

MTSAT Monthly Operations Report

March 2010

1. Special operation events

1.1 Eclipse operation

MTSAT-1R spring eclipse and sun avoidance operation were performed from March 1 through March 31.

1.2 Solar-interference operation

MTSAT-1R solar-interference operation was performed from March 3 through March 9.

2. Imagery dissemination

2.1 High Rate Information Transmission (HRIT) imagery via MTSAT-1R

HRIT dissemination via MTSAT-1R was performed according to the regular schedule. The following tables show the performance of HRIT dissemination and a summary of canceled HRIT dissemination during March 2010.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1731	
Performed	1727	
Performance in %	99.77	

Summary of canceled HRIT dissemination via MTSAT-1R

Date	HRIT	Reasons
March 9	F13, F15, N15, F16	Low receiving level on antenna by heavy snow fall

2.2 Low Rate Information transmission (LRIT) imagery via MTSAT-1R

LRIT dissemination via MTSAT-1R was performed according to the regular schedule. The following tables show the performance of LRIT dissemination and a summary of canceled LRIT dissemination during March 2010.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2225	
Performed	2218	
Performance in %	99.69	

Summary of canceled LRIT dissemination via MTSAT-1R

Date	LRIT	Reasons
March 9	PS-F13, PS-F15, PS-F16 D1-F13, D1-F15, D1-F16 PS-N15	Low receiving level on antenna by heavy snow fall

2.3 HRIT imagery via landline

HRIT dissemination via landline was performed according to the regular schedule. The following tables show the performance of its dissemination and a summary of canceled HRIT dissemination during March 2010.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	12360	
Performed	12325	
Performance in %	99.72	

Summary of canceled HRIT dissemination via landline

Date	HRIT	Reasons
March 9	F13, F15, N15, F16	Low receiving level on antenna by heavy snow fall

3. Data Collection System

3.1 International Data Collection System (IDCS)

The following table shows the status of reception and dissemination of International Data Collection Platform (IDCP) messages that were received in MTSAT-1R's area of responsibility.

Reception and dissemination of IDCP messages

IDCP channels	Numbers of IDCPs ^{a)}	Received messages	Error messages ^{b)}	Messages disseminated to the GTS
I06	0	0	0	0
I07	0	0	0	0
I12	3	0	0	0
I14	0	0	0	0
I15	2	283	283	0
I16	4	0	0	0
I18	0	0	0	0
I20	2	0	0	0
Total	11	283	283	0

a) IDCP numbers are those registered in MTSAT-DCS as of March 1, 2010.

b) No message, or message unsuitable for WMO codes.

3.2 Interference on IDCP channels

The following table shows interference on MTSAT International Data Collection System (IDCS) channels that occurred during March 2010.

Interference on MTSAT IDCS Channels (March 2010)

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

Note - W: weak interference / H: harmful interference

4. Satellite system status

4.1 Satellite status

MTSAT-1R is located at longitude 140 east and continues to provide operational services.

4.2 Maneuver

- 1) An east-west station-keeping maneuver of MTSAT-1R was carried out from 07:14 UTC on March 5, 2010.
- 2) An east-west station-keeping maneuver of MTSAT-1R was carried out from 08:14 UTC on March 18, 2010.

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 on April 15, 2010

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42163.901894
	Eccentricity (e)	-	0.000299461
	Inclination (I)	Degree	0.068294
	Right ascension of ascending node (Ω)	Degree	197.705263
	Argument of perigee (ω)	Degree	192.339664
	Mean anomaly (M)	Degree	73.429251