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从西宁盆地新生代变形探讨青藏高原东北缘的变形特征 [点此下载全文](#)

[张进](#) [马宗晋](#) [李智敏](#) [李文巧](#)

中国地震局地质研究所, 北京, 100029; 中国地震局地质研究所, 北京, 100029; 青海省地震局, 西宁, 810012; 青海省地震局, 西宁, 810012

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摘要:

位于青藏高原东北缘的西宁盆地在新生代期间的变形具有明显的阶段性, 新生代早期该盆地顺时针的转动在西宁盆地中的基底中产生或复活了一些北北西向的左行走滑断裂。晚期(中新世以来), 由于盆地边缘断裂持续强烈活动并伴随着一定的顺时针旋转, 在盆地中形成一系列切割盆地基底的北北东向和北东向次级断裂, 盆地中不同方向次级断裂不同时间的发育与边界左行斜向剪切造成的变形类似。同时盆地中薄皮与厚皮构造共同发育为特征, 不仅盆地盖层发生了一定程度的褶皱变形, 而且沿着切割盆地内部的断裂, 往往基底被抬升至地表, 形成比较明显的基底卷入型褶皱。西宁盆地因此被分割, 形成了一系列更小的次级盆地。而青藏高原东北部新生代变形同样具有以上特征, 斜向挤压是该地区变形的重要方式, 正是由于长期的斜向挤压, 造成了盆地内部与边界之间的应变分配, 盆地内部基底隆起, 并逐渐分割原先的大盆地。而热水—日月山断裂以及温泉断裂发育在海原断裂与昆仑山断裂之间的阶区, 它们的活动和发育与边缘大型走滑断裂有重要的联系, 同时也是压剪作用的重要特征之一。

关键词: [西宁盆地](#) [晚新生代](#) [青藏高原](#) [压剪作用](#)

Study on Deformational Characteristics of Northeastern Qinghai—Xizang (Tibetan) Plateau from Late Cenozoic Deformation in the Xining Basin [Download Fulltext](#)

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Abstract:

Located in the northeastern Qinghai—Xizang (Tibetan) Plateau, the deformation of the Xining basin in the Cenozoic shows obvious characters of stages, in the Early Cenozoic, the basin underwent clockwise rotation, resulting in the formation and reactivation of NNW trending left lateral strike slip faults in the basement. In the Late Cenozoic (since the Miocene), due to the strong and continuous activation of the boundary faults of the basin and rotation to some extent of the basin, a series of NNE and NE striking minor faults cutting the basement developed. The formation of the faults of different directions and stages in the basin is similar to that of transpression deformation. And thin skinned and thick skinned structures all character the deformation of the Xining basin, not only did the cover layers undergo folding to some extent, but also the basements of the basin were uplifted to the surface along some faults, resulting in the formation of basement involved anticlines. And due to the activities of these faults, the basin was dismembered into some small sub basins. And the deformation of the northeastern Qinghai—Tibetan Plateau also has similar characteristics; transpression deformation is an important style of deformation in the region. Just because of long term transpressional action, strain was partitioned between the interior of the basin and its boundary faults, the basement of the basin uplifted and dismembered the early larger basin. The Reshui—Riyueshan and Wenquan faults took place in the step between the Haiyuan fault to the north and the Kunlun fault to the south, the development of them has close relations with these large boundary faults, and these are also important characteristics of transpression.

Keywords: [Xining basin](#) [Late Cenozoic](#) [Qinghai—Xizang\(Tibetan\) Plateau, transpression](#)

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