



# SMERGE Stakeholder Workshop

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*Texas A&M International  
USDA Agricultural Research Service (ARS)  
NASA Goddard Earth Sciences Data & Information Services Center  
USDA Northern Plains Climate Hub*

### What is SMERGE?

SoilMERGE (SMERGE) is a new root-zone soil moisture product, still in development, that covers the contiguous United States. The product is developed by merging NLDAS land surface model output with surface satellite retrievals from the European Space Agency Climate Change Initiative. Unlike other observational soil moisture products, SMERGE spans nearly 4 decades (1979 to 2015). It has a 0.125° spatial resolution, at a daily time-step.

### What were the Workshop Goals & Objectives?

**Goal 1.** Ensure SMERGE indicators and associated tools/products are useable by stakeholders.

**Objective 1.** To engage stakeholders (i.e., data users) in discussions of the specifications and accessibility of SMERGE data.

**Objective 2.** To brainstorm additional applications for SMERGE and to gauge the level of potential interest by different user communities.

**Objective 3.** To identify individuals interested in using SMERGE data within a framework that can support decisions.

### SMERGE Workshop Action-Shots!



### Stakeholder Workshop Accomplishments:

- ◆ Engaged an interdisciplinary group of 19 stakeholders from nine states representing a variety of disciplines in academia and government (e.g., Soils & Climate, Watersheds & Rivers, Ecology & Disturbance, Dryland Agriculture).

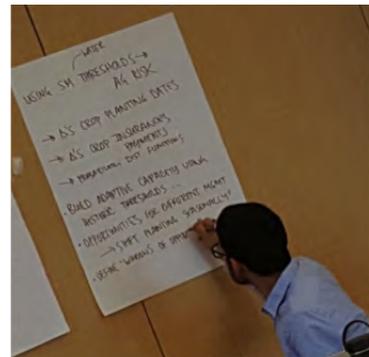


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- ◆ *Received feedback on data specifications and accessibility.* Specific interests included accessing SMERGE data in the form of a data rod (i.e., time series of a single geographical location), and soil moisture estimates for a depth of 0 – 10 cm (i.e., seed zone).
- ◆ *Brainstormed potential applications of SMERGE* through an interactive session – participants proposed four project ideas. Also, an additional list of potential applications was compiled through a written *Communities of Interest* exercise.
- ◆ *Identified six Communities of Interest.* Participants provided potential applications of SMERGE data, and suggested topics for future workshops. These workshops would accomplish one or more of the following outcomes: build capacity to use soil moisture data; apply SMERGE data to a *Community of Interest* idea; and share management-relevant insights with stakeholders.

### SMERGE Workshop Action-Shots!



**Visit the SMERGE website for more information & team contacts!**  
<http://www.tamui.edu/cees/smerge/overview.shtml>