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THE ATMOSPHERIC AND OCEANOGRAPHIC INFORMATION PROCESSING SYSTEM (AOIPS)

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The AOIPS is an interactive, minicomputer-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.