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80-10279  
CTR-163345

PRELIMINARY

HEAT CAPACITY MAPPING REPORT

NAS 5 - 24232

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STANFORD REMOTE SENSING LABORATORY

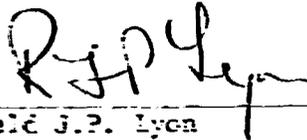
Dept. of Applied Earth Sciences  
Stanford, California 94305

(F80-10279) GEOLOGICAL AND GEOTHERMAL DATA  
USE INVESTIGATIONS FOR APPLICATION EXPLORER  
MISSION-A (HEAT CAPACITY MAPPING MISSION)  
Technical Report, 1 Oct. - 31 Dec. 1979  
(Stanford Univ.) 5 p HC A02/MP A01 CSCL 03B G3/43

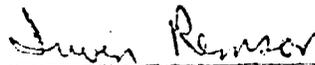
N80-29822

Unclass  
00279

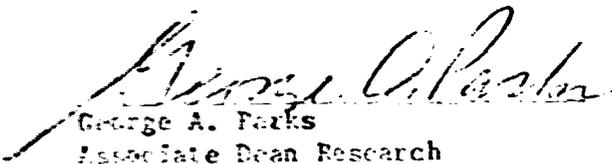
October 1, 1979 to December 31, 1979



Ronald J.P. Lyon  
Principal Investigator



Irwin Remson  
Chairman



George A. Parks  
Associate Dean Research

Sponsored Projects

RECEIVED

JUN 4 1980

SIS/902.6  
HEM 814  
TYPE #

**A. Title of Investigation:** Geological and Geothermal Data Use  
Investigations for Application Explorer  
Mission-A (Heat Capacity Mapping Mission)

**B. Investigation No.:** Contract NAS 5-24232

**C. Principal Investigators:** R.J.P. Lyon  
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**D. Technical Monitor:** J.C. Broderick  
Goddard Space Flight Center  
Greenbelt, Maryland 20771  
(301) 982-4826

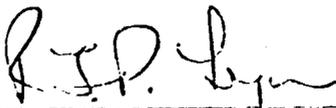
**E. Period:** October 1, 1979 to December 31, 1979

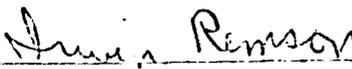
**F. Action Required:** None - Research Awaiting tapes

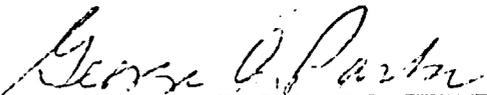
PRELIMINARY  
HEAT CAPACITY MAPPING REPORT  
NAS 5 - 24232

STANFORD REMOTE SENSING LABORATORY  
Dept. of Applied Earth Sciences  
Stanford, California 94305

January 1, 1980 to March 31, 1980

  
\_\_\_\_\_  
Ronald J. P. Lyon  
Principal Investigator

  
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Irwin Remson  
Chairman

  
\_\_\_\_\_  
George A. Parks  
Associate Dean Research

Sponsored Projects

RECEIVED

JUN 4 1980

SIS/902.6  
HCM 014  
TYPE II

- A. Title of Investigation:** Geological and Geothermal Data Use  
Investigations for Application Explorer  
Mission-A (Heat Capacity Mapping Mission)
- B. Investigation No.:** Contract NAS 5-24232
- C. Principal Investigators:** R.J.P. Lyon  
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(415) 497-0847
- D. Technical Monitor:** J.C. Broderick  
Goddard Space Flight Center  
Greenbelt, Maryland 20771  
(301) 982-4826
- E. Period:** January 1, 1980 to March 31, 1980
- F. Action Required:** Delta-T & T.I. tapes needed.

REPORT

The following HCMM 9-track, 1600 BPI calibrated tapes have been received to date (April, 1980):

- |        |   |                 |
|--------|---|-----------------|
| Set 1: | AA-0034-10210-3                                 | 30 May 1978     |
|        | 0035-21310-1,2                                  | (complete)      |
|        | 0035-21340-replaced by 0035-21330-1,2           |                 |
| Set 2: | AA-0082-10160-3                                 | 17 July 1978    |
|        | 0082-21090-1,2                                  | (complete)      |
| Set 3: | AA-0184-21040-1,2                               | 20 October 1978 |
|        | (No night IR received, apparently no available) |                 |
| Set 4: | AA-0226-20480-1,2                               | 7 December 1978 |
|        | (No night IR received, apparently too cold!)    |                 |

No Delta-T, apparently thermal inertia, etc. sets have been received yet, except TEST TAPE set (E. USA) AANDU-800823-1,2,3.

TRAVEL

Dr. A.E. Prelat attended the HCMM briefing at Ispna, Italy at NASA request, presenting a review of the Stanford HCMM project and an overview of the advantages of presenting merged data sets--Landsat plus HCMM dates. It was apparently well received.

PROGRES

1. Field data from the three site visits has been written up in final form.
2. The HCMM data from Set 2 (July 1978) has been studied relative to the field data using the Watson model. A reasonable fit has been secured.