



Helmholtz-Zentrum für Ozeanforschung Kiel

## Tutorial

# Research Software Publication at GEOMAR

### Contact

#### **Data Management**

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Research software developed by GEOMAR scientists and software developers can be published at GEOMAR. This process is an initiative of the GEOMAR software developers and is realised in cooperation between the GEOMAR Digital Research Services team and the GEOMAR library. A DOI for research software can be requested via the research software submission form: <https://portal.geomar.de/research-software-submission>

The software will be published within OceanRep GEOMAR (<https://oceanrep.geomar.de/>), the institutional repository for full-text print publications managed by the GEOMAR library. (Example: DOI [10.3289/SW\\_2\\_2020](https://doi.org/10.3289/SW_2_2020))

## Typical Workflow

### You need to:

- **Fill in the research software submission form:** <https://portal.geomar.de/research-software-submission>
- **Prepare your Software for Publication:**
  - Software Code must be in a GEOMAR GitLab repository: <https://git.geomar.de>
  - The GitLab Repository must be publically available, a personal namespace is not possible ([Internal Git Tutorial](#))
  - In GitLab we have a dedicated group, move or copy your code there <https://git.geomar.de/open-source> if you don't already have a group for your project. If you need assistance setting up or copying your repository in GitLab let us know via the comment field within the submission form, otherwise tell us where to find your software code.

**The repository with your software code *\*must\** contain the following information in a README.md file:**

- Author(s)
- Software Title
- Short description of the research software
- Licence (Open Source Licence recommended, e.g. BSD 3-clause, MIT, Apache, .. )
- Installation instructions, Usage instructions and/ or examples
- Version(s) of used software, and dependencies (libraries and packages) have to be provided, either in the README or in a format accepted by the community (e.g. requirements.txt- File)

Any further information necessary for reproducing your results (e.g. seeds for random data) should be provided in the appropriate format.

### Data Management will:

- check information in your GitLab repository (see above prerequisites) for completeness
- forward your information to the GEOMAR Library
- contact you with status and/ or further questions

## GEOMAR Library will:

- check metadata for completeness
- reserve a DOI for you (can be done in advance if needed)
- make an entry in OceanRep (<https://oceanrep.geomar.de>) for your software

## Data Management will:

- add a DOI to your README.md
- create a .zip file of your GitLab repository and attach it to the OceanRep entry
- add links to GitLab repository in the OceanRep entry

## Read more about dealing with research software:

Helmholtz Open Science: [Positionspapier zu wissenschaftlicher Software](#)

**Alliance of Science Organisations in Germany:** As part of the second phase of the Alliance of Science Organisations' priority initiative "Digital Information", the working group "Scientific Software" has produced a handout on the use of research data software:

[DE]: <https://doi.org/10.5281/zenodo.1172969>

[EN]: <https://doi.org/10.5281/zenodo.1172988>

**If you have other questions or comments please contact the data management team:**

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