



CA20108 FAIRNESS: Fair Network of micrometeorological measurements
Conference on micrometeorological measurements
Urban microclimate monitoring and agricultural meteorology
for climate change

19-21 September 2023

Conference promoted by CA20108 - FAIR Network of micrometeorological measurements (FAIRNESS) CREA - Research Center for Policy and Bioeconomy and Research Center for Agriculture and Environment and University of Florence - DAGRI Department of Agriculture, Food, Environment and Forestry.

September

Week 38

MO	TU	WE	TH	FR	SA	SU
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

19 Tuesday ([link to the conference](#))

12:00 Workshop FAIRNESS

18:30 Ice Breakers to Open Conference

September

Week 38

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				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
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20 Wednesday ([link to the conference](#))

Opening and welcome

- 09:00 Alessandra Pesce
Head of the Research Center for Policy and Bioeconomy, CREA PB
- 09:05 Giuseppe Corti
Head of the Research Center for Agriculture and Environment, CREA AA
- 09:10 Simone Orlandini
Head of DAGRI Department of Agriculture, Food, Environment and Forestry, University of Florence
- 09:15 Branislava Lalic
Chair of CA20108 – FAIR NETwork of micrometeorological measurements (FAIRNESS)
- 09:20 Filiberto Altobelli
Board Member of Italian Association of Agrometeorology (AIAM) and International Society for Agricultural Meteorology (INSAM)

Morning Session 1. Networking and communication

Chair: Michal Lehnert

Department of Geography, Faculty of Science, Palacký University Olomouc, Olomouc, Czech Republic

- 09:25 **Keynote speaker: Agrifood system solutions are climate solutions for a sustainable future?**
Federica Matteoli
GACSA - Global Alliance for Climate Smart Agriculture
- 9:55 **Accuracy comparison of All-In-One (AIO) and Low-Cost Sensors (LCS) for air temperature assessment in an urban environment**
Shakir Ahmed and Britta Jänicke
Department of Architecture, Urban Planning and Landscape Planning, Chair of Environmental Meteorology, University of Kassel
- 10:15 **Pedestrian thermal comfort mapping for evidence-based urban planning; a low-cost, user-friendly and interdisciplinary approach for the case study of Dresden, Germany**
Claire Gallacher
Leibniz Institute of Ecological Urban and Regional Development
- 10:35 **Urban Microclimate Monitoring in the Region of Sofia (Bulgaria)**
Simeon Matev, Nina Nikolova, Dimitar Krenchev
Faculty of Geology and Geography Sofia University St. Kliment Ohridski Sofia, Bulgaria
- 10:55 **Coffee Break**
- 11:20 **Application of low-cost sensors in urban microclimate and air quality monitoring**
Viša Tasić
Science Center Mining and Metallurgy Institute Bor, Bor, Serbia

Tatjana Apostolovski -Trujić, Bojan Radović
Laboratory for Chemical Testing Mining and Metallurgy Institute Bor, Bor, Serbia

- 11:40 **Application of Mobile Micrometeorological Carts (MMCs) in different built-up and land cover types**
Daniela Arsenović
University of Novi Sad Sad, Faculty of Sciences, Chair for Social Geography, Novi Sad, Serbia
- Stevan Savić, Dragan Milošević, Jelena Dunjić
University of Novi Sad Sad, Faculty of Sciences, Chair for Geoecology, Novi Sad, Serbia
University of Novi Sad, Faculty of Sciences, Chair for Social Geography, Novi Sad, Serbia
- 12:00 **Associations of urban and adjacent forest climatological conditions during extreme events**
Peter Marčiš
Technical University in Zvolen, T. G. Masaryka 24, Zvolen, 960 01, Slovakia - National Forest Centre, T. G. Masaryka 22, Zvolen, 960 92, Slovakia
- Leštianska Adriana, Sitko Roman, Střelcová Katarína
Technical University in Zvolen, T. G. Masaryka 24, Zvolen, 960 01, Slovakia
- 12:20 **Comparison of bioclimatic conditions between rural and urban stations in Slovakia**
Kristína Szabóová
Slovak hydrometeorological institute, department of climatology, Bratislava, Slovakia
- 12:40 **Lunch**

Afternoon Session 2. Development and implementation

Chairs: Anastasia Paschalidou

*Department of Forestry and Management of the
Environment and Natural resources Democritus
University of Thrace, Orestiada, Greece*

13:40 Examining Urban Heat Island Effects in Pärnu (Estonia) using a Network of 50 Weather Sensors

Andreas Hoy

*Stockholm Environment Institute Tallinn Centre, Tallinn,
Estonia*

14:00 Urban Geometry and Surface Radiation Effects on Microclimate: Manhattan case-study

Tania Sharmin

Welsh School of Architecture, Cardiff University, UK

Forrest Meggers, Coleman B. Merchant

Princeton University, USA

14:20 Performance of a low-cost dual frequency GNSS receiver for near real-time water vapor estimation

Christina Oikonomou, Ion-Anastasios Karolos , Stylianos
Bitharis

Cloudwater Ltd, Nicosia, Cyprus

Haris Haralambous

*Frederick University, Frederick Research Center Nicosia,
Cyprus*

Christos Pikridas

*Aristotle University of Thessaloniki, Department of
Geodesy and Surveying Thessaloniki, Greece*

14:40 How can we manage real-time re-use of observational data?

Matthias Zeeman, Ferdinand Briegel , Gregor Feigel ,
Daniel Fenner, Marvin Plein, Andreas Christen
*Chair of Environmental Meteorology, University of
Freiburg, Freiburg, Germany*

Giorgos Somarakis, Nektarios Chrysoulakis
Remote Sensing Lab, FORTH Heraklion, Crete, Greece
Sue Grimmond
*Department of Meteorology, University of Reading
Reading, UK*

15:00 Coffee Break

15:30 Urban area effects on cloudiness over Sofia

Ventsislav Danchevski
*Dept. "Meteorology and Geophysics" Faculty of Physics
Sofia University, Sofia, Bulgaria*

15:50 Monitoring long term urban micrometeorological parameters in a medium - size city, Erzincan Turkey

Zeynep Eren
*Atatürk University Engineering Faculty, Environmental
Engineering Department*

Süleyman Toy
*Atatürk University Architecture and Design Faculty, City
and Regional Planning Department*

Dinner

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21 Thursday ([link to the conference](#))

Morning Session 3. Dissemination and application

Chairs: Filiberto Altobelli

CREA Research Centre for Agricultural Policy and Bioeconomy

Anna Dalla Marta, DAGRI Department of Agriculture, Food, Environment and Forestry, University of Florence

9:00 **Keynote speaker**

Data-driven estimation of actual evapotranspiration to support irrigation management

Offer Rozenstein

Department of Environmental Physics and Irrigation

Institute of Soil, Water and Environmental Sciences

Agricultural Research Organization - Volcani Institute, Israel

9:30 **Keynote speaker**

Application of agrometeorological databases using multi-channel dissemination systems in South Asia

Nabansu Chattopadhyay

International Society for Agricultural Meteorology (INSAM)

9:50 **Tuning Of WOFOST PCSE Model for Winter Wheat in Egypt**

Magdy Abdel Wahab

Cairo University

10:10 Rice water requirements analysis using Sentinel-2 data processing tool for AquaCrop

Andrea Martelli, Filiberto Altobelli

Research Centre for Agricultural Policies and Bioeconomy (CREA), Rome

Marco Di Tullio

Faculty of Civil and Industrial Engineering, University of Rome La Sapienza

Maria Rivoli, Simone Orlandini, Leonardo Verdi

Anna Dalla Marta

Department of Agriculture, Food, Environment and Forestry (DAGRI) - University of Florence, Italy

Stefano Monaco

Research Centre for Engineering and Agro-Food Processing (CREA), Turin

10:30 Coffee Break

10:50 Evaporative cooling potential from green roofs in Vienna

Sabina Thaler, Josef Eitzinger, Herbert Formayer,
Christian Gützer, Erich Mursch-Radlgruber, Katharina
Perny, Melissa Sadriu

Institute of Meteorology and Climatology University of Natural Resources and Life Sciences, Vienna, Austria

Anna Hofer, David Wöß, Tobias Pröll

Institute of Chemical and Energy Engineering University of Natural Resources and Life Sciences, Vienna, Austria

Stephan Hörbinger, Hans Peter Rauch, Debora Szocska

Institute of Soil Bioengineering and Landscape

Construction University of Natural Resources and Life Sciences, Vienna, Austria

Valéry Masson, Robert Schoetter

Meteo-France, CNRM Université de Toulouse, France

Jürgen Preiss, Max Wittkowski
Environmental Agency (MA22) City of Vienna, Austria

Stefan Schmidt
Gartenbau Schönbrunn (HBLFA) Vienna, Austria

Heidelinde Trimmel
*Institute for Applied System Analysis (IIASA) Laxenburg,
Austria*

**11:10 Meteorological databases for agrometeorology in
Hungary (Construction or/and apply?)**

Tamàs Weidinger, Róbert Mészáros
*Department of Meteorology, Institute of Geography and
Earth Sciences, Faculty of Sciences, University, Hungary*

Dénes Lóczy
*Institute of Geography and Earth Sciences, Faculty of
Sciences, University of Pécs, Ifjúság*

László Báder
*Pál Vásárhelyi Doctoral School of Civil Engineering and
Earth Sciences, Budapest University of Technology
and Economics, Műegyetem rkp., Budapest*

László Lakatos
*Department of Environmental Sciences and Landscape
Ecology, Eszterházi Károly Catholic University, Eger,
Eszterházy*

**11:30 Daily calculated phenological data as added value to the
FAIR micromet data**

Ivan Koci, Milena Marcic
*PIS – Forecasting and Warning Service PSS Poljoprivredna
Stanica doo Novi Sad, Serbia*

Branislava Lalic
*Faculty of Agriculture University of Novi Sad Novi Sad,
Serbia*

11:50 How changing from manual to automatic affects the climatological normal?

Pavol Nejedlík, Lukasová, V., Buchholcerová A.,
Onderka M., Bilčík D., Bičárová S.
ESI SAS

12:10 Lunch

Afternoon Session 4. Beyond FAIRNESS Strategies

Chairs: Sabina Thaler

*Institute of Meteorology and Climatology University of
Natural Resources and Life Sciences, Vienna, Austria*

**13:30 Long-term micrometeorological observational site in
Brazillian Pampa biome**

Débora Regina Roberti, Michel B. Stefanello, Otávio Costa
Acevedo

*Departamento de Física Universidade Federal de Santa
Maria Santa Maria, RS, Brazil*

Luis Eduardo Medeiros, Felipe D. Costa

*Centro de Tecnologia - Campus Alegrete Universidade
Federal do Pampa Alegrete, Brazil*

**13:50 Data-driven approaches in missing value handling
concerning atmospheric quality time series data**

Evangelos Bagkis, Theodossios Kassandra, Kostas
Karatzas

*Environmental Informatics Research Group, School of
Mechanical Engineering, Aristotle University of
Thessaloniki, Thessaloniki, Greece*

14:10 Thermal environment of playgrounds in Czech cities: an example of applied measurement campaign in urban areas

Michal Lehnert, René Jirmus, Veronika Květoňová,
Martin Jurek, Jindřich Frajer

*Department of Geography, Faculty of Science, Palacký
University Olomouc, Olomouc, Czech Republic*

Jan Geletič,

*Institute of Computer Science, Czech Academy of
Sciences, Prague, Czech Republic*

14:30 Season transitions on microscale

Branislava Lalic, Ana Firanj Sremac

*Department of Field and Vegetable Crops Faculty of
Agriculture Novi Sad, Serbia*

14:50 Coffe Break - Poster Session

**Engaging the Community: The many Benefits of a
Participatory Temperature Measurement Network**

Saskia Drossaert van Dusseldorp, Curdin Spirig, Julien
Anet

*School of Engineering Zurich University of Applied
Sciences Winterthur, Switzerland*

Sandra Probst-Rüd

Fachstelle Umwelt City of Winterthur, Switzerland

**Phenological observations and climate changes in
European beech forests**

Stefan Stjepanovic, Branislava Lalic, Ana Firanji
Sremac, Katarina Strelcova, Adriana Leštianska

Technical University in Zvolen, Slovakia

**Searching for evidence of urban microclimate signals:
The case of Thessaloniki, Greece**

Kyriaki Psistaki, Anastasia Paschalidou

*Department of Forestry and Management of the
Environment and Natural resources Democritus University
of Thrace, Orestiada, Greece*

Ana Firanj Sremac, Branislava Lalic

*Department of Field and Vegetable Crops, Faculty of
Agriculture, Orestiada, Greece, Novi Sad, Serbia*

**Measuring drought in Estonia: case study of very dry
spring 2023**

Merko Kärp, Triin Saue, Kairo Kiitsak

*Department of Agricultural research Centre of Estonian
Rural Research and Knowledge, Jõgeva, Estonia*

**15:30 International Advanced School in Agricultural
Meteorology: Past and future initiative**

Filiberto Altobelli

*CREA Research Centre for Agricultural Policy and
Bioeconomy*

Anna Dalla Marta

*DAGRI Department of Agriculture, Food, Environment and
Forestry, University of Florence*

Federica Rossi, Marina Baldi

Institute for Bioeconomy - CNR IBE

15:40 Concluding Remarks

Branislava Lalic

*Chair of CA20108 – FAIR NETwork of micrometeorological
measurements (FAIRNESS)*

Filiberto Altobelli

President of local Organizing Committee

Scientific Committee

Filiberto ALTOBELLI, Branislava LALIC, Simone ORLANDINI, Pavol NEJEDLIC, Stevan SAVIC, Joseph EITZINGER, Anna DALLA MARTA, Mark ROANTREE, Giuseppe CORTI, Alessandra PESCE, Benjamin BECHTEL, GertJan STEENEVELD

Organizing Committee

Maria Grazia PIAZZA, Andrea MARTELLI, Antonella DI FONZO, Filiberto ALTOBELLI, Silvia SOCCIARELLI, Irene FABBRI, Claudia FONTANA, Francesco AMBROSINI, Luigi IAFRATE, Andrea MARCUCCI, Antonio IANNONE, Paolo PESARINI

Secretariat

Maria Grazia PIAZZA
Filiberto ALTOBELLI

Venue

Via della Navicella 2-4, Rome

**We recommend the accommodation facilities in the Termini Station area,
Via Nazionale, Via Cavour, Rione Monti, Colosseo
List of hotels suggested for those dates nearby:**

HOTEL 4 ****

MERCURE ROMA CENTRO COLOSSEO, Via Labicana 144 Rome, Tel. +39 06 770021, H2909@accor.com, 4****

EXE INTERNATIONAL PALACE, Via Nazionale 46 Rome, Tel. +39 06 48939960, 4****

HOTEL DUCA D'ALBA, Via leonina 14 Rome, 4****, Tel. +39 06 484471, info@hotelducdalba.com

HOTEL BRITANNIA, Via Napoli 64, Rome, Tel. +39 06 4883153, 4****
c.arcangeli@bzarhotel.com

HOTEL DIOCLEZIANO Via Gaeta 71, Rome, Tel. +39 06 48900767, 4****
c.arcangeli@bzarhotel.com

Bettoja Atlantico Hotel Via Cavour 23, Rome, Tel. +39 06 485951, 4****

HOTEL 3 ***

CONDOMINIO MONTI, Via dei Serpenti 109, Rome, Tel. +39 06 488 5889, 3***

c.arcangeli@bzarhotel.com

HOTEL RAFFAELLO SURE HOTEL COLLECTION BY BEST WESTERN 3***
Via Urbana 3, Rome, Tel. +39 06 4884342 hotelraffaello@rhr.it,

GUEST HOUSE GRAZIOLI, Piazza Grazioli 18, Pantheon, Rome, Tel. +39 06 8698 7733, 3***