

N49RF ERROR SUMMARY

Hurricane Ingrid 14 SEPT 2013



Flight ID: 20130914N1

Sensor or system	Number or Name
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Static Pressure Probe

Dynamic Pressure Probe

Total Temperature Probe

Dewpoint Temp. Probe

Vertical Accelerometer

Altimeter

PSM.2

PQM.2

TTM.4x

TDM.1

AccZI.1

Altimeter

AltGPS.3

INE Selection

Differential Attack Pressure Probe

Differential Sideslip Pressure Probe

Dynamic Attack Pressure Probe

PDBETA.2

PQALPHA.2

PQALPHA.2

Dynamic Sideslip Pressure Probe

PQBETA.2

Constants File

PQBETA.2

Flight Directory acdata/MET/2013/20130914N1

Local Met Data: <u>Takeoff</u> (1250Z) <u>Landing</u> (2005Z)

Aircraft Static Pressure 1010.5 mb 1010.1 mb Tower Pressure (corrected) 1012.8 mb 1012.1 mb

Notes:

TDM.1 and TDM.2 are both not rated for use under -50 deg C. Cannot be considered reliable for dewpoints colder than -50C.

PQAlpha and PQBeta on both channels had issues near the end of the flight. PQAlpha.1 may have iced up or had a loose connection as it drifted starting at 18:09z. PQM.2 was used to substitute into both PQAlpha.2 and PQBeta.2 where spikes were found upon the aircraft's descent (after 19:37z). PQM.2 was substituted using an offset of -34.77mb for PQAlpha.2 and -22.92mb for PQBeta.2. This aided in fixing derived parameters using these inputs.

TTM.4 is the default reference total temperature that is normally used. However, TTM.1 and TTM.4 had false values from 17:10z to 18:43z. TTM.3 was substituted for this time period creating a new parameter TTM.4x which is the best total temperature parameter to use in calculations. It should be noted that TTM.3 has an oscillation of about 1 degree C and may be noticed in the TTM.4x parameter.

Number of Drops: Good 18, Bad 3, Total 21

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