



"Dispersion of particulate matter (PM_{2.5}) from wood combustion for residential heating: optimization of mitigation actions based on large-eddy simulations" published in Atmos. Chem. Phys., 21, 12463–12477, 2021

Tobias Wolf, Lasse H. Pettersson, and Igor Esau

Nansen Environmental and Remote Sensing Center, Jahnebakken 3, N-5007 Bergen, Norway

Correspondence: Igor Esau (igore@nersc.no)

Published: 17 December 2021

One of the readers of the manuscript indicated inconsistency in the text and numbers on page 12468. During the review process a sentence was accidentally removed from the text.

This inconsistency appeared because one of the linking sentences was missed in the text. Instead of the text "We arrived at 8.8 h of wood burning, primarily between 15:00 and 24:00 LT (local time); 90 % of all aerosol exhaust comes out as $PM_{2.5}$. Taken together, these assumptions and estimations result in the average $PM_{2.5}$ emission rate of 0.7647 g s⁻¹ per stove.".

The following text must appear: "We arrived at 8.8 h of wood burning, primarily between 15:00 and 24:00 LT (local time); 90% of all aerosol exhaust comes out as PM_{2.5}. For our study, we adopted slightly different numbers, namely, 1.57 kg h^{-1} for the wood consumption and 7 h for the wood burning duration, after consultations with the Bergen Fire Brigade. Taken together, these assumptions and estimations result in the average PM_{2.5} emission rate of 0.7647×10^{-3} g s⁻¹ per stove. It should be noted here that the a posteriori evaluation of the PM2.5 concentrations in the simulations revealed that the provided emission rates from wood burning fireplaces are too high. Therefore, we keep the concentration patterns but uniformly scale the calculated magnitudes by a factor of 0.1 in order to achieve reasonable concentrations compared to the available measurements (Wolf et al., 2020)."