



Sippican

RAINEX - 30 sondes

HRD - 6 sondes - eye wall mesonorties

NHC - 20 sondes

UBlox for NHC

25.5 86

Dropsonde Scientist

90-120 nm

The lead project scientist (LPS) on the P3 is responsible for determining the distribution patterns for dropwindsonde releases. Predetermined desired data collection patterns are illustrated on the flight patterns. However, these patterns often are required to be altered because of clearance problems, etc. Operational procedures are contained in the operator's manual. On the G-IV the sole HRD person is designated the LPS. The following list contains more general supplementary procedures to be followed. (Check off or initial.)

Preflight

ETA to there 43 IP 24.5 85 - SE of storm

- _____ 1. Determine the status of the AVAPS and HAPS. Report results to the LPS.
- _____ 2. Confirm the mission and pattern selection with the LPS and assure that enough dropsondes are on board the aircraft.
- _____ 3. Modify the flight pattern or drop locations if requested by AOC to accommodate changes in storm location or closeness to land.
- _____ 4. Complete the appropriate preflight set-up and checklists.

In-Flight

- _____ 1. Operate the system as specified in the operator's manual.
- _____ 2. Ensure the AOC flight director is aware of upcoming drops.
- _____ 3. Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal. Recommend if a backup dropsonde should be launched in case of failure.
- _____ 4. Report the transmission of each drop and fill in the Dropwindsonde Scientist Log.

Post flight

- _____ 1. Complete Dropwindsonde Scientist Log.
- _____ 2. Brief the LPS on equipment status and turn in completed forms.
- _____ 3. Hand-carry all dropwindsonde data tapes or CDs as follows:
 - a. Outside of Miami-to the LPS or PI.
 - b. In Miami-to AOML/HRD.

[Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- _____ 4. Debrief at the MGOC or the hotel during a deployment.
- _____ 5. Determine the status of future missions and notify MGOC as to where you can be contacted.

ROC Lab

305-421-4071

322 12x15

1755 2019 9 88 39.4

1923 26 34 88 51

28.5

KATRINA

N42/3RF HRD GPS Dropwindsonde Scientist Log (Revised 5/2002)

Storm 050828 Dropwindsonde Scientists GAMACHE Page 1 of 3Flight ID 050828 Flight Director DAMIANO, MAYEAUX Takeoff from MACDILL at 1620 UTCMission ID 1812A KATRINA AVAPS Operators SANS SOUL OLNEY Recovery at MACDILL at 0140 UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd (kt)	hgt (m)	BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
										UBLOX sondes except #10	
1	044535018	171943	27°32'	87°2'	996.3	118°/42	11		Rainband	RAIN NHC	?X 996.3
2	051926195	174308	26°34'	88°21'	—	—	—		NE Eyewall	RAINEX; RH heating cycles	—
3	051926170	174345	26°33'	88°23'	—	—	—		NE Eyewall	RAINEX	—
4	051926060	174412	26°31'	88°25'	924.0	81°/122	11		NE Eyewall	NHC NE EYEW	20 924.0
5	044535440	175620	26°20'	88°40'	902	310°/15	12		Eye	NHC	18 902.0
6	053116033	175825	26°15'	88°50'	928.4	263°/104	9	28.5	SW Eyewall	NHC SW EYEW	22 928.4
7	043835047	175858	26°13'	88°53'	—	—	—		SW Eyewall	RAINEX	
8	044135154	180033	26°09'	88°57'	—	—	—		SW Eyewall	RAINEX	
9	051926265	182259	25°2'	89°55'	994.8	281°/43	44		Rainband	RAINB NHC	26 994.8
10	012225096	183148	25°01'	89°07'	—	—	—			AOC SONDE; RH heating cycles; DLD 5.5S	
11	044535572	185348	25°10'	87°17'	994.8	183°/44	11		Rainband	RAINB NHC	35 994.8
12	044535567	191720	26°20'	88°33'	—	—	—		SE Eyewall	RAINEX; NLD; PTH telemetry poor/missing, & spotty winds 714-830 mb	
13	053116037	191808	26°22'	88°35'	—	—	—		SE Eyewall	RAINEX	
14	051926298	191915	26°25'	88°38'	920.5	163°/59	11		SE Eyewall	NHC SE EYE WALL	920.5
15	044535114	192307	26°39'	88°51'	901.8	346°/14	8		Eye	DLD 3S; NHC; RH heating cycles	37 901.8
16	053116039	193221	26°37'	89°01'	919.5	318°/23	42		NW Eyewall	NW EYEWALL	39 919.5

053116039

AL12-200508282023

2012 2032
26 46
88 55

N42/3RF HRD GPS Dropwindsonde Scientist Log (Revised 5/2002)

Storm KATRINA Dropwindsonde Scientists GAMACHE Page 2 of 3
 Flight ID 050828L Flight Director DAMIAND, MAYEAOX Takeoff from MAC DILL at 1620 UTC
 Mission ID 1812A KATRINA AVAPS Operators SANS SOUCI, OLNEY Recovery at _____ at _____ UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd hgt (kt) (m)	BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
		19334	26°40'	89°03'	—	—	—	NW Eyewall	RAINEX	
17	051926098	19334	26°40'	89°03'	—	—	—	NW Eyewall	RAINEX	
18	051926076	193454	26°42'	89°06'	—	—	—	Rainband	RAINB NHC	41
19	053116035	195941	27°43'	90°24'	991.9	10°/39	9	Rainband	No launch detect	
20	053116034	201400	26°37'	90°43'	—	—	—	Rainband	RAINB	42
21	044535004	201639	26°36'	90°30'	988.1	329°/46	13	W Eyewall	NHC EYEWALL W	051
22	051926295	203433	26°43'	89°19'	929.4	306°/113	27	Eye	NHC EYE	053
23	051926174	203810	26°46'	88°55'	903.1	238°/6	7	E Eyewall	NHC EYEWALL E	054
24	044535557	204124	26°45'	88°41'	—	118°/36	—	Rainband	RH heating cycles RAINB	055
25	053116232	210605	26°45'	86°58'	993.4	143°/50	9		RAINEX	
26	043845006	211637	27°26'	87°07'	—	—	—		RAINEX; RH heating cycles	
27	053116005	212258	27°47'	87°40'	—	—	—		RAINEX	
28	043845059	212721	28°02'	88°02'	—	—	—		RAINEX	
29	053116223	213333	28°26'	88°37'	—	—	—		RAINEX	
30	051926297	220423	28°38'	89°04'	993	86°/53	8	Rainband	ULD 30S NHC RAINB N	61

2214

[illegible]