

## Calculation of maximum discharges of rivers freshetson the model of the riv. Vere

***Merab Alaverdashvili, Giorgi Bregvadze, Nunu Tsintsadze,  
Nana Kokaia, Darejan Kiknadze, Nestan Khufenia***

E-mail: [merab.alaverdashvili@tsu.ge](mailto:merab.alaverdashvili@tsu.ge)

Department of Geography,  
Faculty of Exact and Natural Sciences,  
Ivane Javakishvili Tbilisi State University  
3, I. Chavchavadze Ave., 0179, Tbilisi

As the observations show, in the warm period of a year, the hydrological regime of the riv. Vere is characterized by huge inundations, in the result of sudden rainfalls. Due to the climate changes, their number and power became more frequent, especially starting from 1990s. Calculation of the maximum discharges of freshets applying Chezy formula. In the paper, the calculation of the expenditures of severe flood of June 14, 2015 at the riv. Vere is given as the model by two methods for the section adjacent to the conjunction of Napetvrebi ravine – applying Chezy and Sokolovsky formulas, and according to the maximum expenditures calculated to Napetvrebi ravine, for the laboratory section and completely for the basin of the riv. Vere, applying the relation coefficients of their areas, the values of the maximum expenditures of the severe flood of June 14 are accordingly 477 and 512 m<sup>3</sup>/s. Furthermore, it should be mentioned that the comparison of all three results of the maximum expenditures to Napetvrebi ravine shows that they are quite close to each other which indicates to the reliability of the maximum expenditures of the inundations calculated applying Chezy formula in the laboratory section starting from 1990s up today.