

# **Low-Cloud Feedback Working Group Report**

- ▶ Four/five presentations, one being a point of outside information.
- ▶ Reviewed, affirmed, base strategy: (i) isolate meteorological characteristics associated with divergent low-cloud feedback response; (ii) understand how clouds should change to represent such forcings; (iii) develop tools for looking at the coupled parameterization: (a) improved MMF; (b) improved conventional parameterizations
- ▶ We are in step (i), looking toward step (ii). UW group has made nice progress using a compositing approach with mean forcing. UCLA/CSU group has been struggling at the interface between the SCM and GCM to develop a strategy that includes transients. This will be ongoing.
- ▶ Step (ii) has had some ground work done, in terms of resolution studies with LES, incorporation of more sophisticated microphysical representations and radiative transfer models; but this work is missing an observational component.
- ▶ Regarding step (iiia) we should begin developing experience that allows us to use the prototype approach on smaller sub-domains (non-global refinement) and with finer resolution. Toward this end working toward a finer resolution MMF (also vertical) is necessary. For step (iiib) there is working going on both at Hampton/NASA and Durango/CSU, but this is hampered by the lack of clear targets waiting on (ii).
- ▶ Interest in forming a small data group to address the fruits of (ii); Plan for a subgroup meeting in late March early April (UW, UCLA, DOE/Livermore, JPL, Pincus) to help advance our thoughts on opportunities for data based exploration.