



The experimental measurements of snowfall and snowmelt in Slovenian Alps and Dinaric region

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The experimental measurements of snowfall and snowmelt started on 7 measuring stations in the Slovenian alpine, sub-alpine, and Dinaric region. Two of them are positioned in central part of Slovenia. Three of the measuring stations are situated on elevation higher than 1.000 metres a.s.l. The measurement has been underway by simple and inexpensive equipment based on tipping bucket instruments. For the measurement of snowfall, each site has been equipped with an tipping bucket instrument filled with antifreeze, and a rod for measuring the depth of snow cover and an tipping bucket instrument situated 20 centimetres below the surface for the measurement of snowmelt.

In the snow cover period we took samples with snow sample tube set. This set measures snow depth and water content to determine snow density.

Experience in the measurement, results of the measurement and water balance analysis will be presented. The instruments have been installed for monitoring of landslide sites for the analyses of snowmelt water and as part of the research project (AWARE) that aims at providing innovative tools for monitoring and predicting water availability and distribution in those drainage basins where snowmelt is a major component of the annual water balance, such as the Alpine catchments.