THE $^{14}N/^{15}N$ ISOTOPE RATIO IN DENSE MOLECULAR CLOUDS

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Observations of the 3-2 and 1-0 transitions of HNC at 271.981 and 90.663 GHz, $H^{15}NC$ at 266.567 and 88.865 GHz were conducted using the Arizona Radio Observatory (ARO) 12m at 2 and 3mm in wavelength and Submillimeter Telescopes (SMT) at 1mm. The ^{13}C isotopomer was also observed to evaluate the high optical depth in the main isotope, hence the 3-2, 2-1, 1-0 transitions of $HN^{13}C$ at 261.263, 174.179 and 87.090 GHz were recorded as well. Observations were made toward the molecular clouds SgrB2, W31, G34.3, W51M, M17-SW, DR-21, L134, Orion A, W3 (OH), NGC7538 and S156, located at various distances from the Galactic Center. The preliminary results indicate a ratio $^{14}N/^{15}N$ of 120-200, similarly to the values found in comets.