

Curriculum Vitae

Name: Fredrik Lindberg

Date of birth: 7 August, 1974

Citizenship: Swedish

Current position: Professor in geography with a focus on physical geography

University affiliation: University of Gothenburg, Department of Earth Sciences, Guldhedsgatan 5, 40530, Göteborg, Sweden Tel +46 (0)31 786 2606, e-mail: fredrik.lindberg@gvc.gu.se

Education

- Doctor of Philosophy, Physical Geography, 2002-2007. Department of Earth Sciences, University of Gothenburg. Dissertation date: September 25, 2007. Dissertation title: "*Spatial variation of the urban climate and its influence on thermal comfort and behaviour*". Supervisors: Professor Ingegärd Eliasson (main) and Professor Sofia Thorsson (co).
- Masters of Science in Physical Geography, 2000-2002. Dissertation title: "*The covariation between building intensity and intra urban air temperature*", Department of Earth Sciences, University of Gothenburg.
- Master of Sciences in Geography, 1998-2000. Dissertation title: "*An attempt to measure the rate of stone uplift for an area located in Bollebygds community, SW Sweden*", Department of Earth Sciences, University of Gothenburg.
- Bachelor of Sciences in Geography, 1996-1998. Department of Earth Sciences, University of Gothenburg.

Academic degree

Professor in Geography (May 2024)

Post-doctoral visit

King's College London, Geography, Environmental Monitoring and Modelling group, Professor Sue Grimmond (2009-2010)

Current post, period of appointment, time for research in the position

Professor, Department of Earth Sciences, University of Gothenburg, 2024-

Teaching expertise

- Teacher of undergraduate and graduate courses at Department of Earth Sciences (appr. 50% activity level), University of Gothenburg, Sweden (2022-)
- Teacher of undergraduate and graduate courses at Department of Earth Sciences (appr. 40% activity level), University of Gothenburg, Sweden (2015-2022)
- Responsible for the development of the Master program in Geography at University of Gothenburg, Sweden (2014-)
- Teacher of undergraduate and graduate courses at Department of Earth Science (10% activity level), University of Gothenburg, Sweden (2013-2015)
- Teacher of undergraduate and graduate courses at Department of Earth Science (30% activity level), University of Gothenburg, Sweden (2010-2013)
- Assistant of the graduate course "Micro- and local Climatology - theory and field measurements, 7.5 ECT", Department of Earth Science, University of Gothenburg, Sweden (2009)

- Invited lecturer on “Principles of urban climatology” for a MSc course in Architectural Engineering (Environmental Design) for the University of Bath, United Kingdom (2010)
- Lecturer (20%) of undergraduate human geography GIS courses, University of Gothenburg, Sweden (2008)
- Teaching assistant of undergraduate physical geography and geography courses (20% activity level), University of Gothenburg, Sweden (2002-2007).

Course development

- Third cycle GIS course (Python scripting in GIS), Department of Earth Sciences, University of Gothenburg, Sweden (2018)
- Second cycle course on Urban sustainable Development, Department of Earth Sciences, University of Gothenburg, Sweden (2014)
- Second cycle GIS courses (Urban GIS and Open-Source GIS), Department of Earth Sciences, University of Gothenburg, Sweden (2011)
- Frist cycle web-based courses in GIS, Department of Earth Sciences, University of Gothenburg, Sweden (2009)

Previous positions and periods of appointment

- Researcher, Physical Geography, Department of Earth Sciences, University of Gothenburg, Sweden (2011-2022)
- Consultant at Tyréns (10%), 2014
- Post-doctoral fellow, King's College London, Geography, Environmental Monitoring and Modelling group (2009-2010)
- Part-time lecturer, Department of Human and Economic Geography, University of Gothenburg, Sweden (2008)
- GIS-engineer, City Planning Authority, City of Gothenburg, Sweden (2008)
- PhD candidate, Physical Geography, Department of Earth Sciences, University of Gothenburg, Sweden (2002-2007)

Awards and special commissions

- Yearly GIS-award 2008 from ‘GIS i Väst’, 25 TSEK
- Stefan Stenlunds GIS-award 2008 from Lantmäteriet, ESRI S-GROUP and LINFO Norrbotten, 17 TSEK

Other academic duties

- Minor Field Studies officer at the Department of Earth Science (2002-2007)
- Webmaster for the Göteborg Urban Climate Group website (2002-)
- Responsible of software licensing at the Department of Earth Science (2012-)
- Post graduate education board at the Department of Earth Science (2014-2017)
- Advisory board for IT services at Faculty of Natural Sciences (2013-2017)
- Program coordinator of the Master program in Geography at the Department of Earth Science (2014-)
- Responsible of climate stations at the Department of Earth Science (2012-2015)
- Shared head (with Sofia Thorsson) of Göteborg Urban Climate Group at University of Gothenburg (2020-)
- Evaluation board of the proposal for the Helmholtz Institute Freiburg for Urban Climate and Environmental Sciences (HIF-UCES) (March 2023)
- Department council, Department of Earth Sciences (2022-)

- Working group to assign new Dean and faculty board 2024-2030, Faculty of Natural Sciences, GU (2023-)
- External head examiner for the third cycle studies, "Geobiosphere Science with a specialisation in Geographical Information Science NAGBVG02" at the Faculty of Sciences, Lund University (2024)
- External deputy examiner for the third cycle studies, "Geobiosphere Science with a specialisation in Physical Geography and Ecosystem Science NAGBVN02" at the Faculty of Sciences, Lund University (2024)

Supervision

Master theses (M = main supervisor)

Josie Gao, 2024, GU (M); Jesper Fahlström, 2024, GU (M); Evelina Bladh, 2024, GU (M); Rebecca Johansson, 2023, GU; GU; Madeleine Cleverstam Vikström, 2023, GU (M); Sebastian Daland, 2023, GU (M); Sandra Lucic, 2023, GU, (M); Ida Dolff, 2022, GU, (M); Louise Lindén, 2022, GU, (M); Alexandra Matyas, 2022, GU; Robert Klein, 2022, GU, (M); Julia Cederbrant, 2021, GU, (M); Ville Strålnacke, 2021, GU, (M); Cornelia Wing, 2021, GU; Kristin Blinge, 2020, GU; Ruben Hallberg, 2020, GU; Oskar Bäcklin, 2019, GU; Timmy Nilsson, 2019, GU, (M); Norea Hellberg, 2019, GU; Filip Olsson, 2019, GU; Deria Abda Amin, 2017, GU; Sara Johansson, 2017, GU, (M); Gunnar Palm, 2017, GU, (M); Bengt Myrberg, 2016/17, GU, (M); Charles Hansson, 2014/15, GU, (M); Hanna Hassberg, 2014/15, Lund University (LU)/GU, (M); Niklas Krave, 2014, LU/GU, (M); Natalia Kuska, 2013, GU, (M); Lars Pettersson, 2011, LU/GU, (M); Annika Larsson, 2011, SLU/GU; Deepak Jeswani, 2008, GU, (M); Jesper Björklund, 2008, GU

PhD candidates, postdoctoral fellows and visiting researcher

Jessika Lönn, Ph.D. student, 2022-, GU, (M)
 Nils Wallenberg, Postdoctoral fellow, 2022-2024, GU (M)
 Jeremy Bernard, Marie Skłodowska-Curie Individual Fellowship, 2020-2023, GU (M)
 Oskar Bäcklin, Ph.D. student, 2020-, GU
 Hampus Luning, Ph.D. student, 2019-, GU/Sahlgrenska
 Zeng Liyue, visiting Ph.D. student, 2018-2019, Chongqing University, P. R. China (M)
 Nils Wallenberg, Ph.D. student, 2018-2022, GU (M)
 Frans Olofson, Postdoctoral fellow, 2015-2018, GU (M)
 Jenny Kingberg, Postdoctoral fellow, 2014-2016, GU
 Nithyanandam Yugeswaran, visiting PhD-student, 2014, Hong Kong Polytechnic University (M)
 Yumei Hu, Ph.D. student, 2011-2018, GU
 Kevin Lau, Postdoctoral fellow, 2013-2014, GU (M)
 Shihō Onomura, Ph.D, 2011-2015, GU
 Janina Konarska, Ph.D. 2011-2015, GU

Doctoral examiner of third-cycle studies

Examiner for PhD-student Cheng Shen (University of Gothenburg) (2022-)

PhD board evaluation member and faculty opponent

- Substitute on evaluation board on PhD defense of Aifang Chen (University of Gothenburg) (June, 2020)
- Head of evaluation board on PhD defence of Karl Samuelson (University of Gävle) (December, 2021)
- External examiner on viva voce (PhD defence) of Megan Stretton (University of Reading) (December, 2022)

Scientific funding

- **Värmeböljors inverkan på äldre personers hälsa och välbefinnande - Erfarenheter och adaptiva strategier för utomhusaktiviteter i stadsmiljö** (The Kamprad Family Foundation, 2024-2027, 400 TSEK). PI: Susanne Gustafsson, Co-applicants: Fredrik Lindberg, Pär Bjälkebring (GU), Isabel Hansson (GU), Marie Kivi (GR)
- **Den bebyggda miljön** (Boverket, FORMAS, 2023, 40 TSEK). PI Sofia Thorsson/Fredrik Lindberg
- **Practical guidelines to resilient urban planning against heat stress** (COWI foundation, 2022-2025, 3288 TSEK). PI: Marie Häger (GU/COWI), Co-applicants: GU, Chalmers and COWI DK

- ***HEAT: Heat stress in outdoor Environments - Planning the city of the older Adults Today and in a future warmer climate*** (FORMAS, 2021-2025, 8000 TSEK). PI: Fredrik Lindberg, Co-applicants: Susanne Gustafsson (JU), Sofia Thorsson (GU), Pär Bjälkebring (GU), Isabel Hansson (GU), Marie Kivi (GR), Erik Johansson LTH and Christofer Åström (UMU)
- ***PESCA - Process for establishing sustainable climate change adaptation***, 2022-2023 (VINNOVA, 2022-2023, 3500 TSEK) PI: Göteborgsregionen, Co-applicants: Fredrik Lindberg, Sofia Thorsson, Chalmers, Ale municipality and Acama AB
- ***Transformation towards green and blue cities: Conflicts between the sustainable development goals, TRANSSAFE*** (FORMAS, 2020-2022 TSEK 3000), PI: Magnus Evander (UU), Co-applicants: Fredrik Lindberg and others
- ***Multifunctional blue-green infrastructure - optimizing socio-cultural and environmental aspects for sustainable urban development*** (FORMAS, 2020-2024, TSEK 7985), PI: Sofia Thorsson, Co-applicants: Fredrik Lindberg, David Rayner, Jutta Schade, Matthias Borris, Özüm Durgun, Mattias Sandberg, Janina Konarska
- ***Development of a heat warning system for outdoor sport events*** (In-house (Sahlgrenska Academy), 2019-2020 TSEK 200), PI: Fredrik Lindberg (UG)
- ***The influence of warm weather and outdoor-environment design on preschoolers' physical activities and thermal comfort*** (FORMAS, 2019-2022 TSEK 3000), PI: Fredrik Lindberg (UG), Co-applicants: Anders Raustorp (UG),
- ***Visualising and modelling urban air quality - influence of vegetation, building morphology and traffic emissions*** (FORMAS, 2018-2021 TSEK 8992), PI: Håkan Pleijel (UG), Co-applicants: Fredrik Lindberg and others
- ***URBANFLUXES - URBan ANthropogenic heat FLUX from Earth observation Satellites*** (Horizon 2020 - Research and Innovation Programme, 2015-2017, Total/GU T€ 2687/319), PI: Nektarios Chrysoulakis (FORTH), WP-leaders: Fredrik Lindberg and others
- ***CLIMPLAN – A fast responsive, modelling system for urban climate sensitive planning applications*** (FORMAS, 2013-2018, TSEK 4787, Young researcher grant), PI: Fredrik Lindberg
- ***Efficient use of land and energy in Dar es Salaam, Tanzania*** (SIDA/VR, 2013-2015, TSEK 3000), PI: Erik Johansson, Co-applicants: Fredrik Lindberg, Sofia Thorsson, Maria Rasmussen
- ***Valuation of ecosystem services provided by urban greenery*** (FORMAS, 2014-2016, TSEK 8605), PI: Sofia Thorsson, Co-applicants: Fredrik Lindberg, Bengt Gunnarsson, Yvonne Andersson-Sköld, Marcus Hedblom, Åsa Ode Sang, Igor Knez
- ***Infrastrukturnära vegetation*** (Trafikverket, 2012, TSEK 100), PI: Fredrik Lindberg, Co-applicant: Sofia Thorsson
- ***Inventory of urban vegetation using LIDAR technology*** (Mistra Urban Futures, 2012, TSEK 198), Main applicant: PI, Co-applicant: Fredrik Lindberg
- ***SOLEN – integration of solar energy calculations in the planning process*** (City of Göteborg, 2012, 150 TSEK), PI: Fredrik Lindberg
- ***Solar Energy from Building Envelopes - SEBE*** (VINNOVA, 2011, 735 TSEK), PI: Per Jonsson, Co-applicants: Fredrik Lindberg, Tomas Landelius, Bengt Stridh, Joakim Jeppsson
- ***Adapting cities to climate induced risks - a coordinated approach*** (FORMAS, 2011-2013, 7000 TSEK), PI: Sofia Thorsson, Co-applicants: Yvonne Andersson-Sköld, Anna Jonsson, Sara Janhäll, Fredrik Lindberg, Mira Övuka-Andersson and Ulf Moback
- ***Potential impact of climate trends and weather extremes on outdoor thermal comfort in European cities - implications for sustainable urban design*** (UrbanNet/EU, 2010-2013, 7000 TSEK), PI: Sofia Thorsson, Co-applicants: Ana Monteiro, Lutz Katschner, Fredrik Lindberg and David Rayner

- **Potential photovoltaic energy production on roof structures**, (SolElprogrammet/Göteborg energy/Länsstyrelsen, 2011, 528 TSEK), PI: Per Jonsson, Co-applicant: Fredrik Lindberg
- **The influence of vegetation and green spaces on human thermal comfort in urban areas – a quantitative approach**. Postdoctoral Fellowship (FORMAS, 2009-2010, 390 TSEK), PI: Fredrik Lindberg
- Smaller financial support has been provided from the following scholarships summing up to 101 TSEK: SSAG - the Swedish Society of Anthropology and Geography), the Sven Lindqvist fund, the Adlerbertska research fund, the Hierta-Retzius fund and the Swedish Cartographic Society.

Review assignments for scientific journals

Transactions in GIS; Building Information Science; Building and Environment; Climate Research; Landscape and Urban Planning; Boundary Layer Climates; Meteorologischen Zeitschrift; Advances in Meteorology; Geografica Polonica; Urban Geography; Urban Climate (*Certificate of Excellence in Reviewing, 2013*); Journal of Atmospheric and Oceanic Technology; International Journal of Climatology; Theoretical and Applied Climatology; International Journal of Biometeorology; Geophysical Research Letters; Agricultural and Forest Meteorology; Environment and Planning B: Planning and Design; Sustainable Cities and Society; Computers, Environment and Urban Systems; Remote Sensing; Science of the Total Environment, Building Research & Information, Geoscientific Model Development, Nature Climate Change; Remote Sensing of the Environment

Review assignments for books

Urban Climates, Ch. 5: "Radiation" by T.R. Oke, G. Mills, A. Christen, J. Voogt. 2014.

Scientific meetings and conferences

- EGU General Assembly 2023, Vienna, Austria, 23-28 April 2023 – oral presentation
- International Association for Urban Climate Virtual Poster Session, August 2022 – plenary moderator and passive participation
- Swedish Climate Symposium, May, 2022, Norrköping, Sweden – keynote oral presentation
- Uppstartskonferens för Vinnova och Formas utlysningar om klimatanpassning i den byggda miljön, April, 2022, Stockholm, Sweden – poster presentation
- Symposium on Challenges in Applied Human Biometeorology, March, 2020, Freiburg, Germany - oral presentation
- The 10th International Conference on Urban Climate (ICUC10), New York, US, 2018 - oral presentation and workshop organizer
- AGILE 2018, 21st Conference on Geo-information science, Lund 12-15 June, Sweden - workshop organizer "Introduction to OSGeo and Python programming using PyQGIS"
- International Conference for Free and Open-Source Software for Geospatial (FOSS4G), Boston, US, 2017 - oral presentation
- 21th International Congress of Biometeorology, September, 2017, Durham, UK - oral presentation
- The 9th International Conference on Urban Climate (ICUC9), Toulouse, France, 2015 - oral and poster presentation
- The 1st International QGIS Conference for Users, Educators and Developers, 18-19 May, Nodebo, Denmark
- Position 2015, 17-19 March 2015, Stockholm (Sweden)
- Symposium "Towards integrated modelling of urban systems" 15-17 October 2014, Lyon (France)

- The 8th International Conference on Urban Climate (ICUC8), Dublin, Ireland, 2012 - member of the international scientific committee, session chair, oral and poster presentation
- The 4th GAC conference on Atmospheric Science, May 2010 - oral presentation
- NCAS Urban Meteorology Workshop, Urban roughness sub layers - from measurements and CFD to predictive models, March 2009, University of Reading, UK
- Workshop on "The potential impact of climate change on heat stress in different built structures and cities across Europe". Gothenburg, Sweden, 2009 - co-organizer, oral presentation
- The 7th International Conference on Urban Climate (ICUC7), Yokohama, Japan, 2009 - member of the international scientific committee, session chair, oral and poster presentation
- Conference of Free and Open-Source Software for Geospatial (FOSS4G), Cape Town, South Africa, 2008
- FORMAS conference "Urban public spaces", Gothenburg, Sweden, 2007 - organizer, oral presentation
- The 6th International Conference on Urban Climate (ICUC6), Gothenburg, Sweden, 2006 - organizer, oral and poster presentation
- Nordic GIS-conference, 2004, Gothenburg, Sweden - oral presentation
- The 5th International Conference on Urban Climate (ICUC5), Lodz, Poland, 2003 - oral presentation

Selection of invited talks

- Nationellt möte: Tillämpad stadsbyggnad 2023, KTH, Stockholm, Sweden (2023)
- 143rd EuroSDR Board of Delegates meeting, Gävle, Sweden (2023)
- Climat Urbain, Amphi Pierre Gilles de Gennes, Paris, France (2023)
- End seminar CityAirSim, Chalmerska huset, Gothenburg, Sweden (2022)
- GISVäst 30 year anniversary, Clarion Post Hotel, Gothenburg, Sweden (2022)
- Kunskapslyftet, Building and Planning office, City of Gothenburg, Sweden (2022)
- Swedish Climate Symposium 2022 in Norrköping, Sweden (2022)
- URBISPHERE online seminar on urban form and function (2020)
- Technische Universität Berlin, Center for Innovation and Science on Building Greening, Germany (2018)
- Technische Universität Berlin, Department of Ecology, Germany (2013)
- Wageningen University and Research Centre, Meteorology and Air Quality Group, Netherlands (2012)
- University of Kassel, Environmental Meteorology, Germany (2011)
- University of Reading, Department of Meteorology, United Kingdom (2011)

Selection of experience of communicating results with stakeholders/end users

- Participated on Swedish national television (SVT) news (Rapport), 2023.
- *Hetare blötare städer – Verket - en plats för kreativitet och möten*, Stadsdelsförvaltningen Centrum, Göteborg, Sweden, 2023
- Klimatsmart – Hur är med det? Public online web-seminars organised by Science Faculty, GU, 2020.
- Participated in national radio on the Swedish Radio (SR), Vetenskapsradion Klotet 2020.

- Participated in regional radio on the Swedish Radio (SR), 2018.
- Attended a workshop in Dar es Salaam on energy efficient and climate sensitive planning, 2016.
- Participated in regional afternoon radio show “Eftermiddag i P4” on the Swedish Radio (SR), 2015.
- Participated in regional morning radio show “P4-morgon” on the Swedish Radio (SR), 2015.
- Two Stakeholder workshops in conjunction to FORMAS-funded project “Adapting cities to climate induced risks - a coordinated approach”, 2011-2013.
- Newspaper article about urban climate and health in Göteborgs Posten, 2014-05-10.
- Participated in the regional news concerning Solar energy in Göteborg, Swedish Television (SVT), 2011.
- Participation in Workshop within Mistra Urban Futures “Climate adapted city planning”, November 2010
- “What lurks in the darkness – the use of a shadow casting algorithm in urban climatology”. Presentation at the “GIS i Väst”-meeting, 2008
- Participated in “Eftersnack” concerning local climate in Göteborg, Swedish Television (SVT), 2008.
- Participated and interviewed in the news program on the Swedish Radio (SR), Norrland, 2005.
- Participated and interviewed in the news program on TV4 Norrland, 2005.
- Newspaper article about the local climate in Luleå in Norrländska Socialdemokraten, 2005.
- Participated and interviewed in the news program at the Swedish Radio (SR), Göteborg, 2008.
- Participated and arranged working symposium “Stadens offentliga rum” in Göteborg, 2007 (FORMAS).

Board assignments and non-academic work

- Board member in *GISväst*, (2013-2019)
- Board member in *QGISSweden* (2016-)
- Board member in *Geografiska föreningen i Göteborg* (2022-)
- Scientific consultant at, Tyréns (2013-2014) including:
 - o *WWW.HEDEN.GO:TEBORG*, (<http://www.tyrens.se/sv/Heden/WWWHEDENGOTEborg/>)
 - o *Bioclimatic Design Toolkit* – Tyréns UK.
 - o *Tyréns Solplan* – A tool to estimate and visualize potential sun energy production on building roofs
- White architects, Planning proposal around Central station in Göteborg, Sweden (2012)

Professional Memberships

- International Association of Urban Climate (IAUC), Swedish Cartographic Society, GIS-Väst, The Swedish Society for Anthropology and Geography (SSAG), QGIS Sweden (board member), Geografiska föreningen i Göteborg

Publications

Summary statistics (February 2024):

h-index: 38 (Google Scholar); 34 (Scopus)

Total peer-reviewed articles: 68 with 16 as first author

Total citations: 6940 (Google Scholar); 4376 (Scopus)

In peer-review journals:

Lindberg, F., Lindström, A., Stålnacke, V., Sofia Thorsson and Georgia Destouni (2024) Observations and modelling of mosquito prevalence within urban areas – A case study from Uppsala, Sweden. *Urban Ecosystem*. <https://doi.org/10.1007/s11252-024-01511-7>

Wallenberg N., **Lindberg F.**, Thorsson S., Jungmalm J., Fröberg A., Raustorp A. and Rayner D. (2023) The effects of warm weather on children's outdoor heat stress and physical activity in a preschool yard in Gothenburg, Sweden. *International Journal of Biometeorology*. <https://doi.org/10.1007/s00484-023-02551-y>

Bernard, J., **Lindberg, F.**, and Oswald, S.: URock 2023a: an open-source GIS-based wind model for complex urban settings, *Geosci. Model Dev.*, 16, 5703–5727, <https://doi.org/10.5194/gmd-16-5703-2023>, 2023.

Zeng L., **Lindberg F.**, Zhang X., Pan P. and Lu J. (2023) Road surface temperature evaluated with street view-derived parameters in a hot and humid megacity. *Urban Climate*. <https://doi.org/10.1016/j.uclim.2023.101585>.

Wallenberg N., Rayner, D., **Lindberg, F.** and Thorsson, S. (2023) Present and future heat stress of preschoolers in five Swedish cities. *Climate Risk Management*. <https://doi.org/10.1016/j.crm.2023.100508>.

Wallenberg, N., **Lindberg, F.**, Holmer, B., and Rayner, D. (2023) An anisotropic parameterization scheme for longwave irradiance and its impact on radiant load in urban outdoor settings. *International journal of biometeorology*. <https://doi.org/10.1007/s00484-023-02441-3>.

Wallenberg N., **Lindberg, F.**, and Rayner, D. (2022) Locating trees to mitigate outdoor radiant load of humans in urban areas using a metaheuristic hill climbing algorithm – Introducing TreePlanter v1.0. *Geoscientific Modelling Development*. *Geosci. Model Dev.*, 15, 1107–1128.

Bäcklin O., **Lindberg, F.**, Thorsson, S., Rayner, D., and Wallenberg, N. (2022) Outdoor heat stress at preschools during an extreme summer in Gothenburg, Sweden - Preschool teachers' experiences contextualized by radiation modelling. *Sustainable Cities and Society*. <https://doi.org/10.1016/j.scs.2021.103324>.

Konarska J, Klingberg J and **Lindberg F** (2021) Applications of Dual-Wavelength Hemispherical Photography in Urban Climatology and Urban Forestry. *Urban Forestry & Urban Greening* 58. <https://doi.org/10.1016/j.ufug.2020.126964>.

Olvmo M, Holmer B, Thorsson S, Reese H and **Lindberg F** (2020) Sub-arctic palsa degradation and the role of climatic drivers in the largest coherent palsa mire complex in Sweden (Vissátvuopmi), 1955–2016. *Sci Rep* 10, 8937. <https://doi.org/10.1038/s41598-020-65719-1>

Thorsson, S, Rayner D, Palm G, **Lindberg F**, Carlström E, Börjesson M, Nilson F, Khorram-Manesh A, and Holmer B. (2020) "Is Physiological Equivalent Temperature (Pet) a Superior Screening Tool for Heat Stress Risk Than Wet-Bulb Globe Temperature (Wbgt) Index? Eight Years of Data from the Gothenburg Half Marathon." *British Journal of Sports Medicine*. <https://doi.org/10.1136/bjsports-2019-100632>.

Lindberg F, K. F. G. Olofson, T. Sun, C. S. B. Grimmond, and C. Feigenwinter. "Urban Storage Heat Flux Variability Explored Using Satellite, Meteorological and Geodata." *Theoretical and Applied Climatology* (2020). <https://doi.org/10.1007/s00704-020-03189-1>.

Wallenberg, Nils, **Lindberg F**, Holmer B, and Thorsson S. (2020) "The Influence of Anisotropic Diffuse Shortwave Radiation on Mean Radiant Temperature in Outdoor Urban Environments." *Urban Climate* 31 (2020). <https://doi.org/10.1016/j.uclim.2020.100589>.

Khorram-Manesh A, Löf T, Börjesson M, Nilson F, Thorsson S, **Lindberg F**, Carlström E. (2020) Profiling Collapsing Half Marathon Runners—Emerging Risk Factors: Results from Gothenburg Half Marathon. *Sports*. 2020; 8(1):2.

Aminipouri M, Rayner D, **Lindberg F**, Thorsson S, Knudby AJ, Zickfeld K, et al. (2019) Urban tree planting to maintain outdoor thermal comfort under climate change: The case of Vancouver's local climate zones. *Building and Environment*. 2019; 158:226-36.

Ching, J., D. Aliaga, G. Mills, V. Masson, L. See, M. Neophytou, A. Middel, A. Baklanov, C. Ren, E. Ng, J. Fung, M. Wong, Y. Huang, A. Martilli, O. Brousse, I. Stewart, X. Zhang, A. Shehata, S. Miao, X. Wang, W. Wang, Y. Yamagata, D. Duarte, Y. Li, J. Feddema, B. Bechtel, J. Hidalgo, Y. Roustan, Y. Kim, H. Simon, T. Kropp, M. Bruse, **F. Lindberg**, S. Grimmond, M. Demuzure, F. Chen, C. Li, J. Gonzales-Cruz, B. Bornstein, Q. He, P. Tzu, A. Hanna,

- E. Erell, N. Tapper, R. K. Mall & D. Niyogi (2019) Pathway using WUDAPT's Digital Synthetic City tool towards generating urban canopy parameters for multi-scale urban atmospheric modeling. *Urban Climate*, 28.
- Carlström, E., Börjesson, M., Palm, G., Thorsson, S., **Lindberg, F.**, Holmer, B., Berner, A., Örninge, P., Luning, H., Nilson, F., Gelang, C., Khorram-Manesh, A., (2019) Medical emergencies during a half marathon contest – the influence of weather. : *International Journal of Sports Medicine*. In Press.
- Oswald, S. M., M. Revesz, H. Trimmel, P. Weihs, S. Zamini, A. Schneider, M. Peyerl, S. Krispel, H. E. Rieder, E. Mursch-Radlgruber & **F. Lindberg** (2018) Coupling of urban energy balance model with 3-D radiation model to derive human thermal (dis)comfort. *International Journal of Biometeorology*. DOI 10.1007/s00484-018-1642-z
- Nilson, F., **F. Lindberg**, G. Palm, L. Lundgren, D. Rayner, M. Börjesson, S. Thorsson, A. Khorram-Manesh & E. Carlström (2018) Can participants predict where ambulance-requiring cases occur at a half marathon? *Scandinavian Journal of Medicine & Science in Sports*, 28, 2760-2766.
- Nilson, F., **F. Lindberg**, G. Palm, L. Lundgren, D. Rayner, M. Börjesson, S. Thorsson, A. Khorram-Manesh & E. Carlström (2018) TESTING A NOVEL METHOD FOR IDENTIFYING WHERE SERIOUS MEDICAL ENCOUNTERS OCCUR AT MARATHONS IN ORDER TO IMPROVE MEDICAL PREPAREDNESS AND RUNNERS' SAFETY. *Injury Prevention*, 24.
- Chrysoulakis N., Grimmond C.S.B, Feigenwinter C, **Lindberg F**, Gastellu-Etchegorry J., Marconcini M., Mitraka Z., Stagakis S., Crawford B., Olofson F., L. Landier L., Morrison W. & Parlow E. (2018) Urban energy exchanges monitoring from space. *Scientific Reports*, 8, 11498.
- Feigenwinter, C., Vogt, R., Parlow, E., **Lindberg, F.**, Marconcini, M., Frate, F.D., et al. (2018) Spatial Distribution of Sensible and Latent Heat Flux in the City of Basel (Switzerland). *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*. 2018; (99):1-7.
- Lindberg, F.**, Grimmond, C.S.B., Gabey, A., Huang, B., Kent, C.W., Sun, T., Theeuwes, N., Järvi, L., Ward, H., Capel-Timms, I., Chang, Y.Y., Jonsson, P., Krave, N., Liu, D., Meyer, D., Olofson, F., Tan, J.G., Wästberg, D., Xue, L., Zhang, Z. (2018) Urban Multi-scale Environmental Predictor (UMEP): An integrated tool for city-based climate services. *Environmental Modelling and Software*. 99, 70-87.
- Andersson-Sköld, Y., Klingberg, J., Gunnarsson, B., Gustafsson, I., Hedblom, M., Knez, I., **Lindberg, F.**, Ode Sang, Å., Pleijel, H., Thorsson, P. and Thorsson, S. (2017) A framework for assessing urban greenery's effects and valuing its ecosystem services. *Journal of Environmental Management*. 205, 274-285.
- Feigenwinter, C., Vogt, R., Parlow, E., **Lindberg, F.**, Marconcini, M., Frate, F.D., Chrysoulakis N., (2017) Spatial Distribution of Sensible and Latent Heat Flux in the URBANFLUXES case study city Basel (Switzerland), 2017 JOINT URBAN REMOTE SENSING EVENT (JURSE)
- Klingberg, J., Konarska, J., **Lindberg, F.**, Johansson, L. and Thorsson, S. (2017) Leaf area of urban woodlands, parks and trees in a high latitude city. *Urban Forestry and Urban Greening*. 26, 31-40.
- Yahia, M., Johansson, E., Thorsson, S., **Lindberg, F.**, Rasmussen, M. (2017) Effect of urban design on microclimate and thermal comfort outdoors in warm-humid Dar es Salaam, Tanzania. *International Journal of Biometeorology*. In Press.
- Thorsson, S., Rayner, D., **Lindberg, F.**, Monteiro, A., Katzschnier, L., K., Lau, Campe, S., Katzschnier, A., Konarska, J., Onomura, S., Velho, S., Holmer, B. (2017) Present and projected future mean radiant temperature for three European cities. *International Journal of Biometeorology*. 61, 1531–1543. DOI 10.1007/s00484-017-1332-2.
- Hedblom, M., **Lindberg, F.**, Vogel, E., Wissman, J. and Ahrné, K. (2017) Estimating urban lawn cover in space and time: case studies in three Swedish cities. *Urban Ecosystem*. 20: 1109-1119.
<https://doi.org/10.1007/s11252-017-0658-1>.
- Kent, C.W., Grimmond, C.S.B., Gatey, D., Barlow, J., Kotthaus, S., **Lindberg, F.**, Haliots, C.H. (2017) Evaluation of urban local-scale aerodynamic parameters: implications for modelling the vertical profile of wind and source areas. *Boundary Layer Meteorology*. 164: 183-213. <https://doi.org/10.1007/s10546-017-0248-z>
- Lau, K., **Lindberg, F.**, Johansson, E., Rasmussen, M. and Thorsson, S. (2017) Investigating solar energy potential in tropical urban environment: a case study of Dar es Salaam, Tanzania. *Sustainable Cities and Society*. DOI: 10.1016/j.scs.2017.01.010.

Yunus, A., Avtar, R., Kraines, S., Yamamuro, M., **Lindberg, F.** and Grimmond C.S.B. (2016) Uncertainties in Tidally Adjusted Estimates of Sea Level Rise Flooding (Bathtub Model) for the Greater London. *Remote Sensing* 8(5), DOI:10.3390/rs8050366

Lindberg, F., Lau, K., Rayner, D. and Thorsson, S. (2016) The impact of urban planning strategies on heat stress in a climate-change perspective. *Sustainable Cities and Society*. 25, 1–12.

Onomura, S., **Lindberg, F.**, Holmer, B. and Thorsson, S. (2016) Intra-urban nocturnal cooling rates: development and evaluation of the NOCRA model. *Meteorological Applications*. DOI: 10.1002/met.1558.

Lindberg, F., Onomura, S. and Grimmond, C.S.B (2016) Influence of ground surface characteristics on the mean radiant temperature in urban areas. *International Journal of Biometeorology*. 60(9), 1439–1452.

Konarska, J., Uddling, J., & Holmer, B., Lutz, M., **Lindberg, F.**, Pleijel, H. and Thorsson, S. (2016) Transpiration of urban trees and its cooling effect in a high latitude city. *International Journal of Biometeorology*. 60:1, 159–172.

Jänicke, B., Meier, F., **Lindberg, F.**, Schubert, S., Scherer, D. (2016) Towards city-wide, building-resolving analysis of mean radiant temperature. *Urban Climate*. 15, 83–98.

Konarska, J., Holmer, B., **Lindberg, F.**, Thorsson, S. (2015) Influence of vegetation and building geometry on the spatial variations of air temperature and cooling rates in a high latitude city. *International Journal of Climatology*. 36(5), 2379–2395

Hu, Y., Almkvist, E., **Lindberg, F.**, Bogren, J. and Gustavsson, T. (2015) The use of screening effects in modelling route-based daytime road surface temperature. *Theoretical and Applied Climatology*. 125(1), 303–319.

Lindberg, F., Jonsson, P., Honjo, T. and Wästberg, D. (2015) Solar energy on building envelopes - 3D modelling in a 2D environment. *Solar Energy*. 115 (2015) 369–378

Andersson-Sköld, Y., Thorsson, S., Rayner, D., **Lindberg, F.**, Janhäll, S., Jonsson, A., Moback, U., Bergman, R. and Granberg, M. (2015) An integrated method for assessing climate-related risks and adaptation alternatives in urban areas. *Climate Risk Management*. 7, 31–50.

Johansson, L., Onomura, S., **Lindberg, F.** and Seaquist, J. (2015) Towards the modelling of pedestrian wind speed using high resolution digital surface models and statistical methods. *Theoretical and Applied Climatology*. 124(1), 189–203.

Lindberg, F., Grimmond, C.S.B. and Martilli, A. (2015) Sunlit fractions on urban facets - Impact of spatial resolution and approach. *Urban Climate*. 12:65-84.

Onomura, S., Grimmond, C.S.B., **Lindberg, F.**, Holmer, B., and Thorsson, S. (2015) Meteorological forcing data for urban outdoor thermal comfort models from a coupled convective boundary layer and surface energy balance scheme. *Urban Climate*. 11:1-23.

Rayner, D., **Lindberg, F.**, Thorsson, S. and Holmer, B. (2014) A statistical downscaling algorithm for thermal comfort applications. *Theoretical and Applied Climatology*. 122(3), 729–742.

Lau, K., **Lindberg, F.**, Rayner, D. and Thorsson, S. (2014) The effect of urban geometry on mean radiant temperature under future climate change: a study of three European cities. *International Journal of Biometeorology*. 59(7), 799–814.

Thorsson, S., Rocklöv, J., Konarska, J., **Lindberg, F.**, Holmer, B., Dousset, B. and Rayner, D. (2014) Mean radiant temperature - A predictor of heat related mortality. *Urban Climate* 10:2, 332-345.

Konarska, J., **Lindberg, F.**, Larsson, A., Thorsson, S. and Holmer, B. (2013) Transmissivity of solar radiation through crowns of single urban trees—application for outdoor thermal comfort modelling. *Theoretical and Applied Climatology*. 117:363-376.

Lindberg, F., Holmer, B., Thorsson, S. and Rayner, D. (2013) Characteristics of the mean radiant temperature in high latitude cities—implications for sensitive climate planning applications. *International Journal of Biometeorology* 58:5, 613-627.

Lindberg, F., Grimmond, C., Yogeswaran, N., Kotthaus, S. and Allen, L. (2013) Impact of city changes and weather on anthropogenic heat flux in Europe 1995–2015. *Urban Climate* 4, 1-15.

- Loridan, T., **Lindberg, F.**, Jorba, O., Kotthaus, S., Grossman-Clarke, S. and Grimmond, C. (2013) High Resolution Simulation of the Variability of Surface Energy Balance Fluxes Across Central London with Urban Zones for Energy Partitioning. *Boundary-Layer Meteorology* 147:3, 493-523.
- Franzén, L., **Lindberg, F.**, Viklander, V. and Walther, A. (2012) The potential peatland extent and carbon sink in Sweden, as related to the Peatland / Ice Age Hypothesis. *Mires and Peat* 10:8, 1–19.
- Allen, L., **Lindberg, F.** and Grimmond, C. (2011) Global to city scale urban anthropogenic heat flux: model and variability. *International Journal of Climatology* 31:13, 1990-2005.
- Lindberg, F.**, Olvmo, M. and Bergdahl, K. (2011) Mapping areas of potential slope failures in cohesive soils using a shadow-casting algorithm – A case study from SW Sweden. *Computers and Geotechnics* 38, 791-799.
- Lindberg, F.** and Grimmond, C. (2011) Nature of vegetation and building morphology characteristics across a city: Influence on shadow patterns and mean radiant temperatures in London. *Urban Ecosystems* 14:4, 617-634.
- Lindberg, F.** and Grimmond, C. (2011) The influence of vegetation and building morphology on shadow patterns and mean radiant temperature in urban areas: model development and evaluation. *Theoretical and Applied Climatology* 105:3, 311-323.
- Lordian, T., Grimmond, C., Offerle, B., Young, D., Smith, T., Järvi, L. and **Lindberg, F.** (2011) Local-Scale Urban Meteorological Parameterization Scheme (LUMPS): longwave radiation parameterization and seasonality related developments. *Journal of Applied Meteorology and Climatology* 50, 185–202.
- Lindberg, F.** and Grimmond, C. (2010) Continuous sky view factor from high resolution urban digital elevation models. *Climate Research* 42:3, 177-183.
- Thorsson, S., **Lindberg, F.**, Björklund, J., Holmer, B. and Rayner, D. (2010) Potential changes in outdoor thermal comfort conditions in Gothenburg, Sweden due to climate change: the influence of urban geometry. *International Journal of Climatology* 31:2, 324–335.
- Gal, T., **Lindberg, F.** and Unger, J. (2009) Computing continuous sky view factors using 3D urban raster and vector databases: comparison and application to urban climate. *Theoretical and Applied Climatology* 95:1-2, 111-123.
- Knez, I., Thorsson, S., Eliasson, I. and **Lindberg, F.** (2009) Psychological mechanisms in outdoor place and weather assessment: towards a conceptual model. *International Journal of Biometeorology* 53:1, 101-111.
- Lindberg, F.**, Holmer, B. and Thorsson, S. (2008) SOLWEIG 1.0 – Modelling spatial variations of 3D radiant fluxes and mean radiant temperature in complex urban settings. *International Journal of Biometeorology* 52, 697–713.
- Eliasson, I., Knez, I., Westerberg, U., Thorsson, S. and **Lindberg, F.** (2007) Climate and behaviour in a Nordic city. *Landscape and Urban Planning* 82:1-2, 72-84.
- Lindberg, F.** (2007) Modelling the urban climate using a local governmental database. *Meteorological Applications* 14:3, 263-273.
- Thorsson, S., **Lindberg, F.**, Eliasson, I. and Holmer, B. (2007) Different methods for estimating the mean radiant temperature in an outdoor setting. *International Journal of Climatology* 27:14, 1983-1993.
- Thorsson, S., Honjo, T., **Lindberg, F.**, Eliasson, I. and Lim, E. (2006) Thermal comfort and outdoor activity in Japanese urban public places. *Environment and Behavior* 39:5, 660-684.
- Lindberg, F.** (2005) Towards the use of local governmental 3-d data within urban climatology studies. *Mapping and Image Science* 2, 4-9.

Computer tools:

PET Calculator – A web-based tool for calculating Physiological Equivalent Temperature (PET) for outdoor sporting events. Experimental version available from <https://biglimp.pythonanywhere.com>

UMEP – Universal Multi-scale Environmental Predictor. An open source climate sensitive planning tools for practitioners and researchers. Available as a QGIS-plugin at <https://umep-docs.readthedocs.io>

SOLWEIG 2023a – **S**Olar and **L**ong**W**ave Environmental Irradiance **G**eometry model. A tool that calculates radiant fluxes and mean radiant temperature in complex urban settings. Available through UMEP.

The Lucy Model V2014a - Large scale **U**rban **C**onsumption of energ**Y** model. A model that estimates anthropogenic heat fluxes on any location on Earth. Available through UMEP and as stand-alone.

SEBE 2015a – **S**olar **E**nergy on **B**uilding **E**nvelopes. A tool that simulates spatial variations of potential photovoltaic energy production on building envelopes in urban areas. Available through UMEP.

SEES 1.2 – **S**olar **E**nergy from **E**xisting **S**tructures. A tool that simulates spatial variations of potential photovoltaic energy production on roof structures in urban areas. Available for download from the Göteborg Urban Climate Group webpage (<http://www.gvc.gu.se/english/research/climate/urban-climate/>).

SkyViewFactorCalculator 1.1 – A tool calculates sky view factor for digital hemispherical fish eye photos. Available for download from the Göteborg Urban Climate Group webpage (<http://www.gvc.gu.se/english/research/climate/urban-climate/>).

PlanAreaIndexCalculator 1.0 – A tool calculates Plan area index for unreferenced maps (<http://www.gvc.gu.se/english/research/climate/urban-climate/>).

Conference abstracts:

Lindberg, F. (2003) Urban geometry and temperature variations. Proceedings of the 5th International Conference on Urban Climate, Lodz, Poland.

Westerberg, U., **Lindberg, F.**, Sandberg, M. and Claesson, L. (2004) Windiness in an urban space described with different methods. Impact of wind and storm on city life and built environment. Cost Action 14, Proceedings of the International Conference on Urban Wind Engineering and Building Aerodynamics, May 5 - 7, Von Karman Institute, Belgium.

Lindberg F (2004) Microclimate and Behaviour studies in an urban space. Conference on Public Space, 5-6 February, Lund, Sweden.

Lindberg, F. (2006) Modelling the urban microclimate using local governmental 3-d raw data. Lindqvist, S, Grimmond, CBS, (eds.), The 6th International Conference on Urban Climate, Göteborg, Sweden.

Thorsson, S., **Lindberg, F.**, Björklund, J. and Holmer, B. (2009) Potential increase of heat stress in Swedish cities due to climate change: the impact of built structure on thermal comfort. The 7th International Conference on Urban Climate (ICUC7), Yokohama, Japan, 29 June – 3 July.

Lindberg, F. and Thorsson, S. (2009) SOLWEIG - The new model for calculating the mean radiant temperature. The Seventh International Conference on Urban Climate.

Lindberg, F. and Grimmond, C.S.B. (2012) 3D modelling of vegetation within a 2D model – evaluation and application. The 8th International Conference on Urban Climates.

Johansson, L., Lindberg, F., Onomura, S., Holmer, B. and Thorsson, S. (2012) Statistical modelling of pedestrian wind speed using high-resolution digital surface models. The 8th International Conference on Urban Climates.

Lindberg, F., Grimmond C.S.B., Onomura, S. and Järvi, L. (2014) UMEP - An integrated tool for urban climatology and climate sensitive planning applications. "Towards integrated modelling of urban systems" 15-17 October 2014, Lyon (France).

Holmer, B., **Lindberg, F.**, Rayner, D. and Thorsson, S. 2015: How to transform the standing man from a box to a cylinder – a modified methodology to calculate mean radiant temperature in field studies and models, ICUC9 – 9 th International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment, BPH5: Human perception and new indicators. Toulouse, July 2015.

Lindberg, F., Grimmond, CSB., Onomura, S., Järvi, L. and Ward, H. 2015: UMEP - An integrated tool for urban climatology and climate-sensitive planning applications. ICUC9 – 9 th International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment, TUKUP7 (cont): Warning plans & Decision support tools. Toulouse, July 2015.

Ward, H., Grimmond, C.S.B., Kotthaus, S., Järvi, L., **Lindberg, F.**, Evans, J., Morrison, W., and Mustchin, J. 2015: Using observations to improve modelled energy, water and carbon exchanges for urban areas. ICUC9 – 9 th

International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment, NOMTM10 (cont): Urban Canopy parameterizations II : development & sensitivity. Toulouse, July 2015.

Shiho Onomura, S., Holmer, B., **Lindberg, F.** and Thorsson, S. 2015: An intra-urban nocturnal cooling rate model ICUC9 – 9 th International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment, NOMTM2: Statistical models : development & sensitivity. Toulouse, July 2015.

Jänicke, B., Meier, F., **Lindberg, F.** and Scherer, D. 2015: Towards a city-wide analysis of mean radiant temperature at high spatial resolution – An example from Berlin, Germany. ICUC9 – 9 th International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment, BPH1: Modeling of outdoor microclimate & comfort. Toulouse, July 2015.

Klingberg, J., Konarska, J., **Lindberg, F.** and Thorsson, S. 2015: Leaf area measurements of urban woodlands, parks and trees in Gothenburg, Sweden. ICUC9 – 9 th International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment, UCP11: Influence of urban vegetation II : parks & green roofs. Toulouse, July 2015.

Konarska, J., Uddling Fredin, J., Holmer, B., Lutz, M., **Lindberg, F.**, Pleijel, H. and Thorsson, S. 2015: Transpiration of urban trees and its impact on nocturnal cooling in Gothenburg, Sweden. ICUC9 – 9 th International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment, UCP10 (cont): Influence of urban vegetation I : urban trees. Toulouse, July 2015.

Landier, L., Al Bitar, A., Gregoire, T., Lauret, N., Yin, T., Gastellu-Etchegorry, J.P., Aubert, S., Mitraka, Z., Chrysoulakis, N., Feigenwinter, C., Parlow, E., Heldens, W., Kotthaus, S., Grimmond, C.S.B. and **Lindberg, F.** 2015: Modeling parameters and remote sensing acquisition of urban canopies. POSTER 25: NOMTM - Urban canopy parameterizations. ICUC9 – 9 th International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment. Toulouse, July 2015.

Chrysoulakis, N., Esch, T., Gastellu-Etchegorry, J.P., Grimmond, C.S.B., Parlow, E., **Lindberg, F.**, Del Frate, F., Klostermann, J. and Mitraka, Z. 2015: A novel approach for anthropogenic heat flux estimation from space. ICUC9 – 9 th International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment, NOMTM7: Field campaigns. Toulouse, July 2015.

Lau, K., Thorsson, S., **Lindberg, F.**, Holmer, B. 2015: Street geometry design and its effect on mean radiant temperature: A parametric study based on numerical modelling. ICUC9 – 9 th International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment, POSTER 8: BPH/UDC - Outdoor microclimate, modelling and link with urban form. Toulouse, July 2015.

Kotthaus, S., Inagaki, A., **Lindberg, F.**, Grimmond, C.S.B., Kanda, M. 2015: Quantifying the impact of surface heterogeneities on the radiative response of a simplified urban surface. ICUC9 – 9 th International Conference on Urban Climate jointly with 12th Symposium on the Urban Environment, POSTER 8: BPH/UDC - Outdoor microclimate, modelling and link with urban form. Toulouse, July 2015.

Chrysoulakis, N., Heldens, W., Gastellu-Etchegorry, J-P., Grimmond, CSB., Feigenwinter, C., **Lindberg, F.**, Del Frate, F., Klostermann, J., Mitraka, Z., Esch, T., Al Bitar, A., Gabey, A., Parlow, E., Olofson, F. 2016: A novel approach for anthropogenic heat flux estimation from space. IGARSS 2016 - 2016 IEEE International Geoscience and Remote Sensing Symposium

Landier, L., Al Bitar, A., Lauret, N., Gastellu-Etchegorry, J-P., Aubert, S., Mitraka, Z., Feigenwinter, C., Parlow, E., Heldens, W., Kotthaus, S., Grimmond, CSB., **Lindberg, F.**, Chrysoulakis, N.. 2016: 3D modeling of radiative transfer and energy balance in urban canopies combined to remote sensing acquisitions. IGARSS 2016 - 2016 IEEE International Geoscience and Remote Sensing Symposium

Chrysoulakis, N., Heldens, W., Gastellu-Etchegorry, J-P., Grimmond, CSB., Feigenwinter, C., **Lindberg, F.**, Del Frate, F., Klostermann, J., Mitraka, Z., Esch, T., Al Bitar, A., Gabey, A., Parlow, E., Olofson, F. 2016: Anthropogenic heat flux estimation from space: first results. EGU General Assembly 2016, held 17-22 April, 2016 in Vienna Austria

Chrysoulakis, N., Feigenwinter, C., Al Bitar, A., Esch, T., Del Frate, F., Gabey, A., Gastellu-Etchegorry, J-P., Grimmond, CSB., Heldens, W., Klostermann, J., **Lindberg, F.**, Mitraka, Z., Olofson, F., Parlow, E. 2016: Anthropogenic Heat Flux Estimation from Space: The URBANFLUXES Project. AMS 22nd Symposium on Boundary Layers and Turbulence

Landier, L., Lauret, N., Gastellu-Etchegorry, J-P., Al Bitar, A., Mitraka, Z., Feigenwinter, C., Parlow, E., Heldens, W., Kotthaus, S., Grimmond, CSB., **Lindberg, F.**, Chrysoulakis, N.. 2016: Calibration of DART Radiative Transfer Model with Satellite Images for Simulating Albedo and Thermal Irradiance Images and 3D Radiative Budget of Urban Environment. 36th EARSeL Symposium, 20-24 June 2016, Bonn, Germany

Chrysoulakis, N., Marconcini, M., Gastellu-Etchegorry, J., Grimmond, C.S.B. , Feigenwinter, C., **Lindberg, F.**, Del Frate, F., Klostermann, J., Mitraka, Z., Esch, T., Landier, L., Gabey, A., Parlow, E., Olofson, F. 2016: Anthropogenic heat flux estimation from space: results of the first phase of the URBANFLUXES project. Proc. SPIE 10008, Remote Sensing Technologies and Applications in Urban Environments, 100080C (October 26, 2016), doi:10.1117/12.2239411.

Lindberg F, Grimmond, C.S.B., Gabey, A., Huang, B., Kent, C.W., Sun, T., Theeuwes, N., Järvi, L., Ward, H., Capel-Timms, I., Chang, Y.Y., Jonsson, P., Krave, N., Liu, D., Meyer, D., Olofson, F., Tan, J.G., Wästberg, D., Xue, L., Zhang, Z. (2017) Urban Multi-scale Environmental Predictor-an extensive tool for climate services in urban areas. Free and Open Source Software for Geospatial (FOSS4G) Conference Proceedings. 17:1.

Lindberg F, Grimmond, C.S.B., Gabey, A., Huang, B., Kent, C.W., Sun, T., Theeuwes, N., Järvi, L., Ward, H., Capel-Timms, I., Chang, Y.Y., Jonsson, P., Krave, N., Liu, D., Meyer, D., Olofson, F., Tan, J.G., Wästberg, D., Xue, L., Zhang, Z. (2017) UMEP - An integrated tool for city-based climate services. 21th International Congress of Biometeorology, Extended Abstracts. 50-54.

Nilson F, **Lindberg F**, Palm G, et al PA 13-2-0532 Testing a novel method for identifying where serious medical encounters occur at marathons in order to improve medical preparedness and runners' safety Injury Prevention 2018;24:A29.

Lindberg, F., Grimmond, C.S.B., Kent, C.W., Solecki, W., Link, H. 4B.1: Urban Planning Strategies and Their Effect on Mitigating Heat Waves for New York City (Invited Presentation). 10th International Conference on Urban Climate/14th Symposium on the Urban Environment, New York, US, August 2018

Christoph W Kent, C. S. B. Grimmond, D. Gatey, J. F. Barlow, S. Kotthaus, **F. Lindberg**, C. H. Halios, K. Lee, H. C. Ward, J. W. Hong, and J. Hong. 4A.4: Urban Aerodynamic Roughness Parameters and Implications for Modelling the Vertical Profile of Wind Speed. 10th International Conference on Urban Climate/14th Symposium on the Urban Environment, New York, US, August 2018

Björn Holmer, **F. Lindberg** and S. Thorsson. 9B.7: Mean Radiant Temperature and the Shape If the Standing Man. 10th International Conference on Urban Climate/14th Symposium on the Urban Environment, New York, US, August 2018

Sandro M. Oswald, H. Trimmel, M. Revesz, P. Weihs, S. Zamini, A. Schneider, M. Peyerl, S. Krispel, and **F. Lindberg**. 77: Coupling of SOLWEIG and TEB to derive human thermal (dis)comfort. 10th International Conference on Urban Climate/14th Symposium on the Urban Environment, New York, US, August 2018

Niki Gaitani, **F. Lindberg**, T. Thiis, and I. Burud. 12A.2: Validation of the SOLWEIG model with High Resolution Spatial Measurements of Surface Temperatures. 10th International Conference on Urban Climate/14th Symposium on the Urban Environment, New York, US, August 2018

Nils Wallenberg, **F. Lindberg**, S. Thorsson, and B. Holmer. 9B.8: The Influence of Anisotropic Diffuse Radiation on Mean Radiant Temperature in Outdoor Urban Environments. 10th International Conference on Urban Climate/14th Symposium on the Urban Environment, New York, US, August 2018

Nektarios Chrysoulakis, C. S. B. Grimmond, C. Feigenwinter, **F. Lindberg**, J. P. Gastellu-Etchegorry, M. Marconcini, F. del Frate, J. Klostermann, Z. Mitraka, S. Stagakis, F. Olofson, L. Landier, A. M. Gabey, B. Crawford, W. Morrison, T. Sun, C. W. Kent, T. Esch, and E. Parlow. 7E.3: Urban Energy Balance from Space: the URBANFLUXES Project. 10th International Conference on Urban Climate/14th Symposium on the Urban Environment, New York, US, August 2018

Sofia Thorsson, G. Palm, **F. Lindberg**, D. Rayner, E. Carlström, M. Börjesson, F. Nilson, A. Khorram Manesh, and B. Holmer. 8B.2: Is the Wet-Bulb Globe Temperature (WBGT) Index the Best Screening Tool for the Assessment of Heat Stress during a City Half-Marathon? 10th International Conference on Urban Climate/14th Symposium on the Urban Environment, New York, US, August 2018.

Bernard, J., **Lindberg, F.**, and Oswald, S.: Quick calculation of wind field in urban area within a free and open source GIS: evaluation of the URock model, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-16480, <https://doi.org/10.5194/egusphere-egu23-16480>, 2023.

Lindberg, F., Bernard, J., Wallenberg, N., Bäcklin, O., Lönn, J., Thorsson, S., and Kalori, K.: Modelling spatial variation of thermal comfort indices in urban settings performed within an open source GIS , EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-7111, <https://doi.org/10.5194/egusphere-egu23-7111>, 2023.

Conference Workshops organizer:

Practical Workshop — the Urban Multi-scale Environmental Predictor (UMEP), 10th International Conference on Urban Climate/14th Symposium on the Urban Environment, New York, US, August 2018

Introduction to OSGeo and Python programming using PyQGIS – AGILE 2018. 21st Conference on Geo-information science. Lund 12-15 June, Sweden, 2018

Reports:

Wallenberg N, Thorsson S, **Lindberg F**, Holmer, H. (2018) Värmestress i urbana utomhusmiljöer – förekomst och möjliga åtgärder i befintlig bebyggelse. Folkhälsomyndigheten Artikelnummer: 18061

Lindberg, F., Johansson, L. and Thorsson, S. (2013) Infrastrukturnära vegetation i Göteborg. Mistra Urban Futures.

Lindberg, F., Johansson, L. and Thorsson, S. (2013) Träden i staden – Användningen av LiDAR-data för att identifiera urban vegetation. Mistra Urban Futures.

Thorsson, S., Andersson-Sköld, Y., **Lindberg, F.**, Anna, J., Janhäll, S., Moback, U. and Andersson Ovuka, M. (2011) Adapting cities to climate induced risks - a coordinated approach. Climate and Construction.

Book chapters:

Fredrik Lindberg & Sofia Thorsson (2024). "13. Det urbana klimatet – Bebyggelsens påverkan på utomhusklimatet" in "Den byggda formens betydelse – Kunskap från forskning". Editor: Caroline Stigsdotter. Boverket, FORMAS.

Petter Pilesjö, Lars Eklundh, **Fredrik Lindberg**, Karin Larsson & Nicklas Guldåker. (2020) "Kapitel 8 Analys av geografiska data" in "Geografisk informationsbehandling - Teori, metoder och tillämpningar". Editor: Lars Harrie. Sjätte upplagan (In Swedish)

Magliulo, V., Toscano, P., Grimmond, C.S.B., Kotthaus, S., Järvi, L., Setälä, H., **Lindberg, F.**, Vogt, R., Staszewski, T. Bubak, A., Synnefa, A., Santamouris, M. (2015) "Environmental measurements in BRIDGE case studies" in "Understanding Urban Metabolism: A Tool for Urban Planning". Editors: Chrysoulakis, N., Anselmo de Castro, E., Moors, E.J.

Grimmond, C.S.B., Järvi, L., **Lindberg, F.**, Marras, S., Falk, M., Loridan, T., Pigeon, G., Pyles D.R., Spano, D. (2015) "Urban energy budget models" in "Understanding Urban Metabolism: A Tool for Urban Planning". Editors: Chrysoulakis, N., Anselmo de Castro, E., Moors, E.J.

Holmer, B., **Lindberg, F.** and Thorsson, S. (2015) Urban climatic map studies in Sweden, Gothenburg, in Urban climatic maps - for sustainable urban planning, Editor: Edward Ng and Chao Ren. Routledge 2015.

Theses:

Lindberg, F. (2007) Spatial variations of the urban climate and its influence on thermal comfort and behaviour. Göteborg University. A114. Doctoral Thesis in Physical Geography.

Lindberg, F. (2002) The covariation between building intensity and intra urban air temperature. Master thesis in Physical geography. Earth Sciences Centre, Göteborg University, B333 (in Swedish).

Lindberg, F. (1998) An attempt to measure the rate of stone uplift for an area located in Bollebygds community, SW Sweden. Master thesis in Geography. Earth Sciences Centre, Göteborg University, B142 (in Swedish).