Classification of Plate Motion and Global Plate Motion relating to the Japan Sea Opening

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Velocity of Plate movement is largest along the Euler Equator, where might be related to the driving force. New classification on Plate movement is proposed, using the position of its Euler Equator; as autonomous for crossing the plate boundary and as accompanied for crossing outside of the plate boundary. Pacific Plate has both of autonomous movements for the spreading and subduction. Philippine Sea Plate is typical accompanied Plate with Pacific Plate.

The Japan Sea Opening was distinct event not only for the birth of Japanese Island Arc system but also for global Plate Tectonic framework. New dating on the strike slip movement of Karakoram Fault gives same age of Japan Sea Opening. The sedimentary facies drastically change at the age of Japan Sea Opening.