Ocean-based Negative Emission Technologies

OCEAN NETs
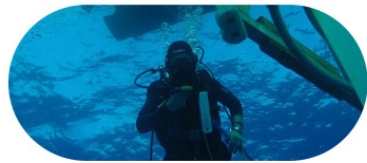
Deliverable Title	**D8.4** **Periodic report on available data**
Lead	GEOMAR Helmholtz Center for Ocean Research Kiel
Related Work Package	WP 8: Data Management
Related Task	Tasks 8.1 and 8.2
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Abstract: This document is the second of three periodic reports on available data. To present we can report on the deposition of one database, one supplementary dataset with code, one supplementary code repository, one preliminary dataset and 33 individual data files for internal use only marked as work in progress towards data publication. All web based links are listed in Part A of WP8's 2nd periodic Report.

Document History

Date	Version	Description	Name/Affiliation
22.12.2022	1.0	First submitted version.	Carsten Schirnick / GEOMAR

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List of abbreviations, acronyms and definitions

FAIR: **F**indable, **A**ccessible, **I**nteroperable, **R**eusable

1. Introduction

1.1 Context

OceanNETs is a European Union project funded by the Commission's Horizon 2020 program under the topic of Negative emissions and land-use based mitigation assessment (LC-CLA-02-2019), coordinated by GEOMAR | Helmholtz Center for Ocean Research Kiel (GEOMAR), Germany.

OceanNETs responds to the societal need to rapidly provide a scientifically rigorous and comprehensive assessment of negative emission technologies (NETs). The project focuses on analyzing and quantifying the environmental, social, and political feasibility and impacts of ocean-based NETs. OceanNETs will close fundamental knowledge gaps on specific ocean-based NETs and provide more in-depth investigations of NETs that have already been suggested to have a high CDR potential, levels of sustainability, or potential co-benefits. It will identify to what extent, and how, ocean-based NETs can play a role in keeping climate change within the limits set by the Paris Agreement.

1.2 Purpose and scope of the deliverable

WP 8 supports all researchers in the OceanNETs project in order to achieve publication of their research data on which their scientific results and output is based. This deliverable is a report on the status quo of published datasets, software code supplementing any datasets and usage of the web based internal sharing platform for research data during ongoing research.

1.3 Relation to other deliverables

This deliverable reports on the achievements of data submissions fulfilling deliverables or provisioning of declarations regarding the management of sensitive data which are thus stored locally at the institutions of the respective investigators in order to comply with privacy regulations.

2. Technical part of the deliverable

2.1 Data Management Plan

The data management plan for OceanNETs has been updated and submitted in mid 2022. Its current version is 2 and available via DOI:10.3289/oceannets_d8.1 .

2.2 Research data - management and handling

WP 8 is actively guiding researchers on how to prepare and where to upload their datasets and/or supplementary code in order to achieve FAIR compliant and open access for their research output.

Transient lack of storage capacities at data centers other than GEOMAR which were intended for dissemination of very large volumes of numerical modelling outputs (tens of

Terabytes) are delaying timely submission. This shortcome is expected to be temporary and resolved within the project's term. Otherwise, long term storage will be provided at alternative data centers and long lasting file transfers triggered in time.

3. Conclusion

Overall deliverables of research data are fulfilled as expected or alternative storage capacities are at hand and will be made available for data submission if required.