

Interactive comment on "Calculating human thermal comfort and thermal stress in the PALM model system 6.0" by Dominik Fröhlich and Andreas Matzarakis

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Dear Anonymous Referee #1,

thanks for your valuable comments and your efforts in improving the manuscript. We addressed your comments individually below.

3. Why not retreive wind speed from 10 meters above ground from the output of palm instead of recalcualting is separately? I you do decide to do this, plesea justify and present the differences and methodology used for the recalculation procedure.

The wind speed actually used for UTCI is 1.1 m as well. It is determined from the

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10 m wind speed by a profile published in Havenith et al. 2012. For this was also applied in the generic runs that are the source to the regression equation wind input must be provided for 10m above ground level. The module applies the very same profile to actually directly use the wind speed at the desired altitude with minimal error. Furthermore the model allows for rather complex environments. UTCI might therefore be desired for places where wind speed is available at (approximately) 1.1m, but not at 10Åäm above ground level (e.g. below some obstacle).

5. No parameters are unclear but I would argue that a model description paper like this should explain the items included and not refer back to any test dataset etc. If you choose to include this stearing parameters, please give explanations of the same.

The list was removed entirely as the whole input is provided anyway and it was only relevant for the difference to the generic scenario, that is not part of the manuscript any more.

7. In my version line 23 on page 10 is "...then compared to the output by the programs in the attachment to the VDI guideline 3787...". The VDI guideline programvis confusing to me. Is this a software of is it just information text or something else? Please clarify.

A reference version of the three thermal indices implemented in the biometeorology module is provided by a compact disc shipped along with the VDI guideline including both compiled versions as well as source code.

17. Sorry, my misstake. It should be 27 of 55 references (49.1%). Hence, my argument of self-referencing still holds.

Agreed anyways. Self-referencing was reduced.

Interactive comment on Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2019-202, 2019.