NOAA Technical Memorandum NWS WR-189

ANNUAL DATA AND VERIFICATION TABULATION
EASTERN NORTH PACIFIC TROPICAL STORMS AND HURRICANES 1984

Salt Lake City, Utah
April 1985

U.S. DEPARTMENT OF COMMERCE / National Oceanic and Atmospheric Administration / National Weather Service

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E. B. Gunther and R. L. Cross

Eastern Pacific Hurricane Center
San Francisco, California
April 1985

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DEPARTMENT OF COMMERCE
Malcolm Baldrige, Secretary

National Oceanic and
Atmospheric Administration
John V. Byrne, Administrator

National Weather
Service
Richard E. Hallgren, Director

This publication has been reviewed
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for Glenn E. Rasch, Chief
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I. INTRODUCTION

This is the sixth report of an annual series covering eastern north Pacific tropical cyclone activity. Data are provided by the National Weather Service, the National Earth Satellite Service Field Station - San Francisco, California, and the Chief, Aerial Reconnaissance Coordination, all Hurricanes (CARCAH), Miami, Florida.

II. OBJECTIVE FORECAST TECHNIQUES

Tropical cyclone prediction models used by Eastern Pacific Hurricane Center (EPHC) forecasters include:

1. EPHC77 (Leftwich and Neumann, 1977). A statistical-synoptic model.

2. EPHC81 (Leftwich, 1981). A statistical-dynamic model.

3. EPCLIPER (Neumann, 1982). A simulated analog model based on persistence and climatology.

4. EPANALOG (Jarrell, Mauck, and Renard, 1975). An analog model.

5. SANBAR (Sanders and Burpee, 1968). A filtered barotropic model.

In addition to the above models, forecasters also make use of NMC analyses and prognoses.

III. VERIFICATION

Verification statistics for the 1984 season are shown in Table 1. The forecast displacement error is the vector difference between the forecast displacement and the actual displacement computed from best-track positions. The initial position error is not subtracted from the forecast error, and depressions are not verified.

IV. DATA SUMMARIES

A summary of the 1984 eastern north Pacific tropical cyclone statistics is given in Table 2. Best track, operational positions, and position errors are given in Tables 3-26.

Reconnaissance aircraft flew into three of the 1984 cyclones as they moved up the west coast of Baja California in September and October. The first flight, with two penetrations, was made by the U.S. Air Force into Hurricane Marie on 8 September. The following day, two more penetrations of the hurricane were made. The next reconnaissance flights were made by NOAA research aircraft into Hurricane Norbert on 22 September. Three penetrations of the hurricane were made on that day, two the next, and three on the following day. The final reconnaissance of the 1984 season was made by the U.S. Air Force into Tropical Storm Polo on 2 October. Two penetrations of the storm were made.

Even as satellite imagery continues to improve and is one of the more important tools used by tropical forecasters, aircraft reconnaissance and ship reports are invaluable in providing comparative observations.

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TABLE 1
1984 FORECAST ERRORS*

	Forecast Period		
	24 HR	48 HR	72 HR
EPHC Forecasters	165(89)/343	334(180)/269	513(277)/203
EPANALOG	167(90)/325	334(180)/259	506(273)/193
EPHC77	167(90)/327	326(176)/262	497(268)/196
CLIPER	167(90)/333	358(193)/268	562(303)/201
EPHC81	158(85)/145	313(169)/116	517(279)/86

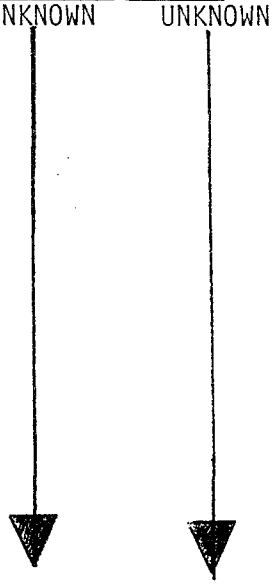
*Average error in kilometers (nautical miles) / number of cases.

TABLE 2

Summary of Eastern North Pacific Tropical Cyclones of 1984

(Includes only those Storms that Reached Hurricane HU or Tropical Storm TS)

NO.	NAME	CLASS	DATES	MAX(KTS)	DAMAGE ($MILLION)	DEATHS
1	ALMA	TS	17-21 MAY	50	UNKNOWN	UNKNOWN
2	BORIS	HU	28 MAY-18 JUN	65		
3	CRISTINA	HU	17-26 JUN	90		
4	DOUGLAS	HU	25 JUN-3 JUL	125		
5	ELIDA	HU	28 JUN-8 JUL	115		
6	FAUSTO	HU	3-10 JUL	95		
7	GENEVIEVE	HU	7-14 JUL	100		
8	HERNAN	TS	27 JUL-1 AUG	45		
9	ISELLE	HU	3-12 AUG	115		
10	JULIO	TS	15-20 AUG	55		
11	KENNA	TS	16-18 AUG	40		
12	LOWELL	HU	26-30 AUG	75		
13	MARIE	HU	5-11 SEP	80		
14	NORBERT	HU	14-26 SEP	115		
15	ODILE	HU	71-22 SEP	90		
16	POLO	HU	26 SEP-3 OCT	100		
17	RACHEL	TS	7-16 OCT	55		
18	SIMON	TS	31 OCT-8 NOV	55		



T.S. ALMA

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
51700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
51706	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
51712	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
51718	9.7	99.8	9.0	99.5	45.6	9.3	103.1	118.	9.5	106.2	361.	9.6	109.2	497.
51800	9.9	101.3	9.3	101.0	40.1	9.6	105.5	89.	9.7	109.3	261.	9.5	113.1	331.
51806	9.1	102.8	9.1	102.8	0.0	10.0	108.9	36.	11.1	112.0	212.	12.3	115.6	285.
51812	9.2	104.3	9.1	104.2	8.4	9.6	107.3	189.	10.9	110.5	364.	13.1	114.2	429.
51818	9.3	105.8	9.3	105.1	41.0	10.5	109.9	154.	12.5	114.1	274.	14.9	117.3	395.
51900	9.5	107.4	9.5	107.0	23.5	10.1	112.0	107.	10.5	115.8	184.	12.0	118.1	0.
51906	9.5	109.0	9.4	109.0	6.0	10.0	114.4	56.	10.7	119.7	73.	11.5	123.8	0.
51912	9.5	110.5	9.6	110.5	6.0	10.7	116.0	78.	12.7	120.1	193.	16.6	121.0	0.
51918	9.5	112.0	9.5	112.3	17.6	10.2	118.3	59.	12.2	121.5	156.	16.0	122.7	0.
52000	9.5	113.6	9.5	113.7	5.9	9.7	119.3	40.	10.0	123.5	0.	10.4	128.0	0.
52006	9.5	115.1	9.5	115.2	5.9	9.8	120.1	40.	10.0	123.7	0.	10.3	126.8	0.
52012	9.5	116.4	9.5	116.5	5.9	9.8	121.6	68.	10.6	125.8	0.	12.2	129.7	0.
52018	9.5	117.6	9.5	117.6	0.0	9.6	121.9	35.	10.0	126.0	0.	10.0	130.1	0.
52100	9.5	118.7	9.4	118.7	6.0	9.5	123.0	0.	9.8	126.9	0.	10.2	130.9	0.
52106	9.5	119.6	9.5	119.5	5.9	9.7	122.9	0.	10.3	126.0	0.	10.8	128.8	0.
52112	9.5	120.5	9.5	120.5	0.0	9.7	123.9	0.	10.7	127.0	0.	12.2	129.8	0.
52118	9.6	121.3	9.6	121.3	0.0	10.0	124.8	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								82.			231.			387.
NUMBER OF CASES								13			9			5

TABLE 3.

BORIS

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
52800	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
52806	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
52812	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
52818	11.6	94.0	11.2	94.2	26.7	12.1	96.8	71.	12.2	99.5	128.	11.9	102.4	197.
52900	11.7	94.6	11.4	94.8	21.4	12.7	97.4	71.	13.8	100.4	155.	14.5	104.6	293.
52906	12.0	95.0	11.6	95.1	24.7	12.6	97.2	55.	13.8	99.8	71.	14.5	103.0	226.
52912	12.3	95.3	11.8	95.6	34.7	13.0	97.9	71.	13.9	100.6	95.	14.6	103.2	239.
52918	12.7	95.8	12.6	95.7	8.3	14.2	97.5	49.	15.5	99.6	127.	16.6	102.4	242.
53000	13.0	96.2	13.2	96.3	13.3	15.0	98.7	115.	16.5	101.2	205.	17.4	103.3	312.
53006	13.2	96.6	13.3	96.6	6.0	14.8	98.1	78.	15.9	99.8	137.	16.8	102.7	229.
53012	13.4	97.1	13.5	96.8	18.4	14.3	98.4	55.	15.0	100.5	109.	15.8	102.9	0.
53018	13.1	97.6	13.4	97.7	18.9	13.8	99.8	33.	14.2	102.5	177.	14.2	106.3	419.
53100	13.5	98.1	13.3	97.8	21.3	13.4	98.6	64.	13.8	101.1	93.	14.0	104.9	382.
53106	13.6	98.3	13.6	98.6	17.5	13.9	100.7	88.	14.2	102.8	163.	15.1	106.0	421.
53112	13.6	98.6	13.6	99.0	23.4	13.8	101.1	111.	14.0	103.3	0.	14.0	105.4	365.
53118	13.6	98.8	13.4	99.4	37.1	13.3	101.1	96.	13.2	102.8	206.	13.2	105.0	323.
6 100	13.7	99.0	13.4	99.7	44.8	13.5	101.6	123.	13.6	104.0	324.	13.8	106.8	428.
6 106	13.5	99.1	13.7	99.2	13.3	14.1	100.3	18.	14.4	101.9	222.	15.0	103.7	348.
6 112	13.4	99.2	13.7	99.2	18.0	13.9	99.7	0.	14.1	100.4	137.	14.5	101.7	254.
6 118	13.2	99.3	13.7	99.5	32.2	14.0	100.3	129.	0.0	0.0	0.	0.0	0.0	0.
6 200	12.9	99.3	13.7	99.5	49.4	13.9	100.1	160.	0.0	0.0	0.	0.0	0.0	0.
6 206	12.6	99.2	14.0	100.0	96.2	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 212	12.3	99.1	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 218	12.1	99.1	12.0	99.5	24.0	12.3	100.0	40.	12.5	100.8	96.	13.1	101.7	143.
6 300	11.8	99.2	11.5	98.9	25.1	10.8	99.3	48.	10.8	101.4	164.	11.2	103.8	247.
6 306	11.7	99.3	11.2	100.0	50.7	11.2	102.9	196.	11.5	105.1	338.	12.0	106.9	344.
6 312	11.5	99.5	12.0	99.5	30.0	11.9	100.1	72.	0.0	0.0	0.	0.0	0.0	0.
6 318	11.3	99.7	11.7	99.7	24.0	11.6	100.9	61.	0.0	0.0	0.	0.0	0.0	0.
6 400	11.2	99.9	11.2	100.0	5.8	11.2	101.4	147.	0.0	0.0	0.	0.0	0.0	0.
6 406	11.4	100.1	10.8	99.6	46.4	10.7	99.5	168.	0.0	0.0	0.	0.0	0.0	0.
6 412	11.8	100.1	10.8	99.6	66.7	10.6	99.8	229.	0.0	0.0	0.	0.0	0.0	0.
6 418	12.3	100.0	11.1	100.0	72.0	11.8	101.0	193.	0.0	0.0	0.	0.0	0.0	0.
6 500	12.9	99.7	12.9	99.6	5.8	15.5	98.4	165.	0.0	0.0	0.	0.0	0.0	0.
6 506	13.6	99.4	13.5	99.7	18.5	16.1	99.1	174.	0.0	0.0	0.	0.0	0.0	0.
6 512	14.4	99.8	14.4	99.5	17.5	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 518	14.6	100.4	14.9	100.1	25.1	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 600	14.7	101.0	14.2	100.9	30.6	13.3	103.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 606	14.8	101.6	14.5	101.6	18.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 612	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 706	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 712	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 718	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								103.			164.			301.
NUMBER OF CASES								28			18			18

TABLE 4. BORIS - PART 1

BORIS

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
6 800	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 806	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 812	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 818	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 906	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 912	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
6 918	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61006	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61106	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61112	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61118	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61212	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61218	14.1	109.9	13.9	109.6	21.0	14.0	110.0	48.	14.1	111.2	121.	14.2	112.0	280.
61300	14.1	110.1	14.0	109.7	23.8	14.0	110.0	77.	14.2	111.5	133.	14.2	112.2	303.
61306	14.0	110.4	14.0	110.1	17.2	13.9	111.2	29.	14.0	112.6	181.	14.2	114.1	315.
61312	14.0	110.7	13.9	110.3	23.6	14.1	111.7	25.	14.5	113.7	203.	15.8	116.8	295.
61318	14.1	110.8	13.8	110.8	18.0	13.8	112.8	109.	14.4	114.8	272.	15.8	116.8	300.
61400	14.3	111.2	13.8	111.3	30.5	14.2	113.2	127.	15.1	114.8	251.	16.2	116.9	308.
61406	14.5	111.6	13.9	111.7	36.4	14.5	113.6	154.	16.0	115.1	226.	18.5	116.2	229.
61412	14.8	112.2	13.8	112.0	61.1	14.2	114.2	229.	15.1	116.3	312.	17.0	117.8	289.
61418	15.6	112.6	15.6	112.6	0.0	17.5	113.5	73.	20.4	113.4	48.	21.5	111.2	211.
61500	16.3	112.9	16.2	112.5	23.2	19.1	113.0	28.	21.0	114.4	78.	0.0	0.0	0.
61506	17.0	113.1	17.0	113.0	5.6	20.9	114.6	113.	25.6	115.8	335.	0.0	0.0	0.
61512	17.7	113.3	17.8	112.9	23.2	21.5	112.5	130.	0.0	0.0	0.	0.0	0.0	0.
61518	18.4	113.6	18.7	113.3	24.6	22.5	113.7	175.	0.0	0.0	0.	0.0	0.0	0.
61600	18.9	113.7	19.1	113.5	16.4	21.7	114.3	108.	0.0	0.0	0.	0.0	0.0	0.
61606	19.3	113.7	19.4	113.4	17.9	21.3	113.1	38.	0.0	0.0	0.	0.0	0.0	0.
61612	19.5	113.8	19.5	113.4	22.4	20.7	113.5	41.	21.4	113.7	0.	0.0	0.0	0.
61618	19.7	113.9	19.6	113.4	28.7	20.8	113.6	72.	0.0	0.0	0.	0.0	0.0	0.
61700	19.9	114.0	20.1	113.4	35.7	21.5	113.5	123.	22.8	113.7	0.	24.0	114.2	0.
61706	20.1	114.3	20.7	112.9	86.4	22.4	111.8	250.	23.8	110.3	0.	0.0	0.0	0.
61712	20.2	114.6	20.2	114.0	33.6	20.5	114.4	0.	0.0	0.0	0.	0.0	0.0	0.
61718	20.3	115.0	20.2	114.7	17.9	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61800	20.3	115.4	20.2	115.2	12.7	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61806	0.0	0.0	20.2	115.6	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61812	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61818	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								103.			196.			291.
NUMBER OF CASES								19			11			9

TABLE 5. BORIS - PART 2

CRISTINA

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
61700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
61706	14.0	103.3	14.0	102.2	63.8	14.3	102.9	122.	14.3	104.8	134.	14.7	107.4	135.
61712	14.0	103.6	14.0	103.0	34.8	14.4	104.9	53.	14.9	107.2	55.	15.1	109.7	35.
61718	14.0	104.1	14.1	103.9	13.0	14.9	106.3	55.	15.4	108.7	69.	15.8	111.0	48.
61800	14.0	104.1	14.2	104.6	31.3	14.6	106.2	46.	15.4	109.7	75.	16.5	112.1	121.
61806	14.0	105.3	14.2	105.0	21.0	15.0	107.7	64.	16.8	110.0	109.	19.0	111.7	272.
61812	14.0	105.9	14.3	105.8	18.9	14.7	108.6	55.	16.0	111.2	79.	17.1	114.7	209.
61818	14.0	106.5	14.0	106.5	0.0	14.4	109.2	64.	15.1	112.0	58.	16.4	115.0	180.
61900	14.1	106.9	14.0	106.7	13.0	14.6	106.2	145.	14.4	110.6	70.	15.2	113.0	42.
61906	14.2	107.3	14.1	107.1	13.0	14.3	108.9	63.	14.7	111.1	71.	15.2	113.5	59.
61912	14.3	107.7	14.2	107.8	8.3	14.5	110.0	35.	15.3	115.0	164.	16.0	115.0	102.
61918	14.4	108.2	14.4	108.1	5.7	15.0	109.8	70.	15.8	112.0	44.	16.3	114.6	63.
62000	14.7	108.7	14.6	108.7	6.0	15.3	111.1	63.	16.3	113.6	81.	17.3	116.2	132.
62006	14.8	109.4	15.0	109.7	21.0	15.4	112.9	64.	15.8	116.2	191.	16.1	119.5	309.
62012	14.8	110.2	15.0	110.3	13.3	15.6	113.2	84.	16.4	116.2	167.	17.2	119.5	281.
62018	14.6	111.0	15.0	111.0	24.0	15.0	114.1	110.	15.5	117.2	218.	16.0	120.3	320.
62100	14.5	111.8	14.5	111.8	0.0	14.3	115.1	175.	14.4	119.1	350.	14.6	123.1	494.
62106	14.6	111.9	14.5	112.3	23.7	14.8	114.8	131.	14.9	117.6	258.	15.1	120.4	362.
62112	14.8	112.0	14.5	112.3	24.9	14.8	113.0	103.	15.0	114.6	216.	15.0	117.0	326.
62118	15.1	112.1	15.1	112.2	5.7	15.5	113.1	91.	15.9	114.5	191.	16.5	116.5	237.
62200	15.5	112.5	15.6	112.4	8.2	17.6	113.3	36.	19.2	114.8	75.	20.2	116.9	118.
62206	16.0	112.9	16.0	112.9	0.0	17.5	114.8	35.	18.8	116.9	73.	19.5	119.3	58.
62212	16.4	113.3	16.5	113.3	6.0	18.2	114.9	25.	19.4	116.7	79.	20.4	118.9	118.
62218	16.9	113.8	16.9	113.7	5.6	18.7	115.3	21.	20.1	116.7	85.	20.9	118.4	192.
62300	17.3	114.2	17.4	113.9	17.7	19.2	114.5	91.	21.1	115.0	231.	23.0	115.2	419.
62306	17.8	114.7	18.0	114.5	16.4	19.8	116.0	41.	21.5	117.1	180.	22.7	118.5	323.
62312	18.3	115.2	18.6	114.8	28.6	20.8	116.3	77.	22.1	117.4	223.	22.8	118.9	0.
62318	18.8	115.6	18.9	115.6	6.0	21.0	117.5	67.	22.3	118.9	172.	22.9	120.4	0.
62400	19.4	116.2	19.4	116.1	5.6	21.3	118.0	87.	22.7	119.6	179.	24.0	120.6	0.
62406	19.8	116.8	20.0	116.7	13.2	21.9	119.2	111.	23.0	121.4	188.	23.8	123.5	0.
62412	20.0	117.6	20.4	117.6	24.0	21.8	120.8	79.	22.8	122.8	0.	21.0	121.0	0.
62418	20.1	118.3	20.1	118.2	5.6	20.2	120.7	90.	20.4	123.2	0.	20.4	123.2	0.
62500	20.2	119.1	20.2	119.0	5.6	20.7	122.0	64.	21.2	124.6	0.	0.0	0.0	0.
62506	20.2	120.1	20.2	120.0	5.6	20.4	123.8	38.	21.0	126.6	0.	0.0	0.0	0.
62512	20.5	121.9	20.5	121.0	50.1	21.4	125.0	0.	0.0	0.0	0.	0.0	0.0	0.
62518	21.0	121.9	21.3	121.8	18.8	23.5	124.8	0.	0.0	0.0	0.	0.0	0.0	0.
62600	21.5	122.6	21.6	122.6	6.0	24.2	125.1	0.	0.0	0.0	0.	0.0	0.0	0.
62606	0.0	0.0	21.0	124.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
62612	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
62618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								74.			141.			198.
NUMBER OF CASES								33			29			25

TABLE 6.

DOUGLAS

DATE/TIME (GMT)	BEST TRACK LAT.	LONG.	OPERATIONAL POSITION LAT.	LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	LONG.	ERROR (N.MI)	48 HOUR FORECAST LAT.	LONG.	ERROR (N.MI.)	72 HOUR FORECAST LAT.	LONG.	ERROR (N.MI.)
62500	10.3	106.5	10.5	106.5	12.0	11.4	110.7	59.	12.4	114.7	59.	13.1	118.9	50.
62506	10.3	107.4	10.5	108.5	65.5	11.1	112.0	32.	12.0	115.4	44.	12.5	118.5	38.
62512	10.4	108.3	10.5	108.2	8.4	10.6	111.9	54.	11.5	115.3	115.	12.3	118.9	67.
62518	10.4	109.3	10.5	109.4	8.4	11.2	113.0	17.	12.8	116.6	17.	14.3	120.0	64.
62600	10.5	110.4	10.5	110.3	5.8	11.3	114.3	30.	12.4	118.1	24.	14.1	121.7	25.
62606	10.6	111.5	10.6	111.8	17.5	11.1	116.7	130.	12.2	120.5	105.	13.6	123.2	33.
62612	10.9	112.5	10.8	112.8	18.5	11.4	117.2	123.	12.3	121.2	92.	13.2	125.5	113.
62618	11.3	113.5	11.4	113.2	18.4	12.8	117.0	17.	14.2	120.4	54.	15.7	123.9	92.
62700	11.9	114.3	11.7	114.0	21.1	12.9	117.2	53.	13.9	120.1	100.	14.4	123.3	165.
62706	12.4	115.3	12.7	115.2	18.9	15.8	118.2	173.	17.5	120.5	248.	18.6	123.5	295.
62712	12.6	116.1	13.2	116.2	36.5	14.8	119.6	109.	16.2	123.1	132.	16.3	127.2	79.
62718	12.7	117.0	13.0	116.8	21.4	13.7	120.1	30.	13.9	123.5	97.	13.7	126.9	159.
62800	12.8	117.9	12.8	118.1	11.6	13.0	121.8	42.	13.3	125.6	100.	13.6	129.5	133.
62806	13.0	118.9	13.0	118.9	0.0	13.5	122.7	31.	13.8	126.4	96.	13.8	130.1	150.
62812	13.1	119.8	13.0	119.8	6.0	13.3	123.8	48.	13.7	128.3	102.	13.7	132.7	208.
62818	13.4	120.7	13.3	120.4	18.3	14.2	123.5	90.	14.4	126.7	144.	14.7	130.0	176.
62900	13.8	121.8	13.7	121.8	6.0	14.8	126.3	13.	15.5	131.6	106.	15.8	136.8	281.
62906	14.0	122.8	14.0	122.8	0.0	15.2	127.3	6.	16.1	131.9	99.	17.4	136.3	192.
62912	14.3	123.9	14.1	123.8	13.3	14.4	127.7	67.	14.5	131.4	135.	14.7	135.1	208.
62918	14.6	125.0	14.6	125.0	0.0	15.4	128.8	8.	15.8	132.5	110.	15.8	136.1	132.
63000	14.9	126.1	14.9	126.1	0.0	15.9	130.4	35.	16.3	134.8	163.	16.8	139.3	182.
63006	15.1	127.2	15.2	127.2	6.0	16.3	131.7	86.	17.1	136.0	180.	17.6	140.3	167.
63012	15.3	128.1	15.4	128.2	8.3	16.4	132.3	83.	17.1	136.4	148.	17.8	139.9	0.
63018	15.6	128.8	15.5	128.9	8.3	16.2	132.5	91.	17.0	136.2	71.	17.9	140.4	0.
7 100	15.9	129.6	15.8	129.8	12.9	16.8	133.2	68.	17.4	136.8	37.	18.4	140.4	0.
7 106	16.3	130.2	16.3	130.2	0.0	17.7	132.7	25.	19.1	135.2	144.	20.6	137.9	0.
7 112	16.7	130.8	16.7	130.9	5.7	18.3	133.3	44.	19.6	136.0	0.	20.5	139.6	0.
7 118	17.1	131.5	17.3	131.4	13.3	18.7	134.2	84.	19.7	137.0	0.	20.3	140.2	0.
7 200	17.4	132.2	17.4	132.2	0.0	18.2	135.4	57.	18.5	138.6	0.	18.4	141.7	0.
7 206	17.7	133.3	18.0	133.0	24.9	19.4	136.4	106.	20.0	139.7	0.	20.3	143.0	0.
7 212	17.7	134.4	18.0	134.0	29.1	18.5	137.7	0.	18.8	141.4	0.	18.9	145.1	0.
7 218	17.8	135.4	17.9	135.4	6.0	18.0	139.9	0.	18.2	144.1	0.	18.4	148.3	0.
7 300	17.8	136.5	17.8	136.3	11.4	17.7	140.3	0.	17.7	144.0	0.	17.6	147.7	0.
7 306	17.8	137.6	17.9	137.4	12.9	18.1	141.4	0.	0.0	0.0	0.	0.0	0.0	0.
7 312	17.9	138.8	0.0	0.0	0.0	18.4	143.9	0.	18.9	154.6	0.	19.4	154.6	0.
7 318	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								60.			105.			137.
NUMBER OF CASES								30			26			22

TABLE 7.

ELIDA

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
62800	10.1	101.8	9.5	101.5	40.0	9.9	104.4	51.	10.3	107.6	216.	11.3	110.7	240.
62806	10.2	102.6	9.6	102.2	42.9	10.1	105.6	74.	10.9	109.2	205.	11.5	112.6	250.
62812	10.4	103.3	9.7	102.9	48.1	10.1	105.8	139.	10.4	108.7	253.	10.8	111.5	295.
62818	10.5	104.0	10.0	104.0	30.0	11.1	107.7	133.	12.6	111.3	160.	14.0	114.6	142.
62900	10.9	104.8	10.5	105.0	26.7	12.0	108.9	137.	13.1	113.0	188.	13.6	117.2	249.
62906	11.7	105.6	11.3	105.9	29.6	12.6	109.7	126.	13.7	113.6	167.	14.0	117.6	236.
62912	12.5	106.3	12.4	106.0	18.3	14.6	108.7	23.	15.6	112.0	6.	16.8	115.2	44.
62918	13.2	107.0	13.2	107.0	0.0	14.3	110.2	40.	14.5	113.2	70.	14.6	114.0	158.
63000	13.9	107.6	13.9	107.6	0.0	16.0	110.5	44.	18.0	113.4	121.	19.3	116.5	164.
63006	14.3	108.3	14.2	108.3	6.0	15.9	111.1	30.	17.2	114.2	54.	18.0	117.7	72.
63012	14.6	109.1	14.6	109.1	0.0	15.9	112.4	26.	16.9	115.4	53.	17.7	118.8	36.
63018	15.0	109.9	14.9	109.9	6.0	16.2	113.2	43.	17.1	116.4	48.	17.8	119.8	44.
7 100	15.3	110.6	15.3	110.7	5.7	16.5	113.8	31.	18.0	113.4	217.	18.1	120.3	55.
7 106	15.5	111.4	15.5	111.4	0.0	16.2	114.7	24.	16.8	118.1	17.	17.1	121.5	13.
7 112	15.7	112.0	15.7	112.0	0.0	16.6	115.0	30.	17.4	118.0	49.	18.0	121.0	103.
7 118	15.9	112.8	15.6	112.8	18.0	16.8	115.9	25.	17.8	119.0	54.	18.0	123.0	53.
7 200	16.0	113.6	16.0	113.7	5.7	16.6	117.0	6.	17.2	120.4	6.	17.7	124.2	75.
7 206	16.1	114.3	16.3	114.3	12.0	17.0	117.7	13.	17.6	121.1	42.	18.1	124.7	117.
7 212	16.2	115.1	16.1	115.0	8.3	16.5	118.2	50.	17.0	121.7	53.	17.5	125.0	100.
7 218	16.4	116.0	16.4	116.0	0.0	17.4	119.3	25.	18.0	122.7	48.	18.6	126.3	246.
7 300	16.6	116.9	16.6	116.9	0.0	17.3	120.6	8.	18.0	124.2	87.	18.3	128.0	322.
7 306	16.8	117.8	16.8	117.8	0.0	17.5	121.3	29.	17.8	124.9	112.	18.1	128.4	333.
7 312	17.0	118.7	17.1	118.8	8.3	18.1	123.0	59.	19.0	126.8	237.	19.9	130.3	495.
7 318	17.0	119.6	17.1	119.6	6.0	17.9	123.4	62.	18.4	127.3	279.	18.7	131.4	518.
7 400	17.0	120.6	17.2	120.5	13.3	17.4	124.2	65.	17.7	126.9	250.	17.7	131.7	526.
7 406	16.9	121.4	17.2	121.7	24.9	17.4	125.7	140.	18.1	128.8	352.	18.4	132.7	610.
7 412	16.8	122.0	17.2	122.6	42.0	17.5	126.4	171.	17.7	130.3	429.	17.9	134.3	709.
7 418	16.7	122.5	17.2	122.6	30.5	17.3	125.6	162.	17.5	129.0	364.	17.9	132.8	685.
7 500	16.6	122.8	16.9	123.2	29.2	16.8	126.3	191.	17.1	129.4	390.	17.2	132.7	743.
7 506	16.3	123.1	16.6	123.4	25.0	16.4	126.1	167.	16.3	129.2	384.	16.4	132.7	764.
7 512	15.9	123.3	16.5	123.6	39.9	16.2	125.2	129.	16.4	127.2	292.	16.4	130.6	774.
7 518	15.5	123.5	15.5	123.5	0.0	14.4	124.7	87.	14.0	127.0	346.	14.0	129.8	819.
7 600	15.1	123.7	15.1	123.5	11.6	14.5	123.9	60.	15.0	124.5	261.	16.2	125.4	0.
7 606	15.0	123.7	15.0	123.6	5.8	14.4	124.3	100.	0.0	0.0	0.	0.0	0.0	0.
7 612	14.8	123.6	14.8	123.5	5.8	13.9	123.9	121.	13.9	124.9	458.	15.9	127.2	0.
7 618	14.9	123.3	14.9	123.3	0.0	15.2	124.1	168.	15.7	124.7	514.	16.8	126.5	0.
7 700	15.0	123.0	15.0	123.0	0.0	16.0	123.3	198.	0.0	0.0	0.	0.0	0.0	0.
7 706	15.1	122.6	15.0	122.7	8.3	15.1	121.8	134.	0.0	0.0	0.	0.0	0.0	0.
7 712	15.2	122.0	15.2	122.3	17.4	15.3	121.0	220.	15.0	120.2	0.	15.0	119.3	0.
7 718	15.3	121.2	15.3	121.2	0.0	16.1	119.7	226.	17.0	118.0	0.	18.6	117.4	0.
7 800	15.4	120.4	15.1	120.0	29.4	15.4	117.2	0.	0.0	0.0	0.	0.0	0.0	0.
7 806	15.4	119.5	15.4	119.5	0.0	15.8	116.1	0.	0.0	0.0	0.	0.0	0.0	0.
7 812	15.6	117.2	15.6	117.2	0.0	18.0	113.0	0.	0.0	0.0	0.	0.0	0.0	0.
7 818	15.8	115.8	15.8	115.8	0.0	13.8	109.9	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								89.			194.			312.
NUMBER OF CASES								40			35			32

TABLE 8.

FAUSTO

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
7 300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
7 306	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
7 312	15.8	103.9	15.5	103.5	29.1	15.8	106.8	70.	16.3	110.0	138.	16.8	113.4	302.
7 318	16.1	104.0	15.5	103.9	36.4	16.3	107.3	66.	17.2	111.2	189.	17.8	115.2	372.
7 400	16.4	105.5	16.4	105.9	22.6	17.5	109.8	126.	18.6	113.5	297.	19.4	117.0	421.
7 406	16.7	106.1	16.5	106.7	36.0	17.2	110.3	134.	17.7	114.0	314.	18.6	117.0	406.
7 412	17.0	106.6	16.9	107.2	34.2	17.8	110.3	126.	19.0	113.4	261.	19.8	117.0	380.
7 418	17.3	107.0	17.4	107.3	17.8	19.0	109.2	91.	20.0	111.4	136.	20.7	113.8	180.
7 500	17.5	107.5	17.5	107.6	5.6	18.6	109.9	94.	19.8	112.2	150.	20.9	114.8	206.
7 506	17.6	107.7	17.6	108.0	16.8	18.3	110.3	100.	19.2	113.0	181.	20.0	115.6	266.
7 512	17.8	108.0	17.7	108.1	8.2	18.7	108.8	36.	20.0	109.8	79.	20.9	111.8	175.
7 518	17.9	108.1	18.0	108.0	8.2	19.2	108.9	36.	20.4	110.4	68.	21.4	113.0	158.
7 600	18.2	108.3	18.2	108.3	0.0	19.2	109.5	66.	19.7	110.8	141.	20.3	112.3	280.
7 606	18.7	108.6	18.7	108.6	0.0	20.5	109.9	11.	21.6	111.5	75.	22.3	113.2	179.
7 612	19.3	108.8	19.3	108.8	0.0	21.4	110.0	25.	23.5	111.9	46.	25.0	114.0	143.
7 618	19.9	109.1	19.8	109.0	8.1	21.8	110.1	38.	23.2	111.5	120.	24.2	113.5	193.
7 700	20.3	109.6	20.3	109.6	0.0	21.9	111.9	34.	23.3	114.3	68.	24.4	116.9	58.
7 706	20.7	110.1	20.5	110.1	12.0	21.3	112.5	96.	21.9	115.0	148.	23.0	117.3	63.
7 712	21.1	110.4	21.2	110.4	6.0	22.9	112.1	58.	24.0	114.4	116.	24.7	117.0	0.
7 718	21.5	110.7	21.5	110.7	0.0	23.0	112.2	93.	24.3	113.8	177.	24.9	115.9	0.
7 800	22.0	111.3	22.0	111.3	0.0	23.6	113.3	97.	24.7	115.5	135.	25.5	118.7	0.
7 806	22.7	112.0	22.8	111.9	8.1	25.1	114.3	86.	26.4	116.5	168.	27.1	118.8	0.
7 812	23.3	112.7	23.7	112.7	24.0	26.4	114.3	174.	29.1	116.0	0.	32.1	117.1	0.
7 818	23.9	113.5	24.0	113.5	6.0	25.7	115.3	142.	27.5	117.0	0.	29.7	118.5	0.
7 900	24.0	114.6	24.3	114.9	24.4	25.2	119.9	139.	25.7	124.3	0.	26.1	128.4	0.
7 906	24.0	115.5	24.3	115.6	18.8	25.0	120.2	142.	0.0	0.0	0.	0.0	0.0	0.
7 912	23.9	116.2	24.3	116.5	29.1	24.4	119.9	0.	0.0	0.0	0.	0.0	0.0	0.
7 918	23.9	117.0	23.9	117.0	0.0	24.4	119.2	0.	0.0	0.0	0.	0.0	0.0	0.
71000	23.9	117.8	23.9	117.8	0.0	24.1	120.9	0.	0.0	0.0	0.	0.0	0.0	0.
71006	0.0	0.0	23.9	117.9	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
71012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
71018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								87.			150.			236.
NUMBER OF CASES								24			20			16

TABLE 9.

GENEVIEVE

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
7 700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
7 706	10.5	95.5	10.5	95.5	0.0	11.7	97.6	74.	12.4	100.3	138.	13.7	103.1	264.
7 712	10.9	96.1	11.0	96.0	8.3	12.7	99.0	80.	13.5	101.4	113.	14.1	103.6	301.
7 718	11.3	96.8	11.3	96.8	0.0	12.6	99.7	59.	12.4	102.6	211.	14.3	105.6	296.
7 800	11.7	97.8	11.8	97.8	6.0	13.2	101.3	6.	14.4	104.7	106.	15.5	108.1	247.
7 806	11.7	98.8	12.1	98.8	24.0	13.7	102.7	45.	15.4	105.7	103.	16.2	108.7	236.
7 812	12.0	99.7	12.3	100.3	38.6	13.8	104.8	131.	15.0	108.2	187.	16.4	111.7	273.
7 818	12.3	100.4	12.6	100.7	24.8	14.0	104.6	92.	15.2	108.7	223.	16.3	113.0	329.
7 900	13.0	101.4	13.1	101.3	8.3	14.5	104.5	104.	15.8	107.9	231.	16.9	111.1	253.
7 906	13.7	102.2	14.0	102.0	21.2	16.4	105.8	44.	18.0	109.7	128.	19.0	114.0	306.
7 912	14.5	103.2	14.8	102.8	28.8	17.2	106.3	58.	18.1	109.9	141.	18.8	113.5	315.
7 918	15.3	104.3	15.5	104.3	12.0	17.0	107.0	115.	18.2	110.0	148.	19.2	113.0	259.
71000	16.1	105.1	16.1	105.2	5.6	18.1	108.9	93.	19.3	112.5	197.	20.2	115.6	345.
71006	17.0	106.1	17.1	106.0	8.2	19.3	110.0	62.	20.6	113.5	254.	21.3	117.2	437.
71012	17.9	107.0	17.9	107.0	0.0	20.1	110.8	81.	21.3	113.8	285.	21.9	116.0	351.
71018	18.8	107.8	18.8	107.7	5.5	21.4	111.4	122.	23.0	114.1	292.	23.8	116.0	308.
71100	19.4	108.4	19.6	108.5	13.2	21.9	111.4	130.	23.4	114.3	284.	24.1	117.0	337.
71106	20.0	108.9	20.1	109.3	22.8	22.2	112.2	192.	23.4	114.8	309.	24.1	117.7	370.
71112	20.4	109.0	20.4	109.4	22.0	22.0	111.7	170.	23.0	113.8	230.	23.5	116.0	0.
71118	20.7	109.0	20.6	109.4	22.8	21.8	110.2	64.	22.8	111.9	76.	23.0	114.0	0.
71200	20.9	109.0	20.8	109.4	22.8	21.5	109.5	6.	22.4	111.4	21.	22.9	114.7	0.
71206	21.1	109.0	21.0	109.0	6.0	21.9	109.1	21.	22.8	110.0	69.	23.8	112.0	0.
71212	21.3	109.1	21.5	108.7	25.0	22.4	108.4	72.	23.2	108.8	0.	23.8	109.6	0.
71218	21.4	109.3	21.5	109.1	12.5	22.0	110.2	30.	22.6	110.9	0.	23.0	112.3	0.
71300	21.7	109.6	21.5	109.6	12.0	22.0	111.1	36.	22.8	112.1	0.	23.8	112.9	0.
71306	21.8	110.0	22.1	109.4	37.5	23.4	110.7	18.	24.5	113.2	0.	0.0	0.0	0.
71312	22.0	110.3	22.4	109.7	40.8	23.3	111.1	0.	24.0	112.0	0.	0.0	0.0	0.
71318	22.9	110.6	22.2	110.7	42.4	23.2	112.7	0.	24.0	115.5	0.	24.5	119.0	0.
71400	22.7	110.8	22.6	111.1	17.5	24.0	112.7	0.	0.0	0.0	0.	0.0	0.0	0.
71406	23.5	110.9	23.5	111.0	5.5	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
71412	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
71418	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								76.			178.			308.
NUMBER OF CASES								25			21			17

TABLE 10.

HERNAN

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
72700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
72706	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
72712	16.0	110.6	16.1	111.0	23.4	18.3	114.3	68.	20.5	116.5	188.	22.1	118.8	319.
72718	16.4	111.4	16.6	112.0	36.1	18.0	115.7	49.	19.3	119.5	114.	20.2	123.3	183.
72800	16.6	112.3	16.8	112.5	16.5	18.1	116.3	49.	19.5	120.0	115.	20.0	123.1	153.
72806	16.9	113.1	17.2	113.5	29.0	18.5	117.0	60.	19.8	120.6	146.	20.7	123.7	199.
72812	17.0	114.0	17.2	114.0	12.0	18.1	117.3	47.	19.2	120.6	122.	20.0	123.9	151.
72818	17.2	115.0	17.2	115.5	28.6	17.6	119.7	63.	17.8	124.0	127.	17.8	128.2	231.
72900	17.3	115.9	17.3	116.1	11.4	17.9	119.3	29.	18.7	122.7	72.	19.1	126.3	138.
72906	17.4	116.7	17.5	117.0	18.1	18.3	120.6	59.	19.3	123.7	120.	19.9	126.2	0.
72912	17.5	117.6	17.7	118.0	25.8	18.6	122.1	105.	20.1	125.9	203.	22.0	129.8	0.
72918	17.5	118.4	17.6	118.6	12.9	18.4	122.0	55.	19.4	125.3	141.	20.4	128.6	0.
73000	17.5	119.2	17.6	119.7	29.1	17.9	123.6	82.	18.7	127.3	158.	19.4	131.3	0.
73006	17.4	120.0	17.4	120.2	11.4	17.3	123.9	64.	17.7	127.5	0.	18.3	131.0	0.
73012	17.5	120.7	17.2	121.0	24.8	16.9	124.9	83.	0.0	0.0	0.	0.0	0.0	0.
73018	17.5	121.5	17.5	121.8	17.1	17.5	125.0	47.	0.0	0.0	0.	0.0	0.0	0.
73100	17.6	122.2	17.6	122.2	0.0	17.7	124.8	40.	0.0	0.0	0.	0.0	0.0	0.
73106	17.5	122.9	17.5	122.8	5.7	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
73112	17.4	123.6	17.5	123.6	6.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
73118	17.3	124.2	17.3	124.2	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
8 100	17.1	125.1	17.1	125.1	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
8 106	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
8 112	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
8 118	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								60.			137.			196.
NUMBER OF CASES								15			11			7

TABLE 11.

ISELLE

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
8 300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
8 306	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
8 312	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
8 318	14.0	96.4	13.0	99.0	161.8	13.3	102.7	192.	13.7	106.3	241.	14.2	109.5	225.
8 400	14.1	97.2	14.2	96.5	40.8	14.2	97.8	140.	14.3	99.4	217.	14.8	102.5	354.
8 406	14.2	97.9	14.2	97.2	40.2	14.4	99.6	76.	15.2	102.9	67.	16.5	107.0	148.
8 412	14.3	98.7	14.1	99.4	42.1	14.3	101.7	44.	14.5	104.2	141.	14.8	107.0	271.
8 418	14.4	99.3	14.4	99.6	17.2	15.0	103.0	34.	15.8	106.6	74.	16.5	110.2	141.
8 500	14.6	100.0	14.9	100.1	18.9	16.2	102.9	25.	17.4	106.1	115.	18.3	109.8	189.
8 506	14.8	100.7	14.9	100.8	8.3	15.5	103.9	40.	16.2	106.9	161.	17.6	111.5	139.
8 512	15.0	101.5	15.0	101.5	0.0	15.7	104.6	66.	16.5	107.9	174.	17.5	112.0	164.
8 518	15.4	102.5	15.3	102.5	6.0	16.4	105.8	73.	17.7	109.3	161.	18.9	113.0	145.
8 600	16.0	103.5	15.8	102.8	41.5	17.5	105.4	156.	18.8	108.1	289.	19.9	111.6	287.
8 606	16.6	104.5	16.1	103.6	59.1	17.4	106.8	149.	18.8	110.2	216.	20.0	113.7	210.
8 612	16.8	105.6	16.8	104.7	50.8	18.4	107.9	167.	19.8	111.1	233.	20.6	113.9	248.
8 618	17.0	106.9	17.0	106.9	0.0	17.7	111.7	29.	18.4	115.3	19.	19.3	119.0	23.
8 700	17.2	108.1	17.2	108.1	0.0	17.6	113.0	25.	18.4	116.7	17.	19.4	119.8	56.
8 706	17.4	109.3	17.4	109.4	5.6	18.2	114.3	26.	19.3	119.1	121.	20.3	123.8	231.
8 712	17.7	110.6	17.6	110.7	8.2	18.4	115.5	44.	19.5	120.2	135.	20.6	124.5	255.
8 718	17.9	112.0	18.0	112.1	8.2	19.0	117.7	142.	20.3	122.5	228.	21.2	128.0	449.
8 800	18.0	113.1	18.0	113.1	0.0	18.1	117.1	44.	18.4	121.5	170.	18.9	126.0	365.
8 806	18.1	114.0	18.0	113.9	8.2	18.1	117.4	35.	18.5	120.7	133.	19.3	123.5	283.
8 812	18.2	114.8	18.1	114.8	6.0	18.5	118.4	37.	19.2	122.0	165.	20.0	125.5	325.
8 818	18.3	115.5	18.1	115.4	13.2	18.3	118.6	60.	18.5	121.8	239.	19.0	125.0	377.
8 900	18.5	116.3	18.4	116.4	8.2	18.8	120.3	99.	19.5	124.0	261.	20.1	127.7	391.
8 906	18.8	117.0	18.6	117.1	13.2	19.8	120.0	45.	20.9	122.9	181.	21.4	125.8	282.
8 912	19.1	117.7	18.9	117.9	16.2	19.9	121.1	100.	21.0	124.2	241.	22.0	127.5	315.
8 918	19.5	118.2	19.3	118.6	25.0	20.6	121.6	127.	22.0	125.0	211.	24.2	127.8	0.
81000	20.0	118.7	19.8	118.9	16.2	20.7	121.6	135.	21.7	124.6	222.	21.9	127.7	0.
81006	20.5	119.2	20.5	119.7	27.4	22.0	122.3	109.	23.2	125.0	165.	24.1	128.0	0.
81012	21.3	119.8	21.2	120.0	12.5	24.2	121.9	61.	27.0	124.0	43.	28.7	126.5	0.
81018	22.1	120.4	22.1	120.0	21.9	25.5	121.3	97.	28.5	122.9	0.	29.0	124.9	0.
81100	22.9	121.0	22.9	121.1	5.5	25.5	123.0	24.	27.4	124.2	0.	28.1	125.1	0.
81106	23.7	121.7	23.8	122.0	17.5	26.5	125.8	106.	28.0	129.0	0.	29.3	132.3	0.
81112	24.3	122.3	24.8	122.8	40.6	28.7	125.4	158.	31.2	127.6	0.	0.0	0.0	0.
81118	24.9	122.9	25.0	123.0	8.1	27.3	125.1	0.	0.0	0.0	0.	0.0	0.0	0.
81200	25.4	123.5	25.2	123.3	16.2	26.1	124.7	0.	0.0	0.0	0.	0.0	0.0	0.
81206	25.8	124.0	25.8	124.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
81212	26.4	124.2	26.3	124.2	6.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
81218	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								83.			166.			245.
NUMBER OF CASES								32			28			24

TABLE 12.

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
81500	14.5	98.8	14.4	99.0	12.9	15.1	101.5	68.	16.3	104.5	59.	17.6	108.6	155.
81506	14.5	99.5	14.4	99.7	12.9	15.0	102.7	49.	16.0	105.8	187.	17.2	109.9	217.
81512	14.6	100.4	14.4	100.3	13.3	15.0	103.4	72.	16.4	106.8	238.	18.0	110.2	230.
81518	15.0	101.3	15.0	101.5	11.3	16.5	105.4	81.	18.4	109.2	196.	20.0	113.5	341.
81600	15.4	102.1	15.5	102.6	28.8	17.7	106.7	152.	19.6	110.4	243.	21.3	114.0	381.
81606	15.8	102.7	15.8	102.9	11.3	17.4	106.2	170.	19.1	109.4	159.	20.7	112.7	285.
81612	16.1	103.3	16.2	103.5	12.8	17.9	106.8	212.	19.5	110.1	190.	21.0	114.0	346.
81618	16.5	103.9	16.4	104.0	8.2	18.1	106.8	71.	19.8	110.2	154.	21.6	114.0	341.
81700	16.8	104.5	17.2	104.1	32.9	19.0	104.5	97.	0.0	0.0	0.	0.0	0.0	0.
81706	17.2	105.0	18.0	103.3	106.8	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
81712	17.6	105.5	18.2	103.1	139.4	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
81718	17.9	105.9	17.2	106.0	42.4	18.9	108.6	69.	22.0	110.0	161.	25.0	108.5	330.
81800	18.3	106.3	18.8	106.2	30.5	22.3	108.4	175.	25.4	110.7	352.	0.0	0.0	0.
81806	18.7	106.7	19.0	106.6	18.8	21.5	108.1	121.	24.3	108.1	259.	0.0	0.0	0.
81812	18.9	106.9	20.1	106.8	72.2	23.7	107.8	240.	0.0	0.0	0.	0.0	0.0	0.
81818	19.1	107.1	19.4	107.5	28.6	20.9	108.8	69.	0.0	0.0	0.	0.0	0.0	0.
81900	19.3	107.4	19.5	107.5	13.2	20.3	108.2	18.	0.0	0.0	0.	0.0	0.0	0.
81906	19.5	107.6	19.5	107.8	11.1	20.6	109.4	67.	22.0	111.0	0.	23.5	111.2	0.
81912	19.7	107.8	19.7	108.0	11.1	20.9	109.4	82.	0.0	0.0	0.	0.0	0.0	0.
81918	19.9	108.0	19.9	108.2	11.1	21.1	109.4	109.	0.0	0.0	0.	0.0	0.0	0.
82000	20.0	108.1	20.0	108.2	5.6	20.7	108.7	0.	0.0	0.0	0.	0.0	0.0	0.
82006	20.0	108.3	20.0	108.4	5.6	20.6	109.0	0.	0.0	0.0	0.	0.0	0.0	0.
82012	0.0	0.0	19.7	108.7	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
82018	0.0	0.0	19.5	108.5	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								107.			200.			292.
NUMBER OF CASES								18			11			9

TABLE 13. JULIO

KENNA

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
81600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
81606	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
81612	12.4	133.8	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
81618	12.4	134.3	12.3	134.5	13.2	12.5	138.5	43.	13.2	142.5	0.	14.5	146.4	0.
81700	12.5	135.1	12.5	135.5	23.4	13.1	139.4	46.	13.7	143.3	0.	14.5	147.0	0.
81706	12.5	136.0	12.5	136.0	0.0	12.6	139.9	19.	12.7	144.0	0.	12.8	148.8	0.
81712	12.5	136.8	12.5	136.4	23.4	12.8	139.1	34.	13.7	142.3	0.	15.0	145.2	0.
81718	12.5	137.8	12.3	137.8	12.0	12.5	141.4	0.	13.1	145.2	0.	14.0	149.1	0.
81800	12.6	138.8	12.5	138.9	8.4	12.9	143.2	0.	13.5	146.7	0.	14.6	149.9	0.
81806	12.6	139.6	12.5	139.6	6.0	13.2	143.3	0.	14.2	147.0	0.	15.2	150.7	0.
81812	0.0	0.0	12.5	139.6	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
81818	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								36.			0.			0.
NUMBER OF CASES								4			0			0

TABLE 14.

LOWELL

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
82600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
82606	15.6	114.1	13.1	117.0	223.5	13.1	120.8	252.	13.8	123.8	253.	15.2	126.7	327.
82612	15.7	114.8	13.2	118.0	237.1	13.3	121.9	263.	13.3	125.8	333.	13.4	130.0	484.
82618	15.8	115.7	15.8	115.7	0.0	16.2	119.0	68.	16.9	122.7	96.	18.0	125.7	300.
82700	16.0	116.8	16.0	116.8	0.0	17.0	121.3	13.	18.2	125.5	104.	19.4	129.1	265.
82706	16.2	117.8	16.3	118.0	12.6	17.7	122.2	31.	19.4	126.0	82.	21.3	129.2	214.
82712	16.5	118.9	16.5	118.8	5.5	17.5	122.7	26.	19.2	126.0	78.	20.1	129.8	0.
82718	16.7	120.0	16.8	120.0	6.0	18.0	123.7	21.	19.2	127.7	210.	20.3	131.5	0.
82800	17.0	120.9	17.2	121.2	20.5	18.7	126.0	108.	20.0	129.3	230.	21.8	132.7	0.
82806	17.4	121.6	17.5	121.7	8.2	18.5	124.9	114.	19.8	128.2	314.	20.9	131.1	0.
82812	17.8	122.6	17.7	122.3	17.6	18.7	125.1	119.	19.8	128.0	0.	21.2	131.3	0.
82818	18.7	123.7	18.3	123.5	26.4	20.1	126.6	164.	21.7	129.6	0.	23.0	132.9	0.
82900	19.7	124.7	19.5	124.3	25.1	23.0	126.9	110.	25.7	129.1	0.	0.0	0.0	0.
82906	20.6	125.6	20.4	125.0	35.2	22.9	127.7	166.	24.0	129.2	0.	0.0	0.0	0.
82912	21.7	126.7	20.5	126.0	81.7	22.6	129.2	0.	24.0	132.1	0.	0.0	0.0	0.
82918	22.7	127.5	22.7	127.5	0.0	26.2	131.0	0.	0.0	0.0	0.	0.0	0.0	0.
83000	23.8	128.7	23.8	128.7	0.0	27.1	133.5	0.	0.0	0.0	0.	0.0	0.0	0.
83006	24.8	129.9	24.8	129.9	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
83012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
83018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								112.			189.			318.
NUMBER OF CASES								13			9			5

TABLE 15.

MARIE

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
9 500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
9 506	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
9 512	16.8	104.4	16.0	106.0	101.0	16.5	108.0	133.	17.7	110.1	270.	19.5	113.8	337.
9 518	17.2	105.3	16.5	106.3	69.2	17.6	108.6	129.	19.8	111.3	191.	21.2	113.9	303.
9 600	17.6	106.1	17.2	106.0	24.6	18.4	108.6	166.	19.5	111.3	270.	21.1	114.0	374.
9 606	18.0	107.3	17.6	107.4	24.6	19.2	111.8	102.	21.0	115.6	219.	22.8	119.3	334.
9 612	18.7	108.3	18.4	109.2	51.4	20.4	113.9	119.	22.7	117.6	198.	25.0	120.2	264.
9 618	19.3	109.5	19.3	110.0	26.5	22.8	115.0	127.	26.0	116.6	38.	27.3	118.0	121.
9 700	20.0	110.6	20.0	111.0	21.3	22.2	114.2	87.	24.5	116.6	152.	25.0	118.9	269.
9 706	20.8	111.6	20.9	111.7	8.0	24.1	115.0	61.	26.7	116.7	81.	29.0	118.0	113.
9 712	21.5	112.3	21.7	112.3	12.0	25.5	114.5	40.	29.5	113.8	209.	0.0	0.0	0.
9 718	22.4	112.9	22.7	112.7	20.8	25.9	114.0	103.	28.4	116.0	182.	29.8	118.5	110.
9 800	23.4	113.3	23.5	113.5	11.9	26.8	115.1	60.	29.3	116.1	199.	31.0	118.3	122.
9 806	24.3	113.9	24.3	113.9	0.0	27.8	115.1	107.	30.4	115.9	217.	0.0	0.0	0.
9 812	25.0	115.0	25.0	115.0	0.0	28.1	117.4	45.	30.0	120.0	24.	30.8	123.3	0.
9 818	25.9	115.9	25.9	115.9	0.0	29.0	118.8	32.	31.0	122.2	95.	0.0	0.0	0.
9 900	27.0	116.2	27.0	116.2	0.0	31.2	116.6	202.	0.0	0.0	0.	0.0	0.0	0.
9 906	28.0	117.0	28.0	117.1	5.2	31.3	119.9	96.	33.6	123.0	0.	0.0	0.0	0.
9 912	28.6	118.0	28.8	117.7	19.6	32.2	120.8	117.	33.0	123.5	0.	0.0	0.0	0.
9 918	29.0	119.0	28.9	119.4	21.5	29.6	121.8	83.	30.5	124.2	0.	0.0	0.0	0.
91000	29.3	119.6	29.4	119.9	16.6	30.5	122.7	109.	31.8	124.9	0.	0.0	0.0	0.
91006	29.8	120.0	29.7	120.0	6.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91012	30.2	120.3	30.3	120.3	6.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91018	30.4	120.5	30.4	120.5	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91100	30.5	120.6	30.5	120.6	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91106	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91112	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91118	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								101.			167.			235.
NUMBER OF CASES								19			14			10

TABLE 16.

NORBERT

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
91400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91406	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91412	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91418	18.5	115.5	18.5	115.6	5.7	18.6	117.2	140.	18.9	119.0	374.	19.3	121.5	557.
91500	18.1	115.5	18.1	115.5	0.0	17.3	116.5	106.	17.8	117.6	317.	18.0	119.2	400.
91506	17.9	115.2	17.9	115.1	5.7	17.6	114.1	24.	0.0	0.0	0.	0.0	0.0	0.
91512	17.8	115.0	18.0	115.3	20.8	18.5	115.7	173.	18.9	116.4	285.	19.2	117.2	239.
91518	17.7	114.8	17.8	114.9	8.3	18.2	115.0	145.	18.5	115.4	207.	18.8	115.8	131.
91600	17.5	114.3	17.7	114.7	25.4	18.0	113.4	88.	19.3	112.1	54.	23.0	111.0	281.
91606	17.3	113.7	17.7	114.5	51.1	17.9	113.7	122.	19.3	114.4	101.	20.0	116.6	121.
91612	17.2	113.0	17.2	113.0	0.0	17.5	111.9	17.	18.1	111.5	98.	18.9	111.3	227.
91618	17.1	112.5	17.2	112.7	12.8	17.5	111.7	31.	18.3	111.1	143.	19.3	110.9	278.
91700	17.1	112.0	17.2	112.1	8.2	17.4	111.0	91.	18.2	110.3	233.	19.7	110.2	351.
91706	17.4	111.8	17.2	111.7	13.3	17.8	110.5	139.	18.7	110.0	261.	19.8	109.9	393.
91712	17.7	111.7	17.3	111.7	24.0	17.8	111.2	122.	18.4	110.8	263.	19.0	110.4	370.
91718	17.9	111.8	18.0	111.8	6.0	19.5	112.0	90.	21.0	113.0	176.	22.1	114.5	284.
91800	18.3	112.0	18.4	112.2	12.7	20.6	114.9	82.	22.7	118.3	225.	24.8	122.0	542.
91806	18.6	112.5	18.8	112.7	16.4	20.3	115.7	80.	22.1	118.5	204.	24.1	120.8	518.
91812	18.9	112.9	18.9	113.0	5.7	19.9	115.0	13.	20.4	117.0	108.	20.4	119.1	335.
91818	19.1	113.4	19.0	113.5	8.3	19.2	115.6	32.	19.5	117.8	123.	19.9	120.3	445.
91900	19.4	113.9	19.4	114.2	17.0	20.5	116.3	66.	21.6	118.7	281.	22.3	121.2	626.
91906	19.5	114.6	19.6	114.5	8.3	20.4	116.5	80.	21.1	118.5	297.	21.5	120.5	627.
91912	19.6	115.1	19.8	115.2	13.3	20.7	117.7	134.	21.8	120.0	428.	22.9	122.7	823.
91918	19.5	115.8	19.7	115.8	12.0	19.6	118.4	149.	20.0	120.9	479.	20.8	123.4	847.
92000	19.4	116.3	19.4	116.4	5.7	19.2	118.5	162.	18.9	120.8	523.	19.3	122.8	821.
92006	18.9	116.7	19.1	116.8	13.3	17.7	118.4	175.	17.0	120.2	541.	16.6	122.2	794.
92012	18.3	116.7	18.6	116.9	21.3	17.3	118.0	197.	17.7	120.4	616.	18.3	125.3	957.
92018	17.8	116.5	17.8	116.6	5.7	17.0	116.0	157.	17.7	115.4	368.	20.1	114.0	303.
92100	17.3	116.1	17.5	116.3	16.5	17.2	114.0	122.	17.8	113.0	258.	18.8	111.2	128.
92106	16.9	115.4	17.1	115.4	12.0	17.3	113.0	135.	18.1	111.0	151.	19.9	110.0	23.
92112	16.6	114.4	16.8	114.6	16.4	17.5	111.8	130.	18.2	111.0	143.	21.6	110.4	54.
92118	16.5	113.3	16.6	113.3	6.0	17.0	110.0	58.	17.9	109.4	69.	18.9	109.7	183.
92200	16.5	111.9	16.5	112.0	5.6	18.7	106.4	140.	0.0	0.0	0.	0.0	0.0	0.
92206	16.5	110.8	16.5	110.8	0.0	18.5	106.8	106.	0.0	0.0	0.	0.0	0.0	0.
92212	16.6	109.7	16.7	109.7	6.0	19.1	106.7	111.	22.3	105.0	322.	0.0	0.0	0.
92218	17.0	108.9	17.1	109.0	8.2	21.1	106.0	206.	0.0	0.0	0.	0.0	0.0	0.
92300	17.4	108.4	17.5	108.5	8.2	20.0	106.7	137.	0.0	0.0	0.	0.0	0.0	0.
92306	17.8	108.3	17.6	108.4	13.3	19.2	107.8	110.	21.8	107.7	288.	23.7	107.2	0.
92312	18.3	108.3	18.4	108.5	12.8	20.9	108.1	135.	24.0	107.3	323.	0.0	0.0	0.
92318	18.8	108.7	18.9	108.8	8.2	20.9	111.3	36.	22.2	114.4	191.	22.9	117.7	0.
92400	19.3	109.1	19.3	109.0	5.6	21.1	110.3	124.	22.8	112.8	0.	24.2	115.7	0.
92406	19.9	109.6	19.9	109.6	0.0	21.9	111.7	91.	23.7	113.6	0.	26.4	113.3	0.
92412	20.7	110.3	20.7	110.5	11.3	23.1	113.7	66.	25.3	116.7	0.	27.6	118.3	0.
92418	21.5	111.1	21.5	111.4	16.9	25.7	115.7	116.	30.3	118.5	0.	32.9	116.9	0.
92500	22.3	112.0	22.3	112.1	5.6	26.3	115.3	0.	30.5	117.5	0.	0.0	0.0	0.
92506	23.1	112.6	23.1	112.7	5.6	26.1	115.1	0.	29.2	114.9	0.	0.0	0.0	0.
92512	24.1	113.1	24.1	113.2	5.6	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
92518	25.1	113.5	25.3	113.6	13.3	30.1	112.8	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								108.			264.			416.
NUMBER OF CASES								41			32			28

TABLE 17.

ODILE

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
91700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91706	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91712	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
91718	14.3	101.5	14.0	101.7	21.4	14.6	105.1	54.	15.8	108.2	205.	17.1	111.2	460.
91800	14.5	102.2	14.4	102.2	6.0	15.0	105.7	68.	16.6	109.5	276.	18.3	113.2	622.
91806	14.7	102.9	15.0	103.2	24.8	16.8	106.0	104.	18.3	108.6	258.	19.8	111.5	577.
91812	15.0	103.6	15.0	103.7	5.7	16.3	106.5	65.	17.5	109.3	283.	18.7	112.0	640.
91818	15.2	104.1	15.2	104.4	17.2	16.1	107.3	151.	17.3	110.3	409.	18.8	113.2	718.
91900	15.4	104.5	15.4	104.6	5.7	16.4	106.6	109.	18.0	109.3	400.	19.8	112.6	700.
91906	15.7	104.9	15.5	104.8	13.3	16.4	106.7	127.	17.8	108.7	392.	19.7	110.8	602.
91912	16.0	105.0	15.8	105.5	30.9	16.9	107.9	198.	18.3	110.4	546.	20.0	113.3	668.
91918	16.3	104.7	16.4	104.7	6.0	16.4	106.7	202.	17.3	109.5	497.	18.9	112.4	594.
92000	16.5	104.5	16.4	104.7	12.9	16.7	104.9	139.	17.8	107.0	361.	19.0	109.4	0.
92006	16.6	104.1	16.5	104.5	23.5	17.4	104.4	148.	19.0	105.5	308.	20.9	107.8	0.
92012	16.6	103.6	16.4	104.5	52.6	17.5	104.7	219.	19.0	105.7	243.	21.3	107.3	0.
92018	16.6	103.2	16.7	103.2	6.0	17.3	101.7	71.	0.0	0.0	0.	0.0	0.0	0.
92100	16.6	102.6	16.5	102.5	8.3	16.6	100.2	44.	0.0	0.0	0.	0.0	0.0	0.
92106	16.4	101.9	16.5	102.0	8.3	16.8	100.1	44.	0.0	0.0	0.	0.0	0.0	0.
92112	16.3	101.2	16.3	101.1	5.7	16.4	98.6	199.	0.0	0.0	0.	0.0	0.0	0.
92118	16.4	100.9	16.4	100.9	0.0	16.7	101.7	80.	17.3	103.1	0.	17.9	104.7	0.
92200	16.4	100.8	16.3	100.9	8.3	17.2	101.1	0.	0.0	0.0	0.	0.0	0.0	0.
92206	16.5	100.7	16.5	100.8	5.7	17.1	100.7	0.	0.0	0.0	0.	0.0	0.0	0.
92212	17.0	102.0	17.0	102.0	0.0	19.5	106.7	0.	0.0	0.0	0.	0.0	0.0	0.
92218	18.0	102.0	18.0	102.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								119.			348.			620.
NUMBER OF CASES								17			12			9

TABLE 18.

POLO

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
92600	12.9	97.6	13.6	100.5	173.8	14.1	104.6	258.	14.7	107.7	240.	15.0	110.6	246.
92606	12.8	98.2	11.6	100.1	131.7	12.0	103.6	183.	13.3	106.7	124.	16.0	111.0	258.
92612	12.7	98.8	13.5	97.0	115.1	13.5	98.1	258.	13.9	100.0	302.	14.3	101.9	349.
92618	12.6	99.5	13.5	96.0	210.3	13.6	97.1	384.	13.8	99.3	400.	14.1	103.0	325.
92700	12.5	100.4	12.5	100.5	5.8	12.9	102.9	103.	14.0	105.5	79.	14.5	108.0	96.
92706	12.4	101.3	12.4	100.5	46.3	12.7	102.3	155.	13.7	104.6	158.	15.0	107.1	160.
92712	12.3	102.4	12.2	102.3	8.3	12.8	105.3	21.	14.2	108.0	13.	15.6	110.5	78.
92718	12.2	103.5	12.2	103.5	0.0	12.8	107.8	100.	17.4	111.5	221.	15.9	115.0	229.
92800	12.3	104.2	12.2	104.5	18.3	12.5	108.3	108.	13.7	111.8	189.	15.1	115.3	245.
92806	12.4	104.8	12.2	104.9	13.3	12.4	107.7	76.	13.4	110.8	163.	15.1	114.3	215.
92812	12.7	105.5	12.6	105.0	29.3	13.1	106.9	97.	13.7	109.3	202.	14.3	111.9	329.
92818	13.0	106.2	13.0	106.1	5.7	14.7	109.0	38.	16.6	112.0	58.	18.5	114.6	91.
92900	13.4	106.7	13.4	106.7	0.0	14.7	109.4	55.	15.7	112.2	132.	16.0	115.2	287.
92906	13.9	107.3	13.6	107.3	18.0	14.9	109.5	61.	16.0	112.0	178.	17.0	115.1	283.
92912	14.4	107.9	14.4	107.9	0.0	16.4	110.2	32.	19.0	112.0	116.	21.7	112.0	111.
92918	15.1	108.6	15.1	108.5	5.5	17.9	110.5	58.	21.0	111.6	168.	24.0	112.0	91.
93000	15.6	109.3	15.6	109.2	5.6	17.2	111.8	48.	18.4	114.4	138.	19.0	116.9	356.
93006	16.1	110.0	15.9	109.7	20.4	17.4	110.6	180.	20.0	112.5	128.	22.7	110.9	68.
93012	16.7	110.7	16.9	110.4	20.4	19.6	112.6	80.	23.6	112.3	106.	0.0	0.0	0.
93018	17.3	111.5	17.3	111.3	11.0	19.9	113.7	40.	23.3	114.2	73.	0.0	0.0	0.
10 100	18.0	112.5	17.9	112.2	17.6	20.2	119.4	288.	22.1	113.9	107.	0.0	0.0	0.
10 106	18.6	113.4	18.6	113.5	5.5	21.4	116.3	129.	25.5	114.8	221.	0.0	0.0	0.
10 112	19.4	114.1	19.4	114.0	5.5	24.0	113.6	91.	0.0	0.0	0.	0.0	0.0	0.
10 118	20.0	114.5	20.0	114.4	5.5	23.4	114.0	66.	0.0	0.0	0.	0.0	0.0	0.
10 200	20.8	114.4	20.7	114.3	8.1	24.0	112.5	55.	0.0	0.0	0.	0.0	0.0	0.
10 206	21.7	114.2	21.6	114.0	12.6	25.5	111.1	102.	0.0	0.0	0.	0.0	0.0	0.
10 212	22.2	113.8	22.5	113.8	18.0	25.7	112.6	156.	0.0	0.0	0.	0.0	0.0	0.
10 218	22.6	113.1	22.8	113.0	13.2	24.5	112.6	0.	0.0	0.0	0.	0.0	0.0	0.
10 300	23.2	112.3	23.1	112.3	6.0	24.5	110.2	0.	0.0	0.0	0.	0.0	0.0	0.
10 306	23.8	111.3	23.8	111.2	5.5	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
10 312	24.5	109.9	24.8	109.9	18.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
10 318	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								119.			160.			212.
NUMBER OF CASES								27			22			18

TABLE 19.

RACHEL

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
10 700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
10 706	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
10 712	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
10 718	11.2	97.0	11.2	97.0	0.0	12.0	100.6	38.	13.5	104.3	74.	15.3	107.9	158.
10 800	11.3	98.0	11.2	97.2	47.1	11.4	99.7	130.	12.3	102.9	141.	13.7	106.1	42.
10 806	11.4	99.0	11.4	99.0	0.0	11.6	103.0	17.	12.7	106.8	73.	13.8	110.4	222.
10 812	11.4	100.0	11.5	100.0	6.0	11.9	103.7	32.	12.6	106.8	41.	13.6	109.8	187.
10 818	11.5	101.0	11.5	101.0	0.0	12.1	104.7	13.	12.9	108.0	70.	14.0	111.0	21.
10 900	11.6	102.1	11.6	101.9	11.6	12.2	105.6	19.	13.3	109.1	140.	14.7	112.5	46.
10 906	11.8	103.0	11.8	103.2	11.6	13.1	107.3	108.	14.7	110.8	255.	17.0	114.0	180.
10 912	11.9	103.8	12.1	104.2	26.0	12.5	107.7	94.	15.2	110.0	215.	18.2	112.5	236.
10 918	12.1	104.5	12.3	104.6	13.3	13.7	107.6	67.	15.6	110.1	121.	18.1	112.6	245.
101000	12.3	105.2	12.3	105.3	5.8	13.4	108.3	94.	15.0	111.6	59.	17.0	114.6	139.
101006	12.6	105.9	12.4	105.6	21.1	13.4	108.0	82.	14.8	110.8	127.	16.0	113.7	63.
101012	12.9	106.7	12.5	106.1	42.0	13.5	108.3	101.	15.1	110.6	195.	17.3	113.2	121.
101018	13.2	107.3	12.9	106.8	33.9	14.3	108.7	127.	16.3	110.5	269.	18.5	112.1	329.
101100	13.4	108.2	13.3	106.7	85.9	15.4	107.3	284.	17.8	107.2	523.	20.0	105.6	730.
101106	13.5	109.1	13.5	106.6	142.7	15.0	106.0	403.	17.5	105.4	548.	0.0	0.0	0.
101112	13.6	109.9	13.8	106.6	188.7	15.7	106.2	452.	17.8	105.9	522.	20.7	105.3	781.
101118	13.6	110.5	13.7	110.8	18.1	14.6	114.3	29.	0.0	0.0	0.	0.0	0.0	0.
101200	14.0	111.9	14.1	112.0	8.3	16.0	115.4	64.	0.0	0.0	0.	0.0	0.0	0.
101206	14.2	112.9	14.2	112.9	0.0	15.0	114.8	60.	0.0	0.0	0.	0.0	0.0	0.
101212	14.4	113.9	14.5	113.9	6.0	15.6	117.4	152.	0.0	0.0	0.	0.0	0.0	0.
101218	14.6	114.8	14.6	114.8	0.0	15.6	117.1	13.	0.0	0.0	0.	0.0	0.0	0.
101300	14.8	115.4	15.0	115.8	25.8	16.2	119.6	118.	0.0	0.0	0.	0.0	0.0	0.
101306	15.0	115.9	16.0	114.8	86.8	18.4	114.5	248.	0.0	0.0	0.	0.0	0.0	0.
101312	15.3	116.4	16.0	114.8	100.5	16.6	115.5	152.	0.0	0.0	0.	0.0	0.0	0.
101318	15.5	117.0	15.5	116.9	5.7	16.3	119.0	0.	0.0	0.0	0.	0.0	0.0	0.
101400	15.6	117.5	15.8	117.6	13.3	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
101406	15.6	117.9	16.1	118.1	32.1	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
101412	15.6	118.3	15.2	117.7	41.8	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
101418	15.5	118.5	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
101500	15.5	118.7	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
101506	15.4	118.9	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
101512	15.3	119.1	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
101518	15.3	119.3	15.8	118.8	41.4	17.0	120.1	0.	0.0	0.0	0.	0.0	0.0	0.
101600	15.3	119.5	15.4	119.9	23.6	16.1	120.6	0.	0.0	0.0	0.	0.0	0.0	0.
101606	15.2	119.7	15.3	120.1	23.6	15.4	121.4	0.	0.0	0.0	0.	0.0	0.0	0.
101612	15.2	119.9	15.2	119.9	0.0	15.2	120.7	0.	0.0	0.0	0.	0.0	0.0	0.
101618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								121.			211.			233.
NUMBER OF CASES								24			16			15

TABLE 20.

SIMON

DATE/TIME (GMT)	BEST TRACK LAT.	BEST TRACK LONG.	OPERATIONAL POSITION LAT.	OPERATIONAL POSITION LONG.	POSITION ERROR (N.MI.)	24 HOUR FORECAST LAT.	24 HOUR FORECAST LONG.	24 HOUR FORECAST ERROR (N.MI)	48 HOUR FORECAST LAT.	48 HOUR FORECAST LONG.	48 HOUR FORECAST ERROR (N.MI.)	72 HOUR FORECAST LAT.	72 HOUR FORECAST LONG.	72 HOUR FORECAST ERROR (N.MI.)
103100	13.1	98.4	13.2	98.5	8.3	13.7	102.4	38.	15.0	106.2	176.	17.0	108.0	440.
103106	13.1	99.2	13.3	99.3	13.3	14.1	103.0	54.	14.9	105.9	261.	16.7	108.4	529.
103112	13.1	100.2	13.5	100.2	24.0	14.6	104.0	59.	15.8	107.9	253.	18.6	110.8	502.
103118	13.3	101.4	13.3	101.3	5.8	13.7	105.2	173.	15.3	108.3	318.	17.7	110.4	584.
11 100	13.6	102.7	13.1	102.2	41.7	13.5	106.2	259.	14.5	109.6	360.	16.6	112.1	590.
11 106	14.0	104.0	13.9	103.9	8.3	15.3	108.4	120.	16.2	111.8	334.	16.5	115.6	460.
11 112	14.3	105.7	14.4	105.0	40.6	16.0	109.7	157.	17.5	114.0	310.	21.1	115.0	709.
11 118	14.5	107.3	16.0	107.0	91.6	17.9	111.9	195.	19.7	112.4	532.	21.7	111.0	989.
11 200	14.6	108.7	17.6	107.6	190.7	23.7	109.2	582.	0.0	0.0	0.	0.0	0.0	0.
11 206	14.8	110.4	14.8	110.4	0.0	17.0	115.0	152.	20.4	116.0	568.	24.6	113.5	1063.
11 212	15.0	112.1	15.0	112.2	5.7	17.0	116.9	141.	20.7	118.5	555.	24.0	118.9	811.
11 218	15.3	113.8	15.2	113.8	6.0	17.2	119.0	166.	20.4	122.3	465.	23.3	124.6	561.
11 300	15.4	115.4	16.1	115.6	43.5	18.2	121.4	242.	19.0	126.6	343.	19.9	131.8	247.
11 306	15.2	117.0	16.5	117.6	85.2	18.6	123.7	297.	20.6	128.5	384.	0.0	0.0	0.
11 312	14.9	118.7	16.5	119.3	101.9	17.5	125.1	256.	18.3	127.5	234.	18.6	130.2	76.
11 318	14.5	120.1	14.6	120.0	8.3	14.0	124.7	81.	14.6	127.7	136.	16.2	129.6	71.
11 400	14.2	121.6	14.2	122.0	23.1	13.5	127.8	6.	13.7	133.0	204.	14.0	138.1	457.
11 406	13.8	123.2	13.7	123.0	13.0	13.2	127.4	97.	14.0	131.1	172.	0.0	0.0	0.
11 412	13.6	124.6	13.3	124.3	25.0	12.4	128.9	154.	12.9	132.7	296.	14.5	135.2	271.
11 418	13.7	126.1	13.5	126.0	13.3	13.8	130.4	100.	14.3	132.7	206.	0.0	0.0	0.
11 500	14.2	127.4	13.4	127.8	53.3	13.7	133.7	236.	0.0	0.0	0.	0.0	0.0	0.
11 506	14.6	128.4	14.2	128.7	29.6	15.3	132.7	156.	0.0	0.0	0.	0.0	0.0	0.
11 512	15.0	129.2	14.9	129.5	18.3	16.4	133.0	150.	0.0	0.0	0.	0.0	0.0	0.
11 518	15.6	129.8	15.4	129.9	13.3	16.2	132.1	104.	0.0	0.0	0.	0.0	0.0	0.
11 600	16.0	130.2	16.0	130.4	11.5	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
11 606	16.2	130.4	16.8	130.5	36.5	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
11 612	16.2	130.7	17.4	130.6	72.2	19.6	130.4	164.	0.0	0.0	0.	0.0	0.0	0.
11 618	16.3	130.9	17.0	130.5	47.9	0.0	0.0	0.	0.0	0.0	0.	0.0	0.0	0.
11 700	16.2	131.1	16.9	130.8	45.4	17.2	131.1	0.	0.0	0.0	0.	0.0	0.0	0.
11 706	16.2	131.4	17.0	131.0	53.3	17.4	132.0	0.	0.0	0.0	0.	0.0	0.0	0.
11 712	16.0	132.3	17.0	131.3	83.3	17.4	132.6	0.	0.0	0.0	0.	0.0	0.0	0.
11 718	17.7	133.3	16.1	131.8	129.3	16.0	133.1	0.	0.0	0.0	0.	0.0	0.0	0.
MEAN VECTOR ERRORS (N.MI)								166.			322.			523.
NUMBER OF CASES								25			19			16

TABLE 21.

NOAA Technical Memoranda NWS WR: (Continued)

121 Climatological Prediction of Cumulonimbus Clouds in the Vicinity of the Yucca Flat Weather Station. R. F. Quiring, June 1977. (PB-271-704/AS)
122 A Method for Transforming Temperature Distribution to Normality. Morris S. Webb, Jr., June 1977. (PB-271-742/AS)
124 Statistical Guidance for Prediction of Eastern North Pacific Tropical Cyclone Motion - Part I. Charles J. Neumann and Preston W. Leftwich, August 1977. (PB-272-661)
125 Statistical Guidance on the Prediction of Eastern North Pacific Tropical Cyclone Motion - Part II. Preston W. Leftwich and Charles J. Neumann, August 1977. (PB-273-155/AS)
127 Development of a Probability Equation for Winter-Type Precipitation Patterns in Great Falls, Montana. Kenneth B. Mielke, February 1978.(PB-281-387/AS)
128 Hand Calculator Program to Compute Parcel Thermal Dynamics. Dan Gudgel, April 1978. (PB-283-080/AS)
129 Fire Whirls. David W. Goens, May 1978. (PB-283-866/AS)
130 Flash-Flood Procedure. Ralph C. Hatch and Gerald Williams, May 1978. (PB-286-014/AS)
131 Automated Fire-Weather Forecasts. Mark A. Mollner and David E. Olsen, September 1978. (PB-289-916/AS)
132 Estimates of the Effects of Terrain Blocking on the Los Angeles WSR-74C Weather Radar. R. G. Pappas, R. Y. Lee, B. W. Finke, October 1978.(PB289767/AS)
133 Spectral Techniques in Ocean Wave Forecasting. John A. Jannuzzi, October 1978. (PB291317/AS)
134 Solar Radiation. John A. Jannuzzi, November 1978. (PB291195/AS)
135 Application of a Spectrum Analyzer in Forecasting Ocean Swell in Southern California Coastal Waters. Lawrence P. Kierulff, January 1979. (PB292716/AS)
136 Basic Hydrologic Principles. Thomas L. Dietrich, January 1979. (PB292247/AS)
137 LFM 24-Hour Prediction of Eastern Pacific Cyclones Refined by Satellite Images. John R. Zimmerman and Charles P. Ruscha, Jr., Jan. 1979. (PB294324/AS)
138 A Simple Analysis/Diagnosis System for Real Time Evaluation of Vertical Motion. Scott Heflick and James R. Fors, February 1979. (PB294216/AS)
139 Aids for Forecasting Minimum Temperature in the Wenatchee Frost District. Robert S. Robinson, April 1979. (PB298339/AS)
140 Influence of Cloudiness on Summertime Temperatures in the Eastern Washington Fire Weather District. James Holcomb, April 1979. (PB298674/AS)
141 Comparison of LFM and MFM Precipitation Guidance for Nevada During Doreen. Christopher Hill, April 1979. (PB298613/AS)
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143 The Depth of the Marine Layer at San Diego as Related to Subsequent Cool Season Precipitation Episodes in Arizona. Ira S. Brenner, May 1979. (PB298817/AS)
144 Arizona Cool Season Climatological Surface Wind and Pressure Gradient Study. Ira S. Brenner, May 1979. (PB298900/AS)
145 On the Use of Solar Radiation and Temperature Models to Estimate the Snap Bean Maturity Date in the Willamette Valley. Earl M. Bates, August 1979. (PB80-160971)
146 The BART Experiment. Morris S. Webb, October 1979. (PB80-155112)
147 Occurrence and Distribution of Flash Floods in the Western Region. Thomas L. Dietrich, December 1979. (PB80-160344)
149 Misinterpretations of Precipitation Probability Forecasts. Allan H. Murphy, Sarah Lichtenstein, Baruch Fischhoff, and Robert L. Winkler, February 1980. (PB80-174576)
150 Annual Data and Verification Tabulation - Eastern and Central North Pacific Tropical Storms and Hurricanes 1979. Emil B. Gunther and Staff, EPHC, April 1980. (PB80-220486)
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179 Stratified Maximum Temperature Relationships Between Sixteen Zone Stations in Arizona and Respective Key Stations. Ira S. Brenner, June 1983. (PB83-248904)
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