Paleoclimatology study in Kanibarazan Wetland (south of Lake Urmia)

Bita Mirzapour¹, Javad Darvishi Khatooni², Raziyeh Lak³, Reza Shahbazi⁴

¹ Geological survey of Iran, email: Mirzapourb@yahoo.com
² Geological survey of Iran, email: javaddarvishi2007@yahoo.com
³ Faculty of Earth Sciences Institute, email: lak_ir@yahoo.com
⁴ Geological survey of Iran, email: rezashahbazi@ut.ac.ir

Kanibarazan Wetland is located in the north-western of Iran (southern Urmia lake), consists of a freshwater pound and it`s specific flora and surrounded by seasonal wetlands which become dry during summer and autumn. Zarrinehroud and Siminehroud are two most important river that supply the water of this area. The Kanibarazan Wetland is one of the most important habitats for waterbirds in the region, supporting more than twenty thousand birds with more than one hundred and forty four bird species recorded at this site, including a number of important species such as the endangered White-headed Duck.

In this research undisturbed sedimentary cores of western Lake sediments were prepared using hand auger[1](eg. Piovano et al., 2002) and we try to reconstruction Holocene Paleoenvironment, and Water Fluctuation in the south of Urmia Saline Lake. cores having a maximum depth of 12 meters of the Lake sub-floor sediments were verified (Fig 1). We have taken the cores in 2 times in Wet season (April) and Dry season (September).

Sedimentary facies were identified by color, grain size, mineralogy specifications, sedimentary fabrics, evaporative and specific structures[2][3](Li et al., 1996: Valeo- Garces et al., 1999). With regard to vertical sedimentary facies (from surface to sub-surface areas) changes, geography, climatic conditions and Lake water level fluctuation were re-constructed.

Results indicated some separable types of sedimentary facies in cores. Facies are from Lacustrine, Playa, Swamp, fluvial and terrestrial environments. Coring and verification of wetland Sub-environment sedimentary facies indicate that sequential drying up tracks are visible in the coastal areas. The main stage of Lake region drought commenced about 13000 years ago. This event indicated coincidence with...
the last Ice Age. Regarding the Ice Age, downfall of moisture and Lakes' water levels of North Africa and southern Asia was pointed out [4].

References: