

A SPECTRAL LINE SURVEY OF SELECTED 3 MM BANDS TOWARD SAGITTARIUS B2(N-LMH) USING THE NRAO 12 METER RADIO TELESCOPE AND THE BIMA ARRAY II. DATA ANALYSIS

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We have analyzed the data from our 3 mm spectral line survey of the high mass star forming region Sagittarius B2(N-LMH)^{b,c}, covering 3.6 GHz of bandwidth, where we detected 218 lines (97 identified molecular transitions, one recombination line, and 120 unidentified lines). The analysis was done using rotation-temperature diagrams and amplitude distributions in the u - v plane. These methods give insight into the rotation temperature and column density of each observed species as well as the distribution on the sky. From the distribution information we can infer potential formation mechanisms for these species as well as constrain possible identifications for the unidentified transitions.

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^cD. N. Friedel, L. E. Snyder, B. E. Turner, and A. Remijan, *ApJ* **600**, 243 (2004)