

# Ice Clouds Sub-Group

- Houze – TWP-ICE Anvil Generation by MCSs
- Liu – Cloud Ice Retrievals for TWP-ICE
- McFarquhar – Measurements of Small Ice Crystals during TWP-ICE
- Mitchell – Bimodal Size Spectra and Ice Particle Mass-Area Relationships
- Comstock – Understanding RHI and Ice Crystal Growth
- Mace – Cirrus Intercomparison: Forcing Results

# Ice Clouds Retrieval Intercomparison Project

- BAMS article – Accepted; to be Published March 2007
- “An Intercomparison of Microphysical Retrieval Algorithms for Upper Tropospheric Ice Clouds”  
Comstock, d’Entremont, DeSlover, Mace, Matrosov, McFarlane, Minnis, Mitchell, Sassen, Shupe, Turner, and Wang

# Ice Clouds Retrieval Intercomparison Project

- Jay Mace Cloud Forcing Analysis
  - Compared observed and calculated cloud forcing for a number of cases at SGP
  - Small IWP/small forcing cases have too little forcing for all retrievals
- Path Forward
  - Currently analyzing sensitivity to  $r_e$
  - Initial results: IWP dominates
  - Validate the forcing results using clear and cloud sky fluxes
- BBHRP Project

# Instrument Prioritization

- Working MMCR's
  - Improved QC monitoring
  - Calibration
- Upper tropospheric extinction at NSA
  - Daytime and nighttime
  - HSRL or Raman lidar

# VAP Recommendations

## Released/Development VAPs

- MPL Visible optical depth VAP released
  - `sgpmplcod1comflyC1.c1`
- Temperature/IWC/LWC from Raman Lidar
- Cloud Classification
- MPLNOR – Currently not running

## Proposed VAPs

- Raman Lidar cirrus extinction
- Polarization MPL VAP (NSA and others)