PROGRAMME OF THE EUROPEAN UNION

Implemented by European Commission

The New CEMS-Floods Global Flood Hazard Maps

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1. What are the global flood hazard maps?

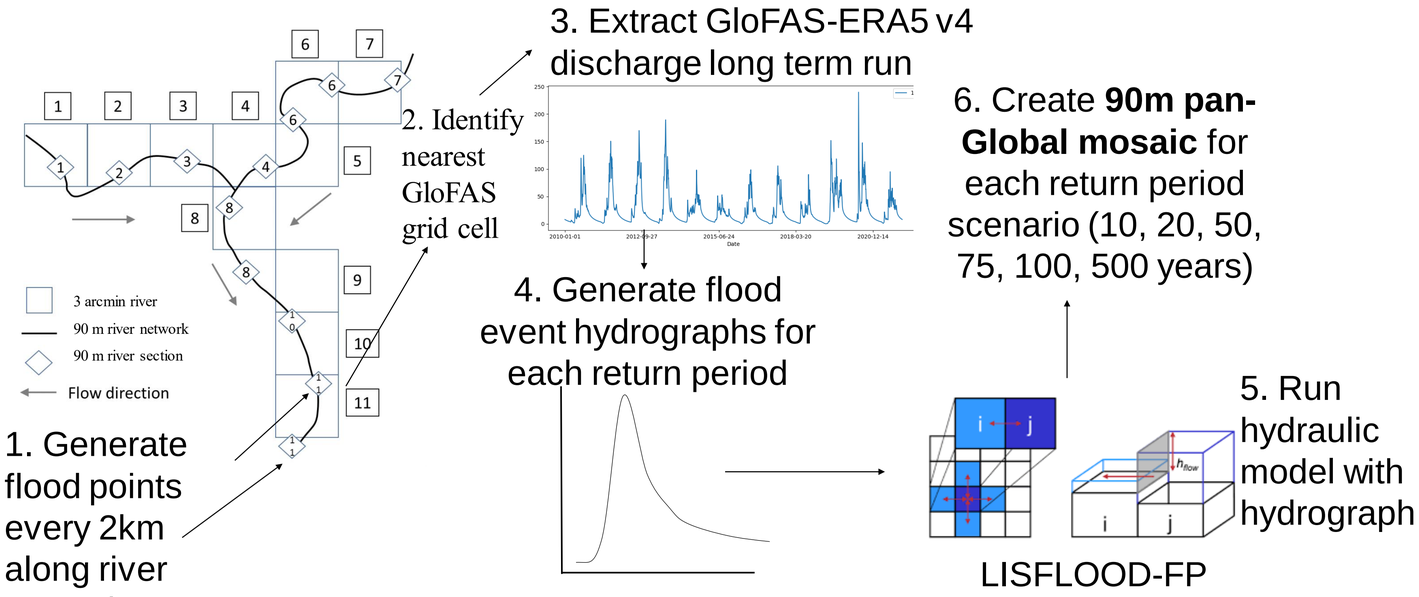
- A **catalogue of flood inundation** extents at **~90 m** for different return period scenarios are generated across the GloFAS domain

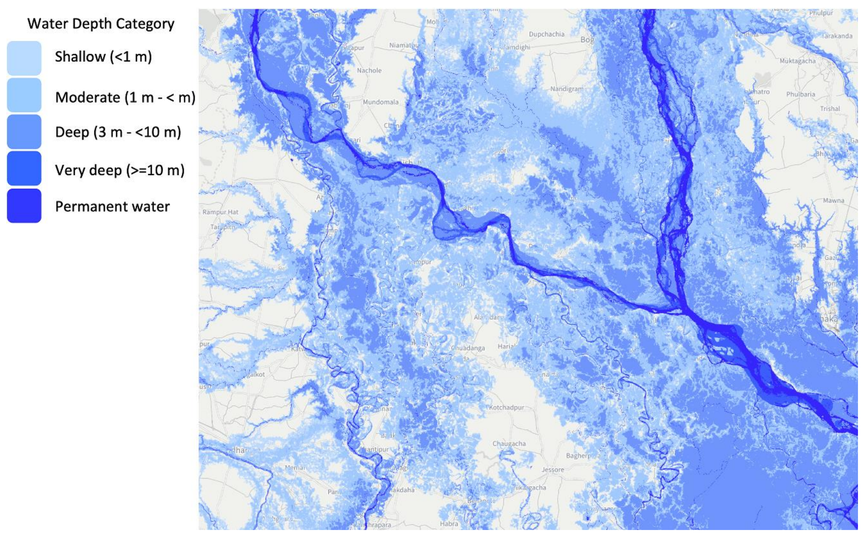
  Return period scenarios = 10, 20, 50, 75, 100, 200 and 500 years
- Realtime forecast product '**Rapid Flood Mapping**' layer

2. What's new in the flood hazard maps?

- Use of **MERIT-Hydro DEM**
  - **Higher** resolution
  - Hydrological terrain **corrections**
- GloFAS v4.0 long term run forcings (from ERA5)
- **Additional return period scenario** 75 years
- Generated for rivers with **upstream area >=500 km²** (previously >=2000 km²)

3. How are the flood maps created?

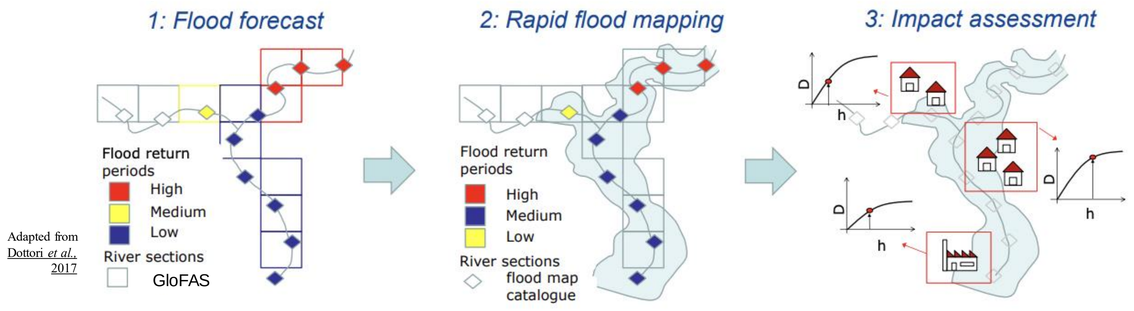


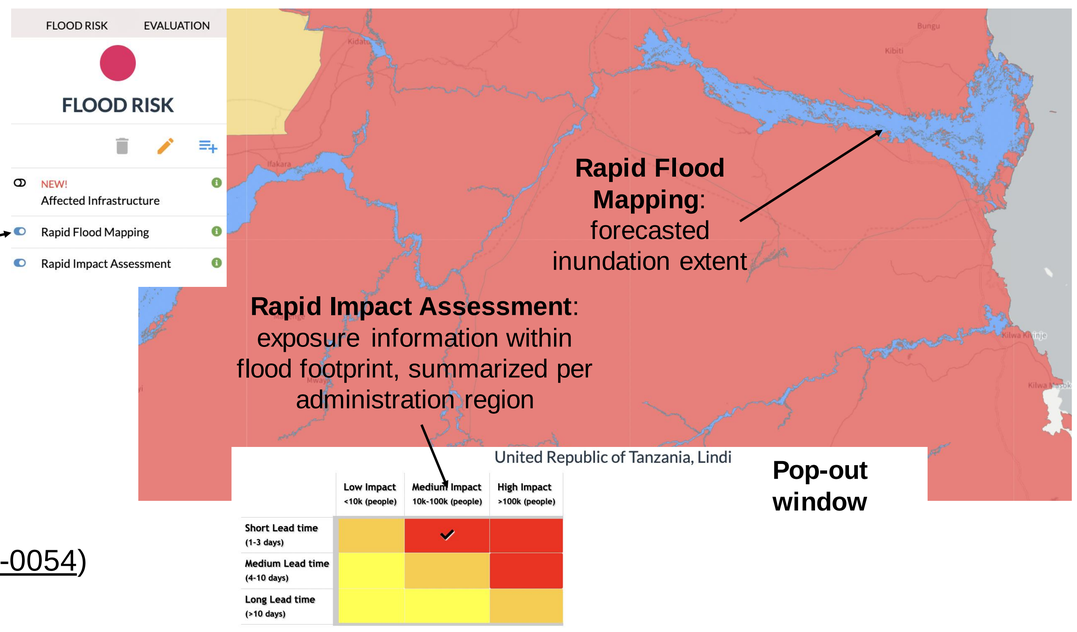


100 year return period flood depth in Ganges river. Available under 'Static' layers in GloFAS webviewer

4. How are the flood maps used in GloFAS?

1. In each 3arcmin cell, maximum 30 day ensemble median streamflow forecasted by GloFAS is extracted and converted to a return period
2. At each cell the corresponding flood map is extracted
3. Exposure data within the flood map is extracted

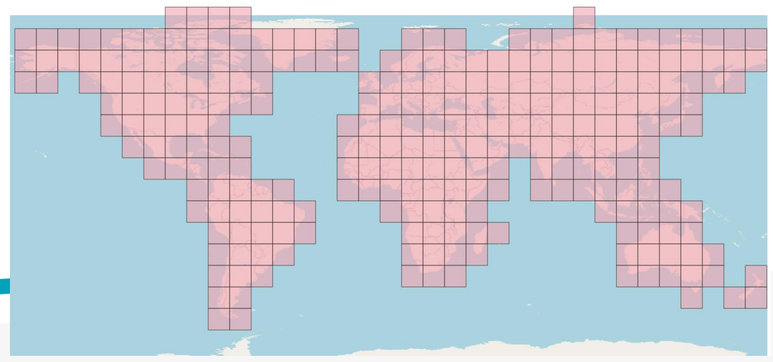




Exposure Information	Protected	Unprotected
Population affected [No. of people]	12300	12300
Population within floodplain affected [%]	NaN	NaN
Cities affected [% area affected]	N/A	N/A
Health facilities affected [No. of facilities]	N/A	N/A
Education facilities affected [No. of facilities]	N/A	N/A
Airport affected [No. of facilities]	N/A	N/A
Powerplant facilities affected [No. of facilities]	N/A	N/A
Artificial surfaces affected [ha]	67	67
Agricultural surfaces affected [ha]	4958	4958
Forest and semi-natural surfaces affected [ha]	94309	94309

5. How can I get the data?

- From the JRC website – soon (old data available at > https://data.jrc.ec.europa.eu/collection/id-0054)
- Flood depth data available in 5x5 degree tiles



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