Geophysical Research Abstracts,
Vol. 11, EGU2009-2362, 2009
EGU General Assembly 2009

Trends, rhythms and events in Plio-Pleistocene African climate

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We analyzed published records of terrigenous dust flux from marine sediments off subtropical West Africa, the eastern Mediterranean Sea, and the Arabian Sea, and lake records from East Africa using statistical methods to detect trends, rhythms and events in Plio-Pleistocene African climate. The critical reassessment of the environmental significance of dust flux and lake records removes the apparent inconsistencies between marine vs. terrestrial records of African climate variability. Based on these results, major steps in mammalian and hominin evolution occurred during episodes of a wetter, but highly variable climate largely controlled by orbitally-induced insolation changes in the low latitudes.