

## Lithology and deformation of chert - clastic sequence in a long - core sample in Kochi - shi, Shikoku

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The Togano Unit of the southern Chichibu terrane, a part of the Jurassic accretional complex, is one of the representative rock units. The Togano Unit is characterized by a chert - clastic sequence. The site of borehole is situated at the northern end of the Kochi-shi eastern comprehensive sports ground. It is about 5 kilometers southwest of the Kochi JR Station. The whole length of the core is 601m. The interval between 0 to 127 m is an alluvium and 127 to 600 m corresponds to the Togano Unit. The boring core records obvious deformation structures, which is difficult to observe in the outcrop. As a result of the core observation, the core is characterized by the repetition of three chert - clastic sequences. The sequence is composed of cataclastic mixed rock, chert, siliceous mudstone and coarse clastic rock units, from the bottom to top. The cataclastic mixed rock unit consists of clasts of siliceous claystone, chert and volcanic rock in an argillaceous matrix associated with veins and scary cleavage. Bedded siliceous claystone and chert, 1 to 2 meters in thickness, are embedded in cataclastic zones. Cataclastic zones are cataclasite, breccia and gouge. Thus, the cataclastic zones are considered to have moved repeatedly. In contrast to the cataclastic mixed rock, its underlying clastic rocks record soft to semi solid sediment deformations. The deformations are concentrated in the uppermost part of the coarse clastic rock of the underlying chert - clastic sequence. The cataclastic mixed rock seems to represent the ancient decollement zone. At the same time, the hydro pressure increased remarkably and soft to semi solid deformation might be formed.