

Dropsonde Scientist

Flight ID 190901+11 Storm DORIAN Mission ID 2905A

Dropsonde Scientists Brittany Dahl Jon Zawistak

AVAPS Operators Joe Greene

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.

RD41

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

Storm DORIAN

Flight ID 190901H1

Dropsonde Scientist B. Dahl

AVAPS Operator J. Greene

Mission ID 2905A

(exp. 0213A)

Dropsonde Scientist J. Zawislak

AVAPS Operator

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Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Pressure (mb)	Wind closest to		SST (C)	Eye/Eyewall, Rainband, etc.	Obs #
						Dir/Spd (deg/kt)	Hgt (m)			
✓ 1		1255 ³⁰	27.52	77.76	1009	055/36		-	-	3
Comments 1P										
✓ 2		1311	27.02	77.18	1003	085/42		-	-	4
Comments 2 mid										
✓ 3		1321	DO NOT TRANSMIT					-	EYEWALL	
Comments 3 mmw early launch detect "125550" file. Diagnosed 132147.00 ✓ NW										
4		1325							"	
Comments 4 mmw no launch detect - BAD										
✓ 5		1324	26.44	76.54	921	230/14		-	✓ CENTER	5
Comments 5 center flagged launch TH & winds. lifted up, initially.										
✓ 6		1325	26.40	76.48	939	130/176		-	✓ EYEWALL	7 OCA
Comments 6 mmw lowest winds marked we, unflagging to 242.755 to get w/iso SE										
✓ 7		1326	26.37	76.46	956	150/114		-	✓ EYEWALL	8
Comments 7 mmw SE										
✓ 8		1335	25.95	76.00	1001	205/48		-	-	10
Comments 8 mid										
✓ 9		1347	25.34	75.43	1010	195/32		-	-	11
Comments 9 end E										
✓ 10		1420	27.55	75.50	1010	105/33		-		12
Comments 10 from										

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Mission ID

Flight ID 190901H
(exp. 0213A)

Dropsonde Scientist
Dropsonde Scientist

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		1432	26.96	76.17	1002	100/47		-			
Comments	mid										
✓ 12		1436	26.77	76.41	994	105/56		-			
Comments	?										
✓ 13		1440	26.64	76.58	967	090/131	15	-	✓ EYEWALL	13	
Comments	mmw flag launch TH. Keep 206.75 wind, t=193.25-199.0								NE		CL eye wall NE
14		1441									
Comments	mmw BAD sonde no launch detect										
Comments											
✓ 15		1443	26.50	76.78	913	005/20		-	✓ CENTER	15	
Comments	ctr										
✓ 16		1444	26.43	76.86	935	^{1st} 245/157	13	-	✓ EYEWALL	17	
Comments	mmw flag launch TH								SW		
17		1445	26.40	76.88	953	250/106		-	EYEWALL	30	
Comments	mmw						↑ last report		SW		
✓ 18		1456	25.80	77.46	1004	300/38		-			
Comments	mid size										
✓ 19		151330	26.32	76.75	968	185/80		-	EYEWALL	19	
Comments	inbound S RMW								S		

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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)			
✓ 20		151414	26.36	76.76	952	170/130		—	EYEWALL S	21
Comments	RMW S flag launch TH, cut at t=197.0s									
✓ 21		151442	26.39	76.77	939	140/138		—	EYEWALL S	23
Comments	RMW S flag launch TH									
✓ 22		1516	26.50	76.80	914	350/21		—	CENTER	18
Comments	CTR good									
23		151832								
Comments	RMW N DO NOT TRANSMIT									
✓ 24		151850	26.67	76.80	953				EYEWALL N	20
Comments	RMW N									
✓ 25		151918	26.70	76.80	962	035/145	20	—	EYEWALL N	22
Comments	RMW N									
✓ 26		151953	26.73	76.80	972	030/84		—	EYEWALL N	24
Comments	RMW N									
27		1530	27.43	77.85	1006.2	080/49		—	—	29
Comments	end									
Comments										
Comments										

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

DUPLICATE NOT NEEDED

Storm ALOS/DURIAN Flight ID 20190401(1)
Mission ID 2405A (exp. 0213A)

Dropsonde Scientist DAHL
Dropsonde Scientist ZAWISLA

AVAPS Operator GREENE
AVAPS Operator

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MIDPOINTS AND ENDPOINTS

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)			
	185130879	131130	27.02	77.17	1003	023/42	10		MP PASS 4)	4
Comments										
	185130004	133514	25.95	76.00	1001	203/50	10		MP ON PASS 1 OUTSIDE	10
Comments										
	191040506	134744	25.34	75.43	1009.6	198/34	10		ENDPOINT PASS 1 TO SE	11
Comments										
	184040035	142022	27.55	75.50	1010.4	102/34	10		MP IN FROM NW	12
Comments										
	185130193	143237	26.96	76.16	1001.6	102/50	10		MP INBOUND F MP	26
Comments										
	191010492	143651	26.77	76.41	993.6	105/53	10		MP? ON INBOUND	27
Comments										
	183321108	145646	25.96	77.46	1004.4	302/40	10		EP ON OUTBOUND TO SW	28
Comments										
	183311023	153038	27.44	76.81	1006.2	79/50	10		EP ON N SIDE	29
Comments										
Comments										
Comments										

