东太平洋海盆**CC**区沉积物因子分析揭示的沉积环境地球化学演化信息

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提要：对中国大洋矿产资源开发研究协会DY851和DY853航次获得的东太平洋晚新生代沉积物（包括61个表层沉积物样品和16个沉积物柱状岩芯）进行了系统的地球化学和数理统计分析，揭示了东太平洋海盆CC区晚新生代沉积环境地球化学演化的一些特征。认为洋底扩张、沉积区离东太平洋洋脊的距离、海底的地热强度及地热活动频率影响了研究区CCD的深度和CCD波动的频率及幅度，从而在一定程度上制约了研究区的沉积环境。

关 键 词： 东太平洋海盆；碳酸盐补偿深度； 地热； 因子分析
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Clues to the geochemical evolution of the sedimentary environment as revealed by factor analysis of sediments in area CC of the East Pacific oceanic basin

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Abstract: A systematic geochemical and multivariant statistical analysis of Late Cenozoic sediments (including 61 samples of surface sediments and 16 piston cores of sedimentary columns) from the East Pacific oceanic basin during the cruises DY851 and DY853 sponsored by the China Oceanic Mineral Resources Association has revealed some characteristics of geochemical evolution of the sedimentary environment in area CC of the East Pacific oceanic basin during the Late Cenozoic. It is considered that the ocean-floor spreading, distance from the East Pacific ridge, submarine geothermal flow and frequency of geothermal activity might affect the depth of the carbonate compensation depth (CCD) and the frequency and amplitude of CCD fluctuation, and therefore constrained the sedimentary environment of the study area to some extent.
Key words: East Pacific oceanic basin; carbonate compensation depth; heat flow; factor analysis