

VELOCITY ELLIPSES IN THE GALACTIC PLANE: REGIONAL
VARIATIONS AND SPECTRAL DISTRIBUTIONS

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Velocity ellipses of nearby stars are calculated for stratifications in strips. Such stratifications are made both in strips parallel to the longitude line $60^\circ - 240^\circ$ and to the longitude line $150^\circ - 330^\circ$, with different widenings of the strips.

Considering the spectral distribution and the ℓ vertex direction for each strip, we find large variations for homogeneous distributions, as well as small variations for non-homogeneous distributions. Indicators of old and young age are considered in fractional form, and they do not seem to have any influence on the above mentioned variations in ℓ vertex. We may be facing another influence, which acts differently on different star locations. This may be a local effect which is more discernible using two regions separated by the $60 - 240^\circ$ longitude line, than when we use $150^\circ - 330^\circ$ as a division line.

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