

OUR UNDER COMMON CLIMATE FUTURE CHANGE

international Scientific Conference

Climate variability, change and vulnerability in the Pacific, Indian and Southern Oceans

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Short Summary (max 15 lines)

The Pacific, Indian and Southern oceans are home to large and unique reservoirs of marine and terrestrial biodiversity and therefore subject to vulnerability from climate variations. These oceans also host major climate phenomena such as El Niño, Tropical Convergence zones, the Indian Ocean Dipole, the Southern Annular Mode and other modes of natural climate variability. Climate change represents a considerable threat due to the convolution of slow trends and potential changes in that natural variability. Threats come for rising sea levels, temperature extremes, oxygen minimum zones, reduced carbon uptake, droughts and changing rainfall and teleconnection patterns which may impact not only the rate of climate change but also fisheries, agriculture and natural vegetation. This session will discuss the current status of physical and biogeochemical understanding and projections of climate change in these oceans, robust findings and remaining uncertainties, as well as potential socio-economic and environmental impacts of those changes, on marine and terrestrial ecosystems as well as human societies.

Full Abstract (max 35 lines)

The Pacific, Indian and Southern oceans are home to large and unique reservoirs of marine and terrestrial biodiversity and therefore subject to vulnerability from climate variations. These oceans also host major climate phenomena such as El Niño, Tropical Convergence zones, the Indian Ocean Dipole, the Southern Annular Mode and other modes of natural climate variability. Climate change represents a considerable threat due to the convolution of slow trends and potential changes in that natural variability. Threats come for rising sea levels, temperature extremes, oxygen minimum zones, reduced carbon uptake, droughts and changing rainfall and teleconnection patterns which may impact not only the rate of climate change but also fisheries, agriculture and natural vegetation. At stakes are also health and livelihoods in numerous regions of the globe, such as population displacements in low-lying islands and countries giving rise to new social, economic and legal challenges.

This session will discuss the current status of physical and biogeochemical understanding and projections of climate change in these oceans, robust findings and remaining uncertainties, as well as potential socio-economic and environmental impacts of those changes, on marine and terrestrial ecosystems as well as human societies.

Proposed structure of the Parallel Session

Keynote speakers (Please include as follows: Time allocation - Title, First Name, Last Name, Institution, Country, Email):

- 20 min ENSO and the tropical Pacific in a changing climate, Mike, McPhaden, NOAA/PMEL, USA, Michael.J.Mcphaden@noaa.gov
- 20 min Health and tropical variability, Carlos, Corvalan, WHO, Brazil
- 20 min The Indian ocean in a changing climate, Jerôme, Vialard, France, Jerome. Vialard@locean-ipsl.upmc.fr

Offered communications

- Time allocation for offered communication 1 :
- Time allocation for offered communication 2 :
- Time allocation for offered communication 3 :
- Time allocation for offered communication 4 :

Session Number (as provided to you by the Conference Secretariat): 1111a - Tropical and Southern Oceans

Keywords (enter at least 1 keyword, max 4):

- Ocean and climate
- Climate variability
- Tropical vulnerability
- Pacific, Indian and Southern oceans

Updated on: Tuesday, March 10, 2015 9:01 AM

- Time allocation for offered communication 5 :
- Time allocation for offered communication 6 :

 Total time allocation for poster presentations:
Please indicate the total number of people (including conveners, and speakers) from your Parallal Session that you anticipate will attend the conference as a participant : **10** +

Comments: We would like to add another 3 key notes