# N43RF ERROR SUMMARY
# OCEAN HEAT CONTENT
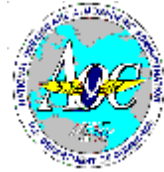
**Flight ID: 20130820I1**

| Sensor or system | Number or Name |
|---|---|
| INE   (for wind derivation) | INE1 |
| Accelerometer | AccZfilterI-GPS.1 |
| Temperature Probe | TTM.1 |
| Dew Point Probe | TDM.2X |
| Static Pressure | PSM.2 |
| Dynamic Pressure | PQM.2 |
| Vert. Wind | ALTGPS.3 (NOVATEL) |
| Project Directory | /acdata/2013/MET/20130820I1 |

Notes:

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There were two data gaps: 204806Z – 205422Z and 205432Z – 210719Z. These gaps occurred after the OHC mission was completed. The gaps were generated by shutting down the aircraft data system then restarting the data system to test new software.

During the following time periods, the EdgeTech dewpoint sensor (TDM.2) had erroneous output: 142313Z – 142550Z, 144530 – 144748Z, 152706Z – 152849Z, 154804Z – 154819Z, 174254Z – 174434Z, 194637Z – 194645Z, 195035Z - 195150Z and 204709Z – 204746Z. The erroneous data was removed and replaced with Buck dewpoint sensor (TDM.1) output by direct substitution,

$$TDM.2 = TDM.1$$

During the flight there were instances where dewpoint temperature values exceeded derived ambient temperature values resulting in humidity values above 100%. These situations occurred during heavy precipitation events.

All other instrumentation worked optimally.

SPECIAL NOTE!!!   The variable names DPJ_GSZ, DPJ_ASZ and DPJ_WSZ in the netCDF file represent vertical ground speeds , vertical air speeds and vertical wind speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm.  It is recommended that these values be used for vertical wind analysis.

Dropsondes deployed: 15; 15 good; 15 tempdrop messages sent
AXBTs deployed: 34; 30 good; 4 bad
AXCTDs deployed: 15; 13 good
AXCPs deployed: 12; 2 good

|  | **Takeoff(1330Z)** | **Landing(2117Z)** |
|---|---|---|
| Aircraft Static Pressure | 1017.6mb | 1015.4mb |
| Corrected Tower Pressure | 1017.3mb | 1014.6mb |

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