



Corrigendum to **“Quantifying new water fractions and transit time distributions using ensemble hydrograph separation: theory and benchmark tests” published in Hydrol. Earth Syst. Sci., 23, 303–349, 2019**

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A factor of Q_j was inadvertently omitted from Eqs. (56)
and (57). The correct equations are

$$\text{cov}^*(X_k, X_\ell)_{(k\ell)} = \frac{\sum_{j \in (k\ell)} Q_j}{\left(\sum_{j \in (k\ell)} Q_j\right)^2 - \sum_{j \in (k\ell)} Q_j^2}$$
$$\sum_{j \in (k\ell)} Q_j \left(x_{jk} - \bar{x}_{k(k\ell)}^*\right) \left(x_{j\ell} - \bar{x}_{\ell(k\ell)}^*\right) \quad (56)$$

and

$$\text{cov}^*(X_k, Y)_{(ky)} = \frac{\sum_{j \in (ky)} Q_j}{\left(\sum_{j \in (ky)} Q_j\right)^2 - \sum_{j \in (ky)} Q_j^2}$$
$$\sum_{j \in (ky)} Q_j \left(x_{jk} - \bar{x}_{k(ky)}^*\right) \left(y_j - \bar{y}_{(ky)}^*\right). \quad (57)$$

The calculations used in the paper are correct. The error is
only in the presentation of the equations. The results and their
interpretation are not affected.