

The New NOAO Archive

Christopher J. Miller & Elizabeth Stobie

The Science Data Management (SDM) program within NOAO is pleased to announce the release of the new NOAO Archive (available at www.archive.noao.edu). NOAO principal investigators (PIs) can now access their raw data taken on NOAO instruments within 24 hours of their observations.

No more tapes or DVDs. SDM protects and serves your raw data electronically.

Formerly known as the Data Products Program (see related article in this *Newsletter*), SDM has a long track record of safely storing data taken on NOAO instruments through its “Save The Bits” (iSTB) software. Behind the scenes on most NOAO instruments, iSTB moves data from the mountaintops to spinning disks in Tucson, AZ, and La Serena, Chile. A third copy of every file is placed in deep storage at the National Center for Supercomputing Applications.

SDM has completed its goal to modernize this system and provide Web-based archival access to raw data for all NOAO PIs as well as to the public. The proprietary period of all data is protected in accordance with NOAO policy (www.noao.edu/noaoprop/help/datarights.html). New users of the system will receive an email from SDM asking them to register one time with the Single-Sign-On services of the US Virtual Observatory (www.us-vo.org) to access their proprietary data. After this one-time initial registration, NOAO PIs can access any data from future observing runs as well. The NOAO Archive is accessible via a Firefox browser at: www.archive.noao.edu.

Public access to thousands of NEWFIRM and Mosaic raw images.

For non-PIs, the NOAO Archive utilizes the NOAO Virtual Observatory (VO) Portal (portal-nvo.noao.edu) to provide easy access to a variety of VO imaging archives like SDSS, HST, XMM, and Chandra.

Non-PIs can also query for thousands of NEWFIRM and Mosaic raw data taken during the scientific verification stage of the NOAO Archive project (prior to 1 January 2008). As time goes on, more and more data will become public in the NOAO Archive as the standard 18-month proprietary periods expire.

Quicker science results via automatically reduced imaging data for Mosaic.

The NOAO Archive has also integrated the Mosaic pipeline into its operations. The pipeline runs automatically on all Mosaic data taken on the Blanco and Mayall 4-meter telescopes. Once the data are pipeline-reduced, the calibrated images, stacks, masks, and master calibrations are all ingested back into the NOAO Archive. PIs can access their reduced Mosaic data within 48 hours after the end of their observing run. Anyone interested in examining the quality of the data products from the Mosaic pipeline should read the *NOAO Data Handbook* and download examples from the non-proprietary, reduced data available in the NOAO Archive.

No more media. No more worries of lost data. No more reasons to store extra copies. Analyze the reduced Mosaic data within 48 hours of the observing run.

The NOAO Archive was designed and developed to meet the needs of both the NOAO community and the astronomical community at large. It forms the basis for future SDM mandates such as the inclusion of pipeline-reduced NEWFIRM images as well as access to raw and reduced data from the Dark Energy Camera.

On future observing runs, keep an eye out for an email from NOAO announcing the availability of data for your run from the NOAO Archive. SDM is always interested in the user experience, so please send feedback to vohelp@noao.edu.

NEWFIRM Reduced Data Sets Are Now Available

Principal investigators (PIs) observing with NEWFIRM will be receiving emails from NOAO Science Data Management regarding the availability of their pipeline-reduced data products. The NEWFIRM Science Pipeline is undergoing science verification, and PIs are encouraged to download and examine their reduced images. Please send all feedback to: vohelp@noao.edu.