

SSS015-P01

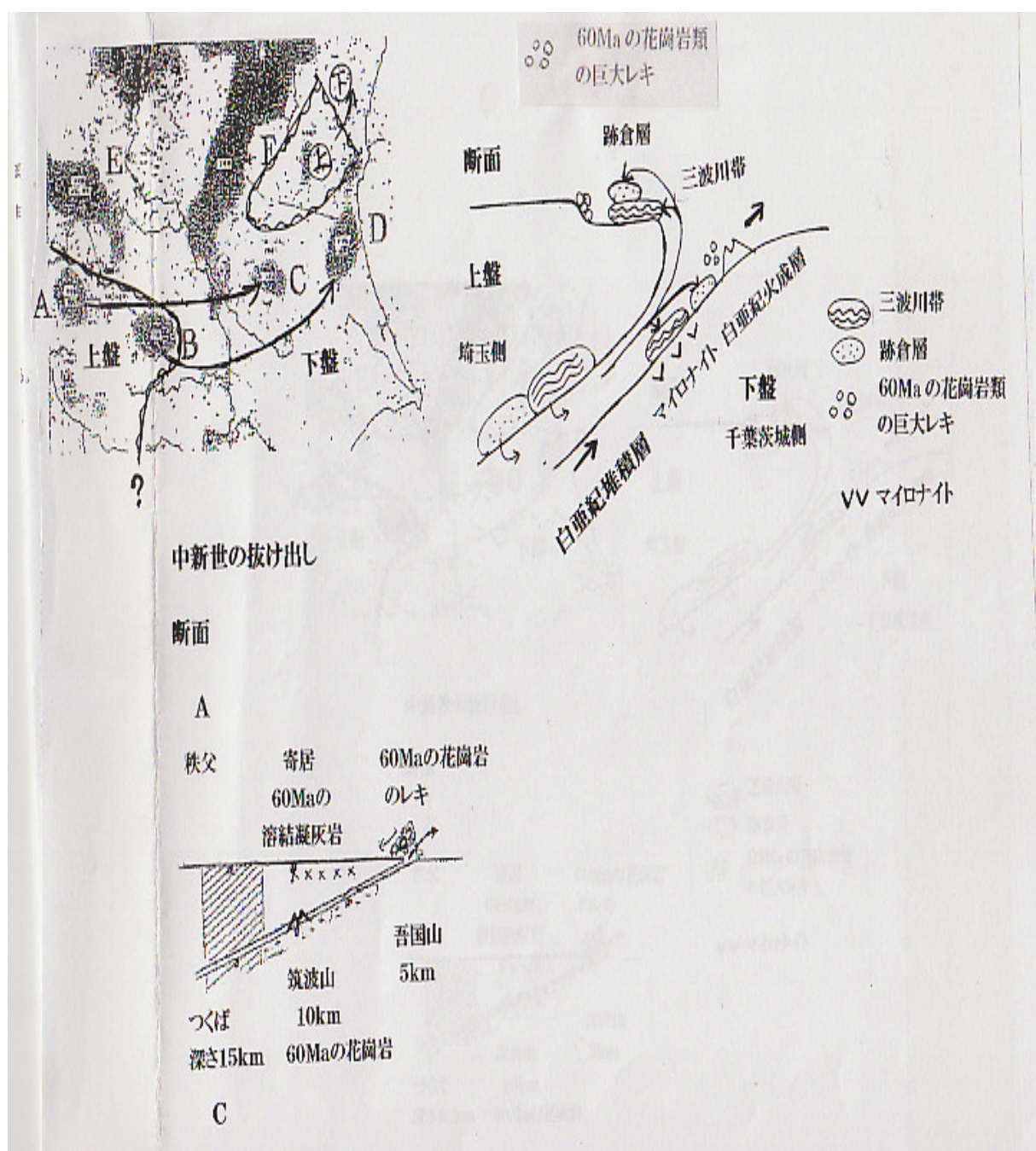
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Relationship between half-graben and high-velocities area at depths of 10km in Kanto Area 3

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¹none



The distribution of half-graben (ground-based V shaped Valley structure)(Takahashi 2005) seems to coincide with high-velocities area at depths of 10km in Kanto Area (Matsubara 2005)_____(Oishi 2007)

High-velocities area in Kanto, Chichibu oval A and Kawagoe oval B in Saitama Prefecture, Tsukuba oval C and Hokota oval D, major axis is about both the size of 22 km, a 15 km diameter approximately the same magnitude at short. The distance between the center of the AB, CD is the distance between the center of approximately equal in both 44km.

The AB CD and each batch, AB and CD may have some relation. In addition the high-velocities area AB in Saitama Prefecture stopped at depths of about 15km, but in Ibaraki Prefecture the high-velocities area exists at depths of up to 50 km below the earth's surface that cover the southern part of Ibaraki Prefecture. _____[1]

E in Isezaki and Fukaya high-velocities zonal bands, F in the midstream Kinugawa, they are considered to be open rift Miocene 15 Ma. F sequence of the eastern belt of closely matches Karasuyama ?Sugonuma fault.

The area of the north of the Tone river in Kanto moved about 100km to the east.(Takahashi 2005 volcanic from deviation)_____[2] CD area approaches AB area if we reconstitute this about 100km movement to the east on the map. According to the sillimanite and cordierite depth analysis, Tsukuba was at depths of 15km, Mt. Tsukuba 10km, Mt. Wagakuni 5km. _____[3]

Large gravel, boulder of granitoid in Ushikubi and Ogawamachi in Saitama Prefecture has been found but strangely enough its mass rock does not exist around there. The gravel of granitoid is as old as that of Mt. Tsukuba, about 60Ma. _____[4]

Shallow Moho under Tsukuba is 25km _____[5]

Mylonite has been found in Kukizaki well, south part of Tsukuba and in Oyo Chisitsu well, center part of Tsukuba _____[6]

Katakuresaito that proves the normal fault movement has been found in Oyo Chisitsu well. _____[7]

According to [1]-[7], we can say that Tsukuba oval was once piled under the Chichibu oval B at about depths of 15km and slipped out, and moved about 100km to east Miocene 15 Ma. Before slipping out, Tsukuba was at depths of 15km, Mt. Tsukuba 10km, Mt. Wagakuni 5km were piled under Saitama prefecture's slope. Over Mt. Tsukuba was Yorii in Saitama Prefecture. Yorii has welded tuff that is about 60Ma and as old as Mt. Tsukuba's granitoid.

"Revisiting the Median Tectonic Line"

When we see seismic tomography and gravity anomaly in Kanto Area, we can see the hanging wall and the foot wall. The area of south of Naranashi fault including AB oval is hanging wall. Other area, north of Naranashi fault and south part of Ibaraki Prefecture including CD oval and north part of Chiba prefecture is foot wall that had slipped out.

Gravity anomaly in the south slope of the CD seems to indicate the slope of the foot wall intact. The area of east part of Kawagoe oval B of hanging wall seems to have collapsed and not to exist. Looking at north of AB area, MLT can be considered the northern edge of the Sanbagawa metamorphic belt on the hanging wall. This means that the area of east part of Kawagoe oval B doesn't have MLT. Sanbagawa area in Chiba Prefecture should be considered the part that couldn't strand on the hanging wall and scattered on the footwall. In Chiba

Prefecture, as proof of that the Cretaceous sedimentary (not metamorphic, metamorphic weak) and Sanbagawa area are mixed and don't line up in the shape of layer.

Garnet in Edosaki near oval C corresponds to that of Atokura formation near oval A. (Hisada 2004)

Sanbagawa metamorphic and Atokura formation on the bottom of the hanging wall were scooped out by the foot wall, and lifted up, and some of them stranded on a hanging wall and other couldn't strand and moved to east.

Matsubushi mylonite of the evidence given in this was near MLT (Takagi 2007) are stratified Cretaceous footwall rather, traces of which are evidence of tensile normal fault movement.