

URSI/IAGA Joint Working Group on VERSIM (VLF/ELF Remote Sensing of the Ionosphere and Magnetosphere)

Business meeting - Thursday 16 September 2010.

There was a meeting of the VERSIM working group during 4th VERSIM Workshop, held in Prague, (Czech Republic) at 15:15 on Thursday 16 September, 2010.

Present: Craig J. Rodger (New Zealand) and Janos Lichtenberger (Hungary) in the chair. David Shklyar (Russia), Jaroslav Chum (Czech Republic), Ondrej Santolik (Czech Republic), Jean-Pierre Raulin (Brazil), Fernando C. P. Bertoni (Brazil), Aleksandra Nina (Serbia), Desanka Sulic (Serbia), Eva Macusova (Czech Republic), Frantisek Nemecek (USA), Benjamin Grison (Czech Republic), Jiri Fiser (Czech Republic), Kaiti Wang (Taiwan), Mark Clilverd (UK), Ilya Kuzichev (Russia), Jyrki Manninen (Finland), Jay Albert (USA), Peter Steinbach (Hungary), Andrew Collier (South Africa), Brett Delport (South Africa), Marlie van Zyl (South Africa), Andy J Smith (UK), Yoshiharu Omura (Japan), Colin Price (Israel), Peter Bespalov (Russia), Daniel Hamar (Hungary), Ernst D. Schmitter (Germany), Jacob Bortnik (USA), Andrei Demekhov (Russia), Michel Parrot (France).

Overview comments

Craig Rodger (the IAGA co-chairman), welcomed the many participants to the VERSIM business meeting held as part of the 4th VERSIM workshop. He noted how the VERSIM workshops were now a strong feature of the VERSIM community, which were well supported by the membership and included many very strong presentations. He also commented on how much progress there has been since the first workshop in 2004. For example, data from the DEMETER satellite, which was newly launched in 2004, is now being used in a very large percentage of the talks at the 4th workshop (including a dedicated session). In 2004 Janos Lichtenberger reported on his efforts to automatically detect whistlers in broadband VLF data – in 2010 he reported on the auto-detection of tens of millions of whistlers, and his successes in developing an automatic whistler scaling technique. Craig also reminded the community that in 2006 we first heard of the plans for deploying SAVNET (South American VLF Network), while in 2010 this was being used to study solar flares and gamma ray bursts occurring thousands of light years distant! Craig mentioned another example, the WWLLN lightning location network. In 2004 he reported on the first results of this network, at that time it consisted of 11 stations and were able to locate 10.6 million lightning strokes, while now it has over 50 operating stations, reporting 115.4 million lightning strokes in 2009. Many of the talks presented in this workshop used WWLLN data. Through the VERSIM workshops there is increasing collaboration in our community, strengthening the scientific quality and overall "force" of the community. It was particularly fitting that the 4th VERSIM workshop took place in the Hotel Globus, Prague, where Jyrki Manninen first came up with the concept of regular VERSIM workshops.

Craig also commented on the importance of our yearly VERSIM newsletter to share information and also to demonstrate the vibrancy of our community to the wider URSI and IAGA community.

VERSIM-relevant sessions at the next IAGA meeting

The next IAGA meeting is to occur from 2-7 July 2010 in Melbourne, Australia (as part of IUGG which falls on 28 June-7 July). There was a brief presentation concerning the IAGA timetable and the sessions which are likely to be of most interest to the VERSIM community. These are

Thunderstorms: Upwards and Downwards Coupling of the Atmospheric Layers and near-Earth Space
Radiation Belt Dynamics: drivers and impacts of acceleration and loss processes
Remote Sensing and Modeling of the Earth's Plasmasphere
New Techniques and Instrumentation in Space Plasma Physics
Climate and Weather of the Sun-Earth System - CAWSES –II early results
Electromagnetic studies of active processes using space technology

At this stage a detailed timetable for the Melbourne meeting has not been announced. However, VERSIM members should be aware that the abstract deadline is set for 17 January 2011.

VERSIM-relevant sessions at the next URSI General Assembly

The next URSI general assembly is to occur from 13-20 August 2011 in Istanbul, Turkey. There was a brief discussion on URSI-relevant sessions. Although these do not seem to have been widely announced through the web, we are aware of multiple sessions involving waves in plasma and coupling to the radiation belts. No doubt there will also be sessions on lightning and ionospheric change.

VERSIM members should be aware that the abstract deadline is set for 11 February 2011.

Comments on the 4th VERSIM workshop

The meeting formally thanked the Czech hosts of the 4th VERSIM workshop, Ondrej Santolik and Jaroslav Chum, for a very successful meeting. We enjoyed good facilities and an excellent (and memorable) excursion as part of the workshop.

IAGA resolution on open-access scientific software

As the VERSIM community is aware, a VERSIM-supported resolution on open access scientific software was put forward to IAGA at the Sopron meeting. This was supported by IAGA's Council, although it requires confirmation at the Melbourne meeting. To prepare for this, L.R.O. Storey has been working on a website which would serve repository for VERSIM-related software. Janos Lichtenberger showed the meeting a draft of the front page of the website, and noted that it was to be hosted by his institution in Hungary (and linked to from the IAGA main website). There are already plans for Japanese-developed open source ray tracing software to be available through the website.

Support for and from retired community members

Owen Storey suggested to the community to discuss the way how the retired scientist can help the community with their activity and how the community can help retired scientist to keep working alongside the rest of the community, because the skills and knowledge of retired scientists should not go to waste, and in the new century, with longer lifespans and a global trend towards earlier retirement, this issue may become larger.

There are various routes by which retired scientist might be supported, one major problem for many of them is the restriction of access to scientific journals (particularly for those who work from home) and also how to pay for the publication costs when submitting their work to those journals.

As part of the ideas for supporting retired scientists, Owen suggested the VERSIM workshops include a session devoted to those scientists who have retired since the last such meeting or will retire before the next one, a summary would be given on that person's scientific career to date. This introduction would be followed by a longer speech by that person, describing what he (or she, hereinafter understood) foresees as the natural continuation of his life's work, and what part they hope to play in this.

In the wide-ranging discussion which followed at the during the business meeting, the community agreed that the knowledge and abilities of retired scientists should not go to waste. Suggestions were made to form a community 'a voluntary library service' for retired scientists who have difficulties accessing journals. Another suggestion was to ask the retired scientists to give talks on those part of science history they had participated in (e.g. experiments or the life of another important scientist, etc.). There were several talks of this nature at the 3rd VERSIM workshop, which were well received. It was also pointed that retired scientist might have different view of their life in retirement and thus their problems may be treated differently. One suggestion was for retiring researchers to provide to provide perspectives on what they thought were the current outstanding research questions in the field – it was pointed out that Henry Rishbeth had posed such a list near the end of his time.

Future VERSIM workshop

It has been widely accepted that following the strengths of our previous VERSIM workshops, there would be real value in a 5th VERSIM workshop. At this point it seems sensible to have this in 2012, as neither IAGA or URSI will meet that year. Jean-Pierre Raulin (Brazil) has invited the VERSIM community to meet in the state of Sao Paulo, Brazil in September 2012. He gave a presentation on this concept – at this point the suggestion is to hold the meeting in a hotel ~60km away from the city of Sao Paulo, in a comparatively quiet region near to their main observatory site. The observatory site would provide a potential excursion during the meeting, and also has student-level accommodation for approximately 12 people. Another excursion would be to a INPE space research centre some 1 hours drive away. Jean-Pierre outlined the various Brazilian organisations who would be expected to support the meeting (logistics, administration and financial support), and indicated that he hoped quite a few participants could be assisted to attend – considerably more than in previous VERSIM workshops.

There was general acceptance of this invitation, and we therefore expect the next workshop to be in Brazil.

IAGA Young Researcher Award

There were 8 candidates for the IAGA Young Researcher Award, provided by IAGA as part of their support for the VERSIM Workshop. The IAGA award consists of support to participate in the next Assembly (in Melbourne, Australia, in 2011): a low-cost air ticket, waiving of the registration fee, and USD 200 as a contribution to cover hotel and subsistence costs. The Award is for a young scientist (not more than 30 years old in 2010) who contributes the best paper to the meeting. The young scientist nominated shall have made a major contribution to the study reported and have been the first author of the paper presented, besides having given a very good presentation at the meeting.

Janos Lichtenberger announced that the 4th VERSIM workshop Scientific Committee will recommend to the IAGA Executive Committee that Eva Macúšová (Czech Republic) should receive this award, on the basis of her presentation "The Banded Structure of the Whistler-mode Chorus Emissions".

Other business:

None.

The VERSIM meeting broke up at around 15:40.