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# THE NOAA SATELLITE FLOOD PORTAL

**Abstract**

For more than two decades, the emergency management community has articulated a need for real-time, street-level flood inundation maps depicting the areal extent, depth, and infrastructure impacted by flood waters, to inform critical decisions needed to save lives and mitigate property damage before, during, and, after a flood event. NOAA's Climate Ready Nation's products and services portfolio includes a comprehensive real-time and forecast flood inundation mapping (FIM) capability at the street level for all communities nationwide. This allows for a better depiction of when, where, and how deep flood waters will be for improved Emergency Management decision support before, during, and after. The NOAA FIM includes the use of satellite and airborne imagery. NOAA's National Environmental Satellite and Information Service (NESDIS) has developed a satellite observation-based flood portal to provide global satellite flood imagery (optical and SAR) into a mapping service enabling simple integration of observations from NOAA, Partners, Commercial, and aircraft observations. The portal is routinely used by NOAA's National Water Center (NWC), River Forecast Centers (RFCs), the US Federal Emergency Management Agency (FEMA) and by emergency management communities throughout the world. We will discuss the products currently available, provide examples of how the products are being used by various agencies, and demonstrate the easy access to information by anyone, anywhere in the world. The NOAA flood portal project is affiliated with the Space Climate Observatory, where coordination of various flood related projects takes place.