

Dropsonde Scientist

Flight ID 20190920 HI Storm AL102019 Mission ID WC10AJERRY

Dropsonde Scientists Kelly Ryan

AVAPS Operators Joe

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)

Storm **AL102019** Flight ID **20902011**  
 Mission ID **WC10AJ** (exp. 0213A)

Dropsonde Scientist **Kelly**  
 Dropsonde Scientist **Rejan**

AVAPS Operator  
 AVAPS Operator

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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,	Obs #
						Dir/Spd (deg/kt)	Hgt (m)			
✓ 1	191050428	1216	17.64	58.58	1011	165° 27kts	10		end SE	
Comments extremely dry here; obvious shear										
✓ 2	185130763	1227	18.19	59.22	1010	150° 28kts	10		mid SE	
Comments again, dry BLEH										
✓ 3	185130760	1238	18.64	59.81	991	133° 11kts	10		center	
Comments (hunted) very saturated to surf from ~875										
✓ 4	191720576	1252	19.36	60.58	1011	35° 23kt	10		mid NW	
Comments										
✓ 5	191640242	1302	19.90	61.17	1012	45° 18kts	10		end NW	
Comments super dry layer 800-900mb; almost entirely easterly winds FL thru 925mb!										
✓ 6	185130790	1321	18.75	61.93	1013	71° 6kts	10		end W	
Comments again super dry (~45-50%RH) in layers; <del>most</del> dry near 775mb AND 900mb; some directional shear in 4-5mb										
✓ 7	191010394	1340	18.74	60.92	1010	15° 43kt	10		mid W	
Comments near 100% RH 800-875										
✓ 8	185140165	1352	18.79	60.08	994	145° 30kts	10		center	
Comments another beautiful center sounding; saturated to ~890mb										
✓ 9	185130757	1357	18.82	59.70	1008	125° 54kts	10		RMW (E)	
Comments (released very late) outside RMW; deep saturated layer FL to 900mb										
✓ 10	191720621	1405	18.82	59.21	1011	135° 39	10		mid E	
Comments										

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Storm Mission ID

Jerry

Flight ID 1019092011  
(exp. 0213A)

Dropsonde Scientist  
Dropsonde Scientist

Kelly

AVAPS Operator  
AVAPS Operator

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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)			
✓ 11	191050429	1419	18.81	-58.27	1013	125° 20kts	10m		end E	
Comments										
✓ 12	191640232	1443	20.04	-59.08	1012	110° 32kts	10m		end NE	
Comments end pt (NE)										
✓ 13	192040998	1455	19.37	-59.57	1011	120° 37kts	10m		mid NE	
Comments										
✓ 14	191750174	1524	18.21	-60.97	1009	280° 15kts	10m		mid SW	
Comments										
✓ 15	192050067	1535	17.16	-61.49	1010	250° 8kt	10		end SW	
Comments near 50% RH ~950mb; some directional shear ~950-975mb										
✓ 16	192040005	1547	17.62	-60.80	1009	240° 15kt	10		end S	
Comments near 60% RH ~900mb										
✓ 17	192050129	1559	18.48	-60.80	1008	280° 19kt	10		mid S	
Comments										
✓ 18	192040748	1625	20.38	-60.81	1011	75° 32kt	10		mid N	
Comments super dry layer ~800-850mb; generally pretty dry										
✓ 19	192040004	1632	20.85	-60.81	1014	75° 20kts			end N	
Comments										
20		1730			989.9	108° 25kts	@125m		Ocean winds	
Comments FAST FALL										

Storm  
Mission ID

*Jerry*

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(exp. 0213A)

*20190920 HI*

Dropsonde Scientist  
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*Kelly*

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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	185130819	1747	19.80	160.85	1008	90°	40 kt	10		north RNW
Comments										
✓ 22	191050438	1755	19.33	160.93	998	125	50 kt	10		north enw
Comments										
Comments										
Comments										
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*ocean winds*