# MDG 7: Evaluation of Wind and Wave Energy Resources (Sainte Marie Island)

Keywords: ocean waves, ocean winds, renewable energy

#### **Primary actors**

Madagascar: DGM (Rhino RAJAONARIVONY)

**UK:** SatOC (Ellis Ash)

## Stakeholders / End Users

DGM, CNRO

## **Introduction / Statement of the Problem**

There is interest to map the potential wind and wave energy resource around Sainte Marie Island for consideration by renewable energy development companies.

# **Case study description**

The case study will involve the following activities:

- Use of published algorithms to estimate wave period from altimeter wave measurements.
- Retrieval of wave period and direction data from SAR satellite wave mode archives.
- Use of published algorithms to derive regional wind and wave power from the C-RISe and supporting satellite data archives.

## **Expected Impacts**

Long Term Primary Impact: After end of Project (> 2020)

Help DGM understand the viability of renewable infrastructure projects in the region of Sainte Marie Island.

Secondary Impact: To be reported on Case Study Completion at March 2019 Help DGM understand the use of additional and complementary satellite wave data sets.

In the long term, potentially supports the development of renewable energy resources at the Madagascar coast.