**Table S1.** Suspended sediment river samples

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Site | Storm | Date (ddmmyyhh) | δ13C (‰)d | Corg (%) | N/C | N (%) | SS (mg L-1) | POC (mg L-1) | SUERC # | Δ14Corg (‰)e |
| SP | 1 | 29011006 | -26.3 | 0.86 | 0.17 | 0.14 | 299 | 2.57 | 34128 | -492 |
| SP | 1 | 29011009 | -24.7 | 0.50 | 0.20 | 0.10 | 282 | 1.42 |  |  |
| SP | 1 | 29011012 | -24.8 | 0.55 | 0.22 | 0.12 | 365 | 2.00 |  |  |
| SP | 1 | 29011015 | -25.7 | 0.70 | 0.19 | 0.13 | 223 | 1.56 |  |  |
| SP | 1 | 29011018 | -24.6 | 0.64 | 0.21 | 0.14 | 371 | 2.39 | 34131 | -620 |
| SP | 1 | 29011021 | -25.9 | 0.80 | 0.18 | 0.14 | 340 | 2.71 | 34132 | -593 |
| SP | 1 | 30011000 | -25.6 | 0.86 | 0.17 | 0.15 | 7594 | 65.30 | 34133 | -419 |
| SP | 1 | 30011003 | -25.5 | 0.81 | 0.20 | 0.16 | 1531 | 12.34 | 34134 | -507 |
| SP | 1 | 30011006 | -25.2 | 0.80 | 0.20 | 0.16 | 1212 | 9.75 | 34135 | -477 |
| SP | 1 | 30011009 | -24.8 | 0.66 | 0.20 | 0.13 | 1058 | 6.99 |  |  |
| SP | 1 | 30011012 | -24.5 | 0.57 | 0.25 | 0.14 | 938 | 5.38 | 34136 | -712 |
| SP | 1 | 30011015 | -24.5 | 0.62 | 0.24 | 0.14 | 736 | 4.53 |  |  |
| SP | 1 | 30011018 | -24.5 | 0.63 | 0.24 | 0.15 | 704 | 4.44 |  |  |
| SP | 1 | 30011021 | -24.5 | 0.59 | 0.23 | 0.14 | 613 | 3.62 |  |  |
| SP | 1 | 31011000 | -24.6 | 0.59 | 0.24 | 0.14 | 636 | 3.77 | 34137 | -704 |
| SP | 1 | 31011003 | -24.6 | 0.64 | 0.20 | 0.13 | 509 | 3.27 |  |  |
| SP | 1 | 31011006 | -24.9 | 0.71 | 0.19 | 0.13 | 493 | 3.49 |  |  |
| SP | 1 | 31011015 | -24.6 | 0.62 | 0.25 | 0.15 | 394 | 2.44 |  |  |
| SP | 1 | 01021000 | -25.1 | 0.63 | 0.19 | 0.12 | 338 | 2.12 |  |  |
| SP | 1 | 01021009 | -24.7 | 0.57 | 0.22 | 0.13 | 334 | 1.90 |  |  |
| SP | 1 | 01021018 | -24.9 | 0.64 | 0.21 | 0.13 | 421 | 2.72 |  |  |
| WQ | 1 | 29011006 | -25.9 | 0.74 | 0.17 | 0.13 | 137 | 1.02 | 34443 | -459 |
| WQ | 1 | 29011009 | -26.5 | 0.79 | 0.16 | 0.13 | 123 | 0.97 |  |  |
| WQ | 1 | 29011012 | -26.7 | 1.13 | 0.15 | 0.17 | 66 | 0.74 |  |  |
| WQ | 1 | 29011015 | -26.1 | 0.84 | 0.16 | 0.13 | 83 | 0.70 |  |  |
| WQ | 1 | 29011018 | -27.0 | 1.18 | 0.13 | 0.15 | 113 | 1.33 | 34444 | -340 |
| WQ | 1 | 29011021 | -26.2 | 1.03 | 0.19 | 0.19 | 1891 | 19.57 | 34144 | -216 |
| WQ | 1 | 30011000 | -26.1 | 1.30 | 0.15 | 0.20 | 1696 | 22.05 | 34145 | -196 |
| WQ | 1 | 30011003 | -26.1 | 0.76 | 0.19 | 0.14 | 2869 | 21.87 | 34146 | -291 |
| WQ | 1 | 30011006 | -25.6 | 0.62 | 0.21 | 0.13 | 737 | 4.56 | 34147 | -404 |
| WQ | 1 | 30011009 | -25.6 | 0.59 | 0.20 | 0.12 | 286 | 1.69 |  |  |
| WQ | 1 | 30011012 | -26.7 | 0.85 | 0.18 | 0.15 | 136 | 1.15 | 34445 | -350 |
| WQ | 1 | 30011015 | -25.6 | 0.65 | 0.18 | 0.12 | 202 | 1.33 |  |  |
| WQ | 1 | 30011018 | -25.2 | 0.59 | 0.20 | 0.12 | 239 | 1.40 |  |  |
| WQ | 1 | 30011021 | -25.7 | 0.68 | 0.18 | 0.12 | 180 | 1.22 |  |  |
| WQ | 1 | 31011000 | -26.2 | 0.94 | 0.15 | 0.14 | 78 | 0.73 | 34446 | -334 |
| WQ | 1 | 31011003 | -25.5 | 0.59 | 0.18 | 0.11 | 155 | 0.91 |  |  |
| WQ | 1 | 31011006 | -25.6 | 0.61 | 0.20 | 0.12 | 20 | 0.12 |  |  |
| WQ | 1 | 31011015 | -26.1 | 0.95 | 0.18 | 0.17 | 69 | 0.65 |  |  |
| WQ | 1 | 01021000 | -26.6 | 1.28 | 0.13 | 0.17 | 41 | 0.53 |  |  |
| WQ | 1 | 01021009 | -25.8 | 0.80 | 0.19 | 0.15 | 79 | 0.63 |  |  |
| WQ | 1 | 01021018 | -20.9 | 1.08 | 0.20 | 0.22 | 69 | 0.75 |  |  |
| SP | 2 | 03021018 | -25.1 | 0.67 | 0.20 | 0.13 | 226 | 1.52 | 34138 | -423 |
| SP | 2 | 03021021 | -25.3 | 0.63 | 0.18 | 0.11 | 147 | 0.93 |  |  |
| SP | 2 | 04021000a | -30.3 | 6.83 | 0.03 | 0.20 | 105 | 7.14 | 34141 | -15 |
| SP | 2 | 04021000b | -29.6 | 2.65 | 0.06 | 0.15 | 836 | 22.18 | 35755 | -30 |
| SP | 2 | 04021000c | -29.0 | 1.35 | 0.07 | 0.09 | 592 | 7.98 |  |  |
| SP | 2 | 04021003 | -26.3 | 1.09 | 0.15 | 0.16 | 180 | 1.96 | 34442 | -127 |
| SP | 2 | 04021006 | -25.7 | 0.67 | 0.18 | 0.12 | 184 | 1.23 |  |  |
| SP | 2 | 04021009 | -26.8 | 0.69 | 0.17 | 0.12 | 185 | 1.28 |  |  |
| SP | 2 | 04021012 | -24.9 | 0.52 | 0.22 | 0.12 | 889 | 4.60 | 34143 | -694 |
| SP |  | 04021005 | -26.6 | 1.07 | 0.13 | 0.14 | 547 | 5.85 |  |  |
| SP |  | 04021018 | -25.9 | 0.70 | 0.17 | 0.12 | 1724 | 12.00 |  |  |
| SP |  | 04021021 | -25.3 | 0.74 | 0.18 | 0.13 | 873 | 6.46 |  |  |

a > 500 μm, b 63 – 500 μm, c < 63 μm

dsamples independently combusted using an elemental analyser [[*Gröcke et al.*, 2011](#_ENREF_1)].

eA mathematical adjustment to account for ongoing radioactive decay of the international reference standard (oxalic acid) since AD 1950' and Δ14C=(ASN/AABS -1)1000‰ (as in *Stuiver & Polach* [[1977](#_ENREF_2)].

**References**

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Stuiver, M., and H. A. Polach (1977), Discussion: Reporting of 14C data, *Radiocarbon*, *19*(3), 355-363.