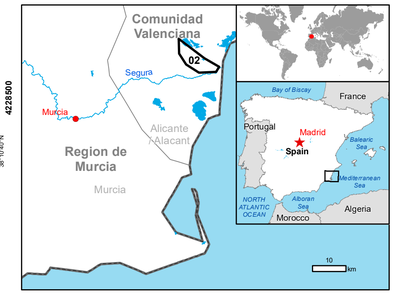
GLIDE number: N/A
Int. Charter call ID: N/A

Activation ID: EMSR388
Product N.: 02MURCIA, v1

Dolores - SPAIN

Flood - Situation as of 22/09/2019

Delineation MONIT02 - Overview map 01



Cartographic Information

1:20000

Full color A1, 200 dpi resolution

0 0.25 0.5 1 km

N

Grid: WGS 1984 UTM Zone 30N map coordinate system
Tick marks: WGS 84 geographical coordinate system

Legend

Crisis Information
- Flooded Area (22/09/2019 10:44 UTC)
- Previous Flooded Area (18/09/2019 10:51 UTC)
- Flood trace (22/09/2019 10:44 UTC)

General Information
- Area of Interest

Administrative boundaries
- Municipality

Placenames
- Placename

Hydrography
- River
- Stream
- Lake
- Reservoir

Transportation
- Primary Road
- Secondary Road

Land use - Land Cover
Features available in the vector package

Consequences within the AOI				
	Unit of measurement		Affected	Total in AOI
Flooded area	ha		3562.4	
Flood trace	ha		191.1	
Estimated population	Number of inhabitants		N/A	12262
Transportation	Primary Road	km	2.4	2.4
	Secondary Road	km	22.5	41.5
	Local Road	km	34.2	129.5
	Cart Track	km	152.7	223.3
Land use	Arable land	ha	3400.6	4140.1
	Permanent crops	ha	48.7	106.1
	Heterogeneous agricultural areas	ha	364.4	1098.2
	Forests	ha	0.7	0.9
	Shrub and/or herbaceous vegetation association	ha	0.6	2.7
	Inland wetlands	ha	4.4	39.5

Map Information

Heavy rainfall, hail, winds up to 100 km/h and huge waves have affected the Southeast of the Iberian Peninsula, causing floods in many villages with much damage to infrastructure and buildings in the provinces of Valencia, Alicante, Murcia and Albacete. The request is for Delineation and monitoring over large AOIs and damage grading analysis over focused badly hit areas.

The present map shows the flood grading product in the area of Murcia (Spain). The thematic layer has been derived from post-event satellite image using a semi-automatic approach. The estimated geometric accuracy (RMSE) is 15 m or better from native positional accuracy of the background satellite image.

Relevant date records (UTC)

Event	11/09/2019 12:00	Situation as of	22/09/2019 10:44
Activation	12/09/2019 13:37	Map production	24/09/2019

Data sources

Pre-event image: Sentinel-2B (2019) (acquired on 19/08/2019 at 10:50 UTC, GSD 10.0 m, approx. 0% cloud coverage in AoI, 0° off-nadir angle), provided under COPERNICUS by the European Union and ESA.

Post-event image: Landsat 8 © courtesy of the U.S. Geological Survey (acquired on 22/09/2019 at 10:44 UTC, GSD 15.0 m, approx. 0% cloud coverage in AoI).
Pléiades-1A © CNES (2019), distributed by Airbus DS (acquired on 18/09/2019 at 10:51 UTC, GSD 0.5 m, approx. 0% cloud coverage in AoI, 17.2° off-nadir angle), provided under COPERNICUS by the European Union and ESA, all rights reserved.

Base vector layers: OpenStreetMap © OpenStreetMap contributors, Wikimapia.org, GeoNames 2015, Corine Land Cover (CLC) 2012, refined by the producer.
Inset maps: JRC 2013, EuroBoundaryMap 2017 © EuroGeographics, Natural Earth 2012, CCM River DB © EUJRC2007, GeoNames 2013.

Population data: GHS Population Grid © European Commission, 2015 http://data.europa.eu/89h/jrc-ghsl-ghs_pop_gpw4_globe_r2015a.
Digital Elevation Model: EU-DEM (25 m)

Disclaimer

Products elaborated in this Copernicus EMS Rapid Mapping activity are realized to the best of our ability, within a very short time frame, optimising the available data and information. All geographic information has limitations due to scale, resolution, date and interpretation of the original sources. No liability concerning the contents or the use thereof is assumed by the producer and by the European Union.

Delivery formats are Layered Geospatial PDF, GeoJPEG and vector (ESRI shapefiles, Google Earth KML, GeoJSON).

Map produced by e-GEOS released by e-GEOS (ODO).

For the latest version of this map and related products visit http://emergency.copernicus.eu/EMSR388

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