

SMAP CAL/VAL WORKSHOP #9

George Mason University – Meeting Room 1204, Alan and Sally Merten Hall

October 22-23, 2018

Day 1

Morning 1: Meeting Objectives & SMAP status (Chair: A. Colliander)

8:30	Welcome	J. Qu
8:45	Objectives of the Workshop	A. Colliander
9:00	Mission Status	S. Yueh
9:15	Science and Applications Update	D. Entekhabi, S. Yueh
9:30	NASA HQ	J. Entin
9:45	Break	

Morning 2: Product validation status (Chair: P. O'Neill)

10:10	Status of SMAP Radiometer Calibration	J. Peng
10:30	Soil Moisture Passive Products	S. Chan
10:50	SMAP-Sentinel High-Resolution SM Product	N. Das
11:10	L4 Soil Moisture	R. Reichle
11:30	Freeze/Thaw Products Update	X. Xu
11:50	Lunch	

Afternoon 1: SMAPVEX19 (Chair: A. Colliander)

13:15	SMAPVEX19 Motivation, Objectives, Overview	A. Colliander
13:30	PALS Airborne Instrument	S. Misra
13:45	Sites and Soil Moisture Measurements	M. Cosh
14:00	Vegetation Characterization Plans	L. Bourgeau-Chavez
14:15	Sherbrooke Tower Radiometer	A. Roy
14:30	NISAR and UAVSAR 2019	B. Chapman
15:00	Discussion	A. Colliander, M. Cosh
15:40	Break	

Afternoon 2: New Directions in Soil Moisture Validation and Observation [POSTERS with 5 min talks]

(Chair: D. Entekhabi)

16:05	Multi-scale L-band freeze/thaw retrieval in boreal forest	A. Roy
16:10	Dielectric characterization of vegetation	A. Mavrovic
16:15	BERMS soil moisture network	A. Berg
16:20	NMM3D forest modeling	H. Huang
16:25	Evaluating the SMAP and SMOS soil moisture values together with the results obtained from four land surface models	F. Lahoud
16:30	Temporal and spatial mismatch effect between SMAP and SMOS soil moisture	N. Yang
16:35	Validation strategy for high resolution soil moisture product	A. Balenzano
16:40	A non-stationary geostatistical framework for soil moisture prediction in the presence of surface heterogeneity	B. Mohanty
16:45	Evaluating the sensitivity of surface soil moisture dynamics to soil profile layering schemes	P. Shellito

16:50	An in-situ data based model to downscale radiometric satellite soil moisture products	I.-Y. Yeo
16:55	Standardizing short-term satellite soil moisture datasets	R. Leeper
17:00	Adjourn	

Day 2

Morning 1: Cal/Val Synergies with Other Missions (Chair: S. Yueh)

8:30	SMOS Long-Term Validation and Forest Retrieval Development	Y. Kerr
9:00	Validation of Merged SMAP-SMOS Soil Moisture Product	R. Bindlish
9:20	CYGNSS and Soil Moisture Product Prospects	C. Ruf
9:40	Break	

Morning 2: Validation Methodology 1 (Chair: A. Colliander)

10:00	SMAP Soil Moisture Product Bias Analysis	A. Colliander
10:15	Core Site Uncertainty Analysis	F. Chen
10:30	Sensor Calibration at TxSON	T. Caldwell
10:45	Core Site Bias Analysis using Random Forest	M. Moghaddam
11:00	Upscaling of Little River	M. Cosh
11:15	SMAPVEX16-MB: Upscaling of Carman	M. Friesen
11:30	SMAPVEX16-SF Tower Measurements	J. Judge
11:45	Lunch	

Afternoon 1: Validation Methodology 2 (Chair: W. Crow)

13:15	Evaluation of Multi-frequency TB over Kuwait Validation Site	H. Al Jassar
13:30	International Soil Moisture Network	T. Scanlon
13:45	Time-variable Vegetation Biases	S. Zwieback
14:00	Status of Triple Collocation	W. Crow
14:15	Validation Practices for Satellite Soil Moisture Products - What Are (the) Errors?	A. Gruber
14:30	Discussion	W. Crow
15:00	Break	

Afternoon 2: High-resolution Soil Moisture Validation (Chair: M. Cosh)

15:30	Sentinel-1 High-resolution SM Product and Validation	F. Mattia, A. Balenzano
15:45	Julich High Density Network	C. Montzka
16:00	SoilSCAPE Network	M. Moghaddam
16:15	Discussion on Validation of 1-km Soil Moisture Products	M. Cosh
16:45	Closing of Workshop	A. Colliander
17:00	Adjourn	