

QUATERNARY GEOLOGY AND ORE DEPOSITS OF THE NORTH-WEST SHELF OF THE SEA OF JAPAN

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The North-West shelf of the Sea of Japan was studied by using geological-geophysical techniques, including drilling. Among sediments are identified the units from Low Pleistocene up to Holocene, corresponding transgression-regression cycles of the Sea of Japan. We can distinguish: inshore marine sediments, beach and lagoon deposits. The typical geomorphological and lithological evidences allowed to restore the ancient river's deltas and drowned costs which were formed in the last sea's transgression. The reconstruction of ancient deltas and drowned costs has a practical interest because with surf deposits (sands and gravels) are connected the parcels of gold, cassiterite, titanomagnetite, zircon, and monazite. Because the north-west continental shelf of the Sea of Japan is a part of a land submergence we can recognize the same types of middle -late Holocene parcels on the shelf and the continental margin. The continental gold parcels on the shelf (middle-late Quaternary) are covered by Holocene marine deposits, but on the island's shelf wide spread marine parcels of Late Holocene formed in the last Pacific transgression. It was established that in the central parts of the bays with muddy sediments are connected the fine-grained gold deposits.