GCPEx Citation Data Edit Overview

The data have been reviewed graphically to check for instrument errors. When data were found to be invalid, those data were replaced by a missing value code (9999.99999). The following contains the dates of flights, takeoff and landing times, the parameters with invalid data, and why missing value codes replaced data. The bar below each instrument represents the length of the flight. The green shows where the instrument was working correctly during the flight and the red shows where missing value codes replaced the incorrect data.

GCPEX-1 (1/19/2012, 14:58 UTC to 18:02 UTC)

Pitot Nose – Broken Pitot line

GCPEX-2 (1/27/2012, 02:13 UTC to 05:30 UTC)

Pitot Nose - Pitot Nose differed from Pitot Wing. Pitot Nose data point outliers.

GCPEX-3 (1/28/2012, 16:01 UTC to 19:26 UTC)

Pitot Nose - Odd large fluctuations that differ from Pitot Wing

2-DC_Conc – 2-DC Hydrometeor Imagining Probe did not work properly on this flight.

GCPEX-4 (1/30/2012, 22:59 to 02:09)

Pitot Nose - Pitot Nose differed from Pitot Wing. Pitot Nose data point outliers.

GCPEX-5 (2/12/2012, 03:16 to 06:41)

Pitot Nose – Pitot Nose differed from Pitot Wing

DEWPT – Edgetech Chilled Mirror dew point is edited because it is oscillation and the TDL dew point is steady, agree after this point. Several DEWPT data point outliers.

AIR_T_ROSE2 – AIR_T_ROSE2 jumps then drops where AIR_T_ROSE stays constant.

GCPEX-6 (2/12/2012, 23:56 to 02:11)

Pitot nose - Pitot Nose differed from Pitot Wing

DEWPT - Instrument warming up at beginning of flight. EG & G dew point probe shows 2-3 degrees higher than temp while the laser hygrometer probe shows even to temp

GCPEX-7 (2/14/2012, 16:43 to 20:09)

Pitot Nose - Pitot Nose sensor plugged up and changing in response to elevation change.

GCPEX-8 (2/16/2012, 14:29 to 17:23)

Pitot Nose - Pitot Nose differed from Pitot Wing

DEWPT – Instrument warming up at the beginning of the flight.

GCPEX-9 (2/18/2012, 09:52 to 12:59)

Pitot Nose – Pitot Nose differs from Pitot Wing

GCPEX-10 (2/18/2012, 15:49 to 19:00)

Pitot Nose – Pitot Nose differs from Pitot Wing

DEWPT - Instrument warming up at beginning of flight.

TDL_Mixing_Ratio – DewPoint and FrostPoint data point outliers.

GCPEX-11 (2/24/2012, 11:48 to 15:06)

Pitot nose - Pitot Nose differed from Pitot Wing

GCPEX-12 (2/24/2012, 16:52 to 20:14)

Pitot Nose – Went low then high.

DEWPT – DEWPT data point outliers.