



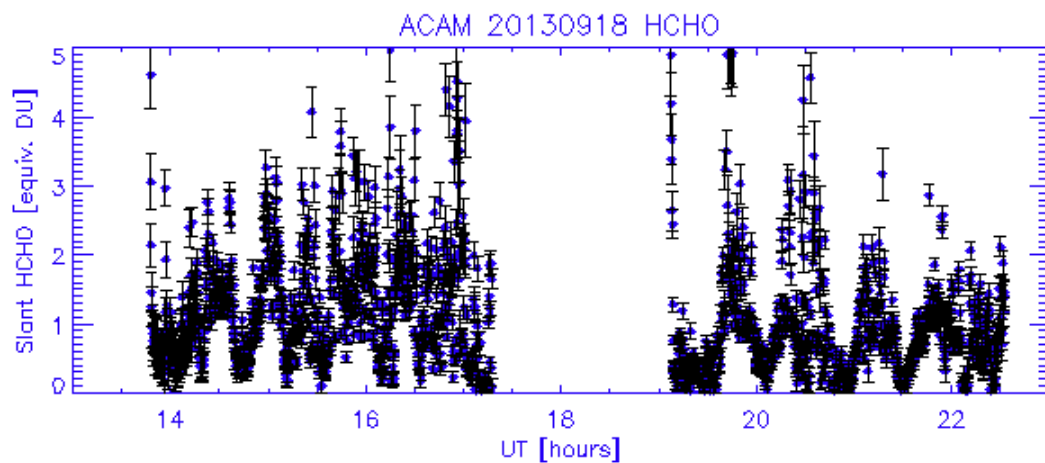
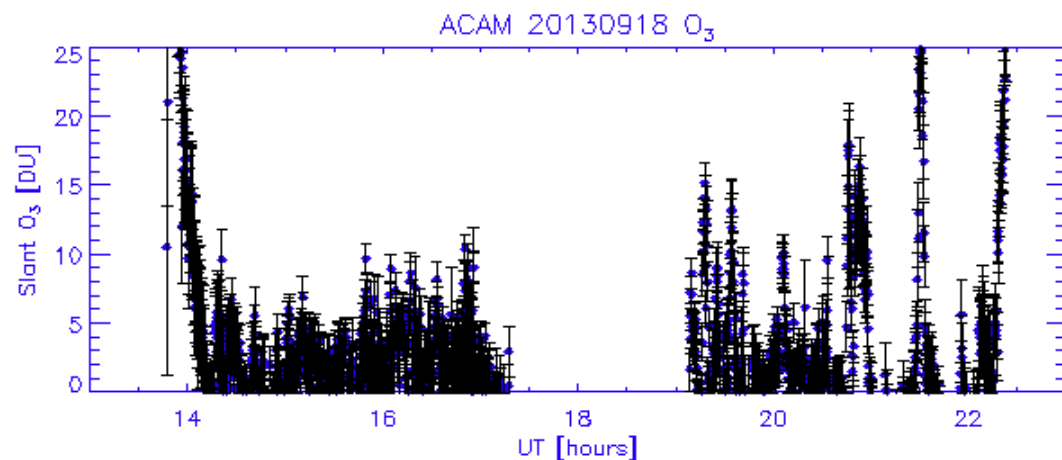
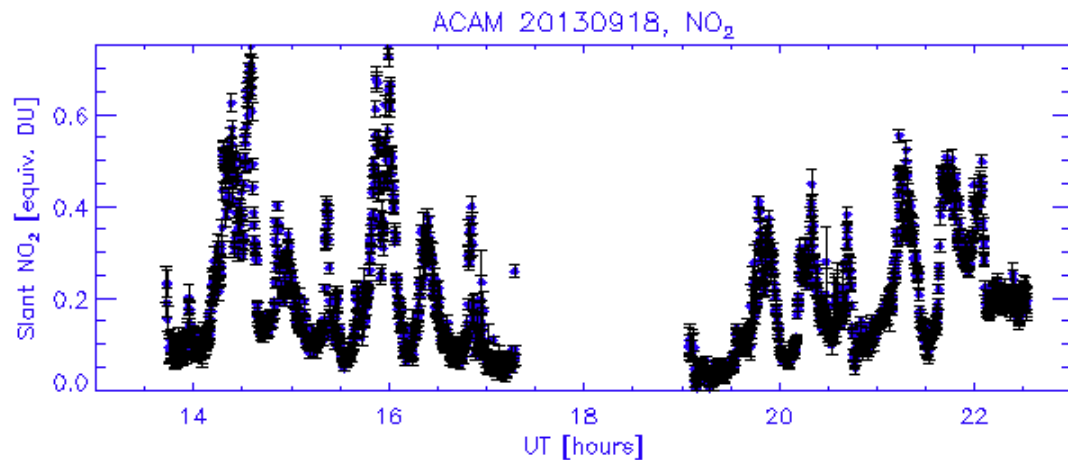
# ACAM Flight Report

2013-09-18

## Operations Summary

The ACAM instrument operated normally during the flight. This was to be the 7<sup>th</sup> research flight but the P3B aborted their flight early on due to a mechanical issue. Conditions were similar to the previous days flights and enhanced values of  $\text{NO}_2$ ,  $\text{CH}_2\text{O}$ , and  $\text{O}_3$  were observed throughout the day. Some larger than normal  $\text{O}_3$  peaks were observed in the afternoon over the ship channel area.

The following retrievals are swath averaged [7km across track by 1.3 km meters along track].



## 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 at typical levels for recent flights and a more northerly distribution in the afternoon.

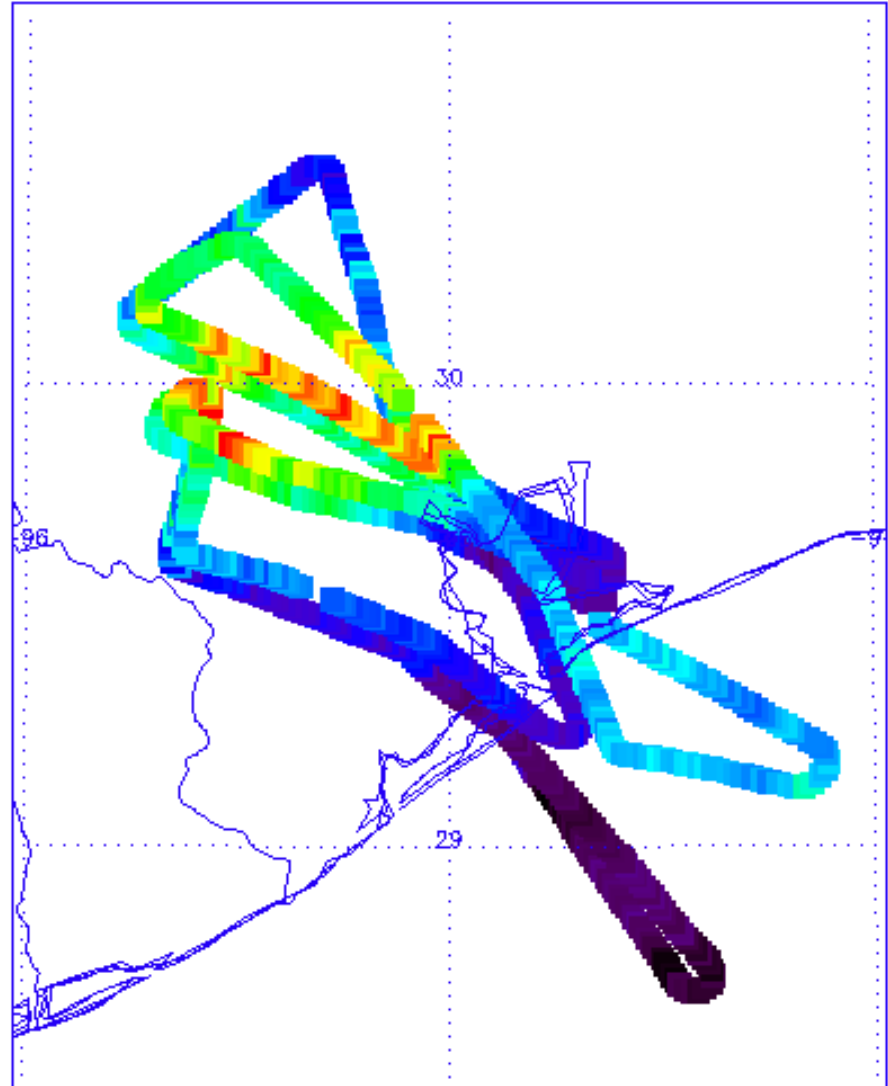
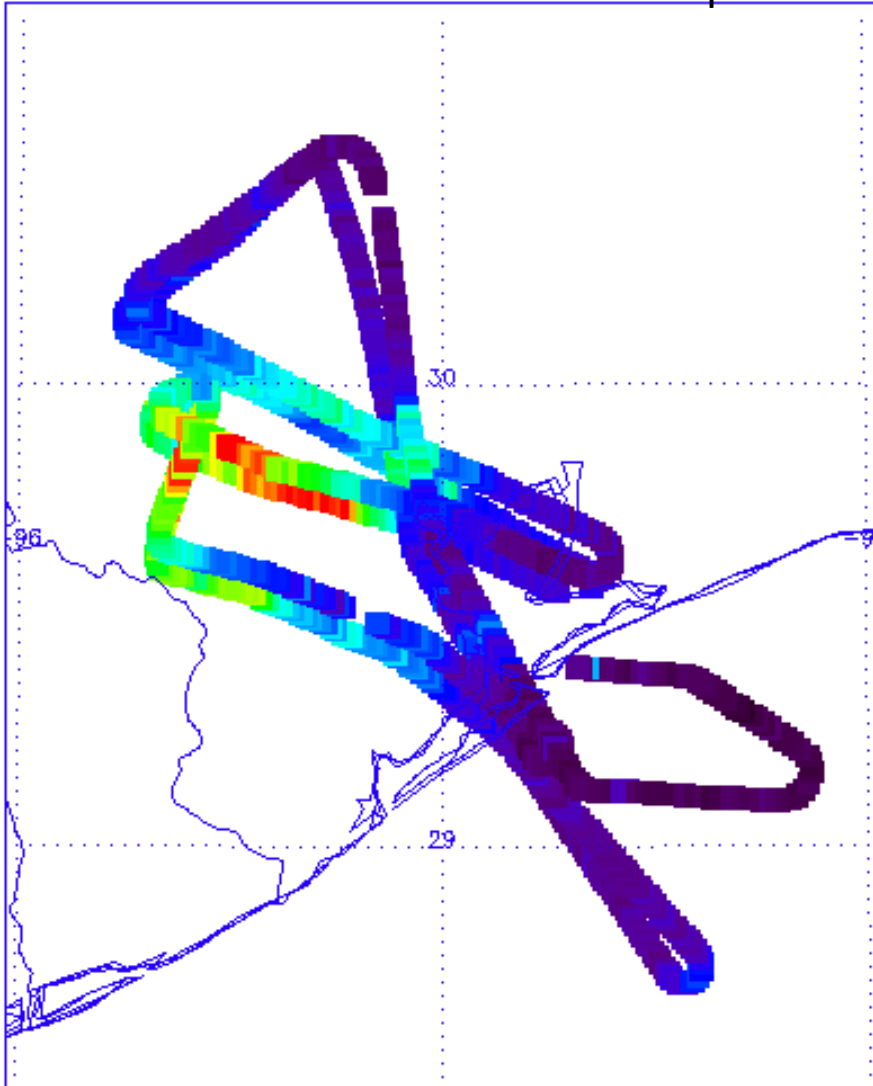
Enhanced values of HCHO were observed near the Channel View site throughout the day and generally west of the city on the Manvel Croix track. Some enhancement north to Conroe was also observed. O<sub>3</sub> appears to be more variable than last flight with some well defined peaks at Smith Point in the afternoon.

# 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



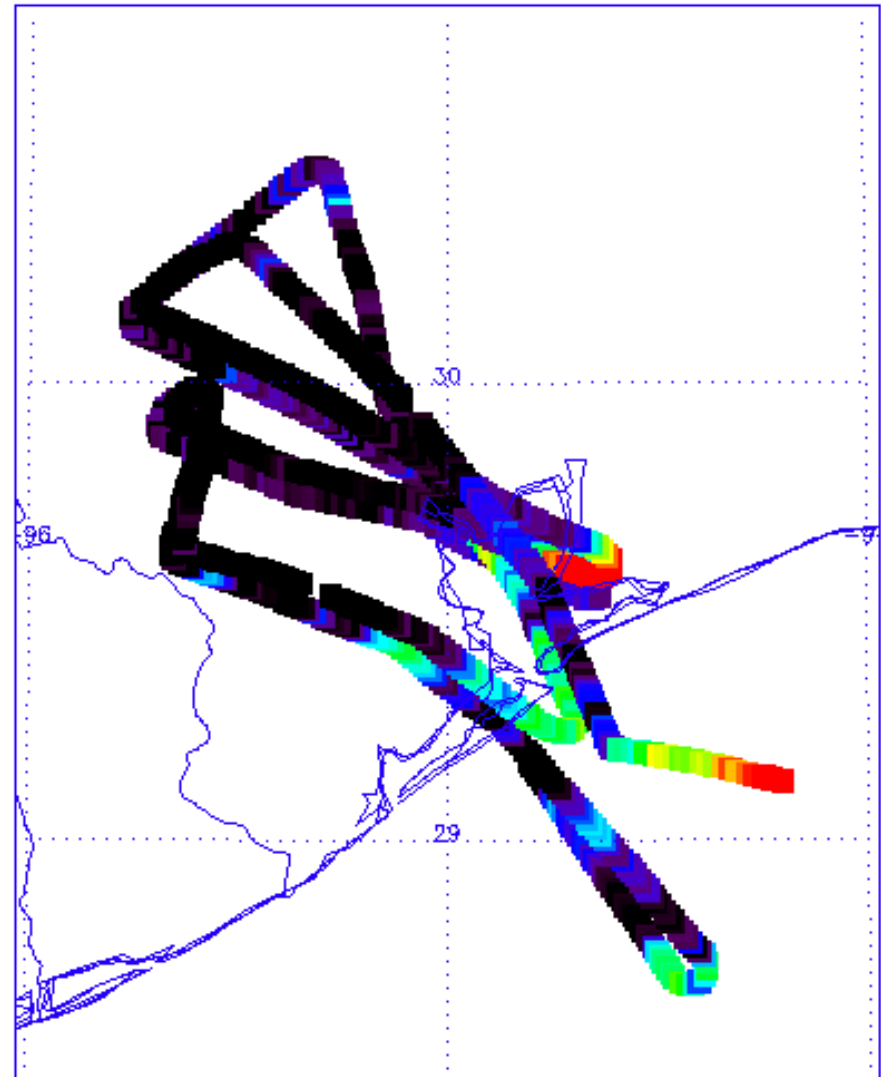
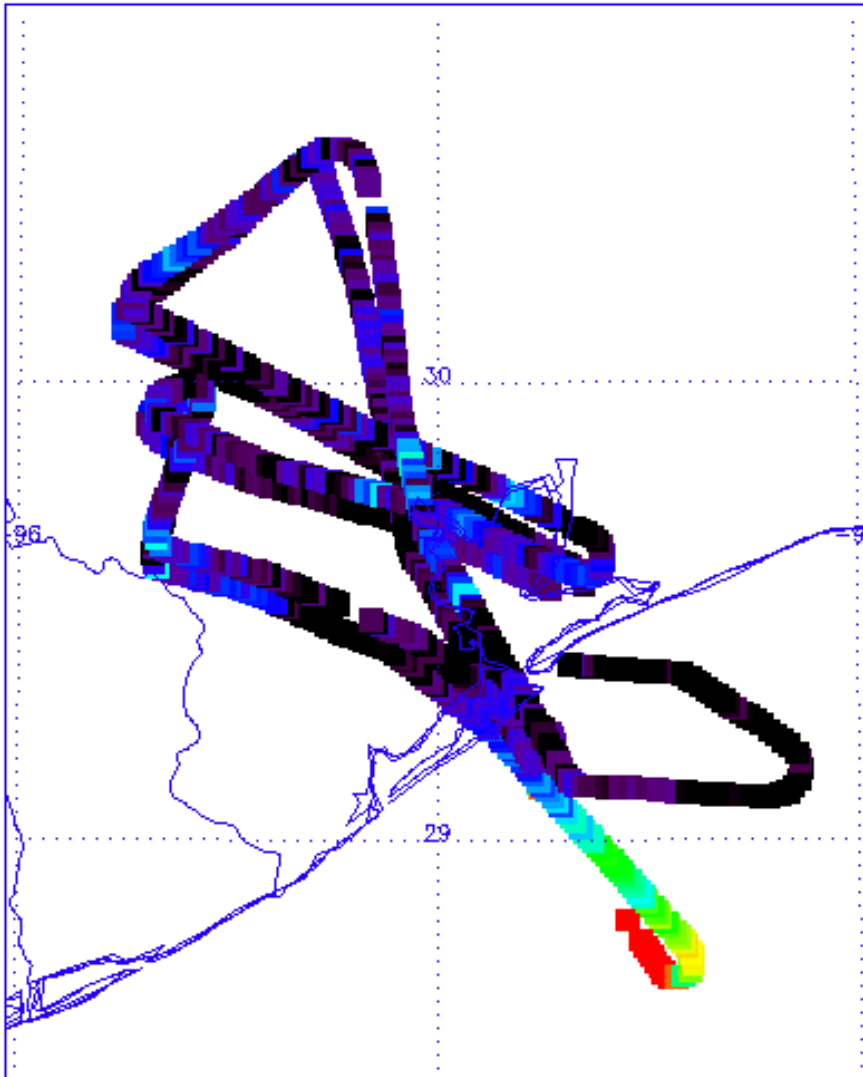
# O<sub>3</sub> Spatial Distribution

Morning

Afternoon

Peak [red] = 30 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

