Flood and Climate Information for Management of Disasters and Mosquito-Borne Disease

**SERVIR Applied Sciences Team Project, Ceccato et al.**

This project forecasts flood likelihoods and assesses vector-borne disease risk for SERVIR-Eastern and Southern Africa in support of infectious disease monitoring and outbreak prediction.

Co-I Erika Podest (JPL) trains RCMRD staff and 16 participants from the Ministry of Water and Irrigation of Kenya, Kenya Water Institute, and the Ministry of Mining’s Department of Resource Surveys and Remote Sensing, in methods to automate the detection of surface water extent and color using Landsat images.

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**Multi-Scale Disaster Risk Assessment and Decision Support System for DRR**

**ICIMOD/SERVIR-Himalaya**

This application combines the CREST hydrologic model with digital elevation maps and sends users an email alert with real-time and short-term forecast flood inundation maps of select stream-gauge locations. An web map version of the flood simulator is above.

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**Surface Water and Flood Extent Mapping Tool For the Lower Mekong**

**SERVIR-Mekong: ADPC / Deltares / SEI / SIG**

This satellite-based water resources and water hazard mapping system produces a series of historical flood extent maps for the years 2000 to 2015 for the most extensive flooding in the Lower Mekong Basin during monsoon seasons to help end users visualize and understand the inter-annual variability of inundated areas. Landsat and SRTM are primary inputs into processing run on Google Earth Engine.

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**Flood Simulator for African Basins**

**RCMRD/SERVIR-Eastern & Southern Africa with FEWS NET**

This application combines the CREST hydrologic model with digital elevation maps and sends users an email alert with real-time and short-term forecast flood inundation maps of select stream-gauge locations. An web map version of the flood simulator is above.

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