



TAHMO's goal is to install 20,000 on-the-ground sensing stations every 30 km across the African continent, specifically designed to provide rainfall, temperature, and other critical data from robust redundant sensors uploading by cell-phone in real time. TAHMO will make this high-quality data freely available to governments, scientists and farmers on the Internet for various applications including improving agricultural productivity, providing early warning for floods, and information required to provide short-term weather and long-term climate forecasts. The project will make it possible for Africa to leapfrog to one of the best-monitored continents in the world.



Trans African Hydro-Meteorological Observatory

School2School Program

TAHMO partners schools throughout Africa with sister schools in the United States and Europe. School joining the TAHMO network can purchase an automatic weather station for both their own school and their sister school for \$6000, which includes the station installation and 3 years of maintenance for both stations.

TAHMO staff conduct site visits with African partners to get to know teachers and students while preparing logistically for installations. When fundraising goals are met, TAHMO technical staff deliver an in-person training to school staff members about weather station function and minor maintenance aspects, and install stations. These stations upload data automatically to an internet server and schools are provided with software and classroom education tools to view and analyze the local weather data that their station and the stations at other schools are recording.

Data can be used to enhance activities with sister schools across the globe by comparing climates and weather. Many of the TAHMO lesson plans provided make use of real-time weather data in the classroom. The weather information is also shared publicly through TAHMO's website for additional research and agricultural applications.

Interested in participating?

Please send an email to s2s@tahmo.org with the following information:

- School's full name +grade range + number of students and teachers
- Website of the school (if applicable)
- Information about access to resources: power, Internet, computers, cell phone services, 3G cell phone capacity, etc.
- Picture of the school site

Join the TAHMO network and enjoy:

- Cross-cultural exchange with a sister school in Africa
- Communication and collaborative educational activities with your sister school
- Access to real-time weather data collected at both your school and your sister school
- Creative and new lesson plans incorporating global issues into your classroom



School-2-School Partnership

You will be partnered with a school in Africa based on similar age ranges or special interests. Sister school partnerships are based on a planned sequence of 4 communications per year. The preferred Communication Method: Handwritten Student Letters- each student in a class writes a letter, teacher collects and scans letters, emailing to sister school teacher, the teacher receiving the letters will print and distribute a letter to each student in the class. The partnership is intended to be both academically and culturally connecting the students.

Suggested communication topics

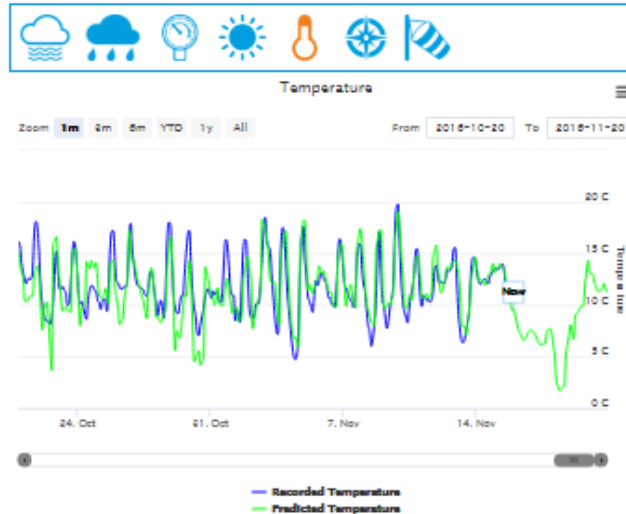
- Class introduction
- Compare and contrast TAHMO weather station data from your school and your sister school
- Answering a weather phenomenon
- Cultural topics or event
- Hands-on science experiment

Examples of letters, discussion topics, and lesson plans are available.

School-2-School Website

Once a station has been installed, collection of data will start immediately and be accessible on the website: school2school.net. On the website, you will have access to:

- Graphically view 7 measured parameters: relative humidity, precipitation, barometric pressure, solar radiation, temperature, wind direction, and wind speed.
- Download complete data files for your school and your sister school



Learning Objectives

- Take readings from the weather station and make a graph out of it.
- Interpret the data and make weather predictions based on his/her findings.
- Identify trends in weather data.
- Communicate in English (written) with students from other countries in order to find out about their weather and measurements.
- Compare different climates and weather of different regions in the world and explain how these differences will affect daily life.
- Gain cultural understanding and connections with your sister school.
- Understand how weather sensors work.
- Design a sensor which is able to measure a weather variable and make a prototype.

If you are interesting in downloading a sample set of data to view and use for trial analysis, you can go to the school-2-school website and select the Adams Elementary station using the following login credentials:

- username: guest
- password: guest

School2School Program Requirements

- Provide a safe outdoor location for the permanent placement of a weather station
- Assign two staff members, such as teachers, as contacts for collaborative activities with your sister school.
- Integrate weather station data into the educational curriculum, interact in classroom exchange with their sister school, and provide feedback on educational activities and data accessibility.
- Purchase of \$6000 USD for the installation of a permanent automatic weather station at your school and in a school in Africa.

- Communication a minimum of 4x per year with assigned sister school: preferred method of handwritten student letters scanned and email
- General monthly weather station maintenance.
- Attend a professional development workshop about TAHMO education modules, cross cultural activities, and the basics of weather station data and use.

www.TAHMO.org

www.School2School.net

