

THE GLOBULAR CLUSTER NGC 6144 AND ITS NEIGHBOURING REGION

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NGC 6144 is situated in the general area behind the nebulosity in Scorpio-Ophiuchus between its counterpart M4 and the bright red giant star Antares. The color magnitude diagram (CMD) is characterized by a steep giant branch, a group of exclusively blue horizontal branch stars, and a well defined instability gap within the colour range $\sim 0.4 < B-V < 0.8$. The CMD has the typical features of metal poor clusters, similar to M3, M15, and M92. From the analysis of five circular areas equal to the one measured in the cluster, it is shown that absorption increases towards the NE direction. The deduced reddening of $E(B-V)=0.40$ places the object at 15.8 kpc from the Sun, 4.3 kpc from the galactic plane and 7.8 kpc from the galactic centre, assuming $R_0=9$ kpc. The inferred values of $\Delta V \sim 3.1$ and $S \sim 5$, corroborate the tendency of metal deficiency suggested by the integrated colours, which render $Q=-0.41$.