Dataset name: **Nutrients: Ammonium**

|  |  |
| --- | --- |
| Parameters: | * **Ammonium concentration** |

PROJECT TITLE: **MOBYDICK**

Oceanographic cruise: **MOBYDICK**

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

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

Project manager: **Bernard Quéguiner** [bernard.queguiner@mio.osupytheas.fr](mailto:bernard.queguiner@mio.osupytheas.fr)

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**Observatoire Océanologique de Banyuls sur mer**

**66650 Banyuls sur mer, France**

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

Latitude: **49.5°S – 52.5°S**

Longitude: **67,0°E – 74.5°E**

Parameter supervisor: **Stéphane Blain**

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# OPERATIONS

## Sampling device(s)

Water samples were obtained from rosette bottles.

## List of stations sampled

M1: CTD38; M3: CTD23; M4\_1: CTD13; M4\_2: CTD42; M2\_1: CTD07; M2\_2: CTD30; M2\_3: CTD53; M3\_3: CTD60

# INSTRUMENTS

Instrument Type: **Fluorometer**

Manufacturer: **Turner Designs**

Model: **Trilogy®**

Instrument Features / Calibration: **N/A**

# DESCRIPTION of PARAMETERS

## Sampling details

Samples were collected in polypropylene tubes directly from the rosette bottles. Following rinsing, the tubes were filled with 40 mL of seawater and closed immediately to avoid contamination by air.

## Analytical procedure

Back at the onboard laboratory, the oxidative reagent was added, following the method of Holmes *et al.* (1999). Samples for NH4+ determination were incubated for at least 3 h in the dark, at ambient temperature, before fluorescence measurements (Excitation wavelength: 370 nm, emission wavelength/reading: 460 nm).

## Units

* Ammonium concentration: nmol L–1

## Sensor precision

N/A

## Post-cruise data analysis/treatment required

N/A

## Estimated Date of Delivery

6 months after the cruise

# BIBLIOGRAPHY

Holmes R.M., Aminot A., Kérouel R., Hooker B., PetersonB., 1999. A simple and precise method for measuring ammonium in marine and freshwater ecosystem. *Journal canadien des sciences halieutiques et aquatiques*, **56**(10): 1801-1808.

[https://doi.org/10.1139/f99-128 56](https://doi.org/10.1139/f99-128%2056)