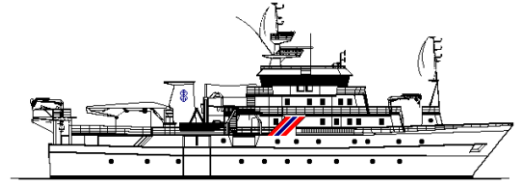


| <b>Country:</b> Angola  |            |       |          |  |
|---|------------|-------|----------|--|
| <b>Research vessel:</b> R/V DR. FRIDTJOF NANSEN                   |            |       |          |  |
| <b>Survey number:</b> 2015408                                     |            |       |          |  |
| <b>Number of days:</b> 29   |            |       |          |  |
| <b>General objectives:</b> Survey of the fish resources of Angola |            |       |          |  |
|   | Port       | Date  | Coverage | Specific objectives  |
| <b>Departure</b>  | Walvis Bay | 15/08 | Angola   | <ul style="list-style-type: none"> <li>• To estimate the relative abundance and map the distribution of the main commercially important pelagic and semi-pelagic fish species in Angolan waters, including the two sardinella species <i>Sardinella aurita</i> and <i>S. maderensis</i>, the Cunene horse mackerel <i>Trachurus trecae</i>, the Cape horse mackerel <i>Trachurus capensis</i> as well as other clupeid and carangid species.</li> <li>• To collect biological information of target species: <i>T. trecae</i>, <i>T. capensis</i>, <i>S. aurita</i>, <i>S. maderensis</i>, <i>Sardinops ocellata</i>, <i>Decapterus rhonchus</i>, <i>Selene dorsalis</i>, <i>Chloroscombrus chrysurus</i> as well as <i>Brachideuterus auritus</i>.</li> <li>• To collect otoliths from both horse mackerel species for analyses of length-age relationships.</li> <li>• To collect depth stratified samples of zoo and phytoplankton in order to continue the studies on feeding biology, relating stomach contents to estimated zooplankton compositions and densities.</li> <li>• To observe and make records of sea birds and sea mammals in the survey area.</li> <li>• To map the general meteorological, hydrographical and biological conditions in the survey area by means of continuous recordings of weather data, CTD-casts (Temperature, Salinity and Oxygen), ADCP measurements (Acoustic Doppler Current Profiler) and plankton sampling along acoustical and hydrographical transect lines.</li> <li>• On-the-job training of cruise participants on the main survey routines, including use of the Nansis database and scrutinizing acoustical observation (echograms) with the post-processing system, the Large Scale Survey System (LSSS).</li> </ul> |
| <b>Arrival</b>  | Walvis Bay | 13/09 |          |  |
| <b>Cruise leader:</b> Kathrine Michalsen                          |            |       |          |  |





NANSEN PROJECT



**Participants:**

From INIP, Angola: 15.08-13.09.2015: Aristóteles Amaro (Angola Team leader), Pedro Panzo, José Mateus da Silva, Paulo A. de Sousa Coelho, Geraldina de A. S. José, Joana Pinheiro, Victor Agostinho, Domingos Pedro, Edson Mangureira.

From IMR, Norway: 15.08-13.09.2015: Kathrine Michalsen (Cruise Leader), Oddgeir Alvheim (to 31.08), Diana Zaera-Pérez (from 31.08), Jan Frode Wilhelmsen, Inge Nymark.

**Summary of the results**

A summary of main findings are presented in the final report including biomass estimates.

**Report: status: final References:**

Report ready

**Constraints/Comments:**

