

N42RF ERROR SUMMARY  
20201101H1

Flight ID: 20201101H1

| 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               | 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/20201101H1 |

| Local Met Data        | Takeoff KLAL (1515Z) | Landing KLAL (0000Z) |
|-----------------------|----------------------|----------------------|
| Dynamic Corrections   |                      | Yes                  |
| AttackAngleIntercept  |                      | 2.27641              |
| AttackAngleSlope      |                      | 6.01899              |
| SlipAngleIntercept    |                      | 0.232                |
| SlipAngleSlope        |                      | 7.17429              |
| AttackAngleIntercept2 |                      | 2.06387              |
| AttackAngleSlope2     |                      | 6.01177              |
| SlipAngleIntercept2   |                      | 0.195                |
| SlipAngleSlope2       |                      | 6.67434              |

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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.

PDalpha.2 and PDBeta.2 inoperative. PQM.1 temporary failure ~ 2145Z. TTM.3 unavailable. TDM.1 unrealistic positive data spike ~ 1735Z. TDM.3 inoperative. TRadU.1 unavailable.

| Expendable Type<br>----- | # deployed<br>----- | # good<br>----- | # transmitted<br>----- |
|--------------------------|---------------------|-----------------|------------------------|
| Dropsondes               | 6                   | 6               | 6                      |
| Test sondes              | 0                   | 0               | 0                      |
| AXBTs                    | 0                   | 0               | 0                      |
| AXCPs                    | 0                   | 0               | 0                      |
| AXCTDs                   | 0                   | 0               | 0                      |

UAS 0 0 0

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

ACAT-4 Version = 7.3

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

| FLIGHT INFORMATION                |            |                             |       | CREW MANIFEST |                   |             | MISSION INFORMATION     |                         |                 |     |      |
|-----------------------------------|------------|-----------------------------|-------|---------------|-------------------|-------------|-------------------------|-------------------------|-----------------|-----|------|
| FLT ID:                           | 20201101H1 | FLT #:                      | 21-15 | AC:           | Mitchell          | Scientists: | Pressure                |                         | Dropsondes      |     |      |
| From:                             | KLAL       | ETD:                        | 1500Z | CP(s):        | Shaw              |             | A/C Takeoff             | 1015.4                  | Good            | Bad | Sent |
| To:                               | KLAL       | ETA:                        | 2300Z |               | Rannenberg        |             | ASOS Takeoff            | KLAL 1450Z<br>1015.3 mb | 6               | 0   | 6    |
| Block Time                        |            | Flight Time                 |       | NAV:          | Richards/B, Utama |             |                         |                         | BTs             |     |      |
| In:                               | 22:51      | Land:                       | 22:41 | FE(s):        | Darby             |             | A/C Land                | 1011.4                  | Good            | Bad | Sent |
| Out:                              | 15:05      | T/O:                        | 15:15 | FD(s):        | Heystek           |             | ASOS Land               | KLAL 2250Z<br>1011.6 mb | 0               | 0   | 0    |
| Total:                            | 7.8        | Total:                      | 7.4   | SSA:          | Mascaro           | Visitors:   |                         |                         |                 |     |      |
| Sponsoring Org:                   |            | NWS / NHC                   |       |               | AVAPS:            | Patel       | Storm Number ID:        |                         | AL292020        |     |      |
| Program:                          |            | PRX                         |       |               | SEB:              |             | (ie: AL072012)          |                         |                 |     |      |
| Purpose:                          |            | TS Eta 1730z fix mission #1 |       |               | MX:               |             | TCPOD/WSPOD Mission     |                         | NOAA2 0129A ETA |     |      |
|                                   |            |                             |       |               |                   |             | (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             |                   |             |                         | 2                       |                 |     |      |
| LACK OF PRECIPITATION             |            |                             |       |               | X                 |             | 3                       |                         |                 |     |      |
| RELATIVE HUMIDITY ≥ 80%           |            |                             |       | X             |                   |             |                         | 4                       |                 |     |      |
| LARGE AIR-SEA TEMP GRADIENT       |            |                             |       |               | X                 |             |                         |                         |                 |     |      |
| HIGH SURFACE WINDS                |            |                             |       |               | X                 |             |                         |                         |                 |     |      |
| LONG FETCH / DURATION OF SFC WND  |            |                             |       | X             |                   |             |                         |                         |                 |     |      |
| SEA SALT ACCRETION FORECAST       |            |                             |       |               | X                 |             |                         |                         |                 |     |      |
| SEA SALT ACCRETION OBSERVED       |            |                             |       |               | X                 |             | Pennies:                |                         | 2 TS Pennies    |     |      |

\*Highlighted items must be completed before departure.

Remarks:

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## P-3 QC Checklist

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

|                     |                    |
|---------------------|--------------------|
| Flight ID:          | 20201101H1         |
| Flight Director(s): | Carpenter / Holmes |
| Mission:            | Tasked/Operational |
| UWZ.d mean:         | 0.12               |

| Pressure Comparison |                      |                      |
|---------------------|----------------------|----------------------|
|                     | T/O                  | Land                 |
| Aircraft            | 1015.4               | 1011.4               |
| Tower               | KLAL 1450Z 1015.3 mb | KLAL 2250Z 1011.6 mb |

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

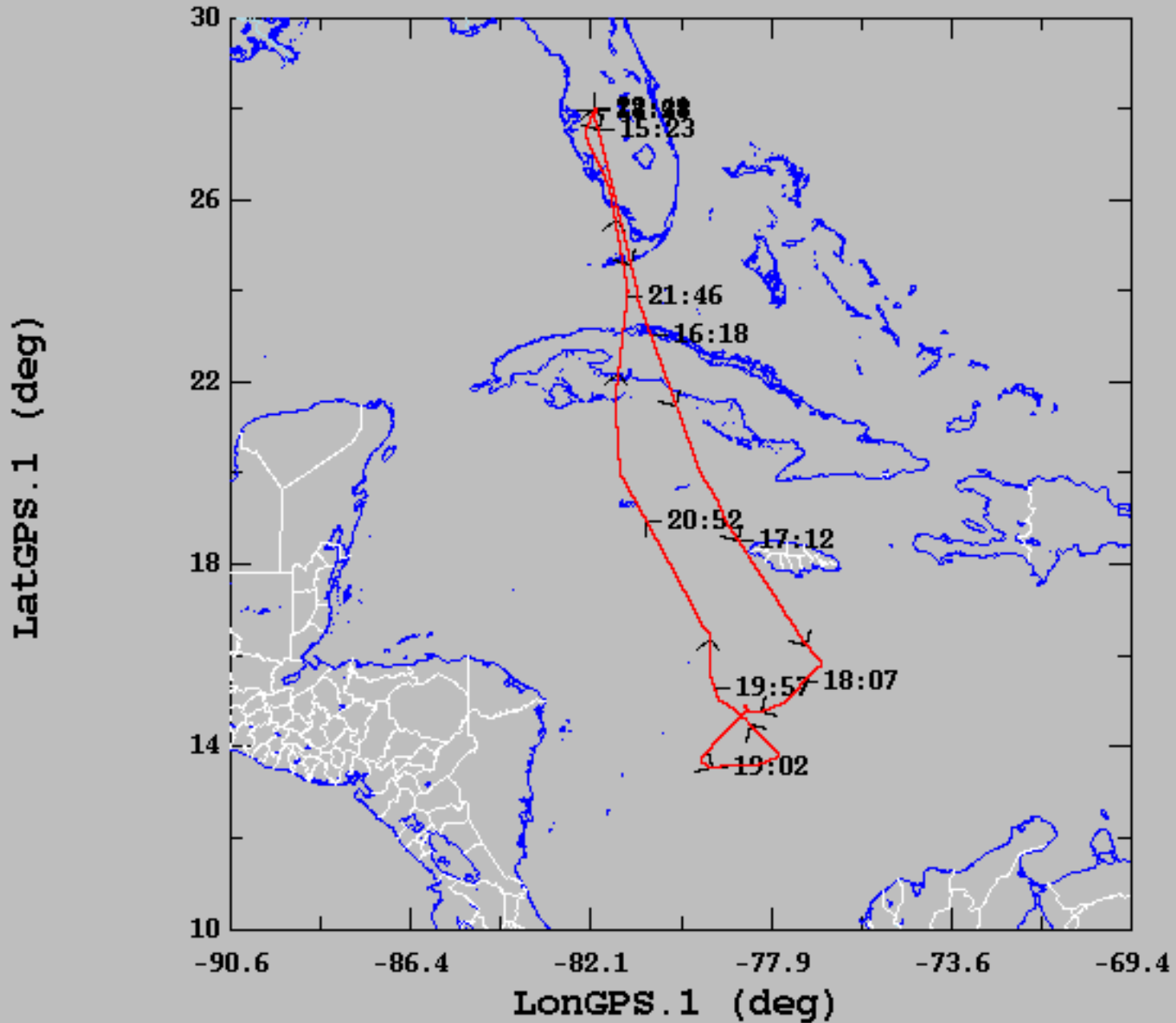
| FLID_Mission_Documents.pdf:                        |
|--|
| ✓ Error Summary                                    |
| ✓ Crew Manifest                                    |
| ✓ QC Checklist                                     |
| ✓ Dropwindsonde Log(s) - AVAPS and FD if completed |
| ✓ Flight Track    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

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

| NOTES:   |
|--|
| <p>PDAlpha.2 and PDBeta.2 inoperative.</p> <p>PQM.1 temporary failure ~2145Z.</p> <p>TTM.3 unavailable.</p> <p>TDM.1 unrealistic positive data spike ~1735Z.</p> <p>TDM.3 inoperative.</p> <p>TRadU.1 unavailable.</p> |



11/01/2020, 13:33:56-22:41:32



|                            | mean   | sigma | min    | max    |
|----------------------------|--------|-------|--------|--------|
| — LatGPS.1 (deg), 1 s/sec  | 21.19  | 5.24  | 13.56  | 27.99  |
| — LongGPS.1 (deg), 1 s/sec | -80.23 | 1.66  | -82.24 | -76.65 |