new ideas – session 1

new ideas (1)

- identify the MAIN limitations in aerosol modelling (for better climate projections)
- document radiative transfer codes and quantify potential biases
- improve aerosol vertical distributions (apply CALIPSO data) … one issue is the diversity in the free troposphere

new ideas (2)

- extend to ‘aerosol - cloud - precipitation’
- constraint on wet scavaging (the ‘popular’ tuner) … with CALIPSO data ?
- understand diversity for aerosol water (Is it just a problem of the host GCM ?)
- improve emission data input to modeling (will inverse modeling help ?)

suggestions

- down-scale with cloud-resolving models
- link wet scavaging to vertical profiles
- explore existing data-sets (RICO, TC4 NASA campaign, SCOUT, HIPPO, …)
- use CALIPSO to co-locate aerosol and cloud in altitude
- develop simplified method that capture the essence of processes (e.g. SOA)