

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

Production date: 14/12/2014

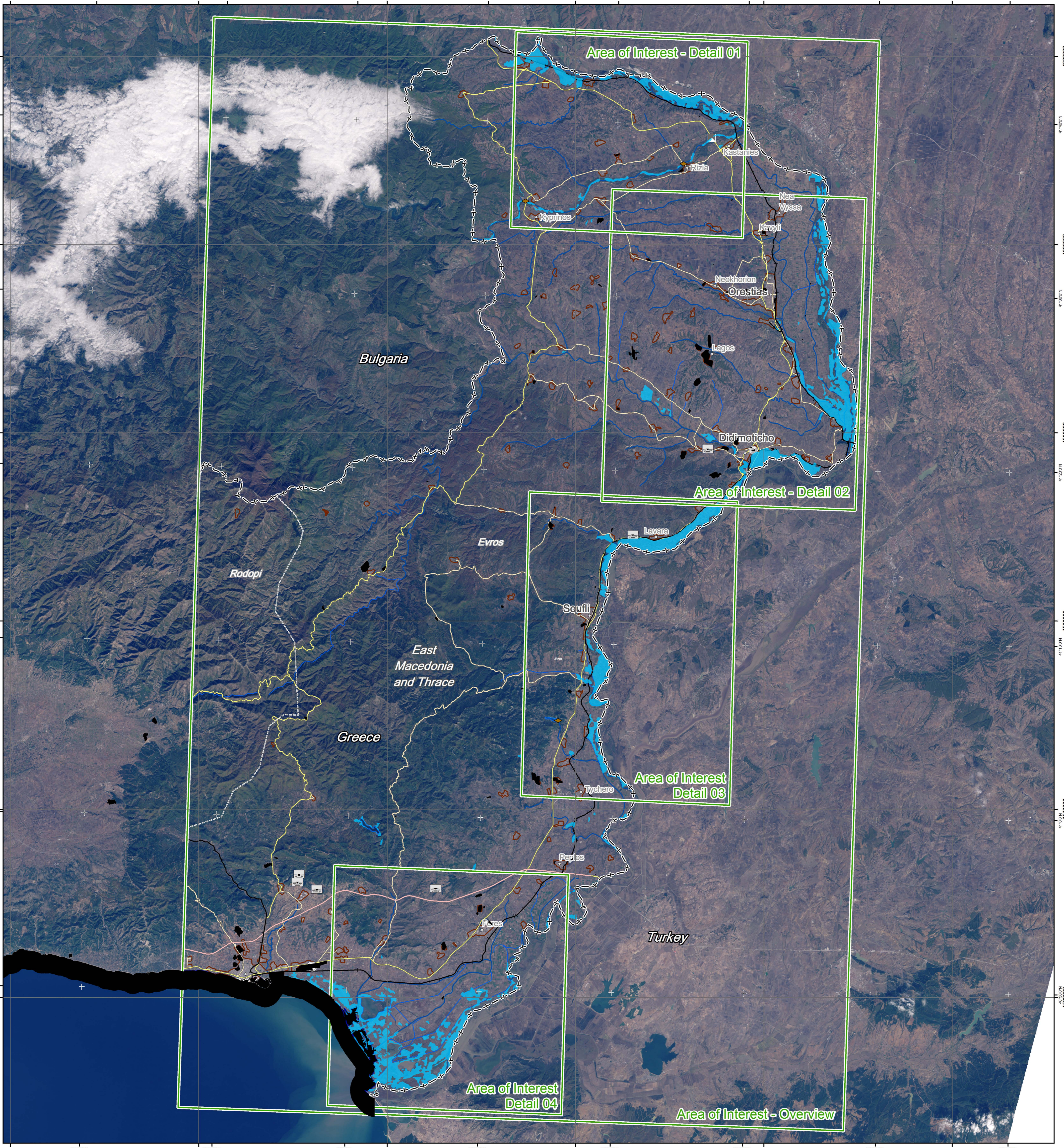
Cartographic Information

1:200000

Full color ISO A1, high resolution (300 dpi)

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

380000 400000 420000 440000 460000 26°40'0"E 26°50'0"E 26°10'0"E 26°20'0"E 26°30'0"E 26°40'0"E 26°50'0"E



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: Sentinel-1 © ESA (acquired on 12/12/2014 04:22 UTC, GSD 20 m).
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 SIRS. 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 BÄTTELLE, 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 Sentinel-1 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 SIRS 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

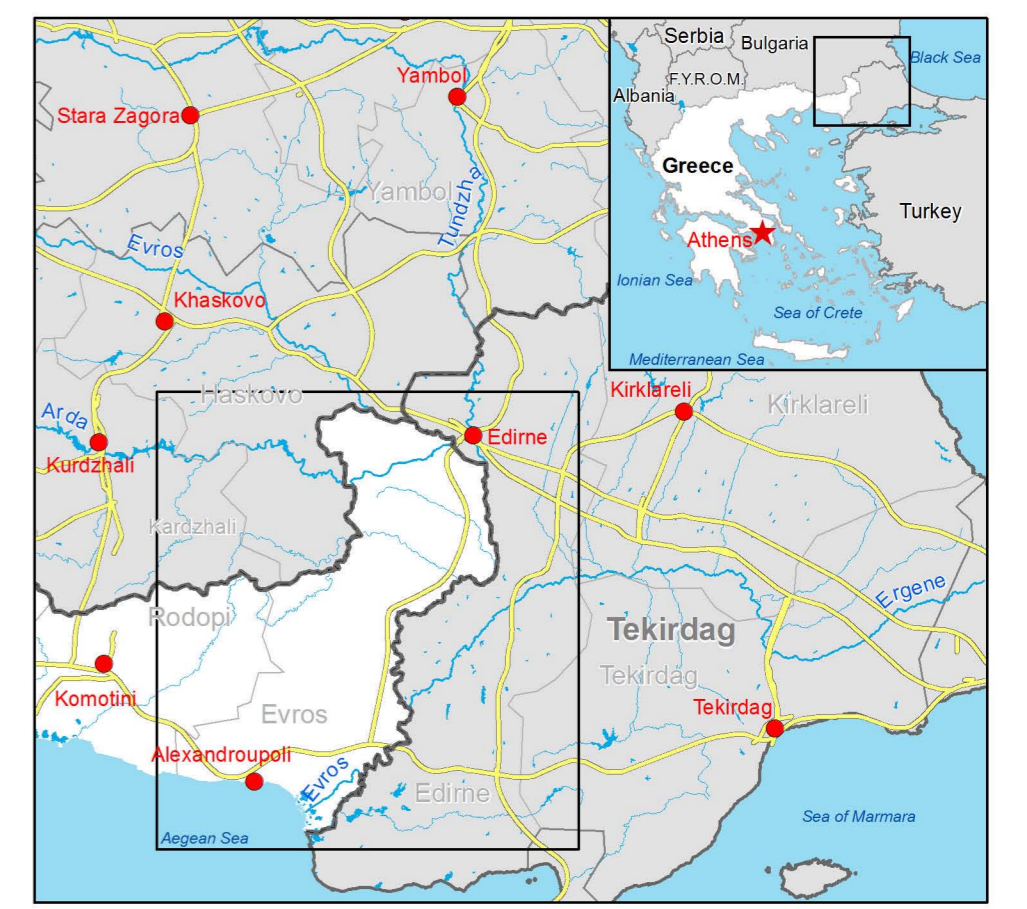
Map products available at <http://emergency.copernicus.eu/mapping/list-of-components/EMSR114>

Legend

- River
- Stream
- Lake
- Area of Interest
- International Boundary
- Province
- Populated Place
- Built-Up Area
- ◆ Dam
- Coastline
- Quarry
- Railway
- Motorway
- Primary Road
- Secondary Road
- Industry / Utilities
- Quarry
- Transportation
- Aerodrome
- Bridge
- Helipad
- Railway
- Motorway
- Primary Road
- Secondary Road

Consequences within the Overview AOI on 12/12/2014

		Affected	Total in AOI
Flooded area	ha	15 394	
Estimated population	Inhabitants	2 667	144 326
Settlements	Built-Up Area	ha	7 585
Transportation	Railway	km	212
	Motorway	km	47
	Primary Road	km	415
	Secondary Road	km	370
Utilities	Aerodrome	No.	1
	Bridge	No.	1
	Helipad	No.	1
	Quarry	No.	6



Civil Protection
 Response
 Delineation Map - Overview
 Planning
 Sentinel-1 © ESA
 10-12-2014