

# MCmatlab: an open-source, user-friendly, MATLAB-integrated three-dimensional Monte Carlo light transport solver with heat diffusion and tissue damage (Erratum)

**Dominik Marti, Rikke N. Aasbjerg, Peter E. Andersen, and  
Anders K. Hansen**

Technical University of Denmark, Department of Photonics Engineering, Roskilde, Denmark

[DOI: [10.1117/1.JBO.26.1.019804](https://doi.org/10.1117/1.JBO.26.1.019804)]

This article [*J. Biomed. Opt.* **23**(12), 121622 (2018) doi: [10.1117/1.JBO.23.12.121622](https://doi.org/10.1117/1.JBO.23.12.121622)] was originally published on 15 December 2018 with an error in an equation in Sec. 3.1. The provided equation for  $\Delta T$  on the bottom of column 1 on page 4 in the original article was incorrect. The right-hand side of that equation should have been divided by  $dx dy dz$ . The correct equation for  $\Delta T$  is thus

$$\begin{aligned} \Delta T = \frac{\Delta t}{c_V} & \left( P\mu_a F + (T_{x^-} - T) \frac{2kk_{x^-}}{k + k_{x^-}} \frac{1}{dx^2} + (T_{x^+} - T) \frac{2kk_{x^+}}{k + k_{x^+}} \frac{1}{dx^2} \right. \\ & + (T_{y^-} - T) \frac{2kk_{y^-}}{k + k_{y^-}} \frac{1}{dy^2} + (T_{y^+} - T) \frac{2kk_{y^+}}{k + k_{y^+}} \frac{1}{dy^2} \\ & \left. + (T_{z^-} - T) \frac{2kk_{z^-}}{k + k_{z^-}} \frac{1}{dz^2} + (T_{z^+} - T) \frac{2kk_{z^+}}{k + k_{z^+}} \frac{1}{dz^2} \right) \end{aligned}$$

The implementation in the provided MCmatlab was correct at all times, so calculations done with the tool did not suffer from the misprint in the article. The authors wish to credit Dr. [Loris Fichera](#) for alerting them to the mistake.

The error was corrected on 19 January 2021.