

Minutes of 2011 Business Meeting of IAGA Working Group V-MOD Saturday 2nd July 2011, Melbourne.

The session started at 12.00 on [Saturday, 2.7.2011](#).

Proposed Agenda

- 1) Production, release and publication of the 11th generation International Geomagnetic Reference Field
- 2) Status of data available for field modeling
- 3) International Standard ISO16695: Geomagnetic Reference Models
- 4) Report from the task force for the World Digital Magnetic Anomaly Map
- 5) New V-MOD officers
- 6) Suggestions for sessions at IAGA 2013 in Mexico

The agenda was accepted but the order was modified. The draft IGRF ISO was discussed at the end.

Production, release and publication of the 11th generation International Geomagnetic Reference Field and Status of data available for field modeling

A summary of IGRF activity was given by S. Maus.

The IGRF was released the 20th of December 2009. The importance of making the old non-definitive IGRF coefficients available to the community was stressed. They are now published on the web page: http://www.ngdc.noaa.gov/IAGA/vmod/igrf_old_models.html

Thorough details concerning the activity of the IGRF working group, the candidate models, and their assessment were provided in the presentation made by S. Maus. A special issue was published in *Earth Planets and Space* (Vol. 62 (No. 10), pp. 717-848, 2010).

IAGA 2013 will be in Mexico, Merida, Yucatan. Two ideas the community should think of for IAGA 2013, during which the IGRF-12 task force will be defined. 1) Extending the model up to SH 15 to avoid spectral gap with crustal field; 2) Extending the SV to higher degree model and include an external dipole field for the ring current. Some exploratory works were carried out in the IGRF-11 special issue but more inputs from the operational side are needed (what would be the advantages, the software complications etc.)

Report from the task force for the World Digital Magnetic Anomaly Map

Juha Khoronen reported on the WDMAM activities. Due to difficulties in recovering the meta-data of some sets of newly released aeromagnetic or marine grids, the publication of WDMAM-2 is postponed. A new version of the map is expected for July 2012 and should be presented in Brisbane during the 34th International Geological Congress. J. Khoronen was reconfirmed as a project leader of the WDMAM.

Election of new chair and co-chair

C. Finlay was the candidate for the V-MOD WG chair. E. Thébault was the candidate for the co-chair position. F. Lowes raised the geographic distribution problem of the chair and co-chair candidates (both in Europe). It was agreed that in the future the agenda will be published earlier on the web page to advertise the positions and offer better opportunities to search for candidates for these positions. After a survey among the participants, although everyone was in favor of the geographic rule, there were no other candidates. The proposed set up was accepted.

Suggestions for sessions at IAGA 2013 in Mexico

Three sessions will be proposed for IAGA 2013 in Merida, Mexico.

- 1) Results from Swarm and preceding magnetic satellite missions (Whaler, Olsen, Lesur) joint with Div 1
- 2) Modeling and interpretation of geomagnetic secular variation from satellite and observatory measurements : Finlay / Holme / Gillet (this would include time-dependence field modeling, data assimilation etc., maybe joint with Div 1?)
- 3) Modeling and interpretation of lithospheric magnetic anomalies (Dyment, Ravat, Korhonen)

International Standard ISO16695: Geomagnetic Reference Models

The ISO Geomagnetic Reference Models (ISO-GRM) is a project that already has a number: 16695. A full draft was made available and proposed by S. Maus. The IGRF software was updated by M. Nair in order to demonstrate the technical feasibility of the draft proposal. It was further proposed that the IGRF product would also contain the SV coefficients in addition to the magnetic field snapshots between epochs. For IGRF users, this should allow a better main field interpolation between IGRF releases (so far, there is one snapshot every five years for IGRF models, the SV coefficients are only proposed for the field extrapolation in time). The proposed format was the subject of some debate. One issue was that some candidate models to the IGRF are developed using complex time basis functions. This format does not comply easily with the IGRF SV linear interpolation because generating main field snapshots + linear SV coefficients in the post processing would lead to a model different from the parent one. The only way to retain a faithful representation of the models having a complex representation in time is to modify the proposed file format in a manner that would be more difficult to handle. More generally, the problem raised by the current ISO format is that it is not only designed to apply only to IGRF models but also to other main field models. Therefore, the attendees required more time to consider these aspects.

No final consensus could be found on the ISO file format and there was not time left for further discussion. R. Holme volunteered to collect the different arguments for or against the format described in the ISO proposal.

The meeting ended at 13.30

E. Thébault, IUGG, Melbourne 2011