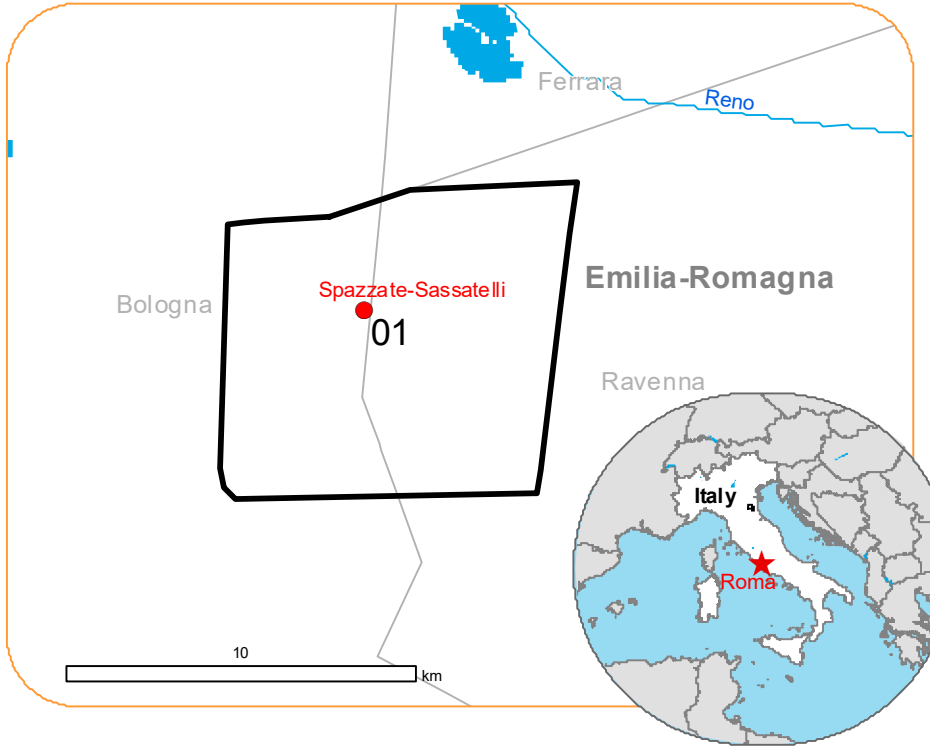


Situation as of 04/05/2023 10:15 UTC  
Delineation - Overview map 01



Flooded area : 1 316.3 ha  
Potentially affected population : ~ 200

Potentially Affected Built-up and Transportations

Road 20.5 km  
Built-Up 158 No.  
Airport 0.3 km

#### Crisis Information

Flooded Area

#### General Information

Area of Interest

#### Administrative boundaries

Province  
Municipality

#### Built-Up Area

Residential

#### Hydrography

River  
Stream  
Lake  
Land Subject to Inundation

#### Facilities

Long-distance pipelines or lines  
Local pipelines or lines

#### Transportation

Main road  
Local road  
Track  
Railway  
Airfield runway

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 29/07/2021, GSD 0.6 m, approx. 0% cloud coverage in AoI)  
Post-event image: Pléiades-1A/B © CNES (2023), distributed by Airbus DS (acquired on 04/05/2023 at 10:15 UTC, GSD 0.5 m, approx. 0% cloud coverage in AoI, 23° off-nadir angle). This image is used as background image. All images are provided under COPERNICUS by the European Union and ESA, all rights reserved.

Base vector layers: OpenStreetMap © OpenStreetMap contributors (current year), Wikimapia.org, GeoNames 2015, 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](https://ghsl.jrc.ec.europa.eu/ghs_pop2022.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.

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.

Map produced by SERTIT 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>



PROGRAMME OF THE  
EUROPEAN UNION





# **EMSR659 AOI: 01 Spazzate-Sassatelli Delineation**

Consequences within the AOI				
		Unit of measurement	Affected	Total in AOI
Flooded area		ha		1 316.3
Estimated population		Number of inhabitants	~ 200	~ 7 400
Built-up	Residential Buildings	No.	139	2 900
	Industrial buildings	No.	18	161
	Buildings used as places of worship and for religious activities	No.	1	6
	Communication buildings, stations, terminals and associated buildings	No.	0	1
Transportation	Airfield runways	km	0.3	0.5
	Primary Road	km	0.0	10.2
	Secondary Road	km	1.9	12.0
	Local Road	km	1.7	47.0
	Cart Track	km	16.9	117.9
	Long-distance railways	km	0.0	6.7
Facilities	Sport and recreation constructions	ha	6.4	19.6
	Long-distance pipelines, communication and electricity lines	km	4.2	38.4
	Local pipelines and cables	km	0.0	0.3
Land use	Arable land	ha	1 066.6	6 156.0
	Permanent crops	ha	149.4	219.1
	Heterogeneous agricultural areas	ha	90.3	1 481.5
	Other	ha	10.0	201.1

## **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