

Dropwindsonde Scientist Log

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|---------------|----------|-------------------|------------|--------------------|-------|-----------------|-------|-----------------|-------|
| Storm: | Francine | Flight ID: | 20240911H1 | Mission ID: | 1306A | Takeoff: | HHMMZ | Landing: | HHMMZ |
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| Dropsonde Scientist(s): | Dunion | AVAPS Operator: | Dykeman |
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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 # |
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| 1 | 240650321 | 10027 | 27.323 | 91.701 | 1000.6 | 130/38 | 10 | | | 01 |
| Comments: IP (WP1 east of ctr) | | | | | | | | | | |
| 2 | 241420075 | 101219 | 27.326 | 92.610 | 994.5 | 145/43 | 10 | 28.3 | | 02 |
| Comments: WP1-Ctr midpoint; BT Combo | | | | | | | | | | |
| 3 | | 101831 | | | | | | | | X |
| Comments: WP1-Ctr RMW 1; no humidity...backed up | | | | | | | | | | |
| 4 | 233340982 | 101906 | 27.329 | 93.118 | 983.7 | 140/53 | 10 | | | 04 |
| Comments: WP1-Ctr RMW 1; set end at 200.75s (0 sats at bottom); flagged all RH (100% saturated than drops to 20% below ~945 mb | | | | | | | | | | |
| 5 | 233814455 | 102333 | 27.234 | 93.426 | n/a | n/a | n/a | 28.6 | center | 05 |
| Comments: WP 1-2 center; BT combo; set end at 167.25s (0 sats at bottom); marked as did not hit surface/set heights missing; lots of satellite drop outs - this one is ugly | | | | | | | | | | |
| 6 | 233814512 | 103233 | 27.227 | 94.095 | 993.3 | 345/50 | 10 | | | 06 |
| Comments: Center-WP 2 RMW; set end at 201.25s (0 sats at bottom); saturated through profile | | | | | | | | | | |
| 7 | 240620823 | 103646 | 27.228 | 94.406 | 996.6 | 015/41 | 10 | 28.8 | | 07 |
| Comments: Ctr-WP2 midpoint; BT Combo; dry (53-65% RH) from ~825-900 mb | | | | | | | | | | |
| 8 | 233640708 | 104911 | 27.251 | 95.334 | 1002.8 | 025/24 | 10 | | | 08 |

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| Comments: WP 2 (west); keep getting post splash message in Aspen, but the data looks ok | | | | | | | | | | |
| 9 | 241030386 | 112112 | 26.048 | 94.161 | 1003.9 | 285/24 | 10 | | | 09 |
| Comments: WP 3 (SW); Skyfora combo; set end at 206.00s (0 sats at bottom); | | | | | | | | | | |
| 10 | 240520573 | 113042 | 26.652 | 93.777 | 997.5 | 300/46 | 10 | 28.6 | | 10 |
| Comments: WP 3-Ctr midpoint; BT Combo; set end at 190.25s (0 sats at bottom); | | | | | | | | | | |

| 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 | 233340979 | 114414 | 27.468 | 93.250 | 975.7 | 360/07 | 10 | 28.4 | center | 11 |
| Comments: WP 3-4 center; BT combo; set end at 17.25s (0 sats at bottom); | | | | | | | | | | |
| 12 | 235051111 | 115059 | 27.853 | 92.972 | 987.2 | 085/59 | 10 | | | 12 |
| Comments: Center-WP 4 RMW | | | | | | | | | | |
| 13 | 235115053 | 115641 | 28.194 | 92.749 | 996.3 | 080/52 | 10 | | 28.2 | 13 |
| Comments: Center-WP 4 midpoint; BT Combo with wave drifter; set end at 195.25s (0 sats at bottom); | | | | | | | | | | |
| 14 | 233410959 | 120856 | 28.872 | 92.305 | 1004.3 | 070/34 | 10 | | | 15 |
| Comments: WP 4 (NE); set end at 198.00s (0 sats at bottom); | | | | | | | | | | |

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| 15 | 240610536 | 125628 | 29.109 | 94.026 | 1003.6 | 060/28 | 10 | | | 16 |
| Comments: WP 5 (NW); post splash message in Aspen, but the data looks ok (lots of satellite dropouts to zero, but good intermittent data - QC looks ok) | | | | | | | | | | |
| 16 | 233340920 | 130629 | 28.472 | 93.603 | 998.6 | 050/48 | 10 | 27.3 | | 17 |
| Comments: WP 5-Ctr midpoint; BT Combo; set end at 190.25s (0 sats at bottom); | | | | | | | | | | |
| 17 | 233540554 | 132056 | 27.750 | 92.913 | 976.7 | 110/10 | 10 | 29.1 | center | 18 |
| Comments: WP 3-4 center; BT combo; keep getting post splash message in Aspen, but the data looks ok | | | | | | | | | | |
| 18 | 233814609 | 133435 | 26.966 | 92.402 | 995.6 | 210/67 | 10 | 29.7 | | 20 |
| Comments: Center-WP 6 midpoint; BT combo; keep getting post splash message in Aspen, but the data looks ok. Big Temp swings in profile that were also coincident with WSpd swings. With a lot of dry air aloft where these swings are happening, I wonder if we're seeing convectively driven downdrafts- decided not to flag T or RH | | | | | | | | | | |
| 19 | 233814520 | 134546 | 26.328 | 91.998 | 1005.0 | 205/32 | 10 | | LAST REPORT | 21 |
| Comments: WP 6 (SE); Skyfora combo; set end at 204.75s (0 sats at bottom); onion sounding (dry layer ~790-930 mb) | | | | | | | | | | |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|------------|------------|-------------------|--------------------------------------|------------------------|---------------|------------------------------|------|
| 20 | 240610559 | 142221 | 28.250 | 92.781 | 986.2 | 025/75 | 10 | | | X |
| Extra sonde for research - targeting the A-sized wave drifter (charged to GOMO) - not transmitted to the GTS; flagged 160.50-160.75s (3 sats with bad data) | | | | | | | | | | |