

# Knowledge Transfer to NWP & Climate Modeling Centers



**Knowledge Transfer**

**CMMAP STM Meeting  
UCLA, 15-17 Jan. 2008**



# KT Action Items

*(Aug. 2006, Feb. 2007 STM)*

## **Actions Underway:**

- Develop student/post-doc interactions among CMMAP and modeling centers.
- Subject MMF to same tests used by climate community.

## **Extensions / next steps:**

- Evaluate MMF using GFDL, NCEP, ... diagnostics?
- Analyze MMF's skill for short-range forecasts?
- Analyze MMF's performance for GCSS test cases?
- Subject MMF to the CFMIP-2 protocols for cloud feedbacks?
- Translation of MMF results into IPCC AR4 PCMDI framework
  
- Others?



# New research-related areas

- Analysis of implications of SuperCAM for coupled climate
- Exploration of MJO  $\leftrightarrow$  ENSO connection in coupled mode?
- Simulation of mid-latitude storms and cloud systems?
- Others?



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# Philosophy of standard tests

- How does diagnosis in community frameworks constitute knowledge transfer?
- Once the results are sufficiently compelling for both climate and NWP, will climate and weather centers begin active work on MMF?
- Role of centers: KT recipients or stake-holders



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# Philosophical discussion

- *Anonymous NWP modeler:*  
“Put to bed the idea that NWP centers would use MMF in near future.”
- *Anonymous FOG (friend of global) modeler:*  
“We need to demonstrate that the simulations are demonstrably better, and the reasons can be attributed to processes.

If we find out that MMF does not do a hugely better job, then we need to understand why.”

- *Advice from Jay Fein:*  
“Producing a basis for moving towards the goal, but not necessarily reaching the goal, would still be a tremendous legacy.”

