

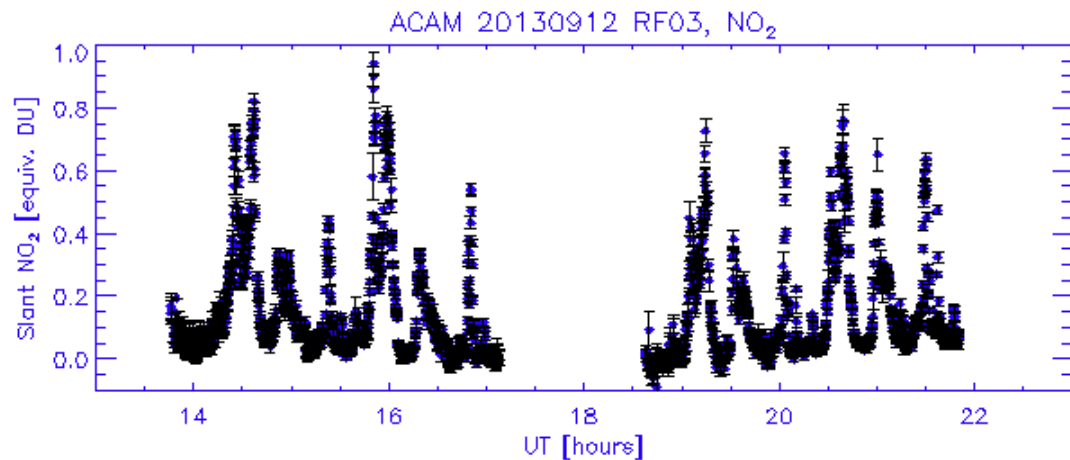


ACAM Flight Report

2013-09-11

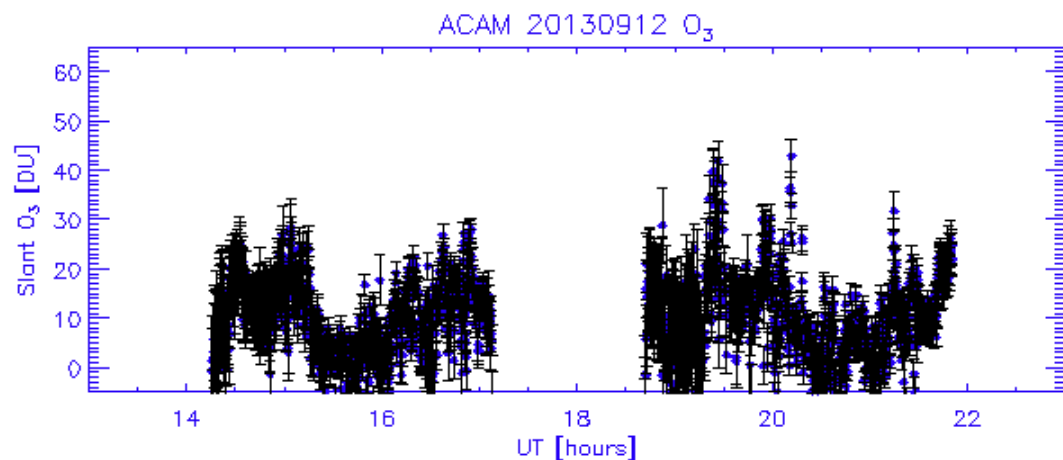
Operations Summary RF03

The ACAM instrument operated normally during the third research flight. Cloud cover prevented retrievals in approximately 25% of pixels when binned to 1 km but enhanced values of NO_2 , CH_2O , and O_3 were observed throughout the day. The following retrievals are swath averaged [7km across track by 1.3 km meters along track].

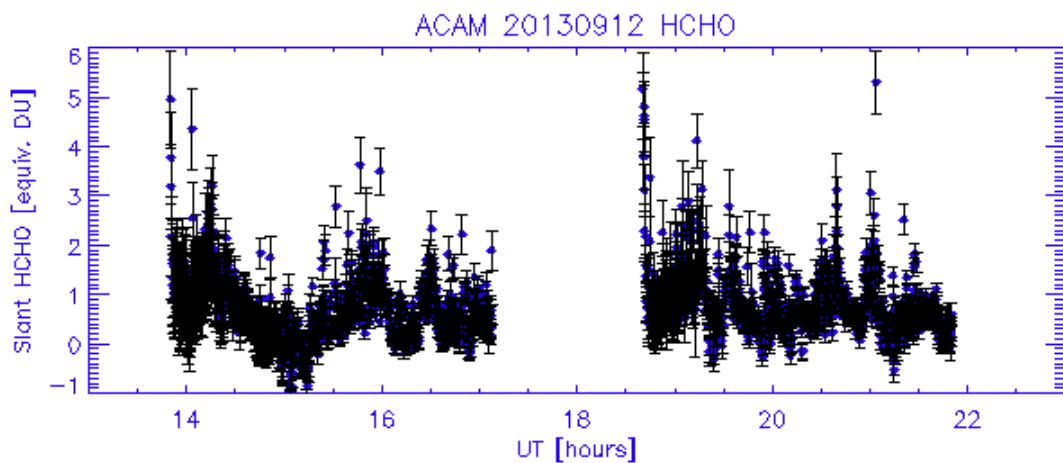


Trace gas slant column amounts

Enhanced values of NO₂ were seen in the West Houston, Channel view, and Manvel Croix areas in both the morning and afternoon legs.



Enhanced values of both O₃ and HCHO were observed near the Channel View site throughout the day and generally west of the city on the Manvel Croix track.

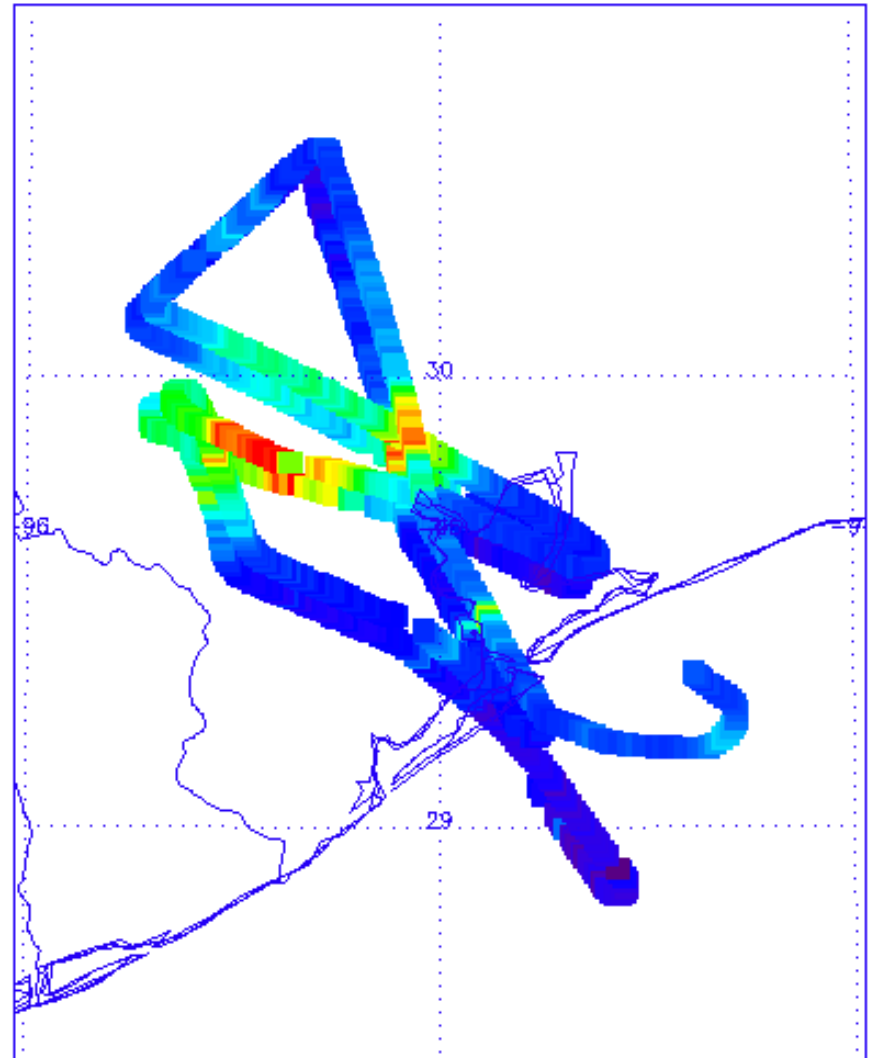
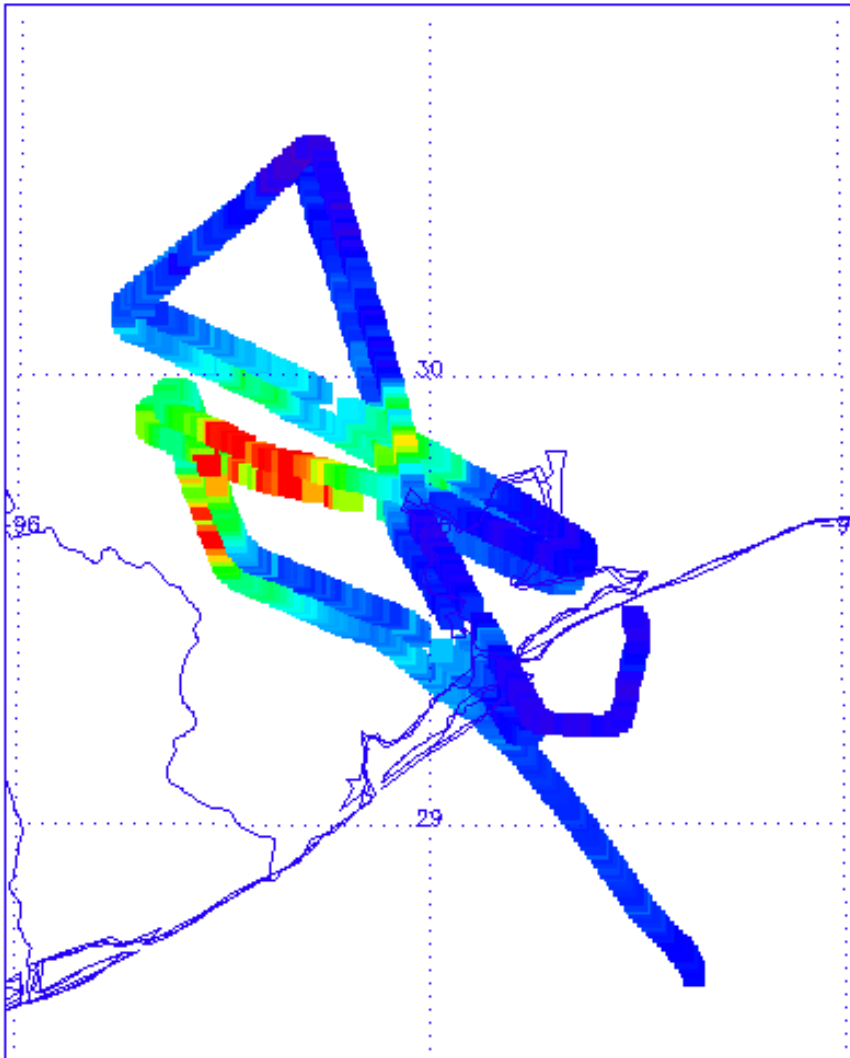


NO₂ Spatial Distribution

Morning

Afternoon

Peak [red] = 2.4 e16 molec./cm²
Second pass offset to show track values



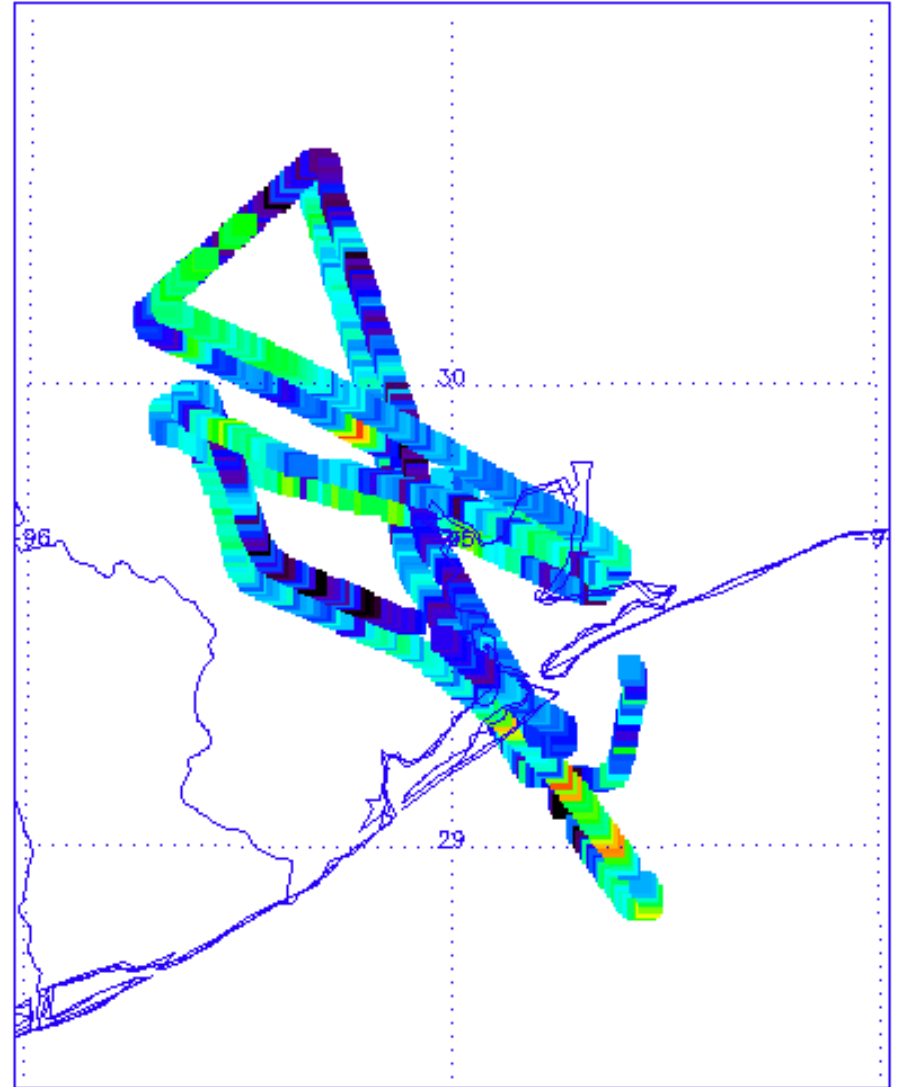
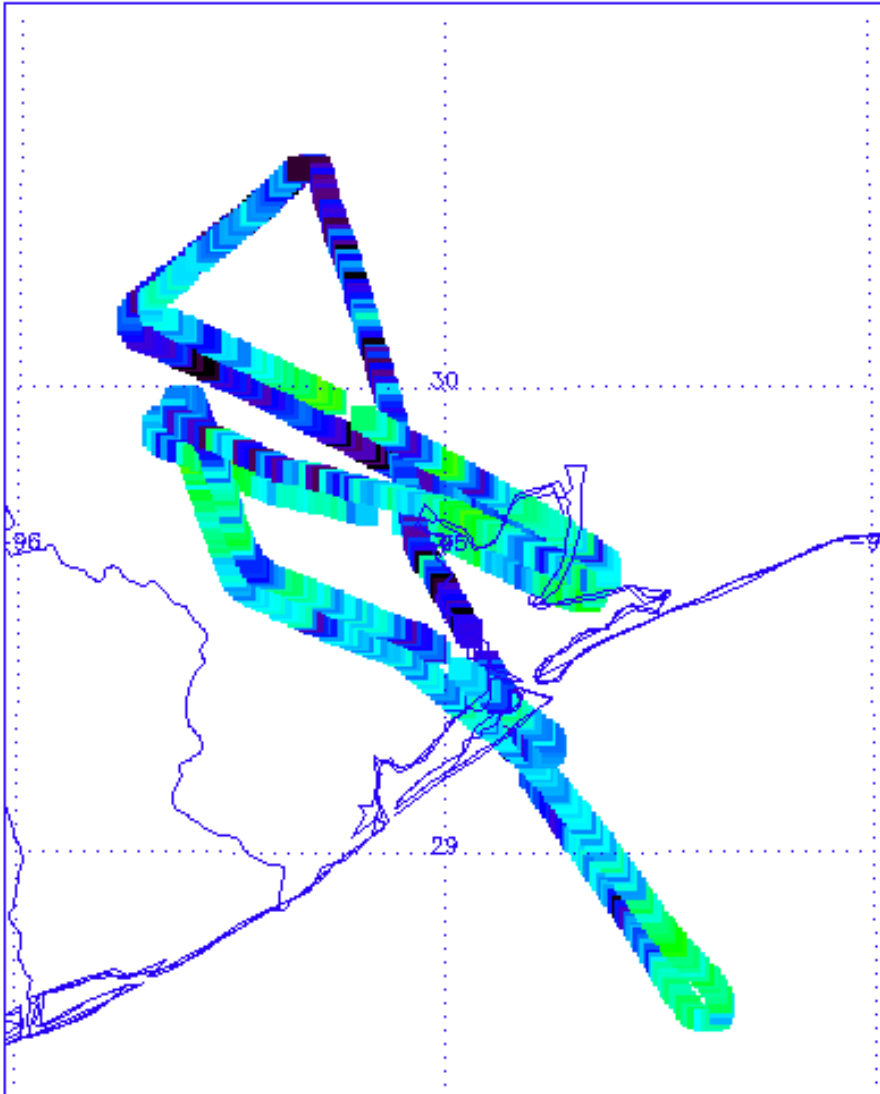
O₃ Spatial Distribution

Morning

Afternoon

Peak [red] = 40 DU

Second pass offset to show track values



HCHO Spatial Distribution

Morning

Afternoon

Peak [red] = 5.5×10^{16} molec./cm²

Second pass offset to show track values

