



Swiss Hydrology in Time and Space: The new data and analysis platform of the Hydrological Atlas of Switzerland

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The objective of the Hydrological Atlas of Switzerland (HADES) is to provide a comprehensive and detailed insight into the hydrological conditions in Switzerland. It is aimed at practitioners, scientists and the general public. The HADES was launched as early as 1989 and was a printed atlas with thematic maps at a quite large scale of 1:500,000 until 2010. In addition, other products such as excursion guides and learning tools for schools have been created.

The printed maps of HADES provide an excellent overview of the variability of hydrological characteristics in space. Parts of the original information, however, may disappear due to the generalization necessary for the cartographic representation. In addition, the representations are rather static from a temporal point of view as they are usually limited to a certain period of time .

The new digital data and analysis platform (<http://hydromaps.ch>) has been designed to overcome these limitations. It enables the display of hydrological parameters on different spatial scales, which are connected to each other via a zoom function. The zoom levels are only limited by the spatial resolution and by the accuracy of the underlying data. On the time scale, the main focus is on long-term annual, monthly and seasonal averages representing climatology. The period can now be selected dynamically so that it is possible to compare different periods. Furthermore, maps of individual months or even events can also be called up for selected topics , in order to assess the deviations from the climatological mean values .

On the spatial domain, more than 4000 catchments are pre-processed. Various hydrological parameters are available as spatial averages for each of these catchments. Within a catchment, for example, the parameters of the water balance can be compared. Furthermore, comparisons between different catchments are also possible.

These few examples show the interactivity and usability of the new Atlas platform developed by the HADES project team. The HADES has been financed by the Swiss Federal Office for the Environment for over thirty years. It has made a successful transition from the analog static world in the 1990ies to today's digital dynamic world. It will continue to make a major contribution to Swiss hydrology.