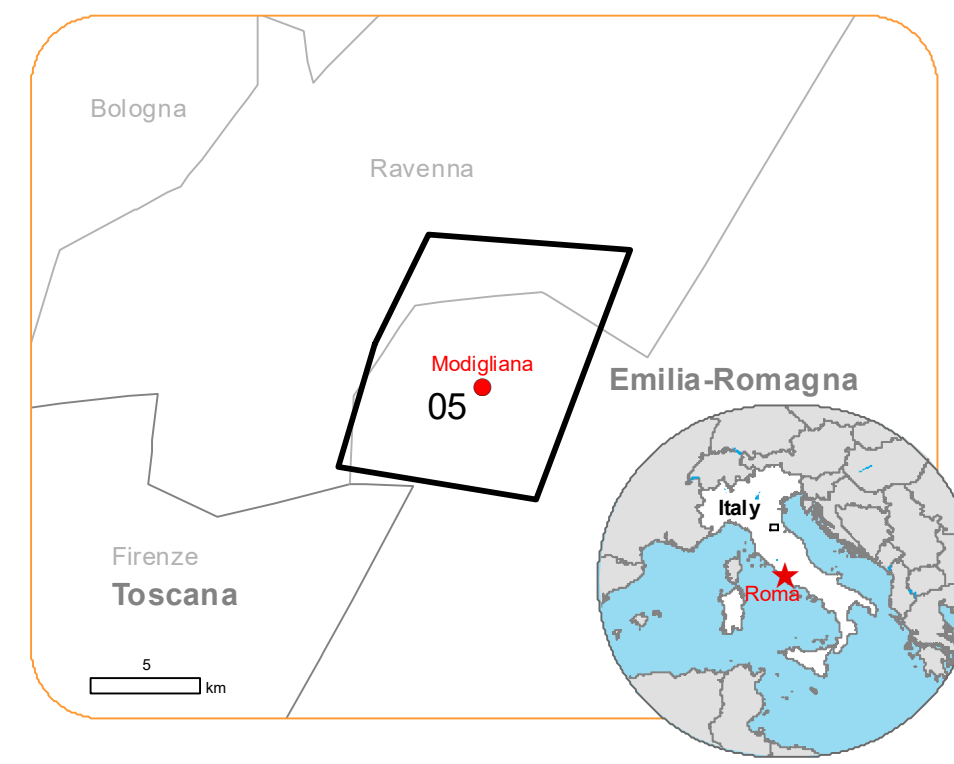


Situation as of 06/05/2023 09:42 UTC
Grading - Overview map 01





 Flood trace
21.8 ha
 Landslide
0.5 ha
 Potentially affected
population
~ 10

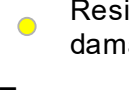
Affected Built-up and Transportations

 Road
0.2 km
 Built-up
7 No.

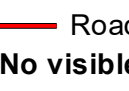
Crisis Information

-  Landslide
-  Flood trace

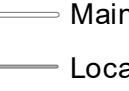
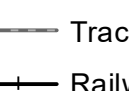
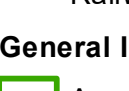

Built-Up Grading

-  Residential Building, Possibly damaged


Transportation Grading

-  Road, Destroyed

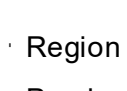
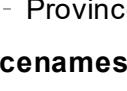
No visible damage

-  Main road, No visible
-  Local road, No visible
-  Track, No visible
-  Railway, No visible

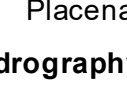
General Information

-  Area of Interest

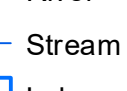
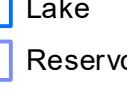
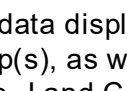
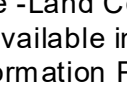
Administrative

-  Region
-  Province

Placenames

-  Placename

Hydrography

-  River
-  Stream
-  Lake
-  Reservoir

All data displayed on the map(s), as well as the Land Use - Land Cover layer, is available in the Crisis Information Package and the Base Layer Package (for reference data). All products and data are also available for download on the activation webpage.

Event:
On the 02 May 2023, an intense phase of bad weather, with considerable rainfall, hit Emilia-Romagna, Italy. The event is on-going with river levels very high, the breaking of the Sillaro River embankment and the overflow of the Lamone River producing flooding close to the cities of Massa Lombarda and Conselice. 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 21/05/2022, resolution 0.6 m)
Post-event image:Piérides-IA/B © CNES (2023), distributed by Airbus DS (acquired on 06/05/2023 at 09:42 UTC, resolution 0.5 m).
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Base vector layers:OpenStreetMap © OpenStreetMap contributors (2023), 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, 2022
https://ghsl.jrc.ec.europa.eu/ghs_pop2022.php

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 2.5 m or better, from native positional accuracy of the background satellite image. The minimum mapping unit (MMU) is 100 sq m.

This analysis has been supplemented by the social media.

Map produced by e-GEOS released by e-GEOS on the 08/05/2023.
Details on this activation and service conditions available through the QR code or at the link:
<https://emergency.copernicus.eu/EMSR659>

EMSR659 AOI: 05 Modigliana Grading

Consequences within the AOI								
	Unit of measurement			Destroyed	Damaged	Possibly damaged*	Total affected**	Total in AOI
Landslide		ha						0.5
Flood trace		ha						21.8
Estimated population	Number of inhabitants						~ 10	~ 5,000
Built-up	Residential Buildings	No.		0	0	7	7	2,107
	Office buildings	No.		0	0	0	0	1
	Administrative	No.		0	0	0	0	1
	Institutional	No.		0	0	0	0	1
	Fire station	No.		0	0	0	0	1
	Wholesale and retail trade buildings	No.		0	0	0	0	2
	Industrial buildings	No.		0	0	0	0	70
	Reservoirs, silos and warehouses	No.		0	0	0	0	3
	School, university and research buildings	No.		0	0	0	0	2
	Hospital or institutional care buildings	No.		0	0	0	0	4
	Other non-residential buildings	No.		0	0	0	0	7
	Non-residential farm buildings	No.		0	0	0	0	1
	Buildings used as places of worship and for religious activities	No.		0	0	0	0	25
	Other buildings not elsewhere classified	No.		0	0	0	0	1
	Cemetery	No.		0	0	0	0	5
	Hotel buildings	No.		0	0	0	0	2
	Communication buildings, stations, terminals and associated buildings	No.		0	0	0	0	2
Transportation	Primary Road	km		0.0	0.0	0.0	0.0	1.8
	Secondary Road	km		0.0	0.0	0.0	0.0	45.3
	Local Road	km		0.0	0.0	0.0	0.0	53.2
	Cart Track	km		0.2	0.0	0.0	0.2	259.0
	Long-distance railways	km		0.0	0.0	0.0	0.0	2.1
			Very high damage	High damage	Moderate damage	Negligible to slight damage	Total affected**	Total in AOI
Land use	Arable land	ha	NA	NA	NA	NA	13.3	3,033.9
	Heterogeneous agricultural areas	ha	NA	NA	NA	NA	8.2	4,538.4
	Shrub and/or herbaceous vegetation association	ha	NA	NA	NA	NA	0.5	212.5
	Other	ha	NA	NA	NA	NA	0.2	172.5
	Forests	ha	NA	NA	NA	NA	0.1	2,678.7
	Open spaces with little or no vegetation	ha	NA	NA	NA	NA	0.0	27.5
<p>* Presence of damage proxies and proximity with destroyed/damaged asset</p> <p>** Sum of all damage classes</p>								

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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PROGRAMME OF THE
EUROPEAN UNION

