

***Interactive comment on* “Effect of hygroscopic seeding on warm rain clouds – numerical study using a hybrid cloud microphysical model” by N. Kuba and M. Murakami**

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We would like to thank Dr. Graham Feingold for commenting about “Bowen model”.

We cannot find “Taffe Bowen” but “E. G. Bowen” in the Rogers and Yau Cloud Physics text book. We do not deny that difference in trajectory lead to difference in final size between larger drops formed on GCCN and smaller droplets formed on smaller CCN. However this effect is larger in case of smaller updraft velocity. The reduction of rainfall amount caused by seeding with hygroscopic flare particles is larger in case of shallow convective cloud (3.3.1, Fig. 12) than in case of stratiform cloud (3.3.2, Fig.13) in our study. Therefore it is difficult to interpret the discussion in section 3.3.1 in terms of Taffe

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Bowen's (1950) model in our study.

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