

NASA Announces NSSDC To Be "Privatized"

by Joseph King

At his major news conference on May 19, 1995, NASA Administrator Daniel Goldin announced a series of steps involving the consolidation of functions across NASA field centers, conversion of certain science activities to university-affiliated institutes, privatization of some other functions, and other steps. All these are intended to decrease NASA spending and/or to improve the effectiveness of certain functions. As a follow-up to Goldin's discussion, Goddard Acting Director Joseph Rothenberg briefed the Goddard community on the implications for Goddard. One of the decisions announced is a privatization of the National Space Science Data Center. One view of this is that the privatized NSSDC would be an institute serving as the data node of a network of science institutes.

There are many issues that NASA and Goddard will address carefully as the term "NSSDC privatization" is given meaning. NASA has an overriding commitment to preserve and protect the data of continuing value from past and current missions now in the NSSDC archives. In addition to uncountable science papers on library shelves, these data represent the key legacy of NASA's scientific past. NASA also has a commitment to increase the ease of location of, access to, and use of these data.

Current NSSDC managers will participate with other NASA managers and scientists in defining the nature of the privatized entity that will continue NSSDC functionality. In this process NASA will solicit suggestions from academia and industry on optimal "privatization strategies." The result-

ing entity may be wholly, partly, or not physically located at Goddard.

It is recognized that the function of archiving and disseminating space science data will not generate sufficient revenue to enable the creation of a self-sustaining commercial entity. NASA resources and therefore NASA oversight will continue their involvement. NASA, however, anticipates new management relations in which industry and/or academia will bring to bear new and more cost-beneficial space science data management and archiving services. Academia and/or industry will play roles they can most effectively assume, and NASA will play the roles it needs to play.

The time scale for privatization of NSSDC is likely to be between one and a few years.

Clementine Raw Images Available from NSSDC

by David Williams

The full set of Clementine raw images on 89 CD-ROM volumes will be available at NSSDC by July 1995. Arranged by Clementine orbit number, the disks contain raw images from all imaging sensors and browse and full

resolution images readable on Macintosh, DOS, and UNIX platforms. Also, the Planetary Data System will be releasing a set of more "user-friendly" Lunar Digital Image Models (LDIMs) at the end of 1995. The CD-ROM volumes are \$6 each plus a \$30 processing fee and can be

ordered from the Coordinated Request and User Support Office (CRUSO) whose addresses and telephone/FAX numbers are on page 4. More information on the disks is available on the World Wide Web at URL <http://nssdc.gsfc.nasa.gov/planetary/clemcd.html>.

COHOWeb: WWW-Based New Access to Solar Wind Data

by Jason Mathews and Syed Towheed

COHOWeb is the second generation of World Wide Web (WWW)-based interactive data retrieval and browsing systems that reuses ideas and software from the 1994 OMNIWeb, its predecessor. COHOWeb, which integrates retrieval and browsing into a single interface, allows the user to select a subset from the available

Coordinated Heliospheric Observations (COHO) data, produce a listing, and display the data as times series plots. The COHOWeb data base consists of hourly magnetic field and plasma parameters from the Ulysses, Voyagers 1 and 2, Pioneers 10 and 11, and Helios 1 and 2 spacecraft and from OMNI. The COHOWeb URL is <http://nssdc.gsfc.nasa.gov/cohoweb/cw.html>.



Dr. James Green cuts the ribbon to the new Space Science Experimenters Analysis Facility. See page 4 for details.



Major Upgrade to NSS Software Brings DLT Operational

by Jeanne Behnke and Cathie Meetre

The UNIX-based Digital Linear Tape (DLT) jukebox whose purchase was announced in the March 1995 *NSSDC News* has been brought operational with the upgrade of the NSSDC Storage System (NSS) software previously DEC/VMS-specific. The DLT increases NSSDC's mass storage capacity from 1.2 TB to 3.7 TB.

The NSS software continues to run in NSSDC's VMS environment, but it now manages the loading of data to and the retrieval of data from both the 12" WORM optical platters in the VMS segment of NSSDC Data Archive and Distribution System (NDADS) and DLT tapes in the UNIX segment of NDADS. Whether data are held on one or another of these subsystems will be transparent to NSSDC customers.

Goddard Veterans Join Hughes STX Management Team

by Joseph King

Hughes STX, NSSDC's on-site support services contractor, has enlisted the services of two of its employees with long histories in Goddard's Laboratory for Extraterrestrial Physics (LEP) to serve in key management roles at NSSDC: Dr. Mauricio Peredo and Cathie Meetre. Dr. Mauricio Peredo now oversees Hughes STX's group of space plasma physicists and related persons and will retain some of his current responsibilities as key scientist with the International Solar-Terrestrial Physics (ISTP) Planning and Operations Facility (SPOF).

Cathie Meetre now oversees the Hughes STX group responsible for evolving and managing NSSDC's computer, information, and data systems and will retain some responsibilities in LEP's radio astronomy group.

Science Information Systems Interoperability Conference (SISIC) Call for Papers

by James Thieman

Many NSSDC newsletter readers are familiar with the Catalog Interoperability/NASA Science Internet Workshops held annually for the last few years. This year will see a different direction and "formalization" of the conference through a call for papers to encourage wider community participation. A revision of the format also means a revision in the name. The Science Information Systems Interoperability Conference (SISIC) will be held November 7-9, 1995, at the University of Maryland Conference Center in College Park, Maryland. The theme of the conference is "Scientific Data Management and Analysis in a Distributed Network Environment." A mixture of invited papers, contributed papers, panels, and demonstrations will take place in the various sessions. Please see the on-line version of the newsletter for more details.

New Data Arrive at NSSDC

by Joseph King

Data products that first arrived at NSSDC since the March *NSSDC News* include Dynamics Explorer 1 magnetic field data at 16 vectors/sec resolution, Helios 1 and 2 magnetic field data at 6-sec resolution, ATLAS 1 (shuttle) ENAP/ISO data related to atmospheric emissions stimulated by precipitation of energetic neutral atoms, ISEE 1 and 2 4-sec magnetic field data (with final processing), Pioneer 10 and 11 energetic particle data from the University of Iowa at 15-min resolution, and Ulysses plasma wave (URAP) and charged particle flux (HI-SCALE) data.

A new version of the COBE/DIRBE Explanatory Supplement was made available on the World Wide Web (WWW) at URL http://www.gsfc.nasa.gov/astro/cobe/cobe_home.html.

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Flows of data into NSSDC continue for many on-going missions: IUE, ROSAT, ASCA, YOHKOH, IMP 8 (field, plasma, and some particle data now at NSSDC through the end of 1994).

From the Planetary Data System NSSDC has received data from several planetary missions, including Galileo, Magellan, Pioneer Venus, Viking, and Voyager. There is a WWW page tracking incoming planetary data sets at URL <http://nssdc.gsfc.nasa.gov/planetary/incoming.html>.

Further details on these and other NSSDC-held data sets are available from the NASA Master Directory and NSSDC Master Catalog electronically accessible at URL <http://nssdc.gsfc.nasa.gov>.

CDF Staff Receive Award as Updates Continue

by Greg Goucher

On May 2, 1995, the CDF staff received a NASA Group Achievement Award for providing outstanding software support for the management, archiving, analysis, and distribution of NASA data. Recipients are Greg Goucher, Mona Kessel, Jason Mathews, and Robert McGuire of GSFC and Richard Burley, Tami Kovalick, Howard Leckner, and Jeffrey Love of Hughes STX.

Continuing improvements include those made to the CDF access tools used in the World Wide Web (WWW)-based OMNIWeb Data System to extend them for the NSSDC Coordinated Heliospheric Observations (COHO) data in the COHWeb Data System. In addition, the "What's New" page and the CDF User's Mailing List were updated with plans to make the *CDF User's Guide and References* available from the WWW. In addition, there have been a number of enhancements to the CDF software. (See the latest release notes for details.)

NASIRC Receives NASA Group Award

by Valerie Thomas

The NASA Automated Systems Incident Response Capability (NASIRC) received a NASA Group Achievement Award at a NASA Headquarters Awards ceremony on April 12, 1995. This "award winning" team provides immediate technical assistance and on-going value-added support for computer and network security-related incident handling issues on an agency-wide basis.

Responsiveness, reliability, threat-awareness briefings and workshops, and quality incident handling services and products have resulted in continual requests for connectivity to the NASIRC on-line technical archives from worldwide sources in the public, private industry, defense, and academic communities. The team members who received the award are Fred Blonder, Sherry Butler, Richard Carr, James Green, Jacquetta Green-Bridges, Kelly Gyax, Frank Husson, Brian Lev, Henry Middleton, Richard Payne, Patricia Sisson, Ronald Tencati, and Valerie Thomas.

NASIRC has achieved these accomplishments through its "hotline" (1-800-7-NASIRC) and its participation in an international forum of incident response teams.

For more information about NASIRC and its technical services, on-line archives, and automated tools and techniques, readers can check the NASIRC World Wide Web Home Page (<http://nasirc.nasa.gov/>).

NSSDC Request Handling Group Wins Productivity Award

by Curtiss Barrett

The following members of the NSSDC request handling group received a Goddard Productivity

Improvement and Quality Enhancement Award for improving response to the growing number of requests for CD-ROMs: Curtiss Barrett of GSFC and Ronald Buck, Sabrina Cook, Vanessa Davis, Marie Dowling, LaDonna Earl, David Guell, Karinn Hassan, Matthew Jewett, Barbara Pope, Ralph Post, Sharlene Rhodes, Barbara Rowland, and Barbara Thomas of Hughes STX.

NSSDC OMNI Data Set Updated

by Emily Greene

NSSDC's OMNI data set of hourly solar wind magnetic field and plasma parameters, energetic particle fluxes, and geomagnetic and solar activity indices has recently been updated with data from IMP 8 to the end of 1994. In addition, the 1963-1972 part of OMNI, long available on the OMNItape, has also been made part of the on-line version of OMNI. This data set underlies the long-available NODIS/OMNI as well as the recently developed and enthusiastically received OMNIWeb.

NOST News

by Donald Sawyer

The International Standards Organization (ISO) TC20/SC13 committee has accepted a task to develop archive standards. This work will be coordinated by the Consultative Committee for Space Data Systems (CCSDS) Panel 2 in which NSSDC's NASA/Science Office of Standards and Technology (NOST) plays a key role. The new thrust is not intended to be limited to space-related archiving. The initial proposal is to develop an archiving reference model defining types of archives and levels of service. The NOST is encouraging participation by NASA and its supported archives, and it welcomes all comments and critiques.

Making Space Physics More Widely Comprehensible

by David Stern and Mauricio Peredo

The demonstration project "The Exploration of the Magnetosphere" being assembled by David Stern (GSFC, Code 695) and Mauricio Peredo (Hughes STX) aims to make the scientifically exciting field of space physics more comprehensible to the broader public, specifically the technically literate segment of society—technicians, engineers, science teachers, space enthusiasts, and students. Its precise, non-mathematical language retains the scientific flavor, the excitement of discovery, and the intricate interplay of phenomena.

The material is still incomplete, but users are welcome to browse through it via the World Wide Web.

Planetary Education CD-ROM Sales Brisk

by David Williams

Over 700 Planetary Data System "Welcome to the Planets" educational CD-ROMs have been sold since January 1995. With almost 200 images of planets, moons, spacecraft, and other solar system objects, the CD is now available for DOS Windows as well as Macintosh. The charge is \$6.00 each plus a \$30.00 request processing fee per order and a \$5.00 shipping fee for foreign orders.

NSSDCNEWS

NSSDC News is published quarterly by NASA's National Space Science Data Center. Please send your address changes and requests to the appropriate address listed in the box on page 4. Your comments are welcome.

Joe King, Head
Miranda Robinson, Editor
Erin Jackson, Graphics
Syed Towheed, WWW

NSSDC Participates in Spring AGU Meeting

by Karinn Hassan

On May 30-June 2, 1995, NSSDC hosted a booth at the Spring Annual Meeting of the American Geophysical Union in Baltimore, Maryland.

Staff demonstrated network-accessible systems including OMNIWeb and COHWeb, over the Internet and its space physics CD-ROMs, sold 127 space physics and "Welcome to the Planets" CD-ROMs, and talked with about 150 visitors. In addition, Dr. James Green, Dr. Joseph King, and Valerie Thomas gave a presentation and poster as part of the country's K-12 education endeavor.

NSSDC Hosts Space Science Experimenters Analysis Facility Open House

by Valerie Thomas

NSSDC now shares its 27-year-old home at Building 26 with the new Space Science Experimenters Analysis Facility, located in the basement of the building. The facility houses the Solar Heliospheric Observatory (SOHO) and Global Geospace Science (GGS) experimenters with a conference room, kitchen, and the computer room of the Solar Data Analysis Center. Those NSSDC offices once located in the basement area have been relocated.

Dr. James Green presided at the May 2, 1995, formal ribbon-cutting ceremony that was followed by a picnic attended by European SOHO scientists at GSFC for flight simulation activities as well as by NSSDC and other GSFC personnel.

New Guide to the NSSDC Now Available

by Carolyn Ng

The May 1995 *A Guide to the Data and Services of the NSSDC* (NSSDC/WDC-A-R&S 95-01) is now available with a revised folder and updated inserts. The red, white, and blue folder shows a Cosmic Background Explorer (COBE) Differential Microwave Radiometer (DMR) image in Mollweide projection. Copies are available through the Coordinated Request and User Support Office, whose addresses and telephone/FAX numbers can be found in the box at the lower right.

SSDOO and Local Science Center Unveil Educational Partnership Home Page at the Spring AGU Meeting

by Valerie Thomas

At the spring AGU meeting in Baltimore, Maryland, on June 1, 1995, Valerie Thomas of the Space Science Data Operations Office (SSDOO) and Greta Lee of the Howard B. Owens Science Center (HBOSC) demonstrated a poster home page (URL: http://www.gsfc.nasa.gov/hbowens/agu_poster.html) on the SSDOO/HBOSC partnership. This page points to the newly created HBOSC Home Page (URL: http://www.gsfc.nasa.gov/hbowens/hbowens_home.html). In addition, HBOSC staff will be creating their own home pages over the summer. By September 1995 HBOSC hopes to have a virtual Science Center for access by non-local students. The following people worked hard to make these home pages a reality: Jim Gass (Hughes STX), Nathan James (NSSDC), Rob Kilgore (McDonnell Douglas), Greta Lee (HBOSC), Charlie Toth (HBOSC), and Russell Waugh (HBOSC).

NSSDC Annual Report for 1994 Available

by Joseph King

NSSDC recently issued the *NSSDC 1994 Annual Report* describing the qualitative highlights of the year and metrics relative to the growth of the archive, the nature of the archive, and access to and dissemination of data from the archive. The report includes statistics for the contents of NSSDC's various informational data bases and World Wide Web access statistics. Copies of this report are available by request to NSSDC/CRUSO, whose addresses and telephone/FAX numbers can be found below.

NSSDC Information

To discuss the archiving of data at NSSDC, contact

JOSEPH H. KING, HEAD
NSSDC, CODE 633
NASA/GODDARD SPACE FLIGHT CENTER
GREENBELT, MD 20771 U.S.A.

To request data or information from NSSDC, contact

NSSDC (for U.S. requesters) or
WDC-A-R&S (for non-U.S. requesters)

both at

Coordinated Request and User Support Office (CRUSO)
NSSDC, Code 633
NASA/Goddard Space Flight Center
Greenbelt, MD 20771 U.S.A.
Telephone: (301) 286-6695
FAX: (301) 286-1771
Internet: request@nssdc.gsfc.nasa.gov
NSI/DECnet: NSSDC::REQUEST

To access NSSDC's on-line services (NODIS), log on

TELNET: 128.183.36.23
Username: NODIS

To access NSSDC's WWW home page, enter this URL:

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

To access NSSDC's education home page, enter this URL:

http://www.gsfc.nasa.gov/education/education_home.html