

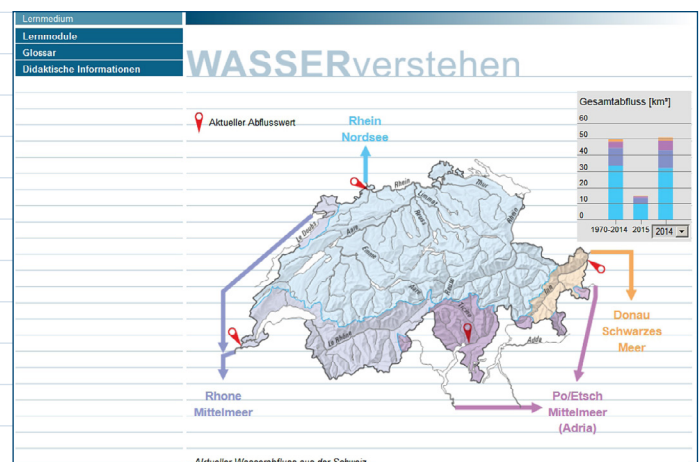


## Newsletter No. 2 – April 2015

In the last decade or so, the digital world has rendered the classical printed products of HADES nearly obsolete. Since the new website went live last year, it has received more than 50000 visits, a strong indication of HADES' value. Jan Schwanbeck, the developer of the new interactive atlas, is convinced that this trend will significantly enhance the capabilities and functions of future digital HADES versions (see interview on page 2).

Some of our products, however, don't require a computer screen or Internet connection: the printed excursion guide series "Tracks along the Water World" are extremely off-road friendly and enjoy lasting popularity. With great motivation, the authors of the new excursion guide for the French-speaking Valais worked through the cold winter months; the new guide is now in the test phase. In this newsletter, we present a sneak preview of the three tours.

Already in print are the first four thematic worksheets of the new teaching material "Understanding Water", which was presented in detail in the last newsletter. On 22 May, the work of Matthias Probst will be presented to the media and then released for use in geography classes. Textbook publishers hep (German) and lep (French) will distribute the worksheets, but access is also possible via the website ([www.hades.unibe.ch](http://www.hades.unibe.ch)). Of interest to both teachers and hydrology practitioners, the welcome page also offers a novel overview of the current discharge from the "water tower" Switzerland and access to the discharge time series for the biggest Alpine rivers. This allows for a rapid initial classification of the current hydrological situation.



Home page of the new teaching material "Understanding Water", with information on discharge in Switzerland



## Excursions "Tracks along the Water World", Series 7

Bruno Schädler, from the Hydrological Group at the University of Bern, has been acquainted with the mountain region above Crans-Montana for many decades. As the author of excursion 7.1, he leads us through a region of extremes, from the Plaine Morte to Lac de Tseuzier. It is clear that humans only survived in this region in the past thanks to great ingenuity and hard work. Less clear are the surface and subsurface runoff conditions in the glacial region.

In the next volume of the new series, Emmanuel Reynard and Héléne Maret from the Institut de Géographie et Durabilité at the University of Lausanne take us on a hike around Saillon. Themes include the landscape changes in the Rhone Valley, floods and their effects, and the third Rhone correction.



Underway on the Plaine Morte Glacier (Photo: Matthias Probst)

On the third trip, Emmanuel Reynard guides us through Savièse and explains the water supply system in the Alpine region. He discusses the challenges that need to be mastered today to ensure our future coexistence with the water abundances and shortages that characterise the valley.



## The new interactive Atlas

Interview with Jan Schwanbeck, HADES scientific staff

**HADES:** Jan, what are you working on now?

**Schwanbeck:** I am in the process of expanding and updating our website for the launch of the new teaching material. I am also working on updating the hydrological measurement station map for the new interactive atlas.

**HADES:** What is the interactive hydrological atlas, exactly?

**Schwanbeck:** This is a software that allows the user to access the contents of the atlas. The user can not only view the map content, but also query and analyse the data. Five main content chapters are planned: three of the chapters will cover the water cycle and differentiate between water in the atmosphere, on the Earth's surface, and in the soil/subsurface. Two additional chapters will be devoted to the interaction between humans and water, and to synthesis topics such as the water balance. Thus, the atlas will summarise the most important existing data and supplement them with current and additional data.



*Jan Schwanbeck has been working with HADES since 2012. He played a key role in the development of the new website (2014) and is currently responsible for the implementation of the interactive atlas. (Photo: Emmanuel Rey)*

**HADES:** In what ways will the atlas be interactive? Or, put another way, what options will the users of the interactive hydrological atlas have?

**Schwanbeck:** At the moment, it is planned that users will be able to configure the base map themselves. Depending on the map, further functions will be available. It will also be possible to aggregate the data to different spatial units; for example, precipitation for the basic catchments, river basins or water balance basins. The user can then select different time periods. Eventually, we will also include tools for analysis and for the calculation of specific values.

**HADES:** A big advantage of the interactive atlas is that updates and the publication of new topics can be made quite easily and quickly compared to printed maps. How often are updates planned, and is there new content in the works?

**SCHWANBECK:** Today, the demand for timely online data is very high. In cooperation with our partners, we will try to update the data in meaningful cycles. Depending on the map theme, update cycles of 1–2 years or 5–10 years may be appropriate. For example, maps with data concerning measurement stations will be updated more frequently than maps of long-term mean annual precipitation. Currently, several new projects are in progress. We work closely with Swiss hydrologists and scientists from WSL, SLF, MeteoSwiss, FOEN and cantonal offices and universities. New maps for precipitation, discharge and possibly also for evaporation are underway.

**HADES:** How do the technical aspects work? Can the platform be used locally, without Internet?

**Schwanbeck:** The plan is for a purely Internet-based solution with a stand-alone atlas browser. This allows us to ensure that the latest map content is available to all users.

**HADES:** In the past, new print versions of the maps were introduced with a media presentation. How will you inform interested users that new topics are available?

**Schwanbeck:** We will certainly inform users about updates and new maps via the HADES homepage, in this newsletter and via the atlas program itself. If the opportunity arises, we will release multiple updates simultaneously and report the new features of each update. This could be done via the FOEN's communication channels or even via an article in the press.

**HADES:** What excites you about your work for HADES?

**Schwanbeck:** As a non-Swiss, I first learned the hydrology of Switzerland through HADES. But I also noticed that HADES was slowly getting old. When the opportunity arose to work on this novel map system, I was immediately hooked! I am convinced that HADES in a digital format, with regularly updated data, will be much more useful: There will be more added value for all users. The project is also very exciting because we are working with partners from the Institute of Cartography and Geoinformation at ETH Zurich to develop something that is completely new and for which there is no template. And finally, by working on the interactive hydrological atlas, I can broaden and deepen my own knowledge.

**HADES:** Can you already give a date for the release of the interactive atlas?

**Schwanbeck:** It's still too early to name a date. Although the initial contents are already available, there are still some organisational issues that need to be resolved. In addition, the atlas software itself is still in the development and test phase. I hope that we can report the impending launch in the next newsletter.

## Registration and contact

By registering at [www.hades.unibe.ch/en/register](http://www.hades.unibe.ch/en/register), you will receive first-hand information about new products.

Three copies of the teaching material "Understanding Water" and "Schweizer Bücherbon" vouchers were raffled off to those who registered with HADES between August and December 2014. The winners will be contacted in the coming weeks.

The questions, tips and suggestions that we receive from users tell us that HADES occupies an important place in practice and research. We thank everyone for his/her interest in HADES and wish you all successful projects and wonderful adventures through the world of water!

HADES Project Management, April 2015

Rolf Weingartner

Felix Hauser

Tom Reist