

# Abstract

This thesis, which is focused to Coniacan clastic deposits of NW-part of Bohemia, presents dual approach to the submitted topic: 1) field studies of sedimentary architectures, facies and structures in the vicinity of Kytlice and Sloup v Čechách villages, and 2) subsurface research based on available well-log data. The second part comprise also the area of Cvikov, previously sedimentologically explored by D. Uličný.

Sedimentological field work revealed the presence of an assemblage of sedimentary facies typical for coarse-grained Gilbert-type deltas. As for the sedimentary architectures, these deltas resemble main geometrical type of delta-bodies of the Bohemian Cretaceous Basin according to Uličný (2001): shallow-water (L), and deep-water (H) deltas, respectively. Available field data allowed a consideration of a presence of transitional type, as well. The latter is typical for relatively high-angle foresets, but, in contrary, relatively small thickness.

Sedimentary processes in the delta environment are governed by strong influence of tidal currents, responsible for significant reworking and redistribution of a clastic material from a fluvial input. Other factor that governed the character of sedimentation this milieu, are gravitational process that used to operate mainly on steep foresets of high-angle. Such processes were predominant in H-type deltas, but were rare, or not present in L-type deltas. One of the result of gravitational processes is higher rate of turbidity current sedimentation that contribute to the deposition of specific type of a „fyschoid“ facies.

The outcrops of delta bodies documented in the field were a subject to a further comparison with stratigraphic, well-log data based correlations. Stratigraphic correlations are presented on 7 panels incorporated in the practical part of the thesis. These correlations allowed a wide-scale interpretation of a sandbodies prograding from the tectonic margin to an axial part of a basin as a succession of a Gilbert-type deltas.

Conclusions of this thesis consist of two parts. The first are field-data based interpretations of sedimentary environments and processes. The second part gives a statements about subsurface extent of Coniacan clastic deposits, their transgressive-regressive history and genetic-stratigraphic evolution.