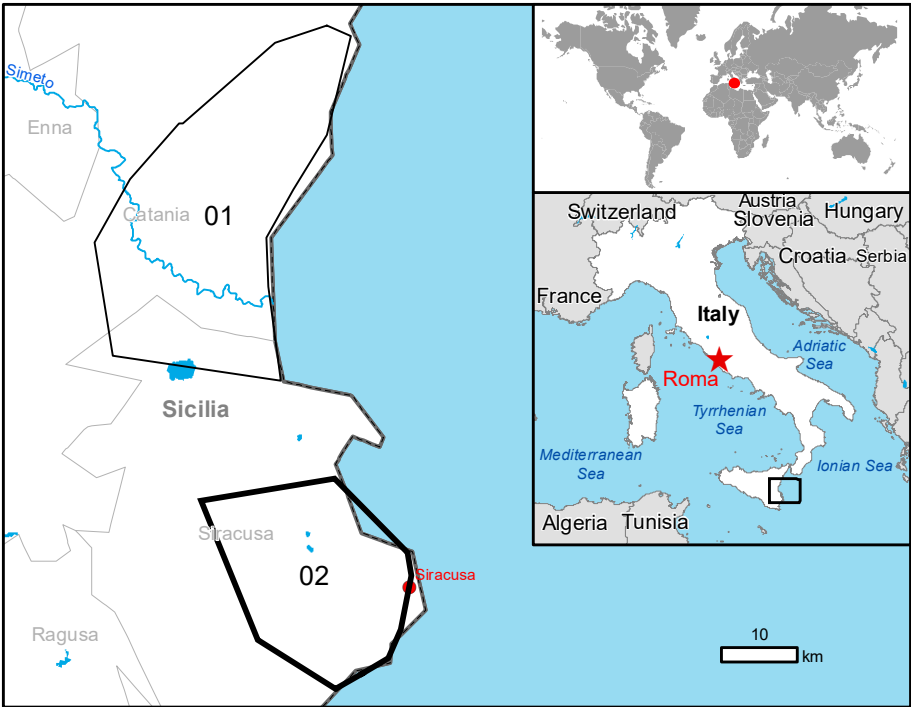


Siracusa - ITALY

Flood - Situation as of 30/10/2021

Delineation MONIT02 - Overview map 01



Cartographic Information

1:50000

Full color A1, 200 dpi resolution

0 1 2 4 km

Grid: WGS 1984 UTM Zone 33N map coordinate system
Tick marks: WGS 84 geographical coordinate system

Legend

Crisis Information	Administrative boundaries	Hydrography
■ Flooded Area (30/10/2021 16:34 UTC)	— Coastline	— River
■ Previous Flooded Area (29/10/2021 17:02 UTC)	- - - - - Municipality	— Stream
General Information	Placenames	Land Use, Land Cover, Facilities, Building points and Transportation network
■ Area of Interest	○ Placename	■ Lake
■ Image Footprint		■ Land Subject to Inundation
■ Not Analysed - No data		■ Land Use, Land Cover, Facilities, Building points and Transportation network

Consequences within the AOI		
	Affected	Total in AOI
Flooded area	ha	68.4
Estimated population	No.	160.336
Built-up	No.	27.649
Transportation	km	2.458,1
Facilities	km	272,2
Land use	ha	1.513,4
	ha	50.412,9

Full table available in the vector package

Map Information

In the late evening of Saturday 23 October 2021, a deep cyclone located in the Ionian Sea, brought heavy and persistent rainfall to the Ionian coast of Sicily and Calabria, mainly around Catania and Siracusa cities. A Red alert was issued by the National Department of Civil Protection. The rain gauge of the municipality of Linguaglossa, recorded over 500 mm in 48 hours. The worst situation was registered in the metropolitan area of Catania and in the municipality of Misterbianco with extensive urban flooding. Road circulation was impeded and several houses were invaded by mud and debris. In the municipality of Randazzo, many people have been evacuated due the overflow of the Fiascio stream. The National Department of Civil Protection triggered the Copernicus EMS Rapid Mapping Service for First Estimate, Delineation and Grading products.

The present map shows the flood delineation in the area of Siracusa (Italy). The thematic layer has been derived from post-event satellite image using a semi-automatic approach. The scale of analysis is 1:10000. The estimated geometric accuracy (RMSE) is 6 m or better, from native positional accuracy of the background satellite image. The minimum mapping unit (MMU) is 576 sq m.

Relevant date records (UTC)

Event	24/10/2021 00:00	Situation as of	30/10/2021 16:34
Activation	27/10/2021 11:31	Map production	31/10/2021

Data sources

Pre-event image: Sentinel-2A (2021) (acquired on 12/08/2021 at 09:40 UTC, GSD 10 m, approx. 0% cloud coverage in Aoi, 0° off-nadir angle) provided under COPERNICUS by the European Union and ESA.
Post-event image: COSMO-SkyMed © ASI (2021), distributed by e-GEOS S.p.A. (acquired on 30/10/2021 at 16:34 UTC, GSD 3.0 m), provided under COPERNICUS by the European Union and ESA, all rights reserved. RADARSAT 2 Data and products © MacDonald, Dettwiler and Associates Ltd. (2021) (acquired on 29/10/2021 at 17:02 UTC, GSD 30 m) – RADARSAT is an official mark of the Canadian Space Agency – provided under COPERNICUS by the European Union and ESA, all rights reserved.

Base vector layers: OpenStreetMap © OpenStreetMap contributors (2021), 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 © EURC2007, GeoNames 2015.
Population data: GHs Population Grid © European Commission, 2019
https://ghsl.jrc.ec.europa.eu/ghs_pop2019.php
Digital Elevation Model: COP-DEM-EEA-10-R product © DLR e.V. (2014-2018) and © Airbus Defence and Space GmbH (2020) provided under COPERNICUS by the European Union and ESA, all rights reserved.

Disclaimer

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Please be aware that the thematic accuracy might be lower in urban and forested areas due to inherent limitations of the SAR analysis technique.

Delivery formats are Layered Geospatial PDF, GeoJPEG and vector (ESRI shapefiles, Google Earth KML, GeoJSON).

Map produced by ITHACA released by e-GEOS (ODO).

For the latest version of this map and related products visit
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