

Using Luminescence Dating to Address issues with the Neolithic Pottery of Northeast India

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Imprecise chronological data have long been affecting archaeological studies in Assam and Garo Hills, Meghalaya. Relative dating methods have been applied all along for discussing the antiquity of stone tools and ceramics found in the archaeological sites of these two areas. Both the areas are important as the eastern Asiatic Neolithic complex of double shouldered celts and Cord marked pottery was first reported in India from Daojali Hading, Assam (1961) and Garo Hills has the highest concentration of prehistoric sites found in Northeast India. Optically stimulated luminescence (OSL) dating offered an excellent opportunity for dating the ceramic samples recovered during the first excavations in 1961(Daojali Hading) and 1999 (Gawak Abri), as the method provided a direct age estimate of the time of last exposure of quartz or feldspar minerals to light or heat and the purity of the etched quartz (i.e. any feldspar contaminations) can be confirmed by infra-red stimulated luminescence (IRSL) technique. Date obtained from Daojali Hading is 2.7 ± 0.3 ka (LD1728) and from Gawak Abri it is 2.3 ± 0.2 ka (LD1727).

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