GLIDE number: N/A

Activation ID: EMSR130
Product N.: 16IRRAWADDYDELTA, v2, English

Irrawaddy Delta - MYANMAR
Flood - 01/08/2015
Delineation Map

Cartographic Information

1:600000

Full color ISO A1, medium resolution (200 dpi)

0 12,5 25 50 km

N

Grid: WGS 1984 UTM Zone 46N map coordinate system
Tick marks: WGS 84 geographical coordinate system

Legend

Crisis Information
- Flooded Area delineation 11/08/2015 11:46 UTC
- Flooded Area delineation 10/08/2015 23:49 UTC
- Flooded Area delineation 09/08/2015 11:13 UTC

General Information
- Area of Interest
- Missing data

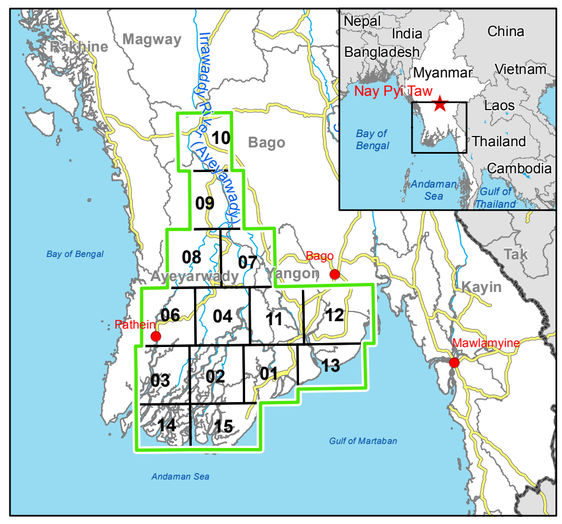
Administrative boundaries
- Region
- Province

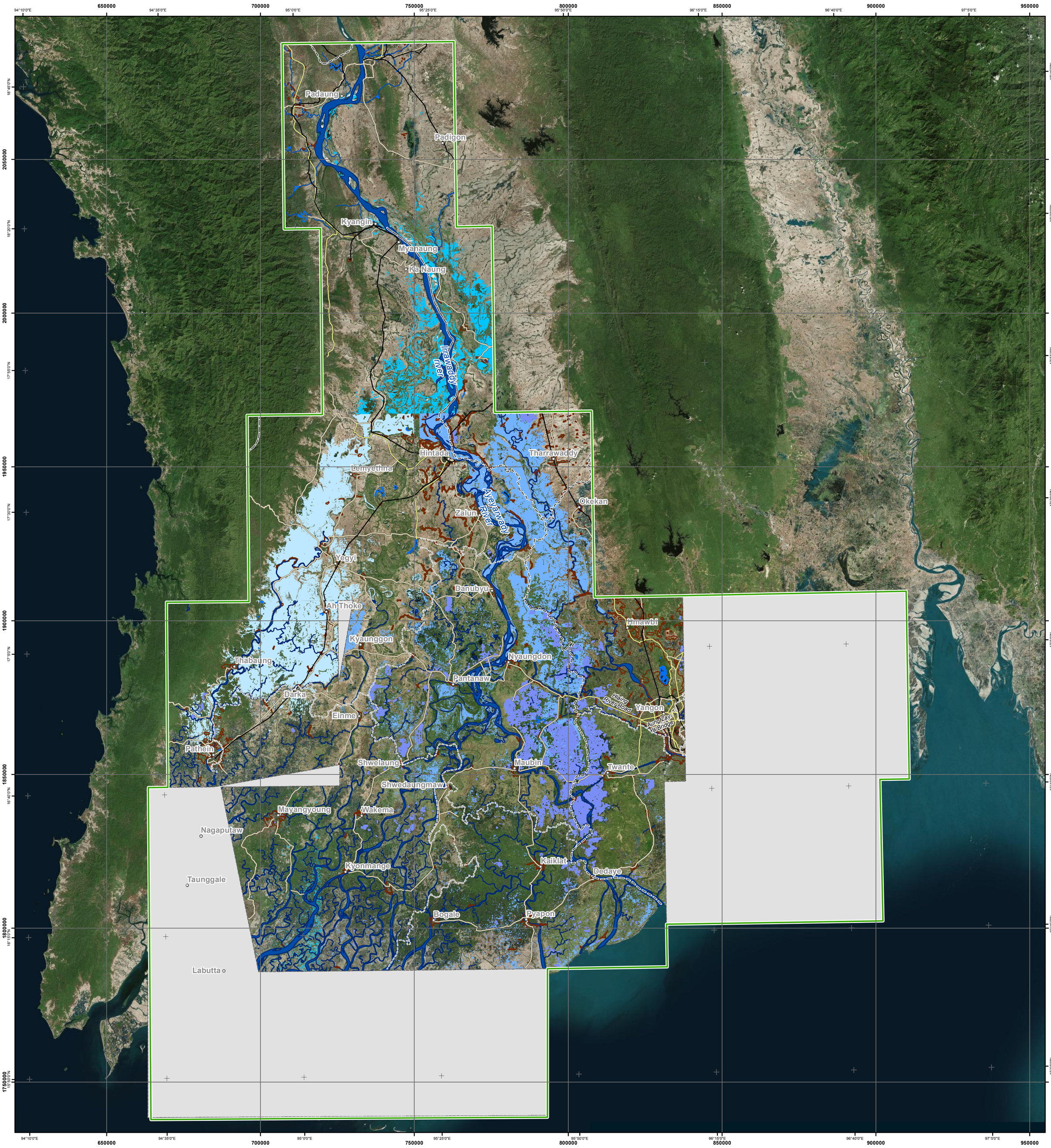
Settlements
- Populated Place
- Built-Up Area

Hydrology
- River
- Stream
- Lake
- Reservoir
- River

Transportation
- Railway
- Primary Road
- Secondary Road

Consequences within the AOI on 09, 10, 11/08/2015				
			Affected	Total in AOI
Flooded area		ha	428922,1	
Estimated population		Inhabitants	4252141	11935674
Settlements	Built-up area	ha	35491,8	75542,0
Transportation	Railways	km	26,0	567,6
	Primary roads	km	33,0	402,1
	Secondary roads	km	57,2	1702,3





Map Information

Unusual heavy monsoon rains have been affecting Myanmar since 16 July causing river overflows and floods. In the past few days, torrential rains damaged farmland, roads, rail tracks, bridges and houses.
The core users of the map is Emergency Response Coordination Centre (ERCC).

Data Sources

COSMO-SkyMed © ASI (2015), distributed by e-GEOS S.p.A. (acquired on 09/08/2015 11:13 GSD 30m 0% cloud coverage) provided under COPERNICUS by the European Union and ESA.
COSMO-SkyMed © ASI (2015), distributed by e-GEOS S.p.A. (acquired on 10/08/2015 23:49 GSD 30m 0% cloud coverage) provided under COPERNICUS by the European Union and ESA.
Sentinel-1A (acquired on 11/08/2015 11:46 GSD 10m 0% cloud coverage) provided under COPERNICUS by the European Union and ESA.
ESRI World Imagery © DigitalGlobe (acquired on 15/01/2010, GSD 20 m, cloud coverage 0%).
Base vector layers based on OpenStreetMap © OpenStreetMap contributors, Wikimapia.org, GeoNames (approx. 1:10000, extracted on 01/01/2001), refined by e-GEOS. 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 BATTELLE, LLC.
All Data sources are complete and with no gaps.

Dissemination/Publication

Delivery formats are GeoTIFF, GeoPDF, GeoJPEG and vectors (shapefile and KML formats).
Map products available in the Copernicus EMS Portal at the following URL: http://emergency.copernicus.eu/mapping/list-of-components/EMSR130
All products are © of the European Union.

Disclaimer

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 Copernicus EMS Rapid Mapping Product Portfolio specifications.

Relevant date records			
Event	01/08/2015	Last crisis status	09,10,11/08/2015
Activation	07/08/2015	Map production	08/09/2015

Map Production

The present map shows the flood delineation in the area of Irrawaddy Delta (MYANMAR). The basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-event image Landsat-8.
Thematic layers, assessing the delineation of the event have been derived from post-event COSMO-SkyMed and Sentinel-1A images acquired in different dates.
All satellite images have been radiometrically enhanced, orthocorrected with RPC approach (using SRTM elevation data).
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.

Contact

Map produced by e-GEOS under contract 259736 with the European Union.
Name of the release inspector (quality control): e-GEOS(ODO).
E-mail: rapidmapping@ems-copernicus.eu

Copernicus
Europe's eyes on Earth