHER			PGTW
31	012304	23.8N	144.4E	PCN 5		NOAA6			PGTW
32	020008	23.7N	144.4E	PCN 5	T4.5/4.5 /D0.5/24HRS	DMSP39			PGTW
33	020300	23.4N	144.5E	PCN 0		OTHER			PGTW
34	021002	23.8N	144.3E	PCN 5		NOAA6			PGTW
* 35	021200	23.8N	144.1E	PCN 0		OTHER			PGTW
36	021600	24.3N	144.1E	PCN 0		OTHER			PGTW
37	022242	25.0N	144.5E	PCN 3		NOAA6	PSN BSD ON WELL DFND LLCC		PGTW
38	030129	25.4N	144.4E	PCN 3	T5.0/5.0-/D0.5/25HRS	DMSP39	PSBL EYE FRMNG		PGTW
39	030129	25.5N	144.5E	PCN 3	T4.5/4.5	DMSP39	INIT OBS		RODN
40	030300	25.9N	144.4E	PCN E		OTHER			PGTW
41	030940	26.3N	144.3E	PCN 3		NOAA6			PGTW
42	031600	27.3N	144.2E	PCN 0		OTHER			PGTW
43	032056	27.6N	144.2E	PCN 6		DMSP37			PGTW
44	032219	27.8N	144.6E	PCN 3		NOAA6			PGTW
45	040109	27.8N	144.6E	PCN 3	T5.0/5.0-	DMSP39	INIT OBS		RKSO
46	040109	28.0N	144.6E	PCN 3	T3.5/4.5 /W1.5/24HRS	DMSP39			PGTW
47	040300	28.3N	144.7E	PCN C		OTHER			PGTW
48	040900	29.1N	144.9E	PCN C		OTHER			PGTW
49	040917	29.0N	144.8E	PCN 3		NOAA6			PGTW
50	041600	29.5N	145.3E	PCN 0		OTHER			PGTW
51	042034	29.8N	146.2E	PCN 3	T3.5/4.0-/W1.5/19HRS	DMSP37			RKSO
52	042035	29.9N	146.0E	PCN 5		DMSP37			PGTW
53	042157	30.0N	146.2E	PCN 3		NOAA6			PGTW
54	050049	30.2N	146.3E	PCN 3		DMSP39			RKSO
55	050049	30.2N	146.6E	PCN 3	T3.5/3.5-/S0.0/24HRS	DMSP39			PGTW
56	050300	30.4N	146.8E	PCN C		OTHER			PGTW
57	050855	30.8N	147.4E	PCN 4		NOAA6			PGTW
58	050900	30.9N	147.7E	PCN C		OTHER			PGTW
59	051200	30.9N	147.7E	PCN E		OTHER			PGTW
60	051600	31.2N	148.3E	PCN C		OTHER			PGTW
61	052013	31.7N	149.0E	PCN 3	T3.5/3.5 /S0.0/24HRS	DMSP37			RKSO
62	052013	31.8N	148.9E	PCN 4		DMSP37			PGTW
63	052135	31.9N	149.1E	PCN 3		NOAA6			PGTW
64	060029	32.1N	149.3E	PCN 3	T4.0/4.0-/D0.5/24HRS	DMSP39			PGTW
65	060029	32.2N	149.4E	PCN 1	T4.0/4.0-	DMSP39	INIT OBS		RODN
66	060300	32.3N	149.6E	PCN E		OTHER			PGTW
67	060933	32.7N	150.6E	PCN 4		NOAA6			PGTW
68	060900	32.9N	150.9E	PCN C		OTHER			PGTW
69	061200	33.1N	151.5E	PCN E		OTHER			PGTW
70	061600	33.7N	152.6E	PCN C		OTHER			PGTW
71	061952	34.0N	153.3E	PCN 4		DMSP37			PGTW
72	070000	34.9N	154.4E	PCN C		OTHER			PGTW
73	070900	36.6N	155.2E	PCN C		OTHER			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	290138	23.9N 148.6E	1500FT		1002	35 170 30	190 29 130 50	4 1				+21 +25 +25	1
2	292225	24.0N 149.3E	700MB	3015	994	35 250 60	230 36 120 15	3 4				+16 +14 +10	2
3	301004	25.3N 149.0E	700MB	2947	984		270 50 190 45	5 4				+11 +11 +11	4
4	301904	25.4N 148.6E	700MB	2910			230 53 140 30	5 5					5
5	302137	25.3N 148.6E	700MB	2906	926	25 310 120	040 45 330 30	5 7	CIRCULAR	30		+10	5
6	310602	25.2N 148.0E	700MB	2858		40 200 60	300 60 200 15	5 3					6
7	310830	25.1N 148.0E	700MB	2856	972	65 200 15	360 67 280 15	5 5	CIRCULAR	30		+14 +15 +12	6
8	311922	24.6N 147.3E	700MB	2852			210 56 140 80	4 3					7
9	312149	24.6N 146.8E	700MB	2862	971	50 340 30	070 60 360 30	5 3				+15 +17 +13	7
10	010640	24.1N 146.2E	700MB			70 230 20	320 64 230 15	8 2					8
11	010900	24.1N 145.8E	700MB		963	70 260 60	350 66 260 30	8 3				+14 +19 +14	8
12	011910	23.8N 144.9E	700MB	2853			280 50 200 60	10 2					9
13	012130	23.6N 144.7E	700MB	2835	967	50 360 40	100 60 360 25	2 2				+16 +18 +12	9
14	020747	24.0N 144.5E	700MB	2817		90 180 45	290 73 210 70	3 3					10
15	020915	24.1N 144.6E	700MB	2812	965		070 62 360 85	3 3				+15 +15 +11	10
16	021930	25.4N 144.4E	700MB	2782			270 62 180 60	5 3					11
17	022150	25.3N 144.1E	700MB	2771	962	45 040 160	360 48 280 50	10 4				+11 +15 +15	11
18	030609	26.2N 144.4E	700MB	2765		40 150 130	270 62 190 25	6 3					12
19	030850	26.4N 144.5E	700MB	2772	963	55 320 20	040 55 320 15	8 3				+14 +15 +14	12
20	031900	27.5N 144.3E	700MB	2809			310 52 240 25	2 2					13
21	032200	27.6N 144.5E	700MB	2824	969	50 310 100	020 51 310 100	2 2				+15 +12	13

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

TYPHOON MARGE

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
080712Z	14.3	159.1	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.
080718Z	14.3	158.5	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.
080800Z	14.2	158.0	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.
080806Z	14.2	157.5	35	14.5	157.2	35.	25.	0.	14.6	155.8	45.	51.	5.	14.6	153.3	50.	325.	-55.	14.6	150.8	55.	693.	-55.
080812Z	14.1	157.0	35	14.3	156.8	40.	17.	5.	14.2	154.4	50.	146.	0.	14.4	151.9	50.	448.	-60.	14.8	149.5	55.	782.	-45.
080818Z	14.2	156.5	35	14.2	156.3	40.	12.	5.	14.4	153.9	50.	189.	-10.	14.7	151.6	50.	519.	-60.	14.9	149.2	55.	537.	-45.
080900Z	14.6	156.1	40	14.1	155.8	40.	35.	0.	14.3	153.4	50.	261.	-25.	14.6	150.8	55.	624.	-55.	15.0	148.8	65.	904.	-50.
080906Z	15.4	156.1	40	14.7	155.7	45.	48.	5.	15.1	153.4	55.	295.	-50.	15.4	150.6	60.	654.	-50.	15.8	147.0	70.	901.	-25.
080912Z	16.3	155.7	50	16.2	155.8	45.	8.	-5.	18.2	154.8	55.	106.	-55.	20.0	153.3	60.	412.	-40.	21.8	151.8	70.	526.	-25.
080918Z	17.3	155.2	60	16.7	155.6	45.	43.	-15.	18.7	154.3	55.	244.	-55.	20.6	152.8	60.	443.	-40.	22.3	151.2	70.	542.	-20.
081000Z	18.4	155.0	75	18.5	154.9	65.	8.	-10.	22.8	154.2	85.	102.	-25.	25.9	154.5	85.	159.	-10.	28.2	155.3	70.	172.	-15.
081006Z	19.8	155.0	105	19.9	155.0	70.	6.	-35.	25.0	155.4	90.	21.	-20.	28.6	157.2	80.	70.	-15.	30.9	159.8	70.	181.	-10.
081012Z	21.3	155.0	110	21.3	155.0	110.	0.	0.	26.7	155.5	120.	20.	20.	30.1	157.6	85.	90.	-10.	32.0	160.6	65.	203.	-15.
081018Z	22.7	155.2	110	22.7	155.3	110.	6.	0.	27.2	156.3	110.	32.	10.	30.6	158.7	80.	140.	-10.	32.5	161.0	60.	232.	-15.
081100Z	24.1	155.4	110	24.0	155.5	110.	8.	0.	28.2	156.7	100.	40.	5.	31.2	158.0	70.	96.	-15.	34.2	159.2	50.	98.	-20.
081106Z	25.3	155.6	110	25.4	155.6	110.	6.	0.	30.5	156.8	90.	106.	-5.	33.5	157.8	65.	146.	-15.	0.0	0.0	0.	-0.	0.
081112Z	26.5	155.8	100	26.7	155.7	100.	13.	0.	31.3	156.3	80.	92.	-15.	34.7	157.9	60.	179.	-20.	0.0	0.0	0.	-0.	0.
081118Z	27.5	155.8	100	27.8	155.9	95.	13.	-5.	31.9	156.7	75.	102.	-15.	35.0	159.2	55.	169.	-20.	0.0	0.0	0.	-0.	0.
081200Z	28.3	155.8	95	28.7	156.1	95.	29.	0.	32.1	156.7	70.	72.	-15.	35.3	158.5	50.	155.	-20.	0.0	0.0	0.	-0.	0.
081206Z	28.9	155.9	95	29.0	155.4	95.	27.	0.	31.7	156.3	85.	18.	5.	34.1	157.3	70.	135.	5.	0.0	0.0	0.	-0.	0.
081212Z	29.8	155.9	95	29.8	156.1	95.	10.	0.	32.7	156.6	75.	48.	-5.	35.9	158.6	60.	202.	0.	0.0	0.0	0.	-0.	0.
081218Z	30.3	156.0	90	30.6	156.2	80.	21.	-10.	33.5	156.8	50.	74.	-25.	36.7	159.0	45.	240.	-15.	0.0	0.0	0.	-0.	0.
081300Z	31.0	156.1	85	31.1	155.9	80.	12.	-5.	33.7	156.4	50.	116.	-20.	36.2	158.2	40.	306.	-15.	0.0	0.0	0.	-0.	0.
081306Z	31.4	156.3	80	31.8	156.1	75.	26.	-5.	34.7	156.9	50.	172.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081312Z	31.9	156.6	80	32.1	156.3	70.	19.	-10.	34.7	157.4	50.	193.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081318Z	32.3	157.2	75	32.7	156.7	65.	35.	-10.	34.7	158.2	45.	215.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081400Z	32.7	158.4	70	32.8	157.9	65.	31.	-5.	34.0	162.3	45.	67.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081406Z	32.9	159.6	65	32.9	159.3	65.	15.	0.	34.1	165.2	45.	18.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081412Z	33.1	160.9	60	33.2	160.8	60.	0.	0.	34.2	168.7	40.	60.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081418Z	33.3	162.2	60	33.4	162.2	55.	6.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081500Z	33.5	163.5	55	33.4	163.0	50.	26.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081506Z	33.8	165.2	55	33.7	164.3	50.	45.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081512Z	34.4	167.5	50	34.0	166.7	50.	46.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
081518Z	35.3	170.8	45	35.3	170.8	45.	0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	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.	114.	276.	506.	20.	114.	276.	506.
AVG RIGHT ANGLE ERROR	11.	58.	180.	371.	11.	58.	180.	371.
AVG INTENSITY MAGNITUDE ERROR	5.	18.	27.	27.	5.	18.	27.	27.
AVG INTENSITY BIAS	-4.	-14.	-26.	-27.	0.	-14.	-26.	-27.
NUMBER OF FORECASTS	31	26	20	12	31	26	20	12

DISTANCE TRAVELED BY STORM IS 1980. NM

AVERAGE SPEED OF STORM IS 18. KNOTS

TYPHOON MARGE
FIX POSITIONS FOR CYCLONE NO. 13

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
* 1	060833	16.2N 161.6E	PCN 6		NOAA6		PGTW
2	072100	14.2N 158.0E	PCN 0		OTHER		PGTW
3	072350	14.0N 157.9E	PCN 5	T0.5/0.5	DMSP39	INIT OBS	PGTW
4	080929	13.8N 157.0E	PCN 6		NOAA6		PGTW
5	081600	13.8N 156.4E	PCN 0		OTHER		PGTW
6	081701	13.7N 156.3E	PCN 6		TIROSN		PGTW
7	082100	13.8N 156.2E	PCN 0		OTHER		PGTW
8	082209	13.8N 156.1E	PCN 5		NOAA6		PGTW
9	082330	13.9N 156.0E	PCN 6	T2.5/2.5 /D2.0/24HRS	DMSP39		PGTW
10	090300	14.6N 155.9E	PCN 0		OTHER		PGTW
11	090907	16.1N 155.9E	PCN 6		NOAA6		PGTW
12	091600	16.7N 155.3E	PCN 0		OTHER		PGTW
13	092147	18.1N 154.8E	PCN 5	T3.5/3.5 /D1.0/22HRS	NOAA6		PGTW
14	100300	19.3N 155.3E	PCN E		OTHER		PGTW
15	100845	20.9N 154.9E	PCN 2		NOAA6		PGTW
16	101600	22.4N 156.2E	PCN E		OTHER		PGTW
17	102000	23.4N 155.1E	PCN 2		DMSP37		PGTW
18	102100	23.4N 155.4E	PCN E		OTHER		PGTW
19	102124	23.3N 155.4E	PCN 1	T5.5/5.5 /D2.0/24HRS	NOAA6		PGTW
20	110822	25.9N 155.6E	PCN 2		NOAA6		PGTW
21	110900	26.1N 155.9E	PCN E		OTHER		PGTW
22	111600	27.4N 156.0E	PCN E		OTHER		PGTW
23	111947	27.8N 155.9E	PCN 4	T5.5/5.5-/S0.0/22HRS	DMSP37		PGTW
24	112100	28.0N 156.2E	PCN C		OTHER		PGTW
25	112102	27.8N 156.0E	PCN 3		NOAA6		PGTW
26	120511	28.8N 155.8E	PCN 1		TIROSN		PGTW
27	120900	29.5N 156.1E	PCN E		OTHER		PGTW
28	120941	29.5N 156.0E	PCN 1		NOAA6		PGTW
29	121200	29.8N 156.0E	PCN C		OTHER		PGTW
30	121800	30.4N 156.1E	PCN C		OTHER		PGTW
31	121926	30.5N 155.7E	PCN 3	T4.5/5.5-/W1.0/24HRS	DMSP39		PGTW
32	122100	30.8N 156.0E	PCN C		OTHER		PGTW
33	122221	30.8N 156.0E	PCN 3		NOAA6		PGTW
34	130000	31.0N 156.2E	PCN C		OTHER		PGTW
35	130300	31.3N 156.2E	PCN C		OTHER		PGTW
36	130919	31.7N 156.4E	PCN 3		NOAA6		PGTW
37	131600	32.4N 156.7E	PCN 0		OTHER		PGTW
38	132100	32.7N 158.0E	PCN 0		OTHER		PGTW
39	132158	32.5N 157.7E	PCN 3	T3.5/4.5-/W1.0/26HRS	NOAA6		PGTW
40	140448	32.9N 159.1E	PCN 3		TIROSN		PGTW

41	140857	33.1N	160.1E	PCN 3		NOAA6		PGTW
42	141600	33.3N	161.7E	PCN 0		OTHER		PGTW
43	142100	33.3N	162.2E	PCN 0		OTHER		PGTW
44	150300	33.8N	163.6E	PCN 0	T3.5/3.5-/S0.0/29HRS	OTHER		PGTW
45	150600	34.0N	164.4E	PCN 0		OTHER		PGTW
46	150834	33.9N	165.8E	PCN 6		NOAA6		PGTW
47	151600	35.2N	169.9E	PCN 0		OTHER		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	080533	14.3N 157.6E	1500FT		998	35 040 50	190 45 070 40	5 1			+26 28	1
2	090035	14.7N 156.2E	700MB	3025	992	35 250 24	360 24 250 24	7 3	CIRCULAR	22	+10 +15 +12	2
3	090615	15.5N 156.1E	700MB	3015		40 030 15	320 35 230 15	6 4				3
4	090839	15.8N 156.0E	700MB	3019	990	40 100 90	160 57 090 15	5 2	CIRCULAR	15	+11 +15 +11	3
5	091902	17.5N 154.9E	700MB	2869			270 64 220 45	10 3				4
6	092215	18.2N 155.1E	700MB	2841			120 77 360 25	5 2	CIRCULAR	20	+ 9 +18 +13	4
7	100642	20.1N 155.1E	700MB	2666		106 180 5	300 80 180 10	5 1				5
8	100835	20.7N 155.0E	700MB	2624	944	120 050 10	150 114 010 15	5 1	CIRCULAR	15	+12 +23 + 8	5
9	110437	25.1N 155.6E	700MB	2637	946	110 290 5	290 110 250 10	5 1	CIRCULAR	12	+16 +17 +15	7

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

TROPICAL DEPRESSION 14

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	
081418Z	14.6	125.3	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.	
081500Z	15.3	123.4	20	15.5	123.8	30.	26.	10.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
081506Z	16.0	121.6	15	16.5	125.5	30.	226.	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	126.	0.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	67.	0.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	13.	0.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	13.	0.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	2	0	0	0	0	0	0	0

DISTANCE TRAVELED BY STORM IS 229. NM

AVERAGE SPEED OF STORM IS 19. KNOTS

TROPICAL DEPRESSION TD-14
FIX POSITIONS FOR CYCLONE NO. 14

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
* 1	122221	8.1N 137.5E	PCN 5	T0.0/0.0	NOAA6	INIT OBS	PGTW
2	141600	13.8N 126.8E	PCN 0		OTHER		PGTW
3	141800	14.4N 125.4E	PCN 0		OTHER	BSD ON UL FLOW	PGTW
4	142100	14.9N 124.4E	PCN 0		OTHER	PSN BSD ON CONTINUITY	PGTW
5	142206	15.4N 124.3E	PCN 5		DMSP37	PSN BSD ON UL FEATURES	PGTW
6	142317	15.9N 123.4E	PCN 5	T2.0/2.0	NOAA6	INIT OBS	PGTW
7	150300	16.0N 122.7E	PCN 0		OTHER		PGTW
* 8	150900	16.0N 121.8E	PCN 0		OTHER		PGTW
9	151157	16.8N 121.9E	PCN 5		NOAA6		RODN
10	151600	17.3N 120.8E	PCN 0		OTHER	CONTINUITY FROM KADENA	PGTW
11	151904	17.6N 120.9E	PCN 6		TIROSN	POOR LONGITUDINAL PSN	RPMK
12	151904	17.6N 120.0E	PCN 5		TIROSN	LLCC PSN AT 15.1N 128.7E	PGTW
13	152100	18.6N 119.4E	PCN 0		OTHER	PSN BSD ON ULCC AND CONTINUITY	PGTW
* 14	152100	14.6N 126.1E	PCN 0		OTHER	PSN BSD ON LLCC	PGTW
15	160000	18.8N 118.4E	PCN 0		OTHER	PSN BSD ON CONTINUITY	PGTW
16	160036	19.7N 120.2E	PCN 5	T1.5/1.5	NOAA6	INIT OBS	RODN
17	160300	19.9N 119.1E	PCN 0		OTHER		PGTW
18	160749	20.1N 116.2E	PCN 5	T1.0/1.0	TIROSN	INIT OBS	RPMK
19	160900	19.8N 117.0E	PCN 0		OTHER		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	150442	16.2N 127.1E	1500FT		1004	20 240 40	290 19 240 40	8 5			+24 +25 +24 27	2

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

TYPHOON NORRIS

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
082300Z	15.2	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.
082306Z	15.8	142.2	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.
082312Z	16.1	140.7	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.
082318Z	16.4	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.
082400Z	16.8	138.3	30	16.8	138.3	30.	0.	0.	18.3	133.5	40.	74.	5.	19.7	128.6	50.	74.	0.	21.0	124.5	60.	81.	-20.
082406Z	17.2	137.4	30	17.1	137.2	30.	13.	0.	18.7	132.2	45.	74.	10.	20.5	127.9	55.	41.	0.	22.9	124.1	65.	37.	-20.
082412Z	17.5	136.6	30	17.2	134.9	30.	09.	0.	18.3	133.0	45.	70.	5.	19.8	129.2	55.	147.	-5.	21.8	125.7	65.	218.	-25.
082418Z	17.9	135.7	30	18.1	135.3	30.	26.	0.	20.1	131.6	45.	30.	0.	22.4	128.2	55.	111.	-15.	25.3	125.3	65.	217.	5.
082500Z	18.2	134.8	35	19.1	134.8	30.	54.	-5.	22.0	131.8	45.	155.	-5.	24.2	127.9	60.	177.	-20.	26.8	124.6	65.	226.	10.
082506Z	18.7	133.5	35	18.8	133.5	35.	5.	0.	20.2	129.2	50.	45.	-5.	24.8	125.3	60.	109.	-25.	26.3	123.1	65.	169.	20.
082512Z	19.3	132.1	40	19.2	132.3	40.	13.	0.	20.6	128.3	50.	77.	-10.	23.3	125.0	60.	134.	-30.	26.5	122.9	65.	226.	30.
082518Z	19.8	131.0	45	19.7	131.0	40.	6.	-5.	21.9	126.2	55.	24.	-15.	25.6	123.5	65.	131.	5.	29.4	122.2	65.	303.	45.
082600Z	20.2	129.8	50	19.9	129.6	45.	21.	-5.	22.4	124.8	65.	42.	-15.	25.8	122.5	70.	99.	15.	29.0	124.5	60.	434.	45.
082606Z	20.7	128.6	55	20.8	128.5	55.	6.	0.	23.2	124.2	05.	24.	0.	26.8	122.3	75.	137.	30.	0.0	0.0	0.	-0.	0.
082612Z	21.5	127.3	60	21.2	127.3	60.	18.	0.	24.0	123.2	80.	20.	-10.	27.7	122.6	70.	229.	35.	0.0	0.0	0.	-0.	0.
082618Z	22.3	126.2	70	22.3	126.1	65.	6.	-5.	26.3	123.0	85.	138.	25.	29.8	124.6	70.	424.	50.	0.0	0.0	0.	-0.	0.
082700Z	23.1	124.9	80	23.4	125.0	75.	19.	-5.	28.0	123.3	85.	220.	30.	31.5	126.5	70.	564.	55.	0.0	0.0	0.	-0.	0.
082706Z	23.5	123.9	85	23.9	123.7	85.	21.	0.	27.8	121.9	85.	157.	40.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082712Z	24.3	122.8	90	24.6	123.0	85.	21.	-5.	28.2	122.1	85.	220.	50.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082718Z	24.5	121.4	60	24.8	122.0	80.	37.	20.	28.2	120.4	60.	186.	40.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082800Z	25.0	120.9	55	25.5	120.3	55.	44.	0.	28.6	119.5	30.	164.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082806Z	25.8	120.0	45	25.7	120.3	55.	17.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082812Z	26.1	118.7	35	26.8	118.8	40.	42.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082818Z	26.6	117.4	20	27.4	117.0	30.	52.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
082900Z	27.6	116.6	15	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	26.	103.	183.	212.	22.	93.	126.	168.
AVG RIGHT ANGLE ERROR	19.	78.	134.	144.	17.	69.	84.	102.
AVG INTENSITY MAGNITUDE ERROR	4.	16.	22.	24.	4.	15.	16.	19.
AVG INTENSITY BIAS	1.	9.	7.	10.	0.	7.	-1.	0.
NUMBER OF FORECASTS	20	17	13	9	15	15	11	7

DISTANCE TRAVELED BY STORM IS 1710. NM

AVERAGE SPEED OF STORM IS 12. KNOTS

TYPHOON NORRIS
FIX POSITIONS FOR CYCLONE NO. 15

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	222200	15.6N 144.4E	PCN 5	T0.0/0.0	NOAA6	INIT OBS	PGTW
2	230300	15.4N 143.1E	PCN 0		OTHER		PGTW
3	230900	16.1N 141.2E	PCN 0		OTHER		PGTW
4	231039	16.5N 140.9E	PCN 5		NOAA6		PGTW
5	231200	16.5N 140.9E	PCN 0		OTHER		PGTW
6	232100	16.5N 139.2E	PCN 0		OTHER		PGTW
7	232319	16.7N 138.5E	PCN 5	T1.0/1.0 /D1.0/25HRS	NOAA6		PGTW
8	240300	16.8N 138.1E	PCN 0		OTHER		PGTW
9	240617	17.1N 137.7E	PCN 5		TIROSN		PGTW
10	240900	17.3N 137.8E	PCN 0		OTHER		PGTW
11	241017	17.1N 137.0E	PCN 5		NOAA6		PGTW
12	241902	18.3N 135.7E	PCN 5		TIROSN		PGTW
13	241902	18.9N 135.9E	PCN 5		TIROSN		RPMK
14	242100	18.4N 135.3E	PCN 0		OTHER		PGTW
15	242257	18.3N 135.1E	PCN 5	T2.5/2.5 /D1.5/24HRS	NOAA6		PGTW
16	250600	19.0N 133.5E	PCN 5	T3.0/3.0	TIROSN	INIT OBS	RODN
17	250606	19.0N 133.5E	PCN 3		TIROSN		PGTW
18	250900	19.2N 132.9E	PCN 0		OTHER		PGTW
19	250955	19.2N 132.8E	PCN 5		NOAA6		PGTW
20	251600	19.5N 131.2E	PCN 0		OTHER		PGTW
21	252100	20.1N 130.2E	PCN 0		OTHER		PGTW
22	252124	19.6N 130.2E	PCN 6	T4.0/4.0	DMSP37	INIT OBS	RPMK
23	252134	19.9N 130.0E	PCN 6		DMSP37		PGTW
24	252234	19.6N 130.0E	PCN 5	T3.5/3.5 /D1.0/24HRS	NOAA6		PGTW
25	260100	20.2N 129.7E	PCN 0		OTHER		PGTW
26	260554	20.4N 128.5E	PCN 3		TIROSN		PGTW
27	260554	20.5N 128.8E	PCN 5	T4.0/4.0 /D1.0/24HRS	TIROSN	INIT OBS	RODN
28	260900	20.7N 128.0E	PCN 0		OTHER		PGTW
29	261114	21.1N 127.6E	PCN 5		NOAA6		PGTW
30	261114	21.0N 128.0E	PCN 6		NOAA6		RPMK
31	261114	21.3N 127.9E	PCN 5		NOAA6		RODN
32	262100	23.0N 125.7E	PCN 0		OTHER		PGTW
33	262353	23.2N 125.0E	PCN 1	T4.5/4.5 /D1.0/25HRS	NOAA6		PGTW
34	270724	23.5N 123.6E	PCN 1	T4.0/4.0	TIROSN	INIT OBS	RKSO
35	270900	24.0N 123.3E	PCN E		OTHER		PGTW
36	271051	24.3N 123.1E	PCN 2		NOAA6		PGTW
37	271200	24.5N 122.9E	PCN E		OTHER		PGTW
38	271600	24.8N 122.0E	PCN 0		OTHER		PGTW
39	272010	24.4N 120.7E	PCN 3		TIROSN		RKSO
40	272010	24.3N 121.0E	PCN 3		TIROSN		RODN
41	272339	24.9N 121.0E	PCN 3	T3.5/3.5 /W1.0/24HRS	NOAA6		PGTW
42	280300	25.6N 120.5E	PCN 0		OTHER		PGTW
43	280713	25.6N 118.6E	PCN 3	T3.5/3.5-	TIROSN	INIT OBS	RPMK
44	280713	24.7N 118.8E	PCN 5	T3.0/3.0-	TIROSN	INIT OBS	RODN
45	280900	26.1N 118.4E	PCN 0		OTHER		PGTW
46	281029	25.4N 117.9E	PCN 5		NOAA6	FIX DSD ON UL FEATURES	PGTW
47	281200	26.1N 117.2E	PCN 0		OTHER		PGTW
48	281600	26.7N 116.9E	PCN 0		OTHER		PGTW
49	282100	26.4N 115.8E	PCN 0		OTHER		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	240100	16.9N 138.1E	1500FT		1005	35 030 10	090 25 030 15	6 5			+25 +26 +26 28	1
2	241215	17.8N 136.4E	700MB	3131			130 30 130 60	2 3				2
3	241520	18.3N 135.8E	700MB	3115	1002		270 25 210 120	5 5			+12 +12 + 8	2
4	250008	18.2N 134.7E	700MB	3064		35 360 30	230 18 050 20	5 5				3
5	250307	18.6N 133.9E	700MB	3034		35 350 23	240 34 160 15	8 10			+11 +13 +12	3
6	260424	20.6N 128.9E	700MB	2962	983	35 240 35	290 42 240 35	5 5			+11 +16 +12	6
7	261228	21.6N 127.1E	700MB	2898			220 70 140 40	2 4				7
8	261445	21.8N 126.8E	700MB	2873	973		050 55 300 50	2 3			+12 +17 +10	7
9	262030	22.6N 125.7E	700MB	2796								8
10	262100	22.9N 125.5E	700MB	2790	962		330 42 240 17	4 3			+13 +18 +11	8
11	270008	23.1N 124.8E	700MB	2764		55 310 45	030 72 310 20	4 2				8
12	270250	23.4N 124.2E	700MB	2714	954	65 010 35	140 94 070 30	4 3			+16 +18 +15	8

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	262100	22.6N 125.6E	LAND				55//5 53011		24.3N 124.2E	47918
2	262100	22.7N 125.5E	LAND				22913 53114		24.8N 125.3E	47927
3	270000	23.1N 124.9E	LAND				55//4 73118		24.3N 124.2E	47918
4	270100	23.3N 124.7E	LAND				55//4 73116		24.3N 124.2E	47918
5	270100	23.4N 124.6E	LAND				51913		24.8N 125.3E	47927
6	270200	23.3N 124.5E	LAND				50913 73014		24.3N 124.2E	47918
7	270200	23.4N 124.5E	LAND				11914 53012		24.8N 125.3E	47927
8	270300	23.3N 124.2E	LAND				51913 72914		24.3N 124.2E	47918
9	270300	23.4N 124.2E	LAND				11813 52714		24.8N 125.3E	47927
10	270400	23.5N 124.1E	LAND				50813 72912		24.3N 124.2E	47918
11	270400	23.5N 123.9E	LAND				21914 52816		24.8N 125.3E	47927
12	270500	23.5N 123.9E	LAND				55//3 72911		24.3N 124.2E	47918
13	270500	23.4N 123.8E	LAND				21843 52611		24.8N 125.3E	47927
14	270500	23.5N 123.8E	LAND				5//// /2714		24.0N 121.6E	46699
15	270500	23.5N 123.7E	LAND				5//// /2612	RCKK		
16	270600	23.6N 123.7E	LAND				///// /3106		24.0N 121.6E	46699
17	270700	23.6N 123.6E	LAND				10812 52907		24.0N 121.6E	46699
18	270700	23.6N 123.6E	LAND				55//3 73000		24.3N 124.2E	47918
19	270700	23.5N 123.6E	LAND				12814 53205		24.8N 125.3E	47927
20	270800	23.6N 123.6E	LAND				12814 53205		24.8N 125.3E	47927
21	270800	23.7N 123.5E	LAND				5//// /3506		24.0N 121.6E	46699
22	270800	23.6N 123.5E	LAND				50913 72908		24.3N 124.2E	47918
23	270900	23.8N 123.4E	LAND				50913 73210		24.3N 124.2E	47918
24	270900	23.8N 123.4E	LAND				11973 53114		24.8N 125.3E	47927
25	271000	23.9N 123.3E	LAND				5//// /3506		24.0N 121.6E	46699
26	271000	23.8N 123.4E	LAND				5//// /3506		24.0N 121.6E	46699
27	271000	23.9N 123.3E	LAND				50912 73207		24.3N 124.2E	47918
28	271000	23.9N 123.3E	LAND				10622 53308		24.8N 125.3E	47927
29	271100	24.1N 123.2E	LAND				10812 73312		24.3N 124.2E	47918
30	271100	24.1N 123.1E	LAND				12832 53216		24.8N 125.3E	47927
31	271100	24.1N 123.0E	LAND				5//// /3113		24.0N 121.6E	46699
32	271200	24.2N 122.8E	LAND				21932 53019		24.8N 125.3E	47927
33	271200	24.3N 122.9E	LAND				45//2 73214		24.3N 124.2E	47918
34	271300	24.3N 122.5E	LAND				21842 52916		24.8N 125.3E	47927
35	271300	24.4N 122.5E	LAND				45//3 73010		24.3N 124.2E	47918
36	271400	24.5N 122.4E	LAND				55//3 73016		24.3N 124.2E	47918
37	271500	24.6N 122.0E	LAND				55//3 73016		24.3N 124.2E	47918
38	271500	24.5N 122.0E	LAND				7///3 52919		24.3N 124.2E	47918
39	271600	24.5N 121.8E	LAND				55//3 72814		24.3N 124.2E	47918
40	271700	24.5N 121.5E	LAND				65//2 72718		24.3N 124.2E	47918
41	271800	24.5N 121.3E	LAND				65//2 72612		24.3N 124.2E	47918

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

TROPICAL DEPRESSION 16

BEST TRACK DATA

	BEST TRACK		WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
					ERRORS				ERRORS				ERRORS					
MO/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
090118Z	4.9 150.8	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.
090200Z	5.5 150.1	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.
090206Z	6.2 149.8	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.
090212Z	6.9 149.1	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.
090218Z	7.5 148.5	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.
090300Z	7.8 148.0	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.
090306Z	7.9 147.5	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.
090312Z	8.2 147.2	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.
090318Z	8.4 147.1	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.
090400Z	8.9 146.9	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.
090406Z	9.4 146.5	25	9.2 146.5	25.	12.	0.	10.4 144.7	50.	241.	35.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
090412Z	9.6 145.5	25	9.5 146.2	30.	42.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
090418Z	10.3 144.0	25	10.0 145.5	30.	90.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
090500Z	11.6 142.6	20	10.7 143.2	30.	64.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
090506Z	13.6 142.2	15	11.2 141.9	30.	144.	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	70.	241.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	20.	28.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	7.	35.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	7.	35.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	5	1	0	0	0	0	0	0

DISTANCE TRAVELED BY STORM IS 776. NM

AVERAGE SPEED OF STORM IS 9. KNOTS

TROPICAL DEPRESSION TD-16
FIX POSITIONS FOR CYCLONE NO. 16

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	012139	5.3N 150.3E	PCN 5	T0.5/0.5	NOAA6	INIT OBS	PGTW
2	020300	5.0N 149.6E	PCN 0		OTHER		PGTW
3	021010	6.4N 149.4E	PCN 5		NOAA6		PGTW
4	022025	7.0N 148.5E	PCN 5		DMSP37		PGTW
5	022216	7.9N 148.5E	PCN 6	T1.5/1.5 /D1.0/24HRS	NOAA6		PGTW
6	030000	7.9N 147.5E	PCN 0		OTHER		PGTW
7	030604	8.0N 147.0E	PCN 5		TIROSN		PGTW
8	030956	8.6N 147.3E	PCN 5		NOAA6		PGTW
9	032235	8.0N 148.0E	PCN 5	T2.0/2.0 /D0.5/24HRS	NOAA6	UL 10.2N 145.0E	PGTW
10	040300	9.5N 147.3E	PCN 0		OTHER		PGTW
11	040900	9.6N 146.6E	PCN 0		OTHER		PGTW
12	040534	9.5N 146.5E	PCN 5		NOAA6		PGTW
13	041200	9.6N 146.1E	PCN 0		OTHER		PGTW
14	041037	10.3N 144.3E	PCN 6		TIROSN		PGTW
15	041037	10.2N 144.6E	PCN 6		TIROSN		RPMK
16	042100	10.3N 143.6E	PCN 0		OTHER		PGTW
17	042213	10.2N 143.6E	PCN 5	T2.5/2.5 /D0.5/24HRS	NOAA6		PGTW
18	050911	12.2N 142.6E	PCN 5		NOAA6		PGTW
19	051600	14.2N 142.7E	PCN 0		OTHER		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	040155	8.9N 146.8E	1500FT		1002	25 030 30	330 25 300 50	5 10			+22 +22 +22 29	3
2	041451	10.0N 144.7E	700MB	3122	1010		050 17 030 80	5 15			+10 +10 +10	4
3	050844	12.1N 142.5E	700MB	3008	1001	25 330 135	040 18 330 135	5 5			+12 +10	5

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

TYPHOON ORCHID

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
090600Z	14.7	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.
090606Z	15.2	145.1	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.
090612Z	16.1	144.8	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.
090618Z	17.1	143.9	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.
090700Z	18.0	142.8	45	18.0	142.8	40.	0.	-5.	21.2	138.5	65.	60.	5.	23.0	135.3	75.	77.	10.	26.9	133.7	80.	172.	5.
090706Z	18.7	141.9	50	19.4	142.0	45.	42.	-5.	23.2	138.1	70.	147.	10.	26.0	136.4	80.	266.	10.	29.3	135.5	75.	279.	-5.
090712Z	19.3	140.8	55	19.8	140.7	55.	30.	0.	23.5	136.7	80.	114.	20.	26.7	134.5	85.	243.	10.	29.6	134.8	75.	231.	-5.
090718Z	19.7	139.7	55	19.4	138.6	55.	64.	0.	22.3	134.5	80.	56.	20.	25.9	132.8	85.	79.	10.	28.8	133.0	75.	174.	-10.
090800Z	20.2	138.6	60	19.9	137.0	55.	92.	-5.	22.7	132.7	75.	94.	10.	26.3	131.3	85.	78.	10.	29.6	132.0	75.	122.	10.
090806Z	20.8	137.5	60	20.7	137.5	60.	6.	0.	23.0	134.2	70.	67.	0.	26.1	132.2	80.	119.	0.	29.2	132.5	75.	308.	20.
090812Z	21.6	136.5	60	21.2	136.6	60.	25.	0.	23.8	133.5	80.	88.	5.	26.2	132.0	85.	112.	5.	29.5	133.7	75.	470.	35.
090818Z	22.2	135.5	60	22.4	135.3	60.	16.	0.	25.5	132.5	85.	59.	10.	28.8	132.9	80.	170.	-5.	32.1	137.4	70.	517.	40.
090900Z	22.8	134.4	65	22.9	134.6	60.	13.	-5.	26.2	132.2	80.	87.	5.	29.7	132.7	85.	137.	20.	0.0	0.0	0.	-0.	0.
090906Z	23.5	133.1	70	23.4	133.6	65.	28.	-5.	26.7	131.2	75.	57.	-5.	30.9	132.2	70.	205.	15.	0.0	0.0	0.	-0.	0.
090912Z	23.2	132.2	75	24.2	132.9	65.	71.	-10.	28.6	129.9	75.	71.	-5.	32.5	132.0	70.	287.	30.	0.0	0.0	0.	-0.	0.
090918Z	25.5	131.4	75	24.9	131.5	70.	36.	-5.	29.2	129.7	75.	76.	-10.	34.7	131.0	55.	330.	25.	0.0	0.0	0.	-0.	0.
091000Z	25.0	131.3	75	25.4	130.0	70.	74.	-5.	29.7	127.9	75.	185.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091006Z	27.5	130.6	80	27.2	131.2	75.	37.	-5.	34.2	132.6	65.	50.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091012Z	27.8	130.9	80	28.8	130.7	75.	61.	-5.	35.8	133.8	50.	112.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091018Z	30.4	130.2	85	30.0	130.5	80.	28.	-5.	37.8	136.2	50.	198.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091100Z	31.4	130.9	65	31.2	130.3	60.	33.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091106Z	34.3	131.6	55	34.2	131.6	50.	6.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091112Z	37.3	132.4	40	37.3	132.7	45.	14.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091118Z	40.0	133.0	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.

	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	36.	95.	175.	284.	36.	88.	161.	251.
AVG RIGHT ANGLE ERROR	22.	62.	98.	179.	22.	55.	103.	159.
AVG INTENSITY MAGNITUDE ERROR	4.	10.	13.	16.	4.	9.	11.	13.
AVG INTENSITY BIAS	-3.	7.	12.	11.	0.	6.	10.	7.
NUMBER OF FORECASTS	19	16	12	8	19	15	11	7

DISTANCE TRAVELED BY STORM IS 2043. NM

AVERAGE SPEED OF STORM IS 15. KNOTS

TYPHOON ORCHID
FIX POSITIONS FOR CYCLONE NO. 17

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	052151	14.6N 145.2E	PCN 5		NOAA6		PGTW
2	060300	14.8N 145.1E	PCN 0		OTHER		PGTW
3	060529	14.5N 145.2E	PCN 5	T1.5/1.5	TIROSN	INIT OBS	PGTW
4	060900	15.4N 145.0E	PCN 0		OTHER		PGTW
5	061030	15.7N 144.7E	PCN 5		NOAA6		PGTW
6	061200	16.0N 144.6E	PCN 0		OTHER		PGTW
7	062128	17.0N 143.9E	PCN 5	T2.5/2.5 /D1.0/24HRS	NOAA6		PGTW
8	070300	19.1N 142.7E	PCN 0		OTHER		PGTW
9	070900	19.4N 141.5E	PCN 0		OTHER		PGTW
10	071008	19.7N 141.3E	PCN 5		NOAA6		PGTW
11	071200	19.7N 141.0E	PCN 0		OTHER		PGTW
12	071600	20.3N 139.6E	PCN 0		OTHER		PGTW
13	071802	19.8N 138.4E	PCN 6		TIROSN		PGTW
14	072100	19.8N 138.2E	PCN 0		OTHER		PGTW
15	072247	19.9N 137.9E	PCN 5	T3.5/3.5 /D1.0/25HRS	NOAA6		PGTW
16	080300	20.1N 137.2E	PCN 0		OTHER		PGTW
17	080648	20.9N 137.3E	PCN 5		TIROSN		PGTW
18	080648	21.2N 136.9E	PCN 5	T4.0/4.0	TIROSN	INIT OBS	RPMK
19	080900	21.4N 136.8E	PCN 0		OTHER		PGTW
20	080945	21.2N 136.8E	PCN 5		NOAA6		PGTW
21	081200	21.8N 136.4E	PCN 0		OTHER		PGTW
22	081600	22.6N 135.2E	PCN 0		OTHER		PGTW
23	082100	22.6N 135.0E	PCN 0		OTHER		PGTW
24	082225	22.6N 134.7E	PCN 5	T4.0/4.0 /D0.5/24HRS	NOAA6		PGTW
25	082225	22.2N 134.7E	PCN 6	T4.0/4.0	NOAA6	INIT OBS	RODN
26	090300	23.3N 133.9E	PCN 0		OTHER		PGTW
27	090636	23.6N 132.7E	PCN 5	T3.0/4.0 /W1.0/24HRS	TIROSN		RPMK
28	090636	23.4N 132.8E	PCN 5		TIROSN		PGTW
29	090900	23.7N 132.3E	PCN 0		OTHER		PGTW
30	091104	23.4N 132.0E	PCN 5		NOAA6		PGTW
31	091200	23.6N 132.1E	PCN 0		OTHER		PGTW
32	091600	25.3N 132.0E	PCN 0		OTHER		PGTW
33	092119	25.3N 130.3E	PCN 6		DMSP37		PGTW
34	092344	24.7N 130.6E	PCN 5	T4.0/4.0 /S0.0/24HRS	NOAA6		PGTW
35	100300	25.8N 130.5E	PCN 0		OTHER		PGTW
36	100625	27.4N 130.0E	PCN 1	T4.0/4.0	TIROSN	INIT OBS	RKSO
37	100625	27.3N 130.7E	PCN 3		TIROSN		PGTW
38	100900	27.5N 130.4E	PCN 0		OTHER		PGTW
39	101200	27.3N 130.3E	PCN 0		OTHER		PGTW
40	102100	30.5N 129.8E	PCN 0		OTHER		PGTW
41	102321	31.3N 130.7E	PCN 3	T4.0/4.0-/S0.0/24HRS	NOAA6		PGTW
42	102321	30.9N 130.4E	PCN 5	T3.0/3.0	NOAA6	INIT OBS	RPMK
43	110613	34.4N 133.7E	PCN 3	T3.0/4.0 /W1.0/24HRS	TIROSN		RKSO
44	110613	34.4N 131.7E	PCN 5		TIROSN		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	070805	18.8N 142.7E	1500FT		992	45 060 45	160 46 080 20	3 1			+24 +26 +26 27	1
2	071300	18.9N 139.3E	700MB	3016			160 36 080 30	8 5			+12 +16 +11	2
3	080547	20.8N 137.5E	700MB	2928	900	40 340 20	220 37 140 90	3 10			+14 +14 +14	3
4	081335	21.8N 136.3E	700MB	2872			210 31 140 90	5 5				4
5	081452	21.9N 135.9E	700MB	2861	971		210 31 140 90	5 5			+15 +16 +12	4
6	090204	23.0N 134.1E	700MB	2870	974	35 140 210	220 37 140 140	5 5			+13 +14 +11	5
7	091210	23.1N 132.8E	700MB	2797			180 67 070 75	2 2				6
8	091505	24.3N 132.7E	700MB	2814	996		280 67 210 130	2 5			+11 +16 +16	6
9	091938	25.2N 130.7E	700MB	2724			090 55 360 5	10 2				7
10	092139	24.9N 130.2E	700MB	2743	964	60 060 45	080 55 080 40	5 10			+16 +17 +12	7
11	100040	25.2N 131.4E	700MB	2744		60 140 90	220 70 140 105	5 10				8
12	100253	26.4N 131.5E	700MB	2760	960	70 060 5	340 40 240 103	5 10	CIRCULAR	12	+15	8
13	101610	29.5N 130.5E	700MB	2789	965		160 88 060 190	2 2			+12 +17 +17	9

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR	RADOB-CODE TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	100300	26.4N 131.4E	LAND							28.4N 129.5E	47909
2	100500	27.2N 130.8E	LAND							28.4N 129.5E	47909
3	100700	27.5N 130.8E	LAND							28.4N 129.5E	47909
4	100900	27.1N 129.9E	LAND							28.4N 129.5E	47909
5	101000	27.1N 130.3E	LAND							28.4N 129.5E	47909
6	101100	27.3N 130.6E	LAND							28.4N 129.5E	47909
7	101200	27.8N 130.9E	LAND							28.4N 129.5E	47909
8	101200	27.8N 130.9E	LAND				52963	50327		28.4N 129.5E	47909
9	101400	28.8N 131.3E	LAND				55943	53632		28.4N 129.5E	47909
10	101500	29.2N 130.8E	LAND				52883	53232		28.4N 129.5E	47909
11	101600	29.6N 130.6E	LAND				52813	53427		28.4N 129.5E	47909
12	101600	29.7N 130.5E	LAND				225/0	5////		30.6N 131.0E	47869
13	101700	30.0N 130.3E	LAND				52943	53432		28.4N 129.5E	47909
14	101800	30.3N 130.2E	LAND				226/0	5////		30.6N 131.0E	47869
15	101800	30.5N 130.2E	LAND				55943	53527		28.4N 129.5E	47090
16	101900	30.6N 130.1E	LAND				65/43	53313		28.4N 129.5E	47090
17	101900	30.5N 130.2E	LAND				5///0	53611		30.6N 131.0E	47869
18	102000	30.7N 130.1E	LAND				65/43	50208		28.4N 129.5E	47909
19	102000	30.7N 130.1E	LAND				3490/	4////		33.4N 130.2E	47806
20	102100	30.8N 130.2E	LAND				34///	40305		33.4N 130.2E	47806
21	102100	30.6N 130.2E	LAND				10370	50000		30.6N 131.0E	47869
22	102200	30.8N 130.3E	LAND				2000/	40708		33.4N 130.2E	47806
23	102200	30.8N 130.4E	LAND				20310	50316		30.6N 131.0E	47869
24	102300	31.1N 130.7E	LAND				2014/	40316		33.4N 130.2E	47806
25	102300	31.2N 130.8E	LAND				5///1	50432		30.6N 131.0E	47869
26	110000	31.6N 130.9E	LAND				5///1	53627		30.6N 131.0E	47869
27	110100	31.7N 131.0E	LAND				20/1/	50419		33.4N 130.2E	47806
28	110100	31.8N 130.9E	LAND				6///1	53616		30.6N 131.0E	47869
29	110200	32.3N 131.0E	LAND				6//01	5////		34.3N 132.6E	47792
30	110200	32.1N 132.1E	LAND				20/1/	50122		33.4N 130.2E	47806
31	110200	32.5N 131.2E	LAND				6////	50241		30.6N 131.0E	47869
32	110300	32.7N 131.2E	LAND				55//1	50227		34.3N 132.6E	47792
33	110300	32.7N 131.1E	LAND				2011/	53632		33.4N 130.2E	47806
34	110300	32.6N 131.1E	LAND				1060/	/////		33.3N 134.2E	47899
35	110400	33.2N 131.2E	LAND				55//1	53627		34.3N 132.6E	47792
36	110400	33.6N 131.1E	LAND				65///	53649		33.4N 130.2E	47806
37	110400	33.0N 131.3E	LAND				3035/	50324		33.3N 134.2E	47899
38	110500	33.7N 131.2E	LAND				55//1	53627		34.3N 132.6E	47792
39	110500	33.8N 131.3E	LAND				35///	50419		33.4N 130.2E	47806
40	110600	34.4N 131.6E	LAND				55//2	5////		35.5N 133.1E	47791
41	110700	35.0N 131.5E	LAND				22401	36035		35.5N 133.1E	47971
42	110700	35.6N 131.1E	LAND				55//2	53522		34.3N 132.6E	47792
43	110700	34.8N 131.7E	LAND				30///	50135		33.4N 130.2E	47806
44	110900	35.8N 131.7E	LAND				/////	36024		35.5N 133.1E	47791
45	110900	35.6N 131.3E	LAND				55//2	50130		34.3N 132.6E	47792
46	111000	35.4N 131.7E	LAND				65//1	01024		35.5N 133.1E	47791
47	111000	35.1N 131.2E	LAND				55//2	53630		34.3N 132.6E	47792
48	111000	35.4N 131.7E	LAND				6////	53632		33.4N 130.2E	47806
49	111100	36.8N 132.1E	LAND				65///	02035		35.5N 133.1E	47791
50	111200	37.3N 132.3E	LAND				65///	03038		35.5N 133.1E	47791
51	111200	37.3N 132.3E	LAND				65///	50338		35.5N 133.1E	47791

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

TYPHOON RUTH

BEST TRACK DATA

	BEST TRACK			WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
						ERRORS				ERRORS				ERRORS					
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
091300Z	19.0	113.9	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.
091306Z	18.6	113.8	30	18.8	113.8	30.	12.	0.	19.2	112.7	30.	26.	-10.	19.9	111.1	45.	124.	0.	21.4	109.5	50.	314.	20.
091312Z	18.3	113.7	30	18.2	113.6	30.	8.	0.	17.3	112.0	40.	126.	0.	17.1	110.0	50.	209.	-10.	0.0	0.0	0.	-0.	0.
091318Z	18.1	113.4	35	18.0	113.0	30.	23.	-5.	17.6	111.4	45.	124.	0.	17.7	109.5	50.	202.	-15.	0.0	0.0	0.	-0.	0.
091400Z	18.3	113.0	40	18.4	113.6	30.	35.	-10.	18.1	112.5	50.	175.	15.	18.0	110.3	55.	200.	0.	0.0	0.0	0.	-0.	0.
091406Z	18.8	112.5	40	18.4	113.3	40.	51.	0.	18.1	112.2	50.	212.	5.	17.8	111.0	55.	303.	25.	0.0	0.0	0.	-0.	0.
091412Z	19.4	111.8	40	19.3	112.3	40.	29.	0.	20.6	109.7	30.	114.	-30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091418Z	19.6	110.8	45	20.2	110.7	40.	36.	-5.	21.5	106.0	20.	100.	-45.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091500Z	19.7	109.9	35	19.6	109.0	35.	8.	0.	19.9	106.5	45.	59.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091506Z	19.8	108.9	45	19.8	108.9	45.	0.	0.	20.3	105.0	0.	74.	-30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091512Z	19.9	107.8	60	19.9	107.9	50.	6.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091518Z	19.8	106.7	65	20.2	106.2	50.	37.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091600Z	19.6	105.5	55	19.4	105.5	55.	12.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091606Z	19.2	104.4	30	19.1	104.5	30.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	20.	113.	241.	314.	24.	118.	206.	0.
AVG RIGHT ANGLE ERROR	11.	60.	130.	131.	14.	62.	107.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	16.	10.	20.	5.	14.	6.	0.
AVG INTENSITY BIAS	-3.	-12.	0.	20.	0.	-9.	-6.	0.
NUMBER OF FORECASTS	13	9	5	1	10	8	4	0

DISTANCE TRAVELED BY STORM IS 608. NM

AVERAGE SPEED OF STORM IS 8. KNOTS

TYPHOON RUTH
FIX POSITIONS FOR CYCLONE NO. 18

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	122100	18.8N 113.6E	PCN 0		OTHER		PGTW
2	130300	18.7N 113.9E	PCN C		OTHER		PGTW
3	130600	18.7N 113.8E	PCN 0	T2.0/2.0	OTHER	INIT OBS	PGTW
4	130900	18.4N 113.7E	PCN 0		OTHER		PGTW
5	131116	18.1N 113.7E	PCN 5		NOAA6		PGTW
6	131116	10.4N 113.3E	PCN 5		NOAA6		RODN
7	131600	18.1N 113.0E	PCN 0		OTHER		PGTW
8	132017	18.0N 112.2E	PCN 6		TIROSN		RPMK
9	132018	18.4N 113.6E	PCN 5		TIROSN		RODN
10	132355	18.3N 113.3E	PCN 3	T3.0/3.0	NOAA6	INIT OBS	PGTW
11	140300	18.4N 113.3E	PCN 0		OTHER		PGTW
12	140721	18.9N 112.6E	PCN 5	T3.0/3.0	TIROSN	INIT OBS	RPMK
13	140900	19.2N 112.6E	PCN 0		OTHER		PGTW
14	141200	19.3N 111.9E	PCN 0		OTHER		PGTW
15	141600	20.0N 111.0E	PCN 0		OTHER		PGTW
16	142006	19.8N 110.5E	PCN 5		TIROSN		RPMK
17	142006	19.7N 109.5E	PCN 5		TIROSN		RODN
18	150114	19.8N 109.5E	PCN 6	T4.0/4.0-/D1.0/18HRS	NOAA6		RPMK
19	150300	19.6N 109.3E	PCN C		OTHER		PGTW
20	150900	19.9N 108.5E	PCN 0		OTHER		PGTW
21	151213	19.7N 107.8E	PCN 4		NOAA6	RAGGED EYE	RODN
22	151600	20.2N 107.0E	PCN E		OTHER		PGTW
23	152100	19.5N 106.2E	PCN E		OTHER		PGTW
24	160052	19.2N 105.6E	PCN 3		NOAA6	NO DVORAK	RPMK
25	160052	19.5N 105.3E	PCN 3	T4.5/4.5-	NOAA6	INIT OBS	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	140600	18.6N 112.6E	LAND				6//// /////		22.3N 114.2E	45005

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
* 1	170000	18.0N 100.1E	10	60	
* 2	180000	17.0N 98.5E	10	50	

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

TYPHOON PERCY

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
091312Z	16.4	131.5	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.
091318Z	17.1	131.3	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.
091400Z	17.7	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	0.0	0.	-0.	0.
091406Z	18.7	131.3	40	18.5	131.6	45.	21.	5.	21.7	131.8	65.	298.	15.	24.9	129.6	75.	397.	5.	26.2	125.6	70.	344.	-40.
091412Z	18.7	130.0	45	19.2	131.3	45.	79.	0.	22.2	130.7	65.	302.	15.	25.4	128.1	75.	373.	0.	28.2	125.0	70.	460.	-55.
091418Z	18.8	128.8	45	18.7	128.8	45.	6.	0.	19.5	124.1	60.	156.	5.	21.7	121.8	65.	210.	-20.	26.0	123.3	70.	287.	-50.
091500Z	19.3	128.1	45	19.0	127.9	50.	21.	5.	20.6	122.8	65.	234.	0.	25.4	119.2	70.	447.	-25.	30.7	122.0	40.	534.	-75.
091506Z	19.2	127.2	50	19.5	126.8	50.	29.	0.	21.4	122.2	55.	256.	-15.	24.3	119.5	65.	337.	-45.	0.0	0.0	0.	-0.	0.
091512Z	18.8	126.7	50	19.9	126.2	50.	71.	0.	21.6	122.8	65.	214.	-10.	24.5	119.9	40.	287.	-85.	27.8	119.5	45.	393.	-30.
091518Z	18.4	126.6	55	18.7	126.1	55.	34.	0.	19.3	123.1	70.	120.	-15.	22.0	120.3	70.	113.	-50.	26.0	119.3	45.	181.	-10.
091600Z	18.8	126.5	65	18.7	126.2	55.	18.	-10.	19.3	124.1	70.	49.	-25.	22.0	120.3	70.	46.	-45.	26.0	119.3	45.	173.	10.
091606Z	19.1	126.1	70	19.0	125.8	70.	18.	0.	20.3	122.3	85.	102.	-25.	23.2	119.5	60.	42.	-30.	27.0	116.4	35.	189.	5.
091612Z	19.5	125.9	75	19.4	125.7	75.	13.	0.	20.9	123.1	90.	12.	-35.	24.0	120.4	45.	126.	-25.	27.8	120.2	40.	309.	20.
091618Z	20.0	125.1	85	19.7	125.6	80.	33.	-5.	21.6	123.0	100.	91.	-20.	24.3	121.4	60.	296.	5.	0.0	0.0	0.	-0.	0.
091700Z	19.9	124.7	95	20.2	124.9	80.	21.	-15.	22.0	122.2	100.	62.	-15.	25.0	120.6	55.	212.	20.	0.0	0.0	0.	-0.	0.
091706Z	20.6	124.1	110	20.5	124.2	100.	8.	-10.	23.0	122.1	115.	152.	25.	26.0	121.1	120.	293.	90.	0.0	0.0	0.	-0.	0.
091712Z	20.7	123.1	125	21.1	123.6	110.	37.	-15.	23.8	121.7	110.	185.	40.	26.9	121.2	60.	345.	40.	0.0	0.0	0.	-0.	0.
091718Z	21.3	122.2	120	21.2	122.4	120.	13.	0.	24.2	120.0	70.	132.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091800Z	21.8	121.1	115	21.8	121.3	125.	11.	10.	26.1	119.1	60.	168.	25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091806Z	22.5	119.4	90	23.0	119.8	100.	37.	10.	27.6	119.3	65.	247.	35.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091812Z	22.8	118.5	70	23.2	118.5	90.	24.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091818Z	23.3	117.8	55	23.5	117.8	55.	12.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091900Z	24.2	116.8	35	24.2	117.2	30.	22.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091906Z	24.9	115.8	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.
091912Z	25.7	114.9	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	26.	164.	245.	309.	26.	158.	233.	326.
AVG RIGHT ANGLE ERROR	18.	113.	172.	291.	18.	105.	150.	307.
AVG INTENSITY MAGNITUDE ERROR	6.	20.	35.	33.	6.	19.	30.	39.
AVG INTENSITY BIAS	-1.	1.	-12.	-25.	0.	-1.	-25.	-36.
NUMBER OF FORECASTS	20	17	14	9	20	16	12	7

DISTANCE TRAVELED BY STORM IS 1260. NM

AVERAGE SPEED OF STORM IS 9. KNOTS

TYPHOON PERCY
FIX POSITIONS FOR CYCLONE NO. 19

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	131200	16.9N 131.4E	PCN 0		OTHER		PGTW
2	131600	17.2N 130.9E	PCN 0		OTHER		PGTW
3	132356	17.7N 131.3E	PCN 6		NOAA6		PGTW
4	140300	18.3N 131.5E	PCN C		OTHER		PGTW
5	140721	18.8N 131.7E	PCN 5		TIROSN		PGTW
6	140721	17.8N 130.8E	PCN 5	T3.0/3.0	TIROSN	INIT OBS	RPMK
7	141054	19.2N 130.7E	PCN 5		NOAA6		PGTW
8	142113	19.2N 128.7E	PCN 5		DMSP37		PGTW
9	142333	19.3N 128.3E	PCN 3	T3.0/3.0	NOAA6	INIT OBS	PGTW
10	150709	19.6N 127.3E	PCN 5		TIROSN		PGTW
11	151031	18.7N 126.8E	PCN 5		NOAA6	UL PSBL EYE FRMG	PGTW
12	151600	18.9N 126.6E	PCN C		OTHER		PGTW
13	151954	18.7N 127.1E	PCN 5		TIROSN	LRG DVCST NO DEFINITION	RKSO
14	152100	18.3N 126.7E	PCN 0		OTHER		PGTW
15	152311	18.9N 126.1E	PCN 3	T4.0/4.0 /D1.0/24HRS	NOAA6		PGTW
16	152311	18.8N 125.7E	PCN 5		NOAA6		RPMB
17	160657	19.1N 126.2E	PCN 1		TIROSN		PGTW
18	160657	19.0N 126.2E	PCN 1		TIROSN		RPMB
19	160658	19.0N 126.0E	PCN 1	T5.0/5.0	TIROSN	INIT OBS	RODN
20	160900	19.3N 126.0E	PCN E		OTHER		PGTW
21	161009	19.3N 125.9E	PCN 1		NOAA6		PGTW
22	161600	20.0N 125.2E	PCN E		OTHER		PGTW
23	161943	20.0N 125.0E	PCN 1		TIROSN		RKSO
24	162100	19.9N 124.9E	PCN E		OTHER		PGTW
25	162212	19.0N 125.1E	PCN 4		DMSP37		RPMK
26	162248	20.1N 124.9E	PCN 1	T5.0/5.0 /D1.0/24HRS	NOAA6		PGTW
27	170000	19.9N 124.7E	PCN E		OTHER		PGTW
28	170030	19.7N 124.9E	PCN 5		NOAA6		RPMK
29	170646	20.5N 124.2E	PCN 1	T6.0/6.0 /D1.0/24HRS	TIROSN		RODN
30	170646	20.7N 124.0E	PCN 1		TIROSN		PGTW
31	170900	20.7N 123.6E	PCN E		OTHER		PGTW
32	171931	21.6N 121.9E	PCN 5		TIROSN		RPMK
33	172100	21.5N 121.5E	PCN E		OTHER		PGTW
34	172151	21.6N 121.3E	PCN 3		DMSP37	NO DVORAK	PGTW
35	180007	21.8N 121.2E	PCN 1	T6.0/6.0	NOAA6	INIT OBS	RPMK
36	180300	22.2N 120.5E	PCN 0		OTHER		PGTW
37	180634	22.2N 119.5E	PCN 3		TIROSN	NO CH2 FOR DV	RODN
38	180634	22.5N 119.4E	PCN 5		TIROSN		PGTW
39	180900	22.5N 118.9E	PCN 0		OTHER		PGTW
40	181105	22.5N 118.5E	PCN 5		NOAA6		PGTW
41	181200	22.6N 118.3E	PCN 0		OTHER		PGTW
42	181600	23.3N 118.2E	PCN 0		OTHER		PGTW
43	182100	23.7N 117.7E	PCN 0		OTHER		PGTW
44	182345	24.1N 116.8E	PCN 3	T3.0/3.0	NOAA6	INIT OBS	PGTW
45	190900	25.3N 115.4E	PCN C		OTHER		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	140244	18.1N 131.6E	1500FT		992	50 150 5	060 35 320 33	1 1				+25 +26 +23 27	1
2	141207	18.7N 129.9E	700MB	3000			170 45 030 30	5 2					2
3	141524	18.7N 129.3E	700MB	3003			020 42 280 25	7 3				+11 +14 +14	2
4	150352	19.3N 127.4E	700MB	2991	985	40 130 60	030 39 330 16	5 5				+16 +19 +12	3
5	151237	18.7N 126.8E	700MB	3011			130 50 100 45	1 3					4
6	151435	18.7N 126.5E	700MB	2991	987		040 35 280 20	1 2				+19 +21 + 8	4
7	160011	18.7N 126.4E	700MB	2879		65 160 15	230 62 160 15	2 5					5
8	160248	18.8N 126.2E	700MB	2857	970	65 330 20	020 69 330 18	6 2	CIRCULAR	22		+12 +16 +12	5
9	161316	19.4N 125.9E	700MB	2803			340 55 260 35	5 2	CIRCULAR	25			6
10	170110	20.0N 124.5E	700MB	2644		80 180 7	270 52 170 35	3 1	CIRCULAR	20			7
11	170302	20.3N 124.5E	700MB	2583		100 310 8	180 73 100 45	3 1	CIRCULAR	20		+14 +18 +11	7
12	171306	20.8N 123.0E	700MB	2387			240 100 160 8	4 2	CIRCULAR	15		+25 +12	8
13	171616	21.0N 122.4E	700MB	2407			070 126 340 10	4 5	CIRCULAR	15		+12 +24 +12	8

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	171100	20.7N 123.3E	LAND				207/5 3////		24.0N 121.6E	46699
2	171200	20.7N 123.1E	LAND				20715 52908		24.0N 121.6E	46699
3	171300	20.8N 123.0E	LAND				20624 53109		24.0N 121.6E	46699
4	171400	20.8N 122.8E	LAND				10614 52708		24.0N 121.6E	46699
5	171500	20.9N 122.6E	LAND				10674 52807		24.0N 121.6E	46699
6	171600	20.9N 122.6E	LAND				20734 53105		24.0N 121.6E	46699
7	171700	20.9N 122.4E	LAND				4//// 53106		22.6N 120.3E	46744
8	171700	21.0N 122.4E	LAND				20734 53109		24.0N 121.6E	46699
9	171800	21.0N 122.3E	LAND				4///1 53209		22.6N 120.3E	46744
10	171800	21.2N 122.3E	LAND				10713 53212		24.0N 121.6E	46699
11	171900	21.2N 122.2E	LAND				4///1 53111		22.6N 120.3E	46744
12	171900	21.3N 122.3E	LAND				10654 532//		24.0N 121.6E	46699
13	172000	21.3N 121.9E	LAND				2///3 53218		22.6N 120.3E	46744
14	172000	21.5N 122.0E	LAND				10733 53215		24.0N 121.6E	46699
15	172100	21.5N 121.7E	LAND				10503 53016		22.6N 120.3E	46744
16	172100	21.5N 121.7E	LAND				10583 52916		24.0N 121.6E	46699
17	172200	21.6N 121.4E	LAND				10512 52916		22.6N 120.3E	46744
18	172200	21.7N 121.5E	LAND				10384 53118		24.0N 121.6E	46699
19	172300	21.8N 121.2E	LAND				10423 53016		22.6N 120.3E	46744
20	172300	21.8N 121.2E	LAND				35664 52914		24.0N 121.6E	46699
21	180000	21.8N 120.9E	LAND				10123 53018		22.6N 120.3E	46744
22	180000	21.9N 121.1E	LAND				55//3 53310		24.0N 121.6E	46699
23	180100	22.0N 120.7E	LAND				15/// 53014		22.6N 120.3E	46744
24	180100	22.0N 121.0E	LAND				55//4 52909		24.0N 121.6E	46699
25	180200	22.1N 120.5E	LAND				15/// 53012		22.6N 120.3E	46744
26	180300	22.3N 120.2E	LAND				10082 53023		22.6N 120.3E	46744
27	180400	22.3N 119.9E	LAND				25/63 52716		22.6N 120.3E	46744
28	180500	22.4N 119.5E	LAND				15/63 52719		22.6N 120.3E	46744
29	180600	22.4N 119.5E	LAND				25/63 50000		22.6N 120.3E	46744
30	180700	22.4N 119.3E	LAND				25/63 52718		22.6N 120.3E	46744
31	180800	22.4N 119.2E	LAND				25//3 52709		22.6N 120.3E	46744
32	180900	22.4N 119.1E	LAND				25//3 52705		22.6N 120.3E	46744
33	181000	22.4N 119.0E	LAND				25//3 52704		22.6N 120.3E	46744
34	181100	22.5N 118.9E	LAND				25//3 53105		22.6N 120.3E	46744
35	181200	22.6N 118.8E	LAND				25/// 53113		22.6N 120.3E	46744
36	181300	22.7N 118.6E	LAND				25/// 53109		22.6N 120.3E	46744
37	181400	22.8N 118.5E	LAND				25/// 53111		22.6N 120.3E	46744
38	181500	23.0N 118.3E	LAND				25/// 53110		22.6N 120.3E	46744
39	181600	23.1N 118.2E	LAND				25/// 53112		22.6N 120.3E	46744
40	181700	23.3N 118.0E	LAND				25/// 53114		22.6N 120.3E	46744
41	181800	23.5N 117.8E	LAND				25/// 53113		22.6N 120.3E	46744
42	181900	23.7N 117.7E	LAND				2030/ 53116		22.6N 120.3E	46744
43	182000	23.8N 117.6E	LAND				25/// 53212		22.6N 120.3E	46744

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

NNNN
12290441 KNPN CY 46

TYPHOON SPERRY

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS							
MMDDHR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
091206Z	10.1	153.7	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.
091212Z	10.5	153.1	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.
091218Z	11.1	152.6	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.
091300Z	12.2	152.5	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.
091306Z	13.2	152.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091312Z	14.2	152.7	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.
091318Z	15.1	152.4	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.
091400Z	16.0	152.0	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.
091406Z	17.1	151.2	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.
091412Z	18.3	150.3	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.
091418Z	19.3	149.0	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.
091500Z	20.0	147.4	35	19.9	147.8	30.	23.	-5.	22.2	141.8	45.	44.	5.	24.9	136.0	55.	58.	0.	27.5	132.0	65.	346.	5.
091506Z	20.6	145.8	40	20.3	146.1	40.	25.	0.	22.9	140.2	55.	33.	15.	25.2	135.4	65.	124.	10.	28.0	131.2	70.	422.	5.
091512Z	21.1	144.2	40	21.2	144.4	45.	13.	5.	23.5	138.7	55.	25.	10.	26.3	133.9	65.	179.	10.	29.4	129.2	70.	565.	5.
091518Z	21.6	142.5	40	21.8	142.7	50.	16.	10.	24.5	136.8	60.	20.	10.	27.4	132.2	65.	279.	10.	30.4	127.7	70.	694.	5
091600Z	22.2	141.0	40	22.0	140.8	45.	16.	5.	24.9	134.5	65.	116.	10.	28.3	130.8	70.	384.	10.	32.2	129.6	65.	653.	0.
091606Z	22.9	139.6	40	22.8	139.2	45.	23.	5.	25.7	133.2	65.	174.	10.	29.9	129.8	65.	461.	0.	33.8	129.9	50.	700.	-10.
091612Z	23.7	138.3	45	23.2	138.3	45.	30.	0.	26.1	133.2	65.	214.	10.	29.4	129.9	60.	529.	-5.	33.9	131.2	45.	698.	-20.
091618Z	24.7	137.1	50	24.5	137.0	50.	13.	0.	28.7	133.0	65.	210.	10.	32.3	133.0	70.	423.	5.	36.2	130.2	30.	493.	-30.
091700Z	25.8	136.4	55	25.5	136.0	55.	28.	0.	29.7	132.2	70.	292.	10.	34.4	135.5	60.	396.	-5.	0.0	0.0	0.	-0.	0.
091706Z	27.2	136.0	55	27.0	136.0	55.	12.	0.	32.6	136.7	55.	152.	-10.	38.0	145.0	45.	407.	-20.	0.0	0.0	0.	-0.	0.
091712Z	28.5	136.2	55	28.2	135.9	55.	24.	0.	34.1	138.2	55.	212.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091718Z	29.6	136.9	55	30.0	136.4	55.	35.	0.	35.2	141.6	45.	246.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091800Z	30.3	137.8	60	30.4	130.0	50.	12.	-10.	34.5	147.5	35.	323.	-30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091806Z	30.7	138.7	65	31.0	138.7	65.	18.	0.	34.3	146.9	40.	247.	-25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091812Z	30.9	140.0	65	31.1	139.6	65.	24.	0.	32.6	145.2	45.	87.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091818Z	31.1	141.2	65	31.4	141.2	65.	18.	0.	32.7	148.2	40.	162.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091900Z	31.2	142.4	65	31.5	142.8	65.	27.	0.	32.9	150.4	45.	233.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091906Z	31.3	143.5	65	31.4	144.3	65.	41.	0.	32.6	152.0	45.	249.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091912Z	31.2	144.7	65	31.4	145.3	65.	33.	0.	32.9	153.0	40.	296.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
091918Z	30.9	145.8	60	31.5	146.0	60.	37.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092000Z	30.6	146.7	55	31.0	146.8	55.	24.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092006Z	30.6	147.7	50	30.5	147.7	50.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092012Z	31.2	148.3	45	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092018Z	31.8	148.9	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.
092100Z	32.5	149.4	40	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092106Z	33.1	149.9	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.
092112Z	33.6	150.6	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.
092118Z	34.0	151.4	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.
092200Z	34.3	152.3	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	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.	176.	324.	571.	23.	176.	324.	571.
AVG RIGHT ANGLE ERROR	17.	133.	236.	413.	17.	133.	236.	413.
AVG INTENSITY MAGNITUDE ERROR	2.	13.	8.	11.	2.	13.	8.	11.
AVG INTENSITY BIAS	0.	-3.	2.	-6.	0.	-3.	2.	-6.
NUMBER OF FORECASTS	22	19	10	9	22	19	10	9

DISTANCE TRAVELED BY STORM IS 2624. NM

AVERAGE SPEED OF STORM IS 11. KNOTS

TYPHOON SPERRY
FIX POSITIONS FOR CYCLONE NO. 20

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
* 1	120957	10.3N 153.3E	PCN 5		NOAA6		PGTW
* 2	122055	11.0N 152.4E	PCN 6	T1.0/1.0	NOAA6	INIT OBS	PGTW
3	140912	17.4N 150.9E	PCN 5		NOAA6		PGTW
4	141600	19.4N 149.8E	PCN 0		OTHER		PGTW
5	142152	19.8N 148.0E	PCN 3	T2.5/2.5	NOAA6	INIT OBS	PGTW
6	150050	20.4N 145.2E	PCN 5		NOAA6		PGTW
7	151600	21.5N 143.2E	PCN 0		OTHER		PGTW
8	152052	21.6N 141.5E	PCN 5		DMSP37		PGTW
9	152311	22.1N 141.1E	PCN 3	T3.5/3.5 /D1.0/25HRS	NOAA6		PGTW
10	160900	23.1N 139.4E	PCN 0		OTHER		PGTW
11	161009	23.2N 139.0E	PCN 5		NOAA6		PGTW
12	161200	23.6N 138.7E	PCN 0		OTHER		PGTW
13	161600	24.1N 137.3E	PCN 0		OTHER	IR WKNESS	PGTW
14	161934	24.3N 137.2E	PCN 3		TIROSN		PGTW
15	162100	25.0N 137.0E	PCN 0		OTHER		PGTW
16	162248	25.4N 136.5E	PCN 3	T4.0/4.0 /D0.5/24HRS	NOAA6		PGTW
17	170000	25.4N 136.5E	PCN 0		OTHER		PGTW
18	170646	27.2N 136.0E	PCN 5		TIROSN		PGTW
19	170900	27.7N 136.3E	PCN 0		OTHER		PGTW
20	170947	27.7N 136.2E	PCN 5		NOAA6		PGTW
21	172100	29.1N 137.2E	PCN 0		OTHER		PGTW
22	172226	30.0N 138.1E	PCN 5	T3.5/4.0-/W0.5/24HRS	NOAA6		PGTW
23	180300	30.6N 138.3E	PCN 0		OTHER		PGTW
24	180634	31.4N 138.0E	PCN 5		TIROSN		PGTW
25	180900	31.4N 139.1E	PCN 0		OTHER		PGTW
26	180924	31.0N 139.5E	PCN 3		NOAA6		PGTW
27	181200	31.1N 140.0E	PCN 0		OTHER		PGTW
28	181600	31.2N 140.8E	PCN 0		OTHER		PGTW
29	182100	31.1N 141.8E	PCN E		OTHER		PGTW
30	182204	31.2N 142.0E	PCN 3	T4.0/4.0-/D0.5/24HRS	NOAA6		PGTW
31	190000	31.2N 142.3E	PCN E		OTHER		PGTW
32	190900	31.3N 144.2E	PCN E		OTHER		PGTW
33	190902	31.3N 144.3E	PCN 3		NOAA6		PGTW
34	191200	31.1N 144.8E	PCN C		OTHER		PGTW
35	191600	31.5N 145.2E	PCN 0		OTHER		PGTW

36	192100	30.8N 145.9E	PCN 0		OTHER		PGTW
37	192141	30.8N 146.3E	PCN 5	T3.0/4.0 /W1.0/24HRS	NOAA6		PGTW
38	200300	30.3N 147.2E	PCN 0		OTHER		PGTW
39	200839	30.8N 148.3E	PCN 6		NOAA6		PGTW
40	202300	32.6N 149.0E	PCN 6		NOAA6		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	150230	20.3N 146.8E	700MB	3043	995	45 020 15	110 40 020 15	3 2			+14 +15 +10	2
2	150641	20.8N 145.8E	700MB	3046	993	50 360 20	030 41 330 15	3 2			+12 +16 +11	2
3	160325	22.6N 140.3E	700MB	3076		45 150 35	220 38 150 75	5 2			+10 +13	3
4	161727	24.7N 137.2E	700MB	3019	991		020 36 310 15	5 2			+11 +13 +13	5
5	170309	26.4N 136.2E	700MB	3003	990	50 040 30	110 47 030 15	6 2			+11 +16 +12	6
6	171457	29.2N 136.3E	700MB	2994	987		310 49 190 13	10 2			+13 +16 +12	8
7	180308	30.6N 138.0E	700MB	3043	989	65 170 44	290 58 240 27	3 5			+17 +16 + 8	9
8	180535	30.5N 138.6E	700MB	3025		65 220 25	070 42 360 30	4 5				9
9	180718	30.9N 138.0E	700MB	3016		55 010 40	100 50 010 40	5 3				10
10	180829	30.9N 139.0E	700MB	3004	990	65 230 40	290 54 230 40	5 2			+13 +15 +10	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	180700	30.6N 139.0E	LAND				21871 50508		35.3N 138.7E	47639
2	180800	30.6N 139.2E	LAND				11511 50911		35.3N 138.7E	47639
3	180900	30.6N 139.3E	LAND				14841 50905		35.3N 138.7E	47639
4	181100	30.6N 139.8E	LAND				24451 50914		35.3N 138.7E	47639
5	181200	30.6N 140.1E	LAND				54//1 50196		35.3N 138.7E	47639
6	181300	30.8N 140.3E	LAND				52/11 70711		35.3N 138.7E	47639
7	182000	30.6N 139.8E	LAND				24451 50914		35.3N 138.7E	47639
8	190200	31.2N 143.0E	LAND				35//1 50611		35.3N 138.7E	47639
9	190200	31.2N 143.0E	LAND				35//1 50611		35.3N 138.7E	47639
10	190300	31.2N 143.4E	LAND				3///1 70716		35.3N 138.7E	47639

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

TROPICAL STORM THELMA

BEST TRACK DATA

	BEST TRACK		WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
					ERRORS				ERRORS				ERRORS					
MO/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
092500Z	15.5 147.0	15	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
092506Z	15.6 146.8	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.
092512Z	15.8 146.6	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.
092518Z	16.1 146.3	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.
092600Z	16.3 146.1	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.
092606Z	16.7 145.6	25	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
092612Z	17.3 145.1	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.
092618Z	17.8 144.7	25	17.2 143.0	30.	103.	5.	19.1 139.7	50.	187.	15.	21.1 135.5	65.	493.	20.	22.0 130.0	75.	1000.	20.
092700Z	18.3 144.3	25	17.7 142.9	30.	87.	5.	19.0 140.3	50.	193.	15.	20.7 137.5	65.	490.	15.	23.2 135.5	70.	850.	25.
092706Z	19.2 143.6	30	18.0 142.4	30.	99.	0.	19.1 140.2	50.	265.	15.	20.9 137.5	65.	559.	10.	23.5 135.5	70.	1093.	25.
092712Z	20.0 143.0	30	20.5 143.9	30.	59.	0.	23.9 143.0	45.	49.	5.	26.0 140.5	60.	309.	5.	28.3 139.7	60.	969.	15.
092718Z	20.8 142.5	35	22.0 141.9	45.	124.	10.	27.6 139.6	45.	206.	0.	30.9 139.3	65.	344.	10.	0.0 0.0	0.	-0.	0.
092800Z	21.7 142.2	35	21.8 142.0	35.	13.	0.	26.0 142.0	30.	61.	-20.	31.5 149.1	20.	49.	-25.	0.0 0.0	0.	-0.	0.
092806Z	23.2 142.0	35	22.4 142.1	35.	48.	0.	26.1 143.5	30.	119.	-25.	31.7 148.4	20.	266.	-25.	0.0 0.0	0.	-0.	0.
092812Z	24.5 142.4	40	24.4 142.0	30.	23.	-10.	28.7 144.9	30.	42.	-25.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
092818Z	25.8 142.9	45	25.0 142.8	40.	5.	-5.	30.1 146.5	30.	44.	-25.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
092900Z	26.8 143.5	50	26.8 143.5	50.	0.	0.	30.6 146.9	50.	103.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
092906Z	28.0 144.2	55	26.3 143.5	55.	180.	0.	31.2 147.3	40.	325.	-5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
092912Z	29.4 144.9	55	28.0 144.2	55.	91.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
092918Z	30.7 146.0	55	30.8 150.0	55.	285.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
093000Z	32.3 147.9	45	32.0 146.2	55.	88.	10.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
093006Z	35.2 151.7	45	33.9 147.9	50.	202.	5.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.	0.0 0.0	0.	-0.	0.
093012Z	37.3 155.8	45	37.8 155.5	45.	33.	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	81.	145.	358.	978.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	43.	83.	218.	577.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	14.	16.	21.	0.	0.	0.	0.
AVG INTENSITY BIAS	1.	-4.	1.	21.	0.	0.	0.	0.
NUMBER OF FORECASTS	16	11	7	4	0	0	0	0

DISTANCE TRAVELED BY STORM IS 1681. NM

AVERAGE SPEED OF STORM IS 13. KNOTS

TROPICAL STORM THELMA
FIX POSITIONS FOR CYCLONE NO. 21

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
* 1	272200	23.7N 143.1E	PCN 5	T3.0/3.0 /D1.0/24HRS	NOAA6		PGTW
2	252249	15.7N 147.3E	PCN 5	T0.5/0.5	NOAA6	INIT OBS	PGTW
3	260000	15.6N 145.4E	PCN 0		OTHER		PGTW
* 4	260900	16.5N 144.0E	PCN 0		OTHER		PGTW
* 5	261200	17.0N 144.0E	PCN 0		OTHER		PGTW
6	262227	18.1N 144.5E	PCN 6	T2.0/2.0 /D1.5/24HRS	NOAA6		PGTW
7	270300	17.7N 142.7E	PCN 0		OTHER		PGTW
8	270632	19.3N 143.6E	PCN 5		TIROSN		PGTW
9	270900	19.4N 144.3E	PCN 0		OTHER		PGTW
10	270925	20.1N 144.2E	PCN 5		NOAA6		PGTW
* 11	271200	21.1N 144.1E	PCN 0		OTHER		PGTW
* 12	271600	22.6N 143.2E	PCN 0		OTHER		PGTW
* 13	272100	23.4N 142.8E	PCN 0		OTHER		PGTW
14	280300	22.1N 142.7E	PCN 0		OTHER	ULCC 24.3 142.6	PGTW
15	280600	23.7N 141.5E	PCN C		OTHER	PSN BSD ON EXPSD LLCC	PGTW
16	280621	23.4N 141.3E	PCN 3		TIROSN		PGTW
17	280621	23.7N 141.4E	PCN 3	T2.0/2.0	TIROSN	INIT OBS	RPMK
18	280900	23.2N 141.5E	PCN 0		OTHER	ULCCS AT 23.2 143.4 25.8 143.4	PGTW
19	280903	23.1N 141.3E	PCN 6		NOAA6	ULCCS AT 23.1 143.3 25.8 143.2	PGTW
20	281200	24.9N 143.6E	PCN 0		OTHER		PGTW
21	281600	25.1N 143.2E	PCN 0		OTHER		PGTW
22	281906	26.0N 143.7E	PCN 6		TIROSN		PGTW
23	291906	25.5N 145.6E	PCN 5		TIROSN		RPMK
24	282100	26.1N 143.3E	PCN 0		OTHER		PGTW
25	282143	26.5N 143.5E	PCN 5	T2.5/3.0 /W0.5/24HRS	NOAA6	PSBL LLCC 26.1 142.3	PGTW
26	290300	27.6N 143.6E	PCN 0		OTHER		PGTW
27	290600	28.2N 144.1E	PCN 0		OTHER		PGTW
28	290609	28.2N 143.5E	PCN 5		TIROSN	PSBL LLCC 26.4 143.7	PGTW
29	290609	28.0N 144.9E	PCN 5	T3.0/3.0	TIROSN	INIT OBS	RODN
30	290900	29.2N 144.4E	PCN 0		OTHER		PGTW
31	291022	28.6N 144.8E	PCN 5		NOAA6		PGTW
32	291200	29.9N 144.8E	PCN 0		OTHER		PGTW
* 33	291600	31.6N 145.1E	PCN 0		OTHER		PGTW
34	291854	30.0N 146.6E	PCN 5		TIROSN		PGTW
35	292100	30.7N 147.0E	PCN 0		OTHER	PSBL LLVL 31.9146.4	PGTW
36	292301	31.5N 148.3E	PCN 5	T1.0/2.5 /W1.5/25HRS	NOAA6	PSBL LLCC ULCC 32.6 146.5	PGTW
37	300600	35.3N 151.8E	PCN 0		OTHER	ULCC	PGTW
38	300900	36.8N 153.8E	PCN 0		OTHER	ULCC	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	271530	22.1N 142.3E	700MB	3014	993		170 33 100 136	4 10				+12 +11	3
2	280100	21.9N 141.9E	700MB	3007		25 020 170	100 27 020 150	4 3					4
3	200300	22.1N 142.2E	700MB	2993		30 300 35	360 23 320 110	4 4				+15 +14 +12	4
4	281104	25.7N 143.1E	700MB	2981			340 44 200 40	2 5					5
5	281418	25.2N 143.9E	700MB	2981	987		320 27 240 40	2 5				+15 +12 +10	5
6	290015	27.0N 143.1E	700MB	2964		40 100 60	310 23 170 130	5 3					6
7	290258	26.9N 143.0E	700MB	2934	982	55 060 42	090 36 350 110	5 4				+10 +14 +12	6
8	291500	30.2N 144.4E	700MB	2925			290 50 120 150	5 2				+13 +13 +13	7

TYPHOON VERNON

BEST TRACK DATA

	BEST TRACK		WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
					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	12.2	161.2	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.
092706Z	12.2	160.4	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092712Z	12.3	159.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
092718Z	12.4	159.1	25	12.6	158.9	30.	17.	5.	14.0	154.7	45.	81.	5.	16.0	150.0	55.	283.	-5.	18.0	144.4	65.	479.	-15.
092800Z	12.6	158.4	25	13.0	157.0	30.	42.	5.	14.6	152.9	50.	163.	10.	17.0	148.1	65.	369.	0.	19.3	144.0	75.	427.	-15.
092806Z	13.2	157.4	30	13.0	157.5	30.	13.	0.	14.0	154.0	50.	133.	5.	16.0	149.5	65.	308.	-10.	18.0	145.5	75.	415.	-20.
092812Z	13.8	156.7	35	13.1	156.7	30.	42.	-5.	14.5	153.1	50.	166.	0.	16.5	148.5	65.	334.	-10.	19.7	144.7	75.	422.	-25.
092818Z	14.5	156.0	40	14.4	155.0	40.	58.	0.	16.6	150.1	65.	270.	5.	19.6	145.9	75.	302.	-5.	24.1	143.8	85.	306.	-20.
092900Z	15.0	155.7	40	14.8	154.5	50.	70.	10.	17.9	150.9	65.	205.	0.	22.2	148.8	80.	161.	-10.	26.7	140.4	80.	24.	-25.
092906Z	15.7	155.5	45	15.5	155.5	55.	12.	10.	17.6	153.5	70.	87.	-5.	21.0	151.4	90.	151.	-5.	25.5	150.3	90.	144.	-15.
092912Z	16.4	155.2	50	16.4	155.3	60.	6.	10.	19.5	153.8	75.	49.	0.	23.1	150.4	85.	90.	-15.	27.1	149.1	90.	82.	-10.
092918Z	17.1	154.8	60	17.3	154.9	65.	13.	5.	20.6	152.7	75.	94.	-5.	24.4	149.8	85.	79.	-20.	28.6	149.3	85.	75.	-15.
093000Z	18.0	154.5	65	18.1	154.4	65.	8.	0.	21.2	152.1	75.	75.	-15.	25.5	149.7	85.	76.	-20.	29.7	149.5	85.	90.	-10.
093006Z	19.0	153.9	75	19.0	154.1	75.	11.	0.	22.3	151.3	0.	74.	-95.	26.5	149.5	0.	72.	-105.	31.1	150.1	0.	136.	-80.
093012Z	20.0	153.1	75	20.2	153.5	75.	25.	0.	23.8	151.6	90.	90.	-10.	26.8	150.8	100.	151.	0.	31.5	153.3	90.	276.	30.
093018Z	22.1	152.2	80	21.1	152.2	80.	60.	0.	25.0	149.9	110.	40.	5.	30.4	153.2	80.	225.	-20.	33.5	161.2	55.	347.	0.
100100Z	22.4	151.7	90	22.3	152.3	05.	34.	-5.	26.8	151.3	110.	141.	5.	31.7	155.3	75.	287.	-20.	0.0	0.0	0.	-0.	0.
100106Z	23.5	151.0	95	23.3	151.2	100.	16.	5.	26.9	150.5	110.	109.	5.	31.2	154.6	75.	198.	-5.	0.0	0.0	0.	-0.	0.
100112Z	24.6	150.2	100	24.7	150.4	100.	12.	0.	29.6	149.6	110.	89.	10.	34.2	156.5	75.	142.	15.	0.0	0.0	0.	-0.	0.
100118Z	25.6	149.2	105	26.5	149.5	105.	56.	0.	33.7	152.8	90.	306.	-10.	35.2	165.3	60.	368.	5.	0.0	0.0	0.	-0.	0.
100200Z	26.4	148.7	105	27.3	148.5	110.	55.	5.	32.7	150.4	90.	96.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100206Z	27.3	148.5	105	27.0	148.4	110.	19.	5.	32.0	149.0	85.	130.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100212Z	28.4	148.6	100	28.7	148.6	110.	18.	10.	33.3	150.3	80.	266.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100218Z	29.8	148.9	100	29.7	148.7	105.	12.	5.	34.8	153.7	75.	371.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100300Z	31.2	149.7	95	31.1	149.7	100.	6.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100306Z	33.1	151.4	80	32.8	151.3	90.	19.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100312Z	36.0	154.6	60	34.7	153.8	80.	87.	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100318Z	39.1	159.3	55	39.0	160.0	50.	33.	-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	30.	145.	216.	248.	31.	145.	216.	248.
AVG RIGHT ANGLE ERROR	18.	77.	185.	203.	19.	77.	185.	203.
AVG INTENSITY MAGNITUDE ERROR	5.	11.	16.	22.	5.	11.	16.	22.
AVG INTENSITY BIAS	4.	-2.	-14.	-17.	0.	-2.	-14.	-17.
NUMBER OF FORECASTS	25	21	17	13	22	21	17	13

DISTANCE TRAVELED BY STORM IS 2141. NM

AVERAGE SPEED OF STORM IS 13. KNOTS

TYPHOON VERNON
FIX POSITIONS FOR CYCLONE NO. 22

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	252108	12.5N 165.0E	PCN 5	T1.0/1.0	NOAA6	INIT OBS	PGTW
2	260000	13.0N 164.9E	PCN 0		OTHER		PGTW
3	260502	13.3N 163.7E	PCN 3		TIROSN		PGTW
4	261200	12.8N 164.4E	PCN 0		OTHER		PGTW
5	270300	12.4N 160.5E	PCN 0	T1.5/1.5 /D0.5/30HRS	OTHER		PGTW
6	270900	12.2N 160.4E	PCN 0		OTHER		PGTW
7	270925	12.3N 160.1E	PCN 5		OTHER		PGTW
8	271200	12.1N 159.8E	PCN 0		OTHER		PGTW
9	271600	13.2N 159.3E	PCN 0		OTHER		PGTW
10	271958	12.6N 158.5E	PCN 6		DMSP37		PGTW
11	272100	12.8N 158.5E	PCN 0		OTHER		PGTW
12	280000	12.8N 157.9E	PCN 0	T2.5/2.5 /D1.0/21HRS	OTHER		PGTW
13	280300	13.0N 157.8E	PCN 0		OTHER		PGTW
14	280600	13.7N 157.5E	PCN 0		OTHER		PGTW
15	280900	13.4N 158.0E	PCN 0		OTHER		PGTW
16	280903	13.3N 157.8E	PCN 6		NOAA6		PGTW
17	281200	13.3N 157.6E	PCN 0		OTHER		PGTW
18	281600	14.1N 156.6E	PCN 0		OTHER		PGTW
19	281937	14.3N 155.5E	PCN 6		DMSP37		PGTW
20	282143	14.7N 155.1E	PCN 5	T3.0/3.0 /D0.5/21HRS	NOAA6		PGTW
21	290300	15.4N 154.6E	PCN 0		OTHER	SECONDARY LLCC 15.3 155.4	PGTW
22	290600	15.5N 156.0E	PCN 0		OTHER		PGTW
23	290846	15.9N 155.4E	PCN 6		NOAA6		PGTW
24	290900	16.1N 155.5E	PCN 0		OTHER		PGTW
25	291200	16.6N 155.2E	PCN 0		OTHER		PGTW
26	291600	16.9N 155.1E	PCN 0		OTHER		PGTW
27	291712	17.3N 154.4E	PCN 4		TIROSN		PGTW
28	292100	17.7N 154.4E	PCN 0		OTHER		PGTW
29	292120	17.6N 154.7E	PCN 3	T3.5/3.5 /D0.5/24HRS	NOAA6		PGTW
30	300818	19.7N 153.6E	PCN 2		NOAA6		PGTW
31	302100	21.5N 152.5E	PCN E		OTHER		PGTW
32	302157	21.8N 152.6E	PCN 1	T4.5/4.5 /D1.0/24HRS	NOAA6		PGTW
33	302239	22.0N 152.0E	PCN 1		NOAA6		PGTW
34	010937	23.9N 150.5E	PCN 2		NOAA6		PGTW
35	010937	24.1N 151.0E	PCN 1		NOAA6		RODN
36	011200	24.6N 150.3E	PCN E		OTHER		PGTW
37	011600	25.1N 149.3E	PCN E		OTHER		PGTW
38	012014	25.9N 148.7E	PCN 2		DMSP37		PGTW
39	012100	25.8N 149.1E	PCN E		OTHER		PGTW
40	012216	26.1N 148.9E	PCN 1	T4.0/4.5 /D0.5/25HRS	NOAA6		PGTW
41	020915	27.9N 148.6E	PCN 1		NOAA6		PGTW
42	020915	28.0N 148.5E	PCN 1		NOAA6		RODN
43	021200	28.4N 148.6E	PCN E		OTHER		PGTW
44	021953	30.3N 148.8E	PCN 6		DMSP37	CNTR OBSCURED BY SHADOW	PGTW
45	022100	30.2N 149.1E	PCN E		OTHER		PGTW
46	022154	30.6N 149.4E	PCN 1	T4.5/4.5-/S0.0/24HRS	NOAA6		PGTW

47	030000	31.2N 149.6E	PCN E	OTHER	PGTW
48	030400	32.5N 150.7E	PCN E	OTHER	PGTW
49	030900	34.5N 152.7E	PCN O	OTHER	PGTW
50	030952	34.3N 152.4E	PCN 6	NOAA6	PGTW
51	031600	38.3N 158.0E	PCN O	OTHER	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	280310	12.8N 157.9E	1500FT		997	25 280 105	320 30 280 55	5 10			+26 +26 +23 27	2
2	281610	14.5N 156.1E	700MB	3010			320 54 230 140	15 5			+10 +13 + 7	3
3	281534	14.5N 156.0E	700MB	3009			180 48 120 50	10 5				3
4	290507	15.5N 155.5E	700MB	2947	982	40 290 60	350 47 290 90	5 5				4
5	290726	15.8N 155.4E	700MB	2954		55 130 115	210 60 130 105	5 5				4
6	290908	16.1N 155.4E	700MB	2962	984		050 73 280 60	5 5			+10 +14 +10	4
7	291538	16.9N 155.0E	700MB	2891	975		330 62 230 38	4 8			+14 +20 + 7	5
8	300229	18.4N 154.3E	700MB	2821		50 200 120	270 70 200 52	5 5	CIRCULAR	40		6
9	300410	18.8N 154.2E	700MB	2803	964	50 270 15	150 81 070 85	5 3	CIRCULAR	40	+13 +19 + 6	6
10	301319	20.3N 152.8E	700MB	2752			320 56 230 50	2 4				7
11	301621	20.9N 152.4E	700MB	2697	952		100 60 060 30	2 4	CIRCULAR	45	+15 +20 + 9	7
12	010028	22.4N 151.7E	700MB	2663		40 210 70	300 75 180 25	5 5	CIRCULAR			8
13	010323	22.8N 151.3E	700MB	2611	944	80 180 5	020 75 310 30	6 3	CIRCULAR	35	+13 +19 + 9	8
14	011704	25.4N 149.3E	700MB	2544	937		260 97 170 18	4 2	CIRCULAR	30	+13 +19 +14	9
15	020001	26.4N 148.6E	700MB	2580		80 210 30	300 80 200 20	4 3				10
16	020251	26.7N 148.5E	700MB	2553		80 320 10	030 74 320 15	4 2	ELLIPTICAL	22 15 120	+15 +19 +13	10
17	021145	28.3N 148.5E	700MB	2564			250 92 160 15	2 2				11
18	021420	29.0N 148.6E	700MB	2578	940		350 68 280 30	2 2	ELLIPTICAL	40 25 060	+14 +18 +14	11

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

SUPER TYPHOON WYNNE

BEST TRACK DATA

	BEST TRACK		WARNING						24 HOUR FORECAST						48 HOUR FORECAST						72 HOUR FORECAST					
						ERRORS						ERRORS						ERRORS								
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND		POSIT		WIND	DST	WIND		POSIT		WIND	DST	WIND	
100212Z	9.4	156.5	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.	
100218Z	8.4	155.7	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.	
100300Z	7.6	155.0	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.	
100306Z	7.0	154.2	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.	
100312Z	6.6	153.7	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.	
100318Z	6.2	152.9	60	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
100400Z	6.0	152.2	70	5.8	152.2	55.	12.	-15.	6.8	140.4	70.	97.	30.		9.5	145.5	80.	152.	35.		12.8	142.7	90.	182.	40.	
100406Z	6.2	151.1	60	6.2	151.2	60.	6.	0.	7.7	147.9	75.	97.	10.		10.4	145.0	85.	154.	25.		13.2	142.2	95.	187.	45.	
100412Z	6.7	150.3	50	6.0	150.8	60.	51.	10.	7.3	140.2	70.	150.	25.		10.1	145.3	80.	222.	30.		13.0	142.5	90.	205.	30.	
100418Z	7.3	149.8	45	7.2	149.4	50.	24.	5.	9.8	146.3	70.	85.	40.		12.8	143.5	80.	147.	30.		15.6	140.9	90.	137.	25.	
100500Z	8.0	149.5	40	7.8	149.4	45.	13.	5.	9.9	147.5	60.	115.	15.		12.8	144.0	70.	150.	20.		15.7	143.5	90.	112.	20.	
100506Z	8.8	149.1	65	8.8	149.1	50.	0.	-15.	11.9	147.4	65.	85.	5.		15.0	144.8	75.	66.	25.		18.8	143.5	95.	155.	20.	
100512Z	9.8	148.4	45	8.8	149.1	50.	73.	5.	11.9	147.4	65.	151.	20.		15.9	144.9	75.	108.	15.		18.8	143.5	95.	195.	15.	
100518Z	10.6	147.5	30	10.7	147.2	40.	19.	10.	13.9	142.8	45.	141.	-5.		15.8	137.7	55.	309.	-10.		16.1	133.1	65.	372.	-25.	
100600Z	11.7	146.0	45	11.5	146.2	45.	37.	0.	14.7	141.5	55.	177.	5.		16.3	135.5	65.	360.	-5.		17.0	129.2	75.	510.	-45.	
100606Z	12.7	146.2	60	12.6	146.0	50.	13.	-10.	15.2	142.2	65.	110.	15.		17.2	136.2	75.	285.	0.		17.9	129.7	90.	476.	-60.	
100612Z	13.8	145.7	45	13.5	145.7	50.	18.	5.	16.7	141.8	60.	100.	0.		17.7	135.6	70.	262.	-10.		18.0	129.5	80.	300.	-65.	
100618Z	14.7	145.1	50	14.7	144.9	40.	12.	-10.	17.7	140.2	60.	171.	-5.		18.8	134.2	70.	285.	-20.		18.8	126.0	80.	473.	-60.	
100700Z	15.3	144.5	50	15.5	144.2	45.	21.	-5.	19.3	141.5	60.	142.	-10.		23.3	139.6	70.	289.	-50.		29.0	139.9	75.	618.	-60.	
100706Z	15.8	144.0	50	15.8	144.1	50.	6.	0.	18.3	142.2	0.	78.	-75.		21.7	140.1	0.	233.	-150.		26.2	144.2	0.	734.	-130.	
100712Z	16.3	143.5	60	16.6	143.6	50.	19.	-10.	19.6	141.3	55.	119.	-25.		23.2	139.9	65.	305.	-80.		20.0	141.0	60.	711.	-65.	
100718Z	16.7	143.0	65	16.8	143.1	55.	8.	-10.	19.6	141.3	70.	142.	-20.		23.2	140.0	75.	342.	-65.		20.2	142.2	70.	770.	-55.	
100800Z	17.0	142.1	70	17.3	142.8	60.	44.	-10.	19.7	141.2	70.	198.	-50.		22.7	140.1	75.	395.	-60.		26.5	140.5	75.	692.	-45.	
100806Z	17.4	141.2	75	17.5	141.1	65.	8.	-10.	19.3	137.8	75.	47.	-75.		22.1	135.9	80.	218.	-50.		25.5	135.2	85.	413.	-30.	
100812Z	17.9	140.2	80	17.8	140.1	70.	8.	-10.	19.9	137.0	80.	59.	-65.		23.5	135.3	85.	276.	-40.		28.3	136.3	95.	554.	-30.	
100818Z	18.3	139.2	90	18.5	139.0	95.	16.	5.	21.7	134.8	110.	102.	-30.		26.3	134.3	105.	359.	-20.		30.0	138.3	95.	711.	-15.	
100900Z	18.7	138.0	120	19.0	138.0	140.	18.	20.	21.9	134.5	150.	104.	15.		25.5	134.0	140.	332.	20.		29.8	137.6	100.	679.	-5.	
100906Z	19.1	137.0	150	19.2	136.7	150.	18.	0.	20.9	132.0	150.	6.	20.		23.1	128.0	130.	12.	15.		26.7	126.5	210.	86.	110.	
100912Z	19.6	136.0	145	19.5	136.2	150.	13.	5.	20.9	132.4	150.	96.	25.		22.8	128.7	130.	102.	15.		26.4	127.0	120.	67.	20.	
100918Z	20.0	134.9	140	20.2	134.9	140.	12.	0.	22.4	130.2	120.	37.	-5.		24.9	127.5	110.	64.	0.		27.9	127.0	90.	79.	-10.	
101000Z	20.5	133.4	135	20.6	133.7	140.	18.	5.	23.0	129.4	120.	41.	0.		26.2	126.8	110.	92.	5.		29.2	127.9	90.	111.	-5.	
101006Z	20.9	132.1	130	20.8	132.2	130.	8.	0.	23.6	127.9	110.	19.	-5.		27.5	126.8	100.	136.	0.		30.6	129.6	05.	165.	-5.	
101012Z	21.5	130.8	125	21.4	130.7	125.	8.	0.	24.1	127.0	100.	21.	-15.		27.8	127.3	90.	129.	-10.		31.8	131.3	75.	187.	-15.	
101018Z	22.0	129.7	125	22.1	129.5	125.	13.	0.	25.6	126.5	100.	84.	-10.		30.2	129.5	85.	269.	-15.		34.4	136.2	65.	370.	-25.	
101100Z	22.6	128.8	120	22.6	128.8	125.	0.	5.	26.4	126.7	100.	101.	-5.		30.8	130.2	85.	263.	-10.		34.8	137.2	70.	288.	-15.	
101106Z	23.3	128.0	115	23.6	128.1	115.	19.	0.	27.8	127.4	95.	167.	-5.		32.5	133.6	85.	396.	-5.		30.0	144.0	60.	491.	-20.	
101112Z	23.8	127.2	115	23.8	127.4	110.	11.	-5.	27.7	127.4	90.	128.	-10.		32.5	133.6	80.	306.	-10.		0.0	0.0	0.	-0.	0.	
101118Z	24.2	126.6	110	24.8	126.5	110.	36.	0.	29.2	127.8	90.	165.	-10.		33.8	134.0	80.	265.	-10.		0.0	0.0	0.	-0.	0.	
101200Z	24.8	126.1	105	24.8	126.1	105.	0.	0.	28.2	125.8	90.	36.	-5.		33.3	130.8	65.	154.	-20.		0.0	0.0	0.	-0.	0.	
101206Z	25.4	125.8	100	25.3	125.4	100.	22.	0.	27.8	125.0	85.	130.	-5.		32.2	129.0	75.	374.	-5.		0.0	0.0	0.	-0.	0.	
101212Z	26.1	125.8	100	26.1	125.7	100.	5.	0.	29.6	126.2	95.	120.	5.		34.8	153.9	85.	681.	15.		0.0	0.0	0.	-0.	0.	
101218Z	27.0	125.9	100	26.9	125.6	100.	17.	0.	31.5	128.7	0.	110.	-90.		36.3	136.7	0.	404.	-60.		0.0	0.0	0.	-0.	0.	
101300Z	27.9	126.4	95	27.8	126.3	100.	8.	5.	32.1	130.1	75.	152.	-10.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
101306Z	28.8	127.2	90	28.9	127.0	90.	12.	0.	33.3	131.8	60.	234.	-20.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
101312Z	29.8	128.5	90	29.6	128.4	85.	13.	-5.	34.2	134.2	50.	292.	-20.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
101318Z	30.5	130.5	90	30.3	130.0	80.	28.	-10.	33.0	138.4	60.	358.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
101400Z	31.5	133.0	85	31.7	133.4	75.	24.	-10.	37.6	147.0	50.	142.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
101406Z	32.6	136.4	80	32.4	136.3	75.	13.	-5.	0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
101412Z	34.0	140.1	70	34.0	139.9	75.	10.	5.	0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
101418Z	35.5	145.0	60	36.2	145.1	60.	42.	0.	0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
101500Z	36.0	149.2	50	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	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.	119.	248.	378.	18.	120.	248.	370.
AVG RIGHT ANGLE ERROR	12.	66.	137.	273.	12.	65.	137.	273.
AVG INTENSITY MAGNITUDE ERROR	5.	20.	27.	37.	5.	19.	27.	37.
AVG INTENSITY BIAS	-1.	-8.	-13.	-15.	0.	-10.	-13.	-15.
NUMBER OF FORECASTS	44	41	36	30	43	40	36	30

DISTANCE TRAVELED BY STORM IS 3728. NM

AVERAGE SPEED OF STORM IS 12. KNOTS

SUPER TYPHOON WYNNE
FIX POSITIONS FOR CYCLONE NO. 23

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	021200	9.3N 156.4E	PCN 0		OTHER		PGTW
2	021953	8.2N 155.4E	PCN 6		DMSP37		PGTW
3	022154	7.8N 155.2E	PCN 5	T0.5/0.5	NOAA6	INIT OBS	PGTW
4	030400	7.6N 154.3E	PCN 0		OTHER		PGTW
5	030852	6.6N 153.7E	PCN 6		NOAA6		PGTW
6	031200	6.5N 153.6E	PCN 0		OTHER		PGTW
7	031600	6.3N 153.0E	PCN 0		OTHER		PGTW
8	031800	6.4N 152.7E	PCN 0		OTHER		PGTW
9	032100	6.2N 152.2E	PCN 0		OTHER		PGTW
10	032132	6.0N 152.1E	PCN 3	T2.5/2.5 /D2.0/24HRS	NOAA6		PGTW
11	040000	6.0N 152.0E	PCN E		OTHER		PGTW
12	040400	6.1N 151.6E	PCN E		OTHER		PGTW
13	040511	6.3N 151.2E	PCN 3		TIROSN		PGTW
* 14	041011	5.7N 150.9E	PCN 5		NOAA6		PGTW
* 15	041200	5.6N 150.5E	PCN 0		OTHER		PGTW
16	042109	7.5N 149.8E	PCN 3	T3.5/3.5 /D1.0/24HRS	NOAA6		PGTW
17	050949	9.7N 148.9E	PCN 5		NOAA6		PGTW
18	051200	9.7N 148.4E	PCN 0		OTHER		PGTW
19	051600	10.1N 147.8E	PCN 0		OTHER		PGTW
20	052030	11.5N 147.4E	PCN 6		DMSP37		PGTW
21	052228	11.8N 146.9E	PCN 5	T3.0/3.0+/W0.5/25HRS	NOAA6		PGTW
22	060000	11.9N 146.7E	PCN 0		OTHER		PGTW
23	060400	12.5N 146.3E	PCN 0		OTHER		PGTW
24	060600	12.6N 145.9E	PCN 0		OTHER		PGTW
25	060630	12.6N 146.0E	PCN 3		TIROSN		PGTW

26	060900	13.3N 145.6E	PCN 0		OTHER			PGTW
27	060926	13.3N 145.4E	PCN 3		NOAA6			PGTW
* 28	061200	13.8N 144.6E	PCN 0		OTHER			PGTW
29	061600	14.7N 145.2E	PCN 0		OTHER			PGTW
* 30	061800	15.0N 144.8E	PCN 0		OTHER			PGTW
31	062100	15.0N 144.5E	PCN 0		OTHER			PGTW
32	062206	15.3N 144.4E	PCN 5	T3.0/3.0 /S0.0/24HRS	NOAA6			PGTW
33	070000	15.3N 143.9E	PCN 0		OTHER			PGTW
34	070400	15.7N 144.1E	PCN 0		OTHER			PGTW
35	070618	16.0N 143.9E	PCN 5		TIROSN			PGTW
36	070900	16.2N 143.8E	PCN 0		OTHER			PGTW
37	070904	16.2N 143.4E	PCN 6		NOAA6			PGTW
* 38	071600	17.2N 142.7E	PCN 0		OTHER			PGTW
39	071903	17.1N 142.7E	PCN 5		TIROSN			PGTW
40	071903	17.8N 143.0E	PCN 5		TIROSN			RPMK
41	072100	17.3N 142.5E	PCN 0		OTHER			PGTW
42	072143	16.8N 142.1E	PCN 5	T4.0/4.0 /D1.0/24HRS	NOAA6			PGTW
43	080000	17.0N 142.1E	PCN E		OTHER			PGTW
44	080400	17.3N 141.5E	PCN E		OTHER			PGTW
45	080600	17.5N 141.1E	PCN C		OTHER			PGTW
46	080607	17.4N 141.1E	PCN 3		TIROSN			PGTW
47	080900	17.7N 140.6E	PCN C		OTHER			PGTW
48	081023	17.7N 140.4E	PCN 3		NOAA6			PGTW
49	081200	17.8N 140.1E	PCN E		OTHER			PGTW
50	081600	18.4N 139.4E	PCN E		OTHER			PGTW
51	082100	18.5N 138.7E	PCN E		OTHER			PGTW
52	082107	18.0N 138.6E	PCN 2	T5.5/5.5	DMSP37	INIT OBS		RKSO
* 53	082211	18.4N 138.4E	PCN 1		NOAA6	PSN BASED ON DISTINCT EYE		RPMB
54	082302	18.8N 138.1E	PCN 1		NOAA6			RKSO
55	082302	18.8N 138.1E	PCN 1	T5.0/5.0 /D1.5/25HRS	NOAA6			PGTW
56	090300	18.0N 137.6E	PCN E		OTHER			PGTW
57	090555	19.1N 137.1E	PCN 1		TIROSN			PGTW
58	090900	19.2N 136.7E	PCN E		OTHER			PGTW
59	091000	19.3N 136.5E	PCN 1		NOAA6			PGTW
60	091200	19.3N 136.1E	PCN E		OTHER			PGTW
61	091600	19.8N 135.3E	PCN E		OTHER			PGTW
62	092100	20.3N 134.2E	PCN E		OTHER			PGTW
* 63	092149	20.7N 133.6E	PCN 1		NOAA6	PSN BASED ON WELL DEFINED EYE		RPMB
64	092240	20.3N 133.8E	PCN 1	T6.5/6.5 /D1.0/24HRS	NOAA6			PGTW
65	100300	20.6N 132.7E	PCN E		OTHER			PGTW
* 66	100725	21.7N 132.0E	PCN 1		NOAA6	EYE PARTIALLY CLD FILLED		RPMB
67	100900	21.2N 131.5E	PCN E		OTHER			PGTW
68	101119	21.4N 130.9E	PCN 1		NOAA6			PGTW
69	101829	21.8N 129.8E	PCN 1		TIROSN			RPMK
70	101829	21.8N 129.5E	PCN 1		TIROSN			PGTW
71	102100	22.4N 129.3E	PCN E		OTHER			RODN
72	110000	22.6N 128.8E	PCN E		OTHER			PGTW
73	111057	23.5N 127.2E	PCN 1		NOAA6			PGTW
74	111200	23.5N 127.1E	PCN E		OTHER			PGTW
75	112100	24.4N 126.3E	PCN E		OTHER			PGTW
76	112336	24.8N 126.2E	PCN 1	T6.0/6.0	NOAA6	INIT OBS		PGTW
77	120900	25.7N 125.5E	PCN E		OTHER			PGTW
78	121034	25.8N 125.6E	PCN 1		NOAA6			PGTW
79	121034	27.1N 126.4E	PCN C		OTHER			PGTW
80	121947	27.3N 126.3E	PCN 5		TIROSN			RPMK
81	122314	27.7N 126.3E	PCN 3	T4.5/5.5-/W1.5/24HRS	NOAA6			PGTW
* 82	130651	29.1N 127.9E	PCN 3	T4.0/4.5-	TIROSN	INIT OBS		RKSO
* 83	130651	28.9N 127.4E	PCN 1	T5.0/5.0-	TIROSN	INIT OBS		RODN
84	130900	29.4N 128.0E	PCN C		OTHER			PGTW
85	131935	30.8N 131.2E	PCN 3		TIROSN			RKSO
86	132100	30.9N 132.0E	PCN 0		OTHER			PGTW
87	132251	31.4N 132.5E	PCN 3	T4.0/4.5 /W0.5/24HRS	NOAA6			PGTW
88	140000	31.5N 133.1E	PCN C		OTHER			PGTW
89	140300	32.2N 134.9E	PCN 0		OTHER			PGTW
90	140900	33.3N 137.8E	PCN 0		OTHER			PGTW
91	140940	33.6N 138.8E	PCN 5		NOAA6			PGTW
92	141600	35.8N 143.3E	PCN 0		OTHER			PGTW
93	142100	35.9N 146.8E	PCN 0		OTHER			PGTW
94	150000	35.1N 148.6E	PCN 0		OTHER			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/ORIENTATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN ND.
1	040122	5.7N 152.0E	700MB	2954	984	75 110 20	210 82 110 20	15 2	CIRCULAR	10	+11 +16 +10	1
2	040332	5.9N 151.7E	700MB	2919	976	65 020 15	110 55 030 20	10 2	CIRCULAR	12	+12 +20 + 9	1
3	041617	7.1N 149.9E	700MB	3064			320 30 220 8	5 2	CIRCULAR	15	+13 +15 +10	2
4	041624	7.6N 149.6E	700MB	3044			270 57 160 9	5 2				2
5	042111	7.6N 149.6E	700MB	3098		45 010 5	010 26 270 25	5 2	CIRCULAR	15	+12 +13 + 9	2
6	050320	8.4N 149.3E	700MB	3068	997	45 350 20	010 32 300 15	4 3			+10 +17 + 8	3
7	050621	9.0N 149.1E	700MB	3047	996	80 090 30	160 74 100 12	4 3			+14 +17 + 8	3
* 8	050855	8.3N 149.0E	700MB	3122	1006		070 31 330 130	10 7			+10 +12 + 7	4
* 9	051142	8.9N 148.1E	700MB	3135			140 29 020 160	10 5				4
10	051615	10.3N 146.8E	700MB	3127	1008		100 20 340 100	10 5			+12 +10 + 8	5
11	051831	10.4N 146.7E	700MB	3125			090 24 340 130	6 5				5
* 12	052011	10.5N 146.3E	700MB	3127	1008		200 19 120 105	6 5			+ 9 +11 + 8	5
13	060052	11.8N 146.6E	700MB	3054		45 270 5	300 52 270 15	2 1	ELLIPTICAL	13 10 050		6
14	060305	12.2N 146.4E	700MB	3041	999	50 060 5	190 45 140 10	2 4	ELLIPTICAL	18 13 030	+ 9 +14 + 6	6
15	060618	12.9N 146.4E	700MB	3070	994	70 100 15	120 46 100 5	2 7				7
16	060907	13.4N 146.2E	700MB	3090	1002		150 49 040 30	2 5			+16 +12 + 8	7
17	061207	13.8N 146.0E	700MB	3081			080 40 340 13	2 5				7
18	061514	14.4N 145.6E	700MB	3073			180 50 090 12	2 2			+11 +15	8
19	070317	15.5N 144.5E	700MB	3033	992	50 360 7	340 44 270 10	3 1	CIRCULAR	20	+ 9 +14 + 8	10
20	071445	16.5N 143.3E	700MB	2965	994		070 70 010 20	5 1	CIRCULAR	15	+11 +16 + 9	12
21	080240	17.1N 141.5E	700MB	2882	975	80 030 15	200 53 100 8	6 5	ELLIPTICAL	25 15 040	+ 9 +14 +12	14
22	081245	17.9N 139.9E	700MB	2660			030 108 350 10	4 1	CIRCULAR	12		15
23	081511	18.3N 139.4E	700MB	2578	952		350 87 270 15	4 1	CIRCULAR	13	+11 +16 +12	15
24	082326	18.7N 138.1E	700MB	2197		130 120 7	130 115 090 12	5 1				16
25	090236	18.8N 137.6E	700MB	2130	890	130 290 16	010 110 290 14	5 1	CIRCULAR	10	+13 +29 +15	16
26	091255	19.6N 135.9E	700MB	2207			180 113 090 10	5 1	CIRCULAR	12		17
27	091437	19.8N 135.6E	700MB	2199	898		260 110 180 10	5 1	CONCENTRIC	11 34	+14 +22 +17	17
28	100012	20.5N 133.3E	700MB	2313		100 100 20	200 114 150 14	4 1	CIRCULAR	20		18
29	100250	20.6N 132.8E	700MB	2309	912	100 010 8	020 104 270 12	3 1	CIRCULAR	19	+10 +17 +17	18

30	101120	21.6N	131.0E	700MB	2267	907				200	114	100	10	5	2	CIRCULAR	17		+13	+19		21
31	101423	21.7N	130.2E	700MB	2262	906				010	124	280	12	7	2	CIRCULAR	18		+12	+17		21
32	110055	22.8N	128.8E	700MB	2384		100	090	10	180	75	090	20	4	1							22
33	110201	22.9N	128.5E	700MB	2372	918	100	090	10	010	73	270	30	4	1	CIRCULAR	20		+14	+18	+14	22
34	110740	23.5N	122.7E	700MB	2349		100	130	15	200	107	130	20	10	2							23
35	110912	23.6N	127.6E	700MB	2338	914	110	230	15	320	100	230	15	10	4	CIRCULAR	20		+13	+20	+16	23
36	111222	23.7N	127.1E	700MB	2325					090	110	030	15	5	1	CIRCULAR	17					24
37	111440	24.0N	126.7E	700MB	2346	915				220	115	140	15	5	1	CIRCULAR	19		+14	+17		24
38	112120	24.5N	126.3E	700MB	2421	924				110	95	030	10	7	2	CIRCULAR	18		+15	+17	+16	25
39	120026	24.8N	126.1E	700MB	2437		100	330	15	290	58	210	30	5	3							25
40	120349	25.1N	125.7E	700MB	2435	925	80	360	25	090	68	360	61	4	1	CIRCULAR	15		+14	+17	+14	26
41	120700	25.7N	125.8E	700MB	2413		100	100	30	210	97	130	16	4	1							26
42	121019	25.8N	125.6E	700MB	2428	925				100	62	090	150	10	2	CIRCULAR	20		+13	+19	+16	27
43	121320	26.3N	125.7E	700MB	2454	927				210	55	150	110	10	2	ELLIPTICAL	13	10	120	+15	+18	+17	27
44	130133	28.1N	126.5E	700MB	2564		45	080	115	160	71	080	85	5	2							29
45	130315	28.4N	126.6E	700MB	2582	943				210	72	130	75	5	2					+13	+18	+17	29
46	131239	29.9N	128.7E	700MB						150	76	060	60	10	2								30
47	131505	30.1N	129.3E	700MB						320	79	260	60	4	2					+18	+18	+14	30
48	140022	31.5N	133.0E	700MB	2659		70	070	30	180	68	070	60	2	2								31
49	140230	31.8N	134.2E	700MB	2720	956	100	250	60	330	81	250	30	2	2					+15	+15	+14	31
50	140528	32.4N	135.8E	700MB	2791		80	150	9	160	56	070	90	5	2								32
51	140734	32.8N	136.9E	700MB	2783		80	150	30	240	81	150	30	5	5					+14	+16	+14	32

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	052335	12.0N	146.7E	LAND	GOOD	CIRCULAR	20			WALL CLD OPEN N-E	13.6N	144.9E	91218
2	060135	12.0N	146.6E	LAND	GOOD	CIRCULAR	20				13.6N	144.9E	91210
3	060235	12.3N	146.4E	LAND	GOOD	CIRCULAR	20				13.6N	144.9E	91218
4	060335	12.5N	146.4E	LAND	GOOD	CIRCULAR				WALL CLD OPEN E	13.6N	144.9E	91218
5	060435	12.6N	146.3E	LAND	FAIR	CIRCULAR	20				13.6N	144.9E	91218
6	060535	12.7N	146.1E	LAND	POOR						13.6N	144.9E	91218
* 7	060635	13.1N	146.1E	LAND	POOR						13.6N	144.9E	91218
8	060810	13.3N	146.3E	LAND	POOR						13.6N	144.9E	91218
* 9	060910	13.7N	146.3E	LAND	POOR						13.6N	144.9E	91218
10	060935	13.8N	146.3E	LAND	POOR						13.6N	144.9E	91218
11	061010	13.7N	146.1E	LAND	POOR						13.6N	144.9E	91218
12	061135	13.8N	146.0E	LAND	POOR						13.6N	144.9E	91218
13	061210	13.8N	146.0E	LAND	POOR						13.6N	144.9E	91218
14	061235	13.8N	146.0E	LAND	POOR						13.6N	144.9E	91218
15	061335	14.1N	145.6E	LAND	POOR						13.6N	144.9E	91218
16	061410	14.3N	145.9E	LAND	FAIR	CIRCULAR	30			WALL CLD OPEN N	13.6N	144.9E	91218
17	061435	14.4N	145.8E	LAND	GOOD	CIRCULAR	23			WALL CLD OPEN N	13.6N	144.9E	91218
18	061510	14.7N	145.5E	LAND	GOOD	CIRCULAR	25			WALL CLD OPEN SW-NE	13.6N	144.9E	91218
19	061535	14.6N	145.6E	LAND	GOOD	CIRCULAR	23			WALL CLD OPEN N	13.6N	144.9E	91218
20	061735	14.9N	145.3E	LAND	GOOD	CIRCULAR	22				13.6N	144.9E	91218
21	061835	15.0N	145.3E	LAND	GOOD	CIRCULAR	22			WALL CLD OPEN N	13.6N	144.9E	91218
22	061910	15.0N	145.1E	LAND	GOOD	CIRCULAR	20				13.6N	144.9E	91218
23	061935	15.1N	145.1E	LAND	GOOD	CIRCULAR	20				13.6N	144.9E	91218
24	062010	15.2N	145.0E	LAND	FAIR	CIRCULAR	20			WALL CLD OPEN N	13.6N	144.9E	91218
25	062035	15.2N	145.0E	LAND	FAIR	CIRCULAR	20			WALL CLD OPEN N	13.6N	144.9E	91218
26	062335	15.4N	144.4E	LAND	FAIR						13.6N	144.9E	91218
27	070035	15.4N	144.3E	LAND	FAIR						13.6N	144.9E	91218
28	070310	15.6N	144.1E	LAND	GOOD	CIRCULAR	25				13.6N	144.9E	91218
29	070335	15.7N	144.0E	LAND	GOOD	CIRCULAR	25			NORTHERN HALF WYNNE ATTENUATED	13.6N	144.9E	91218
30	070434	15.7N	144.0E	LAND	GOOD	CIRCULAR	25				13.6N	144.9E	91218
31	070535	15.8N	144.0E	LAND	GOOD						13.6N	144.9E	91218
32	070635	15.9N	143.9E	LAND	GOOD					NORTHERN HALF WYNNE ATTENUATED	13.6N	144.9E	91218
33	070735	15.9N	143.9E	LAND	GOOD					NORTHERN HALF WYNNE ATTENUATED	13.6N	144.9E	91218
34	070810	16.0N	143.8E	LAND	FAIR						13.6N	144.9E	91218
35	070835	16.1N	143.7E	LAND	POOR						13.6N	144.9E	91218
36	110700	23.5N	127.8E	LAND				20713	52814		26.2N	127.8E	47937
37	110735	23.4N	127.7E	LAND	FAIR						26.4N	127.8E	47935
38	110800	23.4N	127.8E	LAND				65/02	/////		24.3N	124.2E	47918
39	110800	23.6N	127.6E	LAND				3///3	5////		24.8N	125.3E	47927
40	110800	23.5N	127.7E	LAND				20613	52805		26.2N	127.8E	47937
41	110900	23.4N	127.5E	LAND				65/13	52716		24.3N	124.2E	47918
42	110900	23.5N	127.5E	LAND				20873	52508		24.8N	125.3E	47927
43	111000	23.4N	127.4E	LAND				65/13	53008		24.3N	124.2E	47918
44	111000	23.6N	127.4E	LAND				20723	53008		28.4N	125.3E	47927
45	111000	23.6N	127.5E	LAND				11174	72905		26.2N	127.8E	47937
46	111100	23.5N	127.4E	LAND				65/13	72809		24.3N	124.2E	47918
47	111100	23.6N	127.3E	LAND				20813	53005		28.4N	125.3E	47927
48	111100	23.7N	127.4E	LAND				10713	73006		26.2N	127.8E	47937
49	111130	23.7N	127.3E	LAND	FAIR						26.4N	127.8E	47935
50	111200	23.6N	127.2E	LAND				11717	52608		28.4N	125.3E	47927
51	111200	23.6N	127.2E	LAND				10702	73207		24.3N	124.2E	47918
52	111205	23.8N	127.2E	LAND	FAIR						26.4N	127.8E	47935
53	111235	23.8N	127.2E	LAND	FAIR						26.4N	127.8E	47935
54	111300	23.8N	127.2E	LAND				10713	53511		28.4N	125.3E	47927
55	111300	23.7N	127.2E	LAND				10712	73006		26.2N	127.8E	47937
56	111300	23.7N	127.2E	LAND				10712	73206		24.3N	124.2E	47918
57	111310	23.9N	127.1E	LAND	FAIR						26.4N	127.8E	47935
58	111400	23.8N	127.1E	LAND				10713	53305		28.4N	125.3E	47927
59	111400	23.8N	127.2E	LAND				10713	73105		26.2N	127.8E	47937
60	111400	23.7N	127.1E	LAND				10713	73207		24.3N	124.2E	47918
61	111500	24.0N	127.0E	LAND				11843	53314		28.4N	125.3E	47927
62	111500	24.0N	127.1E	LAND				10713	73207		26.2N	127.8E	47937
63	111500	23.9N	127.1E	LAND				10713	73406		24.3N	124.2E	47918
64	111600	24.2N	126.9E	LAND				11713	53214		28.4N	125.3E	47927
65	111600	24.2N	127.0E	LAND				20743	73410		26.2N	127.8E	47937
66	111600	24.1N	126.9E	LAND				10612	73311		24.3N	124.2E	47918
67	111700	24.3N	126.7E	LAND				10612	53015		28.4N	125.3E	47927
68	111700	24.3N	126.8E	LAND				20613	73311		26.2N	127.8E	47937
69	111700	24.3N	126.7E	LAND				10512	73215		24.3N	124.2E	47918
70	111800	24.4N	126.6E	LAND				20613	73112		26.2N	127.8E	47937
71	111900	24.3N	126.3E	LAND				12812	52506		28.4N	125.3E	47927
72	111900	24.3N	126.5E	LAND				20714	72716		26.2N	127.8E	47937
73	111900	24.3N	126.3E	LAND				55/42	72911		24.3N	124.2E	47918
74	112000	24.3N	126.3E	LAND				11712	52004		28.4N	125.3E	47927
75	112000	24.2N	126.4E	LAND				20712	72608		26.2N	127.8E	47937
76	112000	24.2N	126.3E	LAND				55/42	72613		24.3N	124.2E	47918
77	112100	24.3N	126.4E	LAND				10513	50505		28.4N	125.3E	47927
78	112100	24.3N	126.4E	LAND				10612	72102		24.3N	124.2E	47918
79	112200	24.5N	126.3E	LAND				10513	53312		28.4N	125.3E	47927
80	112200	24.5N	126.4E	LAND				20613	73106		26.2N	127.8E	47937

81	112200	24.5N	126.4E	LAND		11712	70104	24.3N	124.2E	47918
82	112300	24.7N	126.3E	LAND		10512	53511	28.4N	125.3E	47927
83	112300	24.6N	126.3E	LAND		20613	73509	26.2N	127.8E	47937
84	112300	24.6N	126.3E	LAND		12812	73507	24.3N	124.2E	47918
85	120100	24.9N	126.0E	LAND		29612	732//	24.3N	124.2E	47918
86	120100	24.9N	125.9E	LAND		11512	53013	28.4N	125.3E	47927
87	120100	24.9N	126.0E	LAND		20512	73210	26.2N	127.8E	47937
88	120110	25.0N	126.0E	LAND	FAIR			26.4N	127.8E	47935
89	120130	25.1N	125.9E	LAND	FAIR			26.4N	127.8E	47935
90	120200	24.9N	125.9E	LAND		20612	73108	26.2N	127.8E	47937
91	120200	25.0N	125.9E	LAND		21812	73111	24.3N	124.2E	47918
92	120200	25.0N	125.8E	LAND		12512	52908	28.4N	125.3E	47927
93	120300	25.0N	125.8E	LAND		10512	53504	28.4N	125.3E	47927
94	120300	25.0N	125.8E	LAND		21612	72907	24.3N	124.2E	47918
95	120400	25.0N	125.8E	LAND		10513	72704	26.2N	127.8E	47936
96	120400	25.0N	125.8E	LAND		10513	73104	24.3N	124.2E	47918
97	120400	25.1N	125.8E	LAND		10512	53604	28.4N	125.3E	47927
98	120500	25.0N	125.8E	LAND		10513	73204	26.2N	127.8E	47937
99	120500	25.1N	125.8E	LAND		20514	73404	24.3N	124.2E	47918
100	120700	25.4N	125.8E	LAND		20614	73508	24.3N	124.2E	47918
101	120700	25.6N	125.8E	LAND		11412	53512	28.4N	125.3E	47927
102	120700	25.4N	125.8E	LAND		10515	73608	26.2N	127.8E	47937
103	120800	25.6N	125.6E	LAND		12512	53008	28.4N	125.3E	47927
104	120800	25.5N	125.7E	LAND		20612	73511	26.2N	127.8E	47937
105	120900	25.6N	125.8E	LAND		5//42	73609	28.4N	125.3E	47927
106	120900	25.7N	125.7E	LAND		11802	73308	24.3N	124.2E	47918
107	120900	25.7N	125.6E	LAND		10412	53308	28.4N	125.3E	47927
108	120935	25.8N	125.8E	LAND	GOOD			26.4N	127.8E	47935
109	121000	25.9N	125.6E	LAND		10512	50308	28.4N	125.3E	47927
110	121000	25.7N	125.6E	LAND		10513	73407	26.2N	127.8E	47937
111	121000	25.7N	125.7E	LAND		21712	73306	24.3N	124.2E	47918
112	121010	25.8N	125.8E	LAND	GOOD			26.4N	127.8E	47935
113	121035	25.9N	125.8E	LAND	GOOD			26.4N	127.8E	47935
114	121100	25.8N	125.7E	LAND		11812	73305	24.3N	124.2E	47918
115	121100	25.9N	125.6E	LAND		10412	53504	28.4N	125.3E	47927
116	121100	25.8N	125.7E	LAND		10513	70105	26.2N	127.8E	47937
117	121110	26.0N	125.8E	LAND	GOOD			26.4N	127.8E	47935
118	121135	26.0N	125.7E	LAND	GOOD			26.4N	127.8E	47935
119	121200	25.9N	125.6E	LAND		10512	53305	28.4N	125.3E	47927
120	121200	26.0N	125.8E	LAND		45//2	70207	24.3N	124.2E	47918
121	121210	26.2N	125.7E	LAND	GOOD			26.4N	127.8E	47935
122	121235	26.1N	125.9E	LAND	GOOD			26.4N	127.8E	47935
123	121300	26.2N	125.7E	LAND		10512	50214	28.4N	125.3E	47927
124	121300	26.1N	125.7E	LAND		10554	70100	26.2N	127.8E	47937
125	121300	26.0N	125.7E	LAND		55//2	70105	24.3N	124.2E	47918
126	121335	26.3N	125.8E	LAND	GOOD			26.4N	127.8E	47935
127	121400	26.4N	125.7E	LAND		11512	53612	28.4N	125.3E	47927
128	121400	26.1N	125.7E	LAND		10434	70105	26.2N	127.8E	47937
129	121410	26.4N	125.8E	LAND	GOOD			26.4N	127.8E	47935
130	121435	26.5N	125.9E	LAND	GOOD			26.4N	127.8E	47935
131	121500	26.4N	125.7E	LAND		10412	53006	28.4N	125.3E	47927
132	121510	26.6N	125.8E	LAND	GOOD			26.4N	127.8E	47935
133	121535	26.6N	125.9E	LAND	GOOD			26.4N	127.8E	47935
134	121600	26.6N	125.8E	LAND		12513	50214	28.4N	125.3E	47927
135	121600	26.5N	125.7E	LAND		10512	73608	26.2N	127.8E	47937
136	121610	26.7N	125.9E	LAND	GOOD			26.4N	127.8E	47935
137	121635	26.7N	125.9E	LAND	GOOD			26.4N	127.8E	47935
138	121700	26.7N	125.7E	LAND		10413	53406	28.4N	125.3E	47927
139	121700	26.6N	126.0E	LAND		/////	/////	26.2N	127.8E	47937
140	121710	26.8N	125.9E	LAND	GOOD			26.4N	127.8E	47935
141	121800	26.9N	125.9E	LAND		11613	50316	28.4N	125.3E	47927
142	122100	27.4N	126.1E	LAND		72742	50308	28.4N	125.3E	47927
143	122100	27.3N	125.9E	LAND		10612	70110	26.2N	127.8E	47937
144	122200	27.5N	126.0E	LAND		20412	70110	26.2N	127.8E	47937
145	130100	28.0N	126.3E	LAND		20562	70311	26.2N	127.8E	47937
146	130100	28.1N	126.5E	LAND		25/12	50416	28.4N	129.5E	47909
147	130200	28.2N	126.6E	LAND		55//2	50614	28.4N	129.5E	47909
148	130200	28.3N	126.5E	LAND		35//2	70315	26.2N	127.8E	47937
149	130300	28.4N	126.7E	LAND		55/12	50313	28.4N	129.5E	47909
150	130400	28.6N	126.9E	LAND		55112	50413	28.4N	129.5E	47909
151	130500	28.7N	127.0E	LAND		55/12	50310	28.4N	129.5E	47909
152	130700	29.2N	127.4E	LAND		25/82	50316	28.4N	129.5E	47909
153	130800	28.2N	127.6E	LAND		55/43	50613	28.4N	129.5E	47909
154	130900	29.3N	127.9E	LAND		55/12	50813	28.4N	129.5E	47909
155	131000	29.4N	128.0E	LAND		55/12	50613	28.4N	129.5E	47909
156	131100	29.6N	128.5E	LAND		55/12	50722	28.4N	129.5E	47909
157	131200	29.6N	128.5E	LAND		55/42	50411	28.4N	129.5E	47909
158	131300	29.8N	128.9E	LAND		55/42	50619	28.4N	129.5E	47909
159	131400	29.9N	129.1E	LAND		55/42	50713	28.4N	129.5E	47909
160	131400	29.0N	129.2E	LAND		5///1	50622	30.6N	131.0E	47869
161	131500	30.0N	129.5E	LAND		55/12	50719	28.4N	129.5E	47909
162	131500	30.1N	129.5E	LAND		5///1	50722	30.6N	131.0E	47869
163	131600	30.2N	129.8E	LAND		55/12	50622	28.4N	129.5E	47909
164	131600	30.1N	129.9E	LAND		5///1	50819	30.6N	131.0E	47869
165	131700	30.3N	130.2E	LAND		55/42	50819	28.4N	129.5E	47909
166	131700	30.3N	130.2E	LAND		5///1	50619	30.6N	131.0E	47869
167	131000	30.5N	130.4E	LAND		65/62	50619	28.4N	129.5E	47909
168	131000	30.3N	130.7E	LAND		5///1	50830	30.6N	131.0E	47869
169	131900	30.5N	130.9E	LAND		65/12	50827	28.4N	129.5E	47909
170	131900	30.5N	131.1E	LAND		22601	50622	30.6N	131.0E	47869
171	132000	30.8N	131.4E	LAND		65/62	50624	28.4N	129.5E	47909
172	132000	30.8N	131.3E	LAND		4//41	50522	30.6N	131.0E	47869
173	132100	31.0N	131.6E	LAND		65/42	50419	28.4N	129.5E	47909
174	132100	31.1N	131.9E	LAND		4///1	50627	30.6N	131.0E	47869
175	132200	31.2N	132.1E	LAND		65//2	4////	33.3N	134.2E	47899
176	132200	31.2N	132.1E	LAND		4///1	50616	30.6N	131.0E	47869
177	132300	31.3N	132.5E	LAND		65//2	50722	33.3N	134.2E	47899
178	132300	31.2N	132.7E	LAND		5///0	50827	30.6N	131.0E	47869
179	140100	31.5N	133.5E	LAND		65//1	50627	33.3N	134.2E	47899
180	140100	31.4N	133.5E	LAND		6///0	50716	30.6N	131.0E	47869
181	140200	31.7N	134.1E	LAND		65//1	50632	33.3N	134.2E	47899
182	140200	31.6N	134.1E	LAND		7////	50735	30.6N	131.0E	47869
183	140300	31.8N	134.5E	LAND		65//1	50727	33.3N	134.2E	47899
184	140400	32.1N	135.0E	LAND		65//1	50632	33.3N	134.2E	47899
185	140400	31.9N	135.2E	LAND		6////	50727	35.4N	138.7E	47639
186	140500	32.4N	135.6E	LAND		55//1	50632	33.3N	134.2E	47899
187	140500	32.1N	135.5E	LAND		401//	50622	35.3N	138.7E	47639
188	140700	32.8N	136.8E	LAND		65//1	50638	33.3N	134.2E	47899
189	140700	32.5N	136.8E	LAND		55917	70727	35.3N	138.7E	47639
190	140800	33.0N	137.4E	LAND		75///	50632	33.3N	134.2E	47899
191	140800	32.9N	137.6E	LAND		55///	70738	35.3N	138.7E	47639
192	140900	33.3N	138.2E	LAND		55///	70638	35.3N	138.7E	47639
193	141000	33.7N	138.9E	LAND		65///	70641	35.3N	138.7E	47639
194	141100	33.7N	139.6E	LAND		65///	70738	35.3N	138.7E	47639
195	141200	33.7N	140.2E	LAND		65///	70835	35.3N	138.7E	47639

TROPICAL STORM ALEX

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
							ERRORS					ERRORS					ERRORS						
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
100806Z	19.1	162.0	15	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100812Z	18.3	161.1	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.
100818Z	17.7	160.3	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.
100900Z	17.8	159.5	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.
100906Z	18.0	158.8	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.
100912Z	18.3	158.2	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.
100918Z	18.6	157.4	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.
101000Z	19.1	155.9	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.
101006Z	19.4	154.8	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.
101012Z	20.0	153.7	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.
101018Z	20.7	152.6	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.
101100Z	21.4	151.3	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101106Z	22.3	150.3	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.
101112Z	22.6	149.1	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.
101118Z	22.6	147.7	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101200Z	23.2	146.6	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.
101206Z	23.9	145.3	30	23.6	145.0	30.	24.	9.	27.0	142.0	40.	96.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101212Z	24.6	144.1	30	24.2	144.5	30.	32.	0.	26.3	141.1	40.	157.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101218Z	25.4	142.8	30	25.4	143.0	30.	11.	0.	29.9	141.3	40.	42.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101300Z	26.2	141.7	30	26.8	141.3	30.	42.	0.	32.5	140.5	45.	175.	20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101306Z	27.2	140.2	35	27.2	140.6	35.	21.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101312Z	28.7	139.9	30	28.2	139.8	35.	30.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101318Z	30.6	141.4	30	30.3	141.7	30.	24.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
101400Z	33.7	143.7	25	33.1	143.4	25.	39.	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.	118.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	17.	45.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	1.	11.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	1.	11.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	8	4	0	0	0	0	0	0

DISTANCE TRAVELED BY STORM IS 1844. NM

AVERAGE SPEED OF STORM IS 13. KNOTS

TROPICAL STORM ALEX
FIX POSITIONS FOR CYCLONE NO. 24

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	080841	19.4N 161.7E	PCN 6		NOAA6		PGTW
* 2	081600	19.7N 160.4E	PCN 0		OTHER		PGTW
3	082121	18.1N 159.4E	PCN 5	T1.0/1.0	NOAA6	INIT OBS	PGTW
4	090300	18.4N 159.1E	PCN 0		OTHER		PGTW
5	091200	18.7N 158.1E	PCN 0		OTHER		PGTW
6	091600	18.7N 157.6E	PCN 0		OTHER		PGTW
7	092058	18.8N 156.1E	PCN 5	T1.5/1.5 /D0.5/24HRS	NOAA6		PGTW
8	100938	19.6N 153.8E	PCN 5		NOAA6	ULCC 20.9 155.1	PGTW
* 9	102217	22.5N 153.1E	PCN 5	T1.5/1.5 /S0.0/24HRS	NOAA6	UL ONLY	PGTW
10	110915	22.7N 150.0E	PCN 5		NOAA6		PGTW
11	111200	23.1N 149.6E	PCN 0		OTHER		PGTW
12	112155	23.1N 147.4E	PCN 5	T2.0/2.0 /D0.5/24HRS	NOAA6		PGTW
13	120600	24.6N 145.6E	PCN 0		OTHER		PGTW
14	120853	24.5N 145.0E	PCN 5		NOAA6		PGTW
15	120900	24.6N 145.0E	PCN 0		OTHER		PGTW
16	122100	26.2N 141.8E	PCN 0		OTHER		PGTW
17	122314	26.2N 141.3E	PCN 5	T2.0/2.0+/S0.0/24HRS	NOAA6		PGTW
18	130900	27.6N 139.7E	PCN 0		OTHER		PGTW
19	131600	29.9N 140.9E	PCN 0		OTHER		PGTW
20	132100	31.8N 142.4E	PCN 0		OTHER		PGTW
21	132251	32.9N 143.0E	PCN 5	T2.5/2.5-/D0.5/24HRS	NOAA6		PGTW
22	140000	33.6N 143.5E	PCN 0		OTHER		PGTW
23	140300	35.5N 145.5E	PCN 0		OTHER		PGTW
24	140900	38.3N 150.1E	PCN 0		OTHER		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	100546	19.4N 154.6E	1500FT		1009	25 050 75	170 25 060 70	3 10			+20 +24 +23 20	1
2	110303	21.9N 150.8E	1500FT		1006	15 070 45	020 15 270 25	8 5			+23 +24 +24 20	2
3	120014	23.3N 146.3E	1500FT		1004	40 030 60	110 51 030 60	5 2			+24 +24 +23 29	3
4	121520	25.1N 143.3E	700MB	3081	1000		080 47 360 20	10 5			+12 +16 +11	5
5	130100	26.2N 141.3E	700MB	3109		35 110 60	160 46 060 15	3 3				6
6	130414	26.9N 140.7E	700MB	3098	999	35 350 10	120 33 360 15	5 3			+15 +17 +10	6

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

TYPHOON BETTY

BEST TRACK DATA

	BEST TRACK		WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
					ERRORS				ERRORS				ERRORS					
MO/DA/HR	POSIT	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
102812Z	7.1	151.3	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.
102818Z	7.3	152.7	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.
102900Z	7.8	153.0	30	8.2	152.9	35.	58.	5.	10.2	149.0	60.	103.	10.	11.8	144.5	70.	117.	-5.	13.2	139.5	80.	197.	-15.
102906Z	8.9	154.2	30	8.9	154.1	35.	6.	5.	11.2	153.2	60.	242.	5.	12.2	149.2	70.	479.	-10.	13.0	144.5	80.	579.	-15.
102912Z	9.9	153.4	35	9.6	153.2	40.	21.	5.	11.9	149.4	60.	130.	0.	12.7	146.2	75.	401.	-10.	13.4	142.6	80.	554.	-10.
102918Z	10.4	152.1	45	10.8	152.0	50.	25.	5.	12.9	147.1	70.	116.	0.	13.6	142.5	95.	274.	-5.	15.8	138.0	90.	397.	-5.
103000Z	10.9	150.6	50	10.6	151.5	50.	56.	0.	12.2	146.0	70.	224.	-5.	14.0	142.0	85.	336.	-10.	16.4	137.5	90.	375.	-5.
103006Z	11.7	149.1	55	11.0	149.2	60.	8.	5.	13.3	143.1	80.	118.	0.	14.7	137.2	85.	153.	-10.	17.0	131.5	90.	146.	-10.
103012Z	12.2	147.2	60	12.4	147.5	60.	21.	0.	13.8	141.3	80.	110.	-5.	15.2	135.7	85.	150.	-5.	18.0	130.5	90.	192.	-15.
103018Z	12.9	145.1	70	12.8	145.7	65.	35.	-5.	14.2	138.9	80.	65.	-10.	16.5	132.8	90.	117.	-5.	20.0	120.2	95.	317.	-10.
103100Z	13.2	143.1	75	13.3	143.5	70.	24.	-5.	15.3	136.4	95.	79.	0.	19.5	130.9	115.	222.	20.	23.5	129.0	105.	550.	-5.
103106Z	13.6	141.1	80	13.6	141.7	80.	35.	0.	16.4	133.9	100.	137.	5.	21.1	129.0	120.	377.	20.	26.2	131.2	110.	749.	0.
103112Z	13.9	139.4	85	14.1	139.3	85.	19.	0.	17.3	132.2	105.	101.	15.	22.2	120.8	115.	431.	10.	27.0	134.2	105.	902.	-10.
103118Z	14.0	137.8	90	13.8	137.5	85.	21.	-5.	15.2	130.3	110.	103.	15.	17.1	125.0	125.	252.	20.	21.0	122.2	120.	434.	0.
110100Z	14.0	136.2	95	14.3	136.3	90.	19.	-5.	15.8	129.8	115.	100.	20.	19.2	125.1	130.	344.	20.	23.3	127.3	115.	527.	-5.
110106Z	14.2	134.6	95	14.1	134.6	90.	6.	-5.	15.8	120.6	115.	107.	15.	19.5	125.0	110.	343.	0.	23.2	127.1	100.	515.	-25.
110112Z	14.4	133.1	90	14.2	132.5	90.	37.	0.	16.6	126.4	100.	192.	-5.	20.8	125.5	95.	388.	-20.	24.7	133.0	85.	780.	-35.
110118Z	14.7	132.0	95	14.8	131.8	85.	13.	-10.	17.2	126.8	80.	102.	-25.	21.6	127.7	75.	432.	-45.	25.3	135.2	60.	940.	-45.
110200Z	14.8	131.2	95	15.0	130.4	85.	48.	-10.	17.6	126.6	80.	221.	-30.	21.6	127.7	75.	430.	-45.	25.8	136.0	50.	1056.	-15.
110206Z	14.9	130.2	100	14.9	130.3	100.	6.	0.	16.8	127.1	80.	156.	-30.	19.6	126.0	70.	294.	-55.	22.0	129.7	60.	605.	10.
110212Z	15.0	129.3	105	15.2	129.4	100.	13.	-5.	16.8	126.2	90.	146.	-25.	19.0	124.8	80.	223.	-40.	22.7	120.2	60.	504.	15.
110218Z	14.7	128.6	105	15.2	128.5	105.	30.	0.	16.7	125.3	100.	129.	-20.	18.9	124.2	80.	228.	-25.	22.6	127.5	60.	435.	15.
110300Z	14.2	128.1	110	14.2	128.1	110.	0.	0.	15.2	127.9	115.	100.	-5.	16.6	125.2	105.	253.	40.	18.0	124.2	95.	203.	50.
110306Z	14.2	127.3	110	14.4	127.7	110.	26.	0.	15.9	126.0	115.	139.	-10.	17.8	124.3	105.	207.	55.	20.0	124.4	95.	103.	50.
110312Z	14.4	126.7	115	14.7	126.6	115.	19.	0.	16.0	123.6	110.	47.	-10.	18.3	121.4	50.	51.	5.	21.4	122.0	60.	13.	15.
110318Z	14.6	125.8	120	14.6	126.0	115.	12.	-5.	15.3	123.1	110.	96.	5.	17.6	121.2	50.	90.	5.	20.8	121.8	65.	127.	25.
110400Z	14.8	124.8	120	14.6	124.9	115.	13.	-5.	15.4	120.9	70.	54.	5.	17.2	117.2	80.	260.	35.	20.3	115.2	65.	560.	25.
110406Z	15.2	123.7	125	14.9	123.5	120.	21.	-5.	16.3	119.1	75.	109.	25.	18.2	115.3	95.	362.	40.	21.0	112.2	65.	813.	30.
110412Z	15.8	122.8	120	14.7	122.5	120.	60.	0.	17.2	118.3	80.	141.	35.	19.5	114.5	85.	447.	40.	22.2	112.4	50.	918.	15.
110418Z	16.0	121.6	105	16.0	121.2	100.	23.	-5.	17.4	117.2	85.	221.	40.	19.9	114.0	85.	539.	45.	23.3	111.9	40.	1086.	5.
110500Z	16.3	120.8	65	16.3	120.5	65.	17.	0.	17.9	116.4	80.	276.	35.	20.8	113.3	65.	651.	25.	0.0	0.0	0.	-0.	0.
110506Z	17.3	120.7	50	17.7	120.7	40.	24.	-10.	22.0	121.0	20.	84.	-25.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110512Z	18.3	120.5	45	18.5	120.3	45.	16.	0.	21.0	120.0	30.	126.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110518Z	19.2	120.6	45	19.6	120.9	45.	29.	0.	23.8	123.6	20.	05.	-20.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110600Z	19.9	120.8	45	19.4	120.7	45.	30.	0.	22.2	122.1	45.	163.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110606Z	20.6	121.2	45	20.6	121.3	40.	6.	-5.	24.4	125.4	25.	60.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110612Z	21.5	122.2	45	21.6	122.4	35.	13.	-10.	25.6	120.4	25.	22.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110618Z	22.4	123.3	40	22.5	123.6	25.	18.	-15.	27.0	132.8	25.	64.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110700Z	23.5	124.7	40	23.5	125.1	40.	22.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110706Z	24.4	126.5	35	24.6	126.3	40.	16.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110712Z	25.6	128.8	35	25.3	128.5	35.	24.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110718Z	26.9	131.6	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.

	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.	131.	306.	524.	23.	131.	306.	524.
AVG RIGHT ANGLE ERROR	14.	81.	215.	405.	14.	81.	215.	405.
AVG INTENSITY MAGNITUDE ERROR	4.	14.	23.	17.	4.	14.	23.	17.
AVG INTENSITY BIAS	-2.	-1.	3.	1.	0.	-1.	3.	1.
NUMBER OF FORECASTS	39	36	29	20	37	36	29	20

DISTANCE TRAVELED BY STORM IS 3228. NM

AVERAGE SPEED OF STORM IS 13. KNOTS

TYPHOON BETTY
FIX POSITIONS FOR CYCLONE NO. 25

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	261200	6.6N 151.3E	PCN 0		OTHER		PGTW
2	262122	4.6N 152.8E	PCN 5		NOAA6		PGTW
3	271001	4.5N 151.9E	PCN 5		NOAA6		PGTW
4	280939	6.4N 151.2E	PCN 5		NOAA6		PGTW
5	281200	7.5N 150.9E	PCN 0		OTHER		PGTW
6	281600	7.0N 150.8E	PCN 0		OTHER		PGTW
7	282210	7.1N 153.1E	PCN 5		NOAA6		PGTW
8	290900	7.5N 152.6E	PCN 0	T2.5/2.5	OTHER	INIT OBS	PGTW
9	290300	8.3N 153.1E	PCN 0		OTHER		PGTW
10	290916	9.4N 153.7E	PCN 5		NOAA6		PGTW
11	291200	9.8N 153.5E	PCN 0		OTHER		PGTW
12	291600	10.0N 152.2E	PCN 0		OTHER		PGTW
13	292023	10.9N 150.9E	PCN 6		DMSP37		PGTW
14	292100	11.1N 150.4E	PCN 0		OTHER		PGTW
15	292156	10.7N 151.1E	PCN 5	T3.5/3.5 /D1.0/22HRS	NOAA6		PGTW
16	300000	11.2N 150.7E	PCN 0		OTHER		PGTW
17	300300	11.0N 150.1E	PCN 0		OTHER		PGTW
18	300515	11.5N 149.5E	PCN 5		TIROSN		PGTW
19	300600	12.4N 148.8E	PCN 0		OTHER		PGTW
20	300854	11.6N 148.3E	PCN 5		NOAA6		PGTW
21	301800	13.0N 145.3E	PCN 6		TIROSN		PGTW
22	302100	12.8N 143.7E	PCN 0		OTHER		PGTW
23	302133	12.8N 144.2E	PCN 5	T4.5/4.5 /D1.0/24HRS	NOAA6		PGTW
24	310300	13.7N 142.3E	PCN 0		OTHER		PGTW
25	310900	13.8N 149.3E	PCN 0		OTHER		PGTW
26	311013	13.9N 139.8E	PCN 3		NOAA6		PGTW
27	311200	13.6N 138.8E	PCN 0		OTHER		PGTW
28	311600	14.3N 138.2E	PCN 0		OTHER		PGTW
29	312121	13.6N 136.8E	PCN 3		DMSP37		PGTW

30	312252	13.6N	136.3E	PCN 3	T5.5/5.5 /D1.0/25HRS	NOAA6			PGTW
31	312252	13.7N	136.6E	PCN 5		NOAA6			RPMK
32	010300	14.0N	135.6E	PCN 0		OTHER			PGTW
33	010900	14.1N	133.3E	PCN 0		OTHER			PGTW
34	010950	14.1N	133.4E	PCN 5		NOAA6			PGTW
35	011200	14.5N	132.9E	PCN 0		OTHER			PGTW
36	011600	14.2N	132.3E	PCN 0		OTHER			PGTW
37	011919	14.5N	131.6E	PCN 5		TIROSN			PGTW
38	011919	14.4N	131.4E	PCN 5		TIROSN			RPMK
39	012230	14.7N	131.3E	PCN 3	T5.0/5.5 /W0.5/24HRS	NOAA6			PGTW
40	020300	14.8N	130.3E	PCN 0		OTHER			PGTW
41	020600	15.2N	130.3E	PCN 0		OTHER			PGTW
42	020900	15.0N	129.7E	PCN 0		OTHER			PGTW
43	021109	15.1N	129.4E	PCN 5		NOAA6			PGTW
44	021200	15.2N	129.1E	PCN 0		OTHER			PGTW
45	022100	14.8N	128.2E	PCN 0		OTHER			PGTW
46	030000	14.4N	127.9E	PCN 0	T6.0/6.0 /D1.0/25HRS	OTHER			PGTW
47	030300	14.3N	127.9E	PCN E		OTHER			PGTW
48	030900	14.5N	127.1E	PCN E		OTHER			PGTW
49	031047	14.6N	127.0E	PCN 1		NOAA6			PGTW
50	031200	14.5N	126.7E	PCN E		OTHER			PGTW
51	032100	14.5N	125.2E	PCN E		OTHER			PGTW
52	032158	14.6N	125.0E	PCN 1		DMSP37			PGTW
53	032326	14.6N	124.9E	PCN 1	T6.5/6.5 /D0.5/24HRS	NOAA6			PGTW
54	040300	14.8N	124.2E	PCN E		OTHER			PGTW
55	040900	15.4N	123.2E	PCN E		OTHER			PGTW
56	041010	15.5N	122.3E	PCN 6		NOAA6			RODN
57	041024	15.6N	123.2E	PCN E		NOAA6			PGTW
58	041200	15.7N	122.6E	PCN E		OTHER			PGTW
59	041600	15.9N	121.6E	PCN E		OTHER			PGTW
60	042100	16.1N	120.9E	PCN 0		OTHER			PGTW
61	042304	16.0N	120.6E	PCN 5	T5.0/6.0 /W1.5/24HRS	NOAA6			PGTW
62	050000	16.3N	120.7E	PCN 0		OTHER			PGTW
63	050300	16.8N	120.9E	PCN 0		OTHER			PGTW
64	050900	17.6N	120.4E	PCN 0		OTHER			PGTW
65	051137	18.1N	120.7E	PCN 6		NOAA5			RODN
66	051200	17.7N	120.2E	PCN 0		OTHER			PGTW
67	052100	18.9N	120.7E	PCN 0		OTHER			PGTW
68	060000	19.5N	121.2E	PCN 0	T3.0/4.0+/W2.0/25HRS	OTHER			PGTW
* 69	060022	19.1N	119.3E	PCN 3	T2.5/2.5	NOAA6	INIT OBS		RPMK
70	060300	20.2N	120.9E	PCN 0		OTHER			PGTW
71	060900	21.1N	121.0E	PCN 0		OTHER			PGTW
72	061115	20.9N	121.5E	PCN 6		NOAA6			RODN
73	061120	21.2N	121.7E	PCN 5		NOAA6			PGTW
74	062100	20.6N	123.5E	PCN 0		OTHER			PGTW
75	070000	22.0N	124.6E	PCN 5	T3.0/3.0	NOAA6	INIT OBS		RKSO
76	070000	23.6N	124.5E	PCN 0	T2.0/3.0 /W1.0/24HRS	OTHER			PGTW
77	070900	24.7N	127.4E	PCN 0		OTHER			PGTW
78	071050	25.5N	128.4E	PCN 5		NOAA6			PGTW
79	071200	25.8N	128.7E	PCN 0		OTHER			PGTW
80	071600	26.8N	130.2E	PCN 0		OTHER			PGTW
81	072337	27.9N	134.1E	PCN 5	T1.0/2.0 /W1.0/24HRS	NOAA6			PGTW
82	080000	27.8N	135.5E	PCN 0		OTHER			PGTW
83	080300	28.0N	137.6E	PCN 0		OTHER			PGTW
84	080600	28.8N	140.2E	PCN 0		OTHER			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 DIAM	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	290451	6.7N 154.2E	1500FT		1001	30 290 120	320 30 290 120	6 8			+25 +25 +24 29	1
2	291526	10.5N 152.6E	700MB	3009	994		140 28 020 20	3 5			+11 +12	2
3	292112	10.3N 151.8E	700MB	3024	993	35 270 10	360 33 270 60	5 5			+11 +13 +12	3
4	300042	11.0N 150.5E	700MB	3024		40 100 20	200 54 110 30	5 6				3
5	300253	11.4N 150.1E	700MB	2999	991	50 070 10	150 84 060 30	5 5			+12 +13 +11	3
6	300833	11.8N 148.5E	700MB	2994	988	35 300 90	050 49 290 60	8 5			+10 +14 +10	4
7	301132	12.1N 147.5E	700MB	2977			130 72 070 20	5 3			+14 +11	4
8	301309	12.4N 146.0E	700MB	2942	981		150 79 070 15	5 3			+12 +15 +13	4
9	311305	13.7N 139.0E	700MB	2771			350 56 280 10	5 2				5
10	311440	13.7N 138.6E	700MB	2760	959		020 96 290 40	10 2			+13 +19 +12	5
11	311034	14.0N 137.8E	700MB	2736			360 57 200 75	5 1				6
12	312128	14.1N 137.0E	700MB		960	100 350 20	080 80 300 20	5 1			+12 +18 +11	6
13	010033	13.9N 136.1E	700MB	2759	962	110 350 17	170 68 070 55	5 1			+13 +18 +13	6
14	011459	14.7N 132.5E	700MB	2790			050 94 320 10	6 5			+11 +17	8
15	020829	14.7N 131.0E	700MB	2749		120 270 20	010 100 270 20	4 3			+11 +21	9
16	020306	14.9N 130.7E	700MB	2734	956	120 090 40	150 112 080 15	4 3			+18 +21 +11	9
17	021131	15.0N 129.6E	700MB				140 63 060 25	5 2			+12 +18	10
18	021404	15.0N 129.0E	700MB		959		350 68 280 70	5 2	ELLIPTICAL	19 10 350	+16 +19 +12	10
19	030026	14.1N 128.1E	700MB	2702		60 290 110	020 87 310 60	8 5			+12 +17	11
20	030302	14.2N 127.5E	700MB	2659	948	80 150 15	230 69 150 20	5 3	CIRCULAR	35	+16 +17 +14	11
21	030544	14.3N 127.6E	700MB	2603		45 330 100	030 90 310 15	8 3	CIRCULAR	30	+15 +17 +12	11
22	031200	14.4N 126.7E	700MB	2474			350 100 270 35	7 1	CIRCULAR	35		12
23	031429	14.4N 126.4E	700MB	2458	928		280 113 210 30	7 1	CIRCULAR	30	+12 +22 +11	12
24	032200	14.6N 125.3E	700MB	2441	926	60 270 10	360 105 270 20	5 5	CIRCULAR	35	+14 +19 +13	13
25	040150	14.8N 124.5E	700MB			130 040 10	170 112 080 14	5 5	CIRCULAR	35		13
26	040340	14.9N 124.1E	700MB	2475	928	130 010 16	030 120 310 22	3 2	CIRCULAR	35	+17 +18 +15	13
27	040851	15.5N 123.1E	700MB	2459	928		320 76 100 25	5 3	CONCENTRIC	25 30	+11 +15 +15	14
28	041106	15.7N 122.8E	700MB	2482				5 3	CIRCULAR	25	+15 +15	14
29	050840	17.9N 120.3E	700MB	2967	987	45 300 30	360 39 280 80	2 10			+12 +11 + 7	15
30	051317	18.8N 120.7E	700MB	3000			130 55 030 110	5 3				16
31	051550	19.2N 120.8E	700MB	2997	988		340 36 240 90	5 3			+14 +14 +10	16
32	060335	20.2N 121.1E	700MB	2999	990	30 040 180	130 39 040 180	5 5			+ 8 +12 +11	17
33	061322	21.9N 122.4E	700MB	3011			320 75 220 100	2 5				18
34	061555	22.1N 122.1E	700MB	3017	993		130 56 030 70	2 5			+12 +12 + 8	19
35	070135	23.8N 125.2E	700MB	3032		40 040 10	330 60 230 80	2 2				19
36	070400	24.2N 125.7E	700MB	3026	994	40 360 15	020 30 300 60	5 2			+14 +15 +10	19

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADAR-CODE ASWNR	TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	032100	14.7N 125.6E	LAND				3////	52720	/999/	14.1N 123.0E	98440
2	032200	14.8N 125.4E	LAND				35//3	52717	/////	14.1N 123.0E	98440
3	032300	14.8N 125.2E	LAND				20/34	52725	///// /999/	14.1N 123.0E	98440
4	040000	14.8N 125.1E	LAND				20/44	73005	///// /999/	14.1N 123.0E	98440
5	040100	14.8N 124.9E	LAND				20/34	53407	///// /999/	14.1N 123.0E	98440
6	040200	14.9N 124.7E	LAND				20/14	53019	///// /999/	14.1N 123.0E	98440
7	040200	16.2N 121.4E	LAND				45///	43205		16.3N 120.6E	98321
8	040300	15.1N 124.5E	LAND				10/95	53214	///// /999/	14.1N 123.0E	98440
9	040500	15.2N 124.1E	LAND				10/15	53108	///// /999/	14.1N 123.0E	98440
10	040700	15.5N 123.7E	LAND				10326	53113	///// /999/	14.1N 123.0E	89440
11	040700	15.4N 123.8E	LAND				1085/	53006	EYE CI DIA 25NM	16.3N 120.6E	98321
12	040800	15.6N 123.5E	LAND				10434	53219	///// /999/	14.1N 123.0E	98440
13	040900	15.8N 123.3E	LAND				10324	53214	///// /999/	14.1N 123.0E	30440
14	040900	15.7N 123.4E	LAND				1190/	53110	EYE EL DIA 20NM		98431
15	041200	16.1N 122.7E	LAND				1083/	52910	EYE 90 PCT CIR OPEN NE DIA 27NM	16.3N 120.6E	98321
16	041300	16.2N 122.6E	LAND				1081/	53406	EYE 90 PCT CIR OPEN NE DIA 27NM	16.3N 120.6E	98321
17	041300	16.2N 122.5E	LAND				109//	/////	/999/	16.3N 120.6E	98321
18	041400	16.2N 122.4E	LAND				1070/	52815	EYE 100 PCT CIR DIA 19NM	16.3N 120.6E	98321
19	041400	16.3N 122.3E	LAND				1083/	43012	EYE 100 PCT CIR DIA 22NM	16.3N 120.6E	90321
20	041400	16.8N 122.1E	LAND				35502	/////	/9999/	16.3N 120.6E	90321
21	041600	16.2N 122.1E	LAND				1068/	52815	EYE 100 PCT CIR DIA 17NM	16.3N 120.6E	98321
22	041600	16.2N 122.0E	LAND				1052/	42706	EYE 100 PCT CIR DIA 17NM	16.3N 120.6E	98321
23	041600	16.1N 121.9E	LAND				1042/	52512	EYE 100 PCT CIR DIA 13NM	16.3N 120.6E	98321
24	041700	16.0N 121.7E	LAND				1114/	52410	EYE EL DIA 5NM	16.3N 120.6E	98321
25	041800	16.1N 121.6E	LAND				35///	43605	EYE ILL DEFINED	16.3N 120.6E	98321
26	041900	16.1N 121.4E	LAND				45///	52910		16.3N 120.6E	90321
27	050200	19.2N 120.1E	LAND				4////	/////		16.3N 120.6E	90321
28	050800	17.7N 120.8E	LAND				35556	632//	EYE OPEN NW		90231
29	051600	18.9N 120.1E	LAND				2290/	/////	EYE 50 PCT EL OPEN SW TO SSW	16.3N 120.6E	98321
30	051600	19.2N 119.9E	LAND				42///	6////		16.3N 120.6E	90321
31	060000	19.1N 120.1E	LAND				4////	/////		16.3N 120.6E	90321
32	060200	19.7N 120.2E	LAND				4////	40312		16.3N 120.6E	98321
33	060500	19.9N 120.9E	LAND				40000	4////		16.3N 120.6E	90321
34	060600	20.0N 120.4E	LAND				4////	43605		16.3N 120.6E	90321
35	060700	20.0N 121.0E	LAND				35642	50637			98231
36	062100	23.4N 124.8E	LAND				6///3	43022		24.8N 125.3E	47927
37	062200	23.7N 125.0E	LAND				6////	50419		24.8N 125.3E	47927
38	070700	24.0N 127.1E	LAND				65/32	50624		26.2N 127.8E	47937
39	070800	24.6N 127.3E	LAND				65912	51511		26.2N 127.8E	47937
40	071000	25.1N 128.1E	LAND				/5//2	70716		26.2N 127.8E	47937
41	071100	25.2N 128.0E	LAND				/5//2	70626		26.2N 127.8E	47937
42	071200	25.4N 128.9E	LAND				65/12	70723		26.2E 127.8E	47937
43	071300	25.4N 129.2E	LAND				65/12	70722		26.2N 127.8E	47937
44	071600	25.9N 130.0E	LAND				65//2	5////		28.4N 129.5E	47909
45	071800	26.6N 131.6E	LAND				65//1	5////		28.4N 129.5E	47909
46	071900	26.7N 132.0E	LAND				65//2	50624		28.4N 129.5E	47909

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

TROPICAL STORM CARY

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	
102818Z	13.8	124.5	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.	
102900Z	13.8	122.5	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.	
102906Z	14.5	121.0	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.	
102912Z	15.1	119.4	30	14.8	120.0	25.	39.	-5.		16.3	115.2	50.	38.	15.		18.5	111.2	55.	260.	20.		20.4	107.7	45.	457.	15.	
102918Z	15.7	118.0	35	15.5	118.3	40.	21.	5.		17.3	113.6	50.	120.	15.		19.1	110.1	45.	311.	10.		21.1	107.2	40.	532.	15.	
103000Z	16.1	117.0	35	16.2	117.0	40.	6.	5.		19.0	113.2	50.	220.	15.		21.3	112.4	45.	481.	10.		25.2	115.7	20.	909.	0.	
103006Z	16.3	116.2	35	16.8	115.7	50.	41.	15.		19.8	112.9	60.	277.	25.		22.0	112.3	50.	489.	20.		0.0	0.0	0.	-0.	0.	
103012Z	16.3	115.6	35	17.0	114.7	50.	103.	15.		21.2	112.4	55.	380.	20.		23.6	113.2	50.	651.	20.		0.0	0.0	0.	-0.	0.	
103018Z	16.0	115.2	35	16.5	114.9	40.	34.	5.		17.6	112.1	35.	101.	0.		18.7	109.4	30.	376.	5.		0.0	0.0	0.	-0.	0.	
103100Z	15.6	114.7	35	16.9	114.2	45.	83.	10.		18.2	111.4	40.	210.	5.		19.5	108.9	30.	456.	10.		0.0	0.0	0.	-0.	0.	
103106Z	15.3	114.1	35	15.6	114.3	45.	21.	10.		15.8	112.2	40.	130.	10.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
103112Z	14.8	113.6	35	15.2	113.2	45.	33.	10.		14.8	109.8	30.	103.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
103118Z	14.7	113.0	35	14.7	112.4	35.	35.	0.		14.5	107.6	20.	156.	-5.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
110100Z	14.6	112.0	35	14.3	112.7	35.	44.	0.		14.0	109.5	30.	146.	10.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
110106Z	13.9	111.1	30	14.5	111.0	35.	36.	5.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
110112Z	13.1	110.1	30	13.6	110.3	30.	32.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
110118Z	12.4	109.2	25	12.5	109.2	25.	6.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.		0.0	0.0	0.	-0.	0.	
110200Z	11.9	108.2	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	38.	180.	421.	630.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	27.	158.	358.	540.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	6.	11.	14.	10.	0.	0.	0.	0.
AVG INTENSITY BIAS	5.	10.	14.	10.	0.	0.	0.	0.
NUMBER OF FORECASTS	14	11	7	3	0	0	0	0

DISTANCE TRAVELED BY STORM IS 1068. NM

AVERAGE SPEED OF STORM IS 10. KNOTS

TROPICAL STORM CARY
FIX POSITIONS FOR CYCLONE NO. 26

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
* 1	281120	11.4N 124.6E	PCN 5		NOAA6		PGTW
* 2	282359	14.7N 128.6E	PCN 5		NOAA6		RPMK
3	290000	15.0N 121.1E	PCN 0		OTHER		PGTW
4	291058	15.4N 118.6E	PCN 5		NOAA6		PGTW
5	291600	15.7N 118.7E	PCN 0		OTHER		PGTW
6	291954	16.9N 117.5E	PCN 6		TIROSN		PGTW
7	292100	17.2N 116.7E	PCN 0		OTHER		PGTW
8	292337	16.1N 116.5E	PCN 5	T2.5/2.5	NOAA6	INIT OBS	PGTW
9	300000	16.5N 116.2E	PCN 0		OTHER		PGTW
10	300300	16.8N 116.3E	PCN 0		OTHER		PGTW
11	300900	18.0N 116.2E	PCN 0		OTHER		PGTW
12	301211	17.7N 114.5E	PCN 5		NOAA6		RODN
13	301600	17.7N 114.5E	PCN 0		OTHER		PGTW
14	301942	16.9N 114.8E	PCN 5		TIROSN	2ND CC 184N 1181E	RPMK
15	301942	16.7N 115.1E	PCN 5		TIROSN		PGTW
16	310300	15.4N 114.7E	PCN 0		OTHER		PGTW
17	310600	15.4N 113.7E	PCN 0		OTHER		PGTW
18	310827	15.0N 114.8E	PCN 5		TIROSN	PRTLY EXPSD LLCC	RPMK
19	310900	15.0N 113.6E	PCN 0		OTHER		PGTW
20	311200	14.5N 113.6E	PCN 0		OTHER		PGTW
21	311600	14.4N 114.1E	PCN 0		OTHER		PGTW
22	312100	14.7N 112.1E	PCN 0		OTHER		PGTW
23	312112	14.5N 113.3E	PCN 6		TIROSN		RPMK
24	010033	14.7N 112.0E	PCN 5	T3.0/3.0	NOAA6	INIT OBS	RPMK
25	010300	14.6N 111.6E	PCN 0		OTHER		PGTW
26	010815	13.5N 110.5E	PCN 5		TIROSN		RPMK
27	010900	13.6N 111.2E	PCN 0		OTHER		PGTW
28	011131	13.2N 110.1E	PCN 5		NOAA6		RODN
29	011200	13.1N 109.7E	PCN 0		OTHER		PGTW
30	011600	12.6N 109.7E	PCN 0		OTHER		PGTW
31	012101	11.5N 108.9E	PCN 5		TIROSN		RPMK

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN- DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	260534	7.8N 136.4E	1500FT		1007	25 090 70	070 28 330 85	8 8			+24 +24 +23 28	1
2	292354	16.1N 117.8E	1500FT		998	030 090 090	200 035 120 035	5 1			+25 +26 29	1
3	301405	16.1N 115.5E	700MB	3050	1001		090 039 020 060	5 5			+14 +10	2

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

TYPHOON DINAH

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
111806Z	4.3	180.1	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.
111812Z	3.8	177.5	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.
111818Z	2.8	175.7	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.
111900Z	2.4	173.9	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.
111906Z	2.7	172.3	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.
111912Z	3.3	170.0	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.
111918Z	4.0	169.5	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.
112000Z	4.8	168.1	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.
112006Z	5.7	166.5	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.
112012Z	7.3	164.7	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.
112018Z	8.6	162.6	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.
112100Z	9.5	160.1	40	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112106Z	10.2	157.7	45	10.5	157.6	35.	19.	-10.	12.6	149.6	45.	32.	-30.	15.9	143.3	55.	103.	-45.	20.8	138.0	65.	436.	-20.
112112Z	10.5	155.5	55	10.8	155.3	40.	21.	-15.	13.1	148.2	55.	84.	-30.	16.6	142.8	60.	138.	-35.	21.2	138.2	70.	612.	-10.
112118Z	10.8	153.5	65	11.0	153.3	60.	17.	-5.	14.0	146.3	60.	70.	-40.	18.0	141.2	85.	210.	-10.	23.4	137.6	95.	770.	25.
112200Z	11.7	151.5	70	11.4	151.4	75.	19.	5.	14.3	143.5	100.	133.	0.	18.8	137.6	110.	427.	20.	24.8	139.6	70.	829.	10.
112206Z	13.1	149.4	75	13.0	149.4	80.	6.	5.	17.2	142.0	100.	126.	0.	22.7	139.8	105.	350.	20.	27.4	145.0	70.	716.	20.
112212Z	14.2	147.3	85	14.0	147.5	75.	17.	-10.	18.2	140.9	65.	167.	-30.	24.5	143.5	60.	283.	-20.	0.0	0.0	0.	-0.	0.
112218Z	15.1	145.9	100	15.2	145.3	80.	35.	-20.	20.3	140.8	95.	185.	0.	26.2	146.2	70.	205.	0.	0.0	0.0	0.	-0.	0.
112300Z	16.2	144.7	100	16.2	144.8	100.	6.	0.	21.8	142.4	95.	130.	5.	27.2	148.2	85.	350.	25.	0.0	0.0	0.	-0.	0.
112306Z	17.4	144.2	100	16.2	144.1	100.	72.	0.	21.4	142.0	80.	256.	-5.	27.0	147.6	65.	595.	15.	0.0	0.0	0.	-0.	0.
112312Z	18.7	143.8	95	18.6	143.9	90.	0.	-5.	23.3	145.1	75.	211.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112318Z	20.2	144.1	95	20.4	144.0	85.	13.	-10.	27.2	150.2	70.	100.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112400Z	21.4	144.7	90	21.1	144.7	95.	18.	5.	25.6	150.3	70.	263.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112406Z	23.0	146.3	85	21.2	144.7	90.	139.	5.	29.4	156.2	55.	125.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112412Z	24.6	148.7	80	24.5	148.7	85.	6.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112418Z	26.0	151.5	70	25.9	151.4	80.	8.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112500Z	27.4	154.8	60	27.5	154.9	65.	8.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
112506Z	28.8	158.5	50	29.0	158.3	60.	16.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	25.	145.	304.	673.	25.	145.	304.	673.
AVG RIGHT ANGLE ERROR	14.	93.	175.	336.	14.	93.	175.	336.
AVG INTENSITY MAGNITUDE ERROR	7.	12.	21.	17.	7.	12.	21.	17.
AVG INTENSITY BIAS	-1.	-9.	-3.	5.	0.	-9.	-3.	5.
NUMBER OF FORECASTS	17	13	9	5	17	13	9	5

DISTANCE TRAVELED BY STORM IS 3530. NM

AVERAGE SPEED OF STORM IS 21. KNOTS

TYPHOON DINAH
FIX POSITIONS FOR CYCLONE NO. 27

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	180900	4.3N 178.9E	PCN 0		OTHER		PGTW
2	181200	4.1N 177.4E	PCN 0		OTHER		PGTW
3	182100	3.2N 174.6E	PCN 0		OTHER		PGTW
4	190000	4.0N 173.6E	PCN 0		OTHER		PGTW
5	192049	4.2N 169.0E	PCN 6	T0.5/0.5	NOAA6	INIT OBS	PGTW
6	200900	6.8N 165.8E	PCN 0		OTHER		PGTW
7	201200	7.1N 165.0E	PCN 0		OTHER		PGTW
8	201600	8.6N 163.1E	PCN 0		OTHER		PGTW
9	202100	8.9N 161.8E	PCN 0		OTHER		PGTW
10	210000	9.6N 159.9E	PCN 0		OTHER		PGTW
11	210600	10.1N 157.2E	PCN 0	T3.0/3.0	OTHER	INIT OBS	PGTW
12	210900	10.1N 156.8E	PCN 0		OTHER		PGTW
13	210906	10.4N 156.4E	PCN 6		NOAA6		PGTW
14	211200	10.6N 155.7E	PCN 0		OTHER		PGTW
15	211600	10.7N 153.9E	PCN C		OTHER		PGTW
16	212100	11.4N 152.3E	PCN E		OTHER		PGTW
17	220000	11.8N 151.4E	PCN E	T4.5/4.5 /D1.5/18HRS	OTHER		PGTW
18	220300	12.4N 150.3E	PCN E		OTHER		PGTW
19	220600	13.1N 149.2E	PCN E		OTHER		PGTW
20	220900	13.9N 147.9E	PCN C		OTHER		PGTW
21	221200	14.3N 147.2E	PCN C		OTHER		PGTW
22	221600	15.0N 146.2E	PCN C		OTHER		PGTW
23	222122	15.7N 145.3E	PCN 1	T5.5/5.5 /D1.0/21HRS	NOAA6		PGTW
24	230300	16.8N 144.4E	PCN C		OTHER		PGTW
25	230600	17.3N 144.4E	PCN C		OTHER		PGTW
26	230900	18.0N 144.1E	PCN C		OTHER		PGTW
27	231002	18.2N 143.9E	PCN 3		NOAA6		PGTW
28	231002	17.9N 143.9E	PCN 1		NOAA6		RODN
29	231200	18.5N 144.0E	PCN E		OTHER		PGTW
30	232241	20.9N 144.6E	PCN 3	T4.0/5.5 /W1.5/25HRS	NOAA6		PGTW
31	240300	22.0N 145.2E	PCN E		OTHER		PGTW
32	240900	23.6N 147.5E	PCN E		OTHER		PGTW
33	240939	23.8N 147.8E	PCN 1		NOAA6		RODN
34	241200	24.5N 148.7E	PCN E		OTHER		PGTW
35	241600	25.5N 150.4E	PCN E		OTHER		PGTW
36	242219	26.9N 153.8E	PCN 3	T3.0/4.0 /W1.0/24HRS	NOAA6		PGTW
37	250300	28.0N 156.5E	PCN 0		OTHER		PGTW
38	251200	30.2N 162.8E	PCN 0		OTHER		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	210229	9.8N 159.0E	1500FT		998	55 050 75	100 61 050 75	8 1					1
2	211722	10.7N 153.7E	700MB	2884	976		020 53 280 8	7 2	CIRCULAR	8		+13 +15 +11	2
3	212347	11.4N 151.6E	700MB	2831		90 200 5	360 33 270 18	5 1					3
4	220245	12.3N 150.6E	700MB	2831	970	100 090 2	190 85 030 7	5 2	CIRCULAR	4		+11 +15 +13	3
5	220826	13.4N 148.6E	700MB	2879	975		080 70 360 5	4 1				+12 +15 +14	4
6	221224	14.1N 147.2E	700MB	2842			080 53 310 20	4 2					4
7	221440	14.4N 146.6E	700MB	2755			060 82 340 5	4 1	CIRCULAR	5		+11 +17 +15	4
8	221601	13.0N 149.4E	700MB	2808		100 040 3	010 71 280 15	5 2					3
9	222105	15.6N 145.3E	700MB	2564	941	100 330 5	250 54 150 15	1 2	CIRCULAR	7		+14 +18 +12	5
10	230104	16.3N 144.6E	700MB	2645		80 340 3	250 56 150 5	5 4					5
11	230356	16.8N 144.3E	700MB	2648	948	100 060 6	130 92 030 15	4 2				+14 +18 +12	5
12	231321	18.9N 143.8E	700MB	2749			290 67 210 20	7 2					6
13	231536	19.6N 143.9E	700MB	2719	955		040 70 310 15	7 2	ELLIPTICAL	25 20	110	+11 +19 +18	6
14	240112	21.5N 144.8E	700MB	2702		100 170 20	240 99 170 20	5 2					7
15	240422	22.3N 145.6E	700MB	2712		90 290 10	030 56 290 25	5 2	ELLIPTICAL	20 15	020	+11 +19 +11	7

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	221110	13.9N 147.6E	LAND						13.6N 144.9E	91218
2	221135	14.0N 147.5E	LAND						13.6N 144.9E	91218
3	221210	14.2N 147.3E	LAND						13.6N 144.9E	91218
4	221235	14.2N 147.3E	LAND						13.6N 144.9E	91218
5	221335	14.3N 146.8E	LAND						13.6N 144.9E	91218
6	221516	14.6N 146.3E	LAND						13.6N 144.9E	91218
7	221535	14.8N 146.4E	LAND						13.6N 144.9E	91218
8	221610	14.8N 146.3E	LAND						13.6N 144.9E	91218
9	221710	14.8N 146.2E	LAND						13.6N 144.9E	91218
10	221735	14.9N 146.1E	LAND						13.6N 144.9E	91218
11	221810	15.0N 146.0E	LAND						13.6N 144.9E	91218
12	221835	15.2N 145.8E	LAND						13.6N 144.9E	91218
13	222035	15.6N 145.2E	LAND						13.6N 144.9E	91218
14	222110	15.6N 145.3E	LAND						13.6N 144.9E	91218
15	222135	15.7N 145.2E	LAND			49			13.6N 144.9E	91218
16	222210	15.8N 145.1E	LAND						13.6N 144.9E	91218
17	222235	15.8N 145.0E	LAND						13.6N 144.9E	91218

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

TROPICAL STORM ED

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
121400Z	9.8	138.0	15	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121406Z	10.3	136.5	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.
121412Z	10.7	135.4	15	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121418Z	11.2	133.9	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.
121500Z	11.4	132.7	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.
121506Z	11.7	131.5	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.
121512Z	11.9	130.7	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.
121518Z	12.1	129.9	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.
121600Z	12.3	129.2	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.
121606Z	12.7	128.5	50	12.8	128.5	40.	6.	-10.	14.3	126.0	50.	96.	10.	15.6	123.7	45.	232.	10.	16.5	121.3	25.	374.	-15.
121612Z	13.1	128.0	50	13.2	127.8	40.	13.	-10.	14.8	125.2	50.	149.	15.	15.9	122.8	50.	282.	10.	16.8	120.0	30.	442.	-5.
121618Z	13.5	127.8	50	13.4	127.6	50.	13.	0.	14.9	125.7	50.	129.	15.	16.2	124.2	45.	233.	5.	17.0	122.1	25.	360.	-10.
121700Z	13.6	127.7	45	13.8	127.1	50.	37.	5.	15.4	125.5	50.	155.	15.	16.5	123.8	40.	259.	0.	0.0	0.0	0.	-0.	0.
121706Z	13.6	127.5	40	13.7	127.2	50.	18.	10.	15.0	125.9	50.	115.	15.	16.5	124.1	40.	237.	0.	17.5	121.8	25.	433.	-10.
121712Z	13.5	127.4	35	13.9	126.8	50.	42.	15.	15.2	125.4	50.	137.	10.	16.7	123.8	40.	246.	5.	0.0	0.0	0.	-0.	0.
121718Z	13.4	127.3	35	14.3	126.6	45.	67.	10.	16.8	124.9	40.	231.	0.	17.1	122.9	30.	322.	-5.	0.0	0.0	0.	-0.	0.
121800Z	13.4	127.2	35	14.4	125.8	45.	101.	10.	15.8	124.3	45.	212.	5.	17.2	122.5	40.	371.	5.	0.0	0.0	0.	-0.	0.
121806Z	13.4	127.0	35	13.7	127.0	45.	18.	10.	14.7	125.8	45.	94.	5.	15.7	124.5	40.	245.	5.	0.0	0.0	0.	-0.	0.
121812Z	13.5	127.0	40	13.9	126.9	45.	25.	5.	15.2	125.5	45.	115.	10.	16.1	123.8	40.	296.	10.	0.0	0.0	0.	-0.	0.
121818Z	13.7	127.3	40	14.0	127.5	45.	21.	5.	16.1	128.3	40.	100.	5.	18.2	133.5	25.	493.	0.	0.0	0.0	0.	-0.	0.
121900Z	13.9	127.4	40	14.6	127.6	45.	43.	5.	16.3	129.8	40.	137.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121906Z	13.9	127.2	40	13.8	127.3	45.	8.	5.	14.8	126.7	35.	113.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121912Z	14.2	127.2	35	14.0	127.1	45.	13.	10.	14.7	126.5	35.	120.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121918Z	14.5	127.8	35	14.3	127.4	40.	26.	5.	15.2	126.8	30.	171.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122000Z	14.1	128.1	35	15.2	128.1	35.	66.	0.	16.1	127.8	25.	249.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122006Z	13.4	128.0	35	14.2	127.8	35.	49.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122012Z	12.9	127.7	30	14.4	127.6	35.	90.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122018Z	12.4	127.4	25	14.4	127.6	35.	120.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
122100Z	12.0	127.0	20	11.9	126.8	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	40.	146.	292.	402.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	21.	120.	262.	378.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	7.	8.	5.	10.	0.	0.	0.	0.
AVG INTENSITY BIAS	5.	8.	4.	-10.	0.	0.	0.	0.
NUMBER OF FORECASTS	20	16	11	4	0	0	0	0

DISTANCE TRAVELED BY STORM IS 987. NM

AVERAGE SPEED OF STORM IS 6. KNOTS

TROPICAL STORM ED
FIX POSITIONS FOR CYCLONE NO. 28

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	140000	9.9N 138.0E	PCN 0	T1.0/1.0	OTHER	INIT OBS	PGTW
2	140300	10.0N 137.1E	PCN 0		OTHER		PGTW
3	141200	10.5N 135.4E	PCN 0		OTHER		PGTW
4	141600	11.3N 134.5E	PCN 0		OTHER		PGTW
5	142100	12.0N 134.1E	PCN 0		OTHER		PGTW
6	142314	12.7N 133.8E	PCN 5	T2.0/2.0 /D1.0/23HRS	NOAA6		PGTW
7	150000	12.3N 133.3E	PCN 0		OTHER		PGTW
8	150300	13.0N 133.0E	PCN 0		OTHER		PGTW
9	151021	13.1N 130.2E	PCN 6		NOAA6		PGTW
10	151600	13.5N 130.0E	PCN 0		OTHER		PGTW
11	152252	12.2N 129.1E	PCN 5	T1.0/2.0 /W1.0/24HRS	NOAA6		PGTW
12	160000	13.0N 129.9E	PCN 0		OTHER		PGTW
13	160900	13.4N 127.6E	PCN 0		OTHER		PGTW
14	161200	13.5N 127.5E	PCN 0		OTHER		PGTW
15	162100	13.6N 127.3E	PCN 0		OTHER		PGTW
16	170000	13.7N 127.0E	PCN 0		OTHER		PGTW
17	170010	13.8N 127.1E	PCN 5		NOAA6		RJDN
18	170900	14.0N 126.7E	PCN 0		OTHER		PGTW
19	171100	14.7N 127.2E	PCN 5		NOAA6		PGTW
20	171200	15.0N 127.4E	PCN 0		OTHER		PGTW
21	171600	14.6N 125.9E	PCN 0		OTHER		PGTW
22	172100	14.3N 126.3E	PCN 0		OTHER		PGTW
23	172348	14.6N 125.7E	PCN 5	T3.0/3.0	NOAA6	INIT OBS	PGTW
24	180900	13.8N 127.0E	PCN 0		OTHER		PGTW
25	181045	13.7N 128.2E	PCN 5		NOAA6		RPMK
26	181046	13.7N 127.2E	PCN 5		NOAA6		RJDH
27	181046	14.0N 127.0E	PCN 5		NOAA6		PGTW
28	181200	13.7N 127.1E	PCN 0		OTHER		PGTW
29	181600	14.3N 127.7E	PCN 0		OTHER		PGTW
30	182100	14.4N 127.4E	PCN 0		OTHER	ULCC 15.4 127.5	PGTW
31	182325	14.0N 127.8E	PCN 5	T2.0/3.0 /W1.0/24HRS	NOAA6		PGTW
32	190900	16.1N 127.9E	PCN 0		OTHER		PGTW
33	191023	15.2N 127.6E	PCN 5		NOAA6		PGTW
34	191023	15.8N 127.1E	PCN 5		NOAA6		RPLK
35	191200	14.7N 128.1E	PCN 0		OTHER		PGTW
36	192100	15.5N 129.0E	PCN 0		OTHER		PGTW
37	192303	15.3N 128.8E	PCN 5	T2.0/2.0-/S1.0/24HRS	NOAA6		PGTW
38	200600	14.4N 128.0E	PCN 0		OTHER		PGTW
39	200900	14.3N 128.0E	PCN 0		OTHER		PGTW
40	201142	14.5N 128.0E	PCN 5		NOAA6		RPMK
41	201600	14.7N 127.5E	PCN 0		OTHER		PGTW
42	202240	12.0N 126.9E	PCN 3	T1.0/1.0 /W1.0/24HRS	NOAA6	LL EXPOSED	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	150450	11.7N 131.7E	1500FT		1004	35 020 20	150 32 020 20	2 3			+25 +25 +22	1
2	160320	12.6N 128.9E	1500FT			50 090 15	160 60 090 15	6 5			+23 +26 +26 28	2
3	161315	13.1N 127.9E	700MB	3049			240 33 140 40	10 8				3
4	161610	13.8N 127.8E	700MB	3037			020 50 300 35	10 10			+12 +15 + 7	3
5	170316	13.5N 127.4E	700MB	3025	991	50 060 10	080 33 350 15	3 2			+11 +15 +10	4
6	171341	13.3N 126.9E	700MB	3040			120 38 040 35	10 5				5
7	171558	13.5N 127.3E	700MB	3032	992		350 32 290 120	10 5			+13 +14 +11	5
8	100304	13.4N 127.1E	700MB	3024	992	35 320 75	020 51 330 100	7 3			+10 +14 +10	6
9	101340	13.8N 127.5E	700MB	3032			340 40 240 30	5 5				7
10	101555	13.9N 127.5E	700MB	3016	991		290 50 200 15	5 8			+14 +14 +10	7
11	190245	13.9N 127.4E	700MB	3029		40 300 10	080 32 300 10	3 2				8
12	190413	13.9N 127.3E	700MB	3021	989	35 090 15	200 32 100 10	3 2			+13 +17 +10	8
13	191348	14.2N 127.2E	700MB	3064			080 22 020 30	10 5				9
14	191543	14.5N 127.7E	700MB	3067	999		230 32 150 50	6 5			+12 +12 +12	9
15	200230	13.9N 128.1E	700MB	3066		45 300 50	010 20 320 40	10 6				10
16	200420	14.0N 128.0E	700MB	3065	995	40 150 10	270 23 160 90	10 5			+15 +17 +11	10

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	160000	12.0N 129.0E	20	60	
2	181200	13.5N 127.0E	35	20	
3	210000	12.0N 127.0E	30	30	

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

TROPICAL CYCLONE 23-80

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
111202Z	11.3	74.8	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.
111208Z	11.3	74.1	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.
111214Z	11.4	73.5	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.
111220Z	11.5	73.0	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.
111302Z	11.6	72.5	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.
111308Z	11.8	72.0	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.
111314Z	12.0	71.6	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.
111320Z	12.2	71.4	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.
111402Z	12.4	71.1	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111408Z	12.7	70.8	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.
111414Z	12.9	70.6	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.
111420Z	13.3	70.3	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.
111502Z	13.5	69.9	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.
111508Z	13.7	69.7	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.
111514Z	14.1	69.5	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.
111520Z	14.4	69.1	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.
111602Z	14.7	68.7	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.
111608Z	14.9	68.4	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.
111614Z	15.0	68.0	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.
111620Z	15.2	67.6	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111702Z	15.4	67.1	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.
111708Z	16.1	66.7	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.
111714Z	16.9	66.8	35	15.9	66.4	35.	64.	0.	17.8	65.1	40.	220.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111720Z	17.6	67.2	35	17.3	67.4	35.	21.	0.	19.1	69.8	35.	45.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111802Z	18.2	67.6	35	17.8	67.9	35.	29.	0.	17.8	67.9	30.	169.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111808Z	18.7	68.2	30	18.1	68.4	35.	30.	5.	19.8	71.2	30.	46.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111814Z	19.2	68.7	30	19.2	68.8	30.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111820Z	19.6	69.2	25	19.8	69.4	30.	16.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111902Z	19.9	69.9	20	20.0	69.8	25.	8.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111908Z	20.4	70.7	20	20.3	70.7	20.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	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.	120.	0.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	16.	66.	0.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	10.	0.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	2.	10.	0.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	8	4	0	0	0	0	0	0

DISTANCE TRAVELED BY STORM IS 940. NM

AVERAGE SPEED OF STORM IS 5. KNOTS

TC23-80
FIX POSITIONS FOR CYCLONE NO. 23

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	120311	11.3N	74.7E	PCN 5	T2.0/2.0	NOAA6	INIT OBS	KGWC
2	130248	11.7N	72.2E	PCN 5	T1.5/1.5 /W0.5/24HRS	NOAA6		KGWC
* 3	140407	13.7N	68.1E	PCN 6	T1.5/1.5 /S0.0/24HRS	NOAA6		KGWC
4	141505	12.0N	70.4E	PCN 6		NOAA6		KGWC
5	150345	13.5N	69.9E	PCN 6	T2.0/2.0 /D0.5/24HRS	NOAA6		KGWC
6	151443	14.0N	69.8E	PCN 6		NOAA6		KGWC
* 7	160322	14.0N	69.6E	PCN 5	T2.0/2.0 /S0.0/24HRS	NOAA6		KGWC
8	161420	15.1N	68.0E	PCN 6		NOAA6		KGWC
9	170300	15.5N	67.1E	PCN 5	T2.5/2.5 /D0.5/24HRS	NOAA6		KGWC
10	171539	17.0N	67.2E	PCN 6		NOAA6		KGWC
11	180410	18.5N	67.5E	PCN 6	T1.5/2.5 /W1.0/24HRS	NOAA6		KGWC
12	181516	18.9N	68.6E	PCN 6		NOAA6		KGWC

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

TROPICAL CYCLONE 27-80

BEST TRACK DATA

	BEST TRACK			WARNING					24 HOUR FORECAST					48 HOUR FORECAST					72 HOUR FORECAST				
						ERRORS					ERRORS					ERRORS							
MO/DA/HR	POSIT		WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND	POSIT		WIND	DST	WIND
121000Z	8.9	92.0	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.
121014Z	8.9	92.9	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.
121020Z	9.1	93.4	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.
121102Z	9.5	93.5	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.
121108Z	9.7	93.2	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.
121114Z	9.7	92.8	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.
121120Z	9.7	92.5	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.
121202Z	9.8	92.0	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.
121208Z	10.2	91.6	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.
121214Z	10.8	91.8	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.
121220Z	11.1	92.1	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.
121302Z	11.2	92.6	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.
121308Z	11.3	93.2	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.
121314Z	11.3	93.7	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.
121320Z	11.0	94.0	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.
121402Z	10.8	94.0	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.
121408Z	10.5	93.7	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.
121414Z	10.3	93.3	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.
121420Z	10.2	92.5	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.
121502Z	9.8	91.1	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.
121508Z	10.0	90.0	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.
121514Z	10.1	89.5	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.
121520Z	9.3	87.0	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.
121602Z	0.0	85.7	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.
121608Z	8.6	84.6	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.
121614Z	8.6	83.5	35	8.2	82.8	35.	43.	0.	8.6	78.0	30.	89.	5.	9.2	74.7	35.	90.	10.	11.9	70.8	40.	167.	15.
121620Z	8.5	82.6	35	8.4	82.1	35.	30.	0.	8.0	78.1	30.	73.	5.	9.1	75.9	30.	97.	5.	0.0	0.0	0.	-0.	0.
121702Z	8.4	81.8	35	9.1	81.6	35.	43.	0.	10.0	70.6	20.	167.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121708Z	8.3	81.1	30	9.3	80.7	35.	64.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121714Z	8.1	80.2	25	9.0	80.2	35.	102.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121720Z	7.8	78.8	25	9.5	79.0	25.	102.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
121802Z	7.7	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.
121808Z	7.7	75.8	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.
121814Z	7.7	74.7	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.
121820Z	7.9	73.9	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.
121902Z	8.1	72.9	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.
121908Z	8.5	71.7	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.
121914Z	9.1	70.7	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.
121920Z	9.8	69.9	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.
122002Z	10.9	68.8	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
AVG FORECAST POSIT ERROR	65.	109.	93.	167.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	55.	81.	87.	126.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	3.	5.	8.	15.	0.	0.	0.	0.
AVG INTENSITY BIAS	3.	2.	8.	15.	0.	0.	0.	0.
NUMBER OF FORECASTS	6	3	2	1	0	0	0	0

DISTANCE TRAVELED BY STORM IS 2816. NM

AVERAGE SPEED OF STORM IS 9. KNOTS

TC27-80
FIX POSITIONS FOR CYCLONE NO. 27

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION		ACCRY	DVORAK CODE	SATELLITE	COMMENTS	SITE
1	101200	9.5N	93.1E	PCN 0		OTHER		PGTW
2	110000	9.4N	93.5E	PCN 0		OTHER		PGTW
3	110225	9.6N	93.5E	PCN 6	T1.5/1.5	NOAA6	INIT OBS	KGWC
4	110600	9.4N	93.1E	PCN 0	T1.0/1.0	OTHER	INIT OBS	PGTW
5	110900	9.5N	92.4E	PCN 0		OTHER		PGTW
* 6	111200	9.9N	92.0E	PCN 0		OTHER		PGTW
* 7	120203	11.3N	92.2E	PCN 5	T2.0/2.0 /D0.5/24HRS	NOAA6		KGWC
8	120300	10.0N	92.2E	PCN 0	T1.0/1.0 /S0.0/21HRS	OTHER		PGTW
9	120600	10.4N	91.6E	PCN 0		OTHER		PGTW
10	122100	10.8N	92.6E	PCN 0		OTHER		PGTW
* 11	130140	11.2N	92.8E	PCN 5	T2.0/2.0 /S0.0/24HRS	NOAA6		KGWC
* 12	130300	11.0N	93.2E	PCN 0	T0.5/0.5 /W0.5/24HRS	OTHER		PGTW
13	140117	11.3N	93.9E	PCN 5	T1.5/2.0-/W0.5/24HRS	NOAA6		KGWC
* 14	141350	11.2N	95.0E	PCN 6		NOAA6		FJDG
15	150055	10.5N	92.0E	PCN 6	T1.5/2.0-/W0.5/24HRS	NOAA6		KGWC
16	150300	9.4N	91.5E	PCN 0	T1.0/1.0	OTHER	INIT OBS	PGTW
17	151600	10.5N	88.7E	PCN 0		OTHER		PGTW
18	160214	8.2N	86.5E	PCN 5	T2.0/2.0 /D0.5	NOAA6		KGWC
19	160300	8.7N	85.5E	PCN 0		OTHER		PGTW
20	160600	8.2N	84.2E	PCN 0	T2.5/2.5-/D1.5/27HRS	OTHER		PGTW
21	161200	8.2N	83.7E	PCN 0		OTHER		PGTW
22	161600	8.6N	83.2E	PCN 0		OTHER		PGTW
23	162100	9.1N	82.6E	PCN 0		OTHER		PGTW
24	170000	9.0N	82.3E	PCN 0		OTHER		PGTW
25	170900	9.0N	81.0E	PCN 0		OTHER		PGTW
* 26	171200	9.4N	80.4E	PCN 0		OTHER		PGTW
* 27	171431	9.0N	80.9E	PCN 6		NOAA6		FJDG
* 28	171600	9.4N	79.2E	PCN 0		OTHER		PGTW
29	180600	7.8N	76.2E	PCN 0		OTHER		PGTW
30	180900	8.3N	76.1E	PCN 0		OTHER		PGTW
31	200343	12.3N	70.4E	PCN 6	T1.0/1.0 /S0.0	NOAA6		KGWC
32	200406	11.2N	68.2E	PCN 5	T1.0/1.0 /S0.0	NOAA6		KGWC
33	201504	11.0N	69.3E	PCN 4	T1.0/1.0 /S0.0	NOAA5		KGWC

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION		INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	171200	8.0N	81.0E	25	30	
2	180000	7.5N	77.5E	20	30	

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