

Goddard Space Flight Center
Greenbelt, Maryland
20771

July 14, 1987

Reply to Attn of:

Dear Colleague,

The IUE Observatory has adopted new procedures in the distribution of some forms of IUE data. These changes involve requests for reprocessed data, for extracted spectra from the IUE Condensed Data Archive (CDA), and for raw images only. These changes have been made in order to speed up the distribution of the data to astronomers, especially to researchers working on NASA supported programs (such as the IUE SADAP and IUE Guest Observer programs), and to take advantage of some new Observatory computer facilities. The new procedures are described below.

Requesting Reprocessed Data

Astronomers analyzing archival IUE data frequently find that their spectra are more useful if they have been reprocessed using the most up-to-date version of the image processing software and calibrations. In general, data processed during 1982 or earlier benefit most from reprocessing. Details of the changes to the image processing system may be found in articles in the NASA IUE Newsletters (B. E. Turnrose, R. W. Thompson, and J. E. Gass, 1984, NASA IUE Newsletter No. 25, pg. 40; J. E. Gass and R. W. Thompson, 1985, NASA IUE Newsletter No. 28, pg. 102; J. R. Munoz Peiro, 1985, NASA IUE Newsletter No. 27, pg. 58). A summary of the major changes to the image processing system thus far is given in the IUE Data Analysis Guide (C. A. Grady, 1986, IUE Data Analysis Guide, pg. 17).

Please use the following procedures to request reprocessed archival data. You should send the attached form to the IUE Operations Scientist to request reprocessing of IUE data. Note that, if you have a NASA supported program, it is not necessary to include a letter providing scientific justification of the reprocessing effort. The Observatory will provide magnetic tapes for your data; you are asked to return the tapes when you are finished with them. The data products will be shipped directly to you, rather than through the National Space Science Data Center (NSSDC) as has been done in the past.

All requests for reprocessing will be reviewed to insure that the Observatory can provide the necessary resources and to identify any special or unusual requests. Priority will be given to requests for data required for IUE supported programs, either observing programs or archival programs under the Space Astrophysics Data Analysis Program (SADAP). Therefore please note the appropriate program ID on the form.

Please specify clearly what data products you require. Currently magnetic tapes can be provided at 800 or 1600 bpi; in the future, probably late this fall, it will be possible to provide tapes at 6250 bpi. Photowrites and CalComp plots can be generated if needed. However these data products require more time to prepare, so you may wish to request them only if you really need them. It will expedite delivery if large requests are broken into several smaller requests; please note which spectra are needed most urgently and which can be supplied at a later date.

Requests for Extracted Spectra from the Condensed Data Archive

The IUE Observatory, through the Goddard Regional Data Analysis Facility (RDAF), provides extracted spectra to requesters directly from the IUE Condensed Data Archive (CDA). This service has been available since early 1986 (S. R. Heap, 1986, NASA IUE Newsletter No. 29, pg. 98). Copies of the current version of the extracted data in the IUE archives are provided on magnetic tape. Requests may be made by mail, by telephone, or via computer message to the RDAF staff. A magnetic tape (or tapes) will be sent to the requester in a week or two. Alternatively the tape(s) can be held at the Observatory for pickup during your IUE observing run, or at the RDAF for a subsequent visit. Currently tape densities of 800 bpi and 1600 bpi are available; in the near future 6250 bpi will become available as well.

The procedures for requesting extracted spectra through the RDAF are essentially unchanged. We ask however that you use the new form which is enclosed to mail in your data requests. In addition, priority will be given to requests for data required for IUE supported programs, either observing programs or archival programs under the Space Astrophysics Data Analysis Program (SADAP). Therefore please note the appropriate program ID on the form.

Please note that RDAF visitors may request IUE data for their analysis as usual. You may request specific images when you call to schedule your visit to the RDAF. If sufficient notice is given (a few days), the data will be obtained and loaded into your account prior to your arrival. If the data you wish to analyze has been recently obtained with IUE and thus is not yet releasable, we ask that you bring along your Guest Observer tapes or arrange to have them held at the Observatory during your observing run. If your analysis of the data is part of an IUE supported program, we ask that you let us know the program ID for our records.

Requests for Raw Images Only

In some special cases, astronomers may wish to have available the raw images for some spectra. It is possible, for instance, to call up a raw image on an image display system for inspection of exposure levels, radiation hits, and so forth. The creation of a new facility at Goddard permits the Observatory to obtain copies of the raw images quickly. Requests for tapes of raw images will be filled under the new procedures. Please use the new form for such requests.

Requests for raw images will be reviewed to insure that the Observatory can provide the necessary resources and to identify any special or unusual requests. Priority will be given to requests for data required for IUE

supported programs, as described above. Therefore please note the appropriate program ID on the form.

Future Plans

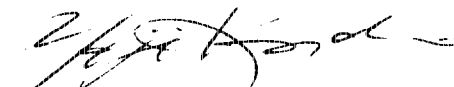
As you may know, the Observatory is making several improvements to its support facilities. The IUE image processing system is being moved to a VAX computer; the move should be completed by IUESIPS late this fall. The new VAX-based system will improve the rate at which new images can be processed and archival data can be reprocessed. A special archive of raw images has been created which will facilitate the retrieval of data to be reprocessed. This archive and the VAX-based IUESIPS will produce a great improvement in the time required to fill reprocessing requests.

The Goddard RDAF is also being moved to the new IUE VAX. This should improve remote access for RDAF users and improve analysis capabilities. It is expected that the RDAF will move to the new VAX in the late summer.

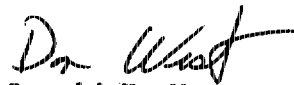
The IUE Project has undertaken the work required to produce a final, homogeneous, high quality archive of IUE data. The scientific instrument is being completely recalibrated. Some of the new calibrations (the LWR and LWP ITFs and absolute calibrations) will be implemented in the image processing system some time this fall, after final tests and verification. Further work is ongoing; additional calibrations and image processing system enhancements are planned. The new IUE VAX computer has been acquired so that the entire archive data can then be reprocessed into final form in a timely fashion.

Further Information

Please feel free to contact us if you have questions regarding these procedures, progress on specific data requests, or your special requests. Please call Dr. Don West at (301) 286-6901, or Dr. Catherine Imhoff or Dr. Howard Scott at (301) 286-5749. You may also wish to contact Ms. Joy Nichols-Bohlin (301-286-7346) regarding questions about the IUESIPS image processing system or Mr. Randy Thompson (301-286-8800) concerning the RDAF. We welcome your comments and suggestions.



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IUE Project Scientist



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