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Geological Correlation between the Funatsu Shear Zone in the Hida Belt of Southwest Japan and the Honam Shear Zone in the Korean Peninsula

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The Hida Belt of southwest Japan is composed mainly of low P/T type Hida Metamorphic Rocks, granitic mylonites and Funatsu Granites. The Funatsu Granites are Jurassic (ca. 180 Ma) granitoids intruding into the Hida Metamorphic Rocks and granitic mylonites. The Funatsu Shear Zone (Komatsu et al., 1993) [1] is a dextral shear zone located in the Hida Belt, consisting of the granitic mylonites. The massive Funatsu Granites intrude into the granitic mylonites cutting the mylonitic foliation (Harayama et al., 2000) [2]. On the other hand, the Iwaidani Mylonite Zone consists of granitic mylonites originated from the Funatsu Granite (Harayama et al., 2000) [2]. Therefore, at least, two times of mylonitization (pre- and post-date the intrusion of the Funatsu Granites) had taken place in the Hida Belt.

The Honam Shear Zone (Yanai et al., 1985) [3] in the Korean Peninsula is composed of several dextral shear zones situated in and around the Ogcheon Belt.

These shear zones are also composed mainly granitic mylonites and intruded by Jurassic Daebo Granites, which is correlated to the Funatsu Granites. Recent study (Cho et al., 1999) [4] revealed that the Namwon Granite, which is one of the Jurassic Daebo Granite, was slightly mylonitized in early Middle Jurassic (180-160 Ma). Therefore, at least, two times of mylonitization (pre- and post-date the intrusion of the Daebo Granites) had taken place also in the Korean Peninsula. Consequently, the Funatsu Shear Zone is correlative to the Honam Shear Zone based on the geology and tectonics around the Hida and Ogcheon Belts.

References

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