

# MTSAT Monthly Operations Report

## February 2007

### 1. Events of special operation

#### 1.1 Eclipse Operation

Spring Eclipse and Sun Avoidance Operation of MTSAT-1R was performed from February 16 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

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	1560	1564	
Performed	1558	1562	
Performance in %	99.87	99.87	

Summary of canceled HiRID and HRIT image dissemination

Date	HiRID	HRIT	Reasons
February 3	N17, N17W	N17, N17W	Ground system trouble

#### 2.2 LRIT image dissemination

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	2014	
Performed	2013	
Performance in %	99.95	

Summary of canceled LRIT image dissemination

Date	LRIT	Reasons
February 3	PS-N17	Ground system trouble

2.3 WEFAX image dissemination

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.

Performance of WEFAX image dissemination

	WEFAX	Remarks
Scheduled	2464	
Performed	2463	
Performance in %	99.96	

Summary of canceled WEFAX image dissemination

Date	WEFAX	Reasons
February 15	H-05	Ground system trouble

2.4 HRIT image dissemination via landline

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.

Performance of HRIT image dissemination via landline

	HRIT	Remarks
Scheduled	5376	
Performed	5376	
Performance in %	100.00	

Summary of canceled HRIT image dissemination via landline

Date	HRIT	Reasons
	None	

### 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
I12	3	0	0	0	0
I14	3	0	0	0	0
I15	7	0	0	0	0
I16	5	0	0	0	0
I18 (ASDAR)	7	0	0	0	0
I20	3	0	0	0	0
Total	64	0	0	0	0

- 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 2007.

Table 1 Interference on MTSAT IDCS Channels (Feb. 2007)

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			W	W							H

W: weak interference  
H : harmful 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 February 7

North- south station-keeping maneuver of MTSAT-1R  
00:56 UTC February 3

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

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

Epoch 08:00:0.00 UTC March 21, 2007

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42165.404619
	Eccentricity (e)	-	0.000253471
	Inclination (I)	Degree	0.019579
	Right ascension of ascending node ( $\Omega$ )	Degree	80.135503
	Argument of perigee ( $\omega$ )	Degree	278.955337
	Mean anomaly (M)	Degree	63.048192