



CLIVAR's Interest in Decadal Variability, Predictability, and Prediction

DCV-DCPP-VIII

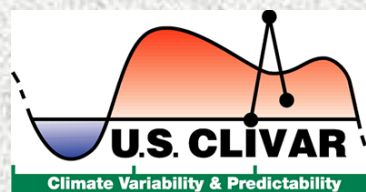
October 15-17, 2009 St Michaels, MD

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CLIVAR Activities

- Modelling Activities
 - CMIP5 Near Term Experimental Protocol
 - CMIP-WGCM-WGSIP oversight group
 - WCRP Climate-system Historical Forecast Project
 - WGOMD Coordinated Ocean-ice Reference Experiment
 - GSOP Global Synthesis Evaluation Framework
- Regional Activities
 - Atlantic Implementation Panel
 - Pacific Implementation Panel
 - Indian Ocean Panel
 - And other Panel's activities

CLIVAR Imperatives



- Anthropogenic Climate Change
- Decadal Variability, Predictability and Prediction
 - Determine predictability
 - Mechanisms of variability
 - Role of oceans
 - Adequacy of observing system
 - Initialization
 - Drought
 - (Building pan-WCRP links)
 - (Complete CMIP5)
- Intraseasonal and Seasonal Predictability and Prediction
- Improved Atmosphere and Ocean Components of ESMs
- Data Synthesis and Analysis
- Ocean Observing System
- Capacity Building

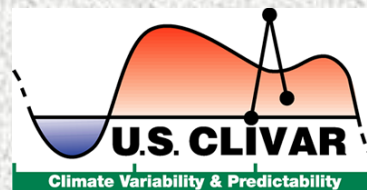


WCRP Conference
Spring 2011

US CLIVAR

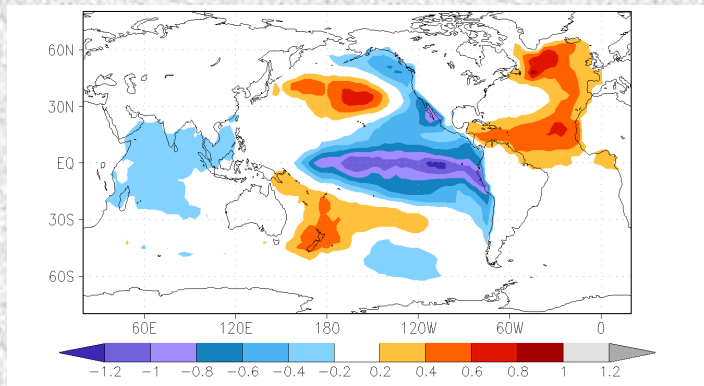
Decadal is a US CLIVAR Focus

- Working Group (short-term) on Decadal Predictability
 - Co-chairs Amy Solomon, Lisa Goddard, and Arun Kumar.
 - Develop a framework/white paper to distinguish natural variability from forced variability- assess predictability of decadal-scale climate variations that is added by initialization of climate projections.
 - Identify metrics that can be used as a strategy to assess and validate decadal-scale climate predictions and simulations.

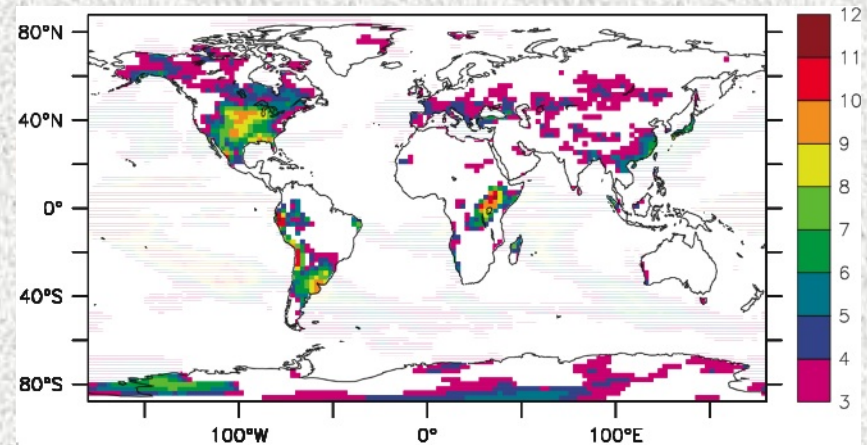


Drought Working Group

- DWG Web page
- Coordinated model simulations
- Focused workshop on drought (with DRICOMP) Oct 2008
- Special Issue in JCLIM (20+ pubs)



“Perfect” SSTA pattern
for US drought



Model mean implications for
global drought

Atlantic Meridional Overturning Circulation (AMOC)

- U.S. effort spinning up (Science Team has nearly two dozen members); some early tangible results
- First AMOC Workshop May 2009 (observational focus); 100+ attendees
- Strong agency interest and support (three agencies are now funding a range of activities)
- Four Foci:
 - Observations/changes in AMOC, Climate Impacts, Assimilation, AMOC Predictability



Summary

Decadal variability, predictability, and prediction is an important priority to
CLIVAR

Congrats on 8th Workshop

U.S. CLIVAR Program

