



SEMINAR SERIES PRESENTATION

Tuesday, September 11, 2012 – NSSTC 2096 – 9:00a

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TOPIC: **SERVIR Wireless Sensor Network: Enabling real-time in-situ observations for environmental and disaster applications**

Abstract

Inadequate local scale ground observations inhibit an adequate description of actual environmental conditions that impact a number of phenomena such as landslides. The spatial and temporal resolution obtained with utilizing satellite data is insufficient for real-time early warning systems. Major challenges with in situ instruments lie in the prohibitive costs of installing and maintaining equipment for long duration deployments. Costs increase especially if instruments must be connected to the power grid and repeatedly visited for data logging in remote locations. Recently, wireless sensor networks (WSNs) have become much more practical for environmental scientists, providing more affordable monitoring and assessment capabilities. The Regional Visualization and Monitoring System (SERVIR), a joint venture between NASA, the US Agency for International Development (USAID) and other international partners, has developed an affordable and robust wireless sensor network requiring minimal maintenance to make distributed environmental observations with applications ranging from landslide monitoring to flash flood warning systems.

REFRESHMENTS WILL BE PROVIDED