

Dr. Paul Bowyer

Contact

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Current Position

07/2010 - present Senior Science Officer, Climate Service Center, Helmholtz Zentrum Geesthacht, Germany

Main responsibilities:

- Project developer and manager for climate impacts and adaptation projects relating to agriculture, forestry and land use.
- Research on climate impacts and vulnerability in agriculture, forestry, ecosystem services, and cross-sectoral impacts in Europe.
- Research on climate information user needs, e.g. C3S SECTEUR project.
- Training and capacity building on the use of climate information for climate adaptation planning.
- Developing user relevant products and services e.g. Adaptation Guidebook, Focus Papers, Climate Impact Hotspot Mapping.

Employment Record

06/2008 – 06/2010 Science Officer, Environmental Change Institute, UK Climate Impacts Programme (UKCIP), University of Oxford, UK

05/2007 – 05/2008 Remote Sensing Specialist and Project Coordinator, ESA GMES Polar View Project (<http://www.polarview.aq/>), British Antarctic Survey, Cambridge, UK

04/2005 – 12/2006 NERC Post-Doctoral Research Fellow, Department of Geography, University College London, UK

08/2003 – 03/2005 Research Associate, Transect Project US National Institutes of Health, University of Salford, UK

01/2002 – 07/2003 Research Associate, EU SPREAD Project, University of Salford, UK

10/1999 – 01/2002 Demonstrator, Department of Geography, University of Salford, UK

Academic Record

- 10/1999 – 07/2005 Ph.D, Remote Sensing, University of Salford
- 10/1998 – 09/1999 M.Sc., Geographical Information Systems, University of Nottingham
- 09/1994 – 07/1997 B.Sc., Geography, Upper Second Class Honours, University of Leicester
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Publications (peer-reviewed)

- Williges, K., Mechler, R., **Bowyer, P.**, and Balkovich, J., 2016, Towards an assessment of adaptive capacity of the European agricultural sector to droughts, *Climate Services*, <https://doi.org/10.1016/j.cliser.2016.10.003>
- Bowyer, P.**, Brasseur, G.P., Jacob, D.J., 2015, The role of climate services in adapting to climate variability and change, In Leal, W., *Handbook of Climate Change Adaptation*, Volume 1, Springer, Berlin, Heidelberg https://doi.org/10.1007/978-3-642-38670-1_29
- Bowyer, P.**, Schaller, M., Bender, S., and Jacob, D.J., 2015, Adaptation as Climate Risk Management: Methods and Approaches, In Leal, W., *Handbook of Climate Change Adaptation*, Volume 1, Springer, Berlin, Heidelberg https://doi.org/10.1007/978-3-642-38670-1_28
- Groth, M., **Bowyer, P.**, Hennemuth, B., Kehlenbeck, U., Keup-Thiel, E., and Schuck-Zöller, S., 2014, Informationsbedarf von Unternehmen – eine sektorspezifische Auswertung des CSC-Anfragenservice. Mahammadzadeh, M., Chrischilles, E., Striebeck, J., Biebeler, H., Bardt, H. (ed.), *Unternehmensstrategien zur Anpassung an den Klimawandel – Theoretische Zugänge und empirische Befunde*. Oekom-Verlag, München, 177-186.
- Schuck-Zöller, S., **Bowyer, P.**, Jacob, D., Brasseur, G., 2014, Inter- und transdisziplinäres Arbeiten im Klimaschutzservice In Beese, K., Fekkak, M., Katz, C., Körner, C., and Molitor, H. (ed.), *Anpassung an regionale Klimafolgen kommunizieren*. oekom München, p. 97–114.
- Street, R.B., Steynor, A., **Bowyer, P.**, and Humphrey, K., 2009, Delivering and using the UK climate projections 2009, *Weather*, 64, 9, 227-231
<http://onlinelibrary.wiley.com/doi/10.1002/wea.487/abstract>
- Quaife, T., Lewis, P., De Kauwe, M., Williams, M., Law, B., Disney, M., **Bowyer, P.**, 2008, Assimilating Canopy Reflectance data into an Ecosystem Model with an Ensemble Kalman Filter, *Remote Sensing of Environment*, 112, 1347-1364, doi: 10.1016/j.rse.2007.05.020.
<http://www.sciencedirect.com/science/article/pii/S0034425707003276>
- Grace, J., Nichol, C., Disney, M., Lewis, P., Quaife, T., and **Bowyer, P.**, 2007, Can we measure terrestrial photosynthesis from space directly, using spectral reflectance and fluorescence? *Global Change Biology*, 13, 1484-1497, doi: 10.1111/j.1365-2486.2007.01352.x. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2486.2007.01352.x/full>
- Bowyer, P.**, and Danson, F.M., 2004, Sensitivity of spectral reflectance to variation in live fuel moisture content at leaf and canopy level, *Remote Sensing of Environment*, 92, 297-308, <http://www.sciencedirect.com/science/article/pii/S003442570400149X>

Danson, F.M., and **Bowyer, P.**, 2004, Estimating live fuel moisture content from remotely sensed reflectance, *Remote Sensing of Environment*, 92, 309-321, <http://www.sciencedirect.com/science/article/pii/S0034425704001476>

Koetz, B., Schaepman, M., Morsdorf, F., **Bowyer, P.**, Itten, K., and Allgower, B., 2004, Radiative transfer modelling within a heterogeneous canopy for estimation of forest fire fuel properties, *Remote Sensing of Environment*, 92, 332-344, <http://www.sciencedirect.com/science/article/pii/S0034425704001488>

GERICS Reports

Bowyer, P., Bender, S., Rechid, D., & Schaller, M. 2014, Adapting to Climate Change: Methods and Tools for Climate Risk Management. Climate Service Center Report 17, 124p.

Bowyer, 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.

Bender, S., **Bowyer, P.**, & Schaller, M., 2012, Bedarfsanalyse Klimawandel – Fragen an die Land- und Wasserwirtschaft. Climate Service Center Report 4, 68p.