

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

Business meeting - Tuesday 12 August 2008.

There was a meeting of the VERSIM working group during the International Union of Radio Science General Assembly, held in Chicago (USA), at 1200 on Tuesday 12 August 2008.

Present: Craig J. Rodger (New Zealand) in the chair, acting on behalf of Janos Lichtenberger (Hungary) the URSI co-chair, who was also present. J. Bortnik (USA), R. Gamble (New Zealand), Vikas Sonwalker (USA), Don Carpenter (USA), O. Santolik (Czech Rep), M. Vellonte (Italy), H. Strangeways (UK), K. Ferencz (Hungary), S. Cummer (USA), D. Shklyar (Russia), A. Demekhov (Russia).

Chairman's Report

Craig Rodger (the IAGA co-chairman), described the purpose and nature of the working group, and outlined activities of the working group since the previous URSI meeting, held in New Delhi (India) in October 2005. The last VERSIM meeting was at the IUGG meeting in Perugia (Italy), in July 2007. Our community to open to those involved in our broad scientific interests, and spans both of URSI Commissions G & H, as well as IAGA Divisions II and III. While this may indicate our working groups activities do not necessary fit snugly into the structures of URSI and IAGA, the VERSIM working group operates comfortably inside both parent bodies. The report from the chair included a brief discussion on the yearly VERSIM newsletter, which is well supported by the community through a large number of reports made from many countries. In particular, leadership of the URSI Commissions and the IAGA Divisional structure have praised the regular VERSIM newsletter, suggesting it indicates the vibrancy of our community.

Congratulations to VERSIM members

At this URSI General Assembly Prof. Umran Inan (USA) was awarded the Appleton Prize, and was also elected to one of the URSI Vice-President positions. Umran Inan is a long-standing leader in the scientific efforts of the VERSIM community, and the meeting expressed their congratulations on these highly appropriate events. In addition, another very active VERSIM member, Ondrej Santolik was elected on Monday 11 August to the position of vice-chair of URSI Commission H. He received more than 3 times more votes than the next candidate!

3rd VERSIM Workshop to be held in 2008

Janos Lichtenberger briefly reported on preparations for the 3rd VERSIM Workshop which is to be held in Tihany (Hungary), starting in mid-September of this year. More than 50 individuals have registered, and we have a very full scientific programme. VERSIM's parent bodies have both supported the workshop, with EUR1500 from URSI and US\$1000 from IAGA, which will assist the operation of the workshop. The 3rd workshop builds on first two highly successful workshops in Finland. It appears the 3rd workshop may well have more participants, cementing the strength of this new approach in VERSIM activities.

Janos reminded those gathered that participants in the 3rd VERSIM Workshop should contact him with their planned arrival and departure dates, so he can try and plan transport options to and from Tihany.

Symposia at future URSI Assemblies

There was a lot of discussion concerning possible sessions at the next URSI General Assembly in 2011. In particular, it was suggested that a session on the **Amplification of Waves in Plasma**, concentrating particularly on the nonlinear theories associated with the growth of high amplitude waves would be very relevant. Jacob Bortnik (USA) and David Shklyar (Russia) "volunteered" to be session organizers. Addition suggestions were:

wave particle interactions and coupling to the radiation belts

remote sensing of structures in the plasmasphere (both active and passive joint with G)

Electric field antennas in plasmas (joint with G and B).

These suggestions will be taken to the Commission G/H Business meeting.

VERSIM Science Topics

It has been suggested that the VERSIM community could identify Science "Topics" that are of current interest to the wider international community. Obviously, groups in different regions will be better suited to support different topics. For example, ground based observations at high latitudes can provide important information on triggered emissions, which is extremely unlikely for observations made from equatorial locations. However, such locations are more likely to provide important data on lightning and red sprites.

The IAGA VERSIM chairman has mentioned this concept at several of the last VERSIM meetings, but has failed to move the concept forward. With that in mind, he suggests a brief (30 min) "brain storming" session at the VERSIM business meeting during the 3rd VERSIM workshop to establish an initial framework. This suggestion was supported by the meeting.

In addition, the IAGA chairman noted a request from R. Friedel that VERSIM members could provide experimental data to support the needs of the inner magnetospheric modeling community: knowledge of plasmaspheric densities, plasmopause position, and also a measure of hiss/ chorus intensities. Ground based wave measurements can help address these needs, and could provide continuous, near-real time estimate (if possible) of these quantities, in as much a global sense as possible. This is a good example of how mid- and high- latitude measurements can provide very valuable context to wider scientific communities, and is an example of the suggestions which will appear in the VERSIM science topics.

Future of the working group

It was unanimously agreed to recommend that the working group continue in existence for the period up to the next URSI meeting (2008-2011). At this time the issue will be put to the VERSIM community again. This does not reflect a feeling that the working group should necessarily be wound up, it simply reflects the normal process for reporting to our parent bodies (URSI and IAGA). At the business meeting it was noted that the community appears vibrant, with more than 50 members coming together at the next VERSIM workshop only 5 weeks after this URSI General Assembly.

URSI Chair of the Working group

Janos Lichtenberger (*Eötvös University*, Hungary) was nominated and unanimously re-elected to the position of URSI chair of the VERSIM meeting. Our thanks go to Janos for continuing in this role, and also for preparing the 3rd workshop, which is now very close indeed.

Other business:

None.

The VERSIM meeting broke up at around 1230.