

Future changes in flow patterns in Czech headwater catchments

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Studies on small-forested catchments showed that annual runoff is projected to decline in 2071–2100 compared to 1967–1990 by 10 to 30%. Impacts on the distribution of monthly flow are projected to be significant, with summer– autumn decreases of 30 to 95%, and winter increases of up to ~40%. Mean daily flows are estimated to decrease by ~70% from August to November.

The projected changes in runoff are due to seasonal redistribution of precipitation with expected summer decreases and winter increases, and evapotranspiration increase in the summer as a result of higher temperature and prolongation of the growing season.

Source: Benčoková et al., 2011. Climate Research 49: 1–15.

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