



N43RF ERROR SUMMARY

CALWATER2 Mission #7

9 February 2015



Flight ID: 20150209I1

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

Number or Name

PSM.2
PQM.2
TTM.1
TDM.1X
AccZfilterI-GPS.1
AltI-GPS.1
1
PDALPHA.1
PDBETA.1
PQALPHA.1
PQBETA.1
acdata/MET/2015/20150209I1

Local Met Data:

Aircraft Static Pressure
Tower Pressure (corrected)

Takeoff (1748Z)

1022.7 mb
1021.7 mb

Landing (2335Z)

1021.0 mb
1020.3 mb

Notes:

The Buck dewpoint (TDM.1) sensor was used as the source dewpoint sensor for this mission but did require one edit to correct for an unrealistic spike in the data. Specifically, the Edgetech sensor (TDM.2) was substituted in for TDM.1 between 22:44:54Z and 22:46:00Z. AltGPS.3 (Novatel) was not used as the primary altimeter source because it had gap between 19:23:25Z and 19:23:27Z. AltI-GPS.1 trended well with AltGPS.3 and was used in its place throughout the mission. PQM.1 (Wingtip dynamic pressure sensor) appears to have had water in its line, which froze during the transit to the operations area. During this period PQM.4 data is unusable. PQM.2 (Fuselage dynamic pressure sensor) was used as the reference in all calculations and did not exhibit any of the same problems. 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	16	16	16
AXBT	31	29	29
Test Sondes	0	0	0

Flight Director:
Phone #:

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