



BIG energy seminar series

Addressing the scale and complexity of the global energy challenge.

SEAS Seminars: Sustainable Energy and Atmospheric Sciences

Friday, June 17, 2011

NOAA (National Oceanic & Atmospheric Administration), Earth System Research Laboratory

9:30 am: **SPATIAL & TEMPORAL VARIABILITY OF INSOLATION MEASURED AT A FIELD SITE IN HAWAII**

Laura Hinkelman, Joint Institute for the Study of the Atmosphere and Ocean at the University of Washington

10:30 am: **SURFACE SOLAR RADIATION FROM GEOSTATIONARY SATELLITES**

Istvan Laszlo, NOAA/NESDIS, Center for Satellite Applications and Research (STAR)

10:30 – 11:30 am: **Q & A**



Laura Hinkelman, Ph.D.

Laura Hinkelman received her Ph.D. in Meteorology from the Pennsylvania State University in 2003. Upon graduation, she became a research scientist affiliated with the NASA Langley Research Center, focusing on surface energy budgets derived from satellite measurements. Since 2009, she has worked with scientists at NREL to study the spatial and temporal variability of insolation at different scales. She is currently on the research staff of the Joint Institute for the Study of the Atmosphere and Ocean at the University of Washington (Seattle).

Summary of Dr. Hinkelman's Talk: Widespread deployment of photovoltaic (PV) energy production systems requires understanding the spatial and temporal variability of the available solar irradiance. This talk presents the results of variability studies conducted using data from 17 radiometers deployed by the National Renewable Energy Laboratory (NREL) at a site on Oahu Island.



Istvan Laszlo, Ph.D.

Istvan Laszlo received an M.S. degree in Astronomy/Physics and a Ph.D. degree in Physics from the Eötvös Loránd University in Budapest, Hungary. He is a research scientist at the Center for Satellite Applications and Research (STAR) of NOAA/NESDIS and also an adjunct professor at the Department of Atmospheric and Oceanic Science at the University of Maryland at College Park, Maryland. Dr. Laszlo's research interests include atmospheric radiation, radiative transfer, radiation budget and remote sensing of atmospheric and surface properties from space.

Summary of Dr. Laszlo's Talk: Solar radiation at the surface from GOES data in real time has been routinely estimated at the National Environmental Satellite, Data and Information Service (NESDIS) of the National Oceanic and Atmospheric Administration (NOAA). Currently available and planned products will be described along with the techniques used to produce them.

Map to NOAA: <http://www.esrl.noaa.gov/about/visiting.html>

Please Note: If you plan to attend and do not work at NOAA, contact Holly Palm (Holly.Palm@noaa.gov) at least one day in advance, so that she can facilitate your entrance to the campus. Visitors must have photo identification.