



## **Didi Shiraki piggyback basin in the Georgian part of Kura foreland: implications for timing and development of the thrust wedge (south-east Georgia)**

V. Alania (1) and O. Enukidze ()

(1) Institute of Geology, Department of Tectonics, Ministry of Education and Sciences of Georgia, Tbilisi, Georgia (v\_alania2002@yahoo.com), (2) Institute of Geology, Department of Sedimentology, Ministry of Education and Sciences of Georgia, Tbilisi, Georgia (onise\_enu@yahoo.com)

In south-east Georgia, Plio-Pleistocene synorogenic deposits in the Didi Shiraki syncline of north Kura foreland record the transition from foreland-basin to piggyback basin deposition on the hangingwall of the thrust.

Unconformity-bounded sedimentary units within the basin thin both southward and northward onto structures generated by thrust faulting. Seismic reflection profiles and Didi Shiraki well show that Up to 750 m of Plio-Pleistocene (Akchagil-Apsheronian) strata accumulated between these structures, which consist of a ramp anticline in the south and a thrust duplex in the north.

Thrust systems are represents the Tertiary strata: post-Maikopian basin-fill and Akchagil-Apsheronian growth strata (alluvial-fluvial conglomerates, gravelites and poor cemented sandstones).

Sequential balanced models are illustrating the development of Didi Shiraki syncline from the seismic profiles by kink-band migration and fault-bend folding with deposition.