

# IAGA WG VDAT

## Minutes of meeting

<b>Meeting:</b>	<b>IAGA WG V-DAT meeting</b>		
<b>Date:</b>	14 July 2023	<b>Venue:</b>	IUGG 2023 Berlin
<b>Participants</b>			
<b>Chair: Ellen Clarke, co-chair: Anna Willer</b>			
Alexander Grayner Alexandre Pais Amoré Nel Arnaud Chulliat Ashley Smith Aude Chambodut Audrey Schillings Ayako Matsuoka Barbara Leichter Ciaran Beggan Clemens Kloss	Guram Kervalishvili Jesper Gjerloev Jonas Nielsen Juan José Curto Jürgen Matzka Kirsten Elger Kusumita Arora Laszlo Hegymegi Lauren Orr Manoj Nair Martin Rother Masahito Nosé	Natalia Gómez-Perez Nils Olsen Patrick Alken Pierdavide Coisson Roman Leonhardt Santiago Marsal Vimodé Sarah Reay Tanja Petersen Veronique Mendel Vincent Lesur William Brown Yan Feng	

## Table of Contents

<b>Agenda .....</b>	<b>3</b>
<b>Welcome.....</b>	<b>3</b>
<b>1 Status of the IAGA-endorsed data products (magnetic activity indices and lists of events) ...</b>	<b>3</b>
<b>2 PC index – The effect of a change in the reference epoch .....</b>	<b>4</b>
<b>3 Data DOI Task Force report .....</b>	<b>4</b>
<b>4 Status Report from INTERMAGNET.....</b>	<b>4</b>
<b>5 Status Report from WDCs for Geomagnetism .....</b>	<b>4</b>
<b>6 Resolutions .....</b>	<b>4</b>
<b>7 Sessions and conveners for IAGA-IASPEI 2025, Lisbon .....</b>	<b>5</b>
<b>8 Election of new officers .....</b>	<b>5</b>
<b>9 Any other business.....</b>	<b>5</b>
<b>10 Actions .....</b>	<b>5</b>

## Agenda

1. Status of the IAGA-endorsed data products (magnetic activity indices and lists of events)
  - ISGI data Repository (*Aude Chambodut*)
  - aa, CK days, am (*Aude Chambodut*)
  - Kp/ap, Q/D days (*Jürgen Matzka*)
  - AE, Dst (*Ayako Matsuoka*)
  - Rapid variations SC, sfe (*Juan José Curto*)
  - PC (*Anna Willer*)
2. PC index – The effect of a change in the reference epoch (*Jonas Bregnhøj Nielsen*)
3. Data DOI Task Force report (*Kirsten Elger*)
4. Status Report from INTERMAGNET (*Ellen Clarke*)
5. Status Report from WDCs for Geomagnetism (*Sarah Reay, Edinburgh, Anna Willer, Copenhagen*)
6. Resolutions
7. Sessions and conveners for IAGA-IASPEI 2025, Lisbon
8. Election of new officers
9. AOB

## Welcome

Ellen Clarke welcomed the meeting participants and presented the agenda. There was no objections or additions to the agenda.

## 1 Status of the IAGA-endorsed data products (magnetic activity indices and lists of events)

ISGI Data Repository (*Aude Chambodut*) – data exchange, updates and increased distribution. Preparing DOIs for the bulletin series (highlighted that the authors of the bulletin will be the only ones appearing in the citation) and ensuring IAGA ROR ID in this and all IAGA endorsed products

- **aa, CK days, am** (*Aude Chambodut*) – EOST have continued computation and provision, DOIs minted
- **Kp/ap, Q/D days** (*Jürgen Matzka*) – GFZ Continued as normal, DOI, archive monthly updated, new paper about Kp was published in 2021, new portal for data distribution
- **AE, Dst** (*Ayako Matsuoka*) – Kyoto Both have the definitions of the version updated on the web site. Some clarity is needed on the definition of ‘final’ AE, which may be the reason for the delays. Definitive Dst from 2017 is delayed due to delay of San Juan data
- **Rapid variations SC, sfe** (*Juan José Curto*) – Ebre Continued to add to the list. New observatories now providing SC lists: KOU PPT DLT IPM LZH (France) and TDC VSS TTB SHE VNA (Brazil), SCs are now distinguished between +ve and –ve H component after Takeuchi, et al, 2002.
- **PC** (*Anna Naemi Willer*) – DTU and AARI continued as normal. Final PCS available to 2019 (2020-21 coming soon), Final PCN available to 2021 (2022 coming soon). AARI are working on DOIs and both teams are working on a technical publication. DTU are installing a new observatory TAB, which will eventually replace THL due to likely contamination of data by developments.

Short discussion on choice of license, commercial or non-commercial. Arguments on free use of data vs. funding or direct contact opportunities.

## 2 PC index – The effect of a change in the reference epoch

*At the V-DAT meeting in the IAGA assembly in 2021, DTU suggested to restructure and optimize the coefficients code, and analyse the effect of a change in the reference epoch.*

The effect of a change in the reference epoch (*Jonas Bregnhøj Nielsen*) – presented the analysis results – The absolute difference between PCN-index calculated with coefficients based on solar cycle 23 and 24, are very small (over 95% below 0.2 mV/m). Therefore, DTU recommend keeping the original coefficients. This was uncontested at the meeting and therefore approved by the WG

## 3 Data DOI Task Force report

Data **DOI Task Force** report (*Kirsten Elger*) Task Force (TF) continued under Kirsten's chairmanship since 2021 to promote the use of DOI referenced data publications as best practice and FAIR principles. TF met online in March 2022. INTERMAGNET data reference sets now have DOIs. DOIs are now common practice with many organisations. WG decided to continue with the TF for the next 2 years, to continue to guide and encourage further update. Action on Ellen/Anna to send an email to all the meeting participants to ask if there are any further volunteers to be included in the TF and on Kirsten to communicate with the full list of members – some previous members may need to be asked to confirm further commitment.

## 4 Status Report from INTERMAGNET

Status Report from **INTERMAGNET** (*Ellen Clarke*) – Meeting in Sopron in May. Introducing a new “General Member” category, move of the database and data collections from NRCAN, Ottawa to BGS, Edinburgh. Several developments going on regarding the data delivery and metadata collection and distribution

## 5 Status Report from WDCs for Geomagnetism

Status Report from **WDS/WDC for Geomagnetism** (*Sarah Reay and Anna Willer*) – All of the original WDCs – Edinburgh, Copenhagen, Boulder, Mumbai, Moscow and Beijing are all still active. Most have continued under the WDS umbrella. Action for Ellen and Anna to contact Geeta Vichare, to get the status on Mumbai WDC. Reports on developments were given by Copenhagen and Edinburgh. There are several new developments in progress in Edinburgh, for example that a new Monthly Mean database has been created and an application for Core Trust Seal certification as well as an update in the metadata database are in progress. A question was raised where the WDC Edinburgh server was located, Sarah confirmed that it is located within BGS premises, secured and with backup facilities.

## 6 Resolutions

We had no suggestions for new **resolutions**

## 7 Sessions and conveners for IAGA-IASPEI 2025, Lisbon

**Sessions and conveners** for IAGA-IASPEI 2025, Lisbon

- Geomagnetic Observations, Indices and Products for Space Science, Space Weather and Space Climate Applications (*Audrey Schilling (Umeå University); Gemma Richardson (BGS); Denny Oliveira (NASA) researcher from India (Kusimita to let us know)*)
- Analogue Data for the Future: Preservation and Present-Day Utilization of Historical Data in the Geosciences (Suggest as a joint session with IASPEI) (*Ciaran Beggan and tbc*)

## 8 Election of new officers

Ellen Clarke nominated current co-chair Anna Willer for new chair. There were no other nominations, and the votes were in favour for Anna to become the new chair of the V-DAT for the next 4 years.

Ellen Clarke and Anna Willer nominated Ayako Matsuoka to be the new co-chair of the V-DAT. There were no other nominations, and the votes were in favour for Ayako Matsuoka to become the new co-chair.

Chair: Anna Willer

Co-chair: Ayako Matsuoka

## 9 Any other business

Suggestion by Ciaran Beggan for further discussions and collaborative efforts on the digitization of analogue geomagnetic records. WG agreed to form a new task force or sub-group (chaired by Ciaran). Names of several of those interested in joining this group were collated: Ellen Clarke, Anna Willer, Kusumita Arora, Joan José Curto and Tanja Petersen. Action on Ellen/Anna to send an email to all the meeting participants to ask if there are any further volunteers to be included and on Ciaran to communicate with the collated list of members. It was noted that digitalisation contains more than one step. First to scan from for example microfilms to digitized images, and then to digitize the images to numbers. The digitalization from digitized images to numbers is the most difficult and time-consuming part but that work-load should not prevent us to start with the first part if we get the opportunity to do so.

## 10 Actions

Ellen Clarke and Anna Willer will send an email to all participants in the meeting, with the minutes of meeting and ask who would like to join the DOI task force, and who that are interested in joining the subgroup on digitalization and distribute that information to Chiaran and Kirsten.

Chiara Beggan will invite to the new IAGA V-DAT subgroup on digitalisation.

Kirsten Elger will invite to the DOI Task Force meeting.

Chair and co-chair to contact Geeta Vichare, to get the status on Mumbai WDC.