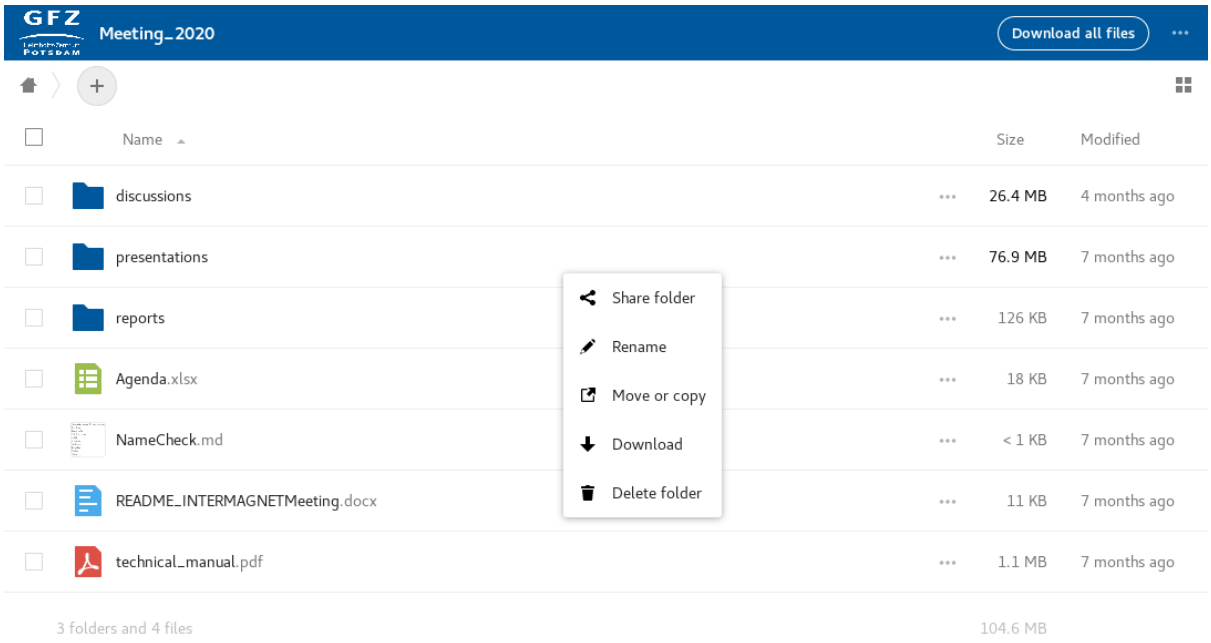
Highlights of the 2020 online Intermagnet Meeting

The 2020 Intermagnet meeting was held between 13th and 15nd July. It was to have been hosted by Kazan University as part of the 19th IAGA observatories workshop, however the workshop has been postponed, so the meeting was held online over the same dates as originally planned.



The GFZ NextCloud site used for much of the online meeting

Report Contents

The minutes of the meeting are available at https://intermagnet.github.io/meetings/2020-Online/INTERMAGNETMeetingMinutes-OnLine2020-PUBLIC.pdf, though material relating to individual observatories, institutes or people has been removed from this public copy of the minutes.

Data publication

As mentioned in previous communications Intermagnet has created a number of Digital Object Identifiers (DOIs) corresponding to the annual publication of definitive data. Data and a description of the publication are available from the landing page for each DOI:

- Annual publication for 2013: https://doi.org/10.5880/INTERMAGNET.2013
- Annual publication for 2014: https://doi.org/10.5880/INTERMAGNET.2014
- Intermagnet Reference Data Set, 2015: https://doi.org/10.5880/INTERMAGNET.1991.2015

As described in previous reports, the Intermagnet Reference Data Set (IRDS) contains all data from the first Intermagnet publication in 1991 up to the current year, including any corrections that have been made.

The IRDS for 2016 is about to be published.

Real-time data embargo

Real-time data are received from INTERMAGNET observatories within 72 hours of recording and made available to users as both data and in plots. Please note that it is possible for the data that you supply to be embargoed for a period before being made available to users. Please contact Charles Blais, the chair of the WWW, Geomagnetic Information Nodes (GINs) and Data Formats subcommittee if you want to set up a data embargo for the data from your observatory.

Technical manual V5

Version 5 of the Intermagnet technical manual has been published and can be found here: https://intermagnet.github.io/docs/Technical-Manual/technical_manual.pdf. The manual is a major revision over the previous version and includes much new material such as the specification for recording 1-second data to Intermagnet standards and details of new data formats. Many thanks to everyone who has contributed and particularly to the members of the Intermagnet Technical Manual subcommittee for all the work they have done to complete the updated manual.

INTERMAGNET statement on Dual-Use Export Control for High Specification Magnetometers

A message from Chris Turbitt & Jürgen Matzka

Meaning of dual-use and export control: Dual-use technology is technology that can be used both for peaceful and military purposes. Export control refers to laws and regulations regarding the export of goods, software and technology that fall under the dual-use category.

Institutes affected: Those institutes shipping fluxgate magnetometers, Overhauser/proton magnetometers or optically pumped magnetometers from one country to another may be affected by the export control of dual use items.

Regulations: The following describes regulations for export from the European Union (EU) but similar regulations apply in other countries. EU Regulation 2019/2199 amending Council Regulation (EC) No 428/2009, category 6A006 – Magnetometers:

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2019:338:FULL&from=EN

Institutes be aware of EU Regulation 2019/2199 category 6A006, which restricts the export of low noise magnetometers out of the EU. Instruments that fall into this category are capable of measuring signal at 1Hz i.e. with an analogue output or with a digital output of 2Hz or higher. Regulation 2019/2199 restricts export of instruments with now noise (sensitivity) defined as:

Overhauser/Proton/optically pumped magnetometers:

2. "Magnetometers" using optically pumped or nuclear precession (proton/Overhauser) "technology" having a 'sensitivity' lower (better) than 20 pT (rms) per square root Hz at a frequency of 1 Hz;

Fluxgate magnetometers:

3. "Magnetometers" using fluxgate "technology" having a 'sensitivity' equal to or lower (better) than 10 pT (rms) per square root Hz at a frequency of 1 Hz;

Recommendations: Under this regulation, any instrument that falls into the categories above would require an export license granted by the corresponding government agency of the country of export. Institutes are advised to consult with the instrument manufacturer and the corresponding government agency before shipping instruments out of the EU. Similar rules might apply for countries outside the EU.

This information is also available in section 13.3 of the minutes of this meeting: https://intermagnet.github.io/meetings/2020-Online/INTERMAGNETMeetingMinutes-OnLine2020-PUBLIC.pdf

Intermagnet officers

There have been no changes to the organisational structure of Intermagnet, which can be seen on the new website: https://intermagnet.github.io/structure.html

Next meetings

With the ongoing restrictions in travel due to the Coronavirus pandemic, the next Intermagnet meeting will be held online in March 2021. Because of the difficulties of holding an online meeting across a number of time zones, we will not invite guests to this meeting, however we will publish a record of the meeting in the usual way and we look forward to seeing guests as soon as we are able to arrange a face-to-face meeting.

Thanks to…

GFZ Potsdam assisted greatly in the organisation of this meeting by making the facilities of their "Next Cloud" document collaboration web site available to Intermagnet officers. Many thanks to Achim Morschhauser for this.

Simon Flower (Intermagnet Operations Committee Chair), smf@bgs.ac.uk, 22nd Feb 2021