



NOAA G-IV N49RF
HUR-10
28 June 2010 TD Alex NHC



Flight ID: 100628n

Sensor or system

Accelerometer
Altitude
Attack Angle
Dew Point Probe
Dynamic Pressure
Geopotential Altitude
Inertial Selected
Static Pressure
Slip Angle
Temperature Probe
True Air Speed
Constants File
Project Directory

Number or Name

ACINS
PALT
AKRD2
DPR
QC2M
GPGALT
VEW, VNS
PS1M
SSRD1
AT3/TT3
TAS1
49cal093
home/local/proj/1005

Local Met Data:

Aircraft Static Pressure
Tower Pressure (corrected)

Takeoff (1750Z)

1013.5 mb
1013.4 mb

Landing (0158Z)

1013.8 mb
1013.7 mb

Notes:

PS2 drops down 4mb below PS1 from 194339Z – 194717Z. PS1 stair steps +/- 0.5mb from 213303Z – 213501Z. PS1 is selected for default due to PS2 erroneous 4mb drop. Due to PS2 drop, TAS2 also drops so TAS1 is selected as default.

At 201418Z, DAP1 drops 15-20mb below DAP2 (affects AKRD), DBP2 drops ~40mb below DBP1 (affects SSRD) and both remain erroneously low for remainder of flight. At the same time, TT1 and TT4 split with TT3 remaining steady and consistent with Flight Deck Temp. These data anomalies are likely due to flying through and diverting around convection at 2014Z near ob 9 on the NE side of TD Alex. Therefore, the defaults are AKRD2, SSRD1 and TT3.

HGALT has several spikes and is noisy throughout flight. GPGALT is default.
There was a spike in LAT from 214954Z – 214956Z.

There were periods where the dewpoint temperature exceeded the ambient temperature resulting in RH values > 100%. This was likely due to heavy rain, a wet-bulb effect on the total temperature sensor, and/or an artificial warming of the dewpoint sensor as it tried to burn off excess moisture. Corrections were not made to the data.

DPL starts out 5C colder, is slow to respond and doesn't get colder than ~ -35C. DPR is default.
All other instruments worked optimally during the flight.
36 dropsondes launched: 30 good, 6 bad.
All 30 good drops successfully transmitted and ingested into the 29/00Z model.

Flight Director:
Phone #:

Jess Williams
(813) 828-3310 ext. 3140

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

FLT ID: 100628n	From: KMCF	To: KMCF
FLT #: 10-079	Blk In: 0204 Z	Lnd Time(on): 0158 Z
ETD: 1730 Z	Blk Out: 1742 Z	T/O Time (off): 1750 Z
ETE: 8	Total Blk: 8 ¹²² (8.4)	Total Flt: 8 ¹⁸ (8.1)
Sponsoring Org: NHC	Program: Hurio	Purpose: Surveillance ^{TSA ex}

AOC Flight Crew

Aircraft Commander: Hagan	Data System: Defeo
Co-Pilot: Toth	Avaps: Smith, J
Navigator: /	System Engineer: Lynch, C
Flight Eng: /	AA: Quiles
Flt Director: Flaherty, Williams	AA:
Avionics:	Crew Chief:

Participating Scientists, Visitors, & Add'l Aircrew on back.

of people listed on back: (8)

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1013.5	2994	1013.8	1013.1 2993
ATIS - Takeoff	123 09007H 105M SU041 BKN095 BKN120 BKN150 OVC200 33/25			
ATIS - Land	0055 32004 10 BKN040 BKN090 OVC290 2933			

Data Source	Number	Data Disposition / Date / Quality / File Name(s)
Flight Level Tapes		
Radar Tapes		
Dropsondes	36	Good: 30 Bad: 6 Sent: 30
AXBT		

List other data sources on back in Remarks section.

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)	Recco Times:	Fix #	Fix Time
Storm Name: Alex			
Mission ID: NOAA9 0601A ALEX			

N49RF AOC GPS Dropwindsonde Log

06014 ALX

Flight ID: 1006028N

Flight Director: Flanerty/Williams

Mission ID: N04A9 0601A

Storm/Track: ALEX

30 035

Pg 1 of 1

Ch. #	Drop #	Sonde ID	Drop Time (UTC)	Lat (°N)	Lon (°W)	Wx Cond.	L5/R5	SFC Pts (mb)	Ob #	R5 Lowest Winds (Ht, Ws, Wd)	L5 Lowest Winds (Ht, Ws, Wd)	Sent Time (UTC)
5	1	9105	1814	26	84	0C Bld	15	1012.7	1			1911
1	2	9062	1828	24.7	85.1	0C Bld	15	1010.2	2			1920
2	3	9135	1841	26	86	0C Bld	15	1010.0	3			1925
3	4	9129	1900	24.4	87.2	0C Bld	15	1009.0	4			1929
1	5	9106	1914	25.9	88	0C Bld	15	1010.9	5			2028
2	7	9126	1925	23.2	89.3	0C Bld	15	1009.9	6			2031
1	8	9059	1937	24	89.9	11 11	15	1007.7	7			2032
2	9	9149	1950	23	87.1	11 11	15	1005.2	8			2042
1	10	9032	2012			11 11	15	1003.1	9			2110
2	11	9109	2013	27.1	89.2	11 11	15	1002.9	10			2116
3	12	9128	2028	22.3	90.7	11 11	15	999.9	11			2157
1	13	9025	2059	19.0	91.2	11 11	15	1001.5	12			2208
2	14	9031	2108	18.7	92.9	11 11	15	1001.5	12			2208
3	15	9016	2118	18.5	94.1	11 11	15	1003.1	13			2212
4	16	9090	2147	21.1	96.1	SET Bld	15	1011.4	14			222406
1	17	9109	2158	22.0	93.4	SET Bld	15	1004.0	15			224429
2	18	9076	2209	22.4	96.1	SET Bld	15	1003.9	16			2249
3	19	9149	2220	22.5	95.3	SET Bld	15	1003.2	17			2249
2	20	9103	2236									
2	21	9256	2244	25.9	95.0	SET Bld	15	1005.1	18			22443
4	22		2301									
4	23	9102	2304	24.0	93.7	SET Bld	15	1001.2	19			2326
1	24	9119	2311	24	92.2	SET Bld	15	1001.2	20			235103
3	25	9136	2323	23.9	91.2	SET Bld	15	1005.1	21			235409
1	26	9065	2332	25	92	SET Bld	15	1005.1	22			2356
2	27	9205	2352	22	93.5	SET Bld	15	1008.0	23			2359
1	28	9064	0006	28.5	94.3	SET Bld	15	1008.5	24			2042
2	29	9145	0023	28.5	92.0	11 11	15	1009.8	25			2058
7	30	9101	0038	24.1	90.5	11 11	15	1009.1	26			2109
1	31	9026	0052			11 11	15	1009.1	27			2120
2	32		0104			11 11	15	1009.1	28			2139
2	33		0114			11 11	15	1009.1	29			2139

603C

945 1946

945 1946

945 1946

945 1946

945 1946

N49RF AVAPS DropSonde Log

Project: PFI Flight ID: 100628N Flt Dir: Jess W
 Mission: TS ALEX Flight #: 1 Status: Sys 1 * Sys 2 ✓ Launcher S/N: 02

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments /Status/ Failure Reason	\$	GOOD ☒
1	062939105	1/5	1814	Ø	✓	JAS	(1)-NO CH1 - GOOD CH5	N	✓
2	092 929 062	1/6	1828	Ø	3	↓		↓	✓
3	092 929 135	2	1841	Ø	Ø	↓		↓	✓
4	092 429 146	1	1855	Ø	Ø	↓	NO L.D. - Fast Fall	↓	B ✓
5	092 819 139	3	1900	Ø	Ø		DROP 4 BU		✓
6	092 929 106	1/5	1914	Ø	4		DROP 5		✓
7	092 429 126	2/6	1925	Ø	Ø		DROP 6		✓
8	092 929 059	1/7	1937	Ø	17		" "		✓
9	092 429 164	2/5	1958	Ø	3	CFL	8		✓
10	092 929 032	1/7	2012 ²⁰¹¹	Ø	5	↓	lost winds / PFI 250-750		X
11	092 819 009	2	2017 ²⁷	Ø	4	↓	Backup lost GPS - 250-400 lost all below 550		X
12	092 819 128	3/8	2028	Ø	5		DROP 10		✓
13	092 929 025	1/5	2059	Ø	12		DROP 12 (11 Skipped)		✓
14	092 929 031	2/7	2108 ²¹⁰⁹	Ø	8		DROP 13		✓
15	092 929 016	3/8	2118 ²¹¹⁷	Ø	5		DROP 14		✓
16	062 939 090	4/5	2147 ²¹⁴⁵	Ø	13	CFL	DROP 15 (lost winds)		✓
17	062 859 104	1/	2158 ¹²	Ø	2	↓	DROP 16		✓
18	092 929 076	2/	2209 ¹⁰	Ø	2	↓	DROP 17		✓
19	092 819 144	3/5	2220 ¹⁰	Ø	15		DROP 18		✓
20	062 939 102	4/7		Ø			DROP 19 (bad launch detect @ 855 mb)		X
21	062 919 057	1/	2235	Ø	3		DROP 19 backup		✓
22	091 849 256	2/5	2244	.5	4		DROP 20		✓
23	062 939 096	3/7	2305 ¹⁶	Ø			DROP 21 (late launch detect)		X
24	062 439 050	4/	2304	.4	5		DROP 21 backup		✓
25	062 929 119	1/	2311	Ø		CFL	noisy winds		✓
26	063 239 048	2/5		Ø		↓	late launch detect		X
27	092 929 136	3	2323	Ø	9	↓	Backup		✓
28	062 859 065	1/6	2332	Ø	7		noisy winds above 300mb		✓
29	062 839 205	2/5	2352	Ø	8				✓
30	092 929 064	1/7	0006	Ø					✓
31	092 429 145	2	0023	Ø	14				✓
32	062 939 104	7	0038	Ø	10		LS only		✓
33	061 329 026	1/8	0052	Ø	8				

\$ Codes A = AOC N = NHC/NWS H = HRD OW = NESDIS

CH#6 Week GRS TELEPH

* CH#4 Tekin REXE FILE - CH# RESCAN WORK

① AC FL WINDS BAD - 3 files

SEE REVERSE

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: ALEX

National Hurricane Center: June 27, 2010 12:45:41 PM

Aircraft: N49RF

Proposed takeoff: 28/1730Z

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DROP LOCATIONS

#	LAT (d m)	LON (d m)	TIME (h:mm)
✓1	26 00	-84 00	0:19
2	24 30	-85 00	0:34
3	26 00	-86 00	0:48
4	24 30	-87 00	1:03
5	26 00	-88 00	1:17
6	25 15	-89 15	1:29
7	24 00	-90 00	1:40
8	23 00	-87 00	2:05
9	22 00	-88 30	2:20
10	22 24	-90 42	2:37
11	19 49	-90 46	2:58
12	18 59	-91 39	3:08
13	18 40	-92 51	3:18
14	18 24	-94 07	3:28
15	21 06	-96 24	3:57
16	22 00	-97 37	4:09
17	22 24	-96 06	4:22
18	23 27	-95 16	4:32
19	25 00	-96 00	4:46
20	26 00	-95 00	4:57
21	24 01	-94 04	5:15
22	24 01	-92 44	5:26
23	23 27	-91 32	5:36
24	25 00	-92 00	5:49
25	27 00	-93 30	6:10
26	28 30	-94 30	6:24
27	28 30	-92 00	6:43
28	27 00	-90 30	7:00
29	28 30	-89 15	7:16
30	27 30	-88 00	7:28
31	29 00	-86 30	7:45
32	27 30	-85 00	8:02

Copy list

TS Alex - 32 Drops, capture strength of high over gulf and surrounding

environment to improve track fcst - Show Track From NHC - Fly again tom

TS Movement: **CTR** 20.3N 91.7W @ 15Z 50660kt
FCST 21.9, 92.1W 55kt gust 65kt
MOV NNW 330
989mb @ 6kt
12ft seas

t/o wx: metar: 1730Z
15009 um BKN030
taf: Tempo 6000 TSRA BKN025

Flight: Cloud tops: 150' - 800'
Sct - 55C SCT +235-400
Few - 65C Few to 45 150' - 52k

Precip/lightning:

MOVG NW¹⁵ 20kt

wind: FL 400-450 ~~W~~ WNW 30-35kt ↓ 510kt, WSW 5-10 ↑ 40-45kt

turb: **LOT OCC** mod

FZLV1-15,000

landing wx:

taf: 0230Z BKN030
wind E 9kt

local conditions:

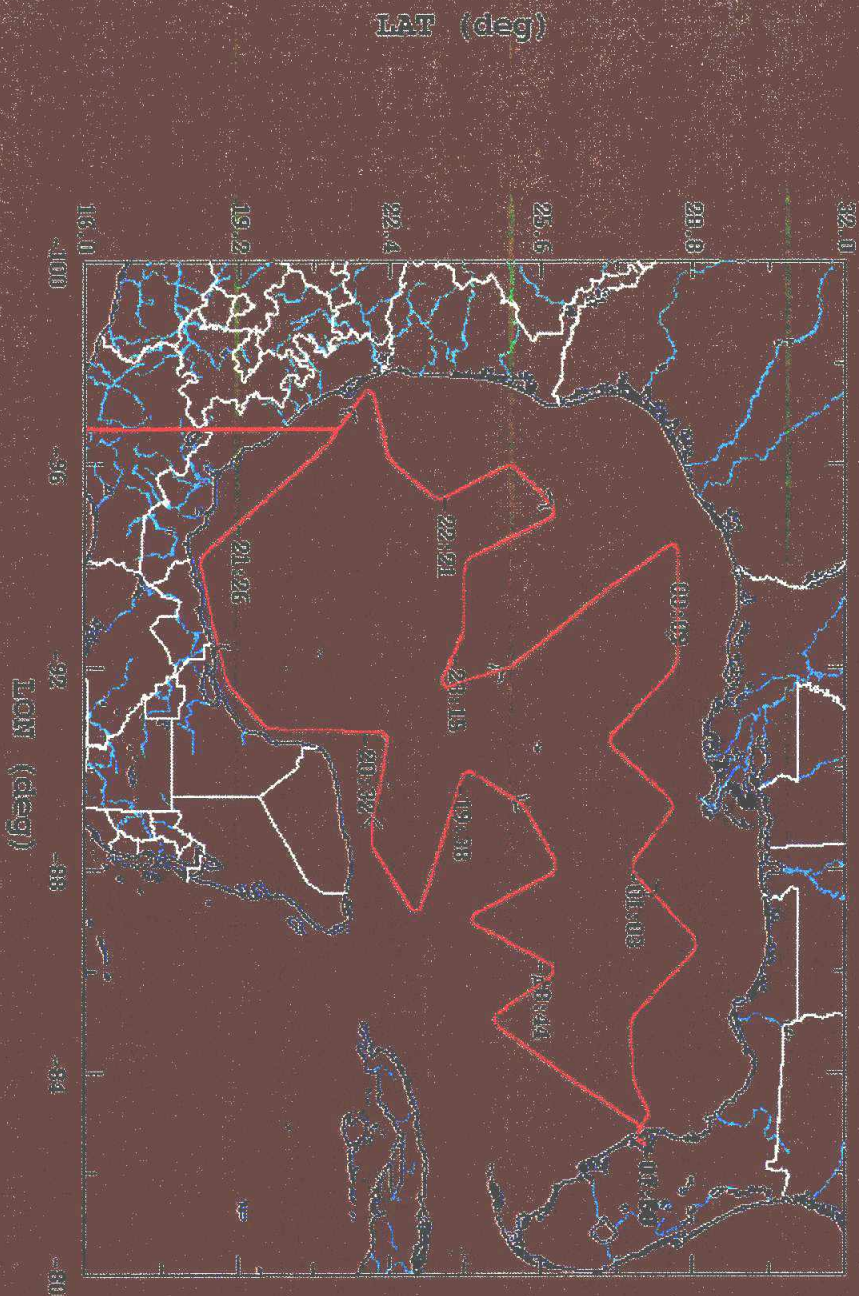
Sea Salt:

Volcanic Ash:

HURRICANE_2010, Flight 100628m

DRG = US Alex

This plot contains preflight data



NOAA G-IV Flight Track for 21-24 Oct 2010

On 20-10-2010 the storm was centered at 21.4, 23.4

