














Satellite detected waters in Sofala Province of Mozambique as of 26 January 2021

This map illustrates satellite-detected surface waters in Sofala province of Mozambique as observed from a Sentinel-1 image acquired on 26 January 2021 at 05:09 local time and using an automated analysis with Artificial Intelligence based methods. Within the analyzed area of about 15,500 km² and, a total of about 1,000 km² of lands appear to be flooded. The surface waters extent detected using the 26th of January 2021 image seems to be stable compared with the 25th of January 2021 observation. Based on Worldpop population data and the detected surface waters in the analyzed area, about 53,000 people are potentially exposed or living close to flooded areas for a total population about 1 million in this zone. About half of the potentially affected population area is located within Buzi district.

This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to UNITAR-UNOSAT. Important Note: Flood analysis from radar images may underestimate the presence of standing waters in built-up areas and densely vegetated areas due to backscattering properties of the radar signal.

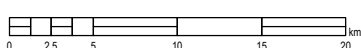
Legend

-  City/Town
-  School
-  Hospital
-  Airport
-  Primary road
-  Secondary road
-  River
-  District boundary
-  Reference water
-  Satellite detected water [26 January 2021]
-  Satellite detected water [25 January 2021]

Province / District	Total Area in AOI (km ²)	Flood Extent in AOI (km ²)	Total Population in AOI	Population Potentially Exposed	Percentage of Population Potentially Exposed in AOI
Sofala	10,624	927	906,181	52,528	6%
Buzi	3,307	391	110,205	22,501	19%
Cidade Da Beira	631	22	473,211	8,604	2%
Dondo	2,162	94	178,512	4,138	2%
Gorongosa	1,384	138	26,304	2,229	8%
Muanza	1,802	88	16,305	822	5%
Nhamatanda	1,548	214	92,564	14,034	15%

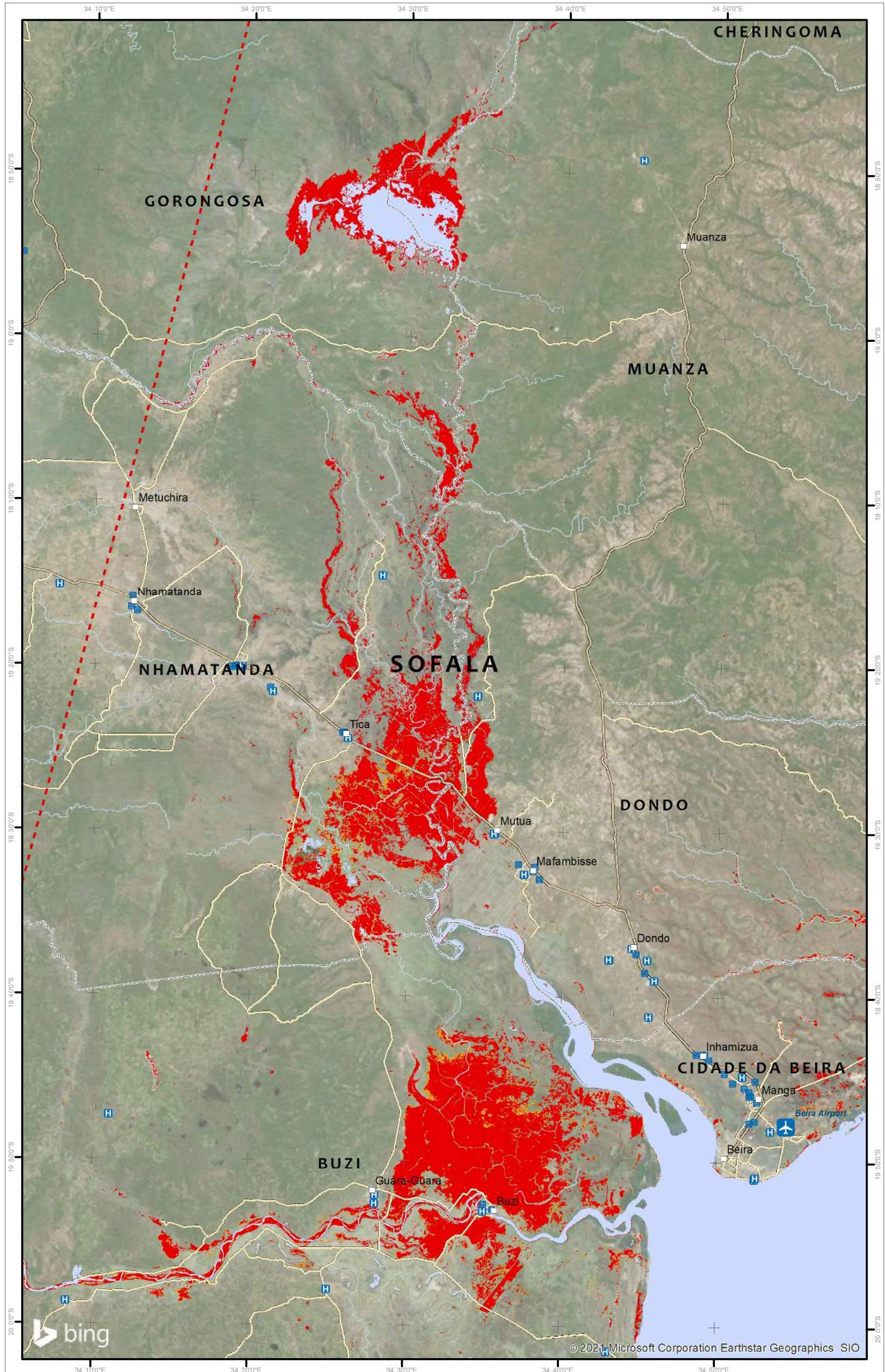


Map Scale for A3: 1:450,000



Analysis conducted with ArcGIS v10.7

Coordinate System: WGS 1984 UTM Zone 36S
Projection: Transverse Mercator
Datum: WGS 1984
Units: Meter



Satellite Data : Sentinel-1
Imagery Date (1) : 26 January 2021 (03:09 UTC)
Imagery Date (2) : 25 January 2021 (16:16 UTC)
Resolution : 10 m
Copyright : Contain modified Copernicus Sentinel Data [2021]
Source : ESA

Administrative boundaries : UNOCHA ROSEA
Population data : WorldPop [2020]
Reference Water : EU Commission's Joint Research Centre
Based data : Open Street Map
Background : Bing

Analysis : UNITAR - UNOSAT AI Based Methods
Production : UNITAR - UNOSAT

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