



A Regional Investigation of Climate Change Impacts on Bulgarian Streamflows

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This paper investigates impact of climate variability on streamflow by using a 50 year data set within a region with minimal human development. Runoff in the region was found to be highly variable (0.008 to 1.657 m³/s). A plot of the runoff anomalies (deviation from the mean) shows a correlation with decreased rainfall. The Standardised Precipitation Index (SPI) was then used to quantify the precipitation deficit on a 12 month time scale, which showed agreement with the observed drought period of 1985-1994. Changes to runoff are not caused by man's activity, but rather hydro-meteorological elements. The decreases in runoff are attributed to increased temperature over the past 10 years and considerable less rainfall.