



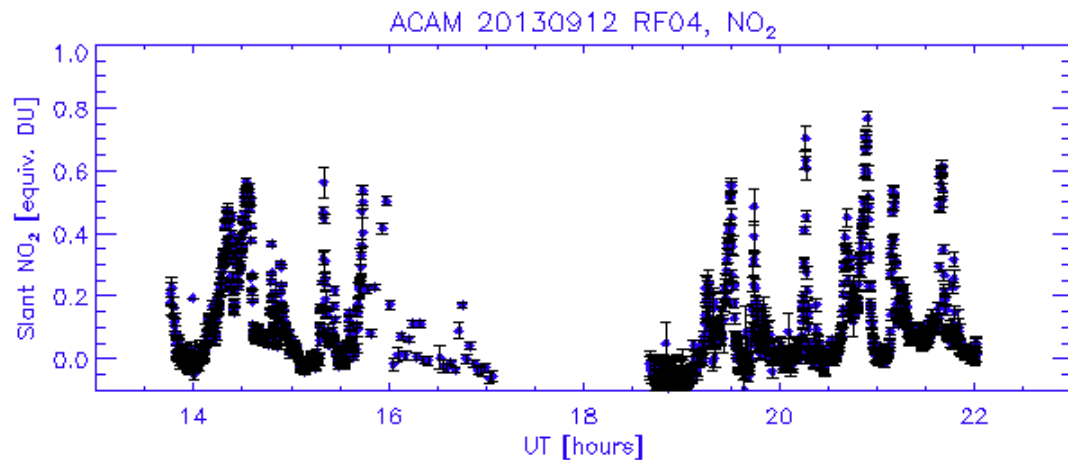
## ACAM Flight Report

2013-09-12

### Operations Summary RF04

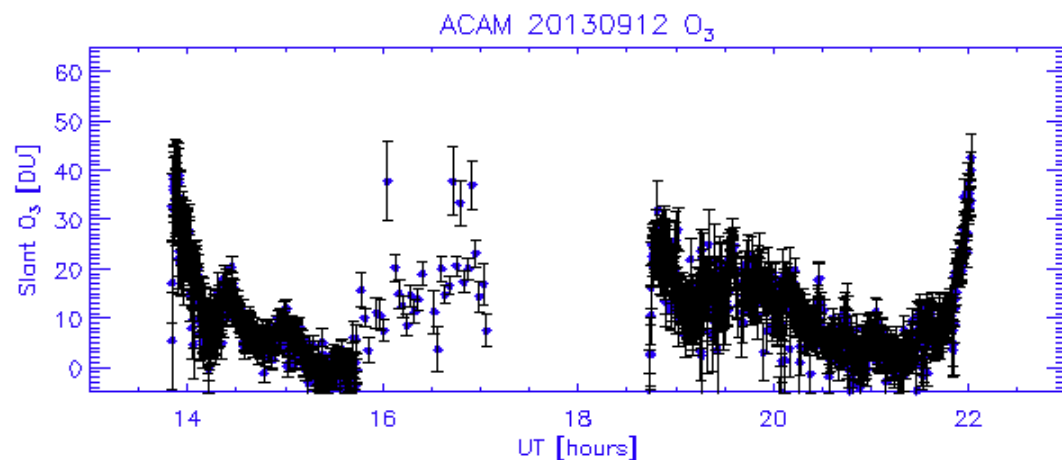
The ACAM instrument operated normally during most of the third research flight. Cloud cover was less of an issue today with 10-15% of pixels when binned to 1 km but enhanced values of  $\text{NO}_2$ ,  $\text{CH}_2\text{O}$ , and  $\text{O}_3$  were observed throughout the day. The following retrievals are swath averaged [7km across track by 1.3 km meters along track].

A problem with the data storage system caused the loss of 1 hour of data during the morning flight. Troubleshooting of the system will be done on the next non-flight day.

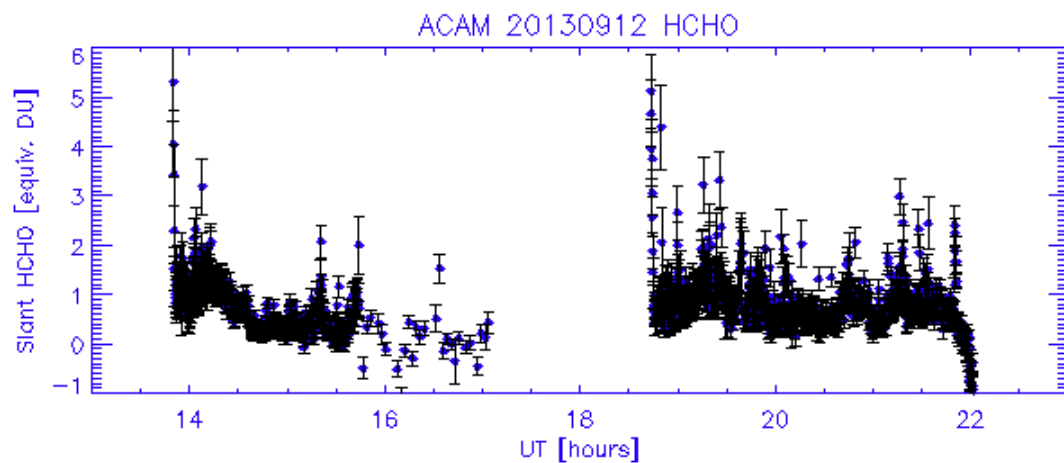


## Trace gas slant column amounts

Enhanced values of NO<sub>2</sub> were seen in the West Houston, Channel view, and Manvel Croix areas in both the morning and afternoon legs with peak values occurring in the afternoon.



Enhanced values of both O<sub>3</sub> and HCHO were observed near the Channel View site throughout the day and generally west of the city on the Manvel Croix track.

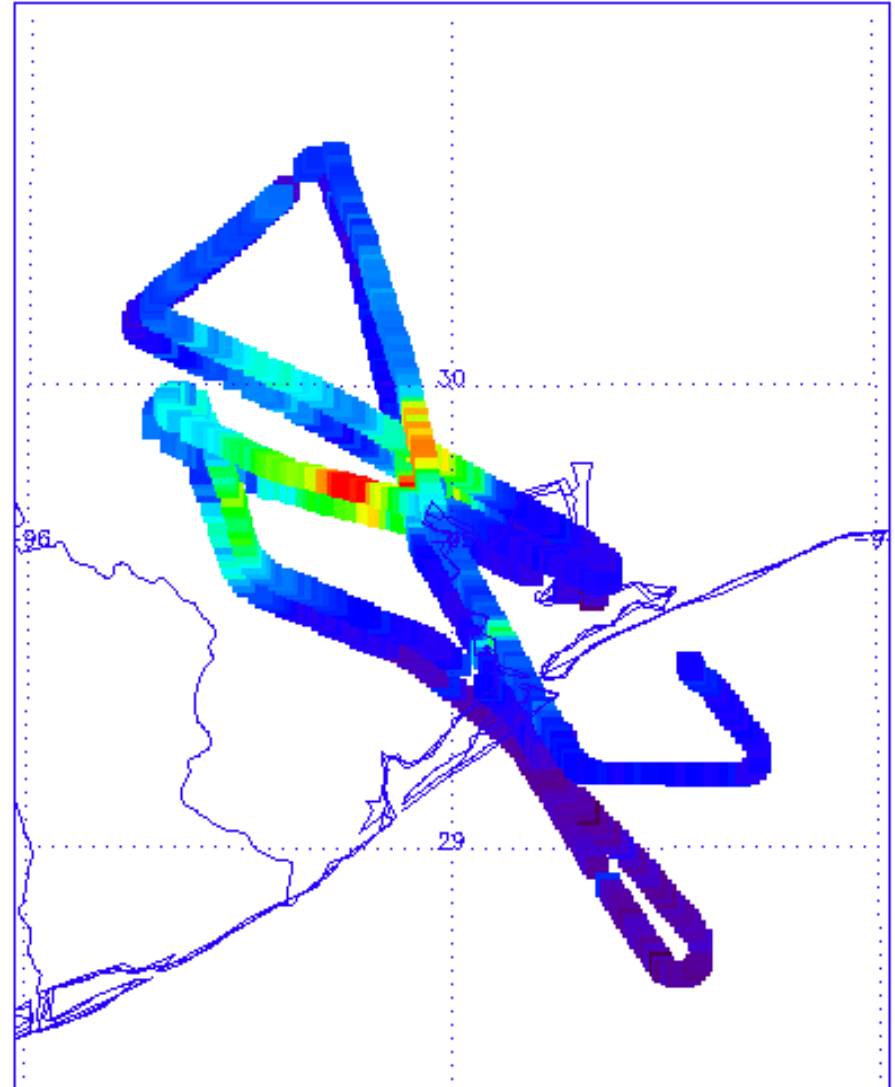
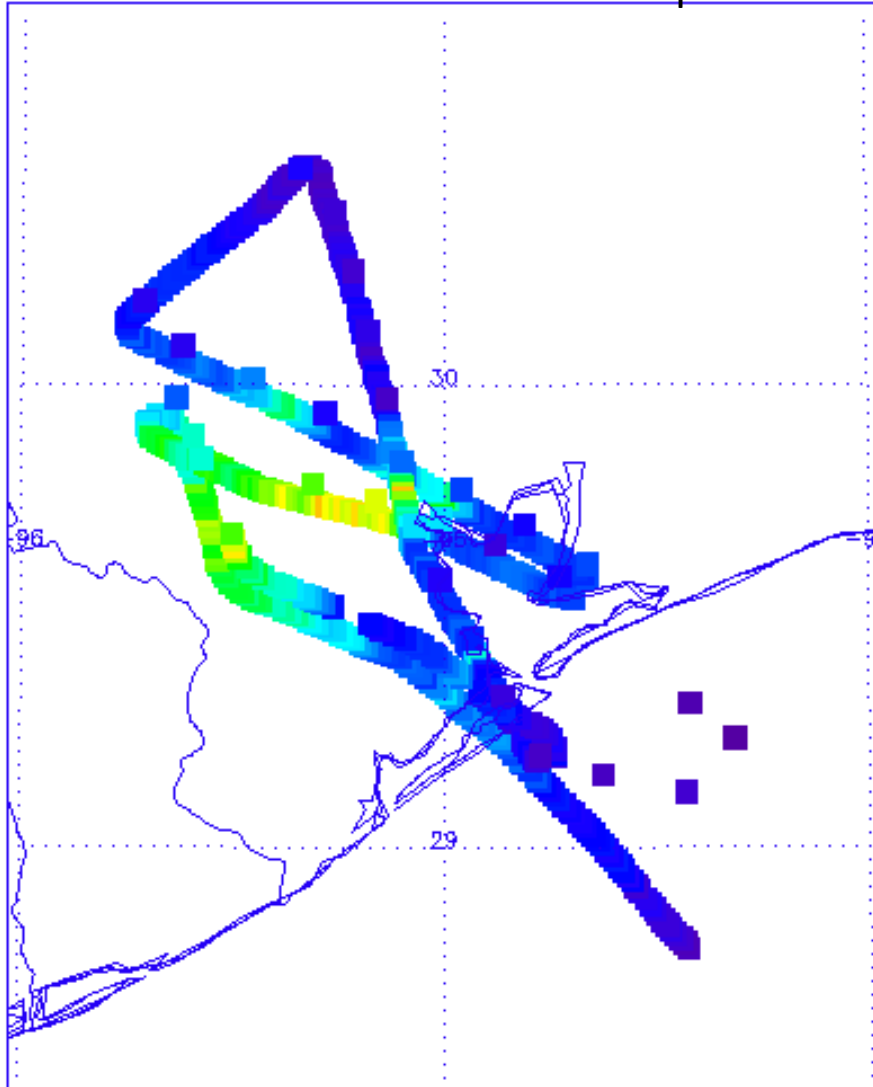


# NO<sub>2</sub> Spatial Distribution

Morning

Afternoon

Peak [red] = 2.0 e16 molec./cm<sup>2</sup>  
Second pass offset to show track values



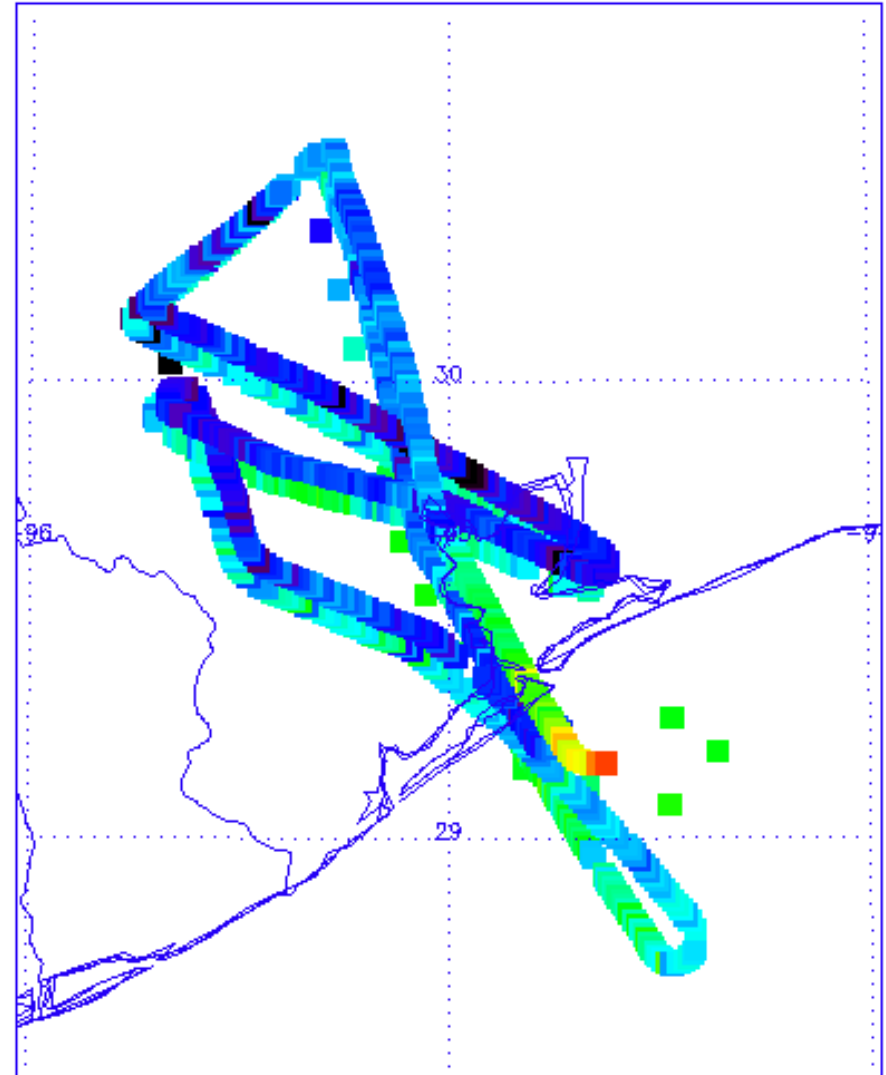
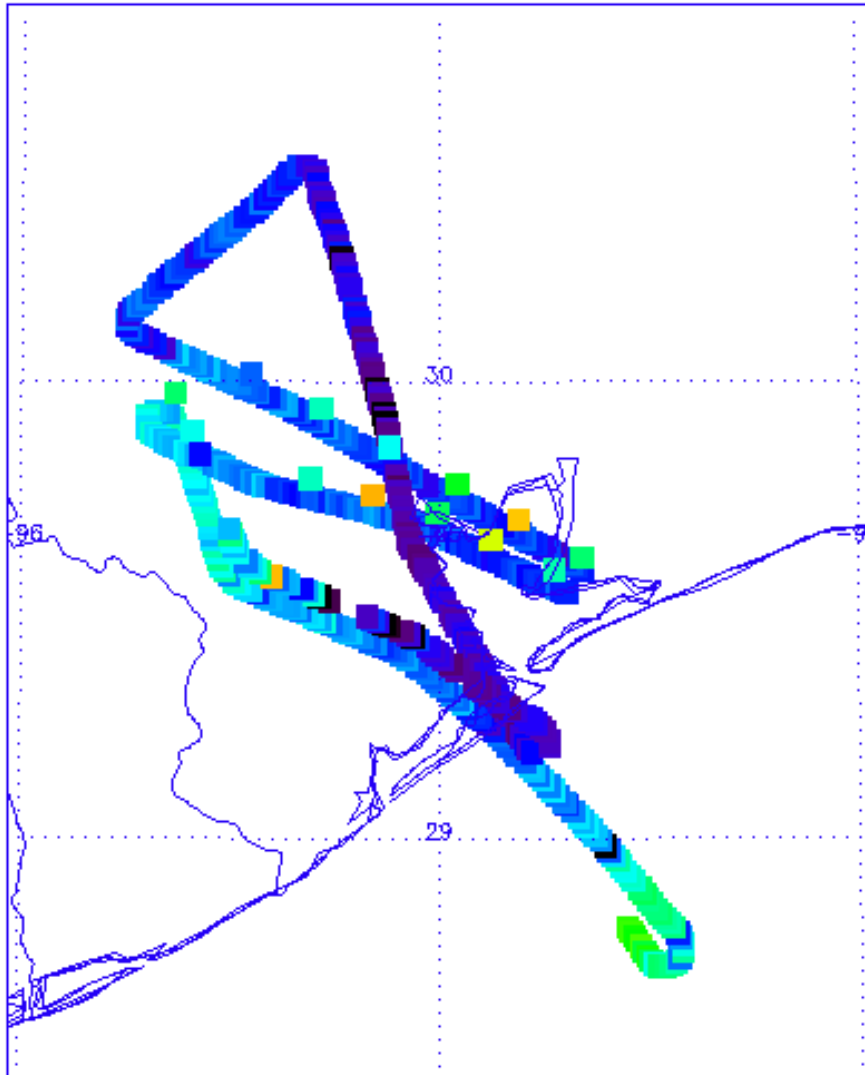
# O<sub>3</sub> Spatial Distribution

Morning

Afternoon

Peak [red] = 35 DU

Second pass offset to show track values



# HCHO Spatial Distribution

Morning

Afternoon

Peak [red] =  $4 \times 10^{16}$  molec./cm<sup>2</sup>

Second pass offset to show track values

