

Development of trough fill sediments along the Sagami trough to Boso triple junction: Generic concept for KAP

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The Sagami trough is a world unique plate boundary close to the Boso triple junction, genetically comes back to Cretaceous or Paleogene as the Shimanto accretionary prism. The next oldest terrigenous clastic sediments are of Eocene age, and then during Miocene the area has accepted a large amount of Izu forearc sediments; first early to middle Miocene Emi accretionary prism, next middle Miocene to early Pliocene Miura prism, and then late Pliocene Chikura prism (?). Collisional type conglomeratic strata are correlatable to such prism formations, because the boundary is just on the forearc side of the Izu arc collision zone between the Honshu arc. Still at present thick piles of sediments are developed in three different domains along the Sagami trough, in which the Sagami Basin has 4 km thick trench-fill, not yet accreted to Honshu side. The triple junction has huge piles of sediments, now largely collapsed downward with intermittent dam-up to form deep-sea terraces in the triangle area of the junction. Sediments of Miocene age in the Boso Peninsula and those of the triple junction amazingly resemble those from the Japan trench, suggesting a large amount of the trench sediments are accreted to the triple junction area including the Boso Peninsula.