

EISCAT 3D Norway Meeting

Date: Nov. 22, 2022, 13:30

Attendees: Devin Huyghebaert (UiT) [DH], Harri Hellgren (EISCAT) [HH], Andres Spicher (UiT), Björn Gustavsson (UiT), Dag Lorentzen (UNIS), Inger Solheim (UiT) [IS], Ingrid Mann (UiT) [IM], Jon-Thøger G. Hagen (UiB), Jone Peter Reistad (UiB), Juha Vierinen (UiT), Karl Magnus Laundal (UiB) [KML], Kjellmar Oksavik (UiB) [KO], Lasse Clausen (UiO) [LC], Lindis Bjoland (UiB), Lisa Baddeley (UNIS) [LB], Nina Eriksen (UNIS), Njål Gulbrandsen (TGO), Norah Kwagala (UiB), Patrick Joseph Espy (NTNU), Spencer Mark Hatch (UiB) [SMH], Theresa Rexer (UiT), Yaqi Jin (UiO), Martin Flügge (Andøya Space Center)

Agenda:

Harri Hellgren - Update on EISCAT 3D Construction (presentation and discussion/questions)

LB: First light in spring 2023?

HH: Yes, the project is still on time for this.

IM: Can you say something about using the central site in a monostatic mode for test operations?

HH: As soon as we have receivers working and a data link to EISCAT HQ, testing will start. It is also possible to move computers to Skibotn if there are delays in the data link.

DH: Are there plans to use the receivers to do radio surveys of the galactic background?

HH: As soon as the receivers are setup, yes.

IS: There was mention of a transmitter installation in Kaiseniemi in the past. What is the status of this?

HH: It was only a test setup to determine how the electronics would fit in the container. There is a transmit license at all receive sites. Maybe the PET test array could go to Kaiseniemi.

Ingrid Mann - Update on EISCAT 3D Norway (presentation and discussion/questions)

The research council is working on a long term plan for research infrastructure – they have asked all institutions for input. A high level committee will create a long term plan together with the research council.

Some EISCAT objectives to highlight to representatives:

- Continuity in data
- Relevance of space debris and space weather
- Local relevance of measurements in northern Norway and Svalbard – different science topics
- Capacity building for space physics

Each institution will have a contact/representative for this long term planning – it is important to reach out and keep space physics included in the planning

IM: The EISCAT Symposium 2024 will be in Norway/Tromsø/Skibotn

KML: Large Meeting in August in Bergen (Physical Society) with section for space physics

IM: EISCAT 3D in the news: Contact Devin Huyghebaert with link to any articles so they can be added to E3D Norway Website

IM: Sept. 7, 2023 – Kickoff meeting for EISCAT 3D first light/measurements?

IS: Worthwhile to plan schedule earlier to have high profile guests attend

IM: Next EISCAT 3D proposal – Science questions/goals. Maybe should include radar techniques and analysis development.

SMH: What was the dialogue with Forskningsrådet, and what was the context of the funding for the EISCAT_3D project?

IM: Contract with research council is similar to research projects, but most of money goes directly to EISCAT. Project reporting is slightly different – reporting mainly done by EISCAT association. Includes both funding for EISCAT 3D and operation for EISCAT facilities.

EISCAT 3D operational costs will significantly increase, users in Norway therefore will need to apply for funding to secure membership in EISCAT association – done through a research infrastructure proposal. Uncertain yet when the call for this proposal will come.

Link from IM (About EISCAT_3D Project):

https://en.uit.no/prosjekter/prosjektsub?p_document_id=487937&sub_id=487936

Lisa Baddeley - SAC update and EISCAT Norway Time Allocation (presentation and discussion/questions)

Plan:

Feb. 1st deadline for radar time (70% of time) – also still ad-hoc time available from leftovers 30% in Sept. 14th Assigned

30% reserved for initial EISCAT-3D operations for trigger modes. Data will be available to full Norwegian EISCAT community

IM: Opportunity to modify common programmes?

LB: Should be able to, similar to what is possible now.

KO: Difficult to plan one year ahead with uncertainty around EISCAT 3D

LB: Flexible still, and this time application includes the Svalbard radar

KO: What will be the distribution between the old and new systems?

LB: This still needs to be determined by EISCAT. 30% of Norwegian total time will be saved for EISCAT_3D in 2023

IM: EISCAT should start looking into the distribution of time between new and old system

HH: Once it gets closer to operations the time allocation will be determined.

DH: Cost of radar operations for old vs new system?

HH: Cost of single PET system has been determined, very dependent on electricity cost

BG: Will there be UHF and EISCAT 3D simultaneous operations during commissioning phase?

HH: There should be some overlap between the VHF, UHF, and EISCAT 3D

IM: Science Advisory Committee made a proposal for coincident operations between systems

LB: VHF and UHF will not be turned off until the council are happy with EISCAT_3D data

HH: There will be overlap of the systems for at least for the monostatic operations from EISCAT 3D

Open Discussion:

EGI/FEIDE Contracts for EISCAT Authentication

LC: Will the contracts take time for other institutions?

DH: There should be a template approved by UiT that could be used for other Norwegians institutions, reducing the time for approval.

LB: UNIS approved the EGI check-in, but they may be re-working data handling and could require a contract in the future

KO: Bergen has approved the EGI check-in

Informal EISCAT 3D Software Meeting – Tromsø Dec. 7-8, 2022 – Hybrid component likely

- Discussion points: Project status, GUISDAP plans, development of experiments/GUISDAP 2.0 (analysis software development)

- Finalized Agenda will be after Nov. 24

Observatory Days, Sodankylä, 11th – 13th January 2023

- E3D Software meeting is tentatively planned by EISCAT

- Registration deadline: December 12, 2022

ROMFORSK call, Young Talents, Research Council of Norway, due Feb. 8th, 2023

Physical Society National Meeting in Tromsø in March, 2023

- Possibility to have next EISCAT 3D Norway Meeting in person/hybrid

EISCAT Symposium 2024 hosted by Norway

IM: Upcoming annual report request for information?

LB: Will send an email asking for input, publications

IM: Need to acknowledge RCN project numbers for papers and articles