

## N49RF ERROR SUMMARY

## TS Joaquin 29 September 2015



Flight ID: 20150929N1

Sensor or system	Number or Name
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.1
Dewpoint Temp. Probe	TDM.1
Vertical Accelerometer	AccZfilterI.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Programs Probe	DDAIDHA 1

Differential Attack Pressure Probe

Differential Sideslip Pressure Probe

PDALPHA.1

PDBETA.1

Dynamic Attack Pressure Probe

PQALPHA.1

Dynamic Sideslip Pressure Probe

PQBETA.1

Flight Directory acdata/2015/MET/20150929N1

Local Met Data:Takeoff (1810Z)Landing (2344Z)Aircraft Static Pressure1006.4 mbNA (see note \*)Tower Pressure (corrected)1009.6 mb1008.6 mb

## Notes:

\* Power to the science instruments was permanently interrupted as a result of an aircraft electrical power generation problem at 21:45:37Z (~ half way through the scheduled mission).

The Edgetech dewpoint sensor (TDM.1) was the most representative dewpoint sensor throughout and was therefore used as the source, but TDM.2 (Edgetech) was also consistent. Both dewpoint instruments trended well with each other, but it should be noted that both had unrealistic spikes as we passed near/over the circulation center. AltGPS.2 had two 1 second dropouts (18:29:24Z and 18:41:48Z). AltRA.1 recorded 39 instances of "NAN's" between 17:46:34Z and 01:37:05Z. All other sensors 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.

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.

TDM.1 and TDM.2 are both not rated for use under -50 deg C and cannot be considered reliable for dew points colder than -50C. TDM.1 exceeded the ambient temperature for nearly the entire mission during cruise above 41,000 feet. TDM.2 was used for post processing.

Expendable Type	Number deployed	Number good	Number of messages transmitted
GPS dropwindsonde	13	13	12*
Test Sondes	0	0	0

Flight Director: Mike Holmes
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Flight Director: Phone #: