

Indian Ocean Survey by R/V “Dr Fridtjof Nansen”

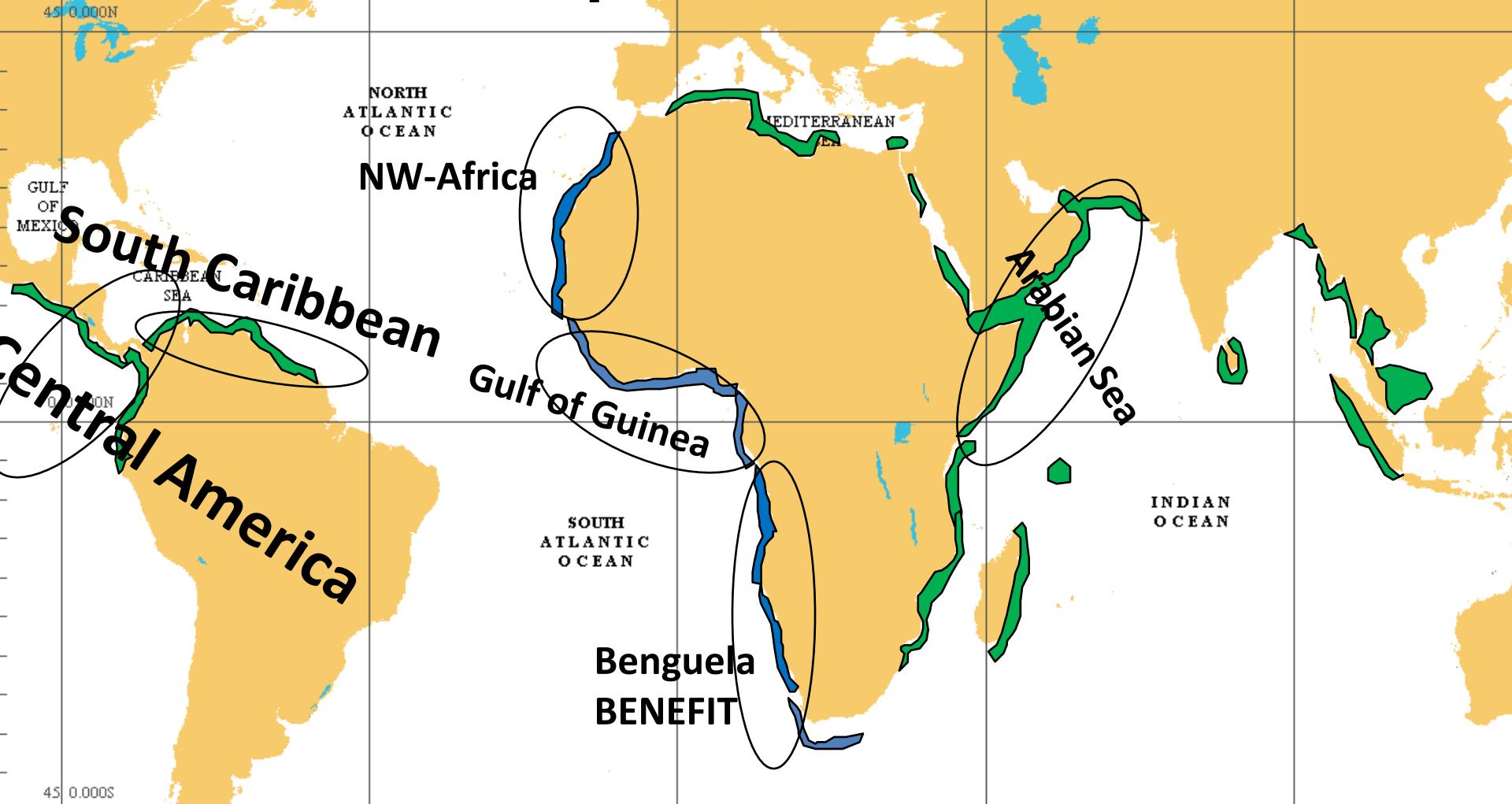
Dr. Reidar Toresen
IMR, Norway

**26th June – 10th
August 2015**

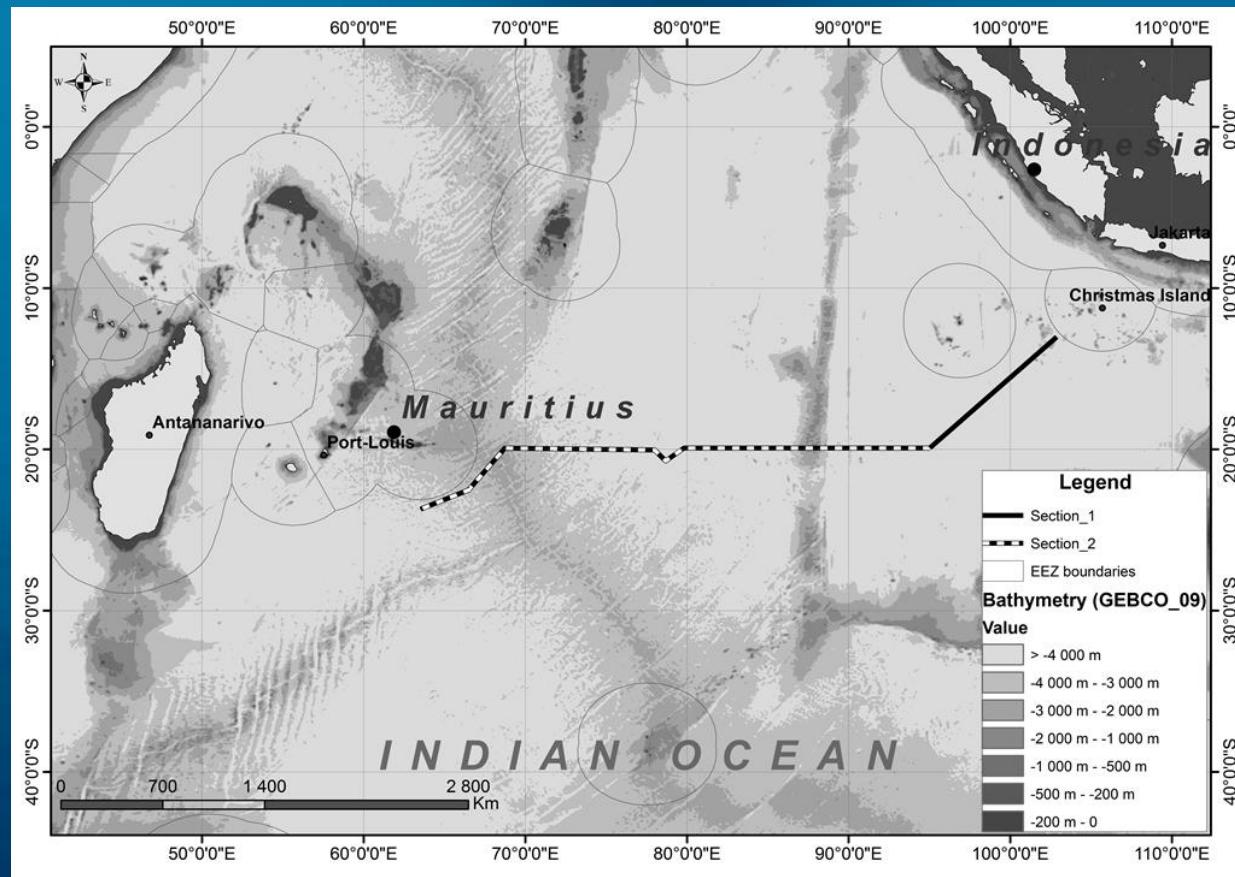


Regional approaches in the Nansen Programme

Operation since the 1970s



Cruise tracks, 1st leg



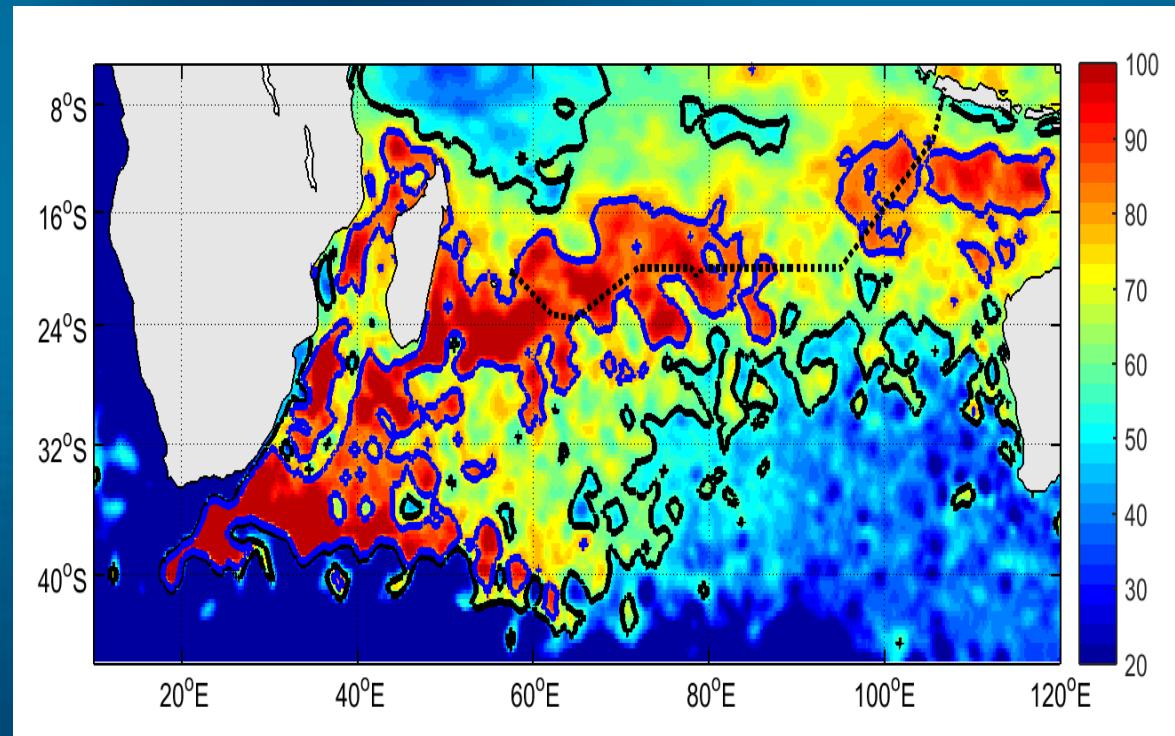
Study features of the subtropical gyre

Oceanographic
mesoscale
studies

Biological
production

Mesopelagic
fish

Plastic particles



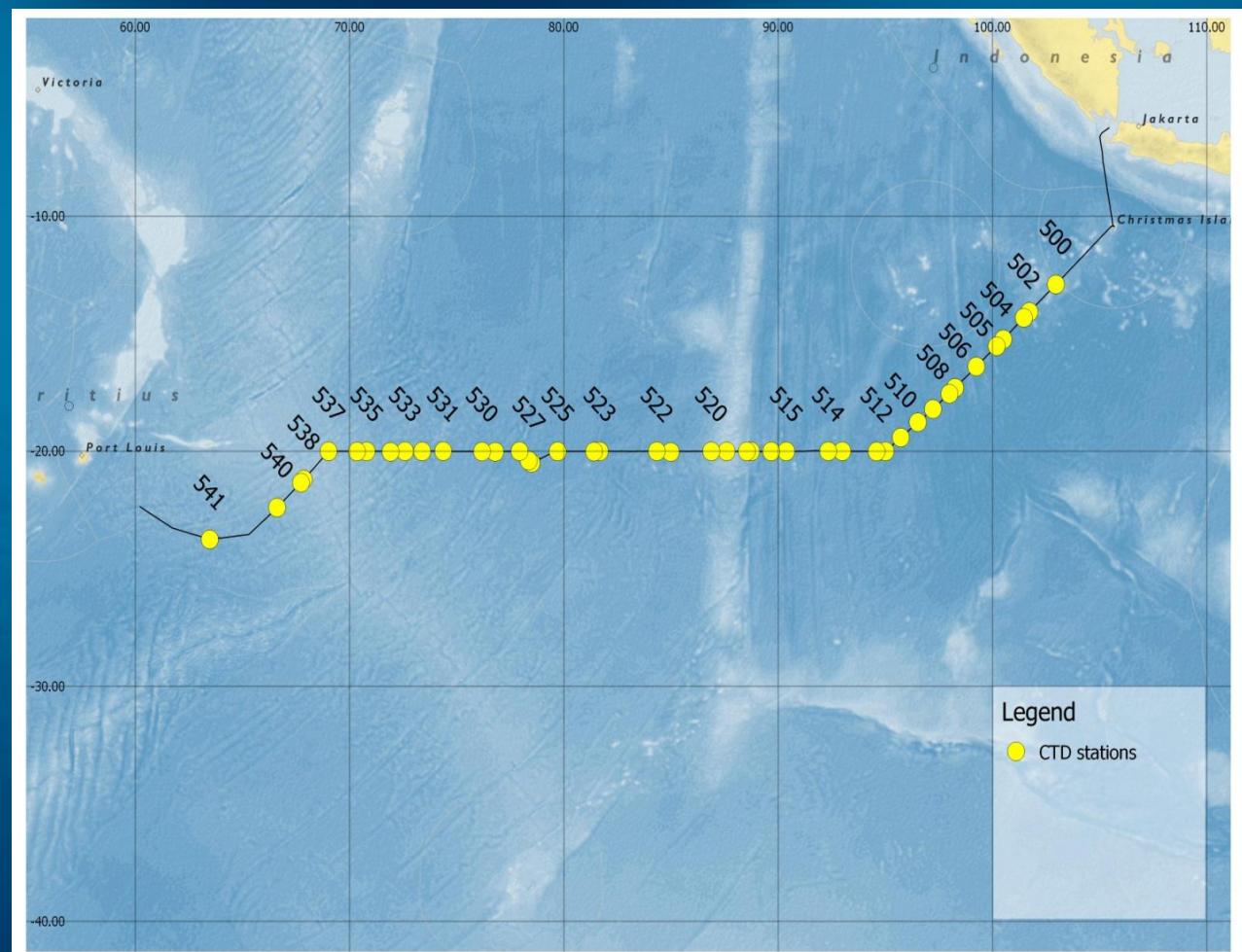
41 CTD
casts

ARGO
buoys

Iridium
drifters



Oceanography

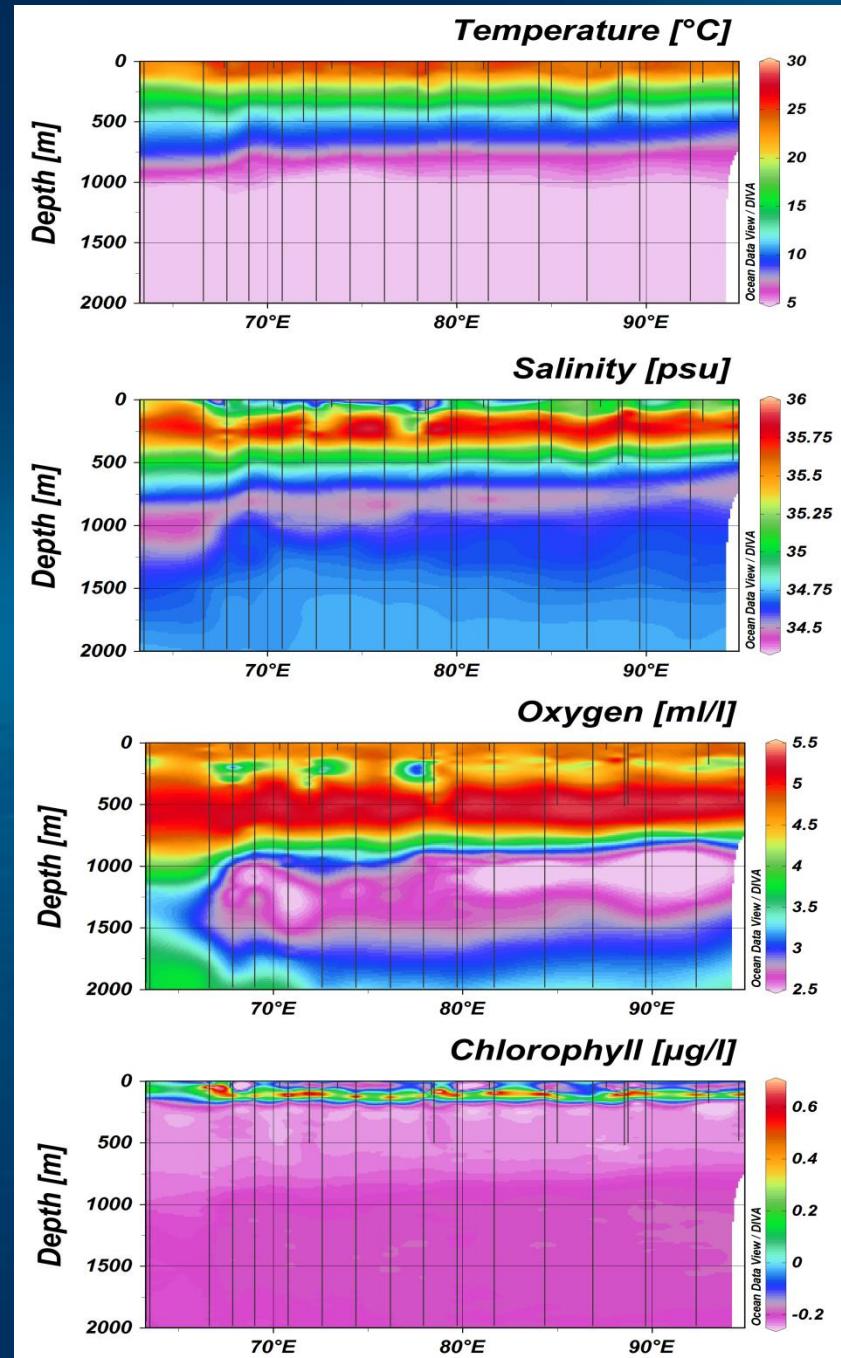


Oceanography and primary production

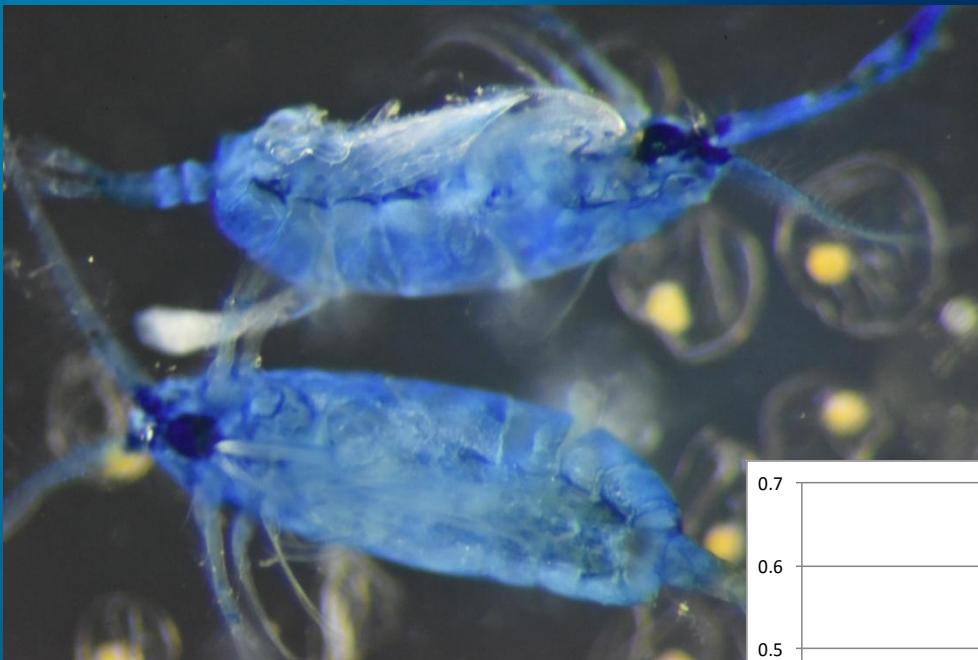
Sea surface heights anomalies of eddies

Positive SSH leads to fluorescence peak

Negative SSH leads to fluorescence low



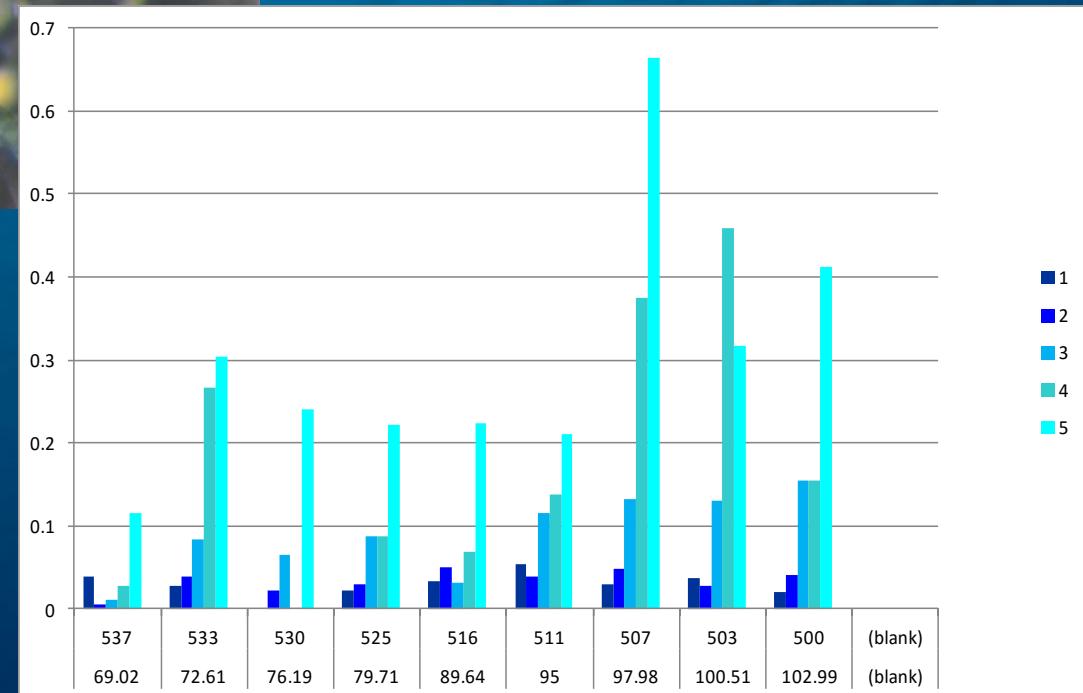
Plankton



Eleven Multinet stations

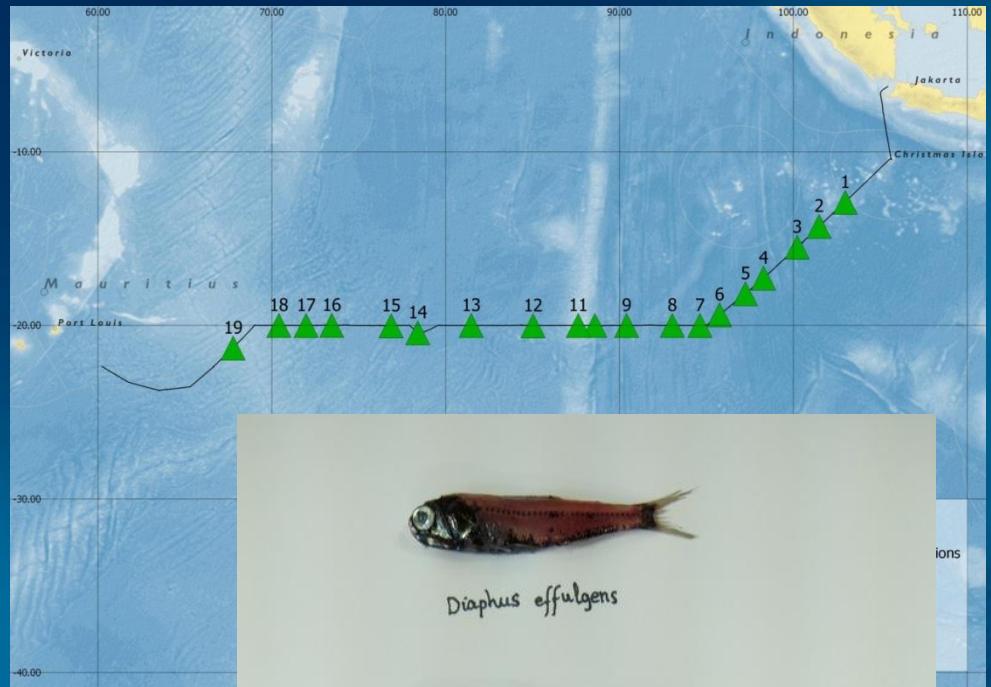
Five phyto – plankton stations

Multinet 600 – 0 m



Meso pelagic fish

Nineteen pelagic trawl hauls for meso - pelagic fish



Diaphus effulgens



Ceratoscopelus warmingii



Symbolophorus evermanni



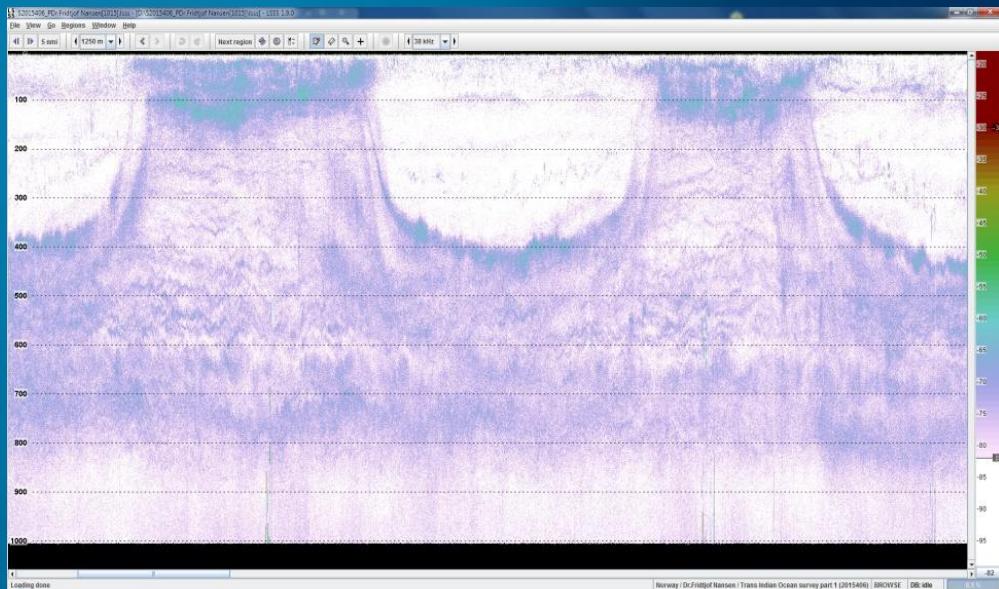
Diplophos taenia

Diet analysis



Mesopelagic fish

Echogram, 38 kHz, diurnal migrations



Density of mesopelagic fish

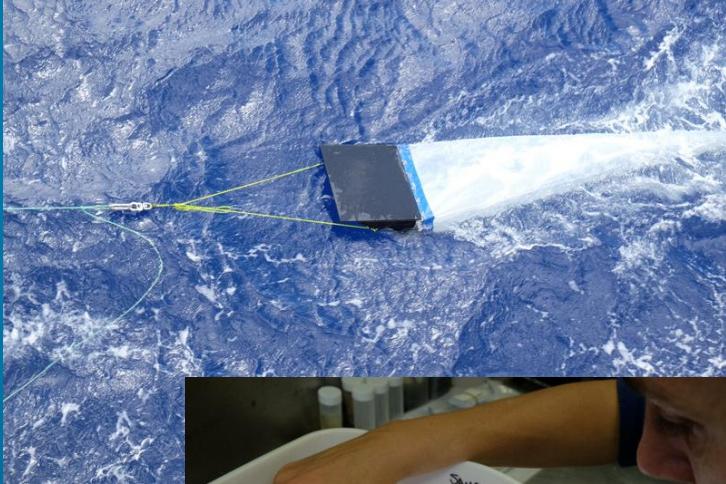


Million individuals
per square NM



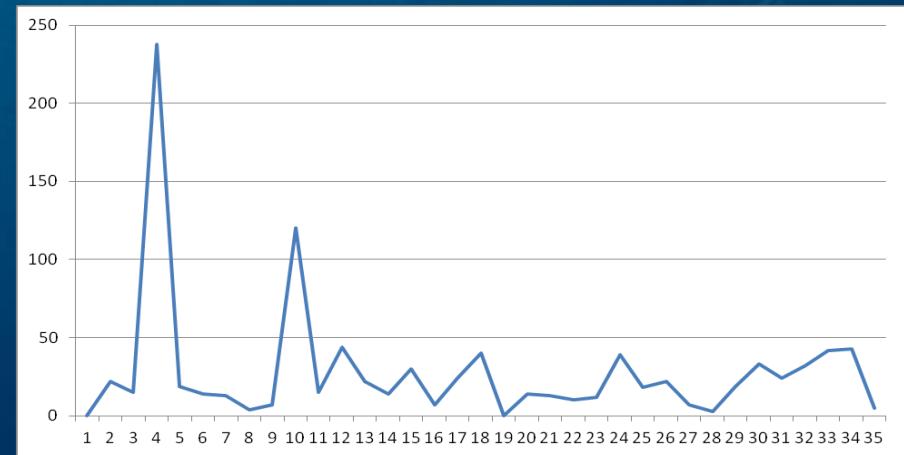
Plastic particles

Manta trawl



Large variation

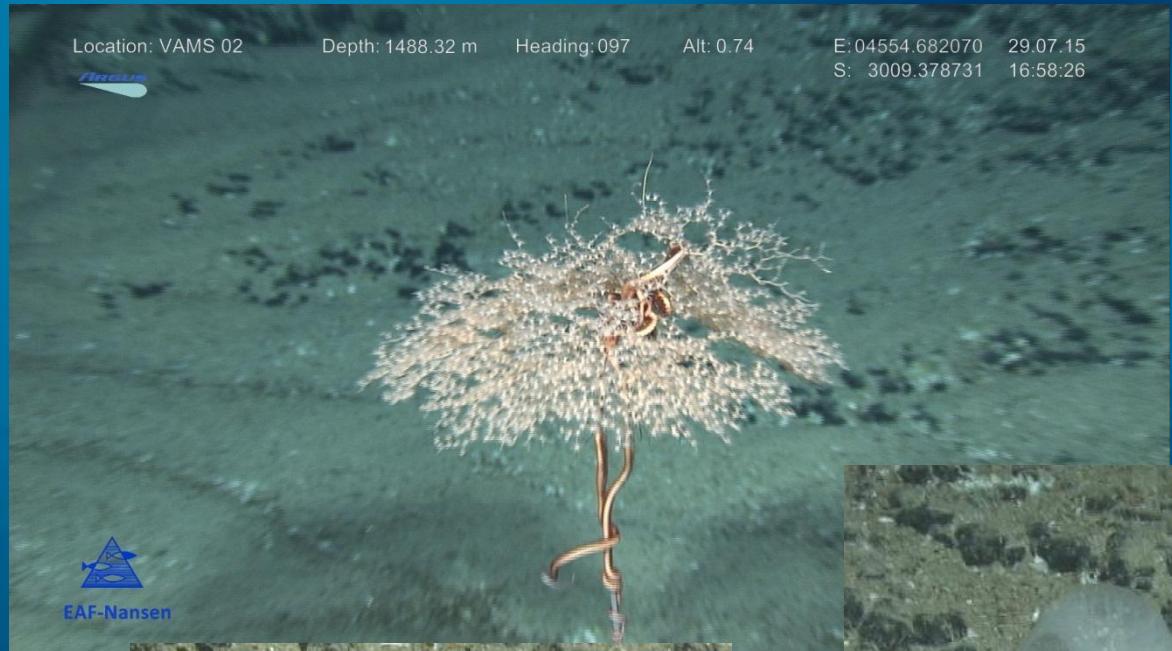
Small particles



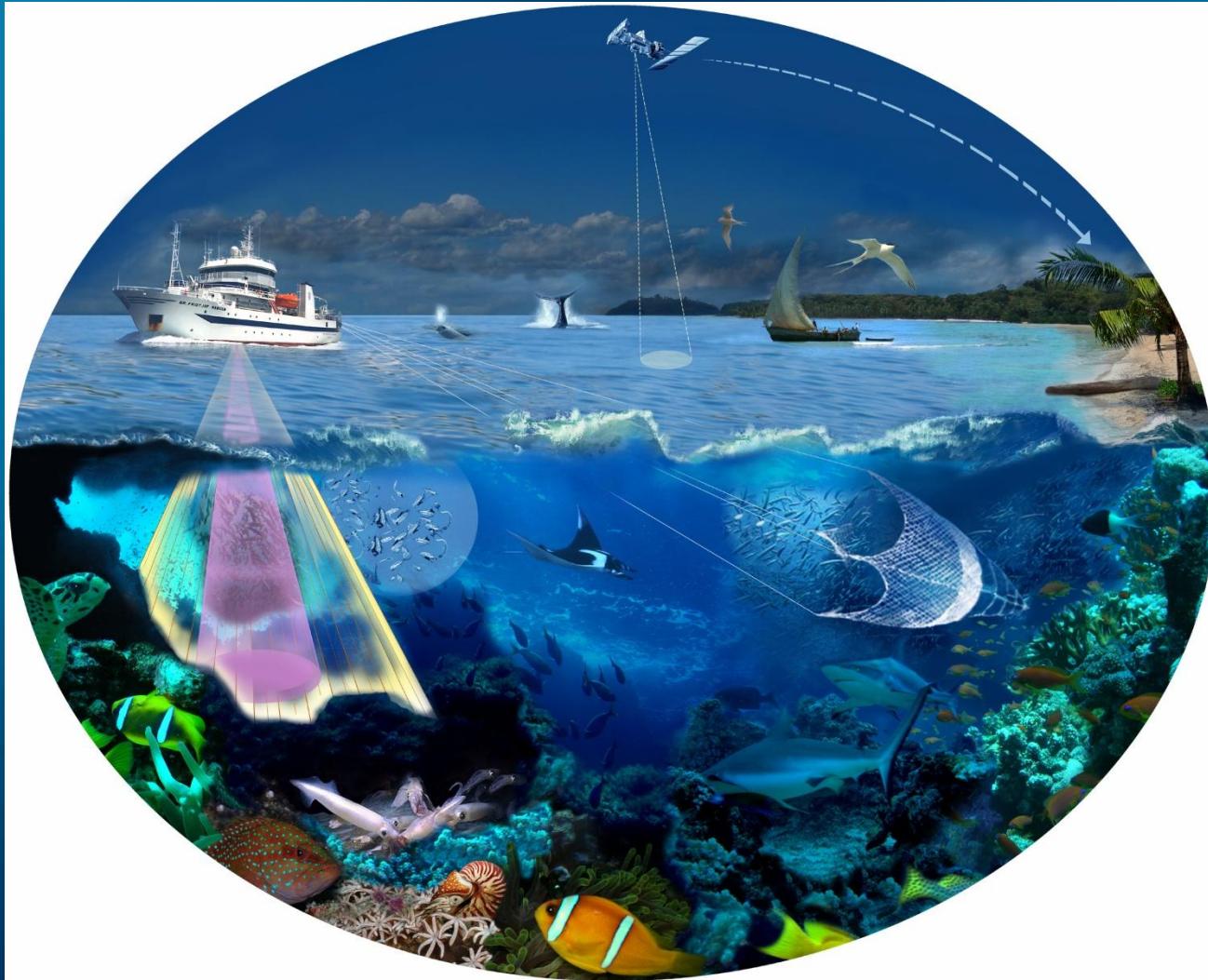
VAMS 01 (Madagascar Ridge, 841 m) Highlights



VAMS 02 (Madagascar Ridge, 1840 m) Highlights



THE NEW EAF-NANSEN PROGRAMME (2016-20): MONITORING MARINE ECOSYSTEMS



New Dr. Fridtjof Nansen, 2016/17 >

- 74,5m LOA
- 17,5m beam
- 7 laboratories
- Accomodation for 45 persons
- Delivery Sept 2016 from Gondan yard, Spain



Thank You !



See: www.cDCF.no and www.eaf-nansen.org

