
Abstract:

The continental shelves of the world have been partitioned into well-accepted biogeographic provinces since the work of Briggs in 1974. The last proposal for dividing the abyssal sea floor into provinces was put forward by Vinogradova in 1979, and a brief scheme for the bathyal was proposed by Zezina in 1973. The problem with any proposal is the lack of data for many parts of the ocean. However, because of threats to marine biodiversity from both fishing and mining, there is a management requirement to determine, using the data available, what are the likely biological provinces throughout the deep sea. Since biological data are not available for many areas at these depths, hydrographic data, in particular temperature, salinity, and dissolved oxygen were summarized for the lower bathyal and abyssal regions, and combined with model outputs of POC flux, were used as surrogates to define likely biogeographic provinces.