E7.4-10596
CR-138705

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102000-21-L
14 June 1974

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Mapping Exposed Silicate Rock Types and Exposed Ferric and Ferrous Compounds from a Space Platform

Quarterly Report for Period 8 December 1973 - 8 March 1974

EREP Investigation 444M
NASA Contract NAS9-13317

Prepared by

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(E74-10596) MAPPING EXPOSED SILICATE ROCK TYPES AND EXPOSED FERRIC AND FERROUS COMPOUNDS FROM A SPACE PLATFORM Quarterly (Environmental Research Inst. of Michigan) 2 p HC $4.00 CSCL 08G
N74-27782
Unclas
G3/13 00596

Mapping Exposed Silicate Rock Types and Exposed Ferric and Ferrous Compounds from a Space Platform

Quarterly Report for Period 8 December 1973 - 8 March 1974

This is the fourth quarterly report for this contract, which is entitled "Mapping Exposed Silicate Rock Types and Exposed Ferric and Ferrous Compounds from a Space Platform". The financial reports have been submitted monthly under separate cover.

During this quarter data were successfully collected by SL-4 Skylab astronauts in the vicinity of the Pisgah Crater, California test site. No screening film from SL-4 have been received as yet. The SRAGAL computer program for converting laboratory data into a form useful for feature selection and interpretation of ratioed Skylab data has been debugged and ratio codes have been calculated for 211 rock, mineral, and soil laboratory reflectance spectra. A paper is being written for the Remote Sensing Symposium in April (at Ann Arbor, Michigan). Next quarter this paper, including Skylab S-192 ratio codes, will be reported. Linear discriminant analysis is being used to select the best 12 of 66 possible non-reciprocal ratios from S-192, as well as to rank the S-192 channels on the basis of the above 211 laboratory spectra.

No field trips have been made during this contract, and none are anticipated until scanner data are processed.

Respectfully submitted,

Robert K. Vincent

Robert K. Vincent
Principal Investigator

Approved by:

F. Thomson for

Richard R. Legault
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RKV:RRL:njm