



IEEE METROPOLITAN LOS ANGELES SECTION  
GEOSCIENCE AND REMOTE SENSING SOCIETY (GRSS) CHAPTER



The AirMOSS Mission to Understand Root Zone Soil Moisture Effects on  
Carbon Exchange

Dr. Mahta Moghaddam, University of Southern California

Wednesday, November 6, 2013

Cameron's Restaurant, 1978 East Colorado Blvd., Pasadena, CA 91107

[www.camerons4fish.com](http://www.camerons4fish.com) (*Free Parking*)



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Membership Development

*The IEEE Geoscience & Remote Sensing Society Chapter in Los Angeles  
presents a special dinner, lecture, and election event*

**DATE & TIME:** Wednesday, November 6, 2013 (Dinner starts at 5:30 PM, talk starts at 6:30 PM)

**This meeting is free to IEEE Los Angeles Section GRSS Chapter members and their spouses/companions, and includes dinner and non-alcoholic beverages. Non-members fee is \$45. Reservations are required by November 3, 2013 to guarantee seating.**

If you wish to become a GRSS member, go to [www.ieee.org/join](http://www.ieee.org/join). You do not need to be an engineer or a scientist to become a member. For questions, please contact: [la.grss.officers@ieee.org](mailto:la.grss.officers@ieee.org).

**RESERVATION DETAILS:** RSVP to [la.grss.officers@ieee.org](mailto:la.grss.officers@ieee.org) by November 3, 2013. If you are an IEEE member, please include your IEEE membership number.

**About the Speaker**

Dr. Moghaddam is a Professor of Electrical Engineering at the University of Southern California. Dr. Moghaddam has introduced innovative approaches and algorithms for quantitative interpretation of multi-channel radar imagery based on analytical inverse scattering techniques applied to complex and random media. She received the B.S. degree from the University of Kansas, Lawrence, and the M.S. and Ph.D. degrees from the University of Illinois, Urbana-Champaign, all in electrical and computer engineering. From 1991 to 2003, she was with the Jet Propulsion Laboratory, California Institute of Technology, Pasadena, and the Radiation Laboratory in the Department of Electrical Engineering and Computer Science at the University of Michigan, Ann Arbor from 2003 to 2012, before joining USC. Dr. Moghaddam is an IEEE Fellow and member of the GRSS AdCom. Dr. Moghaddam is the AirMOSS Project Principal Investigator.

**About the Topic**

Soil moisture is one of the most important variables controlling the exchange of carbon between soils and the atmosphere. It is highly heterogeneous in time and space, and elusive to measure comprehensively because most remote sensing techniques are either not able to see below the surface, or if they can, have difficulty in distinguishing soil moisture from other contributors to the measurements, such as soil type and vegetation cover, including roots. The NASA AirMOSS airborne P-band (70-cm wavelength) polarimetric radar mission is the first experiment to comprehensively map and model root-zone soil moisture in significant watersheds of the United States, informing scientists of nature of soil moisture variability and its impact on carbon exchange.

**About the Election**

We will conduct an election of GRSS chapter officers for the following year at this meeting. If you would like to nominate anyone including yourself, please send your nomination, including the candidate's IEEE membership number, resume, and statement of interest, to [la.grss.officers@ieee.org](mailto:la.grss.officers@ieee.org) by October 25, 2013 to be placed on the ballot. All Metro LA Section GRSS Chapter members are eligible to vote.