



**FOR IMMEDIATE RELEASE**

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**Ecological Forecasting by Integrating Surface, Satellite and Climate Data with Ecosystem Models**

*Dr. Ramakrishna Nemani*  
*NASA Ames Research Center*

*Grand Forks, ND* – Information technology, weather/climate forecasting, ecosystem modeling, and satellite remote sensing are helping enhance management decisions related to floods, droughts, forest fires, human health, and crop, range, and forest production.

The **Terrestrial Observation and Prediction System** or **TOPS** is modeling software that brings together these technologies to monitor Earth's natural resources and forecast how ecosystems will behave. Whether preparing for the summer fire season or for spring floods, knowledge of the magnitude and direction of future conditions can save time, money, and valuable resources.

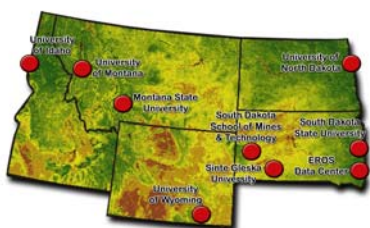
**Dr. Ramakrishna Nemani of NASA Ames Research Center** will describe how this advanced decision making tool is used on **Friday, January 12, 2007 at 3 pm in Clifford Hall Auditorium, room 210 on the UND campus.**

The impetus for developing TOPS came from NASA's research in Napa Valley, California, which explored the relationship between climate and wine quality and the application of remote sensing and modeling in vineyard management. Analysis of long-term climate records and wine ratings showed that interannual variability in climate has a strong impact on the yearly \$30 billion California wine industry.

TOPS applications range from crop quality forecasting and irrigation management, to fire risk forecasting, and snow pack monitoring.

Dr. Nemani has a BS in Agronomy, an MS in Meteorology from India. He received his PhD in 1987 from the University of Montana in forest ecology and remote sensing. He directs the Ecological Forecasting Laboratory at NASA Ames Research Center.

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