

Ny-Ålesund Atmosphere Flagship open workshop on Black Carbon 7-8 November 2019 in Oslo, Norway



Photo from PSI.

The Ny-Ålesund Atmosphere Flagship will arrange a Black Carbon (BC) workshop on 7 – 8 November 2019 at CICERO in Oslo. The workshop is timed to occur immediately after the Svalbard Science Conference that is also taking place in Oslo on 5 – 6 November.

The workshop will focus on:

- Existing and planned long term and short term eBC, rBC, and EC observations in Ny-Ålesund and across the Arctic
- Modelling approaches to describe atmospheric ageing, transport, and radiative forcing of Arctic BC
- Optimization of integrated modelling and observational approaches to improve understanding of BC climate and air quality impacts

Thursday morning will be dedicated to the presentation of existing and planned BC measurements in Ny-Ålesund and across the Arctic, including long-term measurements, special campaigns and airborne observations. Early Thursday afternoon will be for presentation of different approaches used to model BC in the Arctic. In the late afternoon the group will be broken into subgroups of 'observers' and 'modellers'. Each subgroup will be given the task to identify key questions they would have for the other subgroup in relation to important BC-related research topics (e.g. BC source identification, transport and removal, radiative forcing, cloud interaction, BrC absorption, ...). Then, on Friday morning the group will meet as a whole again to discuss the results of the previous afternoon's breakout session, with the goal of developing combined observation-modelling approaches for tackling major BC-related research challenges, including those specific to the MOSAiC drift period.

Workshop tentative schedule:

Thursday, 7 November

08:30 – 09:00 Registration

09:00 – 09:10 Opening of the workshop

09:10 – 10:30 Atmospheric black carbon observations in the Arctic

- Introduction on measuring techniques
- Past and current observations in the Arctic
- Observations during the MOSAiC year
- Trends, sources, and properties

10:30 – 11:00 Coffee break

11:00 – 12:30 From the atmosphere to the snow

- Vertical distribution
- Cloud interaction
- Snow observations

12:30 – 13:30 Lunch Break

13:30 – 15:00 Modelling approaches in the Arctic

- Overview of different models and their performance in the Arctic
- Source apportionment studies
- AMAP modelling overarching goals
- Modelling activity during MOSAiC

15:00 – 15:30 Coffee break

15:30- 16:30 Parameterizations in models

- Emission inventories
- Atmospheric processing “transport, ageing, size distribution, optical properties”
- In snow deposition

16:30 – 17:30 Break up session in order to identify

- Understanding gaps, collaboration priorities, future overarching objectives

Friday, 8 November

09:00 – 10:30 Discussion

10:30 – 11:00 Coffee break

11:00 – 12:00 Final remarks, perspective, close of the meeting

Registration

The registration for the workshop is available at the following link:

<https://docs.google.com/forms/d/e/1FAIpQLScxEUWm73dGPbB9bGx40aB3qAVmC2yP2Ov5R6r7XyGOIKuZOw/viewform>

The maximum number of workshop participants is 50 (room size limit). Registration will be open until the November 1 2019, or until the workshop is fully booked.

Support

The meeting is free of charge and include coffee breaks and lunches.

Venue

CICERO Center for International Climate Research, Oslo, Norway ([see map](#)). **Hotel**

The participants need to reserve rooms themselves. Workshop webpage: To be added

Atmosphere Flagship webpage: <http://nysmac.npolar.no/research/flagships/atmosphere.html>

Contact persons

[Marco Zanatta](#), Alfred Wegner Institute (AWI)

[Rob Modini](#), Paul Scherrer Institute (PSI)

[Stefania Gilardoni](#), Institute of Polar Sciences - National Research Council (ISP-CNR)

[Bjørn Samset](#), CICERO Center for International Climate Research