

# INTERMAGNET EXCON/OPSCOM Meeting

**Venue: Adolf-Schmidt-Observatorium für Erdmagnetismus,  
GFZ Helmholtz Centre Potsdam  
Lindenstraße 7, 14823 Niemegk  
Germany**

June 18 - 20, 2015

## Report to INTERMAGNET Observatories

The meeting was held at the NGK Adolf-Schmidt-Observatorium für Erdmagnetismus in Niemagk, Germany.

We were welcomed at the beginning of the meeting by GFZ Head of Section Prof. Dr. Claudia Stolle and Dr. Jürgen Matzka, Senior Scientist and Head of the Magnetic Observatory. Alan Thomson, Chair of EXCON, launched the meeting by a few words.

The staff of the Magnetic Observatory, organizer of the meeting, provided valuable support: airport pick-ups and drop-offs, transport, meals, conference rooms and equipment as well as much needed facilities and help for the participants in the preparation and execution of their tasks. A wonderful banquet dinner at the restaurant "Das Alte Brauhaus" was a highlight of the meeting.

A visit to the NGK geomagnetic observatory was organized for the INTERMAGNET officers and meeting guests. Many thanks to Jürgen and the staff of the Magnetic Observatory for the great hospitality and support!

### ***Participants***

#### EXCON

Boteler, David

Finn, Carol

Thomson, Alan

Excused: Gautier Hulot

#### OPSCOM

Blais, Charles

Flower, Simon

Matzka, Jürgen

Nose, Masahito

Rasson, Jean

Reda, Jan

Stewart, Duff

Turbitt, Chris

Excused: Virginie Maury, Benoît St-

Louis

#### Observers

Arora, Kusumita

Behlke, Rico

Bracke, Stephan

Bronkalla, Oliver

Brunke, Heinz-Peter

Clarke, Ellen

Feller, Martin

Gonsette, Alexandre

Hegymegi, Laszlo

Hejda, Pavel

Heumez, Benoit

Isac, Anca

Lalanne, Xavier

Leonhardt, Roman

Lhuillier, Florian

Linthe, Achim

Miklavec, Mojca

Morschhauser, Achim

Pedersen, Lars

Poncelet, Antoine

Pulz, Eberhard

Schwarz, Gerhard

Toh, Hiroaki

Widmer-Schnidrig, Rudolf

Yoshimura, Jun

## **EXCON membership**

There was no change in the EXCON membership.

## **OPSCOM membership and Subcommittees**

Officer Masahito Nose announced his resignation from OPSCOM for after the Niemegek meeting. INTERMAGNET warmly thanks Masahito for his valuable contributions. Regrettably, Virginie Maury was absent from our meeting for the second time in a row. Considering the vacancies, it was felt that the Operational Committee needs new blood. An *in camera* OPSCOM meeting was held to receive the nominations of potential new members and to put together a list of candidates for the committee. The list was then discussed in an *in camera* plenary meeting with EXCON. As a result, the following OPSCOM Officers were elected:

Stephan Bracke, Belgium.

Benoît Heumez, France

Roman Leonhardt, Austria

Hiroaki Toh, Japan

There was no modification in the Subcommittee membership except for the departure of Joachim Linthe who retired after the last Hyderabad meeting.

Benoît St-Louis, on sick leave, had asked J Rasson the replace him in his duties as Chairman of the Technical Manual Subcommittee.



**Figure 1. Meeting participants in the Niemegek Observatory “dining hall”**

## **Subcommittees**

| Subcommittee:  | Definitive Data | WWW/GINS & Data Formats | Technical Manual | IMO Applications | Instrumentation & Data Acq. |
|----------------|-----------------|-------------------------|------------------|------------------|-----------------------------|
| # members:     | 6               | 7                       | 6                | 6                | 6                           |
| B. St-Louis    |                 |                         | <b>Benoît</b>    | Benoît           | Benoît                      |
| C. Blais       | Charles         | Charles                 |                  |                  |                             |
| C. Turbitt     |                 |                         | Chris            | <b>Chris</b>     | Chris                       |
| D. Stewart     |                 | Duff                    |                  | Duff             | Duff                        |
| J. Matzka      | Jürgen          |                         | Jürgen           | Jürgen           | Jürgen                      |
| J. Rasson      |                 |                         | Jean             | Jean             | Jean                        |
| J. Reda        | <b>Jan</b>      | Jan                     |                  |                  |                             |
| M. Nose        | Masahito        | Masahito                | Masahito         |                  |                             |
| P. Crosthwaite |                 |                         | Peter            |                  | <b>Peter</b>                |
| S. Flower      | Simon           | <b>Simon</b>            |                  |                  |                             |
| V. Maury       | Virginie        | Virginie                |                  | Virginie         |                             |

## **Presentations at the meeting**

Alan Thomson: European Plate Observing System (EPOS)

Jan Reda: Past and present geomagnetic observations at the Polish Polar Station Hornsund

Stephan Bracke :A proof of concept of real-time data transfer

Joachim Linthe on behalf of Yuri Sumaruk: Magnetic Observatory Odessa

Jürgen Matzka: Details on the Antarctic observatory Neumayer -III Station (VNA)

Simon Flower: software for working with 1s data

## **Subcommittee on IMO applications and standards**

Update on applications from 2014

- King Edward Point (KEP), South Georgia: transmitting real-time data and 2013 data are on the Paris FTP site.
- Sable Island (SBL), Canada: transmitting real-time data and 2013 data are on the Paris FTP site.
- Sonmiani (SON), Pakistan: transmitting real-time data.

New applications 2015

- Neumayer-III Station (VNA), Antarctica: conditionally accepted on the grounds that real-time data are transmitted to the Kyoto GIN.
- Jim Carrigan Observatory (JCO), USA: accepted unconditionally.

### **IMO's of concern.**

The IMO application subcommittee has a list of 10 IMO's that did either not transmit data to the GIN or did not produce definitive data for an extended time. They are at risk of losing INTERMAGNET membership. Could they contact INTERMAGNET to try to resolve their problems?

Regrettably, after careful consideration and recommendation by the IMO's Application Subcommittee to EXCON, 2 IMO's have lost their INTERMAGNET membership. We kindly ask them to submit renewed applications to INTERMAGNET once processing problems have been resolved.

There is now a total of 127 IMO's.

### **Baselines for variation data**

Users have complained about reported INTERMAGNET variation data having no baseline at all, which would prevent them from doing meaningful coordinate systems transformations. This was discussed in the subcommittee and a decision was produced and accepted by EXCON.

### **IMO Subcommittee decision, 2015:**

*“INTERMAGNET will continue to accept variation data, but IMOs will be encouraged to transmit baseline adjusted data. Observatories submitting new applications will be required to transmit baseline adjusted data.”*

## **GIN/WWW/Data Format Subcommittee**

### **Review of progress on actions from previous meetings:**

- Progress report on getting submissions of quasi-definitive QD, 1-second and real-time data from IMOs
- Progress report on the INTERMAGNET metadata
- Progress report on obtaining DOIs for definitive data published by INTERMAGNET

### **1-second data issues**

- How do we want to publish the 1-second data? This decision was proposed to EXCON and adopted:

*“INTERMAGNET 1-second definitive data will be published on the web site only”*

- What software do we need so that IMOs can create data in the new 1-second imagCDF format?
- What software will be needed by those who check the data?
- What software do we need for end users to visualize the data

#### **Work on communications infrastructure for INTERMAGNET real-time data.**

- Report on experiments conducted since last meeting: e.g. the Seismic EDGE system to transfer data
- Discussion on the way ahead: e.g. MQTT data transfer software

#### **Clarification of ‘G’ geomagnetic element for users.**

We will add a link titled ‘Geomagnetic Element G’ to the ‘Data Formats’ page of the INTERMAGNET web site, pointing to the section of the Technical Manual’s IAF documentation that describes ‘G’.

### ***Definitive Data subcommittee***

#### **Call for 2015 definitive data**

The call for 1min definitive 2015 data will be issued at the end of February 2016 with a delivery deadline set at August 1, 2016.

A new console application `check1min.exe` (32-bits, Windows) has been written to control the definitive IAF files and other files intended for DVD. This program combines the functions of previous programs like `imaghc7.exe`, `ymchk.exe`, ... but offers more functions. The current version of this program (ver. 1.3) is available on the Paris ftp server, the same server where you put your definitive data for the DVD: <ftp://par-gin.ipgp.fr/CHECK1mindata/>. It is our intention to add more checking functionalities to `check1min.exe` in the future.

### **The next EXCON/OPSCOM meeting**

The next INTERMAGNET meeting will be held in Dourbes, Belgium just after the IAGA Workshop on Geomagnetic Observatories also held in Dourbes. The dates for the INTERMAGNET meeting are set as September 12 – 14, 2016.

Please note that IMO’s may send observers to this meeting. As space will limit the amount of observers, we encourage Observers to register their participation with [jr@oma.be](mailto:jr@oma.be) at the earliest. IMO's are welcome to submit topics for discussion at this upcoming meeting.

This report will from now on be sent to the worldobs mailing list [worldobs@geolab.nrcan.gc.ca](mailto:worldobs@geolab.nrcan.gc.ca) in addition to the imocontact list [imocontact@geolab.nrcan.gc.ca](mailto:imocontact@geolab.nrcan.gc.ca).