

## **HS2.5.3 Recent advancement in estimating global, continental and regional scale water balance components**

Convener: Hannes Müller Schmied

Co-conveners: Stephanie Eisner, Lukas Gudmundsson, Rohini Kumar, Ted Veldkamp

[Displays](#) | Chat Fri, 08 May, 10:45–12:30

### **Rules for the chat for this session**

We will only discuss one display at a time.

- The conveners will introduce each display.
- Authors are asked to provide a short opening statement for their display (e.g. the topic of their display, the takehome message, or a single sentence summary)
- The floor is then open for discussion on this display.
- After about 5 minutes of chat time, we will switch to the next display.
- Please refrain from discussing an abstract currently not on display.

Note that you can post questions and comments on the page of each display, in case you would like to discuss further.

### **Displays in this session**

D159 | EGU2020-12302

[Remote sensing of groundwater storage change - past, present and future](#) not presented

Susanna Werth, Manoochehr Shirzaei, Grace Carlson, and Chandrakanta Ojha

D160 | EGU2020-2197

[On the difficulties in estimating water balance components from remote sensing in an anthropogenically modified catchment in southern India](#)

Tejas Kulkarni, Mathias Gassmann, and Sanaz Vajedian

D161 | EGU2020-4323

[Improvement of uncertainty estimation in global hydrological models by using high resolution satellite data as an interpolator](#) not presented

Rogier Westerhoff, Frederika Mourot, and Conny Tschirter

D162 | EGU2020-10920

[Multi-source quantification of precipitation in the global water cycle](#)

Mijael Rodrigo Vargas Godoy, Rajani Kumar Pradhan, Shailendra Pratap, Akif Rahim, and Yannis Markonis

D163 | EGU2020-12736

[Closing the Combined Water and Energy Balance of Global Watersheds Based on Satellite Data](#)

Sarfaraz Alam, Akash Koppa, Diego G. Miralles, and Mekonnen Gebremichael

D164 | EGU2020-13718

[An observation-based approach for global runoff estimation: exploiting satellite soil moisture and Grace](#)

Stefania Camici, Luca Brocca, Christian Massari, Gabriele Giuliani, Nico Sneeuw, Hassan Hashemi Farahani, Marco Restano, and Jérôme Benveniste

D165 | EGU2020-6587

[How to validate calibrated/assimilated global hydrological outputs with high resolution groundwater data and regional models: an investigation of WaterGAP performance over France](#)

**Kuei-Hua Hsu**, Laurent Longuevergne, and Annette Eicker

D166 | EGU2020-7107

[Multi-criterial calibration of a global hydrological model for the Mississippi basin: Exploring the effect of the number of calibration units](#) not presented

**HM Mehedi Hasan**, Andreas Güntner, Somayeh Shadkam, and Petra Döll

D167 | EGU2020-11596

[Improvement of the simulation of the water and energy cycle using Multiscale Parameter Regionalization \(MPR\)](#)

**Stephan Thober**, Matthias Kelbling, Florian Pappenberger, Christel Prudhomme, Gianpaolo Balsamo, Robert Schweppe, Sabine Attinger, and Luis Samaniego

D168 | EGU2020-8849

[HydroGFD3: a climatological and real-time updated hydrological forcing dataset](#)

**Peter Berg**, Fredrik Almén, Denica Bozhinova, and Riejanne Mook

D169 | EGU2020-10699

[Bias correction of global high-resolution precipitation climatologies using streamflow observations from 9372 catchments](#)

Camila Alvarez-Garretón, **Hylke Beck**, Eric Wood, Tim R. McVicar, Mauricio Zambrano-Bigiarini, Oscar M. Baez-Villanueva, Justin Sheffield, and Dirk N. Karger

D170 | EGU2020-12491

[Incorporating groundwater disequilibrium in large-scale, isotopically-constrained water budgets](#) not presented

**Gabriel Bowen**, Scott Allen, and Stephen Good

D171 | EGU2020-11888

[Projections and simulation of water balance in the Southern Ice Field, Patagonia, Chile](#)

**Catalina Jerez Toledo** and Ximena Vargas Mesa

D172 | EGU2020-9951

[Using Earth observation data of vegetation to improve global hydrological simulations](#)

**Tina Trautmann**, Sujan Koirala, Nuno Carvillhais, Andreas Güntner, Hyungjun Kim, and Martin Jung

D173 | EGU2020-21834

[Assessment of the effect of including information on the water level of surface water bodies into large scale hydrological modelling – Case study Amazon basin](#)

**Christoph Niemann**, Sabrina Wissenbach, and Petra Döll