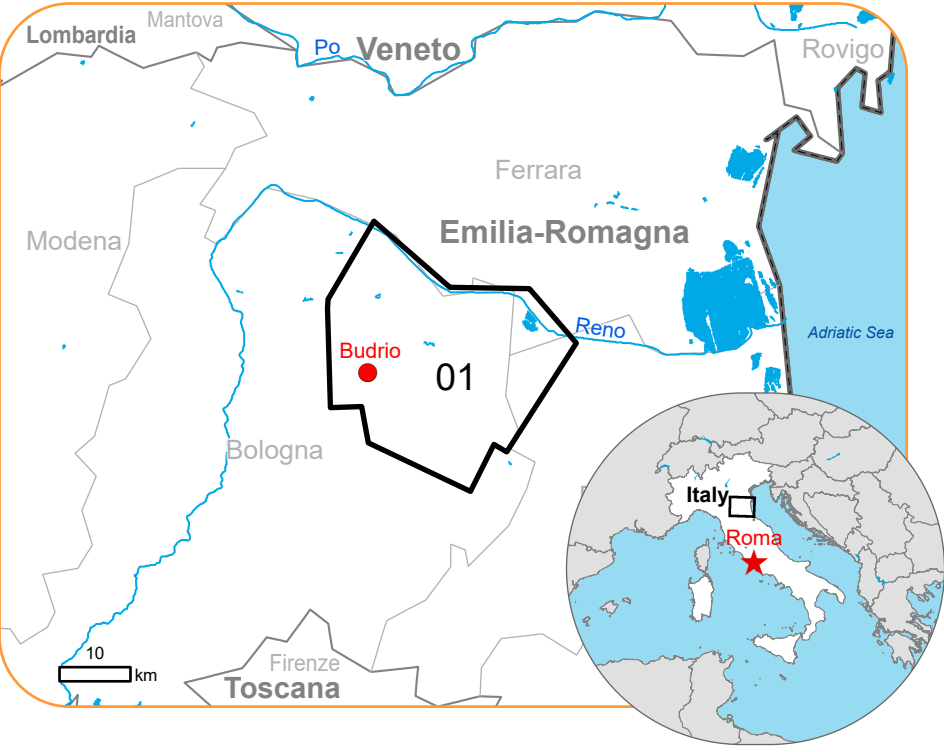




EMSR771 - AOI01
Flood in Emilia-Romagna, Italy
BUDRIOMOLINELLA

Situation as of 20/10/2024 17:07 UTC
Delineation - Overview map 01



Flooded area
2,988.9 ha



Potentially affected
population
~ 100

Potentially Affected Built-up and Transportations



Railway
0.6 km



Road
30.2 km



Built-Up
1.9 ha

Estimated flood depth (m)

Below 0.50
0.50 - 1.00
1.00 - 2.00
2.00 - 4.00
4.00 - 6.00

Facilities

Long-distance pipelines or lines
Local pipelines or lines
Mining or extraction site
Power plant
Sport and recreation constructions
Dump Site
Water or Aquatic infrastructure
Highway
Main road
Local road
Track
Railway
Airfield runway
Navigable canal
Airfield
Helipad
Water or Aquatic infrastructure

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
Unclassified

Hydrography

Lake, River

Event Italy has been hit in recent days by a severe phase of bad weather, which has caused flooding in large parts of the country. In Emilia-Romagna, in particular, several rivers reached the third-highest alert level. During the night and early hours of October 20, several rivers in the city of Bologna overflowed, causing flooding in the city and neighboring municipalities: San Lazzaro, Medicina and Budrio. The situation is still ongoing, although the weather is expected to improve. The National Civil Protection System has been configured as national emergency. 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: Sentinel-2A/B (2024) (acquired on 30/08/2024 at 10:05 UTC; resolution 10.0 m). Post-event image: Sentinel-1A/B (2024) (acquired on 20/10/2024 at 17:07 UTC, resolution 20.0 m). All images are provided under COPERNICUS by the European Union and ESA, all rights reserved.

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 Planetek Hellas released by SERTIT on the 22/10/2024.

Details on this activation and service conditions available through the QR code or at the link: <https://rapidmapping.emergency.copernicus.eu/EMSR771>



PROGRAMME OF THE
EUROPEAN UNION



Consequences within the AOI			
		Unit of measurement	
Flooded area		ha	Affected
Estimated population	Number of inhabitants	ha	Total in AOI
Built-up	Residential Buildings	ha	~ 100
	Office buildings	ha	< 100,000
	Wholesale and retail trade buildings	ha	
	Industrial buildings	ha	
	School, university and research buildings	ha	
	Hospital or institutional care buildings	ha	
	Military	ha	
	Cemetery	ha	
	Building block	ha	
	Unclassified	ha	
Transportation	Airfield runways	ha	
	Navigable canals	ha	
	Helipad	ha	
	Airfield runways	km	
	Navigable canals	km	
	Highways	km	
	Primary Road	km	
	Secondary Road	km	
	Local Road	km	
	Cart Track	km	
	Long-distance railways	km	
Facilities	Settling Basin	ha	
	Constructions for mining or extraction	ha	
	Power plant constructions	ha	
	Sport and recreation constructions	ha	
	Other civil engineering works not elsewhere classified	ha	
	Long-distance pipelines, communication and electricity lines	km	
	Local pipelines and cables	km	
Land use	Arable land	ha	
	Inland wetlands	ha	
	Heterogeneous agricultural areas	ha	
	Other	ha	
	Forests	ha	
	Permanent crops	ha	
	Shrub and/or herbaceous vegetation association	ha	

Disclaimer:
Full disclaimer and other helpful information available in the online manual:
<https://emergency.copernicus.eu/mapping/ems-online-manual-rapid-mapping-products>
© European Union / Copernicus Emergency Management Service

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.

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.
Digital Elevation Model: Digital Terrain Model (5m) © Geoportale Regione Emilia-Romagna (2016).



PROGRAMME OF THE
EUROPEAN UNION

Access to the portal

