Dear Editor:

Here is our response to the concern by David Mitchell regarding the use of *κ* = 0.54 for density correction of snow for fall speed calculations. Our response is in italic.

Reviewer comment:

1. Page 16, regarding the use of *κ* in equation 11: It is understood that the use of *κ*

is "justified" since it is cited in another publication, but that publication does not say anything about how this *κ* value of 0.54 was obtained, but rather cites other articles, and those articles do not explain how this value was derived either. In contrast, Foote and du Toit (1969, JAS) dedicated a large part of a paper explaining how *κ* was ~ 0.4 for raindrops. You would be doing the atmospheric sciences community a favor by acknowledging a lack of literature support for this value of *κ* (unless you can find a reference describing how it was obtained). Otherwise, you will be perpetuating something that has not been verified. You can defend using this value of K based on what you have stated: "Our intent for this publication was also to run the model in the default state ...", but you can also acknowledge the lack of literature support for this value of *κ.*

*Response:*

*After communicating with the reviewer (David Mithell), we both agree that the citation of Heymsfield et al (2007) actually is appropriate in regards to using the value 0.54 for* κ *in equation 11. Therefore we leave the text as it is currently written.*