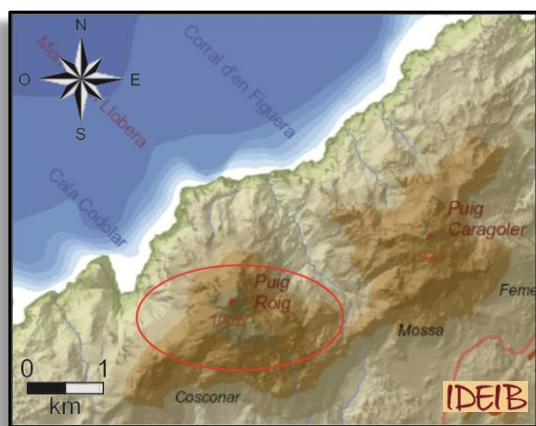


## MA24TE

671005b

## Tectonic klippe of the Puig Roig

### Location



Municipality: Escorca

U.T.M. coordinates (31N ETRS89): X: 488049  
Y: 4412362



### Difficulty and duration



4h 25min

### Access

At present the access to the Puig Roig is restricted because the path crosses several private properties: it can only be reached on Sundays via the path leading to the *posseió* of Mossa. This path starts from p.K. 17,9 of the Lluc-Pollença road (Ma10). Apart from any other authorisations, the permission of the owner of the private property is required.

The structure of the Puig Roig can be observed very well from the Viewpoint of Geological Interest of Escorca, on the Ma10 road.

### Principal interest

Tectonic

### Secondary interest

Geomorphological, stratigraphic

## Description of the locality

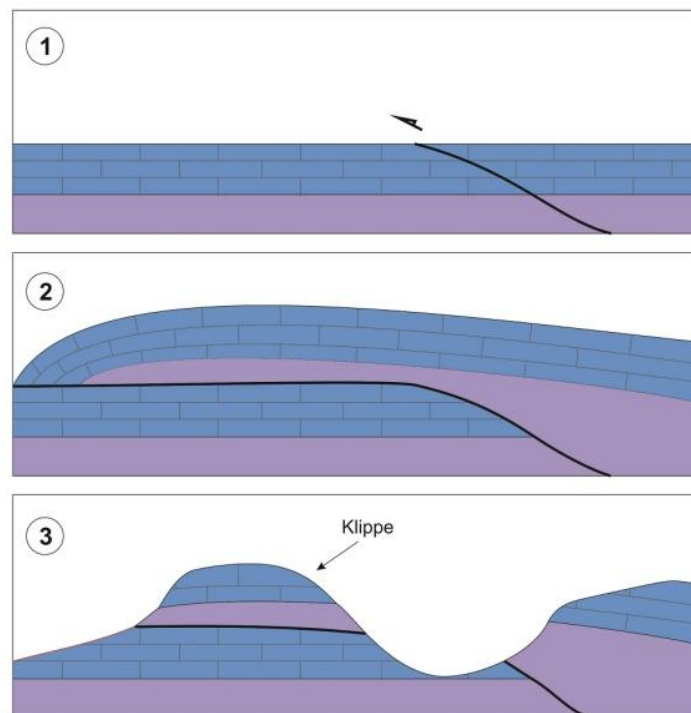
One of the most characteristic tectonic structures of mountain systems are thrust faults, which correspond to large masses of rock that have been mobilised and piled up onto each other by orogenic forces.

Thrust faults are generated by large reverse faults spreading along a fracture surface (sliding surface) which tends towards the horizontal and tends to coincide with the softer materials, more susceptible to being mobilised.

The materials can sometimes move several kilometres from their original position. Occasionally erosion makes a part of the thrustured rocks disappear progressively until some zones are left disconnected from the rest of the thrust. The structure resulting from this process is called a tectonic island or klippe.

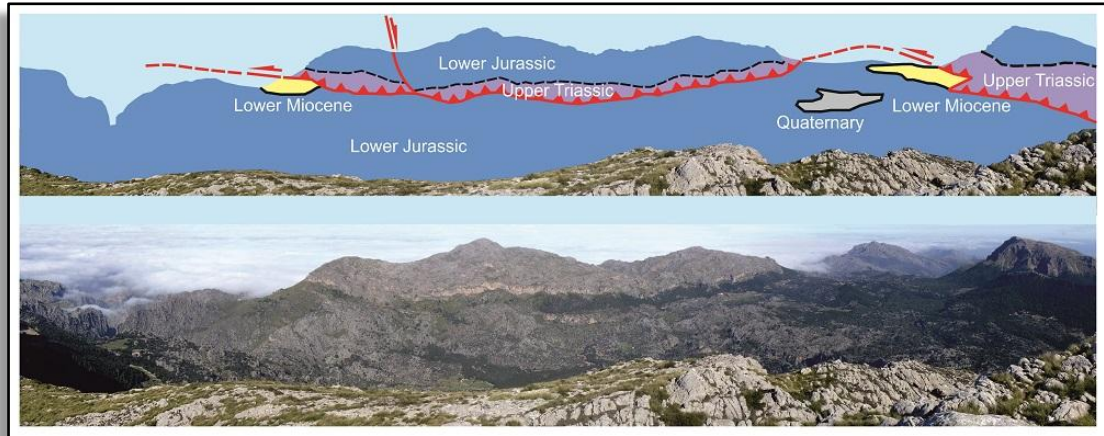
One of the best examples of this type of structure, which is common in Mallorcan reliefs, is the Puig Roig.

Since the stratigraphic sequence and the thrust surface is the same in the Puig Roig as in the Puig Tomir (Moleta de Binifaldó), the interpretation is that both reliefs must have been united: that is to say, they originate from the same thrust (as is observed in this simplified diagram).



Simplified diagram of the formation of a tectonic klippe

In this case, the materials that have served as the sliding surface correspond to the Keuper facies of the Upper Triassic, normally composed of clays and gypsums, materials that deform very easily. This same level has served as the base in most of the thrust faults that form the Serra de Tramuntana.



Panoramic view of the Puig Roig with its geological structure.

### For more information

Gelabert Ferrer, Bernadí; 1998. *La estructura geológica de la mitad occidental de la isla de Mallorca*. IGME. 129 pp.

### Recommendations

It is advisable to take a hat, water and comfortable footwear.

The site is accessible all year round, but it is recommended to make the visit in spring or autumn because of the length of the walk.

On returning to the Puig Roig you can visit the SGI *Site of crinoids of the Lower Jurassic of Es Cosconar*, located close to the houses of the same name.

Do not fail to visit the monastery of Lluc and the nearby SGI *Karstic relief of Lluc*.