

Thompson, L.G., M.E. Davis and E. Mosley-Thompson. 1994.

Glacial records of global climate: A 1500-year tropical ice core record of climate. *Human Ecology*, 22(1), 83-95.

A general discussion is given of climate variability over the last 1500 years as interpreted from two ice cores from the Quelccaya ice cap, Peru. The possible role of climatic variability in prehistory over this period is discussed with emphases on (1) relationships between climate and the rise and decline of coastal and highland cultures; (2) the possible causes of two major dust events recorded in the Quelccaya ice cores around AD 920 and AD 600; and (3) implications of climatic variation for the occupation and abandonment of the Gran Pajatzen area. The remarkable similarity between changes in highland and coastal cultures and changes in accumulation as determined from the Quelccaya ice cores implies a strong connection between human activities and climate in this region of the globe. Two ice cores drilled to bedrock from the 6047 masl col of Huascarán in the Cordillera Blanca, Peru in 1993 offer the potential of an annual to decadal climatic and environmental record which should allow the study of human-climate and human-environmental relationships over 10,000+ years. The 1991 and 1993 evidence from the Quelccaya ice cap indicates that recent and rapid warming is currently underway in the tropical Andes. Thus many of the unique glacier archives are in imminent danger of being lost forever.