**Analysis and Distance Determination of the Globular Clusters in Milky Way Between \(-3 \leq Z (kps) \leq 3\)**

The present paper is of three folds, first, to provide some basic descriptive statistics parameters for the apparent and absolute magnitudes of globular clusters in Milky Way between \(Z\), where \(Z\) is the distance from the galactic plane. Second, to establish the frequency functions and of the absolute and apparent magnitudes for these clusters. Third, to compute the distance \(r\) of the clusters as a system assuming that, they scatter around a mean absolute magnitude in a Gaussian distribution. The accuracy of the numerical results is very satisfactory that, the percentage errors in the mean and median magnitudes of the clusters are respectively 0.3% and 0.01%.

**Keywords:**
- Galactic Clusters
- Distance Determination
- Galactic Plane
- Apparent Magnitude
- Absolute Magnitude

**References:**
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