

EURO-FRIEND publications 2006 – 2009

- Adler M.-J. and Ungureanu, V. (2006) Multi-model Technique for low flow forecasting. IAHS Publ. **308**, 151-157.
- Bates, B.C., Kundzewicz, Z.W., Wu, S. and Palutikof, J.P. (Eds.) (2008) Climate Change and Water. Technical Paper of the Intergovernmental Panel on Climate Change, IPCC Secretariat, Geneva, 210 pg. (P. Döll one of 26 lead authors).
- Beven, K.J. (2006), A manifesto for the equifinality thesis. *J. Hydrol.*, **320**, 18-36.
- Beven, K.J. (2009) Environmental Modelling: An Uncertain Future?, Routledge, London.
- Beven, K.J. and Blazkova, S. (2008) Estimating the frequency of hydrological extremes with uncertainty: Skalka catchment, Czech Republic. *Geophysical Research Abstracts*, **10**(2), 1-1. ISSN 1029-7006.
- Bíba, M., Jakubowski W., Jařabáč M., Oceánská Z. and Vícha Z. (2007) The evaluation of low flow discharges in two experimental watersheds in the Beskydy Mts. IAHS Publ. **308**, 134-138.
- Bíba, M., Jakubowski W., Jařabáč M., Oceánská Z. and Vícha Z. (2008) Pravděpodobnosti nejmenších průtoků ve dvou beskydských experimentálních povodích vyhodnocené hydrologickým modelem Lowfestim (Probabilities of lowest discharges in two experimental catchments of Beskydy assessed by the Lowfesim hydrological model). *Zprávy Lesnického výzkumu*, **53**(1), 7-17.
- Blazkova, S. and Beven, K.J. (2007) Constraining uncertainty in flood frequency modelling on a large catchment in the Czech Republic [CD-ROM], Uppsala Univ., Sweden.
- Blazkova, S. and Beven, K.J. (2008) Flood frequency estimation at the Skalka catchment using continuous simulation with uncertainty. In: Blažková, Š. And Ředinová, J. (Eds) *Modelling Floods and Droughts, Uncertainty Estimates for Water Resources Management*. UNESCO workshop, T.G. Masaryk Water Research Institute, 21-26. ISBN 978-80-85900.
- Blazkova, S. and Beven K.J. (2009), A limits of acceptability approach to model evaluation and uncertainty estimation in flood frequency estimation by continuous simulation: Skalka catchment, Czech Republic, *Water Resour. Res.*, **45**, W00B16, doi:10.1029/2007WR006726.
- Blazkova, S. and Beven, K.J. (2009): Uncertainty in flood estimation. *Structure and Infrastructure Engineering*, **5**(4), 325-332, doi: 10.1080/15732470701189514.
- Bonell, M., McDonnell, J., Scatena, F.N., Seibert, J., Uhlenbrook, S. & van Lanen, H.A.J. (2006) HELPing FRIENDs in PUBs: charting a course for synergies within international water research programs in gauged and ungauged basins *Hydrological Processes* **20**(8): 1867-1874. (DOI: 10.1002/hyp.6196).
- Bower D., McGregor G.R., Hannah D.M. and Sheridan S.C. (2007) Development of a Spatial Synoptic Classification Scheme for Western Europe. *International Journal of Climatology*, **27**, 2017-2040.
- Brázdil R., Demarée G.R., Deutsch M., Garnier E., Kiss A., Luterbacher J., Macdonald N., Rohr C., Dobrovolný P., Kolár P. & Chromá K. (2009), European floods during the winter 1783/1784: scenarios of an extreme event during the ‘Little Ice Age’, *Theoretical and*

- Applied Climatology, (DOI 10.1007/s00704-009-0170-5)
- Bubeníčková, L., Říčicová, P., Bercha, Š., Jirák, J. and Kulasová, A. (2006) Modelling of flood waves in the Jezdecká experimental basin. Proceedings of the 11th biennial conference of the euromediterranean network of experimental and representative basins (ERB), 19-22 September 2006, Luxembourg, 190-194.
- Chopart, S. and Sauquet, E. (2008). Usage des jaugeages volants en régionalisation des débits d'étiage (Using spot gauging data to interpolate low flow characteristics). *Revue des sciences de l'eau / Journal of Water Science*, **21**(3), 267-281.
- Chen, L and Werner, M (2009) Utility Of Different Strategies In Using Emergency Flood Storage Basins In The Middle Yangtze River. China, 8th International Conference on Hydroinformatics, Concepcion, Chile.
- Choi, H.T. and Beven, K.J. (2007) Multi-period and multi-criteria model conditioning to reduce prediction uncertainty in an application of TOPMODEL within the GLUE framework. *J. Hydrol.*, **332** (3-4), 316-336.
- Croke, H.L. and Pappenberger, F. (2008) Evaluating forecasts of extreme events for hydrological applications: an approach for screening unfamiliar performance measures. *Meteorological Applications*, **15**(1), 181-197.
- Croke, H.L., Pappenberger, F. (2009) Ensemble Flood Forecasting: a review. *J. Hydrol.*, **375**(3-4), 613-626.
- Croke, H.L., Pappenberger, F. and Renaud, J-P. (2008) Multi-Method Global Sensitivity Analysis (MMGSA) for Modelling Floodplain Hydrological Processes. *Hydrological Processes*, **22**(11), 1660-167.
- Cole, G. A. And Marsh, T. (2006) An historical analysis of drought in England and Wales. *IAHS Publ.* **308**, 483-189.
- Colleuille, H., Beldring, S., Mengistu, Z., Haugen, L.E., Øverlie, T., Andersen, J. and Wong, W.K. (2008) Monitoring system for groundwater and soil water based on simulations and real-time observations: The Norwegian experience. In Sveinsson, O.G.B., S.M. Gardarsson, and S. Gunnlaugsdottir (Eds.): XXV Nordic Hydrologic Conference, NHP Report No. **50**, 329-339.
- Corzo G. A., Solomatine, D. P., Hidayat, de Wit, M., Werner, M., Uhlenbrook, S. and Price, R. K. (2009) Combining semi-distributed process-based and data-driven models in flow simulation: a case study of the Meuse river basin. *Hydrology and Earth System Sciences*, 1619-1634.
- Cranston, M., Werner, M., Janssen, A., Hollebrandse, F., Lardet, P., Oxbrow, P.J. and Piedra, M. (2007) Flood Early Warning System (FEWS) Scotland: An example of real time system and forecasting model development and delivery best practice In: DEFRA Conference on Flood and Coastal Management, Paper 02-3, York, UK.
- Dadson, S. J., Bell, V. A. and Jones, R. G. (2008) Evaluation of a grid-based river flow model using regional climate model output over Europe. *Geophysical Research Abstracts*, **10**, EGU2008-A-03853.
- Dakova, S. (2007) Recent extraordinary floods in Bulgaria. In: "Observing and modeling exceptional floods and rains", University of Calabria, Cosenza, 35-43.

- Dakova, S. (2007) Vulnerability assessment to water scarcity and drought by implication of climate changes of some Bulgarian rivers. Second AMHY-FRIEND Workshop on Hydrological Extremes, University of Calabria, 6-8 June 2007, Kozencia, Italy.
- Dakova, S. (2007) Hydrological extremes in Bulgaria – current and coming. XXIV IUGG -IAHS Conference, 3 – 14 July 2007, Perugia, Italy.
- Dakova, S. (2008) Assessment of Climate Change Impact on the Water Resources - case study on Struma and Osam river basins. Proc. of Int. Commference on "Global Environmental Changes: Challenges to science and sociency in Southeastern Europe", 19-21 May 2008, Sofia, [CD-ROM].
- Dakova S. (2008) Water resources availability under changing climate- a case study on transboundary rivers Struma/strimon and Mesta/Nestos. Proc. of "IV TWM International Symposium", Thesaloniki, 15-18 October 2008, <http://www.inweb.gr/twm4/abs/DAKOVA%20Snejana.pdf>.
- Dakova, S. et al. (2007) Characterization of the runoff regime and its stability in Danube catchment's, Hydrological monograph, XI, IHP-UNESCO, Budapest.
- Dakova, S. and Tzankov, K. (2008) Monitoring of the Water resources- status and further development. International Conference: Water sector in Bulgaria- status and perspectives, 28-29 May,2008, Sofia, Inter Expo Center.
- Demuth, S. and Gustard, A. (2009) Manual on Low-flow Estimation and Prediction. WMO – Operational Hydrology Report No. 50 / WMO-No. 1029, Geneva, 136 pg.
- Demeritt, D., Cloke, H., Pappenberger, F., Thielen, J., Bartholmes, J. and Ramos, M.-H. (2007). Ensemble predictions and perceptions of risk, uncertainty, and error in flood forecasting. Environmental Hazards, 7(2), 115-127.
- Demirel, M.C., Venancio, A. and Kahya, E. (2008) Flow Forecast by SWAT Model and ANN in Pracana Basin, Portugal. Advances in Engineering Software, doi:10.1016/j.advengsoft.2008.08.002.
- Demuzere, M. et al. (23 authors, among them Anne Fleig) (2008) COST 733 -WG4: applications of weather type classifications, Advances in weather and circulation types classifications and applications. Abstract in: Advances in weather and circulation type classifications & applications – Book of abstracts, 22-25 October 2008, Cracow, Poland, pg. 32.
- Diodato N. (2006) Spatial uncertainty modeling of climate processes for extreme hydrogeomorphological events hazard monitoring. ASCE Journal of Environmental Engineering **132**, 1530-1538.
- Diodato N., Ceccarelli M., Bellocchi G. (2008). Decadal and century-long changes in the reconstruction of erosive rainfall anomalies at a Mediterranean fluvial basin. Earth Surface Processes and Landforms **33**, 2078–2093.
- Diodato, N., Ceccarelli, M., (2009). Combining satellite and geospatial technologies for rainstorms hazard soft mapping. In Press on The Open Environmental Engineering Journal
- Dixon, H., Lawler, D. M. and Shamseldin, A. Y. (2006) Streamflow trends in western Britain. Geophysical Research Letters, **33**, L19406, doi:10.1029/2006GL027325.
- Döll, P. (2009) Vulnerability to the impact of climate change on renewable groundwater resources: a global-scale assessment. Environ. Res. Lett., **4**, 036006, doi: 10.1088/1748-

- 9326/4/3/035006.
- Döll, P. and Fiedler, K. (2008) Global-scale modeling of groundwater recharge. *Hydrol. Earth Syst. Sci.*, **12**, 863-885.
- Döll, P., Petschel-Held, G. and Leemans, R. (2008) Scale issues in scenario development. In Alcamo, J. (Ed.): *Environmental Futures: The Practice of Environmental Scenario Analysis. Developments in Integrated Environmental Assessment*, 3, Elsevier, 151-168. (ISBN-13: 978-0444532930)
- Döll, P., Berkhoff, K., Bormann, H., Fohrer, N., Gerten, D., Hagemann, S. and Krol, M. (2008) Advances and visions in large-scale hydrological modelling: findings from the 11th Workshop on Large-Scale Hydrological Modelling, *Adv. Geosci.*, **18**, 51-61.
- Döll, P., Fiedler, K. and Zhang, J. (2009) Global-scale analysis of river flow alterations due to water withdrawals and reservoirs, *Hydrol. Earth Syst. Sci. Diss.*, **6**, 4773-4812.
- Easey, J., Proudhomme, C., Hannah, D. M. (2006) Seasonal forecasting of river flows: a review of the stat-of-art. *IAHS Publ.* **308**, 158-162.
- Engeland, K., Hisdal, H. and Beldring, S. (2006) Predicting low flows in ungauged catchments. *IAHS Publ.* **308**, 163-168.
- Engeland, K. and Hisdal, H. (2009) A comparison of low flow estimates in ungauged catchments using regional regression and the HBV-model. *Water Resources Management*, doi: 10.1007/s11269-008-9397-7.
- Faulkner, H., Parker, D., Green, C. and Beven, K.J. (2007) Developing a translational discourse to communicate uncertainty in flood risk between science and the practitioner. *AMBIO*, **36** (8), 692-703
- Fendekova, M. and Fendek, M. (2006) Factors affecting the groundwater regime in the High Tatra Mountains. *IAHS Publ.* **308**, 617-622.
- Fendekova, M., Petrovic, P. (2008) Precipitation data homogeneity assessment for hydrological drought modelling in the Nitra basin. *Meteorological journal*, **11**, 147-151. ISSN 1335-339X.
- Fendek, M., Stojkovova, M., Fendekova, M. and Machlica, A. (2009) Influence of different geological conditions on groundwater runoff development. In: *Water: A vital resource under stress. 8th IAHS Scientific Assembly & 27th IAH Congress*, National Geophysical Research Institute, Hyderabad, India & Association of Hydrologists of India, 6 – 12 September 2009, [CD ROM].
- Fendekova, M., Fendek, M., Gregor, M., Nemethy, P. (2009) Surface and groundwater runoff interaction during drought periods in the Upper Nitra River catchment. In: *Water: A vital resource under stress. 8th IAHS Scientific Assembly & 27th IAH Congress*, National Geophysical Research Institute, Hyderabad, India & Association of Hydrologists of India, 6 – 12 September 2009, [CD ROM].
- Fendekova, M., Flakova, R., Slivova, V., Zenisova, Z., Skoda, P., Demeterova, B., Fendek, M., Gavurnik, J., Nemethy, P. and Krcmar, D. (2009) Influence of hydrological drought on surface and groundwater quantitative and qualitative parameters in Torysa River catchment, Eastern Slovakia. *Bulletyn Panstwowego Instititu Geologicznego*, **436**, 109-114.
- Feranec, J., Šúri, M., Oťahel, J. and Cebecauer, T. (2000) Landscape changes in Slovak Republic

- 1970's - 1990's. International Archives of Photogrammetry and remote Sensing, **32** (7C2), 64-70.
- Feranec, J., Oťahel, J., Machková, N., Nováček, J., Pravda, J., Cebecauer, T. and Husár, K. (2005) Land cover changes in administrative regions of Slovakia in 1990-2000. In: Himiyama, Y et al. (Eds.), Land use/cover changes in selected regions in the world, 4th Asahikava (International Geographical Union Study Group on Land Use/Cover Changes), Hokkaido University of Education, 25-31.
- Fiala, T. (2007) Trendy průměrných průtoků na českých tocích v období 1961-2005 (Trends of mean discharges at Czech rivers in period 1961-2005). In: Zborník príspevkov z 19. konference mladých hydrológov. SHMÚ, Bratislava, ISBN 978-80-88907-59-6, 7 pg.
- Fiala, T. (2008) Statistical Characteristics and Trends of Mean Discharges of Period 1961-2005. Journal of Hydrology and Hydromechanics, SAV, Bratislava, **56** (2), 133-140.
- Fiedler, K. and Döll, P. (2007): Global modeling of continental water storage changes. Advances in Geosciences, **11**, 63-68.
- Fleig, A. K. (2008) Test-application of COST-733 WTCs: Hydrological drought in North-Western Europe. Presentation at WG4 meeting of COST733, Brussels, Mar 2008.
- Fleig, A.K., Tallaksen, L.M., Hisdal, H. & Demuth, S. (2006) A global evaluation of streamflow drought characteristics. Hydrology and Earth System Sciences, **10**, 535-552.
- Fleig, A. K., Tallaksen, L.M. and Hisdal, H. (2006) Drought indices suitable to study linkages to large-scale climate drivers in regions with seasonal frost influence. IAHS Publ. **308**, 169-174.
- Fleig, A. K., Tallaksen, L. M., Hannah, D. and Hisdal, H. (2007) Identification of atmospheric patterns associated with severe regional drought in North-Western Europe. Abstract EGU General Assembly, Vienna, Austria.
- Fleig, A.K., Tallaksen, L.M., Hisdal, H., Hannah, D.M. and Stahl, K. (2008) Application of COST-733 WTCs: Associations between weather types and hydrological drought in north-western Europe. Abstract in: Advances in weather and circulation type classifications & applications – Book of abstracts, 22-25 October 2008, Cracow, Poland, pg. 38.
- Fleig, A.K., Tallaksen, L.M., Hisdal, H., Hannah, D.M. & Stahl, K. (2008) Regional hydrological droughts and weather types in north-western Europe. Abstract at the Northern European FRIEND & AMHY-FRIEND Joint Low Flow Meeting, Bratislava, Slovakia, Nov 2008.
- Fürst, T., Vodák, R., Šír, M. and Bíl, M. (2009) On the incompatibility of Richards' equation and finger-like infiltration in unsaturated homogeneous porous media. Water Resour. Res., **45**, W03408, doi:10.1029/2008WR007062.
- Gerrits, A.M.J., Savenije, H.H.G. and Pfister, L. (2007) Forest floor interception measurements. UNESCO IHP VI - Technical Documents in Hydrology, **81**, 81-86.
- Gottschalk, L., Krasovskáia, I., Leblois, E. and Sauquet, E. (2006) Mapping mean and variance of runoff in a river basin. Hydrol. Earth Syst. Sci., **10**, 469-484.
- Güntner, A., Schmidt, R. and Döll, P. (2007) Supporting large-scale hydrogeological monitoring and modelling by time-variable gravity data. Hydrogeology Journal, **15**(1), 167-170, doi: 10.1007/s10040-006-0089-1.

- Güntner, A., Stuck, J., Werth, S., Döll, P., Verzano, K. and Merz, B. (2007) A global analysis of temporal and spatial variations in continental water storage. *Water Resources Research*, **43**, W05416, doi.org/10.1029/2006WR005247.
- Halmova, D., Pekarova, P. and Miklanek, P. (2006) Rainfall interception in hornbeam and spruce forest in Slovakia. *Meteorologicky casopis*, **9**(3-4), 123-129.
- Hannaford, J. and Marsh, T. (2006) An assessment of trends in UK runoff and low flows using a network of undisturbed catchments. *International Journal of Climatology*, **26**(9). 1237-1253, doi: 10.1002/joc.1303
- Hannaford J., Lloyd-Hughes B., Keef C., Parry S. and Prudhomme C. Examining the large-scale spatial coherence of European drought using regional indicators of rainfall and streamflow deficit. *Hydrological Processes*, Special issue S150 Large Scale Hydrology (in press).
- He, H.Y., Cloke, H.L., Wetterhall, F., Pappenberger F., Freer, J. and Wilson, M. (2009) Tracking the uncertainty in flood alerts driven by grand ensemble weather predictions. *Meteorological Applications*, **16**(1), 91-101.
- Herrmann, A. (2008) 30 Jahre integraler Forschungsansatz zum Abflussbildungsprozess und 60 Jahre Abflussbeobachtungen im Oberharz (30 years of integrated scientific investigations of the runoff formation processes and 60 years of runoff observations in the Upper Harz Mountains). *Hydrol. Wasserbewirtsch.* **52**(3), 132-136.
- Herrmann, A. and Duncker, D. (2008) Runoff formation in a tile-drained agricultural basin of the Harz Mountain foreland, Northern Germany. FRIEND 5/ERB Workshop on Water balance and runoff/water quality generation in tile-drained agricultural catchments Brno, Czech Republic, 4-6 September 2007, *Soil & Water Res.*, **3**, 83-97.
- Herrmann, A. and Schumann, S. (2009) Untersuchung des Abflussbildungsprozesses als Kontrollmechanismus für den Gebietswasserumsatz des Oberharzer Einzugsgebiets Lange Bramke (Investigations of the runoff formation process as a control mechanism for monitoring the basin turnover in the Lange Bramke catchment, Upper Harz Mountains). *Hydrol. Wasserbewirtschaftung*, **53**(2), 65-79.
- Herrmann, A. and Schumann S. (2009) Runoff formation in a small mountainous basin dominated by a fractured rock aquifer: results from the tracer based Integrated Catchment Approach (ICA). UNESCO IHP VI - Technical Documents. in *Hydrology*, **84**, 103-110.
- Herrmann, A., Schöniger, M., Schumann, S. and Thies, R. (2006) Integrative experimentelle Erfassung und Modellierung des Abflussbildungsprozesses im paläozoischen Mittelgebirge. *Dresdner. Schr. z. Hydrol.*, **5**, 172-180.
- Herrmann, A., Schumann, S., Thies, R., Duncker, D. and Stichler, W. (2008) A runoff generation process study for fractured rock aquifers of Paleozoic age based on the ICA concept and tracing experiments in Lange Bramke basin, Harz Mountains. UNESCO IHP VI - Technical Documents. in *Hydrology*, **81**, 101-108.
- Herrmann, A., Schöniger, M. and Schumann, S. (2006) A new, physically-based, numerical runoff formation model system for the study of surface-close groundwater relationships and system reactions upon environmental changes. *IAHS Publ.* **308**, 623-628.
- Heynert, K., Whitfield, D. and Werner, M. (2007) The Role of Modern Flood Forecasting Systems in the Flood Loss Mitigation - A Country Wide Case in England and Wales. In: Charting

The Course: New Perspectives in Floodplain Management, ASFPM 31st Annual Conference, Norfolk, VA, USA.

- Hirabayashi, Y., Kanae, S., Motoya, K., Masuda, K. and Döll, P. (2008) A 59-year (1948-2006) global near-surface meteorological data set for land surface models. Part I: Development of daily forcing and assessment of precipitation intensity. *Hydrological Research Letters*, **2**, 36-40.
- Hirabayashi, Y., Kanae, S., Motoya, K., Masuda, K. and Döll, P. (2008) A 59-year (1948-2006) global near-surface meteorological data set for land surface models. Part II: Global snowfall estimation. *Hydrological Research Letters*, **2**, 65-69.
- Hisdal, H., Holmqvist, E., Jónsdóttir J.F., Jónsson, P., Järvet, A., Lindström, G., Kolcova, T., Kriauciuniene, J., Kuusisto, E., Lizuma, L., Meilutyte-Barauskiene, D., Reihan, A. and Roald, L.A. (2007) Climate change signals in streamflow data in Nordic and Baltic countries. In: Heinonen, M. (Ed.) Climate and Water. Proc. of the third Int. Conf. on Climate and Water, Helsinki, Finland, 3-6 September 2007, 182-187.
- Hlavčová, K., Parajka, J., Szolgay, J. and Kohnová, S. (2006) Grid-based and conceptual approaches to modeling impact of climate change on runoff. *Slovak Journal of Civil Engineering*, **XIV** (1), 19-29.
- Hlavčová, K., Szolgay, J., Kohnová, S., Horvát, O. and Papánková, Z. (2006) Parametrization of land-use characteristics in distributed rainfall-runoff modeling. *Meteorological Journal*, **9**, 131-138.
- Hlavčová, K., Horvát, O., Szolgay, J., Danko, M. and Kohnová, S. (2007) Scenarios of Land Use Changes and Simulations of Hydrological Responses in the Poprad River Basin. *Meteorological Journal*, **10**, 199-203, ISSN 1335-339X.
- Hlavčová, K., Horvát, O., Szolgay, J., Danko, M. and Kohnová, S. (2007) Assessing Land Use Change Impact on the Runoff Regime in Selected Basins in Slovakia. In: Petraš, J. (Ed.), Water Management and Hydraulic Engineering, Proc. of 10th Int. Symposium. Croatia, Šibenik, 4-9 September 2007 - Zagreb: Faculty of Civil Engineering, [CD-ROM], 8 pg., ISBN 978-953-6272-22-8.
- Hlavčová, K., Lapin, M., Szolgay, J. and Kohnová, S. (2007) A simple model for estimation of climate change induced extreme daily precipitation changes for flash flood modelling. In: Heinonen, M.. (Ed.), 3rd Int. Conf. on Climate and Water: 3-6 September 2007, Helsinki, Finland, Finnish Environment Institute SYKE, 188-193.
- Holko, L. and Kostka, Z. (2008) Spatial and temporal variations of electric conductivity in selected streams of the upper and central Liptov region. In Slovak with an English abstract. *Acta Hydrologica Slovaca*, **9**(1), 89-97.
- Holko, L. and Kostka, Z. (2008) Analysis of runoff regime by means of flashiness index. In Slovak with an English abstract. *Acta Hydrologica Slovaca*, **9**(2), 262-268.
- Holko, L., Herrmann, A. and Kulasová, A. (2006) Changes of runoff regime in small catchments in central Europe – are there any? *IAHS Publ.* **308**, 508-513.
- Holko, L., Šanda, M., Kostka, Z. and Michalko, J. (2008) Mean residence times of water in catchments with different areas. In Slovak. *Hydrologie malého povodí* 2008, (Eds. Šír, M., Tesař, M. and Lichner, L.), Ústav pro hydrodynamiku AV ČR, Praha, 107-113.

- Holko, L., Hlavatá, H., Kostka, Z. and Novák, J. (2009) Hydrological regimes of small catchments in the High Tatra Mountains before and after extraordinary wind-induced deforestation. *Folia Geographica, Series Geographica Physica*, **XL**, 33-34.
- Horáček, S., Kašpárek, L. and Novický, O. (2008) Estimation of climate change impact on water resources by using Bilan water balance model. In: Brilly, M. and Šraj, M. (Eds.), XXIVth Conf. of the Danubian Countries on the Hydrological Forecasting and Hydrological Bases of Water Management. Bled, 2 June 2008. Ljubljana: Slovenian National Committee for the IHP UNESCO, pg. 105, ISBN 978-961-91090-3-8. Also published as: IOP Conference Series: Earth and Environmental Science, No. 4, 56-62, ISSN 1755-1307.
- Hughes, D., Greenwood, P., Blair, G., Coulson, G., Grace, P., Pappenberger, F., Smith, P. (Smith, Paul) and Beven, K.J. (2008) An experiment with reflective middleware to support grid-based flood monitoring. *Concurrency and Computation-Practice & Experience*, **20**(11), 1303-1316.
- Hunger, M. and Döll, P. (2008) Value of river discharge data for global-scale hydrological modeling. *Hydrol. Earth Syst. Sci.*, **12**, 841-861.
- Jakubowski, W. and Tokarczyk, T. (2007) The maximum low flow parameters depending on assumed threshold level. Abstract, XXIV Conference "General Assembly Earth, Our Changing Planet", <http://www.iugg2007perugia.it/webbook/>, Perugia, Italy.
- Jakubowski W. and Tokarczyk T. (2008) Temporal variability of low flow intensity in Nysa Klodzka River basin. *Czasowa zmienność intensywności niżówek w zlewni Nysy Kłodzkiej. Meteorologia, Hydrologia, Ochrona Środowiska – kierunki badań i problemy* (red. Alfreda Dubickiego). Wydawnictwo IMGW, s. Monografie, Warszawa.
- Jones P. and Macdonald, N. (2007) Making space for unruly water: sustainable drainage systems and the management of surface runoff. *Geoforum*, **38**(3), 534-544 (doi:10.1016/j.geoforum.2006.10.005).
- Jong, C., de, Lawler, D.M. and Essery, R. 2009. Mountain Hydroclimatology and Snow Seasonality - Perspectives on climate impacts, snow seasonality and hydrological change in mountain environments, *Hydrological Processes*, **23**, 955–961, doi: 10.1002/hyp.7193.
- Kašpárek, L. (2007) Projevy změny klimatu v hydrologickém režimu krajiny (Manifestations of the climate changes in the hydrological regime of the landscape). In: Konference krajinné inženýrství 2007. Praha, 20 September 2007. Pardubice: Česká společnost krajinných inženýrů, 24-32, ISBN 978-80-01037-72-0.
- Kašpárek, L. and Novický, O. (2007) Předpokládané dopady klimatické změny na vodní zdroje v ČR. (Predicted impacts of climate changes on water resources of the Czech Republic). In: Škultétyová, I. (Ed.). AQUA 2007 - Zborník prác z vedecko - odbornej konferencie. Trenčín, 20.6.2007. Trenčín : Slovenská technická univerzita v Bratislave, 2007, s. 45-55, ISBN 978-80-227-2692-4.
- Kašpárek, L. and Novický, O. (2008) A method for reducing uncertainty in water balance simulation. In: Blažková, Š. and Ředinová, J. (Eds.) Modelling Floods and Droughts. Praha, 14 March 2008. Praha: Výzkumný ústav vodohospodářský T.G. Masaryka, v.v.i., 2008, 51-56. ISBN 978-80-85900-78-1.
- Kašpárek, L. and Novický, O. (2008) Approaches for drought analysis and their application. In:

-
- Blažková, Š. and Ředinová, J. (Eds.) Modelling Floods and Droughts. Praha, 14 March 2008. Praha: Výzkumný ústav vodohospodářský T.G. Masaryka, v.v.i., 2008, 63-68. ISBN 978-80-85900-78-1.
- Kašpárek, L., Novický, O. and Uhlík, J. (2007) Possible impacts of climate change on groundwater resources and groundwater flow in well developed water bearing aquifers. In Heinonen, M. (Ed.) Conf. on Climate & Water, Helsinki, Finnish Environment Institute, 358-364, ISBN 978-95-21127-90-8.
- Kingston, D.G., Hannah, D.M., McGregor, G.R. and Lawler D.M., (2007) Assessing large-scale hydroclimatological variability and linkages across northwest Europe. In: FRIEND International Seminar on Climatic and anthropogenic impacts on the variability of water resources, G. Mahé (Ed.), Technical Document in Hydrology No. **80**, UNESCO Paris, 19-26.
- Kingston, D.G., McGregor, G.R., Hannah, D.M. and Lawler, D.M., (2007) Large-scale climatic controls on New England river flow. *Journal of Hydrometeorology*, **8**, 367-379.
- Kingston, D.G., Hannah, D.M., Lawler, D.M. and McGregor, G.R. (2009) Climate-river flow relationships across montane and lowland environments in northern Europe. *Hydrological Processes*, **23**, 985-996.
- Kjeldsen TR and Jones DA (2006) Prediction uncertainty in a median based index flood method using L-moments. *Water Resources Research*, **42**, W07414, doi :10.1029 / 2005WR004069.
- Kjeldsen TR and Jones DA (2007) Estimation of the index flood using data transfer in the UK. *Hydrological Sciences Journal*, **52**(1), 86-98.
- Kjeldsen TR and Jones DA (2009) A formal statistical model for pooled analysis of extreme floods. *Hydrology Research*, **40**(5), 465-480, doi: 10.2166/nh.2009.055.
- Kjeldsen T. R., D. A. Jones (2009), An exploratory analysis of error components in hydrological regression modeling, *Water Resources Research*, **45**, W02407, doi:10.1029/2007WR006283.
- Kjeldsen, T.R., Lamb, R. and Blazkova, S. (2009) Uncertainty In Flood Frequency Analysis. In: Beven, K.J. and Hall, J. (Eds): Applied uncertainty analysis for flood risk management. World Scientific / Imperial College Press, 2009.
- Koboltschnig, G.R., Schoener, W., Zappa, M. and Holzmann, H. (2007) Contribution of glacier melt to stream runoff: if the climatically extreme summer of 2003 had happened in 1979. *Annals of Glaciology*, **46**, 303-308.
- Kohnová, S., Szolgay, J., Solín, L. and Hlavčová, K. (2006) Regional methods for prediction in ungauged basins. Case studies. Key Publishing, Ostrava, 113 pg., ISBN 80-87071-02-6.
- Kondapali, S., Werner, M. and Wright N. (2008) Comparing forecast skill of inundation models of differing complexity: The case of Upton upon Severn, FloodRisk European Conference on Flood Risk Management Research in Practice, 30 Sep. – 2 Oct 2008, Oxford, UK.
- Kostka, Z. (2009) Runoff response to rainfall even in the mountain catchment. In Slovak with English abstract. *Acta Hydrologica Slovaca*, **10**(1), 113-122.
- Krein, A., Salvia-Castellvi, M., Iffly, J.F., Barnich, F., Matgen, P., van den Bos, R., Hoffmann, L., Pfister, L., Hofmann, H. and Kies, A. (2007) Uncertainty in chemical hydrograph separation. UNESCO IHP VI - Technical Documents in Hydrology, **81**, 21-26.

- Kulasová, B., Boháč, M. and Fiala, T. (2008) Dopady změny klimatu na minimální průtoky (Impacts of climate change on low flows). Sborník z Magdeburského semináře o ochraně vod 2008. Programmkomitee des Magdeburger Gewässerschutzseminars, Magdeburg, 240 pg.
- Kulasová, B., Boháč, M. and Fiala, T. (2008) Climate change impacts on low flows. Sborník příspěvků z workshopu Adolfa Patery 2008, Praha, 95-102.
- Kundzewicz, Z.W. and Döll, P. (2009) Will groundwater ease freshwater stress under climate change? *Hydrological Sciences Journal*, **54**(4), 665-675, doi: 10.1623/hysj.54.4.665.
- Kundzewicz, Z.W., Mata, L.J., Arnell, N.W., Döll, P., Kabat, P., Jiménez, B., Miller, K.A., Oki, T., Sen, Z. and Shiklomanov, I.A. (2007) Freshwater resources and their management. In: Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Eds. Parry, M.L., Canziani, O.F., Palutikof, J.P., van der Linden, P.J. and Hanson, C.E.). Cambridge University Press, Cambridge, UK, 173-210.
- Kundzewicz, Z.W., Mata, L.J., Arnell, N.W., Döll, P., Jimenez, B., Miller, K., Oki, T., Sen, Z. and Shiklomanov, I. (2008) The implications of projected climate change for freshwater resources and their management. *Hydrological Sciences Journal*, **53**(1), 3-10.
- Kundzewicz, Z. W., Mata, L. J., Arnell, N. W., Döll, P., Jimenez, B., Miller, K., Oki, T. and Sen. Z. (2009). *Hydrological Sciences Journal* **54**(2), 406-415, doi:10.1623/hysj.54.2.406.
- Laaha, G. and Bloschl, G. (2006) Low flow estimation in Austria. *IAHS Publ.* **308**, 117-121.
- Lanen H.A.J. van (2006) Drought propagation through the hydrological cycle. *IAHS Publ.* **308**, 122-127.
- Lanen, H.A.J. van, and Tallaksen, L.M. (2007) Hydrological drought, climate variability and change. In: Heinonen, M. (Ed.) Climate and Water. Proc. of the 3rd Int. Conf. on Climate and Water, Helsinki, Finland, 3-6 September 2007, 488-493.
- Lanen, H.A.J. van, and Tallaksen, L.M. (2008) Drought in Europe. In: Lambert, M., Daniell, T. & Leonard, M. (Eds.). Proc. Water Down Under 2008, Adelaide, Australia, 14-17 April 2008, 98-108.
- Lanen, H.A.J. van, and Fendeková, M. (2009) Forschung zu Niedrigwasser und Dürre in Europa: Ergebnisse und Ziele. *Hydrologie und Wasserbewirtschaftung, Hydrologischen Notizen – UN Waterforum*, 53(1): 38-40.
- Lanen, H.A.J. van, and Tallaksen, L.M. (2009) Hydrological Drought: Monitoring, Prediction and Forecasting. In: Kovar, P., Maca, P. & Redinova, J. (Eds.) Water Policy 2009, Water as a Vulnerable and Exhaustible Resource. Proc. of the joint Conf. of APLU and ICA, 23-26 June 2009, Prague, CULS Prague, Czech Republic, 139-142.
- Lanen, H.A.J. van, Tallaksen, L.M and Rees, G. (2007) Droughts and climate change. In: Commission Staff Working Document Impact Assessment (SEC(2007) 993), Accompanying document to Communication Addressing the challenge of water scarcity and droughts in the European Union (COM(2007) 414), Commission of the European Communities, Brussels, Belgium, 13 pg.
- Lanen, H.A.J. van, Tallaksen, L.M., Candel, M., Carrera, J., Crooks, S., Engeland, K., Fendeková, M., Haddeland, I., Hisdal, H., Horacek, S., Jódar Bermúdez, J., van Loon, A.F., Machlica,

- A., Navarro, V., Novický, O. and Prudhomme, C. (2008) Database with hydrometeorological variables for selected river basins: Metadata Catalogue, WATCH Technical Report No. 4, 86 pg.
- Lanen, H.A.J. van, Tallaksen, L.M., Piani, C. and Pieri, P. (2008) International Summer School on Hydrological Drought and Global Change, Trieste, Italy, 22-27 June 2008. WATCH Technical Report No. 8, 45 pg.
- Lanen, H.A.J. van, Kundzewicz, Z.W., Tallaksen, Hisdal, H., L.M., Fendeková, and Prudhomme, C. (2008) Indices for different types of droughts and floods at different scales. WATCH Technical Report No. 11, 17 pg.
- Lang, C., Gille, E., Francois, D. and Auer, J.-C. (2006) Le dispositif PRESAGES: un ensemble d'outils pour la prévision des étiages. IAHS Publ. **308**, 145-150.
- Lang, M., Renard, B., Sauquet, E., Bois, P., Dupeyrat, A., Laurent, C., Mestre, O., Niel, H., Neppel, L. and Gailhard, J. (2006) A national study on trends and variations of French floods and droughts. IAHS Publication **308**, 514-519.
- Lang, C., Gille, E., Francois, D. and Drogue, G. (2008) Improvement of a lumped rainfall-runoff structure and calibration procedure for predicting daily low flow discharges. Journal of Hydrology and Hydromechanics, **56**(1), 59-71.
- Lardet, P., Cranston, M. and Werner, M. (2007) Flood Early Warning System (FEWS) for South West Scotland: A State-of-the-Art Real Time Forecasting System. In: Charting The Course: New Perspectives in Floodplain Management, ASFPM 31st Annual Conference, Norfolk, VA, USA.
- Lehner, B., Döll, P., Alcamo, J., Henrichs, H. and Kaspar, F. (2006) Estimating the impact of global change on flood and drought risks in Europe: a continental, integrated assessment. Climatic Change, **75**, 273-299.
- Lichner, L., Hallett, P.D., Feeney, D.S., Ďugová, O., Šír, M. and Tesař, M. (2007) Field measurement of soil water repellency and its impact on water flow under different vegetation. Biologia, Bratislava, **62**(5), 537 – 541.
- Lichner, L., Orfánus, T., Nováková, K., Šír, M and Tesař, M. (2007) The impact of vegetation on hydraulic conductivity of sandy soil. Soil & Water Research, **2**(2), 59-66.
- Lichner, L., Nagy, V., Houšková, B., Šír, M. and Tesař, M. (2008) Impact of land-use change on hydraulic properties of wettable and hydrophobic soils. Cereal Research Communications, **36**, 1599-1602.
- Loon, A.F. van, Rakovec, O., Horáček, S., Tallaksen L.M., Hisdal, H., Candel Pérez M., Lanen H.A.J., van & Novický, O. (2008) Drought propagation in contrasting catchments in Norway, Czech Republic and Spain: preliminary results. Abstract in: UNESCO EURO-FRIEND International Workshop on Low Flows and Drought, Bratislava, 10-12 November 2008.
- Loon, A.F. van, van Lanen, H.A.J., Seibert, J. and P.J.J.F. Torfs (2009) Adaptation of the HBV model for the study of drought propagation in European catchments. Geophysical Research Abstracts EGU2009-9589, EGU General Assembly 2009.
- Macdonald N. (2006), An underutilized resource: historical flood chronologies a valuable resource in determining periods of hydro-geomorphic change. In: Rowan J.S., Duck R.W. and

- Werritty A. (Eds.). IAHS/ICCE International Symposium on Sediment Dynamics and the Hydromorphology of Fluvial Systems, IAHS Publ. **306**, 120-127.
- Macdonald N. (2007) Epigraphic records: a valuable resource in re-assessing flood risk and long-term climate variability. *Environmental History*, **12**(1), 136-140.
- Macdonald N. and Jones P. (2006) The inclusion of sustainable drainage systems in flood management in the post industrial city. *Scottish Geographical Journal*, **122**(3), 233-246 (doi: 10.1080/00369220601106460).
- Macdonald N. and Jones P. (2006) The retro-fitting of Sustainable Drainage Systems into established urban areas and its interdisciplinary demands: A case study of Glasgow, British Hydrological Society: Proc. of the 9th National Hydrological Symposium, University of Durham, 10-13 September 2006, 79-83, ISBN:1903741149.
- Macdonald N. and Phillips I.D. (2006) Long-term precipitation variations in Scotland derived from non-standard sources, 1860-. *Scottish Geographical Journal*, **122**(1), 1-18 (doi: 10.1080/00369220600830771).
- Macdonald N., Black A. R., Werritty A. and McEwen L. J. (2006) Historical and pooled flood frequency analysis for the River Tay at Perth, Scotland. *Area*, **38**(1):34-46 (doi:10.1111/j.1475-4762.2006.00673.x).
- Macdonald N., Phillips I.D. and Thorpe J. (2008) Reconstruction of long-term precipitation records for Edinburgh: an examination of the mechanisms responsible for temporal variations in precipitation, *Theoretical and Applied Climatology*, **92**, 141-154 (doi: 10.1007/s00704-007-0324-2).
- Machlica, A., Stojkovova, M., Bara, M. (2007) Impact of meteorological drought on the baseflow formation. In: IUGG XXIV 2007 conference (IAHS), Perugia, Italy, 2007, <http://www.iugg2007perugia.it/webbook/>
- Machlica, A., Stojkovova, M. and Fendekova, M. (2008) Assessment of hydrological drought occurrence in Nitra River catchment (Slovakia) in the period 1976 – 2005. Abstract EGU General Assembly 2008, **10**, EGU2008-A-09329.
- Machlica, A., Stojkovova M. (2008) Groundwater drought in different geological conditions. Proc. 24th Conference of the Danubian Countries on the hydrological forecasting and hydrological bases of the water management. Bled, Slovenia, 2-4 June 2008, 1-10. CD: ISBN 978-961-91090-2-1; published in IOP Conf. Series: Earth and Environmental Science 4 (2008) 012010, doi: 10.1088/1755-1307/4/1/012010. Full text accessible at: <http://www.iop.org/EJ/toc/1755-1315/4/1>.
- Massei N., Laignel B., Rosero E., Motelay-Massei A., Deloffre J., Yang Z.-L. and Rossi A. (2009) A wavelet approach to the short-term to pluridecennial variability of streamflow in the Mississippi river basin from 1934 to 1998. *Int. J. Clim.*, in press.
- Massei N., Laignel B., Deloffre J., Mesquita J., Motelay A., Lafite R. and Durand A. (2009) Long-term hydrological changes of the Seine river flow (France) and their relation to the North-Atlantic Oscillation over the period 1950-2008. *Int. J. Clim.* (special issue), in press.
- Massei, N., A. Durand, J. Deloffre, J. P. Dupont, D. Valdes, and B. Laignel. (2007) Investigating possible links between the North Atlantic Oscillation and rainfall variability in northwestern France over the past 35 years. *J. Geophys. Res. - Atm.*, **112**, 1-10.

- McDonnell, J.J., Sivapalan, M., Vaché, K., Dunn, S., Grant, G., Haggerty, R., Hinz, C., Hooper, R., Kirchner, J., Roderick, M.L., Selker, J. and Weiler, M. (2007) Moving beyond heterogeneity and process complexity: A new vision for watershed hydrology. *Water Resources Research*, **43**, W07301, doi: 10.1029/2006WR005467.
- Miklanek, P. and Pekarova, P. (2007) Influence of forest on snowmelt runoff in small highland basins in Slovakia. *Folia Geographica, series Geographica - Physica*, **XXXVII-XXXVIII**, 51-62.
- Milly, P. C. D., Betancourt, J., Falkenmark, M., Hirsch, R.M., Kundzewicz, Z.W., Lettenmaier, D.P. and Stouffer, R.J. (2008) Stationarity Is Dead: Whither Water Management? *Science*, **319**, 573-574.
- Monk W.A., Wood P.J., Hannah D.M. and Wilson D.A. (2008) Macroinvertebrate community response to inter-annual and regional river flow regime dynamics. *River Research and Applications*, **24**, 988–1001 doi: 10.1002/rra.1120.
- Monk W.A., Wood P.J., Hannah D.M., Wilson, D.A., Extence C.A. and Chadd R.P. (2006) Flow variability and macroinvertebrate community response within riverine systems. *River Research and Applications*, **22**, 595-615
- Monk W.A., Wood, P.J., Hannah, D.M. and Wilson, D.A. (2007) Selection of river flow indices for the assessment of hydroecological change. *River Research and Applications*, **23**, 113–122
- Novický, O., Kašpárek, L. and Uhlík, J. (2007) Possible impacts of climate change on groundwater resources and groundwater flow in well developed water bearing aquifers. In: Proc. of 3rd Int. Conf. on climate and water, Helsinki, Finland, September 2007, ISBN 978-952-11-2790-8.
- Novický, O. and Kašpárek, L. (2008) Možné analýzy sucha a jejich aplikace (Possible analyses of drought and their application). In: Blažková, Š. and Ředinová, J. (Eds.) Modelling Floods and Droughts. Praha, 14 March 2008. Praha: Výzkumný ústav vodohospodářský T.G. Masaryka, v.v.i., 2008, 63-68. ISBN 978-80-85900-78-1.
- Novický, O., Kašpárek, L. and Vyskoč, P. (2008) Integrated simulation by hydrological, hydraulic and water management modelling techniques in support of water resources management in the Czech Republic. In: Taniguchi, M., Burnett, W.C., Fukushima, Y., Haigh (Eds.), From Headwaters to the Ocean, Kyoto (Japan), 1 October 2008. CRC Press/Balkema, Leiden, the Netherlands, 243-248, ISBN 978-0-415-47279-1.
- Novický, O., Vyskoč, P., Kašpárek, L., Treml, P. and Mrkvíčková, M. (2008) Assessment of possible impacts of climate change on water resources in the Vltava River basin. In Internationale Kommission zum Schutz der Elbe Magdeburger Gewässerschutzseminar 2008. Magdeburg (Germany), 7 October 2008. Internationale Kommission zum Schutz der Elbe (IKSE), 164-168.
- Pappenberger, F. and Beven, K.J. (2006) Ignorance is bliss - or 7 reasons not to use uncertainty analysis. *Water Resources Research*, **42**(5): doi: 10.1029/2005WR004820.
- Pappenberger, F., Harvey, H., Beven, K.J., Hall, J. and Meadowcroft, I. (2006) Decision tree for choosing an uncertainty analysis methodology: a wiki experiment. *Hydrological Processes*, **20**(17), 3793-3798.
- Pappenberger, F. , Iorgulescu, I. and Beven, K.J. (2006) Sensitivity analysis based on regional

- splits and regression trees (SARS-RT). Environmental Modelling & Software, **21**(7), 976-990.
- Pappenberger, F., Matgen, P., Beven, K.J., Henry, J.B., Pfister, L. and Fraipont de, P. (2006) Influence of uncertain boundary conditions and model structure on flood inundation predictions. Advances in Water Resources, **29**(10), 1430-1449.
- Pappenberger, F., Frodsham, K., Beven, K., Romanowicz, R. and Matgen, P. (2007) Fuzzy set approach to calibrating distributed flood inundation models using remote sensing observations. Hydrology and Earth System Sciences, **11**(2), 739-752.
- Pappenberger, F., Beven, K.J., Frodsham, K., Romanowicz, R. and Matgen, P. (2007) Grasping the unavoidable subjectivity in calibration of flood inundation models: A Vulnerability weighted approach. Journal of Hydrology, **333**(2-4), 275-287.
- Pappenberger, F., Buizza, R., Bodis, K. and Ghelli, A. (2009) The skill of probabilistic forecasts under observational uncertainties within the Generalized Likelihood Uncertainty Estimation framework for hydrological applications. Journal of Hydrometeorology, **10**(3), 807:819.
- Pappenberger, F. and Buizza, R. (2009) The skill of ECMWF predictions for hydrological modelling. Weather and Forecasting, **24**(3), 749:766.
- Pappenberger, F., Bartholmes, J., Thielen, J., Cloke, H.L., de Roo, A., Buizza R. (2008) New dimensions in early flood warning across the globe using GRAND ensembles. Geophysical Research Letters, **35**(10), Art No. L10404.
- Pappenberger, F., Scipal, K. and Buizza, R. (2008) Hydrological aspects of meteorological verification. Atmospheric Science Letters, **9**, 43-52.
- Pappenberger, F., Beven, K.J., Ratto, M. and Matgen, P. (2008) Multi-method global sensitivity analysis of flood inundation models. Advances in Water Resources, **31**(1), 1-14
- Pekarova, P., Sebin, M., Pekar, J., Onderka, M. and Miklanek, P. (2008) Simulation of the impact of fertilizer dozes on nitrate concentrations in the stream. Cereal Research Communications, **36**(1), 1051-1054.
- Pekarova, P., Onderka, M., Miklanek, P., Halmova, D. and Pekar, J. (2009) Mass balance of dissolved chemicals in microbasins with different land cover. Folia Geographica, series Geographica - Physica, **XL**, 57-70.
- Pekarova, P., Sebin, M., Pekar, J., Onderka, M. and Miklanek, P. (2008) Simulation of the impact of fertilizer dozes on nitrate concentrations in the stream. Cereal Research Communications, **36**(1), 1051-1054.
- Pekarova, P., Pekar, J. and Miklanek, P. (2006) Impact of water sampling frequency on estimating water quality status in the Ondava River. Ecohydrology and Hydrobiology, **6**(1-4), 105-113.
- Peters, E., Bier, G., van Lanen, H.A.J. and Torfs, P.J.J.F. (2006) Propagation and spatial distribution of drought in a groundwater catchment. J. of Hydrol. **321**, 257-275.
- Prudhomme, C., Fleig, A.K., Schiemann, R., Frei, C. and Tallaksen, L.M. (2008) Hydrological applications in COST-733. Abstract in: Advances in weather and circulation type classifications & applications – Book of abstracts, 22-25 October 2008, Cracow, Poland, pg. 76.
- Prudhomme C. and Genevier M. Can Circulation Types be a proxy for flooding risk in Europe?

- Hydrological Processes, Special issue S150 Large Scale Hydrology (submitted).
- Pfister, L., McDonnell, J.J., Wrede, S., Hlúbková, D., Matgen, P., Fenicia, F., Ector, L. and Hoffmann, L. (2009) The rivers are alive: On the potential for diatoms as a tracer of water source and hydrological connectivity. Invited commentary. *Hydrological Processes*, **23**, 2841-2845.
- Querner, E.P. (2007) Water management measures analysed for Dutch basins to reduce flooding. *Journal of Water and Land Development*, **11**, 45-58.
- Querner, E.P. (2008) Water management measures analysed for Dutch basins to reduce flooding. In: Chelmicki, W. and Siwek, J. (Eds), Proc. 12th Internal Conference Hydrological Extremes in Small Basins (ERB), 18-20 Sept 2008, Cracow, Poland: 301-304.
- Querner, E.P. and Rakhorst, M. (2006) Impact assessment of measures in the upstream part of Dutch basins to reduce flooding. *IAHS Publ.* **308**, 180-186.
- Querner, E.P. and Mulder, H.M. (2007) Hydrological analysis for meeting Climate change effects and European Water Framework Directive targets. *Journal of Water and Land Development*, **11**, 59-69.
- Querner, E.P. and Povilaitis, A. (2009) Hydrological effects of water management measures in the Dovinė River Basin, Lithuania. *Hydrological Sciences Journal*, **54**(2), 363-374.
- Rakovec, O., van Loon, A.F., Horáček, S., Kašpárek, L., van Lanen, H.A.J. & Novický, O. (2009) Drought analysis for the Upper-Metuje and Upper-Sázava catchments (Czech Republic) using the hydrological model HBV. *WATCH Technical Report No. 19*, 90 pg.
- Ratto, M., Young, P.C., Romanowicz, R., Pappenberger, F., Saltelli, A. and Pagano, A. (2007) Uncertainty, sensitivity analysis and the role of data based mechanistic modeling in hydrology. *Hydrology and Earth System Sciences*, **11**(4), 1249-1266.
- Renner, M., Werner, M., Rademacher, S. and Sprokkereef, E. (2009) Verification of ensemble flow forecasts for the River Rhine. *Journal of Hydrology*, 463-475.
- Ribatet, M., Sauquet, E., Grésillon, J.M. and Ouarda, T.B.J.M. (2007) Usefulness of the Reversible Jump Markov Chain Monte Carlo Model in Regional Flood Frequency Analysis. *Water Resources Research*, **43**, W08403, doi:10.1029/2006WR005525.
- Ribatet, M., Sauquet, E., Grésillon, J.M. and Ouarda T.B.J.M. (2007) A Regional Bayesian POT Model for Flood Frequency Analysis. *Stochastic Environmental Research and Risk Assessment (SERRA)*, **21** (4), 327-339. doi: 10.1007/s00477-006-0068-z.
- Ribatet, M., Ouarda, T. B. M. J., Sauquet, E. and Gresillon, J.-M. (2009) Modeling all exceedances above a threshold using an extremal dependence structure: Inferences on several flood characteristics. *Water Resources Res.*, **45**, W03407, doi: 10.1029/2007WR006322.
- Romanowicz, R.J., Young, P.C. and Beven, K.J. (2006) Data assimilation and adaptive forecasting of water levels in the river Severn catchment, United Kingdom. *Water Resources Research*, **42** (6): Art. No. W06407.
- Romanowicz, R., Kiczko, A. and Pappenberger, F. (2008) A state dependent nonlinear approach to flood forecasting. *Publication of the Institute of Geophysics, Poland*, E7(401).
- Romanowicz, R., Young, P., Beven, K.J. and Pappenberger, F. (2008) A Data based mechanistic

- approach to flood forecasting. *Advances in Water Resources*, **31**(8), 1048-1056.
- Rossi A., Massei N., Laignel B., Sebag D. And Copard Y. (2009) The response of the Mississippi River to climate fluctuations and reservoir construction as indicated by wavelet analysis of streamflow and suspended-sediment load, 1950-1975. *J. of Hydrol.*, in press.
- Sauquet, E. (2006) Mapping mean annual river discharges: geostatistical developments for incorporating river network dependencies, *J. of Hydrol.*, **331** (1-2), 300-314. doi: 10.1016/j.jhydrol.2006.05.018.
- Sauquet, E., Ramos, M.H., Chapel, L. and Bernardara, P (2008) Stream flow scaling properties: investigating characteristic scales from different statistical approaches. *Hydrol. Processes*, **22**(17): 3462-3475.
- Sauquet, E., Gottschalk, L. and Krasovskiaia, I. (2008) Estimating mean monthly runoff at ungauged locations: an application to France. *Hydrology Research*, **39**(5-6), 403-423.
- Schmidt, R., Schwintzer, P., Flechtner, F., Reigber, Ch., Güntner, A., Döll, P., Ramillien, G., Cazenave, A., Petrovic, S., Jochmann, H. and Wünsch, J. (2006) GRACE observations of changes in continental water storage. *Global and Planetary Change*, **50**, 112-126.
- Schumann, S. and Herrmann, A. (2009) 60 years Bramke research basins: History, major hydrological results and perspectives. *Landschaftsökologie und Umweltforschung*, **50**, 243-248.
- Schumann, G., Hostache, R., Puech, C., Pappenberger, F., Matgen, P., Hoffmann, L. and Pfister, L. (2007) Moving towards an improved flood-modelling concept using remote sensing. *UNESCO IHP VI - Technical Documents in Hydrology*, **81**, 27-34.
- Schumann, G., Matgen, P., Hoffmann, L., Hostache, R., Pappenberger, F. and Pfister, L. (2007) Evaluating uncertain flood inundation predictions with uncertain remotely sensed water stages. *International Journal of River Basing Management*, **6**(3), 187-199
- Schumann, G., Matgen, P., Hoffmann, L., Hostache, R., Pappenberger, F. and Pfister, L. (2007) Deriving distributed roughness values from satellite radar data for flood inundation modelling. *J. of Hydrol.*, **344**(1-2): 96-111.
- Schumann, G., Matgen, P., Hoffmann, L., Hostache, R., Pappenberger, F. and Pfister, L. (2007). High-resolution 3-D flood information from radar imagery for flood hazard management. *IEEE Trasactions on Geoscience and Remote Sensing*, **45**(6): 1715-1725.
- Schumann, G., Pappenberger, F. and Matgen, P. (2008) Estimating uncertainty associated with water stages from single SARimage. *Advances in Water Resources* , **31**(8), 1048-1056.
- Schumann, G., Pappenberger, F. and Matgen, P. (2008) Conditioning water stages from satellite imagery on uncertain data points. *IEE Geoscience and Remote Sensing Letters*, **5**(4), 810-813.
- Schumann, S., Herrmann, A. and Duncker, D. (2009) Evolution and impact of hydrological extreme years in the Lange Bramke basin, Harz Mountains, Germany. *UNESCO IHP VI - Technical Documents in Hydrology*, **84**, Unesco, Paris, 111-116.
- Schumann, S., Herrmann, A. and Duncker, D. (2009) Evolution and impact of hydrological extreme years in the Lange Bramke basin, Harz Mountains, Germany. *UNESCO IHP VI - Technical Documents in Hydrology*, **84**, 111-116.

- Sebin, M., Pekarova, P. and Miklanek, P. (2007) Evaluation and indirect estimation of nitrate losses from the agricultural microbasin Rybarik. *Biologia*, **62**(5), 569-572.
- Sebin, M., Pekarova P. and Miklanek, P. (2007). Nitrate wash off from the Bratislava Forest Park basin Vydrica in years 1986 - 2005. *Journal of Hydrology and Hydromechanics*, **55**(3), 145-155.
- Siebert, S. and Döll, P. (2007) Irrigation water use – a global perspective. In Lozán, J., Graßl, H., Hupfer, P., Menzel, L., Schönwiese, Chr. (Eds.): *Global Change: Enough Water for all? Wissenschaftliche Auswertungen/GEO*, Hamburg, 104-107.
- Siebert, S., and Döll, P. (2009) Quantifying blue and green water uses and virtual water contents in global crop production as well as potential production losses without irrigation. *J. of Hydrol.*, doi 10.1016/j.jhydrol.2009.07.031.
- Šír, M., Čermák, J., Nadezhina, N., Pražák, J. and Tesař, M. (2008) Measuring and modelling forest transpiration. *Earth Environ. Sci.*, **4**, doi: 10.1088/1755-1307/4/1/012050.
- Šír, M., Lichner, L., Tesař, M., Krejča, M. and Váchal, J. (2008) Soil water retention and gross primary productivity in the Zábrod area in the Šumava Mts. *Soil & Water Res.*, **3**, 130-138.
- Šír, M., Lichner, L., Tesař, M., Hallett, P.D. and Martinková, M. (2009) Simulation of phytomass productivity based on the optimum temperature for plant growth in a cold climate. *Biologia*, **64**(3), 615-619.
- Skaugen, T., Langsholt, E.G., Hisdal, H., Langsrud, O., Follestad, T. and Host, G. (2006) Uncertainty in flood forecasting. In Refsgaard J.C and Hojberg, A.K. (Eds.) XXIV Nordic Hydrological Conference 2006, NHP Report no. **49**, 674-680.
- Skaugen, T. (2008) Modelling the dynamics of discharge as a function of river network and shape of catchment. In: Blažková, Š. and Ředínová, J. (Eds.) *Modelling Floods and Droughts*. Praha, 14 March 2008. Praha: Výzkumný ústav vodohospodářský T.G. Masaryka, v.v.i., 2008, ISBN 978-80-85900-78-1.
- Slimani, S., Massei, N., Mesquita, J., Valdes, D., Fournier, M., Laignel, B. and Dupont, J.P. (2009) Combined climatic and geological forcings on the spatio-temporal variability of piezometric levels in the chalk aquifer of Upper Normandy (France) at pluridecennal scale. *Hydrogeology Journal*, doi: 10.1007/s10040-009-0488-1.
- Smith, P.J., Hughes, D., Beven, K.J., Cross, P., Tych, W., Coulson, G. and Blair, G. (2009) Towards the provision of site specific flood warnings using wireless sensor network. *Meteorological Applications*, **16**(1), 57-64.
- Snelder, T.H., Lamouroux, N., Pella, H., Shankar, U., Leathwick, J.R. and Sauquet, E. (2008) Predictive mapping of natural flow regime classifications. *J. of Hydrol.*, **373**(1-2), 57-67.
- Solín, L. (2006) Estimation of floods with different return period by regional frequency analysis. (in Slovak). *Geographia Slovaca*, **23**, pg. 68.
- Solín, L. (2007) Single scale flood risk of small basins in Slovakia. *Ecohydrology & Hydrobiology*, **7**(2), 165-177.
- Solín, L. (2008) Analysis of floods occurrence in Slovakia in the period 1996–2006. (in Slovak). *J. Hydrol. Hydromech.*, **56**(2), 95-115.
- Solín, L. and Martinčáková, M. (2007) Some remarks on methodology applied to flood maps

- production in Slovakia (in Slovak). *Geograph. J.* **59**(2), 131-158.
- Somorowska, U. (2006) Physical insights into soil water storage in the soil–plant–atmosphere system. *IAHS Publ.* **308**, 646-650.
- Somorowska, U. (2007) Quantifying the uncertainties in the terrestrial water storage-runoff relation using in-situ soil moisture data. *UNESCO IHP VI - Technical Documents in Hydrology*, **81**, 35-41.
- Somorowska, U. (2009) Changes of the soil moisture regime in lowland catchment in current and future climate conditions. *UNESCO IHP VI - Technical Documents in Hydrology*, **84**, 157-164.
- Stahl, K., Hisdal, H., Tallaksen, L.M., van Lanen, H.A.J., Hannaford, J. & Sauquet, E. (2008) Trends in low flows and streamflow droughts across Europe. *UNESCO Report*, Paris, 39 pg.
- Stahl, K., Lanen, H.A.J. van & Uhlenbrook, S. (2009) Processes and Regimes, Chapter 4, In: Demuth, S. & Gustard, A. (Eds.) *Manual on Low-flow Estimation and Prediction*. WMO – Operational Hydrology Report No. **50** / WMO-No. **1029**, Geneva, pg. 36-42.
- Stojkovova, M. and Fendekova, M. (2007) Temporal and spatial distribution of minimum groundwater runoff in the western and central part of Slovakia. *Geophysical Research Abstracts*, **9**, pg. 03470.
- Stojkovova, M., Machlica, A. and Fendekova, M. (2008) Hodnotenie vyskytu hydrologickeho sucha a jeho vplyvu na zlozky vodnej bilancie v povodi hornej Nitry (Assessment of hydrological drought and its influence on elements of water balance in the Upper Nitra catchment). *Proc. Hydrologie maleho povodi 2008* (Hydrology of a small catchment 2008), Prague, Czech Republic, 23-24 May 2008, 269-276.
- Szolgay, J., Hlavčová, K., Lapin, M., Parajka, J. and Kohnová, S. (2007) Impact of climate change on runoff regime in Slovakia. (in Slovak). Ostrava : KEY Publishing, 160 pg. – ISBN 978-80-87071-50-2.
- Tallaksen, L.M. and van Lanen, H.A.J. (2007) Key aspects of Low flow and drought. In: Book of Abstracts, International CHR-Workshop – Expert Consultation, Würzburg, Germany, 25-26 September 2007, 13-18.
- Tallaksen, L. M., Hisdal, H., and van Lanen, H. A.J. (2006) Propagation of drought in a groundwater fed catchment, the Pang in the UK. *IAHS Publ.* **308**, 128-133.
- Tallaksen, L.M., Demuth, S. and van Lanen, H.A.J. (2007) Low flow and drought studies – the Northern European (NE) FRIEND experience. In: G. Mahé (Ed.), *Climatic and anthropogenic impacts on the variability of water resources*, FRIEND International Seminar, Montpellier, 22-24 November 2005), Technical Document in Hydrology No. **80**, UNESCO Paris, 99-106.
- Tallaksen, L.M., Hisdal, H. and van Lanen, H.A.J. (2009) Space-time modeling of catchment scale drought characteristics. *J. of Hydrol.* **375**(3-4), 363-372 (doi:10.1016/j.jhydrol.2009.06.032).
- Tesař, M., Šír, M., Lichner, L. and Zelenková, E. (2006) Influence of vegetation cover on thermal regime of mountainous catchments. *Biologia*, **61**, 311-314.
- Tesař, M., Šír, M., Lichner, L. and Čermák, J. (2007) Plant transpiration and net entropy exchange on the Earth's surface in a Czech watershed. *Biologia*, **62**(5), 547-551.

- Tesař, M., Šír, M., Krejča, M. and Váchal, J. (2008) Influence of vegetation cover on air and soil temperatures in the Šumava Mts. (Czech Republic). *Earth Environ. Sci.*, **4**, doi: 10.1088/1755-1307/4/1/012029.
- Tesař, M., Šír, M., Lichner, L. and Fišák, J. (2008) Extreme runoff formation in the Krkonoše Mts. in August 2002. *Soil & Water Res.*, **3**, 147-154.
- Thielen, J., Bogner, K., Pappenberger F., Kalas, M., del Medico, M. and de Roo, A. (2009) Monthly-medium- and short range flood warning: testing the limits of predictability. *Meteorological Applications*, **16** (1), 77-90
- Titz, A. and Döll, P. (2009) Actor modelling and its contribution to the development of integrative strategies for management of pharmaceuticals in drinking water. *Social Science & Medicine*, **68**, 672–681.
- Tokarczyk T. (2008) Widely applied indices for drought assessment and Polish application (Wskaźniki oceny suszy stosowane w Polsce i na świecie) In: Infrastruktura i ekologia terenów wiejskich, Wyd. PAN O. w Krakowie, Komisja Technicznej Infrastruktury wsi. Kraków.
- Tokarczyk T. & Jakubowski W. (2006) Temporal and spatial variability of drought in mountain catchments of Nysa Klodzka basin. *IAHS Publication* **308**: 139-144.
- Tokarczyk T., Bogusz A. and Chudzik B. (2006) Zmienność odpływu podziemnego w górskich zlewniach dorzecza górnej i środkowej Odry (The underground runoff variability in mountainous catchments of Upper and Middle Odra River Basin), XI Międzynarodowej konferencji Naukowo-Technicznej „Zarządzanie zasobami wodnymi w dorzeczu Odry”, Mat. konferencyjne, Łądek Zdrój.
- Tokarczyk T., Bogusz A., Chudzik B., Garncarz B. (2007). The base flow variability in upper and middle Odra River basin (Zmienność odpływu bazowego w zlewni górnej i środkowej Odry). Mat. konf. „Modelowanie procesów hydrologicznych” UP Wrocław, 26-27 June 2007, pg. 4.
- Tokarczyk T., Adynkiewicz-Piragas M., Bogusz A., Otop I. and Urban G. (2007) Water resources during drought conditions in Dolnoslaskie region (Zasoby wodne województwa dolnośląskiego w okresach suszy). Mat. konf. 4. Międzynarodowej Konferencji “Ochrona i Rekultywacja Terenów Dorzecza Odry: Rekultywacja terenów zdegradowanych”. Zielona Góra - 28-29 June 2007.
- Tokarczyk T., Jakubowski W. and Bogusz A. (2007) The Risk of extremes drought appearance in the Upper and Middle Odra River basin (Ryzyko wystąpienia ekstremalnych susz w dorzeczu górnej i środkowej Odry). Mat. konferencyjne „Rola melioracji wodnych w inżynierii, kształtowaniu i ochronie środowiska” UW Wrocław, 19-21 september 2007.
- Tokarczyk T., Jakubowski W., Bogusz A., 2007: Ryzyko wystąpienia ekstremalnych susz w dorzeczu górnej i środkowej Odry (The risk of hydrological drought occurrence the Upper and Middle Odra River basin), mat. konferencyjne „Rola melioracji wodnych w inżynierii, kształtowaniu i ochronie środowiska” UW Wrocław, 19-21 september 2007.
- Tokarczyk T., Adynkiewicz-Piragas M., Otop I. and Bogusz A. (2008) Drought occurrences in Odra River basin (Susze na obszarze dorzeca Odry). Meteorologia, Hydrologia, Ochrona Środowiska – kierunki badań i problemy(red. Alfreda Dubickiego). Wydawnictwo IMGW, s.

- Monografie, Warszawa.
- Velde, Y., van der, Rozemeijer, J.C., De Rooij, G.H., Van Geer, F.C. and Broers H.P. (2009) Field-scale measurements for separation of catchment discharge into flow route contributions. *Vadose Zone Journal*, **8**, 1-11.
- Velde, Y., van der, De Rooij, G.H. and Torfs, P.J.J.F. (2009) Catchment-scale non-linear groundwater-surface water interactions in densely drained lowland catchments. *Hydrol. Earth Syst. Sci. Discuss.*, **6**, 3753-3810.
- Voksø, A., Orthe, N.K., Hisdal, H. And Engeland, K. (2008) Low Flow Index Map for Norway – Interaction Using GIS-Software and Analysis. In: Sveinsson, O.G.B., S.M. Gardarsson, and S. Gunnlaugsdottir (Eds.), XXV Nordic Hydrologic Conference, NHP Report No. **50**, 154-159.
- Weichel, T., Pappenberger, F. and Schulz, K. (2007) Sensitivity and uncertainty in flood inundation modelling - concept of an analysis framework. *Advances in Geosciences*, **11**, 31-36.
- Werner, M.G.F. (2008) Open Model Integration in Flood Forecasting. *Practical Hydroinformatics*, Abrahart R.J. et al. (Eds.), Chapter 35, Springer-Verlag Berlin Heidelberg.
- Werner, M. and Heynert, K. (2006) Open model integration – A review of practical examples in operational flood forecasting. *7th Int. Conf. on Hydroinformatics*, Gourbesville, Cunge, Guinot & Liong (Eds.). Research Publishing, **1**, 155-162, ISBN 81-903170-2-4.
- Werner, M. and Whitfield,D (2007) On model integration in operational flood forecasting *Hydrological Processes*, 1519-1521. doi: 10.1002/hyp.6726.
- Werner, M. and Lambert, M. (2007) Comparison of modelling approaches used in practical flood extent modelling. *Journal of Hydraulic Research*, **2**, 202-215.
- Werner, M. and Janssen, A. (2009) A Discussion Of Paradigms In Operational Flood Forecasting And Their Influence On Forecasting System Design And Forecasting Organisation. *8th International Conference on Hydroinformatics*, Concepcion, Chile.
- Werner, M. and Cranston, M. (2009) Utility of Radar Rainfall Nowcasts for Hydrological Forecasting in Flashy Catchments. *Meteorological Applications*, **1**, 41-55.
- Werner M. and Mohammed, Y. Operational flood forecasting as a key flood risk management strategy: past, present and future, *2nd Forum on Flooding in the Eastern Nile*, Khartoum, Sudan.
- Werner, M., Cranston, M., Harrison, T., Whitfield, D. and Schellekens, J. (2009) Recent Developments in Operational Flood Forecasting in England, Wales and Scotland. *Meteorological Applications* **1**, 13-32.
- Werner, M., Bürgi, T., Vogt,S. and van Dijk, M. (2007) Multiple ensemble forecasts in the operational forecasting system for the Rhine basin in Switzerland (Poster). In: *3rd HEPEX Workshop*, Stresa (Lago Maggiore), Italy, <http://hydis8.eng.uci.edu/hepex>.
- Werritty A., Paine J., Macdonald N., Rowan J.S. and McEwen L.J. (2006) Use of proxy flood records to improve estimates of flood risk: lower River Tay, Scotland. *Catena*, **66**(1-2):107-119 (doi: 10.1016/j.catena.2005.07.012).
- Wilby, R.L., Beven, K.J. and Reynard, N.S. (2008) Climate change and fluvial flood risk in the

- UK: more of the same? *Hydrological Processes*, **22**(14), 2511-2523.
- Wipfler, L., van Lanen, H.A.J., Ludwig, L., Tallaksen, L.M., Fleig, A.K., Niemeyer, S., Sauquet, E. and Ramos, H.M. (2009) Extended Guidance Document on the Natural System & Drought, XEROCHORE Technical Report, Wageningen 54 pg.
- Xingguo, M., Pappenberger, F., Beven, K.J., de Roo, A. and Suxia, L. (2006) Parameter conditioning and prediction uncertainties of the LISFLOOD-WB distributed hydrological model. *Hydrological Sciences Journal-Journal Des Sciences Hydrologiques*, **51**(1), 45-65.
- Young, A. R., Keller, V. and Griffiths, J. (2006) Predicting low flows in ungauged basins: a hydrological response unit approach to continuous simulation. *IAHS Publ.* **308**, 134-138.
- Younger, P.M., Gadian, A.M., Wang, C.G., Freer, J.E. and Beven, K.J. (2008) The usability of 25 m resolution data from the UK Meteorological Office Unified Model input data for a hydrological model. *Meteorological Applications*, **15**(2), 207-217
- Zappa, M. and Kan, C. (2007) Extreme heat and runoff extremes in the Swiss Alps. *Natural Hazards and Earth System Sciences*, **7**, 375-389, <<http://www.nat-hazards-earth-syst-sci.net/7/375/2007/nhess-7-375-2007.html>>Direct
- Zhang, J. and Döll, P. (2008) Assessment of ecologically relevant hydrological change in China due to water use and reservoirs. *Adv. Geosci.*, **18**, 25-30.