



Corrigendum

Corrigendum to “Exposure dating of precariously balanced rocks” [Quaternary Geochronology 6 (2011) 295–303]

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We discovered an error in the computer code that carries out the geometric shielding calculations in this paper. The error concerned the summation of attenuation distances when a simulated cosmic ray path passed through multiple domains of soil or rock. This resulted in incorrect estimates of the parameters $S_{0,i}$ and L_i for some samples in Table 1. These incorrect estimates were also displayed in Fig. 6. Revised versions of Table 1 and Fig. 6 appear below.

Table 1¹⁰Be concentrations and sample-specific constants for samples on the GV2 PBR.

| Sample name | Distance below PBR top z_i (cm) | Sample thickness (cm) | $[{}^{10}\text{Be}]^a$ (10^3 atoms g ⁻¹) | $S_{0,i}$ (g cm ⁻²) | L_i (cm a ⁻¹) | Assumed $\epsilon_{S,i}$ |
|-------------|-----------------------------------|-----------------------|---|---------------------------------|-----------------------------|--------------------------|
| GV2-3 | 0 | 4.5 | 688 ± 16 | 0.96 | 160 | 2×10^{-4} |
| GV2-2 | 69 | 4 | 410.3 ± 6.7 | 0.90 | 171 | 0 |
| GV2-4 | 117 | 3.5 | 207.6 ± 4.4 | 0.60 | 225 | 0 |
| GV2-1 | 169 | 5 | 163.3 ± 3.8 | 0.50 | 223 | 0 |

^a Normalized to the isotope ratio standards of Nishiizumi et al. (2007).

This revision has a small effect on our estimate of the fragility age t_{tip} for the “GV2” precariously balanced rock (18.7 ± 2.8 ka as originally published). The corrected values for $S_{0,i}$ and L_i shown above slightly improve the value of the misfit statistic M (to 32 from 42 as originally published) and yield $t_{\text{tip}} = 18.5 \pm 2.0$ ka.

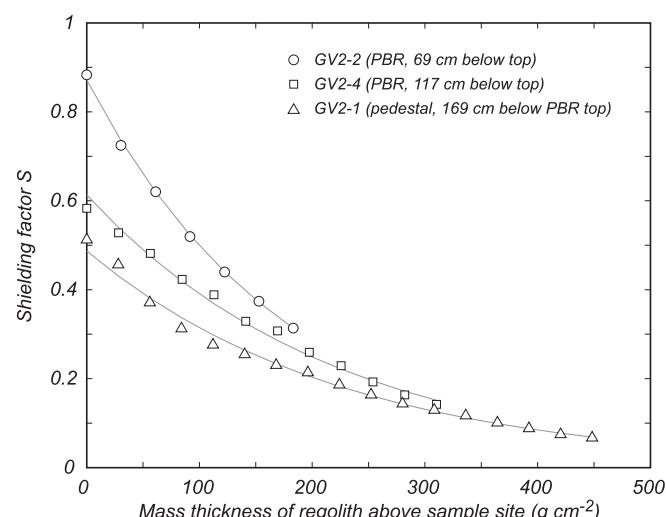


Fig. 6. Exponential fits to numerical calculations of the shielding factor for samples below the PBR top as a function of soil depth above the sample location. The symbols are the results of the Monte Carlo integration; the lines are given by Equation (6) with the parameters from Table 1.