U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N43RF Manifest FLIGHT INFORMATION **CREW MANIFEST** MISSION INFORMATION 2022082811 FLT #: FLT ID: AC: Doremus Scientists: Pressure **Dropsondes** 2000Z From: KLAL ETD: Marks Copare Good Bad Sent CP(s): A/C Takeoff 0200Z **TBPB** To: ETA: Wood Reasor 0 0 0 **Block Time** Flight Time NAV: Utama Aberson ASOS Takeoff Darby Chang BTs 0105Z 0101Z In: Land: FE(s): Pittman Jelenak Good Bad Sent A/C Land Sapp Holmes 1949Z 2002Z FD(s): Out: T/0: Kalen 0 0 0 **ASOS** Land SSA: Richards Visitors: 5.3 5.0 Total: Total: AVAPS: Warnecke Storm Number ID: N/A Sponsoring Org: HRD Kregelka (ie: AL072012) PRX LaLonde SEB: TCPOD/WSPOD Mission Program: **NOAA3 WXWXA TRAIN** Sans Souci (ie: NOAA2 2418A SANDY) Transit to TBPB Purpose: **OBSERVATIONS** MX: Mazur YN AS REQUIRED BY ORM **REMARKS** Fix Number Obs Number Fix Time SLP **VOLCANIC ASH** Χ 1 Χ SCIENCE MISSION WITHIN BDRY LAYER χ LACK OF PRECIPITATION 2 RELATIVE HUMIDITY ≥ 80% Χ Χ LARGE AIR-SEA TEMP GRADIENT 3 HIGH SURFACE WINDS LONG FETCH / DURATION OF SFC WND 4 SEA SALT ACCRETION FORECAST Χ SEA SALT ACCRETION OBSERVED Pennies: *Highlighted items must be completed before departure. Remarks:

P-3 QC Checklist

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

| Flight ID: | 2022082811 |
|---------------------|---------------------------------|
| Flight Director(s): | FD: Kalen / Holmes QC: Hathaway |
| Mission: | Ferry |
| UWZ.d mean: | 0.04 |

| Pressure Comparison | | | | |
|---------------------|------------------|------------------|--|--|
| | T/0 | Land | | |
| Aircraft | | | | |
| Tower | 1008.6 mb (KLAL) | 1005.4 mb (TBPB) | | |

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

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

| QC Key | |
|---------------|--------------|
| Not checked | |
| Valid | \checkmark |
| Errors (note) | X |

NOTES:

- Slight oscillation apparent at finer scales in variables: Pitchl.1, Pitchl.2, Rolll.1, Rolll.2, PSM.1, PDBeta.1, PDBeta.2, PQM.1, RollRatel.1, RollRatel.2, TTM.2
- TTM.2 noiser sensor in comparison to TTM.1
- Difference of roughly 40 mb between PDAlpha.1 and PDAlpha.2
- PQM.1 approximately 10-20 mb higher than rest of PQMs throughout the flight.
- PQM.4 approximately 15-30 mb lower than rest of PQMs in the beginning portion of flight.
- -TDM.2 does not contain same level of sensitivity as TDM.1.
- -TRadU.1 remains near zero entire flight.
- DPJWSZ, LatGPS.4, LonGPS.4, AltGPS.4, AltRA.1 and AltRa1.c was unavailable throughout entire flight.
- AltRA.1 was spotty throughouth beginning portions of flight.
- AltRa1.c has consistent dropouts throughout entire flight.
- Large variability between PDBeta.1 and PDBeta.2 in beginning portion of flight.

N43RF ERROR SUMMARY 2022082811

Flight ID: 20220828I1

| 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/2022/MET/20220828I1

| Local | Met Data | Takeoff | KLAL | (2002Z) | Landing | TBPB | (0000Z) |
|-------|----------------------|---------|------|---------|---------|-------|---------|
| | Dynamic Corrections | | | Yes | | | |
| | AttackAngleIntercept | | | 0.12675 | | | |
| | AttackAngleSlope | | | 5.36078 | | | |
| | SlipAngleIntercept | | | 0.2 | | | |
| | SlipAngleSlope | | | | 6. | 67768 | |

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.

- Slight oscillation apparent at finer scales in variables: PitchI.1, PitchI.2, RollI.1, RollI.2, PSM.1, PDBeta.1, PDBeta.2, PQM.1, RollRateI.1, RollRateI.2, TTM.2
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| Expendable Type | # deployed | # good | <pre># transmitted</pre> |
|-----------------|------------|--------|--------------------------|
| | | | |
| 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/Holmes

Phone #: 8635003962

ACAT-4 Version = 7.4

08/28/2022, 18:20:51-24:58:53

