9th Japanese-German Meeting on Urban Climatology in Berlin

28 September – 2 October, 2026

Venue: Chair of Climatology, Institute of Ecology
Technische Universität Berlin
Rothenburgstraße 12
12165 Berlin, Germany

Monday, 28 September

15:00 – 16:00 Registration

16:00 – 17:30 Welcome address and presentations

1. Film „History of JGM“
   Jürgen Baumüller – Universität Stuttgart
2. Regional urban climate modeling from a global perspective
   Alvin Varquez – Institute of Science Tokyo
3. How to get climate adaptive and resilient cities fast, and what urban planning can do about it
   Jan Polivka – TU Berlin

18:00 – 21:00 Icebreaker with food and drinks

Tuesday, 29 September

09:00 – 10:30 Presentations
Human Biometeorology and Urban Heat Adaptation

4: Urban climate, thermal bioclimate and climate adaptation – some fallacies and facts
Andreas Matzarakis – University of Freiburg
or **Jürgen Baumüller** – University Stuttgart

5: What Is the Most Accurate Hazard Metric for Prevention of Heat Disorder?
Makoto Nakayoshi – Tokyo University of Science

6: Fundamental Study on Mitigation of Heat Stress via Water Ingestion in Hot Environments
Atsumasa Yoshida – Osaka Metropolitan University

7: Implementation of adaptation measures for extreme heat in city center redevelopment in Kobe city
Hideki Takebayashi – Kobe University

8: A socio-spatially differentiated analysis to assess citizen's thermal exposure in Berlin
Daniele Santucci – RWTH Aachen

9: Urban cycling under heat stress: Effects of weather, local climate and infrastructure on physiological response
Britta Jänicke – University of Kassel

10:30 – 11:00 Coffee break

11:00 – 12.30 Presentations
Urban Climate Modelling across scales and domains

10: Toward Improved Evaluation of Urban Effects in Global Climate Models Using Enhanced Urban Representation in MPAS-A
Asahi Kawaura – Tokyo University of Science

11: Development of SLUCM+BEM and Its Implementation in Regional and Global Climate Models for Assesing Climate Change Adaptation and Mitigation in Cites
Yuya Takane – National Institute for Environmental Studies

12: Free slot

13: Mesoscale and micro-scale climate modeling of a desert city
Erell Evyatar – Ben-Gurion University

14: Rooftop photovoltaic impacts on outdoor and indoor urban microclimate: Summer and winter simulations by local climate zones using LES
Julian Anders – Leibniz Universität Hannover

15: Free slot

12:30 – 13.30 Lunch break

13:30 – 15:00 Poster Session 1

A: Meteorology or Geodata: What Dominates Uncertainty in Urban Climate Simulations?
Astrid Ziemann – TU Dresden

B: TOUCH – Temperature, Ozone and Urban Conditions for Health
Clarissa Likidis – University of Augsburg

C: An Introduction to the VDI Standards on Urban Climate
Ge Cheng – VDI

D: Quarter Century Urban Climate Measurements in Sendai
Hironori Watanabe – Tohoku Institute of Technology

E: What is the “Sea Level” of the Urban Heat Island?
Jonas Kittner – Ruhr-University Bochum

F: Study on the Effects of Measures Against Heat Stroke for the Elderly on Cooling Load Based on a Survey of Actual Air Conditioning Use
Kosuke Kittaka – Kobe University

G: Validating a SOLWEIG -based thermal comfort now-casting service for the city of Dortmund
Luise Wolf – Ruhr-University Bochum

H: tba
Masakazu Moriyama – Kobe University

I: An initiative undertaken by students in collaboration with the local government to protect a near future where children can play outside even in summer
Taiko Kudo – Research Institute for Humanity and Nature

15:00 – 15:30 Coffee break

15:30 – 17:30 Presentations
Data-Driven Methods for Urban Climate Analysis and Modelling

16: City-wide assessments, predictions and scenarios of urban heat by integrating physical models, machine learning, sensor networks and mobility data
Andreas Christen – University of Freiburg – extra time

17: Creating real-time continuous maps of temperature and wind for urban areas using a neural network
Karolin Samsel – GEO-NET Umweltconsulting GmbH

18: POD analysis on change of flow pattern with Building Height Variability in urban area
Xinyi Yue – Tohoku University

19: Regionalisation of Crowd-sourced Air Temperature Data using Local Climate Zones
Max Sauer – University of Bamberg

20: Hybrid AI-based modelling for high-resolution urban climate applications: concept and initial developments from the MACSpeeDZ project
Robert von Tils – GEO-NET Umweltconsulting GmbH

21: Satellite-derived Land Surface Temperatures Strongly Mischaracterise Urban Heat Hazard
Benjamin Bechtel – Bochum Urban Climate Lab

18:30 – 21:30 Conference dinner

Wednesday, 30 September

09:00 – 10:30 Presentations
Observing Urban Climate: From Indoor Exposure to the Urban Boundary Layer

22: Measuring Indoor Heat Exposure Among Migrant Households: A Mixed-Methods Study in Rotterdam and Antwerp
Marjolein van Esch – Delft University of Technology

23: Orbisens – Modular environmental sensing for cities
Jens Lamping – Orbisens

24: A pairwise calibration strategy for O_3 and PM sensor deployments: evaluation and application
Paul Gäbel – University of Augsburg

25: Compact and Low-cost Instrument for Comprehensive Thermal Comfort Assessment for Mobile and Stationary Applications
Makoto Nakayoshi – Tokyo University of Science

26: Spatial variations in mixed-layer height and growth rate characteristics along a ceilometer transect through Paris
Dana Looschelders – University of Freiburg

27: Observations of the nocturnal urban boundary layer and advective cooling by local winds in Stuttgart, Germany
Meinolf Koßmann – Deutscher Wetterdienst

10:30 – 11:00 Coffee break

11:00 – 12:30 Presentations
Urban Climate Change, Environmental Risks and Planning

28: Unprecedented warming over the past 30 years in Berlin, Germany, unaffected by urban effects
Dieter Scherer – TU Berlin

29: Study on the Countermeasures to Urban Warming Considering Present and Future Climate in Fukuyama City, Hiroshima Prefecture
Makoto Yokohama – Fukuyama City University

30: HydroSlopeNet: Learning Landslide Risk via Hydrological–Mechanical Coupling
Ren Ozeki – The University of Osaka

31: Lost and found – “Urban Climate 21” an urban climate information system on CD-Rom for Stuttgart
Jürgen Baumüller – Universität Stuttgart

32: Assessing the Operational Utility of Land Surface Temperature (LST) in Urban Heat Mitigation Planning
Raz Jaschek – Ben-Gurion University of the Negev

33: Assessment of the Outdoor Thermal Environment Impact of a Large-scale Green Park Redevelopment Project
Toshiaki Ichinose – NIES / Nagoya University

12:30 – 13.30 Lunch break

13:30 – 15:00 Poster Session 2

J: Modeling the effect of air conditioning units on the urban microclimate
Tobias Gronemeier – pecanode GmbH

K: Verification of Summer Cooling Effects Induced by Enhanced Ventilation after Urban River Restoration
Toshiaki Ichinose – NIES / Nagoya Univ.

L: Microclimate in Three Contrasting Courtyards Under the Influence of a Water Misting Cooling System
Valeri Goldberg – TU Dresden

M: Towards a backwards model for urban climate adaptation using a neural network
Vivien Voss – GEO-NET Umweltconsulting GmbH

N: Influence of urban morphology on vertical exchange and dissipation of kinetic energy
Yasuyuki Ishida – Tohoku University

O: Heatwave Characteristics and Influencing Factors Based on Perceived Temperature in Major Cities of South Korea
Yeon-Su Lee – Kyungpook National University

P: Assessing the Potential of School Forests as Climate-Adaptive Public Green Infrastructure: A Case Study of Elementary Schools in Daegu Metropolitan City, South Korea
Yoo-Na Seo – Kyungpook National University

Q: An initiative undertaken by students in collaboration with the local government to protect a future where children can play outside even in summer
Yuki Morinaga – School of Commerce, Meiji University

15:00 – 15:30 Coffee break

15:30 – 17:30 Presentations
Green Infrastructure for Urban Climate Adaptation

34: A Systematic Review of Urban Shade Research: Structural Mechanisms and Integrated Framework for Climate-Adaptive Design
Jeong-Hee Eum – Kyungpook National University

35: A study of effective placement of green infrastructure based on rainwater runoff model at Ishizu river basin
Ai Kitanishi – Osaka Metropolitan University Graduate School

36: Temporal and Spatial Variability of Urban Tree Transpiration and Its Implications for Urban Climate Mitigation
Jun Teshirogi – Kanazawa Institute of Technology

37: GREENVELOPES: Carbon and water exchange of green building envelopes
Niklas Markolf – TU Braunschweig

38: Quantitative Modeling of Tree Shade for Heat-Adaptive Urban Street Design
Uk-Je Sung – Kyungpook National University

39: Effects of Street Tree Morphology on the Thermal Environment of Pedestrian Areas
Haruka Nishiyama – Tohoku University

Thursday, 1 October

All day Excursion within Berlin

Friday, 2 October

All day Excursion within Berlin