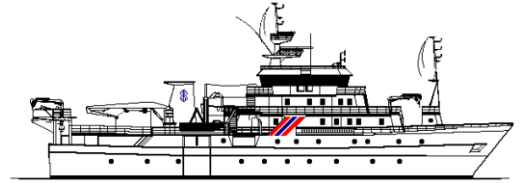


<b>Country:</b> Southern Indian Ocean				
<b>Research vessel:</b> R/V DR. FRIDTJOF NANSEN				
<b>Survey number:</b> 2015407				
<b>Number of days:</b> 19				
<b>General objectives:</b>				
	Port	Date	Coverage	Specific objectives
<b>Departure</b>	Phuket, Thailand	18/07	Southern Madagascar ridge	<p>a. Benthic habitat mapping with focus on two pre-selected areas with assumed local upwelling's, using a video assisted sampling device (VAMS) for video identification of benthic communities, in fauna and macro fauna sampling as well as determination of sediment composition and status.</p> <p>b. Bathymetric mapping using a multi beam echo sounder to create detailed bathymetric profiles where necessary. In addition to this, sampling of physical and biological oceanographic parameters in order to observe the ecology of the whole habitat, including the pelagic zone.</p> <p>c. Collect oceanographic data (temperature, density, oxygen, nutrient salts, chlorophyll and current measurements based on LADCP) along the route, to study biological productivity.</p> <p>d. Collect plankton samples from the water column and its main scattering layers, to estimate the horizontal and vertical distribution, abundance, biomass, taxonomic and size composition of meso-zooplankton and link them to the oceanographic data.</p> <p>e. Continue the plastic sampling from the first part of the survey to expand the data set.</p> <p>f. Collect acoustic data for interpretation.</p>
<b>Arrival</b>	Phuket, Thailand	06/08		
<b>Cruise leader:</b> Bjørn Serigstad				





NANSEN PROJECT



**Participants:**

From IMR: Bjørn Serigstad (cruise leader) Tore Mørk (Instrument chief) Kåre Tveit (Instrument operator) Magne Olsen Tor Ensrud  
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From University of Bergen: Karen Fosse Sivertsen  
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From CSDF: Jean Jacques Be  
Seychelles fishing authorities: Calvin G. Gerry  
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UWC – University of Western Cape SA DFO Ca - Department of fisheries and Oceans, Canada  
Bradley Marlon Blows

**Summary of the results**

The aim of the survey was to map the ecology in local areas with assumed local upwelling and compare the habitat on the eastern and western part of the location to observe possible differences in plankton biomass due to the influence of upwelling and direction of currents. It was also a pilot survey to test the suitability of video based techniques combined with benthos and pelagic sampling to characterize local ecosystems for habitat classification in tropical high seas and to adopt and standardize these techniques to the VAMS (Video Assisted Multi Sampler).

The second leg of the survey took place between 18th of July and August 10th. work on selected habitats on the Mascarene Plateau and Madagascar Ridge to develop methods for habitat mapping and ecosystem classification. Two locations on the Madagascar Ridge were chosen for this special study. The Northern location on the Madagascar Ridge was a seamount at position 26°55.241S and 46°13.728E within the EEZ of Madagascar and southern part was the Walther Shoals at position 33o 10’S and 43o 53’E, in international waters. The results of this work will be used to discuss a more extensive use of this equipment for habitat mapping in the period towards 2020.

**Report: status: final References:**

Report ready

**Constraints/Comments:**

