Urban carbon dioxide Flux Monitoring using Eddy Covariance and Earth Observation

DEMONSTRATION EVENT ON MONITORING URBAN CARBON DIOXIDE EMISSIONS

3 DECEMBER 2021, 09:00 – 12:30 KLINGELBERGSTRASSE 27, BASEL







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INFORMATION

Independent, timely and accurate monitoring of urban greenhouse gas (GHG) emissions is critical to assess the progress towards the Paris Agreement goals, evaluate the implemented climate actions and support urban planning, policy- and decision-making processes to efficiently reduce GHG emissions.

The project diFUME develops an observation-based method for highresolution mapping and monitoring of urban carbon dioxide (CO_2) emissions based on population activity, traffic, satellite and in-situ atmospheric measurements to provide a realistic and dynamic overview of the urban CO_2 fluxes.

This demonstration event will bring together stakeholders from several disciplines and sectors to present diFUME and discuss their needs related to greenhouse gas emission data and the potentials or limitations of the observation-based methodologies in respect to their activities. User-oriented feedback is important for improving the modelling approaches and developing tools which can prove useful for climate action and sustainable urban planning.

For more information on the project diFUME, *visit our website:* <u>https://mcr.unibas.ch/difume/</u>





AGENDA

Presentations will be in English or German. German-English translation will be possible during the discussions.

- 09:00 09:15 Welcome talk M. Kalberer (DE)
- 09:15 09:45 Introduction to observation-based CO₂ emission monitoring approaches and related ongoing EU projects – S. Stagakis, C. Feigenwinter (EN)
- 09:45 10:15 CO₂ flux measurements in the city of Basel over the last 15 years R. Vogt (DE)
- 10:15 10:30 Discussion (Moderation: F. Siegrist, frasuk) (DE & EN)
- 10:30 11:00 Coffee break
- 11:00 11:45 Monitoring CO₂ emissions in high spatial and temporal scales: the diFUME approach S. Stagakis (EN)
- 11:45 12:30 Discussion & feedback (Moderation: F. Siegrist, frasuk) (DE & EN)

Contacts:

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Dr. Stavros Stagakis email: stavros.stagakis@unibas.ch tel: +41 61 207 07 55 <u>Location</u>: Klingelbergstrasse 27 5th floor auditorium University of Basel

The event may be transferred to an online platform in case of COVID19 restrictions