



# PIRE ePing project update

Date: 05/16/2022



# ePING project updates from OU

- Progress to date:
  1. Mobile app developed for collecting hydrometeorological data by citizen scientists
  2. Purchasing five cell phones and sent to Ethiopia (Dr. Seifu Admassu Tilahun Bahir, Bahir Dar University)
  3. Interactive web interface display data in the cloud
  4. provided training via virtual meetings



# Android mobile app

Step 1: log in with credentials



Step 2: Type in recorded data



Step 3: upload to the cloud

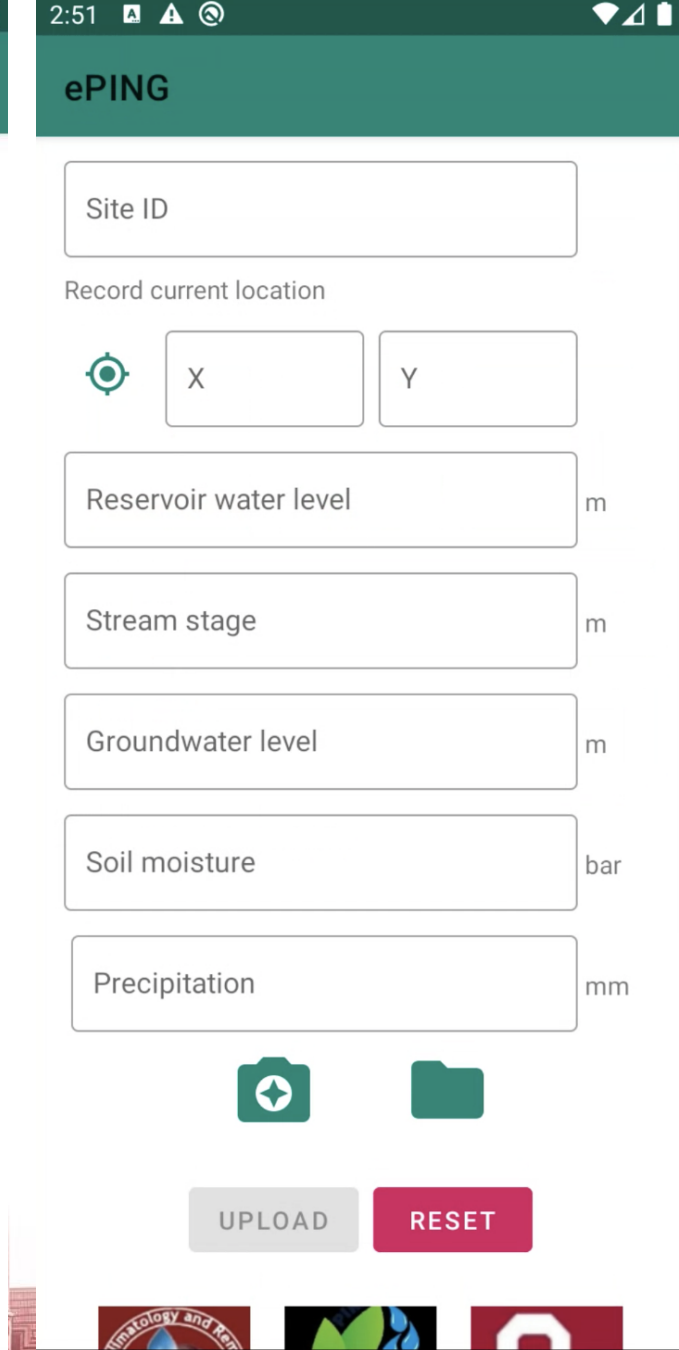
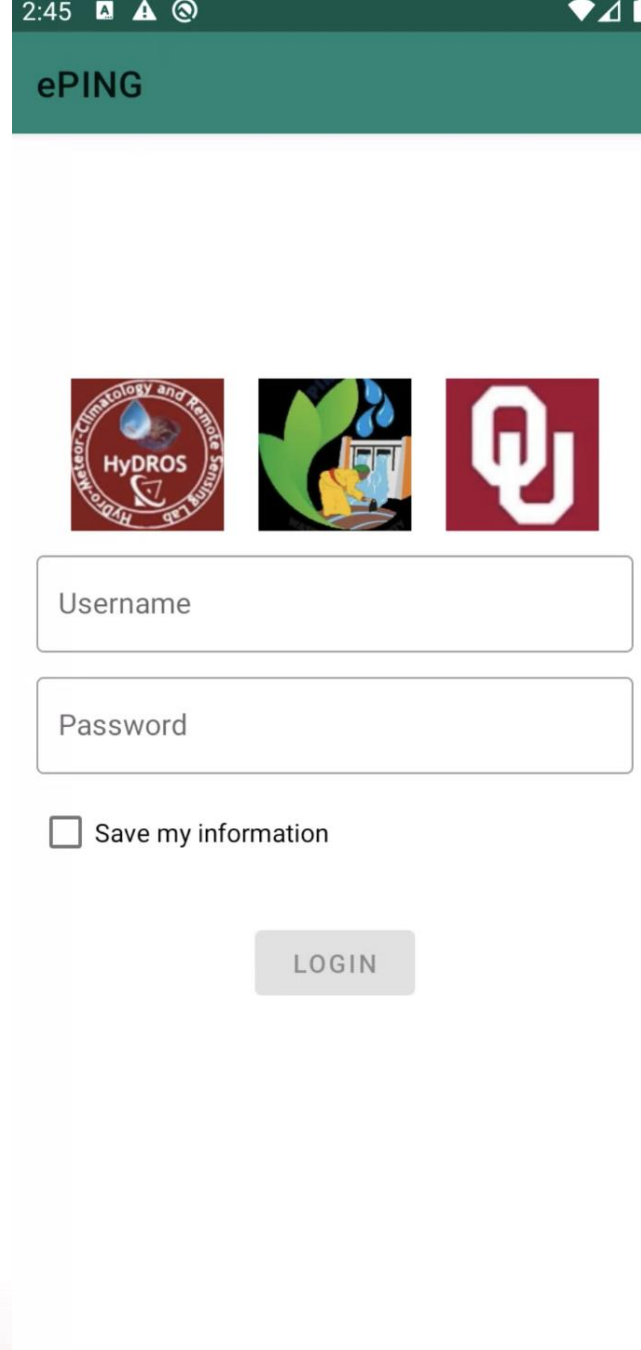
With network

Upload success!

Without network

Apps saved as csv file and will upload when it has network

Five cell phones have been sent to Ethiopia  
Dr. Seifu Admassu Tilahun Bahir,  
Bahir Dar University



## Next Step Plans

- Provide virtual training to local citizens scientists to help them properly collect, upload, and visualize data
- Travel there and provide further training
- Visualize and Analyze the collected data





# Interactive web interface in Cloud

<https://eping.herokuapp.com/>



[USER GUIDE](#)

[Download Data](#)  
[Survey](#)

## PIRE Project

e-PING Application Dashboard ---1.2.2.200625\_beta

e-PING Application is a smart phone Apps to collect hydro-meteorological observations data such as precipitation, surface water info, groundwater level, river stages and soil moisture from Blue Nile Basin in Ethiopia

### Project Summary

The UCONN PIRE project in collaboration with the University of Oklahoma and University of Wisconsin establishes an international research and education partnership to promote a political-institutional model of science that links sociological and engineering methods in a people-centered approach to the human-climate-water-agriculture-energy nexus in the Blue Nile basin (BNB), Ethiopia. The project is a multi-year collaborative endeavor that will run from 2016 to 2021. By the end of the project, the research team will have crafted state-of-the-art tools to help smallholder farmers make practical decisions about water, crops, and fertilizers and ultimately gain more secure access to food and water in the face of increasingly challenging climatic extremes. We promote a political-institutional model of science that links sociological and engineering methods for a people-centered approach. Our political-institutional approach integrates graduate and undergraduate education, professional training, and community outreach into the research program to develop the human capital and social connections between all stakeholders—scientists, farmers, policymakers and students in the United States and in Ethiopia. The project achieves its objectives through provision of superior quality seasonal forecast information at a scale relevant to local farmers and water resource managers.

### Watersheds:

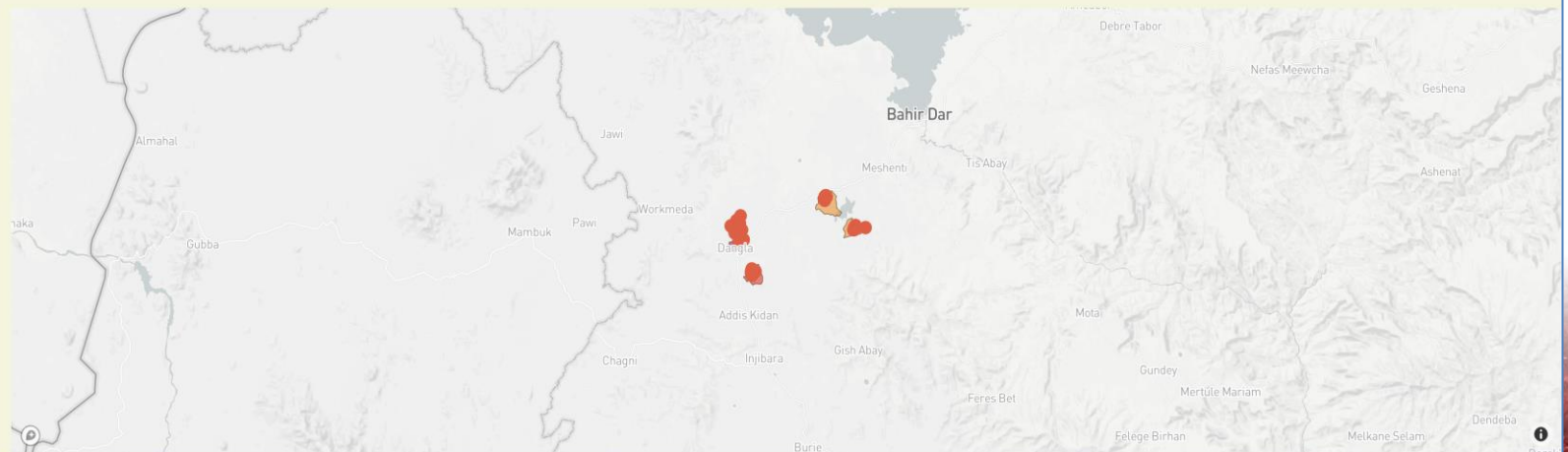
Branti Watershed  Koga Watershed  Markudi Watershed  Quashni Watershed

### Features Selection:

- Q:soil\_moisture\_percent
- Q:soil\_moisture\_kohm
- Q:stream\_gage\_m
- Q:groundwater\_level
- K:soil\_moisture\_percent
- K:soil\_moisture\_kohm
- K:groundwater\_level
- B:soil\_moisture\_kohm
- B:soil\_moisture\_percent
- B:stream\_gage\_m
- B:groundwater\_level
- M:soil\_moisture\_percent
- M:soil\_moisture\_kohm
- M:stream\_gage\_m
- M:groundwater\_level

### Multi-Select SITID Dropdown

### All Sites Location Map



# Interactive web interface (quick Demo)

<https://eping.herokuapp.com/>

Multi-Select SITID Dropdown

x WB1b x WB2b x WB3b x WB4b x WB5b x WB6b x WB7b x WB8b x WB9b x

Please Select the start Date and End Date:

03/23/2015 → 06/09/2021

Watersheds: groundwater\_level Data From 2015-03-23T00:00:00 to 2021-06-09T17:40:37

