

Quantification of Uncertainty in Cloud Retrievals (QUICR) breakout session

Agenda

Thursday, 13 March 2014 (Room #3)

10:30 – 12:00

1. Breakout goal and FG related issues (S. Xie – 5 minutes)
2. BBHRP update (L. Riihimaki – 10 minutes)
3. PSUADE in MICROBASE (Q. Tang – 15 minutes)
4. Uncertainty in forward model calculation (G. Mace – 20 minutes)
5. Discussion (Mace/Protat/Xie, 40 minutes)

1) Ideas on a major field campaign proposal to build a statistically comprehensive library of mass- and area-dimensional relationships in atmospheric ice clouds (any other properties that are important and normally assumed in retrievals)

- *Which instrumentation is mandatory?*
- *Which PIs want to invest time in this?*
- *Sharing with EU is an option (perhaps a necessity)?*
- *Which cloud target do we want to start with and in which geographical location?*
- *What strategy do we want to adopt?*
- *How should we pursue collaboration with the European cloud retrieval community and ASR modeling community?*

2) Ideas on DOE-EU collaborations

- *Use synthetic datasets to evaluate retrieval algorithms*
- *Build a set of real-atmosphere datasets for algorithm development and evaluation (i.e. ARM/EU COPS)*
- *Create common guidelines for calibrating and characterizing uncertainty in ground-based instruments*
- *DOE/ARM Data Portal (<http://useu.ornl.gov/cap/>) to share data, codes, forward models etc.*
- *Characterize uncertainty of forward models*
- *Develop common optimal estimation framework*