



# 2019–2021 CTD casts around Sardinia (IDMAR project)

DATE	2019-09-02
TEMPORAL EXTENT	2019-09-02 - 2021-09-04
AUTHORS	<a href="#">Angelo Bonanno</a> <sup>id 1</sup> , <a href="#">Simona Genovese</a> <sup>id 1</sup> , <a href="#">Ignazio Fontana</a> <sup>id 1</sup> , <a href="#">Giovanni Giacalone</a> <sup>id 1</sup> , <a href="#">Gualtiero Basilone</a> <sup>id 1</sup> , <a href="#">Salvatore Aronica</a> <sup>id 1</sup> , <a href="#">Roberto Sorgente</a> <sup>id 2</sup> , <a href="#">Alberto Ribotti</a> <sup>id 2</sup>
AFFILIATIONS	1. CNR-IAS, 91021 Torretta Granitola (TP), Italy 2. CNR-IAS, 09170 Oristano, Italy
DOI	<a href="#">10.17882/99196</a>
PUBLISHER	<a href="#">SEANOE</a>
CONTRIBUTORS	<a href="#">In Memory of Salvatore Mazzola</a> <sup>id</sup>

Three oceanographic cruises were organized in the seas around Sardinia (western Mediterranean) between September 2019 and September 2021 (see the table) by the Italian National Research Council (CNR) and the acquisition of 241 hydrological vertical profiles by a SBE 911plus V 5.1g. Data of conductivity (SBE-4 sensor, resolution of  $3 \times 10^{-4}$  S/m), temperature (SBE-3/F thermometer, resolution of 0.00015 °C/bit at -1 °C or 0.00018 °C/bit at 31 °C), dissolved oxygen (DO; SBE-43 polarographic membrane sensor with a range of 120% of surface saturation and an accuracy of  $\pm 2\%$  of saturation), Chlorophyll-a fluorescence (Chl-a; Chelsea Aqua 3 Con in  $\mu\text{g/l}$ ) reported as Relative Fluorescence Unit. Turbidity was acquired by a WET Labs ECO-NTU. The pH/Redox sensor (SBE27) was available just during the cruise IDMAR2019. Data were quality checked and processed by the Sea-Bird Seasoft© software, and the coarse errors corrected. In all three cruises the 35-meter-long R/V G. Dallaporta was used. The data set is provided per cruise as Ocean Data View (ODV, Schlitzer, 2024) Spreadsheet files in TXT format where missing data values are set to -1.e10. The cruises have been realized in the framework of the project Distributed Research Infrastructure in the Sea (IDMAR) funded by the Italian National Research Council and the Regional Operational Programme "Sicily 2014-2020" in the framework of the European Regional Development Fund (ERDF).

## DataVariable

Pressure, Digiquartz [db]

Temperature [deg C]; ITS-90 in all other cruises

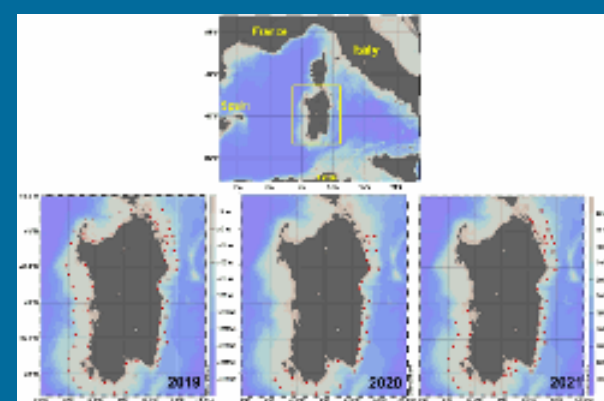
Conductivity [mS/cm]

Oxygen, SBE43 [ml/l] in all cruises

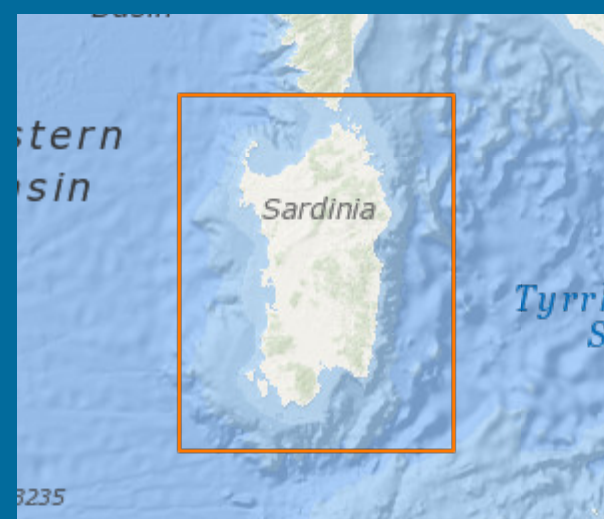
Oxygen, SBE43 [% saturation]

Fluorescence, Chelsea Aqua 3 Chl Con [ $\mu\text{g/l}$ ] in all cruises

## DOWNLOAD DATA



Casts realized during the three cruises in 2019, 2020 and 2021



## Download metadata

[TXT](#) [RIS](#) [XLS](#) [RTF](#) [BIBTEX](#)

pH/Redox, SBE27 just in IDMAR2019

Turbidity, WET Labs ECO [NTU] in all cruises

*Table : List of cruises organized in the period 2019–2021 with the number of casts per cruise, the areas interested and the dates of the calibration of sensors before each cruise (month and year)*

	Cruise start	Cruise end	# casts	area	Sensors calibration date
IDMAR 2019	02/09/2019	15/02/2019	154	All seas around Sardinia	Temp.: Aug.17 - Cond.: Feb.19 Oxy.: Sept.19 - Fluo.: June16 Press: Apr.17 - pH: Sept.16 - Turb.: May17
IDMAR 2020	01/10/2020	06/10/2020	34	South and eastern Sardinian seas	Temp.: Jan.20 - Cond.: Jan.20 Oxy.: Feb.19 - Fluo.: June16 Press: Apr.17 - Turb.: May17
IDMAR 2021	29/08/2021	04/09/2021	53	Center-west, south and eastern Sardinian seas	Temp.: June21 - Cond.: June21 Oxy.: Feb.19 - Fluo.: June16 Press: Apr.17 - Turb.: May17

#### DISCIPLINES

Physical oceanography

#### KEYWORDS

hydrological data, Sardinia, CTD profiles, western Mediterranean Sea, water masses, coastal hydrology

#### LOCATION

41.5N, 38.5S, 7.5E, 10.5W

#### LICENCE



#### UTILISATION

These data are published without any warranty: the user assumes all risk arising from her/his use of these data. These data are intended to be quality controlled, but it is possible that they contain errors. It is the unique responsibility of the user to assess if the data are appropriate for his/her use, and to interpret them accordingly. We welcome users to ask questions and report problems to the contact addresses listed in the data files.

#### ACKNOWLEDGEMENTS

The data used in this work have been collected in the framework of the project IDMAR (Infrastruttura Distribuita di ricerca per il MARE) funded by the Italian National Research Council and the Regional Operational Programme "Sicily 2014-2020" in the framework of the European Regional Development Fund (ERDF). We thank captain and crew on R/V G. Dallaporta for their essential support on board.

## Devices

Cruise name

Station

Type of acquisition (here C)

Date in mon/day/yr and Time in hh:mm

Longitude [degrees\_east]

Latitude [degrees\_north]

Bot. Depth [m]

## Data

FILE	SIZE	FORMAT	PROCESSING	ACCESS
IDMAR 2019 compressed dataset in txt and map in jpeg formats	745 Ko	ODV	Processed data	<a href="#">Open access</a> <a href="#">Download</a>
IDMAR 2020 compressed dataset in txt and map in jpeg formats	391 Ko	ODV	Processed data	<a href="#">Open access</a> <a href="#">Download</a>
IDMAR 2021 compressed dataset in txt and map in jpeg formats	452 Ko	ODV	Processed data	<a href="#">Open access</a> <a href="#">Download</a>

## How to cite

Angelo Bonanno, Simona Genovese, Ignazio Fontana, Giovanni Giacalone, Gualtiero Basilone, Salvatore Aronica, Roberto Sorgente, Alberto Ribotti (2019). 2019–2021 CTD casts around Sardinia (IDMAR project). SEANOE. <https://doi.org/10.17882/99196>

[Copy this text](#) 

## Related documents

Schlitzer R. (2024). Ocean Data View. <https://odv.awi.de/>.

Ribotti Alberto, Sorgente Roberto, Borghini Mireno (2020). Quality assurance and control on hydrological data off western Sardinia (2000–2004), western Mediterranean. *Earth System Science Data*, 12 (2). <https://doi.org/10.5194/essd-12-1287-2020>

**SEANOE** SEA SCIENTIFIC  
OPEN DATA  
PUBLICATION

New Upload 

[About](#)

[Contact](#)

[Legal notice](#)

[Credits](#)

[RSS](#)

[Twitter](#)

[OAI-PMH](#)

Certified by

