Processing Record for this file: (Make notes here unique for this file)

Loading from flight 140310a Data taken from NOx CPU c:\data\NOx

Data in flight appear normal.

It has been observed that the NO/NO2 ratios do not appear reasonable at low levels (<500 pptv). The zero on the NO channel appears erroneously high. This affects both the NO and the NO2 results at low values. These data are only preliminary.

To attempt to lower the NO2 background, on 3/4/2014, the NO2 photolysis cell was disassembled and cleaned. The parts were inspected and no visible dirt was observed. The white ODM teflon had a distinct acrid odor. All parts were wiped down with ChemWipes and D.I. water. Odor indectable after cleaning. Unit was reassembled. However, the offset remains. Vendor being consulted. Offset appears very consistent and will be subtracted later.

Prior to the 3/7 flight, the Mo was baked out for ~10 min at 400 C in air. The spike signals in NOy observed on the ground are originating at the Mo converter. They go away when Mo heat is turned off. They are not correlated with heater cycling. They go away once air is flowing over the inlet. The window blank was observed to have been recently paint.

AAF 3-Channel NO_x Analyzer Parsed NOy Channel Data



AAF 3-Channel NO_x Analyzer Parsed NOx Channel Data



AAF 3-Channel NO_x Analyzer Parsed NO Channel Data



AAF 3-Channel NO_x Analyzer Housekeeping T Temperatures



AAF 3-Channel NO_x Analyzer Housekeeping 5 Zeros/Photol/SAs











Status HV_control byte



AAF TEI 146i Calibrator State

(UTC)

AAF 3-Channel NO_x Analyzer Processed NO_y Channel Data



[NO_y] (ppbv)

AAF 3-Channel NO_x Analyzer Processed NO_2 Channel Data



[NO₂] (ppbv)

AAF 3-Channel NO_x Analyzer Processed NO Channel Data



(vddd) [ON]