

Department of Natural Resources  
New York State College of Agriculture and Life Sciences  
CORNELL UNIVERSITY  
PROGRESS REPORT

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Evaluation of Skylab Imagery as an Information Service for Investigating  
Land Use and Natural Resources, (Skylab) NASA Contract: NAS 9-13364

This report covers the period from August 1 through 31, 1974. This past month has been mainly spent in trying to refine techniques already developed so that maximum utility can be made of them in doing detailed interpretations of the Skylab data.

Some work has slowed as a result of staff vacations and a staff change. Dr. Deborah Stevens, who had worked on both the ERTS-A project and Skylab over the past year, left to accompany her husband to New Mexico. Mr. George Weiner has been hired as a replacement. Mr. Weiner's background is in regional and city planning and is presently completing his dissertation here at Cornell. His primary responsibility will be to coordinate the survey of potential users at the state, regional and local levels.

A draft of a questionnaire has been developed to determine the data and information needs of various governmental agencies and other organizations in selected areas of New York State. Each agency or organization is viewed as an information processing unit. The objective of the questionnaire is to determine the flow of data/information into, through and out of each unit. In such a way we hope to evaluate the utility of the information which we can derive from Skylab and other remote sensing sources to fulfill the data needs of different groups.

For organizational purposes, the questionnaire is divided into five sections. The purpose of each is as follows:

1. Determination of the distinguishing characteristics of the agency, including function, subject area, jurisdiction, staff size and capabilities,
2. Determination of the basic data/information needs in terms of type, format,

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 EVALUATION OF SKYLAB IMAGERY  
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categorical specificity, accuracy, frequency, etc.

3. Determination of present methods of data/information acquisition and storage.
4. Determination of present methods of processing and/or analyzing data and information, and determination of the extent of computer usage in this stage.
5. Determination of the character and purpose of the agency's products and services, and determination of who the user/beneficiary is.

Discussions with interested faculty are presently underway to evaluate and perfect the draft questionnaire. Pre-testing of the questionnaire should begin in late September to early October.

The color prediction model has now been revised to select color composites for separating three points simultaneously from six bands of information. (The green, red and far infra-red bands are used. Density values from both enlarged positive and contact negative transparencies are made. Therefore, six bands do not, in this case, imply six spectral bands.) An evaluation as to the information content of these new composites has not yet been completed.

It is hoped that most photographic and color prediction model techniques will be finalized by the end of September or in early October. Work will then concentrate heavily on detailed interpretation of the different test sites as well as compiling data on the user survey.

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