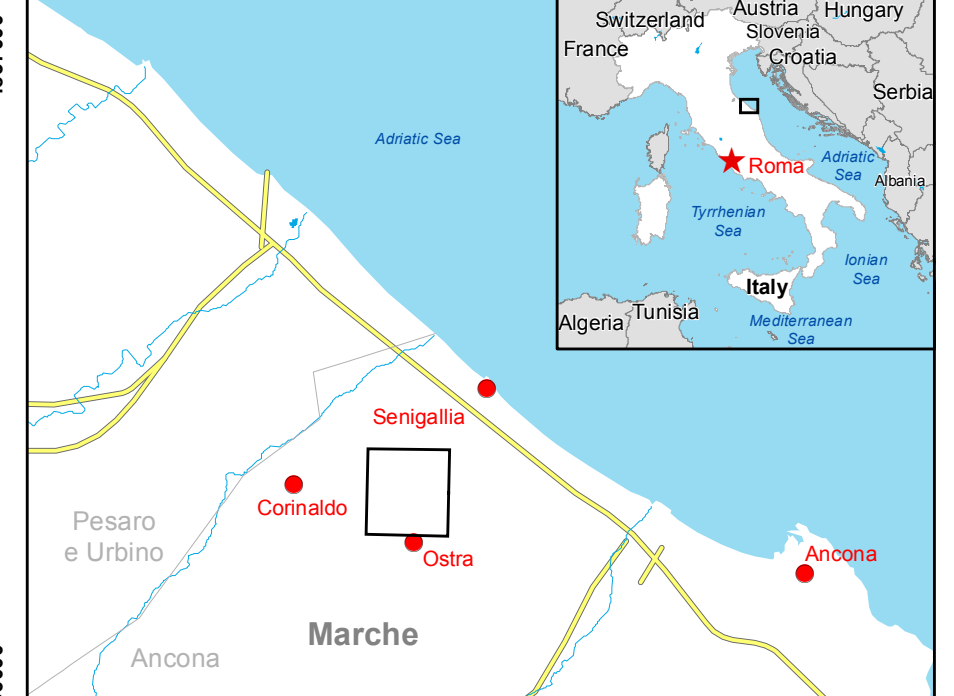


GLIDE number: N/A Activation ID: EMSR-083
Product N.: 01Senigallia, v1

Senigallia - ITALY Flood 03/05/2014 Delineation Map - Detail02

Production date: 10/05/2014



Cartographic Information

1:12000 Full color ISO A1, medium resolution (200 dpi)



Grid: WGS 1984 UTM Zone 33N map coordinate system
Tick marks: WGS 84 geographical coordinate system

- Legend**
Crisis Information
Flooded Area (09/05/2014, 10:11 UTC)
General Information
Area of Interest
Administrative boundaries
Municipality
Settlements
Populated Place
Residential
Agricultural
Green Area
Industrial
- Hydrology**
River
Stream
River
Reservoir
Transportation
Storage Tank
Processing Facility
Secondary Road
Local Road
Land use - Land Cover
Features available in vector data

Consequences within the detail AOI02 on 09/05/2014			
		Affected	Total in AOI
Flooded area	ha	775	7897
	km²	23.9	113
Settlements	ha	13.4	373
	km²	2.1	49
Transportation	ha	0	0.91
	km²	2.8	34
Utilities	ha	5.5	86
	km²	0	2
Land use	ha	0	3
	km²	165.7	3701

Map Information
On May, 3rd 2014 heavy rainfall caused severe floods across the territory of Marche region. One of the most affected areas was the Misa basin. Quickly, the event involved the whole Region, in particular the towns of Senigallia, Cornalio and Ostra. Hundreds of people have been evacuated in the whole area. The scope of this map is to assess the damages and support the Italian Civil Protection Department for the recovery phase.
This map has not been validated with in-situ data.

Data Sources
Inset maps based on: Administrative boundaries (JRC, 2013, GISCO 2010, © EuroGeographics), Hydrology, Transportation (Natural Earth, 2012, CCM River DB © E-JRC 2007), Settlements (Geonames, 2013).
Pleiades © CNES 2014 (acquired on 09/05/2014 at 10:11 UTC, GSD 0.7 m, 0% cloud coverage) provided under ESA GSC-DA DWH License.
Pre-event aerial orthoimages © 2014 courtesy of AGEA (acquired in 2010, GSD 1.0 m).
Base vector layers based on Geoportale Nazionale © Ministero dell'Ambiente (http://www.pcn.minambiente.it), GADM 2011 (www.gadm.org), Wikimapia.org (approx. 1:10,000, extracted on 05/05/2014), refined by ITHACA. Source information is included in vector data.
Elevation data: EU-DEM (25m posting).
Population data: Landsat 2010 © UT BATTELLE, LLC.
All Data sources are complete and with no gaps.

Dissemination/Publication
Delivery formats are GeoTIFF, GeoPDF, GeoJPEG and vectors (shapefile and KML formats).

Framework
The products elaborated in the framework of current mapping in rush mode activation are realized to the best of our ability, within a very short time frame during a crisis, optimising the available data and information. All geographic information has limitations due to scale, resolution, date and interpretation of the original data sources. The products are compliant with GIO-EMS RUSH Product Portfolio specifications.

Map Production
The present map shows the flood delineation in the area of Senigallia, Marche (ITALY). The basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-event aerial orthoimages © 2014 courtesy of AGEA (acquired in 2010, GSD 1.0 m).
Thematic layers, assessing the delineation of the event, have been derived from post-event image Pleiades © CNES 2014 (acquired on 09/05/2014 at 10:11 UTC, GSD 0.7 m, 0% cloud coverage).
All satellite images have been radiometrically enhanced, orthorectified with RPC approach (using EU-DEM elevation data) and coregistered to the pre-event image.
The estimated geometric accuracy of this product is 5 m CE90 or better, from native positional accuracy of the background aerial orthoimage.
The estimated thematic accuracy of this product is 60% or better, as it is based on visual interpretation of recognizable items on very high resolution optical imagery, acquired several days after a flash flood event.
Map produced on 10/05/2014 by ITHACA under contract 257219 with the European Commission. All products are © of the European Commission.
Name of the release inspector (quality control): e-GEOS (ODO).
E-mail: rush@ems-gmes.eu

Map products available at <http://emergency.copernicus.eu/mapping/list-of-components/EMSR083>

Civil Protection
Response
Delineation Map - Detail
Planning
Pleiades (c) CNES 2014
03-05-2014