
Macro-scale European population trends and the impact of regional climate dynamics towards the Bronze Age-Iron Age transition.

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Résumé

Increasing and decreasing population trends represent a common denominator in prehistoric research. Traditionally, the 2nd millennium and the beginning of the 1st millennium BC in prehistoric Europe are characterized by several phases of crisis regarding settlement strategies, exchange networks and, at regional scale, demographic density. Nowadays, archaeologists interested in quantifying long-term human population changes have used the frequency of radiocarbon dates in order to detect changes in the demographic intensity. The most used technique is the construction of SCPD (Summed Calibrated Probability Distribution) of sequences of ¹⁴C dates. In this paper, we test the capabilities of such method between 1800 and 800 BC using the updated EUBAR database including more than 1700 radiocarbon dates from archaeological contexts from the Ebro to the Danube River (namely, north-east Iberian Peninsula, Southern France, Northern Italy, Switzerland, Austria and Southern Germany). Our results suggest a slow process of demographic growth on the macro scale with evidences of phenomena of discontinuity detectable locally. Additionally, we compared these smaller-scale trends with regional pollen-based climatic reconstructions, identifying variable degrees of correlation between population trends and temperature/precipitation dynamics.

Mots-Clés: Bronze Age, Paleoclimate modeling, Paleodemographic reconstruction, South, Western Europe, Radiocarbon dates, Palynological records

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