



EMSR861 - AOI27
Storm Kristin and Flooding in Central Portugal,
Galicia and Andalusia, Spain
RIO TIETAR

Situation as of 03/02/2026 18:18 UTC
Delineation MONIT01 - Overview map 01



Flooded area
EO-based 175.8 ha
Model-based 150.6 ha

Potentially affected population
~ Not available

Potentially Affected Transportations

Road
0.9 km

- | Estimated flood depth (m) | Hydrography |
|---------------------------|----------------------------------|
| Below 0.50 | Lake, River |
| 0.50 to 1.00 | Facilities |
| 1.00 to 2.00 | Long-distance pipelines or lines |
| 2.00 to 4.00 | Local pipelines or lines |
| Above 4.00 | Power plant |
- | General Information | Transportation |
|---|------------------------------------|
| Area of Interest | Sport and recreation constructions |
| Built-Up Area | Transportation |
| Residential | Main road |
| Non residential | Local road |
| School, university and research buildings | Track |

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 (2025) (acquired on 27/10/2025 at 11:12 UTC, resolution 10 m). This image is used as background image. Post-event image: Sentinel-1 (2026) (acquired on 03/02/2026 at 18:18 UTC, resolution 20 m). 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. 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 models 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.

Consequences within the AOI

				LATEST IMPACT		
			Unit of measurement	Imagery-based observation*	Model-based output	Imagery- and Model-based results
Crisis information	Flooded area		ha	175.8	150.6	326.5
	Maximum of all extents**		ha	175.8	150.6	326.5

				POTENTIALLY AFFECTED		TOTAL POTENTIALLY AFFECTED	Total in AOI
Estimated population		Inhabitants	No.	NA	NA	NA	~ 2,100
Assets	Built-up	Residential Buildings	ha	0	0	0	8.2
		Industrial buildings	ha	0	0	0	203.9
		School, university and research buildings	ha	0	0	0	0.1
	Transportation	Primary Road	km	0	0.1	0.1	2.8
		Secondary Road	km	0	0	0	3.7
		Local Road	km	0	0	0	40.8
		Cart Track	km	0.4	0.4	0.8	76.9
	Facilities	Power plant constructions	ha	0	0	0	269.4
		Sport and recreation constructions	ha	0	0	0	0.8
		Long-distance pipelines, communication and electricity lines	km	1.3	1.4	2.7	38.2
		Local pipelines and cables	km	0.2	0.2	0.3	3.4
	Land use	Arable land	ha	152.1	54.5	206.5	4,316.6
		Other	ha	17.4	88.5	105.9	503.1
		Shrub and/or herbaceous vegetation association	ha	2.7	1.7	4.4	1,869.9
		Forests	ha	1.9	2.1	4.0	671.7
		Open spaces with little or no vegetation	ha	1.7	3.5	5.2	16.8
		Permanent crops	ha	0	0.4	0.4	350.3
		Pastures	ha	0	0	0	46.4
		Heterogeneous agricultural areas	ha	0	0	0	2,228.2

* 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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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).

