

Computer Science Seminar Series

National Capital Region

Mapping Surface Radiation Budget from Remote Sensing Data

Speaker: Dr. Dongdong Wang
University of Maryland, College Park
Friday, April 3, 2015
1:00PM- 2:00PM, NVC 325

Abstract

The radiation exchange between the land surface and the atmosphere is a vital component of the climate system. It plays significant roles in driving various kinds of land surface processes, e.g., snow melting, photosynthesis, respiration, evapotranspiration, and so on. Remote sensing is a unique tool to monitor surface radiation budget (SRB) at regional or global scales. In this presentation, I will briefly introduce the theory and practice of monitoring SRB from various remote sensing data. I will summarize our recent researches on algorithm development and data analysis of several SRB components, including land surface albedo, surface shortwave net radiation and surface all-wave net radiation.

Biography

Dr. Dongdong Wang is currently a Research Assistant Professor at the Department of Geographical Sciences, University of Maryland, College Park. He is interested in understanding land surface dynamics and its interactions with the human or climate systems with the help of geospatial technologies. His recent research focuses on: 1) monitoring surface radiation budget with satellite data through developing innovative retrieval algorithms, 2) integrating high-level satellite products with spatiotemporal statistical approaches and 3) understanding interactions between climate change and terrestrial ecosystem.

