

NOAA Technical Memorandum NWS NHC 13

Property of  
NOAA Coral Gables Library  
Gables One Tower  
1320 South Dixie Highway, Room 520  
Coral Gables, Florida 33145

ANNUAL DATA AND VERIFICATION TABULATION  
ATLANTIC TROPICAL CYCLONES 1979

Paul J. Hebert and Staff, NHC

National Hurricane Center  
Miami, Florida  
June 1980

UNITED STATES  
DEPARTMENT OF COMMERCE  
Philip M. Klutznick, Secretary

NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION  
Richard A. Frank, Administrator

National Weather  
Service  
Richard E. Hallgren, Director



## INTRODUCTION

This is the sixth report of an annual series prepared by the National Hurricane Center (NHC) to provide a source of summarized data on Atlantic tropical cyclones. It will not duplicate the narrative overview of the hurricane season and the description of individual storms which will continue to be published in the Monthly Weather Review.

In addition to data supplied by the National Weather Service, materials have been furnished by the NOAA National Environmental Satellite Services (NESS) Miami office, and the CARCAH (Chief Aerial Reconnaissance Coordination, all Hurricanes).

## OBJECTIVE FORECAST TECHNIQUES

The following tropical cyclone prediction models were used at National Hurricane Center for forecasting motion on an operational basis:

- NHC-67 (Miller, Hill, Chase, 1968). A stepwise screening regression model using predictors derived from the current 24-hour old 1000, 700, and 500 mb data, and includes persistence during the early forecast periods.
2. SANBAR (Sanders and Burpee, 1968). A filtered barotropic model using input data derived from the 1000 to 100 mb pressure weighted winds. The model requires use of "bogus" data in data-void areas. The system was modified by Pike (1972) so that the initial wind field near the storm would conform to the current storm motion
3. HURRAN (Hope and Neumann, 1970). An analog system using as a data base the tracks of all Atlantic tropical storms and hurricanes dating back to 1886.

4. CLIPER (Neumann, 1972). Stepwise multiple screening regression using the predictors derived from climatology and persistence.
5. NHC-72 (Neumann, Hope, Miller, 1972). A modified stepwise multiple screening regression system which combines the NHC-67 concept and the CLIPER system into a single model.
6. NHC-73 (Neumann and Lawrence, 1973). Similar in concept to the NHC-72 except it also uses the "perfect prog" and MOS (model output statistics) methods to introduce NMC (National Meteorological Center) numerical prognostic data into the prediction equations
7. NMC MFM MODEL (Hovermale, 1975). A ten-level baroclinic model which uses a moving fine mesh (MFM) grid nested within the coarser NMC fixed grid primitive equation (PE) model. It is capable of predicting both track and intensity changes.

The National Hurricane Center uses the above models as guidance in the formulation of its forecasts. The hurricane forecaster also makes extensive use of analyses and prognoses produced by NMC and RCTM (Regional Center for Tropical Meteorology) in Miami.

#### VERIFICATION

Verification statistics for the 1979 season are shown in Table 1 (Pelissier, 1979). The initial position error in Table 1 is the difference between the operational initial position and that determined during post analysis (best track position). The forecast displacement error is the vector difference between the forecast displacement and the actual displacement computed from best-track positions. The landfall prediction error for the official forecasts is given in Table 2. It is

defined as the distance from the predicted landfall point, made 24 hours prior to actual landfall, to the actual landfall point. In cases where a storm either crossed an island or made landfall when predicted to remain offshore, the error was designated as the distance from the landfall point to the nearest point on the forecast track.

Tropical cyclone warning lead times for United States landfalling storms are given in Table 3a. A summary of warning lead times for the period 1970 - 1979 for hurricanes only and for both tropical storms and hurricanes is given in Table 3b. The length of time between the issuance of the warnings and the time that the center crossed the coast, as determined from the "best track", was taken as the warning lead time. A more complete discussion of the verification of tropical cyclone warning lead times, as well as verifications for individual storms from 1970 1977, can be found in the 1977 Annual Data and Verification Tabulation (Lawrence, Hebert, and Staff, 1979).

#### DATA SUMMARIES

A summary of 1979 North Atlantic tropical cyclone statistics is given in Table 4. A subtropical storm which occurred in October is also included. Tracks of 1979 named storms and the October subtropical storm are shown in Figure 1

The best track, initial, and forecast positions for 1979 named storms are in Table 5, along with initial position and forecast errors, and storm average errors.

Table 6 lists all center fix positions and intensity evaluations used operationally at the National Hurricane Center during 1979. Fixes are in chronological order, and include those obtained by aerial reconnaissance

penetrations, satellite (Miami SFSS), and land-based radar. The legend precedes the initial table.

Supplementary Vortex Data Messages which replaced Vortex Profiles in the 1977 Annual Data Tabulation are given in Table 7. A diagram of the paths flown in obtaining these Data Messages is given in Figure 2. The symbolic code for interpreting the Data Messages is given as Appendix A.

Table 8 is an aerial reconnaissance summary for the 1979 season.

Graphs of the lowest central pressure versus time for 1979 tropical cyclones and the October subtropical cyclone are presented in Figure 3.

Daily GOES-2 satellite photographs of 1979 named tropical cyclones and the October subtropical cyclone are shown in Figure 4.

Selected radar photographs of Hurricanes Bob, David, and Frederic are in Figure 5.

#### ACKNOWLEDGMENTS

Main contributors were: Ms Albertha Sanders, who listed the center fixes in chronological order; Dr Joseph Pelissier, who computed the verification statistics; Ms Joan Kerwood and Ms Liliias Wilson, who typed the tables and manuscript.

## REFERENCES

- Hope, J.R. and C.J. Neumann, 1970: "An Operational Technique for Relating the Movement of Existing Tropical Cyclones to Past Tracks", Monthly Weather Review, Vol. 98, No. 23, pp. 925-933.
- Hovermale, J.B., 1975: First season storm movement characteristics of the NMC objective hurricane forecast model. Minutes of the NOAA Hurricane Warning Conference, National Hurricane Center, Coral Gables, Florida.
- Lawrence, Miles B., Paul J. Hebert, and Staff, NHC, 1979: "Annual Data and Verification Tabulation Atlantic Tropical Cyclones, 1978", NOAA Technical Memorandum NWS NHC-9.
- Miller, B.I., E.C. Hill and P.P. Chase, 1968: "Revised Technique for Forecasting Hurricane Motion by Statistical Methods", Monthly Weather Review, Vol. 96, No. 8, pp. 540-548.
- Neumann, C.J., 1972: "An Alternative to the HURRAN Tropical Cyclone Forecast System", NOAA Technical Memorandum NWS SR-62, 24 pp.
- , J.R. Hope and B.I. Miller, 1972: "A Statistical Method of Combining Synoptic and Empirical Tropical Cyclone Prediction Systems", NOAA Technical Memorandum NWS SR-63, 32 pp.
- and M.B. Lawrence, 1973: "Statistical-Dynamical Prediction of Tropical Cyclone Motion (NHC-73)", NOAA Technical Memorandum NWS SR-69, 34 pp.
- Pelissier, J.M., 1979: Minutes of the NOAA Hurricane Warning Conference, National Hurricane Center, Coral Gables, Florida.
- Pike, A.C., 1972: "Improved Barotropic Hurricane Track Prediction by Adjustment of the Initial Wind Field", NOAA Technical Memorandum NWS SR-66, 16 pp.
- Sanders, F., and R.W. Burpee, 1968: "Experiments in Barotropic Hurricane Track Forecasting", Journal of Applied Meteorology, Vol. 7, No. 3, pp. 313-323.

LIST OF FIGURES, TABLES, AND APPENDICES

- Table 1. Verification of 1979 tropical storm and hurricane forecasts. Figures in parentheses are the number of cases.
- Table 2. Landfall errors of 1979 tropical storms and hurricanes.
- Table 3a. Warning lead times for 1979 landfalling United States tropical storms and hurricanes.
- Table 3b. Summary of warning lead times for hurricanes only and all tropical cyclones for the period 1970-79.
- Table 4. Summary of 1979 tropical and subtropical cyclone statistics.
- Table 5. Best track, initial and forecast positions, initial position error and forecast errors for 1979 tropical cyclones.
- Table 6. Center fix positions and intensity evaluations for 1979 tropical and subtropical cyclones.
- Table 7. Supplementary Vortex Data Messages, 1979 Atlantic tropical cyclones.
- Table 8. Aerial weather reconnaissance summary for 1979 hurricane season.
- Figure 1. Tracks of 1979 tropical and subtropical cyclones.
- Figure 2. Flight pattern flown in obtaining Supplementary Vortex Data Messages.
- Figure 3. Lowest pressure vs time, 1979 tropical and subtropical cyclones.
- Figure 4. Daily GOES-2 satellite photographs of 1979 named tropical cyclones and the October subtropical cyclone.
- Figure 5. Selected radar photographs of 1979 landfalling United States hurricanes.
- Appendix A. Code for Supplementary Vortex Data Messages of Figure 7.

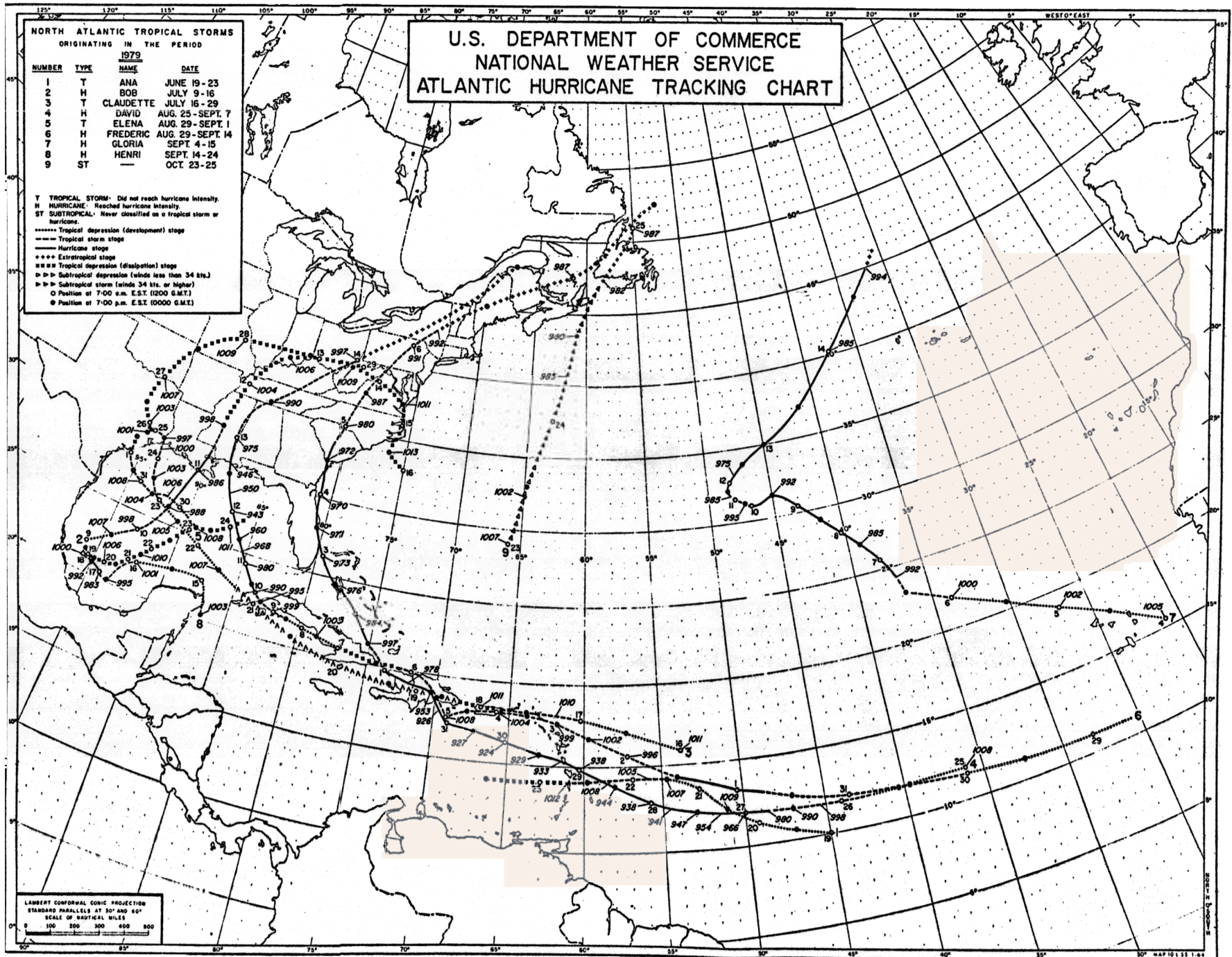
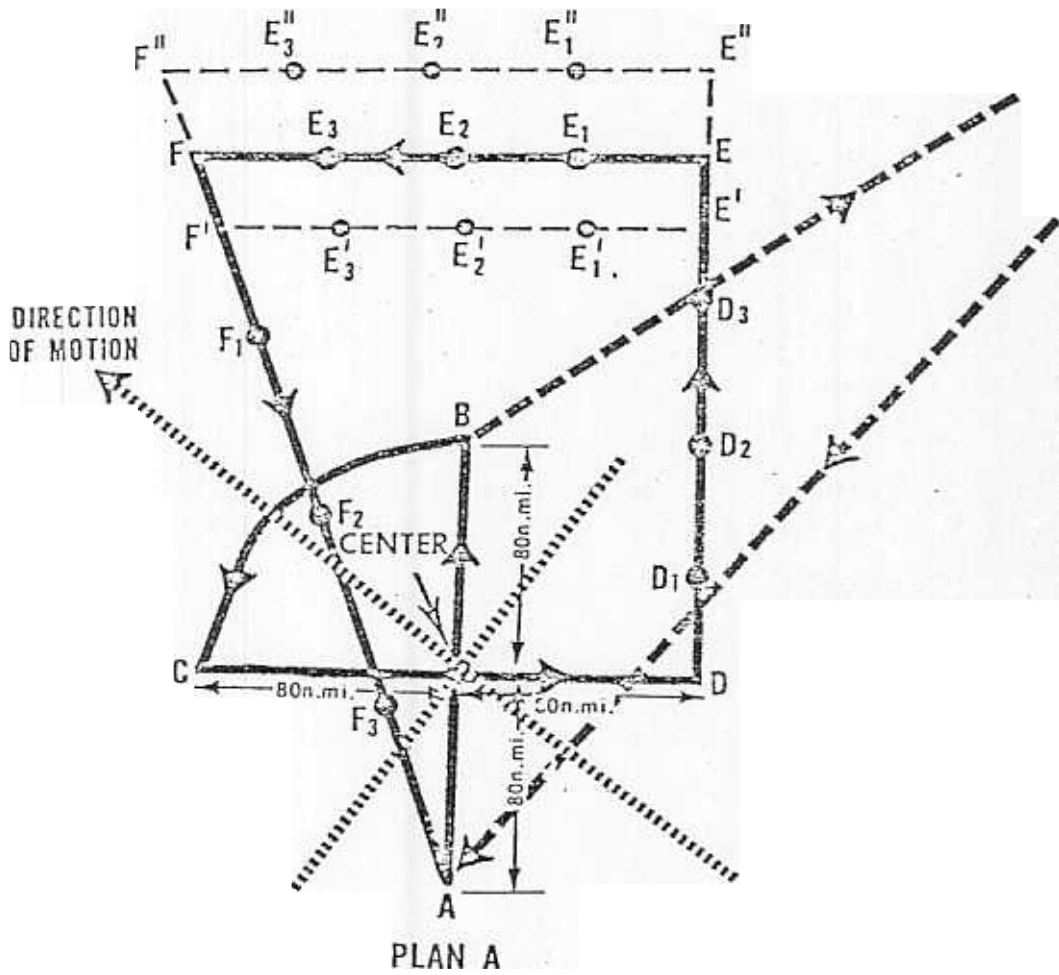


Figure 1. Tracks of 1979 Atlantic tropical and subtropical cyclones.





FLIGHT ALTITUDES					
A	B	C	D	-- 10,000 FEET	
D	E	F	A	-- 1,500 FEET	

Figure 2. Flight pattern flow in obtaining Supplementary Vortex Data Messages.

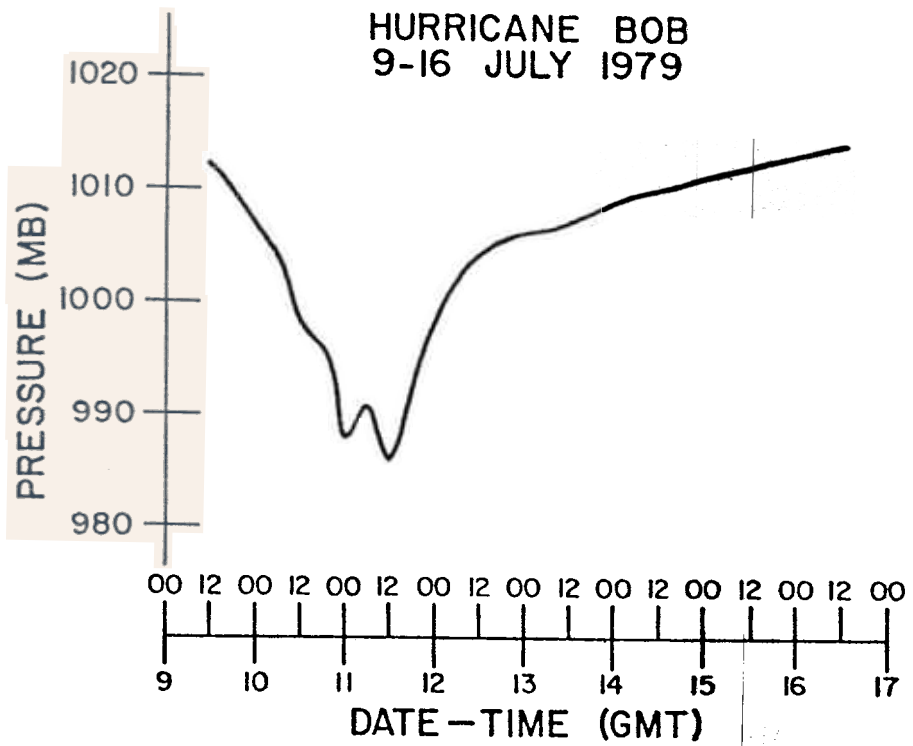
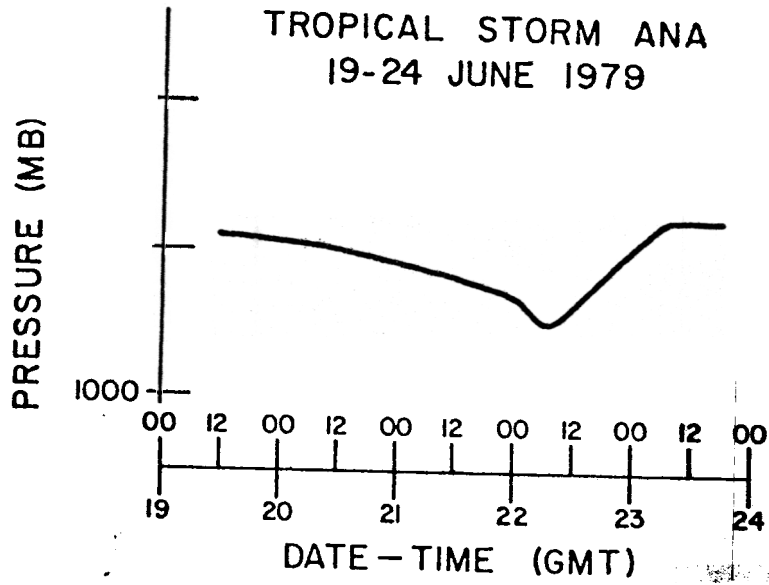


Figure 3. Lowest pressure vs time, 1979 tropical and subtropical cyclones.

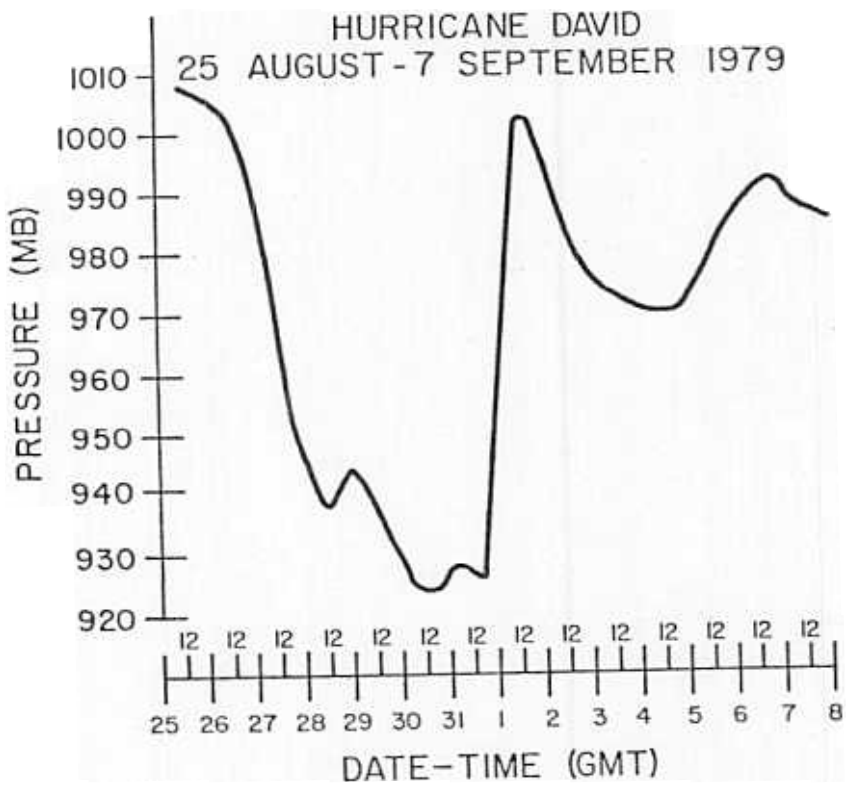
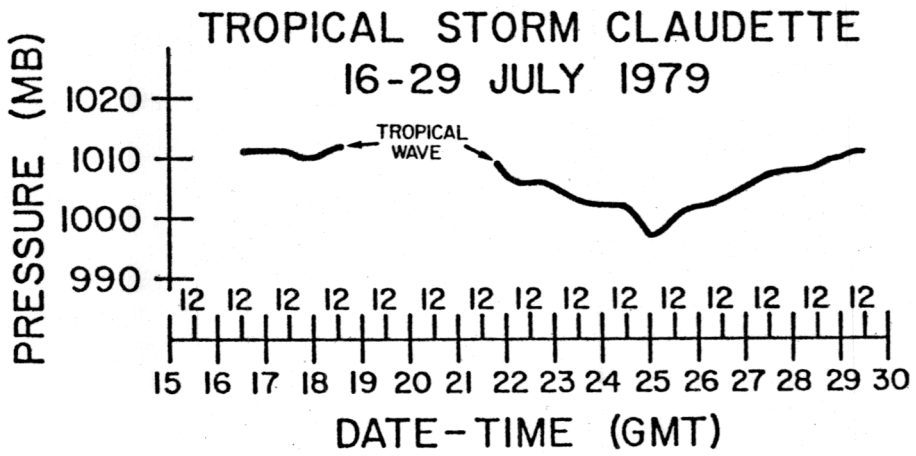


Figure 3 continued.

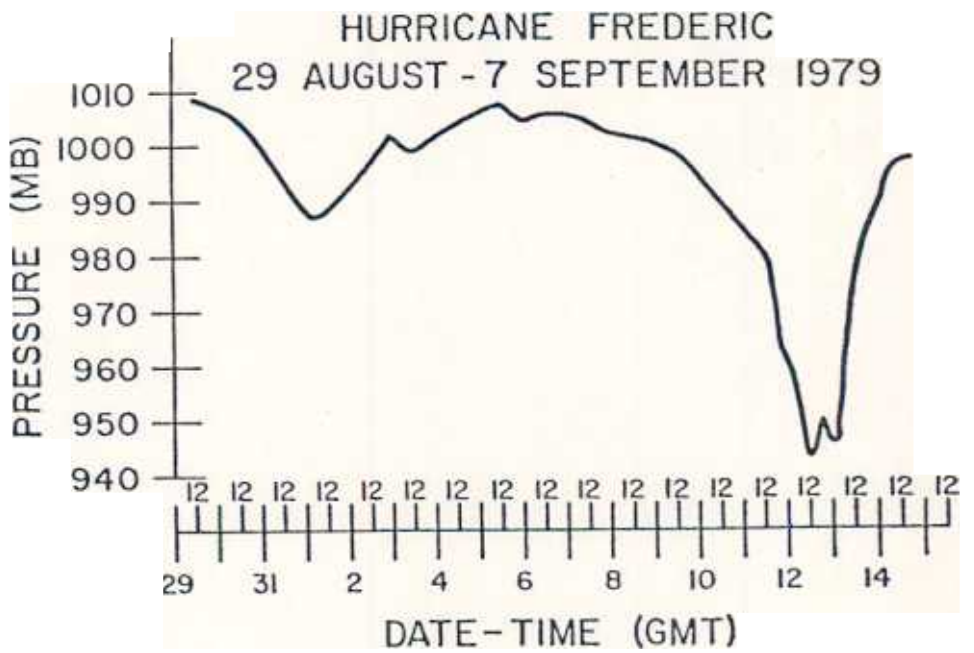
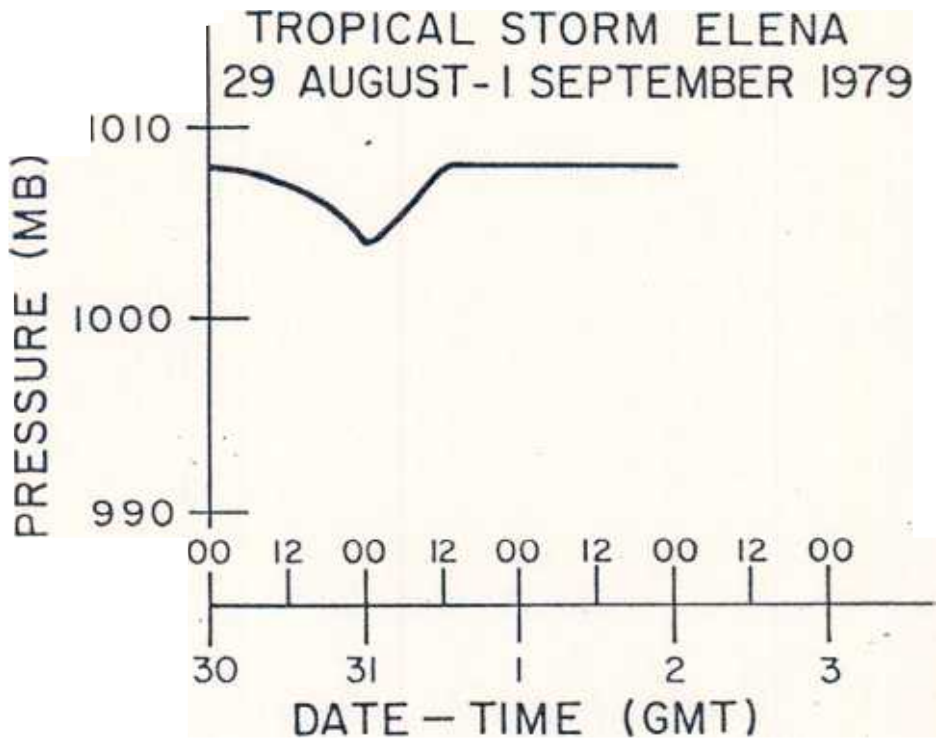


Figure 3 continued.

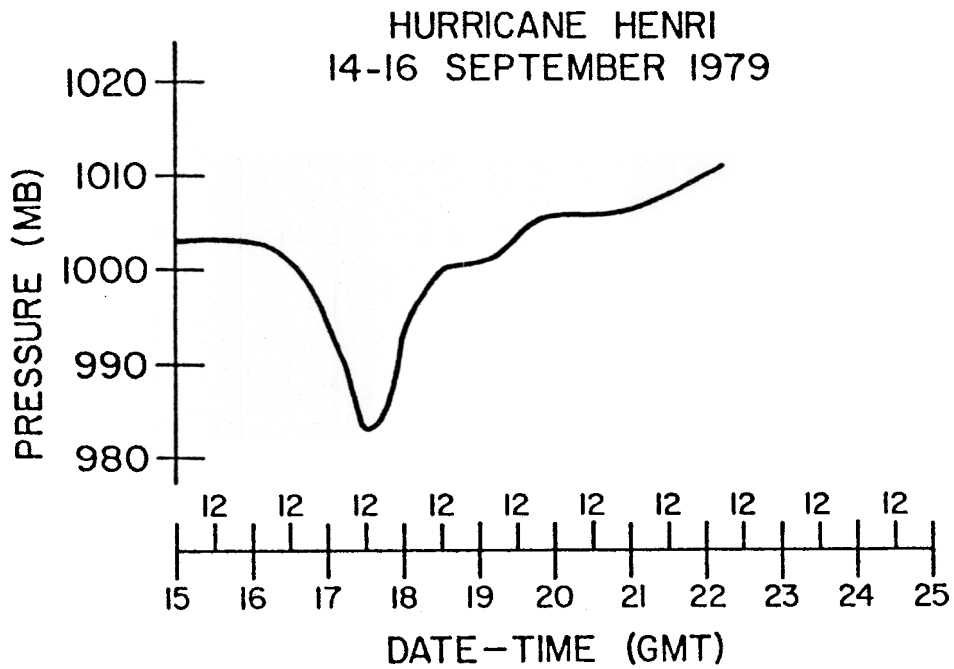
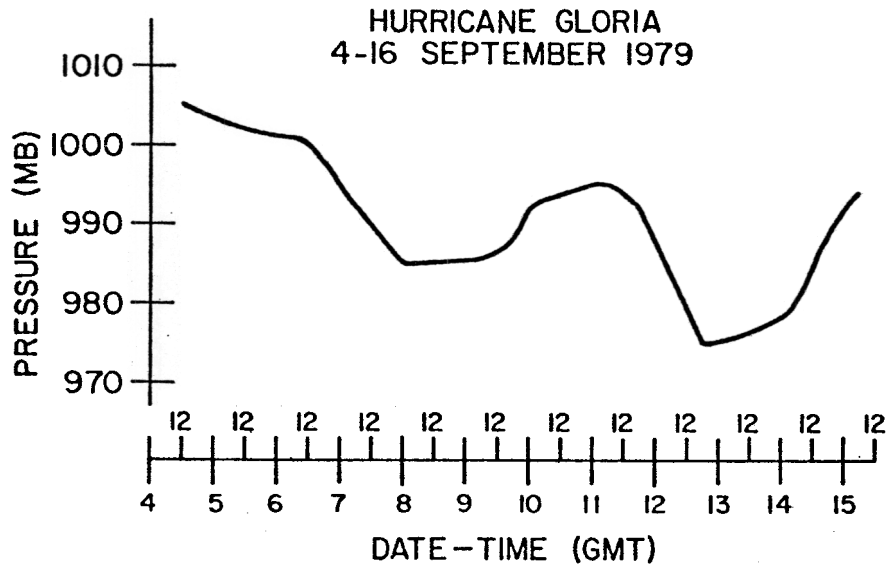


Figure 3 continued

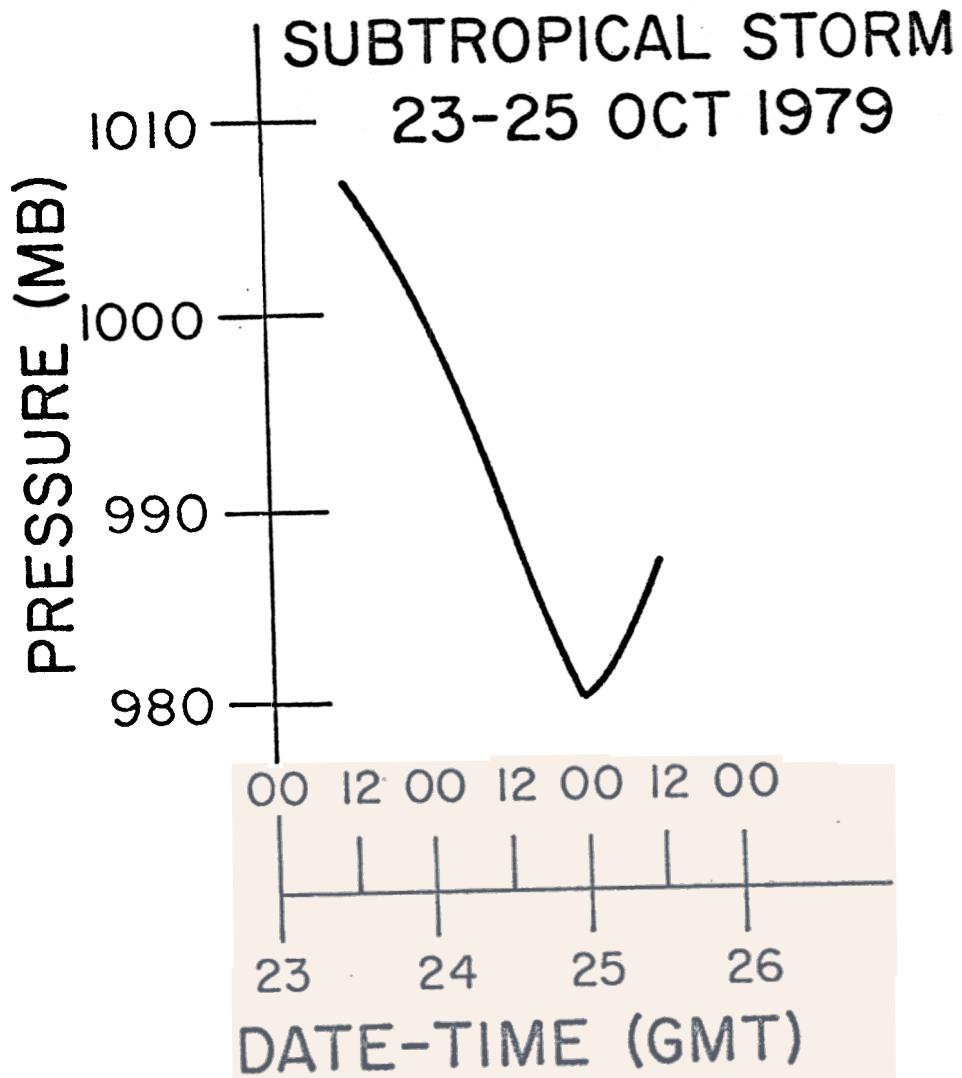


Figure 3 continued.



1901 GMT 6/21/79  
1008 MB



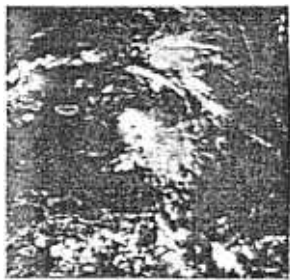
1731 GMT 6/22/79  
1008 MB



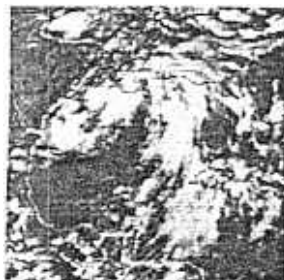
2031 GMT 7/10/79  
993 MB



1331 GMT 7/11/79  
987 MB



1601 GMT 7/17/79  
1011 MB

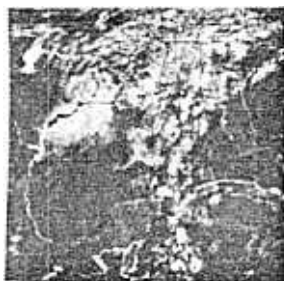


2031 GMT 7/23/79  
1003 MB

CLAUDETTE



2101 GMT 7/24/79  
998 MB

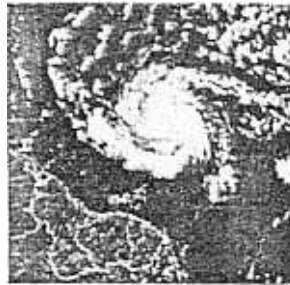


1431 GMT 7/25/79  
1001 MB

Figure 4. Daily SMS-2 satellite photographs of 1979 named tropical cyclones and October subtropical cyclone.



1731 GMT 8/26/79  
999 MB



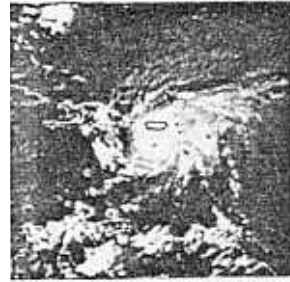
1631 GMT 8/27/79  
957 MB



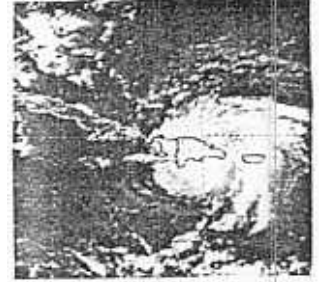
1902 GMT 8/28/79  
942 MB



1901 GMT 8/29/79  
933 MB

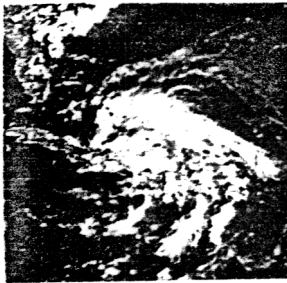


2001 GMT 8/30/79  
925 MB



1901 GMT 8/31/79  
930 MB

DAVID



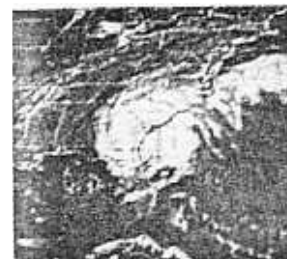
1731 GMT 9/1/79  
1002 MB



1831 GMT 9/2/79  
979 MB



1931 GMT 9/3/79  
972 MB



1831 GMT 9/4/79  
970 MB



1731 GMT 9/5/79  
984 MB



1531 GMT 9/6/79  
991 MB

Figure 4 continued.



ELENA



2001 GMT 8/30/79  
1005 MB



1901 GMT 8/31/79  
1008 MB



1731 GMT 9/1/79  
1008 MB



1603 GMT 8/30/79  
1004 MB



1831 GMT 8/31/79  
991 MB



1731 GMT 9/1/79  
990 MB

FREDERIC



1831 GMT 9/2/79  
999 MB



1931 GMT 9/3/79  
1000 MB



1601 GMT 9/4/79  
1005 MB



1731 GMT 9/5/79  
1007 MB



1531 GMT 9/6/79  
1006 MB



1431 GMT 9/7/79  
1004 MB

Figure 4 continued.



1631 GMT 9/8/79  
1001 MB



1901 GMT 9/9/79  
997 MB



2001 GMT 9/10/79  
986 MB

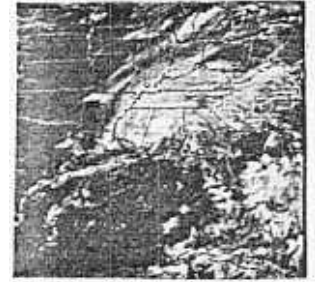
## FREDERIC



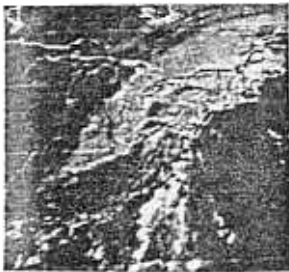
1901 GMT 9/11/79  
968 MB



1931 GMT 9/12/79  
949 MB



1631 GMT 9/13/79  
985 MB



1331 GMT 9/14/79  
997 MB

Figure 4 continued.



1601 GMT 9/4/79  
1004 MB



1601 GMT 9/5/79  
1002 MB



1101 GMT 9/6/79  
1000 MB



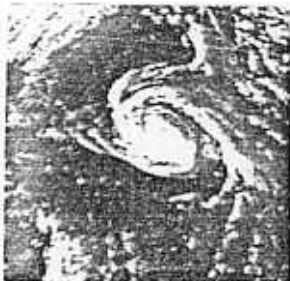
1431 GMT 9/7/79  
989 MB



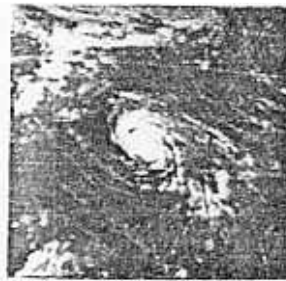
1631 GMT 9/8/79  
985 MB



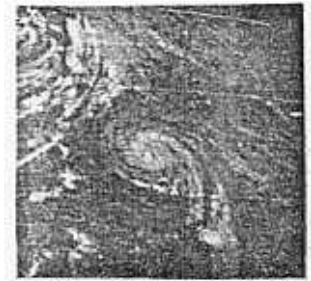
1901 GMT 9/9/79  
988 MB



1431 GMT 9/10/79  
994 MB



1901 GMT 9/11/79  
992 MB



1931 GMT 9/12/79  
975 MB



1631 GMT 9/13/79  
977 MB



1331 GMT 9/14/79  
986 MB



2031 GMT 9/16/79  
997 MB



1901 GMT 9/17/79  
984 MB

HENRI



2131 GMT 9/18/79  
1000 MB



1831 GMT 9/19/79  
1005 MB

SUBTROPICAL  
STORM



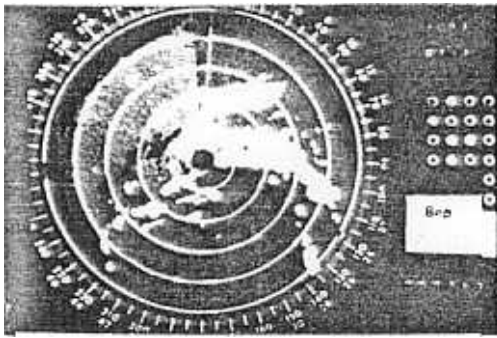
1631 GMT 10/23/79  
1004 MB



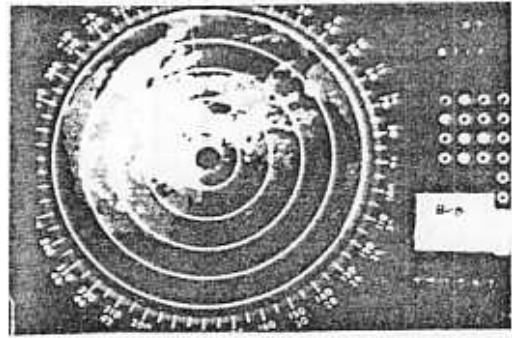
1731 GMT 10/24/79  
984 MB

Figure 4 continued.

BOB

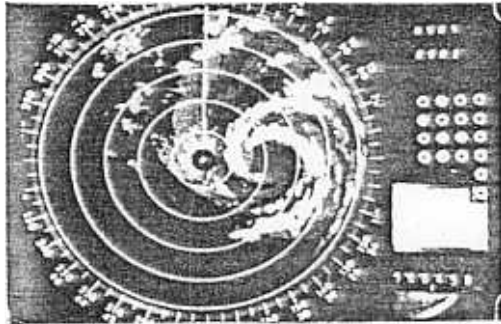


1003 GMT 7/11/79

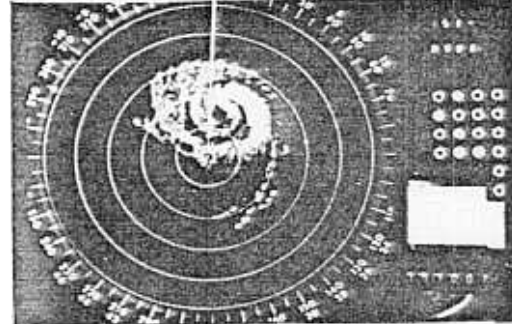


1409 GMT 7/11/79

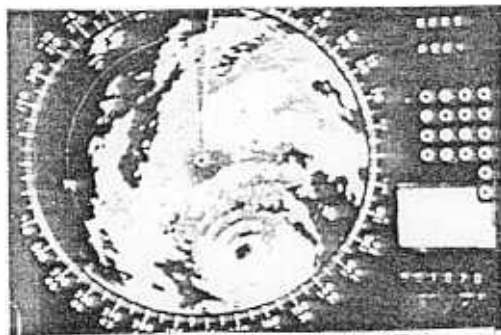
DAVID



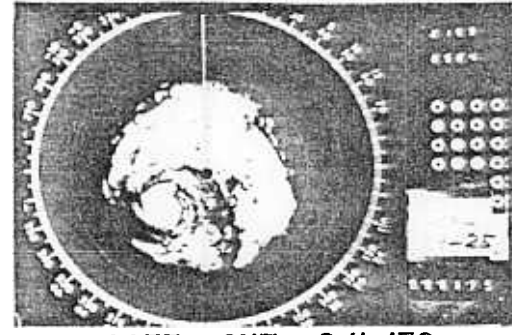
0909 GMT 9/3/79



1534 GMT 9/3/79

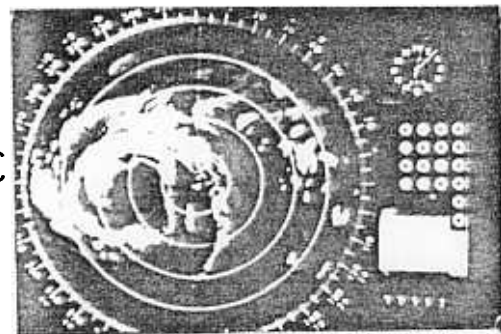


0009 GMT 9/4/79

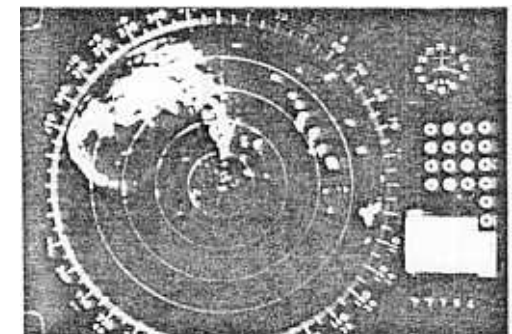


2153 GMT 9/4/79

FREDERIC



0308 GMT 9/13/79



0701 GMT 9/13/79

Figure 5. Selected radar photographs of Hurricanes Bob, David, and Frederic

APPENDIX A  
CODE FOR SUPPLEMENTARY VORTEX DATA MESSAGES.

DATE		AIRCRAFT NUMBER			ARWO		
MANOP HEADING (PRECEDENCE IMMEDIATE)							
MISSION IDENTIFIER AND OBSERVATION NUMBER							
<b>SUPPLEMENTARY VORTEX DATA MESSAGE</b>							
1 AZIMUTH	2 ddDEG DEG	3 FLZZZ FL					
4 LEFT RIGHT	5 FRONT REAR	6 QUAD					
7 DjHHH	8 DTTQQ	9 DjHHH	10 DTTQQ	11 DjHHH	12 DTTQQ	13 DjHHH	14 DTTQQ
8	8	4	4	3	3	1	1
15 DjHHH	16 DTTQQ	17 64RRR	18 50RRR	19 34RRR	20 MXFFF	21 BBRR	22 hhhhh
Ø	Ø	64	50	34	MX		
23 LEFT RIGHT	24 FRONT REAR	25 QUAD					
26 DjHHH	27 DTTQQ	28 DjHHH	29 DTTQQ	30 DjHHH	31 DTTQQ	32 DjHHH	33 DTTQQ
8	8	4	4	3	3	1	1
34 DjHHH	35 DTTQQ	36 64RRR	37 50RRR	38 34RRR	39 MXFFF	40 BBRR	41 hhhhh
Ø	Ø	64	50	34	MX		
42 LEFT RIGHT	43 FRONT REAR	44 QUAD					
45 DjHHH	46 DTTQQ	47 DjHHH	48 DTTQQ	49 DjHHH	50 DTTQQ	51 DjHHH	52 DTTQQ
8	8	4	4	3	3	1	1
53 DjHHH	54 DTTQQ	55 64RRR	56 50RRR	57 34RRR	58 MXFFF	59 BBRR	60 hhhhh
Ø	Ø	64	50	34	MX		
61 LEFT RIGHT	62 FRONT REAR	63 QUAD					
64 DjHHH	65 DTTQQ	66 DjHHH	67 DTTQQ	68 DjHHH	69 DTTQQ	70 DjHHH	71 DTTQQ
8	8	4	4	3	3	1	1
72 DjHHH	73 DTTQQ	74 64RRR	75 50RRR	76 34RRR	77 MXFFF	78 BBRR	79 hhhhh
Ø	Ø	64	50	34	MX		
Remarks							
<b>CODE FIGURES</b>		dd - True direction in tens of degrees (pattern orientation based on direction of storm motion). zzz - Flight level in hundreds of feet (absolute altitude below 5500 feet). D - Group indicator designating the distance from the center in nautical miles (8-80, 4-45, 3-30, 1-15, Ø-center). hhhhh - Height of the eyewall in feet. jHHH - Pressure height data in RECCO format. TTQQ - Temperature/dewpoint in degrees Celsius. Add 50 for negative values. FFF - Maximum observed wind speed in knots. BBRR - Bearing and range from the center of MXFFF. RRR - Radial extent of 64 kt, 50 kt, and 34 kt winds from the center in nautical miles. // - Data are unknown or unobtainable.					

21

Table 1. Verification of 1979 tropical storm and hurricane forecasts.

Figures in parentheses are number of cases.

METHOD	INITIAL POSITION ERROR (N.MI.)	FORECAST DISPLACEMENT ERRORS (N.MI.)			
		12 HR	24 HR	48 HR	72 HR
OFFICIAL	18 (156)	40 (146)	84 (138)	155 (98)	234 (83)
NHC67	19 (128)	45 (126)	86 (112)	158 (84)	256 (67)
	19 (153)	46 (151)	83 (136)	197 (106)	295 (89)
HURRAN	17 (101)	39 (100)	79 (92)	142 (74)	185 (62)
CLIPER	19 (155)	45 (153)	89 (137)	171 (106)	245 (89)
NHC73	17 (62)	39 (61)	80 (53)	155 (39)	266 (32)
SANBAR	18 (74)	49 (73)	97 (65)	197 (49)	316 (41)
	12 (21)	57 (21)	90 (20)	136 (16)	-- (0)

TABLE 2a Landfall prediction errors for 1979 tropical storms and hurricanes.

STORM NAME	CATEGORY AT LANDFALL	DATE/TIME (GMT) OF LANDFALL	FORECAST ERROR (N.MI.)	LANDFALL LOCATION AND REMARKS
	T.S.	6/23/04		St. Lucia Island. Storm made landfall within 24 hours of developing.
	H	7/11/12		West of Grand Isle, LA. Storm made landfall within 24 hours of developing.
Claudette #1	T.S.	7/17/22		St. Martin Island. Storm made landfall within 24 hours of developing.
Claudette #2	T.S.	7/24/22	25	Near Beaumont, TX
David #1	H	8/29/16	35	Dominica Island. Forecast track was offshore to south.
	#2 H	8/31/20	45	West of Santo Domingo, Dominican Republic. Forecast track was offshore to south.
David #3	H	9/2/20	50	Andros Island, Bahamas. Forecast track was offshore to southwest.
David #4	H	9/3/16	0	Jupiter, FL.
David #5	H	9/4/22	75	Near Savannah Beach, GA.
Elena	T.S.	9/1/14	50	Near Freeport, TX
Frederic #1	T.S.	9/3/12	110	Barbuda Island. Forecast track was offshore to south.
Frederic #2	T.S.	9/4/12	65	Puerto Rico. Forecast track was offshore to north.
Frederic #3	H	9/6/00	30	Near Santo Domingo, Dominican Republic.
Frederic #4	H	9/13/03	40	Near Mobile, AL.

TABLE 2b. Ten year summary of errors in the prediction of the points of landfall of Atlantic tropical storms and hurricanes during the period 1970-1979.

	<u>ALL LANDFALLS</u>	<u>(1979)</u>	<u>UNITED STATES</u>	<u>(1979)</u>
AVERAGE ERROR (N.MI.)	49	48	39	38
NUMBER OF CASES	(45)	(11)	(18)	(5)



TABLE 3a. Tropical cyclone warning lead times for 1979 United States landfalling storms/hurricanes.

STORM NAME	CATEGORY	DATE/TIME (GMT)	TYPE AND TIME (GMT)	WARNING LEAD TIMES (HOURS)
	AT LANDFALL	OF LANDFALL	OF WARNINGS ISSUED FOR LANDFALL LOCATIONS IN TABLE 2.	
Bob	H	7/11/12	Hurricane warnings Vermilion Bay, LA to Biloxi, MS. 7/10/22	14
Claudette (landfall #2)	T.S.	7/24/22	Gale warnings Freeport, TX to Biloxi, MS. 7/23/13	33
David (landfall #4)	#1 H	9/3/16	Hurricane warnings extended from Cape Canaveral, FL to Palm Beach, FL (hurricane warnings issued earlier from Palm Beach to Marathon, FL). 9/2/22	18
David (landfall #5)	#2 H	9/4/22	Hurricane warnings extended northward to Charleston, SC (hurricane warnings issued earlier from Boca Raton, FL to Fernandina Beach, FL). 9/4/04	18
Elena	T.S.	9/1/14	Gale warnings Port O'Connor, TX to Morgan City, LA. 8/30/22.	40
Frederic (landfall #4)	H	9/13/03	Hurricane warnings Grand Isle, LA to Panama City, FL. 9/12/0230	24

TABLE 3b. Ten year summary of warning lead times for all tropical cyclones and for only hurricanes making United States landfalls during the period 1970-1979

	<u>ALL STORMS/HURRICANES</u>	<u>(1979)</u>	<u>ALL HURRICANES</u>	<u>(1979)</u>
AVERAGE LEAD TIME (HOURS)	18	22	19	19
STANDARD DEVIATION (HOURS)	8.3	6.7	4.9	4.1
NUMBER OF CASES	(23)	( 6)	(11)	( 4)

Table 4. Summary of North Atlantic Tropical and Subtropical Cyclone Statistics, 1979.

NO.	NAME	CLASS	DATES	MAXIMUM SUSTAINED WINDS (KT)	LOWEST PRESSURE (MB)	U.S. DAMAGE (\$ MILLION) <sup>1</sup>	DEATHS
1.	ANA	T	19-23 JUNE	50	1005		
2.	BOB	H	9-16 JULY	65	986	20	U.S. 1
3.	CLAUDETTE	T	16-29 JULY	45	997	400	U.S. 1 1 PUERTO RICO
4.	DAVID	H	25 AUG. - 7 SEPT.	150	924	320	U.S. 5 7 PUERTO RICO 56 DOMINICA 1200 DOM. REP.
5.	ELENA	T	29 AUG. - 1 SEPT.	35	1004	<10	U.S. 2
6.	FREDERIC	H	29 AUG. - 14 SEPT.	115	943	2300	U.S. 5 7 ST. MAARTEN
7.	GLORIA	H	4-15 SEPT.	85	975		
8.	HENRI	H	14-24 SEPT.	75	983		
9.		ST	23-25 OCT.	65	980		

T - tropical storm (winds 34 - 63 kt)  
H - hurricane (winds 64 kt or higher)  
ST - subtropical storm (winds 34 kt or higher)

<sup>1</sup>includes Puerto Rico and U.S. Virgin Islands

Table 5. Best track, initial and forecast positions, initial position error and forecast errors for 1979 tropical cyclones.

TROPICAL STORM ANA 19-23 JUNE 1979

DATE/TIME (GMT)	BEST TRACK		OPERATIONAL POSITION		POSITION ERROR (N.MI.)	12 HOUR FORECAST			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST		
	LAT.	LONG.	LAT.	LONG.		LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)
2200	14.2	54.7	14.3	54.8	8				15.5	59.0	94						
2206	14.2	55.8	14.6	55.8					15.5	60.5							
2212	14.2	56.9	14.7	56.7	32	14.5	59.3	18	14.5	61.5		15.0	66.0		16.5	71.0	
2218	14.1	58.3	14.1	58.5		14.0	61.0		14.0	64.5		15.0	70.0		17.0	75.0	
2300	14.1	59.8	14.1	59.9		14.0	62.0		14.0	65.0		15.0	70.0		16.0	75.0	
MEAN VECTOR ERRORS (N.MI.)					20			18			94						
NUMBER OF CASES					2			1			1			0			0

HURRICANE BOB 9-16 JULY 1979

DATE/TIME (GMT)	BEST TRACK		OPERATIONAL POSITION		POSITION ERROR (N.MI.)	12 HOUR FORECAST			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST		
	LAT.	LONG.	LAT.	LONG.		LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)
1006	23.5	93.8	22.5	95.0	89				28.0	90.0	142						
1012	24.0	93.0	24.0	93.0	0	26.0	91.5	13	29.0	90.5	8	33.0	90.0				
1018	25.0	92.3	24.8	92.2	13	27.5	91.0	6	30.2	90.5	42	34.0	90.0				
1100	26.2	91.6	26.2	91.5	5	28.5	90.5	36	31.0	90.0		35.0	90.0				
1106	27.8	91.1	28.0	91.0	13	30.8	90.3	26	33.5	89.5							
1112	29.1	90.6	29.4	90.6		32.5	90.0		35.0	90.0							
1118	31.0	90.2															
MEAN VECTOR ERRORS(N.MI.)					24			20			64						
NUMBER OF CASES					5			4			3			0			0

TROPICAL STORM CLAUDETTE 16-29 JULY 1979

DATE/TIME (GMT)	BEST TRACK		OPERATIONAL POSITION		POSITION ERROR (N.MI.)	12 HOUR FORECAST			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST		
	LAT.	LONG.	LAT.	LONG.		LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)
1712	17.8	60.3	18.0	60.5	17	18.5	64.5	29	19.5	68.0		21.0	74.0		23.0	78.0	
1718	18.0	62.1	18.0	62.4		19.2	66.0		19.9	69.5		21.5	75.0		23.0	78.0	
1800	18.2	63.8	18.3	63.9		19.3	67.8		20.2	71.0		22.0	75.0		26.0	76.0	
(NOTE: CLAUDETTE WAS NOT A TROPICAL STORM FROM 18/06 TO 23/06. FORECASTS NOT VERIFIED.)																	
2312	26.4	92.4	27.0	92.5	36	29.5	93.5	84	32.0	94.0	156						
2318	26.9	92.9	27.6	93.4	50	29.8	94.2	49	32.5	94.5	132						
2400	27.5	93.4	28.0	94.0	44	29.0	94.5	21	31.0	95.0	28						
2406	28.3	93.5	27.2	94.7	92				27.5	97.5	147						
2412	28.8	93.7	28.5	94.0	24	30.2	94.0	16	32.2	94.0							
2418	29.6	93.9	29.6	93.8	5	31.0	93.5	55	32.5	93.0							
2500	30.3	93.9	30.3	93.9													
2506	30.3	94.3	30.3	94.3													
MEAN VECTOR ERRORS (N.MI.)					38			42			116						
NUMBER OF CASES					7			6			4			0			0

Table 5 continued.

HURRICANE DAVID 25 AUGUST 7 SEPTEMBER 1979

DATE/TIME (GMT)	BEST TRACK		OPERATIONAL POSITION		POSITION ERROR (N.MI.)	12 HOUR FORECAST			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST			
	LAT.	LONG.	LAT.	LONG.		LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	
2606	11.6	42.2	11.9	42.1	19				13.0	50.0	108							
2612	11.6	44.0	11.5	44.0	6	12.0	48.0	63	12.5	52.0	127	13.5	59.0	199	15.0	65.0	273	
2618	11.6	45.5	11.5	45.2	19	11.7	48.0	12	12.0	51.0	17	13.0	57.0	24	15.0	62.0	42	
2700	11.7	47.0	11.7	46.1	53	11.8	48.5	35	12.0	50.5	89	13.5	55.0	123	15.0	60.0	116	
2706	11.8	48.5	11.8	48.0	29	12.0	51.0	6	13.0	54.0	31	14.0	59.0	21	16.0	63.0	40	
2712	11.8	50.0	11.8	50.0	0	12.0	53.5	37	12.5	57.0	78	14.0	64.0	220	16.0	71.0	335	
2718	11.9	51.5	11.9	51.5	0	12.1	54.8	34	12.5	58.0	77	13.5	64.0	176	15.0	70.0	240	
2800	12.2	52.9	12.2	52.6	18	12.4	55.4	24	13.0	58.5	63	13.5	64.0	153	14.0	69.0	204	
2806	12.5	54.4	12.5	54.2	12	13.0	57.5	48	13.4	60.2	85	15.0	65.0	83	17.0	69.0	52	
2812	12.8	55.7	12.8	55.6	6	13.3	58.7	53	13.5	61.4	105	15.5	67.5	147	17.0	73.0	230	
2818	13.2	56.9	13.3	57.0	8	14.0	59.6	25	14.8	62.0	40	16.0	67.0	58	17.5	72.0	129	
2900	13.7	58.0	13.7	58.1	6	14.7	60.8	24	15.5	64.0	64	17.0	69.0	93	18.0	74.0	205	
2906	14.2	59.2	14.1	59.3	8	15.3	62.0	18	16.3	64.5	27	17.5	68.5	37	19.5	73.5	81	
2912	14.8	60.3	14.8	60.4	6	15.6	62.6	17	16.5	65.0	21	18.0	70.0	66	19.0	74.0	44	
2918	15.3	61.6	15.4	61.8	13	16.3	64.3	13	17.2	67.0	46	18.0	72.0	120	19.0	77.0	161	
3000	15.6	62.8	15.9	63.1	25	16.8	66.1	37	17.5	69.5	112	18.0	74.0	199	18.5	78.0	233	
3006	16.0	64.2	16.0	64.2	0	16.9	67.2	60	17.6	69.9	99	18.9	75.2	183	20.2	80.6	303	
3012	16.3	65.2	16.3	65.2	0	16.8	67.8	29	17.3	70.0	52	18.5	75.0	103	19.5	80.0	295	
3018	16.6	66.2	16.6	66.3	6	17.2	68.5	13	17.6	70.6	49	18.5	75.5	134	20.0	80.0	272	
3100	16.8	67.3	16.9	67.3	6	17.5	69.3	17	17.8	71.9	108	19.0	77.0	176	21.0	82.0	302	
3106	17.0	68.3	17.0	68.5	11	17.5	70.6	47	18.0	72.5	80	19.5	77.5	176	22.0	82.0	247	
3112	17.2	69.1	17.2	69.5	23	17.6	71.5	82	18.0	73.5	108	19.5	77.5	215	21.5	81.0	293	
3118	17.9	69.7	17.8	69.7	6	18.8	71.8	27	19.0	73.5	109	20.5	76.0	213	23.0	78.0	274	
0100	18.8	70.4	18.8	70.5	6	19.7	72.1	96	20.5	73.5	112	22.0	76.0	205	24.0	78.0	278	
0106	19.3	72.0	19.5	72.0	12	20.6	73.8	47	22.0	76.0	28	25.0	79.0	31	28.5	81.0	49	
0112	19.7	73.7	19.6	73.8	8	21.0	75.5	16	22.5	77.5	65	26.5	80.5	47	31.0	82.0	75	
0118	20.6	74.6	20.5	74.6	6	21.8	76.2	39	23.5	78.5	63	27.5	81.0	49	32.0	82.0	54	
0200	21.3	75.2	21.2	75.3	8	22.7	76.9	30	24.0	78.7	34	28.0	81.5	48	32.0	82.0	47	
0206	21.9	75.5	21.8	75.7	13	23.5	77.5	19	25.0	79.0	20	28.5	81.5	40	32.5	82.5	89	
0212	23.0	76.3	23.0	76.2	6	24.6	78.0	11	26.0	79.5	18	29.5	81.0	43	33.0	80.0	117	
0218	23.9	77.4	23.9	77.4	0	25.2	79.0	8	27.5	80.5	24	32.5	80.0	86	37.0	77.0	157	
0300	24.6	78.3	24.5	78.3	6	26.1	80.3	38	28.0	81.0	27	32.0	81.5	31	36.0	79.0	93	
0306	25.3	79.1	25.2	79.0	8	26.4	80.6	50	28.0	82.0	91	32.0	83.0	139				
0312	26.3	79.6	26.3	79.5	5	28.2	80.2	16	30.5	80.5	24	34.5	79.0	78	38.5	76.0	180	
0318	27.2	80.2	27.2	80.2	0	29.0	81.4	32	31.0	81.2	30	34.5	79.0	115	38.0	76.0		
0400	28.0	80.5	27.9	80.5	6	30.0	80.5	22	32.5	79.7	71	35.0	77.0	193	38.0	76.0		
0406	29.1	80.8	29.1	80.8	0	31.0	80.5	47	33.0	79.5	76	36.0	77.0	205	39.0	73.5		
0412	30.2	80.9	30.2	80.8	5	32.5	80.3	35	34.5	78.5	102	38.0	74.0	233	41.0	69.0		
0418	31.5	81.2	31.5	81.0	10	32.6	81.0	56	35.0	80.0	72	39.0	76.0		42.0	70.0		
0500	32.5	81.1	32.2	81.2	19	34.0	80.3	41	36.5	78.5	71	40.0	74.0		42.0	68.0		
0506	33.5	80.9	33.4	80.8	8	35.2	79.7	56	37.0	78.0	127	41.0	73.0		44.0	66.0		
0512	34.9	80.6	34.4	80.5	30	36.0	80.0	72	39.0	78.0	146	42.0	68.0		46.0	56.0		
0518	36.2	80.1	35.5	80.0	42	38.0	78.0	35	41.0	74.0		43.0	63.0		47.0	50.0		
0600	37.6	79.5	37.5	79.5	6	40.5	75.5	65	42.0	70.0		44.0	59.0		47.0	48.0		
0606	39.2	78.5	39.5	78.5		43.0	74.0		45.5	67.0		48.0	52.0		50.0	35.0		
0612	41.5	76.3	42.5	75.5		45.0	71.0		48.5	63.0		53.0	43.0					
MEAN VECTOR ERRORS (N.MI.)					11				36						121			172
NUMBER OF CASES					44				43					37				32

Table 5 continued.

## TROPICAL STORM ELENA 29 AUGUST - 1 SEPTEMBER 1979

DATE/TIME (GMT)	BEST TRACK		OPERATIONAL POSITION		POSITION ERROR (N.MI.)	12 HOUR FORECAST			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST			
	LAT.	LONG.	LAT.	LONG.		LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	
3018	26.8	91.8	27.0	92.0	16	28.0	94.0	60	28.5	95.5	68	31.0	97.0		33.0	97.0		
3100	26.5	93.0	26.8	93.0	18	27.5	94.8	34	28.5	96.5	82	30.5	97.5		33.0	97.5		
3106	26.8	93.8	27.2	93.5	29	27.6	95.4	54	28.5	97.0	96							
3112	27.0	94.2	27.0	94.5	16	27.5	95.5	8	27.5	97.0	77							
3118	27.3	94.7	27.6	94.6	19	28.0	95.0	24	28.5	95.0		30.0	94.0		32.0	91.0		
0100	27.6	95.1	27.7	95.0	8	28.0	95.0	52	29.0	95.0		31.0	94.0		32.0	92.0		
0106	27.9	95.5	28.0	95.5		28.8	96.2		29.5	96.5								
0112	28.5	95.8	28.6	95.7		30.0	96.0											
MEAN VECTOR ERRORS (N.MI.)					18			39			81							
NUMBER OF CASES					6			6			4			0				0

## HURRICANE FREDERIC 29 AUGUST - 14 SEPTEMBER 1979

DATE/TIME (GMT)	BEST TRACK		OPERATIONAL POSITION		POSITION ERROR (N.MI.)	12 HOUR FORECAST			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST			
	LAT.	LONG.	LAT.	LONG.		LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	
3012	11.5	36.0	11.5	36.5	29				11.5	43.0	64							
3018	11.6	37.8	11.5	38.2	24	11.7	42.0	0	12.0	46.0	30	13.0	52.0	59	14.0	57.0	184	
3100	11.7	39.7	11.5	39.5	17	11.8	42.0	77	12.0	46.0	50	13.0	52.0	129	14.0	57.0	213	
3106	11.8	41.6	11.5	41.4	21	11.6	45.0	8	11.7	48.5	54	12.5	54.0	147	13.5	59.0	219	
3112	11.9	43.5	12.0	43.0	30	12.2	46.3	27	12.5	49.5	59	13.5	55.5	144	14.5	61.0	187	
3118	12.0	45.1	12.2	45.0	13	12.2	49.5	75	12.5	52.0	91	13.5	58.0	185	16.0	63.0	121	
0100	12.5	47.0	12.5	47.0	0	13.3	50.2	12	14.0	53.5	39	16.5	58.5	76	19.5	63.0	101	
0106	12.9	48.7	12.9	48.3	23	13.5	51.0	56	14.0	55.0	54	15.5	60.0	99	18.0	64.0	24	
0112	13.3	50.4	13.4	50.6	13	14.0	54.5	27	15.0	57.5	37	17.0	63.0	68	20.0	68.0	157	
0118	13.8	52.3	13.8	52.8	29	14.8	56.0	6	15.5	59.0	51	17.5	63.5	21	19.5	67.5	85	
0200	14.3	54.1	14.0	54.0	19	15.0	57.5	26	16.2	60.2	31	18.0	64.8	65	20.5	68.5	174	
0206	14.9	55.5	13.9	56.1	69	15.0	59.0	29	15.5	62.0	50	17.0	67.0	92	18.0	72.0	179	
0212	15.5	57.2	15.6	57.2	6	16.8	59.7	6	18.5	62.5	67	21.0	67.0	181	23.0	71.0	345	
0218	16.3	58.8	16.5	58.8	12	17.6	61.4	39	19.5	64.5	132	22.0	69.0	254	24.0	74.0	436	
0300	16.7	59.8	17.7	59.3	66	18.3	62.0	42	19.7	64.0	58	22.0	67.5	180	25.0	70.0	332	
0306	17.1	60.8	17.3	60.8	12	18.5	63.3	41	19.0	65.0	44	21.0	68.3	199	24.0	71.0	265	
0312	17.5	61.8	17.3	62.0	17	18.2	63.8	27	19.0	65.5	72	21.5	69.0	259	24.5	71.5	289	
0318	17.8	62.8	17.7	62.7	8	18.7	65.0	45	19.5	66.5	91	21.0	69.0	200	24.0	73.0		
0400	18.0	63.8	18.0	64.0	11	19.0	66.8	71	20.0	69.5	147	22.0	73.0	266	25.0	76.0		
0406	18.1	64.8	18.2	65.0	13	18.8	66.9	36	19.2	68.8	96	20.5	72.5	108	24.0	75.0		
0412	18.1	65.8	18.3	66.1	21	18.2	68.0	6	18.5	70.0	61	20.0	74.0	107	23.5	76.5		
0418	18.1	66.8	18.4	67.0	21	18.2	69.5	42	18.0	72.0	126	18.5	77.0		20.0	80.0		
0500	18.0	67.8	18.0	68.0	11	17.9	69.7	35	17.8	71.0	66	18.0	75.0		19.0	80.0		
0506	17.5	68.7	17.7	68.8	13	17.5	70.5	55	17.5	72.5	159	17.5	76.0		18.0	80.5		
0512	17.4	69.2	17.5	70.0	46	17.0	70.5	97	17.0	72.0	183	17.0	76.0		18.0	80.0		
0518	17.8	69.6	18.0	69.5	13	18.5	71.0	70	18.5	72.5		19.0	77.0		20.5	80.5		
0600	18.5	69.9	18.2	69.8	19	18.4	71.4	74	18.5	73.0		19.0	77.5		20.0	81.0	84	
0606	19.4	70.7	18.7	70.3	48	19.2	71.2		20.0	72.0		21.5	73.5		24.0	75.0	380	
0612	19.9	71.8	19.0	71.0	70	20.0	72.0		21.0	73.0		23.0	75.0		25.0	77.0	334	

(NOTE: FREDERIC WAS A DEPRESSION FROM 06/18 TO 08/18. FORECASTS NOT VERIFIED.)

Table 5 continued.

DATE/TIME (GMT)	BEST TRACK		OPERATIONAL POSITION		POSITION ERROR (N.MI.)	12 HOUR FORECAST			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST		
	LAT.	LONG.	LAT.	LONG.		LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)
0900	21.7	81.0	21.8	81.0	6				23.5	83.5	66						
0906	21.8	81.5	22.2	81.5	24				22.8	83.5	21						
0912	21.9	82.0	22.0	82.0	6	22.8	84.0	58	23.0	85.0	78	24.0	88.0	178	25.0	90.0	220
0918	22.0	82.5	22.2	83.3	46	22.4	84.4	34	23.0	86.0	78	24.5	89.0	169	27.0	90.0	125
1000	22.4	83.0	22.0	83.0	24	22.0	83.0	41	23.0	83.5	28	25.0	84.5	73	27.0	85.0	210
1006	22.7	83.3	22.7	83.0	17	23.0	83.5	0	23.5	84.0	19	26.0	86.0	31	29.0	87.0	125
1012	22.8	83.6	22.6	83.0	35	23.2	84.2	45	24.0	85.0	45	26.5	86.5	42	29.5	87.0	160
1018	23.0	83.8	23.2	83.8	12	23.8	83.9	30	24.5	84.5	57	27.0	86.5	115	31.0	87.0	199
1100	23.3	84.0	23.4	83.7	18	24.2	84.5	18	25.0	85.0	55	28.0	86.0	140	31.0	86.0	260
1106	23.8	84.4	23.8	84.1	16	24.8	84.8	13	26.0	85.5	44	30.0	86.0	124	34.0	85.5	191
1112	24.4	84.8	24.4	84.9	5	25.5	85.9	12	26.5	86.5	63	29.5	87.5	175	33.0	87.5	498
1118	25.0	85.2	24.8	85.3	13	26.0	86.2	24	27.0	87.0	84	29.5	88.5	259	32.5	89.5	
1200	25.7	85.8	25.7	85.7	5	27.2	86.8	13	29.0	87.5	47	33.0	88.0	143	37.0	84.0	
1206	26.5	86.4	26.5	86.5	5	28.7	87.8	18	31.3	88.5	30	35.0	86.5	151	38.0	88.0	
1212	27.4	87.0	27.4	87.0	0	29.3	88.2	26	31.5	88.5	43	36.0	85.0	283	40.0	79.0	
1218	28.4	87.7	28.4	87.5	11	30.3	88.3	30	32.5	88.0	91	37.0	83.0		41.5	73.5	
1300	29.7	88.0	29.8	88.0	6	32.0	88.5	21	34.5	87.0	48	39.0	80.0		44.0	69.0	
1306	30.8	88.5	30.8	88.4	5	34.0	87.5	20	36.5	84.0	36	40.0	76.0		42.0	64.0	
1312	32.2	88.7	32.1	88.6	8	35.0	86.5	21	37.0	83.0	175	42.0	74.0		45.0	67.0	
1318	34.0	88.0	34.0	87.7					38.0	81.0							
1400	35.2	87.0															
1406	37.0	84.5															
1412	39.5	81.0															
MEAN VECTOR ERRORS (N.MI.)					20			34			69			143			218
NUMBER OF CASES					48			43			44			33			28

29

HURRICANE GLORIA 4-15 SEPTEMBER 1979

DATE/TIME (GMT)	BEST TRACK		OPERATIONAL POSITION		POSITION ERROR (N.MI.)	12 HOUR FORECAST			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST		
	LAT.	LONG.	LAT.	LONG.		LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)
0612	22.0	33.8	22.0	34.0	11	23.5	37.0	18	25.0	40.0	104	30.0	45.0	265	36.5	47.5	420
0618	22.5	35.5	22.5	35.5	0	24.0	39.0	101	26.0	41.0	126	30.0	45.0	226	36.0	47.5	347
0700	23.2	36.8	22.8	37.2	33	24.5	39.5	73	26.5	42.0	129	31.0	45.5	217	36.5	47.5	341
0706	24.4	37.2	24.5	37.0	12	25.5	39.8	92	26.8	42.0	127	30.5	46.5	220	35.5	49.0	304
0712	25.6	38.0	25.7	38.0	6	27.0	40.5	70	28.0	43.0	143	30.0	49.0	302	32.0	55.0	423
0718	26.4	38.7	26.5	38.5	12	27.8	41.2	75	28.8	44.0	168	30.0	48.5	252	32.0	52.0	270
0800	27.0	39.2	27.5	39.5	34	28.3	41.5	49	29.5	44.0	106	31.5	49.0	191	34.5	52.5	290
0806	27.5	40.0	27.8	40.5	32	28.5	43.0	83	29.0	45.0	127	31.0	48.0	92	36.0	51.0	289
0812	28.0	40.3	27.8	40.0	20	28.5	41.0	42	29.5	42.0	63	31.0	43.5	155	33.5	45.0	190
0818	28.6	41.0	28.3	40.7	24	29.0	42.0	38	29.8	43.0	65	31.5	44.0	145	34.0	45.0	217
0900	29.3	41.7	28.7	41.7	36	30.5	43.0	43	31.5	44.0	63	34.0	45.0	232	37.0	45.5	359
0906	29.9	42.5	30.0	42.6	8	31.4	44.2	19	33.0	46.0	102	36.0	49.0	275	40.0	49.0	450
0912	30.4	43.2	30.3	43.3	8	32.2	45.1	48	33.5	47.0	156	37.0	49.3	335	41.0	49.0	499
0918	31.0	44.0	31.0	43.9	5	33.0	46.0	109	34.5	48.0	211	37.5	49.0	344	42.0	48.0	528

Table 5 continued.

Hurricane Gloria continued.

DATE/TIME (GMT)	BEST TRACK		OPERATIONAL POSITION		POSITION ERROR (N.MI.)	12 HOUR FORECAST			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST		
	LAT.	LONG.	LAT.	LONG.		LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)
1000	31.5	45.0	31.7	44.9	13	33.1	46.5	115	35.0	48.5	219	38.5	49.5	369	42.0	48.0	477
1006	31.2	45.8	32.0	46.0	49	33.2	47.8	84	35.0	49.0	174	39.0	50.0	353	43.0	48.0	470
1012	31.0	46.8	31.6	46.6	37	31.0	47.5	56	31.0	48.0	72	34.0	46.0	111	39.0	44.0	208
1018	31.1	47.0	31.4	46.6	27	31.0	46.5	66	31.0	46.5	101	34.0	45.0	123	38.0	43.0	104
1100	31.3	47.4	31.0	47.0	27	31.0	47.0	40	31.0	47.0	82	33.0	45.0	88	36.0	43.0	101
1106	31.4	47.9	31.0	46.5	76	31.0	46.0	57	31.5	44.5	141	33.0	41.5	169	36.0	39.0	133
1112	31.6	48.1	31.5	47.5	31	32.8	48.2	43	34.0	48.2	82	36.5	46.5	140	39.0	44.0	321
1118	31.8	48.4	31.8	48.2	10	33.0	48.4	36	34.5	48.2	84	37.0	46.0	130	39.0	44.0	423
1200	32.2	48.6	32.0	48.5	13	33.0	49.0	47	34.0	49.0	106	36.0	48.0	322	38.0	46.0	633
1206	32.4	48.6	32.3	48.0	31	33.0	47.0	12	34.5	45.5	8	38.0	43.0	195	42.0	39.0	
1212	32.8	48.3	32.9	48.3	6	34.0	47.0	0	35.0	46.0	50	39.0	42.0	209	45.0	37.0	
1218	33.2	47.8	33.2	47.8	0	34.0	46.8	50	35.5	45.5	88	40.0	40.0	225	45.0	35.0	
1300	33.9	47.0	33.9	46.5	25	35.2	44.5	12	36.5	42.5	78	40.0	37.0	257	45.0	30.0	
1306	34.5	46.0	34.5	46.0	0	35.8	43.0	41	37.5	40.0	65	41.5	32.5				
1312	35.0	45.0	34.9	45.2	12	36.0	43.5	102	37.5	41.5	226	41.0	36.0				
1318	36.0	43.8	35.9	43.8	6	38.0	40.0	34	41.0	36.0	55	47.0	28.0				
1400	37.0	41.5	36.8	41.3	15	40.0	37.0	28	43.0	32.0	80	49.0	22.0				
1406	38.5	39.5	38.3	39.5	12	41.5	34.5	61	46.0	28.0							
1412	40.2	37.8	40.2	37.8	0	43.5	34.0	6	47.5	29.5							
1418	42.0	35.8	42.0	35.8		45.0	32.0		47.0	28.0							
1500	43.4	34.0															
MEAN VECTOR ERRORS (N.MI.)					19			53			110			220			339
NUMBER OF CASES					33			33			31			27			23

HURRICANE HENRI 14-24 SEPTEMBER 1979

DATE/TIME (GMT)	BEST TRACK		OPERATIONAL POSITION		POSITION ERROR (N.MI.)	12 HOUR FORECAST			24 HOUR FORECAST			48 HOUR FORECAST			72 HOUR FORECAST		
	LAT.	LONG.	LAT.	LONG.		LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)	LAT.	LONG.	ERROR (N.MI.)
1612	22.1	92.2	22.3	91.5	41				23.5	95.5	204						
1618	21.3	93.1	21.5	93.0	13	20.2	95.2	74	19.5	97.0	167						
1700	20.2	93.6	20.5	93.5	19	19.5	95.0	85	18.5	96.5	186						
1706	20.2	94.0	20.1	93.7	18	19.4	95.1	90	18.5	96.5	164						
1712	20.4	94.3	20.4	94.1	11	20.5	94.0	51	20.5	94.0	94	21.5	95.5	27	23.0	96.0	
1718	20.8	94.6	20.7	94.7	8	21.6	95.6	42	22.6	96.3	72	24.5	97.5		26.5	98.0	
1800	20.9	95.0	21.0	95.0	6	21.8	95.5	32	23.5	96.0	115	25.5	96.5		29.0	95.0	
1806	21.0	95.4	21.3	95.5	19	21.8	96.1	18	22.8	96.5	85	25.0	96.5		28.0	96.0	
1812	21.2	95.7	21.0	95.5	16	22.0	96.0	50	22.5	96.5	117	24.0	97.5		25.5	98.0	
1818	21.6	95.7	21.6	95.7	0	22.0	96.0	48	22.5	96.5		24.0	97.5		25.5	98.0	
1900	21.5	95.7	21.5	96.0	17	21.2	96.9	62	21.2	97.5							
1906	21.3	95.6	21.4	96.2		21.4	96.2		22.5	96.0		25.0	96.0		27.5	95.0	
1912	21.1	95.5	21.1	95.6		21.5	95.5		21.5	95.5							
MEAN VECTOR ERRORS (N.MI.)					15			55			134			26			
NUMBER OF CASES					11			10			9			1			0

1979 SUMMARY FOR OFFICIAL	POS.ERR	12HR	24HR	48HR	72HR
AVERAGE ERROR FOR ALL STORMS (N.MI.)	18	40	84	155	234
NUMBER OF CASES	156	146	138	98	

LEGEND FOR TABLE 6

Key to fix characteristics

SATELLITE:

Classification confidence\*, location and confidence\*\*, visible or infrared, resolution (Km).

- \*1 = completely certain as to current intensity number used.
- 2 = tempted to vary up or down by  $\frac{1}{2}$  T or S number.
- 3 = might vary up or down by 1 T or S number, or more.

- \*\*1 = well defined eye with certain picture registration.
- 2 = well defined eye with uncertain picture registration.
- 3 = well defined circulation center with certain picture registration.
- 4 = well defined circulation center with uncertain picture registration.
- 5 = poorly defined circulation center with certain picture registration.
- 6 = poorly defined circulation center with uncertain picture registration.

RECONNAISSANCE:

Navigational Accuracy/Meteorology Accuracy.

RADAR:

LCH = Lake Charles, LA  
SIL = Slidell (New Orleans), LA  
GLS = Galveston, TX  
EYW = Key West, FL  
MIA = Miami, FL  
TPA = Tampa (Bay), FL  
DAB = Daytona Beach, FL  
AYS = Waycross, GA  
CHS = Charleston, SC  
AHN = Athens, GA  
AGS = Augusta, GA  
ILM = Wilmington, NC  
AQQ = Apalachicola, FL  
NPA = Pensacola, FL  
MOB = Mobile, AL  
JAN = Jackson, MS

MKPO = Barbados  
MJSJ = San Juan, Puerto Rico



Table 6. Center fix positions and intensity evaluations for 1979 tropical and subtropical cyclones.

TROPICAL STORM ANA  
19 - 24 JUNE 1979

CENTER FIXES

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX.WIND(KT)		MIN. ACFT. ALT.	MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP.(°C)		EYE C=CIR. DIA. E=ELIP.N.MI.	REMARKS	
			LAT. °N	LON. °W			FLT. LVL.	SFC.				IN.	OUT.			
1	19	1400	10.0	45.0	SMS-2	2,5,VSBL 1		25								
2	19	1800	9.8	45.9	SMS-2	2,5,VSBL 1		25								
3	20	0000	10.5	47.0	SMS-2	2,5, IR 8		27								
4	20	0600	11.1	48.2	SMS-2	2,5, IR 8		27								
5	20	1200	10.8	49.7	SMS-2	2,5,VSBL 1		27								
6	20	1800	11.7	50.2	SMS-2	2,5,VSBL 1		27								
7	21	0000	12.0	51.2	SMS-2	2,5, IR 8		27								
8	21	0600	13.2	51.9	SMS-2	2,5, IR 8		30								
9	21	1200	13.5	52.2	SMS-2	2,3,VSBL 1		30								
10	21	1800	14.0	53.5	SMS-2	2,3,VSBL 1		30								
11	21	2206	14.2	54.0	AF	5/5	33	28	155M	1007		26	24	C	20	GOOD RADAR PRESENTATION.
12	22	0000	14.3	54.8	SMS-2	2,3, IR 8		30								
13	22	0600	14.6	55.8	SMS-2	2,3, IR 8		33								
14	22	1124	14.3	56.9	AF	1/2	65	55	330M	1007		25	26			POORLY DEFINED.
15	22	1200	14.4	57.0	SMS-2	2,3,VSBL 1		40								
16	22	1303	14.1	57.2	AF		65	55		1008						
17	22	1800	14.1	58.5	SMS-2	2,3,VSBL 1		40								
18	22	1945	14.1	58.7	AF	3/3	34	35	158M	1007		27	25			
19	22	2100	14.1	59.1	SMS-2	2,5,VSBL 4		40								
20	22	2136	13.9	58.8	AF		30	25		1010						
21	23	0000	14.2	59.9	SMS-2	2,3, IR 8		35								
22	23	0300	14.0	60.5	SMS-2	2,4, IR 8		35								
23	23	0600	13.8	61.4	SMS-2	2,4, IR 8		35								
24	23	1200	14.1	62.7	SMS-2	1,3,VSBL 1		30								
25	23	1800	14.2	64.8	SMS-2	2,3,VSBL 2		30								
26	24	0000	14.2	66.1	SMS-2	2,5, IR 8		30								
27	24	0600	14.4	67.3	SMS-2	2,5, IR 8		25								
28	24	1200	13.7	70.6	SMS-2	5,VSBL 1										

Table 6 continued.

HURRICANE BOB  
9 - 16 JULY

## CENTER FIXES

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND(KT)		ACFT.	MIN. PRESS. 700MB (MB)	MIN. HT. (M)	TEMP. (°C)		EYE		REMARKS
			LAT. °N	LO. °W			FLT. LVL.	SFC.				IN.	OUT.	C=CIR. DIA.	E=ELIP. N.MI.	
1	9	1200	22.8	96.2	SMS-2	2,5, IR 8		25								
2	9	1415	22.2	95.8	AF	10/10	22	20		1012						
3	9	1800	23.0	95.5	SMS-2	2,5, IR 8		25								
4	10	0000	22.5	95.0	SMS-2	2,5, IR 8		25								
5	10	0600	23.0	95.0	SMS-2	2,5, IR 8		25								
6	10	1300	24.0	93.5	SMS-2	2,5, VSBL 1		35								
7	10	1416	24.3	92.8	AF	1/5	56	50	305M	998		26	23	C	30	
8	10	1831	25.0	91.8	SMS-2	2,5, VSBL 1		45								
9	10	1920	25.4	92.0	AF	2/5	45	40		994	3038	14	12			
10	10	2100	25.8	91.6	SMS-2	2,3, VSBL 1		55								
11	10	2228	25.9	91.7	AF		70	50			3000					
12	10	2305	25.9	91.7	AF	2/5	60	55		988	3004	15	10	C	28	OPEN SOUTH.
13	10	2330	26.3	91.6	SMS-2	5, IR 8										
14	10	2335	26.0	91.7	AF		50	55			3004					
15	11	0000	26.3	91.6	SMS-2	2,5, VSBL 1		55								
16	11	0300	26.6	91.3	SMS-2	2,5, IR 8		55								
17	11	0505	27.6	91.3	AF	3/5	40			991	3000	11	09	C	25	POORLY DEFINED.
18	11	0530	27.8	90.8	SMS-2	5, IR 8										
19	11	0600	27.9	90.8	SMS-2	2,5, IR 8		55								
20	11	0711	27.8	90.7	RADAR	LCH										FAIR FIX.
21	11	0713	28.0	91.0	AF		51				2971					
22	11	0735	28.0	90.9	RADAR	SIL										15° SPIRAL OVERLAY.
23	11	0735	27.9	90.8	RADAR	LCH										POOR FIX.
24	11	0807	28.2	90.9	RADAR	SIL										15° SPIRAL OVERLAY.
25	11	0810	28.1	90.5	RADAR	LCH										POOR FIX.
26	11	0835	28.2	90.7	RADAR	SIL										FAIR FIX.
27	11	0835	28.3	90.2	RADAR	LCH										POOR FIX.
28	11	0900	28.6	90.5	SMS-2	2,5, IR 8		65								
29	11	0905	28.5	90.9	AF	3/5	35			988	2982	12	11	C	20	POORLY DEFINED.
30	11	0907	27.4	90.5	RADAR	SIL										FAIR FIX.
31	11	0908	28.5	90.2	RADAR	LCH										FAIR FIX.
32	11	0935	28.7	90.7	RADAR	SIL										15° SPIRAL OVERLAY. FAIR FIX.
33	11	0935	28.8	90.0	RADAR	LCH										POOR FIX.

Table 6 continued.

## HURRICANE BOB CONTINUED

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)		ACFT. ALT.	MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE C=CIR. DIA. E=ELIP. N.MI.	REMARKS	
			LAT. °N	LONG. °W			FLT. LVL.	SFC.				IN.	OUT.			
34	11	1000	29.1	90.6	SMS-2	1, IR 8									15° SPIRAL OVERLAY. FAIR FIX.	
35	11	1004	28.9	90.7	RADAR	SIL									GOOD FIX.	
36	11	1010	29.0	90.6	RADAR	LCH									FAIR FIX.	
37	11	1035	29.1	90.3	RADAR	LCH									POOR FIX.	
38	11	1035	29.1	90.7	RADAR	SIL									FAIR FIX.	
39	11	1104	29.1	90.7	AF	3/5	43	60		986	2963	11	12	C	25	OPEN EAST.
40	11	1105	29.3	90.5	RADAR	SIL										FAIR FIX.
41	11	1110	29.3	90.5	RADAR	LCH										
42	11	1135	29.2	90.6	RADAR	SIL										FAIR FIX.
43	11	1135	29.3	90.5	RADAR	LCH										
44	11	1200	29.2	90.5	AF		40	40		987	2991					
45	11	1208	29.5	90.6	RADAR	SIL										GOOD FIX.
46	11	1236	29.7	90.5	RADAR	SIL										FAIR FIX.
47	11	1304	29.5	90.5	RADAR	SIL										10° SPIRAL OVERLAY. GOOD FIX.
48	11	1337	29.2	90.7	RADAR	SIL								12		FAIR FIX.
49	11	1408	30.0	90.5	RADAR	SIL								10		GOOD FIX.
50	11	1437	30.1	90.3	RADAR	SIL								10		GOOD FIX.
51	11	1506	30.3	90.3	RADAR	SIL								12		GOOD FIX.
52	11	1534	30.4	90.2	RADAR	SIL								18		GOOD FIX.
53	11	1610	30.4	90.2	RADAR	SIL								20		GOOD FIX.
54	11	1707	30.7	90.2	RADAR	SIL								20		FAIR FIX.
55	11	1734	30.8	90.5	RADAR	SIL								20		FAIR FIX.
56	11	1801	30.9	90.1	RADAR	SIL								18		FAIR FIX.

Table 6 continued.

## TROPICAL STORM CLAUDETTE

16 - 29 JULY 1979

## CENTER FIXES

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			ACFT.	MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE		REMARKS
			LAT. °N	LN. °W			FLT.	SFC.	ALT.				IN.	OUT.	C=CIR.	DIA. E=ELIP.N.MI.	
1	16	1800	16.6	55.4	SMS-2	2,5,VSBL 1		30									
2	17	0000	17.2	56.8	SMS-2	2,5, IR 8		35									
3	17	0600	17.6	58.7	SMS-2	2,5, IR 8		35									
4	17	1130	18.0	60.5	SMS-2	5,VSBL 1											
5	17	1225	17.4	60.8	AF		45	45		1011							
6	17	1330	18.2	61.3	SMS-2	2,5,VSBL 1		40									
7	17	1400	17.7	61.3	AF		40	40		1012							
8	17	1800	18.2	62.7	SMS-2	2,5,VSBL 1		40									
9	17	1815	18.0	62.4	AF	3/5	35	35	213M	1010		25		C		5	
10	17	2300	18.3	63.7	AF	3/3	38	35	283M	1011		25	25	C		5	
11	18	0000	18.2	64.3	SMS-2	5, IR 8											
12	18	0030	18.2	64.6	SMS-2	2,6, IR 8		40									
13	18	0600	18.3	66.3	SMS-2	5, IR 8											
14	18	0630	18.4	66.3	SMS-2	2,5, IR 8		35									
15	18	1130	18.5	67.3	SMS-2	2,5,VSBL 1		35									
16	18	1400	18.5	67.7	SMS-2	5,VSBL 1											
17	18	1800	18.7	68.3	SMS-2	2,5,VSBL 1		30									
18	19	0030	19.0	69.3	SMS-2	1,5, IR 8		30									
19	19	0630	19.1	70.8	SMS-2	1,5, IR 8		25									
20	19	1200	18.4	71.8	SMS-2	2,5,VSBL 1		25									
21	19	1800	18.0	72.0	SMS-2	2,5,VSBL 1		25									
22	20	0000	17.8	73.3	SMS-2	1,5, IR 8		25									
23	20	0630	18.8	75.6	SMS-2	2,5, IR 8		25									
24	21	0030	20.7	80.8	SMS-2	2,5, IR 8		25									
25	21	0630	21.4	81.4	SMS-2	2,5, IR 8		25									
26	21	1200	22.1	83.4	SMS-2	2,5,VSBL 1		30									
27	21	1800	23.0	84.5	SMS-2	3,5, IR 8		30									
28	21	2320	24.0	86.5	AF	5/20	15	25	426M	1008		24	23				
29	22	0000	24.3	85.5	SMS-2	5, IR 8											
30	22	0030	24.4	85.6	SMS-2	2,5, IR 8		30									
31	22	0200	24.1	87.2	AF	5/20	30		429M	1007		23	23				
32	22	0600	25.5	87.1	SMS-2	5, IR 8											
33	22	0630	24.8	86.7	SMS-2	2,5, IR 8		25									
34	22	1230	25.2	90.0	AF	2/20	25	20	454M	1007		24	23			40	
35	22	1300	25.1	90.2	SMS-2	2,5,VSBL 1		33									
36	22	1524	25.1	90.0	AF	5/5	17	15	408M	1007		24	25			40	
37	22	1800	24.9	89.7	SMS-2	2,4,VSBL 1		30									

Table 6 continued.

## Tropical Storm Claudette continued.

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT.	SFC.	ACFT.			IN.	OUT.	C=CIR. DIA.	E=ELIP. N.MI.	
38	22	1855	25.0	90.1	AF	3/10	40	35	271M	1006		26	26		80	
39	22	2120	24.9	90.4	AF	3/10	25	15	277M	1005		26	26		60	
40	22	2358	24.9	90.5	AF	5/10	40	25	290M	1005		26	26		60	
41	23	0000	25.5	90.0	SMS-2	2,5, IR 8		30								
42	23	0400	25.3	90.8	AF	5/5	25		408M	1005			25		20	
43	23	0600	26.0	90.8	SMS-2	IR 8		30								
44	23	0615	26.3	91.8	AF	5/20	60			1004						
45	23	0835	26.1	91.6	AF	5/20	40		420M	1003		25	25			
46	23	1135	26.9	92.3	AF	3/10	44	35	338M	1005		25	25		30	
47	23	1230	27.5	91.6	SMS-2	2,3,VSBL 1		40								
48	23	1430	27.1	93.3	SMS-2	2,5,VSBL 1		35								
49	23	1433	27.1	93.0	AF	3/5	25	25	349M	1005		25	25		25	
50	23	1715	27.4	93.4	AF	3/5	22	25	361M	1005		25	25		30	
51	23	1800	27.1	93.3	SMS-2	2,5,VSBL 1		35								
52	23	2030	27.8	93.9	SMS-2	2,5,VSBL 1		35								
53	23	2122	27.4	93.8	AF	5/5	22	25	354M	1003		25	25		20	
54	23	2358	27.3	94.1	AF	5/5	30	25	372M	1004		26	25		E/36/28/17	
55	24	0000	27.8	94.0	SMS-2	2,5, IR 8		35								
56	24	0300	27.5	94.0	SMS-2	2,5, IR 8		35								
57	24	0302	27.2	94.3	AF	5/20	16	15	393M	1004		25	26			
58	24	0555	27.2	94.6	AF	3/3	20			1007						
59	24	0600	27.3	94.3	SMS-2	2,5, IR 8		35								
60	24	0822	28.5	94.6	AF	5/5	20			1005						
61	24	1200	28.5	94.0	SMS-2	5, IR 8										
62	24	1230	28.5	94.0	SMS-2	2,5,VSBL 1		40								
63	24	1530	29.2	93.5	SMS-2	1,5,VSBL 1		50								
64	24	1542	29.5	93.6	RADAR	LCH										
65	24	1630	29.6	93.7	RADAR	LCH										
66	24	1709	29.3	93.9	RADAR	GLS										FAIR FIX.
67	24	1730	29.6	93.7	RADAR	LCH										
68	24	1735	29.3	93.9	RADAR	GLS										FAIR FIX.
69	24	1807	29.6	93.7	RADAR	GLS										GOOD FIX.
70	24	1814	29.6	93.7	RADAR	LCH										
71	24	1830	29.4	93.5	SMS-2	1,3,VSBL 1		55								
72	24	1830	29.8	93.8	AF		50									
73	24	1832	29.7	93.7	RADAR	LCH										
74	24	1835	29.6	93.6	RADAR	GLS										GOOD FIX.
75	24	1900	29.8	93.7	RADAR	LCH										
76	24	1910	29.8	93.8	RADAR	GLS										GOOD FIX.
77	24	1930	29.8	93.7	RADAR	LCH										

Table 6 continued.

Tropical Storm Claudette continued.

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			ACFT	MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	SFC.	LT				IN.	OUT.	C=CIR. DIA. E=ELIP. N.MI.		
78	24	1935	29.8	93.7	RADAR	GLS											GOOD FIX.
79	24	1947	29.9	93.8	RADAR	LCH											GOOD FIX.
80	24	2010	29.8	93.8	RADAR	GLS											FAIR FIX.
81	24	2033	29.9	94.0	RADAR	LCH											FAIR FIX.
82	24	2035	29.8	93.9	RADAR	GLS											FAIR FIX.
83	24	2104	29.9	94.0	RADAR	LCH											FAIR FIX.
84	24	2106	29.8	93.8	RADAR	GLS											FAIR FIX.
85	24	2130	29.9	93.9	SMS-2	VSBL 1											
86	24	2135	29.8	94.0	RADAR	LCH											FAIR FIX.
87	24	2137	29.8	93.8	RADAR	GLS											FAIR FIX.
88	24	2155	29.9	94.0	RADAR	LCH											GOOD FIX.
89	24	2205	29.8	93.8	RADAR	GLS											FAIR FIX.
90	24	2235	29.8	93.9	RADAR	LCH											FAIR FIX.
91	24	2235	29.8	93.7	RADAR	GLS											FAIR FIX.
92	24	2256	30.0	93.9	RADAR	LCH											GOOD FIX.
93	24	2306	29.9	93.8	RADAR	GLS											15° SPIRAL OVERLAY.
94	24	2335	30.0	93.8	RADAR	LCH											GOOD FIX.
95	25	0005	30.1	93.9	RADAR	GLS											15° SPIRAL OVERLAY.
96	25	0035	29.9	93.9	RADAR	LCH											GOOD FIX.
97	25	0035	30.0	93.8	RADAR	GLS											15° SPIRAL OVERLAY. FAIR FIX.
98	25	0057	30.0	93.9	RADAR	LCH											FAIR FIX.
99	25	0106	30.0	93.9	RADAR	GLS											10° SPIRAL OVERLAY. FAIR FIX.
100	25	0135	30.1	94.1	RADAR	LCH											FAIR FIX.
101	25	0135	30.1	94.1	RADAR	GLS											20° SPIRAL OVERLAY. POOR FIX.
102	25	0200	30.1	94.1	RADAR	LCH											GOOD FIX.
103	25	0235	30.0	94.2	RADAR	LCH											FAIR FIX.
104	25	0302	30.1	94.2	RADAR	LCH											GOOD FIX.
105	25	0335	30.0	94.3	RADAR	LCH											POSSIBLE CENTER.
106	25	0401	30.0	94.3	RADAR	LCH											POSSIBLE CENTER.
107	25	0435	30.0	94.5	RADAR	LCH											POSSIBLE CENTER.
108	25	0500	30.1	94.8	RADAR	LCH											POSSIBLE CENTER.
109	25	0531	30.1	94.9	RADAR	LCH											POSSIBLE CENTER.
110	25	0535	30.1	94.4	RADAR	GLS											POSSIBLE CENTER.

Table 6 continued.

HURRICANE DAVID  
25 August - 7 September 1979

## CENTER FIXES

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)		ACFT. ALT.	MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	SFC.				IN.	OUT.	C=CIR. DIA. E=ELIP.N.MI.		
1	25	1200	11.7	36.1	SMS-2	2,3,VSBL 1		25								
2	25	1800	11.7	37.8	SMS-2	2,3,VSBL 1		30								
3	25	2300	11.7	39.8	SMS-2	5, IR 8										
4	26	0000	11.7	40.1	SMS-2	2,5, IR 8		30								
5	26	0500	11.9	41.5	SMS-2	5, IR 8										
6	26	0600	11.9	42.1	SMS-2	2,5, IR 8		30								
7	26	1200	11.5	44.0	SMS-2	1,3,VSBL 1		45								
8	26	1800	11.5	45.2	SMS-2	2,3,VSBL 1		50								
9	26	2300	11.8	45.9	SMS-2	5, IR 8										
10	27	0000	11.8	46.2	SMS-2	2,5, IR 8		50								
11	27	0500	11.6	47.7	SMS-2	5, IR 8										
12	27	0600	11.8	48.0	SMS-2	2,5, IR 8		55								
13	27	1200	11.8	50.0	SMS-2	2,1,VSBL 1		77								
14	27	1730	12.0	51.4	SMS-2	1,VSBL 1										
15	27	1810	11.9	51.5	AF	0/2	84	95	700MB	954	2705	15	11	C	8	CLOSED WALL.
16	27	1830	12.0	51.6	SMS-2	1,1,VSBL 1		90								
17	27	2003	12.1	51.9	AF	0/2	99	100	700MB	951	2673	15	10		7	CLOSED WALL.
18	27	2200	12.2	52.2	SMS-2	1,1, IR 8		102								
19	27	2300	12.2	52.4	SMS-2	1, IR 8										
20	28	0000	12.3	52.7	SMS-2	2,1, IR 8		102								
21	28	0300	12.4	53.5	SMS-2	2,1, IR 8		102								
22	28	0500	12.5	54.0	SMS-2	1, IR 8										
23	28	0600	12.6	54.3	SMS-2	2,1, IR 8		115								
24	28	0900	12.7	54.9	SMS-2	2,1, IR 8		127								
25	28	1200	12.9	55.6	SMS-2	1,VSBL 1										
26	28	1230	12.9	55.7	SMS-2	1,1, IR 8		127								
27	28	1250	12.8	55.9	AF	2/3	80	110	700MB	932	2493	15	13	E	04/07/05	CLOSED WALL.
28	28	1430	13.1	56.2	SMS-2	1,1,VSBL 1		127								
29	28	1635	13.2	56.7	AF	5/5		95	700MB			15	8	C	5	CLOSED WALL.
30	28	1750	13.3	56.9	AF	2/2			700MB			14	10	C	5	CLOSED WALL.
31	28	1800	13.3	56.9	SMS-2	2,1,VSBL 1		127								
32	28	2100	13.5	57.4	SMS-2	2,1, IR 8		121								
33	28	2100	13.5	57.2	MKPO	RADAR										10° SPIRAL OVERLAY.
34	28	2130	13.7	57.4	MKPO	RADAR										10° SPIRAL OVERLAY.
35	28	2150	13.8	57.7	MKPO	RADAR										10° SPIRAL OVERLAY.

## Hurricane David continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP: (°C)		EYE		REMARKS	
			LAT. °N	LON. °W			FLT. LVL.	ACFT. SFC.	ALT.			IN.	OUT.	C=CIR. DIA. E=ELIP. N.M.I.			
36	28	2250	13.7	57.8	MKPO	RADAR											
37	28	2300	13.6	57.7	SMS-2	1, IR 8											10° SPIRAL OVERLAY.
38	28	2312	13.7	57.9	AF	3/4											
39	28	2330	13.8	57.8	MKPO	RADAR	78		700MB	954	2711	20	11	C	12		CLOSED WALL.
40	29	0000	13.7	57.9	SMS-2	2,1, IR 8											10° SPIRAL OVERLAY.
41	29	0020	13.8	58.1	MKPO	RADAR			115								
42	29	0210	13.9	58.6	AF	3/2											10° SPIRAL OVERLAY.
43	29	0230	14.0	58.5	MKPO	RADAR	108		700MB	948	2646	15	9	C	15		CLOSED WALL.
44	29	0300	14.0	58.6	MKPO	RADAR											10° SPIRAL OVERLAY.
45	29	0300	14.0	58.4	SMS-2	2,1, IR 8			115								10° SPIRAL OVERLAY.
46	29	0400	14.2	58.9	MKPO	RADAR											
47	29	0430	14.2	59.0	MKPO	RADAR											10° SPIRAL OVERLAY.
48	29	0500	14.2	59.2	MKPO	RADAR											10° SPIRAL OVERLAY.
49	29	0500	14.2	59.0	SMS-2	1, IR 8											10° SPIRAL OVERLAY.
50	29	0500	14.1	59.1	AF	3/2	86		700MB	945	2628	16	10	C	10		CLOSED WALL.
51	29	0530	14.2	59.3	MKPO	RADAR											
52	29	0600	14.3	59.3	MKPO	RADAR											
53	29	0600	14.2	59.2	SMS-2	2,1, IR 8											
54	29	0700	14.3	59.5	MKPO	RADAR											
55	29	0847	14.5	59.9	AF	0/5	89		700MB	944	2546	14	10	IC	10		CLOSED WALL.
56	29	0900	14.4	59.7	SMS-2	2,1, IR 8			115								
57	29	1023	14.6	60.1	MKPO	RADAR											
58	29	1148	14.8	60.4	AF	0/2	122	125	700MB	938	2555	18	10	C	9		CLOSED WALL.
59	29	1200	14.7	60.3	SMS-2	1,1, VSBL 1			115								
60	29	1218	14.9	60.5	MKPO	RADAR											
61	29	1430	15.1	60.9	MKPO	RADAR											
62	29	1530	15.2	61.2	SMS-2	1,1, VSBL 1			115								
63	29	1830	15.4	61.8	SMS-2	2,1, VSBL 1											
64	29	1910	15.4	61.9	AF	0/2	90	110	700MB	940	2577	15	10	C	5		CLOSED WALL.
65	29	2100	15.6	62.3	SMS-2	2,1, VSBL 1			134								
66	29	2107	15.6	62.3	AF	1/2	130	95	700MB	937	2545	17	11	C	10		CLOSED WALL.
67	29	2332	15.6	62.9	AF	2/5	85		700MB		2495	18	11	C	7		CLOSED WALL.
68	30	0000	15.6	62.8	SMS-2	2,1, IR 8			134								
69	30	0300	15.7	63.4	SMS-2	2,1, IR 8			134								
70	30	0600	15.9	64.2	SMS-2	2,1, IR 8			134								
71	30	0620	16.0	64.2	NOAA	5/2	135		700MB	929		19	12	C	10		CLOSED WALL.
72	30	0730	15.9	64.6	MJSJ	RADAR											FAIR FIX.
73	30	0800	15.9	64.7	MJSJ	RADAR											FAIR FIX.
74	30	0830	16.0	64.8	MJSJ	RADAR											FAIR FIX.
75	30	0840	16.2	64.5	NOAA		158		948M	924							
76	30	0900	16.1	64.5	SMS-2	2,1, IR 8			134								



Table 6 continued.

Hurricane David continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND(KT)			MIN. PRESS. (MB)	MIN. TEMP: (°C)		EYE		REMARKS	
			LAT. °N	LONG. °W			FLT. LVL.	ACFT. SFC.	ALT.		700MB HT. (M)	IN.	OUT.	C=CIR. DIA. E=ELIP. N.MI.		
77	30	0900	16.0	64.8	MJSJ	RADAR									FAIR FIX.	
78	30	0930	16.1	64.9	MJSJ	RADAR									FAIR FIX.	
79	30	1000	16.1	65.0	MJSJ	RADAR									FAIR FIX.	
80	30	1030	16.2	65.2	MJSJ	RADAR									FAIR FIX.	
81	30	1100	16.2	65.2	MJSJ	RADAR									FAIR FIX.	
82	30	1130	16.2	65.3	MJSJ	RADAR									FAIR FIX.	
83	30	1200	16.2	65.3	MJSJ	RADAR									FAIR FIX.	
84	30	1200	16.3	65.2	SMS-2	2, VSBL 1			127							
85	30	1203	16.3	65.2	NOAA		144	100	850MB	930		21	17	C	20	CLOSED WALL.
86	30	1230	16.3	65.4	MJSJ	RADAR									12	FAIR FIX.
87	30	1300	16.3	65.5	MJSJ	RADAR									10	FAIR FIX.
88	30	1322	16.4	65.4	NOAA		135			924						
89	30	1330	16.3	65.6	MJSJ	RADAR									10	
90	30	1400	16.3	65.8	MJSJ	RADAR										
91	30	1430	16.3	65.9	MJSJ	RADAR										
92	30	1457	16.5	65.8	NOAA		150			932		21	16		30	OPEN SOUTHEAST.
93	30	1500	16.3	66.0	MJSJ	RADAR										
94	30	1530	16.5	65.7	SMS-2	2, 2, VSBL 1			127							
95	30	1530	16.4	66.1	MJSJ	RADAR										
96	30	1600	16.4	66.2	MJSJ	RADAR									16	
97	30	1635	16.4	66.2	MJSJ	RADAR									15	
98	30	1700	16.5	66.4	MJSJ	RADAR									18	FAIR FIX.
99	30	1730	16.5	66.4	MJSJ	RADAR										
100	30	1738	16.6	66.2	NOAA	2/2	150		850MB	931		24	17	C	25	CLOSED WALL.
101	30	1800	16.7	66.3	SMS-2	2, 2, VSBL 1			127							
102	30	1800	16.6	66.5	MJSJ	RADAR									18	DOUBLE EYE - DIA. 36.
103	30	1830	16.7	66.6	MJSJ	RADAR										
104	30	1900	16.7	66.8	MJSJ	RADAR										
105	30	1930	16.8	66.8	MJSJ	RADAR										
106	30	2000	16.8	66.9	MJSJ	RADAR										
107	30	2015	16.7	66.7	NOAA	2/2	160		850MB	930		22	17		25	CLOSED WALL.
108	30	2030	16.8	67.0	MJSJ	RADAR										
109	30	2100	16.8	67.1	MJSJ	RADAR									22	
110	30	2130	16.9	67.2	MJSJ	RADAR										
111	30	2130	16.8	66.9	SMS-2	2, 1, VSBL 1			121							
112	30	2200	16.9	67.2	MJSJ	RADAR									24	FAIR FIX.
113	30	2230	16.9	67.3	MJSJ	RADAR									26	FAIR FIX.
114	30	2300	17.0	67.4	MJSJ	RADAR									22	FAIR FIX.

Table 6 continued.

Hurricane David continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	ACFT. SFC. ALT.	IN.			OUT.	C=CIR. DIA. E=ELIP. N.MI.			
115	30	2330	17.0	67.5	MJSJ	RADAR									21	FAIR FIX.
116	30	2332	16.8	67.3	AF	2/2	140		700MB	930	2474	16	9	C	15	CLOSED WALL.
117	31	0000	16.8	67.3	SMS-2	1, IR 8										
118	31	0000	17.1	67.5	MJSJ	RADAR										
119	31	0030	17.1	67.6	MJSJ	RADAR										
120	31	0030	16.8	67.4	SMS-2	2,1, IR 8		121								
121	31	0100	17.0	67.8	MJSJ	RADAR									24	
122	31	0130	17.1	67.8	MJSJ	RADAR									25	FAIR FIX.
123	31	0200	17.1	67.9	MJSJ	RADAR									25	FAIR FIX.
124	31	0230	17.1	68.0	MJSJ	RADAR									28	FAIR FIX.
125	31	0232	17.0	67.9	AF	2/3	145		700MB	931		19	8	C	20	CLOSED WALL.
126	31	0330	16.8	67.9	SMS-2	1, IR 8		127								
127	31	0330	17.2	68.3	MJSJ	RADAR									25	FAIR FIX.
128	31	0400	17.2	68.4	MJSJ	RADAR									25	POOR FIX.
129	31	0430	17.2	68.5	MJSJ	RADAR									25	FAIR FIX.
130	31	0508	16.9	68.3	AF	2/5			700MB	928	2471	19	9		20	CLOSED WALL.
131	31	0600	16.9	68.1	SMS-2	2, IR 8										
132	31	0630	16.9	68.3	SMS-2	2,2, IR 8		127								
133	31	0930	17.1	68.9	SMS-2	2,2, IR 8		127								
134	31	1200	17.2	69.2	SMS-2	1, IR 8										
135	31	1230	17.2	69.2	NOAA	2/2	130		700MB	928	2457	19	10	C	20	CLOSED WALL.
136	31	1300	17.2	69.3	SMS-2	2,1, VSBL 1		127								
137	31	1500	17.4	69.5	SMS-2	2,1, VSBL 1		127								
138	31	1741	17.8	69.7	NOAA	2/2	151		700MB	926	2434	20	12		20	CLOSED WALL.
139	31	1800	17.8	69.7	SMS-2	2,1, VSBL 1		140								
140	31	1900	18.1	70.0	SMS-2	1, VSBL 1										
141	31	2030	18.4	70.1	SMS-2	1, IR 8										
142	31	2100	18.5	70.3	SMS-2	1, VSBL 1										
143	31	2200	18.8	70.4	SMS-2	5, IR 8										
144	31	2300	19.0	70.4	SMS-2	5, IR 8										
145	01	0000	18.8	70.4	SMS-2	5, IR 8										
146	01	0300	19.1	71.2	SMS-2	3, IR 8										
147	01	0600	19.5	72.0	SMS-2	1, IR 8										
148	01	0900	20.1	72.3	SMS-2	3, IR 8										
149	01	1200	19.6	73.7	SMS-2	2,3, VSBL 1		77								
150	01	1200	19.6	73.8	AF		39	60			1002	11			20	POORLY DEFINED.
151	01	1500	20.2	73.8	SMS-2	2,3, VSBL 1		77								

Table 6 continued.

Hurricane David continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP: (°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	ACFT. SFC.	ALT.			IN.	OUT.	C=CIR. DIA. E=ELIP.N.MI.		
152	01	1600	20.4	74.0	SMS-2	3, VSBL 1										
153	01	1700	20.4	74.3	SMS-2	3, VSBL 1										
154	01	1800	20.6	74.6	SMS-2	2,5, VSBL 1		77								
155	01	2000	20.7	74.7	SMS-2	5, VSBL 1										
156	01	2100	20.9	75.0	SMS-2	2,5, VSBL 1		65								
157	02	0000	21.3	75.2	SMS-2	2,5, IR 8		55								
158	02	0300	21.4	75.4	SMS-2	6, IR 8										
159	02	0325	21.5	75.3	NOAA		55		700MB	992		17	12			
160	02	0542	22.0	75.5	NOAA	2/8	75		700MB	996		17	12			POORLY DEFINED.
161	02	0600	21.7	75.5	SMS-2	2,5, IR 8		55								
162	02	0628	22.1	75.3	NOAA											
163	02	0709	22.3	75.7	NOAA											
164	02	0815	22.5	75.8	NOAA	2/2	63		700MB	988	3005	17	13			POORLY DEFINED.
165	02	0900	22.4	75.7	SMS-2	2,3, IR 8		65								
166	02	1130	23.0	76.3	NOAA		60		700MB		2988					
167	02	1200	23.0	76.3	NOAA	2/2	80	80	660M	982		26	23	C	25	OPEN SOUTH.
168	02	1230	23.4	76.6	SMS-2	2,1, VSBL 1		83								
169	02	1300	23.2	76.5	NOAA											
170	02	1400	23.3	76.8	NOAA											
171	02	1500	23.6	77.0	SMS-2	2,3, VSBL 1		90								
172	02	1504	23.4	76.8	NOAA	2/5	90	850MB	983			24	17	C	25	POORLY DEFINED.
173	02	1558	23.5	77.0	NOAA											
174	02	1600	23.8	77.0	SMS-2	1, VSBL 1										
175	02	1658	23.7	77.2	NOAA											
176	02	1700	23.9	77.0	SMS-2	1, VSBL 1										
177	02	1745	23.9	77.4	SMS-2	2,1, VSBL 1		90								
178	02	1748	23.9	77.3	NOAA	2/4	90		850MB	980		23	17	C	40	POORLY DEFINED.
179	02	1900	24.1	77.5	SMS-2	1, VSBL 1										
180	02	2049	24.3	77.8	NOAA	2/5	76		850MB	975		23	17		40	OPEN SOUTH.
181	02	2100	24.2	77.6	SMS-2	1,1, VSBL 1		90								
182	02	2230	24.4	78.1	EYW	RADAR									48	15° SPIRAL OVERLAY. POOR FIX.
183	02	2255	24.4	78.0	MIA	RADAR									45	
184	02	2310	24.4	78.1	EYW	RADAR									40	POOR FIX.
185	02	2330	24.5	78.2	EYW	RADAR									40	POOR FIX.
186	02	2333	24.5	78.2	NOAA	2/5	87		850MB	977		21	18		40	OPEN SOUTH THRU WEST.
187	03	0007	24.5	78.1	MIA	RADAR										
188	03	0010	24.6	78.3	EYW	RADAR									35	15° SPIRAL OVERLAY. POOR FIX.
189	03	0025	24.6	78.4	EYW	RADAR									20	POOR FIX

Table 6 continued.

## Hurricane David continued.

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX.WIND(KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP: (°C)		EYE C=CIR. DIA. E=ELIP.N.MI.	REMARKS
			LAT. °N	°W			FLT. LVL.	ACFT. SFC. ALT.	IN.			OUT.			
190	03	0030	24.9	78.1	SMS-2	1,3, IR 8		90							
191	03	0035	24.6	78.1	MIA	RADAR								40	
192	03	0051	24.6	78.3	NOAA		80		965					60	OPEN SOUTH HALF.
193	03	0110	24.6	78.3	MIA	RADAR								50	ELLIPTICAL EYE.
194	03	0110	24.8	78.4	EYW	RADAR								20	FAIR FIX.
195	03	0130	24.8	78.4	EYW	RADAR								30	FAIR FIX.
196	03	0135	24.7	78.4	MIA	RADAR								48	ELLIPTICAL EYE.
197	03	0207	24.9	78.4	MIA	RADAR								25	FAIR FIX.
198	03	0230	24.8	78.3	EYW	RADAR								30	FAIR FIX.
199	03	0232	24.9	78.4	MIA	RADAR								25	FAIR FIX.
200	03	0302	24.8	78.6	NOAA	1/5	80	788M	966		24	23		30	OPEN SOUTH.
201	03	0305	24.9	78.5	MIA	RADAR								32	GOOD FIX.
202	03	0310	25.0	78.5	EYW	RADAR								30	GOOD FIX.
203	03	0330	25.2	78.6	SMS-2	2,3, IR 8		90							
204	03	0330	25.0	78.5	EYW	RADAR								35	GOOD FIX.
205	03	0332	25.0	78.5	MIA	RADAR								35	GOOD FIX.
206	03	0407	25.2	78.6	MIA	RADAR								25	GOOD FIX.
207	03	0407	25.0	78.6	EYW	RADAR								38	GOOD FIX.
208	03	0430	25.2	78.7	EYW	RADAR								30	GOOD FIX.
209	03	0430	25.1	78.7	MIA	RADAR								35	FAIR FIX.
210	03	0505	25.2	78.9	MIA	RADAR								40	FAIR FIX.
211	03	0510	25.3	78.7	EYW	RADAR								27	FAIR FIX.
212	03	0530	25.1	79.0	EYW	RADAR								40	FAIR FIX.
213	03	0530	25.2	79.0	MIA	RADAR								45	FAIR FIX.
214	03	0531	25.2	79.0	NOAA	2/5	75	850MB	981		22	21		50	OPEN SOUTH.
215	03	0605	25.2	79.0	MIA	RADAR								48	GOOD FIX.
216	03	0610	25.2	79.0	EYW	RADAR								50	FAIR FIX.
217	03	0630	25.2	79.0	EYW	RADAR								50	GOOD FIX.
218	03	0630	25.3	79.0	MIA	RADAR								35	GOOD FIX.
219	03	0630	25.5	79.3	SMS-2	2,5, IR 8		90							
220	03	0704	25.4	79.2	MIA	RADAR								34	POOR FIX.
221	03	0710	25.4	79.1	EYW	RADAR								32	GOOD FIX.
222	03	0730	25.4	79.2	EYW	RADAR								36	GOOD FIX.
223	03	0734	25.4	79.2	MIA	RADAR								35	FAIR FIX.
224	03	0803	25.6	79.0	SMS-2	-----									
225	03	0806	25.6	79.2	MIA	RADAR								30	GOOD FIX.
226	03	0810	25.4	79.1	EYW	RADAR								30	GOOD FIX.
227	03	0830	25.7	79.2	EYW	RADAR								30	GOOD FIX.

Table 6 continued.

## Hurricane David continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER,	MAX. WIND (KT)			MIN. PRESS. (MB)	TEMP. (°C)		EYE C=CIR. DIA. E=ELIP. N.MI.	REMARKS	
			LAT. °N	LONG. °W			FLT. LVL.	ACFT. SFC. ALT.	700MB HT. (M)		IN.	OUT.			
228	03	0833	25.7	79.3	MIA	RADAR							25	GOOD FIX.	
229	03	0904	25.7	79.4	NOAA				850MB						
230	03	0905	25.7	79.3	MIA	RADAR							30	GOOD FIX.	
231	03	0910	25.7	79.4	EYW	RADAR							38	GOOD FIX.	
232	03	0930	25.8	79.1	SMS-2	1,1, IR 8		90							
233	03	0930	25.7	79.4	EYW	RADAR							32	GOOD FIX.	
234	03	0930	25.8	79.3	MIA	RADAR							30	GOOD FIX.	
235	03	1003	25.9	79.4	MIA	RADAR							30	GOOD FIX.	
236	03	1102	26.0	79.5	MIA	RADAR							28	GOOD FIX.	
237	03	1104	26.1	79.5	NOAA	2/5	85	850MB	977	20	19		20	POORLY DEFINED.	
238	03	1105	26.1	79.6	EYW	RADAR									
239	03	1132	26.1	79.6	EYW	RADAR									
240	03	1135	26.1	79.5	MIA	RADAR							24	GOOD FIX.	
241	03	1200	26.3	79.7	SMS-2	2,1, VSBL 1		102							
242	03	1203	26.2	79.5	MIA	RADAR							24	GOOD FIX.	
243	03	1203	26.0	79.5	TPA	RADAR									
244	03	1234	26.2	79.5	MIA	RADAR							24	FAIR FIX.	
245	03	1235	26.2	79.5	TPA	RADAR							40	POOR FIX.	
246	03	1300	26.4	79.6	SMS-2	1, VSBL 1									
247	03	1305	26.3	79.5	TPA	RADAR							45	POOR FIX.	
248	03	1307	26.5	79.5	MIA	RADAR							24	GOOD FIX.	
249	03	1330	26.6	79.6	MIA	RADAR									
250	03	1332	26.3	79.6	TPA	RADAR							35	POOR FIX.	
251	03	1400	26.6	79.6	SMS-2	1, VSBL 1									
252	03	1405	26.7	79.5	TPA	RADAR							20	POOR FIX.	
253	03	1412	26.5	79.8	MIA	RADAR							35	POOR FIX.	
254	03	1432	26.7	79.7	MIA	RADAR							26	GOOD FIX.	
255	03	1435	26.7	79.4	TPA	RADAR							25		
256	03	1445	26.7	79.7	AF	1/3	53	65	700MB	973	831	15	11	30	OPEN SOUTH AND WEST.
257	03	1500	26.8	79.9	SMS-2	2,1, VSBL 1		02							
258	03	1506	27.0	79.8	MIA	RADAR							30	GOOD FIX.	
259	03	1533	26.9	80.0	MIA	RADAR							26	GOOD FIX.	
260	03	1600	27.0	80.1	SMS-2	1, VSBL 1									
261	03	1605	27.0	80.1	MIA	RADAR							20	GOOD FIX.	
262	03	1605	27.0	80.2	TPA	RADAR							20	GOOD FIX.	
263	03	1622	27.0	80.1	TPA	RADAR									
264	03	1635	27.0	80.1	MIA	RADAR							26	GOOD FIX.	
265	03	1706	27.1	80.1	MIA	RADAR							22	FAIR FIX.	

Table 6 continued.

Hurricane David continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX.WIND(KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP: (°C)		EYE		REMARKS
			LAT. °N	Lon. °W			FLT. LVL.	ACFT. SFC.	ALT.			IN.	OUT.	C=CIR. E=ELIP.	DIA. N.MI.	
266	03	1708	27.1	80.1	TPA	RADAR									25	
267	03	1730	27.1	80.2	MIA	RADAR									28	FAIR FIX.
268	03	1735	27.2	80.2	TPA	RADAR									25	POOR FIX.
269	03	1800	27.3	80.4	SMS-2	2,1,VSBL 1			102							
270	03	1802	27.2	80.2	TPA	RADAR									20	FAIR FIX.
271	03	1804	27.2	80.4	MIA	RADAR									20	FAIR FIX.
272	03	1835	27.3	80.4	MIA	RADAR									20	POOR FIX.
273	03	1835	27.3	80.3	TPA	RADAR									20	GOOD FIX.
274	03	1900	27.4	80.4	SMS-2	1,VSBL 1										
275	03	1904	27.4	80.4	TPA	RADAR									19	POOR FIX.
276	03	1904	27.2	80.4	MIA	RADAR									18	POOR FIX.
277	03	1934	27.4	80.4	MIA	RADAR									20	GOOD FIX.
278	03	1935	27.4	80.4	TPA	RADAR										
279	03	2000	27.5	80.6	SMS-2	1,VSBL 1									20	GOOD FIX.
280	03	2035	27.4	80.5	MIA	RADAR									20	GOOD FIX.
281	03	2035	27.5	80.4	TPA	RADAR									20	GOOD FIX.
282	03	2035	27.6	80.5	DAB	RADAR										
283	03	2100	27.6	80.6	SMS-2	2,1,VSBL 1			102							
284	03	2105	27.5	80.6	MIA	RADAR									15	GOOD FIX.
285	03	2105	27.5	80.5	TPA	RADAR									20	GOOD FIX.
286	03	2132	27.6	80.6	DAB	RADAR									16	GOOD FIX.
287	03	2133	27.6	80.6	MIA	RADAR									14	GOOD FIX.
288	03	2135	27.6	80.5	TPA	RADAR									18	GOOD FIX.
289	03	2200	27.7	80.6	SMS-2	1,VSBL 1										
290	03	2200	27.7	80.6	DAB	RADAR									12	GOOD FIX.
291	03	2202	27.7	80.6	TPA	RADAR									18	GOOD FIX.
292	03	2206	27.6	80.6	MIA	RADAR									18	GOOD FIX.
293	03	2231	27.7	80.6	DAB	RADAR									14	GOOD FIX.
294	03	2235	27.6	80.6	MIA	RADAR									12	GOOD FIX.
295	03	2235	27.7	80.6	TPA	RADAR									18	GOOD FIX.
296	03	2300	27.7	80.6	DAB	RADAR									12	GOOD FIX.
297	03	2301	27.7	80.5	TPA	RADAR									14	GOOD FIX.
298	03	2308	27.7	80.6	MIA	RADAR									12	GOOD FIX.
299	03	2334	27.8	80.5	MIA	RADAR									18	GOOD FIX.
300	03	2335	27.8	80.5	TPA	RADAR									14	GOOD FIX.
301	03	2335	27.8	80.5	DAB	RADAR									10	FAIR FIX.
302	04	0001	27.9	80.5	DAB	RADAR									10	GOOD FIX.
303	04	0002	27.9	80.5	TPA	RADAR									12	GOOD FIX.

57

Table 6 continued.

## Hurricane David continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX.WIND(KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP:(°C)		EYE		REMARKS
			LAT. °N	LON. °W			FLT. LVL.	ACFT. SFC. ALT.	IN.			OUT.	C-CIR. E-ELIP.	DIA. N.MI.		
304	04	0003	27.9	80.6	MIA	RADAR									19	GOOD FIX.
305	04	0030	28.0	80.5	SMS-2	1,1, IR 8		102								
306	04	0031	28.0	80.5	DAB	RADAR									20	GOOD FIX.
307	04	0033	28.0	80.6	MIA	RADAR									21	GOOD FIX.
308	04	0035	28.0	80.5	TPA	RADAR									15	GOOD FIX.
309	04	0058	28.1	80.6	DAB	RADAR									12	GOOD FIX.
310	04	0101	28.1	80.5	TPA	RADAR									15	GOOD FIX.
311	04	0104	28.0	80.6	MIA	RADAR									20	GOOD FIX.
312	04	0130	28.1	80.5	DAB	RADAR									12	GOOD FIX.
313	04	0133	28.1	80.6	MIA	RADAR									29	POOR FIX.
314	04	0135	28.1	80.5	TPA	RADAR									14	GOOD FIX.
315	04	0200	28.3	80.5	DAB	RADAR									12	GOOD FIX.
316	04	0201	28.3	80.4	TPA	RADAR									15	GOOD FIX.
317	04	0208	28.2	80.5	MIA	RADAR									30	POOR FIX.
318	04	0230	28.3	80.6	DAB	RADAR									15	GOOD FIX.
319	04	0233	28.3	80.6	MIA	RADAR									20	POOR FIX.
320	04	0235	28.4	80.5	TPA	RADAR									12	GOOD FIX.
321	04	0246	28.5	80.6	NOAA	3/5	80		850MB			20	C	20	GOOD FIX.	
322	04	0301	28.4	80.6	TPA	RADAR									15	GOOD FIX.
323	04	0301	28.4	80.6	DAB	RADAR									12	GOOD FIX.
324	04	0315	28.5	80.6	NOAA											RADAR EYE.
325	04	0330	28.4	80.6	SMS-2	1,1, IR 8		90								
326	04	0335	28.6	80.6	TPA	RADAR									16	GOOD FIX.
327	04	0335	28.6	80.6	DAB	RADAR										
328	04	0400	28.6	80.7	DAB	RADAR									10	
329	04	0404	28.7	80.8	TPA	RADAR									22	GOOD FIX.
330	04	0431	28.7	80.7	DAB	RADAR									10	
331	04	0433	28.6	80.6	TPA	RADAR									15	GOOD FIX.
332	04	0500	28.8	80.8	DAB	RADAR									12	GOOD FIX.
333	04	0503	28.8	80.6	TPA	RADAR									12	GOOD FIX.
334	04	0530	28.8	80.8	DAB	RADAR									15	GOOD FIX.
335	04	0535	28.9	80.7	TPA	RADAR									12	GOOD FIX.
336	04	0544	28.9	80.9	NOAA		70						C	15	CLOSED WALL.	
337	04	0600	28.9	80.8	DAB	RADAR									12	GOOD FIX.
338	04	0601	28.9	80.7	TPA	RADAR									12	GOOD FIX.
339	04	0630	29.1	80.7	SMS-2	1,1, IR 8		90							11	GOOD FIX.
340	04	0631	29.0	80.7	TPA	RADAR									11	GOOD FIX.

Table 6 continued.

Hurricane David continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX.WIND(KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE		REMARKS
			LAT. N	LONG. W			FLT. LVL.	ACFT. SFC. ALT.	IN.			OUT.	C=CIR. E-ELIP.	DIA. N.MI.		
341	04	0640	29.0	80.8	DAB	RADAR								12		GOOD FIX.
342	04	0700	29.1	80.9	DAB	RADAR								12		GOOD FIX.
343	04	0701	29.2	80.7	TPA	RADAR								12		GOOD FIX.
344	04	0730	29.2	80.7	TPA	RADAR								12		GOOD FIX.
345	04	0730	29.2	80.8	DAB	RADAR								12		GOOD FIX.
346	04	0735	29.2	80.8	AYS	RADAR										GOOD FIX.
347	04	0800	29.3	80.8	DAB	RADAR								15		GOOD FIX.
348	04	0808	29.3	80.8	AYS	RADAR								22		GOOD FIX.
349	04	0830	29.4	80.7	DAB	RADAR								15		GOOD FIX.
350	04	0835	29.6	80.7	AYS	RADAR										GOOD FIX.
351	04	0900	29.5	80.7	DAB	RADAR								15		GOOD FIX.
352	04	0901	29.5	80.7	TPA	RADAR								12		GOOD FIX.
353	04	0901	29.6	80.7	AYS	RADAR								20		GOOD FIX.
354	04	0929	29.6	80.7	DAB	RADAR								15		GOOD FIX.
355	04	0930	29.8	80.7	SMS-2	1,1, IR 8		90								
356	04	0934	29.7	80.7	AYS	RADAR								18		GOOD FIX. ELLIPTICAL EYE.
357	04	1034	29.9	80.7	DAB	RADAR								26		GOOD FIX.
358	04	1035	30.0	80.7	AYS	RADAR								14		GOOD FIX.
359	04	1100	30.0	80.8	DAB	RADAR										
360	04	1106	30.0	80.7	AYS	RADAR								12		GOOD FIX.
361	04	1134	30.1	80.8	DAB	RADAR								23		GOOD FIX.
362	04	1135	30.2	80.8	AYS	RADAR								15		FAIR FIX.
363	04	1142	30.1	80.9	AF	1/2	46		700MB	975	2871	14	12	10		OPEN NORTH.
364	04	1200	30.2	80.8	AYS	RADAR								12		OPEN WEST.
365	04	1200	30.2	80.9	DAB	RADAR										
366	04	1200	30.2	80.9	SMS-2	2,1, VSBL 1		90								
367	04	1230	30.3	80.9	AYS	RADAR								12		FAIR FIX. OPEN WEST.
368	04	1234	30.3	81.0	DAB	RADAR										
369	04	1300	30.4	80.9	DAB	RADAR								15		FAIR FIX. OPEN WEST.
370	04	1300	30.4	80.8	AYS	RADAR								12		FAIR FIX.
371	04	1330	30.4	80.8	AYS	RADAR								10		GOOD FIX.
372	04	1335	30.5	80.9	DAB	RADAR								12		GOOD FIX.
373	04	1400	30.6	80.9	DAB	RADAR								10		FAIR FIX.
374	04	0401	30.6	80.9	CHS	RADAR										
375	04	1414	30.6	80.9	AF	1/3	55			975		13		C	10	CLOSED WALL.
376	04	1430	30.8	81.0	DAB	RADAR								12		POOR FIX.
377	04	1430	30.7	80.8	AYS	RADAR								10		GOOD FIX.
378	04	1435	30.6	80.9	CHS	RADAR										



Table 6 continued

Hurricane David continued.

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE C=CIR. DIA. E=ELIP.N.MI.	REMARKS	
			LAT. °N	LON. °W			FLT. LVL.	ACFT. SFC ALT.	IN.			OUT.				
379	04	1457	30.8	80.9	DAB	RADAR								10	FAIR FIX.	
380	04	1500	30.8	80.8	AYS	RADAR								8	GOOD FIX.	
381	04	1500	30.9	80.9	SMS-2	2,2,VSBL 1		84								
382	04	1515	30.8	80.9	AF	1/2			700MB	975	2862	13	11	C	12	CLOSED WALL.
383	04	1532	30.8	81.0	CHS	RADAR								13	GOOD FIX.	
384	04	1534	30.9	80.9	DAB	RADAR								10	GOOD FIX.	
385	04	1535	30.9	80.9	AYS	RADAR								13	GOOD FIX.	
386	04	1600	31.1	80.9	AYS	RADAR								10	GOOD FIX.	
387	04	1604	31.0	81.0	CHS	RADAR								10	GOOD FIX.	
388	04	1630	31.1	81.1	DAB	RADAR								10	POOR FIX.	
389	04	1630	31.1	80.9	AYS	RADAR								10	GOOD FIX.	
390	04	1700	31.2	80.9	AYS	RADAR								10	GOOD FIX.	
391	04	1702	31.4	81.1	CHS	RADAR								12	FAIR FIX.	
392	04	1730	31.3	81.2	CHS	RADAR								10	FAIR FIX.	
393	04	1732	31.3	81.0	AYS	RADAR								11	GOOD FIX.	
394	04	1800	31.5	81.0	AYS	RADAR								11	GOOD FIX.	
395	04	1800	31.4	81.2	CHS	RADAR								10	GOOD FIX.	
396	04	1800	31.6	81.0	SMS-2	2,1,VSBL 1		90								
397	04	1805	31.5	81.0	AYS	RADAR										
398	04	1822	31.5	81.2	NOAA	2/2		80				15	10	15	CLOSED WALL.	
399	04	1830	31.5	81.1	AYS	RADAR								8	GOOD FIX.	
400	04	1832	31.6	81.1	CHS	RADAR								8	GOOD FIX.	
401	04	1859	31.7	81.1	AYS	RADAR								8	GOOD FIX.	
402	04	1900	31.6	81.2	CHS	RADAR								10	GOOD FIX.	
403	04	1900	31.8	81.1	SMS-2	1,VSBL 1								6	GOOD FIX.	
404	04	1930	31.9	81.2	CHS	RADAR								10	GOOD FIX.	
405	04	1933	31.7	81.1	AYS	RADAR								10	GOOD FIX.	
406	04	1957	31.8	81.2	AYS	RADAR								8	GOOD FIX.	
407	04	1957	31.8	81.2	CHS	RADAR										
408	04	2030	31.9	81.4	CHS	RADAR								7	GOOD FIX.	
409	04	2033	31.9	81.2	AYS	RADAR								10	GOOD FIX.	
410	04	2057	31.9	81.2	AYS	RADAR										
411	04	2100	31.9	81.3	CHS	RADAR										
412	04	2100	32.0	81.1	SMS-2	1,VSBL 1										
413	04	2100	31.9	81.3	NOAA			70						10		
414	04	2130	32.0	81.3	AYS	RADAR								10	GOOD FIX.	
415	04	2130	32.0	81.2	CHS	RADAR										
416	04	2157	32.1	81.2	AYS	RADAR								7	GOOD FIX.	

Table 6 continued.

## Hurricane David continued.

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX.WIND(KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	ACFT. SFC.	ALT.			IN.	OUT.	C=CIR. DIA. E=ELIP.N.MI.		
417	04	2200	32.0	81.2	CHS	RADAR										GOOD FIX.
418	04	2230	32.1	81.2	CHS	RADAR									7	GOOD FIX.
419	04	2253	32.1	81.2	AYS	RADAR									5	GOOD FIX.
420	04	2300	32.2	81.2	CHS	RADAR										
421	04	2307	32.1	81.2	AYS	RADAR										
422	04	2335	32.2	81.3	AYS	RADAR										
423	04	2346	32.2	81.2	NOAA	2/4	65						C	8		CLOSED WALL.
424	04	2357	32.3	81.1	AYS	RADAR										GOOD FIX.
425	05	0000	32.3	81.1	AHN	RADAR								10		GOOD FIX.
426	05	0030	32.3	81.2	CHS	RADAR								4		FAIR FIX.
427	05	0030	32.3	81.1	AYS	RADAR								6		GOOD FIX.
428	05	0032	32.3	81.2	AHN	RADAR								10		GOOD FIX.
429	05	0100	32.5	81.0	AHN	RADAR								8		GOOD FIX.
430	05	0100	32.4	81.1	AYS	RADAR								4		GOOD FIX.
431	05	0100	32.4	81.1	CHS	RADAR								4		FAIR FIX.
432	05	0130	32.6	81.1	CHS	RADAR								3		POOR FIX.
433	05	0131	32.5	81.0	AYS	RADAR								5		GOOD FIX.
434	05	0132	32.5	81.0	AHN	RADAR								8		GOOD FIX.
435	05	0159	32.6	81.0	AYS	RADAR								4		POOR FIX.
436	05	0200	32.6	80.9	AHN	RADAR								10		GOOD FIX.
437	05	0200	32.6	81.1	CHS	RADAR								4		FAIR FIX.
438	05	0230	32.7	81.0	CHS	RADAR								4		FAIR FIX.
439	05	0231	32.7	80.9	AHN	RADAR								8		GOOD FIX.
440	05	0235	32.7	81.0	AYS	RADAR								3		POOR FIX.
441	05	0300	32.8	81.0	CHS	RADAR								4		FAIR FIX.
442	05	0300	32.8	80.8	AHN	RADAR								8		POOR FIX.
443	05	0330	32.9	80.9	CHS	RADAR								3		POOR FIX.
444	05	0430	33.1	81.0	CHS	RADAR								3		POOR FIX.
445	05	0430	33.0	81.0	AGS	RADAR										POOR FIX.
446	05	0500	33.3	80.9	CHS	RADAR								3		POOR FIX.
447	05	0534	33.2	80.9	AGS	RADAR								10		POOR FIX.
448	05	0600	33.3	80.8	SMS-2	3, IR 8										
449	05	0608	33.3	80.7	ILM	RADAR								18		GOOD FIX.
450	05	0630	33.4	80.8	ILM	RADAR								18		GOOD FIX.
451	05	0637	33.4	80.9	AGS	RADAR								10		POOR FIX.
452	05	0702	33.4	80.8	ILM	RADAR								24		GOOD FIX.
453	05	0730	33.5	80.8	ILM	RADAR								24		GOOD FIX.
454	05	0810	33.5	80.9	ILM	RADAR								30		FAIR FIX.
455	05	0833	34.1	80.7	CHS	RADAR								18		POOR FIX.
456	05	0833	33.6	81.0	ILM	RADAR								30		FAIR FIX.
457	05	0910	33.7	81.0	ILM	RADAR								40		FAIR FIX.
458	05	0930	33.8	81.1	ILM	RADAR								40		FAIR FIX.
459	05	1020	34.0	81.2	ILM	RADAR								40		POOR FIX.
460	05	1039	34.1	81.3	ILM	RADAR								40		POOR FIX.
461	05	1115	34.5	81.6	ILM	RADAR								40		20° SPIRAL OVERLAY.
462	05	1135	34.7	81.5	ILM	RADAR								40		20° SPIRAL OVERLAY.

(NOTE: RADAR FIXES FROM FORT-DE-FRANCE, MARTINIQUE WERE TAKEN, BUT WERE NOT AVAILABLE FOR THIS TABULATION.)

Table 6 continued.

TROPICAL STORM ELENA  
29 AUGUST - 1 SEPTEMBER 1979

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX.WIND(KT)		ACFT.	CENTER FIXES		EYE C=CIR. DIA. E=ELIP.N.MI.	REMARKS
			LAT.	LON.			FLT.	MIN. PRESS.		MIN. 700MB	TEMP. (°C)		
			°N	°W			LVL.	SFC.		ALT.	(MB)		
1	29	1303	25.3	87.0	SMS-2	2,4,VSBL 1		25					
2	29	1930	26.0	87.5	SMS-2	2,5,VSBL 1		25					
3	29	2308	25.6	89.0	AF	5/2		387M	1011		26		
4	30	0100	25.7	89.3	SMS-2	2,5, IR 8							
5	30	0530	25.5	89.0	SMS-2	5, IR 8							
6	30	0630	25.5	89.0	SMS-2	2,5, IR 8							
7	30	1300	26.7	90.6	SMS-2	2,5,VSBL 1							
8	30	1500	27.2	91.5	SMS-2	6,VSBL 2							
9	30	1620	27.0	91.7	AF	5/1	44	40	177M	1006		27	
10	30	1930	27.0	92.1	SMS-2	2,5,VSBL 1							
11	30	2205	26.4	92.7	AF	5/10	26	30	177M	1004		24	30
12	31	0000	26.5	92.8	SMS-2	2,5, IR 8							
13	31	0600	26.5	94.0	SMS-2	5, IR 8							
14	31	0700	26.5	94.0	SMS-2	2,5, IR 8							
15	31	0910	27.0	94.0	AF	4/10	15			1011			SECOND CENTER 27.3N 94.2W.
16	31	1230	27.0	94.5	SMS-2	2,5,VSBL 1							
17	31	1726	27.3	94.3	AF	2/5	19	25	329M	1008		25	C 30
18	31	1730	27.6	94.6	SMS-2	2,5,VSBL 1							
19	01	0000	27.7	94.9	SMS-2	2,5, IR 8							
20	01	0228	27.7	95.2	AF	1/5	23		393M	998		25	25
21	01	0507	28.1	95.6	AF	1/5	28		402M	1001		25	25
22	01	0600	28.1	95.3	SMS-2	2,5, IR 8							
23	01	1200	28.6	95.7	AF	5/5	35	35	214M	1008		26	25
24	01	1230	28.0	95.8	SMS-2	2,5,VSBL 1							
25	01	1830	29.0	95.5	SMS-2	5,VSBL 1							

(NOTE: RADAR CENTER NOT DISCERNIBLE.)

TABLE 6 Continued.

HURRICANE FREDERIC  
29 AUGUST - 13 SEPTEMBER 1979

## CENTER FIXES

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)		ACFT. ALT.	MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	SPC.				IN.	OUT.	C=CIR. DIA. E=ELIP. N.MI.		
1	29	0730	11.0	26.0	SMS-2			25								
2	29	1131	11.1	27.9	SMS-2			30								
3	29	1730	11.3	30.5	SMS-2			30								
4	29	2330	11.3	32.5	SMS-2			33								
5	30	0530	11.5	34.2	SMS-2			33								
6	30	1231	11.5	36.8	SMS-2			33								
7	30	1730	11.5	38.0	SMS-2			40								
8	30	2330	11.5	39.5	SMS-2			45								
9	31	0600	11.5	41.4	SMS-2			45								
10	31	1130	12.0	43.0	SMS-2			55								
11	31	1830	12.0	45.0	SMS-2			55								
12	31	2330	12.8	46.8	SMS-2			55								
13	1	0600	13.1	48.3	SMS-2			65								
14	1	1200	13.4	50.6	SMS-2			65								
15	1	1730	14.1	52.8	SMS-2			65								
16	2	0000	14.1	54.1	SMS-2			40								
17	2	0600	13.9	56.1	SMS-2			60								
18	2	1200	15.6	57.2	AF		35	70	700MB	996	3077	16	18			
19	2	1300	15.5	57.5	SMS-2			60								
20	2	1406	15.7	57.9	AF		23	75	700MB	1001	3112					
21	2	1556	15.8	58.3	AF		31	35	700MB		3090					
22	2	1730	16.4	58.9	SMS-2	3, VSBL 1										
23	2	1814	15.9	58.9	AF	2/2	27	75	700MB	999		16	15			
24	2	1830	16.4	59.1	SMS-2	2, 3, VSBL 1										
25	2	2130	17.0	60.0	SMS-2	2, 3, VSBL 1										
26	2	2330	17.2	60.2	SMS-2	1, 5, IR 8										
27	3	0030	16.7	59.2	AF	4/10			700MB	1002	3079	12	8			
28	3	0330	17.5	60.5	SMS-2	2, 5, IR 8										
29	3	0543	17.1	60.6	AF	5/5	74		418M	995		24	23			
30	3	0600	17.4	61.0	SMS-2	2, 5, IR 8										
31	3	0900	17.1	61.3	SMS-2	1, 3, IR 8										
32	3	1130	17.3	61.7	SMS-2	2, 3, VSBL 1										
33	3	1241	17.3	62.1	AF	1/2	65	70	396M	999		25	23	C	10	POORLY DEFINED.
34	3	1530	17.5	62.7	SMS-2	2, 5, VSBL 1										
35	3	1703	17.7	62.8	AF	2/3	34		700MB	1000	3093	15	10		10	POORLY DEFINED.
36	3	1830	17.8	63.2	SMS-2	2, 5, VSBL 1										
37		2000	18.1	63.1	RADAR	MJSJ										POSSIBLE CENTER.

CI=40.7  
WIND 65.7

Table 6 continued.

Hurricane Frederic continued.

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. TEMP. (°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	SFC.	ACFT. ALT.		700MB HT. (M)	IN.	OUT.	C=CIR. DIA. E=ELIP. N.MI.	
38	3	2030	18.2	63.2	RADAR										
39	3	2130	18.3	63.3	RADAR										
40	3	2130	18.0	63.8	SMS-2			55							
41	3	2230	18.3	63.2	RADAR									2	10° SPIRAL OVERLAY. POOR FIX.
42	3	2300	18.2	63.3	RADAR									2	GOOD FIX.
43	3	2330	18.2	63.4	RADAR									3	GOOD FIX.
44	3	2357	18.0	63.8	AF		45	700MB	1001	3095	15	11			POORLY DEFINED.
45	4	0000	18.0	64.3	SMS-2			55							
46	4	0000	18.1	63.5	RADAR									3	GOOD FIX.
47	4	0100	18.1	63.5	RADAR									5	15° SPIRAL OVERLAY. GOOD FIX.
48	4	0130	18.1	63.3	RADAR									5	15° SPIRAL OVERLAY. FAIR FIX.
49	4	0230	18.2	63.6	RADAR									6	FAIR FIX.
50	4	0300	18.1	63.9	RADAR									5	FAIR FIX.
51	4	0300	18.2	65.0	SMS-2			55							
52	4	0330	18.1	63.9	RADAR										CENTER VISIBLE.
53	4	0335	17.8	64.5	AF		47	700MB		3124					
54	4	0400	18.1	63.5	RADAR	MJSJ								3	GOOD FIX.
55	4	0500	18.2	64.8	AF	3/7	34	700MB		3112	12	10			
56	4	0600	18.4	65.2	SMS-2	2,5, IR 8		55							
57	4	0900	18.4	65.7	SMS-2	1,5, IR 8		55							
58	4	1230	18.4	65.8	SMS-2	2,5, IR 8		55							
59	4	1530	18.4	66.1	SMS-2	2,3, VSBL 1		45							
60	4	1730	18.4	66.9	SMS-2	2,5, VSBL 1		45							
61	4	2100	18.3	67.5	SMS-2	2,5, VSBL 1		45							
62	5	0000	18.0	67.9	SMS-2	2,5, IR 8		45							
63	5	0022	18.1	67.8	AF	1/2	41	415M	1011		23	23			
64	5	0300	18.1	68.2	SMS-2	2,5, IR 8		45							
65	5	0630	17.7	68.6	SMS-2	1,5, IR 8		45							
66	5	0713	17.3	69.3	AF	4/15	25	427M	1008		24	23			
67	5	0930	17.7	69.0	SMS-2	2,5, IR 8		35							
68	5	1200	17.2	69.3	SMS-2	2,5, IR 8		30							
69	5	1230	17.2	69.1	AF	2/5		30			25		C	20	POORLY DEFINED.
70	5	1511	17.4	69.1	AF	2/5		18			25		C	20	POORLY DEFINED.
71	5	1700	17.9	69.4	AF	2/5		25			25		C	15	POORLY DEFINED.
72	5	1730	17.1	69.5	SMS-2	2,5, VSBL 1		30							
73	5	2100	18.2	69.6	SMS-2	2,5, VSBL 1		30							
74	6	0030	18.3	69.8	SMS-2	2,5, IR 8		33							
75	6	0300	18.7	70.2	SMS-2	1,5, IR 8		35							

Table 6 continued.

## Hurricane Frederic continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP: (°C)		EYE C=CIR. DIA. E=ELIP. N.MI.	REMARKS
			LAT. °N	LON. °W			FLT. LVL.	ACFT. SFC. ALT.	IN.			OUT.			
76	6	0630	18.5	70.0	SMS-2										
77	6	0900	18.7	70.0	SMS-2										
78	6	1200	19.3	70.4	SMS-2										
79	7	0030	19.3	73.9	SMS-2										
80	7	1830	20.8	77.5	SMS-2										
81	8	1230	21.5	80.0	SMS-2										
82	8	1800	21.7	80.1	SMS-2										
83	9	0000	22.0	81.0	SMS-2										
84	9	0600	22.0	81.5	SMS-2										
85	9	1230	22.2	82.5	SMS-2										
86	9	1400	22.6	81.6	RADAR										POSSIBLE CENTER.
87	9	1415	22.5	81.6	RADAR										POSSIBLE CENTER.
88	9	1435	22.5	81.6	RADAR										POSSIBLE CENTER.
89	9	1510	22.7	81.6	RADAR										POSSIBLE CENTER.
90	9	1535	22.6	81.6	RADAR										POSSIBLE CENTER.
91	9	1611	22.8	81.5	RADAR										POSSIBLE CENTER.
92	9	1635	22.7	81.7	RADAR										POSSIBLE CENTER.
93	9	1710	22.5	82.0	RADAR										POSSIBLE CENTER.
94	9	1735	22.5	82.1	RADAR										POSSIBLE CENTER.
95	9	1800	22.2	83.3	SMS-2										
96	9	1814	22.2	82.5	RADAR										POSSIBLE CENTER.
97	9	1835	22.3	82.5	RADAR										POSSIBLE CENTER.
98	9	1912	22.4	82.4	RADAR										POSSIBLE CENTER.
99	9	1935	22.4	82.4	RADAR										POSSIBLE CENTER.
100	9	2011	22.3	82.5	RADAR										POSSIBLE CENTER.
101	9	2300	22.0	83.2	SMS-2										
102	10	0000	22.0	83.2	SMS-2										
103	10	0230	22.8	82.6	RADAR										POSSIBLE CENTER.
104	10	0300	--	--	SMS-2										
105	10	0510	22.6	82.6	RADAR										POSSIBLE CENTER.
106	10	0530	22.6	82.6	RADAR										POSSIBLE CENTER.
107	10	0600	22.5	82.5	SMS-2										
108	10	0610	22.7	82.7	RADAR										POSSIBLE CENTER.
109	10	0630	22.7	83.7	RADAR										POSSIBLE CENTER.
110	10	0710	22.7	83.0	RADAR										FAIR FIX.
111	10	0730	22.8	83.0	RADAR										FAIR FIX.
112	10	0810	22.8	83.0	RADAR										POOR FIX.
113	10	0830	22.8	83.0	RADAR										POOR FIX.

Table 6 continued.

## Hurricane Frederic continued.

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KI)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE C=CIR. DIA. E=ELIP. N.MI.	REMARKS	
			LAT. °N	LONG. °W			FLT. LVL.	ACFT. SFC. ALT.	IN.			OUT.				
114	10	0930	22.8	82.9	RADAR	EYW									POSSIBLE CENTER.	
115	10	1200	22.5	82.6	SMS-2	5, VSBL 1										
116	10	1206	22.8	83.0	RADAR	EYW									POSSIBLE CENTER.	
117	10	1230	22.5	82.7	SMS-2	1, 5, VSBL 1		55								
118	10	1237	22.7	83.1	RADAR	EYW									POSSIBLE CENTER.	
119	10	1600	23.1	83.6	SMS-2	1, VSBL 1										
120	10	1800	23.2	83.8	SMS-2	1, 3, VSBL 1		60								
121	10	1812	23.2	83.4	RADAR	EYW									POSSIBLE CENTER.	
122	10	1835	23.2	83.4	RADAR	EYW									POSSIBLE CENTER.	
123	10	1912	23.2	83.5	RADAR	EYW									POSSIBLE CENTER.	
124	10	1935	23.2	83.5	RADAR	EYW									POSSIBLE CENTER.	
125	10	2011	23.3	83.5	RADAR	EYW									POSSIBLE CENTER.	
126	10	2035	23.4	83.6	RADAR	EYW									POSSIBLE CENTER.	
127	10	2115	23.3	83.7	RADAR	EYW									POSSIBLE EYE.	
128	10	2135	23.3	83.6	RADAR	EYW									POOR FIX. POSSIBLE EYE.	
129	10	2200	23.2	83.8	SMS-2	1, VSBL 1										
130	10	2210	23.3	83.6	RADAR	EYW							28		FAIR FIX.	
131	10	2230	23.3	83.7	RADAR	EYW							22		GOOD FIX.	
132	10	2310	23.4	83.7	RADAR	EYW							20		GOOD FIX.	
133	10	2334	23.4	83.7	RADAR	EYW							30		GOOD FIX.	
134	10	2345	23.5	83.9	AF	10/5	50	45	549M	985	26		C	20	OPEN WEST.	
135	11	0000	23.3	84.0	SMS-2	2, 5, IR 8		60								
136	11	0010	23.5	83.8	RADAR	EYW								30	GOOD FIX.	
137	11	0030	23.5	83.9	RADAR	EYW								34	GOOD FIX.	
138	11	0110	23.5	83.9	RADAR	EYW								32		
139	11	0130	23.5	83.8	RADAR	EYW								24		
140	11	0150	23.5	84.0	AF	5/5	41		700MB		2961	14	15	C	30	OPEN WEST.
141	11	0210	23.5	83.7	RADAR	EYW									20	FAIR FIX.
142	11	0230	23.5	83.7	RADAR	EYW									25	FAIR FIX.
143	11	0300	23.6	84.2	SMS-2	5, IR 8										
144	11	0310	23.5	83.7	RADAR	EYW									30	FAIR FIX.
145	11	0330	23.6	83.8	RADAR	EYW									28	FAIR FIX.
146	11	0345	23.8	84.1	AF	5/5	50		700MB		2964	14	11		30	OPEN SOUTH.
147	11	0410	23.6	83.8	RADAR	EYW									45	FAIR FIX.
148	11	0430	23.7	83.9	RADAR	EYW									30	GOOD FIX.
149	11	0501	23.8	84.3	AF	5/5	45		700MB	985	2952	15	16	C	30	CLOSED WALL.
150	11	0510	23.5	84.0	RADAR	EYW									40	FAIR FIX.
151	11	0530	23.6	84.1	RADAR	EYW									28	GOOD FIX.





TABLE 6 Continued.

Hurricane Frederic continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. TEMP: (°C)		EYE		REMARKS
			LAT. N	LN. W			FLT. LVL.	ACFT. SFC.	ALT.		700MB HT. (M)	IN.	OUT.	C=CIR. DIA. E=ELIP. N.MI.	
190	12	0723	26.7	86.6	AF	5/5	95		700MB	950	2661	19	11	17	CLOSED WALL.
191	12	0800	26.6	86.5	SMS-2	1, IR 8									
192	12	0843	26.8	86.7	AF	2/2	90		700MB	948	2655	21	14	25	OPEN SOUTH.
193	12	0900	26.9	86.6	SMS-2	2,1, IR 8		102							
194	12	1010	27.1	86.7	RADAR	AQQ									FAIR FIX.
195	12	1035	27.2	86.8	RADAR	AQQ									FAIR FIX.
196	12	1035	27.2	86.8	RADAR	NPA									FAIR FIX.
197	12	1051	27.2	86.9	AF		105		700MB	945	2608				
198	12	1100	27.3	86.8	RADAR	AQQ									GOOD FIX.
199	12	1134	27.5	86.8	RADAR	NPA									POOR FIX.
200	12	1135	27.3	87.1	RADAR	AQQ									FAIR FIX.
201	12	1157	27.4	86.9	AF	5/2	95	90	700MB	943	2620	21	13	C 10	CLOSED WALL.
202	12	1200	27.3	86.9	SMS-2	2,2, VSBL 1		(109)							
203	12	1210	27.6	86.9	RADAR	NPA									FAIR FIX.
204	12	1235	27.3	86.8	RADAR	AQQ									POOR FIX.
205	12	1235	27.6	86.9	RADAR	NPA									FAIR FIX.
206	12	1300	27.4	87.2	RADAR	AQQ									FAIR FIX.
207	12	1305	27.6	87.1	RADAR	NPA									POOR FIX.
208	12	1328	27.6	87.0	AF	5/3	90	90	700MB	947	2641			C 10	CLOSED WALL
209	12	1330	27.7	87.1	RADAR	NPA									POOR FIX.
210	12	1335	27.3	87.2	RADAR	AQQ									FAIR FIX.
211	12	1400	27.5	87.3	RADAR	AQQ									POOR FIX.
212	12	1404	27.7	87.1	RADAR	NPA								20	GOOD FIX.
213	12	1431	27.9	87.2	RADAR	NPA									FAIR FIX.
214	12	1500	27.7	87.2	RADAR	AQQ									POOR FIX.
215	12	1500	27.9	87.2	SMS-2	2,1, VSBL 1		(109)							
216	12	1503	27.9	87.3	RADAR	NPA									
217	12	1517	27.9	87.4	NOAA	2/2	95	85	850MB	952		21	18	35	OPEN SOUTHEAST.
218	12	1532	28.0	87.3	RADAR	NPA									GOOD FIX.
219	12	1604	28.0	87.3	RADAR	NPA									GOOD FIX.
220	12	1610	28.1	87.7	RADAR	AQQ									
221	12	1622	28.1	87.4	NOAA										
222	12	1634	28.1	87.4	RADAR	NPA								28	GOOD FIX.
223	12	1635	28.1	87.6	RADAR	AQQ									15° SPIRAL OVERLAY.
224	12	1700	28.2	87.4	RADAR	AQQ									15° SPIRAL OVERLAY.
225	12	1703	28.2	87.4	RADAR	NPA								26	GOOD FIX.
226	12	1732	28.3	87.4	RADAR	NPA									FAIR FIX.
227	12	1755	28.4	87.6	NOAA	2/2	110	85	850MB	950		20	19	40	OPEN SOUTHWEST.

TABLE 6 Continued.

Hurricane Frederic continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. TEMP. (°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	ACFT. SFC. ALT.	700MB HT. (M)		IN.	OUT.	C=CIR. DIA.	E=ELIP. N.MI.	
228	12	1800	28.4	87.4	SMS-2	2,1,VSBL 1									
229	12	1805	28.3	87.5	RADAR	NPA									POOR FIX. OPEN SOUTH.
230	12	1810	28.4	87.5	RADAR	AQQ									POOR FIX.
231	12	1830	28.5	87.5	RADAR	NPA									POOR FIX. OPEN SOUTH.
232	12	1835	28.4	87.5	RADAR	MOB									
233	12	1835	28.4	87.7	RADAR	AQQ									POOR FIX.
234	12	1902	28.6	87.6	RADAR	NPA									POOR FIX. OPEN SOUTH.
235	12	1910	28.7	87.6	RADAR	AQQ									POOR FIX.
236	12	1930	28.7	87.6	RADAR	NPA								30	GOOD FIX.
237	12	1935	28.6	87.7	RADAR	AQQ									POOR FIX.
238	12	2000	28.8	87.8	SMS-2	2,1,VSBL 4		115							
239	12	2003	28.8	87.7	RADAR	NPA									POOR FIX. OPEN SOUTHEAST.
240	12	2010	28.8	87.8	RADAR	AQQ									POOR FIX.
241	12	2030	28.9	87.8	RADAR	NPA									GOOD FIX. OPEN SOUTHEAST.
242	12	2035	29.0	87.7	RADAR	MOB									FAIR FIX.
243	12	2035	28.8	87.9	RADAR	AQQ									FAIR FIX.
244	12	2035	28.9	87.8	AF		60	70	700MB		2622				
245	12	2104	29.0	87.7	RADAR	NPA									POOR FIX. EYE OPEN.
246	12	2110	29.0	88.0	RADAR	AQQ									POOR FIX.
247	12	2110	29.0	87.9	AF	2/3	60	70	700MB	946	2626	18	16	C	20
248	12	2133	29.1	87.8	RADAR	NPA									30
249	12	2135	29.2	87.9	RADAR	MOB									GOOD FIX. OPEN SOUTH HALF.
250	12	2135	29.0	88.0	RADAR	AQQ									POOR FIX.
251	12	2137	29.2	87.6	RADAR	SIL									22
252	12	2200	29.2	87.8	SMS-2	2,1,VSBL 1		115							
253	12	2201	29.2	87.9	RADAR	NPA									26
254	12	2205	29.3	87.7	RADAR	SIL									35
255	12	2221	29.3	87.9	AF		75	110	700MB		2625				
256	12	2234	29.3	87.9	RADAR	MOB									
257	12	2234	29.3	87.8	RADAR	NPA									35
258	12	2235	29.4	88.2	RADAR	AQQ									GOOD FIX. EYE CLOSED.
259	12	2235	29.4	87.8	RADAR	SIL									POOR FIX.
260	12	2301	29.3	87.8	RADAR	NPA									25
261	12	2308	29.5	87.9	RADAR	SIL									40
262	12	2309	29.6	88.0	AF	2/3	87	110	700MB	946	2620	17	15	E01/20/12	30
263	12	2330	29.6	87.7	SMS-2	2,1,VSBL 1		115							
264	12	2334	29.6	87.9	RADAR	SIL									40
265	12	2335	29.4	87.9	RADAR	NPA									FAIR FIX. OPEN SOUTH HALF.

57

109

TABLE 6 Continued.

## Hurricane Frederic continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP: (°C)		EYE		REMARKS
			LAT. °N	LON. °W			FLT. LVL.	ACFT. SFC.	ALT.			IN.	OUT.	C=CIR. DIA. E=ELIP. N.MI.		
266	13	0001	29.5	88.0	RADAR	NPA									E04/45/35	
267	13	0001	29.7	87.9	RADAR	SIL									25	FAIR FIX. OPEN SOUTH.
268	13	0014	29.7	88.1	NOAA	1/3	138			946		25	23	C	50	CLOSED WALL.
269	13	0032	29.6	88.1	RADAR	NPA									35	FAIR FIX.
270	13	0059	29.9	88.0	RADAR	SIL									30	FAIR FIX.
271	13	0100	29.9	87.9	SMS-2	1, IR 8										
272	13	0101	29.7	88.1	RADAR	NPA									40	GOOD FIX.
273	13	0130	29.9	88.1	RADAR	NPA									35	GOOD FIX.
274	13	0131	29.9	88.0	RADAR	SIL									30	GOOD FIX.
275	13	0131	29.7	88.0	RADAR	MOB										FAIR FIX.
276	13	0200	30.2	87.9	SMS-2	1, IR 8										
277	13	0202	30.0	88.2	RADAR	NPA									35	GOOD FIX.
278	13	0202	30.1	88.1	RADAR	SIL									25	FAIR FIX. OPEN EAST.
279	13	0208	30.1	88.3	NOAA	2/5	118		850MB	946		23	22	C	40	OPEN SOUTHEAST.
280	13	0230	30.4	88.1	SMS-2	2,1, IR 8		115								
281	13	0231	30.1	88.2	RADAR	NPA									35	GOOD FIX.
282	13	0232	29.8	87.9	RADAR	MOB										FAIR FIX.
283	13	0233	30.2	88.1	RADAR	SIL									25	FAIR FIX.
284	13	0248	30.1	88.3	NOAA	2/5	105		850MB	946		22	21	C	45	OPEN SOUTHWEST.
285	13	0258	30.2	88.2	RADAR	NPA									35	GOOD FIX.
286	13	0300	30.3	88.2	RADAR	SIL									25	FAIR FIX.
287	13	0300	30.5	88.1	SMS-2	2,1, IR 8										
288	13	0334	30.3	88.3	RADAR	NPA									35	GOOD FIX.
289	13	0335	30.5	88.3	RADAR	SIL									20	FAIR FIX.
290	13	0335	30.1	88.2	RADAR	MOB										GOOD FIX.
291	13	0357	30.5	88.4	RADAR	SIL									20	GOOD FIX. OPEN EAST - SOUTH.
292	13	0430	30.6	88.3	RADAR	SIL									20	FAIR FIX. OPEN SOUTH HALF.
293	13	0430	30.4	88.3	RADAR	NPA									36	GOOD FIX.
294	13	0435	30.3	88.3	RADAR	MOB										GOOD FIX.
295	13	0457	30.9	88.4	RADAR	SIL									15	POOR FIX. OPEN SOUTH HALF.
296	13	0501	30.5	88.3	RADAR	NPA									40	GOOD FIX.
297	13	0530	30.5	88.4	RADAR	NPA									36	FAIR FIX.
298	13	0530	30.9	88.6	RADAR	SIL									10	POSSIBLE CENTER.
299	13	0600	31.0	88.2	SMS-2	1, IR 8										
300	13	0601	30.8	88.6	RADAR	NPA									14	GOOD FIX.
301	13	0630	30.9	88.8	RADAR	NPA									10	FAIR FIX. EYE.
302	13	0633	30.9	88.7	RADAR	JAN									10	GOOD FIX. EYE.
303	13	0634	30.6	88.6	RADAR	MOB									7	FAIR FIX. EYE.
304	13	0634	31.0	88.6	RADAR	SIL									10	POSSIBLE CENTER.
305	13	0658	31.2	88.5	RADAR	SIL									10	
306	13	0704	31.1	88.7	RADAR	JAN										GOOD FIX.
307	13	0708	31.2	88.6	RADAR	NPA										15° SPIRAL OVERLAY.
308	13	0734	31.2	88.4	RADAR	JAN									10	FAIR FIX.
309	13	0735	30.9	88.5	RADAR	MOB										FAIR FIX. EYE.
310	13	0803	31.3	88.7	RADAR	JAN									12	FAIR FIX.
311	13	0832	31.4	88.6	RADAR	JAN									10	FAIR FIX.
312	13	0834	31.7	88.8	RADAR	MOB										FAIR FIX. EYE.
313	13	0901	31.7	88.7	RADAR	JAN									10	FAIR FIX.
314	13	0934	31.8	88.7	RADAR	JAN									10	FAIR FIX.

(NOTE: RADAR FIXES FROM LE RAIZET, GUADELOUPE AND COOLIDGE AIRPORT, ANTIGUA WERE TAKEN, BUT WERE NOT AVAILABLE FOR THIS TABULATION.)

TABLE 6 Continued.

HURRICANE GLORIA  
4 - 15 SEPTEMBER 1979

## CENTER FIXES

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)		ACFT.	MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE C-CIR. DIA. E-ELIP. N. MI.	REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	SFC.				IN.	OUT.		
1	5	1200	19.1	26.9	SMS-2	2,3,VSBL 4					25				
2	5	1800	19.5	28.5	SMS-2	2,5,VSBL 4					30				
3	6	0100	19.2	32.1	SMS-2	1,5, IR 8					30				
4	6	0600	19.4	33.7	SMS-2	1,5, IR 8					30				
5	6	1200	22.3	34.0	SMS-2	2,VSBL 4									
6	6	1230	22.1	34.5	SMS-2	2,5,VSBL 4					45				
7	6	1730	22.5	35.5	SMS-2	2,3,VSBL 4					45				
8	7	0000	22.8	37.2	SMS-2	1,3, IR 8					45				
9	7	0400	24.5	36.7	SMS-2	1, IR 8									
10	7	0700	24.8	37.2	SMS-2	1,1, IR 8					65				
11	7	1200	25.7	38.0	SMS-2	2,4,VSBL 1					65				
12	7	1800	26.5	38.6	SMS-2	2,1,VSBL 1					65				
13	7	2330	27.5	39.5	SMS-2	5, IR 8									
14	8	0030	27.5	39.5	SMS-2	2,5, IR 8					65				
15	8	0600	27.5	40.0	SMS-2	2,5, IR 8					65				
16	8	1130	28.0	40.2	SMS-2	2,3,VSBL 1					65				
17	8	1730	28.3	41.0	SMS-2	2,3,VSBL 1					65				
18	9	0030	29.5	41.5	SMS-2	2,5, IR 8					77				
19	9	0600	30.0	42.7	SMS-2	2,5, IR 8					77				
20	9	1200	30.3	43.3	SMS-2	1,3,VSBL 1					77				
21	9	1730	31.0	43.9	SMS-2	2,3,VSBL 1					77				
22	9	2330	31.6	44.9	SMS-2	5, IR 8									
23	10	0000	31.6	45.0	SMS-2	2,5, IR 8					65				
24	10	0600	31.5	45.6	SMS-2	2,5, IR 8					65				
25	10	1131	31.1	46.6	SMS-2	2,3,VSBL 1					65				
26	10	1730	31.1	46.6	SMS-2	1,3,VSBL 1					55				
27	10	2330	30.9	46.8	SMS-2	3, IR 8									
28	11	0000	30.8	46.8	SMS-2	2,3, IR 8					50				
29	11	0600	31.0	46.2	SMS-2	2,5, IR 8					55				
30	11	1130	31.6	47.7	SMS-2	2,3,VSBL 1					60				
31	11	1730	31.8	48.2	SMS-2	1,1,VSBL 1					65				

TABLE 6 Continued.

## HURRICANE GLORIA CONTINUED

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND(KT)		ACFT.	MIN.	MIN.	TEMP. (°C)		EYE	REMARKS
			LAT. N	LON. W			FLT. LVL.	SFC.		PRESS. (MB)	700MB HT. (M)	IN.	OUT.	C=CIR.DIA. E=ELIP.N.MI.	
32	11	2330	32.0	48.5	SMS-2	1, IR 8									
33	12	0000	32.0	48.5	SMS-2	2,1, IR 8		71							
34	12	0200	32.0	48.4	SMS-2	1, IR 8									
35	12	0600	32.3	48.0	SMS-2	2,3, IR 8		71							
36	12	1200	32.9	48.3	SMS-2	2,1,VSBL 1		77							
37	12	1800	33.2	47.8	SMS-2	1,VSBL 1									
38	12	1800	33.2	47.8	SMS-2	VSBL 1		84							
39	13	0130	34.1	46.7	SMS-2	2,1, IR 8		84							
40	13	0600	34.6	46.2	SMS-2	2,1, IR 8									
41	13	1200	34.9	45.2	SMS-2	2,-,VSBL 1		77							
42	13	1800	35.9	43.8	SMS-2	2,1,VSBL 1		84							
43	14	0000	36.8	41.3	SMS-2	1,1, IR 8		84							
44	14	0600	37.5	39.5	SMS-2	2,1, IR 8		84							
45	14	1200	40.5	38.0	SMS-2	2,1,VSBL 1		77							
46	14	1800	41.9	36.0	SMS-2	2,2,VSBL 1		65							
47	14	2330	43.5	33.0	SMS-2	2, IR 8									
48	15	0000	43.5	33.0	SMS-2	1,2, IR 8		65							

TABLE 6 Continued.

HURRICANE HENRI  
14 - 24 SEPTEMBER 1979

## CENTER FIXES

FIX NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP. (°C)		EYE		REMARKS
			LAT. °N	LON. °W			FLT. LVL.	ACFT. SFC. ALT.	IN.			OUT.	C=CIR. DIA. E=ELIP. N.M.I.			
1.	13	1930	18.0	86.0	SMS-2	3, VSBL 1										
2.	14	0030	18.8	87.2	SMS-2	5, IR 8										
3.	14	0630	19.4	86.2	SMS-2	5, IR 8										
4.	14	1930	20.0	87.2	SMS-2	2,5, VSBL 1		25								
5.	14	2331	22.8	87.1	SMS-2	2,-, IR 8		25								
6.	15	0600	22.6	87.1	SMS-2	2,5, IR 8		25								
7.	15	1200	22.5	87.4	SMS-2	2,5, VSBL 1		25								
8.	15	1800	22.5	87.8	SMS-2	2,5, VSBL 1		25								
9.	15	1810	22.6	88.3	AF	5/5	40	35	1003		25	25				
10.	15	2330	22.5	88.7	SMS-2	2,3, IR 8		27								
11.	16	0600	22.5	91.0	SMS-2	2,3, IR 8		30								
12.	16	1200	22.0	91.5	SMS-2	5, IR 8										
13.	16	1330	22.0	92.5	SMS-2	2,5, IR 8		30								
14.	16	1500	21.5	93.1	SMS-2	2,5, IR 8		35								
15.	16	1720	21.5	92.9	AF	1/5	46	40	999							
16.	16	1800	21.1	93.5	SMS-2	2,5, IR 8		45								
17.	16	2257	20.6	93.2	AF	3/2			997		24	26				
18.	17	0000	20.6	94.5	SMS-2	2,5, IR 8		50								
19.	17	0017	20.4	93.5	AF	2/2	42	45	995		25	25				
20.	17.	0200	20.6	93.5	AF	4/2	68		993							
21.	17	0630	20.1	93.7	AF	5/5	58		990							
22.	17	0700	21.3	94.3	SMS-2	2,1, IR 8		65								
23.	17	0804	20.2	94.2	AF	5/10			700MB	989		15				
24.	17	1030	20.2	95.1	SMS-2	5, IR 8										
25.	17	1230	19.9	94.9	SMS-2	2,5, IR 8		65								
26.	17	1240	20.4	94.1	AF	1/1	45	45	700MB	979	2941	20	16	C	10	
27.	17	1435	20.5	94.3	AF	1/1	72	60	700MB	984	2974	20	10	C	15	
28.	17	1530	20.8	94.3	SMS-2	2,4, VSBL 1		65								
29.	17	1630	20.7	94.5	AF		50	50	700MB							
30.	17.	1720	20.6	94.8	AF	1/1	50	40	700MB	984	2981	19	16			
31.	17	1800	21.0	94.7	SMS-2	3, VSBL 1										
32.	17	1830	21.1	94.8	SMS-2	2,3, VSBL 1		65								
33.	17	2100	21.0	94.9	AF	5/3	50	50	700MB	987	2996	16	16	C	15	POORLY DEFINED.
34.	17	2311	21.0	94.9	AF	5/3	37	35	700MB	989	3008	17	13	C	20	OPEN NORTHEAST.
35.	17	2330	21.2	95.0	SMS-2	3, IR 8										
36.	18	0030	21.0	95.0	SMS-2	3,6, IR 8		65								
37.	18	0330	21.0	95.6	AF	5/3	45		700MB	997	3054			C	40	OPEN NORTHEAST.

TABLE 6 Continued.

Hurricane Henri continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX. WIND (KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP: (°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	ACFT. SFC. ALT.	IN.			OUT.	C=CIR. DIA.	E=ELIP. N.MI.		
38	18	0600	21.0	96.0	SMS-2	3, IR 8										
39	18	0600	22.2	91.7	SMS-2	2,5, IR 8		25								
40	18	0600	21.0	96.0	SMS-2	3,5, IR 8		45								
41	18	0620	21.0	95.6	AF	5/3	30		700MB	997	3048	13	12			POORLY DEFINED.
42	18	0825	20.9	95.6	AF	5/3	36		700MB	998	3047	13	10			POORLY DEFINED.
43	18	1100	21.0	95.8	AF	5/5	35		700MB	1000	3059	11	12			POORLY DEFINED.
44	18	1200	21.3	95.2	SMS-2	5, IR 8										
45	18	1300	21.5	95.4	SMS-2	2,3,VSBL 1	45									
46	18	1500	21.5	95.5	SMS-2	3,VSBL 1										
47	18	1700	21.5	95.6	SMS-2	3,VSBL 1										
48	18	1748	21.6	95.7	AF	5/3	34	40		1001		26	25			
49	18	1830	21.6	95.7	SMS-2	2,3,VSBL 1		30								
50	18	2017	21.6	95.8	AF	5/3	47	40		999		26	23			
51	18	2300	21.3	96.0	SMS-2	3, IR 8										
52	19	0000	21.3	96.3	SMS-2	2,3, IR 8		30								
53	19	0315	21.4	95.6	AF	2/10	25		700MB	1001	3095	13	12			
54	19	0600	21.2	96.2	SMS-2	3,5, IR 8		30								
55	19	0950	21.3	95.6	AF	6/5	32		427M	1001		24	24			
56	19	1027	21.3	95.6	AF	5/5	47		433M	1000		24	20			
57	19	1224	21.1	95.6	AF	5/5	26	25	271M	1003		26	24			
58	19	1300	21.1	95.8	SMS-2	1,3,VSBL 1		30								
59	19	1436	21.1	95.4	AF	5/5	19	50	204M	1005		27	26			
60	19	1730	21.0	95.3	AF	5/5	22	15	250M	1005		26	24			
61	19	1800	21.1	95.3	SMS-2	1,3,VSBL 1		30								
62	19	2035	21.2	95.0	AF	5/1	25	20	268M	999		25				
63	19	2328	21.5	94.8	AF	5/5	45	50	256M	1000		24				
64	19	2330	21.4	95.0	SMS-2	2, IR 8										
65	20	0000	21.4	95.0	SMS-2	2,5, IR 8		30								
66	20	0630	21.5	95.0	SMS-2	3,5, IR 8		30								
67	20	1300	21.2	94.2	SMS-2	2,3,VSBL 1		30								
68	20	1730	21.1	93.7	SMS-2	2,3,VSBL 1		30								
69	20	1818	21.3	93.7	AF	5/5	30	30	384M	1007		22				
70	20	2300	21.2	93.4	SMS-2	3,VSBL 1										
71	21	0030	21.2	93.3	SMS-2	2,3, IR 8		25								
72	21	0600	21.2	93.1	SMS-2	5, IR 8										
73	21	1300	22.0	92.9	SMS-2	2,3,VSBL 1		25								
74	21	1730	22.0	92.5	SMS-2	2,3,VSBL 1		25								
75	22	0000	22.0	92.0	SMS-2	5, IR 8										
76	22	0000	22.0	92.0	SMS-2	2,3, IR 8		25								
77	22	1300	23.2	91.6	SMS-2	2,5,VSBL 1		25								
78	22	1700	23.8	91.8	SMS-2	5,VSBL 1										

TABLE 6 Continued.

Hurricane Henri continued.

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX.WIND(KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP:(°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	ACFT. SFC.	ALT.			IN.	OUT.	C=CIR. DIA. E=ELIP.N.MI.		
79	22	1800	24.5	91.5	SMS-2	2,5,VSBL 1			35							
80	23	0100	24.5	90.4	SMS-2	2,5, IR 8			35							
81	23	0630	25.1	89.7	SMS-2	2,5, IR 8			35							
82	23	1300	25.5	89.5	SMS-2	2,5,VSBL 1			30							
83	23	1700	25.5	89.0	SMS-2	5,VSBL 1										
84	23	1800	25.5	88.9	SMS-2	2,5,VSBL 1			30							
85	23	1813	25.4	88.8	AF	2/3	35	30	193M	1011		24	25			
86	23	2216	25.4	88.5	AF	2/3	28	25	165M	1009		26	25			
87	24	0000	25.5	88.4	SMS-2	1,5, IR 8			30							
88	24	0600	26.0	87.8	SMS-2	1,5, IR 8			30							
89	24	1130	26.3	87.5	SMS-2	5 IR 8										
90	24	1300	26.5	87.0	SMS-2	2,5,VSBL 1			30							
91	24	1830	26.3	86.7	SMS-2	2,5,VSBL 1			25							
92	24	2200	26.8	86.4	SMS-2	5, IR 8										

SUBTROPICAL STORM  
23-25 OCTOBER 1979

FIX. NO.	DATE	TIME (GMT)	POSITION		UNIT	CHARACTER.	MAX.WIND(KT)			MIN. PRESS. (MB)	MIN. 700MB HT. (M)	TEMP:(°C)		EYE		REMARKS
			LAT. °N	LONG. °W			FLT. LVL.	ACFT. SFC.	ALT.			IN.	OUT.	C=CIR. DIA. E=ELIP.N.MI.		
1	24	1230	37.6	63.9	SMS-2	1,3,VSBL 1			40							
	24	1800	40.7	63.2	SMS-2	1,3,VSBL 1			50							



Table 7. Supplementary vortex data messages, 1979 Atlantic tropical cyclones.

BOB

URNT12 KMIA 102327  
AF977 0403 BOB OB 15  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 04 DEG FL098  
LEFT REAR QUAD  
83100 81105 43083 41106 33079 31006 13050 11006

URNT12 KMIA 110802  
AF980 0503 BOB OB 09  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 030 DEG FL100  
RIGHT FRONT QUAD  
83100 808// 43076 409// 33064 309// 13044 109//  
03000 011// 64/// 50/// 34050 MX040 03045 /////  
LEFT REAR QUAD  
83085 809// 43065 410// 33053 309// 13029 110//  
03000 011// 64/// 50/// 34050 MX038 24015 /////  
RIGHT REAR QUAD  
83088 809// 43069 408// 33048 311// 13022 109//  
03971 012// 64/// 50025 34045 MX051 16015 /////  
LEFT FRONT QUAD  
83069 808// 43050 409// 33337 310// 13013 110//  
03971 012// 64/// 50/// 34015 MX034 33015 /////

URNT12 KMIA 111155  
AF980 0503 BOB OB 16  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 030 DEG FL100  
LEFT REAR QUAD  
83073 808// 43046 409// 33040 310// 13019 111//  
03982 012// 64/// 50/// 34035 MX035 18030 /////  
RIGHT REAR QUAD  
83086 809// 43052 409// 33027 311// 13009 112//  
03982 012// 64/// 50040 34/// MX052 15015 /////  
RIGHT FRONT QUAD  
83061 809// 43030 410// 33002 313// 13982 112//  
03963 011// 64/// 50050 34/// MX060 09040 /////  
ITEM 58 AND 59 ARE FOR SFC WNDS

Table 7 continued.

DAVID

URNT12 KMIA 272152  
AF964 0107 DAVID OB 19 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 273 DEG FL 010  
RIGHT FRONT QUAD  
83190 81006 43034 41107 33069 31008 13010 11010  
03705 01512 64030 50080 34130 MX095 30208 18000  
LEFT FRONT QUAD  
83094 81010 43080 40909 33003 31010 13999 11111  
03705 01512 64030 50040 34090 MX085 23008 18000  
LEFT REAR QUAD  
83084 81008 43118 40990 33047 30909 13944 11010  
03673 01513 64030 50045 34080 MX100 14008 18000  
RIGHT REAR QUAD  
83084 81010 43069 40909 33022 31010 13972 11111  
03673 01513 64030 50075 34100 MX100 05008 18000

URNT12 KMIA 281750  
AF967 0207 DAVID OB 12 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 27 DEG FL 100  
RIGHT REAR QUAD  
83113 80705 43072 40807 33035 30707 13992 10807  
03493 01511 64030 50063 34/// MX090 06015 /////  
LEFT FRONT QUAD  
83105 80807 43071 40905 33047 30806 13003 10808  
03581 01512 64018 50025 34060 MX095 22024 /////  
RIGHT FRONT QUAD  
83091 80905 43058 40906 33029 31008 13959 11010  
03581 01512 64012 50018 34/// MX095 33010 /////  
UNABLE LEFT REAR DUE INTENSE TRW APPROXIMATELY  
60 NMI FROM CNTR

Table 7 continued.

URNT12 KMIA 290428  
AF964 0307 DAVID OB 12 KMIA COR 02  
SUPPLEMENTARY VORTEX DATA MESSAGE COR 02  
AZIMUTH 28 DEG FL 100  
RIGHT FRONT QUAD  
83104 81008 43083 40908 33029 31010 13926 11111  
03711 02118 64035 50070 34150 MX078 30012 /////  
LEFT REAR QUAD  
83097 80909 43071 41010 33055 31010 13984 11111  
03711 02078 64/// 50000 34080 MX058 15015 /////  
RIGHT REAR QUAD  
83096 81010 43075 41010 33045 30808 13730 11212  
03646 01515 64025 50060 34120 MX108 05007 /////  
LEFT FRONT QUAD  
83096 81008 43050 41010 33019 3///// 13020 11708  
03646 01515 64015 50045 34060 MX064 28015 /////

URNT12 KMIA 291345  
AF980 0407 DAVID OB 17 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 32 DEG FL 100  
RIGHT FRONT QUAD  
83090 80907 43054 40907 33042 30907 13987 11007  
03596 01409 64040 50090 34120 MX095 32006 /////  
LEFT FRONT QUAD  
83080 80906 43948 40808 33888 31109 13833 11209  
03596 01409 64040 50080 34110 MX095 23010 /////  
LEFT REAR QUAD  
83079 80907 43065 41007 33026 30907 13925 11007  
03550 01810 64035 50660 34100 MX122 14007 25000  
RIGHT REAR QUAD  
83087 80907 43056 40907 33996 30908 13962 10908  
03550 01810 64040 50100 34120 MX120 05007 25000

Table 7 continued.

URNT12 KMIA 300034  
AF980 0507 DAVID OB 13 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 300 DEG FL 100  
RIGHT REAR QUAD  
83094 80806 43050 40908 33000 30808 13909 11109  
03057 01507 64038 50064 34078 MX150 03018 /////  
LEFT REAR QUAD  
83075 80807 43024 40906 33978 30906 13879 11107  
03545 01708 64034 50045 34072 MX090 31015 /////  
LEFT FRONT QUAD  
83076 80806 43032 40807 33000 30908 13903 11108  
03045 01708 64032 50052 34090 MX/// /////  
RIGHT FRONT QUAD  
83088 81007 43037 40906 33999 30906 13821 11107  
03495 01808 64070 50100 34/// MX130 33015 /////

URNT12 KMIA 310453 COR  
AF980 0907 DAVID OB14 KMIA COR  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 29 DEG FL 100  
LEFT REAR QUAD  
83074 80807 43046 40907 33977 30907 13764 11609  
03474 01608 64036 50042 34045 MX130 13015 /////  
RIGHT FRONT QUAD  
8///// 8///// 43097 40907 33018 30807 13926 10807  
03490 01909 64033 50040 34/// MX145 35012 /////  
RIGHT REAR QUAD  
83094 80907 43/// 4///// 33973 30808 13792 11109  
03490 01909 64999 50072 34/// MX121 08512 /////  
UNABLE 80NM RIGHT FRONT QUAD DUE TO LAND PROXIMITY.

UNABLE 45NM RIGHT REAR QUAD DUE TO TRW.

Table 7 continued.

URNT12 KMIA 011505  
AF985 1207 DAVID OB 12 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 350 DEG FL 100  
RIGHT FRONT QUAD  
83312 80807 43308 40909 33308 30909 13308 10909  
02424 02424 64/// 50/// 34/// MX060 36060 /////  
RIGHT REAR QUAD  
8///// 8///// 43308 41111 30004 32424 10003 12523  
00002 02424 64080 50/// 34040 MX060 07090 /////  
LAST REPORT ETA MJSJ 01/1515Z OBS 01 THRU 12 TO KMIA

URNT12 KMIA 031940 COR  
AF980 1907 DAVID OB 10 COR KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 32 DEG FL106  
LEFT REAR QUAD  
83038 80906 43000 41006 32901 31107 12883 11108  
02831 01508 64/// 50020 34100 MX053 18015 /////  
RIGHT FRONT QUAD  
83071 80806 43016 40906 32992 30808 12915 11108  
02831 01508 64050 50/// 34/// MX067 06045 /////  
RIGHT REAR QUAD  
83074 80807 43015 40906 32958 30907 12892 11207  
0//// 0//// 64/// 5080 34/// MX050 11080 /////  
RIGHT FRONT QUAD  
83032 80907 42968 41007 32912 31008 12858 11108  
0//// 0//// 64/// 50050 34/// MX060 05015 /////

URNT12 KMIA 041501  
AF969 2107 DAVID OB 09 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 36 DEG FL100  
RIGHT FRONT QUAD  
83031 81007 43981 41209 33963 31210 13905 11410  
03871 01411 64/// 50/// 34/// MX075 04080 /////  
RIGHT REAR QUAD  
83060 81008 43011 41110 33974 31110 13957 11210  
03868 01312 64/// 50/// 34/// MX055 15012 /////

Table 7 continued.

FREDERIC

URNT12 KMIA 021952 COR  
AF963 0109 FREDERIC OB 21 COR KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 270 DEG FL 100  
RIGHT FRONT QUAD  
83103 80808 43130 41210 33113 31510 13100 11807  
03077 01611 64/// 50/// 34030 MX035 31530 /////  
LEFT REAR QUAD  
83154 80909 43136 40909 33138 31111 13111 11111  
03077 01611 64/// 50/// 34035 MX035 13530 /////  
RIGHT REAR QUAD  
83153 81010 43137 41010 33124 31212 13107 11611  
03311 01610 64/// 50/// 34/// MX037 00823 /////  
LEFT FRONT QUAD  
83151 81107 43148 41207 33141 31308 13127 11608  
03211 01610 64/// 50/// 34/// MX024 22530 /////

URNT12 KMIA 021953 COR  
AF963 0109 FREDERIC OB 22 COR KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 270 DEG FL 100  
LEFT REAR QUAD  
83145 81007 43138 41010 33133 31111 13130 11507  
03090 01507 64/// 50/// 34015 MX015 21031 /////  
RIGHT REAR QUAD  
83147 80909 43133 41110 33124 31210 13105 11212  
03090 01507 64045 50/// 34/// MX015 01029 /////  
LEFT FRONT QUAD  
83146 80908 43134 41309 33138 31309 13122 11507  
00999 02525 64/// 50/// 34/// MX027 24045 /////  
RIGHT FRONT QUAD  
83186 80909 43143 41308 33141 31408 13134 11408  
00999 02525 64/// 50/// 34/// MX026 32020 /////

Table 7 continued.

URNT12 KMIA 030227 COR 02  
AF985 0209 FREDERIC OB 06 COR 02 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 29 DEG FL100  
LEFT FRONT QUAD  
83141 80907 43125 40907 33118 30808 13121 10808  
03079 01207 64/// 50/// 34052 MX043 09010 /////  
RIGHT FRONT QUAD  
83139 80906 43126 40908 33091 31007 1///// 1/////  
03079 01207 64/// 50/// 34085 MX038 31080 /////

URNT12 KMIA 031747 COR  
AF972 0409 FREDERIC OB 13 COR KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 300 DEG FL100  
RIGHT FRONT QUAD  
83148 80906 43134 40909 33107 31209 13098 11308  
0///// 0///// 64/// 50/// 34/// MX046 34545 /////  
LEFT FRONT QUAD  
83149 80904 43139 41004 33128 31104 13116 11107  
03093 01605 64/// 50025 34040 MX050 25025 /////  
LEFT REAR QUAD  
83143 80904 43131 41004 33124 30904 13104 11306  
03093 01605 64/// 50/// 34025 MX035 17014 /////  
RIGHT REAR QUAD  
83132 80807 43125 40807 33115 30707 13096 11019  
03093 01508 64/// 50/// 34040 MX034 07030 /////

URNT12 KMIA 040515  
AF985 0509 FREDERIC OB 19 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 29 DEG FL100  
RIGHT FRONT QUAD  
83146 80807 43137 40807 33133 31007 1///// 1/////  
03095 01511 64/// 50/// 34050 MX045 34020 /////  
LEFT REAR QUAD  
83149 80906 43137 40905 33128 30806 13122 10909  
03095 01511 64/// 50/// 34/// MX027 17030 /////

Table 7 continued.

URNT12 KMIA 051745 COR  
AF972 0909 FREDERIC OB 12 COR KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 260 DEG FL015  
LEFT FRONT QUAD  
80012 82522 40011 42522 30011 32522 10010 12522  
00008 02523 64/// 50/// 34/// MX017 22015 /////  
LEFT REAR QUAD  
80011 82622 40012 42522 30011 32522 10011 12522  
00009 02522 64/// 50/// 34/// MX018 13045 /////  
RIGHT REAR QUAD  
8///// 8///// 40009 42422 30009 32423 10009 12422  
00009 02522 64/// 50/// 34045 MX037 05045 /////  
RIGHT FRONT QUAD  
8///// 8///// 40009 42422 30009 32222 10008 12422  
00007 02521 64/// 50/// 34/// MX030 30045 /////

URNT12 KMIA 110327 COR  
AF972 1909 FREDERIC OB 11 COR KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 31 DEG FL100  
RIGHT FRONT QUAD  
83095 81110 4///// 4///// 30994 32422 10990 12423  
00985 02624 64/// 50040 34/// MX060 36030 /////  
LEFT FRONT QUAD  
83083 81106 43043 41208 33010 31508 13976 11508  
03961 01408 64/// 50/// 34/// MX041 26530 /////  
RIGHT REAR QUAD  
83098 80908 43052 41010 33022 31010 13985 11310  
03961 01408 64/// 50080 34/// MX050 08580 /////



Table 7 continued.

URNT12 KMIA 110615 COR  
AF972 1909 FREDERIC OB 19 COR KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 31 DEG FL100  
RIGHT FRONT QUAD  
83089 80908 43056 41008 33018 31109 13999 11209  
03964 01410 64/// 50100 34/// MX050 36030 /////  
LEFT FRONT QUAD  
83066 81307 43051 41407 33020 31508 13999 11509  
03964 01410 64/// 50/// 34045 MX035 24045 /////  
LEFT FRONT QUAD  
83066 81307 43045 41407 33972 31609 13960 11508  
03952 01508 64/// 50/// 34060 MX045 23045 /////  
RIGHT FRONT QUAD  
83081 81007 43045 41208 33017 31308 13969 11907  
03952 01508 64/// 50/// 34/// MX045 32045 /////

URNT12 KMIA 120438 COR  
AF967 2209 FREDERIC OB 17 COR KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 32 DEG FL100  
RIGHT FRONT QUAD  
83060 88970 43593 40909 33854 31210 13776 11607  
03772 01708 64055 50045 34035 MX079 36080 30000  
LEFT FRONT QUAD  
83057 81006 43009 41007 33956 31108 13829 11409  
03749 01807 64040 50090 34/// MX095 18012 /////  
LEFT REAR QUAD  
83081 81008 43030 41008 33987 31008 13846 11411  
03749 01807 64025 50045 34100 MX099 15025 /////  
RIGHT REAR QUAD  
83075 81007 43027 41006 33936 31107 13815 11410  
03728 01608 64080 50/// 34/// MX085 08045 /////

Table 7 continued

URNT12 KMIA 121130  
AF365 2309 FREDERIC OB 08 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 330 DEG FL100  
LEFT FRONT QUAD  
83067 81108 43013 41209 33961 31310 13951 11111  
03655 01911 64020 50030 34080 MX090 18020 22000  
RIGHT FRONT QUAD  
83063 81011 43011 41010 33969 31010 13909 11111  
03608 02113 64050 50060 34/// MX105 18020 22000

URNT12 KMIA 121458  
AF980 2409 FREDERIC OB 08 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 360 DEG FL100  
LEFT FRONT QUAD  
83039 81006 43914 41107 3//// 3//// 1//// 1////  
03641 02010 64050 50080 34110 MX095 36030 20000  
LEFT REAR QUAD  
83059 81208 43957 41105 33901 31105 13722 11708  
03641 02010 64040 50060 34075 MX090 21030 20000  
RIGHT REAR QUAD  
83993 81208 43001 41007 33950 31208 13848 11709  
03620 02110 64040 50060 34075 MX095 15030 ////  
LAST REPORT ETA KLRF 12/1545Z OBS 01 THRU 08 TO KMIAD

Table 7 continued.

HENRI

URNT12 KMIA 171659  
AF966 0812 HENRI OB 14 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 270 DEG FL100  
RIGHT FRONT QUAD  
83067 81106 43025 41505 33995 31605 13974 11708  
03941 02011 64/// 50/// 34040 MX045 36030 /////  
LEFT FRONT QUAD  
83052 81010 43017 41010 33018 31010 13002 11010  
03974 02009 64080 50/// 34/// MX073 23080 /////  
LEFT REAR QUAD  
83085 80909 43043 40909 33015 31310 13997 11808  
03974 02009 64/// 50060 34/// MX050 12060 /////  
RIGHT REAR QUAD  
83092 81009 43041 41709 33017 31808 13015 11908  
03982 02010 64/// 50080 34/// MX050 05080 /////

URNT12 KMIA 180043  
AF977 0912 HENRI OB 15 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 31 DEG FL100  
LEFT FRONT QUAD  
83057 81104 43037 41005 33021 31205 13005 11605  
03996 01606 64/// 50100 34/// MX050 35060 07000  
LEFT REAR QUAD  
83050 81103 43030 41203 33017 31303 13004 11704  
03008 01704 64/// 50/// 34080 MX037 18060 15000  
RIGHT FRONT  
83008 81704 43039 41305 33020 31405 13010 11605  
03008 01704 64/// 50040 34100 MX065 02070 07000  
LAST REPORT ETA KBIX 18/0210Z OBS 01 THRU 15 TO KMIAD

Table 7 continued.

URNT12 KMIA 181133 CO4 02  
AF969 1012 HENRI OB 18 COR 02 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 27 DEG FL100  
RIGHT REAR QUAD  
83096 81003 43084 41205 33080 31305 13059 11305  
03054 01507 64/// 50/// 34/// MX045 06080 ////  
LEFT FRONT QUAD  
8//// 8//// 43073 41009 33070 31009 13063 11110  
0//// 0//// 64/// 50/// 34/// MX030 24045 ////  
LEFT REAR QUAD  
83091 80808 43073 41008 33070 31208 1//// 1////  
03048 01309 64/// 50/// 34/// MX030 15080 ////  
RIGHT FRONT QUAD  
83082 80908 43067 40908 33057 31009 13054 11109  
0//// 0//// 64/// 50/// 34080 MX035 31080 ////  
NILO

URNT12 KMIA 181207 COR  
AF969 1012 HENRI OB 20 COR KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 27 DEG FL100  
LEFT FRONT QUAD  
8//// 8//// 43079 40908 33066 31008 13060 11008  
03047 01309 64/// 50/// 34060 MX036 24060 ////  
LEFT REAR QUAD  
83081 80908 43068 40909 33069 31109 13060 11109  
0//// 0//// 64/// 50/// 34/// MX026 13080 ////  
RIGHT REAR QUAD  
83087 81205 43078 41305 33062 31307 13062 11308  
03059 01109 64/// 50/// 34/// MX035 04080 ////  
NILO

Table 7 continued.

URNT12 KMIA 191806  
AF966 1412 HENRI OB 13 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 02 DEG FL010  
RIGHT REAR QUAD  
80010 82323 40009 42323 30007 32323 1//// 1////  
00005 02625 64/// 50/// 34/// MX015 34030 ////

URNT12 KMIA 191555  
AF966 1412 HENRI OB 10 KMIA  
SUPPLEMENTARY VORTEX DATA MESSAGE  
AZIMUTH 03 DEG FL015  
RIGHT REAR QUAD  
80009 82422 40009 42322 30008 32323 10007 12424  
00003 02625 64/// 50/// 34/// MX025 36045 ////  
RIGHT FRONT QUAD  
80010 82424 40009 42424 30008 32423 10006 12424  
00003 02625 64/// 50080 34/// MX050 32080 ////  
LEFT FRONT QUAD  
80012 82222 40009 42121 30008 32424 10005 12626  
00005 02726 64/// 50/// 34040 MX045 21045 ////  
LEFT REAR QUAD  
80011 82322 40010 42323 30009 32222 10006 12525  
00005 02726 64/// 50/// 34050 MX045 13030 ////

Table 8. Tropical Cyclone Reconnaissance Summary for 1979

<hr/>		
1. Requirements Levied	Atlantic	Eastern & Central Pacific
Cyclones	204	3
Invest	<u>19</u>	<u>0</u>
TOTAL	223	3
2. Requirements Accomplished	Atlantic	Eastern & Central Pacific
53 WRS (cyclones/invest)	45/9	0/0
920 WRG (cyclones/invest)	112/9	3/0
RFC (cyclones/invest)	<u>42/1</u>	<u>0/0</u>
TOTAL	199/19*	3/0
3. Missions Flown	Atlantic	Eastern & Central Pacific
53 WRS	37	0
920 WRG	69	3
RFC	<u>18</u>	<u>0</u>
TOTAL	124	3
4. Flying Time	Atlantic	Eastern & Central Pacific
53 WRS	312.0	0.0
920 WRG	698.4	35.5
RFC	<u>189.7</u>	<u>0.0</u>
TOTAL	1200.1	35.5
GRAND TOTAL 1235.6		

\*Of the five unaccomplished requirements in the Atlantic, two were resources permitting.