

CLIVAR/CliC/SCAR Southern Ocean Region Panel SORP-11: Sept. 17-18, 2016

National activities report

Country SOUTH AFRICA

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Receipt of material prior to Sept. 5, 2016 will ensure inclusion in meeting discussion. Receipt of material prior to Oct. 10, 2016 will ensure inclusion in meeting report and contribute to future SORP discussions, as well as input to the SOOS and other CLIVAR/CliC/SCAR activities.

Purpose of material gathered for the SORP: To build an overview of
- observational, modeling, state estimation initiatives relevant to the SORP

(This can include a list of activities, maps showing where work has been done, major international project involvement, etc.)

A. Recent and ongoing activities

Does your country have a national committee tasked with oversight of Southern Ocean climate science?

YES – COMPRISED OF A NUMBER OF PARASTATAL AND TERTIARY INSTITUTES I.E. UNIVERSITY OF CAPE TOWN (UCT), PRETORIA (UP), RHODES UNIVERSITY (RU), SOUTH AFRICAN WEATHER SERVICE (SAWS), CSIR ETC..

What major activities have been carried out in the last several years or are in progress now? Contact information for the projects would be useful.

1. Observational?

YES GOODHOPE LINE REGULARLY MONITORED DURING SUMMER AND WINTER MONTHS (DEC, FEB, JULY) FROM THE SA AGULHAS II. UNDERWAY OBSERVATIONS COMPRISE OF XBT, TSG, ADCP, CO₂, IRON, OXYGEN, NUTRIENTS, TOP PREDATORS, CHL-A, ARGO/GLIDER/SVP DRIFTER DEPLOYMENTS

2. Modeling?

YES SOME MODELLING (OCEAN, BIOGEOCHEMICAL, ECOSYSTEM, ATMOSPHERIC) UNDERTAKEN AT UCT, UP AND CSIR

– CONTACT (UCT) PROF ISABELLE ANSORGE, PROF MARCELLO VICHI, PROF PETER RYAN, DR SARAH FAWCETT, (CSIR) DR SANDY THOMALLA, DR SEBASTIAAN SWART, DR WARREN JOUBERT AND DR

PEDRO MONTEIRO (UP) PROF NICO DE BRUYN (UWC) PROF KEN FINDLAY

3. State estimation?

B. Planned activities

What major activities are planned or likely to occur during the next several years?
Contact information for the projects would be useful.

1. Observational? ONGOING GOODHOPE, SAMOC-SA CRUISES, SOCCO (CSIR)
2. Modeling? ONGOING – LINKED TO MSC AND PHD STUDIES
3. State estimation?

SORP terms of reference <http://www.clivar.org/clivar-panels/southern>

"To serve as a forum for the discussion and communication of scientific advances in the understanding of climate variability and change in the Southern Ocean. To advise CLIVAR, [CliC](#), and [SCAR](#) on progress, achievements, new opportunities and impediments in internationally-coordinated Southern Ocean research."

Specific Activities:

1. Facilitate progress in the development of tools and methods required to assess climate variability, climate change and climate predictability of the ocean-atmosphere-ice system in the Southern Ocean.
2. Identify opportunities and coordinated strategies to implement these methods, spanning observations, models, experiments, and process studies.
3. Provide scientific and technical input into international research coordination, collaborating as required with other relevant programs, including the [Southern Ocean Observing System \(SOOS\)](#).
4. Monitor and evaluate progress in Southern Ocean research, and identify gaps.
5. Enhance interaction between the meteorology, oceanography, cryosphere, geology, biogeochemistry and paleoclimate communities with an interest in the climate of the Southern Ocean.
6. Work with relevant agencies on the standardization, distribution and archiving of Southern Ocean observations.