

CLIVAR: CLIMATE & OCEAN

variability, predictability and change

2016 was a big year for CLIVAR!

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General reflection

- Great enthusiasm and community engagement for CLIVAR and WCRP research
- Large number of unsolved problems that are scientifically challenging and have global societal impacts

New CLIVAR Science

Long term objectives:

- Identify ocean and coupled **climate processes** that are critical for global and regional climate variability and change
- Identify temporal and spatial scales of **climate predictability**
- Quantify constraints on **climate sensitivity**, air-sea exchange and Earth's energy budget / ocean heat content
- Quantify **regional impacts** of climate change in **sea level, cryosphere and water cycle**
- Quantify past/present/future **ocean role in CO₂ and heat uptake** and links between **climate and ocean ecosystems**

New CLIVAR Science Plan will be released in 2017

Outcomes of Parallel Sessions

- CLIVAR has several **regional activities** e.g. Monsoons and Upwelling Research Focus, but point made that additional links with e.g. Latin America and Africa should be explored.
- Historically **GCOS** and **GOOS** have had strong connections with CLIVAR e.g. **OOPC**. This needs to be maintained and strengthened
- Potential for further cooperation with **IOC** discussed e.g. on upwelling and physical issues affecting ecosystems
- How to improve **communications** both within CLIVAR and with other core projects and WCRP activities?
- Discussion on e.g. CLIVAR's role ocean acidification, formation of Northern Ocean Regional Panel (with CliC), role in OceanObs'19

Outcomes of Parallel Sessions

- **Funding issues:**
 - Still a need for fundamental climate science
 - Need to do as much possible via online meeting
 - CLIVAR only has funding for SSG meeting to e.g. finalise Science Plan. *No other meetings will be funded.*
 - EU funding, Belmont and other sources of funding being explored. We need to make the case to these bodies for the need of fundamental climate science
 - Level of support from WCRP is not sustainable. Can get by for a year but if lack of funding continues community will disintegrate...