

LONG-TERM FLUCTUATIONS OF VLTAVA RIVER FLOWS IN PRAGUE

KASPAREK, L.

TGM Water Research Institute, p. r. i.

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The first part the present study contains recommendations for the selection of representative observation period used for the calculation of average flow characteristics. This is the result of calculations based on time series of flows of the Vltava River in Prague with beginning in 1801. In the next part the possibilities of prediction of 10-year moving average flow are examined using an autoregressive model. It is shown that 7-year or 10-year moving average flow is similar to that of the geomagnetic 22-year cycle of the Sun. From the correlation between the mean annual flows and the maximum flood flows follows that even the fluctuation of the multi-annual average flow rates to a large extent correspond to flood occurrence and magnitude.