

**NOAA G-IV N49RF
Hurricane Frances Mission 4
Surveillance Flight**

Flight ID: N040902

<u>Sensor or System</u>	<u>Number or Name</u>
INE (for wind derivation)	VEW_PITR, VNS_PITR
Attack Angle	AKRD2
Slip Angle	SSRD2
Accelerometer	ACINS_PITR
Temperature Probe	AT3
Dew Point Probe	DPLC
Altitude (for vertical wind derivation)	PALT
Static Pressure	PS2C
Dynamic Pressure	QC2C
True Air Speed	TAS2
Constants File	49cal041
Project Directory	406

Notes:

There were no time/data glitches during this flight.

Due to large spikes in the both dewpoint sensors at 2319Z during a left roll, the left dewpoint sensor will be substituted in for DPX and DPXC. Since the amplitude of the spike in the left sensor was less than that of the right, it is the better of the two options.

Otherwise, all instruments performed optimally during this mission.

Flight Director:

Martin Mayeaux (813) 828-3310 x 3086

U.S. Dept. of Commerce / NMAO / NOAA / Aircraft Operations Center

Flt ID: 040902N	From: Kmcf	To: Kmcf
Flt. No: 04-95	Blk In: 0134 z	Time On: 0127 z
ETD: 1730 z	Blk Out: 1714 z	Time Off: 1727 z
ETE: 8+00	Blk Time: 8+20 (8.3) Hrs	Flt Time: 8+00 (8.0) Hrs
Sponsoring Org: NHC	Program: Surveillance Hurricane	Purpose: Frances

AOC Flight Crew

Aircraft Commander: Finke, m	Data System: Hornbrook, C
Co-Pilot: Hagen, J, Boston, R	AVAPS: Brogan, D
Navigator:	System Eng:
Flight Eng:	A A:
Flight Director: Mayeaux, m, Flaherty, P	A A:
Avionics: Carpenter, D	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
Kaplan, J	HRD Haps	HRD
McMillan, S	Om & Director	Om &
Wolfe, K	Media	Palm Beach Post
Livingston, C	Media	Palm Beach Post
Yates, G	HRD VIP	NOAA

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)

Storm Name:

Mission ID: 1906A Frances

Penetration number and time

Recco Times

2542044308

Fix # Fix Time

A 2116 07051
315

M

Teal - (15-212) Teal 12 10000 ft

Teal 39 on 0000Z 10,000 ft

P3-43-1800Z (2405 7444-2112Z
947

(See reverse for additional remarks)

U.S. Dept. of Commerce / NMAO / NOAA / Aircraft Operations Center

Flight ID: 040902 N		Time Off: 1727 Z		Time On: 0127 Z	
	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land	
Pressure	1014.1 mb	3001 mb	1013.0 mb	2991 mb	
ATIS	Time	Observation			
Takeoff	1355Z	07009KT 75m FEW030 FEW250 28/25 A 3001			
Land	2255Z	10010KT 865m 31/22 A2991			
	Number	Data Disposition / Date / Quality			
Flight Level Tapes	1				
Radar Tapes					
Cloud Physics Tapes / CDs					
Video Tapes					
Dropsondes	29	Good: 28 Bad: 1			
AXBT					
AXCP					
AXCTD					

Remarks:

2pm - 23.8 74.4 WNW 13 949 mb 3 35 kts
2351 - 74° 17" 948

N49RF AVAPS DropSonde Log

N49RF Project: Hurricane '04

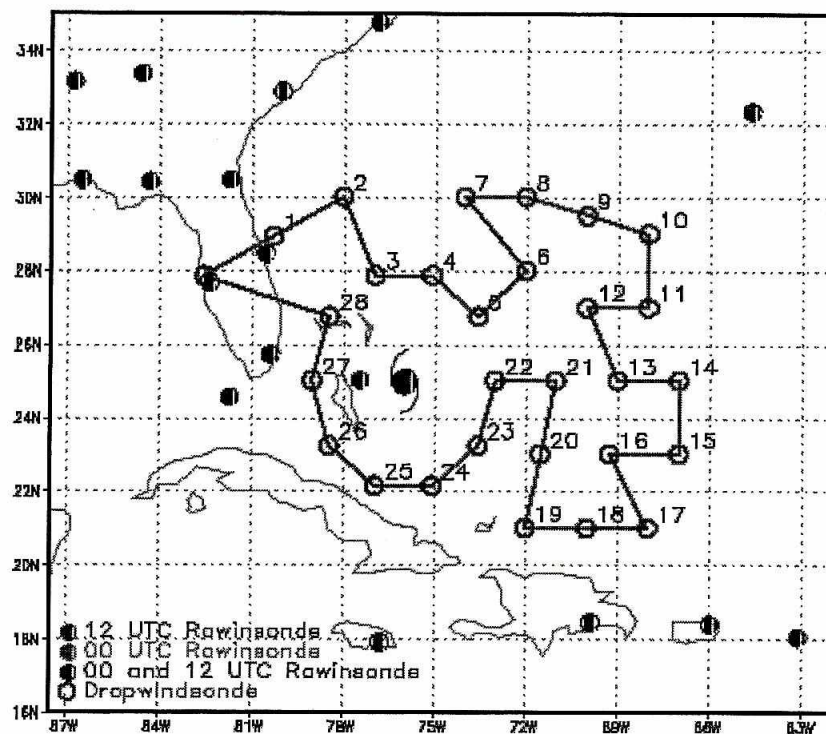
Flight ID 040902NB (2nd flight of the day)

Mission: FRANES Flight #: 9

Launcher S/N: 02

Status: Sys 1 OK Sys 2 OK

Drop #	Sonde Serial Number	Chn. #	Time (Zulu)	Press. offset	Winds time	Operator Initials	Comments / Drop Status/ Failure Reason	GOOD ☒
1	032 345 043	1	1752	-1.2	41	DWC	OK	✓
2	033 048 100	1	1810	-.5	47		OK	✓
3	032 335 118	5	1829	-1.1	40		Freq. changed on LS - OK	✓
4	032 335 213	1	1842	0	87		Late winds	✓
5	033 048 093	2	1855	0	9		OK	✓
6	033 048 096	1	1909	0	14			✓
7	032 335 247	1	1930	0	57			✓
8	033 118 035	2	1942	.5	70		Very late winds	✓
9	032 345 045	3	1944	0	52		B/U for drop #8 - OK	✓
10	033 048 099	1	1956	0	120		Late winds	✓
11	032 335 427	2	2009	-.7	26		OK	✓
12	032 345 042	1	2024	0	57			✓
13	032 345 057	2	2040	-.7	14			✓
14	032 335 211	1	2056	0	34			✓
15	032 335 256	2	2110	-1.0	40			✓
16	032 345 056	1	2125	-1.0	51			✓
17	032 335 245	2	2141	0	96		Late winds	✓
18	032 345 048	1	2158	0	29		OK	✓
19	032 335 387	2	2213	0	44			✓
20	032 335 425	1	2228	-.7	51			✓
21	032 345 010	2	2245	-.9	71		Late winds	✓
22	033 118 042	1	2302	0	24		OK	✓
23	032 345 012	2	2317	0	30			✓
24	032 345 127	1	2333	-.5	38			✓
25	032 345 015	2	2348	0	20			✓
26	032 345 013	1	0002	0	34		telemetry interference / Good	✓
27	032 335 252	2	0017	0	35		OK	✓
28	032 335 403	1	0033	0	50		Intermittent winds	✓
29	032 335 253	2	0047	0	21		OK	✓
30								
31								
32								
33								



GRADE COLVIGES

2004-08-01-11:31

HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: FRANCES

Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 02/1730Z

DROP LOCATIONS

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
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1	28 55	80 16		0:28
2	30 00	78 00		0:47
3	27 51	76 56		1:06
4	27 51	75 04		1:19
5	26 46	73 34		1:33
6	28 00	72 00		1:49
7	30 00	74 00		2:10
8	30 00	72 00		2:24
9	29 30	70 00		2:39
10	29 00	68 00		2:54
11	27 00	68 00		3:10
12	27 00	70 00		3:25
13	25 00	69 00		3:43
14	25 00	67 00		3:57
15	23 00	67 00		4:14
16	23 00	69 15		4:31
17	21 00	68 00		4:50
18	21 00	70 00		5:05
19	21 00	72 00		5:20
20	23 00	71 30		5:37
21	25 00	71 00		5:53
22	25 00	73 00		6:08
23	23 14	73 34		6:23
24	22 09	75 04		6:38
25	22 09	76 56		6:52
26	23 14	78 26		7:06
27	25 00	79 00		7:21
28	26 46	78 26		7:36

1730

1855

1905

125

130

135

2335-0015

605

640

645