



EMSR847 - AOI28
Tropical storm Melissa in the Caribbean
TOP HILL

Situation as of 02/11/2025 15:45 UTC
Grading - Overview map 01



Flooded area
24.3 ha

Potentially affected
population
~ 50

Affected Built-up and Transportations

Built-Up
380 No.

Road
0.2 km

- Crisis Information**
- Flooded Area
 - Flood trace
- Built Up Grading**
- Destroyed
 - Damaged
 - Possibly damaged
- Transportation Grading**
- Road, Destroyed
 - Road, Possibly damaged
 - Main road, No visible damage
 - Local road, No visible damage
 - Track, No visible damage
 - Railway, No visible damage
 - Airfield runway, No visible damage
- General Information**
- Area of Interest
- Placenames**
- Placename
- Hydrography**
- Lake, River

Event: On 25 October 2025 at 20:00, Tropical Storm Melissa is forecast to affect Jamaica and the southern peninsula of Haiti. The event is expected to cause damage to housing, infrastructure, and transport networks due to heavy rainfall, strong winds, flooding, and landslides. Hurricane conditions are forecast for Jamaica during the weekend and subsequently for the southern peninsula of Haiti and Cuba. Copernicus EMS Rapid Mapping is requested to provide flood extent and damage assessment emergency mapping.

Data sources and analysis: Pre-event image: [WorldView-2] © Vantor (2025), provided by European Space Imaging (acquired on 26/09/2025 at 15:37 UTC, resolution 0.5 m). [WorldView-3] © Vantor (2025), provided by European Space Imaging (acquired on 23/07/2025 at 15:41 UTC, resolution 0.5 m). [Geosat-2] © GEOSAT (2025) (acquired on 30/08/2025 at 14:35 UTC, resolution 0.75 m).

Post-event image: Pléiades-1A/B © CNES (2025), distributed by Airbus DS (acquired on 02/11/2025 at 15:45 UTC, resolution 0.5 m). This image is used as background image. All images are provided under COPERNICUS by the European Union and ESA, all rights reserved.

The thematic layer has been derived from post-event satellite image using a semi-automatic approach

Map produced by SERTIT released by e-GEOS on the 03/11/2025.

Details on this activation and service conditions available through the QR code or at the link: <https://mapping.emergency.copernicus.eu/activations/EMSR847>

Consequences within the AOI

			LATEST IMPACT	
			Unit of measurement	EO-based observation*
Crisis information	Flood trace		ha	17.8
	Flooded area		ha	24.3
	Maximum of all extents**		ha	42.1

Estimated population		Inhabitants	No.	Destroyed	Damaged	Possibly damaged***	Total affected****	Total in AOI
							~ 50	~ 17 000
Assets	Built-up	Residential Buildings	No.	15	26	96	137	2 450
		Wholesale and retail trade buildings	No.	0	0	0	0	1
		Industrial buildings and warehouses	No.	0	1	3	4	4
		Other non-residential buildings	No.	0	0	3	3	3
		Non-residential farm buildings	No.	2	10	20	32	94
		Unclassified	No.	13	36	155	204	8 971
	Transportation	Airfield runways	km	0	0	0	0	0.6
		Primary Road	km	0	0	0	0	18.0
		Secondary Road	km	0	0	0	0	11.6
		Local Road	km	0.2	0	0.04	0.2	277.1
		Cart Track	km	0	0	0	0	38.7
		Long-distance railways	km	0	0	0	0	9.2
	Facilities	Constructions for mining or extraction	ha	0	0	0	0	28.3
		Sport and recreation constructions	ha	0	0	0	0	7.8
		Long-distance pipelines, communication and electricity lines	km	0	0	0	0	7.1
	Land use	Forests	ha				21.2	9 901.9
		Shrub and/or herbaceous vegetation association	ha				20.2	2 471.1
		Other	ha				0.6	453.2
		Heterogeneous agricultural areas	ha				0.1	814.5
		Inland wetlands	ha				0	15.0

* Corresponds to the water surface observed in the most recent satellite imagery, excluding permanent water.

** Corresponds to the geographic union (and NOT the sum) of all Crisis Information layers.

*** It is intersected with the population and asset datasets to estimate the impacts.

**** Sum of all damage classes

Disclaimer:

Full disclaimer and other helpful information available in the online manual:

<https://mapping.emergency.copernicus.eu/about/rapid-mapping-manual/>

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Data Access:

All data displayed on the map(s), as well as Land Use - Land Cover layer(s), are available in the Crisis Information Package and the Base Layer Package (for reference data). The table above is available in editable format in the Crisis Information Package. All products and data are also available for download on the portal.

Estimated Population:

Estimated population is based on Copernicus Global Human Settlement Layer (GHSL) dataset. Additional population datasets and analysis are available in the summary table.

Data Sources:

Base Vector Layers: OpenStreetMap © OpenStreetMap contributors (2025); Wikimapia.org; GeoNames 2015; Global Administrative Areas (2022), refined by the producer, Globe Land 30 (2010), Copernicus Global Land Service: Land Cover (2019).

Inset Maps: Natural Earth 2023; HydroLAKES 2016 by HydroSHEDS; © EuroGeographics, © TurkStat. Source: European Commission – Eurostat/GISCO, 2021.

Digital Elevation Model:

FABDEM (ForestAndBuildingsremovedCopernicusDEM) removes building and tree height biases from the Copernicus GLO 30 Digital Elevation Model (DEM) (Airbus, 2020).

Access to the portal

