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NARROW BAND OBSERVATIONS OF THE RS CVn BINARY TY PYXIDIS

Recently studies of TY Pyxidis have been published by Andersen and Popper (1975) and by Surendiranath et al. (1978). In March and April 1977 an investigation of several later type stars suspected to carry star spots has been undertaken. The stars have been observed with the photometer at the 61cm Cassegrain telescope of the Astronomical Institute of the Ruhr University of Bochum at the European Southern Observatory in La Silla, Chile. The photomultiplier was a refrigerated EMI 9502A tube, the filters were Johnson's B, at 5125A (Hw 45A), 5170A (Hw 40A), and 6750A (Hw 200A). The narrow bands have been specially selected for the observation of star spot sensitive spectral regions. First observations in this colour system have been published by the author (1978), more detailed studies of the other program stars are in progress.

The observations of TY Pyx are shown in Table 1. Comparison star was HD 77087. The times of the observations are equivalent to the phases 0.7, 0.98 and 0.03 using the ephemeris given by Andersen and Popper (1975). The colour indices do not show any significant changes at these phases. Therefore it should be concluded that no larger star spots were visible at the time and phases of the observations.

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References:

- Andersen, J., Popper, D.M. 1975, *Astron. Astrophys.* 39, 131
Hoffmann, M., 1978, *Mitteilungen Astron. Gesellsch.* 43, 186
Surendiranath, R., Vivekananda, Rao, P., Sarma, M.R.K., 1978
Acta Astr. 28, 231

Table 1
 All times in JD Hel.+2443240

t	ΔB	t	$\Delta 6750$	t	$\Delta 5170$	t	$\Delta 5125$
5.4990	.335	5.4993	.765	5.4997	.540	5.5001	.550
5.5047	.330	5.5009	.750	5.5004	.545	5.5058	.545
6.4892	.480	5.5050	.730	5.5054	.550	6.4905	.685
6.4948	.440	5.5066	.785	5.5062	.540	6.4959	.640
6.5307	.320	6.4897	.795	6.4901	.700	6.5330	.535
8.5833	.325	6.4914	.765	6.4909	.670	8.5855	.575
9.5405	.570	6.4951	.895	6.4955	.640	9.5414	.770
9.5481	.610	6.4968	.910	6.4963	.645	9.5489	.825
		6.5314	.705	8.5848	.565		
		6.5346	.855	8.5863	.590		
		8.5841	.840	9.5410	.790		
		8.5870	.780	9.5421	.795		
				9.5485	.820		
				9.5492	.835		