

EMSR847 - AO118
Tropical storm Melissa in the Caribbean
MONTEGO BAY

Situation as of 31/10/2025 16:09 UTC

Grading - Overview map 01



Flood trace
48.8 ha
Landslide
17.5 ha



Potentially affected
population
~ 1,600

Affected Built-up and Transportations



Built-Up
65 No.

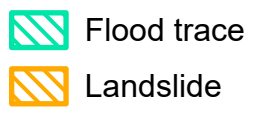


Road
11.3 km

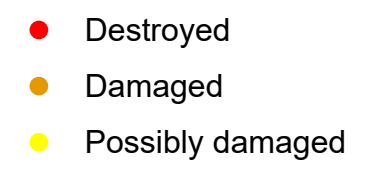


Railway
0.6 km

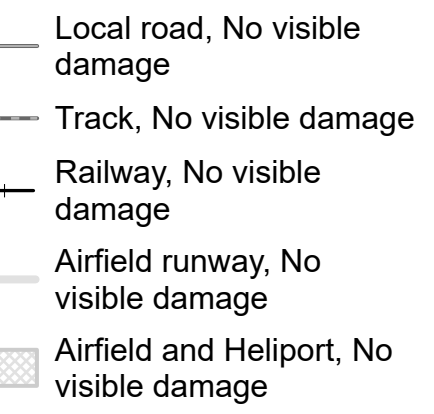
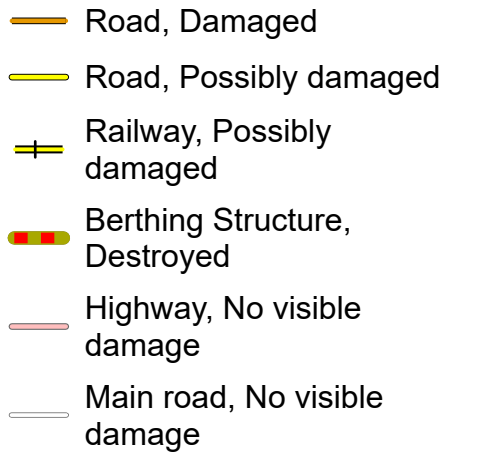
Crisis Information



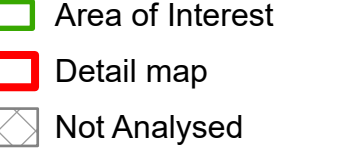
Built Up Grading



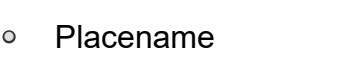
Transportation Grading



General Information



Placenames



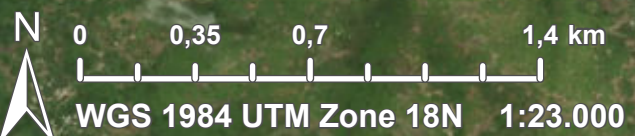
Hydrography



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 images: Legion © Vantor (2025), provided by European Space Imaging (acquired on 19/03/2025 at 15:59 UTC, resolution 0.3 m), and WorldView-3 © Vantor (2025), provided by European Space Imaging (acquired on 19/03/2025 at 15:49 UTC, resolution 0.3 m).
Post-event image: Legion © Vantor (2025), provided by European Space Imaging (acquired on 31/10/2025 at 16:09 UTC, resolution 0.5 m).
This image is used as background image.
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The thematic layer has been derived from post-event satellite image by means of visual interpretation.



Map produced by e-GEOS released by e-GEOS on the 01/11/2025.

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



PROGRAMME OF THE
EUROPEAN UNION





EMSR847 - AOI18
Tropical storm Melissa in the Caribbean
MONTEGO BAY

Situation as of 31/10/2025 16:09 UTC
Grading - Detail map 02



- Crisis Information**

 - Flood trace
 - Landslide

Built Up Grading

 - Destroyed
 - Damaged
 - Possibly damaged

Transportation Grading

 - Road, Damaged
 - Road, Possibly damaged
 - Railway, Possibly damaged
- Main road, No visible damage
 - Local road, No visible damage
 - Track, No visible damage
 - Railway, No visible damage

General Information

 - Area of Interest
 - Not Analysed

Placenames

 - Placename

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Consequences within the AOI

			LATEST IMPACT	
			EO-based observation*	
Crisis information	Flood trace		ha	48,8
	Landslide		ha	17,5
	Maximum of all extents**		ha	66,2

Estimated population		Inhabitants	No.	Destroyed	Damaged	Possibly damaged***	Total affected****	Total in AOI
							- 1.600	- 150.000
Assets	Built-up	Residential Buildings	No.	0	0	0	0	37.613
		Institutional	No.	0	0	0	0	4
		Police station	No.	0	0	0	0	4
		Wholesale and retail trade buildings	No.	1	1	5	7	333
		Hotels and similar buildings	No.	0	9	0	9	9
		Industrial buildings	No.	1	5	0	6	9
		Industrial buildings and warehouses	No.	10	11	3	24	24
		Public entertainment buildings	No.	0	1	1	2	3
		School, university and research buildings	No.	0	0	2	2	16
		Hospital or institutional care buildings	No.	0	0	5	5	6
		Other non-residential buildings	No.	0	1	0	1	1
		Buildings used as places of worship and for religious activities	No.	0	1	0	1	3
		Other buildings not elsewhere classified	No.	0	0	0	0	5
		Hotel buildings	No.	1	6	1	8	76
		Communication buildings, stations, terminals and associated buildings	No.	0	0	0	0	4
		Airfield runways	ha	0	0	0	0	161,3
		Airfield runways	km	0	0	0	0	8,2
	Transportation	Berthing Structure	km	0,02	0	0	0,02	0,02
		Highways	km	0	0	0	0	21,9
		Primary Road	km	0	0	0,4	0,4	106,5
		Secondary Road	km	0	0	0,03	0,03	16,8
		Local Road	km	0	0,3	10,2	10,5	489,6
		Can Track	km	0	0	0,3	0,3	22,2
		Long-distance railways	km	0	0	0,6	0,6	6,2
	Facilities	Settling Basin	ha	0	0	0	0	42,5
		Breakwater	ha	0	0	0	0	0,7
		Constructions for mining or extraction	ha	0	0	0	0	33,5
		Power plant constructions	ha	0	0	0	0	11,7
		Sport and recreation constructions	ha	0	0	0	0	45,6
		Long-distance pipelines, communication and electricity lines	km	0	0	0	0	9,4
		Breakwater	km	0	0	0	0	0,5
	Land use	Other	ha				50,3	4.206,6
		Forests	ha				12,5	2.964,7
		Shrub and/or herbaceous vegetation association	ha				3,5	760,8
		Inland wetlands	ha				0,01	143,1

* 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



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