New evidence for enhanced cosmogenic isotope production rate in the atmosphere ~37 ka BP

W. Ninglian, Y. Tandong, E.G. Thompson, E. Mosley-Thompson,
J. Cole-Dai, M.E. Davis and P.-N. Lin

Abstract:
A ^{36}Cl peak has been found at about 37 ka BP in the Guliya ice core, drilled from the Qinghai-Tibetan Plateau. This peak is indicative of enhanced cosmogenic isotope production in the atmosphere, rather than a change in accumulation rate. Comparison with the records of ^{10}Be and ^{36}Cl in ice cores from Antarctica and Greenland indicates that peaks of the cosmogenic isotopes are global, and that they can be used as time markers for dating ice core. Interestingly, the 37 ka BP global event coincided with a cold period.