

# MTSAT Monthly Operations Report

## February 2011

### 1. Special operation events

#### 1.1 Eclipse operation

MTSAT-2 spring eclipse operation was performed from February 15 through February 28.

#### 1.2 Solar-interference operation

There was no solar-interference operation of MTSAT-2.

### 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 February 2011.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1565	
Performed	1564	
Performance in %	99.94	

Summary of canceled HRIT dissemination via MTSAT-1R

Date	HRIT	Reasons
February 14	N13	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 February 2011.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2683	
Performed	2682	
Performance in %	99.96	

Summary of canceled LRIT dissemination via MTSAT-1R

Date	LRIT	Reasons
February 14	N13	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 February 2011.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	11180	
Performed	11170	
Performance in %	99.91	

Summary of canceled HRIT dissemination via landline

Date	HRIT	Reasons
February 14	F13(South hemisphere), N13	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 <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	672	672	0
I16	4	0	0	0
I18	0	0	0	0
I20	2	0	0	0
Total	11	672	672	0

a) IDCP numbers are those registered in MTSAT-DCS as of February 1, 2011.

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 February 2011.

Interference on MTSAT IDCS Channels (February 2011)

Channel	1	2	3	4	5	6	7	8	9	10	11
Interference											
Channel	12	13	14	15	16	17	18	19	20	21	22
Interference						W					
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-2 located at longitude 145 east is performing the observation operation, and MTSAT-1R located at longitude 140 east is operating telecommunication services such as data dissemination and DCP data relay.

##### 4.2 Maneuver

- 1) A north-south station-keeping maneuver of MTSAT-2 was carried out from 22:02 UTC on February 2, 2011.
- 2) An east-west station-keeping maneuver of MTSAT-2 was carried out from 02:16 UTC on February 9, 2011.
- 3) A north-south station-keeping maneuver of MTSAT-2 was carried out from 22:02 UTC on February 16, 2011.

##### 4.3 Orbit elements of MTSAT-1R/2

The orbit elements of MTSAT-2 are shown in the following table.

Epoch 10:00:0.00 UTC on March 2, 2011 – MTSAT-2

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42164.484800
	Eccentricity (e)	-	0.000212234
	Inclination (I)	Degree	0.039282
	Right ascension of ascending node ( $\Omega$ )	Degree	142.776409
	Argument of perigee ( $\omega$ )	Degree	216.435395
	Mean anomaly (M)	Degree	95.605802