

Emplacement mechanism of Tanzawa tonalite

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The AMS measurement of the Tanzawa tonalite reveals the mode of emplacement of tonalite magma. The space provided by the subsidence of the floor was filled with tonalite magma migrating upward along fractures margined the body. The transcurrent deformations of tonalite and EW trending synplutonic dykes suggest the emplacement of Tanzawa tonalite magma was taken place under the NS extensional tectonics. The EW trending elongated shape of the Tanzawa tonalite is also concordant with the NS extension. The Tanzawa tonalite is estimated to be a kind of pull apart pluton emplaced under the NS extensional tectonics.