

AMAX-DOAS measurements of BrO, IO and OVOC on the GV

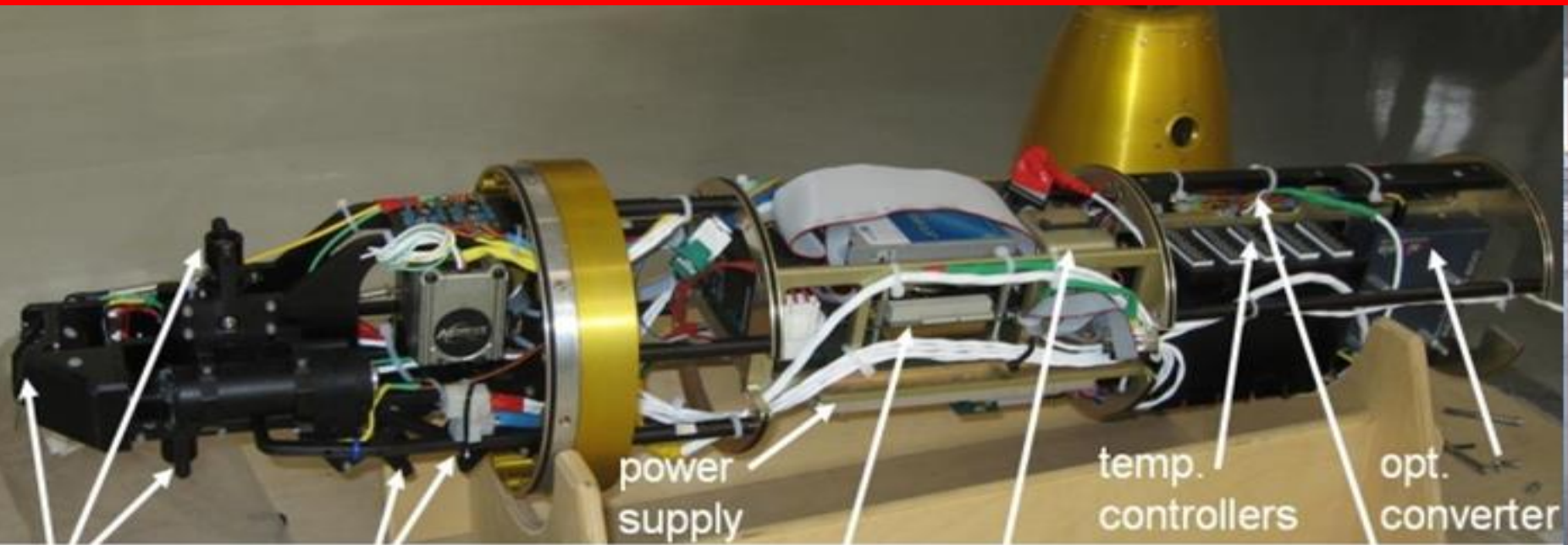
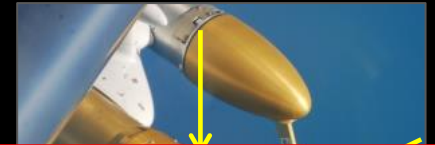
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CU-AMAX-DOAS instrument aboard NSF/NCAR GV

University of Colorado Airborne Multi-AXis
Differential Optical Absorption Spectroscopy

Telescope pylon



Forward,
zenith, nadir

slant
forward/backward

power
supply

PC104

MMQ (INS/GPS) +
inclinometer

temp.
controllers

opt.
converter



Forward,
zenith, nadir

slant
forward/backward

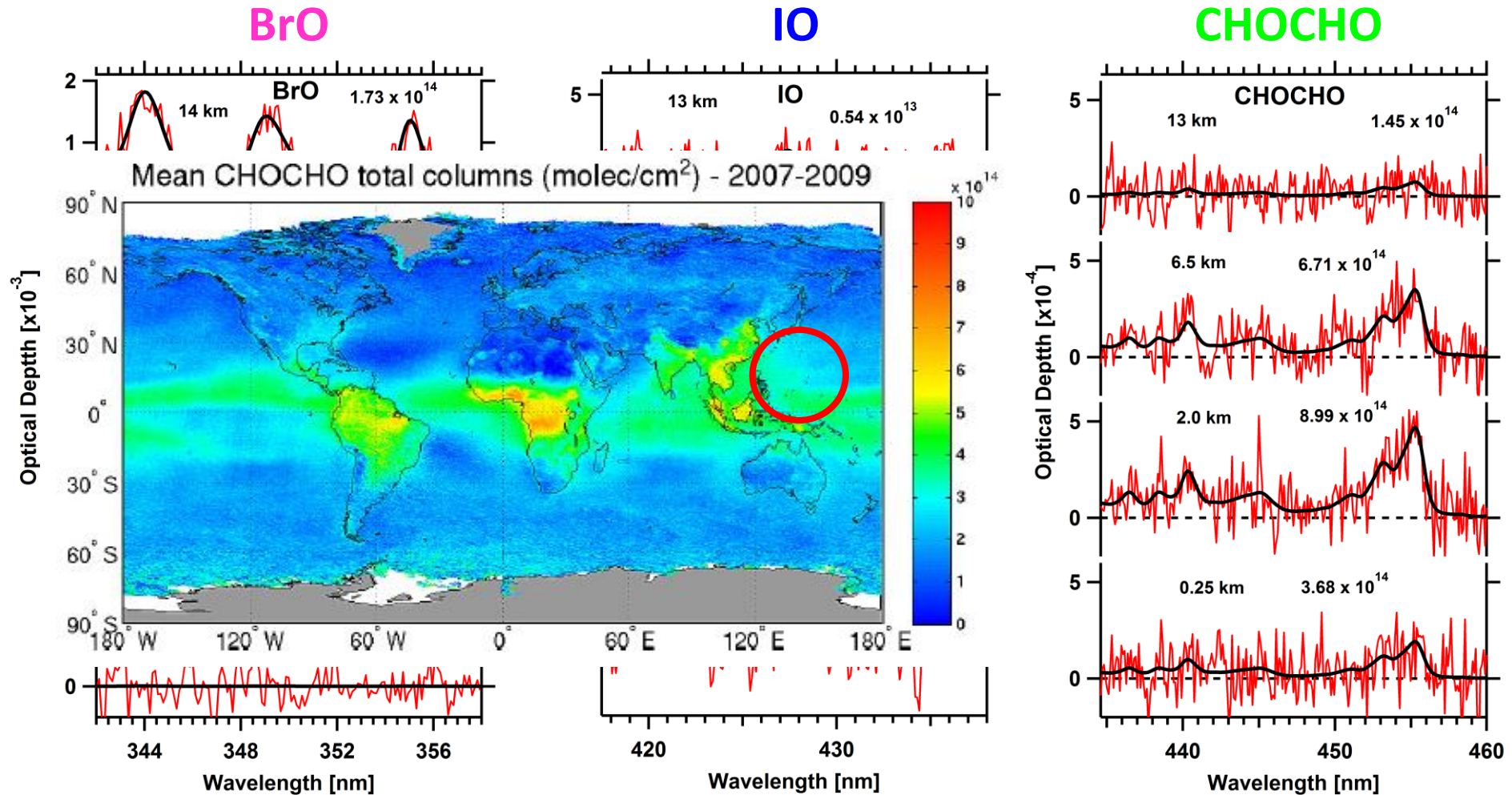
PC104

MMQ (INS/GPS) +
inclinometer

NI DAQ
card

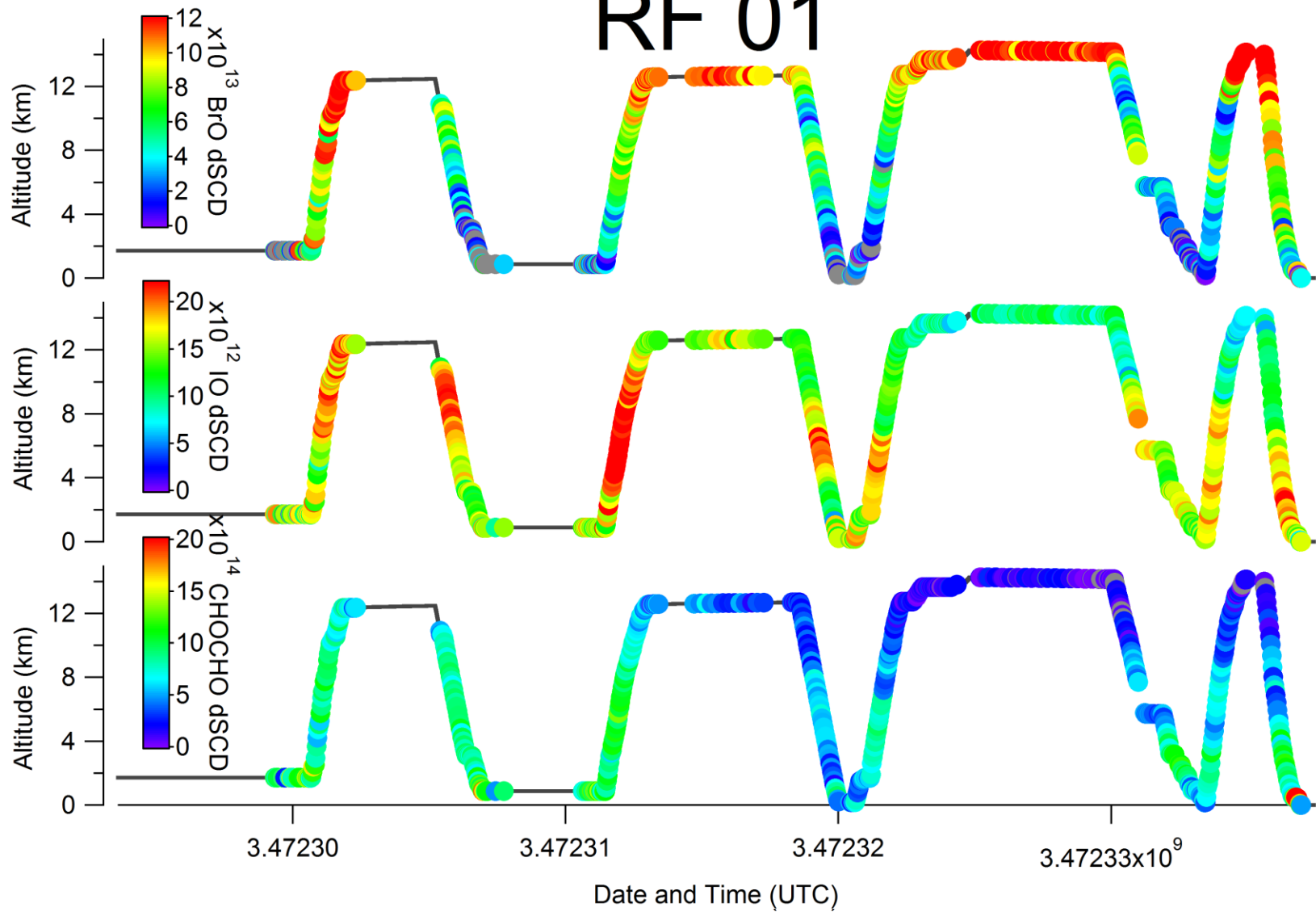
Volkamer et al., SPIE 2009
Baidar et al., AMT 2013

Spectral proof at different altitudes

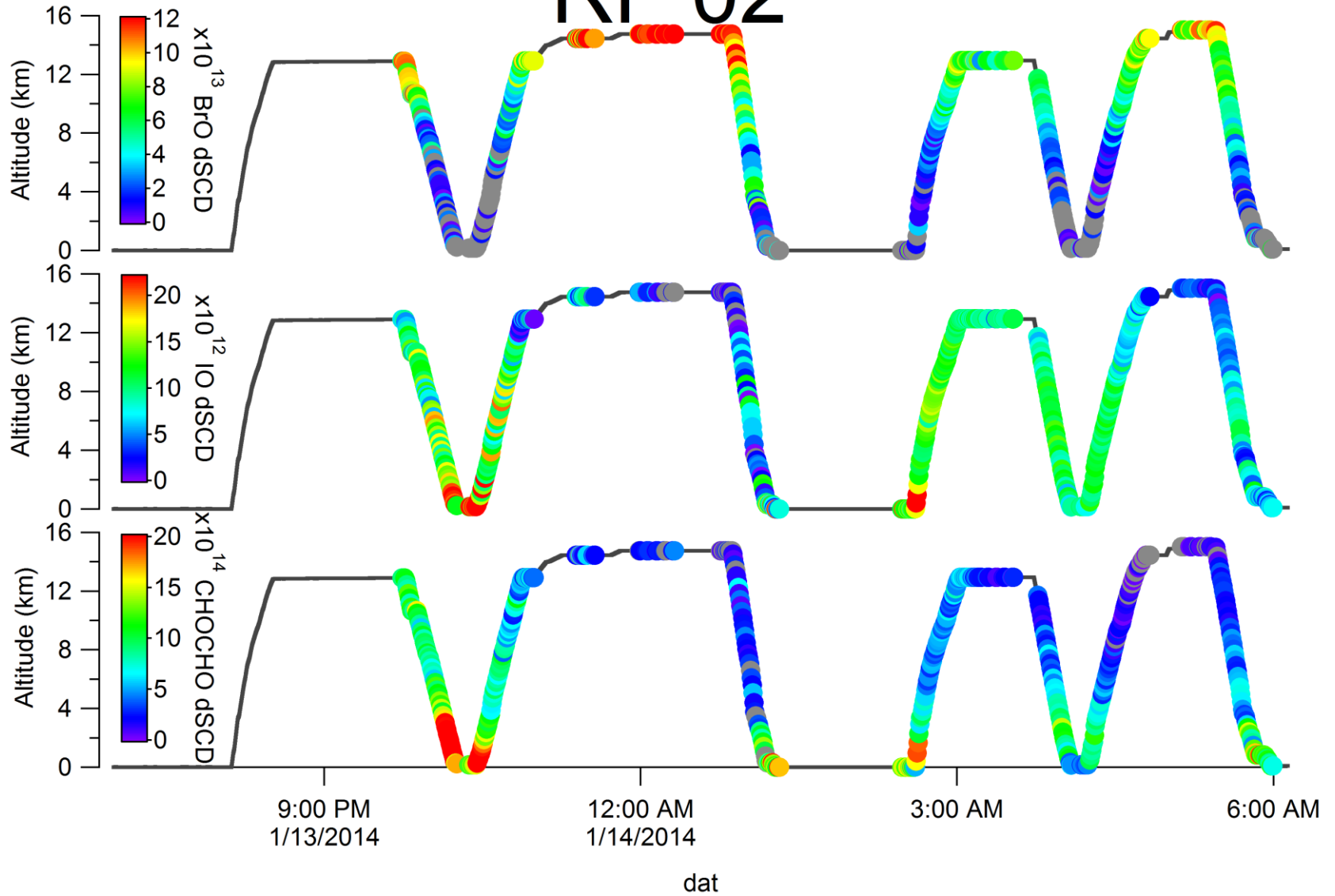


- BrO increases with altitude
- IO decreases with altitude
- CHOCHO in MBL (Sinreich et al., 2010), max in FT?, no CHOCHO in strat air

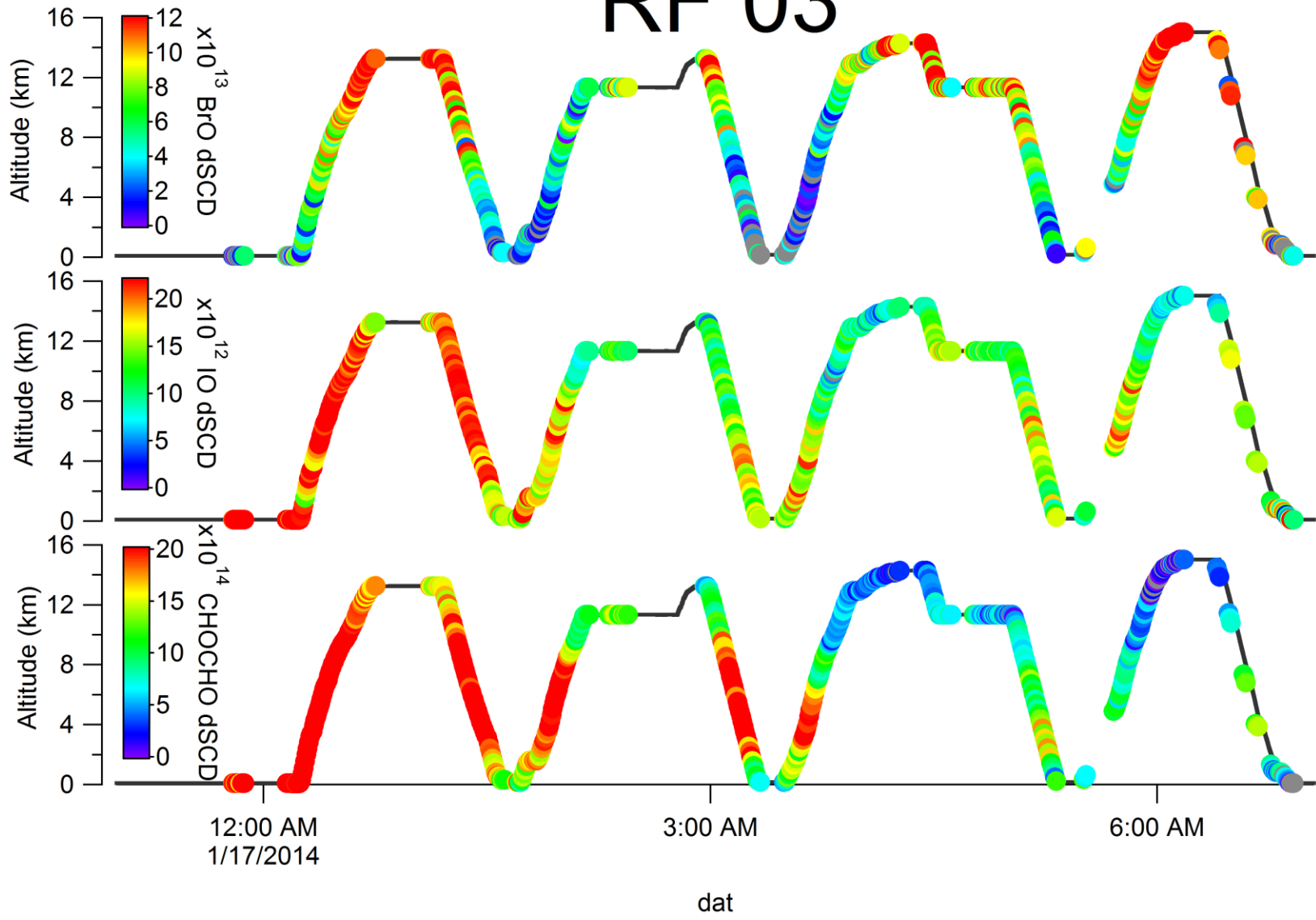
RF 01



RF 02



RF 03



Picture credit:
Pavel Romashkin

Pyranometer (RAF sensor)
The dome is filled with water
– you see the air
bubble

No cloud optical depth measurements as of RF03?
And no replacement for 1-2 weeks, if at all!