Dataset name: **Mesozooplankton and micronekton fatty acids**

|  |  |
| --- | --- |
| Parameters: | **Fatty acid composition** |

PROJECT TITLE: **MOBYDICK**

Oceanographic cruise: **MOBYDICK**

Start date: **18/02/2018**

End date: **27/03/2018**

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Geographic information: **Indian sector of the Southern Ocean**

Latitude: **49.5°S – 52.5°S**

Longitude: **67,0°E – 74.5°E**

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# OPERATIONS

## Sampling device(s)

Samples were collected from vertical zooplankton net tows (WP2 and WP3) and mesopelagic trawl tows.

## List of stations sampled

Zooplankton nets: M1, M2\_1, M2\_2, M2\_3, M3\_1, M3\_2, M3\_3, M4\_1, M4\_2.

Midwater trawls: M2\_1, M2\_2, M3, M3\_1, M4\_1, M4\_2.

# INSTRUMENTS

Instrument Type: Plankton nets WP2 and WP3

Manufacturer: General Oceanics

Model:TBD

Instrument Features / Calibration: N/A

Instrument Type: Pelagic trawl

Manufacturer: Le Drezen

Model: Mesopelagos

Instrument Features / Calibration: N/A

# DESCRIPTION of PARAMETERS

## Measurement details

Zooplankton net samples were size fractionated using 125, 250, 500, 1000, 2000 and 4000 µm sieves from the WP2 net, and using 1000, 2000 and 4000 µm sieves from the WP3 net. Size fractions < 4000 µm were filtered onto pre–weighed Whatman GF/F filters. Zooplankton from the 4000 µm size fraction were separated to species level and grouped into logarithmic size bins. Macrozooplankton and micronekton were sampled from the midwater trawls with the aim to have representation of major taxa and size classes from al trawls. In the case of smaller animals (< 50 mm) the entire animal was collected. In the case of larger animals a tissue sample (~ 20 mg) was collected. All samples were frozen at -80oC.

## Analytical procedure

These samples were collected for the purpose of fatty acid analysis, as an additional tool for dietary / food web analysis. Whether these samples will be used for this purpose depends in part on the outcome of the isotope analysis. Options are being investigated for analyzing these samples in France (where they are currently housed). Alternatively they may be shipped to Canada. However, the shipping cost may be prohibitive.

## Units

* Fatty acid profiles – weight and percent composition of individual fatty acids.

## Sensor precision

TBD

## Post-cruise data analysis/treatment required

Samples need to be kept frozen at -80oC. Currently these samples are located at Urania Cristaki’s lab.

## Estimated Date of Delivery

TBD – depending on type of analysis that is done on these samples.

# BIBLIOGRAPHY

TBD