

N49RF AOC GPS Dropwindsonde Log (updated 8/2017)

Flight ID: 20171006N1

Flight Director(s): Belson / Parrish

Mission ID: 0416A

Storm Name/Track: Nate

PG 1 of 1

| Sonde # | Obs # | Sonde ID (Last 5) | Drop Time (UTC) | Ch # | Lat (°N) | Lon (°E) | Wx Cond. | SFC Pres (mb) | 250 | Comments / Issues / ASPEN Edits | KWBC # | Bad Sonde? |
|---------|-------|-------------------|-----------------|------|----------|----------|----------|---------------|-----------|---------------------------------|--------|------------|
| 1 | 1 | 163815089 | 0628 | 1 | 25 00 | 83 00 | UNK | 1009 | 098 | | 0643 | |
| 2 | 2 | 35057 | 0646 | 2 | 23 13 | 84 16 | UNK | 1008 | 097 | | 0705 | |
| 3 | 3 | 15117 | 0701 | 3 | 21 56 | 84 25 | UNK | 1006 | 096 | | 0719 | |
| 4 | 4 | 15194 | 0712 | 4 | 20 49 | 84 42 | UNK | 1006 | 097 | | 0731 | |
| 5 | 5 | 15119 | 0723 | 1 | 20 08 | 83 32 | CONV | 1005 | 098 | | 0740 | |
| 6 | 6 | 15027 | 0734 | 2 | 19 10 | 82 42 | CONV | 1005 | 097 | | 0752 | |
| 7 | 7 | 25016 | 0745 | 3 | 17 52 | 82 32 | CONV | 1004 | 099 | Some interference | 0803 | |
| 8 | 8 | 35001 | 0755 | 4 | 16 39 | 82 45 | UNK | 1004 | 096 | | 0815 | |
| 9 | 9 | 15210 | 0817 | 1 | 16 21 | 82 25 | UNK | - | 111 | early termination | 0836 | |
| 10 | 10 | 55013 | 0830 | 2 | 16 04 | 81 09 | UNK | 1006 | 095 | | 0851 | |
| 11 | 11 | 35253 | 0839 | 3 | 16 54 | 81 51 | UNK | 1004 | 094 | | 0859 | |
| 12 | 12 | 45029 | 0848 | 4 | 17 58 | 81 39 | UNK | 1005 | 095 | | 0907 | |
| 13 | 13 | 55044 | 0900 | 1 | 19 24 | 87 03 | UNK | 1004 | 095 | | 0919 | |
| 14 | 14 | 15166 | 0912 | 2 | 20 49 | 86 16 | UNK | 005 | 095 | | 0933 | |
| 15 | 15 | 15165 | 0923 | 3 | 21 57 | 87 02 | UNK | 006 | 096 | | 0950 | |
| 16 | 16 | 55019 | 0935 | 4 | 22 00 | 89 32 | FEW | 006 | 093 | | 0954 | |
| 17 | 17 | 15247 | 0947 | 1 | 22 00 | 90 01 | OVC | 006 | 091 | | 1007 | |
| 18 | 18 | 15169 | 0958 | 2 | 21 52 | 91 25 | SCT | 008 | 090 | | 1024 | |
| 19 | 19 | 35317 | 1010 | 3 | 20 34 | 91 38 | FEW | 007 | 090 | | 1031 | |
| 20 | 20 | 15176 | 1020 | 4 | 20 36 | 92 54 | FEW | 008 | 088 | | 1046 | |
| 21 | 21 | 15172 | 1031 | 1 | 21 54 | 93 07 | SCT | 009 | 088 | | 1052 | |
| 22 | 22 | 35196? | 1042 | 2 | 22 00 | 94 31 | FEW | - | No signal | | | Y |
| 23 | 22 | 15021 | 1043 | 3 | 22 00 | 94 39 | FEW | 009 | 089 | | 1110 | |
| 24 | 23 | 35015 | 1052 | 4 | 22 06 | 95 54 | FEW | 010 | 092 | | 1121 | |
| 25 | 24 | 35093 | 1105 | 1 | 23 31 | 96 00 | SCT | 011 | 094 | | 1124 | |
| 26 | 25 | 35264 | 1118 | 2 | 24 54 | 95 52 | BKN | 011 | 096 | | 1139 | |
| 27 | 26 | 15035 | 1130 | 3 | 24 48 | 94 31 | UNK | 011 | 094 | | 1154 | |
| 28 | 27 | 25012 | 1139 | 4 | 23 37 | 94 24 | FEW | 010 | 091 | | 1206 | |
| 29 | 28 | 55049 | 1151 | 1 | 23 35 | 93 06 | FEW | 010 | 091 | | 1211 | |
| 30 | 29 | 25013 | 1202 | 2 | 24 54 | 92 53 | FEW | 010 | 093 | | 1299 | |
| 31 | 30 | 15093 | 1214 | 3 | 24 54 | 91 36 | OVC | 009 | 093 | | 1234 | |
| 32 | 31 | 35319 | 1225 | 4 | 23 36 | 91 24 | OVC | 008 | 092 | | 1250 | |
| 33 | 32 | 15039 | 1236 | 1 | 23 35 | 90 06 | SCT | 007 | 094 | | 1300 | |
| 34 | 33 | 55188 | 1247 | 2 | 24 54 | 89 52 | BKN | 007 | 095 | | 1308 | |
| 35 | 34 | 55033 | 1257 | 3 | 24 54 | 89 36 | SCT | 007 | 097 | | 1318 | |
| 36 | 35 | 15043 | 1309 | 4 | 23 36 | 88 23 | OVC | 007 | 096 | | 1329 | |
| 37 | 36 | 15124 | 1320 | 1 | 23 30 | 86 59 | SCT-OVC | 007 | 097 | | 1340 | |
| 38 | 37 | 55147 | 1333 | 2 | 24 25 | 85 36 | SCT | 007 | 100 | | 1353 | |
| 39 | 38 | 15023 | 1348 | 3 | 25 47 | 84 10 | TCU | 011 | 101 | | 1408 | |

LAST

NOAA • AOC • SED

N49RF AVAPS DROP LOG

Lead Tech: Gabe Defeo

Project: Hurricane 2017

Mission: TS NatcFlight ID: 20171006N1Take Off: 0557

Landing: _____

Flt Dir: Paris 4

Launcher S/N: _____

| Drop # | Sonde Serial # | Rcvr # | Press Offset | Launch Time | Operator | Charge \$\$ To | Comments | Good ? |
|--------|----------------|--------|--------------|-------------|----------|----------------|-----------------|--------|
| 1 | 163815089 | 1 | -1.3 | 0628 | JED | NWS | | ✓ |
| 2 | 162735057 | 2 | -1.6 | 0646 | JED | 4 | | ✓ |
| 3 | 163615117 | 3 | -1.8 | 0701 | 4 | | | ✓ |
| 4 | 162715194 | 4 | -1.2 | 0712 | | | | ✓ |
| 5 | 163815119 | 1 | -1.4 | 0723 | | | | ✓ |
| 6 | 163815027 | 2 | -1.1 | 0734 | | | | ✓ |
| 7 | 163325016 | 3 | -0.2 | 0745 | | | | ✓ |
| 8 | 162735001 | 4 | -0.5 | 0755 | | | | ✓ |
| 9 | 162715210 | 1 | -1.5 | 0816 | | | ended at 941mb. | ✓ |
| 10 | 162655013 | 2 | -1.9 | 0830 | | | | ✓ |
| 11 | 163335253 | 3 | -2.4 | 0839 | | | | ✓ |
| 12 | 162745029 | 4 | -1.3 | 0847 | | | | ✓ |
| 13 | 163255044 | 1 | -0.8 | 0900 | | | | ✓ |
| 14 | 162715166 | 2 | -1.4 | 0912 | | | | ✓ |
| 15 | 162715165 | 3 | -1.1 | 0923 | | | | ✓ |
| 16 | 163255019 | 4 | -1.0 | 0935 | | | | ✓ |
| 17 | 162715247 | 1 | -1.9 | 0947 | | | | ✓ |
| 18 | 162715169 | 2 | -0.9 | 0958 | | | | ✓ |
| 19 | 163335317 | 3 | -0.8 | 1010 | | | | ✓ |
| 20 | 162715176 | 4 | -1.0 | 1020 | | | | ✓ |
| 21 | 162715172 | 1 | -1.0 | 1031 | | | | ✓ |
| 22 | 163335196 | 2 | -1.1 | 1042 | | | Lost at Launch | ✗ |
| 23 | 163815021 | 3 | -0.9 | 1043 | | | | ✓ |
| 24 | 163835015 | 4 | -1.9 | 1052 | | | | ✓ |
| 25 | 162735093 | 1 | -1.8 | 1105 | | | | ✓ |
| 26 | 163335264 | 2 | -1.2 | 1118 | | | | ✓ |
| 27 | 163815035 | 3 | -1.2 | 1130 | | | | ✓ |
| 28 | 163525012 | 4 | -1.2 | 1139 | | | | ✓ |
| 29 | 163255049 | 1 | -1.0 | 1151 | | | | ✓ |
| 30 | 163025013 | 2 | -1.5 | 1203 | | | | ✓ |
| 31 | 163815093 | 3 | -1.0 | 1214 | | | | ✓ |
| 32 | 163335319 | 4 | -0.9 | 1225 | | | | ✓ |
| 33 | 163815039 | 1 | -1.1 | 1236 | | | | ✓ |
| 34 | 162655188 | 2 | -1.0 | 1247 | | | | ✓ |

| Drop # | Sonde Serial # | Rcvr # | Press Offset | Launch Time | Operator | Charge \$\$ To | Comments | Good ? |
|--------|----------------|--------|--------------|-------------|----------|----------------|----------|--------|
| 35 | 163255033 | 3 | -0.9 | 1257 | VED | NWS | | ✓ |
| 36 | 142719043 | 4 | -1.1 | 1309 | ↑ | ↑ | | ✓ |
| 37 | 162715124 | 1 | -1.3 | 1320 | ↑ | ↑ | | ✓ |
| 38 | 162655147 | 2 | -1.1 | 1333 | ↑ | ↑ | | ✓ |
| 39 | 163815023 | 3 | -0.9 | 1348 | ↓ | ↓ | | ✓ |
| 40 | | | | | | | | |
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Drop Station Operator Notes

Charge \$\$ To Options: AOC, NWS, HFIP, HRD, IR/SST or HRD ONLY– Do not use funding codes!

AVAPS Pre-Flight Check:

- If time-permits, verify cabin pressure sensor w/ lab standard
- Start AVAPS., then start Soundings and set the Project Name and Full Flight ID (example: 20120823N2).
- Verify the Frequency band allocation as required:
- Band A - W53rd, Band B - Research, Band C - N43RF, Band D - N49RF, Band E - Global Hawk
- Select the **GPS Reference** tab from the **Soundings Displays** page and verify good GPS data
- Perform a prelaunch check on each channel, look for reasonable data and no CRC error status lights. Verify data is available on Remote AVAPS at R1 and L1, then terminate the sonde by selecting **Abort** to cancel the sonde initialization. Verify the AVAPS Data mission folder has been created
- Verify AVAPS PC Time is correct
- Early launch detects are caused usually by remanufactured sondes with the chute riser line not properly coiled between the PCB ears. This may also cause fast falls. If this is suspected, repack the riser line as time permits
- Eyewall drop performance is improved when using sondes manufactured after 7/2016
- Perform RH Regeneration on all sondes - this must be done prior to sonde initialization -

AVAPS Launch:

- Select a sonde frequency in the Green band and away from other sondes
- Enter sonde pressure error offset if 0.4mB or greater using cabin pressure sensor - warning, this can not be used during a climb
- If the Cal lab pressure standard and the cabin pressure standard match, apply pressure offset +/- 0.1mB
- Select "begin data collection" and verify good data with winds prior to putting sonde in launch tube
- Do not shorten the ribbon on N49
- Loosen ribbon and extend end of ribbon to near, but not over, the sensor end of the sonde
- Place the sonde in the launch tube, sensor arm up, with the power pin socket facing starboard
- Verify the sonde is actively tracking GPS data prior to launch and no early launch detect