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**N86 - 32866**

**Pilot Land Data System**

**Jeffrey L. Star and John E. Estes**

## NASA Pilot Land Data System

Dr. Jeffrey L. Star  
Prof. John E. Estes

The Pilot Land Data System (PLDS), funded by NASA's Information Systems Office, is a multi-institution effort directed towards solving the data access and management needs of scientists studying the land surface and working with NASA (NASA 1984). Researchers at the University of California, Santa Barbara have been involved in PLDS since the first planning workshops several years ago, and have contributed in several areas (Estes et al 1985).

### Workstations and PLDS

The purpose of one small effort, in conjunction with Mr. William Likens at NASA Ames Research Laboratory, has been to continue PLDS development activity in the area of scientific workstations. This was funded in part through NASA grant NAG2 - 352, "Workstations and the NASA Pilot Land Data System". Within PLDS, workstations are viewed as the user interface to the network, providing local processing capabilities as well as remote access to communications, processing power, and data.

The staff at NASA Ames Research Center has developed a Workstation Subsystem Databook (Likens et al, 1985). This volume reviews some of the hardware and software which is now available from the commercial sector. A portion of our efforts under this contract has been to help gather data for the databook, as well as insure the technical accuracy of the book.

We have also participated in technical meetings sponsored by Mr. Likens at the Jet Propulsion Laboratory. The meeting in Pasadena on 7 March 85 considered workstations to be used in the funded PLDS science projects, and we discussed methods to use the expertise developed throughout the working group to assist the successful completion of the science scenarios. In particular, we met with Dr. Alex Goetz to discuss his needs for manipulating spectrometer datasets, with Mr. Mike Martin to examine the overlap between his efforts on the Pilot Planetary Data System workstations and ours on the PLDS, and with Mr. Fred Billingsley to discuss the DAVID catalog interchange system.

Recent efforts on workstation developments have included coordination with Mr. Billingsley, and Mr. Paylor from JPL. We have helped guide them to a set of specifications for the workstations they will be purchasing, and demonstrated several workstations and software systems which we own and operate to better acquaint them with commercial options.

On 18 December 85, Mr. Likens came to UCSB for a final meeting. We demonstrated desktop image processing systems we have purchased or developed, and provided additional information for the databook.

#### **PLDS Science Steering Group**

On 16 Sept 85, and on 15,16 April 86, we participated in the PLDS Science Steering Group (SSG) meeting at Goddard Space Flight Center. At these meetings, we both reviewed progress to date towards meeting PLDS objectives in supporting the science scenarios, as well as formulated plans for demonstration projects

in the near future. At the April PLDS SSG meeting Dr. Estes, in Dr. Rossow's absence, acted as chair of the SSG. A significant part of the work at these meetings was to consider alternatives in the face of significantly less funding than anticipated. This included prioritizing portions of the program, as well as examining alternatives that build on efforts funded elsewhere. The draft of Dr. Estes' comments are included below.

### References

Estes et al 1985

Estes, JE, JL Star, PJ Cressy and M Devirian. Pilot Land Data System. Photogrammetric Engineering and Remote Sensing 51(6):703-709. June 1985.

Likens et al 1985

Likens, W, W. Acevedo, and D. Wolski. Pilot Land Data System Workstation Subsystem Data Book. Ecosystems Office, Nasa Ames Research Center, Moffett Field. March 1985

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Pilot Land Data System Working Group. The Pilot Land Data System: Report of the Program Planning Workshops. NASA Technical Memorandum 86250. July 1984.