

HURRICANE FLOYD XCDX

Flight 2 I990913

DATA TYPE	SENSOR or OPTION
INE	2
Accelerometer	2
Temperature Probe	1
Altitude (for vertical wind)	RA159
Static Pressure	Fuselage
Dynamic Pressure	Fuselage
Dewpoint Probe	2

Notes:

There were several data/time gaps due to data system problems:

195141Z - 201100Z
215212Z - 215220Z
223751Z - 223810Z

Several small spurious spikes in the fuselage static pressure (PSF) data occurred during the following time frames:

2149Z - 2152Z
2205Z - 2208Z

These spikes were removed and patched over.

The vertical wind had erroneous values at 195131Z and 201110Z due to the aforementioned data gaps.

During the penetration of the storm center, dewpoint temperature values were greater than ambient temperature values.

Aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical wind speeds, respectively, derived from Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	Takeoff	Landing
Aircraft static pressure	1009.0 mb	1007.0 mb
Corrected tower pressure	1010.5mb	1007.0 mb

Flight Director: A. Barry Damiano, (813) 828-3310 ext. 3073

FLT ID: I990913	FM: KMDA	TO: KMDA/KMCF
FLT NO: 99-053	BLK IN: 0204/03292	ATA: 01522/03202
ETD: 17302	BLK OUT: 17272/02272	ATD: 17372/02332
ETE:	BLK TIME: 8:37/1:02	FLT TIME: 8:15/1:47
SPONSOR ORG: HRD	PROGRAM: HURR. RESEARCH	PURPOSE: XCOR H. FLOYD

DAO PERSONNEL

AC	MCKEN	SYS ENG
CP	KENOL	DATA SYS
NAV	RATHBUN	McNAMARA
FE	WADE/MOORE	RADAR
RADIO	SANS SOUJI	DELGADO
FD	DAMIANO	BT/ODW
		CARPENTER
		CLD PHYS
		DOPPLER

PARTICIPATING SCIENTIST/VISITORS/DAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
WILLOUGHBY	PI	HRD
DORST	HAPS	HRD
LEIGHTON	RADAR	HRD
WALSH	SAR	NASA
RETCHIE	OBS	HRD
KATSAROS	OBS	AORIL DIRECTOR
GILBERT	MEDIA	ABC WASH
WRIGHT	MEDIA	ABC WASH

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)

LF not working well. Switched Trans. did not solve problem.
 went back to original trans. Lots of ERR writing to
 tape 8

19422, 1959342 sys lock up.

2408
 7314

924 mb
 sonde

21142
 2416
 7329

22377
 2424
 7349

00222

2428
 7408

924 mb
 sonde

AVAPS problem
 talking to
 NAPS

STOPPED IN MIAMI
 TO DROPOFF/PICKUP HRD FOLKS

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OAOWF2 FILE

FLT ID: 1990913 TIME OFF: 1737Z/0233Z TIME ON: 0152Z/0320Z

	A/C T/O	WX STN	A/C LAND	WX STN
PRESSURE	<u>1009.5</u>	<u>29.85/29.75</u>	<u>1007.0/1016.0</u>	<u>29.76 29.76/29.88</u>

NO DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES	<u>3</u>	
FAST FLT LVL TAPES		
RADAR TAPES	<u>1</u>	
DOPPLER TAPES		
ODW CASSETTES		
HARD COPIES		
AXBT	<u>10</u>	
AXCP		
GPS <u>GPS</u>	<u>22</u>	<u>22 good; only 3 messages sent out</u>

PHOTOGRAPHY

	FWD	LS	RS	VERT
ON				
OFF				
RATE				

REMARKS

(12)

(10)

I990913

TIME	LAT	LONG	TRK	HD	WD	WS	TA	TD	PA	GA	SP	PS			PQ
175000	2335	7927	101	99	42	18	12.7	-2.0	2760	2888	1008.8	722.3	ABU	CLD	85.8
180700	2517	7810	110	105	19	25	2.0	-13.4	4625	4843	1004.1	567.8	BTN	CLD	73.5
184200	2549	7540	127	118	6	52	1.5	-3.1	4650	4812	995.3	565.7	BTN	CLD	70.8
190400	2246	7459	134	141	290	61	6.3	5.6	3670	3706	991.4	643.4	RW	-	71.8
191635	2224	7327	0	351	276	51	6.3	4.3	3667	3720	994.0	643.2	(19)	DROP	75.1
193007	2320	7324	12	355	293	78	8.1	9.6	3710	3607	972.2	641.3	(22)	DROP	72.4
194143	2408	7314	9	8	254	12	22.8	9.6	3665	3176	917.1	643.7	(24)	DROP	72.8
195702	2513	7314	1	21	96	84	8.3	9.9	3662	3616	978.2	643.2	(24)	BT	
195704	2513	7314											(24)	DROP	70.8
201209	2616	7318	230	220	87	71	6.7	3.4	3676	3760	995.7	642.4	(24)	DROP	66.3
202318	2534	7403	225	222	61	76	7.1	5.8	3676	3699	988.1	642.9	BT	-	74.0
203000	2508	7433	224	226	40	82	7.4	6.5	3677	3682	986.8	642.9	RW	-	73.9
203404	2452	7450	226	232	28	72	7.3	7.2	3676	3691	987.3	643.0	BT	-	69.1
204614	2406	7534	107	91	3	64	7.1	2.8	3677	3736	993.2	642.7	(29)	DROP	68.0
210121	2407	7426	79	64	352	71	8.6	6.3	3677	3596	975.0	642.7	(29)	DROP	78.1
211041	2413	7343	81	64	335	86	13.1	12.6	3672	3213	926.5	643.8	(29)	DROP	70.9
211625	2417	7317	91	113	183	91	12.7	12.7	3669	3230	933.4	643.8	(29)	DROP	69.5
212148	2416	7254	90	111	180	84	9.8	5.3	3673	3525	965.7	643.2	BT	-	71.7
213005	2416	7218	90	110	181	83	7.6	7.9	3652	3643	973.6	643.1	BT	-	
213005													(29)	DROP	
214725	2420	7105	337	335	165	61	5.8	3.2	3678	3776	998.6	642.6	(29)	DROP	74.5
220452	2540	7152	231	215	136	70	6.2	3.7	3679	3766	997.2	642.4	(29)	DROP	76.2
221935	2400	7240	242	222	151	95	8.1	8.5	3679	3619	979.8	643.9	(29)	DROP	73.9
222603	2447	7305	240	221	147	92	8.8	8.9	3684	3534	967.6	643.4	BT	-	71.2
223238	2434	7333	246	225	138	99	13.0	12.4	3639	3160	925.0	645.8	(29)	DROP	71.8
223925	2417	7400	237	257	316	90	12.0	13.2	3578	3169	940		EYE	DROP	
225248	2346	7451	233	249	340	71	7.8	7.9	3673	3651	982.1	643.1	(29)	DROP	75.2
230831	2307	7543	89	80	329	52	5.9	5.0	3672	3788	995.1	643.7	(29)	DROP	76.6
233500	2306	7317	90	98	238	59	7.2	6.4	3686	3710	988.5	642.0	(29)	DROP	76.8
234957	2310	7205	301	285	199	56	6.9	3.2	3675	3759	996.0	643.1	(29)	DROP	70.3
000438	2347	7303	305	291	214	73	7.9	8.0	3657	3618	981.0	644.9	(37)	DROP	69.4
001144	2404	7330	304	287	211	80	9.4	9.1	3664	3527	966.9	643.8	BT	-	71.1
002145	2427	7410											(29)	DROP	
003719	2513	7458	317	337	45	83	7.2	6.8	3694	3658	981.4	641.2	(29)	DROP	73.3
004200	2527	7512	315	333	49	76	6.9	4.9	3688	3701	988.0	641.8	BT	-	
004830	2546	7537	281	293	55	70	6.4	4.2	3691	3758	994.0	641.6	(29)	DROP	74.2

6+40
3+25
10+05

MISSION PREFLIGHT LOG

NOAA FORM 56-49
(2-95)

DESTINATION
KAMA 21KMLC

MISSION
FLOT 10

NAVIGATOR
PLATHUN

AIRCRAFT COMMANDER
MCKIM

FLIGHT DIRECTOR
DAMIANO

SCHEDULED / ACTUAL TAKEOFF Z
1730Z / 1736Z

DATE OF TAKEOFF
13 SEP 99

WP	LAT / LON	RTE	MH	VAR +E=>	TH	DR +R=>	TRK	GS	WD	WS	ALT	TAS	LEG / TOT DIST	LEG / TOT TIME	PROP ETA	ETA	ATA	REMARKS
9	25 45.1 80 09.3						105	240					57	114	1750	1752		
1	25 23.2 79 16.5						104	260					61	118	1804	1806		
2	25 18.0 78 10.9						111	265					42	109	1813	1815		
3	25 02.5 77 20.2						120	270					149	133	1846	1847		
4	23 24.9 76 15.8						117	270					55	112	1858	1859		
5	23 08.1 75 23.4						132	270					69	115	1913	1915		
6	23 24 75 30						357	260					260	1100	2013	2013		
7	26 16 75 14						224	300					108	138	2051	2046		
8	24 10 75 37						087	260					264	140	2151	2146		
9	24 16 75 05						327	300					85	117	2208	2204		
1	23 43 75 18						225	260					243	156	2304	2305		
2	23 45 75 55						087	300					175	135	2339	2340		
3	23 50 76 30						311	260					259	140	0039	0045		
4	23 50 76 50						094	280					115	124	0103	0105		
5	23 50 77 30.4						225	290					2099	117	0120			
6	26 16 78 56.8						225	280					38	108	0128			
7	26 45.7 79 38.0						244	260					40	109	0137			
1	25 48.3 80 17.4												2177	8+01				
2	25 48.0 80 20.9																	
3	26 25.0 80 58.3																	
4	26 49.7 81 23.5																	
5	27 35 82 18																	

INS PERFORMANCE	
INS 1	INS 2
BEGIN ALIGN TIME	1522Z →
ALIGN STATUS (0-5)	0
END NAV TIME	0325Z →
START NAV TIME	1720Z →
DELTA T	10105 →

TERMINAL ERRORS	
INS 1	INS 2
DELTA LAT	-1.5 +.9
DELTA LON	+1.4 -2.7
RGS	1 2
RADIAL ERROR	1 3

REMARKS
40
38
179
113
270
260
430
135
565

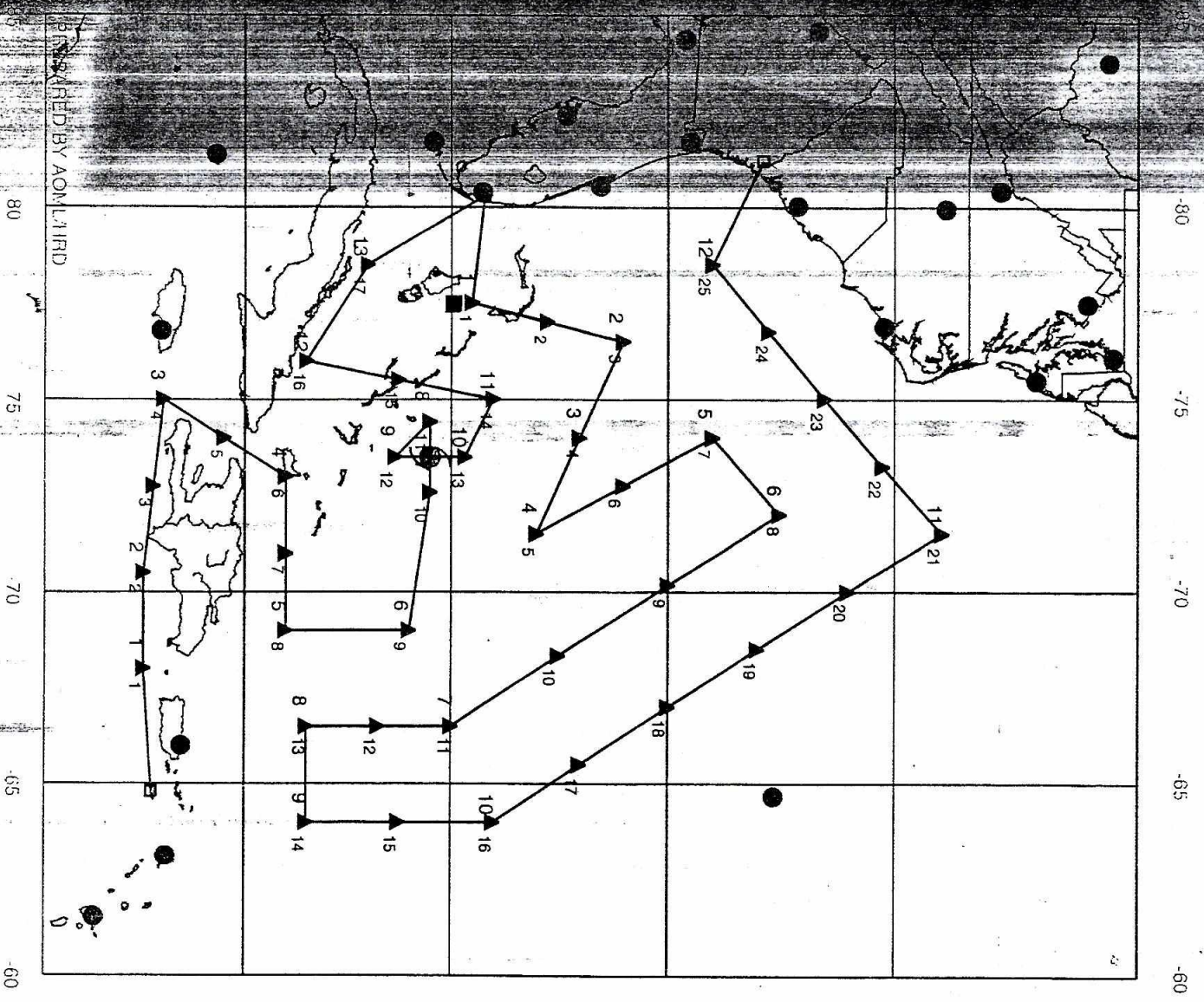
FLIGHT TRACKS FLOYD/SYNOPTIC

990913na11.fik
990913hp.fik

RAWINSONDES 9908

- Regular
- 12Z only
- 00Z only
- Infrequent
- Infrequent - 00Z
- Infrequent - 12Z

▲ DROP LOCATIONS



FLIGHT TRACKS FLOYD/XCDX

990913p K

RAWINSONDES 0800

- Regular
- 12Z only
- 00Z only
- Infrequent
- Infrequent - 00Z
- Infrequent - 12Z

▲ DROP LOCATIONS

