Supplementary material

Mesozoic and Cenozoic deformations in the Raggyorcaka area, Tibet: Implications for the tectonic evolution of the North Qiangtang terrane

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Table S1. Statistics of N-S buckle folds in the North Qiangtang terrane and the South Qiangtang accretionary complex belt.

| Geographic location | Geometric characteristics | Strata of folds | Reference |
|---------------------|---------------------------|-----------------|-----------|
| Shuangquan Lake, Xinyue Mountain | Attitude of two limbs of anticline in Shuangquan Lake: 280°±70° and 95°±55°, hinge 7°±7°, interlimb angle approximately 60°; Xinyueshan exhibits a series of anticlines and synclines, along with N-S-trending thrust faults. | Middle Jurassic clastics | Wang et al., 2004 |
| Xinyue Mountain south of Yinlong Lake, Yanlinghe southwest of Bandao Lake, Qirong Mountain in Shuanghu | Upright horizontal parallel folds with predominant axial orientations of 350°-45°, interlimb angles of 90°-140°, and hinge zone widths of 0.5-3 km. | Middle Jurassic carbonatite and clastics | Yong et al., 2004 |
| Shuangquan Lake, Jinxing Lake Maoyingzui, Longwei Lake, Tuonamu, Zuerkengwula Mountain, Yicangma River, Xiangyang Lake | Upright horizontal parallel folds, with predominant axial orientations of 350-30°, interlimb angles of mainly 100-154°, and hinge zone widths of 1-8 km. The folds are superimposed on early nearly E-W-trending anticlines and form dome structures. | Middle -Upper Jurassic carbonatite and clastics | Jia et al., 2006 |
| Raggyorcaka, Mayer Kangri | Accretionary complex: upright horizontal parallel folds with predominant axial orientations of 0-15°, interlimb angles of 110-120°, and hinge zone widths of 20-1300 m. North Qiangtang terrane: upright plunging or upright horizontal parallel folds with predominant axial orientations of 5-30°, interlimb angles of 120-150°, and hinge zone widths of 20-1000 m. | Accretionary complex belt: Late Carboniferous-Middle Triassic metamorphic rocks; North Qiangtang terrane: Late Permian-Middle Triassic carbonatite and clastics, and Miocene-Early Pliocene clastics | This paper |
Figure S1. The location of N-S buckle folds in the North Qiangtang terrane and rose diagrams of hinges. The folds mostly exhibit as the upright horizontal type and is evenly distributed in the basin, indicating that a contraction deformation once occurred in a nearly E-W direction.