

SIXTH ANNUAL PECORA SYMPOSIUM



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April 13-17, 1980
Sioux Falls, S.D.

General Chairman and
Technical Program Chairman
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CALL FOR PAPERS/SIXTH ANNUAL PECORA SYMPOSIUM

Integration of Remote Sensing into the Exploration Process

The Sixth Annual Pecora Symposium on Remote Sensing will be held in Sioux Falls, South Dakota, April 13 - 17, 1980. Sioux Falls is the traditional site of the symposium as it is in the vicinity of the United States Geological Survey's EROS Data Center, which is the main data processing facility for the Landsat series of earth resource satellites. It is also a principle distribution center for all types of United States spacecraft and aircraft imagery.

The Sixth Symposium is being sponsored by the Society of Exploration Geophysicists in cooperation with the United States Geological Survey, The American Association of Petroleum Geologists, The Geosat Committee and the National Aeronautics and Space Administration.

The main theme of the Sixth Symposium will be the integration of remote sensing techniques with the wide range of geological, geophysical, and geochemical methods that are currently employed in mineral, geothermal, and hydrocarbon exploration.

Papers are being solicited in the following areas:

A) Imaging Systems Applied to Exploration Problems

Application and interpretation of data from imaging systems installed in either satellites or aircraft. Spectrum coverage includes UV, visible, near IR, thermal IR, and radar wavelengths.

B) Non-imaging Systems Applied to Exploration Problems

This group to include passive non-imaging systems such as UV, visible, infrared and microwave radiometers together with correlation spectrometers and active optical systems such as laser fluorosensors, etc. Presentations on state-of-the-art airborne geophysical systems are also being sought, including advanced airborne magnetometer techniques, active and passive electromagnetic systems, far-field radio frequency techniques, airborne magnetic gradiometers, etc.

Symposium Theme: Integration of Remote Sensing Into the Exploration Process

Sponsored by:

Society of Exploration Geophysicists
P.O. Box 3098
Tulsa, Oklahoma 74101

Cooperating Sponsors:

United States Geological Survey
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/ Remote Sensing of Geobotanical Effects Applied to Exploration

Methods and case histories relating to the detection of spectral reflectance changes, fluorescence modifications, thermal emission changes, etc., in vegetation overlying various types of economic deposits.

D) Image Enhancement, Pattern Recognition and Other Signal Processing Techniques Applied to Exploration

Image enhancement, both analog and digital, such as band stretching, band ratioing, level slicing, principle component classification methods, etc. Case histories showing applications.

E) Integration Techniques

Methods of integrating satellite and airborne remote sensing techniques with each other and their joint use with surface geological, geochemical and geophysical methods. Case histories on the successful integration of remote sensing systems and data into exploration programs that have led to discoveries.

F) Advanced Earth Resource Satellites and Airborne Survey Programs -- Proposed and Planned

The potential for new satellite and airborne sensors and techniques. The arguments for higher resolution and stereo imagery, increased coverage of the spectrum, national aeromagnetic surveys, etc.

G) General Comments

The symposium will not use parallel sessions, and the aim will be to select a limited number of papers that have some general relevance across the whole exploration field, even though they may be mainly directed to one specific exploration discipline. It is hoped that this policy will help stimulate the cross-fertilization of ideas between the various exploration disciplines.

An important part of the symposium will be a poster session which should provide a particularly suitable forum for certain types of remote sensing papers. Typical examples of papers especially suitable to the poster paper format would include enhancement techniques that are difficult to show in slide form, simultaneous displays of multiple sets of data covering a given region that lead up to an integrated interpretation, and practical demonstrations of new instrumentation or data processing concepts. The program will be arranged to provide a lengthy period of exposure for the poster exhibits so that ample opportunity will be available for attendees to see these displays and talk with the authors.

Papers are being sought for presentation in either the standard, oral-session format or the poster paper format. Authors are asked to consider which format is most suitable for their paper(s).

H) Abstract Requirements and Dates

Brief abstracts of not more than 300 words are requested for submission by October 15th. These abstracts will be reviewed by various sub-panels of the technical program committee according to subject classification. Authors of papers that have been accepted will be notified by December 14.

Extended abstracts will be required on the accepted papers by February 1. These abstracts should be 500 to 1,000 words in length and may include one illustration or table. The extended abstracts will be printed and issued to all attendees at the time of registration. Full length papers will not be published in a proceedings volume due to the expense and complexity of publishing a collection of remote sensing papers that inevitably call for numerous color reproductions. Authors will be encouraged, however, to provide preprints of their paper(s) prior to or at the Symposium. Copies of preprints thus supplied may be ordered during the Symposium for mail delivery to the purchaser after the meeting.

Exclusive publication rights for papers presented at the Sixth Annual Pecora Symposium will be held by the Society of Exploration Geophysicists except in cases where an author's employer prohibits publication.

Abstracts should be submitted to:

Sixth Annual Pecora Symposium
c/o Society of Exploration Geophysicists
Box 3098
Tulsa, Oklahoma 74101