



Tectonic situation of Imjingang Fold Belt and the eastern Chinese Sulu Belt's termination: Relation with Hida Marginal Belt

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Imjingang Fold Belt (IFB) having shallow Moho-depth (ca. 25km) and three EW-blocks (the western Gangryeong, the middle Imjin/Yeoncheon Group and the eastern block) curves to the north (Hamheung-Hyesan) through Ganseong-Goseong area and had undergone the effect of middle-type metamorphism and deformation around 250Ma (CHIME & SHRIMP) and again after Daedong Group, which basal conglomerate shows a right lateral EW-shear movement sense. Results of CHAMP (CHALLENGING Minisatellite Payload) and GRACE (Gravity Recovery and Climate Experiment) (S. Maus et al, 2004), differential velocity of P wave (T. Hao et al, 2003), and basic volcanic occurrence (A. Ishiwatari et al, 2003) on the far east Asia do not support connecting the eastern extension of Chinese Dabie-Sulu collision belt and Korean Imjingang fold belt (IFB) or Ogcheon fold belt (OFB). The Chinese continent-continent collision belt detours the western sea of Korean peninsula toward the south and joins to Tsushima- Koto line at around the south of Jeju Island. The southern most boundary of Amurian plate has been recently suggested to the above detour trajectory. Hida-Mino region shows major dynamic force from NNW-to-SSE and the weaker S-to-N later on, which has been newly recognized and is the opposite from the accretionary prism theory. Hida marginal belt involved two Devonian blocks is still uncertain that the eastern Fukuji correlate to the south China block and the western Moribu to the north by float fossil, Fusulinids. Ultrahigh pressure minerals such as coesite or diamond characterizing the Dabie-Sulu metamorphic rocks in east China and evidences of strong tectonic event have not been found from metamorphic rocks in Hida Marginal belt yet. More research is needed to illuminate the termination of Chinese Sulu belt to the east on the basis of clearer evidence.