Stanford University
Department of Applied Earth Sciences
Stanford, CA 94305

SKYLAB

MONTHLY REPORT # 3-4 (October and November 1973)

A. TITLE: FEASIBILITY OF USING S-191 INFRARED SPECTRA FOR GEOLOGICAL STUDIES FROM SPACE

B. PRINCIPAL INVESTIGATORS: R.J.P. Lyon: A.A. Green: F.R. Honey
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C. PROPOSAL #9641 Contract # NAS 9-13357

D. TECHNICAL MONITORS: Larry York: Tim White
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E. PERIOD: September 2- November 2, 1973

Remote Sensing Laboratory

Stanford University

Stanford, California

F. OVERALL STATUS (Problem areas, significant progress)

1. Not enough data received to date to determine suitability of SL3 results.

2. Airborne and ground based radiometer, and contact, temperature measurements were made in support of SL3 overpass at Mono Lake, California, and Luning, Nevada on September 13, 1973. Ground Measurements were supported, in part, by members of the Nevada Remote Sensing Project. Agreement between the ground and airborne results were very close, indicating that surface temperatures at the time of the SL3 overpass can be determined reliably.

3. Software development is proceeding.

G. DATA RECEIVED TO DATE

See next page.

H. RECOMMENDATIONS (Decisions/Actions required to ensure attainment of scientific objectives).

1. Supply of SL2 and RB57 data would enable software testing, as well as providing useful aircraft data.

I. EXPECTED ACCOMPLISHMENTS FOR NEXT PERIOD

1. Analysis of SL3 data (if received).

J. SIGNIFICANT RESULTS

None. No spacecraft data.

K. SUMMARY OF FUTURE EFFORT

1. Completion and use of software for semi-automatic analysis of RB57 and SL3 data tapes.

2. Ground truth measurements using spectrometer, and correlation of these results with RB57 and SL3 data.

L. TRAVEL SUMMARY AND PLANS

Field work for ground measurements using spectrometer.

G. DATA RECEIVED TO DATE

	AIRCRAFT RB57					SKYLAB					
	Films	Boresight Film	Data Logs	Data Tapes	16 mm. C,R.T. Plots	I.R. R57 Data Images	S190A	S190B	S192	S191 Data Tapes	S191 Boresight Film
SL2	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	R.	N.R.	N.R.	N.R.	R.
SL3	R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.	N.R.

R.=Received

N.R.= Not Received