

GLOBE Soil Moisture Campaign - Announcement

Dear Teacher,

The Soil Moisture Investigation team would like to introduce a new opportunity for you and your students to participate in an important scientific project, collect student research data, prepare for a local science fair and/or learn about soils in your area. We propose a twice a year soil moisture data collection campaign (2003: Apr. 19-27 and Oct. 11-19) that shares many similarities with a MUC-athon (a group land cover data collection campaign).

The goal is to create global and regional snapshots of near-surface soil moisture for comparison with satellite and model data sets. In short, we ask that you organize groups of students and parents to:

- collect near-surface (0-5 and 10 cm) soil moisture measurements,
- follow the gravimetric data collection protocol (no canopy, unirrigated site),
- within 60 minutes travel time of your school,
- anytime during the 9 day collection period,
- anytime of day.

In general, this measurement is relatively simple to make and does not take any expensive equipment (except the soil drying oven and GPS, but see below). If you are new to GLOBE, your local GLOBE partnership should be able to train you to do this measurement in about an hour.

You will need:

- Soil cans with lids or good plastic bags/baggies,
- Trowel
- Permanent markers, Ruler
- GPS and map
- Soil drying oven

Not every one has a soil drying oven and a GPS. So what can you do? Good science is all about collaborations and this protocol is designed to encourage you to develop regional collaborations with groups who dry soil and measure location on a daily basis. Please contact your local partnership office or any one of the following organizations (field offices are better than downtown offices), explain what you are doing and request help/support/facilities/mentoring to get the job done:

- GLOBE Partnership and Affiliates
- USDA Natural Resource Conservation Service (NRCS)
- USDA Agricultural Resource Service (ARS)
- USDI Geological Survey (USGS)
- US Environmental Protection Agency (EPA)
- University or Community College Soil, Environmental, and Engineering Depts.
- University cooperative extension agencies
- Soil engineering companies

Where can you find more information? Contact:

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Soil Moisture Campaign Web Site:
www.hwr.arizona.edu/globe/sci/SM/SMC/