

Geosci. Model Dev. Discuss., referee comment RC2 https://doi.org/10.5194/gmd-2021-73-RC2, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on gmd-2021-73

Anonymous Referee #2

Referee comment on "Bulk hydrometeor optical properties for microwave and submillimetre radiative transfer in RTTOV-SCATT v13.0" by Alan J. Geer et al., Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2021-73-RC2, 2021

This is a well-written paper, clear with substance! Although the authors describe it as "This work aims to be both a scientific user guide to the hydrotable generator in RTTOV 75 and also a helpful reference for users of similar tools.", it provides an excellent survey of the state-of-the-art in microwave radiative transfer and remote sensing, as well as integration with Earth Science models, documenting not only current weaknesses but also challenges for going forward. It has certainly given this reviewer many ideas for filling in the gaps. Thus, in this reviewer's opinion, it can well serve as a coordinator for targeted efforts in advancing the field. My only nitpicking criticism will be the choice of colors used in the plots: Perhaps red and green should not be used together at the same time in consideration of the colorblind.