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**Sediments from the abandoned river valley record low sea level in Pärnu region, eastern Baltic Sea, before the Litorina transgression**

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Pärnu region in SW Estonia in the eastern coast of Gulf of Riga is characterized by slow post-glacial isostatic uplift (about 1 mm/yr) and slowly undulating low topography. Therefore even small increases in sea level can easily lead to flooding of substantial areas. The complex deglaciation history of the Baltic Sea area, with up-dammed lakes and early phases of post-glacial seas has, at times, left SW Estonia submerged, while at other times, it emerged as terrestrial land. Therefore, transgressive deposition of water-laid sediments of the Ancylus Lake and the Litorina Sea have led to repeated burial of organic matter layers and associated Stone Age settlement layers. So far it remains unclear if water level in Pärnu region dropped close to the present sea level or even below it before the Litorina Sea transgression. An abandoned river valley (*ca* 120 m-wide) with organic infill was discovered at elevation -6 m below present sea level during the fieldwork in autumn 2015. The valley is filled with organic matter (up to 4 m thick) consisting of remains of plant species characteristic to wetland and is buried under *ca* 7 m-thick layer of Litorina Sea coastal sands. This may suggest, that sea level in Pärnu region was several meters below zero before transgression. Preliminary results suggest that filling of the abandoned Pärnu river valley with organic matter took place between 9.5 and 8.1 cal ka BP. Several Mesolithic stray finds, like a bird-shaped or a human-shaped statuette are associated with this prehistoric valley dated only to slightly younger time period 8.0-7.8 cal ka BP. Further studies are required in order to clarify the development of this valley system during Mesolithic including its continuation at the bottom of the present-day Pärnu Bay.

