

Global Flood Partnership: cooperation framework between scientific organizations and flood disaster managers worldwide

Aim

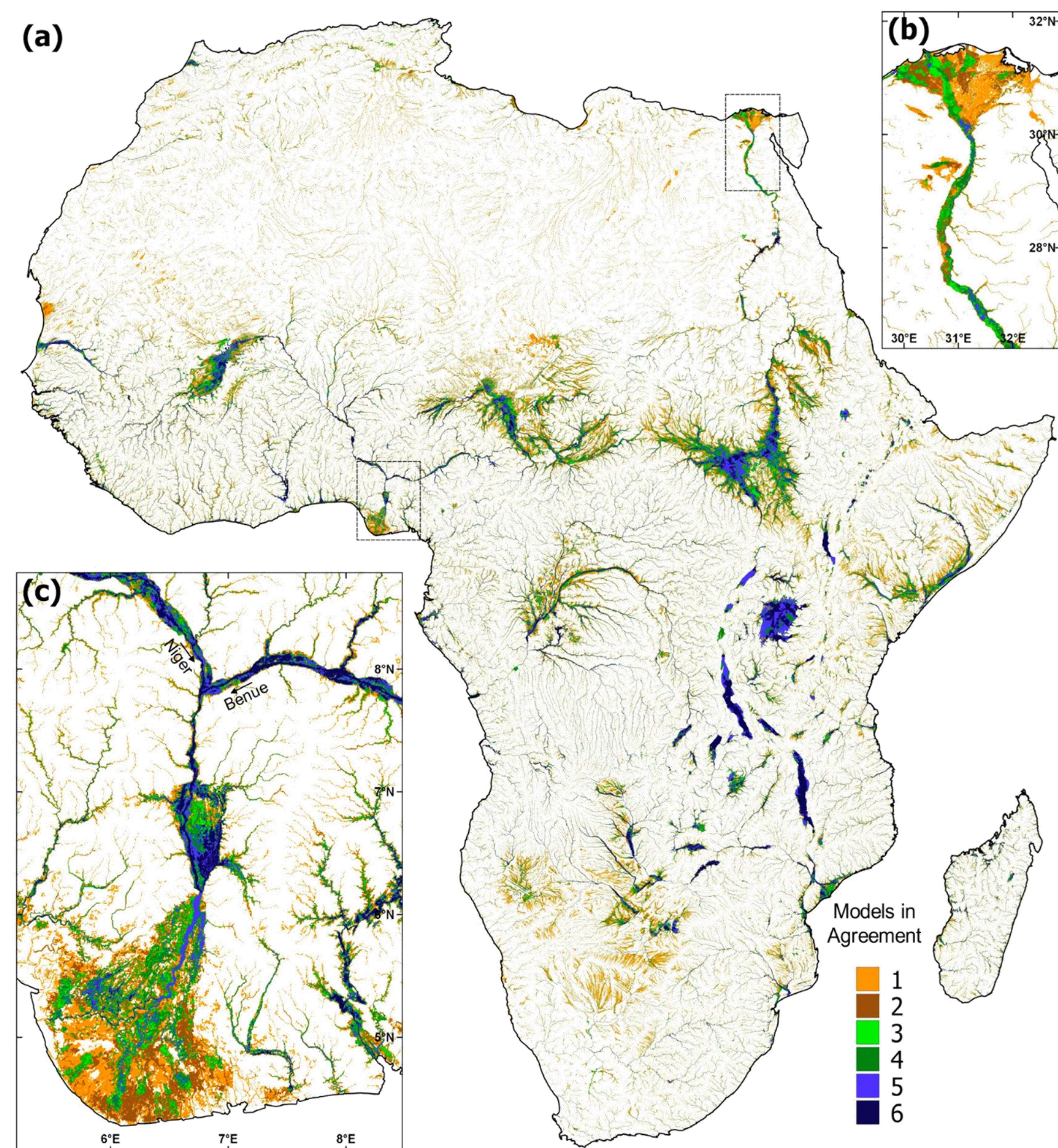
The Global Flood Partnership (GFP) is a cooperation framework between scientific organisations and flood disaster managers worldwide to develop flood observational and modeling infrastructure, leveraging on existing initiatives for better predicting and managing flood disaster impacts and flood risk globally.

Who we are

The GFP is a community of **researchers and practitioners** from a variety of countries and institutions including international organizations, the private sector, national authorities, universities, governmental research agencies and no-profit organizations. The GFP is made of people who join on a **voluntary basis** to contribute and benefit from a global network focused on flood risk reduction.

Collaboration

The GFP provides a platform to **share and promote** global flood risk management research and tools. Below is an example of a GFP collaboration comparing six global flood hazard models:



(a) Aggregated results for six models for a 1-in-100 year return period fluvial flood hazard for the African continent. Colour scale indicates how many models predict flooding. (b) Detail for the lower Nile. (c) Detail for the lower Niger, showing areas of strong agreement (narrow confined floodplains at the confluence of Benue and Niger Rivers) and areas of disagreement in the Niger coastal delta. Adapted from: Trigg, M. A., Birch, C. E., Neal, J. C., Bates, P. D., Smith, A., Sampson, C. C., Yamazaki, D., Hirabayashi, Y., Pappenberger, F., E Dutra, Ward, P. J., Winsemius, H. C., Salamon, P., Dottori, F., Rudari, R., Kappes, M. S., Simpson, A. L., Hadzilacos, G. and Fewtrell, T. J.: The credibility challenge for global fluvial flood risk analysis, Environ. Res. Lett., 11(9), 094014, [doi:10.1088/1748-9326/11/9/094014](https://doi.org/10.1088/1748-9326/11/9/094014), 2016

Bridging the gap

The GFP has established a **GFP Support Service** connecting scientists/developers of global scale flood risk management tools and models with practitioners.

It provides practitioners with access to tools and data based on the latest scientific developments of a global network of researchers in flood risk management. Researchers will benefit from the service by having access to use case studies that could provide a better understanding of the practitioners needs so future developments can be adjusted accordingly.

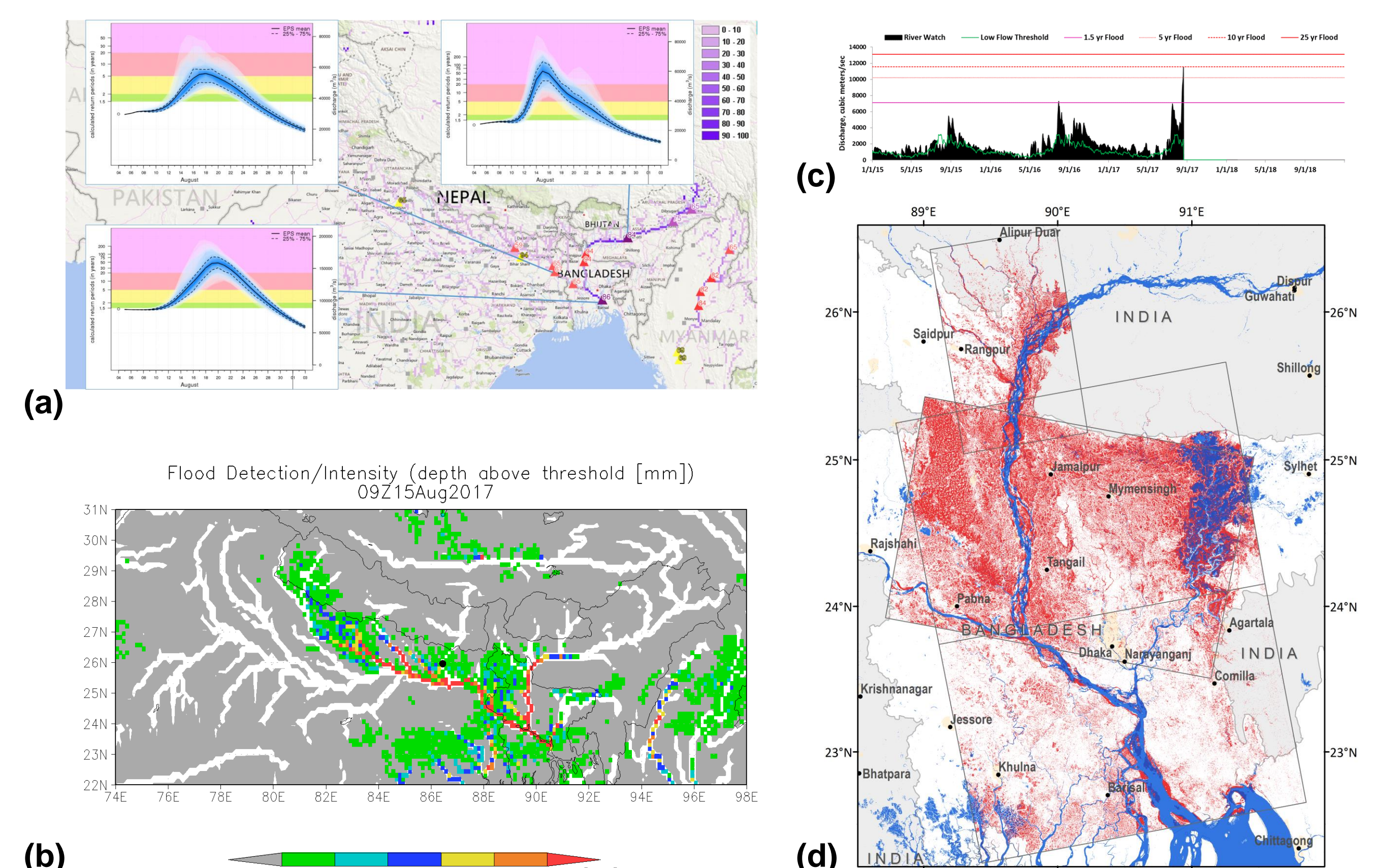
The GFP Support Service can be activated for any large scale forecasted or ongoing flood event around the world.

Anyone subscribed to the GFP mailing list can contribute to the GFP Support Service with data and tools.

The GFP Support Service in action

In August 2017, heavy and prolonged monsoon rains caused landslides and floods that killed about 1300 people and affected over 45 million people across India, Nepal and Bangladesh.

The GFP Support Service was activated on 7 August, three days before the start of the main flooding in the upper Brahmaputra, following a persistent signal of a major upcoming event from global forecasting tools such as the Copernicus Global Flood Awareness System. During the course of the event GFP participants shared a variety of information, ranging from early warning to satellite based flood monitoring products with end users such as the UN World Food Program, Red Cross, the EC Emergency Response Coordination Centre, NGOs or national authorities.



GFP products during the 2017 South Asia floods: (a) GloFAS forecasts, (b) GFMS flood detection, (c) satellite-derived discharge from River Watch v3.4, (d) inundation extent based on Sentinel-1 satellite imagery.

Find out more: <https://gfp.jrc.ec.europa.eu/>