



NOAA G-IV ERROR SUMMARY
HURRICANE 2005
H. DENNIS IN NW CARIBBEAN



Flight ID: N050707

<u>Sensor or system</u>	<u>Number or Name</u>
INE (for wind derivation)	VEW_PITR, VNS_PITR
Accelerometer	ACINS_PITR
Temperature Probe	AT3
Dew Point Probe	DPRC
Static Pressure	PS2M
Dynamic Pressure	QC2M
Attack Angle	AKRD1
Slip Angle	SSRD2
Vert. Wind	PALT
Constants File	49cal041
Project Directory	/proj/506

Local surface observation not current or unavailable.

Notes:

There were no data gaps.

The Total Temperature #2 (TT2) probe was not available for this mission.

Both dynamic sideslip pressures output erroneous data during the time frame 0144Z – 0147Z. Dynamic sideslip pressure #2, DBP2, was selected but the erroneous data does produce erroneous output for horizontal wind speed and direction (WS,WD), and vertical wind (WI) during this time frame.

The radar altimeter, HGM232, output erroneous data from takeoff until 2005Z.

All other instruments worked optimally during the brief flight.

	Takeoff	Landing
Aircraft Static Pressure	1015.3mb	1014.8mb
Corrected Tower Pressure	1015.1mb	1014.7mb

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

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

AOCWF1

Flt ID: 050707N	From: KMCF	To: KMCF
Flt No: 05-101	Blk In: 0222Z	ATA: 0213Z
ETD: 1800Z	Blk Out: 1751Z	ATD: 1802Z
ETE:	Blk Time: 8:31 (8.5)	Flt Time: 8:11 (8.2)
Sponsor Org: NHC	Program: HURR.SURV	Purpose: H ₀ DENNIS

AOC Personnel

AC: FINKE	Sys Eng:
CP: POSTON	Data Sys: BROGAN
Nav:	Radar:
FE:	GPS/BT: TONG / KERR
FD: DAMIANO	Cld Phys:
Avionics:	

Participating Scientists / Visitors / AOC

Name (Last, First)	Activity on Aircraft	Affiliation
ABERSON	HAPS	HRD
BROWN, EBEN	MEDIA	WFLA 970 AM

Proposed/Actual Mission Remarks (Recco, Fixes, Storm, PENET, NHOP #)

0504A DENNIS

1st sonde sent 19/11Z

TEAL 06 in storm
until ~23Z

5000 ft
2027Z
all 4 sondes
station
2032Z
2230Z
Saw east eye wall
on radar from
44h ft
2305Z
Sonde
2306Z
7702
2306Z
NE
130KTS
951 mb
from sonde

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

AOCWF2

Flt ID:

050707N

Time Off:

1802Z

Time On:

0213Z

A/C (Take Off)

Wx Station (Take Off)

A/C (Land)

Wx Station (Land)

Pressure

1015.3

30.00 / 1015.1

1014.8

29.98 / 1014.7

Number

29.99

Data Disposition / Date / Quality

Flt Lvl Tapes

1

Radar Tapes

Cloud Physics Tapes

Video Tapes

AXBT

AXCP

AXCTD

Dropsondes

29

1 no ws; 1 no PTH; 1 FF; 26 good
27 messages sent

Video

Forward

Left Side

Right Side

Down

Remarks

Time On

Time Off

Rate

Remarks

N49RF AVAPS DropSonde Log

29 3 bad

N49RF Project: HURRICANE 2005

Flight ID 050707n

Mission: DENNIS Flight #: 2

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	043845129	1	1846	0	33	BK	Winds in and out at high alt.	✓
2	044245103	2	1909	0	33			✓
3	043625086	1	1920	.4	20			✓
4	043625113	3	1935	.4	22			✓
5	043625120	4	1953	.4			No winds	
6	043625075	1	1954	.4	24		B/U for Drop 5	✓
7	043625008	2	2012	0	23			✓
8	043625025	3	2023	.3	45			✓
9	043625065	1	2038	.4	31			✓
10	043845205	2	2053	0	40			✓
11	044245111	3	2111	.3	54			✓
12	043625125	1	2040	.3	29			✓
13	043625121	2	2156	0	20			✓
14	043625114	3	2212	.5	55			✓
15	043625060	1	2236	.3	38			✓
16	043625091	2	2254	.3	22			✓
17	043845206	3	2309	.3	42			✓
18	043625063	1	2326	.4	43			✓
19	043625104	2	2341	.4	15			✓
20	043625007	3	2355	.5	14		NO PTH	
21	043625100	1	2358	.6	36		B/U for Drop 20	✓
22	043625090	2	0011	.4	22			✓
23	043625107	3	0024	.5	26			✓
24	043625124	1	0038	.3	19			✓
25	043625111	2	0056	.6	55			✓
26	044245035	3	0112	0	22			✓
27	044245003	1	0124	.3	27		No winds at first, B/U dropped, then winds appeared on 27	✓
28	043625010	2	0127	.4	38		B/U for drop 26, became fast fall	
29	043845204	3	0138	0	50			✓
30								
31								
32								
33								

050707N

VEW-PETR, UNS-PETR

AT3

~~AT3~~

DPRC

~~AT3~~ / 32M

OL2M

AKRD1

SSRD2

~~NO~~ DATA GAPS

DBP1 + DBP2 erroneous

0144Z - 0147Z

HGM232 1823Z ~~2005Z~~
2005Z

=====

HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: DENNIS

=====

Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N49RF Altitude: FL410-450 Proposed takeoff: 07/1800Z

=====

DROP LOCATIONS

#	LAT (d m)	LON (d m)	RAD/AZM (nm/dg)	TIME (h:mm)
---	--------------	--------------	--------------------	----------------

1	25 38	78 00	0.58	0.58
2	23 06	79 27	1.09	1.09
3	22 36	77 49	1.22	1.22
4	21 35	76 17	1.36	1.36
5	24 00	76 00	1.56	1.56
6	24 30	74 00	2.12	2.12
7	25 00	72 00	2.27	2.27
8	25 00	70 00	2.42	2.42
9	23 00	70 00	2.58	2.58
10	21 00	69 00	3.16	3.16
11	23 00	72 00	3.44	3.44
12	23 00	74 00	3.59	3.59
13	21 00	74 00	4.15	4.15
14	19 40	75 45	4.39	4.39
15	17 58	74 02	4.58	4.58
16	18 04	76 06	5.14	5.14
17	16 54	77 49	5.31	5.31
18	16 54	79 41	5.45	5.45
19	17 59	81 11	6.00	6.00
20	19 45	81 45	6.15	6.15
21	21 18	81 11	6.28	6.28
22	21 24	83 00	6.42	6.42
23	21 54	85 06	7.00	7.00
24	23 06	83 30	7.15	7.15
25	24 00	85 00	7.29	7.29
26	25 30	84 00	7.43	7.43

0504A DENNIS

TEAL #6 in storm

~~0.58~~

7500

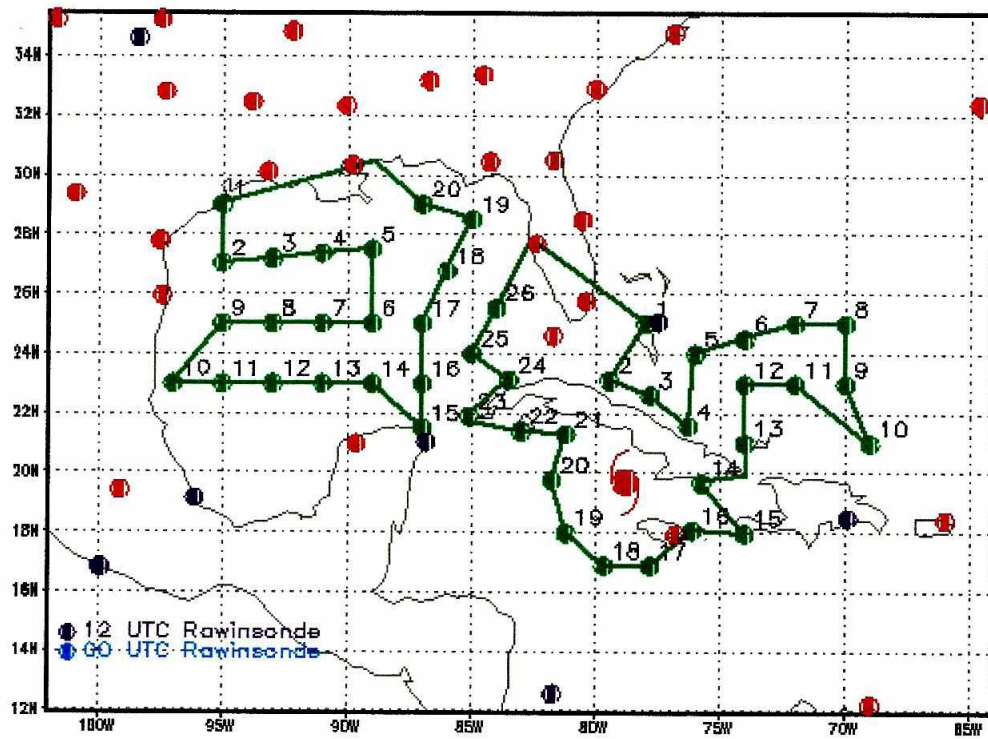
4.25

37500

15000

30000

3187500



GADS: COLA/IBES

2005-07-08-11:22