

### Map Information

Due to the heavy rainfall in the last days, many areas in the western part of Greece have been flooded. The rivers Arachthos, Acheron, Kalamas and Louros have been flooded and damages to infrastructures have been reported.

Villages that are located in the delta of Arachthos river have been evacuated for precautionary reasons.

The core users of the maps are Disaster Response Authorities involved in the operations.

#### Data Sources

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).

Sentinel-1 A (acquired on 02/02/2015 16:31 UTC, GSD 10m) provided by the European Space Agency. ESRI World Imagery © Esri, Digitalglobe (acquired on 05/07/2010, 17/10/2011, and 25/03/2012, GSD

2,5 m, approx. 0% cloud coverage).

Base vector layers based on OpenStreetMap © OpenStreetMap contributors, Wikimapia.org, GeoNames (approx. 1:10000, extracted on 02/02/2015), refined by ITHACA. Source information is included in vector data.

Population data: Landscan 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 Epirus (GREECE). The basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-event ESRI World Imagery.

Thematic layers, assessing the delineation of the event, have been derived from post-event Sentinel-1 A image.

All satellite images have been radiometrically enhanced and geocoded (using SRTM elevation data). The estimated geometric accuracy of this product is 15 m CE90 or better, from native positional accuracy of the satellite images.

The estimated thematic accuracy of this product is 85% or better, based on previous experience in using high-resolution SAR for flood extent delineation. Please be aware that the thematic accuracy might be lower in urban and forested areas due to known limitations of the analysis technique.

Only the area enclosed by the Area of Interest has been analyzed. Map produced on 03/02/2015 by ITHACA under contract 257219 with the European Commission. All products are © of the European Commission.

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Flood

L Civil Protection

Delineation Map - Detail

Sentinel-1 A © European Space Agency

**O** Response

🖌 Planning

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