Multiproxy studies for the understanding of long-term socio-environmental trajectories in NW Brittany (Plouescat, France)

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Résumé

In NW Brittany (France), the bay of Goulven appears to be a key area to understand coastal socio-environmental trajectories thanks to an important concentration of gallery graves, erected during the Recent and Late Neolithic, testifying to a marked human occupation. To shed new light on environmental and anthropogenic dynamics, a multidisciplinary approach mobilizing sedimentological and palynological analyses was implemented on a sedimentary core, covering the last 7 kyrs BP and retrieved in a current coastal wetland located upstream of this bay.

XRF and palynological analyses display a progressive sedimentary infilling of the former maritime marsh up to a continental area totally disconnected from the marine influence at 5.4 ka BP, which corresponds to the start of gallery graves buildings. Although the dense concentration of such monuments, the pollinic signal does not reflect any anthropogenic influence, suggesting a potential gap between first human disturbance and their environmental impact and/or palynological records. Anthropogenic pollen markers become obvious from 4.6 ka BP (i.e., Late Neolithic) consistent with the flourishment of the first metallurgic societies (Bell Beaker culture) in Brittany. Since then anthropogenic pollen indicators steadily increase reaching two thresholds: at 2.9 ka BP (i.e., Late Bronze Age) marked by maximal forest clearing leading to significant human-induced soil erosion, and at 2.4 ka BP (i.e., Second Iron Age) characterized by a high proportion of pastoral pollen indicators suggesting the local development of breeding.

The next step of this study will be to combine our data with sed-DNA to detect occurrences

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of domestic mammals and plants and accurately reconstruct the past history of local agropastoral practices. The final step will be to compare the evolution of local anthropogenic signal at the view of the climatic dynamic to establish a complete paleoenvironmental framework.

Mots-Clés: NW Brittany, Neolithic, Bronze Age, Iron Age, palynological data, paleoenvironmental dynamics