INFRARED SPECTRA OF CO_2 AND H_2O AT ATMOSPHERIC TEMPERATURES

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We have measured the absolute intensities as well as N_2- and air- broadened half-widths of lines in the P- and R- branches of the v2- fundamental bands of CO_2 at temperatures between 170K and 296K employing a Fourier-Transform-Spectrometer with spectral resolution as high as 0.0016 cm^{-1}. Intensities and self-broadening coefficients of lines of water vapor in the 7000-8800cm^{-1} region have also been measured at room temperature.