

Situation as of 05/06/2024 16:59 UTC  
Delineation MONIT03 - Overview map 01



Flooded area  
1775.2 ha

Potentially affected population  
~ 2.800

Potentially Affected Built-up and Transportations

Built-up  
21.1 ha

Road  
88.4 km

Railway  
2 km

Estimated water depth (m)

0.15 - 0.50  
0.50 - 1.00  
1.00 - 2.00  
2.00 - 4.00

Crisis information

Maximum Water Extent

Area of Interest

Detail map

Administrative Boundaries

Province

Municipality

Placenames

Placename

Built-Up Area

Residential

Non residential

School, university and research buildings

Hospital or institutional care buildings

Military

Hydrography

River

Stream

Lake

River

Facilities

Long-distance pipelines or lines

Water or Aquatic infrastructure

Dam

Mining or extraction site

Water Well

Power plant

Sport and recreation constructions

Dump Site

Water or Aquatic infrastructure

Dam

Transportation

Highway

Main road

Railway

Airfield runway

Navigable canal

Transportation

Airfield

Helipad

Harbour

Water or Aquatic infrastructure

Full table available in the vector package

**Event:** Starting in the early morning of 31st May 2024, continuous rain (about 50 to 150 l/m<sup>2</sup> in 48 hours) is expected in wide areas of Southern and Eastern Germany (potentially affected states: Bavaria, Baden-Wuerttemberg, Hesse, Saxony, Saxony-Anhalt, Thuringia). Although uncertainties of the forecast still have to be considered, competent authorities expect flooding of different severities in wide areas. Following formal flash flood EFAS notifications, Copernicus EMS Rapid Mapping is requested to provide initial rough estimation, flood extent and damage assessment emergency mapping for some potentially affected regions.

**Data sources and analysis:** Pre-event image: Sentinel-2A/B (2024) (acquired on 27/04/2024 at 10:17 UTC, resolution 10.0 m). This image is used as background image.

Post-event image: Sentinel-1A/B (2024) (acquired 05/06/2024 16:59 UTC, resolution 20.0 m). All images are provided under COPERNICUS by the European Union and ESA, all rights reserved.

The thematic layer has been derived from post-event satellite image using a semi-automatic approach. Please be aware that the thematic accuracy might be lower in urban and forested areas due to inherent limitations of the SAR analysis technique.

The water extent and water depth information is based on the analysis of post-event satellite imagery and on Digital Elevation Model data. The flooded area corresponds to the water observed in the most recent satellite imagery, excluding the permanent water.

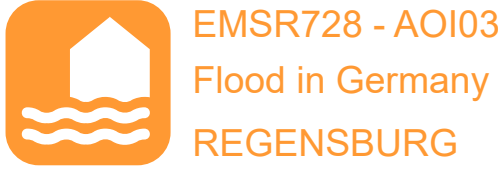
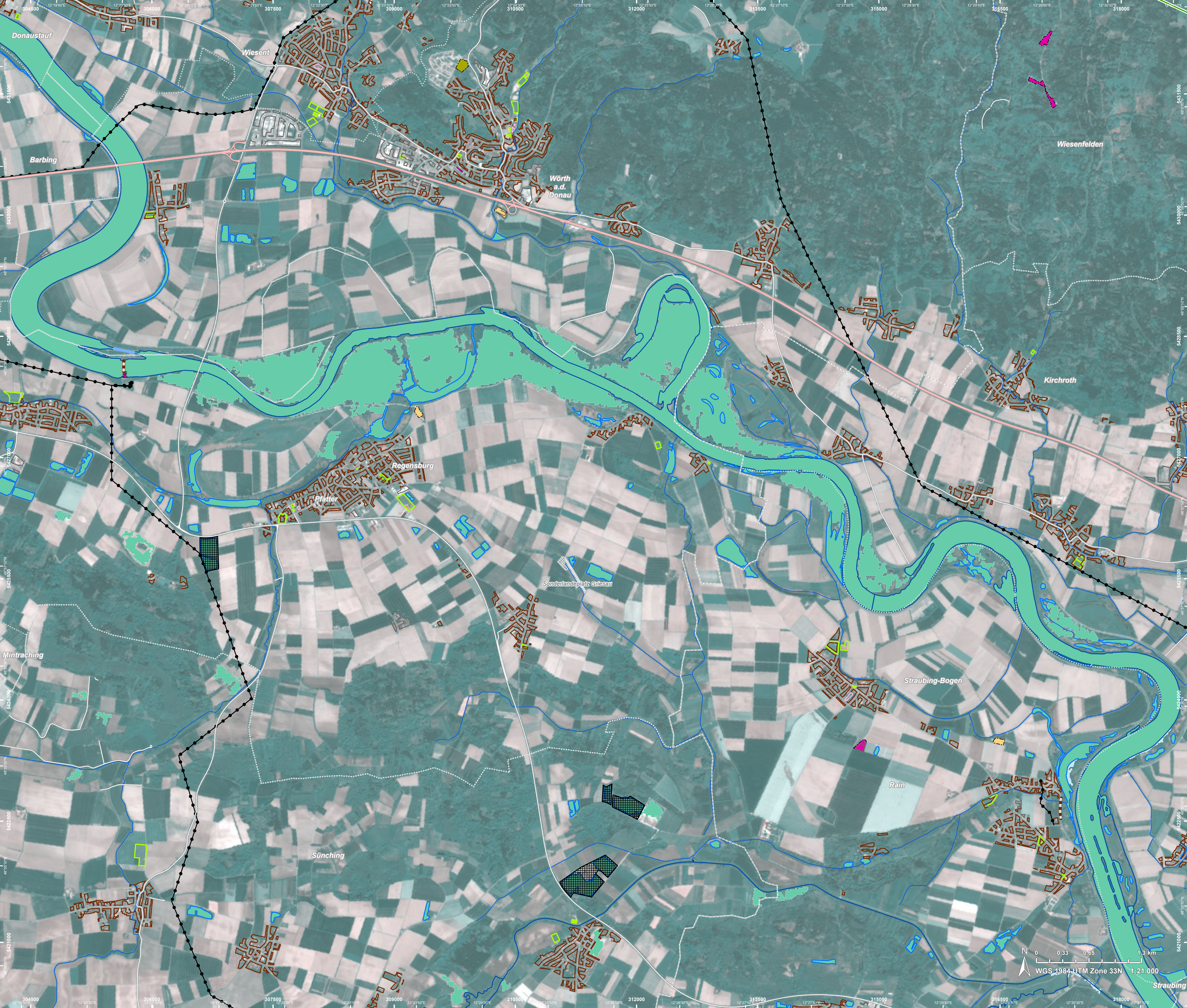
Water depth values are not calculated outside the observed event areas.

Map produced by GAF AG released by e-GEOS on the 06/06/2024.

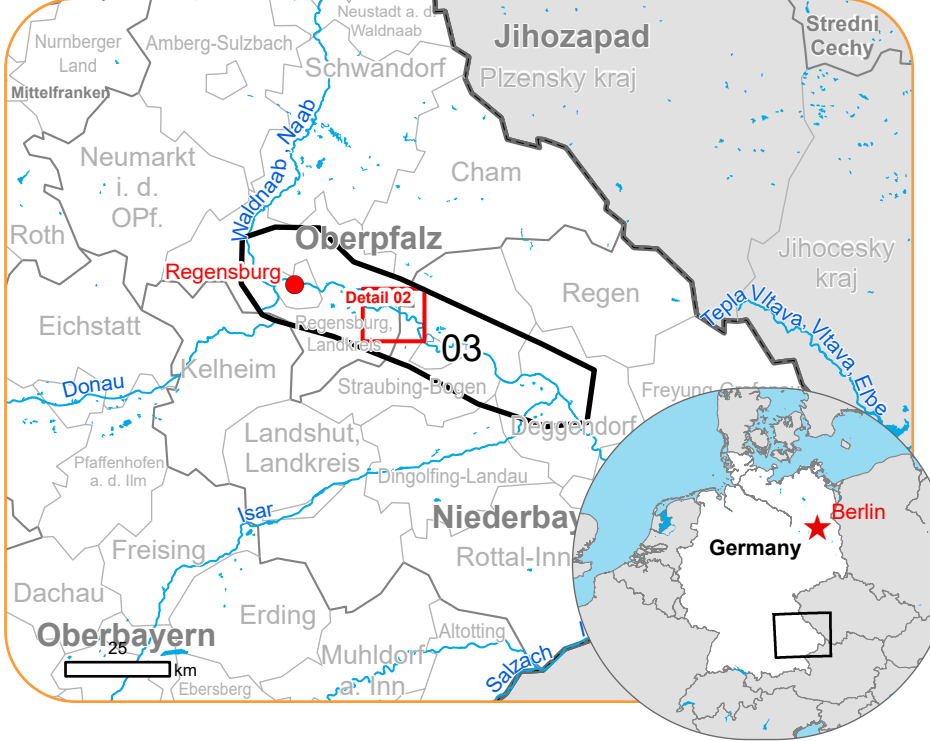
Details on this activation and service conditions available through the QR code or at the link: <https://rapidmapping.emergency.copernicus.eu/EMSR728>







Situation as of 05/06/2024 16:59 UTC  
Delineation MONIT03 - Detail map 02



Estimated water depth (m)	Facilities
0.15 - 0.50	Long-distance pipelines or lines
<b>Crisis information</b>	Dam
Maximum Water Extent	Mining or extraction site
<b>General Information</b>	Power plant
Area of Interest	Sport and recreation constructions
<b>Administrative Boundaries</b>	Dump Site
Province	Water or Aquatic infrastructure
Municipality	<b>Transportation</b>
<b>Built-Up Area</b>	Highway
Residential	Main road
Non residential	Airfield runway
School, university and research buildings	Navigable canal
Hospital or institutional care buildings	<b>Transportation</b>
<b>Hydrography</b>	Airfield
River	Helipad
Stream	Water or Aquatic infrastructure
Lake	
River	

Full table available in the vector package

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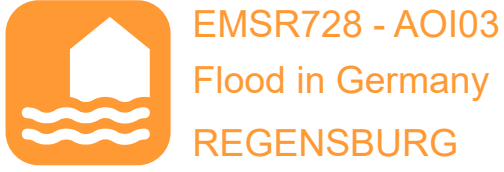
Water depth values are not calculated outside the observed event areas.

Map produced by GAF AG released by e-GEOS on the 06/06/2024.

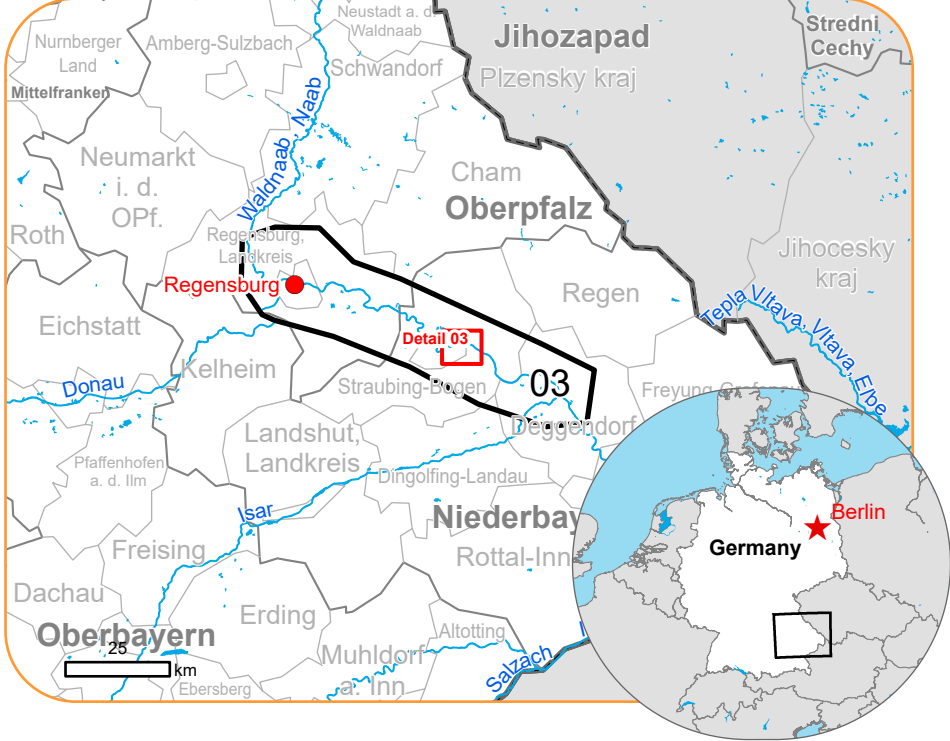
Details on this activation and service conditions available through the QR code or at the link: <https://rapidmapping.emergency.copernicus.eu/EMSR728>







Situation as of 05/06/2024 16:59 UTC  
Delineation MONIT03 - Detail map 03



- Estimated water depth (m)**
- 0.15 - 0.50
  - 0.50 - 1.00
  - 1.00 - 2.00
- Crisis information**
- Maximum Water Extent
- Administrative Boundaries**
- Province
  - Municipality
- Built-Up Area**
- Residential
  - Non residential
  - School, university and research buildings
  - Military
- Hydrography**
- River
  - Stream
  - Lake
- Facilities**
- Long-distance pipelines or lines
  - Water or Aquatic infrastructure
  - Dam
  - Mining or extraction site
  - Water Well
  - Power plant
  - Sport and recreation constructions
  - Water or Aquatic infrastructure
- Transportation**
- Highway
  - Main road
  - Railway
  - Helipad

Full table available in the vector package

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Consequences within the AOI				
		Unit of measurement	Affected	Total in AOI
Flooded area*		ha		1.775,2
Water Extent**		ha		6.472,9
Maximum Water Extent***		ha		6.989,7
Permanent Water		ha		4.697,7
Estimated population	Number of inhabitants		~ 2.800	~ 470.000
Built-up	Residential Buildings	ha	5,9	5.014,0
	Office buildings	ha	0,05	483,3
	Wholesale and retail trade buildings	ha	0	28,4
	Industrial buildings	ha	14,1	931,2
	School, university and research buildings	ha	0,1	96,9
	Hospital or institutional care buildings	ha	0	31,0
	Military	ha	1,0	217,3
	Cemetery	ha	0	16,1
Transportation	Airfield runways	ha	0	49,9
	Navigable canals	ha	0,6	0,8
	Helipad	ha	0	0,7
	Harbours	ha	0,02	8,4
	Airfield runways	km	0	7,5
	Navigable canals	km	0,6	1,0
	Highways	km	4,5	414,4
	Primary Road	km	1,0	210,2
	Secondary Road	km	2,7	418,4
	Local Road	km	4,9	4.534,8
	Cart Track	km	75,4	7.185,1
	Harbours	km	0,2	2,1
Facilities	Long-distance railways	km	2,0	537,7
	Settling Basin	ha	0	46,6
	Breakwater	ha	1,0	1,1
	Dams	ha	0,5	0,8
	Constructions for mining or extraction	ha	139,7	757,2
	Power plant constructions	ha	0,3	263,7
	Sport and recreation constructions	ha	44,6	1.068,2
	Other civil engineering works not elsewhere classified	ha	0,5	32,0
	Long-distance pipelines, communication and electricity lines	km	6,2	347,9
	Breakwater	km	0,1	0,1
Land use	Dams	km	0,7	1,6
	Other	ha	3.619,7	22.428,2
	Arable land	ha	1.360,0	84.875,4
	Pastures	ha	1.275,1	21.851,9
	Forests	ha	171,2	38.898,2
	Heterogeneous agricultural areas	ha	18,1	388,2
	Shrub and/or herbaceous vegetation association	ha	13,4	429,8
	Permanent crops	ha	12,6	252,1
	Inland wetlands	ha	2,9	29,3

\* Corresponds to the water observed in the most recent satellite imagery, excluding permanent water  
\*\* Corresponds to the water observed in the most recent satellite imagery, including permanent water  
\*\*\* Corresponds to the water observed in all previous products and in the most recent satellite imagery (cumulative analysis)

**Disclaimer:**  
Full disclaimer and other helpful information available in the online manual:  
<https://emergency.copernicus.eu/mapping/ems/online-manual-rapid-mapping-products>  
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**Data Access:**  
All data displayed on the map(s), as well as the Physiography and Land Use - Land Cover layers, are available in the Crisis Information Package and the Base Layer Package (for reference data). The table above is available in editable format in the Crisis Information Package. All products and data are also available for download on the portal.

**Estimated Population:**  
Estimated population is based on Copernicus Global Human Settlement Layer (GHSL) dataset. Additional population datasets and analysis are available in the summary table.

**Data Sources:**  
Base vector layers: OpenStreetMap © OpenStreetMap contributors (2024), Wikimapia.org, GeoNames 2015, Corine Land Cover (CLC) 2018, EuroBoundaryMap 2017 ©EuroGeographics.  
Inset maps: JRC 2013, GISCO 2010 © EuroGeographics, Natural Earth 2012, CCM River DB © EUJRC2007, GeoNames 2015.  
Digital Elevation Model: Digital Terrain Model (5m) © GeoBasis-DE / BKG (2024)

