



GLIDE number: N/A      Activation ID: EMSR130  
Product N.: 09MONYO, v1, English

# Monyo - MYANMAR Flood - 01/08/2015 Delineation Map



## Cartographic Information

1:110000      Full color ISO A1, low resolution (100 dpi)



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

## Legend

- Crisis Information**  
Flooded Area (11-08-2015 11:46 UTC)
- General Information**  
Area of Interest
- Administrative boundaries**  
Region
- Settlements**  
Populated Place  
Built-Up Area
- Hydrology**  
River  
Lake  
Reservoir  
River
- Transportation**  
Railway  
Primary Road  
Secondary Road  
Local Road

Consequences within the AOI on 11/08/2015			
Flooded area	ha	Affected	Total in AOI
Estimated population	Inhabitants	278018	828745
Settlements	ha	0	1021
Transportation	Primary roads	km	0
	Secondary roads	km	5
	Local roads	km	18,2
	Railways	km	0

## 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).

Relevant date and time records (UTC)			
Event	01/08/2015 00:00	Last crisis status	11/08/2015 11:46
Activation	07/08/2015 10:00	Map production	12/08/2015

## Data Sources

Sentinel-1A, (acquired on 11/08/2015, 11:46 UTC, GSD 10 m) provided by the European Space Agency.  
Landsat-8 © U.S. Geological Survey (acquired on 05/03/2015, GSD 15 m, approx. 0.88% cloud coverage)  
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: Landsat 2010 © UT BATTELLE, LLC.  
All Data sources are complete and with no gaps.  
Inset maps based on: Administrative boundaries (JRC 2013), Hydrology, Transportation (Natural Earth, 2012), Settlements (Geonames, 2013).

## Dissemination/Publication

Delivery formats are GeoTIFF, GeoPDF, GeoJPEG and vectors (shapfile 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.

## Map Production

The present map shows the flood delineation in the area of Monyo (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 image Sentinel-1A.  
All satellite images have been radiometrically enhanced, orthorectified 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.  
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