**Figure S1**: Δ14C values (‰) of cellulose samples from a Scots pine growing in central Norway, eight increments per year. Samples were taken from three wood cores, where two provided the rings from 1953-1956 and 1957-1965, respectively from the west side of the tree and one provided the rings from 1952-1965 from the east side of the tree. Twenty-four measurements from the west core were repeated. Error bars are too small to show in the figure.

**Figure S2**: Sub-annual cellulose Δ14C values in two wood cores from a Scots pine from central Norway in 1963, compared to direct measurements of atmospheric Δ14C from Vermunt in Austria, Kapp Linné on Spitsbergen, Abisko in northern Sweden, Trondheim in central Norway, Lindesnes in southern Norway, and Fruholmen, N-Norway.

