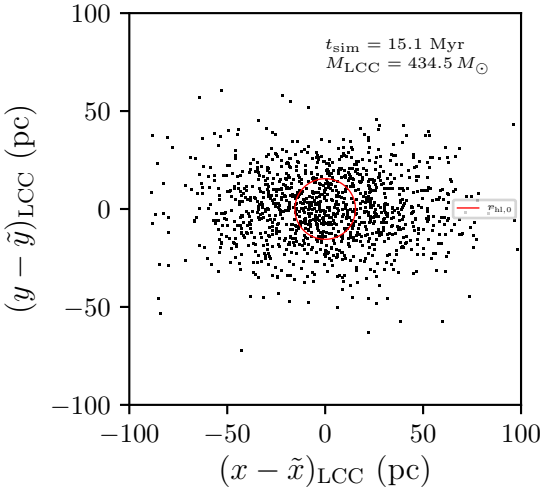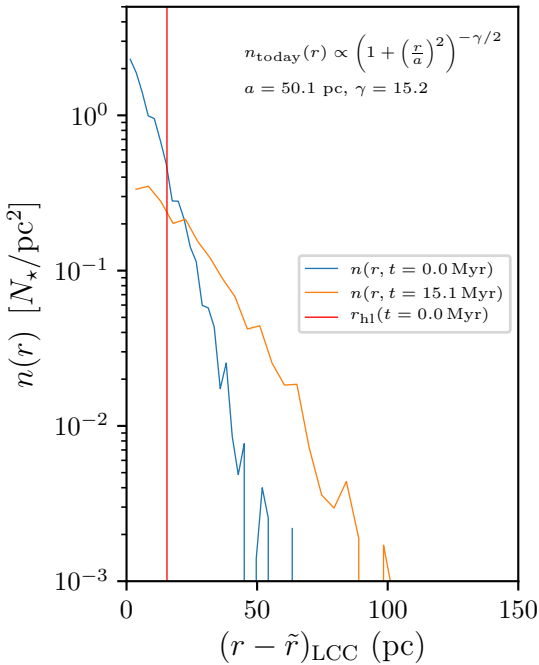Lower Centaurus Crux model