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Neogene Magnetostratigraphy from the Issyk-Kul Basin, Kyrgyz Tianshan

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The Issyk-Kul Basin in the Kyrgyz Tianshan is a deep, lacustrine intermountain basin. The on-going uplift and exhumation of this orogenic belt, caused by the collision of India and Eurasia, led to the accumulation of up to 4 km of Cenozoic sediments within the basin and to the formation of Lake Issyk-Kul, the second largest mountain lake in the world. Shortening across the Tianshan has increased substantially in the past 5-10 Ma. The exact timing and propagation of deformation is however unclear. We present new magnetostratigraphic age constraints from two ca. 500 m thick sections from fossil-poor fluvio-lacustrine sediments southwest of Lake Issyk-Kul. Both sections were collected in the Chu formation, also called the Issyk Kul group. The sections end at the contact with the overlying Sharpyldak formation. 365 samples were subjected to stepwise demagnetization. Magnetostratigraphic correlations suggest the sections are of Miocene and Mio-Pliocene age respectively. These results and their tectonic context will be presented.