

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_3D community. Norwegian EISCAT news and contributions are also included. 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. Previous newsletters are available on the EISCAT_3D Norway website.

EISCAT_3D Update

From the EISCAT Council:

EISCAT_3D construction is progressing well. The EISCAT Scientific Association is currently installing the EISCAT_3D antennas at the transmitter site in Skibotn, Norway and at the receiver sites in Kaiseniemi, Sweden and in Karesuvanto, Finland. The current schedule is to start EISCAT_3D operations in 2023, 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 at:
<https://eiscat.se/category/eiscat3d/>

EISCAT_3D Norway Meeting

An EISCAT_3D Norway Meeting was held on November 22, 2022. For more information, please visit the following website and view the minutes posted under the “Discussion and Newsletters” tab:
<https://uit.no/eiscat3dnorway>

The next EISCAT 3D Norway Meeting will be in the Spring, 2023. An email will be sent to the EISCAT Norway mailing list in the coming months to select a time and date.

EISCAT Symposium 2024

The EISCAT Symposium is held every 2 years. In 2024 Norway will host the meeting. The Space Physics group at UiT has agreed to organize. Exact dates and details are still to be determined.

EISCAT Norway Radar Time Allocation

The procedure to apply for radar time has been updated, with new application deadlines.

70% of time is available for the **Feb. 1, 2023** deadline
 30% of time is available for the **Sept. 14, 2023** deadline

Note that 30% of the radar time for 2023 will be reserved for initial EISCAT-3D operations for trigger modes. This data will be available to the full Norwegian EISCAT community.

These details are also available in a presentation posted under “Discussion and Newsletters” on the EISCAT_3D Norway website:
<https://uit.no/eiscat3dnorway>

Research Council of Norway Young Talents

A call for proposals from the Research Council of Norway have been released for “Researcher Project for Young Talents”. There is a thematic call for space research, with specifically EISCAT named in the description, and a call for FRIPRO (Ground-breaking Research).

Proposal Deadlines:
 08 February, 2023 (Space Research)
 15 March, 2023 (FRIPRO)
<https://www.forskningsradet.no/>

EGU 2023

EGU 2023 General Assembly details:
 Dates: 23–28 April 2023
 Location: Vienna, Austria & Online
 Abstract Deadline: 10 January 2023, 13:00 CET

CEDAR 2023

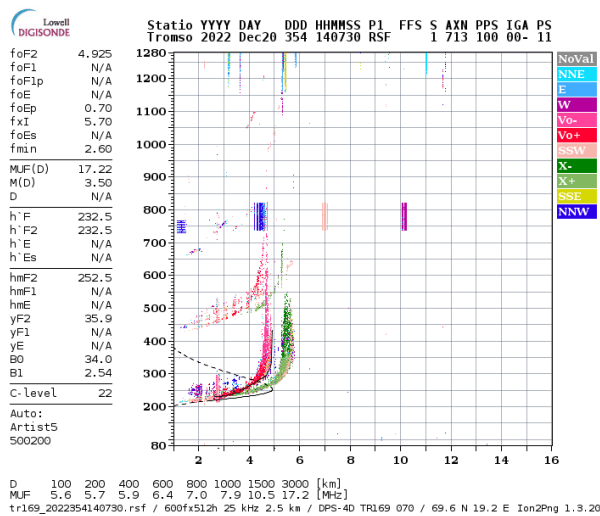
CEDAR Workshop 2023 Details:
 Dates: 25-30 June 2023
 Location: San Diego, California
 Abstract Deadline: To Be Announced

URSI 2023

URSI 2023 General Assembly Details:
 Dates: 19-26 August 2023
 Location: Sapporo, Japan
 Abstract Deadline: 25 January 2023

New TGO Digisonde Operational

The new DPS-4D digisonde is now running at Ramfjordmoen. Some assistance from Lowell with phase calibrations is ongoing, but the ionosonde can now be considered operational. <https://www.tgo.uit.no/ionosonde/>



Example DPS-4D Ionogram

Recent EISCAT Norway Publications

Alfonsi, L., Bergeot, N., Cilliers, P. . et al. Review of Environmental Monitoring by Means of Radio Waves in the Polar Regions: From Atmosphere to Geospace. *Surv Geophys* 43, 1609–1698 (2022). <https://doi.org/10.1007/s10712-022-09734-z>

P. Dalin, H. Suzuki, N. Pertsev, V. Perminov, D. Efremov, P. Voelger, V.L. Narayanan, I. Mann, I. Häggström, M. Zalcik, O. Ugolnikov, J. Hedin, J. Gumbel, R. Latteck, G. Baumgarten, Studies of noctilucent clouds from the stratosphere during the SONC balloon-borne experiment in 2021, *Journal of Atmospheric and Solar-Terrestrial Physics*, Volume 240, 2022, 105959, ISSN 1364-6826, <https://doi.org/10.1016/j.jastp.2022.105959>.

Daniel Kastinen, Juha Vierinen, Tom Grydeland, Johan Kero, Using radar beam-parks to characterize the Kosmos-1408 fragmentation event, *Acta Astronautica*, Volume 202, 2023, Pages 341-359, ISSN 0094-5765, <https://doi.org/10.1016/j.actaastro.2022.10.021>.

McKay, D., Grydeland, T., & Gustavsson, B. (2022). Manx arrays: Perfect non-redundant interferometric geometries. *Radio Science*, 57, e2022RS007500. <https://doi.org/10.1029/2022RS007500>

EISCAT_3D Software Discussion

A discussion and workshop on software implementation for EISCAT_3D was held at UiT and online on Dec. 7, 2022. Many different aspects of the EISCAT_3D software pipeline were discussed. More information on these discussions will be distributed in the near future.

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, 2023. 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.

