

IMAGE Science Council (SC) meeting 2022 minutes

Time: 27 April 2022 13:15-16:15 CEST

Place: Online meeting in Zoom.

Present:

Representatives of the contributor institutes:

TGO: Magnar G. Johnsen (Chair of the Scientific Council)

SGU: Gerhard Schwarz

FMI: Kirsti Kauristie

Ari Viljanen

Mirjam Kellinsalmi

SGO: Tero Raita

IRF: Masatoshi Yamauchi

IG: Jan Reda

Anne Neska

Representatives from GFZ (Jürgen Matzka) and PGI missing from the meeting. The PGI member, Alexander Yahnin, passed away last February. Other PGI (Russia) members were in original Doodle poll invitation to the SC meeting, but they did not respond. After agreement between the IMAGE PI and Scientific Council Chair, in light of the current Russian aggression in Ukraine, they were not informed about the time of the meeting and did not receive the meeting link.

Associate Members:

Anna Willer, DTU Space, Denmark

Hermann Opgenoorth, Umeå University, Sweden

Hermann Lühr, GFZ German Research Centre For Geosciences, Germany

Ian Mann, University of Alberta, Canada

Agenda with minutes:

1. Acceptance of Agenda

The agenda was sent one week before the meeting and an update with minor additions was sent out the day before the meeting (Items 1,2, 6 in Agenda). The Agenda was accepted without remarks.

2. Appointment of writer of the minutes

Tero Raita was selected be writer of the minutes after suggestion from the Science Chair.

3. Russian invasion of Ukraine - implications for IMAGE collaboration.

The participant institutions of the IMAGE network are from different countries and follow their own policies for the collaboration with Russian institutes during the present situation. One of the members of IMAGE is Polar Geophysical Institute, Russian Academy of Science with Lovozero observatory.

The SC discussed how the IMAGE team should react to the present situation. SC was united wrt. to the need of a statement, and the formulation of such a statement and possible actions were discussed. It was stated that IMAGE follows the sanction policy of the IMAGE PI institute and country (FMI, Finland). SC notes that the statement is not set towards individual Russian scientists.

The SC remarks that PGI data delivery to IMAGE it is not done according to IMAGE statutes. The latest Lovorezo data submitted to the IMAGE database hosted by FMI is from 2013. The SC noted that sanctions effect also to the data dissemination of older data and addition to formulation of acknowledgement was decided for coming data use.

An action was proposed, agreed upon and three alternative texts to be included on the IMAGE web site was created:

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- Suspend PGI membership, owing to the current situation
- This should be reflected on the IMAGE page, ie.:
 - Alt1: «PGI membership is currently suspended»
 - Alt2: «PGI membership is currently suspended owing to the current political situation»
 - Alt3: «PGI membership is suspended due to Russian aggression and their invasion of Ukraine»
- Including text for acknowledgements. Pre 2013 data acknowledgement text, and post 2013 data acknowledgment not including PGI.
- Keep old Russian data available, but not include potential new data.

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The alternative texts were voted for, see end of document.

4. Accepting DTU magnetometers into IMAGE

DTU magnetometers were already welcomed by many IMAGE parties after Anna Willer approached the IMAGE by the short letter introducing the stations. Some discussion rose about the quality of the Brorfelde observatory, which earlier withdrew from INTERMAGNET membership due to data quality issues. (More: Maule et. al., Earth Planets Space, 61, 1233-1241, 2009). Also, the ownership of the new instruments was discussed. ESA owns Level 1a data, i.e. raw sensor output data (in nT), but DTU and SGU have full rights to use Level 1a data and owns the Level 1b data, i.e. calibrated data, of all newly installed MAG-SWE-stations. It is the Level 1b data that will be delivered to IMAGE. The stations have been a big investment for DTU. Operational funding is secured until end of 2023, but contracts are in preparation for the continuation. The funding in the future is possible via ESA on a three-year basis.

The SC accepted the DTU Space, Denmark to be new party of IMAGE without obligations. Specially, Brorfelde case need to be decided after DTU Space has signed membership.

With the inclusion of magnetometers from Greenland, the question of including Jan Mayen from TGO and magnetometers in Iceland arise. In Iceland there is Leirvogur Magnetic Observatory by University of Iceland that we know well through Nordic collaboration, and there are two magnetometers by NIPR (Japan) and one by PRIC (China).

After joining of DTU magnetometers to the IMAGE in the magnetometers in Iceland will be surrounded by IMAGE stations. Earlier Leirvogur was not taken in IMAGE as it was remote for other station. The realtime data of Leirvogur is already available at TGO and they could process it to IMAGE. It is not likely that University of Iceland will approach IMAGE on its own. Magnar G. Johnsen indicated that a possibility would be to invite them in.

Magnar G. Johnsen communicated with PRIC (China) about collaboration with real-time exchange of data, but they don't seem interested.

Hermann Luhr asked about status of the TGO station at Jan Mayen, which was told to be closed 2005-2013 by Magnar G. Johnsen. The station has been operation since 2013, but not part of IMAGE network. To include it in IMAGE is a low hanging fruit, it is just to add it to the ordinary stream.

Hermann Opgenoorth pointed that reason to for new instrument for lower latitudes was the improvement of the monitoring of space weather effects.

No final decisions were made regarding inclusion of Icelandic stations.

5. Next IMAGE meeting will be in Helsinki, but when?

Originally was meant to be in Helsinki 2022 for the 40th anniversary. FMI will set doodle poll for the meeting for second half of 2022.

6. Any other business?

- Ian Mann asked about IMAGE participation to the Plasma Observatory space mission coming in 2030s. FMI is invited to collaborate, which links IMAGE network to the mission.
- Anna Willer asked about DTU data delivery to IMAGE. It should be discussed with PI Liisa Juusola. Data of pre-membership also possible to share. Hermann: When data will be visible in the website? Anna open to share older data to IMAGE.
- Tero Raita informed that Eija Tanskanen will be the SC member of SGO in future.
- Voting of the IMAGE statement (Item 3 above):

According to the IMAGE statutes each contribution institute has one vote. The present parties were TGO, SGU, FMI, SGO, IRF and IG

First voting was set to vote on the statement with “the reason” (ALT2 and ALT3 texts) or “without the reason” (ALT1 text). The result was a unanimous vote of “with reason”.

Reason: SGU, FMI, SGO, IG, IRF, TGO

Second voting was set to the formulation of the statement text with reason:

ALT 2: IRF

ALT 3: IG, FMI, SGU, SGO, TGO

The decided statement text, where the word “their” was replaced to “the” is follow: “PGI membership is suspended due to Russian aggression and the invasion of Ukraine”

PS:

After the meeting Kirsti Kauristie asked to remind IMAGE team about the danger of possible cyber attacks to the infrastructure disseminating IMAGE data, which is not in 24/7 monitoring. Each IMAGE partner should ensure their own data backups to be capable re-establish a joint on-line archive in possible case of serious failure.

PS2:

After the meeting it was realised that DTU Space should not have participated in the voting (item 6), since they have not signed the IMAGE Consortium Agreement yet, and thus, was not entitled to vote. They were therefore not listed in the outcome of the vote. However, the outcome of the voting remains the same.