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S07

S07 Danube valley geological structure, neotectonic activity and evolution during the Pliocene - Pleistocene time

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This session accepts both full papers and abstracts

Springing in the Black Forest Mountains (Germany), Danube developed its own valley of 2,857 km in length and *ca* 50 km in width. Along its flow, through ten countries, Danube crosses the Alps, the Wien Basin, the Western Carpathians, the Pannonian Basin, the Southwestern Carpathians, the Moesian and Scythic Basins a.o. Since the 20th century, geologists within their national territories (Wien Basin, Kiss Alfold, Great-Alfold, Romanian Plain a.o.) identified the remains of the Danube Formation (Ionescu-Argetoaia 1918, Szadeczky-Kardoss 1938, Fink 1955, Ronai 1960, Liteanu & Ghenea 1966, Janacek 1969, Rakic 1977, Halouzka & Minarikova 1977, Enciu 1998). This session will discuss the newest models on Danube Valley evolution by national researchers, based on its associated deposits. The main focus will be the relationship between the neotectonic regime of different panels of the Danube bottom during the last 2.5 My and its litho- and chrono- stratigraphy: number of the accumulative terraces within positive tectonic areas and number of the buried sequences within the subsiding areas pertaining to the Pannonian (ThamoBozsoet al. 2002, Nador et al. 2002) and Dacic Basins (Enciu 2007). One interesting debate is the incongruence between the traditional models of the Danube terraces Stratigraphy (Pecsi 1959, 1996, Halouzka & Minarikova 1977 a.o) and the recent models based on the modern methods of sediments dating: TL, OSL, TCN (Musinschi 1999, Ruszkiczay-Rudiger 2007). The expected impact of the Danube Evolution along the middle (Pannonian) and lower (Dacic) Basins will turn to good account in the Stratigraphy, the Hydrostratigraphy and the Groundwater resources management.