GLIDE number: N/A   Activation ID: EMSR332
Product N.: 01VERONA, v1, English

Verona - ITALY
Flood - Situation as of 03/11/2018
Delineation Map - Monit 01
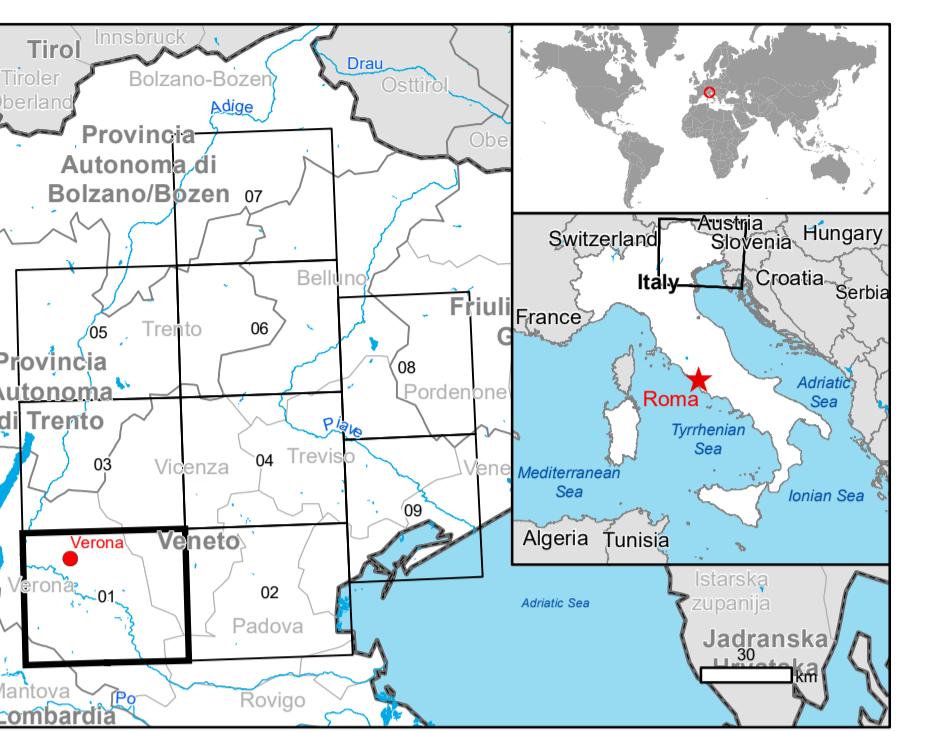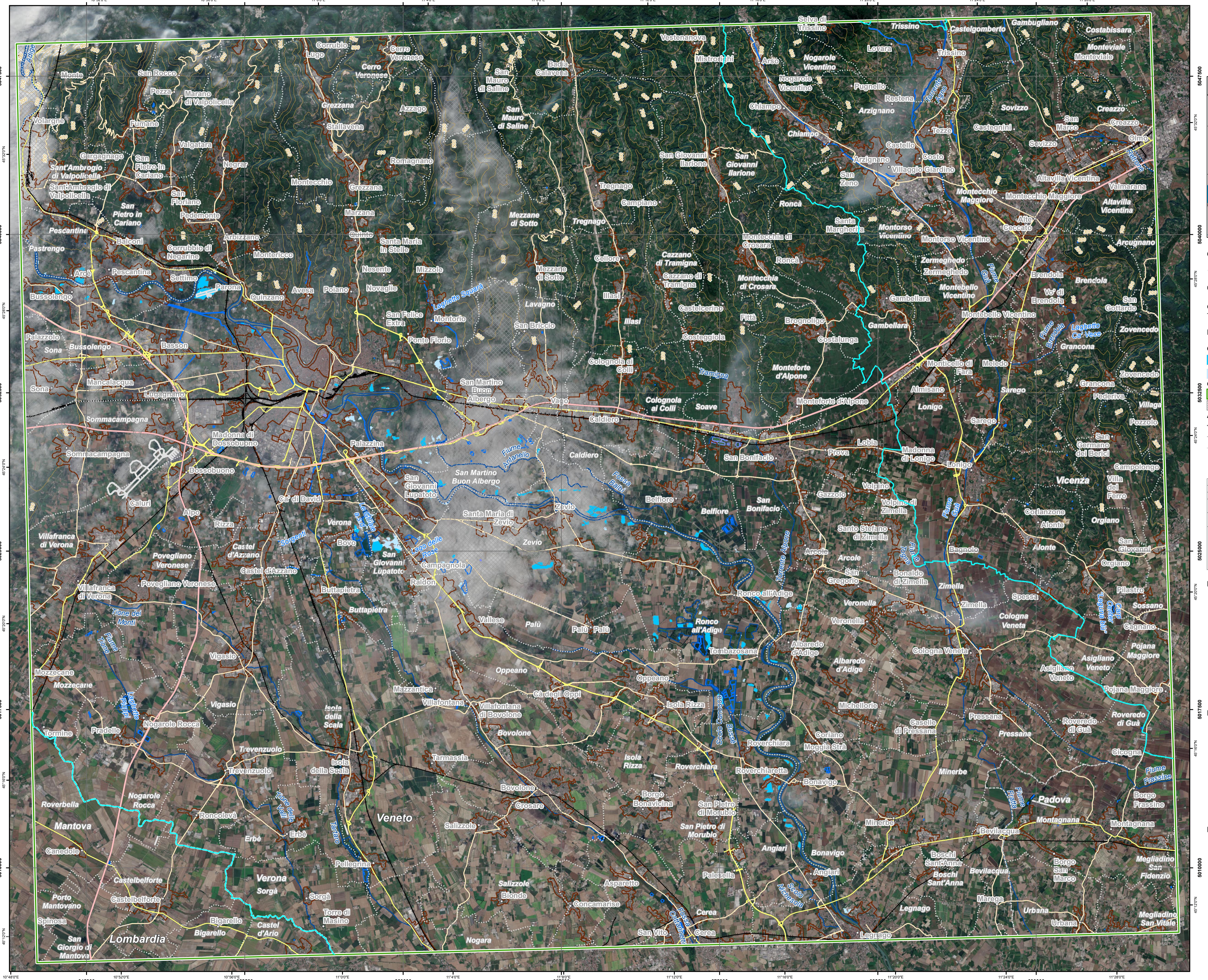
Cartographic Information

1:82000   Full color ISO A1, high resolution (300 dpi)

0 1 2 3 4 5 km

Grid: WGS 1984 UTM Zone 32N map coordinate system
Tick marks: WGS 84 geographical coordinate system

Legend

Crisis Information
- Flooded Area (03/11/2018 17:05 UTC)
- Flooded Area (02/11/2018 05:18 UTC)

General Information
- Area of Interest
- Not Analysed

Administrative boundaries
- Region
- Province
- Municipality

Placenames
- ○ Placename

Built-Up Area
- Built-Up Area

Hydrography
- River
- Lake
- Reservoir
- River

Physiography
- Elevation Contour (m)

Transportation
- Highway
- Primary Road
- Secondary Road
- Long-distance railway
- Airfield runway
- Helipad

Land use - Land Cover
Features available in vector data

Consequences within the AOI		Unit of measurement	Affected	Total in AOI
Flooded area		ha		442.6
Estimated population		Number of inhabitants	498	935554
Settlements	Residential	ha	10.3	19316.9
	Non Residential	ha	3.9	7311.5
Transportation	Airfield runway	km	5	26.6
	Highway	km	0.0	402.2
	Primary Road	km	0.0	595.4
	Secondary Road	km	0.4	912.6
	Long-distance railway	km	0.0	504.6
	Helipad	ha	0.0	0.0

Map Information

An intense weather event with heavy rains occurred in Northern Italy from the first hours of October, 27th until 30th affecting especially Friuli Venezia Giulia and Veneto Regions. The heavy rain caused the rapid increasing of the level of Livenza, Piave,Tagliamento and Adige rivers. The event has been important both for intensity and for the lasting. In the whole event some rain gauge in Friuli Venezia Giulia registered 780mm (rain gauge of Claut in municipality of Pordenone). All the 4 rivers reached the highest level of warning. The worst damage was caused by strong winds which had hit the mountainous part of the region and caused the fall of large amount of trees.

The present map shows the flood delineation in the area of Verona (Italy). The thematic layer has been derived from post-event satellite image using a semi-automatic approach. The estimated geometric accuracy is 5 m CE90 or better, from native positional accuracy of the background satellite image.

Relevant date records		
Event	28/10/2018	Situation as of	03/11/2018
Activation	02/11/2018	Map production	04/11/2018

Data Sources

Pre-event image: Sentinel 2A/B (2018) (acquired on 26/09/2018 at 10:17 UTC, GSD 10.0 m, approx. 10% cloud coverage in AoI, 0° off-nadir angle) provided under COPERNICUS by the European Union and ESA.
Post-event image: Sentinel-1A/B (2018), (acquired on 03/11/2018 at 17:05 UTC, GSD 10 m), provided under COPERNICUS by the European Union, ESA and European Space Imaging, all rights reserved.
Sentinel-1A/B (2018), (acquired on 02/11/2018 at 05:18 UTC, GSD 10 m) provided under COPERNICUS by the European Union, ESA and European Space Imaging, all rights reserved.

Base vector layers: OpenStreetMap © OpenStreetMap contributors, Wikimapia.org, GeoNames 2015, refined by the producer.
Inset maps: JRC 2013, © EuroGeographics, EuroBoundaryMap 2017, © EuroGeographics, Natural Earth 2012, CCM River DB © EUJRC2007, GeoNames 2013.
Population data: GHS Population Grid © European Commission, 2015 http://data.europa.eu/89h/jrc-ghsl-ghs_pop_gpw4_globe_r2015a.
Digital Elevation Model: SRTM (90m) (NASA/USGS).

Disclaimer

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Please be aware that the thematic accuracy might be lower in urban and forested areas due to inherent limitations of the SAR analysis technique.

Map produced by e-GEOS released by e-GEOS (ODO).

For the latest version of this map and related products visit
http://emergency.copernicus.eu/EMSR332

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