recreation potential of the country, while the second witnesses that Ukrainian natural recreation potential is concentrated around cities-millionaires and big cities. In other words, it is only in Kyiv, Khatkiv, Dnipropetrovsk, Donetsk and Lugansk Regions that over 1/3 of its (potential) totality is accumulated. To substantiate perspectives of recreation in Ukraine, it is important to analyze territorial differences in intro-components structure of natural recreation potential of this country. Thus, it is worth mentioning that the role of sanitary-resort treatment resources increases from the Eastern Economic Macro- (District) where their total is 18%, to the Western (23%) and Southern (33%) Macro-Rayons. Sanitary-resort resources are of special importance in the Odessa (59%) and Zakarpattya Oblasts (43%), Autonomic Republic of Crimea (40%), Vinnytsa (39%) and Lviv (30%) Oblasts. It is obvious that the perspectives of sanitary-resort branch in Ukraine belong to these regions. At the same time, the share of sanitary-resort treatment in natural recreation wealth of the Kyiv, Kharkiv, Dnipropetrovsk, Donetsk and Lugansk Oblasts successively decreases from 1/3 to 1/6. It is in the first turn explained by the increase of the role of natural resources for rest and tourism, efficiently used by the recreants from cities-millionaires and big cities in the form of week-end outdoor holidays. It is also important to mention those Ukrainian administrative Rayons where natural recreation potential is the first (basic) component in the integral natural resources potential (NRP). These are the Chornomorskiy (Black Sea) Rayon of the Autonomic Republic of Crimea, city of Chernivtsi, Kosiv Rayon in Ivano-Frankivsk Oblast, Mukachevo, Svalyava, Khust Rayons in Zakarpattya Oblast, and Kharkiv Rayon in Kharkiv Oblast. 54 more Administrative Rayons of Ukraine possess natural recreation resources as their second-important natural wealth. It is also important to analyze indices of Ukrainian people's provision with natural recreation potential (average index – 100 points). Thus, as regards to Ukrainian natural regions, the East-European Plain is provided at average level of 86 points, Ukrainian Carpathians – 187, and the Crimean Mountains – 331 points. In East-European Plain, the Steppe is provided with natural recreation resources at a level of 91 points, Forest-Steppe – 83, and Mixed Forests – 80 points. Uneven provision in Rayons is evidenced by the following: absolute indices in Mixed Forests amount to 727 points (Slovechansko-Ovrutskiy Rayon, Zhytomyrske Polissya) and 395 points (Dovbacahnsko-Chervonoarmiyskiy Rayon). The Forest-Steppe does not manifest too much difference. West-Ukrainian Forest-Steppe Province is provided at a level of 59 points per inhabitant (absolute value – 562 points), Dnistrovsko-Dniprovska Forest-Steppe Province – 77 points (amplitude – 205-231 points) Livoberezhno-Dniprovska Forest-Steppe Province – 91, and Serednorosiyska Forest-Steppe Province – 111 points. The Crimean Mountains manifest high and relatively homogeneous level of people's provision with natural recreation, and, except for two rayon – Western (Girsko-Krymska Oblast, 34 points) and Chornoricskiy (Peredgirn-Krymska Oblast, 35 points) – ranges within the limits of 260 – 462 points. People's provision with natural recreation resources in Ukrainian Carpathians is rather high and homogeneous. The Oblast of Peredkarpattya is estimated to have 125 points, the same of Zovnishni (External) Carpathians) – 156, Vododilno-Verkhovynska – 341, Polonynsko-Chornogirska – 340, Rakhivsko-Chyvchynska – 375, Volcanic Carpathians and Mizhgirni Kotlovyny – 253, and Zakarpatska Plain – 214 points. As regards Rayons, people's provision is not considerably different. Thus, the geographical analysis proves that territorial differentiation of Ukrainian natural-recreation potential significantly influences upon substantiation of the ways for its balanced development.

Quarternary evolution of "Ancient Lake Ohrid", FYROM/Albania

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The cross-boundary Lake Ohrid (40°54´ – 41°10'N, 20°38' – 20°48'E) located at the border of FYR of Macedonia and Albania is situated within a karstic environment in an active tectonic region in the Balkanides and stretches over a length of c. 30 km and a width of c. 15 km. The regional basin and range setting in an extensional back-arc system, that is controlled

by the roll-back of the subducted plate of the Northern Hellenic Trench, produces an elongated N-S trending basin with relatively straight shorelines along the lake. These in particular are linked mostly to N-S trending active faults that are formed by extension and point to active subsidence. The evolution of the shorelines during the Holocene was investigated by studying extensive parts of the present-day coastline, including locations in the northern and southern plains as well as deltas of inflowing rivers and mass movement bodies on the eastern shore where a steep relief is exposed. Ground Penetrating Radar and electric resistivity have been applied as non-invasive shallow subsurface mapping methods to image sedimentary and tectonic structures and unconsolidated sediment cores were taken to support the geophysical data. The southern plain is dominated by alluvial plain deposits and deltaic foresets, generated by the meandering Cerava River. This could be validated by the geophysical data. The northern plain shows fluvial-dominated sequences including channel structures which are underlain by deltaic sediments and foresets. The Velestovo site to the east of the basin provides evidence for a shallow lagoon or marsh environment by peat deposits with periodical clastic input of the Velestovo creek. A change in the drilled sediments from peat to clayey marls at a depth of 8 m suggests a change in the depositional environment, which can be related to a sudden lake-level drop or to tectonic activities. No evidence for a higher lake-level during the Holocene was found in the plains north and south of the lake, except rare temporal floodings, which are also documented historically and lacustrine faunal elements (ostracods, Chara) encountered within the sediments. The abrupt change in sediment composition in the core of the east coast can be related to a sudden lake-level drop, enhanced discharge of the karstic springs or to tectonic activities. Considering the tectonic activity of the region and the landscape architecture a tectonic event is likely the cause of this effect. In conclusion, the plains north and south of the lake are dominated by clastic input related to climate variations and uplift/erosion, whereas the steep western and eastern margins are controlled tectonically by normal faulting. Mapping of the limestone cliffs around Lake Ohrid yielded no evidence for abrasional platforms or notches as indicators for past higher lake-levels. Hydroacoustic survey exhibited several drowned platform like terraces at depth ca. of 30 and 60 m below present-day lake level.

Cosmogenic ^{10}Be dating of Danube terraces in Hungary

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Quaternary development of the Danube valley in the Pannonian Basin is of crucial importance for the understanding of the landscape evolution and neotectonics of the region. The Danube River is the only river crossing the uplifting Transdanubian Range (TR), therefore providing a unique opportunity for the quantification of the Quaternary river incision/uplift rate of the TR. The TR is a low altitude (up to 750 m) mountain range composed to Palaeozoic to Mesozoic basement between the two major sub-basins of the Pannonian Basin System. Accordingly, for a better understanding of the structural evolution of the area, it is necessary to calculate the vertical movements and to distinguish between tectonic and climatic forces in landscape evolution. The existing terrace chronology – the so called "traditional terrace system" – in the Danube valley was based on geomorphological, sedimentological and palaeolontological data. These data, however, allow only a relative chronology, which is valid at certain river sections and does not provide numerical ages of the terrace horizons. Exposure age dating of the Danube terraces has started in the axial zone of the TR, where cosmogenic ^{3}He was used to determine the age of andesite strath terraces. These data showed that Danube terraces, and connected uplift of the TR are significantly younger then it was suggested before. Instead of the late Pliocene – early Pleistocene onset of the uplift suggested by the traditional terrace system, a middle Miocene beginning was