

MADAGASCAR

MAHANORO DISTRICT, ATSINANANA REGION

IMAGERY ANALYSIS: 24/02/2022 PUBLISHED 02/03/2022 V1.

ANALYSED AREA	FLOODS EXTENT	POPULATION POTENTIALLY EXPOSED
450km ²	40km ²	3,500



TROPICAL CYCLONE
TC20220221MDG



Satellite detected water extents in Mahanoro District, Atsinanana Region, Madagascar as of 24 February 2022

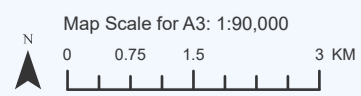
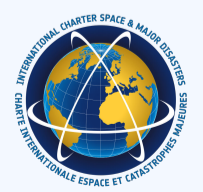
This map illustrates satellite-detected surface waters in Mahanoro District, Atsinanana Region, Madagascar as observed from a Sentinel-2 image acquired on 24 February 2022 at 10:00 local time. Within the analyzed cloud free zones of about 450 km², a total of about 40 km² of lands appear to be flooded. Based on Worldpop population data and the detected surface waters, about 3,500 people are potentially exposed or living close to flooded areas.

This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to United Nations Satellite Centre (UNOSAT).

Legend

- Region boundary
- District boundary
- Commune boundary
- Secondary road
- Tertiary road
- Other road
- River
- Analysis extent
- Cloud mask
- Reference water
- Satellite detected water [24 Feb. 2022]

Region	District	Commune	Analyzed area in cloud free zone (km ²)	Flood Extent (km ²)	Population in Analyzed area	Population Potentially Exposed to Floods
Vatovavy Fitovinany	Mahanoro	Ambodibonara	203	15.14	18,150	1,840
		Ambodiharina	50	8.37	3,160	500
		Masomeloka	191	17.84	11,280	1,180
Total			445	41	32,590	3,520



Spatial Reference
Name: WGS 1984 UTM Zone 38S
PCS: WGS 1984 UTM Zone 38S
GCS: GCS WGS 1984
Datum: WGS 1984

Satellite Data: Sentinel-2
Imagery Date: 24 Feb. 2022 at 07:00 UTC
Resolution: 10 m
Copyright: Contains modified Copernicus Sentinel Data [2022]
Source: ESA

Administrative boundaries: Madagascar National Disaster Management Office (BNGRC)
Population data: WorldPop [2020]
Reference Water: ESRI 2020 Land Cover
Populated place: OpenStreetMap
Road data: OpenStreetMap
Waterways: OpenStreetMap
Background: ESRI Topography
Background (insets): ESRI Basemap

Analysis: United Nations Satellite Centre (UNOSAT)
Production: United Nations Satellite Centre (UNOSAT)