

Dropsonde Scientist

Flight ID 20190817H1 Storm EP95 Mission ID WANXE GENESIS

Dropsonde Scientists Bucci

AVAPS Operators TODD RICHARDS

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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Mission ID WAWXE
Genesis

(exp. 0213A)

Dropsonde Scientist

AVAPS Operator

End
sonde
@ 556
(seconds)

Drop #	Sonde ID (serial numbers)	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (C)	Eye/Eyewall, Rainband, etc.	Obs #
						Dir/Spd (deg/kt)	Hgt (m)			
1 ✓✓	182310555	140612	12°60'N	90°7.6'W	1011.1	105/16	10			
Comments	IP, drop from 13Kft, cloud/stratiform rain present ** kept transmitting @ sfc									
2 ✓✓	182340106	141930	13° N	91° 2.8'	1012.2	90/16	12			
Comments	flight level clear, scattered clouds beneath									
3	182340123	143046	13°N							
Comments	Northern E-W leg * bad winds -- very noisy NOT TRANSMITTED									
4 ✓✓	182610126	143301	13°N	92°	1011.2	65/10	99			
Comments	back up sonde Sat-Dz issues below 1000mb, removed low level winds									
5	182830058	144216								
Comments	no ptu, air temp, or humidity transmitting NOT TRANSMITTED									
6 ✓✓	182840137	144355	13.12°N	93.17°W	1011.4	70/9				
Comments	659-699mb ^{winds} removed - parachute problem?									
7 ✓✓	182531170	145332	13°N	94.61°W	1012.3	290/2	10			
Comments	good sonde									
8 ✓✓	182840140	150445	13°N	95.01°W	1012.4	245/7	10			
Comments	western most drop of North E-W leg									
9 ✓✓	182230735	151713	11.99°N	95° W	1013.1	110/1	12			
Comments										
10 ✓✓	182730870	153230	12.28°N	93.98°W	1012.5	285/9	10			
Comments	Descended to 10Kft, late launch									

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Drop #	Sonde ID (serial number)	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)			
11 ✓✓	182230834	154717	12°N	92.97°W	1012.4	285/5	10			
Comments Ascend to 18 kft										
12 ✓✓	182621210	155910	12°N	91.99°W	1012.1	70/16	10			
Comments Dropped from above 20 kft										
13 ✓✓	182230195	161246	12°N	90.91°W	1011.4	50/17	10			
Comments sonde transmitted after splash, ended @ 414 seconds										
14 ✓✓	182230197	162501	11.93°N	89.97°W	1012.3	140/14	10			
Comments										
15 ✓✓	182610097	163420	11.99°N	89.23°W	1013.4	200/4	10			
Comments										
16 ✓✓	182230742	164825	10.99°N	88.99°W	1012.1	185/11	10			
Comments clear, scattered clouds below (cumulus)										
17 ✓✓	182840138	170134	10.99°N	90.0°W	1011.7	210/17	10			
Comments cloud layer below plane (surface obscured)										
18 ✓✓	182230196	171418	11°N	91°W		270/13	952mb			
Comments in cloud layer above 20 kft, had signal near surface, set heights missing										
19 ✓✓	182340179	172648	11°N	92°W	1011.9	295/10	10			
Comments signal interference 600-900 mb data gap										
20	182340111	173856	11°N	93°W	1012.6	00/10	10			
Comments noisy winds, parachute problem, no altitudes										

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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)			
21 ✓✓	182840253	175101	11°N	94°W	1011.6	30/13	86			
Comments low winds increase unrealistically and were removed, dry on W end of leg										
22 ✓✓	182230734	180256	11°N	95°W	1010.9	05/05	10			
Comments										
23 ✓✓	182840133	181529	10°N	95°W	1011.1	295/06	10			
Comments dry air ~900-650 mb										
24 ✓✓	182840141	182858	10°N	93.9°W	1012	15/8	10			
Comments										
25 ✓✓	182340108	184012	10°N	92.95°W	1010.6	350/08	10			
Comments										
26 ✓✓	182840143	185136	9.92°N	91.95°W	1010.9	210/06	10			
Comments										
27 ✓✓	182840134	190239	10°N	90.99°W	1011.2	235/12	12			
Comments										
28	182730295	1914	10°N	89.98°W	1010.2	215/13	10			
Comments										
Comments										
Comments										