

Soil Moisture Active Passive (SMAP) Applications Workshop
NOAA Science Center Auditorium, 1301 East West Highway, Silver Spring, MD 20910
9-10 September 2009

<p>The NASA Soil Moisture Active Passive (SMAP) mission has a targeted launch date of 2014 to provide global measurements of soil moisture and freeze/thaw state (http://smap.jpl.nasa.gov/). SMAP applications include improving drought and flood guidance, agricultural productivity estimation, weather forecasting, climate predictions, disease risk assessment, and national defense. A SMAP Applications Workshop is planned to share information about SMAP applications and to inform the SMAP Mission about the challenges facing SMAP users. The workshop will provide the input required to write the SMAP Applications Plan.</p>		
9 September Wednesday		
7:30am	Registration	
8:30 – 8:35 am	Louis Uccellini, NCEP Director	NOAA Welcome
8:35 – 8:45 am	Jared Entin, NASA	NASA Welcome & SMAP Program
8:45 – 8:55 am	Brad Doorn, NASA	NASA Applied Sciences Program
8:55 – 9:10 am	Kent Kellogg, JPL	Overview of SMAP mission & instruments
9:10 – 9:30 am	Eni Njoku, JPL & Peggy O’Neill, GSFC	Overview of SMAP data products
9:30 – 9:40 am	Dara Entekhabi, SMAP SDT Leader	Charge to workshop
9:40-10 am Break		
Applications in the Context of SMAP Moderator Xiwu Zhan, NOAA SMAP Liaison		
10:00 – 10:15 am	Stephane Belair, Environment Canada	Weather and climate forecasting
10:15 – 10:30 am	Michael Ek and Xiwu Zhan, NOAA NCEP	Weather and climate forecasting
10:30 – 10:45 am	James Verdin, USGS	Operational drought forecasting
10:45 – 11:00 am	Brian Cosgrove, NWS OHD	Flood monitoring and prediction
11:00 – 11:15 am	Wade Crow, USDA ARS	Agricultural productivity
11:15 – 11:30 am	Gregory Glass, JHBSPH	Human health
11:30 – 11:45 am	Robert Davis, USACE	National defense
11:45 – Noon	Ramakrishna Nemani, NASA ARC	Ecosystem carbon balance
	Poster Presenters	1-min Oral Poster Introductions
Noon -1pm	Lunch and Posters	
	<p>Poster Title, Presenter & Affiliation: P1) ECMWF soil moisture analysis: use of active and passive microwave data, Patricia de Rosnay, ECMWF P2) Remotely Sensed Soil Moisture and Landslide Hazards, Jennifer Jacobs, UNH P3) Famine Early Warning Systems and Remote Sensing Data, Molly Brown, GSFC P4) Methodology for Improving Desert Locust Decision Support in Africa and Asia</p>	

	using SMAP Soil Moisture Estimates, John Bolton, GSFC P5) Monitoring Drought with the U.S. Climate Reference Network and SMAP, Michael Palecki, USCRN/NCDC P6) Land Surface Characterization for Precipitation Retrieval in the GPM Era, Joe Turk, NASA JPL
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The rest of the workshop will be characterized by small-group discussions (breakouts), organized by SMAP application areas to answer three questions:

- *What are the known and potential SMAP applications?*
- *How will SMAP products be used to realize applications and what are the ancillary data needs?*
- *How can we engage the SMAP Community of Practice, identify the SMAP Community of Potential, and facilitate exchange with the SMAP Mission?*

There will be four breakout groups meeting in parallel (so as to keep the group sizes small) in each of three breakout sessions. Each of the breakout sessions (I-III) feeds into the next, so we plan to have plenary sessions between breakouts to hear the reports.

9 September Wednesday (continued)		
1:00 - 1:05 pm	Wade Crow, SMAP SDT	Charge to Breakout I
1:30 -3:00 pm	Breakout I -- SMAP Applications What are the known and potential SMAP applications?	
	3:00-3:30pm Break	
3:30-5:00 pm	Plenary - Reports from Breakout I and Discussion	
10 September Thursday		
8:30 -8:35 am	Randy Koster, SMAP SDT	Charge to Breakout II
9:00 – 10:30am	Breakout II – SMAP applications requirements/SMAP data products How will SMAP products be used to realize applications and what are the ancillary data needs?	
	10:30-11:00 am Break	
11:00- Noon	Plenary - Reports from Breakout II and Discussion	
Noon - 1pm	Lunch and Posters	
1:00 - 1:05 pm	John Kimball, SMAP SDT	Charge to Breakout III
1:30 – 3:00 pm	Breakout III - SMAP pre-launch outreach to applications How can we engage the SMAP Community of Practice, identify the SMAP Community of Potential, and facilitate exchange with the SMAP Mission?	
	3:00-3:30 pm Break	
3:30-4:30 pm	Plenary - Reports from Breakout III and Discussion	
4:30 pm	Susan Moran, SMAP SDT	Final Summary and Discussion
5 pm	Adjourn	
11 September Friday		
8-10am	SMAP Applications Plan Writing Committee	Meet at USDA ARS Beltsville Building 007 at BARC

Acronyms:	
ARC	Ames Research Center
ARS	Agricultural Research Service
GSFC	Goddard Space Flight Center
ECMWF	European Centre for Medium-Range Weather Forecasts
GSFC	Goddard Space Flight Center
JHBSPH	Johns Hopkins Bloomberg School of Public Health
JPL	Jet Propulsion Laboratory
NOAA	National Oceanic and Atmospheric Administration
NCDC	National Climatic Data Center
NCEP	National Centers for Environmental Prediction
NWS	National Weather Service
OHD	Office of Hydrologic Development
SDT	Science Definition Team
SMAP	Soil Moisture Active Passive
SSMC3	Silver Spring Metro Complex Building 3
UNH	University of New Hampshire
USACE	United States Army Corps of Engineers
USCRN	U.S. Climate Reference Network
USDA	United States Department of Agriculture
USGS	United States Geological Survey
For more information, please contact Dr. Susan Moran, susan.moran@ars.usda.gov or 520 670 6380 X171.	