

E.6 Dropsonde Scientist

The on-board lead project scientist (LPS) on each aircraft 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. The following list contains more general supplementary procedures to be followed. (Check off and initial.)

E.6.1 Preflight

- _____ 1. Determine the status of equipment and report results to the on-board LPS.
- _____ 2. Confirm the mission and pattern selection from the LPS and assure that the proper number and distribution (frequency) of dropsondes are on board the aircraft.
- _____ 3. Complete the appropriate preflight calibrations and checklists.

E.6.2 In-Flight

- _____ 1. Operate the system as specified in the operator's manual.
- _____ 2. Obtain drop release approval (for each drop) from the AOC flight director or navigator for each specific time and location of drop.
- _____ 3. Report to the LPS as soon as it is determined that the dropsonde is (or is not) transmitting a good signal.
- _____ 4. Report completion of each drop and readiness for the next drop.
- _____ 5. Complete Form E-6.

E.6.3 Post flight

- _____ 1. Complete the summary form for GPS sondes.
- _____ 2. Brief the on-board LPS on equipment status and turn in reports and completed forms to the LPS.
- _____ 3. Hand-carry all dropwindsonde data tapes and printouts and inform the AOC flight director that you are arranging delivery as follows:
 - a. Outside of Miami-to the LPS.
 - b. In Miami-to AOML/HRD (temporarily), either directly or via MGOC, for conversion to 9-track magnetic tapes.
- _____ 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.

H. ISIDORE 2N-STORM PATTERN

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

Storm H. ISIDORE Dropwindsonde Scientists P. Dodge Page 1 of
 Flight ID 02092II Flight Director B. Damiano Takeoff from MADIK at 170150 UTC
 Mission ID WVX R AVAPS Operators D. Samu Souci, R. Tang Recovery at VI at 0201 UTC
ISIDORE

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 #
✓ 1	011 115 037	1824	22.44	84.67	1004				MBL 130154	17
2	010615317	18455	22.26	85.82	983	111/74 21		RB	1. WINDS LATE	20
3	020615028	185352	21.04	86.08	959.3	250/45 54		eyewall	inner edge, large ↑↓	22
4	021735051	185439	21.04	"	968	241/36 32		eyewall		23
5	021735076	192623	20.07	86.15	999.7	228/66 12				25
6	011218100	1941	21.80	86.16	994	250/42 20				27
7	000845655	195329	21.76	86.15	966 ^(H)	237/90 71			eyewall S (used Hydro P)	29
8	020615047	195401	21.80	86.15		228/80 39			eyewall inner S	31
9	020615254	200039	22.21	86.13	964	55/76 14			eyewall u N	32
10	020615026	201232	22.08	86.12	994.5	87/40 9			(POSSIBLE P. BIAS -4.1)	39
11	011838027	203028	24.02	86.20	1000	88/34 9				41
12	020248017	210034	22.86	87.98					LAUNCH DETECT F.U.? NOT transmitted	X
13	011245330	211528	22.46	87.14		21/76 19				48
14	011838025	212804	22.11	86.37	955	346/97 17		EWall	W EYEWALL 9.0	50
15	020165033	214024	22.81	86.05	955	160/97 11		FWall	E. Eyewall	52
16	022918050	214107	22.0	86.01	962	145/82 1		E Wall	LARGE PARACHUTE	54
17	020615314	214133	21.0	86.0	965	160/84 19		E Wall	E Eyewall	56

59' 01'

← sonde traveled 13 km

~~N49RF~~ HRD GPS Dropwindsonde Scientist Log (Revised 5/2002)

Storm H ISIDORE Dropwindsonde Scientists P. Dodge Page 2 of 2
Flight ID 0909217 Flight Director B. Damiano Takeoff from MacDill at 1701 UTC
Mission ID WXWXA AVAPS Operators R. Teng, D. SansSouci Recovery at " at 0201 UTC
ISIDORE

[illegible]

Large paracitrate - ended
↑ up being fast fall.

NOTE: 22 sondes charged to HRD. If NHC agrees to pay for eyewall drops - we need to tell Jeff S. which ones.