

Understanding the Carbon and Water Cycles using SMOS Data and Models

THURSDAY 13 NOVEMBER 2014

SESSION I: INTRODUCTION

9:00-9:20	Welcome and introduction to the workshop	Drusch	Matthias	ESA
9:20-9:40	ESA's Earth Observation Programme: Relevance to water & carbon cycle	Borgeaud	Maurice	ESA
9:40-10:00	SMOS mission status	Mecklenburg	Susanne	ESA

SESSION II: VEGETATION AND CARBON CYCLE - METHODS AND VALIDATION Chair: Jennifer Grant (Lund University) and Simone Bircher (CESBIO)

10:00-10:30	Keynote I: The need for soil moisture data for evaluation and optimisation of a global Land Surface Model	Mc Bean	Natasha	IPSL - LSCE
10:30-11:00	Keynote II: Carbon and water cycle interactions from space	de Jeu	Richard	VU University Amsterdam
		Dolman	Han	VU University Amsterdam
11:00-11:20	COFFEE BREAK			
11:20-11:40	Retrieval, validation and scientific content of forest optical depth	Vittucci	Cristina	Tor Vergata University
11:40-12:00	A global-scale vegetation water product from SMOS optical depth	Grant	Jennifer	Lund University
12:00-12:20	Three years of ground-based L-band radiometry in the Alps: topography, vegetation and snow issues	Pellarin	T.	CNRS
12:20-12:40	Using remotely sensed soil moisture to estimate vegetation phenology for seasonally-arid regions	Olén	Niklas	Lund University
12:40-13:00	Analysis of the behavior of microwave L-band emissions of organic-rich soils in the northern cold climate zone in support of the SMOS mission	Bircher	Simone	Spatiales de la Biosphère (CESBIO),
13:00-14:00	LUNCH			

SESSION III: VEGETATION AND CARBON CYCLE - APPLICATIONS, Chair: Marko Scholz (Lund University) and Klaus Scipal (ESA)

14:00-14:30	Keynote I: Potential of combining SMOS products with other vegetation state /functioning information to improve the description of surface-atmosphere carbon exchanges in global dynamical models.	Moreno	Jose	University of Valencia
14:30-15:00	Keynote II: Better matching satellite Earth surface observations within numerical weather prediction models: why & how	Balsamo	Gianpaolo	ECMWF
15:00-15:20	Constraining terrestrial carbon fluxes by assimilating the SMOS soil moisture product into a model of the global terrestrial biosphere	Scholze	Marko	Lund University
15:20-15:40	Quantifying the synergistic benefits of remotely sensed soil moisture and solar induced fluorescence for global agricultural monitoring	Drewry	D.	Jet Propulsion Laboratory
15:40-16:00	A SMOS/MODIS Synergistic Approach to Assessing Bioenergy-induced Soil Moisture Variations in the Mississippi River Basin, USA	Wang	C.	University of South Carolina
16:00-16:20	COFFEE BREAK			
16:20-16:40	Monitoring and understanding carbon and water cycles at high latitudes using SMOS	Rautiainen	Kimmo	Finnish Meteorological Institute
16:40-17:00	SMOS Soil Moisture and Vegetation Products Comparison against Remote	Escorihuela	M. J.	isardSAT
17:00-18:30	DISCUSSION			

