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REQUEST TO FLARE STAR OBSERVERS

We are planning an extensive series of X-ray observations of the flare star UV-Ceti (1950 r.a. = $01^{\text{h}}36^{\text{m}}25^{\text{s}}$, 1950 dec = $-18^{\circ}12.7'$) with the Astronomical Netherlands Satellite (ANS) during 3-8 January 1975. The Smithsonian X-ray experiment on ANS will observe in the 1-30keV energy range with 1 sec time resolution and spectrum recording every 4 seconds. Flares could be detected to at least the limit $\sim 5 \times 10^{-10}$ erg/cm² sec in the 1.5keV-7keV band. In addition, the soft X-ray (0.25keV-8keV) experiment on ANS will be observing with comparable sensitivity and time resolution. On 5 and 6 January it will be possible for the third ANS experiment, a uv telescope (1500-3000 Å), to also observe the star. The satellite can maintain pointing (within an arc minute) on the star for about 15 minutes during each 98-minute orbit.

We urgently request all possible optical observers to search for flares during this period. We hope observers will record data with high time resolution for as long as possible while the star is visible after local sunset. Due to the satellite orbit, especially long observations are possible over Asia and Australia. Observers can obtain a list of approximate ANS observing times by 20 December upon notifying either Dr. J. Grindlay at the Center for Astrophysics or Dr. J. Heise, Laboratory for Space Research, Beneluxlaan 21, Utrecht, Netherlands (telex no. 47224).

During a similar observing program on YZ-CMI in 1974 October, it is very likely that we detected an X-ray flare. Unfortunately there was no coincident optical or radio observation at that particular time. We hope it will be possible for many observers to monitor UV-Ceti and communicate times of any flares to us.

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