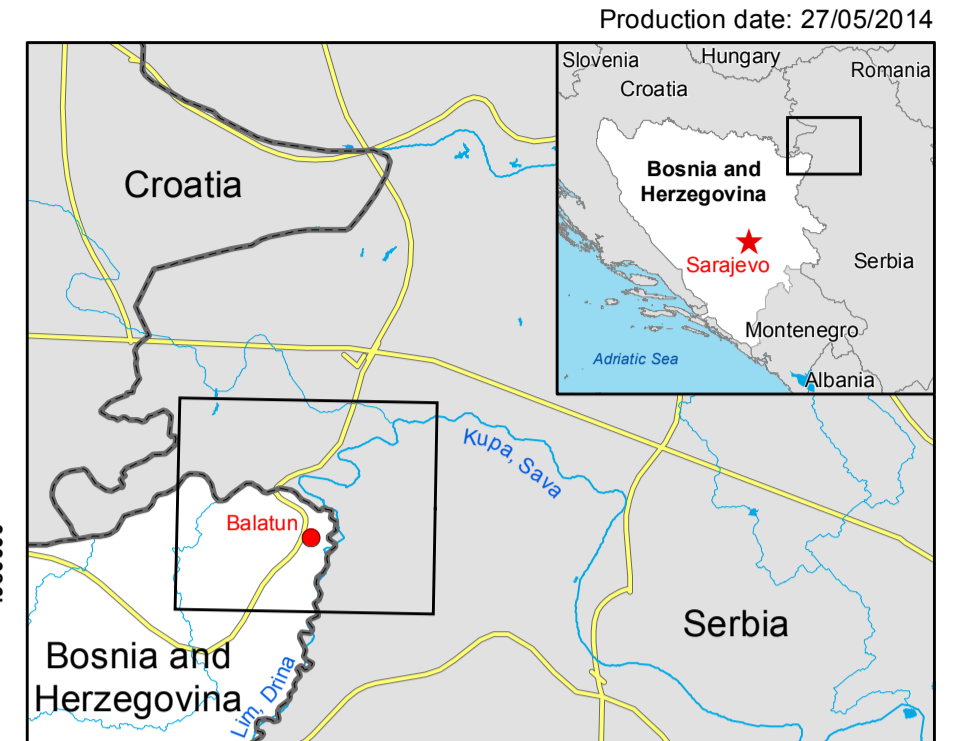


Balatun - BOSNIA AND HERZEGOVINA Flood - 13/05/2014 Reference Map - Overview



Cartographic Information

1:45000 Full color ISO A1, medium resolution (200 dpi)

0 0.75 1.5 3 km

Grid: WGS 1984 UTM Zone 34N map coordinate system
Tick marks: WGS 84 geographical coordinate system

Legend

General Information

- Area of Interest
- Administrative boundaries
- Settlements

Hydrology

- River
- Stream
- Canal
- River
- Lake
- Reservoir

Point of Interest

- Educational
- Institutional
- Religious
- Transportation
- Cemetery

Transportation

- Bridge
- Railway
- Primary Road
- Secondary Road
- Local Road

Exposure within the overview AOI			
Settlements	Estimated population		70361
	Residential	ha	2729.9
	Agricultural	ha	33.8
	Cemetery	ha	5.2
	Industrial	ha	17
	Transportation	ha	4.4
	Recreational	ha	1.9
Transportation	Religious	ha	1.1
	Primary roads	km	32.5
	Secondary roads	km	70.5
	Local roads	km	423.4
	Railways	km	26
Bridges	No.	25	

Map Information

On 13 May 2014, heavy rainfalls and widespread flooding hit large parts of Bosnia and Herzegovina. Heavy rainfall continued to affect large parts, in particular the region of Doboj and Zenica. The core users of the maps are Disaster Response Authorities involved in operations.

Data Sources

Inset maps based on: Administrative boundaries (JRC 2013, GISCO 2010, ©EuroGeographics), Hydrology, Transportation (Natural Earth, 2012, CCM River DB © EURC 2007), Settlements (Geonames, 2013).
SPOT6 © Airbus Defence and Space (acquired on 13/02/2014 08:58 UTC, GSD 2.6 m, 0% cloud coverage), all rights reserved.
Landsat © U.S. Geological Survey (acquired on 12/03/2014, GSD 15 m, approx. 0% cloud coverage).
Base vector layers based on OpenStreetMap © OpenStreetMap contributors, GeoNames (approx. 1:10,000, extracted on 21/05/2014), refined by ITHACA. Source information is included in vector data.
Population data: Landsat 2010 © UT BATTELLE, LLC.
Elevation data: EU-DEM (25 m posting). Height in meters above mean sea level.
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, 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 basic topographic features such as transportation, hydrology and settlements in the area of Balatun (BOSNIA AND HERZEGOVINA). These basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-vent orthomaps from SPOT6 © Airbus Defence and Space (acquired on 13/02/2014 08:58 UTC, GSD 2.6 m, 0% cloud coverage).
All satellite images have been radiometrically enhanced and orthorectified with RPC approach (using EU-DEM elevation data).
The estimated geometric accuracy of this product is 6.6 m CE90 or better, from native positional accuracy of the background satellite image.
The estimated thematic accuracy of this product is 85% or better, as it is based on visual interpretation of recognizable items on high resolution optical imagery. Shadowed areas are zones of lower interpretation accuracy due to the poorer image radiometry.
Only the area enclosed by the Area of Interest has been analyzed.
Map produced on 27/05/2014 by ITHACA under contract 257219 with the European Commission. All products are © of the European Commission.
Name of the release inspector (quality control): GAF AG (ODD).

Map products available at <http://emergency.copernicus.eu/mapping/list-of-components/EMSR087>

Flood

- Civil Protection
- Response
- Reference Map - Overview
- Planning

SPOT 6 (c) Airbus Defense and Space
13-05-2014