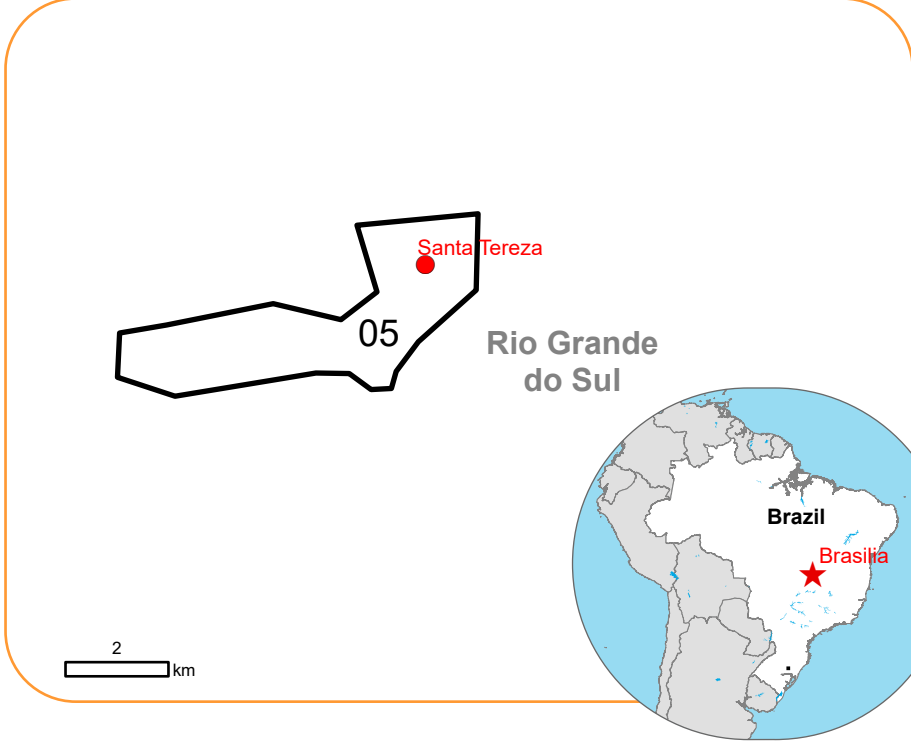


EMSR720 - AOI05
Flood in Rio Grande Do Sul State, Brazil
SANTA TEREZA

Situation as of 05/05/2024 22:15 UTC
Delineation MONIT01 - Overview map 01



Flooded area 78.6 ha
Potentially affected population ~ 30

Potentially Affected Transportations



Road
0.7 km

Estimated water depth (m)	Hydrography
0.15 - 0.50	River
0.50 - 1.00	Stream
1.00 - 2.00	Lake
2.00 - 4.00	River
4.00 - 6.00	
Crisis information	Facilities
Maximum Water Extent	Long-distance pipelines or lines
General Information	Sport and recreation constructions
Area of Interest	Transportation
Administrative Boundaries	Main road
Province	Local road
Placenames	Track
Placename	Railway
Built-Up Area	
Non residential	
Unclassified	

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). This image is used as background image
Post-event image: PAZ satellite image © Hisdesat Servicios Estratégicos S.A, 2024 (acquired on 05/05/2024 at 22:15 UTC, resolution 3.3 m).
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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: FAO/DEM(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 e-GEOS released by e-GEOS on the 06/05/2024.

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	Affected	Total in AOI
Flooded area*		ha		78.6
Water Extent**		ha		201.3
Maximum Water Extent***		ha		217.7
Permanent Water		ha		122.8
Estimated population		Number of inhabitants	~ 30	~ 900
Built-up	Buildings used as places of worship and for religious activities	No.	0	1
	Communication buildings, stations, terminals and associated buildings	No.	0	1
	Unclassified	No.	2	706
Transportation	Primary Road	km	0.1	1.9
	Secondary Road	km	0	1.8
	Local Road	km	0.5	13.9
	Cart Track	km	0.05	20.3
	Long-distance railways	km	0	9.3
Facilities	Sport and recreation constructions	ha	0.3	1.9
	Long-distance pipelines, communication and electricity lines	km	0.3	1.4
Land use	Inland wetlands	ha	87.0	137.5
	Other	ha	60.5	85.7
	Forests	ha	22.4	773.9
	Heterogeneous agricultural areas	ha	21.4	88.8
	Shrub and/or herbaceous vegetation association	ha	10.0	60.2

* 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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