pegmatite intrusions in the LG area disturbed the isotopic systems of the two minerals but the simultaneous or imminent reheating mentioned above caused the resetting of the K-feldspar isotopic system and partly the biotite isotopic system.

The reheating event, which is probably associated with a tectonic event, that disturbed the mineral isotopic systems exceeded the closure temperature of biotite for the Rb/Sr isotopic system (350 ± 50°C), but did not exceed the closure temperature of muscovite for the K/Ar isotopic system (375 ± 25°C).

The comparison of the K/Ar mineral ages of the present study, the existing Rb/Sr and U/Pb mineral ages and the closure temperatures of the different isotopic systems for the different minerals indicate a high cooling rate for the TMG of the Sithonia pluton which reaches 60 ± 12 °C per million years, received as minimum due to thermal event that caused slightly younger biotite and K-feldspar resultant ages. This is in agreement with the aspect that the extensional collapse of the Hellenides where the Sithonia pluton intrudes started during Eocene.

Upper Triassic platform, slope and basin facies of the Pilis Mountains (Transdanubian Range, Hungary)

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The Pilis Mountains is located in the NE part of the Transdanubian Range. It is a narrow fault-bounded range of NW–SE strike, 30 km NW of Budapest that consists of Triassic platform carbonates and coeval slope and basin facies. Due to the NW general dip of the succession the oldest formations crop out at the southwestern end of the range. Here the Norian Main Dolomite is overlain by bedded Dachstein Limestone of Middle to Late Norian age. Further NW, along the steep northeastern slope of the range Norian slope and basin facies are exposed (Feketehegy Formation). The slope facies are characterised by redeposited platform-derived carbonates and mollusc coquinas. Above the coquina beds of the Feketehegy Formation near-reef facies was encountered in the north-westernmost Triassic blocks of the Pilis Mountains. Based on investigation of the bio- and lithofacies, palaeographic setting and evolution of a Late Triassic intraplatform basin (Feketehegy Basin) could be outlined.

The NE part of the Transdanubian Range was relatively close to the edge of the passive margin of the Neotethys Ocean. The extensional regime due to the continuing ocean opening led to development of smaller or larger intraplatform basins in the outer platform belt during the Late Triassic. The Feketehegy Basin was one of them, which formed in the Middle to Late Norian. Low-angle slopes developed between the platform and the basin, site of deposition of large amount of platform-derived sediments. Patch reefs and ooid shoals came into being along the margin of the newly formed basin. Bivalves *Pseudomyoconcha* and *Pteria* inhabited the platform margin and the upper slope from where large amount of shells redeposited by storm currents and accumulated on the low-angle slope in the form of storm coquinas. Reworked ooids, strongly abraded bioclasts and locally reef-derived bioclasts and lithoclasts of various origins were deposited in the deeper part of the slope, above the storm wave base. Further basinward fine-grained tempestites were deposited below the storm wave base in a restricted, oxygen-depleted basin. The basin evolution came to an end probably in the latest Norian to Rhaetian when the prograding platform reoccupied the former basin.