Change of geographical environment of the Niigata Plain by event sedimentation

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In the Niigata plain, the 10 rows of coastal sand dune are distributed along present coast. From the similarity of the form, it can be divided into three coastal sand dune named New coastal sand dune I to III. It became clear that sedimentation system of the alluvium in the Niigata plain had been composed of barrier system and delta system. That the origin of the sediment which forms this delta system is a catastrophical floodflow by pyroclastic flow eruptionin the Numazawa volcano at middle part of the Tadami River in Fukushima Prefecture. It is estimated that the enormous pyroclast by this catastrophical flood affected not only rapid advance of delta system of the plain area in the Agano River watershed but also advance of the barrier. Then, the following were carried out : Arrangement of the existing boring data in the region and new boring exploration in the representative site between New Coastal sand dune II and coastal sand dune I. As this result, it became clear that the facies which mainly contains the gravel with coarse grain pyroclasts such as the pumice was widely distributed in this region further than the eastern region of the Niigata City . And, the delta plain expanded from that it shows the facies of the reticular channel and distribution of the similar facies from estimated river mouth position in the scale of the about 4 to 5km radius. And, the main watercourse can be estimated with that the form which extends like the bird food in the shallow sea was shown. This sediment volume can be estimated with 4 cubic km. Rapid reclamation of shallow sea by this event flood and enormous sediment volume seemed to greatly control the flow of the coastal current in those days. The coastal sand dune has been formed the position where this delta plain with coarse grain deposits is distributed. There is the high possibility that the large shift of the coastal sand dune is originated from the inflow of this event sedimentation to the shallow sea.