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摘要:

本文详细描述了天山中段沿乌鲁木齐—库尔勒公路后峡—乌瓦门段的构造变形特点。综合室内外观察研究及内部的乌拉斯台地区鉴别出三条规模较大的韧性剪切带: 中天山北缘剪切带前人已有研究, 出露宽达10km的右超糜棱岩; 乌拉斯台剪切带中的糜棱岩宽超过200m, 具有左行走滑运动特点; 中天山地块南缘剪切带宽度达5km超糜棱岩, 运动方式为左行斜冲。中天山块体南北两侧的脆性边界断层与糜棱岩带变形中心基本重合。这些剪切带指示天山各地质单元间目前的空间关系可能是走滑拼接的结果。研究天山造山带内剪切带的展布、运动方式、总变形位置、了解造山动力学过程具有重要意义。

关键词: [剪切带](#) [运动学](#) [中天山地块](#) [糜棱岩](#)

Ductile Shearing Zones Occurring along the Northern and Southern Boundaries of the Central Tianshan Block [Download Fulltext](#)

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Abstract:

This paper described in detail the structural features of the central Tianshan block along the Wulumuqi-Korla highway. Basing upon field and microstructural observations, three ductile shearing zones in the Central Tianshan Block are identified. The ductile shearing zone occurred along the Northern Margin of the Central Tianshan Block has been studied before, and is dextral with a width up to 10km. The Wulasitai ductile shearing zone in the Central Tianshan block, and is a sinistral one, where its mylonite has a width of 200 m. The ductile shearing zone along the southern margin of the Central Tianshan block is presented as a lot of dioritic mylonite. Shearing criteria such as S-C fabric indicated that it is a sinistral shearing zone. The boundary of the Central Tianshan block developed along the shearing center of the northern or southern margin respectively. Above shearing zones must have very large strain accumulations, suggesting the amalgamation of the Tianshan range result from strike sliding in a great degree. It is significant to study the kinematics and total strain accumulation of the ductile shearing zones for reconstruction of the tectonic evolution of the Tianshan range.

Keywords: [ductile shearing zone](#) [mylonite zone](#) [kinematics](#) [Central Tianshan block](#)