Exogenic geomorphic processes dynamics at the Black Sea coast, Russia

Yulia Kuznetsova (1) and Daria Tsvetkova (2)

(1) Lomonosov Moscow State University, Faculty of Geography, Laboratory of Soil Erosion and Channel Processes, Moscow, Russian Federation (kuzyulia@gmail.com), (2) Lomonosov Moscow State University, Faculty of Geography, Department of Geomorphology, Moscow, Russian Federation (tsvetkovad94@mail.ru)

Nowadays there is an obvious grow of anthropogenic load going on in many areas worldwide. Under such conditions, intensive activation of a number of exogenic geomorphic processes may be observed. Moreover, if natural environment is aggressive itself their dynamics and rates may reach enormous values. Our work is conducted at the Black Sea coast, known for its mountainous topography, wet subtropical climate and intensive anthropogenic development (especially during the last decade due to the recent Olympic games). We chose two key basins near Sochi, Russia to study a number of presented exogenic processes, including rill, gully and channel erosion, weathering, suffusion and piping, soil creep. A set of field study methods is used to monitor the processes dynamics since 2005 (and late 1970s for soil creep). In addition, soil erosion rates and landslide susceptibility were modelled to get information of the watersheds dynamics. This is ongoing work, but the results of the passed period of observations will be resented. Special attention is paid to the processes connectivity and their input into sediment redistribution over the river basins.