The dynamics around the area where the Nankai Earthquake occurs

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The plates of east and west collide in the Japan Deep and Izu-Ogasawara Trench. The western plate is a terminus and the Pacific plate is sedimenting in the slanting lower part.

The Pacific plate is low temperature and has a high temperature part broadly below. On the other hand, on the whole, the western plate is high temperature comparatively also including the surface.(2)

On the both sides of sedimentation slab, the western high temperature part and the high temperature part of the east side lower part pull each other, and tend to approach. That is, the former pushes the sedimentation slab on the east from the west, and the latter goes to the west with the hard whole east side plate which covers and hangs. The composition of the high temperature parts which sandwiched the low-temperature sedimentation plate is the 2 Temperature Rotation Disk. As for the power in which the west side plate is pulled to the east, the perpendicular ingredient becomes large, so that it is close to the trench. And from the east, the Pacific plate crowds the whole sedimentation slab. Therefore, the neutral line of the diastrophism of the direction of east and west observed on the surface of the earth is in an west rather than the trench.

There is the neutral line from the offing in west coast of the Tohoku district to Niigata. However, it flows to an west in the south of Niigata, arrives at Osaka, skips and crosses Setouchi, and travels through Bungo Channel. If it goes south to Ogasawara, the neutral line which met the trench (Izu Ogasawara) again will be seen.(3)

Since the Southwest Islands trench which faces it has the perpendicular sedimentation plate, the trench itself is the neutral line.(2)

Both trenches are approaching, so that it goes to north. The seabed which spreads south of the Tokai and Nankai Trough is mutually pulled with the high temperature part of the outside of both trenches as a common high temperature part. Consequently, both trenches are under approach mutually.

What reduced the relation (it considers as System A) of the plates of east and west mentioned above, and rotated a little less than 90 degrees to the right (it considers as System B) exists in Tokai from Shikoku.

For System A, it will be in the state where a low-temperature plate is caught in a part of west side plate, and the high temperature part will be divided up and down in the portion.(2)

Although they are pulled mutually, the high temperature part of the top and the high temperature part of the vast east side lower part which exists from the first are not pulled mutually. That is, although the Chugoku district and the Hokuriku district go to an east, Shikoku and the southern area from the line(1) which connects Gobo-shi, Osaka-shi, Suzuka-mountain range, Nakatsugawa-shi, etc. with the sedimentation slab underground is not pulled to the east.

In the Nankai and Tokai slab, the northern limit line of sedimentation slab is extended to a northeast, and reaches in the direction of Lake Biwa in Kinki.(1)

Kinki is classified into a northwestern part and a southeast part by the existence of underground slab. Therefore, Chugoku, the Kinki northwest part, and Hokuriku is a eastward movement and Shikoku to Tokai of the Pacific coast is a westward movement, and Shikoku to the Kinki southeast part rather westward movement. It was explained by this that the diastrophism of east and west had collided by the line which connects Wakayama-shi, Osaka-shi, and Ibuki-Sanchi, and that(3) the neutral line having flowed from Niigata to the west, and having arrived at Osaka-shi.

(1):http://www.geog.or.jp/journal/back/pdf110-4/p581-591.pdf
(2):http://ohp-ju.eri.u-tokyo.ac.jp/tokutei/index.html
(3):http://mekira.gsi.go.jp/JAPANESE/crstanime9604_9912b.html