

# Multi-Temp 05 Workshop Presentations

## DISASTERS, CLIMATE CHANGE & WATER MANAGEMENT

Milne	Oral	Change Detection Analysis in Wetlands Using JERS-1 Radar Data: Tonle Sap Great Lake, Cambodia
Zourarakis	Oral	Forward Change Detection 2000 - 2004: Urban Sprawl And Imperviousness in Lexington, KY
Aten	Oral	Lake Eutrophication Change Detection for the Management of Water Resources
van den Bergh	Oral	A Multi temporal Approach to Fire Detection using MSG Data
Butson	Oral	Mapping Land Cover Change and Terrestrial Dynamics Over Northern Canada Using Multi-Temporal Landsat Imagery
Reed	Oral	Trend Analysis of Time-Series Phenology Derived from Satellite Data
Nielsen	Oral	Multi- and Hyperspectral Remote Sensing Change Detection with Generalized Difference Images by the IR-MAD Method
Beauchemin	Poster	An Adaptive Filter For The Reduction Of Artifacts Caused By Image Misregistration
Garcia	Poster	Multitemporal Analysis of NDVI and Land Surface Temperature for Modeling the Probability of Forest Fire Occurrence in Central Mexico
Ledrew	Poster	The Temporal Signal of Sea Ice Variability in the Polar Basin from Wavelet Analysis of Passive Microwave Sea Ice Concentrations
Carter	Poster	GIS Management Tools For Estimating Change Trends in Surface Water Quality: An Application of Multi-Temporal Land Cover Data
Chang	Poster	Seasonal Soil Moisture Variation Analysis Using RADARSAT-1 Satellite Image in a Semi-Arid Coastal Watershed

## TERRESTRIAL & COASTAL ECOSYSTEMS

Lunetta	Oral	Land-Cover Characterization and Change Detection Using Multi-temporal MODIS NDVI Data
Leceerf	Oral	Monitoring Land Use and Land Cover Changes in Oceanic and Fragmented Landscapes with Reconstructed MODIS Time Series
Miller	Oral	Using Multi-Temporal MODIS 250 m Data to Calibrate and Validate a Sediment Transport Model for Environmental Monitoring of Coastal Waters
Rangoonwala	Oral	Remote Sensing Methods for Mapping the Onset and Progression of Spartina Alterniflora Marsh Dieback in Coastal Louisiana
Burkhalter	Oral	The Coastal Change Analysis Program: Mapping Change and Monitoring Change Trends in the Coastal Zone
Huseby	Oral	Alignment of Growth Seasons from Satellite Data
Ledrew	Oral	The Application of the Getis Statistic to High Resolution Imagery to Detect Change in the Spatial Structure of Submerged Tropical Corals Between Image Dates
Aurdal	Oral	Use of Hidden Markov Models and Phenology for Multitemporal Satellite Image Classification: Applications to Mountain Vegetation Classification
Liu	Oral	Classifying Multi-temporal Landsat TM Imagery Using Markov Random Fields and Support Vector Machines
Abuelgasim	Poster	Use of Multi-temporal Remotely Sensed Data for Monitoring Land Reclamation in Sudbury, Ontario (Canada)
Fraser	Poster	An Analysis of Large-Scale Forest Cover Disturbance in Canada (1998-2004) Based on Multi-Temporal Coarse Resolution Data
Nelson	Poster	Mapping and Improving Frequency, Accuracy, and Interpretation of Land Cover Change: Classifying Coastal Louisiana with 1990, 1993, 1996, and 1999 Landsat Thematic Mapper Image Data

## BIODIVERSITY & AGRICULTURE

Goodenough	Oral	Evaluation of Multi-Temporal ASAR for Boreal Forests in Hinton
Collins	Oral	Multitemporal Analysis of Landsat Data to Determine Forest Age Classes for the Mississippi Statewide Forest Inventory - Preliminary Results
Moskal	Oral	Temporal Signatures and Harmonic Analysis of Natural and Anthropogenic Disturbances of Forested Landscapes: A Case Study in the Yellowstone Region
Roberts	Oral	Mountain Pine Beetle Detection and Monitoring: Replication Trials for Early Detection
Kovacs	Oral	Detecting Siberian Silk Moth Damage in Central Siberia Using Multi-Temporal MODIS data
Cooke	Oral	Assessment of Current Field Plots and LiDAR 'Virtual' Plots as Guides to Classification Procedures for Multitemporal Analysis of Historic and Current Landsat Data for Determining Forest Age Classes
Song	Oral	Improving Automated Detection of Land Cover Change for Large Areas Using Landsat Data
Shore	Oral	Selection of Multi-Temporal Scenes for the Mississippi Cropland Data Layer, 2004
Ryan	Oral	Crop Surveillance Demonstration Using a Near-Daily MODIS Vegetation Index Time Series
Mathur	Poster	Feature Extraction via Spectro-Temporal Analysis of Hyperspectral Data for Vegetative Target Detection
Sharma	Oral	Hyper-Temporal Radarsat SAR Data of a Forested Terrain
Mostovoy	Poster	Using MODIS LST Data for High-Resolution Estimates of Daily Air Temperature Over Mississippi
Lee	Poster	Forest Type Classification of Jeju Warm Temperate Forest Using Bi-temporal High Spatial Imagery of IKONOS
Garcia	Poster	Post-Classification Digital Change Detection Analysis of a Temperate Forest in the Southwest Basin of Mexico City, in a 16-year Span
Johnson	Poster	The Use of Landsat TM to Detect Change in the Area of Tropical Forest Types After Fire: Huai Kha Khaeng Wildlife Sanctuary, Thailand

## METHODOLOGICAL APPROACHES

Bovolo	Oral	A Wavelet-Based Change-Detection Technique for Multitemporal SAR Images
O'Hara	Oral	Use and Analysis of Temporal Map Algebra for Vegetation Index Compositing
Bruce	Oral	Denosing and Wavelet-Based Feature Extraction of MODIS Multi-Temporal Vegetation Signatures
Plaza	Oral	Automatic Image Registration Using Morphological Region of Interest Feature Extraction
Walsworth	Oral	Testing of Two Date Change Detection Using a Modified Enhancement Classification Method
Tilton	Oral	Monitoring Change Through Hierarchical Segmentation of Remotely Sensed Image Data
Pagnutti	Oral	Atmospheric Correction of High-Spatial-Resolution Commercial Satellite Imagery Products Using MODIS Atmospheric Products
Riishojgaard	Oral	High-Latitude Winds From Molniya Orbit: A Mission Concept For NASA's Earth System Science Pathfinder Program
van Aardt	Oral	Development of Indicators of Burning Efficiency Based on Time Series of SPOT VEGETATION Data
Bazi	Poster	Change Detection in Multitemporal SAR Images Based on the EM-GA Algorithm and Markov Random Fields
O'Hara	Poster	Object and Feature-Space Fusion and Information Mining for Change Detection
Du	Poster	Unsupervised Linear Unmixing for Change Detection in Multitemporal Airborne Hyperspectral Imagery
Yarbrough	Poster	Using At-Sensor Radiance and Reflectance Tasseled Cap Transforms Applied to Change Detection for the ASTER Sensor

[www.multitemp05.org](http://www.multitemp05.org)



**16 - 18 May 2005**  
**Beau Rivage Resort and Casino**  
**Biloxi, Mississippi, USA**

***3rd International Workshop***  
***on the Analysis of Multi-temporal***  
***Remote Sensing Images***



*A listing of all presentation titles is provided on the last page of this program.*

## Sunday - May 15, 2005

## Monday - May 16, 2005

## Tuesday - May 17, 2005

## Wednesday - May 18, 2005

*Welcome to*

# Multi Temp 2005

**To All Speakers:**

*Please provide an electronic copy of your presentation to the attendants at the registration table in the Hotel Conference Center as soon as possible.*

6:00 pm Registration - *Camellia Room A*

7:00 pm Ice Breaker / Social - *Camellia Room A*

7:00 am Breakfast/Continued Registration - *Camellia Room A*  
 8:00 am General Session - Welcome - *Camellia Room B*  
 Roger King and Colin Scanes, MSU  
 8:45 am Admiral Thomas Donaldson, NASA SSC  
 9:00 am Admiral Conrad Lautenbacher, NOAA  
 10:00 am Break - *Foyer*  
 10:30 am Ron Birk, NASA Applied Sciences Program  
 11:15 am John Townshend, University of Maryland  
 12:00 pm Lunch - *Camellia Room A*  
 1:00 pm **Biodiversity & Agriculture Session - *Camellia Room B***  
 David Goodenough, Pacific Forestry Centre, Moderator  
 1:20 pm Curt Collins, Mississippi State University  
 1:40 pm Monika Moskal, SW Missouri State University  
 2:00 pm Arthur Roberts, Simon Fraser University  
 2:20 pm Katalin Kovacs, NASA Goddard Space Flight Center  
 2:40 pm Bill Cooke, Mississippi State University  
 3:00 pm Break - *Camellia Room A*  
 3:30 pm Kuan Song, University of Maryland  
 3:50 pm Fred Shore, MS Department of Ag and Commerce  
 4:10 pm Robert Ryan, NASA Stennis Space Center  
 4:30 pm Don Leckie, Natural Resources Canada  
 Discussion  
 7:00 pm Social - *Camellia Room A*  
 7:30 pm Dinner - *Camellia Room A*

7:00 am Breakfast - *Camellia Room A*  
 8:00 am **Methodological Approaches Session - *Camellia Room B***  
 Lorenzo Bruzzone, University of Trento, Moderator  
 8:20 am Chuck O'Hara, Mississippi State University  
 8:40 am Lori Bruce, Mississippi State University  
 9:00 am Jacqueline LeMoigne, University of Extremadura  
 9:20 am Don Leckie, Natural Resources Canada  
 9:40 am Jim Tilton, NASA Goddard Space Flight Center  
 10:00 am Break - *Foyer*  
 10:30 am Mary Pagnutti, NASA Stennis Space Center  
 10:50 am Lars P. Riishojgaard, NASA Goddard Space Flight Center  
 11:10 am Jan van Aardt, Katholieke Universiteit Leuven  
 11:30 am Discussion  
 12:00 pm Lunch - *Magnolia Room G*  
 1:00 pm Interactive Poster Session - *Camellia Room A*  
 (Please remove Posters by 4pm.)  
 2:30 pm Break - *Camellia Room A*  
 3:00 pm **Disasters/Climate Change/Water Management Session - *Camellia Room A***  
 Tony Milne, University of New South Wales, Moderator  
 3:20 pm Demetrio Zourarakis, State of Kentucky  
 3:40 pm Michelle Aten, University of Mississippi  
 4:00 pm Frans van den Bergh, CSIR Satellite Application Centre  
 4:20 pm Chris Butson, Prologic of Canada  
 4:40 pm Brad Reed, USGS EROS Data Center  
 5:00 pm Allen Nielsen, Technical University of Denmark  
 Discussion

7:00 am Breakfast - *Foyer*  
 8:00 am **Terrestrial and Coastal Ecosystems Session - *Camellia Room B***  
 Ross Lunetta, Environmental Protection Agency, Moderator  
 8:20 am Remi Lecerf, COSTEL-UNR 6554 CNRS Univ. Rennes 2  
 8:40 am Carlos del Castillo, NASA Stennis Space Center  
 9:00 am Amina Rangoonwala, IAP World Services, Inc.  
 9:20 am Shan Burkhalter, NOAA Coastal Services Center  
 9:40 am Ragnar Huseby, Norwegian Computing Center  
 10:00 am Break - *Foyer*  
 10:30 am Ellsworth LeDrew, University of Waterloo  
 10:50 am Lars Aurdal, Norwegian Computing Center  
 11:10 am Desheng Liu, University of California at Berkeley  
 11:30 am Discussion / Adjourn  
 12:00 pm Box Lunch - *Foyer*  
 1:00 pm Depart for Stennis Space Center Tour  
 5:00 pm Arrive Back at Beau Rivage Hotel

### **Multi-Temp 05 Sponsors:**

**IEEE GRSS** – Institute of Electrical and Electronics Engineers, Geoscience and Remote Sensing Society  
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