



AGENDA (Final version, 12 Feb 2024, times in GMT – Icelandic time)

THE 8th HIGH LATITUDE DUST WORKSHOP

In-situ measurements, remote sensing, modelling, long-range transport, and impacts of HLD and low latitude dust in the Arctic, emphasizing CAMS User engagement in Iceland.

13-14 FEB 2024

Agricultural University of Iceland in *Reykjavik*, in co-operation with the ICEDUST Association, Finish Meteorological Institute, Ministry for Foreign Affairs of Finland, National Survey of Iceland, Copernicus Atmosphere Monitoring Service (CAMS), UArctic Thematic Network on HLD, Czech University of Life Sciences, Finnish Environment Institute (SYKE), University of Belgrade, and Republic Hydrometeorological Service of Serbia

Venue: Agricultural University of Iceland (AUI), Arleynir 22, Keldnaholt, Reykjavik, Iceland

Link to Workshop online: Feb 13 <https://eu01web.zoom.us/j/65918870908>

Feb 14 <https://eu01web.zoom.us/j/69142260122>

Workshop website: <https://icedustblog.wordpress.com/2023/12/27/high-latitude-dust-workshop-2024/>

DAY 1

Session 1: 10:00-11:30 (GMT) Chair: Pavla Dagsson-Waldhauserova		Observations of HLD around the world
10:00 – 10:05	Pavla Dagsson-Waldhauserova and Outi Meinander	Welcome to the Workshop
10:05 – 10:10	Ragnheiður Þórarinsdóttir Rector of the AUI	Welcome speech
10:15 – 10:30	Outi Meinander, Finland, on site	Recent updates in High Latitude Dust as a SLCF in the Arctic and long-range transported dust in Finland

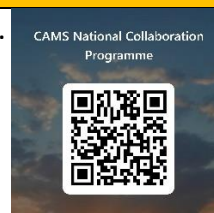
10:30 – 10:45	Daniel Bellamy, Canada, on site	Multi-year investigation of mineral dust emissions in proglacial valleys of the St. Elias Mountains, Canada
10:45 – 11:00	Nora Bergner, Switzerland	High-latitude dust measurements in southern Greenlandic outwash plains for radiative and ice-nucleating properties
11:00 – 11:15	Sara Herrero, Spain, on site	Identification of high turbidity aerosol events in the Arctic by sun-photometry: A case of study in Ny-Alesund, Svalbard
11:15 – 11:30	Claudia di Biagio, France	Current activities on the investigation of physico-chemical and optical properties of high latitude dust
11:45 - 12:45	Lunch	
Session 2: 12:45-14:00 (GMT) Chair: Outi Meinander		Impacts of HLD on cryosphere and human health
12:45-13:00	Susan Kaspari, USA, on site	The Role of Light Absorbing Particles in Snow and Ice on Svalbard: A Focus on Dust
13:00-13:15	Arnold Downey, Canada, on site	Ä'äy Chù Valley, Yukon, Canada: Mineral Dust Concentrations, Size Properties and Metallic Composition as Related to Glacial Sedimentology and Implications on Human Health
13:15-13:30	Steinunn Helgadóttir, Iceland	Quantifying glacier melt enhancement due to dust deposition during the 2022 melt season Tungnaárjökull glacier, South Iceland
13:30-13:40	Posters - brief introduction: Oscar Orme, USA, on site / Sara Herrero, Spain, on site	Investigating dust deposition and composition on Svalbard using a 2021 Holtedahlfonna shallow ice core / Aerosol properties retrieved under high turbidity conditions and the corresponding aerosol radiative effect in the European Arctic in the period 2017-2022 by sun photometry
13:40 - 14:00	Coffee break	
Session 3: 14:00-15:45 (GMT) Chairs: Daniel Bellamy and Outi Meinander		HLD history and networking / Vertical and horizontal transport of HLD
14:00 – 14:20	Joseph M. Prospero, USA	A brief history of aerosol sampling on the Westerman Islands, Iceland: a pioneering study of dust sources and transport in the high latitudes

14:20 – 14:35	Pavla Dagsson-Waldhauserova, Iceland, on site	High Latitude Dust networking and HLD measurement network in Iceland and Antarctica
14:35 – 14:50	Celia Herrero, Spain, on site	CAECENET: Integrating photometer and ceilometer data for continuous columnar and vertical aerosol properties
14:50 – 15:05	Phillipe Gauvin-Bourdon, Canada	Temporal variabilities and the characterization of the major dust source pathways in the Canadian Arctic Archipelago
15:05 – 15:25	Bea Moroni, Italy	On the trail of Icelandic dust reaching the Arctic
15:25 – 15:45	Coffee and discussions	
15:45-16:45	 Open meeting of the UARctic Thematic Network on HLD	Discussions on HLD research strategy, networking and funding
17:00	Workshop Day 1 Closing	Thank you for today!

DAY 2

Session 4: 10:00-11:55 Chair: Pavla Dagsson-Waldhauserova and Outi Meinander		HLD modelling and in-situ measurements of dust and gases
10:00 – 10:05	Outi Meinander and Pavla Dagsson-Waldhauserova	Welcome to the second day of the HLD Workshop
10:05 – 10.25	Andreas Uppstu, Finland, on site	SILAM: Emission, long-range transport and deposition modeling of dust
10.25 – 10:45	Slobodan Nickovic and Ana Vukovic, Serbia and WMO SDS-WAS NAME-E	High Latitude Dust modelling: principles, practice, examples
10.45 – 11:05	Ólafur Rögnvaldsson, Erling Brynjólfsson and Gunnlaugur M. Einarsson, Iceland, on site	Airborne in-situ observations of gases and dust in Iceland
11:05 - 11:15	Short coffee break	
11:15-11:35	Niko Karvosenoja, Finland, on site	Dust in emission inventories
11:35-11:50	Jean-Baptiste Renard, France	Vertical profiles of particles above Iceland with the balloon-borne LOAC instrument
11:50 – 11:55	Pavla Dagsson-Waldhauserova	Announcement for the CAMS session*
11:55 - 12:55	Lunch	
CAMS Session: 13:00-16:30 Chairs: Ann-Mari Fjæraa and Pavla Dagsson-Waldhauserova		See the next page

*We kindly ask you to fill this 1-min [survey](#) before the CAMS session.





PROGRAMME OF
THE EUROPEAN UNION



LANDMÆLINGAR
ÍSLANDS



CAMS USER WORKSHOP Iceland

14 February 2024

Hybrid event (online, Agricultural Uni of Iceland - Arleynir 22, 112 Reykjavik)

Streaming link: <https://eu01web.zoom.us/j/69142260122>

Extension to the 8th High Latitude Dust Workshop 2024

All times given for Iceland (Central Europe: add 1 hour)

Agenda

Chair / co-chair: (A.-M. Fjæraa / NILU and P. Dagsson-Waldhauserova / AUI)

13:00 – 13:05 **Welcome** from organizers, housekeeping information

13:05 – 13:15 Welcome note (Atli Thor Fanndal / Space Iceland)

1: Overview of the Copernicus Atmosphere Monitoring Service CAMS

13:15 – 13:45 CAMS: How does it work? What does it offer? What kind of data are available? How can they be accessed? What user support is provided?

([R. Engelen / ECMWF](#))

13:45 – 13:55 The National Collaboration Programme NCP ([C. Ananasso / ECMWF](#))

13:55 – 14:05 CAMS User intelligence: How are users involved? ([T. Popp / DLR](#))

14:05 – 14:15 Questions and answers

14:15 – 14:30 Coffee break

2: Use of CAMS data

Example show cases, needs in Iceland and other EU member states

14:30 – 14:45 Major environmental issues in Iceland where CAMS could help / CAMS use case in Iceland (P. Dagsson-Waldhauserova / AUI)

14:45 – 15:05 Fully coupled high-resolution Icelandic dust transport model DREAM-Iceland - complementing the CAMS aerosol capabilities (B. Cvetkovic / RHSS)

15:05 – 15:20 CERC local air quality forecasting services using CAMS ([A. Stidworthy / CERC](#))

15:20 – 15:35 Air Quality Activities at WMO ([S. Basart / WMO](#))

15:35 – 15:50 The CAMS_FAIRMODE natural dust exercise and perspective for Iceland and arctic regions ([L. Tarrason](#) and A.-M. Fjæraa / NILU)

3. Discussion

15:50 – 16:30 **To start, collection of written input (on-site: cards / online: miro board)**

Specific feedback and user needs for CAMS from Iceland

How can CAMS help for Iceland environmental tasks?

Which specifics need to be taken into account in Iceland?

Invitation for 3-5 interviews / detailed iteration on user needs ([T. Popp / DLR](#))

Conclusions of the workshop (P. Dagsson-Waldhauserova / AUI and M. Hrabalíková / LMI, [T. Popp / DLR](#))

16:30 End of the workshop

Thank you for being with us!

We look forward to welcoming you!

Organizing team of the 8th HLD Workshop: Pavla Dagsson-Waldhauserova (Agricultural University of Iceland, IceDust, contact: firstname@lbhi.is), Outi Meinander (Finnish Meteorological Institute, contact: firstname.lastname@fmi.fi), Michaela Hrabalikova (National Survey of Iceland, contact: firstname.lastname@lmi.is), and in co-operation with the IceDust Association, Iceland.

Workshop websites for further information and streaming link:

- ✚ <https://icedustblog.wordpress.com/2023/12/27/high-latitude-dust-workshop-2024/>
- ✚ <https://atmosphere.copernicus.eu/cams-user-engagement-workshop-user-community-iceland?fbclid=IwAR2E85imnUrxEudGhH5goT3jR1SG4C2iEb4jaxdzvkuSPOJgulbYin7REcY>
- ✚ <https://www.lmi.is/is/um-lmi/frettayfirlit/vinnustofa-cams-a-islandi>
- ✚ <https://www.uarctic.org/news/2024/2/join-the-8th-workshop-on-high-latitude-dust-2024-with-cams-user-engagement-session/>
- ✚ <https://aerosol-soc.com/events/the-8th-high-latitude-dust-hld-workshop/>