CW-CRDS SPECTRA OF $^{16}O_3$ FROM 5970 TO 6200 CM^{-1}: 2052 TRANSITIONS ASSIGNED AND ANALYSED

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The high resolution CW-CRDS infrared spectra of ozone have been recorded in the 5970-6200 cm^{-1} spectral range. The high sensitivity allow to observe very weak lines. In this region, only two A type bands centred at 6063 and 6124 cm^{-1} were previously analysed[a]. Here, thanks to the record of new spectra, we largely extend the range of their observed quantum numbers, and, first of all, we observe three B type bands: $2\nu_1 + 3\nu_2 + 2\nu_3$ (138 transitions), $5\nu_1 + \nu_2$ (16 transitions), and $\nu_1 + 2\nu_2 + 4\nu_3$ (499 transitions). It is necessary to include 6 vibrational levels in the Hamiltonian model, accounting of many resonances to correctly (r.m.s=6x 10^{-3} cm^{-1} reproduce the observed positions.
In addition, transition moment are fitted. Finally, more than 95% of all experimentally observed lines are assigned and are satisfactorily reproduced, accounting of the difficulty of analyses of levels not far from the dissociation.

[a] M-R De-Backer-Barilly, A. Barbe, Vl G: Tyuterev, D. Romanini, B. Moeskops, A. Campargue, *J. Mol. Structure, 780, 223 (2006)*