



Archaeology and Climate: Human Reactions and Actions relating to Water Level Changes of the Aral Sea

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The main purpose of the CLIMAN project (INTAS Project Aral 00-1030) is to trace climate changes over the last 15ky in the Aral Sea Basin as recorded in shorelines and lake sediments. Human activities as reactions to (or causes of) water level oscillations are evaluated. Results from the spring 2002 and summer 2003 archaeological expeditions and their interpretation concerning climate and water level changes are presented. The new research on the Aral Sea contradicts some previous assumptions, while others are confirmed. The oldest archaeological traces are from the Palaeolithic (50-35 kyBP) lying at heights of around 57-60 m a.s.l. or higher. Later prehistoric periods (Neolithic to Bronze Age, 9-3.5ky BP) are represented by many settlements at various heights from 46/47 m upwards, showing a regression not observed previously. The formerly assumed highest water-levels of 72/73 and 57/58 m a.s.l. for these periods can not be correct and probably such a high level was never attained at any time after cca. 50 ky BP. A wetter climate, with the forest-steppe vegetation zone reaching further south up to the northern shores of the Aral Sea is indicated by the archaeological tool-kits for the period 6-4 ky BP. A settlement from the 15th-16th cent. AD proves a major medieval regression. This also confirms historic reports about changes in river courses.