

*Conducting Remote
Sensing Seminars
across the United
States*



Chris J. Johannsen
Purdue University
March 9, 2004

I-Light Symposium

In order to apply Spatial Technologies to
Agriculture,
we use: “Tools”

Remote
Sensing

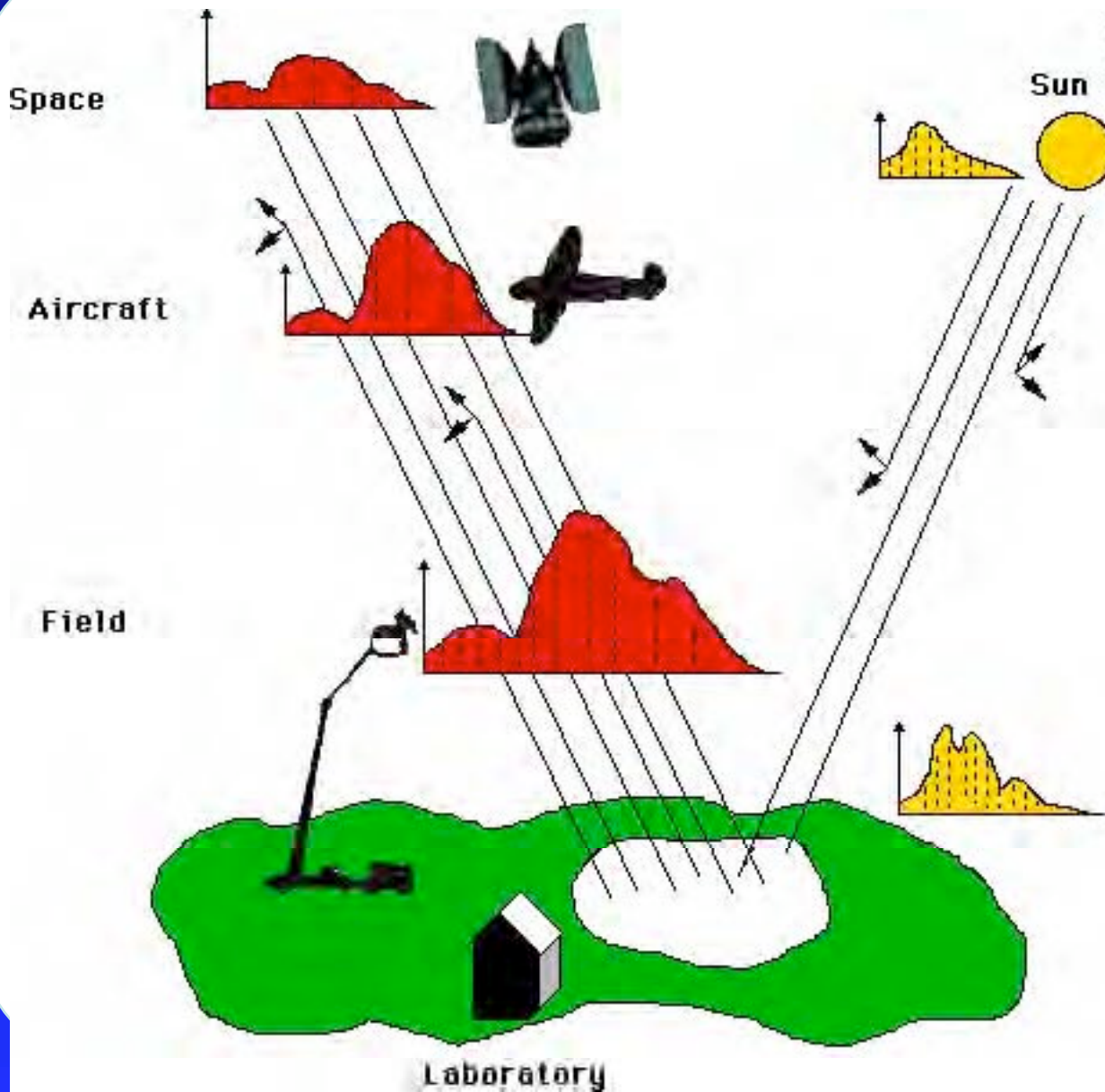
Geographic Information
Systems

Global Positioning
Systems

Communications

Spatial Statistics

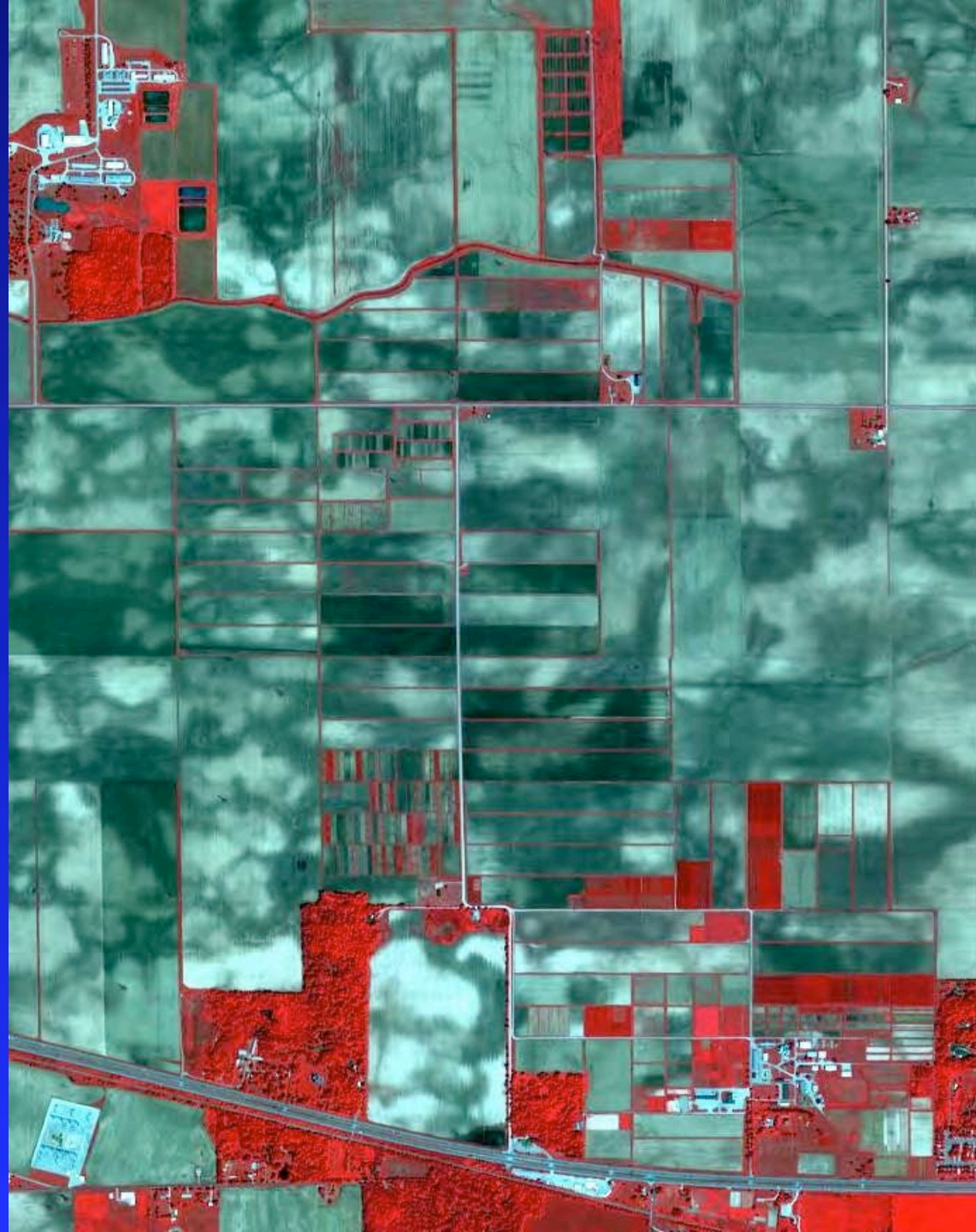
Basic RS Measurements



Remote Sensing: Viewing the Earth from Ground, Aerial and Space Platforms

**IKONOS Satellite
Space Imaging, Inc**

May 24, 2000



Conducting TV Interviews



Background - Extension opportunities with radio and TV

Filming the Corn Blight Watch Experiment



Background - Filming the Corn Blight Watch Experiment

Teaching Agronomy Course to 9 Remote Locations via IHETS



Background - The “Agricultural Tonight Show”

A “Remote Experience”



Background -Taking a question from a student at Ft. Wayne

Opening PowerPoint - 1998

AGRY 598G

Remote Sensing Seminar

Credit: 1 hour

Instructor: Chris J. Johannsen

3-353 LILY, 494-6248

August 31, 1998



Objectives of Remote Sensing Seminars

Provide a forum for graduate students to:

- interact with academic, aerospace and government personnel working with remote sensing technology
- hear the latest information about remote sensing technology
- provide opportunities to explore future career paths involving remote sensing technologies.

Sequence of the Growth of the RS Seminars

1998 and 1999 Agronomy Department Seminar

2000 Indiana State University - IHETS Connection

2001 Added Mississippi State University and Stennis
Space Center

2002 Added the University of Nebraska

2003 Added EROS Data Center and SD School of Mines

2004 Conducting special Earth Observation Seminars
with the Katholieke Universiteit Leuven (KUL)
Belgium

2000 Remote Sensing Seminar Students and Department

Name

Department

Marshall Beatty	Agronomy
*Greg Blumhoff	Agronomy
*Richard J. Caldanaro	Civil Engineering
*Paul Carter	Agronomy
*Matt Coon	Soc/Anthropology
Krysten DeBroke	EAS
*Peng Du	Agronomy
*Bruce Erickson	Agronomy
*Dan Getman	EAS
*Brenda Hofmann	Agronomy
William King	Forestry & NR
Kyoung Jae Lim	Ag & BioEngineering
*Huagen Liu	EAS
*Pablo Mercuri	Agronomy
*Keith Morris	Agronomy
*Suresh Muthukrishnan	EAS
*Kent Ross	Agronomy
*Maggie Sullivan	Ag & BioEngineering
Van Etten, Jeffrey	Horticulture/LA
Wallace, Robert M.	Civil Engineering
*Wenchun Wu	Forestry & NR

Note: students registered from 7 departments within the Schools of Agriculture, Engineering and Science.

Information Extraction Principles for Hyperspectral Data

David Landgrebe
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Outline

- A Historical Perspective
- Data and Analysis Factors
- Hyperspectral Data Characteristics
- Examples
- Summary of Key Factors

More than 15 Purdue faculty provided seminars during the series

Speakers Participating in RS Seminars

George Buttner, Head, Environmental Applications, Remote Sensing Centre, Budapest Hungary “CORINE Land Cover Program in Europe”

David Shaw, Director, Remote Sensing Technologies Center, Mississippi State University, “Remote Sensing: From Pandora to the Oracle”

Ryan Jensen, Geology, Geography and Anthropology, Indiana State University, “Integrating artificial neural networks and TM data to estimate forest LAI”

Donald Runquist, University of Nebraska, "University of Nebraska Airborne Remote Sensing Program"

Speakers (Continued)

- +**Kass Green, President, Pacific Meridian**
- +**Patrick Willis, National Ag Statistics Service, USDA**
- +**Bruce Davis, Chief Scientist, Commercial Remote Sensing Program, Stennis Space Center**
- +**Roger King, Chief Technologist, Applications Division, NASA Headquarters**
- +**Michael F. Goodchild, Uni. of California, Santa Barbara, CA**
- +**Kevin Gallo, NOAA/NESDIS, USGS EROS Data Center**
- +**Mark Vanacht, President, AG Business Consultants, St. Louis**
- +**Tina Cary, Cary and Associates, Longmont, CO**
- +**Joanne Gabrynowicz, Director, Nat. RS and Space Law Center, University of Mississippi**

Speakers (Continued)

Tim Warner, Geography and Geology Department, West Virginia University, Morgantown, WV

Todd Helt, President, Telemorphic Inc. San Francisco, CA

Michael Renslow, Manager, Spencer B. Gross, Portland, OR

Bryan Pijanowski, Michigan State University, Lansing, MI

Susan Carson Lambert, Governor's Office for Technology, Commonwealth of Kentucky

Harold Reetz, Jr., Midwest Director, Potash Phosphate Institute

The Future

Invited IndianaView and AmericanView Universities to participate in seminars for Fall 2004

Expect to provide seminars during Fall and Spring Semesters

Discussing the possibilities of teaching AGRY 545 Remote Sensing of Land Resources to the United Arab Emirates

Will conduct Graduate Student Thesis Defenses with KULeuven using the Purdue Communications Services

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**Are there any
Questions?**