

Radiocarbon dating and isotopic analysis of foodcrust on the Incipient Jomon pottery: Re-evaluation of emergency of pottery in Japan.

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The emergency ceramic vessel (pottery) is one of major technical progress in the history of human, because the vessels were made possible to process large amount of plant starch. Previously, this invention was interpreted as an adaptation to the warmer environment which expand temperate forest and produced more edible plant, started from the Holocene about 11600 year ago. However, the direct dating of charred materials on a potshard from the Odaiyamamoto-1 site, Aomori prefecture, have changed this interpretation. The calibrated radiocarbon age showed dates as old as. 16500-15000 cal BP, corresponding to the Last Glacial Maximum of the terminal Pleistocene. Recent studies on the Incipient (Pleistocene) and Initial (Holocene) Jomon pottery showed evidences suggesting their unique function by lipid biomarker and isotope analyses. We are challenging these ideas by re-analyzing the old archaeological collection from the Fukui Cave, Nagasaki Prefecture, which storing at Tohoku University and Okayama University of Science today. I would like to share my experience of exploiting “scientific data” for archaeological discussion through this case study.