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OCCULT - A MEDIUM FOR TECHNOLOGY TRANSFER

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The National Aeronautics and Space Administration (NASA) has been transferring remote sensing technology to state and local government agencies through the Regional Applications Program since 1977. Typical participants in the program are new to both remote sensing and computer-aided analysis. Therefore, it is essential to introduce them to technology as simply as possible. Two approaches to this are: (i) special purpose mini-computer based (turn key) systems, and (ii) remotely accessed software on general purpose computers. The latter approach facilitates entry into the field with significantly lower costs.

Most of the available software packages for analyzing remotely sensed data require familiarity with techniques, computers and some form of job control language. However, experience has shown that novices find the use of "computer languages" a distraction from the main learning goals. The purpose of this paper is to describe an effort to aid users through a conversational system.

This system uses programs from the Office for Remote Sensing of Earth Resources (ORSER) software developed by the Pennsylvania State University. To facilitate communication with these programs, an interactive front-end, called ORSER Complete Conversational User-Language Translator (OCCULT) has been developed at GSFC. Through OCCULT, a user is prompted for all the data needed for submitting a program. The main features of OCCULT are: prompt-length control (depending on user's expertise); free-format user response; prompt-suppression by multiple-response; "help" messages to clarify prompts; a "back-up" command for error correction; display of data for review and editing prior to submission; a catalog to manage user's data and program set-ups; a print-out of the summary of activities during a session. In addition to the above, an easily updatable glossary of terms is maintained through which a user can get explanations for specific words. OCCULT is structured to permit easy addition of new analysis modules.

OCCULT will be made available to trainees in the Regional Applications Program through a nationwide time-sharing network. It will also be available for purchase through COSMIC.