Multidisciplinary study of man-environment interactions during the Upper Pleistocene in Central Spain: The Abrigo del Molino system

David álvaro-Alonso*†, María De Andrés-Herrero*‡, Andrés Díez Herrero‡, Julio Garrote Revilla‡, Mario Hernández Ruiz‡, Aitor Hevia Carrillo‡, Luis Jordá Bordehore‡, Martin Kehl§, Nicole Klasen‡, José-Eugenio Ortiz‡, Janet Rethemeyer‡, Yolanda Sánchez Moya‡, Alfonso Sopeña‡, Trinidad Torres‡, Gerd-Christian Weniger** and José Yravedra**

1Dpto. Prehistoria y Arqueología. UNED-Asturias – Gijón, Asturias, Espagne
2Institute of Prehistoric Archaeology. University of Cologne / Neanderthal Museum – Espagne
3Dpto. de Geodinámica, Estratigrafía y Paleontología. UCM – Espagne
4Instituto Geológico y Minero de España – Espagne
5Dpto. de Prehistoria y Arqueología. UNED – Espagne
6Institute of Geography, University of Cologne – Allemagne
7E.T.S. I. de Minas y la Energía (UPM) – Espagne
8Institute of Geology and Mineralogy, University of Cologne – Allemagne
9IGeo (CSIC) – Espagne
10Institute of Prehistoric Archaeology. University of Cologne / Neanderthal Museum. – Allemagne
11Dpto. Prehistoria. UCM – Espagne

Résumé

Abrigo del Molino was discovered in 2012 and it is being excavated from 2013 to the present. It has been currently revealed as an important site to characterize late Mousterian occupations in the interior of the Iberian Peninsula. The rockshelter opens upstream of Eresma River (Segovia, Central Spain), in a monoclinal fold produced by the Alpine orogeny in the Cretaceous strata in which the cave was formed later. Fluvial sediments form the base of the stratigraphy, accumulated during palaeofloods of the Eresma River. This process was followed by a filling phase caused by the action of debris flow. From this moment, the rockshelter started to be occupied by Neanderthal groups.

During the 2014 campaign a small shelter, also totally filled by sediments was discovered in the immediately upper part of Abrigo del Molino, which was called "Abrigo del Molino superior". The human occupations registered in this shelter were smaller and slightly previous to the occupations at Abrigo del Molino. Everything indicates that the process of the embedding of the Eresma River, and the subsequent action of gravitational displacement of the debris flow on the slope, towards the river, caused the collapse and sealing of the "upper zone". Once the river incised and the slope stabilized, another rockshelter located at a lower level of the valley slope became accessible.

*Intervenant
†Auteur correspondant: dalvarez@gijon.uned.es
This process, which reflects the evolution of the "Abrigo del Molino" system, is a clear example of how the climatic factors that affect the geomorphological processes have conditioned human occupations in this inland area of the Iberian Peninsula. These processes caused the adaptation of the Neanderthal groups to this changing scenario.

**Mots-Clés:** Mousterian, Neanderthals, Geoarchaeology