

Abstract Submitted
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Color magnitude relations in radio-loud clusters of galaxies¹ DONALD PLESHINGER, JASON PINKNEY, Ohio Northern University — We present a preliminary analysis of catalogs of galaxies in 10 clusters of galaxies which were selected for their radio source content. The ultimate goal is to identify the dynamical state of the clusters (e.g., undergoing mergers) and see if it could be related to the morphology of the tailed radio galaxies. The cataloged properties are measured objectively by the “SExtractor” software. These include: position, total and aperture magnitudes in B, V, and R filters, color indices, ellipticity, position angle, FWHM and a “stellarity index” to aid in separating stars from galaxies. We describe the reduction of the MOSA mosaic CCD data obtained at the Kitt Peak 0.9-m telescope. We use the USNO-B1 catalog to calibrate our magnitude zeropoints. Our plots of color vs magnitude show that the early type galaxies in our samples fall on the color magnitude relations (CMRs) as expected for clusters at redshifts of $z=0.06-0.15$. We present statistics on the catalogs resulting from a photometric selection of galaxies.

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