

## RESEARCH PROJECTS

<u>TITLE</u>	<u>SPONSOR</u>	<u>PERIOD</u>	<u>CO-INVESTIGATORS</u>
Study of land atmosphere interactions using satellite data assimilation	NASA	1998-2001	Dubayah (Maryland) Qualls (Idaho)
Coupling satellite remote sensing and unsteady flow modeling for discharge estimation	NASA	1999-2002	Bradley (Iowa)
Determination of land surface soil moisture using L and S band sensors	JPL/Caltech	2000-2001	Njoku (JPL)
The influence of land atmosphere interactions on variability of the North American Monsoon	NASA	2000-2003	Small (Colorado)
Spatial Scaling and Temporal persistence of soil moisture using observations and analysis	NOAA	2001-2002	Mitchell (NCEP)
Development simple, inexpensive and reliable tool for determination of in-situ soil water content	USC	2001-2002	Pierce (USC)
Validation of soil moisture products using the Advanced Microwave Scanning Radiometer (AMSR) and aircraft prototypes using ground sampling	USDA	2001-2006	Jackson (USDA)
Extended validation of AMSR-E soil moisture products	NASA	2001-2004	Jackson (USDA)
Studies of combined passive and active remote sensing	NASA	2002-2005	Njoku (JPL) Jackson (USDA)
Climate change and intertidal biogeography: Coupling remote sensing data to thermal physiology across a cascade of scales	NASA	2004-2007	Helmuth (USC)
Hydrological Information System	NSF	2003-2006	Maidment (Texas)
Spatially distributed wetness resulting from flooding from Hurricane Katrina	USC	2005-2006	-

## CURRENT RESEARCH PROJECTS

<u>TITLE</u>	<u>SPONSOR</u>	<u>PERIOD</u>	<u>CO-INVESTIGATORS</u>
Modeling influence of plant cover on water and energy cycling at the land-atmosphere interface: Constraints from satellite data	NASA	2004-2008	Small (Colorado)
Use of satellite soil moisture observations for improved prediction of the North American precipitation variability	NASA	2004-2008	Small (Colorado)
AQUA AMSR-E soil moisture algorithm product improvement	NASA	2004-2008	Jackson (USDA) Njoku (JPL)
Hydrological validation of satellite soil moisture estimates	JAXA	2005-2008	-
Ecological impact of climate change on marine organisms	NOAA	2004-2009	Wetthey (USC)
Determining the impact of climate change on intertidal mussels using MODIS surface temperatures	NASA	2007-2010	Helmuth (USC)