



Curriculum vitae

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Name: Markus Disse

Birthday and place: 07th January 1963, Paderborn

Languages: German (mother tongue), English (fluent), Spanish (moderate)

Education

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| 1995 | PhD (Dr.-Ing.) at the University of Karlsruhe (TH) |
| 1985 – 1990 | Studies of Civil Engineering at the University of Karlsruhe (TH)
Specialisation in Water Management / Hydraulic Engineering;
Degree: Diploma |
| 1983 – 1985 | Studies of Civil Engineering at the University of Hannover (TU);
Degree: Pre-Diploma |

Career

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| Since July | Full Professor and Chair for Hydrology and River Basin Management at the Technical University of Munich (Technische Universität München) |
| 2013 | Sabbatical at the University of Arizona, Tucson (USA), Department of Hydrology and Water Resources (01.08. – 31.12.) |
| 2003 – 2013 | Full Professor and Chair for Water Management and Resources, Engineering at the Universität der Bundeswehr München |
| 1996 – 2002 | Research assistant at the Federal Institute of Hydrology (BfG), Koblenz, Germany |
| 1996 – 1998 | leading the department River Morphology |
| 1998 – 2002 | leading the department Water Management and Statistics |

Research Projects (selection)

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| 2019 - 2022 | Research project of the Bavarian State Ministry for the Environment and Consumer Protection:

Climate protection and adaptation potential in bogs of Bavaria - KliMoBay |
| 2019 - 2021 | Deutsche Forschungsgemeinschaft (DFG):

Sensitivity of high Alpine geosystems to climate change since 1850 |
| 2018 - 2020 | Danube Transnational Programme (INTERREG):

Danube Floodplain: Reducing the flood risk through floodplain restoration along the Danube River and tributaries |
| 2017 – 2020 | Research project of the Bavarian State Ministry for the Environment and Consumer Protection:

Flash floods and wildly draining water in Bavaria: capture, explore, evaluate Project HiOS (high surface runoff and torrent) |
| 2015 - 2020 | Research project of the Bavarian State Ministry for the Environment and Consumer Protection:

Process-based modeling of natural flood retention measures to analyze event- and area-dependent effectiveness (ProNaHo) |

2015 – 2018	BMBF – Collaborative project SINOWATER Good Water Governance: Management and innovative technologies to improve water quality in two significant Chinese waters (Leitung Prof. Dr.-Ing. Max Dohmann, RWTH Aachen)
2014 - 2018	Sino-German NSFC/DFG cooperation group: Integrated Water Resource Management: from Modeling to Adaptation

Activities in associations and working groups

since 2017	President of the “Fachgemeinschaft Hydrologische Wissenschaften (professional community in the DWA)”
since 2011	Member of the extended presidium of the “Deutsche Hydrologische Gesellschaft”
since 2011	Member of the scientific advisory board of the “Deutscher Wetterdienst”
since 2010	Member of the board of the DWA
since 2010	Head of the committee “Hydrologie und Wasserbewirtschaftung” in the DWA
since 2001	Scientific board member of the International Centre of Water Resources and Global Change (ICWRGC)

Invited reviewer

- Water Resources Research
- Journal of Hydrology
- Water Resources Management
- Journal of Hydrological Sciences (IAHS Press)
- Hydrology and Earth System Science
- Journal of River Basin Management
- Environmental Modelling and Software
- Journal of Flood Risk Management
- Hydrologie und Wasserbewirtschaftung (Editor)
- Korrespondenz Wasserwirtschaft (Editor)

Peer Reviewed Journals (selection)

1. **Francesca Perosa, Sami Fanger, Aude Zingraff-Hamed, Markus Disse, (2021).** A meta-analysis of the value of ecosystem services of floodplains for the Danube River Basin, *Science of The Total Environment*, Volume 777, 2021, 146062, ISSN 0048-9697,
<https://doi.org/10.1016/j.scitotenv.2021.146062>.
2. **Xiong, Yufei; Ta, Zhijie; Gan, Miao; Yang, MeiLin; Chen, Xi; Yu, Ruide; Disse, Markus; Yu, Yang. (2021).** "Evaluation of CMIP5 Climate Models Using Historical Surface Air Temperatures in Central Asia" *Atmosphere* 12, no. 3: 308. doi.org/10.3390/atmos12030308
3. **Perosa, F.; Gelhaus, M.; Zwirglmaier, V.; Arias-Rodriguez, L.F.; Zingraff-Hamed, A.; Cyffka, B.; Disse, M. (2021)** Integrated Valuation of Nature-Based Solutions Using TESSA: Three Floodplain Restoration Studies in the Danube Catchment. *Sustainability*, 13, 1482. <https://doi.org/10.3390/su13031482>
4. **Maria Kaiser, Stephan Günemann, Markus Disse (2021)** Spatiotemporal analysis of heavy rain-induced flood occurrences in Germany using a novel event database approach, *Journal of Hydrology*, 125985, ISSN 0022-1694, <https://doi.org/10.1016/j.jhydrol.2021.125985>.
5. **Lin, Q.; Leandro, J.; Gerber, S.; Disse, M. (2020).** Multistep Flood Inundation Forecasts with Resilient Backpropagation Neural Networks: Kulmbach Case Study. *Water* , 12, 3568. <https://doi.org/10.3390/w12123568>
6. **Punit K. Bhola, Jorge Leandro, and Markus Disse (2020)** Building hazard maps with differentiated risk perception for flood impact assessment. *Nat. Hazards Earth Syst. Sci.*, 20, 2647–2663, <https://doi.org/10.5194/nhess-20-2647-2020>
7. **Lin Qing, Leandro Jorge, Wu Wenrong, Bhola Punit, Disse Markus (2020)** Prediction of Maximum Flood Inundation Extents With Resilient Backpropagation Neural Network: Case Study of Kulmbach. *Frontiers in Earth Science*, 8, 332, 2296-6463, [DOI:10.3389/feart.2020.00332](https://doi.org/10.3389/feart.2020.00332)
8. **Teschemacher, S.; Bittner, D.; Disse, M. (2020)** Automated Location Detection of Retention and Detention Basins for Water Management. *Water*, 12, 1491. <https://doi.org/10.3390/w12051491>
9. **Arias-Rodriguez, L.F.; Duan, Z.; Sepúlveda, R.; Martinez-Martinez, S.I.; Disse, M. (2020)** Monitoring Water Quality of Valle de Bravo Reservoir, Mexico, Using Entire Lifespan of MERIS Data and Machine Learning Approaches. *Remote Sens.* 12, 1586. <https://doi.org/10.3390/w12010300>
10. **Daniel Bittner, Ayla Rychlik, Tobias Klöffel, Anna Leuteritz, Markus Disse, Gabriele Chiogna (2020)** A GIS-based model for simulating the hydrological effects of land use changes on karst systems – The integration of the LuKARS model into FREEWAT, *Environmental Modelling & Software*, Volume 127, 2020, 104682, ISSN 1364-8152, <https://doi.org/10.1016/j.envsoft.2020.104682>.
11. **Maria Kaiser, Stephan Günemann, Markus Disse (2020).** Providing guidance on efficient flash flood documentation: an application based approach, *Journal of Hydrology*, Volume 581, 2020, 124466, ISSN 0022-1694, <https://doi.org/10.1016/j.jhydrol.2019.124466>.
12. **Adla, S.; Rai, N.K.; Karumanchi, S.H.; Tripathi, S.; Disse, M.; Pande, S. (2020)** Laboratory Calibration and Performance Evaluation of Low-Cost Capacitive and Very Low-Cost Resistive Soil Moisture Sensors. *Sensors*, 20, 363. <https://doi.org/10.3390/s20020363>
13. **M. Disse, T.G. Johnson, J. Leandro, T. Hartmann (2020):** Exploring the relation between flood risk management and flood resilience, *Water Security*, Volume 9, 100059, ISSN 2468-3124, <https://doi.org/10.1016/j.wasec.2020.100059>
14. **Matthias Kopp, Ye Tuo, Markus Disse, (2019):** Fully automated snow depth measurements from time-lapse images applying a convolutional neural network, *Science of The Total Environment*, Volume 697, 134213, ISSN 0048-9697, <https://doi.org/10.1016/j.scitotenv.2019.134213>

15. Alqadi, Mohammad & Margane, Armin & Alraggad, Marwan & Subah, Ali & Disse, Markus & Hamdan, Ibraheem & Chiogna, Gabriele. (2019). Implementation of Simple Strategies to Improve Wellfield Management in Arid Regions: The Case Study of Wadi Al Arab Wellfield, Jordan. *Sustainability*. 11. [10.3390/su11215903](https://doi.org/10.3390/su11215903).
16. Soham Adla, Shivam Tripathi, Markus Disse (2019) Can We Calibrate a Daily Time-Step Hydrological Model Using Monthly Time-Step Discharge Data? in: Journal "Water"; DOI: [10.3390/w11091750](https://doi.org/10.3390/w11091750)
17. Punit Kumar Bhola, Jorge Leandro, Markus Disse (2019) Reducing uncertainties in flood inundation outputs of a two-dimensional hydrodynamic model by constraining roughness in: *Natural Hazards and Earth System Sciences*; DOI: [10.5194/nhess-19-1445-2019](https://doi.org/10.5194/nhess-19-1445-2019)
18. J. Leandro, A. Gander, M.N.A. Beg, P. Bhola, I. Konnerth, W. Willems, R. Carvalho, M. Disse (2019) Forecasting upper and lower uncertainty bands of river flood discharges with high predictive skill in: *Journal of Hydrology*; DOI: [10.1016/j.jhydrol.2019.06.052](https://doi.org/10.1016/j.jhydrol.2019.06.052)
19. Punit Kumar Bhola, Jorge Leandro, Markus Disse (2019) Hazard maps with differentiated exceedance probability for flood impact assessment in: *Natural Hazards and Earth System Sciences Discussions*; DOI: [10.5194/nhess-2019-158](https://doi.org/10.5194/nhess-2019-158)
20. Sonja Teschemacher, Wolfgang Rieger, Markus Disse (2019) Experimental Investigation of Lateral Subsurface Flow Depending on Land Use and Soil Cultivation in: Journal "Water"; DOI: [10.3390/w11040766](https://doi.org/10.3390/w11040766)
21. Giorgia Marcolini, Roland Koch, Barbara Chimani, Wolfgang Schöner, Alberto Bellin, Markus Disse, Gabriele Chiogna (2019) Evaluation of homogenization methods for seasonal snow depth data in the Austrian Alps, 1930–2010 in: *International Journal of Climatology*; <https://doi.org/10.1002/joc.6095>
22. Punit Kumar Bhola, Jorge Leandro, Markus Disse (2019) Reducing uncertainties in flood inundation outputs of a two-dimensional hydrodynamic model by constraining roughness in: *Natural Hazards and Earth System Sciences Discussions*; DOI: [10.5194/nhess-2018-369](https://doi.org/10.5194/nhess-2018-369)
23. Yang Yu, Yuanyue Pi, Xiang Yu, Zhijie Ta, Lingxiao Sun, Markus Disse, Fanjiang Zeng, Yaoming Li, Xi Chen, Ruide Yu (2019) Climate change, water resources and sustainable development in the arid and semi-arid lands of Central Asia in the past 30 years in: *Journal of Arid Land*; DOI: [10.1007/S40333-018-0073-3](https://doi.org/10.1007/S40333-018-0073-3); WOSUID: [WOS:000458965000001](#)
24. Sethuraman N. Rao, Jorge Leandro, Bhavana B. Nair, Punit Kumar Bhola, Markus Disse (2019) Flood inundation forecasts using validation data generated with the assistance of computer vision, in: *Journal of Hydroinformatics*; DOI: [10.2166/HYDRO.2018.044](https://doi.org/10.2166/HYDRO.2018.044); WOSUID: [WOS:000461175900003](#)
25. Grambow, M., Disse, M., Chen, K., Patalong, H., Uhl, H.-D. (2019) Sustainable Water Resource Management in China-Reflections from a comparative governance perspective, in: Koester, S., Reese, M., Jiane, Z. (Eds.) *Urban Water Management for Future Cities*, pp. 283-301, Springer International Publishing ISBN: 978-3-030-01487-2
26. Punit Kumar Bhola, Bhavana B. Nair, Jorge Leandro, Sethuraman N. Rao, Markus Disse (2018) Flood inundation forecasts using validation data generated with the assistance of computer vision, in: *Journal of Hydroinformatics* (2018) 21 (2): 240-256. <https://doi.org/10.2166/hydro.2018.044>, [link](#)
27. Dagnenet Fenta Mekonnen, D.F., Duan, Z., Rientjes T., Disse,M. (2018) Analysis of combined and isolated effects of land-use and land-cover changes and climate change on the upper Blue Nile River basin's streamflow in *Hydrol. Earth Syst. Sci.*, 22, 6187-6207, 2018; DOI: <https://doi.org/10.5194/hess-22-6187-2018>; [link](#)
28. Bhola, P.K., Leandro, J., Disse, M. (2018) Framework for Offline Flood Inundation Forecasts for Two-Dimensional Hydrodynamic Models in *Geosciences* 2018, 8, 346; DOI: doi.org/10.3390/geosciences8090346. [link](#)

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29. **Bittner, D., Sheikhy, T., Kohl, B., Disse, M., Chiogna, G. (2018)** Modeling the hydrological impact of land use change in a dolomite-dominated karst system in: *Journal of Hydrology*, Volume 567, 267-279; DOI://doi.org/10.1016/j.jhydrol.2018.10.017. [link](#)
 30. **Disse, M., Konnerth, I., Bhola, P.K., Leandro, J. (2018)** Unsicherheitsabschätzung für die Berechnung von Dynamischen Überschwemmungskarten – Fallstudie Kulmbach. In: Heimerl S. (eds) *Vorsorgender und nachsorgender Hochwasserschutz*, pp 350-357, Springer Vieweg, Wiesbaden, Germany; DOI: doi.org/10.1007/978-3-658-21839-3_50. [link](#)
 31. **Beatrice Dittes, Maria Kaiser, Olga Špačková, Wolfgang Rieger, Markus Disse, Daniel Straub (2018)** Risk-based flood protection planning under climate change and modeling uncertainty: a pre-alpine case study in *Nat. Hazards Earth Syst. Sci.*, 18, 1327-1347, 2018; [link](#)
 32. **Dagnenet Fenta Mekonnen, Markus Disse (2018)** Analyzing the future climate change of Upper Blue Nile River basin using statistical downscaling techniques in *Hydrological and Earth System Sciences*, 22, 2391–2408, Copernicus Publications; [link](#)
 33. **Yu Yang, Chen Xi, Philipp Huttner, Marie Hinnenthal, Andreas Brieden, Lingxiao Sun, Markus Disse (2018)** *Model based decision support system for land use changes and socio-economic assessments* in *Journal of arid land* 2018 vol. 10 nr. 2, Springer-Verlag; [link](#)
 34. **Ye Tuo, Giorgia Marcolini, Markus Disse, Gabriele Chiogna (2018)** *A multi-objective approach to improve SWAT model calibration in alpine catchments* in *Journal of Hydrology* 559/2018, 347-360, Elsevier B.V.; [link](#)
 35. **Tuo, Y., Marcolini, G., Disse, M.. Chiogna, G. (2018)** Calibration of snow parameters in SWAT: comparison of three approaches in the Upper Adige River basin (Italy) in *Hydrological Sciences Journal*; DOI: [10.1080/02626667.2018.1439172](https://doi.org/10.1080/02626667.2018.1439172); EID: 2-s2.0-85043340072
 36. **Markus Disse (2018)** FgHW Forum on the Flood Risk Management Directive (2007/60/EC) in *Hydrologie und Wasserbewirtschaftung*; WOSUID: [WOS:000445897600036](#)
 37. **Wolfgang Rieger, Sonja Teschemacher, Susanne Haas, Johanna Springer, Markus Disse (2017)** *Multikriterielle Wirksamkeitsanalysen zum dezentralen Hochwasserschutz* in *Wasserwirtschaft* 11/2017. Springer professional; [link](#)
 38. **Markus Disse, Iris Konnerth, Punit Kumar Bhola, Jorge Leandro (2017)** *Unsicherheitsabschätzung für die Berechnung von dynamischen Überschwemmungskarten - Fallstudie Kulmbach* in: *Wasserwirtschaft* 11/2017, Springer professional; [link](#)
 39. **Erwin Isaac Polanco, Amr Fleifle, Ralf Ludwig, Markus Disse (2017)** *Improving SWAT model Performance in the upper Blue Nile Basin using meteorological data Integration and subcatchment discretization* in: *Hydrology and Earth System Sciences* 21, 4907–4926, 2017 [link](#)
 40. **Giorgia Marcolini, Alberto Bellin, Markus Disse, Gabriele Chiogna (2017)**: *Variability in snow depth time series in the Adige catchment* in: *Journal of Hydrology: Regional Studies* 13 (2017) 240-254, Elsevier B.V. [link](#)
 41. **Yang Yu, Ruide Yu, Xi Chen, Guoan Yu, Miao Gan, Markus Disse (2017)**: *Agricultural water allocation strategies along the oasis of Tarim River in Northwest China* in: *Agricultural Water Management* 187 (2017) 24–36, Elsevier B.V. [link](#)
 42. **Yu, G.-A., Li, Z., Disse, M., Huang, H.Q. (2017)**: Sediment dynamics of an alloegenic river channel in a very arid environment in: *Hydrological Processes*; DOI: [10.1002/hyp.11171](https://doi.org/10.1002/hyp.11171); EID: 2-s2.0-85018566513
 43. **Guo-An Yu, Markus Disse, Yang Yu (2016)**: *Hysteresis effects in suspended sediment concentration of an alloegenic river channel in a very arid environment* in: *Geophysical Research Abstracts* Vol. 18, EGU2016-7051, 2016 [link](#)
 44. **Markus Disse (2016)**: *Sustainable land and water management of River Oases along the Tarim River* in: *Proc. IAHS*, doi:10.5194/piahs-373-25-2016 [link](#)

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45. **Ye Tuo, Zheng Duan, Markus Disse, Gabriele Chiogna (2016): Evaluation of precipitation input for SWAT modeling in Alpine catchment: A case study in the Adige river basin (Italy)** in: Elsevier B.V. [link](#)
46. **Zheng Duan, Junzhi Liu, Ye Tuo, Gabriele Chiogna, Markus Disse (2016): Evaluation of eight high spatial resolution gridded precipitation products in Adige Basin (Italy) at multiple temporal and spatial scales** in: Elsevier B.V. [link](#)
47. **Guo-An Yu, Markus Disse, He Qing Huang, Yang Yu, Zhiwei Li (2016): River network evolution and fluvial process responses to human activity in a hyper-arid environment – Case of the Tarim River in Northwest China** in: Elsevier B.V. Catena 147 (2016) 96–109 [link](#)
48. **Markus Disse, Andreas Brieden, Christian Rumbaur, Marie Hinnenthal, Yang Yu, Philipp Huttner(2016) Großräumige Hydrologische Modellierung und Decision Support System für eine nachhaltige Wasserverteilung im ariden Nordwesten Chinas** in: Forum für Hydrologie und Wasserbewirtschaftung Heft 37.16 [link](#)
49. **Eleni S. Bekri, Markus Disse, Panayotis C. Yannopoulos (2015): Bewässerungsstrategien und optimierte Wasserallokation im Einzugsgebiet des Alfeios Flusses, Griechenland** in: Forum für Hydrologie und Wasserbewirtschaftung Heft 35.15 [link](#)
50. **Ming Han, Chengyi Zhao, Gary Feng, Markus Disse, Fengzhi Shi, Juyan Li (2015) An eco-hydrological approach to predicting regional vegetation and groundwater response to ecological water conveyance in dryland riparian ecosystems** in: Elsevier [link](#)
51. **Patrick Keilholz, Punit Kumar Bhola and M. Disse (2015) Integrierte Betrachtung der Grundhochwasser-Problematik in der Gemeinde Tacherting (Bayern)** in: Korrespondenz Wasserwirtschaft 2015 (8) Nr.11; doi: 10.3243/kwe2015.11.003
52. **E. S. Bekri, P. C. Yannopoulos and M. Disse (2015) Optimizing Water Allocation under Uncertain System Conditions for Water and Agriculture Future Scenarios in Alfeios River Basin (Greece)—Part B: Fuzzy-Boundary Intervals Combined with Multi-Stage Stochastic Programming Model** in: Water 2015, 7(11), 6427-6466 doi:10.3390/w7116427 [link](#)
53. **E. S. Bekri, P. C. Yannopoulos and M. Disse (2015) Optimizing Water Allocation under Uncertain System Conditions in Alfeios River Basin (Greece), Part A: Two-Stage Stochastic Programming Model with Deterministic Boundary Intervals** in: Water 2015, 7(10), 5305-5344; doi:10.3390/w7105305 [link](#)
54. **E. S. Bekri, P. C. Yannopoulos and M. Disse (2015) The art of searching for extremes from Euclid to Dantzig: A historical pursuit of optimisation theory, as a basis for the evolution of optimisation methods of water resources management** in: IWA, DOI: 10.13140/RG.2.1.3942.1288
55. **T. Y. Gan, Mari Ito, S Huelsmann, X Qin, X Lu, S. Y Liang, P Rutschman, M Disse & H Koivosalo (2015) Possible climate change/variability and human impacts, vulnerability of African drought prone regions, its water resources and capacity building** in: Hydrological Sciences Journal, DOI: 10.1080/02626667.2015.1057143
56. **Patrick Keilholz, Markus Disse and Ümüt Halik (2015) Effects of Land Use and Climate Change on Groundwater and Ecosystems at the Middle Reaches of the Tarim River Using the MIKE SHE Integrated Hydrological Model** in: Water 2015, 7, 3040-3056; doi:10.3390/w7063040 [link.pdf](#)
57. **Yang Yu, Markus Disse, Ruide Yu, Guoan Yu, Lingxiao Sun, Philipp Huttner and Christian Rumbaur (2015) Large-Scale Hydrological Modeling and Decision-Making for Agricultural Water Consumption and Allocation in the Main Stem Tarim River, China** in: Water 2015, 7, 2821-2839; doi:10.3390/w7062821 [link.pdf](#)
58. **Ye Tuo, Gabriele Chiogna and Markus Disse (2015) A Multi-Criteria Model Selection Protocol for Practical Applications to Nutrient Transport at the Catchment Scale** in: Water 2015, 7, 2851-2880; doi:10.3390/w7062851 [link.pdf](#)

59. **C. Rumbaur, N. Thevs and M. Disse et al. (2015)** Sustainable management of river oases along the Tarim River (*SuMaRiO*) in Northwest China under conditions of climate change in: Earth System Dynamics 6, 83–107, 2015 www.earth-syst-dynam.net/6/83/2015/; doi:10.5194/esd-6-83-2015 [link.pdf](#)
60. **Wolfgang Rieger, Markus Disse (2014)** Quantifying the influence of artificial drainage on runoff generation in a agricultural catchment by using WaSiM-ETH 7.9.11 in: Geophysical Research Abstracts, Vol. 10, EGU2008-A-04129, 2008 [link](#)
61. **Eleni Bekri, Panayotis Yannopoulos, Markus Disse (2013)** A combined linear optimisation methodology for water resources allocation in Alfeios River Basin (Greece) under uncertain and vague system conditions [link](#)
62. **P. Fiener, K. Auerswald, F. Winter, and M. Disse (2013)** Statistical analysis and modelling of surface runoff from arable fields in central Europe, *Hydrol. Earth Syst. Sci.*, 17, 4121-4132, doi:10.5194/hess-17-4121-2013, 2013. [link](#)
63. **Cyfka, B., C. Rumbaur, M. Kuba & M. Disse (2013)** Sustainable Management of River Oases along the Tarim River, P.R. China (*SuMaRiO*) and the Ecosystem Services Approach. In: Geography, Environment & Sustainability, No. 4
64. **Disse, M., Drewes, J.E., Rutschmann, P. (2013)** Presentation of the International Master Programme "Environmental Engineering" at the Technical University Munich (TUM). *Hydrologie und Wasserbewirtschaftung* 57(3), 94-99
65. **Rieger, W.; Disse, M (2013)** Ein physikalisch basierter Modellansatz zur Beurteilung der Wirksamkeit einzelner und kombinierter dezentraler Hochwasserschutzmaßnahmen (A physically-based model approach to assess the effectiveness of single and combined measures of decentralized flood protection) In: *Hydrologie und Wasserbewirtschaftung*, Heft 1, S. 14 – 25, DOI: 10.5675/HyWa_2013,1_2
66. **Markus Disse, Christian Jacoby, Timo Heinisch (2010)** WASKlim: Entwicklung eines übertragbaren Konzeptes zur Bestimmung der Anpassungsfähigkeit sensibler Sektoren an den Klimawandel am Beispiel der Wasserwirtschaft in: Umweltbundesamt Texte 47/2010 [link](#)
67. **Winter, F.; Disse, M. (2010)** Saturated Hydraulic Conductivity from Field Measurements Compared to Pedotransfer Functions in a Heterogeneous Arable Landscape Journal of Earth Science, Vol. 21, No. 6, p. 923–930, ISSN 1674-487X, DOI: 10.1007/s12583-010-0145-6
68. **Rieger, W., Winter, F. und Disse, M. (2010)** Uncertainties of Soil Parameterisation in Process-Based Simulation of Distributed Flood Control Measures in: Advances in Geosciences, 27, 121–129, 2010, doi:10.5194/adgeo-27-121-2010. [link](#)
69. **Merz, B.; Hall, J.; Disse, M.; Schumann, A. (2010)** Fluvial flood risk management in a changing world in: Nat. Hazards Earth Syst. Sci., 10, 509-527, 2010. [link](#)
70. **Zhang, Q.; Disse, M.; Chen, G.; Su, B.; Jiang, T.; Xu, C.-Y. (2008)** Periodicity of sediment load and runoff in the Yangtze River basin and possible impacts from climatic changes and human activities in: *Hydrological Sciences–Journal des Sciences Hydrologiques*, 53(2) April 2008, S. 457-465 [link.pdf](#)
71. **Bronstert, A.; Bárdossy, A.; Bismuth, C.; Buiteveld, H.; Disse, M.; Engel, H.; Fritsch, U. (2007)** Multi-Scale Modelling of Land-Use Change and River Training Effects on Floods in the Rhine Basin in: *River Research and Applications* 23: S. 1102-1125 [link](#)
72. **Bronstert, Bárdossy, Bismuth, Buiteveld, Disse, Engel, Fritsch, Hundecha, Lammersen, Niehoff, Ritter (2007)** Erratum: Multi-Scale Modelling of Land-Use Change and River Training Effects on Floods in the Rhine Basin [link](#)
73. **Disse, M.; Pakosch, S.; Yörük, A. (2007)** Entwicklung eines Expertensystems zur Hochwasserfrühwarnung unter Berücksichtigung der Vorhersageunsicherheit in: *Hydrologie und Wasserbewirtschaftung*, Heft 5, S. 210 – 215

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74. **Huang, S.; Rauberg, J.; Apel, H.; Disse, M.; Lindenschmidt, K.-E. (2007)** *The effectiveness of polder systems on peak discharge capping of floods along the middle reaches of the Elbe River in Germany* in: Hydrol. Earth Syst. Sci., 11, 1391–1401, 2007 [link](#)
75. **Merz, B.; Friedrich, J.; Disse, M.; Schwarz, J.; Goldammer, J.G.; Wächter, J. (2006)** *Possibilities and Limitations of Interdisciplinary, User-oriented Research: Experiences from the German Research Network Natural Disasters* in: Natural Hazards (2006) Volume 38: Special Issue: German Research Network Natural Disasters: Towards an integrated risk assessment - Case studies in Germany, S. 3-20, DOI 10.1007/s11069-005-8597-1
76. **Kamprath, P.; Disse, M.; Hammer, M.; Köngeter, J. (2006)** *Assessment of Discharge through a Dike Breach and Simulation of Flood Wave Propagation* in: Natural Hazards (2006) Volume 38: Special Issue: German Research Network Natural Disasters: Towards an integrated risk assessment - Case studies in Germany, S. 63-78, DOI 10.1007/s11069-005-8600-x
77. **Disse, M.; Broich, K. (2004)** *Wellenausbreitung und Überflutungsflächen infolge von Deichbrüchen* in: Forum für Hydrologie und Wasserbewirtschaftung, Heft 06/04: Hochwassermanagement - Gefährdungspotentiale und Risiko der Flächennutzung, S.79-102, ISBN 3-937758-19-4
78. **Disse, M.; Kamrath, P.; Wilhelmi, J.; Köngeter, J. (2003)** *Simulation des Hochwasserwellenablaufes und der Ausbreitung von Überflutungsflächen unter Berücksichtigung von Deichbrüchen* in: Wasserwirtschaft, Heft 5/2003
79. **Disse, M.; Assmann, A. (2003)** *Bestimmung der Überflutungsflächen infolge von Deichbrüchen mit GIS-basierten Werkzeugen* in: Hydrologie und Wasserbewirtschaftung, Heft 06/03, S. 228-233
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