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EDITOR'S ADDRESS

Dear readers,

It is our pleasure to present to you the third issue of the newsletter devoted to the FAIRNESS COST Action.

Newsletters have the role of showing and spreading the Action's features and deliverables.

In this third issue, we are pleased to give highlights about project workshop which was held in August, conference and WG2 meeting in September, and field work with micrometeorological instruments.

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ABOUT FAIRNESS

The FAIRNESS action intends to improve standardization and integration between databases/sets of micrometeorological measurements that are part of research projects or local/regional observational networks established for special purposes (agrometeorology, urban microclimate monitoring).

Addressing identified challenges requires an effective transboundary network of researchers, stakeholders (extension services and environmental agencies, local authorities and ministries, SME) and civil society (specialized and general public) from Europe and beyond to identify and fill knowledge gaps, standardize, optimize and promote new environmental-tailored measurement and control procedures, enhance research effectiveness and improve dissemination.

Workshop in Brussels -on gap filling and their practical applications -

Date: 29-30 August 2023

Venue: COST Association Office, 23rd Floor,
Avenue du Boulevard-Bolwerklaan 21, 1210 Brussels



Workshop started with an opening first session where participants Caluwaerts, Vergauwen and Koci shared their insights and methodologies regarding gap filling, highlighting the critical role of gap analysis. This session set the tone for a deep dive into innovative practices within the field.

In the second session, attention shifted towards leveraging Python's *scipy* library of functions for gap filling. A team from Dublin City University, comprising Roantree, Cuong, and Nguyen, showcased their work in employing Python for effective gap filling strategies, offering an additional perspective on the use of technology in addressing data gaps. The final session took a step to present more traditional gap filling approaches. Lalic provided comprehensive review of various gap-filling techniques applicable to different gap durations. Additionally, the methodology introduced by Lompar et al. (2019) which focuses on the debiasing of ERA5 reanalysis data, was discussed. Amber Jacobs from the University of Ghent further enriched the session with a presentation on filling urban observational data gaps using ERA5 debiasing techniques.

Prepared by Branislava Lalić

Meeting in Bratislava

The FAIRNESS WG2 Meeting at the EMS2023 Conference

Date: September 6, 2023

Venue: University of Economics Bratislava (EUBA)

Dolnozemska cesta 1, 852 35 Bratislava, Slovakia



The EMS2023 conference was held from 3rd to 8th September 2023. Amidst the wide variety of sessions and discussions, a CA20108 FAIRNESS WG2 meeting, was held as a side event on Wednesday, September 6.

The central focus of the meeting was the introduction and exploration of the new FAIR Micrometeorological Platform (FMP2.0), a knowledge-sharing platform dedicated to micro-scale measurements.

Conveyed by Branislava Lalić the meeting served as a forum for presenting the FMP2.0, discussing its features, potential impacts, and the roadmap for its development and deployment. Setting was informal and open, facilitating exchange of ideas, questions and ideas from participants. As the FAIR Micrometeorological Platform moves from concept to reality, it holds the potential to accelerated gathering of knowledge from data in urban and rural micrometeorology.

Prepared by Branislava Lalić

ACTION CONFERENCE IN ROME**Conference on micrometeorological measurements Urban microclimate monitoring and agricultural meteorology for climate change**

Date: 19-21 September 2023

With aim to present action results

Venue: CREA-Council for Agricultural Research and Economics,
Via della Navicella, 2-4, Rome, Italy



Conference gathered about 30 participants and presentations about of cost-effectiveness of FAIRNESS, standardization, and methodology improvement of micrometeorological in situ measurements. Identified new application modalities and “neighboring” community.

**Measurement campaign in Novi Sad – summer 2022, during hog days,
monitoring time 12-20h (June/July) or 10-18h (May/August)**



Measurement with mobile micrometeorological cart – MMC

MMC have 2 minute frequency, and measures air temperature, relative humidity, wind speed/direction, globe temperature, global radiation six-directional short-/long wave radiation.



FAIR Network of micrometeorological measurements

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- **Areas of Expertise Relevant for the Action**
- Earth and related Environmental sciences: Meteorology, atmospheric physics and dynamics
- Earth and related Environmental sciences: Climatology and climate change

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Keywords

rural micrometeorology, urban micrometeorology, climate change, measurement network, knowledge share platform



Funded by
the European Union