

N43RF ERROR SUMMARY
20230909I1

Flight ID: 20230909I1

| 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.1 |
| 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/2023/MET/20230909I1

| Local Met Data | Takeoff TISX (0833Z) | Landing TISX (1301Z) |
|----------------------|----------------------|----------------------|
| Dynamic Corrections | | Yes |
| AttackAngleIntercept | | 0.050058 |
| AttackAngleSlope | | 5.32015 |
| SlipAngleIntercept | | 0.165 |
| SlipAngleSlope | | 6.66754 |

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.

I.3 for Pitch and Roll is not operational.

TRadU.1 has erroneous data throughout the flight and should not be used.

PDALPHaref, PDBETAref, PQALPHaref, PQBETAref, and DPJ_WSZ are not provided since _AC file is not produced; all other "C" file parameters checked are from the _A file.

TTM.3 and TDM.3 inop

GPS.3 and .4 parameters unrepresentative

PQM.1 trending ~5 mb high

Humidity parameters suspect

| Expendable Type | # deployed | # good | # transmitted |
|-----------------|------------|--------|---------------|
| ----- | ----- | ----- | ----- |
| Dropsondes | 7 | 6 | 6 |
| Test sondes | 0 | 0 | 0 |
| AXBTs | 1 | 1 | 1 |
| AXCPs | 0 | 0 | 0 |
| AXCTDs | 0 | 0 | 0 |
| UAS | 0 | 0 | 0 |

Flight Director: KALEN / LUNDRY
Phone #: 863-500-3962

ACAT-4 Version = 7.4

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

| FLIGHT INFORMATION | | | | CREW MANIFEST | | | MISSION INFORMATION | | | | |
|-----------------------------------|--------------|-------------|--------------|---------------|----------|-------------------------|---------------------|------------|------------------|----------|----------|
| FLT ID: | 20230909I1 | FLT #: | | AC: | COPARE | Scientists: | Pressure | | Dropsondes | | |
| From: | TISX | ETD: | 0830Z | CP(s): | KEITH | ABERSON | A/C Takeoff | | Good | Bad | Sent |
| To: | TISX | ETA: | 1630Z | | WOOD | J. ZHANG | | | 6 | 1 | 6 |
| Block Time | | Flight Time | | NAV: | UTAMA | KO | ASOS Takeoff | | BTs | | |
| In: | 12:49 | Land: | 12:44 | FE(s): | TYSON | | | | Good | Bad | Sent |
| Out: | 8:27 | T/O: | 8:34 | FD(s): | KALEN | | A/C Land | | 1 | 0 | 1 |
| Total: | 4.4 | Total: | 4.2 | SSA: | RICHARDS | Visitors: | | | | | |
| Sponsoring Org: | EMC | | | SEB: | | DAVID NOLAN | Storm Number ID: | | AL132023 | | |
| Program: | PRX | | | | | KELLY RYAN | (ie: AL072012) | | | | |
| Purpose: | HX LEE TDR | | | | | PATRICK DURAN | TCPOD/WSPOD Mission | | 0713A LEE | | |
| | | | | MX: | | (ie: NOAA2 2418A SANDY) | | | | | |
| AS REQUIRED BY ORM | | | | Y | N | REMARKS | Fix Number | Obs Number | Fix Time | SLP | |
| VOLCANIC ASH | | | | | X | MECH GEN FAIL #4 | 1 | 5 | 1013Z | 956MB | |
| 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: | 1 - CAT 3 | | | |

*Highlighted items must be completed before departure.

Remarks:

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| |
| |
| |

P-3 QC Checklist

| | |
|--------------------|--|
| Overall Assessment | Minor instrument issue(s) - no mission impact. |
|--------------------|--|

| | |
|---------------------|--|
| Flight ID: | 2023090911 |
| Flight Director(s): | KALEN / LUNDRY |
| Mission: | Non-tasked Science Collection/Research |
| UWZ.d mean: | -0.11 |

| Pressure Comparison | | |
|---------------------|--------|------|
| | T/O | Land |
| Aircraft | 1009.3 | - |
| Tower | 1009.2 | - |

| | Raw 1Hz Mean File Parameters | | | | C File Parameters | |
|----------------------|--|--|--|---|--|--|
| ✓ Accelerometer | ✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2 | ✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2 | ✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2 | ✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2 | ✓ AccZref | |
| ✓ Altitude | ✓ AltGPS.1 ✓ AltGPS.2 x AltGPS.3 x AltGPS.4 | ✓ Alti-GPS.1 ✓ Alti-GPS.2 | ✓ AltPaADDU.1 ✓ AltBCADDU.1 | ✓ AltRA.1 ✓ AltRA.2 | ✓ ALTref ✓ ALTPA.d ✓ ALTGA.d | ✓ AltRA1.c ✓ AltRA2.c |
| ✓ Ground Speed | ✓ GsXI-GPS.1 ✓ GsXI-GPS.2 | ✓ GsYI-GPS.1 ✓ GsYI-GPS.2 | ✓ GsZI-GPS.1 ✓ GsZI-GPS.2 | | ✓ GSXref ✓ GSYref ✓ GSZref | |
| ✓ Lat / Lon | ✓ LatGPS.1 ✓ LatGPS.2 x LatGPS.3 x LatGPS.4 | ✓ LatI-GPS.1 ✓ LatI-GPS.2 | ✓ LonGPS.1 ✓ LonGPS.2 x LonGPS.3 x LonGPS.4 | ✓ LonI-GPS.1 ✓ LonI-GPS.2 | ✓ LATref ✓ LONref | |
| ✓ Pressure | ✓ PDALPHA.1 ✓ PDALPHA.2 ✓ PDBETA.1 ✓ PDBETA.2 | ✓ PQALPHA.1 ✓ PQBETA.1 | ✓ PQM.1 ✓ PQM.2 ✓ PQM.3 ✓ PQM.4 | ✓ PSM.1 ✓ PSM.2 ✓ PTM.1 | x PDLAPHaref x PDBETAref x PQALPHaref x PQBETAref | ✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c |
| ✓ Air Speed | ✓ CasADDU.1 | ✓ TasADDU.1 | ✓ lasADDU.1 | | ✓ IAS.d | ✓ TAS.d |
| ✓ Pitch / Roll | ✓ PitchI.1 ✓ PitchI.2 x PitchI.3 | ✓ PitchRateI.1 ✓ PitchRateI.2 x PitchRateI.3 | ✓ RollI.1 ✓ RollI.2 x RollI.3 | ✓ RollRateI.1 ✓ RollRateI.2 x RollRateI.3 | ✓ PITCHref ✓ ROLLref | |
| ✓ Temp / Dewpt | ✓ TTM.1 ✓ TTM.2 x TTM.3 | ✓ TDM.1 ✓ TDM.2 x TDM.3 | ✓ TRadD.1 ✓ TRadS.1 x TRadU.1 | | ✓ TD.c ✓ TDMref | ✓ TTMref ✓ TA.d |
| ✓ Misc. (Must check) | | | | | x UWZ.d x DPJ_WSZ x HUM | ✓ WS.d ✓ WD.d |

| FLID_Mission_Documents.pdf: |
|--|
| ✓ Error Summary |
| ✓ Crew Manifest |
| ✓ QC Checklist |
| ✓ Dropwindsonde Log(s) - AVAPS and FD if completed |
| ✓ Flight Track |
| ✓ Miscellaneous FD Notes |

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

| NOTES: |
|---|
| <p>I.3 for Pitch and Roll is not operational.</p> <p>TRadU.1 has erroneous data throughout the flight and should not be used.</p> <p>PDALPHaref, PDBETAref, PQALPHaref, PQBETAref, and DPJ_WSZ are not provided since _AC file is not produced; all other "C" file parameters checked are from the _A file.</p> <p>TTM.3 and TDM.3 inop</p> <p>GPS.3 and .4 parameters unrepresentative</p> <p>PQM.1 trending ~5 mb high</p> <p>Humidity parameters suspect</p> |

AVAPS Drop Log

Project: _____

Mission: Hurricane Lee

Flight ID: 20230909II

Take Off: _____

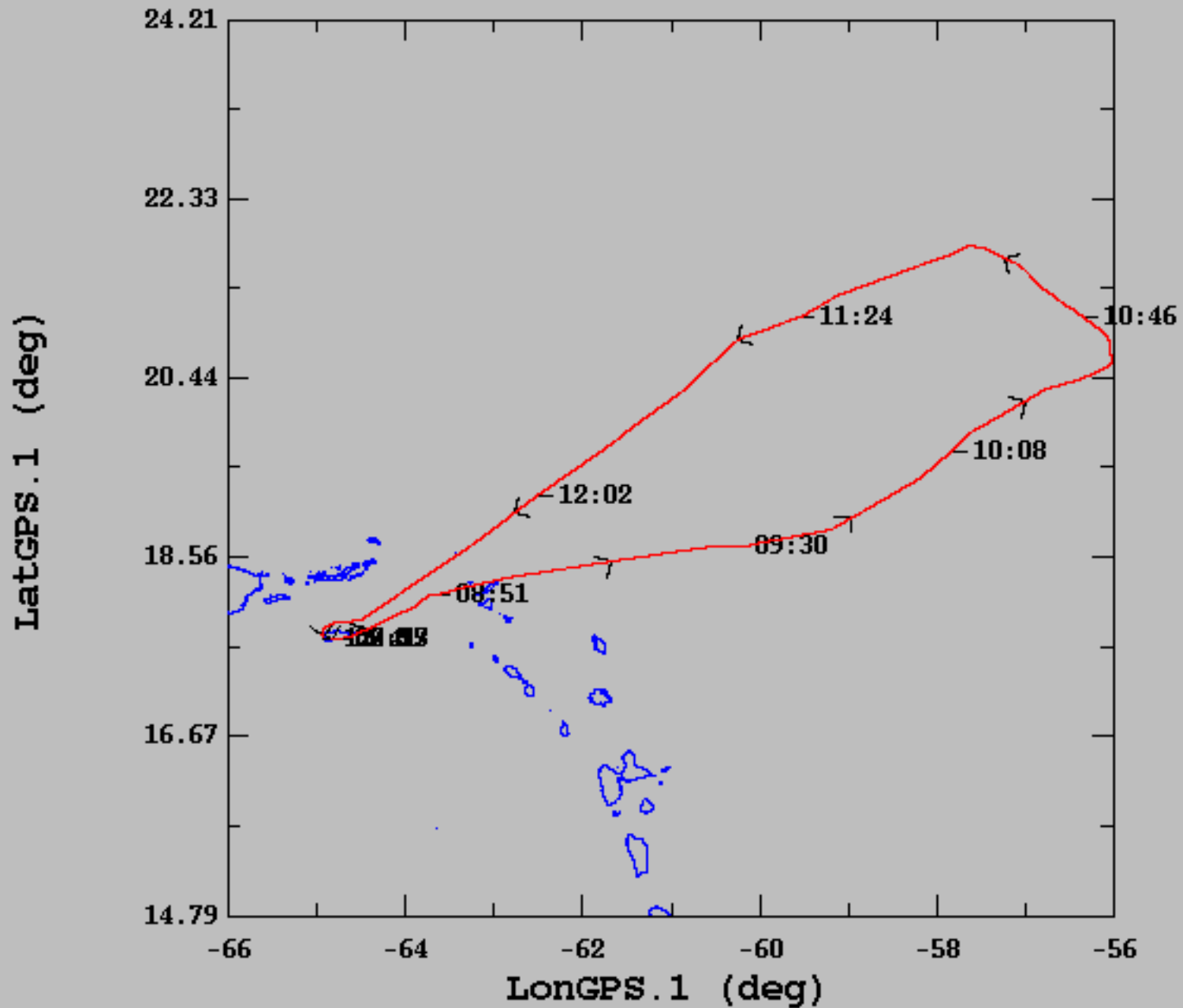
Landing: _____

Flt Dir: KQ

Launcher S/N: _____

| Drop # | Sonde Serial # | Rcvr # | Press Offset | Launch Time | Operator | Charge \$\$ To | Comments | Good ? |
|--------|----------------------|--------------|-----------------|-------------|----------|----------------|-------------------|--------|
| 1 | 222010058 | 1 | -0.8 | 0945 | HK | NWS | IPI | ✓ |
| 2 | 221950452 | 2 | -0.3 | 0958 | HK | NWS | MP2 | ✓ |
| 3 | 221750665 | 3 | -0.9 | 1011 | HK | NWS | RMW | ✓ |
| 4 | 222010047 | 4 | -1.0 | 1013 | HK | NWS | RMW CNTL only | ✓ |
| 5 | 220440643 | 5 | -0.8 | 1015 | HK | NWS | RW | ✓ |
| 6 | 222010060 | 6 | -1.1 | 1015 | HK | NWS | RMW/cut off early | ✓ |
| 7 | 221730253 | 7 | -0.8 | 1027 | HK | NWS | MP | ✓ |
| 8 | 222020515 | 8 | -1.0 | | | | RTB | |
| 9 | 221750528 | 1 | -0.4 | | | | | |
| 10 | 221730342 | 2 | -0.6 | | | | | |
| 11 | 222120819 | 3 | -0.5 | | | | | |
| 12 | | | | | | | | |
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| 31 | | | | | | | | |

09/09/2023, 06:57:14-12:41:11



| | mean | sigma | min | max |
|----------------------------|--------|-------|--------|--------|
| — LatGPS.1 (deg), 1 s/sec | 19.01 | 1.32 | 17.70 | 21.83 |
| — LongGPS.1 (deg), 1 s/sec | -61.62 | 3.01 | -64.93 | -56.02 |