

NAPPE TECTONICS AND STRIKE-SLIP SHEAR ZONES IN THE NEOPROTEROZOIC MOZAMBIQUE BELT OF SOUTHERN KENYA AND NORTHERN TANZANIA .

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The granulite-facies rocks of the Taita Hills and the East Tsavo National Park (Galana River) of Southern Kenya can be divided into three structural domains: (1) The easternmost domain (East Galana) consists of migmatic orthogneisses, marbles, calcsilicate rocks, and metapelites. Their foliation planes plunge gently to the south-west or are oriented subhorizontally. Stretching and mineral lineations strike to the north-west/south-east. (2) The western domain (West Galana) mainly consists of similar lithologies, but it additionally contains amphibolites. Structurally it differs totally from domain 1. It is characterized by foliation planes which plunge very steeply to the south-west. Pronounced north - south trending stretching lineations show an average inclination of 20°. Shear folds and other kinematic indicators prove a broad shear zone with strong left-lateral displacement and less pronounced dextral overprint. (3) The westernmost domain (Taita Hills) is mainly composed of orthogneisses together with marbles and metapelites. This sequence exhibits flat foliation plains, gently dipping to the north-east. Stretching lineations strike north - south. Domain 3 forms a pile of southward thrust nappe sheets. East-west aligned ultramafic lenses are incorporated into this stack of thrust slices. Structures similar to those in (3) were found in the Pare and Usambara Mountains of Tanzania. Here ultramafic lenses are tectonically incorporated in a north- south trending corridor. In Tanzania, domain 1 continues into the Uмба Steppe. Domain 1 seems to resemble a continental margin situation. Domain 2 carries features of a suture zone, and domain 3 could fit into the scenario of an accretionary wedge..