DEFORMATION FEATURES AND MECHANISM OF FORMATION OF THE DUCTILE SHEAR ZONES IN THE EASTERN SECTOR OF THE WUGONG MOUNTAINS

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Two types of ductile shear zones are developed in the eastern sector of the Wugong Mountains, Central-western Jiangxi Province, namely the NNW-trending steep-dipping strike-slip shear zone and the near-E-W-trending, subhorizontal ductile thrust shear zone, the latter being located to the east of the former.

These two different types of ductile shear zones are both characterized by: (1) peculiar "conical-sheath" folds and "cake- to tongue-shaped" folds, (2) mineral stretching and growth lineation with basically similar orientation, and (3) foliation with gradational changes in attitude. These common features suggest that the two types of shear zones are the product of deformation caused by the same mechanism.

Structural analysis of superposed folds shows that ductile shear deformation was superposed on the near-E-W-trending folds, and later, passive slip folds with crenulation cleavages as axile planes were in turn superposed on it and the near-E-W-trending folds as well. This suggests that they are essentially synchronous. The boundary between them may be a kind of transform fault.