CGMS-XXIX JPN-WP-05 Prepared by Japan Agenda Item G.1 Discussed in Plenary

# SCHEDULES OF MTSAT-1R OBSERVATIONS AND IMAGE DATA DISSEMINATION

This document describes the schedules of MTSAT-1R observations and image data dissemination.

Draft schedules of observation and image data dissemination are shown in Attachment-1 and -2.

# Schedules of MTSAT-1R Observations and Image Data Dissemination

#### 1. Introduction

The Multi-functional Transport Satellite-1 Replacement (MTSAT-1R), which is the successor to the Geostationary Meteorological Satellite-5 (GMS-5) and the replacement of MTSAT, is planned to be started its operation from the summer of 2003.

This document describes the draft schedule of observation and image data dissemination of MTSAT-1R.

#### 2. Observation Schedule

The observation schedule of MTSAT-1R will consist of hourly full disk observation, hourly north hemisphere observation, and 6 hourly northern/southern hemisphere observation for deriving cloud/water vapor motion wind vectors. Draft schedules are shown in Attachment-1 and -2. It is possible to obtain half-hourly image data for north hemisphere and 6 hourly wind vectors from three successive 15-minute interval images.

#### 3. Image Data Dissemination Schedule

#### **3.1 Data Dissemination Service for MDUS**

High Resolution Imager Data (HiRID) service will be started as a replacement of S-VISSR to be transmitted for the Medium-scale Data Utilization Stations (MDUSs). As HiRID format is upper compatible with S-VISSR format, existing MDUSs can receive and process HiRID without any modification.

High Rate Information Transmission (HRIT) service is planned to start in March 2005 for dissemination service of original resolution imagery, i.e. 1 km for visible and 4 km for infrared, without any reduction of radiometric capability of imager of MTSAT-1R to MDUSs. Since a communication link and data format are totally different from S-VISSR or HiRID, users need to install a new receiving system or change the receiver and the data processing software of the existing system.

During the period of about three years from March 2005 to the end of the meteorological mission of MTSAT-1R, HiRID and HRIT will be available via the same frequency band according to a time-shared broadcasting schedule (see Attachment-1 and -2).

#### **3.2 Data Dissemination Service for SDUS**

Law Rate Information Transmission (LRIT) will be put into operation in the summer of 2003, and a digital transmission service of cloud imageries and meteorological data to SDUSs will start. The meteorological data to be disseminated by LRIT includes numerical weather predictions (Grid Point Values), synoptic/upper-air observations and meteorological bulletins such as tropical cyclone advisories.

The current WEFAX dissemination service is also continued until March 2005.

However, the broadcast schedule for MTSAT-1R is planned to be changed slightly. WEFAX service will be terminated in March 2005.

LRIT and WEFAX services will be available via the same frequency band according to a time-shared broadcasting schedule until March 2005 (see Attachment-1 and -2).

## 4. Relevant Documentations

Detailed information of LRIT, HiRID and HRIT are available in the following documentations:

(1) JMA LRIT Mission Specific Implementation (Issue 5, 1 December 2000),

- (2) MTSAT HiRID Technical Information (Issue 3, 1 June 1999),
- (3) JMA HRIT Mission Specific Implementation (Issue 1.1, 1 December 2000).

The Japan Meteorological Agency (JMA) will deliver further information when it is available.

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Attachment-1

Time 00 10   (UTC) (UTC) (UTC) (UTC)	20	30 40	50 60
$\begin{array}{c} 00\\ 06\end{array}$ Obs. SD00-1	SD00-2	FD01-1	
(06) (12)MDUS HIRID SD 00 (18) <sub>SDUS</sub> LRIT	-1 HiRID SD 00-2	HiRID FD 01-1	
(18) <sub>SDUS</sub> LRIT	WEFAX	LRI	T
	ШИ		
01 Obs. ND01-1	НК	FD02-1	
(13) <sup>MDUS</sup> HiRID ND 01		HiRID FD 02-1	
(19) <sub>SDUS</sub> LRIT	WEFAX	LRI	Т
02 Obs. ND02-1		FD03-1	
(08) (14)MDUS HiRID ND 02	2-1	HiRID FD 03-1	
(20)	WEFAX	LRIT	
03 Obs. ND03-1 (09) (15) <sup>MDUS</sup> HiRID ND 03		FD04-1	
(15) <sup>MDUS</sup> HiRID ND 03	3-1	HiRID FD 04-1	
(21) <sub>SDUS</sub>	WEFAX	LRI	T
04 Obs. ND04-1 (10) (16)MDUS HiRID ND 04		FD05-1	
(22)		HiRID FD 05-1	
(22) <sub>SDUS</sub> LRIT	WEFAX	LRIT	
05 Obs. ND05-1	ND05-2	FD06-1	
(17) <sup>MDUS</sup> HIRID ND 03	i-1 HiRID ND 05-2	2 HiRID FD 06-1	
(22)	WEFAX	LRIT	

# MTSAT-1R Observation and Dissemination Schedule for 2003-2004 (Draft)

Legend:

- FD• Full Disk
- ND Northern half Disk

SD • Southern half Disk

Remark:

Observation schedule will be modified to adjust new imager of MTSAT-1R.

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Attachment-2

Time (UTC) 00 10   00 0 10   00 0 SD00-1	20 SD00-2	30 40	50 60
(06) (12) MDUS HRIT (12) SDUS HRIT HIRID SD 00-1	HRIT SD 00-1 HiRID SD 00-2	HRIT SD 00-2 LRIT	ID FD 01-1 HRIT FD01-1
01 Obs. ND01-1	НК	I I I	FD02-1
(07) (13) MDUS HRIT FD01-1 HiRID ND 01-1	HRIT ND 01-1	Hir	ID FD 02-1 HRIT FD02-1
(19) <sub>SDUS</sub>		LRIT	
02 <sub>Obs.</sub> ND02-1		I	FD03-1
$(08) \\ (14) MDUS \qquad HRIT \\ FD02-1 \qquad HiRID ND 02-1$	HRIT ND 02-1	HiF	ID FD 03-1 HRIT FD03-1
(20) <sub>SDUS</sub>		LRIT	
03 Obs ND03-1		I	FD04-1
U3 ND03-1   (09) HRIT   (15) MDUS	HRIT ND 03-1		ID FD 04-1 HRIT FD04-1
(15) (21) SDUS	ND 03-1	LRIT	<u>1'D0+-1</u>
	1		
04 Obs. ND04-1 (10) HRIT WIRD VIE 644			5D05-1
$\begin{array}{c} (10) \\ (16) \\ (16) \\ (22) \\ sDUS \end{array} \qquad HRIT \\ HiRID ND 04-1 \\ HiRID ND 04$	HRIT ND 04-1		ID FD 05-1 HRIT FD05-1
		LRIT	
05 <sub>Obs.</sub> ND05-1	ND05-2	F	D06-1
$(11) \\ (17) MDUS \qquad HRIT \\ HiRID ND 05-1$	HRIT ND 05-1 HiRID ND 05-2	HRIT ND 05-2 HiF	ID FD 06-1 HRIT FD06-1
(23) <sub>SDUS</sub>		LRIT	

# MTSAT-1R Observation and Dissemination Schedule for 2005-2007 (Draft)

Legend:

FD • Full Disk

ND • Northern half Disk

SD • Southern half Disk

Remark:

Observation schedule will be modified to adjust new imager of MTSAT-1R.