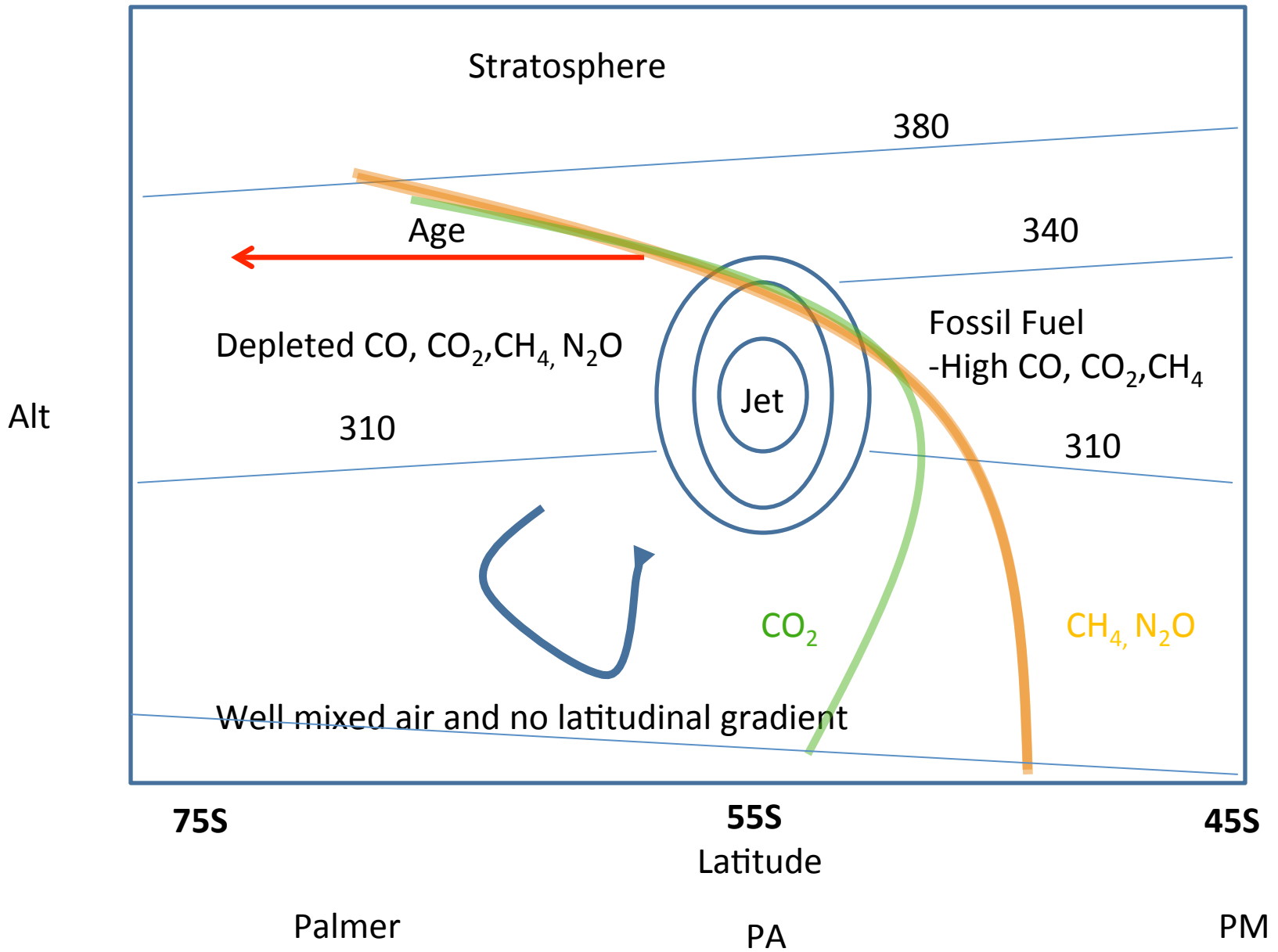


An aerial photograph of a vast, flat, white ice shelf under a clear blue sky. A small, dark airplane is visible in the upper right quadrant of the sky. The foreground shows the dark blue ocean with several large, white icebergs of various shapes and sizes. The text "Long-lived tracers" is centered in the middle of the image in a large, black, sans-serif font.

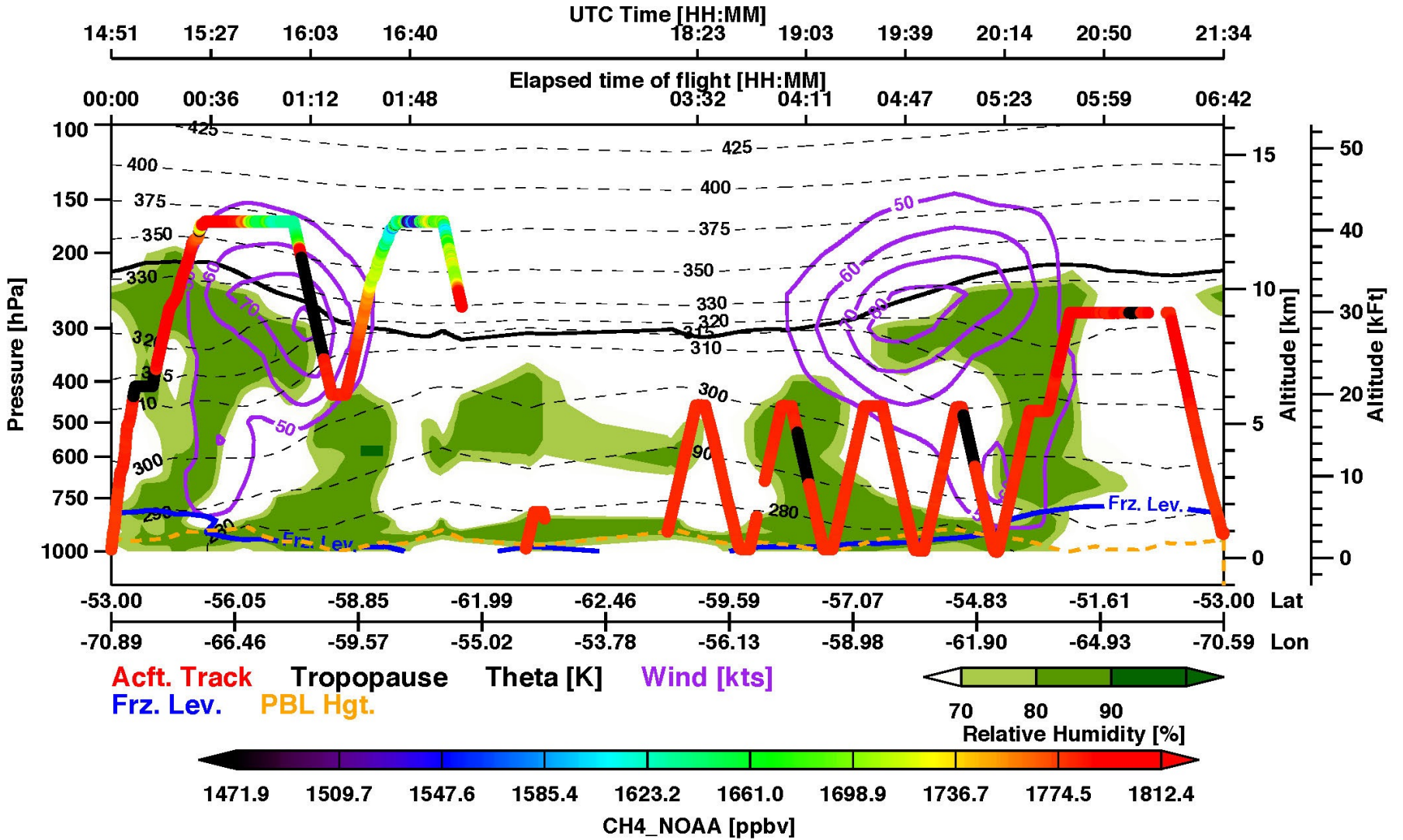
Long-lived tracers

Kathryn McKain

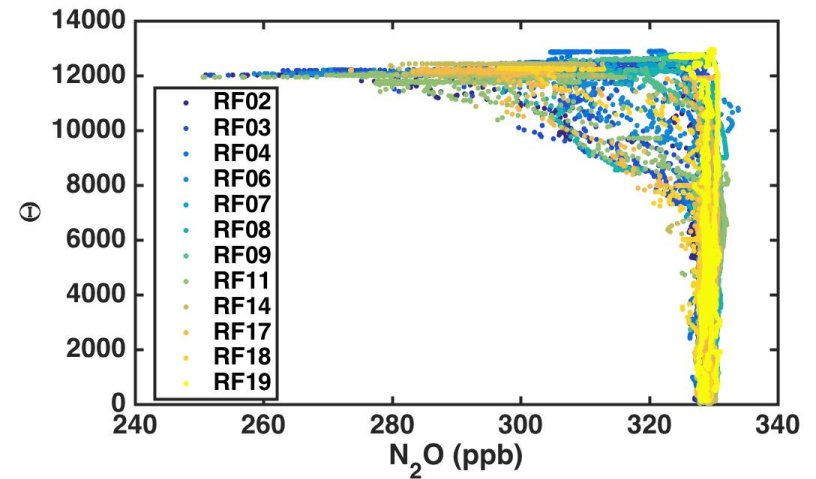
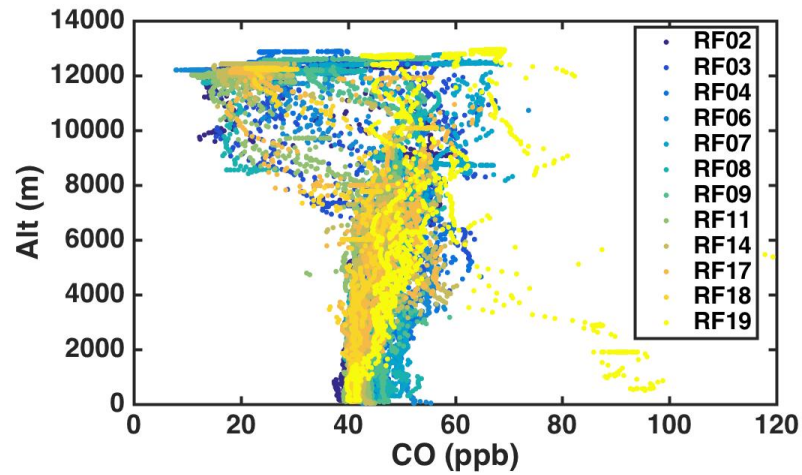
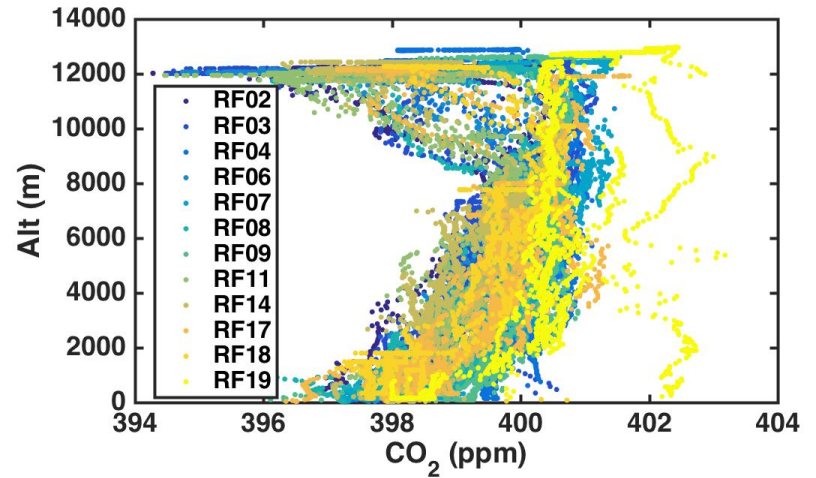
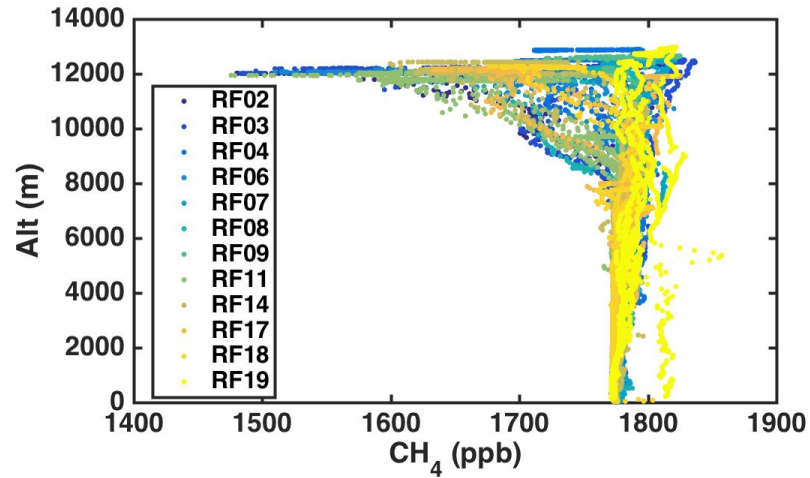
Colm Sweeney



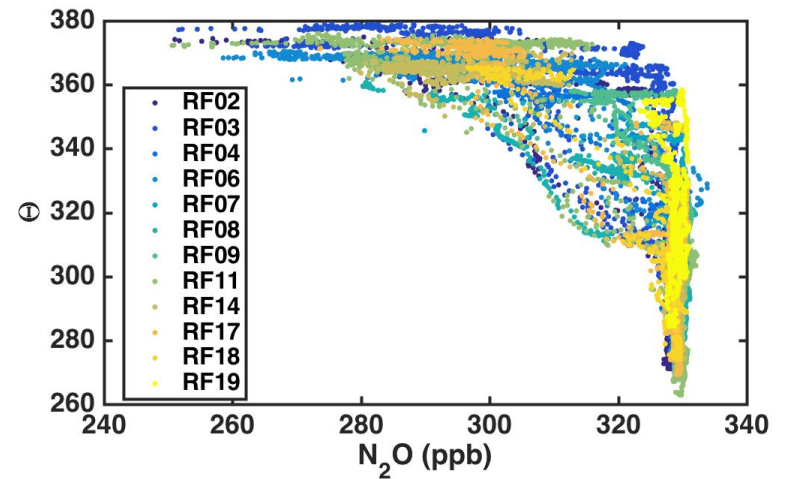
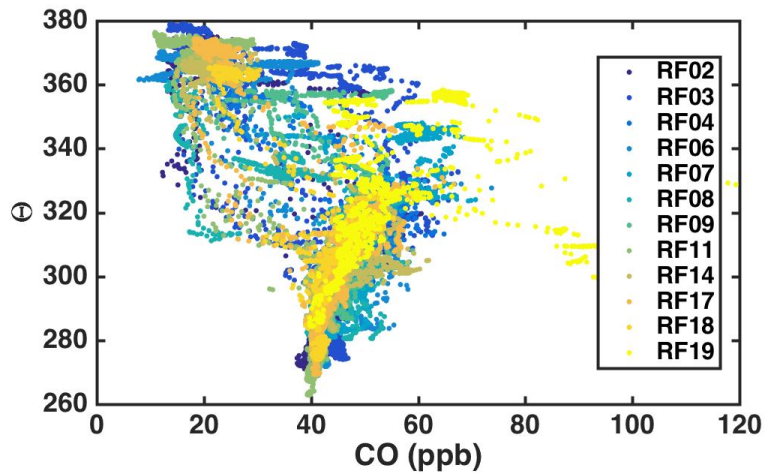
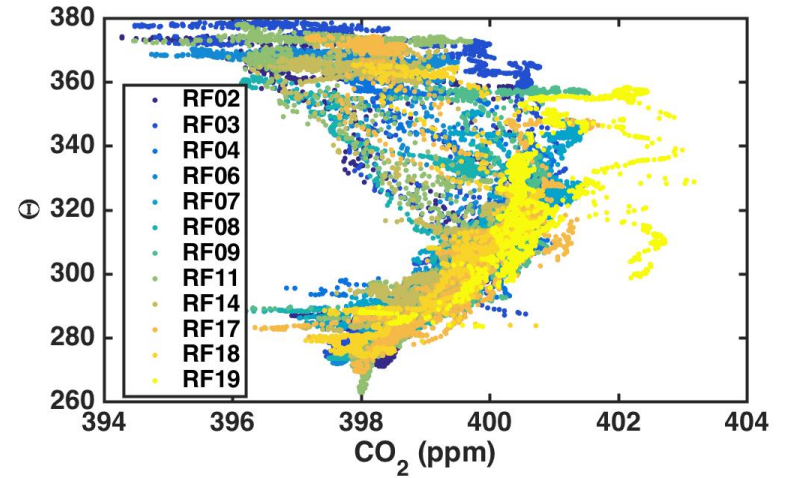
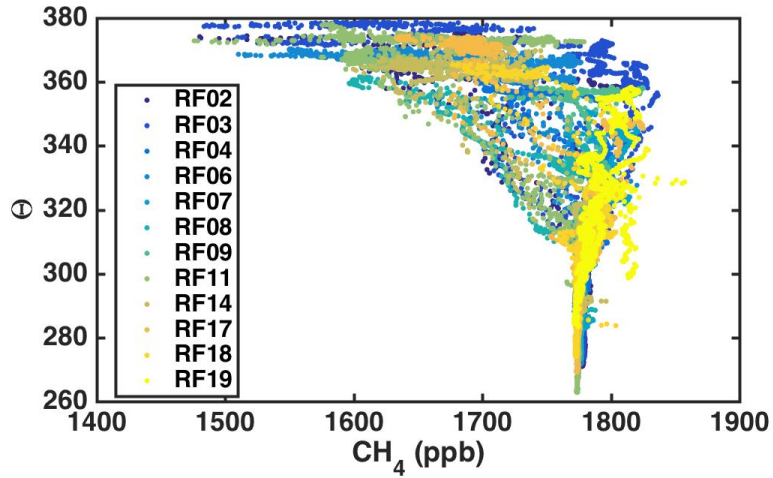
20160118, RF02



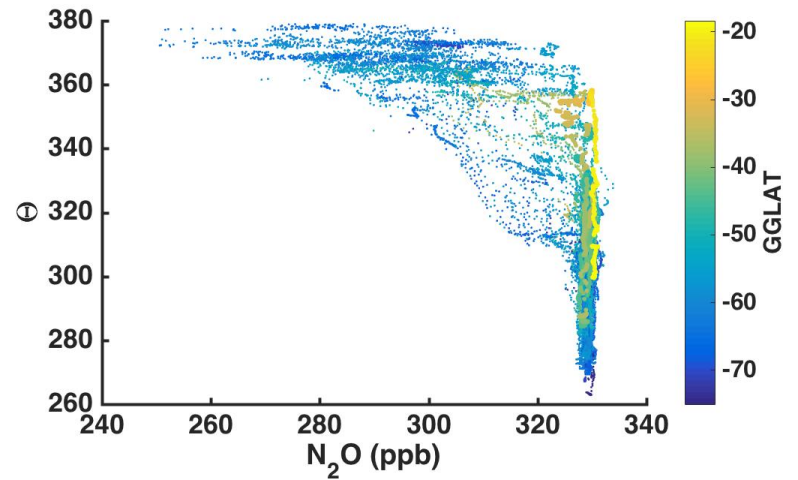
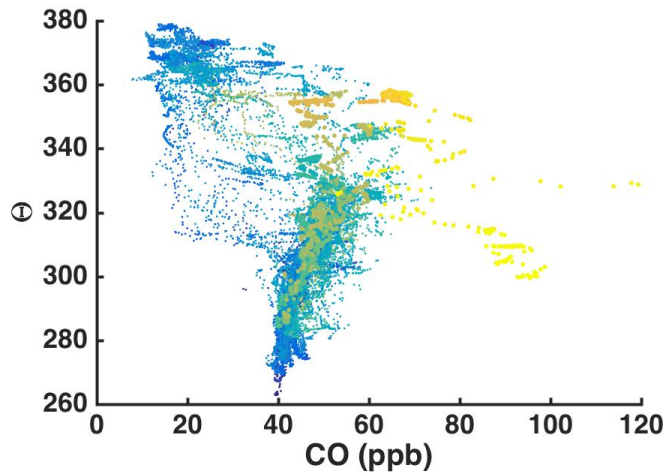
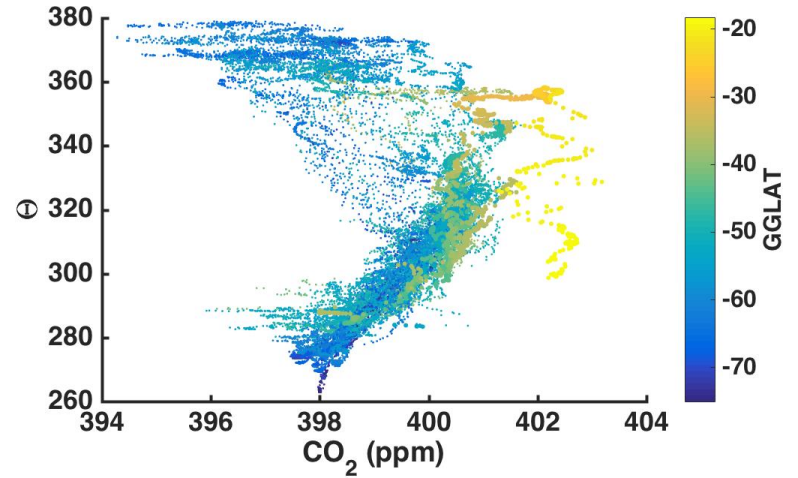
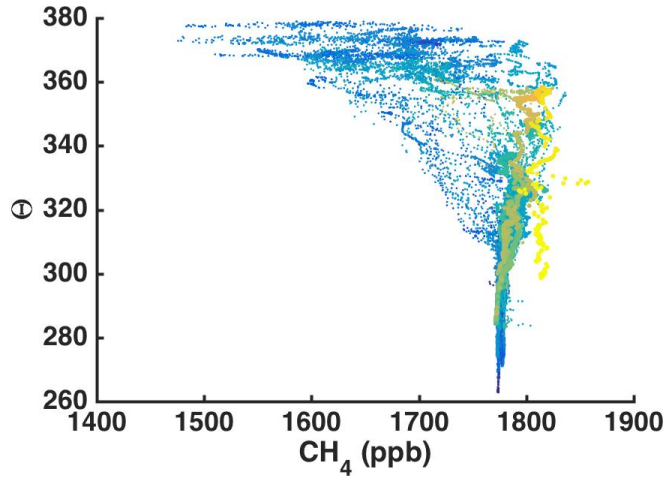
Profiles



Profiles

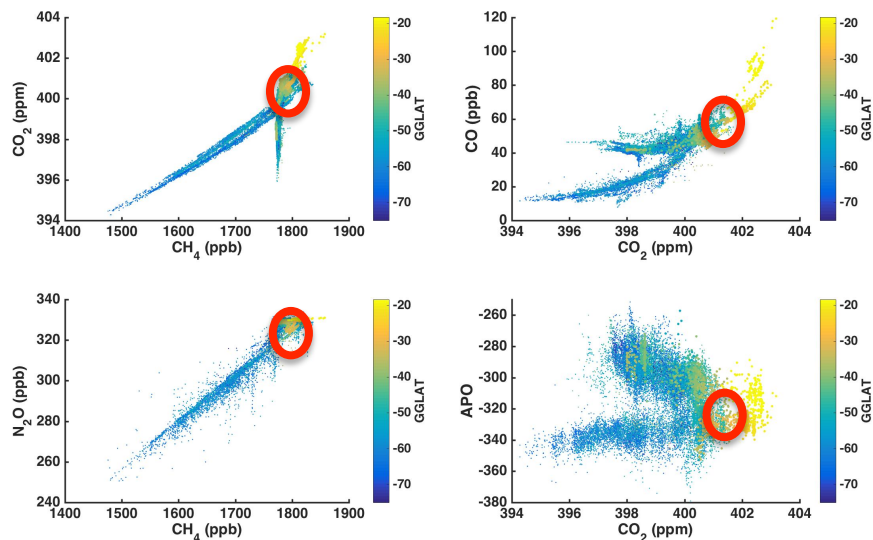


Profiles

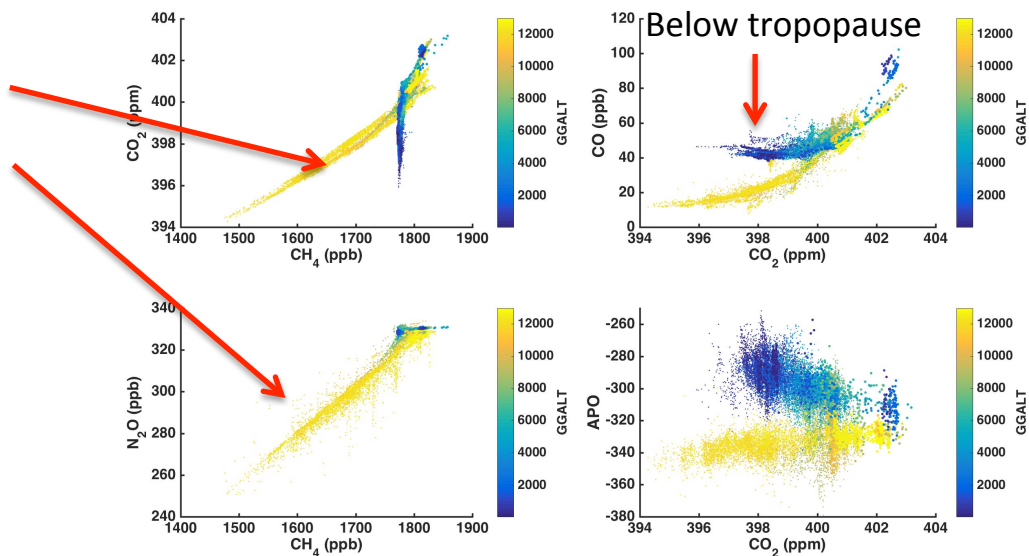


Property/Property

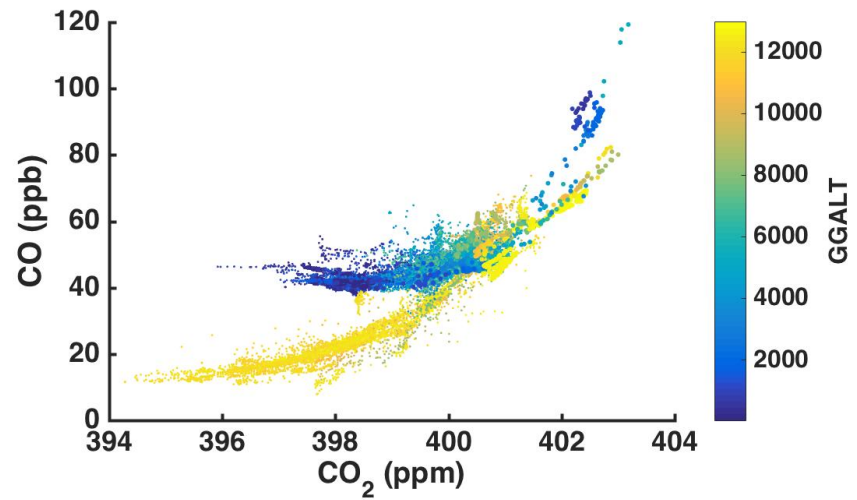
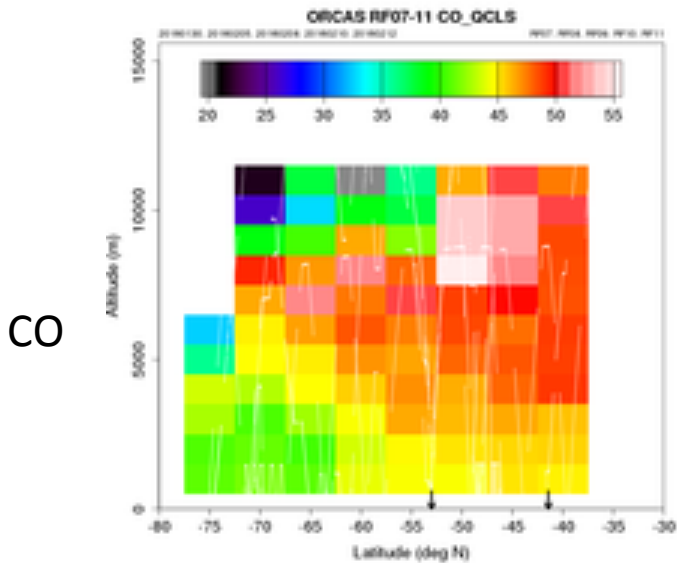
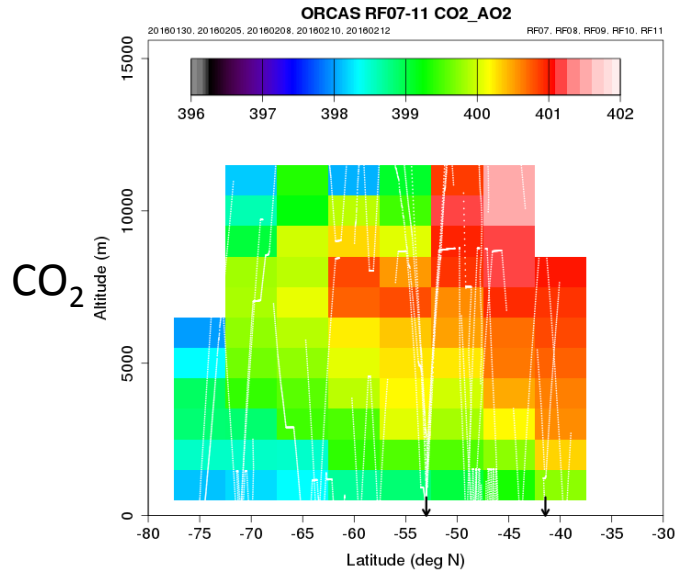
High Latitude



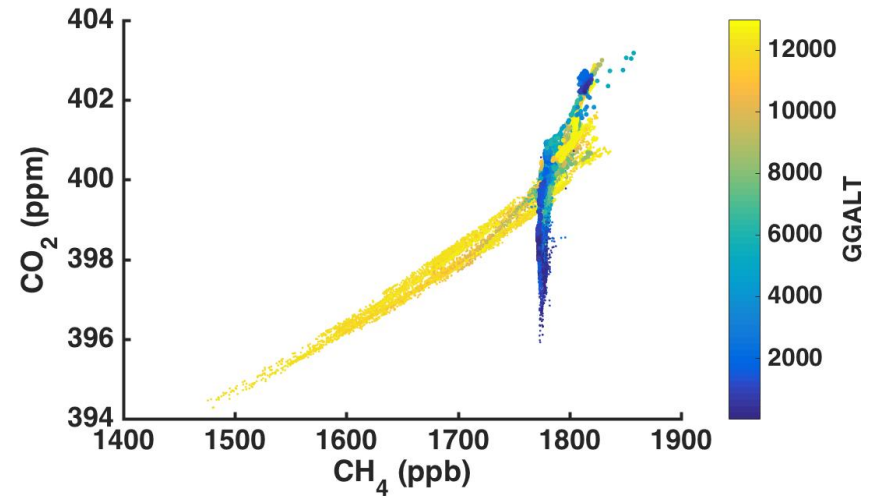
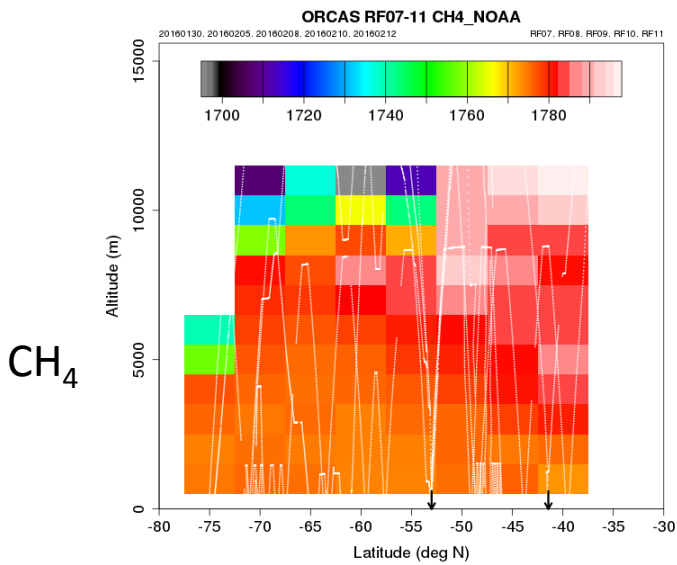
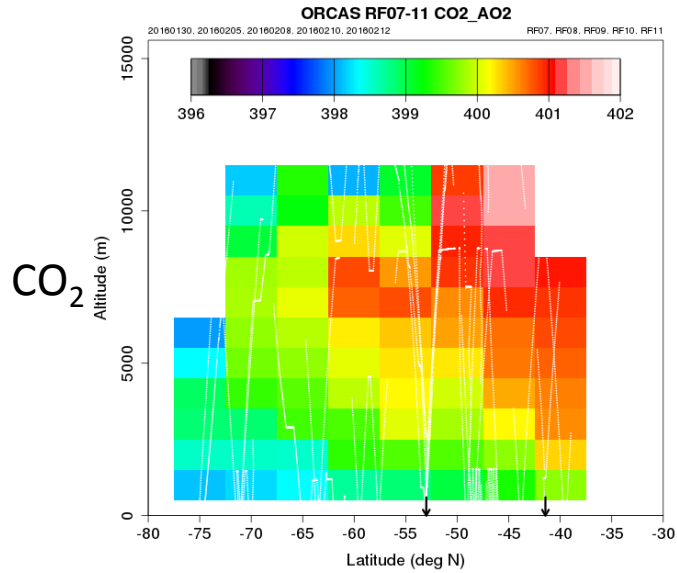
High Altitude



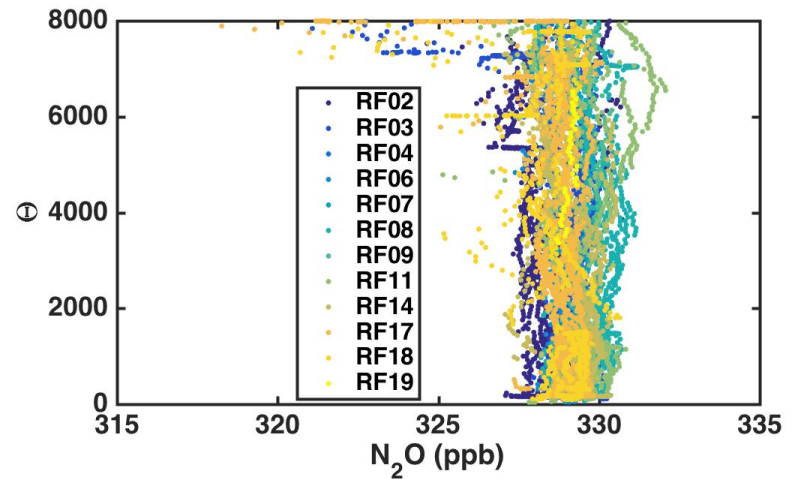
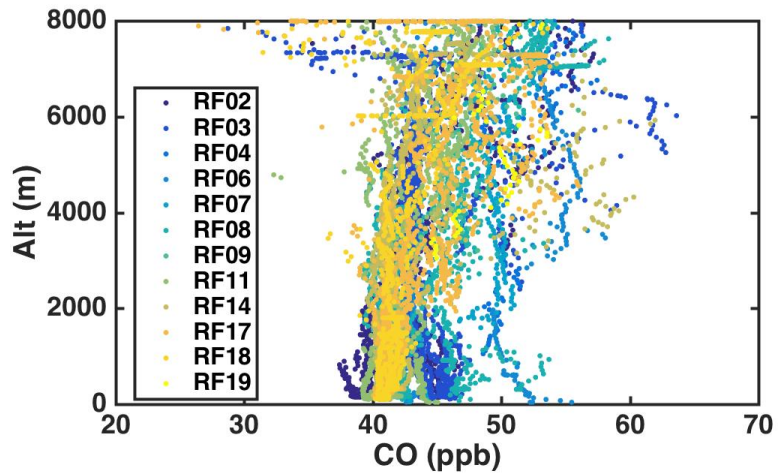
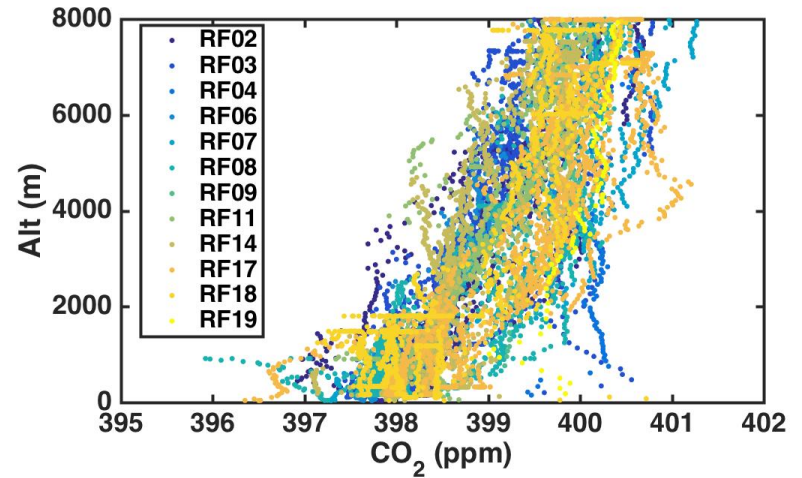
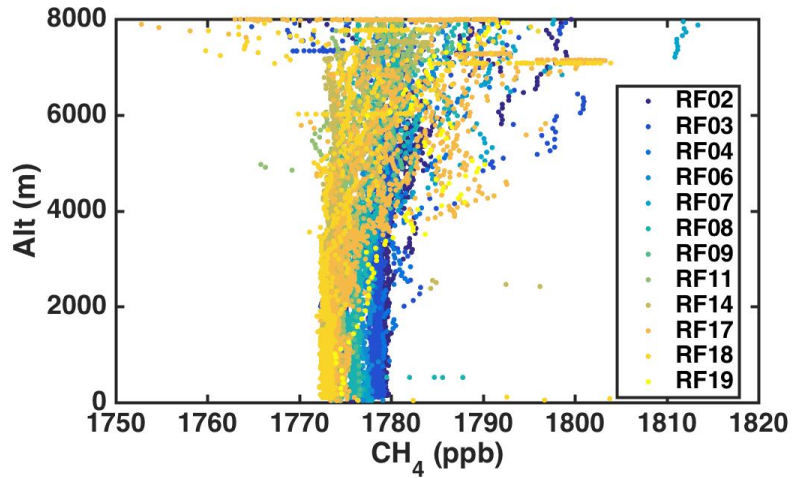
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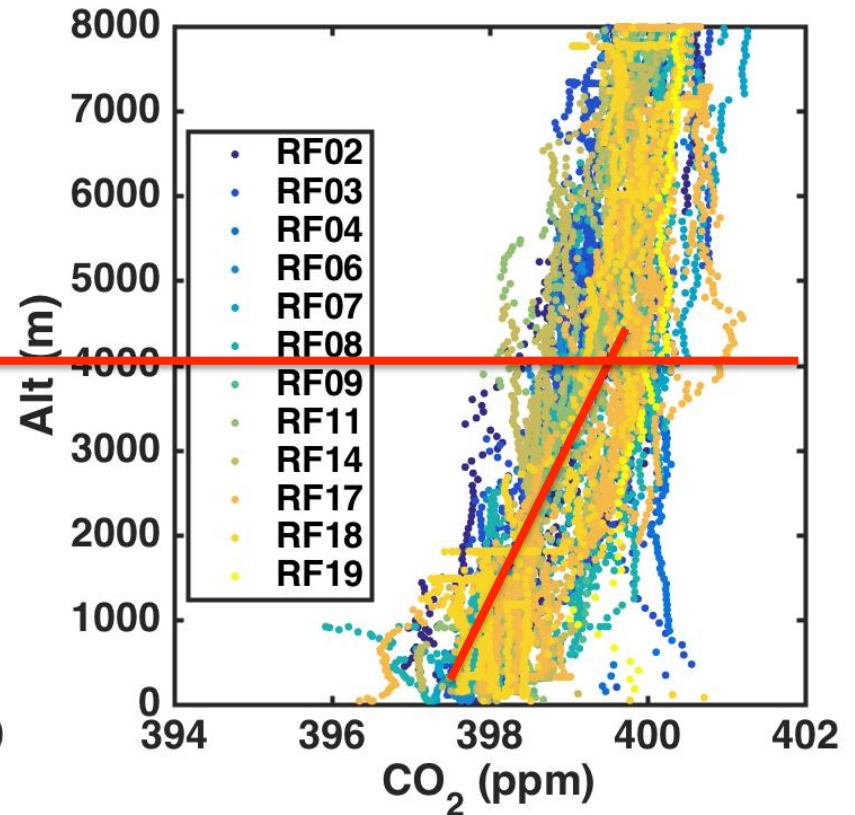
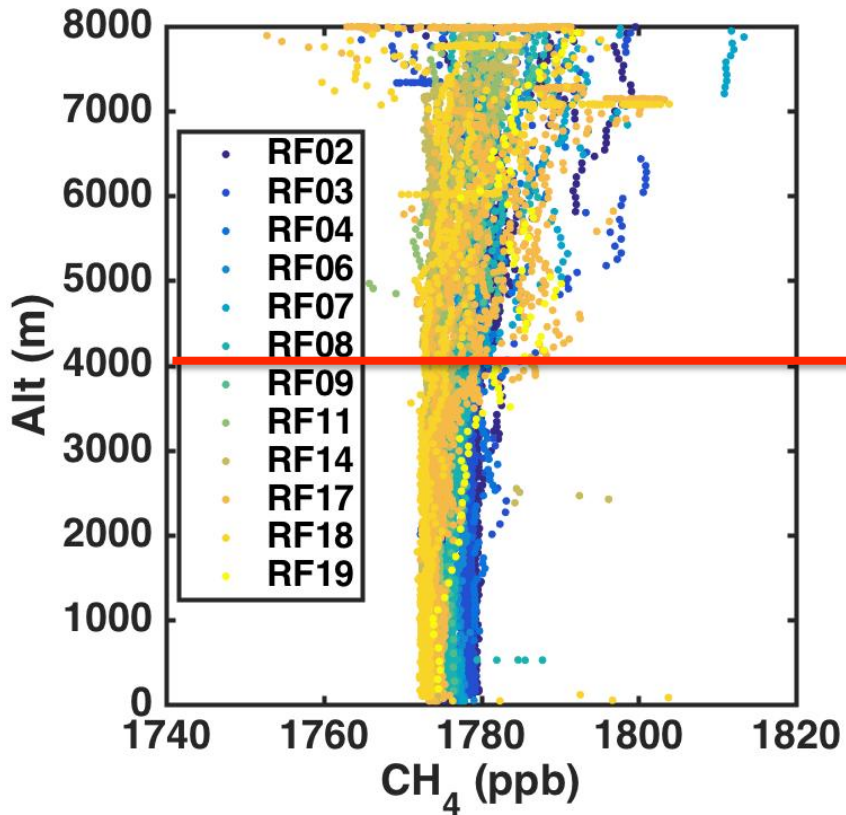
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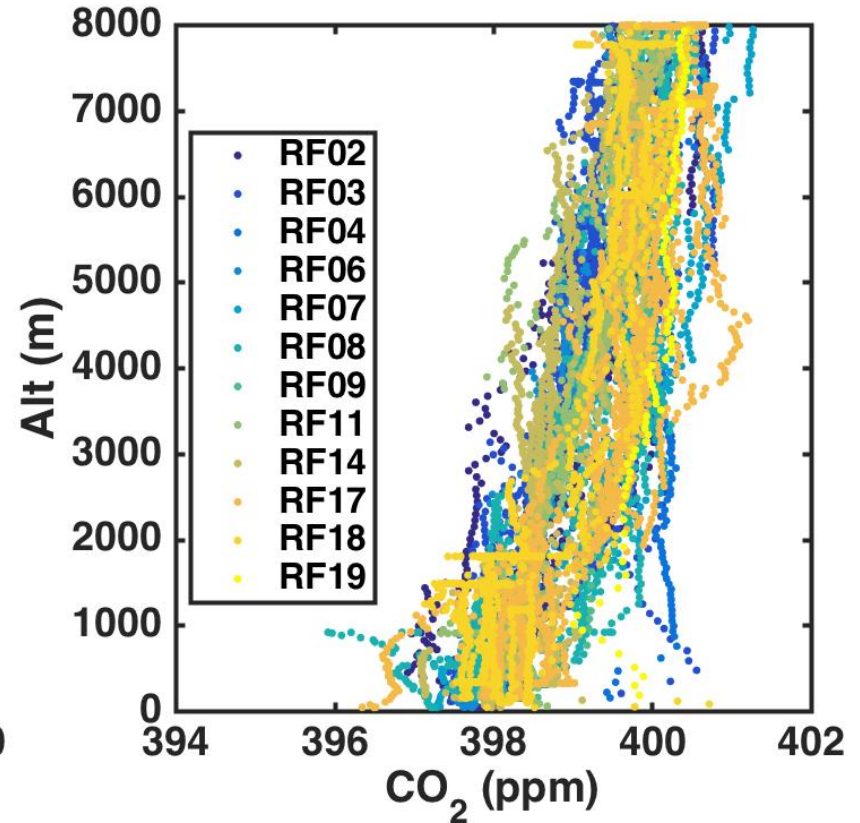
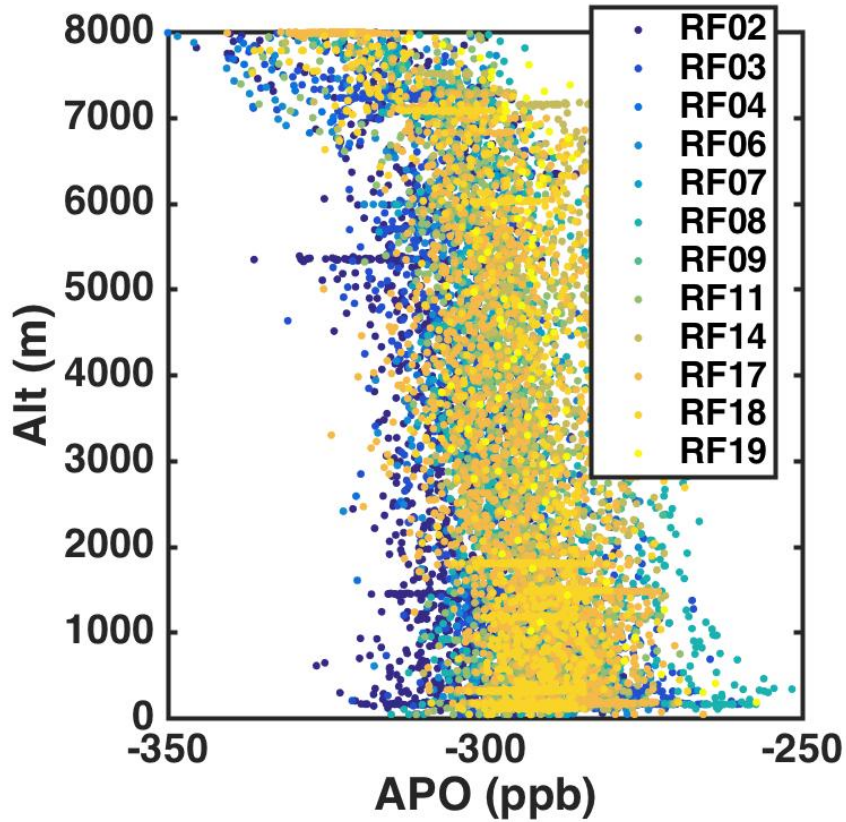
Tropospheric Gradients



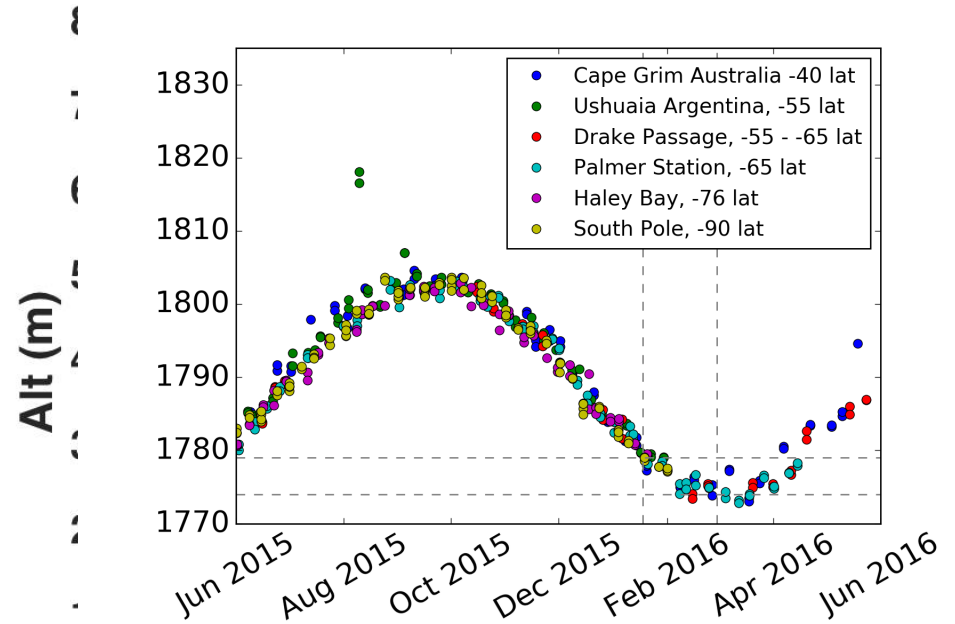
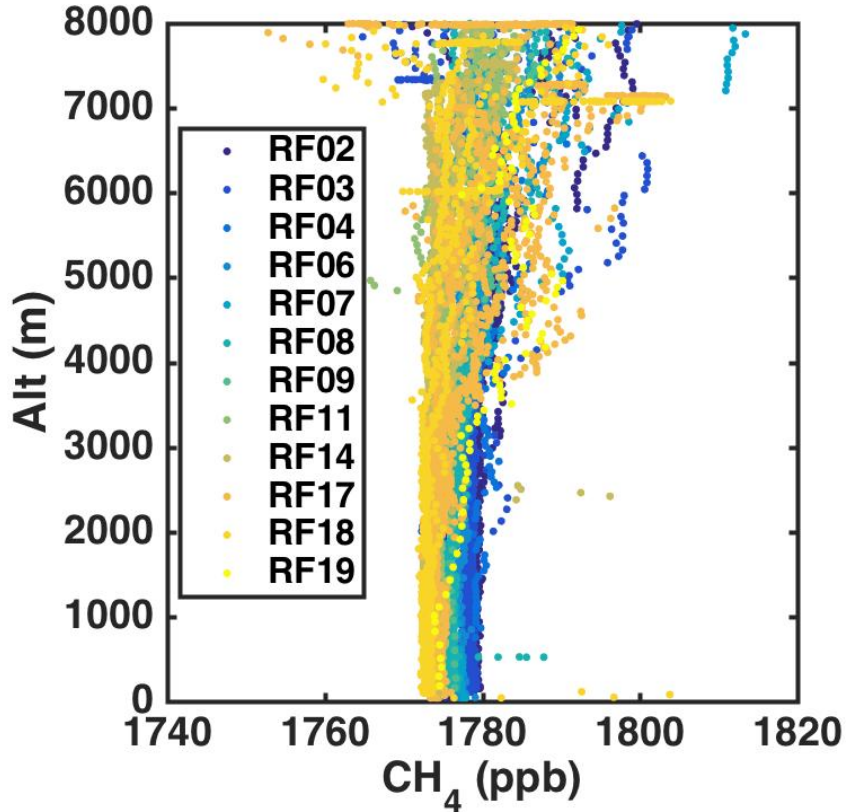
Tropospheric Gradients



Tropospheric Gradients

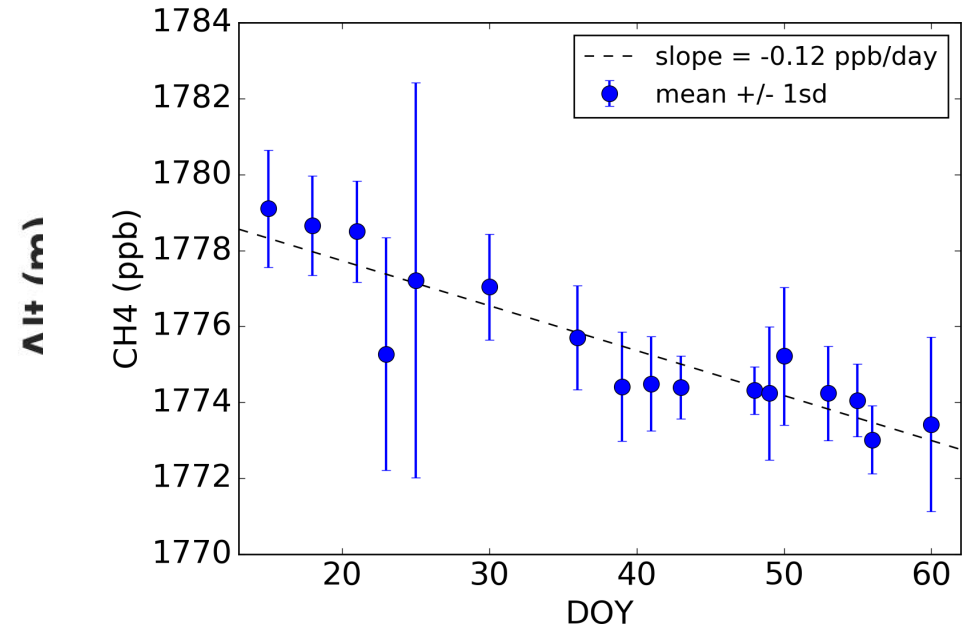
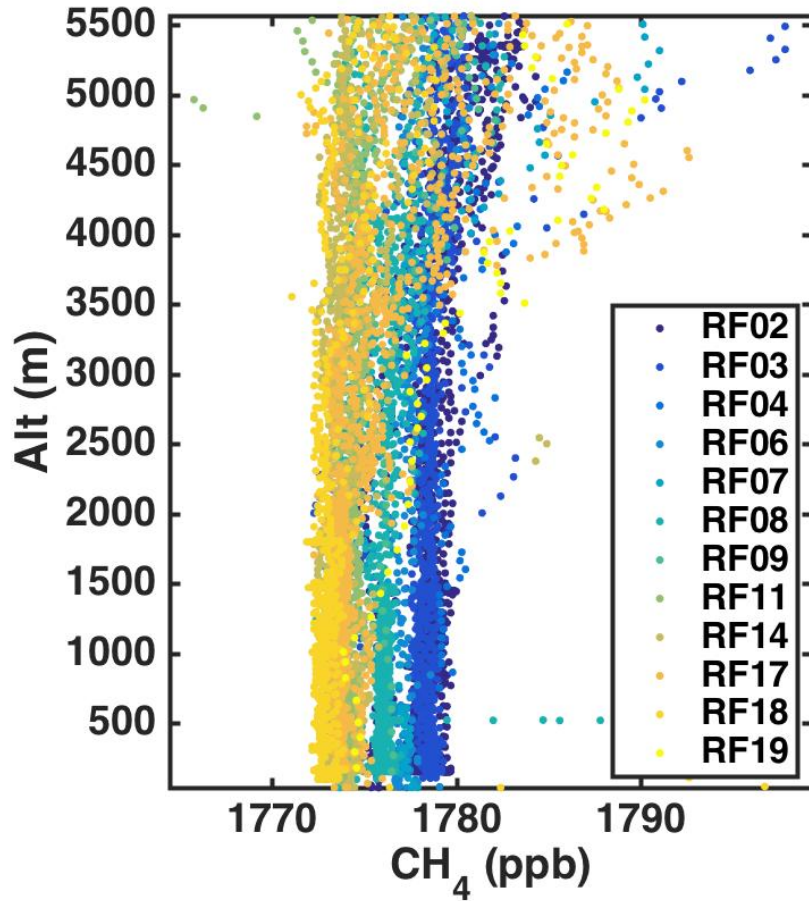


Tropospheric Gradients



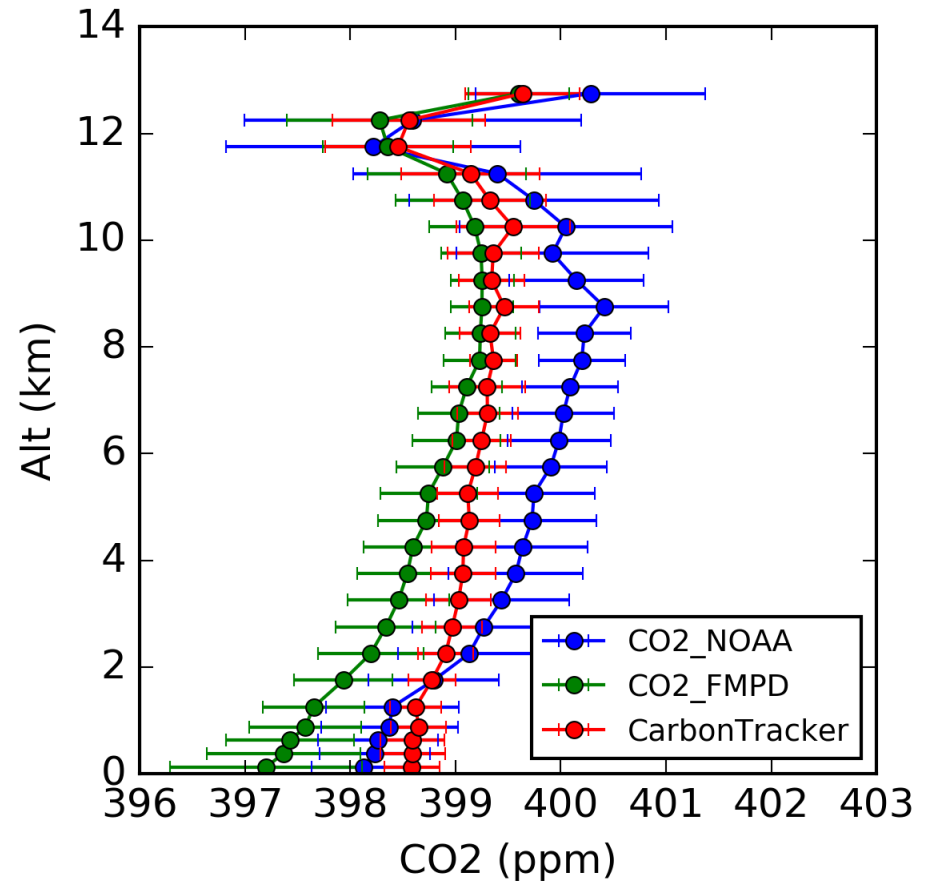
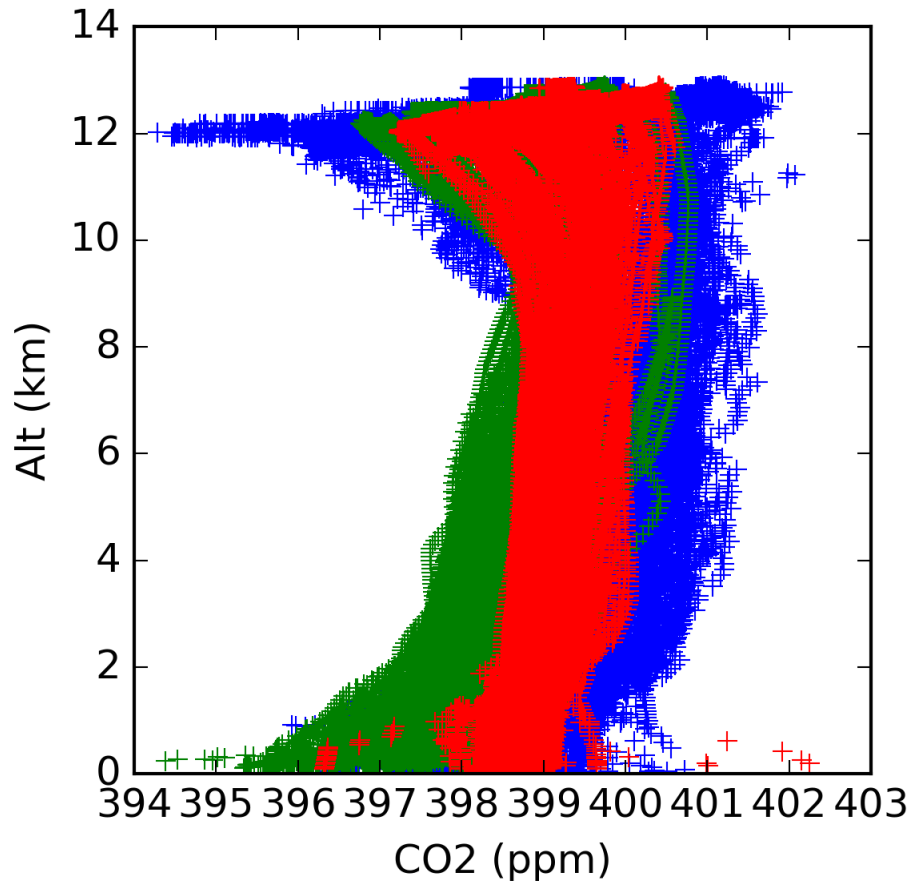
CH₄ changes by 7 ppb over 45 days

Tropospheric Gradients

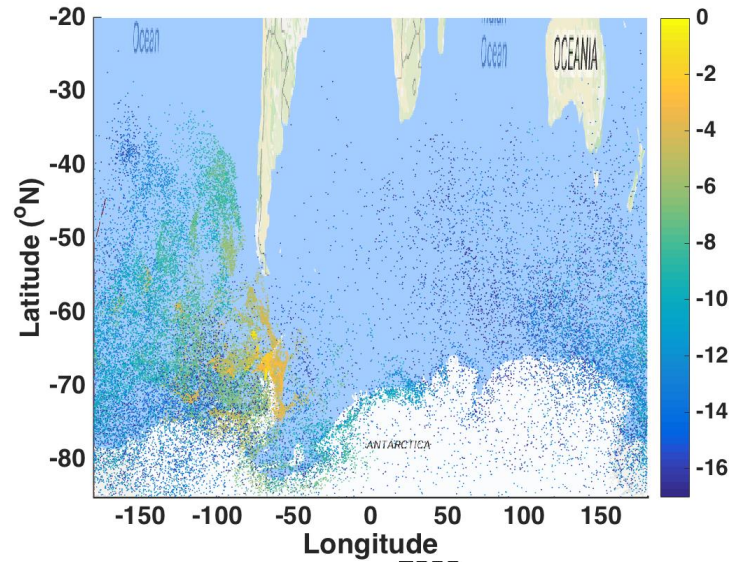


CH₄ changes by 7 ppb over 45 days

Model comparison



Residence time?



60%

