of the Most Basin, (probably due to gently inclined relay ramps), and confirms that the KHFZ is generally a post-depositional feature which probably developed by hard linkage of earlier, en-échelon, E-W normal faults.

All three seismic reflection profiles show a number of strike-slip faults expressed as flower structures of minor vertical displacements, commonly younger than the Oligo-Miocene deposits, but suggesting also significant strike-slip deformation prior to the basin filling.

The most pronounced tectonic feature in the reflection-seismic profiles is the deformation of the whole basin fill at the margin of the KHFZ. The flexure of the preserved basin fill, accompanied by an array of secondary normal faults in the coal seam and the clastics, is interpreted as due to forced folding caused by a propagation of a major normal fault in the rigid crystalline basement. The sedimentary package above the fault zone is fractured by an array of secondary, synthetic normal faults in the folded zone, which splay off the master fault and mostly die out upward (cf. analogue models by Schlische et al., 2002, for closely similar examples). Immediately above the hinge zone of the flexure, a fan-like array of both synthetic and antithetic faults occurs. The kinematic interpretation of this fan, which could be related to the bending of the clastic package during forced folding, is complicated by the occurrence of a minor vertical fault coinciding with the bend and possibly evolving upward into a flower structure. The exact succession of deformation events in this zone should be addressed by analogue modelling. The age of the basin-fill deformation at the KHFZ is Late Miocene to post-Miocene; exact timing cannot be assessed from the seismic data.

The present interpretation of reflection-seismic data allowed to separate distinct styles of pre- and post-depositional tectonic deformation in the Most Basin. Future efforts should focus on the nature of the transition between the styles of syn- and post-depositional faulting, and, above all, on the dynamic causes of the uplift of the Krušné Hory Mountains which led to significant modification of the original, syn-rift architecture of the Ohře Rift.

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References


Large-Scale Stratigraphic Geometries in a Rift-Margin, Lacustrine Delta System Influenced by Peat Compaction: Comparison of Field and Reflection Seismic Data (the Miocene Bilina Delta, Ohře Rift, Czech Republic)

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The stratigraphic geometry of depositional systems is generally thought of as a product of the interplay of basin-floor subsidence, base-level changes, and sediment supply. The subsidence of basin floor is generally implicitly regarded as mainly tectonic and isostatic in origin, but it can be significantly modified by migration of ductile substrate such as salt, and by compaction. In depositional systems with strongly compactible and migrating substrates, the feedback between sediment supply, loading and compaction/migration of the substratum leads to creation of local to regional accommodation and, at the same time, may have a strong influence on the resulting stratigraphic geometries. In coal-bearing basins, syndepositional compaction of peat plays a significant, but as yet not fully explored, role in the behaviour of depositional systems and the resulting stratigraphic geometries.

The early Miocene Bilina Delta is package of a fluvi-deltaic clastics deposited at the southeastern margin of the Most
Succession of Lava Flows of Úhošť Hill in Relation to the History of Magma Reservoir

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A detailed study of petrology, geochemistry and volcanology was made at the locality of Úhošť near Kadaň on the NE margin of the Doupovské hory volcanic complex (Rapprich, 2003). Doupovské hory volcanic complex belongs to the Central European alkaline volcanic suite and its genesis is associated with the Eger Graben (Kopecký, 1987). The Doupovské hory

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