

## Dropwindsonde Scientist Log

<b>Storm:</b>	RAFAEL	<b>Flight ID:</b>	20241107H1	<b>Mission ID:</b>	WA18A	<b>Takeoff:</b>		<b>Landing:</b>	
<b>Dropsonde Scientist(s):</b>		Kaplan			<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.

Storm: &lt;&lt;RAFAEL&gt;&gt;

Flight ID: &lt;&lt;241107H1&gt;&gt;

Mission ID: &lt;&lt; WA18A

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	233650326	0921	25.89	85.78	1008.4	37/22	10			1
End of drop at 204.75 Lots of extra post splash data removed.										
2	235144618	0928	25.48	86.03	1008.3	37/26	10			2
3	243150062	0940	24.88	85.46	1004	30/28	10			3
4	230351456	1009	24.3	84.91	985	349/66kt	10		RMW	4
5	235154011	1013	24.26	84.63	970.5	149/14	10		center	5
6	233640815	1026	23.70	84.01	1000.4	180/44	10			6
7	234830545	1036	23.28	83.56	1003.8	151/30	10			7
8	235154179	1108	25.60	83.50	1009.1	89/24	10			8
9	235144632	1119	25.05	84.13	1003	88/38	10			9
10	235154025	1134	24.34	84.82	970.5	142/17	10		center	10
Set end of drop at 182.25 s										
11	235154027	1146	23.78	85.43	1001.1	310/34	10			11
Set end of drop at 200.5 s										

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12	232210228	1158	23.18	86.11	1005.9	325/23	10			12
Data gap 202.75 to 204.25. Set end time @204.5. Aspen would not compute heights at first. Post-splash data.										
13	232320194	1215	22.76	84.99	1005.5	243/18	10			13
14	235154102	1227	23.6	84.98	999.6	251/41	10			15
End of drop at 198.75 lots of post-splash data. Aspen initially wouldn't compute heights and all heights were set missing. After choosing an earlier end time ASPEN then computed heights. This happened again (ASPEN initially set heights missing until a new earlier drop time was chosen) on either drop 16 or 17.										
15	235144631	1238	24.36	84.98	971.3	209/10	10	center		16
End of drop at 186.0										
16	235154183	1252	25.31	84.96	1004.1	67/47	10			17
17	232210227	1304	26.13	84.95	1008.5	85/40	10			18
18	235154101	1317	25.62	85.82	1008.6	45/35	10			19
19	235144617	1341	24.45	87.12	1007.0	16/31	10			20
Post splash warning, however, heights computed initially this time. Set end time to 198.75 and then recomputed heights though.										
20	235144595	1355	24.45	86.16	1004.1	352/35	10			21
End of drop @205.25										
21	230351549	1409	24.46	85.11	971.8	139/10	10	center		22
Set end of drop@ 176.75										
22	235144638	1422	24.45	84.23	1003.6	136/40	10			24
Set end of drop at 199.25										

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23	235154115	1436	24.45	83.29	1009.1	136/26kt	10	LAST REPORT	25
Set end of drop @216.25.									
Notes: TAG numbering appears to have been a problem again on this flight. AOC’s website archive shows 23 WMO messages were sent off the plane which is consistent with the 23 drops that were made during the flight. However, 3 VDM’s were also sent off the aircraft (these also appear in AOC’s website archive) so there should have been 26 total obs messages (23 drops +VDMs) yet the last obs number. was 25. Carcah was a bit confused given this so the FD concluded that only 22 of the 23 drops were sent off the plane since they were certain that they had sent 3 VDMs.									