



AGENDA (1st DRAFT OF AGENDA, 10 Feb 2023)

THE 7th HIGH LATITUDE DUST WORKSHOP

Field observations and impacts of HLD compared to other dust sources

14-15 FEB 2023

Agricultural University of Iceland in *Reykjavik*, in co-operation with the ICEDUST Association, Finish Meteorological Institute and Czech University of Life Sciences

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

Link to Workshop online: <https://eu01web.zoom.us/j/ToBeAdded>

DAY 1

Session 1: 10:00-13:30 (GMT) Chair: Pavla Dagsson-Waldhauserova		Observations of HLD
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	Alexander Baklanov, Switzerland and Denmark, on site	Arctic dust and aerosols: sources, multi-scale modelling, impacts and mitigations
10:30 – 10:45	Arnold Downey, Canada, on site	Mineral Dust in the Ä'äy Chù Valley, Yukon: An assessment of size distribution characteristics and potentially toxic elements
10:45 – 11:00	Ratko Ristić and Dragana Đorđević, Serbia, on site	Will CO2 reduction concept increase atmospheric dust contribution?
11:00 – 11:15	Konrad Kandler, Kerstin Schepanski and HiLDA team, Germany	Distributed dust and meteorological measurements on Dyngjusandur during the HiLDA 2021 summer campaign: first insights on diurnal behaviour and spatial connections

11:15 – 11:30	Cristina Gonzalez Florez, Spain	Comparison of emitted dust size distributions from field campaigns in Morocco and Iceland
11:30 - 12:30	Lunch	
12:30-12:45	Jesús Yus-Díez, Spain and Slovenia	Multi-wavelength optical properties of mineral dust in Dyngjúsundur during the 2021 FRAGMENT-HiLDA summer campaign in Iceland
12:45-13:00	Christian Juncher Jørgensen, Denmark	Long-term continuous monitoring of mineral dust in Kangerlussuaq, West Greenland
13:00-13:15	Adam Kristensson, Sweden	Measurements of multiple dust sources in the Scandinavian atmosphere
13:15-13:30	Marcin Hojan, Poland	Can dust storms from Poland reach high latitudes?
13:30 - 14:00	Coffee break	
Session 2: 14:00-17:30 (GMT) Chair: Arnold Downey		Measurements, modelling and long-range transport of HLD
14:00 – 14:15	Daniel Bellamy, Canada	Modelling mineral dust emissions from Canadian proglacial valleys
14:15 – 14:30	Biagio Di Mauro, Italy	Local dust sources versus long-range transported dust in Svalbard
14:30 – 14:45	Tamar Richards-Thomas, Canada	Volcaniclastic Dust Emission and Dispersion Initiated by Water Droplet Impact
14:45 – 15:00	Ellie Fisher, Iceland and Finland	Investigating Optical Characteristics of Atmospheric Aerosols in a High Arctic Environment: Villum Research Station, NE Greenland
15:00 – 15:30	<i>Coffee and discussions</i>	
15:30	Workshop Day 1 Closing	Thank you for today!

DAY 2

Session 3: 10:00-11:45 Chair: Pavla Dagsson-Waldhauserova		Sources of air pollution, impacts of HLD and long-range transport of low latitude dust towards high latitudes
10:00 – 10:05	Pavla Dagsson-Waldhauserova	Welcome to the second part of the Workshop
10:05 – 10:20	Blanca Astray, Czech Republic and Spain, on site	Tracing sources of pollution using stable Pb isotopes; a case study in three Arctic localities
10:20 – 10:35	Ágústa Helgadóttir, Iceland, on site	Monitoring of aeolian deposition from Háslón reservoir, NE Iceland
10:35 – 10:50	Clarissa Baldo, UK	Optical properties of Icelandic dust in the shortwave spectrum
10:50 – 11:05	Claudia di Biagio, France	High versus low latitude dust optical properties in the infrared spectral range
11:05 - 11:15	Short coffee break	
11:15-11:30	Georgy Varga, Hungary	Saharan dust transport towards high latitudes
11:30-11:45	Keyvan Ranjbar, Canada	Preliminary analysis of a Saharan dust event over Houston during the ESCAPE campaign
11:45 - 12:45	Lunch	
Session 4: 12:45-13:45 Chair: Alexander Baklanov		Impacts of HLD on clouds and cryosphere, and detection techniques of HLD
12:45-13:00	Mark Tarn, UK	Measurements of ice-nucleating particles in the Labrador Sea region
13:00-13:15	Ross Herbert, UK	Simulating ice nucleating particles in the Arctic using the Met Office UM-UKCA model
13:15-13:30	Andri Gunnarsson, Iceland	Impacts of Light Absorbing Particles on Vatnajökull during the summer 2022: Impacts on mass balance and runoff
13:30-13:45	Seyed Ali Sayedain, Canada	Identification & optical analysis of Lhù'ààn Mân' (Kluane Lake, Yukon) HLD plumes using AERONET and lidar measurements supported by surface microphysics retrievals
13:45-14:15	Coffee break	

Session 5 14:15-15:30 Chair: Pavla Dagsson-Waldhauserova		Active HLD sources and HLD research strategy
14:15-14:30	Outi Meinander, Finland	Newly identified climatically and environmentally significant high latitude dust sources
14:30-14:45	Jan Kavan, Poland and Czech Republic	Topography controls spatial pattern of HLD deposition, James Ross Island, Antarctica
14:45-15:00	Pavla Dagsson-Waldhauserova, Iceland, onsite	IceDust Association and updates on <i>in situ</i> measurements of HLD
15:00-15:15	Alexander Baklanov, Switzerland and Denmark, on site	WMO SDS-WAS and UN Coalition on Combating Sand/Dust Storms activities and strategy (with focus on HLD)
15:15 – 15:30	Coffee and discussions	
15:30 – 16:00	<i>IceDust Association meeting</i>	<i>Strategy and planning</i>
16:30	Workshop Closing	Thank you for being with us!

We look forward to welcoming you!

Organizing team: Pavla Dagsson-Waldhauserova (Agricultural University of Iceland, contact: firstname@lbhi.is), Outi Meinander (Finnish Meteorological Institute, contact: firstname.lastname@fmi.fi), Alexander Baklanov (WMO and University of Denmark, contact: Alastname@wmo.int), and in co-operation with the IceDust Association, Iceland.