Dataset name: **Particulate organic matter: Phosphorus**

|  |  |
| --- | --- |
| Parameters: | * **Particulate organic phosphorus 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)

Address: **Mediterranean Institute of Oceanolography**

**Institut Pytheas - Observatoire des Sciences de l'Univers**

**Bâtiment OCEANOMED, Campus de Luminy, case 901**

**F-13288 Marseille Cedex 09, France**

Chief scientist: **Ingrid Obernosterer** [ingrid.obernosterer@obs-banyuls.fr](mailto:ingrid.obernosterer@obs-banyuls.fr)

Address: **Laboratoire d’Océanographie Microbienne**

**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**

LOMIC

Observatoire Océanologique de Banyuls sur mer

66650 Banyuls sur mer, France

+33 (0)4 68 88 73 44

[stephane.blain@obs-banyuls.fr](mailto:stephane.blain@obs-banyuls.fr)

Dataset contact: **Stéphane Blain**

LOMIC

Observatoire Océanologique de Banyuls sur mer

66650 Banyuls sur mer, France

+33 (0)4 68 88 73 44

[stephane.blain@obs-banyuls.fr](mailto:stephane.blain@obs-banyuls.fr)

# OPERATIONS

## Sampling device(s)

Water samples were obtained from rosette bottles (12 depths).

## List of stations sampled

M1: CTD 35 and 38; M3: CTD23 and 26; M4\_1: CTD13, 17 and 18; M4\_2: CTD42 and 44; M2\_1: CTD07; M2\_2: CTD29 and 30; M2\_3: CTD53; M3\_3: CTD60

# INSTRUMENTS

Instrument Type: **Autonalyser**

Manufacturer: **Bran+Luebbe**

Model: **AA3**

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

# DESCRIPTION of PARAMETERS

## Sampling details

500 mL of seawater were sampled in HDPE bottles and filtered onto precalcinated (450°C, 24h) 25 mm Whatman GF/F filters. Filters were then dried in an oven (40°C, 24h) and stored in glass vials until analysis.

## Analytical procedure

Analysis is done through persulfate digestion at 120°C followed by phosphate determination using segmented flow analysis (Pujo Pay & Raimbault, 1994).

## Units

* POP concentration: µmol L–1

## Sensor precision

N/A

## Post-cruise data analysis/treatment required

N/A

## Estimated Date of Delivery

6 months after the cruise

# BIBLIOGRAPHY

Pujo-Pay M., Raimbault P. 1994. Improvement of the wet-oxidation procedure for simultaneous determination of particulate organic nitrogen and phosphorus collected on filters. *Marine Ecology Progress Series*, **105**, 203-207.