

Interactive comment on “Update and evaluation of the ozone dry deposition in the Oslo CTM3 v1.0” by Stefanie Falk and Amund Søvde Haslerud

Anonymous Referee #1

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The authors state in their response that "In fact, we originally used Eq. (2) with L in the denominator for the second term. The sign error was likely the reason why the Monteith method was chosen. Certainly, an update shall be considered in the future, but it is not feasible to redo all simulations now."

The fact of the matter is that there have been some fundamental inconsistencies in the formulation of this equation, and the authors' logic of "it is not feasible to redo all simulations now" is not tenable. Ideally, the simulation would need to be done again. At the very least, the authors need to perform some test runs which demonstrate whether or not the inconsistencies in Eq. (2) make any significant difference to the results.

The authors have also not clarified how the value of the zero-plane displacement height d is selected. They simply state that d is constant (typically 0.7m). Looking up any

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atmospheric boundary-layer text book (e.g. Garratt, 1992), d is approximately 0.7 times the canopy height (or the height of the roughness element). Please check this for consistency too.

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