



# N42RF ERROR SUMMARY FERRY FROM ST. CROIX TO MACDILL (GABRIELLE)



**Flight ID: 20130908H1**

<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	ALTPA (pressure alt)
Project Directory	/acdata/2013/MET/20130908H1

Notes:

There were no data gaps.

During the time periods 195000Z – 195300Z and 195300Z – 195500Z, the measured Buck (TDM.1) dewpoint temperature output displayed erroneous values that were manually removed and replaced. The statistical techniques used to replace the removed data had patch values of 0.20 and 0.13, respectively.

Also during the time frame 222700Z - 223700Z the measured Buck (TDM.1) dewpoint temperature output 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 0.33.

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.

Pressure altitude was selected for deriving vertical wind since the Novatel GPS altitude output experienced several periods of no data.

**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.

**Takeoff(1830Z)    Landing(2238Z)**

Aircraft Static Pressure            1011.9mb            1009.3mb

Corrected Tower Pressure            1010.2mb            1011.0mb

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