

Legend

Crisis Information

Flooded Area

General Information

Area of Interest

Administrative boundaries

International Boundary

Province

Placenames

Placename

Built-Up Area

Residential

Industrial

Hospital or institutional care

Building used as place of worship and for religious activities

Military

Hydrography

River

Stream

Lake

Land Subject to Inundation

River

Facilities

Sport and recreation constructions

Transportation

Highway

Local Road

Cart Track

Long-distance railway

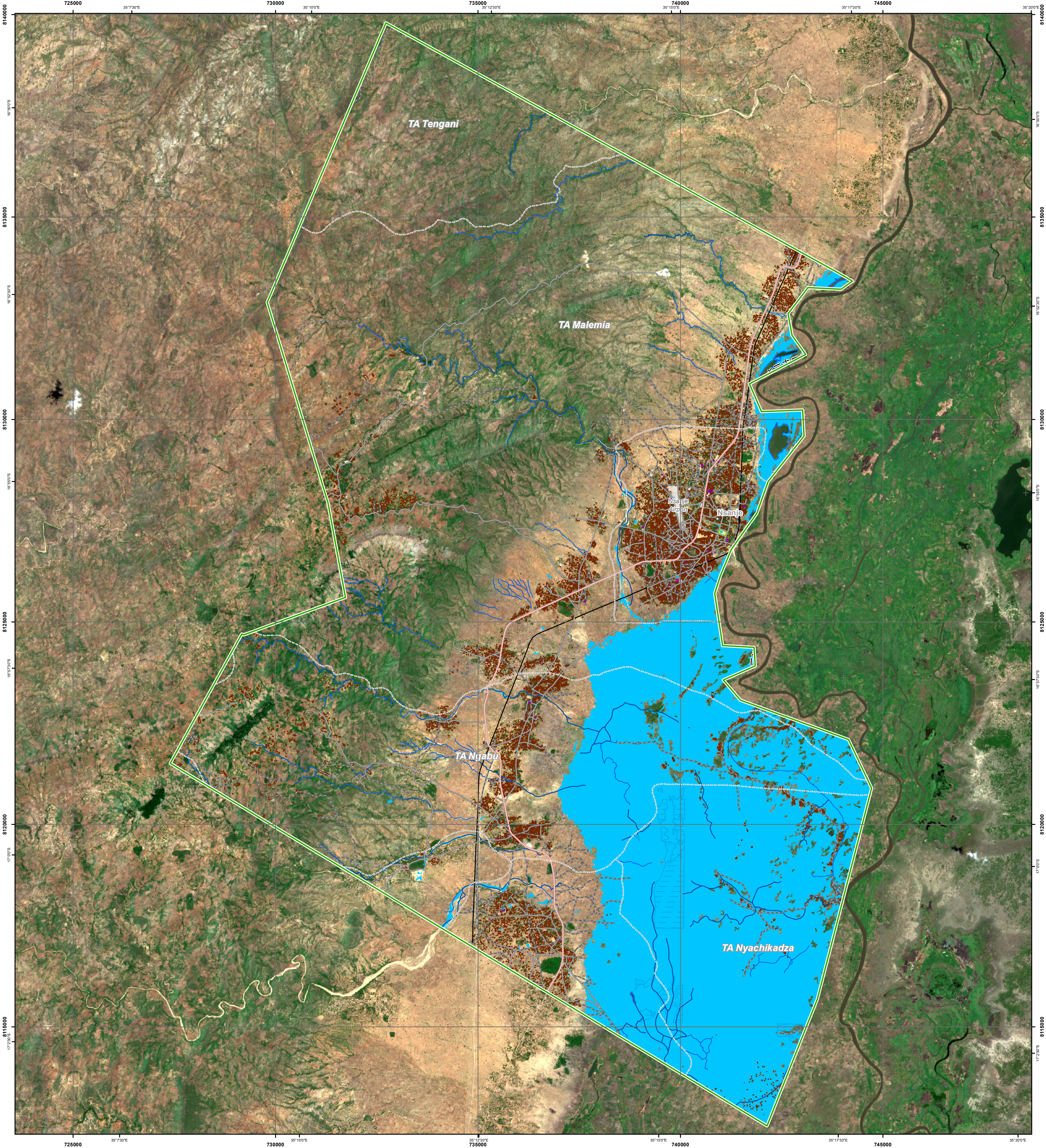
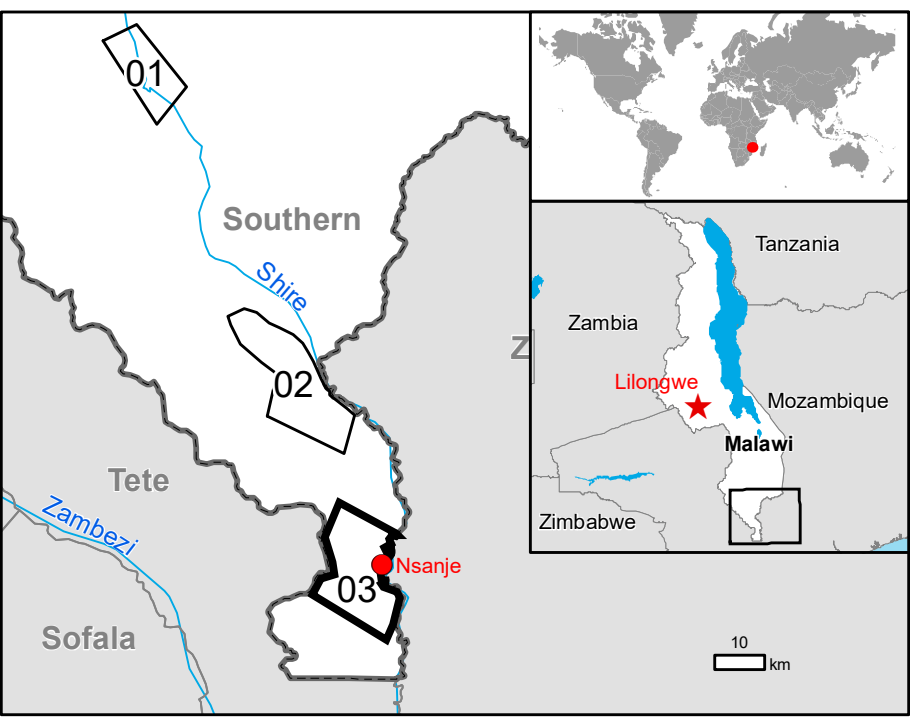
Airfield runway

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	8,741	6,243.1
Estimated population	Number of inhabitants	1.1	65,110
Built-up	Residential Buildings	ha	0.1
	Industrial buildings	ha	0.0
	Hospital or institutional care buildings	ha	0.0
	Buildings used as places of worship and for religious activities	ha	0.0
	Military	ha	0.0
	Airfield runways	km	0.0
	Highways	km	0.2
	Local Road	km	23.1
	Cart Track	km	130.9
	Long-distance railways	km	181.9
Transportation	Airfield runways	km	0.1
	Highways	km	0.1
	Local Road	km	21.8
	Cart Track	km	11.7
	Long-distance railways	km	1.8
	Sport and recreation constructions	ha	0.4
	Heterogeneous agricultural areas	ha	972.7
	Forests	ha	8,993.2
	Shrub and/or herbaceous vegetation association	ha	1,994.7
	Open spaces with little or no vegetation	ha	1,527.4
Facilities	Land use	ha	271.0
	Land use	ha	1,733.9
	Land use	ha	1,765.0
	Land use	ha	1,527.5



Map Information

The passage of tropical storm named ANA on 25 January 2022 over southern Malawi with heavy rainfall caused rivers overflow, floods and landslides resulting in casualties and widespread damage.

The present map shows flood delineation in the area of Nsanje (Malawi). The thematic layer has been derived from post-event satellite image using a semi-automatic approach. The scale of analysis is 1:50000. The estimated geometric accuracy (RMSE) is 12.5 m or better, from native positional accuracy of the background satellite image. The minimum mapping unit (MMU) is 2500 sq m.

Data sources

Pre-event image: Sentinel-2A (2021) (acquired on 11/12/2021 at 07:54 UTC, GSD 10 m, approx. 0% cloud coverage in AOI) provided under COPERNICUS by the European Union and ESA.

Post-event image: COSMO-SkyMed © ASI (2022), distributed by e-GEOS S.p.A. (acquired on 29/01/2022 at 04:05 UTC, GSD 5 m), provided under COPERNICUS by the European Union and ESA, all rights reserved.

Base vector layers: OpenStreetMap © OpenStreetMap contributors (2021), 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

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 Telespazio Iberica released by e-GEOS (ODO).

For the latest version of this map and related products visit <https://emergency.copernicus.eu/EMSR561>

jrc-ems-rapidmapping@ec.europa.eu
© European Union
For full Copyright notice visit <https://emergency.copernicus.eu/mapping/ems-cite-copernicus-ems-mapping-portal>

Relevant date records (UTC)

Event	24/01/2022 12:00	Situation as of	29/01/2022 04:05
Activation	27/01/2022 15:42	Map production	29/01/2022