

REINVESTIGATION OF THE MICROWAVE SPECTRUM OF THE O₂-H₂O VAN DER WAALS COMPLEX

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Further spectral data of the O₂-H₂O van der Waals complex was obtained, expanding the range of transition lines for structural determination. Previous work was done in the 14-29 GHz range^a. Transitions have been measured as low as 11 GHz using a chirp pulse FTMW spectrometer. Working fits inclusive of these newfound transitions will be presented. Furthermore, current work with higher resolution cavity FTMW data utilizing Helmholtz coils on the complex will be discussed.

^aY. Kasai, E. Dupuy, R. Saito, K. Hashimoto, A. Sabu, S. Kondo, Y. Sumiyoshi, and Y. Endo. *Atmos. Chem. Phys.*, 11, 8607-8612, 2011