



NOAA P-3 N42RF H. Ophelia

Flight ID: 050913H

Sensor or system

Number or Name

INE.....	2
Accelerometer.....	2
Temperature Probe.....	1
Dew Point Probe.....	1
Altimeter (for vertical wind).....	RA-159
Static Pressure.....	Rosemount (fuselage)
Dynamic Pressure.....	Rosemount (fuselage)
Time Source.....	Micro 99

Local Met. Data: Not copied at takeoff

Take off: 1858Z

Land: 0106Z

The RA-232 was substituted for the RA-159 during take off and landing due to spiking (T.O. 185501-185838; 005955-010900 Land).

Dew point probe #1 had a balancing spike removed. It was replaced by dew pointer #2 with a 3.1 °C offset (233439-233747).

All other instruments functioned normally during the flight.

There were no data gaps noted.

There were times during heavy precipitation events (e.g. eye wall penetrations) when the dew point exceeded ambient temperature yielding a RH of greater than 100%. This is probably due to a wet bulb effect on the total temperature probe and/or the dew pointer over heating while trying to remove excess moisture. In these instances, no corrections were attempted.

SPECIAL NOTE: These data have not had Dr. Dave Jorgensen's vertical wind algorithm applied to them. Only the Aircraft Operations Center standard vertical wind algorithm has been applied. A new post-flight data processing algorithm was employed which currently lacks the Jorgensen method. The data can and will be rerun if required by the investigator.

	Take off	Land
Aircraft Static Pressure	1014.0 mb	1014.1 mb
Corrected Tower Pressure	1015.2 mb	1014.6 mb

Flight Director: Tom Shepherd
813-828-3310 x3053

U.S. Dep't. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID: 050913H	From: KMCF	To: Kmcf
Flt No: 05-	In: 0117 Z	On: 0106 Z
ETD: 1900Z	Out: 1846	Off: 1858
ETE: 5+00	Blk Time: 6+31 6.5 Hrs	Flt Time: 6+08 6.1 Hrs
Sponsoring Org: NOAA/NESDIS	Program: HURR05	Purpose: TH OPHELIA

AOC Flight Crew

Aircraft Commander: STRONG, T	Data System: McMillan, S ✓
Co-Pilot: NELSON, M	AVAPS: DLNEY, B ✓
Navigator: GALLAGHER, T	System Engineer: KERR, B ✓
Flight Eng: BAST, E ' WADE, S	AA:
Flight Director: SHEPHERD, T ✓	AA:
Avionics:	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
CHANG, P -		
ESTEBAN, D ✓		
ASUZU, P ✓		
CHU, TAO -		
x HUA QIND, CAI -		
x WEI, CHIHHSIEN		

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)	Recco Times	Fix #	Fix Time
Storm Name: OPHELIA	4 2310	61	2029
Mission ID: WX16A OPHELIA	5 2339		3212N 7810W E985
TEAC 40 10KPA 202 21 00 03	152 320 76.0 988	2 2122 3 2246	

(See reverse for additional remarks)

GX 254-379-2285

U.S. DEPT OF COMMERCE / NMAO / NOAA / AIRCRAFT OPERATIONS CENTER

FLT ID: 050913H TIME OFF: 1858 Z TIME ON: 0106 Z

	A/C - Takeoff	WX Station - Takeoff	A/C - Land	WX Station - Land
Pressure	1014.0	29.98	1014.1	29.96

ATIS - Takeoff

ATIS - Land

Data Source	Number	Data Disposition / Date / Quality	
Flight Level Tapes	2		
Radar Tapes	1		
Cloud Physics Tapes / Cds	0		
Video Tapes	4		
Dropsondes	15	Good: 15 Bad:	Total:
AXBT	6	3 REV F	
AXCP			
AXCTD			
SONOBUOY			

REMARKS:

050913H

Time	Lat	Lon	TA	TD	Trk	Hdg	RA	PS	SP	WD	WS	WZ	Comments
184723	27.50.76	-82.29.58	31.5	15.4	270.1	270.4	11.0	1014.3	1015.6	87.0	4.5	19.0	Block out @ 1846Z
185806	27.51.12	-82.31.14	29.9	15.0	41.0	39.7	14.0	1011.4	1013.0	304.5	5.6	1.8	Take off
192339	29.8.34	-81.15.00	15.7	.3	31.6	29.3	2242.0	780.9	1010.4	304.6	7.6	.2	Still ovr land
193054	29.34.62	-80.55.80	14.1	7.6	32.5	30.0	2261.0	781.0	1013.6	312.6	8.5	.1	Feet wet now.
193328	29.43.62	-80.48.66	14.2	7.7	36.0	32.6	2257.0	780.9	1012.9	307.0	9.7	.0	Descend to 4k RA
193710	29.56.22	-80.38.40	19.8	11.0	38.5	32.1	1225.0	880.3	1012.7	308.0	15.3	-.2	No2w at 4k RA
193915	30.2.64	-80.32.94	19.7	11.1	36.3	29.7	1202.0	882.5	1012.6	306.0	15.7	.1	Mark buoy
194232	30.12.78	-80.24.36	19.1	12.2	36.3	29.2	1199.0	882.6	1012.6	300.4	16.1	.2	End leg ovr buoy
200800	31.28.68	-79.21.96	18.2	15.7	35.6	22.4	1201.0	877.0	1006.6	313.2	29.0	1.4	Abt 70 mi out now
201253	31.41.46	-79.8.76	18.2	15.2	44.6	29.9	1206.0	874.5	1004.3	322.8	30.0	.1	BT1
202057	31.59.82	-78.44.88	18.8	15.2	60.6	40.2	1211.0	865.7	994.5	323.7	42.0	-.4	D1
202303	32.3.72	-78.37.02	19.2	16.6	62.5	49.2	1222.0	862.3	991.5	323.5	34.1	2.2	D2
203233	32.18.90	-78.0.24	20.2	16.4	44.3	47.9	1212.0	859.9	987.2	161.8	6.3	-.2	BT3 time 2029Z 3212N 7810W
204458	32.55.08	-77.18.96	19.0	15.8	42.2	61.3	1205.0	869.6	998.2	153.5	39.9	.0	D3 NE wind max (?)
204748	33.3.18	-77.9.60	18.8	15.4	44.3	60.5	1208.0	872.5	1001.9	141.6	31.8	-.3	D4
205404	33.20.52	-76.49.44	18.4	14.8	40.8	56.0	1243.0	873.1	1006.9	144.4	29.1	-.8	BT3
205605	33.26.34	-76.43.26	18.4	14.6	17.4	28.9	1215.0	877.0	1008.2	139.9	28.1	-.1	Turn to trk 303
211300	33.25.98	-77.44.28	18.5	15.2	198.2	183.7	1202.0	873.7	1002.8	106.6	31.6	.2	BT4
211421	33.21.30	-77.46.20	18.8	13.8	199.1	183.6	1215.0	871.0	1001.1	101.1	32.9	.6	D5 Rev. F
211655	33.12.60	-77.49.74	18.8	16.3	199.2	181.6	1178.0	872.0	998.0	120.2	37.4	-.1	D6 Rev. F
212210	32.55.20	-77.55.98	20.2	17.0	189.7	178.3	1201.0	865.1	991.9	110.1	25.6	.9	Abt 40 mi frm cntr now.
212808	32.33.78	-77.59.94	20.3	16.8	189.0	186.2	1215.0	860.1	987.7	111.3	7.5	.0	Turn to trk 060 . Set up for Sat ovr pass
213903	32.48.72	-77.20.58	19.1	16.1	59.4	77.0	1204.0	869.5	997.9	160.5	35.2	-.1	D7; 50 mi frm cntr on NE side.
220303	33.35.16	-75.47.28	18.9	11.0	60.2	71.0	1215.0	880.6	1012.3	153.1	20.1	.2	BT5; D8 Sat ovr pass
220716	33.43.44	-75.30.78	18.9	10.0	43.9	51.6	1225.0	880.5	1013.3	159.6	17.9	.1	90L270R; will ovr fly last drop
223115	33.6.78	-76.50.52	18.9	12.8	240.9	225.9	1159.0	880.6	1005.8	147.9	33.1	-.2	Abt 80 mi frm cntr
224031	32.49.56	-77.25.50	19.0	16.1	239.7	220.5	1225.0	866.0	996.3	152.0	40.0	-.4	D9 NE eyewall
224353	32.43.20	-77.37.62	19.9	16.9	240.3	225.0	1228.0	861.6	991.1	156.0	31.5	.4	D10; Rev F NE eyewall
224630	32.38.22	-77.47.28	20.4	17.0	238.8	230.3	1216.0	860.9	988.6	156.3	18.7	.8	Pen 3
225454	32.46.02	-77.44.70	20.1	17.6	31.0	41.8	1205.0	863.2	990.2	144.9	24.3	.4	D11 outbound NNE eyewall
225552	32.49.56	-77.42.36	19.6	17.1	28.7	43.5	1240.0	860.8	991.5	147.1	30.5	.7	D12 NNE eyewall
230337	33.14.10	-77.41.58	19.1	15.7	258.9	246.6	1203.0	871.3	999.8	121.6	36.9	-.1	Turn to trk 220
230909	32.57.96	-77.56.16	19.6	17.0	205.6	190.0	1204.0	864.3	991.6	121.6	33.2	.6	D13NNE eyewall inbound
231021	32.54.06	-77.58.38	20.2	17.5	204.8	193.1	1202.0	863.1	989.6	118.6	23.7	.9	Pen 4
231913	32.54.48	-78.20.82	20.6	17.7	328.8	342.7	1230.0	859.4	988.4	76.8	29.0	-.1	D14 NNW eyewall outbound
233139	33.12.78	-78.31.38	19.1	17.0	160.5	144.9	1205.0	870.5	999.0	69.5	33.2	.3	BT6
233630	32.56.34	-78.24.72	20.4	33.0	159.6	144.8	1196.0	864.6	988.9	72.2	30.3	-.8	D15 NNW eyewall inbound
233916	32.46.92	-78.20.58	20.6	17.7	160.2	150.5	1216.0	860.2	987.7	71.3	20.9	-.3	Pen 5
235840	31.45.60	-78.54.78	17.7	15.3	220.7	236.0	1197.0	874.4	1003.4	307.0	30.7	-.2	Climb RTB
004050	28.55.32	-81.8.22	1.7	-23.4	220.2	224.3	5175.0	548.4	1004.8	311.8	9.1	.1	Feet dry.
010538	27.51.36	-82.30.90	27.7	18.9	220.4	219.7	-6.0	1015.3	1014.6	345.1	2.9	-.2	Land
011644	27.50.94	-82.29.58	27.2	18.6	295.9	134.2	179.0	1014.3	1035.0	130.5	2.4	.2	Block in

CODELESS = C.L

Mission : OPHELIA

Flight ID : 050913h

Landing :

[illegible]