

Renate Anna Irma Wilcke

Diplom Meteorologin

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Education

- 04/2010 – 02/2014 **PhD**, *University of Graz, Wegener Center for Climate, Graz.*
PhD thesis: "Evaluation of Multi-Variable Quantile Mapping Based on Regional Climate Models"
- 10/2003 – 02/2010 **Diplom Meteorologist**, *Ludwig-Maximilians University, Munich.*
Diploma thesis: "The Madden-Julian Oscillation, its behaviour and its impact on Northern Australia" – diploma thesis at the Bureau of Meteorology Australia, Darwin

Experience

Vocational

- 01/2014 – current **PostDoc**, *Rosby Centre, SMHI, Norrköping, Sweden.*
Reducing ensemble size, bias correction
- 04/2010 – 12/2013 **Researcher**, *Wegener Center for Climate and Global Change, University of Graz, Graz, Austria.*
Bias correction of regional climate model output
- 07/2008 – 09/2008 **Student research assistant**, *Department of Physics of the Atmosphere, Deutsches Zentrum für Luft- und Raumfahrt (DLR), Oberpfaffenhofen, Germany.*
Evaluation of lightning data.
- 08/2006 – 08/2008 **Tutor**, *Ludwig-Maximilians-University, Department of Physics, Munich.*
Tutor for practical physics exercises

Stays abroad

- 03/2013 – 04/2013 **Short term scientific mission**, *Department of Statistical Science, UCL, London, U.K., VALUE: COST Action ES1102 stipend for a collaboration with Dr. R. E. Chandler.*
Work on inter-variable relations in RCMs
- 11/2012 **Training school**, *Santander, Spain, VALUE: COST Action ES1102.*
Introduction to Dynamical and Statistical Downscaling
- 11/2008 – 06/2009 **Diploma thesis**, *Bureau of Meteorology Australia, Darwin, Australia.*
Research for Master thesis: "The Madden-Julian Oscillation, its behaviour and its impact on Northern Australia"

02/2008 – 04/2008 **Internship**, *Bureau of Meteorology Australia*, Darwin, Australia.
Evaluation of advancement of risk model for severe weather, evaluation of MJO correlating with ENSO

08/2007 – 09/2007 **Internship**, *Met Eireann*, Dublin, Ireland.
Evaluation of ENSEMBLES runs for C4I

Languages

German	native	
English	fluent	
Latin	intermediate	<i>7 years at school</i>
French	basic	<i>3 years at school</i>
Norwegian	basic	<i>1 semester at uni</i>
Swedish	basic	

Computer skills

Basic	MatLab, C++
Intermediate	Python, Fortran95, HTML
Expert	R, IDL, LaTeX

Research Interests

- Statistical regional downscaling
- Inter-variable relationships in RCM output and after MOS
- Climate model evaluation
- Error characterisation of RCMs
- advancing error-correction method

Ongoing projects

2012–2015	COST Action VALUE: Co-leader of WG 3: downscaling and validation of climate model data
2014–2016	CLIP-C
2014–2016	Mistra SWECIA

Conferences

- oral *A detailed evaluation of quantile mapping on multivariate RCM output*, Wilcke R. A. I., T. Mendlik, A. Gobiet, 12th International Meeting on Statistical Climatology, 24 - 28 June 2013, Jeju, Korea
- poster *Physical Consistency of Multi-Parameter Error-Correction and Downscaling of Regional Climate Models*, Wilcke R. A. I., T. Mendlik, A. Gobiet, EGU General Assembly 2012, 23 - 27 April, 2012, Vienna, Austria

- oral *Physical Consistency of Multi-Parameter Error-Correction and Downscaling of Regional Climate Models*, Wilcke R. A. I., A. Gobiet, T. Mendlik, International Conference on End User Needs for Regional Climate Change Scenarios, 7 – 9 March 2012, Kiel, Germany
- oral *Multi-parameter Error Correction and Downscaling of Regional Climate Models*, Wilcke R. A. I., A. Gobiet, T. Mendlik, M. J. Themeßl, EMS Annual Meeting / ECAM 2011, 12 – 16 September 2011, Berlin, Germany
- poster *Physical Consistency of Multi-Parameter Error-Correction and Downscaling of Regional Climate Models*, Wilcke R. A. I., T. Mendlik, A. Gobiet, EGU General Assembly 2012, 23 – 27 April 2012, Vienna, Austria
- poster *Change of temperature und precipitation 1961–2050 for the ski resorts in the Schladming area (Styria, Austrian Alps)*, Egger, C., P. Schajer, R. A. I. Wilcke, T. Marke and U. Strasser, 12. Österreichischer Klimatag 2011, 21 – 22 September, Vienna, Austria

Teaching and Advising

- teaching Lecturer in interdisciplinary practical course - Auswirkungen des Klimawandels auf den Wintertourismus (Impacts of climate change on winter tourism), Winter 2012/2013 (Joint with Andreas Gobiet & Andrea Damm)
- advising Michaela Trummer, Best way to distinguish between liquid and solid precipitation, Master student, Oct 2011 - Apr 2013. (First supervisor Andreas Gobiet)
- advising Elisabeth Zacherl, Unser Klima im Wandel. Globale Erwärmung, Zukunftsprognosen und mögliche Folgen., Bachelor student, Dec 2012 - Jun 2013.
- advising Anna Katharina Krammer, Die Auswirkungen der künstlichen Beschneigung auf die Umwelt (Impact of artificial snow on the environment), Bachelor student, Dec 2012 - Jun 2013.

Publications

- R. A. I. Wilcke, A. Leuprecht, and Gobiet A. Effects of climate change on future snow conditions in tyrol and styria (cc-snow), final report – climate, 2012. Wegener Center Verlag, Graz, Austria.
- R. A. I. Wilcke, T. Marke, F. Hanzer, U. Strasser, and A. Gobiet. Effects of quantile mapping on impact models. *H.E.S.S.*, in preparation.
- R. A. I. Wilcke, T. Mendlik, and A. Gobiet. Multi-variable error-correction of regional climate models. *Climatic Change*, 120(4):pp 871–887, 2013.