

EMSR703 - AOI01
Tropical Cyclone in Mexico
ACAPULCO COAST

Situation as of 28/10/2023 17:23 UTC
Grading MONIT01 - Overview map 01



Flooded area 589.1 ha
Landslide 11.4 ha
Potentially affected population ~ 380,000

Affected Built-up and Transportations

Road 28.1 km
Bridge 8 No.
Built-up 4750.2 ha

- | | |
|---|------------------------------------|
| Crisis Information | General Information |
| Flooded Area | Area of Interest |
| Mass Movement | Detail map |
| Built Up Grading | Image Footprint |
| Destroyed | Not Analysed |
| Damaged | Administrative boundaries |
| Possibly damaged | Province |
| Transportation Grading | Placenames |
| Bridge and elevated highway, Damaged | Placename |
| Bridge and elevated highway, Destroyed | Hydrography |
| Bridge and elevated highway, Possibly damaged | Stream |
| Main road, No visible damage | Lake |
| Local road, No visible damage | Land Subject to Inundation |
| Road, Possibly damaged | River |
| Highway, No visible damage | Stream |
| | Facilities |
| | Sport and recreation constructions |
| | Transportation |
| | Airfield |
| | Helipad |

Event:
On 25 October around 06:25 UTC, TC OTIS (Cat. 5 Hurricane) made landfall over the area of the coastal City of Acapulco (central Guerrero State, southern Mexico) with maximum sustained winds of 270 km/h OTIS-23.

OTIS-23 caused floods and landslides that resulted in evacuations and severe damage. As of 26 October, 34,522 evacuated families in 631 temporary shelters across the affected area according to WHO PAHO and national authorities. Copernicus EMS Rapid Mapping is requested to provide damage assessment emergency mapping.

Data sources and analysis: Pre-event image: ESRI World Imagery © DigitalGlobe (acquired on 06/01/2023, resolution 0.5 m).
Post-event images: WorldView-3 © Maxar Technologies, Inc. (2023), (acquired on 28/10/2023 at 17:21 UTC, 17:22 UTC and 17:23 UTC, resolution 0.5 m).
Pléiades Neo © CNES (2023), distributed by Airbus DS (acquired on 26/10/2023 at 17:13 UTC, resolution 0.3 m).

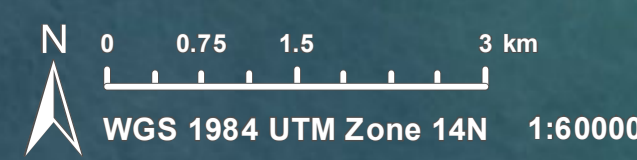
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Base vector layers: OpenStreetMap © OpenStreetMap contributors (2023), Wikimapia.org, GeoNames 2015. Global Administrative Areas (2012), refined by the producer. Globe Land 30 (2010).

Inset maps: JRC 2013, Natural Earth 2012, GeoNames 2015.
Population data: GHS Population Grid © European Commission, 2023 https://ghsl.jrc.ec.europa.eu/ghs_pop2023.php
Digital Elevation Model: FABDEM (ForestAndBuildingsremovedCopernicusDEM) removes building and tree height biases from the Copernicus GLO 30 Digital Elevation Model (DEM) (Airbus,2020).

Map produced by SERTIT released by e-GEOS on the 01/11/2023.

Details on this activation and service conditions available through the QR code or at the link: <https://rapidmapping.emergency.copernicus.eu/EMSR703>



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Situation as of 28/10/2023 17:23 UTC
Grading MONIT01 - Detail map 02



Flooded area 263 ha (45 % of total affected)
 Potentially affected population ~ 3,400 (0.9 % of total affected)

Affected Built-up and Transports

Road 3 km (11 % of total affected)
 Built-up 111.8 ha (2.4 % of total affected)

- | | |
|---|---|
| <p>Crisis Information</p> <ul style="list-style-type: none"> Flooded Area Destroyed Damaged Possibly damaged <p>Built Up Grading</p> <ul style="list-style-type: none"> Main road, No visible damage Track, No visible damage Airfield runway, No visible damage Local road, No visible damage Road, Possibly damaged | <p>General Information</p> <ul style="list-style-type: none"> Area of Interest <p>Hydrography</p> <ul style="list-style-type: none"> Stream Lake Land Subject to Inundation <p>Facilities</p> <ul style="list-style-type: none"> Sport and recreation constructions <p>Transportation</p> <ul style="list-style-type: none"> Airfield Helipad |
|---|---|

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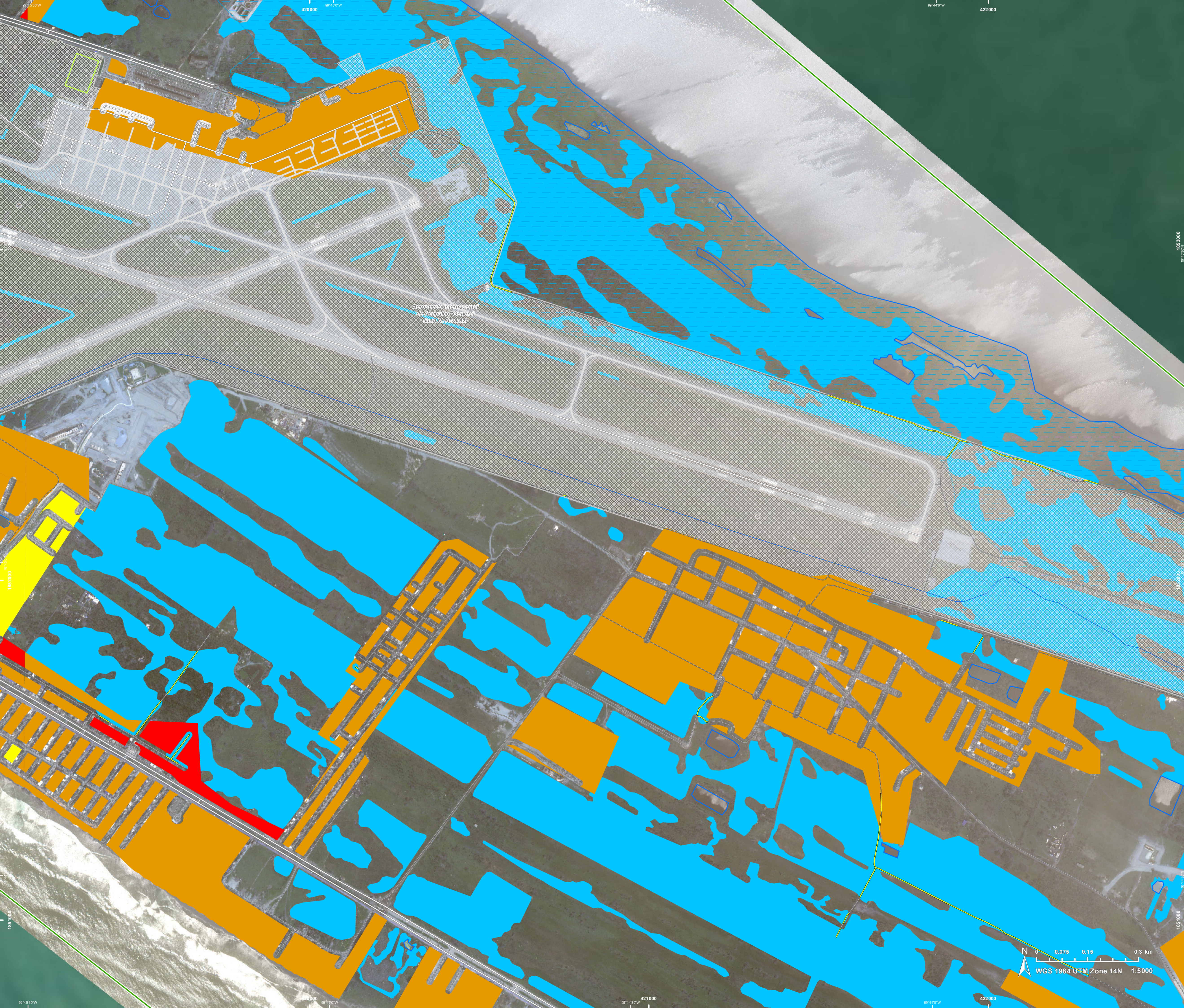
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Situation as of 28/10/2023 17:23 UTC
Grading MONIT01 - Detail map 03



Flooded area 0.052 ha (~0.01% of total affected)
Potentially affected population ~2141 (0.5% of total affected)

Affected Built-up and Transportations

Built-up 186.4 ha (4% of total affected)

- Crisis Information**
 - Flooded Area
 - Built Up Grading
 - Destroyed
 - Damaged
 - Possibly damaged
 - Transportation Grading
 - Main road, No visible damage
- General Information**
 - Area of Interest
 - Image Footprint
 - Placenames
 - Placename
 - Hydrography
 - Lake
 - Land Subject to Inundation

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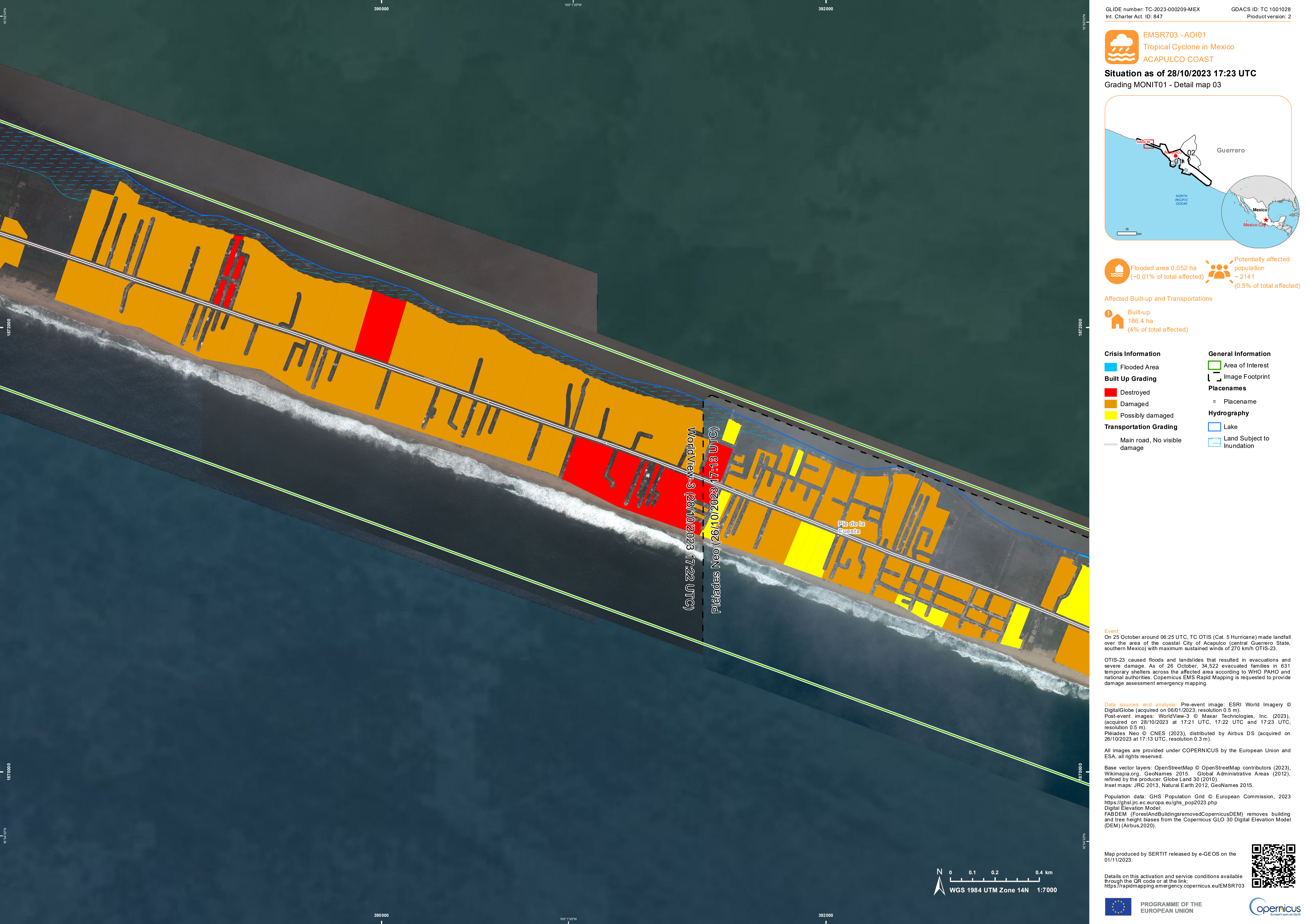
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Consequences within the AOI							
	Unit of measurement	Destroyed	Damaged	Possibly damage*	Total affected**	Total in AOI	
Flooded area	ha					589.1	
Landslide	ha					11.4	
Estimated population	Number of inhabitants				~ 380 000	~ 380 000	
Built-up	Residential Buildings	ha	1 437.4	2 678.7	169.3	4 285.4	4 285.4
	Other non-residential buildings	ha	47.0	404.3	13.5	464.8	464.8
Transportation	Airfield runways	ha	0	0	0	0	494.5
	Helipad	ha	0	0	0	0	0.01
	Airfield runways	km	0	0	0	0	14.3
	Highways	km	0	0	0	0	16.0
	Primary Road	km	0	0	0.5	0.5	121.4
	Secondary Road	km	0	0	0	0	66.8
	Local Road	km	0	0.1	22.1	22.2	1 165.2
	Cart Track	km	0	0.02	4.9	4.9	54.3
	No Driveway	km	0	0.02	0.5	0.5	60.2
Bridges and elevated highways	No.	1	1	6	8	8	
Facilities	Sport and recreation constructions	ha	0	0	0	0	59.3
	Long-distance pipelines, communication and electricity lines	km	0	0	0	0	29.4
Land use	Forests	ha				305.8	4 998.4
	Inland wetlands	ha				210.7	970.2
	Other	ha				59.2	7 186.0
	Heterogeneous agricultural areas	ha				15.5	107.8
	Shrub and/or herbaceous vegetation association	ha				9.3	376.7
	Open spaces with little or no vegetation	ha				0	67.5
* Presence of damage proxies and proximity with destroyed/damaged asset							
** Sum of all damage classes							

Disclaimer:

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

<https://emergency.copernicus.eu/mapping/ems/online-manual-rapid-mapping-products>

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Data access:

All data displayed on the map(s), as well as the Physiography and Land Use - Land Cover layers, 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.

Access to the portal



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