Outcrop of shear zone along the Sakuragi bend of the Kawakami fault, the Median Tectonic Line active fault system

Michio Morino[1], Saori Ikeda[2], Emi Taninomiya[2], takafumi yoshida[2], Ikuo Hara[2]

[1] OYO Corporation Present address: Active Fault Research Center, GSJ-AIST, [2] OYO Corporation

The Median Tectonic Line(MTL), geological boundary between the Cretaceous Izumi Group and the Sambagawa Metamorphic Rocks, bends northward at the eastern part of Kawauchi Town, Ehime Prefecture, West Shikoku and this is called the Sakuragi-bend. The Kawakami fault, the MTL active fault system, is located at north of the MTL. The strike shows ENE-WSW. But the fault agrees with the MTL on the Sakuragi-bend and again shows ENE-WSW strike no the east.

The Sakuragi-bend extends in mountains and fault topography is obscure. Also the shear zone of the Kawakami fault was not found. Therefore it was suggested that the Kawakami fault is not active along the Sakuragi-bend, and that because the Kawakami fault shows a left echelon arrangement, the Sakuragi-bend forms the boundary of the east and west segments.

We found the outcrop of shear zone along the Sakuragi-bend. The fault shatters the Miocene Ishizuchi Group and the Izumi Group. The fault strikes N45E and dips 15NW. The slickenline on the fault surface strikes N75W and dips 10W. It is inferred that the Kawakami fault on the Sakuragi-bend forms a low angle reverse fault and continues eastward. This suggests that the Kawakami fault is composed of a single segment both the east and west parts.