AWAS data status

RSMAS Lab:

Xiaorong Zhu (Res. Assoc.)
Leslie Pope (Res. Assistant)
Katrina Smith (Grad Student)
Maria Navarro (Post-Doc.)
Alex Ehrenzeller (Undergrad.)

Field/Aircraft:

Rich Lueb
Roger Hendershot
Fred Moore
Jim Elkins
David Nance
Eric Hintsa

Data

Ben Miller Steve Montzka

Sampling/Methodology

- 24 samples/flight (mostly),
 - 200 250 samples/mission
 - Approx. 60 gases reported
- Lab analysis: 5 instruments:
 - GC/MSD (1): General CFCs, HCFCs, RONO₂, etc.
 - GC/MSD (2): More volatile PFC, HFC, NMHC
 - GC/FID: $C_2 C_5$ NMHC
 - GC/FID/RGD: CH₄ + CO
 - GC/ECD: N_2O (+SF₆)

Current Status

Priority

- Whole mission merges of NWAS/AWAS/(PANTHER) data
- Adjusts offsets (typically small) between calibration scales used by NOAA and UM
- HIPPO 1, 2, and 3 have been distributed.
 - Only H1 with PANTHER, so far
 - Individual AWAS only files not yet submitted.
- Working on HIPPO 4 and 5...
 - Progressing well but not complete
 - Different working standards used during course of mission

Issues

- No N₂O data for H2 and H3
- Halon 1211 contamination during initial 5 6 samples of some flights (esp. H3 5)
- HFC-227ea contamination at high altitude (pump issue?)
- Occasional "flyers" discard or flag?
- Calibrations:
 - OCS standard drift H4/5
 - Ethyne, CH₃I
 - Direct standard exchange useful?