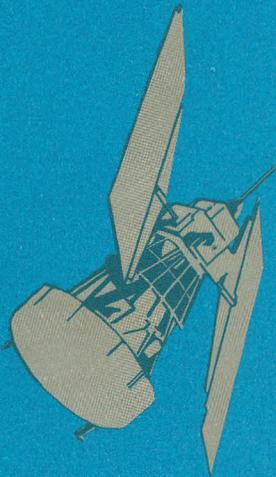


ADVANCE NOTICE



The 1st Annual William T. Pecora Memorial Symposium

Emphasis Topic:
Applications of Remote Sensing
to Mineral and Mineral
Fuel Exploration

October 28-31, 1975
Sioux Falls, South Dakota

Sponsored by
American Mining Congress
In Concert With
United States Geological Survey
American Association of Petroleum Geologists
American Society of Photogrammetry
The Association of American Geographers
The Geological Society of America
Society of Economic Geologists



The 1st Annual William T. Pecora Memorial Symposium scheduled for Sioux Falls, South Dakota, October 28-31, 1975, will foster the exchange of multi-disciplinary scientific and management findings resulting from the use of remotely sensed data.

The four-day symposium will address itself to new and revolutionary discoveries which assist the earth scientist in meeting the world's obligation to produce the minerals, fiber and food essential for the security and continuing progress of our people. Remote sensing experts from the United States, Canada, Mexico and South America will present more than 30 technical papers covering the results of two years of LANDSAT (formerly ERTS—Earth Resources Technology Satellite) productivity. Additionally, the symposium will feature specialized tours of the EROS (Earth Resources Observation Systems) Data Center geared to the interest of each attendee.

The schedule shown below is just a sampling of the four-day program. Additional technical papers and special event speakers will be announced later.

TUESDAY AFTERNOON

Tours of the EROS Data Center. Shuttle buses will depart the Holiday Inn at short intervals throughout the afternoon. Visitors will be given specialized tours in small groups showing applications of the equipment and services within the Data Center.

WEDNESDAY MORNING

Welcoming Address: The Honorable Richard F. Kneip, Governor of the State of South Dakota

Opening Remarks: The Honorable V.E. McKelvey, Director, U.S. Geological Survey, Reston, VA
INTERNATIONAL IMPLICATIONS OF LANDSAT DATA FROM A GEOLOGICAL VIEWPOINT

Dr. John Reinemund, *Chief*, Office of International Geology, U.S. Geological Survey, Reston, VA

NASA PLANS FOR FUTURE EARTH RESOURCE MISSIONS

Dr. William Nordberg
Director of Applications, NASA Goddard Space Flight Center, Greenbelt, MD

USES OF LANDSAT DATA IN PETROLEUM EXPLORATION

Michel T. Halbouty, Houston
LANDSAT APPLICATIONS TO RESOURCE EXPLORATION AND GASLINE PLANNING

Dr. Carlos Brockmann, *Director*, Programa ERTS/Bolivia, GEOBOL Servicio Geologico de Bolivia, La Paz, Bolivia, South America



WEDNESDAY AFTERNOON

AN OVERVIEW OF CANADIAN PROGRESS IN THE USES OF LANDSAT DATA IN GEOLOGY

Co-authors: Dr. L.W. Morley, *Director*, Canadian Centre for Remote Sensing, Ottawa, Ontario, Canada and

Dr. A. F. Gregory, *President*, Gregory Geoscience Ltd., Ottawa, Ontario, Canada

MAPPING AND CHARTING FROM LANDSAT

Dr. A. P. Colvocoresses, *Cartography Coordinator*, EROS Program, U.S. Geological Survey, Reston, VA

RELATIONSHIP OF MINERAL RESOURCES TO LINEAR FEATURES IN MEXICO AS DETERMINED FROM LANDSAT DATA

Ing. Guillermo P. Salas, *Director General*, Consejo de Recursos Naturales Renovables, Mexico City, Mexico

USES OF LANDSAT AND OTHER REMOTE SENSOR SYSTEMS TO ADDRESS ENERGY, MINERALS, AND RELATED ENVIRONMENTAL PROBLEMS

Dr. John M. DeNoyer, *Director*, EROS Program, U.S. Geological Survey, Reston, VA

THURSDAY MORNING

LANDSAT CONTRIBUTIONS TO STUDIES OF PLATE TECTONICS

Dr. Jan Kutina, *Consulting Geologist*, Bethlehem Steel Corporation, Bethlehem, PA

MACHINE PROCESSING OF LANDSAT DATA IN THE SEARCH FOR ALTERATION HALOS

Dr. Lawrence Rowan, *Geologist*, U.S. Geological Survey, Reston, VA

LANDSAT DATA CONTRIBUTIONS TO EXPLORATION OF FOREIGN REGIONS (TUNISIA, EGYPT, YEMEN AND SUMATRA)

Co-authors: Seth I. Gutman, *Geophysicist* and

Dr. F. P. Bentz, *Chief Geologist*, Santa Fe Minerals, Inc., Orange, CA

LANDSAT AND OTHER REMOTE SENSING TECHNIQUES APPLIED TO INVESTIGATION OF VEGETATED GEOCHEMICAL ANOMALIES

Co-authors: Dr. Frank Canney, *Geologist*, U.S. Geological Survey, Denver, Wm. R. Hemphill, Acting Assistant Program Manager, EROS Program, Reston, VA; Gary L. Raines, Research Associate, U.S. Geological Survey, Denver, and Robert D. Watson, Physicist, U.S. Geological Survey, Flagstaff, AZ

USE OF LANDSAT DATA FOR ENGINEERING GEOLOGIC APPLICATIONS IN NORTH CENTRAL IRAN

Dr. Daniel B. Krinsley, *Chief*, Environmental Impact Analysis Program, U.S. Geological Survey, Reston, VA



FUTURE SENSOR TECHNOLOGY FOR GEOLOGIC AND RELATED MISSIONS

Marvin S. Maxwell, *Head*, Systems and Missions Analysis Branch, NASA Goddard Space Flight Center, Greenbelt, MD

ENVIRONMENTAL EVALUATION AND SITE STUDIES USING LANDSAT DATA

Leo Eichen, *Manager*, Remote Sensing Technology Group, Dames & Moore, Cranford, NJ

LANDSAT DATA CONTRIBUTIONS TO PROJECT 'BIRDDOG'

Terrence J. Donovan, *Geologist*, Branch of Oil and Gas Resources, U.S. Geological Survey, Denver

THURSDAY AFTERNOON

LANDSAT IMAGE STUDIES AS APPLIED TO PETROLEUM EXPLORATION IN KENYA

John B. Miller, *Staff Geologist*, Chevron Overseas Petroleum, Inc., San Francisco

REGIONAL LINEAR ANALYSIS AS A GUIDE TO MINERAL RESOURCE EXPLORATION—USING LANDSAT (ERTS) DATA

Dr. Robert A. Hodgson, *Research Associate*, Gulf Research and Development Co., Pittsburgh

EXPLORATION BY PETROLEUM INDEPENDENTS USING IMAGERY AND PHOTOS FROM EROS AND MSC SURVEYS

Robert Worthing, *Chief Geologist*, The Reserve Petroleum Co., Oklahoma City

TECTONIC DEDUCTIONS FROM ALASKAN SPACE IMAGERY

Co-authors: E.H. Lathram, EROS, Pacific Coast/Alaska, U.S. Geological Survey, Menlo Park, CA and

R. Reynolds, Department of Applied Earth Sciences, Stanford University, Stanford, CA

COMPUTER-ENHANCED LANDSAT DATA AS A MINERAL EXPLORATION TOOL IN ALASKA

Co-authors: Nairn R. D. Albert, *Geologist*, U.S. Geological Survey, Menlo Park, CA and

Pat S. Chavez, *Mathematician*, U.S. Geological Survey, Flagstaff, AZ

EVALUATION OF IMPROVED DIGITAL PROCESSING TECHNIQUES OF LANDSAT DATA FOR SULFIDE MINERAL PROSPECTING

Co-authors: Robert Gordon Schmidt, *Geologist*, U.S. Geological Survey, Reston, VA and Ralph Bernstein, *Senior Engineer*, IBM, Gaithersburg, MD

FRIDAY MORNING

WHY REMOTE SENSING? A MANAGEMENT VIEW

J. Robert Porter, *President*, Earth Satellite Corporation, Chevy Chase, MD

REGIONAL AND GLOBAL GEOLOGICAL STUDIES USING SATELLITE MAGNETOMETER DATA

Robert D. Regan, *Geophysicist*, U.S. Geological Survey, Reston, VA

AIRTRACE—AN AIRBORNE GEOCHEMICAL EXPLORATION TECHNIQUE

Dr. Anthony R. Barringer, Barringer Research, Ltd., Rexdale, Ontario, Canada

AN APPLICATION OF SATELLITE IMAGERY TO MINERAL EXPLORATION

Co-authors: Mark Liggett, *Research Geologist*, and

John F. Childs, *Research Geologist*, Cyprus Georesearch Co., Los Angeles

MINERAL EXPLORATION APPLICATIONS OF DIGITALLY PROCESSED LANDSAT IMAGERY

Prof. Ronald J. P. Lyon, *Director*, Remote Sensing Laboratory, Stanford University, Palo Alto, CA

OPTIMUM SLAR SYSTEM PARAMETERS FOR REVELATION OF GEOLOGIC DATA

Co-authors: Louis F. Dellwig, *Director*, Remote Sensing Laboratory and

Richard Moore, Space Technology Center, Lawrence, Kansas

TO BE ANNOUNCED

Dr. Floyd Sabins, *Senior Research Associate*, Chevron Oil Field Research Co., La Habra, CA

FRIDAY AFTERNOON

Tours of the EROS Data Center for those who did not visit on Tuesday or who wish to return. Shuttle buses will depart the Holiday Inn at short intervals throughout the afternoon.

SPECIAL EVENTS

Early Bird Reception, Tuesday, October 28

Luncheon, Wednesday, October 29

Speaker: The Honorable Frank E. Moss, U.S. Senator from Utah

Luncheon, Thursday, October 30

Speaker: To be announced

Reception and Banquet, Thursday, October 30

Speaker and program to be announced

REGISTRATION

The Symposium Registration Fee is \$75.00 per person. (A receipt setting forth the registration fee and meal function costs will be issued upon request). The fee covers all technical sessions, the Early Bird Reception, all shuttle bus transportation, the Wednesday and Thursday Luncheons and Thursday Banquet.

Smooth your registration by filling in the enclosed registration form and mail it (with your check) to the American Mining Congress, 1100 Ring Building, Washington, D.C. 20036. Advance registrations will be accepted until October 17. After this date, attendees may register for the symposium in Sioux Falls beginning October 28.

All advance registration material will be held in Sioux Falls and may be secured upon your arrival.

HOTEL RESERVATIONS

Write today for your hotel reservations; an application form is enclosed. All reservations will be handled by the Symposium Housing Bureau, Sioux Falls Chamber of Commerce, 101 West 9th St., Sioux Falls, SD 57101. Confirmations will be sent by the hotel direct to the attendee.

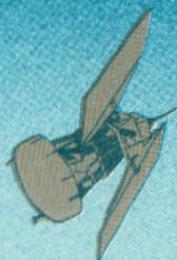
Hotel and meeting space in Sioux Falls is limited; therefore consider making your hotel reservation early.

AMERICAN MINING CONGRESS

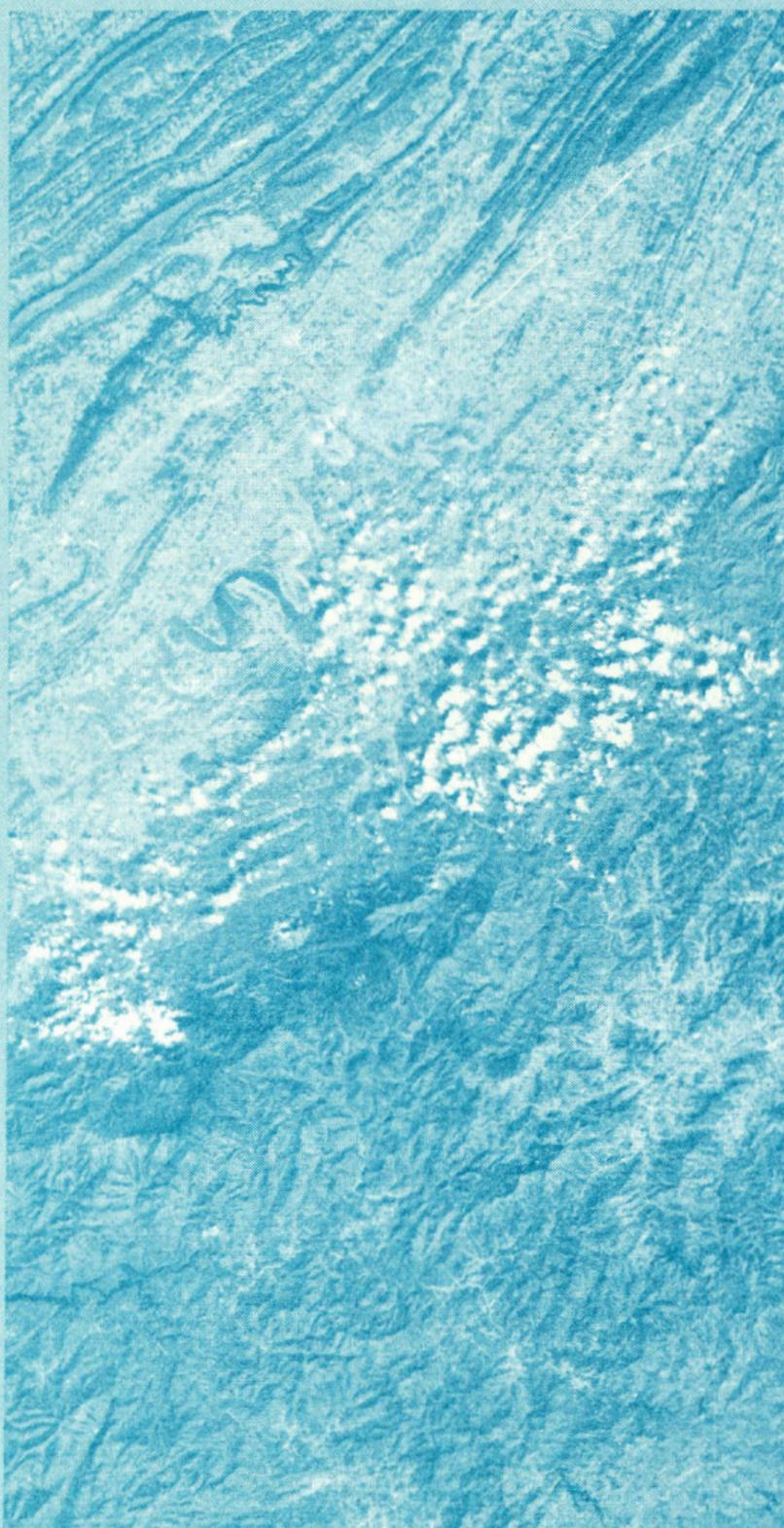
The American Mining Congress is a trade association founded in 1897. Its membership is composed of (1) U.S. companies that produce most of the nation's metals, coal and industrial and agricultural minerals; (2) more than 240 companies that manufacture mining and mineral processing machinery equipment and supplies, and (3) engineering and contracting companies and financial institutions that serve the mining industry.

It is self-evident that minerals required by industry and agriculture can be extracted from the earth only at those places where they exist, and only in an economic and governmental-policy climate compatible with the risks inherent in mining.





The development of adequate domestic reserves of all mineral resources is of the greatest national importance. The American Mining Congress contributes to the attainment of this national goal — and to the achievement of national environmental goals — by aiding in the development of improved equipment and processes that will increase the efficient production of mineral resources and enhance the health, safety and welfare of the mining industry's employees and the economic well being and security of our nation.



This photo shows a segment of The Appalachian Mountains in Tennessee. It was taken from an altitude of approximately 570 miles by ERTS.