Geological History of the Area

In the north, in the area of the UNESCO World Heritage site, the time period between 350 and 30 Ma is almost completely documented with different rocks.

Between 250 and 300 Million years (Ma) the Verrucano rocks were formed. The fine or coarse grained rocks are mainly dark green, grey, purple or blood-red. Especially the coarse-grained variety of Verrucano shows nice sedimentation patterns and contains volcanic fragments. At the Fuoostock or in the Pizoal area, volcanic layers are found within the sedimentary rocks.

The rocks from the Triassic (250–210 Ma), the Jurassic (210–140 Ma), the Cretaceous (140–65 Ma) and the Tertiary (65–2 Ma) can be identified in many places in beautiful outcrops making the region interesting for further studies.

The sedimentary rocks allow reconstructing the geological history without interruption: Desert-like basin during the “Verrucano-Time”, an ocean flooding the old continent and later evaporating during the Triassic, an ocean getting deeper during Jurassic, the disappearance of this ocean in the Cretaceous and the upfolding of the Alps during the Tertiary.

120 to 60 Ma ago, the Tethys Oceans was closed and the oceanic crust disappeared under Africa. 60 Ma ago, the collision between African and European continent took place and the southern margin of Europe plunged under Africa.

The rocks are very strongly deformed and folded. Gigantic forces pushed them one upon another over large distances.

Nowadays, the erosion accompanying the alpine upfolding brings these rocks back to the surface. 2 Ma ago, the cooling-down of the climate intensifies the erosion: the shaping and polishing activity of the glaciers is mainly responsible for the actual morphology of our landscape.

Text partly modified after: