







# **COSMO User Workshop**

21 January 2020

### Goal

The COSMO User Workshop is intended as a platform to meet other COSMO users and get to know the work of each other. Sessions with oral presentations are complemented with extended coffee breaks where new COSMO users/developers have the opportunity to present their project on posters. The allocated time of 20 minutes for oral presentations includes a few minutes for questions.

We hope that you will enjoy this lively mix in an informal and interactive atmosphere!

### Location

Empa Akademie, Überlandstrasse 129, 8600 Dübendorf (see directions at the end)

## **Program**

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09.00	- 09.10	Dominik Brunner, Welcome and general information
09.10	- 09.30	Stephan Henne, Empa, Atmospheric Modelling and Remote Sensing
		FLEXPART-COSMO activities at Empa
09.30	- 09.50	Pavle Arsenovic, Empa, Atmospheric Modelling and Remote Sensing
		Carbon Tracker - COSMO: Estimating biospheric CO₂ fluxes from a dense CO₂ observation network over Switzerland
09.50	- 10.10	Gesa Eirund, IAC ETH, Atmospheric Physics
		The impact of warm and moist airmass intrusions on Arctic mixed-phase stratocumulus
10.10	- 10.30	Jonas Jucker, C2SM ETH
		Improving COSMO with the new radiation scheme CLOUDRAD
10.30	- 11.30	Coffee Break and poster session
11.30	- 11.50	Sascha Bellaire, MeteoSwiss
		The new snow cover scheme for COSMO and ICON: Status and Future plans
11.50	- 12.10	Christian Steger, IAC ETH, Climate and Water Cycle
		Improving the representation of snow cover in a kilometre-scale climate model by considering topographic effects on surface radiation
12.10	- 12.30	Annika Oertel, IAC ETH, Atmospheric Dynamics
		Investigating the dynamical relevance of embedded convection in warm conveyor belts using online trajectories in convection-permitting COSMO

		simulations
12.30	- 13.30	Lunch
13.30	- 13.50	Claire Merker, MeteoSwiss
		Data assimilation activities at MeteoSwiss
13.50	- 14.10	Bryn Pickering, ETH, Climate Policy Group
		COSMO reanalysis performance in complex terrain: analysis of wind variability in Switzerland
14.10	- 14.30	Christian Zeman, IAC ETH, Climate and Water Cycle
		Heavy Precipitation and Vertical Winds in High-Resolution Atmospheric Models
14.30	- 14.50	Andries de Vries, IAC ETH, Atmospheric Dynamics
		Ice cloud formation pathways and their isotopic signals in high- resolution COSMOiso simulations of the African monsoon
14.50	- 15.50	Coffee Break and poster session
15.50	- 16.10	Roman Brogli, IAC ETH, Climate and Water Cycle
		Impose climate changes to existing CCLM simulations: Development of new software
16.10	- 16.30	Ronny Meier, IAC ETH, Land-climate dynamics
		The effect of biomass heat storage in offline and coupled simulations
16.30	<b>– 16.50</b>	Carlos Osuna, MeteoSwiss
		Status and roadmap of COSMO & ICON on accelerators
16.50	- 17.00	Feedback and final discussion
17.00	End	

### **Directions**

The meeting will take place at the Empa Akademie, Überlandstrasse 129, 8600 Dübendorf. <a href="https://www.empa.ch/documents/20195/56305/directions">https://www.empa.ch/documents/20195/56305/directions</a> duebendorf en.pdf

### From Zurich airport

When coming from the airport, the easiest way is to take tram no 12 with direction 'Stettbach' (light blue number) from the bus/tram terminal just in front of Zürich airport. After approximately 20 minutes you have to leave at station 'Dübendorf, Giessen', which is close to the Empa Akademie.

### From Zürich downtown

Frequent suburban trains travel to either Stettbach (S3,S9,S12) or Dübendorf (S9,S14). From Stettbach, you can take tram 12 to 'Dübendorf, Giessen', or bus 760 to 'Empa', from where the meeting location can be reached after a short walk. The meeting venue can also be reached by walking (10 min) from the Dübendorf train station.