

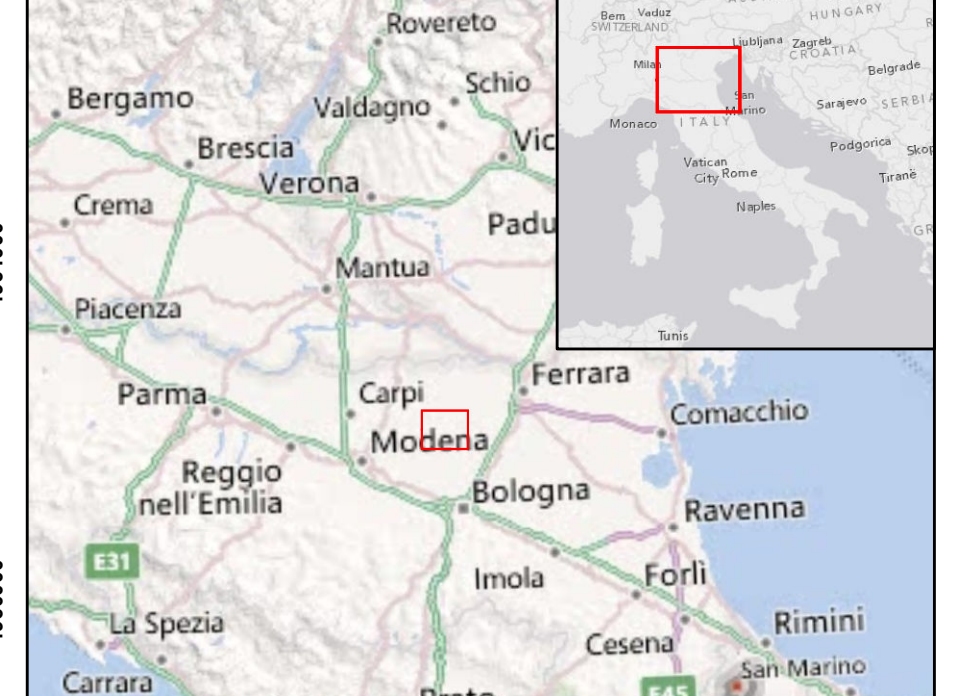
GLIDE number: EQ-2012-000090-ITA Activation ID: EMSR-004  
Product N.: 06Cento, v1

## Cento, Emilia Romagna, ITALY

### Earthquake - 29/05/2012

#### Grading Map - Overview

Production date: 31.05.2012



#### Cartographic Information

1:22451 Full color ISO A1, medium resolution (200 dpi)

0 0.35 0.7 1.4 km

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

- #### Legend
- Area of Interest
  - Crisis Information
    - Gathering of People
    - Road Block
    - Affected building
  - Building Blocks
    - Highly Affected
    - Moderately Affected
    - Not Affected
  - Transportation
    - Primary Road
    - Secondary Road
    - Local Road
    - Bridge
  - Points of Interest
    - Institutional
    - Educational
    - Medical
    - Religious
    - Other

Consequences within the AOI				
estimated AOI population	41150 Inhabitants			
affected assets	34 Building blocks			
Residential	30	Educational	0	
Industrial	1	Medical	0	
Commercial	1	Recreational	0	
Institutional	0	Religious	0	
Multi-Functional	2	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: www.glide.number.net).

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, 0.6 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 GAF (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 have been realized to the best of our ability, within a very short time frame during a crisis, optimizing 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 building damage assessment in the area of Cento, ITALY, based on visual interpretation of post-event satellite imagery acquired on 30/05/2012 (WorldView-02, spatial resolution 0.6 m). Damage classes are assigned to building blocks according to the percentage of affected buildings versus the total number of buildings in the building block, specifically: not affected (0-5%), moderately affected (5-50%), highly affected (> 50%). 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 this product is 60% or better, as it is based on visual interpretation of recognizable items on very high resolution satellite imagery.

Map produced on 31/05/2012 by GAF under contract 257219 with the European Commission.  
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