

Hydrometeorological Hazards Services

Flood Extent Mapping

The FEM service estimates the cumulative extent of flood traces using both Sentinel-1 and Sentinel-2 over a period around a flood event start date, provided in the form of classified raster (flooded, not flooded, permanent water body). The service is developed by CIMA Foundation and WASDI Sarl.

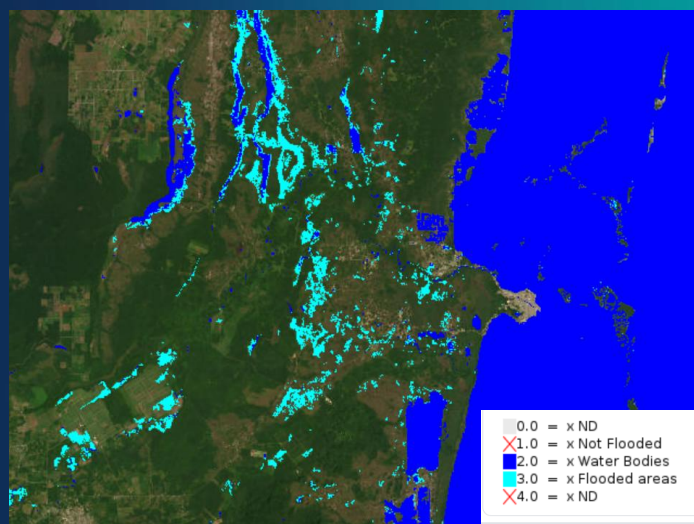


Figure 1 – Flood Extent map over Belize after Hurricanes Eta and Iota (2020)

Flood Depth Mapping

The FLDM service provides the maximum water Depth per pixel for a specific flood extent map. The service is co-developed by LIST and CIMA Foundation

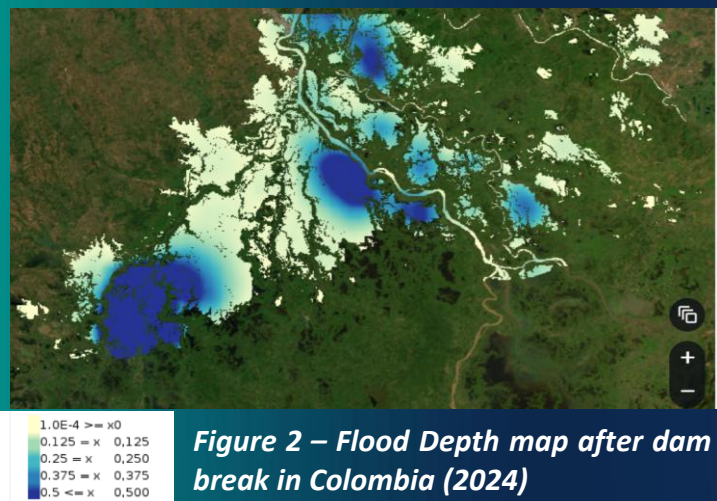


Figure 2 – Flood Depth map after dam break in Colombia (2024)

Flood Frequency Mapping

The FFM service estimates a series of flood records for a user defined period, providing flood extent maps and the associated flood frequency map.



Figure 3 – Flood Frequency map after dam break in Colombia (2024)

