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Product N.: 02LACRUZDERIOGRANDE, v1

**La Cruz De Rio Grande - GUATEMALA, HONDURAS, NICARAGUA**  
**Flood - Situation as of 22/11/2020**  
Delineation - Overview map 01

**Cartographic Information**  
1:500000  
Full color A1, 200 dpi resolution  
0 1 2 4 km  
Grid: WGS 1984 UTM Zone 16N map coordinate system  
Tick marks: WGS 84 geographical coordinate system

**Legend**  
**Crisis Information**  
Flooded Area (22/11/2020 23:21 UTC)  
**General Information**  
Area of Interest  
**Administrative boundaries**  
Region  
Province  
**Placenames**  
Placename  
**Built-Up Area**  
Residential  
**Hydrography**  
River  
River  
**Transportation**  
Local Road  
Cart Track  
**Transportation**  
Local Road  
Cart Track  
**Land Use - Land Cover**  
Features available in the vector package

Consequences within the AOI		Unit of measurement	Affected	Total in AOI
Flooded area		ha		454.3
Estimated population		Number of inhabitants		25316
Buildings	Residential Buildings	ha	0.0	2.1
Transportation	Local Road	km	0.0	21.2
	Cart Track	km	0.5	24.6
	No Driveway	km	0.0	1.1
Land use	Forest	ha	435.0	50948.3
	Shrub and/or herbaceous vegetation association	ha	16.3	931.4
	Other	ha	2.7	584.1

**Map Information**  
Hurricane Iota is an extremely strong hurricane bringing very high levels of rainfalls to Honduras, Nicaragua and Guatemala. The risk of flooding is extremely high and many 20yr + returns are to be expected as soil is already saturated by the passage of a previous hurricane (Eta) less than two weeks ago.  
The present map shows the flood delineation in the area of La Cruz de Rio Grande (Nicaragua). The thematic layer has been derived from post-event satellite image using a semi-automatic approach. The estimated geometric accuracy (RMSE) is 30 m or better, from native positional accuracy of the background satellite image.

**Relevant date records (UTC)**

Event	17/11/2020 00:00	Situation as of	22/11/2020 23:21
Activation	17/11/2020 14:23	Map production	23/11/2020

**Data sources**  
Pre-event image: Sentinel-2A/B (2020) (acquired on 20/04/2020 at 16:05 UTC, GSD 10.0 m, approx. 10% cloud coverage in AOI) provided under COPERNICUS by the European Union and ESA.  
Post-event image: COSMO-SkyMed © ASI (2020), distributed by e-GEOS S.p.A. (acquired on 22/11/2020 at 23:21 UTC, GSD 30.0 m), provided under COPERNICUS by the European Union and ESA, all rights reserved.  
Base vector layers: OpenStreetMap © OpenStreetMap contributors, Wikimapia.org, GeoNames 2015, Globe Land 30 (2010), Global Administrative Areas (2012), refined by the producer.  
Inset maps: JRC 2013, Natural Earth 2012, GeoNames 2013.  
Population data: GHS Population Grid © European Commission, 2019  
Digital Elevation Model: SRTM (90 m) (NASA/USGS)

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Please be aware that the thematic accuracy might be lower in urban and forested areas due to inherent limitations of the SAR analysis technique.  
Delivery formats are Layered Geospatial PDF, GeoJPEG and vector (ESRI shapefiles, Google Earth KML, GeoJSON).  
Map produced by e-GEOS released by SERTIT (ODO).  
For the latest version of this map and related products visit <https://emergency.copernicus.eu/EMSR482>  
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