METHANE LINE PARAMETERS IN THE NEAR-INFRARED

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To characterize the methane spectrum from 4800-5500 and 6180 to 10000 cm^{-1}, over 40000 positions and line intensities have been retrieved from selected laboratory spectra. These data have been recorded at room temperature and at 0.01 and 0.02 cm^{-1} resolution using the McMath-Pierce Fourier transform spectrometer located at Kitt Peak, AZ. Positions have been calibrated using residual water features at 5300 and 7200 cm^{-1}. Intensity measurements are good to 7% or better for the stronger features; weaker absorptions are less accurately measured. These new measurements have been listed in HITRAN format and mixed with the old information for the 5500 to 6180 cm^{-1} interval. Probable assignments from the literature have been listed for 2% of the observed features.
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