

Quick Update on CLIVAR activities



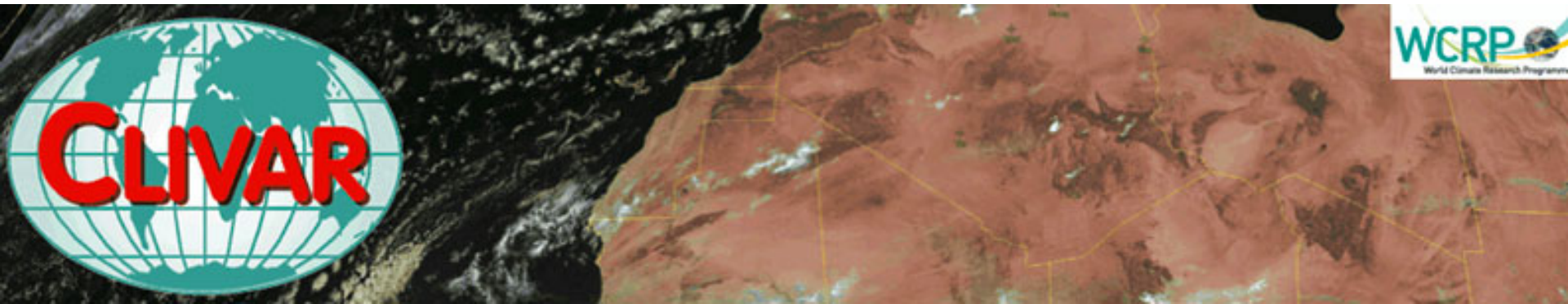
SOG-19, La Paz, Mexico, 11-14 June 2012

WCRP WDAC meeting, EUMETSAT, 4-5 March 2013

Martin Visbeck, Roger Barry, Keith Haines, Lisa Goddard, Valery Detemmerman,
PP Mathieu.

CLIVAR Mission

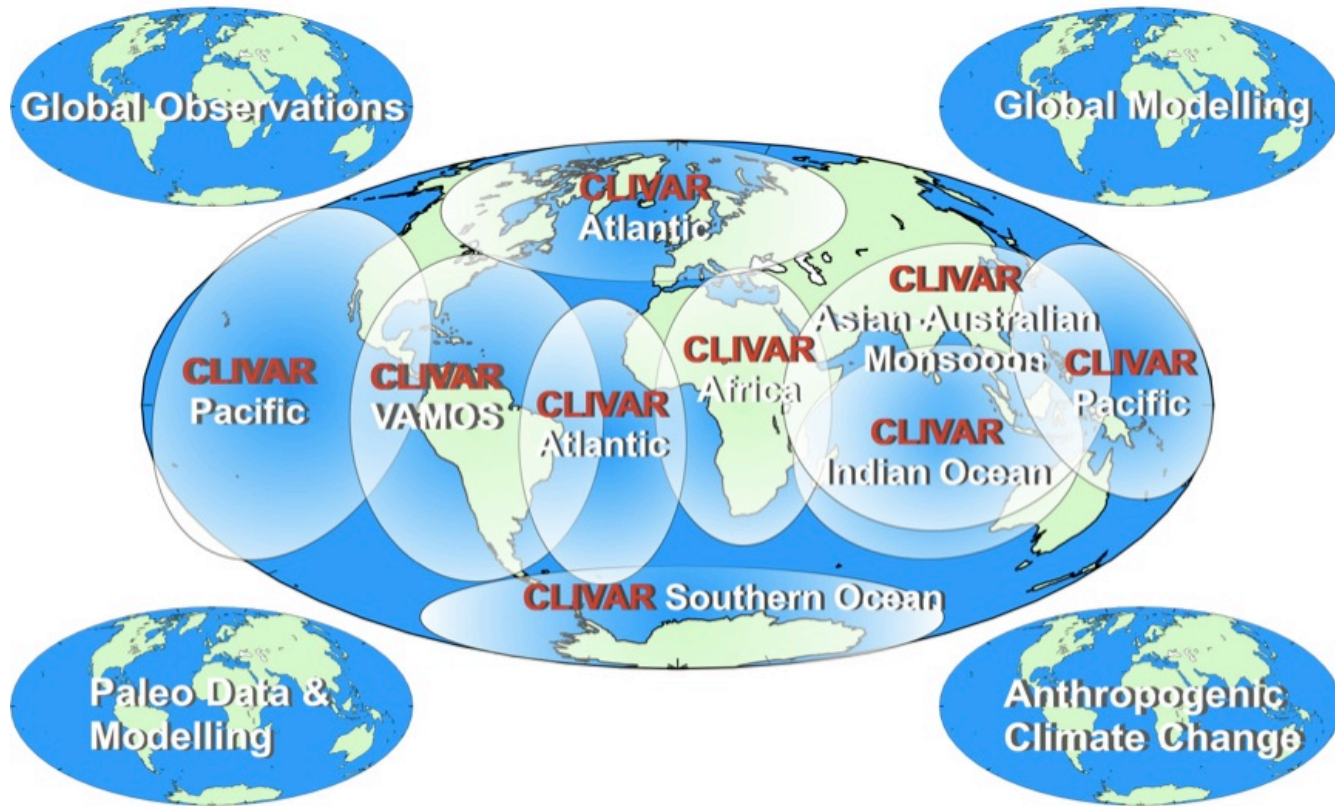
The World Climate Research Programme's project on ocean-atmosphere interactions



To observe, simulate and predict changes in Earth's climate system with a focus on ocean-atmosphere interactions, enabling better understanding of climate variability, predictability and change, to the benefit of society and the environment in which we live.

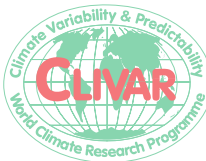


CLIVAR Global View with regional implementation



CLIVAR Objectives

- **Understand the causes of climate variability on intra-seasonal to centennial time-scales through *observations, analysis, and modeling*.**
- **Improve predictions of climate variability and change associated with both internal and external processes.**
- **Extend observational climate record through assembly of quality-controlled paleoclimatic and instrumental data sets.**



CLIVAR Key Capabilities

- **Improving ocean observing systems**
- **Improving ocean system models**
- **Ocean data, synthesis and information systems**
- **Support of global assessments**
- **Knowledge exchange with societal actors**
- **Education and capacity building**



CLIVAR Organisation (evolving)

Scientific Steering Group

ICPO

———— Crosscutting (global) Panels ————

Observations & Data

Modeling

Global Synthesis &
Observations Panel

PAGES / CLIVAR
Working Group

Working Group on
Seasonal to Interannual
Prediction

JSC / CLIVAR
Working Group on
Coupled Modeling

CCI / CLIVAR Expert Team
on Climate Change Detection and Indices

Working Group on Ocean Model Development

———— Regional Panels ————

CLIVAR / IOC Indian Ocean
Implementation Panel

Atlantic
Implementation Panel

Asian-Australian
Monsoon Panel

Variability
of the
American
Monsoon
Systems
(VAMOS)

Pacific
Implementation Panel

Southern Ocean
Implementation Panel

Variability of the African
Climate System Panel



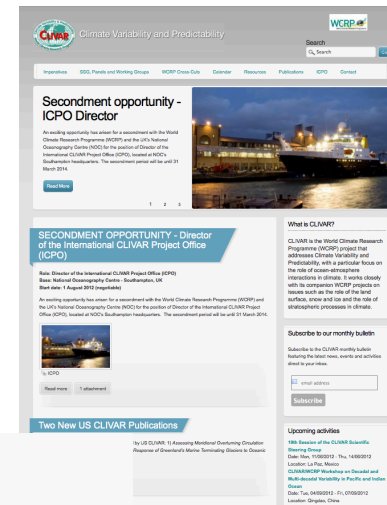
International CLIVAR Project Office (ICPO)



Roger Barry
Director



Jennifer Riley
Staff Scientist



Nico Caltabiano
Staff Scientist



Valery Detemmerman
WCRP JPS



Carlos Ereño
Staff Scientist



Anna Pirani
Staff Scientist



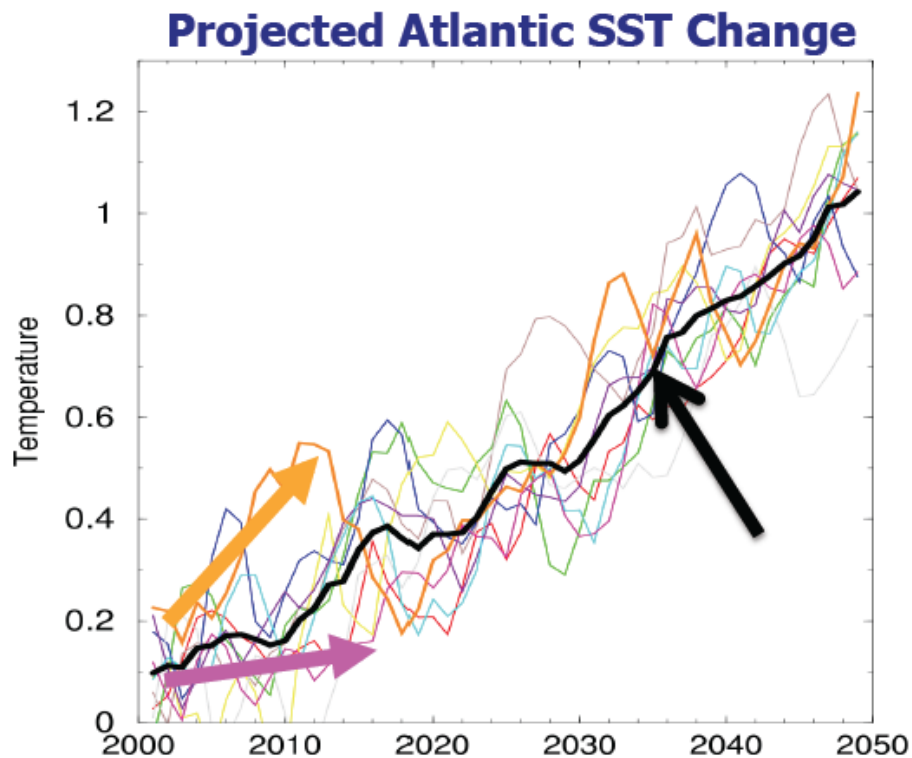
Xiaohui Tang
Staff Scientist

www.clivar.org



CLIVAR Achievements - Atlantic Implementation Panel:

Decadal Prediction of SST



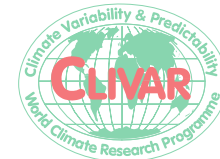
Decadal Variations:

- ✓ **Forced by External Processes**
- ✓ **Generated by Internal Processes**
- ✓ **Interactions of Forced and Natural Variability**

Evolution of CLIVAR – Research Strategy

What's in a Name?

- Climate variability and change in the atmosphere - ocean system
(a proposal – ongoing naming)

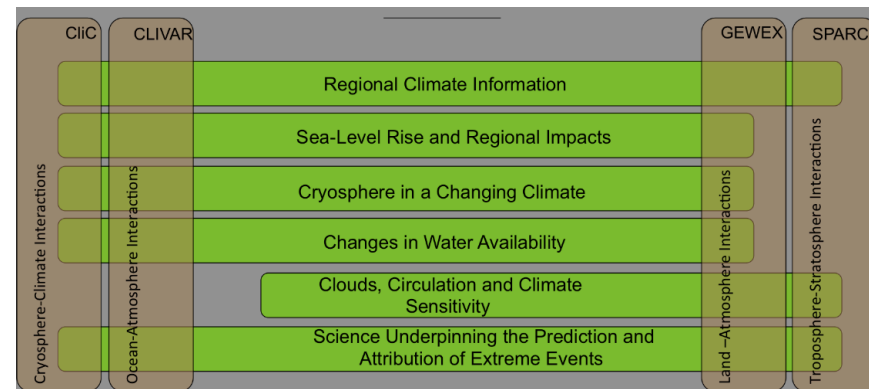


Research Opportunities

- Intraseasonal, Seasonal & Interannual variability and predictability of monsoon systems
- Decadal variability & predictability of ocean & climate variability
- Extreme events in the atmosphere-ocean system
- Marine biophysical interactions and dynamics of upwelling systems
- Dynamics of regional sea level variability

Key Capabilities

- Improving ocean system models
- Improving ocean observing systems
- Support to Global Assessment
- Ocean data, synthesis and information systems
- Knowledge transfer and stakeholder feedback
- Education, capacity building and outreach



Evolution of CLIVAR – Main Directions

- **CLIVAR remains the ocean-atmosphere program of the World Climate Research Program**
- **CLIVAR is in the process of formulating a new set of research opportunities that will contribute to the Grand Challenges of WCRP and the wider context of the oceans role in climate variability and change.**
- **CLIVAR will retain its global and balanced approach based on observations, models and theory and their joint exploitation for climate assessment and climate prediction.**
- **CLIVAR supports the development of sustained climate and ocean observations as well as targeted improvements to the ocean components of earth system models.**
- **CLIVAR will intensify its partnerships with the marine biogeochemistry and eco-system community as well as with a selected spectrum of its informator user community.**
- **Back Education, capacity building and outreach.**
- **Next Step SGS-20 (May 2013, Kiel Germany)**

