



Corrigendum to

“Study of a temperature gradient metamorphism of snow from 3-D images: time evolution of microstructures, physical properties and their associated anisotropy” published in The Cryosphere, 8, 2255–2274, 2014

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In this article, Sect. 2.6.1, “Self-consistent estimates: effective thermal conductivity and air tortuosity”, contained typos in two equations that contribute to the definition of the self-consistent model. Please find below the corrected version.

First, on page 2262, the definition of γ , used in Eqs. (27) and (28), is not correct. In the published paper, we state, “where γ is linked to the aspect ratio of the ellipsoid and anisotropy ratio of \mathbf{k}^{sc} by $\gamma = (a/b) \times (k_{xy}^{\text{sc}}/k_z^{\text{sc}})$ ”.

The correct definition is $\gamma = (a/b) \times \sqrt{(k_z^{\text{sc}}/k_{xy}^{\text{sc}})}$.

Second, on page 2262, there is a typo in Eq. (32), which defined partly the vertical and horizontal components of the effective thermal conductivity tensor. In the published paper, we state

$$\Delta_z = (k_a(\phi - (1 - 2Q)) + k_i((1 - \phi) - (1 - 2Q)))^2 - 4(1 - 2Q) - 1(1 - 2Q)k_i k_a. \quad (32)$$

The correct version of Eq. (32) is

$$\Delta_z = (k_a(\phi - (1 - 2Q)) + k_i((1 - \phi) - (1 - 2Q)))^2 - 4((1 - 2Q) - 1)(1 - 2Q)k_i k_a. \quad (32)$$