

Figure A1: Observations of the expected frequency range for the pure rotational transitions of corannulene J +1  $\rightarrow$  J: 108  $\rightarrow$  107, 111  $\rightarrow$  110 and 215  $\rightarrow$  214 and 216  $\rightarrow$  215.

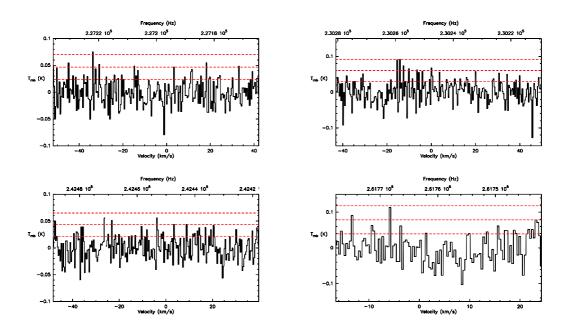


Figure A2: Observations of the expected frequency range for the pure rotational transitions of corannulene J +1  $\rightarrow$  J: 223  $\rightarrow$  222, 226  $\rightarrow$  225, 238  $\rightarrow$  237 and 257  $\rightarrow$  256.