A SYNOPTIC VIEW OF THE MAGELLANIC CLOUDS: VMC, GAIA AND BEYOND

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Physical Parameters of Star Clusters from Statistical Isochrone Fits on VISCACHA data

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The VISCACHA survey is an ongoing project based on deep (V ~ 24) and adaptive-optics-assisted photometric observations of star clusters in the outermost regions of the LMC and SMC. In this work we present the collection of BVI images and color-magnitude diagrams of all targets observed until 2016 (~ 100). Homogeneous and self-consistent ages, [Fe/H], distances, and E(B-V) values were derived using a statistical isochrone fitting following a Bayesian approach. These results significantly improve the age-metallicity relation for the LMC and SMC, as well as the age and metallicity gradients and our knowledge about the three-dimensional distribution of the star clusters in these galaxies. In combination with other reliable results from literature we present a catalog of bona fide physical parameters of Magellanic Clouds stars clusters that will be continuously updated.