

Publications

Publications with and about RTC-Tools:

Rötz, A.; Bouillon, C.; Hohenrainer, J.; Ebner von Eschenbach, A.-D. (2016): Synthese von Praxiserfahrung und Modelloptimierung als Grundlage eines verbesserten Talsperrenbetriebes. in: Wasserressourcen - Wissen in Flussgebieten vernetzen Beiträge zum Tag der Hydrologie am 17./18. März 2016 in Koblenz, ausgerichtet von der Hochschule Koblenz und der Bundesanstalt für Gewässerkunde, Forum für Hydrologie und Wasserbewirtschaftung, Schriftenreihe der Fachgemeinschaft Hydrologische Wissenschaften und des Hauptausschusses Hydrologie und Wasserbewirtschaftung Nr. 37.16; Hennef: Fachgemeinschaft Hydrologische Wissenschaften in der DWA.

Schwanenberg, D.; Becker, B. (2016): Software tools for modelling Real-time control / RTC-Tools. Technical Reference Manual. Deltares, Delft.

Schwanenberg, D.; Becker, B. P. J.; Xu, M. (2015): The Open RTC-Tools Software framework for Modeling Real-Time Control in Water Resources Systems. *Journal of Hydroinformatics* 17 (1), 130–148. DOI 10.2166/hydro.2014.046

Schwanenberg, D.; Fan, F. M.; Naumann, S.; Kuwajima, J. I.; Montero, R. A.; Reis, A. A. dos (2015): Short-Term Reservoir Optimization for Flood Mitigation under Meteorological and Hydrological Forecast Uncertainty. *Water Resources Management* 29 (5), 1635–1651. DOI 10.1007/s11269-014-0899-1

Becker, B.; Schruoff, T.; Schwanenberg, D. (2014): Modellierung von reaktiver Steuerung und Model Predictive Control (Modelling of reactive control and Model Predictive Control). in: *Simulation techniques and models for hydraulic engineering and water management*, Wasserbauliche Mitteilungen; Dresden: Selbstverlag der Technischen Universität Dresden.

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Talsma, J.; Schwanenberg, D.; Gooijer, J.; Heeringen, K.-J.; Becker, B. (2014): MODEL PREDICTIVE CONTROL FOR REAL TIME OPERATION OF HYDRAULIC STRUCTURES FOR DRAINING THE OPERATIONAL AREA OF THE DUTCH WATER AUTHORITY NOORDERZIJLVEST. Presented at the HIC 2014 - 11th International Conference on Hydroinformatics; New York.

Montero, R. A.; Schwanenberg, D.; Hatz, M.; Brinkmann, M. (2013): Simplified hydraulic modelling in model predictive control of flood mitigation measures along rivers. *Journal of Applied Water Engineering and Research* 1–11. DOI 10.1080/23249676.2013.827897

Ortiz Rodríguez, I. (2013): Operation of multi-purpose reservoirs: simulation study comparing fixed rules and real-time control. Master's Thesis. RWTH Aachen University, Institute of Hydraulic Engineering and Water Resources Management, Aachen.

Schwanenberg, D.; Talsma, J.; Pinho, J. L.; Assis dos Reis, A.; Rodrigues Bessa, M.; Kuwajima, J. (2013): Short-term reservoir optimization for mitigation downstream flood risks. Presented at the 8th INTERNATIONAL CONFERENCE OF EWRA "Water Resources Management in an Interdisciplinary and Changing Context"; Porto, Portugal.

Talsma, J.; Patzke, S.; Becker, B. P. J.; Goorden, N.; Schwanenberg, D.; Prinsen, G. (2013): Application of model predictive control on water extractions in scarcity situations in the Netherlands. *Revista de Ingeniería Innova* 6, 1–10.

Becker, B. P. J.; Schwanenberg, D.; Schruff, T.; Hatz, M. (2012): Conjunctive real-time control and hydrodynamic modelling in application to Rhine River. in: *Proceedings of 10th International Conference on Hydroinformatics*; Hamburg, Germany: TuTech Verlag TuTech Innovation GmbH.

Patzke, S.; Talsma, J.; Becker, B. P. J.; Goorden, N.; Schwanenberg, D.; Prinsen, G. (2012): The national hydrological instrument of the Netherlands (NHI). in: *10th International Conference on Hydroinformatics Hamburg, Germany / Understanding Changing Climate and Environment and Finding Solutions*; : TuTech Verlag TuTech Innovation GmbH.

Schwanenberg, D.; Ochterbeck, T.; Gooijer, J.; Xu, M.; van Heeringen, K.-J. (2012): Model predictive control of pumps and gates for draining Dutch polder systems. in: *10th International Conference on Hydroinformatics Hamburg, Germany / Understanding Changing Climate and Environment and Finding Solutions*; : TuTech Verlag TuTech Innovation GmbH.

Schwanenberg, D.; Sheret, I.; Rauschenbach, T.; Galleli, S.; Vieira, J. M.; Pinho, J. L. (2012): Adjoint modeling framework for water resources models. in: *10th International Conference on Hydroinformatics Hamburg, Germany / Understanding Changing Climate and Environment and Finding Solutions*; : TuTech Verlag TuTech Innovation GmbH.

Schruff, T. (2011): A decision support framework for hydro power producers. Diplomarbeit. RWTH Aachen University. [Faculty of] Civil Engineering, Aachen.

Schwanenberg, D.; Becker, B. P. .; Schruff, T. (2011): SOBEK-Grobmodell des staugeregelten Oberrheins. Report No. 1201242-000-ZWS-0014. Deltares.

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