



GLIDE number: EQ-2012-000090-ITA Activation ID: EMRS004
Product N.: 05SanFelice, v2

Mirandola, Emilia Romagna, ITALY

Earthquake - 29/05/2012

Delineation Map - 01 Detail

Production date: 21/06/2012



Cartographic Information

1:6 000 Full color ISO A1, medium resolution (200 dpi)

0 125 250 500
m

Map Coordinate System: WGS 1984 UTM Zone 32N
Graticule: WGS 84 geographical coordinates

- #### Legend
- Area of interest
 - Crisis Information**
 - Gathering of People
 - Buildings**
 - Affected
 - Not Affected
 - Transportation**
 - Primary Road
 - Secondary Road
 - Local Road
 - Other
 - Points of Interest**
 - Transportation
 - Institutional
 - Educational
 - Medical
 - Recreational
 - Religious
 - Cemetery

Consequences within the AOI				
Estimated AOI population	9021 Inhabitants			
Affected assets	25 Buildings			
Residential	16	Educational	0	
Industrial	9	Medical	0	
Commercial	0	Recreational	0	
Institutional	0	Religious	0	
Multi-Functional	0	Transportation	0	
Other	0	Military	0	

Map Information

An earthquake with a magnitude 5.8 killed at least 16 people in northern Italy on 29/05/2012, damaging buildings and leaving 14,000 people homeless in the Emilia Romagna region north of Bologna, one of Italy most agriculturally and industrially productive areas. The epicentre of the earthquake, which struck at depth of 9.6 km (6 miles), was less than 30 km (19 miles) from Modena, not far from where the magnitude 6 earthquake struck on 20th May (Source: Glide Number).

The core users of the map are Civil Protection authorities involved in operations in the field. The aim of the map production is to support the emergency response activities.

Data Sources

Background imagery: WorldView-02 © Digitalglobe (0% cloudy, 0.5 m resolution, acquired on 30/05/2012)
LandScan ©UT BATTELLE, LLC, 2010 (approx. 1km resolution).
Base vector layers based on Openstreetmap and Wikimapia refined by SIRS (nominal scale 1:5000).
All Data sources are complete and with no gaps.

Dissemination/Publication

No restrictions on the publication of the mapping apply.
Delivery formats are GeoTIFF, GeoPDF, GeoJPEG and vectors (shapefile and KML formats).

Framework

The products elaborated for this rapid mapping has been 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 a delineation of the affected buildings in the city of Mirandola, ITALY, based on visual interpretation of post-event satellite imagery acquired on 30/05/2012 (WorldView-02, spatial resolution 0.5 m).
Post-event satellite images have been orthorectified using RPC model and SRTM elevation data. The estimated geometric accuracy of this product is 5m CE90 or better, from native positional accuracy of the background orthoimage.
The estimated thematic accuracy of the updating is 60% or better, as it is based on visual interpretation of recognizable items on very high resolution satellite imagery. The overall estimated thematic accuracy is in the range 60-85% due to the use of two different post event data sources.
Map produced on 21/06/2012 by SIRS under contract 257219 with the European Commission. All products are © of the European Commission.
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