

Wide Field CCD Photometry of the Globular Cluster NGC 7492

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The wide field two-color (V and R) 12K × 8K CCD images have been obtained for the sparse globular cluster NGC 7492, whose tidal radius is $\sim 7''.6$, using 3.5 m Canada-France-Hawaii Telescope (CFHT). Each frame covers $42'' \times 28''$ area. We have obtained images at two adjacent fields, and the total coverage is about $40'' \times 40''$. We identified approximately 30,000 stars down to about three magnitudes below the main-sequence turnoff ($V=24$). We have investigated the dynamical status of the cluster by examining the density profiles of the stars of different brightness and found marginal evidence for the mass segregation. The stellar density beyond the tidal radius is higher than the background values, consistent with the recent findings of tidal tails from globular clusters. We also investigated the properties of evolved stars through the luminosity function of stars.