Climate change, environmental instability key factors in human evolution

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In a newly published paper, Smithsonian anthropologist Richard Potts and anthropologist J. Tyler Faith of the University of Queensland, Australia, relate in detail the results of years of study defining a predictive model of climate and environmental variability correlated with key changes or stages in human evolution in East Africa and China. The study, in concert with previous studies, challenges some long-held theories about what has driven the mechanisms of human evolution.

The model, say the authors, predicts eight long periods of environmental instability in East Africa correlated with times of hominin evolutionary innovations as a result of natural selection resulting from the variability. The research also included data derived frompalynological study in the Nihewan Basin of China, where evidence suggests that early humans survived and successfully adapted to a new, radically changed environment.

“Unstable climate conditions favored the evolution of the roots of human flexibility in our ancestors,” says Potts. “The narrative of human evolution that arises from our analyses stresses the importance of adaptability to changing environments, rather than adaptation to any one environment, in the early success of the genus *Homo*.”

Read full, original post: Prehistoric climate variability a key factor in human evolution, say scientists