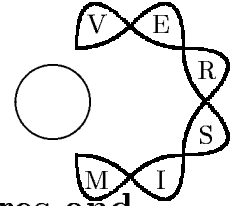


IAGA/URSI
Joint Working Group on



VLF/ELF Remote Sensing of Ionospheres and Magnetospheres

Editor: A J Smith

Newsletter

No. 11 — July 1997

Dear colleagues,

The 8th Scientific Assembly of IAGA (International Association of Geomagnetism and Aeronomy), one of the working group's two parent bodies, is nearly upon us. It will be held in Uppsala, Sweden, next month. This issue of the *VERSIM Newsletter* contains information about the Assembly programme of interest to VERSIM members. Hope to see you there. There are also details of a VERSIM bibliography which has been launched on the VERSIM World Wide Web site.

IAGA, Uppsala, 1997

The 8th Scientific Assembly of IAGA will be held in Uppsala, Sweden, 4–15 August 1997. Details are available from the local organising committee [IAGA 97, Swedish Institute of Space Physics, S-75591 Uppsala, Sweden; tel: +46-18-303600; fax: +46-18-403100; email: iaga@irfu.se; WWW: http://www.irfu.se/iaga_97.html].

Localised ionospheric perturbations related to lightning and VLF transmitters

There will be a half-day VERSIM session (Session 2.14) on *Localised ionospheric perturbations related to lightning and VLF transmitters*, conveners: D. Nunn and A.J. Smith. This session is scheduled for the morning of **Monday 11 August 1997, beginning at**

0830 in room HSC1, and will be concerned with the scattering of VLF radiation from D region ionospheric irregularities.

The programme of the session will be as follows:

Chairman: Dr D. Nunn

- 08:30–09:00 **U.S. Inan** *Lightning induced disturbances of the ionosphere.* (Invited)
- 09:00–09:30
K. Baba and **M. Hayakawa** *Numerical modelling of VLF Trimpis by means of FEM and FDTD.* (Invited)
- 09:30–10:00 **M.A. Clilverd**, **A.J. Smith** and **R.F. Yeo.** *Observation of a sharp decline in Trimpis activity with increasing latitude: observations and implications.* (Invited)

10:00–10:20 **Coffee break**

Chairman: Dr Dr A.J. Smith

- 10:20–10:40 **L. Rizzo Piazza** and **J.H. Fernandez** *One year statistical analysis of Trimpis events detected at Cmte. Ferraz Brazilian Antarctic station.*
- 10:40–11:00 **D. Nunn** and **M. Hayakawa** *Numerical modelling of VLF Trimpis on the path NWC (Australia) –Dunedin (New Zealand).*
- 11:00–11:20 **R.F. Yeo** *Modelling the VLF Trimpis Effect with multiple point scatterers.*

- 11:20–11:40 **V. Kim** and **V.V. Hegai** *Whistlers as possible precursors of strong earthquakes.*
- 11:40–12:00 **R.N. Singh** and **R. Dwivedi** *Lightning generated VLF wave probing of the lower ionosphere.*

HG3: Theory and simulations of nonlinear processes in space plasmas Conveners: Y. Omura and M.A. Abdalla

HG5: Wave propagation: observations and data analysis Conveners: F. Lefeuvre and K. Hashimoto.

VERSIM business meeting

There will be a meeting of the VERSIM working group during the Uppsala Assembly, at **1900 on Wednesday 6 August 1997 in room HSC A110**. The draft agenda is: 1. Chairman's Report; 2. Future of the working group; 3. Reports from VERSIM research groups; 4. Symposia at future IAGA and URSI Assemblies; 5. Any other business. If you have any specific issues you would like to discuss, please let one of the co-chairmen know (see below for addresses, etc.). **All are welcome!**

URSI, Toronto, 1999

The XXVIth URSI General Assembly will be held in Toronto, Canada, in the middle of August 1999; see the WWW page: <http://intec.rug.ac.be:8080/www/u/ursi/URSIGA.html>.

Sessions for Toronto include:

H1: Active experiments involving space plasmas Convener: W.J. Raitt

H2: Wave-particle interactions: quantitative comparison between observations, theory and simulations Conveners: R.R. Anderson, I. Nagano and D. Nunn

H3: Pitch-angle scattering (and acceleration) of trapped particles by waves in magnetospheres Conveners: A.J. Smith, J. Lemaire and U.S. Inan. A VERSIM sponsored session which is a follow-up to the successful "waves and the radiation belts" session at Lille, broadened to include waves other than whistler mode and radiation belts other than Earth's

VERSIM Bibliography

One of our members (Dr James R Wait) suggested that a list of recent papers relevant to our studies could be useful. Our URSI co-chairman, Dr Michel Parrot, has made a first attempt at compiling such a list, and it may be found on the VERSIM Web site at <http://www.nerc-bas.ac.uk/public/uasd/versim.html#bib>. Only papers in peer-reviewed journals, listed by on-line services, have been included. We apologize for any omission. If one of your papers has been omitted, please send the details by e-mail to mparrot@cnrs-orleans.fr, and a correction will be made. In any case, please give us your comments about the usefulness of this list.

The role of the VERSIM Working Group

The working group serves as a forum for workers studying the behaviour of the magnetosphere and ionosphere by means of ELF and VLF radio waves, both naturally and artificially generated. Originally the emphasis was on probing of the magnetosphere by whistlers, but later the scope became somewhat broader. The group aims to promote research in this field by facilitating the exchange of ideas, information and experience between active research workers and other interested scientists. This is done through regular meetings at IAGA and URSI Assemblies, and via the circulation of a newsletter. The group has also been active in sponsoring scientific symposia at IAGA and URSI Assemblies, in areas relevant to its field of interest, and in coordinating observational campaigns. There are currently ~100 scientists from 22 different countries (Australia, Austria, Belgium, Brazil, China, Czech Republic, Denmark, Finland, France, Germany, Hungary, India, Japan, New

Zealand, Norway, Russia, South Africa, Sweden, Ukraine, UK, USA, and Yugoslavia) on the VERSIM mailing list.

Please send any information of interest to other members of the working group, for publication in the next newsletter, to the editor, **A J Smith**, at the address given below; electronic mail preferred, otherwise mail or fax.

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