

#397

VIKING LANDER 1 & 2
COMMAND HISTORY WITH SPECTRA HISTORY
AND
TEMP. HISTORY ON MAG. TAPE

75-075C-13E
75-083C-13E

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1. INTRODUCTION:

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

When printing, special settings may be required to make the text box appear on the printed output.

Version	Date	Person	Page	Description of Change
01				
02				

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC
INFORMATION SYSTEM:

<http://nssdc.gsfc.nasa.gov/nmc/>

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

- a. Associated Documents To find associated documents you will need to know the document ID number and then click here.
<http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/>

- b. Core Catalog Materials

VIKING 1 LANDER

COMMAND, SPECTRA, TEMP HIST MTAPE

75-075C-13E PSPG-00008

This data set has been restored. There were originally three 7-track, 800 BPI tapes written in BCD. There is one restored tape written in ASCII. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tapes were created on a 1108 computer. The DR and DS numbers along with the corresponding D numbers are as follows:

DR#	DS#	D#	FILES	
-----	-----	-----	-----	
DR004014	DS004014	D029361	1 - 3	SOL. 1 - 104
		D036436	4 - 6	SOL. 104 - 458

o D36437 : Bad tape.

VIKING 2 LANDER

COMMAND, SPECTRA, TEMP HIST MTAPE

75-083C-13E PSPG-00471

This data set have been restored. Originally there were three 7-track, 800 BPI tapes, written in BCD. There is one restored tape, written in ASCII. The original tapes were created on a 1108 computer, and the restored tape was created on an IBM 9021 computer. The DR tape is 3480 cartridge and the DS tape is 9-track, 6250 BPI. The DR and DS number along with their corresponding D numbers are as follows:

DR#	DS#	DD#	FILES
-----	-----	-----	-----
DR-005166	DS-005166	DD-029362	1 - 3 SOL. 1 - 61
		DD-036434	4 - 6 SOL. 61 - 412
		DD-036435	7 - 9 SOL. 412 - 775

VIKING LANDER 1 & 2
COMMAND HISTORY WITH SPECTRA HISTORY

AND

TEMP. HISTORY ON MAG. TAPE

75-075C-13E

75-083C-13E

This data set catalog consists of 3 Viking Lander 1 and 3 Viking Lander 2 data tape. The tapes are 800 BPI, 7-track, ~~BCD~~^{BCD}, with 3 files of data on each tape. The tapes were created on a Univac 1108 computer. The 'D' and 'C' numbers along with the time spans are as follows:

Viking Lander 1

<u>D#</u>	<u>C#</u>	<u>TIME SPAN</u>
D-29361	C-19280	SOL. 1 - 104
D-36436	C-21011	SOL. 104 - 458
D-36437		SOL. 458 - 841

Viking Lander 2

D-29362	C-19281	SOL. 1 - 61
D-36434	C-21609	SOL. 62 - 412
D-36435	C-21010	SOL. 412 - 775



JET PROPULSION LABORATORY California Institute of Technology • 4800 Oak Grove Drive, Pasadena, California 91103

March 25, 1977

Robert W. Vostreys
National Space Science Data Center
Code 601
Goddard Space Flight Center
Greenbelt, Md. 20771

Dear Dr. Vostreys,

Enclosed you will find:

- (1) ~~Command history~~ ^{with} ~~spectra history~~ and temperature history data *on magnetic*
collected by the Inorganic Chemical Analysis Team (ICAT) during *Topo*
the Viking primary and reduced missions.

Viking-1: Tape ICAT 1

Viking-2: Tape ICAT 2

- (2) Plots on microfiche of all spectra taken.

Please note that we have arranged to produce the microfiche copy and therefore are not delivering the more bulky hardcopy printout. Also enclosed is a copy of the documentation of file formats, and reprints of our published work to date.

Sincerely,

Benton C. Clark
Cognizant Engineer, ICAN
(JPL Mail Stop 264-339, Phone ext. 7836)

BC:ljm

cc: P. Toulmin, III
G. J. Soffen
C. Wende

encl.

The tapes ICAT 1 and ICAT 2 are even parity, 800 BPI, written in external BCD on the Univac 1108 (character code). There are three files per tape. The first file contains the command history information, the second file contains temperature history data and the third file contains spectra history. Each file has 120 characters per card image with the last 40 characters blank filled. This allows for 24 logical records to equal one physical record or 2880 characters per physical record.

On tape ICAT 1, file one has 137 physical records, file 2 has 291 physical records and file 3 has 1875 physical records. On tape ICAT 2 file one has 58 physical records, file two has 230 physical records and file three has 621 physical records.

Attached is a description of the files.

-----DATA FILE

- SPCNIS FILE -----

CARD 1. HEADER CARD FOR FILE. SPCNIS FILE
CARD 2. (RSPNM(KD),KD=1,9),OPNAM,KTR2,JPLTM3,DATE3,NSP(10A6,I3,2A6,I5)
CARDS 3-15. (RSPK(NW),NW=1,127) (10F8.1)
CARD 16. (NDFSP(I),I=1,16) (16I5)
CARD 17. (CTIM1(I),I=1,16) (16F5.1)
FOLLOWING CARDS. REPEAT OF CARDS 2-17.

DEFINITIONS.

RSPNM(NSP,KD) = SPECTRUM NAME
RSPK(NSP,NW) = RAW SPECTRUM DATA, NORMALIZED TO 30.7 SEC
KTR2(NSP) = PC TUBE WHICH GENERATED THIS SPECTRUM
JPLTM3(NSP) = JPL TIME THIS SPECTRUM ASSEMBLED
DATE3(NSP) = JPL DATE THIS SPECTRUM ASSEMBLED
NDFSP(NSP,J) = DATA FRAME NO.S USED TO MAKE THIS SPECTRUM
CTIM1(NSP,J) = COUNTING TIME FOR EACH DATA FRAME
OPNAM = NAME OF OPERATOR WHO GENERATED THIS SPECTRUM

NOTES.

THE NSP NO. IS STORED AT THE END OF THE SPECTRUM NAME CARD (SEE CARD 2)
SPECTRA ARE 16 APART.

Spectrum number ends in column 80. For example, to find spectrum number 87, use FIND,79 87.

----- DATA FILE.

TEMHIS FILE -----

CARD 1. *HEADER CARD FOR DATA FILE

----- TEMHIS FILE

CARD 2. NTEMP, NDECS (315)

CARDS 3 AND FOLLOWING. ITEMP(NTEM), HTEMP(NTEM), NTEM=1, NTEMX 4 (I10, P10.7)

CARD N. 'EOG'. END OF GROUP CARD (A3)

DEFINITIONS.

NTEMX = TOTAL NUMBER OF DECSET TEMPERATURE GROUPS (675 MAX. READINGS EACH)

HTEMP(NTEM) = TEMP READING FROM PLAT RES THERMOM IN XRFS BOX

ITEMP(NTEM) = GCSC TIME (SEC) AT WHICH TEMP MEAS TAKEN

NTEMP = NUMBER OF TEMP READINGS IN A GROUP (675 MAX.)

NDECM(IM) = NUMBER OF GROUPS STORED IN THIS FILE. ISET2(10,IM).

----- DATA FILE

CONHIS FILE -----

CARD 1 *HEADER CARD FOR FILE CONHIS FILE*
CARD 2. NCDTX,NCD1 (2I5)
CARD 3. PURCOM (NCD,KD), NSIP, MSETC (10A6, 2I5)
CARD 4. NCD,KTR1S, IVOLTS, IDUMPS, IDUMPC, CPERS, ICPERC, NWGS, IDT, IPRED, IGCSC
(I4, I2, I5, 1X, A4, A2, 1X, F5.1,A2,1X,I3,1X, I5, 1X, I3, 1X, I70)

DEFINITIONS.

NCDX = TOTAL NUMBER OF COMMANDS SENT (ISET2(1,IN))
KTR1S(NCD) = PC TUBE NUMBER
IVOLTS(NCD) = HIGH VOLTAGE BIAS SETTING
IDUMPS(NCD) = DUMP, QUO, FLAG, OR BAD (A4)
IDUMPC(NCD) = GIVES -A, -B, ETC. (A2)
-CPERS(NCD) = COUNT PERIOD (30.7, 122.9, ETC.)
ICPERC(NCD) = GIVES -A OR -B FOR COUNT PERIOD (A2)
NWGS(NCD) = WINDOW GROUP
IDT(NCD) = EXECUTION TIME FOR COMMAND NCD
IGCSC(NCD) = TIME(IN SEC,GCSC)CMD IS TO BEGIN EXECUTION ON MARS
IPRED(NCD) = PREDICTED NUMBER OF DATA FRAMES COMMANDED
NCDTX = NUMBER OF COMMANDS STORED IN THIS GROUP
NCD1 = NCD NUMBER OF FIRST COMMAND IN THIS GROUP
PURCOM(NCD,10) = PURPOSE OF THE COMMAND
NSIP = COMMAND TABLE NUMBER (SIP NUMBER) WHICH PRODUCED THIS COMMAND
MSETC = NUMBER OF THE MSET ENTRY WHICH PRODUCED THIS COMMAND

File number 1, record number 1, record size is 2882 bytes

0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
380
400
420
440
460
480
500
520
540
560
580
600
620
640
660
680
700
720
740
760
780
800
820
840
860
880
900
920
940
960
980
1000
1020
1040
1060
1080
1100

E O G

S	E			1				1	F	I	R	S	T		C	R	U	I
D	D		C	H	E	C	O	U	T	/	V	I	K	I	N	G		
1	3	7	5	0	4	1	6	3	3		7	5					1	1

E O G

D 6 7 5 3 V L - 1 , S H O U L
B E P R E - S E P , X A O O 1 1 0
1 9 7 6 0 0 0 0 4 9 0 7

1	2	6	8	.	1
1	3	6	8	.	1
1	4	6	8	.	1
1	5	6	8	.	1
1	6	6	8	.	1
1	7	6	8	.	1

D-29361
sol 1-104
(max time)

FILE 1

FILE

0 85-6-150 1 X

AS LENGTH 2

2880 BYTES

51. -

COMMIT

F T L S

M. M. T.

S T A N

[illegible]