



N42RF ERROR SUMMARY H. ARTHUR TDR MISSION #2



Flight ID: 20140703H1

<u>Sensor or system</u>	<u>Number or Name</u>
INE (for wind derivation)	INE1
Accelerometer	AccZfilterI-GPS.2
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/2014/MET/20140703H1

Notes:

There were no data gaps. Take off was delayed due to fueling issues with KMCF.

NHC upgraded Arthur to a hurricane at 09Z.

Dewpoint sensor #2 (TDM.2, EdgeTech) experienced several periods of erroneous output when compared to the LICOR H2O output during the following time periods:

101759Z – 102746Z, 115901Z – 120610Z, 123645Z – 125000Z and 125123Z – 131027Z

Values from dewpoint sensor #1 (TDM.1, Buck) were directly substituted in place of dewpoint sensor #2 (EdgeTech),

$$\text{TDM.2} = \text{TDM.1}$$

There were times during the flight when heavy precipitation events caused dewpoint temperature to be greater than derived ambient temperature.

All other AOC instruments worked optimally.

The wingtip pressure probe was the old single port system.

There were 27 dropsondes deployed; all 27 were good; 27 tempdrop messages were sent to NHC.

SPECIAL NOTE: The variable names GSZ_DPJ, ASZ_DPJ and WSZ_DPJ 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.

	<u>Takeoff</u> (0627Z)	<u>Landing</u> (1407Z)
Aircraft Static Pressure	1014.9 mb	1016.3 mb
Tower Pressure (corrected)	1014.3 mb	1016.6 mb
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