

(Note: To avoid any confusion, the items to be determined after the BM have been eliminated from this web version. E-mail addresses and phone numbers were also removed)

Minutes of Div-V Business Meeting (summary)

Wednesday 4 July 18:00-19:10

Building: Chem. Dept., Room F

Attendants: 60

Chair: Toshihiko Iyemori

Co-chair: Mioara Mandea

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1. Report from chair

A brief summary of Div.-V activities after Toulouse IAGA 2005

- 1) XIIth IAGA WORKSHOP ON GEOMAGNETIC OBSERVATORY INSTRUMENTS, DATA ACQUISITION AND PROCESSING (Belsk, June 19-24, 2006) was very successful.
- 2) Special issue of the journal Earth, Planets and Space on global magnetic field modeling and IGRF has been published in Vol.57, No.12 (December 2005)
- 3) Proceedings of XIth IAGA Workshop on Geomagnetic Observatory Instruments, Data Acquisition and Processing (Kakioka, November 9-17, 2004) have been published.
- 4) Special issue of the journal Earth, Planets and Space on “Ground Magnetic Observations: New technologies and the role in understanding the Earth System “ has been published in Vol.58, No.6 (2006)
- 5) Action to conserve electro-magnetic environment for Valentia observatory, i.e.,

sending letters from Div.-V was successful.

6) International Session "170 years of observatory work at the Urals: the history and modern state" (July 17-23, 2006) has been held.

7) Activities related to Swarm, Oersted and CHAMP

Swarm meeting

Special issue of the journal Earth, Planets and Space on "Swarm—The Earth's Magnetic Field and Environment Explorers" has been published in VOL.58, No. 4 (2006)

8) Ongoing work on the world digital magnetic anomaly map - Now the 1st edition is ready!

9) Responded to queries concerning the IGRF

10) Update of the home page of each WGs

2. Report from WG V-OBS

IAGA WG V-OBS: Business Meeting, 2 July 2007

Chair: H-J Linthe

Co-Chair: P B Kotzé

Number of delegates attending: 32

1. Draft IAGA guides for compass calibration and compass swing bases compiled by Louis Loubser (Hermanus Magnetic Observatory) need to be edited to be of more general application by the observatory community.
2. The IAGA requirements for the calculation of hourly mean values have been discussed by Jean-Jacques Schott, using the Kerguelen observatory as an example during the period 1999-2003. It was shown that a correlation exists between data scatter and well-chosen magnetic activity, arguing that no simple rule for hourly mean values does exist. It was proposed that means can only be determined if sufficient data exist (> 90%), and that higher frequency data may be another solution. A uniform standard, preferably INTERMAGNET, should be applied by all observatories.
3. Hiroaki Toh (Japan) presented results obtained from an ocean-bottom magnetic observatory. As no absolute measurements are obtained for base line control as would be the case for other ground-based magnetic observatories, it was suggested that it be given a code as variometer station to distinguish it from the normal 3 letter IAGA observatory code.

4. The report by Tomasz Ernst on the XII IAGA Magnetic Observatory Workshop at the Belsk observatory in Poland during June 19-24, 2006, indicated that the workshop was attended by 102 participants. A total of 47 oral presentations, 5 invited talks, as well as 41 posters were presented. Training sessions as well as demonstrations of automated absolute magnetometer systems, were also part of the activities. Financial support by IAGA as well as IUGG enabled several overseas scientists to attend. At present a total of 53 papers have been accepted for publication. Printed versions of the proceedings will be available soon.
 5. Progress in organizing the next IAGA Observatory workshop, to take place at the US Geological Survey in Golden, Colorado, and the Boulder observatory, from June 9-18, 2008, was given by Alan Berarducci. Everything seems to be on track.
 6. No proposals for the 2010 workshop have so far been received.
 7. David Kerridge (BGS), in his report on INTERMAGNET, indicated that an almost complete turnover of committee members took place at the meeting held in Warsaw, Poland, following the Observatory Workshop in Belsk. At that meeting, a new functional group on Instrumentation and Data Acquisition, headed by Jean Rasson, was formed. This group will pay particular attention to 1 second data accumulation as well as new instrument developments aimed at automatic absolute observations, while guidance on base lines as well as collaboration between INTERMAGNET and World Data Centres will also form important focus areas.
 8. New Working Group chair: Pieter Kotzé, co-chair: Pavel Hejda
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3. Report from WG V-MOD

IAGA V-MOD Business Meeting

Monday 2 July, Chemistry Building, Room B,

12.45-13.45

1) Activity since IAGA2005 Toulouse (excl WDMAM)

- Toulouse minutes posted on V-MOD website
- website maintained by US NGDC
- special issue of the journal Earth, Planets and Space on “Modelling the Earth’s Magnetic Field” with 10 papers published in 2005
- future satellite missions...ESA Swarm
- many models being produced/papers being published
- Chair/co-chair dealt with IGRF enquiries

- reporter reviews on modelling: Terry Sabaka-modelling the magnetic field in recent times and Chris Finlay-historical field modelling...ASV040 on Saturday
- ground-based data collection

2) ISO Resolution 263

Who wants a norm?

- “The delegates of WG4 discussed the possibility of a NWI on the Earth main magnetic field. ISO TC20/SC14/WG4 delegates recognized that IAGA Div V working group on the main field modeling continues to be the organization that provides scientific leadership in the effort to develop an Earth main magnetic field standard The IAGA leadership believes that an ISO norm for the main field would strengthen the IGRF”
- The relevant ISO committee would welcome it because there are already established standards for the main field which are also mentioned in other norms (e.g. magnetosphere)
- Engineers Someone from V-MOD writes a draft norm
- The draft is first circulated in V-MOD
- Then the IAGA-Div-V leadership can comment
- Submitted to ISO
- Circulated to member countries for comment
- Valid for 5 years, up for renewal/change

Pro/Cons

Con:

- Potential waste of time

Pro:

- If WE write the standard, it will not restrict field modelers
- Someone outside of IAGA may submit a badly drafted standard, potentially causing lots of problems for IAGA

Kent Tobisko (US representative on ISO) has promised to help

- With the paper work
- Would do all of the ISO committee work
- who integrate main field models can state their compliance with an ISO norm
- Devices would only be compliant if they were updated every five years for the current model

Content of the norm

- Would have to be general
 - Have to accommodate IGRF, WMM and other models

- Should not limit our freedom to choose model degree
- Should not specify coefficient estimation methods
- What can we safely include?
 - Spherical harmonic representation
 - Definition of SH coefficients for main field and SV
 - Field component and transform equations

Procedure

3) New V-Mod officers

Chair: Stefan Maus

Vice-Chair: Chris Finlay (Zurich)

4) IGRF-11 task force

Suggested chair: Chris Finlay

Executive:

Nils Olsen

Frank Lowes

Sue McLean/Stefan Maus

Vincent Lesur

Susan Macmillan

Erwan Thebault

(Tanya)

Aude Chambodut (EOPGS)

Terry Sabaka

5) WDMAM task force

	2003-2007	2007-2011
GTK	Korhonen (Chair)	Korhonen (Chair)
NASA	Purucker	Purucker (V-Chair)
GFZ	Mandea	Lesur
NOAA	McLean/Maus	McLean/Maus
IPGP		Thebault
Russia	Tamara L	Tamara L
Other	Reeves (v-Chair)	Reeves
	Ravat	Hamoudi

		(Algeria)
	Milligan	Milligan
	Ishihara	Ishihara
ADAMAP	Ghidella	Luis Gaya Pique
Canada		M. Pilkington

6) Sessions for IAGA 2009

4. Report of V-DAT Business meeting

Tuesday 3 July, 12:40 – 13:55, Math., Room I2

35 Present

1) Actions from 2005 meeting.

- a. Clarify position on derivation, availability of the PC index (PCN and PCS), in discussions with Dr Oleg Troschichev (AARI) at IAGA conference, 2nd week (M Menvielle, P Stauning). - Done (new unified calibration is available)
- b. Circulate to WG chair & co-chair the draft PC report for discussion (M Menvielle). Superseded by above and by work of new task force to be led by M Menvielle.
- c. Clarify status of PC index on IAGA V-DAT website (and at NGDC if necessary). (S MacLean, A Thomson, M Rajaram). Done.
- d. Provide list of data recovered (or give web links) on V-DAT website (M Rajaram and S MacLean). In preparation. Need to update Division site on data recovery issues.
- e. Ask NGDC to make clear what is/is not an IAGA endorsed index on their website (A Thomson, S MacLean). Done.
- f. What is status of IAGA guide on indices? (T Iyemori, H McCreadie, M Menvielle, C Barton) – HMcC: “In final stages of completion”.
- g. What is status of V-DAT website (S Maclean). Up to date –will now be more heavily used for advertising developments. Task force / subgroup to oversee the data formats and indices plan to coordinate the proceedings through the V-Dat website.

2) Status of indices

Index production is ‘healthy’ and near-real-time provision is increasingly possible.
Reports made by:

Dr M Menvielle (ISGI),

Dr H-J Linthe (GFZ),

Dr M Nose (Kyoto)

3) Short report by Dr JJ Curto on sudden commencements definition.

Agreement to introduce new method of SC definition and to run in parallel for 2 years with old method, subject to support from institutes. This will allow users to understand changes and impacts.

4) Election of new officers.

- V-DAT Chair: Dr Mita Rajaram (Indian Institute of Geomagnetism)

- Joint V-DAT Vice-Chair: Dr Renata Lukianova (AARI, St Petersburg), Dr Luis Gaya-Pique (IPGP, Paris). Joint chair, in view of expanded responsibilities for website and task force organisation.

- Nominated Division V co-chair: Dr Alan Thomson (BGS)

5) IAGA resolutions.

“IUGG, recognising the scientific value of modern and mature geophysical data sets, acknowledges existing efforts by national institutes to digitise and preserve archived data, and urges governments and inter-governmental agencies to fully support further data recovery and preservation for the future of scientific research.”

Mita Rajaram and Sue McLean to finalise wording.

6) IAGA 2009 sessions.

7) Comments by Ellen Clarke on 'problems' with the *aa* index.

Problem with the *aa* ? (Ellen Clarke, BGS)

There is a real signal in the long-term *aa* data, related to solar activity that is not yet fully understood.

But

Some evidence to suggest a small discrepancy in *aa* levels ($\sim 2nT$) between solar cycle 14 and 19 – something may have changed from 1957

Small baseline (at $K=0$ level) steps when instrumental changes were made at Northern Observatory (1938 and 1997)

Also evidence to suggest a baseline drift at Hartland from 1980 (possibly site noise

related)

Current level, when considering $K=0$ is the same as it was in 1868

Is it enough to make sure users know of any discontinuities or should an official IAGA sanctioned correction be made?

A valuable tool for long-term studies is in danger of being ignored due to mis-reporting of these (so-called) problems.

To be further considered by task force, organised by M Menvielle.

8) Any other business.

None as time had expired.

5. New WG Chairs and Co-chairs:

	Chair	Co-chair
WG V-OBS:	Pieter Kotzé	Pavel Hejda
WG V-MOD:	Stefan Maus	Chris Finlay
WG V-DAT:	Mita Rajaram	Renata Lukianova Luis Gaya_Pique

6. IAGA2009 in Sopron, Hungary

Session proposal from Div.-V

(under discussion among new leaders and suggested conveners)

7. Suggested candidates for next chair and

8. Other topics

None

(Appendix)

After the 2nd COD, following new officers for Div.-V were selected at executive committee.

Division V:

Chair:

Dr. Monika Korte
GeoForschungsZentrum Potsdam
Telegrafenberg
14473 Potsdam
Germany

Co-Chair:

Dr. Alan W P Thomson
Seismology and Geomagnetism Programme,
British Geological Survey.
West Mains Road,
Edinburgh EH9 3LA,
UK

WG V-OBS

Chair:

Dr. Pieter Kotzé
Hermanus Magnetic Observatory
P O Box 32, Hermanus 7200
South Africa

Co-Chair

Dr. Pavel Hejda
Institute of Geophysics AS CR
Bocni II/1401
141 31 Prague
Czech Republic

WG V-MOD

Chair

Dr. Stefan Maus
CIRES, University of Colorado,
David Skaggs Research Center
NOAA/NGDC E/GC1
325 Broadway
Boulder, CO 80305-3328
USA

Co-Chair

Dr. Christopher Finlay
Earth and Planetary Magnetism Group
Institute of Geophysics,
ETH Zurich
HPP L2.2, Hoenggerberg
Zurich
CH-8093
Switzerland

WG V-DAT

Chair:

Dr. Mita Rajaram
Indian Institute of Geomagnetism
Kalamboli Highway, New Panvel (W),
Navi Mumbai 410218.
INDIA.

Co-Chairs:

Dr. Renata Lukianova
Department of Ocean-Atmosphere Interaction,
Arctic and Antarctic Research Institute,
Russian Federal Servey for Hydrometeorology and Environmental Monitoring
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199397 St.Petersburg,
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Dr. Luis R. Gaya-Pique
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