

**EMSR861 - AOI05**  
Storm Kristin and Flooding in Central Portugal,  
Galicia and Andalusia, Spain  
**COIMBRA**

**Situation as of 01/02/2026 18:34 UTC**  
Delineation - Overview map 01






**Flooded area**  
EO-based 7,722.7 ha  
Model-based 4,006.8 ha




**Potentially affected population**  
~ 270


**Potentially Affected Built-up and Transportations**



**Built-Up**  
5.4 ha



**Road**  
422.6 km



**Railway**  
11.5 km

**Estimated flood depth (m)**

- Below 0.50
- 0.50 to 1.00
- 1.00 to 2.00
- 2.00 to 4.00
- Above 4.00

**General Information**

- Area of Interest
- Image Footprint
- Not Analysed

**Administrative Boundaries**

- Region
- Province

**Built-Up Area**

- Residential
- Non residential
- School, university and research buildings
- Hospital or institutional care buildings
- Military

**Hydrography**

- Lake, River

**Facilities**

- Long-distance pipelines or lines
- Water or Aquatic infrastructure
- Dam
- Mining or extraction site
- Water Well
- Power plant
- Sport and recreation constructions
- Dump Site
- Water or Aquatic infrastructure
- Dam

**Transportation**

- Highway
- Main road
- Railway
- Airfield runway
- Airfield
- Heliport
- Harbour

**Event** On 26 January 2026 at 18:00, Storm Kristin is reported to have affected central Portugal (Coimbra Region, Leiria Region, Médio Tejo and Beira Baixa sub-regions) and a river overflow is forecast to affect the Guadalquivir River Basin in the provinces of Granada, Jaén and Córdoba (Andalusia, Spain). The event is on-going and spreading, with storm-related damage reported to affect buildings, infrastructure, transport networks and utilities in central Portugal, and flooding expected to affect buildings and infrastructure in the Guadalquivir floodplains, including urban areas, in Andalusia. Copernicus EMS Rapid Mapping is requested to provide storm and flood extent and damage assessment emergency mapping for subsequent analyses, and to improve understanding of the Guadalquivir basin's response to this type of event.


**Data sources and analysis:** Pre-event image: Sentinel-2 (2026) (acquired on 14/12/2025 at 11:23 UTC, resolution 10.0 m).  
Post-event image: Sentinel-1 (2026) (acquired on 01/02/2026 at 18:34 UTC, resolution 20.0 m).  
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The thematic layer has been derived from post-event satellite image using a semi-automatic approach. Please be aware that the thematic accuracy might be lower in urban and forested areas due to inherent limitations of the SAR analysis technique.

The flooded area corresponds to the water observed in the most recent satellite imagery, excluding the permanent water.  
An extrapolated flood extent is generated by integrating observed flood areas with a Digital Terrain Model (DTM). The model's accuracy and spatial coverage depend on DTM resolution and quality, enabling the prediction of potentially flooded areas in regions with limited visibility in imagery, such as urban and forested zones.

Map produced by Telespazio Iberica released by e-GEOS on the 02/02/2026.

Details on this activation and service conditions available through the QR code or at the link: <https://mapping.emergency.copernicus.eu/activations/EMSR861>





## Consequences within the AOI

Crisis information		Unit of measurement	LATEST IMPACT		
			Imagery-based observation*	Model-based output	Imagery- and Model-based results
	Flooded area	ha	7,722.7	4,006.8	11,729.5
	Maximum of all extents**	ha	7,722.7	4,006.8	11,729.5

				POTENTIALLY AFFECTED		TOTAL POTENTIALLY AFFECTED	Total in AOI
Estimated population		Inhabitants	No.	~ 70	~ 200	~ 270	~ 980,000
Assets	Built-up	Residential Buildings	ha	0	0.1	0.1	6,820.2
		Office buildings	ha	0	0	0	82.4
		Wholesale and retail trade buildings	ha	0	0.01	0.01	55.5
		Industrial buildings	ha	0	5.2	5.2	4,001.5
		School, university and research buildings	ha	0	0	0	568.5
		Hospital or institutional care buildings	ha	0	0	0	50.8
		Military	ha	0	0	0	896.9
		Cemetery	ha	0.01	0.1	0.1	170.4
		Airfield runways	ha	0	0	0	732.1
		Navigable canals	ha	0	0.4	0.4	1.7
	Transportation	Helipad	ha	0	0	0	0.3
		Harbours	ha	0	0	0	3.7
		Harbours	ha	0	0	0	0.04
		Airfield runways	km	0.6	0	0.6	28.0
		Navigable canals	km	0	1.2	1.2	3.8
		Highways	km	0.3	7.5	7.8	1,626.6
		Primary Road	km	0.8	10.5	11.4	1,348.2
		Secondary Road	km	1.5	2.0	3.5	2,124.8
		Local Road	km	5.8	24.1	30.0	16,262.9
		Cart Track	km	146.1	223.8	369.9	21,282.8
		Railway Yard	km	0	0	0	0.3
		Harbours	km	0	0	0	0.1
		Long-distance railways	km	0.3	11.2	11.5	797.7
	Facilities	Settling Basin	ha	0	1.1	1.1	98.0
		Breakwater	ha	0	1.9	1.9	14.7
		Dams	ha	0	0	0	6.1
		Constructions for mining or extraction	ha	0	0	0	1,965.4
		Power plant constructions	ha	0	0	0	164.6
		Sport and recreation constructions	ha	5.7	15.0	20.7	1,502.5
		Other civil engineering works not elsewhere classified	ha	0	0.01	0.01	205.7
		Long-distance pipelines, communication and electricity lines	km	11.3	9.6	20.9	2,741.4
		Local pipelines and cables	km	4.7	5.4	10.2	574.8
		Aqueducts, irrigation and cultivation waterworks	km	1.0	9.5	10.4	46.3
	Land use	Breakwater	km	0	0	0	0.4
		Dams	km	0	0.1	0.1	4.3
		Arable land	ha	7,161.5	3,186.2	10,347.7	43,956.5
		Heterogeneous agricultural areas	ha	156.4	163.0	319.3	194,415.1
		Coastal wetlands	ha	156.0	235.0	390.9	1,278.8
		Shrub and/or herbaceous vegetation association	ha	144.3	65.2	209.5	124,084.7
		Inland wetlands	ha	54.8	99.2	154.0	393.3
		Other	ha	38.1	193.0	231.1	89,294.3
		Forests	ha	10.0	46.5	56.5	243,517.6
		Permanent crops	ha	1.2	0.6	1.8	60,855.1
		Open spaces with little or no vegetation	ha	0.6	18.2	18.8	6,435.8
		Pastures	ha	0	0	0	643.7

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

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

## 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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Access to the portal



## 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 (2026); Wikimapia.org; GeoNames 2015;

© EuroGeographics, © TurkStat. Source: European Commission – Eurostat/GISCO, 2024.

Corine Land Cover (CLC) 2018.

Inset Maps: Natural Earth 2023; HydroLAKES 2016 by HydroSHEDS;

© EuroGeographics, © TurkStat. Source: European Commission – Eurostat/GISCO, 2024.

## Digital Elevation Model:

FABDEM (ForestAndBuildingsremovedCopernicusDEM) removes building and tree height biases from the Copernicus GLO 30

Digital Elevation Model (DEM) (Airbus, 2020).

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