

Deformationsanalyse im *Main Ethiopian Rift* mit Hilfe der Fernerkundung

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The seismically active northern Ethiopian rift is one of few sites worldwide in the transition between continental and oceanic rifting. The Miocene to recent Main Ethiopian Rift is roughly 60 km wide and has a N20-30 regional trend. During the last 2 Ma the main structural and volcanic activity has been localised in narrow zones, about 20 km wide, where the tectonic style and the nature of the volcanism has changed. Within these *en échelon* tectono-magmatic segments we observe an intimate relationship between the generation of faults and the localisation and type of magma. At the surface, brittle extension takes mainly place on both sides of the segments whereas aligned basaltic cones assess dyke intrusions at the segment centers. We propose that these recent faults are induced by dykes. We show that these segments grow and interact with other segments and or older structures, like border faults. This localisation of the deformation does not seem to be related to an increase of the regional strain and may be related to rheological changes in the crust due to the injection of hot, plume related material and the rift obliquity.
