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# NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

SCHOOL OF PHYSICAL AND MATHEMATICAL SCIENCES

DEPARTMENT OF GEOSCIENCES  
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CR-138253

Investigation Title: Utilization of ERTS-A Data in Geological Evaluation, Regional Planning, Forest Management, and Water Management in North Carolina

Proposal No. 018

GSFC. ID 281

Contract No. NAS5-21732

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The period April-May was spent working on the ERTS-1 imagery covering Region J (Raleigh area) and Region G (Greensboro-Winston-Salem area) to develop land-use maps for training of land-use planners and for evaluation of the ERTS-1 imagery by the planners. Also, preliminary work was undertaken to map the land-use and geologic data in the Asheville-Bucombe County region. Work continued intermittently on flood plain interpretation in the Wilmington area.

Imagery of the Chowan River was studied for evidence it might contain of water quality differences (chiefly turbidity) in the Chowan. It has also been possible to compare vegetative differences along within the lowland areas adjacent to the river as a guide to areas of possible flooding. Detailed groundtruth was supplied by personnel from the U.S. Geological Survey and was obtained from topographic maps. The conclusion derived from the works is that the ERTS-1 imagery enlarged to a scaled of 1:125,000 in a color additive viewer is a good starting place for acquiring data for input about flooding into a proposed computer model of the Chowan River.

There may be sufficient funds available to complete the final report.

(E74-10519) UTILIZATION OF ERTS-A DATA  
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