

CHAPTER VI - TROPICAL CYCLONE CENTER FIX DATA

1. INTRODUCTION

During the 1977 storm season, 2373 fixes on the 21 northwest Pacific area tropical cyclones and 180 fixes on the North Indian Ocean area tropical cyclones were collected at Fleet Weather Central/Joint Typhoon Warning Center, Guam. Table 6-1, Fix Platform Summary, delineates the number of fixes by platform for each tropical cyclone as well as season

totals. A discussion of the various reconnaissance platforms is presented in Chapter II.

Fix totals as listed in Table 6-1 include all fixes received from primary and secondary sources whether real-time or after-the-fact of which all were used for post-storm analyses. Therefore, totals are in some instances, larger than those listed and evaluated in previous chapters of this report.

TABLE 6-1. FIX PLATFORM SUMMARY

AIRCRAFT	FIX PLATFORM						TOTAL NO. OF FIXES	
	DMSP	NOAA	SMS	LRDR	SHIP RADAR	ACR		
<u>WESTERN PACIFIC</u>								
TS PATSY	7	18	39	5	-	-	69	
TD 02	4	22	5	-	-	-	31	
TS RUTH	2	38	21	-	8	-	70	
TD 04	2	21	6	2	-	-	31	
TY SARAH	13	52	24	-	1	-	90	
TY THELMA	10	74	22	-	20	-	126	
TY VERA	13	54	26	-	67	-	160	
TS WANDA	8	39	26	-	-	-	73	
TS AMY	3	50	18	-	39	-	110	
TY BABE	19	141	39[3]	-	88	-	287	
TS CARLA	1	44	10[1]	-	-	-	55	
TY DINAH	14	123	43[4]	-	41	4	225	
TS EMMA	8	71	25[1]	-	14	-	118	
TS FREDA	2	32	8[1]	-	11	1	54	
TY GILDA	12	47	36[5]	-	-	-	95	
TS HARRIET	11	36	21[4]	-	-	-	68	
TY IVY	9	57	13[1]	-	-	-	79	
TY JEAN	3	59	12[1]	-	-	-	74	
TY KIM	31	71	51[3]	-	70	-	223	
TY LUCY	19	64	43[1]	-	-	-	126	
TY MARY	20	86	54[7]	23	26	-	209	
TOTAL	211	1199	542[32]	30	385	5	1	2373
% OF TOTAL NO. OF FIXES	8.9%	50.5%	22.8%	1.26%	16.2%	.2%	.04%	100%
<u>TROPICAL CYCLONE</u>								
17-77		13	8					21
18-77		13	8					21
19-77		27	8					35
21-77		46	20[3]					66
22-77		26	11[2]					37
TOTAL		125	55[5]					180
% OF TOTAL NO. OF FIXES		69.4%	30.6%					100%

[] - FIXES RECEIVED FROM FWF SUITLAND IN END-OF-STORM SUMMARY PACKET AFTER BEST-TRACK COMPLETED AND ARE LISTED AT THE END OF SECTIONS 3 AND 4 RESPECTIVELY.

2. FORMAT

The fix data are divided into two groups by geographical area and sequentially ordered within each group. For all types of fixes, the first four columns tabulate information in the following format:

FIX NO. - Fixes are numbered sequentially.

TIME - Day, hour and minutes (GMT) of fix.

POSIT - Position of storm center in degrees and tenths.

FIXCAT - Type of fix used (SAT - satellite, P - aircraft penetration, LRDR - land radar, ACR - aircraft radar, SRDR - ship radar).

The format of the remainder of the print-out varies with the type of fix.

a. **SATELLITE** - Intensity estimates and trends from visual data (when available) are listed as derived from the Dvorak technique (NOAA TM; NESS - 45). Fix data from NOAA-4 and NOAA-5 satellites are appropriately labeled and indicate confidence numbers (CONF) if the U. S. Navy Fleet Weather Facility, Suitland, MD provided the data (see Table 6-2), or Position Code Number (PCN) if USAF DMSP sites provided the data. Fixes based on IR data are appropriately annotated with IR DATA. Geosynchronous Meteorological Satellite (SMS-2) data are noted as such and may contain occasional narrative comments and accuracy estimates.

b. **RADAR** - The latitude and longitude of the radar sites are given in the POSIT OF RADAR column. If available, plain language remarks regarding the size, accuracy, and echo characteristics of the fix appear as received. Radar data sites using the standard World Meteorological Organization (WMO)

Code include a five-digit code group for reporting tropical cyclone characteristics of size, appearance and accuracy of location of the center or eye.

c. **AIRCRAFT PENETRATION** - Complete eye/center fix reports are obtained at levied fix times. Supplemental fixes are sometimes made during peripheral data gathering legs between scheduled fixes. These normally provide date, time and location only.

The categories of aircraft reconnaissance information are as follows:

(1) **ACCRY** (Accuracy): The estimated navigation (first number) and meteorological (second number) accuracies are expressed in nautical miles.

(2) **FIX LVL** (Fix level): A constant-pressure-surface flight level (listed in mb) is normally maintained during a tropical cyclone fix mission. Low-level missions are usually flown at 1500 feet (457 m). This altitude, however, is not normally constant due to maneuvers to avoid turbulence and to maintain visual contact of the ocean surface.

(3) **MAX OBS FLT LVL WIND**: Wind speed (knots) at flight level is measured by the AN/APN 147 doppler radar system aboard the WC-130 aircraft. Values entered in this category represent the maximum wind measured prior to obtaining a scheduled fix. This measurement may not represent the maximum flight level wind associated with the tropical cyclone because the aircraft only samples those portions of the tropical cyclone along the flight path. In many instances the flight path may be through the weak sector of the cyclone. In areas of heavy rainfall, the doppler radar may track energy reflected from precipitation rather than from the sea surface; thus preventing accurate wind speed measurement. In obvious cases such erroneous wind data will not be reported. In addition, the doppler radar system on the WC-130 re-

TABLE 6-2. CONFIDENCE (CONF) NUMBERS AS A FUNCTION OF DVORAK T NUMBER AND RADIUS OF 90% PROBABILITY AREA (NM).

TROPICAL CYCLONE INTENSITY	CONF (1)	CONF (2)	CONF (3)
T1.5	60	120	170
T2.0	60	120	170
T2.5	60	120	170
T3.0	50	100	150
T3.5	45	90	140
T4.0	45	90	140
T4.5	45	90	140
T5.0	40	90	130
T5.5	40	80	130
T6.0	40	80	130
T6.5	30	70	120
T7.0	30	70	120
T7.5	30	60	100
T8.0	30	60	100

stricts wind measurements to drift angles less than or equal to 27 degrees if the wind is normal to the aircraft heading.

(4) MAX OBS SFC WIND: The maximum surface wind (knots) is an estimate made by the Airborne Weather Reconnaissance Officer (ARWO) based on sea state. This observation is limited to the region of the flight path, and may not be representative of the entire storm. Availability of data is also dependent upon the absence of undercast conditions and the presence of adequate illumination. The positions of the maximum flight level wind and the maximum observed surface wind do not necessarily coincide.

(5) OBS MIN SLP: The minimum observed sea level pressure on a 700 mb fix mission is obtained by applying the minimum 700 mb height to the following regression equation:

$$SLP \text{ (MB)} = .115 \text{ (700 mb HGT [M])} + 645$$

This relationship is accurate within +3 mb in most cases. However, if the 700 mb center and the surface center are not vertically aligned, the minimum sea level pressure will be erroneously high. If the surface center can be visually detected (e.g.

in the eye), the minimum sea level pressure is obtained by a dropsonde released above the surface vortex center.

If the fix is made at the 1500 foot level, the sea level pressure is extrapolated from that level.

(6) MIN 700 MB HGT: The minimum height of the 700 mb surface in the vortex center is recorded in decameters.

(7) FLT LVL TI/TO: This category denotes the maximum temperature measured in the center (TI) and the ambient temperature outside the center (TO). The outside temperature is measured just prior to entering the wall cloud. Both temperature observations are in degrees Celsius and are made at flight level. Reconnaissance aircraft seldom penetrate on the same azimuth from one fix to another; thus, the position of TO normally varies both in bearing and range from the center.

(8) EYE FORM/ORIENTATION/DIA: The shape and diameter (nm) of the eye is determined by visual observation or by radar presentation analysis. This is reported only if the center is 50% or more surrounded by wall cloud. For elliptical eyes, the size of both major and minor axes are given in nm.

3. WESTERN NORTH PACIFIC FIX DATA

TROPICAL STORM PAISY FIX POSITIONS FOR CYCLONE NO. 1 0000Z 23 MAR TO 0000Z 31 MAR																		
FIX NO.	TIME	POSIT	FIX ACCUR	FIX CAT	FLX LVL	LVL	DIA	VEL	BHG	HNG	VEL	BHG	RNG	SLP	MIN	FLX	PUSIT UF RADAR	MSN NMR
1	212124Z	1.1N 166.4E	SAT	(T2.0/2.0 / / HHS)										NOAA-5	(CONF 01)			
2	212129Z	1.5N 166.3E	SAT	(T1.0/1.0 / / HHS)										PCN 5	NOAA-5			
3	221005Z	1.6N 166.0E	SAT	(IR DATA)											NOAA-5	(CONF 02)		
4	221004Z	1.9N 166.1E	SAT	(IR DATA)											NOAA-5			
5	222051Z	2.9N 166.2E	SAT	(T2.0/2.0 / / HHS)										PCN 6	UMSP			
6	222239Z	4.0N 163.9E	SAT	(T2.5/2.5 /00.5/25HRS)											NOAA-5	(CONF 02)		
7	222242Z	2.6N 164.2E	SAT	(IR DATA)											NOAA-5			
8	230237Z	2.6N 165.1E	P	15 5 1500 280 42 190 30 35 230 15 - - - 24 23 - - -													1	
9	230753Z	3.0N 163.5E	SAT	(IR DATA)										PCN 6	UMSP			
10	230921Z	3.5N 163.1E	SAT	(IR DATA)										PCN 6	NOAA-5			
11	230922Z	3.0N 162.1E	SAT	(IR DATA)										PCN 6	NOAA-5			
12	230924Z	3.5N 163.0E	SAT	(IR DATA)											NOAA-5	(CONF 02)		
13	232119Z	3.4N 163.5E	SAT	(IR DATA)											SMS-2			
14	232034Z	2.7N 164.5E	SAT	(T1.5/2.0 / / HHS)										PCN 6	UMSP			
15	232039Z	3.8N 162.2E	SAT	(T2.0/2.0 /S /24HRS)										PCN 6	UMSP			
16	232156Z	3.8N 162.5E	SAT	(T1.5/2.0 /W1.0/24HRS)											NOAA-5	(CONF 01)		
17	232158Z	3.6N 165.4E	SAT	(IR DATA)										PCN 3	NOAA-5			
18	232159Z	3.5N 165.0E	SAT	(IR DATA)										PCN 6	NOAA-5			
19	240406Z	3.7N 164.8E	P	20 15 700 280 45 220 35 40 290 10 1002 312 10 10 - - -													2	
20	240741Z	3.4N 164.2E	SAT	(IR DATA)										PCN 6	UMSP			
21	240838Z	3.8N 165.1E	SAT	(IR DATA)										PCN 6	NOAA-5			
22	241134Z	3.7N 165.1E	SAT	(IR DATA)										PCN 6	NOAA-5			
23	241035Z	3.5N 163.0E	SAT	(IR DATA)											NOAA-5	(CONF 01)		
24	242027Z	4.1N 165.3E	SAT	(IR DATA)										PCN 6	UMSP			
25	242027Z	4.1N 165.5E	SAT	(T 0/1.0 /W1.5/24HRS)										PCN 6	UMSP			
26	242114Z	*.1N 165.5E	SAT	(T 0/1.0 /W2.0 /24HRS)										PCN 6	NOAA-5			
27	242114Z	4.1N 165.4E	SAT	(IR DATA)										PCN 6	NOAA-5			
28	250950Z	4.1N 165.3E	SAT	(IR DATA)										PCN 6	NOAA-5			
29	250950Z	2.3N 164.0E	SAT	(IR DATA)										PCN 6	NOAA-5			
30	252226Z	2.0N 163.0E	SAT	(T2.0/2.0 /D0.5/24HRS)											NOAA-5	(CONF 02)		
31	252226Z	2.0N 163.2E	SAT	(T2.0/2.0 /D2.0/24HRS)										PCN 5	NOAA-5			
32	260115Z	1.7N 163.2E	SAT	(T1.0/2.0 / / HHS)											SMS-2			
33	260858Z	2.1N 162.5E	SAT	(IR DATA)										PCN 6	UMSP			
34	260859Z	2.0N 162.3E	SAT	(IR DATA)										PCN 6	UMSP			
35	260906Z	2.2N 162.3E	SAT	(IR DATA)										PCN 6	NOAA-5			
36	262019Z	2.4N 161.8E	SAT	(T2.5/2.5 / / HHS)											SMS-2			
37	262142Z	3.5N 161.6E	SAT	(T3.0/3.0 /D1.0/24HRS)											NOAA-5	(CONF 01)		
38	262142Z	3.3N 161.5E	SAT	(T3.0/3.0 /D1.0/24HRS)										PCN 5	NOAA-5			
39	262142Z	2.9N 161.7E	SAT	(T2.5/2.5 / / HRS)										PCN 6	NOAA-5			
40	270115Z	3.7N 161.1E	SAT	(T3.0/3.0 /D2.0/24HRS)											SMS-2			
41	270846Z	4.1N 160.6E	SAT	(IR DATA)										PCN 6	UMSP			
42	270847Z	4.0N 160.2E	SAT	(IR DATA)										PCN 6	UMSP			
43	271018Z	4.2N 160.0E	SAT	(IR DATA)										PCN 5	NOAA-5			
44	272019Z	4.8N 159.0E	SAT	(T1.5/2.5 /S /24HRS)											NOAA-5	(CONF 02)		
45	272257Z	5.6N 159.2E	SAT	(T1.5/2.5 /D1.5/24HRS)													5	
46	272254Z	5.5N 159.3E	SAT	(IR DATA)										PCN 5	NOAA-5			
47	272255Z	5.3N 159.2E	SAT	(T3.5/3.5 /D0.5/25HRS)													4	
48	272311Z	5.7N 159.1E	P	7 5 700 320 60 240 5 65 120 10 981 292 19 9 ELIP N-S 15x10													6	
49	280415Z	6.3N 158.4E	P	10 4 700 30 30 250 10 55 250 10 997 309 11 9 CIRC 15														
50	280834Z	6.6N 158.4E	SAT	(IR DATA)										PCN 6	UMSP			
51	280435Z	6.2N 158.4E	SAT	(IR DATA)										PCN 6	UMSP			
52	280934Z	6.3N 158.2E	SAT	(IR DATA)										PCN 6	NOAA-5			
53	281433Z	6.9N 157.2E	P	10 4 700 230 50 150 10 - - - 999 308 15 11 - - -														
54	282127Z	7.1N 156.6E	SAT	(IR DATA)										PCN 5	UMSP			
55	282207Z	7.5N 156.5E	SAT	(T1.5/2.5 /W3.0/24HRS)											NOAA-5	(CONF 01)		
56	282211Z	7.1N 156.6E	SAT	(T3.5/3.5 /S /24HRS)										PCN 5	NOAA-5			
57	290407Z	8.1N 154.6E	P	4 25 700 200 28 90 80 20 70 30 1005 312 11 9 - - -													7	
58	290822Z	8.3N 154.8E	SAT	(IR DATA)										PCN 6	UMSP			
59	290853Z	9.0N 154.0E	SAT	(IR DATA)											NOAA-5	(CONF 02)		
60	291047Z	8.6N 154.6E	SAT	(IR DATA)										PCN 6	NOAA-5			
61	291444Z	8.8N 153.8E	P	1 20 700 990 15 360 15 - - - 1003 312 11 10 - - -													8	
62	292107Z	8.2N 154.1E	SAT	(T1.0/1.0 / / HHS)										PCN 6	UMSP			
63	292108Z	8.6N 154.5E	SAT	(T1.0/2.0 /W2.5/23HRS)										PCN 5	UMSP			
64	292314Z	9.9N 154.5E	SAT	(T2.0/2.5 /D0.5/25HRS)											NOAA-5	(CONF 01)		
65	292323Z	8.0N 155.0E	SAT	(IR DATA)										PCN 5	NOAA-5			
66	301003Z	8.2N 155.0E	SAT	(IR DATA)										PCN 6	NOAA-5			
67	301006Z	10.0N 154.3E	SAT	(IR DATA)											NOAA-5	(CONF-02)		
68	302056Z	8.0N 149.0E	SAT	(T 0/1.0 /W1.0/24HRS)										PCN 6	UMSP			
69	302236Z	9.6N 151.0E	SAT	(T1.0/1.5 /W1.0/23HRS)											NOAA-5	(CONF-02)		

TROPICAL DEPRESSION 2 FIX POSITIONS FOR CYCLONE NO. 2 0000Z 26 MAY TO 0600Z 27 MAY														
FIX NO.	TIME	POSIT	FIX CAT	ACCRY	MAX OBS	MAX OBS	OBS	MIN	FLT	POSIT OF RADAR	MSN NMBR			
			NAV-MET	LVL	FLT LVL WIND	SLP	MIN	700MB	LVL	EYE	ORIENT. LAT/UN	EYE DIA		
					VEL VEL BRG RNG	VEL BRG RNG	HGT	TI/TB	FORM					
1	232348Z	18.3N 124.8E	SAT	(IR 0/ 0 / / HRS)	PCN 5	NOAA-5								
2	240206Z	18.3N 125.0E	SAT	(IR DATA)	PCN 5	UMSP								
3	242322Z	15.2N 128.2E	SAT	(T1.0/1.0 / / HRS)	PCN 5	UMSP								
4	250054Z	16.5N 128.5E	SAT	(T1.0/1.0 / / HRS)	NOAA-5	(CONF 01)								
5	250100Z	16.5N 128.4E	SAT	(T1.0/1.0 / / HRS)	PCN 5	UMSP								
6	251025Z	16.6N 128.3E	SAT	(IR DATA)	PCN 5	UMSP								
7	251025Z	15.9N 127.7E	SAT	(IR DATA)	PCN 5	UMSP								
8	251140Z	16.3N 128.2E	SAT	(IR DATA)	PCN 6	UMSP								
9	251145Z	16.5N 128.0E	SAT		NOAA-5	(CONF 02)								
10	251440Z	17.0N 128.3E	SAT	(IR DATA)	PCN 6	UMSP								
11	252309Z	18.7N 127.4E	SAT	(T2.0/2.0 / / D1.0/24HRS)	PCN 5	UMSP								
12	252310Z	18.5N 127.4E	SAT	(IR DATA)	PCN 5	UMSP								
13	260010Z	18.1N 127.5E	SAT		NOAA-5	(CONF 02)								
14	260017Z	19.8N 129.2E	SAT	(T2.0/2.0 / / D1.0/23HRS)	PCN 3	UMSP								
15	260030Z	19.8N 128.7E	P	6 5 1500	180 30 100	40 35 130	60 1001	-	23 24	-	-	-		
16	260320Z	20.4N 129.0E	P	5 5 700	- - -	- 10 270	20 1001	31W 13 13	-	-	-	1		
17	260322Z	20.6N 129.0E	SAT	(IR DATA)	PCN 3	UMSP								
18	260322Z	20.8N 129.1E	SAT	(IR DATA)	PCN 3	UMSP								
19	261056Z	21.8N 129.5E	SAT	(IR DATA)	PCN 5	UMSP								
20	261155Z	21.2N 129.4E	SAT	(IR DATA)	PCN 5	UMSP								
21	261155Z	22.0N 129.3E	SAT	(IR DATA)	PCN 5	UMSP								
22	261259Z	20.0N 126.9E	SAT	(IR DATA)	NOAA-5	(CONF 02)								
23	261604Z	21.8N 129.4E	SAT	(IR DATA)	PCN 5	UMSP								
24	261604Z	22.8N 129.8E	SAT	(IR DATA)	PCN 5	UMSP								
25	261811Z	23.3N 130.2E	P	5 15 700	210 28 110	30 - -	- 1003	31W 11 11	-	-	-	2		
26	262258Z	23.8N 130.5E	SAT	(IR DATA)	PCN 5	UMSP								
27	262258Z	21.5N 130.3E	SAT	(T2.0/2.0 /S /24HRS)	PCN 5	UMSP								
28	262333Z	24.5N 130.6E	SAT	(T1.0/2.0 /W1.0/24HRS)	PCN 5	UMSP								
29	270304Z	24.4N 131.0E	SAT	(T1.0/1.0 / / HRS)	PCN 5	UMSP								
30	270305Z	24.7N 130.8E	SAT	(IR DATA)	PCN 5	UMSP								
31	270415Z	25.3N 131.6E	P	5 2 1500	50 25 290	40 25 300	25 1003	- 23 23	-	-	-	3		

TROPICAL STORM KATHY																			
FIX POSITIONS FOR CYCLONE NO. 3																			
0600Z 14 JUN TO 1200Z 17 JUN																			
FIX	TIME	POSITI	FIX	AUCHY	FIX	FLT	LVL	WIND	SPL	WIND	DBS	MIN	700MB	LVL	EYE	URLEN	EYE	POSI	
NO.		CAT	NAV-MET	LVL	DIM	VEL	BHG	RNG	VEL	BHG	RNG	SLP	HGT	T1/10	FORM	LAT/	DIR	OF	
																		RADAR	
																		MSN	
																		NMBR	
1	100051	5.3N 129.0E	SAT	(T1.0/1.0 / / HRS)							NOAA-5	(CONF 01)							
2	100055	6.3N 130.4E	SAT	(T 0/ 0 / / HRS)							PCN 5	NOAA-5							
3	101135	7.0N 128.2E	SAT	(IR DATA							PCN 6	NOAA-5							
4	101134	8.5N 129.0E	SAT	(IR DATA							PCN 5	NOAA-5	(CONF 01)						
5	110008	7.5N 127.5E	SAT	(T1.0/1.0 / 5 / 24HRS)							NOAA-5	(CONF 02)							
6	110011	7.2N 126.8E	SAT	(T1.0/1.0 / D1.0/24HRS)							PCN 5	NOAA-5							
7	110204	7.4N 127.2E	SAT	(IR DATA							PCN 5	UMSP							
8	111247	8.8N 125.7E	SAT	(IR DATA							PCN 6	UMSP							
9	111445	9.6N 124.3E	SAT	(IR DATA							PCN 6	UMSP							
10	120111	12.5N 123.5E	SAT	(T2.0/2.0 / D1.0/25HRS)							NOAA-5	(CONF 01)							
11	120123	13.1N 123.1E	SAT	(T 0/ 0 / D1.0/25HRS)							PCN 5	NOAA-5	(CONF 02)						
12	120324	11.3N 125.4E	SAT	(T1.0/1.0 / / HRS)							PCN 5	UMSP							
13	121207	11.9N 123.0E	SAT	(IR DATA							PCN 5	NOAA-5	(CONF 02)						
14	130034	13.1N 114.5E	SAT	(T 1.5/1.5 / W0.5 / 24 HRS)							PCN 5	NOAA-5	(CONF 02)						
15	130039	12.4N 114.0E	SAT	(T 0/ 0 / 0 / S / 23HRS)							PCN 5	NOAA-5							
16	130310	12.9N 114.3E	SAT	(T2.0/2.0 / D1.0/24HRS)							PCN 5	UMSP							
17	131139	14.0N 117.9E	SAT								PCN 6	UMSP							
18	131147	14.7N 118.1E	SAT	(IR DATA							PCN 6	UMSP							
19	132242	15.6N 117.6E	SAT	(T2.5/2.5 / / HRS)							PCN 5	UMSP							
20	132247	14.8N 117.6E	SAT	(T2.5/2.5 / / HRS)							PCN 5	UMSP							
21	132247	14.9N 117.3E	SAT	(T3.0/3.0 / D1.0/20HRS)							PCN 5	UMSP							
22	140146	15.9N 117.0E	SAT	(T3.0/3.0 / D1.0/25HRS)							NOAA-5	(CONF 02)							
23	141128	16.6N 116.8E	SAT	(IR DATA							PCN 5	UMSP							
24	141239	17.0N 116.5E	SAT	(IR DATA							PCN 6	NOAA-5	(CONF 01)						
25	141355	16.8N 116.5E	SAT	(IR DATA							PCN 6	UMSP							
26	141534	17.7N 116.5E	SAT	(IR DATA							PCN 5	UMSP							
27	141535	18.0N 116.5E	SAT	(IR DATA							PCN 6	UMSP							
28	14223~	18.2N 116.6E	SAT	(T4.0/4.0 / D1.0/24HRS)							PCN 5	UMSP							
29	14223~	17.2N 115.9E	SAT	(T3.5/3.5 / D1.0/24HRS)							PCN 6	UMSP							
30	14223n	18.0N 116.2E	SAT	(IR DATA							PCN 5	UMSP							
31	150012?	18.2N 116.2E	SAT	(IR DATA							PCN 5	UMSP							
32	150055	18.7N 116.8E	P	5 5 700 250 75 270							7	980	291	19 15	CINC	20	1		
33	150101	18.3N 116.6E	SAT	(T3.0/3.0 / S / 23HRS)							PCN 3	NOAA-5	(CONF 01)						
34	150107	18.6N 116.9E	SAT	(IR DATA							PCN 3	NOAA-5							
35	150402	19.2N 117.0E	P	1 S 700 190 52 140							30	80	60	10	980	291	22 12	- - -	
36	150417	19.2N 116.7E	SAT	(T4.0/4.0 / / HRS)							PCN 3	UMSP						2	
37	150620	19.6N 116.8E	LRUR	- 20800														22.3N 114.2E	
38	151115	19.4N 116.8E	SAT	(IR DATA							PCN 6	UMSP							
39	151115	19.8N 116.9E	SAT	(IR DATA							PCN 6	UMSP							
40	151115	19.5N 116.5E	SAT	(IR DATA							PCN 6	UMSP							
41	151147	20.0N 116.8E	SAT	(IR DATA							PCN 5	UMSP							
42	151504	21.0N 117.7E	LRUR	- 5//														22.3N 114.2E	
43	151517	20.5N 117.1E	SAT								PCN 5	UMSP							
44	151517	20.4N 117.4E	SAT	(IR DATA							PCN 5	UMSP							
45	151517	20.8N 117.3E	SAT	(IR DATA							PCN 5	UMSP							
46	151654	21.1N 117.2E	SAT	(IR DATA							PCN 5	UMSP							
47	151722	21.1N 117.8E	AC R	-															
48	160000Z	21.3N 117.1E	SAT	(IR DATA							PCN 3	UMSP							
49	160000Z	21.1N 117.5E	LRUR	- 65//															
50	160017	22.0N 116.9E	SAT	(T2.0/3.0 / W1.0/23HRS)							NOAA-5	(CONF 01)							
51	160024	22.2N 117.7E	SAT	(T3.0/4.0 / / HRS)							PCN 5	NOAA-5							
52	160359	22.8N 118.4E	SAT	(T4.0/4.0 / / HRS)							PCN 6	UMSP							
53	160359	22.8N 118.2E	SAT	(T3.0/3.5 / W0.5/30HRS)							PCN 5	UMSP							
54	160359	23.2N 118.3E	SAT	(T3.5/4.0 / W0.5/24HRS)							PCN 3	UMSP							
55	160500Z	22.9N 118.0E	LRUR	- 259//															
56	161103	23.3N 119.2E	SAT	(IR DATA							PCN 6	UMSP							
57	161103	23.8N 118.7E	SAT								PCN 6	UMSP							
58	161103	23.5N 118.7E	SAT								PCN 6	UMSP							
59	161104	23.7N 118.3E	LRUR	- //															
60	161204	23.9N 118.5E	LRUR	- //															
61	161307	23.0N 118.0E	SAT	(IR DATA							NOAA-5	(CONF 01)							
62	161307	24.3N 118.4E	LRUR	- //															
63	161402	24.6N 118.9E	LRUR	- //															
64	161641	24.7N 119.4E	SAT	(IR DATA							PCN 5	UMSP							
65	161641	23.7N 116.9E	SAT	(IR DATA							PCN 5	UMSP							
66	162348	25.3N 119.2E	SAT	(T2.0/3.0 / W1.0/24HRS)							PCN 5	UMSP							
67	162349	25.2N 120.2E	SAT	(IR DATA							PCN 5	UMSP							
68	170136	26.7N 120.6E	SAT	(T2.0/3.0 / W1.0/25HRS)							PCN 5	NOAA-5							
69	170342	26.6N 121.2E	SAT	(IR DATA							PCN 5	UMSP							
70	170342	26.8N 121.5E	SAT	(T2.0/3.0 / W1.0/24HRS)							PCN 5	UMSP							

TROPICAL DEPRESSION 4
FIX POSITIONS FOR CYCLONE NO. 4
0000Z 05 JUL TO 0600Z 06 JUL

FIX NU.	TIME	POSIT	CAT	ACRY	MAX OBS	MAX OBS	OBS	MIN	700MB	LVL	FLT	EYE	UNIEN-	EYE	PUSIT	NSN
															NAV-MET		LVL	DIX	VEL	BKG	RNG	SLP	HGT	TI/TO	FORM	ATION	DIA	OF RADAR
1	021254Z	15.3N 120.6E	SAT	(IR DATA	)	PCN 6	NOAA-5									
2	022357Z	13.8N 116.5E	SAT	(T1.0/1.0 /	/ HRS)	PCN 5	UMSP									
3	030131Z	11.9N 116.0E	SAT	(T1.0/1.0 /	/ HRS)	PCN 5	NOAA-5									
4	030405Z	11.8N 116.1E	SAT	(IR DATA	)	PCN 5	UMSP									
5	031210Z	12.7N 115.9E	SAT	(IR DATA	)	PCN 5	NOAA-5									
6	031647Z	11.7N 114.1E	SAT	(IR DATA	)	PCN 6	UMSP									
7	032345Z	15.0N 113.0E	SAT	(IR DATA	)	PCN 6	UMSP									
8	032345Z	13.4N 113.5E	SAT	(T1.0/1.0 /S	/24HRS)	PCN 5	UMSP									
9	040047Z	16.5N 116.4E	SAT	(T1.0/1.0 /S	/24HRS)	PCN 5	NOAA-5									
10	040347Z	16.9N 115.7E	SAT	(T1.0/1.0 /	/ HRS)	PCN 5	UMSP									
11	040347Z	15.2N 113.2E	SAT	(IR DATA	)	PCN 5	UMSP									
12	041127Z	17.7N 116.0E	SAT	(IR DATA	)	PCN 6	NOAA-5									
13	041230Z	18.3N 116.2E	SAT	(IR DATA	)	PCN 5	UMSP									
14	041230Z	14.6N 114.5E	SAT	(IR DATA	)	PCN 5	UMSP									
15	041629Z	18.4N 116.1E	SAT	(IR DATA	)	PCN 6	UMSP									
16	041629Z	17.6N 114.8E	SAT	(IR DATA	)	PCN 5	UMSP									
17	042222Z	17.8N 114.2E	P	10 30 1500	150 28 90	100 25 90	50 991	-	25 25	-	- -	-				3
18	042337Z	18.1N 114.0E	SAT	(T1.0/1.0 /S	/20HRS)	PCN 6	UMSP									
19	042337Z	18.4N 112.7E	SAT	(T1.0/1.0 /S	/24HRS)	PCN 5	UMSP									
20	050330Z	18.1N 113.0E	SAT	(T2.0/2.0 /D1.0/28HRS)		PCN 3	UMSP									
21	050330Z	18.5N 113.1E	SAT	(IR DATA	)	PCN 5	UMSP									
22	050348Z	17.5N 133.1E	P	10 10 700	170 30 70	150 30 70	150 995	30*	11	-	- -	-				4
23	051214Z	20.1N 111.9E	SAT	(IR DATA	)	PCN 5	UMSP									
24	051214Z	20.0N 110.5E	SAT	(IR DATA	)	PCN 5	UMSP									
25	051230Z	20.3N 111.3E	SAT	(IR DATA	)	PCN 5	NOAA-5									
26	051246Z	19.0N 111.5E	SAT	(IR DATA	)	SMS-2	(CONF 01)									
27	051612Z	20.4N 111.5E	SAT	(IR DATA	)	PCN 6	UMSP									
28	051612Z	19.5N 111.5E	SAT	(IR DATA	)	PCN 6	UMSP									
29	052321Z	22.0N 109.6E	SAT	(T 0/1.0 /W1.0/24HRS)		PCN 5	UMSP									
30	060115Z	22.5N 110.2E	SAT	(T 0/1.0 /	/ HRS)	PCN 5	UMSP									
31	060115Z	20.9N 109.4E	SAT	(T1.0/1.0 /	/ HRS)	SMS-2	(CONF 01)									

TYPHOON SARAH
FIX POSITIONS FOR CYCLONE NO. 5
1200Z 16 JUL TO 1200Z 21 JUL

!YPMDDUN THELMA FIX POSITIONS FOR CYCLONE NO. 6 0000Z 21 JUL 10 0000Z 26 JUL																	
FIX NO.	TIME	POSIT	FIX CAT	ACCRY NAV-MET	MAX LVL	FLT LVL	WIND DIR	MAX SLP	WHS SFC WIND	MIN SLP	FLT MIG	MIN 700MB LVL	EYE FORM	UNIEN- TI/TU	EYE LAT/UN	POSI- TUF RADAR	MSN NMBR
1	192203Z	13.0N 129.5E	SAT	(IR DATA)	1	0	0	/	HRS	PCN 5	UMSP						
2	192203Z	13.7N 129.5E	SAT	(IR DATA)	1	0	0	/	HRS	PCN 6	UMSP						
3	192203Z	13.6N 133.7E	SAT	(IR DATA)	1	0	1	0	/	HRS	PCN 5	UMSP					
4	200146Z	13.8N 130.1E	SAT	(IR DATA)						PCN 5	UMSP						
5	200224Z	13.5N 133.9E	SAT	(IR DATA)						PCN 5	UMSP						
6	201040Z	13.2N 132.1E	SAT	(IR DATA)						PCN 6	UMSP						
7	201121Z	14.5N 131.2E	SAT	(IR DATA)						PCN 5	NOAA-5						
8	201125Z	15.0N 131.5E	SAT	(IR DATA)						PCN 5	NOAA-5	(CONF 01)					
9	202144Z	15.0N 129.9E	SAT	(T2.0/2.0 /D2.0/24HRS)						PCN 5	UMSP						
10	202144Z	14.2N 130.5E	SAT	(T2.0/2.0 /D2.0/24HRS)						PCN 5	UMSP						
11	202144Z	14.9N 130.0E	SAT	(T2.0/2.0 /D1.0/24HRS)						PCN 5	UMSP						
12	202357Z	14.6N 130.2E	SAT	(IR DATA)						PCN 5	NOAA-5						
13	210211Z	14.8N 129.7E	SAT	(IR DATA)						PCN 5	UMSP						
14	210211Z	15.4N 129.9E	SAT	(IR DATA)						PCN 5	UMSP						
15	210211Z	15.3N 129.8E	SAT	(IR DATA)						PCN 5	UMSP						
16	210919Z	15.6N 128.5E	P	1 5 700	170	50	130	150	55 130	30	993	303	14 10	-	-	-	
17	211027Z	15.5N 128.4E	SAT	(IR DATA)						PCN 5	UMSP						
18	211027Z	15.6N 128.6E	SAT	(IR DATA)						PCN 6	UMSP						
19	211028Z	15.7N 128.3E	SAT	(IR DATA)						PCN 5	UMSP						
20	211054Z	15.6N 128.2E	P	3 10 700	-	-	-	-	-	997	300	15	-	-	-		
21	211234Z	15.5N 127.9E	SAT	(IR DATA)						PCN 6	NOAA-5						
22	211234Z	15.2N 127.3E	SAT	(IR DATA)						PCN 6	UMSP	(CONF 01)					
23	211453Z	15.7N 127.7E	SAT	(IR DATA)						PCN 6	UMSP						
24	211453Z	15.3N 127.7E	SAT	(IR DATA)						PCN 6	UMSP						
25	211511Z	15.5N 128.0E	P	3 10 700	290	33	210	50	-	985	290	13 13	-	-	-		
26	212120Z	15.9N 127.7E	SAT	(T3.5/3.5 /D1.0/24HRS)						PCN 3	UMSP						
27	212120Z	15.9N 128.0E	SAT	(T3.0/3.0 /D1.0/24HRS)						PCN 5	UMSP						
28	212129Z	16.0N 127.7E	SAT	(T3.0/3.0 /D1.0/24HRS)						PCN 3	UMSP						
29	220110Z	16.1N 127.7E	SAT	(IR DATA)						PCN 3	NOAA-5						
30	220331Z	16.4N 126.7E	P	5 5 700	190	40	150	220	50 180	20	987	290	17 12	CIRC	60	3	
31	220335Z	17.2N 127.1E	SAT	(IR DATA)						PCN 5	UMSP						
32	220335Z	16.5N 128.9E	SAT	(IR DATA)						PCN 5	UMSP						
33	221011Z	17.0N 126.7E	SAT	(IR DATA)						PCN 5	UMSP						
34	221011Z	17.5N 126.9E	SAT	(IR DATA)						PCN 4	UMSP						
35	221133Z	17.1N 125.4E	SAT	(IR DATA)						PCN 6	UMSP						
36	221151Z	17.3N 125.1E	SAT	(IR DATA)						PCN 5	NOAA-5						
37	221435Z	17.0N 125.0E	SAT	(IR DATA)						PCN 4	UMSP						
38	221436Z	17.3N 124.9E	SAT	(IR DATA)						PCN 5	UMSP						
39	221546Z	17.0N 124.8E	P	3 5 700	200	55	110	50	-	973	280	16 13	CIRC	20	4		
40	222050Z	17.3N 124.3E	P	3 3 700	40	60	360	8	-	965	270	14 11	ELIP	N-S	15X10	4	
41	222253Z	17.7N 124.1E	SAT	(T4.0/4.0 /D1.0/25HRS)						PCN 3	UMSP						
42	222254Z	17.5N 124.2E	SAT	(T4.0/4.0 /D1.0/25HRS)						PCN 5	UMSP						
43	222254Z	17.5N 124.2E	SAT	(T4.0/4.0 /D1.0/25HRS)						PCN 4	UMSP						
44	222314Z	17.6N 123.8E	SAT	(IR DATA)						PCN 6	UMSP						
45	230024Z	17.7N 123.8E	SAT	(T4.5/4.5 /D1.0/24HRS)						PCN 3	NOAA-5						
46	230216Z	17.6N 122.5E	SAT	(T4.5/4.5 /D1.0/24HRS)						PCN 5	NOAA-5	(CONF 02)					
47	230300Z	17.5N 123.4E	LRDR	- 3260/								-	-	-	-		
48	230311Z	18.1N 123.5E	SAT	(IR DATA)						PCN 1	UMSP						
49	230312Z	18.2N 123.4E	SAT	(T4.0/4.0 /D1.0/24HRS)						PCN 1	UMSP						
50	230312Z	17.9N 123.5E	SAT	(IR DATA)						PCN 1	UMSP						
51	230314Z	18.2N 123.5E	SAT	(IR DATA)						PCN 1	UMSP						
52	230314Z	18.1N 123.4E	SAT	(IR DATA)						PCN 1	UMSP						
53	230322Z	18.1N 123.4E	P	3 4 700	120	84	50	15	100	50	15	960	27*	15 14	CIRC	B	
54	230400Z	17.7N 123.3E	LRDR	- 20610								-	-	-	-		
55	230500Z	17.8N 123.2E	LRDR	- 21640								-	-	-	-		
56	230600Z	18.0N 123.1E	LRDR	- 21610								-	-	-	-		
57	230700Z	18.4N 122.6E	LRDR	- 20611								-	-	-	-		
58	230800Z	18.6N 122.5E	LRDR	- 20451								-	-	-	-		
59	231106Z	18.3N 122.2E	SAT	(IR DATA)						PCN 3	NOAA-5						
60	231135Z	18.8N 122.2E	SAT	(IR DATA)						PCN 4	UMSP						
61	231135Z	18.8N 122.5E	SAT	(IR DATA)						PCN 4	UMSP						
62	231201Z	18.8N 122.5E	SAT	(IR DATA)						PCN 3	UMSP						
63	231202Z	18.8N 122.3E	SAT	(IR DATA)						PCN 3	UMSP						
64	231302Z	18.7N 122.1E	SAT	(IR DATA)						PCN 4	NOAA-5						
65	231552Z	19.0N 121.8E	SAT	(IR DATA)						PCN 2	UMSP						
66	231552Z	19.0N 121.5E	P	2 2 700	180	60	140	30	-	963	270	15 16	ELIP	N-S	5X3	6	
67	231600Z	19.0N 121.5E	SAT	(IR DATA)						PCN 1	UMSP						
68	231600Z	19.2N 121.1E	SAT	(IR DATA)						PCN 3	UMSP						
69	232135Z	19.6N 121.9E	P	1 3 700	340	55	270	40	75 270	10	964	27*	16 13	ELIP	N-S	35X25	6
70	232234Z	19.5N 121.0E	SAT	(IR DATA)						PCN 3	UMSP						
71	232234Z	19.3N 121.7E	SAT	(T5.0/5.0 /D1.0/24HRS)						PCN 1	UMSP						
72	232305Z	19.4N 120.8E	SAT	(T5.0/5.0 /D1.0/24HRS)						PCN 1	UMSP						
73	232314Z	19.4N 121.1E	SAT	(T5.0/5.0 /D1.0/24HRS)						PCN 3	UMSP						
74	240100Z	19.6N 120.7E	LRDR	- 5///								-	-	-	22.0N 120.3E		
75	240100Z	19.7N 120.4E	LRDR	- 5///								-	-	-	18.1N 120.5E		
76	240131Z	18.6N 120.2E	SAT	(T5.0/5.0 /D0.5/23HRS)						PCN 1	NOAA-5	(CONF 01)					
77	240131Z	19.7N 120.7E	SAT	(IR DATA)						PCN 1	NOAA-5						
78	240200Z	19.7N 120.4E	LRDR	-								-	-	-			
79	240309Z	19.8N 120.3E	SAT	(IR DATA)						PCN 2	UMSP						
80	240309Z	19.8N 120.3E	SAT	(T5.0/5.0 /D1.0/24HRS)						PCN 1	UMSP						
81	240309Z	19.9N 120.2E	SAT	(IR DATA)						PCN 1	UMSP						
82	240500Z	19.8N 120.2E	LRDR	- 5///								-	-	-	22.0N 120.3E		
83	240600Z	19.9N 120.2E	LRDR	- 5///								-	-	-	22.0N 120.3E		
84	240700Z	20.0N 120.1E	LRDR	- 5///								-	-	-	22.0N 120.3E		
85	240900Z	20.3N 119.4E	LRDR	- 5///								-	-	-	22.0N 120.3E		
86	240942Z	20.5N 119.8E	P	3 5 700	270	80	190	15	80 310	9	95d</td						

TYPHOON VERA FIX POSITIONS FOR CYCLONE NO. 7 0000Z 28 JUL TO 0600Z 01 AUG																		
FIX NO.	TIME	POSIT	FIX CAT	ACCRY NAV-MET	FIX LVL	FLT DIR	LVL	WIND VEL	SFC BRG	WIND RNG	OBS SLP	MIN 700MB HGT	FLT TI/TU	EYE FORM	URIEN- ATION	EYE DIA	POSIT OF RADAR	MSN NMBR
1	260010Z	26.5N 130+6E	SAT	(T 0/ 0 / / HRS)							PCN 5	NOAA-5						
2	261505Z	24.9N 131+7E	SAT	(IR DATA	)						PCN 6	NOAA-5					
3	262145Z	25.4N 131+7E	SAT	(T1.0/1.0+/ D1.0/22 HRS)							PCN 5	UMSP						
4	262326Z	25.6N 131+6E	SAT	(IR DATA	)						PCN 5	NOAA-5					
5	270123Z	25.5N 131+5E	SAT	(IR DATA	)						PCN 5	NOAA-5					
6	271027Z	25.5N 130+6E	SAT	(IR DATA	)						PCN 5	UMSP					
7	27127Z	25.5N 131+5E	SAT	(IR DATA	)						PCN 4	UMSP					
8	271203Z	25.4N 131+1E	SAT	(IR DATA	)						PCN 5	NOAA-5					
9	271449Z	25.8N 130+8E	SAT	(IR DATA	)						PCN 5	UMSP					
10	271449Z	25.6N 131+1E	SAT	(IR DATA	)						PCN 5	UMSP					
11	272127Z	25.6N 129+6E	SAT	(T2.0/2.0 / / HRS)							PCN 3	UMSP						
12	272129Z	25.5N 129+6E	SAT	(T2.5/2.5 / D1.5/24HRS)							PCN 5	UMSP						
13	272129Z	25.5N 130+4E	SAT	(T3.0/3.0 / / HRS)							PCN 3	UMSP						
14	280032Z	25.2N 129+8E	SAT	(T2.0/2.0 / / HRS)							NOAA-5	(CONF 01)						
15	280039Z	25.5N 129+6E	SAT	(IR DATA	)						PCN 5	NOAA-5					
16	280208Z	25.4N 130+3E	P	3 5 1500	-	-	-	-	-	40 350	25 988	-	25 26	-	-	-		
17	280314Z	25.5N 130+2E	P	5 5 700	-	-	-	-	-	40 330	35 987	298	13 13	-	-	-		
18	281010Z	25.4N 129+3E	SAT	(IR DATA	)						PCN 4	UMSP					1
19	281039Z	25.1N 129+4E	P	2 5 700	240	50	140	70	50	270	30	987	297	15 14	-	2		
20	281101Z	25.6N 129+6E	SAT	(IR DATA	)						PCN 4	UMSP					
21	281101Z	25.6N 129+5E	SAT	(IR DATA	)						PCN 3	UMSP					
22	281118Z	25.3N 129+5E	SAT	(IR DATA	)						PCN 3	NOAA-5					
23	281119Z	26.0N 130+2E	SAT	(IR DATA	)						PCN 4	NOAA-5					
24	281432Z	25.5N 128+9E	SAT	(IR DATA	)						PCN 3	UMSP					
25	281432Z	25.3N 129+2E	SAT	(IR DATA	)						PCN 4	UMSP					
26	281441Z	25.3N 129+1E	P	2 5 700	40	50	340	8	-	-	986	299	14 12	-	-	2		
27	281613Z	25.2N 129+1E	SAT	(IR DATA	)						PCN 3	UMSP					
28	281613Z	25.3N 128+9E	SAT	(IR DATA	)						PCN 3	UMSP					
29	282111Z	24.9N 128+5E	SAT	(T3.5/3.5-/ D1.0/24HRS)							PCN 3	UMSP						
30	282111Z	25.2N 128+3E	SAT	(T3.5/3.5-/ D0.5/24HRS)							PCN 3	UMSP						
31	282155Z	24.8N 128+4E	P	2 3 700	110	55	100	55	-	-	-	977	289	15 11	-	3		
32	282355Z	24.8N 128+1E	SAT	(IR DATA	)						PCN 3	NOAA-5	(CONF 01)				
33	282357Z	25.0N 128+0E	SAT	(T3.5/3.5-/ D1.5/24HRS)							PCN 1	UMSP						
34	290314Z	24.9N 127+8E	SAT	(IR DATA	)						PCN 1	UMSP					
35	290314Z	24.6N 127+8E	SAT	(T4.5/4.5 / / HRS)							PCN 1	UMSP						
36	290314Z	24.9N 128+4E	SAT	(T4.0/4.0 / / HRS)							PCN 1	UMSP						
37	290315Z	24.6N 127+9E	P	2 3 700	10	65	300	10	60	300	25	972	289	16 10	CIRC	3		
38	290341Z	24.6N 127+8E	SAT	(IR DATA	)						PCN 1	UMSP					
39	290932Z	24.3N 126+8E	P	4 3 700	140	90	045	15	70	250	10	950	269	18 14	CIRC	8		
40	290953Z	24.6N 126+7E	SAT	(IR DATA	)						PCN 1	UMSP					4
41	290953Z	24.5N 126+8E	SAT	(IR DATA	)						PCN 1	UMSP					
42	291035Z	24.6N 126+8E	SAT	(IR DATA	)						PCN 4	NOAA-5					
43	291223Z	24.0N 126+7E	SAT	(IR DATA	)						PCN 4	NOAA-5					
44	291231Z	23.5N 126+7E	SAT	(IR DATA	)						PCN 1	NOAA-5					
45	291431Z	23.6N 126+1E	P	3 3 700	360	100	280	18	-	-	-	940	259	19 15	ELIP	E-W	7X5	
46	291555Z	23.2N 126+2E	SAT	(IR DATA	)						PCN 1	UMSP					4
47	291556Z	23.0N 126+1E	SAT	(IR DATA	)						PCN 4	UMSP					
48	292043Z	23.3N 125+7E	P	2 5 700	-	-	-	-	-	-	932	249	17 14	ELIP	SE-NW	15X12		
49	292236Z	23.4N 125+6E	SAT	(T5.0/5.0 / D1.5/24HRS)							PCN 1	UMSP					5	
50	292236Z	23.5N 125+5E	SAT	(T5.5/5.5 / D1.0/20HRS)							PCN 1	UMSP						
51	292337Z	23.3N 125+9E	SAT	(IR DATA	)						PCN 1	UMSP					
52	300058Z	23.8N 126+0E	SAT	(T5.0/5.0 / D1.5/25HRS)							NOAA-5	(CONF 01)						
53	300107Z	23.3N 125+6E	SAT	(T5.5/5.5 / D2.0/28 HRS)							PCN 1	UMSP						
54	300237Z	23.3N 125+5E	P	2 5 700	-	-	-	-	-	-	-	925	249	18 12	ELIP	SW-NW	15X12	
55	300256Z	23.3N 125+6E	SAT	(IR DATA	)						PCN 1	UMSP					
56	300256Z	23.2N 125+5E	SAT	(IR DATA	)						PCN 1	UMSP					
57	300847Z	23.6N 125+2E	P	2 4 700	240	100	170	12	65	160	32	933	250	17 13	CIRC	8	6	
58	301037Z	23.7N 124+9E	SAT	(IR DATA	)						PCN 4	UMSP					
59	301037Z	23.7N 125+4E	SAT	(IR DATA	)						PCN 6	UMSP					
60	301117Z	23.8N 124+9E	SAT	(IR DATA	)						PCN 2	UMSP					
61	301117Z	23.5N 124+8E	SAT	(IR DATA	)						PCN 2	UMSP					
62	301147Z	23.4N 124+9E	SAT	(IR DATA	)						PCN 1	NOAA-5					
63	301154Z	22.9N 125+1E	SAT	(IR DATA	)						NOAA-5	(CONF 02)					
64	301200Z	23.7N 125+0E	LRDR	- 10312							-	-	-	-	24.0N 124+2E	-		
65	301219Z	23.6N 124+7E	SAT	(IR DATA	)						-	-	-	-	24.3N 124+2E	-	
66	301219Z	23.6N 124+6E	SAT	(IR DATA	)						-	-	-	-	24.0N 121+6E	-	
67	301240Z	23.7N 124+8E	SAT	(IR DATA	)						-	-	-	-	24.3N 124+2E	-	
68	301300Z	23.7N 124+9E	LRUR	- 11412							-	-	-	-	24.0N 124+2E	-		
69	301300Z	23.8N 124+8E	LRUR	- 10413							-	-	-	-	24.3N 124+2E	-		
70	301400Z	23.8N 124+8E	LRUR	- 11311							-	-	-	-	24.0N 121+6E	-		
71	301400Z	23.8N 124+8E	LRUR	- 11311							-	-	-	-	24.3N 124+2E	-		
72	301400Z	23.8N 124+8E	LRUR	- 11311							-	-	-	-	24.0N 125+3E	-		
73	301500Z	23.9N 124+6E	LRUR	- 10472							-	-	-	-	24.0N 125+3E	-		
74	301500Z	23.8N 124+6E	LRUR	- 11411							-	-	-	-	24.0N 121+6E	-		
75	301500Z	23.9N 124+6E	LRUR	- 11411							-	-	-	-	24.3N 124+2E	-		
76	301538Z	24.0N 124+2E	SAT	(IR DATA	)						PCN 1	UMSP					
77	301538Z	24.1N 124+1E	SAT	(IR DATA	)						PCN 1	UMSP					
78	301600Z	24.0N 124+5E	LRDR	- 10742							-	-	-	-	24.0N 121+6E	-		
79	301600Z	23.9N 124+5E	LRDR	- 12411							-	-	-	-	24.3N 124+2E	-		
80	301600Z	23.9N 124+5E	LRDR	- 10313							-	-	-	-	24.0N 125+3E	-		
81	301700Z	24.0N 124+4E	LRDR	- 10791							-	-	-	-	24.0N 121+6E	-		
82	301700Z	23.9N 124+3E	LRDR	- 22631							-	-	-	-	24.3N 124+2E			

TROPICAL STORM ANDA FIX POSITIONS FOR CYCLONE NO. 8 0600Z 31 JUL TO 0600Z 04 AUG																		
FIX NO.	TIME	POSIT	FIX CAT	ACCRY	FIX NAV-MET	FLT LVL	LVL QNH	WIND VEL	SFC BRG	MAX OBS RNG	MAX OBS VEL	OBS SLP	MIN 700MB	FLT HGT	EYE TI/TU	ORIEN- FORM	POSIT OF RADAR	MSN NNBR
1	291414Z	19.9N 140.3E	SAT	(IR DATA	)	PCN 5	UMSP										
2	292311Z	23.0N 139.5E	SAT	(T 0/ 0 / / HRS)		PCN 5	NOAA-5											
3	300936Z	22.6N 139.5E	SAT	(IR DATA	)	PCN 6	UMSP										
◆	310014Z	23.7N 141.0E	SAT	(T1.5/1.5 / / HRS)		PCN 5	NOAA-5	(CONF 02)										
5	310232Z	23.0N 141.0E	SAT	(T2.0/2.0 /D2.0/25HRS)		PCN 5	NOAA-5											
6	310239Z	23.2N 140.3E	SAT	(IR DATA	)	PCN 5	UMSP										
7	310918Z	23.7N 140.5E	SAT	(IR DATA	)	PCN 6	UMSP										
8	310919Z	25.8N 140.3E	SAT	(IR DATA	)	PCN 6	UMSP										
9	311103Z	24.1N 141.5E	SAT	(IR DATA	)	PCN 5	NOAA-5										
10	311103Z	23.6N 140.0E	SAT	(IR DATA	)	PCN 6	NOAA-5										
11	311117Z	23.6N 141.5E	SAT	(IR DATA	)	PCN 6	NOAA-5	(CONF 02)									
12	311339Z	25.0N 141.5E	SAT	(IR DATA	)	PCN 6	UMSP										
13	311339Z	26.3N 142.3E	SAT	(IR DATA	)	PCN 6	UMSP										
14	312020Z	24.8N 141.0E	SAT	(IR DATA	)	PCN 6	UMSP										
15	312326Z	24.5N 140.3E	P	5 15 700	- - -	- 45	40	90	996	305	13 -	CIRC	15			1		
16	312337Z	26.4N 141.5E	SAT	(T2.5/2.5 /D1.0/23HRS)		PCN 5	NOAA-5	(CONF 01)										
17	312339Z	25.2N 141.2E	SAT	(T3.0/3.0 /D1.0/23HRS)		PCN 5	NOAA-5											
18	010004Z	25.8N 140.5E	P	10 10 700	- - -	- 45	50	80	994	305	13 -	CIRC	10			1		
19	010302Z	26.0N 140.5E	P	5 10 700	80 43 360	65	25	270	40	993	303	13 13	CIRC	12				
20	010901Z	25.1N 141.0E	SAT	(IR DATA	)	PCN 6	UMSP										
21	010902Z	25.8N 141.5E	SAT	(IR DATA	)	PCN 6	UMSP										
22	011013Z	25.9N 141.5E	SAT	(IR DATA	)	PCN 6	UMSP										
23	011019Z	26.1N 142.0E	SAT	(IR DATA	)	PCN 6	NOAA-5										
24	011043Z	26.5N 139.5E	SAT	(IR DATA	)	PCN 6	UMSP										
25	011503Z	26.8N 141.0E	SAT	(IR DATA	)	PCN 5	UMSP										
26	011503Z	26.7N 140.5E	SAT	(IR DATA	)	PCN 4	UMSP										
27	011628Z	27.2N 141.1E	P	8 10 700	210 40 120	12 -	-	-	993	305	13 13	-	-	-		2		
28	012003Z	27.4N 140.7E	SAT	(IR DATA	)	PCN 5	UMSP										
29	012043Z	27.6N 140.3E	P	2 5 700	160 20 60	25 30	60	25	994	301	14 13	-	-	-		3		
30	012144Z	27.8N 140.5E	SAT	(T3.0/3.0 / / HRS)		PCN 3	UMSP											
31	012144Z	27.8N 140.5E	SAT	(T3.0/3.0 / / HRS)		PCN 3	UMSP											
32	012245Z	27.2N 140.5E	SAT	(T2.5/2.5 / S / 23HRS)		NOAA-5	(CONF 01)											
33	012255Z	27.8N 140.5E	SAT	(IR DATA	)	PCN 3	NOAA-5										
34	020052Z	27.7N 140.5E	SAT	(IR DATA	)	PCN 3	NOAA-5										
35	020203Z	27.5N 140.5E	SAT	(IR DATA	)	PCN 3	UMSP										
36	020203Z	27.6N 140.5E	SAT	(IR DATA	)	PCN 3	UMSP										
37	020955Z	28.2N 142.4E	P	10 5 700	290 35 200	10 45	150	10	990	301	16 15	CIRC	12			4		
38	021026Z	28.2N 142.5E	SAT	(IR DATA	)	PCN 5	UMSP										
39	021026Z	28.4N 142.5E	SAT	(IR DATA	)	PCN 3	UMSP										
40	021132Z	27.8N 142.2E	SAT	(IR DATA	)	PCN 5	NOAA-5										
41	021132Z	28.2N 143.0E	SAT	(IR DATA	)	PCN 6	NOAA-5										
42	021445Z	28.6N 142.7E	SAT	(IR DATA	)	PCN 5	UMSP										
43	021445Z	28.3N 143.0E	SAT	(IR DATA	)	PCN 4	UMSP										
44	022120Z	30.0N 143.5E	P	2 2 700	290 30 190	10 -	-	-	986	291	14 11	-	-	-		5		
45	022127Z	29.7N 143.4E	SAT	(T3.0/3.0 / S / 24HRS)		PCN 5	UMSP											
46	022127Z	29.3N 143.4E	SAT	(T2.5/2.5 / / HRS)		PCN 3	UMSP											
47	022200Z	29.8N 143.7E	SAT	(T3.0/3.0 /D0.5/23HRS)		NOAA-5	(CONF 01)											
48	030008Z	30.0N 143.3E	SAT	(IR DATA	)	PCN 3	NOAA-5										
49	030144Z	30.2N 143.5E	SAT	(IR DATA	)	PCN 3	UMSP										
50	030146Z	30.3N 143.5E	SAT	(T2.5/3.0 /W0.5/28HRS)		PCN 3	UMSP											
51	031009Z	30.5N 143.9E	SAT	(IR DATA	)	PCN 5	UMSP										
52	031009Z	30.8N 144.3E	SAT	(IR DATA	)	PCN 6	UMSP										
53	031048Z	29.5N 143.4E	SAT	(IR DATA	)	PCN 5	NOAA-5										
54	031056Z	29.6N 144.3E	SAT	(IR DATA	)	NOAA-5	(CONF 02)										
55	031213Z	30.6N 145.8E	P	4 6 700	350 30 270	15 -	-	-	991	301	16 16	-	-	-		6		
56	031428Z	29.9N 145.3E	SAT	(IR DATA	)	PCN 5	UMSP										
57	031428Z	30.0N 145.4E	SAT	(IR DATA	)	PCN 6	UMSP										
58	032110Z	31.0N 146.1E	SAT	(T1.0/2.0 /W2.0/24HRS)		PCN 3	UMSP											
59	032110Z	31.0N 146.1E	SAT	(T1.0/2.0 /W1.5/20HRS)		PCN 3	UMSP											
60	032313Z	31.7N 146.5E	SAT	(T1.5/2.0 /W1.5/25HRS)		NOAA-5	(CONF 01)											
61	032324Z	31.1N 146.2E	SAT	(IR DATA	)	PCN 3	NOAA-5										
62	040124Z	31.2N 146.5E	SAT	(IR DATA	)	PCN 3	UMSP										
63	040124Z	31.0N 146.6E	SAT	(IR DATA	)	PCN 3	UMSP										
64	040952Z	31.4N 146.9E	SAT	(IR DATA	)	PCN 6	UMSP										
65	041014Z	32.0N 147.0E	SAT	(IR DATA	)	NOAA-5	(CONF 02)										
66	042039Z	32.1N 148.1E	SAT	(T 0/1.5 /W1.0/24HRS)		PCN 3	UMSP											
67	042053Z	31.8N 148.3E	SAT	(IR DATA	)	PCN 3	UMSP										
68	042229Z	32.2N 149.0E	SAT	(T1.0/1.5 /W0.5/23HRS)		NOAA-5	(CONF 01)											
69	042239Z	31.7N 148.5E	SAT	(IR DATA	)	PCN 3	NOAA-5										
70	050036Z	31.6N 148.6E	SAT	(IR DATA	)	PCN 3	NOAA-5										
71	050919Z	31.4N 148.8E	SAT	(IR DATA	)	PCN 6	NOAA-5										
72	061032Z	34.2N 153.0E	SAT	(IR DATA	)	PCN 6	NOAA-5										
73	052352Z	33.7N 150.4E	SAT	(T 0/ 0 / S / 27HRS)		PCN 3	DMSP											

TROPICAL STORM AMY
FIX POSITIONS FOR CYCLONE NO. 9
0000Z 20 AUG TO 1800Z 23 AUG

FIX NO.	TIME	POSIT	CAT	ACCRY	FIX	FLT	MAX OBS			MAX OBS			OBS	MIN	FLT	EYE	ORIEN-	EYE	POSIT				
							NAV-MET	LVL	DIM	VEL	LVL	WIND	SFC WIND	MIN	LVL	HGT	TI/TD	FORM	TIATN	DIA	OF	HAUAR	MSN NMNR
1	172300Z	19.9N 128.4E	P	10	5	700	260	30	180	20	30	180	20	996	-	27	25	-	-	-	-	1	
2	180050Z	20.2N 127.7E	P	5	10	700	130	18	30	40	35	90	60	1001	30	13	14	-	-	-	-	1	
3	190151Z	21.0N 122.0E	SAT	(T1.5/1.5 /			/ HRS)					NOAA-5	(CONF 01)										
4	190250Z	22.0N 121.1E	SAT	(T1.5/1.5 /			/ HRS)					PCN 5	UMSP										
5	191040Z	20.9N 119.4E	SAT	(IR DATA			)					PCN 6	UMSP									
6	191130Z	21.0N 119.5E	SAT	(IR DATA			)					PCN 6	UMSP									
7	191230Z	20.6N 120.7E	SAT	(IR DATA			)					PCN 5	NOAA-5									
8	192142Z	20.6N 121.0E	SAT	(T1.0/1.0 /			/ HRS)					PCN 5	UMSP										
9	192200Z	20.7N 120.9E	LRDR	-	40274																		
10	192300Z	20.7N 120.8E	LRDR	-	45/5																		
11	200100Z	20.7N 120.6E	LRUR	-	10/11																		
12	200107Z	21.5N 121.0E	SAT	(T1.5/1.5 / S			/23 HRS)						NOAA-5	(CONF 02)									
13	200115Z	20.6N 120.6E	SAT	(IR DATA)					PCN 5	NOAA-5										
14	200200Z	20.7N 120.6E	LRDR	-	1022																		
15	200300Z	20.7N 120.6E	LRDR	-	25/5																		
16	200333Z	20.7N 120.0E	SAT	(T1.0/1.0 /			/ HRS)					PCN 6	UMSP										
17	200333Z	20.8N 119.9E	SAT	(T1.0/1.0 /			/ HRS)					PCN 5	UMSP										
18	200500Z	20.7N 120.5E	LRDR	-	1///																		
19	200700Z	21.3N 120.5E	LRDR	-	1///																		
20	200900Z	21.3N 120.2E	LRDR	-	1///																		
21	201000Z	21.3N 120.1E	LRDR	-	1///																		
22	201024Z	20.0N 118.6E	SAT	(IR DATA)					PCN 6	UMSP										
23	201024Z	21.8N 119.3E	SAT	(IR DATA)					PCN 6	UMSP										
24	201030Z	21.2N 120.1E	P	2	2	1500	40	40	310	10	35	310	10	986	-	25	26	-	-	-	-	2	
25	201100Z	21.3N 119.9E	LRDR	-	1///																		
26	201127Z	20.2N 118.7E	SAT	(IR DATA)					PCN 5	UMSP										
27	201155Z	21.0N 119.6E	SAT	(IR DATA)					PCN 5	NOAA-5										
28	201200Z	21.4N 119.8E	LRDR	-	1///																		
29	201222Z	21.5N 119.0E	SAT	(IR DATA)						NOAA-5	(CONF 01)									
30	201205Z	21.0N 119.2E	SAT	(IR DATA)					PCN 6	UMSP										
31	201300Z	21.3N 119.3E	LRDR	-	1///																		
32	201400Z	21.3N 119.0E	LRDR	-	1///																		
33	201500Z	20.7N 119.0E	LRUR	-	1///																		
34	201615Z	20.4N 118.6E	SAT	(IR DATA)					PCN 5	UMSP										
35	201615Z	20.0N 118.1E	SAT	(IR DATA)					PCN 5	UMSP										
36	202230Z	20.8N 117.7E	SAT	(IR DATA)					PCN 6	UMSP										
37	202300Z	20.3N 118.3E	LRDR	-	4///																		
38	202306Z	20.7N 117.3E	SAT	(IR DATA)					PCN 5	UMSP										
39	202306Z	20.4N 117.8E	SAT	(IR DATA)					PCN 5	UMSP										
40	202306Z	19.0N 118.0E	SAT	(T2.5/2.5 / D1.0/20HRS)								PCN 4	UMSP										
41	210031Z	20.7N 117.9E	SAT	(T2.0/2.0 /			/ HRS)					PCN 5	NOAA-5										
42	210100Z	20.4N 118.3E	LRDR	-	4///																		
43	210200Z	20.4N 118.3E	LRDR	-	4///																		
44	210300Z	20.9N 119.0E	LRDR	-	4///																		
45	210315Z	20.7N 119.3E	SAT	(IR DATA)					PCN 5	UMSP										
46	210315Z	20.8N 119.2E	SAT	(T2.0/2.0 /			/ HRS)					PCN 3	UMSP										
47	210315Z	20.5N 119.3E	SAT	(T2.5/2.5-0/1.5/24HRS)								PCN 4	UMSP										
48	210315Z	20.3N 119.4E	SAT	(T1.0/1.0 / 5			/24HRS)					PCN 5	UMSP										
49	210315Z	21.0N 119.1E	SAT	(IR DATA)					PCN 3	UMSP										
50	211000Z	22.6N 119.4E	LRDR	-	10102																		
51	211100Z	22.6N 119.1E	LRDR	-	1011/																		
52	211111Z	21.8N 118.9E	SAT	(IR DATA)					PCN 5	NOAA-5										
53	211115Z	22.0N 118.9E	SAT	(IR DATA)					PCN 6	UMSP										
54	211115Z	22.5N 118.4E	SAT	(IR DATA)					PCN 4	UMSP										
55	211140Z	21.2N 119.1E	SAT	(IR DATA)					PCN 5	UMSP										
56	211148Z	22.4N 118.9E	SAT	(IR DATA)					PCN 5	UMSP										
57	211200Z	22.5N 118.9E	LRDR	-	4///																		
58	211300Z	22.3N 118.7E	LRDR	-	4///																		
59	211400Z	22.2N 118.6E	LRDR	-	4///																		
60	211557Z	21.3N 118.8E	SAT	(IR DATA)					PCN 6	UMSP										
61	211557Z	22.3N 119.3E	SAT	(IR DATA)					PCN 5	UMSP										
62	211600Z	22.2N 118.8E	LRDR	-	4///																		
63	211700Z	22.2N 118.8E	LRDR	-	4///																		
64	211800Z	21.9N 118.9E	LRDR	-	4///																		
65	212000Z	22.2N 119.5E	LRDR	-	4///																		
66	212200Z	22.0N 119.5E	LRDR	-	1140/																		
67	212214Z	23.2N 118.9E	SAT	(T2.0/2.0 /			/ HRS)					PCN 5	UMSP										
68	212244Z	22.1N 118.0E	SAT	(T2.0/2.5 / 0/0.5/24HRS)								PCN 4	UMSP										
69	212249Z	22.6N 119.6E	SAT	(T2.5/ 2.5- D1.5/ 24 HRS)								PCN 5	UMSP										
70	212249Z	23.0N 119.9E	SAT	(T2.0/2.0 / -0/1.0/20HRS)								PCN 5	UMSP										
71	220100Z	22.3N 120.0E	LRDR	-	1///																		
72	220134Z	24.0N 120.1E	SAT	(T2.0/2.0 /			/ HRS)					PCN 4	NOAA-5	(CONF 01)									
73	220143Z	23.5N 120.2E	SAT	(IR DATA)					PCN 4	NOAA-5										
74	220200Z	22.4N 120.3E	LRDR	-	1///																		
75	220258Z	23.7N 119.8E	SAT	(IR DATA)					PCN 3	UMSP										
76	220258Z	23.9N 119.6E	SAT	(T2.5/2.5-/-0/0.5/24HRS)								PCN 3	UMSP										
77	220300Z	22.3N 120.3E	LRDR	-	1///																		
78	220500Z	22.1N 120.2E	LRDR	-	1///																		
79	220600Z	22.1N 120.3E	LRDR	-	1///																		
80	220700Z	23.5N 119.8E	LRDR	-	1///																		
81	221100Z	24.2N 121.1E	LRDR	-	1///																		
82	221103Z	24.5N 120.3E	SAT	(IR DATA)					PCN 5	NOAA-5										
83	221103Z	25.5N 120.1E	SAT	(IR DATA)					PCN 6	UMSP										

91	222206Z	28.6N 123.9E	SAT	(IR DATA)	PCN 6	DMSP
92	222231Z	29.5N 125.0E	SAT	(T2.0/2.0 /S /24HRS)	PCN 5	DMSP
93	222232Z	28.5N 124.3E	SAT	(IR DATA)	PCN 6	DMSP
94	222300Z	26.3N 123.4E	LHR	- 5///	-	-
95	230000Z	26.4N 124.0E	LHR	- 20212	-	-
96	230049Z	27.6N 123.4E	SAT	(T2.0/2.0 /S /23HRS)	NOAA-5	(CONF 01)
97	230059Z	30.4N 125.5E	SAT	(T2.0/2.0 /S /27HRS)	PCN 5	NOAA-5
98	230200Z	26.6N 124.9E	LHR	- 201/1	-	-
99	230240Z	30.3N 126.8E	SAT	(IR DATA)	PCN 6	DMSP
100	230240Z	31.0N 124.4E	SAT	(T2.0/2.5 /WU.5/24HRS)	PCN 5	DMSP
101	231050Z	31.2N 127.7E	SAT	T3.0/3.0-/D1.0/10 HRS	PCN 6	DMSP
102	231114Z	32.3N 128.1E	SAT	(IR DATA)	PCN 5	DMSP
103	231114Z	32.5N 129.0E	SAT	(IR DATA)	PCN 6	DMSP
104	231130Z	31.5N 127.1E	SAT	(IR DATA)	PCN 5	NOAA-5
105	231140Z	31.8N 127.5E	SAT	(IR DATA)	NOAA-5	(CONF 02)
106	231522Z	31.8N 128.2E	SAT	(IR DATA)	PCN 5	DMSP
107	231522Z	33.6N 130.0E	SAT	(IR DATA)	PCN 6	DMSP
108	231522Z	32.8N 127.5E	SAT	(IR DATA)	PCN 4	DMSP
109	240015Z	31.1N 129.9E	SAT	(T3.5/3.5 /D1.5/23HRS)	PCN 3	NOAA-5
110	241108Z	38.0N 126.4E	SAT	(IR DATA)	NOAA-5	(CONF 01)

TYPHOON BABE
FIX POSITIONS FOR CYCLONE NO. 10
0000UZ 02 SEP TO 1800UZ 10 SEP

FIX NU.	TIME	POSIT	FIX ACCHY	FIX CAT NAV-MET	FLT LVL	LVL	UIK VEL	BRG RNG	SFC WIND	WBS	MIN	FLT	POSIT OF RADAR	MSN NMNR
									SLP	700MB	LVL	EYE	UNIEN- ATION	EYE
									HG!	TI/TD	FORM			
1	301024Z	3.9N 158.0E	SAT	(IR DATA)					PCN 6	NOAA-5				
2	302015Z	5.7N 159.1E	SAT	(T1.0/1.0 / / HRS)					PCN 6	DMSP				
3	310201Z	6.2N 153.3E	SAT	(IR DATA)					PCN 6	DMSP				
4	310857Z	7.9N 153.0E	SAT	(IR DATA)					PCN 5	DMSP				
5	310910Z	8.0N 153.0E	SAT	(IR DATA)					PCN 6	NOAA-5				
6	311301Z	6.7N 152.4E	SAT	(IR DATA)					PCN 6	DMSP				
7	311958Z	6.7N 149.9E	SAT	(T1.0/1.0 /S /24HRS)					PCN 3	DMSP				
8	312216Z	7.1N 150.0E	SAT	(IR DATA)					PCN 4	NOAA-5				
9	010143Z	8.2N 149.1E	SAT	(IR DATA)					PCN 3	DMSP				
10	010840Z	8.1N 147.5E	SAT	(IR DATA)					PCN 6	DMSP				
11	010901Z	8.3N 147.5E	SAT	(IR DATA)					PCN 6	DMSP				
12	011052Z	8.9N 147.8E	SAT	(IR DATA)					PCN 6	NOAA-5				
13	011425Z	9.7N 146.8E	SAT	(IR DATA)					PCN 5	DMSP				
14	011425Z	8.1N 146.4E	SAT						PCN 6	DMSP				
15	012123Z	9.3N 144.8E	SAT	(T2.0/2.0 /D1.0/26HRS)					PCN 6	DMSP				
16	012123Z	9.1N 145.1E	SAT	(T2.0/2.0 / / HRS)					PCN 6	DMSP				
17	012146Z	9.1N 145.0E	SAT	(IR DATA)					PCN 6	DMSP				
18	012325Z	8.7N 144.4E	SAT	(T1.5/1.5 / / HRS)					NOAA-5	(CONF 02)				
19	012329Z	9.1N 144.6E	SAT	(IR DATA)					PCN 5	NOAA-5				
20	020052Z	8.1N 144.3E	P	5 2 1500 130 46 100	20	* 0	90	20	995	-	26 24	-	-	1
21	020125Z	9.6N 143.3E	SAT	(IR DATA)					PCN 5	DMSP				
22	020334Z	8.3N 143.6E	P	5 1 1500 190 48 110	15	55	110	15	990	-	26 23	CIMC	6	2
23	021005Z	8.9N 142.6E	SAT	(IR DATA)					PCN 6	DMSP				
24	021005Z	9.4N 142.5E	SAT	(IR DATA)					PCN 6	DMSP				
25	021008Z	8.9N 142.3E	SAT	(IR DATA)					PCN 6	NOAA-5				
26	021031Z	9.0N 142.4E	SAT	(IR DATA)					PCN 6	DMSP				
27	021031Z	8.7N 141.7E	SAT	(IR DATA)					PCN 6	DMSP				
28	021407Z	9.4N 141.7E	SAT	(IR DATA)					PCN 5	DMSP				
29	021407Z	9.3N 141.7E	SAT	(IR DATA)					PCN 6	DMSP				
30	021555Z	8.9N 140.3E	P	10 - 700 140 55 50	20	-	-	-	-	-	12	-	-	3
31	022104Z	9.9N 139.2E	SAT	(T3.0/3.0 /D1.0/24HRS)					PCN 5	DMSP				
32	022104Z	9.6N 139.8E	SAT	(T3.0/3.0 /D1.0/24HRS)					PCN 5	DMSP				
33	022133Z	9.8N 139.1E	SAT	(IR DATA)					PCN 5	DMSP				
34	022134Z	9.6N 139.7E	SAT	(IR DATA)					PCN 6	DMSP				
35	022245Z	9.9N 139.1E	SAT	(IR DATA)					PCN 6	NOAA-5				
36	030010Z	9.5N 137.5E	SAT	(T3.0/3.0 /D1.5/25HRS)					NOAA-5	(CONF 01)				
37	030330Z	10.0N 138.1E	P	5 2 700 30 55 270	40	50	90	10	993	308	* 13	-	-	4
38	030433Z	10.4N 137.2E	P	10 1 700 130 55 40	35	50	40	20	992	301	* 12	-	-	4
39	030445Z	10.2N 136.9E	SAT	(IR DATA)					PCN 5	DMSP				
40	030445Z	10.1N 136.3E	SAT	(IR DATA)					PCN 6	DMSP				
41	031017Z	10.3N 136.8E	SAT	(IR DATA)					PCN 6	DMSP				
42	031024Z	11.0N 136.9E	SAT	(IR DATA)					PCN 6	DMSP				
43	031121Z	10.9N 136.3E	SAT	(IR DATA)					PCN 5	NOAA-5				
44	031350Z	11.3N 136.3E	SAT	(IR DATA)					PCN 5	DMSP				
45	032122Z	11.5N 134.9E	SAT	(IR DATA)					PCN 5	DMSP				
46	032230Z	10.5N 134.6E	SAT	(T4.0/4.0 /D1.0/25HRS)					PCN 5	DMSP				
47	032230Z	11.3N 133.8E	SAT	(T4.0/4.0 /D1.0/25HRS)					PCN 6	DMSP				
48	032230Z	10.8N 134.6E	SAT	(T3.0/3.0 / / HRS)					PCN 5	DMSP				
49	032304Z	10.5N 134.5E	SAT	(IR DATA)					PCN 5	DMSP				
50	032326Z	10.0N 134.0E	SAT	(T4.0/4.0 /D1.0/23HRS)					NOAA-5	(CONF 01)				

51	032356Z	10.7N	134+5E	SAT	(IR DATA	)	PCN 5	NOAA-5
52	040232Z	10.9N	134+0E	SAT	(IR DATA	)	PCN 5	UMSP
53	040232Z	11.3N	133+4E	SAT	(IR DATA	)	PCN 5	UMSP
54	040232Z	10.7N	134+2E	SAT	(TS.5/3.5 / / HRS)	PCN 3	UMSP	
55	040309Z	10.7N	134+3E	P	6 2 700 120 61 360	38 - 95 120	20 987 295 17 13	- - - -
56	040931Z	10.6N	132+8E	SAT	(IR DATA	)	PCN 5	UMSP
57	040931Z	10.8N	132+8E	SAT	(IR DATA	)	PCN 6	UMSP
58	041006Z	10.7N	132+6E	SAT	(IR DATA	)	PCN 6	UMSP
59	041037Z	10.6N	132+5E	SAT	(IR DATA	)	PCN 6	NOAA-5
60	041233Z	10.5N	132+0E	SAT	(IR DATA	)	PCN 6	NOAA-5
61	041513Z	10.5N	132+2E	SAT	(IR DATA	)	PCN 5	UMSP
62	041514Z	10.4N	131+4E	SAT	(IR DATA	)	PCN 5	UMSP
63	041514Z	10.8N	131+8E	SAT	(IR DATA	)	PCN 6	UMSP
64	042150Z	11.1N	131+9E	P	5 5 700 20 55 290	18 80 60	12 986 291 19 16	- - - -
65	042213Z	10.4N	131+4E	SAT	(TS.0/5.0 /D1.0/24HRS)	PCN 5	UMSP	
66	042213Z	10.6N	131+3E	SAT	(TS.0/5.0 /D1.0/24HRS)	PCN 6	UMSP	
67	042213Z	10.5N	131+6E	SAT	(T4.0/4.0 /D0.5/21HRS)	PCN 3	UMSP	
68	042251Z	10.4N	131+5E	SAT	(IR DATA	)	PCN 5	UMSP
69	042251Z	10.4N	131+1E	SAT	(IR DATA	)	PCN 6	UMSP
70	042313Z	10.2N	131+3E	SAT	(IR DATA	)	PCN 6	NOAA-5
71	050038Z	10.5N	132+0E	SAT	(T4.0/4.0 /S /25HRS)	NOAA-5	(CONF 01)	
72	050214Z	10.3N	130+6E	SAT	(IR DATA	)	PCN 5	UMSP
73	050214Z	10.6N	130+7E	SAT	(IR DATA	)	PCN 5	UMSP
74	050832Z	11.1N	130+9E	P	5 2 700 210 65 150	50 - 65 150	50 988 290 17 13	- - - -
75	051055Z	10.7N	130+8E	SAT	(IR DATA	)	PCN 5	UMSP
76	051055Z	10.4N	130+1E	SAT	(IR DATA	)	PCN 6	UMSP
77	051134Z	10.8N	130+6E	SAT	(IR DATA	)	PCN 5	UMSP
78	051149Z	11.1N	130+5E	SAT	(IR DATA	)	PCN 5	NOAA-5
79	051152Z	10.8N	130+9E	SAT	(IR DATA	)	NOAA-5	(CONF 03)
80	051456Z	11.2N	130+3E	SAT	(IR DATA	)	PCN 6	UMSP
81	051456Z	10.6N	130+3E	SAT	(IR DATA	)	PCN 6	UMSP
82	052155Z	12.1N	130+5E	SAT	(T4.5/+5.5 / / HRS)	PCN 5	UMSP	
83	052156Z	12.0N	129+6E	SAT	(TS.0/5.0 /S /24HRS)	PCN 5	UMSP	
84	052239Z	13.0N	130+7E	SAT	(IR DATA	)	PCN 5	UMSP
85	052239Z	12.3N	130+2E	SAT	(IR DATA	)	PCN 5	UMSP
86	052243Z	13.1N	130+2E	P	2 5 700 340 45 240	50 - 70 240	30 982 291 17 13	- - - -
87	060025Z	13.3N	130+2E	SAT	(IR DATA	)	PCN 5	NOAA-5
88	060157Z	13.3N	130+2E	SAT	(IR DATA	)	PCN 5	UMSP
89	060157Z	13.2N	130+2E	SAT	(TS.0/5.0 /S /27HRS)	PCN 4	UMSP	
90	060335Z	13.7N	129+9E	P	2 5 700 230 55 140	40 - 80 150	80 980 291 16 11	- - - -
91	061034Z	14.8N	129+4E	SAT	(IR DATA	)	PCN 5	UMSP
92	061038Z	15.1N	129+9E	SAT	(IR DATA	)	PCN 5	UMSP
93	061038Z	14.0N	129+7E	SAT	(IR DATA	)	PCN 4	UMSP
94	061105Z	14.9N	129+0E	SAT	(IR DATA	)	PCN 6	NOAA-5
95	061124Z	15.0N	128+9E	SAT	(IR DATA	)	PCN 5	UMSP
96	061124Z	15.0N	129+3E	SAT	(IR DATA	)	PCN 6	UMSP
97	061439Z	15.6N	129+0E	SAT	(IR DATA	)	PCN 5	UMSP
98	061439Z	15.4N	129+4E	SAT	(IR DATA	)	PCN 2	UMSP
99	062138Z	16.2N	128+6E	SAT	(T5.0/5.0 / / HRS)	PCN 2	UMSP	
100	062139Z	16.3N	128+6E	SAT	(IR DATA	)	PCN 1	UMSP
101	062139Z	16.3N	128+7E	SAT	(T5.5/5.5 /D0.5/24HRS)	PCN 1	UMSP	
102	062139Z	16.3N	129+0E	SAT	(T6.0/6.0 /D1.0/20HRS)	PCN 2	UMSP	
103	062220Z	16.2N	128+8E	P	5 5 700 360 57 270	20 - - -	960 271 18 11 ELIP N-S 20X15	4
104	062227Z	16.3N	128+6E	SAT	(IR DATA	)	PCN 1	UMSP
105	062227Z	16.4N	128+8E	SAT	(TS.5/5.5 /D1.0/24HRS)	PCN 3	UMSP	
106	062336Z	16.8N	128+9E	SAT	(T5.0/5.0 / / HRS)	NOAA-5	(CONF 01)	
107	062341Z	16.5N	128+6E	SAT	(IR DATA	)	PCN 1	NOAA-5
108	070320Z	17.4N	128+5E	SAT	(IR DATA	)	PCN 1	UMSP
109	070321Z	17.5N	128+6E	SAT	(IR DATA	)	PCN 2	UMSP
110	070321Z	17.1N	128+7E	SAT	(IR DATA	)	PCN 2	UMSP
111	070321Z	17.9N	128+5E	SAT	(IR DATA	)	PCN 1	UMSP
112	070344Z	17.3N	128+4E	P	3 1 700 80 95 350	30 - 80 350	10 947 264 21 12 CIHC	15
113	071021Z	18.2N	127+8E	SAT	(IR DATA	)	PCN 1	UMSP
114	071021Z	18.5N	127+9E	SAT	(IR DATA	)	PCN 2	UMSP
115	071021Z	18.2N	128+0E	SAT	(IR DATA	)	PCN 2	UMSP
116	071112Z	18.3N	128+0E	SAT	(IR DATA	)	PCN 1	UMSP
117	071112Z	18.1N	128+5E	SAT	(IR DATA	)	PCN 1	UMSP
118	071218Z	18.6N	128+0E	SAT	(IR DATA	)	PCN 1	NOAA-5
119	071220Z	18.0N	127+6E	SAT	(IR DATA	)	NOAA-5	(CONF 01)
120	071603Z	19.1N	127+5E	SAT	(IR DATA	)	PCN 2	UMSP
121	071603Z	18.8N	127+9E	SAT	(IR DATA	)	PCN 1	UMSP
122	072122Z	19.9N	126+9E	SAT	(T7.0/7.0 /D1.0/24HRS)	PCN 1	UMSP	
123	072122Z	19.9N	127+2E	SAT	(T6.5/6.5 /D0.5/24HRS)	PCN 2	UMSP	
124	072204Z	20.1N	127+4E	P	5 5 700 70 100 360	12 130 150	10 907 224 17 14 CIHC	10
125	072215Z	19.9N	126+9E	SAT	(IR DATA	)	PCN 2	UMSP
126	072215Z	19.7N	127+4E	SAT	(T6.0/6.0 /D0.5/24HRS)	PCN 2	UMSP	
127	080023Z	20.5N	127+0E	SAT	(T6.0/6.0 /D1.0/25HRS)	NOAA-5	(CONF 01)	
128	080054Z	20.6N	127+2E	SAT	(IR DATA	)	PCN 1	NOAA-5
129	080303Z	21.0N	127+0E	SAT	(IR DATA	)	PCN 1	UMSP
130	080303Z	21.0N	127+2E	SAT	(IR DATA	)	PCN 3	UMSP
131	080303Z	20.8N	127+3E	SAT	(IR DATA	)	PCN 1	UMSP
132	080303Z	21.1N	127+0E	SAT	(T6.5/6.5 / / HRS)	PCN 1	UMSP	
133	080349Z	21.0N	127+0E	P	3 5 700 320 95 260	20 140 240	8 906 221 21 15 CIHC	14
134	081004Z	21.7N	126+7E	SAT	(IR DATA	)	PCN 1	UMSP
135	081004Z	21.9N	126+5E	SAT	(IR DATA	)	PCN 4	UMSP
136	081004Z	22.0N	126+8E	SAT	(IR DATA	)	PCN 2	UMSP
137	081100Z	21.9N	126+8E	SAT	(IR DATA	)	PCN 1	UMSP
138	081100Z	22.4N	126+9E	SAT	(IR DATA	)	PCN 4	UMSP
139	081100Z	22.0N	126+6E	SAT	(IR DATA	)	PCN 2	UMSP
140	081134Z	22.0N	126+9E	SAT	(IR DATA	)	PCN 1	NOAA-5

TROPICAL STORM CARLA
FIX POSITIONS FOR CYCLONE NO. 11
0000Z 03 SEP TO 0000Z 05 SEP

FIX NO.	TIME	POSIT	CAT	ACRY	FIX	FLT	LVL	WIND	SFC WIND	MAX OBS	OBS	MIN	FLT	PUSIT OF			MSN NMBR
														NAV-MET	LVL	DIR VEL BRG RNG		VEL BRG RNG	SLP	HGT	TI/TD	FORM	URIEN- SATION	EYE DIA	RADAR
1	302156Z	13.6N 131.9E	SAT		(T1.0/1.0 / / HRS)	PCN	5	UMSP									
2	310056Z	13.7N 131.4E	SAT		(IR DATA)	PCN	6	NOAA-5									
3	310201Z	14.6N 129.6E	SAT		(IR DATA)	PCN	5	UMSP									
4	311039Z	14.8N 130.0E	SAT		(IR DATA)	PCN	5	UMSP									
5	311136Z	14.0N 129.6E	SAT		(IR DATA)	PCN	5	NOAA-5									
6	311442Z	15.0N 129.4E	SAT		(IR DATA)	PCN	5	UMSP									
7	312141Z	15.1N 128.7E	SAT		(T 0/0.5 /W1.0/24HRS)	PCN	5	UMSP									
8	010325Z	14.2N 126.6E	SAT		(T1.0/1.0 / / HRS)	PCN	5	UMSP									
9	011022Z	17.8N 122.9E	SAT		(IR DATA)	PCN	5	UMSP									
10	011043Z	14.5N 125.1E	SAT		(IR DATA)	PCN	5	UMSP									
11	011249Z	18.2N 122.7E	SAT		(IR DATA)	PCN	6	NOAA-5									
12	011607Z	16.5N 122.1E	SAT		(IR DATA)	PCN	6	UMSP									
13	011607Z	16.3N 121.9E	SAT		(IR DATA)	PCN	5	UMSP									
14	012304Z	18.3N 120.1E	SAT		(T2.0/2.0 / / HRS)	PCN	5	UMSP									
15	012304Z	17.5N 120.9E	SAT		(T2.0/2.0 /D1.0/20HRS)	PCN	5	UMSP									
16	012304Z	17.5N 121.0E	SAT		(T2.0/2.0 / / HRS)	PCN	3	UMSP									
17	012328Z	18.3N 119.9E	SAT		(IR DATA)	PCN	6	UMSP									
18	012328Z	17.6N 120.6E	SAT		(IR DATA)	PCN	5	UMSP									
19	020125Z	18.3N 119.6E	SAT		(T2.0/2.0 / / HRS)	PCN	5	NOAA-5									
20	021147Z	18.7N 116.1E	SAT		(IR DATA)	PCN	6	UMSP									
21	021147Z	17.9N 116.2E	SAT		(IR DATA)	PCN	6	UMSP									
22	021205Z	18.2N 116.4E	SAT		(IR DATA)	PCN	6	NOAA-5									
23	021213Z	18.8N 116.0E	SAT		(IR DATA)	PCN	6	UMSP									
24	021549Z	18.3N 114.6E	SAT		(IR DATA)	PCN	5	UMSP									
25	021549Z	18.2N 115.3E	SAT		(IR DATA)	PCN	5	UMSP									
26	022247Z	18.3N 112.6E	SAT		(T2.0/2.0 / / HRS)	PCN	5	UMSP									
27	022247Z	18.4N 113.7E	SAT		(IR DATA)	PCN	6	UMSP									
28	022247Z	19.5N 115.0E	SAT		(IR DATA)	PCN	5	UMSP									
29	022316Z	19.9N 114.9E	SAT		(IR DATA)	PCN	6	UMSP									
30	022316Z	18.4N 111.7E	SAT		(T2.5/2.5 /D0.5/24HRS)	PCN	5	UMSP									
31	030010Z	18.5N 112.5E	SAT		(T2.5/2.5 / / HRS)	NOAA	5	NOAA-5	(CONF 01)								
32	030045Z	17.7N 114.7E	P	5	5 700 100 35 50	50	45	50	50	992	-	27	25	-	-	-	1
33	030431Z	19.0N 113.0E	SAT		(IR DATA)	PCN	5	UMSP									
34	031130Z	17.7N 110.5E	SAT		(IR DATA)	PCN	6	UMSP									
35	031200Z	16.0N 112.6E	SAT			PCN	6	UMSP									
36	032230Z	17.8N 110.3E	SAT		(T2.5/2.5 /D0.5/24HRS)	PCN	5	UMSP									
37	032230Z	17.4N 111.0E	SAT		(T3.0/3.0 / / HRS)	PCN	6	UMSP									
38	032230Z	17.0N 111.0E	SAT		(IR DATA)	PCN	5	UMSP									
39	032304Z	17.2N 110.0E	SAT		(IR DATA)	PCN	5	UMSP									
40	040122Z	17.0N 110.0E	SAT		(T3.5/3.5 /D1.0/24HRS)	NOAA	5	NOAA-5	(CONF 01)								
41	040413Z	17.8N 110.3E	SAT		(IR DATA)	PCN	4	UMSP									
42	040413Z	16.9N 110.0E	SAT		(T2.5/2.5 /S /29HRS)	PCN	5	UMSP									
43	041112Z	18.2N 108.5E	SAT		(IR DATA)	PCN	5	UMSP									
44	041112Z	17.8N 108.0E	SAT		(IR DATA)	PCN	5	UMSP									
45	041148Z	17.8N 108.7E	SAT		(IR DATA)	PCN	6	UMSP									
46	041148Z	17.6N 108.4E	SAT		(IR DATA)	PCN	6	UMSP									
47	041233Z	17.1N 106.4E	SAT		(IR DATA)	PCN	6	NOAA-5									
48	041254Z	17.3N 106.2E	SAT		(IR DATA)	PCN	4	UMSP									
49	041655Z	17.5N 106.2E	SAT		(IR DATA)	PCN	6	UMSP									
50	042354Z	16.9N 103.8E	SAT		(IR DATA)	PCN	5	UMSP									
51	050033Z	16.8N 103.7E	SAT		(IR DATA)	PCN	5	UMSP									
52	050038Z	17.0N 104.0E	SAT		(T1.5/1.5 /W2.0/24HRS)	NOAA	5	NOAA-5	(CONF 01)								
53	050109Z	16.8N 103.6E	SAT		(T2.0/2.0 /W0.5/26HRS)	PCN	6	NOAA-5									
54	050355Z	17.1N 104.0E	SAT		(T1.0/2.0 /W1.5/24HRS)	PCN	5	UMSP									
55	050356Z	16.5N 105.2E	SAT		(IR DATA)	PCN	6	UMSP									

TYPHOON DINAH
FIX POSITIONS FOR CYCLONE NO. 12
1200Z 14 SEP TO 1800Z 23 SEP

FIX NO.	TIME	POSIT	FIX CAT NAV-MET	ACCRY	MAX OBS	OBS	MIN	FLT	POSIT OF RADAR	MSN NMBR														
			LVL	DIA	LVL WIND	SEC WIND	MIN	700MB	LVL	EYE	ORIENT	EYE	FORM	TI/TO	SLP	HGT	TI/TO	FORM	TI/TO	SLP	HGT			
1	101011Z	18.3N 150.0E	SAT	(IR DATA)		NOAA-5	(CONF 02)																	
2	102030Z	15.5N 151.9E	SAT	(T 0/ 0 / / HRS)		PCN 5	UMSP																	
3	102234Z	18.6N 151.0E	SAT	(T1.0/1.0 / / HRS)		NOAA-5	(CONF 02)																	
4	110913Z	15.2N 150.5E	SAT	(IR DATA)		PCN 5	UMSP																	
5	111124Z	19.4N 146.3E	SAT	(IR DATA)		NOAA-5	(CONF 02)																	
6	112013Z	19.9N 147.0E	SAT	(T 0/ 0 / S /24HRS)		PCN 5	UMSP																	
7	120103Z	20.0N 145.5E	SAT	(IR DATA)		PCN 5	UMSP																	
8	121011Z	21.5N 142.3E	SAT	(IR DATA)		PCN 5	UMSP																	
9	121037Z	21.5N 142.1E	SAT	(IR DATA)		PCN 5	UMSP																	
10	121044Z	21.2N 141.4E	SAT	(IR DATA)		NOAA-5	(CONF 01)																	
11	121435Z	21.8N 141.2E	SAT	(IR DATA)		PCN 5	UMSP																	
12	122113Z	21.8N 139.6E	SAT	(IR DATA)		PCN 6	UMSP																	
13	122138Z	21.7N 139.2E	SAT	(T1.0/1.0 /D1.0/25HRS)		PCN 5	UMSP																	
14	122138Z	20.3N 139.1E	SAT	(T 0/ 0 / / HRS)		PCN 5	UMSP																	
15	122317Z	22.1N 137.1E	SAT	(IR DATA)		PCN 5	NOAA-5																	
16	130135Z	22.6N 138.2E	SAT	(IR DATA)		PCN 5	UMSP																	
17	130959Z	22.4N 136.0E	SAT	(IR DATA)		PCN 6	UMSP																	
18	130959Z	23.1N 135.9E	SAT	(IR DATA)		PCN 6	UMSP																	
19	131020Z	22.1N 135.8E	SAT	(IR DATA)		PCN 5	UMSP																	
20	131020Z	23.1N 135.8E	SAT	(IR DATA)		PCN 6	UMSP																	
21	131020Z	23.0N 136.0E	SAT	(IR DATA)		PCN 6	UMSP																	
22	131146Z	22.3N 135.5E	SAT	(IR DATA)		PCN 5	NOAA-5																	
23	131417Z	22.5N 135.0E	SAT	(IR DATA)		PCN 5	UMSP																	
24	132121Z	21.7N 131.5E	SAT	(T2.0/2.0 /D1.0/24HRS)		PCN 5	UMSP																	
25	132121Z	21.7N 131.6E	SAT	(T2.0/2.0 / / HRS)		PCN 5	UMSP																	
26	132121Z	21.8N 132.2E	SAT	(T1.0/1.0 /D1.0/24HRS)		PCN 5	UMSP																	
27	140023Z	21.6N 131.3E	SAT	(IR DATA)		PCN 5	NOAA-5																	
28	140254Z	22.3N 129.4E	SAT	(T2.5/2.5 / / HRS)		PCN 3	UMSP																	
29	140259Z	21.6N 130.5E	SAT	(IR DATA)		PCN 5	UMSP																	
30	140259Z	22.2N 130.8E	SAT	(IR DATA)		PCN 5	UMSP																	
31	140259Z	21.7N 130.7E	SAT	(IR DATA)		PCN 6	UMSP																	
32	141003Z	21.7N 128.6E	SAT	(IR DATA)		PCN 5	UMSP																	
33	141003Z	21.6N 128.0E	SAT	(IR DATA)		PCN 6	UMSP																	
34	141003Z	21.3N 128.7E	SAT	(IR DATA)		PCN 6	UMSP																	
35	141003Z	21.5N 127.9E	SAT	(IR DATA)		PCN 4	UMSP																	
36	141103Z	21.6N 128.2E	SAT	(IR DATA)		PCN 5	NOAA-5																	
37	141128Z	21.7N 127.9E	SAT	(IR DATA)		PCN 5	UMSP																	
38	141129Z	21.6N 128.1E	SAT	(IR DATA)		PCN 5	UMSP																	
39	141129Z	21.5N 127.6E	SAT	(IR DATA)		PCN 4	UMSP																	
40	141208Z	21.5N 127.8E	SAT	(IR DATA)		PCN 2	NOAA-4																	
41	141541Z	20.8N 127.1E	SAT	(IR DATA)		PCN 3	UMSP																	
42	141541Z	20.8N 127.0E	SAT	(IR DATA)		PCN 3	UMSP																	
43	142245Z	19.4N 124.5E	SAT	(IR DATA)		PCN 6	UMSP																	
44	142245Z	19.4N 124.7E	SAT	(T4.0/4.0 /D2.0/25HRS)		PCN 5	UMSP																	
45	142245Z	19.9N 124.3E	SAT	(T4.0/4.0 /D2.0/25HRS)		PCN 5	UMSP																	
46	142245Z	19.3N 124.9E	SAT	(T3.5/3.5 / / HRS)		PCN 3	UMSP																	
47	142245Z	18.7N 124.0E	SAT	(T3.5/3.5 /D1.0/21HRS)		PCN 5	UMSP																	
48	150129Z	19.1N 125.1E	SAT	(T4.0/4.0 / / HRS)		NOAA-5	(CONF 02)																	
49	150135Z	19.2N 124.4E	SAT	(IR DATA)		PCN 5	NOAA-5																	
50	150241Z	19.0N 124.0E	SAT	(IR DATA)		PCN 3	UMSP																	
51	150241Z	18.9N 123.6E	SAT	(T3.5/3.5 / / HRS)		PCN 5	UMSP																	
52	150241Z	19.0N 124.0E	SAT	(IR DATA)		PCN 5	UMSP																	
53	150241Z	18.9N 123.9E	SAT	(IR DATA)		PCN 3	UMSP																	
54	150450Z	18.9N 123.9E	P	5 5 700 18U 65 100	15	65 100	15	968	281	16 13	CIRC	22												
55	150935Z	18.4N 123.1E	P	5 5 700 12U 76 40	45	75 330	10	967	284	19 15	ELIP	SE-NW 30X15	3											
56	151108Z	18.3N 122.7E	SAT	(IR DATA)		PCN 5	NOAA-4																	
57	151116Z	18.3N 122.5E	SAT	(IR DATA)		PCN 5	UMSP																	
58	151116Z	18.6N 120.7E	SAT	(IR DATA)		PCN 5	UMSP																	
59	151128Z	17.7N 122.4E	SAT	(IR DATA)		PCN 5	UMSP																	
60	151128Z	18.0N 122.5E	SAT	(IR DATA)		PCN 5	UMSP																	
61	151215Z	18.0N 122.4E	SAT	(IR DATA)		PCN 5	NOAA-5																	
62	151221Z	18.3N 122.8E	SAT	(IR DATA)		NOAA-5	(CONF 02)																	
63	151523Z	17.8N 121.8E	SAT	(IR DATA)		PCN 5	UMSP																	
64	151523Z	17.8N 121.7E	SAT	(IR DATA)		PCN 5	UMSP																	
65	152228Z	17.3N 120.3E	SAT	(T4.0/4.0 /S /24HRS)		PCN 3	UMSP																	
66	152228Z	17.4N 120.1E	SAT	(T4.0/4.0+/S /24HRS)		PCN 3	UMSP																	
67	152228Z	17.3N 120.4E	SAT	(T4.5/4.5 /D1.0/24HRS)		PCN 3	UMSP																	
68	152228Z	17.9N 119.8E	SAT	(T4.5/4.5 /D1.0/24HRS)		PCN 3	UMSP																	
69	160045Z	16.3N 119.9E	SAT	(T4.0/4.0 /S /23HRS)		NOAA-5	(CONF 01)																	
70	160224Z	17.0N 119.2E	SAT	(IR DATA)		PCN 3	UMSP																	
71	160346Z	17.4N 119.7E	P	2 5 700 18U 45 150	60	40 150	60	985	295	13 10	-	- - -												4
72	160405Z	17.1N 119.6E	SAT	(IR DATA)		PCN 3	UMSP																	
73	160935Z	17.2N 118.7E	P	2 5 700 28U 50 250	25	-	-	984	294	14 12	-	- - -												
74	161114Z	16.9N 118.4E	SAT	(IR DATA)		PCN 5	UMSP																	
75	161104Z	17.1N 118.5E	SAT	(IR DATA)		PCN 5	UMSP																	
76	161104Z	17.0N 118.0E	SAT	(IR DATA)		PCN 4	UMSP																	
77	161111Z	16.9N 118.3E	SAT	(IR DATA)		PCN 5	UMSP	</																

91 171053Z 17.0N 115.4E SAT (IR DATA) PCN 4 UMSP
 92 171054Z 16.9N 115.5E SAT (IR DATA) PCN 5 UMSP
 93 171054Z 16.9N 115.4E SAT (IR DATA) PCN 5 UMSP
 94 171234Z 17.3N 116.2E SAT (IR DATA) PCN 6 UMSP
 95 171234Z 17.0N 115.7E SAT (IR DATA) PCN 5 UMSP
 96 171243Z 17.2N 115.5E SAT (IR DATA) PCN 5 NOAA-5
 97 171244Z 17.5N 117.0E SAT (IR DATA) NOAA-5 (CONF 01)
 98 171630Z 16.7N 115.3E SAT (IR DATA) PCN 6 UMSP
 99 171630Z 17.4N 115.8E SAT (IR DATA) PCN 5 UMSP
 100 172334Z 17.9N 117.2E SAT (T4.5/4.5 /D0.5/24HRS) PCN 5 UMSP
 101 172334Z 17.2N 117.3E SAT (T4.0/4.0 /5 /24HRS) PCN 5 UMSP
 102 180112Z 18.6N 117.2E SAT (T4.0/4.0 /5 /23HRS) NOAA-5 (CONF 01)
 103 180120Z 18.8N 117.1E SAT (IR DATA) PCN 5 NOAA-5
 104 180330Z 18.3N 117.6E SAT (IR DATA) PCN 3 UMSP
 105 180330Z 18.2N 117.4E SAT (IR DATA) PCN 3 UMSP
 106 180500Z 18.6N 117.5E SRDR - WELL DEFINED EYE TRACKED FOR 90 MIN - USS OKLAHOMA CITY (CG-5)
 107 180707Z 18.6N 117.9E SRDR - EYE POSIT - USS OKLAHOMA CITY (CG-5)
 108 181034Z 18.8N 117.6E SAT (IR DATA) PCN 3 UMSP
 109 181034Z 18.9N 117.6E SAT (IR DATA) PCN 3 UMSP
 110 181159Z 18.9N 117.8E SAT (IR DATA) PCN 3 NOAA-5
 111 181205Z 18.5N 117.8E SAT (IR DATA) NOAA-5 (CONF 01)
 112 181218Z 19.1N 117.4E SAT (IR DATA) PCN 6 UMSP
 113 181612Z 19.0N 118.2E SAT (IR DATA) PCN 6 UMSP
 114 181612Z 19.3N 117.6E SAT (IR DATA) PCN 5 UMSP
 115 182201Z 19.6N 118.2E P 2 2 700 220 62 120 37 00 320 15 972 285 15 13 ELIP N-S 40X30 6
 116 182318Z 19.4N 119.2E SAT (T4.0/4.5 /WU.5/24HRS) PCN 6 UMSP
 117 182318Z 19.5N 119.0E SAT (T4.5/4.5 /D0.5/24HRS) PCN 3 UMSP
 118 182318Z 19.5N 119.2E SAT (T4.0/4.0 / / MRS) PCN 5 UMSP
 119 190001Z 19.3N 118.0E SRDR - APPARENT RADAR EYE - FEEDER BANDS DISTINCT USS OKLAHOMA CITY (CG-5)
 120 190028Z 19.5N 119.1E SAT (T4.5/4.5 /D0.5/23HRS) NOAA-5 (CONF 01)
 121 190054Z 19.1N 118.1E SAT (T4.5/5.0 / / MRS) PCN 5 NOAA-5
 122 190200Z 19.5N 118.8E LRDR - 45// - - - 22.6N 120.3E -
 123 190200Z 19.4N 117.9E SRDR - RADAR STORM CENTER - - - 22.6N 120.3E -
 124 190300Z 19.6N 118.6E LRDR - 45// - - - 22.6N 120.3E -
 125 190600Z 19.8N 118.6E LRDR - 45// - - - 22.6N 120.3E -
 126 190900Z 19.8N 118.7E LRDR - 1290/ - - - 22.6N 120.3E -
 127 191115Z 19.8N 118.5E SAT (IR DATA) PCN 5 NOAA-5
 128 191200Z 20.0N 118.8E LRDR - 1291/ - - - 22.6N 120.3E -
 129 191201Z 19.2N 119.3E SAT (IR DATA) PCN 5 UMSP
 130 191201Z 19.7N 119.0E SAT (IR DATA) PCN 1 UMSP
 131 191300Z 20.0N 118.9E LRUR - 1291/ - - - 22.6N 120.3E -
 132 191317Z 20.2N 118.7E SAT (IR DATA) NOAA-5 (CONF 02)
 133 191400Z 20.0N 118.9E LRDR - 1291/ - - - 22.6N 120.3E -
 134 191554Z 19.7N 119.0E SAT (IR DATA) PCN 5 UMSP
 135 191554Z 19.7N 118.9E SAT (IR DATA) PCN 1 UMSP
 136 191600Z 20.0N 118.9E LRDR - 1291/ - - - 22.6N 120.3E -
 137 191700Z 20.1N 118.9E LRDR - 1097/ - - - 22.6N 120.3E -
 138 191800Z 20.1N 119.0E LRDR - 1091/ - - - 22.6N 120.3E -
 139 191900Z 20.1N 119.0E LRDR - 1091/ - - - 22.6N 120.3E -
 140 192000Z 20.2N 119.1E LRDR - 1097/ - - - 22.6N 120.3E -
 141 192100Z 20.2N 119.1E LRDR - 1097/ - - - 22.6N 120.3E -
 142 192200Z 20.3N 119.1E LRDR - 1097/ - - - 22.6N 120.3E -
 143 192205Z 20.0N 119.1E P - 3 700 700 140 74 60 36 - - - 964 27/ 16 13 CINC 40 7
 144 192301Z 20.0N 119.6E SAT (T6.0/6.0 /D1.5/24HRS) PCN 1 UMSP
 145 192312Z 20.1N 119.4E SAT (T4.5/4.5 / / MRS) PCN 1 UMSP
 146 200000Z 20.2N 119.4E LRDR - 1097/ - - - 22.6N 120.3E -
 147 200140Z 19.9N 119.3E SAT (T5.0/5.0 /D0.5/25HRS) NOAA-5 (CONF 01)
 148 200200Z 20.2N 119.1E LRDR - 25/6/ - - - 22.6N 120.3E -
 149 200300Z 20.2N 119.1E LRDR - 21972 - - - 22.6N 120.3E -
 150 200332Z 20.1N 119.3E P 2 8 700 70 75 340 40 - - - 965 27/ 16 14 CINC 35 7
 151 200500Z 20.6N 118.9E LRDR - 25712 - - - 22.6N 120.3E -
 152 201000Z 20.3N 119.0E LRDR - 2063/ - - - 22.6N 120.3E -
 153 201100Z 20.4N 118.9E LRDR - 25792 - - - 22.6N 120.3E -
 154 201144Z 20.1N 119.3E SAT (IR DATA) PCN 5 UMSP
 155 201144Z 20.3N 119.4E SAT (IR DATA) PCN 1 UMSP
 156 201157Z 20.5N 119.1E SAT (IR DATA) PCN 2 UMSP
 157 201157Z 20.2N 119.1E SAT (IR DATA) PCN 4 UMSP
 158 201200Z 20.2N 119.1E LRDR - 2171/ - - - 22.6N 120.3E -
 159 201228Z 20.2N 119.1E SAT (IR DATA) PCN 3 NOAA-5 (CONF 02)
 160 201234Z 20.3N 119.1E SAT (IR DATA) NOAA-5 (CONF 01)
 161 201300Z 20.1N 119.0E LRDR - 2081/ - - - 22.6N 120.3E -
 162 201400Z 20.1N 118.9E LRDR - 26// - - - 22.6N 120.3E -
 163 201500Z 20.1N 118.9E LRDR - 25// - - - 22.6N 120.3E -
 164 201537Z 20.4N 118.9E SAT (IR DATA) PCN 1 UMSP
 165 201600Z 20.1N 118.8E LRDR - 55/// - - - 22.6N 120.3E -
 166 201700Z 20.1N 118.7E LRDR - 55/// - - - 22.6N 120.3E -
 167 201800Z 20.2N 118.6E LRDR - 55/// - - - 22.6N 120.3E -
 168 201900Z 20.1N 118.5E LRDR - 55/// - - - 22.6N 120.3E -
 169 202000Z 20.1N 118.5E LRDR - ///// - - - 22.6N 120.3E -
 170 202150Z 20.1N 118.8E P - 10 700 140 60 40 40 - - - 970 28/ 13 11 ELIP N-S 20X5 X
 171 202244Z 20.0N 118.5E SAT (T4.5/4.5 / / MRS) PCN 5 UMSP
 172 202244Z 20.0N 118.2E SAT (IR DATA) PCN 3 UMSP
 173 202244Z 20.3N 118.6E SAT (T4.0/4.0 / / MRS) PCN 5 UMSP
 174 202244Z 20.3N 118.2E SAT (T6.0/6.0 /S /24HRS) PCN 1 UMSP
 175 202300Z 19.9N 118.4E SAT (IR DATA) PCN 1 UMSP
 176 202300Z 20.0N 118.3E SAT (T3.5/4.5-/W1.0/24HRS) PCN 3 UMSP
 177 210000Z 20.0N 118.5E LRUR - 5/// - - - 22.6N 120.3E -
 178 210057Z 19.5M 118.5E SAT (T5.0/5.0 /S /23HRS) NOAA-5 (CONF 01)
 179 210100Z 20.2N 118.5E LRDR - 45// - - - 22.6N 120.3E -
 180 210104Z 19.9N 118.5E SAT (IR DATA) PCN 3 NOAA-5

TROPICAL STORM EMMA
FIX POSITIONS FOR CYCLONE NO. 13
0600Z 15 SEP TO 0600Z 20 SEP

FIX NO.	TIME	POSIT	FIX ACCRY	CAT	MAX OBS	MAX OBS	OBS	MIN	FLT	EYE	ORIEN-	EYE	POSIT	RADAR	MSN	
													NAV-MET			LVL	DIH	VEL	BRG	RNG	VEL	BRG	RNG	SLP	HGT	TI/TU	FORM	LATITUN	DIA
1	120856Z	17.2N 145.5E	SAT	(IR DATA)			PCN 5	UMSP								
2	121011Z	17.3N 145.2E	SAT	(IR DATA)			PCN 5	UMSP								
3	121435Z	17.6N 145.7E	SAT	(IR DATA)			PCN 5	UMSP								
4	122114Z	18.4N 145.3E	SAT	(IR DATA)			PCN 6	UMSP								
5	122138Z	18.4N 145.6E	SAT	(T 0/ 0 / / HRS)			PCN 5	UMSP								
6	122317Z	18.3N 145.7E	SAT	(IR DATA)			PCN 5	NOAA-5								
7	130135Z	17.8N 146.6E	SAT	(IR DATA)			PCN 5	UMSP								
8	132120Z	18.3N 146.4E	SAT	(T 0/ 0 / / HRS)			PCN 5	UMSP								
9	132121Z	18.1N 146.3E	SAT	(T1.0/1.0 /D1.0/24HRS)			PCN 3	UMSP								
10	132226Z	18.2N 146.3E	SAT	(IR DATA)			PCN 3	NOAA-5								
11	140117Z	18.2N 146.4E	SAT	(IR DATA)			PCN 5	UMSP								
12	140117Z	19.3N 145.3E	SAT	(T1.0/1.0 / / HRS)			PCN 6	UMSP								
13	140947Z	18.5N 142.2E	SAT	(IR DATA)			PCN 6	UMSP								
14	141003Z	18.7N 141.9E	SAT	(IR DATA)			PCN 5	UMSP								
15	141003Z	19.1N 141.7E	SAT	(IR DATA)			PCN 6	UMSP								
16	141013Z	18.7N 142.0E	SAT	(IR DATA)			PCN 5	NOAA-4								
17	141103Z	18.6N 141.7E	SAT	(IR DATA)			PCN 5	NOAA-5								
18	141359Z	18.1N 141.8E	SAT	(IR DATA)			PCN 5	UMSP								
19	141359Z	18.2N 141.7E	SAT	(IR DATA)			PCN 5	UMSP								
20	142050Z	19.5N 142.3E	SAT	(IR DATA)			PCN 4	UMSP								
21	142104Z	20.0N 142.7E	SAT	(T2.0/2.0 /D1.0/24HRS)			PCN 5	UMSP								
22	142104Z	20.1N 142.4E	SAT	(IR DATA)			PCN 3	UMSP								
23	142104Z	20.1N 142.4E	SAT	(T2.5/2.5 / / HRS)			PCN 3	UMSP								
24	142332Z	21.1N 146.1E	SAT	(T2.0/2.0 / / HRS)			NOAA-5	(CONF 02)								
25	142339Z	20.0N 142.8E	SAT	(IR DATA)			PCN 3	NOAA-5								
26	150100Z	19.9N 143.3E	SAT	(IR DATA)			PCN 5	UMSP								
27	150300Z	20.8N 142.9E	P	10 15 700	210 45 130		45	35 130	45	983	-	24 25	-	-	-	3
28	150356Z	21.3N 143.0E	P	13 7 700	30 24 300		30	20 300	30	986	29b	14 14	-	-	-	3
29	150934Z	21.8N 143.6E	SAT	(IR DATA)			PCN 6	UMSP								
30	150946Z	21.9N 143.5E	SAT	(IR DATA)			PCN 5	UMSP								
31	150946Z	21.7N 143.8E	SAT	(IR DATA)			PCN 5	UMSP								
32	151019Z	22.0N 143.2E	SAT	(IR DATA)			PCN 5	NOAA-5								
33	151342Z	22.8N 144.0E	SAT	(IR DATA)			PCN 5	UMSP								
34	151342Z	22.1N 143.7E	SAT	(IR DATA)			PCN 6	UMSP								
35	152046Z	24.2N 146.7E	SAT	(T3.0/3.0 /D1.0/24HRS)			PCN 5	UMSP								
36	152247Z	24.1N 145.9E	SAT	(T3.0/3.0 /D1.0/23HRS)			NOAA-5	(CONF 02)								
37	152255Z	24.6N 144.8E	SAT	(IR DATA)			PCN 5	NOAA-5								
38	160042Z	25.4N 143.8E	SAT	(IR DATA)			PCN 5	UMSP								
39	160224Z	25.3N 143.6E	SAT	(T3.0/3.0 / / HRS)			PCN 3	UMSP								
40	160353Z	25.1N 144.0E	P	10 15 700	260 60 190		45	55 190	90	979	29c	13 12	-	-	-	5
41	160922Z	27.1N 144.3E	SAT	(IR DATA)			PCN 6	UMSP								
42	160929Z	27.1N 144.4E	SAT	(IR DATA)			PCN 5	UMSP								
43	160929Z	26.3N 144.3E	SAT	(IR DATA)			PCN 3	UMSP								
44	160929Z	25.8N 143.7E	SAT	(IR DATA)			PCN 3	UMSP								
45	161008Z	26.7N 144.4E	SAT	(IR DATA)			PCN 5	NOAA-4								
46	161104Z	27.1N 144.7E	SAT	(IR DATA)			PCN 5	UMSP								
47	161104Z	26.2N 144.4E	SAT	(IR DATA)			PCN 3	UMSP								
48	161202Z	25.7N 143.0E	SAT	(IR DATA)			NOAA-5	(CONF 01)								
49	161506Z	27.2N 144.9E	SAT	(IR DATA)			PCN 5	UMSP								
50	161506Z	25.9N 144.1E	SAT	(IR DATA)			PCN 5	UMSP								
51	162029Z	27.5N 146.0E	SAT	(T2.0/3.0 /W1.0/24HRS)			PCN 3	UMSP								
52	162145Z	27.0N 144.6E	P	5 15 700	270 50 200		120	35 200	120	966	-	13 14	-	-	-	6
53	162207Z	26.3N 144.4E	SAT	(T3.0/3.0 /S /21HRS)			PCN 5	UMSP								
54	162358Z	27.1N 144.0E	SAT	(T3.0/3.0 /S /25HRS)			NOAA-5	(CONF 01)								
55	170007Z	26.9N 144.6E	SAT	(IR DATA)			PCN 3	NOAA-5								
56	170206Z	27.3N 144.6E	SAT	(IR DATA)			PCN 5	UMSP								
57	170206Z	28.0N 145.3E	SAT	(T3.0/3.0 / / HRS)			PCN 5	UMSP								
58	170240Z	27.7N 144.4E	P	5 15 700	90 60 50		160	50 20	120	972	-	14 14	-	-	-	6
59	170911Z	28.8N 144.0E	SAT	(IR DATA)			PCN 6	UMSP								
60	170912Z	28.4N 144.1E	SAT	(IR DATA)			PCN 5	UMSP								
61	171052Z	29.6N 144.0E	SAT	(IR DATA)			PCN 6	UMSP								
62	171104Z	29.0N 143.3E	SAT	(IR DATA)			PCN 5	NOAA-4								
63	171118Z	28.8N 143.5E	SAT	(IR DATA)			NOAA-5	(CONF 01)								
64	171448Z	29.2N 144.0E	SAT	(IR DATA)			PCN 5	UMSP								
65	171448Z	29.1N 143.6E	SAT	(IR DATA)			PCN 3	UMSP								
66	172012Z	29.1N 143.6E	SAT	(T3.0/3.0 /D1.0/24HRS)			PCN 5	UMSP								
67	172012Z	30.0N 144.5E	SAT	(T2.0/2.0 / / HRS)			PCN 6	UMSP								
68	172303Z	29.1N 143.6E	SAT	(IR DATA)			PCN 5	NOAA-5								
69	180102Z	29.0N 141.8E	SAT	(T3.0/3.0 /S /25HRS)			NOAA-5	(CONF 01)								
70	180108Z	29.6N 142.7E	SAT	(IR DATA)			PCN 3	UMSP								
71	180148Z	29.5N 142.6E	SAT	(T2.0/3.0 /W1.0/24HRS)			PCN 3	UMSP								
72	180237Z	28.8N 142.0E	P	5 5 700	210 45 130		90	50 40	80	981	29c	14 13	-	-	-	7
73	181003Z	29.3N 141.2E	SAT	(IR DATA)			PCN 5	NOAA-5								
74	181012Z	29.5N 140.0E	SAT	(IR DATA)			NOAA-5	(CONF 01)								
75	181036Z	29.3N 141.0E	SAT	(IR DATA)			PCN 5	UMSP								
76	181036Z	30.0N 141.0E	SAT	(IR DATA)			PCN 3	UMSP								
77	181404Z	29.9N 141.4E	SAT	(IR DATA)			PCN 3	UMSP								
78	181430Z	29.8N 141.0E	SAT	(IR DATA)			PCN 5	UMSP								
79	181430Z	30.8N 140.9E	SAT	(IR DATA)			PCN 5	UMSP								
80	181533Z	30.6N 140.2E	P	2 5 700	270 72 180	100	-	-	977	29c	14 14	-	-	-	8	
81	182000Z	31.7N 140.3E	LRDR	- 6//3												
82	182100Z	32.0N 140.2E	LRDR	- 6//3												
83	182137Z	31.7N 140.4E	SAT	(T4.0/4.0 /D1.0/25HRS)			PCN 5	UMSP								
84	182137Z	31.4N 139.8E	SAT	(T3.5/3.5 /D1.5/25HRS)			PCN 6	UMSP								
85	182137Z	31.4N 139.8E	SAT	(T4.0/4.0 / / HRS)			PCN 3	UMSP								
86	182137Z	31.5N 139.8E	SAT	(T3.5/3.5 /D1.5/20HRS)			PCN 3	UMSP								
87	182200Z	32.2N 140.3E	LRDR	- 5//3												
88	182228Z	31.8N 140.5E	SAT	(T3.0/3.0 /S /21HRS)			NOAA-5	(CONF 01)								
89	182300Z	32.3N 140.2E	LRDR	- 5//5												
90	190000Z	32.5N 140.3E	LRDR	- 6//6												

91	190030Z	31.9N	140.7E	SAT	IR DATA			PCN 5 NOAA-5	- - -	-	35.3N 138.7E	-
92	190100Z	32.3N	140.3E	LRDR	- 6//6			PCN 5	UMSP	-	-	-
93	190131Z	32.7N	140.6E	SAT	IR DATA			PCN 3	UMSP	-	-	-
94	190131Z	32.4N	140.2E	SAT	IR DATA			PCN 3	UMSP	-	-	-
95	190300Z	32.8N	140.2E	LRDR	- 6//6			PCN 5	NOAA-5	-	-	35.3N 138.7E
96	190345Z	33.3N	140.6E	P 5 10 700	50 35 320 90	- - -	981	298 14 14	-	-	35.3N 138.7E	10
97	190400Z	32.9N	140.0E	LRDR	- 6//6			PCN 5	UMSP	-	-	35.3N 138.7E
98	190500Z	33.2N	140.0E	LRDR	- 6//5			PCN 5	UMSP	-	-	35.3N 138.7E
99	190700Z	33.7N	140.4E	LRDR	- //			PCN 5	UMSP	-	-	35.3N 138.7E
100	190800Z	34.2N	140.6E	LRDR	- 6//			PCN 5	UMSP	-	-	35.3N 138.7E
101	190900Z	34.5N	140.9E	LRDR	- 6//			PCN 5	UMSP	-	-	35.3N 138.7E
102	191000Z	34.6N	141.3E	LRDR	- 6//			PCN 5	UMSP	-	-	35.3N 138.7E
103	191019Z	34.7N	141.1E	SAT	IR DATA			PCN 5	UMSP	-	-	-
104	191019Z	34.7N	141.0E	SAT	IR DATA			PCN 5	UMSP	-	-	-
105	191019Z	35.9N	141.2E	SAT	IR DATA			PCN 4	UMSP	-	-	-
106	191019Z	34.8N	140.6E	SAT	IR DATA			PCN 5	UMSP	-	-	-
107	191100Z	34.7N	142.1E	LRDR	- 6//			PCN 5	NOAA-5	-	-	35.3N 138.7E
108	191115Z	34.9N	141.7E	SAT	IR DATA			PCN 5	NOAA-5	-	-	-
109	191413Z	35.7N	142.8E	SAT	IR DATA			PCN 5	UMSP	-	-	-
110	191413Z	35.9N	143.0E	SAT	IR DATA			PCN 6	UMSP	-	-	-
111	191413Z	36.0N	142.2E	SAT	IR DATA			PCN 3	UMSP	-	-	-
112	192120Z	38.2N	145.2E	SAT	(T2.0/3.0-/W2.0/24HRS)			PCN 5	UMSP	-	-	-
113	192120Z	38.1N	145.4E	SAT	(T2.0/3.0-/W1.0/24HRS)			PCN 6	UMSP	-	-	-
114	192120Z	38.4N	145.5E	SAT	(T2.5/2.5-/W0.5/24HRS)			PCN 5	UMSP	-	-	-
115	192120Z	38.8N	144.6E	SAT	(T2.5/3.5-/W1.0/24HRS)			PCN 5	UMSP	-	-	-
116	192337Z	39.0N	146.0E	SAT	(T2.5/3.0-/W0.5/25HRS)			NOAA-5	(CONF 01)	-	-	-
117	192352Z	39.0N	145.2E	SAT	IR DATA			PCN 5	NOAA-5	-	-	-
118	201032Z	43.5N	151.3E	SAT	IR DATA			PCN 6	NOAA-5	-	-	-

TROPICAL STORM FREDA
FIX POSITIONS FOR CYCLONE NO. 14
0000Z 23 SEP TO 0000Z 25 SEP

FIX NO.	TIME	POSIT	MAX OBS	MAX OBS	0BS	MIN	FLT	POSIT OF RADAR	MSN NMN												
			CAT	ACRY	FLT	LVL	MIND	SFC	WIND	MIN	700MB	LVL	EYE	ORIENT	EYE	DIA					
			CAT	NAV-MET	LVL	DIH	VEL	BRG	HNG	VEL	BRG	RNG	SLP	HGT	TI/TO	FORM	URIN	ATION	EYE	DIA	
1	182137Z	15.2N	139.2E	SAT	(T 0/ 0 / / HRS)			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	
2	191019Z	14.5N	137.5E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	
3	192120Z	13.4N	136.1E	SAT	(T 0/ 0 / S / 24HRS)			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	
4	201002Z	13.0N	134.2E	SAT	(T1.0/1.0 / D1.0/24HRS)			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	
5	202103Z	13.5N	134.2E	SAT	(T1.0/1.0 / D1.0/24HRS)			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	
6	210945Z	13.8N	133.1E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	
7	211003Z	13.7N	133.0E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	
8	211143Z	14.1N	132.0E	SAT	IR DATA			PCN 5	NOAA-5	-	-	-	-	-	-	-	-	-	-	-	
9	211514Z	14.3N	132.1E	SAT	IR DATA			PCN 6	UMSP	-	-	-	-	-	-	-	-	-	-	-	
10	212227Z	17.1N	130.3E	SAT	(T1.0/1.0 / S / 25HRS)			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	
11	212248Z	17.0N	130.2E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	
12	220204Z	15.2N	129.9E	P 5 25 700	190 35 120 100	45	120 100 1001	-	23 23	-	-	-	-	-	-	-	-	-	-	-	1
13	221110Z	17.0N	129.5E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
14	221132Z	16.9N	128.5E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
15	222121Z	18.0N	126.3E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
16	222323Z	18.2N	126.2E	SAT	(T1.0/1.0 / S / 24HRS)			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
17	222336Z	19.4N	126.5E	SAT	IR DATA			PCN 5	NOAA-5	-	-	-	-	-	-	-	-	-	-	-	-
18	230125Z	18.0N	123.6E	SAT	(T1.5/1.5 / / HRS)			NOAA-5	(CONF 01)	-	-	-	-	-	-	-	-	-	-	-	-
19	230202Z	18.8N	122.9E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
20	230344Z	18.4N	123.3E	SAT	(T1.0/1.0 / / HRS)			PCN 3	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
21	230344Z	17.9N	123.2E	SAT	(T1.0/1.0 / / HRS)			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
22	231052Z	19.5N	120.0E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
23	231121Z	19.7N	120.6E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
24	231121Z	19.9N	120.5E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
25	231445Z	19.1N	119.3E	P 5 5 700	230 60 120	15	- - -	988	298 15 12	-	-	-	-	-	-	-	-	-	-	-	?
26	231624Z	18.7N	118.3E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
27	231626Z	18.6N	119.4E	SAT	IR DATA			PCN 6	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
28	232153Z	19.5N	117.7E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
29	231940Z	19.2N	117.4E	SRDR	- STORM CENTER			PCN 5	NOAA-5	-	-	-	-	-	-	-	-	-	-	-	-
30	232153Z	19.5N	117.5E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
31	232244Z	19.4N	117.6E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
32	232300Z	19.9N	117.3E	LRDR	- 7//			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
33	232335Z	19.3N	117.3E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
34	240000Z	19.8N	117.1E	LRDR	- 7//			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
35	240047Z	19.6N	116.1E	SAT	(T3.5/3.5 / D0.0/24HRS)			NOAA-5	(CONF 01)	-	-	-	-	-	-	-	-	-	-	-	-
36	240048Z	19.7N	115.1E	SAT	(T4.0/4.0 / / HRS)			PCN 3	NOAA-5	-	-	-	-	-	-	-	-	-	-	-	-
37	240610Z	20.4N	114.8E	LRDR	- 1092			-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	240646Z	20.3N	115.0E	LRDR	- 2092			-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	240800Z	20.6N	114.5E	LRDR	- 4//4			-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	241100Z	21.1N	113.8E	LRDR	- 5//4			-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	241200Z	21.1N	113.6E	LRDR	- 45/1			-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	241217Z	20.4N	113.9E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
43	241217Z	21.2N	113.2E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
44	241300Z	21.0N	113.2E	LRDR	- 5//4			-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	241400Z	21.2N	112.9E	LRDR	- //			-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	241500Z	21.3N	112.5E	LRDR	- //			-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	241607Z	21.3N	112.2E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
48	241608Z	22.0N	111.6E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
49	241700Z	21.6N	111.7E	LRDR	- //			-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	242314Z	22.0N	108.9E	SAT	IR DATA			PCN 6	UMSP	-	-	-	-	-	-	-	-	-	-	-	-
51	242314Z	22.1N	110.0E	SAT	IR DATA			PCN 5	UMSP	-	-	-	-	-							

TYPHOON GILDA FIX POSITIONS FOR CYCLONE NO. 15 0000Z 03 OCT TO 0600Z 14 OCT																													
FIX NU.	TIME	POSIT	CAT	ACCRY	FIX	FLT	LVL	WIND	SFC DIA	MIN	FLD	EYE	ORIENT	EYE	POSIT OF RAIDAN	MSN NMHR	MAX ODS	MAX ODS	UBS	MIN	700MB	LVL	MGL	TI/FD	FORM	LATITUN	DIA		
																		DIM	VEL	BNG	RNG	VEL	BNG	RNG	SLP				
1	011013Z	12.6N 156.3E	SAT	(IR DATA)						PCN 5	NOAA-5																		
2	012244Z	13.1N 157.9E	SAT	(T2.0/1.0 / / HRS)						PCN 5	NOAA-5																		
3	020105Z	14.0N 156.9E	SAT	(IR DATA)						PCN 6	UMSP																		
4	020929Z	13.6N 157.1E	SAT	(IR DATA)						PCN 5	NOAA-5																		
5	020931Z	15.9N 155.4E	SAT	(IR DATA)						PCN 6	UMSP																		
6	022009Z	16.5N 155.6E	SAT	(T2.0/2.0 / / HRS)						NOAA-5																			
7	022101Z	16.7N 155.6E	SAT	(IR DATA)						PCN 6	UMSP																		
8	022205Z	16.6N 155.8E	SAT	(T2.0/2.0 /D1.0/24HRS)						PCN 5	NOAA-5																		
9	022234Z	16.5N 155.8E	P 10	5 700 180 38 130						PCN 4	UMSP								-	26	24	-	-	-	-	-	-	1	
10	030007Z	17.4N 155.0E	SAT	(T2.0/2.0 / / HRS)						PCN 4	UMSP																		
11	030205Z	16.5N 156.3E	P 13	30 700 100 20 340						160	25 340	160	999	30	12	12		-	-	-	-	-					1		
12	030801Z	17.8N 155.3E	SAT	(IR DATA)						PCN 6	UMSP																		
13	030919Z	17.2N 155.9E	SAT	(IR DATA)						PCN 5	UMSP																		
14	031555Z	17.9N 156.6E	P 2	5 700 60 27 330						30	-	-	-	994	30	16	13	-	-	-	-	-					2		
15	032043Z	18.6N 155.7E	SAT	(T2.5/2.5 /D0.5/21HRS)						PCN 6	UMSP																		
16	032522Z	18.0N 155.8E	SAT	(T2.0/2.0 /S 25HRS)						PCN 6	NOAA-4																		
17	032310Z	17.8N 155.6E	SAT	(T2.5/2.5 / 0.5/27HRS)						NOAA-5																			
18	032314Z	18.1N 155.7E	SAT	(IR DATA)						PCN 6	NOAA-5																		
19	040029Z	17.8N 155.7E	SAT	(IR DATA)						PCN 4	UMSP																		
20	040240Z	18.0N 155.5E	P 10	5 700 260 60 170						25	4U 170	25	988	-	27	23	-	-	-	-	-					3			
21	040262Z	19.8N 156.3E	SAT	(IR DATA)						PCN 6	UMSP																		
22	040954Z	18.9N 155.0E	SAT	(IR DATA)						PCN 5	NOAA-5																		
23	041003Z	18.0N 155.0E	SAT	(IR DATA)						PCN 6	NOAA-5																		
24	041311Z	20.4N 154.9E	SAT	(IR DATA)						PCN 6	UMSP																		
25	041452Z	19.8N 154.0E	P 2	5 700 210 40 130						30	-	-	-	989	29	19	16	-	-	-	-	-					4		
26	042024Z	20.8N 153.2E	SAT	(T3.5/3.5 /D1.0/24HRS)						PCN 4	UMSP																		
27	042152Z	21.1N 152.7E	SAT	(T3.0/3.0 /D1.0/23HRS)						PCN 6	NOAA-5																		
28	042234Z	20.5N 156.4E	SAT	(IR DATA)						PCN 6	NOAA-5																		
29	050017Z	21.0N 151.6E	SAT	(IR DATA)						PCN 6	UMSP																		
30	050239Z	20.7N 152.5E	P 15	2 700 100 80 360						5	8U 120	50	974	280	14	14	ELIP	N-S	10X5								5		
31	050455Z	21.9N 151.6E	SAT	(IR DATA)						PCN 4	UMSP																		
32	050904Z	21.9N 151.5E	SAT	(IR DATA)						PCN 4	DMSP																		
33	050914Z	21.9N 150.6E	SAT	(IR DATA)						PCN 6	NOAA-5																		
34	051110Z	22.0N 150.7E	SAT	(IR DATA)						PCN 5	NOAA-5																		
35	051116Z	21.6N 150.5E	SAT	(IR DATA)						PCN 4	UMSP																		
36	051254Z	21.9N 150.9E	SAT	(IR DATA)						PCN 5	DMSP																		
37	051434Z	21.0N 150.9E	SAT	(IR DATA)						PCN 5	UMSP																		
38	051525Z	22.1N 150.4E	P 5	5 700 350 50 240						40	-	-	-	976	280	14	14	-	-	-	-	-					6		
39	052009Z	22.9N 150.3E	SAT	(T4.0/4.0 /D1.0 /22HRS)						PCN 3	UMSP																		
40	052009Z	22.7N 150.1E	SAT	(T3.5/3.5 /S 5 /24HRS)						PCN 4	UMSP																		
41	052130Z	23.5N 150.6E	SAT	(IR DATA)						PCN 6	UMSP																		
42	052137Z	22.8N 150.3E	SAT	(IR DATA)						PCN 6	UMSP																		
43	052247Z	23.0N 150.1E	SAT	(IR DATA)						PCN 6	NOAA-4																		
44	052346Z	23.2N 150.1E	SAT	(IR DATA)						PCN 5	NOAA-5																		
45	060136Z	26.0N 149.6E	SAT	(IR DATA)						PCN 5	UMSP																		
46	060622Z	23.8N 149.1E	P 15	5 700 270 40 200						50	45 200	50	986	29	17	15	-	-	-	-	-					8			
47	060851Z	25.2N 148.8E	SAT	(IR DATA)						PCA 6	UMSP																		
48	060852Z	25.1N 148.9E	SAT	(IR DATA)						PCA 6	UMSP																		
49	061024Z	24.9N 149.1E	SAT	(IR DATA)						PCA 6	UMSP																		
50	061024Z	24.6N 149.0E	SAT	(IR DATA)						PCA 5	UMSP																		
51	061026Z	24.5N 148.6E	SAT	(IR DATA)						PCA 6	NOAA-5																		
52	061034Z	24.5N 149.2E	SAT	(IR DATA)						PCN 1	UMSP																		
53	061417Z	24.8N 148.8E	SAT	(IR DATA)						PCN 6	UMSP																		
54	061519Z	24.6N 148.0E	P 5	4 700 210 57 130						45	-	-	-	979	290	14	13	-	-	-	-	-				9			
55	061952Z	26.2N 148.3E	SAT	(IR DATA)						PCA 6	UMSP																		
56	062133Z	25.6N 148.1E	SAT	(T4.0/4.0 /D0.5 /25HRS)						PCN 4	UMSP																		
58	062302Z	25.6N 148.1E	SAT	(T3.5/4.0 / / HRS)						PCN 1	NOAA-5																		
59	062347Z	25.3N 148.2E	SAT	(IR DATA)						PCN 5	NOAA-4																		
60	070018Z	26.4N 147.6E	SAT	(T5.0 /5.0 /D1.5 /27 HRS)						PCN 2	UMSP	</																	

91 091325Z 41.3N 156+9E SAT (IR DATA) PCN 5 UHSP
 92 092043Z 40.1N 160+1E SAT (IR DATA) PCN 5 UHSP
 93 092332Z 41.2N 161+6E SAT (IR DATA /11.5/1.5 /W1.5/24HRS) NOAA-5 (CONF 01)
 94 092447Z 41.2N 161+0E SAT (T2.0/3.0 / / HRS) PCN 5 NOAA-5
 95 100927Z 41.7N 168+6E SAT (IR DATA) PCN 6 NOAA-5

TROPICAL STORM HANNET
FIX POSITIONS FOR CYCLONE NO. 16
0600Z 16 OCT TO 1800Z 20 OCT

FIX NU.	TIME	POSIT	CAT	ACCRY	FIX	FLT LVL	WIND	SFC WIND	MAX OBS	OBS	MIN	FLT	EYE	ORIENT-	EYE	POSI-		MSN NMNH		
1	132116Z	10.4N 150+9E	SAT	(IR DATA)	PCN 5	UHSP														
2	140057Z	10.8N 149+2E	SAT	(IR DATA)	PCN 5	UHSP														
3	140608Z	13.3N 137+1E	P	3 15 1500 200 28 100	55	20	80	150	100	-	26	26	-	-	-				1	
4	140958Z	10.2N 147+3E	SAT	(IR DATA)	PCN 5	UHSP														
5	141023Z	10.4N 147+1E	SAT	(IR DATA)	PCN 5	NOAA-5														
6	141339Z	10.4N 146+8E	SAT	(IR DATA)	PCN 5	UHSP														
7	142059Z	11.8N 142+6E	SAT	(T2.0/1.0 /D1.0/24HRS)	PCN 5	UHSP														
8	142300Z	12.2N 141+9E	SAT	(IR DATA)	PCN 5	NOAA-5														
9	142322Z	12.2N 142+0E	SAT	(IR DATA)	PCN 6	NOAA-4														
10	150221Z	13.0N 141+1E	SAT	(IR DATA)	PCN 5	UHSP														
11	150823Z	11.8N 139+9E	P	3 30 1500 90 30 360	100	25	360	100	100	-	25	25	-	-	-				2	
12	151136Z	14.4N 140+4E	SAT	(IR DATA)	PCN 5	NOAA-5														
13	151503Z	14.7N 139+6E	SAT	(IR DATA)	PCN 6	UHSP														
14	152042Z	15.6N 138+8E	SAT	(IR DATA)	PCN 5	UHSP														
15	152223Z	15.4N 136+7E	SAT	(T2.0/2.0 /D1.0/25HRS)	PCN 5	UHSP														
16	160012Z	15.8N 136+5E	SAT	(IR DATA)	PCN 5	NOAA-5														
17	160203Z	15.9N 136+2E	SAT	(IR DATA)	PCN 5	UHSP														
18	160245Z	15.7N 135+8E	P	2 30 1500 120 52 -	-	35	-	-	999	-	25	25	-	-	-				3	
19	161052Z	16.6N 134+6E	SAT	(IR DATA)	PCN 5	NOAA-5														
20	161056Z	17.0N 135+0E	SAT	(IR DATA)		NOAA-5 (CONF 01)														
21	161445Z	16.8N 133+7E	SAT	(IR DATA)	PCN 5	UHSP														
22	161510Z	15.9N 133+7E	P	5 30 700 190 28 110	90	-	-	-	-	-	309	10 10	-	-	-				4	
23	162206Z	17.8N 133+2E	SAT	(T2.0/2.0+/S /24HRS)	PCN 5	UHSP														
24	162206Z	17.8N 132+6E	SAT	(T3.5/3.5 / / HRS)	PCN 3	UHSP														
25	162206Z	17.2N 133+0E	SAT	(T2.5/2.5 / / HRS)	PCN 5	UHSP														
26	162206Z	17.2N 133+0E	SAT	(T3.0/3.0 / / HRS)	PCN 3	UHSP														
27	162328Z	17.7N 132+7E	SAT	(IR DATA)	PCN 5	NOAA-5														
28	170145Z	17.6N 132+1E	SAT	(IR DATA)	PCN 5	UHSP														
29	170145Z	17.6N 132+3E	SAT	(IR DATA)	PCN 5	UHSP														
30	170332Z	17.6N 132+1E	P	3 5 700 350 40 220	55	40	180	15	989	299	15 11	-	-	-					5	
31	171048Z	18.2N 131+5E	SAT	(IR DATA)	PCN 5	UHSP														
32	171049Z	18.1N 131+3E	SAT	(IR DATA)	PCN 5	UHSP														
33	171204Z	18.8N 131+4E	SAT	(IR DATA)	PCN 5	NOAA-5														
34	171209Z	18.7N 131+2E	SAT	(IR DATA)	PCN 5	NOAA-5 (CONF 02)														
35	171427Z	18.2N 131+6E	SAT	(IR DATA)	PCN 5	UHSP														
36	171507Z	17.6N 131+8E	P	5 5 700 450 45 90	10	-	-	-	990	309	16 15	-	-	-					6	
37	172032Z	18.4N 132+6E	P	5 2 700 40 50 280	26	50	90	10	988	299	19 15	-	-	-					6	
38	172149Z	18.5N 132+1E	SAT	(T3.5/3.5 /D1.5/24HRS)	PCN 5	UHSP														
39	172149Z	18.5N 131+9E	SAT	(T4.5/4.5 /D1.5/24HRS)	PCN 3	UHSP														
40	180040Z	19.3N 132+7E	SAT	(IR DATA)	PCN 5	NOAA-5														
41	180309Z	19.5N 132+6E	SAT	(IR DATA)	PCN 5	UHSP														
42	180914Z	20.6N 132+5E	SAT	(IR DATA)	PCN 5	UHSP														
43	181031Z	20.7N 132+4E	SAT	(IR DATA)	PCN 5	UHSP														
44	181120Z	20.6N 132+9E	SAT	(IR DATA)	PCN 5	NOAA-5														
45	181417Z	21.1N 132+9E	SAT	(IR DATA)	PCN 5	UHSP														
46	181522Z	22.8N 133+4E	P	5 30 700 310 45 210	50	-	-	-	994	309	11 11	-	-	-					8	
47	182132Z	24.0N 134+2E	SAT	(T4.0/4.0/-D0.5 /24 HRS)	PCN 5	UHSP														
48	182348Z	24.0N 134+9E	SAT	(T3.0/3.5 / / HRS)	PCN 5	NOAA-5 (CONF 02)														
49	182356Z	24.8N 135+1E	SAT	(IR DATA)	PCN 5	NOAA-5														
50	190252Z	26.1N 135+8E	SAT	(IR DATA)	PCN 6	DHSP														
51	190350Z	26.3N 135+6E	P	10 15 700 230 50 190	30	45	210	70	985	299	12 12	-	-	-					9	
52	190945Z	28.0N 138+3E	SAT	(IR DATA)	PCN 5	NOAA-4														
53	191014Z	28.1N 138+2E	SAT	(IR DATA)	PCN 5	UHSP														
54	191036Z	28.2N 138+8E	SAT	(IR DATA)	PCN 5	NOAA-5														
55	191045Z	29.0N 137+8E	SAT	(IR DATA)	PCN 5	NOAA-5 (CONF 01)														
56	191352Z	28.5N 138+3E	SAT	(IR DATA)	PCN 5	UHSP														
57	191534Z	28.6N 138+0E	P	5 5 700 190 72 80 190	-	-	-	-	984	299	19 17	-	-	-					10	
58	192115Z	30.1N 140+0E	SAT	(T2.5/3.5 /W1.5/24HRS)	PCN 5	UHSP														
59	192115Z	29.5N 139+5E	SAT	(T2.5/2.5 / / HRS)	PCN 5	UHSP														
60	192312Z	30.3N 140+5E	SAT	(IR DATA)	PCN 5	NOAA-5														
61	200058Z	30.2N 141+0E	SAT	(T2.5/2.5 /W0.5/25HRS)	PCN 5	NOAA-5 (CONF 02)														
62	200313Z	29.5N 140+3E	P	3 5 700 420 60 90	80	SU	220	60	990	309	13 10	-	-	-					11	
63	200952Z	29.6N 142+3E	SAT	(IR DATA)	PCN 5	NOAA-5														
64	200957Z	29.6N 142+4E	SAT	(IR DATA)	PCN 5	UHSP														
65	200957Z	31.0N 143+7E	SAT	(IR DATA)	PCN 5	UHSP														
66	201040Z	30.0N 142+4E	SAT	(IR DATA)	PCN 5	NOAA-4														
67	201334Z	30.6N 144+2E	SAT	(IR DATA)	PCN 6	UHSP														
68	201516Z	30.5N 144+3E	SAT	(IR DATA)	PCN 5	UHSP														

TYPHOON IVY																			
FIX POSITIONS FOR CYCLONE NO. 17 0600Z 21 OCT TO 0000Z 27 OCT																			
NO.	TIME	POSIT	FLX	ACCRY	FIX	FLT	LVL	WIND	SFC WIND	MIN	MAX OBS	MIN	FLT	SLP	HGT	FL/10	FORM	URGEN-	POSIT
			SAT	NAV-NET	LVL	DIR	VEL	BRG	RNG	SLP	PCN	PCN	PCN	PCN	PCN	PCN	PCN	PCN	OF RADAR
			(IR DATA		)				)		S	S	S	S	S	S	S	S	NMSR
1	191014Z	13.7N 146.1E	SAT	(IR DATA	)				)		PCN	S	UMSP						
2	191036Z	13.8N 146.0E	SAT	(IR DATA	)				)		PCN	S	UMSP						
3	192115Z	15.0N 146.5E	SAT	(T2.0/2.0 /	/	/	HRS)				PCN	S	UMSP						
4	192306Z	16.1N 148.0E	SAT	(T1.5/1.5 /	/	/	HRS)						NOAA-5	(CONF 01)					
5	192312Z	15.1N 146.4E	SAT	(IR DATA				)			PCN	S	UMSP						
6	200053Z	15.8N 146.6E	SAT	(IR DATA				)			PCN	S	UMSP						
7	200952Z	17.8N 147.5E	SAT	(IR DATA				)			PCN	S	UMSP						
8	200957Z	17.0N 147.5E	SAT	(IR DATA				)					NOAA-5	(CONF 01)					
9	200957Z	17.7N 147.7E	SAT	(IR DATA				)			PCN	S	UMSP						
10	201334Z	18.8N 146.8E	SAT	(IR DATA				)			PCN	S	UMSP						
11	201334Z	17.7N 146.2E	SAT	(IR DATA				)			PCN	S	UMSP						
12	202058Z	18.5N 147.1E	SAT	(T2.0/2.0 /S	/24HRS)						PCN	S	UMSP						
13	202221Z	17.1N 146.0E	SAT	(T2.0/2.0 /D0.5/23HRS)									NOAA-5	(CONF 01)					
14	202228Z	18.5N 147.2E	SAT	(IR DATA				)			PCN	S	UMSP						
15	210219Z	16.5N 147.2E	P	5 5 1500	110	32	30	90	25 30	90	988	-	25 25	-	-	-	-	1	
16	210328Z	16.2N 147.4E	P	3 15 700	-	-	-	-	-	-	996	30	12 13	-	-	-	-	1	
17	210940Z	17.0N 147.8E	SAT	(IR DATA				)			PCN	S	UMSP						
18	210940Z	16.4N 147.7E	SAT	(IR DATA				)			PCN	S	UMSP						
19	211105Z	17.6N 147.5E	SAT	(IR DATA				)			PCN	S	UMSP						
20	211110Z	16.7N 147.6E	SAT	(IR DATA				)					NOAA-5	(CONF 03)					
21	211545Z	17.0N 147.0E	P	3 20 700	140	38	40	55	-	-	996	30	12 12	-	-	-	-	2	
22	212041Z	17.8N 146.8E	SAT	(T2.0/2.0 /S	/24HRS)						PCN	S	UMSP						
23	212041Z	17.6N 146.8E	SAT	(T2.0/2.0 /	/HRS)						PCN	S	UMSP						
24	212207Z	17.9N 146.9E	SAT	(IR DATA				)			PCN	S	UMSP						
25	212334Z	17.1N 145.7E	SAT	(T2.5/2.5 /D0.5/25HRS)									NOAA-5	(CONF 01)					
26	212341Z	17.9N 146.4E	SAT	(IR DATA				)			PCN	S	UMSP						
27	220250Z	17.3N 145.5E	P	5 20 700	20	20	30	20	80	150	989	30	11 12	-	-	-	-	3	
28	220922Z	16.6N 144.9E	SAT	(IR DATA				)			PCN	S	UMSP						
29	220923Z	17.2N 144.8E	SAT	(IR DATA				)			PCN	S	UMSP						
30	221016Z	16.8N 145.0E	SAT	(IR DATA				)					NOAA-5	(CONF 01)					
31	221021Z	17.1N 144.9E	SAT	(IR DATA				)			PCN	S	UMSP						
32	221557Z	17.0N 146.1E	P	2 5 700	290	45	220	180	-	-	98d	29	12 12	-	-	-	-	4	
33	222023Z	17.2N 146.3E	SAT	(T3.5/3.5 /D1.5/24HRS)							PCN	S	UMSP						
34	222242Z	17.7N 146.4E	SAT	(T3.5/3.5 /D1.5/24HRS)							PCN	S	UMSP						
35	222045Z	17.5N 146.5E	P	5 5 700	19	48	280	15	-	-	98v	29	15 15	-	-	-	-	4	
36	222248Z	17.9N 147.6E	SAT	(T4.0/4.0 /D1.5/23HRS)									NOAA-5	(CONF 01)					
37	222257Z	17.8N 146.5E	SAT	(IR DATA				)			PCN	S	UMSP						
38	230957Z	18.6N 147.8E	SAT	(IR DATA				)			PCN	S	UMSP						
39	230962Z	18.6N 147.9E	SAT	(IR DATA				)			PCN	S	UMSP						
40	230937Z	18.6N 147.8E	SAT	(IR DATA				)			PCN	S	UMSP						
41	230942Z	18.6N 148.6E	SAT	(IR DATA				)					NOAA-5	(CONF 01)					
42	232004Z	21.1N 149.6E	SAT	(T4.5/4.5 /D1.0/24HRS)							PCN	S	UMSP						
43	232006Z	20.8N 150.0E	SAT	(IR DATA				)			PCN	S	UMSP						
44	232213Z	21.2N 150.0E	SAT	(IR DATA				)			PCN	S	UMSP						
45	240341Z	21.5N 151.2E	P	10 20 700	320	75	240	60	35	220	100	967	28	16 12	CIRC		30	7	
46	240848Z	22.9N 152.1E	SAT	(IR DATA				)			PCN	S	UMSP						
47	240849Z	22.6N 152.0E	SAT	(IR DATA				)			PCN	S	UMSP						
48	241049Z	23.0N 152.4E	SAT	(IR DATA				)			PCN	S	UMSP						
49	241056Z	23.0N 152.5E	SAT	(IR DATA				)					NOAA-5	(CONF 01)					
50	241508Z	24.2N 153.7E	P	5 2 700	280	93	200	60	-	-	962	27	20 12	CIRC		50		8	
51	241949Z	24.8N 153.3E	SAT	(T5.0/5.0 /D0.5/24HRS)							PCN	S	UMSP						
52	241949Z	24.6N 153.6E	SAT	(IR DATA				)			PCN	S	UMSP						
53	242257Z	25.2N 154.5E	SAT	(IR DATA				)			PCN	S	UMSP						
54	242315Z	25.4N 154.5E	SAT	(T5.0/5.0 /	/HRS)								NOAA-5	(CONF 01)					
55	242325Z	25.1N 154.4E	SAT	(IR DATA				)			PCN	S	UMSP						
56	250106Z	26.0N 154.6E	SAT	(IR DATA				)			PCN	S	UMSP						
57	250106Z	25.3N 154.6E	SAT	(T4.5/4.5 /	/HRS)						PCN	S	UMSP						
58	250233Z	25.8N 154.4E	P	3 2 700	290	90	180	10	80	90	15	945	26	21 11	CIRC		30	4	
59	250831Z	27.5N 154.9E	SAT	(IR DATA				)			PCN	S	UMSP						
60	250832Z	26.7N 155.0E	SAT	(IR DATA				)			PCN	S	UMSP						
61	251005Z	27.0N 155.5E	SAT	(IR DATA				)			PCN	S	UMSP						
62	251013Z	26.6N 155.5E	SAT	(IR DATA				)					NOAA-5	(CONF 01)					
63	251327Z	27.4N 155.8E	SAT	(IR DATA				)			PCN	S	UMSP						
64	251348Z	27.2N 155.8E	SAT	(IR DATA				)			PCN	S	UMSP						
65	251932Z	28.6N 155.9E	SAT	(IR DATA				)			PCN	S	UMSP						
66	251932Z	28.0N 156.2E	SAT	(IR DATA				)			PCN	S	UMSP						
67	252157Z	28.7N 156.2E	SAT	(IR DATA				)			PCN	S	UMSP						
68	252237Z	28.7N 156.1E	SAT	(T5.0/5.0 /S	/23HRS)								NOAA-5	(CONF 01)					
69	252241Z	28.7N 156.4E	SAT	(T4.5/5.0 /	/HRS)						PCN	S	UMSP						
70	260048Z	29.2N 156.5E	SAT	(IR DATA				)			PCN	S	UMSP						
71	260048Z	29.4N 156.6E	SAT	(T4.0/4.5 /WU.5/24HRS)							PCN	S	UMSP						
72	260814Z	31.5N 157.4E	SAT	(IR DATA				)			PCN	S	UMSP						
73	260830Z	30.0N 157.2E	SAT	(IR DATA				)			PCN	S	UMSP						
74	260921Z	31.0N 158.2E	SAT	(IR DATA				)			PCN	S	UMSP						
75	260931Z	31.0N 159.0E	SAT	(IR DATA				)					NOAA-5	(CONF 01)					
76	260956Z	30.9N 158.1E	SAT	(IR DATA				)			PCN	S	UMSP						
77	261320Z	32.0N 161.1E	SAT	(IR DATA				)			PCN	S	UMSP						
78	262157Z	37.2N 164.5E	SAT	(T3.0/3.5 /W1.5/23HRS)							PCN	S	UMSP						
79	262253Z	38.7N 164.4E	SAT	(IR DATA				)			PCN	S	UMSP						

TYPHOON JEAN
FIX POSITIONS FOR CYCLONE NO. 1H
1200Z 28 OCT TO 1200Z 03 NOV

FIX NO.	TIME	POSIT	FIX CAT	ACCRY	FLT LVL	LVL DIM	VEL	WIND	SFC WIND	MAX OBS	MIN	WIND	FLT	POSIT OF RADAR	MSN NMBR	
										SLP	MIN	700MB	LVL	EYE	WIND	EYE
										HGT	11/TO	FORM	WIND	WIND	DIR	
1	24212AZ	7.3N 171.9E	SAT	(I 0/ 0 / / HRS)	PCN 5	UMSP										
2	252157Z	12.2N 165.9E	SAT	(I 0/ 0 / 5 /24HRS)	PCN 6	UMSP										
3	262157Z	13.6N 163.7E	SAT	(I 0/ 0 / 5 /24HRS)	PCN 5	UMSP										
4	270031Z	15.8N 160.3E	SAT	(IR DATA)	PCN 6	UMSP										
5	272302Z	17.8N 159.1E	SAT	(I1.5/1.5 / / HRS)	NOAA-5	(CONF 01)										
6	272311Z	17.5N 159.5E	SAT	(I1.0/1.0 /D1.0/25HRS)	PCN 5	UMSP										
7	280921Z	19.1N 157.4E	SAT	(IR DATA)	PCN 5	UMSP										
8	280921Z	20.0N 156.3E	SAT	(IR DATA)	PCN 6	UMSP										
9	280956Z	19.1N 157.0E	SAT	(IR DATA)	PCN 5	UMSP										
10	280956Z	18.6N 157.0E	SAT	(IR DATA)	NOAA-5	(CONF 01)										
11	281254Z	19.6N 156.9E	SAT	(IR DATA)	PCN 5	UMSP										
12	282022Z	20.0N 156.3E	SAT	(I3.0/0.3.0 / / HRS)	PCN 4	UMSP										
13	282023Z	20.1N 156.6E	SAT	(I3.0/0.3.0 / / HRS)	PCN 3	UMSP										
14	282212Z	20.1N 156.1E	SAT	(I3.0/0.3.0 /D1.5/23HRS)	NOAA-5	(CONF 01)										
15	282226Z	20.0N 156.3E	SAT	(IR DATA)	PCN 6	UMSP										
16	282248Z	20.1N 156.3E	SAT	(IR DATA)	PCN 6	UMSP										
17	290513Z	20.8N 156.1E	P	2 5 1500 300 70 210	25	65 300	70	980	-	25 24	CINC	30			1	
18	290904Z	20.8N 156.5E	SAT	(IR DATA)	PCN 6	UMSP										
19	290905Z	20.9N 156.3E	SAT	(IR DATA)	PCN 5	UMSP										
20	290906Z	20.7N 156.2E	SAT	(IR DATA)	PCN 6	UMSP										
21	290912Z	20.7N 156.0E	SAT	(IR DATA)	NOAA-5	(CONF 01)										
22	291237Z	21.5N 156.7E	SAT	(IR DATA)	PCN 6	UMSP										
23	291237Z	21.4N 156.4E	SAT	(IR DATA)	PCN 6	UMSP										
24	291451Z	21.7N 156.9E	P	5 10 700 240 72 150	15	- - -	-	-	972	284	16 13 CINC	30			2	
25	292005Z	22.7N 157.5E	SAT	(I3.5/3.5 /D0.5/24HRS)	PCN 5	UMSP										
26	292005Z	22.8N 157.4E	SAT	(I3.0/0.3.0 /S /24HRS)	PCN 4	UMSP										
27	292142Z	22.9N 157.6E	SAT	(IR DATA)	PCN 5	UMSP										
28	292324Z	24.1N 157.3E	SAT	(I4.0/4.0 /D1.0/25HRS)	NOAA-5	(CONF 01)										
29	300119Z	23.2N 156.2E	SAT	(IR DATA)	PCN 6	UMSP										
30	300307Z	23.2N 157.3E	P	2 5 700 440 70 220	50	65 220	45	978	290	18 10	- - -	-			3	
31	300847Z	24.5N 158.4E	SAT	(IR DATA)	PCN 6	UMSP										
32	300848Z	24.3N 158.5E	SAT	(IR DATA)	PCN 5	UMSP										
33	301014Z	24.2N 158.4E	SAT	(IR DATA)	PCN 6	UMSP										
34	301026Z	24.5N 159.0E	SAT	(IR DATA)	NOAA-5	(NO CONF)										
35	301401Z	23.5N 157.0E	SAT	(IR DATA)	PCN 5	UMSP										
36	301401Z	25.5N 159.4E	SAT	(IR DATA)	PCN 6	UMSP										
37	301948Z	24.0N 157.1E	SAT	(I1.0/2.0 / /D0.5/24HRS)	PCN 3	UMSP										
38	301948Z	23.8N 157.2E	SAT	(I2.0/3.0 / /D1.0/24HRS)	PCN 4	UMSP										
39	302254Z	24.0N 156.5E	SAT	(IR DATA)	PCN 4	UMSP										
40	302345Z	23.8N 156.5E	SAT	(I2.0/0.3.0 / /D2.0/24HRS)	NOAA-5	(CONF 01)										
41	310102Z	24.4N 156.1E	SAT	(IR DATA)	PCN 3	UMSP										
42	310102Z	24.2N 155.9E	SAT	(I2.5/2.5/- / HRS)	PCN 4	UMSP										
43	310830Z	24.8N 156.3E	SAT	(IR DATA)	PCN 4	UMSP										
44	310830Z	24.8N 154.4E	SAT	(IR DATA)	PCN 4	UMSP										
45	310934Z	24.9N 154.0E	SAT	(IR DATA)	PCN 6	UMSP										
46	310943Z	26.3N 153.7E	SAT	(IR DATA)	NOAA-5	(CONF 02)										
47	311344Z	25.1N 153.0E	SAT	(IR DATA)	PCN 6	UMSP										
48	312111Z	25.4N 149.9E	SAT	(I2.5/2.5 / / HRS)	PCN 3	UMSP										
49	312113Z	25.8N 150.4E	SAT	(I 0/1.0 / /D1.0/25HRS)	PCN 3	UMSP										
50	312357Z	26.1N 149.3E	SAT	(I2.0/0.2.0 / /24HRS)	NOAA-5	(CONF 01)										
51	010859Z	25.5N 147.0E	SAT	(IR DATA)	NOAA-5	(CONF 01)										
52	011046Z	26.3N 146.3E	SAT	(IR DATA)	PCN 4	UMSP										
53	012056Z	26.6N 145.9E	SAT	(I3.5/3.5 /D1.0/24HRS)	PCN 1	UMSP										
54	012323Z	26.5N 146.1E	SAT	(I2.0/0.2.0 / / HRS)	PCN 3	UMSP										
55	020208Z	26.9N 146.1E	SAT	(IR DATA)	PCN 5	UMSP										
56	020937Z	27.3N 146.6E	SAT	(IR DATA)	PCN 6	UMSP										
57	020938Z	26.9N 146.8E	SAT	(IR DATA)	PCN 5	UMSP										
58	021002Z	27.0N 146.4E	SAT	(IR DATA)	PCN 5	UMSP										
59	021012Z	26.0N 147.0E	SAT	(IR DATA)	NOAA-5	(CONF 02)										
60	021450Z	27.0N 146.6E	SAT	(IR DATA)	PCN 6	UMSP										
61	021450Z	26.4N 146.9E	SAT	(IR DATA)	PCN 3	UMSP										
62	022039Z	27.5N 146.2E	SAT	(I1.0/0.2.0 / /D1.0/21HRS)	PCN 4	UMSP										
63	022039Z	27.1N 146.1E	SAT	(IR DATA)	PCN 3	UMSP										
64	022239Z	27.8N 146.4E	SAT	(IR DATA)	PCN 3	UMSP										
65	022333Z	27.3N 146.6E	SAT	(IR DATA)	PCN 3	UMSP										
66	030025Z	27.0N 147.0E	SAT	NOAA-5	(CONF 01)											
67	030151Z	26.9N 146.5E	SAT	(IR DATA)	PCN 3	UMSP										
68	030914Z	26.1N 146.1E	SAT	(IR DATA)	PCN 3	UMSP										
69	030920Z	26.1N 145.6E	SAT	(IR DATA)	PCN 6	UMSP										
70	030921Z	26.1N 146.1E	SAT	(IR DATA)	PCN 3	UMSP										
71	032351Z	24.6N 143.5E	SAT	(IR DATA)	PCN 3	UMSP										
72	041031Z	24.1N 141.3E	SAT	(IR DATA)	PCN 3	UMSP										
73	042307Z	23.6N 139.2E	SAT	(IR DATA)	PCN 3	UMSP										
74	060014Z	23.2N 134.5E	SAT	(IR DATA)	PCN 3	UMSP										

FIX NO.	TIME	POSIT	CAT	ACCRY	MAX OHS	MAX OBS	MIN	FLI	POSIT OF RADAR		MSN NMBR									
									NAV-MET	FIX		AT	DIR	AT	DIR					
					DIA	VEL	HGT	RNG	VEL	BRG	RNG	SLV	MIN	700MB	LVL	EYE	ORIENT-	EYE	AT	DIR
1	0321557	7.2N 150.1E	SAT	(T 0/ 0 /) / HRS	PCN 5	NOAA-5														
2	0409042	6.4N 150.5E	SAT	(IR DATA)	PCN 6	UMSP														
3	0410312	6.8N 153.9E	SAT	(IR DATA)	PCN 5	NOAA-5														
4	0414157	9.2N 153.2E	SAT	(IR DATA)	PCN 5	UMSP														
5	0420047	10.1N 152.1E	SAT	(T2.0/2.0 /) / HRS	PCN 6	UMSP														
6	0421332	10.3N 151.8E	SAT	(IR DATA)	PCN 6	NOAA-4														
7	0422507	9.4N 153.1E	P	5 12 1500 300 38 230	25	20 240	20	100/	-	22	22	-	-	-	-	-	-	-	2	
8	0423092	9.5N 153.1E	SAT	(IR DATA)	PCN 5	NOAA-5														
9	0501152	9.9N 152.5E	SAT	(IR DATA)	PCN 6	UMSP														
10	0508462	11.0N 152.9E	SAT	(IR DATA)	PCN 6	NOAA-5														
11	0509472	11.0N 152.6E	SAT	(IR DATA)	PCN 5	UMSP														
12	0513572	11.2N 152.4E	SAT	(IR DATA)	PCN 5	NOAA-5														
13	0521297	10.5N 151.9E	SAT	(T2.0/2.0 /) / HRS	PCN 6	NOAA-5	(CONF 02)													
14	0522192	11.7N 154.6E	SAT	(T1.0/1.0 /) / HRS	NOAA-5															
15	0600412	10.2N 153.8E	P	5 20 1500 260 25 180	50	25 180	50	1004	-	24	25	-	-	-	-	-	-	-	3	
16	0600542	10.4N 153.3E	SAT	(IR DATA)	PCN 5	UMSP														
17	0603122	10.8N 153.1E	P	5 40 700 210 28 130	120	25 180	50	998	30/	11	10	-	-	-	-	-	-	-	3	
18	0608292	11.2N 153.1E	SAT	(IR DATA)	PCN 6	UMSP														
19	0608292	11.4N 152.4E	SAT	(IR DATA)	PCN 6	UMSP														
20	0610302	11.3N 152.0E	SAT	(IR DATA)	PCN 5	NOAA-5														
21	0611027	11.9N 152.0E	SAT	(IR DATA)	PCN 5	NOAA-5	(CONF 02)													
22	0613397	11.8N 151.5E	SAT	(IR DATA)	PCN 5	UMSP														
23	0615107	11.4N 151.7E	P	10 5 700 110 50 50	25	-	-	994	30/	10	11	ELIP	N-S	15K1U					4	
24	0620362	11.5N 151.8E	P	8 2 700 120 30 60	50	35 360	10	992	30/	18	12	-	-	-	-	-	-	-	4	
25	0621122	12.0N 150.8E	SAT	(T3.0/3.0 /) / HRS	PCN 5	UMSP														
26	0623307	12.0N 150.5E	SAT	(T3.0/3.0 /) / D2.0/25HRS	NOAA-5		(CONF 01)													
27	0623352	12.0N 150.4E	SAT	(IR DATA)	PCN 5	NOAA-5														
28	0700402	12.2N 150.1E	SAT	(IR DATA)	PCN 5	UMSP														
29	0702527	12.4N 150.4E	P	5 5 700 360 25 290	30	25 290	30	995	30/	18	13	CIMC	-	20					5	
30	0709327	12.8N 149.4E	P	3 5 700 80 35 30	25	-	-	992	30/	17	12	-	-	-	-	-	-	-	5	
31	0709542	12.8N 149.6E	SAT	(IR DATA)	PCN 5	UMSP														
32	0710152	12.8N 149.2E	SAT	(IR DATA)	PCN 5	NOAA-5														
33	0713222	13.0N 148.8E	SAT	(IR DATA)	PCN 5	UMSP														
34	0715082	12.7N 148.9E	P	15 10 700 40 40 280	125	-	-	995	30/	14	11	-	-	-	-	-	-	-	6	
35	0720552	13.1N 147.6E	SAT	(T4.0/4.0 /) / D1.0/24HRS	PCN 5	UMSP														
36	0721142	13.0N 147.8E	SAT	(T4.0/4.0 /) / D1.0/24HRS	PCN 5	NOAA-5	(CONF 01)												7	
37	0722472	12.9N 147.6E	SAT	(T3.0/3.0 /) / 23HRS	NOAA-5															
38	0722512	13.2N 147.5E	SAT	(IR DATA)	PCN 6	NOAA-5														
39	0800102	13.2N 146.9E	LRUR	- PSBL CENT POOR FIX	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
40	0800357	13.3N 147.0E	LRUR	- PSBL CENT POOR FIX	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
41	0801102	13.3N 146.7E	LRUR	- 100 SPIRAL OVERLAY EYE FAIR FIX 70% WALL CLD CIRC D25 MVMT 270/13 WALL CLD OPEN SE	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
42	0801352	13.3N 146.5E	LRUR	- EYE 10° SPRL GOOD FIX CIRC D20 80% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
43	0802032	13.0N 147.1E	SAT	(T4.0/4.0 /) / HRS	PCN 6	UMSP														
44	0802042	13.3N 147.0E	SAT	(IR DATA)	PCN 5	DMSP														
45	0802102	13.3N 147.6E	SAT	(T4.0/4.0 /) / HRS	PCN 1	UMSP														
46	0802102	13.3N 146.5E	LRUR	- EYE 10 DEG SPRL FAIR FIX CIRC D20 80% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
47	0802352	13.3N 146.4E	LRUR	- EYE 10 DEG SPRL FAIR FIX CIRC D20 80% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
48	0802542	13.2N 146.5E	P	2 3 700 20 33 250 70 45 270 50 98/	29/	12 11														8
49	0803102	13.3N 146.3E	LRUR	- EYE 10 DEG SPRL FAIR FIX CIRC D20 70% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
50	0803352	13.3N 146.2E	LRUR	- EYE 100 SPRL FAIR FIX CIRC D15 70% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
51	0804107	13.3N 146.1E	LRUR	- EYE 100 SPRL FAIR FIX CIRC D15 70% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
52	0804352	13.4N 146.0E	LRUR	- EYE 15° SPRL FAIR FIX CIRC D20 60% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
53	0805107	13.2N 146.0E	LRUR	- EYE 10° SPRL GOOD FIX CIRC D12 80% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
54	0805362	13.2N 145.8E	LRUR	- EYE 15° SPRL FAIR FIX CIRC D10 70% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
55	0806107	13.2N 145.8E	LRUR	- EYE 10° SPRL FAIR FIX CIRC D10 70% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
56	0806357	13.2N 145.7E	LRUR	- EYE 10° SPRL GOOD FIX CIRC D13 90% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
57	0807102	13.2N 145.5E	LRUR	- EYE 10° SPRL FAIR FIX CIRC D15 70% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
58	0807352	13.2N 145.5E	LRUR	- EYE 10° SPRL FAIR FIX CIRC D15 70% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
59	0808012	13.3N 145.5E	LRUR	- EYE 10° SPRL GOOD FIX CIRC D15	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
60	0808312	13.3N 145.3E	P	2 3 700 270 44 140 30	-	-	97/	28/	14	11										
61	0808352	13.4N 145.4E	LRUR	- EYE 10° SPRL GOOD FIX CIRC D10	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
62	0809102	13.4N 145.3E	LRUR	- EYE 10° SPRL GOOD FIX CIRC D10	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
63	0809352	13.5N 145.3E	LRUR	- EYE 10° SPRL GOOD FIX CIRC D12	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
64	0809372	13.4N 145.3E	SAT	(IR DATA)	PCN 3	UMSP														
65	0810352	13.5N 144.9E	LRUR	- EYE GOOD FIX CIRC D18 80% WALL CLD EYE OVER N PORT GUAM	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
66	0810102	13.5N 144.8E	LRUR	- EYE GOOD FIX CIRC D18 90% WALL CLD EYE CENTER OVER GUAM	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
67	0811282	13.5N 144.7E	SAT	(IR DATA)	NOAA-5															
68	0811302	13.5N 144.5E	SAT	(IR DATA)	NOAA-5	(CONF 01)														
69	0811352	13.5N 144.8E	LRUR	- EYE 100° SPRL OVERLAY FAIR FIX	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
70	0812082	13.6N 144.8E	LRUR	- EYE GOOD FIX D22 80% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
71	0812352	13.6N 144.6E	LRUR	- EYE GOOD FIX CIRC D20 60% WALL CLD OPEN NW	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
72	0813042	13.7N 144.4E	LRUR	- EYE GOOD FIX ELIP AXIS 25/15 60% WALL CLD OPEN SE	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
73	0813352	13.7N 144.3E	LRUR	- EYE GOOD FIX CIRC D22 70% WALL CLD OPEN E	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
74	0814102	13.7N 144.0E	LRUR	- EYE GOOD FIX CIRC D18 70% WALL CLD OPEN E	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
75	0814462	13.6N 143.9E	SAT	(IR DATA)	PCN 5	UMSP														
76	0815352	13.7N 143.7E	LRUR	- EYE GOOD FIX ELIP 25/18 80% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
77	0816352	13.8N 143.3E	LRUR	- EYE GOOD FIX ELIP AXIS 30/20 60% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
78	0817352	13.7N 143.1E	LRUR	- EYE GOOD FIX ELIP AXIS 25/15 70% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
79	0819107	13.8N 142.8E	LRUR	- EYE GOOD FIX ELIP AXIS 25/17 70% WALL CLD	-	-	-	-	-	-	-	-	-	13.6N	144.9E	-	-	-	-	
80	0819352	13.8N 142.7E	LRUR	- EYE GOOD FIX																

91	090919Z	14+2N	139+9E	SAT	(IR DATA)	)	PCN 6	UMSP
92	090920Z	14+4N	138+7E	SAT	(IR DATA)	)	PCN 6	UMSP
93	091044Z	14+6N	138+8E	SAT	(IR DATA)	)	PCN 1	NOAA-5
94	091048Z	13+7N	138+9E	SAT	(IR DATA)	)		NOAA-5 (CONF 02)
95	091428Z	14+8N	137+8E	SAT	(IR DATA)	)	PCN 1	UMSP
96	091428Z	14+8N	137+9E	SAT	(IR DATA)	)	PCN 1	UMSP
97	091435Z	13+8N	143+9E	P	2 5 700 14 54 280	28 - -	-	972 28+ 16 11 CIHC 23	4
98	092202Z	15+2N	136+0E	SAT	(TS+0/6.0 /DL+U/25HRS)	)	PCN 1	UMSP
99	092202Z	15+1N	135+8E	SAT	(TS+0/6.0 /DL+U/20HRS)	)	PCN 1	UMSP
100	092320Z	15+0N	135+7E	SAT	(IR DATA)	)	PCN 1	NOAA-5
101	100013Z	14+9N	135+4E	SAT	(IR DATA)	)	PCN 1	NOAA-4
102	100110Z	14+9N	135+2E	SAT	(TS+0/6.0 /DL+5/25HRS)	)		NOAA-5 (CONF 02)
103	100129Z	14+9N	135+4E	SAT	(IR DATA)	)	PCN 1	UMSP
104	100310Z	15+2N	134+7E	SAT	(IR DATA)	)	PCN 1	UMSP
105	100328Z	14+8N	134+5E	P	2 3 700 50 110 290	24 120 290	25 929 24+ 18 15 CIHC	30	11
106	101044Z	14+8N	133+4E	SAT	(IR DATA)	)	PCN 1	UMSP
107	101044Z	14+9N	133+6E	SAT	(IR DATA)	)	PCN 1	UMSP
108	101044Z	14+8N	133+6E	SAT	(IR DATA)	)	PCN 1	UMSP
109	101156Z	14+9N	133+1E	SAT	(IR DATA)	)	PCN 1	NOAA-5
110	101200Z	14+8N	132+9E	SAT	(IR DATA)	)		NOAA-5 (CONF 01)
111	101410Z	15+0N	132+7E	SAT	(IR DATA)	)	PCN 1	UMSP
112	101520Z	14+5N	132+7E	P	5 5 700 320 95 290	20 - -	-	919 23+ 17 15 ELIP N-S 40X30	12
113	102145Z	14+7N	131+7E	SAT	(TS+5/6.5 /D0.5/24HRS)	)	PCN 1	UMSP
114	102145Z	14+7N	131+5E	SAT	(TS+5/6.5 /D0.5/24HRS)	)	PCN 1	UMSP
115	102313Z	14+8N	131+6E	SAT	(IR DATA)	)	PCN 1	NOAA-4
116	110026Z	14+9N	131+5E	SAT	(TS+5/6.5 /D0.5/23HRS)	)		NOAA-5 (CONF 02)
117	110032Z	14+8N	131+5E	SAT	(IR DATA)	)	PCN 1	NOAA-5
118	110253Z	14+8N	131+2E	SAT	(IR DATA)	)	PCN 1	UMSP
119	110253Z	14+8N	131+0E	SAT	(IR DATA)	)	PCN 1	UMSP
120	110345Z	14+7N	131+1E	P	5 5 700 50 105 310	40 45 320 150 925 24+ 16 13 ELIP N-S 35X30	13		
121	111027Z	14+7N	130+3E	SAT	(IR DATA)	)	PCN 1	UMSP
122	111027Z	14+8N	130+3E	SAT	(IR DATA)	)	PCN 1	UMSP
123	111112Z	14+7N	130+1E	SAT	(IR DATA)	)	PCN 1	NOAA-5
124	111116Z	14+8N	129+8E	SAT	(IR DATA)	)		NOAA-5 (CONF 01)
125	111510Z	14+6N	130+0E	P	2 2 700 350 93 260	70 - -	-	939 25+ 16 13 ELIP E-W 35X15	14
126	111534Z	14+7N	129+8E	SAT	(IR DATA)	)	PCN 1	UMSP
127	111534Z	14+5N	129+7E	SAT	(IR DATA)	)	PCN 1	UMSP
128	112053Z	14+6N	129+4E	P	2 2 700 20 92 260	30 - -	-	940 25+ 17 12 ELIP SW-NL 25X20	14
129	112128Z	14+7N	128+8E	SAT	(IR DATA)	)	PCN 1	UMSP
130	112128Z	14+9N	128+8E	SAT	(TS+5/6.5 /W1.0/24HRS)	)	PCN 1	UMSP
131	112310Z	14+4N	128+9E	SAT	(TS+0/6.0 /W1.5/25HRS)	)	PCN 3	DMSP
132	112342Z	14+8N	129+2E	SAT	(TS+5/6.0 /W1.0/23HRS)	)		NOAA-5 (CONF 01)
133	112348Z	14+7N	129+1E	SAT	(TS+0/6.0 / / HRS)	)	PCN 3	NOAA-5
134	120008Z	14+8N	128+8E	SAT	(IR DATA)	)		NOAA-4
135	120235Z	14+7N	128+8E	SAT	(IR DATA)	)	PCN 1	QMSP
136	120235Z	14+8N	128+4E	SAT	(TS+0/5.0 / / HRS)	)	PCN 3	UMSP
137	120235Z	14+6N	128+6E	SAT	(IR DATA)	)	PCN 1	UMSP
138	120300Z	14+6N	128+5E	P	3 5 700 40 90 320	40 110 20 12 940 25+ 17 15 CIHC - - - -	20	15	
139	120831Z	14+5N	127+9E	P	3 5 700 130 95 50	70 90 40 40 940 25+ 17 15 - - -	-	-	15
140	121010Z	14+8N	127+4E	SAT	(IR DATA)	)	PCN 3	DMSP
141	121224Z	14+7N	127+1E	SAT	(IR DATA)	)	PCN 3	NOAA-5
142	121230Z	14+4N	127+0E	SAT	(IR DATA)	)		NOAA-5 (CONF 01)
143	121516Z	14+6N	126+7E	SAT	(IR DATA)	)	PCN 3	UMSP
144	121517Z	14+5N	126+7E	SAT	(IR DATA)	)	PCN 3	UMSP
145	121542Z	14+6N	126+6E	P	5 5 700 110 100 340	93 - - - -	934 25+ 16 13 CIHC - - -	13	16
146	122030Z	14+3N	126+0E	P	5 5 700 70 35 340	10 - - -	934 25+ 19 16 CIHC - - -	15	16
147	122252Z	14+6N	125+6E	SAT	(TS+0/5.0 / / HRS)	)	PCN 1	UMSP
148	122252Z	14+5N	125+7E	SAT	(TS+0/5.0 / S / 23HRS)	)	PCN 1	UMSP
149	122300Z	14+8N	125+6E	LRDR	- 2070/-	-	- - -	14+1N 123+0E	-
150	130054Z	14+9N	125+5E	SAT	(TS+0/5.5 /W0.5/25HRS)	NOAA-5 (CONF 01)	- - -	- - -	-
151	130100Z	14+8N	124+1E	LRDR	- EYE 100% CONCENTRIC INNER D22/OUTER D28	-	- - -	14+3N 127+7E	-
152	130101Z	14+5N	125+1E	SAT	(IR DATA)	)	PCN 1	NOAA-5
153	130300Z	14+7N	124+7E	LRDR	- EYE 100% CONCENTRIC INNER D14/OUTER D20	-	- - -	14+3N 127+7E	-
154	130304Z	14+7N	124+6E	P	2 2 700 20 88 290 50 65 290 75 930 24+ 18 15 CIHC	-	- - -	14+3N 127+7E	17
155	130400Z	14+7N	124+5E	LRDR	- EYE 100% CONCENTRIC INNER D12/OUTER D28	-	- - -	14+3N 127+7E	-
156	130500Z	14+7N	124+3E	LRDR	- EYE 80% CIRC OPEN NNE INNER 10/OUTER 30	-	- - -	14+1N 123+0E	-
157	130600Z	14+7N	124+3E	LRDR	- 10522	-	- - -	14+1N 123+0E	-
158	130700Z	14+7N	124+1E	LRDR	- 10522	-	- - -	14+1N 123+0E	-
159	130800Z	14+6N	123+8E	LRDR	- 10522	-	- - -	14+1N 123+0E	-
160	130800Z	14+7N	124+0E	LRDR	- EYE 100% CIRC D10 MOVG WNW 11 KTS	-	- - -	16+6N 120+3E	-
161	130834Z	14+5N	123+7E	P	2 2 700 110 94 20 10 120 40 30 92+	24+ 18 15 CIHC - - -	14	17	
162	131000Z	14+6N	123+6E	LRDR	- 10522	-	- - -	14+1N 123+0E	-
163	131134Z	14+6N	123+4E	SAT	(IR DATA)	)	PCN 1	UMSP
164	131142Z	14+6N	123+4E	SAT	(IR DATA)	)	PCN 1	NOAA-5
165	131200Z	14+7N	123+1E	LRDR	- 10311	-	- - -	14+1N 123+0E	-
166	131200Z	14+8N	123+4E	LRDR	- 1078/-	-	- - -	16+3N 120+6E	-
167	131300Z	14+6N	122+9E	LRDR	- 10311	-	- - -	14+1N 123+0E	-
168	131300Z	14+7N	123+3E	LRDR	- 10382	-	- - -	16+3N 120+6E	-
169	131400Z	14+7N	123+1E	LRDR	- 10373	-	- - -	16+3N 120+6E	-
170	131430Z	14+5N	122+8E	LRDR	- PSBL 150° SPRL BND OVRLAY	-	- - -	15+2N 120+6E	-
171	131459Z	14+7N	122+6E	SAT	(IR DATA)	)	PCN 1	UMSP
172	131459Z	14+7N	122+7E	SAT	(IR DATA)	)	PCN 1	UMSP
173	131500Z	14+7N	122+6E	LRDR	- 10321	-	- - -	14+1N 123+0E	-
174	131500Z	14+7N	122+8E	LRDR	- 10372	-	- - -	16+3N 120+6E	-
175	131500Z	14+6N	122+8E	LRDR	- PSBL 150° OVRLAY	-	- - -	15+2N 120+6E	-
176	131522Z	14+8N	122+6E	P	2 2 700 360 90 270 30 - -	93+	25+ 15 11 CIHC 6	12	
177	131600Z	14+7N	122+4E	LRDR	- 11321	-	- - -	14+1N 123+0E	-
178	131600Z	14+7N	122+6E	LRDR	- 10312	-	- - -	16+3N 120+6E	-
179	13183-2	14+8N	121+9E	LRDR	- PSBL EYE FAIR FIX 60% ELIP AXIS 10/5 MOVT 1010	-	- - -	15+2N 120+6E	-
180	131900Z	14+9N	122+0E	LRDR	- 1231/-	-	- - -	16+3N 120+6E	-

141	131937/	15.0N	121.6E	LRUR	- EYE GOOD FIX 90% WALL CLD CIRC D6 1212	-	-	-	-	15.2N	120.6E	-
142	132000/	15.0N	121.7E	LRUR	- 1015/	-	-	-	-	16.3N	120.6E	-
143	132100/	15.0N	121.5E	LRUR	- 1011/	-	-	-	-	16.3N	120.6E	-
144	132100/	15.0N	121.3E	LRUR	- PSBL EYE 100% SPRL OVRLAY POOR FIX CIRC D6 EYE 70% FILLED	-	-	-	-	15.2N	120.6E	-
145	132235/	15.1N	121.1E	SAT	(T4.0/5.0 / <1.0/24HRS) PCN 5 UMSP	-	-	-	-	16.0N	120.3E	-
146	132300/	15.0N	121.0E	LRUR	- PSBL CENT APPROX 120/29 FROM RPK	-	-	-	-	16.0N	120.3E	-
147	140011/	15.1N	120.6E	SAT	(T5.0/5.5 / 5 / 23HRS) NOAA-5 (CONF 01)	-	-	-	-	16.0N	120.3E	-
148	140017/	15.3N	120.7E	SAT	(IR DATA) NOAA-5	-	-	-	-	16.0N	120.3E	-
149	140200/	15.2N	120.0E	LRUR	- 1060/	-	-	-	-	16.3N	120.6E	-
150	140300/	15.2N	119.7E	LRUR	- 1083/	-	-	-	-	16.3N	120.6E	-
151	140430/	15.5N	119.9E	LRUR	- PSBL EYE 55PCT MOVING NW 10	-	-	-	-	16.0N	120.3E	-
152	140500/	15.4N	119.3E	LRUR	- 1048/	-	-	-	-	16.3N	120.6E	-
153	140600/	15.5N	119.3E	LRUR	- 1153/	-	-	-	-	16.3N	120.6E	-
154	140630/	15.8N	119.6E	LRUR	- PSBL CENT 35%	-	-	-	-	16.0N	120.3E	-
155	140947/	15.5N	118.6E	P	5 5 700 120 51 30 20 25 20 120 994 302 14 11	-	-	-	-			19
156	141253/	15.8N	118.3E	SAT	(IR DATA) NOAA-5	-	-	-	-			
157	141257/	16.5N	118.1E	SAT	(IR DATA) NOAA-5 (CONF 02)	-	-	-	-			
158	141535/	16.0N	118.3E	P	2 5 700 140 64 40 120 - - 1004 312 13 12	-	-	-	-			20
159	141623/	15.8N	118.2E	SAT	(IR DATA) PCN 5 UMSP	-	-	-	-			
200	142042/	16.2N	118.2E	P	3 10 700 60 41 320 135 - - 1004 312 13 12	-	-	-	-			20
201	142218/	16.3N	118.1E	SAT	(IR DATA) PCN 5 UMSP	-	-	-	-			
202	150054/	16.5N	118.4E	SAT	(IR DATA) PCN 6 NOAA-4	-	-	-	-			
203	150124/	16.6N	118.4E	SAT	(T2.5/3.5 / / HRS) PCN 5 NOAA-5	-	-	-	-			
204	150920/	17.3N	118.1E	P	5 5 700 190 55 60 120 40 280 20 - 302 13 11 ELIP SE-NW 15X 8	-	-	-	-			21
205	151100/	17.4N	118.3E	SAT	(IR DATA) PCN 5 UMSP	-	-	-	-			
206	151204/	17.7N	118.4E	SAT	(IR DATA) PCN 5 NOAA-5	-	-	-	-			
207	151215/	17.0N	118.2E	SAT	(IR DATA) NOAA-5 (CONF 02)	-	-	-	-			
208	151605/	18.3N	120.1E	SAT	(IR DATA) PCN 5 UMSP	-	-	-	-			
209	151605/	17.8N	118.8E	SAT	(IR DATA) PCN 6 UMSP	-	-	-	-			
210	151604/	17.7N	120.2E	SAT	(IR DATA) PCN 6 UMSP	-	-	-	-			
211	152154/	19.5N	119.2E	P	2 15 700 220 25 90 130 - - 998 302 12 13	-	-	-	-			22
212	152201/	18.9N	120.7E	SAT	(IR DATA) PCN 5 UMSP	-	-	-	-			
213	160034/	19.8N	121.5E	SAT	(T2.0/2.0 / / HRS) NOAA-5 (CONF 02)	-	-	-	-			
214	160045/	19.5N	120.3E	SAT	(T1.0/2.0 / <1.0/23HRS) PCN 5 NOAA-5	-	-	-	-			
215	160234/	20.3N	120.9E	P	2 20 700 240 11 160 25 25 260 150 999 302 12 10	-	-	-	-			22
216	160306/	20.0N	120.8E	SAT	(IR DATA) PCN 5 UMSP	-	-	-	-			
217	160306/	19.8N	122.6E	SAT	(T1.0/1.0 / / HRS) PCN 5 UMSP	-	-	-	-			
218	161043/	20.6N	121.5E	SAT	(IR DATA) PCN 5 UMSP	-	-	-	-			
219	161125/	20.8N	122.2E	SAT	(IR DATA) PCN 5 NOAA-5	-	-	-	-			
220	161548/	21.0N	122.9E	SAT	(IR DATA) PCN 5 UMSP	-	-	-	-			
221	161548/	21.6N	124.5E	SAT	(IR DATA) PCN 5 UMSP	-	-	-	-			
222	162144/	21.3N	124.9E	SAT	(IR DATA) PCN 5 UMSP	-	-	-	-			
223	170001/	21.5N	125.7E	SAT	(T1.0/1.0 / 5 / 25HRS) PCN 5 NOAA-5	-	-	-	-			

TYPHOON LUCY FIX POSITIONS FOR CYCLONE NO. 20 0600Z 28 NOV TO 1800Z 4 DEC																			
NO.	TIME	POSIT	FIX	ACCRY	FIX	FLT	LVL	WIND	MAX OBS	MAX OBS	WHS	MIN	FLT	SLP	LVL	EYE	UNIEN-	POSIT	
		CAT	NAV-MET	LVL	UIN	VEL	BNG	RNG	VEL	BNG	HGT	MIN	700MB	SLP	T1/T0	FORM	ATION	OF	
1	2508427	6.7N 170.5E	SAT	(IR DATA)					PCN 6	NOAA-5									
2	2521187	7.1N 168.9E	SAT	(T1.0/1.5 /	/ HRS)				PCN 6	NOAA-5									
3	2600107	7.1N 168.5E	SAT	(IR DATA)					PCN 6	DMSP									
4	2609547	8.3N 167.3E	SAT	(IR DATA)					PCN 6	NOAA-5									
5	2622317	7.7N 165.9E	SAT	(T1.0/1.0 /S	/25HRS)				PCN 5	NOAA-5									
6	2709107	6.9N 165.0E	SAT	(IR DATA)					PCN 6	NOAA-5									
7	2712347	6.7N 163.8E	SAT	(IR DATA)					PCN 6	UMSP									
8	2720177	6.9N 161.9E	SAT	(T2.0/2.0 /	/ HRS)				PCN 6	UMSP									
9	2721477	6.8N 162.1E	SAT	(IR DATA)					PCN 5	NOAA-5									
10	2801147	7.2N 161.3E	SAT	(IR DATA)					PCN 3	UMSP									
11	2806007	6.7N 159.9E	P	2 20 700	30 45 300	20	40	310	20	997	-	26	26	-	-	-	-	1	
12	2808597	6.8N 158.8E	SAT	(IR DATA)					PCN 6	UMSP									
13	2808597	7.4N 157.7E	SAT	(IR DATA)					PCN 6	UMSP									
14	2812237	6.8N 156.2E	SAT	(IR DATA)					PCN 2	NOAA-5									
15	2813572	7.2N 156.6E	SAT	(IR DATA)					PCN 6	UMSP									
16	2813587	7.1N 157.4E	SAT	(IR DATA)					PCN 6	UMSP									
17	2820007	7.5N 154.6E	SAT	(T2.0/2.0 /S	/24HRS)				PCN 5	UMSP									
18	2820007	6.4N 156.6E	SAT	(T2.0/2.0 /	/ HRS)				PCN 6	UMSP									
19	2822567	7.0N 154.5E	SAT	(T2.0/2.0 /	/ HRS)				NOAA-5	(CONF 02)									
20	2822597	6.6N 155.1E	SAT	(IR DATA)					PCN 5	NOAA-5									
21	2900587	6.5N 156.7E	SAT	(IR DATA)					PCN 4	UMSP									
22	2903277	7.6N 154.9E	P	4 6 700	110 45 30	60	30	30	10	993	308	10	9	-	-	-	-	2	
23	2908417	8.6N 151.8E	SAT	(IR DATA)					PCN 6	UMSP									
24	2908427	8.3N 151.7E	SAT	(IR DATA)					PCN 6	UMSP									
25	2909397	8.5N 151.6E	SAT	(IR DATA)					PCN 6	NOAA-5									
26	2909427	7.0N 154.6E	SAT	(IR DATA)					NOAA-5	(CONF 03)									
27	2913407	9.0N 151.1E	SAT	(IR DATA)					PCN 6	UMSP									
28	2921257	8.7N 148.5E	SAT	(T2.0/2.0 /S	/25HRS)				PCN 5	UMSP									
29	2922127	7.5N 150.9E	SAT	(T2.5/2.5 /D0.5	/25HRS)				NOAA-5	(CONF 01)									
30	2922157	8.6N 147.9E	SAT	(IR DATA)					PCN 5	NOAA-5									
31	2923247	8.6N 147.1E	SAT	(IR DATA)					PCN 5	NOAA-4									
32	3007257	7.3N 148.7E	P	5 15 1500	360 27 280	90	25	280	90	1004	-	25	25	-	-	-	-	4	
33	3010062	8.3N 147.9E	SAT	(IR DATA)					PCN 6	UMSP									
34	3010062	7.7N 145.9E	SAT	(IR DATA)					PCN 5	UMSP									
35	3010517	8.5N 147.6E	SAT	(IR DATA)					PCN 6	NOAA-5									
36	3010547	9.2N 145.6E	SAT	(IR DATA)					NOAA-5	(CONF 01)									
37	3013237	7.4N 146.6E	SAT	(IR DATA)					PCN 6	UMSP									
38	3013237	7.0N 145.6E	SAT	(IR DATA)					PCN 6	DMSP									
39	3021077	8.1N 144.5E	SAT	(T3.0/3.0 /D1.0	/24HRS)				PCN 6	DMSP									
40	3021497	7.6N 145.2E	P	5 20 700	50 45 350	240	25	360	105	1000	-	25	26	-	-	-	-	5	
41	3023247	9.8N 143.3E	SAT	(T3.0/3.0 /D0.5	/25HRS)				NOAA-5	(CONF 01)									
42	3023277	8.3N 144.1E	SAT	(IR DATA)					PCN 6	NOAA-5									
43	0102057	8.1N 141.6E	SAT	(IR DATA)					PCN 5	DMSP									
44	0102307	8.1N 141.5E	P	5 5 1500	130 45 60	95	40	60	95	1004	-	25	25	-	-	-	-	5	
45	0109497	10.6N 139.8E	SAT	(IR DATA)					PCN 5	DMSP									
46	0109497	8.9N 138.6E	SAT	(IR DATA)					PCN 6	DMSP									
47	0112047	10.8N 138.6E	SAT	(IR DATA)					PCN 5	NOAA-5									
48	0112067	10.0N 138.5E	SAT	(IR DATA)					NOAA-5	(CONF 01)									
49	0114397	10.4N 137.6E	P	2 2 700	160 50 100	100	-	-	992	304	15	13	-	-	-	-	-	6	
50	0114467	10.3N 137.3E	SAT	(IR DATA)					PCN 5	DMSP									
51	0121207	11.3N 136.4E	P	2 5 700	-	-	-	-	989	292	16	11	CIMC	40				6	
52	0122327	11.5N 136.1E	SAT	(T3.5/3.5 /D0.5	/25HRS)				PCN 5	UMSP									
53	0122327	11.4N 136.0E	SAT	(IR DATA)					PCN 3	UMSP									
54	0123197	11.6N 136.1E	SAT	(IR DATA)					PCN 6	NOAA-4									
55	0200362	11.7N 136.2E	SAT	(T4.0/4.0 /D1.0	/25HRS)				NOAA-5	(CONF 01)									
56	0200402	11.8N 135.6E	SAT	(IR DATA)					PCN 6	NOAA-5									
57	0201472	11.2N 135.0E	SAT	(IR DATA)					PCN 5	UMSP									
58	0201472	11.2N 134.8E	SAT	(T4.0/4.0 /	/ HRS)				PCN 3	UMSP									
59	0202432	11.4N 134.8E	P	4 6 700	130 75 60	28	80	60	28	984	29%	18	14	ELIP	N-S	20X25		7	
60	0211142	11.7N 133.5E	SAT	(IR DATA)					PCN 5	UMSP									
61	0211142	11.6N 133.3E	SAT	(IR DATA)					PCN 5	UMSP									
62	0211202	11.3N 133.4E	SAT	(IR DATA)					PCN 5	NOAA-5									
63	0211237	12.3N 133.4E	SAT	(IR DATA)					NOAA-5	(CONF 02)									
64	0214292	11.7N 133.0E	SAT	(IR DATA)					PCN 5	UMSP									
65	0214292	11.6N 133.1E	SAT	(IR DATA)					PCN 5	UMSP									
66	0221392	12.7N 131.8E	P	5 3 700	170 100 60	10	100	270	7	946	26%	18	12	CIMC	12			8	
67	0222152	12.8N 131.9E	SAT	(T5.0/5.0 /D1.5	/24HRS)				PCN 1	UMSP									
68	0222152	12.6N 131.7E	SAT	(T4.5/4.5 /D0.5	/20HRS)				PCN 3	DMSP									
69	0223512	13.0N 131.5E	SAT	(T5.5/5.5 /D1.5	/25HRS)				NOAA-5	(CONF 01)									
70	0223562	12.9N 131.9E	SAT	(IR DATA)					PCN 1	NOAA-5									
71	0302547	12.9N 130.9E	P	5 2 700	140 105 50	30	110	50	8	931	24%	23	12	CIMC	12			8	
72	0303112	13.0N 130.9E	SAT	(IR DATA)					PCN 1	UMSP									
73	0303112	13.1N 131.0E	SAT	(IR DATA)					PCN 1	DMSP									
74	0310572	13.3N 130.1E	SAT	(IR DATA)					PCN 1	DMSP									
75	0310572	13.4N 130.2E	SAT	(IR DATA)					PCN 1	DMSP									
76	0312327	13.4N 129.8E	SAT	(IR DATA)					PCN 1	NOAA-5									
77	0312352	13.3N 129.0E	SAT	(IR DATA)					NOAA-5	(CONF 01)									
78	0314112	13.4N 129.4E	SAT	(IR DATA)					PCN 1	DMSP									
79	0314112	13.6N 129.8E	SAT	(IR DATA)					PCN 1	DMSP									
80	0314432	13.7N 129.5E	P	5 2 700	140 120 10	13	-	-	919	23%	26	12	CIMC	18				9	
81	0315532	13.5N 129.8E	SAT	(IR DATA)					PCN 1	DMSP									
82	0320382	14.3N 129.0E	P	5 3 700	40 90 300	25	-	-	920	23%	21	12	CIMC	25					
8																			

TYPHOON MARY
FIX POSITIONS FOR CYCLONE NO. 21
0600Z 20 DEC TD 1000Z 21 DEC 1966

FIX NO.	TIME	POSIT	FIX CAT	ACCRY	MAX OBS	MAX OBS	MIN	FLT	PUSI OF
			NAV-MET	LVL	LVL	WIND	SFC	EYE	RADAR
					DIR	VEL	IND	FLY	SLP
1	190834Z	8.9N 177.0E	SAT	(IR DATA	)	PCN 6	NOAA-5		
2	191117Z	8.6N 177.0E	SAT	(IR DATA	)	PCN 6	UMSP		
3	191315Z	9.0N 177.0E	SAT	(IR DATA	)		SNS-2		
4	191545Z	9.5N 179.0E	SAT	(IR DATA	)		SNS-2	(CONF 01)	
5	191929Z	9.0N 176.0E	SAT	(IR DATA	)		SNS-2		
6	192046Z	9.6N 177.0E	SAT	(T1.0/1.0 / / HRS)	PCN 6	UMSP			
7	192106Z	9.2N 178.0E	SAT	(T1.5/2.5 / / HRS)	PCN 6	NOAA-5	(CONF 01)		
8	192121Z	9.1N 178.0E	SAT	(T1.0/1.0 / / HRS)	PCN 5	NOAA-5			
9	192352Z	11.4N 180.0E	SAT	(IR DATA	)	PCN 6	UMSP		
10	192352Z	9.8N 178.0E	SAT	(IR DATA	)	PCN 6	UMSP		
11	200415Z	9.6N 179.0E	SAT	(IR DATA	)		SNS-2		
12	200747Z	9.7N 178.0E	SAT	(IR DATA	)	PCN 6	UMSP		
13	200753Z	10.0N 179.0E	SAT	(IR DATA	)		NOAA-5	(CONF 01)	
14	201052Z	10.2N 179.0E	SAT	(IR DATA	)	PCN 6	UMSP		
15	201053Z	10.1N 179.0E	SAT	(IR DATA	)	PCN 6	UMSP		
16	201115Z	9.5N 179.0E	SAT	(IR DATA	)		SNS-2	(60 NM)	
17	201848Z	10.0N 179.0E	SAT	(IR DATA	)	PCN 6	UMSP		
18	201949Z	9.5N 178.0E	SAT	(IR DATA	)		SNS-2	(60 NM)	
19	202022Z	9.0N 180.0E	SAT	(T3.0/3.0 /D0.5/23HRS)		NOAA-5	(CONF 01)		
20	210215Z	9.5N 179.0E	SAT	(IR DATA	)		SNS-2		
21	210315Z	9.7N 178.0E	SAT	(IR DATA	)		SNS-2	(60 NM)	
22	210729Z	10.3N 179.0E	SAT	(T2.0/3.0 / / HRS)	PCN 6	UMSP			
23	210730Z	10.1N 179.0E	SAT	(IR DATA	)	PCN 6	UMSP		
24	210902Z	10.0N 178.0E	SAT	(IR DATA	)		NOAA-5		
25	210902Z	10.2N 179.0E	SAT	(IR DATA	)	PCN 6	NOAA-5		
26	211215Z	10.0N 178.0E	SAT	(IR DATA	)		SNS-2	(60 NM)	
27	211216Z	9.8N 179.0E	SAT	(T2.0/3.0 /W1.0/12 HRS)	PCN 4	UMSP			
28	211217Z	10.5N 179.0E	SAT	(IR DATA	)	PCN 6	UMSP		
29	211515Z	9.8N 178.0E	SAT	(IR DATA	)		SNS-2		
30	211831Z	10.4N 176.0E	SAT	(T3.0/3.0 / / HRS)	PCN 6	UMSP			
31	212133Z	10.0N 177.0E	SAT	(T3.5/3.5 /D0.5/25HRS)		NOAA-5	(CONF 02)		
32	212134Z	9.6N 177.0E	SAT	(T3.0/3.0 / / HRS)	PCN 5	NOAA-5			
33	212317Z	10.2N 177.0E	SAT	(T3.0/3.0 / / HRS)	PCN 4	UMSP			
34	212317Z	10.9N 176.0E	SAT	(T3.0/3.0 / / HRS)	PCN 6	UMSP			
35	220713Z	10.2N 175.0E	SAT	(IR DATA	)	PCN 6	UMSP		
36	220745Z	9.9N 174.0E	SAT	(IR DATA	)		SMS-2		
37	220818Z	10.2N 174.0E	SAT	(IR DATA	)	PCN 6	NOAA-5		
38	221115Z	10.5N 174.0E	SAT	(IR DATA	)		SNS-2	(60 NM)	
39	221159Z	10.6N 173.5E	SAT	(T3.0/3.0 / / HRS)	PCN 6	UMSP			
40	221845Z	11.0N 174.0E	SAT	(IR DATA	)		SNS-2	(CONF 2)	
41	221955Z	11.1N 173.5E	SAT	(T4.5/4.5 / / HRS)	PCN 1	UMSP			
42	221955Z	11.1N 173.5E	SAT	(T4.5/4.5 /D1.5/21HRS)	PCN 2	UMSP			
43	222015Z	11.1N 173.0E	SAT	(T4.0/4.0 / / HRS)		SNS-2	(60 NM)		
44	222051Z	11.0N 173.0E	SAT	(T5.0/5.0 /D1.5/23HRS)		NOAA-5	(CONF 01)		
45	222054Z	11.1N 173.0E	SAT	(IR DATA	)	PCN 2	NOAA-5		
46	222054Z	11.4N 173.0E	SAT	(T4.0/4.0 /D1.0/22HRS)	PCN 2	NOAA-5			
47	222259Z	11.2N 172.0E	SAT	(T5.0/5.0 /D2.0/24HRS)	PCN 4	UMSP			
48	230219Z	11.5N 172.0E	SAT	(IR DATA	)		SNS-2	(30 NM)	
49	230837Z	11.6N 171.0E	SAT	(IR DATA	)	PCN 6	UMSP		
50	230837Z	12.4N 171.0E	SAT	(IR DATA	)	PCN 6	UMSP		
51	230931Z	12.1N 171.0E	SAT	(IR DATA	)	PCN 6	NOAA-5		
52	230934Z	11.6N 171.0E	SAT	(IR DATA	)	PCN 6	NOAA-5	(CONF 01)	
53	231141Z	12.6N 173.0E	SAT	(IR DATA	)	PCN 6	UMSP		
54	231938Z	12.3N 170.0E	SAT	(T4.0/4.5 /W0.5/24HRS)	PCN 6	UMSP			
55	231945Z	12.8N 169.0E	SAT	(T3.0/4.0 /W1.0/24HRS)		SNS-2	(40 NM)		
56	232207Z	12.6N 170.0E	SAT	(T4.0/4.5 / / HRS)	PCN 5	NOAA-5			
57	240023Z	12.9N 170.0E	SAT	(IR DATA	)	PCN 5	UMSP		
58	240023Z	12.8N 170.0E	SAT	(IR DATA	)	PCN 6	UMSP		
59	240115Z	12.5N 169.0E	SAT	(T4.0/4.0 /D1.0/22HRS)	PCN 6	UMSP			
60	240815Z	13.0N 169.0E	SAT	(IR DATA	)		SNS-2	(CONF 01)	
61	240820Z	12.9N 169.0E	SAT	(IR DATA	)	PCN 4	UMSP		
62	240820Z	12.9N 169.0E	SAT	(IR DATA	)	PCN 4	UMSP		
63	240847Z	12.9N 169.0E	SAT	(IR DATA	)	PCN 4	NOAA-5		
64	240847Z	12.7N 169.0E	SAT	(IR DATA	)	PCN 2	NOAA-5		
65	241305Z	12.9N 169.0E	SAT	(IR DATA	)	PCN 1	UMSP		
66	241305Z	12.7N 169.0E	SAT	(IR DATA	)	PCN 4	UMSP		
67	241315Z	13.0N 168.0E	SAT	(IR DATA	)		SNS-2	(60 NM)	
68	242409Z	12.6N 169.0E	SAT	(IR DATA	)		SNS-2	(30 NM)	
69	242120Z	12.4N 169.0E	SAT	(T5.0/5.0 / / HRS)		NOAA-5	(CONF 01)		
70	242123Z	12.4N 169.0E	SAT	(T5.0/5.0 /D1.0/23HRS)	PCN 1	NOAA-5			
71	250006Z	12.2N 169.0E	SAT	(IR DATA	)	PCN 2	UMSP		
72	250249Z	12.3N 169.0E	SAT	(IR DATA	)		SNS-2	(60 NM)	
73	250314Z	11.9N 169.0E	SAT	(S 5 700 300 115 210	25	100 210	25 947	262 17 10 CIRC	15
74	250803Z	11.8N 169.0E	SAT	(IR DATA	)	PCN 2	UMSP		
75	250803Z	11.9N 168.0E	SAT	(IR DATA	)	PCN 4	UMSP		
76	250803Z	11.6N 168.0E	SAT	(IR DATA	)	PCN 6	NOAA-5		
77	250959Z	11.8N 168.0E	SAT	(IR DATA	)	PCN 4	NOAA-5		
78	251002Z	12.0N 169.0E	SAT	(IR DATA	)	PCN 6	NOAA-5	(CONF 01)	
79	251248Z	11.8N 168.0E	SAT	(IR DATA	)	PCN 6	UMSP		
80	251415Z	11.3N 168.0E	SAT	(IR DATA	)		SNS-2	(60 NM)	
81	251559Z	11.1N 168.0E	SAT	(S 2 4 700 300 82 260	45	-	964	271 13 11 E-LIP	E-W 35x45
82	251625Z	11.1N 168.0E	LRDR	- 150 SPRL OVRLY PSBL EYE POOR FIX					8.7N 167.7E
83	251725Z	11.2N 168.0E	LRUR	- 150 SPRL OVRLY PSBL EYE POOR FIX					8.7N 167.7E
84	251825Z	10.8N 168.0E	LRDR	- 150 SPRL OVRLY PSBL EYE POOR FIX					8.7N 167.7E
85	252025Z	10.9N 168.0E	LRDR	- 150 SPRL OVRLY PSBL EYE POOR FIX					8.7N 167.7E
86	252039Z	10.8N 168.0E	SAT	(T5.0/5.0 / / HRS)	PCN 5	NOAA-5			
87	252045Z	10.4N 165.0E	SAT	(IR DATA	)	PCN 5	UMSP		
88	252045Z	10.7N 167.0E	SAT	(T4.0/4.5 / / HRS)	PCN 6	UMSP			
89	252050Z	10.5N 167.0E	SAT	(T3.5/4.0 / / HRS)		SNS-2	(40 NM)		
90	252231Z	10.5N 168.0E	SAT	(T5.0/5.0 /W1.0/25HRS)		NOAA-5	(CONF 01)		

91	252236Z	10.2N 167.8E	SAT	(T5.0/5.0 /S /25HRS)	PCN 6 NOAA-5								
92	252325Z	10.3N 167.4E	LRDR	- 15° SPRL OVRLY PSBL EYE POOR FIX									
93	252349Z	10.4N 167.1E	SAT	(T4.0/5.0 / / HRS)	PCN 6 UMSP								
94	260025Z	10.2N 167.2E	LRDR	- 15° SPRL OVRLY PSBL EYE POOR FIX									
95	260130Z	10.2N 167.0E	LRDR	- 15° SPRL OVRLY PSBL EYE POOR FIX									
96	260215Z	10.6N 165.8E	SAT	(IR DATA) SMS-2 (60 NM)									
97	260225Z	10.1N 166.8E	LRDR	- 15° SPRL OVRLY PSBL EYE POOR FIX									
98	260357Z	10.1N 166.6E	P 5 15	700 2u 82 270 15 88 380 20 97/ 28/ 28 21									
99	260425Z	10.0N 166.1E	LRDR	- 15° SPRL OVRLY PSBL EYE POOR FIX									
100	260525Z	10.0N 166.1E	LRDR	- 15° SPRL OVRLY PSBL EYE POOR FIX									
101	260915Z	9.6N 165.1E	SAT	(IR DATA) PCN 6 NOAA-5									
102	260915Z	9.5N 165.1E	SAT	(IR DATA) NOAA-5									
103	261230Z	9.4N 164.5E	SAT	(IR DATA) PCN 5 UMSP									
104	261415Z	8.9N 164.0E	SAT	(IR DATA) SMS-2 (60 NM)									
105	261437Z	9.3N 164.1E	P 5 15	700 1u 55 270 25 - - 98/ 29/ 16 15									
106	262028Z	8.5N 162.6E	SAT	(T3.5/4.5 / / HRS)	PCN 6 UMSP								
107	262028Z	8.3N 162.4E	SAT	(T4.0/5.0 / / HRS)	PCN 6 UMSP								
108	262147Z	9.8N 162.8E	SAT	(T3.5/4.5 /WU.5/23HRS) NOAA-5 (CONF 02)									
109	262151Z	8.6N 162.2E	SAT	(IR DATA) PCN 5 NOAA-5									
110	270112Z	8.7N 161.3E	SAT	(IR DATA) PCN 6 UMSP									
111	270331Z	9.0N 160.2E	P 5 3	700 150 56 50 50 60 50 60 991 30/ 15 14									6
112	270910Z	9.0N 158.3E	SAT	(IR DATA) PCN 6 UMSP									
113	270910Z	9.3N 158.4E	SAT	(IR DATA) PCN 6 UMSP									
114	271027Z	9.7N 157.9E	SAT	(IR DATA) PCN 5 NOAA-5 (CONF 01)									
115	271030Z	9.2N 158.2E	SAT	(IR DATA) PCN 6 UMSP									
116	271354Z	9.0N 156.6E	SAT	(IR DATA) PCN 6 UMSP									
117	271354Z	9.0N 156.1E	SAT	(IR DATA) PCN 6 UMSP									
118	271440Z	8.7N 156.5E	P 5 5	700 7U 57 330 120 - - 999 30/ 12 11 CINC 15									7
119	272011Z	9.1N 154.3E	SAT	(T3.0/3.5 /WU.5/24HRS) PCN 5 UMSP									
120	272011Z	9.0N 154.0E	SAT	(T3.0/3.5 /W1.0/24HRS) PCN 6 UMSP									
121	272259Z	9.3N 153.7E	SAT	(T3.5/3.5 /S / 25HRS) NOAA-5 (CONF 02)									
122	272304Z	9.0N 153.6E	SAT	(IR DATA) PCN 5 NOAA-5									
123	280054Z	9.1N 153.5E	SAT	(IR DATA) PCN 5 UMSP									
124	280232Z	9.7N 152.9E	P 15 8	700 150 30 130 20 - - 999 30/ 15 12									8
125	280853Z	9.5N 150.7E	SAT	(IR DATA) PCN 6 UMSP									
126	280853Z	9.6N 150.7E	SAT	(IR DATA) PCN 6 UMSP									
127	280943Z	9.7N 150.6E	SAT	(IR DATA) PCN 5 NOAA-5 (CONF 01)									
128	281142Z	10.1N 150.0E	SAT	(IR DATA) PCN 6 UMSP									
129	281336Z	10.2N 150.1E	SAT	(IR DATA) PCN 6 UMSP									
130	281521Z	11.4N 149.5E	P 10 3	700 14U 50 20 20 - - 990 30/ 10 11 ELIP SW-NE 25X15									9
131	282135Z	11.0N 148.4E	SAT	(T3.0/3.0 /S / 24HRS) PCN 6 UMSP									
132	282136Z	11.5N 148.6E	SAT	(T3.5/3.5 /D0.5/25HRS) PCN 6 UMSP									
133	282136Z	10.9N 148.3E	SAT	(T3.5/3.5 / / HRS) PCN 3 UMSP									
134	282204Z	11.3N 148.7E	P 20 5	700 70 61 320 15 7U 12U 15 991 30/ 13 9									10
135	282207Z	11.5N 148.5E	SAT	(IR DATA) PCN 5 NOAA-5									
136	290037Z	11.4N 147.8E	SAT	(IR DATA) PCN 6 UMSP									
137	290218Z	11.0N 147.6E	SAT	(IR DATA) PCN 3 UMSP									
138	290239Z	11.1N 147.6E	P 10 2	700 80 65 340 26 5U 340 80 984 29/ 14 12 CINC 18									
139	290810Z	11.5N 146.5E	LRDR	- PSBL EYE FAIR FIX CIRC D20 60% WALL CLD									
140	290835Z	11.5N 146.5E	LRDR	- PSBL EYE FAIR FIX ELIP AXIS 30/20 70% WALL CLD									
141	290910Z	11.4N 146.2E	LRDR	- EYE GOOD FIX ELIP AXIS 30/20 70% WALL CLD									
142	290935Z	11.6N 146.2E	LRDR	- EYE GOOD FIX ELIP AXIS 25/15 70% WALL CLD									
143	290939Z	11.2N 145.9E	P 5 3	700 3U 77 330 8U 7U 320 60 984 29/ 15 13 CINC 30									11
144	291010Z	11.4N 145.9E	LRDR	- EYE GOOD FIX ELIP AXIS 25/15 60% WALL CLD									
145	291014Z	11.3N 145.9E	SAT	(IR DATA) PCN 2 UMSP									
146	291018Z	11.2N 145.7E	SAT	(IR DATA) PCN 3 UMSP									
147	291035Z	11.3N 145.7E	LRDR	- EYE GOOD FIX ELIP AXIS 25/15 60% WALL CLD									
148	291100Z	11.2N 145.6E	SAT	(IR DATA) PCN 4 NOAA-5									
149	291111Z	11.2N 145.5E	LRDR	- EYE GOOD FIX CIRC D25 70% WALL CLD									
150	291135Z	11.2N 145.6E	LRDR	- EYE GOOD FIX CIRC D20 60% WALL CLD									
151	291210Z	11.2N 145.5E	LRDR	- EYE GOOD FIX ELIP AXIS 25/15 60% WALL CLD									
152	291235Z	11.2N 145.3E	LRDR	- EYE POOR FIX CIRC D25 40% WALL CLD									
153	291255Z	11.1N 145.1E	P 5 5	700 29U 70 200 45 - - 982 29/ 15 9 CINC 19									
154	291313Z	11.2N 145.3E	LRDR	- PSBL CENT POOR FIX 30% WALL CLD									
155	291319Z	11.2N 145.9E	SAT	(IR DATA) PCN 2 UMSP									
156	291335Z	11.2N 145.1E	LRDR	- PSBL CENT POOR FIX 40% WALL CLD									
157	291410Z	11.2N 145.1E	LRDR	- PSBL CENT POOR FIX 40% WALL CLD									
158	291433Z	11.0N 145.0E	P 7 2	700 33U 65 240 10 - - 979 29/ 17 -									
159	292114Z	10.4N 143.3E	SAT	(T2.0/3.0 /W1.5/24HRS) PCN 4 UMSP									
160	292332Z	10.3N 143.2E	SAT	(IR DATA) PCN 3 NOAA-5									
161	300201Z	10.4N 142.4E	SAT	(IR DATA) PCN 3 UMSP									
162	300245Z	10.4N 142.3E	P 4 2	700 300 74 240 20 8U 300 21 982 29/ 15 10 CINC 40									12
163	301001Z	10.3N 140.8E	SAT	(IR DATA) PCN 6 UMSP									
164	301001Z	10.2N 140.7E	SAT	(IR DATA) PCN 4 UMSP									
165	301012Z	10.2N 140.7E	SAT	(IR DATA) PCN 6 NOAA-5									
166	301014Z	10.2N 140.3E	SAT	(IR DATA) NOAA-5 (CONF 02)									
167	301433Z	10.2N 139.8E	P 30 7	700 150 55 60 30 - - 992 30/ 21 17 CINC 15									13
168	301443Z	10.2N 139.6E	SAT	(IR DATA) PCN 6 UMSP									
169	302101Z	10.3N 138.6E	SAT	(IR DATA) PCN 6 UMSP									
170	302243Z	10.1N 137.9E	SAT	(T3.0/3.0 / / HRS) PCN 5 UMSP									
171	302248Z	10.2N 138.3E	SAT	(T2.0/2.0 / / HRS) PCN 5 NOAA-5									
172	310039Z	10.8N 137.8E	SAT	(T3.0/3.5 / / HRS) NOAA-5 (CONF 01)									
173	310143Z	10.3N 137.0E	SAT	(IR DATA) PCN 6 UMSP									
174	310231Z	9.9N 136.8E	P *	700 150 40 60 11U - - 998 30/ 13 11									14
175	310943Z	9.1N 135.4E	SAT	(IR DATA) PCN 6 UMSP									
176	310943Z	9.3N 135.3E	SAT	(IR DATA) PCN 6 UMSP									
177	311124Z	9.2N 135.1E	SAT	(IR DATA) PCN 6 NOAA-5									
178	311425Z	8.9N 133.9E	SAT	(IR DATA) PCN 6 UMSP									
179	311554Z	8.1N 134.1E	P 5 15	700 90 24 10 30 - - 1003 31/ 12 11									15
180	312226Z	8.1N 131.8E	SAT	(T2.0/2.0 / / HRS) PCN 5 UMSP									

4. NORTH INDIAN OCEAN FIX DATA

FIX POSITIONS FOR TROPICAL CYCLONE NO. 17-77
2000Z 11 MAY TO 0800Z 13 MAY

FIX NO.	TIME	POSIT	FIX CAT	ACCHY	MAX OBS	MAX OBS	OBS	MIN	FLT	POSIT OF RADAR	MSN NMBR				
			NAV-MET	LVL	LVL	DIAH	VEL	SFC WIND	MIN 700MB	LVL	EYE FORM	URIEN- IATION	EYE DIA		
					BRG	RNG	VEL	BRG	RNG	SLP	HGT	TI/T0	FORM	URIEN- IATION	EYE DIA
1	080515Z	7.1N 82.2E	SAT	(T1.5/0.5 / / HRS)	PCN 6	DMSP									
2	080657Z	7.5N 71.6E	SAT	(IR DATA)	PCN 6	UMSP									
3	090302Z	9.0N 77.5E	SAT	(IR DATA)											
4	100410Z	14.0N 87.0E	SAT	(T1.5/1.5 / / HRS)	NOAA-5										
5	100440Z	11.9N 88.3E	SAT	(IR DATA)	PCN 6	UMSP									
6	101457Z	14.5N 87.3E	SAT	(IR DATA)											
7	110026Z	14.8N 88.5E	SAT	(T3.0/3.0 / / HRS)	PCN 5	UMSP									
8	110324Z	15.8N 88.1E	SAT	(T2.5/2.5 / 01.0/23HRS)	NOAA-5										
9	111303Z	17.0N 89.3E	SAT	(IR DATA)	PCN 5	UMSP									
10	111415Z	16.7N 89.7E	SAT	(IR DATA)											
11	111704Z	15.4N 88.5E	SAT	(IR DATA)	PCN 4	UMSP									
12	111705Z	16.4N 89.5E	SAT	(IR DATA)	PCN 5	UMSP									
13	120014Z	18.5N 89.0E	SAT	(T4.0/4.0 / 01.0/24HRS)	PCN 4	UMSP									
14	120207Z	18.4N 88.2E	SAT	(T4.0/4.0 / / HRS)	PCN 6	UMSP									
15	120240Z	18.8N 89.0E	SAT	(T3.5/3.5 / 01.0/23HRS)	NOAA-5										
16	120547Z	20.3N 89.3E	SAT	(T4.0/4.0 / / HRS)	NOAA-5										
17	121303Z	20.8N 89.2E	SAT	(IR DATA)	PCN 3	UMSP									
18	121333Z	21.4N 89.4E	SAT	(IR DATA)											
19	121824Z	22.2N 90.9E	SAT	(T4.0/4.0 / S /24HRS)	PCN 2	UMSP									
20	130006Z	23.8N 90.9E	SAT	(T3.5/4.0 /WU.5/24HRS)	PCN 3	UMSP									
21	130149Z	23.6N 91.7E	SAT	(T4.0/4.0 / S /24HRS)	PCN 4	UMSP									

FIX POSITIONS FOR TROPICAL CYCLONE NO. 18-77
2000Z 10 JUN TO 0800Z 13 JUN

FIX NO.	TIME	POSIT	FIX CAT	ACCRY	MAX OBS	MAX OBS	OBS	MIN	FLT	POSIT OF RADAR	MSN NMBR			
			NAV-MET	LVL	DIAH	VEL	BRG	RNG	SLP	HGT	TI/T0	FORM	URIEN- IATION	EYE DIA
					BRG	RNG	VEL	BRG	RNG	SLP				
1	090329Z	16.0N 69.0E	SAT	(T1.0/1.0 / / HRS)										
2	091617Z	16.9N 69.4E	SAT	(IR DATA)										
3	100440Z	17.9N 68.3E	SAT	(T2.5/2.5 /D1.5/25HRS)										
4	100448Z	18.7N 68.6E	SAT	(T3.5/1.5 / / HRS)	PCN 4	UMSP								
5	101540Z	18.3N 68.8E	SAT	(IR DATA)	PCN 6	UMSP								
6	102008Z	19.2N 66.1E	SAT	(T3.5/3.5 / / HRS)	PCN 6	UMSP								
7	110242Z	19.5N 66.0E	SAT	(T4.5/3.5 /D1.0/24HRS)	PCN 3	UMSP								
8	110357Z	19.7N 66.0E	SAT	(T3.5/3.5 /D1.0/23HRS)	NOAA-5									
9	110404Z	20.2N 65.6E	SAT	(IR DATA)	PCN 4	UMSP								
10	110709Z	19.6N 64.8E	SAT	(IR DATA)	PCN 3	UMSP								
11	111528Z	19.7N 65.0E	SAT	(IR DATA)	PCN 6	UMSP								
12	111954Z	19.6N 61.0E	SAT	(IR DATA)	PCN 5	UMSP								
13	120234Z	20.1N 62.6E	SAT	(T3.5/3.5 /S /24HRS)	PCN 3	UMSP								
14	120251Z	20.1N 61.4E	SAT	(T4.0/4.0 /D0.5/24HRS)	PCN 1	UMSP								
15	120509Z	20.2N 62.3E	SAT	(T5.0/5.0 /D1.5/25HRS)	NOAA-5									
16	121515Z	21.1N 60.5E	SAT	(IR DATA)	PCN 6	UMSP								
17	121602Z	20.3N 59.8E	SAT	(IR DATA)										
18	121933Z	20.6N 59.9E	SAT	(IR DATA)	PCN 2	UMSP								
19	130219Z	20.8N 59.1E	SAT	(IR DATA)	PCN 6	UMSP								
20	130425Z	20.5N 58.5E	SAT	(T3.0/4.0 /W2.0/23HRS)	NOAA-5									
21	140534Z	20.1N 54.9E	SAT	(T1.0/1.0 /W2.0/25HRS)	NOAA-5									

FIX POSITIONS FOR TROPICAL CYCLONE NO. 19-77
2000Z 29 OCT TO 2000Z 31 OCT

FIX NO.	TIME	POSIT	FIX CAT	ACCRY	MAX OBS	MAX OBS	OBS	MIN	FLT	PUSIT OF RADAR						MSN NNBR
										NAV-MET	FLT LVL	WIND	SFC WIND	MIN	700MB		LVL	EYE	ORIEN-	EYE	TI/TU	FORM	LATIUN	DIA
1	270020Z	12.0N 91.0E	SAT	(IR DATA)	PCN 6	UMSP										
2	270027Z	12.4N 92.4E	SAT	(T2.0/2.0 / / HRS)	PCN 5	UMSP										
3	270535Z	11.4N 92.1E	SAT	(T2.0/2.0 / / HRS)	PCN 6	UMSP										
4	271302Z	11.4N 92.3E	SAT	(IR DATA)	PCN 6	UMSP										
5	271429Z	10.8N 90.4E	SAT	(IR DATA)	NOAA-5	(CONF 02)										
6	271817Z	11.8N 92.6E	SAT	(IR DATA)	PCN 6	UMSP										
7	280144Z	11.5N 88.2E	SAT	(IR DATA)	PCN 6	UMSP										
8	280254Z	11.0N 90.0E	SAT	(T2.0/2.0 / / HRS)	NOAA-5	(CONF 02)										
9	280517Z	13.0N 89.1E	SAT	(T2.0/2.0 /S /24HRS)	PCN 5	UMSP										
10	281245Z	12.1N 89.2E	SAT	(IR DATA)	PCN 5	UMSP										
11	281245Z	12.2N 88.1E	SAT	(IR DATA)	PCN 5	UMSP										
12	281345Z	13.0N 89.8E	SAT	(IR DATA)	NOAA-5	(CONF 02)										
13	281800Z	11.3N 88.0E	SAT	(IR DATA)	PCN 5	UMSP										
14	290127Z	11.3N 88.1E	SAT	(IR DATA)	PCN 6	UMSP										
15	290409Z	11.8N 87.8E	SAT	(T2.0/2.0 /S /25HRS)	NOAA-5	(CONF 01)										
16	290500Z	13.5N 87.9E	SAT	(T2.0/2.0 /S /24HRS)	PCN 4	UMSP										
17	291409Z	12.1N 85.9E	SAT	(IR DATA)	PCN 6	UMSP										
18	291500Z	12.2N 85.1E	SAT	(IR DATA)	NOAA-5	(CONF 01)										
19	291742Z	13.2N 85.4E	SAT	(IR DATA)	PCN 3	UMSP										
20	300110Z	14.2N 85.0E	SAT	(IR DATA)	PCN 3	UMSP										
21	300326Z	14.3N 84.1E	SAT	(T2.0/2.0 /S /23HRS)	NOAA-5											
22	300624Z	13.6N 84.6E	SAT	(IR DATA)	PCN 5	UMSP										
23	301352Z	14.6N 83.2E	SAT	(IR DATA)	PCN 4	UMSP										
24	301415Z	14.0N 83.0E	SAT	(IR DATA)	NOAA-5											
25	301724Z	14.7N 82.4E	SAT	(IR DATA)	PCN 6	UMSP										
26	301906Z	14.9N 82.2E	SAT	(IR DATA)	PCN 6	UMSP										
27	310053Z	15.0N 82.1E	SAT	(IR DATA)	PCN 6	UMSP										
28	310242Z	14.5N 81.5E	SAT	(T3.0/3.0 /D1.0/23HRS)	NOAA-5											
29	310606Z	15.0N 80.6E	SAT	(T3.0/3.0 / / HRS)	PCN 5	UMSP										
30	311335Z	15.8N 79.2E	SAT	(IR DATA)	PCN 6	UMSP										
31	030143Z	16.5N 65.0E	SAT	(IR DATA)	PCN 6	UMSP										
32	030655Z	16.3N 63.0E	SAT	(T1.5/L.5 / / HRS)	PCN 6	UMSP										
33	031425Z	16.6N 61.2E	SAT	(IR DATA)	PCN 6	UMSP										
34	040308Z	16.7N 58.2E	SAT	(IR DATA)	PCN 6	UMSP										
35	040637Z	15.7N 58.4E	SAT	(IR DATA)	PCN 6	UMSP										

FIX POSITIONS FOR TROPICAL CYCLONE NO. 21-77
2000Z 10 NOV 19 2000Z 21 NOV

2000Z 10 NOV 10 2000Z 21 NOV
MAX 80°F MAX 81°F

FIX NO.	TIME	POSIT	CAT	ACCRY	MAX OBS	MAX OBS	OBS	MIN	FLT	UNIEN-		EYE		POSI T OF HAAR
										NAV-MET	T/T	FORM	INTEN	
										HGT				
1	091242Z	11.5N 90.0E	SAT	(IR DATA	)	PCN 6	UMSP							
2	091439Z	11.3N 88.3E	SAT	(IR DATA	)	NOAA-5	(CONF 02)							
3	100307Z	10.8N 86.0E	SAT	(T3.0/3.0 /	/ MHS)	NOAA-5	(CONF 01)							
4	101356Z	11.6N 84.8E	SAT	(IR DATA	)	NOAA-5	(CONF 02)							
5	101407Z	11.5N 85.2E	SAT	(IR DATA	)	PCN 6	UMSP							
6	101733Z	11.7N 84.7E	SAT	(IR DATA	)	PCN 6	UMSP							
7	110108Z	11.4N 82.7E	SAT	(T3.5/3.5 /	/ MHS)	PCN 4	UMSP							
8	110224Z	10.5N 82.5E	SAT	(T4.0/4.0 /	D1.u/23HRS)	NOAA-5	(CONF 01)							
9	110615Z	10.9N 82.3E	SAT	(T3.0/3.5 /	/ MHS)	PCN 3	UMSP							
10	111350Z	11.0N 81.1E	SAT	(IR DATA	)	PCN 2	UMSP							
11	111507Z	11.0N 80.0E	SAT	(IR DATA	)	NOAA-5	(CONF 01)							
12	111857Z	11.2N 80.7E	SAT	(IR DATA	)	PCN 2	UMSP							
13	120051Z	11.0N 79.5E	SAT	(T3.0/3.5 /WU.5/24HRS)		PCN 2	UMSP							
14	120336Z	10.6N 80.0E	SAT	(T4.5/4.5 /DU.5/25HRS)		NOAA-5	(CONF 01)							
15	120552Z	10.7N 78.8E	SAT	(T3.0/3.5 /S	/24HRS)	PCN 4	UMSP							
16	130215Z	10.5N 75.0E	SAT	(T1.5/2.5 /W1.b/25HRS)		PCN 6	UMSP							
17	131437Z	12.4N 74.0E	SAT	(IR DATA	)	PCN 6	UMSP							
18	131822Z	12.0N 73.0E	SAT	(IR DATA	)	PCN 6	UMSP							
19	140159Z	12.7N 72.0E	SAT	(T2.0/2.0 /DU.5/24HRS)		PCN 6	UMSP							
20	140404Z	12.6N 71.4E	SAT	(T2.0/2.0 /	/ MHS)	PCN 6	UMSP							
21	140704Z	12.7N 71.2E	SAT	(T3.0/3.0 /	/ MHS)	PCN 6	UMSP							
22	141441Z	12.7N 69.6E	SAT	(IR DATA	)	NOAA-5	(CONF 01)							
23	141453Z	13.3N 67.8E	SAT	(IR DATA	)	PCN 6	UMSP							
24	141946Z	13.2N 69.3E	SAT	(IR DATA	)	PCN 6	UMSP							
25	150141Z	13.9N 66.8E	SAT	(T3.5/3.5 /D1.b/24HRS)		PCN 6	UMSP							
26	150320Z	13.9N 67.8E	SAT	(T4.0/4.0 /D2.u/23HRS)		PCN 4	UMSP							
27	150646Z	14.4N 66.7E	SAT	(T4.0/3.5 /D1.u/24HRS)		PCN 6	UMSP							
28	151423Z	14.3N 66.4E	SAT	(IR DATA	)	PCN 6	UMSP							
29	151672Z	13.5N 65.6E	SAT	(IR DATA	)	NOAA-5	(CONF 01)							
30	151928Z	14.0N 66.4E	SAT	(IR DATA	)	PCN 6	UMSP							
31	160305Z	13.7N 66.5E	SAT	(T4.0/4.0 /DU.b/25HRS)		PCN 6	UMSP							
32	160433Z	13.0N 66.8E	SAT	(T4.5/4.5 /DU.b/25HRS)		PCN 4	UMSP							
33	160629Z	13.4N 66.6E	SAT	(T4.0/4.0 /S	/24HRS)	PCN 4	UMSP							
34	161512Z	13.0N 66.5E	SAT	(IR DATA	)	NOAA-5	(CONF 01)							
35	161911Z	13.5N 67.0E	SAT	(IR DATA	)	PCN 6	UMSP							
36	170248Z	12.2N 67.2E	SAT	(T4.5/4.5 /DU.b/24HRS)		PCN 6	UMSP							
37	170349Z	13.1N 66.9E	SAT	(T5.0/5.0 /DU.b/23HRS)		NOAA-5	(CONF 01)							
38	170611Z	12.1N 66.8E	SAT	(IR DATA	)	PCN 6	UMSP							
39	171437Z	12.5N 67.3E	SAT	(IR DATA	)	NOAA-5	(CONF 01)							
40	171530Z	12.0N 67.0E	SAT	(IR DATA	)	PCN 6	UMSP							
41	171853Z	12.4N 66.6E	SAT	(IR DATA	)	PCN 4	UMSP							
42	180231Z	11.7N 67.3E	SAT	(T3.5/4.5 /W1.u/24HRS)		PCN 6	UMSP							
43	180502Z	10.4N 67.4E	SAT	(T5.0/5.u /S	/25HRS)	NOAA-5	(CONF 01)							
44	180735Z	11.4N 67.5E	SAT	(IR DATA	)	PCN 6	UMSP							
45	181514Z	10.6N 69.4E	SAT	(IR DATA	)	PCN 6	UMSP							
46	181549Z	10.3N 69.0E	SAT	(IR DATA	)	NOAA-5	(CONF 01)							
47	181836Z	10.3N 70.2E	SAT	(IR DATA	)	PCN 6	UMSP							
48	190214Z	10.3N 70.2E	SAT	(T3.5/3.5 /S	/24HRS)	PCN 6	UMSP							
49	190418Z	10.3N 69.6E	SAT	(T3.0/4.0 /W2.u/23HRS)		NOAA-5	(CONF 01)							
50	190717Z	10.0N 70.5E	SAT	(IR DATA	)	PCN 6	UMSP							
51	191456Z	9.8N 70.3E	SAT	(IR DATA	)	PCN 6	UMSP							
52	191818Z	9.7N 70.5E	SAT	(IR DATA	)	PCN 6	UMSP							
53	200157Z	10.3N 71.4E	SAT	(T3.5/3.5 /S	/24HRS)	PCN 6	UMSP							
54	200335Z	10.2N 72.8E	SAT	(T3.5/4.0 /D0.b/23HRS)		NOAA-5	(CONF 01)							
55	200700Z	10.8N 71.9E	SAT	(IR DATA	)	PCN 6	UMSP							
56	201439Z	10.0N 74.0E	SAT	(IR DATA	)	PCN 6	UMSP							
57	201800Z	9.8N 73.2E	SAT	(IR DATA	)	PCN 6	UMSP							
58	210140Z	10.5N 73.6E	SAT	(T3.5/3.5 /S	/24HRS)	PCN 4	UMSP							
59	210642Z	11.6N 73.4E	SAT	(IR DATA	)	PCN 5	UMSP							
60	211422Z	13.2N 73.5E	SAT	(IR DATA	)	PCN 6	UMSP							
61	211554Z	14.9N 73.4E	SAT	(IR DATA	)	NOAA-5	(CONF 01)							
62	211924Z	15.2N 74.1E	SAT	(IR DATA	)	PCN 6	UMSP							
63	220123Z	15.1N 74.4E	SAT	(T2.5/3.0 /W1.u/24HRS)		PCN 6	UMSP							
64	220401Z	15.9N 75.0E	SAT	(T1.0/1.5 /	/ HRS)	NOAA-5	(CONF 01)							
65	220624Z	16.7N 74.6E	SAT	(IR DATA	)	PCN 6	UMSP							
66	221405Z	17.5N 74.6E	SAT	(IR DATA	)	PCN 6	UMSP							

FIX POSITIONS FOR TROPICAL CYCLONE NO. 22-7/
0800Z 15 NOV TO 2000Z 19 NOV

FIX NO.	TIME	POSIT	FIX CAT	ACCRY	FIX LVL	FLT	LVL	WIND	SEC WIND	MIN	700MB	LVL	SLP	HGT	TI/TD	FORM	ORIEN-	EYE	POSIT OF RADAR	MSN NMBR
				NAV-MET	VEL	DIH	VEL	BRG	RNG								ATION	DIA		
1	140016Z	6.1N 91.6E	SAT	(T1.5/1.5	/	/	HRS)	PCN 6	UMSP											
2	140210Z	5.9N 91.7E	SAT	(T1.5/1.5	/	/	HRS)		NOAA-5	(CONF 01)										
3	140525Z	5.9N 91.0E	SAT	(T2.5/2.5	/	/	HRS)	PCN 6	UMSP											
4	141451Z	6.5N 91.2E	SAT	(IR DATA			)		NOAA-5	(CONF 01)									
5	141904Z	6.0N 90.0E	SAT	(IR DATA			)	PCN 4	UMSP										
6	150141Z	6.1N 89.3E	SAT	(T3.0/3.0	/	D1.5/25HRS)		PCN 6	UMSP											
7	150323Z	6.7N 89.4E	SAT	(T3.0/3.0	/	D1.5/25HRS)			NOAA-5	(CONF 01)										
8	150505Z	6.0N 87.5E	SAT	(T4.0/4.0	/	D1.5/24HRS)		PCN 4	UMSP											
9	151241Z	6.2N 85.9E	SAT	(IR DATA			)	PCN 4	UMSP										
10	151407Z	6.1N 86.3E	SAT	(IR DATA			)		NOAA-5	(CONF 02)									
11	151747Z	6.4N 86.6E	SAT	(IR DATA			)	PCN 6	UMSP										
12	160124Z	7.0N 85.6E	SAT	(T4.5/4.5	/	D1.5/24HRS)		PCN 6	UMSP											
13	160239Z	6.8N 85.5E	SAT	(T5.0/5.0	/	D2.0/23HRS)			NOAA-5	(CONF 01)										
14	160629Z	7.0N 85.4E	SAT	(T5.5/5.5	/	D1.5/25HRS)		PCN 2	UMSP											
15	161416Z	8.2N 84.9E	SAT	(IR DATA			)	PCN 2	UMSP										
16	161521Z	8.0N 84.2E	SAT	(IR DATA			)		NOAA-5	(CONF 01)									
17	161724Z	8.7N 84.5E	SAT	(IR DATA			)	PCN 2	UMSP										
18	170107Z	9.6N 84.5E	SAT	(T5.5/5.5	/	D1.0/24HRS)		PCN 2	UMSP											
19	170350Z	9.1N 83.7E	SAT	(T5.5/5.5	/	D0.5/25HRS)			NOAA-5	(CONF 01)										
20	170611Z	10.2N 83.9E	SAT	(IR DATA			)	PCN 2	UMSP										
21	171329Z	11.4N 83.3E	SAT	(IR DATA			)	PCN 2	UMSP										
22	171437Z	11.4N 83.7E	SAT	(IR DATA			)		NOAA-5	(CONF 01)									
23	171853Z	11.7N 83.1E	SAT	(IR DATA			)	PCN 2	UMSP										
24	180050Z	12.3N 82.7E	SAT	(T6.0/6.0	/	D0.5/24HRS)		PCN 2	UMSP											
25	180305Z	12.5N 82.9E	SAT	(T7.0/7.0	/	D1.5/23HRS)			NOAA-5	(CONF 01)										
26	180553Z	12.6N 82.5E	SAT	(IR DATA			)	PCN 2	UMSP										
27	181551Z	13.5N 81.9E	SAT	(IR DATA			)		NOAA-5	(CONF 01)									
28	181834Z	13.8N 81.7E	SAT	(IR DATA			)	PCN 2	UMSP										
29	190032Z	14.5N 81.6E	SAT	(IR DATA			)	PCN 2	UMSP										
30	190214Z	14.8N 81.6E	SAT	(T6.0/6.0	/	S / 25HRS)		PCN 2	UMSP											
31	190416Z	15.1N 81.9E	SAT	(T7.0/7.0	/	S / 25HRS)			NOAA-5	(CONF 01)										
32	190536Z	15.2N 81.3E	SAT	(IR DATA			)	PCN 2	UMSP										
33	191314Z	16.1N 80.0E	SAT	(IR DATA			)	PCN 2	UMSP										
34	191818Z	16.9N 80.8E	SAT	(IR DATA			)	PCN 2	UMSP										
35	200157Z	18.2N 81.2E	SAT	(T4.0/5.0	/	N / 24HRS)		PCN 6	UMSP											
36	200519Z	19.2N 81.9E	SAT	(IR DATA			)	PCN 6	UMSP										
37	201800Z	19.5N 80.8E	SAT	(IR DATA			)	PCN 6	UMSP										

LATE FIXES LISTED AS [] IN TABLE 6-1.

TYPHOON BABE - 0000Z 02 SEP TO 1800Z 10 SEP

01 060020Z 13.0N 130.0E SAT	(T4.0/4.0 /S /24HRS)	NOAA-5 (CONF 01)
02 061109Z 14.0N 129.2E SAT	(IR DATA)	NOAA-5 (CONF 03)
03 081141Z 22.0N 127.0E SAT	(IR DATA)	NOAA-5 (CONF 01)

TROPICAL STORM CARLA - 0000Z 03 SEP TO 0000Z 05 SEP

01 020118Z 18.3N 118.0E SAT	(T1.5/1.5 /D1.0/24HRS)	NOAA-5 (CONF 02)
-----------------------------	------------------------	------------------

TYPHOON DINAH - 1200Z 14 SEP TO 1800Z 23 SEP

01 122303Z (SEE COMMENT) SAT	(T2.0/2.0 /S /24HRS)	NOAA-5 (CONF 01) - 02 DEG EITHER SIDE OF A LINE FM 22N-135E
02 131157Z 22.7N 134.3E SAT	(IR DATA)	TO 22N-142E
03 140015Z 22.0N 131.5E SAT	(T3.0/3.0 /D1.0/25HRS)	NOAA-5 (CONF 01)
04 141110Z 21.6N 128.0E SAT	(IR DATA)	NOAA-5 (CONF 02)

TROPICAL STORM EMMA - 0600Z 15 SEP TO 0600Z 20 SEP

01 141108Z 19.0N 144.5E SAT	(IR DATA)	NOAA-5 (CONF 02)
-----------------------------	------------	------------------

TROPICAL STORM FREDA - 0000Z 23 SEP TO 0000Z 25 SEP

01 241330Z 20.4N 111.0E SAT	(IR DATA)	NOAA-5 (CONF 02)
-----------------------------	------------	------------------

TYPHOON GILDA - 0000Z 03 OCT TO 0600Z 10 OCT

01 042227Z 19.2N 152.7E SAT	(T3.5/3.5 /D1.0/23HRS)	NOAA-5 (CONF 02)
02 052315Z 23.5N 150.0E SAT	(T4.0/4.0 /D0.5/25HRS)	NOAA-5 (CONF 01)
03 070027Z 26.5N 147.8E SAT	(T4.5/4.5 /D0.5/24HRS)	NOAA-5 (CONF 01)
04 080004Z 30.0N 147.7E SAT	(T5.0/5.0 /D0.5/24HRS)	NOAA-5 (CONF 01)
05 091024Z 41.2N 165.4E SAT	(IR DATA)	NOAA-5 (CONF 01)

TROPICAL STORM HARRIET - 0600Z 16 OCT TO 1800Z 20 OCT

01 160006Z 15.1N 136.1E SAT	(T2.0/2.0 /D2.0/24HRS)	NOAA-5 (CONF 01)
02 170117Z 17.1N 131.9E SAT	(T3.0/3.0 /D1.0/25HRS)	NOAA-5 (CONF 01)
03 180034Z 18.9N 132.5E SAT	(T3.5/3.5 /D0.5/23HRS)	NOAA-5 (CONF 02)
04 181126Z 19.5N 133.3E SAT	(IR DATA)	NOAA-5 (CONF 02)

TYPHOON IVY - 0600Z 21 OCT TO 0000Z 27 OCT

01 240000Z 21.2N 151.1E SAT	(T4.5/4.5 /D0.5/25HRS)	NOAA-5 (CONF 01)
-----------------------------	------------------------	------------------

TYPHOON JEAN - 1200Z 28 OCT TO 1200Z 03 NOV

01 012313Z 26.7N 146.1E SAT	(T3.0/3.0 /D1.0/23HRS)	NOAA-5 (CONF 01)
-----------------------------	------------------------	------------------

TYPHOON KIM - 0600Z 06 NOV TO 0000Z 17 NOV

01 071018Z 12.3N 149.0E SAT	(IR DATA)	NOAA-5 (CONF 01)
02 131145Z 14.3N 123.2E SAT	(IR DATA)	NOAA-5 (CONF 01)
03 150122Z 16.9N 118.8E SAT	(T3.5/3.5 /W1.5/25HRS)	NOAA-5 (CONF 01)

TYPHOON LUCY - 0600Z 28 NOV TO 1800Z 07 DEC

01 281025Z 06.9N 157.0E SAT	(IR DATA)	NOAA-5 (CONF 02)
-----------------------------	------------	------------------

TYPHOON MARY - 0600Z 20 DEC TO 1800Z 03 JAN

01 232159Z 12.6N 170.5E SAT	(T3.5/4.5 /W1.0/25HRS)	NOAA-5 (CONF 01)
02 260918Z 09.5N 165.0E SAT	(IR DATA)	NOAA-5 (CONF 01)
03 290011Z 11.4N 149.5E SAT	(T3.5/3.5 /S /25HRS)	NOAA-5 (CONF 01)
04 291059Z 11.1N 145.5E SAT	(IR DATA)	NOAA-5 (CONF 01)
05 292328Z 11.1N 143.0E SAT	(VIS DATA)	NOAA-5 (CONF 01)
06 311127Z 09.4N 134.6E SAT	(IR DATA)	NOAA-5 (CONF 02)
07 030025Z 09.9N 122.3E SAT	(T1.5/1.5 /W1.0/24HRS)	NOAA-5 (CONF 01)

LATE FIXES LISTED AS [] IN TABLE 6-1.

TROPICAL CYCLONE NO. 21-77 - 2000Z 10 NOV TO 2000Z 21 NOV

01	191505Z	09.4N 070.0E	SAT	(IR DATA)	NOAA-5	(CONF 01)
02	201618Z	10.0N 072.9E	SAT	{IR DATA }	NOAA-5	(CONF 02)
03	210445Z	11.2N 074.8E	SAT	{T2.5/3.0 /W1.0/25HRS}	NOAA-5	(CONF 02)

TROPICAL CYCLONE NO. 22-77 - 0800Z 15 NOV TO 2000Z 19 NOV

01	191507Z	15.9N 080.9E	SAT	(IR DATA)	NOAA-5	(CONF 01)
02	200331Z	19.6N 082.2E	SAT	{VIS DATA }	NOAA-5	(CONF 02)