MDG 6: Coastal Risk from Sea Level Change

Keywords: Sea Level Change, marine ecosystem, ocean winds, ocean waves, climate change

Primary actors

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Stakeholders / End Users

DGM, CNRO, BNCCC, ICZM, CFIM, Coastal Planners, Port Developers, Shipping Companies

Introduction / Statement of the Problem

There is a lack of information on the potential risk at the Madagascar Coast from climate change, in terms of the vulnerability of ecosystems and infrastructure, and the impact of changes in sea level, wind and wave climate.

Case study description

The case study will involve the following activities:

- Assessment of future risk at Madagascar Coast from Sea Level Change.
- CNRO to identify issues and key locations of potential impact on marine ecosystems.
- Analysis of altimeter sea level data to identify regional characteristics of sea level variability.
- Analysis of satellite wave, wind and current climatology data to identify regional changes in ocean climate.
- Assessment of this information in terms of risk at the coast.

Expected Impacts

Long Term Primary Impact: 2019 onwards
Application of satellite data to coastal zone planning and management, to mitigate against the impacts of climate change.

Secondary Impact: To be reported on Case Study Completion at March 2019
Better understanding of the vulnerability of Madagascan ecosystems and infrastructure to changes in ocean climate (Sea Level, surges, waves and winds).

SDG 1.5, 9.A, 11.B, 13.1, 13.2, 13.3, 14.2