

Knowledge of the spatially resolved star formation history (SFH) of disk galaxies gives information about the disk growth, its environment, and its formation in general. SFH estimates both in the Milky Way and external galaxies assume implicitly that stars were born at the galactic radii they are currently found at. Using a range of numerical simulations, we show that dynamical effects causing redistribution of stellar angular momentum in the disk, a phenomenon known as radial migration, need to be taken into account in estimating the SFH of disk galaxies. The most significant bias in terms of total disk mass is seen for the population born in the disk inner one scale-length, typically formed in a high burst of star formation, where the SFH is underestimated for old stars by about 25-50% and overestimated for younger ones by up to 100%. The SFH is typically underestimated by up to 50% for radii outside the inner one scale-length and overestimated at the disk outskirts by 50-200%. Subdominant star formation bursts seen at different birth radius bins get washed out, while large ones spread to neighboring radii, when estimating the SFH using the final radius. Possible correction of the estimated SFH will be discussed.