HIGH-RESOLUTION SPECTROSCOPY OF THE $A^1\Pi(v'$=0-10)$-X^1\Sigma^+(v''$=0) BANDS IN ^{13}C^{18}O

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Ultraviolet spectrographs on space-borne astronomical facilities are used to study CO photochemistry primarily through observations of the $A - X$ Fourth Positive Band System. Absorption from ^{12}C^{16}O, ^{13}C^{16}O, ^{12}C^{18}O, and ^{12}C^{17}O in diffuse interstellar clouds has been detected to date. While the necessary spectroscopic data are available to identify the isotopologues, measurements of oscillator strengths only exist for the most abundant variant, ^{12}C^{16}O. In our ongoing experiments on the DESIRS beam-line at the SOLEIL Synchrotron, we are acquiring the necessary data on oscillator strengths and term values for other isotopologues. Here we present our latest results involving $A - X$ bands in ^{13}C^{18}O.