

TROPICAL STORM SARAH
BEST TRACK DATA

MD/DA/HR	BEST TRACK				WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST					
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
061908Z	5.9	136.3	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
061906Z	6.4	135.6	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
061912Z	7.0	134.9	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
061918Z	7.4	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.
062000Z	7.8	133.3	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062006Z	7.9	132.3	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062012Z	8.1	131.2	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062018Z	8.3	130.2	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062100Z	8.6	129.0	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062106Z	8.8	127.8	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062112Z	9.3	126.3	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062118Z	9.9	125.0	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062200Z	10.4	123.3	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062206Z	11.4	121.7	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062212Z	12.2	120.4	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062218Z	12.7	119.0	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062300Z	12.7	117.5	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062306Z	12.8	116.3	15	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062312Z	12.8	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.
062318Z	12.8	114.3	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062400Z	12.8	113.2	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062406Z	12.9	112.2	30	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062412Z	13.6	111.6	30	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062418Z	14.3	111.1	30	14.0	110.8	30	35.	0.	18.1	108.0	35.	103.	5.	0.0	0.0	0.	0.	0.	0.	0.	0.	0.
062500Z	15.0	108.6	30	15.2	108.5	30.	13.	0.	17.9	107.7	35.	76.	10.	0.0	0.0	0.	0.	0.	0.	0.	0.	0.
062506Z	15.7	109.9	35	15.6	109.8	35.	8.	0.	18.2	107.5	45.	105.	30.	0.0	0.0	0.	0.	0.	0.	0.	0.	0.
062512Z	16.2	109.2	35	16.3	109.5	30.	16.	-5.	0.0	0.0	0.	0.	-0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
062518Z	16.4	108.2	30	17.4	109.0	25.	76.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.	0.	0.	0.	0.	0.
062600Z	16.7	107.3	25	16.5	107.3	25.	12.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.	0.	0.	0.	0.	0.
062606Z	16.8	106.4	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.

ALL FORECASTS
WRNG 24-HR 48-HR 72-HR

TYPHOONS WHILE OVER 35 KTS
WRNG 24-HR 48-HR 72-HR

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1940. NM
AVERAGE SPEED OF TROPICAL CYCLONE IS 11. KNOTS

TROPICAL STORM SARAH
FIX POSITIONS FOR CYCLONE NO. 1

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
*	1 170000	6.5N 138.5E	PCN 6	T8.0/0.0		INIT OBS ULCC FIX
2	180225	5.3N 136.5E	PCN 4	T8.5/0.5		INIT OBS
3	190610	6.1N 136.4E	PCN 5	T1.0/1.0		RPMK
*	4 192146	7.8N 135.0E	PCN 6	T0.5/0.5 /S0.0/25HRS		PGTW
5	200000	7.9N 133.2E	PCN 6			PGTW
6	200300	7.9N 132.4E	PCN 6			PGTW
*	7 200558	9.5N 132.0E	PCN 5	T1.0/1.0 /D0.5/06HRS	ULCC FIX	PGTW
*	8 201007	9.5N 131.1E	PCN 5			PGTW
*	9 201200	9.4N 131.1E	PCN 6		ULCC FIX	PGTW

* 10	201600	9.6N	130.4E	PCN 6	T1.0/1.0 /D0.5/18HRS	ULCC FIX	PGTW
* 11	201800	9.4N	130.5E	PCN 6		ULCC FIX	PGTW
* 12	202125	9.5N	130.1E	PCN 5		ULCC FIX	PGTW
* 13	210000	9.9N	128.4E	PCN 5		ULCC FIX	PGTW
14	218300	8.1N	128.8E	PCN 5			PGTW
15	211200	9.9N	125.6E	PCN 6		ULCC FIX	PGTW
16	211600	9.8N	125.1E	PCN 6		ULCC FIX	PGTW
17	211800	10.0N	124.6E	PCN 6		ULCC FIX	PGTW
18	212100	10.0N	124.1E	PCN 6		ULCC FIX	PGTW
19	220000	10.5N	123.9E	PCN 6		ULCC FIX	PGTW
* 20	220300	10.6N	124.2E	PCN 6	T0.0/0.0	ULCC FIX	PGTW
21	230000	13.8N	117.5E	PCN 6			PGTW
* 22	230300	14.2N	116.0E	PCN 6	T0.0/0.0 /S0.0/24HRS		PGTW
23	240000	13.3N	113.2E	PCN 6	T1.5/1.5-/D1.5/21HRS	ULCC FIX	PGTW
24	240300	13.2N	112.9E	PCN 6		ULCC FIX	PGTW
25	240600	13.3N	112.4E	PCN 6		ULCC FIX	PGTW
26	240651	13.4N	113.4E	PCN 5	T2.0/2.0	INIT OBS	RPMK
27	240900	13.9N	111.7E	PCN 6		ULCC FIX	PGTW
28	241200	14.3N	111.6E	PCN 6	T1.5/1.5 /S0.0/12HRS	ULCC FIX	PGTW
29	241600	14.6N	111.0E	PCN 6			PGTW
30	241800	14.6N	110.5E	PCN 6			PGTW
31	242100	14.5N	110.3E	PCN 6			PGTW
* 32	242323	15.5N	111.8E	PCN 5	T1.5/2.0-/W0.5/14HRS		RPMK
33	250000	15.1N	109.8E	PCN 6	T1.5/1.5-/S0.0/12HRS	ULCC FIX	PGTW
34	250041	15.6N	111.1E	PCN 5	T1.5/2.0-/W0.5/16HRS		RPMK
35	250300	15.2N	108.0E	PCN 6		ULCC FIX	PGTW
36	250600	15.6N	109.9E	PCN 6		ULCC FIX	PGTW
37	250820	16.0N	109.8E	PCN 3	T1.5/2.0-/W0.5/25HRS	ULCC FIX	RPMK
38	250900	15.5N	109.6E	PCN 6			PGTW
39	251140	16.4N	109.3E	PCN 3			RPMK
40	251140	16.3N	109.5E	PCN 6			RODN
41	251200	16.4N	108.7E	PCN 6			PGTW
42	251600	16.7N	108.0E	PCN 6	T1.5/1.5-/S0.0/16HRS		PGTW
* 43	251800	16.8N	107.2E	PCN 6			PGTW
44	252100	17.3N	107.4E	PCN 6			PGTW
45	252302	16.5N	107.2E	PCN 3	T1.0/1.0	INIT OBS EXP LLCC	RODN
46	260000	16.6N	107.2E	PCN 4		EXP LLCC	PGTW

AIRCRAFT FIXES

FIX NO. (Z)	TIME	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-	EYE TEMP (C)	MSH NO.
1	210025	8.4N 129.0E	1500FT		1009	15 230 00	130 16 070 30	10 10		DIA/TATION	OUT/ IN/ DP/SST	+26 +25 +24 29 1

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

TYPHOON TIP
BEST TRACK DATA

MD/DA/HR	BEST TRACK		WARNING		24 HOUR FORECAST						48 HOUR FORECAST						72 HOUR FORECAST							
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND		
070912Z	11.4	127.4	25	0.8	0.0	0.	-0.	0.	0.8	0.0	0.	-0.	0.	0.8	0.0	0.	0.8	0.0	0.	-0.	0.	0.		
070918Z	12.4	125.3	25	0.8	0.0	0.	-0.	0.	0.8	0.0	0.	-0.	0.	0.8	0.0	0.	0.8	0.0	0.	-0.	0.	0.		
071000Z	12.8	123.3	25	0.8	0.0	0.	-0.	0.	0.8	0.0	0.	-0.	0.	0.8	0.0	0.	0.8	0.0	0.	-0.	0.	0.		
071006Z	13.3	121.6	30	0.8	0.0	0.	-0.	0.	0.8	0.0	0.	-0.	0.	0.8	0.0	0.	0.8	0.0	0.	-0.	0.	0.		
071012Z	13.6	120.2	30	13.9	119.6	35.	39.	5.	15.8	114.9	45.	53.	-20.	17.6	118.3	45.	133.	-10.	18.9	107.7	35.	204.	5.	
071018Z	13.8	118.9	50	13.9	118.9	45.	6.	-5.	15.5	113.5	60.	91.	0.	17.3	109.2	45.	178.	-5.	19.3	106.9	35.	226.	10.	
071100Z	14.4	117.7	60	14.3	117.6	60.	8.	0.	16.8	113.2	60.	40.	20.	18.3	108.6	65.	177.	30.	0.0	0.0	0.	-0.	0.	
071106Z	15.1	116.7	60	15.1	116.5	60.	12.	0.	17.4	111.9	60.	75.	5.	18.7	107.9	50.	207.	20.	0.0	0.0	0.	-0.	0.	
071112Z	15.6	115.8	65	15.6	115.9	65.	6.	0.	17.6	112.2	70.	29.	15.	19.0	109.2	50.	137.	20.	0.0	0.0	0.	-0.	0.	
071118Z	16.2	114.9	60	16.3	114.8	65.	8.	5.	18.2	111.2	70.	51.	20.	19.7	106.1	50.	157.	25.	0.0	0.0	0.	-0.	0.	
071200Z	16.8	113.9	60	16.7	114.0	60.	8.	0.	18.7	110.3	50.	80.	15.	0.0	0.0	0.	8.	-0.	0.	0.0	0.0	0.	-0.	0.
071206Z	17.3	113.2	55	17.3	113.2	60.	0.	5.	19.6	109.7	50.	92.	20.	0.0	0.0	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071212Z	17.9	112.6	55	18.3	112.1	55.	37.	0.	20.7	109.2	40.	84.	10.	0.0	0.0	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071218Z	18.6	112.0	50	18.7	112.0	45.	6.	-5.	21.9	111.3	25.	66.	0.	0.0	0.0	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071300Z	19.4	111.5	35	19.5	111.5	40.	6.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071306Z	20.2	112.1	38	20.2	111.0	35.	11.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071312Z	20.8	110.7	30	21.0	110.0	30.	13.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.
071318Z	21.3	110.3	25	21.3	110.3	25.	8.	0.	0.0	0.0	0.	-0.	8.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	

WRNG	ALL FORECASTS			TYPHOONS WHILE OVER 35 KTS				
	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR		
Avg Forecast Posit Error	12.	66.	165.	215.	18.	60.	163.	0.
Avg Right Angle Error	8.	53.	160.	204.	6.	48.	156.	0.
Avg Intensity Magnitude Error	3.	13.	18.	8.	3.	14.	15.	0.
Avg Intensity Bias	1.	9.	13.	8.	1.	8.	5.	0.
Number of Forecasts	14	10	6	2	10	7	3	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1286. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 12. KNOTS

TYPHOON TIP
FIX POSITIONS FOR CYCLONE NO. 2

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
1	080911	9.5N 132.4E	PCN 6			PGBTW
2	091200	9.3N 131.9E	PCN 6			PGBTW
3	092151	11.8N 130.0E	PCN 5			PGBTW
4	090000	10.7N 129.5E	PCN 6			PGBTW
5	090300	10.8N 129.2E	PCN 6	T0.0/0.0	INIT OBS	PGBTW
6	090600	10.9N 129.1E	PCN 6			PGBTW
7	090900	11.0N 128.3E	PCN 6		ULCC FIX	PGBTW
8	091200	11.1N 127.6E	PCN 6		ULCC FIX	PGBTW
9	091600	11.8N 126.2E	PCN 6	T1.5/1.5-	INIT OBS	PGBTW
10	091800	12.3N 125.6E	PCN 6			PGBTW
11	092100	12.5N 125.0E	PCN 6			PGBTW
12	092130	12.8N 122.6E	PCN 5	T1.5/1.5	INIT OBS	RPMK
13	100000	12.9N 122.7E	PCN 4			PGBTW
14	100300	12.9N 122.5E	PCN 4	T2.5/2.5+/D1.0/11HRS		PGBTW
15	100600	13.3N 121.4E	PCN 4			PGBTW
16	100900	13.1N 121.1E	PCN 6			PGBTW
17	101018	13.4N 120.9E	PCN 3			PGBTW
18	101200	13.5N 120.8E	PCN 4			PGBTW
19	101600	13.8N 119.4E	PCN 6	T4.0/4.0 /D1.5/13HRS		PGBTW
20	101800	13.8N 119.1E	PCN 6			PGBTW
21	101942	13.7N 116.1E	PCN 6			RDDN
22	102100	13.8N 118.3E	PCN 6			PGBTW
23	102250	14.2N 118.0E	PCN 5	T3.0/3.0 /D1.5/25HRS		RPMK
24	102357	14.0N 117.6E	PCN 3	T3.5/3.5	INIT OBS	RDDN
25	102357	14.4N 117.3E	PCN 3			RPMK
26	110000	14.6N 117.5E	PCN 4			PGBTW
27	110300	14.8N 117.3E	PCN 4	T3.5/3.5-/D1.0/11HRS		PGBTW
28	110644	15.4N 116.6E	PCN 3		EXP LLCC	PGBTW
29	110900	15.5N 116.4E	PCN 4		EXP LLCC	PGBTW
30	111056	15.6N 115.9E	PCN 4		EXP LLCC	PGBTW

31	111600	16.1N 115.2E	PCN 4	T4.0/4.0-/S0.0/13HRS		PGTW
32	111800	16.5N 114.6E	PCN 6			PGTW
33	111929	16.0N 113.8E	PCN 5		ULCC FIX	RODN
34	112100	16.9N 114.2E	PCN 6			PGTW
35	112229	16.7N 114.4E	PCN 3	T3.0/3.5 /W0.5/23HRS		RPMK
36	112315	16.6N 114.8E	PCN 3	T4.0/4.0 /D0.5/24HRS	EXP LLCC	RODN
37	112335	16.8N 114.1E	PCN 3	T3.0/3.5 /W0.5/24HRS	EXP LLCC	RPMK
38	120800	16.8N 113.9E	PCN 4		EXP LLCC	PGTW
39	120300	17.3N 113.3E	PCN 4	T4.0/4.0-/S0.0/11HRS		PGTW
40	120600	17.2N 113.0E	PCN 6			PGTW
41	120632	17.6N 112.8E	PCN 3		EXP LLCC	PGTW
42	120632	18.0N 112.7E	PCN 3	T3.0/3.5 /S0.0/08HRS	EXP LLCC	RPMK
43	120900	17.9N 112.6E	PCN 4		EXP LLCC	PGTW
44	121200	18.2N 112.2E	PCN 4			PGTW
45	121209	17.3N 111.3E	PCN 5			RODN
46	121215	17.9N 112.3E	PCN 5			RPMK
47	121600	18.5N 112.1E	PCN 4	T2.5/3.5 /W1.5/13HRS	EXP LLCC	PGTW
48	121800	18.7N 112.1E	PCN 4		EXP LLCC	PGTW
49	121917	19.1N 111.5E	PCN 3		EXP LLCC	PGTW
50	122100	19.3N 111.8E	PCN 4		EXP LLCC	PGTW
51	122208	19.4N 111.5E	PCN 3	T2.5/3.0-/W0.5/24HRS	EXP LLCC	RPMK
52	130800	19.5N 111.5E	PCN 4		EXP LLCC	PGTW
53	130300	19.7N 111.4E	PCN 4	T1.5/2.5-	INIT OBS	PGTW
54	130600	20.0N 111.3E	PCN 4		EXP LLCC	PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/TET	EYE SHAPE	EYE DIAM	ORIENTATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	110030	14.5N 117.7E	700MB	2977	984	70 090 25	170	69 110 38	10 5	CIRCULAR	20	+14 +17 + 9	2
2	110838	15.4N 116.4E	700MB	2938		60 030 74	120	70 020 21	5 5			+15 +17	3
3	111105	15.5N 116.1E	700MB	2921	977	70 090 4	080	54 360 30	5 5	CIRCULAR	30	+14 +20	3
4	112152	16.5N 114.2E	700MB	2934	981	50 020 38	130	65 020 28	15 5	CIRCULAR	20	+13 +18 +13	4
5	120844	17.0N 113.0E	700MB	2931		80 170 13	050	64 270 20	10 15			+14 +18 +11	4

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	110000	14.1N 117.5E	LAND				1000/ /////	EYE 70 PCT CIR OPEN NW	16.3N 120.6E	98321
2	110100	14.2N 117.2E	LAND				1091/ 52883	EYE 60 PCT CIR OPEN NW	16.3N 120.6E	98321
3	110200	14.4N 116.9E	LAND				1093/ 53012	EYE 60 PCT CIR OPEN N	16.3N 120.6E	98321
4	130358	19.9N 110.0E	LAND				2/// 53108		20.0N 110.3E	59758

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	101800	13.4N 118.5E	045	025	SHIP OBSERVATION PRESSURE EST. 995 MB
2	130900	20.6N 110.0E	030	030	WMD 59758
3	131500	21.0N 110.3E	025	030	WMD 59642

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

TYPHOON VERA
BEST TRACK DATA

BEST TRACK				WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
MD/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	
070906Z	9.5 146.2	20	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
070912Z	9.0 145.4	20	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
070918Z	8.5 144.6	20	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
071000Z	8.4 143.3	20	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
071006Z	9.0 142.8	25	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
071012Z	9.3 140.8	25	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
071018Z	9.4 138.1	25	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
071100Z	9.7 136.6	25	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
071106Z	10.1 135.4	25	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
071112Z	10.6 134.4	30	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
071118Z	10.8 133.4	30	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
071200Z	11.0 132.3	30	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.	-0.	0.	
071206Z	11.4 131.1	30	11.7	130.7	30.	30.	0.	13.1	127.1	40.	118.	-15.	14.4	123.1	55.	117.	-25.	16.9	119.8
071212Z	11.6 129.9	35	11.7	129.3	30.	36.	-5.	14.0	124.1	50.	223.	-10.	15.8	120.4	40.	230.	-40.	18.3	117.3
071218Z	11.4 129.2	40	12.0	128.4	40.	59.	0.	14.0	124.3	55.	163.	-10.	16.0	120.0	40.	188.	-35.	18.8	117.0
071300Z	11.3 128.6	50	11.2	128.5	45.	8.	-5.	12.6	124.0	55.	82.	-20.	13.9	119.3	50.	124.	-20.	15.8	114.5
071306Z	11.3 127.9	55	11.3	127.9	55.	8.	0.	12.8	123.2	65.	77.	-15.	14.3	119.7	55.	47.	-5.	16.3	116.7
071312Z	11.7 127.1	60	11.7	127.0	60.	6.	0.	13.1	122.5	55.	54.	-25.	15.2	118.6	60.	31.	0.	17.0	115.5
071318Z	12.1 126.3	65	12.2	126.0	65.	19.	0.	13.4	121.7	55.	42.	-20.	15.6	117.8	60.	38.	-5.	17.1	114.6
071400Z	12.5 125.4	75	12.4	125.4	70.	6.	-5.	13.6	121.5	55.	36.	-15.	15.1	117.8	65.	115.	-5.	17.3	115.3
071406Z	13.0 124.5	80	12.9	124.4	65.	8.	-15.	14.2	119.7	55.	51.	-5.	16.3	116.4	75.	71.	0.	18.4	113.7
071412Z	13.3 123.4	80	13.4	123.3	60.	8.	-20.	14.7	118.6	60.	51.	0.	17.1	115.3	70.	58.	-10.	18.9	112.7
071418Z	13.8 122.3	75	13.9	122.3	60.	6.	-15.	15.5	118.6	60.	59.	-5.	17.8	115.7	65.	136.	-20.	19.9	113.1
071500Z	14.2 121.4	70	14.3	121.1	60.	18.	-10.	16.7	116.9	70.	11.	0.	19.2	114.4	55.	120.	-35.	21.4	112.5
071506Z	14.7 120.4	60	14.8	120.1	55.	18.	-5.	17.0	116.5	75.	53.	0.	19.4	114.2	55.	101.	-25.	21.8	112.3
071512Z	15.4 119.1	60	15.5	119.2	55.	8.	-5.	18.4	115.5	70.	63.	-10.	21.2	112.8	50.	196.	-20.	0.0	0.
071518Z	16.1 117.8	65	16.3	117.7	60.	13.	-5.	18.8	114.0	60.	42.	-25.	21.9	111.9	50.	228.	-15.	0.0	0.
071600Z	16.7 116.7	70	17.0	116.6	65.	19.	-5.	19.5	112.8	65.	41.	-25.	21.8	110.4	40.	198.	-15.	0.0	0.
071606Z	17.2 115.6	75	17.3	115.4	70.	13.	-5.	19.9	111.2	60.	21.	-20.	22.6	108.2	35.	159.	-5.	0.0	0.
071612Z	17.8 114.6	80	17.7	114.6	70.	6.	-10.	19.8	110.9	55.	74.	-15.	0.0	0.	0.	0.	0.	0.	0.
071618Z	18.4 113.4	85	18.6	113.2	80.	17.	-5.	20.9	109.0	65.	58.	0.	0.0	0.	0.	0.	0.	0.	0.
071700Z	19.0 112.3	90	19.1	112.1	90.	13.	0.	21.7	108.0	65.	74.	10.	0.0	0.	0.	0.	0.	0.	0.
071706Z	19.6 111.0	90	19.8	111.1	85.	13.	5.	21.8	107.6	60.	110.	20.	0.0	0.	0.	0.	0.	0.	0.
071712Z	19.9 109.6	70	19.8	109.7	65.	8.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.	0.
071718Z	20.3 108.2	65	20.3	108.5	65.	17.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.	0.
071800Z	20.9 107.0	55	21.0	107.5	55.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.	0.
071806Z	21.3 105.7	40	21.3	105.8	45.	6.	5.	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	-0.	0.	0.

ALL FORECASTS
WRNG 24-HR 48-HR 72-HR

TYPHOONS WHILE OVER 35 KTS
WRNG 24-HR 48-HR 72-HR

Avg Forecast Posit Error
Avg Right Angle Error
Avg Intensity Magnitude Error
Avg Intensity Bias
Number of Forecasts

14. 72. 131. 187.
9. 39. 66. 70.
5. 13. 16. 11.
-4. -10. -16. -11.
25 21 17 13

14. 72. 131. 187.
9. 39. 66. 70.
5. 13. 16. 11.
-5. -18. -16. -11.
24 21 17 13

Distance Traveled by Tropical Cyclone is 2546. NM

Average Speed of Tropical Cyclone is 12. Knots

TYPHOON VERA
FIX POSITIONS FOR CYCLONE NO. 3

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
1	090600	9.6N 145.6E	PCN 6	T0.5/0.5	INIT OBS ULCC FIX	PGTW
* 2	090850	9.1N 144.1E	PCN 5			PGTW
* 3	092238	9.5N 142.5E	PCN 5		ULCC FIX	PGTW
* 4	100300	9.3N 141.4E	PCN 6	T1.5/1.5 /D1.0/21HRS	ULCC FIX	PGTW
5	100600	9.1N 142.1E	PCN 4			PGTW
6	100829	9.2N 141.5E	PCN 5			PGTW
7	100936	9.1N 141.0E	PCN 6			PGTW
8	101200	8.9N 140.8E	PCN 6			PGTW
9	101600	9.4N 138.4E	PCN 6	T2.0/2.0 /D0.5/13HRS		PGTW
10	101800	9.7N 137.6E	PCN 6			PGTW
11	102109	10.2N 137.2E	PCN 5		ULCC FIX	PGTW

12	102109	10.8N 137.4E	PCN 5	T2.0/2.0	INIT OBS	RPMK
13	110000	10.3N 136.7E	PCN 6			PGTW
14	110300	9.8N 135.8E	PCN 4	T2.0/2.0 /D0.5/11HRS	ULCC FIX	PGTW
15	110644	9.5N 135.2E	PCN 6		ULCC FIX	PGTW
16	110949	9.7N 134.5E	PCN 6		ULCC FIX	PGTW
17	111056	10.7N 134.1E	PCN 6			PGTW
18	111600	10.5N 133.4E	PCN 6	T2.0/2.0-/S0.0/13HRS		PGTW
19	111747	10.4N 132.8E	PCN 6			PGTW
20	112048	11.6N 132.2E	PCN 6			PGTW
21	112335	10.8N 131.9E	PCN 5	T2.5/2.5 /D0.5/26HRS		RPMK
22	120000	11.8N 132.5E	PCN 6			PGTW
23	120300	11.6N 131.2E	PCN 6	T2.5/2.5 /D0.5/11HRS		PGTW
24	120600	11.8N 130.2E	PCN 6			PGTW
25	120632	11.9N 130.0E	PCN 5			PGTW
26	120632	11.6N 132.0E	PCN 5			RPMK
27	120928	11.7N 129.7E	PCN 6			PGTW
28	121200	11.5N 129.2E	PCN 6			PGTW
29	121600	11.6N 128.8E	PCN 6	T3.0/3.0 /D1.0/13HRS		PGTW
30	121800	11.3N 129.0E	PCN 6			PGTW
31	121917	11.5N 129.8E	PCN 6			PGTW
32	122100	11.5N 129.2E	PCN 6			PGTW
33	122313	10.9N 126.7E	PCN 5	T3.0/3.0 /D0.5/24HRS		RPMK
34	122314	11.5N 126.9E	PCN 6			PGTW
35	130000	11.1N 128.3E	PCN 4			PGTW
36	130300	11.2N 127.8E	PCN 4	T3.5/3.5 /D1.0/11HRS		PGTW
37	130620	11.4N 127.9E	PCN 3			PGTW
38	130907	11.5N 127.3E	PCN 3			PGTW
39	131200	11.2N 127.0E	PCN 2			PGTW
40	131600	12.1N 126.2E	PCN 2	T4.0/4.0-/D1.0/13HRS		PGTW
41	131800	12.2N 126.0E	PCN 4			PGTW
42	131905	12.8N 125.9E	PCN 5			PGTW
43	132100	12.1N 125.5E	PCN 5			PGTW
44	132147	12.4N 125.5E	PCN 5		ULCC FIX	PGTW
45	132251	12.8N 125.5E	PCN 5			PGTW
46	132351	12.4N 125.6E	PCN 5	T4.5/4.5-/D1.5/24HRS		RPMK
47	140000	12.4N 125.5E	PCN 2			PGTW
48	140300	12.8N 124.9E	PCN 2	T4.5/4.5-/D1.0/11HRS	EYE DIA 18MM	PGTW
49	140600	12.9N 124.4E	PCN 2			PGTW
50	140607	12.9N 124.4E	PCN 1	T4.5/4.5	INIT OBS	RODN
51	140900	13.1N 123.8E	PCN 4			PGTW
52	141027	13.2N 123.7E	PCN 4			PGTW
53	141131	13.1N 123.7E	PCN 1			RODN
54	141131	13.3N 123.6E	PCN 1			RPMK
55	141200	13.4N 123.2E	PCN 2			PGTW
56	141600	13.7N 122.7E	PCN 2	T4.5/4.5-/D0.5/13HRS		PGTW
57	141800	13.9N 122.3E	PCN 2			PGTW
58	141852	14.0N 122.2E	PCN 2			PGTW
59	142100	14.1N 121.8E	PCN 2			PGTW
60	142126	14.2N 121.6E	PCN 4			PGTW
61	142156	14.8N 121.5E	PCN 1	T4.0/4.5 /W0.5/22HRS		RPMK
62	150000	14.4N 121.1E	PCN 4			PGTW
63	150300	14.6N 120.8E	PCN 4	T3.5/4.5+/W1.0/11HRS		PGTW
64	150600	15.0N 120.4E	PCN 4			PGTW
65	151006	15.3N 119.7E	PCN 4			PGTW
66	151118	15.4N 119.2E	PCN 3			RODN
67	151118	15.5N 119.3E	PCN 4			PGTW
68	151600	16.0N 118.1E	PCN 4	T4.0/4.8 /D0.5/13HRS		PGTW
69	151800	16.2N 117.7E	PCN 4			PGTW
70	152100	16.4N 117.1E	PCN 4			PGTW
71	152349	16.8N 116.8E	PCN 3	T4.0/4.8+/S0.0/22HRS		RPMK
72	160000	17.0N 116.6E	PCN 4			PGTW
73	160300	16.9N 115.8E	PCN 2	T4.5/4.5 /D1.0/11HRS	EYE OPEN N	PGTW
74	160600	17.1N 115.3E	PCN 2			PGTW
75	160725	17.2N 115.3E	PCN 3	T4.5/4.5	INIT OBS	RODN
76	160900	17.7N 114.8E	PCN 4			PGTW
77	161200	17.9N 114.4E	PCN 4			PGTW
78	161600	18.5N 113.5E	PCN 6	T5.0/5.0-/D1.0/13HRS		PGTW
79	161800	18.6N 113.1E	PCN 6			PGTW
80	162100	18.6N 112.6E	PCN 6			PGTW
81	162225	18.5N 112.1E	PCN 3			RODN
82	162327	18.9N 112.5E	PCN 5	T4.5/4.5-/D0.5/24HRS		RPMK
83	170000	19.0N 112.1E	PCN 6			PGTW
84	170300	19.2N 111.6E	PCN 6	T4.0/4.5-/W1.0/11HRS		PGTW
85	170600	19.3N 111.0E	PCN 6			PGTW
86	170712	19.7N 110.7E	PCN 5	T4.0/4.5-/W0.5/08HRS		RPMK
87	170900	19.8N 110.5E	PCN 6			PGTW
88	171105	19.6N 109.5E	PCN 1			RODN
89	171105	20.1N 109.9E	PCN 4			RPMK
90	171200	19.8N 109.8E	PCN 6			PGTW
91	171207	19.8N 109.6E	PCN 2	T4.5/4.5		RODN
92	171600	20.1N 108.5E	PCN 6	T3.5/4.0-/W1.0/13HRS		PGTW
93	171800	20.3N 108.1E	PCN 4			PGTW
94	171957	20.5N 107.6E	PCN 3			RODN
95	172100	20.8N 107.3E	PCN 4			PGTW
96	172204	20.5N 107.0E	PCN 5			RODN
97	172204	20.7N 106.9E	PCN 5		ULCC FIX	RPMK
98	180000	21.6N 107.0E	PCN 6			PGTW
99	180300	21.3N 106.3E	PCN 6	T3.0/3.5-/W1.0/11HRS		PGTW
*100	180600	20.6N 104.8E	PCN 6			PGTW
*101	180659	20.5N 104.7E	PCN 5	T2.5/2.5		RODN
102	180900	21.0N 104.0E	PCN 6			PGTW

103 181200 20.8N 103.0E PCN 6
 104 190300 22.5N 98.5E PCN 6

ULCC FIX

PGTW
 PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM	EYE ORIEN-TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	120116	11.1N 132.2E	1500FT	1004	30 040 90	120 32 030 160	6 15				+25 +24 +14		2
2	122207	11.1N 128.4E	1500FT	992	40 100 25	110 36 040 60	12 15				+12 +13 +12	29	3
3	130059	11.2N 128.5E	1500FT	993	45 140 45	190 51 130 60	5 8						3
4	130919	11.5N 127.7E	700MB	2966	986 50 290 35	040 52 300 52	15 15	CIRCULAR 30			+13 +13		4
5	131224	11.8N 126.9E	700MB	2954		130 65 030 52	15 10				+11 +13		4
6	150900	15.2N 119.8E	700MB	2959	35 230 90	010 55 280 45	4 8						5
7	151136	15.6N 118.8E	700MB	2970	986	190 65 130 95	10 6	ELLIPTICAL 20	10 360	+11 +14 +12		5	
8	160856	17.3N 115.0E	700MB		75 010 30 100	73 010 30 15	10 8	CIRCULAR 40		+15 +16		8	
9	161106	17.5N 114.8E	700MB		40 270 30 230	68 150 15 15	10 8	CIRCULAR 35		+16 +15		8	
10	162200	18.9N 112.8E	700MB		70 070 60 180	90 110 50 20		CIRCULAR 40				9	

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADAR-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	131400	11.9N 126.8E	LAND				10303 40000	EYE 80 PCT CIR OPEN E	14.0N 124.3E	98447
2	131430	11.9N 126.8E	LAND				10513 42905	EYE 80 PCT CIR OPEN E	14.0N 124.3E	98447
3	131500	11.9N 126.8E	LAND				10513 40000	EYE 80 PCT CIR OPEN E	14.0N 124.3E	98447
4	131530	11.9N 126.7E	LAND				10512 40000	EYE 80 PCT CIR OPEN E	14.0N 124.3E	98447
5	131600	11.9N 126.8E	LAND				10513 40000	EYE 80 PCT CIR OPEN E	14.0N 124.3E	98447
6	131630	12.1N 126.7E	LAND				10422 42908	EYE 80 PCT CIR OPEN N	14.0N 124.3E	98447
7	131700	12.2N 126.5E	LAND				10422 43219	EYE 80 PCT CIR OPEN N	14.0N 124.3E	98447
8	131730	12.2N 126.3E	LAND				10412 42821	EYE 80 PCT CIR OPEN N	14.0N 124.3E	98447
9	131800	12.2N 126.2E	LAND				10513 42712	EYE 80 PCT CIR OPEN W	14.0N 124.3E	98447
10	131830	12.2N 126.1E	LAND				12653 42918	EYE 100 PT ELPTCL AXIS 60/30	14.0N 124.3E	98447
11	132330	12.4N 125.5E	LAND				10523 42915	EYE DIA 30 KMS	14.0N 124.3E	98447
12	140000	12.5N 125.4E	LAND				10523 43208	EYE 100 PCT CIR DIA 30 KMS	14.0N 124.3E	98447
13	140000	12.5N 124.4E	LAND				11901 //		10.3N 124.3E	98646
14	140030	12.5N 125.4E	LAND				10512 43208	EYE DIA 30 KMS	14.0N 124.3E	98447
15	140100	12.4N 125.3E	LAND				10513 42710	EYE DIA 30 KMS	14.0N 124.3E	98447
16	140100	12.5N 125.2E	LAND				20848 52620		10.3N 124.3E	98646
17	140130	12.6N 125.2E	LAND				10512 43216	EYE DIA 30 KMS	14.0N 124.3E	98447
18	140200	12.6N 125.1E	LAND				10512 42711	EYE DIA 30 KMS	14.0N 124.3E	98447
19	140300	12.7N 124.8E	LAND				10512 42811	EYE DIA 25 KMS	14.0N 124.3E	98447
20	140300	12.8N 124.8E	LAND				3// 42818	EYE IN BLIND SECTOR	10.3N 124.0E	98646
21	140310	12.7N 124.8E	LAND				10512 42989	EYE DIA 25 KMS	14.0N 124.3E	98447
22	140400	12.7N 124.7E	LAND				10512 42710	EYE DIA 25 KMS	14.0N 124.3E	98447
23	140430	12.8N 124.7E	LAND				10512 43216	EYE DIA 30 KMS	14.0N 124.3E	98447
24	140500	12.8N 124.6E	LAND				10512 43205	EYE DIA 30 KMS	14.0N 124.3E	98447
25	140600	12.9N 124.5E	LAND				10512 43213		14.0N 124.3E	98447
26	140830	13.2N 124.8E	LAND				10512 42915		14.0N 124.3E	98447
27	140830	13.2N 124.2E	LAND				2051/ 43204		14.1N 123.0E	98440
28	140900	13.4N 124.2E	LAND				2041/ 43411		14.1N 123.0E	98440
29	141000	13.4N 124.0E	LAND				1061/ 43205		14.1N 123.0E	98440
30	141030	13.2N 123.9E	LAND				1061/ 42211		14.1N 123.0E	98440
31	141030	13.2N 123.6E	LAND				10512 42611		14.0N 124.3E	98447
32	141100	13.3N 123.8E	LAND				1061/ 42987		14.1N 123.0E	98440
33	141110	13.3N 123.7E	LAND				1061/ 42785		14.1N 123.0E	98440
34	141110	13.4N 123.4E	LAND				10513 42917		14.0N 124.3E	98447
35	141200	13.3N 123.6E	LAND				1052/ 42707		14.1N 123.0E	98440
36	141230	13.3N 123.4E	LAND				1051/ //		14.1N 123.0E	98440
37	141230	13.4N 123.3E	LAND				10513 42903		14.0N 124.3E	98447
38	141300	13.3N 123.3E	LAND				10510 42706		14.1N 123.0E	98440
39	141300	13.4N 123.2E	LAND				10513 42713	EYE DIA 25 KMS	14.0N 124.3E	98447
40	141330	13.4N 123.2E	LAND				10310 43207		14.1N 123.0E	98440
41	141400	13.3N 123.0E	LAND				10553 42715		14.0N 124.3E	98447
42	141400	13.5N 123.1E	LAND				10611 42905		14.1N 123.0E	98440
43	141430	13.4N 123.1E	LAND				10611 42904		14.1N 123.0E	98440
44	141600	13.5N 122.9E	LAND				1132/ 43205		14.1N 123.0E	98440
45	141630	13.6N 122.8E	LAND				1031/ 43005		14.1N 123.0E	98440
46	142200	14.1N 121.6E	LAND				10310 52712		14.1N 123.0E	98440
47	142200	14.0N 121.8E	LAND				4// 52016		16.3N 120.6E	98321
48	142300	14.1N 121.5E	LAND				21320 52709		14.1N 123.0E	98440
49	142300	13.8N 122.2E	LAND				1074/ 52912	EYE 60 PCT CIR DIA 50 KMS	16.3N 120.6E	98321
50	150000	14.2N 121.3E	LAND				21340 52812		14.1N 123.0E	98440
51	150030	14.3N 121.1E	LAND				35/51 52913		14.1N 123.0E	98440
52	150130	14.8N 120.2E	LAND	POOR					15.2N 120.6E	98327
53	150200	14.7N 120.3E	LAND	GOOD					15.2N 120.6E	98327
54	150300	14.4N 120.7E	LAND				323// 531//		14.8N 120.2E	98426
55	150300	14.8N 120.7E	LAND	FAIR					15.2N 120.6E	98327
56	150330	14.5N 120.6E	LAND				2037/ 331//		14.8N 120.2E	98426
57	150400	14.5N 120.5E	LAND				3405/ 631//		14.8N 120.2E	98426
58	150400	14.6N 120.5E	LAND	POOR					15.2N 120.6E	98327
59	150430	14.6N 120.5E	LAND				3155/ 529//		14.8N 120.2E	98426
60	150500	14.3N 121.1E	LAND				35/51 52913		14.1N 123.0E	98440
61	150500	14.8N 120.3E	LAND	FAIR					15.2N 120.6E	98327

62 150600 14.8N 120.2E LAND FAIR
63 150800 15.1N 120.1E LAND

3434/ 733//

15.2N 120.6E 98327
14.8N 120.2E 98426

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	170900	19.7N 110.5E	080	020	WMO 59758, 59855
2	171200	19.8N 109.7E	065	015	WMO 59845, 59758
3	180300	20.9N 106.4E	050	010	WMO 48826, 48820

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

**SUPER TYPHOON WAYNE
BEST TRACK DATA**

MD/DA/HR	BEST TRACK		WARNING		24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST						
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	
072018Z	8.5	138.9	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	
072100Z	9.4	137.8	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	
072106Z	10.6	136.8	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	
072112Z	11.8	136.2	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	
072118Z	13.0	135.8	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	
072200Z	14.0	134.9	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	
072206Z	14.7	133.9	30	14.6	134.1	25	13.	-5.	16.2	129.9	40	96.	-25.	18.2	126.4	55	205.	-80.	20.0
072212Z	15.4	132.8	40	15.2	132.6	30	17.	-10.	17.3	129.2	40	106.	-40.	19.4	126.7	55	283.	-65.	21.5
072218Z	16.1	131.6	50	16.1	131.8	45	12.	-5.	18.4	128.7	65	150.	-35.	20.4	126.1	75	319.	-35.	22.4
072300Z	16.8	130.2	55	16.8	130.2	50	0.	-5.	19.9	125.8	70	72.	-50.	22.9	122.7	80	185.	-15.	0.0
072306Z	17.4	128.8	65	17.4	128.8	65	0.	0.	20.4	124.3	85	72.	-50.	23.5	121.1	70	160.	-10.	0.0
072312Z	18.2	127.6	60	18.2	127.5	65	6.	-15.	21.6	123.1	85	102.	-35.	24.2	120.5	65	204.	20.	0.0
072318Z	18.8	126.1	100	18.8	126.3	75	11.	-25.	21.9	122.0	90	91.	-20.	24.6	119.4	60	229.	30.	0.0
072400Z	19.3	124.7	120	19.3	124.5	125	11.	5.	21.8	118.9	115.	45.	20.	0.0	0.	0.	0.0	0.	0.
072406Z	19.8	123.2	135	19.9	123.2	130	6.	-5.	22.8	118.2	185.	42.	25.	0.0	0.	0.	0.0	0.	0.
072412Z	20.4	121.8	120	20.5	121.2	120	34.	0.	22.5	116.3	100	135.	55.	0.0	0.	0.	0.0	0.	0.
072418Z	21.3	120.5	110	21.1	120.2	115	21.	5.	23.4	115.2	90	144.	60.	0.0	0.	0.	0.0	0.	0.
072500Z	22.4	119.4	95	22.3	119.3	95	0.	0.	0.	0.	-0.	0.	0.	0.	0.	0.	0.	0.	0.
072506Z	23.5	118.2	80	23.5	118.1	85	6.	5.	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.
072512Z	24.7	116.8	45	24.8	117.2	45	23.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.
072518Z	25.8	115.4	30	0.0	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.

ALL FORECASTS				
WRNG	24-HR	48-HR	72-HR	
Avg Forecast Posit Error	12.	96.	226.	454.
Avg Right Angle Error	10.	63.	92.	102.
Avg Intensity Magnitude Error	6.	38.	36.	28.
Avg Intensity Bias	-4.	-9.	-22.	18.
Number of Forecasts	14	11	7	3

TYPHOONS WHILE OVER 35 KTS				
WRNG	24-HR	48-HR	72-HR	
WRNG	12.	91.	226.	424.
PGTW	10.	58.	92.	73.
PGTW	6.	36.	38.	18.
PGTW	13.	18.	6.	2

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1739. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 14. KNOTS

**SUPER TYPHOON WAYNE
FIX POSITIONS FOR CYCLONE NO. 4**

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
*	210000	12.5N 138.5E	PCN 6	T1.0/1.0		PGTW
2	211600	12.6N 135.8E	PCN 6	T1.5/1.5 /D0.5/16HRS		PGTW
3	211800	12.7N 135.1E	PCN 6			PGTW
4	212048	13.0N 135.5E	PCN 5			PGTW
5	220000	14.6N 135.2E	PCN 6	T2.0/2.0 /D1.0/08HRS	ULCC FIX	PGTW
6	220600	15.0N 133.3E	PCN 6		ULCC FIX	PGTW
7	220900	14.9N 132.8E	PCN 6		ULCC FIX	PGTW
8	221200	15.5N 132.2E	PCN 6			PGTW
9	221500	16.0N 132.0E	PCN 6	T3.5/3.5 /D2.0/16HRS		PGTW
10	221800	16.4N 131.5E	PCN 6			PGTW
11	221855	16.1N 131.5E	PCN 5			PGTW
12	222100	16.3N 131.0E	PCN 6			PGTW
13	222258	16.6N 130.5E	PCN 3	T3.5/3.5		RODN
14	230000	16.9N 130.2E	PCN 4			PGTW
15	230300	17.1N 129.3E	PCN 4	T4.0/4.0 /D2.0/11HRS		PGTW
16	230600	17.4N 128.7E	PCN 4			PGTW
17	230900	18.0N 128.2E	PCN 4			PGTW
18	230956	17.6N 127.0E	PCN 3			RODN
19	231137	18.2N 127.5E	PCN 3			RODN
20	231200	18.4N 127.5E	PCN 4			PGTW
21	231600	18.6N 126.6E	PCN 4	T4.5/4.5 /D1.0/13HRS		PGTW
22	231800	18.9N 126.1E	PCN 4			PGTW
23	231842	18.9N 126.1E	PCN 4			RODN
24	231843	19.0N 125.7E	PCN 4			PGTW
25	232100	19.0N 125.4E	PCN 2			PGTW
26	232139	19.1N 125.1E	PCN 1			PGTW
27	240000	19.3N 124.6E	PCN 2			PGTW
28	240017	19.2N 124.8E	PCN 1	T5.0/5.0 /D1.5/25HRS	INIT OBS	RODN
29	240300	19.6N 123.8E	PCN 2	T6.5/6.5	INIT OBS	PGTW
30	240600	19.9N 123.0E	PCN 2			PGTW
31	240727	20.0N 122.6E	PCN 1	T5.5/5.5	INIT OBS	RODN

32	241019	20.3N	121.9E	PCN 3		PGTW
33	241116	20.0N	122.0E	PCN 6		RODN
34	241116	20.3N	122.0E	PCN 3		RPMK
35	241200	20.6N	121.7E	PCN 4	T6.0/6.0-/D1.5/13HRS	PGTW
36	241600	21.0N	120.9E	PCN 4		PGTW
37	241800	21.3N	120.4E	PCN 4		PGTW
38	242100	21.7N	119.9E	PCN 4		PGTW
39	242356	22.2N	119.1E	PCN 5		RODN
40	250000	22.4N	119.2E	PCN 4		PGTW
41	250300	23.0N	118.7E	PCN 2	T4.0/5.0-/W2.5/11HRS	PGTW
42	250500	23.6N	118.2E	PCN 4		PGTW
43	250715	24.0N	118.1E	PCN 3	T4.5/5.5-/W1.0/24HRS	RODN
44	250715	23.7N	118.1E	PCN 1	T4.0/4.0-	RPMK
45	250900	24.3N	117.8E	PCN 4	INIT OBS	PGTW
46	251854	24.6N	117.0E	PCN 6		PGTW
47	251854	24.2N	116.0E	PCN 5		RPMK
48	251200	24.5N	116.5E	PCN 6	ULCC FIX	PGTW
49	251600	25.5N	115.8E	PCN 6	INIT OBS ULCC FIX	PGTW
50	261200	30.0N	112.0E	PCN 6	T2.0/3.0-	PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	0BS 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	220457	14.5N 134.2E	1500FT		1005	25 360 45	060 24 368 45	16 8	ELLIPTICAL 12 8 100	+26 +23 28	1	
2	222053	16.3N 131.2E	700MB	2985	988	210 57 138 29	10 10 3	ELLIPTICAL 20 15 100	+12 +16	2		
3	222352	16.8N 130.1E	700MB	2994	989	50 090 9	130 56 020 20	15 3	+12 +15	2		
4	230550	17.3N 128.0E	700MB	2939		88 030 15	150 77 020 20	10 2	+15 +15 +12	3		
5	230940	17.6N 128.3E	700MB	2891	976	65 350 15	080 58 330 30	5 2	CIRCULAR 20	+15 +13 +12	3	
6	231130	18.0N 127.7E	700MB	2830			280 63 198 35	10 3	+12 +15 +12	3		
7	232030	19.0N 125.7E	700MB	2548		35 140 120	210 96 138 28	12 5	+12 +18 +13	5		
8	232325	19.2N 124.6E	700MB	2412	921	130 080 7	150 112 080 20	8 2	ELLIPTICAL 18 10 030	+11 +20 +11	5	
9	241850	20.3N 122.0E	700MB	2419	922		140 97 040 30	10 1	CIRCULAR 12	+11 +22 +20	6	
10	241315	20.6N 121.5E	700MB	2522			050 100 050 30	5 2	CIRCULAR 50		6	
11	242032	21.0N 120.0E	700MB	2633	946		130 84 050 4	3 1	CIRCULAR 25	+22 +16	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	240340	19.9N 123.5E	LAND				10412 43412	EYE DIA 20 KMS	16.3N 120.6E	98321
2	240400	19.9N 123.4E	LAND				10412 42708	EYE DIA 20 KMS	16.3N 120.6E	98321
3	242100	21.0N 119.0E	LAND				6/// 53113		25.1N 121.6E	46696
4	250400	23.0N 118.5E	LAND				6/// 53022		22.6N 120.3E	46744
5	250400	23.1N 118.2E	LAND				6/// 53012		23.6N 119.6E	46734
6	250500	23.2N 118.4E	LAND				6/// 53409		22.6N 120.3E	46744
7	250500	23.3N 118.1E	LAND				6/// 53114		23.6N 119.6E	46734

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	250900	24.4N 117.9E	060	020	WMO 59134
2	251200	24.6N 117.3E	050	020	WMO 58927

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

SUPER TYPHOON ABBY
BEST TRACK DATA

MO/DA/HR	BEST TRACK		WARNING		24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
	POSIT	WIND	POSIT	WIND	ERRORS	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
080500Z	9.1	140.7	30	9.2	140.8	30.	8.	0.	10.8	137.2	45.	101.	10.	12.2	133.5	65.
080506Z	9.3	140.5	30	9.5	140.1	40.	27.	10.	10.9	136.6	55.	89.	18.	12.4	132.6	65.
080512Z	9.5	139.9	30	9.6	139.9	35.	0.	5.	10.6	137.4	45.	72.	-18.	11.9	134.4	65.
080518Z	9.9	139.4	35	9.8	139.3	35.	8.	0.	10.9	136.6	50.	91.	-15.	12.4	133.3	70.
080600Z	10.2	138.8	35	10.2	138.8	40.	0.	5.	12.2	135.7	60.	36.	-5.	14.2	132.1	80.
080606Z	11.0	138.1	45	10.9	137.8	45.	19.	0.	12.9	134.4	60.	46.	-15.	14.8	131.2	80.
080612Z	11.8	137.3	55	11.7	137.5	55.	13.	0.	14.5	134.5	75.	35.	-15.	16.7	131.1	90.
080618Z	12.4	136.4	65	12.3	136.3	65.	8.	0.	14.4	133.1	90.	43.	-25.	16.5	129.7	110.
080700Z	12.8	135.8	65	12.8	135.8	70.	0.	5.	14.8	132.6	90.	61.	-40.	16.2	129.6	115.
080706Z	13.6	134.7	75	13.5	134.9	80.	13.	5.	15.3	131.7	95.	72.	-48.	16.9	128.8	120.
080712Z	14.4	133.9	90	14.3	134.8	90.	8.	0.	16.5	130.6	130.	88.	-18.	18.7	127.7	125.
080718Z	15.0	133.5	115	15.0	133.5	100.	0.	-15.	17.2	130.4	135.	59.	-18.	19.7	127.5	130.
080800Z	15.8	132.8	130	15.8	132.8	125.	0.	-5.	18.2	129.7	135.	67.	-10.	20.3	127.1	120.
080806Z	16.3	132.4	135	16.6	132.3	130.	19.	-5.	19.2	129.7	130.	87.	-5.	21.5	127.2	110.
080812Z	17.1	132.0	140	17.2	131.9	135.	8.	-5.	20.0	129.6	125.	87.	0.	22.8	127.2	110.
080818Z	17.4	131.4	145	17.8	131.5	140.	25.	-5.	20.7	129.2	125.	127.	5.	23.5	126.6	110.
080900Z	17.8	130.8	145	17.8	130.9	135.	6.	-10.	19.7	129.4	115.	64.	0.	22.3	127.2	105.
080906Z	18.1	130.7	135	18.1	130.7	130.	0.	-5.	19.7	129.4	110.	58.	-18.	21.9	127.5	100.
080912Z	18.7	130.3	125	18.8	130.2	125.	8.	0.	20.5	128.8	110.	102.	-5.	22.2	127.4	100.
080918Z	18.9	130.4	120	18.9	130.2	120.	11.	0.	20.6	129.0	110.	90.	0.	23.1	126.9	100.
081000Z	19.2	130.4	115	19.1	130.2	120.	13.	5.	20.4	129.1	110.	91.	0.	22.2	127.6	113.
081006Z	19.5	130.4	120	19.7	130.8	115.	26.	-5.	21.3	128.6	105.	123.	-18.	23.1	127.8	100.
081012Z	19.9	130.5	115	19.9	130.5	115.	0.	0.	21.5	130.4	105.	18.	-20.	23.3	129.3	90.
081018Z	20.1	130.5	110	20.0	130.4	115.	8.	5.	21.3	130.3	100.	45.	-20.	23.2	129.3	85.
081100Z	20.6	130.7	110	20.6	130.5	110.	11.	0.	22.5	129.9	90.	44.	-30.	23.9	128.2	80.
081106Z	21.2	130.8	115	21.3	130.6	120.	13.	5.	23.3	129.5	105.	76.	-15.	25.1	127.2	90.
081112Z	21.6	130.7	125	21.6	130.6	125.	6.	0.	23.5	129.3	110.	105.	-15.	25.3	127.0	90.
081118Z	22.0	130.6	120	22.0	130.4	120.	11.	0.	24.0	129.0	105.	137.	-15.	25.6	126.6	90.
081200Z	22.5	130.7	120	22.6	130.5	120.	13.	0.	24.4	129.4	100.	132.	-15.	25.9	127.3	90.
081206Z	22.9	130.8	120	23.0	130.6	115.	13.	-5.	24.9	129.7	95.	136.	-15.	26.3	127.3	90.
081212Z	23.4	131.2	125	23.5	131.0	115.	13.	-10.	25.3	130.0	95.	141.	-15.	26.5	127.8	90.
081218Z	23.9	131.5	120	23.8	131.1	110.	23.	-10.	25.5	130.0	95.	166.	-18.	26.8	127.8	90.
081300Z	24.6	131.8	115	24.6	131.7	110.	5.	-5.	27.6	131.3	90.	123.	-15.	30.3	129.7	80.
081306Z	24.9	132.2	110	25.3	132.1	105.	25.	-5.	26.1	131.2	90.	134.	-18.	30.7	129.6	80.
081312Z	25.4	132.6	110	25.5	132.4	100.	12.	-10.	27.8	132.4	90.	68.	-10.	30.4	131.4	80.
081318Z	26.1	133.0	105	26.2	132.9	100.	8.	-5.	29.0	132.7	90.	69.	-5.	31.7	132.1	75.
081400Z	26.6	133.3	105	26.7	133.2	105.	8.	0.	29.9	133.4	85.	85.	-5.	32.5	131.8	70.
081406Z	27.2	133.5	100	27.3	133.4	100.	8.	0.	30.1	133.4	80.	70.	-5.	32.6	131.8	65.
081412Z	27.6	133.5	100	27.6	133.5	95.	0.	-5.	30.0	133.4	80.	56.	-5.	32.2	132.1	65.
081418Z	28.1	133.5	95	28.2	133.5	90.	6.	-5.	31.0	132.9	80.	115.	0.	36.0	131.2	55.
081500Z	28.5	133.6	90	28.5	133.5	90.	5.	0.	32.5	132.3	75.	166.	0.	41.8	132.7	45.
081506Z	29.1	134.1	85	29.0	133.7	85.	22.	0.	33.3	132.9	65.	172.	-5.	43.1	133.9	35.
081512Z	29.5	134.3	85	29.6	134.3	85.	6.	0.	35.7	132.9	55.	254.	-15.	42.6	134.6	35.
081518Z	30.0	134.8	80	30.2	134.7	80.	13.	0.	36.3	132.8	45.	255.	-25.	0.0	0.0	0.
081600Z	31.1	135.1	75	31.0	135.0	75.	8.	0.	38.8	135.7	50.	218.	-10.	0.0	0.0	0.
081606Z	31.8	135.8	70	31.9	135.8	70.	6.	0.	39.3	139.7	45.	263.	-10.	0.0	0.0	0.
081612Z	32.7	136.5	70	32.6	136.4	70.	8.	0.	37.9	139.2	40.	138.	-5.	0.0	0.0	0.
081618Z	33.8	137.0	70	33.7	137.2	70.	12.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.
081700Z	34.6	137.3	60	34.6	137.4	60.	5.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.
081706Z	35.1	138.1	55	35.0	138.2	55.	8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.
081712Z	35.6	139.4	45	36.0	140.1	46.	42.	-5.	0.0	0.0	0.	-8.	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	11.	104.	224.	18.	104.	224.	340.
Avg Right Angle Error	8.	84.	199.	8.	84.	199.	307.
Avg Intensity Magnitude Error	3.	12.	17.	3.	12.	17.	21.
Avg Intensity Bias	-1.	-11.	-17.	-19.	-2.	-11.	-17.
Number of Forecasts	51	47	43	39	48	47	43
							39

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2031. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

SUPER TYPHOON ABBY
FIX POSITIONS FOR CYCLONE NO. 5

SATELLITE FIXES

FIX TIME NO. (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1 012011	7.7N 146.7E	PCN 5	TO.0/0.0	INIT OBS	PGTW

2	020000	7.4N 146.0E	PCN 6		PGTW
3	020300	7.1N 145.8E	PCN 6		PGTW
4	020600	6.6N 145.7E	PCN 6		PGTW
5	020900	6.9N 145.7E	PCN 6		PGTW
6	030300	8.4N 145.4E	PCN 6	T1.0/1.0 /D1.0/30HRS	PGTW
7	030600	8.6N 145.1E	PCN 6		PGTW
8	031200	8.7N 144.5E	PCN 6		PGTW
9	032110	8.4N 143.7E	PCN 6		PGTW
10	040000	8.5N 143.1E	PCN 6		PGTW
11	040300	9.1N 143.2E	PCN 6	T2.0/2.0 /D1.0/24HRS	PGTW
12	040512	8.2N 142.8E	PCN 6		PGTW
13	040809	8.8N 142.5E	PCN 6		PGTW
14	041200	8.6N 142.3E	PCN 6		PGTW
15	041756	8.9N 141.7E	PCN 5		PGTW
16	042137	9.3N 141.2E	PCN 5		PGTW
17	050000	9.5N 140.7E	PCN 6		PGTW
18	050300	9.5N 140.3E	PCN 6	T3.0/3.0 /D1.0/24HRS	PGTW
19	050459	9.6N 140.3E	PCN 6	T2.5/2.5	RODN
20	050600	9.7N 140.1E	PCN 6		PGTW
21	050900	9.8N 140.5E	PCN 6		PGTW
22	050929	9.1N 141.8E	PCN 5		PGTW
23	051017	9.3N 140.3E	PCN 6		PGTW
24	051200	10.0N 140.8E	PCN 6		PGTW
25	051600	10.1N 140.1E	PCN 6	T3.0/3.0	PGTW
26	051744	10.3N 140.2E	PCN 6		PGTW
27	052028	9.9N 139.5E	PCN 3		PGTW
28	052257	10.2N 139.8E	PCN 5	T2.5/2.5	RPMK
29	052257	10.1N 139.3E	PCN 5		PGTW
30	052257	10.1N 139.7E	PCN 5		RODN
31	060000	10.3N 138.6E	PCN 4		PGTW
32	060300	10.5N 138.2E	PCN 4	T3.0/3.0 /D0.0/24HRS	PGTW
33	060629	11.0N 137.9E	PCN 5		PGTW
34	060629	10.9N 137.8E	PCN 3	T3.0/3.0	RPMK
35	060629	11.1N 138.2E	PCN 5	T3.5/3.5 /D1.0/24HRS	RODN
36	060908	11.6N 137.4E	PCN 4	T3.0/3.0 /D0.5/10HRS	RPMK
37	060908	11.4N 137.6E	PCN 6		PGTW
38	060955	11.4N 137.9E	PCN 5		RODN
39	061200	11.9N 137.1E	PCN 6		PGTW
40	061600	12.8N 136.4E	PCN 6	T4.0/4.0 /D1.0/13HRS	PGTW
41	061800	12.2N 136.1E	PCN 6		PGTW
42	062100	12.4N 135.7E	PCN 2		PGTW
43	062235	12.4N 135.6E	PCN 2		PGTW
44	062235	13.8N 136.1E	PCN 3	T4.0/4.0 /D1.5/24HRS	RPMK
45	062235	13.8N 136.1E	PCN 3		RODN
46	070000	12.9N 135.4E	PCN 4		PGTW
47	070300	13.4N 134.9E	PCN 2	T4.5/4.5 /D1.5/11HRS	PGTW
48	070617	13.6N 134.5E	PCN 3		PGTW
49	070617	13.5N 134.6E	PCN 3	T5.0/5.0 /D1.5/24HRS	RODN
50	070847	13.8N 134.3E	PCN 4		PGTW
51	070933	14.0N 133.9E	PCN 3		RODN
52	071200	14.3N 134.2E	PCN 2		PGTW
53	071600	14.8N 133.8E	PCN 2		PGTW
54	071800	15.0N 133.6E	PCN 2	T6.0/6.0 /D1.5/15HRS	PGTW
55	071981	15.2N 133.4E	PCN 1		PGTW
56	072100	15.3N 133.0E	PCN 2		PGTW
57	072127	15.3N 133.2E	PCN 1		EYE DIA 6NM
58	072213	15.4N 133.0E	PCN 1		PGTW
59	072213	15.5N 133.0E	PCN 1		RODN
60	080000	15.6N 133.0E	PCN 2		PGTW
61	080300	15.9N 132.7E	PCN 2	T6.0/6.0 /D1.5/09HRS	PGTW
62	080600	16.5N 132.5E	PCN 2		PGTW
63	080604	16.4N 132.4E	PCN 1		PGTW
64	080604	16.3N 132.1E	PCN 3	T5.0/5.0	RKSO
65	080654	16.5N 132.4E	PCN 1	T6.5/6.5 /D1.5/24HRS	RODN
66	080900	16.8N 132.2E	PCN 2		PGTW
67	081007	16.9N 132.2E	PCN 1		PGTW
68	081053	17.0N 132.1E	PCN 1		EYE DIA 12NM
69	081200	17.1N 132.0E	PCN 2		PGTW
70	081600	17.5N 131.5E	PCN 2	T7.0/7.0 /D1.0/22HRS	PGTW
71	081800	17.6N 131.3E	PCN 2		PGTW
72	081849	17.4N 131.4E	PCN 1		PGTW
73	082106	17.6N 131.1E	PCN 2		PGTW
74	082106	17.5N 130.8E	PCN 1	T7.0/7.0 /D3.0/26HRS	RPMK
75	082106	17.5N 131.1E	PCN 1		RODN
76	082312	17.7N 131.1E	PCN 1		PGTW
77	082333	17.7N 130.8E	PCN 1		PGTW
78	090000	17.7N 131.0E	PCN 2		PGTW
79	090300	17.9N 130.9E	PCN 2	T7.0/7.0 /D1.0/11HRS	EYE DIA 18NM
80	090552	18.0N 130.5E	PCN 3	T7.0/7.0 /D2.0/24HRS	RKSO
81	090552	18.1N 130.7E	PCN 1		PGTW
82	090552	18.1N 130.7E	PCN 1	T7.5/7.5 /D1.0/24HRS	EYE DIA 18NM
83	090600	18.1N 130.7E	PCN 2		RODN
84	090900	18.3N 130.6E	PCN 2		PGTW
85	090946	18.4N 130.7E	PCN 1		PGTW
86	091031	18.5N 130.5E	PCN 1		PGTW
87	091200	18.7N 130.5E	PCN 2		PGTW
88	091600	18.8N 130.5E	PCN 2	T6.5/6.5 /D0.5/13HRS	PGTW
89	091800	18.8N 130.4E	PCN 2		PGTW
90	092045	18.9N 130.2E	PCN 1		PGTW
91	092311	19.2N 130.1E	PCN 1	T5.5/6.5 /D1.5/26HRS	RPMK
92	092311	19.1N 130.4E	PCN 1		RODN

93	100000	18.9N	130.4E	PCN 2				PGTW
94	100300	19.2N	130.4E	PCN 2				PGTW
95	100533	19.2N	130.2E	PCN 1	T7.0/7.5 /W0.5/24HRS			RODN
96	100539	19.7N	130.3E	PCN 1	T5.5/6.5 /W1.5/14HRS			PGTW
97	100539	19.4N	130.8E	PCN 1	T6.0/7.0 /W1.0/24HRS			RKSO
98	100900	19.7N	130.4E	PCN 2				PGTW
99	101200	19.8N	130.4E	PCN 2				PGTW
100	101500	19.9N	130.4E	PCN 2	T5.0/6.0 /W1.5/10HRS			PGTW
101	101800	20.0N	130.4E	PCN 2				PGTW
102	101824	20.1N	130.4E	PCN 2				PGTW
103	102024	20.0N	130.3E	PCN 2				PGTW
104	102249	20.2N	130.4E	PCN 1				RODN
105	110000	20.3N	130.7E	PCN 2				PGTW
106	110300	20.9N	130.8E	PCN 2	T4.5/5.5 /W1.0/11HRS			PGTW
107	110527	21.1N	131.0E	PCN 1	T6.0/6.0 /S0.0/23HRS			RKSO
108	110527	21.4N	130.6E	PCN 2				PGTW
109	110527	21.0N	130.7E	PCN 1	T5.5/7.0 /W1.5/24HRS	EYE DIA 30NM		RODN
110	110904	21.4N	130.5E	PCN 2				PGTW
111	111845	21.4N	130.0E	PCN 2				RPMK
112	111845	21.0N	131.0E	PCN 1				RODN
113	111200	21.6N	130.6E	PCN 2				PGTW
114	111600	21.7N	130.6E	PCN 2	T4.5/5.5 /W0.5/13HRS			PGTW
115	111751	21.8N	130.4E	PCN 2				PGTW
116	112141	22.3N	131.1E	PCN 1	T6.5/6.5	INIT OBS		RPMK
117	112144	22.3N	130.9E	PCN 1		EYE DIA 30NM		PGTW
118	112227	22.3N	130.7E	PCN 1				PGTW
119	120000	22.4N	130.8E	PCN 2				PGTW
120	120300	22.6N	130.9E	PCN 2	T5.5/5.5-/D1.0/11HRS	EYE DIA 30NM		PGTW
121	120600	22.9N	130.8E	PCN 2		EYE DIA 40NM		PGTW
122	120657	22.9N	130.9E	PCN 1	T6.0/6.0	INIT OBS		RPMK
123	120900	23.2N	131.0E	PCN 2				PGTW
124	121024	23.1N	131.2E	PCN 1				RKSO
125	121200	23.4N	131.1E	PCN 2				PGTW
126	121600	23.7N	131.1E	PCN 2	T5.5/5.5-/S0.0/13HRS			PGTW
127	121941	24.0N	131.2E	PCN 1				RPMK
128	122100	24.2N	131.6E	PCN 2				PGTL
129	122123	24.2N	131.6E	PCN 1				PGTW
130	122123	24.3N	131.0E	PCN 1	T5.5/5.5	EYE DIA 24NM		RODN
131	122347	24.5N	131.9E	PCN 1		EYE DIA 30NM		PGTW
132	130300	24.7N	131.9E	PCN 2		EYE DIA 30NM		PGTW
133	130502	24.9N	132.1E	PCN 2	T5.5/5.5 /S0.0/11HRS			PGTW
134	130900	25.4N	132.3E	PCN 2				RPMK
135	131045	25.3N	132.8E	PCN 1				PGTW
136	131200	25.6N	132.4E	PCN 2				PGTW
137	131600	26.0N	132.6E	PCN 2	T5.5/5.5-/S0.0/13HRS			PGTW
138	131800	26.2N	132.9E	PCN 2				PGTW
139	132100	26.7N	133.1E	PCN 2				PGTW
140	132102	26.4N	133.1E	PCN 1	T5.5/5.5-/S0.0/24HRS			RODN
141	132325	26.5N	133.3E	PCN 1				PGTW
142	140300	26.9N	133.5E	PCN 2				PGTW
143	140600	27.3N	133.4E	PCN 2	T4.5/5.5-/W1.0/14HRS			PGTW
144	140900	27.5N	133.5E	PCN 2				PGTW
145	140942	27.3N	133.5E	PCN 1	T6.0/6.0 /S0.0/24HRS			RKSO
146	141200	27.8N	133.5E	PCN 2				PGTW
147	141600	28.1N	133.5E	PCN 2	T4.5/5.5-/W1.0/10HRS			PGTW
148	141800	28.2N	133.6E	PCN 2				PGTW
149	142041	28.4N	133.3E	PCN 3				PGTW
150	142303	28.3N	133.6E	PCN 1	T4.5/6.0-/W1.5/13HRS			RKSO
151	142303	28.3N	133.5E	PCN 1				PGTW
152	150000	28.6N	133.4E	PCN 2				PGTW
153	150300	28.9N	133.6E	PCN 2				PGTW
154	150600	29.0N	133.8E	PCN 2				PGTW
155	150620	28.7N	133.9E	PCN 3	T4.5/4.5-/S0.0/14HRS			PGTW
156	150622	28.7N	133.7E	PCN 1	T5.0/5.5 /W0.5/24HRS			RODN
157	150900	29.3N	134.0E	PCN 4				PGTW
158	151001	28.8N	133.7E	PCN 2				RKSO
159	151200	29.5N	134.2E	PCN 4				PGTW
160	151600	29.7N	134.6E	PCN 4	T4.5/4.5-/S0.0/10HRS			PGTW
161	151800	29.9N	134.8E	PCN 4				PGTW
162	151904	30.2N	135.0E	PCN 3				PGTW
163	152020	30.6N	134.8E	PCN 1				PGTW
164	152241	30.7N	135.0E	PCN 3				RODN
165	152242	31.0N	135.2E	PCN 3				PGTW
166	156000	31.0N	135.1E	PCN 3				PGTW
167	160300	31.4N	135.6E	PCN 3				PGTW
168	160600	31.9N	135.8E	PCN 6				PGTW
169	160607	31.8N	135.6E	PCN 6	T3.5/4.5-/W1.0/14HRS			PGTW
170	160900	32.3N	136.6E	PCN 6				PGTW
171	161200	32.8N	136.5E	PCN 6				PGTW
172	161600	33.2N	136.9E	PCN 4	T3.0/4.0 /W0.5/10HRS			PGTW
173	161800	33.7N	137.5E	PCN 4				PGTW
174	161959	34.1N	137.4E	PCN 4				PGTW
175	162100	34.2N	137.2E	PCN 6				PGTW
176	170000	34.5N	137.5E	PCN 4				PGTW
177	170300	34.7N	137.7E	PCN 4				PGTW
178	170600	34.9N	138.1E	PCN 6	T2.5/3.5 /W1.0/14HRS	ULCC FIX		PGTW
179	170839	35.4N	138.6E	PCN 6		ULCC FIX		PGTW
180	170918	35.0N	138.7E	PCN 3		ULCC FIX		RKSO
181	171200	35.6N	139.3E	PCN 6		ULCC FIX		PGTW
182	171600	35.5N	139.8E	PCN 6		ULCC FIX		PGTW
183	171800	35.8N	140.5E	PCN 6		ULCC FIX		PGTW

184	172100	36.1N	141.2E	PCN	6		ULCC FIX	PGBTW
185	172339	36.6N	142.7E	PCN	5	T2.0/2.0	INIT OBS	RKSD
186	180000	36.7N	141.7E	PCN	6	T1.5/2.5	/W1.0/18HRS	PGBTW
187	180300	37.8N	141.6E	PCN	6			PGBTW
188	180600	38.9N	141.5E	PCN	6			PGBTW

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.		
		LONG	LAT				DIR	VEL	BRG	RNG	DIR	VEL	BRG	RNG						
1	050034	9.2N	140.7E	1500FT	1004	30	340	15	070	30	340	19	5	3			+23 +23	27		
2	050848	9.4N	140.4E	700MB	3074	998	20	350	35	080	40	360	70					+11 +11 + 9	3	
3	051147	9.6N	140.0E	1500FT	1002					230	26	130	90	7	10			+11 +11 +11	4	
4	052054	10.0N	139.2E	700MB	3043	997	30	340	60	060	38	340	120	10	10			+12 +11 +10	4	
5	052336	10.2N	138.8E	700MB	3048	996	40	130	45	200	42	130	45	10	10				5	
6	060932	11.5N	137.8E	700MB	2988		25	240	70	260	34	200	30	15	3				6	
7	061132	11.8N	137.5E	700MB	2965	985				150	72	050	25	10	2	CIRCULAR	30	+14 +15	5	
8	062828	12.6N	136.2E	700MB	2888		20	310	120	140	75	070	8	7	7				6	
9	062314	12.8N	135.9E	700MB	2877	973	80	130	18	250	79	360	1	5	5	CIRCULAR	20	+13 +22 + 5	6	
10	070845	13.9N	134.5E	700MB	2747		80	240	28	160	95	060	12	18	2	CIRCULAR	20	+12 +21 + 9	7	
11	071141	14.2N	134.1E	700MB	2653	946				080	110	310	14	12	2	ELLIPTICAL	20 14 360	+19 +21 +10	7	
12	072037	15.3N	133.1E	700MB	2389		50	220	40	140	120	040	10	5	1				8	
13	072329	15.7N	132.8E	700MB	2384	908	120	240	6	200	110	110	15	10	2	CIRCULAR	13	+15 +26 + 4	8	
14	080835	16.7N	132.2E	700MB	2224	980	80	150	12	110	117	050	10	5	5			+12 +25 +10	10	
15	081112	17.0N	132.1E	700MB	2208	981				310	105	240	10	18	5	CIRCULAR	20	+12 +22 +21	10	
16	082049	17.6N	131.2E	700MB	2094	988				330	113	270	26	10	1	CIRCULAR	15	+33 +16	11	
17	082342	17.8N	130.8E	700MB	2129	893	100	070	22	130	113	070	15	7	1	CIRCULAR	18	+13 +22 +13	11	
18	091034	18.8N	130.1E	700MB	2267	908	130	250	90	210	108	120	30	7	2	ELLIPTICAL	10 7 180	+15 +18 +14	13	
19	091337	18.8N	130.3E	700MB	2381					070	112	190	10							13
20	092120	19.0N	130.4E	700MB	2445	927	75	110	90	340	111	250	5	5	5			+14 +17 +17	14	
21	092344	19.2N	130.3E	700MB	2453	927	100	050	10	010	107	290	5	5	5	CIRCULAR	20	+13 +17 +16	14	
22	100857	19.7N	130.4E	700MB	2415		70	110	80	310	103	220	15	7	4				17	
23	101109	19.8N	130.5E	700MB	2434	926				350	93	270	8	10	3	CIRCULAR	7	+14 +16	17	
24	102109	20.3N	130.5E	700MB	2472	929	90	030	18	330	102	240	20	3	3			+14 +17 +16	18	
25	110011	20.6N	130.6E	700MB	2500	934	70	340	10	210	186	120	33	4	3	CIRCULAR	30	+16 +17 +16	18	
26	110034	21.5N	130.7E	700MB	2401	921	95	310	6	210	188	100	25	5	5			+14 +28 +14	19	
27	111101	21.5N	130.7E	700MB	2369	917				060	118	050	15	5	5	CIRCULAR	25	+14 +21 +14	19	
28	112332	22.5N	130.6E	700MB	2402	921	90	250	18	340	187	250	18	7	1	CIRCULAR	25	+14 +28	20	
29	120209	22.7N	130.7E	700MB	2393		80	060	15	050	188	300	13	7	1	CIRCULAR	25	+15 +20	20	
30	121117	23.3N	131.1E	700MB	2345					320	90	230	15	15	2	CIRCULAR	25	+15 +22 +17	22	
31	121330	23.3N	131.2E	700MB	2357					120	92	030	20	10	2				22	
32	122240	24.4N	131.7E	700MB	2411	922	65	360	12	240	89	330	45	10	7	CIRCULAR	25	+15 +17 +15	25	
33	130102	24.7N	131.8E	700MB	2424		80	240	18	360	80	270	53	10	5	CIRCULAR	25	+16 +18 +16	25	
34	131225	25.4N	132.7E	700MB	2471	928				330	94	250	50	10	2	CIRCULAR	20	+17 +18 +15	26	
35	132046	26.3N	133.2E	700MB	2550	937	60	070	120	260	85	180	30	12	3	CIRCULAR	20	+16 +17 +16	27	
36	141035	27.4N	133.5E	700MB	2593	942				230	74	120	30	5	10	CONCENTRIC	05 20	+17 +18 +15	28	
37	141310	27.7N	133.5E	700MB	2609	944				100	63	120	120	5	10	CONCENTRIC	08 20	+15 +17 +15	28	
38	142834	28.2N	133.5E	700MB	2681					320	66	230	90	15	4			+17 +18 +15	29	
39	142319	28.4N	133.5E	700MB	2695	953	55	120	120	220	79	120	94	10	4			+17 +18 +17	29	
40	150830	29.2N	134.2E	700MB	2964		45	010	190	010	62	270	90	10	5	CIRCULAR	40		30	
41	151849	29.4N	134.2E	700MB	2703					190	86	090	100	10	5			+15 +17	30	
42	152032	30.8N	134.8E	700MB	2772		60	290	120	100	67	830	118	10	5			+16 +17	31	
43	152355	31.0N	135.0E	700MB	2795	965	65	200	155	230	81	140	120	5	4			+15 +17	31	
44	160857	32.3N	135.1E	700MB	2828	969	35	250	40	150	60	090	174	5	8			+16 +16	32	
45	161147	32.7N	136.4E	700MB	2840					230	69	170	144	5	1			+17 +16	32	
46	162058	34.3N	137.2E	700MB	2881		75	150	90	220	73	150	77	5	6	CIRCULAR	20	+17 +16 +15	33	
47	162254	34.5N	137.2E	700MB	2816		50	150	90	220	61	160	110	2	3	CIRCULAR	10	+14 +16 +15	33	

SEEDS FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	160000	31.3N 135.3E	LAND				5//// /////		33.3N 134.2E	47899
2	160100	31.4N 135.5E	LAND				5//// 50614		33.3N 134.2E	47899
3	160300	31.8N 136.0E	LAND				5//// /////		33.3N 134.2E	47899
4	160400	31.7N 135.8E	LAND				5//// /////		33.3N 134.2E	47899
5	160500	31.8N 135.8E	LAND				5//// 50105		33.3N 134.2E	47899
6	160600	31.8N 135.8E	LAND				5//// 50105		33.3N 134.2E	47899
7	161400	33.2N 136.8E	LAND				5//// 50322		33.3N 134.2E	47899
8	161400	33.1N 136.9E	LAND				6//// 5////		34.6N 135.7E	47773
9	161500	33.4N 136.9E	LAND				5//// 50216		33.3N 134.2E	47899
10	161500	33.3N 137.0E	LAND				6////'5////		34.6N 135.7E	47773
11	161900	34.0N 137.2E	LAND				203/2 50511		35.2N 137.0E	47636
12	161900	33.9N 137.1E	LAND				5//4 53511		35.3N 138.7E	47639
13	161900	34.3N 137.1E	LAND				65/// 53611		34.6N 135.7E	47773
14	162200	34.4N 137.3E	LAND				23711 50408		35.2N 137.0E	47636
15	162200	34.4N 137.1E	LAND				5//2 53608		35.3N 138.7E	47639
16	162200	34.4N 137.4E	LAND				65/// 5////		34.6N 135.7E	47773
17	162300	34.5N 137.2E	LAND				5//2 50211		35.3N 138.7E	47639
18	162300	34.5N 137.5E	LAND				55/// 50308		34.6N 135.7E	47773
19	162300	34.5N 137.3E	LAND				23711 53605		35.2N 137.0E	47636
20	170000	34.5N 137.2E	LAND				52//3 50408		35.3N 138.7E	47639
21	170000	34.6N 137.5E	LAND				55/// 53608		34.6N 135.7E	47773

22	170100	34.5N	137.3E	LAND		52/13 50000	35.3N	138.7E	47639
23	170100	34.9N	137.5E	LAND		55/// 53511	34.6N	135.7E	47773
24	170200	34.8N	137.3E	LAND		51/13 50111	35.3N	138.7E	47639
25	170400	34.9N	137.5E	LAND		52/13 50411	35.3N	138.7E	47639
26	170500	34.9N	138.0E	LAND		353// ////	35.2N	137.0E	47636
27	170500	34.9N	137.9E	LAND		52/43 50919	35.3N	138.7E	47639
28	170500	34.8N	138.1E	LAND		55/// 5///	34.6N	135.7E	47773
29	170600	35.0N	138.3E	LAND		5/// //	35.2N	137.0E	47636
30	170600	35.0N	138.2E	LAND		51//3 50814	35.3N	138.7E	47639
31	170600	35.0N	138.3E	LAND		55//1 50611	34.6N	135.7E	47773
32	170700	35.1N	138.5E	LAND		5/// //	35.2N	137.0E	47636
33	170700	35.1N	138.4E	LAND		21//3 50511	35.3N	138.7E	47639
34	170700	35.1N	138.4E	LAND		55//1 50611	34.6N	135.7E	47773
35	170800	35.2N	138.6E	LAND		7/// //	35.2N	137.0E	47636
36	170800	35.2N	138.6E	LAND		5//3 50716	35.3N	138.7E	47639
37	170800	35.1N	138.6E	LAND		55//1 50611	34.6N	135.7E	47773
38	170900	35.2N	138.7E	LAND		4//3 50705	35.3N	138.7E	47639
39	170945	35.5N	139.2E	LAND	GOOD CIRCULAR	68	35.7N	139.3E	47642

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	170000	34.6N 137.4E	068	030	WMO 47654
2	170900	35.4N 138.3E	050	018	WMO 47638
3	171200	35.7N 139.5E	045	020	WMO 47626
4	171500	36.4N 139.6E	040	020	WMO 47624
5	171800	36.6N 140.3E	040	025	WMO 47629
6	180000	37.5N 140.6E	035	030	WMO 47595

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

TROPICAL STORM BEN
BEST TRACK DATA

MD/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST					
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
081200Z	24.3	145.1	30	0.0	0.0	0.	-8.	0.	0.0	0.0	-8.	0.	0.0	0.0	0.	-8.	0.	0.
081206Z	24.9	145.8	35	0.0	0.0	0.	-8.	0.	0.0	0.0	-8.	0.	0.0	0.0	0.	-8.	0.	0.
081212Z	25.7	146.1	40	26.0	145.6	40	32.	0.	29.9	144.1	40	72.	-18.	32.6	143.2	35.	32.	-18.
081218Z	27.0	146.8	40	26.6	146.2	40	26.	0.	30.0	145.6	40	10.	-18.	32.7	144.7	35.	177.	-18.
081300Z	28.0	145.6	40	28.2	145.4	40	16.	0.	31.6	144.3	40	62.	-18.	35.0	143.8	35.	233.	-10.
081306Z	28.7	145.4	45	28.5	145.3	40	13.	-5.	30.7	144.7	40	91.	-5.	33.2	144.0	35.	405.	5.
081312Z	29.3	145.3	50	29.1	145.3	50	12.	0.	32.0	144.0	40	73.	-5.	0.0	0.0	0.	0.	-8.
081318Z	30.0	145.4	50	29.9	145.2	45	12.	-5.	32.4	143.2	40	130.	-5.	0.0	0.0	0.	0.	-8.
081400Z	30.9	145.2	50	30.8	145.1	45	8.	-5.	33.9	143.3	40	212.	-5.	0.0	0.0	0.	0.	-8.
081406Z	32.2	144.5	45	31.8	144.8	45	28.	0.	35.2	143.0	40	333.	18.	0.0	0.0	0.	0.	-8.
081412Z	33.1	143.4	45	32.9	143.4	45	12.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.	-8.
081418Z	34.1	141.6	45	34.1	141.3	55.	15.	10.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.	-8.
081500Z	34.6	139.1	45	34.3	139.3	50.	21.	5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.	-8.
081506Z	35.2	136.2	30	35.3	136.4	35.	11.	5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.	-8.

WRNG	ALL FORECASTS			TYPHOONS WHILE OVER 35 KTS			
	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
Avg Forecast Posit Error	17.	123.	212.	0.	0.	0.	0.
Avg Right Angle Error	12.	41.	46.	0.	0.	0.	0.
Avg Intensity Magnitude Error	3.	8.	9.	0.	0.	0.	0.
Avg Intensity Bias	0.	-5.	-6.	0.	0.	0.	0.
Number of Forecasts	12	8	4	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 968. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 12. KNOTS

TROPICAL STORM BEN
FIX POSITIONS FOR CYCLONE NO. 7

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
1	112227	24.0N 145.3E	PCN 5	T2.0/2.0	INIT OBS	PGTW
2	120000	24.4N 144.7E	PCN 6			PGTW
3	120300	24.5N 145.3E	PCN 4			PGTW
4	120600	24.7N 145.9E	PCN 4			PGTW
5	121200	25.0N 146.7E	PCN 6			PGTW
6	121800	26.7N 145.5E	PCN 6	T2.5/2.5	INIT OBS	PGTW
7	121942	27.3N 145.4E	PCN 6			PGTW
8	122100	28.1N 145.3E	PCN 6			PGTW
9	122206	28.3N 145.4E	PCN 5			PGTW
10	130000	28.0N 145.7E	PCN 6			PGTW
11	130502	28.3N 145.4E	PCN 4	T3.0/3.0-/D0.5/11HRS		PGTW
12	130900	28.7N 145.5E	PCN 4		EXP LLCC	PGTW
13	131200	29.0N 145.4E	PCN 6			PGTW
14	131600	29.5N 145.4E	PCN 6	T2.5/2.5-/S0.0/11HRS		PGTW
15	131800	29.9N 145.2E	PCN 6			PGTW
16	132144	30.6N 145.1E	PCN 6			PGTW
17	140000	30.8N 145.2E	PCN 4			PGTW
18	140450	31.8N 144.7E	PCN 4	T2.0/3.0 /W1.0/13HRS		PGTW
19	140900	32.5N 144.2E	PCN 6			PGTW
20	140942	32.6N 144.0E	PCN 3	T1.5/1.5	INIT OBS	RODN
21	141200	33.1N 143.3E	PCN 6		EXP LLCC	PGTW
22	141500	33.5N 142.3E	PCN 6	T2.0/2.5 /W0.5/11HRS	EXP LLCC	PGTW
23	141800	34.1N 141.2E	PCN 6		EXP LLCC	PGTW
24	142041	34.4N 140.1E	PCN 5		EXP LLCC	PGTW
25	142303	34.3N 139.7E	PCN 3			PGTW
26	150000	34.5N 139.6E	PCN 4		EXP LLCC	PGTW
27	150600	35.0N 136.5E	PCN 6	T1.0/2.0-/W1.0/14HRS		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	ACRY NAV/TET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	120742	25.2N 146.0E	1500FT	997	48	140	45	200	48	140	63	7 3

2	122053	27.8N	145.7E	1500FT		994	30	200	35	190	35	120	30	10	5				2	
3	122312	28.8N	145.5E	1500FT		994	45	300	10	060	48	300	10	10	5	+25	+26	+23	29	
4	130842	28.9N	145.4E	700MB	2987		35	110	40	060	34	270	25	5	6	+12	+14	+11	3	
5	131134	29.2N	145.2E	700MB	2976					120	55	040	21	3	5	CIRCULAR	20	+12	+14	+11
6	132357	30.8N	145.1E	700MB	2994	998	45	130	25	230	47	130	13	6	1			+14	+17	+10
7	140254	31.3N	144.9E	700MB	2989		55	070	36	160	62	070	26	6	2			+10	+18	+6
8	140833	32.3N	144.2E	700MB	3017		35	180	10	190	41	110	30	10	10			+19		5
9	141102	32.8N	143.5E	700MB	3014					170	51	090	25	10	10			+17	+20	+12
10	142113	34.2N	140.2E	700MB	2992		65	120	52	120	52	040	65	2	6			+12	+16	+12
11	142341	34.2N	139.4E	700MB	3022		20	130	30	190	34	130	30	0	5			+14	+18	+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	141600	33.9N 142.2E	LAND				5////// //////////////		35.3N 138.7E	47639
2	141700	33.9N 141.9E	LAND				4////// 73019		35.3N 138.7E	47639
3	141800	34.1N 141.5E	LAND				5////// 73021		35.3N 138.7E	47639
4	141900	33.9N 141.0E	LAND				5////// 72719		35.3N 138.7E	47639
5	142000	34.1N 140.8E	LAND				6////// 72818		35.3N 138.7E	47639
6	150200	34.5N 138.2E	LAND				5////// //////////////		35.2N 137.8E	47636

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	150600	35.3N 136.4E	035	022	WMO 47636, 47899, 47600
2	151200	37.0N 136.9E	030	065	WMO 47600

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

TROPICAL DEPRESSION 06
BEST TRACK DATA

MO/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST						
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	
080800Z	16.0	111.3	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
080806Z	15.1	112.2	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
080812Z	14.7	113.1	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
080818Z	14.6	114.0	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
080900Z	14.4	114.6	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
080906Z	14.1	115.0	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
080912Z	14.2	115.4	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
080918Z	14.5	115.5	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081000Z	14.9	115.4	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081006Z	15.1	115.3	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081012Z	15.4	115.3	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081018Z	15.8	115.4	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081100Z	16.0	115.5	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081106Z	16.4	115.8	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081112Z	16.7	116.1	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081118Z	17.0	116.3	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081200Z	17.3	116.5	30	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081206Z	17.6	116.7	30	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081212Z	17.8	116.8	30	18.0	116.2	30	36.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081218Z	18.0	116.9	30	17.8	116.2	30	42.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.
081300Z	18.3	117.1	30	18.3	116.9	30	11.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.

ALL FORECASTS			
WRNG	24-HR	48-HR	72-HR
Avg Forecast Posit Error	30.	0.	0.
Avg Right Angle Error	25.	0.	0.
Avg Intensity Magnitude Error	0.	0.	0.
Avg Intensity Bias	0.	0.	0.
Number of Forecasts	3	0	0

TYPHOONS WHILE OVER 35 KTS			
WRNG	24-HR	48-HR	72-HR
Typhoons While Over 35 Kts	0.	0.	0.
Wrng	0.	0.	0.
24-HR	0.	0.	0.
48-HR	0.	0.	0.
72-HR	0.	0.	0.

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 555. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 5. KNOTS

TROPICAL DEPRESSION TD06W-A
FIX POSITIONS FOR CYCLONE NO. 6

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	090000	14.5N 114.5E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	090300	14.4N 114.6E	PCN 6			PGTW
3	090600	14.1N 114.9E	PCN 6			PGTW
4	090734	14.1N 115.5E	PCN 3	T1.5/1.5		RPMK
5	090739	14.6N 114.6E	PCN 5	T1.0/1.0	INIT OBS	RODN
6	090900	14.1N 115.2E	PCN 6			PGTW
7	091127	14.1N 115.3E	PCN 6			RPMK
8	091500	14.4N 115.1E	PCN 6	T1.0/1.0-/D1.0/13HRS		PGTW
9	091600	14.6N 115.1E	PCN 6			PGTW
10	092018	14.3N 115.9E	PCN 5			RPMK
11	092100	14.6N 115.2E	PCN 6			PGTW
12	092226	15.1N 114.8E	PCN 5	T0.5/1.5 /W1.0/15HRS		RPMK
13	092226	14.0N 115.1E	PCN 5			RODN
14	100000	14.8N 115.0E	PCN 6			PGTW
15	100052	15.0N 115.6E	PCN 5	T1.0/1.5 /W0.5/17HRS		RPMK
16	100300	15.2N 115.0E	PCN 6			PGTW
17	100721	14.9N 115.5E	PCN 5	T1.5/1.5 /S0.0/24HRS		RPMK
* 18	101106	15.3N 115.5E	PCN 5	T1.5/1.5 /S0.0/24HRS		RPMK
19	101200	15.6N 116.1E	PCN 6		ULCC FIX	PGTW
20	101600	15.8N 115.5E	PCN 6		ULCC FIX	PGTW
* 21	102006	15.9N 116.6E	PCN 5	T1.5/1.5 /S0.0/24HRS		RPMK
22	102205	16.0N 116.2E	PCN 5	T1.5/1.5 /D1.0/24HRS		RPMK
23	110000	16.7N 115.7E	PCN 6			PGTW
* 24	110030	15.0N 115.1E	PCN 5	T1.0/1.0	INIT OBS	RODN
25	120300	17.0N 116.0E	PCN 4	T1.0/1.0	INIT OBS EXP LLCC	PGTW
26	120600	17.4N 116.6E	PCN 4		EXP LLCC	PGTW
27	120657	17.7N 116.4E	PCN 3	T2.5/2.5	INIT OBS	RPMK
28	120900	17.6N 116.2E	PCN 6			PGTW
29	121200	17.5N 116.3E	PCN 6			PGTW
30	121800	17.7N 115.9E	PCN 6	T2.5/2.5	INIT OBS	PGTW
* 31	122100	17.7N 115.0E	PCN 6			PGTW

* 32 122304 17.9N 115.0E PCN 5 T2.5/2.5 /50.0/24HRS
33 130000 18.8N 116.7E PCN 6

RPMK
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	101021	15.0N 115.4E	1500FT	1000				7 48			+25 +22 27	4
2	110240	15.8N 115.2E	1500FT	1002	15 210 45 060	17 280 34 15 10				+26 +24 31	5	
3	120247	17.5N 116.6E	1500FT	999	40 210 70 020	23 300 40 8 10				+27 +26 +23	6	
4	130008	18.7N 116.9E	1500FT	1005	25 120 90 060	15 120 90 5 15				+25 +24	7	
5	130303	18.5N 117.2E	1500FT	1005	20 230 60 270	24 230 60 5 20				+26 +25 +24	7	

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

**TROPICAL STORM CARMEN
BEST TRACK DATA**

MD/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST					
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
081306Z	19.2	119.4	30	0.0	0.0	0.	-8.	0.	0.0	0.	0.	0.	0.	0.	0.0	0.	-8.	0.
081312Z	19.4	120.2	30	19.7	121.3	30.	65.	0.	21.9	124.6	25.	121.	-20.	0.	0.	0.	0.	0.
081318Z	19.6	120.8	30	20.0	120.8	40.	24.	10.	22.2	124.2	45.	164.	5.	0.	0.	0.	-8.	0.
081400Z	19.8	121.5	35	19.8	121.6	40.	6.	5.	21.1	124.2	45.	238.	15.	0.	0.	0.	0.	-8.
081406Z	19.9	122.7	40	20.1	122.4	40.	21.	0.	21.5	125.0	45.	280.	15.	0.	0.	0.	0.	-8.
081412Z	19.9	124.4	45	19.8	124.2	45.	13.	0.	0.	0.	0.	-8.	0.	0.	0.	0.	0.	-8.
081418Z	20.2	126.2	40	20.0	126.0	40.	16.	0.	0.	0.	0.	-8.	0.	0.	0.	0.	0.	-8.
081500Z	21.0	128.3	30	21.1	128.2	30.	8.	0.	0.	0.	0.	-8.	0.	0.	0.	0.	0.	-8.
081506Z	22.0	130.0	30	22.1	129.9	30.	8.	0.	0.	0.	0.	-8.	0.	0.	0.	0.	0.	-8.

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.	199.	0.	0.	0.	0.	0.
Avg Right Angle Error	12.	105.	0.	0.	0.	0.	0.
Avg Intensity Magnitude Error	2.	14.	0.	0.	0.	0.	0.
Avg Intensity Bias	2.	4.	0.	0.	0.	0.	0.
Number of Forecasts	8	4	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 631. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

**TROPICAL STORM CARMEN
FIX POSITIONS FOR CYCLONE NO. 6**

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	130644	19.4N 120.3E	PCN 5	T1.0/1.5 /W1.5/13HRS		PGTW
2	130900	19.4N 120.5E	PCN 6			PGTW
3	131200	19.7N 120.8E	PCN 6			PGTW
4	131600	19.8N 120.7E	PCN 6	T1.5/1.5 /W1.0/18HRS	ULCC FIX	PGTW
5	131800	20.0N 121.0E	PCN 6			PGTW
6	132100	20.3N 121.2E	PCN 6			PGTW
7	132325	19.4N 121.5E	PCN 5			PGTW
8	140300	19.8N 121.9E	PCN 6			PGTW
9	140600	20.0N 122.2E	PCN 6			PGTW
10	140632	20.0N 122.7E	PCN 6	T1.5/1.5 /S0.0/14HRS		PGTW
11	140900	20.0N 123.1E	PCN 6			PGTW
12	141200	20.3N 123.8E	PCN 6			PGTW
13	141600	20.3N 124.4E	PCN 6	T1.5/1.5 /S0.0/10HRS		PGTW
14	141600	20.4N 124.6E	PCN 6			PGTW
15	142303	21.0N 127.5E	PCN 6			PGTW
16	142303	20.4N 128.2E	PCN 5	T1.5/1.5 INIT OBS		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	131344	19.8N 120.0E	700MB	3065	997		210	29 150	77	5 20	+12 +12	9
2	140328	19.9N 122.1E	700MB	3052	996	35 310	30 010	36 310	27	10 8	+13	10
3	140633	19.8N 122.6E	700MB	3058		38 190	46 020	38 290	46	12 7		
4	141107	19.8N 124.2E	700MB	3016	992	30 240	90 210	40 090	60	5 5	+15 +16	11
5	141426	20.0N 125.2E	700MB	3013			340	23 280	60	5 5	+13 +16	11
6	142142	20.7N 127.6E	700MB	3023		35 120	90 240	54 100	30	5 5		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	132000	19.6N 120.7E	LAND				10001 4///	EYE 100 PCT CIR	18.3N 121.6E	98231
2	132100	19.7N 121.1E	LAND				10011 40401	EYE 100 PCT CIR	18.3N 121.6E	98231
3	132130	19.6N 121.0E	LAND				10012 40901	EYE 100 PCT CIR	18.3N 121.6E	98231

4	132200	19.7N	121.3E	LAND	10811 40401	EYE 100 PCT CIR	18.3N	121.6E	98231
5	132300	19.7N	121.3E	LAND	10811 40401	EYE 100 PCT CIR	18.3N	121.6E	98231
6	132330	19.8N	121.4E	LAND	10781 40402	EYE 80 PCT CIR	18.3N	121.6E	98231
7	140000	19.8N	121.5E	LAND	10651 40601	EYE 100 PCT CIR	18.3N	121.6E	98231
8	141400	20.0N	124.2E	LAND	10341 70927		16.3N	120.6E	98321
9	141500	20.0N	124.3E	LAND	4//1 50903		18.3N	121.6E	98231

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

TROPICAL STORM DOM
BEST TRACK DATA

MD/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST													
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
081706Z	15.2	140.1	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.0	0.	-0.	0.	0.	0.	
081712Z	15.4	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.	
081718Z	15.4	138.1	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.	
081800Z	15.2	137.2	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.0	0.	-0.	0.	0.	0.	
081806Z	15.0	136.3	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.	
081812Z	15.2	135.3	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.	
081818Z	15.6	134.5	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.	
081900Z	15.9	133.8	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.	
081906Z	16.1	133.2	40	16.3	133.2	35.	12.	-5.	16.5	131.3	45.	99.	-5.	20.9	130.7	60.	281.	25.	23.9	130.7	75.	442.	45.			
081912Z	16.3	132.8	45	16.5	132.7	40.	13.	-5.	16.6	131.2	55.	109.	16.	21.0	130.7	65.	314.	35.	23.0	130.7	80.	520.	45.			
081918Z	16.5	132.4	50	16.9	132.3	40.	25.	-18.	19.0	131.1	68.	149.	20.	21.4	130.7	70.	358.	40.	23.4	130.7	85.	600.	40.			
082000Z	16.9	132.2	55	16.8	132.2	45.	6.	-18.	16.0	130.9	60.	230.	25.	19.9	130.3	70.	447.	48.	22.0	130.4	80.	693.	38.			
082006Z	17.4	132.5	50	17.6	132.2	45.	21.	-5.	22.0	134.8	68.	128.	25.	23.8	137.4	70.	80.	48.	25.5	140.2	80.	157.	38.			
082012Z	18.0	133.0	45	17.8	132.8	40.	17.	-5.	19.9	135.1	58.	83.	28.	21.9	137.8	55.	171.	28.	23.6	140.8	65.	198.	20.			
082018Z	18.7	133.7	40	18.6	133.4	40.	18.	0.	20.6	136.0	50.	78.	20.	22.4	138.7	55.	193.	18.	24.1	141.6	65.	155.	25.			
082100Z	19.3	134.7	35	19.4	134.8	25.	8.	-18.	22.2	138.6	25.	50.	-5.	24.6	142.2	20.	28.	-30.	0.0	0.	-0.	0.	0.	0.	0.	
082106Z	20.0	135.6	35	20.8	135.8	25.	11.	-18.	22.6	139.2	25.	45.	-5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082112Z	20.7	136.3	30	20.7	136.6	25.	17.	-5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082118Z	21.4	137.1	30	0.0	0.0	0.	-0.	0.	0.0	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082200Z	22.2	137.9	30	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.	
082206Z	23.2	138.7	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.	0.	
082212Z	23.8	140.1	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.	0.	
082218Z	24.2	141.6	45	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.	
082300Z	24.9	142.6	50	24.9	142.7	45.	5.	-5.	29.0	147.5	48.	298.	0.	31.7	153.7	35.	623.	-15.	0.0	0.0	0.	0.	0.	-0.	0.	0.
082306Z	25.4	143.1	50	25.6	143.7	50.	35.	0.	26.7	148.0	40.	270.	-5.	38.3	154.1	30.	625.	-15.	0.0	0.0	0.	0.	0.	-0.	0.	0.
082312Z	25.8	143.5	45	25.9	143.8	45.	17.	0.	27.9	145.0	35.	127.	-15.	29.8	150.0	25.	446.	-15.	0.0	0.0	0.	0.	0.	-0.	0.	0.
082318Z	25.5	144.0	40	25.9	143.9	45.	25.	5.	27.4	144.8	30.	81.	-28.	29.3	147.8	25.	341.	-10.	0.0	0.0	0.	0.	0.	-0.	0.	0.
082400Z	25.1	144.3	40	25.1	144.2	35.	5.	-5.	25.9	141.0	30.	93.	-20.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082406Z	25.3	144.7	45	25.6	144.4	35.	24.	-18.	26.4	143.2	35.	47.	-18.	27.7	142.3	25.	216.	0.	0.0	0.0	0.	0.	-0.	0.	0.	
082412Z	25.8	144.7	50	25.7	144.8	35.	8.	-15.	27.2	145.2	35.	106.	-5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082418Z	26.2	144.1	50	26.0	144.7	40.	34.	-18.	27.5	144.6	50.	199.	15.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082500Z	26.5	143.4	50	26.3	143.7	35.	20.	-15.	28.3	142.8	45.	132.	15.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082506Z	27.1	142.8	45	27.5	143.4	35.	40.	-18.	29.4	143.1	40.	143.	15.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082512Z	27.9	141.8	40	27.6	142.0	30.	21.	-18.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082518Z	29.1	141.3	35	29.2	140.8	30.	27.	-5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082600Z	30.0	141.2	30	30.2	141.1	25.	13.	-5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	
082606Z	31.2	141.3	25	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.	0.	0.	

ALL FORECASTS
WRNG 24-HR 48-HR 72-HR

TYPHOONS WHILE OVER 35 KTS
WRNG 24-HR 48-HR 72-HR

Avg Forecast Posit Error
Avg Right Angle Error
Avg Intensity Magnitude Error
Avg Intensity Bias
Number of Forecasts

0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0

Distance Traveled by Tropical Cyclone is 1859. NM

Average Speed of Tropical Cyclone is 9. KNOTS

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	171800	15.1N 137.0E	PCN 6		ULCC FIX INIT OBS	PGTW
* 2	180000	15.7N 138.6E	PCN 6	T1.8/1.8		PGTW
* 3	180300	15.9N 137.9E	PCN 6			PGTW
4	180600	15.1N 136.4E	PCN 6			PGTW
5	180900	15.2N 136.2E	PCN 6			PGTW
6	181030	15.3N 135.9E	PCN 6			PGTW
7	181200	15.4N 135.6E	PCN 6			PGTW
8	181600	15.4N 134.5E	PCN 6	T1.8/1.8 /S0.0/16HRS		PGTW
9	181800	15.4N 133.8E	PCN 6			PGTW
10	182050	15.7N 134.2E	PCN 5			PGTW
11	182317	15.7N 133.9E	PCN 5	T2.5/2.5 /D1.5/07HRS		PGTW
12	180300	16.2N 133.8E	PCN 4			PGTW
13	190530	16.4N 133.5E	PCN 3			PGTW
14	190930	16.1N 133.0E	PCN 4			PGTW
15	191200	16.4N 132.7E	PCN 6	T2.5/2.5 /D1.5/12HRS		PGTW

16	191815	17.8N	132.5E	PCN 5			PGTW
17	192037	16.9N	132.1E	PCN 5			PGTW
18	192255	17.1N	132.8E	PCN 3	T2.8/2.8	INIT OBS	RPMK
19	192256	16.7N	132.1E	PCN 3	T3.0/3.0 /D0.5/11HRS		PGTW
20	200000	16.8N	132.2E	PCN 4			PGTW
21	200300	17.1N	132.3E	PCN 4			PGTW
22	200518	17.5N	132.5E	PCN 3			PGTU
23	200600	17.6N	132.6E	PCN 4			PGTU
24	200900	17.7N	132.7E	PCN 6			PGTW
25	201200	17.9N	132.9E	PCN 6			PGTU
26	201802	18.9N	133.5E	PCN 5			PGTU
27	202234	19.2N	134.4E	PCN 3	T2.8/2.8	INIT OBS	RODN
28	202234	19.1N	134.6E	PCN 3	T3.0/3.0 /S0.8/24HRS		PGTW
29	210300	19.7N	135.2E	PCN 4			PGTW
30	210505	19.9N	135.5E	PCN 6			PGTW
31	210600	20.2N	135.9E	PCN 6			PGTW
32	211600	21.2N	137.0E	PCN 6			PGTW
* 33	211758	21.2N	135.6E	PCN 5			RPMK
34	212100	22.8N	138.0E	PCN 6			PGTW
35	212212	22.8N	137.5E	PCN 5	T2.8/2.5 /W1.8/24HRS		PGTW
36	212212	21.8N	137.5E	PCN 5	T2.5/2.5 /D0.5/24HRS		RODN
37	220300	22.8N	139.1E	PCN 4			PGTW
38	220457	22.3N	139.9E	PCN 3			PGTW
39	220600	22.8N	139.0E	PCN 4			PGTW
40	220835	23.8N	139.6E	PCN 5			PGTW
41	221600	24.8N	141.3E	PCN 6			PGTW
42	221738	23.9N	141.5E	PCN 4			PGTW
43	221934	24.2N	142.0E	PCN 4			PGTW
44	222115	24.5N	142.2E	PCN 3			PGTW
45	222158	24.6N	142.5E	PCN 3	T2.8/2.8 /S0.8/24HRS		PGTW
46	230000	24.9N	142.7E	PCN 4			PGTW
47	230300	25.2N	143.1E	PCN 4			PGTW
48	230441	25.2N	143.4E	PCN 3			PGTW
49	230600	25.4N	143.4E	PCN 4			PGTW
50	230900	25.5N	143.6E	PCN 4			PGTW
51	231200	25.8N	143.7E	PCN 4	T2.5/2.5-/D0.5/14HRS		PGTW
52	231600	25.7N	143.8E	PCN 4			PGTW
53	231800	25.9N	143.9E	PCN 4			PGTW
54	232054	25.3N	144.2E	PCN 3			PGTW
55	232310	25.5N	144.0E	PCN 3	T3.0/3.0		RKSD
56	240000	25.2N	144.2E	PCN 4	T2.5/2.5 /S0.8/12HRS	INIT OBS	PGTW
57	240300	25.4N	144.3E	PCN 6			PGTW
58	240600	25.6N	144.6E	PCN 6			PGTW
59	241000	25.7N	144.8E	PCN 6			PGTW
60	241200	25.5N	144.6E	PCN 6	T3.0/3.0 /D0.5/12HRS		PGTW
61	241600	26.0N	144.7E	PCN 6			PGTW
62	241713	26.0N	144.5E	PCN 6			PGTW
63	242033	25.9N	144.0E	PCN 5			PGTW
64	242248	26.3N	143.2E	PCN 5	T3.5/3.5 /D1.0/11HRS		PGTW
65	242248	26.3N	144.0E	PCN 3	T3.0/3.0 /S0.8/24HRS		RKSD
66	250000	26.5N	143.4E	PCN 6			PGTW
67	250300	27.0N	143.3E	PCN 6			PGTW
* 68	250558	27.6N	143.9E	PCN 5			PGTW
69	250946	27.3N	142.5E	PCN 6			PGTW
* 70	251200	27.1N	141.9E	PCN 6	T2.8/2.5-/W1.5/13HRS		PGTW
71	251600	28.9N	141.2E	PCN 4			PGTW
72	251800	29.3N	140.8E	PCN 4			PGTW
73	251843	29.5N	141.1E	PCN 3			PGTW
74	252012	29.8N	141.3E	PCN 3			PGTW
75	252226	30.8N	141.3E	PCN 3	T1.5/2.5 /W2.0/24HRS		PGTW
76	252226	30.0N	141.1E	PCN 3	T2.0/3.0-/W1.0/24HRS		RKSD
77	260000	30.1N	141.4E	PCN 4			PGTW
78	260300	30.7N	141.5E	PCN 4			PGTW
79	260545	31.5N	141.7E	PCN 5			PGTW
80	260852	31.6N	141.4E	PCN 5			PGTW
81	261200	32.3N	141.2E	PCN 6			PGTW
82	261956	32.6N	142.4E	PCN 4			PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-LND VEL/BRG/RNG	MAX-FLT-LVL-LND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM	EYE ORIEN-TATION	EYE TEMP (C) OUT/IN/DP/SST	MSN NO.	
1	190735	16.2N 133.0E	1500FT		1004	40 130 10						+26 +27	30	3
2	192125	16.7N 132.2E	1500FT		1002	58 140 32	248 33 148 25	7 4				+25 +23	31	4
3	192350	16.8N 132.2E	700MB	3112		55 220 27	020 22 030 60	10 3				+11 +12 + 8		4
4	200943	17.5N 132.0E	700MB	3089		35 190 90	240 37 170 95	10 18				+12 +14 +11		5
5	201039	17.8N 132.5E	700MB	3083			200 24 050 30	10 10				+12 +13 + 8		5
6	202059	19.1N 134.4E	700MB	3124		35 150 60	210 48 140 150	5 28				+14 +12		6
7	202343	19.3N 134.8E	1500FT		1003	35 020 5	270 36 220 150	5 2				+27 +26	25	6
8	210838	20.3N 135.9E	1500FT		1002	35 150 50	210 33 140 100	8 18						7
9	211128	20.5N 135.6E	700MB	3116			340 18 220 120	10 15				+10 +14 + 9		7
10	220512	23.4N 138.5E	1500FT		1003	30 160 220	220 38 140 185	5 1				+25 +25 +23		8
11	222351	24.8N 142.7E	1500FT		995	48 090 10	360 37 270 20	7 3				+23 +23 +22		9
12	232059	25.4N 144.2E	1500FT			35 360 8	090 39 360 8	5 3				+28 +28	25	11
13	232316	25.1N 144.2E	1500FT		999	35 330 20	060 40 330 20	5 4				+27 +25	26	11
14	240941	25.5N 144.7E	700MB	3065		38 210 75	240 72 220 80	10 3				+15 +20 +11		12
15	241155	25.2N 144.5E	700MB	3092				180 34 140 75	10 4			+15 +13 + 8		12

16	242042	26.0N	144.0E	700MB	3094	50	060	25	100	51	060	50	15	2	+10	+11	13		
17	242325	26.5N	143.8E	700MB	3052	998	35	140	135	088	34	350	50	8	5	+11	+12	13	
18	251029	27.4N	142.1E	700MB	3122	1007				210	36	110	63	8	7	+12	+11	14	
19	251301	28.2N	141.0E	700MB	3118					060	27	320	68	10	5			14	
20	252032	29.3N	140.8E	700MB	3185	25	090	30	190	26	090	90	5	8	+12	+12	+10	15	
21	252340	30.0N	141.2E	700MB	3120	1003	25	270	25	100	20	030	48	5	10	+26	+22	29	15

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

**TROPICAL DEPRESSION 09
BEST TRACK DATA**

MO/DA/HR	BEST TRACK		WARNING		24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST					
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
082506Z	25.5	128.1	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.
082512Z	25.6	128.8	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.
082518Z	26.6	128.7	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.
082600Z	27.6	129.1	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.
082606Z	29.0	129.2	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.
082612Z	30.3	128.9	25	30.3	129.1	25.	10.	0.	0.0	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.
082618Z	31.8	128.4	25	31.6	128.6	25.	16.	0.	0.0	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.
082700Z	33.3	127.4	30	33.9	127.0	30.	41.	0.	0.0	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.
082706Z	34.9	126.9	25	34.9	127.2	25.	15.	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.	0.	0.	0.	0.	0.	0.	0.
Avg Right Angle Error	11.	0.	0.	0.	0.	0.	0.	0.
Avg Intensity Magnitude Error	0.	0.	0.	0.	0.	0.	0.	0.
Avg Intensity Bias	0.	0.	0.	0.	0.	0.	0.	0.
Number of Forecasts	4	0	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 622. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

**TROPICAL DEPRESSION TD09W
FIX POSITIONS FOR CYCLONE NO. 9**

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	BVORAK CODE	COMMENTS	SITE
1	250300	25.4N 128.1E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	250558	25.5N 128.2E	PCN 5			PGTW
3	250946	25.7N 128.6E	PCN 6			PGTW
4	251200	25.2N 129.0E	PCN 6	T1.5/1.5	INIT OBS ULCC FIX	PGTW
5	251600	26.2N 128.4E	PCN 6		ULCC FIX	PGTW
6	260000	27.8N 129.2E	PCN 6	T2.0/2.0 /D1.0/12HRS		PGTW
7	260300	28.7N 129.3E	PCN 6			PGTW
8	260545	28.9N 129.3E	PCN 5			PGTW
9	260600	29.0N 129.2E	PCN 6			PGTW
10	260900	29.4N 129.1E	PCN 6			PGTW
11	261033	30.0N 129.2E	PCN 3		EXP LLCC	RPMK
12	261105	30.1N 129.0E	PCN 3			RKSO
13	261200	30.3N 128.8E	PCN 6	T1.5/1.5 /S0.0/12HRS		PGTW
14	261600	31.2N 128.6E	PCN 6			PGTW
15	262132	32.7N 128.0E	PCN 3	T1.5/1.5	EXP LLCC	RPMK
16	262346	33.3N 127.9E	PCN 3	T1.5/1.5	INIT OBS	RKSO
17	270000	33.4N 127.5E	PCN 4	T1.5/2.0 /W0.5/12HRS		PGTW
18	270300	34.2N 127.6E	PCN 6			PGTW
19	270600	34.9N 126.9E	PCN 6			PGTW
20	271044	36.8N 127.4E	PCN 5			RKSO

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	262326	33.3N 127.3E	700MB	3081		25 130 55 180 35 120 125	5 8			+14 +14 +11		1

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	270000	33.3N 126.9E	030	020	LWD 47184, 47189
2	270600	34.9N 127.2E	025	025	LWD 47156, 47168

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

TYPHON ELLEN
BEST TRACK DATA

BEST TRACK				WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST				
MO/DA/HR	POSIT	WIND	POSIT	WIND	DST WIND	POSIT	WIND	DST WIND	POSIT	WIND	DST WIND	POSIT	WIND	DST WIND	POSIT	WIND	DST WIND			
082700Z	9.8	183.2	20	0.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.		
082705Z	10.2	181.7	20	0.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.		
082712Z	10.7	180.2	20	0.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.		
082718Z	11.3	176.8	20	0.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.		
082800Z	11.8	177.6	20	0.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.		
082805Z	12.2	176.1	20	0.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.		
082812Z	12.7	174.7	25	0.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.		
082818Z	13.1	173.0	30	0.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.		
082900Z	13.1	171.3	35	13.0	171.3	35.	6.	0.	14.2	164.8	45.	74.	5.	15.8	160.3	55.	278.	10.	15.5	155.8
082905Z	13.2	165.9	35	13.2	178.2	35.	18.	0.	13.9	165.9	45.	154.	0.	14.8	161.8	55.	386.	10.	15.3	157.4
082912Z	13.2	168.5	40	13.2	168.8	40.	18.	0.	14.0	165.2	50.	226.	10.	15.3	161.5	65.	484.	25.	17.0	158.2
082918Z	13.1	166.8	45	13.4	166.9	45.	19.	0.	14.9	163.0	55.	274.	15.	16.0	160.3	75.	558.	35.	17.3	157.9
083000Z	13.0	165.1	40	13.2	165.2	35.	13.	-5.	13.8	159.9	58.	195.	5.	15.0	155.9	70.	394.	35.	16.2	151.8
083005Z	12.5	163.7	45	13.1	163.8	45.	36.	0.	13.3	158.8	65.	202.	20.	14.2	154.8	75.	497.	40.	15.5	158.9
083012Z	11.9	162.0	40	12.3	162.4	40.	34.	0.	12.9	157.9	60.	231.	20.	13.6	154.6	70.	508.	45.	14.5	151.4
083018Z	11.4	168.0	40	12.0	168.3	45.	48.	5.	12.2	154.9	65.	164.	25.	13.4	151.1	75.	452.	45.	14.6	148.1
083100Z	10.9	158.4	45	11.2	158.4	45.	18.	0.	11.0	151.7	65.	51.	30.	11.7	146.1	75.	227.	40.	13.3	141.3
083105Z	10.5	156.9	45	10.8	157.0	45.	19.	0.	10.9	158.8	65.	103.	30.	11.8	145.4	75.	264.	35.	13.3	140.7
083112Z	10.3	155.0	40	10.1	155.2	40.	17.	0.	10.0	149.5	60.	146.	35.	11.2	144.1	70.	260.	25.	12.4	139.3
083118Z	10.2	153.0	40	10.1	153.4	40.	24.	0.	10.9	147.4	60.	188.	30.	12.2	142.5	75.	267.	25.	14.2	137.8
080100Z	10.3	151.2	35	10.2	151.2	35.	6.	0.	11.2	143.5	60.	132.	25.	12.7	137.8	75.	163.	20.	14.3	133.2
080105Z	10.2	149.2	35	10.4	149.2	35.	12.	0.	11.9	141.8	55.	162.	15.	13.7	136.8	70.	192.	10.	15.6	131.5
080112Z	9.4	147.1	25	10.1	147.2	35.	42.	10.	10.8	139.7	55.	100.	10.	12.5	133.8	70.	102.	5.	14.5	129.2
080118Z	9.1	144.8	30	8.4	144.7	35.	42.	5.	8.3	136.9	50.	139.	0.	9.4	131.1	65.	160.	-5.	11.3	126.7
080200Z	9.0	143.4	35	9.5	143.0	25.	38.	-10.	9.6	137.4	45.	25.	-10.	10.6	132.7	60.	118.	-15.	12.3	129.1
080205Z	9.2	141.8	40	9.2	141.8	40.	6.	0.	9.6	136.4	45.	59.	-15.	10.9	131.8	60.	142.	-25.	12.8	128.3
080212Z	9.2	140.2	45	9.3	140.3	40.	8.	-5.	10.3	135.4	50.	69.	-15.	11.8	130.5	65.	126.	-25.	13.1	126.7
080218Z	9.5	138.9	50	9.3	139.1	45.	17.	-5.	10.2	134.3	55.	181.	-15.	11.5	129.5	65.	179.	-30.	12.9	125.6
080300Z	10.0	137.5	55	9.8	137.6	60.	13.	5.	10.8	132.9	60.	114.	-15.	12.5	128.8	70.	157.	-25.	14.6	125.3
080305Z	10.5	136.0	60	10.5	136.0	50.	8.	-10.	12.2	131.9	65.	85.	-20.	14.0	128.2	75.	137.	-20.	15.7	124.5
080312Z	10.9	134.4	65	10.9	134.3	65.	6.	0.	13.2	128.8	85.	55.	-5.	13.8	124.1	90.	205.	-5.	14.2	119.1
080318Z	11.3	133.0	70	11.5	132.8	65.	17.	-5.	13.5	127.5	85.	93.	-10.	14.0	122.6	85.	248.	-15.	14.2	117.6
080400Z	12.3	131.7	75	12.3	131.7	65.	0.	-10.	13.9	127.1	85.	84.	-10.	14.3	122.2	85.	237.	-35.	14.7	117.2
080405Z	13.0	130.7	85	13.0	130.8	70.	6.	-15.	14.5	125.9	98.	102.	-5.	14.5	121.8	80.	261.	-45.	15.7	116.2
080412Z	13.7	129.6	98	13.8	129.4	90.	13.	0.	15.3	124.7	115.	118.	20.	16.3	120.3	70.	180.	-50.	18.7	116.8
080418Z	14.4	128.8	95	14.5	128.7	95.	8.	0.	17.0	124.8	120.	21.	20.	19.2	120.8	90.	26.	-10.	21.0	117.0
080500Z	15.0	128.0	95	15.1	128.0	95.	6.	0.	16.6	126.3	120.	145.	0.	17.2	124.8	130.	291.	40.	18.0	122.4
080505Z	15.9	126.9	95	16.0	127.0	95.	8.	0.	17.8	124.7	120.	91.	-5.	18.7	122.8	105.	218.	20.	19.3	120.9
080512Z	16.8	125.8	95	16.7	125.9	95.	8.	0.	18.6	123.3	140.	63.	20.	18.9	121.1	130.	166.	45.	18.7	119.5
080518Z	17.2	125.1	100	17.2	124.9	100.	11.	0.	18.8	122.0	120.	47.	20.	19.2	120.4	110.	171.	30.	19.4	119.1
080600Z	17.8	124.1	100	17.8	124.0	120.	6.	0.	19.0	121.1	120.	54.	30.	19.3	119.5	100.	179.	25.	19.0	117.8
080605Z	18.3	123.2	125	18.4	123.1	125.	8.	0.	20.0	119.7	115.	41.	30.	20.1	117.2	100.	92.	25.	20.1	115.0
080612Z	18.7	122.2	120	18.7	122.0	120.	11.	0.	20.8	118.8	120.	72.	35.	21.6	116.8	105.	108.	30.	22.1	115.7
080618Z	19.0	121.2	100	19.0	121.0	110.	11.	0.	20.6	118.1	120.	49.	40.	22.1	116.1	105.	114.	35.	0.0	0.0
080700Z	19.3	120.2	98	19.3	120.1	85.	6.	-5.	21.1	117.4	105.	58.	30.	22.7	115.6	98.	127.	25.	0.0	0.0
080705Z	19.5	119.2	85	19.7	119.1	98.	13.	5.	21.4	115.7	105.	31.	30.	22.9	113.6	75.	60.	25.	0.0	0.0
080712Z	19.7	118.3	85	19.7	118.5	95.	6.	10.	20.7	115.1	95.	38.	20.	22.0	113.0	75.	91.	45.	0.0	0.0
080718Z	20.0	117.5	80	19.7	117.8	95.	25.	15.	20.7	115.0	95.	78.	25.	0.0	0.0	0.	-8.	0.	0.0	0.
080800Z	20.5	116.6	75	20.3	116.4	75.	16.	0.	21.8	113.1	65.	25.	0.	0.0	0.0	0.	-8.	0.	0.0	0.
080805Z	20.9	115.8	75	20.9	115.6	75.	11.	0.	22.6	112.2	50.	23.	0.	0.0	0.0	0.	-8.	0.	0.0	0.
080812Z	21.3	114.9	75	21.4	115.0	70.	8.	-5.	23.2	112.7	45.	65.	15.	0.0	0.0	0.	-8.	0.	0.0	0.
080818Z	21.7	114.1	70	21.7	114.3	70.	11.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.
080822Z	22.1	113.4	65	22.2	113.4	65.	6.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.
080905Z	22.5	112.6	50	22.7	112.6	50.	12.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.
080912Z	22.8	111.6	30	22.7	111.5	30.	0.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.

ALL FORECASTS
WRNG 24-HR 48-HR 72-HR
15. 101. 223. 339.
11. 60. 123. 178.
3. 17. 27. 31.
-8. 11. 11. 15.
47 43 39 35

TYPHOONS WHILE OVER 35 KTS
WRNG 24-HR 48-HR 72-HR
13. 98. 212. 311.
18. 61. 122. 170.
3. 16. 26. 28.
-1. 10. 9. 11.
44 48 36 32

distance traveled by tropical cyclone is 4462. NM

Average speed of tropical cyclone is 14. knots

TYPHOON ELLEN
FIX POSITIONS FOR CYCLONE NO. 18

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	270000	9.8N 176.6W	PCN 6	T2.8/2.8	INIT OBS	PGTW
2	270300	9.8N 176.3W	PCN 6			PGTW
3	270600	10.1N 177.7W	PCN 6		ULCC FIX	PGTW
4	270650	10.0N 176.3W	PCN 6	T2.5/2.5 /D1.0/20HRS		KGWC
5	270900	10.4N 176.5W	PCN 6		ULCC FIX	PGTW
6	271200	10.7N 179.9W	PCN 6			PGTW
7	271748	11.5N 176.0E	PCN 6			KGWC
8	271800	11.6N 176.7E	PCN 6			PGTW
9	280000	11.8N 176.0E	PCN 6	T2.8/2.8+/S0.0/24HRS		PGTW
10	280300	11.8N 177.1E	PCN 6			PGTW
11	280600	12.2N 176.8E	PCN 6		ULCC FIX	PGTW
12	280628	12.0N 175.1E	PCN 6	T3.0/3.0 /D0.5/24HRS		KGWC
13	280900	12.3N 175.4E	PCN 6		ULCC FIX	PGTW
14	281200	12.5N 174.8E	PCN 6		ULCC FIX	PGTW
15	281600	13.1N 174.0E	PCN 6	T2.8/2.8	INIT OBS	PGTW
16	281800	13.2N 173.4E	PCN 6		ULCC FIX	PGTW
17	281900	12.9N 172.5E	PCN 6			KGWC
18	282100	13.0N 172.2E	PCN 6			PGTW
19	290000	12.9N 171.2E	PCN 6	T2.5/2.5 /D0.5/00HRS		PGTW
20	290300	12.7N 170.5E	PCN 6			PGTW
21	290326	12.8N 170.2E	PCN 6	T3.0/3.0 /S0.0/21HRS		KGWC
22	290600	13.1N 170.2E	PCN 6			PGTW
23	290900	13.3N 169.6E	PCN 6			PGTW
24	291200	13.2N 168.7E	PCN 6			PGTW
25	291600	13.2N 167.2E	PCN 6	T3.0/3.0 /D1.0/16HRS		PGTW
26	291800	13.3N 166.7E	PCN 6			PGTW
27	292100	13.4N 165.8E	PCN 6		ULCC FIX	PGTW
28	300000	12.9N 164.7E	PCN 6	T2.5/2.5 /S0.0/00HRS		PGTW
29	300300	12.7N 164.0E	PCN 6			PGTW
30	300456	12.6N 163.6E	PCN 5			PGTW
31	300600	12.5N 163.4E	PCN 6			PGTW
32	300900	12.2N 162.6E	PCN 6			PGTW
33	301200	12.1N 161.9E	PCN 6			PGTW
34	301600	11.9N 160.8E	PCN 6	T3.0/3.0 /S0.0/16HRS		PGTW
35	301800	11.8N 160.2E	PCN 6			PGTW
36	302000	11.2N 155.5E	PCN 5			PGTW
37	310000	10.7N 158.4E	PCN 6			PGTW
38	310300	10.6N 157.3E	PCN 6	T3.5/3.5 /D0.5/11HRS		PGTW
39	310600	10.1N 156.2E	PCN 6			PGTW
40	310848	9.6N 155.8E	PCN 5			PGTW
41	311200	9.5N 154.4E	PCN 6			PGTW
42	311600	9.5N 153.4E	PCN 6	T2.5/3.0 /W1.0/13HRS		PGTW
43	311800	9.9N 152.8E	PCN 6			PGTW
44	311947	10.8N 153.3E	PCN 5			PGTW
45	010000	10.5N 151.3E	PCN 6			PGTW
46	010300	10.6N 151.1E	PCN 4	T2.8/2.5+/W0.5/11HRS		PGTW
47	010431	10.7N 150.5E	PCN 6			PGTW
48	010600	10.5N 149.7E	PCN 6			PGTW
49	010827	10.8N 148.6E	PCN 6			PGTW
50	011200	10.1N 146.9E	PCN 6			PGTW
51	011600	9.1N 145.8E	PCN 6	T2.5/2.5 /D0.5/13HRS		PGTW
52	011716	8.9N 145.3E	PCN 5		ULCC FIX	PGTW
53	012100	8.8N 143.6E	PCN 6			PGTW
54	020000	9.7N 144.2E	PCN 6			PGTW
55	020300	9.5N 143.5E	PCN 6	T2.5/2.5+/S0.0/11HRS		PGTW
56	020601	9.2N 142.1E	PCN 5			PGTW
57	020900	8.9N 141.1E	PCN 6			PGTW
58	021200	8.7N 140.4E	PCN 6			PGTW
59	021600	9.1N 139.6E	PCN 6	T3.0/3.0 /D0.5/13HRS		PGTW
60	021800	9.2N 139.4E	PCN 6			PGTW
61	022046	9.5N 138.6E	PCN 6			PGTW
62	022254	9.6N 137.9E	PCN 6			PGTW
63	022254	9.7N 138.0E	PCN 5	T3.0/3.0	INIT OBS	RPMK
64	030000	9.8N 137.5E	PCN 6			PGTW
65	030300	10.2N 136.8E	PCN 6	T3.0/3.0 /D0.5/11HRS		PGTW
66	030548	10.7N 136.1E	PCN 5			PGTW
67	030900	11.0N 135.3E	PCN 6			PGTW
68	031200	11.0N 134.6E	PCN 4			PGTW
69	031600	11.5N 133.2E	PCN 6			PGTW
70	031800	11.5N 132.9E	PCN 6			PGTW
71	031833	11.5N 132.7E	PCN 5			PGTW
72	031833	11.3N 133.1E	PCN 5			RPMK
73	032100	12.0N 132.4E	PCN 6			PGTW
74	032233	12.2N 132.2E	PCN 5			PGTW
75	032233	11.7N 132.1E	PCN 5	T4.0/4.0 /D1.0/24HRS		RPMK
76	040000	12.4N 131.8E	PCN 6			PGTW
77	040300	12.8N 131.3E	PCN 2	T4.0/4.0 /D1.0/11HRS		PGTW
78	040536	12.8N 130.7E	PCN 3			PGTW
79	040600	13.3N 130.6E	PCN 4			PGTW

80	040900	13.4N	130.2E	PCN 4											PGTW
81	040905	13.5N	129.9E	PCN 3											PGTW
82	041600	14.1N	129.2E	PCN 6	T4.5/4.5 /D1.8/13HRS										PGTW
83	041800	14.5N	129.0E	PCN 6											PGTW
84	042100	14.9N	128.5E	PCN 2											PGTW
85	042145	14.9N	128.1E	PCN 1											PGTW
86	050000	15.1N	128.0E	PCN 4											PGTW
87	050300	15.5N	127.5E	PCN 2	T4.5/4.5 /D0.5/11HRS										PGTW
88	050600	16.0N	126.9E	PCN 2											PGTW
89	050900	16.3N	126.4E	PCN 2											PGTW
90	051200	16.7N	125.9E	PCN 2											PGTW
91	051600	16.9N	125.2E	PCN 2	T5.5/5.5 /D1.8/13HRS										PGTW
92	051800	17.1N	124.9E	PCN 2											PGTW
93	052100	17.5N	124.6E	PCN 2											PGTW
94	052124	17.6N	124.5E	PCN 1											PGTW
95	052330	17.8N	124.1E	PCN 1											PGTW
96	052330	17.9N	124.2E	PCN 1	T6.0/6.0										RODN
97	060300	18.1N	123.5E	PCN 2	T6.0/6.0-/D1.5/11HRS										PGTW
98	060643	18.4N	122.9E	PCN 1	T6.0/6.0										RPMK
99	060653	18.5N	123.1E	PCN 1											PGTW
100	060900	18.5N	122.5E	PCN 2											PGTW
101	061004	18.3N	122.3E	PCN 2											PGTW
102	061200	18.7N	122.1E	PCN 4											PGTW
103	061600	18.8N	121.3E	PCN 4	T4.5/5.5+/W1.0/13HRS										PGTW
104	061800	19.1N	121.1E	PCN 4											PGTW
105	062103	19.2N	120.3E	PCN 4											PGTW
106	062244	19.2N	120.2E	PCN 3	T5.0/6.0+/W1.0/10HRS										RPMK
107	062308	19.3N	120.2E	PCN 3	T4.5/5.5+/W1.5/19HRS										RPMK
108	070000	19.2N	120.2E	PCN 4											PGTW
109	070300	19.4N	119.5E	PCN 4											PGTW
110	070641	19.7N	118.9E	PCN 3	T5.0/6.0										PGTW
111	070900	19.5N	118.7E	PCN 4											PGTW
112	071200	19.6N	118.3E	PCN 4											PGTW
113	071600	19.4N	117.9E	PCN 4	T4.5/4.5+/S0.0/10HRS										PGTW
114	071800	19.7N	117.8E	PCN 4											PGTW
115	071926	20.0N	117.5E	PCN 4											PGTW
116	072100	20.1N	117.2E	PCN 4											PGTW
117	072223	20.1N	117.0E	PCN 3	T5.0/5.0 /D0.5/23HRS										RPMK
118	072223	20.0N	116.8E	PCN 3	T4.5/4.5										RODN
119	080000	20.2N	116.4E	PCN 6											PGTW
120	080300	20.7N	116.3E	PCN 6	T4.5/5.0-/W0.5/20HRS										PGTW
121	080600	20.9N	115.6E	PCN 4											PGTW
122	080629	21.0N	115.8E	PCN 3											PGTW
123	080629	21.0N	115.9E	PCN 3	T4.5/5.0 /W0.5/08HRS										RPMK
124	080900	21.5N	115.0E	PCN 6											PGTW
125	081103	21.1N	115.3E	PCN 3											RPMK
126	081103	21.6N	114.7E	PCN 4											RODN
127	081200	21.7N	114.9E	PCN 6											PGTW
128	081600	21.4N	114.4E	PCN 4	T4.5/4.5-/S0.0/13HRS										PGTW
129	081800	21.6N	113.9E	PCN 4											PGTW
130	081913	21.8N	113.8E	PCN 4											PGTW
131	082100	22.1N	113.5E	PCN 4											PGTW
132	082202	21.3N	113.6E	PCN 3	T4.5/4.5										RKSD
133	090000	22.3N	113.1E	PCN 4											PGTW
134	090005	22.0N	113.4E	PCN 3	T4.0/4.5-/W0.5/25HRS										RODN
135	090006	22.2N	113.1E	PCN 3	T4.5/5.0-/W0.5/26HRS										RPMK
136	090300	22.6N	113.0E	PCN 6	T3.5/4.0 /W1.0/11HRS										PGTW
137	090600	22.7N	112.3E	PCN 6											PGTW
138	090758	22.4N	112.2E	PCN 5	T3.0/4.0-/W1.5/25HRS										RPMK
139	090900	22.8N	111.8E	PCN 6											PGTW
*140	091842	22.7N	110.2E	PCN 5											RKSD
141	091104	22.0N	111.5E	PCN 5											RPMK
*142	091104	22.6N	110.2E	PCN 5											PGTW
143	091200	22.4N	111.2E	PCN 6											

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIRA/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIRECTION	EYE TEMP (C)	OUT/IN DP/SST	MSN NO.	
1	292311	13.1N 165.3E	1500FT		1008	35 270 5	190 58 890 15	8 3			+26 +26		1	
2	300153	13.1N 164.7E	1500FT		1007	40 360 15	120 47 360 15	8 3			+24 +25 +25		1	
3	300512	12.8N 163.9E	1500FT		1003	50 050 5	140 45 050 5	12 2			+23 +24 +24	31	2	
4	300812	12.1N 163.6E	700MB	3159			100 36 010 60	8 20						2
5	302658	10.8N 159.2E	700MB	3143	1010	35 330 70	030 32 330 60	8 15			+18 +18		3	
6	302329	11.2N 158.4E	1500FT		1007	45 040 30	110 36 020 70	8 2			+26 +26	30	3	
7	310411	10.9N 157.5E	1500FT		1007	30 030 30	130 53 220 28	3 3			+14 +26 +23		4	
8	310647	10.8N 156.9E	1500FT		1008	35 330 60	060 41 330 50	8 3			+26 +26 +24		4	
9	312130	10.1N 151.6E	1500FT		1006	25 040 90	130 30 060 60	6 8			+23 +25 +25	31	5	
10	010529	10.4N 149.3E	1500FT		1006	25 330 80	010 34 330 90	8 5			+27 +26 +25		7	
11	010622	9.9N 148.4E	1500FT		1009	20 290 40	120 29 060 115	10 10			+27 +24 +23		7	
12	0111519	8.7N 145.9E	700MB	3094			110 46 350 50	20 10			+18 +18 +18		8	
* 13	011837	8.2N 144.0E	700MB	3106			230 37 890 90	15 12						8
14	020220	9.3N 142.7E	1500FT		999	50 030 5	130 48 020 15	5 1			+23 +24 +22	29	9	
15	020621	9.3N 141.2E	700MB	3087	1000	55 030 10	030 60 050 3	8 5	ELLIPTICAL	15 5 360	+11 +13 + 9		10	
16	021145	9.2N 140.5E	700MB	3109			090 37 330 60	8 8						10
17	022048	9.8N 138.2E	700MB	2990		45 330 30	080 67 330 60	5 5			+13 +14		11	
18	022313	9.9N 137.7E	700MB	3082	65 290 14	210 43 140 120	5 5				+ 9 +15		11	

19	030459	10.4N	136.2E	700MB	2994	58	328	35	090	63	330.	70	8	3	CIRCULAR	20	+12 +15 + 8	12	
20	030753	10.7N	135.2E	700MB	2975	55	080	60	130	53	080	90	10	3	CIRCULAR	18	+10 +19 +13	12	
21	032041	11.9N	132.3E	700MB	2944	70	360	78	120	72	030	100	20	1	CIRCULAR	20	+14 +17 +10	13	
22	032330	12.2N	131.0E	700MB	2941	985	80	100	5	230	51	140	10	10	1	CIRCULAR	20	+14 +17 +10	13
23	040528	13.0N	130.6E	700MB	2936	982	90	090	6	140	60	050	60	8	1	ELLIPTICAL	30 15 070	+15 +20 +11	14
24	040621	13.3N	130.3E	700MB	2945	55	290	25	210	50	150	97	8	1	ELLIPTICAL	40 30 030	+15 +21	14	
25	042632	14.8N	128.1E	700MB	2845	48	030	98	160	82	090	15	10	5	ELLIPTICAL	40 30 030	+16 +19 +10	15	
26	042335	15.0N	128.1E	700MB	2827	969	55	340	48	340	68	290	10	15	2	CIRCULAR	25	+15 +17	16
27	050005	16.2N	126.6E	700MB	2712	956	70	120	30	190	97	120	29	10	4	CIRCULAR	17	+16 +19 +13	16
28	051044	16.5N	126.1E	700MB	2673					620	83	360	11	10	1	CIRCULAR	15	+12 +17	17
29	052057	17.5N	124.3E	700MB	2560	936	70	040	60	160	109	120	27	5	5	CIRCULAR	12	+11 +21	17
30	052343	17.8N	124.0E	700MB	2482	928	120	360	89	810	109	270	15	5	5	CIRCULAR	10	+17 +20 +15	18
31	062158	19.2N	120.5E	700MB	2765	55	210	25	130	69	360	50	4	1	CIRCULAR	20	+15 +17 +13	19	
32	062349	19.2N	120.2E	700MB	2793	966	80	090	12	170	71	080	45	8	1	CIRCULAR	20	+13 +21 + 9	19
33	070836	19.7N	118.7E	700MB	2756	90	090	15	160	61	090	15	8	5	CIRCULAR	15	+11 +18 +15	20	
34	071115	19.6N	118.4E	700MB	2742	959	50	360	120	090	66	070	10	8	2	CIRCULAR	15		
35	072236	20.3N	116.8E	700MB	2817	967	60	220	60	160	74	090	30	20	2	CIRCULAR	15		

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWXR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	052300	16.7N	124.2E	LAND			21901 /////		18.3N 121.7E	98231
2	060000	17.8N	123.9E	LAND			22932 42908	EYE 25 PCT ELPTCL DIA 40-60 KMS	18.3N 121.7E	98231
3	060030	17.8N	123.6E	LAND			11992 42702	EYE 50 PCT ELPTCL DIA 50-60 KMS	18.3N 121.7E	98231
4	060100	17.9N	123.7E	LAND			11752 43305	EYE 35 PCT ELPTCL DIA 35-40 KMS	18.3N 121.7E	98231
5	060130	17.9N	123.6E	LAND			11712 42702	EYE 30 PCT ELPTCL DIA 35-40 KMS	18.3N 121.7E	98231
6	060200	18.0N	123.6E	LAND			11832 43602	EYE 30 PCT ELPTCL DIA 40-50 KMS	18.3N 121.7E	98231
7	060230	18.0N	123.5E	LAND			10872 42701	EYE 60 PCT CIR DIA 40 KMS	18.3N 121.7E	98231
8	060300	18.0N	123.5E	LAND			10872 42701	EYE 80 PCT CIR DIA 45 KMS	18.3N 121.7E	98231
9	060330	18.1N	123.4E	LAND			10872 42901	EYE 100 PCT CIR DIA 40 KMS	18.3N 121.7E	98231
10	060500	18.3N	123.3E	LAND			10872 63212	EYE 100 PCT CIR DIA 40 KMS	18.3N 121.7E	98231
11	060500	18.4N	123.8E	LAND			10712 42902		18.3N 121.7E	98231
12	060630	18.4N	122.9E	LAND			10712 43202		18.3N 121.7E	98231
13	060800	18.5N	122.6E	LAND			10742 42802		18.3N 121.7E	98231
14	060900	18.6N	122.5E	LAND			46682 42903		18.3N 121.7E	98231
15	060930	18.6N	122.4E	LAND			10672 42702		18.3N 121.7E	98231
16	061000	18.6N	122.4E	LAND			10521 40800		18.3N 121.7E	98231
17	061030	18.6N	122.3E	LAND			10421 42905		18.3N 121.7E	98231
18	061100	18.6N	122.2E	LAND			10411 42901		18.3N 121.7E	98231
19	061130	18.6N	122.1E	LAND			10411 42702		18.3N 121.7E	98231
20	061230	18.7N	121.9E	LAND			10317 42805		18.3N 121.7E	98231
21	061300	18.7N	121.8E	LAND			4444 / 42901		18.3N 121.7E	98231
22	061430	18.7N	121.6E	LAND			10311 42704	EYE 65 PCT CIR	18.3N 121.7E	98231
23	061500	18.9N	121.5E	LAND			10371 43404	EYE 85 PCT CIR	18.3N 121.7E	98231
24	061530	19.1N	120.7E	LAND			10691 42905	EYE 60 PCT CIR DIA 30 KMS	18.3N 121.7E	98231
25	062000	19.1N	120.7E	LAND			10281 40800	EYE 65 PCT CIR DIA 10 KMS	18.3N 121.7E	98231
26	062100	19.2N	120.7E	LAND			11461 43204	EYE 55 PCT ELPTCL DIA 20 KMS	18.3N 121.7E	98231
27	062230	19.3N	120.3E	LAND			4444 / 42903		16.3N 120.6E	98321
28	062300	19.3N	120.3E	LAND			10841 52705	EYE 50 PCT ELPTCL DIA 25 KMS	18.3N 121.7E	98231
29	062300	19.2N	120.4E	LAND			4444 / 42904		16.3N 120.6E	98321
30	070140	19.4N	119.9E	LAND			11481 43003	EYE 40 PCT ELPTCL DIA 25 KMS	18.3N 121.7E	98231
31	070200	19.6N	119.5E	LAND			10613 43206		16.3N 120.6E	98321
32	070230	19.6N	119.4E	LAND			10613 43207	EYE 50 PCT CIR OPEN SW DIA 35 K	16.3N 120.6E	98321
33	070240	19.4N	119.7E	LAND			11471 42903	EYE 30 PCT DIA 25 KMS	18.3N 121.7E	98231
34	070300	19.5N	119.6E	LAND			11181 33310	EYE 35 PCT ELPTCL DIA 20-25 KMS	18.3N 121.7E	98231
35	070500	20.4N	119.3E	LAND			6//3 53011		23.3N 116.7E	53316
36	070700	19.7N	118.9E	LAND			5/// 53003		18.3N 121.7E	98231
37	071200	19.6N	118.2E	LAND			4/// 52707		22.6N 120.3E	46744
38	080200	20.8N	116.7E	LAND			6//2 / 28008		22.3N 114.2E	45005
39	080400	20.8N	116.0E	LAND			38973 53109		22.3N 114.2E	45005
40	080500	20.8N	116.0E	LAND			38913 63106		22.3N 114.2E	45005
41	080800	21.0N	115.5E	LAND			38943 73108		22.3N 114.2E	45005
42	080900	21.0N	115.4E	LAND			10382 73009		22.3N 114.2E	45005
43	081000	21.0N	115.3E	LAND			10382 73009		22.3N 114.2E	45005
44	081100	21.2N	115.3E	LAND			3/// 73005		22.3N 114.2E	45005
45	081150	21.1N	115.2E	LAND			24934 53010		23.3N 116.7E	53316
46	081200	21.3N	115.0E	LAND			38111 73008		22.3N 114.2E	45005
47	081400	21.5N	114.9E	LAND			2/// 73010		22.3N 114.2E	45005
48	081500	21.5N	114.6E	LAND			2/// 73010		22.3N 114.2E	45005
49	081600	21.6N	114.5E	LAND			2/// 73010		22.3N 114.2E	45005
50	081700	21.6N	114.4E	LAND			2/// 73010		22.3N 114.2E	45005
51	081900	21.7N	114.0E	LAND			2820/ 72911		22.3N 114.2E	45005

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	081800	21.7N	114.3E	070	040 WMO 45005
2	082100	22.0N	113.7E	070	020 WMO 45011, 45005
3	090000	22.2N	113.4E	065	005 WMO 45011

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

**SUPER TYPHOON FORREST
BEST TRACK DATA**

MD/DA/HR	BEST TRACK				WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST						
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND					
092012Z	10.3	144.1	30	10.3	143.9	30.	12.	0.	12.2	140.2	35.	92.	-25.	13.7	137.2	50.	221.	-78.	15.2	134.4	65.	314.	-78.
092018Z	11.0	143.2	40	11.2	143.8	40.	17.	0.	13.2	139.3	75.	76.	10.	15.0	135.5	90.	197.	-50.	16.3	131.6	100.	242.	-30.
092100Z	12.1	141.9	50	12.0	142.0	60.	8.	18.	14.2	138.1	90.	61.	25.	16.2	134.0	100.	147.	-50.	17.5	129.6	110.	201.	-20.
092106Z	12.8	140.9	55	12.7	141.0	65.	8.	18.	15.0	136.5	90.	76.	-5.	16.7	132.4	100.	144.	-45.	17.7	128.2	110.	241.	-15.
092112Z	13.7	139.9	60	13.6	139.9	65.	6.	5.	15.6	136.2	85.	97.	-35.	17.4	132.7	90.	153.	-45.	18.9	129.2	100.	202.	-20.
092118Z	14.4	138.9	65	14.4	139.0	65.	6.	8.	16.5	135.5	80.	112.	-60.	18.3	132.3	90.	138.	-40.	19.4	129.8	95.	238.	-25.
092200Z	15.2	137.9	65	15.1	138.1	65.	13.	0.	17.7	134.6	85.	83.	-65.	19.5	130.8	95.	85.	-35.	20.6	127.2	105.	192.	-15.
092206Z	16.2	136.9	95	16.0	137.0	70.	13.	-25.	19.0	133.0	98.	35.	-55.	21.1	129.5	100.	25.	-25.	23.1	125.8	110.	94.	-15.
092212Z	17.2	136.0	120	17.4	136.1	115.	13.	-5.	19.3	133.0	140.	74.	5.	21.4	130.3	135.	111.	15.	22.8	128.5	130.	174.	10.
092218Z	18.2	134.7	140	18.1	134.7	130.	6.	-18.	20.8	131.0	140.	31.	10.	23.2	128.8	135.	46.	15.	25.1	127.3	130.	91.	10.
092300Z	18.6	133.5	150	18.7	133.6	140.	8.	-10.	21.2	129.7	135.	37.	5.	23.7	127.5	135.	13.	15.	26.1	127.2	130.	125.	15.
092306Z	19.1	132.4	145	19.2	132.6	145.	13.	0.	21.7	128.9	140.	41.	15.	24.5	127.2	135.	20.	10.	26.9	127.4	130.	172.	15.
092312Z	19.8	131.8	135	19.5	131.9	135.	19.	0.	21.5	128.4	125.	42.	5.	24.2	126.8	115.	50.	-5.	27.5	126.9	105.	159.	-5.
092318Z	20.3	131.1	130	20.0	130.9	135.	21.	5.	22.2	127.7	125.	51.	5.	25.2	126.8	115.	65.	-5.	28.5	127.4	105.	188.	0.
092400Z	20.8	130.2	130	20.8	130.3	125.	6.	-5.	24.8	128.2	110.	51.	-10.	27.0	128.8	100.	204.	-15.	30.8	131.5	90.	395.	-5.
092406Z	21.5	129.6	125	21.5	129.8	120.	11.	-5.	24.7	128.3	110.	80.	-15.	27.9	128.8	95.	239.	-20.	31.6	132.3	80.	402.	-5.
092412Z	22.2	128.5	128	22.2	128.6	120.	6.	0.	26.2	127.5	110.	102.	-10.	30.8	130.4	90.	369.	-20.	35.9	143.1	60.	930.	-20.
092418Z	23.0	128.0	120	22.9	127.8	115.	13.	-5.	27.8	127.8	100.	129.	-20.	31.6	131.5	80.	421.	-25.	36.0	145.7	50.	953.	-20.
092500Z	23.8	127.3	128	23.7	127.4	120.	8.	0.	27.9	127.5	118.	149.	-5.	33.9	136.2	80.	673.	-15.	37.5	150.7	50.	1891.	-15.
092506Z	24.3	126.9	125	24.3	126.9	115.	0.	-10.	28.1	127.0	100.	145.	-15.	33.8	135.9	80.	609.	-5.	37.5	150.4	50.	907.	0.
092512Z	24.9	126.3	120	25.1	126.4	115.	13.	-5.	26.8	126.8	105.	152.	-5.	33.9	136.2	80.	571.	0.	0.	0.	0.	0.	0.
092518Z	25.8	125.8	120	25.7	125.8	115.	6.	-5.	29.3	125.8	100.	100.	-5.	33.7	135.8	80.	449.	10.	0.	0.	0.	0.	0.
092600Z	26.8	125.0	115	27.0	125.0	115.	12.	0.	30.2	125.0	100.	63.	5.	33.5	127.5	90.	98.	25.	0.	0.	0.	0.	0.
092606Z	27.7	124.3	115	27.5	124.5	115.	16.	0.	31.3	123.5	100.	78.	15.	34.3	126.6	85.	323.	35.	0.	0.	0.	0.	0.
092612Z	28.2	124.0	118	28.2	124.0	115.	8.	5.	31.5	123.7	100.	99.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
092618Z	29.1	123.9	105	29.1	124.0	110.	5.	5.	33.1	126.5	95.	86.	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
092700Z	29.6	124.0	95	29.8	124.0	100.	12.	5.	32.2	124.7	85.	230.	26.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
092706Z	30.4	124.6	85	30.5	124.4	90.	12.	5.	33.1	126.2	80.	333.	30.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
092712Z	30.9	125.5	88	31.0	125.7	85.	12.	5.	0.8	0.8	8.	-8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
092718Z	31.8	127.2	78	31.5	126.8	85.	27.	15.	0.0	0.0	0.	-8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
092800Z	32.7	129.2	65	32.6	129.3	65.	8.	0.	0.	0.0	0.	-8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
092806Z	32.8	132.8	50	32.9	132.8	50.	6.	0.	0.	0.0	0.	-8.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

ALL FORECASTS

WRNG 24-HR 48-HR 72-HR

Avg Forecast Posit Error	11.	97.	224.	366.
Avg Right Angle Error	8.	64.	79.	118.
Avg Intensity Magnitude Error	5.	18.	25.	17.
Avg Intensity Bias	-8.	-5.	-14.	-12.
Number of Forecasts	32	28	24	20

TYPHOONS WHILE OVER 35 KTS

WRNG 24-HR 48-HR 72-HR

Avg Forecast Posit Error	10.	97.	224.	366.
Avg Right Angle Error	8.	64.	79.	118.
Avg Intensity Magnitude Error	5.	18.	25.	17.
Avg Intensity Bias	-8.	-5.	-14.	-12.
Number of Forecasts	31	28	24	20

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2191. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 12. KNOTS

**SUPER TYPHOON FORREST
FIX POSITIONS FOR CYCLONE NO. 11**

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	170000	7.3N 162.7E	PCN 6	T0.0/0.0		PGTW
2	170300	8.0N 160.6E	PCN 6			PGTW
3	170600	6.8N 161.8E	PCN 6			PGTW
4	170900	5.6N 161.6E	PCN 6			PGTW
5	171200	5.4N 161.9E	PCN 6			PGTW
6	171600	5.4N 159.4E	PCN 6			PGTW
7	171800	5.6N 158.9E	PCN 6			PGTW
8	172100	6.2N 158.5E	PCN 6			PGTW
9	180000	6.2N 158.1E	PCN 6	T0.0/0.0 /S0.0/24HRS		PGTW
10	180300	5.4N 157.6E	PCN 6			PGTW
11	180600	5.3N 156.8E	PCN 6			PGTW
12	180900	5.2N 156.0E	PCN 6			PGTW
13	181200	5.2N 155.3E	PCN 6	T1.5/1.5	INIT OBS	PGTW
14	181600	5.1N 154.3E	PCN 6		ULCC FIX	PGTW
15	181800	5.5N 153.7E	PCN 6			PGTW
16	182100	5.9N 152.6E	PCN 5			PGTW
17	190000	6.0N 152.5E	PCN 6	T2.0/2.0-/D2.0/12HRS	ULCC FIX	PGTW
18	190300	6.3N 151.9E	PCN 6		ULCC FIX	PGTW
19	190600	6.4N 151.3E	PCN 6		ULCC FIX	PGTW
20	190853	6.0N 150.7E	PCN 5		ULCC FIX	PGTW
21	191627	8.7N 148.3E	PCN 6	T2.0/2.0 /D0.5/16HRS	ULCC FIX	PGTW
22	191951	9.3N 147.9E	PCN 6			PGTW
23	192147	9.4N 146.9E	PCN 5			PGTW

24	200000	9.5N	146.3E	PCN 6	T2.5/2.5 /D5.5/09HRS	PGTW	
25	200300	9.7N	145.6E	PCN 6		PGTW	
26	200600	10.2N	144.8E	PCN 6		PGTW	
27	200832	10.1N	144.4E	PCN 6		PGTW	
28	201027	10.3N	144.1E	PCN 6		PGTW	
29	201200	10.2N	144.0E	PCN 6		PGTW	
30	201600	10.7N	143.6E	PCN 6		PGTW	
31	201800	11.1N	143.6E	PCN 6		PGTW	
32	202100	11.8N	142.5E	PCN 6		PGTW	
33	202111	11.8N	142.7E	PCN 6		PGTW	
34	202112	11.7N	143.0E	PCN 5	T3.0/3.0	INIT OBS	RPMK
35	210000	11.9N	141.9E	PCN 6		PGTW	
36	210300	12.4N	141.4E	PCN 4	T3.5/3.5 /D1.0/15HRS	PGTW	
37	210530	12.8N	141.0E	PCN 4		PGTW	
38	210900	13.3N	140.5E	PCN 4		PGTW	
39	211005	13.5N	140.3E	PCN 4		PGTW	
40	211200	13.3N	139.9E	PCN 6	T4.0/4.0 /D1.0/12HRS	PGTW	
41	211600	14.2N	139.6E	PCN 6		PGTW	
42	211800	14.4N	139.0E	PCN 6		PGTW	
43	212050	14.6N	138.5E	PCN 3		PGTW	
44	212245	14.8N	139.2E	PCN 3		PGTW	
45	212245	15.1N	139.3E	PCN 3	T4.5/4.5 /D1.5/25HRS	RPMK	
46	220000	15.3N	138.1E	PCN 4	T4.0/4.0 /D0.5/12HRS	PGTW	
47	220300	15.8N	137.6E	PCN 4		PGTW	
48	220517	16.8N	136.6E	PCN 3	T4.5/4.5	INIT OBS	RODN
49	220600	16.3N	137.0E	PCN 2		PGTW	
50	220900	17.0N	136.7E	PCN 2		PGTW	
51	220944	17.0N	136.4E	PCN 2		PGTW	
52	221200	17.4N	136.1E	PCN 2	T5.0/5.0 /D1.0/12HRS	PGTW	
53	221600	17.9N	135.0E	PCN 2		PGTW	
54	221800	18.1N	134.7E	PCN 2		PGTW	
55	222030	18.4N	134.1E	PCN 1		PGTW	
56	222223	18.5N	133.9E	PCN 1		PGTW	
57	230000	18.5N	133.6E	PCN 2	T5.5/5.5 /D1.5/12HRS	PGTW	
58	230300	18.9N	133.0E	PCN 2		PGTW	
59	230600	19.2N	132.6E	PCN 2		PGTW	
60	230646	19.2N	132.8E	PCN 3	T5.5/5.5 /D1.0/26HRS	RODN	
61	230647	19.8N	132.7E	PCN 1		PGTW	
62	230910	19.3N	132.8E	PCN 2		PGTW	
63	231103	19.4N	132.2E	PCN 1		RPMK	
64	231200	19.5N	131.8E	PCN 2	T5.5/5.5-/D0.5/12HRS	PGTW	
65	231600	19.8N	131.2E	PCN 2		PGTW	
66	231800	19.9N	130.9E	PCN 2		PGTW	
67	232100	20.3N	130.7E	PCN 2		PGTW	
68	232150	20.6N	130.6E	PCN 1		PGTW	
69	232150	20.6N	130.8E	PCN 1	T6.5/6.5	INIT OBS	RPMK
70	232342	20.8N	130.4E	PCN 2	T5.5/5.5 /S0.0/12HRS	PGTW	
71	240000	20.7N	130.3E	PCN 2		PGTW	
72	240300	21.1N	130.8E	PCN 2		PGTW	
73	240600	21.5N	129.7E	PCN 2		PGTW	
74	240634	21.6N	129.5E	PCN 2		PGTW	
75	241041	22.2N	128.8E	PCN 1		PGTW	
76	241041	22.1N	128.8E	PCN 1	T6.5/6.5	INIT OBS	RPMK
77	241200	22.4N	128.7E	PCN 2	T5.8/5.5 /W0.5/12HRS	PGTW	
78	241600	22.6N	128.4E	PCN 4		PGTW	
79	241800	22.9N	128.0E	PCN 4		PGTW	
80	242100	23.3N	127.9E	PCN 4		PGTW	
81	242129	23.5N	127.9E	PCN 3		PGTW	
82	242129	23.4N	128.0E	PCN 1	T6.0/6.5 /W0.5/24HRS	RPMK	
83	242321	23.6N	127.3E	PCN 1	T5.5/5.5-/S0.0/12HRS	PGTW	
84	242321	23.6N	127.4E	PCN 1	T5.0/5.0	INIT OBS	RODN
85	250300	24.2N	127.2E	PCN 2		PGTW	
86	250500	24.4N	126.8E	PCN 2		PGTW	
87	250622	24.3N	126.8E	PCN 1		PGTW	
88	250900	24.8N	127.0E	PCN 2		PGTW	
89	251000	24.8N	126.7E	PCN 2		PGTW	
90	251019	24.8N	126.7E	PCN 2		PGTW	
91	251200	25.2N	126.4E	PCN 2	T5.0/5.0-/S0.0/12HRS	PGTW	
92	251600	25.4N	125.9E	PCN 2		PGTW	
93	251800	25.7N	125.9E	PCN 2		PGTW	
94	252100	26.2N	125.8E	PCN 2		PGTW	
95	252107	26.4N	125.6E	PCN 1		PGTW	
96	252259	26.6N	124.9E	PCN 1	T6.0/6.0 /S0.0/25HRS	RPMK	
97	252259	26.6N	125.1E	PCN 1	T5.5/5.5 /S0.0/11HRS	PGTW	
98	260000	26.8N	125.1E	PCN 2		PGTW	
99	260300	27.4N	124.7E	PCN 2		PGTW	
100	260500	27.6N	124.4E	PCN 2		PGTW	
101	260610	27.5N	124.5E	PCN 1		PGTW	
102	260900	27.9N	124.3E	PCN 2		PGTW	
103	260948	27.9N	124.2E	PCN 2		EYE DIA 25NM	
104	261200	28.2N	124.1E	PCN 2		EYE DIA 25NM	
105	261600	28.7N	124.0E	PCN 2	T5.0/5.0-/S0.0/17HRS	PGTW	
106	261800	29.1N	124.0E	PCN 2		PGTW	
107	262047	29.4N	123.8E	PCN 3		PGTW	
108	270000	29.6N	123.9E	PCN 4	T4.0/5.0 /W1.5/08HRS	RPMK	
109	270019	30.0N	124.2E	PCN 3	T4.5/5.5-/W1.5/25HRS	PGTW	
110	270300	29.9N	124.1E	PCN 4		PGTW	
111	270557	30.3N	124.6E	PCN 3		PGTW	
112	270900	30.7N	124.8E	PCN 4		PGTW	
113	271100	31.0N	125.4E	PCN 5		RODN	
114	271100	31.3N	127.1E	PCN 5		RKSQ	
115	271200	30.8N	125.7E	PCN 6		PGTW	

116	271600	31.3N 126.5E	PCN 6	T2.5/3.5 /W1.5/16HRS		PGTW
117	272025	32.4N 128.5E	PCN 5			RODN
118	272100	32.5N 127.5E	PCN 6		ULCC FIX	PGTW
119	272357	32.6N 129.2E	PCN 3	T3.0/3.0	INIT OBS	RKSO
120	280000	32.6N 129.4E	PCN 4	T3.0/4.0 /W1.5/08HRS		PGTW
121	280300	32.9N 130.8E	PCN 6			PGTW
122	280545	33.0N 132.3E	PCN 5			PGTW
123	280905	33.6N 135.7E	PCN 6			PGTW
124	281200	35.2N 137.8E	PCN 6			PGTW
125	281600	35.0N 140.4E	PCN 6			PGTW
126	281800	35.7N 142.3E	PCN 6			PGTW
127	282355	35.3N 143.7E	PCN 5	T2.0/3.0 /W1.0/24HRS		RKSO

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	202337	12.0N 142.0E	700MB	3032	994	65 160 70	120 61 030	61 8 2			+13 +7	5
2	210252	12.2N 141.4E	700MB	3013	55 050	25	120 44 050	30 6 2			+12 +9	5
3	210544	12.7N 141.0E	700MB	2981	40 360	30	090 49 360	30 5 2			+14	6
4	210839	13.2N 140.4E	700MB	2984	987	60 110	40 220 54 130	70 5 3			+12 +15 +15	6
5	212127	14.9N 138.3E	700MB	2880	65 330	20	200 55 130	120 15 2	CIRCULAR	06	+12 +15 +11	7
6	212348	15.1N 138.1E	700MB	2865	975	60 360	30 130 78 360	20 10 2	CIRCULAR	10	+10 +16 +11	7
7	221057	17.0N 136.2E	700MB	2468	926		090 98 340	30 12 1	CIRCULAR	5	+13 +25 +13	8
8	221345	17.5N 135.7E	700MB	2285			160 105 090	10 12 1				8
9	222038	18.4N 134.2E	700MB	2089		70 310	90 230 98 120	18 3 1	CIRCULAR	5	+14 +27 +15	9
10	222307	18.5N 133.7E	700MB	2068	883	130 210	10 260 94 218	25 3 1	CIRCULAR	5	+15 +27 +17	9
11	230912	19.3N 132.1E	700MB	2189	898	65 120	82 190 96 100	17 8 3	CIRCULAR	6	+15 +19 +18	11
12	231139	19.5N 132.0E	700MB	2235	982		120 96 020	21 8 3	CIRCULAR	7	+13 +19 +18	11
13	232044	20.5N 130.9E	700MB	2314	100 360	30	110 118 360	30 15 1	ELLiptical	35 20 020	+16 +20 +13	12
14	232312	20.8N 130.3E	700MB	2315	911	120 230	30 040 86 320	60 6 1	CONCENTRIC	20 8	+15 +19 +16	12
15	240635	21.9N 129.2E	700MB	2376	100 120	22	149 105 040	40 3 1	ELLiptical	8 4 150	+16 +19 +16	13
16	241104	22.2N 128.7E	700MB	2383	919		040 99 320	45 5 2	ELLiptical	8 4 110	+16 +19 +16	13
17	242032	23.4N 127.8E	700MB	2377	917	80 010	90 170 110 100	80 7 3	CIRCULAR	5	+17 +21 +19	14
18	242312	23.7N 127.4E	700MB	2393	918	60 210	90 030 95 290	41 7 3	CIRCULAR	6	+14 +21 +20	14
19	250830	24.8N 126.8E	700MB	2382	989		190 181 130 97	42 4 2	CIRCULAR	20	+13 +20 +17	15
20	251114	24.8N 126.5E	700MB	2392	918		350 89 260	40 4 2	ELLiptical	40 30 360	+19 +22 +15	15
21	252036	26.3N 125.6E	700MB	2400		90 070	120 160 110 070	120 12 1	ELLiptical	30 20 170	+16 +21 +19	16
22	252355	26.8N 125.1E	700MB	2433	924	130 230	18 110 91 030	30 9 1	CIRCULAR	18	+16 +20 +19	16
23	260641	27.8N 124.3E	700MB	2460	926	180 090	80 180 98 090	80 5 3	CIRCULAR	25	+15 +20 +14	17
24	272358	32.7N 129.2E	700MB	2894	976	50 230	60 310 58 240	100 5 5	CIRCULAR	40	+15 +16 +12	18

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	241900	23.3N 128.0E	LAND	FAIR		70	MVG 34/30		26.1N 127.7E	47937
2	242000	23.3N 127.8E	LAND	FAIR		60	MVG 32/20		26.1N 127.7E	47937
3	242100	23.4N 127.8E	LAND	GOOD		50	MVG 33/20		26.1N 127.7E	47937
4	242200	23.5N 127.6E	LAND	GOOD		50	MVG 33/20		26.1N 127.7E	47937
5	242300	23.7N 127.5E	LAND	GOOD		55	MVG 33/20		26.1N 127.7E	47937
6	250000	23.7N 127.4E	LAND	GOOD		50	MVG 33/20		24.8N 125.3E	47927
7	250100	23.8N 127.3E	LAND	GOOD		48	MVG 33/10		24.8N 125.3E	47927
8	250135	24.1N 127.4E	LAND	POOR			MVG 31/15		26.4N 127.8E	47931
9	250200	23.9N 127.3E	LAND	GOOD		40	MVG 33/20		24.8N 125.3E	47927
10	250235	24.2N 127.3E	LAND	POOR					26.4N 127.8E	47931
11	250300	24.8N 127.2E	LAND	GOOD		50	MVG 33/20		24.8N 125.3E	47927
12	250400	24.2N 127.1E	LAND	GOOD		60	MVG 35/20		26.1N 127.7E	47937
13	250500	24.2N 127.0E	LAND	GOOD		50	MVG 31/20		26.1N 127.7E	47937
14	250535	24.2N 127.1E	LAND	FAIR	ELLIPTICAL		AXIS 40/25		26.4N 127.8E	47931
15	250600	24.2N 126.9E	LAND				45//3 52911 11983 73208		24.8N 125.3E	47927
16	250600	24.3N 126.9E	LAND						26.1N 127.7E	47937
17	250600	24.3N 126.9E	LAND	GOOD		50	MVG 31/20		26.1N 127.7E	47937
18	250700	24.4N 126.8E	LAND	GOOD		55	MVG 33/20		26.1N 127.7E	47937
19	250735	24.8N 127.2E	LAND	POOR					26.4N 127.8E	47931
20	250800	24.7N 126.9E	LAND	GOOD		55	MVG 36/30		26.1N 127.7E	47937
21	250810	24.5N 126.8E	LAND	FAIR					26.4N 127.8E	47931
22	250835	24.8N 127.0E	LAND	FAIR	ELLIPTICAL		AXIS 35/20		26.4N 127.8E	47931
23	250900	24.8N 126.8E	LAND	GOOD		55	MVG 33/30		26.1N 127.7E	47937
24	250930	24.8N 126.7E	LAND	FAIR	ELLIPTICAL		AXIS 35/25		26.4N 127.8E	47931
25	251030	24.9N 126.6E	LAND	GOOD	ELLIPTICAL		AXIS 30/25		26.4N 127.8E	47931
26	251100	25.0N 126.5E	LAND	GOOD		55	MVG 32/10		26.1N 127.7E	47937
27	251130	24.9N 126.4E	LAND	GOOD	ELLIPTICAL		AXIS 55/45		26.4N 127.8E	47931
28	251230	25.1N 126.3E	LAND	GOOD	ELLIPTICAL		AXIS 50/40		26.4N 127.8E	47931
29	251300	25.1N 126.2E	LAND	GOOD		50	MVG 30/15		26.1N 127.7E	47937
30	251335	25.1N 126.2E	LAND	GOOD	ELLIPTICAL		AXIS 30/20		26.4N 127.8E	47931
31	251400	25.2N 126.2E	LAND	GOOD		50	MVG 33/20		26.1N 127.7E	47937
32	251435	25.2N 126.2E	LAND	GOOD	ELLIPTICAL		AXIS 30/25		26.4N 127.8E	47931
33	251600	25.5N 125.9E	LAND	GOOD		55	MVG 33/20		26.1N 127.7E	47937
34	251630	25.3N 126.2E	LAND	GOOD	ELLIPTICAL		AXIS 30/25		26.4N 127.8E	47931
35	251635	25.5N 126.1E	LAND	FAIR					26.4N 127.8E	47931
36	251700	25.6N 125.8E	LAND	GOOD		50	MVG 32/20		26.1N 127.7E	47937
37	251735	25.6N 125.9E	LAND	POOR					26.4N 127.8E	47931

38	251800	25.7N	125.8E	LAND	GOOD		60	MVG	35/10	26.1N	127.7E	47937
39	251835	25.8N	125.8E	LAND	FAIR		60	MVG	36/20	26.4N	127.8E	47931
40	251900	25.8N	125.8E	LAND	GOOD		60	MVG	36/20	26.1N	127.7E	47937
41	251935	25.8N	125.9E	LAND	POOR		CONCENTRIC	MVG	36/40	26.4N	127.8E	47931
42	252000	26.1N	125.8E	LAND	GOOD		40	MVG	36/40	26.1N	127.7E	47937
43	252030	26.2N	125.8E	LAND	FAIR		20	MVG	32/30	26.4N	127.8E	47931
44	252100	26.3N	125.7E	LAND	GOOD		20	MVG	33/40	26.1N	127.7E	47937
45	252200	26.7N	125.5E	LAND	GOOD		40	MVG	32/25	26.1N	127.7E	47937
46	260000	26.8N	125.1E	LAND	GOOD		40	MVG	29/10	26.1N	127.7E	47937
47	260100	26.8N	125.0E	LAND	GOOD		40	MVG	31/30	26.3N	126.8E	47929
48	260200	27.0N	124.8E	LAND	GOOD		40	MVG	32/30	26.3N	126.8E	47929
49	260300	27.2N	124.7E	LAND	GOOD		40	MVG	35/44 53206	24.8N	125.3E	47927
50	260400	27.3N	124.6E	LAND	GOOD		35	MVG	36/20	26.3N	126.8E	47929
51	260400	27.2N	124.7E	LAND	GOOD		20074 52815	MVG	33/20	24.8N	125.3E	47927
52	260500	27.3N	124.4E	LAND	GOOD		30	MVG	33/20	26.3N	126.8E	47929
53	260500	27.4N	124.5E	LAND	GOOD		21815 53608	MVG	33/20	24.8N	125.3E	47927
54	260600	27.4N	124.4E	LAND	FAIR		40	MVG	33/20	26.3N	126.8E	47929
55	260600	27.5N	124.4E	LAND	FAIR		20815 53411	MVG	34/20	24.8N	125.3E	47927
56	260700	27.6N	124.3E	LAND			6///3 83308	MVG	34/20	26.1N	127.7E	47937
57	260700	27.5N	124.5E	LAND			6///5 53411	MVG	34/20	26.3N	126.8E	47929
58	260700	27.6N	124.4E	LAND	FAIR		30	MVG	34/20	24.8N	125.3E	47927
59	260800	27.6N	124.2E	LAND			6///5 53411	MVG	33/20	26.3N	126.8E	47929
60	260800	27.7N	124.3E	LAND	GOOD		25	MVG	35/20	26.3N	126.8E	47929
61	260900	27.8N	124.3E	LAND	GOOD		20	MVG	36/20	26.3N	126.8E	47929
62	261000	27.9N	124.2E	LAND	GOOD		25	MVG	36/20	26.3N	126.8E	47929
63	261100	28.0N	124.1E	LAND	GOOD		20	MVG	31/20	26.3N	126.8E	47929
64	261300	28.2N	124.1E	LAND	GOOD		20	MVG	34/20	26.3N	126.8E	47929
65	261400	28.3N	124.0E	LAND	POOR		20	MVG	34/15	26.3N	126.8E	47929
66	280010	32.7N	129.3E	LAND	GOOD		25	MVG	89/30	32.7N	128.8E	47844

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	280000	32.6N 129.3E	065	030	WMD 47843
2	280300	32.7N 131.3E	055	020	WMD 47821
3	280600	32.9N 132.8E	050	020	WMD 47898
4	281200	34.7N 136.6E	040	012	WMD 47665, 47654, 47651, 47778, 47771
5	281500	33.9N 139.4E	040	050	WMD 47678, 47675

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

TROPICAL STORM GEORGIA
BEST TRACK DATA

MO/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST						
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	
092800Z	17.2	118.0	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.	-0.	0.	0.0	0.0	0.	-0.	0.	
092806Z	17.9	117.2	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.	
092812Z	18.8	116.7	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.	
092818Z	19.2	115.7	35	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.	
092900Z	19.2	114.8	40	19.3	114.9	50.	8.	10.	20.8	111.4	65.	33.	15.	20.4	107.7	60.	52.	5.	0.0
092906Z	19.2	113.8	55	19.3	113.8	55.	6.	0.	19.9	109.4	60.	31.	10.	20.8	105.8	50.	25.	10.	0.0
092912Z	19.3	112.5	55	19.3	112.3	50.	11.	-5.	20.1	107.8	50.	73.	5.	22.0	104.7	40.	78.	10.	0.0
092918Z	19.3	111.9	50	19.3	111.6	50.	17.	0.	19.8	108.4	50.	29.	5.	0.0	0.0	0.	-0.	0.	0.
093000Z	19.6	111.0	50	19.4	110.8	50.	16.	0.	20.1	107.4	45.	34.	-10.	0.0	0.0	0.	-0.	0.	0.
093006Z	20.1	109.9	50	19.7	110.0	45.	25.	-5.	20.6	106.7	45.	68.	5.	0.0	0.0	0.	-0.	0.	0.
093012Z	20.2	109.1	45	20.2	109.0	45.	6.	0.	21.8	106.0	45.	102.	15.	0.0	0.0	0.	-0.	0.	0.
093018Z	20.2	106.1	45	20.2	106.1	45.	6.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.
100100Z	20.2	106.8	55	20.2	107.1	45.	17.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.
100106Z	20.5	105.5	40	20.5	105.5	40.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.
100112Z	20.7	104.6	30	20.7	104.6	40.	8.	10.	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.	53.	52.	0.	0.	0.	0.	0.
Avg Right Angle Error	7.	27.	18.	0.	0.	0.	0.	0.
Avg Intensity Magnitude Error	4.	9.	8.	0.	0.	0.	0.	0.
Avg Intensity Bias	0.	6.	8.	0.	0.	0.	0.	0.
Number of Forecasts	11	7	3	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 825. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 18. KNOTS

TROPICAL STORM GEORGIA
FIX POSITIONS FOR CYCLONE NO. 12

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	280000	17.3N 118.0E	PCN 6	T1.0/1.0	INIT OBS	PGTW
2	280300	17.7N 117.5E	PCN 6			PGTW
3	280600	18.0N 117.2E	PCN 6			PGTW
4	280727	18.4N 116.7E	PCN 5	T1.5/1.5	INIT OBS	RPMK
5	280900	18.4N 116.9E	PCN 6			PGTW
6	281200	18.0N 116.6E	PCN 6	T1.5/1.5	INIT OBS	PGTW
7	281600	19.4N 116.3E	PCN 6			PGTW
8	281800	19.4N 114.8E	PCN 6		ULCC FIX	PGTW
9	282100	19.3N 114.5E	PCN 6			PGTW
10	282146	19.5N 115.1E	PCN 5			RPMK
11	282146	19.2N 114.5E	PCN 5			PGTW
12	290000	19.0N 114.8E	PCN 6	T3.0/3.0 /D2.0/24HRS		PGTW
13	290300	19.3N 114.5E	PCN 6			PGTW
14	290600	19.2N 113.8E	PCN 6			RPMK
15	290714	19.2N 113.8E	PCN 5	T3.5/3.5 /D2.0/24HRS		PGTW
16	290900	19.4N 112.8E	PCN 6			PGTW
17	291026	19.2N 112.5E	PCN 3			PGTW
18	291200	19.4N 112.3E	PCN 6	T3.0/3.0 /D1.5/24HRS		PGTW
19	291214	19.1N 111.8E	PCN 3			RODN
20	291215	18.9N 112.8E	PCN 5			RPMK
21	291600	19.1N 112.0E	PCN 6			PGTW
22	291800	19.1N 111.7E	PCN 6			PGTW
23	292100	19.1N 111.5E	PCN 6			PGTW
24	300000	19.1N 110.9E	PCN 6			PGTW
25	300054	19.6N 111.9E	PCN 3	T3.0/3.0	INIT OBS	RODN
26	300300	19.7N 110.5E	PCN 6		ULCC FIX	PGTW
27	300600	20.2N 109.8E	PCN 6	T3.5/3.5-/D0.5/30HRS		PGTW
28	300900	20.4N 109.6E	PCN 6			PGTW
29	301153	20.1N 109.1E	PCN 4			RODN
30	301200	20.4N 109.0E	PCN 6			PGTW
31	301600	19.9N 108.3E	PCN 6	T3.0/3.0-/S0.0/20HRS		PGTW
32	301800	20.1N 108.1E	PCN 4			PGTW
33	301947	19.8N 107.6E	PCN 5			RODN
34	302100	20.1N 107.7E	PCN 4			PGTW
35	302234	20.2N 107.5E	PCN 4			RODN
36	303000	20.4N 106.8E	PCN 4	T4.0/4.0-/D0.5/10HRS		PGTW
37	303033	20.3N 106.3E	PCN 3	T3.0/3.0 /S0.0/24HRS		RODN

38	010300	20.4N	106.1E	PCN	4		PGTW
39	010500	20.5N	105.5E	PCN	4	T3.0/3.5-1W0.5/24HRS	PGTW
40	011124	20.5N	104.7E	PCN	4		RODN
41	011131	20.6N	104.2E	PCN	5		RPMK
42	011200	20.7N	104.6E	PCN	6		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 DIAM/	EYE ORIEN-	EYE TEMP (C)	MSN NO.
1	290033	19.2N 114.9E	1500FT		996	55 030 20	140 69 030 20	7 5			OUT/ IN/ DP/SST	+26 +27 +24 32	1

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADAR-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	290900	19.5N 113.8E	LAND				6//// /////		22.3N 114.2E	45005
2	291500	19.5N 112.4E	LAND				6//// /////		22.3N 114.2E	45005
3	301100	19.8N 118.3E	LAND				1103/ 3//		16.3N 120.6E	45321

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

**TROPICAL STORM HERBERT
BEST TRACK DATA**

MD/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST						
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST		
100512Z	10.8	115.6	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	
100618Z	11.0	114.7	30	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	
100700Z	11.4	113.8	35	11.3	113.8	35	6.	0.	11.8	111.2	45.	34.	0.	12.3	108.8	35.	43.	-5.	0.0
100706Z	11.5	113.8	40	11.4	113.8	40	6.	0.	12.0	110.1	45.	30.	-5.	0.0	0.	-0.	0.	0.0	0.
100712Z	11.7	112.2	40	11.8	111.8	40	24.	0.	12.2	108.8	40.	43.	-10.	0.0	0.	-0.	0.	0.0	0.
100718Z	11.8	111.5	40	11.9	111.0	40	30.	0.	12.8	108.3	35.	29.	-10.	0.0	0.	-0.	0.	0.0	0.
100800Z	12.2	110.8	45	12.2	110.4	50	23.	5.	12.7	107.9	30.	32.	-10.	0.0	0.	-0.	0.	0.0	0.
100806Z	12.5	110.1	50	12.8	110.3	50	21.	0.	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	
100812Z	12.6	109.4	50	12.9	109.5	45	19.	-5.	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	
100818Z	12.8	108.8	45	12.8	108.5	40	18.	-5.	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	
100900Z	12.9	108.4	40	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.	33.	43.	0.	0.	0.	0.	0.
AVG RIGHT ANGLE ERROR	11.	24.	29.	0.	0.	0.	0.	0.
AVG INTENSITY MAGNITUDE ERROR	2.	7.	5.	0.	0.	0.	0.	0.
AVG INTENSITY BIAS	-1.	-7.	-5.	0.	0.	0.	0.	0.
NUMBER OF FORECASTS	8	5	1	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 445. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

**TROPICAL STORM HERBERT
FIX POSITIONS FOR CYCLONE NO. 13**

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
1	041800	7.1N 121.8E	PCN 6			PGTW
2	042100	7.2N 120.6E	PCN 6			PGTW
3	050000	7.4N 119.9E	PCN 6			PGTW
4	050400	7.8N 119.4E	PCN 6	T1.0/1.0	INIT OBS	PGTW
5	051600	10.0N 118.5E	PCN 6	T1.0/1.0	INIT OBS	PGTW
6	051800	10.1N 118.1E	PCN 6			PGTW
7	052100	10.4N 117.2E	PCN 6			PGTW
8	060000	10.7N 115.4E	PCN 6		ULCC FIX	PGTW
9	060400	10.8N 114.9E	PCN 6	T2.0/2.0 /D1.0/24HRS	ULCC FIX	PGTW
10	060600	10.7N 114.2E	PCN 6		ULCC FIX	PGTW
11	060730	11.0N 115.0E	PCN 3	T1.5/1.5	INIT OBS	RPMK
12	060900	10.9N 115.2E	PCN 6		ULCC FIX	PGTW
13	061123	11.1N 114.9E	PCN 6		ULCC FIX	PGTW
14	061200	11.2N 114.9E	PCN 6			PGTW
15	061600	11.3N 114.2E	PCN 6	T2.0/2.0 /D1.0/24HRS		PGTW
16	061800	11.6N 113.7E	PCN 6			PGTW
* 17	062100	11.9N 113.2E	PCN 6			RPMK
18	062219	12.0N 114.2E	PCN 5	T2.0/2.0 /D0.5/15HRS		PGTW
19	070000	11.5N 113.2E	PCN 6			PGTW
20	070003	11.9N 113.0E	PCN 5	T1.0/1.0	INIT OBS	RODN
21	070400	11.4N 113.1E	PCN 4	T2.5/2.5 /D0.5/24HRS		PGTW
22	070600	11.4N 112.9E	PCN 4			PGTW
23	070717	11.9N 113.1E	PCN 3	T3.0/3.0 /D1.5/24HRS		RPMK
24	070900	11.7N 112.7E	PCN 4			PGTW
25	071100	11.7N 111.7E	PCN 4			RODN
26	071200	11.9N 112.8E	PCN 6			PGTW
27	071600	11.8N 111.4E	PCN 6	T3.0/3.0-/D1.0/24HRS		PGTW
28	071800	12.0N 111.2E	PCN 6			PGTW
29	072002	11.7N 111.5E	PCN 5			RPMK
30	072100	12.3N 111.4E	PCN 6			PGTW
31	072158	12.2N 111.4E	PCN 5			PGTW
32	072159	12.0N 110.6E	PCN 5			RODN
33	072341	11.6N 111.4E	PCN 5	T3.5/3.5-/D1.5/24HRS		RPMK
34	080000	12.3N 111.1E	PCN 6			PGTW
35	080400	13.0N 110.7E	PCN 4	T3.5/3.5-/D1.0/24HRS		PGTW
36	080600	13.2N 110.4E	PCN 4			PGTW
37	080705	12.6N 110.1E	PCN 5	T2.5/2.5	INIT OBS	RODN
38	080900	12.9N 110.0E	PCN 6			PGTW
39	081038	12.9N 109.5E	PCN 3			RPMK
40	081200	12.6N 109.5E	PCN 6			PGTW

41	081600	12.7N 108.8E	PCN 6	T2.5/3.5-/W0.5/24HRS	ULCC FIX	PGTW
42	081800	12.8N 108.5E	PCN 6		ULCC FIX	PGTW
43	081950	13.2N 108.7E	PCN 6			RODN
44	082100	12.9N 108.4E	PCN 6			PGTW
45	090000	13.2N 107.9E	PCN 6		ULCC FIX	PGTW

AIRCRAFT FIXES

FIX NO. (Z)	TIME	FIX POSITION	FLT LVL	700MB OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-	EYE TEMP (C)	MSN NO.
1	070019	11.3N 113.8E	1500FT	998	50 140 28	220 44 140	28 20 4		OUT/ IN/	+23 +24 +22 28	1

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

TYPHOON IDA
BEST TRACK DATA

MO/DA/HR	BEST TRACK		WARNING		24 HOUR FORECAST						48 HOUR FORECAST						72 HOUR FORECAST					
	POSIT	WIND	POSIT	WIND	ERRORS	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND		
100612Z	17.0	146.4	20	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.	0.	0.	-0.	0.	0.	
100618Z	17.4	145.1	20	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.	0.	0.	-0.	0.	0.	
100700Z	17.9	143.9	20	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.	0.	0.	-0.	0.	0.	
100706Z	18.0	142.9	25	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.	0.	0.	-0.	0.	0.	
100712Z	18.4	141.9	25	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.	0.	0.	-0.	0.	0.	
100718Z	19.0	139.9	30	10.8	140.9	30.	58.	0.	20.7	137.1	45.	238.	-10.	22.5	134.2	50.	304.	-10.	24.9	131.9	70.	501.
100800Z	20.0	137.9	40	20.0	138.0	40.	6.	0.	23.0	134.4	45.	132.	-10.	25.5	133.2	50.	198.	-15.	27.4	132.8	70.	499.
100806Z	20.8	136.4	40	20.8	136.5	40.	6.	0.	23.7	132.3	45.	71.	-15.	26.6	131.0	45.	261.	-20.	31.4	132.9	45.	548.
100812Z	21.4	134.8	50	21.3	134.7	50.	8.	0.	23.6	130.2	70.	185.	10.	26.7	129.2	70.	407.	10.	0.0	0.0	0.	-0.
100818Z	22.3	133.2	55	22.2	133.1	55.	8.	0.	25.5	129.4	70.	215.	10.	28.0	129.6	70.	405.	15.	0.0	0.0	0.	-0.
100800Z	23.6	132.1	55	23.6	132.1	55.	8.	0.	27.9	131.5	65.	105.	0.	33.0	135.2	50.	200.	-5.	0.0	0.0	0.	-0.
100806Z	24.8	131.8	60	24.8	131.7	60.	5.	0.	29.4	132.1	60.	95.	-5.	33.9	136.8	45.	318.	0.	0.0	0.0	0.	-0.
100912Z	26.1	132.2	60	26.1	132.3	60.	5.	0.	34.0	130.7	45.	251.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	
100918Z	27.4	132.8	60	27.5	132.8	55.	6.	-5.	34.0	130.6	40.	154.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	
101000Z	28.8	133.2	65	26.7	133.2	65.	6.	0.	34.7	130.6	50.	65.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	
101006Z	30.3	133.6	65	30.5	133.5	65.	13.	0.	36.3	143.0	50.	72.	5.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	
101012Z	31.4	134.8	60	31.4	134.8	60.	0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	
101018Z	32.3	136.3	55	32.3	136.3	55.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	
101100Z	33.7	139.1	55	33.6	138.6	55.	16.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	
101106Z	35.1	142.9	45	35.1	142.8	45.	5.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	

	ALL FORECASTS						TYPHOONS WHILE OVER 35 KTS					
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR				
Avg Forecast Posit Error	10.	144.	298.	516.	6.	144.	298.	516.				
Avg Right Angle Error	6.	58.	95.	25.	6.	58.	95.	25.				
Avg Intensity Magnitude Error	0.	9.	11.	10.	0.	9.	11.	10.				
Avg Intensity Bias	-0.	-5.	-4.	10.	-0.	-5.	-4.	10.				
Number of Forecasts	15	11	7	3	14	11	7	3				

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1889. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 17. KNOTS

TYPHOON IDA
FIX POSITIONS FOR CYCLONE NO. 14

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
*	050000	17.0N 156.8E	PCN 6			PGTW
2	061600	17.3N 145.4E	PCN 6			PGTW
3	062100	17.8N 144.8E	PCN 6			PGTW
4	070000	17.9N 143.9E	PCN 6	T1.5/1.5	INIT OBS	PGTW
5	070400	17.8N 143.3E	PCN 6		ULCC FIX	PGTW
6	070600	18.0N 142.9E	PCN 6		ULCC FIX	PGTW
7	070900	18.1N 142.5E	PCN 6		ULCC FIX	PGTW
8	071200	18.2N 142.0E	PCN 6			PGTW
*	9 071600	18.5N 141.5E	PCN 6	T2.0/2.0	INIT OBS	PGTW
* 10	071800	18.6N 140.9E	PCN 6		ULCC FIX	PGTW
11	072017	18.7N 140.2E	PCN 5			PGTW
12	080000	20.0N 138.0E	PCN 4			PGTW
13	080400	20.6N 137.1E	PCN 4	T3.0/3.0 /D1.5/24HRS		PGTW
14	080523	21.2N 136.5E	PCN 5	T3.5/3.5	INIT OBS	RODN
15	080600	20.9N 136.6E	PCN 4			PGTW
16	080857	21.1N 135.3E	PCN 4			PGTW
17	081049	21.3N 136.0E	PCN 3			RODN
18	081200	21.3N 134.7E	PCN 6			PGTW
19	081600	21.9N 133.6E	PCN 6	T3.5/3.5 /D0.5/24HRS	ULCC FIX	PGTW
20	081800	22.2N 133.1E	PCN 6		ULCC FIX	PGTW
21	082100	22.8N 132.4E	PCN 6			PGTW
22	082137	22.9N 132.5E	PCN 5			PGTW
23	082137	23.4N 133.0E	PCN 5	T3.0/3.0	INIT OBS	RPMK
24	082319	23.8N 132.4E	PCN 3			RODN
25	090000	23.7N 131.7E	PCN 4			PGTW
26	090400	24.5N 131.0E	PCN 2	T4.0/4.0 /D1.0/24HRS		PGTW
27	090510	24.8N 131.9E	PCN 1	T4.0/4.0 /D0.5/24HRS		RODN
28	090600	25.0N 131.9E	PCN 2			PGTW

29	090633	24.8N	131.9E	PCN 3	T4.8/4.8 /D1.8/09HRS	RPMK
30	090653	25.0N	132.2E	PCN 2		PGTW
31	090900	25.5N	131.9E	PCN 4		PGTW
32	091017	25.7N	132.3E	PCN 3		PGTW
33	091200	26.1N	132.3E	PCN 2		PGTW
34	091600	27.2N	132.6E	PCN 4	T3.5/3.5-/S0.8/24HRS	PGTW
35	091800	27.5N	132.8E	PCN 6	ULCC FIX	PGTW
36	092116	28.1N	133.2E	PCN 4		PGTW
37	092258	28.8N	133.3E	PCN 5	ULCC FIX	PGTW
38	092258	28.6N	133.1E	PCN 5		RODH
39	100000	28.6N	133.8E	PCN 6		PGTW
40	100300	29.6N	133.9E	PCN 6		PGTW
41	100600	30.0N	133.9E	PCN 6	T3.5/4.8-/W0.5/26HRS	PGTW
42	100900	30.6N	134.6E	PCN 6		PGTW
43	100956	31.0N	134.8E	PCN 3		PGTW
44	101200	31.4N	135.0E	PCN 4	ULCC FIX	PGTW
45	101600	31.8N	135.3E	PCN 4	T3.0/3.5-/W0.5/24HRS	PGTW
46	101800	32.1N	135.8E	PCN 6	ULCC FIX	PGTW
47	101925	32.8N	137.1E	PCN 5		RODN
48	102055	33.3N	137.6E	PCN 3	ULCC FIX	PGTW
49	102100	33.8N	137.4E	PCN 4	ULCC FIX	PGTW
50	102236	33.2N	138.2E	PCN 3	T3.0/3.0	RKSO
51	110000	33.8N	139.1E	PCN 6		PGTW
52	110300	34.6N	140.8E	PCN 4		PGTW
53	110445	34.9N	141.7E	PCN 6		PGTW
54	110600	35.1N	142.8E	PCN 6	ULCC FIX	PGTW
55	110900	35.8N	145.7E	PCN 6		PGTW
56	111200	36.0N	147.0E	PCN 6	ULCC FIX	PGTW
57	111600	36.8N	151.5E	PCN 6	T1.5/2.5 /W1.5/24HRS	PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/TET	EYE SHAPE	EYE ORIEN-	EYE TEMP (C)	MSN NO.
1	080010	20.0N 137.9E	1500FT		1000	45 010 30 080	44 010 30 10 5			+25 +24 +22	31	1
2	080629	20.0N 136.3E	700MB	3059		50 020 90 128	50 350 25 10 5			+18 +12 +12		2
3	080826	21.1N 135.5E	700MB	3056	997	30 340 90 100	44 010 77 4 5			+25 +22		2
4	082355	23.6N 132.1E	700MB	2980	986	65 280 30 340	51 280 30 7 4			+15 +16		3
5	090238	24.1N 131.8E	700MB	2937		70 140 20 240	69 140 20 5 5			+13 +15 + 8		4
6	090616	24.8N 131.7E	700MB	2969		48 170 70 150	61 040 60 18 1			+13 +15 +18		4
7	090854	25.3N 131.9E	700MB	2951	986	50 270 10 350	43 300 25 12 1			+20 +22 +11		5
8	092037	28.1N 133.0E	700MB	2910		190 80 130	60 18 5			+16 +22		6
9	092347	28.7N 133.1E	700MB	2905	977	80 280 10 350	67 330 18 18 3	CIRCULAR 8		+15 +28		6
10	100534	30.1N 133.5E	700MB	2870		80 090 40 180	104 090 40 10 6	CIRCULAR 30		+15 +20		7
11	100756	30.6N 133.9E	700MB	2873	973	50 250 60 310	66 230 20 7 4			+12 +14 +11		7
12	102038	33.1N 137.3E	700MB	2887		55 070 85 300	66 210 65	ELLIPICAL 12 85 080		+15 +17 +13		
13	102302	33.3N 138.2E	700MB	2901	979	70 160 35 280	76 170 35 5 2	ELLIPICAL 12 08 060				

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADAR-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	100300	29.6N 133.6E	LAND				35/12 53616		30.6N 131.0E	47869
2	100600	30.2N 133.8E	LAND				35/12 50111		30.6N 131.0E	47869
3	100800	30.6N 134.0E	LAND				35/11 50216		33.3N 134.2E	47869
4	100800	30.7N 133.8E	LAND				5/// 4///		33.3N 134.2E	47899
5	100900	30.9N 134.0E	LAND				5/// 50314		33.3N 134.2E	47899
6	100900	30.8N 134.1E	LAND				33/41 50216		30.6N 131.0E	47869
7	101000	31.0N 134.2E	LAND				5/// 50416		33.3N 134.2E	47899
8	101000	30.9N 134.2E	LAND				65/41 50311		30.6N 131.0E	47869
9	101100	31.2N 134.6E	LAND				5/// 50522		33.3N 134.2E	47899
10	101200	31.3N 134.8E	LAND				5/// 50622		33.3N 134.2E	47899
11	101200	31.4N 134.6E	LAND				55//2 4///		35.3N 138.7E	47639
12	101300	31.4N 135.0E	LAND				5/// 50516		33.3N 134.2E	47899
13	101300	31.5N 135.0E	LAND				55//2 50722		35.3N 138.7E	47639
14	101400	31.6N 135.2E	LAND				5/// 50616		33.3N 134.2E	47899
15	101400	31.7N 135.2E	LAND				55//2 50316		35.3N 138.7E	47639
16	101500	31.7N 135.5E	LAND				5/// 50616		33.3N 134.2E	47899
17	101500	31.8N 135.4E	LAND				45//3 50614		35.3N 138.7E	47639
18	101600	31.8N 135.7E	LAND				5/// 50619		33.3N 134.2E	47899
19	101600	31.8N 135.7E	LAND				65//3 50816		35.3N 138.7E	47639
20	101700	32.2N 136.0E	LAND				54//3 50616		35.3N 138.7E	47639
21	101700	31.9N 136.0E	LAND				5/// 50619		33.3N 134.2E	47899
22	101800	32.3N 136.2E	LAND				54//4 50416		35.3N 138.7E	47639
23	101800	32.2N 136.4E	LAND				5/// 50524		33.3N 134.2E	47899
24	101800	32.1N 136.6E	LAND				6/// 4///		34.6N 135.7E	47773
25	101900	32.4N 136.7E	LAND				52//13 50622		35.3N 138.7E	47639
26	101900	32.3N 136.8E	LAND				5/// 50624		33.3N 134.2E	47899
27	101900	32.9N 136.9E	LAND				6/// 4///		34.6N 135.7E	47773
28	102000	33.3N 137.6E	LAND				6/// 4///		34.6N 135.7E	47773
29	102000	32.6N 137.1E	LAND				5/// 50524		33.3N 134.2E	47899
30	102100	33.1N 137.7E	LAND				55// 4///		35.2N 137.0E	47636
* 31	102100	32.7N 138.2E	LAND				6/// 4///		34.6N 135.7E	47773

32	102200	33.0N	138.2E	LAND	65/// / ////	35.2N	137.8E	47636
33	102300	33.3N	138.7E	LAND	65//4 50735	35.3N	138.7E	47639
34	110000	33.4N	139.4E	LAND	55//3 50732	35.3N	138.7E	47639

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

TYPHOON JOE
BEST TRACK DATA

MD/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST										
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	ERRORS				
100806Z	8.8	134.1	20	8.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.					
100812Z	9.5	132.6	20	8.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.					
100818Z	10.4	131.3	20	8.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.					
100902Z	11.1	130.2	20	8.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.					
100906Z	11.6	129.2	20	8.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.					
100912Z	12.0	128.3	20	8.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.					
100918Z	12.5	127.4	25	8.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.					
101002Z	13.2	126.3	30	8.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.					
101006Z	14.0	125.1	30	14.0	125.5	30.	23.	0.	15.7	120.9	30.	26.	0.	17.3	117.1	45.	105.	-5.	18.2	113.0	55.	145.	-10.
101012Z	14.9	123.5	30	15.0	123.5	30.	6.	0.	17.1	118.3	40.	36.	5.	17.5	114.0	50.	51.	0.	18.2	110.0	55.	246.	-10.
101018Z	15.6	122.1	30	15.5	122.3	30.	13.	0.	17.1	118.5	40.	78.	0.	17.5	114.4	50.	87.	-5.	18.1	118.2	55.	264.	5.
101102Z	16.2	120.9	30	15.8	121.4	30.	38.	0.	17.2	117.6	35.	86.	-18.	17.7	113.4	45.	121.	-15.	17.8	109.2	55.	330.	30.
101106Z	16.4	119.6	30	16.4	119.7	30.	6.	0.	17.2	114.8	40.	37.	-18.	17.7	110.6	50.	232.	-15.	0.0	0.0	0.	-8.	0.
101112Z	16.5	118.4	35	16.5	118.7	35.	17.	0.	17.4	113.7	55.	66.	5.	18.6	109.6	65.	243.	0.	0.0	0.0	0.	-8.	0.
101118Z	16.7	117.2	40	16.7	117.4	40.	11.	0.	17.7	112.5	60.	112.	5.	18.9	108.4	65.	272.	15.	0.0	0.0	0.	-8.	0.
101202Z	17.1	116.1	45	17.8	116.8	45.	8.	0.	18.2	111.3	60.	163.	0.	19.2	107.2	50.	309.	25.	0.0	0.0	0.	-8.	0.
101206Z	17.6	115.3	50	17.3	115.4	50.	19.	0.	18.5	111.9	55.	149.	-18.	0.0	0.0	0.	0.	0.	0.0	0.0	0.	-8.	0.
101212Z	18.2	114.5	50	18.4	114.5	55.	12.	5.	22.0	111.9	55.	49.	-18.	0.0	0.0	0.	0.	0.	0.0	0.0	0.	-8.	0.
101218Z	18.9	114.0	55	18.9	113.8	55.	11.	0.	21.8	111.7	55.	31.	5.	0.0	0.0	0.	0.	0.	0.0	0.0	0.	-8.	0.
101302Z	19.7	113.7	60	19.6	113.5	55.	13.	-5.	22.9	113.2	45.	133.	20.	0.0	0.0	0.	0.	0.	0.0	0.0	0.	-8.	0.
101306Z	20.6	113.3	65	20.7	113.5	55.	13.	-18.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.	0.	0.0	0.0	0.	-8.	0.
101312Z	21.5	112.6	65	21.6	112.7	60.	8.	-5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.
101318Z	22.3	111.6	50	22.6	111.9	50.	25.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.
101400Z	23.1	110.8	25	0.0	0.	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.

ALL FORECASTS
WRNG 24-HR 48-HR 72-HR

TYPHOONS WHILE OVER 35 KTS
WRNG 24-HR 48-HR 72-HR

Avg Forecast PDSIT Error

15. 86. 177. 246.

14. 81. 159. 218.

Avg Right Angle Error

10. 61. 151. 200.

11. 62. 129. 173.

Avg Intensity Magnitude Error

2. 7. 10. 14.

3. 6. 8. 8.

Avg Intensity Bias

-1. 0. 0. 4.

-2. -2. -4. -5.

Number of Forecasts

15 12 8 4

10 10 7 3

Distance Traveled by Tropical Cyclone is 1654. NM

Average Speed of Tropical Cyclone is 12. Knots

TYPHOON JOE
FIX POSITIONS FOR CYCLONE NO. 15

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
*	080400	7.2N 131.2E	PCN 6	T1.0/1.0		PGTW
2	081200	11.3N 130.9E	PCN 6		ULCC FIX	PGTW
*	090000	13.8N 129.4E	PCN 6	T2.0/2.0 /D1.0/20HRS		PGTW
*	4	090400	12.7N 130.4E	PCN 6		PGTW
*	5	090653	13.0N 130.1E	PCN 5		PGTW
6	090653	11.4N 129.8E	PCN 3	T1.5/1.5		RPMK
*	7	091200	14.9N 127.0E	PCN 6		PGTW
8	092100	13.1N 126.4E	PCN 6		PGTW	
9	092258	12.8N 127.0E	PCN 5		PGTW	
10	100000	13.0N 125.5E	PCN 6		PGTW	
*	11	100640	13.4N 126.1E	PCN 3	T1.5/1.5 /S0.0/24HRS	RPMK
12	100646	13.5N 126.4E	PCN 5	T2.5/2.5 /D0.5/30HRS	PGTW	
13	100956	15.0N 123.2E	PCN 6		PGTW	
14	101137	15.5N 122.9E	PCN 5		RODN	
15	101137	15.5N 123.0E	PCN 5		RPMK	
16	101200	15.0N 123.4E	PCN 6		PGTW	
17	101600	15.4N 122.4E	PCN 6		PGTW	
18	101800	15.4N 122.2E	PCN 6	T2.0/2.0	INIT OBS	PGTW
19	101925	15.5N 121.7E	PCN 5			PGTW
20	102100	15.7N 121.5E	PCN 6			PGTW
21	102237	15.4N 121.6E	PCN 5	T2.5/2.5 /D1.0/16HRS	RPMK	
22	110000	16.0N 120.9E	PCN 6			PGTW
23	110017	16.1N 120.8E	PCN 5	T2.0/2.0	INIT OBS	RODN
24	110627	16.4N 118.7E	PCN 6	T2.0/2.0	INIT OBS	PGTW
25	111115	16.7N 118.6E	PCN 5			RODN
26	111200	16.4N 118.2E	PCN 6			PGTW

27	111600	16.6N 117.4E	PCN 6												PGTW
28	111800	16.6N 117.0E	PCN 6	T3.0/3.0	/D1.0/24HRS										PGTW
29	112100	16.7N 116.4E	PCN 6												PGTW
30	112216	17.4N 116.6E	PCN 3	T3.0/3.0+	/D0.5/24HRS										RPMK
31	120000	17.2N 116.5E	PCN 6												PGTW
32	120300	17.2N 115.8E	PCN 6	T3.5/3.5	/D1.5/21HRS										PGTW
33	120600	17.3N 115.4E	PCN 6												PGTW
34	120757	17.8N 115.6E	PCN 5	T3.0/3.0			INIT OBS								RODN
35	120900	17.6N 115.0E	PCN 6												PGTW
36	121054	17.9N 114.6E	PCN 6												PGTW
37	121055	18.3N 114.0E	PCN 6				ULCC FIX								RODN
38	121200	18.2N 114.3E	PCN 4												PGTW
39	121600	18.6N 114.2E	PCN 6												PGTW
40	121800	18.8N 114.2E	PCN 6	T3.5/3.5-	/D0.5/24HRS		ULCC FIX								PGTW
41	122042	19.3N 113.7E	PCN 5												RPMK
42	122154	19.4N 113.4E	PCN 5												PGTW
43	122333	19.6N 113.5E	PCN 5	T3.5/3.5	/S0.0/21HRS		ULCC FIX								PGTW
44	130000	19.6N 113.5E	PCN 6				ULCC FIX								PGTW
45	130300	20.0N 113.6E	PCN 2				EYE DIA 20NM								PGTW
46	130600	20.7N 113.4E	PCN 4												PGTW
47	130745	20.7N 113.1E	PCN 3	T4.0/4.0			INIT OBS								RPMK
48	130900	21.1N 113.1E	PCN 2				EYE DIA 12NM								PGTW
49	131034	21.4N 112.8E	PCN 5				ULCC FIX								RODN
50	131034	21.4N 112.8E	PCN 5												PGTW
51	131200	21.7N 112.5E	PCN 6				ULCC FIX								PGTW
52	131600	22.0N 112.0E	PCN 6				ULCC FIX								PGTW
53	131800	22.3N 111.8E	PCN 6				ULCC FIX								PGTW
54	132029	22.8N 111.7E	PCN 5				ULCC FIX								RODN
55	132100	22.9N 111.5E	PCN 6				ULCC FIX								PGTW
56	132314	23.2N 111.3E	PCN 6				ULCC FIX								RODN
57	140000	23.3N 111.1E	PCN 4	T2.0/3.0-	/W1.5/24HRS										PGTW
58	140300	23.7N 110.9E	PCN 6												PGTW
59	140900	24.6N 110.2E	PCN 6												PGTW
60	141200	25.1N 110.6E	PCN 6												PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	0BS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.	
* 1	100204	13.1N 126.5E	1500FT		1003	30 030 95	120 39 050 225	10 5			+29 +38 +26 30	1	
2	100835	14.4N 124.8E	1500FT		1000	30 140 60	340 33 280 120	10 40			+24 +25 +21 29	2	
3	112182	17.0N 116.7E	700FT	2998			160	55 060 65	10 8				3
4	112325	16.7N 116.1E	700FT	3008	992	40 120 60	230 50 120 55	12 8			+11 +12 +8	3	
5	120905	18.0N 115.1E	1500FT	2977	988	65 120 90	130 43 040 120	15 8			+24 +24	4	
6	121056	18.0N 114.5E	1500FT		988	35 020 40	220 51 080 60	15 10			+23 +24 +24	4	

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADAR-CODE ASIAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	101030	14.9N 123.8E	LAND				1013/ 42702		16.3N 120.6E	98321
2	101200	14.9N 123.7E	LAND				1011/ 42505		16.3N 120.6E	98321
3	101300	15.0N 123.5E	LAND				1014/ 42907	EYE 60 PCT CIR OPEN E	16.3N 120.6E	98321
4	101330	15.0N 123.4E	LAND				10141/ 42805		16.3N 120.6E	98321
5	101400	15.0N 123.3E	LAND				1514/ 42806		16.3N 120.6E	98321
* 6	102300	15.6N 122.1E	LAND				40000	//////	16.3N 120.6E	98321
* 7	110030	15.8N 121.7E	LAND				1081/ 42916	EYE 60 PCT CIR OPEN N DIA 40KMS	16.3N 120.6E	98321
* 8	110140	16.2N 121.5E	LAND				12391 43513	EYE 60 PCT ELLIPTICAL		
* 9	110140	16.1N 120.9E	LAND				25/// 42809		16.3N 120.6E	98321
10	110810	16.4N 119.6E	LAND				1070/ 82909		16.3N 120.6E	98321
11	111100	16.4N 119.1E	LAND				4/// 72708		16.3N 120.6E	98321
12	121150	18.3N 114.6E	LAND				22424 73212		16.8N 112.3E	59981
13	122100	19.2N 113.9E	LAND				1010/ ////		22.3N 114.2E	45005
14	130100	19.8N 113.9E	LAND				209/3 ////		22.3N 114.2E	45005
15	130300	20.1N 113.8E	LAND				1081/ 63510		22.3N 114.2E	45005
16	130400	20.3N 113.7E	LAND				1081/ 73511		22.3N 114.2E	45005
17	130650	20.5N 113.5E	LAND				12613 53210			59491
18	130659	20.9N 113.2E	LAND				14612 53312		21.8N 111.9E	59663
19	130750	20.7N 113.3E	LAND				12763 53210			59491
20	130759	21.0N 113.2E	LAND				14612 53312		21.8N 111.9E	59663
21	130800	20.9N 113.1E	LAND				10813 63211		22.3N 114.2E	45005
22	130850	21.0N 113.2E	LAND				12713 53210			59491
23	130859	21.2N 113.1E	LAND				10422 53312			59491
24	130859	21.1N 113.0E	LAND				3/// 273508		20.8N 110.3E	59758
25	130900	21.1N 113.1E	LAND				10423 63211		22.3N 114.2E	45005
26	131000	21.2N 112.9E	LAND				1041/ 63212		22.3N 114.2E	45005
27	131100	21.2N 112.9E	LAND				2086/ 73208		22.3N 114.2E	45005
28	131200	21.3N 112.6E	LAND				1068/ 73108		22.3N 114.2E	45005
29	131300	21.4N 112.7E	LAND				2066/ 73107		22.3N 114.2E	45005
30	131400	21.6N 112.5E	LAND				2066/ 83110		22.3N 114.2E	45005
31	131750	22.2N 111.6E	LAND				21541 53209		20.0N 110.3E	59758

SYNOPTIC FIXES

FIX NO.	TIME (Z)	FIX POSITION	INTENSITY ESTIMATE	NEAREST DATA (NM)	COMMENTS
1	130900	21.1N 113.1E	060	050	WMO 59673 40KTS AND 994.9MB CORRELATES W/SAT RD
2	131200	21.6N 112.6E	060	020	WMO 59673 60KTS AND 986.4MB
3	132100	22.6N 111.4E	030	020	WMO 59463 10KTS AND 1002.1.B

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

TROPICAL STORM KIM
BEST TRACK DATA

MD/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST							
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND		
101418Z	10.1	120.2	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	0.	0.0	0.0	0.	-0.	0.	
101500Z	9.3	118.5	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	-0.	0.0	0.0	0.	-0.	0.	
101506Z	9.3	116.9	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	-0.	0.0	0.0	0.	-0.	0.	
101512Z	9.5	115.6	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	-0.	0.0	0.0	0.	-0.	0.	
101518Z	9.5	114.2	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	-0.	0.0	0.0	0.	-0.	0.	
101600Z	9.0	112.9	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.0	0.0	0.	-0.	0.	
101606Z	9.1	111.8	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.0	0.0	0.	-0.	0.	
101612Z	9.8	110.9	35	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.0	0.0	0.	-0.	0.	
101618Z	10.5	109.9	40	10.3	110.3	40	26.	0.	11.9	108.2	30.	292.	10.	0.0	0.0	0.	-0.	0.0	-0.	0.
101700Z	11.0	108.0	35	11.2	108.6	35.	37.	0.	0.0	0.	0.	0.	0.	0.	0.0	0.	-0.	0.0	-0.	0.
101706Z	11.6	106.2	30	11.5	106.2	30.	6.	0.	0.0	0.	0.	0.	0.	-0.	0.0	0.	-0.	0.0	-0.	0.
101712Z	11.9	104.8	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.	-0.	0.0	0.	-0.	0.0	-0.	0.
101718Z	12.8	103.3	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.	-0.	0.0	0.	-0.	0.0	-0.	0.
101800Z	13.6	102.2	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.	-0.	0.0	0.	-0.	0.0	-0.	0.
101806Z	14.2	101.1	20	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.	0.	-0.	0.0	0.	-0.	0.0	-0.	0.

ALL FORECASTS			
WRNG	24-HR	48-HR	72-HR
23.	292.	0.	0.
Avg Forecast Posit Error	23.	292.	0.
Avg Right Angle Error	11.	55.	0.
Avg Intensity Magnitude Error	0.	10.	0.
Avg Intensity Bias	0.	10.	0.
Number of Forecasts	3	1	0

TYPHOONS WHILE OVER 35 KTS			
WRNG	24-HR	48-HR	72-HR
0.	0.	0.	0.
Avg Forecast Posit Error	0.	0.	0.
Avg Right Angle Error	0.	0.	0.
Avg Intensity Magnitude Error	0.	0.	0.
Avg Intensity Bias	0.	0.	0.
Number of Forecasts	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1224. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 15. KNOTS

TROPICAL STORM KIM
FIX POSITIONS FOR CYCLONE NO. 16

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
* 1	112100	10.0N 139.3E	PCN 6			PGTW
* 2	120000	12.6N 138.5E	PCN 5	T1.0/1.0	INIT OBS	PGTW
* 3	120900	12.0N 137.4E	PCN 6			PGTW
* 4	130300	10.0N 132.0E	PCN 6	T1.0/1.0 /SO.0/27HRS		PGTW
* 5	130600	10.1N 131.0E	PCN 6			PGTW
6	141600	10.4N 121.4E	PCN 6			PGTW
7	141900	10.4N 120.6E	PCN 6			PGTW
8	142100	9.8N 119.3E	PCN 6			PGTW
9	150000	9.0N 118.3E	PCN 6			PGTW
10	150300	9.3N 117.9E	PCN 6	T1.0/1.0	INIT OBS	PGTW
11	150600	9.6N 117.2E	PCN 6			PGTW
12	150900	9.6N 116.7E	PCN 6			PGTW
13	151200	9.3N 116.1E	PCN 6			PGTW
14	151500	9.9N 114.7E	PCN 6	T1.5/1.5	INIT OBS	PGTW
15	151800	9.4N 114.3E	PCN 6			PGTW
16	152100	9.7N 114.0E	PCN 6			PGTW
17	160000	9.0N 113.2E	PCN 6			PGTW
18	160300	9.1N 112.6E	PCN 6	T2.0/2.0 /D1.0/24HRS		PGTW
19	160600	8.6N 112.3E	PCN 6		ULCC FIX	PGTW
20	160900	9.0N 111.7E	PCN 6		ULCC FIX	PGTW
21	161112	9.6N 111.8E	PCN 5			RODN
22	161200	9.6N 111.2E	PCN 6		ULCC FIX	PGTW
23	161600	9.8N 110.6E	PCN 6	T3.0/3.0 /D1.5/24HRS		PGTW
24	161800	10.3N 110.3E	PCN 6			PGTW
25	161953	10.3N 109.6E	PCN 5		ULCC FIX	RODN
26	162100	10.8N 109.6E	PCN 6		ULCC FIX	PGTW
27	162211	10.9N 108.5E	PCN 5			RPMK
28	162347	10.8N 108.3E	PCN 5		ULCC FIX	RODN
29	170000	11.5N 108.2E	PCN 6			PGTW
30	170300	11.6N 107.8E	PCN 4	T2.5/2.5-/D0.5/24HRS		PGTW
31	170600	11.3N 105.9E	PCN 6		ULCC FIX	PGTW
32	170937	12.1N 105.5E	PCN 5	T2.5/2.5-	INIT OBS	RPMK
33	171200	12.9N 104.8E	PCN 6		ULCC FIX	PGTW
34	171600	12.9N 104.0E	PCN 6		ULCC FIX	PGTW
35	171800	13.2N 103.2E	PCN 6		ULCC FIX	PGTW
36	172100	13.2N 102.8E	PCN 6			PGTW
37	180000	13.7N 101.0E	PCN 6			PGTW
38	180300	13.9N 101.3E	PCN 6		ULAC FIX	PGTW

39 180600 14.5N 100.8E PCN 5

ULCC FIX

PGTW

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWLR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	180500	13.8N 101.2E	LAND				66/// 42910		13.8N 100.6E	48455
2	180600	14.0N 101.3E	LAND				66/// 4///		13.8N 100.6E	48455
3	180700	14.1N 101.0E	LAND				66/// 42905		13.8N 100.6E	48455
4	180800	14.3N 100.8E	LAND				6/// / / / /		13.8N 100.6E	48455

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

TROPICAL CYCLONE 16-83
BEST TRACK DATA

MO/DA/HR	BEST TRACK				WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST				
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	ERRORS		
101812Z	14.6	99.8	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	0.0	0.	-0.	0.	
101818Z	14.8	98.4	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	0.0	0.	-0.	0.	
101900Z	15.1	96.9	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.	0.0	0.	0.0	0.	-0.	0.	
101906Z	15.9	95.8	30	15.7	95.5	30.	21.	0.	17.2	91.2	35.	161.	10.	0.0	0.0	0.	-0.	0.	0.0	0.	0.
101912Z	16.8	94.9	30	16.0	95.0	30.	6.	0.	20.3	92.0	40.	51.	15.	0.0	0.0	0.	-0.	0.	0.0	0.	0.
101918Z	17.7	94.2	30	17.9	93.7	30.	31.	0.	22.1	91.1	35.	106.	15.	0.0	0.0	0.	-0.	0.	0.0	0.	0.
102000Z	18.3	93.7	25	18.5	94.1	25.	26.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.
102006Z	19.1	93.2	25	19.4	94.1	25.	54.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.
102012Z	19.9	92.8	25	20.2	93.2	25.	29.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.
102018Z	20.9	92.5	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.

	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.	106.	8.	0.	0.	8.	8.	0.
Avg Right Angle Error	25.	96.	0.	0.	0.	0.	0.	0.
Avg Intensity Magnitude Error	0.	13.	0.	0.	0.	0.	0.	0.
Avg Intensity Bias	0.	13.	0.	0.	0.	0.	0.	0.
Number of Forecasts	6	3	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 610. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 11. KNOTS

TC16(W)
FIX POSITIONS FOR CYCLONE NO. 16

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	181200	14.7N 99.8E	PCN 6		ULCC FIX	PGBTW
2	181800	14.7N 98.3E	PCN 6			PGBTW
3	182100	14.5N 97.6E	PCN 6			PGBTW
4	182310	15.7N 96.8E	PCN 6	T1.5/1.5	INIT OBS ULAC 15.6N 96.7E	KGWC
5	190000	14.5N 96.7E	PCN 6			PGBTW
6	190300	15.4N 96.1E	PCN 6	T2.0/2.0	JINIT OBS	PGBTW
7	190600	16.0N 95.8E	PCN 6			PGBTW
8	190812	16.2N 95.6E	PCN 6		ULAC 16.6N 95.6E	KGWC
9	190900	16.7N 95.6E	PCN 6		ULCC FIX	PGBTW
10	191150	17.2N 94.2E	PCN 6		ULAC 16.6N 94.9E	KGWC
11	191200	17.1N 94.6E	PCN 6		ULCC FIX	PGBTW
12	191600	17.9N 93.8E	PCN 6	T1.5/1.5	INIT OBS	PGBTW
13	191800	17.9N 93.5E	PCN 6			PGBTW
14	192057	18.4N 94.8E	PCN 6			KGWC
15	192057	17.9N 94.2E	PCN 5			RPMK
16	192100	18.3N 94.1E	PCN 6			PGBTW
17	200000	18.4N 93.7E	PCN 6			PGBTW
18	200030	18.5N 94.5E	PCN 6		ULAC 17.0N 93.6E	KGWC
19	200300	18.9N 94.1E	PCN 6			PGBTW
20	200600	19.5N 93.8E	PCN 6	T1.0/1.5 /W1.0/27HRS		PGBTW
21	200900	19.8N 93.7E	PCN 6			PGBTW
22	201130	18.9N 92.5E	PCN 5			RPMK
23	201200	20.3N 93.1E	PCN 6			PGBTW
24	201302	20.1N 91.9E	PCN 6		EXP LLCC	KGWC
25	201600	20.7N 92.3E	PCN 6			PGBTW
26	202045	21.6N 94.4E	PCN 5			RPMK

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

TYPHOON LEX
BEST TRACK DATA

MO/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST					
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
102200Z	16.1 116.8	38 16.4	117.0	38.	21.	0.	17.0	114.5	45.	54.	-5.	17.4	112.0	50.	97.	-5.	17.7	109.5
102206Z	16.1 115.5	35 16.3	115.6	38.	13.	-5.	17.3	112.5	48.	92.	-15.	18.0	109.7	35.	215.	-25.	18.6	106.8
102212Z	16.5 114.8	40 16.6	114.8	38.	6.	-10.	17.4	111.4	48.	166.	-15.	18.6	108.2	45.	298.	-15.	20.8	105.7
102218Z	17.2 114.8	45 16.7	114.2	38.	46.	-15.	17.8	111.0	45.	167.	-10.	19.3	108.1	50.	278.	-15.	21.9	106.2
102300Z	17.9 114.6	50 17.9	114.5	35.	6.	-15.	19.8	112.4	45.	157.	-10.	21.6	110.0	40.	283.	-30.	8.0	0.0
102306Z	17.5 114.1	55 17.6	114.3	45.	13.	-10.	19.5	114.6	48.	143.	-20.	21.4	114.8	48.	346.	-25.	23.3	116.0
102312Z	17.6 114.3	55 17.4	114.0	45.	21.	-10.	18.5	111.9	48.	99.	-20.	20.1	109.9	48.	156.	-25.	0.0	0.0
102318Z	17.5 113.9	55 17.8	113.8	45.	19.	-10.	19.4	112.5	48.	132.	-25.	21.5	111.6	40.	274.	-20.	8.0	0.0
102400Z	17.5 113.7	55 17.7	113.7	45.	12.	-10.	19.4	112.5	48.	149.	-30.	21.5	111.6	48.	317.	-15.	8.0	0.0
102406Z	17.4 113.4	60 17.6	112.8	50.	36.	-10.	19.3	111.7	45.	138.	-20.	21.2	111.2	40.	348.	-5.	0.0	0.0
102412Z	17.3 113.1	60 17.4	112.5	50.	35.	-10.	18.2	110.4	45.	51.	-20.	0.0	0.	0.	0.	0.0	0.	0.
102418Z	17.2 112.3	65 17.3	112.1	55.	13.	-10.	17.8	110.0	50.	63.	-10.	0.0	0.	0.	0.	0.0	0.	0.
102500Z	17.1 111.5	70 16.8	112.1	60.	39.	-10.	16.4	108.9	55.	184.	0.	0.0	0.0	0.	0.	0.0	0.0	0.
102506Z	17.3 110.5	65 17.3	110.7	65.	11.	8.	17.8	108.2	70.	103.	25.	0.0	0.	0.	0.	0.0	0.0	0.
102512Z	17.5 109.9	65 17.6	109.8	65.	8.	8.	0.	0.	0.	0.	-8.	0.	0.	0.	0.	0.0	0.	0.
102518Z	17.7 108.9	60 17.7	108.8	65.	6.	5.	0.	0.	0.	0.	-8.	0.	0.	0.	0.	0.0	0.	0.
102600Z	17.7 107.7	55 17.8	107.8	55.	8.	8.	0.	0.	0.	0.	-8.	0.	0.	0.	0.	0.0	0.	0.
102606Z	17.8 106.4	45 17.7	106.3	45.	8.	8.	0.	0.	0.	0.	-8.	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.	116.	259.	316.	18.	116.	259.	316.
Avg Right Angle Error	11.	69.	156.	137.	11.	69.	156.	137.
Avg Intensity Magnitude Error	7.	16.	18.	24.	8.	16.	18.	24.
Avg Intensity Bias	-7.	-13.	-18.	-24.	-7.	-13.	-18.	-24.
Number of Forecasts	18	14	18	5	17	14	10	5

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 718. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TYPHOON LEX
FIX POSITIONS FOR CYCLONE NO. 17

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
* 1	150600	5.0N 157.4E	PCN 6	T0.0/0.0		PGTW
* 2	150900	4.4N 154.5E	PCN 6			PGTW
* 3	151200	4.3N 154.2E	PCN 6			PGTW
* 4	172009	10.2N 138.0E	PCN 5			PGTW
* 5	180000	11.4N 136.9E	PCN 6			PGTW
* 6	180300	12.1N 135.5E	PCN 6			PGTW
7	191009	14.6N 129.9E	PCN 6	T1.0/1.0	INIT OBS	PGTW
8	191200	15.2N 129.5E	PCN 6		ULCC FIX	PGTW
9	191600	15.4N 129.3E	PCN 6	T1.5/1.5	INIT OBS	PGTW
10	191800	15.6N 128.7E	PCN 6			PGTW
11	192108	14.9N 127.1E	PCN 6			PGTW
12	192242	14.7N 126.9E	PCN 5			PGTW
13	200000	14.6N 126.2E	PCN 6			PGTW
14	200300	14.8N 125.1E	PCN 6	T1.5/1.5-/D0.5/17HRS		PGTW
15	200618	15.0N 124.5E	PCN 5		ULCC FIX	PGTW
16	200618	14.4N 124.6E	PCN 5	T2.0/2.0	INIT OBS	RPMK
17	200900	14.9N 123.7E	PCN 6		ULCC FIX	PGTW
18	200948	14.8N 123.4E	PCN 5		ULCC FIX	PGTW
19	201200	14.9N 122.8E	PCN 6		ULCC FIX	PGTW
20	201600	15.3N 122.1E	PCN 6	T2.0/2.0-/D0.5/24HRS		PGTW
21	201800	15.1N 121.9E	PCN 6		ULCC FIX	PGTW
22	201903	15.1N 121.6E	PCN 6			PGTW
23	202100	15.1N 121.5E	PCN 6			PGTW
24	202228	15.4N 119.2E	PCN 5	T1.5/1.5+/D0.5/16HRS		RPMK
25	210000	15.2N 120.1E	PCN 4			FGTW
26	210300	14.8N 119.5E	PCN 6	T2.0/2.0+/D0.5/24HRS		PGTW
27	210600	14.9N 118.8E	PCN 6			PGTW
28	210748	16.4N 117.3E	PCN 5	T2.0/2.0 /S0.0/25HRS		RPMK
29	210900	15.4N 118.1E	PCN 6			PGTW
30	211100	15.9N 117.7E	PCN 5			PGTW
31	211108	15.8N 117.9E	PCN 6			RODN
32	211600	16.5N 117.4E	PCN 6	T2.0/2.0 /S0.0/24HRS	ULCC FIX	PGTW
33	211800	16.7N 117.2E	PCN 6		ULCC FIX	PGTW

34	212033	15.5N 117.2E	PCN 5												RPMK
35	212100	15.4N 117.3E	PCN 6												PGTW
36	212207	15.8N 117.2E	PCN 5												PGTW
* 37	220000	17.2N 116.9E	PCN 6												PGTW
* 38	220300	17.3N 116.2E	PCN 6	T2.5/2.5 /D0.5/24HRS											PGTW
39	220600	16.3N 115.6E	PCN 4												PGTW
40	220735	16.4N 115.1E	PCN 5	T2.8/2.0 /S0.0/24HRS											RPMK
41	220900	16.4N 115.2E	PCN 6												PGTW
42	221047	16.6N 115.2E	PCN 6												RODN
43	221200	16.5N 114.9E	PCN 6												PGTW
44	221219	16.6N 114.7E	PCN 3												RPMK
45	221600	16.4N 114.7E	PCN 6	T3.0/3.0 /D1.0/24HRS											PGTW
* 46	221800	16.2N 114.7E	PCN 6												PGTW
47	222020	18.2N 114.9E	PCN 6												RODN
48	222100	17.9N 114.7E	PCN 6												PGTW
49	222146	17.8N 114.5E	PCN 5												PGTW
* 50	222318	17.0N 115.1E	PCN 5	T2.5/2.5 /D0.5/16HRS											RPMK
51	230000	18.0N 114.6E	PCN 6												PGTW
52	230300	17.8N 114.1E	PCN 4	T3.5/3.5 /D1.0/24HRS											PGTW
53	230600	17.6N 114.3E	PCN 4												PGTW
54	230723	17.6N 114.5E	PCN 3	T3.0/3.0 /D1.0/24HRS											RPMK
55	230900	17.4N 114.0E	PCN 6												PGTW
56	231026	17.5N 114.2E	PCN 4												PGTW
57	231157	17.4N 114.4E	PCN 3												RPMK
58	231200	17.4N 114.0E	PCN 4												PGTW
59	231600	17.5N 113.9E	PCN 6	T3.5/3.5 /D0.5/24HRS											PGTW
60	231800	17.8N 113.8E	PCN 6												PGTW
61	232008	17.7N 113.8E	PCN 5												RPMK
62	232100	18.0N 113.5E	PCN 6												PGTW
63	232306	17.9N 113.8E	PCN 4	T3.0/3.0											RODN
64	232306	17.7N 114.1E	PCN 5	T3.0/3.0 /D0.5/24HRS											RPMK
65	240000	17.2N 113.4E	PCN 6												PGTW
66	240037	18.0N 113.5E	PCN 3												RODN
67	240037	17.2N 113.4E	PCN 5	T3.5/3.5 /D0.5/25HRS											RPMK
68	240300	17.5N 113.2E	PCN 6	T4.0/4.0-/D0.5/24HRS											PGTW
69	240600	17.5N 112.8E	PCN 6												PGTW
70	241136	16.9N 113.3E	PCN 3												RODN
71	241136	17.1N 112.9E	PCN 3												RPMK
72	241200	17.2N 112.5E	PCN 6												PGTW
73	241600	17.5N 112.4E	PCN 6	T4.0/4.0 /S0.0/13HRS											PGTW
74	241800	17.3N 112.1E	PCN 6												PGTW
75	241955	16.8N 112.3E	PCN 5												RKSO
76	242100	17.2N 111.8E	PCN 6												PGTW
* 77	242245	16.8N 112.4E	PCN 4	T3.5/3.5 /D0.5/24HRS											RODN
78	250000	16.8N 112.0E	PCN 6												PGTW
79	250300	17.3N 111.1E	PCN 4	T4.5/4.5-/D0.5/24HRS											PGTW
80	250658	17.4N 108.4E	PCN 3												PGTW
81	251125	17.6N 109.9E	PCN 3												RODN
82	251125	17.8N 110.1E	PCN 4												RPMK
83	251200	17.5N 109.9E	PCN 6												PGTW
84	251600	17.5N 109.3E	PCN 4	T4.5/4.0-/S0.0/24HRS											PGTW
85	251800	17.7N 108.8E	PCN 2												PGTW
86	251943	17.7N 108.7E	PCN 3												RPMK
87	252100	17.9N 108.2E	PCN 4												PGTW
88	252224	17.5N 107.9E	PCN 3	T3.5/3.5 /S0.0/24HRS											RODN
89	252224	17.5N 107.8E	PCN 3												RPMK
90	260000	17.7N 107.7E	PCN 4												PGTW
91	260300	17.7N 107.0E	PCN 4	T4.0/4.0-/W0.5/24HRS											PGTW
92	260600	17.7N 106.3E	PCN 4												PGTW
93	260900	17.8N 105.8E	PCN 6												PGTW
94	261104	18.1N 105.6E	PCN 5												RODN
95	261233	18.2N 105.5E	PCN 6												RODN
96	261600	18.2N 104.4E	PCN 6	T1.0/2.0 /W3.0/24HRS											PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM/TATION	EYE TEMP (C)	MSN NO.
1	220535	16.1N 115.2E	1500FT		1003	35 070 70	150 39 080 80	5 50			+26 +26	32 2

RADAR FIXES

FIX NO.	TIME (Z)	FIX POSITION	RADAR	ACCRY	EYE SHAPE	EYE DIAM	RADOB-CODE ASWAR TDDFF	COMMENTS	RADAR POSITION	SITE WMO NO.
1	201400	15.7N 124.0E	LAND			1031	/ 52910	EYE 50 PCT CIR	16.3N 120.6E	98321
2	201500	15.8N 123.9E	LAND			103//	/ 52909	EYE 50 PCT NORTH	16.3N 120.6E	98321
3	210630	16.3N 120.3E	LAND			15//	/ 52912		16.3N 120.6E	98321
4	210700	16.5N 120.1E	LAND			1040	/ 52914		16.3N 120.6E	98321
5	210730	16.7N 119.9E	LAND			1041	/ 32914		16.3N 120.6E	98321
6	210800	16.6N 119.8E	LAND			1041	/ 42914		16.3N 120.6E	98321
7	210830	16.8N 119.8E	LAND			1041	/ 42914		16.3N 120.6E	98321
8	210900	16.9N 119.5E	LAND			1144	/ 43007		16.3N 120.6E	98321
9	211100	16.8N 118.9E	LAND			15//	/ 52615		16.3N 120.6E	98321
10	211200	16.6N 118.6E	LAND			4//	/ 52512		16.3N 120.6E	98321
11	211330	16.5N 116.3E	LAND			15//	/ 52514		16.3N 120.6E	98321
12	242350	17.1N 111.4E	LAND			20744	/ 52906		16.8N 112.3E	59981

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

**SUPER TYPHOON MARGE
BEST TRACK DATA**

BEST TRACK				WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
MD/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	
103012Z	6.3	149.5	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.	0.0	0.	-0.	
103018Z	7.3	148.3	25	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.	0.0	0.	-0.	
103100Z	8.2	147.4	30	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.	0.0	0.	-0.	
103106Z	9.7	146.2	35	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	-0.	0.	0.0	0.	-0.	
103112Z	10.4	145.4	35	11.2	144.5	38.	72.	-5.	15.8	143.7	45.	224.	5.	19.8	147.0	65.	444.	-5.	
103118Z	10.7	144.5	35	10.9	144.6	35.	13.	0.	12.8	143.5	45.	148.	0.	16.8	144.0	65.	247.	-18.	
110100Z	11.2	143.2	35	10.3	142.2	58.	80.	15.	12.3	137.6	65.	219.	15.	15.8	135.4	75.	225.	-5.	
110106Z	11.8	142.1	35	11.7	141.9	35.	13.	0.	14.3	137.0	58.	195.	-15.	19.0	136.3	60.	153.	-30.	
110112Z	12.8	141.4	48	12.8	141.2	35.	12.	-5.	16.2	137.8	58.	138.	-28.	20.3	137.5	60.	162.	-45.	
110118Z	13.6	141.1	45	14.4	141.3	58.	49.	5.	19.2	141.5	60.	187.	-15.	22.7	145.5	50.	582.	-80.	
110200Z	14.5	140.6	58	14.8	140.3	58.	25.	0.	19.5	139.3	65.	150.	-15.	23.3	144.3	55.	590.	-85.	
110206Z	15.3	140.2	65	15.5	140.5	65.	21.	0.	19.7	139.5	75.	159.	-15.	23.4	144.4	55.	629.	-90.	
110212Z	16.2	140.2	78	16.5	140.0	65.	21.	-5.	20.8	142.1	65.	324.	-48.	24.0	147.0	55.	782.	-85.	
110218Z	16.6	139.7	75	17.0	139.7	78.	24.	-5.	21.0	140.0	70.	272.	-68.	25.5	145.0	60.	727.	-75.	
110300Z	17.0	139.1	80	17.0	138.9	75.	11.	-5.	20.4	137.5	85.	181.	-55.	25.1	140.6	75.	502.	-55.	
110306Z	17.3	138.3	98	17.4	138.1	98.	13.	0.	19.2	135.1	128.	61.	-25.	22.6	133.1	110.	141.	-28.	
110312Z	17.6	137.5	105	17.6	137.3	100.	11.	-5.	18.3	133.9	120.	29.	-28.	28.6	130.5	115.	194.	-18.	
110318Z	17.9	136.5	138	18.0	136.3	110.	13.	-20.	19.7	132.5	120.	79.	-15.	22.8	130.5	110.	230.	-18.	
110400Z	18.2	135.3	140	18.2	135.1	140.	11.	0.	19.6	131.0	168.	147.	38.	22.6	128.0	150.	410.	38.	
110406Z	18.3	134.6	145	18.5	134.3	145.	21.	0.	20.1	130.2	145.	192.	15.	23.7	127.5	125.	554.	18.	
110412Z	18.7	134.2	140	18.7	134.1	145.	6.	5.	19.5	131.4	140.	174.	15.	22.4	128.3	125.	661.	18.	
110418Z	19.2	133.8	135	19.2	133.4	145.	23.	10.	21.2	130.4	138.	232.	18.	24.0	127.5	110.	899.	18.	
110500Z	19.8	133.6	130	19.8	133.3	138.	17.	0.	21.8	131.0	120.	207.	0.	25.0	129.4	110.	1856.	20.	
110506Z	20.3	133.6	138	20.3	133.3	130.	17.	0.	22.4	133.8	120.	269.	5.	0.0	0.0	0.	0.0	0.	
110512Z	21.2	133.9	125	21.3	133.7	125.	13.	0.	25.3	138.0	185.	103.	-10.	0.0	0.0	0.	0.0	0.	
110518Z	21.8	134.5	120	21.8	134.4	115.	6.	-5.	25.9	139.2	95.	264.	-5.	0.0	0.0	0.	0.0	0.	
110600Z	22.7	135.4	120	22.7	135.6	115.	11.	-5.	27.2	141.2	95.	434.	5.	0.0	0.0	0.	0.0	0.	
110606Z	23.9	137.6	115	23.9	137.5	105.	5.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.		
110612Z	25.4	139.9	115	25.4	140.1	100.	11.	-15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.		
110618Z	27.9	143.6	100	27.8	143.6	98.	6.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.		
110700Z	31.2	148.1	90	31.2	148.1	120.	0.	30.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.		

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2370. NM
AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

**SUPER TYPHOON MARGE
FIX POSITIONS FOR CYCLONE NO. 18**

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
1	290300	4.8N 156.0E	PCN 6	T1.5/1.5	INIT OBS	PGTW
2	290600	3.8N 155.7E	PCN 6			PGTW
3	290900	3.8N 155.2E	PCN 6			PGTW
*	4 292100	2.2N 152.5E	PCN 6		ULCC FIX	PGTW
5	300300	5.9N 151.1E	PCN 6	T1.5/1.5+/S0.0/24HRS		PGTW
6	300600	5.9N 149.5E	PCN 6			PGTW
7	300900	5.5N 149.3E	PCN 6			PGTW
8	300924	5.5N 149.3E	PCN 5			PGTW
9	301200	6.7N 149.4E	PCN 6			PGTW
10	301600	7.0N 148.9E	PCN 6	T2.0/2.0+	INIT OBS ULCC FIX	PGTW
11	301800	7.4N 148.3E	PCN 6		ULCC FIX	PGTW
12	302039	7.7N 147.7E	PCN 5			PGTW
13	302204	7.7N 146.9E	PCN 5			PGTW
14	310000	7.5N 146.7E	PCN 6			PGTW
*	15 310300	7.0N 145.9E	PCN 6		ULCC FIX	PGTW
16	310544	9.8N 145.8E	PCN 3	T2.5/2.5 /D1.0/28HRS		PGTW
17	310600	10.5N 145.4E	PCN 4			PGTW
18	310900	10.6N 144.8E	PCN 6			PGTW
19	311200	10.7N 144.8E	PCN 6			PGTW
20	311600	10.9N 144.7E	PCN 6			PGTW
21	311829	10.9N 144.6E	PCN 6	T3.0/3.0 /D1.0/26HRS		PGTW

22	312017	10.9N	143.9E	PCN 5			PGBTW
23	312143	11.1N	143.6E	PCN 5			PGBTW
* 24	010000	10.1N	142.7E	PCN 6			PGBTW
25	010300	10.5N	142.6E	PCN 6	T2.5/2.5 /S0.0/21HRS	ULCC FIX	PGBTW
26	010531	11.4N	142.2E	PCN 5			PGBTW
27	010531	11.4N	142.4E	PCN 5	T2.5/2.5		PGBTW
28	010900	12.1N	142.0E	PCN 6			PGBTW
29	011022	12.6N	141.4E	PCN 4			PGBTW
30	011200	12.8N	141.2E	PCN 6			PGBTW
31	011600	13.4N	141.4E	PCN 6	T4.0/4.0 /D1.0/22HRS		PGBTW
32	011816	14.4N	141.4E	PCN 5			PGBTW
33	011956	14.6N	141.3E	PCN 6			PGBTW
34	012302	14.6N	140.5E	PCN 3			PGBTW
35	012302	14.5N	140.8E	PCN 3	T4.0/4.0	INIT OBS	RPMK
36	020000	14.6N	140.4E	PCN 2			PGBTW
37	020300	15.1N	140.1E	PCN 2	T4.0/4.0 /D1.5/24HRS	EYE DIA 20NM	PGBTW
38	020519	14.7N	139.8E	PCN 3	T4.0/4.0 /D1.5/24HRS		RODN
39	020519	15.3N	139.8E	PCN 3			PGBTW
40	020836	15.9N	140.0E	PCN 4			PGBTW
41	021001	16.2N	140.4E	PCN 3			PGBTW
42	021200	16.7N	140.3E	PCN 6			PGBTW
43	021600	16.8N	139.6E	PCN 6	T5.0/5.0-/D1.0/24HRS	ULCC FIX	PGBTW
44	021803	16.9N	139.5E	PCN 6			PGBTW
45	022100	17.0N	139.2E	PCN 4			PGBTW
46	022240	17.1N	138.9E	PCN 1	T5.0/5.0-/D1.0/24HRS	EYE DIA 30NM	RPMK
47	030000	17.1N	138.9E	PCN 2			PGBTW
48	030300	17.3N	138.6E	PCN 2	T4.5/4.5 /D0.5/24HRS		PGBTW
49	030506	17.2N	138.2E	PCN 1	T5.0/5.0 /D1.0/24HRS		RODN
50	030600	17.5N	138.4E	PCN 2			PGBTW
51	030900	17.7N	137.8E	PCN 2		EYE DIA 18NM	PGBTW
52	031200	17.7N	137.3E	PCN 2		EYE DIA 18NM	PGBTW
53	031600	17.9N	136.6E	PCN 2	T6.0/6.0-/D1.0/24HRS		PGBTW
54	031800	18.0N	136.3E	PCN 2			PGBTW
55	032100	18.1N	135.8E	PCN 2			PGBTW
56	032218	18.6N	135.5E	PCN 2			PGBTW
57	040000	18.2N	135.3E	PCN 2			PGBTW
58	040300	18.3N	134.8E	PCN 2	T7.0/7.0-/D2.5/24HRS		PGBTW
59	040600	18.5N	134.5E	PCN 2		EYE DIA 36NM	PGBTW
60	040900	18.5N	134.3E	PCN 2		EYE DIA 36NM	PGBTW
61	041058	18.8N	134.5E	PCN 1			RPMK
62	041200	18.7N	134.1E	PCN 2		EYE DIA 36NM	PGBTW
63	041600	19.2N	133.7E	PCN 2	T6.0/6.0-/S0.0/24HRS		PGBTW
64	041800	19.3N	133.5E	PCN 2			PGBTW
65	042100	19.6N	133.5E	PCN 2			PGBTW
66	042338	19.8N	133.5E	PCN 1			RODN
67	050000	19.7N	133.3E	PCN 2			PGBTW
68	050300	20.2N	133.2E	PCN 2	T5.5/6.5 /W1.5/24HRS		PGBTW
69	050600	20.3N	133.5E	PCN 2			PGBTW
70	050623	20.2N	133.6E	PCN 1	T5.0/5.0	INIT OBS	RODN
71	050623	20.4N	133.3E	PCN 1	T5.0/5.0	INIT OBS	RPMK
72	050914	20.7N	133.6E	PCN 2			PGBTW
73	051200	21.0N	133.8E	PCN 2			PGBTW
74	051600	21.5N	134.2E	PCN 2	T5.0/6.0 /W1.0/24HRS		PGBTW
75	051800	21.6N	134.5E	PCN 2			PGBTW
76	051989	21.9N	134.6E	PCN 1			PGBTW
77	052013	22.0N	134.9E	PCN 1			PGBTW
78	052316	22.5N	135.5E	PCN 1			PGBTW
79	052316	22.3N	135.7E	PCN 1	T4.0/5.0 /W1.0/17HRS		RPMK
80	060300	23.2N	136.3E	PCN 2	T5.0/6.0 /W0.5/24HRS		PGBTW
81	060611	23.9N	137.5E	PCN 1			PGBTW
82	060853	24.5N	138.4E	PCN 1			PGBTW
83	061014	25.0N	139.2E	PCN 1			PGBTW
84	061200	25.4N	139.9E	PCN 2			PGBTW
85	061600	27.0N	142.0E	PCN 2	T4.5/5.5-/W0.5/24HRS		PGBTW
86	061800	27.8N	143.6E	PCN 4			PGBTW
87	061856	28.2N	144.4E	PCN 3			PGBTW
88	061952	29.0N	145.2E	PCN 6			PGBTW
89	062100	29.2N	145.7E	PCN 4			PGBTW
90	062254	30.3N	147.6E	PCN 3	T4.0/4.0	INIT OBS	RODN
91	062254	30.1N	147.7E	PCN 3			PGBTW
92	070000	31.1N	148.2E	PCN 6			PGBTW
93	070300	33.3N	158.9E	PCN 6	T3.5/4.5-/W1.5/24HRS		PGBTW
94	070600	34.8N	152.8E	PCN 6			PGBTW
95	071200	37.6N	157.3E	PCN 6			PGBTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION		FLT LVL	700MB HGT	OBS MSLP	MAX-SFC-WND VEL/BRG/RNG		MAX-FLT-LVL-WND DIR/VEL/BRG/RNG		ACCRY NAV/MET	EYE SHAPE	EYE DIAM	EYE ORIEN-TATION		EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
		LONG	LAT				050	170	110	53	050	178	5	10			
*	010105	10.0N	141.6E	1500FT		1005	50	050	170	110	53	050	178	5	10	+27 +26 +25	30
2	010640	12.2N	141.8E	700MB	3060		30	028	140	150	45	020	140	5	5		3
3	010949	12.7N	141.3E	700MB	3064	999				810	35	270	38	5	5		5
4	012100	14.1N	140.6E	1500FT	3018	991	45	010	30	110	43	010	30	8	5		4
5	012344	14.5N	140.3E	1500FT		991	55	260	35	300	49	260	35	8	1	+25 +26 +24	30
6	020547	15.3N	140.1E	700MB	2979		60	110	48	200	60	110	48	8	6	ELLiptical	40 20 090
7	020813	15.7N	140.0E	700MB	2966	985	50	310	20	020	56	318	20	10	6	ELLiptical	40 20 060
8	022240	16.8N	139.2E	700MB	2819		65	330	35	140	79	050	20	5	1	ELLiptical	30 20 060
															+11 +18	5	
															+25 +27 +23	31	
															+25 +27 +23	4	
															+14 +16 + 7	7	
															+11 +18 +10	6	

9	022331	17.0N 130.9E	700MB	2793	964	60 310	10 230	97 140	12 5 1	ELLIPTICAL	35 25	360	+10 +18 + 8	6
10	030552	17.3N 130.2E	700MB	2655	949	90 090	60 180	98 080	30 10 2	CIRCULAR	15		+15 +19 +17	7
11	030833	17.6N 137.0E	700MB	2575	940	50 340	8 190	92 080	25 10 3				+12 +19 + 9	8
12	031105	17.6N 137.5E	700MB	2507			360	91 290	30 10 3					8
13	032031	18.1N 135.0E	700MB	2266		130 360	9 100	113 350	29 10 10	CIRCULAR	21		+12 +21 +14	9
14	032347	18.2N 135.2E	700MB	2187	897	130 190	10 220	136 190	5 8 1	ELLIPTICAL	27 20	810	+19 +25 +12	9
15	040631	18.5N 134.2E	700MB	2154	100 040	40 140	109 040	30 10 1	CIRCULAR	15		+13 +21 +15	10	
16	040919	18.7N 134.2E	700MB	2157	896	70 310	55 350	131 260	18 5 2	CIRCULAR	20		+16 +20 +15	10
17	042041	19.6N 133.6E	700MB	2279		100 020	14 130	108 020	12 8 2	CIRCULAR	20		+13 +19 +17	11
18	042327	19.8N 133.4E	700MB	2295	909	130 310	10 050	120 310	10 8 2				+19 + 8	12
19	050830	20.5N 133.4E	700MB	2276		40 140	95 200	119 180	20 7 3					
20	051105	21.2N 133.6E	700MB	2311	913		100 124	210 10	8 3	CIRCULAR	24		+13 +18 + 7	12
21	052031	22.1N 134.9E	700MB	2396		80 320	80 150	111 070	13 15 2	CIRCULAR	25		+15 +17	13
22	052325	22.6N 135.4E	700MB	2423	923	100 200	26 170	147 070	35 8 4	CIRCULAR	40		+15 +18	13
*23	060830	25.3N 137.7E	700MB	2315		110 220	17 230	119 140	90 6 4				+ 9 + 4	14
24	061115	25.2N 139.8E	700MB	2439	927		830 48	290 80	5 5	CIRCULAR	32		+11 +17 + 7	14
25	062036	29.2N 145.4E	700MB	2593		130 200	40 260	116 200	40 5 10					15
26	062356	31.2N 147.8E	700MB	2665	954	120 180	20		5 5				+10 +18 +12	15
27	070532	34.8N 152.3E	700MB	2769	959	90 220	91 270	85 220	91 10 5				+18 +26	16
28	070905	37.8N 152.1E	700MB	2891			250 72	150 115	10 20				+ 8 + 4	16

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

TROPICAL STORM NORRIS
BEST TRACK DATA

MD/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST										
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	ERRORS	ERRORS	ERRORS	ERRORS	
110800Z	16.8	156.5	38	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.0	0.	0.	0.	0.	0.	0.	
110806Z	17.4	154.7	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.	
110812Z	17.9	153.0	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.	
110818Z	18.4	152.1	45	0.0	0.0	0.	-0.	0.	0.0	0.	0.	0.0	0.	0.	0.	0.0	0.	0.	0.	-0.	0.	0.	
110900Z	18.8	151.8	50	18.6	151.6	50.	17.	0.	21.0	151.2	50.	118.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110906Z	19.4	151.5	45	19.5	151.4	50.	8.	5.	23.6	153.7	35.	12.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110912Z	20.2	151.5	45	20.0	151.8	40.	21.	-5.	23.1	156.0	30.	132.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
110918Z	21.1	151.8	45	21.2	152.2	35.	23.	-10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111000Z	22.2	152.7	45	22.1	152.8	45.	8.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111006Z	23.4	153.7	35	23.1	153.9	40.	21.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
111012Z	24.9	154.6	25	24.6	154.1	40.	33.	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	19.	85.	0.	0.	0.	0.	0.	0.		
Avg Right Angle Error	15.	53.	0.	0.	0.	0.	0.	0.		
Avg Intensity Magnitude Error	6.	3.	0.	0.	0.	0.	0.	0.		
Avg Intensity Bias	1.	3.	0.	0.	0.	0.	0.	0.		
Number of Forecasts	7	3	0	0	0	0	0	0		

Distance traveled by tropical cyclone is 721. NM

Average speed of tropical cyclone is 12. knots

TROPICAL STORM NORRIS
FIX POSITIONS FOR CYCLONE NO. 19

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
1	072051	16.5N 157.5E	PCN 4	T1.5/1.5	INIT OBS	PGTW
2	080000	16.6N 156.5E	PCN 6			PGTW
3	080300	17.1N 155.8E	PCN 6			PGTW
4	080600	17.4N 154.9E	PCN 6			PGTW
5	080900	17.5N 154.3E	PCN 6			PGTW
6	080931	17.5N 153.9E	PCN 5			PGTW
7	081200	17.6N 153.4E	PCN 6			PGTW
8	081649	18.3N 152.1E	PCN 5	T2.0/2.0	INIT OBS	PGTW
9	081910	18.4N 151.8E	PCN 6			PGTW
10	082210	18.5N 151.9E	PCN 3	T3.0/3.0 /D1.5/25HRS		PGTW
11	080000	18.5N 152.0E	PCN 4			PGTW
12	080300	18.6N 151.6E	PCN 4			PGTW
13	080534	18.8N 152.1E	PCN 4			PGTW
14	080750	19.3N 151.9E	PCN 6			PGTW
15	080909	19.3N 152.0E	PCN 6			PGTW
16	091200	19.7N 152.3E	PCN 6			PGTW
17	091600	20.9N 151.6E	PCN 6			PGTW
18	091819	21.2N 152.0E	PCN 5	T2.0/2.0-/S0.0/25HRS		PGTW
19	092030	21.7N 152.7E	PCN 5			PGTW
20	092149	21.7N 153.2E	PCN 5			PGTW
21	100000	22.8N 153.1E	PCN 6			PGTW
22	100522	23.8N 153.8E	PCN 3	T3.0/3.00	INIT OBS EXP LLCC	PGTW
23	100522	23.2N 154.0E	PCN 6	T2.5/2.5	INIT OBS	RPMK
24	100600	23.3N 153.7E	PCN 4			PGTW
25	100847	23.7N 153.9E	PCN 6			PGTW
26	101200	24.5N 154.6E	PCN 6			PGTW
27	101807	25.9N 155.8E	PCN 6			PGTW
28	102157	26.6N 156.5E	PCN 3			PGTW
29	110000	27.5N 157.5E	PCN 6	T2.0/2.0-/W1.5/18HRS	ULCC FIX	PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB OBS HGT	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	082249	18.7N 151.8E	700MB	3038	50 220 15			6 3	CIRCULAR 15	+16	1
2	090636	19.7N 151.5E	1500FT		994 50 130 20	230 55 130 20	7 2		+23 +26 +24 32	2	
3	090824	20.1N 151.4E	700MB	3056		150 45 040 25	8 4	ELLIPTICAL 20 15 140	+11 +17 + 9	2	
4	092057	21.5N 152.4E	700MB	3070	45 360 08	260 48 230 15	6 1		+14 +20 + 3	3	
5	092352	22.1N 152.8E	700MB	3090	45 030 25	130 25 040 70	5 1		+11 +17 + 3	3	
6	100859	24.0N 153.8E	850MB			270 45 130 40	5 5		+20 +20	4	

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

TYPHON ORCHID
BEST TRACK DATA

MD/DA/HR	BEST TRACK		WARNING		24 HOUR FORECAST						48 HOUR FORECAST						72 HOUR FORECAST						
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	
111412Z	13.8	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.	0.	
111418Z	13.3	146.4	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.	0.	
111500Z	12.7	145.6	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	
111506Z	12.3	144.6	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	
111512Z	12.0	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.	0.	
111518Z	11.8	142.7	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	
111600Z	11.3	141.5	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	
111606Z	10.3	140.1	20	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	
111612Z	9.3	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.	0.	
111618Z	9.7	138.0	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.	0.	
111700Z	9.7	136.3	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	
111706Z	10.4	134.6	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	
111712Z	12.0	132.9	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.0	0.0	0.0	0.0	0.	-0.	0.	
111718Z	12.4	131.6	35	12.4	131.1	35	29	0.	16.0	126.5	55	240	5.	19.2	123.3	70	493	5.	22.2	122.2	90	589	5.
111800Z	12.5	130.5	35	12.6	130.6	35	8	0.	15.3	126.9	50	168	0.	17.9	124.8	55	376	-15.	21.8	125.3	45	452	-45.
111806Z	13.0	129.7	40	13.5	129.1	35	46	-5.	17.2	124.9	50	328	-5.	20.3	124.7	50	478	-25.	23.4	128.7	40	593	-55.
111812Z	12.8	128.8	45	12.8	128.5	40	12	-5.	14.2	128.2	50	122	-10.	15.8	126.0	50	177	-30.	18.1	124.4	40	242	-60.
111818Z	12.5	128.5	50	12.2	128.4	45	19	-5.	13.9	128.7	50	126	-15.	15.5	126.3	50	138	-35.	17.7	124.6	45	192	-55.
111900Z	12.8	128.2	50	12.6	128.1	50	13	0.	13.4	126.1	40	109	-30.	14.1	124.1	30	122	-60.	14.5	122.1	25	205	-75.
111906Z	12.5	127.8	55	12.7	127.9	55	13	0.	13.4	126.6	50	82	-25.	14.8	124.8	50	105	-45.	14.2	122.8	45	236	-60.
111912Z	12.2	127.8	60	12.2	127.2	55	35	-5.	12.9	125.2	55	82	-25.	13.6	123.3	50	133	-50.	13.8	121.1	40	299	-65.
111918Z	12.1	127.6	65	12.4	127.2	55	30	-10.	12.7	125.7	60	46	-25.	13.4	123.7	50	122	-50.	13.8	121.6	40	285	-70.
112000Z	12.2	127.5	70	12.2	127.5	65	8	-5.	12.5	126.2	70	60	-20.	13.2	124.2	65	131	-35.	13.8	121.6	60	311	-50.
112006Z	12.7	127.2	75	12.3	127.4	70	27	-5.	13.8	126.0	80	55	-15.	13.9	122.9	75	193	-30.	14.0	119.8	70	412	-58.
112012Z	12.9	126.6	80	12.8	126.6	85	6	5.	13.5	123.1	80	146	-20.	14.2	119.9	70	358	-35.	15.8	116.4	65	569	-48.
112018Z	13.2	126.3	85	13.2	126.1	90	12	5.	13.9	122.6	80	168	-20.	14.2	119.7	70	377	-40.	15.5	116.2	65	569	-35.
112100Z	13.5	126.1	90	13.5	126.1	90	0	0.	14.5	124.3	100	79	0.	14.9	121.7	95	279	-15.	15.8	118.8	65	419	-25.
112106Z	13.9	125.8	95	14.1	125.6	90	17	-5.	15.2	123.1	100	162	-5.	16.4	120.1	80	357	-40.	18.4	117.6	65	448	-15.
112112Z	14.2	125.5	100	14.2	125.3	100	12	0.	15.2	123.3	110	152	5.	15.6	120.8	85	322	-40.	17.7	118.2	95	401	0.
112118Z	14.6	125.4	100	14.8	125.4	105	12	5.	15.5	123.3	105	154	-5.	15.5	120.9	85	307	-35.	17.6	118.3	90	377	5.
112200Z	14.9	125.6	100	14.8	125.5	100	8	0.	14.8	124.8	95	125	-15.	15.8	122.6	85	220	-25.	15.9	120.4	65	274	-10.
112206Z	15.3	125.9	105	15.3	125.6	95	17	-10.	16.7	125.5	85	46	-35.	18.4	124.6	75	56	-25.	20.0	123.4	65	138	0.
112212Z	15.6	125.9	105	15.6	125.9	90	8	-15.	17.7	125.1	75	42	-58.	21.7	128.4	65	328	-30.	24.0	134.0	55	633	0.
112218Z	16.1	125.9	110	16.0	126.0	85	0	-25.	18.1	126.2	75	51	-45.	20.7	128.3	65	264	-20.	23.9	134.0	55	603	5.
112300Z	16.3	126.3	110	16.4	126.2	85	8	-25.	18.3	127.3	75	108	-35.	21.1	129.2	65	319	-10.	24.1	135.0	55	694	5.
112306Z	16.8	126.3	120	16.8	126.4	120	6	0.	16.6	127.4	130	129	30.	21.2	129.3	130	328	65	24.1	135.0	100	704	55.
112312Z	17.8	126.2	125	17.0	126.2	120	0	-5.	18.8	126.3	120	110	25.	21.6	128.1	110	283	55.	24.5	134.1	100	705	60.
112318Z	17.3	125.9	120	17.2	126.0	125	8	5.	19.8	126.4	140	116	55	21.8	128.2	130	272	80.	24.6	134.5	120	796	85.
112400Z	17.5	125.6	110	17.5	125.7	115	6	5.	19.8	125.8	105	91	38	21.5	128.0	95	288	45.	24.4	133.7	75	789	45.
112406Z	17.6	125.4	100	17.6	125.3	110	6	10.	18.9	125.0	100	59	35	21.4	126.9	95	270	50.	0.0	0.0	0.	-0.	0.
112412Z	17.3	125.2	95	17.4	125.3	100	8	5.	18.6	125.6	90	69	35	21.8	127.8	80	316	40.	0.0	0.0	0.	-0.	0.
112418Z	17.7	124.9	95	17.9	125.1	90	17	5.	18.8	124.3	80	39	38.	19.7	123.0	65	261	30.	0.0	0.0	0.	-0.	0.
112500Z	17.9	124.7	75	17.8	124.1	75	35	0.	18.2	123.5	65	52	15.	18.7	121.6	55	324	25.	0.0	0.0	0.	-0.	0.
112506Z	18.0	124.6	65	18.0	124.6	70	8	5.	18.2	123.4	60	88	15.	18.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.
112512Z	18.4	124.4	55	18.2	124.2	60	17	5.	18.6	123.8	40	166	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.
112518Z	18.5	124.9	50	18.4	123.4	55	66	5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.
112600Z	18.1	124.4	40	18.1	124.2	40	11	-10.	18.6	123.0	30	286	0.	0.0	0.	0.	-8.	0.	0.0	0.0	0.	-0.	0.
112606Z	17.4	124.7	45	18.0	124.7	40	36	-5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.
112612Z	16.5	124.9	40	16.8	124.8	40	19	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.
112618Z	15.5	124.2	35	15.8	124.8	35	39	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.
112700Z	14.2	124.9	30	14.2	124.9	30	0	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-0.	0.

ALL FORECASTS
WRNG 24-HR 48-HR 72-HR
AVG FORECAST POSIT ERROR 16. 117. 267. 459.
AVG RIGHT ANGLE ERROR 10. 54. 160. 343.
AVG INTENSITY MAGNITUDE ERROR 5. 21. 36. 38.
AVG INTENSITY BIAS -2. -4. -10. -17.
NUMBER OF FORECASTS 38 33 30 26

TYPHOONS WHILE OVER 35 KTS
WRNG 24-HR 48-HR 72-HR
17. 112. 265. 446.
18. 53. 160. 332.
5. 21. 37. 37.
-2. -4. -11. -20.
37 32 29 25

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 2214. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 7. KNOTS

TYPHOON ORCHID
FIX POSITIONS FOR CYCLONE NO. 28

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	140432	12.9N 146.4E	PCN 6			PGTW
2	141200	14.0N 147.2E	PCN 6			PGTW
3	141600	13.2N 146.8E	PCN 6	T1.0/1.0	INIT OBS	PGTW
4	141800	13.1N 146.5E	PCN 6			PGTW
* 5	142141	11.8N 142.6E	PCN 3			PGTW
* 6	150000	11.7N 142.3E	PCN 4			PGTW
* 7	150300	11.7N 142.0E	PCN 6	T0.5/0.5	INIT OBS	PGTW
8	151800	12.7N 143.2E	PCN 6	T1.0/1.0 /S0.0/26HRS	ULCC FIX	PGTW
9	152300	11.4N 141.6E	PCN 5		ULCC AT 12.6N 142.8E	PGTW
10	160300	11.4N 141.1E	PCN 6	T1.5/1.5 /D1.0/24HRS		PGTW
11	160600	10.3N 141.2E	PCN 6			PGTW
12	160900	9.5N 140.5E	PCN 6			PGTW
13	161200	9.2N 139.6E	PCN 6			PGTW
14	161600	9.3N 139.8E	PCN 6	T1.5/1.5 /D0.5/22HRS	ULCC FIX	PGTW
15	161834	9.5N 138.5E	PCN 5		ULCC FIX	PGTW
16	162100	10.0N 138.1E	PCN 6			PGTW
17	162239	9.7N 136.3E	PCN 5			PGTW
18	170000	9.7N 136.0E	PCN 6			PGTW
19	170300	9.7N 135.3E	PCN 6	T1.5/1.5 /S0.0/24HRS	ULCC FIX	PGTW
20	170537	9.8N 135.4E	PCN 5		ULCC FIX	PGTW
21	171200	12.1N 132.6E	PCN 6			PGTW
22	171600	12.5N 131.2E	PCN 6	T3.0/3.0 /D1.5/24HRS		PGTW
23	171821	12.4N 131.1E	PCN 6			PGTW
24	172103	13.0N 130.1E	PCN 5			PGTW
25	172104	12.8N 131.7E	PCN 5			RPMK
26	180000	12.7N 130.1E	PCN 6			PGTW
27	180300	13.3N 129.5E	PCN 6	T2.5/2.5 /D1.0/24HRS		PGTW
28	180600	13.5N 128.9E	PCN 6			PGTW
29	180707	13.6N 128.9E	PCN 5			PGTW
30	180900	13.5N 128.9E	PCN 6			PGTW
31	181200	13.3N 128.1E	PCN 6			PGTW
* 32	181600	12.7N 127.3E	PCN 6	T3.0/3.0-/S0.0/24HRS		PGTW
33	181800	12.4N 127.5E	PCN 6			PGTW
34	182100	12.8N 127.7E	PCN 6			PGTW
35	182336	12.7N 128.2E	PCN 5			PGTW
36	182336	12.2N 128.5E	PCN 5	T3.0/3.0	INIT OBS	RPMK
37	190300	12.7N 128.0E	PCN 6	T3.0/3.0-/D0.5/24HRS		PGTW
38	190654	12.7N 127.2E	PCN 5			PGTW
39	190900	12.4N 127.4E	PCN 6			PGTW
40	191200	12.0N 127.2E	PCN 6			PGTW
41	191600	12.2N 127.3E	PCN 6	T3.5/3.5-/D0.5/24HRS		PGTW
42	191800	12.7N 127.2E	PCN 6			PGTW
43	191939	12.2N 127.5E	PCN 5			RPMK
44	192100	12.3N 126.9E	PCN 6			PGTW
45	192203	12.1N 127.5E	PCN 3			PGTW
46	192314	12.3N 127.4E	PCN 3			PGTW
47	192314	12.1N 127.4E	PCN 3	T3.0/3.0	INIT OBS	RODN
48	200300	12.3N 127.2E	PCN 4	T4.0/4.0-/D1.0/24HRS		PGTW
49	200642	12.4N 127.4E	PCN 1			PGTW
50	201013	12.9N 126.9E	PCN 1			PGTW
51	201043	12.8N 127.2E	PCN 1			RODN
52	201200	12.8N 126.6E	PCN 2			PGTW
53	201600	13.1N 126.4E	PCN 4	T4.5/4.5-/D1.5/24HRS		PGTW
54	201900	13.2N 126.1E	PCN 4			PGTW
55	201927	13.5N 126.3E	PCN 3			PGTW
56	202100	13.3N 126.0E	PCN 4			PGTW
57	202142	13.2N 126.1E	PCN 4			PGTW
58	202252	13.1N 126.0E	PCN 3			PGTW
59	202252	13.2N 126.1E	PCN 3	T4.0/4.0 /D1.0/24HRS		RODN
60	210300	13.9N 125.6E	PCN 2			PGTW
61	210629	14.2N 125.7E	PCN 1	T5.0/5.0	INIT OBS	RPMK
62	210629	14.2N 125.6E	PCN 3	T4.5/4.5-/D0.5/27HRS		PGTW
63	210900	14.4N 125.3E	PCN 2			PGTW
64	211022	14.3N 125.3E	PCN 4			PGTW
65	211200	14.5N 125.3E	PCN 2			PGTW
66	211600	14.5N 125.4E	PCN 2	T5.0/5.0	INIT OBS	PGTW
67	211800	14.9N 125.6E	PCN 2			PGTW
68	211914	14.9N 125.6E	PCN 1			PGTW
69	211914	14.0N 125.5E	PCN 1			RODN
70	212121	15.0N 125.3E	PCN 5			PGTW
71	220000	15.0N 125.4E	PCN 6			PGTW
72	220012	14.7N 125.7E	PCN 1	T5.0/5.0 /S0.0/18HRS		RPMK
73	220300	15.1N 125.7E	PCN 2	T5.0/5.0 /D0.5/21HRS	EYE DIA 25NM	PGTW
74	220600	15.4N 125.6E	PCN 2			PGTW
75	220617	15.3N 125.7E	PCN 3	T5.0/5.0 /S0.0/24HRS		RPMK
76	220900	15.5N 125.7E	PCN 4			PGTW
77	221200	15.6N 125.9E	PCN 4			PGTW
78	221600	16.0N 125.9E	PCN 4	T4.5/5.0-/W0.5/24HRS		PGTW
79	221800	16.1N 126.1E	PCN 4			PGTW

80	222100	16.4N	126.2E	PCN 2					PGTW
81	230000	16.4N	126.4E	PCN 2					PGTW
82	230300	16.6N	126.3E	PCN 2	T5.0/5.0 /S0.0/24HRS		EYE DIA 18NM		PGTW
83	230605	16.8N	126.3E	PCN 1			EYE DIA 15NM		PGTW
84	230605	16.9N	126.3E	PCN 1	T4.5/4.5		EYE DIA 20NM		PGTW
85	230940	17.1N	126.2E	PCN 1			INIT OBS		RDN
86	231200	17.1N	126.1E	PCN 2					PGTW
87	231600	17.2N	125.9E	PCN 2	T6.5/6.5-/D2.0/24HRS				PGTW
88	231849	17.3N	125.8E	PCN 1					PGTW
89	232100	17.4N	125.8E	PCN 2			EYE DIA 36NM		PGTW
90	232228	17.5N	126.2E	PCN 1					RDN
91	232328	17.5N	125.7E	PCN 1	T5.5/5.5-/D0.5/21HRS		EYE DIA 28NM		PGTW
92	232328	17.5N	125.6E	PCN 1	T6.0/6.0 /D1.0/24HRS				RPMK
93	240300	17.6N	125.5E	PCN 2			EYE DIA 28NM		PGTW
94	240552	17.6N	125.3E	PCN 1	T5.5/6.0 /W0.5/30HRS				RPMK
95	240600	17.6N	125.3E	PCN 2					PGTW
96	240900	17.6N	125.2E	PCN 2					PGTW
97	241827	17.6N	125.1E	PCN 1					PGTW
98	241100	17.4N	125.7E	PCN 3					RPMK
99	241200	17.7N	124.9E	PCN 4					PGTW
100	241600	17.9N	124.8E	PCN 4	T5.0/5.5 /W1.5/24HRS				PGTW
101	241837	18.0N	125.0E	PCN 4					PGTW
102	242158	18.0N	125.0E	PCN 6					PGTW
103	242159	18.1N	124.9E	PCN 5	T5.0/6.0 /W1.0/23HRS				RPMK
104	242306	17.9N	125.0E	PCN 4	T4.0/5.0-/W1.5/24HRS				PGTW
105	242306	17.7N	124.9E	PCN 3	T4.5/5.5 /W1.5/24HRS				RPMK
106	250600	18.0N	124.6E	PCN 4					PGTW
107	250721	17.8N	124.9E	PCN 3	T3.5/3.5		INIT OBS EXP LLCC		RDN
108	251039	18.5N	124.8E	PCN 5					RPMK
109	252138	18.2N	124.6E	PCN 3					PGTW
110	252245	18.2N	125.0E	PCN 5					RDN
111	260000	17.9N	124.6E	PCN 4					PGTW
112	260300	18.3N	125.4E	PCN 6	T2.5/3.5-/W1.5/28HRS				PGTW
113	260600	17.5N	124.9E	PCN 6					PGTW
114	261124	16.2N	125.4E	PCN 5					RPMK

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	0BS MSLP	MAX-SFC-LND VEL/BRG/RNG	MAX-FLT-LVL-LND DIR/VEL/BRG/RNG	ACCRY NAV/NET	EYE SHAPE	EYE DIAM/TATN	EYE TEMP (C) OUT/IN DP/SST	MSN NO.
1	180044	12.5N 130.5E	1500FT	1002	30 260	78 040	35 320	40 6 6			+23	38
2	180034	13.0N 129.2E	700MB	3056	994 40	020 60	110 49 040	90 10 8			+11 +13	+11
3	181103	12.6N 128.8E	700MB	3040			040 55 310	102 18 10				4
4	182120	12.5N 128.2E	1500FT	986	50 210	15 320	59 210	15 20 2			+28 +26	29
5	190023	12.8N 128.1E	700MB	3008	989 40	130 40	040 55 310	68 15 9			+16 +18	+8
6	190754	12.5N 127.8E	700MB	2991	981 40	030 40	130 50 020	51 18 3			+18 +8	6
7	191035	12.1N 127.7E	700MB	2888			040 56 340	30 18 5				6
8	192110	12.2N 127.5E	700MB	2858		45 030	60 140	63 050	15 6 3	CIRCULAR	20	+17 +17 +10
9	192336	12.1N 127.5E	700MB	2832	978	65 270	90 290	76 180	17 7 2	CIRCULAR	20	+11 +17 +10
10	200834	12.8N 127.2E	700MB	2718	80 050	18 330	78 240	16 12 4	CIRCULAR	25	+12 +16 +12	
11	201134	12.8N 126.7E	700MB	2684	954		210 80 130	18 8 4	CIRCULAR	22	+13 +18 +14	
12	202050	13.6N 126.2E	700MB	2632			020 75 310	16 15 4				8
13	202319	13.5N 126.2E	700MB	2648	950	80 080	15 170	80 080	90 15 5	CIRCULAR	20	+10 +14 +14
14	210832	14.1N 125.5E	700MB	2588		45 180	90 030	89 320	30 10 2			9
15	211110	14.2N 125.4E	700MB	2581	942		160 105 100	23 18 2	CIRCULAR	30	+17 +16 +13	
16	212033	14.8N 125.5E	700MB	2568			350 185 240	23 12 2	CIRCULAR	17	+14 +18 +15	
17	212326	14.8N 125.6E	700MB	2590	943	80 070	28 140	93 070	28 8 5			11
18	220917	15.4N 126.0E	700MB	2655		50 270	90 360	91 270	17 12 2			11
19	221156	15.6N 125.8E	700MB	2665			150 83 070	20 10 3	CIRCULAR	30	+13 +17 + 5	
20	2202032	16.2N 126.1E	700MB	2614		60 090	120 140	94 090	22 6 4	CIRCULAR	17	+15 +16 +10
21	222302	16.2N 126.3E	700MB	2632	947	70 310	60 040	93 310	16 8 3	CIRCULAR	20	+15 +18 +15
22	230833	17.0N 126.2E	700MB	2491		120 040	10 360	184 290	24 10 2	CIRCULAR	25	+13 +17 +15
23	231118	16.0N 126.2E	700MB	2501	933		060 118 330	18 8 2	CIRCULAR	25	+14 +18 +15	
24	232031	17.3N 125.9E	700MB	2460			200 115 100	29 10 3	CIRCULAR	25	+15 +17	
25	232256	17.4N 125.7E	700MB	2457	931	55 360	60 050	182 350	21 10 3	CIRCULAR	25	+11 +19
26	240836	17.5N 125.3E	700MB	2593	941	80 260	60 130	85 050	25 8 2	CIRCULAR	15	+16 +18 +14
27	241109	17.3N 125.3E	700MB	2636			020 96 360	31 8 2			+10 +19 +14	
28	242030	17.8N 124.8E	700MB	2791			200 70 100	65 6 5			+13 +15 +15	
29	242301	17.9N 124.8E	700MB	2828	45 040	30 030	63 300	37 6 5	CIRCULAR	25	+18 +16 +13	
30	250056	18.0N 124.6E	700MB	2961	988	65 220	48 330	51 270	15 6 2			17
31	251139	18.3N 124.4E	700MB	3001	992		080 55 320	60 6 3			+15 +16 +11	
32	252118	18.2N 124.8E	700MB	3047			180 53 050	60 6 5			+13 +12 +10	
33	252348	18.2N 124.3E	700MB	3086	1005	25 130	120 070	39 330	64 5 8			19
34	260938	17.2N 124.8E	850MB			50 310	100 070	44 310	70 5 5		+28 +16	
35	261144	16.7N 124.8E	850MB				010 64 220	80 5 5			+24 +23 +15	
36	262045	15.1N 124.2E	700MB	3089		15 130	90 010	38 260	105 10 9			20
37	262342	14.2N 124.9E	1500FT		1006	55 310	85 050	42 020	115 10 13		+23 +24 +24	28

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 190000	13.5N 127.6E	LAND				5//2 42713		14.8N 124.3E	98447

* 2	198130	13.6N	127.1E	LAND	5///2 42923	14.0N	124.3E	98447
* 3	198200	13.7N	126.8E	LAND	5///2 43226	14.0N	124.3E	98447
* 4	198330	13.8N	126.6E	LAND	5///2 42711	14.0N	124.3E	98447
* 5	198400	13.8N	126.6E	LAND	5///2 40000	14.0N	124.3E	98447
* 6	198600	13.6N	126.5E	LAND	5///2 42220	14.0N	124.3E	98447
* 7	198700	13.6N	126.5E	LAND	5///2 40000	14.0N	124.3E	98447
8	198800	12.7N	127.3E	LAND	5///3 40000	14.0N	124.3E	98447
9	191000	12.6N	127.0E	LAND	5///2 42205	14.0N	124.3E	98447
10	191100	12.3N	126.9E	LAND	5///2 51916	14.0N	124.3E	98447
11	191200	12.3N	126.9E	LAND	5///2 50000	14.0N	124.3E	98447
12	191300	12.3N	126.9E	LAND	5///2 52704	14.0N	124.3E	98447
13	201100	12.0N	126.9E	LAND	20503 529//	14.0N	124.3E	98447
14	201200	12.0N	126.8E	LAND	20513 53208	14.0N	124.3E	98447
15	201300	12.0N	126.8E	LAND	20243 52484	14.0N	124.3E	98447
16	201400	12.0N	126.7E	LAND	10413 52508 EYE CIR 50 PCT OPEN NE	14.0N	124.3E	98447
17	201500	12.0N	126.7E	LAND	10323 40000 EYE CIR 50 PCT OPEN NE	14.0N	124.3E	98447
18	210000	13.5N	126.2E	LAND	///// 53405	14.0N	124.3E	98447
19	210100	13.6N	126.1E	LAND	10413 52708	14.0N	124.3E	98447
20	210400	13.6N	125.8E	LAND	10513 52705 EYE CIR 40 PCT OPEN NNE	14.0N	124.3E	98447
21	210800	14.3N	125.7E	LAND	10893 52703	14.0N	124.3E	98447
22	211000	14.4N	125.5E	LAND	10813 52708	14.0N	124.3E	98447
23	211400	14.2N	125.5E	LAND	10713 51506 EYE CIR 40 PCT OPEN NNE	14.0N	124.3E	98447
24	211500	14.4N	125.6E	LAND	10713 50210 EYE CIR 40 PCT OPEN NNE	14.0N	124.3E	98447
25	212200	14.9N	125.6E	LAND	10713 40000	14.0N	124.3E	98447
* 26	212300	14.8N	124.8E	LAND	4/// //	18.3N	121.6E	98321
27	220100	14.8N	125.7E	LAND	10713 51209	14.0N	124.3E	98447
28	220200	14.8N	125.6E	LAND	10743 52704	14.0N	124.3E	98447
29	220300	14.9N	125.7E	LAND	10713 50507	14.0N	124.3E	98447
30	220500	15.1N	125.8E	LAND	10713 53505	14.0N	124.3E	98447
31	220800	15.3N	126.0E	LAND	10613 50911	14.0N	124.3E	98447
32	221000	15.4N	126.1E	LAND	50405 //	14.0N	124.3E	98447
33	221100	15.5N	126.2E	LAND	2/612 53608	14.0N	124.3E	98447
34	221200	15.5N	126.3E	LAND	2/612 50408	14.0N	124.3E	98447
35	250700	18.1N	124.3E	LAND	///2/ 4//	18.3N	121.6E	98231
36	250800	18.1N	124.3E	LAND	///2/ 4//	18.3N	121.6E	98231
37	251500	18.4N	124.0E	LAND	5/// 53001	18.3N	121.6E	98231
38	251600	18.4N	123.9E	LAND	5/// 53001	18.3N	121.6E	98231
39	251800	18.4N	123.8E	LAND	5/// 52703	18.3N	121.6E	98231
40	251900	18.4N	123.7E	LAND	5/// 52905	18.3N	121.6E	98231
41	252100	18.5N	123.4E	LAND	21602 52717	18.3N	121.6E	98231
42	252200	18.5N	123.1E	LAND	21612 52717	18.3N	121.6E	98231
43	252300	18.6N	123.0E	LAND	25552 53315	18.3N	121.6E	98231
44	270600	13.4N	124.7E	LAND	2/// 52205	14.0N	124.3E	98447

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

**TYPHON PERCY
BEST TRACK DATA**

MD/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST										
	POSIT	WIND	POSIT	WIND	DST WIND	ERRORS	POSIT	WIND	DST WIND	ERRORS	POSIT	WIND	DST WIND	ERRORS	POSIT	WIND	DST WIND	ERRORS					
111700Z	10.5	110.0	15	8.0	0.0	0.	-0.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	-8.	0.					
111706Z	10.0	111.0	15	8.0	0.0	0.	-0.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	-8.	0.					
111712Z	9.8	111.0	15	8.0	0.0	0.	-0.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	-8.	0.					
111718Z	9.6	111.1	15	8.0	0.0	0.	-0.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	-8.	0.					
111800Z	9.5	111.1	20	8.0	0.0	0.	-0.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	-8.	0.					
111806Z	9.0	111.6	20	8.0	0.0	0.	-0.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	-8.	0.					
111812Z	8.6	112.0	20	8.0	0.0	0.	-0.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	-8.	0.					
111818Z	8.6	112.6	25	8.0	0.0	0.	-0.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	-8.	0.					
111900Z	8.9	113.1	40	8.0	0.0	0.	-0.	0.	0.0	0.	-8.	0.	0.0	0.	-8.	0.	-8.	0.					
111906Z	8.7	112.7	45	8.7	112.8	45.	6.	0.	9.6	111.7	50.	138.	-15.	10.3	110.3	45.	185.	-15.	12.0	108.0	25.	388.	-15.
111912Z	8.1	112.6	50	8.3	112.6	60.	12.	10.	8.6	110.9	65.	83.	-5.	9.2	109.5	60.	180.	5.	10.0	107.2	55.	388.	20.
111918Z	7.5	112.4	55	8.8	111.3	60.	102.	5.	9.9	109.4	65.	188.	0.	10.6	108.0	50.	312.	0.	11.4	106.5	30.	489.	-5.
112000Z	7.4	111.8	60	7.5	111.7	60.	8.	0.	7.9	110.0	55.	97.	-5.	9.5	107.7	50.	316.	5.	11.0	105.6	45.	563.	10.
112006Z	7.3	111.6	65	8.1	111.2	65.	54.	8.	8.9	110.2	65.	123.	5.	9.8	108.2	65.	309.	25.	10.3	104.8	55.	653.	25.
112012Z	7.3	111.4	70	7.3	111.5	75.	6.	5.	7.5	118.3	65.	101.	30.	8.7	107.7	60.	283.	45.	10.0	107.1	65.	567.	35.
112018Z	7.4	111.3	65	7.5	111.0	75.	19.	18.	8.3	109.2	60.	189.	38.	9.4	107.6	70.	392.	35.	10.7	106.0	30.	676.	5.
112100Z	7.6	111.6	68	7.6	111.5	75.	6.	15.	8.0	110.9	60.	108.	15.	9.0	109.2	50.	333.	15.	10.2	106.5	58.	728.	25.
112106Z	7.6	111.8	68	7.7	111.6	70.	13.	18.	7.5	111.2	50.	109.	18.	8.5	109.0	40.	398.	18.	9.5	106.3	30.	816.	5.
112112Z	7.5	112.0	55	7.5	112.0	60.	8.	5.	7.3	111.0	50.	147.	15.	8.6	108.7	40.	469.	10.	9.3	106.2	30.	985.	10.
112118Z	7.6	112.3	58	7.5	111.5	60.	48.	18.	8.8	109.4	50.	279.	15.	8.5	107.5	40.	590.	15.	9.2	104.2	30.	1089.	10.
112200Z	7.7	112.7	45	7.8	112.7	50.	6.	5.	7.7	111.4	40.	209.	5.	7.8	110.7	35.	499.	10.	8.0	0.0	0.	-8.	0.
112206Z	7.8	113.0	48	7.8	112.8	45.	12.	5.	7.7	112.0	35.	226.	5.	7.7	111.0	30.	575.	5.	8.0	0.0	0.	-8.	0.
112212Z	7.9	113.4	35	7.8	113.4	40.	6.	5.	8.8	113.9	35.	160.	5.	9.0	111.9	30.	583.	10.	8.0	0.0	0.	-8.	0.
112218Z	8.2	114.1	35	8.1	113.9	48.	13.	5.	9.0	112.6	35.	286.	18.	9.1	110.7	30.	717.	10.	8.0	0.0	0.	-8.	0.
112300Z	8.6	114.8	35	8.4	114.9	35.	13.	0.	13.0	121.0	25.	206.	8.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.
112306Z	8.6	115.7	30	9.2	115.4	35.	40.	5.	11.4	117.5	35.	147.	18.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.
112312Z	8.8	116.6	30	8.8	116.6	35.	8.	5.	11.6	118.0	30.	195.	18.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.
112318Z	9.6	117.4	25	9.4	117.3	35.	13.	18.	13.2	117.6	30.	285.	18.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.
112400Z	10.4	118.7	25	10.3	118.3	30.	24.	5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.
112406Z	11.3	120.0	25	11.4	119.2	30.	47.	5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.
112412Z	12.0	121.3	20	12.3	121.2	25.	19.	5.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.
112418Z	12.4	122.4	20	12.5	122.5	20.	8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	-8.	0.

WRNG	ALL FORECASTS			TYPHOONS WHILE OVER 35 KTS				
	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR	
Avg Forecast Posit Error	21.	173.	409.	660.	20.	148.	289.	457.
Avg Right Angle Error	11.	86.	184.	361.	9.	88.	207.	358.
Avg Intensity Magnitude Error	5.	11.	14.	15.	6.	13.	18.	13.
Avg Intensity Bias	5.	8.	12.	11.	6.	8.	14.	3.
Number of Forecasts	23	19	15	11	16	12	8	4

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1123. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

**TYPHON PERCY
FIX POSITIONS FOR CYCLONE NO. 21**

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	181200	8.6N 112.0E	PCN 6		ULCC FIX	PGTW
2	181600	8.7N 112.9E	PCN 6	T1.0/1.0	INIT OBS	PGTW
3	182100	8.8N 113.1E	PCN 6			PGTW
4	182336	8.7N 113.3E	PCN 5	T2.5/2.5	INIT OBS	PGTW
5	182336	9.9N 113.1E	PCN 5	T3.0/3.0	INIT OBS	RPMK
6	190300	8.8N 112.8E	PCN 6			PGTW
7	190600	8.7N 112.4E	PCN 6			PGTW
* 8	190900	8.7N 111.6E	PCN 6			RPMK
9	191104	8.0N 112.6E	PCN 3	T3.0/3.0 /50.0/12HRS		PGTW
* 10	191200	9.0N 111.4E	PCN 6			PGTW
11	191216	8.3N 112.2E	PCN 5		ULCC FIX	RODN
* 12	191600	8.9N 111.0E	PCN 6	T3.0/3.0	INIT OBS	PGTW
* 13	191800	9.3N 111.5E	PCN 6			PGTW
14	191939	7.5N 111.6E	PCN 5			RPMK
* 15	192100	8.9N 111.6E	PCN 6			PGTW
16	192203	7.4N 111.2E	PCN 5			PGTW
17	200000	7.5N 111.4E	PCN 6			PGTW
* 18	200056	8.3N 111.0E	PCN 3	T4.0/4.0/-01.0/22HRS		RPMK

19	200300	7.4N 111.4E	PCN 4	T4.0/4.0-/D1.0/24HRS	PGTW
20	200600	7.7N 111.2E	PCN 4		PGTW
21	200824	7.3N 111.2E	PCN 3		RPMK
22	200900	7.7N 111.0E	PCN 6		PGTW
23	201043	7.1N 110.7E	PCN 5		RODN
* 24	201154	7.3N 110.4E	PCN 3		RODN
25	201154	7.2N 111.2E	PCN 5		RPMK
26	201200	7.5N 111.3E	PCN 6		PGTW
27	201600	8.0N 111.1E	PCN 6	T4.5/4.5-/D1.5/24HRS	PGTW
28	201800	8.3N 111.0E	PCN 6		PGTW
29	202100	7.5N 110.9E	PCN 6		PGTW
30	202323	7.4N 111.1E	PCN 5	T4.0/4.0 /S0.0/23HRS	RPMK
31	210000	7.5N 111.7E	PCN 6		PGTW
32	210300	7.7N 110.8E	PCN 6		PGTW
33	210600	7.7N 111.7E	PCN 6	T3.0/4.0 /W1.0/27HRS	PGTW
34	210811	7.2N 112.1E	PCN 3	T3.0/4.0-/W1.0/24HRS	RPMK
35	210900	7.9N 111.8E	PCN 6		PGTW
36	211132	7.3N 111.2E	PCN 5		RPMK
37	211200	7.6N 111.6E	PCN 6		PGTW
* 38	211600	7.6N 111.1E	PCN 6	T2.5/3.5-/W2.0/24HRS	PGTW
* 39	211800	8.0N 110.6E	PCN 6		PGTW
40	212302	7.8N 112.7E	PCN 3	T2.5/3.5 /W1.5/24HRS	PGTW
41	212302	7.8N 112.7E	PCN 3	T2.5/3.5 /W1.5/24HRS	RPMK
42	220000	7.7N 112.7E	PCN 4		PGTW
43	220012	7.7N 112.9E	PCN 3	T2.0/2.0	INIT OBS
44	220012	7.7N 112.7E	PCN 3		RPMK
45	220300	7.8N 112.8E	PCN 4	T2.0/3.0 /W1.0/21HRS	PGTW
46	220600	7.8N 112.9E	PCN 4		PGTW
47	220759	7.5N 113.1E	PCN 3		RPMK
48	220900	7.8N 113.1E	PCN 6		PGTW
49	221200	7.9N 113.4E	PCN 6		PGTW
50	221600	7.7N 113.9E	PCN 6	T1.5/2.5 /W1.0/24HRS	PGTW
51	221800	8.2N 113.8E	PCN 6		PGTW
52	222100	8.5N 113.5E	PCN 6		RPMK
53	222241	8.3N 114.9E	PCN 3	T2.0/2.5+/W0.5/24HRS	RODN
54	222350	8.7N 115.0E	PCN 3	T1.0/2.0 /W1.0/24HRS	RPMK
55	222350	8.5N 114.8E	PCN 3		PGTW
56	230000	8.5N 115.2E	PCN 4	T2.0/2.0 /S0.0/21HRS	PGTW
57	230000	8.3N 114.7E	PCN 6		PGTW
58	230300	8.9N 115.1E	PCN 6		PGTW
59	230600	8.6N 115.6E	PCN 4		PGTW
60	230746	9.0N 115.9E	PCN 3		RODN
61	230746	8.6N 116.7E	PCN 3		RPMK
62	230900	8.8N 116.1E	PCN 6		PGTW
63	231121	8.4N 116.4E	PCN 5		RPMK
64	231200	8.8N 116.6E	PCN 6		PGTW
65	231600	8.9N 116.9E	PCN 6	T0.5/1.5 /W1.0/24HRS	PGTW
66	231800	9.4N 117.4E	PCN 6		PGTW
67	232100	9.6N 117.5E	PCN 6		PGTW
68	232328	10.6N 118.6E	PCN 5	T1.0/2.0 /W1.0/24HRS	PGTW
69	232328	8.2N 117.5E	PCN 5	T1.0/2.0 /W1.0/24HRS	RPMK
70	240300	10.6N 119.3E	PCN 6		PGTW
71	240600	11.0N 119.6E	PCN 6		PGTW
72	241100	10.9N 121.1E	PCN 5		RODN
73	241100	10.7N 121.1E	PCN 5		RPMK
74	241600	11.0N 121.3E	PCN 6		PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	085 MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DIAM/	EYE ORIEN-	EYE TEMP (C)	MSN NO.
												DUT/ IN/ DP/SST	
1	191842	8.2N 112.6E	700MB	2976	986	60 150 30	088 49 340 22	10 5	CIRCULAR	48		+14 +16 + 6	1
2	192136	7.3N 112.3E	700MB	2956	985		140 51 040 30	15 5				+13 +20 +10	2
3	192331	7.4N 112.8E	700MB	2934	981	65 140 12	220 54 140 30	15 3	ELLIPTICAL	15 10 100		+13 +20 +10	2
4	200905	7.2N 111.5E	700MB	2843		55 270 5	120 79 030 30	15 5	CIRCULAR	20		+20 +18 + 9	3
5	201135	7.2N 111.5E	700MB	2857	971		250 76 180 35	15 2	ELLIPTICAL	20 15 110		+17 +18 +10	3
6	202041	7.4N 111.3E	700MB	2876			160 68 060 18	18 3	ELLIPTICAL	15 7 320		+14 +16 +10	4
7	202344	7.6N 111.6E	700MB	2959	985	80 150 33	190 63 120 60	22 3				+15 +17 +11	4
8	210950	7.5N 112.0E	700MB	2970	986	60 240 10	050 50 320 60	12 3				+13 +15 + 9	5
9	211142	7.7N 111.9E	700MB	2960	986		270 49 210 30	12 3				+11 +15 + 9	5
10	212239	7.7N 112.7E	700MB	2993	991	15 100 120	230 47 130 30	18 12				+16 +15 + 9	6
11	220845	7.9N 113.1E	1500FT	3055	997	30 250 60	340 50 260 39	6 6				+28 +20	7
12	221126	7.8N 113.3E	700MB	3074	1002		260 40 150 30	6 3				+13 +18	7
13	230241	8.8N 114.8E	1500FT		1004	35 060 48	180 27 060 90	6 5				+24 +25 +19	8

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

**TROPICAL STORM RUTH
BEST TRACK DATA**

MD/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST							
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND		
112106Z	7.5	145.3	25	8.8	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112112Z	7.8	144.6	25	8.8	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112118Z	8.0	143.8	25	9.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112200Z	8.1	142.9	25	9.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112206Z	8.2	142.2	25	9.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112212Z	8.3	141.6	25	9.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112218Z	8.6	141.0	25	9.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112300Z	9.0	140.3	30	9.2	148.2	30.	13.	0.	11.4	136.7	45.	257.	25.	14.9	134.3	65.	433.	45.	19.2	134.2
112306Z	9.3	140.4	30	9.4	148.6	30.	13.	0.	10.9	136.8	45.	215.	25.	14.1	135.1	65.	342.	45.	18.7	136.0
112312Z	9.1	140.9	30	9.2	148.9	30.	6.	0.	10.8	139.7	45.	110.	25.	13.0	138.2	60.	256.	40.	16.0	137.4
112318Z	8.6	149.5	30	8.9	148.0	30.	25.	0.	10.4	139.5	58.	134.	25.	13.4	138.1	60.	366.	40.	17.6	137.3
112400Z	8.4	139.8	20	8.4	139.9	20.	6.	0.	0.0	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.
112406Z	8.4	139.4	20	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112412Z	8.4	138.8	20	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112418Z	8.5	138.3	25	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112500Z	8.6	137.9	20	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112506Z	8.9	137.5	20	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112512Z	10.1	135.0	20	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112518Z	11.0	133.1	20	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112600Z	12.7	132.3	20	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112606Z	13.7	132.0	20	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112612Z	14.5	131.4	20	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112618Z	15.1	130.2	20	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112700Z	15.6	129.6	25	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112706Z	16.0	129.2	25	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112712Z	16.5	129.0	25	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112718Z	17.0	128.8	30	8.0	0.0	0.	-8.	0.	0.0	0.	-8.	0.	0.0	0.	0.0	0.0	0.	-8.	0.	
112800Z	17.4	128.6	55	17.3	128.7	55.	6.	0.	18.9	127.3	55.	50.	5.	19.8	125.5	50.	78.	15.	0.0	0.
112806Z	17.8	128.4	60	17.7	128.4	60.	6.	0.	19.1	126.8	55.	43.	10.	20.0	124.8	50.	126.	20.	0.0	0.
112812Z	18.3	128.0	60	18.2	128.1	60.	8.	0.	19.4	126.2	65.	48.	20.	20.2	123.9	60.	178.	40.	0.0	0.
112818Z	18.3	127.4	60	18.3	127.6	60.	11.	0.	19.1	125.6	60.	27.	20.	0.0	0.	0.	0.	0.	0.	0.
112900Z	18.3	126.7	50	18.1	126.7	50.	12.	0.	16.3	125.1	40.	135.	5.	0.0	0.0	0.	0.	0.	0.	0.
112906Z	18.5	126.4	45	18.2	126.5	45.	19.	0.	17.9	125.3	40.	13.	10.	0.0	0.0	0.	0.	0.	0.	0.
112912Z	18.6	126.1	45	18.2	126.4	45.	29.	0.	17.7	125.5	30.	8.	10.	0.0	0.0	0.	0.	0.	0.	0.
112918Z	18.7	125.8	40	17.8	126.1	40.	57.	0.	0.0	0.	0.	-8.	0.	0.0	0.	0.	0.	0.	0.	0.
113000Z	18.5	125.6	35	18.5	125.5	35.	6.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.	-8.	0.	0.
113006Z	18.0	125.5	30	18.1	125.6	30.	8.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.	-8.	0.	0.
113012Z	17.6	125.4	20	17.6	125.2	20.	11.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.	-8.	0.	0.

ALL FORECASTS
WRNG 24-HR 48-HR 72-HR

TYPHOONS WHILE OVER 35 KTS
WRNG 24-HR 48-HR 72-HR

Avg Forecast Posit Error

15.

94.

246.

394.

0.

0.

0.

0.

Avg Right Angle Error

6.

56.

162.

353.

0.

0.

0.

0.

Avg Intensity Magnitude Error

0.

16.

35.

44.

0.

0.

0.

0.

Avg Intensity Bias

0.

16.

35.

44.

0.

0.

0.

0.

Number of Forecasts

16

11

7

4

0

0

0

0

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	190300	4.5N 146.2E	PCN 6			PGTW
2	190900	2.9N 148.6E	PCN 6			PGTW
3	191200	5.2N 146.7E	PCN 6			PGTW
4	191600	2.7N 146.7E	PCN 6			PGTW
* 5	191800	3.2N 142.8E	PCN 6			PGTW
6	192021	4.0N 147.7E	PCN 6			PGTW
7	200000	5.9N 146.8E	PCN 6	T8.5/0.5	ULCC FIX	PGTW
8	200500	7.1N 145.3E	PCN 6			PGTW
9	200902	4.6N 147.1E	PCN 6			PGTW
10	201200	4.5N 147.9E	PCN 6		ULCC FIX	PGTW
11	201600	5.1N 148.2E	PCN 6	T1.6/1.0	INIT OBS	PGTW
12	201745	7.1N 146.1E	PCN 6			PGTW
13	210000	7.4N 145.9E	PCN 6			PGTW

14	210447	8.0N	145.4E	PCN 6	T0.5/0.5 /S0.0/26HRS	PGTW
* 15	210841	9.6N	145.1E	PCN 6		PGTW
* 16	210951	9.8N	144.8E	PCN 6		PGTW
* 17	211732	10.1N	144.1E	PCN 6	T1.5/1.5 /D0.5/26HRS	PGTW
* 18	211800	10.1N	143.8E	PCN 6		PGTW
* 19	212231	10.2N	143.3E	PCN 5		PGTW
* 20	220000	10.7N	142.9E	PCN 6	ULCC FIX	PGTW
* 21	220300	11.2N	142.6E	PCN 6	ULCC FIX	PGTW
* 22	220600	11.3N	140.8E	PCN 6	ULCC FIX	PGTW
* 23	221200	11.0N	140.5E	PCN 6	MLCC FIX	PGTW
* 24	221600	10.9N	141.1E	PCN 6	T1.0/1.5 /W0.5/24HRS	PGTW
* 25	221800	10.9N	140.9E	PCN 6		PGTW
* 26	222100	10.7N	140.5E	PCN 6		PGTW
27	230000	9.0N	140.5E	PCN 4		PGTW
28	230300	9.5N	140.1E	PCN 6	T2.5/2.5 /D1.0/24HRS	PGTW
29	230605	9.5N	139.6E	PCN 5		PGTW
30	231200	9.0N	140.9E	PCN 6		PGTW
* 31	232147	9.1N	139.4E	PCN 5	EXP LLCC	PGTW
32	240000	8.5N	139.8E	PCN 4	T1.0/2.0 /W1.5/21HRS	PGTW
33	240300	8.5N	139.5E	PCN 4	EXP LLCC	PGTW
34	241837	7.8N	138.8E	PCN 6	T1.5/1.5	PGTW
* 35	242306	8.1N	136.8E	PCN 6	INIT OBS	PGTW
* 36	250500	8.7N	136.2E	PCN 6		PGTW
37	250900	9.2N	135.8E	PCN 6		PGTW
38	251200	9.9N	135.5E	PCN 6		PGTW
39	251500	11.7N	134.5E	PCN 6	ULCC FIX	PGTW
40	251825	12.3N	132.2E	PCN 5	T2.0/2.0 /D0.5/24HRS	PGTW
* 41	260600	11.0N	132.4E	PCN 6		PGTW
42	261200	14.5N	132.2E	PCN 6		PGTW
43	261600	14.5N	130.5E	PCN 6	ULCC FIX	PGTW
44	261800	15.0N	129.9E	PCN 6	ULCC FIX	PGTW
45	270000	15.5N	129.5E	PCN 6	T1.5/1.5	PGTW
46	270300	15.0N	129.0E	PCN 6	INIT OBS ULCC FIX	PGTW
47	270600	15.7N	129.2E	PCN 6	ULCC FIX	PGTW
48	270900	15.6N	128.8E	PCN 6		PGTW
49	270956	16.1N	129.4E	PCN 6		PGTW
50	271200	16.6N	129.3E	PCN 6		PGTW
51	271500	17.1N	128.8E	PCN 6	ULCC FIX	PGTW
52	271800	17.3N	128.7E	PCN 6		PGTW
53	272055	17.5N	128.6E	PCN 6		PGTW
54	280000	17.5N	128.4E	PCN 6		PGTW
55	280300	17.6N	128.6E	PCN 4	T3.5/3.5 /D2.0/27HRS	PGTW
56	280500	17.9N	128.5E	PCN 6		PGTW
57	280644	17.9N	128.7E	PCN 5		PGTW
58	280900	18.0N	128.2E	PCN 4		PGTW
59	280935	18.1N	128.3E	PCN 4		PGTW
60	281040	18.3N	128.4E	PCN 4	T3.5/3.5	INIT OBS
61	281040	18.3N	128.2E	PCN 3		RPMK
62	281200	18.2N	128.2E	PCN 6		PGTW
63	281600	18.3N	127.7E	PCN 4		PGTW
64	281800	18.3N	127.5E	PCN 4		PGTW
65	282100	18.3N	127.2E	PCN 6		PGTW
66	282320	18.1N	126.9E	PCN 5		PGTW
67	282320	17.9N	126.9E	PCN 5	T2.5/2.5	RODN
68	290300	18.3N	126.3E	PCN 4	T3.0/3.5 /W0.5/24HRS	PGTW
69	290632	18.6N	126.4E	PCN 1		PGTW
70	290900	18.0N	126.2E	PCN 6		PGTW
71	291018	18.3N	125.7E	PCN 6	T2.0/3.0-/W1.5/24HRS	PGTW
72	292155	18.2N	125.6E	PCN 3		PGTW
73	292258	18.2N	125.6E	PCN 3	T2.0/2.0	PGTW
74	292258	18.3N	125.7E	PCN 3	INIT OBS EXP LLCC	RPMK
75	300620	17.0N	125.7E	PCN 3	T1.5/2.5-/W1.5/27HRS	PGTW
76	301138	17.0N	125.0E	PCN 5	EXP LLCC	RODN

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB HGT	0BS MSLP	MAX-SFC-VND VEL/BRG/RNG	MAX-FLT-LVL-VND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE ORIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	222345	9.2N 140.2E	1500FT		1004	30 220 30	120 20 098 60	8 10			+28 +26 +25	3
2	230624	9.3N 140.7E	1500FT		1000	30 200 60	090 32 030 135	7 8			+25 +27 +26 38	4
3	230807	9.2N 140.7E	1500FT		1001	20 180 80	110 30 320 128	9 8			+27 +25 33	4
* 4	232030	8.5N 138.8E	700MB	3133		15 200 30	120 20 018 98	25 25			+15 +13 +12	5
5	232335	8.4N 139.9E	1500FT		1005	10 300 60	160 14 130 30	15 15			+29 +28 +25 29	5
6	250522	8.9N 137.6E	1500FT		1004	25 240 45	230 17 240 45					6
7	272340	17.3N 128.6E	1500FT		997	60 020 26	020 44 270 31	5 1			+25 +24 +24 30	8
8	280532	17.7N 128.4E	700MB	3026	993	50 240 10	160 67 040 40	18 2				9
9	280912	17.9N 128.2E	700MB	3030	994	68 230 30	150 74 230 45	18 1	CIRCULAR 32		+14 +18 +18	9
10	282041	18.2N 126.8E	700MB	3032			140 43 038 23	6 3				10
11	282318	18.2N 126.8E	700MB	3075	997	45 300 10	140 43 068 55	6 3			+16 + 7	10
12	290531	18.4N 126.5E	700MB	3188	1002	45 240 15	120 37 050 53	12 3	ELLiptical 20 10 348		+17 +16 + 6	11
13	290602	18.5N 126.3E	700MB	3130		48 310 90	250 33 130 60	12 2			+14 +15 + 6	11
* 14	292032	18.2N 124.8E	700MB	3137			200 39 050 120	6 9				12
15	292359	18.6N 125.6E	1500FT	3152	1006	45 270 25	010 37 280 35	5 7			+26 +25 31	12
16	300539	18.1N 125.6E	1500FT	3146	1005	35 270 40	050 15 040 120	12 6			+28 +25 30	13
17	300753	17.0N 125.4E	700MB	3945	1008	5 130 30	110 9 210 90	12 6			+14 +14 + 6	13

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

TROPICAL STORM SPERRY
BEST TRACK DATA

BEST TRACK				WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
MO/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	
120218Z	16.2	132.2	30	16.5	132.1	30.	19.	0.	16.9	129.5	50.	179.	0.	17.0	127.0	65.	362.	30.	
120300Z	16.1	131.7	40	16.2	131.4	45.	18.	5.	16.8	129.4	55.	223.	10.	16.0	127.7	65.	325.	35.	
120306Z	17.3	131.4	45	16.3	131.2	45.	61.	0.	16.2	129.5	55.	208.	15.	0.0	0.0	0.	0.8	0.0	
120312Z	18.0	131.9	55	16.6	132.0	40.	84.	-15.	15.7	131.1	30.	130.	-5.	0.0	0.0	0.	0.0	0.0	
120318Z	18.8	132.4	50	16.9	132.4	40.	66.	-10.	16.1	132.2	30.	58.	-5.	0.0	0.0	0.	0.0	0.0	
120400Z	17.8	132.8	45	18.0	132.9	55.	13.	10.	17.1	133.2	60.	96.	30.	0.0	0.0	0.	0.0	0.0	
120406Z	17.1	132.0	40	17.1	132.8	55.	11.	15.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.0	0.0	
120412Z	16.5	133.2	35	16.5	132.9	50.	17.	15.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.0	0.0	
120418Z	16.0	133.2	35	16.1	132.6	45.	35.	10.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.0	0.0	
120500Z	15.5	133.3	30	15.6	133.3	30.	6.	0.	0.0	0.0	0.	-8.	0.	0.0	0.0	0.	0.0	0.0	

ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
Avg Forecast Posit Error	33.	149.	343.	0.	0.	0.	0.
Avg Right Angle Error	19.	91.	237.	0.	0.	0.	0.
Avg Intensity Magnitude Error	8.	11.	33.	0.	0.	0.	0.
Avg Intensity Bias	3.	8.	33.	0.	0.	0.	0.
Number of Forecasts	18	6	2	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 350. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 6. KNOTS

TROPICAL STORM SPERRY
FIX POSITIONS FOR CYCLONE NO. 23

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
* 1	301800	9.4N 141.5E	PCN 6			PGTW
2	302133	9.4N 140.2E	PCN 5			RPMK
* 3	302237	9.8N 140.6E	PCN 6		ULCC FIX	PGTW
4	011600	13.2N 135.5E	PCN 6	T1.0/1.0	INIT OBS ULCC FIX	PGTW
5	011800	13.0N 135.7E	PCN 6		ULCC FIX	PGTW
6	012100	13.4N 135.6E	PCN 6			PGTW
7	012215	12.5N 134.9E	PCN 5		ULCC FIX	PGTW
8	020114	13.0N 134.6E	PCN 5	T1.5/1.5	INIT OBS ULCC FIX	PGTW
9	020554	15.7N 133.9E	PCN 6			PGTW
10	020900	15.8N 133.1E	PCN 6			PGTW
11	021054	16.2N 133.2E	PCN 6			PGTW
12	021200	16.4N 132.9E	PCN 6			PGTW
13	021600	16.5N 132.5E	PCN 6	T2.5/2.5 /D1.5/24HRS		PGTW
14	021845	16.7N 132.0E	PCN 5			PGTW
15	022051	16.4N 131.6E	PCN 5			PGTW
16	022324	16.2N 131.7E	PCN 5	T2.5/2.5	INIT OBS	RPMK
17	022334	16.0N 131.5E	PCN 5			PGTW
18	030054	16.0N 131.4E	PCN 3	T3.0/3.0 /D1.5/24HRS		PGTW
19	030300	16.1N 131.3E	PCN 6			PGTW
20	030452	16.6N 131.5E	PCN 5			PGTW
21	030542	16.6N 131.1E	PCN 5	T3.0/3.0	INIT OBS ULCC FIX	RODN
22	031200	16.3N 132.4E	PCN 6			PGTW
23	031335	17.9N 131.8E	PCN 5		ULCC FIX	PGTW
24	031600	18.1N 132.2E	PCN 6	T3.5/3.5-/D1.0/24HRS		PGTW
25	031827	18.2N 131.9E	PCN 5			RPMK
26	031827	18.3N 132.5E	PCN 5			PGTW
27	032030	18.5N 132.7E	PCN 5			PGTW
28	032313	18.5N 132.7E	PCN 5			PGTW
* 29	032313	18.9N 133.2E	PCN 5		ULCC FIX	RODN
30	040034	18.5N 132.7E	PCN 5	T3.0/3.0 /S0.0/24HRS		PGTW
31	040300	17.2N 132.8E	PCN 6			PGTW
32	040530	17.2N 132.9E	PCN 5			PGTW
33	041010	17.3N 132.6E	PCN 4		ULCC 18.7N 136.8E	PGTW
* 34	041200	17.2N 132.1E	PCN 6		ULCC 19.0N 137.4E	PGTW
35	041815	16.2N 133.4E	PCN 5			RPMK
36	042150	15.5N 132.8E	PCN 5			PGTW
37	042251	15.6N 132.9E	PCN 3	T1.5/2.5 /W1.5/23HRS		PGTW
38	050000	15.4N 132.9E	PCN 4			PGTW
39	050014	15.5N 133.0E	PCN 3			PGTW
40	050300	14.9N 132.8E	PCN 4		EXP LLCC	PGTW

AIRCRAFT FIXES

FIX NO.	TIME (Z)	FIX POSITION	FLT LVL	700MB OBS HGT	MSLP	MAX-SFC-WND VEL/BRG/RNG	MAX-FLT-LVL-WND DIR/VEL/BRG/RNG	ACCRY NAV/MET	EYE SHAPE	EYE DRIEN-DIAM/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	030021	16.5N 131.5E	700MB	3120 1009		65 160 60	180 44 090	75 10 10			+10 + 9 + 9	2
2	030918	18.0N 131.7E	700MB	3091 1004		35 190 120	250 33 200	82 10 8			+11 +10 +10	3
3	031203	18.1N 132.0E	700MB	3049			200 80 070	12 25 3	CIRCULAR 35		+ 7 +11 + 8	3
4	032243	17.9N 132.7E	700MB	3119		70 360 20	820 65 360	20 14 3			+15 + 9	4
5	040858	16.8N 133.1E	700MB	3135 1006		40 350 70	030 41 360	50 8 1			+26 +25	5
*	6 041137	17.9N 132.6E	700MB	3149 1012			270 16 200	58 8 10			+10 + 4	5
7	042138	15.8N 133.2E	1500FT	1009		40 020 60	040 31 020	90 20 20			+29 +29 +23	6
8	042336	15.6N 133.3E	1500FT	1010		40 290 40	020 33 290	40 20 20			+28 +29 +24	6

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				
MD/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND		
121412Z	8.6	142.8	20	8.0	8.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.0	0.	-0.	0.	
121418Z	9.3	141.2	20	8.0	8.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.0	0.	-0.	0.	
121500Z	10.0	139.8	25	8.0	8.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.0	0.	-0.	0.	
121506Z	10.0	139.5	25	8.0	8.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.0	0.	-0.	0.	
121512Z	11.4	137.2	30	8.0	8.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.0	0.	-0.	0.	
121518Z	11.0	135.9	35	8.0	8.0	0.	-0.	0.	0.0	0.	0.	0.	0.	0.	0.	0.0	0.	-0.	0.	
121602Z	12.2	134.8	40	12.1	134.8	40.	6.	8.	12.7	131.2	60.	17.1	5.	13.4	126.5	65.	55.5	40.	0.0	0.0
121608Z	12.9	133.9	45	12.0	134.0	40.	8.	-5.	14.8	132.3	60.	63.	15.	15.5	130.0	60.	58.9	45.	0.0	0.0
121612Z	13.5	133.6	45	13.0	133.7	45.	19.	8.	16.0	129.7	55.	236.	20.	0.0	0.0	8.	-0.	0.	0.0	0.
121618Z	14.1	133.4	50	14.6	133.1	45.	35.	-5.	16.7	129.4	55.	328.	25.	0.0	0.0	0.	-0.	0.	0.0	0.
121700Z	14.7	133.3	55	14.6	133.2	55.	8.	0.	16.1	131.9	55.	313.	30.	0.0	0.0	0.	-0.	0.	0.0	0.
121706Z	15.2	133.3	45	15.6	133.0	55.	30.	10.	17.1	131.3	55.	499.	40.	0.0	0.0	0.	-0.	0.	0.0	0.
121710Z	16.1	133.8	35	15.6	133.2	50.	46.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.
121718Z	16.8	135.1	30	16.2	133.3	45.	110.	15.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.
121800Z	17.3	137.2	25	17.7	136.4	35.	52.	10.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.
121806Z	17.6	140.0	15	17.7	140.0	20.	6.	5.	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.	268.	572.	0.	0.	0.	0.	0.
Avg Right Angle Error	16.	151.	239.	0.	0.	0.	0.	0.
Avg Intensity Magnitude Error	7.	23.	43.	0.	0.	0.	0.	0.
Avg Intensity Bias	5.	23.	43.	0.	0.	0.	0.	0.
Number of Forecasts	10	6	2	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 1165. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

**TROPICAL STORM THELMA
FIX POSITIONS FOR CYCLONE NO. 24**

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
1	130900	7.2N 151.8E	PCN 6		ULCC FIX	PGTW
2	132021	10.9N 145.9E	PCN 6			PGTW
3	140035	6.9N 148.4E	PCN 6	T0.5/0.5	INIT OBS ULCC FIX 11.0N 150.3	PGTW
4	140300	6.8N 148.0E	PCN 6		ULCC 11.0N 149.2E	PGTW
5	140500	12.2N 148.5E	PCN 6		ULCC FIX	PGTW
6	140955	9.5N 145.3E	PCN 6		ULCC FIX	PGTW
7	141600	9.5N 142.1E	PCN 6		ULCC FIX	PGTW
8	141753	9.6N 141.4E	PCN 6			PGTW
9	142100	10.1N 139.9E	PCN 6			PGTW
10	142235	9.0N 140.2E	PCN 5			PGTW
* 11	150015	7.7N 140.8E	PCN 5	T1.0/1.0 /D0.5/24HRS		PGTW
12	150637	10.0N 138.5E	PCN 6		ULCC FIX	PGTW
13	150840	11.0N 137.7E	PCN 6		ULCC FIX	PGTW
14	150933	11.2N 137.4E	PCN 6		ULCC FIX	PGTW
15	151200	11.5N 136.9E	PCN 6		ULCC FIX	PGTW
16	151255	11.5N 136.5E	PCN 6		ULCC FIX	PGTW
17	151600	12.5N 135.8E	PCN 6	T2.5/2.5	INIT OBS	PGTW
18	151922	12.5N 135.0E	PCN 5			PGTW
19	152128	12.4N 134.6E	PCN 5			PGTW
20	160136	12.1N 134.4E	PCN 5	T2.5/2.5 /D1.5/25HRS		PGTW
21	160300	12.4N 134.3E	PCN 6			PGTW
22	160625	13.0N 134.0E	PCN 3			PGTW
23	160900	13.3N 133.8E	PCN 6			PGTW
24	161001	13.4N 133.8E	PCN 6			PGTW
25	161200	13.8N 133.7E	PCN 6			PGTW
26	161417	13.9N 133.5E	PCN 6		ULCC FIX	PGTW
27	161600	14.4N 133.3E	PCN 6	T3.0/3.0 /D0.5/24HRS		PGTW
28	161800	14.6N 133.1E	PCN 6		ULCC FIX	PGTW
29	161909	14.7N 133.0E	PCN 5			PGTW
* 30	162059	15.4N 132.9E	PCN 6			PGTW
31	162332	14.9N 133.2E	PCN 6	T3.0/3.0 /D0.5/22HRS		PGTW
32	162333	14.5N 133.6E	PCN 3	T3.0/3.0 /D1.0/22HRS		RPMK
33	170300	15.5N 133.4E	PCN 6			PGTW
34	170613	15.6N 133.2E	PCN 5			PGTW
35	170613	15.5N 133.2E	PCN 5	T2.0/2.0	INIT OBS	RDN

36	170939	15.9N 133.3E	PCN 5												PGTW
37	171031	16.1N 133.5E	PCN 5												PGTW
38	171356	15.8N 133.7E	PCN 5												PGTW
39	171600	15.8N 135.2E	PCN 6												PGTW
40	171857	16.2N 135.6E	PCN 5	T2.8/3.0	AJ1.0/27HRS										PGTW
41	172311	17.7N 136.8E	PCN 5	T1.5/2.5	AJ1.5/24HRS										PGTW
42	180056	17.9N 137.0E	PCN 5												PGTW
43	180308	18.1N 139.1E	PCN 6												PGTW

ULCC FIX

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/TATION	EYE TEMP (C) OUT/ IN/ DP/SST	MSN NO.
1	160055	12.1N 134.8E	1500FT	996	45 130 07	220 42 130 7 10 2					+24 +26 +25 28	3
2	162115	14.3N 133.2E	700MB	3028	50 270 9	210 45 090 13 5 2					+10 +16 +18	4
3	170008	14.6N 133.2E	700MB	3045	990	55 210 3 030	27 270 125 4 1	CIRCULAR	12			
4	171000	15.4N 133.2E	700MB	3067	1000		170 38 100 11 15 2			+14 +14 +7	5	
5	180319	17.5N 139.1E	1500FT		1005	25 280 78 020	24 288 70 5 10			+25 +26 +23	7	
6	180547	17.6N 139.9E	1500FT		1004	28 040 30 350	21 040 120 5 10			+28 +28 +22	7	

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

**TROPICAL DEPRESSION 02
BEST TRACK DATA**

BEST TRACK				WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST					
MD/DA/HR	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND			
083006Z	18.1 186.8	20	0.0	0.8	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	-0.	0.		
083012Z	18.7 185.7	20	0.0	0.8	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	-0.	0.		
083018Z	11.2 184.5	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.		
083100Z	11.7 183.6	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.		
083106Z	12.0 182.7	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.		
083112Z	12.4 181.9	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.		
083118Z	12.7 181.2	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.		
080100Z	13.0 180.7	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.		
080106Z	13.3 180.3	30	13.3	179.8	30.	29.	0.	14.8	177.3	35.	110.	18.	15.9	175.7	40.	276.	20.	0.0	0.	-0.	0.
080112Z	13.5 180.1	30	13.5	179.5	30.	35.	0.	14.8	177.9	35.	99.	18.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.
080118Z	13.8 179.9	30	13.8	179.9	30.	0.	0.	16.1	179.2	35.	227.	18.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.
080200Z	13.8 179.4	30	14.0	179.1	30.	21.	0.	15.2	177.5	30.	230.	18.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.
080206Z	13.6 178.9	25	13.7	180.5	30.	93.	5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.
080212Z	13.2 178.3	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.
080218Z	12.8 177.3	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.
080300Z	11.5 176.5	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.
080306Z	11.3 175.7	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.

WRNG	ALL FORECASTS			WRNG	TYPHOONS WHILE OVER 35 KTS		
	24-HR	48-HR	72-HR		24-HR	48-HR	72-HR
Avg Forecast Posit Error	36.	168.	276.	0.	0.	0.	0.
Avg Right Angle Error	17.	117.	205.	0.	0.	0.	0.
Avg Intensity Magnitude Error	1.	18.	20.	0.	0.	0.	0.
Avg Intensity Bias	1.	18.	20.	0.	0.	0.	0.
Number of Forecasts	5	4	1	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 773. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 8. KNOTS

**TROPICAL DEPRESSION TD02C
FIX POSITIONS FOR CYCLONE NO. 2**

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
1	300546	10.2N 173.9W	PCN 6	T1.5/1.5		KGWC
2	301826	11.1N 174.8W	PCN 6	T1.5/1.5		KGWC
3	301845	11.0N 177.5W		T2.0/2.0 /00.5/03HRS	INIT OBS	PHNL
4	302145	11.0N 176.7W		T2.0/2.0 /00.0/02HRS		PHNL
5	302345	12.0N 176.6W		T2.0/2.0 /00.5/03HRS		PHNL
6	310245	12.0N 177.0W	PCN 6	T2.5/2.5 /00.5/03HRS		PHNL
7	310528	12.4N 177.9W	PCN 6	T2.5/2.5 /D1.0/24HRS		KGWC
8	310545	12.6N 177.0W		T2.5/2.5 /S0.0/03HRS		PHNL
9	311145	12.8N 177.4W		T2.5/2.5 /S0.0/06HRS		PHNL
10	311540	12.2N 177.9W	PCN 6		ULAC 12.9N 178.3W	KGWC
11	311805	12.2N 177.6W	PCN 6			KGWC
12	311815	12.5N 178.2W		T3.0/3.0 /D0.5/06HRS		PHNL
13	312345	12.6N 180.0W		T3.0/3.0 /S0.0/06HRS		PHNL
14	010000	12.8N 179.7W	PCN 6	T2.0/2.0	INIT OBS	PGTW
15	010249	13.1N 179.6W	PCN 6	T2.5/2.5 /S0.0/24HRS	ULAC 13.2N 179.8W	KGWC
16	010300	13.1N 179.9W	PCN 6		ULCC FIX	PGTW
17	010545	12.3N 179.7E		T3.0/3.0 /S0.0/06HRS		PHNL
18	010600	12.9N 179.6W	PCN 6			PGTW
19	010900	13.1N 179.8W	PCN 6			PGTW
* 20	011145	11.5N 176.5E		T3.0/3.0 /S0.0/06HRS		PHNL
* 21	011200	13.3N 178.6E	PCN 6	T1.5/1.5	INIT OBS	PGTW
22	011534	13.5N 179.7W	PCN 6		ULAC 12.7N 178.0W	KGWC
23	011600	13.5N 179.3W	PCN 6			PGTW
24	011744	13.5N 179.2W	PCN 6			KGWC
25	011745	13.8N 179.9E		T2.5/3.0 /W0.5/06HRS		PHNL
26	011800	14.0N 179.4W	PCN 6			PGTW
27	012100	14.0N 179.6W	PCN 6			PGTW
28	012345	13.6N 179.6E		T2.0/2.5 /W0.5/06HRS		PHNL
29	020000	13.9N 179.9E	PCN 6			PGTW
30	020236	13.4N 179.8W	PCN 6	T2.0/2.5 /W0.5/24HRS		KGWC
31	020300	13.8N 179.4E	PCN 6	T1.5/1.5	INIT OBS	PGTW
32	020600	13.7N 179.5E	PCN 6			PGTW
33	020624	13.1N 179.7W	PCN 4		EXP LLCC	KGWC

34	021521	12.9N	177.8E	PCN 4		KGWC
35	021723	12.4N	177.3E	PCN 4		KGWC
* 36	030224	13.9N	176.1E	PCN 4	TB.5/1.5 /W1.5/24HRS	KGWC
37	030308	12.8N	175.9E	PCN 4		PGTW

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

TROPICAL CYCLONE 81-83
BEST TRACK DATA

MD/DA/HR	BEST TRACK				WARNING				24 HOUR FORECAST				48 HOUR FORECAST				72 HOUR FORECAST			
	POSIT	WIND	POSIT	WIND	ERRORS	POSIT	WIND	DST	POSIT	WIND	DST	WIND	POSIT	WIND	DST	POSIT	WIND	DST	WIND	
080900Z	22.0	65.6	25	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	-0.	0.
080906Z	21.5	64.2	25	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	-0.	0.
080912Z	21.2	62.9	30	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	-0.	0.
080918Z	20.9	61.7	40	8.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.0	0.	-0.	0.
081000Z	20.8	60.2	45	21.5	61.0	40.	61.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	0.
081006Z	20.7	58.9	40	20.2	58.5	45.	37.	5.	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	0.
081012Z	20.4	57.6	35	19.9	58.2	38.	45.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.	0.0	0.	-0.	0.	0.

	ALL FORECASTS				TYPHOONS WHILE OVER 35 KTS			
	WRNG	24-HR	48-HR	72-HR	WRNG	24-HR	48-HR	72-HR
Avg Forecast Posit Error	48.	0.	0.	0.	0.	0.	0.	0.
Avg Right Angle Error	35.	0.	0.	0.	0.	0.	0.	0.
Avg Intensity Magnitude Error	5.	0.	0.	0.	0.	0.	0.	0.
Avg Intensity Bias	-2.	0.	0.	0.	0.	0.	0.	0.
Number of Forecasts	3	0	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 461. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 13. KNOTS

TC01A
FIX POSITIONS FOR CYCLONE NO. 1

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	090240	22.0N 65.1E	PCN 5	T1.5/1.5	INIT OBS ULAC 21.3N 64.4E	KGWC
2	091057	21.2N 63.3E	PCN 5		ULAC 22.0N 63.5E	KGWC
3	091450	21.4N 62.5E	PCN 5			KGWC
4	100149	21.0N 59.2E	PCN 6	T1.0/1.0 100.5/24HRS	ULAC 20.3N 59.6E	KGWC
5	100414	19.7N 58.8E	PCN 5		ULAC 20.6N 54.2E	KGWC
6	101045	19.7N 58.4E	PCN 5		ULAC 20.4N 59.3E	KGWC
7	101429	21.4N 57.6E	PCN 5		ULAC 21.1N 59.1E	KGWC

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

TROPICAL CYCLONE 02-83
BEST TRACK DATA

MO/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST					
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND
100100Z	18.2	88.6	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100105Z	18.1	88.3	25	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100112Z	18.1	87.9	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100118Z	18.0	87.6	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100200Z	18.0	87.2	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100206Z	17.9	86.7	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100212Z	17.9	86.2	30	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100218Z	17.9	85.7	35	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100300Z	17.9	85.2	45	18.3	85.3	45	25	0.	19.8	84.8	35	162	-10	0.0	0.0	0.	-0.	0.
100306Z	17.9	84.8	50	18.6	85.1	50	45	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100312Z	17.9	84.3	50	18.3	84.4	50	25	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100318Z	18.0	83.3	50	18.2	83.2	50	13	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	-0.	0.
100400Z	18.5	82.3	45	18.6	82.4	45	8	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.	162.	0.	0.	0.	0.	0.	0.
Avg Right Angle Error	25.	114.	0.	0.	0.	0.	0.	0.
Avg Intensity Magnitude Error	0.	18.	0.	0.	0.	0.	0.	0.
Avg Intensity Bias	0.	-10.	0.	0.	0.	0.	0.	0.
Number of Forecasts	5	1	0	0	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 370. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 5. KNOTS

TC02B-83
FIX POSITIONS FOR CYCLONE NO. 2

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACCRY	DVORAK CODE	COMMENTS	SITE
1	272348	16.0N 94.0E	PCN 6	T1.0/1.0	INIT OBS	KGWC
2	282327	15.7N 90.5E	PCN 6	T1.0/1.0 /S0.0/24HRS	ULAC 15.0N 91.6E	KGWC
3	300047	18.1N 89.5E	PCN 5	T1.5/1.5 /D0.5/25HRS		KGWC
4	010026	18.9N 88.8E	PCN 5	T2.5/2.5+/D1.0/24HRS	ULAC 18.1N 87.7E	KGWC
5	010600	17.5N 88.8E	PCN 6			PGTW
* 6	010831	18.3N 86.5E	PCN 5		ULAC 17.8N 86.7E	KGWC
* 7	011306	18.0N 86.4E	PCN 6		ULAC 17.7N 86.2E	KGWC
* 8	020000	17.7N 85.1E	PCN 6			PGTW
9	020005	17.8N 87.5E	PCN 4	T3.0/3.0 /D0.5/24HRS		KGWC
10	020151	17.7N 86.8E	PCN 3			KGWC
11	020300	18.0N 86.7E	PCN 6	T2.5/2.5	INIT OBS	PGTW
12	020600	17.8N 86.0E	PCN 6		ULCC 17.6N 83.3E	PGTW
* 13	021245	17.4N 85.2E	PCN 5		ULAC 17.2N 83.8E	KGWC
14	022103	17.9N 85.5E	PCN 6			KGWC
15	022344	18.3N 85.3E	PCN 6	T3.5/3.5 /D0.5/24HRS	ULAC 17.4N 84.3E	KGWC
16	030130	18.3N 85.1E	PCN 6			KGWC
17	030948	18.0N 84.8E	PCN 3		ULAC 17.2N 83.4E	KGWC
18	031200	18.2N 83.7E	PCN 6			PGTW
19	031224	18.0N 83.9E	PCN 6		ULAC 17.8N 83.3E	KGWC
20	031410	18.0N 83.6E	PCN 4		ULAC 17.7N 83.2E	KGWC
21	031600	18.3N 82.9E	PCN 6		ULCC FIX	PGTW
22	032100	18.5N 82.0E	PCN 6		ULCC FIX	PGTW
23	032233	18.6N 82.6E	PCN 6		ULAC 17.6N 82.0E	KGWC

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

TROPICAL CYCLONE 03-83
BEST TRACK DATA

MO/DA/HR	BEST TRACK			WARNING			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST						
	POSIT	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	POSIT	WIND	DST	WIND	
110506Z	9.6	91.2	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	
110512Z	10.4	91.2	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	
110518Z	11.2	91.0	20	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	
110600Z	12.3	90.1	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	
110606Z	13.3	89.3	25	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	
110612Z	14.3	88.7	30	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	
110618Z	14.9	88.5	30	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	
110700Z	15.6	88.4	30	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	
110706Z	16.0	88.7	35	0.0	0.0	0.	-0.	0.	0.0	0.	-0.	0.	0.0	0.0	0.	0.	-0.	0.	
110712Z	16.3	89.0	35	16.2	88.8	35	13.	0.	18.0	89.4	45.	52.	0.	21.3	89.6	50.	132.	-5.	0.0
110718Z	16.6	89.3	40	17.0	89.0	35.	30.	-5.	18.9	89.8	45.	42.	-5.	20.9	90.0	50.	174.	15.	0.0
110800Z	16.9	89.6	40	17.5	89.5	40.	36.	0.	19.4	90.1	50.	33.	-5.	0.0	0.0	0.	0.	0.0	0.
110806Z	17.4	90.0	45	16.8	89.9	40.	36.	-5.	18.4	91.1	50.	127.	-5.	0.0	0.0	0.	0.	0.0	0.
110812Z	17.9	90.3	45	17.4	89.3	40.	65.	-5.	19.2	90.0	40.	189.	-15.	0.0	0.0	0.	0.	0.0	0.
110818Z	18.5	90.4	50	17.8	89.9	50.	51.	0.	19.0	90.2	50.	210.	15.	0.0	0.0	0.	0.	0.0	0.
110900Z	19.0	90.5	55	18.4	90.1	55.	43.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.	0.0	0.
110906Z	20.5	90.8	55	19.9	90.7	55.	36.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.	0.0	0.
110912Z	21.8	91.9	55	21.7	91.1	58.	45.	-5.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.	0.0	0.
110918Z	22.5	92.6	35	22.8	93.8	35.	69.	0.	0.0	0.0	0.	-0.	0.	0.0	0.0	0.	0.	0.0	0.

WRNG	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.	109.	153.	0.	0.	0.	0.
Avg Right Angle Error	21.	35.	67.	0.	0.	0.	0.
Avg Intensity Magnitude Error	2.	8.	10.	0.	0.	0.	0.
Avg Intensity Bias	-2.	-3.	5.	0.	0.	0.	0.
Number of Forecasts	10	6	2	0	0	0	0

DISTANCE TRAVELED BY TROPICAL CYCLONE IS 900. NM

AVERAGE SPEED OF TROPICAL CYCLONE IS 8. KNOTS

TC03B
FIX POSITIONS FOR CYCLONE NO. 3

SATELLITE FIXES

FIX NO.	TIME (Z)	FIX POSITION	ACRY	DVORAK CODE	COMMENTS	SITE
1	050947	10.2N 91.2E	PCN 6	T1.0/1.0		KGWC
2	052010	11.6N 90.8E	PCN 6		ULAC 12.6N 90.5E	KGWC
3	060935	14.2N 88.9E	PCN 5	T2.0/2.0 /D1.0/24HRS	ULAC 14.2N 87.8E	KGWC
4	062220	15.4N 88.4E	PCN 5			KGWC
5	070000	15.9N 88.1E	PCN 6		ULCC FIX	PGTW
6	070056	15.7N 88.4E	PCN 5			KGWC
7	070216	15.9N 88.5E	PCN 5			KGWC
8	070300	15.7N 88.1E	PCN 6			PGTW
* 9	070600	15.5N 87.6E	PCN 6			PGTW
* 10	070900	15.5N 87.3E	PCN 5			PGTW
11	070923	15.8N 88.8E	PCN 5	T3.0/3.0 /D1.0/24HRS		KGWC
12	071154	16.4N 89.0E	PCN 6		ULAC 16.1N 89.2E	KGWC
* 13	071200	15.6N 87.1E	PCN 6			PGTW
14	071315	16.5N 89.1E	PCN 6		ULAC 16.4N 89.6E	KGWC
* 15	071900	16.7N 87.5E	PCN 6			PGTW
16	072100	16.9N 89.3E	PCN 6			PGTW
17	072207	16.6N 89.1E	PCN 5			KGWW
18	080000	17.3N 89.7E	PCN 6			PGTW
19	080035	16.4N 90.4E	PCN 5		ULAC 17.6N 89.6E	KGWC
20	080154	16.4N 90.1E	PCN 5		ULAC 17.4N 89.4E	KGWC
21	080300	16.6N 89.0E	PCN 6			PGTW
22	080600	17.1N 89.2E	PCN 6	T3.0/3.0	INIT OBS	PGTW
23	080900	17.2N 89.3E	PCN 6			PGTW
24	080910	17.4N 89.5E	PCN 5	T3.5/3.5 /D0.5/24HRS	ULAC 17.5N 89.2E	KGWC
25	081200	17.4N 89.3E	PCN 6			PGTW
26	081315	17.2N 89.8E	PCN 5			KGWC
27	081600	17.7N 89.7E	PCN 6	T3.0/3.0	INIT OBS	PGTW
28	081800	17.8N 89.9E	PCN 6			PGTW
29	082100	18.1N 90.3E	PCN 6			PGTW
30	082155	18.8N 90.6E	PCN 6			KGWC
31	090000	18.4N 90.4E	PCN 6		ULCC FIX	PGTW
32	090014	18.7N 91.2E	PCN 6		ULAC 19.0N 91.0E	KGWC
33	090133	19.1N 90.4E	PCN 5			KGWC

34	090300	18.9N	90.5E	PCN 6		PGTW
35	090600	20.4N	90.9E	PCN 6		PGTW
36	090838	21.2N	91.3E	PCN 5	T4.0/4.0 /D0.5/24HRS	KGUC
37	091200	21.7N	91.1E	PCN 6		PGTW
38	091253	22.1N	92.8E	PCN 5		KGUC
39	091600	22.4N	93.2E	PCN 6		PGTW
40	091800	22.9N	94.6E	PCN 6		PGTW

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