IUE LOW DISPERSION MICROFICHE PLOTS

A set of microfiches has been produced at SERC Rutherford Appleton Laboratory containing, as far as possible, all low dispersion spectra obtained by IUE (about 20000).

The fiches are designed to enable an astronomer to take a quick look at any low dispersion IUE spectrum previously taken. After assessing their quality and usefulness he/she may for example then request tape copies of the data from the appropriate Data Centre, or adjust his/her observing sequence or exposure times.

They were produced by Dr. D. Giaretta and Miss J. Arya, whose task was simplified by the provision by NASA of tape copies of all extracted spectra.

Due to the temporary unavailability of some tapes a certain number of spectra are missing — denoted by blanks on the fiches. Fiches containing such blanks will be replaced in due course, and regular updates with the latest spectra will be produced.

This first issue, of 82 microfiches, covers the period up to the second half of 1983, but there are also a few plots up to November 1983.

Description of the Fiches

The spectra are ordered by camera and image number, with one plot per image number. Headers on each fiche should make the location of any required plot an easy task.

Each plot has a header giving details of the exposure, in much the same format as the Merged Log.

If both apertures have been used, then two header entries are given, but there is only one plot. A caption specifies which aperture is plotted.

A caption: WARNING FOR QUICK LOOK ONLY emphasises the nature of the plots.

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1800-3300A for LW and 1100-2100A for SW. Units for the ordinate are those provided by IUESIPS in the last record of the merged extracted file. In particular it will be ERG/CM ** 2/ANGSTROM, if the spectrum is absolutely calibrated.

With the exception of the Lyman alpha (1215A) and the 2200A hot-spot in the LWR large aperture, the plots are scaled so that the largest feature is well displayed at a convenient scale. This means that Geocoronal Lyman alpha and the LWR hot spot may be truncated.

Where possible spectra produced by the new extraction process of IUESIPS have been used in preference to the old extraction.

All points are plotted for old extractions.

However, for clarity the data for new extractions have been averaged in pairs. This is noted on the plot with the caption:

NEW EXTRACTION TWO-POINT BINNING

No other change has been made to the IUESIPS merged extracted spectra.

Inverted triangles on the plots indicate data points which had been given a negative quality flag by IUESIPS, e.g. data affected by reseau marks or by saturation. For new extraction points, if either of the averaged data had a negative flag then the plotted value is flagged.

Accompanying each set of fiches are cards containing the documentation. Included on these is a description of the plots, as well as a list of known peculiarities, for example high dispersion images which have a low dispersion extraction.

Sets of fiches will be distributed by SERC to all UV astronomical groups in the UK. Master copies will be sent to VILSPA and GSFC where they may be made available to ESA and NASA groups of observers.

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