OZONE ABSORPTION BANDS NEAR 4000 CM$^{-1}$

S. Mikhailenko$^{1)}$ and A. Barbe$^{2)}$

$^{1)}$ V.E. Zuev Institute of Atmospheric Optics SB RAS, 1, Academician Zuev place, 634055 Tomsk, Russia

$^{2)}$ Groupe de Spectrométrie Moléculaire et Atmosphérique, UMR CNRS 7331, UFR Sciences Exactes et Naturelles, Moulin de la Housse, BP 1039 – 51687 Reims Cedex 2, France

e-mail: semen@iao.ru, alain.barbe@univ-reims.fr

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The results of the analyses of ozone absorption between 3900 and 4050 cm$^{-1}$ are reported. The absorption in that spectral region is mainly due to the $4\nu_3$, $\nu_1+3\nu_3$ and $3\nu_1+\nu_2$ interacting bands. The spectra recorded in GSMA laboratory were used for this analysis. All vibrational states between 3600 and 4400 cm$^{-1}$ were taking into account to correctly reproduce the rotational structure of the (004), (103) and (310) states. As the result, a RMS deviation of 0.005 cm$^{-1}$ was obtained for about 2050 energies corresponding to six states. Finally a part of calculated line positions was corrected using empirical ro-vibrational energies. Comparison of the spectrum modelization using generated line list against observed spectrum will be shown.