

Abstract:

Geomorphologically, Africa is renowned for widely developed erosion surfaces. Details of these surfaces, including how they have come to be, are only imperfectly understood. This paper gives the results of a detailed study of the planation surfaces in the small part of Kenya situated just to the immediate east of Nairobi. An outline of the denudation chronology of Kenya is proposed with specific examples for each suggested cycle. The findings are correlated with results from adjacent parts of East Africa and with the outline for Africa following the work of L.C. King. Six cycles of erosion are mapped and it is shown that of these, it is the Kamba Summit plain and the Masii-Kangondi surfaces that marked major phases of long protracted uninterrupted erosion. The surfaces are interpreted as being mainly the results of scarp recession and pedimentation. All the surfaces are still being actively reduced by these processes. The Summit Plain is shown to be a bicyclic surface of late Jurassic age and is a prominent skyline surface at 1950–2134 m above sea level. The Masii-Kangondi surface (from 1219–1453 m) is the equivalent of the African cycle of some authors. It is confirmed to be of early Tertiary age. The work shows that more detailed studies must be undertaken in order to improve our understanding of the erosional and other related problems in Africa. This is particularly important if we are to give correct solutions to the challenging issues of landuse in the continent