

Pecora (1987)

Pete



SYMPOSIUM

Satellite Land Remote Sensing:
Current Programs and a Look to the Future

Preliminary Program

May 5-7, 1987

Holiday Inn City Centre
Sioux Falls, South Dakota

Sponsored by:

The United States Geological Survey, the
National Oceanic and Atmospheric
Administration, and the National Aeronautics
and Space Administration with support from
the Earth Observation Satellite Company and
in cooperation with the American Society
for Photogrammetry and Remote Sensing

OVERVIEW

The Pecora memorial symposia were established in 1975 to honor the late Dr. William T. Pecora for his contributions to the development of a national program for satellite investigations of Earth resources. Dr. Pecora served as Director of the U.S. Geological Survey and later as Under Secretary of the Department of the Interior. The Pecora symposia are forums for the transfer of satellite land remote sensing data from the research and development community to the operational user community and for discussions on policies and issues by domestic and international governments and private industry.

The Pecora XI Symposium, *Satellite Land Remote Sensing — Current Programs and a Look to the Future*, will feature discussions of satellite remote sensing policy and issues by figures of authority from the White House, Congress, the Department of State, the Department of Commerce, the Department of the Interior, the United Nations, private remote-sensing companies, and universities. Also, papers on satellite remote sensing applications, data processing, and sensor systems will be presented by scientists and resource managers from United States and international organizations during both oral and poster sessions. Representatives from leading research, development, and commercial organizations in the United States, Canada, Europe, Japan, India, the USSR, and the People's Republic of China have been invited to discuss future remote sensing system plans and programs.

Pecora XI will also feature an open, provocative discussion of user perspectives on current programs by a panel of experts from all sectors of the user community. During this session, the audience will be encouraged to participate and express their views.

XI Pecora XI SYMPOSIUM

PECORA XI GUEST SPEAKER

SECRETARY ELIZABETH DOLE

Secretary of Transportation Elizabeth Hanford Dole will highlight the Pecora XI Symposium as speaker at the Pecora Awards Banquet on Wednesday evening. Her presence is indicative of high-level Administration interest in this international symposium and the issues that will be addressed. Included in her remarks will be Administration policies and issues relating to the Nation's space activities and launch-capability concerns.

PRELIMINARY

Monday, May 4, 1987

8-10 p.m. Registration

Tuesday, May 5, 1987

7:00 a.m. Registration

8:30 a.m. Welcoming Remarks

9:00 a.m. Satellite Land Remote Sensing:
Policies and Issues

12 noon Keynote Luncheon

1:30 p.m. Exhibits will open at 1:30 on
Tuesday. They will be open from
8:30 - 5:30 on Wednesday, and
from 8:30 - 1:30 on Thursday.

1:30 p.m. Policy and Issues (continued)

6:00 p.m. Poster Session with Wine and
Cheese Ice Breaker

Wednesday, May 6, 1987

8:30 a.m. •Applications of Satellite Remote
Sensing in the Biosciences
•Remote Sensing Selected Topics
(Concurrent Sessions)

12 Noon Lunch

1:30 p.m. •Applications of Satellite Remote
Sensing in the Geosciences
•Technique Development and
Data Processing
(Concurrent Sessions)

3:00 p.m. EROS Data Center Tour

7:00 p.m. Pecora Symposium Award Banquet
Secretary of Transportation
Elizabeth Dole, Featured Speaker

CALENDAR

Thursday, May 7, 1987

8:30 a.m. Future Remote Sensing Plans and
Programs

12 Noon Lunch

1:30 p.m. Forum and Discussion: User
Perspectives on Current Programs

3:00 p.m. EROS Data Center Tour

4:00 p.m. Closing Remarks

Friday, May 8, 1987

9:00 a.m. EROS Data Center Tour

EROS DATA CENTER TOURS

The EROS Data Center, operated by the U.S. Geological Survey's National Mapping Division for the Department of the Interior, is a national archive, production and research facility for remotely sensed data and other forms of Earth-science geographic information. While investigations include advanced remote sensing applications, much of the Center's current research effort deals with designing and operating computerized geographic information systems. The EROS archives hold over 2,000,000 worldwide scenes of Earth acquired by Landsat satellites and over 5,000,000 aerial photographs of U.S. sites.

Guided tours of the EROS Data Center will be offered at 3 p.m. on Wednesday and Thursday, May 6 and 7, and at 9 a.m. on Friday, May 8. Free bus transportation will be furnished. The EROS Data Center is located 16 miles northeast of Sioux Falls.

PRELIMINARY PROGRAM

Tuesday, May 5, 1987

9:00 a.m. - 4:30 p.m.

**Satellite Land Remote Sensing:
Policies and Issues**

An in-depth discussion of major issues currently facing the satellite land remote sensing community, presented by senior policy makers representing a variety of governmental, private sector, and international points of view. Agencies invited to participate include NASA, NOAA, USGS, Department of Commerce, the State Department, ABC News, George Washington University, the National Security Council, the European Space Agency, the United Nations, EOSAT, and the U.S. Congress.

12 noon Keynote Luncheon

**POSTER SESSION
Tuesday, May 5, 1987**

Chairperson: William Anderson, TGS Technology, Inc., EROS

6:00 - 7:30 p.m.

- A Color Communication Scheme for Digital Imagery, *A. Acosta, U.S. Geological Survey.*
- Utilization of a Multilayer Database for Geological Mapping and Exploration in Eastern Nova Scotia, *M. S. Akbavi and W. P. Jones, College of Geographical Sciences.*
- Image Map Production Using Landsat Thematic Mapper Data on an Interactive Digital Image Manipulation System (IDIMS), *M. W. Brennan, R. Colomb, J. Gundy, and J. Hammack, Defense Mapping Agency.*
- Digital Processing Techniques and Film Density Calibration for Printing Image Data, *P. Chavez, J. A. McSweeney, and D. R. Binnie, U.S. Geological Survey.*
- The Use of Satellite Thermal Infrared Telemetry in Soil Moisture and Rainfall Mapping, *R. L. Chilson and W. Hein, South Dakota State University; J. Tunheim, Eastern Washington University.*

Wednesday, May 6, 1987

8:30-12:00 Applications of Satellite Remote Sensing in the Biosciences

Co-Chairpersons: Kevin P. Gallo, NOAA; Chris J. Johannsen, Purdue University

- The Unique Contribution of AVHRR Data for Measuring and Understanding Global Processes: Large Scale Deforestation in the Amazon Basin, *J-P. Malingreau, Joint Research Center of the European Communities, Varese, Italy, and C.J. Tucker, NASA Goddard Space Flight Center.*
- A Method for Monitoring Locust Habitat Conditions, *S.M. Howard, T.R. Loveland, and D.O. Oblen, TGS Technology Inc., EROS; D.G. Moore, USGS, EROS; K.P. Gallo, NOAA/NESDIS, EROS; and J. Olson, USAID.*
- The Utility of AVHRR Data for Monitoring Large-Scale Temporal Changes in Great Lakes Water Quality, *J.R. Vande Castle and T.M. Lillesand, University of Wisconsin-Madison.*
- Sensitivity of Vegetation Index to Proposed AVHRR Filter Changes, *C.G. Justus, Georgia Institute of Technology.*
- Computerized PATREC Assessment of Landsat Derived Land Cover Data to Aid Planning of Pheasant Management in Missouri, *T.L. Haithcoat, University of Missouri-Columbia, and D.L. Hallett, Missouri Department of Conservation.*
- The Relationship of Forest Productivity to Landsat Thematic Mapper Data and Supplemental Terrain Information, *E.A. Cook and L.R. Iverson, Illinois Natural History Survey, and R.L. Graham, Oak Ridge National Laboratory.*

- Monitoring Agricultural Productivity in Developing Nations Utilizing Landsat Data and GIS Technology, *D.J. Wheeler and A.A. Jayasekara, Utah State University.*
- Range Site Reflectance Characteristics Measured by Landsat MSS and Color-Infrared Low Aerial Photography in South Dakota Mixed Prairie, *W. Weaver, USDA/SRS; H.G. Fisser, University of Wyoming; J.K. Lewis, Colorado State University and R.W. Marrs, University of Wyoming.*
- International Satellite Land Surface Climatology Project (ISLSCP), *R. Murphy, NASA, Land Processes Branch.*

8:30-12:00 Applications and Developments in Geologic Remote Sensing

Co-Chairpersons: Michel T. Halbouty, Houston, TX and G. Bryan Bailey, USGS/EROS

- Mapping the Oman Ophiolite with Landsat Thematic Mapper Data, *M.J. Abrams, Jet Propulsion Laboratory.*
- Hydrocarbon Microseepage Detection Using Remote Sensing Techniques, *M. Settle, ARCO Oil and Gas Company.*
- Digital Mapping of Contact Aureoles in Extremadura, Spain, Using Multitemporal Landsat Thematic Mapper Images, *L.C. Rowan, U.S. Geological Survey; C. Anton-Tacheco, Institute of Geology and Mines of Spain; D.W. Brickey, U.S. Geological Survey; A. Payas, Institute of Geology and Mines of Spain.*
- Application of Combined Landsat Thematic Mapper and Airborne Thermal Infrared Multispectral Scanner Data to Lithologic Mapping in Nevada, *M.H. Podwysocki, W.J. Ehmman, and D.W. Brickey, U.S. Geological Survey.*

- Applications of SPOT Data to Geologic Investigations in Nevada, *J.V. Taranik, Mackay School of Mines, University of Nevada.*
- New Techniques for the Quantification and Modelling of Remotely Sensed Alteration and Linear Features in Mineral Resource Assessment Studies, *C.M. Trautwein and L.C. Rowan, U.S. Geological Survey.*
- AVIRIS: The New Future in Geologic Remote Sensing, *A.F.H. Goetz, University of Colorado.*

1:30-4:30 Technique Development and Data Processing

Chairperson: Richard Mroczynski, EOSAT

- Semi-automated Training Sample Selection for Classification of High Resolution Multispectral Imagery, *M.P. Buchheim and T.M. Lillesand, University of Wisconsin-Madison.*
- Characterization of Landscape Complexity in Digital Satellite Images, *J.W. Merchant, University of Kansas.*
- A Paradigm of an Expert System Prototype for Semantic and Syntactic Land-Use/Cover Classification, *T. Cbu, University of Kansas.*
- Multi-frequency Image Analysis: Beyond the Per-point Classifier, *S.C. Abeam, University of Minnesota.*
- Multi-temporal Application of the Tasseled Cap Transformation for General Land Cover Classification, *Y. Lu, NASA/Goddard Space Flight Center, M.H. Story and D.A. Klemas, Sciences Applications Research.*
- Dynamic Method for Search of Control Points for the Registration of Two Pictures, *A. Anglade, Etablissement Technique Central de l'Armement, Arcueil, France, and H. Maitre, Ecole Nationale Supérieure des Telecommunications, Paris, France.*

- Overview of the Land Analysis System (LAS), *B.K. Quirk, TGS Technology Inc., EROS, and L.R. Oleson, USGS, EROS.*
- A Quantitative Equation for Selecting Optimum Parameters of the Matching-Filtering-Template for Linear Feature Detection of Satellite Remote Sensing Images, *Y. Wunian, Chengdu Institute of Geology, Chengdu, China.*

1:30-4:30 Current Remote Sensing Topics and Initiatives

Chairperson: Peggy Harwood, NOAA

- Landsat Data Distribution from 1976 through 1986, *R.A. Pobl, USGS, EROS.*
- Creation of the National Archive for Land Satellite Remotely Sensed Data, *C. Sheffield and O. Russell, Earth Satellite Corporation, and P. Harwood, NOAA.*
- Aerospace Science and Terrestrial Applications in Nevada: a New NOAA Cooperative Institute in Minerals Resources Applications, *J.V. Taranik, University of Nevada-Reno.*
- NOAA Cooperative Institute for Remote Sensing of Biogeophysical Processes, *J. Spiller, University of New Hampshire, and R.W. Birnie, Dartmouth College.*
- NOAA Cooperative Institute for Applied Remote Sensing in Energy Resources, *D. Stearns, University of Oklahoma.*
- Ohio State University's Center for Mapping and NASA Center for Commercial Development of Space, *A. Schenk, Ohio State University.*
- ITD Space Remote Sensing Center's Commercial Strategy for the Late 1980's, *C.F. Schueler, NSTL/Institute for Technology Development.*

Advance registration, postmarked no later than April 20, 1987, is \$130. On-site registration and registration postmarked after April 20, 1987, is \$150. These fees include sessions and exhibits attendance, poster session/ice breaker, luncheon, banquet, and a copy of proceedings. Advance student registration is \$15; registrations postmarked after April 20 and on-site registrations are \$20. Student registration includes sessions/exhibits and poster session/ice breaker. Spouse tickets for the ice breaker, luncheon and banquet may be purchased for \$35.

The registration desk will be open Monday, May 4 from 8 to 10 p.m. and on Tuesday, May 5 at 7 a.m.

PECORA XI COMMITTEE

William C. Draeger, *U.S. Geological Survey/ EROS Data Center*

Peggy Harwood, *National Oceanic and Atmospheric Administration (NOAA)/NESDIS*

Miriam Baltuck, *National Aeronautics and Space Administration*

Richard Mroczynski, *Earth Observation Satellite Company (EOSAT)*

William D. French, *American Society for Photogrammetry and Remote Sensing*

Donald G. Orr, *USGS/EROS*

G. Bryan Bailey, *USGS/EROS*

Kevin Gallo, *NOAA/EROS*

Raymond A. Byrnes, *EOSAT*

G.O. Richards, *TGS Technology, Inc./EROS*

Tim Smith, *TGS/EROS*

Ronald E. Beck, *TGS/EROS*

Lee McManus, *TGS/EROS*

Phyllis G. Wierking, *USGS/EROS*

Howard W. Warriner, *NOAA/EROS*

REGISTRATION

PECORA XI SYMPOSIUM: Satellite Land Remote Sensing — Current Programs and a Look to the Future

Name: _____ Office Phone: _____
 Organization: _____ State: _____ Zip: _____
 Address: _____
 City: _____

	Advance Registration*	On-Site
Participant / Attendee <i>(Includes session/exhibits attendance, poster session / ice- breaker, luncheon, banquet)</i>	\$ 130 <input type="checkbox"/>	\$ 150 <input type="checkbox"/>
Spouse <i>(Includes ice-breaker; luncheon, banquet)</i>	\$ 35 <input type="checkbox"/>	\$ 35 <input type="checkbox"/>
Student <i>(Includes session/exhibits, poster session / ice breaker)</i>	\$ 15 <input type="checkbox"/>	\$ 20 <input type="checkbox"/>

METHOD OF PAYMENT: Check or Money Order (in U.S. funds)
 Purchase Order
 (Sorry - credit cards cannot be accepted)

Make checks payable to Pecora XI Symposium and mail to:

Pecora XI Registration
 USGS EROS Data Center
 Sioux Falls, SD 57198

Please send a list of Sioux Falls Lodging Accommodations.

* Advance registration must be postmarked no later than April 20, 1987.

OFFICIAL BUSINESS
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
EROS DATA CENTER
SIOUX FALLS, SD 57198

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF THE INTERIOR
INT 413

AIR MAIL