

VISUALIZATION OF EARTH AND SPACE SCIENCE DATA AT JPL's SCIENCE DATA PROCESSING SYSTEMS SECTION

William B. Green
Manager, Science Data Processing Systems Section
Jet Propulsion Laboratory
California Institute of Technology

ABSTRACT

JPL's Science Data Processing Systems Section is responsible for processing and visualization of remotely sensed imagery acquired by earth observations and planetary exploration spacecraft. This presentation will provide an overview of systems currently used to process, manipulate and display a variety of data. Examples will include (i) graphical and visualization techniques used to query and retrieve data from large scientific data bases, (ii) graphical user interfaces used to control interactive and production processing of image data files, (iii) rendered animation sequences depicting planetary "flyovers", (iv) data returned by the Galileo spacecraft from the Ganymede encounter in June 1996, (v) examples of image displays to be utilized to support operations of the Mars Pathfinder lander and rover spacecraft in 1997, (vi) examples of internet interfaces developed to support public access to planetary image archives, and (vii) examples of systems being developed to support earth remote sensing applications in the late 1990's. The majority of the systems described will be shown in the Digital Bayou during the conference.