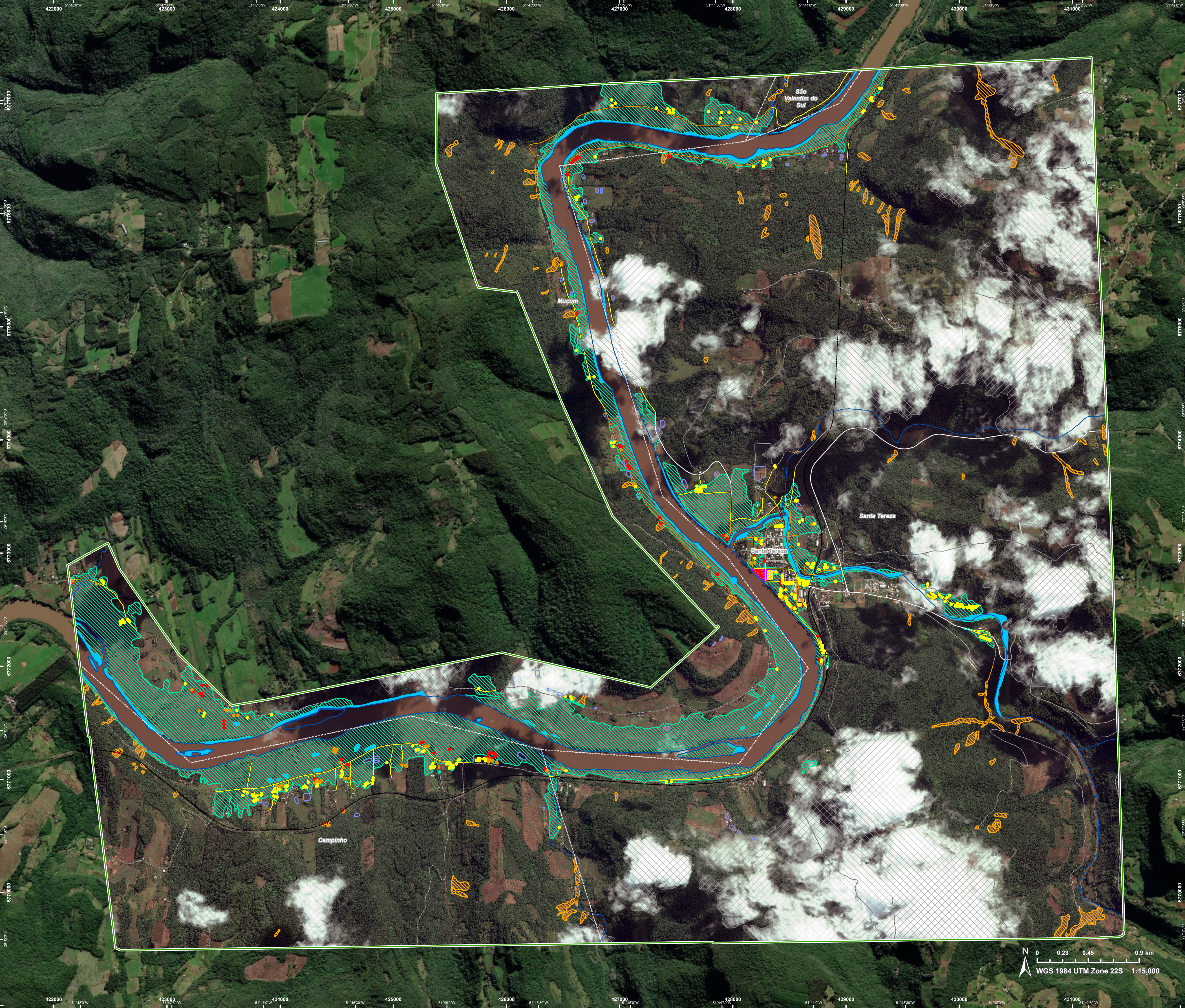
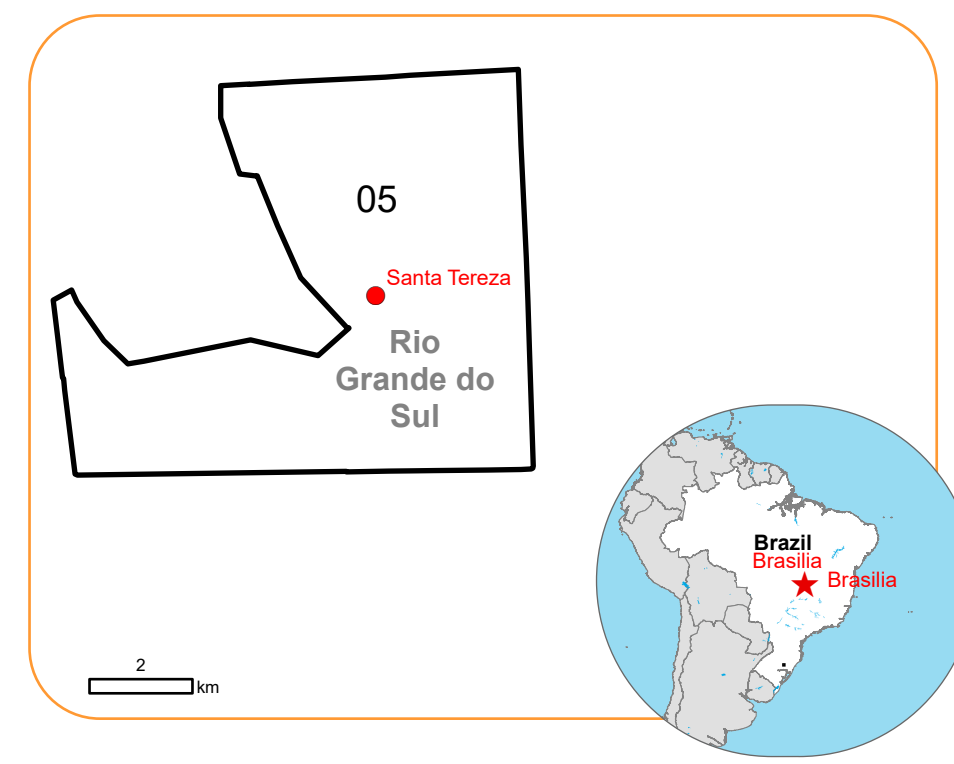




 EMSR720 - AOI05
Flood in Rio Grande Do Sul State, Brazil
SANTA TEREZA

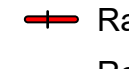
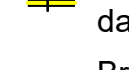
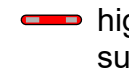
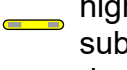
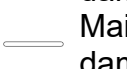
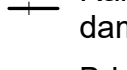
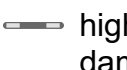
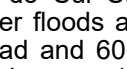
Situation as of 15/05/2024 13:31 UTC
Grading MONIT01 - Overview map 01



 Flood trace 489.2 ha
Flooded area 41.1 ha
Landslide 41.9 ha
 Potentially affected population ~ 350

Affected Built-up and Transportations

 Built-Up 423 No.
 Road 31.6 km
 Railway 0.9 km

- Crisis Information**
-  Flooded Area
 -  Landslide
 -  Flood trace
- Built Up Grading**
-  Destroyed
 -  Damaged
 -  Possibly damaged
- Facilities Grading**
-  Destroyed
 -  Possibly damaged
- Transportation Grading**
-  Road, Destroyed
 -  Road, Damaged
 -  Road, Possibly damaged
 -  Railway, Destroyed
 -  Railway, Possibly damaged
 -  Bridge, elevated highway, tunnel and subway, Destroyed
-  Bridge, elevated highway, tunnel and subway, Possibly damaged
 -  Main road, No visible damage
 -  Local road, No visible damage
 -  Track, No visible damage
 -  Railway, No visible damage
 -  Bridge and elevated highway, No visible damage
- General Information**
-  Area of Interest
 -  Not Analysed
- Administrative Boundaries**
-  Province
- Placenames**
-  Placename
- Hydrography**
-  River
 -  Stream
 -  Reservoir
 -  River

Event: Authorities in Brazil 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 15/07/2023, resolution 1.0 m).
Post-event image: WorldView-3 © Maxar Technologies, Inc. (2024), (acquired on 15/05/2024 at 13:31 UTC, resolution 0.5 m). This image is used as background image.
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, Globe Land 30 (2010), 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 by means of visual interpretation.

Map produced by e-GEOS released by e-GEOS on the 16/05/2024.

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

Consequences within the AOI							
	Unit of measurement		Destroyed	Damaged	Possibly damaged*	Total affected**	Total in AOI
Flood trace	ha						489.2
Flooded area	ha						41.1
Landslide	ha						41.9
Estimated population	Number of inhabitants					~ 350	~ 1.200
Built-up	Residential Buildings	No.	66	69	288	423	909
	Buildings used as places of worship and for religious activities	No.	0	0	0	0	1
	Communication buildings, stations, terminals and associated buildings	No.	0	0	0	0	1
Transportation	Bridges and elevated highways	km	0.1	0	0.1	0.1	0.2
	Primary Road	km	0	0.2	2.6	2.9	6.1
	Secondary Road	km	0	0.3	0	0.3	4.7
	Local Road	km	0.04	2.5	6.6	9.1	22.5
	Cart Track	km	0.4	10.0	8.8	19.2	59.5
	No Driveway	km	0	0.04	0	0.04	0.04
	Long-distance railways	km	0.2	0	0.7	0.9	13.7
Facilities	Sport and recreation constructions	ha	0.7	0	0.6	1.3	1.9
	Long-distance pipelines, communication and electricity lines	km	0	0	0	0	2.4
Land use	Forests	ha				273.1	4.159.0
	Inland wetlands	ha				115.5	260.2
	Heterogeneous agricultural areas	ha				102.8	134.2
	Shrub and/or herbaceous vegetation association	ha				56.0	89.4
	Other	ha				24.8	159.2
* Presence of damage proxies and proximity with destroyed/damaged asset ** Sum of all damage classes							

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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