

General comments:

The revisions that have been made to this manuscript satisfy all of the comments I made on the last versions. With the exception of a few technical issues, the manuscript is ready for publication.

I did not compare the last two papers to this one carefully, but I would hope that by combining them the total length might have decreased more. I will admit that I did not say this in my previous reviews however, so I understand if these suggestions are ignored. Perhaps Section 3.1 can be shortened by focusing on the differences between this approach and past studies, using the appropriate references. I am not sure if all three of these figures are unique or new enough to merit inclusion. In general, as I see it, the main thing that is new in the modeling work is the derivation of a transfer function that includes fall velocity, so keeping this in mind, perhaps there are other modeling sections that can be shortened as well.

Specific comments:

Abstract, ln. 9, 10, 16, 17... The reader hasn't been introduced to HE1 and HE2 yet. These need to be either defined in the abstract, or better yet, different, more generally understood terminology should be used.

Ln. 85. Spain and Norway were omitted from the list of countries with measurement sites.

Ln. 126. How can the ground be frictionless, and at the same time "no-slip" (ln. 775) or "zero-slip" (ln. 988)?

Ln 256. I still find the  $z^*$  and  $u^*$  terminology confusing, despite the fact that it has been used (once?) this way by Baghapour et al. (2017). Here is an example of a more common usage, from the AMS Glossary of terms: [https://glossary.ametsoc.org/wiki/Friction\\_velocity](https://glossary.ametsoc.org/wiki/Friction_velocity) Also it seems that the results here are basically the same as Baghapour et al. (2017), so the use of terminology that aids careful comparison may not really be necessary.

Ln. 319 – 323, and Eq. 19. What purpose does the derivation of  $U_{wc}$  serve? I don't see how it contributes to the manuscript; I suggest removing this all together, unless I have missed something. The two sentences on ln. 334 – 335 would need to be removed as well.

In Figures 7, 8, 9, and 10 change "overall" on the Y-axis label to "integral."

Ln. 486 – 487. Put  $CE_m$ ,  $P_{un}$ , and  $P_{DFAR}$  within parenthesis.

Ln. 493. It isn't clear why "CE" is included in, "Collection efficiency transfer functions CE..."

Ln. 763. Change, "and their paths shows," to "and their paths show."

Ln. 916 – 918. The "nonlinearity in the relationship..." is inadequate. A physical explanation of these CE differences would be preferable.

Ln. 1001. Perhaps change, "vertical" to, "fall" for the sake of consistency in terminology.