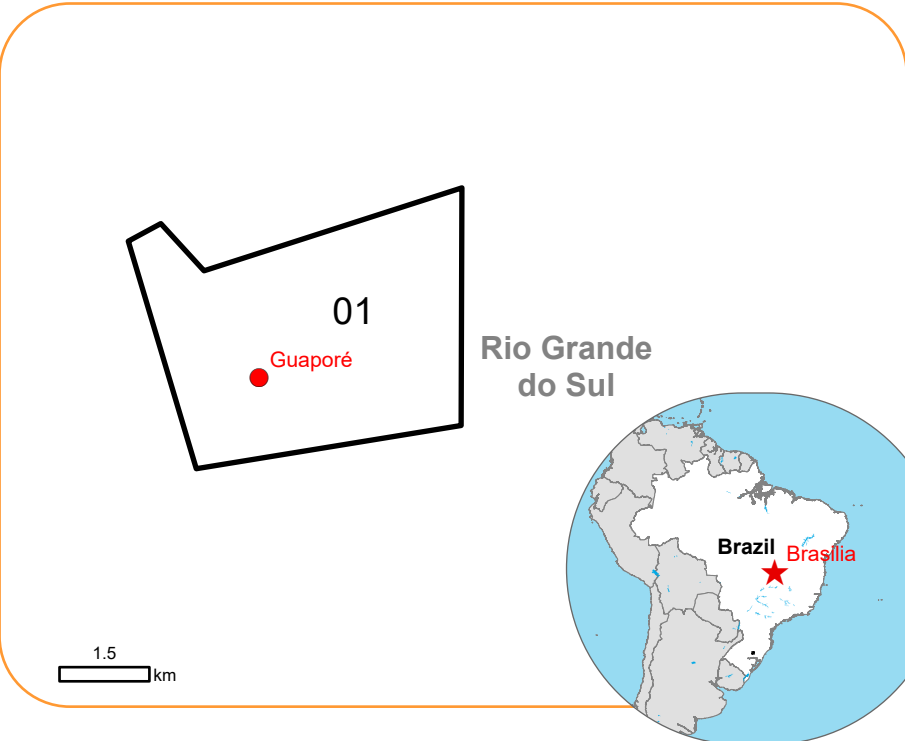




EMSR720 - AOI01
Flood in Rio Grande do Sul Region, Brazil
GUAPORE

Situation as of 04/05/2024 09:48 UTC
Delineation - Overview map 01



Flooded area
34.3 ha



Potentially affected
population
~ 40

Potentially Affected Built-up and Transportations



Road
0.4 km



Railway
0.1 km

Estimated water depth (m)	Hydrography
0.15 - 0.50	Stream
0.50 - 1.00	Lake
1.00 - 2.00	Reservoir
2.00 - 4.00	River
General Information	Facilities
Area of Interest	Sport and recreation constructions
Administrative Boundaries	Transportation
Province	Main road
Municipality	Local road
Placenames	Track
Placename	Railway
Built-Up Area	
Residential	
Non residential	
Hospital or institutional care buildings	

Event:
Authorities in Brazil's Rio Grande do Sul State declared a state of emergency on Thursday, 2 May 2024 after floods and mudslides caused by torrential rains left at least 30 people dead and 60 missing.

Storm damage has affected nearly 150 municipalities, forcing over 15,000 people to flee from their homes. In some areas, the flood is so severe that entire communities have been completely cut off from road infrastructures and network.

Copernicus EMS Rapid Mapping is requested to provide initial rough estimation, flood extent and damage assessment emergency mapping.

Data sources and analysis: Pre-event image: ESRI World Imagery © DigitalGlobe (acquired on 17/11/2022, resolution 0.6 m). This image is used as background image.

Post-event image: COSMO-SkyMed SG © ASI (2024), distributed by e-GEOS S.p.A. (acquired on 04/05/2024 at 09:48 UTC, resolution 3.0 m). All images are provided under COPENICUS by the European Union and ESA, all rights reserved.

Base vector layers: OpenStreetMap © OpenStreetMap contributors (2024), Wikimapia.org, GeoNames 2015. Global Administrative Areas (2012), refined by the producer. Copernicus Global Land Service: Land Cover (2019). Inset maps: JRC 2013, Natural Earth 2012, GeoNames 2015.

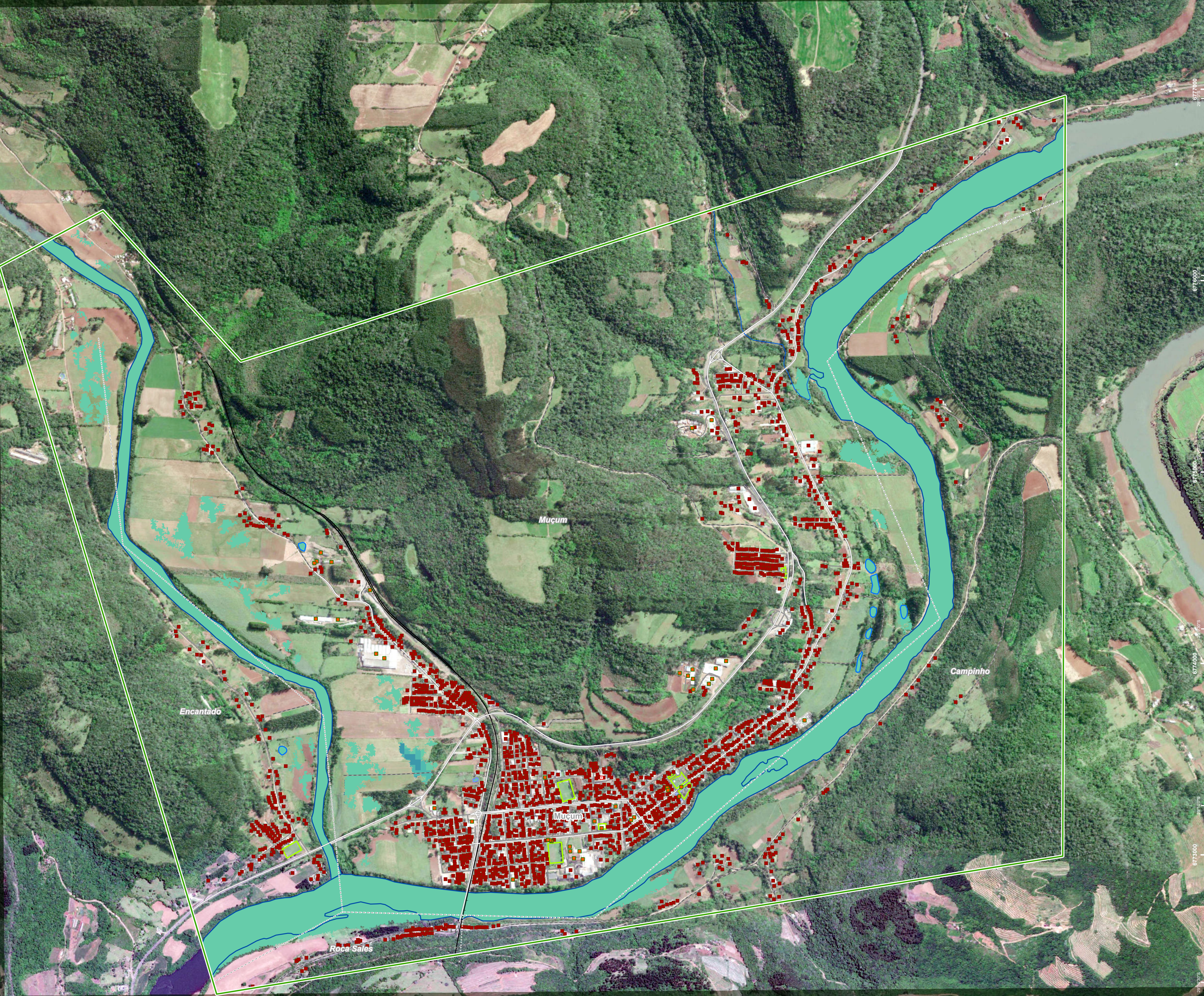
Population data: GHS Population Grid © European Commission, 2023 https://ghsl.jrc.ec.europa.eu/ghs_pop2023.php
Digital Elevation Model:
FADEM (ForestAndBuildingsremovedCopernicusDEM) removes building and tree height biases from the Copernicus GLO 30 Digital Elevation Model (DEM) (Airbus,2020)

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.

Map produced by Telespazio Iberica released by e-GEOS on the 04/05/2024.

Details on this activation and service conditions available through the QR code or at the link: <https://rapidmapping.emergency.copernicus.eu/EMSR720>



WGS 1984 UTM Zone 22S
1:10,000
Sourced: Esri, Maxar, GeoEye, AeroGRID, IGN, and the GIS User Community

Consequences within the AOI				
	Unit of measurement		Affected	Total in AOI
Flooded area	ha			34.3
Water Extent**	ha			178.0
Permanent Water	ha			143.7
Estimated population	Number of inhabitants		~ 40	~ 4,600
Built-up	Residential Buildings	No.	0	2,288
	Institutional	No.	0	1
	Police station	No.	0	1
	Wholesale and retail trade buildings	No.	0	3
	Industrial buildings	No.	0	21
	Hospital or institutional care buildings	No.	0	1
	Other non-residential buildings	No.	0	14
	Cemetery	No.	0	2
	Communication buildings, stations, terminals and associated buildings	No.	0	1
Transportation	Primary Road	km	0.2	17.4
	Local Road	km	0	23.2
	Cart Track	km	0.2	23.2
	Long-distance railways	km	0.1	4.8
Facilities	Sport and recreation constructions	ha	0	2.7
Land use	Inland wetlands	ha	60.5	147.7
	Other	ha	58.5	185.6
	Forests	ha	25.6	1,284.2
	Shrub and/or herbaceous vegetation association	ha	18.7	90.7
	Heterogeneous agricultural areas	ha	14.7	116.3

* 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

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



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