

N49RF ERROR SUMMARY  
20230131N1

Flight ID: 20230131N2

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

Flight Directory                      acdata/2023/MET/20230131N2

| Local Met Data        | Takeoff KONT (0001Z) | Landing KLAL (0351Z) |
|-----------------------|----------------------|----------------------|
| Dynamic Corrections   |                      | Yes                  |
| AttackAngleIntercept  |                      | 6.4652               |
| AttackAngleSlope      |                      | 7.59375              |
| SlipAngleIntercept    |                      | 0.925                |
| SlipAngleSlope        |                      | 6.56381              |
| AttackAngleIntercept2 |                      | 5.01255              |
| AttackAngleSlope2     |                      | 5.40932              |
| SlipAngleIntercept2   |                      | 0.72                 |
| SlipAngleSlope2       |                      | 7.0494               |

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.

| Expendable Type<br>----- | # deployed<br>----- | # good<br>----- | # transmitted<br>----- |
|--------------------------|---------------------|-----------------|------------------------|
| Dropsondes               | 0                   | 0               | 0                      |
| Test sondes              | 0                   | 0               | 0                      |
| AXBTs                    | 0                   | 0               | 0                      |
| AXCPs                    | 0                   | 0               | 0                      |
| AXCTDs                   | 0                   | 0               | 0                      |
| UAS                      | 0                   | 0               | 0                      |

Flight Director: Kalen/de Solo  
Phone #: 8635003962

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:                           | 20230131N2   | FLT #:      |      | AC:           | Nardi      | Scientists: | Pressure                |            | Dropsondes        |     |      |
| From:                             | KONT         | ETD:        |      | CP(s):        | de Triquet |             | A/C Takeoff             |            | Good              | Bad | Sent |
| To:                               | KLAL         | ETA:        |      |               | Bhatnagar  |             |                         |            | 0                 | 0   | 0    |
| Block Time                        |              | Flight Time |      | NAV:          |            |             | ASOS Takeoff            |            | BTs               |     |      |
| In:                               | 3:57         | Land:       | 3:51 | FE(s):        |            |             | A/C Land                |            | Good              | Bad | Sent |
| Out:                              | 23:53        | T/O:        | 0:01 | FD(s):        | Kalen      |             | ASOS Land               |            | 0                 | 0   | 0    |
| Total:                            | 4.1          | Total:      | 3.8  | SSA:          | Defeo      | Visitors:   |                         |            |                   |     |      |
|                                   |              |             |      | AVAPS:        | Hartberger |             |                         |            |                   |     |      |
| Sponsoring Org:                   | CW3E         |             |      | SEB:          | Weinmann   |             | Storm Number ID:        |            |                   |     |      |
| Program:                          | PAR          |             |      |               | Santoni    |             | (ie: AL072012)          |            |                   |     |      |
| Purpose:                          | Repo to KLAL |             |      |               | Crane      |             | TCPOD/WSPOD Mission     |            | NOAA9 WXWXE TRAIN |     |      |
|                                   |              |             |      | MX:           | Newnam     |             | (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:

## G-IV QC Checklist

|                           |                      |
|---------------------------|----------------------|
| <b>Flight ID:</b>         | <b>20230131N2</b>    |
| <b>Flight Director(s)</b> | <b>Kalen/de Solo</b> |
| <b>UWZ.d mean:</b>        | <b>-0.06</b>         |

| Pressure Comparison |              |               |
|---------------------|--------------|---------------|
|                     | <b>T/O</b>   | <b>Land</b>   |
| <b>Aircraft</b>     | <b>982.3</b> | <b>N/A</b>    |
| <b>Tower</b>        | <b>982.4</b> | <b>1017.5</b> |

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

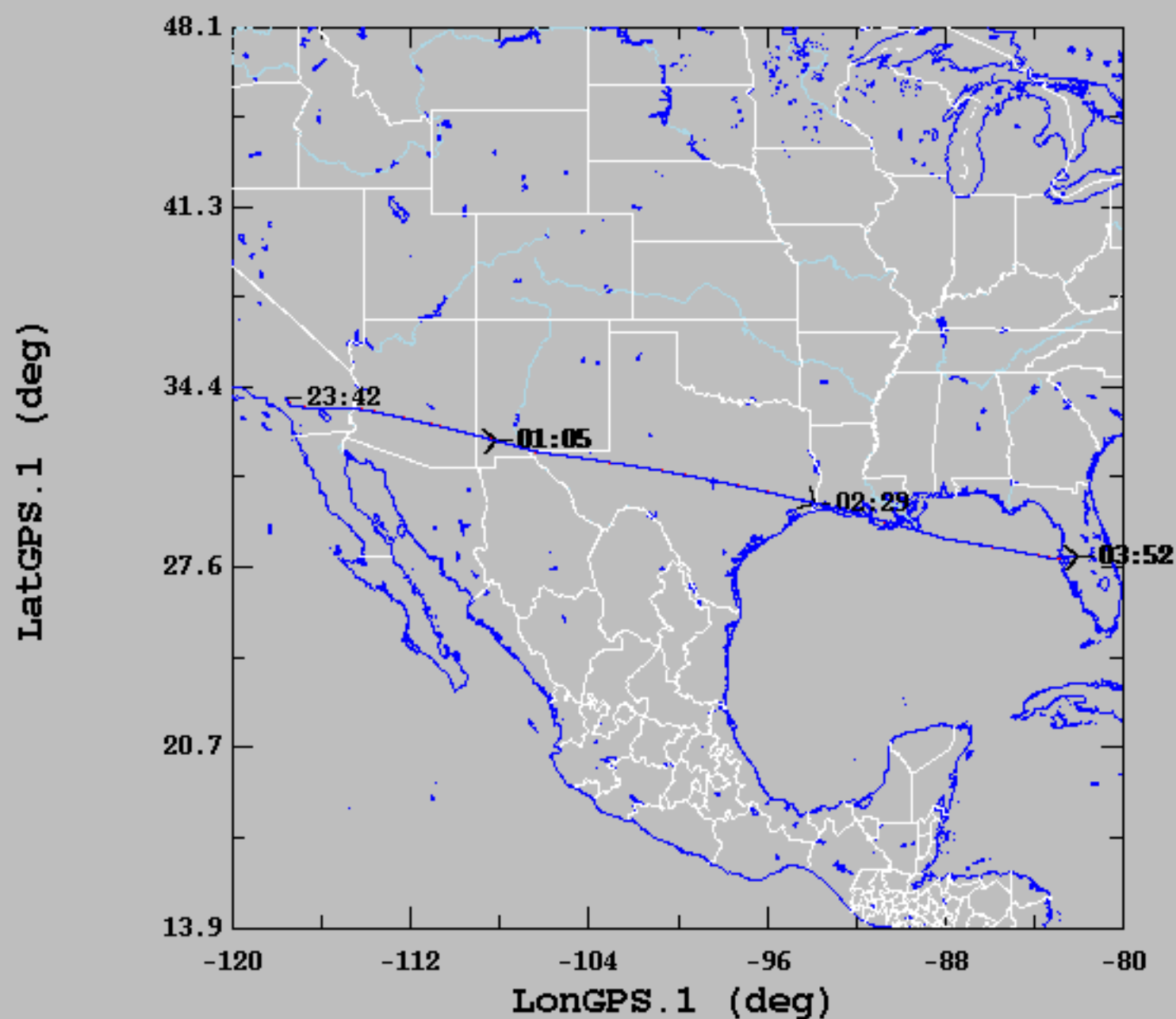
| FLID_Mission_Documents.pdf: |                                                  |
|-----------------------------|--------------------------------------------------|
| ✓                           | Error Summary                                    |
| ✓                           | Crew Manifest      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

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

### NOTES:

TDM.1 and TDM.2 are unrepresentative. Consider all flight level humidity to be suspect.

01/31/2023, 23:42:34-27:52:28



|                         | mean    | sigma | min     | max    |
|-------------------------|---------|-------|---------|--------|
| LatGPS.1 (deg), 1 s/sec | 31.10   | 2.05  | 27.92   | 34.05  |
| LonGPS.1 (deg), 1 s/sec | -100.69 | 11.64 | -117.62 | -82.01 |
| LatI.1 (deg), 1 s/sec   | 31.10   | 2.05  | 27.92   | 34.06  |
| LonI.1 (deg), 1 s/sec   | -100.65 | 11.65 | -117.59 | -81.98 |