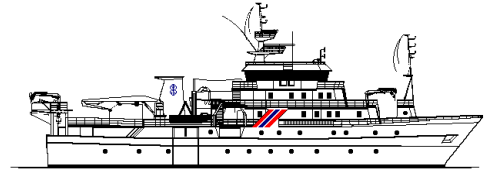


Country: Comoros				
Research vessel: R/V DR. FRIDTJOF NANSEN				
Survey number: 2009409				
Number of days: 29				
General objectives: Survey of the Comoros Gyre				
	Port	Date	Coverage	Specific objectives
Departure	Moroni, Comoros	5 October 2009	Comoros	<ol style="list-style-type: none"> 1. To carry out a multi-disciplinary cruise that investigates the physico-chemical processes and fisheries potential of small pelagic fishes in the Comoros Basin. 2. To establish the distribution, abundance and composition of organisms at a number of trophic levels in the Comoros Basin. 3. To establish, as far as possible, the productivity, diversity and biomass of the pelagic ecosystem. 4. To establish the role of the island shelf region and terrestrial input in linking coastal and pelagic biomes (coupling). 5. To investigate the role of the Comoros Gyre as a dispersal agent. 6. To investigate mesopelagic and, if trawlable conditions exist, demersal fish species diversity and abundance. 7. To determine the distribution and abundance of small pelagic fish shoals around the islands of the Union of Comoros and Mayotte using acoustics methods and a systematic grid survey strategy. 8. To use regular surface and midwater trawls on target fish aggregations for species composition, biological information and genetic material of selected small pelagic fishes for fisheries resource assessment purposes. 9. To link various sources of energy and nutrition to different food-web compartments. 10. Capacity building of ASCLME and SWIOFP trainees & young scientists.
Arrival	Anjouan, Comoros	3 November 2009		
Cruise leader: Kathrine Michalsen form IMR, and Raymond Roman (Local) from UCT				





NANSEN PROJECT



Participants:

From Comoros: Abdallah Youssouf Ben, Jaffar Mohidone, Ahmed Soifa

From IHSM: Ali Binty Soafia

From IMR: Kathrine Michalse, Magne Olsen, Terje Hovland, Ole Sverre Fosshheim

From Megaptera: Morgane Perri

From ORI: Jessica Escobar

From RU: Sven Kaehler

From SAEON: Caren George

From UCT: Raymond Roman, Nicolas Rasclé, Charine Collins, Kate Munnik.

Summary of the results:

While much of the sample analysis remains to be done and data need to be put into context with the help of updated satellite imagery, preliminary results already suggest that the cruise as a whole was a success in terms of meeting its objectives. Few pelagic shoals have been recorded acoustically. Schools of fish have been observed in the surface a couple of times, and we have tried to catch them by rod fishing, but we have had no success. The conclusion is that there is very little fish in this area.

Logistics

Overall, the cruise was successful in achieving most of its objectives and to a large extent; this was due to the professional handling of the logistics by both the crew and the scientists. For future purposes, a number of possible improvements and ideas for future cruises were discussed during a wash-up meeting on the last day of the cruise. The following should be regarded as an idealised wish-list.

- 1) One important lesson learned from this cruise is that all **fishing licenses** must be received before the cruise starts. Only this way can the cruise be conducted in the most efficient way.
- 2) Focuses on processes/features would have increased the ecological outcome of the survey, but then more time would have needed to have been made available for investigating the features, or the sampling area would have had to have been reduced. A towed undulator (or similar) could have been used to reduce the number of hydrographic stations needed by such a survey and thereby free up time for a more detailed gridded sampling strategy. Use of sonar and other types of equipment for fishing would have increased the possibility of getting more fish samples.

Trainees: The trainee's involvement in both the underway science and the analysis and interpretation of the data for this report was exemplary. Nonetheless, it was felt that in some cases our regional collaborators could have gained more from the cruise had individual projects of interest been developed and made available to them. On a positive note, one student from Madagascar successfully completed her own zooplankton study during the cruise. Due to time-constraints, this was not possible during this past cruise. For future purposes, however, this possibility should be investigated in more detail. Requests from two of the trainees were also made to remain part of the science team during the upcoming analysis and write-up of the research. Additional funding might have to be sought to facilitate their continual involvement. Even though the trainees on this cruise was very dedicated it could have been advantageous to have had more scientists onboard, especially those that are supposed to work with the sampled data in the near future

Report: status: final References:

R.Roman, S. Kaehler, K. Michalsen, M. Olsen and M. Perri. **PRELIMINARY Cruise Report "Dr. Fridtjof Nansen", Survey of the Comores Gyre (ASCLME & SWIOFP 2009 Cruise 3), 5 October – 3 November 2009.**

Constraints/Comments:

The report at the moment is preliminary

