



Atarrabi Publication System Getting Started Tutorial

How to publish your data using Atarrabi at World Data Center for Climate

Contact: data@dkrz.de

Introduction

The World Data Center for Climate (WDCC) encourages scientists to publish their data after they have been archived in the WDCC computing center. In the course of the publication process the data will be assigned a *Digital Object Identifier* (DOI) and a *Uniform Resource Name* (URN) which reference to the data for the long-term. Once the data is successfully published the data can easily be cited by using the DOI or URN (see box 'DOI Example'). In case the data is moved to another storage site both identifiers can be updated to point to the new location.

DOI Example

Denhard, Michael (2009); dphase_mpeps: MicroPEPS LAF-Ensemble run by DWD for the MAP D-PHASE project. World Data Center for Climate.

doi:10.1594/WDCC/dphase_mpeps

http://dx.doi.org/10.1594/WDCC/dphase_mpeps

Involved Parties and Software Support

The publication process involves three parties:

- The **scientist** (an authorized author or another person familiar with the primary data and the metadata), who checks and provides all the required metadata.
- A **publication agent**, a WDCC representative who supervises the publication process. Each data publication process is assigned to a publication agent, who helps and supports the scientist and double-checks the entered data.
- The **registration agency** (in case of WDCC the German National Library of Science and Technology, TIB, as the German representative of the DataCite consortium) publishes the data after clearance by the publication agent. Your data will be resolved by the DOI handle system and listed in different catalogs and portals, e. g.

the GetInfo portal of TIB.

The Atarrabi software is a web-based workflow system which is used by the WDCC to guide the scientist through all necessary publication steps. This quick tour provides a step by step tutorial how to use the Atarrabi software.

Requirements For Publication

Please assure the following requirements are met:

- The data was successfully archived at WDCC as experiment or data set group and is listed in the CERA catalog¹ of WDCC.
- The WDCC informed you that the data is ready for publication and denominated the CERA account name which has been granted to publish the data.
- It was specified by the authors and investigators
 - which persons are to be enumerated as authors (order is relevant),
 - which institutions are to be listed as contributing institutions, and
 - which person is to be set as DOI contact (for enquiries regarding the data set).
- Depending on the experiment type the system will ask for additional metadata which has to be entered, such as
 - Relations to other data or publications,
 - Temporal and spatial coverage of the data
 - Used platforms and instruments, and
 - Quality assurance measures and result protocols.

¹ For CMIP5 data publications the metadata out of the data headers and out of the CIM questionnaire are ingested into the database of the DOI publication agency WDCC. A copy of the data is then long-term archived at WDCC.

Getting Started with Atarrabi

1. Open your browser and navigate to the Atarrabi site at <http://cera-www.dkrz.de/atarrabi>. The page will look like in figure 1.
2. If you are not logged-in, Atarrabi will only provide general information about data publication. To get access to its publishing functions use your WDCC CERA account to login. If you do not have a CERA account, use the link 'Register new CERA user' to be presented with a registration form. You will receive your CERA account credentials by email within three workdays.

World Data Center for Climate, Hamburg

WDC

Atarrabi Publication System (V1.5 Beta)

You are not logged in. | [About](#) | [Impressum](#)

Menu

▶ Home

Login

Welcome to the Atarrabi Publication System!

Please login using your existing CERA account credentials to publish data or to view work in progress.

Username

Password

Create a new CERA account:
[Register new CERA user](#)

About Atarrabi

The ATARRABI interface provides a key part of the STD-DOI publication process. Please choose your data domain:

CMIP5 | Environmental Data

The ATARRABI interface provides a key part of the STD-DOI publication process of [CMIP5](#) core data by supporting the authors final quality control of data and metadata. After publication the data remains unchanged. A copy of the data is stored on tapes in the long-term archive of the World Data Center for Climate ([WDCC](#)). Two persistent identifiers ([DOI](#), [URN](#)) are assigned, which can be used for data citation for the credit of the data originator as well as to provide provenance information for derived data product. This step finalizes the overall [CMIP5 quality process](#).

The [WDCC](#) as publication agency is responsible for the STD-DOI process within CMIP5, which follows the [DataCite](#) regulations. The [German National Library of Science and Technology \(TIB\)](#) functions as STD-DOI registration agency, which is currently the managing agency of the DataCite consortium.

Preconditions to start the CMIP5 STD-DOI publication process are:

- a personal WDCC account and a special permission to start the STD-DOI publication process for the related primary data: Click [here](#) to apply for a WDCC account.
- long term availability of primary data in [ESG](#)
- long term availability of metadata in [CIM](#)
- open access to primary data and metadata

This program is web-based and therefore doesn't require any extra client-side software installation or special firewall configuration. Contact: data@dkrz.de

About this software

DFG

This software is funded by the [German Research Foundation](#)

Learn more about the research project [Publication of Environmental Data](#)

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Figure 1: The Atarrabi home screen.

3. Once you have been successfully authenticated you will be redirected to the 'My publications' page (see figure 2). Consider this page your personal workspace where you can start new data publications and view and continue publication processes, which were started but have not been submitted yet ('work in progress' instances). You can get back to this page anytime by using the menu panel entry 'My Publications'.

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for Climate, Hamburg**

CERA

WDC

Atarrabi Publication System (V1.5 Beta)

Logged in as: florian_quadt ([Logout](#)) | [About](#) | [Impressum](#)

Menu

- [Home](#)
- ▶ [My Publications](#)
- [Agent Workspace](#)
- [Administration](#)

[Start new publication](#)
Publish your experiment data with DOI and URN. ([More](#))

Work in Progress					
Id	Entry Acronym	Entry Title	Creation Date	Status	Actions
2	MXEH	ECHAM6-MPIOM-HR	Mar 30, 2011 2:19:51 PM	scientist editing	View Continue

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Figure 2: The 'My Publications' view.

4. Start a new publication by clicking the 'Start new publication' button.
5. Atarrabi will list the experiments and data set groups which have been granted for publication and are not subject of an already started publication process (see figure 3).

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CERA

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Atarrabi Publication System (V1.5 Beta)

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Menu

- [Home](#)
- [My Publications](#)
- [Agent Workspace](#)
- [Administration](#)

Select entry

Please select the entry for the data to be published:

All entries	
Entry acronym	Entry title
MXEH	ECHAM6-MPIOM-HR

Selected entry: **ECHAM6-MPIOM-HR**


[Start publication](#)

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Figure 3: Entry selection view.


6. Select the entry you want to publish and press the button 'Start publication'. In the following we will exemplarily publish CMIP5 model data.
7. Atarrabi will now import all existing metadata from the CERA2 database. This could take a while, so please be patient.
8. Next you are presented with the first page of the Atarrabi publication wizard, the page 'General' (see

figure 4). On the left hand side find the box 'Process Overview' which shows all the pages you will have to traverse. The currently visible page is printed in bold letters and marked with a small arrow. You can navigate through the wizard by using the buttons at the bottom of the page.

Each wizard page is composed in a similar manner. You will find an introductory text right at the top of the page. Sometimes a 'more...' link option is available, which provides additional instructions or information. All metadata fields provide a help text which becomes visible when you move the mouse cursor over the  icon.

World Data Center for Climate, Hamburg





Atarrabi Publication
System (V1.5 Beta)














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Process Overview

- ▶ **General**
- Authors
- DOI Contact
- Contributors
- Relations
- Coverage
- Quality
- Summary

General information for MXEH

These general data information are shown on the [DOI/URN](#) target page and library catalogues like [GetInfo](#). They are belonging to the metadata kernel of the DOI (STD-DOI).
The metadata properties must be provided at the time of identifier registration by WDCC. The core metadata properties are chosen for accurate and consistent identification of data for citation (i.e. title) and retrieval purposes, along with recommended use instructions.

Entry acronym		MXEH
Entry name		ECHAM6-MPIOM-HR
Entry title *		<input style="width: 80%;" type="text" value="ECHAM6-MPIOM-HR"/>
Entry description summary		MPI-M data of the ECHAM6_MPIOM_HR model as contribution for CMIP5 - Coupled Model Intercomparison Project Phase 5 (http://cmip-pcmdi.llnl.gov/cmip5/). Experiment design is described in detail in http://cmip-pcmdi.llnl.gov/cmip5/docs/Taylor_CMIP5_design.pdf and the list of output variables and their temporal resolutions are given in http://cmip-pcmdi.llnl.gov/cmip5/docs/standard_output.pdf . The output is stored in netCDF format as time series per variable in model grid spatial resolution. For more information on the Earth System model and the simulation please refer to the CIM repository.
Additional entry description		<input style="width: 80%; height: 20px;" type="text"/>
Creation date		<input style="width: 80%;" type="text" value="07/30/2010"/> 
Language		English
Project name		IPCC/CMIP5_test
Project description summary		this is for testing purposes ony
DOI/URN target page with actual citation information		http://cera-www.dkrz.de/WDCC/ui/Compact.jsp?acronym=MXEH
Rules for citation *		At least one author is required as contact independent of your choice: <input checked="" type="radio"/> Cite by persons: [author(s)]([PublicationDate]);[Title],[Publisher],[doi:DOI],[http://dx.doi.org/DOI] <input type="radio"/> Cite by institutes: [Contributor(s)]([PublicationDate]);[Title],[Publisher],[doi:DOI],[http://dx.doi.org/DOI]
CMIP5 questionnaire *		<input type="checkbox"/> I approve that the metadata I filled in the CMIP5 questionnaire and sent to CMIP5 is correct and up-to-date.

Message to publication agent

Message to publication agent

* required fields

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Figure 4: 'General' view.

The metadata fields marked with a red asterisk (*) are required to be filled to continue the publication process in the wizard.

If you have questions or comments for the publication agent you can use the 'Message to publication agent' text area. This area is also visible on other wizard pages. This message will be sent to the publication agent during submission in the last wizard step.

You can leave the wizard at any time by clicking the button 'Save and exit'. Your data will be saved and you will be redirected to the 'My Publications' page. The unfinished publication process will be listed in the 'Work in Progress' section (image 2) where you can view or reenter the wizard to continue the publication process.

Move on to the next page by pressing the 'Continue' button.

9. The second page of the wizard, the 'Authors' view (figure 5), will be rendered:

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CERA

WDC

Atarrabi Publication System (V1.5 Beta)

Logged in as: florian_quadt (Logout) | About | Impressum

Process Overview

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Authors for MXEH

Please check the author list of the STD-DOI publication and enter/change if necessary. The ranking describes the rank of the individual author in the author list of the STD-DOI publication citation. At least one author is required.

[more...](#)

Selected authors (ranked)

Persons	Institutes	Action
---------	------------	--------

⚡ First
▲ Up
▼ Down
⚡ Last

Available persons

hens

Persons	Institutes	Action
Dr. Andreas Hense ahense@uni-bonn.de	University of Bonn (UNI_BN-MI) Meteorological Institute(MIUB)	<input type="button" value="Select Author"/>

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Figure 5: 'Authors' view.

Depending on the metadata already stored in the CERA database authors will be listed in the section 'Selected authors (ranked)'. In our example there are no authors predefined. To add a person to the author list you will firstly search the CERA2 pool of existing persons. To do this start typing an author's name. The system will search as you type and present a result list below the search field. Once you have found your desired person you can click the link 'Select Author' to move this person to the author list. If the person is not existing in the CERA database you can create a new person entry by pressing the button 'Add new person' button below the search results. After you have selected or created a new author the view will look like this:

Added Andreas Hense to the Authors-List

Process Overview

- General
- Authors**
- DOI Contact
- Contributors
- Relations
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- Quality
- Summary

Authors for MXEH

Please check the author list of the STD-DOI publication and enter/change if necessary.
The ranking describes the rank of the individual author in the author list of the STD-DOI publication citation. At least one author is required.

[more...](#)

Persons	Institutes	Action	
Dr. Andreas Hense Tel: +49 228 735184 ahense@uni-bonn.de	University of Bonn (UNI_BN-MI) Meteorological Institute (MIUB) Auf dem Huegel 20 D-53121 Bonn, Germany www.meteo.uni-bonn.de	Remove Author Edit Author Edit Institute	First Up Down Last

Available persons

No persons found

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Figure 6: 'Authors' view after author selection.

Notice the order buttons on the right hand side of the author list. The order of the authors will be the order of the authors in the data citation for the 'cite by persons' option (of the general page; figure 4). The action links in the column 'Action' provide functionality like removing the person from the author list, editing the contact data of the author (including the possibility to select another institute) and editing the address data of the assigned institute. The latter two will open new form panels such as in the following picture for example:

After you selected and edited all authors press 'Continue' to get to the next page. Fill out the forms on the following pages 'DOI contact' and 'Contributors' in the same manner as the 'Authors' view.

Add/Edit Author

Title

First name *

Second name

Last name *

Email *

Telephone

Fax

Institute name *

* required fields

Figure 7: 'Add/Edit Author' view.

10. After the 'Contributors' page you will be presented with the 'Relations' view:

Process Overview

- General
- Authors
- DOI Contact
- Contributors
- ▶ **Relations**
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Relations for MXEH

The relations should be used to build up a system promoting dataset discovery with optional properties allowing for flexible description of the resource, including its relationship to other resources. The relations are shown on TIBORDER library catalogue and the WDCC pages in the block references and belonging to the metadata kernel of the DOI (STD-DOI).

[more...](#)

Relation type	Identifier type	Identifier value	
isCitedBy	ppn	123456789	<input type="button" value="Remove"/>
isOldVersionOf	doi	1234/example/CMIP5_MPI-	<input type="button" value="Remove"/>

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Figure 8: 'Relations' view.

This page allows for editing and creating relations to other (data) publications. You will find a definition of the available relation types by showing the text behind the 'more...' link. In case you chose the 'cite by institutes' rule on the general page (figure 4), the order of the contributors will be the order of the authors in the data citation string.

11. The next wizard page deals with the spatial and temporal coverage of the entry:

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- Relations
- ▶ **Coverage**
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Coverage

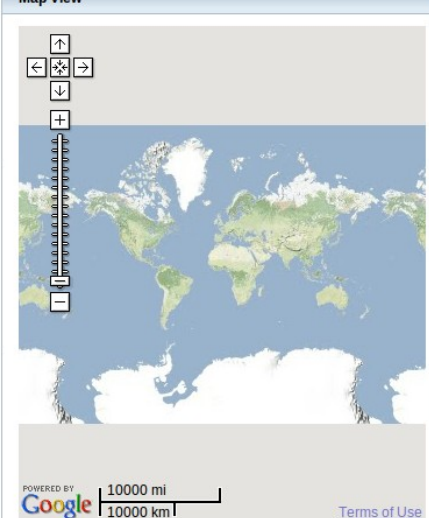
Please check these pieces of coverage information which are extracted out of the netcdf data headers. In case of errors in the presented metadata (i.e. our underlying data), please describe these in the text field on the bottom of the page, precisely, and continue your check and submit your data. The publication agent will get in touch with you.

Selected location

World (global)

Latitude [°]:	-90.0 to 90.0
Longitude [°]:	0.0 to 360.0

Map View



Coverage

	Latitude [°]	Longitude [°]	Altitude	Unit
Min	-90.0	0.0	-6020.0	metre
Max	90.0	360.0	10.0	Hectopascal

Temporal Coverage

start date	<input type="button" value="🕒"/>	16.1.1860
stop date	<input type="button" value="🕒"/>	16.12.1860

Message to publication agent

Message to publication agent

Figure 9: 'Coverage' view.

Since these metadata are extracted from the CMIP5 data header no changes are allowed. If the selected location 'World (global)' did not span the whole world, the map would show a rectangle of the selected location. For comments or questions use, again, the 'Message to publication agent' text field. Click 'Continue' to get to the next page.

- The next page of the wizard is named 'Quality' (see figure 10). This page is about documenting the data quality assurance procedures performed on the primary data and their results. Please describe the quality checks in field '5. Description of your Quality Checks'. Moreover you can upload files which will then be attached to the publication entry. Files can be images, text documents, XML files etc. You can find a list of the accepted file formats below the file upload box. Click 'Continue' to get to the next page.

Process Overview

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- Contributors
- Relations
- Coverage
- Quality**
- Summary

Quality Approval

Please specify your scientific data quality procedure in terms of procedure description and results. Quality information exceeding the summary in Description of Quality Checks are to be provided as added file, e.g. check procedure details, quality check protocols, quality result images etc. The given quality level is assigned during the [CMIP5 quality procedure](#). Results of the CMIP5 quality checks are attached as additional information.

Quality Checks for MXEH

- 1. Data Level**
- 2. Description of Quality Level**
- 3. Quality Check URL**
- 4. Approval**
- 5. Description of your Quality Checks ***
- 6. Number of existing additional information**

Uploaded files

Accepted file formats: txt, grb, jpg, nc, tar, zip, txt.gz, gz, pdf, nc.gz, bin, ieg, xml, tgz, grb.bz2, gif.zip, png, nc.tar.gz, grb.tar, nc.tar, nc.zip, grb.gz

* required fields

Figure 10: 'Quality' view.

- Now we have reached the last page of the publication wizard. This page will give you an overview of all entered metadata. Please check the metadata carefully and go back in the wizard to change or add data. In the authors and contributors sections you can get more details by clicking the name of the person or institute. It is possible to download this summary as PDF or XML file for your records. After the review click 'Submit'.

14. Atarrabi will present you with a confirmation page:

Confirmation

You have successfully finished the workflow of submitting your entry for publication. A publication agent is going to be notified and he/she will review your submitted data. You will be notified by the publication agent in case of DOI assignment or if some issues regarding your data need clarification.

Thank you for your submission: MXEH


Date 31/03/2011 13:26:19

Your task was: scientistEditing

The next steps are:

- AgentReview by a publication agent
- ScientistEditing (in case of data rejection by the publication agent)
- finished (DOI assignment)

The result is:

 Entry stored successfully

[Back to start](#)

Figure 11: Confirmation view.

The process has now been handed over to the publication agent who will perform all further steps. The publication agent will contact you by email in case of questions and after successful data registration.

15. Click 'Back to start' to get back to your 'My publications' section. Since you submitted the entry to the publication agent the entry will not be listed in the 'Work in Progress' section anymore. If metadata have to be changed, the publication agent can reopen the scientist editing process. This entry will then show up in the 'Work in Progress' section again and the wizard can be executed again. A tracking feature to get information about the status of a submitted publication is planned for the future.

Congratulations, you successfully prepared your data for publication!