

# MTSAT Monthly Operations Report

## April 2010

### 1. Special operation events

#### 1.1 Eclipse operation

MTSAT-1R spring eclipse and sun avoidance operation were performed from April 1 through April 20.

#### 1.2 Solar-interference operation

There was no MTSAT-1R solar-interference operation during April 2010.

### 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 April 2010.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1660	
Performed	1660	
Performance in %	100.00	

Summary of canceled HRIT dissemination via MTSAT-1R

Date	HRIT	Reasons
	None	

## 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 April 2010.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2129	
Performed	2129	
Performance in %	100.00	

Summary of canceled LRIT dissemination via MTSAT-1R

Date	LRIT	Reasons
	None	

## 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 April 2010.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	11845	
Performed	11845	
Performance in %	100.00	

Summary of canceled HRIT 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 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 <sup>a)</sup>	Received messages	Error messages <sup>b)</sup>	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	717	717	0
I16	4	0	0	0
I18	0	0	0	0
I20	2	0	0	0
Total	11	717	717	0

a) IDCP numbers are those registered in MTSAT-DCS as of April 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 April 2010.

Interference on MTSAT IDCS Channels (April 2010)

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											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 April 3, 2010.
- 2) A north-south station-keeping maneuver of MTSAT-1R was carried out from 18:56 UTC on April 9, 2010.
- 3) An east-west station-keeping maneuver of MTSAT-1R was carried out from 04:14 UTC on April 12, 2010.
- 4) A north-south station-keeping maneuver of MTSAT-1R was carried out from 18:56 UTC on April 20, 2010.
- 5) An east-west station-keeping maneuver of MTSAT-1R was carried out from 04:14 UTC on April 24, 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 May 15, 2010

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42164.191510
	Eccentricity (e)	-	0.000263183
	Inclination (I)	Degree	0.072855
	Right ascension of ascending node ( $\Omega$ )	Degree	222.913655
	Argument of perigee ( $\omega$ )	Degree	191.357922
	Mean anomaly (M)	Degree	78.757830