

## VARIABLE STARS IN THE GLOBULAR CLUSTER NGC 6717

NGC 6717 ( $C1852 - 2246, l = 12^{\circ}88, b = -10^{\circ}90$ ) according to its spectral class F8 (Hesser & Shavl, 1985) is a relatively high metallicity but poorly studied cluster. Goranskii (1979) obtained an upper part of the CMD and detected one RR Lyrae variable near the cluster center. At present the only CCD photometric study of this cluster was made by Brocato et al. (1996). Our search for RR Lyrae variables was made on the base of these CCD observations by the method described in Kadla et al. (1996).

The cluster has a small apparent angular radius  $r = 1'.9$  (Kukarkin, 1974) and a high central concentration. For this reason the CMD was obtained for stars with  $13'' < r < 120''$  (Figure 1). In the instability strip there are two stars: one is a known RR Lyr variable (V1) detected by Goranskii (1979) and the other is a suspected RR Lyr star. Their positions are shown in the cluster chart (Figure 2).

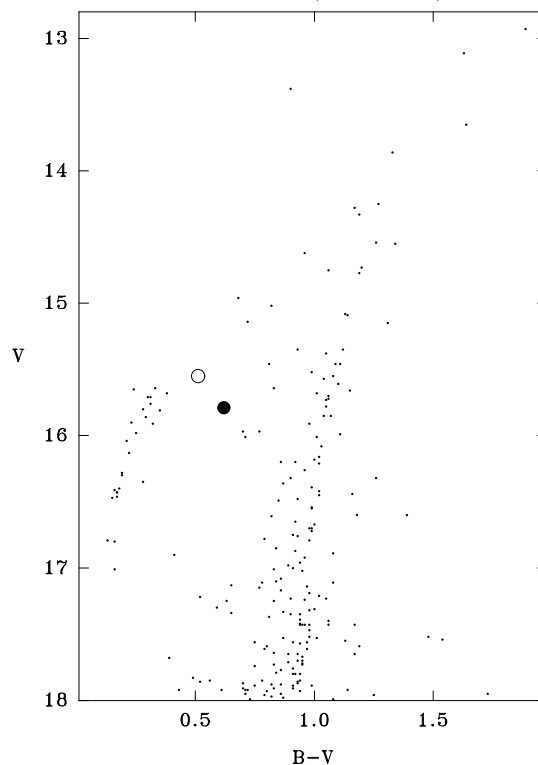


Figure 1. The color - magnitude diagram for the globular cluster NGC 6717. The known RR Lyrae star is denoted by o , suspected - •

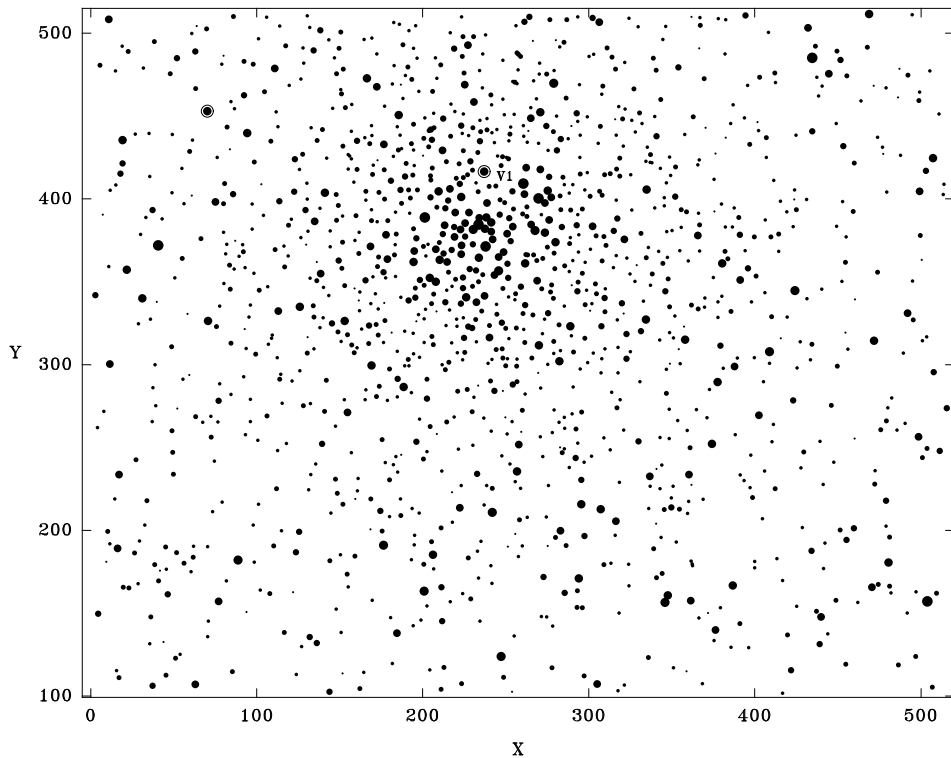


Figure 2. Chart of the cluster. Variable stars are denoted by  $\bigcirc$

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References:

- Brocato E., Buonanno R., Malakhova Yu. & Piersimoni A.M., 1996, *A&A* 312,80  
 Goranskii V.P., 1979, *Soviet Astronomy* 23, 284  
 Hesser J.E. & Shawl S.J., 1985, *PASP*, 97, 465  
 Kadla Z.I., Gerashchenko A.N. & Malakhova Yu.N., 1997, *IBVS* 4413  
 Kukarkin B.V., 1974, *The General Catalogue of Globular Clusters of our Galaxies*. Publishing House Nauka, Moscow