

## Dropwindsonde Scientist Log

<b>Storm:</b>	Helene	<b>Flight ID:</b>	20240926H1	<b>Mission ID:</b>	1709A	<b>Takeoff:</b>	1952Z	<b>Landing:</b>	HHMMZ
---------------	--------	-------------------	------------	--------------------	-------	-----------------	-------	-----------------	-------

<b>Dropsonde Scientist(s):</b>	Sippel/Dahl	<b>AVAPS Operator:</b>	
--------------------------------	-------------	------------------------	--

### Pre-flight

- ✓ Discuss the pattern with the Lead Project Scientist (LPS) and ensure that enough dropsondes are onboard.
- ✓ Complete the appropriate pre-flight set-up of your workstation and ASPEN (see [Dropsonde Processing Guide](#)).

### In-flight

- ✓ Ensure the Flight Director is aware of upcoming drops and whether a backup is requested in case of failure.
- ✓ Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal.
- ✓ Prioritize processing of center drops and report MSLP and surface wind speed and direction to the Flight Director.
- ✓ Fill in the Dropwindsonde Scientist log as drops are released and processed.
- ✓ Copy completed ASPEN files (e.g., FRD, netCDF, Skew-t, WMO txt, BUFR) into the “FRD” folder on the workstation desktop for automated transmission to the ground for archival.

### Once “science is complete”...

- ✓ Make synoptic map plots in ASPEN and copy them to the “FRD” folder on the workstation desktop for automated transmission to the ground for archival.
- ✓ Ensure ASPEN files have been sent to the ground by locating and verifying all files in the “FLIGHTID” folder within the “FRD” folder on the workstation desktop.
- ✓ Archive ASPEN\_DATA and RAW\_DATA into a folder named with the FLIGHTID within the “Season Dropsonde Archive” folder on the workstation desktop and upload the same directories into StormName/FLIGHTID/Dropsonde/ folder on Drive.
- ✓ Download this Dropwindsonde Scientist Log as “PDF” and upload completed PDF and Google Doc to the StormName/FLIGHTID/Dropsonde/ folder within the “Mission Reports” directory in the HFP Google Drive.

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Direction/Speed (deg/kt)	Lowest Wind Height (m)	AXBT SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
1	233814522	2123	27.62	86.62	991	335/35	10		West End Point	1
Comments:										
2	233410954	2135	27.63	85.66	985	315/47	10		West Mid Point	2
Comments: Combo Drop										
3	233640730	2149	27.89	-84.57	948	190/08	10		Center	3
Comments:										
4	233640119	215559	27.899	-84.084	955	130/91	10		RMW E	04
Comments: E outbound RMW. Post-splash flag, artifact of sat dropouts. Nice downdraft around 900 mb. Flagged RH starting at t = 76.50 s.										
5	233814513	220027	27.897	-83.762	972	140/83	10			06
Comments: E outbound mid. Post-splash flag (artifact). Good sonde. (Note: VDM OB 05)										
6	235114824	221018	29.977	-83.083	987	155/75	10			07
Comments: E endpoint. Post-splash flag (artifact).										
7	233814525	222528	29.001	-83.383	987	105/55	10			08
Comments: NE IP. Good sonde.										
8	233631992	223447	28.621	-83.821	974	105/72	10			09

Comments: MP NE inbound. Sats squirrely again, otherwise good.										
9	233814604	223845.1	28.4588	-84.0068	962	100/93	10		EYEWALL NE	11
Comments: RMW NE inbound. Set end t = 176.25 s.										
10	233640695	223845.2	28.4588	-84.0068	964	100/79	10		EYEWALL NE	-
Comments: RMW NE inbound. Set end t = 174.25 s. Spotty sats. Doesn't look like TAG is accepting this one, guessing because of timestamp. Not transmitted, but saved. Marked OB 99.										

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Direction/Speed (deg/kt)	Lowest Wind Height (m)	AXBT SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
11	234220081	223852	28.4545	-84.0121	962	095/83	10		EYEWALL NE	-
Comments: RMW NE inbound. Sats less spotty. Good sonde. TAG isn't accepting this one either. Not transmitted, but saved. Marked OB 99.										
12	234220219	224727	28.316	-84.417	944	180/23	10	29.1	CENTER	10
Comments: Center sonde. BT combo. Good sonde.										
13	233640204	234519	27.658	-85.118	986	290/40	10	-		12
Comments: SW mid outbound. BT combo. no SST. Post-splash flag. Set end t = 180.00 s.										
14	233340904	235251	27.331	-85.489	991	300/45	10			14
Comments: SW endpoint. Good sonde. (Note: VDM OB 13)										

15	235051114	001138	27.638	-84.0328	986	225/52	10			15
Comments: S IP. Good sonde.										
16		0019								-
Comments: S midpt inbound. No launch detect.										
17	233814515	002011	28.260	-84.110	974	235/61	10	-		16
Comments: S midpt inbound backup for sonde 16. BT combo, no SST. Set end t = 179.00 s.										
18	233814514	003457	29.139	-83.869	948	085/108	10		EYEWALL NE	17
Comments: NE RMW outbound. Set end t = 204.25 s to remove some junk at the bottom.										
19	232051010	004242	29.170	-83.744	955	100/108	10		EYEWALL NE	18
Comments: NE RMW inbound. Set end t = 188.75 s.										
20	232320189	004257	29.162	-83.753	955	095/95	10		EYEWALL NE	-
Comments: NE RMW inbound. Set end t = 189.75 s. TAG wouldn't transmit. Saving locally.										

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Direction/Speed (deg/kt)	Lowest Wind Height (m)	AXBT SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
21	233814523	004313	29.153	-83.762	953	090/95	10			19

Comments: NE RMW inbound. Set end t = 208.75 s.										
22	233221004	005010	28.998	-84.188	943	285/09	10	-	CENTER	20
Comments: Center. BT combo, no SST. Set end t = 146.25 s. Good sats. Data at t = 146.50 s were flagged, but I unflagged the wind data (which agreed with the previous obs) in order to encode 10 m wind in tempdrop.										
23	233640671	010032	28.827	-84.870	982	315/51	10			21
Comments: W midpoint outbound. Set end t = 185.25 s.										
24	233630601	011611	28.779	-86.026	993	320/36	10			23
Comments: W endpoint outbound. Set end t = 193.25 s. Flagged RH up through t = 6.50 s to be safe. (Note: VDM OB 22)										
Comments:										
Comments:										
Comments:										
Comments:										

Comments:										
Comments:										

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Direction/Speed (deg/kt)	Lowest Wind Height (m)	AXBT SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
Comments:										
Comments:										
Comments:										
Comments:										
Comments:										
Comments:										

Comments:										
Comments:										
Comments:										
Comments:										
Comments:										