

Raman Lidar Status: Hardware

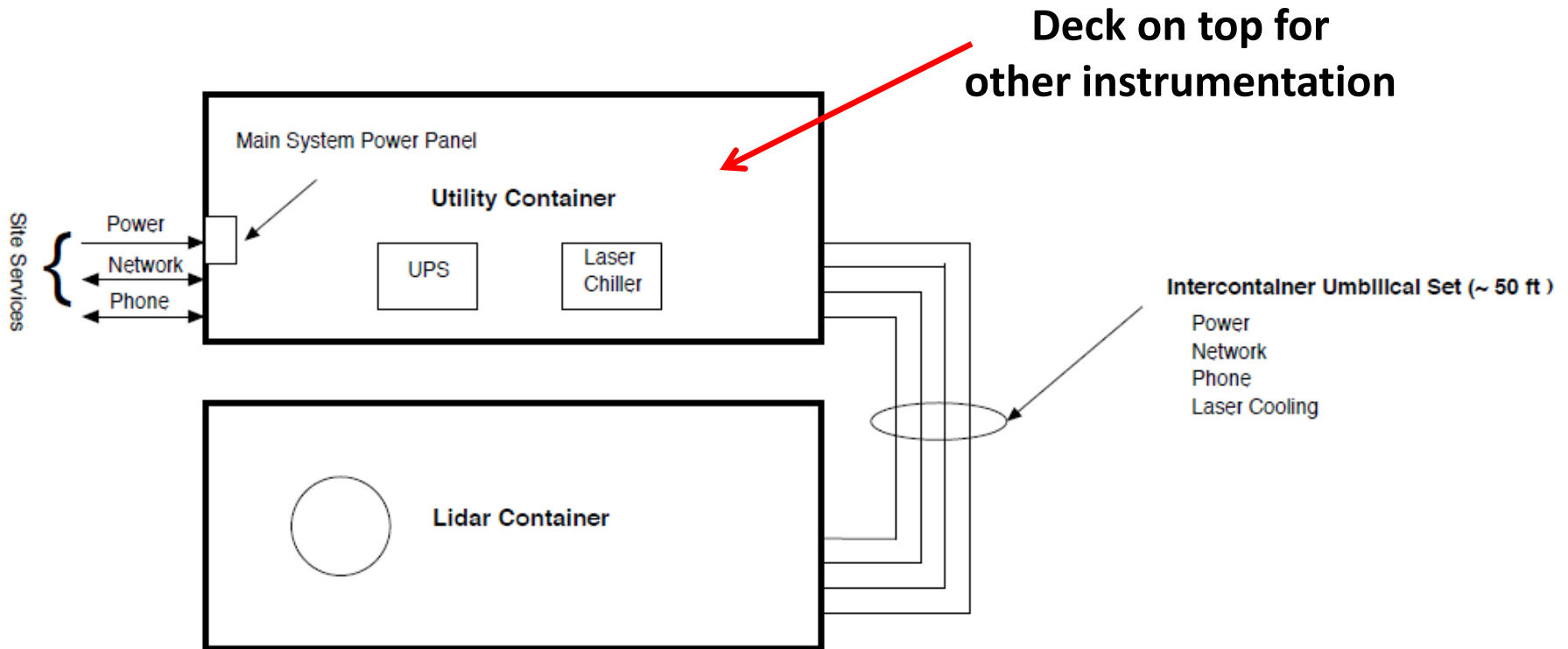
John Goldsmith

Sandia National Laboratories

Livermore, California

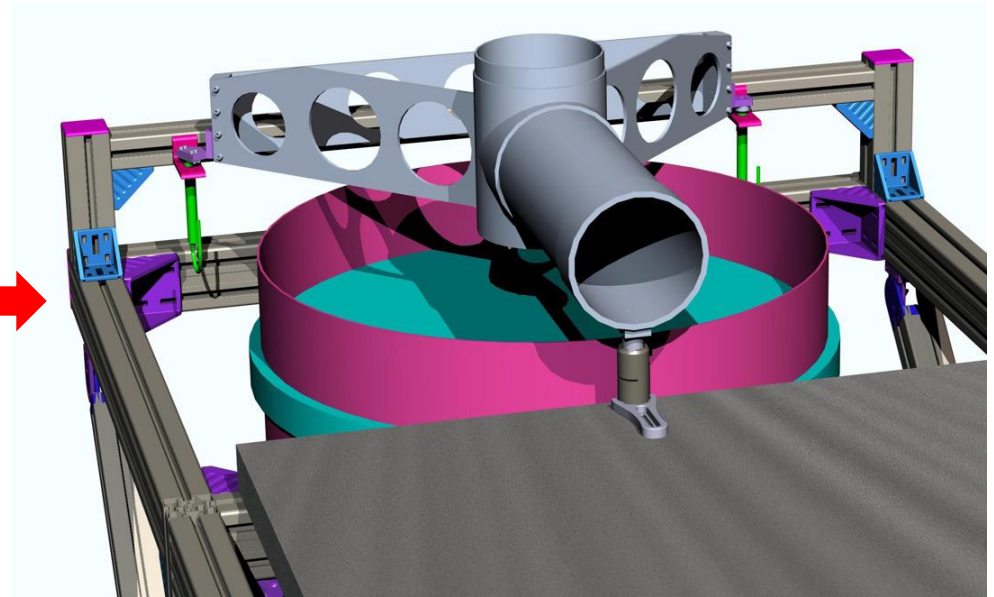
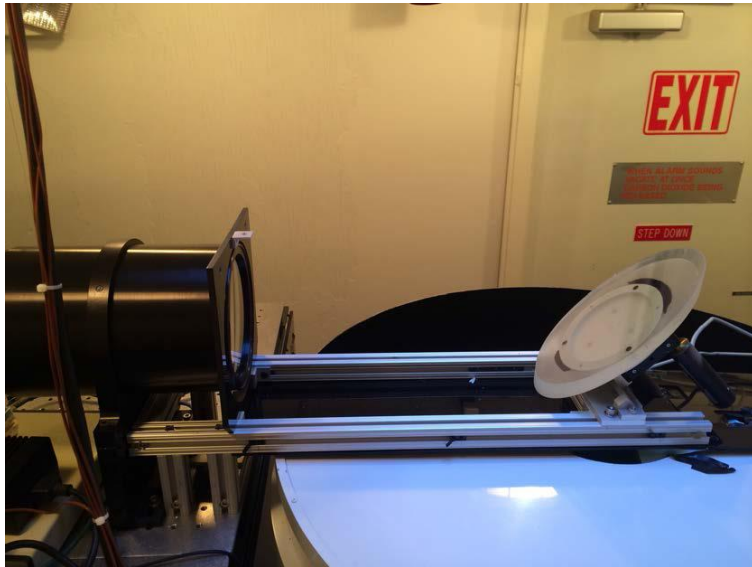


SGP Raman lidar reconfiguration



Now adjacent to radars

Short term (before summer 2015 IOPs):
improve output pointing control



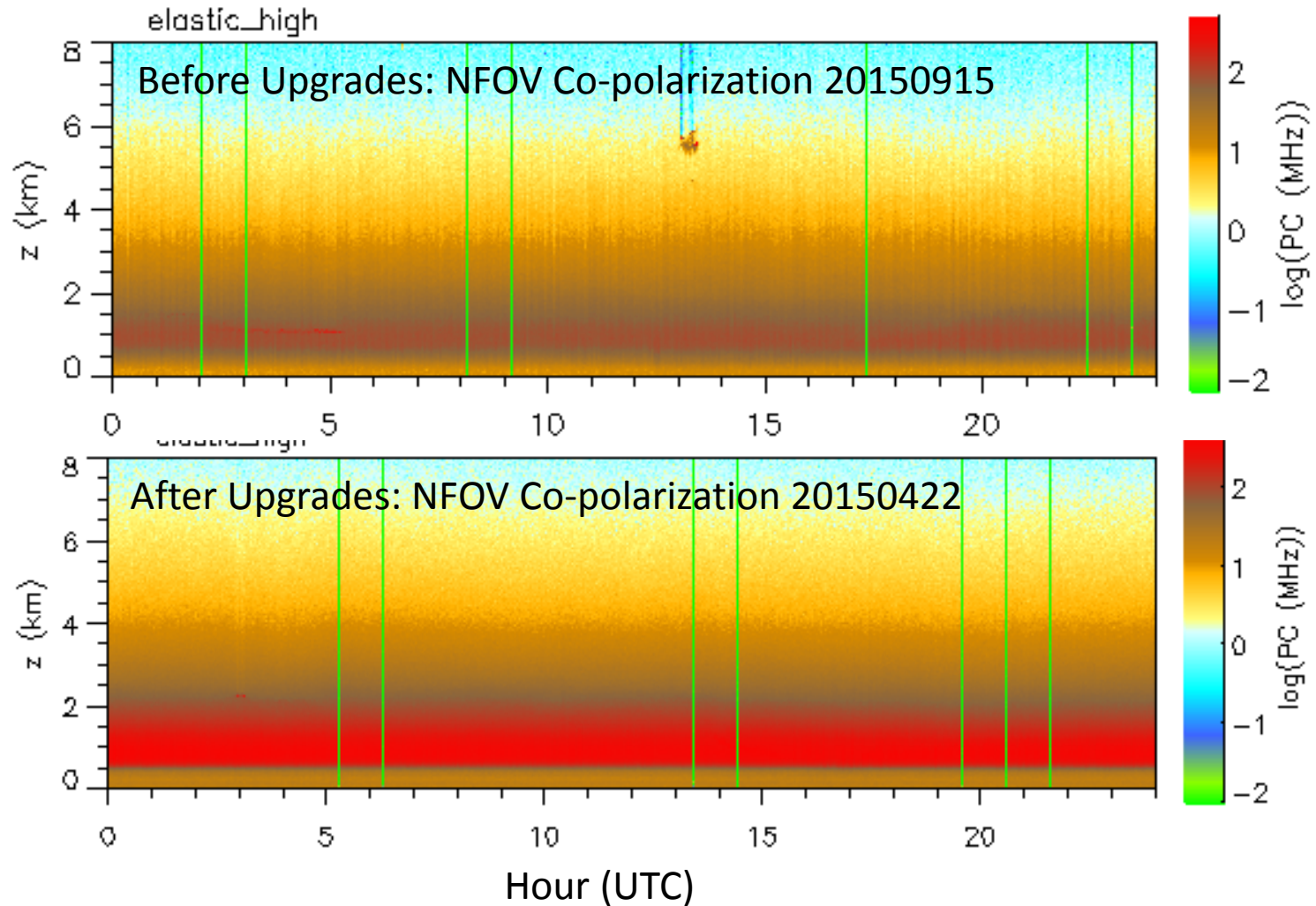
October 2015: Decommission



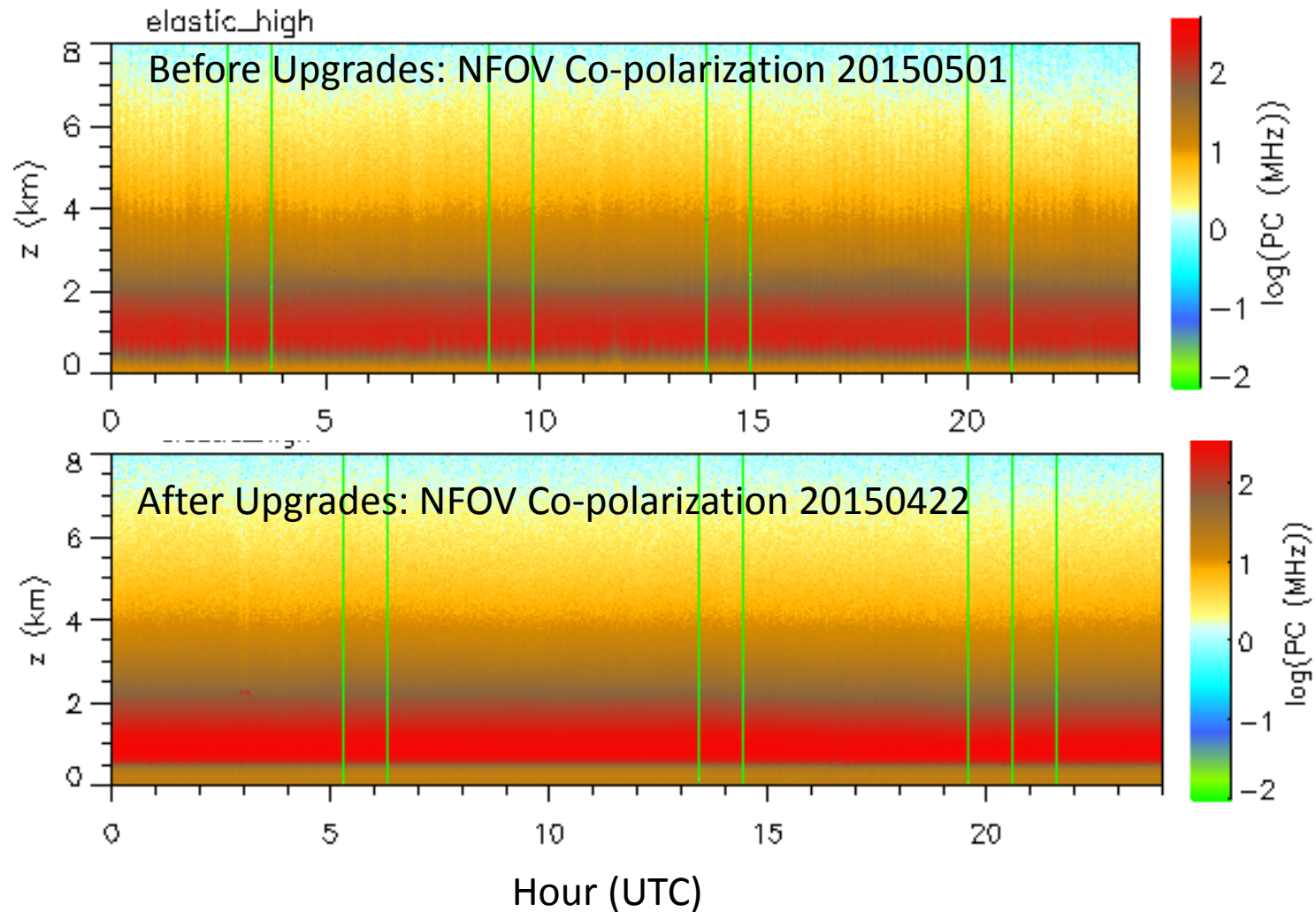
January 2016: Recommission



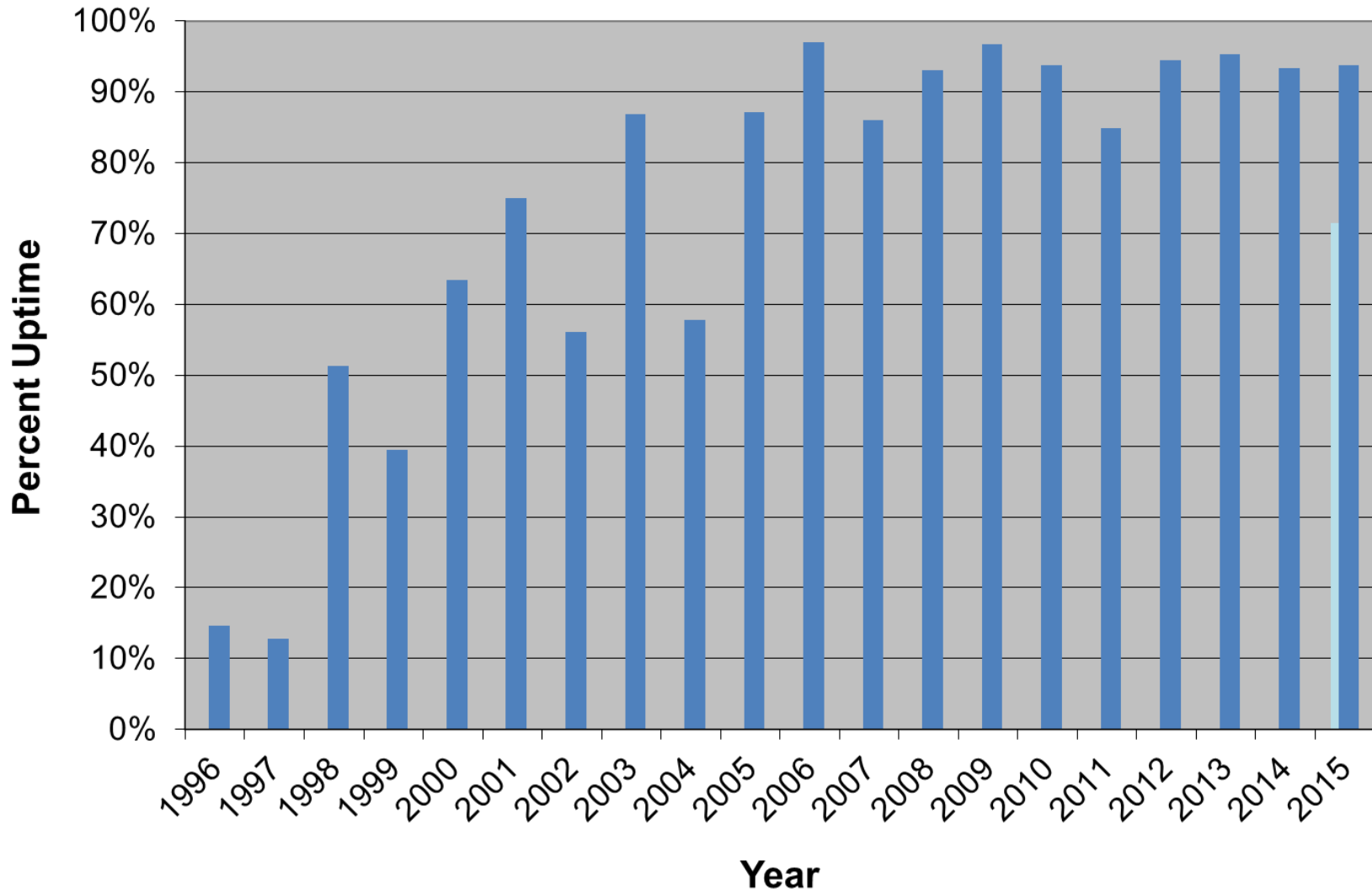
SGPRLC1 Thermal Cycling Issue Greatly Improved After Upgrades



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SGP system uptime

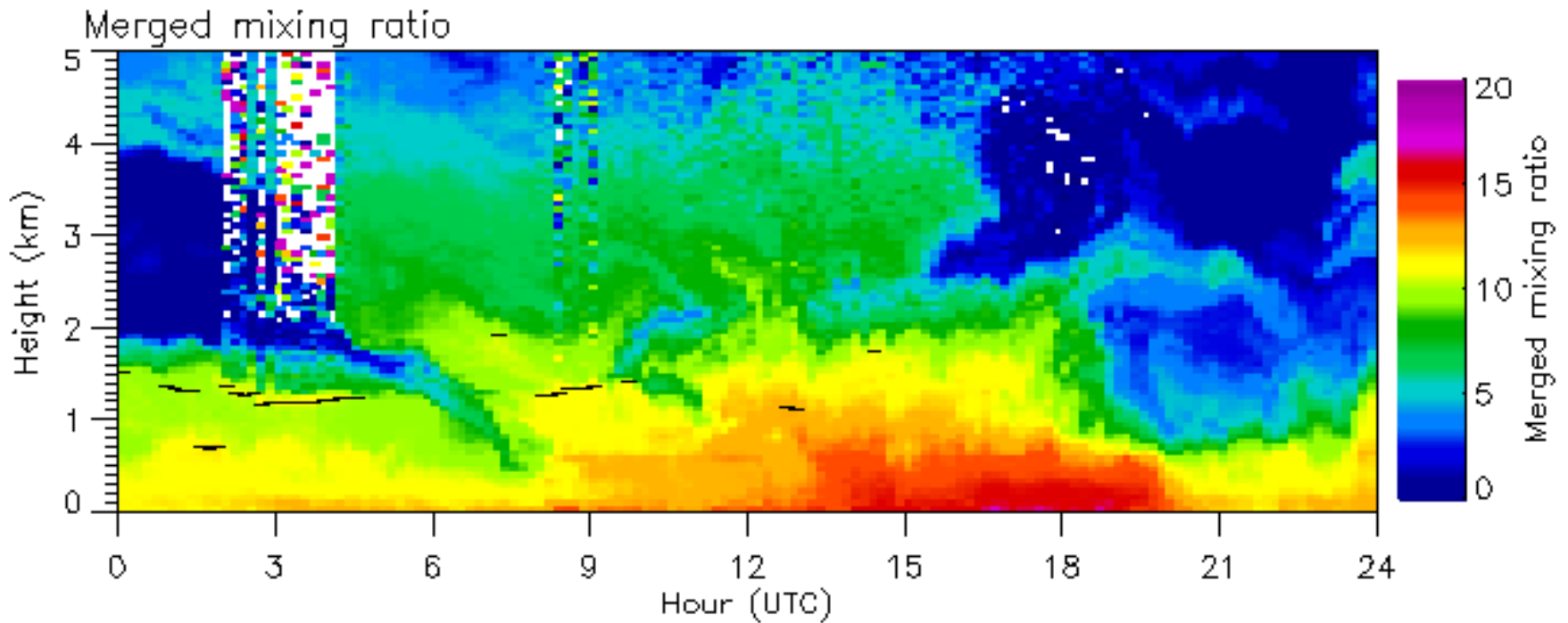


TWP -> ENA complete (first light at ENA 9/4/2015)



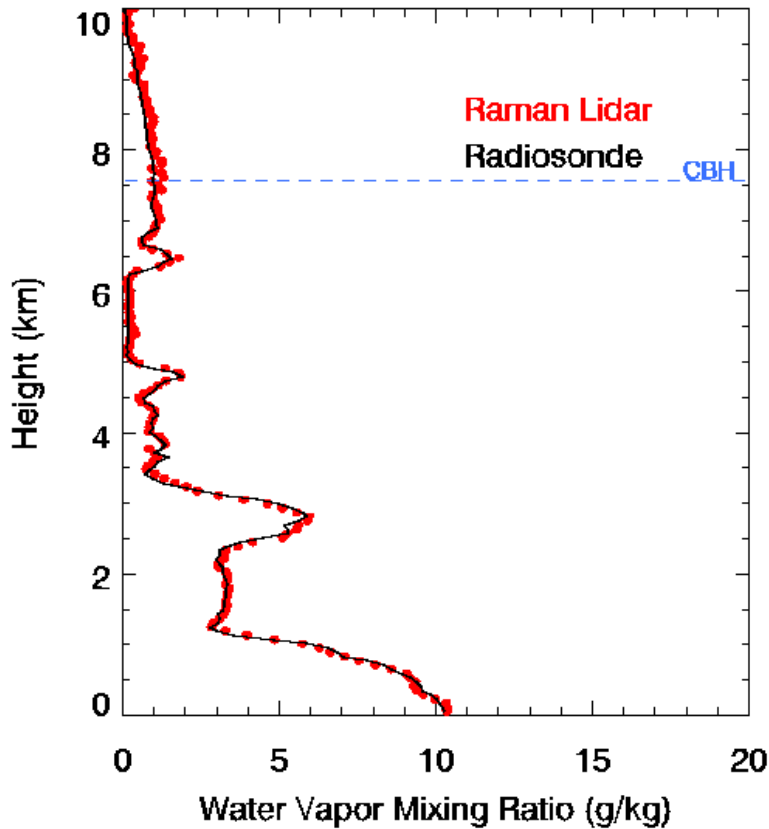
Water-vapor “image” from ENA

enaRLC1, mr, 20150927



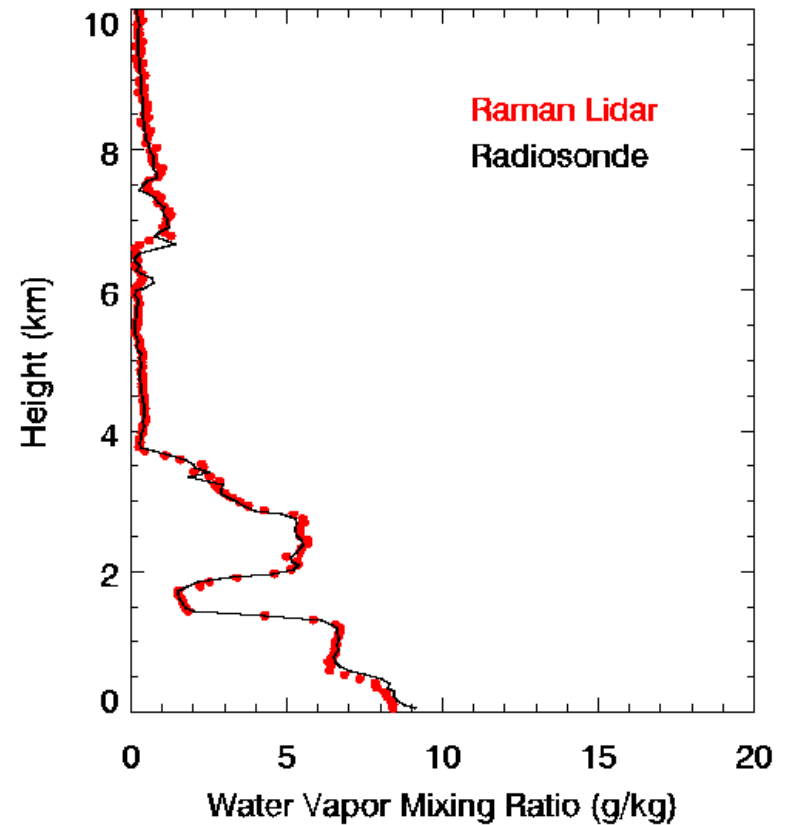
Radiosonde comparisons from ENA

enaRLC1 vs Sonde for 20151012 234500



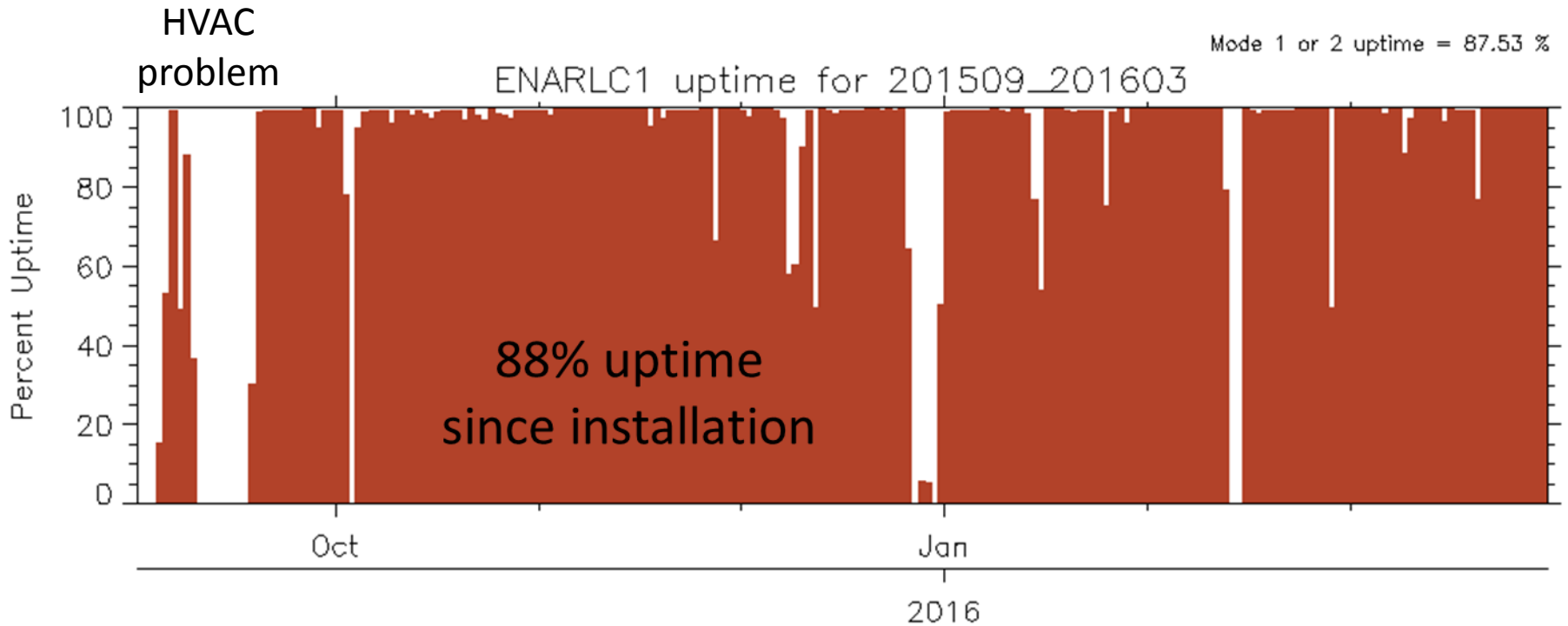
cna10r\profmr1nc\sc1.c0.profile.20151012_234500, Thu Oct 22 23:29:29 2015

enaRLC1 vs Sonde for 20151006 234500



cna10r\profmr1nc\sc1.c0.profile.20151006_234500, Thu Oct 22 23:21:14 2015

Uptime at ENA



Tue Apr 12 16:39:45 2016, R K Newsom

Recent update: laser failure on 4/20/2016

OLI/AMF3: Chamber of Commerce photo



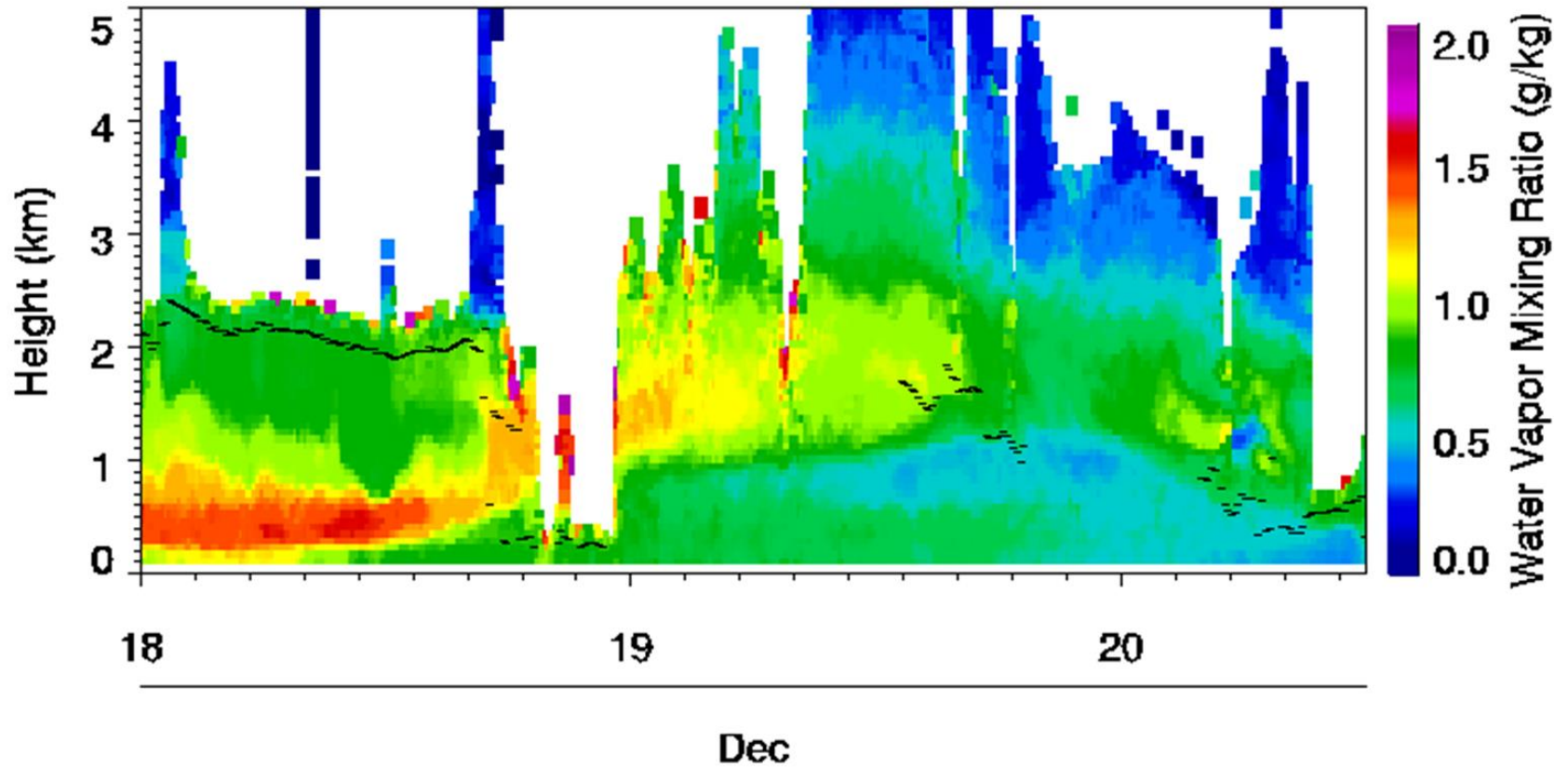
But sometimes...



Lasers aren't the only safety concern...

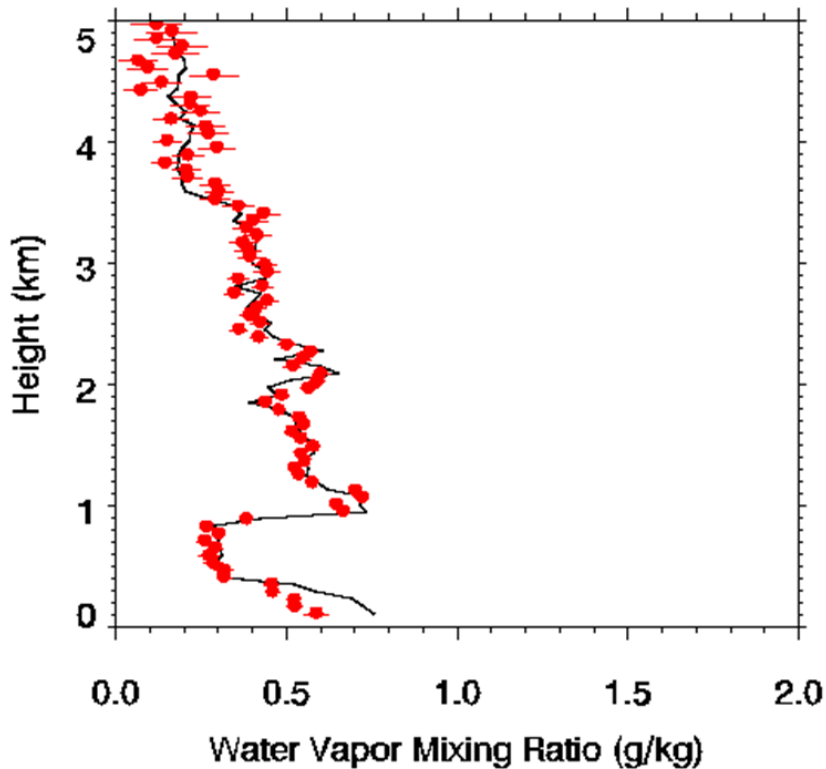


Water vapor “image” from OLI

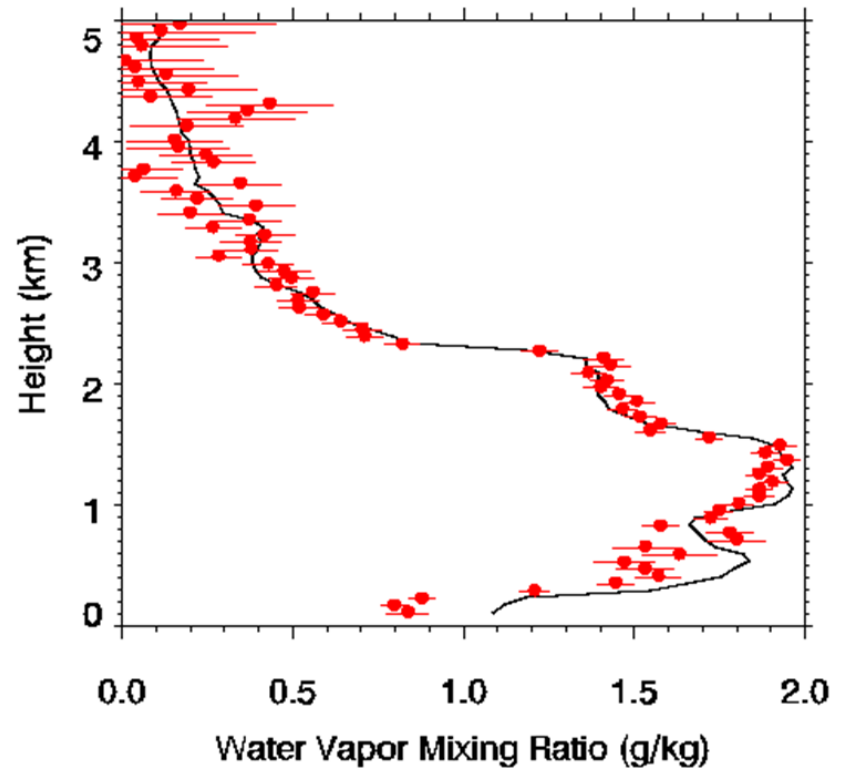


Radiosonde comparisons from OLI

olirM1 versus radiosonde, 20151113 17:45 UTC



olirM1 versus radiosonde, 20151124 23:55 UTC



Current status

- Laser system almost ready to ship back...