

曾兰华, 李森, 李保生, 李会川, 郑影华. 海南岛西部八所组上部砂质沉积物的成因及其环境意义[J]. 地质论评, 2007, 53(6): 783-790

海南岛西部八所组上部砂质沉积物的成因及其环境意义 [点此下载全文](#)

[曾兰华](#) [李森](#) [李保生](#) [李会川](#) [郑影华](#)

嘉应学院地理系, 广东梅州, 514015; 佛山大学资源与环境科学研究所, 广东佛山, 528000; 中国科学院地球环境研究所黄土与第四纪地质国家重点实验室, 西安, 710075; 中国科学院地球环境研究所黄土与第四纪地质国家重点实验室, 西安, 710075; 华南师范大学地理科学学院, 广州, 510631; 佛山市国土资源局顺德分局, 广东佛山, 528333; 北京师范大学中国沙漠研究中心, 北京, 100875

基金项目: 本文为国家自然科学基金资助项目(编号 40671186、40271012、40471139)及国家重点基础研究发展计划“973计划”(编号 2004CB720206)的成果。

DOI:

摘要:

海南岛西海岸地区砂质沉积物广泛发育。对昌化棋子湾剖面砂质沉积物的TL(热释光)测年表明, 该地层沉积于 $32.1 \pm 3.30-10.30 \pm 1.30$ ka BP间, 归属于上更新统八所组上部。通过对该地层沉积构造特征、粒度特征和石英颗粒扫描电镜分析, 显示本区八所组上部自下而上为“风成砂—弱成壤—风成砂—冲积砂—风成砂”沉积“相序”, 八所组上部总体上以厚层风成相为主, 夹短周期气候波动引起的薄层河流相(II层)和弱成壤风成相(IV层)沉积, 与本区八所组陆相冲积成因地层为同期异相地层。由此说明, 末次冰期时南海北部受冰期气候影响, 海平面大幅度下降, 大陆架广泛出露, 局部沙漠化, 并成为海岸风成沉积的物源区。

关键词: [海南岛西部](#) [八所组上部](#) [砂质沉积物](#) [沉积环境](#)

The Genesis and Environmental Significance of the Sandy Sediments of the Upper Basuo Formation in Western Hainan Island [Download Fulltext](#)

Fund Project:

Abstract:

Sandy sediments extensively developed in the west coast of Hainan Island. The TL dating data for the sandy sediments of Qiziwan section showed that the stratum which belongs to the upper Basuo Formation of Upper Pleistocene deposited between $32.1 \pm 3.30-10.30 \pm 1.30$ ka BP. The stratum of Qiziwan section ranged from aeolian to weak soil forming to aeolian to alluvial to aeolian from bottom to top, and this was proved by technical analysis including sedimentary structure characteristics, grain size characteristics, scanning electron microscope etc. The arrangement of sedimentary facies reflects that the stratum was mainly consisted of thick aeolian facies, mixed by some thin fluvial facies (layer II) and weak soil forming aeolian facies (layer IV) which were caused by the short term climate changes. This is heteropic deposit of Basuo Formation, which is considered as alluvial—pluvial deposition in this area. We infer that continental shelf of the South China sea broadly emerged by the climate change in the last Ice Age, accompany by the frequent sand drift activities which caused sandy desertified process and provided an important sources of aeolian deposits in the west coast of Hainan Island.

Keywords: [Western Hainan Island](#) [upper Basuo Formation](#) [sandy sediments](#) [sedimentary environment](#)

[查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

您是第693019位访问者 版权所有《地质论评》

地址: 北京阜成门外百万庄路26号 邮编: 100037 电话: 010-68999804 传真: 010-68995305

本系统由北京勤云科技发展有限公司设计