

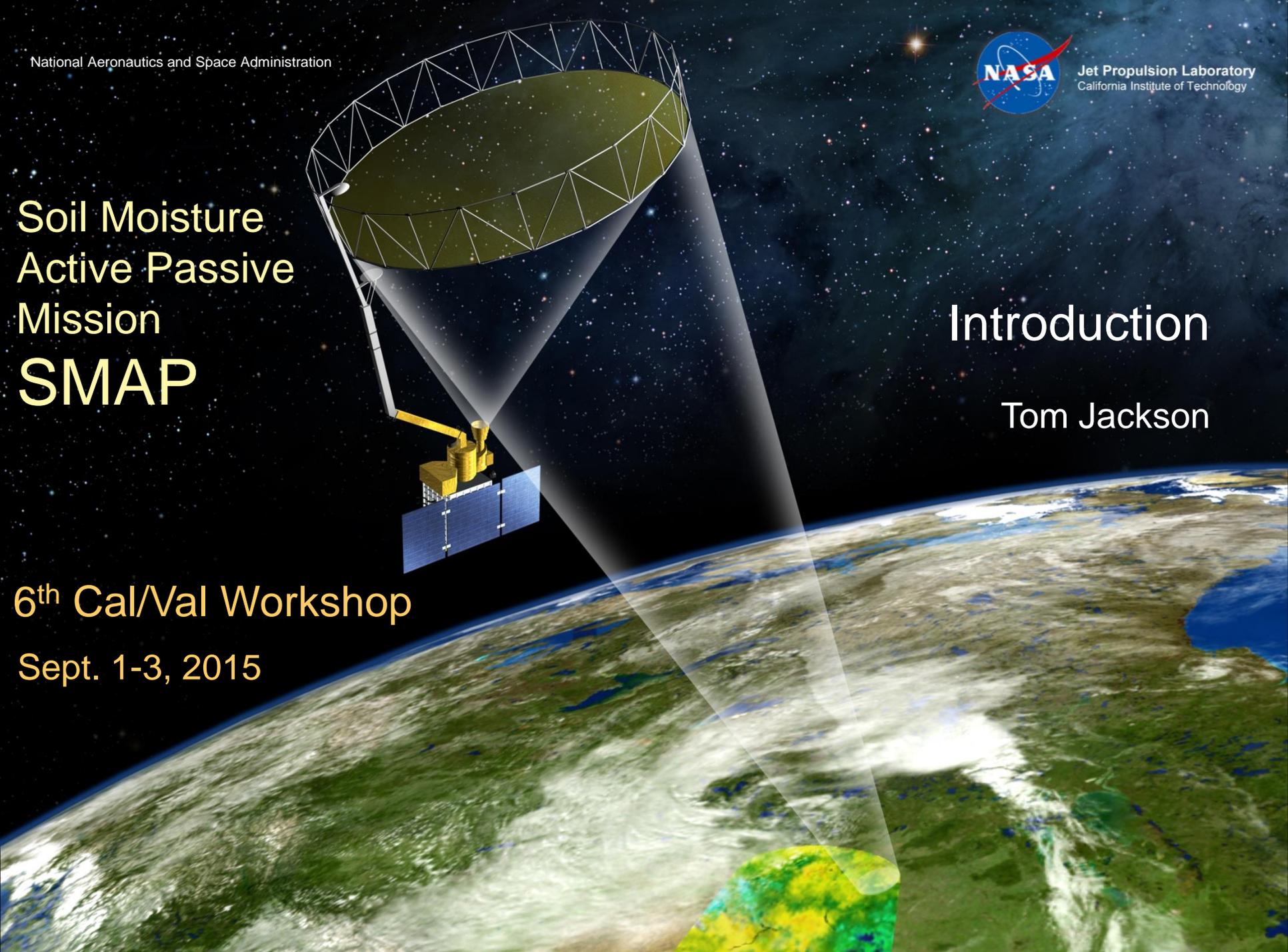
Soil Moisture
Active Passive
Mission
SMAP

Introduction

Tom Jackson

6th Cal/Val Workshop

Sept. 1-3, 2015

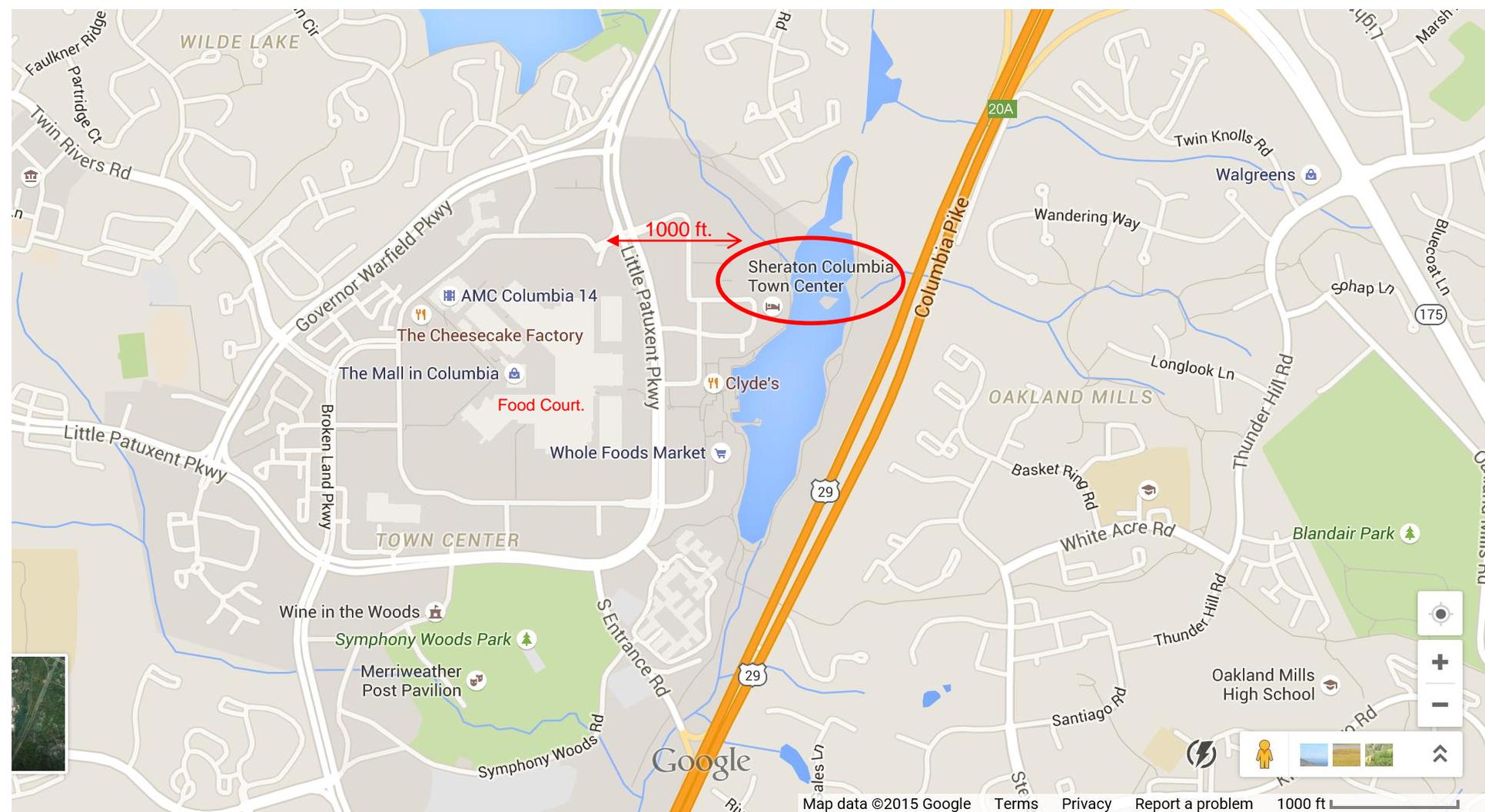




6th SMAP Cal/Val Workshop

- Logistics (Register, release form, posters,....)
- Overall Goal: Review the SMAP Cal/Val activities and specific issues that benefit from the input of the Cal/Val Working Group
 - *SMAP Project (DAART), ST, Cal/Val Partners, and collaborating scientists*

6th SMAP Cal/Val Workshop Location



Map data ©2015 Google Terms Privacy Report a problem 1000 ft



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SMAP Cal/Val Workshops

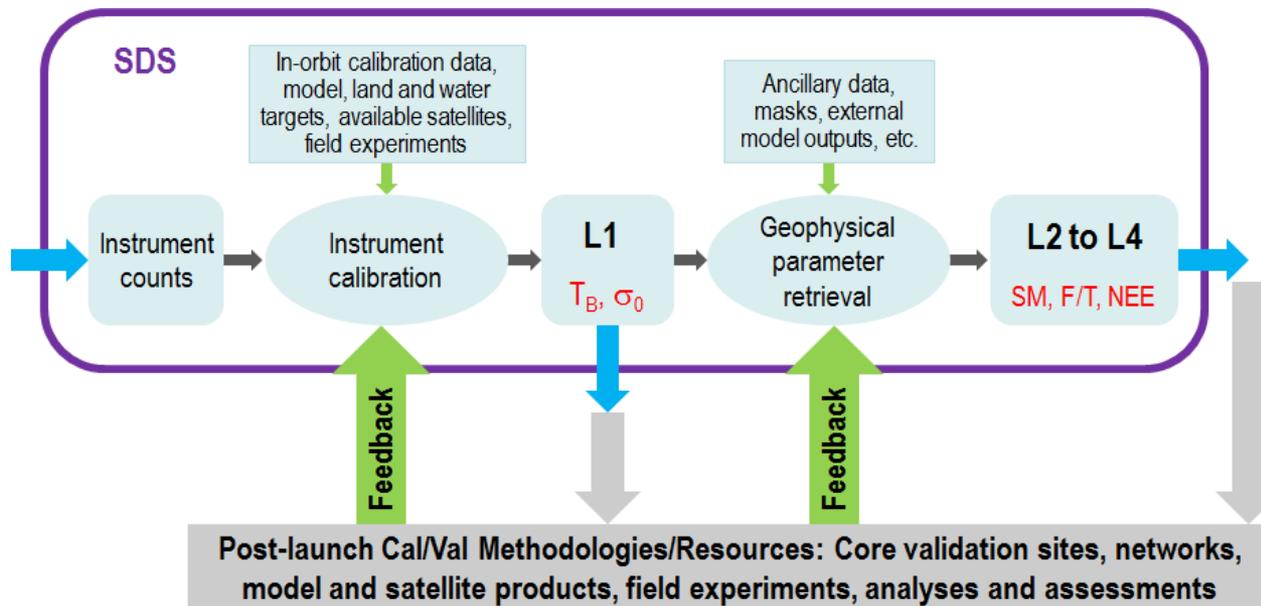
No.	Date	Location	Focus
1	June, 2009	Oxnard ☺	Review Preliminary CV Plan Scoping and Strategy
2	May, 2011	Oxnard ☺	Initiatives resulting from CVW#1 (DCL, MOISST,.) Methodologies: Issues and Actions, SMAPVEX12 Plan
3	Nov., 2012	Oxnard ☺	Phase 1 Rehearsal Design Post-Launch Organization
4	Nov., 2013	Pasadena ☹	Phase 1 Rehearsal Assessment, Phase 2 Plan Post-launch Implementation
5	Sept., 2014	Arcadia ☹	Phase 2 Rehearsal Assessment Core Validation Site Selection Process SMAPVEX15 Plan
6	Sept., 2015	Colombia ☺	Beta Release Product Assessment Validation Resource Continuity and Improvement SMAPVEX16+ Plan



SMAP Cal/Val Objectives and Approach

Validating that the products meet their quantified requirements

- *Calibrate, verify, and improve the performance of the science algorithms*
- *Validate accuracies of the science data products as specified in L1 science requirements according to Cal/Val timeline*





6th SMAP Cal/Val Workshop: Objectives

- Feedback on the *Beta Release L1 Products*. Process that was utilized and actions that will be taken between now and Validated Release.
- In-depth review of the status of each *L2-L4 Product* and validation results to date. Plans and actions for both Beta and Validated Release.
- Identify actions to improve *in situ up-scaling* and move more sites from Candidate to Core status.
- First steps toward a Good Practices Report for L2 Soil Moisture Validation.
- Enhance efforts to incorporate model-based products, in the SMAP L2-L4 Cal/Val.
- Planning for *2016 and beyond field campaigns*.

6th SMAP Cal/Val Workshop Agenda-Day 1



Tuesday		
0815	Introduction	T. Jackson
0830	Mission Progress and Status	S. Yueh/K. Kellogg
0900	NASA HQ Science Perspectives	J. Entin
0915	SMAP Science Team Perspectives	D. Entekhabi
0930	SMAP Products Timeline and Cal/Val	S. Yueh
0945	Break	
	Level 1 Cal/Val	
	<i>Radar Presentations and Validation Report</i>	S. Yueh
1015	Radar Configuration Process	A. Freedman
1030	Radar Beta Calibration	R. West
1130	Looking Forward with SMAP Radar	R. West
1145	Discussion	S. Yueh
1200	Lunch	
	<i>Radiometer Presentations and Validation Report</i>	S. Misra
0100	Radiometer Calibration Overview	S. Misra
0110	Geolocation Assessment	G. DeAmici
0120	Calibration Assessment	J. Peng
0140	Cold Sky Calibration	E. Dinnat
0155	L1C Gridded Product & Quality Flags	S. Chan
0205	Radio-Frequency Interference Assessment	P. Mohammed
0220	L-band Inter-comparison – Rajat Bindlish	R. Bindlish
0230	Plans for Cal/Val Phase-I Release	S. Misra
0240	Eliminating RFI Sources is Possible: SMOS Example	R. Oliva (C)
0250	Break/Posters	
0340	SMAP SDS Processing for Cal/Val	D. Cuddy
0350	Data Archival and Resources	A. Leon/S. Arko
0420	Level 2-4 Cal/Val Methodologies	T. Jackson
0440	Validation and Standard Grids	R. Bindlish
0500	End	
(C) Contributed presentation, also a poster		



6th SMAP Cal/Val Workshop Agenda-Day 2



Wednesday		
	<i>Level 2-4 Product Assessments</i>	E. Njoku
0800	L2 SM P Algorithm Team Report	S. Chan
0900	A Climatology of Optical Thickness (Tau) May Not be Appropriate in Agricultural Regions	B. Hornbuckle (C)
0905	Improved Vegetation Parametrization for SMAP's Passive Retrieval Algorithms	M. Kurum (C)
0915	L2 SM P Discussion	P. O'Neill
0930	<i>Break/Posters</i>	
1015	L2 SM AP Algorithm Team Report	N. Das
1115	Two Methods to Downscale Radiometer Soil Moisture	V. Lakshmi (C)
1120	Intercomparison of Alternate Soil Moisture Downscaling Algorithms Using Active-Passive Microwave Observations	J. Walker (C)
1125	L2 SM AP Discussion	D. Entekhabi
1145	<i>Lunch</i>	
0100	L2 SM A Algorithm Team Report	S. Kim
0200	L2 SM A Discussion	J. Van Zyl
0215	<i>Break/Poster</i>	
0300	L3 FT Algorithm Team Report	C. Derksen/X. Xu
0345	L4 SM Algorithm Team Report	R. Reichle
0430	L4 C Algorithm Team Report	J. Kimball/N. Stavros
0515	<i>End</i>	



6th SMAP Cal/Val Workshop Agenda-Day 3



Thursday		
	<i>Improving and Continuing Validation Resources</i>	
0800	Field Experiment Planning	T. Jackson
0815	SMAPEX-4 Report and SMAPEX-5 Plan	J. Walker
0845	SMAPVEX15 Report	T. Jackson/M. Cosh/A. Colliander
0915	Canada 2016 Planning	J. Powers
0930	SMAPVEX16 and Beyond Planning	T. Jackson
1000	<i>Break</i>	
1015	Core Validation Sites Issues	T. Jackson/A. Colliander
1030	ARS Watershed Sites	M. Cosh
1040	AARC Sites	A. Pacheco
1050	Argentina	M. Thibeault
1100	Australia	J. Walker
1110	Austria	M. Vreugdenhil
1120	Italy	F. Greifeneder
1130	Additional Texas Sites	B. Mohanty (C)
1135	Good Practices for Soil Moisture Validation	T. Jackson/M. Cosh/A. Berg/J. Walker
1215	<i>Lunch</i>	
0115	Sparse Networks in SMAP L2-L4 Cal/Val	W. Crow
0200	Model-based products in SMAP L2-L4 Cal/Val	D. Entekhabi
0230	<i>Break</i>	
0245	Satellite-based products in SMAP L2-L4 Cal/Val	T. Jackson/M. Burgin
0330	<i>Summary</i>	
0400	<i>End</i>	

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