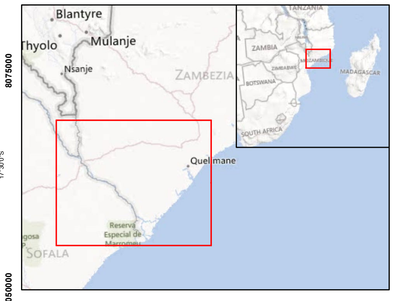
GLIDE number: FL-2013-000008-MOZ

Activation ID: EMSR-026
Product N.: 01Caia, v1

Caia, MOZAMBIQUE
Flood - 22/01/2013
Delineation Map - Overview

Production date: 25/01/2013



Cartographic Information

1:350000

Full color ISO A1, medium resolution (200 dpi)

0 5 10 20 km

N

Map Coordinate System: WGS 1984 UTM Zone 37S
Graticule: WGS 84 geographical coordinates

Legend

FCSubtype
- Flooded areas (24/01/2013)

General Information
- Area of Interest
- COSMO-SkyMed (24/01/2013)
- Settlement
- Province
- District
- Coastline

Transportation
- Aerodrome
- Bridge
- Harbour
- Railway Station
- Primary Road
- Secondary Road
- Local Road
- Railway
- Runway

Built-Up Area
- Built-Up Area

Hydrology
- River

Reference water
- TerraSar-X (2008-2009)
- SWBD, 2000
- Sea / Ocean

	Consequences within the AOI
Potentially affected population	24530 inhabitants
Affected assets	2 aerodromes
	0 bridges
	1 harbour
	0 railway stations
Affected built-up areas	336 ha
Affected road network	47 km
Affected railway network	0.3 km

Map Information

Continuous heavy rainfall in Mozambique over the past 10 days has caused flooding in 19 districts across the country. By 23 January, more than 19,000 persons throughout the country have been affected, around 3,000 houses have been damaged, along with roads, electricity and drainage systems. The water levels in some river basins remains above the alert level, and they are on the rise in the southern and central regions of the country. Government authorities and partners are closely monitoring the situation (Mozambique: Flooding Office of the UN Resident Coordinator, Situation Report No. 1 - http://reliefweb.int/sites/reliefweb.int/files/resources/Mozambique-UNRCO-Situation%20Report%20n1-20130120.pdf).
The map is produced to support disaster relief operations in the area of Caia.

Data Sources

Landsat imagery (acquired in 2000-2002, GSD 15m, 1% cloud coverage, source: USGS/NASA), COSMO-SkyMed © ASI 2013 (acquired on 24/01/2012, GSD 100m,0% occlusion), provided under ESA GSC-DA DWH License.
Base vector layer based on Openstreetmap, Wikimapia, Geonames (extracted on 23/01/2013, approx. 1:10000), VMAP0 (2000, approx. 1:1000000), GAUL (2008), SWBD (2000) refined by ITHACA
Elevation data: SRTM (90m posting)
Population data: Landscan © UT BATELLE, LLC, 2010 (approx. 1km resolution).
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 Caia (Mozambique). These basic topographic features are derived from public datasets, refined by means of visual interpretation of pre-event optical image (Landsat ortho mosaic. Source: USGS/NASA). Reference water has been derived by means of SAR data processing (TerraSAR-X © Astrium 2013) and manual editing. SWBD water bodies are used in the areas not covered by archive SAR data acquisition.
Thematic layers, assessing the delineation of the flood event, have been derived from a COSMO-SkyMed post-event imagery (100m resolution, acquired on 24/01/2013).
All satellite images have been radiometrically enhanced and georeferenced (using SRTM elevation data for the SAR images)
The estimated geometric accuracy of this product is 50m 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 previous experience in using high resolution SAR data 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 SAR analysis technique.
Only the area enclosed by the Area of Interest has been analyzed.
Map produced on 25/01/2013 by ITHACA under contract 257219 with the European Commission. All products are © of the European Commission.
Name of the release inspector (quality control): e-GEOS (ODO).
E-mail: rush@ems-gmes.eu

Flood

- Humanitarian Aid
- Response
- Delineation Map - Overview
- Support Relief Operation
- COSMO-SkyMed (c) ASI (2012)
- 22-01-2013

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