**SEDIMENTARY FEATURE IN LAKE ULAAN AND HOLOCENE PALEOCLIMATE OF THE GOBI REGION**

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ABSTRACT

This study considers sedimentological feature in Lake Ulaan, lying in the most eastern part of the Valley of Lakes, and reconstructs Holocene paleoclimatic changes of Gobi region in Mongolia. In Oct, 2015 four sediments (UN15-1a,b and UN15-2a,b) were sampled from 5 and 20 cm depths on two points in Lake Ulaan. These sediments were geochemically analyzed, and contents of oxides SiO2, TiO2, Al2O3, Fe2O3, CaO, MgO, Na2O, K2O, MnO and P2O5 and radiocarbon (14С) dating were determined in the sediments. Chemical index of alteration indicates that weathering intensity is higher in the sediments UN15-1b and UN15-2b. This implies that humid climates dominated in the Gobi region of Mongolia between middle Holocene and late Holocene. Lower weathering intensity in the sediments UN15-1a and UN15-2a shows the presence of arid climates in the late Holocene.

Keywords: Lake Ulaan, Sediments, Holocene, Climate, Gobi region