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新生代西昆仑隆升的地层学和沉积学记录

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摘要：

西昆仑北坡的新生代沉积在很大程度上良好地记录了新生代西昆仑的隆升过程。区域性不整合面和沉积界
境变化反映了山体和盆地在格局上的变化；沉积物厚度、粒度变化显示了隆升的幅度和速率。就西昆仑的情况看
白垩世持续到渐新世，尽管此时海湾已退缩到西部。在此期间，形成了石膏层、瓣鳃类介壳灰岩和杂色砂泥质沉
积。中新世2000－3000m的沉积厚度表明了相对较高的隆升速率。从中新世后期开始的厚达2000－3000m的磨拉石
中新世后期到早更新世隆升速率高而且是加速的。磨拉石沉积被早更新世的一次强烈的构造脉动所打断，它使磨
方高角度向盆地方向倾斜甚至直立、倒转。水平盖在磨拉石和更老地层之上的中－晚更新世河流和冲积扇机粗粒
为磨拉石沉积的继续。由昆仑山流向塔里木盆地的河流将中－上更新统及更老沉积切割50－100m以上，表明全新

关键词：西昆仑 新生代 隆升 沉积记录 地层 海相环境 水平盖 磨拉石层

Stratigraphic and Sedimentologic Records of the Uplifting of the West Kunlun in the

Fulltext

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Fund Project:

Abstract:

The uplifting of the West Kunlun, or more exactly the relative motion between the West Kunl
the Cenozoic is, to a large extent, well documented by Cenozoic sediments at the northern margin
unconformities and sedimentary boundaries record the rhythm of uplifting; sedimentary environment
lacustrine to fluviatile, alluvial, pluvial fans) notes the variation of the mountain-basin confi
grain size of Cenozoic lithological units may reveal the amplitude and rate of the uplifting.Mari
Bay) was sustained from the latest Cretaceous to the Oligocene, although it had already retreated
time. During this period, gypsum beds, bivalve shell limestone and variegated elastics were forme
Miocene sediments indicate a relatively higher uplifting rate. 2000-3000 m of molasse started in
coarsening-up tendency show a rapid and accelerated uplifting from the late Miocene to early Plei
molasse was interrupted by a tectonic pulse in the early Pleistocene, which resulted in the high-
upright and over-turned of the molasse and underlying older sediments. Horizontal middle to late
pluvial coarse deposits overlying the molasse and older rocks represent the resumption of uplifti
considered as the continuation of molasse formation. That rivers flowing from the West Kunlun to
middle to late Pleistocene gravel beds and older sediments to a depth of 50 to more than 100 m in
since the Holocene.

Keywords:West Kunlun Cenozoic uplift sedimentology