

Reprinted from

**Symposium on
Machine Processing of
Remotely Sensed Data**

June 21 - 23, 1977

The Laboratory for Applications of
Remote Sensing

Purdue University
West Lafayette
Indiana

IEEE Catalog No.
77CH1218-7 MPRSD

Copyright © 1977 IEEE
The Institute of Electrical and Electronics Engineers, Inc.

Copyright © 2004 IEEE. This material is provided with permission of the IEEE. Such permission of the IEEE does not in any way imply IEEE endorsement of any of the products or services of the Purdue Research Foundation/University. Internal or personal use of this material is permitted. However, permission to reprint/republish this material for advertising or promotional purposes or for creating new collective works for resale or redistribution must be obtained from the IEEE by writing to pubs-permissions@ieee.org.

By choosing to view this document, you agree to all provisions of the copyright laws protecting it.

THE ATMOSPHERIC AND OCEANOGRAPHIC INFORMATION PROCESSING SYSTEM (AOIPS)

PETER A. BRACKEN AND JOHN T. DALTON

Information Extraction Division, NASA/
Goddard Space Flight Center, Greenbelt,
Maryland, 20771

The AOIPS is an interactive, mini-computer-based processing and display system that is used primarily for image data analysis and information extraction operations within the Applications Directorate at NASA's Goddard Space Flight Center. The AOIPS contains several unique subsystems including a state-of-the-art image display and analysis terminal, a high density tape unit capable of storing 1.4×10^{10} data bits on each reel of magnetic tape and a unique video switching unit. The system configuration is discussed with emphasis on salient characteristics of the various hardware components. System and application software packages are described with emphasis on the unique image processing and information extraction capabilities provided. Examples are presented of system output products from applications in meteorology, oceanography and earth resources.