

Corrigendum to “IsoplotR: A free and open toolbox for geochronology”

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Whilst writing a detailed manual for the `IsoplotR` package, I found two mistakes in the accompanying paper. Fortunately, neither of these mistakes was incorporated in the actual computer code, so `IsoplotR` users need not worry about their results.

In Section 4, the number of degrees of freedom for a weighted regression is reported as $df = k(n - 1)$. This should be $df = (k - 1)(n - 2)$. Thus, for bivariate regression, $df = n - 2$ and for trivariate regression, $df = 2n - 4$.

In Section 13, the $^{230}\text{Th-U}$ age equation and isochron equation incorporate an incorrect detrital ^{230}Th correction. Equation 14 should be replaced with

$$\frac{A[^{230}\text{Th}] - A[^{230}\text{Th}]_o e^{-\lambda_{230}t}}{A[^{238}\text{U}]} = 1 - e^{-\lambda_{230}t} - \left(\frac{A[^{234}\text{U}]}{A[^{238}\text{U}]} - 1 \right) \left(\frac{\lambda_{230}}{\lambda_{234} - \lambda_{230}} \right) \left(1 - e^{[\lambda_{234} - \lambda_{230}]t} \right) \quad (14)$$

and Equation 15 with

$$\left(\frac{A[^{230}\text{Th}]}{A[^{232}\text{Th}]} \right)_i = \left(\frac{A[^{230}\text{Th}]}{A[^{232}\text{Th}]} \right)_o e^{-\lambda_{230}t} + \left(\frac{A[^{238}\text{U}]}{A[^{232}\text{Th}]} \right)_i (1 - e^{-\lambda_{230}t}) \quad (15)$$

I apologise for any confusion caused by these mistakes.