



Name	Jochen W. Wenninger
Year of birth	1975
Nationality	German
Present position	Lecturer / Researcher in Hydrology
Years with firm	From 2008 – present

EDUCATION

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| 2003-2007 | - PhD research “Studies of hydrological processes in the soil-vegetation-atmosphere system”, University of Freiburg, Faculty of Forest and Environmental Sciences, Germany. (grade point average: summa cum laude: 1.0) |
| 1998-2002 | - Graduate: Hydrology (major), Meteorology, Physical Geography (minor), University of Freiburg, Germany, MSc thesis: “Experimental study about the dynamics of hillslope groundwater and water transport to the floodplain and the stream in the Brugga basin”, (grade point average: 1.3) |
| 1996-1998 | - Undergraduate: Hydrology (major), Meteorology, Physical Geography, Physics, Botany (minor), University of Freiburg, Germany, (grade point average: 1.5) |
| 1982-1995 | - Primary school till high school (grade point average 2.0) |
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EMPLOYMENT RECORD

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| 2008-present | - Lecturer / Researcher in Hydrology at UNESCO-IHE, Core of Hydrology and Water Resources in the Department for Water Engineering, Delft, The Netherlands. |
| 2007-2008 | - Post-doc at University of Freiburg, Institute of Hydrology, Freiburg, Germany. Working on the projects: “Water balance of a dry forest stand”; “Use of geophysical measurement in combination with tracer methods in runoff generation research”; “Runoff generation processes and catchment Modelling” |
| 2003 – 2007 | - Junior scientist (PhD student) at University of Freiburg, Institute of Hydrology, Freiburg, Germany. |
| 2002-2003 | - Teaching Assistant, Institute of Hydrology, Freiburg, Germany |
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KEY QUALIFICATIONS

Dr. Wenninger’s main qualifications are in the area of catchment hydrology and hydrological processes research at the hillslope and headwater scale. His research focused on the process knowledge of water fluxes at varying scales and study sites, whereby the aim was to combine the results of different experimental methods (hydrometry, tracer methods and geophysical techniques) to improve the process knowledge of this hydrological important system. He is experienced in the use of tracer methods, especially natural isotopes to explore runoff source areas, residence times and flow pathways of the water in the subsurface system. His geographical focus has been on the mountainous regions in the Black Forest and the Austrian Alps as well as in the eastern part of South Africa.

Dr. Wenninger is teaching parts of the MSc Programme in Hydrology and Water Resources. Also, he is involved in supervising MSc participants and PhD fellows.

MAIN DISCIPLINE / SPECIALISATION

Catchment and hillslope Hydrology at different regions and scales, experimental hydrological research methods (natural isotopes, dye tracers and hydrogeophysics)



LANGUAGE PROFICIENCY

<i>Language</i>	<i>Reading</i>	<i>Speaking</i>	<i>Writing</i>
German	Mother tongue	Mother tongue	Mother tongue
English	Good	Good	Good
French	Moderate	Moderate	Moderate
Dutch	Slight	Slight	Slight

PUBLICATIONS

PEER-REVIEWED JOURNAL PAPERS

KOCH, K., WENNINGER, J., UHLENBROOK, S. & BONELL, M., 2009. Joint interpretation of hydrological and geophysical data: electrical resistivity tomography results from a process hydrological research site in the Black Forest Mountains, Germany. *Hydrological Processes*, 23 (10), 1501-1513.

UHLENBROOK, S., DIDSZUN, J. & WENNINGER, J., 2008. Source areas and mixing of runoff components at the hillslope scale—a multi-technical approach. *Hydrological Science Journal*, 53(4): 741-753.

WENNINGER, J., UHLENBROOK, S., LORENTZ, S. & LEIBUNDGUT, C., 2008. Identification of runoff generation processes using combined hydrometric, tracer and geophysical methods in a headwater catchment in South Africa *Hydrological Science Journal*, 53(1): 65-80.

BRANDES, E., WENNINGER, J., KOENIGER, P., SCHINDLER, D., RENNENBERG, H., LEIBUNDGUT, C., MAYER, H. & GESSLER, A., 2007. Assessing environmental and physiological controls over water relations in a Scots pine (*Pinus sylvestris* L.) stand through analyses of stable isotope composition of water and organic matter. *Plant, Cell and Environment*, 30(1): 113-127.

UHLENBROOK, S., WENNINGER, J. & LORENTZ, S., 2005. What happens after the catchment caught the storm? Hydrological processes at the small, semi-arid Weatherley catchment, South-Africa. *Adv. Geosci.*, 2: 237-241.

WENNINGER, J., UHLENBROOK, S., TILCH, N. & LEIBUNDGUT, C., 2004. Experimental evidence of fast groundwater responses in a hillslope/floodplain area in the Black Forest Mountains, Germany. *Hydrological Processes*, 18(17): 3305-3322.

CONFERENCE PROCEEDINGS, BOOKS, MONOGRAPHS

KUELLS, C., WENNINGER, J., KLAUS, J., HUXOL, S., MORITZ, K. & ZABORI, J., 2008. Significant trends, underlying processes and indicators - the validation of hydrological change, European Geosciences Union, General Assembly 2008. *Geophysical Research Abstracts*, Vienna, Austria.

WENNINGER, J., 2007. Prozesshydrologische Untersuchung im System Boden-Vegetation-Atmosphäre. *Freiburger Schriften zur Hydrologie*, 25. Institut für Hydrologie, Freiburg, 150 pp.

LORENTZ, S., BURSEY, K., WENNINGER, J. & UHLENBROOK, S., 2007. Combining isotopes and hydrometric observations to inform process based modelling of afforested catchments in eastern headwaters of South Africa, IUGG XXIV 2007, Perugia, Italy.



WENNINGER, J., 2007. Wasserflüsse im System Boden-Vegetation-Atmosphäre unter Anwendung innovativer experimenteller Methoden der hydrologischen Prozessforschung, Disputationsvortrag, Fakultät für Forst- und Umweltwissenschaften, Albert Ludwigs Universität Freiburg, 28.06.2007.

WENNINGER, J. & LEIBUNDGUT, C., 2007. Water fluxes in the Soil-Vegetation-Atmosphere system of a dry pine forest in southwest Germany using different experimental methods, Tag des Wassers 2007, Institut für Hydrologie Freiburg, Germany.

WENNINGER, J., BLATTMANN, E. & LEIBUNDGUT, C., 2007. Prozessforschung im Dreisameinzugsgebiet, Tag des Wassers 2007, Institut für Hydrologie Freiburg, Germany.

TILCH, N., UHLENBROOK, S., DIDSZUN, J., WENNINGER, J., KIRNBAUER, R., ZILLGENS, B. & LEIBUNDGUT, C., 2006. Hydrologische Prozessforschung zur Hochwasserentstehung im Löhnersbach-Einzugsgebiet (Kitzbüheler Alpen, Österreich). Hydrologie und Wasserbewirtschaftung, 50(2): 67-78.

UHLENBROOK, S. & WENNINGER, J., 2006. Identification of flow pathways along hillslopes using electrical resistivity tomography (ERT). In: M. SIVAPALAN et al. (Editors), Predictions in Ungauged Basins: Promise and Progress. IAHS Publ. 303, Proceedings of symposium S7 held during the Seventh IAHS Scientific Assembly at Foz do Iguaçu, Brazil, pp. 15-20.

WENNINGER, J., 2006. Wasserflüsse im System Boden Vegetation Atmosphäre unter Anwendung innovativer experimenteller Methoden der hydrologischen Prozessforschung, Kolloquium des Zentrums für Wasserforschung und des Instituts für Hydrologie, Albert Ludwigs Universität Freiburg, 01.06.2006.

UHLENBROOK, S., WENNINGER, J., KONZ, M., MUL, M. & SAVENIJE, H., 2006. How much process understanding can be gained with limited experimental investigations, and how can we translate that into catchments models?, European Geosciences Union, General Assembly 2006. Geophysical Research Abstracts, Vienna, Austria.

WENNINGER, J., KÖNIGER, P., LEIBUNDGUT, C., SCHINDLER, D. & MAYER, H., 2005. Untersuchungen der Bodenwasserbewegung mit stabilen Isotopen in Hinblick auf die Grundwasserneubildung. Zentralblatt für Geologie und Paläontologie, Teil I(Heft 1-2): 123-139.

UHLENBROOK, S., WENNINGER, J., DIDSZUN, J. & TILCH, N., 2005. Use of electrical resistivity tomography (ERT) and tracers to explore flow pathways and residence times at the hillslope scale, European Geosciences Union, General Assembly 2005. Geophysical Research Abstracts, Vienna, Austria.

WENNINGER, J., KÖNIGER, P., LEIBUNDGUT, C., SCHINDLER, D. & MAYER, H., 2005. Untersuchungen der Bodenwasserbewegung mit stabilen Isotopen in Hinblick auf die Grundwasserneubildung, Braunschweiger Grundwasserkolloquium, Braunschweig, Germany



WENNINGER, J., KÖNIGER, P., LEIBUNDGUT, C., BRANDES, E., GESSLER, A., RENNENBERG, H., SCHINDLER, D. & MAYER, H., 2005. Application of environmental and artificial stable isotope methods to investigate soil-plant-atmosphere interactions in a dry pine forest in southwest Germany, EGU, General Assembly 2005, 24 – 29 April 2005. Geophysical Research Abstracts, Vienna, Austria.

UHLENBROOK, S., DIDSZUN, J., WENNINGER, J. & TILCH, N., 2004. Identification of hydrological processes at mountainous catchments using combined tracer, geophysical and modeling studies, International Conference on Hydrology of Mountain Environments, Berchtesgaden, Germany.

UHLENBROOK, S., WENNINGER, J. & LORENTZ, S., 2004. Combined tracer, geophysical and modeling studies to explore hydrological processes at the catchment scale, Proceedings of the 1st International Instrumented Watershed Symposium (IIWS), Edmonton, Canada, pp. 14 pages.

UHLENBROOK, S., DIDSZUN, J., WENNINGER, J. & TILCH, N., 2004. Wasser- und Stofftransportprozesse in verschiedenen Raum- und Zeitskalen, Tagungsband zum Tag der Hydrologie 2004, Potsdam, Germany.

WENNINGER, J., TILCH, N., UHLENBROOK, S., LEIBUNDGUT, C. & KOHLBECK, F., 2004. Identifikation von Abflussbildungsprozessen mit Hilfe tracerhydrologischer und geoelektrischer Methoden in einem alpinen Einzugsgebiet. In: T. SCHIEDEK, R. KAUFMANN-KNOKE & G. EBHARDT (Editors), Hydrogeologie regionaler Aquifersysteme. Tagung der FH-DGG. Schriftenreihe der Dt. Geol. Ges., Darmstadt, pp. 200.

KÖNIGER, P., SCHNEIDER, P. & WENNINGER, J., 2004. Spatial variation of isotope concentrations (^2H and ^{18}O) in snow cover of two mesoscale catchments – Black Forest in SW Germany, European Geosciences Union, General Assembly 2004. Geophysical Research Abstracts, Nice, France.

WENNINGER, J., UHLENBROOK, S., TILCH, N., KOCH, K. & LEIBUNDGUT, C., 2004. Identification of runoff generation processes using hydrometrical and geoelectrical information in mountainous catchments, European Geosciences Union, General Assembly 2004. Geophysical Research Abstracts, Nice, France.

WELLPOTT, A., MAYER, H., BRANDES, E., GESSLER, A., RENNENBERG, H., WENNINGER, J., KÖNIGER, P. & LEIBUNDGUT, C., 2004. Stable isotope aided water flux investigations within a soil-plant-atmosphere system at a dry pine forest in southwest Germany, SIBAE-BASIN Conference 2004, Interlaken, Switzerland.

WENNINGER, J., UHLENBROOK, S., TILCH, N. & LEIBUNDGUT, C., 2003. Nachweis von „Pressure wave“-Effekten an einem Hangfuss-Talauen-Bereich unter Verwendung hydrochemischer und hydrometrischer Daten, Regionale Wassertage 2003, Freiburg, Germany.

WENNINGER, J., UHLENBROOK, S., TILCH, N. & LEIBUNDGUT, C., 2003. Proving pressure wave effects at a hillslope/floodplain/channel system using hydrochemistry and groundwater levels, European Geophysical Society, General Assembly 2003. European Geophysical Society, Nice, France.

WENNINGER, J., 2002. Experimentelle Untersuchung zur Dynamik von Hanggrundwasser und dessen Übertritt in die Talae und den Vorfluter im Brugga-Einzugsgebiet. Diplom Thesis, Albert-Ludwigs-Universität, Freiburg.



Technical reports 2005: Forschungsschwerpunktprogramm Baden-Württemberg: „Wasserhaushalt eines Waldes auf einem Trockenstandort“; Teilbericht Hydrologie, Auftraggeber: Ministerium für Wissenschaft, Forschung und Kunst Baden-Württemberg; Autoren: Ch. Leibundgut, J. Wenninger, P. Königer.

PROFESSIONAL AFFILIATIONS

Since 2003 Member of the European Geosciences Union (EGU)
Since 2005 Member of the International Association of Hydrological Sciences (IAHS)
Since 2008 Member of the American Geophysical Union (AGU)

ACADEMIC AWARDS

2005-2006 Ph.D. Student Scholarship Holder for especially talented students,
Landesgraduiertenfoerderung Baden Wuerttemberg.

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