

EMSR759 - AOI02
Flood in Hungary, Austria, and Slovakia
KOMARNO

Situation as of 21/09/2024 09:14 UTC
Delineation MONIT01 - Overview map 01



Flooded area
1,000.2 ha



Potentially affected
population
~ 300

Potentially Affected Built-up and Transportations



Built-Up
14.7 ha



Road
64.9 km



Railway
7.8 km

Estimated flood depth (m)

- Below 0.50
- 0.50 - 1.00
- 1.00 - 2.00
- 2.00 - 4.00
- 4.00 - 6.00

Crisis Information

- Maximum Flood Extent
- Flood trace
- Area of Interest
- Detail map

Administrative Boundaries

- International Boundary
- Region
- Province
- Municipality

Placenames

- Placename
- Built-Up Area
 - Residential
 - Non residential
- School, university and research buildings
- Hospital or institutional care buildings
- Military
- Hydrography
 - Lake, River
- Transportation
 - Highway
 - Main road
 - Railway
 - Airfield

Full data available in the vector package.

Event: On 13 September 2024, from 06:00 local time, downpours started affecting the Danube Basin. Maximum precipitation is expected on the weekend of 14 September 2024. Water levels are expected to rise into the middle of the week starting the 15 September 2024. Copernicus EMS Rapid Mapping is requested to provide initial rough estimation and flood extent emergency mapping.

Data sources and analysis: Pre-event image: Sentinel-2A (2024) (acquired on 30/07/2024 at 09:50 UTC, resolution 10.0 m). This image is used as background image.
Post-event image: GeoEye © Maxar Technologies, Inc. (2024), (acquired on 24/09/2024 at 09:14 UTC, resolution 2.0 m).
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The thematic layer has been derived from post-event satellite image using a semi-automatic approach.

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

Map produced by IABG released by e-GEOS on the 21/09/2024.

Details on this activation and service conditions available through the QR code or at the link: <https://rapidmapping.emergency.copernicus.eu/EMSR759>



PROGRAMME OF THE
EUROPEAN UNION





EMSR759 - AOI02
Flood in Hungary, Austria, and Slovakia
KOMARNO

Situation as of 21/09/2024 09:14 UTC
Delineation MONIT01 - Detail map 02



- Estimated flood depth (m)**
- Below 0.50
 - 0.50 - 1.00
 - 1.00 - 2.00
 - 2.00 - 4.00
 - 4.00 - 6.00
- Crisis Information**
- Maximum Flood Extent
 - Flood trace
- General Information**
- Area of Interest
- Administrative Boundaries**
- International Boundary
 - Municipality
- Built-Up Area**
- Residential
 - Non residential
 - School, university and research buildings
- Hydrography**
- Lake, River
- Transportation**
- Main road
 - Railway

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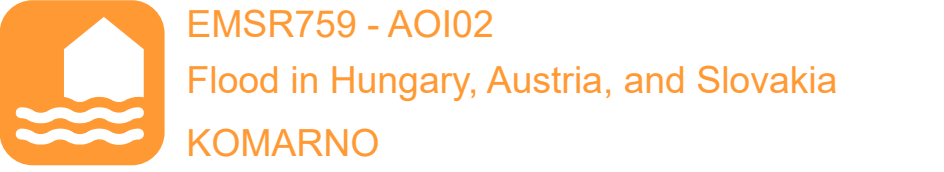
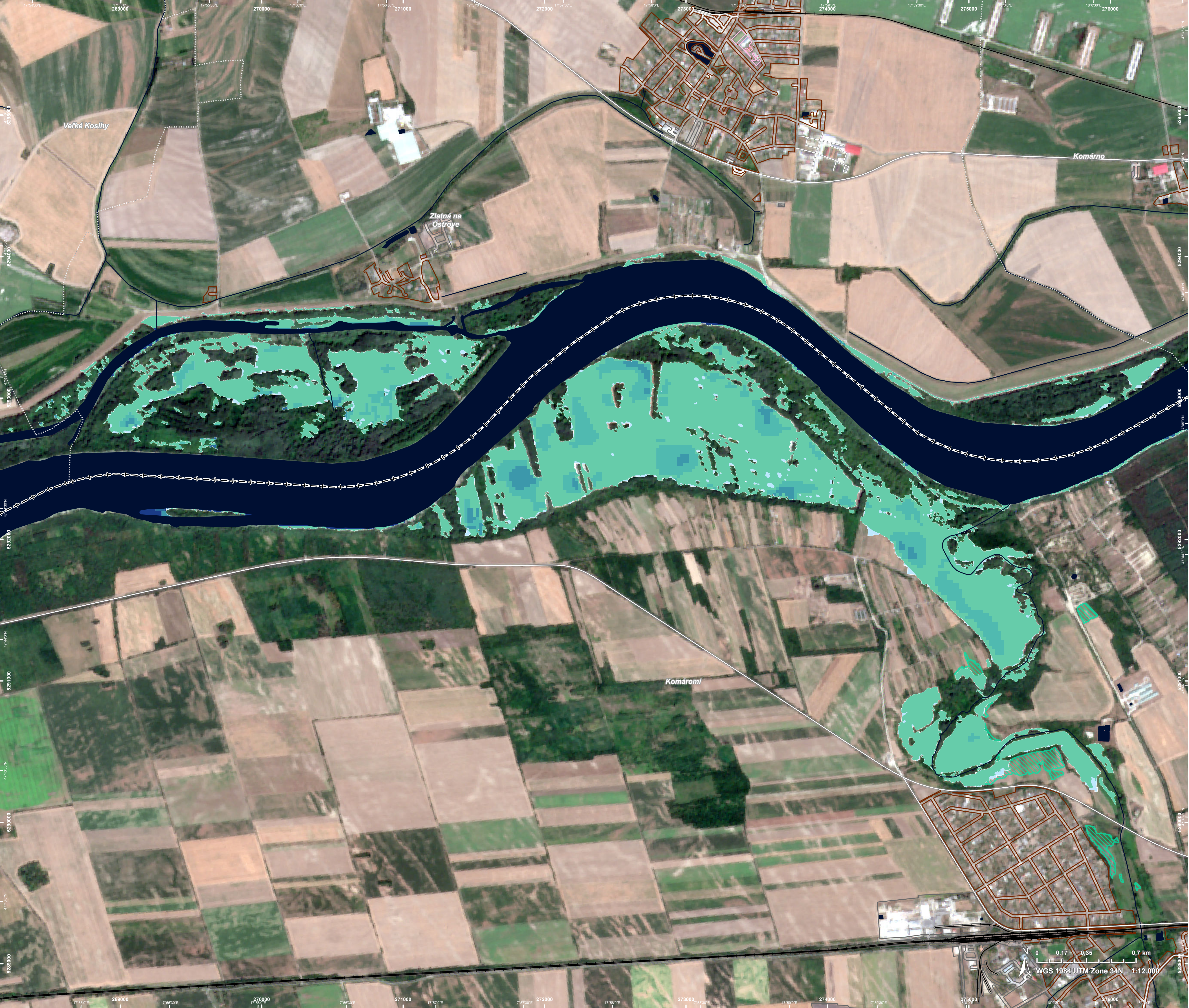
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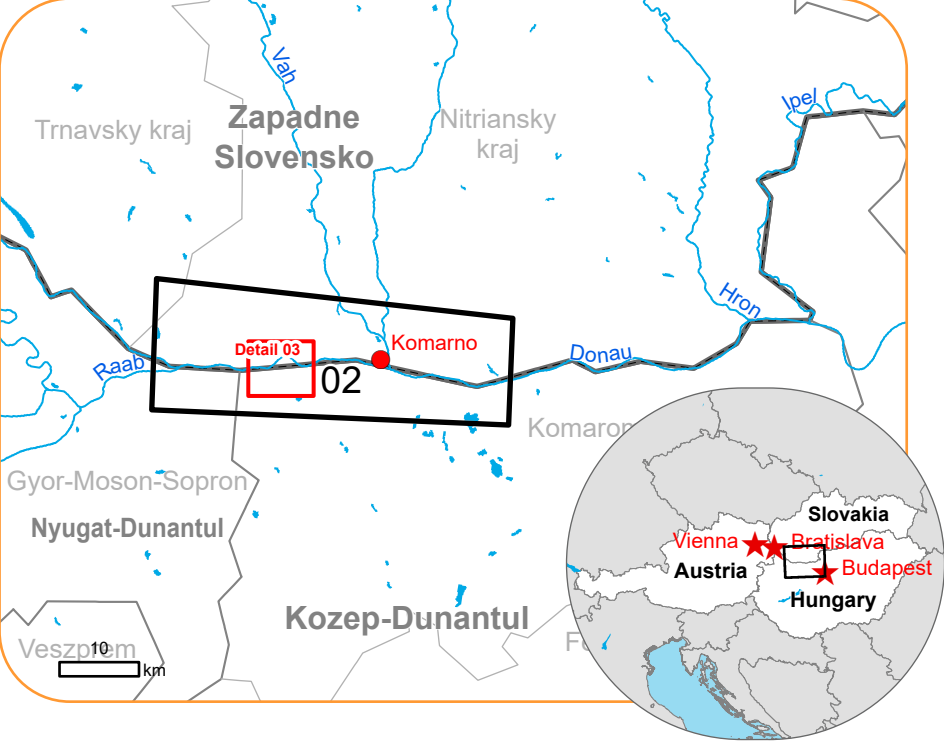
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Situation as of 21/09/2024 09:14 UTC
Delineation MONIT01 - Detail map 03



- | | |
|----------------------------------|---|
| Estimated flood depth (m) | Administrative Boundaries |
| Below 0.50 | International Boundary |
| 0.50 - 1.00 | Municipality |
| 1.00 - 2.00 | Built-Up Area |
| 2.00 - 4.00 | Residential |
| 4.00 - 6.00 | Non residential |
| Crisis Information | School, university and research buildings |
| Maximum Flood Extent | Hydrography |
| Flood trace | Lake, River |
| General Information | Transportation |
| Area of Interest | Main road |
| | Railway |

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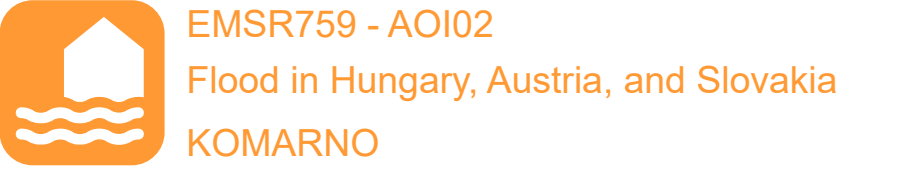
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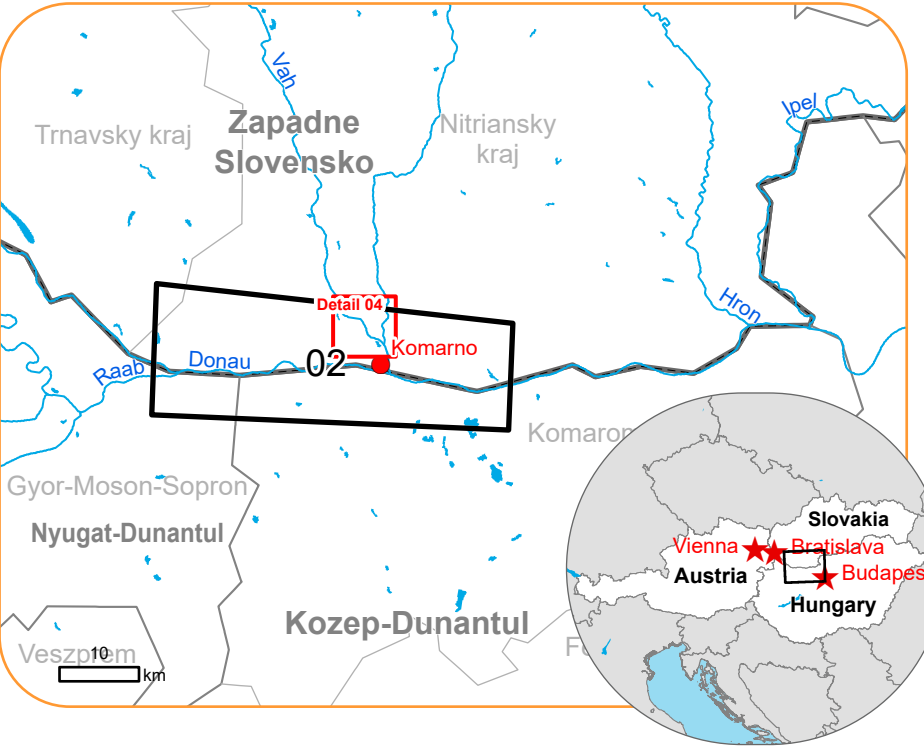
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Situation as of 21/09/2024 09:14 UTC
Delineation MONIT01 - Detail map 04



Estimated flood depth (m)	Built-Up Area
Below 0.50	Residential
0.50 - 1.00	Non residential
1.00 - 2.00	School, university and research buildings
2.00 - 4.00	Hospital or institutional care buildings
4.00 - 6.00	
Crisis Information	Hydrography
Maximum Flood Extent	Lake, River
Flood trace	
General Information	Transportation
Area of Interest	Main road
Administrative Boundaries	Railway
Municipality	

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Consequences within the AOI		Unit of measurement	Affected	Total in AOI
Flood trace		ha		79,2
Flooded area*		ha		1.000,2
Maximum flood extent**		ha		1.027,3
Estimated population	Number of inhabitants		~ 300	~ 90.000
Built-up	Residential Buildings	ha	4,8	3.593,9
	Office buildings	ha	0	16,7
	Wholesale and retail trade buildings	ha	0	6,3
	Industrial buildings	ha	9,9	949,6
	School, university and research buildings	ha	0	21,8
	Hospital or institutional care buildings	ha	0	2,4
	Military	ha	0	326,8
	Cemetery	ha	0	51,3
Transportation	Airfield runways	ha	0	2,8
	Airfield runways	km	0	0,1
	Highways	km	0	4,1
	Primary Road	km	0,1	138,8
	Secondary Road	km	0	51,6
	Local Road	km	8,7	847,3
	Cart Track	km	56,1	1.286,3
	Long-distance railways	km	7,8	314,1
Facilities	Settling Basin	ha	0,1	6,3
	Constructions for mining or extraction	ha	4,5	48,7
	Power plant constructions	ha	0,1	21,9
	Sport and recreation constructions	ha	1,1	92,0
	Other civil engineering works not elsewhere classified	ha	1,0	106,0
	Long-distance pipelines, communication and electricity lines	km	2,0	128,3
	Local pipelines and cables	km	1,1	211,7
	Dams	km	0,7	7,6
Land use	Arable land	ha	350,9	44.172,4
	Pastures	ha	212,9	1.454,5
	Heterogeneous agricultural areas	ha	175,1	4.151,1
	Forests	ha	148,3	5.821,1
	Other	ha	108,3	10.016,0
	Shrub and/or herbaceous vegetation association	ha	80,0	1.053,3
	Inland wetlands	ha	3,7	554,8
	Permanent crops	ha	0,01	201,9

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

** Corresponds to the water observed in all previous products and in all crisis imagery, excluding permanent water (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.

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: FABDEM (ForestAndBuildingsremovedCopernicusDEM) removes building and tree height biases from the Copernicus GLO 30 Digital Elevation Model (DEM) (Airbus,2020).