Arctic winter campaign

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Campaing start and end dates: 1-10-2018 / 31-05-2019

Campaign location: Ny-Ålesund, Svalbard

# Short abstract

Collect surface, stratigraphic and bulk of the annual snow layer to study the deposition paths of anthropogenic contaminants (organic and inorganics), trace elements, in the Austre Brøggerbreen, Midtre Lovénbreen, Austre Lovenbreen, Edithbreen, Kongsvegen and Holtedahlfonna glaciers. Daily and weekly surface snow samples will be collected at Gruvenbadet site for the entire Snow season.

# Keywords

Svalbard, contaminants, snow, deposition, glacier

# Scientific question

The sampling campaign will aim to: Understand which meteorological process driven the deposition of the contaminants during the Artic spring; study the post depositional processes during the Arctic spring (mainly light induced) that can affect the abundance of the anthropogenic contaminants and trace compounds in the surface snow.

# Location:

Hemisphere: North

Location coordinates (in Google form): 78.917498, 11.894075

Campaign start and end dates: (DD.MM.YYYY) 01.10.2018 – 31.05.2019

Type of measurements (mark with an x):

|  |  |  |  |
| --- | --- | --- | --- |
| Ground-based in-situ | Ground-based remote sensing | Airborne in-situ | Airborne remote sensing |
| x |  |  |  |

# Measured parameters:

Aerosols, details:

Gases, details:

Clouds, details:

Others, what: snow physical (density, hardness, crystals, temperature) and chemical parameter (organic contaminants, inorganic contaminants, trace elements)

# Part of a bigger project / activity / infrastructure? If yes, which one?

iCUPE, BC-3D, Sea-snow POPs, BIOMASS

# Participating institutes

National Research Council of Italy (Institute of Atmospheric Sciences and Climate), University of Perugia, University of Milano Bicocca, Norwegian Polar Institute, CNRS, Polish Academy of Science, Goteborg University, *Gdansk University*, Ca Foscari University of Venice

# Additional participation possible? Wishes

yes

# Optional files (e.g. map)