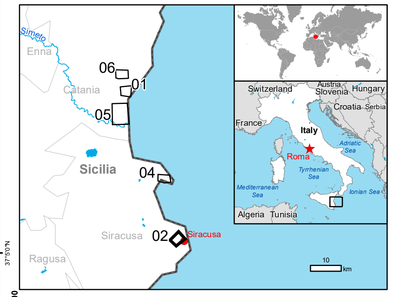
GLIDE number: N/A
Int. Charter Act. ID: N/A

Activation ID: EMSR548
Product N.: 02SIRACUSA, v1

Siracusa - ITALY

Flood - Situation as of 04/11/2021

Grading - Overview map 01



Cartographic Information

1:9000

Full color A1, 200 dpi resolution

0 0.175 0.35 0.7 km

N

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

Legend

Crisis Information
- Flooded Area
- Flood trace

Built Up Grading
- Damaged
- Possibly damaged

Transportation Grading
- Road, Damaged
- Road, Possibly damaged
- Primary Road, No visible damage
- Secondary Road, No visible damage
- Local Road, No visible damage
- Cart Track, No visible damage
- Long-distance railway, No visible damage

Transportation Grading
- Airfield and Heliport, Possibly damaged

General Information
- Area of Interest

Land Use - Land Cover

Features available in the vector package

Consequences within the AOI		Destroyed	Damaged	Possibly damaged*	Total affected**	Total in AOI
Flooded area	ha					4.8
Flood trace	ha					16.7
Estimated population					26	20 369
Built-up	No.	0	3	13	16	5 092
Transportation	km	0.0	0.1	0.5	0.6	163.5
	ha	0.0	0.5	2.4	2.4	2.4
Facilities	km	0.0	0.0	0.0	0.0	12.1
	ha	0.0	0.0	0.0	0.0	50.0
Land use	ha	NA	NA	NA	21.5	1 109.0

* Presence of damage proxies and proximity with destroyed/damaged asset
** Sum of Destroyed, Damaged and Possibly damaged
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 Syracusa 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 Flascio 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 damage grade assessment in the area of Siracusa (Italy). The thematic layer has been derived from post-event satellite image by means of photo interpretation. The scale of analysis is 1:5000. The estimated geometric accuracy (RMSE) is 1.25 m or better, from native positional accuracy of the background satellite image. The minimum mapping unit (MMU) is 100 sq m.

Relevant date records (UTC)

Event	24/10/2021 00:00	Situation as of	04/11/2021 10:17
Activation	27/10/2021 11:31	Map production	06/11/2021

Data sources

Pre-event image: Pléiades-1A/B © CNES (2021), distributed by Airbus DS (acquired on 16/05/2021 at 09:50 UTC, GSD 0.5 m, approx. 0% cloud coverage in AoI, 9.1° off-nadir angle), provided under COPERNICUS by the European Union and ESA, all rights reserved
Post-event image: Pléiades-1A/B © CNES (2021), distributed by Airbus DS (acquired on 04/11/2021 at 10:17 UTC, GSD 0.5 m, approx. 0% cloud coverage in AoI, 34.1° off-nadir angle), 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 © EUJRC2007, GeoNames 2015.
Population data: GHS Population Grid © European Commission, 2019 https://ghsl.jrc.ec.europa.eu/ghs_pop2019.php

Disclaimer

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

Map produced by ITHACA released by SERTIT (ODO).

For the latest version of this map and related products visit
https://emergency.copernicus.eu/EMSR548

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