

Dropsonde Scientist

Flight ID 190820H1 Storm EP95 Mission ID WDWXE GENESIS

Dropsonde Scientists Jason Dunlon Emily Paltz

AVAPS Operators Richards Delgado

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 are often 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

- 1. Determine the status of the AVAPS and workstation. 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. Download all raw and processed AVAPS files to thumbdrive
- 3. Brief the LPS on equipment status and turn in completed forms and thumbdrive.
- 4. Debrief at the base of operations.
- 5. Determine the status of future missions and notify Field Program Director as to where you can be contacted.

NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)



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(exp. 0213A)

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Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (°C)	Eye/Eyewall, Rainband, etc.	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
✓ 1	182730297	145545	13.526	97.642	1009.9	NA	NA			2
Comments IP; Just passed through convection with clouds underneath; Flagged winds below 1002.5										
✓ 2	182740609	150906	13.478	98.617	1009.5	120	08			3
Comments Mdpt from IP to center; See surface										
✓ 3	—	153030	—	—	—	—	—			X
Comments Center; Clouds below. Just passed convective tower; Lost telemetry shortly after launch										
✓ 4	182830071	153206	13.368	100.193	1008.5	250	14			4
Comments Center; Clouds below; Backup sonde										
✓ 5	—	1544	—	—	—	—	—			X
Comments Mdpt from center to Wyp 2; Passing through cloud; Lost sonde										
✓ 6	182840480	154712	13.365	101.317	1008.7	230	14			5
Comments Mdpt from center to Wyp 2; Passing through cloud; Backup sonde										
✓ 7	182531167	160206	13.474	102.399	1009.0	NA	NA			6
Comments Wyp 2; Shallow stratus below;										
✓ 8	182531159	163152	12.306	100.758	1010.2	195	10			7
Comments Wyp 3; shallow clouds below;										
✓ 9	182610168	164240	12.940	100.328	1009.1	235	18			8
Comments Mdpt from Wyp 3 to center; Thicker shallow clouds below										
✓ 10	182730298	170133	14.238	99.928	1009.7	140	21			9
Comments Mdpt from center to Wyp 4; Thin clouds below										

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						Dir/Spd (deg/kt)	Hgt (m)			
✓ 11	182640551	170902	14.790	99.960	1009.3	145	20			10
Comments W4pt 4; See surface										
✓ 12	182740648	172728	13.971	100.813	1008.2	210	17			11
Comments W4pt 5; See surface										
✓ 13	182230824	173500	13.707	100.382	1009.0	170	20			12
Comments Mdpt from W4pt 5 to center; Clouds just below FL										
✓ 14	182531185	175111	13.164	99.417	1010.1	135	08			13
Comments Mdpt from center to FP; Thin clouds with popcorn Cu below. Saw surface;										
✓ 15	182740607	175904	12.866	98.862	1009.9	090	11			14
Comments FP; See surface with popcorn Cu; Momentarily lost contact with sonde										
Comments										
Comments										
Comments										
Comments										
Comments										