Geosci. Model Dev. Discuss., doi:10.5194/gmd-2017-78-RC2, 2017 © Author(s) 2017. CC-BY 3.0 License.



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Interactive comment

Interactive comment on "Parametrisation of the variety of human behaviour related to building energy consumption in TEB (SURFEX v. 8.2)" by Robert Schoetter et al.

Anonymous Referee #1

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The following technical comment was cut short. See below for full comment.

pg21 In32: "The radiative part of the internal heat release is assumed to be 0.1 for all building uses. This might be an oversimplification, but the overall contribution of lighting to the total internal heat release is only 5% to 15%". A value of 0.1 may well be a reasonable simplification, but the justification using lighting is lacking, as the radiative component of internal heat release should include the longwave radiation emitted by all electrical appliances. For office IT equipment the radiative fraction can be 20-40% (e.g. see Wilkins, C. and Hosni, M. H.: Heat gain from office equipment, ASHRAE Journal; New York, 42(6), 33, 2000). Please make more appropriate justification or recalculate.



Discussion paper



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Interactive comment

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