



N42RF ERROR SUMMARY PRE-ARCTIC FLUX TEST FLIGHT



Flight ID: 20130930H1

<u>Sensor or system</u>	<u>Number or Name</u>
INE (for wind derivation)	INE1
Accelerometer	AccZfilterI-GPS.1
Temperature Probe	TTM.1
Dew Point Probe	TDM.1
Static Pressure	PSM.2
Dynamic Pressure	PQM.2
Vert. Wind	GPS.3 (Novatel)
Project Directory	/acdata/2013/MET/20130930H1

Notes:

There were no data gaps.

The measured (TDM.1) Buck dewpoint temperature displayed erroneous values during the following time frame: 180045Z – 180148Z. The erroneous values were replaced via direct substitution using the Port City (TDL...TDM.3) dewpoint temperature values as a reference,

$$\text{TDM.1} = \text{TDM.3} + 10.5$$

Also during the time periods 180900Z – 181200Z and 182800Z - 183200Z the measured Buck (TDM.1) dewpoint temperature displayed erroneous values that were manually removed and replaced with Port City TDL....TDM.3) dewpoint values using statistical techniques with a patch value of 0.20 and 0.50, respectively.

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 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 1; 1 good; 1 message sent to NHC.

AXBTs deployed 1; 1 good; 1 message sent to NHC.

	Takeoff(1756Z)	Landing(1926Z)
Aircraft Static Pressure	1014.4mb	1013.3mb
Corrected Tower Pressure	1014.0mb	1013.0mb
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