N42RF ERROR SUMMARY
ARCTIC FLUX #7 2013 PAEI
5 November 2013

Flight ID: 20131105H1

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.1X
Vertical Accelerometer	AccZfilterI-GPS.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1
Flight Directory	acdata/MET/2013/20131105H1

Local Met Data:	Takeoff (1753Z)	Landing (0256Z)
Aircraft Static Pressure	986.8 mb	997.4 mb
Tower Pressure (corrected)	987.2 mb	997.9 mb

Notes:

After takeoff, during initial climb out from Eielson AFB, there were numerous gaps in the NOVATEL (AltGPS.3) altitude data but none occurred once the aircraft had leveled off enroute to the overwater portion of the mission. AltGPS.3 was selected for post-processing.

Given the very cold boundary layer temperatures seen on this mission, the Edgetech dew point sensor (TDM.2) did not perform as well as it had on the first six flights of this project. Therefore the measured Dewpoint Temperature from the Buck sensor (TDM.1) was used in post processing. On two intervals: between 21:17:00Z and 21:22:12Z and between 00:04:40Z and 00:23:36Z, the dewpoint temperature exceeded the ambient temperature resulting in relative humidity values well in excess of 100%. To correct this erroneous data during those intervals, the values from TDM.1 were replaced with observed values from TDM.2. The TDL (TDM.3) dewpoint sensor trended with the others but was too cold throughout the mission.

All other instruments worked optimally during the flight.

Expendable Type	Number deployed	Number good	Number of messages transmitted
GPS dropwindsonde	6	6	6
AXBT	8	8	2
CTD	2	1	0

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