Wide Field Stellar Distribution around the Remote Young Galactic Globular Clusters Palomar 3 and Palomar 4

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Searching for tidal extension features and/or streams of the probable parent satellite galaxies around the remote young globular cluster Pal 3 and Pal 4, we have used wide field VI photometry of 1.3° x 1.3° area around Pal 3 and 1.3° x 1.9° area around Pal 4 obtained from the CFH12K mosaic CCD. Applying the CMD-mask algorithm to stars in the vicinity of the clusters, we selected member star candidates which are used to examine the characteristics of the spatial distribution of stars around Pal 3 and Pal 4. Isodensity contours in the Gaussian smoothed spatial stellar density maps around the clusters and the Kolmogorov-Smirnov test to the luminosity functions present the detection of tidal halos around Pal 3 up to ~ 4rt and around Pal 4 up to ~ 6rt. Background level isodensity contour around Pal 3 show elongations of stellar distribution to the direction of N-S and the cluster's proper motion. In the vicinity of Pal 4, an extension of tail around the cluster to the opposite direction of the Galactic center and a possible extension of stars to the Galactic center have also been detected on the isodensity maps and the angular luminosity functions. We discuss the relevance of spatial distribution of stars in possible streams around Pal 3 and Pal 4 to the spatial correlation and space orbits of satellite galaxies.