**Table S1**: Results of measurements on Scots pine tree-ring cellulose from northern Norway. Radiocarbon age BP, one sigma error (age ±), number of repeat measurements (n), Lab ID (TRa#), and pretreatment method: c = Stuiver et al (1984) alpha cellulose, s = soxhlet and BABAB, b = BABAB. \* indicates that the sample measurements were normalised using the δ13C value from IRMS.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year (AD) | TRa# | 14C age BP | age ± | Pre-treatment |
| 1864 | 12088 | 88 | 14 | c |
| 108 | 29 | c |
| 1865 | 12373 | 131 | 15 | s |
| 1866 | 12374 | 128 | 15 | s |
| 1867 | 12375 | 89 | 18 | s |
| 117 | 38 | s |
| 1868 | 12376 | 138 | 19 | s |
| 1869 | 12377 | 155 | 16 | s |
| 1870 | 12378 | 104 | 16 | b |
| 85 | 17 | b |
| 1871 | 12379 | 163 | 15 | s |
| 1872 | 12380 | 191 | 16 | s |
| 1873 | 12381 | 150 | 17 | s |
| 1875 | 12089 | 170 | 18 | c |
| 1876 | 12383 | 153 | 14 | s |
| 1877 | 12384 | 155 | 19 | s |
| 1880 | 12090 | 106 | 16 | c |
| 82 | 12 | c |
| 1882 | 12388 | 130 | 16 | s |
| 1883 | 12389 | 145 | 17 | s |
| 1884 | 12390 | 141 | 15 | b |
| 1885 | 12391 | 129 | 18 | s |
| 1886 | 12392 | 140 | 16 | s |
| 105 | 12 | s |
| 1887 | 12437 | 90 | 12 | s |
| 1888 | 12393 | 149 | 16 | s |
| 103 | 13 | s |
| 76 | 15 | s |
| 1889 | 12394 | 96 | 16 | s |
| 122 | 15 | s |
| 1890 | 12091 | 71 | 14 | c |

*Table S1 continued.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year (AD) | TRa# | 14C age BP | age ± | Pre-treatment |
| 1891 | 12395 | 149 | 16 | s |
| 107 | 18 | s |
| 112 | 12 | s |
| 1892 | 12396 | 76 | 17 | s |
| 1893 | 12092 | 82 | 16 | c |
| 1895 | 12093 | 66 | 13 | c |
| 1897 | 12094 | 74 | 13 | c |
| 1898 | 12095 | 119 | 22 | c |
| 1899 & 1900 | 12399 | 105 | 16 | s |
| 1901 | 12096 | 70 | 13 | c |
| 1902 | 12400 | 129 | 15 | s |
| 1903 | 12401 | 161 | 15 | s |
| 68 | 13 | s |
| 1904 | 12097 | 103 | 16 | c |
| 1905 | 12402 | 75 | 18 | b |
| 117 | 15 | b |
| 1906 | 12438 | 77 | 15 | c |
| 62 | 13 | s |
| 1907 | 12403 | 141 | 15 | b |
| 104 | 14 | b |
| 1908 | 12404 | 98 | 15 | s |
| 155 | 15 | s |
| 84 | 13 | s |
| 1910 | 12406 | 115 | 17 | s |
| 1911 | 12407 | 155 | 19 | b |
| 96 | 16 | b |
| 83 | 13 | b |
| 1912 | 12408 | 121 | 16 | b |
| 1913 | 12409 | 85 | 19 | b |
| 120 | 15 | b |
| 1914 | 12098 | 53 | 12 | c |
| 106 | 16 | s |
| 1915 | 12410 | 71 | 16 | b |
| 67 | 14 | b |

*Table S1 continued.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year (AD) | TRa# | 14C age BP | age ± | Pre-treatment |
| 1916 | 12411 | 101 | 15 | s |
| 1917 | 12412 | 81 | 17 | b |
| 1918 | 12413 | 86 | 17 | b |
| 81 | 15 | b |
| 1919 | 12414 | 72 | 14 | b |
| 1920 | 12415 | 60 | 16 | s |
| 58 | 18 | s |
| 1921 | 12416 | 115 | 18 | s |
| 1922 | 12417 | 72 | 16 | s |
| 114 | 15 | s |
| 1923 | 12418 | 82 | 15 | b |
| 1924 | 12419 | 139 | 22 | s |
| 1925 | 12439 | 116 | 15 | c |
| 114 | 14 | s |
| 1926 | 12420 | 118 | 15 | b |
| 1927 | 12421 | 162 | 15 | s |
| 115 | 12 | s |
| 1928 | 12422 | 125 | 16 | b |
| 187 | 15 | b |
| 113 | 15 | b |
| 1929 | 12423 | 135 | 18 | b |
| 156 | 15 | b |
| 1930 | 12424 | 162 | 17 | s |
| 1931 | 12099 | 123 | 14 | c |
| 1932 | 12440 | 112 | 12 | s |
| 212 | 16 | s |
| 141 | 16 | s |
| 1933 | 12425 | 155 | 15 | s |
| 1934 | 12426 | 175 | 19 | s |
| 1935 | 12427 | 137\* | 19 | b |
| 122\* | 16 | b |
| 120\* | 18 | b |
| 1936 | 12428 | 187 | 17 | s |
| 1937 | 12429 | 90 | 19 | s |
| 161 | 16 | s |
| 99 | 16 | s |