

## A NEW APPROACH FOR AUTOMATED ANALYSIS OF HIGH-RESOLUTION MOLECULAR LINE SURVEYS

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At a distance of 1.3 kpc, NGC 6334I is one of the nearest massive star-forming regions. Previous studies of the source have revealed a number of prodigious hot cores, each of which exhibit a rich molecular inventory. Our previous work on NGC 6334I examined spectra from a limited number of positions scattered throughout the source in order to sample the various physical conditions that can be found. In an effort to better characterize the underlying complex physical and chemical structure of this massive star-forming cluster we have conducted an automated LTE fit of the emission spectra corresponding to each of over 8000 pixels surrounding the hot cores using two ALMA Band 7 tunings with a resolution of 0.26'' (340 AU). For each pixel we derive an excitation temperature as well as the column density for each of the 25 most prominent molecular species. Spatial maps of the derived properties for the molecules will be presented with a particular focus on the three C<sub>2</sub>H<sub>4</sub>O<sub>2</sub> isomers and how the clustered star formation appears to impact their abundances. These molecular properties will be discussed within the context of the physical structure of the protocluster.