

STRUCTURE DEFORMATION TRANSITION OF THE UPLIFTING DURING QUATERNARY IN BUQINGSHAN AREA, EASTERN KUNLUN OROGENIC BELT, NORTHEAST QINGHAI—TIBET PLATEAU

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The analysis of the relationship between the Quaternary strata and structures in Buqingshan area, Eastern Kunlun Mountains, shows that there has happened multi-transition of structure deformation. Based on the analysis of the sporopollen, paleomagnetism and TL dating to the Quaternary deposition, it can be concluded that there happened a series of rapid changes of the structural deformation at the end of the middle Pleistocene, i.e. from extensional system to compression system, then rapidly to extensional system again. The short compression event lead to the folding of the middle Pleistocene deposition and the subsequence extension caused the step normal-faults that deeply influenced the middle Pleistocene strata. There occurred again a great transition of deformation system in the later Pleistocene, which changed into left-lateral strike slip system. This deformation pattern has been continuing till now. The determining of the multi-deformation of the uplifting and the constraint to the transition times of the uplift structure in the Quaternary deposition are very helpful to understand profoundly the uplifting process of the northeast part of the Qinghai-Tibet Plateau and the mountain-building process of the Central Orogenic Belt of China.