

Dr. Elke Keup-Thiel

Climate System Department

Contact:

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Work/research experience:

- since 01/2010** Senior scientist at the Climate Service Centre Germany (GERICS), Climate System Department
- 05/2005 – 12/2009** Research associate at the Max-Planck-Institute for Meteorology (MPI-M), Project Service Group Adaptation (SGA)
- 01/2004 – 04/2005** Research associate at the at the Max-Planck-Institute for Meteorology (MPI-M), EU-Project BALANCE: Global change vulnerabilities in the Barents Sea Region
- 03/1998 – 12/2003** Post-Doc at the Meteorological Institute of the University of Hamburg, Cyclones and the North Atlantic Climate System.
- 01/1996 – 12/1997** PhD-student/science officer at the MPI-M, EU-Project SINDICATE II, Study of the INdirect and Direct Influences on Climate of Anthropogenic Trace gas Emissions
- 01/1991 – 12/1995** PhD-student/science officer in the BMBF project Aerosols - Global Aerosol Data Set (GADS); Globale natürliche Aerosolteilchenfelder interaktiv berechnet mit dem Aerosolteilchenmodul APMO im Klimamodell ECHAM
- 03/1990 – 12/1990** Research associate at the University of Hamburg, SFB 318, Climate relevant processes in the system ocean –atmosphere -cyrosphere

Professional qualifications:

Project management:	KliWiSt project: ‘The influence of climate change on wind energy site assessments’ Coordination of service activities of the Climate Service Center Germany for German adaptation projects in the framework of KLIMZUG: ‘Klimawandel in Region zukunftsfähig gestalten’
Development of research proposals	Participation of scientific proposal development and writing proposals for the Climate Service Center Germany contributions, respectively for EU calls.
Software/ Programming skills	Unix/Linux; Shell-scripting; Fortran; climate data operators – CDO’s; MS-Office, SQL – (basics), OTRS
Language skills	German (native speaker); English (business fluent); French (basics)

Key areas of interest:**Thematic foci:**

- Quality management
- Evaluation of climate services and products
- Participatory and transdisciplinary processes
- Advice for adaptation projects and clients towards use and interpretation of climate model data
- Robustness of projected climate change information
- Topic ‘uncertainty’ assessment
- Climate change indicators and impact research

Regional foci:

- Germany / Europe

Research projects and initiatives involved:

Since 2021 Coordination of KliWiSt project: ‘The influence of climate change on wind energy site assessments’ (PI)

Since 2021 Member of DIN e.V. Standards Committee NA 172-00-19 AA: ‘Klimawandel’

Since 2019	Researcher in the project NorQuATrans - Normativity, Objectivity and Quality Assurance of Transdisciplinary Processes
Since 2016	Member of DIN e.V. Standards Committee NA 172-00-19-02 AA: 'Anpassung an die Folgen des Klimawandels'
Since 2015	Member of DIN e.V. (DIN - Deutsches Institut für Normung) Research Group KU-AK4: 'Anpassung an den Klimawandel'
2013 - 2016	CLIPC – Climate Information Platform for Copernicus – Funded by EU/FP7
2013 - 2015	GERICS project: 'KLIMZUG – Wissensarchiv': design and setup of a data base which concerns material of the KLIMZUG projects

Publications & book contributions:

- 2022 Schuck-Zoeller, S., Bathiany, S., Dressel, M., El Zohbi, J. **Keup-Thiel, E.**, Rechid, D. and M. Suhari, 2022: Developing criteria of successful processes in co-creative research. A formative evaluation scheme for Climate Services. 10.22163/fteval.2022.541.
- 2021 Ferguson, L. M., Pampel, H., Bertelmann, R., Dirnagl, U., Zohbi, J. E., Kapitza, D., **Keup-Thiel, E.**, Konrad, U., Lorenz, S., Mittermaier, B., Rechid, D., Schuck-Zöller, S., 2021: Indikatoren für Open Science: Report des Helmholtz Open Science Forum, (Helmholtz Open Science Briefing), Potsdam : Helmholtz Open Science Office, 12 p. <https://doi.org/10.48440/os.helmholtz.024>
- 2020 Zahid, M., El Zohbi, J., Viktor, E., Rechid, D., Schuck-Zöller, S., **Keup-Thiel, E.** and Jacob, D., 2020: What does quality mean to climate data users/providers and how to enable them to evaluate the quality of climate model data and derived products?, in 'Handbook of Climate Services', Editors: Leal Filho, W. and Jacob, D. Springer International Publishing, doi: 10.1007/978-3-030-36875-3
- 2016 Otto, J., Brown, C., Buontempo, C., Doblus-Reyes, F., Jacob, D., Juckes, M., **Keup-Thiel, E.**, Kurnik, B., Schulz, J., Taylor, A., Verhoelst, T. and Walton, P., 2016: Uncertainty: Lessons learned for climate services, Bull. Am. Meteorol. Soc., BAMS-D-16-0173.1, doi:10.1175/BAMS-D-16-0173.1
- 2014 **Keup-Thiel, E.**, Bender, S., Groth, M., Hennemuth, B. und Schuck-Zöller, S., 2014: Service für Anpassungs-Projekte. In Biebeler, H., Bardt, H., Chrischilles, E., Mahammazadeh, M. & Striebeck, J., 2014: Wege zur Anpassung an den Klimawandel– Regionale Netzwerke, Strategien und Maßnahmen, 29-41

- Bender, S., **Keup-Thiel**, E. und Schaller, M., 2015: Klimaprojektionen und ihre Berücksichtigung bei der hydrologischen Modellierung – Welchen Sinn hat ein Ensemble-Ansatz? In Bolle, F.-W. & Krebs, P. [Hrsg.]; Siedlungswasserwirtschaft klimarobust gestalten, KLIMZUG – Klimawandel in Regionen zukunftsfähig gestalten, Band 9, 19-27
- 2009 Groth, M., Bowyer, P., Hennemuth, B., Kehlenbeck, U., **Keup-Thiel**, E. und Schuck-Zöller, S., 2014: Informationsbedarf von Unternehmen – eine sektorspezifische Auswertung des CSC – Anfragenservice; Mahammadzadeh, M., Chrischilles, E., Striebeck, J., Biebeler, H., Bardt, H. (Hrsg.): Unternehmensstrategien zur Anpassung an den Klimawandel–Theoretische Zugänge und empirische Befunde. Oekom-Verlag, München
- 2008 Wunram, C., E. **Keup-Thiel**, H. Mächel und B. Hennemuth, 2009: Die Service Gruppe Anpassung (SGA) verbindet Forschung und Anwendung, in: M. Mahammadzadeh, H. Biebeler, H. Bardt (ed), Klimaschutz und Anpassung an die Klimafolgen, Institut der Deutschen Wirtschaft, Köln, 20-27.
- Hollweg, H.-D., U. Böhm, I. Fast, B. Hennemuth, K. Keuler, E. **Keup-Thiel**, M. Lautenschlager, S. Legutke, K. Radke, B. Rockel, M. Schubert, A. Will, M. Woldt and C. Wunram, 2008: Ensemble simulations over Europe with the regional climate model CLM forced with IPCC AR4 global scenarios. DKRZ, Technical Report No. 3, 148 pp.
- Göttel, H., J. Alexander, E. **Keup-Thiel**, D. Rechid, S. Hagemann, T. Blome, A. Wolf, D. Jacob, 2008: Influence of changed vegetations fields on regional climate simulations in the Barents Sea Region Climatic Change (BALANCE special issue), 87, doi: 10.1007/s10584-007-9341-5: 35-50.
- 2006 **Keup-Thiel**, E., H. Göttel and D. Jacob, 2006: Climate simulations for the Barents Sea Region, Boreal Env. Res. Vol. 11, No 5: 329-339.
- 2003 **Keup-Thiel**, E., C. Klepp, E. Raschke and B. Rockel, 2003: Regional model simulations of the North Atlantic Cyclone 'Caroline' and Comparisons with Satellite Data, Annales Geophysicae, special issue: 'Clouds in radiative, hydrological and chemical Processes', No. 21, 655-659.
- 1998 **Keup-Thiel**, E., 1998: Globale natürliche Aerosolteilchenfelder interaktiv berechnet mit dem Aerosolteilchenmodul APMO im Klimamodell ECHAM, Examensarbeit Nr. 51, Max-Planck-Institut für Meteorologie, ISSN0938-5177, 102 pp
- 1994 Randall, D. A., R. D. Cess, J. P. Blanchet, S. Chalita, R. Colman, D. A. Dazlich, A. D. Del Genio, V. Dymnikov, V. Galin, D. Jarrett, E. **Keup**, A. Lacis, H. Le Treut, X.-Z. Liang, B. J. McAvaney, J. F.

Mahfouf, V. P. Meleshko, J. F. B. Mitchell, J.-J. Morcrette, P. M. Norris, G. L. Potter, L. Rikus, E. Roeckner, J. F. Royer, U. Schlese, D. A. Sheinin, J. M. Slingo, A. P. Sokolov, K. E. Taylor, W. M. Washington, R. T. Wetherald, I. Yagai and M.-H. Zhang, 1994: Analysis of Snow Feedbacks In Fourteen General Circulation Models. *Journal of Geophysical Research*, 99, 20,757-20,771.

- 1991 Cess, R. D., G. L. Potter, M.-H. Zhang, J.-P. Blanchet, S. Chalita, R. Coleman, D. Dazlich, A. D. Del Genio, V. Dymnikov, V. Galin, D. Jerrett, E. **Keup**, A. Lacis, H. Le Treut, X.-Z. Liang, J.-F. Mahfouf, B. J. McAvaney, V. P. Meleshko, J. F. B. Mitchell, J.-J. Morcrette, P. M. Norris, D. A. Randall, L. Rikus, E. Roeckner, J.-F. Royer, U. Schlese, D. A. Sheinin, J. M. Slingo, A. P. Sokolov, K. E. Taylor, W. M. Washington, R. T. Wetherald, and I. Yagai, 1991: Interpretation of Snow-Climate Feedback as Produced by 17 General Circulation Models. *Science*, 253, 888-892.

Roeckner, E., M. Rieland und E. **Keup**, 1991: Modelling of clouds and radiation in the ECHAM-Model, in: ECMWF/WCRP-workshop, cloud radiative transfer and the hydrological cycle, 1991, Workshop Proceedings, Reading (UK), 199-222.

Reports:

Hennemuth, B., Bender, S., Bülow, K., Dreier, N., Hoffmann, P., Mudersbach, C., **Keup-Thiel**, E., Krüger, O., Radermacher, C. and Schoetter, R. 2013: Statistical methods for the analysis of simulated and observed climate data, applied in projects and institutions dealing with climate change impact and adaptation. *Climate Service Center - Report 13*, 135 p, ISSN 2192-4058.

Hennemuth, B., Bender, S., Bülow, K., Dreier, N., Hoffmann, P., Mudersbach, C., **Keup-Thiel**, E., Krüger, O., Radermacher, C. und Schoetter, R. 2013: Statistische Verfahren in der Auswertung von Klimadaten aus Modell und Beobachtung, eingesetzt in Projekten und Institutionen, die sich mit Klimafolgen und Anpassung befassen. *Climate Service Center - Report 13*, 139 p., ISSN 2192-4058.

Bower, P., Schaller, M., **Keup-Thiel**, E., Schwarze, R., 2012: Challenges and possibilities in coupling climate, ecological and socio-economic models: overview and examples from two German research projects. *Climate Service Center – Report 10*, 31p., ISSN 2192-4058.

Keup-Thiel, E., Hennemuth, B., Pfeifer, S., 2012: Besonderheiten und merkmale regionaler Klimaprojektionen im Hinblick auf die weitere Kopplung mit Impaktmodellen. *Climate Service Center – Report 9*, 24p., ISSN 2192-4058.