

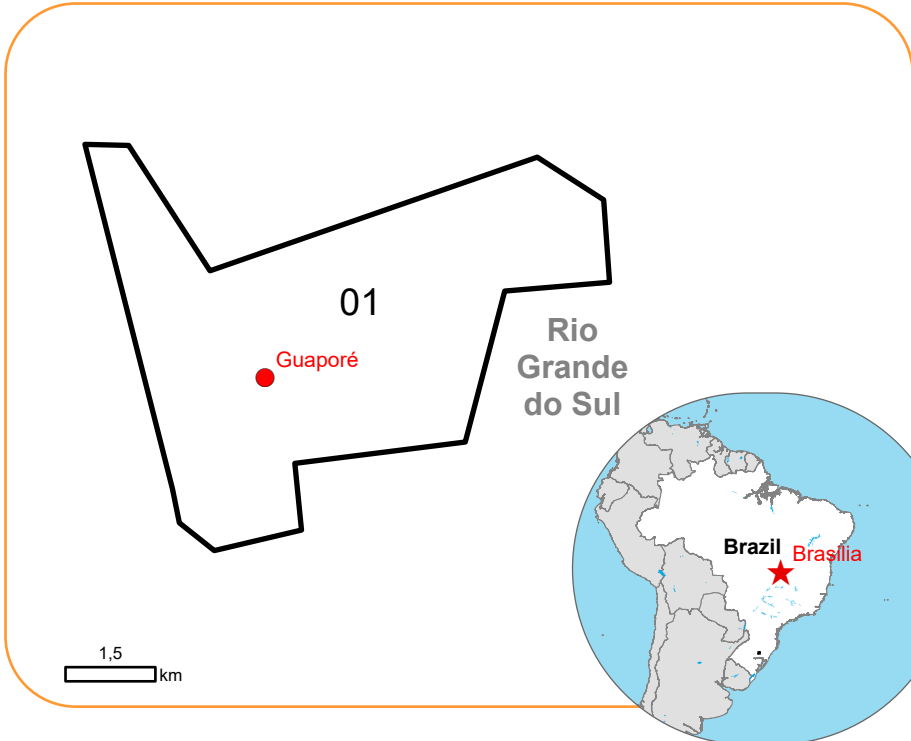
EMSR720 - AOI01

Flood in Rio Grande do Sul State, Brazil

GUAPORE

Situation as of 04/05/2024 22:10 UTC

Delineation MONIT01 - Overview map 01



Flooded area 249.4 ha

Potentially affected population ~ 150

Potentially Affected Built-up and Transportations

Road 3.5 km

Railway 0.2 km

Built-Up 11 No.

Estimated water depth (m)

0.15 - 0.50

0.50 - 1.00

1.00 - 2.00

2.00 - 4.00

4.00 - 6.00

Hydrography

Stream

Lake

Reservoir

River

Facilities

Sport and recreation constructions

Transportation

Main road

Local road

Track

Railway

Crisis information

Maximum Water Extent

General Information

Area of Interest

Placenames

Placename

Built-Up Area

Residential

Non residential

Hospital or institutional care buildings

Unclassified

Events:
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: Sentinel-2A/B (2024) (acquired on 06/04/2024 at 13:31 UTC, resolution 10.0 m). This image is used as background image.

Post-event image: RADARSAT 2 Data and products © MacDonald, Dettwiler and Associates Ltd. (2024) (acquired on 04/05/2024 at 22:10 UTC, resolution 1.56 m).

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: FABDEM (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.

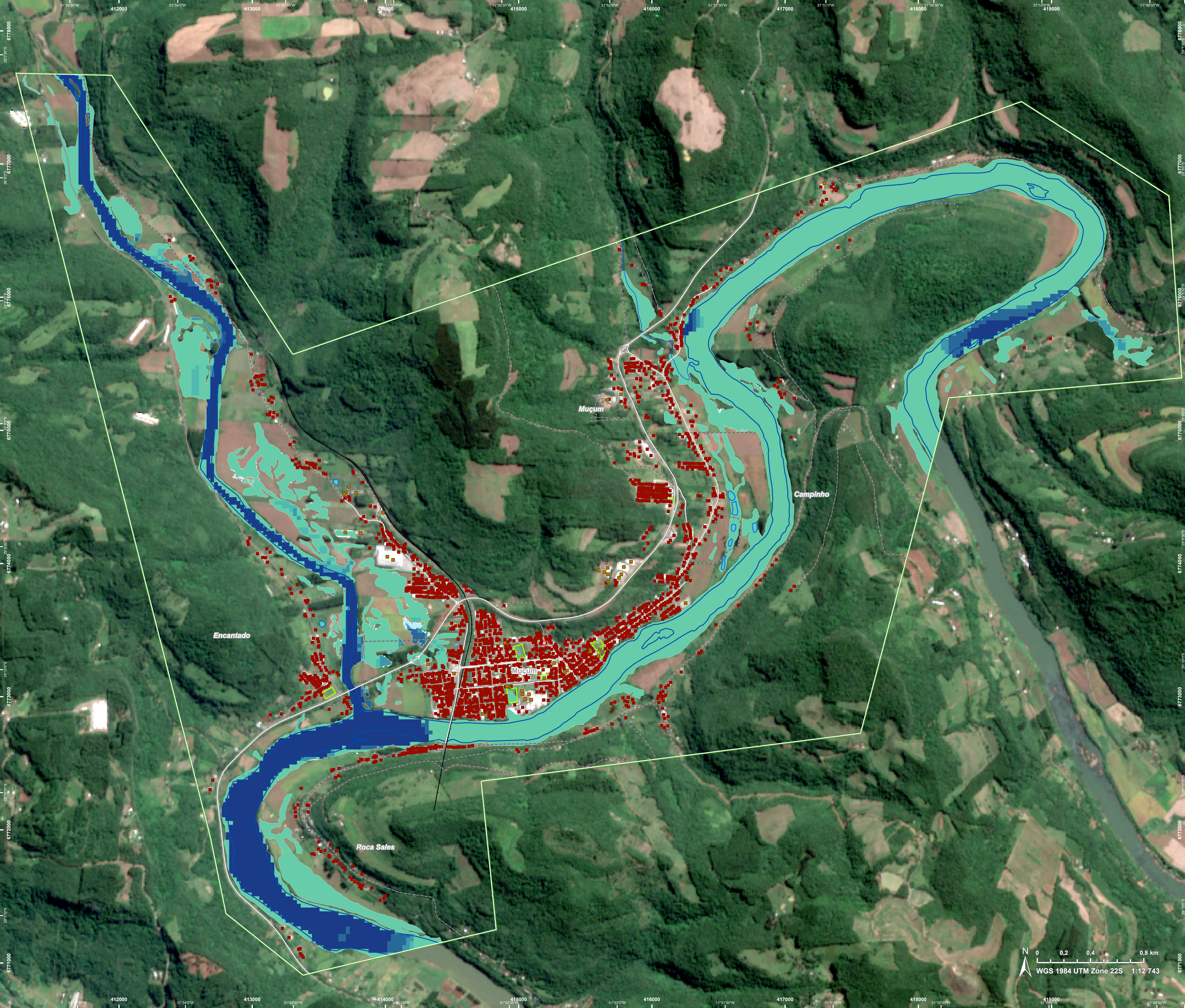
The water extent and water depth information is based on the analysis of post-event satellite imagery and on Digital Elevation Model data. The maximum water extent corresponds to the water observed in all previous products (cumulative analysis). The flooded area corresponds to the water observed in the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

Map produced by CLS released by e-GEOS on the 05/05/2024.

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

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| Consequences within the AOI | | | | |
|-----------------------------|---|---------------------|----------|--------------|
| | | Unit of measurement | Affected | Total in AOI |
| Flooded area* | | ha | | 249,4 |
| Water Extent** | | ha | | 513,5 |
| Maximum Water Extent*** | | ha | | 514,5 |
| Permanent Water | | ha | | 264,1 |
| Estimated population | Number of inhabitants | | ~ 150 | ~ 4 800 |
| Built-up | Residential Buildings | No. | 10 | 2 352 |
| | 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. | 1 | 14 |
| | Cemetery | No. | 0 | 2 |
| | Communication buildings, stations, terminals and associated buildings | No. | 0 | 1 |
| | Unclassified | No. | 0 | 2 |
| Transportation | Primary Road | km | 0,6 | 19,6 |
| | Local Road | km | 1,1 | 27,2 |
| | Cart Track | km | 1,8 | 35,9 |
| | Long-distance railways | km | 0,2 | 5,2 |
| Facilities | Sport and recreation constructions | ha | 0,4 | 2,7 |
| Land use | Inland wetlands | ha | 176,0 | 274,3 |
| | Other | ha | 117,9 | 239,2 |
| | Forests | ha | 112,4 | 2 239,8 |
| | Heterogeneous agricultural areas | ha | 59,4 | 168,2 |
| | Shrub and/or herbaceous vegetation association | ha | 47,8 | 120,3 |

* 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.

Access to
the portal



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