APGC Help Documentation

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For further assistance please do not hesitate to contact the APGC-team:

apgc@awi.de

SEARCH DATASETS

SIMPLE SEARCH

On the **APGC start page** and on the **APGC dataset page** you can search for data by keyword or by selecting an area of interest on a map. In addition, on the **APGC dataset page** you can search by thematic filters.

Just type your search words or phrases into the search field and use the available filters to refine your search.

The most accurate and cleanest search results are obtained by entering the word or phrase in lower case letters.

Search by keyword

You can type any keyword either in the search area in the upper right corner or in the search area in the center of the page. In addition, popular keywords are listed below the center search bar and can be selected.

Search by map

Click on the icon with the pencil. This allows you to draw a rectangle on the map which includes your area of interest. If you are satisfied, click on the “APPLY” button in the lower right corner.

Search by filter

The left menu bar lists thematic filters such as region, products, sensors, resolution etc. Select any filter of interest to you to find specific datasets within that category. To remove the filter, click on the x-button of the selected filter.

Browse data sets

All data sets can be accessed by the “Dataset” button in the upper menu.

Search options on the APGC start page

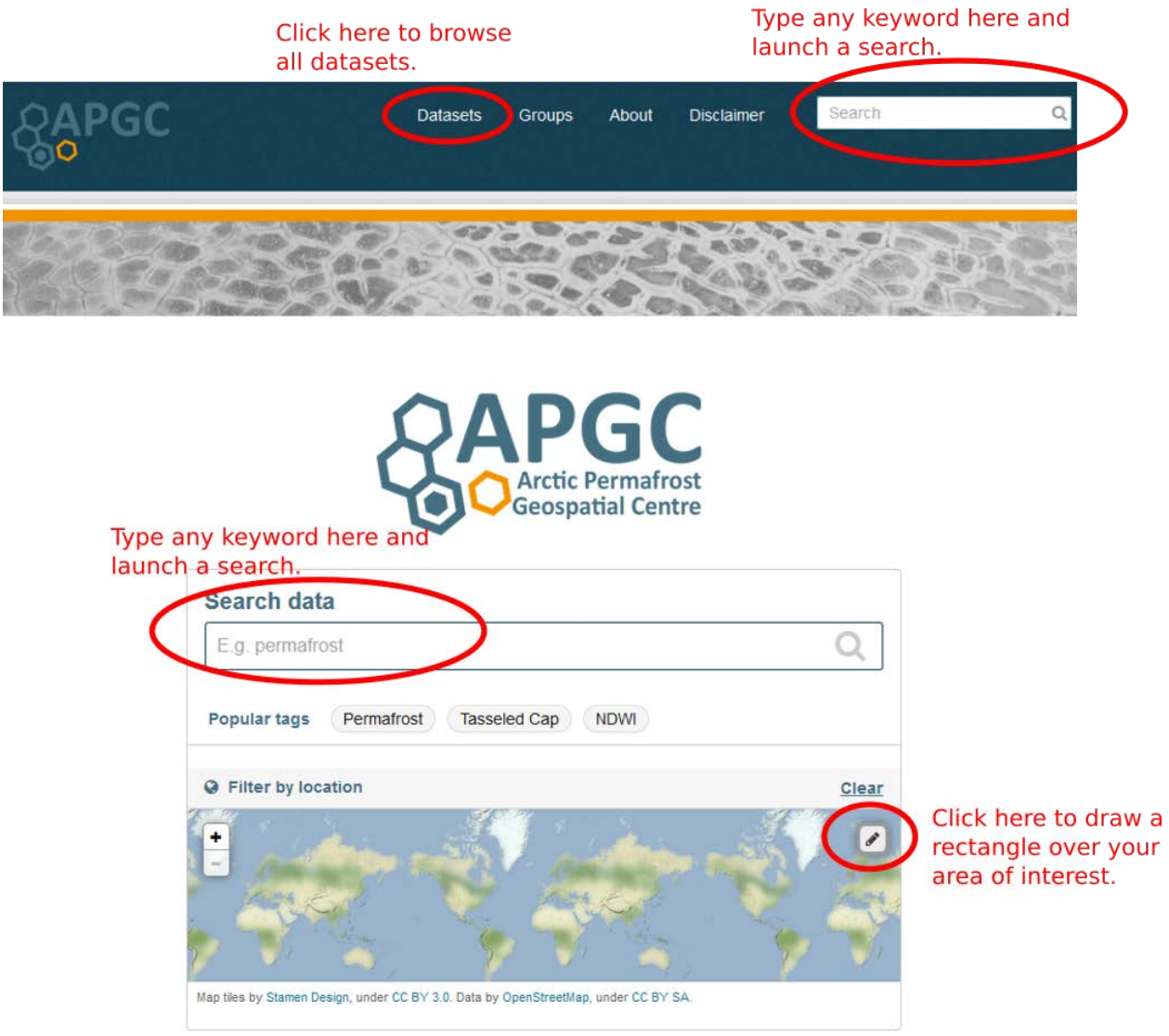


Figure 1

Search options on the APGC dataset page

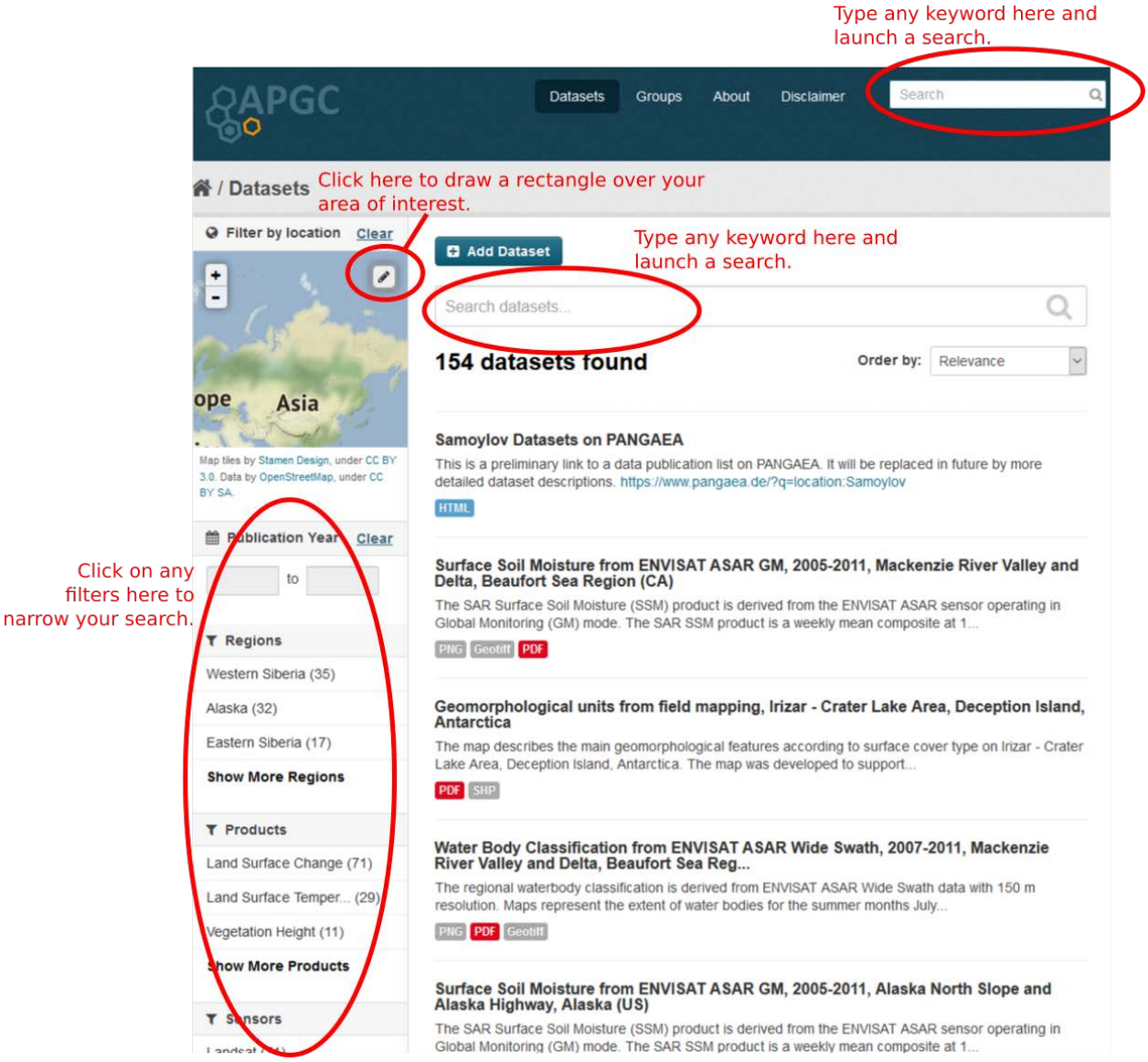


Figure 2

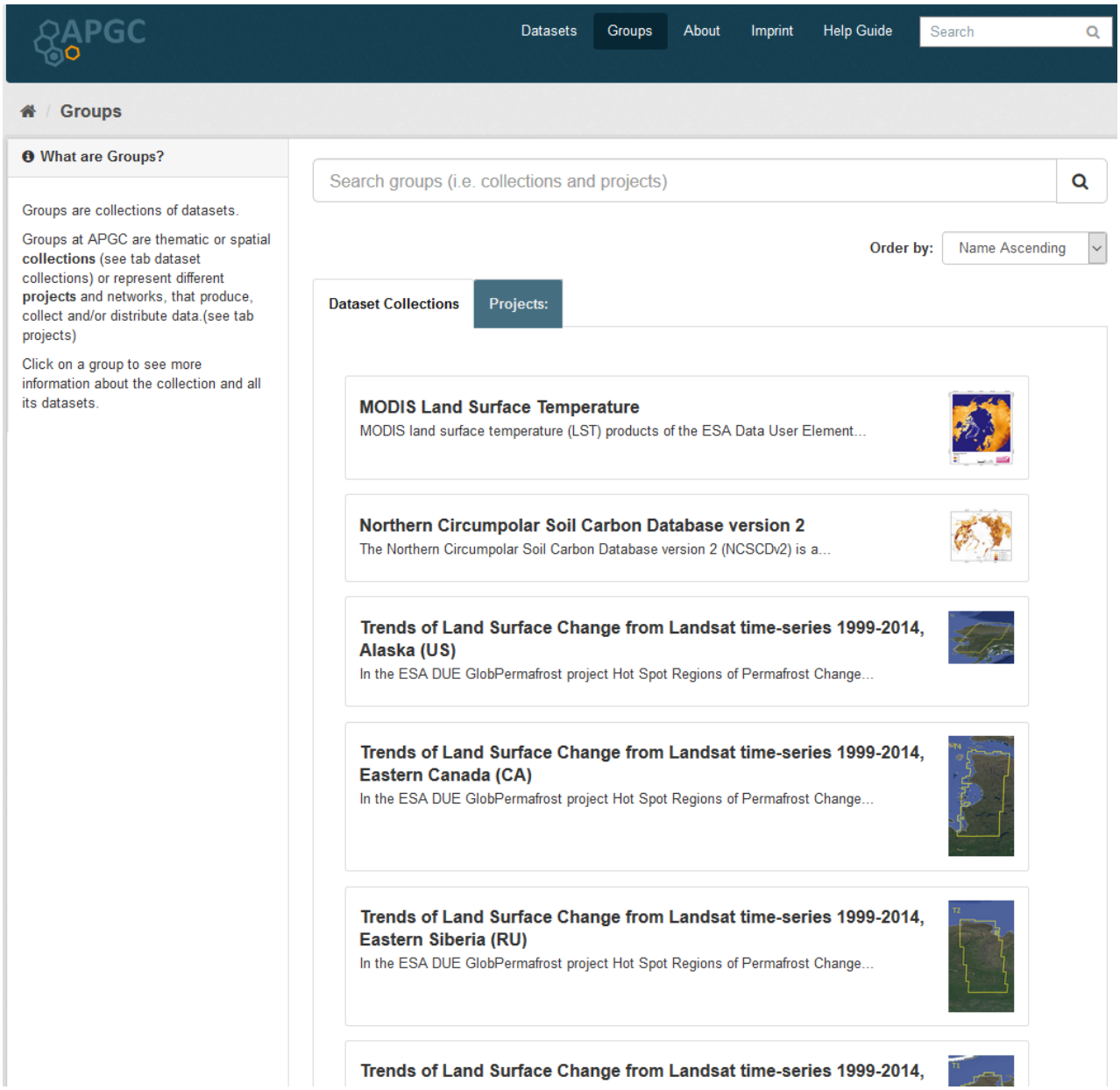
Search by group

Groups are collections of datasets.

Groups at APGC are thematic or spatial **collections** or represent different **projects** or networks, that produce, collect and/or distribute data.

Groups can be accessed via the main menu under the tab "Groups". On this page you can search for groups by entering search terms in the search field. Groups are displayed in two tabs:

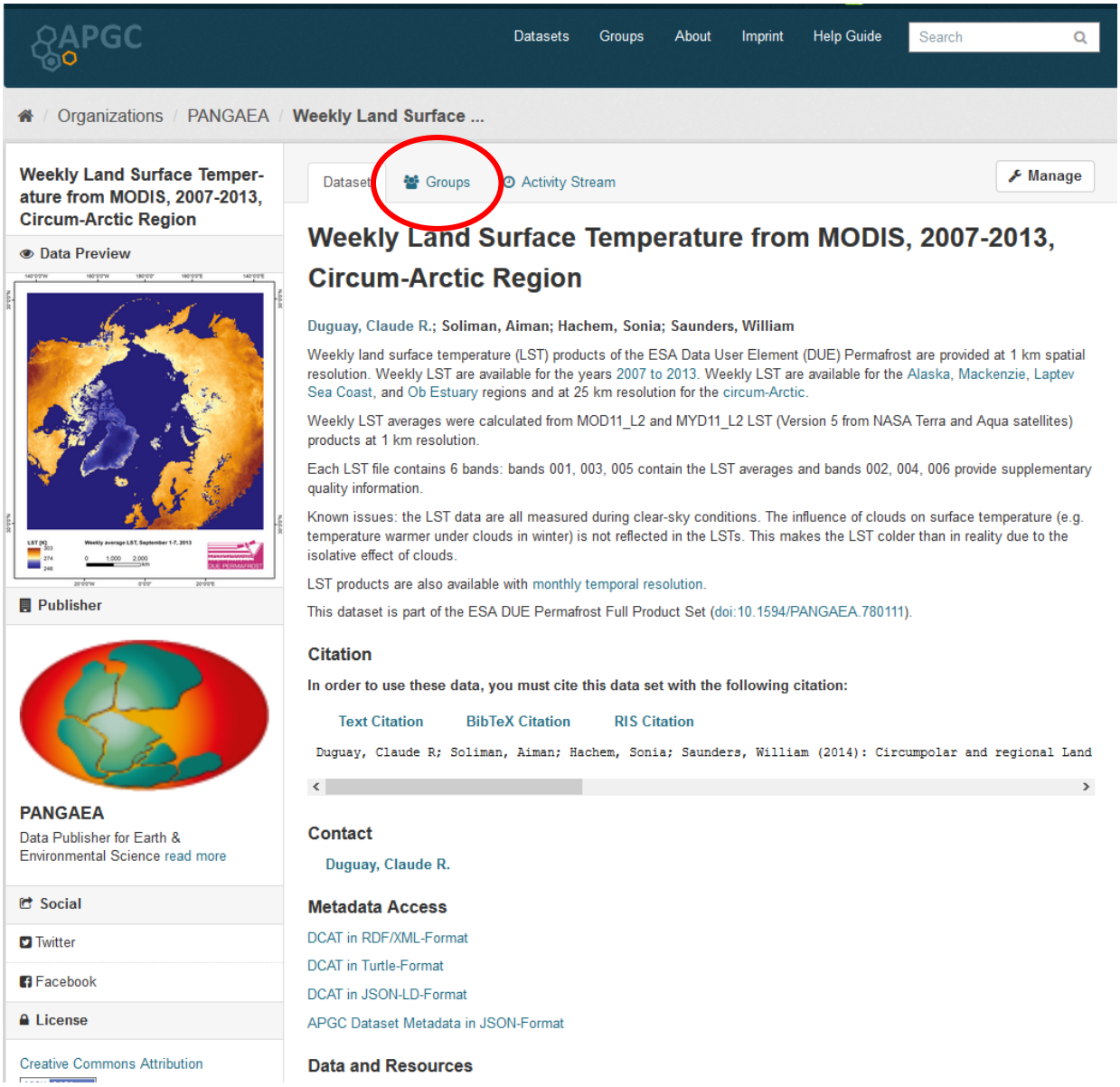
The tab "Dataset Collections", in which thematic or spatial collections are listed, and the tab "Projects", in which the data organized according to projects.



Click on a group to see more information about the dataset collection or project and all its datasets.

The most popular collections and projects can also be accessed directly from the home page. Open the corresponding accordion tab and select one of the listed groups to get to the descriptions and the corresponding data sets.

If you are on the page of a dataset and want to know which group that dataset is assigned to and which datasets belong to its groups go to the "Groups" tab in the dataset menu.



ADVANCED SEARCH

The APGC uses the search platform "Solr" in the back for handling your search queries. So if you want to do some advanced searches on the datasets you have to use the query syntax of the Solr standard query parser.

Example Search Queries

Search for words and phrases

Show all datasets where the keyword "trends" is in the title:

```
title:trends
```

Show all datasets with the word "moisture" and without the word "2010" in the title:

```
title:moisture -title:2010
```

Show all datasets with a resource "Product Guide":

```
res_name:"Product Guide"
```

Combine searches for multiple phrases or words using operators such as AND or OR:

```
(title:"lake ice" OR notes:"lake ice") AND title:Mackenzie
```

Show all datasets where the word "from" is NOT in the title:

```
-title:from
```

Searching using wildcards

All datasets with a word beginning with "per" in the title:

```
title:per*
```

All datasets with a link to a WebGIS view:

```
WebGIS-Link:*
```

Search for values in a specified range

Show all datasets where the temporal coverage is between 2008 and later:

```
temp_coverage:[2008 TO *]
```

Or show all datasets where the temporal coverage described in the title is between 2008 and 2014:

```
title:[2008 TO 2014]
```

Searching using additional search options

Assigning a boost factor for to give certain search terms more relevance:

```
(title:2005)^1.5 (notes:sensor)
```

To search for terms within a specific distance (number of words) from one another you can use a proximity search.

Add the tilde character (~) and a numeric value to the end of a search phrase.

For example, to search for a "surface" and "moisture" within 1 word of each other, use the search:

```
title:"surface moisture"~1
```

Field Names

Search queries can be made on all defined metadata fields.

But the visible field labels in the catalog are not necessarily the same real field names that need to be used for the search query.

The following overview of the most important metadata fields and the corresponding field names will help you.

FIELD LABEL	FIELD NAME (you have to use in a query)
Title	title
URL	name
Identifier	identifier
First Author	first_author
Author Email	author_email
Co-Authors	co_authors
Maintainer	maintainer
Maintainer Email	maintainer_email
Description	notes
Science Keywords	tag_string
Project(s)	projects
Institute	institute
License	license_id
Organization	owner_org

Source	url
Publication Date	PublicationYear
Version	version
Product group	product_group
Product	product
Sensor	sensor
Files	bands
Variables [Units]	variables
Region	region
Spatial Reference	s_reference
Spatial Resolution	s_resolution
Spatial Coverage	s_coverage
Temporal Coverage	temp_coverage
Temporal Resolution	temp_resolution
Format	format
Dataset extent	spatial
Data Preview	preview
Detailed WebGIS View	WebGIS-Link
Data Formats (*of resources*)	res_format
Groups (*Projects*)	groups

Table 1

DOWNLOAD DATA

Download data

Data can be downloaded in each data entry under "Data and Resources".
To download data, click on the download button.
Please be aware that data files can be large, in some cases more than 1 GB.

Download procedures will vary depending on the browser you use and your browser's download settings.

Chrome: under settings/advanced/downloads you can activate the option *Ask where to save each file before downloading*

Mozilla: under Options/Files and Applications/downloads you can activate the option *Ask where to save each file before downloading*

Opera: under opera://settings/vpn under heading "Downloads" you can activate the option *Ask where to save each file before downloading*

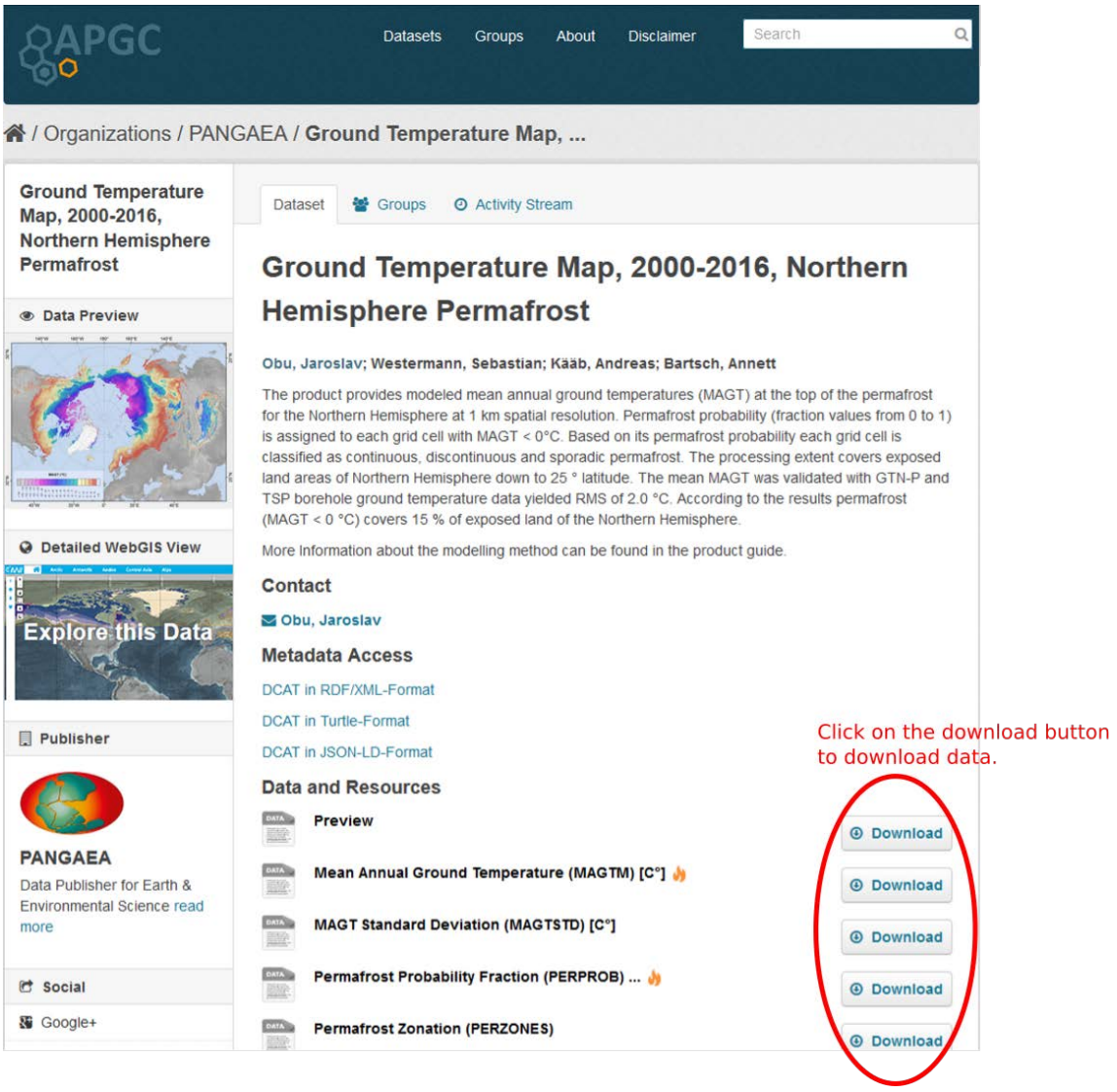


Figure 3

METADATA

Metadata provides information on individual datasets. In APGC, each dataset is described by extensive metadata. Metadata is stored in the title, the abstract, the *Additional Info* table and the product guides. The *Additional Info* table at the bottom of each dataset entry gives you detailed metadata on the thematic, spatial and temporal properties of the data.

Title

The title informs you of the product, the sensor it was derived from, the temporal period it covers (YYYY-YYYY), the site and region name where the dataset is located.

Abstract

The abstract summarizes the most important characteristics of the data.

Product guides

Product guides are available for most data sets. Product guides provide detailed information about the methods used for data processing. Product guides are available as PDF files in the section "Data and Resources". Click on the "download" button and the product guide will open on a separate page.

Additional Info

Detailed metadata of each dataset is listed in the "*Additional Info*" table at the bottom of each dataset. Here you can find information about the thematic, spatial and temporal properties of the data.

Metadata field	Description
Identifier	DOI: digital object identifier in case the data is published
Project(s)	indicates the project the data is associated with
Institute	institute where the data was produced
Source	URL where the data is stored
Publication Date	date the data was published
Version	version of the data
Product group	indicates the product group - relevant only for PerSys data

Product	indicates the thematic product type, eg. land cover, permafrost extent, land surface temperature etc.
Sensor	sensor (eg. satellite sensor or other instrument) that was used to record/measure the data
Files	list of individual data files
Variables [Units]	variables and units of data
Region	geographical region where the data is located
Spatial Reference	spatial projection the data is provided in
Spatial Resolution	spatial resolution indicates the grid cell or pixel size for raster data
Spatial Coverage	spatial coverage of the dataset giving the latitude and longitude range in decimal degrees
Temporal Coverage	temporal coverage of time series or average data with the format YYYY-MM-DD to YYYY-MM-DD
Temporal Resolution	temporal resolution of time series, eg. hourly, daily, weekly, monthly
Format	file format of the data available for download, eg. Geotiff, shape-file, netcdf

Table 2

Download metadata

The complete metadata of the dataset can be downloaded in the section “Metadata Access”. The metadata can be downloaded in different formats:

RDF/XML, Turtle and JSON-LD

These are three different DCAT (Data Catalog Vocabulary) RDF (Resource Description Framework) serialization formats. DCAT is "an RDF vocabulary designed to facilitate interoperability between data catalogs published on the Web". More information can be found on the DCAT W3C page.

APGC Dataset metadata in JSON-Format

This is a full JSON representation of the dataset including corresponding resources and groups using the CKAN API.

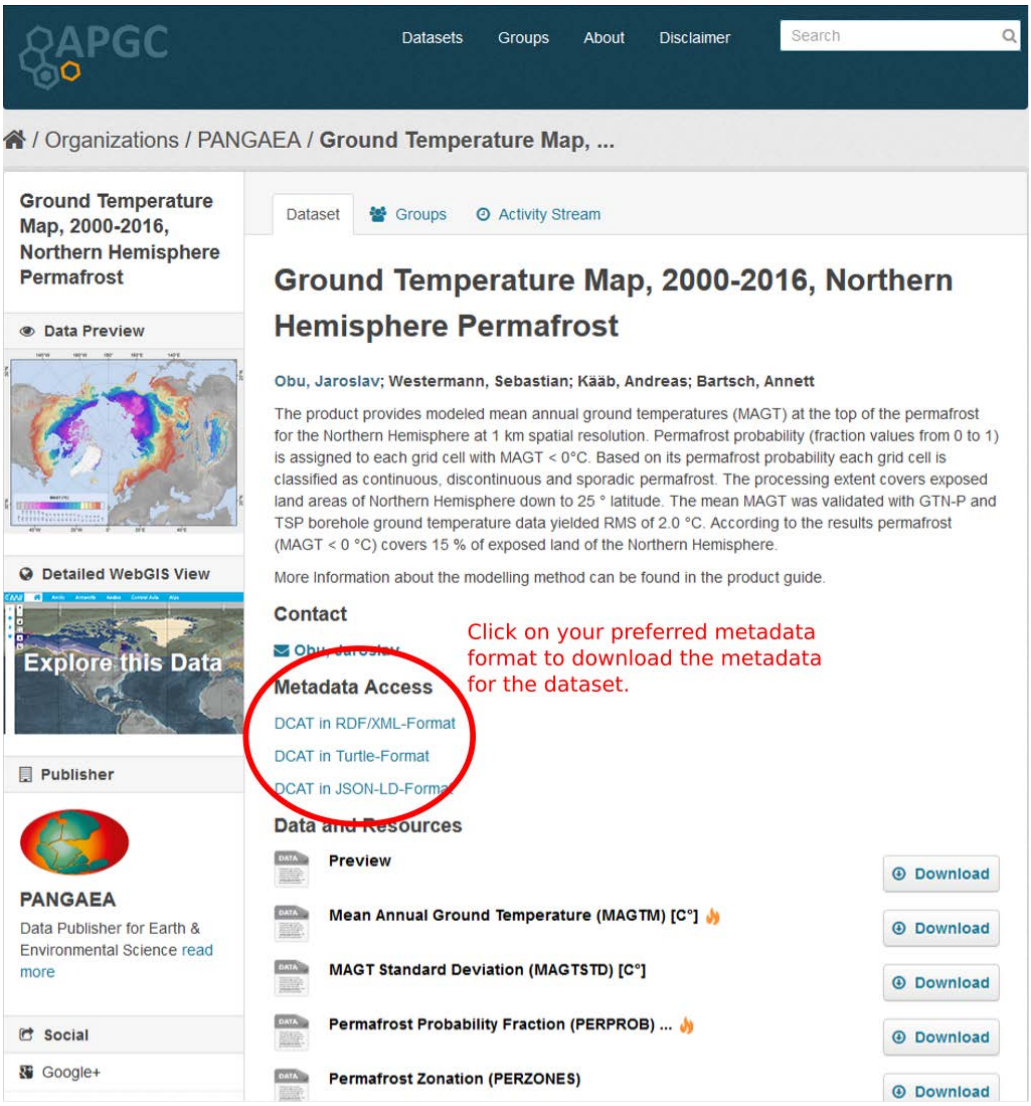


Figure 4

Print the dataset site information

It is possible to print (e.g. as PDF) the pages of the datasets with the metadata contents.

For technical reasons, it may happen that the citation data is not completely displayed in the print. In case you use the data, please inform yourself about the correct Citation for this dataset, shown on this page.

CITE DATA

Data Product Citation Policy

To acknowledge the scientists who have created and shared data products, you should include a bibliographic citation to all data products that you use in your publications. Proper citations, including the authors, title, publisher, and DOI, will help others find and re-use the data.

The proper citation for each APGC dataset is provided on the dataset entry page under the abstract.

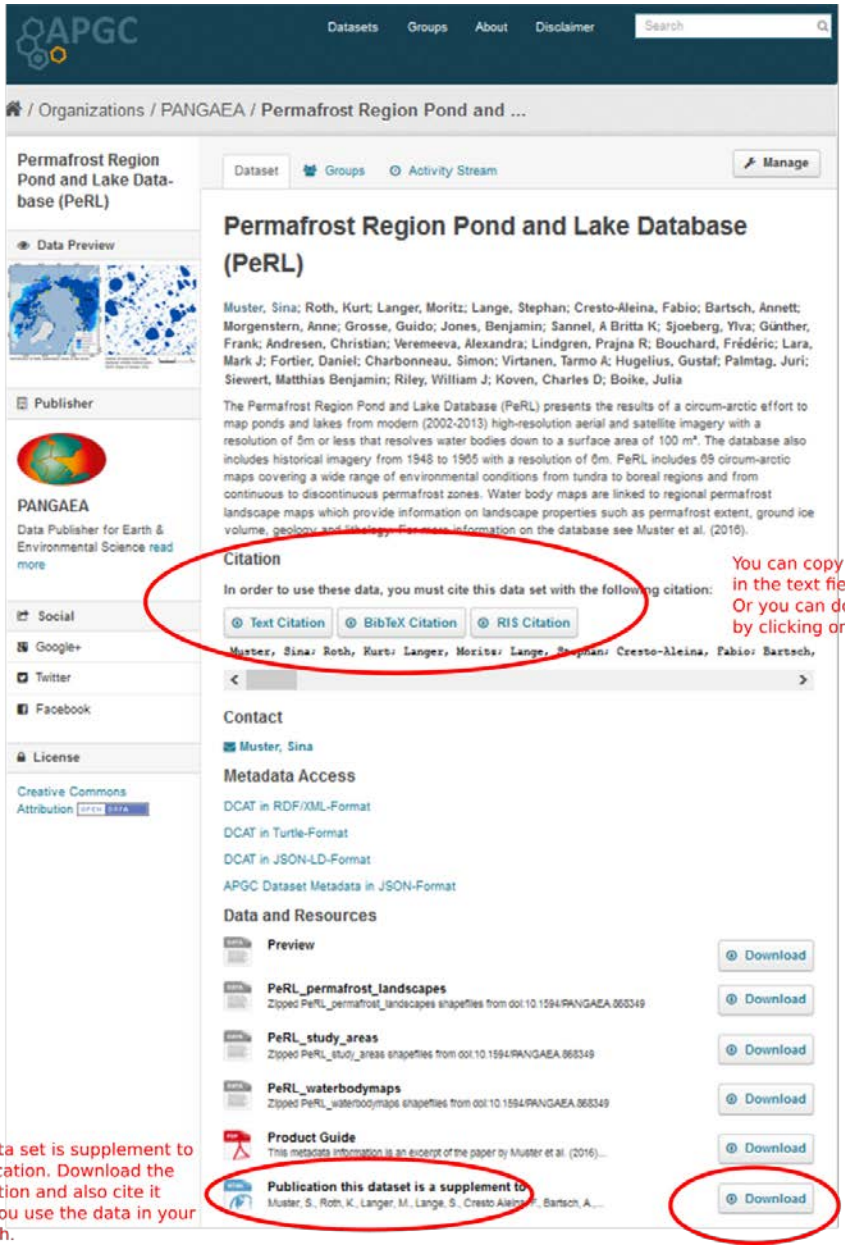
Some of the data is supplement to a publication. In this case, please also cite the publication. The publication can be downloaded under "Data and Resources".

If you have questions about how to cite APGC data products or services, please contact the APGC team at apgc@awi.de.

Citation Example

Dataset

Duguay, Claude R; Soliman, Aiman; Hachem, Sonia; Saunders, William (2014): Circumpolar and regional Land Surface Temperature (version 2) with links to geotiff images (2007-01 to 2013-12). University of Waterloo, Canada, PANGAEA, https://doi.org/10.1594/PANGAEA.836729


APGC
Datasets
Groups
About
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Search
/ Organizations / PANGAEA / Permafrost Region Pond and ...
Permafrost Region Pond and Lake Database (PeRL)
Dataset
Groups
Activity Stream
Manage
Permafrost Region Pond and Lake Database (PeRL)
Muster, Sina; Roth, Kurt; Langer, Moritz; Lange, Stephan; Cresto-Aleina, Fabio; Bartsch, Annett; Morgenstern, Anne; Grosse, Guido; Jones, Benjamin; Sannel, A Britta K; Sjoeberg, Ylva; Günther, Frank; Andresen, Christian; Veremeeva, Alexandra; Lindgren, Prajna R; Bouchard, Frédéric; Lara, Mark J; Fortier, Daniel; Charbonneau, Simon; Virtanen, Tarmo A; Hugelius, Gustaf; Palmtag, Juri; Siewert, Matthias Benjamin; Riley, William J; Koven, Charles D; Boike, Julia
The Permafrost Region Pond and Lake Database (PeRL) presents the results of a circum-arctic effort to map ponds and lakes from modern (2002-2013) high-resolution aerial and satellite imagery with a resolution of 5m or less that resolves water bodies down to a surface area of 100 m². The database also includes historical imagery from 1948 to 1965 with a resolution of 6m. PeRL includes 69 circum-arctic maps covering a wide range of environmental conditions from tundra to boreal regions and from continuous to discontinuous permafrost zones. Water body maps are linked to regional permafrost landscape maps which provide information on landscape properties such as permafrost extent, ground ice volume, geology and lithology. For more information on the database see Muster et al. (2016).
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Metadata Access
DCAT in RDF/XML-Format
DCAT in Turtle-Format
DCAT in JSON-LD-Format
APGC Dataset Metadata in JSON-Format
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Figure 5

INDEX and/or FAQ

Where is the data stored?

Data is stored in external data repositories:

https://pangaea.de: The information system PANGAEA is operated as an Open Access library aimed at archiving, publishing and distributing georeferenced data from earth system research. The system guarantees long-term availability of its content through a commitment of the hosting institutions.

https://ecds.se: Environment Climate Data Sweden, ECDS, was an infrastructure project to improve Swedish researchers access to environmental and climate data. The ECDS data portal is hosted by the Swedish National Data Service at the University of Gothenburg.

http://gtnpdatabase.org: The GTN-P database is hosted at the Arctic Portal in Akureyri, Iceland. It is managed in close cooperation with the Alfred Wegener Institute for Polar and Marine Research in Potsdam, Germany, which is also coordinator of the PAGE21 project within EU 7th framework programme, the main sponsor for the establishment of this database.

How do I cite data?

When using data in your research or for presentation purposes you must cite data like you would cite any other publication (articles, books etc.).

All data in the APGC has been published in a data repository and assigned a DOI (Digital Object Identifier). A **DOI name** is guaranteed to never change, so you can use it to link permanently to datasets or documents. **If you cite datasets, use the full citation provided in different formats under "Citation"** *(see Figure 5)* **and add this link as a persistent reference.**

How do I enter data into the catalogue?

You cannot enter data into the catalogue on your own. However, you can send us an e-mail to **apgc@awi.de** and we will check whether your data meets the APGC requirements. In case your data is accepted into the catalogue, we are happy to enter your data free of cost.