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TWO POSSIBLE NEAR-BY FLARE STARS IN CANCER

During our regular search for flare stars in the field of the Praesepe cluster (approximately 20 sq. degrees) , we have found two dMe stars that undoubtedly form a physical system and certainly do not belong to the Praesepe cluster but are relatively near-by flare stars.

The stars referred to appear in the "Lowell Proper Motion Survey (Northern Hemisphere), the G Numbered Stars" (1971). The separation between the stars is of the order of 12 seconds of arc. In the Table we give the corresponding Tonantzintla serial number for the flare stars found in the Praesepe region, the G Lowell number, the right ascension and declination, the visual magnitudes, the spectral types, and the number of flare-ups detected in each star during 298 hours of effective observation in the near ultraviolet; in the last column of this table, we are giving the  $\Delta m_U$  corresponding to the minimum and maximum amplitudes of the outbursts observed.

The spectral types were derived from red and near infrared objective prism plates taken with our Tonantzintla Schmidt camera. Because of the overlapping of the two spectral images, the H $\alpha$  emission line in the fainter component of the pair is doubtful.

It will be of importance to determine more accurate spectral types, magnitudes and colors and the distance of this physical pair of flare stars. In the near future, we will publish the photographic reproductions of some of the different flare-ups in these stars together with the list of new flare stars found at the Tonantzintla Observatory in the Praesepe cluster region during the last years.

Flare Star Number	Star G number	RA 1950	Dec.	v mag.	Spectral type	No. of* flare-ups detected	$\Delta m_U$
T12	G 009-008	8 <sup>h</sup> 28 <sup>m</sup> 46 <sup>s</sup>	+19 <sup>o</sup> 34'0	12.2	M5e	6	0.9-3.0
T13	G 040-026	8 28 46	+19 34.0	13.4	M5e?	6	0.5-4.0

\*Although six different flare-ups have been detected in each star, in no case the outburst in the two stars coincide in time.

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