

Interactive comment on “Optimising hydroxyl airglow retrievals from long-slit astronomical spectroscopic observations” by Christoph Franzen et al.

Anonymous Referee #2

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Review of the manuscript “Optimising hydroxyl airglow retrievals from long-slit astronomical spectroscopic observations” by Franzen et al.

Comments: The terrestrial atmosphere airglow is usually regarded as contamination of astronomical spectroscopy observations. However, these high resolution airglow spectroscopy observations are very useful for middle and upper atmosphere researches. In this work the authors extracted OH airglow spectra from the background astronomical observations and gave the process of the rotational temperature derivation from the extracted spectra. Moreover, the rotational temperatures of different vibrational bands characterized different heights are discussed. The observations at high spatial and temporal resolutions could contribute to resolve some longstanding problems in atmo-

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spheric physics. This paper is well written and is suitable published. I suggest that this high quality data can be used to study the long term variation of the mesopause region, such as, response to the solar cycle, in the future.

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