Corrigendum to "Modelling soil erosion at European scale: towards harmonization and reproducibility"

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Two editorial mistakes were found in the article. Both refer to Eq.(2), page 231 (whose correct version was published in the discussion paper associated to the article Bosco et al., 2014, page 2652).

The first mistake is related to the operator Ω which has been wrongly rendered with a summation operator ($\sum$). The editorial notation mistake is also evident by considering the semantics of the RDS (relative distance similarity) statistics. As explained in de Rigo et al. (2013) and Bosco et al. (2013), RDS is defined in [0,1]. Therefore, a summation operator whose arguments are quantities mathematically defined in [0, 1] cannot be an instance of the general Ω operator (also applied in de Rigo et al., 2013).

The second editorial mistake affected the numbering of Eq. (2) which was wrongly re-numbered as Eqs. 2,3,4.

As a consequence, the equation rendered in the article as:

$$RDS_c^{i,input} = \max_{\alpha \in A^i} \left(\sum_{j=1}^{26} \left(\frac{\max\left(\min\left(C_c^j, C_\alpha^j\right), \delta C^j\right)}{\max\left(\max\left(C_c^j, C_\alpha^j\right), \delta C^j\right)} \right) \right) \quad (2)$$

$$RDS_c^{i,output} = \max_{\alpha \in A^i} \left(\frac{\max\left(\min\left(R_c^i, R_\alpha^i\right), \delta R^i\right)}{\max\left(\max\left(R_c^i, R_\alpha^i\right), \delta R^i\right)} \right) \quad (3)$$

$$RDS_c^i = \min\left(RDS_c^{i,input},\ RDS_c^{i,output}\right) \quad (4)$$

should be rewritten as:

$$RDS_c^{i,input} = \max_{\alpha \in A^i} \left(\Omega_{j=1}^{26} \left(\frac{\max\left(\min\left(C_c^j, C_\alpha^j\right), \delta C^j\right)}{\max\left(\max\left(C_c^j, C_\alpha^j\right), \delta C^j\right)} \right) \right)$$

$$RDS_c^{i,output} = \max_{\alpha \in A^i} \left(\frac{\max\left(\min\left(R_c^i, R_\alpha^i\right), \delta R^i\right)}{\max\left(\max\left(R_c^i, R_\alpha^i\right), \delta R^i\right)} \right) \quad (2)$$

$$RDS_c^i = \min\left(RDS_c^{i,input},\ RDS_c^{i,output}\right)$$

The wrong numbering in Eq. (2) also reverberates in the numbering of Eq. (3) (which was correctly numbered in the discussion paper Bosco et al., 2014, page 2656). In particular, the equation wrongly re-numbered as Eq. (5) in the article, page 233:

$$IR = e^{-b(Rc)} \quad (5)$$

should be numbered as Eq. (3) (to which the remaining text in the article correctly refers, page 233):

$$IR = e^{-b(Rc)} \quad (3)$$

References

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