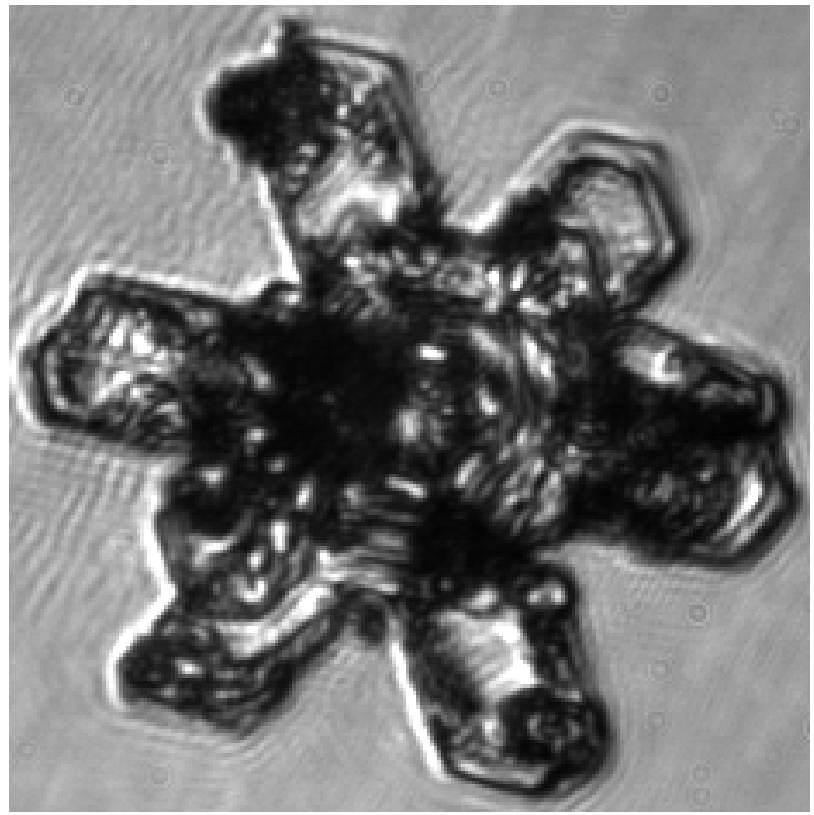
NCAR Interests: Physical Properties of Clouds and Storms

- Understanding the microphysical properties of clouds
  - Importance of warm (droplet) vs cold (ice) processes in producing precipitation
  - Role of cloud dynamics (e.g. updraft) in determining type of precipitation

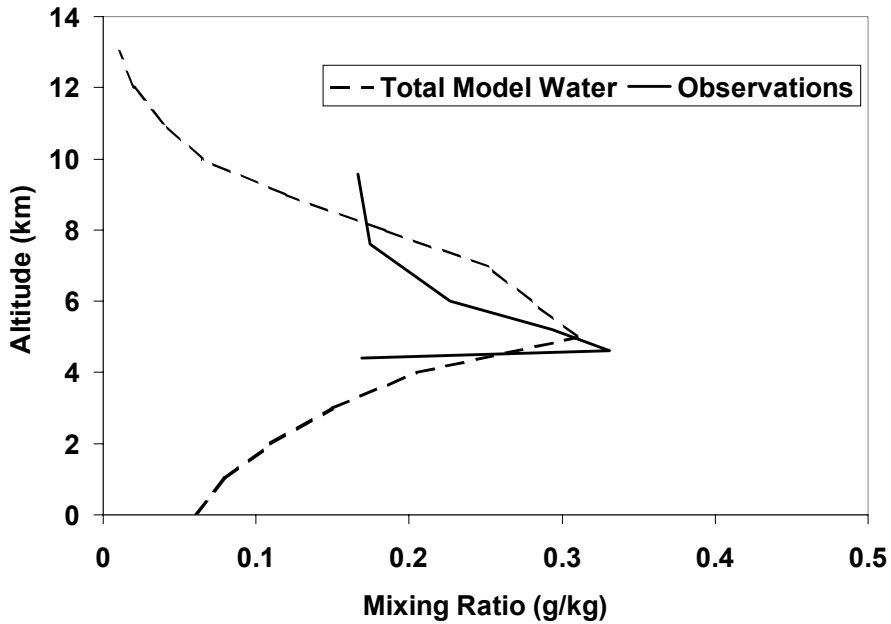


Ice image sampled during TRMM Field Campaign

J. Stith, NCAR

Improving Microphysical Parameterization in Cloud Models

- Determine if same parameterization schemes work for different geographical regions.
- Determine applicability of schemes for different cloud types.



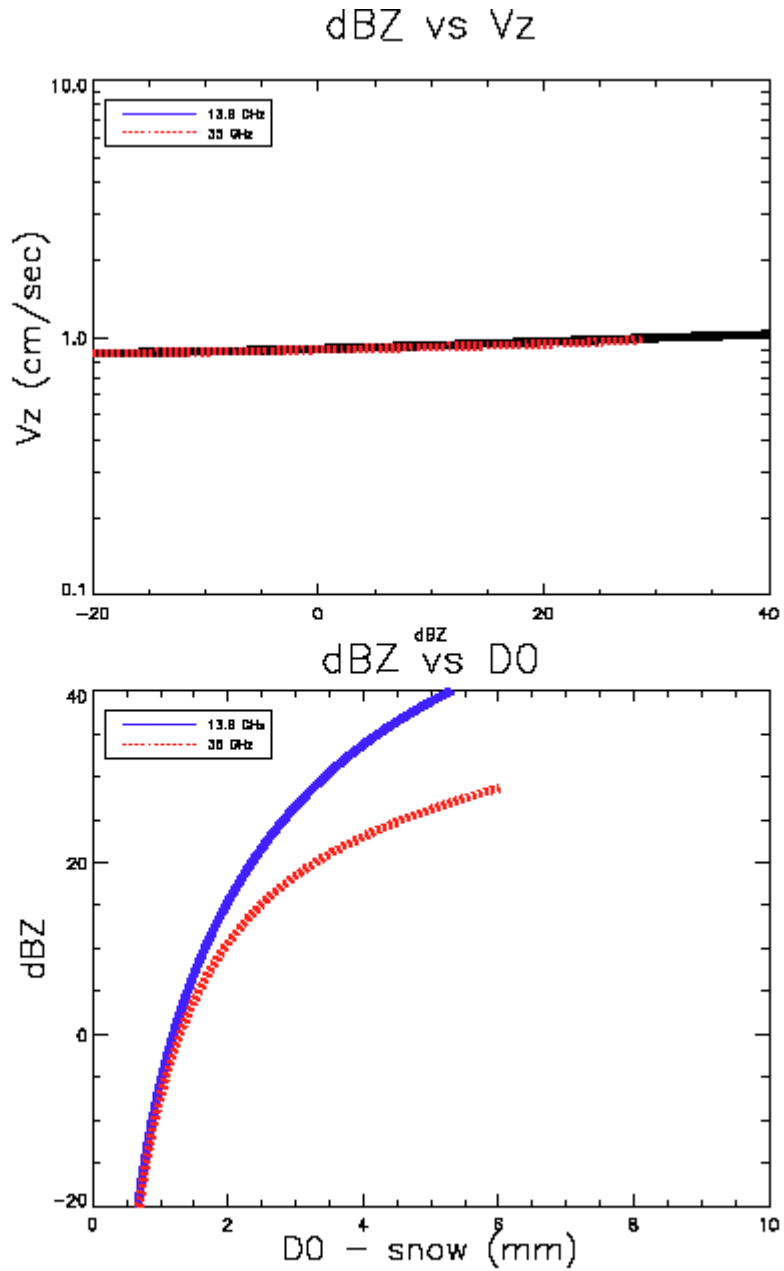
Comparison of Model output with measurements of total water

J. Stith, NCAR

Improving support for scientific field campaigns

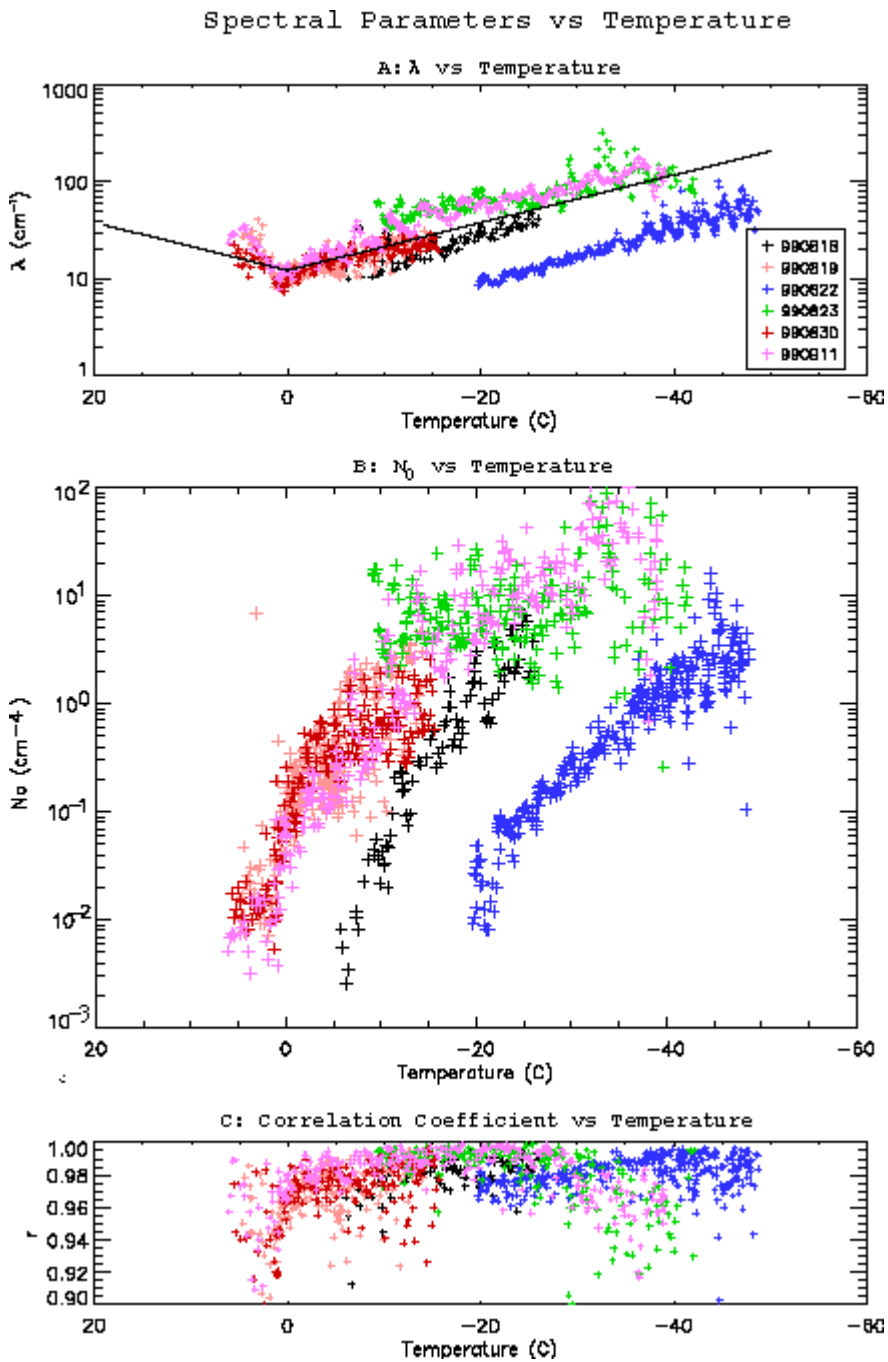
- Data from TRMM has provided valuable guidance for major atmospheric field campaigns, such as the recent Ace-Asia aerosol study.
- GPM can provide more complete coverage

J. Stith, NCAR

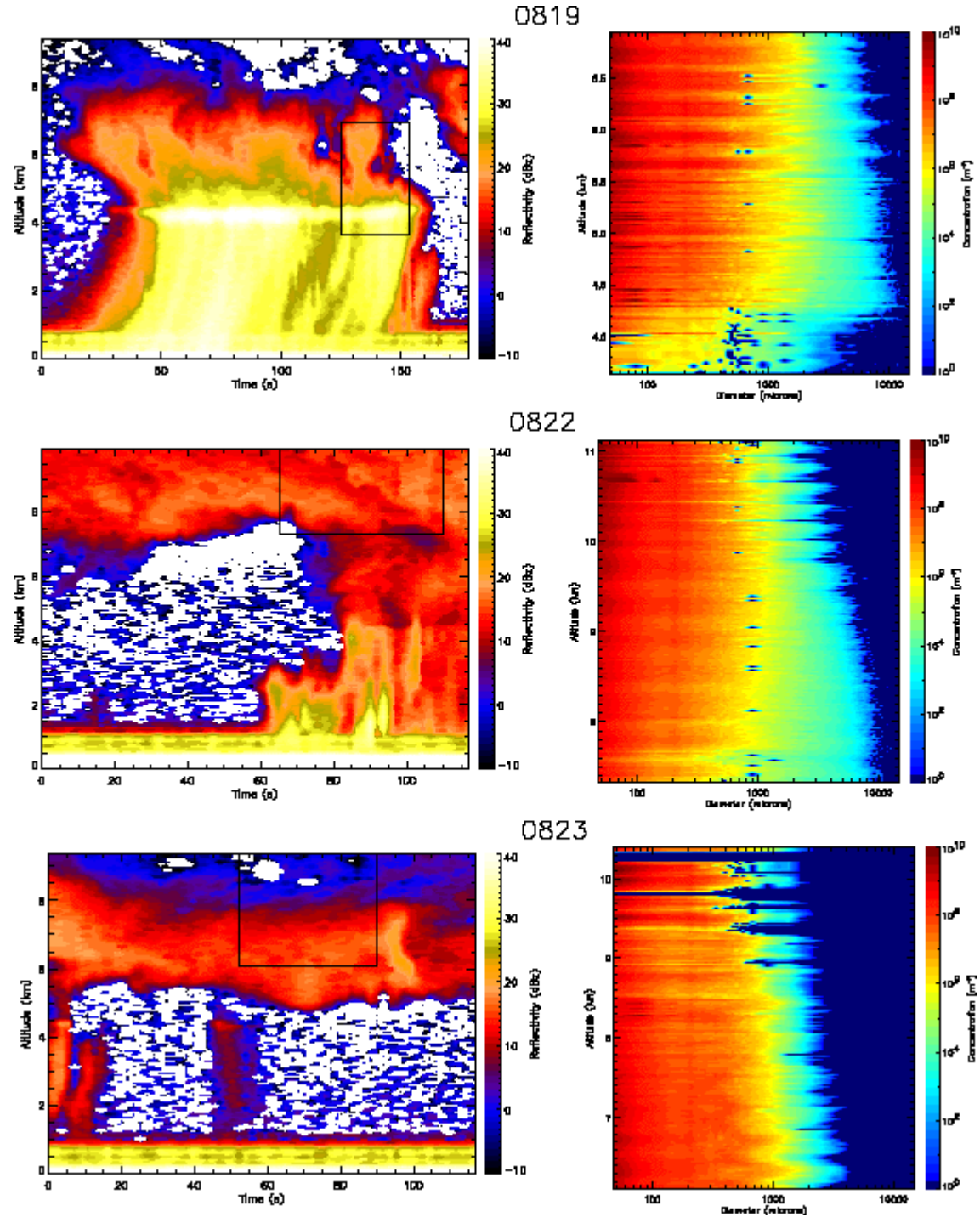


Heymsfield Fig2

A. Heymsfield, NCAR



A. Heymsfield, NCAR



A. Heymsfield, NCAR