

#### **Peer-reviewed publications:**

- Räty, O., Räisänen, J., Bosshard, T. and Donnelly, C., 2018: Intercomparison of Univariate and Joint Bias Correction Methods in Changing Climate From a Hydrological Perspective. *Climate*, 6(2), p.33, 10.3390/cli6020033
- Gutiérrez, J.M., Maraun, D., Widmann, M., Huth, R., Hertig, E., Benestad, R., Roessler, O., Wibig, J., Wilcke, R., Kotlarski, S., San Martín, D., Herrera, S., Bedia, J., Casanueva, A., Manzanas, R., Iturbide, M., Vrac, M., Dubrovsky, M., Ribalaygua, J., Pórtoles, J., Räty, O., Räisänen, J., Hingray, B., Raynaud, D., Casado, M. J., Ramos, P., Zerenner, T., Turco, M., Bosshard, T., Štěpánek, P., Bartholy, J., Pongracz, R., Keller, D. E., Fischer, A. M., Cardoso, R. M., Soares, P. M. M., Czemecki, B., Pagé, C., 2018: An intercomparison of a large ensemble of statistical downscaling methods over Europe: results from the VALUE perfect predictor cross-validation experiment. *International journal of climatology*, <https://doi.org/10.1002/joc.5462>
- Kotlarski, S., Szabó, P., Herrera, S., Räty, O., Keuler, K., Soares, P.M., Cardoso, R.M., Bosshard, T., Pagé, C., Boberg, F. and Gutiérrez, J.M., 2017. Observational uncertainty and regional climate model evaluation: a pan-European perspective. *International Journal of Climatology*, <https://doi.org/10.1002/joc.5249>
- Räty, O., Virta, H., Bosshard, T. and Donnelly, C., 2017. Regional climate model and model output statistics method uncertainties and the effect of temperature and precipitation on future river discharges in Scandinavia. *Hydrology Research*, 48(5), pp.1363-1377, 10.2166/nh.2017.127
- Pechlivanidis, I. G., Olsson, J., Bosshard, T., Sharma, D., & Sharma, K. C., 2016: Multi-basin modelling of future hydrological fluxes in the Indian subcontinent. *Water (Switzerland)*, 8(5), 1–21. <http://doi.org/10.3390/w8050177>
- Berg, P.; Bosshard, T.; Yang, W., 2015: Model Consistent Pseudo-Observations of Precipitation and Their Use for Bias Correcting Regional Climate Models, *Climate*, 3, 118-132
- Yang, W., Gardelin, M., Olsson, J., and Bosshard, T., 2015: Multi-variable bias correction: application of forest fire risk in present and future climate in Sweden, *Nat. Hazards Earth Syst. Sci.*, 15, 2037-2057, doi:10.5194/nhess-15-2037-2015
- Rana, A., Foster, K., Bosshard, T., Olsson, J., Bengtsson, L., 2014: Impact of climate change on rainfall over Mumbai using Distribution-based Scaling of Global Climate Model projections, *Journal of Hydrology: Regional Studies*, 1, 107–128, doi:10.1016/j.ejrh.2014.06.005
- Bosshard, T., Kotlarksi, S., Zappa, M., Schär, S., 2014: Hydrological climate-impact projections for the Rhine river: GCM-RCM uncertainty and separate temperature and precipitation effects, *Journal of Hydrometeorology*, 15(2), 697-713, doi: 10.1175/JHM-D-12-098.1
- Bosshard, T., Carambia, M., Goergen, K., Kotlarski, S., Krahe, P., Zappa, M., Schär, C., 2013: Quantifying uncertainty sources in an ensemble of hydrological climate-impact projections, *Water Resources Research*, 49, doi:10.1029/2011WR011533
- Kotlarski, S., Bosshard, T., Pall, P., Schär, C., 2011: Elevation Gradients of European Climate Change in the regional climate model COSMO-CLM, *Climatic Change*, doi: 10.1007/s10584-011-0195-5
- Bosshard, T., Kotlarski, S., Ewen T., Schär, C., 2011, Spectral representation of the annual cycle in the climate change signal, *Hydrology and Earth System Sciences Discussions*, 8, 1161-1192, doi: 10.5194/hessd-8-1-2011
- Bosshard, T., Zappa, M., 2008, Regional parameter allocation and predictive uncertainty estimation of a rainfall-runoff model in the poorly gauges Three Gorges Area (PR China), *Physics and Chemistry of the Earth*, 33, 1095-1104

#### **PhD thesis**

- Bosshard, T., 2012: Hydrological climate-impact modelling in the Rhine catchment down to Cologne, PhD thesis, ETH Zurich, Zurich, Switzerland

#### **Non peer-reviewed publications and project reports**

- Bosshard, T., Olsson, J., 2014, Comparison of the two climate projections in CLEO to a larger ensemble, CLEO report,  
[http://www.cleoresearch.se/download/18.1acdfdc8146d949da6d5089/1415716824536/CLEO\\_twoscen\\_vs\\_fullensemble\\_comparison\\_submitted.pdf](http://www.cleoresearch.se/download/18.1acdfdc8146d949da6d5089/1415716824536/CLEO_twoscen_vs_fullensemble_comparison_submitted.pdf)
- Olsson, J., Yang, W., Bosshard, T., 2013, Climate model precipitation in hydrological impact studies: limitations and possibilities, *Vatten: Journal of Water Management and Research*, 69(4), 221-230
- Schädler, B., Blanc, P., Volken, D. (Eds), 2012: *Auswirkungen der Klimaänderung auf die Wasserressourcen und Gewässer* (Engl.: Impact of climate change on the water resources and water bodies), Bundesamt für Umwelt, Bern, Switzerland, 76 pp., No. 1217, [www.bafu.admin.ch/uw-1217-d](http://www.bafu.admin.ch/uw-1217-d)
- CH2011, 2011: Swiss Climate Change Scenarios CH2011, published by C2SM, MeteoSwiss, ETH, NCCR Climate, and OcCC, Zurich, Switzerland, 88 pp., ISBN: 978-3-033-03065-7, [www.ch2011.ch](http://www.ch2011.ch)
- Schädler, B., Lustenberger, B. (Eds), 2011: *Auswirkungen der Klimaänderung auf die Wasserkraftnutzung - Synthesebericht. Beiträge zur Hydrologie der Schweiz* (Engl.: Impacts of climate change on the hydropower production – synthesis report), 38, published by Schweizerische Gesellschaft für Hydrologie und Limnologie und Hydrologische Kommission, Bern, Switzerland, 28 pp., ISBN: 978-3-033-02970-5
- Krahe, P., Bosshard, T., Carambia, M., Zappa, M., Volken, D., 2011: *Water Regime in the Alpine Space – The Alpine Rhine River Basin*, technical report WP4 Topic 5, [www.adaptalp.org](http://www.adaptalp.org)