Erratum

Erratum to “Seasonal change of non-point source pollution-induced bioavailable phosphorus loss: A case study of Southwestern China”

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In the article “Seasonal change of non-point source pollution-induced bioavailable phosphorus loss: A case study of Southwestern China” by Gao Y, Zhu B, Wang T, and Wang YF in the January/February 2012 issue (2012;420–421:373–379; <http://dx.doi.org/10.1016/j.jhydrol.2011.12.029>), the equation in data analysis in materials and methods section and the Fig. 2 caption were incorrect. The authors omitted part of their grant information. Please find it provided below. The authors regret the error.

After the separation of the two limbs, a regression analysis was conducted for the BAP concentration versus discharge relationship for each rain event using the following equation:

$$C = a + bQ_i$$

where C is the BAP concentration ($\mu\text{g L}^{-1}$), Q_i is the stream discharge (L s^{-1}), and a and b are empirical parameters.

To test the prediction that a large amount of BAP is strongly pulsed at times of rapidly increased discharge, the rate of changes in the discharge (dQ/dt) and load (dL/dt) were calculated as follows:

$$\frac{dQ}{dt} \approx \frac{Q_i - Q_{i-1}}{t_i - t_{i-1}}$$

$$\frac{dL}{dt} \approx \frac{L_i - L_{i-1}}{t_i - t_{i-1}} = \frac{C_i Q_i - C_{i-1} Q_{i-1}}{t_i - t_{i-1}}$$

Fig. 2.

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where i is the order of the time-series data, t_i is the time (s), and L is the P load ($\mu\text{g L}^{-1}$). For an increasing rate of discharge ($dQ/dt > 0$), a regression analysis was conducted for each rain event using the following equation:

$$\frac{dL}{dt} = a' + b' \frac{dQ_i}{dt}$$

where a' and b' are empirical parameters.

Fig. 2. Changes in rainfall and runoff (a), different forms of P (b), and BAP loads (c) during the monitoring period at the catchment outlet.

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