

A new software tool for radiative transfer calculation and the retrieval procedure in the THz region.

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The application of software for creative processing the spectra from Microwave to Infrared including THz region will be presented. Recently, there are not so many codes to retrieve the spectra in the THz region. This software includes forward simulation of atmospheric spectra, weighting function analysis and retrieval algorithm based on nonlinear least squares method. The geometry of the line-of-sight of the forward model allows the limb, and up-looking direction for the space-born, balloon-born, and ground-based instruments. Weighting function analysis allows the user to select the optimal set of the spectral intervals for temperature profiles and gas profiles retrieval.

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