

Situation as of 02/06/2024 05:06 UTC  
Delineation - Overview map 01



Flooded area 682.4 ha  
Potentially affected population ~ 1000

Potentially Affected Built-up and Transportations

Water infrastructure 1.7 km  
Road 20.6 km  
Railway 0.3 km  
Built-Up 12.2 ha

Estimated water depth (m)	
0.15 - 0.50	Lake
0.50 - 1.00	Reservoir
1.00 - 2.00	River
2.00 - 4.00	
General Information	
Area of Interest	Long-distance pipelines or lines
Detail map	Local pipelines or lines
Image Footprint	Dam
Not Analysed	Mining or extraction site
Administrative Boundaries	
Province	Water Well
Municipality	Power plant
Built-Up Area	
Residential	Sport and recreation constructions
	Dump Site
Hydrography	
River	Water or Aquatic infrastructure
Stream	Dam
Transportation	
	Airfield
	Helipad

**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 28/01/2024 at 10:13 UTC, resolution 10 m).  
Post-event image: Sentinel-1A/B (2024) (acquired on 02/06/2024 at 05:06 UTC, resolution 10 m). All images are provided under COPERNICUS by the European Union and ESA, all rights reserved.  
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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

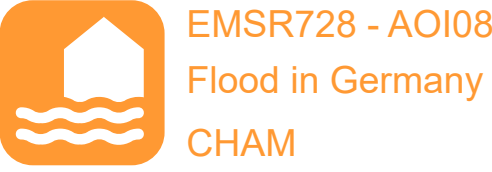
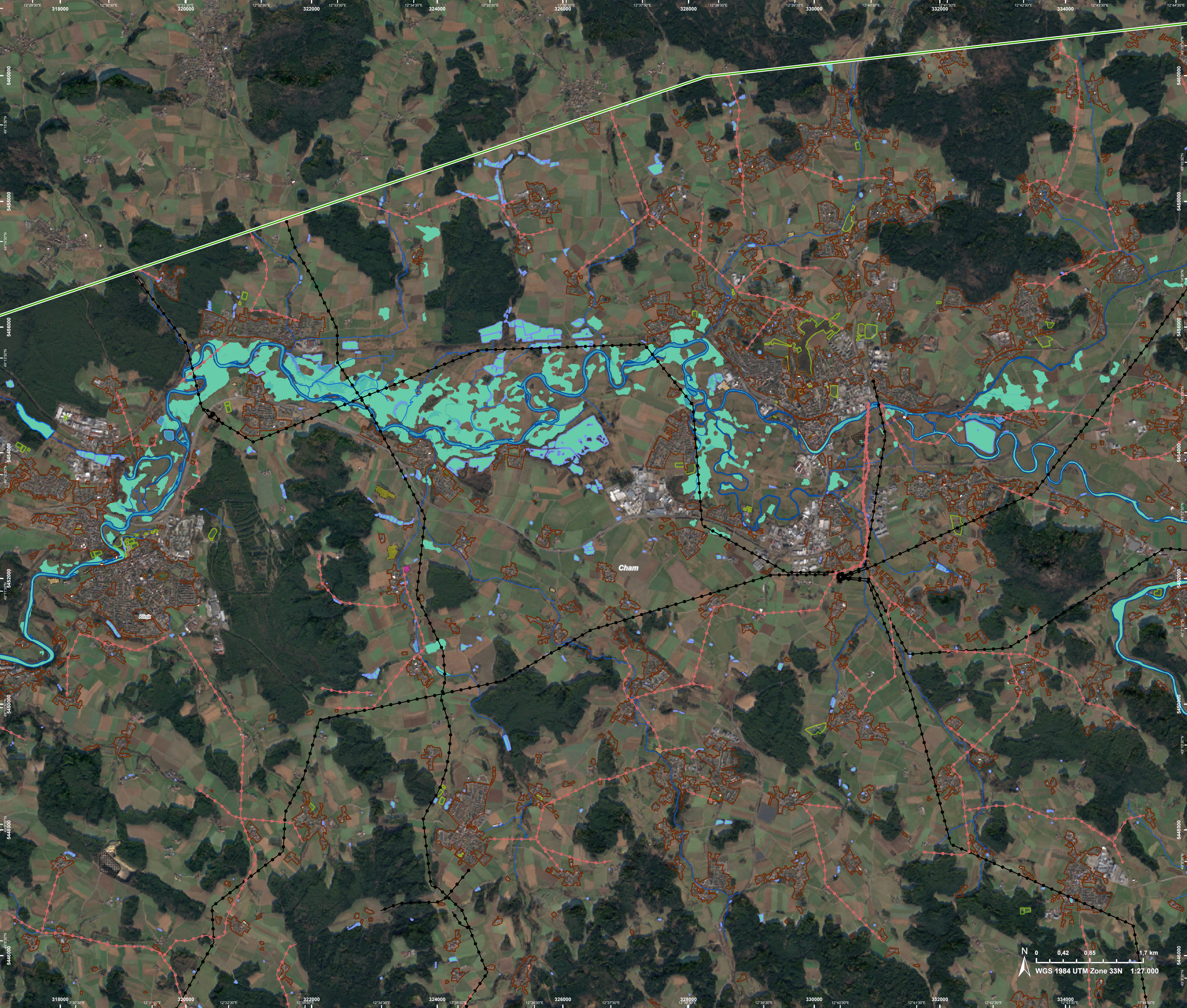
The water extent and water depth information is based on the analysis of post-event satellite imagery and on Digital Elevation Model data. The flooded area corresponds to the water observed in the most recent satellite imagery, excluding the permanent water.

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

Map produced by ITHACA released by e-GEOS on the 04/06/2024.

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 02/06/2024 05:06 UTC  
Delineation - Detail map 02



- Estimated water depth (m)**
- 0.15 - 0.50
  - 0.50 - 1.00
  - 1.00 - 2.00
  - 2.00 - 4.00
- General Information**
- Area of Interest
  - Image Footprint
- Built-Up Area**
- Residential
- Hydrography**
- River
  - Stream
  - Lake
- Facilities**
- Long-distance pipelines or lines
  - Local pipelines or lines
  - Dam
  - Mining or extraction site
  - Power plant
  - Sport and recreation constructions
  - Dump Site
  - Water or Aquatic infrastructure
- Transportation**
- Helipad
- Reservoir**
- River

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Consequences within the AOI			
	Unit of measurement	Affected	Total in AOI
Flooded area*	ha		682,4
Water Extent**	ha		2.016,7
Permanent Water	ha		1.334,3
Estimated population	Number of inhabitants	~ 1.000	~ 260.000
Built-up	Residential Buildings	ha 9,7	14.963,1
	Office buildings	ha 0,8	688,9
	Wholesale and retail trade buildings	ha 0	56,8
	Industrial buildings	ha 1,4	915,9
	School, university and research buildings	ha 0	70,9
	Hospital or institutional care buildings	ha 0	15,7
	Military	ha 0,4	577,8
	Cemetery	ha 0	75,5
Transportation	Airfield runways	ha 0	18,7
	Helipad	ha 0	1,3
	Airfield runways	km 0,3	1,9
	Highways	km 0,3	87,8
	Primary Road	km 1,0	563,7
	Secondary Road	km 1,1	583,1
	Local Road	km 1,2	4.432,1
	Cart Track	km 17,0	8.046,9
	Long-distance railways	km 0,3	270,9
Facilities	Settling Basin	ha 4,7	57,0
	Breakwater	ha 0	0
	Dams	ha 0,00	0,4
	Constructions for mining or extraction	ha 14,9	418,8
	Power plant constructions	ha 0,04	15,1
	Sport and recreation constructions	ha 6,4	557,5
	Other civil engineering works not elsewhere classified	ha 0,1	18,2
	Long-distance pipelines, communication and electricity lines	km 5,8	373,2
	Local pipelines and cables	km 4,5	971,6
Land use	Dams	km 1,7	2,6
	Pastures	ha 1.285,1	96.314,5
	Forests	ha 297,9	110.038,4
	Other	ha 239,6	11.409,5
	Arable land	ha 145,3	21.896,0
	Heterogeneous agricultural areas	ha 35,9	919,6
	Shrub and/or herbaceous vegetation association	ha 12,7	2.379,5

\* Corresponds to the water observed in the most recent satellite imagery, excluding permanent water

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#### 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.

Access to 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 Elevation Model: Digital Terrain Model 10 m, GeoBasis-DE/BKG (2024)



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