



## Joint France – South Africa Marine Science Workshop

A satellite and in-situ field experiment in a turbulent ocean



Center for High Performance Computing, Rosebank, Cape Town

June 12 & 13, Cape Town, South Africa

Within the last 5-10 years, several very high resolution numerical studies have led to major advances highlighting the significance of sub-mesoscale oceanographic features (10 km scale, 200-400m deep), associated with interacting eddies and that drive vertical exchanges and fluxes. It is now well recognized, again from numerical studies, that these sub-mesoscale structures have a similar impact on the meridional heat fluxes and strongly influence biogeochemical processes and resulting ocean productivity and ecosystem dynamics. Very few field experiments have been devoted to these sub-

mesoscale processes, but the few field observations do support the hypothesis that these features contribute to the dynamics of the pelagic ecosystem and its downstream beneficiaries.

This workshop will examine the potential for collaboration among French and South African scientists setting up a joint, extensive and innovative field (both satellite and in-situ) experiment, specifically devoted to the monitoring of these events, in order to quantify their impact on the spatial organisation, functional biodiversity and ecosystem dynamics as well as on the atmosphere-ocean fluxes. The workshop will define the criteria for the selection of locations for the experiment in the Southern ocean and/or Agulhas current regions, with a focus on the Agulhas Retroflexion and the Cape Basin.

Given the strong collaboration that has existed and continues today among South Africa and the French groups, and the development of South African marine science (with the recent acquisition of the *SA Agulhas II*), implementing a major field experiment in the South African waters over the next four years would be an ideal way of furthering these relationships. In addition, this experiment can serve as a platform for other nations' participation including Norway and Germany who bring both experience in the region and technical expertise to the table.

The workshop, planned for June 12 & 13 2012 will bring together representatives from South Africa, France and Norway to consider this experiment and to plan it with the context of several regional and national projects and programmes already in place in the region. The outcome of the workshop will be to develop a strategy and partnerships for its implementation and a roadmap to a proposal for funding.

The meeting will be open to all interested parties in South Africa in the marine science community and in particular, students and young scientists who might become involved as researchers in the experiment are invited to apply to attend.

**If you are keen to participate, please register on this website: <http://tinyurl.com/ctblq3g> by the 30th of May 2012. Limited funding will be made available to support travelling SA delegates and students if necessary. SPACE IS LIMITED TO JUST 25 PARTICIPANTS + SOME STUDENTS.**

Further announcements will follow and details of the programme will be made available via the ACCESS website ([www.access.ac.za](http://www.access.ac.za)).