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RA II Pilot Project Newsletter

DEVELOPING SUPPORT FOR NATIONAL METEOROLOGICAL AND HYDROLOGICAL SERVICES IN SATELLITE DATA, PRODUCTS AND TRAINING

Contents of this issue

Preface

The 14th session of WMO Regional Association II (XIV-RA II), held in Tashkent, Uzbekistan from 5 to 11 December 2008, adopted a resolution to establish a pilot project for the development of support for National Meteorological and Hydrological Services (NMHSs) in the areas of satellite data, products and training.

In short, actions related to user information and training, data accessibility, product availability and the analysis of user feedback were considered of particular relevance at regional level in XIV-RA II, and the session resolved to establish a pilot project aimed at developing a consortium of satellite information providers to support NMHSs in the reception and use of satellite data and products (for details, see general summary paragraphs 4.4.14 (p. 18), 4.9.24 – 4.9.26 (pp. 45 – 46) and Resolution 7 (XIV-RA II) (pp. 94 – 95) of the abridged final report of the session).

We understand that this project was established as a kind of self-help effort for

NMHSs in RA II to make satellite-related information flow better. The major focus of the initiative is to facilitate the timely provision of satellite-related information by satellite operators themselves to users, i.e., NMHSs in RA II, especially developing countries including LDCs. As there are also other ongoing activities such as the Virtual Laboratory (VL), we understand the need to create synergy and greater benefits with a lower level of exertion, avoiding duplication of effort.

After the session, the WMO Secretariat invited WMO Members to join the Pilot Project Coordinating Group, whose members as of 30 September 2009 are Japan (Co-coordinator), the Republic of Korea (Co-coordinator), Bahrain, China, Hong Kong – China, India, Kyrgyzstan, Oman, Pakistan, the Russian Federation, Uzbekistan, Vietnam and, as an observer, EUMETSAT.

The Coordinating Group members discussed immediate action by email correspondence and agreed to establish a bi-monthly newsletter and a mailing list of RA II Members to enable them to review the latest status of available imagery, data, products and training, thereby leading to identification of the requirements of NMHSs as stipulated in the terms of reference of the Coordinating Group in the Resolution. For the time being, the anticipated contributors to the newsletter include (but are not limited to) satellite operators of RA II, i.e., the China Meteorological Administration (CMA), the India Meteorological Department (IMD), the Japan Meteorological Agency (JMA), the Korea Meteorological Administration (KMA) and the Russian Federal Service for Hydrometeorology and Environmental Monitoring (ROSHYDROMET). We also appreciate EUMETSAT's agreement to kindly contribute articles to the newsletter in spite of their observer status to the Coordinating Group.

This is the first issue of the newsletter, and provides information on (1) access to MTSAT data, (2) the Korea Meteorological Administration's training program, (3) news on satellites, (4) the RA II Pilot Project mailing list, and (5) the first-phase action plan of the pilot project. In addition to these subjects, upcoming issues will also include the launch of new satellites and the commencement of new services. We assume that these topics will provide welcome information to user countries.

We hope that the establishment of this newsletter, representing one small step for the pilot project, will lead to a giant leap for services conducted by NMHSs in the region. Finally, we would like to take this opportunity to thank former RA II President Mr. A. Majeed H. Isa for his valuable suggestion that resulted in the establishment of the pilot project.

Toshiyuki KURINO (Japan Meteorological Agency)
Jae-Gwang WON (Korea Meteorological Administration)
Co-coordinators of the Pilot Project Coordinating Group

Figure 1 Venue of the 14th session of WMO Regional Association II (XIV-RA II), held in Tashkent, Uzbekistan, where the pilot project was inaugurated.

Figure 2 A beautiful statue in Tashkent

Dissemination Services by Satellite Operators (1) Access to MTSAT data

Background

Information on the status of meteorological satellites was previously provided to NMHSs on a regular basis by WMO publication No. 411, *Information on meteorological and other environmental satellites*. The WMO Space Programme website has taken the place of this publication, and currently provides a variety of information to NMHSs, including guidance on education and training. However, satellite-related technology (including telecommunications) is enjoying rapid progress, making the medium favorable for providing the latest information on a wide variety of satellite data and products – including dissemination methods – to NMHSs, thereby enabling them to keep abreast of the latest services available.

Updated web pages on data and products from satellite operators themselves are expected to be useful for NMHSs, but such resources may be hidden among enormous numbers of other web pages from the relevant agency. To ensure the effective use of these pages, the WMO Space Programme Office has established and manages a variety of web resources such as those shown below (Figures 3 and 4).

In this newsletter, we will introduce satellite operator services aimed at providing satellite imagery, data, products and training opportunities as well as other related services. If websites introducing such services already exist, these will be introduced instead, since all the details are already provided. In this issue, we will introduce access to MTSAT data as an example of a topic available in time for the first issue. With this article as a start, we hope for better and more detailed information from satellite operators on their services.

RA II Pilot Project web pages (to be established by the end of 2009) will include newsletter archives as well as useful sorted information on satellites.

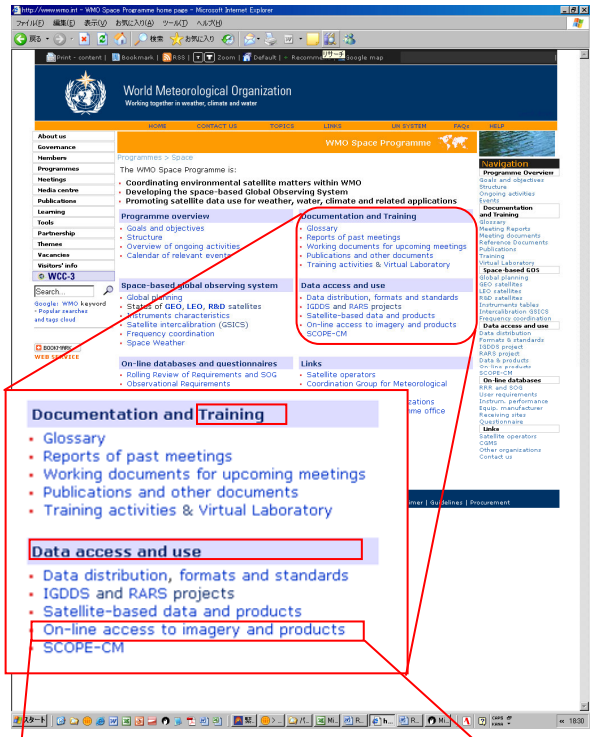

Figure 3 WMOSP's top page (http://www.wmo.int/pages/prog/sat/index_en.html)

Figure 4 WMOSP's web page on on-line products (http://www.wmo.int/pages/prog/sat/Onlineproducts.html)

Access to MTSAT data

Information on MTSAT data, products, data collection systems and training activities can be accessed at http://www.jma.go.jp/jma/jma-eng/satellite/nmhs.html (Figure 5). This page is linked to from WMOSP's website http://www.wmo.int/pages/prog/sat/Onlineproducts.html and JMA's satellite website http://www.jma.go.jp/jma/jma-eng/satellite/index.html.

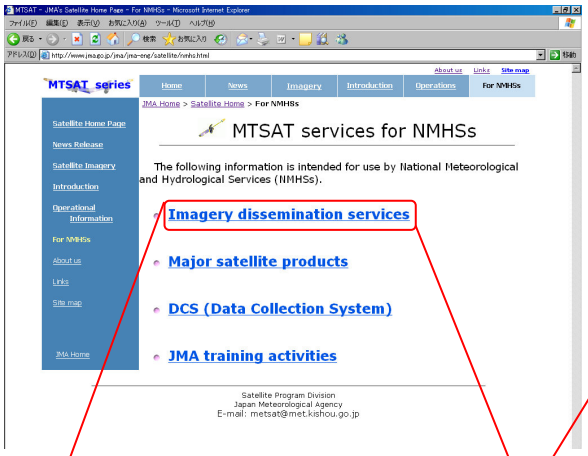

Figure 5 MTSAT services for NMHSs

Clicking the first link, "Imagery dissemination services," brings up the following page:

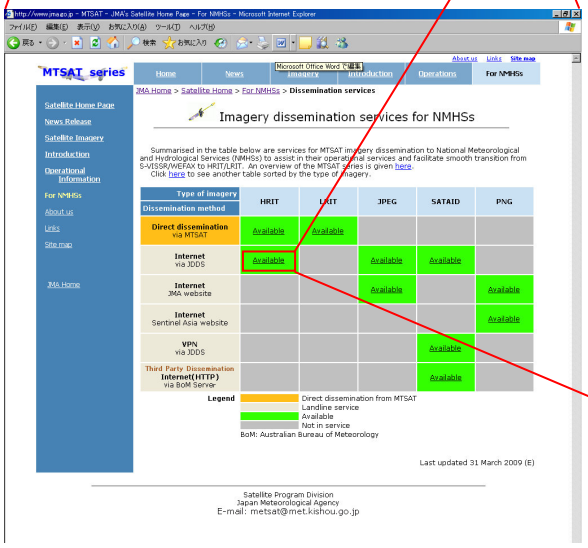

Figure 6 Imagery dissemination services for NMHSs (http://www.jma.go.jp/jma/jma-eng/satellite/ds.html)

This page shows a table sorted by imagery type (available to NMHSs) and dissemination method. Currently, there are ten combinations of imagery and method, including those provided by third parties (the Australian BoM and the Japanese Aerospace Exploration Agency, JAXA). Users wishing to obtain HRIT data through the Internet (via a JDDS server) should click on "Available," which brings up a web page introducing landline HRIT dissemination via the Internet (FTP). The page shows (1) the main characteristics, (2) how to use the HRIT landline dissemination service, and (3) contact details for the service. Further technical details can be found on JMA's websites at http://www.jma.go.jp/jma/jma-eng/satellite/index.html and http://mscweb.kishou.go.jp/. Please feel free to give it a try.

Other services will be introduced in later issues.

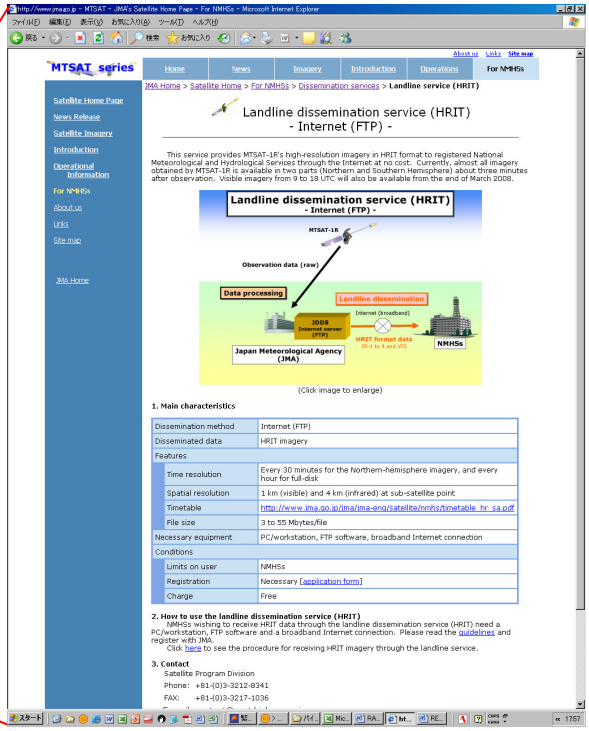

Figure 7 The web page introducing HRIT landline dissemination via the Internet (http://www.jma.go.jp/jma/jma-eng/satellite/nmhs/hrit_in.html)

(Toshiyuki KURINO, JMA)

Training Activities (1)

User Training for Advanced Analysis of COMS (Communication, Ocean and Meteorological Satellite) Data

Since 2007, KMA has hosted a training course for the potential user of COMS (, KMA's first meteorological satellite), data in the Asian-Pacific region with the title of "Advanced Analysis of COMS". In 2009, the third session has been held at KMA headquarter, Seoul, and Korea Meteorological Satellite Center, Jincheon, Chungcheongbuk-do province, Republic of Korea, from 3rd September to 24th September.

This training has been supported by the Korea International Cooperation Agency (KOICA), and 14 participants from 14 countries have participated this year's session. The participating countries are Bangladesh, Cambodia, East-Timor, Fiji, Indonesia, Laos, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Sri Lanka, and Vietnam (in alphabetical order). For reference, 13 trainees from 13 countries in 2007, 13 trainees from 12 countries in 2008 have participated the former sessions.

Figure 8 2008 Training Participants

The main purpose of this training is to provide users the information regarding COMS utilization. Therefore the course is composed of the lectures regarding COMS image data and products, COMS data processing system and utilization, and COMS data service and user stations with introduction of COMS program by the Korean experts on those field. And the course also includes some lectures about various application of earth observing satellite data.

Figure 9 One of the lectures of 2009 Training Program

In the future, it iscould be expected that the achievement of KMA's training course will contribute to the RAII Pilot Project progresses with the cooperation of the participants in the Asian-Pacific region.

COMS is at almost its final stage of development before the launch. KMA plans to continue "the Training for Advanced Analysis of COMS data" after the launch of COMS. And in the next issue of Newsletter, the current status of COMS development program will be introduced.

(Jae-Gwang WON, KMA)

News on Satellites (1) Plan for Switchover of Imaging Function from MTSAT-1R (Himawari-6) to MTSAT-2 (Himawari-7)

MTSAT-1R (Himawari-6), launched on 26 February 2005, has been operating its imaging function in geostationary orbit at 140 degrees east since 28 June 2005. The Japan Meteorological Agency (JMA) plans to switch operational use of Himawari-6's imaging function over to that of MTSAT-2 (Himawari-7) in the summer of 2010 when the service period of MTSAT-1R (Himawari-6)'s earth imaging sensor reaches the end of its five-year design lifetime. MTSAT-2 (Himawari-7), launched on 18 February 2006, has been on standby in geostationary orbit at 145 degrees east since 4 September 2006. MTSAT-1R (Himawari-6) will continue its dissemination services for HRIT/LRIT image data to ground stations after the switchover, which is provisionally scheduled for 1 July 2010. A further announcement will be made when the exact date and time of the switchover are determined. More information is available on JMA's Meteorological Satellite Center website at http://mscweb.kishou.go.jp/notice/switch_over_e.htm.

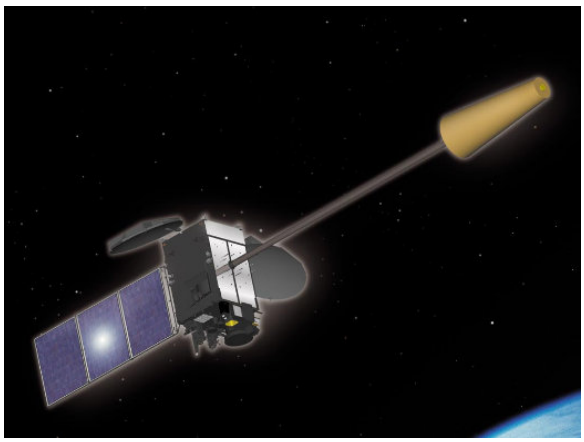

Figure 10 Artist's image of MTSAT-2 (Himawari-7)

(Akihiro SHIMIZU, JMA)

RA II Pilot Project Mailing Lists

Two mailing lists for discussion on the pilot project will soon be set up using the Google Groups service, and will be implemented either through the Google Groups web interface or by e-mail.

One list is for Pilot Project Coordinating Group members who are already registered with the WMO's Regional Office for Asia and the South-West Pacific.

Group name: ra2pp_sat_cg
Group home page:
http://groups.google.com/group/ra2pp_sat_cg
Group email address:
ra2pp_sat_cg@googlegroups.com

An announcement will soon be made from the Google Groups system to individual Pilot Project Coordinating Group.

The other list is for RA II Members in general.

Group name: ra2pp_sat
Group home page:
http://groups.google.com/group/ra2pp_sat
Group email address:
ra2pp_sat@googlegroups.com

A detailed announcement will be made soon by the co-coordinators inviting RA II Members to register for the mailing list.

(Toshiyuki KURINO, JMA, and Jae-Gwang WON, KMA)

First-phase Action Plan of the Pilot Project to Develop Support for NMHSs in Satellite Data, Products and Training

30 September 2009
Pilot Project Coordinating Group

First phase: September 2009 – August 2010

1. Issuance of bi-monthly newsletters for RA II Members (from September 2009)

The contents will include:
- Access to satellite imagery, data and products including application products
- Training activities currently available or to be available in the future
- News on meteorological satellites
- News on new services
- Brief progress reports on the pilot project
- Introduction to the activities of other RAs and WMO VL activities

2. Establishment of pilot project web pages on the WMO Space Programme (WMOSP) website (hosted by WMOSP) (by the end of 2009)

Web pages will include:
- Information on access to satellite imagery, data and products as well as training
- Newsletter archives

3. Creation of a mailing list for RA II Members and another one for Coordinating Group members (by the end of September 2009)

- Collection of opinions on the newsletter, requirements, etc. from RA II Members

4. Identification of requirements through the above activities and by preparing for a survey of RA II Members in order to organize assistance to recipient Members (by August 2010)

5. Alignment of pilot project activities with Virtual Lab activities to optimize assistance to NMHSs in RA II (by August 2010)

- Ongoing liaison with the WMO Secretariat and the VL Secretariat (EUMETSAT) for information sharing in order to optimize assistance to NMHSs while avoiding duplication of effort

6. Creation of a second-phase working plan (by summer 2010)

- Identification of possible imagery, data and products
- Identification of possible training activities

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From the Co-editors

The newsletter will be jointly edited by co-coordinators Jae-Gwang WON and Toshiyuki KURINO (referred to as *the co-editors*). The co-editors invite contributions to the newsletter. Although it is assumed that the major contributors for the time being will be satellite operators, we also welcome articles (short contributions of less than a page are fine) from all RA II Members, regardless of whether they are registered with the WMO Secretariat as members of the Pilot Project Coordinating Group. Topics could include, for example, satellite-related activities, such as how Members have used satellite data to improve weather/climate products. Please bear in mind that this publication is not a technical journal; rather, it is aimed at sharing the latest satellite-related information in areas such as imagery, data, products and training. At the request of RA II Members, topics could be extended to more professional areas such as remote sensing for nowcasting, weather prediction, climate change and satellite product retrieval.

The focus of this pilot project is *direct and timely provision of satellite-related information by satellite operators themselves* to users – NMHSs in RA II, especially developing countries including LDCs.

We look forward to receiving your contributions to the newsletter.

(*Toshiyuki KURINO, JMA, and Jae-Gwang WON, KMA*)

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