

N43RF ERROR SUMMARY
 20201008I1 1726A Delta

Flight ID: 20201008I1

| Sensor or System ----- | Number or Name ----- |
|--------------------------------------|-------------------------|
| Static Pressure Probe | PSM.2 |
| Dynamic Pressure Probe | PQM.2 |
| Total Temperature Probe | TTM.1 |
| Dewpoint Temp. Probe | TDM.2 |
| Vertical Accelerometer | AccZfilterI- |
| GPS.1 | |
| Altimeter | AltGPS.3 |
| INE Selection | 1 |
| Differential Attack Pressure Probe | PDALPHA.1 |
| Differential Sideslip Pressure Probe | PDBETA.1 |
| Dynamic Attack Pressure Probe | PQALPHA.1 |
| Dynamic Sideslip Pressure Probe | PQBETA.1 |

Flight Directory acdata/2020/MET/20201008I1

| Local Met Data | Takeoff KLAL (2101Z) | Landing KLAL (0529Z) |
|----------------------|----------------------|----------------------|
| Dynamic Corrections | | Yes |
| AttackAngleIntercept | | 0.131251 |
| AttackAngleSlope | | 6.02327 |
| SlipAngleIntercept | | 0.23 |
| SlipAngleSlope | | 7.02537 |

Notes:

There were no edits made in the measured parameters used to calculate meteorological and navigational parameters.

Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

See QC Checklist for more remarks

| Expendable Type ----- | # deployed ----- | # good ----- | # transmitted ----- |
|--------------------------|---------------------|-----------------|------------------------|
| Dropsondes | 33 | 32 | 23 |
| Test sondes | 0 | 0 | 0 |
| AXBTs | 2 | 0 | 0 |
| AXCPs | 0 | 0 | 0 |
| AXCTDs | 0 | 0 | 0 |
| UAS | 0 | 0 | 0 |

Flight Director: Lundry
 Phone #: 863-500-3898

ACAT-4 Version = 7.3

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N43RF Manifest

| FLIGHT INFORMATION | | | | CREW MANIFEST | | | MISSION INFORMATION | | | | |
|--|------------|-------------|------------|---------------|------------|-------------|---------------------|-------------------------|---------------|--------------------|------|
| FLT ID: | 2020100811 | FLT #: | 1 | AC: | Rossi | Scientists: | Pressure | | Dropsondes | | |
| From: | KLAL | ETD: | 1700 | CP(s): | Doremus | | A/C Takeoff | | Good | Bad | Sent |
| To: | KLAL | ETA: | 200 | | Rannenberg | | | | 32 | 1 | 23 |
| Block Time | | Flight Time | | NAV: | Freeman | | ASOS Takeoff | | BTs | | |
| In: | 06:27 | Land: | 06:20 | FE(s): | LaLonde | | | | A/C Land | Good | Bad |
| Out: | 20:52 | T/O: | 21:01 | FD(s): | Lundry | | | 0 | 2 | 0 | |
| Total: | 9.5 | Total: | 9.3 | SSA: | Richards | Visitors: | | | | | |
| Sponsoring Org: | | NWS/NHC | | | AVAPS: | McAlister | Rogers | Storm Number ID: | | AL262020 | |
| Program: | | PRX | | | SEB: | | | (ie: AL072012) | | | |
| Purpose: | | | | | MX: | | | TCPOD/WSPOD Mission | | NOAA3 1726A | |
| | | | | | | | | (ie: NOAA2 2418A SANDY) | | | |
| AS REQUIRED BY ORM | | | | Y | N | REMARKS | | Fix Number | Obs Number | Fix Time | SLP |
| VOLCANIC ASH | | | | | x | | | 1 | | | |
| SCIENCE MISSION WITHIN BDRY LAYER | | | | | x | | | | | | |
| LACK OF PRECIPITATION | | | | | x | | | 2 | | | |
| RELATIVE HUMIDITY ≥ 80% | | | | x | | | | | | | |
| LARGE AIR-SEA TEMP GRADIENT | | | | | x | | | 3 | | | |
| HIGH SURFACE WINDS | | | | x | | | | | | | |
| LONG FETCH / DURATION OF SFC WND | | | | x | | | | 4 | | | |
| SEA SALT ACCRETION FORECAST | | | | | x | | | | | | |
| SEA SALT ACCRETION OBSERVED | | | | | x | | | Pennies: | 4 HURR PENNIE | | |
| *Highlighted items must be completed before departure. | | | | | | | | | | | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

P-3 QC Checklist

| | |
|--------------------|---|
| Overall Assessment | Minor instrument issue(s) - minimal mission impact. |
|--------------------|---|

| | |
|---------------------|--------------------|
| Flight ID: | 2020100811 |
| Flight Director(s): | Lundry |
| Mission: | Tasked/Operational |
| UWZ.d mean: | 0.06 |

| Pressure Comparison | | |
|---------------------|--------|----------------|
| | T/O | Land |
| Aircraft | 1011.0 | |
| Tower | 1010.7 | TOWER DATA N/A |

2101Z

0620Z

| | Raw 1Hz Mean File Parameters | | | | C File Parameters | |
|--|--|--|--|--|--|--|
| <input checked="" type="checkbox"/> Accelerometer | <input checked="" type="checkbox"/> AccAXI.1 <input checked="" type="checkbox"/> AccAXI.2 <input checked="" type="checkbox"/> AccAXI-GPS.1 <input checked="" type="checkbox"/> AccAXI-GPS.2 | <input checked="" type="checkbox"/> AccAYI.1 <input checked="" type="checkbox"/> AccAYI.2 <input checked="" type="checkbox"/> AccAYI-GPS.1 <input checked="" type="checkbox"/> AccAYI-GPS.2 | <input checked="" type="checkbox"/> AccAZI.1 <input checked="" type="checkbox"/> AccAZI.2 <input checked="" type="checkbox"/> AccAZI-GPS.1 <input checked="" type="checkbox"/> AccAZI-GPS.2 | <input checked="" type="checkbox"/> AccZfilter-GPS.1 <input checked="" type="checkbox"/> AccZfilter-GPS.2 | <input checked="" type="checkbox"/> AccZref | |
| <input checked="" type="checkbox"/> Altitude | <input checked="" type="checkbox"/> AltGPS.1 <input checked="" type="checkbox"/> AltGPS.2 <input checked="" type="checkbox"/> AltGPS.3 <input type="checkbox"/> AltGPS.4 | <input checked="" type="checkbox"/> AltI-GPS.1 <input checked="" type="checkbox"/> AltI-GPS.2 | <input checked="" type="checkbox"/> AltPaADDU.1 <input checked="" type="checkbox"/> AltBCADDU.1 | <input checked="" type="checkbox"/> AltRA.1 <input checked="" type="checkbox"/> AltRA.2 | <input checked="" type="checkbox"/> ALTref <input checked="" type="checkbox"/> ALTPA.d <input checked="" type="checkbox"/> ALTGA.d | <input checked="" type="checkbox"/> AltRA1.c <input checked="" type="checkbox"/> AltRA2.c |
| <input checked="" type="checkbox"/> Ground Speed | <input checked="" type="checkbox"/> GsXI-GPS.1 <input checked="" type="checkbox"/> GsXI-GPS.2 | <input checked="" type="checkbox"/> GsYI-GPS.1 <input checked="" type="checkbox"/> GsYI-GPS.2 | <input checked="" type="checkbox"/> GsZI-GPS.1 <input checked="" type="checkbox"/> GsZI-GPS.2 | | <input checked="" type="checkbox"/> GSXref <input checked="" type="checkbox"/> GSYref <input checked="" type="checkbox"/> GSZref | |
| <input checked="" type="checkbox"/> Lat / Lon | <input checked="" type="checkbox"/> LatGPS.1 <input checked="" type="checkbox"/> LatGPS.2 <input checked="" type="checkbox"/> LatGPS.3 <input type="checkbox"/> LatGPS.4 | <input checked="" type="checkbox"/> LatI-GPS.1 <input checked="" type="checkbox"/> LatI-GPS.2 | <input checked="" type="checkbox"/> LonGPS.1 <input checked="" type="checkbox"/> LonGPS.2 <input checked="" type="checkbox"/> LonGPS.3 <input type="checkbox"/> LonGPS.4 | <input checked="" type="checkbox"/> LonI-GPS.1 <input checked="" type="checkbox"/> LonI-GPS.2 | <input checked="" type="checkbox"/> LATref <input checked="" type="checkbox"/> LONref | |
| <input checked="" type="checkbox"/> Pressure | <input checked="" type="checkbox"/> PDALPHA.1 <input checked="" type="checkbox"/> PDALPHA.2 <input checked="" type="checkbox"/> PDBETA.1 <input checked="" type="checkbox"/> PDBETA.2 | <input checked="" type="checkbox"/> PQALPHA.1 <input checked="" type="checkbox"/> PQBETA.1 | <input checked="" type="checkbox"/> PQM.1 <input checked="" type="checkbox"/> PQM.2 <input checked="" type="checkbox"/> PQM.3 <input checked="" type="checkbox"/> PQM.4 | <input checked="" type="checkbox"/> PSM.1 <input checked="" type="checkbox"/> PSM.2 <input checked="" type="checkbox"/> PTM.1 | <input checked="" type="checkbox"/> PDLAPHaref <input checked="" type="checkbox"/> PDBETAref <input checked="" type="checkbox"/> PQALPHAref <input checked="" type="checkbox"/> PQBETAref | <input checked="" type="checkbox"/> PQMref <input checked="" type="checkbox"/> PQ.c <input checked="" type="checkbox"/> PSMref <input checked="" type="checkbox"/> PS.c |
| <input checked="" type="checkbox"/> Air Speed | <input checked="" type="checkbox"/> CasADDU.1 | <input checked="" type="checkbox"/> TasADDU.1 | <input checked="" type="checkbox"/> IasADDU.1 | | <input checked="" type="checkbox"/> IAS.d | <input checked="" type="checkbox"/> TAS.d |
| <input checked="" type="checkbox"/> Pitch / Roll | <input checked="" type="checkbox"/> PitchI.1 <input checked="" type="checkbox"/> PitchI.2 <input type="checkbox"/> PitchI.3 | <input checked="" type="checkbox"/> PitchRateI.1 <input checked="" type="checkbox"/> PitchRateI.2 <input type="checkbox"/> PitchRateI.3 | <input checked="" type="checkbox"/> RollI.1 <input checked="" type="checkbox"/> RollI.2 <input type="checkbox"/> RollI.3 | <input checked="" type="checkbox"/> RollRateI.1 <input checked="" type="checkbox"/> RollRateI.2 <input type="checkbox"/> RollRateI.3 | <input checked="" type="checkbox"/> PITCHref <input checked="" type="checkbox"/> ROLLref | |
| <input checked="" type="checkbox"/> Temp / Dewpt | <input checked="" type="checkbox"/> TTM.1 <input checked="" type="checkbox"/> TTM.2 <input type="checkbox"/> TTM.3 | <input checked="" type="checkbox"/> TDM.1 <input checked="" type="checkbox"/> TDM.2 <input style="background-color: #f8d7da; color: #dc3545; font-weight: bold;"/> x TDM.3 | <input checked="" type="checkbox"/> TRadD.1 <input checked="" type="checkbox"/> TRadS.1 <input type="checkbox"/> TRadU.1 | | <input checked="" type="checkbox"/> TD.c <input checked="" type="checkbox"/> TDMref | <input checked="" type="checkbox"/> TTMref <input checked="" type="checkbox"/> TA.d |
| <input checked="" type="checkbox"/> Misc. (Must check) | | | | | <input checked="" type="checkbox"/> UWZ.d <input checked="" type="checkbox"/> DPJ_WSZ <input checked="" type="checkbox"/> HUM | <input checked="" type="checkbox"/> WS.d <input checked="" type="checkbox"/> WD.d |

| FLID_Mission_Documents.pdf: |
|---|
| <input checked="" type="checkbox"/> Error Summary |
| <input checked="" type="checkbox"/> Crew Manifest |
| <input checked="" type="checkbox"/> QC Checklist |
| <input type="checkbox"/> Dropwindsonde Log(s) - AVAPS and FD if completed |
| <input checked="" type="checkbox"/> Flight Track |
| n/a Miscellaneous FD Notes |

| QC Key | |
|---------------|--|
| Not checked | <input type="checkbox"/> |
| Valid | <input checked="" type="checkbox"/> |
| Errors (note) | <input style="background-color: #f8d7da; color: #dc3545; font-weight: bold;" type="checkbox"/> X |

| NOTES: |
|---|
| Data during transit at end of flight missing due to data system issue, all mission data is there, no pressure at landing avail |
| PSM.1 and PSM.2 are drifting apart, difference is greater at higher altitude so does not impact the mission data, just transit data |

AVAPS Drop Log

Project: 2020 Hurricane Season Mission: Hurricane Delta Flight ID: 20201008E1
 Take Off: _____ Landing: _____ Flt Dir: ALundry Launcher S/N: _____

| Drop # | Sonde Serial # | Rcvr # | Press Offset | Launch Time | Operator | Charge \$\$ To | Comments | Good ? |
|--------|----------------|--------|--------------|-------------|----------|----------------|--|--------|
| 1 | 201430053 | 1 | -0.3 | 2307 | MAC | | IP1 | |
| 2 | 201520829 | 2 | -0.7 | ✓ | | | 1st MID IN LATE LAUNCH | X |
| 3 | 201450524 | 3 | -0.3 | 2321 | | | 1st MID IN | |
| 4 | 201520856 | 4 | -0.8 | 2334 | | | 1st Center | |
| 5 | 201650602 | 5 | -0.7 | 2349 | | | 1st MID OUT | |
| 6 | 201510698 | 6 | -0.5 | 2359 | | | 1st END PT | |
| 7 | 202241511 | 7 | -0.4 | 0033 | | | IP2, Double BT Combo | |
| 8 | 201510646 | 8 | -0.3 | 0043 | | | 2nd MID IN | |
| 9 | 114425238 | 1 | -0.5 | 0055 | | | 2nd CTR, IR 90.9F | |
| 10 | 201440492 | 2 | -0.6 | 0111 | | | 2nd MID OUT | |
| 11 | 201450410 | 3 | -0.8 | 0122 | | | 2nd END PT | |
| 12 | 132335120 | 4 | +0.7 | 0135 | | | IP3, IR, Combo Sides | |
| 13 | 201450412 | 5 | -0.8 | 0135 | | | IP3, Combo | |
| 14 | 202270637 | 6 | -0.2 | 0219 | | | 3rd MID IN | |
| 15 | 202311605 | 7 | -0.1 | 0229 | | | 3rd in RMW #1 | |
| 16 | 202520367 | 8 | -0.2 | 0229 | | | 3rd in RMW #2 | |
| 17 | 202520370 | 1 | -0.1 | 0230 | | | 3rd in RMW #3 | |
| 18 | 202520374 | 2 | -0.1 | 0233 | | | 3rd Center | |
| 19 | 202621457 | 3 | -0.2 | 0237 | | | 3rd out RMW #1 | |
| 20 | 201620182 | 4 | -0.5 | 0237 | | | 3rd out RMW #2 | |
| 21 | 201350982 | 5 | -0.6 | 0238 | | | 3rd out RMW #3 | |
| 22 | 201440477 | 6 | -0.5 | 0246 | | | 3rd MID OUT | |
| 23 | 114335128 | 7 | -1.4 | 0258 | | | 3rd End PT, IR Combo | |
| 24 | 202241512 | 8 | -0.6 | 0258 | | | 3rd End PT, Combo ^{Small} | |
| 25 | 132355097 | 1 | -1.8 | 0333 | | | IP4, IR, Combo ^{28.1C} | |
| 26 | 202330416 | 2 | -0.5 | 0333 | | | IP4, Combo | |
| 27 | 201521081 | 3 | -0.6 | 0345 | | | 4th MID IN | |
| 28 | 202270553 | 4 | -0.2 | 0356 | | | 4th RMW IN | |
| 29 | 202621465 | 5 | -0.1 | 0359 | | | 4th Center | |
| 30 | 201350984 | 6 | -0.3 | 0404 | | | 4th RMW OUT | |
| 31 | 201450411 | 7 | -0.8 | 0415 | MAC | | 4th MID OUT | |
| 32 | 132355133 | 8 | -0.8 | 0424 | MAC | | 4th END PT, IR, Combo ^{25.2C} | |
| 33 | 202330426 | 1 | -0.4 | 0424 | MAC | | 4th END PT, Combo | |

AOC GPS Dropwindsonde Log

| Flight ID | 2020100811 | ASPEN Operator/Flight Director(s) | Dunion (Aspen-Ground) / Lundry (FD) | | | | | | | | | | |
|------------|-------------|-----------------------------------|-------------------------------------|------|---------|---------|---------------------|--------------------|--------------|---|--------|---------|----------------------------------|
| Mission ID | NOAA3 1726A | Storm Name/Track | Hurricane Delta | | | | | | | | | | |
| Sonde # | Ob# | Launch Time HHMMSS(Z) | Sonde ID (last 5) | Ch # | Lat | Lon | Prominent Wx Cond | SFC Wind (dir/spd) | SFC Prs (mb) | Comments/Issues/QC/ASPEN Edits | KWBC # | P-3 Ob# | Sonde Issues? |
| 1 | 1 | 230740 | 30053 | 1 | 26.9691 | 93.6327 | N WP (IP) | 050/28 | 1005.3 | set end at 215.25 s | 082319 | 1 | post splash data |
| 2 | X | 2322 | na | na | na | na | N-Ctr Mid | na | na | sonde has sporadic data - did not send | na | X | NO/LATE LAUNCH DETECT, backed up |
| 3 | 2 | 232143 | 50524 | 3 | 26.0104 | 93.6332 | N-Ctr Mid | 030/59 | 993.9 | set end at 224.25 s | 082331 | 2 | post splash data |
| 4 | 3 | 233435 | 20856 | 4 | 25.1942 | 93.5091 | Center #1 | 125/10 | 955.8 | set end at 200.00 s, flagged FL RH | 082347 | 3 | post splash data |
| 5 | 4 | 234920 | 50602 | 5 | 24.217 | 93.5513 | Ctr-S Mid | 265/34 | 995.7 | gged FL RH, flagged winds 10.25-11.75 s (lat | 082359 | 4 | late launch detect |
| 6 | 5 | 235935 | 10698 | 6 | 23.5186 | 93.5492 | S WP | 265/27 | 1002.3 | flagged FL RH | 090014 | 5 | |
| 7 | 6 | 003313 | 41511 | 7 | 25.4028 | 91.9535 | E WP | 145/44 | 1000.6 | AXBT combo with sonde, set end at 231.75 s | 090046 | 6 | post splash data |
| 8 | 7 | 004358 | 10646 | 8 | 25.4029 | 92.7779 | E-Ctr Mid | 140/56 | 990.4 | flagged FL RH | 090055 | 7 | |
| 9 | X | 005525 | 25238 | 1 | 25.3095 | 93.6263 | Center #2 | 055/03 | 955.3 | R Sonde w/ SST (27.1 C), set end at 168.76 s | 090108 | X | post splash data |
| 10 | 8 | 011105 | 40492 | 2 | 25.3227 | 94.7088 | Ctr-W Mid | 350/55 | 996.6 | flagged FL RH | 090129 | 8 | |
| 11 | 9 | 012219 | 50410 | 3 | 25.3614 | 95.5340 | W WP | 345/28 | 1002.4 | | 090136 | 9 | |
| 12 | X | 013547 | 35120 | 4 | 24.3690 | 95.3027 | SW WP | 315/27 | 1003.6 | IR Sonde w/ SST | 090146 | X | |
| 13 | 10 | 013555 | 50412 | 5 | 24.3613 | 95.3090 | SW WP | 315/32 | 1002.9 | RD41 sonde | 090159 | X | |
| 14 | 11 | 021926 | 70637 | 6 | 25.0258 | 94.5553 | SW-Ctr Mid | 330/50 | 996.1 | set end at 285.00 s, flagged FL RH | 090235 | 11 | |
| 15 | X | 022912 | 11605 | 7 | 25.3859 | 93.8759 | SW-Ctr RMW outside | 300/74 | 972.7 | ybe a delayed chute opening, but Aspen caug | 090241 | X | late launch detect |
| 16 | 12 | 022938 | 20367 | 8 | 25.4031 | 93.8444 | SW-Ctr RMW | 285/78 | 965.7 | set end at 203.00 s, flagged FL RH | 090251 | 12 | |
| 17 | X | 023005 | 20370 | 1 | 25.4205 | 93.8109 | SW-Ctr RMW inside | 300/50 | 964.8 | set end at 233.75 s, flagged FL RH | 090255 | X | |
| 18 | 13 | 023349 | 20374 | 2 | 25.6291 | 93.6334 | Center #3 | 320/01 | 958.1 | set end at 258.75 s, flagged FL RH | 090305 | 13 | |
| 19 | X | 023659 | 21457 | 3 | 25.825 | 93.5329 | Ctr-NE RMW inside | 040/83 | 965.8 | set end at 275.75 s, flagged FL RH | 090335 | X | |
| 20 | 14 | 023742 | 20182 | 4 | 25.8710 | 93.5088 | Ctr-NE RMW, RMW-NE | 045/110 | 965.5 | set end at 296.25 s, flagged FL T/RH | 090322 | 15 | post splash data |
| 21 | X | 023828 | 50982 | 5 | 25.9168 | 93.4850 | Ctr-NE RMW outside | na | 974.5 | sd bottom winds: 224.75-225.25 s, flagged FL | 090329 | X | |
| 22 | 15 | 024657 | 40477 | 6 | 26.3487 | 93.1622 | Ctr-NE Mid | 090/42 | 994.1 | set end at 274.50 s, flagged FL RH | 090344 | 16 | |
| 23 | X | 025814 | 35128 | 7 | 26.8565 | 92.5675 | NE WP | 085/46 | 1002.0 | no drop (SST 25.3 C...precip contam?: flagged | 090355 | X | |
| 24 | 16 | 025822 | 41512 | 8 | 26.8615 | 92.5595 | NE WP | 080/40 | 1001.4 | RD41 sonde (Combo) | 090406 | 18 | |
| 25 | X | 033259 | 55097 | 1 | 27.0315 | 95.0720 | NW WP | 030/25 | 1005.1 | mbo drop, SST 28.1 C, set end at 503.75 s, fl | 090422 | X | late launch detect |
| 26 | 17 | 033302 | 30416 | 2 | 27.0289 | 95.0695 | NW WP | 035/35 | 1004.8 | RD41 sonde (Combo) | 090426 | 19 | |
| 27 | 18 | 034514 | 21081 | 3 | 26.4705 | 94.4394 | NW-Ctr Mid | 015/51 | 997.8 | flagged FL RH | 090433 | 20 | |
| 28 | 19 | 035652 | 70553 | 4 | 25.9248 | 93.8266 | NW RMW | 340/79 | 968.8 | set end at 293.25 s, flagged FL RH | 090438 | 21 | post splash data |
| 29 | 20 | 035909 | 21465 | 5 | 25.8634 | 93.6592 | Center #4 | 265/03 | 953.3 | flagged FL RH | 090444 | 22 | Late launch detect |
| 30 | 21 | 040427 | 50984 | 6 | 25.8188 | 93.3655 | SE RMW (SE EYEWALL) | 160/95 | 970.8 | flagged FL RH | 090452 | 23 | |
| 31 | 22 | 041515 | 50411 | 7 | 25.1312 | 92.8289 | Ctr-SE Mid | 190/47 | 997.5 | flagged FL RH | 090458 | 24 | |
| 32 | X | 042442 | 55133 | 8 | 24.6796 | 92.351 | SE WP | 180/32 | 1003.2 | IR sonde (Combo drop), flagged FL RH | 090504 | X | |
| 33 | 23 | 042450 | 30426 | 1 | 24.673 | 92.3441 | SE WP | 170/35 | 1003.4 | RD41 sonde (Combo), set end at 287.25 s | 090510 | 25 | LAST REPORT |

