



N49RF ERROR SUMMARY NHC SURVEILLANCE TS ERIKA FERRY TO MacDILL AFB



Flight ID: 20150828N1

Sensor or system	Number or Name
INE (for wind derivation)	INE1
Accelerometer	ACCZI.1X
Temperature Probe	TTM.4X
Dew Point Probe	TDM.2X (EdgeTech)
Altitude (for vertical wind)	GPS.3 (Novatel)
Static Pressure	PSM.2
Dynamic Pressure	PQM.2
Attack Angle	AA.1
Slip Angle	SA.1
Project Directory	/acdata/2015/MET/20150828N1

Notes:

For this flight we ran out of trunk.

There were no data gaps.

There were numerous missing values (NAN) for radar altimeter (AltRa.1) and subsequently the corrected radar altimeter (AltRa1.c) output.

Inertial accelerometer #1 (ACCZI.1) had erroneous data during the following time frame: 210308Z – 210318Z. The erroneous values were removed and replaced with inertial accelerometer #2 (ACCZI.2) output via direct substitution

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

Inertial roll #1 (ROLLI.1) had erroneous data during the following time frame: 210612Z – 210622Z. The erroneous values were removed and replaced with inertial roll #2 (ROLLI.2) output via direct substitution

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

Fuselage slip (beta) dynamic pressure #1 (PQBETA.1) had erroneous data from 191847Z – 003853Z. The erroneous values were removed and replaced with fuselage slip (beta) dynamic pressure #2 (PQBETA.2) output via direct substitution with an offset

$$PQBETA.1 = PQBETA.2 - 2.8$$

Dewpoint sensor #2 (TDM.2) had erroneous data from 172803Z - 175413Z. The erroneous values were removed and replaced with dewpoint sensor #1 (TDM.1) output and an offset,

$$TDM.2 = TDM.1 + 7.0$$

Additionally there was one other time period where dewpoint sensor #2 (TDM.2) had erroneous data: 210300Z - 211200Z. The erroneous values were removed and replaced employing statistical techniques with a patch of 0.80.

All other sensors worked optimally.

Twenty-seven (27) dropsondes were deployed; 27 were good; 27 WMO messages were sent to NHC.

SPECIAL NOTE!!! The variable names DPJ_GSZ, DPJ_ASZ and DPJ_WSZ in the netCDF file represent vertical ground speed, vertical air speed and vertical wind speed, respectively, computed using Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	Takeoff (1726Z) TBPB	Landing (0134Z) KMCF
Aircraft Static Pressure	1006.3mb	1015.8mb
Corrected Tower Pressure	1006.3mb	1017.4mb
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