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SEVEN-COLOUR PHOTOMETRY OF THE VARIABLE HD 25539

HD 25539 ($\alpha_{1900} = 03^{\text{h}}58^{\text{m}}.3$, $\delta_{1900} = 32^{\circ}18'$, B3V, $V = 6.86$) was observed photoelectrically with the Geneva seven-colour photometer mounted at the 1m telescope of Observatoire de Lyon, at Gornergrat Observatory, Switzerland, during 2 nights in February 1977. The star was used as a comparison star for X Persei (HD 24534). The other comparison star was HD 21856 (HR 1074, B1V, $V = 5.9$).

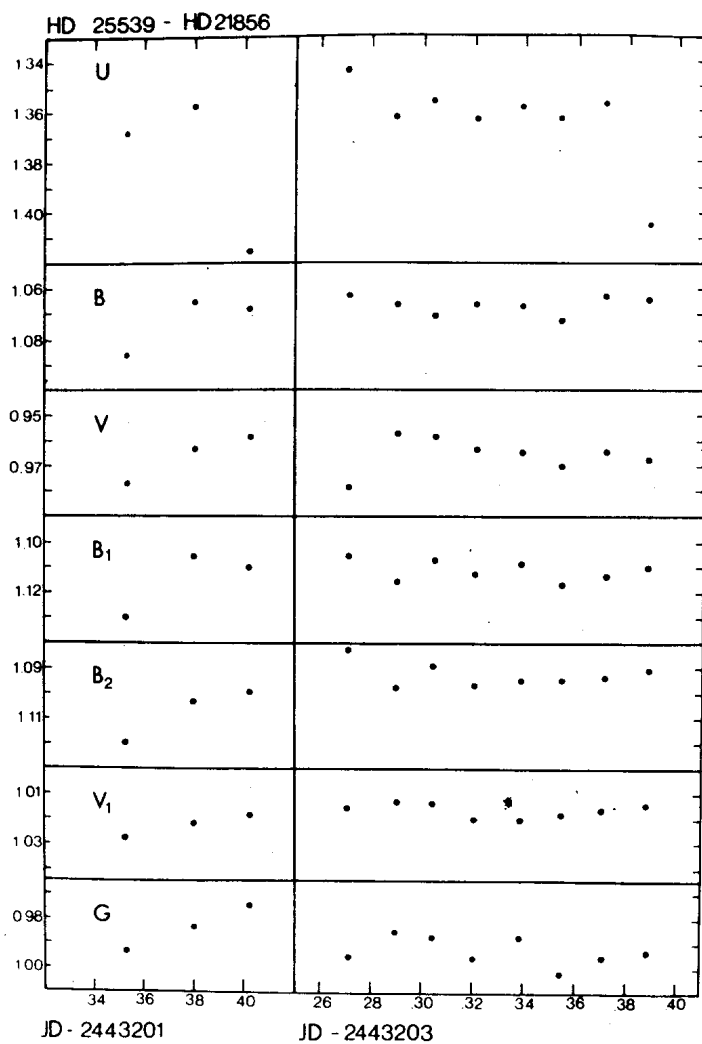
From the high dispersions of the differential measurements (Table 1) we conclude that one of both comparison stars is variable on a timescale of several hours.

JD Hel.- 2440000	n	U	B	V	B ₁	B ₂	V ₁	G
201.39	3	0.030	0.011	0.010	0.013	0.010	0.005	0.009
203.33	8	0.018	0.004	0.007	0.004	0.005	0.003	0.005

Table 1. Standard deviations for the differential measurements HD 25539-HD 21856 for both nights. n denotes the number of measurements. The time indicated is a mean value for the whole night.

From the standard deviations of the non-differential measurements in Table 2 we clearly see that HD 25539 is the variable.

Figure 1 gives the lightcurves resulting from the differential measurements in the sense HD 25539-HD 21856 for both nights. The differences are in the standard system of the photometer.



	HD 25539		HD 21856 (comparison star)	
	JD 244 3201.39	JD 244 3203.33	JD 244 3201.39	JD 244 3203.33
U	0.031	0.020	0.002	0.003
B	0.010	0.003	0.002	0.003
V	0.010	0.006	0.001	0.003
B ₁	0.011	0.004	0.004	0.004
B ₂	0.010	0.004	0.002	0.003
V ₁	0.005	0.002	0.001	0.002
G	0.010	0.004	0.002	0.003

Table 2. Standard deviations of the non-differential measurements of HD 25539 and HD 21856 for both nights.

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Correction to I.B.V.S. No.1269

The third sentence ("Evidence has been found...") should be omitted.

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