Mylonite zones in the layered gabbros of the northern Oman ophiolite

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Mylonite zones ranging in width from a few to tens meters are developed in the layered gabbro of the northern massif of Oman ophiolite. Crosscutting relationships at the Wadi Zabin area in the ophiolite indicate that the mylonitization was initiated after the intrusion of fine-grained gabbro or Hbl porphyritic fine-grained gabbro into massive gabbros.The Hbl porphyritic fine-grained gabbro may have been producted by later stage calk-alkalic magmatism.

The general attitudes of the mylonite zones are N-S trending and subvertical to west dipping, which are prallel to ridge axis shown by the structure of sheeted dykes. Subhorizontal lineations on the mylonitic foliations and asymmetric structures indicate sinistral strike-slip movement during the mylonitization .