WAVEGUIDE CHIRPED-PULSE FOURIER TRANSFORM MICROWAVE (CP-FTMW) SPECTRUM OF ALLYL CHLORIDE

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The microwave spectrum of allyl chloride at 0 °C was measured from 8.7–18.3 GHz with waveguide chirped-pulse Fourier transform microwave spectroscopy (CP-FTMW). The spectrum consists of contributions from ^{35}Cl and ^{37}Cl isotopomers of the *cis* and *skew* isomers. As the vibrational partition function for each of these conformers is approximately 4, the microwave spectrum contains a few thousand transitions with intensities above a 3:1 S/N ratio after a few hours of averaging. We will discuss our progress on the analysis of this spectrum, which has been aided with an automated strategy to find candidate assignments.