

Manakara - MADAGASCAR

Storm - Situation as of 01/03/2023

Grading - Overview map 01

Cartographic Information

1:11000

Full color A1, 200 dpi resolution

0 0.225 0.45 0.9 km

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

Legend

Built Up Grading

- Damaged
- Possibly damaged

Transportation Grading

- Bridge, elevated highway, tunnel and subway. Destroyed
- Secondary Road, No visible damage
- Local Road, No visible damage
- Cart Track, No visible damage
- Long-distance railway, No visible damage
- Bridge and elevated highway, No visible damage

Facilities Grading

- Possibly damaged

General Information

- Area of Interest
- Detail map
- Not Analysed

Placenames

- Placename

Hydrography

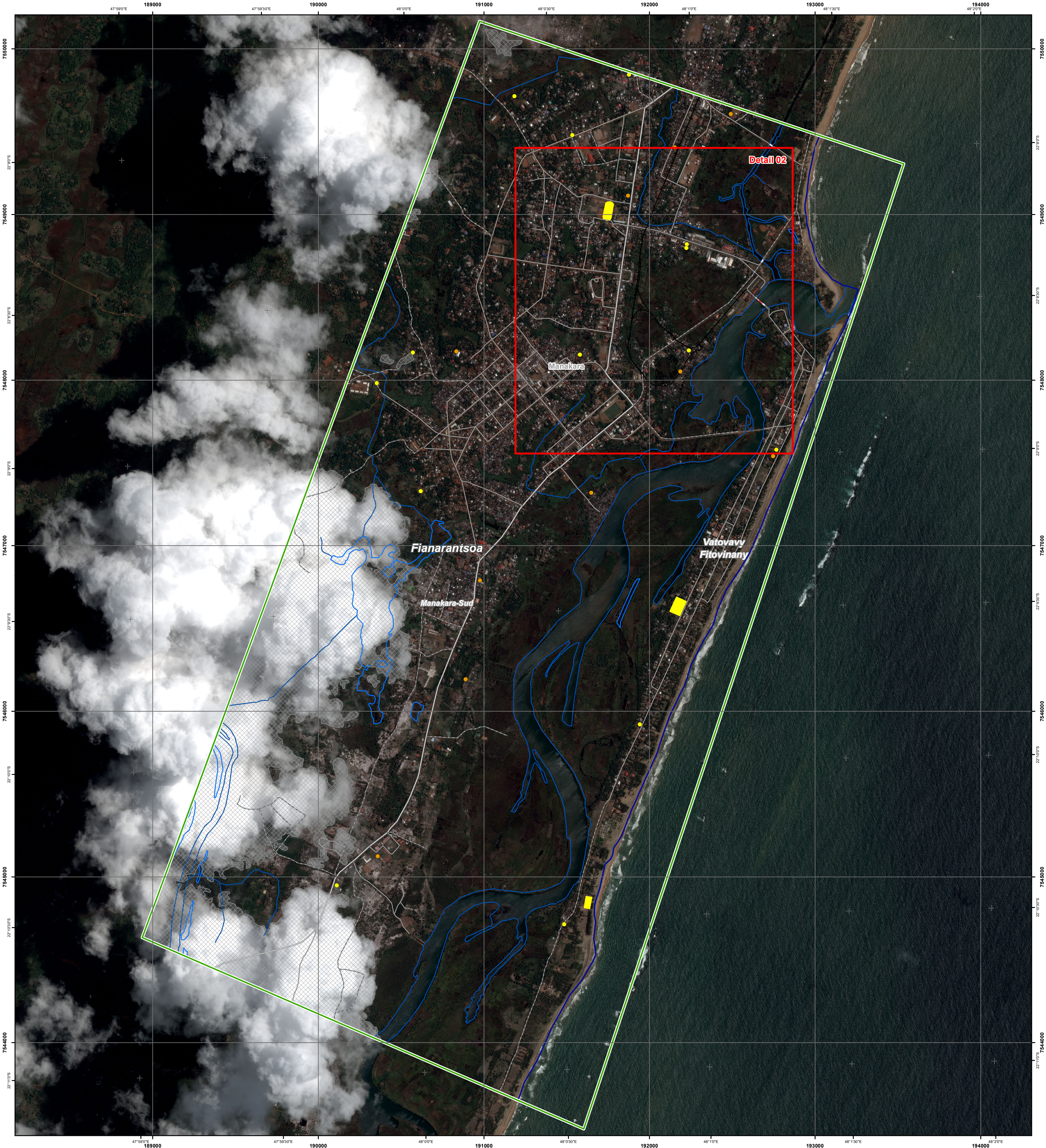
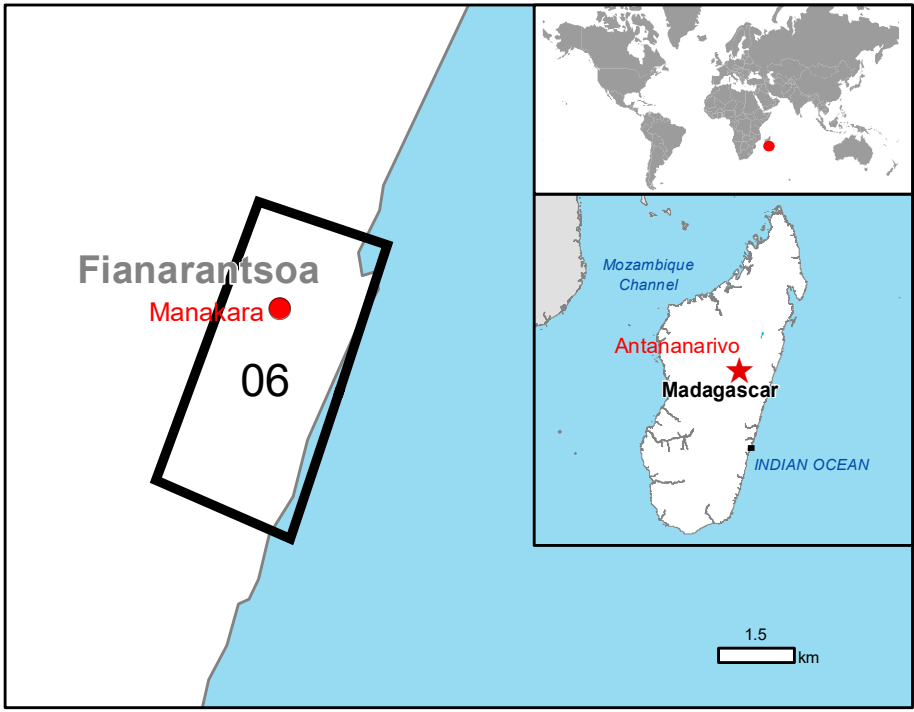
- Coastline
- River
- Lake
- Open Water
- River

Physiography & Land Use - Land Cover

Features available in the vector package

Consequences within the AOI					
		Destroyed	Damaged	Possibly damaged*	Total affected**
Estimated population					
Built-up	No.	0	10	14	24
Transportation	km	0.0	0.0	0.0	0.0
Facilities	ha	0.0	0.0	1.4	1.4
		High damage	Moderate damage	Negligible to slight damage	Total affected**
Land use	ha	0.0	0.0	0.0	1,523.6

* Presence 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 Manakara (Madagascar). The thematic layer has been derived from post-event satellite image by means of visual interpretation. 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.

Data sources

Pre-event image: ESRI World Imagery © DigitalGlobe (acquired on 24/06/2021, GSD 1 m, approx. 0% cloud coverage in AoI).
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. 9% cloud coverage in AoI, 4.8° off-nadir angle), provided by International Charter (call ID 804), all rights reserved.

Base vector layers: OpenStreetMap © OpenStreetMap contributors (2022), Wikimapia.org, GeoNames 2015, Globe Land 30 (2020), 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 (30 m) (NASA/USGS)

Disclaimer

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

Map produced by Telespazio Iberica released by e-GEOS (ODO).

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

jrc-ems-rapidmapping@ec.europa.eu
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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