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palaostrees analysis of quartz grains in regional metamorphic rock at east of Hamedan Batolith

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Abstrac: The study area is located in northern part of metamorphic belt of Sanandaj-Sirjan in east of Hamedan Batolith. This area is mainly composed of regional metamorphic rocks, such as staurolith, andalusite, silimanite and garnet bearing mica schists and slates, with nearly NW-SE trend. The age of these rocks (tectonites) are Pre-jurassic and have experienced two stages of deformation during ductile deformation. The first schistosity (S_1) formed at the first phase (D_1). The second phase (D_2) was formed by sided forces where the most of structures have formed by this force. The fabric elements of second schistosity (S_2) and second lineation (L_2) formed in this phase. The subfabric elements of quartz, due to its physicochemical characteristic, was producted at this phase. Quartz grains, first and second schistosity and axes of microfolds all have orthorombic symmetry.

Keywords: *Fabric elements, Schistosity, Lineation, Quartz., Hamedan.*