

Tables S1-S3 present the range of sediment flux and CRN concentrations derived when 100, 50 and 10% of landslide derived sediment is transported to the outlet. Scenarios A and B relate to erosion scenarios described in Figure 10.

Table S1. Assumes 100% delivery of landslide material

	<i>Background flux (Mt yr⁻¹)</i>	<i>Landslide flux (Mt yr⁻¹)</i>	<i>Background CRN concentration (atoms g⁻¹)</i>	<i>Landslide CRN concentration (atoms g⁻¹)</i>	<i>CRN-derived flux (Mt yr⁻¹)</i>	<i>Volumetric flux (Mt yr⁻¹)</i>
<i>Scenario A</i>	25	1,553	51,852	6,222	186	1,577
<i>Scenario B</i>	124	311	10,370	5,029	197	434

Table S2. Assumes 50% delivery of landslide material

	<i>Background flux (Mt yr⁻¹)</i>	<i>Landslide flux (Mt yr⁻¹)</i>	<i>Background CRN concentration (atoms g⁻¹)</i>	<i>Landslide CRN concentration (atoms g⁻¹)</i>	<i>CRN-derived flux (Mt yr⁻¹)</i>	<i>Volumetric flux (Mt yr⁻¹)</i>
<i>Scenario A</i>	25	1,553	51,852	6,222	169	801
<i>Scenario B</i>	124	311	10,370	5,029	174	279

Table S3. Assumes 10% delivery of landslide material

	<i>Background flux (Mt yr⁻¹)</i>	<i>Landslide flux (Mt yr⁻¹)</i>	<i>Background CRN concentration (atoms g⁻¹)</i>	<i>Landslide CRN concentration (atoms g⁻¹)</i>	<i>CRN-derived flux (Mt yr⁻¹)</i>	<i>Volumetric flux (Mt yr⁻¹)</i>
<i>Scenario A</i>	25	1,553	51,852	6,222	103	180
<i>Scenario B</i>	124	311	10,370	5,029	138	155

Table S4. Fluxes and concentrations relating to early Holocene monsoon intensification – more details in Table 4.

	<i>Background flux (Mt yr⁻¹)</i>	<i>Landslide flux (Mt yr⁻¹)</i>	<i>Background CRN concentration (atoms g⁻¹)</i>	<i>Landslide CRN concentration (atoms g⁻¹)</i>	<i>CRN-derived flux (Mt yr⁻¹)</i>	<i>Volumetric flux (Mt yr⁻¹)</i>
<i>Pre-Holocene</i>	43	621	29,630	8,515	68	87
<i>Holocene</i>	49	1,553	25,926	8,000	105	204