

EISCAT 3D Norway Newsletter

Newsletter Introduction

The newsletter will be released every 3 months and cover recent contributions and developments involving the Norwegian EISCAT 3D community. Norwegian EISCAT news and contributions are also welcome to be posted. 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_3D Antenna Arrays Arriving to Port

The cargo ship carrying the antennas, ground plane panels, and housing units for radar electronics arrived near Tromsø, Norway on Sept. 14, 2022. The equipment have been unloaded and are currently being transported to the 3 sites to be further assembled and installed.

A UiT news release with more details can be found at: [UiT News Release](#)

The EISCAT news release can be found at: <https://eiscat.se/eiscat3d/eiscat-3d-shipment-has-arrived/>



The cargo ship that transported the EISCAT_3D antennas to Norway

EISCAT Symposium

The EISCAT Symposium was held August 15-19, 2022 in the Sundbyholm castle near the town of Eskilstuna in central Sweden. Multiple participants from the EISCAT Norway group were in attendance. For more details on what was presented at the workshop, please visit: <https://www.space.irfu.se/workshops/LPMR-EISCAT/>

EISCAT Symposium 2024

The EISCAT Symposium is typically held every 2 years. In 2024 Norway will host the meeting in Tromsø, Norway. Exact dates and details are still to be determined.

Space Physics Courses at UNIS

The deadline for Masters / PhD students who wish to go to UNIS for the Spring semester 2023 to take the following courses is the 15th of October. The relevant courses are (students can opt to take only one if they do not need to do 30ECTS):

AGF304/804 – Radar diagnostics of Space Plasmas (15ECTS) <https://www.unis.no/course/agf-304-radar-diagnostics-of-space-plasma/>

AGF301/801 – Upper Polar Atmosphere (15ECTS) <https://www.unis.no/course/agf-301-the-upper-polar-atmosphere/>

EISCAT_3D User Meeting

There are plans for an EISCAT_3D User Meeting in the near future. Please keep an eye out for an email from the EISCAT mailing list for further details.

EISCAT_3D Norway Meeting

An EISCAT_3D Norway meeting is planned to be held at the end of November or the beginning of December. An email will be sent to the EISCAT Norway mailing list in the near future for planning the meeting date and the program schedule. If you are not currently on the mailing list and wish to be included, please email EISCAT_Norway@uit.no with a request to be added.

Nordic Observatory Meeting

The 8th Nordic Observatory Meeting (NOM-8) will take place at Kilpisjärvi Biological Station, Tue-Thu, 15-17 November 2022, with the main discussion day being Wed 16th November. These meetings serve to foster collaboration between all the different atmospheric and ionospheric measurement installations in the nordic region.

IMAGE Meeting

There will be an IMAGE meeting in Helsinki 5-6 October. Magnar G. Johnsen is the Science Chair of IM-

AGE, and will be in attendance in addition to another Tromsø Geophysical Observatory employee. IMAGE is a network of 42 magnetometers in the northern European region. This meeting is also the celebration of IMAGE's 40 year anniversary (the network began as "the EISCAT-Magnetometer Cross").

More information on the meeting can be found at: https://space.fmi.fi/image/www/image_meeting_2022/

Award for Professor Emeritus Asgeir Brekke

Asgeir Brekke received the Japanese Order of the Rising Sun, Gold Rays with Neck Ribbon from the Japanese Ambassador on September 9. Asgeir Brekke is a Professor emeritus of UiT The Arctic University of Norway and has contributed extensively over the years to collaborations between Japan and Norway involving the EISCAT radars. The UiT press release with more information can be found at: https://uit.no/nyheter/artikkel?p_document_id=771998

Congratulations Asgeir!



Image credit: Twitter of UiT Norges Arktiske Universitet

EISCAT_3D Radar School

A save the date has been sent out for the next EISCAT Radar School, which will focus on the EISCAT_3D radar system. The radar school will occur in Kilpisjärvi during the week of Aug. 13-19, 2023.

New Hires and Promotions

Two new postdoctoral researchers have been hired at UiT to work with the CASCADE project led by Associate Professor Andres Spicher.

Dr. Theresa Rexer

Postdoctoral Researcher

UiT The Arctic University of Norway

Dr. Andreas Kvammen

Postdoctoral Researcher

UiT The Arctic University of Norway

Recent EISCAT Norway Publications

Fu, H. Y., Jiang, M. L., Vierinen, J., Häggström, I., Rietveld, M. T., Varberg, E., et al. (2022). A stimulated emission diagnostic technique for electron temperature of the high power radio wave modified ionosphere. *Geophysical Research Letters*, 49, e2022GL099390. <https://doi.org/10.1029/2022GL099390>

Jozwicki D, Sharma P, Mann I, Hoppe U-P. Segmentation of PMSE Data Using Random Forests. *Remote Sensing*. 2022; 14(13):2976. <https://doi.org/10.3390/rs14132976>

AutoDIF Instrument Testing

The Tromsø Geophysical Observatory are installing an AutoDIF at the Auroral Observatory. It will be installed in Tromsø for one year for testing before it is moved to the observatory at Bear Island. An autoDIF is an automatic theodolite developed at the Magnetic Observatory at Dourbes in Belgium, for absolute measurements used in calibration of magnetometers. The AutoDIF will aid in improving the quality of the magnetometer data from Bear Island considerably.

New Ionosonde at Ramfjordmoen

Tromsø Geophysical Observatory will be installing a new Lowell DPS-4D ionosonde at Ramfjordmoen in the near future. The plan is for operations to begin in October, 2022.



The new (bottom right) and old (left and middle) ionosondes at the Parial Reflection Experiment Facility at Ramfjordmoen.

Reindeer Riometer Antenna Modifications

A reindeer decided to perform some modifications to one of the riometer antennas operated by Tromsø Geophysical Observatory in Ny-Ålesund recently. The reindeer was able to free itself from the antenna, unharmed, though the antenna was not as fortunate.



Future International EISCAT 3D Meetings

Information about EISCAT and the 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 December, 2022. 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.

