

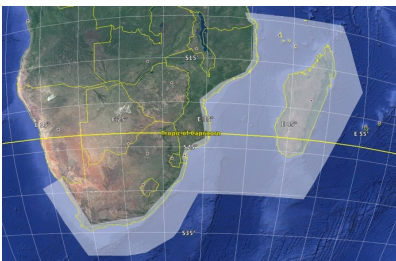
C-RISe Coastal Risk Information Service

C-RISe is a 3 year project funded by the UK Space Agency through the International Partnership programme, which will work with local partners to deliver a Coastal Risk Information service to South Africa, Mozambique and Madagascar, providing satellite-derived information about sea level, wind and waves to support coastal vulnerability assessment and hazard management.

It is now well established that global sea level is increasing, and that large-scale weather patterns are changing. However, even within the Indian Ocean, these changes are not geographically uniform, and are not steady in time, with short-term variability on a range of time scales.

Mozambique, Madagascar and South Africa have significant coastal populations whose lives and economic security are vulnerable to the consequences of climate variability and change. In particular, Mozambique and Madagascar are highly exposed to the surges associated with cyclones, and have coastal ecosystems that are sensitive to climate change.

With access to improved regional information on coastal risk factors (sea level, wave and wind extremes) plans to protect coastal communities and safeguard economic activity can be improved. This information can also contribute to improving industrial and commercial competitiveness in the maritime sector, which is heavily dependent on access to accurate relevant oceanographic information.



Region covered by the C-RISe service

C-RISe will deliver, in a partnership between the UK, Mozambique, Madagascar and South Africa, access to information on sea level rise, storm surge, wind speed and wave heights derived from satellite altimetry and validated with local in-situ measurements. The goal is to enable local stakeholders to use this information to reduce the social and economic impact of coastal inundation and increasingly variable weather patterns.



The C-RISe team will apply an innovative satellite altimeter data processing technique, developed in the UK, to data for the Mozambique, Madagascar and South Africa coastal regions and deliver these satellite observations through a web-based data portal, support local partners using the data, and working with them to develop a range of case studies to demonstrate how the data may be used in different application areas. Through the use of the C-RISe portal and the BILKO satellite data tool, local users will be trained in the validation and use of marine satellite data to quantify coastal hazards and incorporate this information into ongoing development and disaster prevention initiatives.

Project Consortium, UK: Satellite Oceanographic Consultants Ltd (lead partner), National Oceanography Centre (technical/scientific lead), Bilko Development Ltd (software)

International Partners:

Madagascar: Centre National de Recherches Océanographiques (CNRO), Institut Halieutique et des Sciences Marines (IH.SM), Direction Générale de la Météorologie (DGM), WWF Madagascar, Conservation International

Mozambique: Instituto Nacional de Hidrografia e Navegação (INAHINA), Universidade Eduardo Mondlane

South Africa: Council for Scientific and Industrial Research (CSIR)



Contacts for further information:

David Cotton d.cotton@satoc.eu (Project Manager, Data Products)

Christine Sams chrams@noc.ac.uk (Case Studies, Monitoring and Evaluation).

Val Byfield val.byfield@noc.ac.uk (Training, user support)