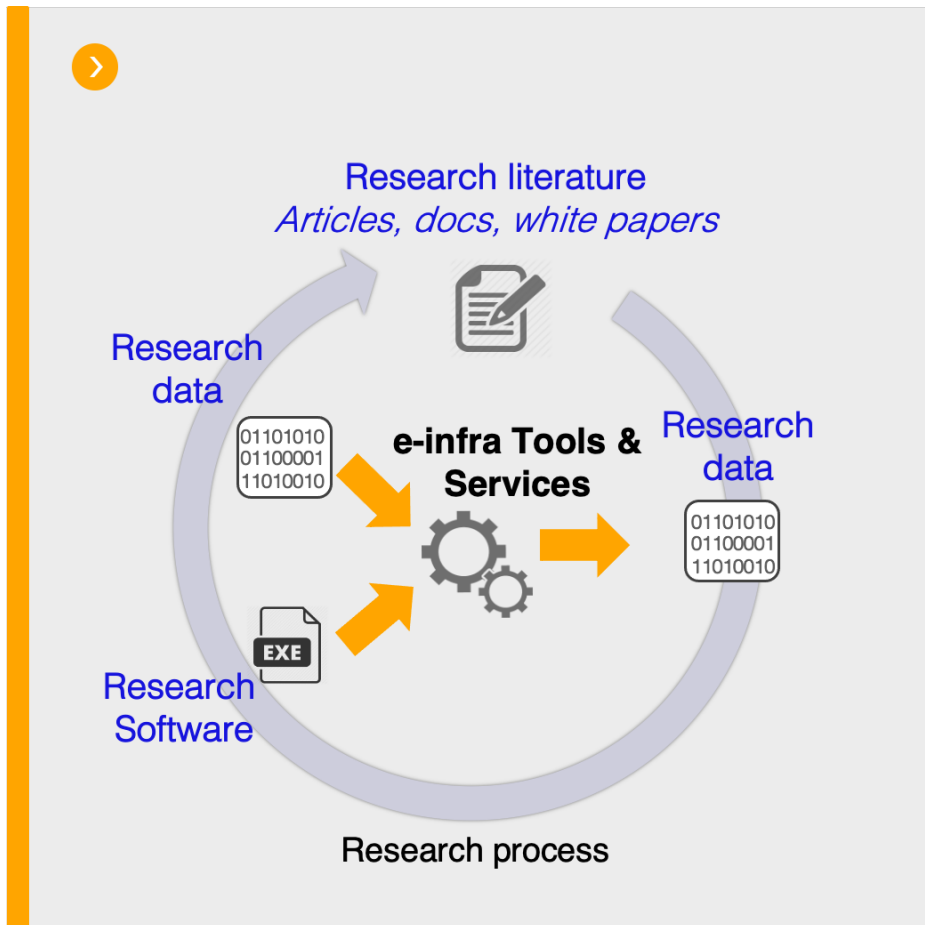




Discovering data in OpenAIRE **CONNECT**

Paolo Manghi, CTO OpenAIRE
Slides from Alessia Bardi, ISTI CNR

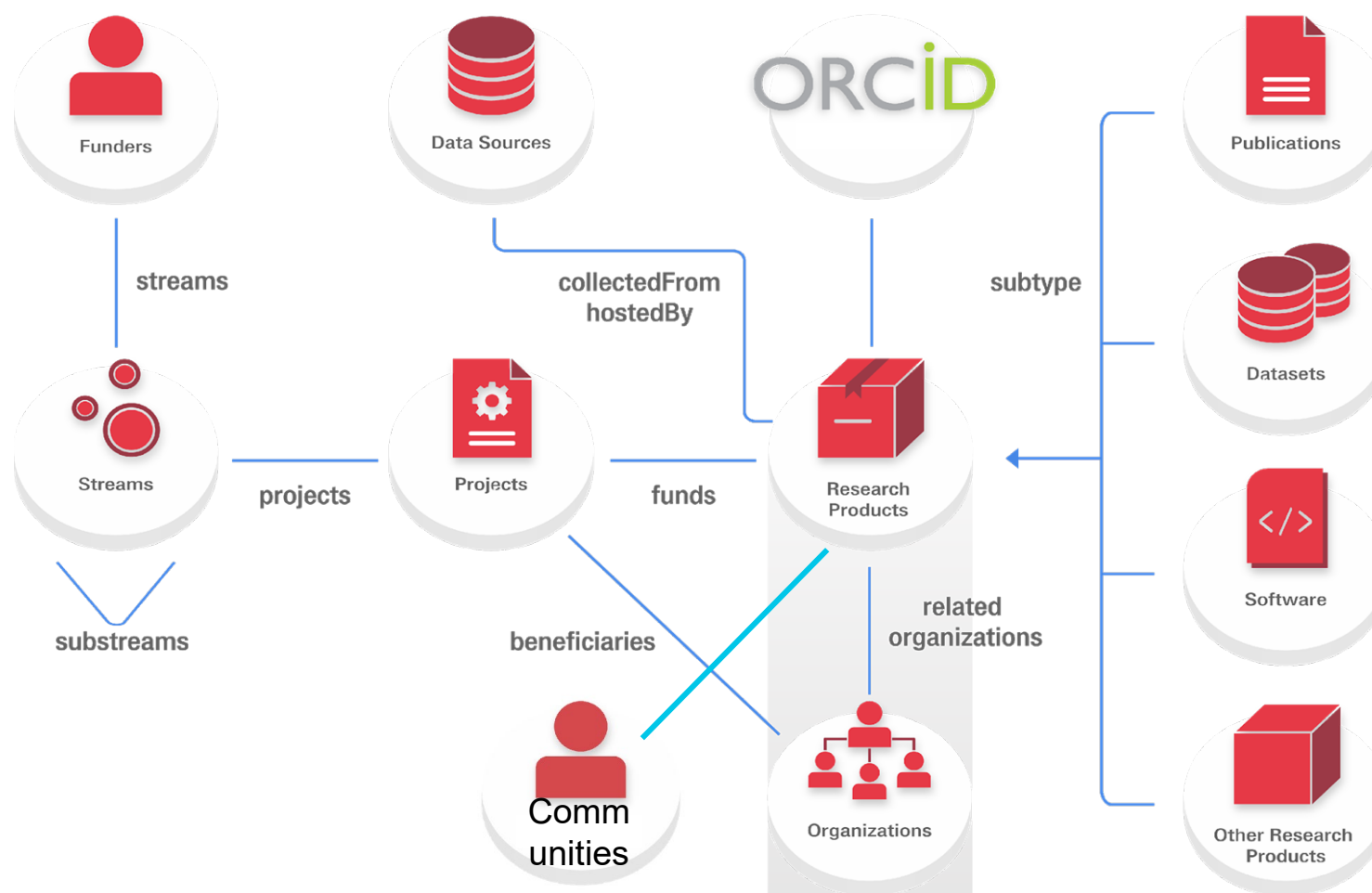
WHY A PLATFORM FOR RESEARCH DATA & SOFTWARE DISCOVERY



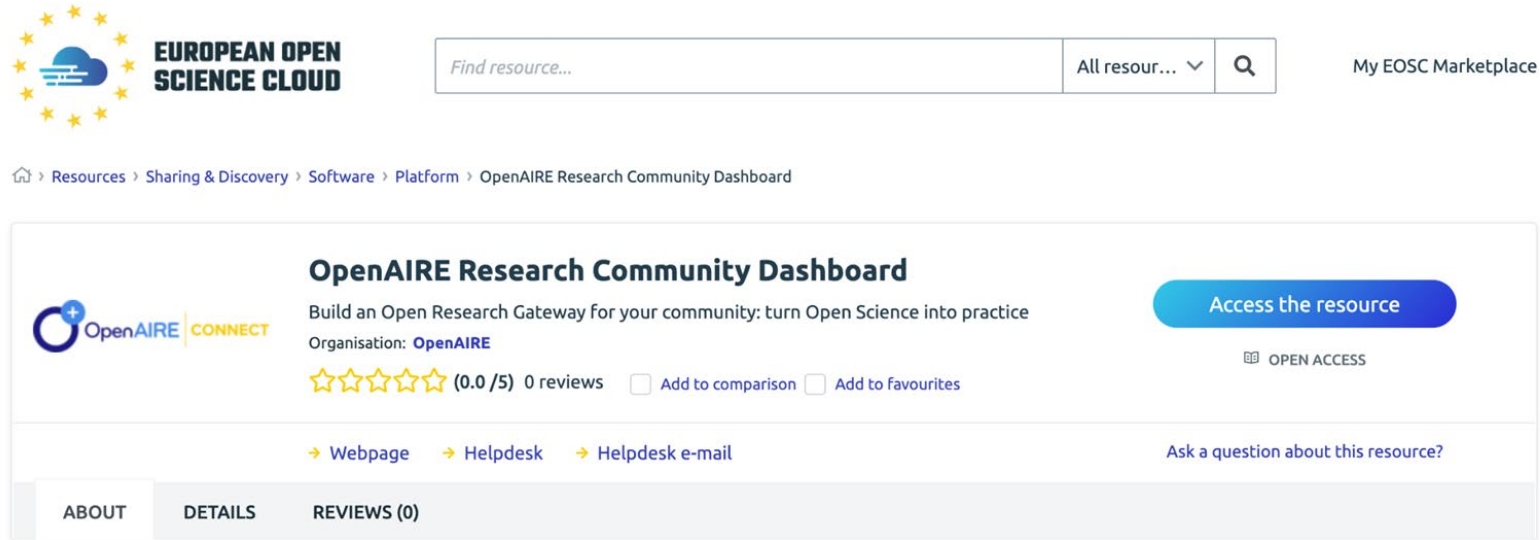
Research data and software:

- As a **first-class citizen** in scholarly communication and in the research flow
- As a **product** of a research activity
- For **transparency** of research evaluation and reproducibility
- For **omni-comprehensive** reward

OPENAIRE RESEARCH GRAPH



OPENAIRE **CONNECT**: RESEARCH COMMUNITY DASHBOARD



The screenshot shows the top navigation bar of the European Open Science Cloud (EOSC) with the logo on the left, a search bar in the center, and a 'My EOSC Marketplace' link on the right. Below the navigation bar is a breadcrumb trail: Home > Resources > Sharing & Discovery > Software > Platform > OpenAIRE Research Community Dashboard. The main content area features the 'OpenAIRE Research Community Dashboard' header with the OpenAIRE CONNECT logo. The description reads: 'Build an Open Research Gateway for your community: turn Open Science into practice'. The organization is listed as 'OpenAIRE'. There are five empty star icons followed by '(0.0 / 5) 0 reviews', and two checkboxes for 'Add to comparison' and 'Add to favourites'. A blue button labeled 'Access the resource' is present, with 'OPEN ACCESS' indicated below it. At the bottom of the dashboard, there are links for 'Webpage', 'Helpdesk', and 'Helpdesk e-mail', along with a link to 'Ask a question about this resource?'. A tabbed interface at the very bottom shows 'ABOUT', 'DETAILS', and 'REVIEWS (0)'.

Powered by



Request a thematic portal for your research community (aka “Community Gateway”) to discover research software and links to publications, data, projects, etc.

FIND THE OPENAIRE GATEWAY FOR YOUR COMMUNITY

The screenshot shows the EOSC Services page with a search for 'marine gateway'. The results list includes the 'European Marine Science OpenAIRE Community Gateway' and the 'Marine Environmental Indicators VLab'. The first result is highlighted with a purple box.

European Marine Science OpenAIRE Community Gateway

Service Open Access English

Scientific domain: Natural Sciences>Other Natural Sciences
Organisation: OpenAIRE

The OpenAIRE Community Gateway for European Marine Science offers a view of the OpenAIRE Graph including literature datasets software other research products and projects (all linked to each other) relative to this discipline. Users can discover sci...

Show more

Marine Environmental Indicators VLab

Service Open Access English

Scientific domain: Natural Sciences>Earth & Related Environmental Sciences

Assessing the socio-economic impact of digitalisation in rural areas

desira

Creation Date: 15-07-2020

The scope of this community is to provide access to publications, research data, projects and software for assessing the socio-economic impact of digitalisation in rural areas in Europe

Aurora Universities Network

AURORA

Creation Date: 30-11-2021

Aurora consists of research-intensive universities deeply committed to the social impact of our activities, and with a history of engagement with the communities in which we operate. Our overall vision is to use our academic excellence to influence societal change through our research and education - aiming to contribute to the...

Common Language Resources and Technology Infrastructure

CLARIN

Creation Date: 01-03-2018

CLARIN

Restricted

Corona Virus Disease

COVID-19 linked data

Creation Date: 16-03-2020

This portal provides access to publications, research data, projects and software that may be relevant to the Corona Virus Disease (COVID-19). The OpenAIRE COVID-19 Gateway aggregates COVID-19 related records, links them and provides a single access point for discovery and navigation. We tag content from the OpenAIRE Research Graph...

DARIAH EU

DARIAH-EU

Creation Date: 01-03-2018

The Digital Research Infrastructure for the Arts and Humanities (DARIAH) aims to enhance and support digitally-enabled research and teaching across the arts and humanities. It develops, maintains and operates an infrastructure in support of ICT-based research practices and sustains researchers in using them to build, analyse and interpret...

FINDING SOFTWARE IN MARINE RESEARCH

The screenshot shows the homepage of the European Marine Science community. At the top, there is a navigation bar with links: Home, Deposit, Link, Search, About, Develop, and Sign in. The main header features the text "European Marine Science" and a "Join" button. Below this, there is a search bar with the text "Type Research products" and "Scholarly works Search in OpenAI...". A purple box highlights the "Research software (1,032)" link in the navigation bar. The main content area includes a "Summary" section and a "Subjects" section with links: marine, ocean, fish, aqua, sea. A "VIEW ALL" link is also present.

The screenshot shows the OpenAIRE search interface. At the top, there is a search bar with the text "Advanced search in Research products" and "Simple Search". Below the search bar, there is a "SEARCHING FIELDS" section with a dropdown menu for "Any field" and a "TERMS" section with a text input field for "Type keywords...". A purple box highlights the "SEARCHING FIELDS" section. Below the search bar, there is a "Filters" section with a "Clear All" button. The filters include: Access (2) with options "Open Access (960)" and "Restricted (65)"; Year range with a date picker showing "e.g. 1800" and "e.g. 2032"; Document Type (1) with options "Software (1,025)"; Funder (3) with options "European Commission (677)", "UK Research and Innovation (9)", and "National Science Foundation (2)"; Country (8) with options "EU (677)", "IT (68)", "DE (19)", "GB (14)", "ES (9)", "US (2)", and "View all"; Language (2) with options "English (130)" and "Spanish; Castilian (1)"; and Source (12). A purple box highlights the "Filters" section. Below the filters, there is a "Results" section showing "1,032 Research Products, Page 1 of 104". The results list includes two items: "Empirical Evaluation of Deep Learning Approaches for Landmark Detection in Fish Bio-Images" and "Global reorganization of deep-sea circulation and carbon storage after the last ice age".

Advanced search in specific fields, also in combination (AND/OR)

Faceted search to filter the result list

<https://mes.openaire.eu>

EXAMPLE

Alice is a researcher, preparing for an expedition to get some ice core samples. She would like to know if there is already some software to plan the sampling or to analyse the data.

She goes to the EOSC Marketplace and finds the European Marine Science Gateway. She accesses the service and looks for software about “ice core”

The screenshot displays the EOSC Marketplace search interface. On the left, the 'Advanced search in Research products' panel shows a search rule with the field 'Any field' and the operator 'includes' applied to the term 'ice core'. A 'Simple Search' link is visible in the top right of this panel. The main search results area on the right shows '1 Research Products, Page 1 of 1'. A list of filters on the left includes 'Access (1)', 'Year range', 'Document Type (1)', 'Funder (1)', 'Country (1)', 'Source (1)', and 'Research community (3)'. The search results list contains one entry, 'optimalcores: An R software project to analyse optimal ice core locations in a climate model simulation', which is highlighted with a red box. This entry is marked as 'OPEN ACCESS' and lists the author 'Thomas Münch', DOI '10.5281/zenodo.5075438', publisher 'Zenodo', and project 'EC | SPACE (716092)'. The description states that 'optimalcores' is an R software project for analyzing temperature and isotope time series in climate model simulations. At the bottom of the interface, there is a banner for the 'EOSC Symposium | 14th November 2022 | Prague' and a button to 'ADD TO ORCID'.

Advanced search in Research products Simple Search

SEARCHING FIELDS TERMS

Any field includes ice core

+ ADD RULE

SEARCH →

Filters Clear All

Access (1)

Open Access (1)

Year range

e.g. 1800 - e.g. 2032

This year Last 5 years Last 10 years

Document Type (1)

Software (1)

Funder (1)

European Commission (1)

Country (1)

EU (1)

Source (1)

ZENODO (1)

Research community (3)

The following results are related to European Marine Science. Are you interested to view more results? Visit [OpenAIRE - Explore](#).

1 Research Products, Page 1 of 1

DOWNLOAD RESULTS

EUROPEAN MARINE SCIENCE RESEARCH SOFTWARE

Sort by Date (mos...)

Research Software . 2021

optimalcores: An R software project to analyse optimal ice core locations in a climate model simulation

OPEN ACCESS

Authors: Thomas Münch;

DOI: 10.5281/zenodo.5075438 ¹², 10.5281/zenodo.5075439 ¹²

Publisher: Zenodo

Project: EC | SPACE (716092)

optimalcores is an R software project to analyse the temperature and isotope time series in an isotope-enabled climate model simulation; specifically, the ECHAMS/MPI-OM-wiso past1000 climate model run can be analysed, but also any other suited model run. The software is...

Average popularity Average influence

+ ADD TO ORCID

EOSC Symposium | 14th November 2022 | Prague

EXAMPLE

The screenshot shows the Zenodo record for the 'optimalcores' software project. The title is 'optimalcores: An R software project to analyse optimal ice core locations in a climate model simulation' by Thomas Münch. It is marked as 'OPEN ACCESS'. The DOI is 10.5281/zenodo.5075438. The publisher is Zenodo, and it was published on 06 Jul 2021. The 'Related research' tab is highlighted with a red box. The 'Funded by' section shows 'EC| SPACE' and is also highlighted with a red box. The 'Download from' section lists two Zenodo records: 'optimalcores' (DOI: 10.5281/zenodo.5075438) and 'optimalcores' (DOI: 10.5281/zenodo.5075439), both highlighted with red boxes. The 'Abstract' section describes the software project and its purpose. The 'Version 1.0.0' section mentions the publication of Münch, Werner and Laepple: How precipitation intermittency sets an optimal sampling distance for temperature reconstructions from Antarctic ice cores, Clim. Past, 17, 1587–1605, 2021.

The screenshot shows the 'Related research' tab of the Zenodo record for the 'optimalcores' software project. It displays two research products:

- 2021 . Harvested . IsSupplementTo**
[How precipitation intermittency sets an optimal sampling distance for temperature reconstructions from Antarctic ice cores](#)
- 2020 . Harvested . IsSupplementedBy**
[Antarctic time series of temperature, precipitation, and stable isotopes in precipitation from the ECHAM5/MPI-OM-wiso past 1000 climate model simulation](#)

Access the source code at the hosting source

Funding EC project SPACE

Links to other research products:
article and dataset

RESEARCH IN CONTEXT

Funding project

The screenshot shows the OpenAIRE funding project page for 'SPACE'. The project is titled 'SPACE' and is described as 'Space-time structure of climate change'. It is a 'Project, 2017 - 2024, On going'. The page includes a progress bar showing the project is 'On going' and a 'Detailed Project Information (CORDIS)' link. The 'Open Access mandate' is set to 'Research data: No'. The 'Summary' tab is selected, showing a description of the project and a 'Partners' section with 'AWI'. The page is powered by 'OpenAIRE Research Graph' and includes a 'See an issue? Report it' link.

Software

The screenshot shows the OpenAIRE software project page for 'optimalcores'. The project is titled 'optimalcores: An R software project to analyse optimal ice core locations in a climate model simulation'. It is a 'Research Software, Software, 2021'. The page includes a 'Summary' tab and a 'Related research (2)' section. The 'Abstract' describes the software as an R project to analyse temperature and isotope time series in an isotope-enabled climate model simulation. The 'Version 1.0.0' of the software is released along with the publication Munch, Werner and Laepple: How precipitation intermittency sets an optimal sampling distance for temperature reconstructions from Antarctic ice cores, Clim. Past, 17, 1587-1605, 2021. The page is powered by 'OpenAIRE Research Graph' and includes a 'See an issue? Give us feedback' link.

Article

The screenshot shows the OpenAIRE article page for 'How precipitation intermittency sets an optimal sampling distance for temperature reconstructions from Antarctic ice cores'. The article is by Thomas Munch, Martin Werner, and Thomas Laepple. It is a 'Publication, Article, Preprint, Other literature type, 2021'. The page includes a 'Summary' tab and a 'Related research (2)' section. The 'Abstract' describes the article as a study on the relationship between precipitation intermittency and temperature reconstructions. The page is powered by 'OpenAIRE Research Graph' and includes a 'See an issue? Give us feedback' link.

Data

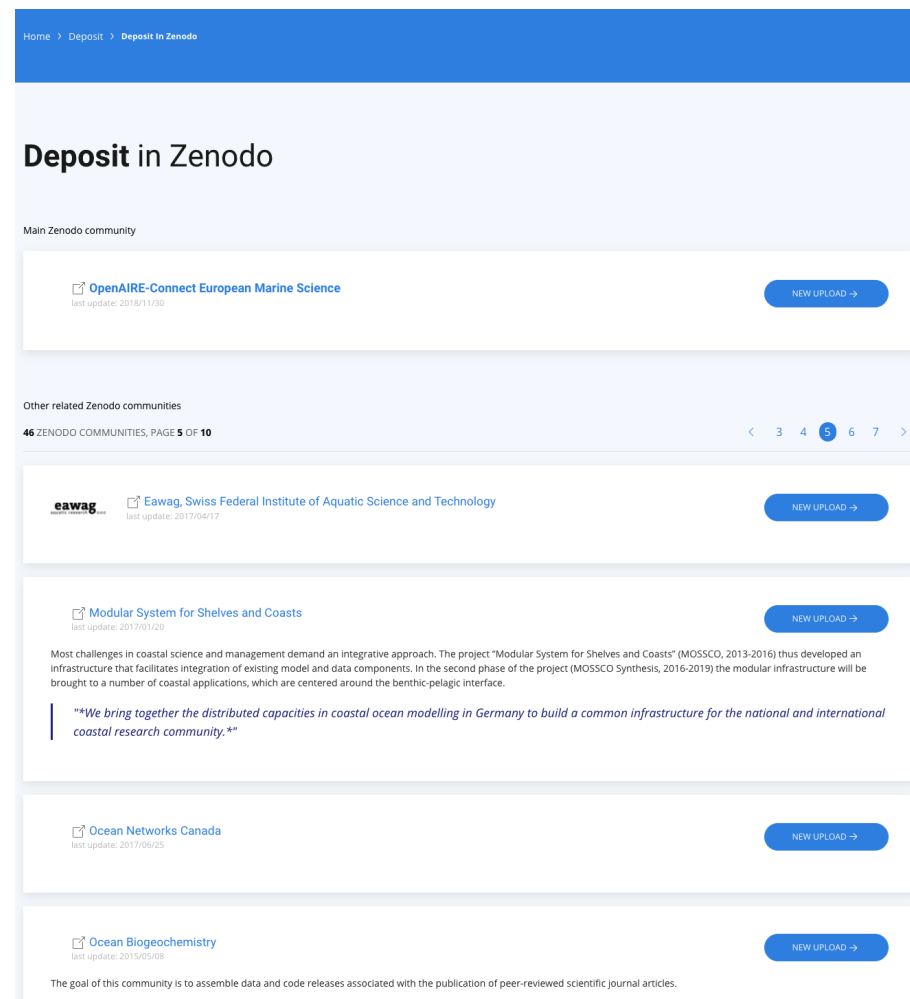
The screenshot shows the OpenAIRE data page for 'Antarctic time series of temperature, isotopes in precipitation from the ECHAM5/MPI-OM-wiso past 1000 climate model simulation'. The dataset is by Thomas Munch and Martin Werner. It is a 'Research Data, Dataset, 2020'. The page includes a 'Summary' tab and a 'Related research (2)' section. The 'Abstract' describes the dataset as a time series of two-metre air temperature (tas), surface temperature (ts), total precipitation (pr), oxygen-18 isotopic composition in precipitation (owx), and deuterium isotopic composition in precipitation (ldr) from the past millennium (800-1999 CE) simulation of the fully coupled ECHAM5/MPI-OM-wiso atmosphere-ocean general circulation model equipped with stable isotope diagnostics (Ispite et al., 2018; Werner et al., 2016) used in the publication of Munch et al. (2021). The data here are provided for the Antarctic region, i.e., all model grid cells south of 60° S. The model's atmospheric component was run with a T31 spectral resolution (3.75° x 3.75°). The page is powered by 'OpenAIRE Research Graph' and includes a 'See an issue? Give us feedback' link.

AFTER THE EXPEDITION

In the end, Alice **could not re-use** the software for her purposes, but she got inspired and developed something new.

She does want others to be able to find her software.

From the **European Marine Science Gateway** she finds out which are the **Zenodo communities** used by her research community, publish her code there, making it available in the gateway automatically



THANKS

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