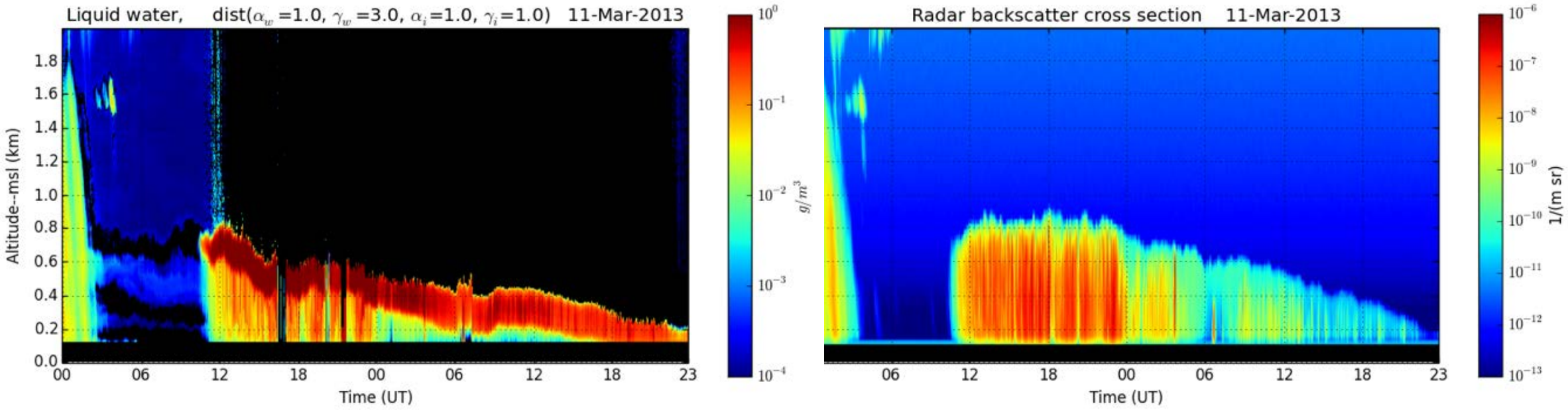
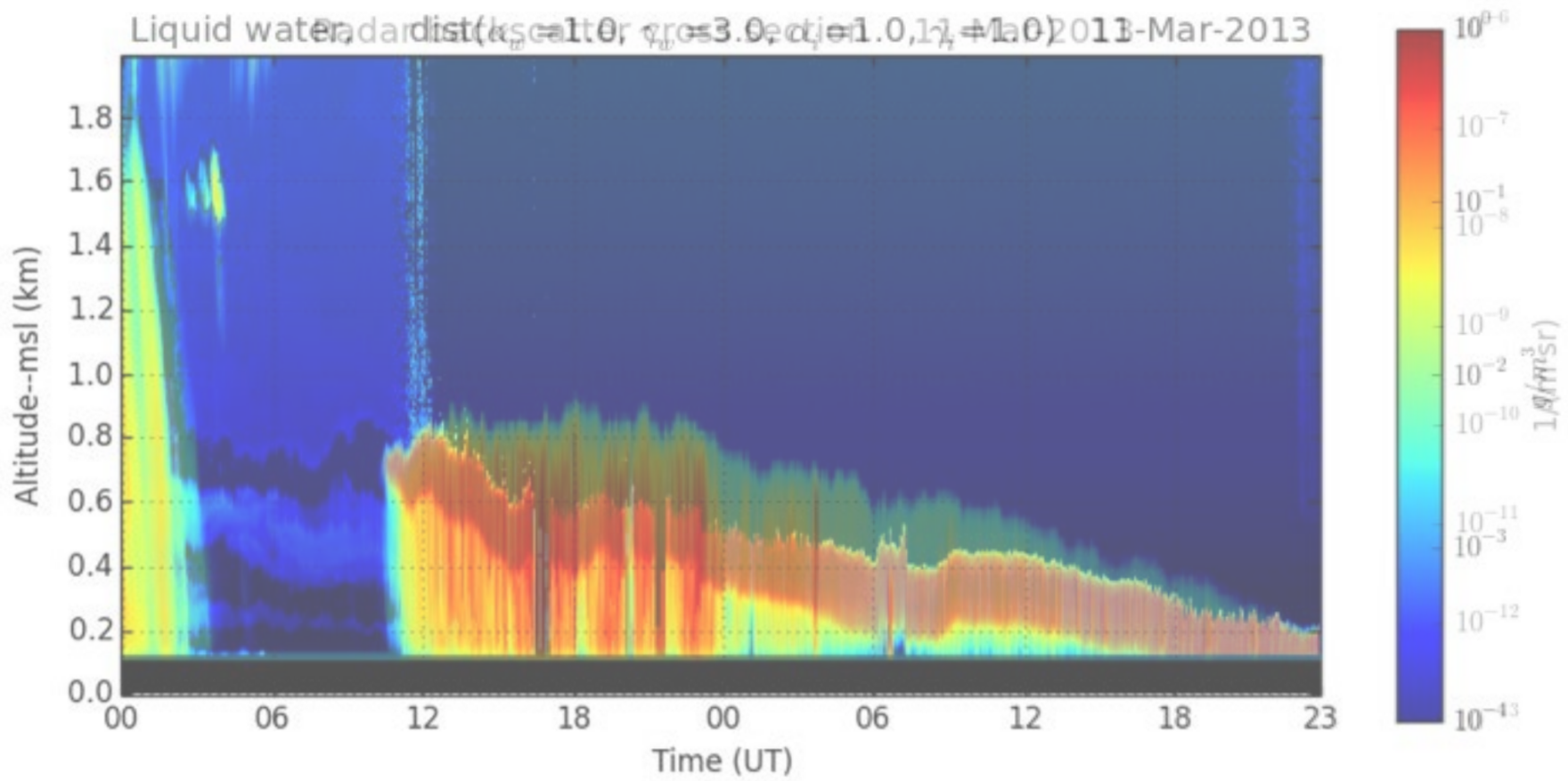
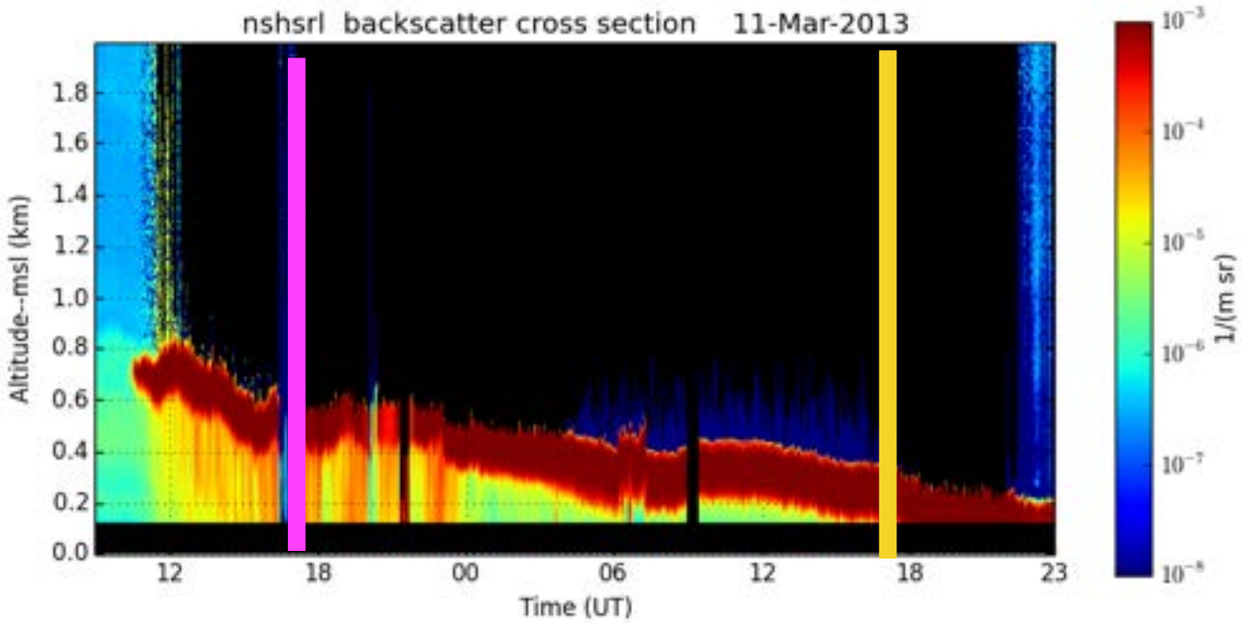
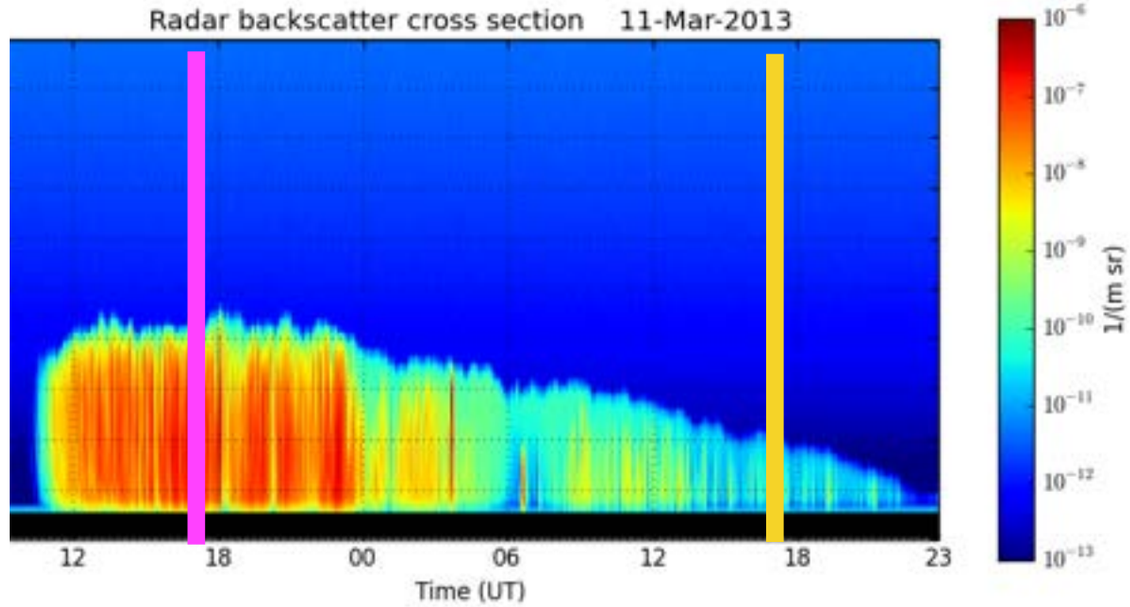
March 11-12, 2013

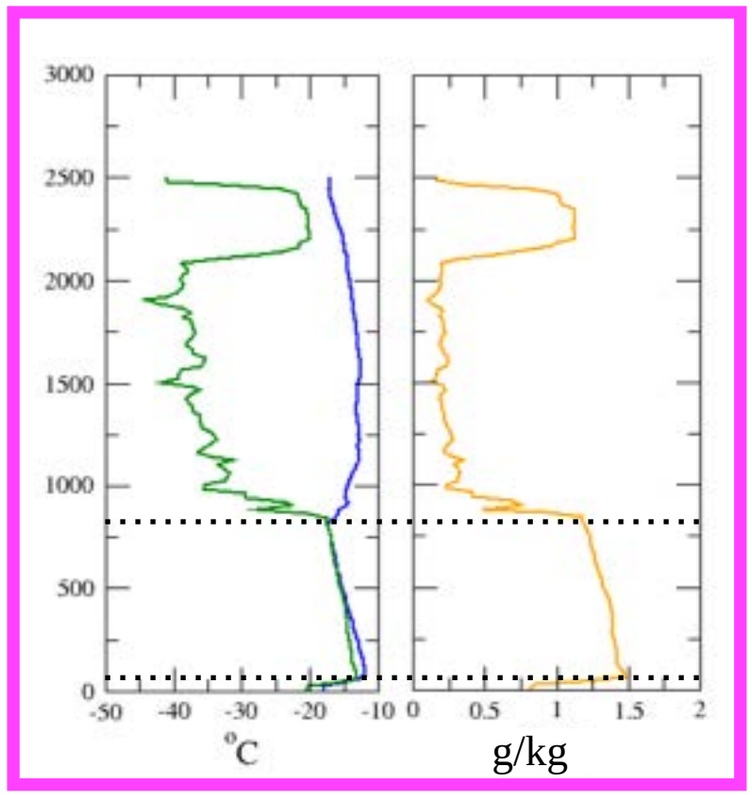
University of Wisconsin Lidar Group





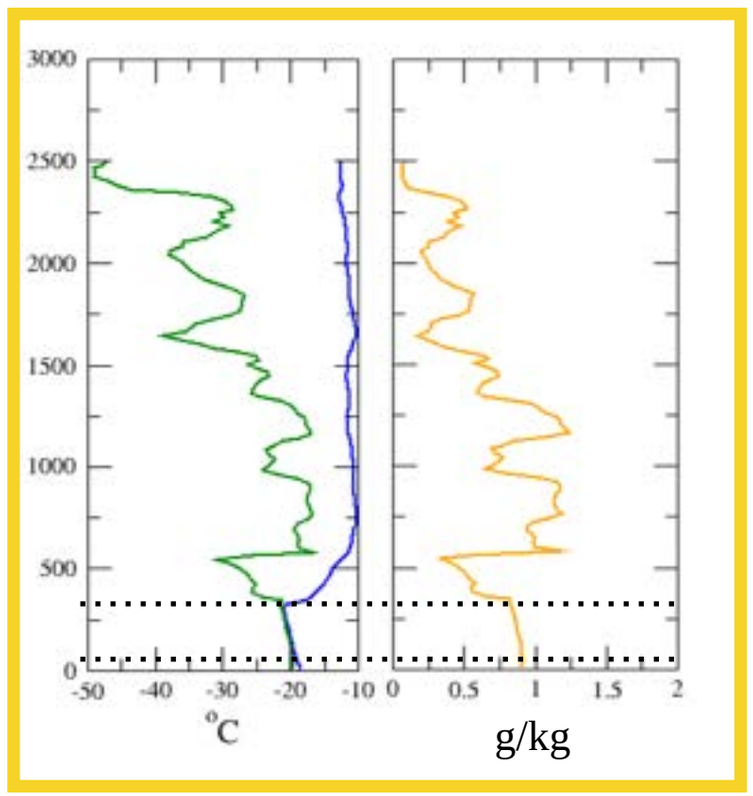






-15°C

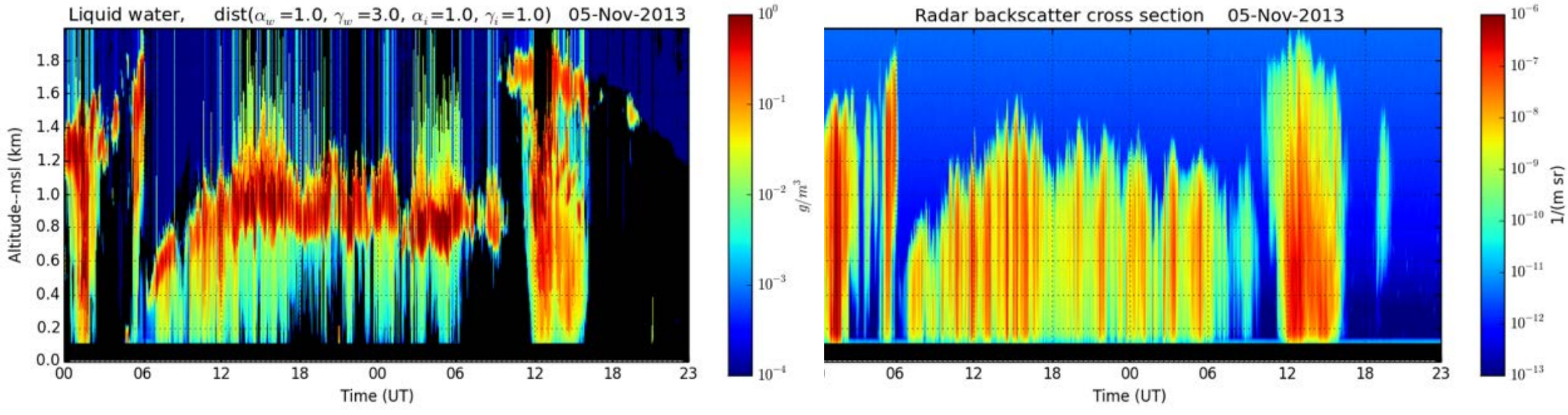
max rh = 99.25%

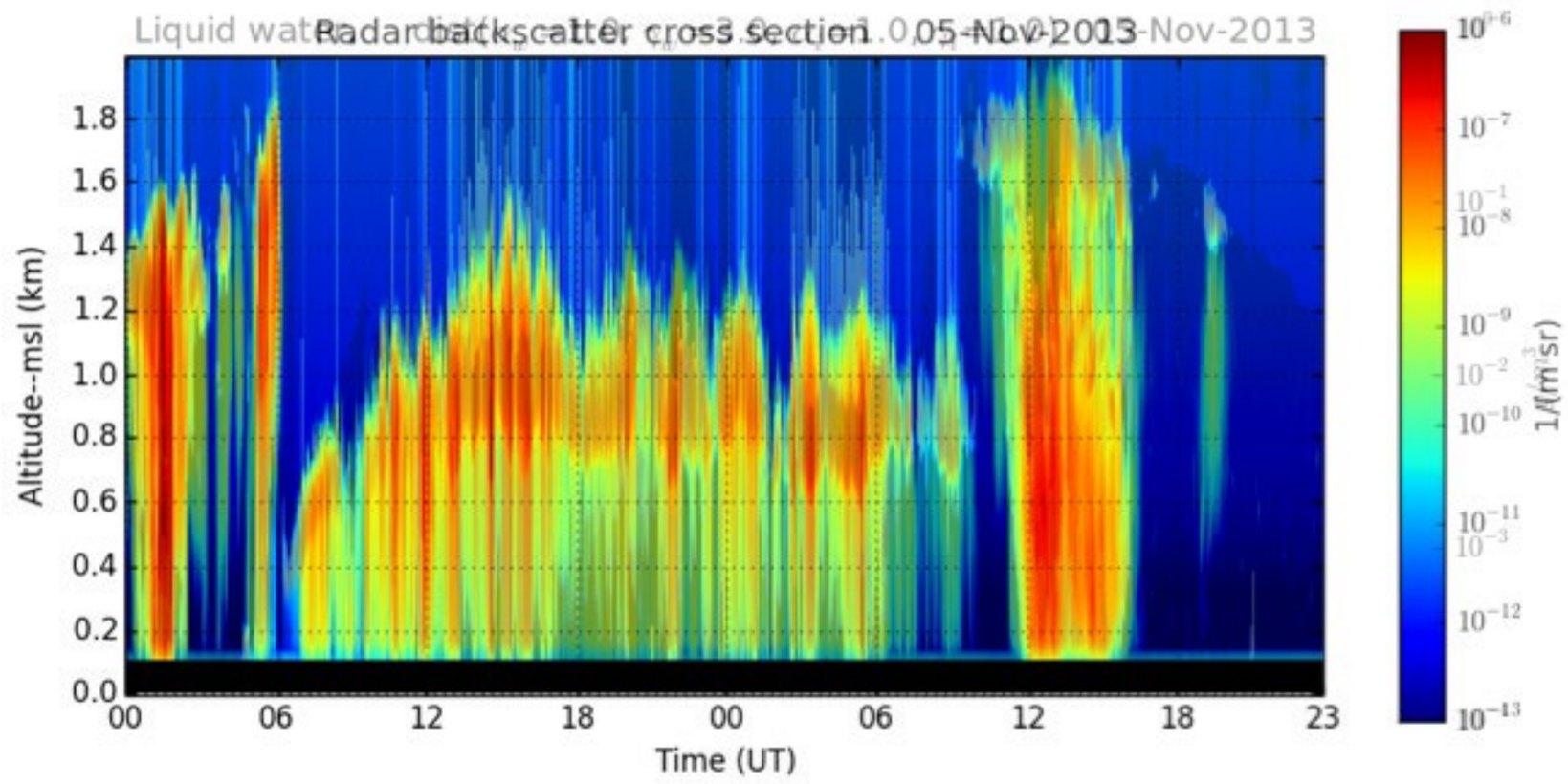


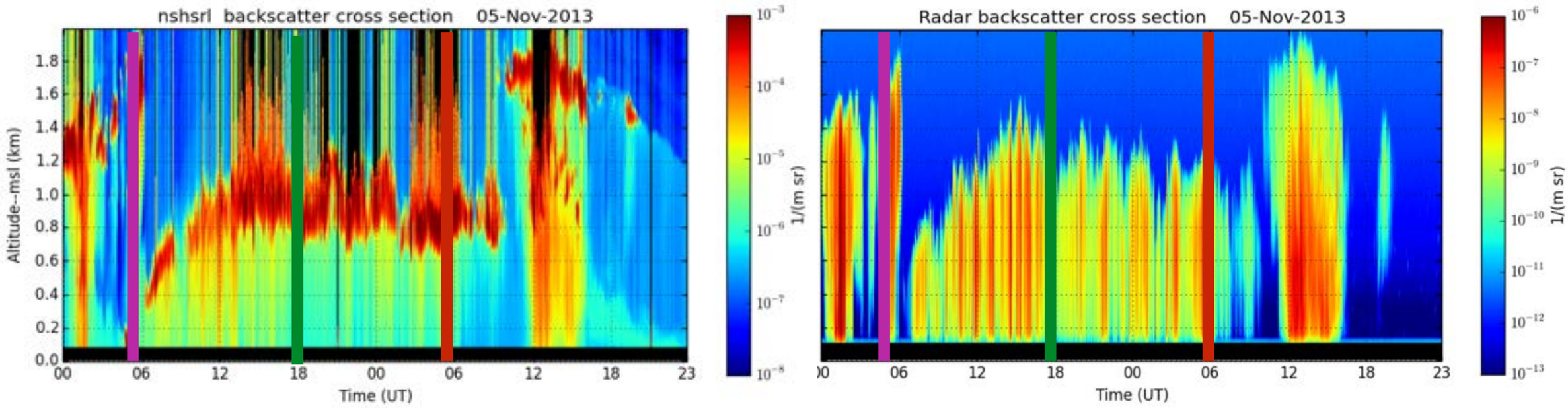
-20°C

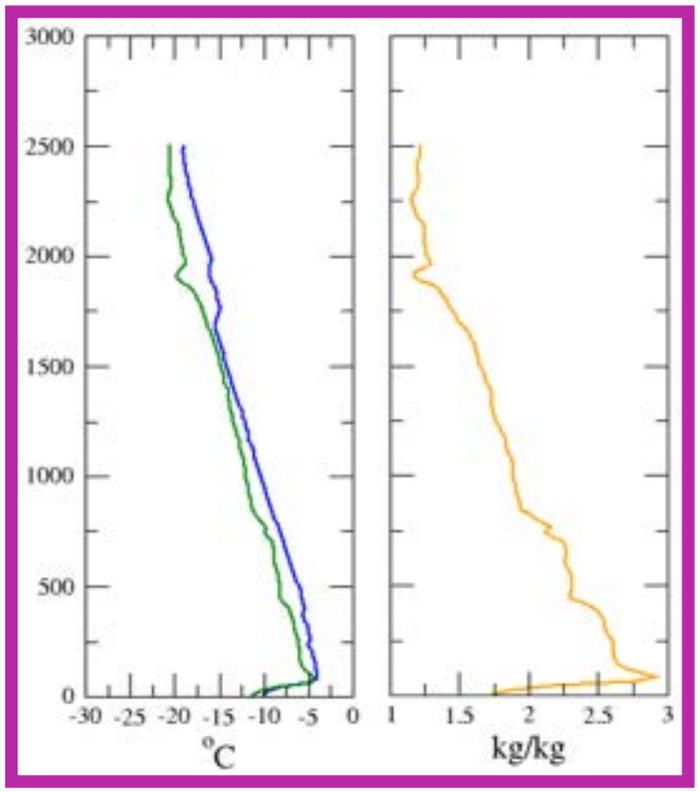
max rh = 98.17%

November 5-6, 2013

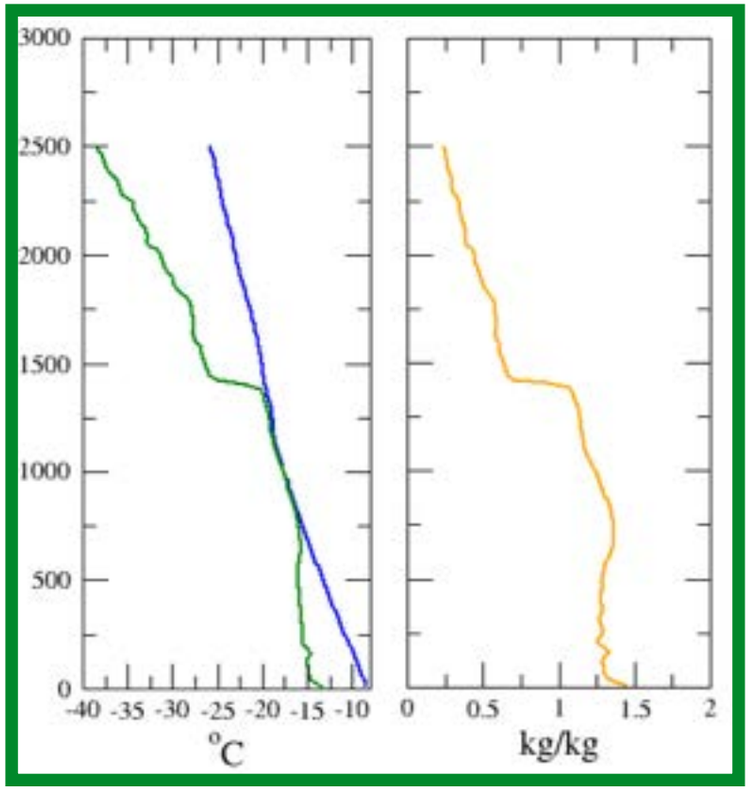




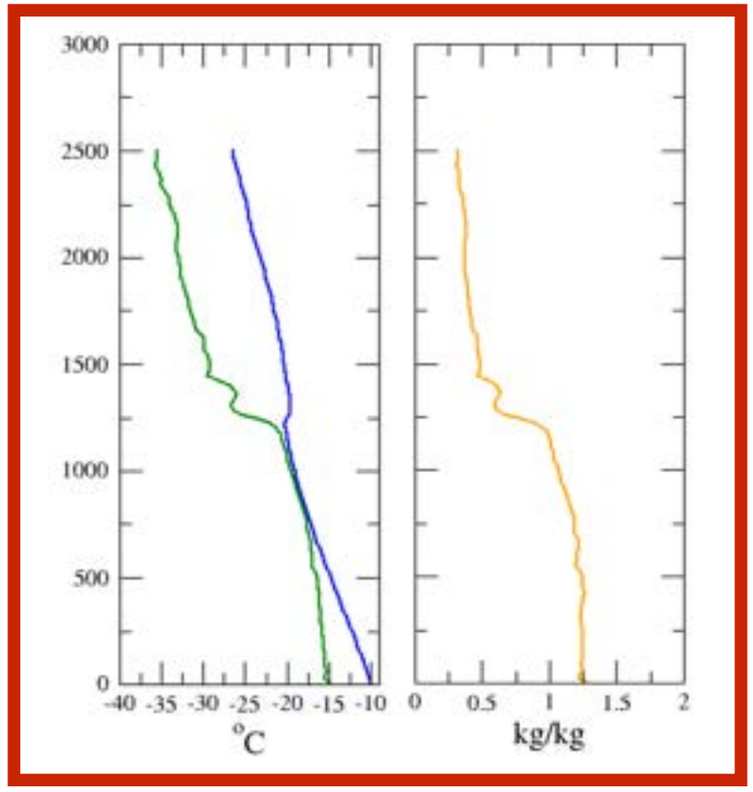




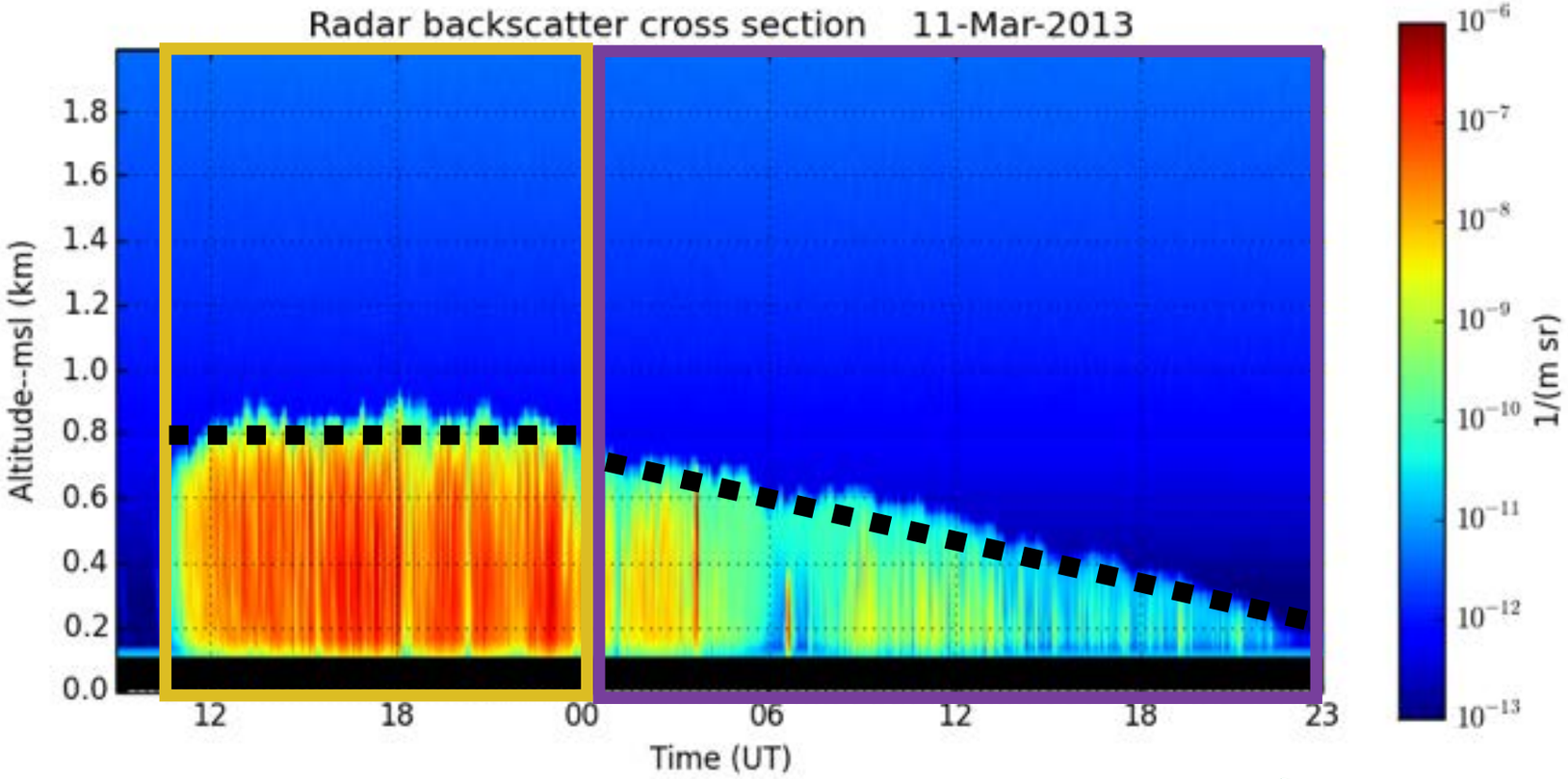
max rh = 98.75%



max rh = 99.23%



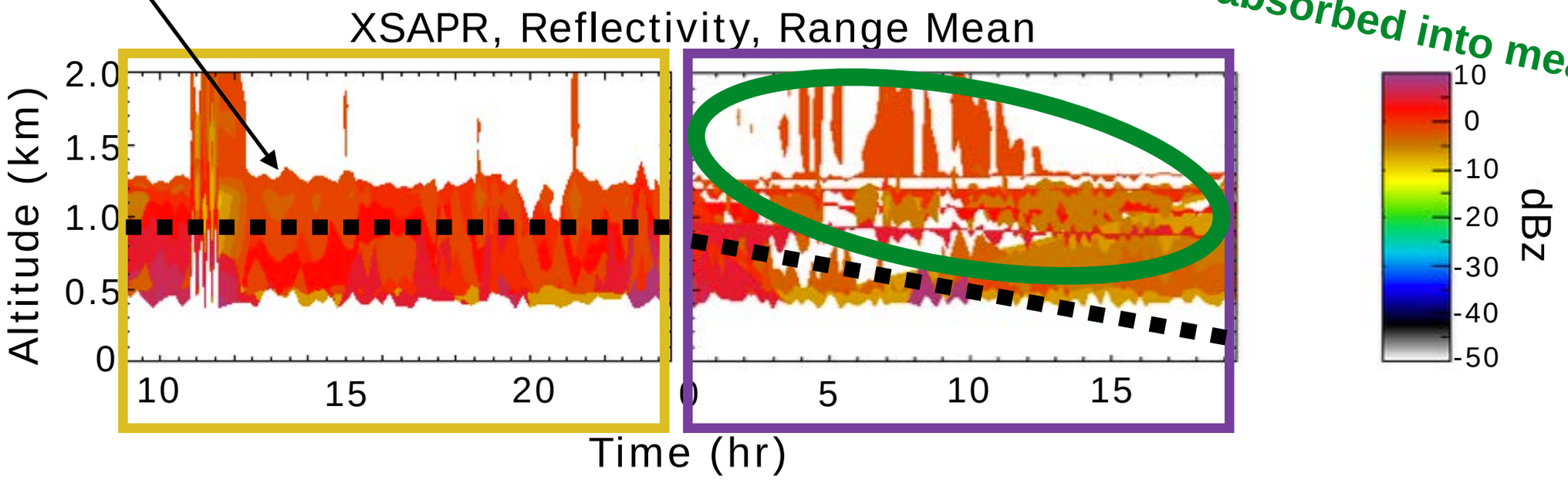
max rh = 97.33%



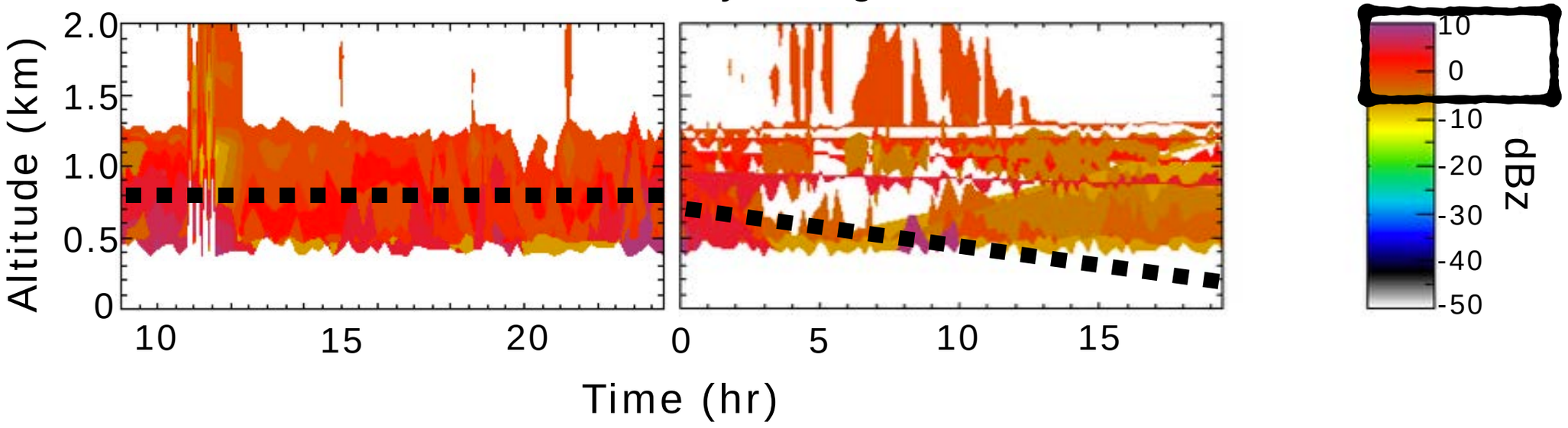
Random threshold I chose

Noise?

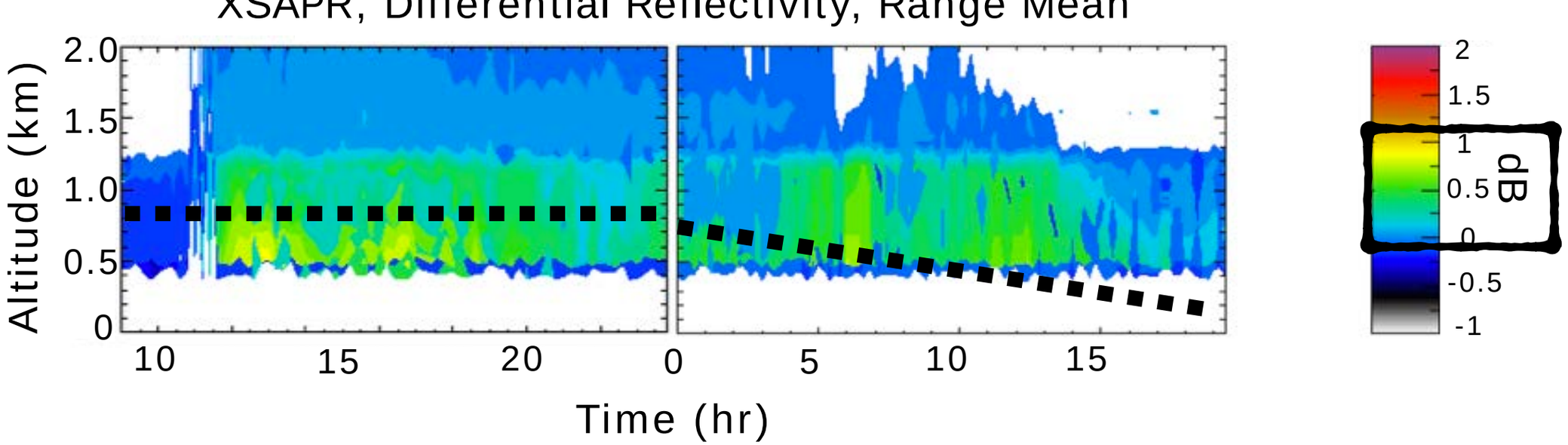
Extraneous particles absorbed into mean?

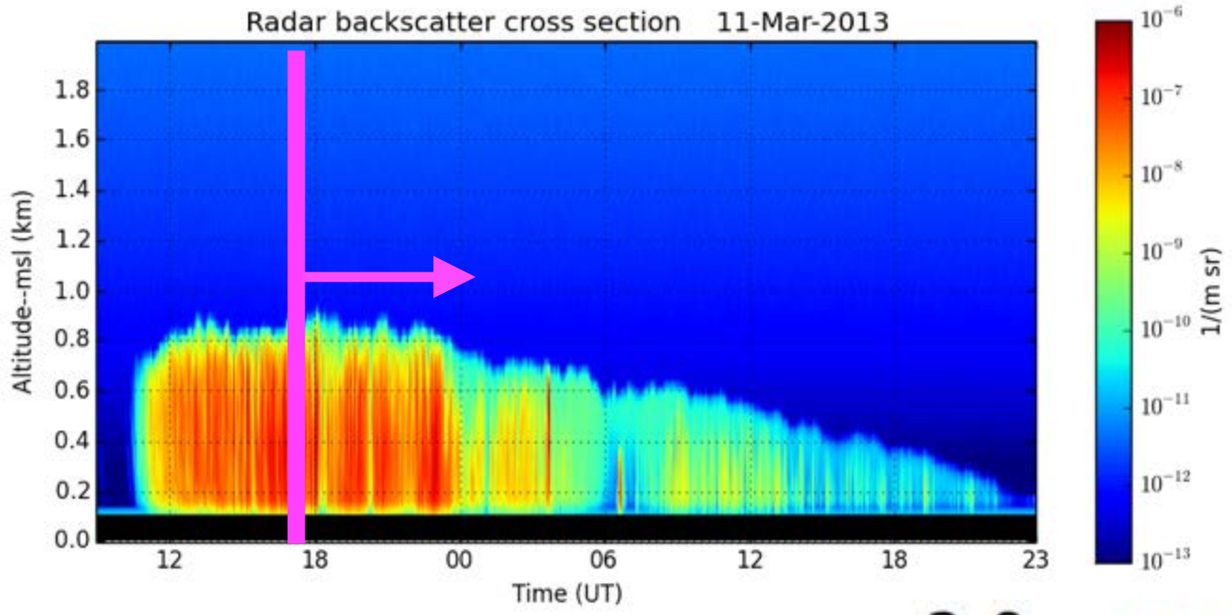


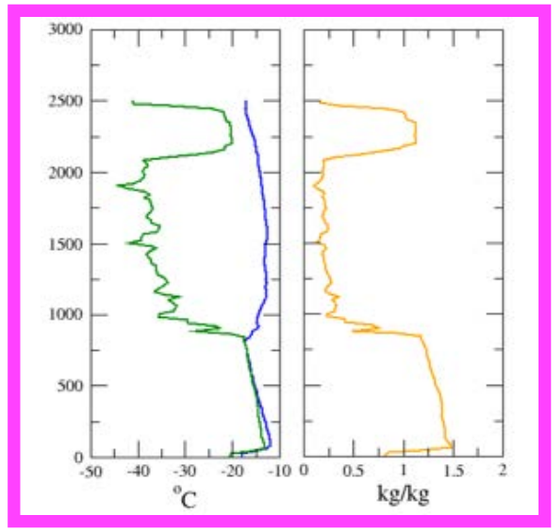
XSAPR, Reflectivity, Range Mean

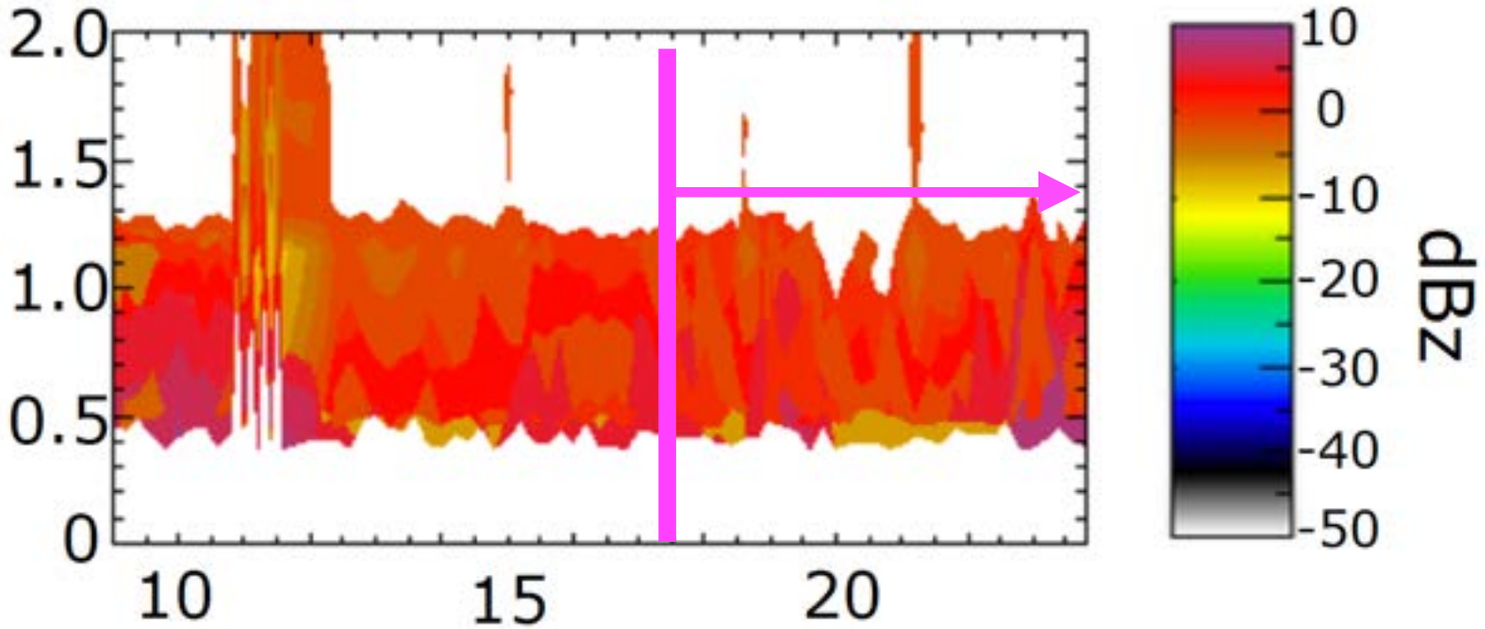


XSAPR, Differential Reflectivity, Range Mean

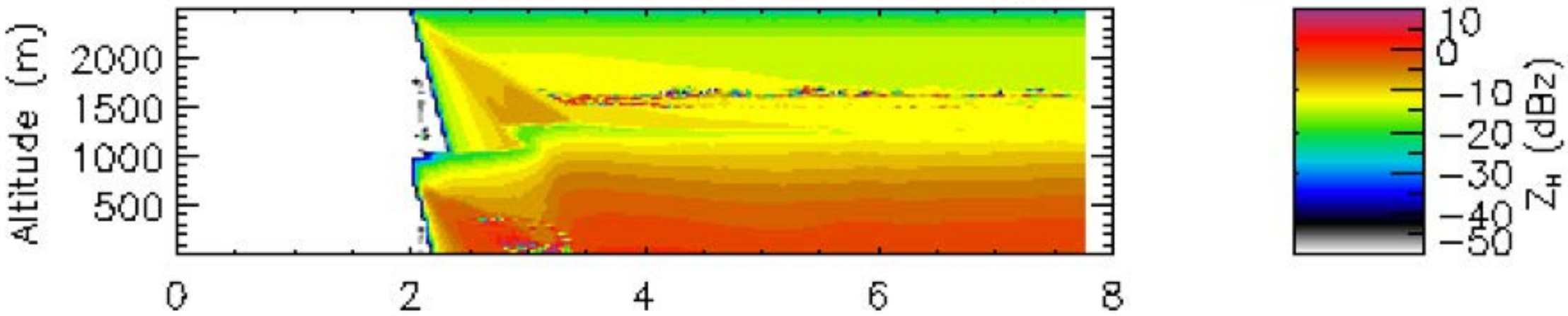








WRFLES
Adaptive Habit Model



Spin-Up Ice Nucleation & Growth

Overall Thoughts:

- Can use Lidar & KAZR to indicate structure
- Can use XSAPR reflectivity to act as a “middle man” between Lidar & KAZR data and model simulations
- XSAPR allows for comparisons to model simulations for dual-pol variables that cannot get with other radars

March Case:

- Nice temperature profile, but not the juiciest case
- Needed to bump simulations to higher concentrations to match obs Zh

Nov Case:

- More moisture, cannot find X-Pol data