

Spatial Characteristics of Climate around 4.0 ka BP and Its Impacts on the Evolution of Prehistoric Civilization in China

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Abstract: 110 paleoclimate and paleoenvironment records from 84 locations of China were employed to discuss the spatial characteristics of climate around 4.0 ka BP and its possible impacts on the transformation and collapse of Neolithic culture of China (CNCC). The results indicate that cold climate characterized by temperature decline prevailed for most regions of China and the humidity exhibit some diversity. Dry and fairly drier conditions occurred in north and northwest arid regions, and most places of southwestern and eastern monsoonal regions. A few records from central Loess Plateau and lower Yangtze River regions show some extent humidity increase characterized by flood events. Briefly, the spatial characteristics of climate in China around 4.0 ka BP show evident discrepancies with the notion that is described as "dry in the north and humid in the south". Humidity increases and accelerated soil erosion in some places around 4.0 ka BP possibly due to the amplified seasonal deviations of monsoon precipitations resulting from high El Nino—Southern Oscillation (ENSO) variability. Recession and collapse of Neolithic cultures in northern, central and eastern China are coevally with the climate transformations around 4.0 ka BP, implying the climate served as the major driving forcing in pre-historical culture evolution.

Key words: climate characteristics; 4.0 ka BP; monsoon precipitation; prehistoric civilization

最长寿地质学家崔克信先生辞世

2013年2月14日,中国科学院地质与地球物理研究所研究员崔克信先生以104岁高龄在北京逝世。据目前所知,他是中国地质学家中之最长寿者。2月20日,在八宝山殡仪馆举行了崔克信先生遗体告别仪式。中国科学院院士、孙枢、叶大年,中国科学院地质与地球物理研究所党委书记钟华,原副所长易善锋、黄家宽,研究员吴浩若、周云生、张绍宗,崔先生的第一位研究生、现中国科学院大学(即原研究生院)教授潘云唐,以及崔先生的老友、原中国科学院自然资源综合考察委员会陆德复、田兴有、侯奎等先生出席了告别仪式,并向崔先生家属表示慰问。

崔克信字子成,河北井陘县人,生于1909年7月7日。1935年毕业于北京大学地质系,曾任实业部(经济部)地质调查所技佐,西康省金矿局副局长工程师,西康省地质调查所技

师、所长。新中国时期,历任西南地质调查所工程师、队长,地质部石油地质局工程师,中国科学院地质研究所副研究员、研究员,科学出版社编辑,中国科学院自然资源综合考察委员会学术指导,中国科学院地质与地球物理研究所研究员,《地质科学》、《古地理学报》编委。

崔克信先生擅长区域地质学、岩相古地理学、砂金矿床学、石油地质学,等等。他主要学术代表作有:《康藏地质图集》、《康藏地质志》、《中国大陆的形成和发展》、《中国自然地理(古地理)(下册)》、《中国西南区域古地理及其演化图集》(2004年他95岁高龄时出版)、《崔克信地质文选》(为庆祝他百岁华诞而出版),等等。

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