

Scientific Publications

Five most cited Articles, according to Web of Science (April 2025):

Hrachowitz, M. et al. 2013. A decade of Predictions in Ungauged Basins (PUB) - a review. *Hydrological Sciences Journal*, 58(6):1198-1255, DOI:10.1080/02626667.2013.803183 **No citations: 994**

Blöschl, G., Hall, J., Viglione, A., Perdigão, R.A.P., Parajka, J., Merz, B., Lun, D. Arheimer, B., et al. 2019. Changing climate both increases and decreases European river floods. *Nature* 573:108–111. <https://doi.org/10.1038/s41586-019-1495-6> **No citations: 937**

Blöschl, G., Hall, J., Parajka, J., Perdigão, R.A.P., Merz, B., Arheimer, B. et al. 2017. Changing climate shifts timing of European floods. *Science* 357(6351):588-590, doi: 10.1126/science.aan2506. <http://science.sciencemag.org/content/357/6351/588> **No citations: 755**

Bloeschl, G. et al. 2019. Twenty-three unsolved problems in hydrology (UPH) - a community perspective. *Hydrological Sciences Journal*, 64(10), 1141-1158. <https://doi.org/10.1080/02626667.2019.1620507> **No citations: 745**

Verthoeven, J.T.A., Arheimer, B., Yin, C., Hefting, M.M. 2006. Regional and global concerns over wetlands and water quality. *Trends in Ecology and Evolution* 21(2):96-103. **No citations: 711**

Journal Articles (peer-reviewed)

1. Schück, F., Arheimer, B., Mazzoleni, M., and Brandimarte, L. 2025. A systematic mapping review of hydrological hazard management in agent-based systems. *Environ. Res. Lett.* 20 113003. DOI 10.1088/1748-9326/ae0fb2 <https://iopscience.iop.org/article/10.1088/1748-9326/ae0fb2>
2. Elenius, M., Pers, C., Schützer, S., Lindström, G., and Arheimer, B., 2025: Where can rewetting of forested peatland reduce extreme flows? Model experiment on the hydrology of Sweden, *Hydrol. Earth Syst. Sci.*, 29, 4307–4325, <https://doi.org/10.5194/hess-29-4307-2025>.
3. Reinecke, R., Stein, L., Gnann, S., Andersson, J.C.M., Arheimer, B., Bierkens, M., Bonetti, S., Güntner, A., Kollet, S., Mishra, S., Moosdorf, N., Nazari, S., Pokhrel, Y., Prudhomme, C., Schewe, J., Shen, C. and Wagener, T. (2025), Uncertainties as a Guide for Global Water Model Advancement. *WIREs Water*, 12: e70025. <https://doi.org/10.1002/wat2.70025>
4. Turner, S., Hannaford, J., Barker, L.J. et al., 2025. ROBIN: Reference observatory of basins for international hydrological climate change detection. *Sci Data* 12, 654. <https://doi.org/10.1038/s41597-025-04907-y>
5. Kreibich, H., Sivapalan, M., AghaKouchak, A., Addor, N., Aksoy, H., Arheimer, B., ... Blöschl, G., 2025. Panta Rhei: a decade of progress in research on change in hydrology and society. *Hydrological Sciences Journal*, 1–27. <https://doi.org/10.1080/02626667.2025.2469762>
6. Krause, S., Lynch, I., Agarwal, A., Akinsemolu, A., Arheimer, B., et al. 2024. Seven strategies to leverage water for peace and foster sustainable and just water management for all. *Nature Water*. <https://doi.org/10.1038/s44221-024-00353-z>
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9. Pimentel, R., Crochemore, L., Andersson, J.C.M. and Arheimer, B., 2023. Assessing robustness in global hydrological predictions by comparing modelling and Earth observations, *Hydrological*

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<https://www.tandfonline.com/doi/full/10.1080/02626667.2023.2267544>
10. Pimentel, R., Arheimer, B., Crochemore, L., Andersson, J. C. M., Pechlivanidis, I. G., and Gustafsson, D., 2023. Which potential evapotranspiration formula to use in hydrological modeling world-wide? Water Resources Research, 59, e2022WR033447.
<https://doi.org/10.1029/2022WR033447>
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Open Data

<http://hypeweb.smhi.se>

<http://vattenwebb.smhi.se>

Climate Service

<http://swicca.climate.copernicus.eu/>

Open Source code

<http://hypecode.smhi.se/>

Hydrological Research at SMHI

www.smhi.se/hydrology-research

Film (for flat screen and dome projection)

<http://www.smhi.se/en/research/research-departments/hydrology/urban-water-vision-eng-1.22093>

YouTube videos

Open science: <https://www.youtube.com/watch?v=KsV7v44T2oY&t=43s>

Open Innovations: <https://www.youtube.com/watch?v=CVoTSPFDLFA&feature=youtu.be>

Open to the world: <https://www.youtube.com/watch?v=-RTEYKrdXf0&t=56s>

Virtual water-Science Laboratory

<http://www.switch-on-vwsl.eu/>