

# Irrawaddy Delta - MYANMAR

## Flood - 01/08/2015

### Delineation Map - Monit02

#### Cartographic Information

1:600000

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 (04/09/2015 11:46 UTC)

##### General Information

Area of Interest

Missing data

##### Settlements

Populated Place

Built-Up Area

##### Hydrology

River

Stream

Lake

Reservoir

River

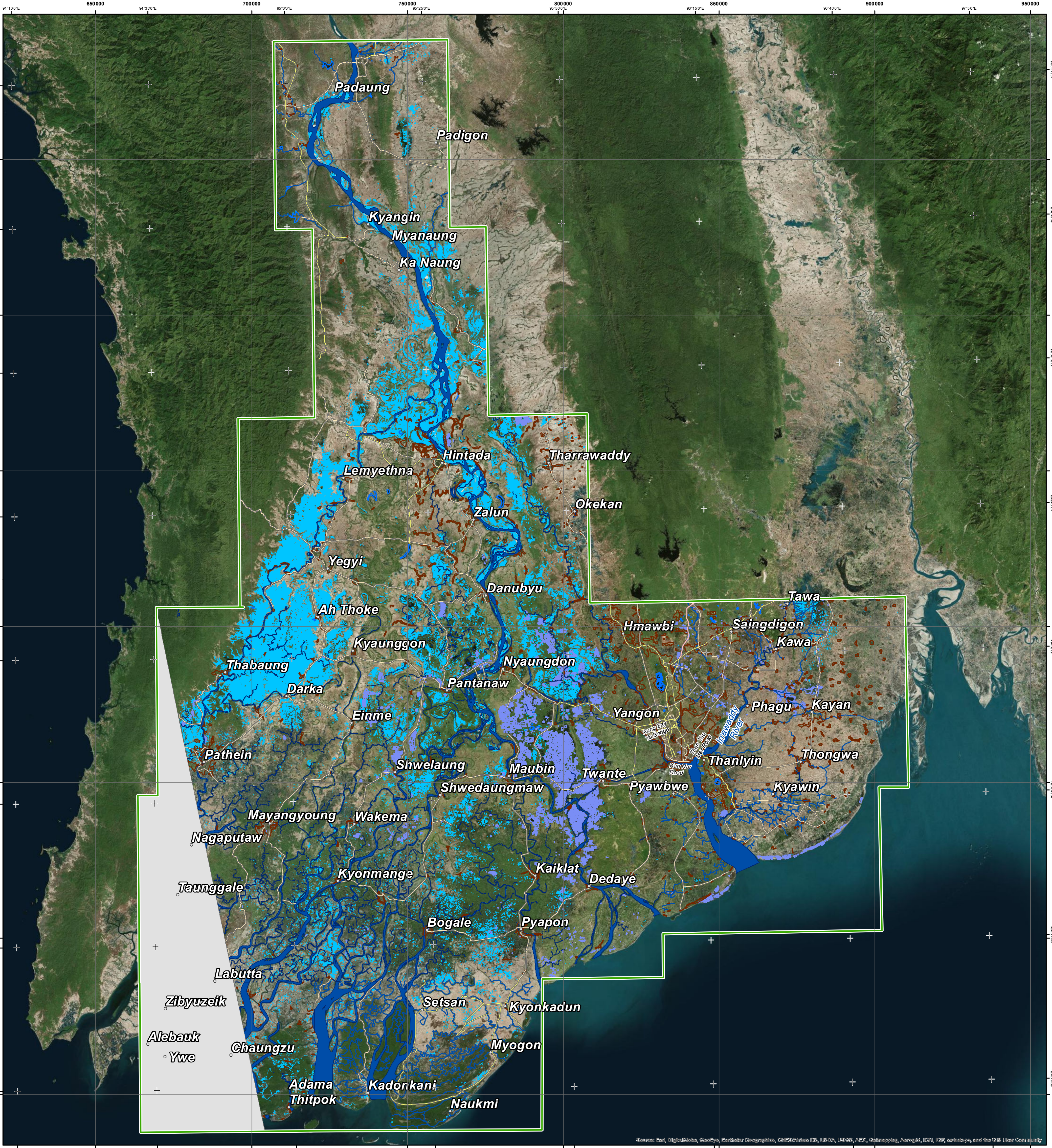
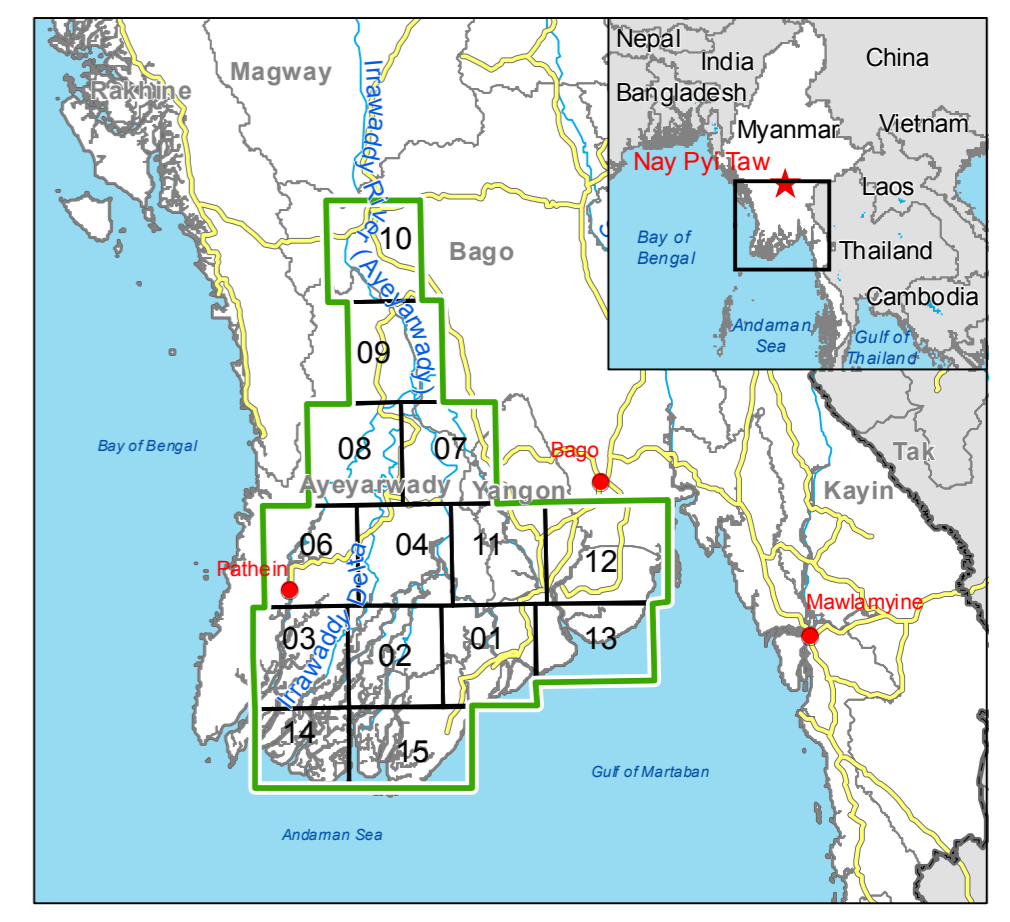
Motorway

Primary Road

Secondary Road

#### Consequences within the AOI on 04/09/2015

	ha	Affected	Total in AOI
Flooded area			442769
Estimated population	Inhabitants	849056	14983176
Settlements	Built-up area	ha	449
Transportation	Primary roads	km	6
	Secondary roads	km	38
		2249	



**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**  
 Sentinel-1A (acquired on 04/09/2015 11:46 UTC, GSD 20 m) provided by European Space Agency. 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 01/01/2011), 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 © URBAT/ELLE, 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 (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 and time records (UTC)			
Event	01/08/2015 00:00	Last crisis status	04/09/2015 11:46
Activation	07/08/2015 10:00	Map production	05/09/2015

**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 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 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 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**  
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