

Abstract Submitted
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Extension of local spiral structure based on massive OB-stars to Gaia EDR3 WILLIAM CHISHOLM, LOUIS STRIGARI, Texas AM University — Gaia Early Data Release 3 provides precise parallaxes for a large sample of massive OB-stars. This precise astrometry allows for an investigation of local Milky Way spiral structure. We use a compiled list of OB-stars in the local galactic arms containing astrometric solutions derived from Gaia DR2, and we crossmatch given Gaia DR2 sources to find Gaia EDR3 counterparts. Additionally, a crossmatch with Hipparcos was performed. We have compiled a list of 250 O-type sources and 4,000 B-type sources with 5D astrometric solutions. The improvements on the accuracies of these sources substantiate previous analysis of local spiral structure.

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