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MAGDAS Report
ISWI UN/NASA/JAXA Workshop

K. Yumoto[1)](; PI of MAGDAS Project)
1) Space Environment Research Center, Kyushu Univ.

Content

1. Objectives of MAGDAS Session

To realize "Equal Partnership" of "instrument provider" and "instrument hosts", this is the guiding principles of IHY/ISWI, and to make the collaborations long-term and self-sustaining of MAGDAS Project, we need three phases of Development of Capacity Building in the process:

(1) Instrument capacity, e.g. maintenance of MAGDAS

(2) Data analysis capacity, e.g. data processing of MAGDAS

(3) Science capacity, e.g. supervising students of MAGDAS host.

The objectives of the first MAGDAS Session were to frankly exchange information and opinions of MAGDAS members, and to start discussion on how we can accelerate Capacity Building.

2. Breakdown of MAGDAS Session

1. Instrument related; 16 talks (SERC, Nigeria, Zambia, Mozambique, Tanzania, Ethiopia, Kenya, Sudan, India, Peru, Australia, Philippines, Brazil),

2. Data related; 3 talks (SERC, Indonesia, Malaysia, Australia),

3. Science related; 11 talks (SERC, Nigeria, Ethiopia, Italy, Australia, Philippines, Nigeria, Cote d'Ivorie, Brazil, Egypt), EEJ, Sq, DP2, Pc 3-4, Pi 2, EQ-related, Space Weather, etc.

Note: 2 talks were not given, because of frontier formalities.

3. Proposed Capacity Building

3.1 Instrument Capacity

- Noise testing, Calibration, Installation, and Maintenance of MAGDAS system

  - ➡ MAGDAS/ISWI School and Workshop
  - ➡ Short-term exchange of young scientists
  - ➡ Supervising and co-supervising students

- Additional stations are also proposed;
  Kenya, Nigeria, Peru. Ethiopia, DR of Congo, Indonesia, Russia

3. Proposed Capacity Building

3.2 Data Analysis Capacity

- Data correction, Making database, and Learning research tools.

➡ MAGDAS/ISWI School and Workshop
➡ Short-term exchange of young scientists
➡ Supervising and co-supervising students

➡ Unification of MAGDAS data format (MAG-I, MAG-II, MAG-9)
➡ Development of New data transfer system
➡ Construction of MAGDAS/SERC Sub-centre

Near Real Time MAGDAS Data Processing System in Indonesia

Setyanto C. P., L. M. Musafar K., M. Ruhimat., H. Bangkit
(National Institute of Aeronautics and Space (LAPAN), INDONESIA)

Kiyohumi Yumoto and MAGDAS Group
(Space Environment Research Center, Kyushu University,JAPAN)

Scheme Of MAGDAS Transfer System in Indonesia using GPRS (General Packet Radio Service) Network

Device Requirements :

- Ethernet Card
- Cross Cable1 PC / Notebook
- GSM/GPRS Modem
- Static IP

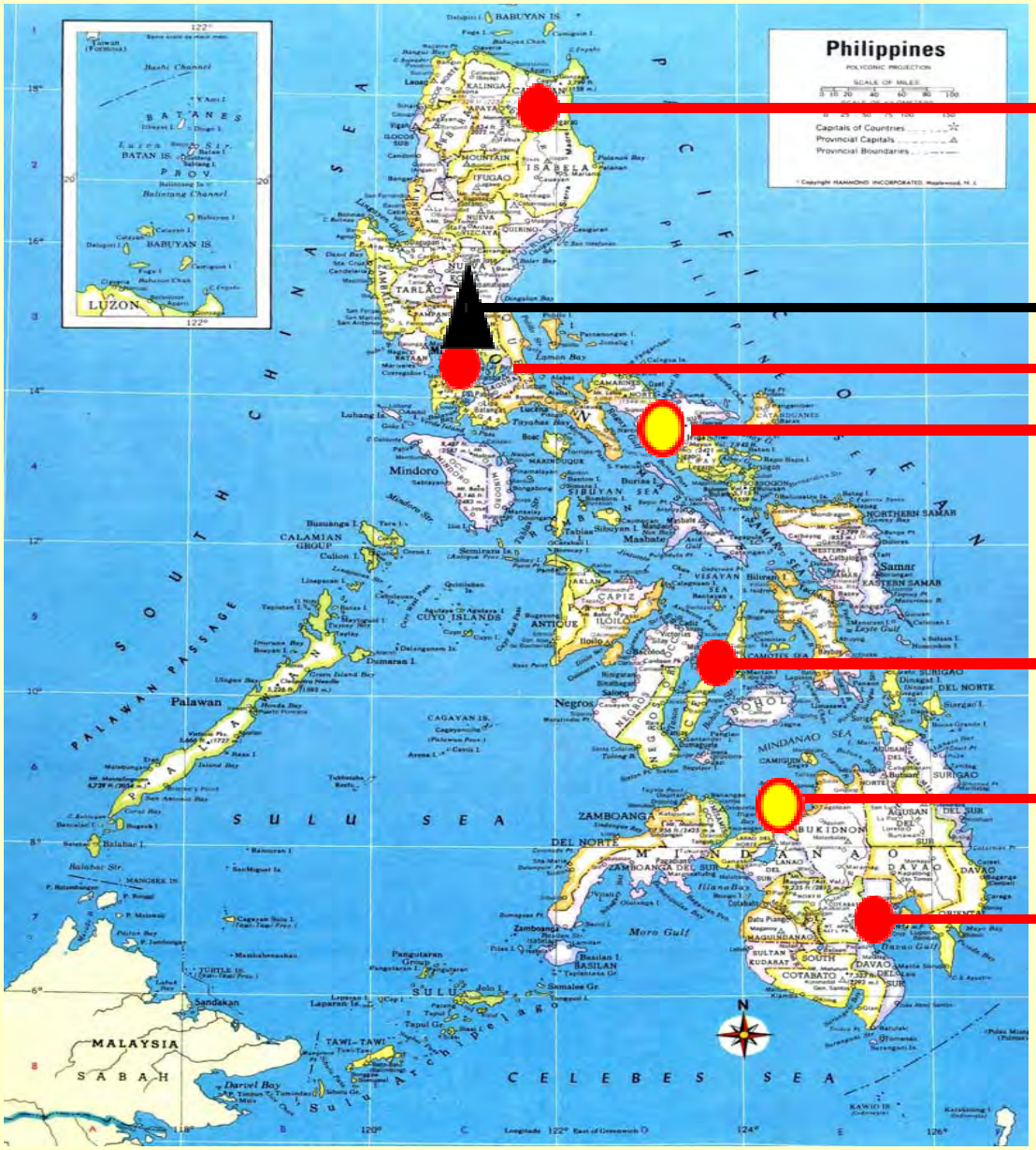
GSM / GPRS Modem with Antena

SERC Subcenter at Manila Observatory

by Quirino M. Sugon Jr.[1], Akihiro Ikeda[2], Daniel J. McNamara[1]
Manabu Shinohara[2], and Kiyohumi Yumoto[2]

[1] Kyushu University's SERC Subcenter, Manila Observatory, Philippines
[2] Space Environment Research Center (SERC), Kyushu University, Japan

Philippine MAGDAS Stations



Tuguegarao

Manila Observatory; FMCW (SERC Subcenter)

Muntinlupa

Legaspi

Cebu

Cagayan de Oro

Davao

MAGDAS Installed

Recently installed

http://www.filipinolanguagemelbourne.org.au/philippines_map.html

SERC Subcenter at Manila Observatory

- Maintain FMCW (Frequency modulated continuous wave) radar
- Server for 6 MAGDAS stations (to be installed)
- Server for 3 SCINDA stations (to be installed)
- Server for 3 earthquake stations (in another building)

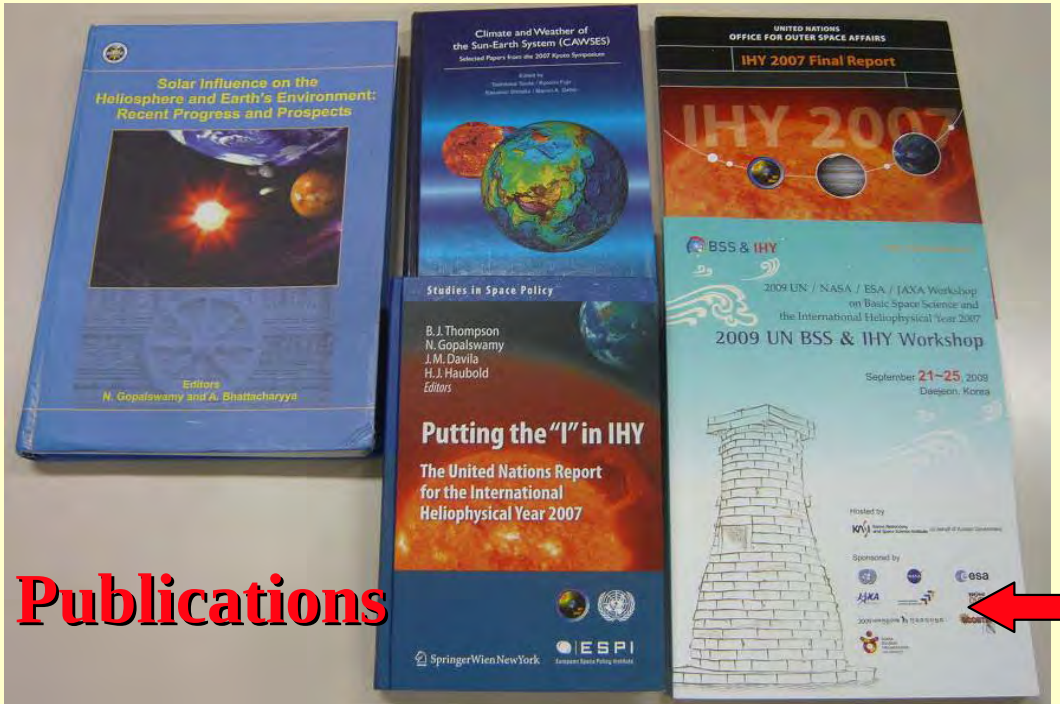
3. Proposed Capacity Building

3.3 Science Capacity

- Ability of Data analysis, Presentation in Meetings, and Publications

  - ➡ MAGDAS/ISWI School and Workshop
  - ➡ Short-term exchange of young scientists
  - ➡ Supervising and co-supervising students

3.3 Supervising Students to Carry out Data Analysis, Presentation & Publications



Publications

Presentation

4. Summary of MAGDAS Session

The final goal of MAGDAS project is to make our collaborations long-term and self-sustaining on a truly global scale

To achieve this, we must follow this roadmap:

(1) Exchange frankly information and opinions on how we can accelerate the Capacity Building.

(2) Conduct MAGDAS/ISWI Schools to train young people on how to maintain instruments and how to use its data,

(3) Conduct short-term and long-term exchanges of students and young staff,

(4) Supervise or co-supervise Ms and Phd students.

MAGDAS/ISWI School
on
Litho-Space Weather with MAGDAS Data
Venue: Redeemer's University, Mowe, Lagos, Nigeria.
Date: Summer (August), 2011

Space Environment Research Centre (SERC) of Kyushu University is holding a training titled "MAGDAS/ISWI School on Litho-Space Weather with MAGDAS Data" in Nigeria, Africa during summer of 2011. The Workshop is aimed at training personnel on handling of MAGDAS data and systems. It is envisioned to be a one-week intensive training school. Participants shall be drawn from Japan, Indonesia, Philippines, several African and other countries. Participants shall be mainly persons hosting or working with MAGDAS facilities/data.

Features

Personnel training and development
MAGDAS operation and maintenance
Data coordination
Special topics: Principles of geomagnetism, Space weather, Equatorial ionosphere, lithospheric dynamics

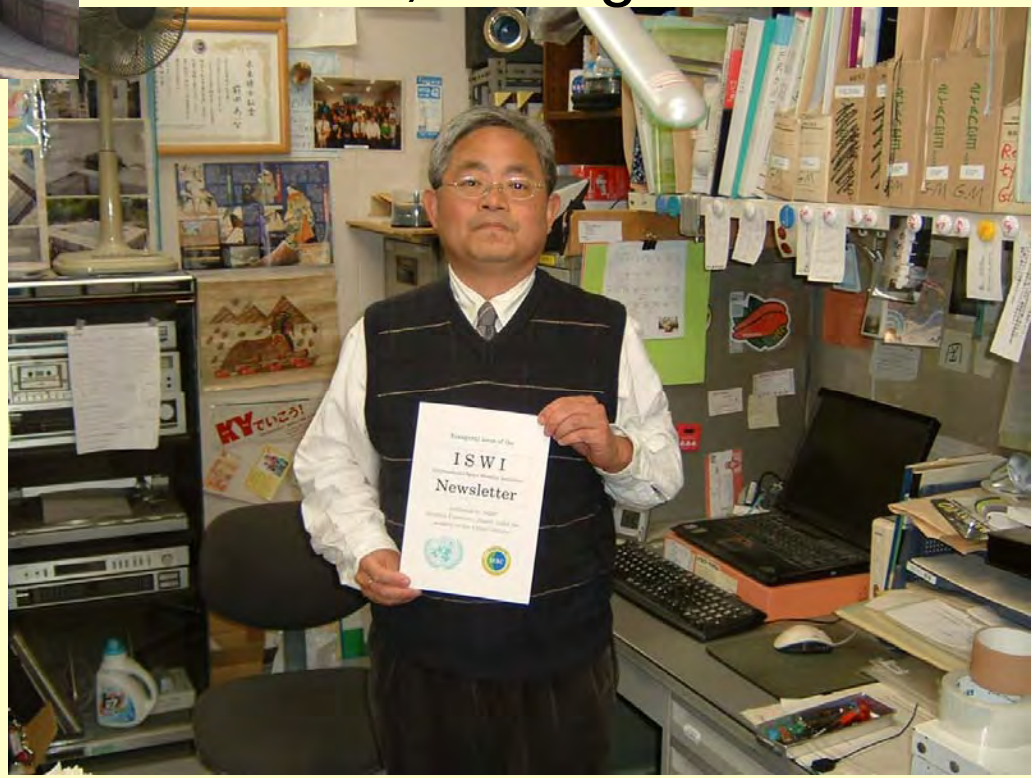
Sponsorships

Travel grant is expected from SERC, Kyushu Univ., and NASA/UN.
Nigeria shall endeavor to take care of local support, including accommodation and feeding.

ISWI Newsletter

Space Environment Research Center (SERC), Kyushu Univ. was requested to publish the ISWI newsletter.

ISWI Newsletter
Editor; George Maeda



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Thank you for your attention !!

Thank you very much for

1) Very nice arrangement of LOC at Helwan Univ.
2) Support by UN/NASA/JAXA and
3) All attendee