MOSES @ EGU 2020 – sessions and presentations

Sessions:

- ESSI1.15 Towards SMART Monitoring and Integrated Data Exploration of the Earth System
  Convener: Jens Greinert | Co-conveners: Peter Dietrich, Andreas Petzold, Roland Ruhnke, Viktoria Wichert
  (Jointly organized session with Digital Earth)
- ITS2.4/HS12.1: From the Source to the Sea – River-Sea Systems under Global Change
  Co-organized by BG4/GM6/NH5/OS2/SSP3, co-sponsored by IAS
  Convener: Jana Friedrich | Co-conveners: Debora Bellafiore, Dietrich Borchardt, Andrea D'Alpaos, Michael Rode *(Jointly organized session with DANUBIUS RI)*
- ESSI2.19: Management and integration of environmental observation data
  Convener: Dorit Kerschke | Co-conveners: Benedikt Gräler, Ralf Kunkel, Anusuriya Devaraju, Johannes Peterseil

Online Presentations:

Hydrological Extremes

D7 - EGU2020-3032
Microcontrollers beyond Arduino: a stationary and a mobile environmental monitoring system
Daniel Beiter, Tobias Vetter, Markus Morgner, Carlo Seehaus, Stephan Schröder, and Theresa Blume
https://presentations.copernicus.org/EGU2020/EGU2020-3032_presentation.pdf

D627- EGU2020-5241
Methane distribution at high spatial resolution in North Sea estuaries
Bussmann, I. , Brix, H. , Fischer, P. and Flöser, G.
doi: 10.5194/egusphere-egu2020-5241

D711 - EGU2020-9292
River water quality modeling using continuous high frequency data allows disentangling whole-stream nitrogen uptake and release pathways
Jingshui Huang and Michael Rode
http://doi.org/10.5194/egusphere-egu2020-9292

D807 - EGU2020-3049
Catchment scale prediction of soil moisture trends from Cosmic Ray Neutron Rover Surveys using machine learning
Erik Nixdorf, Marco Hannemann, Uta Ködel, Martin Schrön, and Thomas Kalbacher
http://doi.org/10.5194/egusphere-egu2020-3049

D800 - EGU2020-21816
The challenge of sensor selection, long term-sensor operation and data evaluation in inter- -institutional long term monitoring projects (lessons learned in the MOSES project)
Philipp Fischer, Madlen Friedrich, Markus Brand, Uta Koedel, Peter Dietrich, Holger Brix, Dorit Kerschke, and Ingeborg Bussmann
doi:10.5194/egusphere-egu2020-21816

D803 - EGU2020-19631
Implementing FAIR in a Collaborative Data Management Framework
Angela Schäfer, Norbert Anselm, Janik Eilers, Stephan Frickenhaus, Peter Gerchow, Frank Oliver Glöckner,

Antonie Haas, Isabel Herrarte, Roland Koppe, Ana Macario, Christian Schäfer-Neth, Brenner Silva, and Philipp Fischer
https://doi.org/10.5194/egusphere egu2020 19631
presentation link: https://presentations.copernicus.org/EGU2020/EGU2020-19631_presentation.pdf

D812 - EGU2020-11084
Significance and implementation of SMART Monitoring Tools
Uta Koedel, Peter Dietrich, Erik Nixdorf, and Philipp Fischer
https://doi.org/10.5194/egusphere-egu2020-11084

D814 - EGU2020-11117
Going beyond FAIR to increase data reliability
Uta Koedel and Peter Dietrich
http://doi.org/10.5194/egusphere-egu2020-11117

D827- EGU2020-15961
Automatic quality control and quality control schema in the Observation to Archive
Brenner Silva, Najmeh Kaffashzadeh, Erik Nixdorf, Sebastian Immoor, Philipp Fischer, Norbert Anselm, Peter Gerchow, Angela Schäfer, Roland Koppe, and the Computing and data center*,
https://doi.org/10.5194/egusphere-egu2020-15961

D869 - EGU2020-10431
Implementing a new data acquisition system for the advanced integrated atmospheric observation system KITcube
Martin Kohler, Mahnaz Fekri, Andreas Wieser, and Jan Handwerker
https://doi.org/10.5194/egusphere-egu2020-10431

D1576 - EGU2020-13624
A concept of hybrid terrestrial gravimetry and cosmic ray neutron sensing for investigating hydrological extreme events
Marvin Reich and Andreas Güntner
http://doi.org/10.5194/egusphere-egu2020-13624
presentation link: https://presentations.copernicus.org/EGU2020/EGU2020-13624_presentation.mp4

D2569 - EGU2020-5655
Summer drought conditions promote the dominant role of phytoplankton in riverine nutrient dynamics
Norbert Kamjunke, Michael Rode, Martina Baborowski, Vanessa Kunz, Oliver Lechtenfeld, Peter Herzsprung, and Markus Weitere
http://doi.org/10.5194/egusphere-egu2020-5655

D3209 - EGU2020-14224
Direct injection of water vapor into the lower stratosphere through extreme convection: A case study for the summer 2019 in the mid latitudes
Dina Khordakova, Christian Rolf, Martina Krämer, and Martin Riese
https://doi.org/10.5194/egusphere-egu2020-14224

Heat waves

D33 - EGU2020-8488
Innovative methods for non-invasive monitoring of hydrological processes from field to catchment scale
Jannis Jakobi, Johan A. Huisman, Martin Schrön, Justus Fiedler, Cosimo Brogi, Harry Vereecken and Heye R. Bogena
https://doi.org/10.5194/egusphere-egu2020-8488

D35 - EGU2020-22317

Monitoring and Mapping of Soil and Snow Water Across Scales with Cosmic-Ray Neutron Sensor Networks and Mobile Platforms
Martin Schrön, Sascha E Oswald, Steffen Zacharias, Peter Dietrich, and Sabine Attinger
https://doi.org/10.5194/egusphere-egu2020-22317

D261 - EGU2020-9773
A Real-time Ensemble Hydrological Forecasting System over Germany at Sub-seasonal to Seasonal Time Range
Husain Najafi, Stephan Thober, Friedrich Boeing, Oldrich Rakovec, Matthias Kelbling, Sebastian Müller, Andreas Marx, and Luis Samaniego

D283 - EGU2020-17412
BRIDGET: a toolbox for the integration and scaling of diverse in-situ evapotranspiration measurements
Sibylle K. Hassler, Peter Dietrich, Ralf Kiese, Matthias Mauder, Jörg Meyer, Corinna Rebmann, and Erwin Zehe
https://doi.org/10.5194/egusphere-egu2020-17412

D2022 - EGU2020-8860
Development of hyperspectral thermal infrared mapping capabilities at field and airborne level within MOSES heat wave event chain
Sabine Chabrillat, Robert Milewski, Maximilian Brell, Christian Hohmann, Thomas Ruhtz, Mathias Zöllner, and Jean-Philippe Gagnon
https://doi.org/10.5194/egusphere-egu2020-8860

Ocean Eddies

D985 - EGU2020-9248
High-resolution dataset assessing methane concentrations and modelling the carbon dynamics within Europe's second largest delta, the Danube River Delta
Anna Canning and Arne Körtzinger
https://doi.org/10.5194/egusphere-egu2020-9248

D2656 - EGU2020-12861
Level up ocean carbon observations: Successful implementation of a novel autonomous total alkalinity analyzer on a commercial Ship of Opportunity
Katharina Seelmann, Tobias Steinhoff und Arne Körtzinger
https://doi.org/10.5194/egusphere-egu2020-12861

D2824 - EGU2020-21028
A first glimpse from the EUREC4A-OA/ATOMIC air-sea experiment
Sabrina Speich, Johannes Karstensen, Chris Fairall, Paquita Zuidema, Chelle Gentemann, Dongxiao Zhang, Hugo Bellenger, Gilles Reverdin, Elizabeth Thompson, Sebastien Bigorre, Wiebke Mohr, and Stefan Kinne and the EUREC4A team
https://doi.org/10.5194/egusphere-egu2020-21028

D3105 - EGU2020-6116
EUREC4A: First Impressions
Bjorn Stevens, Sandrine Bony, David Farrell, Alan Blyth, Chris Fairall, Johannes Karstensen, Trish Quinn, Sabrina Speich, and Team Eurec4a
https://doi.org/10.5194/egusphere-egu2020-6116

Rapid Thawing Permafrost

D582 - EGU2020-5253
Seasonality in Lena River biogeochemistry and dissolved organic matter
Bennet Juhls, Pier Paul Overduin, Colin Andrew Stedmon, Anne Morgenstern, Hanno Meyer, Birgit Heim, Jens Hölemann, and Vasily Povazhnyi
https://doi.org/10.5194/egusphere-egu2020-5253