

National Aeronautics and Space Administration



Jet Propulsion Laboratory  
California Institute of Technology

# Soil Moisture Active Passive Mission SMAP

## Action Item List

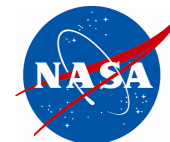
Eni Njoku

Jet Propulsion Laboratory  
California Institute of Technology

3<sup>rd</sup> Cal/Val Workshop

Nov. 14-16, 2012



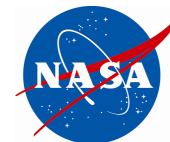


## Workshop Action Item List (1/2)

#	Action	Work Required & Due Date
1	Define absolute calibration “reference standards” and procedure to be used for SMAP L1 radiometer and radar calibration. e.g., Radiometer: external target modeled TB and method for defining calibration line.	Define targets (include dry deserts and forests as warm-end checks) and analysis needed. Complete definition, and planned analysis and correction method, with report by Mar 1, 2013 for review at Mar 5-7, 2013 SDT and inclusion in L1 Cal/Val Plan due Mar 18, 2013.
2	Define SMAPVEX15 airborne campaign: (1) science objectives, (2) site selection, (3) desired airborne instruments, (4) aircraft flight timing/duration, (5) data analysis plan.	Currently no plans defined (=> no campaign!). Project go or no-go decision on SMAPVEX15 to be made Mar 31, 2013. Procedure: (a) questionnaire to Cal/Val Working Group soliciting input by Dec 31, 2012, (b) Steering Group report to Project by Feb 28, 2013. Review at SDT meeting Mar 5-7, 2013.
3	Decision on: (a) completed agreements with Cal/Val partners, (b) Subset of Cal/Val partners designated as Core Validation Sites (CVS) to be used in defining overall mission validation accuracy metric (0.04 cm <sup>3</sup> /cm <sup>3</sup> , SM; 80%, F/T).	Preliminary lists for (a) and (b) to be confirmed by Nov 30, 2012. Final list with signed agreements to be confirmed by Mar 31, 2013. Scope for adding to list of Cal/Val partners (but not CVS) can be kept open.



## Workshop Action Item List (2/2)



#	Action	Work Required & Due Date
4	Develop L1-L4 "Rehearsal Plan" document for Phase-I Rehearsal based on discussions at workshop.	By Feb 15, 2013. Include in L1 and L2-L4 Cal/Val Plans due Mar 18, 2013.
5	Work with SMOS and Aquarius missions to converge on a reference standard for the land (warm brightness temperature) calibration – extrapolated from the conventional cold-sky/ocean/ Antarctic calibration.	Create working groups for passive and active (action on Entekhabi, Lagerloef, Kerr) for SMAP/Aquarius/SMOS convergence on common calibration methodology over complete Earth observation dynamic range (ocean/ cryosphere/land).
6	Publish SMAP definitions of mission validation metrics (including overall accuracy definitions 0.04 cm <sup>3</sup> /cm <sup>3</sup> , SM; 80%, F/T).	To be based on SMAP Core Validation Sites and SMAP memo on validation metrics. Publish on SMAP website by Dec 31, 2012.
7	Define membership and roles of SMAP Cal/Val Team, and post-launch mode of operations.	Draft by Feb 15, 2012, review at SDT meeting Mar 5-7, 2013. Include in all Cal/Val Plan documents.