

Dropsonde Scientist

Flight ID 20120827H2 Storm ISAAC Dropsonde Scientist Lisa Bucc

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 often are required to be 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

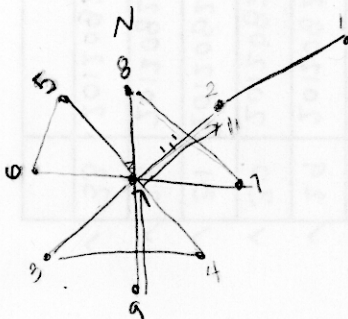
1. Determine the status of the AVAPS and dropsonde workstation. Report to the LPS.
2. Confirm the mission and pattern selection with the LPS and assure that enough dropsondes are on board the aircraft.
3. Modify the flight pattern or drop locations if requested by AOC to accommodate changes in storm 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 dropsonde data to a thumbdrive.
2. Brief the LPS on equipment status and turn in completed forms and thumbdrives
4. Debrief at the base of operations.
5. Determine the status of future missions and notify HFP Director as to where you can be contacted.



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

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 Flight ID 20120827H2 Flight Director Jessica Williams Takeoff from JAX at 20 UTC
 Mission ID 2809A AVAPS Operators Steve Paul Recovery at JAX at 0333 UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd (kt)m/s	hgt (m)	BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
✓ 1	D20120827-210016	21:00:16	27.78	-85.00	998.3	110.7/17.3	7.5		NE	end-dry air ~800mb	
✓ 2	D20120827-211105	21:11:05	27.26	-85.6	993.7	102.6/17.9	7.5		NE	mid-dry air	
✓ 3	D20120827-212151	21:21:51	26.66	-86.02	984.2	79.4/24.2	6.9		NE	RMW-partial fast fall	
✓ 4	D20120827-212543	21:25:43	26.45	-86.19	981.4	178.6/7.2	7.7			center	
✓ 5	D20120827-212816	21:28:16	26.33	-86.33	985.3	320.1/13.5	9.0		SW	RMW1	
✓ 6	D20120827-212917	21:29:17	26.28	-86.38	986.0	302.8/13.4	7.1		SW	RMW2	09
✓ 7	D20120827-213026	21:30:26	26.23	-86.43	988.3	294.7/13.8	8.9		SW	RMW3	11
✓ 8	D20120827-214030	21:40:30	25.76	-86.95	996.2	298.2/21.2	11.1		SW	mid-late launch	
✓ 9	D20120827-215200	21:52:00	25.28	-87.48	1000.7	292.4/18.9	7.3		SW	end	
✓ 10	D20120827-222048	22:20:48	25.479	-85.07	1000.8	206.2/16.4	8.4		SE	end	15
✓ 11	D20120827-223040	22:30:40	25.95	-85.61	995.1	217.0/27.7	8.1		SE	mid	
✓ 12	D20120827-223602	22:36:02	26.22	-85.90	989.2	233.6/18.1	7.8		SE	RMW-late launch-dry	
✓ 13	D20120827-225012	22:50	26.87	86.70	987.9	30/22.6			NW	RMW1	18
✓ 14	D20120827-225115	22:51	26.92	86.76	989.4	35/46 ^{kt}	9.2		NW	RMW2	21
✓ 15	D20120827-	22:52:16	26.97	86.82	988.9	35/42 ^{kt}	8.9		NW	RMW3	23
✓ 16	D20120827	22:58:13	27.26	87.14	993.0	25/33 ^{kt}	6.6		NW	mid	24
✓ 17	D20120822	23:08:22	27.78	87.72	998.0	20/43 ^{kt}	8.5		NW	p+5	

Switched
from m/s
to kts

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

Storm ISAAC Dropwindsonde Scientists LISA BUCCI Page 2 of 2
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 Mission ID 2809 A AVAPS Operators Steve PAUL Recovery at JAX at 0333 UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface		BT SST (°C)	Eye, Eyewall, Rainband (direction)	Comments	Ob #
						dir/spd (kt)	hgt (m)				
✓ 18	20120827	232439	26.70	88.53	1000.6	325/37	9.9		W	pt 6	
✓ 19	20120827	234126	26.59	87.39	993.6	335/26	8.2		W	pt 6 mid	
✓ 20	20120827	235352	26.77	86.50	982.3	341/14	5.8		E-RMW		27
✓ 21	20120828	000129	26.80	85.91	988.2	160/44	5.2		E	mid pt	
✓ 22	20120828	000556	26.79	-85.55	993.1	165/26	6.9		E		
✓ 23	20120828	001905	26.79	-84.54	1001.2	165/35	8.6		E	pt 7	
✓ 24	20120828	005255	28.60	-86.65	999.9	60/41	8.6		N	pt 8	
✓ 25	20120828	010318	27.90	-86.64	993.5	70/36	7.1		N	mid	
✓ 26	20120828	011246	27.27	-86.64	984.8	60/50	9.6		N-RMW		
✓ 27	20120828	013146	25.98	-86.64	995.6	240/43	10.0		S	mid	
✓ 28	20120828	014415	25.24	-86.74	1001.1	250/32	8.0		S	end pt 9 - late launch	
✓ 29	20120828	015938	26.32	-86.77	992.1	240/43	8.4		S	mid	
✓ 30	20120828	020702	26.85	-86.76	984.4	220/46	9.5		S	RMW	
✓ 31	20120828	021146	27.09	-86.98	979.9	358/12	8.7			center	
✓ 32	20120828	022701	27.78	-86.20	995.2	115/42	7.2		NE	mid	
✓ 33	20120828	023756	28.29	-85.55	1001.1	100/40	8.5		NE	end pt 11	