

EISCAT_3D Norway Newsletter

Newsletter Introduction

This newsletter is released every 3 months and covers recent space science contributions and developments involving the Norwegian EISCAT community. If you wish to be included in the mailing list for the newsletter distribution, please use the contact details at the bottom of the page.

EISCAT Norway Radar Time Allocation

The following dates are the application deadlines to apply for radar time.

70% of time is available for the **Feb. 1, 2024** deadline
 30% of time is available for the **Sept. 14, 2024** deadline

For more information, please refer to:
<https://uit.no/eiscat3dnorway>

EISCAT Symposium 2024 - Save the Date

Dear Colleagues,

We are happy to announce that the EISCAT Symposium 2024 will occur the week of July 29 to August 2 in Tromsø, Norway. The 48th Annual European Meeting on Atmospheric Studies by Optical Methods will be held simultaneously.

Venue:

UiT The Arctic University of Norway campus, Tromsø, Norway

Dates:

July 29 - August 2, 2024

Preliminary Session List:

- EISCAT 3D, and complementing instrumentation
- MIT Coupling
- Novel Radar and Signal Processing Techniques
- Imager/Aurora Studies
- Satellite, Rocket, and Multi-Instrument Studies
- D-region and Mesospheric Phenomena
- Meteors and Space Debris
- Machine Learning in Space and Atmospheric Physics
- Modelling of Auroral/Magnetospheric Processes
- Active Ionospheric Experiments (Heating, etc.)
- Space Weather
- Effects of Satellites on Incoherent Scatter Radar Measurements

Accommodations:

Due to the demand for hotels in Tromsø during the summer months, it is recommended to book your hotel/accommodations as soon as possible.

More details about registration and abstract submission will be released in the future.

2024 is an important year for the incoherent scatter community as it will be the first year of EISCAT 3D operations. We hope to see initial results from the system presented at the Symposium!

The registration fee is planned to include coffee breaks, lunches, a visit to the EISCAT 3D Skibotn site, conference style presentations, and a banquet dinner.

We look forward to seeing you in Tromsø for the Symposium!

For any inquiries or requests for more information, please contact: EISCAT_Norway@uit.no

Best regards,
 The Local Organizing Committee (LOC)

LOC at UiT:
 Björn Gustavsson
 Devin Huyghebaert
 Inger Solheim
 Ingrid Mann

EISCAT_3D Norway 2023 Meeting

The EISCAT Norway meeting was split into two parts and held on November 10, 2023 and November 23, 2023.

Minutes from the meeting are posted to the EISCAT_3D Norway website under "Discussion and Newsletters":
<https://uit.no/eiscat3dnorway>

International EISCAT_3D User Meeting

The International EISCAT 3D User meeting was held on November 30 - December 1, 2023.

The schedule and some presentations from the meeting can be found at:

https://www.space.irfu.se/workshops/E3D_User2023-2/

INFRASTRUKTUR Proposal EISCAT_3D

A proposal has been submitted to The Research Council of Norway for funding EISCAT and EISCAT_3D operations. For more information, please contact the PI, Professor Ingrid Mann, UiT The Arctic University of Norway (Email: ingrid.mann@uit.no)

INFRASTRUKTUR Pre-Project Proposal

EISCAT Svalbard ISR

A pre-project proposal has been submitted to The Research Council of Norway for planning the future of the EISCAT Svalbard Incoherent Scatter Radar. For more information, please contact the PI, Professor Lasse Clausen, University of Oslo (Email: lasse.clausen@fys.uio.no)

EISCAT_3D Update

EISCAT_3D construction is progressing well. The current schedule is to start EISCAT_3D operations in 2024, first in the monostatic mode.

In parallel, EISCAT is planning to develop the legal status of the organisation in order to achieve long-term stability. The goal remains non-military scientific operations of the radar to study the Arctic upper atmosphere and ionosphere as well as geospace phenomena. Efforts will be made to reduce any negative impact of these changes on the EISCAT user community, allowing uninterrupted use of the facilities. Follow the updates of EISCAT_3D on: <https://eiscat.se/category/eiscat3d/>

Recent Successful Ph.D. Defences

Dr. Tinna Gunnarsdottir

Title: Mesospheric Dust – Radar applications for detection and investigation

Date: Nov. 15, 2023

Supervisor: Professor Ingrid Mann

Affiliation: UiT The Arctic University of Norway

Congratulations!

TGO Magnetometer at Troll Station

In November a magnetometer was prepared and sent to Troll Station in Antarctica. It is a collaboration with Kongsberg Satellite Services. The instrument will be installed early in 2024.

Japan-Norway Summit Meeting and

Working Dinner

The Prime Minister of Japan and the Prime Minister of Norway met on December 7, 2023, for discussions and a working dinner. Of relevance for EISCAT Norway is the Joint Statement that was released.

From the “Joint Statement on the Strategic Partnership between the Government of Japan and the Government of the Kingdom of Norway” (page 4):

“(ii) The two leaders noted the excellent scientific cooperation between Japan and Norway on Arctic issues, including the work of the National Institute of Polar Research at the Norwegian Ny-Ålesund research station in Svalbard and the two countries’ participation in European Incoherent Scatter Scientific Association (EISCAT), where we jointly operate research radars in Svalbard and on the mainland. The two leaders shared the ambition to build knowledge on the rapid climate change in the Arctic, the impact on ecosystems, endangered species, and the role of the Arctic for the global climate including through cooperation and exchange on Arctic research, including building on the strength of respective national scientific programs.”

Source:

https://www.mofa.go.jp/erp/we/no/pageite_000001_00027.html

Recent EISCAT Norway Publications

Eriksen, N. K., Lorentzen, D. A., Oksavik, K., Baddeley, L., Hosokawa, K., Shiokawa, K., et al. (2023). On the creation, depletion, and end of life of polar cap patches. *Journal of Geophysical Research: Space Physics*, 128, e2023JA031739. <https://doi.org/10.1029/2023JA031739>

Günzkofer, F., Pokhotelov, D., Stober, G., Mann, I., Vadas, S. L., Becker, E., Tjulin, A., Kozlovsky, A., Tsutsumi, M., Gulbrandsen, N., Nozawa, S., Lester, M., Belova, E., Kero, J., Mitchell, N. J., and Borries, C.: Inferring neutral winds in the ionospheric transition region from atmospheric-gravity-wave traveling-ionospheric-disturbance (AGW-TID) observations with the EISCAT VHF radar and the Nordic Meteor Radar Cluster, *Ann. Geophys.*, 41, 409–428, <https://doi.org/10.5194/angeo-41-409-2023>, 2023.

Jin, Y., Moen, J. I., Spicher, A., Liu, J., Clausen, L. B. N., & Miloch, W. J. (2023). Ionospheric flow vortex induced by the sudden decrease in the solar wind dynamic pressure. *Journal of Geophysical Research: Space Physics*, 128, e2023JA031690. <https://doi.org/10.1029/2023JA031690>

1st General Assembly of the

Norwegian Geophysical Society

In recent years, the Norsk Geofysisk Forening (NGF) have worked to increase the number of members and the visibility of NGF. The goal of NGF is to become an important interdisciplinary national network in Norway that includes academia and industry in the private and public sector. NGF is also responsible for Norway's national International Union of Geodesy and Geophysics (IUGG) committee.

NGF plans to organise a large national conference every other year, with the first one held in 2024. Details for this conference are below.

When: 19-21 June 2024

Where: University of Bergen

Call for abstracts and registration opens:
January 15, 2024

Abstract submission deadline: March 22, 2024

Abstract acceptance: April 26, 2024

Organisation committee:

Prof. Thomas Spengler (University of Bergen)
Prof. Igor Ezau (UiT – The Arctic University of Norway)
Britta Schäfer (University of Oslo)
Dr. Hege-Beate Fredriksen (Norwegian Polar Institute)
Dr. Jenny Turton (Arctic Frontiers)

The General Assembly covers:

Cryospheric Sciences, Meteorology and Atmospheric Sciences, Physical Sciences of the Oceans, Seismology and Physics of the Earth's interior, Geomagnetism and Aeronomy, Hydrological Sciences, Geodesy, Volcanology and Chemistry of the Earth's interior.

Feel free to subscribe to NGF's newsletter to keep up to date with what's going on:
<https://geofysikk.org/abonner-nyhetsbrev/>

Future International EISCAT 3D Meetings

Information about EISCAT and EISCAT_3D User Meetings is distributed via the mailing list moderated by EISCAT. To subscribe, email listmaster@eiscat.se. A Slack account is also organized for EISCAT_3D Discussions. To receive an invitation for the Slack channels, email channelmaster@eiscat.se.

Questions, Suggestions, Changes?

The next newsletter will be released in March, 2024. If there are any questions about EISCAT_3D, suggestions for the format of this newsletter, or changes that should be implemented, please let us know with the contact information at the bottom of the page. Thank you.



EISCAT_3D at Skibotn, Credit: EISCAT