

## Structure of the Adriatic - Dinaric Platform Along the Sečovlje - Postojna Profile

Marijan POLJAK and Igor RIŽNAR

The Adriatic - Dinaric platform (GUŠIĆ & JELASKA, 1993) refers to a carbonate platform of the External Dinarides of Mesozoic (Upper Triassic to Cretaceous) and Palaeogene (Palaeocene to Lower Eocene) age.

In its northwestern part, several palaeogeographic units can be distinguished. The first one occupies the northern part of Istria up to the Škofije-Dekani-Kubet area. Here, a hiatus occurred in sedimentation from the Upper Cenomanian to the Palaeocene (VELIĆ & VLAHOVIĆ, 1994). The area to the northeast, that belongs to the Slovene Kras, is characterized by an emersion during Upper Campanian time (JURKOVŠEK et al., 1996). In the area northeast from Postojna, the emersion is limited to the Upper Maastrichtian (ŠRIBAR, 1996).

Tectonically, the Adriatic-Dinaric carbonate platform exhibits different degrees of structural deformation. The least deformed part is the off-shore and on-shore Istrian platform (ĐURASEK et al., 1981) with a dominant radial type of deformation. To the northeast the terrain of Kras, in addition to the Vipava valley and

Brkini, is characterized by gentle folds and longitudinal normal to reverse faults. The most deformed part is the High Karst Zone that lies northeast from Postojna.

There could be a supposed relationship between the palaeogeographic and structural units. Differences in Cretaceous sedimentation may have been caused by synsedimentary normal faulting along regional faults. These faults became reverse listric ones during Eocene regional compression. The main tectonic displacement probably took place along the base of carbonate rocks at the depths of 6000-7000 m. At the surface the displacement is absorbed mainly by folding, which is most intensive in the contact zones between the aforementioned palaeogeographic units.

The most prominent deformed zone is the southwestern slope of Čičarija. It has been generally interpreted as a thrust and imbricated structure (PLENIČAR et al., 1969; ŠIKIĆ et al., 1972). However, detailed investigations have shown that this area is built up predominantly of various types of folds that are only slightly displaced along reverse faults (Fig. 1).

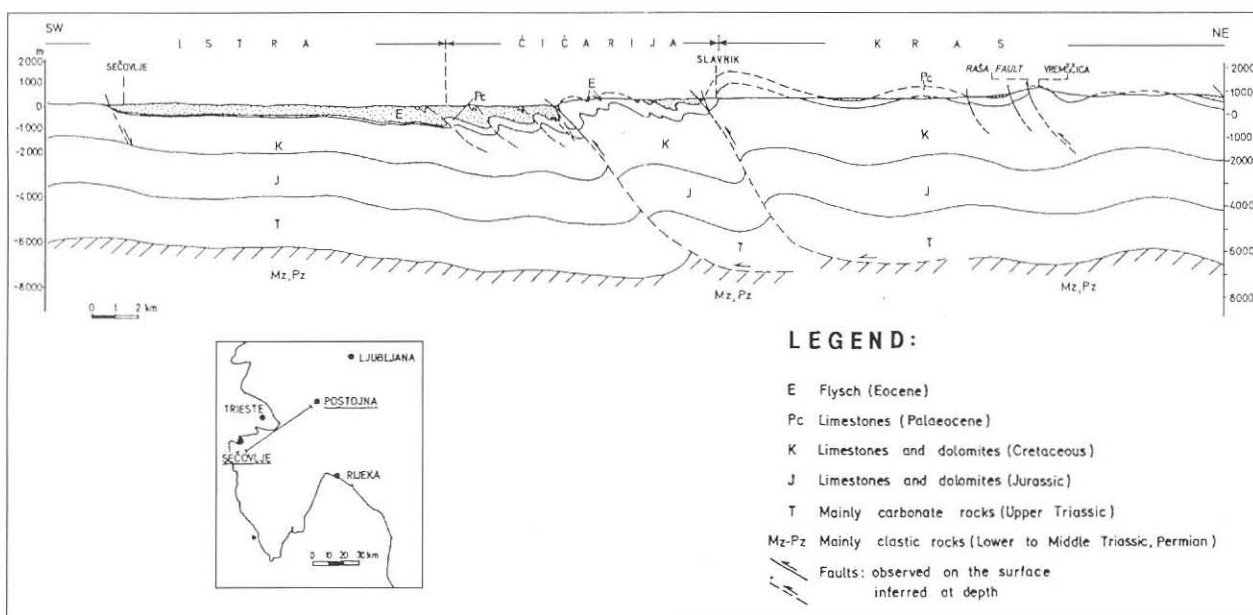


Fig. 1 Geological cross-section Sečovlje-Postojna.

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