

## N43RF ERROR SUMMARY CALWATER2 Mission #2 31 January 2015



## Flight ID: 2015013111

Sensor or system Static Pressure Probe Dynamic Pressure Probe Total Temperature Probe Dewpoint Temp. Probe Vertical Accelerometer Altimeter INE Selection Differential Attack Pressure Probe Differential Sideslip Pressure Probe Dynamic Attack Pressure Probe Dynamic Sideslip Pressure Probe Flight Directory

Local Met Data: Aircraft Static Pressure Tower Pressure (corrected) <u>Takeoff</u> (1925Z) 1013.7 mb 1013.1 mb Number or Name PSM.2 PQM.2 TTM.1 TDM.1X AccZfilterI-GPS.1 AltGPS.3 1 PDALPHA.1 PQBETA.1 PQBETA.1 acdata/2015/MET/2015013111

> Landing (0250Z) 1013.6 mb 1013.1 mb

Notes:

The Buck sensor (TDM.1) was used as the source dewpoint sensor, but did require some corrections to mitigate two anomalous spikes during the mission. Specifically, TDM21 (Edgetech dewpoint) was substituted in for TDM.1 between 22:27:18Z - 22:28:25Z and 00:17:05Z - 00:22:20Z. AltGPS.3 was used as the primary altimeter source. Of note, AltGPS.4 did have numerous anomalous negative spikes during the mission, but otherwise matched up well with AltGPS.3 through the remainder of the mission. All other instruments performed nominally.

Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

Supersaturation: It is common when flying through heavy precipitation in tropical environments to observe dewpoint temperatures that exceed the ambient temperature and generate relative humidity values that exceed 100%.

SPECIAL NOTE!!! The variable names dpj\_wgs, dpj\_was, and dpj\_wz in the netCDF file represent vertical ground, vertical air, 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.

Expendable Type	Number deployed	Number good	Number of messages transmitted
GPS dropwindsonde	24	22	22
AXBT	22	22	22
Test Sondes	0	0	0

Flight Director: Phone #:

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