

## Loess and archeology in Belgium: An overview

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The loess belt in Belgium has been studied since the 19<sup>th</sup> Century, either from stratigraphical, sedimentological, pedological, paleoenvironmental or chronostratigraphical points of view. Recently, the reference sequence for Belgian loess has been revised, including data sets from pedostratigraphy, mineralogy, tephrostratigraphy, radiocarbon and luminescence datings (Haesaerts et al., 2011; Haesaerts et al., 2016; Pirson et al., 2018). Most of the known sequences are related to the Late Pleistocene and were integrated into a high-resolution pedosedimentary sequence encompassing the major part of the Late Pleistocene and reproducible at the scale of the Belgian loess belt. Some Middle Pleistocene sequences are also known, mainly in eastern Belgium. Based on the pedosedimentary and paleoenvironmental signatures of the Belgian sequence, comparisons have been proposed with high-resolution loess sequences from Western and Eastern Europe as well as from Central Siberia.

Paleolithic artifacts have also been recognized as soon as the 19<sup>th</sup> Century in loess sequences from Belgium. Most of the sites we know today are related to the Middle Paleolithic, but some Lower Paleolithic and Upper Paleolithic sites (Aurignacian, Gravettian and Magdalenian) are also known. In the last 20 years, important advances have been made, both on the field and in the laboratory: a few major sites have been excavated in the studied area (e.g. Op den Schans, Remicourt or Maisières-Canal), while old collections have been reappraised,

mainly for the Middle Paleolithic (Toussaint et al., 2016) and the Gravettian (Touzé et al., 2016).

In this presentation, we will briefly describe the new reference loess sequence from Belgium and discuss the position of the known archeological assemblages in this newly defined sequence, both for Lower, Middle and Upper Palaeolithic. Some additional topics related to loess and archeology will also be briefly addressed, such as 1) the very good connection with the regional caves, rich in Paleolithic sites, thanks to a specific geological context, and 2) the potential for future studies in the Belgian loess belt, focusing on archeological survey and including the role of geotechnics (Delvoie et al., 2016).

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