

Geosci. Model Dev. Discuss., referee comment RC2
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Reply on AC1

Anonymous Referee #2

Referee comment on "Implementing the Water, HEat and Transport model in GEOframe (WHETGEO-1D v.1.0): algorithms, informatics, design patterns, open science features, and 1D deployment" by Niccolò Tubini and Riccardo Rigon, Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2021-163-RC2>, 2021

The paper is well written and it address the important topic of implementing Richards equation in a land surface code. It is useful to have both radiation estimation in complex terrain and the surface energy implemented.

I'm not really sure of the utility of changing water viscosity in infiltration processes, in fact the diurnal cycle in soil field measurements are always to be watched carefully because of temperature dependent erros in instruments (especially electronics).

However, solving the heat transport equation is useful for the surface energy budget evaluation.

I think that it can be published after it is modified following the remarks of reviewer 1.