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### Loss via radiodecay

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Volume of deep sea	$8 \times 10^{17} \text{ m}^3$
Mean $\Sigma\text{CO}_2$	$2.3 \text{ mol m}^{-3}$
Mean $\Delta^{14}\text{C}$	$-175\text{‰}$
Mean $^{14}\text{C}/\text{C}$	$1.0 \times 10^{-12}$
Amount of $^{14}\text{C}$ in deep sea	$1.8 \times 10^6 \text{ mol}$
Amount decaying	$220 \text{ mol yr}^{-1}$

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### Gain of radiocarbon from North Atlantic

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Flux	16 Sv
Flux	$6 \times 10^{14} \text{ m}^3 \text{ yr}^{-1}$
$\Sigma\text{CO}_2$	$2.1 \text{ mol m}^{-3}$
$\Delta^{14}\text{C}$	$-67\text{‰}$
$^{14}\text{C}/\text{C}$ - $^{14}\text{C}/\text{C}$ mean deep sea	$0.13 \times 10^{-12}$
Input $^{14}\text{C}$ to deep sea	$130 \text{ mol yr}^{-1}$

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### Gain of radiocarbon from Southern Ocean

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Flux	45 Sv
Flux	$17 \times 10^{14} \text{ m}^3 \text{ yr}^{-1}$
$\Sigma\text{CO}_2$	$2.2 \text{ mol yr}^{-1}$
$\Delta^{14}\text{C}$	$-154\text{‰}$
$^{14}\text{C}/\text{C}$ - $^{14}\text{C}/\text{C}$ mean deep sea	$0.025 \times 10^{-12}$
Input $^{14}\text{C}$ to deep sea	$70 \text{ mol yr}^{-1}$

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### Gain of radiocarbon by particle flux

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Carbon flux	$0.5 \text{ mol m}^{-2} \text{ yr}^{-1}$
$\Delta^{14}\text{C}$	$-70\text{‰}$
$^{14}\text{C}/\text{C}$ - $^{14}\text{C}/\text{C}$ mean deep sea	$0.126 \times 10^{-12}$
Input $^{14}\text{C}$ to deep sea	$20 \text{ mol yr}^{-1}$
Total gain of radiocarbon	$220 \text{ mol yr}^{-1}$

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