MOZ 2a: Validation & analysis of altimeter data against tide gauge data for Mozambique Coast

Keywords: Sea Level, Climate Change, Coastal Risk,

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

13 CLIMATE ACTION

Primary actors

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UK: Angela Hibbert, Francisco Calafat (NOC)

Stakeholders / End Users

INAHINA, UEM

Introduction / Statement of the Problem

Coastal sea level in Mozambique is poorly-understood on medium to long-term timescales

Case study description

The case study will involve the following activities:

- Identifying locations of interest in Mozambique and the wider region for comparison between tide gauge and altimeter sea level data.
- Use C-RISe software and data to compare the altimeter data against the tide gauge data. Provide an assessment on the agreement between the two data sets.
- Analyse the seasonal and inter-annual variability in the Tide Gauge data and in the altimeter data at the location (along the altimeter track) most closely correlated with the Tide Gauge data.
- Examine tidal and higher frequency variability in tide gauge records.
- Produce a report on the comparison between the Tide Gauge and altimeter data, and on the analysis of variability (high frequency to seasonal and inter-annual) at the selected locations.

Expected Impacts

Secondary Impact: To be reported on Case Study Completion at December 2018

INAHINA and UEM will develop the capability to conduct scientific analyses on their own tide gauge datasets as well as making comparisons with satellite altimetry. These skills will allow INAHINA to monitor long-term trends in sea level associated with Climate Change using both tide gauge and satellite data.

SDG 13.1, 13.3 and 9.A