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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| SUPPLEMENTAL TABLE 3. COSMOGENIC 10BE DATA of BINNIE ET AL. (2007) RE-NORMALIZED FOR COMPARISON TO MOJAVE RIVER PEBBLE DATA PRESENTED IN TABLE 2. | | | | | | | | | | | | | | | |
| Sample | Location\*,† | | Elev\* | Elv. flag§ | Thick§ | Density§ | Shield§ | 10Be/9Be\*,# | Production rate | | Quartz\* | Be carrier\* | [10Be]\* | Denudation rate§§ | Equivalent exposure age§§ |
|  | Lat. | Long. |  |  |  |  |  |  | Spallation\*\* | Muons†† |  |  |  |  |  |
|  | (DD N) | (DD W) | (m) |  | (cm) | (g/cm3) |  | (x10-15) | (at/g/y) | (at/g/y) | (g) | (g) | (104 at/g) | (m/My) | (ky) |
| 14 | 34.934 | 117.054 | 1400 | std | 2 | 2.65 | 1 | 384 ± 22 | 11.60 | 0.287 | 50.52 | 205.6 ± 2.1 | 10.11 ± 0.61 | 96.67 ± 5.92 (8.98) | 7.84 ± 0.47 (0.83) |
| 15 | 34.397 | 117.076 | 1540 | std | 2 | 2.65 | 1 | 248 ± 22 | 12.82 | 0.300 | 29.88 | 208.7 ± 2.1 | 11.06 ± 0.72 | 95.88 ± 6.33 (9.28) | 7.77 ± 0.51 (0.84) |
| 19 | 34.404 | 117.063 | 1690 | std | 2 | 2.65 | 1 | 155 ± 2 | 14.24 | 0.315 | 27.97 | 155.2 ± 1.6 | 8.42 ± 0.65 | 138.45 ± 10.82 (14.64) | 5.33 ± 0.41 (0.62) |
| 20 | 34.375 | 117.091 | 1750 | std | 2 | 2.65 | 1 | 649 ± 27 | 14.84 | 0.321 | 39.70 | 201.3 ± 2.0 | 21.51 ± 0.94 | 54.95 ± 2.44 (4.71) | 13.11 ± 0.58 (1.28) |
| 16\*\*\* | 34.276 | 117.031 | 2200 | std | 2 | 2.65 | 1 | 324 ± 17 | 20.05 | 0.368 | 44.28 | 208.0 ± 2.1 | 9.73 ± 0.55 | 160.66 ± 9.15 (15.01) | 4.39 ± 0.24 (0.45) |
| 17\*\*\* | 34.279 | 117.063 | 1970 | std | 2 | 2.65 | 1 | 448 ± 19 | 17.21 | 0.343 | 47.08 | 207.3 ± 2.1 | 12.77 ± 0.58 | 106.66 ± 4.89 (9.22) | 6.71 ± 0.31 (0.66) |
| 18\*\*\* | 34.280 | 117.041 | 2000 | std | 2 | 2.65 | 1 | 709 ± 39 | 17.56 | 0.346 | 53.28 | 206.3 ± 2.1 | 18.06 ± 1.00 | 76.24 ± 4.28 (7.08) | 9.31 ± 0.52 (0.96) |
|  |  |  |  |  |  |  |  | 10Be/9Be## |  | |  |  | [10Be] | Denudation rate§§ | Equivalent exposure age§§ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | (x10-15) |  |  |  |  | (104 at/g) | (m/My) | (ky) |
| 14 | -- | -- | -- | -- | -- | -- | -- | 399 ± 23 | -- | -- | -- | -- | 10.85 ± 0.63 | 82.05 ± 4.80 (7.50) | 9.20 ± 0.53 (0.96) |
| 15 | -- | -- | -- | -- | -- | -- | -- | 258 ± 23 | -- | -- | -- | -- | 12.04 ± 1.07 | 79.50 ± 7.23 (9.18) | 9.35 ± 0.84 (1.17) |
| 19 | -- | -- | -- | -- | -- | -- | -- | 161 ± 2 | -- | -- | -- | -- | 5.97 ± 0.07 | 177.77 ± 2.22 (12.80) | 4.17 ± 0.05 (0.37) |
| 20 | -- | -- | -- | -- | -- | -- | -- | 675 ± 28 | -- | -- | -- | -- | 22.87 ± 0.95 | 46.62 ± 1.97 (3.96) | 15.39 ± 0.64 (1.49) |
| 16\*\*\* | -- | -- | -- | -- | -- | -- | -- | 337 ± 18 | -- | -- | -- | -- | 10.58 ± 0.57 | 133.67 ± 7.20 (12.25) | 5.27 ± 0.28 (0.54) |
| 17\*\*\* | -- | -- | -- | -- | -- | -- | -- | 466 ± 2 | -- | -- | -- | -- | 13.71 ± 0.59 | 89.78 ± 3.89 (7.66) | 7.96 ± 0.34 (0.77) |
| 18\*\*\* | -- | -- | -- | -- | -- | -- | -- | 737 ± 41 | -- | -- | -- | -- | 19.07 ± 1.06 | 65.23 ± 3.68 (6.08) | 10.86 ± 0.61 (1.12) |
| \*As reported in Binnie et al. (2007). | | | | | | | | | | | | | | | |
| †WGS84 | | | | | | | | | | | | | | | |
| §Used in our CRONUS calculations so that Binnie et al.'s (2007) 10Be concentrations would be consistent with our Mojave River pebble data. | | | | | | | | | | | | | | | |
| #Ratios already corrected for background (Binnie et al., 2007). | | | | | | | | | | | | | | | |
| \*\*Constant (time invariant) local production rate based on Lal (1991) and Stone (2000). Refer to CRONUS Earth calculator documentation (Balco et al., 2008). | | | | | | | | | | | | | | | |
| ††Constant (time invariant) local production rate based on Heisinger et al. (2002a, 2002b). Refer to CRONUS Earth calculator documentation (Balco et al., 2008). | | | | | | | | | | | | | | | |
| §§Stated uncertainty is the internal uncertainty, which include error in the blanks, carrier mass (1%), and AMS counting statistics. Parenthetical uncertainty is the external uncertainty, which includes uncertainties in the 10Be production rate and decay constant. | | | | | | | | | | | | | | | |
| ##As determined by our renormalization from the NIST standard series to the revised ICN standard series (Nishiizumi et al., 2007). Equals the reported 10Be/9Be ratio x1.04. | | | | | | | | | | | | | | | |
| \*\*\*Samples collected from within the Mojave River Basin. | | | | | | | | | | | | | | | |