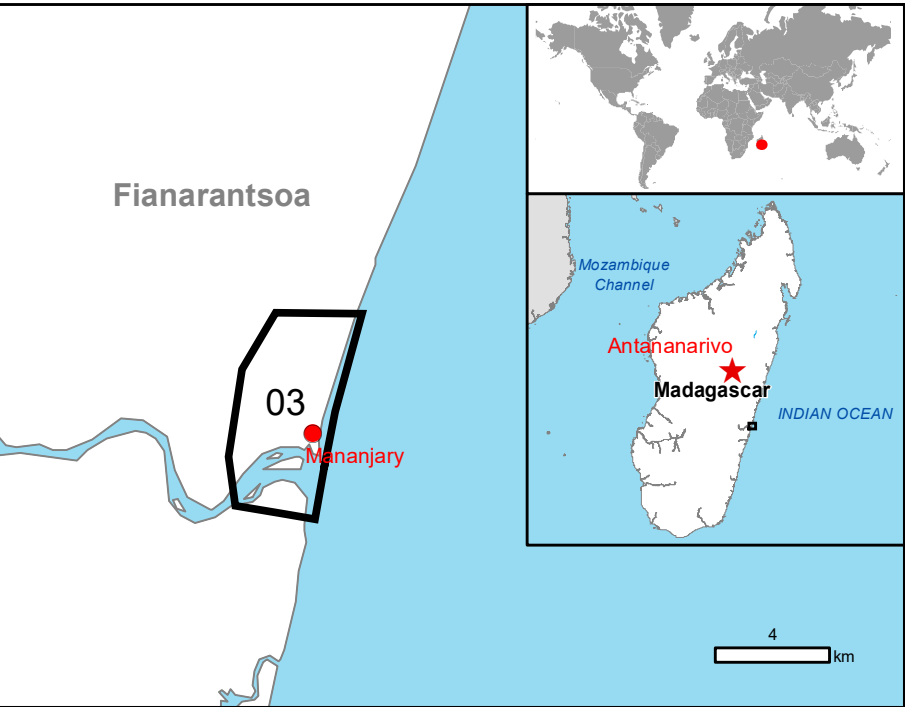


GLIDE number: TC-2023-000023-MDG Activation ID: EMSR652
Int. Charter Act. ID: 804 Product N.: 03MANANJARY, v1

Mananjary - MADAGASCAR

Storm - Situation as of 01/03/2023

Grading - Overview map 01



Cartographic Information

1:15000 Full color A1, 200 dpi resolution



Grid: WGS 1984 UTM Zone 39S map coordinate system
Tick marks: WGS 84 geographical coordinate system

Legend

Crisis Information	Detail map
Built Up Grading	Image Footprint
Destroyed	Not Analysed
Damaged	Placenames
Possibly damaged	Placename
Transportation Grading	Hydrography
Road, Possibly damaged	Coastline
Primary Road, No visible damage	River
Secondary Road, No visible damage	Stream
Local Road, No visible damage	Hydrography
Cart Track, No visible damage	Lake
Airfield and Heliport, No visible damage	Land Subject to inundation
General Information	River
Area of Interest	Physiography & Land Use - Land Cover
	Features available in the vector package

Consequences within the AOI					
	Destroyed	Damaged	Possibly damaged**	Total affected**	Total in AOI
Estimated population				NA	21 609
Built-up	No	37	117	182	13 514
Transportation	km	0.0	0.0	0.3	60.9
	ha	0.0	0.0	0.0	13.0
Facilities	km	0.0	0.0	0.0	7.0
	ha	0.0	0.0	0.0	1.4
	High damage	Moderate damage	Negligible to slight damage	Total affected**	Total in AOI
Land use	ha	0.0	0.0	0.0	2 365.7

* Prevalence of damage proxies and proximity with destroyed/damaged asset
** Sum of all damage classes
Full table available in the vector package

Map Information

Tropical Cyclone Freddy formed off the southern coast of Indonesia in early February and strengthened into a significant storm with maximum sustained winds at 165 mph. In the next days, it's expected to reach the coasts of Madagascar after passing near the islands of Mauritius and La Reunion. Its impact is also expected to be felt in parts of Mozambique, Zimbabwe and South Africa: up to two million people live in its expected path. It is a candidate to be the strongest and most dangerous storm to form so far during 2023, with heavy rains, strong winds and widespread flash floods anticipated.

The present map shows the damage grade assessment in the area of Mananjary (Madagascar). The thematic layer has been derived from post-event satellite image by means of visual interpretation. "Not analysed" indicates an area that could not be analysed in any of the post-event images. The scale of analysis is 1:10000. The estimated geometric accuracy (RMSE) is 2.5 m or better, from native positional accuracy of the background satellite image. The minimum mapping unit (MMU) is 100 sq m.

Relevant date records (UTC)

Event	19/02/2023 14:41	Situation as of	01/03/2023 07:07
Activation	19/02/2023 14:41	Map production	01/03/2023

Data sources

Pre-event image: GeoEye1 © Maxar Technologies, Inc. (2021), (acquired on 05/12/2021 at 06:51 UTC, GSD 0.5 m, approx. 0% cloud coverage in AOI, 2.6° off-nadir angle), provided under COPERNICUS by the European Union, ESA and European Space Imaging, all rights reserved.

Post-event image: Pléiades-1A/B © CNES (2023), distributed by Airbus DS (acquired on 01/03/2023 at 07:07 UTC, GSD 0.5 m, approx. 2.8 % cloud coverage in AOI, 5.6° off-nadir angle), provided by International Charter (call ID 804), all rights reserved.

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

Digital Elevation Model: SRTM (30 m) (NASA/USGS) provided under COPERNICUS by the European Union and ESA, all rights reserved.

Disclaimer

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

Map produced by ITHACA released by e-GEOS (ODO).

For the latest version of this map and related products visit <https://emergency.copernicus.eu/EMSR652>

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