# MTSAT Monthly Operations Report

# February 2006

## 1. Events of special operation

1.1 Eclipse Operation

Spring Eclipse and Sun Avoidance (SA) Operation of MTSAT-1R was performed from February 11 through February 28.

1.2 Solar-interference Operation There was no Solar-interference Operation of MTSAT-1R.

#### 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 February 11 through 28. On account of this, the following MTSAT-1R observation and image dissemination were changed into notrhern hemisphere observation:

F15 from February 11 through February 19, and

F15 and F16 from February 20 through February 28.

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.

		8	
	HiRID	HRIT	Remarks
Scheduled	1568	1568	
Performed	1568	1568	
Performance in %	100.0	100.0	

Performance of HiRID and HRIT image dissemination

#### Summary of canceled HiRID and HRIT image dissemination

Date	HiRID	HRIT	Reasons
	None	None	

### 2.2 LRIT image dissemination

Because of the operation described in 2.1, following LRIT image dissemination was changed into notrhern hemisphere observation:D1-F15 from February 11 through February 19, andD1-F15 and D1-F16 from February 20 through February 28.

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.

	LRIT	Remarks
Scheduled	2016	
Performed	2014	
Performance in %	99.90	

#### Performance of LRIT image dissemination

#### Summary of canceled LRIT image dissemination

Date	LRIT	Reasons
February 20	PS-F07, D1-F07	Trouble of ground system

#### 2.3 WEFAX image dissemination

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

C/D-15 from February 11 through February 28.

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.

	WEFAX	Remarks
Scheduled	2428	
Performed	2426	
Performance in %	99.9	

Performance of WEFAX image dissemination

Date	WEFAX	Reasons
February 20	H/I-07	Trouble of ground system

### Summary of canceled WEFAX image dissemination

## 2.4 HRIT image dissemination via landline

Because of the operation described in 2.1, following HRIT image dissemination via landline was changed into notrhern hemisphere observation:

F15 from February 11 through February 19, and

F15 and F16 from February 20 through February 28.

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.

	HRIT	Remarks
Scheduled	5268	
Performed	5260	
Performance in %	99.8	

#### Performance of HRIT image dissemination via landline

	2	e
Date	HRIT	Reasons
February 20	F07	Trouble of ground system

## Summary of canceled HRIT image dissemination via landline

# 3. Data Collection System

## 3.1 International Data Collection System (IDCS)

The following table shows the status of 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	523	0	523	0
I16	5	0	0	0	0
I18 (ASDAR)	7	313	39	0	274
I20	3	0	0	0	0
Total	64	836	39	523	274

Reception	and	dissem	ination	of	messages
reception	unu	anssenn	mation	01	messages

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 February 2006.

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

 Table 1
 Interference on MTSAT IDCS Channels (Feb. 2006)

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

North-south station-keeping maneuver of MTSAT-1R 00:56 UTC February 5

East-west station-keeping maneuver of MTSAT-1R 07:14 UTC February 12

# 4.3 Orbit elements of MTSAT-1R

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

#### Epoch 03:00:0.00 UTC March 29, 2006

	Element	Unit	Value	
Orbit	Semi-major axis (a)	km	42168.306626	
	Eccentricity (e)	-	0.000303426	
	Inclination (I)	Degree	0.029414	
	Right ascension of ascending node ( $\Omega$ )	Degree	43.607059	
	Argument of perigee ( $\omega$ )	Degree	334.604655	
	Mean anomaly (M)	Degree	353.440969	