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晚三叠世卡尼期碳酸盐生产危机在东特提斯地区的地质记录

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时志强 钱利军 曾德勇 欧莉华

成都理工大学沉积地质研究院，成都，610059;成都理工大学沉积地质研究院，成都，610059;成都理工大学沉积地质研究院，成都，610059;成都理工大学沉积地质研究院，成都，610059

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摘要：

欧洲学者基于阿尔卑斯地区上三叠统卡尼阶地质研究提出卡尼期碳酸盐生产危机（carbonate productivity crisis）或者卡尼期洪水事件（Carnian Pluvial Event）的概念，其主要表现为黑色页岩（或绿色页岩、放射虫硅质岩）覆盖于特提斯范围的碳酸盐岩之上，反映了早、晚卡尼期界限处一次明显的碳酸盐沉积中止事件，之上沉积有厚度逐步增加的硅质碎屑岩；这一地质现象在东特提斯地区（中国）卡尼阶中亦有显现，但远未引起重视。实际野外地质调查与前人文献显示，与古特提斯西部、喜马拉雅等地卡尼阶类似，在中国西南部古特提斯范围内的四川盆地西缘、黔中、滇西北、金沙江沿岸等地，卡尼期碳酸盐岩沉积多被一套灰黑色、深灰色页岩（或深色板岩）及之上的陆源碎屑岩覆盖，显示该时期碳酸盐生产的突然中止和生物礁的突然死亡。卡尼期特提斯范围的构造变动很可能对晚三叠世巨型季风气候造成巨大影响，古太平洋暖流向特提斯地区水汽输入增强，相对干旱的气候向相对潮湿的气候转换，大陆风化速率增加，陆源硅质碎屑输入增多，造成了这一显著的地质事件。

关键词：卡尼期 巨型季风 碳酸盐岩 特提斯 古气候

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Abstract:

The conceptions of (Late Triassic) “Carnian Carbonate Productivity Crisis” or “Carnian Pluvial Event” were proposed by European geologists, based on the research on the Carnian of Alpine Region. The similar lithological change from carbonate rocks to black shale (or green shale and radiolarites), then terrigenous clasolite was widely seen in Eastern Tethys Region (SW China), which had not been paid attention to. Similar to the Carnian in Western paleo tethys Area and Himalayan Spiti Basin, Carnian carbonate deposition(e.g. sponge reef limestone, platform carbonate rocks) in SW China was covered by grayish black, dark gray shale (or slate), and clasolite, which showed the termination of the carbonate production and the sudden death of reef. It was deduced in this paper that the Carnian Carbonate Productivity Crisis was triggered by the orogeny occurred in Tethys region and by the megamonsoon effected by the global (especially Tethys) tectonic movements. More watery climate effected by the megamonsoon would be in charge of more remarkable continental weathering, which caused more clay and siliciclastic material inputting into Tethys Ocean and reacted on this Carnian Carbonate Productivity Crisis.

Keywords:Carnian megamonsoon carbonate Tethys paleoclimate

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