

MTSAT Monthly Operations Report

March 2007

1. Events of special operation

1.1 Eclipse Operation

Spring Eclipse and Sun Avoidance Operation of MTSAT-1R was performed from March 10 through March 31.

1.2 Solar-interference Operation

Solar-interference Operation was performed from March 3 through March 10.

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	1733	1733	
Performed	1729	1729	
Performance in %	99.77	99.77	

Summary of canceled HiRID and HRIT image dissemination

Date	HiRID	HRIT	Reasons
March 13	None	S06,S06W,F07,N07	Radio frequency interference
March 25	N05W,F06,S06,S06W	None	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	2232	
Performed	2232	
Performance in %	100.00	

Summary of canceled LRIT image dissemination

Date	LRIT	Reasons
	None	

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	2728	
Performed	2728	
Performance in %	100.00	

Summary of canceled WEFAX image dissemination

Date	WEFAX	Reasons
	None	

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.

Note: Number of performance has increased, because this program has begun the dissemination of visible image data from F06 of March 5, 2007.

Performance of HRIT image dissemination via landline

	HRIT	Remarks
Scheduled	10517	
Performed	10517	
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 ^{a)}	Received messages	Format errors ^{b)}	Non WMO codes ^{c)}	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	524	524	0	0
I16	5	0	0	0	0
I18	0	0	0	0	0
I20	3	0	0	0	0
Total	64	524	524	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."
- d) ASDAR program was terminated on February 20, 2007. Currently, there is no IDCP registration using I18 channel.

3.2 Interference on IDCP channels

Table 1 shows the interference on MTSAT International Data Collection System (IDCS) channels experienced the period March 2007.

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

Channel	1	2	3	4	5	6	7	8	9	10	11
Interference		W							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											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
08:14 UTC March 5

East-west station-keeping maneuver of MTSAT-1R
07:14 UTC March 29

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 April 11, 2007

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42165.979214
	Eccentricity (e)	-	0.000224031
	Inclination (I)	Degree	0.067259
	Right ascension of ascending node (Ω)	Degree	76.154044
	Argument of perigee (ω)	Degree	329.403540
	Mean anomaly (M)	Degree	53.926378