

Dropwindsonde Scientist Log

Storm:	AL97 / ITOFS-E #1	Flight ID:	20220810N1	Mission ID:	WBWXA	Takeoff:	1218Z	Landing:	2016Z
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Dropsonde Scientist(s):	Dunion	AVAPS Operator:	Lynch
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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	211930584	124042	16.79	25.46	1013.8	105/04	10			1
Comments: SAL: 20% RH 700 mb, 44 kt E jet 700 mb										
2	210731070	125925	16.83	27.81	1014.7	070/15	10			2
Comments: SAL: 35-40% RH 600-850 mb, 44 kt E jet 600 mb										
3	210850293	131822	16.87	30.24	1013.6	065/18	10			3
Comments: SAL: 40-45% RH 600-850 mb, 49 kt E jet 600 mb										
4	210540662	133720	16.92	32.66	1013.9	070/16	10			4
Comments: SAL: 45% RH 750 mb, 50 kt E jet 625 mb, 200-625 mb vertical wind shear (this sounding): 46 kt @282 deg, 200-850 mb VWS: 15 kt @ 263										
5	210550261	135636	16.95	35.09	1014.4	075/14	10			5
Comments: set end at 944.00 s, SAL: 45-50% RH 750 mb, 52 kt E jet 650 mb										
6	210850238	141639	16.90	37.55	1013.2	055/23	10			6
Comments: NW corner of pattern, SAL: 40-50% RH 600-800 mb, 39 kt E jet 600-750 mb										
7	210850237	142942	15.59	38.40	1012.9	055/12	10			7
Comments: post splash data, set end at 888.5 s, sliver of SAL from 700-825 mb with a 34 kt E jet										
8	210731071	144332	14.19	39.30	1011.5	060/17	10			8
Comments: model sensitivity area										
9	210550282	145723	12.79	40.20	1012.4	315/05	10			9
Comments: set end at 949.75										
10	210640597	151127	11.39	41.10	1011.7	255/11	10			10
Comments: model sensitivity area										

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11	210820074	152450	10.06	41.82						NA
Comments: spotty/noisy RH so backed up this one. Actually ended up looking pretty good, but this is a post splash nightmare, so won't work in real-time										
12	212350444	152652	9.97	41.62	1012.7	250/15	10			11
Comments:										
13	212250319	154056	9.83	39.99	1011.4	245/11	10			12
Comments: bad sonde										
14	212250306	155822	9.67	37.99	1011.3	245/11	10			13
Comments: backup										
15	210710341	161300	9.53	36.32	1011.9	225/09	10			14
Comments:										
16	21050213	162427	10.76	36.00	1011.1	260/20	10			15
Comments: flagged 970.25-970.75 s (0 sats),										
17	210520231	163424	12.01	36.00	1009.6	060/06	10			16
Comments:										
18	210440429	164429	13.26	36.00	1009.9	065/15	10			17
Comments: thin wedge of 55-60% RH near 750 mb...could be SAL sneaking in from the N										
19	210420789	165239	14.26	35.99	1011.4	100/13	10			18
Comments: N WP of 1st S-N leg, set end at 921.00 s, thin wedge of dry air now down to 50% RH near 700-825 mb...could be SAL sneaking in from the N, looks like a FF from FL to ~300 mb- flagged winds.										
20	210550947	170632	14.50	34.32	1011.8	085/12	10			19
Comments: N WP of 2nd leg (N-S), set end at 941.25 s, 39kt ESE jet near 600 mb, profile not dry like the previous 2										

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21	212810220	171849	13.24	34.00						NA
Comments: fast fall >> backed up (looks like the sonde was doing a pendulum)										
22	210550965	172054	13.00	34.00	1010.8	075/09	10			20
Comments: set end at 971.00 s, sounding quite moist sfc to ~300 mb										
23	210550958	172930	12.00	34.00	1011.1	115/10	10			21
Comments: set end at 961.50 s										
24	210550293	174004	10.75	34.00	1011.2	255/14	10			22
Comments: very moist sounding...clearly no dry SAL air lingering here										
25	210440456	174754	9.83	34.00	1011.5	225/15	10			23
Comments: set end at 973.00 s, very moist sounding...clearly no dry SAL air lingering here										
26	210731091	180346	9.50	32.33	1011.7	280/09	10			24
Comments:										
27	210731077	181902	11.17	32.00	1011.1	165/08	10			25
Comments: set end at 945.25 s, very narrow 28 kt SE jet at ~600 mb										
28	210540664	183239	12.84	32.00	1011.4	105/02	10			26
Comments: deeper 28-30 kt ESE jet at ~500-750 mb										
29	210540353	184336	14.21	32.00	1011.7	070/06	10			27
Comments: set end at 964.75 s, same 30 kt ESE jet 500-~700 mb										
30	210420774	190204	15.00	29.99						NA
Comments: sonde failed at ~328 mb...was going to take 3 min to get another out, so opted not to back up										