

# MTSAT Monthly Operations Report

## March 2006

### 1. Events of special operation

#### 1.1 Eclipse Operation

Spring Eclipse and Sun Avoidance (SA) Operation of MTSAT-1R was performed from March 1 through March 31.

#### 1.2 Solar-interference Operation

Solar-interference Operation was performed from March 3 through March 9.

#### 1.3 System maintenance

There was no system maintenance that affects MTSAT-1R operation.

### 2. Image observations and dissemination

#### 2.1 HiRID and HRIT image dissemination

Spring Eclipse and Sun Avoidance (SA) Operation of MTSAT-1R was performed from March 1 through 31. On account of this, the following MTSAT-1R observation and image dissemination were changed from full disk observation to northern hemisphere observation:  
F15 and F16 from March 1 through March 4.

For the same reason, the following MTSAT-1R observation and image dissemination were canceled:  
N14, F15, N15 and F16 from March 5 through March 31.

The following tables show the performance of HiRID and HRIT image dissemination and the summary of its canceled dissemination. Data dissemination was performed according to the schedule except the cancellation shown below.

Performance of HiRID and HRIT image dissemination

	HiRID	HRIT	Remarks
Scheduled	1628	1628	
Performed	1622	1625	
Performance in %	99.6	99.8	

Summary of canceled HiRID and HRIT image dissemination

Date	HiRID	HRIT	Reasons
March 9	N10-N11	None	Ground system trouble at CDAS (the <u>C</u> ommand and <u>D</u> ata <u>A</u> cquisition <u>S</u> tation)
March 28	N19-N20	N19-N20	Problem with JAMI. ( <u>J</u> apanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)

2.2 LRIT image dissemination

Because of the operation described in 2.1, following LRIT image dissemination was changed from full disk observation to northern hemisphere observation:  
D1-F15 and D1-F16 from March 1 through March 4.

For the same reason the following LRIT image dissemination was canceled:  
PS-N14, F15, N15, F16 and D1-F15, F16 from March 5 through March 31.

The following tables show the performance of LRIT image dissemination and the summary of its canceled dissemination. Data dissemination was performed according to the schedule except the cancellation shown below.

Performance of LRIT image dissemination

	LRIT	Remarks
Scheduled	2070	
Performed	2066	
Performance in %	99.8	

Summary of canceled LRIT image dissemination

Date	LRIT	Reasons
March 28	PS-N19-D1-F20	Problem with JAMI. ( <u>J</u> apanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)

2.3 WEFAX image dissemination

Because of the operation described in 2.1, following WEFAX image dissemination was cancelled:

C/D-15 from March 1 through March 4.

H/J-14, 15,16 and A/B/C/D-15 from March 5 through March 31.

The following tables show the performance of WEFAX image dissemination and the summary of its canceled dissemination. Data dissemination was performed

according to the schedule except the cancellation shown below.

Performance of WEFAX image dissemination

	WEFAX	Remarks
Scheduled	2450	
Performed	2448	
Performance in %	99.9	

Summary of canceled WEFAX image dissemination

Date	WEFAX	Reasons
March 28	H/J-20	Problem with JAMI. (Japanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)

2.4 HRIT image dissemination via landline

Because of the operation described in 2.1, following HRIT image dissemination via landline was changed from full disk observation to northern hemisphere observation:

F15 and F16 from March 1 through March 4.

For the same reason, the following HRIT image dissemination was canceled:  
F15 and F16 from March 5 through March 31.

The following tables show the performance of HRIT image dissemination via landline and the summary of its canceled dissemination. Data dissemination was performed according to the schedule except the cancellation shown below.

Performance of HRIT image dissemination via landline

	HRIT	Remarks
Scheduled	5488	
Performed	5480	
Performance in %	99.8	

Summary of canceled HRIT image dissemination via landline

Date	HRIT	Reasons
March 28	F20	Problem with JAMI. (Japanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)

### 3. Data Collection System

#### 3.1 International Data Collection System (IDCS)

The following table shows the status of reception and dissemination of messages.

Reception and dissemination of messages

IDCP channel	Number of IDCPs <sup>a)</sup>	Received messages	Format errors <sup>b)</sup>	Non WMO codes <sup>c)</sup>	Disseminated messages to the GTS
I06	14	0	0	0	0
I07	22	0	0	0	0
I10	3	0	0	0	0
I14	3	0	0	0	0
I15	7	731	0	731	0
I16	5	0	0	0	0
I18 (ASDAR)	7	277	34	0	243
I20	3	0	0	0	0
Total	64	1008	34	731	274

- a) Number of DCPs registered to MTSAT-1R IDCS as of March 1, 2005.
- b) DCS system did not process reports because the reporting DCPs were out of the responsible area of MTSAT-1R.
- c) There was no message or the message was unsuited to the WMO codes. The DCP data processing software at MSC detected "DATA BUFFER EMPTY" or "NO MESSAGE."

#### 3.2 Interference on IDCP channels

Table 1 shows the interference on MTSAT International Data Collection System (IDCS) channels experienced the period March 2006.

Table 1 Interference on MTSAT IDCS Channels Mar. 2006)

Channel	1	2	3	4	5	6	7	8	9	10	11
Interference	W										

Channel	12	13	14	15	16	17	18	19	20	21	22
Interference											

Channel	23	24	25	26	27	28	29	30	31	32	33
Interference											S

S: severe interference  
W: weak interference

#### 4. Satellite system status

##### 4.1 Satellite status

MTSAT-1R was located at 140 degrees east and continued to provide its operational services.

##### 4.2 Maneuver

East-west station-keeping maneuver of MTSAT-1R

07:14 UTC March 11

##### 4.3 Orbit elements of MTSAT-1R

The orbit elements of MTSAT-1R are shown in the following table.

Epoch 06:35:18.88 UTC April 19, 2006

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42165.937335
	Eccentricity (e)	-	0.000293910
	Inclination (I)	Degree	0.073229
	Right ascension of ascending node ( $\Omega$ )	Degree	55.364023
	Argument of perigee ( $\omega$ )	Degree	2.129320
	Mean anomaly (M)	Degree	28.888525