Geosci. Model Dev. Discuss.,
https://doi.org/10.5194/gmd-2020-161-RC2, 2020

Geoscientific Model Development Discussions
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Interactive comment on "Modeling lightning observations from space-based platforms (CloudScat.jl 1.0)" *by* Alejandro Luque et al.

Anonymous Referee #2

Received and published: 7 August 2020

Review of "Modeling lightning observations from space-based platforms (CloudScat.jl 1.0)," by Alejandro Luque et al. (MS No.: gmd-2020-161)

With the recent advances in optical and UV observations of lightning and terrestrial gamma-ray flashes (TGFs), understanding the effects of cloud scattering and atmospheric absorption are extremely important. This paper describes a new code for simulating such cloud scattering and atmospheric absorption, producing both light curves and images as seen from space. The work described is very thorough, accurately including all the relevant processes and represents a substantial improvement over previous efforts. The paper is also very well written and was a joy to read. I believed that this paper makes important contributions to atmospheric electricity and to high-energy atmospheric physics, and I expect it to become highly cited. I, therefore,

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Discussion paper

strongly recommend that it be published in its current form.

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