

The A-X and B-X systems of CO_2^+ in Comets

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Fluorescence efficiencies of the A-X and B-X band systems of CO_2^+ have been derived. Although the A-X and B-X band emissions appears very strong in the spectra of cometary comae as well as ion tails, the fluorescence efficiencies of these bands have not been investigated. Model spectra have been constructed using the derived fluorescence efficiencies, and the models have been compared with spectra of comets Austin (1989c1) and P/Giacobini-Zinner. Similarity and dissimilarity between the models and the observations will be discussed.