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Correction to "Ground-motion models for earthquakes occurring in the United Kingdom"

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Regrettably three typographic errors were present in the functional form presented in this article. The correct functional form is:

$$\ln Y = c_1 + f_1(\mathbf{M}) + f_2(\mathbf{M}, R_{JB} \text{ or } R_{RUP}) + f_3(R_{JB} \text{ or } R_{RUP})$$

$$f_1(\mathbf{M}) = c_2 \mathbf{M} + c_3 (8.5 - \mathbf{M})^2$$

$$f_2(\mathbf{M}, R) = c_4 \ln R + (c_5 + c_6 \mathbf{M})(R_{JB} \text{ or } R_{RUP})$$

$$R = \sqrt{(R_{JB} \text{ or } R_{RUP})^2 + [c_7 \exp(c_8 \mathbf{M})]^2}$$

$$f_3(R_{JB} \text{ or } R_{RUP}) = 0 \text{ for } R_{JB} \leq r_1$$

$$f_3(R_{JB} \text{ or } R_{RUP}) = c_9 [\ln(R_{JB} \text{ or } R_{RUP}) - \ln r_1] \text{ for } r_1 < R_{JB} \text{ or } R_{RUP} \leq r_2$$

$$f_3(R_{JB} \text{ or } R_{RUP})$$

$$= c_9 [\ln(R_{JB} \text{ or } R_{RUP})$$

$$- \ln r_1] + c_{10} [\ln(R_{JB} \text{ or } R_{RUP}) - \ln r_2] \text{ for } R_{JB} \text{ or } R_{RUP} > r_2$$

The correct functional form was used for all the calculations presented in the article. This error only affects the equation presented in the published article and not the results.

In addition, a low-resolution version of Figure 10 was erroneously published. The correct high-resolution version is presented below.

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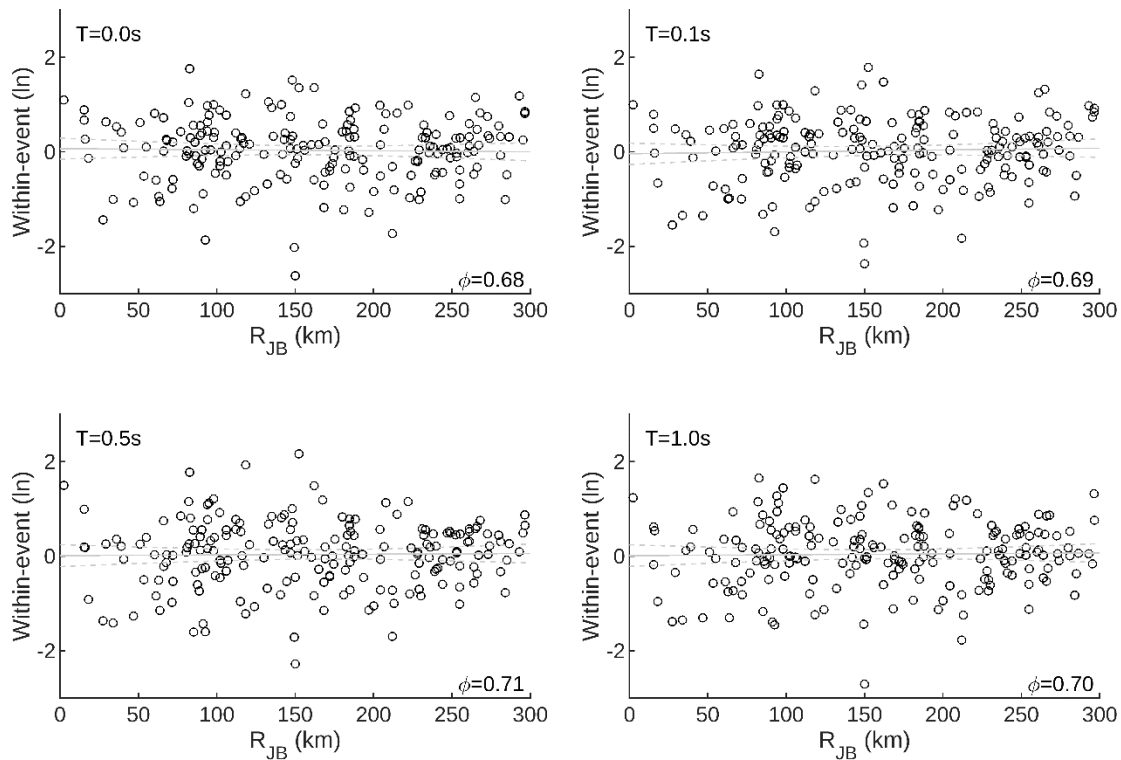


Figure 10: Within-event residuals against magnitude for the weighted mean of the three-branch parameterisation of the model. Grey lines are the linear best-fit line and its 95% confidence limits

We apologise for these errors.

Declarations

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Author Contributions: All authors contributed to drafting this correction.

Data availability: Outputs from CHEEP and codes are available from GitHub (https://github.com/aldabus/DouglasEtAl_UK_HEM_GMM).