

Review of „Accounting for anthropic energy flux of traffic in winter urban road surface temperature simulations with TEB model“ by A. Khalifa, M. Marchetti, L. Bouilloud, E. Martin, M. Bues, and K. Chancibaut.

Very generally I find this paper very long and very technical. I wonder if this is really necessary.

It is very much report like (we did this, we did that, ...).

A general comment as reviewer: why are text, figures and tables separated? In a printed paper these are compiled together to improve readability – why is readability not an issue when reviewers are involved? I can see no reason for such splitting – the age auf typewriter has long ago gone ...

Specific – technical – comments:

The abstract should focus more on the results, the outcome of the study and not list in short the content.

Line 10: Grammar? “... with all the energy interactions, with two approaches to evaluate traffic incidence on RST.”

Generally the language is ok, but there are still several spelling mistakes in the text.

Line 58: “other ones”

Line 69: textdegreeC !?

Generally: between a number and a unit has to be a space (in tex \, is a good choice to achieve a fixed width). Furthermore it is ok to say for instance “between 2 and 3 °C”. I would prefer saying “between 2 °C and 3 °C”, but this is not mandatory. However, the authors are mixing the style, one time they use one style the next line the other one, this has to be harmonized.

Line 81 – 82: these 2 °C two times is confusing – whay not saying that the result by Paramenter & Thornes was confirmed by Chapman et al. ?

Line 100: the abbreviation TEC should not be introduced in the heading but in the text (this is especially ugly as in 3.1 again the unabbreviated version is used ...).

Line 116: for readability $(\rho c)_{road}$ is maybe nicer?

Line 118: the unit is wrong: it has to be $J m^{-3} K^{-1}$!

Line 123: what’s the need for this statement?

Line 213: I find the phrase of “Inspired by ...” somewhat crude.

Line 236: “have”!

Equation (13) and many other: a very general comment. Aren’t these equations

empirical relations? So they are not resulting from fundamental equations (like $F = m \cdot a$); so, wouldn't it be more appropriate to use a \cong instead of a $=$?

Lien 306: "The remainder ..." ???

L 352: "profile"

L 407: "implement"

Chapter 5: Why not just say "Results" and delete discussion?

L 457: "an urban"

L 492: delete "not enough ..."