B18 AMAZON AND COAST BRAZILIAN GREENHOUSE GAS MEASUREMENT PROGRAM AND THE EFFORTS IN CONSTRUCT THE GHG NETWORK

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With the goal of building The Brazilian Greenhouse Gas Network we changed the Atmospheric Chemistry Laboratory (LQA) from IPEN to INPE in order to join two Brazilian groups to build the National GHG Laboratory and improve conditions to build the Brazilian network. In October it will be a workshop to define the structure of this network, based on the experience that we already have in action in Brazil and guests from other networks (NOAA and IGOS) that will bring their experiences to us.

By now the efforts in to construct a GHG network is doing by many projects funded by Brazilian, UK, US, EC agencies. We start this effort with NASA project performing vertical profiles aircraft at SAN (2.86S 54.95W), started in 2000 with monthly/biweekly sampling (300m to 4400m a.s.l.). In 2010 we added three more aircraft sites: TAB (5.96S 70.06W), RBA (9.38S 67.62W) and ALF (8.80S 56.75W). And in 2013 we added 2 new high vertical profiles sites (up to 7.3km to 300m) RBA and in a new site in coast (SAH: 0.76S 47.84W). This project had the objective to compare with GOSAT. Coastal studies are conducting actually at 3 sites: SAL (started 2010), NAT (started 2010) and CAM (started 2014). Since 2010 until 2014, we performed 400 vertical profiles from 300m to 4400m above sea level, measuring CO₂, CH₄, N₂ O, CO and SF₆ on WMO mole fraction scales. SAN is the longest time series, where it was performed 221 vertical profiles since 2000.

It will be showed the results since 2010 until 2014 with new high profiles for CO₂ the flux calculated by Column integration technique.

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