

Conferences Prof. Dr. Manuela Brunner

Brunner, M. I and K. Stahl (2023), Temporal hydrological drought clustering across hydroclimates, IUGG, 11/07/2023-20/07/2023, Berlin, Germany. Talk

Brunner, M. I (2023), Storytelling in Science, IUGG Early career scientist workshop, 11/07/2023-20/07/2023, Berlin, Germany. Invited talk

Brunner, M. I (2023), Spatially compounding hydrological extremes, Extreme Value Analysis Conference (EVA), 26/06/2023-30/06/2023, Milan, Italy. Invited talk

Brunner, M. I and P. Naveau (2023), [Disentangling reservoir regulation patterns from natural streamflow in the Alps and their downstream regions](#), EGU, 23/04/2023-28/04/2023, Vienna, Austria. Talk

Miller, J., A. Böhnisch, R. Ludwig, and **M. I. Brunner** (2023), [Impacts of climate variability and change on regional fire weather in heterogeneous landscapes of Central Europe](#), EGU, 23/04/2023-28/04/2023, Vienna, Austria. Talk

Götte, J. and **M. I. Brunner** (2023), [Drought-to-flood transitions – When and where do they occur?](#), EGU, 23/04/2023-28/04/2023, Vienna, Austria. Talk

Keune, J. and **M. I. Brunner** (2023), [Unravelling the origins of precipitation over the world's water towers](#), EGU, 23/04/2023-28/04/2023, Vienna, Austria. Invited talk

Anderson, B., **M. I. Brunner**, L. Slater, and S. Dadson (2023), [Elasticity curves describe streamflow sensitivity to precipitation across the entire flow distribution](#), EGU, 23/04/2023-28/04/2023, Vienna, Austria. Talk

Saavedra, F., A. Musolff, J. Van Freiberg, R. Merz, K. Knoll, C. Müller, **M. I. Brunner**, and L. Tarasova (2023), Post-drought nitrate mobilization in German catchments, EGU, 23/04/2023-28/04/2023, Vienna, Austria. Talk

Brunner, M. I (2023), Spatially compounding floods and their hydro-meteorological drivers, SPATE Symposium, 23/04/2023, Vienna, Austria. Invited talk

Van Loon, A., **M. I. Brunner**, and J. Götte (2023), [Spatial variability and temporal changes of drought generation processes over Europe and the Alps](#), EGU, 23/04/2023-28/04/2023, Vienna, Austria. Talk

Brunner, M. I. and P. Naveau (2022), Reservoir operation variations in Alpine catchments: a reconstruction using GAMs, AGU, 12/12/2021-16/12/2021, Chicago, United States. Talk (online)

Brunner, M. I., A. Van Loon, and K. Stahl (2022), Extreme and moderate streamflow droughts are governed by different hydro-meteorological processes, Swiss Geoscience Meeting, 17/11/2022-20/11/2022, Lausanne, Switzerland. Talk

Brunner, M. I. (2022), Causes of moderate and extreme hydrological droughts differ, BIRS workshop on Combining Causal Inference and Extreme Value Theory in the Study of Climate Extremes and their Causes, 26/06/2022-1/07/2022, Banff, Canada. Talk (online)

Brunner, M. I. (2022), How do reservoirs affect local and regional floods and droughts?, IAHS, 29/05/2022-03/06/2022, Montpellier, France. Talk

Brunner, M. I. (2022), Floods and droughts: a multivariate perspective on hazard estimation, EGU, 23/05/2022-27/05/2022, Vienna, Austria. Award lecture

Brunner, M. I., D. S. Swain, R. Wood, F. Willkofer, J. Done, E. Gilleland, and R. Ludwig (2022), Flood responses to increases in rainfall extremes vary depending on event severity, EGU, 23/05/2022-27/05/2022, Vienna, Austria. Invited talk

Brunner, M. I., A. Van Loon, and K. Stahl (2022), Classification reveals varying drivers of severe and moderate hydrological droughts in Europe, EGU, 23/05/2022-27/05/2022, Vienna, Austria. Talk

Götte, J. and **M. I. Brunner** (2022), Drought-flood transitions across different hydro-climates, EGU, 23/05/2022-27/05/2022, Vienna, Austria. Talk

Gesualdo, G., M. Benso, **M. I. Brunner**, and E. Mendiondo (2022), Spatiotemporal distribution of hydrological extremes in Brazil, EGU, 23/05/2022-27/05/2022, Vienna, Austria. Talk

Brunner, M. I. (2022), Flow-regulation impacts on hydrological extremes in the Central Alps, Workshop Alpine Hydrology, 24/03/2022-25/03/2022, Obergurgl, Austria. Talk

Brunner, M. I. (2022), Non-stationarity of local and regional drought and flood events through reservoir regulation, Tag der Hydrologie, 22/03/2022-23/03/2022, Munich, Germany. Talk

Götte, J. and **M. I. Brunner** (2022), From droughts to floods – Transition times in different hydro-climates, Tag der Hydrologie, 22/03/2022-23/03/2022, Munich, Germany. Poster

Brunner, M. I. and L. Slater (2021), Reforecast pooling for flood hazard estimation: strengths and weaknesses, AGU, 13/12/2021-17/12/2021, New Orleans, United States. Talk (online)

Towler, E., J. Done, D. Touma, M. Ge, D. Swain, **M. I. Brunner**, and J. Bukowski (2021), Exploring the predictability of connected extremes, AGU, 13/12/2021-17/12/2021, New Orleans, United States. Poster (online)

Rajagopalan B., A. Ossandon, **M. I. Brunner**, W. Kleiber, and V. Mishra (2021), Bayesian hierarchical modeling approaches for hydroclimate risk assessment and management, AGU, 13/12/2021-17/12/2021, New Orleans, United States. Talk (online)

Brunner, M. I., D. L. Swain, R. Wood, F. Willkofer, J. M. Done, E. Gilleland, and R. Ludwig (2021), Shedding light on the extreme precipitation-flood paradox in a warming climate using a hydro-SMILE, Swiss Geoscience Meeting, 19/11/2021-20/11/2021, Geneva, Switzerland. Talk (online)

Brunner, M. I. and E. Gilleland (2021), Complex networks of seasonal high- and low flows in Central Europe, STAHY, 16/09/2021-17/09/2021, Valencia, Spain. Talk (online)

Brunner, M. I., D. L. Swain, R. Wood, F. Willkofer, J. M. Done, E. Gilleland, and R. Ludwig (2021), Reconciling the extreme precipitation-flood paradox in a warming climate, Tag der Hydrologie, 30/08/2021-01/09/2021, Potsdam, Germany. Talk

Brunner, M. I., E. Gilleland, and A. W. Wood (2021), Time scale determines the spatial patterns and extents of compound hot-dry events: an assessment using a multi-site multi-variable weather generator, Extreme Value Analysis 2021, 28/06/2021-02/07/2021, Edinburgh, Great Britain. Invited talk (online)

Brunner, M. I., L. A. Melsen, A. W. Wood, O. Rakovec, N. Mizukami, W. J. M. Knoben, and M. P. Clark (2021), Spatial flood coherence needs more attention in hydrologic modeling, Canadian Meteorological and Oceanographic Society (CMOS) Congress, 31/05/2021-11/06/2021, Victoria, Canada. Invited talk (online)

Brunner, M. I., R. Furrer, and E. Gilleland (2021), Functional data clustering as a powerful tool to group streamflow regimes and flood hydrographs, EGU, 19/04/2021-30/04/2021, Vienna, Austria. Invited talk (online)

Brunner, M. I., D. L. Swain, E. Gilleland, and A. W. Wood (2021), Spatial extent of hydrological drought in the United States: changes and hydro-meteorological drivers, EGU, 19/04/2021-30/04/2021, Vienna, Austria. Display (online)

Blauhut V., M. Stoelzle, L. Ahopelto, **M. I. Brunner**, D. Wendt, and C. Teutschbein (2021), What it takes to increase Europe's resilience to drought – Insights from a pan European survey on recent drought perception, impacts and management, EGU, 19/04/2021-30/04/2021, Vienna, Austria. Display (online)

Zappa M., L. Bernhard, **M. I. Brunner**, K. Bogner, K. Liechti, F. Lustenberger, Ch. Spirig, I. Seidl, and M. Stähli (2021), www.drought.ch – A 10-year span from technology readiness level 1 to 8, EGU, 19/04/2021-30/04/2021, Vienna, Austria. Display (online)

Brunner, M. I., D. L. Swain, E. Gilleland, and A. W. Wood (2021), Compound influences of hydro-meteorological drivers on streamflow drought spatial extent, Workshop on Compound Weather and Climate Events, 12/01/2021-15/01/2021, Bern, Switzerland. Talk (online)

Brunner, M. I., S. Papalexiou, M. P. Clark, and E. Gilleland (2021), How susceptible are large US river basins to widespread flooding?, AMS, 10/01/2021-15/01/2021, New Orleans, United States. Talk (online)

Brunner, M. I., E. Gilleland, D. L. Swain, S. Papalexiou, A. W. Wood, and M. P. Clark (2020), Spatial floods in the United States: understanding, modeling, and hazard estimation, AGU, 1/12/2020-17/12/2020, San Francisco, United States. Virtual poster (online)

Ossandon, A., B. Rajagopalan, W. Kleiber, and **M. I. Brunner** (2020), A space-time modeling framework for projection of seasonal streamflow extremes, AGU, 1/12/2020-17/12/2020, San Francisco, United States. Talk (online)

Brunner, M. I., S. Papalexiou, and E. Gilleland (2020), [How likely are widespread floods in US river basins? Seeking answers using a stochastic, wavelet-based approach](#), EGU, 5/4/2020-5/8/2020, Vienna, Austria. Display (online)

Brunner, M. I., E. Gilleland, D. Swain, A. Wood, and M. Clark (2020). [Spatial dependence of floods and droughts: learning from differences in regional and seasonal patterns](#), EGU, 5/4/2020-5/8/2020, Vienna, Austria. Invited display (online)

Blauhut, V., C. Teutschbein, M. N. Andersen, **M. I. Brunner**, C. Cammalleri, K. Cindrić Kalin, D C. Finger, M. Huysmans, K. Manevski, M. Osuch, R. J. Romanowicz, K. Stahl, M. Stoelzle, A. F. Van Loon, M.T.H. Van Vliet, N. Wanders, J. Vogt, J.-Philippe Vidal, and P. Williams (2020). [Perceiving and managing the 2018 & 2019 droughts in Europe: is there a need for macro-governance in Europe?](#), EGU, 5/4/2020-5/8/2020, Vienna, Austria. Display (online)

Kellner, E. and **M. I. Brunner** (2020). [Reservoirs in world's water towers: Need for appropriate governance processes to reach Sustainable Development Goals](#), EGU, 5/4/2020-5/8/2020, Vienna, Austria. Display (online)

Brunner, M. I. and L. Tallaksen (2019). Link between the proneness of European catchments to multi-year droughts and their hydrological regime, AGU, 12/9/2019-12/13/2019, San Francisco, United States. Oral presentation

Zappa M., **M. Brunner**, B. Hingray, and Anne-Catherine Favre (2019). Future trends in flood characteristics and their interdependence: potential drivers and uncertainty, EGU, 4/8/2019-4/12/2019, Vienna, Austria. Poster presentation

Brunner M. I., A. Björnsen, M. Zappa, H. Zekollari, D. Farinotti, and M. Stähli (2019). [Can reservoirs and lakes alleviate future water scarcity in Switzerland?](#), EGU, 4/8/2019-4/12/2019, Vienna, Austria. PICO presentation

Brunner M. I. (2019). Investigating the possibility of future, alpine multi-year droughts using a stochastic runoff generator, Climate extremes: new ideas for quantifying changes and improving resilience, 3/19/2019-3/23/2019, Riederalp, Switzerland. Oral presentation

Brunner M. I., M. Zappa, M. Stähli (2018). Water shortages under current and future extreme streamflow conditions in Switzerland, Swiss Geoscience Meeting, 11/30/2018-12/01/2018, Bern, Switzerland. Poster presentation

Round V., **M. I. Brunner**, D. Farinotti, A. Björnsen Gurung, M. Stähli (2018). Multiple-purpose use of hydropower dams in high alpine areas, Nordic Water, 8/13/2018-8/14/2018, Bergen, Norway. Oral presentation

Brunner M. I., J. Speerli, A. Björnsen-Gurung, S. Kytzia, S. Bieler, S. Volken, and M. Stähli (2018). Potential of multi-purpose reservoirs for the reduction of water scarcity: A multi-modular assessment framework, EGU, 4/9/2018-4/13/2018, Vienna, Austria. Poster presentation

Brunner M. I., R. Furrer, and A.-C. Favre (2018). Modeling the spatial dependence of floods in a medium-size catchment in Switzerland, EGU, 4/9/2018-4/13/2018, Vienna, Austria. Oral presentation

Brunner M. I., D. Viviroli, A. E. Sikorska, J. Seibert, and A.-C. Favre (2017). Synthetic design hydrographs for gauged and ungauged catchments in Switzerland, Swiss Geosciences meeting, 11/17/2017-11/18/2017, Davos, Switzerland. Oral presentation

Brunner M. I., D. Viviroli, J. Seibert, and A.-C. Favre (2017). Flood response regionalization based on functional clustering of hydrographs, STAHY, 9/21/2017-9/22/2017, Warsaw, Poland. Oral presentation

Brunner M. I., A. E. Sikorska, D. Viviroli, J. Seibert, and A.-C. Favre (2017). Uncertainty assessment of synthetic design hydrographs, EGU, 4/24/2017-4/28/2017, Vienna, Austria. Oral presentation

Brunner, M. I., A. Sikorska, and J. Seibert (2017). Construction and uncertainty of synthetic design hydrographs for mountainous catchments, Symposium on the effects of global change on floods, fluvial geomorphology and related hazards in mountainous rivers, 3/6/2017-3/8/2017, Potsdam, Germany. Poster presentation

Brunner, M. I., A.-C. Favre, D. Viviroli, A. Sikorska, and J. Seibert (2016). Flood volume estimation in Switzerland using synthetic design hydrographs, International conference on integrated water resources management 2016, 5/18/2016-5/20/2016, Bochum, Germany. Poster presentation

Brunner, M. I., O. Vannier, A.-C. Favre, D. Viviroli, P. Meylan, A. Sikorska, and J. Seibert (2016). Flood volume estimation in Switzerland using synthetic design hydrographs – a multivariate statistical approach, 13th Congress INTERPRAEVENT 2016, 5/30/2016-6/2/2016, Lucerne, Switzerland. Oral presentation