

Multiple magmatic events in the Oman ophiolite- an example in Fizh area

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Based on field relations in Wadi Fizh area, following nine episodes of magmatism are defined. 1: Generation of oceanic crust at retreating ocean ridge. 2. Gabbro intruded as a sill. 3: Wehrlite I intruded into the crustal sequence. 4: Dolerite intruded into the gabbro as a precursor of advancing ridge axis. 5: Formation of normal crustal succession beneath advancing ridge axis. 6: Wehrlite II intruded into the normal crustal succession when the layered gabbros were unconsolidated or still hot. 7: Then gabbro and gabbro dykes intruded before the cooling of layered gabbro. 8: Primitive basaltic dykes intruded into layered gabbro. 9: The Khabi complex correlating with the Alley volcanics intruded after the considerable cooling of the gabbroic layer.