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Improving operational flood risk reduction with the Global Flood Partnership

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Every year river flooding affects millions of people in developing countries, due to large human exposure in the floodplains and the lack of adequate flood protection measures. Preparedness and monitoring is an effective way to reduce flood risk. State-of-the-art technologies relying on satellite remote sensing and numerical hydrological and weather predictions can detect and monitor severe flood events at global scale. This presentation describes the emerging role of the Global Flood Partnership (GFP, https://gfp.jrc.ec.europa.eu), a global network connecting scientists, users, private and public organizations active in global flood risk management. To date, a number of GFP member institutes regularly share results from their experimental products, developed to predict and monitor where and when flooding is taking place in near real-time. The goal of the GFP is to foster the dialogue between scientists and users whereby 1) scientists adapt their systems to the needs of emergency managers and 2) emergency managers adapt and adjust existing workflows to include new systems and data. GFP flood products have already been used on several occasions by national environmental agencies and humanitarian organizations to support emergency operations and to reduce the overall socio-economic impacts of disasters. This presentation describes a range of global flood products developed by GFP partners, and how these provide complementary information to support and improve current global flood risk management for large scale catastrophes. Further, we discuss existing challenges and ways forward to turn current experimental products into an integrated flood risk management platform to improve rapid access to flood information and increase resilience to flood events at global scale.