GLIDE number: FF-2014-000059-BIH | Activation ID: EMSR-087
Product N.: 01, v2

Doboj
BOSNIA AND HERZEGOVINA
Flood - 13/05/2012
Delineation Map - Overview

Production date: 24/05/2014

Cartographic Information

1:118000 | Full color ISO A1, medium resolution (200 dpi)

0 2.5 5 10 km

N

Map Coordinate System: WGS 1984 UTM Zone 34N
Graticule: WGS 84 geographical coordinates

Legend

Crisis Information
- Flooded Area (18/05/2014 05:09 UTC)

General Information
- Area of Interest
- Sensor Footprint

Administrative boundaries
- International Boundary
- Region
- Municipality

Settlements
- Populated Place
- Residential
- Agricultural
- Cemetery
- Commercial
- Educational
- Green Area
- Industrial
- Recreational
- Religious
- Transportation
- Urbanized Multi-functional

Hydrology
- Dam
- River
- Stream
- Canal
- Lake
- Reservoir
- River

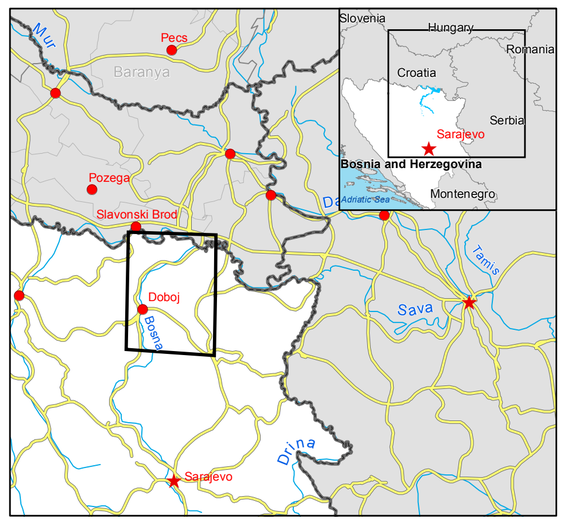
Point of Interest
- Industrial
- Institutional
- Medical
- Religious

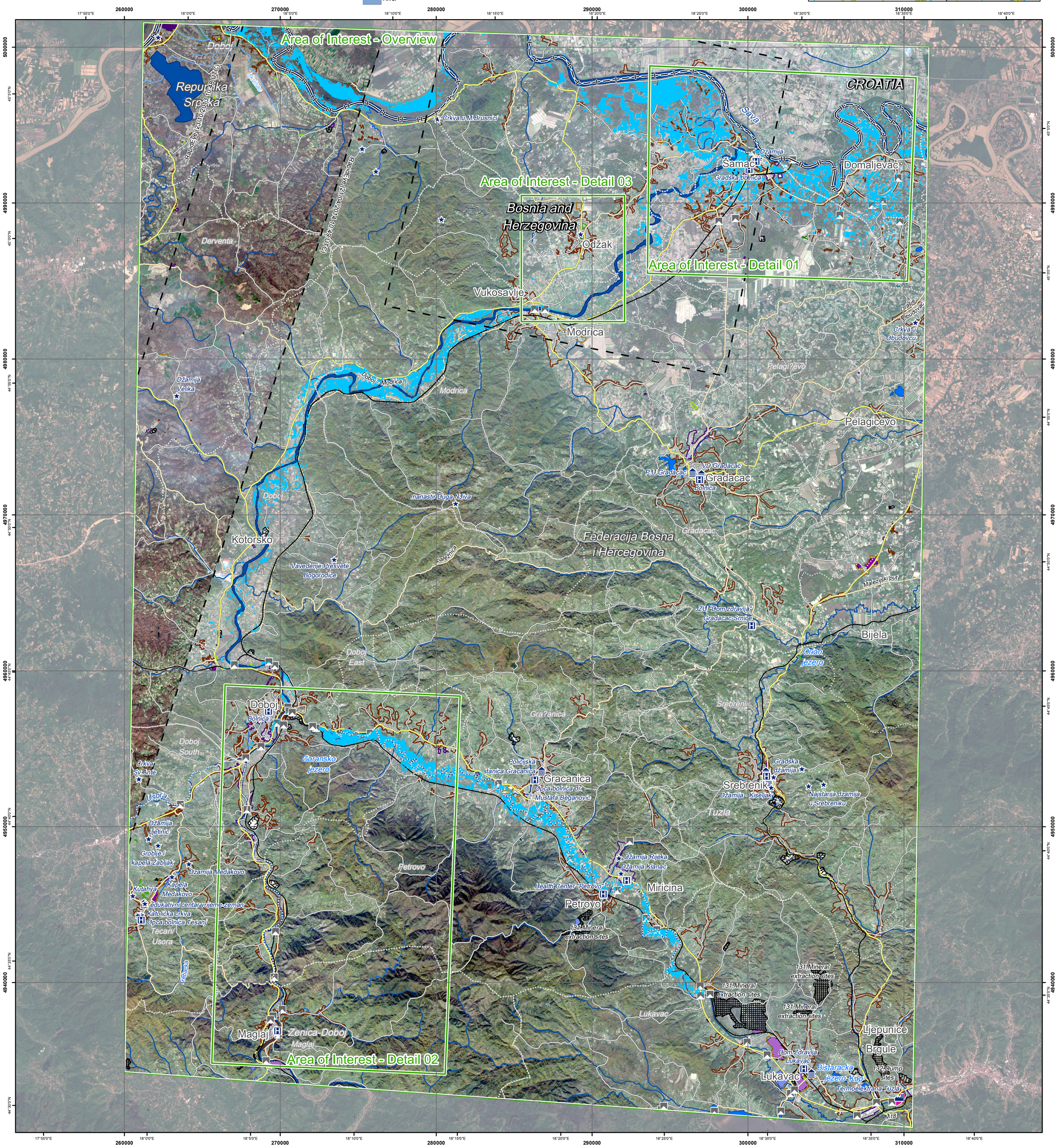
Industry / Utilities
- Storage Tank
- Extraction Mine
- Quarry
- Power Station
- Power Substation
- Processing Facility
- Storage Depot

Transportation
- Bridge
- Motorway
- Primary Road
- Secondary Road
- Local Road
- Railway
- Tunnel

Consequences within the overview AOI on 18/05/2014 on the Bosnian territory

			Affected	Total in AOI
Flooded area		ha	9716	
Estimated population		Inhabitants	2200	510000
Settlements	Industrial	ha	8.3	996.8
	Commercial	ha	0	1.4
	Residential	ha	55.94	13502.8
	Religious	ha	0	1.0
	Recreational	ha	0	50.2
	Urbanized Multifunctional	ha	3.3	880.7
	Transportation	ha	3.8	106.2
	Educational	ha	0	3.3
	Green Area	ha	0	37.6
	Cemetary	ha	0.5	11.1
	Agricultural	ha	0	8.8
Utilities	Storage Depot	ha	0	69.4
	Storage Tank	ha	0	50.4
	Extraction Mine	ha	0	963.1
	Quarry	ha	4.2	263.5
	Processing Facility	ha	0.1	263.4
	Power Station	ha	0	43.8
	Power Substation	ha	0	1.1
Transportation	Motorway	km	0	14.7
	Primary Road	km	5.9	332.8
	Secondary Road	km	4.7	373.9
	Local Road	km	17.1	1571.1
	Railway	km	2.6	212.9





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 © EU-JRC 2007), Settlements (Geonames, 2013).
RapidEye © Blackbridge (acquired on 23/10/2013 10:48 UTC and 21/03/2014 10:49 UTC, GSD 6,5 m, 0% cloud coverage), all rights reserved.
Landsat © USGS (acquired on 06/05/2014, GSD 15 m, 0% cloud coverage).
Radarsat-2 © MDA (acquired on 18/05/2014 05:09 UTC, GSD 15 m).
Base vector layers based on OpenStreetMap © OpenStreetMap contributors, refined by GAF AG. Source information is included in vector data.
Population data: Landscan 2010 © UT BATTELLE, LLC.
Elevation data: SRTM (90 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 Doboj (BOSNIA AND HERZEGOWINA). These basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-event orthoimagery from RapidEye © Blackbridge (acquired on 23/10/2013 10:48 UTC and 21/03/2014 10:49 UTC, GSD 6,5 m, 0% cloud coverage).
Thematic layers, assessing the delineation of the event, have been derived from post-event image Radarsat-2 © MDA (acquired on 18/05/2014 05:09 UTC, GSD 15 m) Ltd. All rights reserved.
All satellite images have been radiometrically enhanced and orthocorrected with RPC approach (using SRTM elevation data).
The estimated geometric accuracy of this product is 45 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 within the Bosnian territory.
Map produced on 24/05/2014 by GAF AG under contract 257219 with the European Commission. All products are © of the European Commission.
Name of the release inspector (quality control): GAF AG (ODO).
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Map products available at http://emergency.copernicus.eu/mapping/list-of-components/EMSR087

Flood
- Civil Protection
- Response
- Delineation Map - Overview
- Planning
- Radarsat-2 © MDA
- 13-05-2012

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