

Evros - GREECE Flood - 10/12/2014 Delineation Map - Detail03

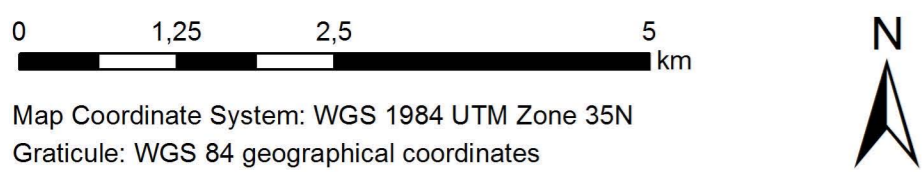
Production date: 13/12/2014

Cartographic Information

1:60000

Full color ISO A1, high resolution (300 dpi)

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

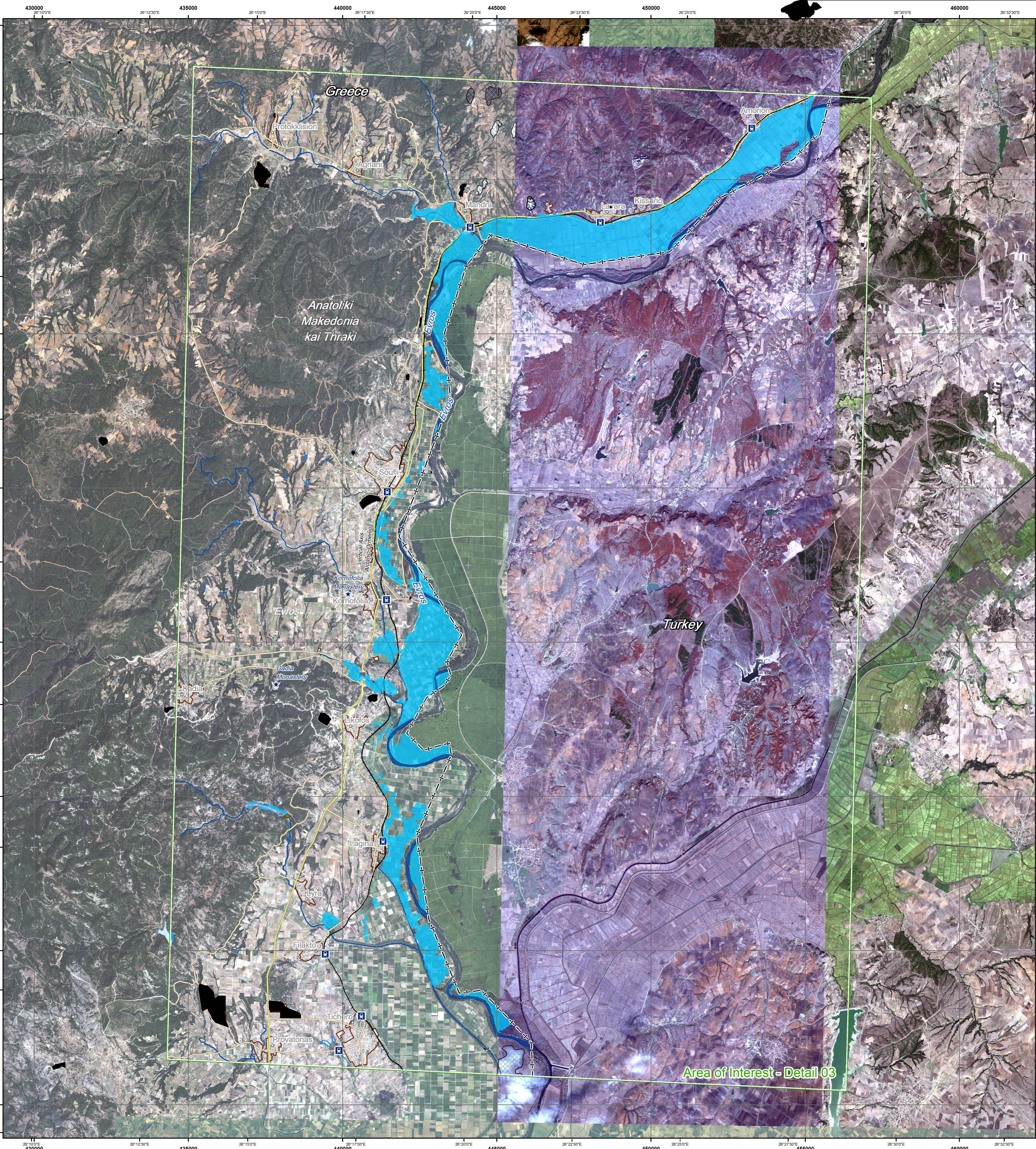
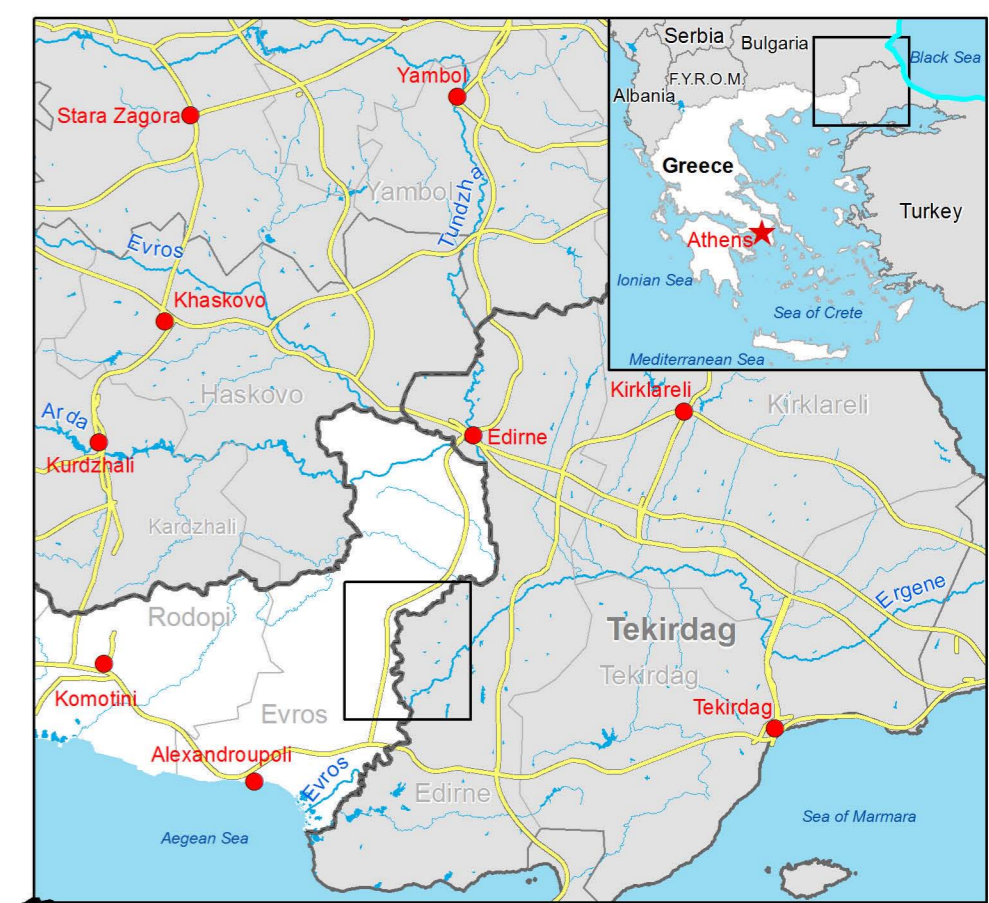


Legend

- | | | |
|----------------------------------|------------------|-----------------------------|
| Crisis Information | Hydrology | Point of Interest |
| Flooded Area (12/12/2014) | Dam | Religious |
| General Information | River | Transportation |
| Area of Interest | Lake | Industry / Utilities |
| Not analyzed | Reservoir | Quarry |
| Administrative boundaries | River | Transportation |
| International Boundary | | Bridge |
| Settlements | | Railway |
| Populated Place | | Primary Road |
| Residential | | Secondary Road |

Consequences within the detail AOI03 on 12/12/2014

	Affected	Total in AOI
Flooded area	ha	3041.7
Estimated population	Inhabitants	647
Settlements	ha	679.5
Transportation		
Primary roads	km	1.5
Secondary roads	km	15
Railways	km	5
Bridges	No.	1
Quary	ha	0
Utilities		
Bridges	No.	2
Quary	ha	0



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 the Evros Regional 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), ESRI World Imagery © Esri, DigitalGlobe (acquired on 19/08/2010, 18/09/2010 and 08/12/2011, GSD 2.5 m, approx. 0.2% cloud coverage), provided under ESA GSC-DA DWH License, Sentinel-1A © ESA (acquired on 12/12/2014 04:22 UTC, GSD 20 m), provided by the European Space Agency. Base vector layers based on OpenStreetMap © OpenStreetMap contributors, Wikimapia.org, GeoNames, GADM (approx. 1:10000, extracted on 12/12/2014), refined by ITHACA. Source information is included in vector data. Elevation data: SRTM (90m posting). Height in meters above mean sea level. Population data: LandScan 2010 © UATTELLE, LLC.

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 ESRI World Imagery. Thematic layers, assessing the delineation of the event, have been derived from post-event Sentinel-1A image (acquired on 12/12/2014 04:22 UTC, GSD 20 m), provided by the European Space Agency. All satellite images have been radiometrically enhanced, geocoded (using SRTM elevation data) and georeferenced to the pre-event image. The estimated geometric accuracy of this product is 10 m CE90 or better, from native positional accuracy of the background satellite image. 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 13/12/2014 by ITHACA 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>