



Become a GLOBE Observer/Citizen Scientist

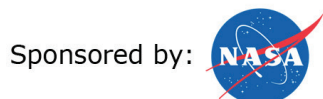
GLOBE students have been doing “Citizen Science” for the past 20 years by engaging in data collection, entry and analysis, partnering with scientists and Earth observing satellites, and participating in scientific measurement campaigns. The GLOBE database now holds approximately 140 million measurements provided by its “student citizen scientists” over a period of two decades. Technology has evolved, providing the ability to measure more phenomena with greater accuracy. GLOBE has become part of the digital revolution with the release of its recent app; solitary efforts have given way to large-scale collaborations, with the power to transform how we think about the world and how we live in it.

Mobile Apps Make Data Entry Easy for Existing GLOBE Members

Recently, GLOBE released its first mobile app for data entry, allowing GLOBE students the opportunity to enter GLOBE science protocol data directly from an iOS or Android device for any of GLOBE’s science protocols. After an initial download of forms, students can enter measurements in the field, and then choose to send the data to GLOBE when an internet connection is available. The app streamlines some aspects of data entry, allowing users to employ the phone’s camera to document sites and measurements. This app is intended only for users who have an existing GLOBE account.

New Mobile Apps Are Coming that Will Expand the Numbers of GLOBE Citizen Scientists

After 20 years of working with student citizen scientists, GLOBE thinks the time is right to engage people beyond the formal education areas (schools) in Citizen Science. GLOBE has released an app which allows anyone in a GLOBE country to enter data about clouds directly into the GLOBE database. Called the GLOBE Observer app, it is available in iOS and Android formats and will have additional GLOBE science protocols in coming years.



www.globe.gov help@globe.gov

Implemented by: UCAR



Become a GLOBE Observer/Citizen Scientist

Through the GLOBE Observer, anyone can join the international GLOBE network of citizen scientists, students, teachers, and scientists while learning more about our shared environment. To participate, an individual must download the GLOBE Observer app and submit observations.



The GLOBE Observer initially allows the GLOBE science protocols to be implemented outside of a school setting, including in informal education institutions, out of school programs, parks and refuges, and homes. GLOBE alumni and families of GLOBE students are particularly encouraged to participate. Ultimately, the GLOBE Observer will provide data for student research, strengthening science education as well as additional data for scientists.

How are GLOBE Observer measurements collected?

The GLOBE Observer app provides step-by-step instructions for each requested measurement. For example, the app asks you to submit cloud photos with your location. You will also be guided through a cloud key to identify cloud types and to record how cloudy the sky is. The app also provides additional information such as a training overview and background scientific information.

How are GLOBE Observer data used?

GLOBE Observer data can be combined with other GLOBE data to support research led by students and professional scientists related to Atmosphere, Biosphere, Hydrosphere, and Soil (Pedosphere).

- » **Student Research Examples:** Past examples of GLOBE data include research on precipitation, phenology, climate and mosquitoes and represent every region in the program. Examples can be found on www.globe.gov
- » **Scientist blogs using student data:** Scientists involved in the program give reports back to the community on the use of data through blogs. An example is the blog by Dr. Kevin Czajkowski on his surface temperature field campaign found under the Scientists' Network Blog on www.globe.gov
- » **Publications by Scientists:** Over the years, scientists have used the data in their research. Publications by scientists using the data can be found at www.globe.gov

Everyone can access data in the GLOBE data and information system by visiting www.globe.gov