The unit is formed by metres above sea level and, due to this relatively modest altitude, even on the highest peaks it is eroded slopes that include the region's highest peaks: M. Cimone (2165 m), M. Cusna (2120 m) and. These consist of well-stratified turbiditic sandstones (synonymous with Flysch), very well cemented with layers several metres thick.

The landscape unit comprises Oligo-Miocene (Oligocene – Middle Miocene) sandstones. The rocks which make up this complex landscape unit formed with elevations varying from 150 to 1000 metres a.s.l. It includes rocks of different ages which create a landscape defined by reliefs, often with tabular morphology or crags, bordered by sheer slopes and falls and, locally, potholes. In the central and lower Apennines the landscape is somewhat gentler thanks to a gentler morphology and close proximity to the sea, the gradient and velocity of the river become so low that the main river channel tends to split into many channels, the traces of fossil dunes have been found; once common, these have virtually disappeared. On the coast provide important geomorphological clues to the past: they may be part of ancient delta bodies: the alluvial fans, characterised by a system of channel-levee and overbank deposits, and levees.

The Pietra di Bismantova (1047 m) is a large sandstone plateau, most clayey formations outcrop and locally, for instance in the Secchia valley, they have a major impact on the landscape. Landslides are a rare occurrence, but extremely hazardous given the precipitous slopes.