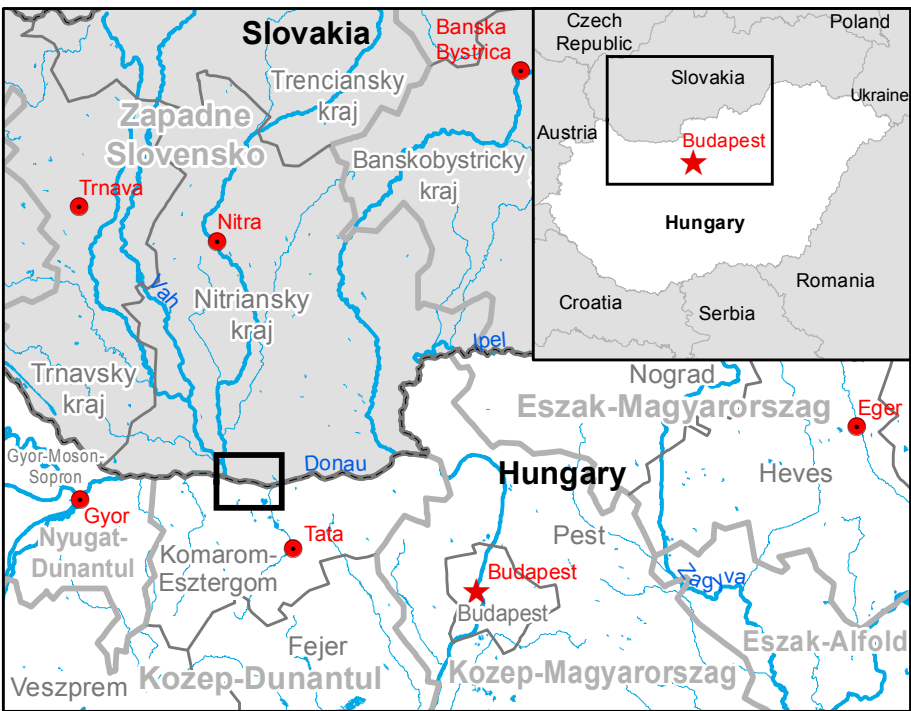


Area of Interest - Detail

GLIDE number: N/A Activation ID: EMSR-046
Product N.: 02Tata, v1

Tata - HUNGARY Flood - 04/06/2013 Delineation Map - Detail

Production date: 07/06/2013



Cartographic Information

1:25000 Full color ISO A1, medium resolution (200 dpi)

0 0.5 1 2 km

Map Coordinate System: WGS 1984 UTM Zone 34N

Graticule: WGS 84 geographical coordinates

Legend

| Crisis Information | Hydrology | Transportation |
|----------------------------|---------------------------------|----------------|
| Flooded Area (07/06/2013) | River | Railway |
| Stream | Canal | Primary Road |
| Area of Interest | Lake | Secondary Road |
| Reservoir | River | Local Road |
| International Boundary | Point of Interest | |
| Settlement | Educational | |
| Populated Place | Institutional | |
| Residential | Medical | |
| Green Area | Transportation | |
| Industrial | Physiography | |
| Recreational | Contour lines and elevation (m) | |
| Religious | | |
| Urbanized Multi-functional | | |

| | Consequences within the Detail AOI on 07/06/2013 |
|----------------------|--|
| Estimated Population | 257 inhabitants |
| Transportation | 0.27 km |
| Settlement | Residential 1.70 ha Industrial 0.49 ha |

Map Information

Surging rivers in Hungary, Czech Republic, Germany and Austria caused widespread flooding in the region. Heavy rains had swelled the Elbe, Danube and Vltava rivers over the weekend, along with smaller rivers and tributaries. Hungary declared states of emergency as the waters of the Danube River rose to record levels. There are flood protection alert and preparedness along 759.8 km in the country. On the upper section of Danube the highest ever measured water levels are expected. Peak on Danube River is expected for June 10 in Budapest. Water management experts are forecasting 885 +/- 20 cm water level in Budapest, the highest ever measured water level. Peak in Nagybajcs (near City Győr, HU/SK border) is expected for June 8, with 900 +/- 10 cm water level (highest ever measured). This is a delineation map for the region of Tata (Hungary), showing the situation as of 07/06/2013. The main users of the map are Civil Protection authorities involved in in-field operations. The potential additional users of the map are Civil Protection authorities involved in operations. The scope of the map is to provide support to planning and rescue operations.

Data Sources

Inset maps based on: Administrative boundaries (JRC 2013, GISC0 2010, © EuroGeographics), Hydrology, Transportation (Natural Earth, 2012, CCM River DB © EU-JRC 2007), Settlements (Geonames, 2013), COSMO-SkyMed © ASI (acquired on 07/06/2013, GSD 30 m), GeoEye-1 © DigitalGlobe (acquired on 08/03/2011, GSD 0.5 m, 0% cloud coverage) provided under ESA GSC-DA DWH License. Landsat imagery © USGS/NASA (acquired in 2000-2002, GSD 15 m, 5% cloud coverage). Base vector layers based on OpenStreetMap, Wikimapia, Geonames (approx. 1:10000, extracted on 06/06/2013), refined by ITHACA. Elevation data EU-DEM (25 m posting). 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, GeoPEG and vectors (shapelite 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 basic topographic features such as transportation, hydrology and settlements in the area of Tata (Hungary). These basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-event Landsat and GeoEye-1 orthomagnery. Thematic layer assessing the delineation of the flood event has been derived from COSMO-SkyMed post-event imagery (30 m resolution, acquired on 07/06/2013 at 4.22 AM). All satellite images have been radiometrically enhanced and georeferenced. The estimated geometric accuracy of this product is 50 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 imagery 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 07/06/2013 by ITHACA under contract 257219 with the European Commission. All products are © of the European Commission. Name of the release inspector (quality control): e-GEDS (ODO). E-mail: rush@ems-gmes.eu

