

Curriculum vitae: Prof. Dr. Eberhard Parlow

Address: Meteorology, Climatology and Remote Sensing Lab (MCR Lab),
Departement of Environmental Sciences, University Basel
Klingelbergstr. 27, CH-4056 Basel

Funktion: Professor ordinarius, Head of Research Group

Date of Birth: 8. Juni 1952

Academic Career:

- 1982 PhD PhD in Geography, Faculty of Geosciences, University Freiburg/Germany. Titel of thesis: Geländeklimatologische Untersuchungen in der Staufener Bucht unter besonderer Berücksichtigung lokaler Ausgleichsströmungen (Topoclimatological investigations in the Staufen Bay/SW-Germany with special consideration of local wind systems)
- 1988 Habilitation Habilitation in Geography, Faculty of Geosciences, University Freiburg/Germany. Titel of habilitation thesis: „Ableitung strahlungsklimatischer Daten und Raummuster für ein subpolares Ökosystem Nordskandinaviens mit Hilfe der Digitalen Bildverarbeitung (Modelling of radiation fluxes for a subpolar ecosystem in Northern Scandinavia using digital image analysis of satellite data)
- 1988 Venia legendi for Geography, University Freiburg
- 1988 : Assistance-Professor (C2) at Institute for Physical Geography, Univ. Freiburg
- 1988/1989 : Lecturer Institute for Meteorology, University Uppsala/Sweden
- 1989 : Appointment as Associate Professor for Meteorology and Climate Ecology, Geographical Institute, University Basel. Head or research group Meteorology/Climate Ecology
- 1989 Venia docendi for Meteorology and Geography, University Basel
- 1992 Call for full professorship for Geoinformatics at Institute for Geography, University Jena (declined)
- 1996 Call for full professorship for Remote Sensing, Institute for Geography, University Bonn (declined)
- 1997 Promotion to Full Professor (chair) for Meteorology, Climatology and Remote Sensing, University Basel, Institute director.
- 2006 : Visiting Professor University of British Columbia Vancouver/Canada
- 2011 : Visiting Professor Technical University Berlin/Germany

Research Coordination and Management

- Fall 1989 Co-PI Regio-Klima-Projektes REKLIP
- 1991 - 1998 Vice-President of Commission Remote Sensing, Swiss Academy of Natural Sciences (SANW)
- 1991 - 1998 Member of Commission Climate and Atmosphere (CCA), Swiss Academy of Natural Sciences (SANW)

1991	Member of international evaluation commission for Swedish Science Foundation (NFR National Forskningsråd)
Since 1996	Member of Editorial Board of Geografiska Annaler
1997 - 2001	Vice-President European Association of Remote Sensing Laboratories (EARSeL)
1998	Member Scientific Advisory Board of Climate Impacts Research Centers (CIRC), Royal Swedish Academy of Sciences, Abisko/Sweden
1998 - 2002	President of Commission Remote Sensing, Swiss Academy of Natural Sciences (SANW)
1998 – 2002	Member of Swiss Governmental Advisory Board for Space Affairs (Commission Fédéral des Affaires Spatial/CFAS)
1998 – 2002	Member Swiss PRODEX-Program-Commission
1999 – 2001	Executive Director Departement Geography, Univ. Basel
2001 - 2003	Member Earth Science Advisory Committee (ESAC) of European Space Agency ESA
2001 – 2005	President European Association of Remote Sensing Laboratories (EARSeL)/ Paris
2002 – 2007	Member Planning Commission University Basel
2004 – 2005	Executive Director Departement Geosciences, Univ. Basel
2009 – 2012	Member scientific Advisory Board of Competence-Center “Design of living space”, Technical University Berlin
2006 –	Member scientific Advisory Board of meteoblue Company/Basel
2005 -	Swiss delegate to EARSeL Council
2008 – 2010	Dean Science Faculty, University Basel
2012 – 2014	Executive Director Departement Environmental Sciences, Univ. Basel

Publications (peer-reviewed, 2002 - 2014)

1. Lietzke, B., R. Vogt, C. Feigenwinter, **E. Parlow** (2014): On the Controlling Factors for the Variability of Carbon Dioxide Flux in a Heterogeneous Urban Environment. Int. Journal of Climatology (in revision).
2. **Parlow, E.**, R. Vogt, C. Feigenwinter (2014): The urban heat island of Basel – seen from different perspectives. Die Erde, Vol 144, No. 3. (accepted)
3. Ritter, M., Müller, M., Tsai, M.-Y., **Parlow, E.** (2013): Air pollution modeling over very complex terrain: An evaluation of WRF-Chem over Switzerland for two one-year periods. Atmospheric Research, 132, 209 – 222.
4. Ritter, M., Müller, M., Jorba, O., **Parlow, E.**, Liu, S. (2013): Impact of chemical and meteorological boundary and initial conditions on air quality modeling: WRF-Chem sensitivity evaluation for a European domain. Meteorology and Atmospheric Physics, 119, 1 – 2, 59 – 70.
5. Esch, T., H. Taubenböck, N. Chrysoulakis, HS Duzgun, A. Tal, C. Feigenwinter, **E. Parlow** (2013): Exploiting Earth Observation in Sustainable Urban Planning and Management - the GEOURBAN Project. 2013 Joint Urban Remote Sensing Event (Jurse) p. 37 – 40.

6. Frey, C., **Parlow, E.** (2012): Flux Measurements in Cairo. Part 2: On the Determination of the Spatial Radiation and Energy Balance Using ASTER Satellite Data. Remote Sensing, 4 (9), p. 2635-2660.
7. Gartmann A., Müller M.D., **Parlow E.**, Vogt R. (2012): Evaluation of numerical simulations of CO2 transport in a city block with field measurements. Environmental Fluid Mechanics, 12, p. 185-200.
8. Müller, M., **Parlow, E.** (2012): Numerical weather prediction as a surrogate for climate observations in practical applications. Theoretical and Applied Climatology, 111, 3 – 4, 577 – 584. doi:10.1007/s00704-012-0693-z.
9. Marconcini, M., Esch, T., Chrysoulakis, N.; Duzgun, HS, Tal A., Feigenwinter C., **Parlow E.** (2013): Towards EO-based sustainable urban planning and management. 2013 IEEE International Geoscience and Remote Sensing Symposium (IGARSS) Pages: 4273-4276.
10. Frey, C. M., **Parlow, E.**, Vogt, R., Harhash, M., Abdel Wahab, M. M. (2011): Flux measurements in Cairo. Part 1: in situ measurements and their applicability for comparison with satellite data. International Journal of Climatology, Volume 31 (2), p. 218–231.
11. Frey, C.M. & **E. Parlow** (2010). Determination of the aerodynamic resistance to heat using morphometric methods. EARSeL eProceedings, 9(2): 52-63.
12. Babst, F., J. Esper, **E. Parlow** (2010): Landsat TM/ETM+ and tree-ring based assessment of spatiotemporal patterns of the autumnal moth (*Epirritia autumnata*) in northernmost Fennoscandia. Remote Sensing of Environment, 114, p. 637-646.
13. Frey, C.M. & **E. Parlow** (2009): Measurement of multispectral BRDF effects of the megacity Cairo, Egypt using CHRIS/PROBA data. In: Maktav, D. (ed.): Remote Sensing for a Changing Europe. IOS Press, 594 – 601.
14. Frey, C. M. & **Parlow, E.** (2009): Geometry effect on the estimation of band reflectance in an urban area. Theoretical and Applied Climatology, 96: 395 – 406
15. Beck-Wörner, C., Raso, G. & Vounatsou, P.V., N’Goran, E., Rigo, G., **Parlow, E.** & Utzinger, J. (2007): Bayesian spatial risk prediction of *Schistosoma mansoni* infection in western Côte d’Ivoire. American Journal of Tropical Medicine and Hygiene, 76(5), p. 956 – 963.
16. Frey, C., Rigo, G. & **Parlow, E.** (2007): Urban radiation balance of two coastal cities in a hot and dry environment. International Journal of Remote Sensing, 28(12), p. 2695 – 2712.
17. Müller, M.D., Schmutz, C. & **Parlow, E.** (2007): A One-dimensional Ensemble Fog Forecast and Assimilation System for Fog Prediction. Pure and Applied Geophysics, 164, p. 1241 – 1264.
18. Rigo, G. & **Parlow, E.** (2007): Modelling the ground heat flux of an urban area using remote sensing data. Theoretical and Applied Climatology, 90, p. 185-199.
19. Frey, C.M.; Rigo, G., **Parlow, E.** (2006): The cooling effect of cities in a hot and dry environment. In A. Marcal (ed.): Global Developments in Environmental Earth Observation from Space. Proceedings 25th Symposium of the European-Association of Remote Sensing Laboratories (EARSeL) Pages: 169-174
20. Rigo, G., **Parlow, E.**, Oesch, D. (2006): Validation of satellite longwave emission and net radiation with in-situ measurements during BUBBLE. In A. Marcal (ed.): Global Developments in Environmental Earth Observation from Space. Proceedings 25th Symposium of the European-Association of Remote Sensing Laboratories (EARSeL), p. 123-128.

21. Rigo, G., **Parlow, E.** & Oesch, D. (2006): Validation of satellite observed thermal emission with in-situ measurements over an urban surface. Remote Sensing of Environment, 104, p. 201-210.
22. Rotach, M.W., Vogt, R., Bernhofer, C., Batchvarova, E., Christen, A., Clappier, A., Feddersen, B., Gryning, S.-E., Martucci, G., Mayer, H., Mitev, V., Oke, T.R., **Parlow, E.**, Richner, H., Roth, M., Roulet, Y.A., Ruffieux, D., Salmond, J., Schatzmann, M. & Voogt, J. (2005): BUBBLE - an Urban Boundary Layer Meteorology Project. Theoretical and Applied Climatology, 81 (3 – 4), p. 231 – 261.
23. van Gorsel, E., Christen, A., Feigenwinter, C., **Parlow, E.** & Vogt, R. (2003): Daytime Turbulence Statistics above a Steep Forested Slope. Boundary Layer Meteorology, 109 (3), p. 311 – 329.
24. Fehrenbach, U., Scherer, D. & **Parlow, E.** (2001): Automated Classification of Planning Objectives for the Consideration of Climate and Air Quality in Urban and Regional Planning for the Example of the Region of Basel/Switzerland. Atmospheric Environment, 35, p. 5605 – 5615.
25. Feigenwinter, C., Vogt, R. & **Parlow, E.** (2000): Analysis of organized structures in urban turbulence. In: R.J. de Dear, J.D. Kalma, T.R. Oke & A. Auliciems (eds.): Biometeorology and urban climatology at the turn of the millennium - Selected papers from the conference Int. Conference Bioclimatology, WMO/TD No. 1026, p. 565 – 570.
26. **Parlow, E.** (2000): Remotely sensed heat fluxes of urban areas. In: R.J. de Dear, J.D. Kalma, T.R. Oke & A. Auliciems (eds.): Biometeorology and urban climatology at the turn of the millennium - Selected papers from Int. Conference Urban Climate, WMO/TD No. 1026, p. 523 – 528.

Book Chapters

27. **Parlow, E.** (2011): Urban Climate. In: Niemelä J., Breuste J.H., Guntenspergen G., McIntyre N.E., Elmqvist T., and James P. (eds.): Urban Ecology - Patterns, Processes, and Applications. p. 392, Oxford University Press.
28. **Parlow, E.** (2011): Besonderheiten des Stadtklimas. In: Gebhardt G., Glaser R., Radtke U., Reuber P. : Geographie, 2. Ausgabe, Spektrum Akademischer Verlag Heidelberg, p. 287 – 294.
29. **Parlow, E.** (2007): Besonderheiten des Stadtklimas. In: Gebhardt G., Glaser R., Radtke U., Reuber P. : Geographie, 1. Ausgabe, Elsevier-Publishers, p. 56 – 60.
30. Babst, F., D.C. Frank, **E. Parlow** & J. Esper (2010): Age and susceptibility of Fennoscandian mountain birch (*Betula pubescens*) towards insect outbreaks. In: Levanic T et al. (Eds.) Tree rings in archaeology, climatology and ecology. TRACE 8, 26-32.
31. **Parlow, E.** (2005): Weather and climate. In: Sandau, R. (ed.), Cost-effective Earth observation missions. p. 99 – 100. Taylor & Francis, London.
32. **Parlow, E.** (2000): Snow runoff models using remotely sensed data. In: Buchroithner, M. (ed.): Remote sensing for environmental data in Albania: a strategy for integrated management. NATO Science Series 2, Environmental Security, 72, p. 165 – 178. Kluwer Academic Publishers, Dordrecht.
33. **Parlow, E.** (1999): Gutes Klima - schlechtes Klima: Lässt sich das Klima bewerten? In: Schneider-Sliwa, R., D. Schaub & G. Gerold: Angewandte Landschaftsökologie - Grundlagen und Methoden, p. 345 – 363. Springer, Berlin/Heidelberg.