The Multimission Archive at STScI Newsletter

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The Multimission Archive at STScI (MAST) Newsletter disseminates information to users of the HST, FUSE, IUE, Copernicus, EUVE, HUT, UIT, WUPPE, IMAPS, BEFS and VLA-FIRST data archives supported by MAST. Inquiries should be sent to archive@stsci.edu.

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Hubble Data Archive Status

The Hubble Data Archive (HDA) contains, as of November 1 1999, 7.0 Tbytes of data. The number of science datasets now totals almost 200,000. Archive ingest has averaged 3.6 Gbytes/day in 1999, while the rate of data retrieval has been about 4 times as large. Work is in progress towards the migration of the entire archive to the new magneto-optical system. Cessation of ingest to the Sony platters, our current archive media, is expected to occur in early 2000. New data will be recorded exclusively to magneto-optical disks, while older data will be transferred (by platter) to the new media whenever a request for a dataset is processed.

Paolo Padovani

StarView II

All our readers should be familiar with StarView, one of the two user interfaces to the HDA (the other being our World Wide Web [WWW] interface). Work is on-going on the successor to StarView, StarView II, an astronomical database browser and research analysis tool. Developed in Java, StarView II provides an easy to use, highly capable user interface that runs on any Java-enabled platform as an applet or application. StarView II features a superior custom query and search form generation system. This system allows the user to easily define search forms from scratch or to use standard forms as templates. Multiple forms, each potentially using a different database site, can run simultaneously within the same session. The flexibility to interactively define database and attribute specifications introduces a new level of power for the astronomical research community. At the same time, standard, pre-defined forms supply a ready-made solution for most users. An "alpha" version of StarView II has been demonstrated at the recent Astronomical Data Analysis Software & Systems meeting in Hawaii. A public release of StarView II is expected for Summer 2000.

Paolo Padovani

Searchable HST and FUSE Abstracts

Abstracts for HST and FUSE observing proposals are now searchable through the Web. The search syntax is similar to AltaVista's simple search format, allowing you to match or exclude abstracts that contain search words. Abstracts may be searched right from the HST or FUSE archive pages, or through the forms at:
Availability of ORFEUS/BEFS Data at MAST

ORFEUS (Orbiting and Retrieval Far and Extreme Ultraviolet Spectrograph) is a telescope constructed and deployed by the German-US space agencies. It was deployed during two Space Shuttle missions for 5 days in September, 1993 and 14 days in November, 1996. The full telescope brings light to one of three spectrographs, including the BEFS (Berkeley Extreme and Far-UV Spectrometer) at its prime focus. The BEFS was designed to obtain spectra of UV point sources simultaneously at FUV and EUV wavelengths (380--1175 Angstroms) at a resolution of about 5000. With these capabilities BEFS provides a link with previous UV spectroscopic missions such as Copernicus, EUVE, HUT, IUE, and of course HST/GHRS and STIS. MAST has ingested raw and processed spectra of ORFEUS-1 (Sept. 1993). Data from the BEFS project have been installed on the web at URL: http://archive.stsci.edu/befs. The spectra can be downloaded from a request page or as clickable links in a catalog page and can be read with standard IDL-based or IRAF/STSDAS software. This data set includes 75 UV sources. The BEFS group plans to send the ORFEUS-2 data to MAST before the end of the year.

Myron Smith

EUVE Calibration Observations Coordinated with Chandra

MAST has made available EUVE data taken as part of the cross calibration of the Chandra X-ray Observatory (AXAF). EUVE observations of emission line sources have been undertaken for comparison to those observed with the LETGS, information to possibly help separate higher orders in the LETGS, and to extend the Emission Line Project to EUV wavelengths. HZ 43 is the brightest DA white dwarf at short wavelengths and is being employed as a calibration standard candle.

The EUVE/Chandra cross-calibration target list is:

<table>
<thead>
<tr>
<th>Target</th>
<th>Exposure</th>
<th>Observations Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capella</td>
<td>160 ksec</td>
<td>Sept 08 - 13, 1999</td>
</tr>
<tr>
<td>V711 Tau</td>
<td>150 ksec</td>
<td>Sept 13 - 22, 1999</td>
</tr>
<tr>
<td>Procyon</td>
<td>100 ksec</td>
<td>TBD</td>
</tr>
<tr>
<td>HZ 43</td>
<td>20 ksec</td>
<td>TBD</td>
</tr>
</tbody>
</table>

The September 08, 1999 observation of Capella in permanent archive format is currently available at:

http://archive.stsci.edu/pub/euve/axafcal

And subsequent observations will be made available as soon as possible.

- D. Christian & J. Dupuis (UCB/SSL)

Direct Retrievals of International Ultraviolet Explorer (IUE) Data at MAST

Data from the IUE final archive, accessible at the Multimission Archive at STScI (MAST), can now be retrieved directly to the user's machine with a very simple procedure. IUE data are in fact now stored on-site at MAST in a CD-ROM juke-box. Data of interest can be searched using a World Wide Web (WWW) interface at http://archive.stsci.edu/iue/search.php. Selected datasets can then be downloaded at a push of a button. No username or password is required.

Users may request the MXLO or MXHI data directly from the search results page as a tar file. The user may request different options by pushing the more options button. This page offers the user the opportunity to select any of the NEWSIPS files or the original IUESIPS files in both the GO format and in the RDAF format. All requests can be made as a tar, tar.gz and zip file.

Requesters should remember that there maybe a slight delay while the appropriate CD is loaded into the jukebox. If a large request is issued, several CDs may be required, thus increasing the time needed to fill the request. Users may find information found at http://archive.stsci.edu/iue/mdr_help.html helpful.

Users may also retrieve the data via anonymous ftp. Users should be cautioned that FTP
access is currently restricted in the following ways:

1. the user must already know the camera name, image sequence number, and data type of the file(s) to be downloaded,
2. no files conversions are currently available via ftp, so returned files are sent individually, in gzipped compressed mode.

In general, IUE data can be accessed from archive.stsci.edu via anonymous ftp. The files are accessed via symbolic links which are stored in subdirectories under /pub/iue/data, and which are structured according to the camera name and image sequence numbers. A separate directory exists for each camera (i.e., lwp,lwr,swp,swr) and below each of these directories is a separate directory for each 1000 image numbers. These directories are named according to the starting image number in each group (i.e., 1000, 2000, 3000, ...). As an example, a typical interactive ftp session to acquire files lwp21500.mxlo.gz and lwp21500.silo.gz would be:

```
ftp archive.stsci.edu
anonymous
username@univ.edu
binary
cd /pub/iue/data/lwp/21000
get lwp21500.mxlo.gz
get lwp21500.silo.gz
```

For additional information on this option see http://archive.stsci.edu/iue/ftp_retrieve.html.

IUE users should be aware that the IUE archive at the NSSDC will be phased out in the next few weeks.

- Randy Thompson & Karen Levay

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**Web-Based Index Page for IUE Data Users**

In the spirit of "one-stop shop," MAST staff have developed a Web-based alphabetical index for users of IUE data. This index has links to various handbooks and reports from the IUE project as well as papers published in the literature. Thus it brings together information data from pre-launch testing to post-mission data processing (NEWSIPS, INES) as well as published evaluations. Its purpose is to be a "yellow pages" resource permitting both novice and experienced IUE users to access the best site for technical information about the IUE instrument and data based on keywords or phrases. Sites accessed are NEWSIPS/IUESIPS image processing manuals, FAQs, published papers on data calibration and evaluation, and various guides, log files, and software sites developed during the lifetime of the mission.

- Myron Smith

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**IUE NEWSIPS Files Fixed**

Since the completion of the IUE Final Archive, we have been able to fix some images that were either not properly processed or could not be processed earlier. Images that were not properly processed were generally due to errors in the database entries that have since been corrected. In addition, some fixes and workarounds were made to allow some images that did not initially process through the NEWSIPS system to process correctly. Users may wish to check our list of fixed images, both GSFC and VILSPA, to see if any of the images they are interested in for their research have either been changed or are newly available. A list of the updated images is available at http://archive.stsci.edu/iue/newsips/update.html.

- Cathy Imhoff

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