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河流相沉积中准层序与短期基准面旋回对比研究——以四川中部须家河组为例 [点此下载全文](#)

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摘要:

通过详细分析曲流河沉积动力学特点,在四川中部须家河组建立了河流相沉积的准层序模式。曲流河沉积中可发育粒级向上变细准层序,也可以发育粒级向上变粗的准层序。辫状河准层序表现为粒级向上变细、河道水体向上变浅的准层序,而粒级向上变粗的准层序不发育。河流相准层序界面是河道砂体底部的冲刷侵蚀面,在粒级向上变粗的泛滥平原-决口扇或决口河道沉积中,准层序界面为暴露过泥岩与上部洪水期的暗色泥岩间的界面。将河流相准层序与短期基准面旋回进行精细的分析与对比认为,二者在层序地层学级次划分中时限相当,发育时间为0.01-0.05Ma;二者的界面是相同的,均为河道砂体底部的冲刷侵蚀面或者是暴露过泛滥平原泥岩、根土岩等。河流相中准层序与短期基准面旋回其实是相同时间内沉积的一套相同的沉积体,二者的不同只是分析的角度不同,其实质内容是一致的,即在曲流河短期基准面升降变化过程中,所保留下来的沉积物总是相对河水位是向上变浅的,由位于河水面以下的河道或边滩砂体向上变浅至河水面之上的天然堤、泛滥平原泥岩,此相序特征也正与准层序向上变浅的定义相同。

关键词: [须家河组](#) [河流相](#) [准层序](#) [短期基准面旋回](#)

Correlation of Parasequence and Short-Term Base Level Cycles in River Facies: A Case of the Xujiahe Formation in Central Sichuan [Download Fulltext](#)

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Abstract:

Through analyzing the sedimentary dynamics in meandering stream, a model of the Xujiahe Formation parasequence in river facies was established in central Sichuan. Fining-upward and coarsening-upward parasequences occurred usually in meandering stream sediments. There was fining-upward parasequence in braided stream, but coarsening-upward parasequence was not in braided stream sediments. The fining-upward parasequence boundary of meandering stream and braided stream is the ravinement surface of river course. The coarsening-upward parasequence boundary of meandering stream was the exposure mudstone of flooding plain and root clay. By the correlation of parasequence and short-term base level cycles in river facies, they had the same time limit. The time limit was 0.01-0.05 Ma. And the boundary of them has the same lithologic character: the ravinement surface of river course or exposure mudstone of flooding plain and root clay. The sediment was of the same age in parasequence and short-term base level cycles, and it was just one thing. From different analyses, the differences of them are revealed: one is the classic sequence stratigraphy, and the other is the high-resolution sequence stratigraphy. The focus of parasequence and short-term base level cycles in river facies is that, when the base-level in meandering stream changes, the sediment relative to the stream stage gets shallow upward. The sediments in the stream stage was getting shallower to the natural levee and the flooding plain.

Keywords: [Xujiahe Formatin](#) [river facies](#) [parasequence](#) [short-term base level cycles](#)

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