

Selected Bibliography Marc Bierkens (as of June 6 2016)

190 publications; 125 in ISI journals; Web of Science (H=30); Scopus (H=34); Google Scholar (H=43)

Books and edited volumes

Bierkens, M.F.P., P.A. Finke and P. de Willigen, 2000. *Upscaling and downscaling methods for environmental research*. Kluwer Academic Publishers, Dordrecht, 190 pp.

Bierkens, M.F.P., J.C. Gehrels and K. Kovar (Editors), 2006. *Calibration and Reliability in Groundwater Modelling: From Uncertainty to Decision Making*. Proceedings of ModelCARE 2005, the Hague. IAHS Publication 304, 316 pp.

De Gruijter, J.J., D.J. Brus, M.F.P. Bierkens and M. Knotters, 2006. *Sampling for Natural Resources Monitoring*. Springer, Berlin, 332 pp.

Bierkens, M.F.P., A.J. Dolman and P.A. Troch (Editors), 2009. *Climate and the Hydrological Cycle*. IAHS Special Publication 8. IAHS Press UK, 343 pp

Selected peer reviewed papers, grouped by research field

Stochastic hydrology (incl. time series modelling, data-assimilation)

Bierkens, M.F.P. and C.E. Puente, 1990. Analytically derived runoff models based on rainfall point processes. *Water Resources Research* 26, 2653-2659.

Bierkens, M.F.P., 1998. Modeling water table fluctuations by means of a stochastic differential equation. *Water Resources Research* 34, 2485-2499.

Knotters, M. and M.F.P. Bierkens, 1999. Physical basis of time series models for water table depths. *Water Resources Research* 36, 181-188.

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Karssenberg D, O. Schmitz, P. Salamon, K. de Jong and M.F.P. Bierkens, 2010. A software framework for construction of process-based stochastic spatio-temporal models and data assimilation. *Environmental Modelling & Software* 25, 489-502.

Geostatistics (incl. mapping, upscaling, sampling)

Bierkens, M.F.P. and P.A. Burrough, 1993. The indicator approach to categorical soil data; I. Theory. *Journal of Soil Science* 44, 361-368.

Bierkens, M.F.P. and P.A. Burrough, 1993. The indicator approach to categorical soil data; II. Application to mapping and land use suitability analysis. *Journal of Soil Science* 44, 369-381.

Bierkens, M.F.P. and H.J.T. Weerts, 1994. Application of indicator simulation to modelling the lithological properties of a complex confining layer. *Geoderma* 62, 265-284.

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Bierkens, M.F.P., 2005. Designing a monitoring network for detecting groundwater pollution with stochastic simulation and a cost model. *Stochastic Environmental Research and Risk Assessment*. DOI: 10.1007/s00477-005-0025-2.

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Ecohydrology

Rietkerk, M., S.C. Dekker, M.J. Wassen, A.W.M. Verkrust and M.F.P. Bierkens, 2004. A putative mechanism for Bog Patterning. *The American Naturalist* 163, 699-708.

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Brolsma R.J., D. Karssenbergh, and M.F.P. Bierkens, 2010. Vegetation competition model for water and light limitation. I: Model description, one-dimensional competition and the influence of groundwater. *Ecological Modelling* 221, 1348-1363.

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- Large-scale hydrology and water resources**
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