

Correlation of hydropower production and meteorological data at Hydropower plant Senj, Croatia

Renata Sokol Jurković, Marjana Gajić-Čapka, Milutin Burić

Proper operation and utilization of hydropower is heavily dependent on the weather conditions through the year. The question is how well hydropower production in HE Senj, Croatia can be estimated from meteorological data. Meteorological elements the most important for hydropower are the amount of precipitation and temperatures. Correlation between production of hydroelectricity and monthly meteorological parameters from meteorological stations is analysed. Multiple linear regression model with stepwise regression method has been applied. Estimation of hydro-power production only by meteorological parameters is possible and very reliable. These results should enhance planning of hydropower plant production.