

ACAT-4 Version = 7.4

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N49RF Manifest

| FLIGHT INFORMATION | | | | CREW MANIFEST | | | MISSION INFORMATION | | | | |
|-----------------------------------|--------------------|-------------|--------------|---------------|-----------|----------------|-------------------------|------------|------------------|-----------|----------|
| FLT ID: | 20210926N1 | FLT #: | | AC: | Norman | Scientists: | Pressure | | Dropsondes | | |
| From: | TISX | ETD: | | CP(s): | DeTriquet | | A/C Takeoff | | Good | Bad | Sent |
| To: | TISX | ETA: | | | | | | | | 29 | 1 |
| Block Time | | Flight Time | | NAV: | | | ASOS Takeoff | | BTs | | |
| In: | 0150z | Land: | 0147z | FE(s): | | | A/C Land | | Good | Bad | Sent |
| Out: | 1726z | T/O: | 1734z | FD(s): | Kalen | Visitors: | ASOS Land | | | | |
| | | | | | Flaherty | | | | | | |
| Total: | 8.4 | Total: | 8.2 | SSA: | Defeo | | | | | | |
| | | | | AVAPS: | Patel | | Storm Number ID: | | AL182021 | | |
| Sponsoring Org: | HRD / ONR | | | | | | (ie: AL072012) | | | | |
| Program: | PHX | | | SEB: | | | TCPOD/WSPOD Mission | | 0118A SAM | | |
| Purpose: | Hurricane Research | | | | | | (ie: NOAA2 2418A SANDY) | | | | |
| | | | | MX: | | | OBSERVATIONS | | | | |
| 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: | | | | |

*Highlighted items must be completed before departure.

Remarks:

| | |
|--|--|
| | |
|--|--|

G-IV QC Checklist

| | |
|---------------------------|-----------------------|
| Flight ID: | 20210926N1 |
| Flight Director(s) | Kalen/Flaherty |

| | |
|--------------------|-------------|
| UWZ.d mean: | 0.08 |
|--------------------|-------------|

| Pressure Comparison | | |
|---------------------|---------------|---------------|
| | T/O | Land |
| Aircraft | 1014.9 | 1015.5 |
| Tower | 1012.1 | 1013.7 |

| | Raw 1Hz Mean File Parameters | | | | | C File Parameters | |
|--|---|--|---|---|--|--|--|
| <input checked="" type="checkbox"/> Accelerometer | <input checked="" type="checkbox"/> AccAXI.1 | <input checked="" type="checkbox"/> AccAYI.1 | <input checked="" type="checkbox"/> AccAZI.1 | | | <input checked="" type="checkbox"/> AccZref | |
| | <input checked="" type="checkbox"/> AccAXI.2 | <input checked="" type="checkbox"/> AccAYI.2 | <input checked="" type="checkbox"/> AccAZI.2 | | | | |
| | <input checked="" type="checkbox"/> AccAXI.3 | <input checked="" type="checkbox"/> AccAYI.3 | <input checked="" type="checkbox"/> AccAZI.3 | | | | |
| <input checked="" type="checkbox"/> Altitude | <input checked="" type="checkbox"/> AltGPS.1 | <input checked="" type="checkbox"/> AltI.1 | <input checked="" type="checkbox"/> AltPaADDU.1 | <input checked="" type="checkbox"/> AltBCADDU.1 | | <input checked="" type="checkbox"/> ALTref | |
| | <input checked="" type="checkbox"/> AltGPS.2 | <input checked="" type="checkbox"/> AltI.2 | <input checked="" type="checkbox"/> AltPaADDU.2 | <input checked="" type="checkbox"/> AltBCADDU.2 | | <input checked="" type="checkbox"/> ALTPA.d | |
| | <input checked="" type="checkbox"/> AltGPS.3 | <input checked="" type="checkbox"/> AltI.3 | <input checked="" type="checkbox"/> AltRA.1 | | | <input checked="" type="checkbox"/> ALTGA.d | |
| <input checked="" type="checkbox"/> Ground Speed | <input checked="" type="checkbox"/> GsXI.1 | <input checked="" type="checkbox"/> GsYI.1 | <input checked="" type="checkbox"/> GsZI.1 | <input checked="" type="checkbox"/> GsGPS.1 | | <input checked="" type="checkbox"/> GSXref | |
| | <input checked="" type="checkbox"/> GsXI.2 | <input checked="" type="checkbox"/> GsYI.2 | <input checked="" type="checkbox"/> GsZI.2 | <input checked="" type="checkbox"/> GsGPS.2 | | <input checked="" type="checkbox"/> GSYref | |
| | <input checked="" type="checkbox"/> GsXI.3 | <input checked="" type="checkbox"/> GsYI.3 | <input checked="" type="checkbox"/> GsZI.3 | <input type="checkbox"/> GsGPS.3 | | <input checked="" type="checkbox"/> GSZref | |
| | <input checked="" type="checkbox"/> GsXGPS.1 | <input checked="" type="checkbox"/> GsYGPS.1 | <input checked="" type="checkbox"/> GsZGPS.1 | | | | |
| | <input checked="" type="checkbox"/> GsXGPS.2 | <input checked="" type="checkbox"/> GsYGPS.2 | <input checked="" type="checkbox"/> GsZGPS.2 | | | | |
| | <input type="checkbox"/> GsXGPS.3 | <input type="checkbox"/> GsYGPS.3 | <input type="checkbox"/> GsZGPS.3 | | | | |
| <input checked="" type="checkbox"/> Lat / Lon | <input checked="" type="checkbox"/> LatGPS.1 | <input checked="" type="checkbox"/> LatI.1 | <input checked="" type="checkbox"/> LonGPS.1 | <input checked="" type="checkbox"/> LonI.1 | | <input checked="" type="checkbox"/> LATref | |
| | <input checked="" type="checkbox"/> LatGPS.2 | <input checked="" type="checkbox"/> LatI.2 | <input checked="" type="checkbox"/> LonGPS.2 | <input checked="" type="checkbox"/> LonI.2 | | <input checked="" type="checkbox"/> LONref | |
| | <input checked="" type="checkbox"/> LatGPS.3 | | <input checked="" type="checkbox"/> LonGPS.3 | | | | |
| <input checked="" type="checkbox"/> Pressure | <input checked="" type="checkbox"/> PDALPHA.1 | <input checked="" type="checkbox"/> PQALPHA.1 | <input checked="" type="checkbox"/> PQM.1 | <input checked="" type="checkbox"/> PSM.1 | | <input checked="" type="checkbox"/> PDLAPHaref | <input checked="" type="checkbox"/> PQMref |
| | <input checked="" type="checkbox"/> PDALPHA.2 | <input checked="" type="checkbox"/> PQALPHA.2 | <input checked="" type="checkbox"/> PQM.2 | <input checked="" type="checkbox"/> PSM.2 | | <input checked="" type="checkbox"/> PDBETAref | <input checked="" type="checkbox"/> PQ.c |
| | <input checked="" type="checkbox"/> PDBETA.1 | <input checked="" type="checkbox"/> PQBETA.1 | | | | <input checked="" type="checkbox"/> PQALPHaref | <input checked="" type="checkbox"/> PSMref |
| | <input checked="" type="checkbox"/> PDBETA.2 | <input checked="" type="checkbox"/> PQBETA.2 | | | | <input checked="" type="checkbox"/> PQBETAref | <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"/> IAS.d | <input checked="" type="checkbox"/> TAS.d |
| <input checked="" type="checkbox"/> Pitch / Roll | <input checked="" type="checkbox"/> PitchI.1 | <input checked="" type="checkbox"/> PitchRateI.1 | <input checked="" type="checkbox"/> RollI.1 | <input checked="" type="checkbox"/> RollRateI.1 | | <input checked="" type="checkbox"/> PITCHref | |
| | <input checked="" type="checkbox"/> PitchI.2 | <input checked="" type="checkbox"/> PitchRateI.2 | <input checked="" type="checkbox"/> RollI.2 | <input checked="" type="checkbox"/> RollRateI.2 | | <input checked="" type="checkbox"/> ROLLref | |
| | <input checked="" type="checkbox"/> PitchI.3 | <input checked="" type="checkbox"/> PitchRateI.3 | <input checked="" type="checkbox"/> RollI.3 | <input checked="" type="checkbox"/> RollRateI.3 | | | |
| <input checked="" type="checkbox"/> Temp / Dewpt | <input checked="" type="checkbox"/> TTM.1 | <input checked="" type="checkbox"/> TTM.4 | <input checked="" type="checkbox"/> TDM.1 | | | <input checked="" type="checkbox"/> TD.c | <input checked="" type="checkbox"/> TTMref |
| | <input type="checkbox"/> TTM.2 | | <input checked="" type="checkbox"/> TDM.2 | | | <input checked="" type="checkbox"/> TDMref | <input checked="" type="checkbox"/> TA.d |
| | <input checked="" type="checkbox"/> TTM.3 | | | | | | |
| <input checked="" type="checkbox"/> Misc. (Must check) | | | | | | <input checked="" type="checkbox"/> UWZ.d | <input checked="" type="checkbox"/> WS.d |
| | | | | | | <input checked="" type="checkbox"/> DPJ_WSZ | <input checked="" type="checkbox"/> WD.d |
| | | | | | | <input checked="" type="checkbox"/> HUM | |

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

| QC Key | |
|---------------|-------------------------------------|
| Not checked | <input type="checkbox"/> |
| Valid | <input checked="" type="checkbox"/> |
| Errors (note) | <input checked="" type="checkbox"/> |

NOTES:

.1 and .2 GPS parameters data "stair step"
 TTM.3 oscillates
 TDM.1 unrepresentative

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20210426 N1

ASPEN Operator/Flight Director(s):

FLAHERTY / KALEN

Mission ID: 0118A SAM

Storm Name/Track:

HURR SAM SURV

PG ___ of ___

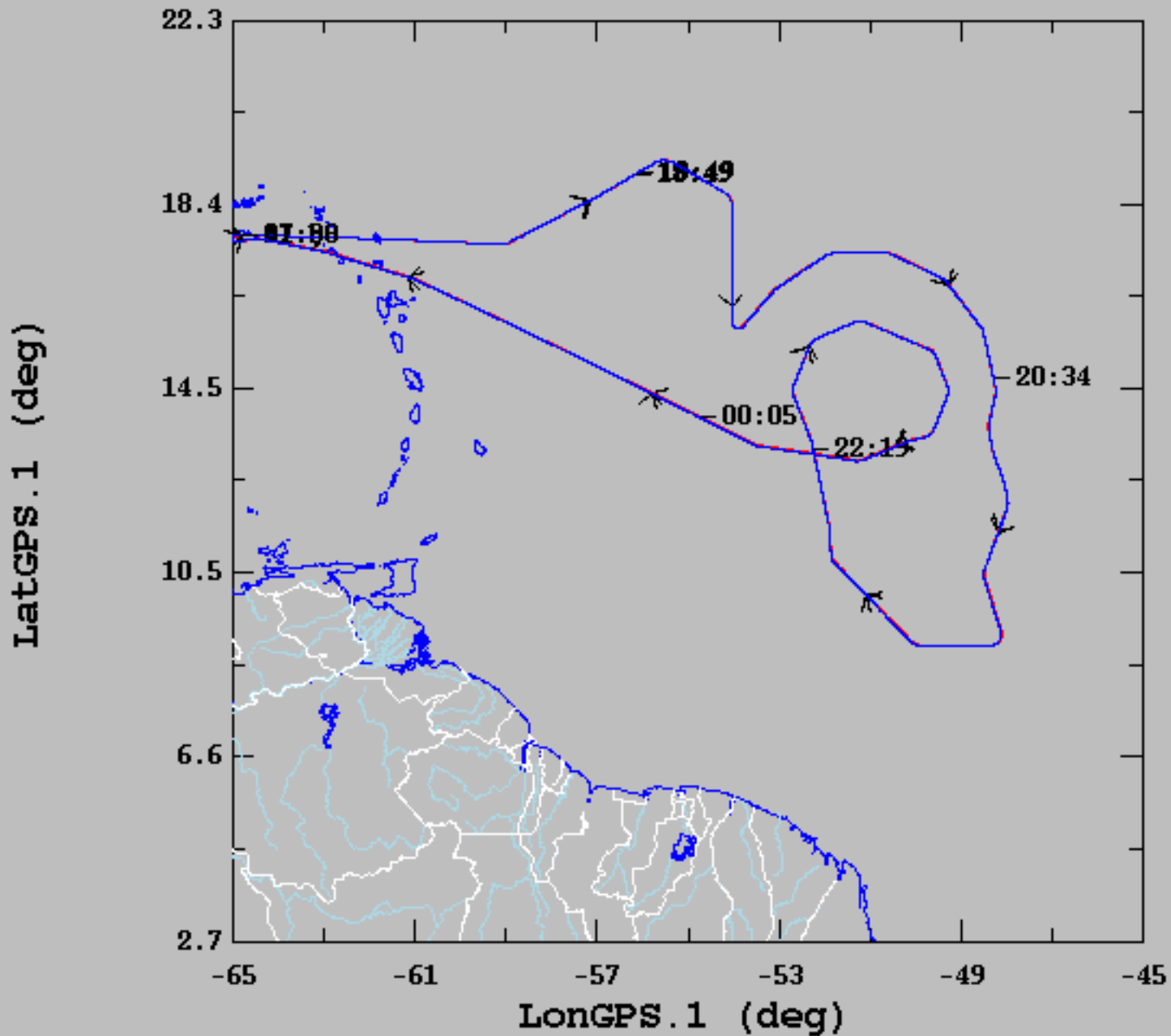
| Sonde # | Ob # | Launch Time HHMMSS (Z) | Sonde ID (min last 5) | Ch # used | Lat (°N) | Lon (°E) | Prominent Wx Cond. | SFC Prs (mb) | Comments / Issues / QC / ASPEN Edits | KWBC # | Sonde Issues? |
|---------|------|------------------------|-----------------------|-----------|----------|----------|--------------------|--------------|--------------------------------------|--------|---------------|
| 1 | 1 | 1823 | 11015 | 1 | 17.5 | -59 | FEW BLW | 1014.2 | | 1849 | |
| 2 | 2 | 1841 | 10299 | 2 | 18.5 | -57 | SCT BLW | 1013.3 | | 1908 | |
| 3 | 3 | 1854 | 10436 | 3 | 19.3 | -55.4 | SCT BLW | 1015.0 | | 1926 | |
| 4 | X | | | 4 | | | | | FAST FALL | | (Y) |
| 5 | 4 | 1909 | 40783 | 1 | 18.3 | -54.0 | SCT BLW | 1014.4 | BACK UP | 1929 | |
| 6 | 5 | 1920 | 10437 | 2 | 16.9 | -54.0 | SCT BLW | 1012.8 | | 1944 | |
| 7 | 6 | 1931 | 30703 | 3 | 15.7 | -53.9 | BEW BLW | 1011.7 | | 1959 | |
| 8 | 7 | 1941 | 30528 | 4 | 16.5 | -53.0 | BEW BLW | 1013.1 | | 2020 | |
| 9 | 8 | 1952 | 30491 | 1 | 17.3 | -51.8 | OVC BLW | 1013.4 | | 2023 | |
| 10 | 9 | 2003 | 10551 | 2 | 17.3 | -50.5 | " | 1014.3 | | 2025 | |
| 11 | 10 | 2014 | 10868 | 3 | 16.7 | -49.3 | " | 1013.9 | | 2047 | |
| 12 | 11 | 2025 | 40288 | 4 | 15.7 | -48.5 | " | 1014.1 | NO SFC WINDS | 2052 | |
| 13 | 12 | 2036 | 10425 | 1 | 14.3 | -48.2 | " | 1012.2 | | 2103 | |
| 14 | 13 | 2048 | 40668 | 2 | 13.0 | -48.2 | " | 1012.8 | | 2109 | |
| 15 | 14 | 2057 | 30891 | 3 | 12.0 | -48.0 | " | 1012.4 | | 2124 | |
| 16 | 15 | 2111 | 30325 | 4 | 10.4 | -48.4 | " | 1012.4 | | 2140 | |
| 17 | 16 | 2123 | 50328 | 1 | 9.0 | -48.1 | " | 1012.3 | | 2143 | |
| 18 | 17 | 2138 | 40823 | 2 | 9.0 | -50.0 | DRK | 1012.58 | | 2207 | |
| 19 | 18 | 2150 | 10495 | 3 | 10.0 | -51.0 | " | 1012.1 | | 2213 | |
| 20 | 19 | 2205 | 20058 | 4 | 11.5 | -51.8 | " | 1011.2 | | 2229 | |
| 21 | 20 | 2221 | 40270 | 1 | 13.3 | -52.2 | " | 1011.2 | | 2304 | |
| 22 | 21 | 2230 | 10547 | 2 | 14.4 | -52.7 | " | 1013.0 | | 2312 | |
| 23 | 22 | 2240 | 40895 | 3 | 15.4 | -52.2 | " | 1011.6 | | 2320 | |
| 24 | 23 | 2249 | 10440 | 4 | 15.8 | -51.2 | " | 1011.3 | | 2329 | |
| 25 | 24 | 2301 | 40831 | 1 | 15.3 | -50.0 | " | 1011.3 | | 2348 | |
| 26 | 25 | 2311 | 40826 | 2 | 14.4 | -49.2 | " | | TERM @ 806 mb | 2353 | (Y) |
| 27 | 26 | 2322 | 10119 | 3 | 13.4 | -49.9 | " | 1010.1 | | 2357 | |
| 28 | 27 | 2334 | 10085 | 4 | 12.9 | -51.2 | " | 1011.3 | | 0002 | |
| 29 | 28 | 2354 | 50327 | 1 | 13.2 | -53.5 | " | 1013.4 | LAST REPORT | 0117 | |
| 30 | | | | | | | | | | | |
| 31 | | | | | | | | | | | |
| 32 | | | | | | | | | | | |
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| 38 | | | | | | | | | | | |

ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived

COMMENTS:

| | | | |
|-----------------------------|---------------------------|--------------------------------------|--------------------------------|
| Obs Xmitted <u>28</u> | Obs Missed <u>0</u> | # of sondes launched <u>29</u> | # of bad sondes <u>1</u> |
|-----------------------------|---------------------------|--------------------------------------|--------------------------------|

2021-09-26, 17:03:53-25:50:28



| | mean | sigma | min | max |
|----------------------------|--------|-------|--------|--------|
| — LatGPS.1 (deg), 1 s/sec | 15.27 | 2.69 | 9.00 | 19.29 |
| — LongGPS.1 (deg), 1 s/sec | -55.09 | 5.54 | -65.00 | -47.94 |
| — LatI.1 (deg), 1 s/sec | 15.28 | 2.68 | 9.01 | 19.29 |
| — LonI.1 (deg), 1 s/sec | -55.08 | 5.54 | -64.97 | -47.95 |