Calibrated Radiocarbon Dates of the Earliest Pottery in the Japanese Archipelago: Distinction between IntCal04 and IntCal09, and “the Year 13,000 Problem”

KUDO Yuichiro

The latest International Calibration curve “IntCal09” was released in December 2009. It enables us to examine the absolute age of archaeological sites situated in the Japanese archipelago spanning from the Early Upper Palaeolithic to the Incipient Jomon sub period (37,000 to 11,000 cal BP). However, it has been noticed that besides the extension of the IntCal04 before 26,000 cal BP, there have been some changes in the IntCal09 calibration curve during 26,000 to 12,000 cal BP; the time span of which has already been released in the IntCal04. In addition, these changes are more than a little different between IntCal09 and IntCal04, especially in the time span of the earliest pottery (about 17,000–15,000 cal BP) in the Japanese archipelago. In this time span, plenty of data for the calibration from the marine sediment from the Cariaco Basin have been added to the IntCal09 dataset; however, it becomes difficult to identify the absolute age of the earliest pottery because of the shape of the calibration curve, which falls under “the year 13,000 problem”. On the contrary, the calibrated age of the Linier-relief pottery group seems to be placed after 15,000 cal BP. The calibrated age of the Linier-relief pottery estimated by the IntCal09 is not very different from that of IntCal04. There is no doubt that the pottery that precedes the Linier-relief pottery group has been placed into the earliest phase of the Incipient Jomon sub period. However, any interpretation of possible correspondence between the application of the earliest pottery and its paleoenvironmental background should vary according to the place where the earliest pottery had been used in the Japanese archipelago. The issues of the emergence of the earliest pottery, its application, and its historical significance should not have been generalized without careful consideration. Further consideration is a must for not only the emergence but also the popularization of the pottery and its relationships with the environment.

Key words: Earliest pottery, ^14C dating, IntCal09, IntCal04, Odai-Yamamoto I site