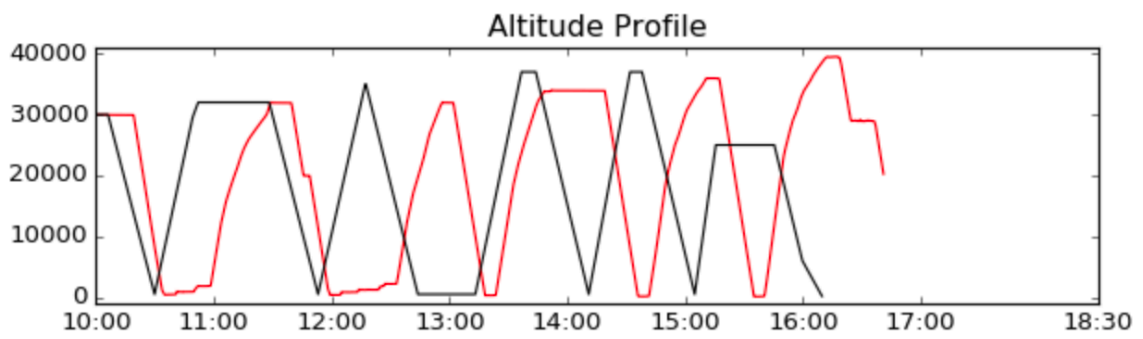
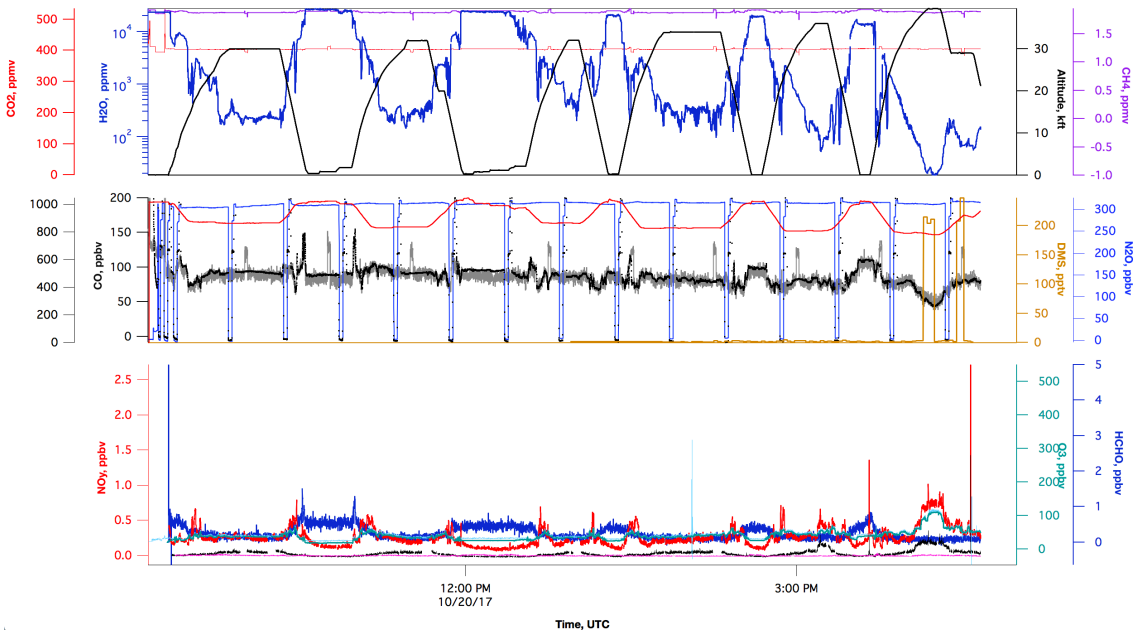


GVAC-LPLA

On-time takeoff 08:18:40 LT (09:18:40 UT)

Landing 15:58:58 LT (15:58:58 UT)

- Left ~10 min early despite having to rework the flight plan due to weather on most of the western side of our planned flightpath. With shortened flight plan (7 rather than 8+ hours), we have not enough real estate to fit in number of planned profiles.
- Despite leaving early, payload was very hot. CITCIMS had difficulty getting computers to boot. Began taking data at 12 ½ N.
- Lots of dust on takeoff. New particle formation observed in cirrus blow-off on south leg.
- Had to do a go-around to fit the flux leg in before south point. Elevated benzene, dichloromethane just above mixed layer. Dust throughout; biomass burning in a dry layer above mixed layer. Dust layer is below 11.5 kft.
- Second profile had a short hold at FL200 to get thru FIR boundary. At 500', performed second flux maneuver (4 level) to both use up some fuel and to end up at south end before heading north. 500', 1000', just below cloud base at 1400'; just above cloud at 2400'.
- Third profile performed before next FIR boundary. Just above mixed layer, low anthropogenic pollution (Becky calls it 'pollution hole').
- 500' leg is quite choppy.
- Reach FL330 at 13:45 UT. In some cirrus here. Climb to FL340. ATC held us from descent until HPT4.
- Fourth Descend to 500'.
- Climb at 2500 ft/min - still hoping to fit one more profile in. FL360.
- Final profile. Some high cirrus. Low cloud.
- Spiral over Lajes + MMS maneuver.





Debrief

CAFS – good.

NOy – good.

DLH– good.

Picarro good.

QCLS good.

SAGA good.

Panther/UCATs good.

AO2/Medusa. good.

GT-CIMS good.

NOAA CIMS good.

WAS good.

MMS good.

TOGA – OK.

AMP fixed leak – otherwise good flight.

CAPS good.

PALMS. good.

ATHOS. good.

ISAF. Good.

SP2 – Good.

HRAMS. Good.

CITCIMS. Lost first climb out due to computer not booting.

That was a lot of work for the nav and pilots. This morning's weather forecast showed strong convection along planned route. Todd scrambled to refile flight plan before takeoff. Conditions on the plane deteriorated rapidly after 7:30 due to excessive heat. Ended up leaving Cabo ~15 min early and headed south to ~9 degrees north. Very little flight time to fit in profiles -- especially given lack of supportive ATC. Performed flux legs on profiles one and two. Ended up fitting in five profiles and two flux maneuvers. MMS bonus at the end while spiraling down over Lajes.