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环青藏高原盆山体系东段新构造变形特征——以川西为例

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摘要:

介于扬子板块与青藏高原之间的川西前陆冲断带是环青藏高原盆山体系东段的重要组成部分,它是研究喜马拉雅构造运动对青藏高原东缘沉积盆地构造作用的重要场所。本文分别选取川西南段、川西北段和川北西段米仓山前的区域构造地质剖面来研究沉积地层在喜马拉雅运动中发生的构造变形特征。通过前陆冲断构造变形带的宽度、水平缩短量,山体隆升、盆地沉降,新构造对早期古构造的叠加与改造关系的研究,揭示出在环青藏高原盆山体系内,造山带与盆地边缘的冲断构造变形从造山带向克拉通盆地内扩展的同时受欧亚大陆与印度板块碰撞及其远程效应的空间位置限制,靠近青藏高原的川西南段到远离它的川北西段,新构造变形强度、新构造变形范围、盆山耦合程度具有依次降低等特征。这种受环青藏高原盆山体系控制的前陆冲断带构造变形具有明显的资环效应,特别是对油气资源的聚集与分布有重要的影响,控制了川西南段晚期次生气藏发育,川西北段和川北西段的早期原生气藏的发育。

英文摘要:

The western Sichuan basin foreland thrust and fold belt locate between the Tibetan Plateau and Upper Yangtze p late, which is the main part of the eastern segment of Circum-Tibetan Plateau Basin and Range System formed during the Himalayan tectonic movement. There are different neo-tectonic deformation features in the different areas. The long geologic profile cross the whole foreland thrust and fold belt in the south segment of western Sichuan basin, north segment of western Sichuan basin and west segment of northern Sichuan basin, are compiled to study the neo-tectonic features and distribution. After comparing their deformation width of foreland thrust and fold belt, structural shortening amount, lifted mountain altitude, basin subsidence and the space relation between old structure and neo-structure, authors consider that, (1) thrust and fold deformation propagate from old orogen to cratonic basin; (2) the spatial location from Tibetan Plateau also lead to the neo-tectonic deformation strength, deformation scope and couple grade of basin and range become weak from south to north in the western Sichuan basin. The neo-tectonic deformation impact the distribution of nature resources and living environment of human being. For example, its the late accumulation secondary nature gas reservoir in the south segment of western Sichuan basin because of the strong neo-tectonic deformation, but the old accumulation primary nature gas reservoir in the north segment of western Sichuan basin and west segment of northern Sichuan basin because of the weak neo-tectonic deformation.

关键词: [环青藏高原盆山体系](#) [喜马拉雅构造运动](#) [川西前陆冲断带](#) [陆内变形](#)

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