

R09b A GMC catalog for the Circumnuclear Disk of Centaurus A

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Although the properties of resolved giant molecular clouds (GMCs) within the different spiral and dwarf galaxies and their scaling relations are generally compatible among them (Bolatto et al. 2008), those in extreme environments such as the Galactic Center and starburst regions substantially differ (Oka et al. 2001; Leroy et al. 2015; Miura et al. 2018). In this contribution we shed light onto the properties of the GMCs in the molecular disk along the dust lane of the elliptical galaxy Centaurus A (Cen A). Cen A is by far the nearest ($D = 3.8$ Mpc) and best studied powerful radio galaxy and giant elliptical (Israel 1998). We present ALMA CO maps towards the CND of this target with high resolution, 20 parsec, and 1.3 km/s channel widths. With these data we have built for the first time a molecular cloud catalog of the CND of CenA using the CPROPS package, and found that a population of the molecular clouds in Cen A resembles Galactic Center molecular clouds. We show how the scaling relations differ from those in other galaxies, and discuss the possible origin of such deviations.