Dataset name: **Macrozooplankton and micronekton communities**

|  |  |
| --- | --- |
| Parameters: | * **Macrozooplankton and micronekton taxonomy** * **Macrozooplankton and micronekton partition among taxons** * **Length of fish and salps** * **Sex of fish** * **Physical/biogeochemical parameters (conductivity, temperature, fluorescence)** |

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: **Cédric Cotté**

LOCEAN

Institut Pierre Simon Laplace.

Boîte 100 - 4, place Jussieu

75252 Paris Cedex 05, France

+33 (0)1 44 27 70 78

[Cedric.Cotte@locean-ipsl.upmc.fr](mailto:Cedric.Cotte@locean-ipsl.upmc.fr)

Dataset contacts: **Yves Cherel**

Centre d'Etudes Biologiques de Chizé

405, route de La Canauderie

79360 Villiers-en-Bois, France

+33 (0)5 49 09 78 35

[cherel@cebc.cnrs.fr](mailto:cherel@cebc.cnrs.fr)

**Boris Espinasse / Natasha Henschke**

Institute for the Oceans and Fisheries

Faculty of Science, Vancouver Campus

AERL, 2202 Main Mall

Vancouver, BC Canada V6T 1Z4

+1 604 822 2731

[b.espinasse@oceans.ubc.ca](mailto:b.espinasse@oceans.ubc.ca) / [nhenschke@eoas.ubc.ca](mailto:nhenschke@eoas.ubc.ca)

# OPERATIONS

## Sampling device(s)

Deployment of meospelagic trawl at depths pre–selected from acoustics. An elephant seal tag equipped the trawl to record simultaneously physical/biogeochemical caracteristics of the water masses

## List of stations sampled

**Table 1 : Characteristics of trawl deployments**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Station ID** | **Trawl** | | **Date** | **Time** | | | **Position** | **Max**  **depth**  **(m)** | **Cable type** |
| **ID** | **OPE #** | **Start** | **End** |  |  |
| Test | Test\_D1 |  | 22/02/2018 | 04:15 | 05:29 | Day | 33°08 S / 61°11 E | 45 | *mésopélagique* |
| Test | Test\_D2 |  | 22/02/2018 | 05:48 | 07:50 | Day | 33°06 S / 61°11 E | 560 | *mésopélagique* |
| M2\_1 | Trawl\_001 | 1 | 26/02/2018 | 01:24 | 03:06 | Day | 50°36 S / 72°00 E | 318 | *mésopélagique* |
| M2\_1 | Trawl\_002 | 3 | 26/02/2018 | 04:35 | 05:54 | Day | 50°30 S / 72°01 E | 210 | *mésopélagique* |
| M2\_1 | Trawl\_003 | 4 | 26/02/2018 | 06:06 | 07:45 | Day | 50°27 S / 72°00 E | 350 | *mésopélagique* |
| M2\_1 | Trawl\_004 | 5 | 27/02/2018 | 15:21 | 16:46 | Night | 50°35 S / 71°55 E | 346 | *mésopélagique* |
| M2\_1 | Trawl\_005 | 6 | 27/02/2018 | 17:08 | 17:58 | Night | 50°35 S / 71°52 E | 55 | *mésopélagique* |
| M2\_1 | Trawl\_006 | 7 | 27/02/2018 | 18:13 | 19:21 | Night | 50°34 S / 71°50 E | 158 | *mésopélagique* |
| M4\_1 | Trawl\_007 | 8 | 01/03/2018 | 02:09 | 03:03 | Day | 52°36 S / 67°11 E | 93 | *mésopélagique* |
| M4\_1 | Trawl\_008 | 9 | 01/03/2018 | 03:13 | 05:08 | Day | 52°35 S / 67°08 E | 575 | *mésopélagique* |
| M4\_1 | Trawl\_009 | 10 | 01/03/2018 | 06:00 | 07:31 | Day | 52°33 S / 67°00 E | 425 | *mésopélagique* |
| M4\_1 | Trawl\_010 | 11 | 02/03/2018 | 15:00 | 16:50 | Night | 52°36 S / 67°11 E | 400 | *mésopélagique* |
| M4\_1 | Trawl\_011 | 12 | 02/03/2018 | 17:02 | 18:07 | Night | 52°39 S / 67°07 E | 96 | *mésopélagique* |
| M4\_1 | Trawl\_012 | 13 | 02/03/2018 | 18:18 | 20:08 | Night | 52°42 S / 67°05 E | 575 | *mésopélagique* |
| M3 | Trawl\_013 | 16 | 04/03/2018 | 10:12 | 11:06 | Day | 50°45 S / 68°03 E | 55 | *mésopélagique* |
| M3 | Trawl\_014 | 17 | 04/03/2018 | 11:19 | 12:58 | Day | 50°47 S / 68°01 E | 460 | *mésopélagique* |
| M2\_2 | Trawl\_015 | 18 | 07/03/2018 | 02:35 | 03:47 | Day | 50°39 S / 71°57 E | 170 | *mésopélagique* |
| M2\_2 | Trawl\_016 | 19 | 07/03/2018 | 04:05 | 04:49 | Day | 50°39 S / 71°57 E | 70 | *mésopélagique* |
| M2\_2 | Trawl\_017 | 20 | 07/03/2018 | 05:09 | 06:21 | Day | 50°39 S / 71°57 E | 350 | *mésopélagique* |
| M2\_2 | Trawl\_018 | 21 | 07/03/2018 | 15:33 | 16:49 | Night | 50°40 S / 71°59 E | 317 | *mésopélagique* |
| M2\_2 | Trawl\_019 | 22 | 07/03/2018 | 17:10 | 17:52 | Night | 50°40 S / 71°59 E | 50 | *mésopélagique* |
| M2\_2 | Trawl\_020 | 22 | 07/03/2018 | 18:14 | 19:08 | Night | 50°40 S / 71°59 E | 175 | *mésopélagique* |

**Table 1 : Characteristics of trawl deployments (cont'd)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Station ID** | **Trawl** | | **Date** | **Time** | | | **Position** | **Max**  **depth**  **(m)** | **Cable type** |
| **ID** | **OPE #** | **Start** | **End** |  |  |
| M1 | Trawl\_021 | 24 | 08/03/2018 | 18:33 | 19:18 | Night | 49°50 S / 74°54 E | 51 | *mésopélagique* |
| M1 | Trawl\_022 | 25 | 08/03/2018 | 19:40 | 20:51 | Night | 49°50 S / 74°54 E | 290 | *mésopélagique* |
| M1 | Trawl\_023 | 26 | 08/03/2018 | 21:06 | 22:44 | Night | 49°50 S / 74°54 E | 617 | *mésopélagique* |
| M1 | Trawl\_024 | 27 | 09/03/2018 | 05:40 | 07:14 | Day | 49°50 S / 74°54 E | 400 | *mésopélagique* |
| M1 | Trawl\_025 | 28 | 09/03/2018 | 07:33 | 08:14 | Day | 49°50 S / 74°54 E | 50 | *mésopélagique* |
| M1 | Trawl\_026 | 29 | 09/03/2018 | 08:29 | 10:05 | Day | 49°50 S / 74°54 E | 632 | *mésopélagique* |
| M4\_2 | Trawl\_027 | 30 | 14/03/2018 | 06:43 | 07:33 | Day | 52°37 S / 67°09 E | 85 | *mésopélagique* |
| M4\_2 | Trawl\_028 | 31 | 14/03/2018 | 07:55 | 09:32 | Day | 52°37 S / 67°09 E | 610 | *mésopélagique* |
| M4\_2 | Trawl\_029 | 32 | 14/03/2018 | 09:51 | 11:08 | Day | 52°37 S / 67°09 E | 410 | *mésopélagique* |
| M4\_2 | Trawl\_030 | 33 | 14/03/2018 | 15:18 | 16:53 | Night | 52°35 S / 67°11 E | 600 | *mésopélagique* |
| M4\_2 | Trawl\_031 | 34 | 14/03/2018 | 17:12 | 17:55 | Night | 52°35 S / 67°11 E | 80 | *mésopélagique* |
| M4\_2 | Trawl\_032 | 35 | 14/03/2018 | 18:12 | 19:32 | Night | 52°35 S / 67°11 E | 400 | *mésopélagique* |
| M3\_2 | Trawl\_033 | 36 | 15/03/2018 | 10:08 | 11:41 | Day | 50°41 S / 68°03 E | 683 | *mésopélagique* |
| M3\_2 | Trawl\_034 | 37 | 15/03/2018 | 15:15 | 17:05 | Night | 50°41 S / 68°03 E | 610 | *mésopélagique* |
| M3\_2 | Trawl\_035 | 38 | 15/03/2018 | 17:25 | 18:09 | Night | 50°41 S / 68°03 E | 90 | *mésopélagique* |
| M3\_2 | Trawl\_036 | 39 | 15/03/2018 | 18:27 | 19:46 | Night | 415 | 610 | *mésopélagique* |
| M2\_3 | Trawl\_037 | 40 | 16/03/2018 | 16:31 | 17:12 | Night | 50°36 S / 71°59 E | 65 | *mésopélagique* |
| M2\_3 | Trawl\_038 | 41 | 16/03/2018 | 17:35 | 18:54 | Night | 50°36 S / 71°59 E | 377 | *mésopélagique* |
| M2\_3 | Trawl\_039 | 42 | 16/03/2018 | 19:15 | 20:01 | Night | 50°36 S / 71°59 E | 30 | *mésopélagique* |
| M2\_3 | Trawl\_040 | 43 | 17/03/2018 | 06:58 | 07:50 | Day | 50°36 S / 71°59 E | 105 | *mésopélagique* |
| M2\_3 | Trawl\_041 | 44 | 17/03/2018 | 08:10 | 09:32 | Day | 50°36 S / 71°59 E | 340 | *mésopélagique* |
| M2\_3 | Trawl\_042 | 45 | 17/03/2018 | 09:52 | 10:49 | Day | 50°36 S / 71°59 E | 190 | *mésopélagique* |
| M3\_3 | Trawl\_043 | 46 | 18/03/2018 | 06:38 | 09:08 | Day | 50°39 S / 67°45 E | 814 | *"siamois"* |
| M3\_3 | Trawl\_044 | 47 | 18/03/2018 | 09:19 | 11:53 | Day | 50°39 S / 67°45 E | 600 | *"siamois"* |
| M3\_3 | Trawl\_045 | 48 | 18/03/2018 | 12:08 | 12:56 | Day | 50°39 S / 67°45 E | 65 | *"siamois"* |
| M3\_3 | Trawl\_046 | 49 | 19/03/2018 | 14:18 | 16:41 | Night | 50°39 S / 67°45 E | 802 | *"siamois"* |
| M3\_3 | Trawl\_047 | 50 | 19/03/2018 | 17:01 | 19:20 | Night | 50°39 S / 67°45 E | 650 | *"siamois"* |
| M3\_3 | Trawl\_048 | 51 | 19/03/2018 | 20:48 | 21:33 | Night | 50°39 S / 67°45 E | 73 | *"siamois"* |

# INSTRUMENTS

Instrument Type: **Pelagic trawl**

Manufacturer: **Le Drezen**

Model: **Mesopelagos**

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

# DESCRIPTION of PARAMETERS

## Sampling details

Macrozooplankton and micronekton samples were taken for taxonomy (including biomass, length of fish and salps, and sex of fish).

## Analytical procedure

Trawl material has been sorted onboard per major taxonomic groups. Biomasses of taxonomic groups/species were determined onboard by weighing. Length of fish and salps were also determined. Sexing of fish was also made.

## Units

* Biomass partition: g per trawl
* Length of fish and salps: mm

## Sensor precision

Accuracy of mass measurements: ±50 g and ± 0.5 g depending on the scale device (à préciser dans la rubrique instruments).

## Post-cruise data analysis/treatment required

N/A

## Estimated Date of Delivery

Database almost completed. Identification of some specimens of fish and crustaceans has to be checked in the laboratory to complete the work.