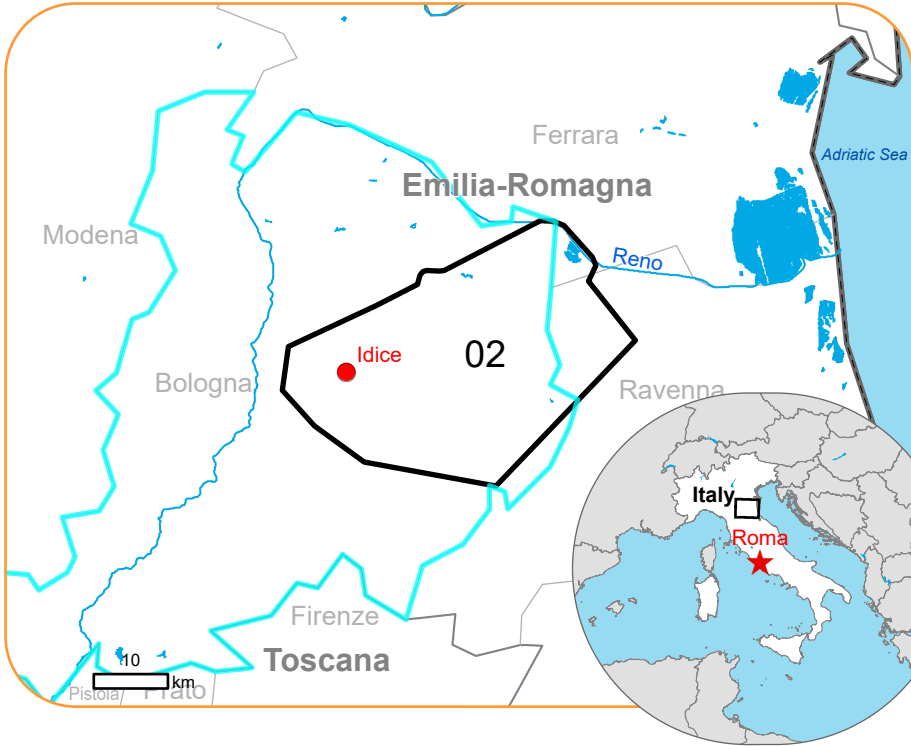
 EMSR762 - AOI02
Flood in Italy
IDICE

Situation as of 20/09/2024 03:46 UTC
Delineation MONIT01 - Overview map 01



 Flooded area
1 138.9 ha

 Potentially affected
population
~ 100

Potentially Affected Built-up and Transportations

 Road
32.2 km

 Built-Up
4.5 ha

Estimated flood depth (m)

- Below 0.50
- 0.50 - 1.00
- 1.00 - 2.00
- 2.00 - 4.00

Crisis Information

- Maximum Flood Extent

General Information

- Area of Interest

Administrative Boundaries

- Province
- Municipality

Placenames

- Placename

Built-Up Area

- Residential
- Non residential
- School, university and research buildings
- Hospital or institutional care buildings
- Military

Hydrography

- Lake, River

Facilities

- Long-distance pipelines or lines
- Local pipelines or lines
- Dam
- Mining or extraction site
- Power plant
- Sport and recreation constructions
- Dump Site
- Water or Aquatic infrastructure

Transportation

- Highway
- Main road
- Local road
- Railway
- Airfield runway
- Navigable canal
- Airfield
- Helipad
- Water or Aquatic infrastructure

Event: Since the early morning of 18 September 2024, intense rainfall is affecting the Emilia-Romagna region in Italy. The situation is ongoing with several rivers at alert level and local floods are reported in some areas of Rimini, Brisighella and Cesena. Flooding is foreseen in several areas in the next hours. Copernicus EMS Rapid Mapping is requested to provide estimation of flood extents, andj damage assessment emergency mapping.


Data sources and analysis: Pre-event image: Sentinel-2A/B (2024) (acquired on 10/08/2024 at 10:05 UTC, resolution 10.0 m). This image is used as background image.
Post-event image: Cosmo-SkyMed SG © ASI (2024), distributed by e-GEOS (acquired on 20/09/2024 at 03:46 UTC, resolution 3.0 m).
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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 flood 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 CLS released by e-GEOS on the 21/09/2024.

Details on this activation and service conditions available through the QR code or at the link: <https://rapidmapping.emergency.copernicus.eu/EMSR762>



Consequences within the AOI		Unit of measurement	Affected	Total in AOI
Flooded area*		ha		1 138,9
Maximum flood extent**		ha		1 911,1
Estimated population	Number of inhabitants		~ 100	~ 370 000
Built-up	Residential Buildings	ha	0,4	5 666,9
	Office buildings	ha	0	98,0
	Wholesale and retail trade buildings	ha	0	2,4
	Industrial buildings	ha	1,2	515,1
	School, university and research buildings	ha	0	4,5
	Hospital or institutional care buildings	ha	0	1,3
	Military	ha	0	1,1
	Cemetery	ha	0	20,5
Transportation	Airfield runways	ha	0	16,3
	Navigable canals	ha	0	0,2
	Helipad	ha	0	0,4
	Airfield runways	km	0	4,1
	Navigable canals	km	0	0,4
	Highways	km	0	109,5
	Primary Road	km	0	203,4
	Secondary Road	km	0,2	228,1
	Local Road	km	3,4	1 747,0
	Cart Track	km	28,6	2 020,4
	Railway Yard	km	0	0,7
	Long-distance railways	km	0	343,1
Facilities	Settling Basin	ha	0	11,7
	Constructions for mining or extraction	ha	0	237,0
	Power plant constructions	ha	0	85,6
	Sport and recreation constructions	ha	0,7	1 985,6
	Other civil engineering works not elsewhere classified	ha	0	50,5
	Long-distance pipelines, communication and electricity lines	km	3,8	492,9
	Local pipelines and cables	km	0	88,1
	Dams	km	0	0,1
Land use	Arable land	ha	1 086,6	66 379,2
	Inland wetlands	ha	29,6	2 224,5
	Heterogeneous agricultural areas	ha	22,4	18 295,8
	Other	ha	0,2	8 592,2
	Permanent crops	ha	0	518,4
	Forests	ha	0	2 443,7
	Shrub and/or herbaceous vegetation association	ha	0	2 700,8
	Open spaces with little or no vegetation	ha	0	322,1

* Corresponds to the water observed in the most recent satellite imagery, excluding permanent water

** Corresponds to the water observed in all previous products and in all crisis imagery, excluding permanent water (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



Estimated Population:

Estimated population is based on Copernicus Global Human Settlement Layer (GHSL) dataset. Additional population datasets and analysis are available in the summary table.

Data Sources:

Base Vector Layers: OpenStreetMap © OpenStreetMap contributors (2024), 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.

DigitalElevation Model: FABDEM (ForestAndBuildingsremovedCopernicusDEM) removes building and tree height biases from the Copernicus GLO 30 Digital Elevation Model (DEM) (Airbus,2020).



PROGRAMME OF THE
EUROPEAN UNION

