

## **Petrology of Basalts and Tectono-Magmatic Evolution of the Japan Sea Region**

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Petrological data about Japan Sea basalts have been processed by the principal component method with our modifications. We have taken basalt samples with SiO<sub>2</sub> contents up to 54% and with volatile components up to 3%.

According to the sample of Site 795 (Central Basin) location on the graph and its age, it may be safely suggested, that during the Early Miocene island-arc (IA) calc-alkalic (CA) volcanism took place there. The locations of the samples of Site 794 (Honshu Basin) and their age suggest the presence of IA conditions during the end of the Early Miocene, when CA basalts were effused, as well as the presence of oceanic conditions in the range from the Early Miocene to the Middle. The samples of Site 797 (Honshu Basin) have been also splitted into two groups. Their ages and locations on the graphs of the samples of Site 797 (Honshu Basin) display, that during the end of the Early Miocene, tholeiitic IA magmatism arose there, and it subsequently followed by the magmatic manifestations of the oceanic type. Probably, this renewal corresponded to the beginning of the basin disjunction. The age of one basaltic sample from the Medvedev Seamount (11-12 mln YBP) within Honshu Basin displays the disjunction time for us. On the graph, this sample is located within the field of oceanic tholeiites.

The most ancient volcanites of the Central Basin are of 52 mln. YBP, and their textural attributes point at their undersea origin. The chemical features of the younger (of the Middle Miocene) volcanites allow to classify them as the specific marginal-sea type of subalkalic basalts corresponding to the stage of the abyssal basin forming during the Middle Miocene. Disjunction of the Honshu Basin happened during the Late Miocene.