CARMA OBSERVATIONS OF PAH RICH SOURCES: NGC 2023, L134N AND GGD 27

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Polycyclic aromatic hydrocarbons (PAHs) and polycyclic aromatic nitrogen heterocycles (PANHs) have been the focus of intense astrochemical interest in recent years. PA(N)Hs account for up to 20% of the interstellar carbon budget and are believed to play key roles in many chemical and physical processes in the ISM. Evaluation of the extent to which PA(N)Hs influence these processes is hampered by our inability to detect PA(N)Hs concurrently with other chemical species using radio astronomy, due to their low dipole moments and large partition functions. An alternative is to observe regions with previous infrared detection and mapping of PA(N)Hs and correlate radio and infrared observations. We have conducted 3 mm CARMA C and D configuration observations of three PA(N)H rich sources that have been previously observed in the infrared: NGC 2023, L134N, and GGD 27. We will report the results of our analysis in the context of PA(N)H observations.