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### Result of $^{14}\text{C}$ dating of charcoal and macrofossil samples from Ii/Keelaharju, Finland.

Pre-treatment of charcoal and similar materials:

1. Visible root-fibres are removed.
2. 1 % HCl is added, the mixture is heated and kept for 8-10 hours just below the boiling point (carbonates are removed).
3. 1 % NaOH is added, the mixture is heated and kept for 8-10 hours just below the boiling point. The insoluble fraction, referred to as INS, is mainly consisting of the original organic material, and should therefore give the most reliable age. The soluble part is precipitated by addition of concentrated HCl. The precipitate, which mainly consists of humics, is washed, dried and referred to as fraction SOL. Influence of contaminants could be obtained from the SOL fraction.

The macrofossil sample has been treated as above except for step 3 when 0.5 % NaOH was used for 1 hour at 60°C.

Prior to the accelerator measurement, the washed and dried material pH 4, is combusted to  $\text{CO}_2$  and converted to graphite using a Fe-catalyst reaction. The age of fraction INS has been measured in the present investigation.

### RESULT

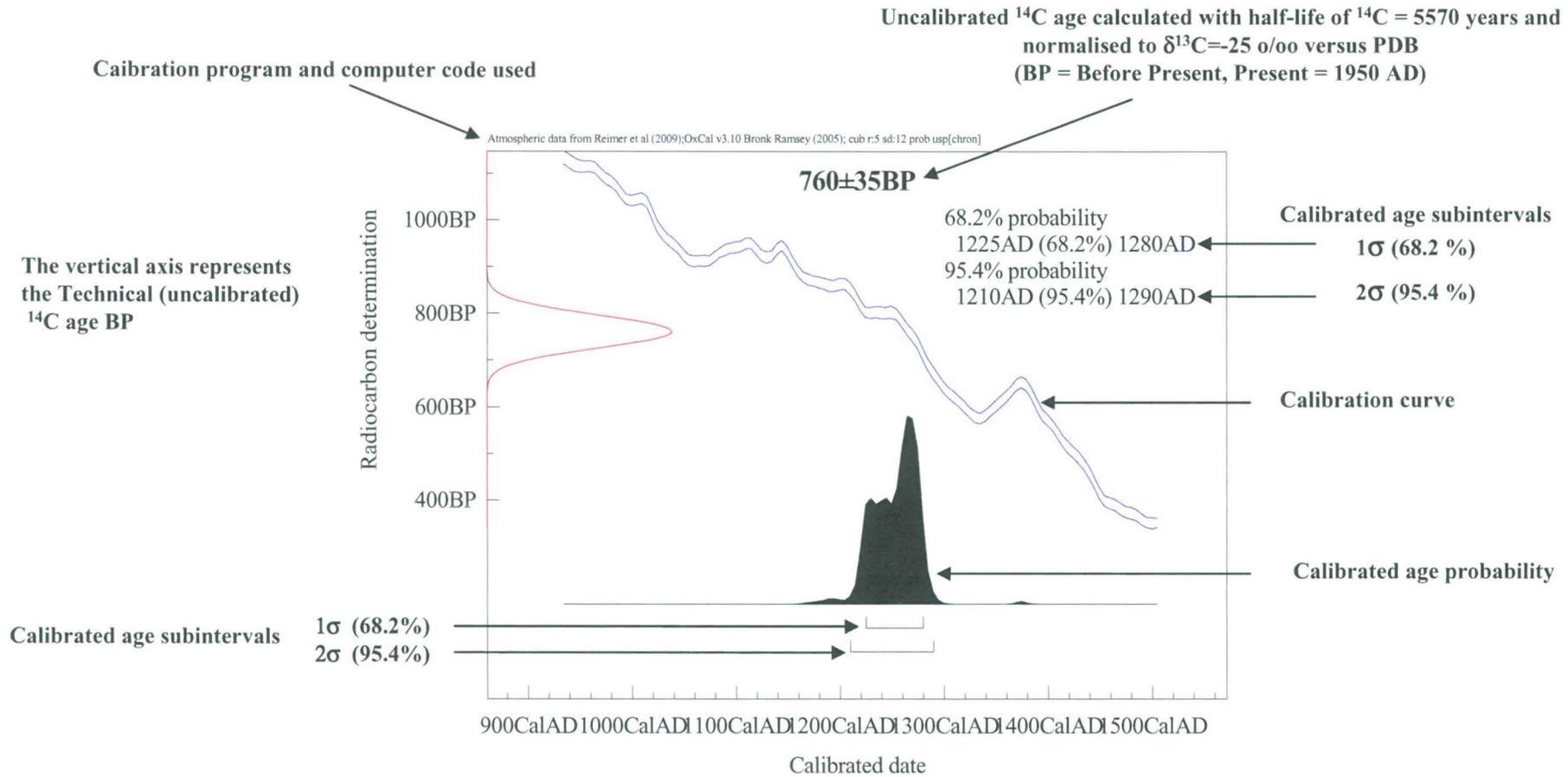
Lab number	Sample	$\delta^{13}\text{C}\text{‰ VPDB}$	$^{14}\text{C}$ age BP
Ua-43683	Sample number 11	-27,9	3 747 ± 35
Ua-43684	Sample number 12	-27,1	3 762 ± 36

The sample *number 10 A* did not contain enough organic material after the pre-treatment and could not be dated.

Best regards

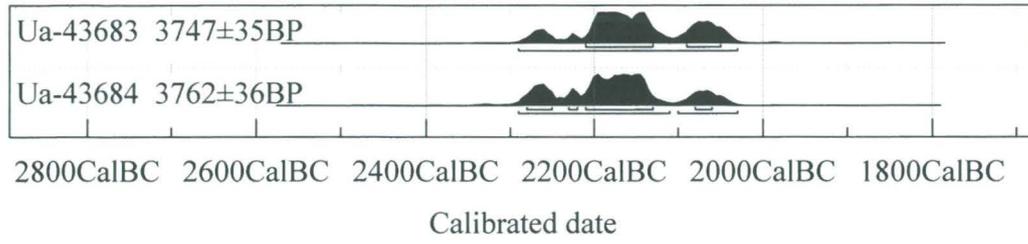
Göran Possnert/ Ingela Sundström

# Explanation of the radiocarbon calibration output from the OxCal program

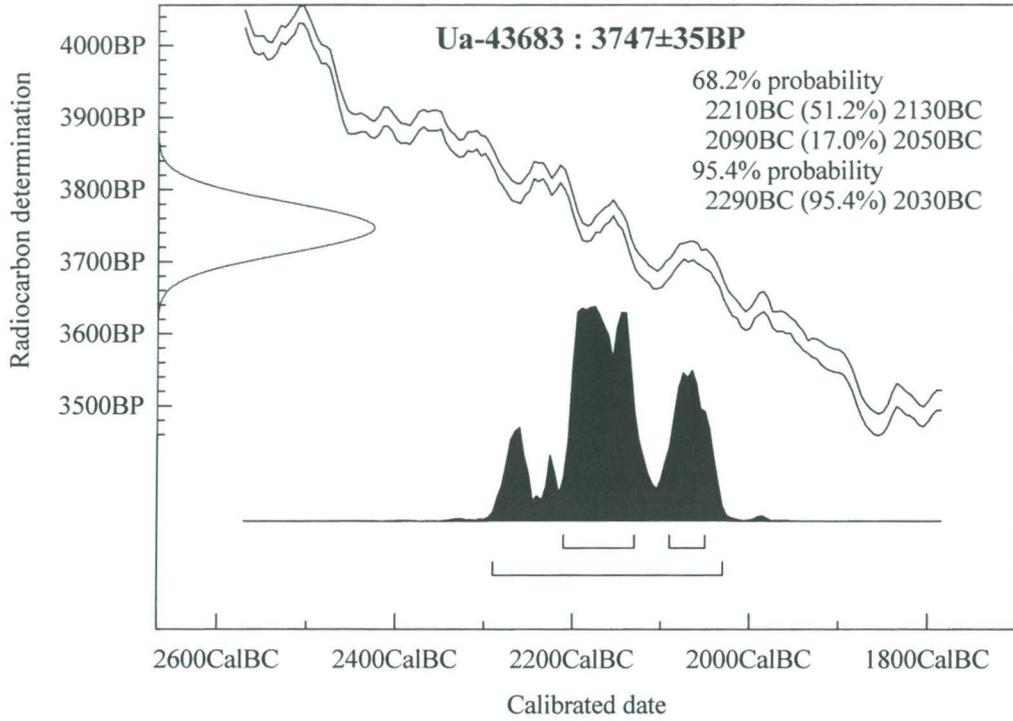


The horizontal axis represents the calibrated (calender) age

Atmospheric data from Reimer et al (2009), OxCal v3.10 Bronk Ramsey (2005); cub r.5 sd.12 prob usp[chron]



Atmospheric data from Reimer et al (2009), OxCal v3.10 Bronk Ramsey (2005); cub r:5 sd:12 prob usp[chron]



Atmospheric data from Reimer et al (2009); OxCal v3.10 Bronk Ramsey (2005); cub r:5 sd:12 prob usp[chron]

