



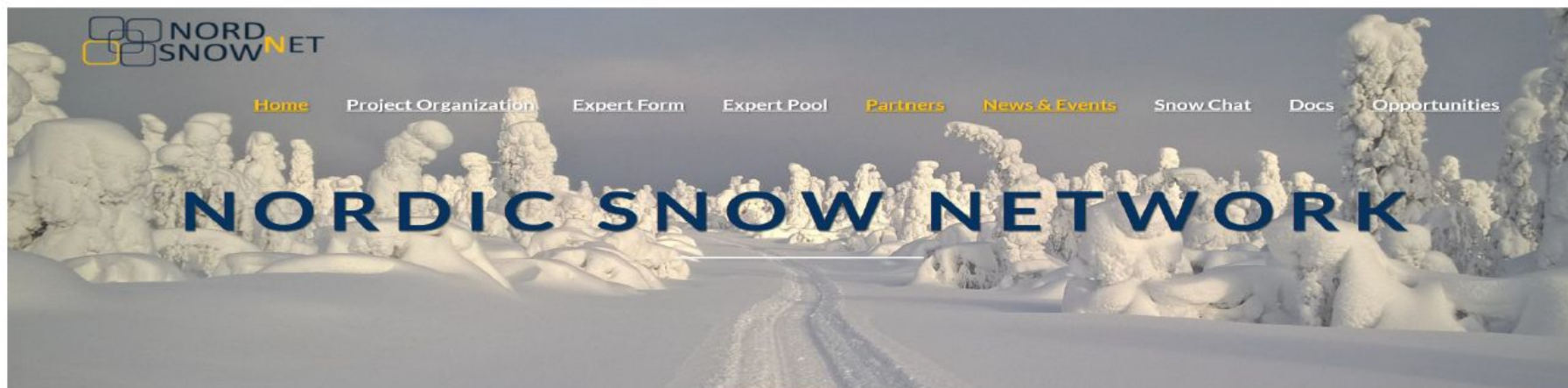
## Coordination efforts on in-situ snow observations towards to harmonization and its applications

### Nordic Snow Network



<https://nordsnownet.fmi.fi/>

Ali Nadir Arslan-ali.nadir.arslan@fmi.fi



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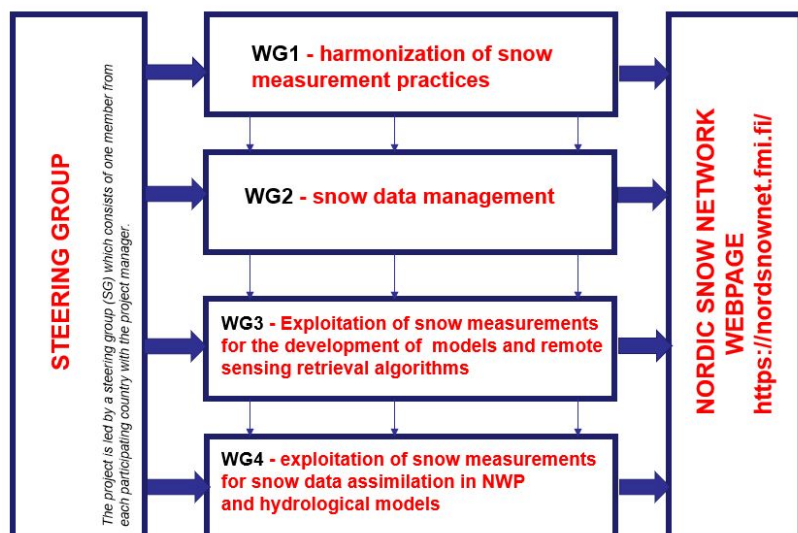


# BACKGROUND

The Nordic Snow Network (NordSnowNet) (<https://nordsnownet.fmi.fi/>) is established to address these issues with 5 national meteorological institutes (NMI (Norway), DMI (Denmark), FMI (Finland), SMHI (Sweden) and IMO (Iceland)), universities (Agricultural University of Iceland, Reykjavik University-Iceland and University of Tartu-Estonia) and Asiaq – Greenland Survey from Greenland.

The point of view of the network is focused on snow in Nordic and related Arctic areas.

## PROJECT ORGANIZATION



## NordSnowNet Working Groups

**WG-1** on "harmonization of snow measurement practices" have as objectives to explore the harmonization needs of the snow measurements, establish a list of actions to be taken to achieve the harmonization, and plan an instrument inter-comparison campaign.

**WG-2** on "snow data management" have as objectives the standardization of the snow data and metadata formats, and the collection and sharing of tools (software) to format the data and store them in open access repositories. The guiding line of the working group's actions is the fulfilment of the FAIR (Findable, Accessible, Interoperable, Re-usable) data principles.

**WG-3** on "Exploitation of snow measurements for the development of models and remote sensing retrieval algorithms" have as objectives to share the advances in model development, identify the working areas that can best benefit from an international coordinated effort, and favour the working synergy among the various institutions.

**WG-4** on "exploitation of snow measurements for snow data assimilation in NWP and hydrological models" have as objectives the sharing of progresses in snow data assimilation, as well as the coordination of the development work.

# MOTIVATION

NordSnowNet is funded by the Nordic Council of Ministers for the time-period from 1.9.2019 to 1.9.2022. The network activities are extended till 31.8.2024 due to the break from COVID-19.

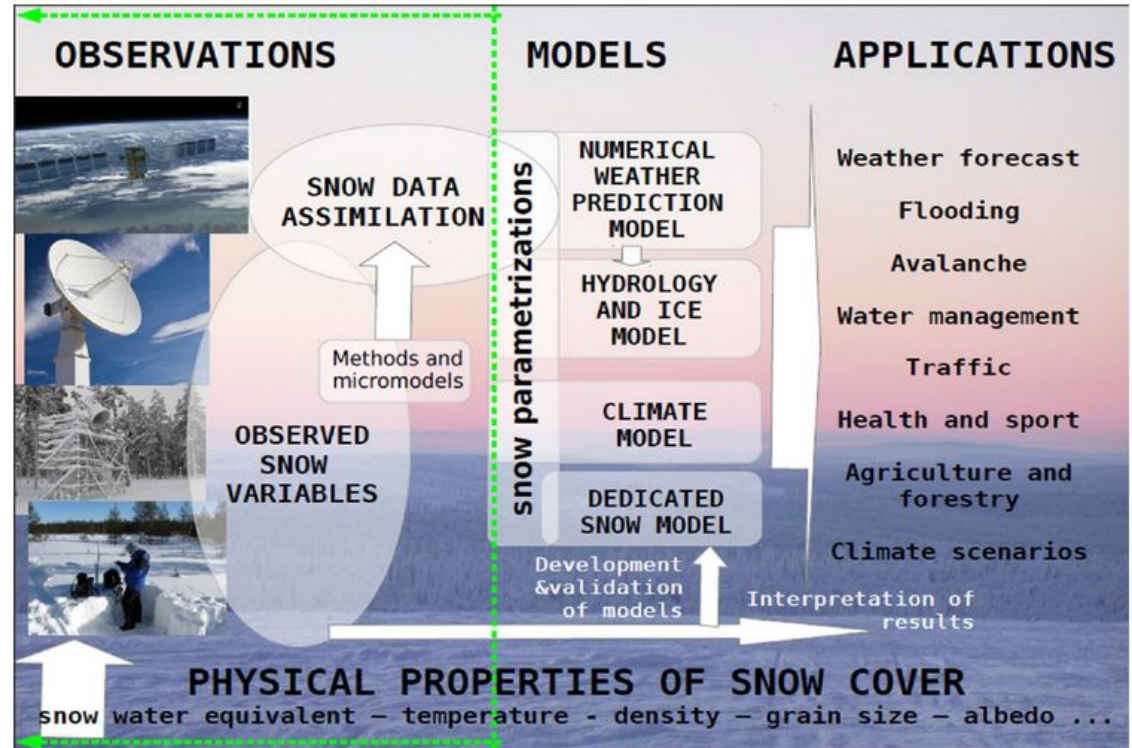
- ❖ The members of the NordSnowNet are strongly motivated to become a UArctic thematic network as a continuation of its mission and activities.
- ❖ Working under the umbrella of UArctic as a new thematic network would help consolidate the NordSnowNet and promote further coordination efforts on in-situ snow observations towards to harmonization and its applications in research and education, focused on students, indigenous and local people, and stakeholder involvement in the Arctic with collaboration of other thematic networks.





# THEMATIC FOCUS AREA OF THE NETWORK

The network will be focus on snow in Nordic and related Arctic areas: making existing Nordic-Arctic research and snow data from observations and models (forecasts and assimilated observations by weather and hydrology models, projections by the climate models) visible for the researcher, data user and education communities. It would support snow-related research and development of applications by exchange of information and data, arranging workshops, training and supporting also informal Nordic researcher contacts and meetings.



# OBJECTIVES

**The main objective is to create a sustainable network for connecting the Nordic-Arctic snow researchers and making their results and data visible.**

- **To facilitate and coordinate existing and new snow related collaboration within Nordic countries**
- **To create a new easily accessible Nordic snow platform including snow information and expertise for Nordic and international collaboration**
- **To provide snow information to be distributed and used by stakeholders to a greater extent than today.**



# NordSnowNet **PLANNED ACTIVITIES**

- **Thematic workshops**
- **Snow field campaigns**
- **Training schools**
- **Extending the presently Nordic-based network to wider UArctic partner coverage**
- **Sessions in international and UArctic conferences**
- **Mobility on scientific missions**
- **Creating scientific benchmarks studies among members that their outcomes can be resulted in scientific publications / reports / white papers.**
- **Preparing scientific proposals within the network, to ensure funding and continuation of the activities.**



# PARTNERS

- Finnish Meteorological Institute
- University of Lapland
- Agricultural University of Iceland
- University of Oulu
- Reykjavik University
- Asiaq - Greenland Survey
- University of Tartu
- Swedish Meteorological and Hydrological Institute

*The Nordic Snow Network has more than 50 scientists representing institutes from Finland, Sweden, Norway, Iceland, Denmark, Greenland and Estonia.*







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**THANK YOU!**

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Ali Nadir Arslan ([ali.nadir.arslan@fmi.fi](mailto:ali.nadir.arslan@fmi.fi))

