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Detection of Moisture and Moisture Related Phenomena from Skylab

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Joe R. Eagleman Principal Investigator

(E75-10307)MAPPING OF SNOW COVER ANDN75-25254FREEZE THAN LINE Progress Report, May 1975(Kansas Univ. Center for Research, Inc.)Unclas4 p HC \$3.25CSCL 08BUnclasG3/4300307

Technical Report 239-22

Progress Report May, 1975

Atmospheric Science Laboratory Center for Research, Inc. University of Kansas

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Mapping of Snow Cover and Freeze-thaw Line

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EREP NO. 540-A2 March 19, 1973 to August 31, 1975 Contract Number NAS 9-13273

Progress Report Mapping of Snow Cover and Freeze-thaw Line

The bulk of the work effort to date has involved the collection of ground-truth data for the four Skylab (SL4) passes and the two aircraft passes and the compilation of that data. Also some effort has gone into a literature search and the development of a bibliography on the subject. Much of the ground-truth information is now available; however, as experience with the soil moisture phase of the project has indicated, analysis of the SL4 data will produce anomalies that will require additional ground information searches for explanation.

Recent work effort has been diverted toward the analysis of the S194 data for the Skylab passes on January 11 and January 14. Also preparations are being made to begin the analysis of the aircraft Radscat data for the 16th and 24th of January. Although the analysis of the S194 data is proceeding, we feel the most fruitful efforts will result from the joint comparison of both the S193 and S194 data with the ground-truth information. This interaction is presently awaiting the arrival of the S193 data.

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Snow Cover Mapping Project

Data	Jan	11-GT	58	Jan	12-GT	1	Jan	14-GT	30	Jan	24-Gt	33
Ground Truth Available		x			x			x			x	
S190A Tabs Tape								x			x	
Film								Х			Х	
S190B Tabs		x						х				
Tape Film		Х						Х				
S192 Tabs Tape Film		λ X X						x x				
S193 SCAT Tabs Tape		x						x				
S194 Tabs Tape		X X						X X			X X	

SKYLAB DATA SL-4

AIRCRAFT DATA

Data	Jan 16	Jan 24			
Ground Truth Available	x	x			
Tabs	x				
Tape	x				
Film	X(RC-8)	X(RC-8)			

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