The evolution of Saharan dust input in Lanzarote (Canary Islands): Lower Holocene triggering by human activity in the northwest Sahara?

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A Holocene increase of Saharan dust input to the area of the Canary islands is accompanied by a strong coarsening of this material during the Early Holocene as recorded in loess-like sediments deposited on Lanzarote. Whereas natural causes can be ruled out for the coarsening that is exceptional during the period of the last 180 ka, it is assumed that anthropogenic activity strongly mobilized dust in an area on the pathway of dust prior to its arrival in Lanzarote comprising parts of Western Sahara and northern Mauritania. Although scarce archaeological data from the coastal area of that region do not point to strong anthropogenic activity during the Early Holocene yet, a high density of unexplored archaeological remains reported from the coastal hinterlands does not exclude this hypothesis. Thus, the results of this study highlight the need of further archaeological investigations in that Saharan region.