Different Portals – Different Views … on the Same Content

Andrea Pörsch [1] // Emanuel Söding [2] // Maximilian Berthold [3] // Roland Koppe [4] // Kirsten Elger [1] // Melanie Lorenz [1] // Sören Lorenz [2]

0000-0003-4502-6223 0000-0002-4467-642X 0000-0003-1985-6426 0000-0002-2826-3932 0000-0001-5140-8602 0000-0001-9496-342X 0000-0001-8577-6614

[1] GFZ Helmholtz Centre for Geosciences ROR 04z8jg394 // [2] GEOMAR Helmholtz Centre for Ocean Research Kiel ROR 02h2x0161 // [3] UBA German Environment Agency ROR 0329ynx05 // [4] Helmholtz Centre for Polar and Marine Research - AWI ROR 032e6b942

The growing number of data portals for discovering and accessing environmental and geoscientific data has greatly improved the ability of researchers, policymakers and the general public to retrieve and utilise important information. The source for the information displayed in these portals are automatically retrieved (harvested) metadata sets from original data sources like research data repositories or databases via standardized interfaces. The purpose of data portals is to compile metadata from different original sources and to present them from the portal-specific perspective (e.g., environmental data in Germany, data from the Helmholtz research field Earth and Environment). As a result, the presentation of the same metadata set can be very different within each data portal.

GFZ Data Services

ORIGINAL

GFZ Data Services
Geosciences Data Publisher

PUBLISHER

Dataset

Flood event and catchment characteristics in Germany and Austria

Released

Cite as: TITLE, PUBLICATION DATE, CITATION INFORMATION, DOI

Copy citation to clipboard

Macdonald, Elena; Merz, Bruno; Ullrich, Sophie; Lüdtke, Stefan; Schröter, Kai; Guse, Björn; Wietzke, Luzie; Kemter, Matthias; Ahrens, Bodo; Vorogushyn, Sergiy (2021): Flood event and catchment characteristics in Germany and Austria. GFZ Data Services. https://doi.org/10.5880/GFZ.4.4.2021.004

Files DATA DOWNLOAD

Download data and description

License: CC BY 4.0 LICENCE

Dataset Description DATASET DESCRIPTION

Supplement to

Macdonald, Elena; Merz, Bruno; Guse, Björn; Wietzke, Luzie; Ullrich, Sophie; Kemter, Matthias; et al. (2022): Event and Catchment Controls of Heavy Tail Behavior of Floods. Water Resources Research. 10.1029/2021WR031260

Related Work RELATED WORK

Cites

Haylock, M. R., Hofstra, N., Klein Tank, A. M. G., Klok, E. J., Jones, P. D., & New, M. (2008). A European daily high-resolution gridded data set of surface temperature and precipitation for 1950–2006. *Journal of Geophysical Research*, *113*(D20), D20119. https://doi.org/10.1029/2008jd010201

Kemter, M., Merz, B., Marwan, N., Vorogushyn, S., & Blöschl, G. (2020). Joint Trends in Flood Magnitudes and Spatial Extents Across Europe. Geophysical Research Letters, 47(7). doi:10.1029/2020gl087464

Primo, C., Kelemen, F. D., Feldmann, H., & Ahrens, B. (2019). A regional atmosphere-ocean climate system model (CCLMv5.0clm7-NEMOv3.3-NEMOv 3.6) over Europe including three marginal seas: on its stability and performance. *Copernicus GmbH*. https://doi.org/10.5194/gmd-2019-73

Samaniego, L., Kumar, R., & Attinger, S. (2010). Multiscale parameter regionalization of a grid-based hydrologic model at the mesoscale. *Water Resources Research*, *46*(5). https://doi.org/10.1029/2008wr007327

Abstract

The dataset comprises a range of variables describing characteristics of flood events and river catchments for 480 gauging stations in Germany and Austria. The event characteristics are asscoiated with annual maximum flood events in the period from 1951 to 2010. They include variables on event precipitation, antecedent catchment state, event catchment response, event timing, and event types. The catchment characteristics include variables on catchment area, catchment wetness, tail heaviness of rainfall, nonlinearity of catchment response, and synchronicity of precipitation and catchment state. The variables were compiled as potential predictors of heavy tail behaviour of flood peak distributions. They are based on gauge observations of discharge, E-OBS meteorological data (Haylock et al. 2008), mHM hydrological model simulations (Samaniego et al., 2010), 4DAS climate reanalysis data (Primo et al., 2019), and the 25x25 m resolution EU-DEM v1.1. A short description of the data processing is included in the file inventory and more details can be found in Macdonald et al. (2022). ABSTRACT

Additional Information

15 June 2022: addition of the DOI of the article to which these data are supplementary material and update of the data description with the citation of the article.

Authors AUTHORS, ORCIDS, AFFILIATIONS

Macdonald, Elena ;GFZ German Research Centre for Geosciences, Potsdam, Germany

Merz, Bruno ;GFZ German Research Centre for Geosciences, Potsdam, Germany

Lüdtke, Stefan ;GFZ German Research Centre for Geosciences, Potsdam, Germany

Schröter, Kai ;GFZ German Research Centre for Geosciences, Potsdam, Germany

Guse, Björn ;GFZ German Research Centre for Geosciences, Potsdam, Germany

Wietzke, Luzie ;GFZ German Research Centre for Geosciences, Potsdam, Germany

Kemter, Matthias ;GFZ German Research Centre for Geosciences, Potsdam, Germany

Ahrens, Bodo ;Institute for Atmospheric and Environmental Sciences, Goethe University Frankfurt, Frankfurt, Germany

Vorogushyn, Sergiy ;GFZ German Research Centre for Geosciences, Potsdam, Germany

Contact

Macdonald, Elena

Keywords

flood event-causing precipitation, pre-event moisture state, catchment response, flood event types, catchment characteristics, climate > meteorological phenomenon > atmospheric precipitation, hydrosphere > hydrologic cycle > flood > flood runoff, hydrosphere > water (geographic) > surface water > freshwater > rain water, pedosphere > soil > soil water > soil moisture, science > natural science > atmospheric science > meteorology > hydrometeorology

GCMD Science Keywords THEMATIC KEYWORDS

EARTH SCIENCE > ATMOSPHERE > PRECIPITATION > PRECIPITATION AMOUNT
EARTH SCIENCE > LAND SURFACE > SOILS > SOIL MOISTURE/WATER CONTENT
EARTH SCIENCE > TERRESTRIAL HYDROSPHERE > SURFACE WATER > FLOODS
EARTH SCIENCE > TERRESTRIAL HYDROSPHERE > SURFACE WATER > RIVERS/STREAMS
EARTH SCIENCE > TERRESTRIAL HYDROSPHERE > SURFACE WATER > WATERSHED CHARACTERISTICS

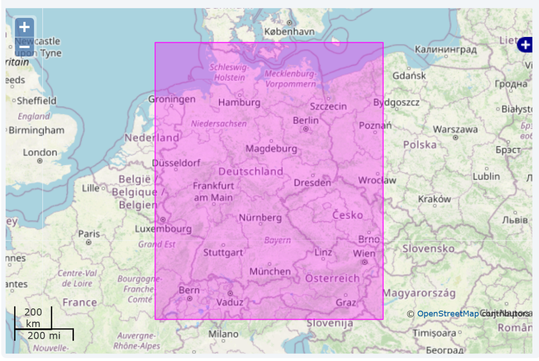
More Metadata

datacite: download xml
iso19115: download xml
schema.org download

GEOGRAPHICAL EXTENT

Location

Please, **click** on markers, line , bounding boxes or the list below to see related details in popup.
To explore to full geographic extent of the map please click and drag the map.



GFZ Helmholtz Centre for Geosciences | HELMHOLTZ GEMEINSCHAFT

DOI Landing page for https://doi.org/10.5880/GFZ.4.4.2021.004

Original data source: DOI-referenced data publication via the domain-specific research data repository for geosciences data GFZ Data Services. The rich metadata are collected via an online metadata editor and curated by data specialists at the repository. The DOI landing page displays the full metadata set, including the authors (ORCIDs and affiliations), related works (DOIs written out as a string and as a reference), a map displaying the spatial extent of the study area and a large number of free keywords and keywords derived from linked-data vocabularies.

umwelt.info

HARVEST

umwelt.info | Suchmaschine Funktionsweise Fokusthemen Neuigkeiten

Flood event and catchment characteristics in Germany and Austria

← Suchergebnisse

TITLE

Zeitbezug PUBLICATION DATE

erstellt: 1.1.2021

Lizenz

cc-by/4.0 LICENCE

Sprache

Englisch/English ABSTRACT

DOI TO THE LANDING PAGE

Flood event and catchment characteristics in Germany and Austria

The dataset comprises a range of variables describing characteristics of flood events and river catchments for 480 gauging stations in Germany and Austria. The event characteristics are asscoiated with annual maximum flood events in the period from 1951 to 2010. They include variables on event precipitation, antecedent catchment state, event catchment response, event timing, and event types. The catchment characteristics include variables on catchment area, catchment wetness, tail heaviness of rainfall, nonlinearity of catchment response, and synchronicity of precipitation and catchment state. The variables were compiled as potential predictors of heavy tail behaviour of flood peak distributions. They are based on gauge observations of discharge, E-OBS meteorological data (Haylock et al. 2008), mHM hydrological model simulations (Samaniego et al., 2010), 4DAS climate reanalysis data (Primo et al., 2019), and the 25x25 m resolution EU-DEM v1.1. A short description of the data processing is included in the file inventory and more details can be found in Macdonald et al. (2022).

Direktlink: http://dx.doi.org/10.5880/GFZ.4.4.2021.004

Feedback geben

Herkunft

PUBLISHER (FROM WIKIDATA)

GFZ Data Services

GFZ Data Services ist ein kuratiertes Forschungsdatenrepositorium im Bereich der Geowissenschaften. Das GFZ Helmholtz-Zentrum für Geoforschung in Potsdam, Deutschland, hostet dieses Repositorium und bietet das Veröffentlichen von Forschungsdaten, wissenschaftlicher Software und datenbezogener Berichte an.

E-Mail: datapub@gfz.de

Kontaktformular

Webseite

Organisationen

GFZ Data Services (Herausgeberschaft)

Schlagwörter THEMATIC KEYWORDS

Fluss | Hochwasser | Wetterdaten | Datenverarbeitung | Einzugsgebiet | Niederschlag | EARTH SCIENCE > ATMOSPHERE > PRECIPITATION > PRECIPITATION AMOUNT | EARTH SCIENCE > LAND SURFACE > SOILS > SOIL MOISTURE/WATER CONTENT | EARTH SCIENCE > TERRESTRIAL HYDROSPHERE > SURFACE WATER > FLOODS | EARTH SCIENCE > TERRESTRIAL HYDROSPHERE > SURFACE WATER > RIVERS/STREAMS | EARTH SCIENCE > TERRESTRIAL HYDROSPHERE > SURFACE WATER > WATERSHED CHARACTERISTICS | catchment characteristics | catchment response | climate > meteorological phenomenon > atmospheric precipitation | flood event types | flood event-causing precipitation | hydrosphere > hydrologic cycle > flood > flood runoff | hydrosphere > water (geographic) > surface water > freshwater > rain water | pedosphere > soil > soil water > soil moisture | pre-event moisture state | science > natural science > atmospheric science > meteorology > hydrometeorology

Metadatenqualität

Auffindbar	Zugänglich	Interoperabel	Wiederverwendbar
63 Punkte	67 Punkte	25 Punkte	67 Punkte

Nationales Zentrum für Umwelt- und Naturschutzinformationen

Außenstelle Umweltbundesamt
Gotthardstraße 34/37
06217 Merseburg
Deutschland

Impressum Datenschutz Sitemap Presse Kontakt

Harvesting Catalogue: https://umwelt.info/de accessed on August 22, 2025

Earth Data

HARVEST

EARTH DATA HOME ABOUT DATA TOOLS & SERVICES VIEWER LOGIN

MAP ALL TYPES Flood event and catchment characteristics in Germany and Austria

SORT BY: RELEVANCE DATE

SELECTED FILTERS: GFZ Data Services

Flood event and catchment characteristics in Germany and Austria (2021) TITLE

Macdonald, Elena; Merz, Bruno; Ullrich, Sophie; Lüdtke, Stefan; Schröter, Kai; Guse, Björn; Wietzke, Luzie; Kemter, Matthias; Ahrens, Bodo; Vorogushyn, Sergiy

AUTHORS, ORCIDS, AFFILIATIONS

https://dx.doi.org/10.5880/GFZ.4.4.2021.004 DOI TO LANDING PAGE

Temporal Coverage

Author

License

Persistent Identifier

Repository

GFZ Data Services (1)

Resource Type

Abstract: The dataset comprises a range of variables describing characteristics of flood events and river catchments for 480 gauging stations in Germany and Austria. The event characteristics are asscoiated with annual maximum flood events in the period from 1951 to 2010. They include variables on event precipitation, antecedent catchment state, event catchment response, event timing, and event types. The catchment characteristics include variables on catchment area, catchment wetness, tail heaviness of rainfall, nonlinearity of catchment response, and synchronicity of precipitation and catchment state. The variables were compiled as potential predictors of heavy tail behaviour of flood peak distributions. They are based on gauge observations of discharge, E-OBS meteorological data (Haylock et al. 2008), mHM hydrological model simulations (Samaniego et al., 2010), 4DAS climate reanalysis data (Primo et al., 2019), and the 25x25 m resolution EU-DEM v1.1. A short description of the data processing is included in the file inventory and more details can be found in Macdonald et al. (2022). ABSTRACT

Provider: GFZ Data Services PUBLISHER

Links LINK TO THE LANDING PAGE

- Flood event and catchment characteristics in Germany and Austria

Relations [1] DATASET DESCRIPTION [2-5] DOIS TO RELATED WORKS

- 10.1029/2021WR031260 [1]
- 10.1029/2008JD010201 [2]
- 10.1029/2020GL087464 [3]
- 10.5194/gmd-2019-73 [4]
- 10.1029/2008WR007327 [5]

« 1 »

1 hits in response (0.17 seconds)

EARTH DATA PORTAL

The Earth Data Portal is a collaborative effort of the Helmholtz centres of the research field Earth and Environment AWI, FZJ, GEOMAR, GFZ, Hereon, KIT and UFZ.

About Us | Contact | How to contribute

POWERED BY ALFRED-WEGENER-INSTITUT HELMHOLTZ-ZENTRUM FÜR POLAR- UND MEERESFORSCHUNG

Am Handelshafen 12
27570 Bremerhaven

+49 (0)471 4831-0
+49 (0)471 4831-1149

DataHub Research Field Earth and Environment | DAM

TERMS OF USE PRIVACY POLICY IMPRINT Version 2.0

Harvesting Catalogue: https://earth-data.de accessed on August 22, 2025

The two images on the right are screenshots of harvesting portals. They have taken the content from the source repository (image on the far left) and present excerpts from it – tailored to the needs of the user community. While umwelt.info is an excellent resource for findability and availability of environmental knowledge, the portals operated by Helmholtz comply to "Guidelines for Safeguarding Good Research Practice" by carefully citing sources and thus ensuring that researchers act honestly, fairly, transparently, and conscientiously in order to strengthen trust in science.

Join in and discuss with us!

- Most of information is successfully transferred and displayed in both harvesting portals: title, publisher, identifier (DOI), and the abstract – only a few properties of the DataCite mandatory fields are missing.
- Relationships supported by persistent identifiers are extremely valuable for scientific research. If DOI referenced metadata is harvested, shouldn't portals at least display all mandatory metadata properties of DataCite?
- Perhaps not all attributes need to be displayed on the harvesting catalog's website because it has a different focus?
- How do we ensure that the contents of the ROR and Wikidata registers do not contradict each other?

HMC Earth and Environment Community Wiki
Contact us at hmc-hub-ee@geomar.de

HELMHOLTZ