
Early Hominin Dispersal into North America During Late MIS 6/Early MIS 5e: Climatic and Ecological Explanations of Hominin and Faunal Movements

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Résumé

Recent publication of the Cerruti Mastodon Site, a ~130,000-year-old archaeological site in southern California, USA indicates an early movement of hominins into North America. This discovery offers the opportunity to develop climatic and ecological hypotheses concerning how early hominins could have arrived in North America this early. Rapid climate warming and attendant floral and faunal changes during late MIS 6 and early MIS 5e caused faunal migrations far to the north of their previous ranges in North America. This included the migration of mastodons and sloths from the midwestern United States far to the north above the Arctic Circle in the Yukon and Alaska. It seems only logical that humans would have rapidly increased their range far to the north in Asia in a similar response to climate change. Rapid sea level rises inundated Beringia early in MIS 5e cutting off this land route, indicating that if hominins arrived in North America via the Beringian Land Bridge, they entered more than ~130,000 ka. At the same time, a major faunal migration of bison took place with bison first appearing in the Yukon at ~130,000 ka having crossed the Bering Land Bridge from Siberia. Hominin groups adapted to bison hunting may have expanded their range along with this prey animal. A coastal route of entry for early hominins by watercraft is also a possibility. Early hominins developed watercraft capable of crossing short distances of open ocean by ~130,000 ka as evidenced by the presence of early humans on Crete in the Mediterranean Sea and on the island of Sulawesi in Indonesia. Both islands are separated from continental land by many kilometers of open water and have been islands throughout the later Pleistocene. During rapid climate warming at the onset of late MIS 6/MIS 5e, early hominins using watercraft could have followed the east coast of Asia far to the north to the southern coast of Beringia and then followed the west coast of North America to the south without having to cross large stretches of open water, if they arrived before Beringia was inundated. There could have been both a land crossing and a coastal watercraft adaptation because these are not competing hypotheses.

Mots-Clés: Early Hominin, North America, Late MIS 6/Early MIS 5e:

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