

MUKOROB & WEISSRAND ESCARPMENT

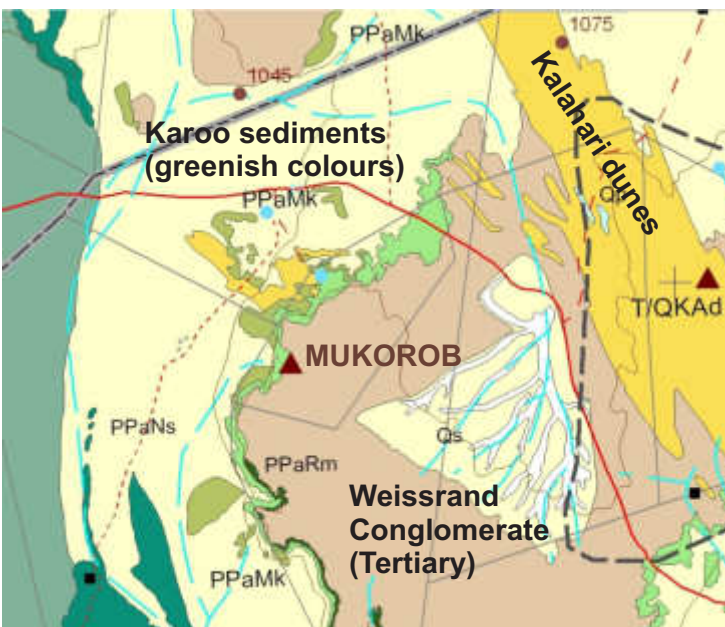


Source: *Roadside Geology of Namibia*

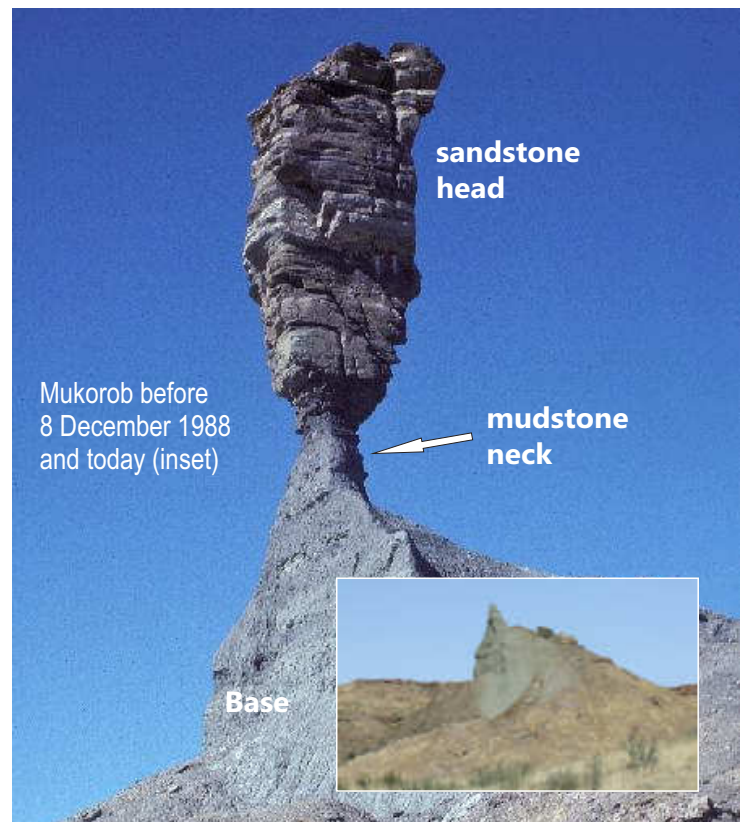
Mukorob, the Nama word for “Finger of God”, was a prominent landmark in southern Namibia, near the village of Asab. The rock pinnacle consisted of an upper, top-heavy sandstone pillar some 12 m in height and weighing around 450 tons, which rested on a thin neck of soft mudstone, ca. 3 m tall and only 1.5 m wide. The fragile neck was supported by a broader mudstone base, the whole elaborate structure towering about 34 m above the surrounding plain. In December 1988 it collapsed owing to natural weathering, its final destruction possibly hastened by the repercussions of an earthquake occurring some 7500 km away in Armenia. Today, only the pedestal and part of the neck remain in their original position, while the debris of the head and most of the neck are scattered about the base.



Satellite image (above) and geological map (below) of the area around Mukorob



The ca. 270 million year old sandstones and mudstones of the Mukorob Formation belong to the Ecca Group of the Karoo Sequence, which was laid down at a time when the southern continents were united as „Gondwanaland“. Following the opening of the South Atlantic ca. 130 million years ago, rapid erosion occurred and eventually produced the prominent cliffs of the Weissrand Escarpment, of which the „Finger of God“ originally formed part, a few million years ago. However, because of its harder, protective sandstone cap Mukorob withstood the steady onslaught better than the surrounding, softer, mudstones, thus becoming an erosional relic as weathering progressed. It is estimated from its distance from the Escarpment that it became isolated some 50 000 years ago.



Time and erosional processes chiseled Mukorob into the shape thousands of visitors knew prior to 8 December 1988. With the soft mudstone neck being eaten away at a greater rate than the sandstone head, the neck eventually became too thin to support the head. Slaking of the mudstones during successive rainy seasons acted its part and further weakened the precarious structure; a fracture plane inclined at 45° to the northeast formed, down which the “Finger of God” slid to its destruction. The inclination of the plane caused the rock column to tilt, so that the mudstones of the neck fell on the northeastern side, while most of the sandstone fragments from the top can now be found on the southwestern side. The shock waves of an earthquake whose epicentre was located in Armenia may have been the „final straw“, but even without that Mukorob would have been doomed.