



Is the onset of the 6th century ‘dark age’ in Maya history related to explosive volcanism?

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Maya societies in Southern Mexico, Guatemala and Belize experienced a ‘dark age’ during the second half of the 6th century. This period, also known as the ‘Maya Hiatus’, is characterized by cultural downturn, political instability and abandonment of many sites in the Central Maya Lowlands. Many theories have been postulated to explain the occurrence of this ‘dark age’ in Maya history. A possible key role of a large volcanic eruption in the onset of this ‘dark age’ will be discussed. Volcanic deposits recovered from the sedimentary archive of lake Tuspán and the Usumacinta-Grijalva delta were studied in detail and the combination of multiple dating techniques allowed the reconstruction of the timing of a large 6th century eruption. Volcanic glass shards were fingerprinted to indicate the source volcano and high resolution pollen records were constructed to indicate the environmental impact of the eruption. Results are compared with available archaeological data and causality with the disruption of Maya civilization will be evaluated.