

Significance of the Yugu peridotite, Korea

Akihisa Koyanagi[1], Shoji Arai[2], Ken-ichiro Hisada[3], Yong Il Lee[4]

[1] Dept. Earth Sci., Kanazawa Univ, [2] Dept. Earth Sci., Kanazawa Univ., [3] Inst. Geosci., Univ. Tsukuba, [4] Dept. Geol. Sci., Seoul National Univ.

Several small ultramafic bodies occur in the southern part of the Korean Peninsula (Republic of Korea). Yugu peridotite is one of them, and is highly deformed and is exceptionally fresh. The peridotite is mainly lherzolite, composed of olivine, OPX, CPX, chromian spinel and Ca-rich amphibole. The characters suggest that the Yugu peridotite was upwelled rapidly from the spinel stability field of the upper mantle beneath the Korean Peninsula along an important tectonic line, which has not been recognized yet.