Operations and instrument status
The instrument experienced a scan mirror failure on the first flight, all data was collected at one scan mirror angle close to nadir. Instrument operations were normal for the second flight. It is not clear at this point whether the failure was temperature or power system related (or a combination of both). The instrument operated normally during post-flight ground tests. Adjustments were made to the pre-flight warm-up procedure and to the scan pattern to reduce stress on the system for flight day 5 (Jan. 22nd).

Science Summary
Trace gas measurements are shown below as differential slant column values relative to a minimum solar zenith angle reference. Observations today were amazingly similar to yesterday with the same NO₂ hot spots seen in the Bakersfield and Fresno area in the afternoon at ~1/2 the levels seen on previous days due to the decrease in traffic on the weekend. All other locations show relatively low levels. Some early enhancements in CH2O are also observed very similar to the data from the 20th.

Time series plots of NO₂ O₃ CH₂ and CH₂O₂
Afternoon flight with normal mirror pattern

NO₂

CH₂O

OCHCHO