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Eemian: What's up on the Western front? ou à l'ouest Rhin de nouveau ?*

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The revised settlement history of Northern Europe during the Eemian



In the 1990s, evidence for the presence of Neanderthals east of the Rhine River during the Eemian was found through new investigations focusing on the chronology of Palaeolithic occupations both in central and middle Europe. More recently, in an area located west of the Rhine, the discovery of the site of Caours in the Somme Basin in the early 2000s provided, for the first time, evidence that Neanderthals settled northern France during the Eemian optimum (MIS 5e). So what's up on the Western Front?

An exceptional site allocated to the Eemian interglacial was discovered in 2013 with rescue archaeological test-pits at Waziers in the Scarpe River Valley, a tributary of the Escaut (Scheldt). Investigated within the framework of a multidisciplinary effort, the alluvial sequence is thick (~ 2.5m), with organic silts and peat layers deposited in a large palaeo-meander of the Scarpe River, and preserved by a loess sequence (± 3m). The correlation of the base of the sequence (silt and peats) with the Eemian is based on the following: i) the occurrence of mammals and mollusc assemblages typical for Pleistocene interglacials; ii) a first U/Th (TIMS) date on oogons of Characeae (minimum age: 103 ± 3.5/-3.4 ka), and iii) the occurrence of a typical Last Glacial (Weichselian) loess sequence overlying fluvial organic deposits.

Owing to the rarity of such sequences and the importance of the flint artefacts discovered within the peat layers, a multidisciplinary research project was launched at Waziers in 2014. Our poster presents the main results from these new investigations and highlights the unique potential of this site for both the reconstruction of Eemian palaeoenvironments and Middle Palaeolithic occupation of northern France. On-going investigations at the Waziers site will undoubtedly produce important contributions to the knowledge of Neanderthal groups and their settlement dynamics throughout the great plains of northwestern Europe.

Stratigraphic sequence

Unit 1 – antequaternary substratum (Eocene sand).

Unit 2 – quaternary deposits prior to unit 3, slope formation (hillwashed chalky gravels and sand).

Unit 3 – lower coarse fluvial deposits (chalk, glauconitic sand and glauconitic sandstones).

Unit 4 – thin fluvial deposits mainly clastic

4a – lower grey loam (laminated loam, a little of sand, malacofauna)

4b – slightly organic loam

4c – upper grey loam (identical to 4a)

4d – upper slightly brownish loam.

Unit 5 – thin fluvial deposits mainly organic

5a – lower brownish loam

5b – lower peat; laminated peaty deposits rich in avifauna

5c – laminated grey loam; laminated deposit with a variable thickness infilling a stream channel

5d – grey loam in little channels which erode prior formations

5e – upper brownish loam and mainly peat. The deposit is rich in woods and faunal remains with frequent woods pointed by beavers. Toward the bank, the unit directly overlies on the peat 5d with a heap of large woods, probably a beaver dam.

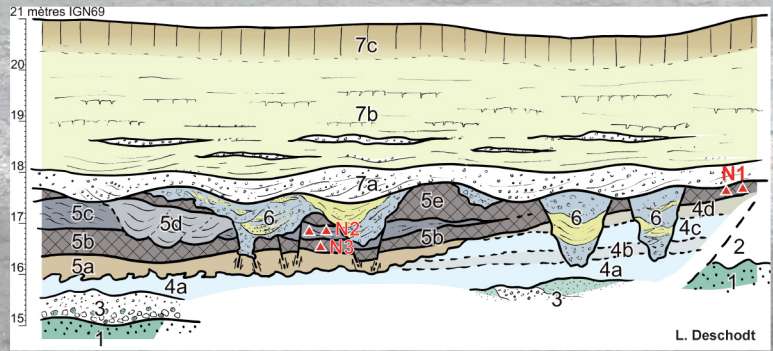
Unit 6 – reworked fluvial deposit, clayey gravels and thermokarstic figures. Unit 6 is associated with deformations, injections and cracks of the prior deposits. It infills little channels typical of thermokarstic structures.

Unit 7 – covering deposits

7a – sheet of chalky gravels, truncates and erodes under-lying layers

7b – sheet mainly constituted of sand. The laminated structure reveals fluvial structures with some chalky gravels deposits.

7c – layer mainly constituted of loam (loess).



L. Deschodt

Excavation - 2014



Bioproxies



Mammals remains

Horse

Equus sp.



Red deer

Cervus elaphus



Meadow rhinoceros

Stephanorhinus cf hemitoechus



Roe deer

Capreolus capreolus



Aurochs

Bos primigenius



Brown bear

Ursus arctos

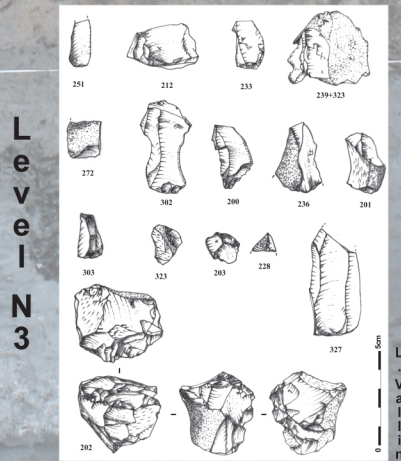


Beaver

Castor fiber

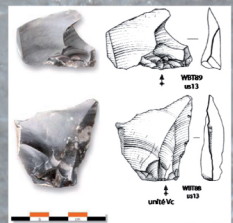


Lithic artefacts



Level 3

Level 2



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* Double clin d'œil à l'ouvrage d'Erich Maria Remarque, Im Westen nichts Neues, roman pacifiste sur la Première Guerre Mondiale paru en 1929 et au Ch'ti, patois du Nord parlé dans les alentours de Waziers.

