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A NEW VARIABLE IN AQUARIUS

While conducting an observing program directed toward the study and determination of the synodic rotational periods of minor planets, it was noticed that one of the comparison stars varies about 0.3 magnitudes (V) almost in two hours. Since this star is not listed in neither the GCVS nor the NSV catalogues, I conclude that its variability has not been previously reported.

Additional differential BV photometry was obtained using a cooled photon-counting photometer equipped with an RCA 31034A photomultiplier tube attached to the 0.76m reflector at the Estacion de Altura "Dr. Carlos U. Cesco" of Felix Aguilar Observatory on the nights of September 8, 1991 and November 12, 1991.

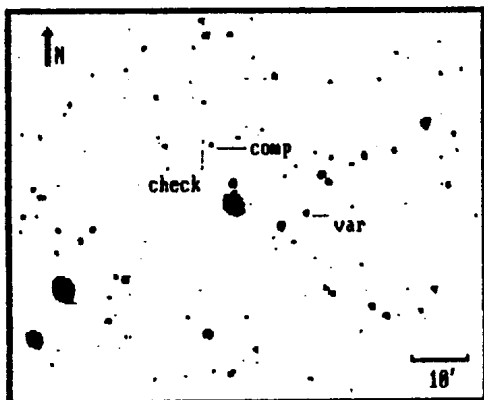


Figure 1

Table I

GSC	R.A. (1950)	DEC	
5198.00659	21 ^h 18 ^m 48 ^s .735	-3 ^o 22'22"663	variable
5199.00616	21 20 7.775	-3 8 49.470	comparison
5199.00693	21 20 15.014	-3 8 17.191	check star

Table II

JD	V	B-V
8507.5854	10 ^m .074	+0 ^m .658
8507.6005	9.925	0.625
8507.6151	9.843	0.632
8507.6359	9.790	0.626
8507.6504	9.952	0.632
8572.5764	9.835	0.734
8572.5849	9.816	0.745
8572.5924	9.777	0.755
8572.6035	9.748	0.754
8572.6096	9.713	0.779
8572.6175	9.709	0.766

Another comparison star selected for the additional photometry ($V = 9.953$, $B-V = 1.518$) was standardized using standard stars of the Selected Area 113 (Landolt 1973, 1983). The standard error about the mean in V and B-V for the comparison star was 0.012 and 0.020 magnitude respectively. Table I gives the astrophysical information (equinox 1950) of these stars which was obtained from the Hubble Space Telescope Guide Star Catalogue (CD ROM Version 1) using the Pickles Software Package (v3.058) (McCartney et al., 1989) and Figure 1 is the finder chart for the new variable. Table II shows the V and B-V values obtained.

This star seems to be variable in both V and B-V, and showed a tendency towards reddening in the November 12 observing night. A period search seems to be useless at this stage, so nothing can be said about the type of variability.

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References:

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Landolt, A.U.: 1983, *Astron. J.* **88**, 439.
McCartney, J., McArthur, B.E. and Jefferys, W.H.: 1989, Pickles Software Package.