



JPL CENTER FOR
CLIMATE SCIENCES

WHAT'S HAPPENING TO EVAPOTRANSPIRATION? THE KEY TO UNDERSTANDING THE WATER CYCLE IN A CHANGING CLIMATE

SPEAKER: PROFESSOR ERIC WOOD
PRINCETON UNIVERSITY



JUNE 4, 2012
11.00 AM-12.00 PM / 180-101
ALSO BROADCAST LIVE ON JPL TV, CHANNEL 32



Recent observations suggest that the Earth's water cycle is "intensifying". A key variable in understanding the water cycle is terrestrial evapotranspiration (ET), which links the water, energy and carbon cycles. ET is the combined flux of water vapor from surface evaporation and vegetation transpiration, or, for the energy budget, the surface latent heat flux. This colloquium will discuss the recently observed trends, the implications for water cycle intensification and whether the water cycle over land is accelerating or decelerating. I will also discuss the challenges in estimating ET from both the ground and satellites, which is central to understanding the water cycle in a changing climate.

Eric F. Wood is the Susan Dod Brown Professor of Civil and Environmental Engineering at Princeton University, where he has taught since 1976. His primary research areas include hydroclimatology with an emphasis on land surface modeling, terrestrial remote sensing and seasonal hydrologic climate forecasts. Currently, he is a Science Team member for the international Global Precipitation Measurement mission and the Advanced Microwave Scanning Radiometer (AMSR-E) instrument onboard NASA's Aqua satellite. Professor Wood received his Bachelor's degree in Applied Science from the University of British Columbia and his Sc.D. in Civil Engineering from the Massachusetts Institute of Technology.

