

N42RF ERROR SUMMARY
20220531H1

Flight ID: 20220531H1

| 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/2022/MET/20220531H1

| Local Met Data | Takeoff KFOE (1950Z) | Landing KFOE (2318Z) |
|-----------------------|----------------------|----------------------|
| Dynamic Corrections | | Yes |
| AttackAngleIntercept | | 2.307 |
| AttackAngleSlope | | 6.07515 |
| SlipAngleIntercept | | 0.237 |
| SlipAngleSlope | | 7.04607 |
| AttackAngleIntercept2 | | 2.06219 |
| AttackAngleSlope2 | | 5.99068 |
| SlipAngleIntercept2 | | 0.125 |
| SlipAngleSlope2 | | 6.9873 |

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.

PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. Electrical noise apparent in TDM.1 and TDM.3. TRadU.1 unavailable. GPS.2 outage during preflight.

| Expendable Type ----- | # deployed ----- | # good ----- | # transmitted ----- |
|--------------------------|---------------------|-----------------|------------------------|
| Dro sondes | 0 | 0 | 0 |
| Test sondes | 0 | 0 | 0 |
| AXB Ts | 0 | 0 | 0 |
| AXCPs | 0 | 0 | 0 |
| AXCTDs | 0 | 0 | 0 |

UAS 0 0 0

Flight Director: Carpenter / Kalen
Phone #: 863-500-3901

ACAT-4 Version = 7.4

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest

| FLIGHT INFORMATION | | | | CREW MANIFEST | | | MISSION INFORMATION | | | | |
|-----------------------------------|------------------|-------------|-------|---------------|-----------|------------------|-------------------------|------------------------|---------------------|-----|------|
| FLT ID: | 20220531H1 | FLT #: | 22- | AC: | Copare | Scientists: | Pressure | | Dropsondes | | |
| From: | KFOE | ETD: | 2000Z | CP(s): | Wood | Conrad Ziegler | A/C Takeoff | 973.1 | Good | Bad | Sent |
| To: | KFOE | ETA: | 0300Z | | | Dan Stechman | | | 0 | 0 | 0 |
| Block Time | | Flight Time | | NAV: | Hough | Ethan Murray | ASOS Takeoff | KFOE 1950Z 974.8 mb | BTs | | |
| In: | 1:54 | Land: | 1:45 | FE(s): | Darby | | A/C Land | N/A | Good | Bad | Sent |
| Out: | 19:41 | T/O: | 19:50 | FD(s): | Gee | | ASOS Land | KFOE 0145Z 975.9 mb | 0 | 0 | 0 |
| Total: | 6.2 | Total: | 5.9 | SSA: | McAlister | Visitors: | Storm Number ID: | | N/A | | |
| Sponsoring Org: | NSSL | | | AVAPS: | Dykeman | Ed Holicky (NWS) | (ie: AL072012) | | | | |
| Program: | PBX | | | SEB: | | | TCPOD/WSPOD Mission | | NOAA2 WXWXA TORUS06 | | |
| Purpose: | TORUS Mission 06 | | | MX: | | | (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: | N/A | | | |

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

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

| | |
|---------------------|--|
| Flight ID: | 20220531H1 |
| Flight Director(s): | Carpenter / Kalen |
| Mission: | Non-tasked Science Collection/Research |
| UWZ.d mean: | 0.07 |

| Pressure Comparison | | |
|---------------------|---------------------|---------------------|
| | T/O | Land |
| Aircraft | 973.1 | N/A |
| Tower | KFOE 1950Z 974.8 mb | KFOE 0145Z 975.9 mb |

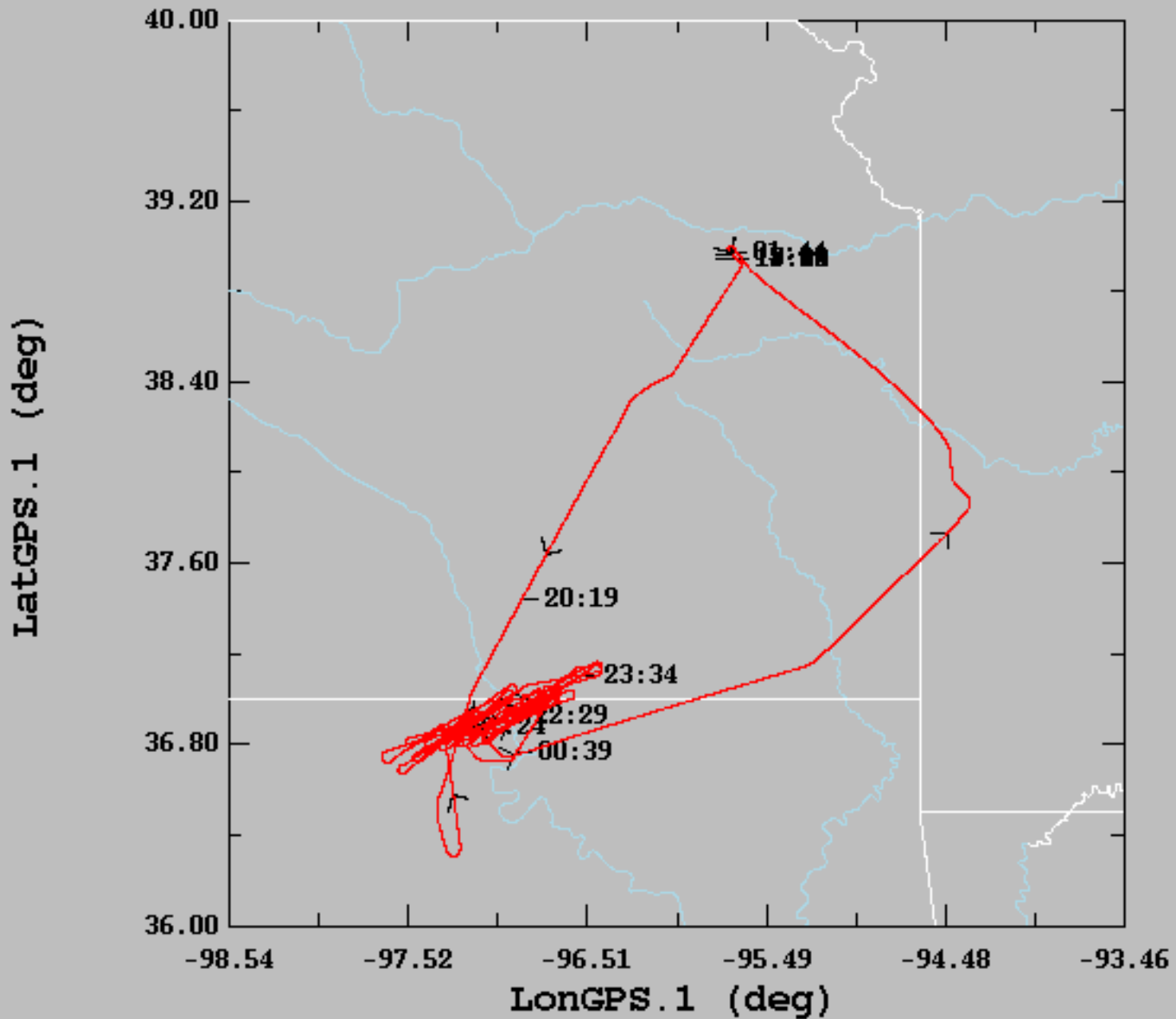
| | Raw 1Hz Mean File Parameters | | | | C File Parameters | |
|----------------------|--|--|--|---|--|--|
| ✓ Accelerometer | ✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2 | ✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2 | ✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2 | ✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2 | ✓ AccZref | |
| ✓ Altitude | ✓ AltGPS.1 ✗ AltGPS.2 ✓ AltGPS.3 ✓ 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 | | | |
| ✓ Lat / Lon | ✓ LatGPS.1 ✗ LatGPS.2 ✓ LatGPS.3 ✓ LatGPS.4 | ✓ LatI-GPS.1 ✗ LatI-GPS.2 | ✓ LonGPS.1 ✗ LonGPS.2 ✓ LonGPS.3 ✓ 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 | ✓ PDLAPHaref ✓ PDBETAref ✓ PQALPHAref ✓ PQBETAref | ✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c |
| ✓ Air Speed | ✓ CasADDU.1 | ✓ TasADDU.1 | ✓ IasADDU.1 | ✓ IAS.d ✓ TAS.d | | |
| ✓ Pitch / Roll | ✓ PitchI.1 ✓ PitchI.2 ✗ PitchI.3 | ✓ PitchRateI.1 ✓ PitchRateI.2 ✗ PitchRateI.3 | ✓ RollI.1 ✓ RollI.2 ✗ RollI.3 | ✓ RollRateI.1 ✓ RollRateI.2 ✗ RollRateI.3 | ✓ PITCHref ✓ ROLLref | |
| ✓ Temp / Dewpt | ✓ TTM.1 ✓ TTM.2 ✗ TTM.3 | ✓ TDM.1 ✓ TDM.2 ✗ TDM.3 | ✓ TRadD.1 ✓ TRadS.1 ✗ TRadU.1 | ✓ TD.c ✓ TDMref ✓ TTMref ✓ TA.d | | |
| ✓ Misc. (Must check) | | | | | ✓ UWZ.d ✓ DPJ_WSZ ✓ 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) | <input checked="" type="checkbox"/> |

| NOTES: |
|---|
| <p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.3 unavailable.</p> <p>Electrical noise apparent in TDM.1 and TDM.3.</p> <p>TRadU.1 unavailable.</p> <p>GPS.2 outage during preflight.</p> |

05/31/2022, 17:05:01-25:44:50



| | mean | sigma | min | max |
|----------------------------|--------|-------|--------|--------|
| — LatGPS.1 (deg), 1 s/sec | 37.72 | 0.96 | 36.31 | 39.00 |
| — LongGPS.1 (deg), 1 s/sec | -96.38 | 0.78 | -97.67 | -94.33 |