

## **Kura Valley Basin, Eastern Georgia: structural architecture and timing**

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Interpretation of reflection seismic images, fieldwork observations in the Eastern Georgia indicates that the frontal portion of the Greater Caucasus thrustbelt overriding the Upper Kura Valley basin contains both thick- and thin-skin architecture. While the former developed earlier, the latter is associated with subsequent accommodation of the ongoing shortening. The location of thick- versus thin-skin architecture is controlled by absence versus presence of the shaly Oligocene-Lower Miocene Maykop formation in the deforming stratigraphic section. Areas with existing thicker Maykop horizons usually undergo thin-skin tectonics of the section detached along the Maykop horizon. Thin or non-existent Maykop formation in other areas controls a thick-skin deformation of the whole section, usually deformed by transpressional strike-slip fault zones.

The shortening in the Upper Kura basin culminated during Pliocene-Quaternary, reacting to indentation by the Arabian Plate. By the Early Pliocene the basin filling process was marked by the continuing retreat of the shoreline of the Kura-Caspian embayment to the east of the Taribani area. This final depositional event established an integrated fluvial drainage system, with sediments shed off both the Greater Caucasus from the north as well as the Lesser Caucasus from the south. The main drainage channels were oriented parallel to the axis of the Kura Basin, generally west-northwest to east-southeast, similar to the orientation of the present Kura River.