

# Evros - GREECE Flood - 10/12/2014 Delineation Map - Overview - Monit01

Production date: 14/12/2014

## Cartographic Information

1:200000 Full color ISO A1, high resolution (300 dpi)

0 5 10 20 km

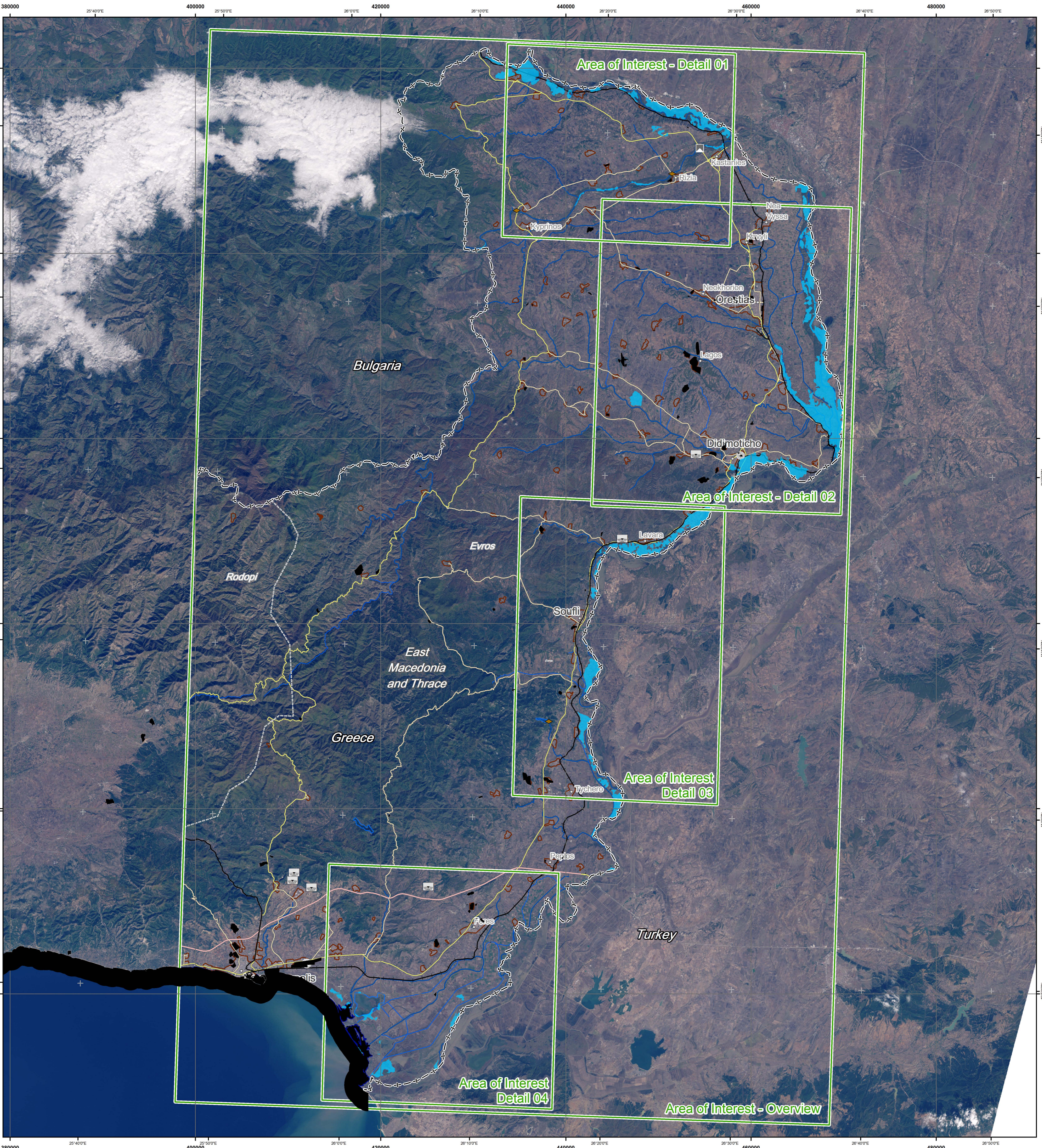
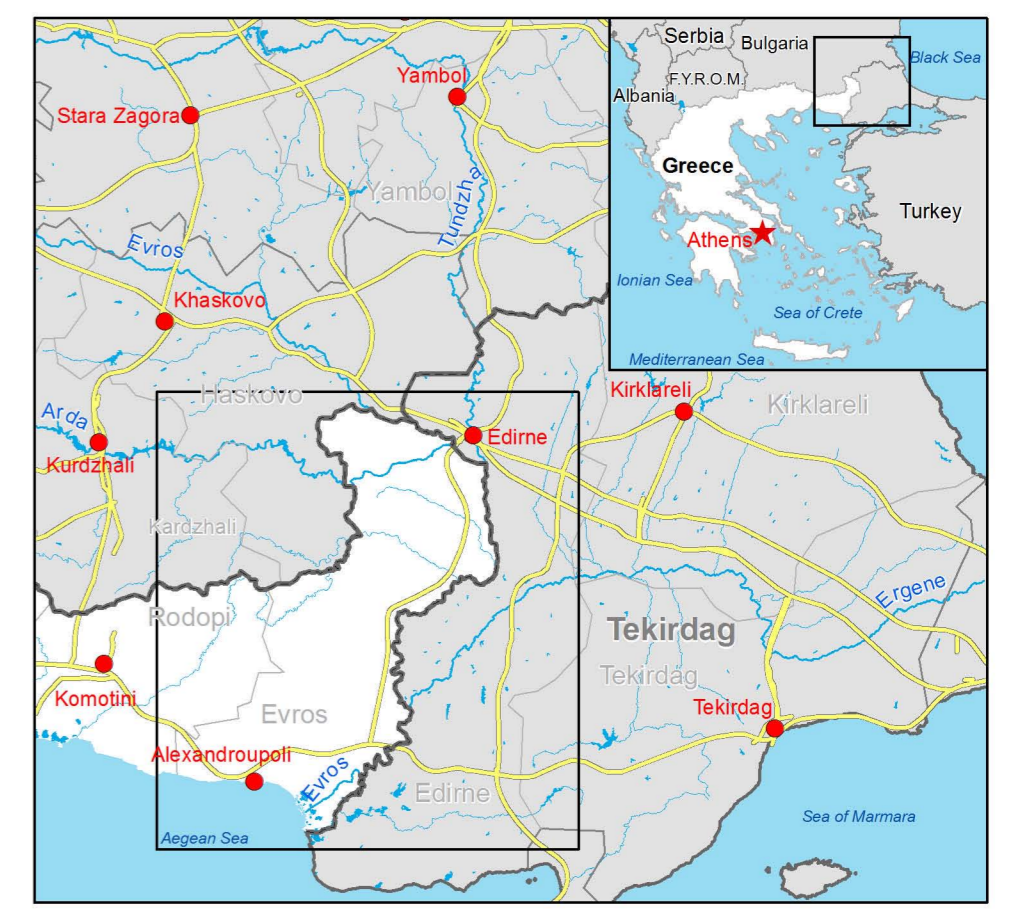
Map Coordinate System: WGS 1984 UTM Zone 35N  
Graticule: WGS 84 geographical coordinates

## Legend

- Crisis Information**
  - Flooded Area (13/12/2014 15:53 UTC)
- General Information**
  - Area of Interest
- Administrative boundaries**
  - International Boundary
  - Province
- Settlements**
  - Populated Place
  - Built-Up Area
- Hydrology**
  - Dam
  - Coastline
- Industry / Utilities**
  - Quarry
- Transportation**
  - Aerodrome
  - Bridge
  - Helipad
  - Railway
  - Motorway
  - Primary Road
  - Secondary Road
- River**
- Stream**
- Lake**

## Consequences within the Overview AOI on 13/12/2014

		Affected	Total in AOI
Flooded area	ha	9 746	
Estimated population	Inhabitants	2 344	144 326
Settlements	Built-Up Area	26.4	7 585
Transportation	Railway	12	212
	Motorway	0	47
	Primary Road	4.5	415
	Secondary Road	0.1	370
Utilities	Aerodrome	0	1
	Bridge	0	1
	Helipad	0	1
	Quarry	0	6



## Map Information

Due to heavy rainfall since 4 December 2014, many areas of the Evros Regional Unit have been flooded. Furthermore, the Greek authorities have been informed by Bulgaria that large amounts of water are expected to enter the Greek territory in the Evros Regional Unit. The flooding in the broader area of this Unit has already caused damage in livestock, agricultural areas and infrastructure. The General Secretary for Civil Protection has declared the affected areas in a state of emergency. The products from Copernicus/EMS will be used by the competent authorities of the Evros Regional Unit and the affected municipalities (Civil Protection authorities, public works services, etc.) for emergency response 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).  
Post-event image: COSMO-SkyMed © ASI 2014 (acquired on 13/12/2014 15:53 UTC, GSD 15 m) provided by e-GEOS S.p.A., all rights reserved.  
Landsat-8 © U.S. Geological Survey (acquired on 04/11/2014, GSD 30 m, 2% cloud coverage).  
Base vector layers based on OpenStreetMap © OpenStreetMap contributors, Wikimapia.org, GeoNames, GADM (approx. 1:10000, extracted on 12/12/2014), refined by SIRIS.  
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.

## 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 Evros (GREECE). The basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-event Landsat-8 images. The thematic layer, assessing the delineation of the event, has been derived from post-event COSMO-SkyMed image. This image has been geocoded (using SRTM elevation data) and coregistered to the pre-event image. The estimated geometric accuracy of this product is 60 m CE90 or better, from native positional accuracy of the background satellite imagery. The estimated thematic accuracy of the 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 14/12/2014 by SIRIS 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/EMSR114>

