

Reply to short comment by Aleksey Malinka

Dear Authors, I have a little note. Kokhanovsky and Zege (2004) do not represent the snow grains as fractal particles. They consider any particles with no regard to their shape. Truly yours, Aleksey Malinka.

Dear Alekesey Malinka,

Thank you for your interest in our manuscript and your efforts to improve it. We checked Kokhanovsky
5 and Zege (2004) again following your comment: they indeed checked different particle models for the
phase function of ice crystals, namely the spherical model, fractal model, and random particle model
(which we believe you are referring to in your comment). However, in the last paragraph on page 5,
they state: "We choose the fractal model here because it has no free parameters for nonabsorbing ice
particles and corresponds closely to the random-particle model at extreme values of its randomness pa-
10 rameters." Kokhanovsky et al. (2005) compare the developed approximate asymptotic theory with in situ
measurements. On page 2 they state: "Kokhanovsky and Zege (2004) derived the following relationship
[...] in the framework of the approximation of fractal snow grains." Therefore, we are confident that the
Kokhanovsky and Zege (2004) work is referenced correctly in our Introduction. But thanks again for
looking at this and encouraging us to double-check.
15 Kind regards from the authors.