

U.S. Climate Change Science Plan (2004-5)

"CCRI will support continued development and refinement of computational climate models. Priority activities will focus on improving model physics (particularly with respect to clouds and aerosols)..."



IPCC Third Assessment (2001)

"...Cloud processes are most important for determining ... temperature, changes in models. ...Considerable uncertainty remains; this represents a significant source of potential error in climate simulations. The range in estimated climate sensitivity of 1.5 to 4.5°C for a CO2 doubling is largely dictated by the interaction of model water vapour feedbacks with the variations in cloud behaviour among existing models."



Think Different

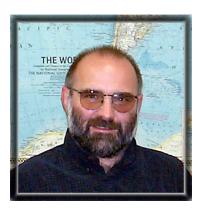
We need a new approach to solving the cloud puzzle.



Fortunately, a new approach has recently emerged through:



Advances in computing power



Human imagination

Timeline

November 2000	DR suggests that Marat create a super-parameterized version of the CAM	
Spring 200 I	Marat produces the first results from the super-parameterized CAM	
Summer 2001	DR starts to seriously consider proposing an STC	
Late 2001	DR decides to go for it, and we begin waiting for the NSF announcement to come out	
February 2002	DR visits NSF to discuss the STC idea with Jay Fein	
Spring 2002	DR starts drafting the STC proposal	
October 2002	The Snowstorm Workshop at the Fort Collins Marriott	
March 2003	The NSF announcement comes out	
May 2003	Major planning Workshop	



Timeline

June 2003	The Pre-Proposal is submitted	
October 2003	NSF invites us to submit a Full Proposal	
Late 2003	Three more Workshops	
February 2004	The Full Proposal is submitted	
Early June 2004	NSF emails to say that we will be site-visited	
October 2004	Site Visit	
January 2005	Six of the twelve site-visited proposals are declined, but ours is not declined	
April 2005	DR visits NSF to meet Margaret Tolbert	
July 2005	The Limbo Workshop in Fort Collins	

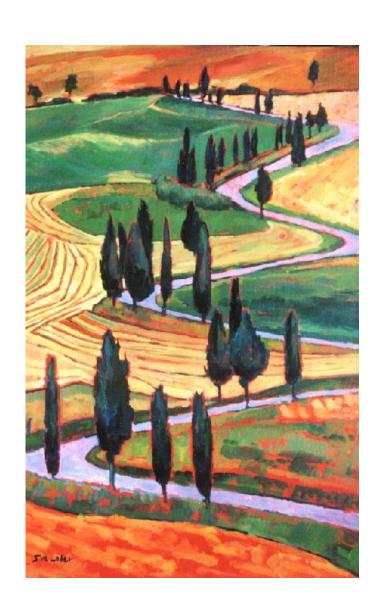


Timeline

December 2005	We get the word that NSF is "moving towards an award"	
February 2006	/ideo conference	
May 2006	Retreat	
June 2006	Strategic Plan approved	
July 2006	Award	

The long and winding road

- Your Wildest Dreams
- Stairway to Heaven
- Sitting in Limbo
- Heaven's Just a Sin Away
- Once in a Lifetime



Thanks.

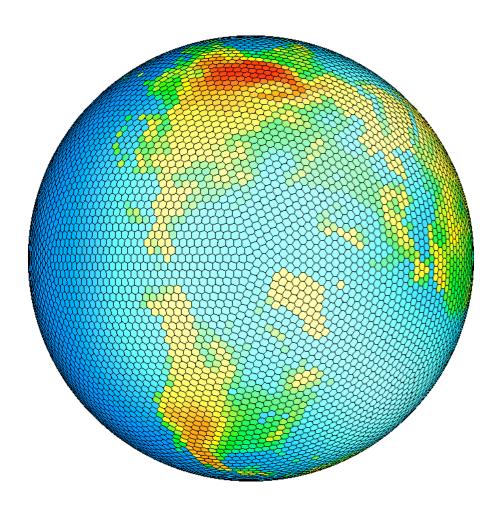
WG MK Wanda and ARM CSU **Proposal Plotters Cost-Sharers Strategic Planners Travelers** Jay and NSF **MAC** Foundation And many more...





		Tuesday, August 15, 2006		
8:30	David Randall Hank Gardner Opening remarks Jay Fein			
8:45	David Randall	31 rate		
9:15	David Randall Research overview		objectives, an	
10:00	Break Meeting			
10:30	Scott Denning Education and Diversity overview			
11:15	Wayne Schubert	ert Knowledge Transfer overview		
11:45	Lunch			
13:15	Cindy Carrick and David Randall Getting your money and other items of interest			
14:00	Working groups Reporting (CC).			
15:30	Break Break			
15:45	Akio Arakawa	Progress towards a Quasi-3D MMF	Ethics training (VK), EAP (DR), Computing (DR), Web site (DR) Visitors (CC)	
16:15	WG Leaders	Reports from working groups		
17:00	David Randall	First-day wrap-up		
17:15	Adjourn for the day			
18:00	Reception at the Marriott			
20:00	Reception ends			

Research

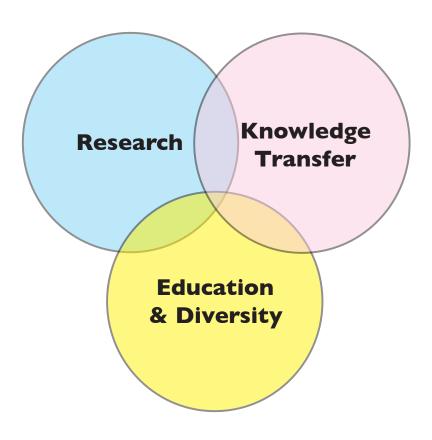


Education and Diversity



Knowledge Transfer







Wednesday, August 16, 2006				
8:30	David Randall	Marching orders		
8:45	Wojciech Grabowski	Cloud microphysics and climate: Progress and prospects	Scott	
9:15	Masaki Satoh and Hiroaki Miura	Design and testing of a global cloud-resolving model	chairs	
10:00	Break			
10:30	Working groups			
12:00	Lunch			
13:30	Bjorn Stevens	Solving the cloud feedback problem	Chin-Ho chairs	
14:00	Howard Drossman	Systematic approaches to Atmospheric Science education		
14:30	Raj Pandya	CMMAP and SOARS		
15:00	Break			
15:30	WG leaders WG reports			
16:15	David Randall	Wrap-up for the day		
16:30	Adjourn for the day			
18:00	Barbecue at DR's house			

	Thursday, August 17, 2006					
8:30	Bruce Wielicki	Climate, MMFs, and satellite observations				
9:00	Working groups					
10:30	Break					
10:45	WG leaders	WG reports				
11:30	David Randall	Wrap-up, and plans for the next meeting				
12:00	Meeting ends					

