



## **Holocene aeolian activity in the Gonghe Basin, north-eastern Tibetan Plateau**

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The Gonghe Basin is located on the north-eastern edge of Tibetan Plateau and has a mean altitude of 3000 m asl. With a size of 20.000 km<sup>2</sup> it is the largest intramontane Basin on the north-eastern Plateau. The well-studied Qinghai Basin is situated north of the Basin, while the drier central Plateau is further south-west. Previous research indicated an early onset of the aeolian accumulation in the Qinghai Basin at around 18 ka while in the areas further to the south-west aeolian archives date back only to the beginning of the Holocene. First new OSL ages from aeolian sand and loess indicate a intermediate timing of the aeolian accumulation in the Gonghe Basin at the transition from the late glacial to the Holocene. Late glacial and early Holocene ages of aeolian sediments were hitherto associated with wetter climate conditions caused by the strengthening of the Asian summer monsoon. Higher moisture availability resulted in an increased vegetation cover, leading to the permanent stabilization of the aeolian sediments. Under glacial climate conditions a constant remobilization of the sediments can be assumed. The new OSL ages from the Gonghe Basin indicate a progressive shift of the monsoonal strength in westward directions during the late glacial until the early Holocene.