辽南新元古代营城子组臼齿灰岩的沉积环境

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摘要: 臼齿(Molar-Tooth)灰岩是发育于中新元古代碳酸盐台地的一种特殊灰岩类型。辽东半岛南部大连地区震旦系营城子组中部臼齿灰岩十分发育,野外观测、室内薄片以及比较沉积学研究表明,臼齿灰岩的出现与环境密切相关。通过米级旋回研究发现,该岩相段以发育浅水碳酸盐岩米级旋回层序为主,臼齿构造主要产出在微旋回中下部的中薄层泥晶灰岩和粉屑灰岩中,形成环境为潮下浅水环境。

关 键 词: 臼齿灰岩; 微层序; 沉积环境; 震旦系; 辽南

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Depositional environments of molar-tooth limestones of the Neoproterozoic Yingchengzi Formation in southern Liaoning

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Abstract: Molar-tooth (MT) limestone is a special type of limestone developed in the Meso- and Neoproterozoic carbonate platform. MT limestone is very well developed in the middle part of the Sinian Yingchengzi Formation in the Dalian area in the southern Liaodong Peninsula. Based on the field observations and thin section examination, as well as the comparative sedimentologic study, the appearance of MT limestone is closely related to the diagenetic environment, and its location is related to the sea-flooding events. According to the study of the meter-scale cycle, in this rock facies segment, mainly meter-scale cyclothems of shallow-water carbonates rocks are developed, and MT structure dominantly occurs in the moderately thick- to thin-bedded micrite and calcisiltite in the middle and lower parts of this micro-cycle, which indicates a subtidal shallow-water environment.

Key words: molar-tooth (MT) limestone; microsequence; sedimentary environment; Sinian; meter-scale cycles of shallow-water carbonates rocks