Wednesday

12: 30 pm to 5:30 pm

A Regional Perspective of Louisiana Coastal March Dieback Using Landsat 7 EIM+ Imagery

Andrew Beall, *University of New Orleans*Amber I.T. Sigurdson and Shea Penland

The Alaska Exotic Plant Information Clearinghouse and Mapping Project

Emily F. Binnian, *USGS/Alaska Sci. Cntr./Geographic Sci. Off.*

Michael Shephard and Page Spencer

Multi-Temporal Analysis of Land Cover on the Mongolian Plateau

Stephen H. Boles, *University of New Hampshire* Xiangming Xiao, Qingyuan Zhang, Sharav Munkhtuya, and Jiyuan Liu

Upper Paraguay River Basin GIS Database - A Tri-national Solution

Dawn Browne, *Ducks Unlimited*Montserrat Carbonell and Dick Kempka

Comparison of Building Extraction Algorithms Using Lidar Data

Hwijeong Chang, *Inha University*, Rep. of Korea Woosug Cho

Mapping Geomorphic Change with Multi-date, Multi-vector AISM in Steep, Mountainous Terrain

Kelly Crowell, *Los Alamos National Laboratory* Cathy Wilson, H. Evan Canfield, J. William Carey, and Jared E. Lyman

Mapping All-terrain Vehicle Trails in Alaska Using Rectified Aerial Photos and GPS

Joel Cusick, Nat. Park Service – Alaska Support Office

Lidar Processing for Civil Works Applications

Carlton Daniel, U.S. Army Topographic Eng. Center

Using Hyperspectral Imagery for Ocean Process Studies in Monterey Bay, California

Andrew M. Fischer, *Cornell University* John P. Ryan

Development of an Immersive Virtual Forest System Based on Lidar Data

Ikuko Fujisaki, *Mississippi State University* Robert J. Moorhead, David L. Evans, Scott D. Roberts, Derek W. Irby, Tao Wang, and Jean Mohammadi-Aragh

Remote Sensing of Invasive Plants in Southeastern Idaho

Nancy Glenn, *Idaho State University* Jacob Mundt

The Alaska DEM Project: Development of Software Tools for Generating Digital Elevation Models from SAR Interferometric Data

Rick Guritz, *Alaska SAR Facility* Rüdiger Gens, Chris Wyatt, and Joanne Groves

Snow and Ice Products from the Moderate Resolution Imaging Spectroradiometer

Dorothy K. Hall, *NASA/Goddard Space Flight Center* Vincent V. Salomonson, George A. Riggs, and Andrew G. Klein

The Atlas of Antarctic Research: Status and Plans Cheryl A. Hallam, *U.S. Geological Survey*

Early Detection of White Grub Injury in Turfgrass Using Imagery and Field Spectrometer Data

Randy M. Hamilton, *Purdue University* Christian J. Johannsen, Rick E. Foster, and Timothy J. Gibb

Application of Satellite Images to the Conservation of Aggregate Resources in California

Chris T. Higgins, *California Geological Survey* Lawrence Busch and Milton Fonseca

Integration of Multispectral Satellite Imagery and Census Data for Estimation of Urban Population Densities

James B. Holt, *U.S. Center for Dis. Control & Prevention* C. P. Lo

Subpixel Analysis of Urban Land Cover from TM Imagery

Ming-Chih Hung, University of Utah,

Strategic Urban Forests Assessment: Baltimore, Maryland

Frederick M. Irani, Maryland Dept. of Natural Res.

VegMeasure: A C++ Computer Program for Field Measurement of Vegetative Cover

Douglas E. Johnson, *Oregon State University* Mounir Louhaichi, Mark Vulfson, and Norman R. Harris

Automatic Object Extraction and Reconstruction in Lidar Data

Yoonseok Jwa, *Inha University*, Rep. of Korea Woosug Cho

Wildlife Migration Monitoring in East Africa Using GIS and Remote Sensing

Sanga-Ngoie Kazadi, *Mie University*, Japan Douglas E. Musiega

Modeling An XML-Driven Feature Scheme in GIS Application

Do-Hyun Kim, Spatial & Imaging Information Technology Center, ETRI-CSTL, Rep of Korea Min-Soo Kim

Efficient Despeckling Method on SAR Images

Kwang-Yong Kim, Republic of Korea Soo Jeong and Kyung-Ok Kim

GeoVideo: A First Step to Media GIS

Kyong-Ho Kim, *Spatial Information Technology Center, ETRI*, Republic of Korea

Sung-Soo Kim, Sung-Ho Lee, Kyoung-Ok Kim, and Jong-Hun Lee

Development of GIS Application System for Efficient Dam Management Support

Lee Geun-Sang, *Chonbuk National Univ*, Rep. of Korea Lim Seung-Hyeon, Choi Yun-Woong, and Park Sung-Kyu

Topoligical Relationships for 3-dimensional Spatial Features

Seong Ho Lee, *Electronics & Telecom. Res. Inst.*, Rep. Of Korea Sung Soo Kim, Kyong Ho Kim, and Kyoung-Ok Kim

Automatic Building Reconstruction Using Lidar and Aerial Image

Youngjin Lee, *Inha University*, Rep. of Korea Woosug Cho

Semi-automatic Building Extraction from High-resolution Satellite Imagery

Youngjae Lim, *Electronics & Telecom. Res. Inst.*, Rep. Of Korea Hong Gab Kim, Soo Jeong, and KyoungOk Kim

Using Remote Sensing, GIS, and Yield Mapping Systems to Access the Impact of Canada Geese on Crops

Mounir Louhaichi, *Oregon State University* Douglas E. Johnson and Michael M. Borman

Remote Sensing for Comparative Resources Analysis Over Two Contrasting Study Regions

J. K. Mishra, *Indira Gandhi National University*, India O.P. Sharma and T. Akatsuka

GIS as a Tool for Oil Spill Response: Example Maps from the SS Jacob Luckenbach Oil Spill Incident

Judd Muskat, *California Dept. of Fish and Game* Mark Lampinen and Randy Imai

Remote Sensing Temporal Change In Urban Biomass

Soojeong Myeong, *State University of New York* Michael Duggin, Paul F. Hopkins, and David Nowak

Using TIR Remote Sensing to Classify Sources of Thermal Variation in the Umatilla River, Oregon

Scott O'Daniel, *Confederated Tribes of the Umatilla Indian Res.*Geoffrey Poole

Increased Classification Accuracy of Forest Cover Types Using High Spatial Resolution Multispectral Data

Sean O'Melveny, *Stephen F. Austin State University* Daniel Unger

4S Mobile Framework Using Open GIS Standards

Byoung-Woo Oh, Spatial & Imaging Information Technology Center, ETRI-CSTL, Rep. of Korea Mi-Jeong Kim, Eun-Kyu Lee, and Min-Soo Kim

Application of Close Range Photogrammetry and Imaging into the Conservation of Stone Monuments

Hyeong-Dong Park, *Seoul National University*, Republic of Korea Chang-Yub Jeong, Yoon-Seop Chang, and Gi-Hye Shin

Using Landsat ETM+ Data to Discriminate Volcanic Rocks Around El"gygytgyn Crater, Siberia

Cynthia G. Peters, *University of Alaska – Fairbanks* Virgil L. Sharpton

Utilizing ASTER Band-ratios for Geological Mapping in the Neoproterozoic Allaqi-Heiani Suture, Southeastern Egypt

Dianwei Ren

Mohamed Abdelsalam

An Evaluation of High Resolution Imagery for Land Cover Classification in a Coastal Environment

Chris Robinson, *NOAA Coastal Service Center* Bill Stevenson, Mark Finkbeiner, and Renee Seaman

Characterization of Classified Surface Water Using Geometric Ratioing

Stacey Shankle, *Ducks Unlimited* Jerry Holden

Factors of Uncertainty in Monitoring Forest Succession Using Multitemporal Landsat Data

Conghe Song, University of North Carolina at Chapel Hill

Littoral Characterization of Willapa Bay Using Multispectral/ Multithermal Imagery and Lidar Data

Karen Steinmaus, *Pacific Northwest National Lab.* Lyle Hibler and Lee Miller

Hyperion and IKONOS Images in African Rainforest Characterization

Prasad S. Thenkabail, *Yale University* Eden Enclona and Mark S. Ashton

Characterizing the Great Valley of California Using Pansharpened Landsat 7 Imagery

Evelyn Torres, *Humboldt State University* Lawrence Fox III

The Impact of Corn Leaf Optical Properties on Image Tone

Charles L. Walthall, *USDA-ARS Hydro & Remote Sensing Lab* Craig Daughtry and John Norman

Landsat 7 — Systematic Positional Anomaly Discovered in Landsat 7 LIG Processed Data

Graeme Weir, *Ministry of Sustainable Res. Management*, Canada Xiaping Yuan

The Study of Strategies for Acquisition of Moving Object Location

Min Kyoung Wook, Rep. of Korea



8:00 am to 4:45 pm

Epipolar Image Generation Using Fundamental Matrix

Jinhyeong Bark, *Inha University*, Rep. of Korea Woosug Cho

Color Image Enhancement Based on Local Area Histogram Equalization

Sakreya Chitwong, *King Mongkuts Institute of Technology Ladkrabang*, Thailand
Fusak Cheevasuvit and Satit Intajag

A View to the Past: Using Historical Aerial Photographs for Planning and Prioritizing Riparian Restoration Along the Lower Mokelumne River, San Joaquin County, California

Brook R. Edwards, *Humboldt State University* Steven J. Steinberg and Kent A. Reeves

ArcGIS as a Photogrammetric Planning, Review and Inventory Tool

Ron Frederiks, New York State Dept. of Transportation

Detecting Micro-features Using High Resolution Interferometric Synthetic Aperture Radar (IFSAR)

Verner Guthrie, *U.S. Army Engineer Research & Dev. Center, Topographic Engineering Center* Edmundo Simental

Developing an Image-based GIS Database and Associated Base Maps for the Rendille Land in Northern Kenya

Akira Hirano, University of Tsukuba, Japan

Construction of Realtime DGPS System Via Internet

Joon-Mook Kang, *Chungnam Nat. Univ.*, Rep. of Korea Eun-Soo Lee, Sung-Ho Cho, and Jae-Hyun Sun

Kinematic Alignment of the Low Cost IMU for a Digital Photologging System

Byung-Guk Kim, *Inha University*, Republic of Korea Jay-Hyoun Kwon and Jong Ki Lee

Implementation of the Grid Coverage Allowing for Efficient and Fast Access to Very Large Datasets in a Pipelined Manner

Hong Gab Kim, *Electronics and Telecom. Res. Institute*, Republic of Korea Kyung Ok Kim

A Study on the Improvement of Rational Function Model Using the Ground Control Points

Joohyum Kim, *Inha University*, Rep. of Korea Woosug Cho

Land-use/Land-cover Classification Using GIS and Landsat/TM Data

Sanga-Ngoie Kazadi, *Mie University*, Japan Shoko Kobayashi

Simulated Normal Color Image from a DOQQ CIR Image

Gayla Malson, *Southwest Texas University* J. Ronald Eyton

Applying GIS and Aerial Photointerpretation to Analyze Landscape Change: Dove Spring Canyon, Mojave Desert, California

Amy M. Mathie, *USGS* Leila Gass

The Geomorphometric Signature of Valles Marineris From M.O.L.A. D.E.M.

George Ch. Miliaresis, *Tech. Inst. of Athens*, Greece Nikolaos Ant. Kokkas

Supporting the City of Seattle's Cedar River Watershed Habitat Conservation Plan with Remotely-sensed Data

Duncan C. Munro. Seattle Public Utilities

GPS Accuracy Assessment

Daniel Unger, *Stephen F. Austin State University* Sean O'Melveny

Feasibility of Remote Sensing for Tornado Disaster Response and Recovery

Timothy Olsen, *University of Wisconsin Envir. Remote*Sensing Center

Coal Mine Fire Investigation and Management: A Novel Operational Application of Remote Sensing & GIS Technology

Anupma Prakash, University of Alaska – Fairbanks

Hood in North Part of Iran, Golestan Province, 10-11 August 2001

Farahnaz Fazel Rastgar, *Meteorology*, Iran Khodadad Bastani

Accessing Data from The National Map

Chris Rusanowski, USGS - EROS Data Center

Development of Integration System of Digital Photogrammetry and CAD for the Datareconstruction of Buildings

Bae Sang-Ho, *Daelim College*, Rep. of Korea Joo Young-Eun and Kang Joon-Mook

Toward a Projection-free GIS Architecture

Jeong Chang Seong, Northern Michigan University

Automated Littoral Feature Extraction Using Neural Network Techniques

Karen Steinmaus, *Pacific Northwest National Lab.* Whitney Hansen, Peter Gross, and Mike O'Brien

Full Frame DCT-based Digital Watermarking for Copyright Protection of Remote Sensing Images

Punya Thitimajshima, *King Mongukut's Institute of Technology Ladkrabang*, Thailand Mana Ladthawanidphan and Yuttapong Rangsanseri

Satellite Images Applied to Geologic, Landscape and Management Risk Map of the Maipu Dept., Chaco Province, Northeastern Region of Argentina

Roberto Torra, *UNNE-UNLP*, Argentina Jorge M. Sisti and Wualter G. Murisengo

Azimuthal High-pass Filtering

David Viertel, *Southwest Texas University* J. Ronald Eyton

Are All Slopes Created Equal?

Robert C. Weih, Jr., *University of Arkansas – Monticello* Tabitha Mattson

A Comparison of Two Geospatial Technologies in Nonuniform Wheat Fields: Yield Monitors and Remote Sensing

Dennis L. Wright, *Utah State University* V. Philip Rasmussen, R. Douglas Ramsey, and Doran J. Baker

Dynamic Shortest Path Algorithm Application on Urban Transportation Network

Yi-Hwa Wu, *University of Utah* Ming-Chih Hung

Design of an Application Service Provider Platform for Location-based Advertising

Jaejun Yoo, *ETRI-Computer & Software*, Republic of Korea Hea-Ok Choi, Jong-Hun Lee, and Deokgi Park

Design of a Reference System for LBS Platform

Jaejun Yoo, *ETRI-Computer & Software*, Republic of Korea Hea-Ok Choi, Jong-Hun Lee, and Cheol-woo Kim

Robust Fuzzy Morphological Processing to Ensure Arbitrary Geometric Transformation for Spatial Imagery

ChangRak Yoon, *Spatial Info. Tech. Cntr., CSTL, STRI*, Rep. of Korea KwangYong Kim, HongGab Kim, and KyungOk Kim



8:00 am to 3:00 pm

Water Quality Monitoring Using Remote Sensing Technique

Suwannee Adsavakulchai, *King Mongkut's University of Technology Thonburi*, Thailand Paweena Panichayapichet

Neural Network Base Junction Extraction and Description

Arpad Barsi, Budapest University of Technology, Hungary

Mapping Rice Agriculture in China with RADARSAT ScanSAR Data

Stephen H. Boles, University of New Hampshire William Salas, Ziangming Xiao, Steve Frolking, Jiyuan Liu, and Changsheng Li

Combining High-resolution Commercial Imagery with Local Data for Practical Applications

Patrick Bresnahan, *Richland County, South Carolina* Jeff Liedtke and Michael Wright

Effects of Topography and Storm Events on Biological Structure Mapped Using Airborne Remote Sensing

Evelyn Brown, *Univ. of Alaska – Fairbanks, Inst. of Marine Sci.* Martín Montes, James Churnside, Chris Wilson, and Anne Hollowed

Effects of Lidar Post-spacing and DEM Cell Size on Slope Estimation for Hydrologic Modeling

T. Edwin Chow, *University of South Carolina* Michael E. Hodgson

Use of High-resolution Multitemporal Imagery for Characterizing Biophysical Factors Associated with Plant Community Succession in a Prairie/Deciduous Forest Ecotone

Benjamin F. Coles, *University of Kansas* M.E. Ramspott, Kevin P. Price, William M. Cook, Robert H. Hagen, and Bryan L. Foster

Integration of Remote Sensing and GIS to Evaluate Changes in the Mississippi Coast and Mississippi Sound

Erika C. Cohen, *University of Mississippi* Greg Easson

Landscape Pattern Analysis from IKONOS Image Data by Wavelet and Semivariogram Method

Sun Danfeng, China

Design Concept and Status of the Digital Mapping CameraGert Ferrano, Z/I Imaging Corporation

Historic Yellowstone Imagery Processed with DIME SoftwareLiz Galli-Noble, *Positive Systems*

Todd Twete

Remote Measurement of Water Quality Parameters in Coastal Waters

Luoheng Han, University of Alabama

Evaluation of High Spatial Resolution Geo-spatial Data Techniques for Delineating Land Cover and Fish Habitat Features at East Texas Reservoirs

Larry Handley, *U.S. Fish & Wildlife Service*James Parks, Daniel R. Unger and Darrel L. McDonald

Mapping the Railroad Network with Terrestrial and Aerial Images

Guangping He, Lambda Tech International, Inc.

A Robust Method for Interactive Extraction of Road Centerlines from Spatial Imagery

Xiangyun Hu, *York University*, Canada C. Vincent Tao

Automatic Extraction of Digital Terrain Models and Road Networks Using Multiple Returns Lidar Data

Yong Hu, *York University*, Canada C. Vincent Tao

Semi-automatic Extraction of Road Centerlines and Building Boundaries from High Resolution Satellite Images

Taejung Kim, *STRC, Korea Advanced Institute of Science & Technology*, Rep. of Korea Seung-Ran Park



Laser Scanning Technology for Three Dimensional (3D) Modeling of Heritage Sites

Zulkepli Majid, *University of Technology*, Malaysia Anuar Ahmad, Halim Setan, and Albert Chong

Rendering Realistic Pine Trees from Lidar Data in a Virtual Forest

Robert Moorhead, *Mississippi State University* Derek W. Irby, Mahnas Jean Mohammadi-Aragh, Tao Wang, David L. Evans, Scott D. Roberts, and Ikuko Fujisaki

Comparison of Lidar and INSAR DEMs with Dense Ground Control

Robert A. Norheim, *Univ. of Washington, College of Forest Res.*

Feature Extraction with the VLS Feature Analyst System

Michael A. O'Brien, NIMAx

An Exploration into Using Lidar Intensity Measurements for Improving the Estimates of Forest Biophysical Parameters

Sorin C. Popescu, *Dept. of Forestry, Virginia* Randolph H. Wynne

Structural Synthesis of Road Fragments and Centerline Detection from Segmented Aerial Imagery

Lakshman Prasad, *Los Alamos National Laboratory* Alexei N. Skourikhine and Steven P. Brumby

Mitigating the Effects of Shadow in High Resolution Imagery

Kevin Riordan, University of South Carolina

Monitoring Land Cover Change in California Using Multitemporal Landsat TM and Ancillary Data

John Rogan, *San Diego State University* Jennifer Miller, Doug Stow, Janet Franklin, Lisa Levien, and Chris Fischer

Estimating Mangrove Conversion and Aquaculture Develop-ment in the Red River Delta, Vietnam, Using Landsat TM

Karen C. Seto, *Stanford University* J. Michael Beman

Sub-pixel Aircraft Detection from Hyperspectral Data of Naval Air Station

Peg Shippert, Research Systems, Inc.

NOAA C-CAP, Great Lakes: A Change Detection Approach to Updating Land Cover

Francois G.F. Smith, Earth Sat. Corp. & NOAA Coastal Services Center

Michael A. Villarreal and Shan Burkhalter

Assessing the Burn Severity of Wildland Fire in Alaska's National Parks

Brian Sorbel, National Park Service

Fuzzy Clustering with Automatic Determination of the Number of Clusters

Yuttapong Rangsanseri, *King Mongkut's Institute of Technology Ladkrabang*, Thailand Punya Thitimajshima and Jirasak Sittigorn

Measurement of Impervious Surfaces for Stormwater Management Applications Using Digital Aerial Imagery, Topographic Lidar, and Lidar Intensity Returns

Jason A. Tullis, *University of South Carolina*John R. Jensen, Kevin D. Riordan, George T. Raber,
Angela M. Browne, Jeanine Backman, Brian M. McKay,
and Daniel R. Morgan

Implementing Geographic Information System (GIS) in Nigeria

David Udoma-Michaels, Dis. GIS Services, Nigeria

Exploration of Satellite-measured Vegetation Seasonality for LANDFIRE Land Cover Classification

James E. Vogelmann, *USGS/EROS Data Center* Zhi-liang Zhu, Brian Tolk, and Chengquan Huang

Incorporating GLOBE Data into a Remotely Sensed Change Detection Analysis of Androscoggin County, Maine

David K. West, *University of New Hampshire* Russell G. Congalton

Image Registration Techniques for Precision Mars Landing Site Mapping

Fengliang Xu, *Ohio State University*Kaichang Di, Ron Li, Larry H. Matthies, and Clark F. Olson

Road Linking Using Fuzzy Reasoning From Satellite Images

Lili Yun, *Kumamoto University*, Japan Keiichi Uchimura

Characterizing Vertical Forest Structure Using Smallfootprint Multi-return Airborne Lidar

Daniel A. Zimble, ESRI

David L. Evans, Robert C. Parker, and George Carlson