

N49RF ERROR SUMMARY Repo KMCF to KLGB 3 October 2015



Flight ID: 20151003N1

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.4 TDM.1 AccZfilterI.1 AltGPS.3 1 PDALPHA.1 PDBETA.1 (See note below)* PQALPHA.1 PQBETA.1 (See note below)* acdata/2015/MET/20151003N1

Local Met Data: Aircraft Static Pressure Tower Pressure (corrected) <u>Takeoff - KMCF</u> (2056Z) 1000.5 mb 1002.5 mb <u>Landing</u> – KLGB (0144Z) 996.8 mb 998.7 mb

Notes:

* The nose radome on N49 was stuck by lightning on 1 Oct and subsequently replaced on 2 Oct. The replacement radome was not equipped to connect the Dynamic Sideslip Pressure Probes (PQBeta.1 and PQBeta.2) and the Differential Sideslip Pressure probes (PDBeta.1 and PDBeta.2). As a consequence, these data are not available in this dataset. Moreover, because these data are not available, flight level wind speed measurements should be considered suspect throughout this dataset.

The Edgetech dewpoint sensor (TDM.1) was the most representative dewpoint sensor throughout and was therefore used as the source. AltRA.1 recorded 30 instances of "NAN's" between 17:54:01Z and 01:10:25Z. 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	0	0	0
Test Sondes	0	0	0

Flight Director: Phone #:

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