

Message from Soil Moisture and Temperature PI: Dr. Jim Washburne
Time again to participate in GLOBE's "Campaign Soil Moisture" protocol

Science fair might be over for this year – but what about next year? Get a jump on next year's class science project by helping us collect soil moisture data all around the world. This new opportunity allows 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.

Anytime during Earth Day Week (Apr. 19-27) and again next fall during Earth Science Week (Oct. 11-19), you are encouraged to collect near-surface soil moisture over as large an area as possible. Collect your samples from large, open and relatively flat areas that have safe public access. There are many ways to participate; three of the most basic are to:

- 1) collect at your school site,
- 2) collect from areas at or near your students' homes,
- 3) collect from driven or walked routes within an hour travel time from your school.

In each case, the basic sampling procedure is very similar to the one-time near-surface soil moisture protocol (four samples: two from 0-5 cm and two from 10 cm). The third option above might be called a soil moisture-athon – where teams of student-parent volunteers develop a cohesive strategy for collecting soil moisture across a large area.

More details about this effort and special data collection worksheets are available on our Campaign web site (www.hwr.arizona.edu/globe/sci/SM/SMC). There are two logistical details of note. First, each data collection site needs a latitude and longitude. You can georeference your site using a GPS receiver or a topographic map with latitude and longitude markings or through one of several web map tools that allow you to enter a (US) address and find the corresponding coordinates. Second, this protocol generates many more soil samples than the other protocols. Remember to measure the wet weights as soon as possible. If you need help drying your samples, we encourage you to make a special effort to contact and work with local educational, engineering and governmental agencies that might let you use their large commercial soil drying ovens. All these issues and more specific examples of helpful contacts can be found at the web site above.

Regardless of what you do, please visit our web site. We hope to have several campaign soil moisture data sets ready to share with you by the end of May. If you are already following any of the standard protocols, just continue making regular measurements at your school site but try to sample some non-school sites if possible. Thanks for your interest. We look forward to hearing from you.

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