


MDG 13: Pollution from Rare Earth Metal Mining	
Keywords: Pollution, Rare Earth Metals, ocean currents, ocean waves, ocean winds, ocean colour	
Primary actors	
Madagascar: CNRO (Damien Daudet Razafiarhinoso) UK: SatOC (David Cotton)	
Stakeholders / End Users	
CNRO, IHSM, Public Health, Madagascar National Parks,	
Introduction / Statement of the Problem	
Rare Earth Metals are mined close to the coast in NW Madagascar (Ampasindava), and there is a concern regarding the potential impact of any pollution from this activity	
Case study description	
<ul style="list-style-type: none"> • CNRO is investigating possible pollution impact from Rare Earth Mining in Ampasindava, and has been carrying out monitoring since 2015. • Since 2016 has been taking samples for analysis by Nuclear Physics group at the University of Antananarivo. • Objective is to access and analyse relevant satellite data (ocean colour, winds, waves and currents) to investigate pollution transport, and to establish characteristics of inter-annual variability in winds, waves and currents in this region. • CNRO has current meter measurements. • Output for C-RISe will be a report on the use of satellite data in this research. • Eventual output of the research by CNRO will be a report on possible pollution pathways. 	
Expected Impacts	
<p><i>Long Term Primary Impact:</i> After end of Project (> 2020) This is part of an ongoing research programme, which will continue beyond the duration of the Use Case. Potential beneficial long term impacts to the wider coastal population of Madagascar, in terms of reducing pollution risk.</p> <p><i>Secondary Impact:</i> CRISE Case study report March 2019, CNRO research activity in this area will continue into subsequent years. Short term impact directly to CNRO will be experience in gaining access to, and working with, satellite data.</p>	
SDG 14.2, 14.A	