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SCG059-P28

Room:Convention Hall

Time:May 27 10:30-13:00

## Slab pull force and direction of plate motion

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Gordon,1978 showed two endpoints of subduction zone of a plate can represent the direction of the plate rotation by the sum of the slab pull forces. But the Pacific Plate, for instance, is not subducting at some subduction zones such as the New Hebrides trench and New Britain trench, but some other plates are subducting below the the Pacific plate. This means that those part of trenches should not be included for the calculation of the direction of the plate motion.

We developed a method for computation of Euler poles of plate rotations with various parameters, e.g., distribution of subducting slabs, slab length/thickness/density, and dip angles. New Euler pole of the Pacific Plate rotation estimated about 20 degree southward from that of Gordon,1978.

Keywords: slab pull force, driving force of plates, Euler pole