

GLOBE Soil Moisture Campaign – Cover Letter

Dear GLOBE Teacher, Trainer, or Parent

The Soil Moisture Investigation team would like to introduce you to a new opportunity for you and your teachers 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 are seeking your participation in a twice a year soil moisture data collection campaign (Apr. 17-25 and Oct. 9-17, 2004) 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, parents and teachers to collect duplicate near-surface (0-5 and 10 cm) soil moisture measurements across as large an area as possible (any one group should not have to travel more than 1 hour away). 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). We recommend introducing this activity before or during the measurement period with a short overview, practice and group construction of soil pouches, followed by a day-long campaign to collect as much data as possible.

This packet contains the following materials to help encourage, train and support your effort. This material is also located on-line < www.hwr.arizona.edu/globe/sci/SM/SMC/>. We recommend that you copy the following sheets together back-to-back in the order indicated:

Cover Letter

Background:

- Teacher's Guide
- Curriculum Connections

Protocol Guides:

- Field Guide – Sample Collection Protocol
- Lab Guide – Gravimetric Sample Drying Protocol

Data Worksheets:

- Field Data Sheet – Single Site (2 pages)
- OR
- Field Data Sheet - Multiple Sites (1 page)

Optional “How to” instruction guides

- Foil Pouch soil sample containers
- 55 gallon drum soil drying oven

Evaluation:

- Teacher Feedback Form

As the forms indicate, the primary point of contact for this effort is our post doc, Martha Whitaker mplw@hwr.arizona.edu. Please let us know if you have any questions or suggestions for improving this activity.

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