

The Kudat ophiolite complex, Northern Sabah, Malaysia - field description and discussion

Abstract

Middle Jurassic to Early Cretaceous ophiolitic rocks occur scattered in the Kudat Fault Zone, Kudat and are referred to for the first time as the Kudat Ophiolite Complex (KOC). This complex tectonically represents a dismembered ophiolite sequence, however all components of a complete ophiolite are present with the exception of a gabbroic and/or cumulate mafic-ultramafic layer. A generalized igneous stratigraphy for the KOC may be reconstructed from these dismembered remnants, consisting of sheared and brecciated serpentinite, plagiogranite, doleritic to basaltic dykes and submarine pillow basalt overlain by radiolarian chert. The KOC may represent as supra-subduction zone ophiolite type (SSZ-ophiolite type).