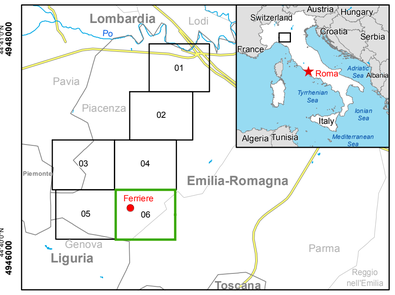
GLIDE number: N/A

Activation ID: EMSR136
Product N.: 06FERRIERE, v2, English

Ferriere - ITALY
Other - 14/09/2015
Grading Map



Cartographic Information

1:28000

Full color ISO A1, medium resolution (200 dpi)

0 0.5 1 2 km

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

N

Legend

Crisis Information
- Landslide

General Information
- Area of Interest

Administrative boundaries
- Region
- Province

Settlements
- Populated Place
- Residential

Transportation
- Bridge
- Primary Road
- Secondary Road
- Local Road

Hydrology
- River
- Stream
- Lake

Land use - Land Cover
Features available in vector data

Consequences within the AOI on 18/09/2015

			Destroyed	Highly damaged	Moderately damaged	Negligible to slight damage	Total affected	Total in AOI
Affected area		ha	0.3	0	0	0	0.3	
Estimated population	Inhabitants in related areas						2	171474
Settlements	Residential	ha	0	0	0	0	0	1360.4
Transportation	Bridge	No.	0	0	0	0	0	7
	Primary roads	km	0	0	0	0	0	19.9
	Secondary roads	km	0	0	0	0	0	153.0
	Local roads	km	0	0	0	0	0	161.8
Land use	Cropland	ha	0	0	0	0.3	0.3	504537.0
	Grassland	ha	0	0	0	0	0	1361.8
	Woodland	ha	0	0	0	0	0	18960.7

Map Information

Heavy rainfall began early on Sunday, 13th September involving at the start the Liguria Region then early in the Monday morning, the Emilia Romagna Region. The intense rains immediately caused severe floods and landslides in the province of Piacenza. Quickly, the severe event affected the whole area due to persistent and intense thunderstorms that still affected the area 4 days later. Hundreds of people have been evacuated, 1 casualty and 2 people missing are reported.

Relevant date and time records (UTC)			
Event	14/09/2015 07:00	Last crisis status	18/09/2015 10:37
Activation	15/09/2015 16:25	Map production	21/09/2015

Data Sources

Pleiades-1A © CNES (2015), distributed by Airbus DS (acquired on 18/09/2015 10:37 UTC, GSD 0.5 m, 15% cloud coverage), provided under COPERNICUS by the European Union and ESA, all rights reserved.
Pre-event aerial orthoimages © 2014 courtesy of AGEA (acquired on 2012-2013 0% cloud coverage).
Base vector layers based on Open StretMap © OpenStreetMap contributors, Wikimapia.org, GeoNames (approx. 1:10000, extracted on 16/09/2015), refined by e-GEOS. Source information is included in vector data.
Elevation data: SRTM (90 m posting). Height in meters above mean sea level.
Population data: Landscan 2010 © UT BATTELLE, LLC.
All Data sources are complete and with no gaps.
Inset maps based on: Administrative boundaries (JRC 2013, GISCO 2010, © EuroGeographics), Hydrology, Transportation (Natural Earth, 2012, CCM River DB © EU-JRC 2007), Settlements (Geonames, 2013).

Dissemination/Publication

Delivery formats are GeoTIFF, GeoPDF, GeoJPEG and vectors (shapefile and KML formats).
Map products available in the Copernicus EMS Portal at the following URL: http://emergency.copernicus.eu/mapping/list-of-components/EMSR136
All products are © of the European Union.

Disclaimer

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 Copernicus EMS Rapid Mapping Product Portfolio specifications.

Map Production

The present map shows the landslide and flood damage grading in the area of Ferriere (ITALY). The basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-event aerial orthoimages.
Thematic layers, assessing the delineation of the event and its grading, have been derived from post-event image (Pleiades).
All satellite images have been radiometrically enhanced, orthocorrected with RPC approach (using SRTM 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 satellite image.
The estimated thematic accuracy of this product is 85% or better as it is based on visual interpretation of high resolution optical imagery.

Contact

Map produced by e-GEOS under contract 259736 with the European Union.
Name of the release inspector (quality control): e-GEOS (ODO).
E-mail: rapidmapping@ems-copernicus.eu

Copernicus Europe's eyes on Earth