

渤海湾老狼坨子海岸带¹⁴C、¹³⁷Cs、²¹⁰Pb测年与现代沉积速率的加速趋势

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摘要: 通过对渤海湾西岸L剖面中同一关键层的碳酸钙和原生腹足类壳体的¹⁴C测年对比研究, 确定了晚全新世约2800cal BP的层位及沉积速率0.045cm/a; 8个样柱的¹³⁷Cs和²¹⁰Pbex强度、蓄积量揭示了距今约120年来堤后盐沼的平均沉积速率约为0.35cm/a, 而面向开放海湾的潮坪上部则达到约2~3cm/a。研究区近一个世纪以来沉积速率的加速趋势, 是渤海湾西岸泥质海岸带的特征之一。

关键词: ¹⁴C测年; ¹³⁷Cs/²¹⁰Pb测年; 沉积速率; 加速; 渤海湾西岸

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¹⁴C, ¹³⁷Cs and ²¹⁰Pb dating and accelerated tendency of the present sedimentation rate
along the Laolangtuozi
coast of the Bohai Bay

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Abstract: ¹⁴C dating comparative study of the calcium carbonate and primary gastropods in the same key layer in transect L on the west coast of the Bohai Bay has determined the late Holocene ~ 2800 cal BP horizon and the sedimentation rate of 0.045 cm/a. The ²¹⁰Pb and ¹³⁷Cs data and inventories of eight columns, combined with the radiocarbon ages, reveal that the average sedimentation rate in the last ~120 years is ~0.35cm/a for the back-marsh and ~2~3cm/yr for the upper part of the open intertidal flat. The acceleration trend of the sedimentation rate in the study area over nearly a century is one of the features of the muddy coastal zone of the Bohai Bay. has existed in the transect L in the back-marsh and intertidal area in Laolangtuozi, Bohai Bay.

Key words: ¹⁴C dating; ¹³⁷Cs/²¹⁰Pb dating; sedimentation rate; acceleration; west coast of the Bohai Bay