

Geological structure of the continental shelves in the northernmost part of Suruga Bay.

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Suruga Bay is a structural subsiding zone with a lot of geological and geomorphologic features. Suruga trough which is thought to be a subsiding Philippine Sea plate boundary runs in north-south direction. Fujikawa fan spreads its fluvial sediments in the northernmost part of the Suruga Bay. We discuss the formation process of geological features on the continental shelves using the detailed seabeam data. We also clarify the deformation of denudation surface on the basement rocks since the Wurm maximum caused by the plate subduction using the seismic profiler data. As a result, unique geomorphic feature was found on the continental shelves along the northernmost part of Suruga Bay. We recognized two steps of submarine flat surfaces and a gentle slope between them. These flat steps gradually changes to wavy shape surface to the west. Moreover, we revealed that the denudation surface of the basement rock, which is thought to be formed in the Wurm maximum age, is gently declined from off Ueda to the east to off mouth of River Fuji to the west. A big displacement was confirmed on the basement denudation surface at the off shore of mouth of River Fuji. This big displacement of basement might show the geologic and geomorphic features of fault activity related to the plate convergence since the Wurm maximum.