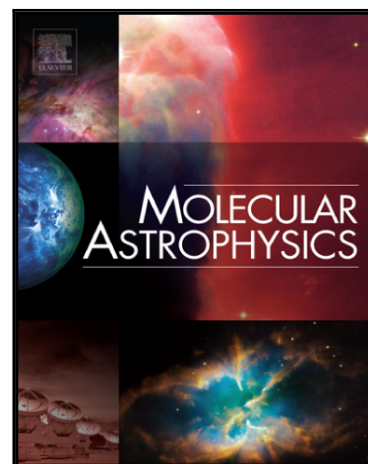


## Accepted Manuscript

Transmission Spectroscopy with the ACE-FTS Infrared Spectral Atlas of Earth: A Model Validation and Feasibility Study

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## Highlights

### Transmission Spectroscopy with the ACE-FTS Infrared Spectral Atlas of Earth: A Model Validation and Feasibility Study

- Exploitation of the ACE-FTS IR Atlases for model validation and feasibility studies of exoplanet transmission spectroscopy.
- Discussion of numeric aspects w.r.t. the evaluation of the integral defining the effective height.
- List of molecules relevant for modeling transmission spectra is given and justified quantitatively.
- Validation of the GARLIC Atmospheric Radiation Line-by-line Infrared Code
- Estimate of signal-to-noise ratio for a transmission spectrum of Earth seen from afar.

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