High-precision measurement of carbon-14 in tree rings around the onset of the Maunder Minimum

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It is well known that the Sun indicates long-term variations at time scales of a few hundred years to a few millennia. It sometimes brings the grand minima, at which period the sunspots disappear for more than several decades. The detailed process of such long-lasting disappearance of sunspots, however, remains unclear. We therefore have been trying to reconstruct solar cycles around the onset of grand minima based on high-precision measurement of carbon-14 in tree rings. In this paper, we report on our preliminary result on the measurement of carbon-14 around the onset of the Maunder Minimum.

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