GUATEMALA

Izabal Department

Imagery analysis: 23 November 2020 | Published 25 November 2020 | Version 1.0

Tropical Cyclone

TC20201119GTM

unitar
United Nations Institute for Training and Research

UNOSAT



Department/ Municipality	Total Area in AOI (km^2)	Flood Extent (km^2)	Total Population in AOI	Population Potentially Exposed	Percentage of Population Potentially Exposed in AOI
Izabal	**4,475**	**148**	**258,620**	**8,570**	**3%**
El Estor	516	4	23,160	200	1%
Livingston	2,354	6	75,840	280	<1%
Morales	409	24	39,170	2,210	6%
Puerto Barrios	1,196	114	120,450	5,880	5%

Satellite detected water in Izabal department of Guatemala as of 23 November 2020

This map illustrates satellite-detected surface waters in Izabal department of Guatemala as observed from a Sentinel-1 image acquired on 23 November 2020 at 05:45 Local time. Within the analyzed area of about 6,000 km2, a total of about 150 km2 of lands appear to be flooded. Based on Worldpop population data and the detected surface waters, about 8,600 people are potentially exposed or living close to flooded areas.

This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to UNITAR-UNOSAT.

Important Note: Flood analysis from radar images may underestimate the presence of standing waters in built-up areas and densely vegetated areas due to backscattering properties of the radar signal.

Legend

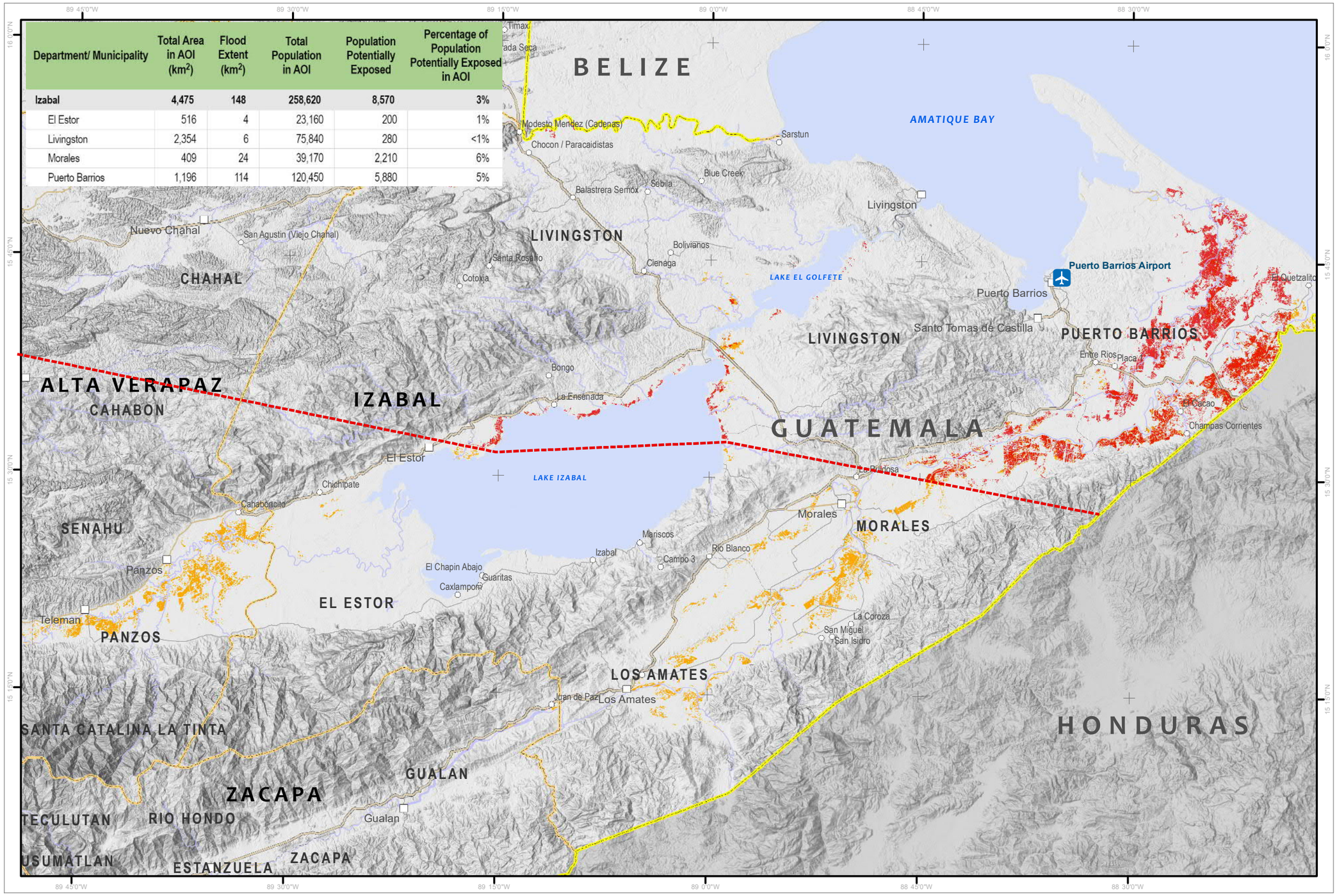
- Village
- City / Town
- Airport
- Primary road
- Secondary road
- Tertiary road
- River
- International boundary
- Department boundary
- Municipality boundary
- Analysis Extent
- Reference water
- Satellite detected water [23 November 2020]
- Satellite detected water [18 November 2020]

Map Scale for A3: 1:500,000

0 5 10 20 km

Analysis conduct with SNAP8.0 and ArcGIS v10.7

Coordinate System: WGS 1984 UTM Zone 16N
Projection: Transverse Mercator
Datum: WGS 1984



Satellite Data : Sentinel-1
Imagery Date (1): 23 November 2020, 11:45 UTC
Imagery Date (2): 19 November 2020, 00:06 UTC
Resolution : 10 m
Copyright : Contain modified Copernicus Sentinel Data [2020]
Source : ESA

Administrative boundaries: Instituto Nacional de Estad stica (INE)
Population data: WorldPop [2020]
Reference Water: The European Commission's JRC
Road: Open Street Map
Background: ALOS Global DSM

Analysis : UNITAR - UNOSAT
Production: UNITAR - UNOSAT

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