



Analysis of river flow change of Bosna river, Bosnia and Herzegovina using remotely sensed and hydro meteorology data

Enes Hatibovic (1) and Ajla Kulagic (2)

(1) Sarajevo School of Science and Technology, Sarajevo, Bosnia And Herzegovina (enes.hatibovic@ssst.edu.ba), (2) Sarajevo School of Science and Technology, Sarajevo, Bosnia And Herzegovina (ajla.kulagic@ssst.edu.ba)

Natural disasters such as floods, droughts, and human negligence, such as unauthorized construction, cause river change in the river. In this study we tried to analyze those changes caused by natural disasters. We choose to analyze time-flow changes the lower flow of Bosna river from period of 2008 until 2015. The river Bosna is the third longest river in Bosnia and Herzegovina and flows for 282 kilometers (175mi). Remotely sensed data together with hydro meteorological data were used to track the changes in the river flow. After analyzing the changes in river bed on the yearly basis, that information was used for estimation of how river flow will change in the next two years. The results show that the changes in river flow, due to natural disasters, and floods that were in Bosnia and Herzegovina in 2014 caused the changes in the river flow of 36 to 662 meters.