

IUE NEWS

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IUE Achieves Mission Goal—in the Two-Gyro Mode

This August IUE celebrated the fifth anniversary of operations under its backup attitude control system, the two-gyro/FSS mode. This is especially notable since the original lifetime goal for IUE was 5 years!

More Power to IUE

IUE managed to sail through its 26th earth shadow season without any major problems. This was due, in part, to a new configuration of the power load on the spacecraft. On July 24 the heater for the four non-functioning gyros were turned off, and the heaters to the two remaining gyros were set to high power. This change resulted in a power savings of about 10 watts, a significant reduction in the overall spacecraft power consumption of about 160 watts. The power savings results in two major benefits. First, the power-positive range of β angles is expanded by several degrees. Currently this range is $\approx 32^\circ - 110^\circ$, depending on power load. Second, it was not necessary to turn off any additional components of the scientific instrument during shadow season.

Progress on the ROSAT-IUE All Sky Survey (RIASS)

As announced last fall, the ROSAT and IUE Projects are sponsoring a special collaborative effort to obtain nearly simultaneous IUE and ROSAT All Sky Survey data. This is based on the expectation that the coordinated ultraviolet and X-ray data should provide unique and important scientific results. The program has become known as the ROSAT-IUE All Sky Survey, or RIASS. At NASA, seventeen IUE Principal Investigators (PIs) are participating in the program. Because the IUE observing schedule is set by the ROSAT observing windows, all the coordinated IUE observations have been handled as a single program. Specific IUE shifts have been scheduled at VILSPA and NASA so that IUE data can be obtained for whichever of the proposed targets (NASA or VILSPA) falls in the ROSAT window on that day. At both NASA and VILSPA, the observations are being obtained largely under service observing, since a given PI's targets are usually scheduled throughout the six-month survey period. The survey began at the end of July and is expected to conclude at the end of January 1991.

Several IUE staff members have been instrumental in carrying out the RIASS program, which has required a great deal of coordination and cooperation among NASA, VILSPA, and the PIs involved. Willem Wamsteker (VILSPA) has acted as the overall RIASS coordinator

and interface with ROSAT. Cathy Imhoff (NASA) has acted as coordinator on the NASA side. Domitilla De Martino (VILSPA) has planned out the observations and pulled together the VILSPA PIs' observing requests. Jerry Bonnell (NASA) has pulled together the NASA PIs' observing requests and performed the observing during the NASA RIASS shifts. The VILSPA RAs have performed the service observing during VILSPA RIASS shifts. The PIs have had to provide detailed observing plans and finding charts well in advance to the IUE staff so that the observations could be planned out and performed. Thus far the program has been running smoothly, and all parties are to be congratulated.

Pfewer Photowrites to Phile

The IUE Project has discontinued production of the photowrites of processed images. Photowrites of all raw images are still generated and sent to the Guest Observers, as well as kept in the browse file at the IUE Science Operations Center. This saves the Observatory money and staff time, and Guest Observers have not generally found this additional photowrite to be of critical importance.

Update on Solar Activity

The current extreme solar maximum has caused some concerns, but so far IUE seems to be weathering the storms well. Since the last Newsletter there have been no significant proton storms, at least as far as IUE's cameras are concerned. The radiation background during the US2 shifts has been relatively low, rarely exceeding 2.0 volts and often below 1.5 volts. The increase in solar array degradation appears to have levelled out and returned to earlier levels.

Just the FAX Ma'm

IUE is now the proud owner of its own FAX machine. The telephone number is (301) 286-7642. The machine is located next to our new photocopy machine.

VILSPA Adopts the New Reference Point

In the last newsletter, we reported that NASA started using the new FES reference point at -144, -176 on January 22. VILSPA has now also implemented the new reference point as of July 23. The FES counts are about 20 percent higher at the new point and are not affected by the "fatigue spot" at the old point. Observers who use offset reference points and do FES photometry should be aware of the change in reference points. Additional information can be found in the article in this issue by Huber and Pérez.

Remote Observer Access to IUE

We have a general user account on the IUESOC MicroVAX accessible to our Guest Observers. Menu-driven routines are available to help you compute β angles, check the

latest versions of the IUE schedules, and access a bulletin board. If arrangements are made in advance, it is also possible to obtain an individual password so that you can access your target list and generate scripts on the laser printer. If you are interested in using this account, please contact one of the Resident Astronomers for the account name and passwords.

RDAF Demo at Albuquerque

The IUE RDAF software package for UNIX workstations (Bonnell *et al.* 1990, *NASA IUE Newsletter*, 41, 208) was demonstrated at the Albuquerque AAS meeting, and there was a steady stream of interested customers. The software was run on a DEC Ultrix workstation provided by the University of Colorado IUE RDAF.

Staff Changes at IUE

Cathy Imhoff has left the position of Technical Supervisor of Telescope Operations, and the only person that they could find who was crazy enough to take the job was Terry Teays. Cathy will continue to give the Project the benefit of her extensive experience in her role as one of our Senior Astronomers. Terry's phone numbers are 301-286-5740 (at GSFC) and 301-794-1475 (at his CSC office); he can be reached via SPAN at `iesoc::teays`.

Replacing Terry as the RDAF Astronomer is Jerry Bonnell, who most of you know as the person who spearheaded our project to convert our VAX/VMS RDAF software to a Sun environment. Jerry's office is out in the trailer, and his phone number is 301-286-7762. He can be reached via SPAN at `iue::bonnell`.

Resident Astronomer and IUE Scheduler, Jim Webb, has left us to take up a position at Florida International University. Bruce McCollum has assumed the heavy burden of being the full-time IUE Science Scheduler. Bruce receives assistance and advice about scheduling from Resident Astronomer Lloyd Rawley. Carlos Aguirre-Echevarria, the person who generates the sky maps and target lists for GOs, is leaving us, and Dee Prather will be his replacement.

The three new Resident Astronomers which we mentioned in our last Newsletter have indeed arrived and begun their training. By the time you are reading this, Cathy Mansperger will have started her shift duties. Mike Carini and Jeff Newmark will begin theirs in December. Rich Arquilla, Mario Pérez, and Ron Pitts round out our roster of on-shift Resident Astronomers.

Myron Smith has begun a two year appointment with NSF. Taking over Myron's duties as the Image Processing Astronomer is Tom Meylan, who has come to us from Georgia State. Amy Papworth, from Washington, has joined the image processing staff.