

#706

SKYLAB  
NSSDC SKYLAB IMAGE DISPLAY  
DEMO

73-027A-056

SOXR-00035

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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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

REQ. AGENT

RLR

RAND NO.

ACQ. AGENT

DAB

SKYLAB

NSSDC SKYLAB IMAGE DISPLAY DEMO

73-027A-05G SOXR-00035

This data set consists of 1 5.25", double sided, low density diskette. The backup is a 3.5", double sided, high density diskette. The backup diskette, KF number, and number of files are as follows:

ORIGINAL DISKETTE #	BACKUP DISKETTE #	FILES
KF00061	17	16

\* KD022731

Data were migrated to new media on 12-14-04.

NATIONAL SPACE SCIENCE DATA CENTER -- SKYLAB IMAGE DISPLAY DEMO  
Version 1.4  
September 23, 1992

ABOUT THE PROGRAMS

Three programs on this disk are run in series by the batch file RUN\_THIS.BAT. They are SHOWS054.EXE, COMPARE.EXE, and PANS054.EXE. Each may be run separately. Detailed usage instructions appear at the beginning of each program source code listing, which may be found in subdirectory \PROGRAMS on this diskette. The performance of the programs is MUCH better if the contents of this disk are copied onto your hard disk, e.g. via "xcopy a:\\*.\* c:\skylab\ /s" . To see the complete demo, type RUN\_THIS. To run any of the programs separately, type SHOWS054.BAT or COMPARE.BAT or another BAT file that is found on the disk. (If you find that RUN\_THIS.BAT does not work, it may be because you have DOS 3.3 or an earlier DOS version. Try OR\_THIS.BAT. If that fails, you can still read SHOWS054.BAT and COMPARE.BAT, and type the commands they contain. Please let us know if you still experience problems.)

ABOUT THE DATA

The NASA Skylab space station was equipped with a soft X-ray telescope that operated during 1973 and 1974 in the 2 - 60 Angstrom wavelength band. Full-Sun images were recorded on film, about 32,000 in number. Approximately 10% of the film images were later digitized with a microdensitometer, yielding 1243 x 1244 and 1400 x 1401 full-Sun images with 9 bits resolution (0 - 511). (There were also many scans of parts of the full-Sun film images, which are in separate data files). Selected full-Sun images have been compressed into 230 x 198 8-bit format for use with 256-color graphics displays on IBM PC compatibles. Four of these sample images are included with this Demo diskette. Additional software for porting the image data to IBM PCs may be obtained from the author.

The full set of film images from the mission is available in NSSDC archives. The digitized image files are available via network file transfers from the NSSDC Data Archive and Distribution System (NDADS), an optical disk system. There are descriptive documents about the instrumentation and data products (e.g. "Data Analysis Guide to the ATM S-054 X-ray Spectrographic Telescope"). NSSDC holds the digitized images on tape, and is in the process of upgrading their accessibility to network file transfers. Additional information about the Skylab mission and data products is also available on-line via the NASA Master Directory. For more information, contact the Coordinated Request and User Support Office, (301) 286-6695, FAX: (301) 286-4952, NSI/DECnet address: NSSDCA::REQUEST, Internet address: request@nssdca.gsfc.nasa.gov, or Dr. David Batchelor, Space Physics Data Facility, Code 632, NASA/Goddard Space Flight Center, Greenbelt, MD 20771 NSI/DECnet address: NSSDCA::BATCHELOR TCP/IP address: batchelor@nssdca.gsfc.nasa.gov

ABOUT THE DEMO

The demo consists of a series of image displays using the programs, driven by the BAT file RUN\_THIS.BAT. First the user is shown a sample image using three different false-color renditions of the solar X-ray image brightness. Second, using one of the false-color intensity renditions, the user is shown two different solar images, recorded

about three days apart in time, alternately on the screen so that the changes due to solar rotation and coronal evolution may be seen. Third, image enhancement to improve feature definition is briefly described, and the user is shown an unprocessed image and the enhanced version of it, alternately. Fourth, two images, separated by a full solar rotation in 28 days, and enhanced to show greater detail, are shown alternately. Fifth, the user is allowed to explore an image in detail -- an image several times the size of the visible portion of it on the screen -- by "panning" the screen window across the image, using the PC's "arrow" keys.

For users equipped with Super VGA 1024 x 768 video graphics adapter cards, there is also a program that they may use to view a high-resolution version of one of the sample images. A piece of information about the user's PC is necessary to use this program SHOW1024. The "mode number" which is needed to invoke the 1024 x 768 mode on the graphics card is needed in general. See the program listing SHOW1024.C in the PROGRAMS subdirectory on this disk. To view the high-resolution image, type SHOW1024 730531UM.741 n (where n is the decimal number used by your VGA graphics adapter to select mode 1024 x 768 with 256 colors).

This was last replaced 09-25-92.

Volume in drive B is DAB920923A  
Volume Serial Number is 0E43-15CB  
Directory of B:\

256GRAYS	PAL	1031	11-29-90	12:22a
73053113	230	58568	01-28-92	5:37p
730531UM	230	58568	02-13-92	4:14p
730531UM	741	580634	09-09-92	1:55p
73060213	230	58568	01-24-92	3:25p
73060217	230	58568	01-23-92	11:18a
73062721	230	58568	05-20-92	3:28p
730627UM	230	58568	06-09-92	1:15p
BLUGRYEL	PAL	1031	11-29-90	12:20a
COMPARE	EXE	44784	09-08-92	3:47p
COMPARE	BAT	140	09-09-92	3:05p
ENHANCED	BAT	936	09-09-92	3:06p
ONE SPIN	BAT	137	09-09-92	3:15p
OR THIS	BAT	245	09-09-92	3:18p
PANS054	BAT	128	09-09-92	3:15p
PANS054	EXE	38624	09-09-92	2:36p
RUN THIS	BAT	215	09-09-92	3:11p
SEPIA	PAL	1031	12-01-90	9:58p
SHOW1024	EXE	35856	09-09-92	2:45p
SHOWS054	BAT	23	01-23-92	3:35p
SHOWS054	EXE	43536	09-08-92	3:21p
READ	ME	4638	09-23-92	1:51p
PROGRAMS	<DIR>		09-23-92	2:06p
23 file(s)		1104397	bytes	
		23552	bytes free	

Volume in drive B is DAB920923A  
Volume Serial Number is 0E43-15CB  
Directory of B:\PROGRAMS

.	<DIR>		09-23-92	2:06p
..	<DIR>		09-23-92	2:06p
COMPARE	C	19645	09-08-92	3:46p
NOTES	TXT	2347	09-09-92	3:01p
PANS054	C	19915	09-09-92	2:35p
SHOW1024	C	17133	09-09-92	12:29p
SHOWS054	C	17213	09-08-92	3:20p
7 file(s)		76253	bytes	
		23552	bytes free	