New Restrictions On Use Of The LWR Camera

Since initial discovery last year of the flare in the ultraviolet converter (UVC) of the IUE's LWR camera, considerable attention has been given to the status of the camera by the GSFC and Vilspa Observatory staffs. Following much discussion at the IUE Three Agency Meeting held in May the following restrictions are being imposed on future use of the LWR camera.

- Authorization to use the LWR camera must be granted by the IUE Project Scientist or IUE Operations Scientist. A written justification for use of the LWR must be provided to the Project by the PI or the person designated by the PI as having responsibility for the conduct of the PI's program. This should be done at least two weeks in advance of the scheduled observations.
- Use of the LWR camera will be limited to a maximum of 200 hours of exposure time per year. (This is about the rate of use experienced since the LWP camera was declared prime last October.) However, the Project's goal will be to minimize LWR camera use while remaining sensitive to legitimate needs.

Should the LWR camera become available at a lower (4.5 kv) UVC setting the need for these restrictions will be reevaluated.

It is expected that requests for LWR camera use will be evaluated with the following criteria in mind.

- Is LWR camera use essential to maintaining data continuity, e.g., to study variability in a single object observed earlier or to make detailed comparisons (e.g., involving line profiles or flux ratios) of new targets with objects for which LWR data exist?
- Is the currently greater short wavelength sensitivity of the LWR camera essential to the program?
- Do LWP camera artifacts present a serious obstacle to achieving the goals of the program?

In contemplating requests for LWR camera usage GOs should consider the following factors.

- The GO will have to absorb additional overhead associated with switching from the LWP camera to the LWR camera and back. Though some of this overhead might be buried in other activities it may amount to nearly an hour for the first day's use and nearly forty minutes on subsequent days.
- Wavelength shifts and intensity transfer function registration errors may affect data obtained while LWR camera temperatures are stabilizing after turn on. Stabilization takes about two hours. Image format shifts can be 1-2 pixels in size.
- LWR data, particularly high dispersion images, but possibly long exposure low dispersion images as well, may be contaminated by the UVC flare.
- There will come a time when the LWR camera is no longer available at a 5-kv UVC setting. GOs with long-term projects who are concerned about data continuity should be switching to the LWP camera now.

The reader's attention is called to articles in this and previous newsletters (c.f., IUE NASA Newsletter No. 23, p.2 for several references) which address and compare characteristics of the LWR and LWP cameras.

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