

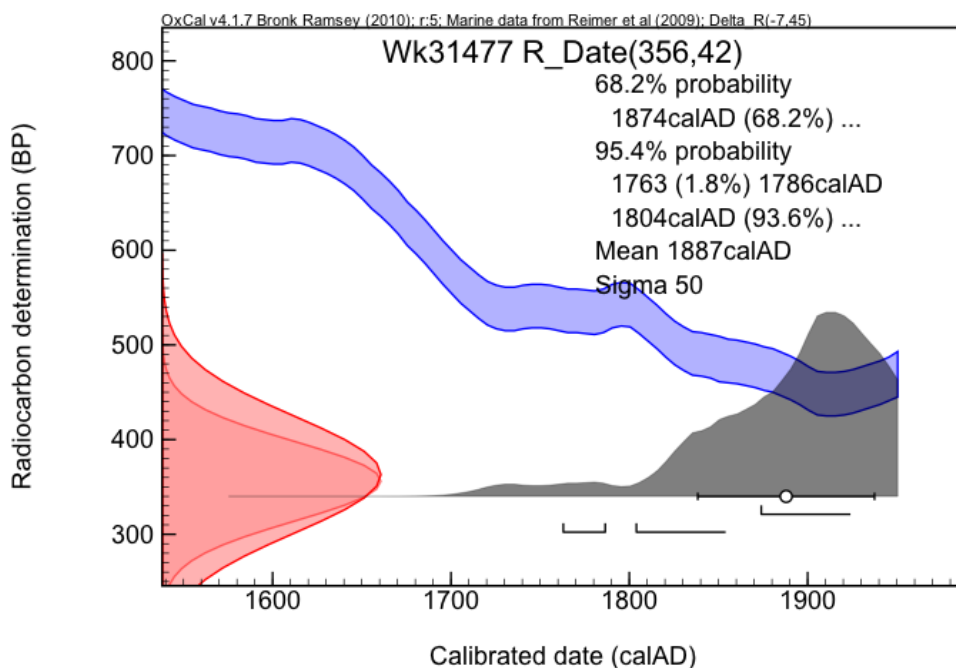


Report on Radiocarbon Age Determination for Wk- 31477

Submitter	B Robinson
Submitter's Code	C2 S2
Site & Location	Ohiwa Harbour, New Zealand
Sample Material	Estuarine shell (mainly cockle)
Physical Pretreatment	Surfaces cleaned. Washed in an ultrasonic bath. Tested for recrystallization: aragonite & a few tiny pieces of naturally calcite material.
Chemical Pretreatment	Sample acid washed using 2 M dil. HCl for 60 seconds, rinsed and dried.

$\delta^{13}\text{C}$	1.0 ± 0.2 ‰
D ¹⁴ C	-43.4 ± 5.0 ‰
F ¹⁴ C%	95.7 ± 0.5 ‰
Result	356 ± 42 BP

Comments



Alan Hogg

9/08/11

- Result is *Conventional Age or Percent Modern Carbon (pMC)* following Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}\text{C}$, is expressed as ‰ wrt PDB.
- F¹⁴C% is also known as *Percent Modern Carbon (pMC)*

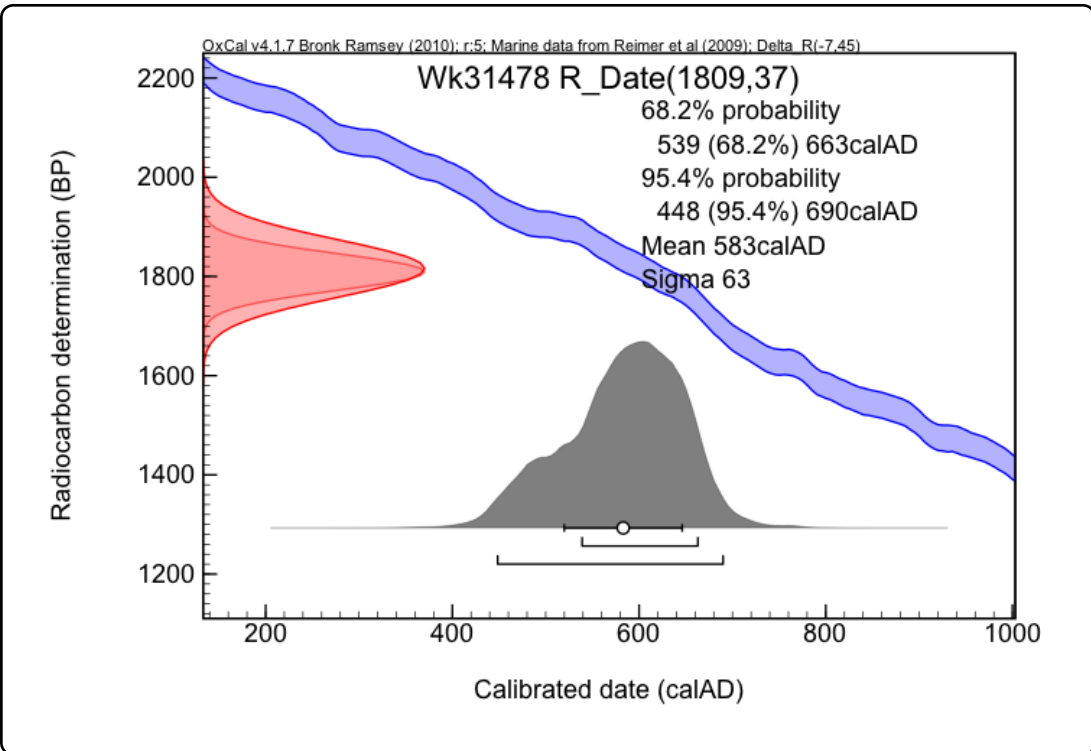


Report on Radiocarbon Age Determination for Wk- 31478

Submitter	B Robinson
Submitter's Code	C2 S1
Site & Location	Ohiwa Harbour, New Zealand
Sample Material	Estuarine shell (mainly cockle)
Physical Pretreatment	Surfaces cleaned. Washed in an ultrasonic bath. Tested for recrystallization: aragonite.
Chemical Pretreatment	Sample acid washed using 2 M dil. HCl for 60 seconds, rinsed and dried.

$\delta^{13}\text{C}$	$0.6 \pm 0.2 \text{ ‰}$
D^{14}C	$-201.7 \pm 3.7 \text{ ‰}$
$\text{F}^{14}\text{C}\%$	$79.8 \pm 0.4 \%$
Result	1809 \pm 37 BP

Comments



- Result is *Conventional Age or Percent Modern Carbon (pMC)* following Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}\text{C}$, is expressed as ‰ wrt PDB.
- $\text{F}^{14}\text{C}\%$ is also known as *Percent Modern Carbon (pMC)*

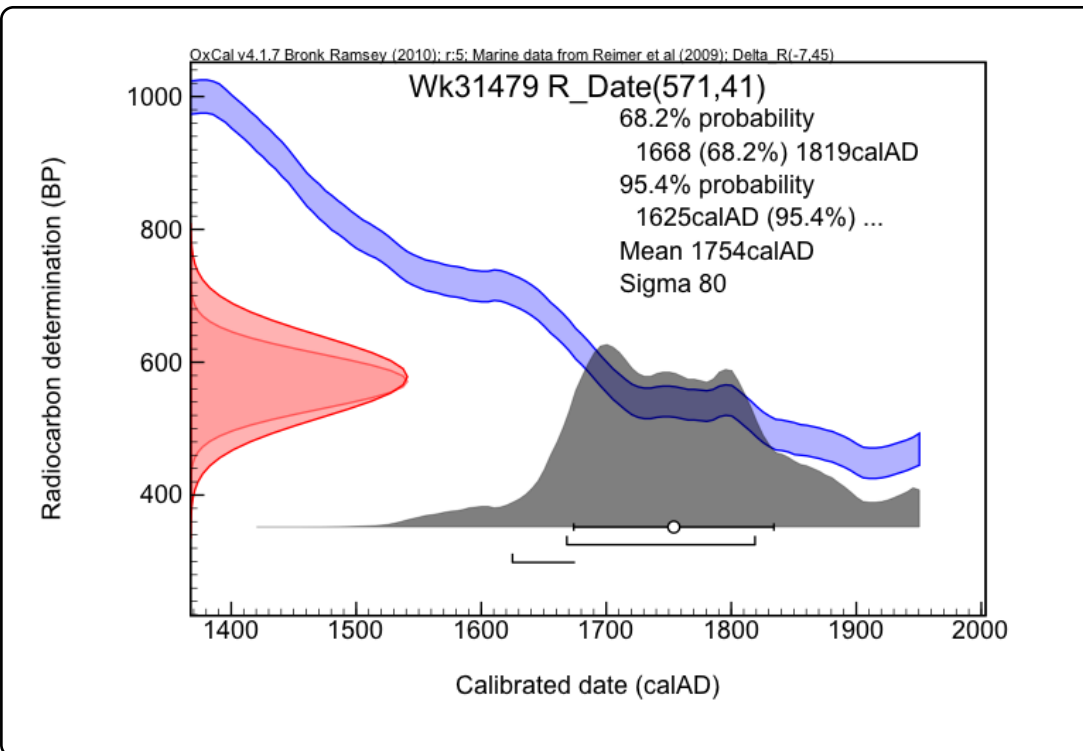


Report on Radiocarbon Age Determination for Wk- 31479

Submitter	B Robinson
Submitter's Code	C S3
Site & Location	Ohiwa Harbour, New Zealand
Sample Material	Estuarine shell (mainly cockle)
Physical Pretreatment	Surfaces cleaned. Washed in an ultrasonic bath. Tested for recrystallization: aragonite.
Chemical Pretreatment	Sample acid washed using 2 M dil. HCl for 60 seconds, rinsed and dried.

$\delta^{13}\text{C}$	$0.7 \pm 0.2 \text{ ‰}$
D^{14}C	$-68.6 \pm 4.7 \text{ ‰}$
$\text{F}^{14}\text{C}\%$	$93.1 \pm 0.5 \%$
Result	$571 \pm 41 \text{ BP}$

Comments



- Result is *Conventional Age or Percent Modern Carbon (pMC)* following Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}\text{C}$, is expressed as ‰ wrt PDB.
- $\text{F}^{14}\text{C}\%$ is also known as *Percent Modern Carbon (pMC)*