

1 Water Balance of Slovenia (1971 – 2000)

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The increasing water demand and climate changes are making water a precious and not always available resource even in humid countries (regions). For the purpose of knowing more about water cycle in Slovenia, water distribution (in time and space), about hydrological characteristics of drainage basins, precipitation and evaporation, the water balance is the most appropriate way to make a full overview.

The water balance for the Slovenia, period 1961 – 1990, was published in 1998. The project based on traditional research methods, with less accurate data and subjective interpretations by the authors (of water balance). Therefore, in the Environmental agency of the Republic of Slovenia, we continue the water cycle research. Our goal is to use new methodology, to support it with GIS and statistical tools and to make more objective, unbiased, complex and detailed research in all the main fields relating the elements of the water balance.

The project Water balance of Slovenia was started in 2004 and is our attempt of creating an integrated set of data and models in GIS format that can be used to characterize the water balance of the Slovenia and its major water balance elements.

The results of water balance are, due to the complexity of the project, divided into two major parts. The methodological part is presenting the methodology and solutions for calculation every single element of water balance. In the second part, the research results of water balance for the new period 1971-2000 are explained by cartographic presentation.