SEDIMENTARY ENVIRONMENTS AS THE INDICATORS OF EARLY CRETACEOUS GEODYNAMIC SETTINGS IN THE FAR-EAST REGION

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On that area several types of Early Cretaceous sedimentary basins have been reconstructed: 1) continental freshwater, 2) epicontinental (epiplatform or foreland) saline and brackish water seas, 3) oceanic margin and marginal sea and 4) oceanic basin. Separate volcanic group of arc seas has also been distinguished.Continental basins were represented by lack, swamp, marsh and river environments; epicontinental basins sometimes of strike-slip origin included shelf seas of different depths; oceanic margin and marginal sea comprised shelf, continental slope and rise and deep part of the sea; oceanic - pelagic and hemipelagic environments; the group of volcanic arc seas embraced backarc and forearc basins including the slopes of volcanic arc itself and trench system. First and second types had been developing on the eastern edge of continental Khanka crystal massif whereas other ones were epioceanic and there sedimentation occurred eastward Sikhote-Alin area.These reconstruction reflect the changes of geodynamic settings on the Far East margin of Asia from a marginal sea open toward the Pacific ocean (passive-tipe) in Valanginian to a marginal sea separated from the ocean by volcanic arc systems (active-tipe) during Hoterivian-Albian geological time. Such changes had been produced by means of oblique subduction of Pacific oceanic plate under the continent which had caused formation of nappes, upthrusts and especially strike-slip dislocations.The research described above was made possible in part by Grant 98-05-65328 from RFFI.