

HIGH-PRECISION DECADAL CALIBRATION OF THE RADIOCARBON TIME SCALE, AD 1950-2500 BC

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INTRODUCTION

The radiocarbon ages of dendrochronologically dated wood samples, each covering 10 years, are reported back to 2500 yr BC. The decadal calibration curve constructed from these data is an extension of the curve previously given for the AD interval (Stuiver, 1982). A major difference with the previous work, however, is the assessment of the error in the radiocarbon age determination. Whereas previously this error was only based on the Poisson counting statistics of the accumulated number of counts for the sample and standards, the current calibration error is based on an estimate of the reproducibility in the radiocarbon activity determination. As a consequence, the uncertainty in the current calibration curve is, on average, 1.6 times that of the AD curve previously given.

The radiocarbon ages obtained for the decadal wood samples (Fig 1 and Table 1) were used for the construction of the bi-decadal calibration curves also reported in this issue (Stuiver & Pearson, 1986; Pearson & Stuiver, 1986). Because the average ^{14}C age of a bi-decadal wood sample is determined from one 20-yr determination by the Belfast laboratory, and from two 10-yr determinations of the Seattle laboratory, the resulting bi-decadal calibration curve is more precisely defined than the decadal curve published here. For most purposes, therefore, the internationally recommended bi-decadal curves should be used. However, the decadal curve is important when investigators are interested in the fine structure of ^{14}C age calibration of samples formed during a short interval (*ie*, <2 decades).

DENDROCHRONOLOGY AND SAMPLE TREATMENT

The trees used for the AD interval were either Douglas Fir (*Pseudotsuga menziesii*) from the US Pacific Northwest, or Sequoia (*Sequoiadendron giganteum*) from California. The dendrochronologic work on these materials is summarized in Table 2, and in Stuiver (1982) and Stuiver and Pearson (1986). Nearly all the BC material was dendro-dated by one of the authors (Becker, 1983). A limited number of samples from the Irish Oak chronology (Pilcher *et al*, 1984) was used near 500 BC.

Table 2 also lists the type of wood pretreatment. The de Vries method (Stuiver & Quay, 1980) was used for most of the AD wood samples, whereas alpha cellulose (Stuiver, Burk & Quay, 1984) was prepared for samples covering the BC interval. The de Vries method does not remove all components added after the year of growth, but our measurements show the influence

of incomplete removal of late additions to be limited to 2 or 3 ^{14}C years (Stuiver & Quay, 1981).

TECHNIQUE AND LABORATORY REPRODUCIBILITY

The ^{14}C community has traditionally been satisfied with reporting age errors based on counting statistics alone. This clearly was an unwise choice as interlaboratory comparisons of results obtained for the same samples show substantial under-reporting of the ^{14}C age errors (International Study Group, 1982; Stuiver, 1982).

Repeat analyses of samples with ^{14}C ages <4000 yr yield an error for the Seattle laboratory equal to 1.6 times the Poisson counting error (Stuiver, 1982; Stuiver & Pearson, 1986). This 1.6 "error multiplier" is only valid for the age ranges given in this paper, and should not be applied to all samples measured in the Seattle laboratory (Stuiver, Pearson & Braziunas, 1986). The error reported with the ^{14}C ages in Table 1 is the actual reproducibility standard deviation. Suitable proof that this standard deviation indeed accounts for the entire uncertainty in the measuring process was derived from a comparison with the ^{14}C ages obtained by the Belfast laboratory (Pearson *et al*, 1986) on contemporaneous wood. The differences in ^{14}C ages of 214 sample pairs (Stuiver & Pearson, 1986, Fig 3) are fully compatible with the quoted errors of the Seattle and Belfast laboratories. Similar agreement is obtained when subdividing the paired samples of the AD 1950-2500 BC period in AD and BC intervals (Figs 2 and 3), and by comparing Belfast Irish Oak results with Seattle German Oak results (Fig 4). Four CO_2 gas proportional counters (Stuiver, Robinson & Yang, 1979) were used for the ^{14}C activity determinations. The counter volumes are ca 4L; when operated at a filling pressure of 3.0 to 3.5 atmospheres the count rates for 'old' NBS oxalic acid are 90 to 100 counts per minute. Background count rates are 1.5 to 2.5 counts per minute, depending on the counter.

SYSTEMATIC DIFFERENCES BETWEEN LABORATORIES

Systematic ^{14}C age differences are discussed in Stuiver (1982); Stuiver and Pearson (1986) and Stuiver *et al* (1986). It was shown that systematic offsets of the Seattle data are limited to a few years for the age ranges discussed here, and that ^{14}C ages of wood of the same age from Ireland, south Germany, and the northwest United States differed, on average, by a few years only. Thus, although our curves are based on wood from trees of dif-

ferent regions, identical results would have been obtained if all measurements had been made on one tree from one locality.

CALIBRATION INSTRUCTIONS

The calibration instructions are similar to those given in Stuiver and Pearson (1986) and Pearson and Stuiver (1986) and are repeated here. The Figure 1 calibration curves consist of three lines. The center line is the actual calibration curve whereas the outer lines indicate the one sigma (standard deviation) uncertainty in the calibration curve. The calibration curve depicts the (non-linear) transformation of ^{14}C ages to calibrated AD/BC (or BP) ages. The nomenclature adopted for the dendro (calendar) year time scale is cal AD/BC or cal BP. The cal AD/BC ages are plotted along the lower horizontal axis and the cal BP ages along the upper one.

Cal BP ages are relative to the year AD 1950, with 0 cal BP equal to AD 1950. The relationship between cal AD/BC and cal BP ages is simple: cal BP = 1950 - cal AD, and cal BP = 1949 + cal BC. The switch from 1950 to 1949 when converting BC ages is caused by the absence of the zero year in the AD/BC chronology (when progressing from 1 BC to AD 1, the cal BP ages should be without a gap).

The conversion of a ^{14}C age to cal age is straightforward: 1) draw a horizontal (parallel to the bottom axis) line (A) through the ^{14}C age to be converted, and 2) draw vertical lines through the intercept(s) of line A and the calibration curve (center line). The cal AD/BC ages can be read at the bottom axis, the cal BP ages at the top. A single ^{14}C age can correspond with multiple cal ages, due to past changes in atmospheric ^{14}C levels (see Stuiver, 1982 for illustration).

The user has to determine the calibrated ages from the Figure 1 graphs by drawing lines. An alternate approach is the use of Table 3, where the cal ages are listed for ^{14}C ages that increase by 20-year steps. Obviously the user has to interpolate between the 20-yr steps of ^{14}C ages and sigmas if further fine tuning is desired.

The conversion of the standard error in the ^{14}C age into a range of cal AD/BC (BP) ages is more complicated. The user should first determine whether he/she wants to use 1) the laboratory quoted error (see Stuiver & Pearson, 1986 for a discussion) or 2) increase the quoted error by a known "error multiplier." Once the sample σ has been targeted, the curve σ (one standard deviation) should be read from the calibration curve by taking the difference in ^{14}C years between center curve and outer curve(s) in Figure 1. The curve σ should then be used to calculate total

$$\sigma = \sqrt{(\text{sample } \sigma)^2 + (\text{curve } \sigma)^2}$$

(Stuiver, 1982).

Horizontal lines should now be drawn through the ^{14}C age + total σ , and ^{14}C age - total σ value. The vertical lines, drawn through the intercepts with the CENTRAL curve, yield the outer limits of possible cal AD/BC (or BP) ages that are compatible with the sample standard deviation.

The above procedure was used to derive the "ranges" of cal AD/BC (BP) ages listed in Table 3.

The conversion procedure yields 1) single or multiple cal AD/BC (BP) ages that are compatible with a certain ^{14}C age, and 2) the range(s) of cal ages that corresponds to the standard deviation in the ^{14}C age. The probability that a certain cal age is the actual sample age may be quite variable within the cal age range. Higher probabilities are encountered around the intercept ages. Low, or near zero probabilities are encountered when part of the calibration curve 'snakes' outside the total σ boundaries. The non-linear transform of a Gaussian standard deviation around a ^{14}C age into cal AD/BC (BP) ages leads to a very complex probability distribution that can only be calculated with the aid of computers. We are currently developing suitable programs for these probability calculations, and plan to make these programs available in the near future.

The calibration data presented in this paper are to be used for samples formed in isotopic (^{14}C) equilibrium with atmospheric CO_2 . Although the wood samples were collected from specific regions (Ireland, Germany and western USA) the calibration data can be used for a large part of the Northern Hemisphere (Stuiver, 1982). However, systematic age differences are possible for Southern Hemispheric samples where ^{14}C ages of wood samples tend to be approximately 30 years older (Lerman, Mook & Vogel, 1970; Vogel, Fuls & Visser, 1986). Thus, ^{14}C ages of Southern Hemispheric samples should be reduced by 30 years before being converted into a cal AD/BC (BP) age.

MARINE SAMPLE AGES

The calibration curves should be applied only for age conversion of samples that were formed in equilibrium with atmospheric CO_2 . Conventional ^{14}C ages of materials not in equilibrium with atmospheric reservoirs do not take into account the off-set in ^{14}C age that may occur (Stuiver & Polach, 1977). This off-set, or reservoir deficiency, has to be deducted from the reported ^{14}C age before any attempt can be made to convert to cal AD/BC (BP) ages. The reservoir deficiency is time-dependent for the mixed layer of the ocean. Model calculated calibration curves for marine samples are listed separately in this volume (Stuiver, Pearson & Braziunas, 1986). This paper also contains a plot of the Table 1 $\Delta^{14}\text{C}$ values.

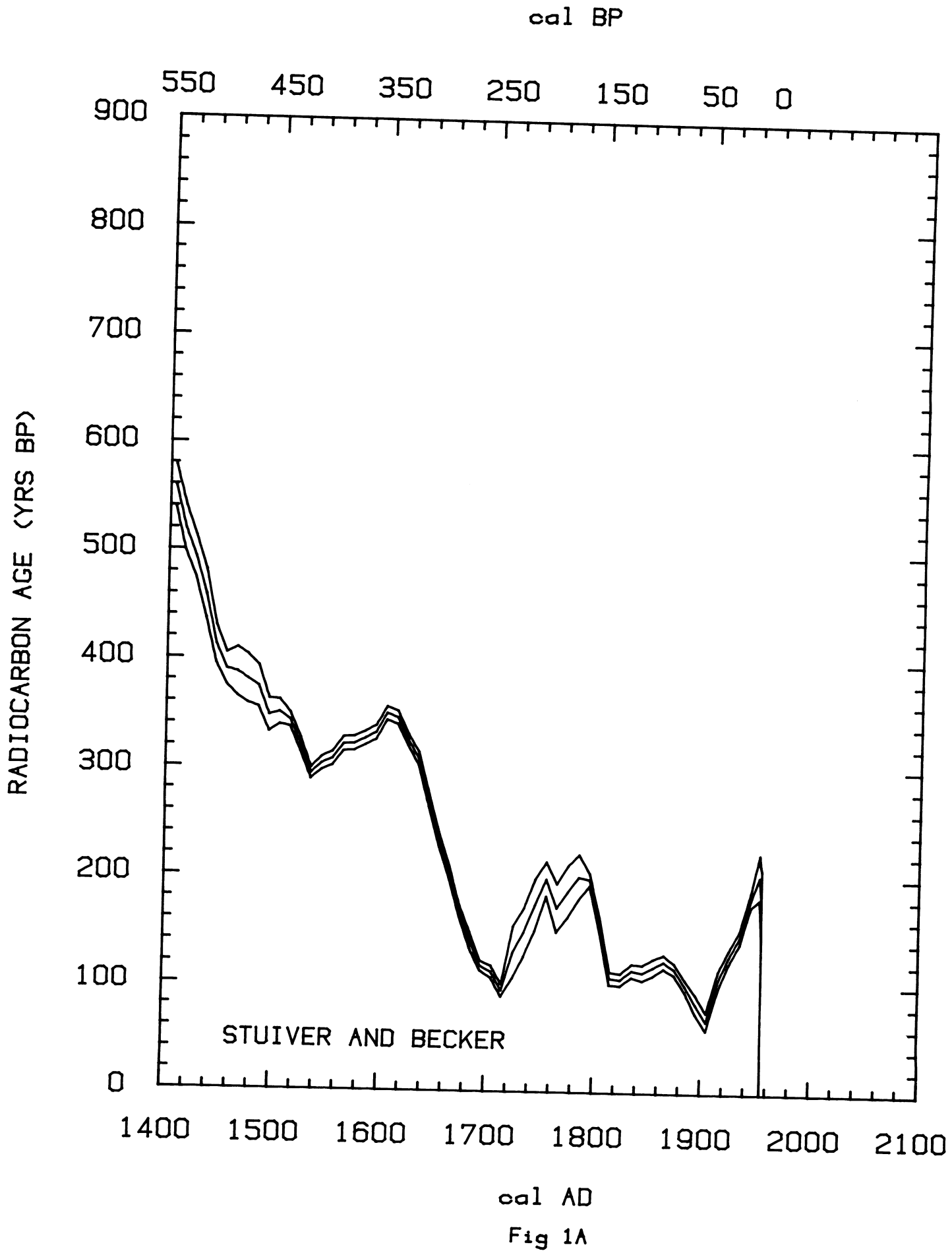
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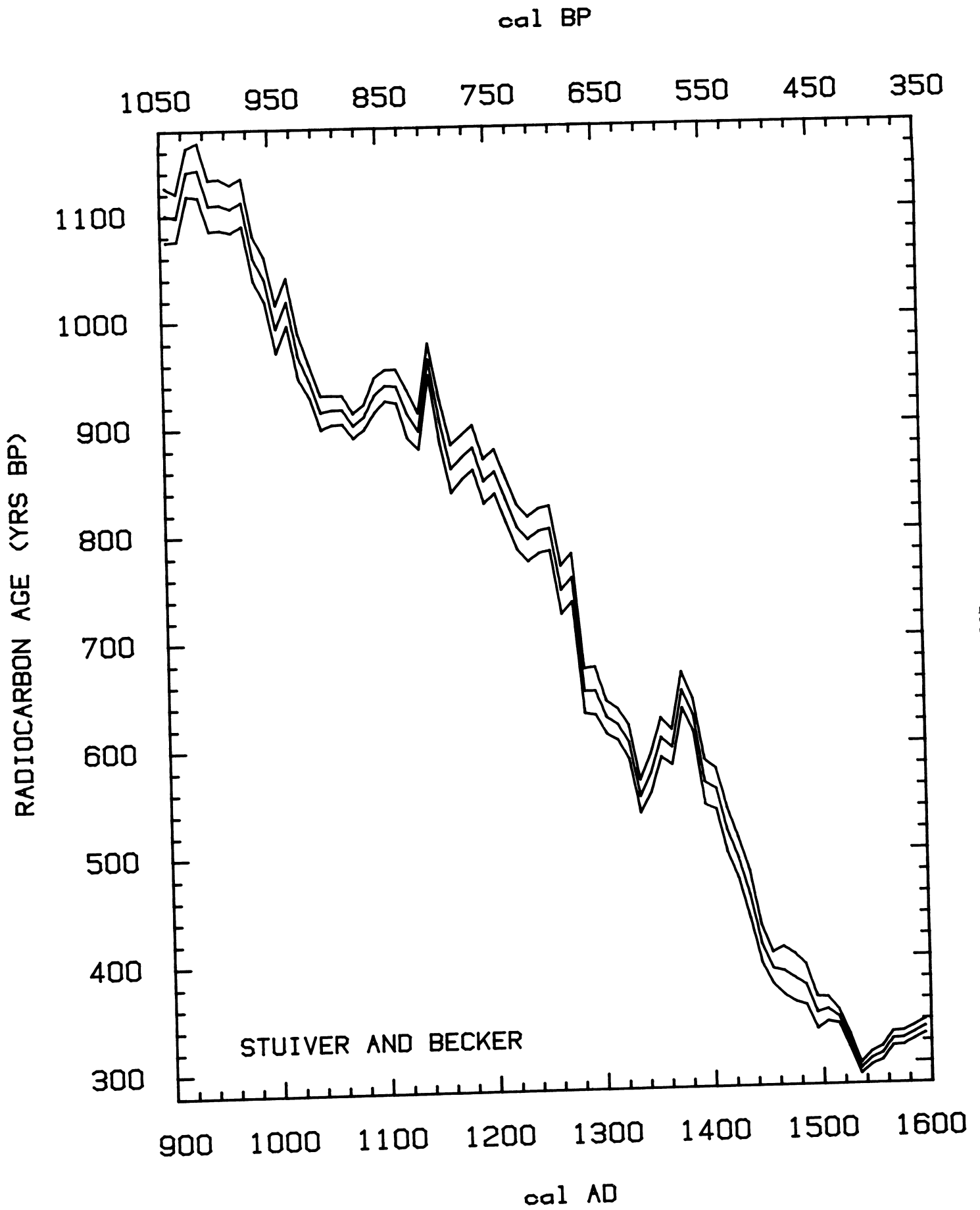


Fig 1B

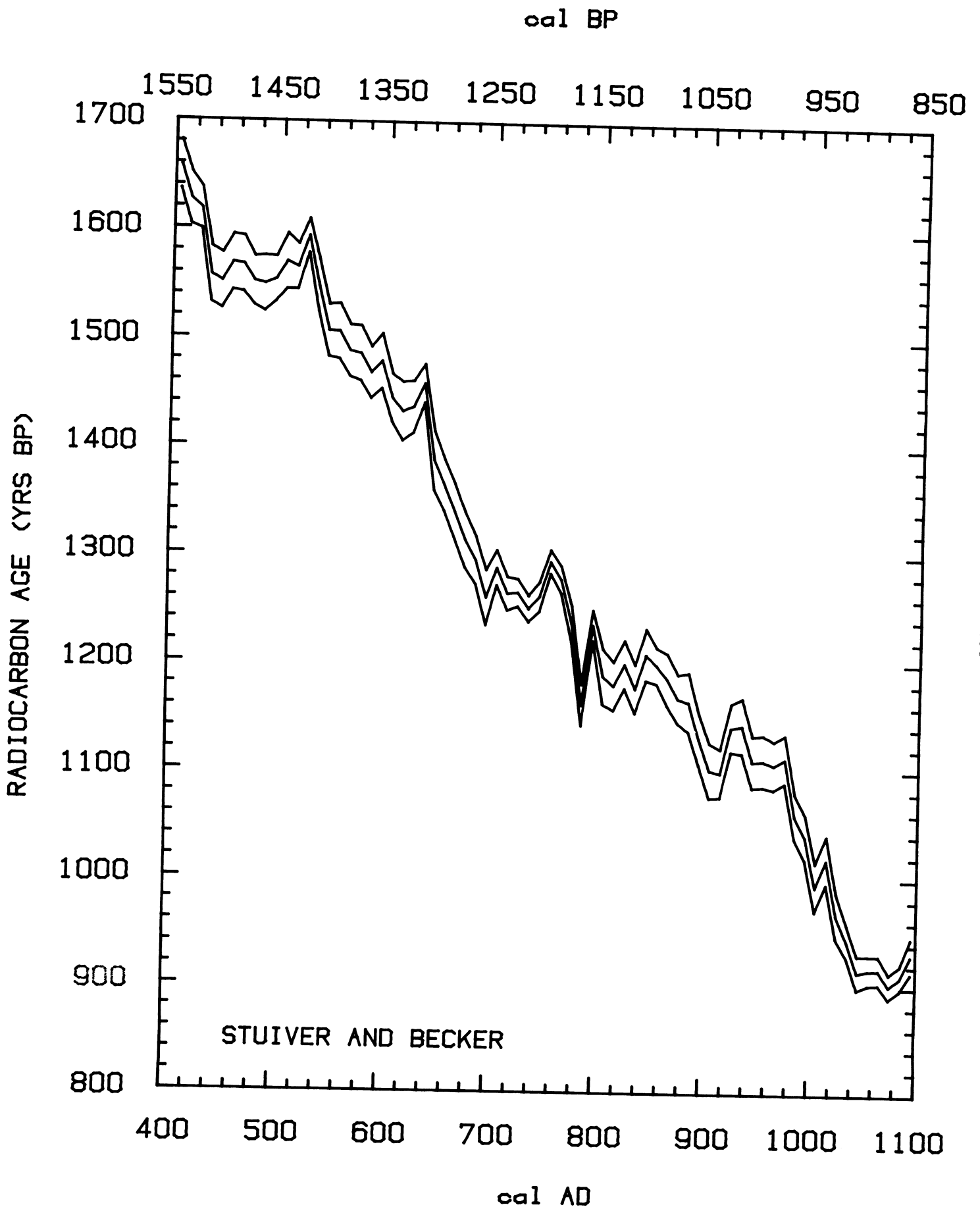


Fig 1C

cal BP

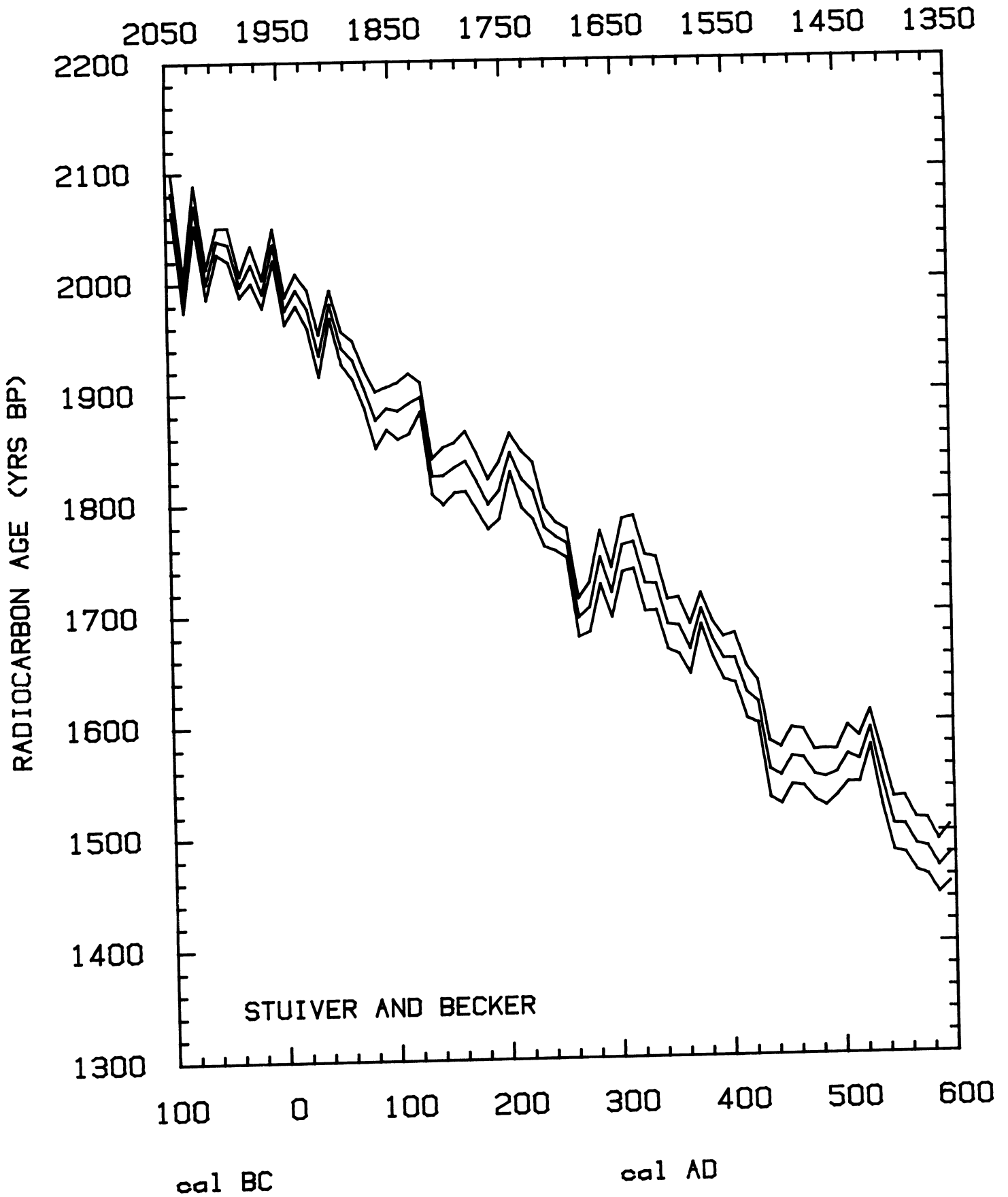
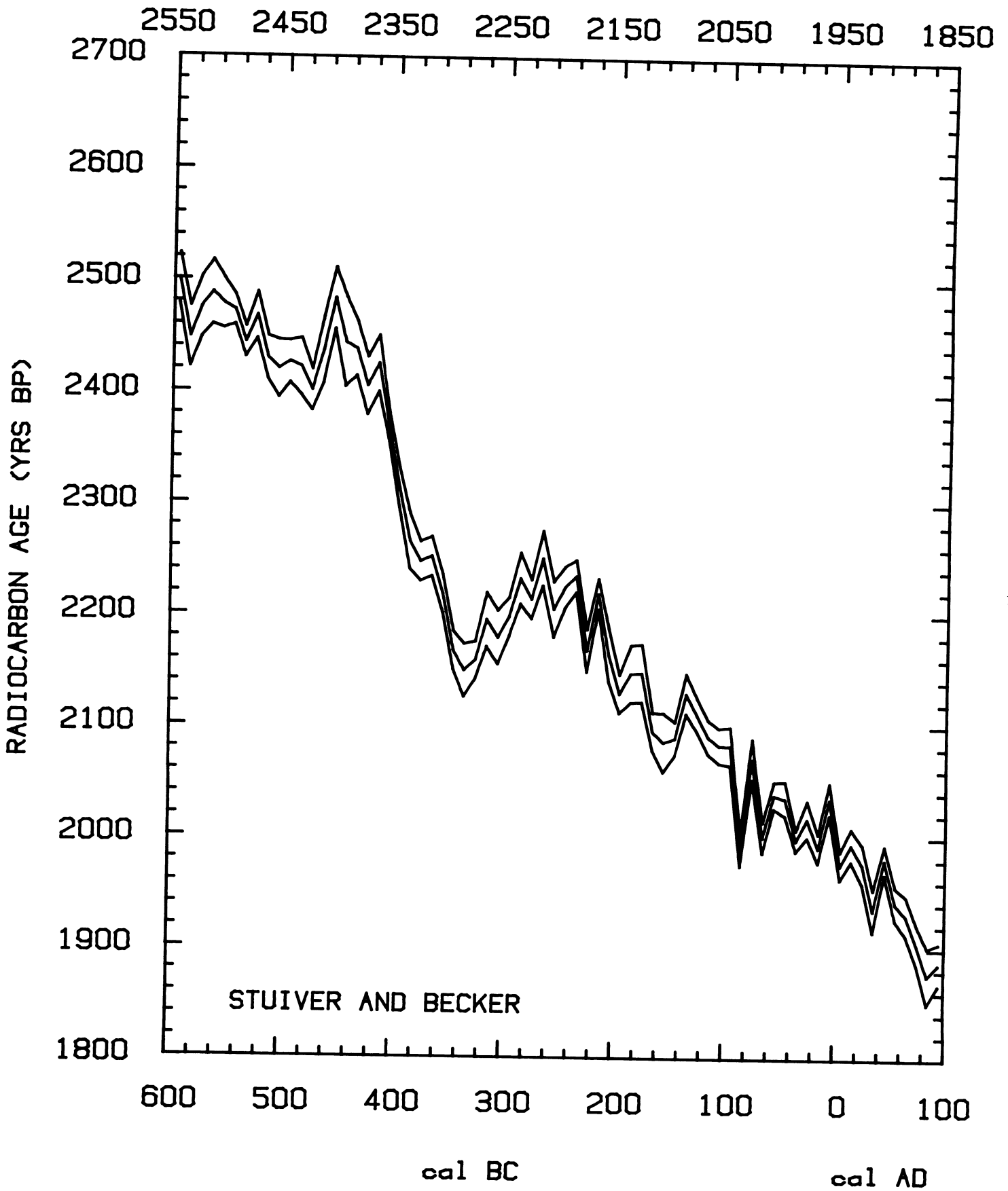


Fig 1D

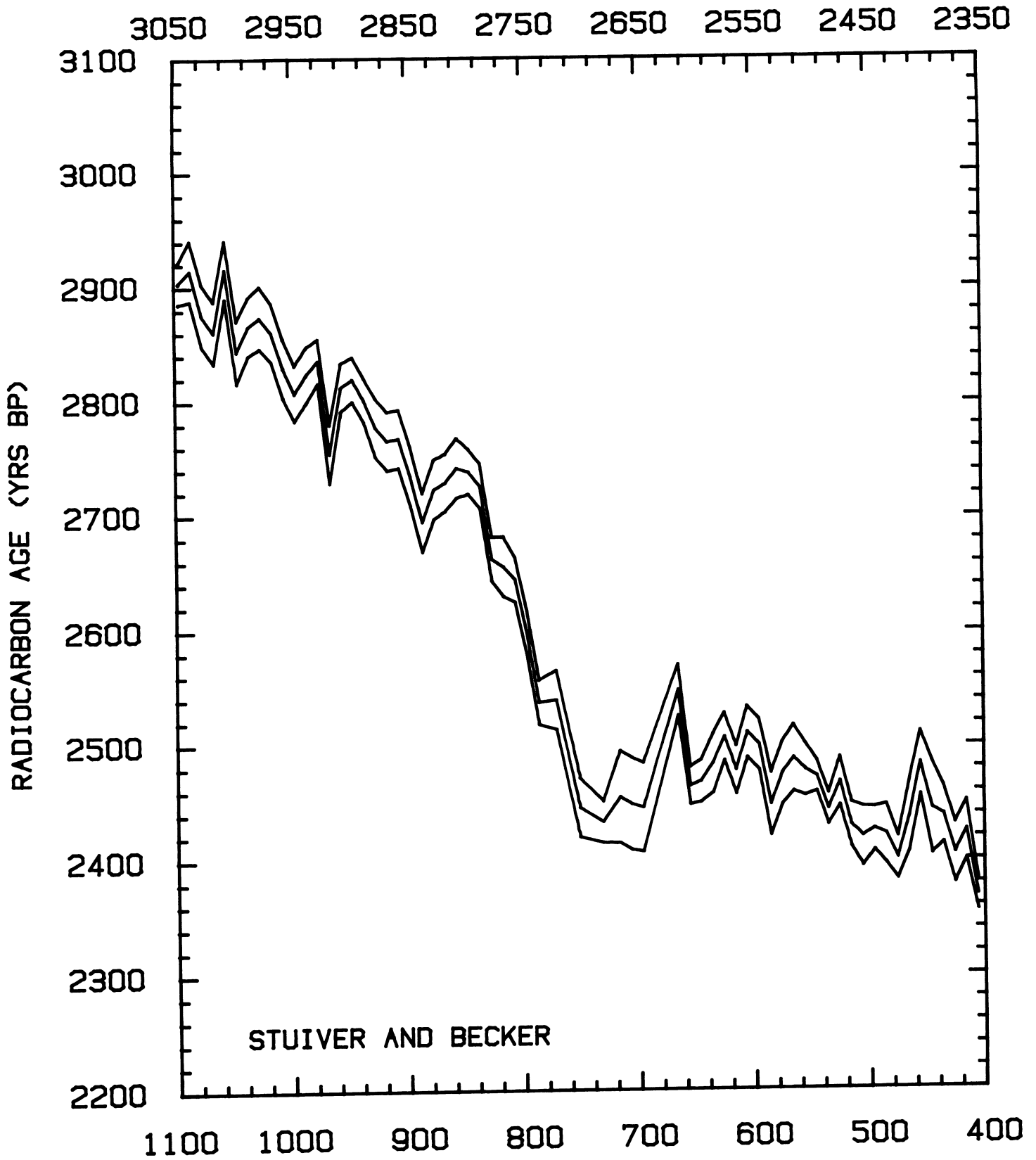
cal BP



870

Fig 1E

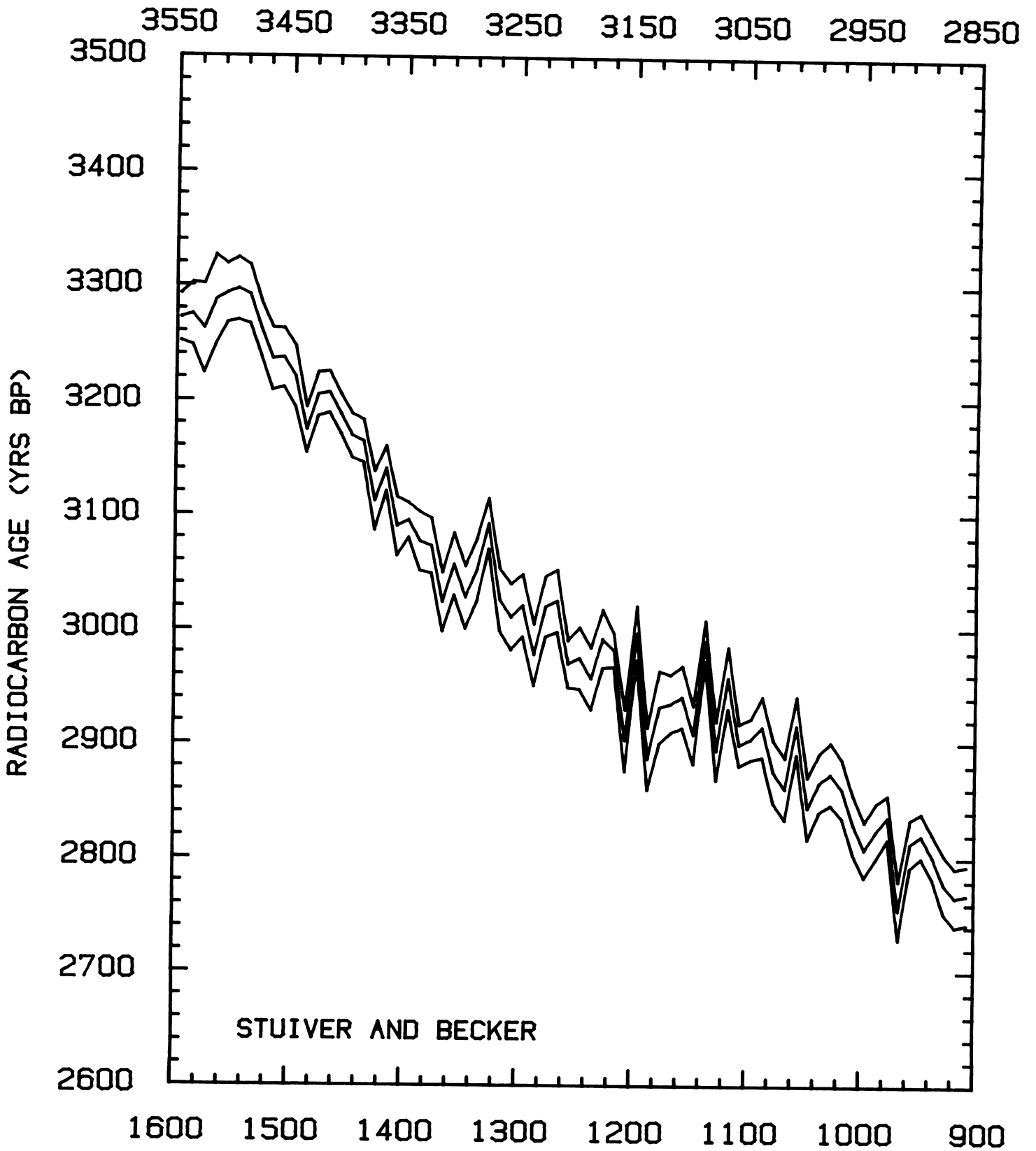
cal BP



cal BC

Fig 1F

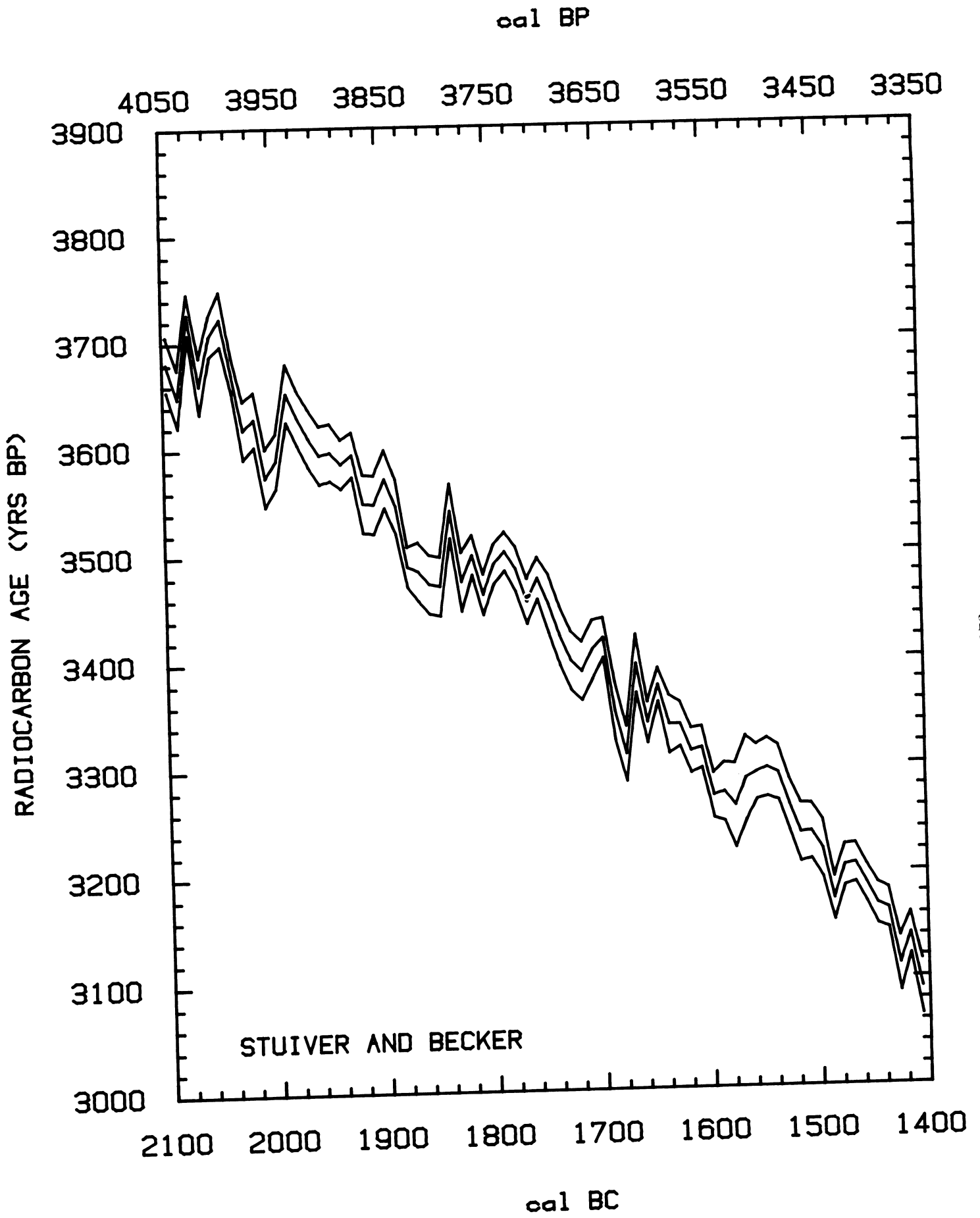
cal BP



872

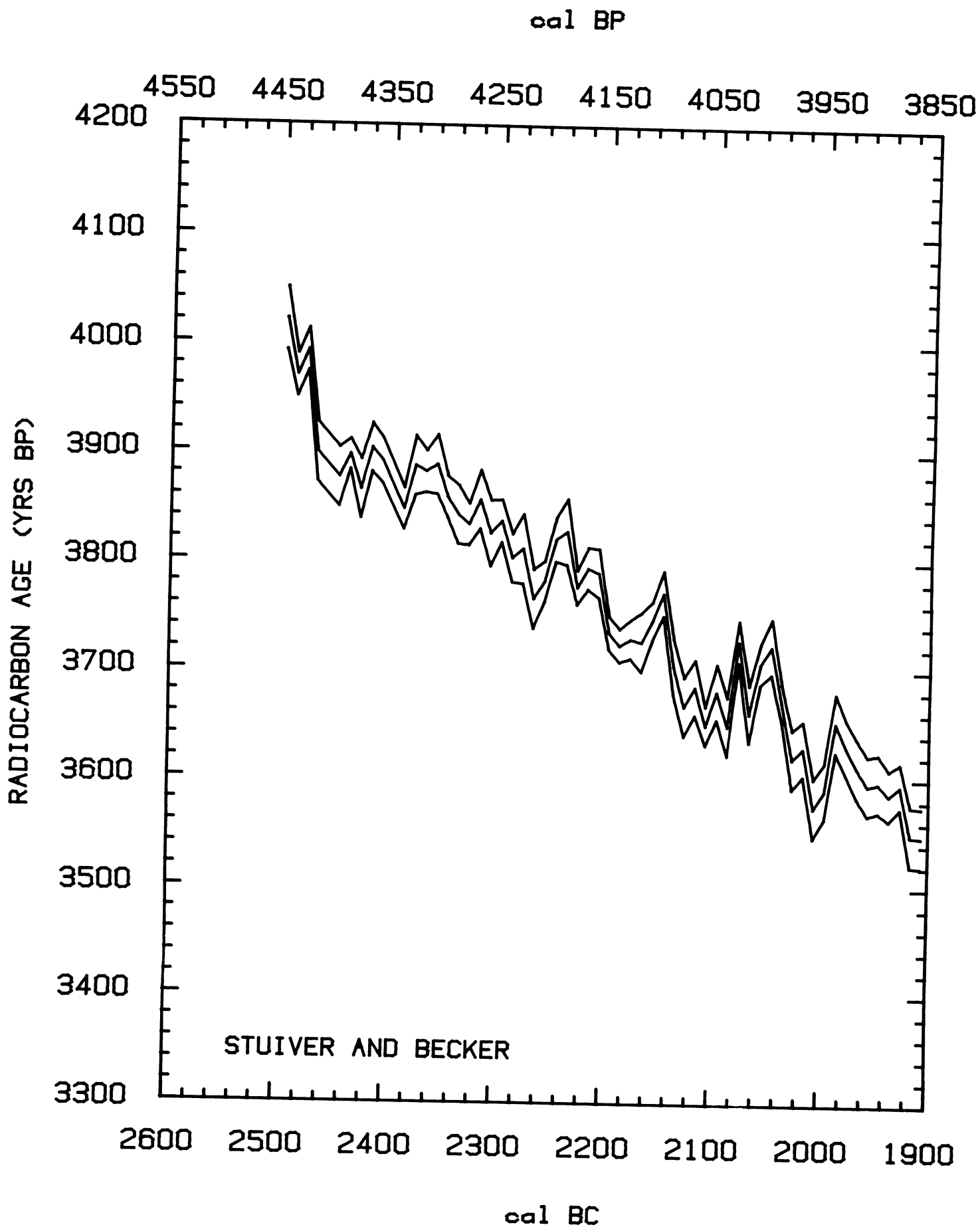
cal BC

Fig 1G



cal BC

Fig 1H



cal BC

Fig 11

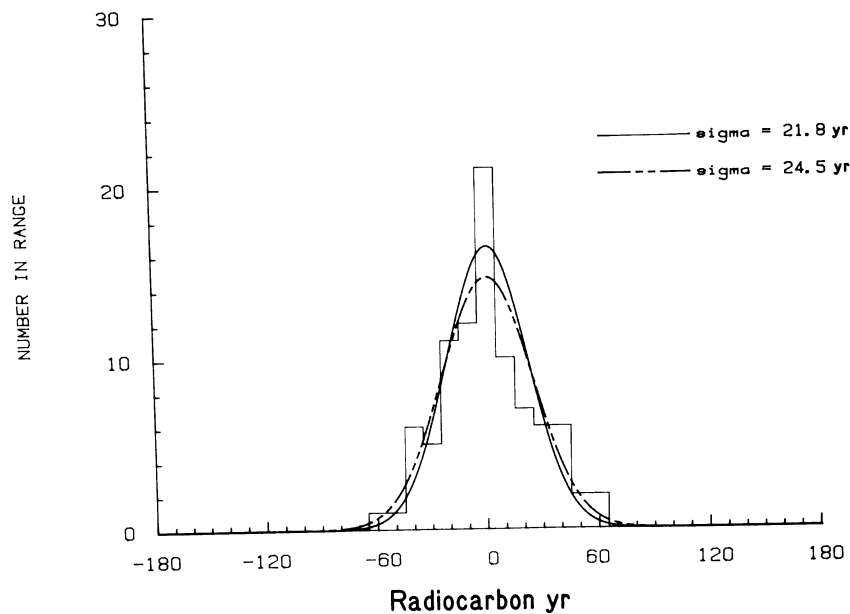


Fig 2. The distribution of ^{14}C age differences of contemporaneous sample pairs measured in Belfast and Seattle. All pairs are from the AD interval. Based on the laboratory precisions, the expected standard deviation is 21.8 yr, actual standard deviation is 24.5 yr.

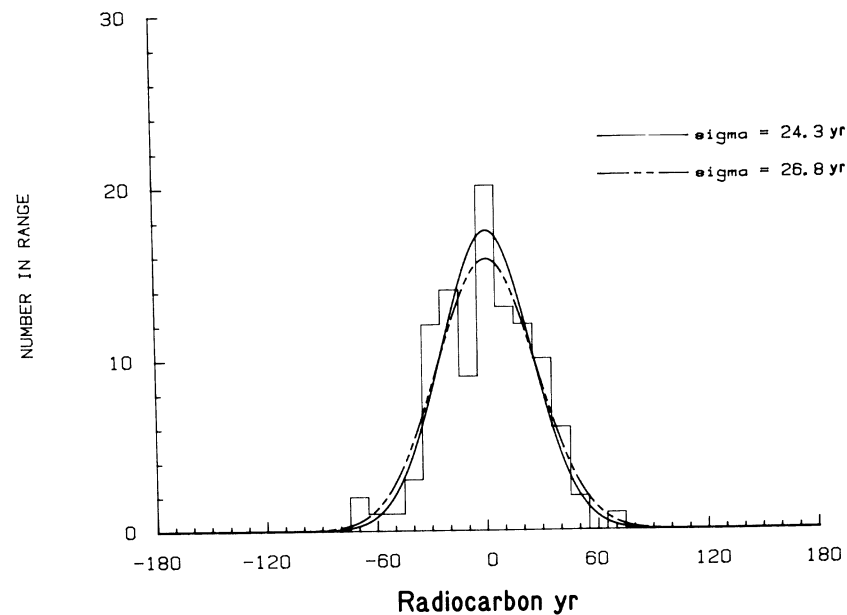


Fig 4. The distribution of ^{14}C age differences of contemporaneous sample pairs measured in Belfast (Irish Oak) and Seattle (South German Oak). Based on the laboratory precisions, the expected standard deviation in the age differences is 24.3 yr, actual standard deviation is 26.8 yr.

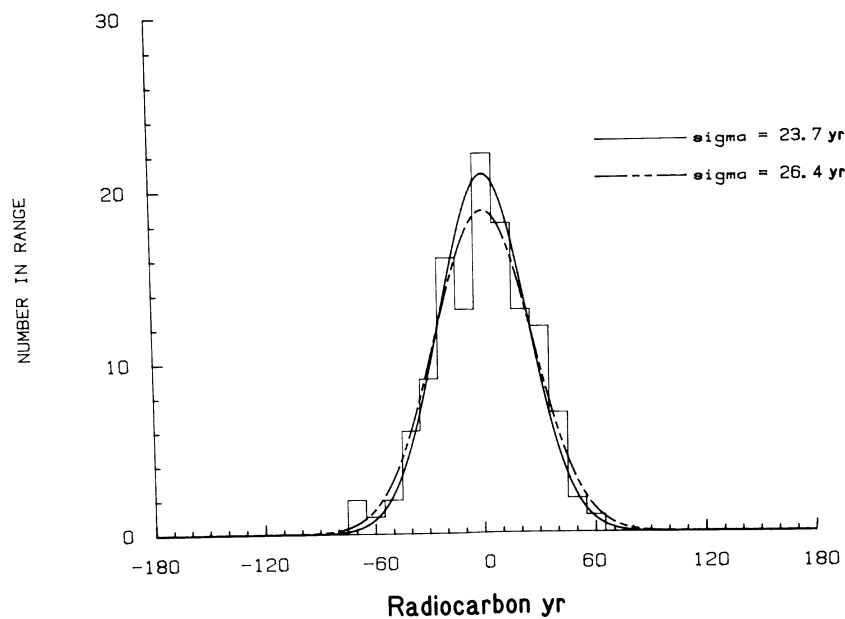


Fig 3. The distribution of ^{14}C age differences of contemporaneous sample pairs measured in Belfast and Seattle. All pairs are from the BC interval. The expected standard deviation, based on the precision quoted by the laboratories, is 23.7 yr. Actual standard deviation is 26.4 yr.

TABLE 1-A

The radiocarbon age determinations were made at the University of Washington (Seattle). The cal AD/BC ages (or cal BP) represent the mid-points of 10-year wood sections, except as noted with asterisks, when 20-year samples were needed to obtain the quantity of treated wood used for a measurement. The standard deviation of the age and Δ values includes a 1.6 lab error multiplier (see text). The trees and wood treatment are listed in Table 2. Overlapping decadal samples with mid-points no greater than one year apart were averaged. Single year data were averaged for the intervals AD 1510–1719 and AD 1790–1949.

cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP	cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP
AD 1944.3	-21.7 ± .9	181 ± 7	AD 1734.5	7.6 ± 2.8	149 ± 22
BP 5.7			BP 215.5		
AD 1934.5	-16.2 ± .8	146 ± 6	AD 1724.5	11.2 ± 3.0	130 ± 24
BP 15.5			BP 225.5		
AD 1924.5	-12.8 ± .8	128 ± 6	AD 1714.5	16.9 ± .7	94 ± 6
BP 25.5			BP 235.5		
AD 1915	-9.0 ± 1.1	106 ± 9	AD 1704.7	15.9 ± .7	112 ± 6
BP 35			BP 245.3		
AD 1904.5	-2.9 ± 1.0	68 ± 8	AD 1694.5	16.4 ± .6	118 ± 4
BP 45.5			BP 265.5		
AD 1894.5	-3.7 ± 1.1	84 ± 9	AD 1684.5	14.7 ± .9	141 ± 7
BP 55.5			BP 275.4		
AD 1884.5	-4.6 ± .7	101 ± 6	AD 1674.6	12.5 ± .7	168 ± 6
BP 65.5			BP 285.5		
AD 1874.5	-5.4 ± .7	116 ± 6	AD 1664.5	9.3 ± .8	203 ± 6
BP 75.5			BP 295.4		
AD 1864.5	-5.0 ± .8	123 ± 6	AD 1654.6	6.7 ± .8	234 ± 7
BP 85.5			BP 305.5		
AD 1854.5	-3.1 ± 1.0	118 ± 8	AD 1644.5	3.3 ± .8	271 ± 6
BP 95.5			BP 315.5		
AD 1845	-1.3 ± .9	113 ± 7	AD 1634.5	-.3 ± .8	309 ± 6
BP 105			BP 325.5		
AD 1835.0	-.3 ± .8	115 ± 6	AD 1624.5	-1.2 ± .7	326 ± 5
BP 115.0			BP 335.5		
AD 1824.5	2.0 ± .7	106 ± 6	AD 1614.5	-2.5 ± .8	346 ± 6
BP 125.5			BP 345.5		
AD 1814.5	3.0 ± .8	107 ± 6	AD 1604.5	-1.8 ± .8	350 ± 6
BP 135.5			BP 355.5		
AD 1804.5	-1.9 ± .8	157 ± 6	AD 1594.5	1.6 ± .8	333 ± 6
BP 145.5			BP 375.5		
AD 1794.5	-5.9 ± .7	198 ± 6	AD 1584.5	3.5 ± .8	327 ± 6
BP 155.5			BP 385.5		
AD 1784.5	-4.9 ± 2.6	201 ± 21	AD 1574.5	5.3 ± .8	322 ± 7
BP 165.5			BP 395.5		
AD 1774.5	-2.0 ± 3.0	187 ± 24	AD 1564.5	6.6 ± .8	322 ± 7
BP 175.5			BP 405.5		
AD 1764.5	1.1 ± 2.8	172 ± 22	AD 1554.5	9.5 ± .8	308 ± 6
BP 185.5			BP 415.5		
AD 1754.5	-1.0 ± 2.0	198 ± 16	AD 1544.5	11.3 ± .8	304 ± 6
BP 195.5			BP 425.5		
AD 1744.5	3.2 ± 3.0	174 ± 24	AD 1534.5	13.7 ± .6	294 ± 5
BP 205.5			BP 435.5		

TABLE 1-B

cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP	cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP
AD 1524.5	11.6 ± .8	321 ± 6	AD 1275	-12.6 ± 2.8	758 ± 22
BP 425.5			BP 675		
AD 1514.5	10.0 ± .8	344 ± 7	AD 1265	-10.0 ± 2.8	746 ± 22
BP 435.5			BP 685		
AD 1504.8	10.3 ± 1.4	351 ± 12	AD 1255	-15.9 ± 2.6	804 ± 21
BP 445.3			BP 695		
AD 1495	11.8 ± 1.9	348 ± 15	AD 1245	-14.4 ± 2.6	802 ± 21
BP 455			BP 705		
AD 1485	9.7 ± 2.4	374 ± 19	AD 1235	-12.3 ± 2.6	794 ± 21
BP 465			BP 715		
AD 1475	10.1 ± 2.8	381 ± 22	AD 1225	-12.5 ± 2.6	806 ± 21
BP 475			BP 725		
AD 1465	10.5 ± 2.8	387 ± 22	AD 1215	-14.4 ± 2.6	831 ± 21
BP 485			BP 735		
AD 1455	11.4 ± 1.8	390 ± 15	AD 1205	-16.5 ± 2.6	858 ± 21
BP 495			BP 745		
AD 1445	9.8 ± 2.2	412 ± 18	AD 1195	-14.2 ± 2.6	849 ± 21
BP 505			BP 755		
AD 1435	5.2 ± 2.8	459 ± 22	AD 1185	-16.9 ± 2.6	880 ± 21
BP 515			BP 765		
AD 1425	2.1 ± 2.4	493 ± 19	AD 1175	-14.6 ± 2.6	871 ± 21
BP 525			BP 775		
AD 1415	.1 ± 2.6	519 ± 21	AD 1165	-12.1 ± 2.8	861 ± 22
BP 535			BP 785		
AD 1405	-3.6 ± 2.4	559 ± 19	AD 1155	-16.3 ± 2.6	905 ± 21
BP 545			BP 795		
AD 1395	-3.2 ± 2.6	565 ± 21	AD 1145	-22.3 ± 1.8	963 ± 15
BP 555			BP 805		
AD 1385	-9.7 ± 1.9	628 ± 15	AD 1135.3	-12.9 ± 2.1	896 ± 17
BP 565			BP 814.8		
AD 1375	-11.4 ± 2.1	651 ± 17	AD 1125	-13.7 ± 2.8	913 ± 22
BP 575			BP 825		
AD 1365	-3.7 ± 2.0	598 ± 16	AD 1115.3	-15.7 ± 2.0	939 ± 16
BP 585			BP 834.8		
AD 1355	-3.6 ± 2.3	607 ± 18	AD 1105.3	-14.6 ± 1.8	939 ± 15
BP 595			BP 844.8		
AD 1345	1.7 ± 2.3	574 ± 18	AD 1095.3	-12.3 ± 2.0	930 ± 16
BP 605			BP 854.8		
AD 1335	5.6 ± 1.9	553 ± 15	AD 1085.3	-8.6 ± 1.4	910 ± 12
BP 615			BP 864.8		
AD 1325	.4 ± 2.0	604 ± 16	AD 1075.3	-6.4 ± 1.4	902 ± 12
BP 625			BP 874.8		
AD 1315	-.4 ± 1.8	620 ± 15	AD 1065.3	-7.1 ± 1.7	917 ± 13
BP 635			BP 884.8		
AD 1305	-.0 ± 1.9	627 ± 15	AD 1055.3	-5.9 ± 1.7	917 ± 14
BP 645			BP 894.8		
AD 1295	-1.9 ± 2.8	652 ± 22	AD 1045.3	-4.4 ± 2.0	915 ± 16
BP 655			BP 904.8		
AD 1285	-.7 ± 2.6	652 ± 21	AD 1035.3	-6.8 ± 1.9	944 ± 15
BP 665			BP 914.8		

TABLE 1-C

cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP	cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP
AD 1025	-8.5 ± 2.6	968 ± 21	AD 775	-11.7 ± 2.1	1236 ± 17
BP 925			BP 1175		
AD 1015	-13.6 ± 2.8	1019 ± 22	AD 764.8	-15.5 ± 1.6	1277 ± 13
BP 935			BP 1185.2		
AD 1005	-9.3 ± 2.8	993 ± 22	AD 754.8	-16.4 ± 1.4	1294 ± 11
BP 945			BP 1195.2		
AD 995	-13.8 ± 2.6	1040 ± 21	AD 744.8	-11.1 ± 1.7	1261 ± 14
BP 955			BP 1205.2		
AD 985	-15.0 ± 2.6	1059 ± 21	AD 734.8	-8.6 ± 1.5	1250 ± 12
BP 965			BP 1215.2		
AD 975	-20.3 ± 2.8	1112 ± 22	AD 724.8	-9.2 ± 1.6	1265 ± 13
BP 975			BP 1225.3		
AD 965	-18.4 ± 2.8	1106 ± 22	AD 714.8	-7.9 ± 2.0	1264 ± 16
BP 985			BP 1235.3		
AD 955	-17.7 ± 3.0	1110 ± 24	AD 704.8	-9.6 ± 2.0	1288 ± 16
BP 995			BP 1245.3		
AD 945	-16.4 ± 3.0	1110 ± 24	AD 695	-5.0 ± 3.2	1260 ± 26
BP 1005			BP 1255		
AD 935	-19.3 ± 3.2	1143 ± 26	AD 685	-8.1 ± 2.8	1295 ± 22
BP 1015			BP 1265		
AD 925	-17.9 ± 2.8	1141 ± 22	AD 675	-9.2 ± 3.2	1313 ± 26
BP 1025			BP 1275		
AD 915	-11.5 ± 2.8	1099 ± 22	AD 665	-11.2 ± 3.2	1339 ± 26
BP 1035			BP 1285		
AD 905	-10.6 ± 3.2	1101 ± 26	AD 655	-13.0 ± 3.0	1364 ± 24
BP 1045			BP 1295		
AD 895	-13.0 ± 3.0	1130 ± 24	AD 645	-14.6 ± 3.4	1386 ± 27
BP 1055			BP 1305		
AD 885	-16.0 ± 3.4	1165 ± 27	AD 635	-22.2 ± 2.2	1458 ± 18
BP 1065			BP 1315		
AD 875	-15.2 ± 2.8	1168 ± 22	AD 625	-18.3 ± 3.0	1436 ± 24
BP 1075			BP 1325		
AD 865	-16.2 ± 3.0	1186 ± 24	AD 615	-16.6 ± 3.4	1432 ± 27
BP 1085			BP 1335		
AD 855	-16.5 ± 2.1	1198 ± 17	AD 605	-16.9 ± 2.8	1444 ± 22
BP 1095			BP 1345		
AD 845	-16.6 ± 3.0	1208 ± 24	AD 595	-19.9 ± 3.2	1478 ± 26
BP 1105			BP 1355		
AD 835	-11.5 ± 2.8	1176 ± 22	AD 585	-17.4 ± 3.0	1468 ± 24
BP 1115			BP 1365		
AD 825	-13.1 ± 2.8	1199 ± 22	AD 575	-18.4 ± 3.2	1485 ± 26
BP 1125			BP 1375		
AD 815	-9.4 ± 2.8	1179 ± 22	AD 565	-17.5 ± 3.0	1488 ± 24
BP 1135			BP 1385		
AD 805	-9.3 ± 3.2	1188 ± 26	AD 555	-18.5 ± 3.2	1506 ± 26
BP 1145			BP 1395		
AD 795	-13.9 ± 1.7	1235 ± 14	AD 545	-17.4 ± 3.0	1506 ± 24
BP 1155			BP 1405		
AD 785	-3.6 ± 2.4	1161 ± 19	AD 535	-21.2 ± 3.0	1547 ± 24
BP 1165			BP 1415		

TABLE 1-D

cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP	cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP
AD 525	-25.6 ± 2.0	1593 ± 16	AD 275	-9.6 ± 2.8	1705 ± 22
BP 1425			BP 1675		
AD 515	-21.0 ± 2.6	1565 ± 21	AD 265	-7.3 ± 2.2	1696 ± 18
BP 1435			BP 1685		
AD 505	-20.4 ± 3.2	1570 ± 26	AD 255	-14.4 ± 1.6	1763 ± 13
BP 1445			BP 1695		
AD 495	-17.2 ± 2.6	1553 ± 21	AD 245	-13.9 ± 1.6	1770 ± 13
BP 1455			BP 1705		
AD 485	-15.5 ± 3.2	1549 ± 26	AD 235	-13.8 ± 2.2	1778 ± 18
BP 1465			BP 1715		
AD 475	-14.6 ± 2.8	1552 ± 22	AD 225	-16.6 ± 3.2	1811 ± 26
BP 1475			BP 1725		
AD 465	-15.3 ± 3.2	1567 ± 26	AD 215	-16.7 ± 3.2	1821 ± 26
BP 1485			BP 1735		
AD 455	-14.3 ± 3.2	1569 ± 26	AD 205	-18.5 ± 2.2	1846 ± 18
BP 1495			BP 1745		
AD 445	-11.0 ± 3.2	1551 ± 26	AD 195	-13.1 ± 3.2	1811 ± 26
BP 1505			BP 1755		
AD 435	-10.5 ± 3.2	1557 ± 26	AD 185	-10.4 ± 2.8	1799 ± 22
BP 1515			BP 1765		
AD 425	-16.8 ± 2.4	1618 ± 19	AD 175	-11.7 ± 3.2	1820 ± 26
BP 1525			BP 1775		
AD 415	-16.7 ± 3.0	1627 ± 24	AD 165	-12.8 ± 3.4	1838 ± 27
BP 1535			BP 1785		
AD 405	-19.3 ± 2.8	1658 ± 22	AD 155	-10.9 ± 2.8	1832 ± 22
BP 1545			BP 1795		
AD 395	-18.1 ± 2.4	1658 ± 19	AD 145	-8.8 ± 3.2	1825 ± 26
BP 1555			BP 1805		
AD 385	-19.1 ± 2.0	1676 ± 16	AD 135	-7.6 ± 2.0	1825 ± 16
BP 1565			BP 1815		
AD 375	-21.2 ± 1.8	1703 ± 14	AD 125	-15.2 ± 1.7	1897 ± 13
BP 1575			BP 1825		
AD 365	-15.6 ± 2.8	1667 ± 22	AD 115	-13.3 ± 3.4	1891 ± 27
BP 1585			BP 1835		
AD 355	-17.0 ± 3.2	1688 ± 26	AD 105	-11.3 ± 3.2	1884 ± 26
BP 1595			BP 1845		
AD 345	-16.0 ± 2.8	1689 ± 22	AD 95	-10.4 ± 2.4	1887 ± 19
BP 1605			BP 1855		
AD 335	-19.3 ± 3.0	1726 ± 24	AD 85	-7.9 ± 3.2	1876 ± 26
BP 1615			BP 1865		
AD 325	-18.2 ± 3.2	1727 ± 26	AD 75	-10.2 ± 2.2	1905 ± 18
BP 1625			BP 1875		
AD 315	-21.5 ± 3.0	1764 ± 24	AD 65	-12.2 ± 2.2	1930 ± 18
BP 1635			BP 1885		
AD 305	-20.0 ± 3.0	1761 ± 24	AD 55	-12.4 ± 1.9	1942 ± 15
BP 1645			BP 1895		
AD 295	-13.6 ± 2.8	1718 ± 22	AD 44.8	-16.0 ± 1.6	1981 ± 13
BP 1655			BP 1905.3		
AD 285	-16.3 ± 3.0	1750 ± 24	AD 34.8	-9.1 ± 2.4	1935 ± 19
BP 1665			BP 1915.3		

TABLE 1-E

cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP	cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP
AD 24.8	-13.1 ± 2.2	1977 ± 17	BC 225.5	-6.8 ± 2.4	2168 ± 19
<u>BP 1925.3</u>			<u>BP 2174.5</u>		
AD 14.8	-14.0 ± 1.8	1994 ± 15	BC 235.5	-13.8 ± 1.8	2235 ± 14
<u>BP 1935.3</u>			<u>BP 2184.5</u>		
AD 4.8	-10.5 ± 1.5	1976 ± 12	BC 245.5	-11.4 ± 2.3	2225 ± 19
<u>BP 1945.3</u>			<u>BP 2194.5</u>		
BC 5.3	-16.8 ± 1.8	2035 ± 14	BC 255.5	-7.8 ± 3.1	2205 ± 25
<u>BP 1954.3</u>			<u>BP 2204.5</u>		
BC 15.3	-10.2 ± 1.6	1991 ± 13	BC 265.5	-12.2 ± 3.0	2251 ± 24
<u>BP 1964.3</u>			<u>BP 2214.5</u>		
BC 25.3	-12.2 ± 2.1	2017 ± 17	BC 275.5	-6.4 ± 2.2	2214 ± 18
<u>BP 1974.3</u>			<u>BP 2224.5</u>		
BC 35.3	-8.6 ± 1.2	1998 ± 10	BC 285.5	-7.6 ± 2.9	2233 ± 23
<u>BP 1984.3</u>			<u>BP 2234.5</u>		
BC 45.3	-12.1 ± 1.9	2036 ± 15	BC 295.5	-2.1 ± 2.1	2198 ± 17
<u>BP 1994.3</u>			<u>BP 2244.5</u>		
BC 55.3	-11.3 ± 1.5	2039 ± 12	BC 305.5	1.4 ± 3.0	2179 ± 24
<u>BP 2004.3</u>			<u>BP 2254.5</u>		
BC 65.3	-5.3 ± 1.7	2000 ± 14	BC 315.5	.7 ± 3.0	2195 ± 24
<u>BP 2014.3</u>			<u>BC 2264.5</u>		
BC 75.3	-12.8 ± 2.3	2071 ± 18	BC 325.5	6.5 ± 2.1	2159 ± 17
<u>BP 2024.3</u>			<u>BP 2274.5</u>		
BC 85.3	-1.5 ± 1.8	1989 ± 14	BC 335.5	8.8 ± 3.0	2150 ± 24
<u>BP 2034.3</u>			<u>BP 2284.5</u>		
BC 95.3	-11.9 ± 2.2	2082 ± 17	BC 345.5	7.8 ± 2.2	2168 ± 17
<u>BP 2044.3</u>			<u>BP 2294.5</u>		
BC 105.3	-10.7 ± 2.0	2083 ± 16	BC 355.5	2.6 ± 2.2	2218 ± 17
<u>BP 2054.3</u>			<u>BP 2304.5</u>		
BC 115.3	-10.5 ± 1.9	2091 ± 15	BC 365.5	-.3 ± 2.2	2252 ± 18
<u>BP 2064.3</u>			<u>BP 2314.5</u>		
BC 125.3	-11.7 ± 1.9	2111 ± 15	BC 375.5	1.5 ± 2.2	2247 ± 18
<u>BP 2074.3</u>			<u>BP 2324.5</u>		
BC 135.3	-12.9 ± 2.2	2130 ± 18	BC 385.5	.4 ± 3.1	2265 ± 25
<u>BP 2084.3</u>			<u>BP 2334.5</u>		
BC 145.3	-6.7 ± 1.9	2089 ± 15	BC 395.5	-4.3 ± 2.3	2313 ± 18
<u>BP 2094.3</u>			<u>BP 2344.5</u>		
BC 155.5	-5.0 ± 3.3	2085 ± 27	BC 405.5	-10.0 ± 1.7	2368 ± 14
<u>BP 2104.5</u>			<u>BP 2354.5</u>		
BC 165.5	-5.0 ± 2.1	2095 ± 17	BC 415.5	-15.7 ± 3.2	2425 ± 25
<u>BP 2114.5</u>			<u>BP 2364.5</u>		
BC 175.5	-10.3 ± 3.3	2148 ± 26	BC 425.5	-12.0 ± 3.2	2405 ± 26
<u>BP 2124.5</u>			<u>BP 2374.5</u>		
BC 185.5	-9.0 ± 3.2	2147 ± 26	BC 435.5	-14.9 ± 3.1	2438 ± 25
<u>BP 2134.5</u>			<u>BP 2384.5</u>		
BC 195.5	-5.6 ± 2.2	2129 ± 17	BC 445.5	-14.5 ± 5.0	2444 ± 40
<u>BP 2144.5</u>			<u>BP 2394.5</u>		
BC 205.5	-8.7 ± 3.0	2164 ± 24	BC 455.5	-18.1 ± 3.4	2483 ± 28
<u>BP 2154.5</u>			<u>BP 2404.5</u>		
BC 215.5	-14.3 ± 1.7	2219 ± 14	BC 465.5	-11.2 ± 3.8	2437 ± 30
<u>BP 2164.5</u>			<u>BP 2414.5</u>		

TABLE 1-F

cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP	cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP
BC 475.5	-5.5 ± 2.3	2401 ± 18	*BC 771.5	13.0 ± 3.2	2540 ± 26
<u>BP 2424.5</u>			<u>BP 2720.5</u>		
BC 485.5	-6.9 ± 3.2	2422 ± 26	BC 786.5	15.1 ± 2.4	2538 ± 19
<u>BP 2434.5</u>			<u>BP 2735.5</u>		
BC 495.5	-6.3 ± 2.4	2426 ± 19	BC 796.5	8.6 ± 2.4	2599 ± 19
<u>BP 2444.5</u>			<u>BP 2745.5</u>		
BC 505.5	-4.3 ± 3.2	2420 ± 26	BC 806.5	4.1 ± 2.4	2645 ± 19
<u>BP 2454.5</u>			<u>BP 2755.5</u>		
BC 515.5	-4.3 ± 2.4	2430 ± 19	BC 816.5	3.9 ± 3.2	2656 ± 26
<u>BP 2464.5</u>			<u>BP 2765.5</u>		
BC 525.5	-7.8 ± 2.6	2468 ± 21	BC 826.5	4.3 ± 2.4	2663 ± 19
<u>BP 2474.5</u>			<u>BP 2775.5</u>		
BC 535.5	-3.6 ± 1.7	2444 ± 14	BC 836.5	-2.4 ± 2.4	2727 ± 19
<u>BP 2484.5</u>			<u>BP 2785.5</u>		
BC 545.5	-6.0 ± 1.6	2472 ± 13	BC 846.5	-2.8 ± 2.4	2739 ± 20
<u>BP 2494.5</u>			<u>BP 2795.5</u>		
BC 555.5	-5.5 ± 2.8	2478 ± 22	BC 856.5	-2.0 ± 3.2	2742 ± 26
<u>BP 2504.5</u>			<u>BP 2805.5</u>		
BC 565.5	-5.5 ± 3.6	2488 ± 29	BC 866.5	.8 ± 3.1	2730 ± 25
<u>BP 2514.5</u>			<u>BP 2815.5</u>		
BC 575.5	-2.7 ± 3.4	2475 ± 27	BC 876.5	2.8 ± 3.2	2723 ± 26
<u>BP 2524.5</u>			<u>BP 2825.5</u>		
BC 585.5	1.9 ± 3.4	2448 ± 27	BC 886.5	7.6 ± 3.2	2695 ± 26
<u>BP 2534.5</u>			<u>BP 2835.5</u>		
BC 595.5	-3.4 ± 2.8	2500 ± 22	BC 896.5	3.8 ± 3.2	2735 ± 26
<u>BP 2544.5</u>			<u>BP 2845.5</u>		
BC 605.5	-3.5 ± 2.8	2511 ± 22	BC 906.5	.9 ± 3.2	2768 ± 26
<u>BP 2554.5</u>			<u>BP 2855.5</u>		
BC 615.5	1.8 ± 2.6	2478 ± 21	BC 916.5	2.3 ± 3.2	2766 ± 26
<u>BP 2564.5</u>			<u>BP 2865.5</u>		
BC 625.5	-.6 ± 2.6	2507 ± 21	BC 926.5	2.1 ± 3.2	2778 ± 26
<u>BP 2574.5</u>			<u>BP 2875.5</u>		
BC 635.5	3.4 ± 3.2	2484 ± 26	BC 936.5	.3 ± 2.4	2802 ± 19
<u>BP 2584.5</u>			<u>BP 2885.5</u>		
BC 646	6.7 ± 2.3	2468 ± 18	BC 946.5	-.8 ± 2.4	2820 ± 19
<u>BP 2595</u>			<u>BP 2895.5</u>		
BC 655.5	8.3 ± 2.0	2464 ± 16	BC 956.5	1.3 ± 2.6	2813 ± 21
<u>BP 2604.5</u>			<u>BP 2905.5</u>		
BC 665.5	-.9 ± 2.8	2548 ± 22	BC 966.5	9.8 ± 3.2	2755 ± 26
<u>BP 2614.5</u>			<u>BP 2915.5</u>		
BC 696.5	15.7 ± 4.8	2446 ± 38	BC 976.5	.9 ± 2.4	2836 ± 19
<u>BP 2645.5</u>			<u>BP 2925.5</u>		
BC 706.5	16.5 ± 5.0	2449 ± 40	BC 986.5	3.6 ± 3.0	2824 ± 24
<u>BP 2655.5</u>			<u>BP 2935.5</u>		
BC 716.5	17.0 ± 5.0	2455 ± 40	BC 996.5	6.8 ± 3.0	2808 ± 24
<u>BP 2665.5</u>			<u>BP 2945.5</u>		
*BC 731.5	21.6 ± 2.3	2434 ± 18	BC 1006.5	5.3 ± 3.2	2830 ± 26
<u>BP 2680.5</u>			<u>BP 2955.5</u>		
*BC 751.5	22.5 ± 3.2	2446 ± 26	BC 1016.5	2.6 ± 3.2	2861 ± 26
<u>BP 2700.5</u>			<u>BP 2965.5</u>		

High-Precision Decadal Calibration of the Radiocarbon Time Scale, AD 1950–2500 BC

TABLE 1-G

cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP
BC 1026.5	2.2 ± 3.4	2874 ± 27
BP 2975.5		
BC 1036.5	4.4 ± 3.2	2866 ± 26
BP 2985.5		
BC 1046.5	8.4 ± 3.4	2844 ± 27
BP 2995.5		
BC 1056.5	.6 ± 3.2	2916 ± 26
BP 3005.5		
BC 1066.5	8.7 ± 3.4	2861 ± 27
BP 3015.5		
BC 1076.5	8.0 ± 3.4	2876 ± 27
BP 3025.5		
BC 1086.5	4.4 ± 3.3	2915 ± 27
BP 3035.5		
BC 1096.5	7.0 ± 2.3	2904 ± 18
BP 3045.5		
BC 1106.5	8.8 ± 2.3	2899 ± 18
BP 3055.5		
BC 1116.5	2.6 ± 3.4	2958 ± 27
BP 3065.5		
BC 1126.5	11.9 ± 3.2	2894 ± 26
BP 3075.5		
BC 1136.5	1.0 ± 2.3	2991 ± 18
BP 3085.5		
BC 1146.5	12.6 ± 3.2	2908 ± 26
BP 3095.5		
BC 1156.5	9.6 ± 3.4	2941 ± 27
BP 3105.5		
BC 1166.5	11.6 ± 3.2	2935 ± 26
BP 3115.5		
BC 1176.5	13.2 ± 4.0	2932 ± 32
BP 3125.5		
BC 1186.5	20.1 ± 3.4	2887 ± 27
BP 3135.5		
BC 1196.5	7.4 ± 3.0	2997 ± 24
BP 3145.5		
BC 1206.5	20.6 ± 3.4	2903 ± 27
BP 3155.5		
BC 1216.5	11.8 ± 1.9	2982 ± 15
BP 3165.5		
BC 1226.5	11.8 ± 3.2	2992 ± 26
BP 3175.5		
BC 1236.5	17.4 ± 3.4	2957 ± 27
BP 3185.5		
BC 1246.5	16.4 ± 3.4	2975 ± 27
BP 3195.5		
BC 1256.5	18.2 ± 2.6	2970 ± 21
BP 3205.5		
BC 1266.5	12.5 ± 3.4	3025 ± 27
BP 3215.5		

cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP
BC 1276.5	14.4 ± 3.3	3020 ± 26
BP 3225.5		
BC 1286.5	20.9 ± 3.4	2978 ± 27
BP 3235.5		
BC 1296.5	16.7 ± 3.4	3021 ± 27
BP 3245.5		
BC 1306.5	19.2 ± 3.6	3011 ± 29
BP 3255.5		
BC 1316.5	18.5 ± 3.4	3026 ± 27
BP 3265.5		
BC 1326.5	11.4 ± 2.8	3092 ± 22
BP 3275.5		
BC 1336.5	17.7 ± 3.4	3052 ± 27
BP 3285.5		
BC 1346.5	22.0 ± 3.4	3028 ± 27
BP 3295.5		
BC 1356.5	19.5 ± 3.4	3057 ± 27
BP 3305.5		
BC 1366.5	25.0 ± 3.2	3024 ± 26
BP 3315.5		
BC 1376.5	20.0 ± 3.0	3073 ± 24
BP 3325.5		
BC 1386.5	20.7 ± 3.2	3077 ± 26
BP 3335.5		
BC 1396.5	19.6 ± 1.9	3095 ± 15
BP 3345.5		
BC 1406.5	21.5 ± 3.2	3090 ± 26
BP 3355.5		
BC 1416.5	16.3 ± 2.4	3140 ± 20
BP 3365.5		
BC 1426.5	21.2 ± 3.2	3112 ± 26
BP 3375.5		
BC 1436.5	15.8 ± 2.3	3164 ± 19
BP 3385.5		
BC 1446.5	16.4 ± 2.4	3169 ± 19
BP 3395.5		
BC 1456.5	15.2 ± 2.2	3188 ± 18
BP 3405.5		
BC 1466.5	14.1 ± 2.3	3207 ± 18
BP 3415.5		
BC 1476.5	15.6 ± 2.4	3205 ± 19
BP 3425.5		
BC 1486.5	20.7 ± 2.5	3174 ± 20
BP 3435.5		
BC 1496.5	16.0 ± 3.3	3221 ± 27
BP 3445.5		
BC 1506.5	15.2 ± 3.2	3237 ± 26
BP 3455.5		
BC 1516.5	16.5 ± 3.4	3236 ± 27
BP 3465.5		

TABLE 1-H

cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP	cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP
BC 1526.5	14.5 ± 3.0	3262 ± 24	BC 1776.5	16.9 ± 2.6	3486 ± 21
BP 3475.5			BP 3725.5		
BC 1536.5	11.9 ± 3.2	3292 ± 26	BC 1786.5	16.0 ± 2.3	3503 ± 18
BP 3485.5			BP 3735.5		
BC 1546.5	12.5 ± 3.4	3297 ± 27	BC 1796.5	18.8 ± 2.3	3491 ± 19
BP 3495.5			BP 3745.5		
BC 1556.5	14.3 ± 3.2	3293 ± 26	BC 1806.5	23.5 ± 2.3	3463 ± 19
BP 3505.5			BP 3755.5		
BC 1566.5	16.2 ± 4.9	3287 ± 39	BC 1816.5	20.1 ± 2.3	3499 ± 19
BP 3515.5			BP 3765.5		
BC 1576.5	20.6 ± 4.9	3262 ± 39	BC 1826.5	24.5 ± 3.4	3475 ± 27
BP 3525.5			BP 3775.5		
BC 1586.5	20.2 ± 3.4	3275 ± 27	BC 1836.5	17.3 ± 3.2	3541 ± 26
BP 3535.5			BP 3785.5		
BC 1596.5	21.8 ± 2.6	3272 ± 21	BC 1846.5	27.4 ± 3.4	3471 ± 27
BP 3545.5			BP 3795.5		
BC 1606.5	17.4 ± 2.4	3317 ± 19	BC 1856.5	28.4 ± 3.4	3473 ± 27
BP 3555.5			BP 3805.5		
BC 1616.5	19.0 ± 2.6	3314 ± 21	BC 1866.5	28.1 ± 3.4	3485 ± 27
BP 3565.5			BP 3815.5		
BC 1626.5	17.0 ± 2.6	3339 ± 21	BC 1876.5	28.8 ± 2.3	3489 ± 19
BP 3575.5			BP 3825.5		
BC 1636.5	18.3 ± 3.4	3339 ± 27	BC 1886.5	22.8 ± 3.2	3546 ± 26
BP 3585.5			BP 3835.5		
BC 1646.5	14.8 ± 2.0	3376 ± 16	BC 1896.5	20.8 ± 3.4	3572 ± 27
BP 3595.5			BP 3845.5		
BC 1656.5	20.5 ± 2.4	3341 ± 19	BC 1906.5	25.1 ± 3.4	3548 ± 27
BP 3605.5			BP 3855.5		
BC 1666.5	14.7 ± 3.4	3396 ± 27	BC 1916.5	26.2 ± 3.4	3549 ± 27
BP 3615.5			BP 3865.5		
BC 1676.5	26.7 ± 3.2	3312 ± 26	BC 1926.5	21.6 ± 2.6	3595 ± 21
BP 3625.5			BP 3875.5		
BC 1686.5	22.8 ± 3.4	3352 ± 27	BC 1936.5	23.9 ± 2.9	3586 ± 23
BP 3635.5			BP 3885.5		
BC 1696.5	15.3 ± 2.3	3421 ± 19	BC 1946.5	23.7 ± 3.3	3597 ± 27
BP 3645.5			BP 3895.5		
BC 1706.5	17.9 ± 3.4	3410 ± 27	BC 1956.5	25.3 ± 3.4	3595 ± 27
BP 3655.5			BP 3905.5		
BC 1716.5	21.7 ± 3.4	3390 ± 27	BC 1966.5	24.5 ± 3.4	3611 ± 27
BP 3665.5			BP 3915.5		
BC 1726.5	21.6 ± 3.4	3400 ± 27	BC 1976.5	23.3 ± 3.2	3630 ± 26
BP 3675.5			BP 3925.5		
BC 1736.5	19.9 ± 3.4	3423 ± 27	BC 1986.5	21.6 ± 3.4	3653 ± 27
BP 3685.5			BP 3935.5		
BC 1746.5	17.4 ± 3.4	3453 ± 27	BC 1996.5	30.9 ± 3.2	3590 ± 27
BP 3695.5			BP 3945.5		
BC 1756.5	15.6 ± 2.4	3477 ± 19	BC 2006.5	34.2 ± 3.4	3574 ± 27
BP 3705.5			BP 3955.5		
BC 1766.5	19.5 ± 2.6	3456 ± 21	BC 2016.5	28.4 ± 3.2	3629 ± 26
BP 3715.5			BP 3965.5		

TABLE 1-I

cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP	cal AD/BC cal BP	$\Delta^{14}\text{C}$	Radiocarbon age BP
BC 2026.5 BP 3975.5	30.9 ± 3.4	3619 ± 27	BC 2276.5 BP 4225.5	37.5 ± 4.0	3811 ± 32
BC 2036.5 BP 3985.5	25.5 ± 2.1	3671 ± 17	BC 2286.5 BP 4235.5	39.8 ± 2.8	3802 ± 22
BC 2046.5 BP 3995.5	20.1 ± 3.2	3723 ± 26	BC 2296.5 BP 4245.5	36.7 ± 2.5	3836 ± 20
BC 2056.5 BP 4005.5	23.4 ± 2.4	3707 ± 19	BC 2306.5 BP 4255.5	39.4 ± 3.8	3825 ± 30
BC 2066.5 BP 4015.5	30.5 ± 3.3	3661 ± 26	BC 2316.5 BP 4265.5	36.7 ± 3.4	3856 ± 27
BC 2076.5 BP 4025.5	23.2 ± 2.4	3728 ± 19	BC 2326.5 BP 4275.5	40.9 ± 2.4	3833 ± 19
BC 2086.5 BP 4035.5	34.5 ± 3.4	3649 ± 27	BC 2336.5 BP 4285.5	41.0 ± 3.4	3842 ± 27
BC 2096.5 BP 4045.5	31.7 ± 3.2	3681 ± 26	BC 2346.5 BP 4295.5	40.2 ± 2.4	3858 ± 19
BC 2106.5 BP 4055.5	37.0 ± 2.3	3650 ± 18	BC 2356.5 BP 4305.5	37.6 ± 3.4	3888 ± 27
BC 2116.5 BP 4065.5	33.7 ± 3.2	3685 ± 26	BC 2366.5 BP 4315.5	39.7 ± 2.4	3882 ± 19
BC 2126.5 BP 4075.5	37.2 ± 3.4	3667 ± 27	BC 2376.5 BP 4325.5	40.2 ± 3.4	3887 ± 27
BC 2136.5 BP 4085.5	33.7 ± 3.2	3704 ± 26	BC 2386.5 BP 4335.5	46.7 ± 2.4	3847 ± 19
BC 2146.5 BP 4095.5	26.4 ± 2.6	3771 ± 21	BC 2406.5 BP 4355.5	43.5 ± 2.6	3891 ± 21
BC 2156.5 BP 4105.5	30.8 ± 2.2	3746 ± 17	BC 2416.5 BP 4365.5	43.1 ± 2.8	3903 ± 22
BC 2166.5 BP 4115.5	34.6 ± 3.4	3726 ± 27	BC 2426.5 BP 4375.5	49.4 ± 3.4	3865 ± 27
BC 2176.5 BP 4125.5	35.5 ± 2.2	3729 ± 18	BC 2436.5 BP 4385.5	46.5 ± 1.8	3897 ± 14
BC 2186.5 BP 4135.5	37.6 ± 1.9	3723 ± 15	BC 2446.5 BP 4395.5	50.5 ± 3.4	3876 ± 27
BC 2196.5 BP 4145.5	37.3 ± 1.9	3735 ± 15	BC 2466.5 BP 4415.5	50.0 ± 3.4	3899 ± 27
BC 2206.5 BP 4155.5	31.5 ± 2.8	3789 ± 22	BC 2476.5 BP 4425.5	39.1 ± 2.4	3993 ± 20
BC 2216.5 BP 4165.5	32.2 ± 2.4	3794 ± 19	BC 2486.5 BP 4435.5	43.4 ± 2.5	3969 ± 20
BC 2226.5 BP 4175.5	35.7 ± 2.0	3776 ± 16	BC 2496.5 BP 4445.5	38.0 ± 3.6	4021 ± 29
BC 2236.5 BP 4185.5	30.4 ± 3.8	3827 ± 30			
BC 2246.5 BP 4195.5	32.6 ± 2.5	3820 ± 20			
BC 2256.5 BP 4205.5	38.8 ± 2.3	3781 ± 19			
BC 2266.5 BP 4215.5	42.2 ± 3.4	3765 ± 27			

TABLE 2

Lab code	Species	Dendro-ages used	Wood treatment*	Location	Dendro- chronology
C	Douglas fir	AD 1915–1954 (single year)	CL	Olympic Peninsula, WA (47° 46' N, 124° 06' W)	Ring counted only
A	Douglas fir	AD 1820–1913 (single year)	DV**	Olympic Peninsula, WA (47° 46' N, 124° 06' W)	Ring counted only
B	Douglas fir	AD 1690–1719 AD 1790–1819 (single year)	DV	Mt Rainier Natl Park, WA (46° 45' N, 121° 45' W)	Ring counted only
F	Douglas fir	AD 1510–1699 (single year)	DV	Coos Bay, OR (43° 07' N, 123° 40' W)	Ring counted only
		AD 1505–1935 (decadal)	DV†		
R	Douglas fir	AD 1305–1505 (decadal)	DV	Pierce County, WA (47°N 122°W)	Ring counted only
S	Douglas fir	AD 945–1315 (decadal)	DV	Shawnigan Lake, Vancouver Island, BC Canada (48° 40' N, 123° 40' W)	Cross-dated by M Parker <i>et al</i> , Western Products Forestry Vancouver, BC
RC	Sequoia	AD 265–935 (decadal)	DV	Sequoia Nat'l Park, CA (36.5° N, 118.5° W)	Cross-dated by H Garfinkel, University of Washington, Seattle
ECK	Oak	AD 705–765 (decadal)	DV	Northern Germany	Cross-dated by D Eckstein, University of Hamburg
SR	Sequoia	145 BC–AD 265 (decadal)	DV	Sequoia Natl Park, CA (36.5° N, 118.5° W)	Cross-dated by H Garfinkel
BK	Oak	2495 BC–AD 45 (decadal)	CL	Southern Germany	Cross-dated by B Becker, University of Hohenheim, Stuttgart, W Germany
PQ	Oak	625–515 BC (decadal)	CL	Ireland	Cross-dated by JR Pilcher, MGL Baillie and GW Pearson, University of Belfast, Northern Ireland

*CL = cellulose method, DV = De Vries method

**Cellulose duplicates run for AD 1836, 1837 and 1853

†Cellulose treatment AD 1505 and 1515

TABLE 3

The conversion of the radiocarbon ages to a series of ranges of cal AD/BC (and BP) dates is determined by the AD/BC intercepts of the sample radiocarbon age $\pm \sqrt{(\text{sample } \sigma)^2 + (\text{curve } \sigma)^2}$ and the calibration curve. Intercepts of the radiocarbon age with the calibration curve are listed to the right. Sample σ is the standard error in the radiocarbon age.

The youngest decade of the calibration curve is AD 1940–1949 with a conventional radiocarbon age of 181 years BP. The curve has been extended to 1954 using data from Stuiver and Quay (1981). Nuclear bomb testing increased atmospheric ^{14}C substantially in 1955, resulting in the “vertical” portion of the Fig 1A calibration curve. Intercepts with this vertical portion yield the 1955*s of the table. In those instances where cal AD/BC ages indicate “negative” BP ages the BP age is given as 0* BP.

For sample sigmas and ranges larger or equal to 100 years the data were rounded to the nearest decade. When the gap between two successive ranges was less than 10 years, the two ranges were combined to a single one.

Illustrations from Stuiver and Pearson (1986) and Pearson and Stuiver (1986) are given below.

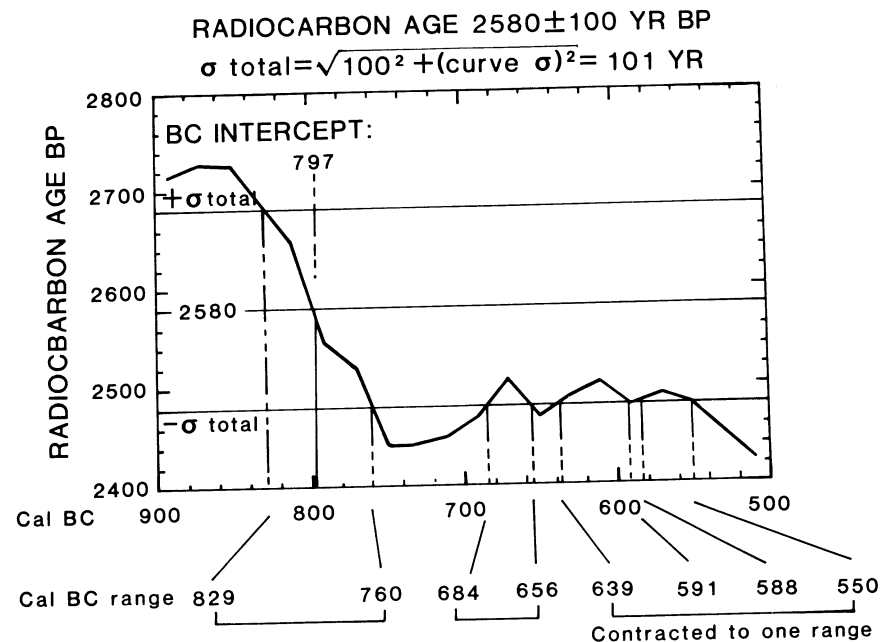
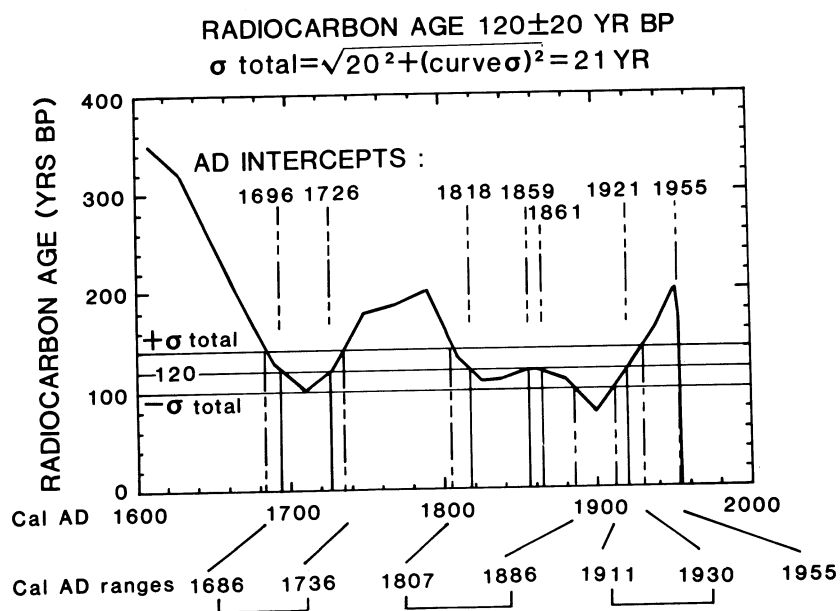


TABLE 3-A

RADIOCARBON AGE BP 80		CALIBRATED AGES:	
		cal AD 1897, 1908, 1955*	
		cal BP 53, 42, 0*	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1710-1717(240-233)	1883-1914(67-36)	
$\sigma = 40$	1693-1722(257-228)	1812-1922(138-28)	
$\sigma = 60$	1685-1730(265-220)	1808-1932(142-18)	
$\sigma = 80$	1677-1739(273-211)	1804-1939(146-11)	
$\sigma = 100$	1671-1747(279-203)	1761-1770(189-180)	1800-1955*(150-0*)
$\sigma = 120$	1670-1955*(280-0*)		
$\sigma = 160$	1650-1955*(300-0*)		
$\sigma = 200$	1640-1955*(310-0*)		
—○—			
RADIOCARBON AGE BP 100		CALIBRATED AGES:	
		cal AD 1711, 1716, 1885, 1913, 1955*	
		cal BP 239, 234, 65, 37, 0*	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1692-1722(258-228)	1811-1922(139-28)	
$\sigma = 40$	1684-1731(266-219)	1808-1932(142-18)	
$\sigma = 60$	1677-1739(273-211)	1804-1939(146-11)	
$\sigma = 80$	1671-1747(279-203)	1761-1770(189-180)	1799-1955*(151-0*)
$\sigma = 100$	1670-1955*(280-0*)		
$\sigma = 120$	1660-1955*(290-0*)		
$\sigma = 160$	1650-1955*(300-0*)		
$\sigma = 200$	1532-1541(418-409)	1640-1955*(310-0*)	
—○—			
RADIOCARBON AGE BP 120		CALIBRATED AGES:	
		cal AD 1693, 1722, 1812, 1859, 1869, 1921, 1955*	
		cal BP 257, 228, 138, 91, 81, 29, 0*	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1684-1731(266-219)	1808-1886(142-64)	1913-1932(37-18)
$\sigma = 40$	1677-1739(273-211)	1804-1939(146-11)	
$\sigma = 60$	1671-1747(279-203)	1761-1770(189-180)	1799-1955*(151-0*)
$\sigma = 80$	1665-1955*(285-0*)		
$\sigma = 100$	1660-1955*(290-0*)		
$\sigma = 120$	1650-1955*(300-0*)		
$\sigma = 160$	1640-1955*(310-0*)		
$\sigma = 200$	1525-1563(425-387)	1630-1955*(320-0*)	
—○—			
RADIOCARBON AGE BP 140		CALIBRATED AGES:	
		cal AD 1685, 1730, 1808, 1931, 1955*	
		cal BP 265, 220, 142, 19, 0*	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1676-1696(274-254)	1721-1740(229-210)	1803-1813(147-137)
	1853-1874(97-76)	1920-1939(30-11)	
$\sigma = 40$	1671-1748(279-202)	1761-1771(189-179)	1799-1886(151-64)
	1913-1955*(37-0*)		
$\sigma = 60$	1665-1955*(285-0*)		
$\sigma = 80$	1659-1955*(291-0*)		
$\sigma = 100$	1650-1955*(300-0*)		
$\sigma = 120$	1650-1955*(300-0*)		
$\sigma = 160$	1532-1541(418-409)	1640-1955*(310-0*)	
$\sigma = 200$	1516-1599(434-351)	1620-1955*(330-0*)	

TABLE 3-B

RADIOCARBON AGE BP 160		CALIBRATED AGES:	
		cal AD 1677, 1739, 1804, 1938, 1955*	
		cal BP 273, 211, 146, 12, 0*	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1670-1686(280-264)	1728-1748(222-202)	1760-1772(190-178)
	1798-1809(152-141)	1929-1955*(21-0*)	
$\sigma = 40$	1665-1694(285-256)	1721-1812(229-138)	1856-1872(94-78)
	1920-1955*(30-0*)		
$\sigma = 60$	1659-1886(291-64)	1913-1955*(37-0*)	
$\sigma = 80$	1653-1898(297-52)	1908-1955*(42-0*)	
$\sigma = 100$	1650-1955*(300-0*)		
$\sigma = 120$	1640-1955*(310-0*)		
$\sigma = 160$	1525-1564(425-386)	1630-1955*(320-0*)	
$\sigma = 200$	1490-1955*(460-0*)		
—○—			
RADIOCARBON AGE BP 180		CALIBRATED AGES:	
		cal AD 1671, 1747, 1761, 1770, 1799, 1944, 1954	
		cal BP 279, 203, 189, 180, 151, 6, 0*	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1664-1679(286-271)	1737-1805(213-145)	1937-1955*(13-0*)
$\sigma = 40$	1658-1686(292-264)	1728-1808(222-142)	1929-1955*(21-0*)
$\sigma = 60$	1652-1694(298-256)	1721-1812(229-138)	1855-1872(95-78)
	1920-1955*(30-0*)		
$\sigma = 80$	1647-1886(303-64)	1913-1955*(37-0*)	
$\sigma = 100$	1640-1955*(310-0*)		
$\sigma = 120$	1532-1542(418-408)	1640-1955*(310-0*)	
$\sigma = 160$	1516-1599(434-351)	1620-1955*(330-0*)	
$\sigma = 200$	1480-1955*(470-0*)		
—○—			
RADIOCARBON AGE BP 200		CALIBRATED AGES:	
		cal AD 1665, 1784, 1787, 1951, 1952	
		cal BP 285, 166, 163, 0*, 0*	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1657-1673(293-277)	1745-1800(205-150)	1943-1955*(7-0*)
$\sigma = 40$	1652-1679(298-271)	1738-1804(212-146)	1938-1955*(12-0*)
$\sigma = 60$	1647-1686(303-264)	1729-1808(221-142)	1930-1955*(20-0*)
$\sigma = 80$	1642-1694(308-256)	1721-1812(229-138)	1856-1871(94-79)
	1920-1955*(30-0*)		
$\sigma = 100$	1532-1542(418-408)	1640-1890(310-60)	1913-1955*(37-0*)
$\sigma = 120$	1524-1564(426-386)	1630-1955*(320-0*)	
$\sigma = 160$	1490-1955*(460-0*)		
$\sigma = 200$	1450-1955*(500-0*)		

High-Precision Decadal Calibration of the Radiocarbon Time Scale, AD 1950–2500 BC

TABLE 3-C

RADIOCARBON AGE BP	220	CALIBRATED AGE:	cal AD 1659 cal BP 291
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1653-1666(297-284)	1783-1792(167-158)	1951-1952(0*)
$\sigma = 40$	1647-1671(303-279)	1747-1799(203-151)	1944-1954(6-0*)
$\sigma = 60$	1642-1678(308-272)	1739-1804(211-146)	1938-1955*(12-0*)
$\sigma = 80$	1532-1541(418-409)	1637-1685(313-265)	1730-1808(220-142)
	1931-1955*(19-0*)		
$\sigma = 100$	1525-1563(425-387)	1628-1694(322-256)	1722-1812(228-138)
	1858-1870(92-80)	1921-1955*(29-0*)	
$\sigma = 120$	1516-1599(434-351)	1620-1890(330-60)	1913-1955*(37-0*)
$\sigma = 160$	1480-1955*(470-0*)		
$\sigma = 200$	1440-1955*(510-0*)		

RADIOCARBON AGE BP	240	CALIBRATED AGE:	cal AD 1653 cal BP 297
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1647-1659(303-291)		
$\sigma = 40$	1642-1666(308-284)	1784-1790(166-160)	1951-1952(0*)
$\sigma = 60$	1532-1541(418-409)	1637-1671(313-279)	1747-1799(203-151)
	1944-1954(6-0*)		
$\sigma = 80$	1525-1563(425-387)	1628-1678(322-272)	1739-1804(211-146)
	1938-1955*(12-0*)		
$\sigma = 100$	1516-1599(434-351)	1618-1685(332-265)	1730-1808(220-142)
	1931-1955*(19-0*)		
$\sigma = 120$	1490-1690(460-260)	1722-1812(228-138)	1858-1870(92-80)
	1921-1955*(29-0*)		
$\sigma = 160$	1450-1900(500-50)	1908-1955*(42-0*)	
$\sigma = 200$	1440-1955*(510-0*)		

RADIOCARBON AGE BP	260	CALIBRATED AGE:	cal AD 1647 cal BP 303
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1642-1653(308-297)		
$\sigma = 40$	1532-1541(418-409)	1637-1659(313-291)	
$\sigma = 60$	1525-1563(425-387)	1628-1665(322-285)	1784-1789(166-161)
	1951-1952(0*)		
$\sigma = 80$	1516-1599(434-351)	1618-1671(332-279)	1747-1799(203-151)
	1944-1954(6-0*)		
$\sigma = 100$	1490-1680(460-270)	1739-1804(211-146)	1938-1955*(12-0*)
$\sigma = 120$	1480-1690(470-260)	1730-1808(220-142)	1931-1955*(19-0*)
$\sigma = 160$	1440-1890(510-60)	1913-1955*(37-0*)	
$\sigma = 200$	1430-1955*(520-0*)		

TABLE 3-D

RADIOCARBON AGE BP	280	CALIBRATED AGE:	cal AD 1642 cal BP 308
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1532-1542(418-408)	1637-1648(313-302)	
$\sigma = 40$	1525-1564(425-386)	1628-1653(322-297)	
$\sigma = 60$	1516-1599(434-351)	1617-1659(333-291)	
$\sigma = 80$	1490-1665(460-285)	1784-1789(166-161)	1951-1952(0*)
$\sigma = 100$	1480-1670(470-280)	1747-1799(203-151)	1944-1954(6-0*)
$\sigma = 120$	1450-1680(500-270)	1739-1804(211-146)	1938-1955*(12-0*)
$\sigma = 160$	1440-1690(510-260)	1722-1812(228-138)	1858-1869(92-81)
	1921-1955*(29-0*)		
$\sigma = 200$	1430-1900(520-50)	1908-1955*(42-0*)	

RADIOCARBON AGE BP	300	CALIBRATED AGES:	cal AD 1532, 1541, 1637 cal BP 418, 409, 313
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Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1524-1564(426-386)	1628-1642(322-308)	
$\sigma = 40$	1516-1599(434-351)	1617-1648(333-302)	
$\sigma = 60$	1490-1653(460-297)		
$\sigma = 80$	1476-1659(474-291)		
$\sigma = 100$	1450-1670(500-280)	1784-1788(166-162)	1951-1952(0*)
$\sigma = 120$	1440-1670(510-280)	1747-1799(203-151)	1944-1954(6-0*)
$\sigma = 160$	1430-1680(520-270)	1730-1808(220-142)	1931-1955*(19-0*)
$\sigma = 200$	1420-1890(530-60)	1913-1955*(37-0*)	

RADIOCARBON AGE BP	320	CALIBRATED AGES:	cal AD 1525, 1563, 1628 cal BP 425, 387, 322
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Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1516-1599(434-351)	1617-1637(333-313)	
$\sigma = 40$	1490-1642(460-308)		
$\sigma = 60$	1476-1648(474-302)		
$\sigma = 80$	1450-1653(500-297)		
$\sigma = 100$	1440-1660(510-290)		
$\sigma = 120$	1440-1670(510-280)	1784-1788(166-162)	1951-1952(0*)
$\sigma = 160$	1430-1680(520-270)	1739-1804(211-146)	1938-1955*(12-0*)
$\sigma = 200$	1410-1690(540-260)	1722-1812(228-138)	1859-1869(91-81)
	1921-1955*(29-0*)		

RADIOCARBON AGE BP	340	CALIBRATED AGES:	cal AD 1516, 1599, 1618 cal BP 434, 351, 332
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Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1490-1525(460-425)	1563-1629(387-321)	
$\sigma = 40$	1476-1637(474-313)		
$\sigma = 60$	1450-1642(500-308)		
$\sigma = 80$	1443-1647(507-303)		
$\sigma = 100$	1440-1650(510-300)		
$\sigma = 120$	1430-1660(520-290)		
$\sigma = 160$	1420-1670(530-280)	1747-1799(203-151)	1944-1954(6-0*)
$\sigma = 200$	1410-1680(540-270)	1730-1808(220-142)	1931-1955*(19-0*)

TABLE 3-E

RADIOCARBON AGE BP 360		CALIBRATED AGE:	
		cal AD 1490	
		cal BP 460	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1467-1519(483-431)	1595-1621(355-329)	
$\sigma = 40$	1449-1526(501-424)	1561-1630(389-320)	
$\sigma = 60$	1443-1637(507-313)		
$\sigma = 80$	1439-1643(511-307)		
$\sigma = 100$	1430-1650(520-300)		
$\sigma = 120$	1430-1650(520-300)		
$\sigma = 160$	1410-1670(540-280)	1783-1792(167-158)	1951-1952(0*)
$\sigma = 200$	1333-1339(617-611)	1400-1680(550-270)	1739-1804(211-146)
	1938-1955*(12-0*)		

RADIOCARBON AGE BP 380		CALIBRATED AGE:	
		cal AD 1476	
		cal BP 474	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1447-1494(503-456)		
$\sigma = 40$	1442-1518(508-432)	1596-1620(354-330)	
$\sigma = 60$	1438-1526(512-424)	1561-1630(389-320)	
$\sigma = 80$	1434-1637(516-313)		
$\sigma = 100$	1430-1640(520-310)		
$\sigma = 120$	1420-1650(530-300)		
$\sigma = 160$	1410-1660(540-290)		
$\sigma = 200$	1329-1347(621-603)	1390-1670(560-280)	1746-1799(204-151)
	1944-1954(6-0*)		

RADIOCARBON AGE BP 400		CALIBRATED AGE:	
		cal AD 1451	
		cal BP 499	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1442-1485(508-465)		
$\sigma = 40$	1438-1492(512-458)		
$\sigma = 60$	1434-1517(516-433)	1598-1619(352-331)	
$\sigma = 80$	1428-1525(522-425)	1562-1629(388-321)	
$\sigma = 100$	1420-1640(530-310)		
$\sigma = 120$	1410-1640(540-310)		
$\sigma = 160$	1333-1339(617-611)	1400-1650(550-300)	
$\sigma = 200$	1326-1365(624-585)	1390-1670(560-280)	1784-1790(166-160)
	1951-1952(0*)		

RADIOCARBON AGE BP 420		CALIBRATED AGE:	
		cal AD 1443	
		cal BP 507	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1437-1454(513-496)		
$\sigma = 40$	1433-1484(517-466)		
$\sigma = 60$	1428-1492(522-458)		
$\sigma = 80$	1421-1517(529-433)	1597-1619(353-331)	
$\sigma = 100$	1410-1530(540-420)	1562-1629(388-321)	
$\sigma = 120$	1410-1640(540-310)		
$\sigma = 160$	1329-1347(621-603)	1390-1650(560-300)	
$\sigma = 200$	1314-1369(636-581)	1390-1660(560-290)	

TABLE 3-F

RADIOCARBON AGE BP 440		CALIBRATED AGE:	
		cal AD 1439	
		cal BP 511	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1432-1445(518-505)		
$\sigma = 40$	1427-1453(523-497)		
$\sigma = 60$	1421-1481(529-469)		
$\sigma = 80$	1414-1491(536-459)		
$\sigma = 100$	1410-1520(540-430)	1598-1619(352-331)	
$\sigma = 120$	1333-1339(617-611)	1400-1530(550-420)	1562-1629(388-321)
$\sigma = 160$	1325-1366(625-584)	1390-1640(560-310)	
$\sigma = 200$	1300-1650(650-300)		

RADIOCARBON AGE BP 460		CALIBRATED AGE:	
		cal AD 1435	
		cal BP 515	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1426-1441(524-509)		
$\sigma = 40$	1420-1444(530-506)		
$\sigma = 60$	1414-1452(536-498)		
$\sigma = 80$	1409-1480(541-470)		
$\sigma = 100$	1333-1339(617-611)	1400-1491(550-459)	
$\sigma = 120$	1329-1347(621-603)	1390-1520(560-430)	1598-1619(352-331)
$\sigma = 160$	1314-1369(636-581)	1390-1640(560-310)	
$\sigma = 200$	1280-1650(670-300)		

RADIOCARBON AGE BP 480		CALIBRATED AGE:	
		cal AD 1429	
		cal BP 521	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1419-1437(531-513)		
$\sigma = 40$	1414-1440(536-510)		
$\sigma = 60$	1409-1444(541-506)		
$\sigma = 80$	1333-1340(617-610)	1399-1452(551-498)	
$\sigma = 100$	1329-1347(621-603)	1392-1480(558-470)	
$\sigma = 120$	1325-1366(625-584)	1390-1490(560-460)	
$\sigma = 160$	1300-1530(650-420)	1562-1629(388-321)	
$\sigma = 200$	1280-1640(670-310)		

RADIOCARBON AGE BP 500		CALIBRATED AGE:	
		cal AD 1422	
		cal BP 528	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1413-1431(537-519)		
$\sigma = 40$	1409-1436(541-514)		
$\sigma = 60$	1333-1340(617-610)	1398-1440(552-510)	
$\sigma = 80$	1329-1348(621-602)	1392-1444(558-506)	
$\sigma = 100$	1325-1366(625-584)	1389-1451(561-499)	
$\sigma = 120$	1313-1369(637-581)	1386-1479(564-471)	
$\sigma = 160$	1280-1520(670-430)	1598-1618(352-332)	
$\sigma = 200$	1280-1640(670-310)		

TABLE 3-G

RADIOCARBON AGE BP 520 CALIBRATED AGE: cal AD 1415
cal BP 535

Sample σ and cal AD(cal BP) ranges:

σ = 20	1408-1425(542-525)	
σ = 40	1333-1341(617-609)	1396-1430(554-520)
σ = 60	1329-1348(621-602)	1392-1435(558-515)
σ = 80	1325-1366(625-584)	1389-1440(561-510)
σ = 100	1313-1370(637-580)	1386-1444(564-506)
σ = 120	1300-1450(650-500)	
σ = 160	1280-1490(670-460)	
σ = 200	1280-1530(670-420)	1563-1629(387-321)

RADIOCARBON AGE BP 540 CALIBRATED AGE: cal AD 1410
cal BP 540

Sample σ and cal AD(cal BP) ranges:

σ = 20	1332-1342(618-608)	1394-1418(556-532)
σ = 40	1329-1348(621-602)	1392-1424(558-526)
σ = 60	1325-1366(625-584)	1389-1430(561-520)
σ = 80	1312-1370(638-580)	1386-1435(564-515)
σ = 100	1300-1440(650-510)	
σ = 120	1280-1440(670-510)	
σ = 160	1280-1480(670-470)	
σ = 200	1280-1520(670-430)	1598-1618(352-332)

RADIOCARBON AGE BP 560 CALIBRATED AGES: cal AD 1334, 1338, 1403
cal BP 616, 612, 547

Sample σ and cal AD(cal BP) ranges:

σ = 20	1328-1349(622-601)	1392-1411(558-539)
σ = 40	1325-1366(625-584)	1389-1416(561-534)
σ = 60	1312-1370(638-580)	1386-1423(564-527)
σ = 80	1299-1429(651-521)	
σ = 100	1280-1440(670-510)	
σ = 120	1280-1440(670-510)	
σ = 160	1280-1450(670-500)	
σ = 200	1260-1490(690-460)	

RADIOCARBON AGE BP 580 CALIBRATED AGES: cal AD 1330, 1347, 1393
cal BP 620, 603, 557

Sample σ and cal AD(cal BP) ranges:

σ = 20	1323-1367(627-583)	1388-1406(562-544)
σ = 40	1310-1370(640-580)	1386-1411(564-539)
σ = 60	1299-1416(651-534)	
σ = 80	1284-1423(666-527)	
σ = 100	1280-1430(670-520)	
σ = 120	1280-1440(670-510)	
σ = 160	1280-1440(670-510)	
σ = 200	1260-1480(690-470)	

TABLE 3-H

RADIOCARBON AGE BP 600 CALIBRATED AGES: cal AD 1326, 1353, 1363, 1365, 1389
cal BP 624, 597, 587, 585, 561

Sample σ and cal AD(cal BP) ranges:

σ = 20	1306-1331(644-619)	1345-1370(605-580)	1385-1394(565-556)
σ = 40	1298-1406(652-544)		
σ = 60	1284-1410(666-540)		
σ = 80	1282-1415(668-535)		
σ = 100	1280-1420(670-530)		
σ = 120	1280-1430(670-520)		
σ = 160	1260-1440(690-510)		
σ = 200	1229-1244(721-706)	1260-1450(690-500)	

RADIOCARBON AGE BP 620 CALIBRATED AGES: cal AD 1315, 1369, 1386
cal BP 635, 581, 564

Sample σ and cal AD(cal BP) ranges:

σ = 20	1297-1327(653-623)	1351-1390(599-560)
σ = 40	1284-1330(666-620)	1346-1393(604-557)
σ = 60	1282-1405(668-545)	
σ = 80	1280-1410(670-540)	
σ = 100	1280-1420(670-530)	
σ = 120	1280-1420(670-530)	
σ = 160	1260-1430(690-520)	
σ = 200	1220-1440(730-510)	

RADIOCARBON AGE BP 640 CALIBRATED AGES: cal AD 1300, 1373, 1380
cal BP 650, 577, 570

Sample σ and cal AD(cal BP) ranges:

σ = 20	1284-1319(666-631)	1368-1387(582-563)
σ = 40	1282-1326(668-624)	1352-1390(598-560)
σ = 60	1280-1330(670-620)	1346-1393(604-557)
σ = 80	1278-1405(672-545)	
σ = 100	1280-1410(670-540)	
σ = 120	1260-1420(690-530)	
σ = 160	1229-1244(721-706)	1260-1430(690-520)
σ = 200	1210-1440(740-510)	

RADIOCARBON AGE BP 660 CALIBRATED AGE: cal AD 1284
cal BP 666

Sample σ and cal AD(cal BP) ranges:

σ = 20	1281-1304(669-646)	1371-1384(579-566)
σ = 40	1280-1319(670-631)	1368-1387(582-563)
σ = 60	1278-1326(672-624)	1352-1390(598-560)
σ = 80	1276-1330(674-620)	1346-1393(604-557)
σ = 100	1260-1410(690-540)	
σ = 120	1260-1410(690-540)	
σ = 160	1220-1420(730-530)	
σ = 200	1165-1165(785-785)	1190-1430(760-520)

TABLE 3-I

RADIOCARBON AGE BP 680 CALIBRATED AGE: cal AD 1282
cal BP 668

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	1280-1296(670-654)	
$\sigma = 40$	1278-1302(672-648)	1372-1382(578-568)
$\sigma = 60$	1276-1318(674-632)	1368-1387(582-563)
$\sigma = 80$	1262-1326(688-624)	1352-1390(598-560)
$\sigma = 100$	1259-1330(691-620)	1346-1393(604-557)
$\sigma = 120$	1230-1410(720-540)	
$\sigma = 160$	1210-1420(740-530)	
$\sigma = 200$	1160-1430(790-520)	

RADIOCARBON AGE BP 700 CALIBRATED AGE: cal AD 1280
cal BP 670

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	1278-1283(672-667)	
$\sigma = 40$	1276-1285(674-665)	
$\sigma = 60$	1262-1301(688-649)	1372-1381(578-569)
$\sigma = 80$	1259-1317(691-633)	1369-1387(581-563)
$\sigma = 100$	1228-1326(722-624)	1352-1390(598-560)
$\sigma = 120$	1220-1330(730-620)	1346-1393(604-557)
$\sigma = 160$	1165-1166(785-784)	1190-1410(760-540)
$\sigma = 200$	1132-1136(818-814)	1160-1420(790-530)

RADIOCARBON AGE BP 720 CALIBRATED AGE: cal AD 1279
cal BP 671

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	1264-1281(686-669)	
$\sigma = 40$	1262-1283(688-667)	
$\sigma = 60$	1259-1285(691-665)	
$\sigma = 80$	1227-1301(723-649)	1372-1381(578-569)
$\sigma = 100$	1218-1317(732-633)	1369-1387(581-563)
$\sigma = 120$	1210-1330(740-620)	1352-1390(598-560)
$\sigma = 160$	1160-1410(790-540)	
$\sigma = 200$	1043-1091(907-859)	1122-1139(828-811) 1150-1420(800-530)

RADIOCARBON AGE BP 740 CALIBRATED AGE: cal AD 1277
cal BP 673

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	1261-1279(689-671)	
$\sigma = 40$	1258-1281(692-669)	
$\sigma = 60$	1227-1283(723-667)	
$\sigma = 80$	1218-1285(732-665)	
$\sigma = 100$	1211-1301(739-649)	1372-1381(578-569)
$\sigma = 120$	1165-1166(785-784)	1190-1320(760-630) 1369-1387(581-563)
$\sigma = 160$	1132-1136(818-814)	1160-1330(790-620) 1346-1393(604-557)
$\sigma = 200$	1040-1410(910-540)	

TABLE 3-J

RADIOCARBON AGE BP 760 CALIBRATED AGE: cal AD 1263
cal BP 687

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	1258-1278(692-672)	
$\sigma = 40$	1225-1279(725-671)	
$\sigma = 60$	1218-1281(732-669)	
$\sigma = 80$	1211-1283(739-667)	
$\sigma = 100$	1165-1167(785-783)	1191-1284(759-666)
$\sigma = 120$	1160-1300(790-650)	1373-1381(577-569)
$\sigma = 160$	1043-1091(907-859)	1122-1139(828-811) 1150-1330(800-620)
$\sigma = 200$	1030-1400(920-550)	

RADIOCARBON AGE BP 780 CALIBRATED AGE: cal AD 1259
cal BP 691

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	1223-1276(727-674)	
$\sigma = 40$	1217-1277(733-673)	
$\sigma = 60$	1210-1279(740-671)	
$\sigma = 80$	1165-1167(785-783)	1191-1281(759-669)
$\sigma = 100$	1160-1280(790-670)	
$\sigma = 120$	1132-1136(818-814)	1160-1280(790-670)
$\sigma = 160$	1040-1320(910-630)	1369-1386(581-564)
$\sigma = 200$	1020-1330(930-620)	1346-1393(604-557)

RADIOCARBON AGE BP 800 CALIBRATED AGES: cal AD 1230, 1243, 1256
cal BP 720, 707, 694

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	1216-1261(734-689)	
$\sigma = 40$	1210-1275(740-675)	
$\sigma = 60$	1164-1168(786-782)	1190-1277(760-673)
$\sigma = 80$	1160-1279(790-671)	
$\sigma = 100$	1131-1136(819-814)	1160-1280(790-670)
$\sigma = 120$	1043-1091(907-859)	1122-1139(828-811) 1150-1280(800-670)
$\sigma = 160$	1030-1300(920-650)	1373-1380(577-570)
$\sigma = 200$	1003-1008(947-942)	1020-1330(930-620) 1353-1390(597-560)

RADIOCARBON AGE BP 820 CALIBRATED AGE: cal AD 1219
cal BP 731

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	1208-1257(742-693)	
$\sigma = 40$	1164-1169(786-781)	1190-1260(760-690)
$\sigma = 60$	1160-1263(790-687)	1274-1275(676-675)
$\sigma = 80$	1075-1076(875-874)	1131-1136(819-814) 1155-1277(795-673)
$\sigma = 100$	1043-1091(907-859)	1121-1139(829-811) 1150-1280(800-670)
$\sigma = 120$	1040-1280(910-670)	
$\sigma = 160$	1020-1280(930-670)	
$\sigma = 200$	1000-1320(950-630)	1369-1386(581-564)

High-Precision Decadal Calibration of the Radiocarbon Time Scale, AD 1950-2500 BC

TABLE 3-K

RADIOCARBON AGE BP	840	CALIBRATED AGE:	cal AD 1212
			cal BP 738
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1163-1173(787-777)	1189-1223(761-727)	
$\sigma = 40$	1159-1257(791-693)		
$\sigma = 60$	1074-1077(876-873)	1131-1136(819-814)	1155-1260(795-690)
$\sigma = 80$	1043-1091(907-859)	1121-1139(829-811)	1152-1263(798-687)
$\sigma = 100$	1040-1280(910-670)		
$\sigma = 120$	1030-1280(920-670)		
$\sigma = 160$	1003-1008(947-942)	1020-1280(930-670)	
$\sigma = 200$	990-1300(960-650)	1373-1380(577-570)	

RADIOCARBON AGE BP 860 CALIBRATED AGE: cal AD 1191
cal BP 759

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1159-1215(791-735)		
$\sigma = 40$	1073-1079(877-871)	1130-1137(820-813)	1155-1221(795-729)
$\sigma = 60$	1042-1092(908-858)	1121-1139(829-811)	1152-1256(798-694)
$\sigma = 80$	1036-1260(914-690)		
$\sigma = 100$	1030-1260(920-690)		
$\sigma = 120$	1020-1280(930-670)		
$\sigma = 160$	1000-1280(950-670)		
$\sigma = 200$	980-1280(970-670)		

RADIOCARBON AGE BP 880 CALIBRATED AGES: cal AD 1161, 1185
cal BP 789, 765

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1071-1084(879-866)	1127-1137(823-813)	1154-1207(796-743)
$\sigma = 40$	1042-1093(908-857)	1120-1139(830-811)	1152-1213(798-737)
$\sigma = 60$	1035-1221(915-729)		
$\sigma = 80$	1027-1256(923-694)		
$\sigma = 100$	1020-1260(930-690)		
$\sigma = 120$	1000-1260(950-690)		
$\sigma = 160$	990-1280(960-670)		
$\sigma = 200$	980-1280(970-670)		

RADIOCARBON AGE BP 900 CALIBRATED AGES: cal AD 1133, 1136, 1156
cal BP 817, 814, 794

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1041-1094(909-856)	1119-1140(831-810)	1151-1162(799-788)
	1176-1188(774-762)		
$\sigma = 40$	1035-1193(915-757)	1203-1206(747-744)	
$\sigma = 60$	1027-1213(923-737)		
$\sigma = 80$	1022-1220(928-730)		
$\sigma = 100$	1000-1260(950-690)		
$\sigma = 120$	1000-1260(950-690)		
$\sigma = 160$	980-1280(970-670)		
$\sigma = 200$	906-916(1044-1034)	980-1280(970-670)	

TABLE 3-L

RADIOCARBON AGE BP 920 CALIBRATED AGES: cal AD 1043, 1090, 1122, 1139, 1152
cal BP 907, 860, 828, 811, 798

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1034-1157(916-793)		
$\sigma = 40$	1027-1161(923-789)	1181-1186(769-764)	
$\sigma = 60$	1022-1192(928-758)		
$\sigma = 80$	1003-1008(947-942)	1018-1212(932-738)	
$\sigma = 100$	1000-1220(950-730)		
$\sigma = 120$	990-1230(960-720)	1241-1256(709-694)	
$\sigma = 160$	980-1260(970-690)		
$\sigma = 200$	898-920(1052-1030)	940-1280(1010-670)	

RADIOCARBON AGE BP 940 CALIBRATED AGES: cal AD 1037, 1142, 1149
cal BP 913, 808, 801

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1026-1067(924-883)	1087-1124(863-826)	1138-1153(812-797)
$\sigma = 40$	1022-1157(928-793)		
$\sigma = 60$	1003-1161(947-789)	1182-1186(768-764)	
$\sigma = 80$	999-1192(951-758)		
$\sigma = 100$	990-1210(960-740)		
$\sigma = 120$	980-1220(970-730)		
$\sigma = 160$	906-915(1044-1035)	980-1260(970-690)	
$\sigma = 200$	892-925(1058-1025)	940-1280(1010-670)	

RADIOCARBON AGE BP 960 CALIBRATED AGES: cal AD 1028, 1144, 1146
cal BP 922, 806, 804

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1021-1039(929-911)	1099-1117(851-833)	1141-1150(809-800)
$\sigma = 40$	1003-1066(947-884)	1088-1124(862-826)	1138-1153(812-797)
$\sigma = 60$	999-1157(951-793)		
$\sigma = 80$	994-1161(956-789)	1183-1186(767-764)	
$\sigma = 100$	980-1190(970-760)		
$\sigma = 120$	980-1210(970-740)		
$\sigma = 160$	898-920(1052-1030)	940-1230(1010-720)	1242-1256(708-694)
$\sigma = 200$	890-1260(1060-690)		

RADIOCARBON AGE BP 980 CALIBRATED AGE: cal AD 1023
cal BP 927

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	1002-1032(948-918)	1143-1147(807-803)	
$\sigma = 40$	998-1038(952-912)	1100-1117(850-833)	1141-1150(809-800)
$\sigma = 60$	993-1066(957-884)	1088-1124(862-826)	1138-1153(812-797)
$\sigma = 80$	984-1157(966-793)		
$\sigma = 100$	980-1160(970-790)	1182-1186(768-764)	
$\sigma = 120$	905-916(1045-1034)	980-1190(970-760)	
$\sigma = 160$	890-1220(1060-730)		
$\sigma = 200$	782-788(1168-1162)	812-816(1138-1134)	833-836(1117-1114)
	870-1260(1080-690)		

TABLE 3-M

TABLE 3-N

RADIOCARBON AGE BP 1000		CALIBRATED AGES:	
		cal AD	1004, 1008, 1019
		cal BP	946, 942, 931
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	997-1024(953-926)		
$\sigma = 40$	992-1031(958-919)	1144-1147(806-803)	
$\sigma = 60$	984-1038(966-912)	1102-1116(848-834)	1141-1150(809-800)
$\sigma = 80$	981-1044(969-906)	1089-1123(861-827)	1138-1153(812-797)
$\sigma = 100$	905-916(1045-1034)	980-1160(970-790)	
$\sigma = 120$	898-920(1052-1030)	940-1160(1010-790)	1182-1186(768-764)
$\sigma = 160$	890-1210(1060-740)		
$\sigma = 200$	780-790(1170-1160)	800-1230(1150-720)	1241-1256(709-694)

RADIOCARBON AGE BP 1020		CALIBRATED AGE:	
		cal AD	999
		cal BP	951

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	990-1020(960-930)		
$\sigma = 40$	984-1024(966-926)		
$\sigma = 60$	980-1030(970-920)	1144-1146(806-804)	
$\sigma = 80$	904-916(1046-1034)	977-1038(973-912)	1103-1116(847-834)
	1141-1149(809-801)		
$\sigma = 100$	898-921(1052-1029)	940-1040(1010-910)	1089-1123(861-827)
	1138-1153(812-797)		
$\sigma = 120$	890-1160(1060-790)		
$\sigma = 160$	782-788(1168-1162)	812-816(1138-1134)	833-837(1117-1113)
	870-1190(1080-760)		
$\sigma = 200$	780-1220(1170-730)		

RADIOCARBON AGE BP 1040		CALIBRATED AGE:	
		cal AD	995
		cal BP	955

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	983-1001(967-949)	1012-1016(938-934)	
$\sigma = 40$	980-1020(970-930)		
$\sigma = 60$	904-916(1046-1034)	977-1023(973-927)	
$\sigma = 80$	898-921(1052-1029)	941-1029(1009-921)	1144-1146(806-804)
$\sigma = 100$	890-1040(1060-910)	1103-1116(847-834)	1141-1149(809-801)
$\sigma = 120$	890-1040(1060-910)	1089-1123(861-827)	1138-1153(812-797)
$\sigma = 160$	780-790(1170-1160)	800-1160(1150-790)	1183-1186(767-764)
$\sigma = 200$	770-1210(1180-740)		

RADIOCARBON AGE BP 1060		CALIBRATED AGE:	
		cal AD	985
		cal BP	965

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	979-997(971-953)		
$\sigma = 40$	904-917(1046-1033)	976-1000(974-950)	1013-1016(937-934)
$\sigma = 60$	897-921(1053-1029)	941-1019(1009-931)	
$\sigma = 80$	891-1023(1059-927)		
$\sigma = 100$	890-1030(1060-920)	1144-1146(806-804)	
$\sigma = 120$	782-788(1168-1162)	812-816(1138-1134)	833-837(1117-1113)
	870-1040(1080-910)	1104-1116(846-834)	1141-1149(809-801)
$\sigma = 160$	780-1160(1170-790)		
$\sigma = 200$	727-745(1223-1205)	770-1190(1180-760)	

RADIOCARBON AGE BP 1080		CALIBRATED AGE:	
		cal AD	981
		cal BP	969

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	902-918(1048-1032)	957-989(993-961)	
$\sigma = 40$	897-921(1053-1029)	940-996(1010-954)	
$\sigma = 60$	891-1000(1059-950)	1014-1015(936-935)	
$\sigma = 80$	885-1019(1065-931)		
$\sigma = 100$	782-788(1168-1162)	811-817(1139-1133)	832-837(1118-1113)
	870-1020(1080-930)		
$\sigma = 120$	780-791(1170-1159)	800-1030(1150-920)	1144-1146(806-804)
$\sigma = 160$	770-1040(1180-910)	1089-1123(861-827)	1138-1153(812-797)
$\sigma = 200$	689-751(1261-1199)	760-1160(1190-790)	1183-1185(767-765)

RADIOCARBON AGE BP 1100		CALIBRATED AGES:	
		cal AD	910, 915, 977
		cal BP	1040, 1035, 973

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	895-922(1055-1028)	939-983(1011-967)	
$\sigma = 40$	890-988(1060-962)		
$\sigma = 60$	885-996(1065-954)		
$\sigma = 80$	782-788(1168-1162)	810-817(1140-1133)	832-837(1118-1113)
	866-1000(1084-950)	1014-1015(936-935)	
$\sigma = 100$	780-791(1170-1159)	800-1020(1150-930)	
$\sigma = 120$	780-1020(1170-930)		
$\sigma = 160$	695-696(1255-1254)	727-745(1223-1205)	770-1040(1180-910)
	1104-1115(846-835)	1141-1149(809-801)	
$\sigma = 200$	680-1160(1270-790)		

RADIOCARBON AGE BP 1120		CALIBRATED AGES:	
		cal AD	899, 920, 942
		cal BP	1051, 1030, 1008

Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	889-979(1061-971)		
$\sigma = 40$	784-786(1166-1164)	878-982(1072-968)	
$\sigma = 60$	782-788(1168-1162)	809-818(1141-1132)	831-838(1119-1112)
	866-987(1084-963)		
$\sigma = 80$	779-791(1171-1159)	802-996(1148-954)	
$\sigma = 100$	780-1000(1170-950)	1014-1015(936-935)	
$\sigma = 120$	770-1020(1180-930)		
$\sigma = 160$	689-751(1261-1199)	760-1030(1190-920)	1144-1146(806-804)
$\sigma = 200$	670-1040(1280-910)	1089-1123(861-827)	1138-1153(812-797)

TABLE 3-O

RADIOCARBON AGE BP 1140 CALIBRATED AGES: cal AD 892, 925, 936
cal BP 1058, 1025, 1014

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	784-786(1166-1164)	873-902(1077-1048)	917-976(1033-974)
$\sigma = 40$	782-788(1168-1162)	806-819(1144-1131)	830-838(1120-1112)
	864-979(1086-971)		
$\sigma = 60$	779-791(1171-1159)	801-982(1149-968)	
$\sigma = 80$	777-986(1173-964)		
$\sigma = 100$	770-1000(1180-950)		
$\sigma = 120$	694-696(1256-1254)	726-745(1224-1205)	770-1000(1180-950)
$\sigma = 160$	680-1020(1270-930)		
$\sigma = 200$	660-1040(1290-910)	1104-1115(846-835)	1141-1149(809-801)

RADIOCARBON AGE BP 1160 CALIBRATED AGE: cal AD 886
cal BP 1064

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	781-789(1169-1161)	804-840(1146-1110)	860-896(1090-1054)
	922-940(1028-1010)		
$\sigma = 40$	779-901(1171-1049)	918-944(1032-1006)	
$\sigma = 60$	776-978(1174-972)		
$\sigma = 80$	773-982(1177-968)		
$\sigma = 100$	694-696(1256-1254)	726-745(1224-1205)	770-990(1180-960)
$\sigma = 120$	688-751(1262-1199)	760-1000(1190-950)	
$\sigma = 160$	670-1020(1280-930)		
$\sigma = 200$	660-1030(1290-920)	1144-1146(806-804)	

RADIOCARBON AGE BP 1180 CALIBRATED AGES: cal AD 782, 788, 814, 816, 833,
836, 868
cal BP 1168, 1162, 1136, 1134, 1117,
1114, 1082

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	779-889(1171-1061)		
$\sigma = 40$	776-894(1174-1056)	923-937(1027-1013)	
$\sigma = 60$	773-900(1177-1050)	919-943(1031-1007)	
$\sigma = 80$	694-696(1256-1254)	726-745(1224-1205)	768-978(1182-972)
$\sigma = 100$	689-751(1261-1199)	760-980(1190-970)	
$\sigma = 120$	680-990(1270-960)		
$\sigma = 160$	660-1000(1290-950)		
$\sigma = 200$	650-1020(1300-930)		

TABLE 3-P

RADIOCARBON AGE BP 1200 CALIBRATED AGES: cal AD 780, 790, 802, 842, 853
cal BP 1170, 1160, 1148, 1108, 1097

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	776-873(1174-1077)		
$\sigma = 40$	773-888(1177-1062)		
$\sigma = 60$	694-696(1256-1254)	726-745(1224-1205)	768-893(1182-1057)
	924-937(1026-1013)		
$\sigma = 80$	689-751(1261-1199)	762-899(1188-1051)	919-943(1031-1007)
$\sigma = 100$	680-980(1270-970)		
$\sigma = 120$	670-980(1280-970)		
$\sigma = 160$	660-1000(1290-950)		
$\sigma = 200$	640-1020(1310-930)		

RADIOCARBON AGE BP 1220 CALIBRATED AGES: cal AD 777, 793, 798
cal BP 1173, 1157, 1152

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	772-804(1178-1146)	822-828(1128-1122)	840-859(1110-1091)
$\sigma = 40$	694-696(1256-1254)	715-746(1235-1204)	768-870(1182-1080)
$\sigma = 60$	688-751(1262-1199)	762-887(1188-1063)	
$\sigma = 80$	681-893(1269-1057)	924-936(1026-1014)	
$\sigma = 100$	670-900(1280-1050)	920-942(1030-1008)	
$\sigma = 120$	660-980(1290-970)		
$\sigma = 160$	650-990(1300-960)		
$\sigma = 200$	640-1000(1310-950)		

RADIOCARBON AGE BP 1240 CALIBRATED AGE: cal AD 774
cal BP 1176

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	694-697(1256-1253)	714-746(1236-1204)	768-778(1182-1172)
	792-799(1158-1151)		
$\sigma = 40$	688-751(1262-1199)	762-803(1188-1147)	824-826(1126-1124)
	842-856(1108-1094)		
$\sigma = 60$	681-869(1269-1081)		
$\sigma = 80$	672-887(1278-1063)		
$\sigma = 100$	660-890(1290-1060)	924-936(1026-1014)	
$\sigma = 120$	660-900(1290-1050)	920-942(1030-1008)	
$\sigma = 160$	640-980(1310-970)		
$\sigma = 200$	608-627(1342-1323)	640-1000(1310-950)	

RADIOCARBON AGE BP 1260 CALIBRATED AGES: cal AD 695, 728, 744, 769
cal BP 1255, 1222, 1206, 1181

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	688-775(1262-1175)		
$\sigma = 40$	681-778(1269-1172)	793-799(1157-1151)	
$\sigma = 60$	672-803(1278-1147)	824-826(1126-1124)	842-855(1108-1095)
$\sigma = 80$	664-869(1286-1081)		
$\sigma = 100$	660-890(1290-1060)		
$\sigma = 120$	650-890(1300-1060)	924-936(1026-1014)	
$\sigma = 160$	640-980(1310-970)		
$\sigma = 200$	600-980(1350-970)		

TABLE 3-Q

RADIOCARBON AGE BP 1280 CALIBRATED AGES: cal AD 689, 702, 708, 751, 763
cal BP 1261, 1248, 1242, 1199, 1187

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	679-771(1271-1179)		
$\sigma = 40$	671-775(1279-1175)		
$\sigma = 60$	664-777(1286-1173)	793-799(1157-1151)	
$\sigma = 80$	656-803(1294-1147)	824-825(1126-1125)	842-855(1108-1095)
$\sigma = 100$	650-870(1300-1080)		
$\sigma = 120$	640-890(1310-1060)		
$\sigma = 160$	608-627(1342-1323)	640-900(1310-1050)	920-942(1030-1008)
$\sigma = 200$	580-980(1370-970)		

RADIOCARBON AGE BP 1300 CALIBRATED AGE: cal AD 682
cal BP 1268

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	668-713(1282-1237)	747-767(1203-1183)	
$\sigma = 40$	662-771(1288-1179)		
$\sigma = 60$	655-775(1295-1175)		
$\sigma = 80$	646-778(1304-1172)	792-799(1158-1151)	
$\sigma = 100$	640-800(1310-1150)	824-826(1126-1124)	841-856(1109-1094)
$\sigma = 120$	640-870(1310-1080)		
$\sigma = 160$	600-890(1350-1060)	924-936(1026-1014)	
$\sigma = 200$	560-980(1390-970)		

RADIOCARBON AGE BP 1320 CALIBRATED AGE: cal AD 672
cal BP 1278

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	660-687(1290-1263)	753-759(1197-1191)	
$\sigma = 40$	653-711(1297-1239)	748-766(1202-1184)	
$\sigma = 60$	645-770(1305-1180)		
$\sigma = 80$	643-775(1307-1175)		
$\sigma = 100$	640-780(1310-1170)	793-799(1157-1151)	
$\sigma = 120$	610-800(1340-1150)	824-826(1126-1124)	842-856(1108-1094)
$\sigma = 160$	580-890(1370-1060)		
$\sigma = 200$	540-900(1410-1050)	920-942(1030-1008)	

RADIOCARBON AGE BP 1340 CALIBRATED AGE: cal AD 665
cal BP 1285

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	651-678(1299-1272)		
$\sigma = 40$	645-686(1305-1264)		
$\sigma = 60$	642-710(1308-1240)	749-765(1201-1185)	
$\sigma = 80$	640-770(1310-1180)		
$\sigma = 100$	610-770(1340-1180)		
$\sigma = 120$	600-780(1350-1170)	793-799(1157-1151)	
$\sigma = 160$	560-870(1390-1080)		
$\sigma = 200$	540-890(1410-1060)	924-936(1026-1014)	

TABLE 3-R

RADIOCARBON AGE BP 1360 CALIBRATED AGE: cal AD 656
cal BP 1294

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	644-669(1306-1281)		
$\sigma = 40$	642-675(1308-1275)		
$\sigma = 60$	640-685(1310-1265)		
$\sigma = 80$	605-690(1345-1260)	701-710(1249-1240)	749-765(1201-1185)
$\sigma = 100$	600-730(1350-1220)	741-770(1209-1180)	
$\sigma = 120$	580-770(1370-1180)		
$\sigma = 160$	540-800(1410-1150)	824-825(1126-1125)	842-855(1108-1095)
$\sigma = 200$	434-451(1516-1499)	469-500(1481-1450)	530-890(1420-1060)

RADIOCARBON AGE BP 1380 CALIBRATED AGE: cal AD 648
cal BP 1302

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	641-662(1309-1288)		
$\sigma = 40$	639-668(1311-1282)		
$\sigma = 60$	605-674(1345-1276)		
$\sigma = 80$	599-684(1351-1266)		
$\sigma = 100$	580-690(1370-1260)	701-709(1249-1241)	750-765(1200-1185)
$\sigma = 120$	560-730(1390-1220)	741-770(1209-1180)	
$\sigma = 160$	540-780(1410-1170)	793-799(1157-1151)	
$\sigma = 200$	430-870(1520-1080)		

RADIOCARBON AGE BP 1400 CALIBRATED AGE: cal AD 643
cal BP 1307

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	639-652(1311-1298)		
$\sigma = 40$	604-659(1346-1291)		
$\sigma = 60$	599-666(1351-1284)		
$\sigma = 80$	576-674(1374-1276)		
$\sigma = 100$	560-680(1390-1270)		
$\sigma = 120$	540-690(1410-1260)	701-709(1249-1241)	750-764(1200-1186)
$\sigma = 160$	434-451(1516-1499)	469-500(1481-1450)	530-770(1420-1180)
$\sigma = 200$	430-780(1520-1170)	790-803(1160-1147)	842-854(1108-1096)

RADIOCARBON AGE BP 1420 CALIBRATED AGE: cal AD 640
cal BP 1310

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	603-645(1347-1305)		
$\sigma = 40$	599-650(1351-1300)		
$\sigma = 60$	576-658(1374-1292)		
$\sigma = 80$	556-666(1394-1284)		
$\sigma = 100$	540-670(1410-1280)		
$\sigma = 120$	540-680(1410-1270)		
$\sigma = 160$	430-730(1520-1220)	742-770(1208-1180)	
$\sigma = 200$	420-780(1530-1170)	793-798(1157-1152)	

TABLE 3-S

RADIOCARBON AGE BP 1440 CALIBRATED AGES: cal AD 608, 627, 638
cal BP 1342, 1323, 1312

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	583-642(1367-1308)		
$\sigma = 40$	572-644(1378-1306)		
$\sigma = 60$	556-650(1394-1300)		
$\sigma = 80$	541-658(1409-1292)		
$\sigma = 100$	540-670(1410-1280)		
$\sigma = 120$	434-451(1516-1499)	468-500(1482-1450)	530-670(1420-1280)
$\sigma = 160$	430-690(1520-1260)	701-709(1249-1241)	750-764(1200-1186)
$\sigma = 200$	410-770(1540-1180)		

RADIOCARBON AGE BP 1460 CALIBRATED AGE: cal AD 600
cal BP 1350

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	563-639(1387-1311)		
$\sigma = 40$	545-641(1405-1309)		
$\sigma = 60$	541-644(1409-1306)		
$\sigma = 80$	536-649(1414-1301)		
$\sigma = 100$	434-452(1516-1498)	468-501(1482-1449)	530-660(1420-1290)
$\sigma = 120$	430-670(1520-1280)		
$\sigma = 160$	420-680(1530-1270)		
$\sigma = 200$	390-730(1560-1220)	743-769(1207-1181)	

RADIOCARBON AGE BP 1480 CALIBRATED AGE: cal AD 578
cal BP 1372

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	544-604(1406-1346)	631-636(1319-1314)	
$\sigma = 40$	540-638(1410-1312)		
$\sigma = 60$	536-641(1414-1309)		
$\sigma = 80$	434-452(1516-1498)	467-501(1483-1449)	531-644(1419-1306)
$\sigma = 100$	430-650(1520-1300)		
$\sigma = 120$	430-660(1520-1290)		
$\sigma = 160$	410-670(1540-1280)		
$\sigma = 200$	358-369(1592-1581)	380-690(1570-1260)	701-709(1249-1241)
	750-764(1200-1186)		

RADIOCARBON AGE BP 1500 CALIBRATED AGE: cal AD 558
cal BP 1392

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	539-598(1411-1352)		
$\sigma = 40$	535-602(1415-1348)	633-636(1317-1314)	
$\sigma = 60$	434-453(1516-1497)	466-502(1484-1448)	531-612(1419-1338)
	623-638(1327-1312)		
$\sigma = 80$	431-641(1519-1309)		
$\sigma = 100$	430-640(1520-1310)		
$\sigma = 120$	420-650(1530-1300)		
$\sigma = 160$	390-670(1560-1280)		
$\sigma = 200$	264-271(1686-1679)	340-680(1610-1270)	

TABLE 3-T

RADIOCARBON AGE BP 1520 CALIBRATED AGE: cal AD 542
cal BP 1408

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	476-490(1474-1460)	534-564(1416-1386)	
$\sigma = 40$	433-454(1517-1496)	465-516(1485-1434)	531-596(1419-1354)
$\sigma = 60$	430-602(1520-1348)	634-635(1316-1315)	
$\sigma = 80$	427-611(1523-1339)	625-638(1325-1312)	
$\sigma = 100$	420-640(1530-1310)		
$\sigma = 120$	410-640(1540-1310)		
$\sigma = 160$	358-369(1592-1581)	380-660(1570-1290)	
$\sigma = 200$	261-279(1689-1671)	294-296(1656-1654)	340-670(1610-1280)

RADIOCARBON AGE BP 1540 CALIBRATED AGE: cal AD 537
cal BP 1413

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	433-517(1517-1433)	530-544(1420-1406)	
$\sigma = 40$	430-562(1520-1388)		
$\sigma = 60$	427-581(1523-1369)	592-596(1358-1354)	
$\sigma = 80$	419-601(1531-1349)	634-635(1316-1315)	
$\sigma = 100$	410-610(1540-1340)	626-638(1324-1312)	
$\sigma = 120$	390-640(1560-1310)		
$\sigma = 160$	264-271(1686-1679)	340-650(1610-1300)	
$\sigma = 200$	258-300(1692-1650)	320-670(1630-1280)	

RADIOCARBON AGE BP 1560 CALIBRATED AGES: cal AD 435, 450, 470, 499, 532
cal BP 1515, 1500, 1480, 1451, 1418

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	430-539(1520-1411)		
$\sigma = 40$	427-543(1523-1407)		
$\sigma = 60$	418-561(1532-1389)		
$\sigma = 80$	410-580(1540-1370)	594-595(1356-1355)	
$\sigma = 100$	390-600(1560-1350)		
$\sigma = 120$	358-369(1592-1581)	380-610(1570-1340)	626-638(1324-1312)
$\sigma = 160$	261-279(1689-1671)	294-296(1656-1654)	340-640(1610-1310)
$\sigma = 200$	260-660(1690-1290)		

RADIOCARBON AGE BP 1580 CALIBRATED AGES: cal AD 431, 520, 528
cal BP 1519, 1430, 1422

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	427-475(1523-1475)	491-534(1459-1416)	
$\sigma = 40$	418-538(1532-1412)		
$\sigma = 60$	410-542(1540-1408)		
$\sigma = 80$	392-560(1558-1390)		
$\sigma = 100$	358-369(1592-1581)	380-580(1570-1370)	
$\sigma = 120$	264-271(1686-1679)	340-600(1610-1350)	
$\sigma = 160$	258-300(1692-1650)	320-640(1630-1310)	
$\sigma = 200$	230-650(1720-1300)		

TABLE 3-U

RADIOCARBON AGE BP 1600	CALIBRATED AGE:	cal AD	428
		cal BP	1522
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	414-433(1536-1517)	517-530(1433-1420)	
$\sigma = 40$	409-473(1541-1477)	495-534(1455-1416)	
$\sigma = 60$	392-538(1558-1412)		
$\sigma = 80$	357-370(1593-1580)	382-542(1568-1408)	
$\sigma = 100$	264-272(1686-1678)	340-560(1610-1390)	
$\sigma = 120$	261-279(1689-1671)	294-296(1656-1654)	340-580(1610-1370)
$\sigma = 160$	260-610(1690-1340)	626-638(1324-1312)	
$\sigma = 200$	184-187(1766-1763)	230-640(1720-1310)	

RADIOCARBON AGE BP 1620	CALIBRATED AGE:	cal AD	423
		cal BP	1527
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	408-430(1542-1520)	524-526(1426-1424)	
$\sigma = 40$	391-432(1559-1518)	518-529(1432-1421)	
$\sigma = 60$	357-370(1593-1580)	382-437(1568-1513)	448-472(1502-1478)
	497-533(1453-1417)		
$\sigma = 80$	264-272(1686-1678)	341-537(1609-1413)	
$\sigma = 100$	261-279(1689-1671)	294-296(1656-1654)	340-540(1610-1410)
$\sigma = 120$	258-301(1692-1649)	320-560(1630-1390)	
$\sigma = 160$	230-600(1720-1350)		
$\sigma = 200$	174-198(1776-1752)	220-640(1730-1310)	

RADIOCARBON AGE BP 1640	CALIBRATED AGE:	cal AD	411
		cal BP	1539
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	363-366(1587-1584)	388-426(1562-1524)	
$\sigma = 40$	356-370(1594-1580)	381-429(1569-1521)	
$\sigma = 60$	264-274(1686-1676)	341-432(1609-1518)	519-529(1431-1421)
$\sigma = 80$	261-279(1689-1671)	293-296(1657-1654)	336-436(1614-1514)
	448-472(1502-1478)	497-533(1453-1417)	
$\sigma = 100$	258-301(1692-1649)	320-540(1630-1410)	
$\sigma = 120$	260-540(1690-1410)		
$\sigma = 160$	184-187(1766-1763)	230-580(1720-1370)	
$\sigma = 200$	130-610(1820-1340)	626-638(1324-1312)	

RADIOCARBON AGE BP 1660	CALIBRATED AGE:	cal AD	394
		cal BP	1556
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	356-371(1594-1579)	381-413(1569-1537)	
$\sigma = 40$	264-273(1686-1677)	341-425(1609-1525)	
$\sigma = 60$	261-279(1689-1671)	294-296(1656-1654)	336-428(1614-1522)
$\sigma = 80$	258-301(1692-1649)	321-432(1629-1518)	520-528(1430-1422)
$\sigma = 100$	260-430(1690-1520)	449-471(1501-1479)	498-533(1452-1417)
$\sigma = 120$	230-540(1720-1410)		
$\sigma = 160$	174-198(1776-1752)	220-560(1730-1390)	
$\sigma = 200$	130-600(1820-1350)		

TABLE 3-V

RADIOCARBON AGE BP 1680	CALIBRATED AGES:	cal AD	359, 369, 383
		cal BP	1591, 1581, 1567
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	263-276(1687-1674)	340-407(1610-1543)	
$\sigma = 40$	261-279(1689-1671)	293-296(1657-1654)	335-412(1615-1538)
$\sigma = 60$	258-301(1692-1649)	321-425(1629-1525)	
$\sigma = 80$	255-428(1695-1522)		
$\sigma = 100$	230-430(1720-1520)	520-528(1430-1422)	
$\sigma = 120$	184-187(1766-1763)	230-430(1720-1520)	449-471(1501-1479)
	498-533(1452-1417)		
$\sigma = 160$	130-540(1820-1410)		
$\sigma = 200$	83-90(1867-1860)	130-580(1820-1370)	

RADIOCARBON AGE BP 1700	CALIBRATED AGES:	cal AD	264, 269, 342, 374, 376
		cal BP	1686, 1681, 1608, 1576, 1574
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	260-280(1690-1670)	292-297(1658-1653)	325-387(1625-1563)
$\sigma = 40$	258-301(1692-1649)	320-406(1630-1544)	
$\sigma = 60$	255-412(1695-1538)		
$\sigma = 80$	234-425(1716-1525)		
$\sigma = 100$	184-187(1766-1763)	230-430(1720-1520)	
$\sigma = 120$	174-198(1776-1752)	210-430(1740-1520)	520-528(1430-1422)
$\sigma = 160$	130-540(1820-1410)		
$\sigma = 200$	80-560(1870-1390)		

RADIOCARBON AGE BP 1720	CALIBRATED AGES:	cal AD	261, 278, 294, 295, 337
		cal BP	1689, 1672, 1656, 1655, 1613
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	257-302(1693-1648)	319-345(1631-1605)	372-380(1578-1570)
$\sigma = 40$	252-386(1698-1564)		
$\sigma = 60$	233-406(1717-1544)		
$\sigma = 80$	183-188(1767-1762)	227-412(1723-1538)	
$\sigma = 100$	174-198(1776-1752)	210-430(1740-1520)	
$\sigma = 120$	130-430(1820-1520)		
$\sigma = 160$	83-90(1867-1860)	130-430(1820-1520)	449-470(1501-1480)
	498-533(1452-1417)		
$\sigma = 200$	70-540(1880-1410)		

RADIOCARBON AGE BP 1740	CALIBRATED AGES:	cal AD	258, 283, 288, 300, 321
		cal BP	1692, 1667, 1662, 1650, 1629
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	245-263(1705-1687)	276-339(1674-1611)	
$\sigma = 40$	233-344(1717-1606)	373-378(1577-1572)	
$\sigma = 60$	183-189(1767-1761)	227-385(1723-1565)	
$\sigma = 80$	173-198(1777-1752)	214-405(1736-1545)	
$\sigma = 100$	130-410(1820-1540)		
$\sigma = 120$	130-430(1820-1520)		
$\sigma = 160$	80-430(1870-1520)	520-528(1430-1422)	
$\sigma = 200$	33-36(1917-1914)	60-540(1890-1410)	

TABLE 3-W

RADIOCARBON AGE BP 1760	CALIBRATED AGES:	cal AD 256, 305, 316	
		cal BP 1694, 1645, 1634	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	232-260(1718-1690)	281-324(1669-1626)	
$\sigma = 40$	182-190(1768-1760)	227-262(1723-1688)	277-338(1673-1612)
$\sigma = 60$	173-199(1777-1751)	214-343(1736-1607)	373-377(1577-1573)
$\sigma = 80$	132-384(1818-1566)		
$\sigma = 100$	130-410(1820-1540)		
$\sigma = 120$	83-90(1867-1860)	130-410(1820-1540)	
$\sigma = 160$	70-430(1880-1520)		
$\sigma = 200$	30-430(1920-1520)	449-470(1501-1480)	498-532(1452-1418)
○			
RADIOCARBON AGE BP 1780	CALIBRATED AGE:	cal AD 234	
		cal BP 1716	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	180-193(1770-1757)	225-257(1725-1693)	303-319(1647-1631)
$\sigma = 40$	135-145(1815-1805)	172-199(1778-1751)	213-259(1737-1691)
	282-323(1668-1627)		
$\sigma = 60$	132-262(1818-1688)	277-338(1673-1612)	
$\sigma = 80$	130-343(1820-1607)	373-377(1577-1573)	
$\sigma = 100$	83-91(1867-1859)	130-380(1820-1570)	
$\sigma = 120$	80-390(1870-1560)		
$\sigma = 160$	33-36(1917-1914)	60-420(1890-1530)	
$\sigma = 200$	4-8(1946-1942)	20-430(1930-1520)	520-528(1430-1422)
○			
RADIOCARBON AGE BP 1800	CALIBRATED AGES:	cal AD 185, 186, 228	
		cal BP 1765, 1764, 1722	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	134-152(1816-1798)	169-201(1781-1749)	211-245(1739-1705)
$\sigma = 40$	132-256(1818-1694)	303-318(1647-1632)	
$\sigma = 60$	129-259(1821-1691)	282-323(1668-1627)	
$\sigma = 80$	82-92(1868-1858)	127-262(1823-1688)	278-338(1672-1612)
$\sigma = 100$	80-340(1870-1610)	373-377(1577-1573)	
$\sigma = 120$	70-380(1880-1570)		
$\sigma = 160$	30-410(1920-1540)		
$\sigma = 200$	cal BC 87-84(2036-2033)	cal BC 36-33(1985-1982)	
	cal BC 19-13(1968-1962)	1-430(1949-1520)	
○			
RADIOCARBON AGE BP 1820	CALIBRATED AGES:	cal AD 175, 198, 216	
		cal BP 1775, 1752, 1734	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	131-232(1819-1718)		
$\sigma = 40$	129-241(1821-1709)		
$\sigma = 60$	82-106(1868-1844)	127-256(1823-1694)	304-317(1646-1633)
$\sigma = 80$	75-259(1875-1691)	282-322(1668-1628)	
$\sigma = 100$	70-260(1880-1690)	278-337(1672-1613)	
$\sigma = 120$	33-36(1917-1914)	50-340(1900-1610)	374-377(1576-1573)
$\sigma = 160$	4-8(1946-1942)	20-390(1930-1560)	
$\sigma = 200$	cal BC 89-81(2038-2030)	cal BC 68-60(2017-2009)	
	cal BC 40-cal AD 420(1990-1530)		

TABLE 3-X

RADIOCARBON AGE BP 1840	CALIBRATED AGES:	cal AD 133, 203, 207	
		cal BP 1817, 1747, 1743	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	129-179(1821-1771)	195-224(1755-1726)	
$\sigma = 40$	82-93(1868-1857)	127-230(1823-1720)	
$\sigma = 60$	76-236(1874-1714)		
$\sigma = 80$	68-256(1882-1694)	304-317(1646-1633)	
$\sigma = 100$	33-36(1917-1914)	50-260(1900-1690)	282-289(1668-1661)
	300-322(1650-1628)		
$\sigma = 120$	30-260(1920-1690)	278-337(1672-1613)	
$\sigma = 160$	cal BC 87-84(2036-2033)	cal BC 36-34(1985-1983)	
	cal BC 19-13(1968-1962)	1-380(1949-1570)	
$\sigma = 200$	cal BC 90-cal AD 410(2040-1540)		
○			
RADIOCARBON AGE BP 1860	CALIBRATED AGE:	cal AD 130	
		cal BP 1820	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	82-106(1868-1844)	127-134(1823-1816)	160-167(1790-1783)
	202-209(1748-1741)		
$\sigma = 40$	76-176(1874-1774)	197-219(1753-1731)	
$\sigma = 60$	68-229(1882-1721)		
$\sigma = 80$	33-36(1917-1914)	55-235(1895-1715)	
$\sigma = 100$	30-260(1920-1690)	305-316(1645-1634)	
$\sigma = 120$	4-8(1946-1942)	20-260(1930-1690)	283-288(1667-1662)
	300-322(1650-1628)		
$\sigma = 160$	cal BC 89-81(2038-2030)	cal BC 68-60(2017-2009)	
	cal BC 40-cal AD 340(1990-1610)	374-376(1576-1574)	
$\sigma = 200$	cal BC 90-cal AD 390(2040-1560)		
○			
RADIOCARBON AGE BP 1880	CALIBRATED AGES:	cal AD 84, 89, 127	
		cal BP 1866, 1861, 1823	
Sample σ and cal AD(cal BP) ranges:			
$\sigma = 20$	74-131(1876-1819)		
$\sigma = 40$	67-134(1883-1816)	160-166(1790-1784)	202-209(1748-1741)
$\sigma = 60$	33-37(1917-1913)	55-176(1895-1774)	197-219(1753-1731)
$\sigma = 80$	28-229(1922-1721)		
$\sigma = 100$	4-8(1946-1942)	20-230(1930-1720)	
$\sigma = 120$	cal BC 87-84(2036-2033)	cal BC 36-33(1985-1982)	
	cal BC 19-13(1968-1962)	1-260(1949-1690)	304-316(1646-1634)
$\sigma = 160$	cal BC 90-cal AD 260(2040-1690)	278-337(1672-1613)	
$\sigma = 200$	cal BC 100-cal AD 380(2050-1570)		

TABLE 3-Y

RADIOCARBON AGE BP 1900 CALIBRATED AGE: cal AD 77
cal BP 1873

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	65-129(1885-1821)		
$\sigma = 40$	32-37(1918-1913)	54-131(1896-1819)	
$\sigma = 60$	28-133(1922-1817)	162-166(1788-1784)	202-209(1748-1741)
$\sigma = 80$	4-9(1946-1941)	21-176(1929-1774)	197-219(1753-1731)
$\sigma = 100$	cal BC 87-84(2036-2033)	cal BC 66-65(2015-2014)	
	cal BC 36-33(1985-1982)	cal BC 20-13(1969-1962)	
	1-230(1949-1720)		
$\sigma = 120$	cal BC 89-81(2038-2030)	cal BC 68-60(2017-2009)	
	cal BC 40-cal AD 230(1990-1720)		
$\sigma = 160$	cal BC 90-cal AD 260(2040-1690)	282-289(1668-1661)	
	300-322(1650-1628)		
$\sigma = 200$	cal BC 167-142(2116-2091)	cal BC 120-cal AD 340(2070-1610)	
	374-376(1576-1574)		

RADIOCARBON AGE BP 1920 CALIBRATED AGE: cal AD 69
cal BP 1881

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	32-37(1918-1913)	54-79(1896-1871)	119-125(1831-1825)
$\sigma = 40$	28-128(1922-1822)		
$\sigma = 60$	4-8(1946-1942)	21-130(1929-1820)	
$\sigma = 80$	cal BC 87-84(2036-2033)	cal BC 36-33(1985-1982)	
	cal BC 19-13(1968-1962)	1-133(1949-1817)	203-208(1747-1742)
$\sigma = 100$	cal BC 89-81(2038-2030)	cal BC 68-60(2017-2009)	
	cal BC 40-cal AD 180(1990-1770)	197-218(1753-1732)	
$\sigma = 120$	cal BC 90-cal AD 230(2040-1720)		
$\sigma = 160$	cal BC 100-cal AD 260(2050-1690)	305-316(1645-1634)	
$\sigma = 200$	cal BC 170-cal AD 260(2120-1690)	278-337(1672-1613)	

RADIOCARBON AGE BP 1940 CALIBRATED AGES: cal AD 34, 36, 57
cal BP 1916, 1914, 1893

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	27-71(1923-1879)		
$\sigma = 40$	3-9(1947-1941)	21-78(1929-1872)	
$\sigma = 60$	cal BC 87-84(2036-2033)	cal BC 66-65(2015-2014)	
	cal BC 36-33(1985-1982)	cal BC 20-13(1969-1962)	
	1-128(1949-1822)		
$\sigma = 80$	cal BC 89-81(2038-2030)	cal BC 68-60(2017-2009)	
	cal BC 42-cal AD 130(1991-1820)		
$\sigma = 100$	cal BC 90-cal AD 130(2040-1820)	203-208(1747-1742)	
$\sigma = 120$	cal BC 90-cal AD 180(2040-1770)	197-217(1753-1733)	
$\sigma = 160$	cal BC 167-142(2116-2091)	cal BC 120-cal AD 230(2070-1720)	
$\sigma = 200$	cal BC 199-189(2148-2138)	cal BC 170-cal AD 260(2120-1690)	
	283-288(1667-1662)	300-322(1650-1628)	

TABLE 3-Z

RADIOCARBON AGE BP 1960 CALIBRATED AGES: cal AD 29, 40, 50
cal BP 1921, 1910, 1900

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	3-62(1947-1888)		
$\sigma = 40$	cal BC 87-84(2036-2033)	cal BC 66-65(2015-2014)	
	cal BC 37-33(1986-1982)	cal BC 20-13(1969-1962)	
	1-70(1949-1880)		
$\sigma = 60$	cal BC 89-81(2038-2030)	cal BC 68-60(2017-2009)	
	cal BC 42-cal AD 77(1991-1873)		
$\sigma = 80$	cal BC 91-cal AD 128(2040-1822)		
$\sigma = 100$	cal BC 90-cal AD 130(2040-1820)		
$\sigma = 120$	cal BC 100-cal AD 130(2050-1820)	203-208(1747-1742)	
$\sigma = 160$	cal BC 170-cal AD 230(2120-1720)		
$\sigma = 200$	cal BC 342-325(2291-2274)	cal BC 200-cal AD 260(2150-1690)	
	305-316(1645-1634)		

RADIOCARBON AGE BP 1980 CALIBRATED AGES: cal AD 4, 7, 23, 45
cal BP 1946, 1943, 1927, 1905

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	cal BC 87-83(2036-2032)	cal BC 66-64(2015-2013)	
	cal BC 37-32(1986-1981)	cal BC 20-12(1969-1961)	
	cal BC 1-cal AD 51(1950-1899)		
$\sigma = 40$	cal BC 89-81(2038-2030)	cal BC 68-59(2017-2008)	
	cal BC 42-cal AD 59(1991-1891)		
$\sigma = 60$	cal BC 91-cal AD 70(2040-1880)		
$\sigma = 80$	cal BC 93-cal AD 77(2042-1873)		
$\sigma = 100$	cal BC 100-cal AD 130(2050-1820)		
$\sigma = 120$	cal BC 167-142(2116-2091)	cal BC 120-cal AD 130(2070-1820)	
$\sigma = 160$	cal BC 199-189(2148-2138)	cal BC 170-cal AD 180(2120-1770)	
	197-217(1753-1733)		
$\sigma = 200$	cal BC 348-320(2297-2269)	cal BC 306-305(2255-2254)	
	cal BC 227-223(2176-2172)	cal BC 210-cal AD 230(2160-1720)	

RADIOCARBON AGE BP 2000 CALIBRATED AGES: cal AD 86, 84, 36, 34, 19,
13, 1
cal BP 2035, 2033, 1985, 1983, 1968,
1962, 1949

Sample σ and cal AD(cal BP) ranges:

$\sigma = 20$	cal BC 89-81(2038-2030)	cal BC 69-59(2018-2008)	
	cal BC 42-cal AD 25(1991-1925)	44-46(1906-1904)	
$\sigma = 40$	cal BC 91-cal AD 29(2040-1921)	40-51(1910-1899)	
$\sigma = 60$	cal BC 93-cal AD 58(2042-1892)		
$\sigma = 80$	cal BC 95-cal AD 70(2044-1880)		
$\sigma = 100$	cal BC 167-142(2116-2091)	cal BC 120-cal AD 80(2070-1870)	
$\sigma = 120$	cal BC 170-cal AD 130(2120-1820)		
$\sigma = 160$	cal BC 342-325(2291-2274)	cal BC 200-cal AD 130(2150-1820)	
	203-208(1747-1742)		
$\sigma = 200$	cal BC 352-295(2301-2244)	cal BC 230-cal AD 230(2180-1720)	

TABLE 3-AA

RADIOCARBON AGE BP 2020 CALIBRATED AGES: cal BC 89, 81, 68, 60, 41,
9, 3
cal BP 2038, 2030, 2017, 2009, 1990,
1958, 1952

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	cal BC 91-cal AD 1(2040-1949)
$\sigma = 40$	cal BC 93-cal AD 24(2042-1926) cal AD 44-46(1906-1904)
$\sigma = 60$	cal BC 95-cal AD 29(2044-1921) cal AD 40-51(1910-1899)
$\sigma = 80$	167-142(2116-2091) cal BC 121-cal AD 58(2070-1892)
$\sigma = 100$	cal BC 170-cal AD 70(2120-1880)
$\sigma = 120$	199-189(2148-2138) cal BC 170-cal AD 80(2120-1870)
$\sigma = 160$	348-320(2297-2269) 306-305(2255-2254) 227-223(2176-2172) cal BC 210-cal AD 130(2160-1820)
$\sigma = 200$	356-274(2305-2223) 259-248(2208-2197) cal BC 230-cal AD 180(2180-1770) cal AD 197-217(1753-1733)

RADIOCARBON AGE BP 2040 CALIBRATED AGES: cal BC 91, 79, 71
cal BP 2040, 2028, 2020

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	93-40(2042-1989) 27-24(1976-1973) 10-2(1959-1951)
$\sigma = 40$	cal BC 106-cal AD 1(2055-1949)
$\sigma = 60$	167-142(2116-2091) cal BC 121-cal AD 24(2070-1926) cal AD 44-46(1906-1904)
$\sigma = 80$	cal BC 171-cal AD 29(2120-1921) cal AD 40-51(1910-1899)
$\sigma = 100$	199-189(2148-2138) cal BC 170-cal AD 60(2120-1890)
$\sigma = 120$	342-325(2291-2274) cal BC 200-cal AD 70(2150-1880)
$\sigma = 160$	352-295(2301-2244) cal BC 230-cal AD 130(2180-1820)
$\sigma = 200$	cal BC 360-cal AD 130(2310-1820) cal AD 203-208(1747-1742)

RADIOCARBON AGE BP 2060 CALIBRATED AGES: cal BC 93, 77, 74
cal BP 2042, 2026, 2023

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	156-155(2105-2104) 109-90(2058-2039) 80-70(2029-2019) 56-45(2005-1994)
$\sigma = 40$	167-142(2116-2091) 121-40(2070-1989) 9-2(1958-1951)
$\sigma = 60$	cal BC 171-cal AD 1(2120-1949)
$\sigma = 80$	199-189(2148-2138) cal BC 174-cal AD 24(2123-1926) cal AD 44-45(1906-1905)
$\sigma = 100$	342-325(2291-2274) cal BC 200-cal AD 30(2150-1920) cal AD 40-51(1910-1899)
$\sigma = 120$	348-319(2297-2268) 307-305(2256-2254) 227-223(2176-2172) cal BC 210-cal AD 60(2160-1890)
$\sigma = 160$	356-274(2305-2223) 259-247(2208-2196) cal BC 230-cal AD 80(2180-1870)
$\sigma = 200$	cal BC 380-cal AD 130(2330-1820)

TABLE 3-BB

RADIOCARBON AGE BP 2080 CALIBRATED AGE: cal BC 95
cal BP 2044

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	167-141(2116-2090) 123-92(2072-2041) 77-73(2026-2022)
$\sigma = 40$	171-90(2120-2039) 79-70(2028-2019) 56-50(2005-1999)
$\sigma = 60$	199-188(2148-2137) 174-41(2123-1990) 9-2(1958-1951)
$\sigma = 80$	342-325(2291-2274) cal BC 205-cal AD 1(2154-1949)
$\sigma = 100$	348-319(2297-2268) 307-304(2256-2253) 228-223(2177-2172) cal BC 210-cal AD 20(2160-1930) cal AD 44-45(1906-1905)
$\sigma = 120$	352-295(2301-2244) cal BC 230-cal AD 30(2180-1920) cal AD 40-50(1910-1900)
$\sigma = 160$	cal BC 360-cal AD 70(2310-1880)
$\sigma = 200$	cal BC 390-cal AD 130(2340-1820)

RADIOCARBON AGE BP 2100 CALIBRATED AGES: cal BC 166, 143, 120
cal BP 2115, 2092, 2069

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	171-94(2120-2043)
$\sigma = 40$	200-187(2149-2136) 175-92(2124-2041) 77-73(2026-2022)
$\sigma = 60$	343-324(2292-2273) 205-90(2154-2039) 79-71(2028-2020) 56-51(2005-2000)
$\sigma = 80$	348-319(2297-2268) 307-304(2256-2253) 228-223(2177-2172) 209-41(2158-1990) 9-2(1958-1951)
$\sigma = 100$	352-294(2301-2243) cal BC 230-cal AD 1(2180-1949)
$\sigma = 120$	356-273(2305-2222) 259-247(2208-2196) cal BC 230-cal AD 20(2180-1930) cal AD 44-45(1906-1905)
$\sigma = 160$	cal BC 380-cal AD 60(2330-1890)
$\sigma = 200$	cal BC 390-cal AD 80(2340-1870)

RADIOCARBON AGE BP 2120 CALIBRATED AGES: cal BC 170, 138, 130
cal BP 2119, 2087, 2079

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	201-186(2150-2135) 175-163(2124-2112) 144-116(2093-2065)
$\sigma = 40$	344-324(2293-2273) 205-95(2154-2044)
$\sigma = 60$	348-319(2297-2268) 308-304(2257-2253) 228-223(2177-2172) 209-93(2158-2042) 77-73(2026-2022)
$\sigma = 80$	352-294(2301-2243) 231-90(2180-2039) 79-71(2028-2020) 55-53(2004-2002)
$\sigma = 100$	356-273(2305-2222) 259-247(2208-2196) 230-40(2180-1990) 9-2(1958-1951)
$\sigma = 120$	cal BC 360-cal AD 1(2310-1949)
$\sigma = 160$	cal BC 390-cal AD 30(2340-1920) cal AD 40-50(1910-1900)
$\sigma = 200$	cal BC 400-cal AD 70(2350-1880)

TABLE 3-CC

RADIOCARBON AGE BP 2140		CALIBRATED AGES:	
		cal BC 199, 189, 174	
		cal BP 2148, 2138, 2123	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	346-323(2295-2272)	226-225(2175-2174)	206-168(2155-2117)
	140-125(2089-2074)		
$\sigma = 40$	349-302(2298-2251)	228-222(2177-2171)	209-165(2158-2114)
	144-117(2093-2066)		
$\sigma = 60$	353-294(2302-2243)	231-95(2180-2044)	
$\sigma = 80$	357-273(2306-2222)	259-246(2208-2195)	234-93(2183-2042)
	77-73(2026-2022)		
$\sigma = 100$	360-90(2310-2040)	79-71(2028-2020)	55-52(2004-2001)
$\sigma = 120$	380-40(2330-1990)	9-2(1958-1951)	
$\sigma = 160$	cal BC 390-cal AD 20(2340-1930)	cal AD 44-45(1906-1905)	
$\sigma = 200$	cal BC 400-cal AD 60(2350-1890)		
—○—			
RADIOCARBON AGE BP 2160		CALIBRATED AGES:	
		cal BC 341, 325, 204	
		cal BP 2290, 2274, 2153	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	350-300(2299-2249)	229-221(2178-2170)	210-172(2159-2121)
$\sigma = 40$	353-293(2302-2242)	256-255(2205-2204)	231-169(2180-2118)
	139-128(2088-2077)		
$\sigma = 60$	357-273(2306-2222)	260-246(2209-2195)	234-166(2183-2115)
	143-118(2092-2067)		
$\sigma = 80$	363-95(2312-2044)		
$\sigma = 100$	380-90(2330-2040)	77-73(2026-2022)	
$\sigma = 120$	390-90(2340-2040)	79-71(2028-2020)	55-54(2004-2003)
$\sigma = 160$	cal BC 400-cal AD 1(2350-1949)		
$\sigma = 200$	cal BC 400-cal AD 30(2350-1920)	cal AD 40-50(1910-1900)	
—○—			
RADIOCARBON AGE BP 2180		CALIBRATED AGES:	
		cal BC 348, 320, 306, 305, 227, 223, 208	
		cal BP 2297, 2269, 2255, 2254, 2176, 2172, 2157	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	353-293(2302-2242)	256-254(2205-2203)	231-202(2180-2151)
$\sigma = 40$	357-273(2306-2222)	260-246(2209-2195)	234-173(2183-2122)
$\sigma = 60$	363-170(2312-2119)	138-129(2087-2078)	
$\sigma = 80$	384-166(2333-2115)	143-119(2092-2068)	
$\sigma = 100$	390-90(2340-2040)		
$\sigma = 120$	390-90(2340-2040)	77-74(2026-2023)	
$\sigma = 160$	400-40(2350-1990)	9-2(1958-1951)	
$\sigma = 200$	cal BC 410-cal AD 20(2360-1930)	cal AD 44-45(1906-1905)	

TABLE 3-DD

RADIOCARBON AGE BP 2200		CALIBRATED AGES:	
		cal BC 352, 295, 230, 219, 212	
		cal BP 2301, 2244, 2179, 2168, 2161	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	358-347(2307-2296)	322-272(2271-2221)	260-207(2209-2156)
$\sigma = 40$	363-339(2312-2288)	328-203(2277-2152)	
$\sigma = 60$	384-174(2333-2123)		
$\sigma = 80$	389-170(2338-2119)	138-129(2087-2078)	
$\sigma = 100$	390-170(2340-2120)	143-119(2092-2068)	
$\sigma = 120$	400-90(2350-2040)		
$\sigma = 160$	400-90(2350-2040)	79-71(2028-2020)	
$\sigma = 200$	476-475(2425-2424)	cal BC 410-cal AD 1(2360-1949)	
—○—			
RADIOCARBON AGE BP 2220		CALIBRATED AGES:	
		cal BC 356, 289, 279, 274, 259, 248, 233	
		cal BP 2305, 2238, 2228, 2223, 2208, 2197, 2182	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	376-350(2325-2299)	317-313(2266-2262)	299-210(2248-2159)
$\sigma = 40$	385-347(2334-2296)	321-207(2270-2156)	
$\sigma = 60$	389-339(2338-2288)	328-203(2277-2152)	
$\sigma = 80$	393-174(2342-2123)		
$\sigma = 100$	400-170(2350-2120)	138-129(2087-2078)	
$\sigma = 120$	400-170(2350-2120)	143-119(2092-2068)	
$\sigma = 160$	410-90(2360-2040)	77-74(2026-2023)	
$\sigma = 200$	507-504(2456-2453)	485-470(2434-2419)	430-40(2380-1990)
	9-3(1958-1952)		
—○—			
RADIOCARBON AGE BP 2240		CALIBRATED AGES:	
		cal BC 362, 268, 263	
		cal BP 2311, 2217, 2212	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	386-354(2335-2303)	292-232(2241-2181)	217-214(2166-2163)
$\sigma = 40$	390-351(2339-2300)	316-315(2265-2264)	297-211(2246-2160)
$\sigma = 60$	393-347(2342-2296)	321-208(2270-2157)	
$\sigma = 80$	397-340(2346-2289)	327-204(2276-2153)	
$\sigma = 100$	400-170(2350-2120)		
$\sigma = 120$	400-170(2350-2120)	138-129(2087-2078)	
$\sigma = 160$	476-475(2425-2424)	410-90(2360-2040)	
$\sigma = 200$	744-726(2693-2675)	519-465(2468-2414)	440-90(2390-2040)
	79-71(2028-2020)		

TABLE 3-EE

RADIOCARBON AGE BP 2260	CALIBRATED AGE:	cal BC 382	
		cal BP 2331	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	390-359(2339-2308)	286-285(2235-2234)	271-261(2220-2210)
	239-235(2188-2184)		
$\sigma = 40$	394-355(2343-2304)	291-233(2240-2182)	216-215(2165-2164)
$\sigma = 60$	397-351(2346-2300)	296-211(2245-2160)	
$\sigma = 80$	401-347(2350-2296)	320-208(2269-2157)	
$\sigma = 100$	404-340(2353-2289)	330-200(2280-2150)	
$\sigma = 120$	410-170(2360-2120)		
$\sigma = 160$	507-503(2456-2452)	485-470(2434-2419)	430-170(2380-2120)
	143-119(2092-2068)		
$\sigma = 200$	755-692(2704-2641)	588-581(2537-2530)	542-460(2491-2409)
	450-90(2400-2040)	77-74(2026-2023)	

RADIOCARBON AGE BP 2280	CALIBRATED AGE:	cal BC 389	
		cal BP 2338	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	395-365(2344-2314)		
$\sigma = 40$	398-360(2347-2309)	270-262(2219-2211)	236-235(2185-2184)
$\sigma = 60$	401-355(2350-2304)	290-233(2239-2182)	216-215(2165-2164)
$\sigma = 80$	404-351(2353-2300)	296-230(2245-2179)	220-212(2169-2161)
$\sigma = 100$	408-348(2357-2297)	320-210(2270-2160)	
$\sigma = 120$	476-475(2425-2424)	411-340(2360-2289)	330-200(2280-2150)
$\sigma = 160$	744-726(2693-2675)	519-464(2468-2413)	440-170(2390-2120)
	138-129(2087-2078)		
$\sigma = 200$	759-686(2708-2635)	658-637(2607-2586)	617-615(2566-2564)
	592-571(2541-2520)	560-90(2510-2040)	

RADIOCARBON AGE BP 2300	CALIBRATED AGE:	cal BC 393	
		cal BP 2342	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	398-387(2347-2336)		
$\sigma = 40$	401-380(2350-2329)		
$\sigma = 60$	405-361(2354-2310)	269-262(2218-2211)	
$\sigma = 80$	408-355(2357-2304)	290-233(2239-2182)	216-215(2165-2164)
$\sigma = 100$	476-475(2425-2424)	411-351(2360-2300)	296-230(2245-2179)
	220-212(2169-2161)		
$\sigma = 120$	508-502(2457-2451)	486-470(2435-2419)	431-348(2380-2297)
	320-210(2270-2160)		
$\sigma = 160$	755-692(2704-2641)	588-581(2537-2530)	542-460(2491-2409)
	450-170(2400-2120)		
$\sigma = 200$	763-680(2712-2629)	660-608(2609-2557)	600-170(2550-2120)
	143-119(2092-2068)		

TABLE 3-FF

RADIOCARBON AGE BP 2320	CALIBRATED AGE:	cal BC 397	
		cal BP 2346	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	401-392(2350-2341)		
$\sigma = 40$	405-388(2354-2337)		
$\sigma = 60$	408-381(2357-2330)		
$\sigma = 80$	476-475(2425-2424)	411-361(2360-2310)	269-263(2218-2212)
$\sigma = 100$	507-503(2456-2452)	485-470(2434-2419)	430-356(2379-2305)
	289-259(2238-2208)	249-233(2198-2182)	216-215(2165-2164)
$\sigma = 120$	744-726(2693-2675)	518-465(2467-2414)	440-352(2389-2301)
	295-230(2244-2179)	219-212(2168-2161)	
$\sigma = 160$	759-686(2708-2635)	657-638(2606-2587)	616-615(2565-2564)
	592-571(2541-2520)	560-340(2510-2290)	330-200(2280-2150)
$\sigma = 200$	767-674(2716-2623)	660-170(2610-2120)	138-130(2087-2079)

RADIOCARBON AGE BP 2340	CALIBRATED AGE:	cal BC 400	
		cal BP 2349	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	405-396(2354-2345)		
$\sigma = 40$	408-392(2357-2341)		
$\sigma = 60$	476-475(2425-2424)	411-388(2360-2337)	
$\sigma = 80$	507-503(2456-2452)	485-470(2434-2419)	430-382(2379-2331)
$\sigma = 100$	744-726(2693-2675)	519-465(2468-2414)	441-362(2390-2311)
	269-263(2218-2212)		
$\sigma = 120$	750-220(2700-2170)		
$\sigma = 160$	763-680(2712-2629)	660-609(2609-2558)	600-350(2550-2300)
	320-210(2270-2160)		
$\sigma = 200$	790-170(2740-2120)		

RADIOCARBON AGE BP 2360	CALIBRATED AGE:	cal BC 404	
		cal BP 2353	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	409-399(2358-2348)		
$\sigma = 40$	477-475(2426-2424)	412-396(2361-2345)	
$\sigma = 60$	508-502(2457-2451)	486-470(2435-2419)	431-392(2380-2341)
$\sigma = 80$	744-726(2693-2675)	519-464(2468-2413)	441-388(2390-2337)
$\sigma = 100$	755-692(2704-2641)	588-581(2537-2530)	542-460(2491-2409)
	450-382(2399-2331)		
$\sigma = 120$	759-686(2708-2635)	657-637(2606-2586)	617-615(2566-2564)
	592-571(2541-2520)	560-360(2510-2310)	269-263(2218-2212)
$\sigma = 160$	767-674(2716-2623)	660-350(2610-2300)	295-230(2244-2179)
	219-212(2168-2161)		
$\sigma = 200$	790-340(2740-2290)	330-200(2280-2150)	

TABLE 3-GG

RADIOCARBON AGE BP 2380		CALIBRATED AGE:		cal BC 408
				cal BP 2357
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	479-473(2428-2422)	426-424(2375-2373)		412-403(2361-2352)
$\sigma = 40$	510-469(2459-2418)	431-400(2380-2349)		
$\sigma = 60$	747-725(2696-2674)	519-464(2468-2413)	444-396(2393-2345)	
$\sigma = 80$	755-692(2704-2641)	588-580(2537-2529)	542-392(2491-2341)	
$\sigma = 100$	759-686(2708-2635)	658-637(2607-2586)	617-614(2566-2563)	
	592-570(2541-2519)	560-390(2510-2340)		
$\sigma = 120$	763-680(2712-2629)	660-608(2609-2557)	600-380(2550-2330)	
$\sigma = 160$	790-360(2740-2310)	289-259(2238-2208)	248-233(2197-2182)	
	216-215(2165-2164)			
$\sigma = 200$	790-350(2740-2300)	320-210(2270-2160)		

RADIOCARBON AGE BP 2400		CALIBRATED AGE:		cal BC 411
				cal BP 2360
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	514-468(2463-2417)	432-406(2381-2355)		
$\sigma = 40$	749-724(2698-2673)	536-535(2485-2484)	519-464(2468-2413)	
	446-403(2395-2352)			
$\sigma = 60$	755-691(2704-2640)	588-580(2537-2529)	542-400(2491-2349)	
$\sigma = 80$	759-685(2708-2634)	658-637(2607-2586)	617-614(2566-2563)	
	592-396(2541-2345)			
$\sigma = 100$	763-680(2712-2629)	660-608(2609-2557)	600-390(2550-2340)	
$\sigma = 120$	768-674(2717-2623)	660-390(2610-2340)		
$\sigma = 160$	790-360(2740-2310)	269-263(2218-2212)		
$\sigma = 200$	800-350(2750-2300)	295-230(2244-2179)	219-212(2168-2161)	

RADIOCARBON AGE BP 2420		CALIBRATED AGES:		cal BC 506, 505, 485, 470, 430, 418, 415
				cal BP 2455, 2454, 2434, 2419, 2379, 2367, 2364
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	752-720(2701-2669)	709-695(2658-2644)	586-585(2535-2534)	
	538-533(2487-2482)	521-463(2470-2412)	447-409(2396-2358)	
$\sigma = 40$	756-690(2705-2639)	656-651(2605-2600)	589-579(2538-2528)	
	543-406(2492-2355)			
$\sigma = 60$	760-685(2709-2634)	658-635(2607-2584)	618-614(2567-2563)	
	592-403(2541-2352)			
$\sigma = 80$	764-679(2713-2628)	660-400(2609-2349)		
$\sigma = 100$	768-673(2717-2622)	660-400(2610-2350)		
$\sigma = 120$	790-390(2740-2340)			
$\sigma = 160$	790-380(2740-2330)			
$\sigma = 200$	800-360(2750-2310)	290-233(2239-2182)	216-215(2165-2164)	

TABLE 3-HH

RADIOCARBON AGE BP 2440		CALIBRATED AGES:		cal BC 742, 727, 518, 465, 439
				cal BP 2691, 2676, 2467, 2414, 2388
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	757-688(2706-2637)	657-643(2606-2592)	590-576(2539-2525)	
	547-412(2496-2361)			
$\sigma = 40$	760-684(2709-2633)	658-634(2607-2583)	619-612(2568-2561)	
	593-410(2542-2359)			
$\sigma = 60$	764-678(2713-2627)	660-407(2609-2356)		
$\sigma = 80$	768-673(2717-2622)	663-403(2612-2352)		
$\sigma = 100$	790-400(2740-2350)			
$\sigma = 120$	790-400(2740-2350)			
$\sigma = 160$	800-390(2750-2340)			
$\sigma = 200$	810-360(2760-2310)	269-263(2218-2212)		

RADIOCARBON AGE BP 2460		CALIBRATED AGES:		cal BC 754, 692, 588, 581, 541, 529, 524, 460, 450
				cal BP 2703, 2641, 2537, 2530, 2490, 2478, 2473, 2409, 2399
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	761-683(2710-2632)	659-632(2608-2581)	620-611(2569-2560)	
	594-514(2543-2463)	468-433(2417-2382)		
$\sigma = 40$	764-678(2713-2627)	661-413(2610-2362)		
$\sigma = 60$	768-410(2717-2359)			
$\sigma = 80$	787-407(2736-2356)			
$\sigma = 100$	790-400(2740-2350)			
$\sigma = 120$	790-400(2740-2350)			
$\sigma = 160$	800-390(2750-2340)			
$\sigma = 200$	820-380(2770-2330)			

RADIOCARBON AGE BP 2480		CALIBRATED AGES:		cal BC 759, 686, 657, 638, 616, 615, 592, 572, 558, 456, 455
				cal BP 2708, 2635, 2606, 2587, 2565, 2564, 2541, 2521, 2507, 2405, 2404
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	766-752(2715-2701)	722-676(2671-2625)	661-520(2610-2469)	
	463-446(2412-2395)			
$\sigma = 40$	769-516(2718-2465)	467-434(2416-2383)		
$\sigma = 60$	788-482(2737-2431)	472-414(2421-2363)		
$\sigma = 80$	791-410(2740-2359)			
$\sigma = 100$	790-410(2740-2360)			
$\sigma = 120$	800-400(2750-2350)			
$\sigma = 160$	810-400(2760-2350)			
$\sigma = 200$	830-390(2780-2340)			

TABLE 3-II

RADIOCARBON AGE BP 2500	CALIBRATED AGES:	cal BC 763, 680, 660, 629, 623, 609, 595	
		cal BP 2712, 2629, 2609, 2578, 2572, 2558, 2545	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	770-756(2719-2705)	689-656(2638-2605)	645-590(2594-2539)
	578-544(2527-2493)	458-452(2407-2401)	
$\sigma = 40$	788-753(2737-2702)	717-714(2666-2663)	694-522(2643-2471)
	462-448(2411-2397)		
$\sigma = 60$	791-517(2740-2466)	466-435(2415-2384)	
$\sigma = 80$	794-483(2743-2432)	471-414(2420-2363)	
$\sigma = 100$	800-410(2750-2360)		
$\sigma = 120$	800-410(2750-2360)		
$\sigma = 160$	820-400(2770-2350)		
$\sigma = 200$	888-884(2837-2833)	830-390(2780-2340)	

RADIOCARBON AGE BP 2520	CALIBRATED AGES:	cal BC 767, 674, 662	
		cal BP 2716, 2623, 2611	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	789-760(2738-2709)	684-658(2633-2607)	634-593(2583-2542)
	566-565(2515-2514)		
$\sigma = 40$	791-757(2740-2706)	688-657(2637-2606)	643-590(2592-2539)
	576-546(2525-2495)	458-453(2407-2402)	
$\sigma = 60$	794-753(2743-2702)	717-716(2666-2665)	694-522(2643-2471)
	462-448(2411-2397)		
$\sigma = 80$	798-517(2747-2466)	466-435(2415-2384)	
$\sigma = 100$	800-480(2750-2430)	471-414(2420-2363)	
$\sigma = 120$	810-410(2760-2360)		
$\sigma = 160$	830-400(2780-2350)		
$\sigma = 200$	893-877(2842-2826)	840-400(2790-2350)	

RADIOCARBON AGE BP 2540	CALIBRATED AGES:	cal BC 787, 772, 668, 665	
		cal BP 2736, 2721, 2617, 2614	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	792-765(2741-2714)	677-661(2626-2610)	606-604(2555-2553)
$\sigma = 40$	794-762(2743-2711)	682-659(2631-2608)	631-621(2580-2570)
	611-594(2560-2543)		
$\sigma = 60$	798-758(2747-2707)	687-657(2636-2606)	641-591(2590-2540)
	575-552(2524-2501)	457-454(2406-2403)	
$\sigma = 80$	802-754(2751-2703)	693-540(2642-2489)	530-523(2479-2472)
	461-449(2410-2398)		
$\sigma = 100$	810-520(2760-2470)	465-435(2414-2384)	
$\sigma = 120$	830-480(2780-2430)	471-429(2420-2378)	419-414(2368-2363)
$\sigma = 160$	888-884(2837-2833)	830-410(2780-2360)	
$\sigma = 200$	900-400(2850-2350)		

TABLE 3-JJ

RADIOCARBON AGE BP 2560	CALIBRATED AGE:	cal BC 790	
		cal BP 2739	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	795-770(2744-2719)	670-664(2619-2613)	
$\sigma = 40$	798-766(2747-2715)	675-662(2624-2611)	
$\sigma = 60$	802-762(2751-2711)	681-659(2630-2608)	630-622(2579-2571)
	610-595(2559-2544)		
$\sigma = 80$	806-758(2755-2707)	687-657(2636-2606)	640-591(2589-2540)
	573-555(2522-2504)	457-454(2406-2403)	
$\sigma = 100$	825-754(2774-2703)	690-540(2640-2490)	529-523(2478-2472)
	461-449(2410-2398)		
$\sigma = 120$	829-739(2778-2688)	730-520(2680-2470)	465-436(2414-2385)
$\sigma = 160$	893-877(2842-2826)	840-410(2790-2360)	
$\sigma = 200$	967-965(2916-2914)	900-400(2850-2350)	

RADIOCARBON AGE BP 2580	CALIBRATED AGE:	cal BC 793	
		cal BP 2742	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	798-789(2747-2738)		
$\sigma = 40$	802-771(2751-2720)	669-664(2618-2613)	
$\sigma = 60$	806-767(2755-2716)	675-662(2624-2611)	
$\sigma = 80$	825-763(2774-2712)	681-659(2630-2608)	630-622(2579-2571)
	610-595(2559-2544)		
$\sigma = 100$	829-758(2778-2707)	687-657(2636-2606)	639-591(2588-2540)
	573-556(2522-2505)	457-454(2406-2403)	
$\sigma = 120$	888-884(2837-2833)	833-754(2782-2703)	690-540(2640-2490)
	529-523(2478-2472)	461-449(2410-2398)	
$\sigma = 160$	900-480(2850-2430)	470-430(2419-2379)	419-414(2368-2363)
$\sigma = 200$	970-962(2919-2911)	930-410(2880-2360)	

RADIOCARBON AGE BP 2600	CALIBRATED AGE:	cal BC 797	
		cal BP 2746	
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	803-792(2752-2741)		
$\sigma = 40$	806-789(2755-2738)		
$\sigma = 60$	827-771(2776-2720)	669-664(2618-2613)	
$\sigma = 80$	830-767(2779-2716)	675-662(2624-2611)	
$\sigma = 100$	888-884(2837-2833)	833-763(2782-2712)	681-660(2630-2609)
	629-622(2578-2571)	609-595(2558-2544)	
$\sigma = 120$	893-877(2842-2826)	836-758(2785-2707)	687-657(2636-2606)
	639-591(2588-2540)	573-556(2522-2505)	457-454(2406-2403)
$\sigma = 160$	967-965(2916-2914)	900-740(2850-2690)	730-520(2680-2470)
	465-437(2414-2386)		
$\sigma = 200$	972-959(2921-2908)	940-410(2890-2360)	

TABLE 3-KK

RADIOCARBON AGE BP 2620		CALIBRATED AGE:		cal BC 801
				cal BP 2750
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	809-795(2758-2744)			
$\sigma = 40$	827-793(2776-2742)			
$\sigma = 60$	830-790(2779-2739)			
$\sigma = 80$	888-884(2837-2833)	833-771(2782-2720)		669-664(2618-2613)
$\sigma = 100$	893-877(2842-2826)	836-767(2785-2716)		675-662(2624-2611)
$\sigma = 120$	900-760(2850-2710)	681-660(2630-2609)		629-623(2578-2572)
	609-595(2558-2544)			
$\sigma = 160$	970-962(2919-2911)	930-750(2880-2700)		690-540(2640-2490)
	529-523(2478-2472)	461-449(2410-2398)		
$\sigma = 200$	1002-988(2951-2937)	970-480(2920-2430)		470-430(2419-2379)
	418-414(2367-2363)			

RADIOCARBON AGE BP 2640		CALIBRATED AGE:		cal BC 805
				cal BP 2754
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	827-799(2776-2748)			
$\sigma = 40$	830-796(2779-2745)			
$\sigma = 60$	889-884(2838-2833)	833-793(2782-2742)		
$\sigma = 80$	893-877(2842-2826)	836-790(2785-2739)		
$\sigma = 100$	900-770(2850-2720)	668-664(2617-2613)		
$\sigma = 120$	967-965(2916-2914)	900-770(2850-2720)		674-662(2623-2611)
$\sigma = 160$	972-959(2921-2908)	940-760(2890-2710)		687-657(2636-2606)
	639-591(2588-2540)	573-556(2522-2505)		456-454(2405-2403)
$\sigma = 200$	1010-740(2960-2690)	730-520(2680-2470)		465-437(2414-2386)

RADIOCARBON AGE BP 2660		CALIBRATED AGE:		cal BC 822
				cal BP 2771
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	831-803(2780-2752)			
$\sigma = 40$	889-883(2838-2832)	833-800(2782-2749)		
$\sigma = 60$	894-875(2843-2824)	836-796(2785-2745)		
$\sigma = 80$	899-793(2848-2742)			
$\sigma = 100$	967-965(2916-2914)	900-790(2850-2740)		
$\sigma = 120$	970-962(2919-2911)	930-770(2880-2720)		669-664(2618-2613)
$\sigma = 160$	1003-988(2952-2937)	970-760(2920-2710)		681-660(2630-2609)
	629-623(2578-2572)	609-595(2558-2544)		
$\sigma = 200$	1067-1066(3016-3015)	1049-1039(2998-2988)		1020-750(2970-2700)
	690-540(2640-2490)	529-523(2478-2472)		461-449(2410-2398)

TABLE 3-LL

RADIOCARBON AGE BP 2680		CALIBRATED AGE:		cal BC 829
				cal BP 2778
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	890-882(2839-2831)			834-813(2783-2762)
$\sigma = 40$	894-875(2843-2824)			836-804(2785-2753)
$\sigma = 60$	899-800(2848-2749)			
$\sigma = 80$	967-965(2916-2914)			905-796(2854-2745)
$\sigma = 100$	970-962(2919-2911)			930-790(2880-2740)
$\sigma = 120$	972-958(2921-2907)			940-790(2890-2740)
$\sigma = 160$	1010-770(2960-2720)			674-662(2623-2611)
$\sigma = 200$	1078-1063(3027-3012)			1050-760(3000-2710)
	639-591(2588-2540)			572-557(2521-2506)
				686-657(2635-2606)
				456-454(2405-2403)

RADIOCARBON AGE BP 2700		CALIBRATED AGES:		cal BC 888, 885, 832
				cal BP 2837, 2834, 2781
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	895-865(2844-2814)			840-827(2789-2776)
$\sigma = 40$	900-814(2849-2763)			
$\sigma = 60$	968-965(2917-2914)			905-804(2854-2753)
$\sigma = 80$	970-962(2919-2911)			929-800(2878-2749)
$\sigma = 100$	972-958(2921-2907)			940-800(2890-2750)
$\sigma = 120$	1003-988(2952-2937)			970-790(2920-2740)
$\sigma = 160$	1067-1066(3016-3015)			1049-1038(2998-2987)
	668-664(2617-2613)			1020-770(2970-2720)
$\sigma = 200$	1188-1183(3137-3132)			1127-1125(3076-3074)
	1080-760(3030-2710)			1107-1102(3056-3051)
	609-595(2558-2544)			681-660(2630-2609)
				629-623(2578-2572)

RADIOCARBON AGE BP 2720		CALIBRATED AGES:		cal BC 893, 878, 835
				cal BP 2842, 2827, 2784
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	901-831(2850-2780)			
$\sigma = 40$	968-965(2917-2914)			917-828(2866-2777)
$\sigma = 60$	970-961(2919-2910)			929-816(2878-2765)
$\sigma = 80$	972-958(2921-2907)			937-805(2886-2754)
$\sigma = 100$	1003-987(2952-2936)			970-800(2920-2750)
$\sigma = 120$	1010-800(2960-2750)			
$\sigma = 160$	1078-1063(3027-3012)			1050-790(3000-2740)
$\sigma = 200$	1209-1205(3158-3154)			1190-1179(3139-3128)
	1129-1122(3078-3071)			1151-1145(3100-3094)
				674-662(2623-2611)

TABLE 3-MM

RADIOCARBON AGE BP 2740 CALIBRATED AGES: cal BC 898, 858, 849
cal BP 2847, 2807, 2798

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	969-964(2918-2913)	921-834(2870-2783)	
$\sigma = 40$	970-961(2919-2910)	930-831(2879-2780)	
$\sigma = 60$	973-958(2922-2907)	938-828(2887-2777)	
$\sigma = 80$	1004-987(2953-2936)	975-816(2924-2765)	
$\sigma = 100$	1010-800(2960-2750)		
$\sigma = 120$	1068-1066(3017-3015)	1049-1038(2998-2987)	1020-800(2970-2750)
$\sigma = 160$	1188-1183(3137-3132)	1127-1125(3076-3074)	1107-1101(3056-3050)
	1080-790(3030-2740)		
$\sigma = 200$	1211-1202(3160-3151)	1191-1142(3140-3091)	1130-770(3080-2720)
	668-664(2617-2613)		

RADIOCARBON AGE BP 2760 CALIBRATED AGES: cal BC 967, 966, 904
cal BP 2916, 2915, 2853

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	971-960(2920-2909)	932-895(2881-2844)	868-838(2817-2787)
$\sigma = 40$	973-958(2922-2907)	939-891(2888-2840)	880-834(2829-2783)
$\sigma = 60$	1004-986(2953-2935)	975-832(2924-2781)	
$\sigma = 80$	1011-829(2960-2778)		
$\sigma = 100$	1068-1066(3017-3015)	1049-1038(2998-2987)	1020-820(2970-2770)
$\sigma = 120$	1078-1063(3027-3012)	1050-800(3000-2750)	
$\sigma = 160$	1209-1205(3158-3154)	1190-1179(3139-3128)	1151-1145(3100-3094)
	1129-1122(3078-3071)	1110-800(3060-2750)	
$\sigma = 200$	1239-1235(3188-3184)	1210-790(3160-2740)	

RADIOCARBON AGE BP 2780 CALIBRATED AGES: cal BC 970, 962, 927
cal BP 2919, 2911, 2876

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	998-995(2947-2944)	973-957(2922-2906)	941-901(2890-2850)
$\sigma = 40$	1005-896(2954-2845)	863-842(2812-2791)	
$\sigma = 60$	1047-1046(2996-2995)	1011-892(2960-2841)	879-835(2828-2784)
$\sigma = 80$	1068-1066(3017-3015)	1049-1038(2998-2987)	1018-832(2967-2781)
$\sigma = 100$	1078-1063(3027-3012)	1050-830(3000-2780)	
$\sigma = 120$	1188-1183(3137-3132)	1127-1125(3076-3074)	1107-1100(3056-3049)
	1080-820(3030-2770)		
$\sigma = 160$	1211-1202(3160-3151)	1191-1142(3140-3091)	1130-800(3080-2750)
$\sigma = 200$	1287-1286(3236-3235)	1259-1230(3208-3179)	1220-790(3170-2740)

TABLE 3-NN

RADIOCARBON AGE BP 2800 CALIBRATED AGES: cal BC 972, 959, 936
cal BP 2921, 2908, 2885

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1007-920(2956-2869)		
$\sigma = 40$	1047-1046(2996-2995)	1012-902(2961-2851)	
$\sigma = 60$	1069-1066(3018-3015)	1049-1037(2998-2986)	1019-897(2968-2846)
	862-844(2811-2793)		
$\sigma = 80$	1078-1062(3027-3011)	1052-892(3001-2841)	879-835(2828-2784)
$\sigma = 100$	1188-1183(3137-3132)	1127-1125(3076-3074)	1107-1099(3056-3048)
	1080-830(3030-2780)		
$\sigma = 120$	1209-1204(3158-3153)	1190-1179(3139-3128)	1151-1145(3100-3094)
	1129-1122(3078-3071)	1110-830(3060-2780)	
$\sigma = 160$	1239-1235(3188-3184)	1210-810(3160-2760)	
$\sigma = 200$	1292-1281(3241-3230)	1260-800(3210-2750)	

RADIOCARBON AGE BP 2820 CALIBRATED AGES: cal BC 1002, 989, 975, 947
cal BP 2951, 2938, 2924, 2896

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1047-1044(2996-2993)	1013-971(2962-2920)	961-931(2910-2880)
$\sigma = 40$	1070-1066(3019-3015)	1050-1036(2999-2985)	1020-923(2969-2872)
$\sigma = 60$	1079-1062(3028-3011)	1052-903(3001-2852)	
$\sigma = 80$	1207-1206(3156-3155)	1188-1183(3137-3132)	1127-1125(3076-3074)
	1107-1098(3056-3047)	1083-897(3032-2846)	861-845(2810-2794)
$\sigma = 100$	1209-1204(3158-3153)	1190-1179(3139-3128)	1151-1145(3100-3094)
	1129-1122(3078-3071)	1110-890(3060-2840)	879-835(2828-2784)
$\sigma = 120$	1211-1202(3160-3151)	1192-1142(3141-3091)	1130-830(3080-2780)
$\sigma = 160$	1287-1286(3236-3235)	1259-1229(3208-3178)	1220-820(3170-2770)
$\sigma = 200$	1310-800(3260-2750)		

RADIOCARBON AGE BP 2840 CALIBRATED AGE: cal BC 1010
cal BP 2959

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1074-1064(3023-3013)	1050-973(2999-2922)	957-940(2906-2889)
$\sigma = 40$	1187-1186(3136-3135)	1079-971(3028-2920)	960-933(2909-2882)
$\sigma = 60$	1207-1206(3156-3155)	1188-1182(3137-3131)	1128-1125(3077-3074)
	1108-1095(3057-3044)	1084-924(3033-2873)	
$\sigma = 80$	1209-1204(3158-3153)	1190-1178(3139-3127)	1151-1145(3100-3094)
	1130-1122(3079-3071)	1111-903(3060-2852)	
$\sigma = 100$	1212-1202(3161-3151)	1192-1142(3141-3091)	1130-900(3080-2850)
	861-844(2810-2793)		
$\sigma = 120$	1240-1235(3189-3184)	1210-890(3160-2840)	879-835(2828-2784)
$\sigma = 160$	1292-1281(3241-3230)	1260-830(3210-2780)	
$\sigma = 200$	1370-1341(3319-3290)	1320-810(3270-2760)	

TABLE 3-OO

RADIOCARBON AGE BP 2860		CALIBRATED AGES:		cal BC 1049, 1039, 1016
				cal BP 2998, 2988, 2965
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	1187-1185(3136-3134)	1081-1005(3030-2954)	984-975(2933-2924)	
$\sigma = 40$	1207-1206(3156-3155)	1188-1182(3137-3131)	1128-1124(3077-3073)	
	1108-974(3057-2923)	957-942(2906-2891)		
$\sigma = 60$	1209-1204(3158-3153)	1190-1178(3139-3127)	1152-1144(3101-3093)	
	1130-1122(3079-3071)	1111-971(3060-2920)	960-933(2909-2882)	
$\sigma = 80$	1212-1202(3161-3151)	1192-1142(3141-3091)	1132-925(3081-2874)	
$\sigma = 100$	1240-1235(3189-3184)	1210-900(3160-2850)		
$\sigma = 120$	1288-1285(3237-3234)	1259-1229(3208-3178)	1220-900(3170-2850)	
	861-845(2810-2794)			
$\sigma = 160$	1310-830(3260-2780)			
$\sigma = 200$	1374-1334(3323-3283)	1320-820(3270-2770)		

RADIOCARBON AGE BP 2880		CALIBRATED AGES:		cal BC 1078, 1063, 1052
				cal BP 3027, 3012, 3001
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	1208-1205(3157-3154)	1189-1181(3138-3130)	1148-1146(3097-3095)	
	1128-1123(3077-3072)	1109-1012(3058-2961)		
$\sigma = 40$	1210-1204(3159-3153)	1190-1177(3139-3126)	1153-1144(3102-3093)	
	1130-1007(3079-2956)	980-976(2929-2925)		
$\sigma = 60$	1212-1202(3161-3151)	1192-1142(3141-3091)	1132-974(3081-2923)	
	955-943(2904-2892)			
$\sigma = 80$	1241-1234(3190-3183)	1214-972(3163-2921)	959-934(2908-2883)	
$\sigma = 100$	1288-1285(3237-3234)	1259-1229(3208-3178)	1220-930(3170-2880)	
$\sigma = 120$	1292-1281(3241-3230)	1260-900(3210-2850)		
$\sigma = 160$	1370-1341(3319-3290)	1320-890(3270-2840)	878-835(2827-2784)	
$\sigma = 200$	1390-830(3340-2780)			

RADIOCARBON AGE BP 2900		CALIBRATED AGES:		cal BC 1188, 1184, 1127, 1126, 1107,
				1104, 1083, 1059, 1054
				cal BP 3137, 3133, 3076, 3075, 3056,
				3053, 3032, 3008, 3003
Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	1210-1203(3159-3152)	1191-1177(3140-3126)	1154-1144(3103-3093)	
	1130-1050(3079-2999)	1034-1022(2983-2971)		
$\sigma = 40$	1212-1014(3161-2963)			
$\sigma = 60$	1241-1234(3190-3183)	1214-1008(3163-2957)	977-976(2926-2925)	
$\sigma = 80$	1288-1285(3237-3234)	1259-1229(3208-3178)	1218-974(3167-2923)	
	952-944(2901-2893)			
$\sigma = 100$	1292-1281(3241-3230)	1260-970(3210-2920)	959-934(2908-2883)	
$\sigma = 120$	1310-930(3260-2880)			
$\sigma = 160$	1374-1334(3323-3283)	1320-900(3270-2850)	860-846(2809-2795)	
$\sigma = 200$	1410-830(3360-2780)			

TABLE 3-PP

RADIOCARBON AGE BP 2920		CALIBRATED AGES:		cal BC 1209, 1205, 1189, 1179, 1150,
				1145, 1129, 1122, 1110
				cal BP 3158, 3154, 3138, 3128, 3099,
				3094, 3078, 3071, 3059

Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	1213-1080(3162-3029)	1062-1053(3011-3002)		
$\sigma = 40$	1242-1234(3191-3183)	1215-1075(3164-3024)	1064-1051(3013-3000)	
	1028-1026(2977-2975)			
$\sigma = 60$	1288-1285(3237-3234)	1259-1015(3208-2964)		
$\sigma = 80$	1292-1280(3241-3229)	1263-1009(3212-2958)		
$\sigma = 100$	1310-970(3260-2920)	951-945(2900-2894)		
$\sigma = 120$	1370-1340(3319-3289)	1320-970(3270-2920)	959-935(2908-2884)	
$\sigma = 160$	1390-900(3340-2850)			
$\sigma = 200$	1428-1423(3377-3372)	1410-890(3360-2840)	878-835(2827-2784)	

RADIOCARBON AGE BP 2940		CALIBRATED AGES:		cal BC 1211, 1203, 1191, 1158, 1156,
				1143, 1131, 1119, 1113
				cal BP 3160, 3152, 3140, 3107, 3105,
				3092, 3080, 3068, 3062

Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	1257-1128(3206-3077)	1092-1108(3041-3057)	1199-1055(3148-3004)	
$\sigma = 40$	1289-1284(3238-3233)	1260-1081(3209-3030)	1061-1053(3010-3002)	
$\sigma = 60$	1293-1280(3242-3229)	1263-1076(3212-3025)	1064-1051(3013-3000)	
$\sigma = 80$	1315-1015(3264-2964)			
$\sigma = 100$	1370-1340(3319-3289)	1320-1010(3270-2960)		
$\sigma = 120$	1374-1334(3323-3283)	1320-1000(3270-2950)	991-974(2940-2923)	
	950-945(2899-2894)			
$\sigma = 160$	1410-930(3360-2880)			
$\sigma = 200$	1430-900(3380-2850)	859-846(2808-2795)		

RADIOCARBON AGE BP 2960		CALIBRATED AGES:		cal BC 1238, 1236, 1214, 1200, 1193,
				1140, 1133
				cal BP 3187, 3185, 3163, 3149, 3142,
				3089, 3082

Sample σ and cal BC(cal BP) ranges:				
$\sigma = 20$	1290-1283(3239-3232)	1260-1190(3209-3139)	1177-1112(3126-3061)	
$\sigma = 40$	1293-1280(3242-3229)	1263-1109(3212-3058)	1088-1086(3037-3035)	
	1057-1056(3006-3005)			
$\sigma = 60$	1367-1366(3316-3315)	1316-1081(3265-3030)	1060-1054(3009-3003)	
$\sigma = 80$	1370-1340(3319-3289)	1319-1077(3268-3026)	1064-1051(3013-3000)	
$\sigma = 100$	1374-1334(3323-3283)	1320-1020(3270-2970)		
$\sigma = 120$	1390-1010(3340-2960)			
$\sigma = 160$	1428-1423(3377-3372)	1410-970(3360-2920)	959-935(2908-2884)	
$\sigma = 200$	1440-900(3390-2850)			

TABLE 3-QQ

RADIOCARBON AGE BP 2980 CALIBRATED AGES: cal BC 1287, 1286, 1258, 1230, 1216, 1198, 1195, 1138, 1135
cal BP 3236, 3235, 3207, 3179, 3165, 3147, 3144, 3087, 3084

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1307-1306(3256-3255)	1294-1279(3243-3228)	1264-1212(3213-3161)
	1202-1192(3151-3141)	1142-1132(3091-3081)	1118-1115(3067-3064)
$\sigma = 40$	1367-1366(3316-3315)	1317-1191(3266-3140)	1173-1154(3122-3103)
	1143-1131(3092-3080)	1120-1112(3069-3061)	
$\sigma = 60$	1371-1340(3320-3289)	1319-1109(3268-3058)	1057-1056(3006-3005)
$\sigma = 80$	1375-1334(3324-3283)	1322-1082(3271-3031)	1060-1054(3009-3003)
$\sigma = 100$	1390-1080(3340-3030)	1064-1051(3013-3000)	
$\sigma = 120$	1410-1020(3360-2970)		
$\sigma = 160$	1430-1000(3380-2950)	990-974(2939-2923)	949-945(2898-2894)
$\sigma = 200$	1488-1484(3437-3433)	1450-930(3400-2880)	

RADIOCARBON AGE BP 3000 CALIBRATED AGES: cal BC 1292, 1281, 1262
cal BP 3241, 3230, 3211

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1368-1364(3317-3313)	1348-1344(3297-3293)	1318-1215(3267-3164)
	1200-1194(3149-3143)	1139-1134(3088-3083)	
$\sigma = 40$	1371-1338(3320-3287)	1320-1213(3269-3162)	1201-1192(3150-3141)
	1141-1133(3090-3082)	1117-1116(3066-3065)	
$\sigma = 60$	1375-1333(3324-3282)	1322-1191(3271-3140)	1168-1155(3117-3104)
	1143-1131(3092-3080)	1120-1113(3069-3062)	
$\sigma = 80$	1390-1109(3339-3058)	1057-1056(3006-3005)	
$\sigma = 100$	1410-1080(3360-3030)	1060-1054(3009-3003)	
$\sigma = 120$	1430-1080(3380-3030)	1064-1051(3013-3000)	
$\sigma = 160$	1440-1010(3390-2960)		
$\sigma = 200$	1492-1478(3441-3427)	1460-970(3410-2920)	959-935(2908-2884)

RADIOCARBON AGE BP 3020 CALIBRATED AGES: cal BC 1313, 1298, 1296, 1277, 1266
cal BP 3262, 3247, 3245, 3226, 3215

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1373-1336(3322-3285)	1321-1260(3270-3209)	1228-1221(3177-3170)
	1198-1196(3147-3145)	1137-1136(3086-3085)	
$\sigma = 40$	1376-1245(3325-3194)	1232-1215(3181-3164)	1199-1194(3148-3143)
	1139-1135(3088-3084)		
$\sigma = 60$	1391-1213(3340-3162)	1201-1193(3150-3142)	1141-1133(3090-3082)
	1117-1116(3066-3065)		
$\sigma = 80$	1409-1191(3358-3140)	1165-1155(3114-3104)	1143-1131(3092-3080)
	1120-1113(3069-3062)		
$\sigma = 100$	1430-1110(3380-3060)		
$\sigma = 120$	1430-1080(3380-3030)	1060-1054(3009-3003)	
$\sigma = 160$	1488-1484(3437-3433)	1450-1020(3400-2970)	
$\sigma = 200$	1500-1000(3450-2950)	990-974(2939-2923)	949-946(2898-2895)

TABLE 3-RR

RADIOCARBON AGE BP 3040 CALIBRATED AGES: cal BC 1370, 1362, 1351, 1342, 1319
cal BP 3319, 3311, 3300, 3291, 3268

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1376-1293(3325-3242)	1280-1263(3229-3212)	
$\sigma = 40$	1392-1261(3341-3210)	1197-1196(3146-3145)	
$\sigma = 60$	1410-1257(3359-3206)	1247-1246(3196-3195)	1231-1216(3180-3165)
	1199-1194(3148-3143)	1138-1135(3087-3084)	
$\sigma = 80$	1429-1213(3378-3162)	1201-1193(3150-3142)	1141-1133(3090-3082)
	1117-1116(3066-3065)		
$\sigma = 100$	1430-1190(3380-3140)	1164-1155(3113-3104)	1143-1131(3092-3080)
	1120-1113(3069-3062)		
$\sigma = 120$	1440-1110(3390-3060)		
$\sigma = 160$	1493-1477(3442-3426)	1460-1080(3410-3030)	1063-1051(3012-3000)
$\sigma = 200$	1520-1010(3470-2960)		

RADIOCARBON AGE BP 3060 CALIBRATED AGES: cal BC 1374, 1335, 1322
cal BP 3323, 3284, 3271

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1407-1317(3356-3266)		
$\sigma = 40$	1410-1295(3359-3244)	1278-1264(3227-3213)	
$\sigma = 60$	1429-1261(3378-3210)	1197-1196(3146-3145)	
$\sigma = 80$	1433-1258(3382-3207)	1231-1216(3180-3165)	1199-1195(3148-3144)
	1138-1135(3087-3084)		
$\sigma = 100$	1440-1210(3390-3160)	1201-1193(3150-3142)	1141-1133(3090-3082)
	1117-1116(3066-3065)		
$\sigma = 120$	1488-1484(3437-3433)	1450-1190(3400-3140)	1162-1155(3111-3104)
	1143-1131(3092-3080)	1120-1113(3069-3062)	
$\sigma = 160$	1500-1080(3450-3030)	1060-1054(3009-3003)	
$\sigma = 200$	1530-1020(3480-2970)		

RADIOCARBON AGE BP 3080 CALIBRATED AGES: cal BC 1388, 1330, 1325
cal BP 3337, 3279, 3274

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1411-1372(3360-3321)	1359-1354(3308-3303)	1338-1320(3287-3269)
$\sigma = 40$	1429-1318(3378-3267)		
$\sigma = 60$	1433-1295(3382-3244)	1278-1265(3227-3214)	
$\sigma = 80$	1436-1261(3385-3210)	1197-1196(3146-3145)	
$\sigma = 100$	1488-1484(3437-3433)	1450-1260(3400-3210)	1231-1216(3180-3165)
	1199-1195(3148-3144)	1138-1135(3087-3084)	
$\sigma = 120$	1493-1477(3442-3426)	1460-1210(3410-3160)	1201-1193(3150-3142)
	1140-1133(3089-3082)	1117-1116(3066-3065)	
$\sigma = 160$	1520-1110(3470-3060)		
$\sigma = 200$	1599-1569(3548-3518)	1530-1080(3480-3030)	1063-1051(3012-3000)

TABLE 3-SS

RADIOCARBON AGE BP 3100		CALIBRATED AGE:	
		cal BC 1408	cal BP 3357
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1430-1376(3379-3325)	1332-1323(3281-3272)	
$\sigma = 40$	1433-1373(3382-3322)	1357-1355(3306-3304)	1336-1321(3285-3270)
$\sigma = 60$	1436-1318(3385-3267)		
$\sigma = 80$	1488-1484(3437-3433)	1454-1296(3403-3245)	1277-1265(3226-3214)
$\sigma = 100$	1493-1477(3442-3426)	1460-1260(3410-3210)	
$\sigma = 120$	1500-1260(3450-3210)	1231-1216(3180-3165)	1199-1195(3148-3144)
	1138-1135(3087-3084)		
$\sigma = 160$	1530-1190(3480-3140)	1161-1156(3110-3105)	1143-1131(3092-3080)
	1120-1113(3069-3062)		
$\sigma = 200$	1600-1080(3550-3030)	1060-1054(3009-3003)	

RADIOCARBON AGE BP 3120		CALIBRATED AGES:	
		cal BC 1428, 1424, 1412	cal BP 3377, 3373, 3361
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1434-1394(3383-3343)	1327-1326(3276-3275)	
$\sigma = 40$	1440-1379(3389-3328)	1331-1324(3280-3273)	
$\sigma = 60$	1489-1483(3438-3432)	1454-1373(3403-3322)	1357-1356(3306-3305)
	1336-1321(3285-3270)		
$\sigma = 80$	1493-1477(3442-3426)	1464-1318(3413-3267)	
$\sigma = 100$	1500-1310(3450-3260)	1300-1296(3249-3245)	1277-1265(3226-3214)
$\sigma = 120$	1520-1260(3470-3210)		
$\sigma = 160$	1599-1569(3548-3518)	1530-1210(3480-3160)	1201-1193(3150-3142)
	1140-1133(3089-3082)		
$\sigma = 200$	1679-1675(3628-3624)	1620-1110(3570-3060)	

RADIOCARBON AGE BP 3140		CALIBRATED AGES:	
		cal BC 1432, 1417, 1416	cal BP 3381, 3366, 3365
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1447-1410(3396-3359)		
$\sigma = 40$	1489-1483(3438-3432)	1455-1396(3404-3345)	
$\sigma = 60$	1493-1477(3442-3426)	1465-1384(3414-3333)	1331-1324(3280-3273)
$\sigma = 80$	1498-1373(3447-3322)	1357-1356(3306-3305)	1335-1321(3284-3270)
$\sigma = 100$	1520-1320(3470-3270)		
$\sigma = 120$	1530-1310(3480-3260)	1300-1296(3249-3245)	1277-1265(3226-3214)
$\sigma = 160$	1600-1260(3550-3210)	1230-1216(3179-3165)	1198-1195(3147-3144)
	1138-1135(3087-3084)		
$\sigma = 200$	1684-1673(3633-3622)	1657-1656(3606-3605)	1640-1190(3590-3140)
	1160-1156(3109-3105)	1143-1131(3092-3080)	1120-1113(3069-3062)

TABLE 3-TT

RADIOCARBON AGE BP 3160		CALIBRATED AGE:	
		cal BC 1436	cal BP 3385
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1490-1481(3439-3430)	1457-1414(3406-3363)	
$\sigma = 40$	1493-1411(3442-3360)		
$\sigma = 60$	1499-1408(3448-3357)		
$\sigma = 80$	1519-1386(3468-3335)	1330-1324(3279-3273)	
$\sigma = 100$	1577-1576(3526-3525)	1530-1370(3480-3320)	1335-1321(3284-3270)
$\sigma = 120$	1599-1569(3548-3518)	1530-1320(3480-3270)	
$\sigma = 160$	1679-1675(3628-3624)	1620-1260(3570-3210)	
$\sigma = 200$	1688-1671(3637-3620)	1660-1210(3610-3160)	1201-1193(3150-3142)
	1140-1133(3089-3082)		

RADIOCARBON AGE BP 3180		CALIBRATED AGES:	
		cal BC 1488, 1485, 1452	cal BP 3437, 3434, 3401
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1494-1434(3443-3383)		
$\sigma = 40$	1499-1431(3448-3380)	1418-1415(3367-3364)	
$\sigma = 60$	1519-1412(3468-3361)		
$\sigma = 80$	1577-1576(3526-3525)	1527-1408(3476-3357)	
$\sigma = 100$	1599-1569(3548-3518)	1530-1390(3480-3340)	1330-1324(3279-3273)
$\sigma = 120$	1600-1370(3550-3320)	1335-1321(3284-3270)	
$\sigma = 160$	1684-1673(3633-3622)	1657-1656(3606-3605)	1640-1310(3590-3260)
	1299-1296(3248-3245)	1277-1265(3226-3214)	
$\sigma = 200$	1690-1260(3640-3210)	1230-1216(3179-3165)	1198-1195(3147-3144)
	1138-1135(3087-3084)		

RADIOCARBON AGE BP 3200		CALIBRATED AGES:	
		cal BC 1492, 1478, 1463	cal BP 3441, 3427, 3412
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1501-1448(3450-3397)		
$\sigma = 40$	1520-1435(3469-3384)		
$\sigma = 60$	1577-1576(3526-3525)	1527-1431(3476-3380)	1418-1416(3367-3365)
$\sigma = 80$	1599-1568(3548-3517)	1533-1412(3482-3361)	
$\sigma = 100$	1600-1410(3550-3360)		
$\sigma = 120$	1679-1675(3628-3624)	1620-1390(3570-3340)	1330-1324(3279-3273)
$\sigma = 160$	1688-1671(3637-3620)	1660-1320(3610-3270)	
$\sigma = 200$	1727-1711(3676-3660)	1690-1260(3640-3210)	

RADIOCARBON AGE BP 3220		CALIBRATED AGE:	
		cal BC 1496	cal BP 3445
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1522-1457(3471-3406)		
$\sigma = 40$	1580-1575(3529-3524)	1528-1449(3477-3398)	
$\sigma = 60$	1599-1568(3548-3517)	1534-1435(3483-3384)	
$\sigma = 80$	1603-1431(3552-3380)	1418-1416(3367-3365)	
$\sigma = 100$	1679-1675(3628-3624)	1620-1410(3570-3360)	
$\sigma = 120$	1684-1673(3633-3622)	1657-1656(3606-3605)	1640-1410(3590-3360)
$\sigma = 160$	1690-1370(3640-3320)	1335-1321(3284-3270)	
$\sigma = 200$	1740-1310(3690-3260)	1299-1296(3248-3245)	1277-1265(3226-3214)

TABLE 3-UU

RADIOCARBON AGE BP 3240 CALIBRATED AGE: cal BC 1518
cal BP 3467

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1597-1595(3546-3544)	1585-1572(3534-3521)	1530-1494(3479-3443)
$\sigma = 40$	1600-1566(3549-3515)	1535-1459(3484-3408)	
$\sigma = 60$	1604-1450(3553-3399)		
$\sigma = 80$	1679-1675(3628-3624)	1620-1435(3569-3384)	
$\sigma = 100$	1684-1673(3633-3622)	1657-1656(3606-3605)	1640-1430(3590-3380)
	1418-1416(3367-3365)		
$\sigma = 120$	1688-1670(3637-3619)	1660-1410(3610-3360)	
$\sigma = 160$	1727-1710(3676-3659)	1690-1390(3640-3340)	1330-1324(3279-3273)
$\sigma = 200$	1740-1320(3690-3270)		

RADIOCARBON AGE BP 3260 CALIBRATED AGE: cal BC 1526
cal BP 3475

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1601-1557(3550-3506)	1537-1501(3486-3450)	
$\sigma = 40$	1604-1495(3553-3444)		
$\sigma = 60$	1680-1675(3629-3624)	1621-1491(3570-3440)	1480-1460(3429-3409)
$\sigma = 80$	1684-1673(3633-3622)	1657-1656(3606-3605)	1638-1450(3587-3399)
$\sigma = 100$	1690-1440(3640-3390)		
$\sigma = 120$	1690-1430(3640-3380)	1418-1416(3367-3365)	
$\sigma = 160$	1740-1410(3690-3360)		
$\sigma = 200$	1768-1764(3717-3713)	1750-1370(3700-3320)	1335-1321(3284-3270)

RADIOCARBON AGE BP 3280 CALIBRATED AGES: cal BC 1598, 1569, 1533
cal BP 3547, 3518, 3482

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1677-1676(3626-3625)	1617-1520(3566-3469)	
$\sigma = 40$	1681-1675(3630-3624)	1622-1503(3571-3452)	
$\sigma = 60$	1685-1672(3634-3621)	1657-1655(3606-3604)	1638-1495(3587-3444)
$\sigma = 80$	1688-1491(3637-3440)	1480-1460(3429-3409)	
$\sigma = 100$	1690-1450(3640-3400)		
$\sigma = 120$	1728-1710(3677-3659)	1690-1440(3640-3390)	
$\sigma = 160$	1740-1410(3690-3360)		
$\sigma = 200$	1864-1845(3813-3794)	1828-1824(3777-3773)	1812-1800(3761-3749)
	1780-1390(3730-3340)	1330-1324(3279-3273)	

RADIOCARBON AGE BP 3300 CALIBRATED AGE: cal BC 1603
cal BP 3552

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1681-1675(3630-3624)	1622-1584(3571-3533)	1573-1530(3522-3479)
$\sigma = 40$	1685-1673(3634-3622)	1657-1655(3606-3604)	1638-1524(3587-3473)
$\sigma = 60$	1688-1506(3637-3455)		
$\sigma = 80$	1691-1496(3640-3445)		
$\sigma = 100$	1727-1711(3676-3660)	1690-1490(3640-3440)	1479-1462(3428-3411)
$\sigma = 120$	1740-1450(3690-3400)		
$\sigma = 160$	1768-1764(3717-3713)	1750-1430(3700-3380)	1417-1416(3366-3365)
$\sigma = 200$	1879-1842(3828-3791)	1830-1410(3780-3360)	

TABLE 3-VV

RADIOCARBON AGE BP 3320 CALIBRATED AGES: cal BC 1679, 1676, 1619
cal BP 3628, 3625, 3568

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1686-1672(3635-3621)	1658-1653(3607-3602)	1640-1600(3589-3549)
	1565-1535(3514-3484)		
$\sigma = 40$	1689-1585(3638-3534)	1572-1530(3521-3479)	
$\sigma = 60$	1691-1524(3640-3473)		
$\sigma = 80$	1728-1710(3677-3659)	1694-1506(3643-3455)	
$\sigma = 100$	1740-1500(3690-3450)		
$\sigma = 120$	1740-1490(3690-3440)	1479-1462(3428-3411)	
$\sigma = 160$	1864-1845(3813-3794)	1828-1824(3777-3773)	1812-1800(3761-3749)
	1780-1440(3730-3390)		
$\sigma = 200$	1880-1410(3830-3360)		

RADIOCARBON AGE BP 3340 CALIBRATED AGES: cal BC 1684, 1673, 1637
cal BP 3633, 3622, 3586

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1689-1605(3638-3554)		
$\sigma = 40$	1692-1601(3641-3550)	1557-1538(3506-3487)	
$\sigma = 60$	1729-1709(3678-3658)	1694-1597(3643-3546)	1571-1531(3520-3480)
$\sigma = 80$	1737-1524(3686-3473)		
$\sigma = 100$	1740-1520(3690-3470)	1507-1506(3456-3455)	
$\sigma = 120$	1769-1763(3718-3712)	1750-1500(3700-3450)	
$\sigma = 160$	1879-1842(3828-3791)	1830-1450(3780-3400)	
$\sigma = 200$	1890-1430(3840-3380)	1417-1416(3366-3365)	

RADIOCARBON AGE BP 3360 CALIBRATED AGES: cal BC 1688, 1671, 1660, 1651, 1642
cal BP 3637, 3620, 3609, 3600, 3591

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1692-1623(3641-3572)		
$\sigma = 40$	1729-1709(3678-3658)	1694-1606(3643-3555)	
$\sigma = 60$	1737-1602(3686-3551)	1549-1544(3498-3493)	
$\sigma = 80$	1743-1598(3692-3547)	1571-1531(3520-3480)	
$\sigma = 100$	1769-1763(3718-3712)	1750-1520(3700-3470)	
$\sigma = 120$	1864-1845(3813-3794)	1828-1824(3777-3773)	1812-1800(3761-3749)
	1780-1520(3730-3470)		
$\sigma = 160$	1880-1490(3830-3440)	1479-1462(3428-3411)	
$\sigma = 200$	1920-1440(3870-3390)		

RADIOCARBON AGE BP 3380 CALIBRATED AGES: cal BC 1691, 1668, 1664
cal BP 3640, 3617, 3613

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1731-1705(3680-3654)	1695-1686(3644-3635)	1672-1639(3621-3588)
$\sigma = 40$	1738-1624(3687-3573)		
$\sigma = 60$	1744-1606(3693-3555)		
$\sigma = 80$	1807-1806(3756-3755)	1769-1763(3718-3712)	1751-1602(3700-3551)
	1548-1545(3497-3494)		
$\sigma = 100$	1865-1845(3814-3794)	1828-1823(3777-3772)	1812-1799(3761-3748)
	1780-1600(3730-3550)	1571-1532(3520-3481)	
$\sigma = 120$	1879-1842(3828-3791)	1830-1520(3780-3470)	
$\sigma = 160$	1890-1500(3840-3450)		
$\sigma = 200$	2008-2002(3957-3951)	1920-1450(3870-3400)	

TABLE 3-WW

RADIOCARBON AGE BP 3400	CALIBRATED AGES: cal BC 1727, 1712, 1693 cal BP 3676, 3661, 3642		
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1740-1689(3689-3638)	1670-1661(3619-3610)	1649-1644(3598-3593)
$\sigma = 40$	1745-1687(3694-3636)	1672-1640(3621-3589)	
$\sigma = 60$	1807-1806(3756-3755)	1770-1762(3719-3711)	1752-1625(3701-3574)
$\sigma = 80$	1866-1845(3815-3794)	1828-1823(3777-3772)	1812-1799(3761-3748)
	1776-1606(3725-3555)		
$\sigma = 100$	1879-1842(3828-3791)	1830-1600(3780-3550)	1547-1546(3496-3495)
$\sigma = 120$	1880-1600(3830-3550)	1570-1532(3519-3481)	
$\sigma = 160$	1920-1520(3870-3470)		
$\sigma = 200$	2012-1995(3961-3944)	1960-1490(3910-3440)	1479-1462(3428-3411)

RADIOCARBON AGE BP 3420	CALIBRATED AGES: cal BC 1735, 1697, 1696 cal BP 3684, 3646, 3645		
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1746-1692(3695-3641)	1667-1665(3616-3614)	
$\sigma = 40$	1808-1805(3757-3754)	1770-1690(3719-3639)	1669-1662(3618-3611)
	1647-1646(3596-3595)		
$\sigma = 60$	1866-1845(3815-3794)	1828-1823(3777-3772)	1812-1799(3761-3748)
	1776-1687(3725-3636)	1671-1641(3620-3590)	
$\sigma = 80$	1879-1842(3828-3791)	1831-1625(3780-3574)	
$\sigma = 100$	1880-1620(3830-3570)		
$\sigma = 120$	1890-1600(3840-3550)		
$\sigma = 160$	2008-2002(3957-3951)	1920-1530(3870-3480)	
$\sigma = 200$	2027-1992(3976-3941)	1970-1500(3920-3450)	

RADIOCARBON AGE BP 3440	CALIBRATED AGE: cal BC 1742 cal BP 3691		
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1857-1846(3806-3795)	1810-1803(3759-3752)	1772-1729(3721-3678)
	1708-1694(3657-3643)		
$\sigma = 40$	1874-1844(3823-3793)	1829-1797(3778-3746)	1778-1692(3727-3641)
	1667-1666(3616-3615)		
$\sigma = 60$	1879-1842(3828-3791)	1831-1690(3780-3639)	1669-1663(3618-3612)
	1647-1646(3596-3595)		
$\sigma = 80$	1883-1687(3832-3636)	1671-1641(3620-3590)	
$\sigma = 100$	1890-1630(3840-3580)		
$\sigma = 120$	1920-1620(3870-3570)	1607-1606(3556-3555)	
$\sigma = 160$	2012-1995(3961-3944)	1960-1600(3910-3550)	1570-1532(3519-3481)
$\sigma = 200$	2030-1520(3980-3470)		

TABLE 3-XX

RADIOCARBON AGE BP 3460	CALIBRATED AGES: cal BC 1768, 1765, 1749 cal BP 3717, 3714, 3698		
Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1876-1844(3825-3793)	1829-1797(3778-3746)	1778-1739(3727-3688)
$\sigma = 40$	1879-1842(3828-3791)	1831-1733(3780-3682)	1702-1696(3651-3645)
$\sigma = 60$	1883-1693(3832-3642)		
$\sigma = 80$	1886-1690(3835-3639)	1669-1663(3618-3612)	
$\sigma = 100$	1920-1690(3870-3640)	1671-1642(3620-3591)	
$\sigma = 120$	2008-2002(3957-3951)	1920-1630(3870-3580)	
$\sigma = 160$	2027-1992(3976-3941)	1970-1600(3920-3550)	
$\sigma = 200$	2110-2103(4059-4052)	2090-2085(4039-4034)	2067-2066(4016-4015)
	2030-1530(3980-3480)		

RADIOCARBON AGE BP 3480	CALIBRATED AGES: cal BC 1862, 1845, 1827, 1824, 1811, 1800, 1775 cal BP 3811, 3794, 3776, 3773, 3760, 3749, 3724		
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Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1880-1745(3829-3694)		
$\sigma = 40$	1883-1740(3832-3689)		
$\sigma = 60$	1886-1733(3835-3682)	1701-1696(3650-3645)	
$\sigma = 80$	1920-1723(3869-3672)	1713-1693(3662-3642)	
$\sigma = 100$	2008-2001(3957-3950)	1920-1690(3870-3640)	1669-1663(3618-3612)
$\sigma = 120$	2012-1995(3961-3944)	1960-1690(3910-3640)	1671-1642(3620-3591)
$\sigma = 160$	2030-1620(3980-3570)		
$\sigma = 200$	2130-2082(4079-4031)	2070-2062(4019-4011)	2040-1600(3990-3550)
	1570-1532(3519-3481)		

RADIOCARBON AGE BP 3500	CALIBRATED AGES: cal BC 1878, 1842, 1830, 1789, 1785 cal BP 3827, 3791, 3779, 3738, 3734		
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Sample σ and cal BC(cal BP) ranges:			
$\sigma = 20$	1884-1771(3833-3720)	1760-1754(3709-3703)	
$\sigma = 40$	1886-1747(3835-3696)		
$\sigma = 60$	1920-1741(3869-3690)		
$\sigma = 80$	2008-2001(3957-3950)	1924-1734(3873-3683)	1700-1696(3649-3645)
$\sigma = 100$	2012-1995(3961-3944)	1960-1720(3910-3670)	1713-1693(3662-3642)
$\sigma = 120$	2027-1991(3976-3940)	1970-1690(3920-3640)	1669-1663(3618-3612)
$\sigma = 160$	2110-2103(4059-4052)	2090-2085(4039-4034)	2067-2066(4016-4015)
	2030-1630(3980-3580)		
$\sigma = 200$	2136-2058(4085-4007)	2040-1600(3990-3550)	

TABLE 3-YY

RADIOCARBON AGE BP 3520 CALIBRATED AGES: cal BC 1882, 1840, 1833
cal BP 3831, 3789, 3782

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1917-1905(3866-3854)	1889-1873(3838-3822)	1844-1813(3793-3762)
	1797-1778(3746-3727)		
$\sigma = 40$	1920-1772(3869-3721)	1758-1755(3707-3704)	
$\sigma = 60$	2008-2000(3957-3949)	1924-1747(3873-3696)	
$\sigma = 80$	2012-1994(3961-3943)	1962-1741(3911-3690)	
$\sigma = 100$	2027-1991(3976-3940)	1970-1730(3920-3680)	1700-1696(3649-3645)
$\sigma = 120$	2030-1720(3980-3670)	1713-1693(3662-3642)	
$\sigma = 160$	2131-2082(4080-4031)	2070-2062(4019-4011)	2040-1690(3990-3640)
	1671-1642(3620-3591)		
$\sigma = 200$	2140-1620(4090-3570)		

RADIOCARBON AGE BP 3540 CALIBRATED AGES: cal BC 1885, 1837, 1836
cal BP 3834, 3786, 3785

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	1921-1880(3870-3829)	1841-1832(3790-3781)	
$\sigma = 40$	2009-1998(3958-3947)	1937-1935(3886-3884)	1925-1877(3874-3826)
	1843-1829(3792-3778)	1819-1815(3768-3764)	1795-1781(3744-3730)
$\sigma = 60$	2012-1994(3961-3943)	1963-1858(3912-3807)	1846-1773(3795-3722)
	1757-1756(3706-3705)		
$\sigma = 80$	2027-1991(3976-3940)	1973-1748(3922-3697)	
$\sigma = 100$	2030-1740(3980-3690)		
$\sigma = 120$	2110-2102(4059-4051)	2091-2085(4040-4034)	2067-2066(4016-4015)
	2030-1730(3980-3680)	1700-1696(3649-3645)	
$\sigma = 160$	2136-2058(4085-4007)	2040-1690(3990-3640)	1669-1663(3618-3612)
$\sigma = 200$	2198-2159(4147-4108)	2140-1630(4090-3580)	

RADIOCARBON AGE BP 3560 CALIBRATED AGES: cal BC 1919, 1902, 1892
cal BP 3868, 3851, 3841

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2010-1996(3959-3945)	1942-1883(3891-3832)	1838-1834(3787-3783)
$\sigma = 40$	2013-1994(3962-3943)	1964-1881(3913-3830)	1841-1832(3790-3781)
$\sigma = 60$	2028-1991(3977-3940)	1974-1877(3923-3826)	1843-1829(3792-3778)
	1818-1815(3767-3764)	1793-1782(3742-3731)	
$\sigma = 80$	2031-1859(3980-3808)	1846-1773(3795-3722)	1757-1756(3706-3705)
$\sigma = 100$	2110-2102(4059-4051)	2091-2085(4040-4034)	2067-2066(4016-4015)
	2030-1750(3980-3700)		
$\sigma = 120$	2131-2082(4080-4031)	2070-2062(4019-4011)	2040-1740(3990-3690)
$\sigma = 160$	2140-1720(4090-3670)	1713-1693(3662-3642)	
$\sigma = 200$	2200-1690(4150-3640)	1671-1642(3620-3591)	

Table 3-ZZ

RADIOCARBON AGE BP 3580 CALIBRATED AGES: cal BC 2008, 2003, 1923
cal BP 3957, 3952, 3872

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2013-1993(3962-3942)	1967-1887(3916-3836)	
$\sigma = 40$	2028-1991(3977-3940)	1975-1884(3924-3833)	1838-1835(3787-3784)
$\sigma = 60$	2032-1881(3981-3830)	1840-1833(3789-3782)	
$\sigma = 80$	2111-2102(4060-4051)	2091-2085(4040-4034)	2067-2066(4016-4015)
	2035-1878(3984-3827)	1843-1830(3792-3779)	1818-1816(3767-3765)
	1792-1783(3741-3732)		
$\sigma = 100$	2131-2082(4080-4031)	2070-2062(4019-4011)	2040-1860(3990-3810)
	1846-1773(3795-3722)	1757-1756(3706-3705)	
$\sigma = 120$	2136-2057(4085-4006)	2040-1750(3990-3700)	
$\sigma = 160$	2198-2159(4147-4108)	2140-1730(4090-3680)	1699-1696(3648-3645)
$\sigma = 200$	2270-2256(4219-4205)	2228-2223(4177-4172)	2210-1690(4160-3640)
	1669-1663(3618-3612)		

RADIOCARBON AGE BP 3600 CALIBRATED AGES: cal BC 2011, 1995, 1960
cal BP 3960, 3944, 3909

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2029-1990(3978-3939)	1978-1920(3927-3869)	1899-1894(3848-3843)
$\sigma = 40$	2032-1917(3981-3866)	1905-1889(3854-3838)	
$\sigma = 60$	2111-2084(4060-4033)	2067-2065(4016-4014)	2035-1884(3984-3833)
	1837-1835(3786-3784)		
$\sigma = 80$	2131-2082(4080-4031)	2070-2061(4019-4010)	2039-1881(3988-3830)
	1840-1833(3789-3782)		
$\sigma = 100$	2136-2057(4085-4006)	2040-1880(3990-3830)	1843-1830(3792-3779)
	1818-1816(3767-3765)	1792-1783(3741-3732)	
$\sigma = 120$	2187-2186(4136-4135)	2140-1860(4090-3810)	1846-1774(3795-3723)
$\sigma = 160$	2200-1740(4150-3690)		
$\sigma = 200$	2274-2251(4223-4200)	2230-1720(4180-3670)	1712-1693(3661-3642)

RADIOCARBON AGE BP 3620 CALIBRATED AGES: cal BC 2027, 2026, 2015, 1992, 1971
cal BP 3976, 3975, 3964, 3941, 3920

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2107-2106(4056-4055)	2088-2086(4037-4035)	2033-2009(3982-3958)
	1998-1925(3947-3874)		
$\sigma = 40$	2127-2126(4076-4075)	2112-2084(4061-4033)	2067-2065(4016-4014)
	2036-1922(3985-3871)		
$\sigma = 60$	2131-2082(4080-4031)	2070-2061(4019-4010)	2039-1918(3988-3867)
	1904-1890(3853-3839)		
$\sigma = 80$	2136-2057(4085-4006)	2043-1885(3992-3834)	1837-1836(3786-3785)
$\sigma = 100$	2187-2186(4136-4135)	2140-1880(4090-3830)	1840-1833(3789-3782)
$\sigma = 120$	2198-2158(4147-4107)	2140-1880(4090-3830)	1843-1830(3792-3779)
	1817-1816(3766-3765)	1791-1783(3740-3732)	
$\sigma = 160$	2270-2256(4219-4205)	2228-2223(4177-4172)	2210-1750(4160-3700)
$\sigma = 200$	2290-1730(4240-3680)	1699-1696(3648-3645)	

Table 3-AAA

RADIOCARBON AGE BP 3640		CALIBRATED AGES:		cal BC 2031, 1989, 1981		cal BP 3980, 3938, 3930	
Sample σ and cal BC(cal BP) ranges:							
$\sigma = 20$	2128-2124(4077-4073)	2113-2084(4062-4033)	2068-2064(4017-4013)				
	2037-2013(3986-3962)	1994-1965(3943-3914)					
$\sigma = 40$	2132-2082(4081-4031)	2070-2061(4019-4010)	2040-2010(3989-3959)				
	1996-1942(3945-3891)	1929-1926(3878-3875)					
$\sigma = 60$	2137-2057(4086-4006)	2043-1922(3992-3871)					
$\sigma = 80$	2187-2185(4137-4134)	2139-1918(4088-3867)	1903-1890(3852-3839)				
$\sigma = 100$	2198-2158(4147-4107)	2140-1880(4090-3830)	1837-1836(3786-3785)				
$\sigma = 120$	2200-1880(4150-3830)	1840-1833(3789-3782)					
$\sigma = 160$	2275-2251(4224-4200)	2230-1860(4180-3810)	1845-1774(3794-3723)				
$\sigma = 200$	2336-2323(4285-4272)	2310-1740(4260-3690)					
RADIOCARBON AGE BP 3660							
		CALIBRATED AGES:		cal BC 2109, 2103, 2090, 2085, 2034		cal BP 4058, 4052, 4039, 4034, 3983	
Sample σ and cal BC(cal BP) ranges:							
$\sigma = 20$	2133-2081(4082-4030)	2071-2060(4020-4009)	2040-2028(3989-3977)				
	1990-1976(3939-3925)						
$\sigma = 40$	2137-2057(4086-4006)	2043-2014(3992-3963)	1993-1968(3942-3917)				
$\sigma = 60$	2188-2184(4137-4133)	2140-2010(4089-3959)	1996-1945(3945-3894)				
$\sigma = 80$	2198-2158(4147-4107)	2142-1923(4091-3872)					
$\sigma = 100$	2200-1920(4150-3870)	1903-1891(3852-3840)					
$\sigma = 120$	2270-2256(4219-4205)	2228-2223(4177-4172)	2210-1890(4160-3840)				
	1837-1836(3786-3785)						
$\sigma = 160$	2290-1880(4240-3830)	1843-1830(3792-3779)	1817-1816(3766-3765)				
	1790-1784(3739-3733)						
$\sigma = 200$	2393-2383(4342-4332)	2350-1750(4300-3700)					
RADIOCARBON AGE BP 3680							
		CALIBRATED AGES:		cal BC 2130, 2119, 2115, 2097, 2096, 2083, 2069, 2062, 2038		cal BP 4079, 4068, 4064, 4046, 4045, 4032, 4018, 4011, 3987	
Sample σ and cal BC(cal BP) ranges:							
$\sigma = 20$	2138-2032(4087-3981)	1987-1985(3936-3934)					
$\sigma = 40$	2190-2180(4139-4129)	2168-2166(4117-4115)	2140-2029(4089-3978)				
	1990-1978(3939-3927)						
$\sigma = 60$	2198-2157(4147-4106)	2143-2014(4092-3963)	1992-1969(3941-3918)				
$\sigma = 80$	2202-2011(4151-3960)	1995-1946(3944-3895)					
$\sigma = 100$	2270-2256(4219-4205)	2228-2223(4177-4172)	2210-1920(4160-3870)				
$\sigma = 120$	2287-2286(4236-4235)	2275-2251(4224-4200)	2230-1920(4180-3870)				
	1902-1891(3851-3840)						
$\sigma = 160$	2336-2323(4285-4272)	2310-1880(4260-3830)	1840-1833(3789-3782)				
$\sigma = 200$	2451-2444(4400-4393)	2432-2422(4381-4371)	2402-2378(4351-4327)				
	2350-1860(4300-3810)	1845-1811(3794-3760)	1801-1774(3750-3723)				

Table 3-BBB

RADIOCARBON AGE BP 3700		CALIBRATED AGES:		cal BC 2135, 2080, 2072, 2058, 2042		cal BP 4084, 4029, 4021, 4007, 3991	
Sample σ and cal BC(cal BP) ranges:							
$\sigma = 20$	2193-2164(4142-4113)	2140-2112(4089-4061)	2100-2036(4049-3985)				
$\sigma = 40$	2199-2156(4148-4105)	2143-2033(4092-3982)					
$\sigma = 60$	2202-2030(4151-3979)	1989-1979(3938-3928)					
$\sigma = 80$	2270-2256(4219-4205)	2228-2222(4177-4171)	2205-2014(4154-3963)				
	1992-1969(3941-3918)						
$\sigma = 100$	2287-2286(4236-4235)	2275-2251(4224-4200)	2230-2010(4180-3960)				
	1995-1958(3944-3907)	1947-1946(3896-3895)					
$\sigma = 120$	2290-1920(4240-3870)						
$\sigma = 160$	2393-2383(4342-4332)	2350-1890(4300-3840)	1837-1836(3786-3785)				
$\sigma = 200$	2470-1880(4420-3830)	1843-1830(3792-3779)	1817-1816(3766-3765)				
	1790-1784(3739-3733)						
RADIOCARBON AGE BP 3720							
		CALIBRATED AGES:		cal BC 2139, 2077, 2075, 2048, 2046		cal BP 4088, 4026, 4024, 3997, 3995	
Sample σ and cal BC(cal BP) ranges:							
$\sigma = 20$	2199-2155(4148-4104)	2143-2133(4092-4082)	2081-2071(4030-4020)				
	2060-2040(4009-3989)						
$\sigma = 40$	2267-2266(4216-4215)	2202-2113(4151-4062)	2099-2094(4048-4043)				
	2083-2037(4032-3986)						
$\sigma = 60$	2271-2256(4220-4205)	2228-2222(4177-4171)	2206-2034(4155-3983)				
$\sigma = 80$	2287-2286(4236-4235)	2275-2251(4224-4200)	2232-2030(4181-3979)				
	1989-1979(3938-3928)						
$\sigma = 100$	2290-2010(4240-3960)	1992-1970(3941-3919)					
$\sigma = 120$	2337-2323(4286-4272)	2310-2010(4260-3960)	1995-1958(3944-3907)				
$\sigma = 160$	2451-2444(4400-4393)	2432-2422(4381-4371)	2402-2378(4351-4327)				
	2367-2366(4316-4315)	2350-1920(4300-3870)	1902-1891(3851-3840)				
$\sigma = 200$	2470-1880(4420-3830)	1840-1833(3789-3782)					
RADIOCARBON AGE BP 3740							
		CALIBRATED AGES:		cal BC 2197, 2160, 2142		cal BP 4146, 4109, 4091	
Sample σ and cal BC(cal BP) ranges:							
$\sigma = 20$	2267-2264(4216-4213)	2203-2137(4152-4086)	2079-2074(4028-4023)				
	2054-2044(4003-3993)						
$\sigma = 40$	2271-2255(4220-4204)	2228-2221(4177-4170)	2206-2134(4155-4083)				
	2081-2072(4030-4021)	2059-2041(4008-3990)					
$\sigma = 60$	2287-2251(4236-4200)	2232-2114(4181-4063)	2098-2095(4047-4044)				
	2083-2037(4032-3986)						
$\sigma = 80$	2293-2034(4242-3983)						
$\sigma = 100$	2337-2322(4286-4271)	2310-2030(4260-3980)	1989-1980(3938-3929)				
$\sigma = 120$	2393-2383(4342-4332)	2350-2010(4300-3960)	1992-1970(3941-3919)				
$\sigma = 160$	2470-1920(4420-3870)						
$\sigma = 200$	2470-1890(4420-3840)	1837-1836(3786-3785)					

Table 3-CCC

RADIOCARBON AGE BP 3760 CALIBRATED AGES: cal BC 2201, 2151, 2145
cal BP 4150, 4100, 4094

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2272-2255(4221-4204)	2229-2219(4178-4168)	2206-2194(4155-4143)
	2164-2141(4113-4090)		
$\sigma = 40$	2287-2250(4236-4199)	2232-2138(4181-4087)	2078-2075(4027-4024)
	2051-2045(4000-3994)		
$\sigma = 60$	2293-2135(4242-4084)	2080-2072(4029-4021)	2059-2041(4008-3990)
$\sigma = 80$	2337-2322(4286-4271)	2312-2114(4261-4063)	2098-2095(4047-4044)
	2083-2038(4032-3987)		
$\sigma = 100$	2393-2383(4342-4332)	2350-2030(4300-3980)	
$\sigma = 120$	2451-2444(4400-4393)	2432-2422(4381-4371)	2402-2378(4351-4327)
	2367-2366(4316-4315)	2350-2030(4300-3980)	1989-1980(3938-3929)
$\sigma = 160$	2470-2010(4420-3960)	1995-1959(3944-3908)	
$\sigma = 200$	2470-1920(4420-3870)	1902-1891(3851-3840)	

RADIOCARBON AGE BP 3780 CALIBRATED AGES: cal BC 2270, 2257, 2227, 2224, 2205
cal BP 4219, 4206, 4176, 4173, 4154

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2289-2249(4238-4198)	2233-2199(4182-4148)	2155-2143(4104-4092)
$\sigma = 40$	2307-2306(4256-4255)	2293-2196(4242-4145)	2162-2141(4111-4090)
$\sigma = 60$	2338-2138(4287-4087)	2078-2075(4027-4024)	2051-2045(4000-3994)
$\sigma = 80$	2394-2382(4343-4331)	2348-2135(4297-4084)	2080-2072(4029-4021)
	2059-2041(4008-3990)		
$\sigma = 100$	2450-2040(4400-3990)		
$\sigma = 120$	2470-2030(4420-3980)		
$\sigma = 160$	2470-2010(4420-3960)	1992-1970(3941-3919)	
$\sigma = 200$	2490-1920(4440-3870)		

RADIOCARBON AGE BP 3800 CALIBRATED AGES: cal BC 2274, 2252, 2231
cal BP 4223, 4201, 4180

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2309-2203(4258-4152)	2147-2146(4096-4095)	
$\sigma = 40$	2339-2200(4288-4149)	2154-2144(4103-4093)	
$\sigma = 60$	2395-2382(4344-4331)	2349-2197(4298-4146)	2162-2141(4111-4090)
$\sigma = 80$	2453-2443(4402-4392)	2432-2422(4381-4371)	2403-2138(4352-4087)
	2078-2075(4027-4024)	2051-2045(4000-3994)	
$\sigma = 100$	2470-2130(4420-4080)	2080-2072(4029-4021)	2059-2042(4008-3991)
$\sigma = 120$	2470-2110(4420-4060)	2098-2095(4047-4044)	2083-2038(4032-3987)
$\sigma = 160$	2470-2030(4420-3980)	1989-1980(3938-3929)	
$\sigma = 200$	2490-2010(4440-3960)	1995-1959(3944-3908)	

Table 3-DDD

RADIOCARBON AGE BP 3820 CALIBRATED AGES: cal BC 2292, 2246, 2235
cal BP 4241, 4195, 4184

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2388-2386(4337-4335)	2342-2272(4291-4221)	2254-2229(4203-4178)
	2219-2207(4168-4156)		
$\sigma = 40$	2427-2426(4376-4375)	2395-2382(4344-4331)	2349-2204(4298-4153)
$\sigma = 60$	2454-2421(4403-4370)	2403-2200(4352-4149)	2153-2144(4102-4093)
$\sigma = 80$	2467-2197(4416-4146)	2161-2141(4110-4090)	
$\sigma = 100$	2470-2140(4420-4090)	2078-2075(4027-4024)	2050-2045(3999-3994)
$\sigma = 120$	2470-2130(4420-4080)	2080-2072(4029-4021)	2059-2042(4008-3991)
$\sigma = 160$	2490-2030(4440-3980)		
$\sigma = 200$	>2500-2010(>4450-3960)	1992-1971(3941-3920)	

RADIOCARBON AGE BP 3840 CALIBRATED AGES: cal BC 2334, 2323, 2311
cal BP 4283, 4272, 4260

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2429-2425(4378-4374)	2398-2380(4347-4329)	2351-2276(4300-4225)
	2250-2233(4199-4182)		
$\sigma = 40$	2456-2421(4405-4370)	2405-2273(4354-4222)	2253-2230(4202-4179)
	2217-2215(4166-4164)		
$\sigma = 60$	2467-2204(4416-4153)		
$\sigma = 80$	2469-2200(4418-4149)	2152-2144(4101-4093)	
$\sigma = 100$	2470-2200(4420-4150)	2161-2141(4110-4090)	
$\sigma = 120$	2470-2140(4420-4090)	2078-2075(4027-4024)	2050-2045(3999-3994)
$\sigma = 160$	2490-2110(4440-4060)	2097-2096(4046-4045)	2083-2038(4032-3987)
$\sigma = 200$	>2500-2030(>4450-3980)	1989-1980(3938-3929)	

RADIOCARBON AGE BP 3860 CALIBRATED AGES: cal BC 2392, 2383, 2347
cal BP 4341, 4332, 4296

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2459-2420(4408-4369)	2406-2295(4355-4244)	
$\sigma = 40$	2467-2290(4416-4239)	2248-2234(4197-4183)	
$\sigma = 60$	2469-2273(4418-4222)	2253-2230(4202-4179)	
$\sigma = 80$	2471-2269(4420-4218)	2259-2204(4208-4153)	
$\sigma = 100$	2470-2200(4420-4150)	2152-2144(4101-4093)	
$\sigma = 120$	2490-2200(4440-4150)	2161-2142(4110-4091)	
$\sigma = 160$	>2500-2140(>4450-4090)	2080-2072(4029-4021)	2058-2042(4007-3991)
$\sigma = 200$	>2500-2030(>4450-3980)		

RADIOCARBON AGE BP 3880 CALIBRATED AGES: cal BC 2450, 2445, 2431, 2423, 2402,
2378, 2354
cal BP 4399, 4394, 4380, 4372, 4351,
4327, 4303

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2468-2341(4417-4290)	2319-2314(4268-4263)	
$\sigma = 40$	2469-2309(4418-4258)	2299-2296(4248-4245)	
$\sigma = 60$	2471-2290(4420-4239)	2248-2234(4197-4183)	
$\sigma = 80$	2473-2273(4422-4222)	2252-2231(4201-4180)	
$\sigma = 100$	2490-2270(4440-4220)	2259-2204(4208-4153)	
$\sigma = 120$	2490-2200(4440-4150)	2152-2145(4101-4094)	
$\sigma = 160$	>2500-2140(>4450-4090)	2078-2075(4027-4024)	2049-2046(3998-3995)
$\sigma = 200$	>2500-2110(>4450-4060)	2097-2096(4046-4045)	2083-2038(4032-3987)

Table 3-EEE

RADIOCARBON AGE BP 3900 CALIBRATED AGES: cal BC 2467, 2417, 2414
cal BP 4416, 4366, 4363

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2470-2397(4419-4346)	2381-2350(4330-4299)	
$\sigma = 40$	2472-2344(4421-4293)	2317-2316(4266-4265)	
$\sigma = 60$	2473-2310(4422-4259)	2297-2296(4246-4245)	
$\sigma = 80$	2489-2291(4438-4240)	2247-2234(4196-4183)	
$\sigma = 100$	2490-2270(4440-4220)	2252-2231(4201-4180)	
$\sigma = 120$	>2500-2270(>4450-4220)	2259-2204(4208-4153)	
$\sigma = 160$	>2500-2200(>4450-4150)	2160-2142(4109-4091)	
$\sigma = 200$	>2500-2140(>4450-4090)	2080-2072(4029-4021)	2058-2042(4007-3991)

RADIOCARBON AGE BP 3920 CALIBRATED AGE: cal BC 2469
cal BP 4418

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2472-2458(4421-4407)	2440-2434(4389-4383)	2420-2406(4369-4355)
$\sigma = 40$	2474-2399(4423-4348)	2380-2352(4329-4301)	
$\sigma = 60$	2489-2345(4438-4294)	2317-2316(4266-4265)	
$\sigma = 80$	2493-2310(4442-4259)		
$\sigma = 100$	>2500-2290(>4450-4240)	2247-2235(4196-4184)	
$\sigma = 120$	>2500-2270(>4450-4220)	2252-2231(4201-4180)	
$\sigma = 160$	>2500-2200(>4450-4150)	2152-2145(4101-4094)	
$\sigma = 200$	>2500-2140(>4450-4090)	2078-2075(4027-4024)	2049-2046(3998-3995)

RADIOCARBON AGE BP 3940 CALIBRATED AGE: cal BC 2471
cal BP 4420

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2487-2486(4436-4435)	2474-2468(4423-4417)	
$\sigma = 40$	2490-2462(4439-4411)	2438-2435(4387-4384)	2419-2409(4368-4358)
$\sigma = 60$	2493-2400(4442-4349)	2379-2352(4328-4301)	
$\sigma = 80$	>2495-2346(>4444-4295)		
$\sigma = 100$	>2500-2310(>4450-4260)		
$\sigma = 120$	>2500-2290(>4450-4240)	2247-2235(4196-4184)	
$\sigma = 160$	>2500-2270(>4450-4220)	2258-2205(4207-4154)	
$\sigma = 200$	>2500-2200(>4450-4150)	2160-2142(4109-4091)	

RADIOCARBON AGE BP 3960 CALIBRATED AGE: cal BC 2473
cal BP 4422

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2491-2470(4440-4419)		
$\sigma = 40$	2494-2468(4443-4417)		
$\sigma = 60$	>2495-2464(>4444-4413)	2437-2436(4386-4385)	2418-2410(4367-4359)
$\sigma = 80$	>2495-2400(>4444-4349)	2379-2353(4328-4302)	
$\sigma = 100$	>2500-2350(>4450-4300)		
$\sigma = 120$	>2500-2310(>4450-4260)		
$\sigma = 160$	>2500-2270(>4450-4220)	2252-2231(4201-4180)	
$\sigma = 200$	>2500-2200(>4450-4150)	2151-2145(4100-4094)	

Table 3-FFF

RADIOCARBON AGE BP 3980 CALIBRATED AGES: cal BC 2489, 2482, 2475
cal BP 4438, 4431, 4424

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	2494-2472(4443-4421)		
$\sigma = 40$	>2495-2470(>4444-4419)		
$\sigma = 60$	>2495-2468(>4444-4417)		
$\sigma = 80$	>2495-2465(>4444-4414)	2418-2411(4367-4360)	
$\sigma = 100$	>2495-2400(>4444-4349)	2379-2353(4328-4302)	
$\sigma = 120$	>2500-2350(>4450-4300)		
$\sigma = 160$	>2500-2290(>4450-4240)	2247-2235(4196-4184)	
$\sigma = 200$	>2500-2270(>4450-4220)	2258-2205(4207-4154)	

RADIOCARBON AGE BP 4000 CALIBRATED AGE: cal BC 2492
cal BP 4441

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	>2495-2474(>4444-4423)		
$\sigma = 40$	>2495-2472(>4444-4421)		
$\sigma = 60$	>2495-2470(>4444-4419)		
$\sigma = 80$	>2495-2468(>4444-4417)		
$\sigma = 100$	>2495-2465(>4444-4414)	2418-2411(4367-4360)	
$\sigma = 120$	>2495-2400(>4444-4349)	2379-2353(4328-4302)	
$\sigma = 160$	>2500-2310(>4450-4260)		
$\sigma = 200$	>2500-2270(>4450-4220)	2252-2231(4201-4180)	

RADIOCARBON AGE BP 4020 CALIBRATED AGE: cal BC 2496
cal BP 4445

Sample σ and cal BC(cal BP) ranges:

$\sigma = 20$	>2495-2490(>4444-4439)	2478-2476(4427-4425)	
$\sigma = 40$	>2495-2474(>4444-4423)		
$\sigma = 60$	>2495-2472(>4444-4421)		
$\sigma = 80$	>2495-2470(>4444-4419)		
$\sigma = 100$	>2495-2468(>4444-4417)		
$\sigma = 120$	>2495-2465(>4444-4414)	2418-2412(4367-4361)	
$\sigma = 160$	>2500-2350(>4450-4300)		
$\sigma = 200$	>2500-2290(>4450-4240)	2247-2235(4196-4184)	