GLIDE number: N/A
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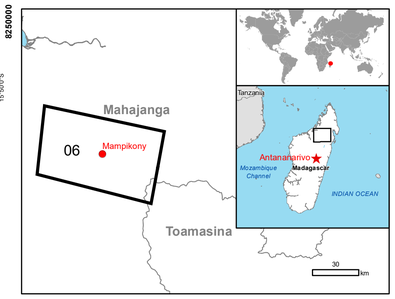
Product N.: 06MAMPIKONY, v1

Mampikony - MADAGASCAR

Storm - Situation as of 27/01/2023

Delineation - Overview map 01



Cartographic Information

1:135000

Full color A1, 200 dpi resolution

0 2.75 5.5 11 km

Grid: WGS 1984 UTM Zone 38S map coordinate system
Tick marks: WGS 84 geographical coordinate system

Legend

Crisis Information
- Flooded Area

General Information
- Area of Interest
- Image Footprint
- Not Analysed

Administrative boundaries
- Province
- Municipality

Placenames
- Placename

Built-Up Area
- Built-Up Area

Hydrography
- River
- Stream
- Lake
- River

Facilities
- Sport and recreation constructions

Transportation
- Primary Road
- Local Road
- Airfield runway
- Airfield runway

Land Use - Land Cover
Features available in the vector package

Consequences within the AOI				
		Unit of measurement	Affected	Total in AOI
Flooded area		ha		17 526.7
Estimated population	Number of inhabitants		8 651	240 295
Built-up	Residential Buildings	ha	2.2	506.0
	Wholesale and retail trade buildings	ha	0.0	0.3
	Industrial buildings	ha	0.0	1.9
Transportation	Airfield runways	ha	0.0	12.7
	Airfield runways	km	0.2	1.3
	Primary Road	km	1.0	79.1
	Local Road	km	1.3	36.1
	Cart Track	km	15.1	443.7
Facilities	Sport and recreation constructions	ha	0.9	2.2
	Navigable canals	km	0.1	0.1
Land use	Heterogeneous agricultural areas	ha	8 531.6	21 206.8
	Forests	ha	2 398.2	117 708.4
	Shrub and/or herbaceous vegetation association	ha	3 991.5	213 858.2
	Open spaces with little or no vegetation	ha	107.7	626.9
	Inland wetlands	ha	2 278.8	6 192.1
	Other	ha	218.9	3 064.3

Map Information

Tropical Storm Cheneso reached the Northeastern coast of Madagascar, in the Sava Region, on the morning of 19 January. Wind gusts of up to 120 km/h were recorded as the storm headed South-West, in addition to heavy rainfall reported particularly in the North, triggering flash flooding and multiple landslides. Approximately 700 homes were damaged, affecting over 2000 people, along with one fatality and one missing person. Numbers are expected to rise as more reports come in from rural areas.
For the Diana, Sava and Anakanjirofo regions (Northeastern coast), a red alert was issued, implying an imminent threat of further torrential rainfall and extreme flooding. Copernicus EMS is activated to provide flood extent and damage assessment.

The present map shows the flood delineation in the area of Mampikony (Madagascar). The thematic layer has been derived from post-event satellite image using a semi-automatic approach. The scale of analysis is 1:25000. The estimated geometric accuracy (RMSE) is 20.0 m or better, from native positional accuracy of the background satellite image. The minimum mapping unit (MMU) is 2500 sq m.

Relevant date records (UTC)

Event	19/01/2023 01:00	Situation as of	27/01/2023 02:26
Activation	25/01/2023 10:49	Map production	27/01/2023

Data sources

Pre-event image: Sentinel-2A/B (2023) (acquired on 29/12/2022 at 07:12 UTC, GSD 10.0 m, approx. 0.5% cloud coverage in AoI, 0° off-nadir angle) provided under COPERNICUS by the European Union and ESA. Sentinel-2A/B (2023) (acquired on 07/10/2022 at 07:01 UTC, GSD 10.0 m, approx. 0% cloud coverage in AoI, 0° off-nadir angle) provided under COPERNICUS by the European Union and ESA.
Post-event image: Sentinel-1A/B (2023) (acquired on 27/01/2023 at 02:26 UTC, GSD 10.0 m) provided under COPERNICUS by the European Union and ESA.

Base vector layers: OpenStreetMap © OpenStreetMap contributors (2022), Wikimapia.org, GeoNames 2015.
Copernicus Global Land Service: Land Cover (2019), Global Administrative Areas (2012), refined by the producer.
Inset maps: JRC 2013, Natural Earth 2012, GeoNames 2015.

Population data: GHS Population Grid © European Commission, 2019 https://ghsl.jrc.ec.europa.eu/ghs_pop2019.php
Digital Elevation Model: SRTM (90 m) (NASA/USGS)

Disclaimer

Products elaborated in this Copernicus EMS Rapid Mapping activity are realized to the best of our ability, within a very short time frame, optimising the available data and information. All geographic information has limitations due to scale, resolution, date and interpretation of the original sources. No liability concerning the contents or the use thereof is assumed by the producer and by the European Union.
Please be aware that the thematic accuracy might be lower in urban and forested areas due to inherent limitations of the SAR analysis technique.

Delivery formats are Layered Geospatial PDF, GeoJPEG and vector (ESRI shapefiles, Google Earth KML, GeoJSON).

Map produced by ITHACA released by SERTIT (ODO).

For the latest version of this map and related products visit
https://emergency.copernicus.eu/EMSR645

jrc-ems-rapidmapping@ec.europa.eu

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