

Dr. Elke Keup-Thiel

Transfer and Capacity Building

Contact:

Climate Service Center Germany
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Work/research experience:

- since 01/2010** Senior scientist at the Climate Service Centre Germany (GERICS), Climate System Department, Transfer and Capacity Building
- 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:

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| 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 (e.g. Climateurope2 , CLIPC). |
| 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
- Quality and evaluation of climate services and products
- Participatory and transdisciplinary processes
- Knowledge transfer
- Robustness of projected climate change information
- Climate change indicators and impact research
- Renewable energies and climate change

Regional foci:

- Germany / Europe

Research projects and initiatives involved:

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| Since 2023 | Member of ISO working group ISO/TC 207/SC 1/WG 11 ‘Applying ISO 14001 framework to environmental aspects by topic areas’ |
| Since 2022 | Member of DIN e.V. Standards Committee NA 172-00-02-03AK: ‘Anwendung der ISO 14001 auf Klima: Klima - Management ‘ |
| Since 2022 | Researcher in the project Climateurope2 , working on standards and recommendations for climate services in Europe. |

- 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 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’
- 2019 – 2023 Contributing researcher in the project NorQuATrans - Normativity, Objectivity and Quality Assurance of Transdisciplinary Processes
- 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:

- 2024 Thomas Frisius, Irem Isik Cetin, **Elke Keup-Thiel** und Diana Rechid
2024: Analysis of high-resolution convection-permitting regional climate simulations with respect to the impact of spatial resolution on simulated wind climate. *J. Phys.: Conf. Ser.* 2767 092023 DOI: [10.1088/1742-6596/2767/9/092023](https://doi.org/10.1088/1742-6596/2767/9/092023)
- 2023 Susanne Schuck-Zöller, Thomas Abeling, Steffen Bender, Markus Groth, **Elke Keup-Thiel**, Heike Molitor, Kirsten Sander, Peer Seipold und Ulli Vilsmaier, 2023: Klimakommunikation und Klimageschichte, in Brasseur, G., D. Jacob and S. Schuck-Zöller (ed): Klimawandel in Deutschland, 2. Edition, Springer Verlag, p 491 -505:
<https://link.springer.com/book/10.1007/978-3-662-66696-8?page=3#toc>
- 2022 Schuck-Zöller, S.; Cortekar, J.; El Zohbi, J.; **Keup-Thiel, E.**; Rechid, D.; Reinbold, A.; Timm, E. (2022): Klimageschichte - Wie gelingt der Transfer von Klimawissen in die Gesellschaft? Innovation und Transfer, Ausgabe 1,
https://www.researchgate.net/publication/366513918_Klimageschichte_Wie_gelingt_der_Transfer_von_Klimawissen_in_die_Gesellschaft

- 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., Jukes, 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., Mahammadzadeh, M. & Striebeck, J., 2014: Wege zur Anpassung an den Klimawandel–Regionale Netzwerke, Strategien und Maßnahmen, 29-41
- 2015 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 Feedback 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. Jarrett, 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 & White papers:** A. Villwock and **E. Keup-Thiel**, 2024: ‘GERICS: Supporting Climateurope2 and standards for Climate Services’, <https://www.openaccessgovernment.org/gerics-climateurope2-and-standards-for-climate-services/180324/>
- I. Isik Cetin and **E. Keup-Thiel**, 2024: ‘GERICS supporting climate-resilient wind energy sites’, Open Access Government, <https://doi.org/10.56367/OAG-044-9508>
- 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.