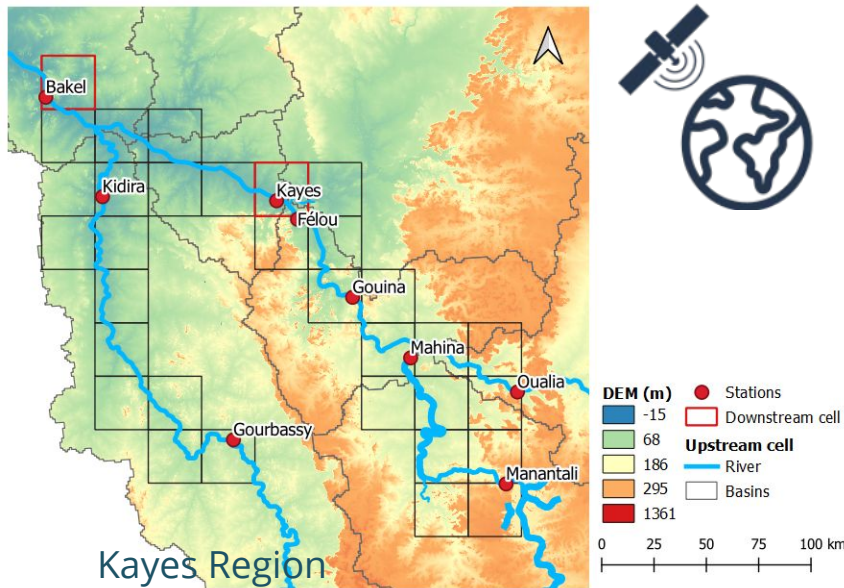


Flood monitoring using passive microwave remote sensing in the Senegal River, Western Mali

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2. Method - microwave AMSR / AMSR2 Satellite:
 Brightness temperature of 3 different spatial resolutions

3. Model Performance

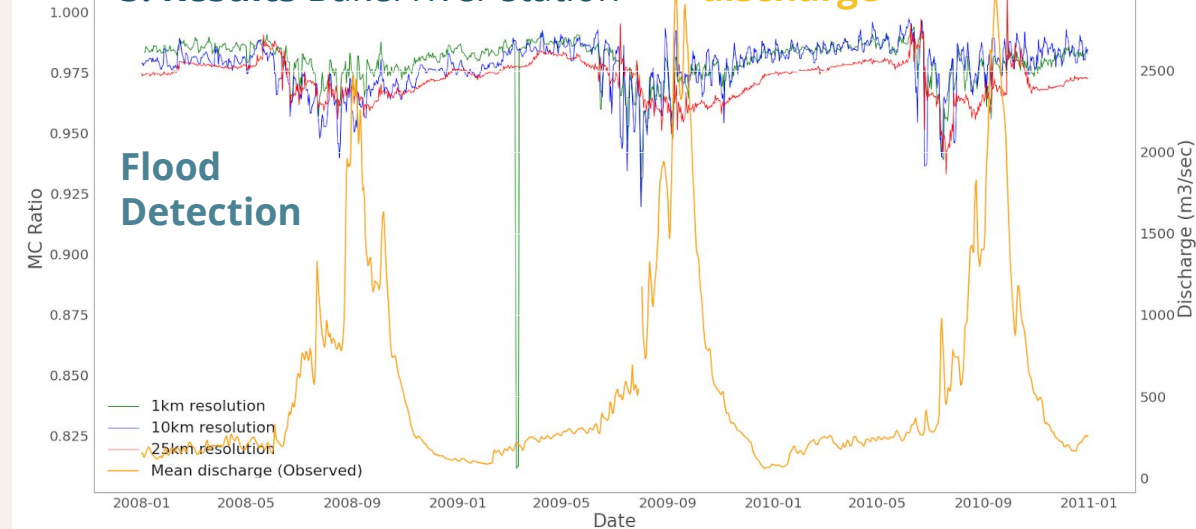
Resolution (km) - Correlation with discharge

1 x 1 -0.525

10 x 10 -0.610

25 x 25 -0.589

3. Results Bakel river station - discharge



1. Introduction

Early Action Protocol for floods for Niger River approved, no EAP yet for Senegal river

Access to and availability of hydrological models for Senegal rivers is limited

Real-time access to river discharge data from actual stations difficult

Would PMRS work?



Satellite signal as indicator for river discharge => flood threshold



Disaster

Preparedness:
 1. Virtual gauging stations
 2. Satellite signal as flood indicator

Early Warning
 Early Action
 ? Flood prediction ?

! Flood detection !
 Response and Recovery

4. Further research

Forecast-based Financing
 Location calibration study
 Flood prediction (rainfall?)



How can satellite data impact forecast-based financing in data scarce areas?