MOLECULAR OBSERVATIONS TOWARDS BIPOLAR OUTFLOWS OF L1448

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The youngest Young Stellar Objects (YSOs) are characterized by well-developed bipolar outflows and massive, optically thick envelopes. A few bipolar outflows have been revealed in the L1448 dark cloud at millimeter wavelengths. With the sensitivity of the Infrared Array Camera (IRAC) onboard the Spitzer Space Telescope, we can now image the outflow cavities in scattered light. We conducted molecular observations such as CO, ^{13}CO, C^{18}O, CS, SiO, HCO$^+$, and N$_2$H$^+$ towards two regions of L1448 (L1448 IRS 2 and IRS 3) in order to study the physical and chemical properties of the bipolar outflows and envelopes using the recently commissioned Combined Array for Research in Mm-wave Astronomy (CARMA) with high sensitivity, high image fidelity, and high angular and spectral resolution. The current results of the observations, compared to the Spitzer IRAC images, are presented.