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差出人　maeda@serc.kyushu-u.ac.jp

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Attachment(s):
(1) "Really final program for ISWI Abuja", 96 KB pdf, 6 pages.
(2) "Abuja MAGDAS Session", 32 KB pdf, 1 page.
(3) "ISWI_NL_summer camp", 224 KB pdf, 3 pages.

: Re:
: Really Final Program for
: UN/Nigeria Workshop on ISWI
:
: &
:
: ISWI Summer Camp Report (USA/Germany)

Dear ISWI Participant:

There are several attachments today.

< 1st >
Yesterday, I sent out the Program for UN/Nigeria Workshop on ISWI (Abuja, Nigeria). Please discard it. I attach updated (and final) program -- courtesy of ISOC of this workshop. Please attend the final session (Session 15) as it will be an important general discussion on the ISWI agenda for the coming years. This is the time to present your views and to influence the agenda.

< 2nd >
Sessions 6 and 7 are set aside as conference time for various ISWI Instrument Teams -- please see the pdf mentioned above (the first pdf). Attached is the agenda for the MAGDAS Session. (The MAGDAS network now consists of 57 real time magnetometers deployed all over the world.) The agenda for other instrument arrays are not attached because they did not send their information to the ISOC in time for this newsletter release.

< 3rd >
This is a really wonderful summer camp report. I hope it will provide the stimulation for more space weather summer camps in the future. I quote the report briefly:
: "The Joint Space Weather Summer Camp of UA Huntsville, the
: German Aerospace Center, the University of Rostock, and
: the University of Greifswald finished successfully at
: the University of Alabama Huntsville on 13 August 2011.
: Over the course of four weeks, from 17th July to 13th August 2011,
: ten UA Huntsville and ten German undergraduate and graduate
: students lived together in a non-stationary Summer Camp to

: get an introduction to mostly all aspects of space weather
: at various Space Weather monitoring and research facilities
: in Germany and US. ″

Huge thanks to N. Jakowski and P. Poete for this contribution to the ISWI Newsletter.

Always faithfully in the service of ISWI,
: George Maeda
: The Editor
: ISWI Newsletter

UN/Nigeria WORKSHOP ON INTERNATIONAL SPACE WEATHER INITIATIVE

Abuja, Nigeria, October 17 – 21 , 2011

Scientific Program

AGENDA – Day 1 (Monday)

Session 1: Opening Session

9:00-9:30	Welcome Addresses: Nigeria officials, Pius Okeke, Hans Haubold, Babatunde Rabiu, H. Hayakawa, Video welcome by Joseph Davila and Nat Gopalswamy	
9:30-9:35	Logistics	Babatunde Rabiu
9:35-10:15	UNBSS 1991-2012	Sharafat Gadimova & Hans haubold
10:15-10:30	Coffee Break	

Session 2: ISWI Tutorials **Chair: H. Haubold**

10:30-11:00	Solar Corona (video)	Joseph Davila
11:00-11:40	Solar Radio emission (video)	Nat Gopalswamy
11:40-12:20	Solar Dynamo and Solar Activity	Katya Georgieva
12:20-12:30	Discussion	
12:30 – 01:30	Lunch	

Session 3: ISWI Tutorials (Continued) **Chair: K. Georgieva**

1:30-2:10	Geospace Science	K. Yumoto
2:10-3:00	Ionosphere	B. Rabiu
3:00-3:40	Solar Energetic Particles	Dalmiro Maia
3:40-4:00	Coffee Break	
4:00-4:40	Solar Dynamics Observatory (video)	Phil Chamberlin
4:40-5:20	Space Weather Modeling (video)	Yihua Zheng
5:20-6:00	Space Weather	A. Mahrous
6:00 – 6:30	Poster Viewing	

AGENDA – Day 2 (Tuesday)

Session 4: ISWI Instrument Overviews Chair: **B. Rabiu**

9:00-9:30	MAGDAS	K. Yumoto
9:30-10:00	SAVNET	F. Bertoni
10:00-10:30	African GPS	C. Mazaudier
10:30-10:50	Coffee Break	

Session 5: ISWI Instrument Overviews **Chair: K. Yumoto**

10:50-11:20	FMT-CHAIN	S. UeNo
11:20-11:50	SEVAN	D. Maricic
11:50-12:30	Discussion on Future of the Instrument program	
12:20-1:30	Lunch	

Session 6: ISWI Instrument Teams **chair: Instrument PIs**

2:00-4:00	Team meetings (parallel)	Team leaders
4:30-4:15	Coffee Break	

Session 7: ISWI Instrument Teams

4:15-5:30	Team meetings (parallel)	Team leaders

Session 8: Posters

5:30-6:30	Posters	

AGENDA – Day 3 (Wednesday)

Session 9: Field Trip

National Space Research and Development Agency NASRDA headquarters, Abuja;

Abuja, Millennium Park; and National Museum Abuja.

AGENDA – Day 4 (Thursday)

Session 10: Science Results **chair: P. Okeke**

9:00-9:30 International Committee on GNSS (ICG) S. Gadimova and H. Haubold

9:30-9:50 Determination of the Best-Fit Tropospheric Delay Model on the Nigerian Permanent GNSS Network (Nignet) J.D. Dodo

9:50-10:10 TEC derived from Some GPS Stations in Nigeria & Comparison with the IRI R.B. Abdulrahim

10:10-10:30 Analyzing Absorption of Sunlight By Mineral Dusts R. Salihu Sa'id

10:30-10:50 The Response of Interplanetary Medium to The Geomagnetic Storm Of April 2010

R. O. Salami

10:50-11:10 Low Level Jet Wind Shear At Niamey At Bamako M. Saidou

11:10-11:30 Coffee Break

Session 11: Science Results **chair: R. Marshall**

11:30-11:50 Space Weather Investigation Based on HF Propagation S.E. Tulunay and Y. Tulunay

11:50 -12:10 Seasonal Variability Of Solar Quiet Daily (Sq) Variation in Geomagnetic Elements at Low Latitudes O.R. Bello

12:10-12:30 Cosmic Ray Radiations & Solar Minimum: Response to Earth's Atmosphere

E.A. Hanson, F.N. Okeke and E.C. Okoro

12:30 – 1:30 Lunch

Session 12: Science Results

1:30-1:50 Signature of Midnight Temperature Maximum (MTM) Using TEC (GPS) and OI630 Nm Night Airglow S. D. Jaypal

1:50-2:10 Joule Heating in the Lower Thermosphere D. L. Danov

2:10-2:30 Electron Density Distribution Over Equatorial Ionosphere E T Desta

2:30-2:50	Ionogram Interpretation via Raytracing	C. D. Bennett
2:50-3:10	Solar Wind turbulence	A. Ibrahem
3:10-3:30	Chain-Project: Operation, Observation And Education	M. M. Lourdes-Milgros
3:30-3:50	Chain-Project: Investigations of Solar Active Phenomena	D. P. Cabezas
3:50-4:10	Solar Radiation and Longwave Radiative Climatology	R. Al-Nuaimi
4:10-4:30	Coffee Break	

Session 13: Extended Poster Session (All authors Present at their Posters)

4:30-6:30 Poster session

AGENDA – Day 5 (Friday)

Session 14: New Initiatives and National Efforts **chair: D. Maia**

9:00-9:20	Malaysia Approach on ISWI	Mhd. F. Asillam
9:20-9:40	Space Science & Technology in Ghana	N.A.K. Browne
9:40-10:00	Space Science at the University of Zambia	H. Mweene
10:00-10:20	Space Weather in China	J. Wang
10:20-10:40	From IHY to ISWI	A.B. Rabiu
10:40-11:00	Coffee Break	
11:00-11:20	Geomagnetism and Solar Physics in Peru	J. Ishitsuka
11:20-11:40	Initial Results from Awesome VLF Receiver in Ecuador	E.D. Lopez
11:40-12:00	International Collaboration and Academic Exchange of the Chain Project	S. Ueno
12:20-12:40	Overview of situation in Australia	R. Marshall
12:40-1:00	MAGDAS Project in Indonesia	H. Bangkit
1:00 – 2:00	Lunch	

Session 15: Closing session chair: **S. Gadimova**

2:00-2:30	Regional Centers for Space Science and Technology Education	S. Gadimova & H. Haubold
2:30-3:00	Discussion on International Center of Space Weather Sciences	K. Yumoto
3:00	Conclusion	H. Haubold

Plan for MAGDAS Session

during *UN/Nigeria Workshop on ISWI*

Conference Time for ISWI Instrument Teams

Day 2 (18 Oct. 2011) Sessions 6 and 7 (2PM to 5:30PM)

Prepared by G. Maeda on 12 Oct 2011.
Approved by Prof. K. Yumoto on the same day.

	Speaker	Country	Talk	Time of Talk	Notes
1	Yumoto	Japan	Problems and Solutions; Future Plans for MAGDAS.	2:00–2:30	
2	Maeda	Japan	Current State of MAGDAS in Africa and the Rest of the World	2:30–2:45	57 stations
3	Rabiu (ABU Rep)	Nigeria	Status of Abuja Station	2:45–3:00	
4	ILR Rep	Nigeria	Status of Ilorin Station	3:00–3:15	
5	LAG Rep	Nigeria	Status of Lagos Station	3:15–3:30	
6	Mweene	Zambia	Status of Lusaka Station	3:30–3:45	
Coffee Break.					
7	Ishitsuka	Peru	Status of Peru Stations	4:15–4:30	2 stations
8	Sugon	Philippines	Status of Philippine Stations	4:30–4:45	6 stations
9	Harry B.	Indonesia	Status of Indonesia Stations	4:45–5:00	7 stations
10	All	All	Discussion	5:00–5:30	Air your views.

Report on the Joint US-Germany Space Weather Summer Camp 2011

N. Jakowski and P. Poete
German Aerospace Center (DLR)

e-mail: Norbert.Jakowski@dlr.de, Peter.Poete@dlr.de

The Joint Space Weather Summer Camp of UA Huntsville, the German Aerospace Center, the University of Rostock, and the University of Greifswald finished successfully at the University of Alabama Huntsville on 13 August 2011. Over the course of four weeks, from 17th July to 13th August 2011, ten UA Huntsville and ten German undergraduate and graduate students lived together in a non-stationary Summer Camp to get an introduction to mostly all aspects of space weather at various Space Weather monitoring and research facilities in Germany and US.

The Space weather Summer Camp started in DLR Neustrelitz with introductions to the physics background of space weather. The lessons covered solar and magnetospheric physics and thermosphere and ionosphere as well. After learning background science, application oriented topics were discussed such as geomagnetic induced currents, direct space weather impact on satellite payloads and propagation of radio waves used in telecommunication, Global Navigation Satellite Systems (GNSS) and remote sensing radars have been discussed. They were introduced into the principles and techniques of the Space Weather Application Center – Ionosphere (SWACI). This data center provides ionospheric information and data to users to mitigate the ionospheric propagation delays and other refraction effects (cf. http://swaciweb.dlr.de).

Figure 1: The Summer Camp group in front of a X band antenna at the DLR site Neustrelitz

During a one day stay at the Leibniz-Institut für Atmosphärenphysik e.V. at the University of Rostock (IAP) in Kuehlungsborn, the students got insight into relationships between the solar radiation and the atmospheric behaviour as considered in the international CAWSES programme. In the 2nd week the students moved to Germany's only ionosonde station operated by the IAP on the island Ruegen in Juliusruh. Here the students learned more details about ionospheric sounding and radar techniques, modelling and ionospheric impact on GNSS networks operated in Germany.

Figure 2: During a lecture at IAP Juliusruh on the island of Ruegen

Lectures given at the Ernst-Moritz Arndt University in Greifswald focused on the physics and monitoring of galactic cosmic rays and energetic solar radiation and their effects on human beings. Finally, before leaving to US, the students became aware of the fact that space weather research, monitoring and forecasting requires close international collaboration. They got an interesting overview on international space weather activities, on the role of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), in particular on the International Space weather Initiative (ISWI).

Figure 3: Last station in Germany at the University of Greifswald

Besides the scientific program the students visited the old hanseatic cities Rostock, Stralsund and Greifswald. A highlight was the visit of the Historical-Technical Museum in Peenemuende where the first launch of a missile into space took place here in October 1942.

After leaving Germany, students then spent two weeks primarily at UAHuntsville from where also an excursion to the Space Weather Prediction Center (SWPC – http://www.swpc.noaa.gov/) and NOAA in Boulder was organized.

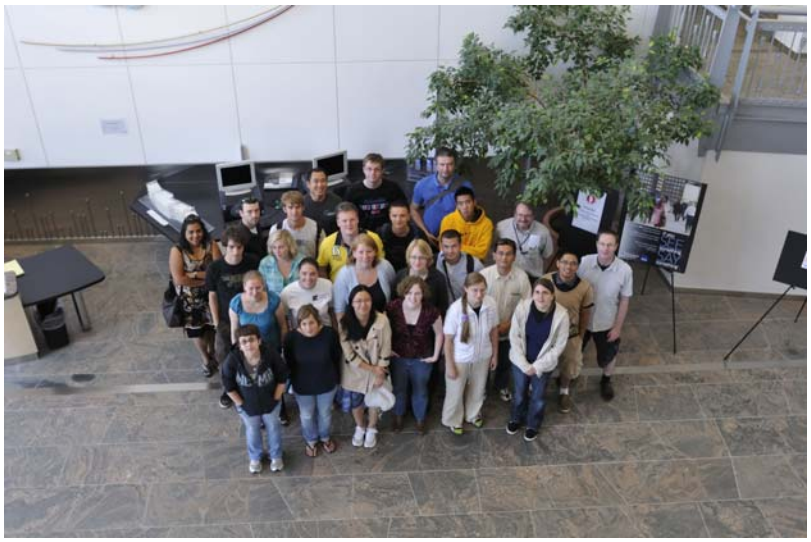

Figure 4: At NOAA Space Weather Prediction Center, Boulder CO

At the Center for Space Plasma and Aeronomic Research (CSPAR) at the UAHuntsville students received lectures primarily on the theoretical background to space weather physics. The got the unique opportunity to apply this knowledge to practical projects and exercises. Thus, one group built a VLF antenna for detecting lightnings via receiving their radio emissions.

Figure 5: One of the student groups presenting their final work and their self-build VLF antenna at UAHuntsville

Results of the five group projects were successfully presented at the end of the Summer Camp.

The feedback of the participants was overwhelmingly positive, encouraging the organizers to think about regular continuation of such a joint summer school.