

A Couple of Notes On IUE Remote Observing and Downloading of Images Directly from the TOCS

Upgrades of IUE Remote Observing Software

The present modules available for IUE Remote Observing were developed in early 1992 for the then available UNIX, ULTRIX, and VMS platforms. The remote package is considered part of the IUE Operations software and is basically identical to the display package which the TO uses at the console. As such, it is routinely upgraded only for operations enhancements. Both the hardware and operating systems are frozen and are not normally updated. The workstations are run on VAX VMS 5.4-3 and IDL Ver 2.3.

We have recently had several inquiries about updates to our packages. Due to budget constraints and the general unavailability to the IUE Operations group of any new hardware or operating systems or layered products, we do not provide updated modules for export. However, there are several related items we are working on with the limited resources available.

Documentation

From the inquiries we have had to date about the IUE Software, only small changes are generally required to make them compatible with the latest operating system and IDL releases. It is much easier to make these changes if there is complete documentation available on how the software modules function. This documentation is also useful for making local adaptations. Work is nearing completion on documentation of the entire IUE Science Operations Software. It should be possible to issue an auxiliary document which describes only the Remote Observing Software package. We will make this available to our remote site users as soon as possible.

Possible Direct Downloading Of IUE Images for IUESIPS Processing.

We are currently exploring the possibility of downloading images from the Sigma ground computers to IUESIPS via the TOCS workstations for image processing, thus bypassing IUESOC tapes. While direct data transfer between modern systems is usually straightforward, the IUE case is more complex. The old Experiment Display System (EDS) was never envisioned as providing any more than a quick-look display. Thus the image blocks sent between the Sigma and the TOCS have no data integrity checks. While this is not a problem for displaying an image, it is a problem if you want to use the data for analysis.

We shortly will be testing a data integrity check algorithm on the Sigma computer. If it does not appreciably slow down the Sigmas or image transmission (not a trivial test for a 1960 era computer), then we will pursue this option as quickly as possible.

Tests of image transmissions to date have shown random bytes containing all zeros are occasionally found in images transmitted to the TOCS and sent to remote sites. **Remote site users are thus cautioned not to use the images transmitted during IUE Remote Observing Session for data analysis. At this point, they are only useful for quick-look analysis performed during the observing session.**

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