IAGA V-MOD Business Meeting
Monday 2 July, Chemistry Building, Room B, 12.45-13.45

- Activity since IAGA2005 Toulouse
- IGRF plans
- World Digital Magnetic Anomaly Map
- International Standards Organisation
- Proposals for IAGA resolutions
- IAGA2009 Sopron, Hungary - proposals for symposia titles and convenors
- Election of new chair and co-chair for the Working Group
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
Ground-based data collection

- on-line WDC at DMI moved to BGS at start of 2007
IGRF plans

- IGRF-11 will be produced in 2009
- Task Force to be decided now to
  - issue open call in Mar 2009 specifying
    - information to be provided with coefficients, eg data used, brief description of parent model, fit to data
    - 1 model per team (individuals to commit themselves to 1 team)
  - determine final models by 1 Dec 2009 using
    - information provided
    - comparisons with independent data (difficult)
    - inter-model comparisons
    - voting
  - upload on website, publish announcements and papers
World Digital Magnetic Anomaly Map
Version 1 is ready!
Talks: Tues all day Dept of Maths
Posters: Tues 6-8 pm Rocca Paolina

Well done everyone who was involved!
WDMAM plans

- Version 2
- Task Force to be decided now to
  - collect more data
  - work towards version 2
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ISO standard for the Main field?

Background and benefits
What could be specified in the standard?
ISO Procedure
Background

ISO passed Resolution 263:

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.
Who wants a norm?

- 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 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
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

• 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
New V-Mod officers

Chair: Susan MacMillan
Vice-Chair: Stefan Maus

Suggested new:
Chair: Stefan Maus
Vice-Chair: Chris Finlay (Zurich)
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 C (EOPGS)
Terry Sabaka
## WDMAM task force

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Sessions 2009

- Current methods of Modelling, with V-OBS (Finlay, Lesur, Sabaka)
- Decade (Olsen and Purucker)
- Jerks, with DIV-I (Mandea and Holme)
- WDMAM (Thebault, Korhonen)