\* ISWI Newsletter - Vol. 5 No. 124 24 December 2013 \* \* \* \* I S W I = International Space Weather Initiative \* \* (www.iswi-secretariat.org) \* \* \* Publisher: Professor K. Yumoto, ICSWSE, Kyushu University, Japan \* \* Editor-in-Chief: Mr. George Maeda, ICSWSE (maeda[at]serc.kyushu-u.ac.jp)\* Archive location: www.iswi-secretariat.org (maintained by Bulgaria) [click on "Publication" tab, then on "Newsletter Archive"] \* \* Caveat: Under the Ground Rules of ISWI, if you use any material from \* the ISWI Newsletter or Website, however minor it may seem \* \* to you, you must give proper credit to the original source. \* 

Attachment(s):

(1) "Award to ISWI", 500 KB pdf, 2 pages.

(2) "IEEE APSNAP2014\_flyer", 200 KB pdf, one page.

(3) "letgirgea51a", 400 KB pdf, 4 pages.

(4) "papers can be submitted for cawses-II", 32 KB pdf, one page.

:	Re:
:	[1] Prof. Haubold receives award on behalf of ISWI.
:	[2] International IEEE Workshop on "Asia-Pacific
:	Satellite Navigation And Positioning",
:	Brisbane, Australia, 26 - 28 Feb. 2014.
:	[3] No. 51 DECEMBER 2013 IGRGEA Letter
:	Int'l Geophysical Research Group /Europe-Africa
:	Int'l Geophysical Research Group /Europe-Asia.
:	[4] Int'l CAWSES-II Symposium (Nagoya, Japan):
:	EPS special issue now open for submission
:	of papers/letters.

Dear ISWI Participant:

As you can see from the above, there are four items today. Each has an associated pdf, and each pdf is attached.

If you recently attended Int'l CAWSES-II Symposium (Nagoya, Japan), please note Item [4]. Your research results can be published, and in some cases with financial support.

Item [3] is the geophysical-research-related newsletter periodically issued by Dr Christine Amory of France. You can write to her for the French version of the newsletter, which is actually the original version.

For tomorrow's issue of the ISWI Newsletter, I have several messages from Mitko, who has maintained the official ISWI website since the start of ISWI. I always appreciate the great work he is doing for ISWI -- and the closing of the year is right time for me to express my thanks to him and the Bulgaria Academy of Sciences, which supports him.

Please be reminded that CAWSES-II comes to an end on 31 Dec 2013. However, under the management of SCOSTEP, a new program starts up on 13 January 2014, and it is called VarSITI (Variability of the Sun and Its Terrestrial Impact, 2014-2018). Details are at http://www.varsiti.org/ VarSITI will have a mailing list. That is all for today.

Merry Christmas from Japan,

- . George Maeda
- . The Editor
- . ISWI Newsletter

Int. Marcel Nicolet medal for Space Weather and Space Climate The international Space Weather and Space Climate Committee presents this certificate of the

# International Marcel Nicolet medal for Space Weather and Space Climate 2013

# Awarded to Dr. Hans J. Haubold

# For his outstanding efforts to structure the space weather community at an international level.

**Professor Jean-Louis Migeot** President of the Royal Academy of Belgium. **Doctor Yury Gurfinkel** 

Russian Academy of Sciences Space Research Institute, Head of meteopathology and magnetobiology DPT of Russian Scientific Medical Center. Professor Kirsti Strøm Bull President of the Academy of -Science in Norway.

Kusti Strem Bul

Doctor Ronald Van der Linden Director of the Royal Observatory of Belgium European Space Weather Week





#### **International IEEE Workshop on**

### **Asia-Pacific Satellite Navigation And** Positioning

#### Brisbane, Australia, 26 - 28 Feb. 2014

#### Organising Committee

**Dr Garry Einicke CSIRO** garry.einicke@csiro.au

**Prof Yanming Feng** OUT y.feng@qut.edu.au

**Prof Matt Higgins** President IGNSS matt.higgins@dnrm.qld.gov.au

**Prof Qile Zhao** Wuhan University zhaoql@whu.edu.cn

#### **GPS-Glonass-Beidou Satellite Navigation**

Increasing global fuel costs pressure resource, agricultural and transport industries to achieve better energy efficiencies and reduce carbon emissions. Navigation, positioning and automation technologies can provide the desired the efficiency gains. In the past however, satellite navigation equipment has exhibited poor performance within canyons, alongside buildings, hills, foliage and other obstructions. The recent deployment of Beidou navigation satellites and accompanying technology has led to unprecedented improvements in accuracy and availability.

The objective of the workshop is to foster collaborative linkages between industry users, service providers and Beidou R&D teams. It will focus on the following.

- Update on the state-of-the-art
- Accessing technology
- Emerging applications
- Typical performance
- Industries' requirements
- Future developments

#### Invitation to the Workshop

#### **Important dates**

50-word abstract emailed to y.feng@qut.edu.au by 30 Jan 2014

**Registration of interest to attend** emailed to garry.einicke@csiro.au by 30 Jan 2014

Decisions notifications by 31 Jan 2014

#### IEEE Aerospace and Electronic Systems Society Qld invites industry users, equipment and service providers, researchers and developers to submit abstracts of proposed presentations on relevant

- subjects including:
  - Status and technology readiness
  - Port & shipping, agriculture, mining
  - & transport requirements
- GNSS products & services
- Augmentation technologies
- Automation & robotics applications.

This is an opportunity for industry users to interact with researchers and guide future developments. The workshop will be held at the CSIRO Centre for Advanced Technologies, Pullenvale, which is located 12 km (approximately 30 minute drive) from the Brisbane central business district. Registration is free. On-site parking is available. The number of participants will be limited as the workshop will be catered.

Full papers will be solicited from speakers after the workshop for submission, review and publication in the Journal of Global Positioning Systems.













#### N° 51 DECEMBER 2013



## IGRGEA LETTER

International Geophysical Research Group /Europe-Africa International Geophysical Research Group /Europe-Asia

#### IGRGEA

At the end of the IEEY, in 1995, IGRGEA (International Geophysical Research Group Europe Africa) has been organized to follow the research work initiated during IEEY (International Equatorial Electrojet Year), in 1992. Since January 2003 IGRGEA is developing at the Institute of Geophysics in Hanoï.

Brief news since the last letter of IGRGEA from May 2013.

#### **BURKINA FASO**

A school on Space Weather GPS/GNSS and new technologies is planed at the University of KOUDOUGOU in 2014 from November 10 to 21. This school is organized by the IRGGEA. The local coordinator is Frédéric OUATTARA. This school is financially supported by the program of CNRS PNST: 'Programme National Soleil Terre'.

Prof. Oumarou SIE is preparing the set-up of the National Education and Research Network (NREN) for mid-January 2014. It has been done in contact with AAU (Association of African Universities) and WACREN (West And Central African Research and Education Network).

#### CÔTE D'IVOIRE

Medard Niangoran MENE defended his PhD on June 21<sup>st</sup>, at the University Houphuët BOIGNY / ABIDJAN, on the theme :" *Statistical study of the prompt penetration of the electric field of magnetospheric convection at the equator, DP*<sub>2</sub>'. His PhD supervisor was Arsène KOBEA. THE MAGDAS/ ISWI school which took place at ABIDJAN from September 23 to 27 was organized by Georg MAEDA from SERC/Japan and Vafi DOUMBIA from the University Houphouët BOIGNY. This school was very successful. A report on this school will be soon sent by the organizers. The participants to this school were from Cameroon, Côte d'Ivoire, Egypt, Ethiopia, France Japan, Nigeria, and Tanzania, below the group photo.



#### MAROC

The Master on GNSS started this year at CRASTE-LF, Center Regional of United Nations training in French Language. This Center is located at Rabat, see letter: Vol. 5 n°42 on the site:

#### http://www.iswi-secretariat.org

This year, there are 12 students of 6 different nationalities: Algeria, Cameroon, Côte d'Ivoire, Morocco, Senegal and Tunisia.

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lyasse AZZOUZI and Rolland FLEURY

Ilyasse AZZOUZI starts a PHD on 'the study of the middle ionosphere by using a dense network of GPS'. He is registered in 2 universities: University Mohammed V of RABAT and University Pierre an Marie CURIE. His supervisors are Christine AMORY-MAZAUDIER, Rolland FLEURY and Abderrahmane TOUZANI.

Prof Aziza BOUNHIR is organizing the school ISWI/MARRAKECH which is planned at Marrakech from May 5 to 10, 2014. <u>http://www.ucam.ac.ma/marrakechastro/oisa/</u> The title of this school is : 'Space Weather: Solar Physics and Sun Earth environment'

The FABRY interferometer RENOIR was installed by Joe MAKELA of the University of Illinois during the period 4-11 November 2013. On the photo below you can see Joe training the Moroccan team. Aziza is writing notes.



#### NIGERIA

The second edition of the school Cyril ONWUMECHILI was organized by Babatunde RABIU, at ABUJA June 23-27. This school was really successful. A report was sent to all the participants of the ISWI project.



#### DRC : REPUBLIC DEMOCRATIC CONGO

After the school on Space Weather which was held in September 2011 in DRC, 2 students from DRC obtained scholarship from the French embassy of KINSHASA.

Jean KIGOSTI is working with Serge SOLUA of the University of TOULOUSE on lightening. His Congolese supervisor is Albert KAZADI.

Raphaël MUKANDILA is working with Frederic MASSON from the University of STRASBOURG on the tectonic motions of East AFRICA. His Congolese supervisor is Keto TONDOZI.

For their degree required projects, 2 students in informatics, Patient NTUMBA and Vianney LOTOY, converted the software for GPS data analysis, provided by Rolland FLEURY (ENST, Brest) to numerous African scientists, from the commercial software MATLAB to an opensource software OCTAVE, then built a minicompute Grid (4PCs) to treat numerous GPS data files and developed a user-friendly Deskstop or Android interface. They were



congratulated for this innovating project and graduated with an honorary mention. Their work was presented last April at the European Geosciences Union conference and during the SUCCES2013 workshop held in Paris (13-14 November 2013) gathering French users facing intensive computing, Clouds and Storage situations; an extended abstract is available.

#### SENEGAL

Idrissa Gaye from the University CHEIKH ANTA DIOP of DAKAR defended his thesis on June 22<sup>nd</sup>. The title is : "*Influence of Irradation and coefficient of damage on the parameters of a silicon solar cell*.".



Pr C. Sene, Dr I. Gaye, P. G. Sissoko.

Professor Cheikh SENE is the head of the Department of Physics of the Faculty of Science and Techniques UCAD.

#### KENYA

The school SCOSTEP/ISWI organized by Nat GOPSLSWAMY and Paul BAKI at Nairobi from October 21 to November 1<sup>st</sup> was very fruitful. The participants to this school were from: Ethiopia, France, Ghana, Kenya, Germany, Malawi, Nigeria, Norway, Uganda, Portugal, Rwanda, Tanzania and USA.

http://www.tukenya.ac.ke/conferences/

#### Group photo of the school in Kenya



The next SCOSTEP/ISWI school will take place in Peru from September 15 to 24, 2014.

#### RWANDA

A school is planned in RWANDA from June 30<sup>th</sup> to July 11<sup>th</sup> 2014.

The title: 'African school on Space Science: related applications and awareness for sustainable development of the region.'

This school is organized by ICTP (Italia), Boston University (USA) and the University of RWANDA.

To register see the website:

http://agenda.ictp.it/smr.php?2631

The deadline is February 28th 2014.

#### GHANA

The fifth conference: African Leadership was held in ACCRA from December 3 to 5, 2013. Website: http://alc2013ghana.com/

A session was organized by Sharafat GADOMIVA from UNOOSA on GNSS. The speakers of this session were Babatunde RABIU (NIGERIA), Olivier OBROU ( CÔTE D'IVOIRE), Mourad BOUZIANI (MOROCCO) and Christine AMORY-MAZAUDIER (FRANCE.

The talks of this session are on the website of OOSA:

http://www.unoosa.org/oosa/en/SAP/gnss/icg/ ALC2013/presentations.html



Our main recommendations are the following: \*To GNSS networks in AFRICA \* Each country has to develop a GNSS network taking advantage of all the GNSS users \* To share GNSS data

#### WALL of THE PEACE

In November was held the 10th edition of the European space weather Week in Antwerp, Belgium. On this occasion, the definition of Space Weather has been translated into 56 languages (6 African languages: Afrikaans, Haoussa, Kinyarwanda, Kiswahili, Peulh et Zulu) and posted on a large sign in front of the Central train station. This initiative, called the "Wall of Peace", was supported by the United Nations (Office for Outer Space Affairs) and has benefited from the active support of GIRGEA, without which it would not have been possible.



Definition of Space Weather:

weather physical 'Space is the and phenomenological state natural of space environments. The associated discipline aims, through observation, monitoring, analysis and modelling, at understanding and predicting the state of the sun, the interplanetary and planetary environments, and the solar and non-solar driven perturbations that affect them; and also at forecasting and nowcasting the possible impacts on biological and technological systems'.



HAPPY NEW YEAR

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papers for cawses-II.txt Date: Wed, 18 Dec 2013 09:48:51 +0900 From: Mamoru Yamamoto <yamamoto@rish.kyoto-u.ac.jp> Subject: CAWSES-II Symposium: EPS special issue now open for submission of papers/letters Dear Attendees of the International CAWSES-II Symposium. Thanks for your interest in contributing to the symposium special issue of the EPS journal. About 50 people have expressed interest in submitting papers. Thank you very much. The web-site for submitting papers/letters is now open. (EPS paper submission page) http://www.earth-planets-space.com/ (What's EPS? page) http://www.earth-planets-space.org/ Some notes: -- The submission deadline is March 31, 2014. -- Publication charge is 100 EURO for letters and 600 EURO for papers. (Discount rate is applied to the members of five EPS-related societies [See below]) -- The CAWSES-II Symposium has some funds to support the publication charges. If you need this support, please indicate it with reasons when vou submit the papers. <EPS-related Societies> Society of Geomagnetism and Earth, Planetary and Space Sciences (SGEPSS) The Seismological Society of Japan The Volcanological Society of Japan The Geodetic Society of Japan The Japanese Society for Planetary Sciences Sincerely, EPS guest editors Mamoru Yamamoto, Kazuo Shiokawa Takuji Nakamura, Nat Gopalswamy