### Supplemental Table 4. Radiocarbon dates used to calculate linear sedimentation rates, and siliciclastic mass accumulation rates used in Figure 7.

<table>
<thead>
<tr>
<th>Core</th>
<th>Dist. to 200 m isobath (km)</th>
<th>Core Depth (cm)</th>
<th>Conventional $^{14}$C Age [1] (yrs BP)</th>
<th>Calibrated $^{14}$C Age [2] (calendar yrs BP)</th>
<th>LSR [3] (cm/kyr)</th>
<th>MAR$_{sil}$ [g/cm$^2$*kyr]</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR 5/90-PC27a</td>
<td>18</td>
<td>52</td>
<td>4760 ± 50$^a$</td>
<td>5005 ± 110</td>
<td>10</td>
<td>512</td>
</tr>
<tr>
<td>FR 4/92-PC11</td>
<td>59</td>
<td>36</td>
<td>6490 ± 50$^a$</td>
<td>7038 ± 85</td>
<td>5</td>
<td>107</td>
</tr>
<tr>
<td>FR 4/92-PC12</td>
<td>48</td>
<td>30</td>
<td>6660 ± 50$^a$</td>
<td>7244 ± 52</td>
<td>4</td>
<td>122</td>
</tr>
<tr>
<td>FR 4/92-PC14</td>
<td>32</td>
<td>24</td>
<td>2330 ± 40$^a$</td>
<td>1930 ± 44</td>
<td>12</td>
<td>394</td>
</tr>
<tr>
<td>FR 4/92-PC16</td>
<td>19</td>
<td>80</td>
<td>6280 ± 70$^b$</td>
<td>6757 ± 83</td>
<td>12</td>
<td>307</td>
</tr>
<tr>
<td>FR 4/92-PC23</td>
<td>2</td>
<td>247</td>
<td>5590 ± 60$^b$</td>
<td>5999 ± 83</td>
<td>41</td>
<td>868</td>
</tr>
<tr>
<td>FR 4/92-PC42</td>
<td>100</td>
<td>10</td>
<td>4440 ± 220$^b$</td>
<td>4598 ± 307</td>
<td>2</td>
<td>44</td>
</tr>
<tr>
<td>ODP 820A</td>
<td>1</td>
<td>325</td>
<td>6304 ± 60$^c$</td>
<td>6784 ± 74</td>
<td>48</td>
<td>1220</td>
</tr>
<tr>
<td>ODP 822A</td>
<td>15</td>
<td>10</td>
<td>1085 ± 255$^d$</td>
<td>737 ± 255$^*$</td>
<td>14</td>
<td>458</td>
</tr>
<tr>
<td>51 GC-43</td>
<td>15</td>
<td>31</td>
<td>5570 ± 50$^d$</td>
<td>5973 ± 64</td>
<td>5</td>
<td>124</td>
</tr>
</tbody>
</table>


[2] Calibrated age were determined as follows: Marine reservoir correction was applied (-400yrs global marine reservoir and 52yrs average northeast Australia marine reservoir) for a total correction of -348yrs (Stuiver & Reimer 1993; Druffel & Griffen 1999). The marine reservoir corrected dates were then calibrated also using Fairbanks et al. (2005) calibration version Fairbanks0805. (*) ODP 822A is out of calibration range for Fairbanks0805 so only the marine reservior correction was applied.

[3] Linear sedimentation rate over hightstand (0-6.5 ka) as limited by available radiocarbon dates. Core tops were assumed to be at 0 yrs BP.