

安徽张八岭地区西冷岩组早期构造变形特征

鲁如魁¹ 高天山² 张志树¹ 刘家云¹ 吴海权¹

(1.安徽省地质调查院, 安徽 合肥 230001;

2.中国科学技术大学地球和空间科学院, 安徽 合肥 230026)

摘要: 安徽张八岭地区西冷岩组早期构造变形复杂, 主要表现为褶皱以及与褶皱变形密切相关的韧性剪切变形。野外调查表明, 该地层中至少发育3期褶皱变形, 其中F1为北西向韧性剪切褶皱; F2为向南南西倾伏的纵弯褶皱; F3为近东西向的宽缓褶皱。F1与F2联合制约了西冷岩组岩层展布的总体格局。显微构造, 特别是岩石的磁性组构特征证明了区内曾发生过多期构造变形, 且有两期最为显著, 即早期的水平剪切和随后发生的侧向挤压。本文重点阐述上述褶皱变形的几何学特征, 并进行运动学和动力学分析。

关键词: 构造变形; 几何学; 运动学; 动力学; 西冷岩组

中图分类号: P551 **文献标识码:** A **文章编号:** 1000-3657 (2004) 02-0131-08

Features of early-stage tectonic deformation of the Xileng Formation-complex in the Zhangbaling area, Anhui Province

LU Ru-kui¹, GAO Tian-shan², ZHANG Zhi-shu¹, LIU Jia-yun¹, WU Hai-quan¹

(1. Anhui Institute of Geological Survey, Hefei 230001, Anhui, China;

2. Academy of Earth and Science, China University of Science and Technology, Hefei 230026, Anhui, China)

Abstract: The complexity of the early-stage tectonic deformation in the Xileng Formation-complex in the Zhangbaling area, Anhui Province is mainly manifested by folds and ductile shear deformation closely related to folds. There are at least three stages of tectonic deformation in strata, of which F1 is NW-trending ductile shear folds at an outcrop scale, F2 is SSW-plunging flexural folds, and F3 is nearly E-W-trending broad folds. F1 and F2 combine to constrain the gross framework of the distribution of the Xileng Group-complex. Microfabrics, especially the magnetic fabric features of rocks, prove that multi-stage tectonic deformation took place in the area. Two stages are most conspicuous, i.e. the early-stage horizontal shear and ensuing lateral extrusion. The paper focuses on the geometric features of the above-mentioned fold deformation and also analyzes its kinematics and dynamics.

Key words: tectonic deformation; geometry; kinematics; dynamics; Xileng Formation-complex