

E75-10202
CR-142388

APPLICATION OF REMOTE SENSING
FOR FISHERY RESOURCE
ASSESSMENT AND MONITORING

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SKYLAB EXPERIMENT NO. 240

CONTRACT NO. T-8217B

(E75-10202) APPLICATION OF REMOTE SENSING FOR FISHERY RESOURCE ASSESSMENT AND MONITORING Progress Report, 1 Mar. - 31 Mar. 1975 (National Marine Fisheries Service, Bay) 3 p HC \$3.25	N75-21727 Unclas 00202
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PROGRESS REPORT NO. 15

REPORTING PERIOD: 1 March to 31 March 1975

Approved: 
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Date Submitted: 4/14/75

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INTRODUCTION

This is report #15 of a series of progress reports required by the Statement of Work for Skylab Experiment #240 entitled "Application of Remote Sensing for Oceanic Gamefish Assessment and Monitoring" under Contract No. T-8217B.

ITEMS RECEIVED FROM NASA/JSC

The following item was received from NASA/JSC during the time period of March 1 to March 31, 1975.

Skylab Earth Resources Data Catalog, JSC 09016.

OVERALL STATUS

A. S192

Evaluation of the S192 imagery resulted in the identification of a cloud duplication or cloud ringing effect in the cloud free areas of the imagery in channels 1, 3, 5 and 19. Discussions with NASA/JSC confirmed the assumption that the high frequency filtering of the data had created this distortion. Channel 18 (band 2) is very noisy with frequent scan line drop out and will probably not be usable. Channel 21 is also very noisy, but averaging over a large area may make possible the direction of general trends.

A request was made to the program office to reprocess bands 1-9, and 13 without high frequency filtering in bands 1, 2, 3, 4, 5, 7, and 8. Initial subtasks established in the previous progress report are being delayed until the new tapes are received.

B. S191

A draft of the S191 section of the final report has been prepared and submitted for typing.

C. S190A

A re-examination of stations 1, 5 and 6 was made to determine if the distribution of white marlin was located in a particular density region. This could be accomplished by utilizing exact white marlin catch locations determined by electronic navigation equipment aboard the subset of vessels which were identified as having this type gear. Lack of water detail in the imagery from the stations 1, 5 and 6 prevented identification of any relationships should any exist. Further effort will be applied in this area by the analysis of stations 2, 3 and 4. Black and white 9 1/2 x 9 1/2 positive and negative transparencies of stations 3 and 4 have been made to be used in density slicing work.

D. S190B

Effort to analyze this imagery has been delayed until the completion of the S190A imagery analysis.

EXPECTED ACCOMPLISHMENTS

The re-examination of the remaining S190A stations (2,3,4) as well as the preparation of the draft of the S190A section of the final report will be completed in the next month. Reinitiation of work on the S192 processing and analysis will be started upon receiving the reprocessed S192 tapes.