



CCCA Datenzentrum hands-on zur Beschreibung von Metadaten für GCOS

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Wien, 19. April 2017



Hands - On

Inhalt

- › Feature CCCA Datenportal
- › Kurze Handlungsanweisung
 - › Howt to start
 - › Add data
 - › Describe metadata
 - › Use functionalities
- › Weiteres Vorgehen

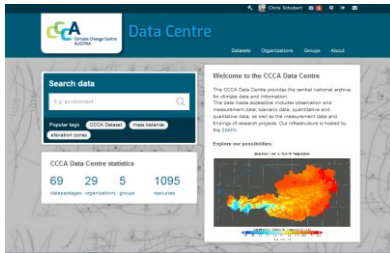


The screenshot shows the CCCA Data Centre website. At the top left is the CCCA logo (Climate Change Centre AUSTRIA). The main navigation bar includes 'Data Centre', 'Datasets', 'Organizations', 'Groups', and 'About'. A search bar is prominently displayed with the text 'Search data' and a search icon. Below the search bar, there are 'Popular tags' including 'CCCA Dataset', 'mass balance', and 'elevation zones'. A statistics box shows '69 datapackages', '29 organizations', '5 groups', and '1095 resources'. A central section titled 'Welcome to the CCCA Data Centre' provides a brief overview of the data available and includes a map of Austria titled 'Daily Mean Sea Level Temperature' with a color-coded legend. Below this, there are two featured project cards: one for 'Uni Salzburg' regarding 'ÖKS15 Factsheets' and another for '3PClim' titled 'Das Klima von Tirol - Südtirol - Belluno...'. The footer contains a disclaimer, the 're3data.org' logo, and the ZAMG logo.

- › CCCA Datenportal online [operationell] seit dem 1.12.2016
- › Testversion seit 15.06.2016
- › Erste Datensätze = ÖKS15 (30.06.)
- › **aufgeführt in re3data als Forschungsdaten Repository**

Grundaufgaben

- › Bereitstellung von klimarelevanten Informationen & Daten, Algorithmen,
- › Interoperable Schnittstelle zu internationalen Portalen
- › Support (Training) zum Datenzugriff, -Beratung



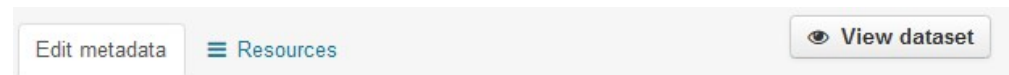
Ein Portal unter vielen ?

FEATURES No. 1, 2 & 3

- Up-Download großer Datenmengen
- Neue Datenschnittstelle (sftp) eingebunden, besonders wichtig für die Performanz von großen Files

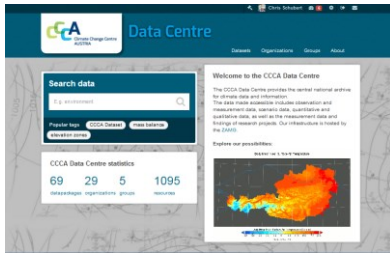


SW Schnittstelle - Harvesting von ISO, INSPIRE Metadaten, DCAT/ISO/INSPIRE Profile im Metadaten Editor



Geographic Aspects of the Resources





Ein Portal unter vielen ?

FEATURES No. 4 & 5

- Implementierung handle® Service für die Vergabe von persistent identifier (PID) -> Grundlage DataCitation hdl.handle.net/20.500.11756/7b9374de

Cite this resource:

Using this data set or resource, you should cite this data set according to the given copyright conditions with following citation rules.

Hiebl et al. (2016). cdd-1961-2011-annual (Ver. 1). Retrieved from CCCA Data Centre: <https://hdl.handle.net/20.500.11756/fa338331>. Access Date: February 22, 2017

Your Publication

Hydrol. Earth Syst. Sci., Discuss., doi:10.5194/hess-2016-435, 2016
 Manuscript under review for journal Hydrol. Earth Syst. Sci.
 Published: 13 September 2016
 © Author(s) 2016. CC-BY 3.0 License.

Hydrology and Earth System Sciences EGU

Scaled distribution mapping: a bias correction method that preserves raw climate model projected changes

Matthew B. Swinbank¹, Peter A. Troch², Christopher L. Castro², Armin Loepfecht³, Hsin-I Chang⁴, Rajarshi Mukherjee⁵, Ericsson M.C. Dima⁶

¹Hugobon Center for Climate and Global Change, University of Graz, Graz, 8010, Austria
²Department of Hydrology and Atmospheric Sciences, University of Arizona, Tucson, AZ 85721, USA
³Swiss Federal Research Center WSL – Agricultural Research Service, Thurgau, 8710, Switzerland
 Correspondence to: Matthew B. Swinbank (swinbank@uni-graz.at)

Abstract. Commonly used bias correction methods such as quantile mapping (QM) across the function of error correction values between modelled and observed distributions are stationary or time-invariant. This article finds that this function of the error correction values cannot be assumed to be stationary. As a result, QM fails to preserve the interdecadal timescale structure of the climate change signal. Previous adaptations of QM, most notably quantile delta mapping (QDM), have been developed that do not rely on this assumption of stationarity. Here, we refine a methodology called scaled distribution mapping (SDM), which is conceptually similar to QDM, but more explicitly sensitive to the distribution of error data and the likelihood of individual events. The SDM method is found to outperform QM, QDM and detrended QM in its ability to better preserve raw climate model projected changes to meteorological variables such as temperature and precipitation.

Keywords: bias correction, stationarity, quantile mapping, precipitation, temperature, climate change signal

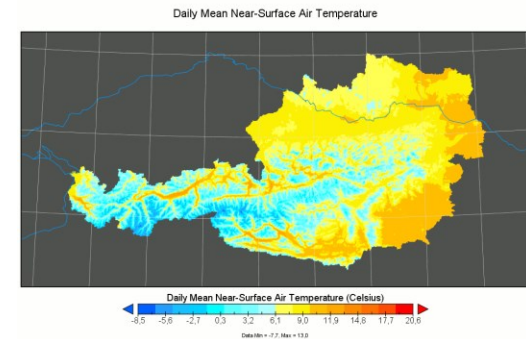
1 Introduction

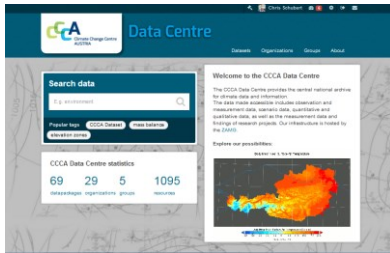
20 Bias correction of climate model projections is essential in order to properly assess the impacts of climate change on human and environmental systems (Gleckler et al., 2010; Sun and Stouffer, 2004; Swinbank et al., 2013; Tang et al., 2012). Biasing model bias is especially important for impact studies involving hydrological models, where runoff is a sensitive function of precipitation (Christensen et al., 2009; Mearns and Higgins, 2009; Stouffer et al., 2011). Global climate models (GCMs) provide large-scale projections for many climate variables (IPCC, 2013). However, many climate projections and hydrologic 25 features are not resolved at the coarse resolution of current GCMs. To bridge this gap, regional climate models (RCMs) are commonly used to downscale GCM data to a higher resolution. Even though RCMs can provide added value (Fowler et al., 2007; Fawcett et al., 2011; D'Arrigo et al., 2013; Lanza et al., 2013; Kotlowski, 2014), systematic errors in the model output still exist (Stouffer et al., 2011; Swinbank et al., 2013).

30 Numerous statistical bias correction methodologies have been developed to remove systematic model errors (Schubert et al., 2002; Sun et al., 2007; Lenderink et al., 2007; Lenderink et al., 2008; Gebrem and Rind, 2012; Chen et al.,

Your Data

formal
Data Citation





Ein Portal unter vielen ?

FEATURE No.6

- Data Explorer Funktion:
Einfache Visualisierung, Darstellung der Dateninhalten, Graphen und Gallery Ansicht

Gletscherinventar

Manage Go to resource Data API

URL: <https://data.ccca.ac.at/dataset/a0e1af36-962-4a1b-997c-d887b7743e00/resource/2ba0f676-2f72-4e49-8d87-8af5021ee356/download>

From the dataset abstract

Dieser Datensatz hat noch keinen Anspruch auf Vollständigkeit und dient zu momentan zu Tests von Funktionalitäten. Für den Download verwenden Sie bitte...

Source: 3PClim Gletscher

Data Explorer Citation Gallery

Embed

Add Filter

id	Gletscher	Geogra...	Geogra...	UTM / E...	UTM / E...	Fläche...	Hochste...	Tiefste...	Expositi...	ATLAS...
1	Blaueis	47.5709...	12.8659...	790751...	5275870...	0.07481...	2368	1937	N	G001
2	Höllental...	47.4245...	10.9946...	650439...	5254284...	0.22376...	2564	2203	NE	G002
3	Nordliche...	47.4138...	10.9756...	649029...	5253039...	0.27772...	2792	2566	E	G003
4	Südliche...	47.4007...	10.9735...	648914...	5251592...	0.04813...	2665	2557	NE	G004
5	Watzma...	47.5551...	12.9296...	795618...	5247345...	0.05668...	2119	1998	NE	G005
6	Rotkees	47.0407...	12.2098...	743837...	5214694...	0.02944...	2966	2783	W	S001
7	Rotkees	47.0362...	12.1992...	743053...	5214167...	0.02637...	2886	2729	NW	S002
8	Rotkees	47.0388...	12.2055...	743513...	5214465...	0.22673...	2978	2489	NW	S003
9	Rotkees	47.0326...	12.1984...	743008...	5213762...	0.65435...	3260	2546	NW	S004
10	Rotkees	47.0281...	12.1959...	742839...	5213252...	0.37351...	3415	2566	NW	S005
11	Rotkees	47.0253...	12.1751...	741269...	5212880...	0.02602...	2905	2645	NW	S006
12	Rotfleck...	47.0236...	12.1694...	740846...	5212673...	0.13836...	3032	2682	E	S007
13	Rotfleck...	47.0247...	12.1560...	739813...	5212747...	0.26047...	2961	2602	N	S008
14	Rotfleck...	47.0137...	12.1225...	737319...	5211421...	0.00891...	2782	2704	NW	S009

Gletscherinventar

Manage Go to resource Data API

URL: <https://data.ccca.ac.at/dataset/a0e1af36-962-4a1b-997c-d887b7743e00/resource/2ba0f676-2f72-4e49-8d87-8af5021ee356/download>

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Source: 3PClim Gletscher

Data Explorer Citation Gallery

Embed

Add Filter

Grid Graph Map 741 records 1 - 100 Search data ... Filters

Latitude / Longitude fields
GeoJSON field
Latitude field
Geografische Breite (°)
Longitude field
Geografische Länge (°)
Update
Auto zoom to features
Cluster markers

Gletscherinventar

Manage Go to resource Data API

URL: <https://data.ccca.ac.at/dataset/a0e1af36-962-4a1b-997c-d887b7743e00/resource/2ba0f676-2f72-4e49-8d87-8af5021ee356/download>

From the dataset abstract

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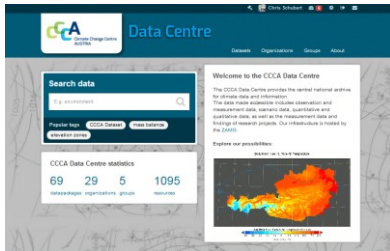
Source: 3PClim Gletscher

Data Explorer Citation Gallery

Embed

Grid Graph Map 741 records 1 - 100 Search data ... Filters

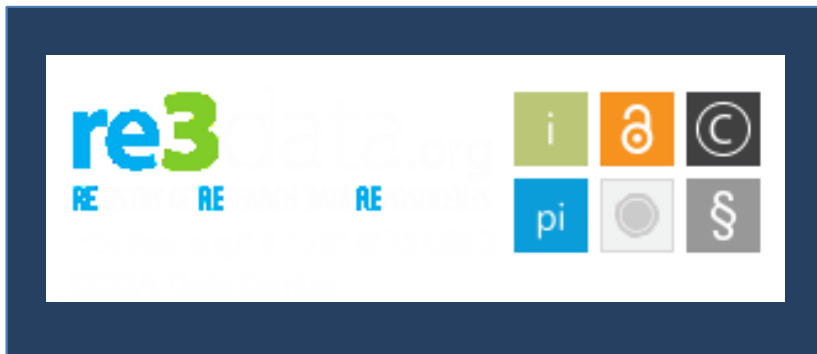
Althaus Kees
Aperer Feuerstein Ferner E1
Arvenal Kees 5



Ein Portal unter vielen ?

FEATURE No. 7

- aufgeführt [zertifiziert] in **re3data** als Forschungsdaten Repository Januar 2017



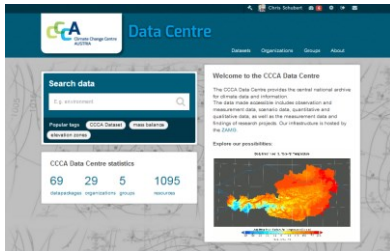
This research data repository provides additional **information** on its services.

This research data repository provides **open access** on its services.

The **terms of use** and **licences** of the data are provided by research data repository.

This research data repository provides a **policy**.

This research data repository uses handle to make its provided data **persistent, unique** and **citable**.

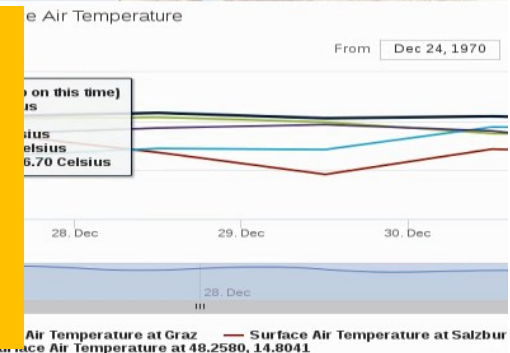
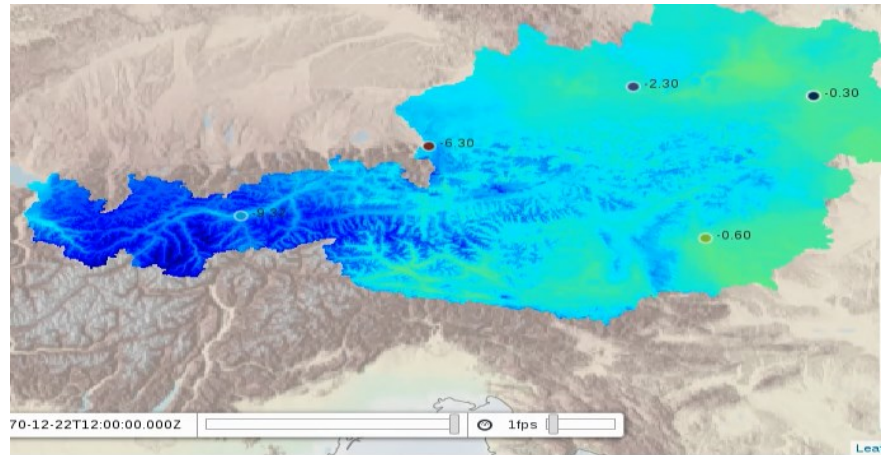


Aktuelle Umsetzungen

- Nächste Phase zur Implementierung der **DataCitation**
- Netcdf library zur **Visualisierung** der ÖKS 2015 Daten
- Abbildung eines konsistenten **Data Life Cycles**
- Piloten zur **Datenprozessierung**

GEOCLIM 2017 – 2021 HRSM

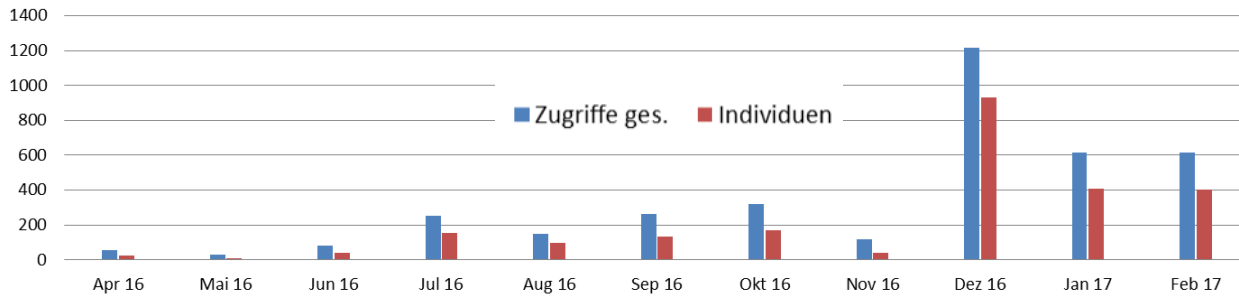
- Research Data Management
- Langzeit Archivierung
- e-infrastructures for european research activities



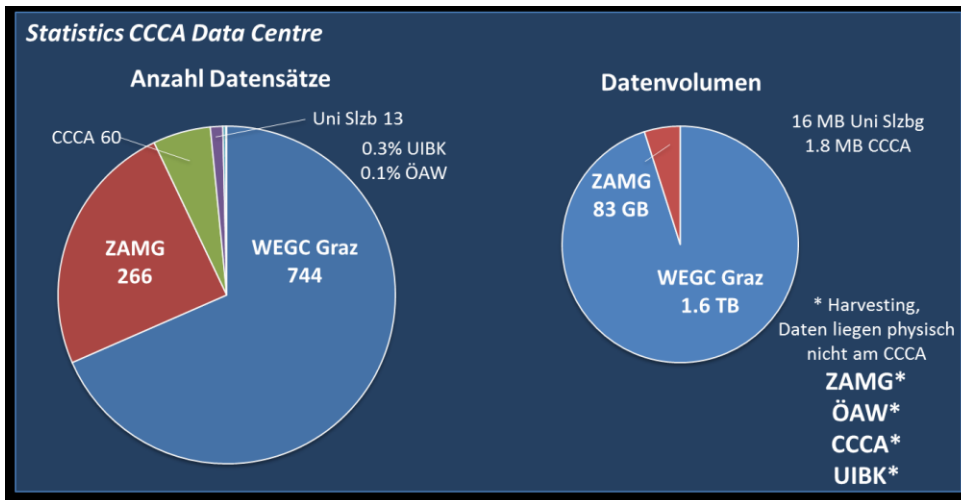
Das CCCA Datenzentrum kann nur mit **vielen Daten** aus möglichst **vielen Institutionen** tragfähig sein !

Wir liefern **Support, Beratung, Strategien !**
Lunch&Learn ist unser offenes **Webinar Format!**

CCCA Portal



Download Total: 375,6 GB
Verweildauer ø: 8,2 min





How to start

Login or **Create an Account**

non private email address

+ Add Dataset

1 Enter Metadata

2 Add Resources

1 Enter Metadata **2 Add Resources**

23.1%

Contact Basics Keywords Spatial Time Quality Conformity Constraints

Owner and Contact Information regarding this dataset

* Organization: AAU

Visibility: IIÖ, JR, TU Graz, TU Wien, UBA, UIBK, UMA, Uni Salzburg

Webpage: []

* Contact Information

* Metadata Point of Contact (Maintainer)

* Name: Chris Schubert

Department: e.g. Department for Geology

* Mail: chris.schubert@ccca.ac.at

Demonstration

data.ccca.ac.at

What are datasets?

A Dataset is a collection of data resources (e.g.csv files), together with Metadata information.

1 Enter Metadata
2 Add Resources

23.1%

* Contact
* Basics
Keywords
Spatial
Time
Quality
Conformity
Constraints

Owner and Contact Information regarding this dataset

* Organization: *Profile-Info*

i Metadata Point of Contact: Name of responsible Organization (Dataset Owner)

Visibility:

i Server operation variable: Shall your dataset be visible to others? (default: yes! - public)

Webpage:

i Webpage of the responsible Organization.

* Contact Information

* Metadata Point of Contact (Maintainer)

* Name:

Department:

* Mail:

Profile-Info

i Name, Department and Mail Address of

What are Metadata?

For automated searchability and exchange ("Harvesting") various profiles of Metadata elements are implemented. The MD elements are based on ISO19115 standard.

Which formats (Profiles) does the CCCA support?

The CCCA MD Editor 1.0 supports the INSPIRE mapping, further profiles, e.g. WMO, DCAT will follow. On every Metadata element you will find information about the corresponding ISO and INSPIRE Elements including obligation information (mandatory, optional, conditional).

Do I have to provide all information?

For your convenience the CCCA supports as well a minimal amount of information about your resources in order to upload and store them on the CCCA server

1 Enter Metadata

2 Add Resources

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Do I have to provide all information?

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25.6%

* Contact
* Basics
Keywords
Spatial
Time
Quality
Conformity
Constraints

Topic and Keywords

Topic Category/ies:

Agriculture and Forestry

Phenology

Meteorology/Climatology

Tourism

Health

Water Management/Hydrology

Infrastructure

Transport

Energy

Desaster/Risk Reduction

Profile-Info

Thesaurus Name:

CF Standard Names
▼

Keywords:

Profile-Info

Keyword Type:

▼

Profile-Info

i Main theme(s) of the dataset. See <http://inspire.ec.europa.eu/metadata-codelist/TopicCategory>

i Commonly used word(s) or formalised word(s) or phrase(s) used to describe the subject.

i Subject matter used to group smimilar keywords

1 What are datasets?

A Dataset is a collection of data resources (e.g.csv files), together with Metadata information.

1 Enter Metadata **2** Add Resources

25.6%

*Contact
*Basics
Keywords
Spatial
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Constraints

Geographic Aspects of the Resources

Polygon:

-- Select pre-defined extent --

i Draw and edit the dataset extent as rectangles and/or polygons on the map, or select a pre-defined area from the menu, or paste a GeoJSON Polygon or Multipolygon geometry below

1 What are Metadata?

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1 Do I have to provide all information?

For your convenience the CCCA supports as well a minimal amount of information about your resources in order to upload and store them on the CCCA server (corresponding

1 Enter Metadata

2 Add Resources

25.6%

*Contact
*Basics
Keywords
Spatial
Time
Quality
Conformity
Constraints

Temporal Extend of the Resources

<p>Starting Date: <input style="width: 80%;" type="text"/></p> <div style="text-align: center; margin-top: 5px;"> Profile-Info </div>	<p>i Starting date for the datasets temporal extent.</p>
<p>Ending Date: <input style="width: 80%;" type="text"/></p> <div style="text-align: center; margin-top: 5px;"> Profile-Info </div>	<p>i Ending date for the datasets temporal extent.</p>
<p>Date of creation: <input style="width: 80%;" type="text"/></p> <div style="text-align: center; margin-top: 5px;"> Profile-Info </div>	<p>i Date of creation of the resources within this dataset.</p>
<p>Date of publication: <input style="width: 80%;" type="text"/></p> <div style="text-align: center; margin-top: 5px;"> Profile-Info </div>	<p>i Date of publication of the resources within this dataset.</p>
<p>Date of revision: <input style="width: 80%;" type="text"/></p> <div style="text-align: center; margin-top: 5px;"> Profile-Info </div>	<p>i Date of revision of the resources within this dataset.</p>

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Do I have to provide all information?

For your convenience the CCCA supports as well a minimal amount of information

CCCA Data Centre | GCOS Austria | Folie 15

19.04.17

How to start

What's a resource?

A resource can be any file or link to a file containing useful data.

1 Enter Metadata

2 Add Resources

File:

Title:

i Name by which the resource is known.

Description:

You can use [Markdown formatting](#) here

i Brief narrative summary of the content of the resource.

Format Name:

i Name of the data transfer format(s) of the resource.

Format Version:

i Version of the format(date, number, etc.).

Resource URI:

i Uniformed Resource Identifier (URI) - world wide valid and citable. Provided automatically by the CCCA Data Center.

Anonymous Download:

i Allow anonymous (not logged in) users to download resource



Danke für Ihre Aufmerksamkeit!

CCCA Geschäftsstelle
Borkowskigasse 4/4
A-1190 Wien

CCCA Servicezentrum
Krenngasse 37
A-8010 Graz

CCCA Datenzentrum
Hohe Warte 38
A-1190 Wien