

NOAA G-IV N49RF

Hurricane Ivan Mission 4

Surveillance Flight

Flight ID: N040911

<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	DPRC
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.

At 0129Z, upon initial descent, DPL became inoperative. Therefore, DPR and DPRC will be used in place of DPX and DPXC.

At 0119Z, DBP1 and DBP2 along with SSRD1 and SSRD2 spiked upon initial descent.

Two spikes in DPRC and DPLC occurred at 2301Z and 2316Z. This occurred in a precipitation event where the heating elements in the instrument likely overcompensated. These values are greater than ambient temperature resulting in relative humidity values greater than 100%.

Otherwise, all instruments performed optimally during this mission.

Flight Director: Martin Mayeaux (813) 828-3310 x 3086

31/8 6/10-4

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

Flt ID: 040911N-B	From: Kmcf	To: Kmcf
Flt. No: 04-107	Blk In: 0150 z	Time On: 0142 z
ETD: 1730 z	Blk Out: 1714 z	Time Off: 1723 z
ETE: 8+30	Blk Time: 8+36 (8.6) Hrs	Flt Time: 8+19 (8.3) Hrs
Sponsoring Org: NHC	Program: Hurricane Surveillance	Purpose: IVAN

AOC Flight Crew

Aircraft Commander: Finke, m	Data System: Roles, J
Co-Pilot: Hagen, J, Poston, R	AVAPS: Goldstein, A
Navigator: /	System Eng:
Flight Eng: /	A A:
Flight Director: Mayeaux, m	A A:
Avionics: Carpenter, D	Crew Chief:

Participating Scientists / Visitors

Name (Last, First)	Activity on Aircraft	Affiliation
Landsa, C	Haps	HRO

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

Storm Name:

Mission ID:

Penetration number and time

Recco Times

00Z - NOAA 2109A IVAN 28 drops
18-00Z - Teal 54 Sfc-10000 ft Bix/Bix

Fix # Fix Time

1900Z 1806' Alt

Teal 54

AF

18.2 79.3

2217 1808 77929

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Flight ID: **040911N-B** Time Off: **1723** Z Time On: **0142** Z

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure	1015.7 mb	3005 1017.6 mb	1014.7 mb	2996 1014.6 mb

ATIS	Time	Observation
Takeoff	1455Z	10009KT-75m FFW020 Sc1250 Z9/23 A3005 08010KT
Land	0138Z	07010KT A2996

	Number	Data Disposition / Date / Quality
Flight Level Tapes		
Radar Tapes		
Cloud Physics Tapes / CDs		
Video Tapes		
Dropsondes	29	Good: 28 Bad: 1
AXBT		
AXCP		
AXCTD		

Remarks:

Call Gordon last drop **Op2 went Bad at 0129 & very close to landing**
813-833-3254

At 0119Z - DBP1 & DBP2 SPIKE downward on ascent and SSRD1 & 2
OPRC & OPRC SPIKE at 2301 and 2316 Z in precip due to heater element overcompensation

N49RF AVAPS DropSonde Log

N49RF Project: Hurricane '04

Flight ID 040911NB

Mission: Ivan

Flight #: 20

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	034 555 161	1	1806	-6.5	69	DWC	Late winds	✓
2	034 918 053	2	1823	0	27		OK	✓
3	033 048 173	1	1838	.4	33			✓
4	033 048 171	2	1853	0	60			✓
5	034 555 176	1	1907	-6.0	18			✓
6	033 048 137	2	1923	0	29			✓
7	033 518 016	1	1935	0	34			✓
8	033 048 166	2	1949	0	45			✓
9	033 415 327	1	2003	0	63			✓
10	033 518 026	2	2017	0	30			✓
11	033 415 324	1	2030	-2.5	18			✓
12	033 415 330	2	2046	-1.4	45			✓
13	033 048 167	1	2102	.7	49			✓
14	034 555 167	1	2127	-6.9	29		Intermittent winds	✓
15	034 555 108	1	2144	-5.8	23		OK	✓
16	033 118 059	2	2202	0	16			✓
17	034 555 109	1	2220	-7.0	24			✓
18	033 415 200	2	2237	0	27			✓
19	034 955 025	1	2254	-1.3	25			✓
20	034 555 166	2	2310	-3.4	23			✓
21	034 555 107	1	2325	-7.1	32			✓
22	034 555 111	2	2341	-6.1	13			✓
23	034 555 182	1	2356	-7.2	30			✓
24	033 048 170	2	0011	.7	36			✓
25	034 555 181	1	0025	-6.8	60		No PTH first 100 sec.	
26	034 555 177	3	0026	-5.3	60		Drop #25 b/v	✓
27	034 555 175	2	0040	-4.2	50		OK	✓
28	034 555 174	1	0059	-6.6	33			✓
29	034 555 103	2	0116	-6.9	49		Lost winds for most of drop	
30								
31								
32								
33								

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: IVAN

Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 11/1730Z

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DROP LOCATIONS

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#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
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1	24 00	79 30		0:48
2	22 12	78 00		1:07
3	22 00	76 00		1:22
4	24 00	76 00		1:38
5	24 00	74 00		1:53
6	22 00	74 00		2:10
7	22 00	72 00		2:25
8	20 30	71 00		2:39
9	21 00	69 00		2:55
10	22 30	68 00		3:09
11	24 00	67 00		3:24
12	22 00	66 00		3:42
13	20 00	66 00		3:58
14	18 30	68 00		4:18
15	17 00	70 00		4:38
16	17 24	72 00		4:53
17	17 48	74 00		5:09
18	19 00	75 48		5:26
19	17 28	76 56		5:42
20	16 32	78 32		5:56
21	16 52	80 21		6:11
22	18 17	81 32		6:26
23	20 00	81 00		6:40
24	20 00	83 00		6:55
25	20 00	85 00		7:11
26	22 00	84 30		7:28
27	24 00	84 00		7:44
28	26 00	84 00		8:01

21.5 22.5
77.5 -78.5800 0000Z (18.5) (79.8) Forecast
830 0030Z 90 miles Away

1810 79.93

1736 -79.10

-over land or near

16.6 -79.1 281 90 miles/60 right

90 right (85 miles) 16.75 -79.7 282

90 right (95 miles) 17.2 -80.6 325

===== HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: IVAN =====

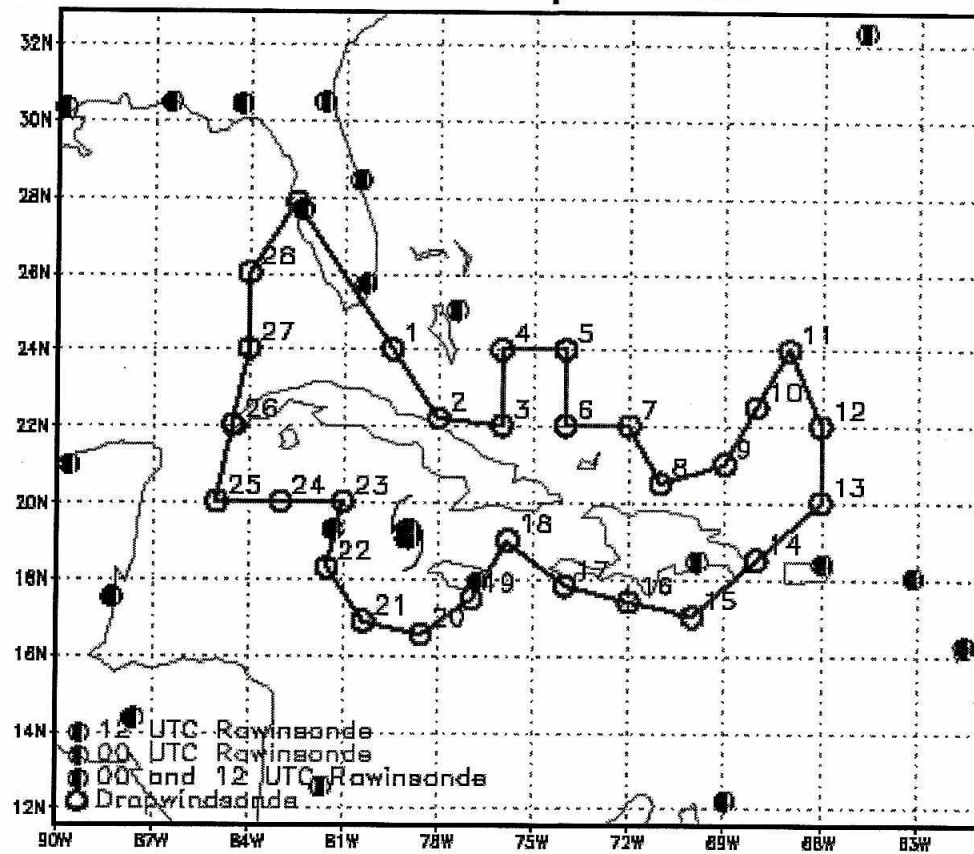
Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 11/1730Z
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TRACK DISTANCE TABLE

#	LAT (d m)	LON (d/m)	RAD/AZM (nm/dg)	LEG (nm)	TOTAL (nm)	TIME (h:mm)
0	MACDILL			0.	0.	0:00
1	24 00	79 30		283.	283.	0:48
2	22 12	78 00		136.	419.	1:07
3	22 00	76 00		112.	532.	1:22
4	24 00	76 00		120.	652.	1:38
5	24 00	74 00		110.	762.	1:53
6	22 00	74 00		120.	882.	2:10
7	22 00	72 00		111.	993.	2:25
8	20 30	71 00		106.	1099.	2:39
9	21 00	69 00		116.	1216.	2:55
10	24 00	67 00		212.	1428.	3:24
11	22 00	66 00		132.	1560.	3:42
12	20 00	66 00		120.	1680.	3:58
13	17 00	70 00		291.	1971.	4:38
14	17 48	74 00		234.	2205.	5:09
15	19 00	75 48		125.	2331.	5:26
16	17 28	76 56		113.	2443.	5:42
17	16 32	78 32		107.	2551.	5:56
18	16 52	80 21		106.	2657.	6:11
19	18 17	81 32		109.	2766.	6:26
20	20 00	81 00		108.	2874.	6:40
21	20 00	85 00		226.	3100.	7:11
22	24 00	84 00		247.	3347.	7:44
23	26 00	84 00		120.	3467.	8:01
24	MACDILL			137.	3604.	8:29

040911N2 12/00Z IVAN



GADS: COLA/IGES

2004-08-10-12:21