

Geology of subsheet E of the Yabello map sheet (NB37-14)

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ABSTRACT

The study area is located in Southern Ethiopia. It is bounded by 4°45' N to 5°00'N latitude and 38°30' E and 38°45' E longitude. The Precambrian basement rocks and intrusive, Tertiary-Quaternary volcanic and unconsolidated Quaternary sediments covered the area.

The gneissic terrain comprises various gneisses and schists. Where as the low-grade belt is constituted of ultramafic schists with minor intercalation of metasediments. The low-grade rocks are intruded by syn-tectonic (?) hornblende gabbro. The gneissic terrain and the low-grade belt are separated by thrust contact.

The basement rocks in the western and central part of the map area are unconformably overlain by Tertiary-Quaternary volcanic rock. Intense erosion and deposition result in the formation of the Quaternary sediments.

Early folding (D₁₋₂), subsequent thrusting (D₃) and later dextral strike-slip movement (D₄) deformations affect the Precambrian basement rocks. The regional metamorphic evolution reached at least upper amphibolite facies in gneissic terrain and upper greenschist to lower amphibolite facies in low-grade belt. Moreover late metamorphic alterations are regionally developed through out the area.