



The Holocene lake-level history of the Aral Sea as deduced from seismoacoustic data

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The Aral Sea basin has been investigated seismoacoustically in 2002 and 2004 using a PC connected station with boomer, constructed in the Paleomagnetic Lab of Kazan State University. More than 20 profiles with a total length of about 60 km have been surveyed in the Chernyshov, Tastubek Bays and in the western deep basin. The seismoacoustic sections have been analysed using sequence-stratigraphy methods. From these data we reconstructed past lake-level changes. Between 5 and 7 regressive/transgressive cycles could be identified. Based on these interpretations we constructed a lake-level curve for Lake Aral. Most prominent lake-level lowerings, characterized by typical reflection boundaries, have been observed in all sections. From the seismoacoustic sections of the western basin we furthermore inferred the tectonic history of the Aral Sea basin and we will highlight the role of tectonics as factor controlling the Aral Sea evolution. The imprint of underflow currents on the modern and ancient relief of the Aral Sea will be discussed too. (The research was supported by INTAS grant Aral-1030.)