The Cartographic Application of ERTS/RBV Imagery in Polar Regions

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Type I Progress Report
ERTS-A

a. Title: The Cartographic Application of ERTS/RBV Imagery in Polar Regions

ERTS-A Proposal No. 149

b. GSFC ID No. of P.I.: IN 391

c. Statement and explanation of any problems that are impeding the progress of investigation:

Although a large volume of Antarctic imagery is being received on automatic distribution, there still remains large areas of the experimental test sites not yet covered by cloud free imagery. The large volume of imagery can in some cases be contributed to repetitive coverage.

d. Discussion of the accomplishments during the reporting period and those planned for the next reporting period:

Preliminary mosaicking of 1:1,000,000-scale ERTS Antarctic imagery is being accomplished for the following general geographic areas: 1. McMurdo, Ross Island, and Dry Valleys, 2. Ross Ice Shelf, Roosevelt Island, 3. Ronne Ice Shelf, and Ellsworth Mountains, 4. Filchner Ice Shelf, Shackleton Range and Coats Land, 5. Sir Rondane Mountains, Belgica Mountains and Queen Febiola Mountains of East Antarctica, 6. Prince Olav Coast of East Antarctica which cover the Japanese Station, Syowa and the USSR Station, Molodezhnaya.

e. Discussion of significant scientific results and their relationship to practical applications or operation problems including estimates of the cost benefits of any significant results (To be prepared in scientific abstract form of 200 words or less):

Preliminary analysis of the late 1973-74 Antarctic imagery, when compared to 1972-73 imagery and existing map sources, clearly show changes in ice fronts, glacier movement and the existence of possible new geographical features. These significant finds are being carefully investigated and will be documented. A listing of exact ERTS scenes will be provided. Details of these investigations will be reported at the earliest possible date.

f. A listing of published articles, and/or paper, preprints, in-house reports, abstracts of talks, that were released during the reporting period: N/A

g. Recommendation concerning practical changes in operations, additional investigative effort, correlation of effort and/or results as related to a maximum utilization of the ERTS system: N/A

h. A listing by date of any changes in Standing Order Forms: N/A

i. ERTS Image Descriptor forms: N/A

j. Listing by date of any changed Data Request forms submitted to Goddard Space Flight Center/NDF during the reporting period: N/A

k. Status of Data Collection Platforms (if applicable): N/A