Preliminary Results of Wide-Field CCD Photometric Study of Extremely Metal Poor Globular Cluster NGC 5053

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We present Color-magnitude diagrams of NGC 5053(RA=13h16m27s, DEC= +17° 41 ′ 53 ″), which is one of the most metal poor globular cluster known in the Galaxy. BVI CCD images covering a field of $42'\times28'$ were obtained at the Canada-France-Hawaii Telescope (CFHT) with the CFH12k wide-field mosaic CCD camera. CMDs show that this data provides CMD more than four magnitude fainter than the main sequence turnoff. The metallicity, [Fe/H]=-2.30±0.20 and the color excess, E(B-V)=0.05±0.02 were derived from the shape of red giant branch(RGB) and the V magnitude of the HB in (V, V-I) CMD(Sarajedini, 1994). Comparing with the fiducial line of M92 which is low metallicity globular cluster, the distance modulus $(m-M)_0$ =16.2±0.2 was derived.