# MTSAT Monthly Operations Report November 2013

## 1. Special operation events

#### 1.1 Eclipse operation

There was no Eclipse Operation of MTSAT-1R.

# 1.2 Solar-interference operation

There was no Solar-interference Operation of MTSAT-1R.

#### 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 November 2013.

#### Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1679	
Performed	1679	Observed by MTSAT-1R
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 November 2013.

#### Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2880	
Performed	2880	Observed by MTSAT-1R
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 November 2013.

#### Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	11995	
Performed	11995	Observed by MTSAT-1R
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 a)	Received messages	Error messages b)	Massages 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	0	0	0
I16	4	0	0	0
I18	0	0	0	0
I20	2	0	0	0
Total	11	0	0	0

a) IDCP numbers are those registered in MTSAT-DCS as of November 1, 2013.

#### 3.2 Interference on IDCP channels

The following table shows interference on MTSAT International Data Collection System (IDCS) channels that occurred during November 2013.

Interference on MTSAT IDCS Channels (November 2013)

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											
Channel	23	24	25	26	27	28	29	30	31	32	33
Interference	Н	Н									Н

Note - W: weak interference / H: harmful interference

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

#### 4. Satellite system status

#### 4.1 Satellite status

MTSAT-1R located at longitude 140 east was performing the observation operation instead of MTSAT-2 because of the ground system maintenance from November 1 through November 30. In addition, MTSAT-1R was operating telecommunication services such as data dissemination and DCP data relay. MTSAT-2 was on standby at longitude 145 east in this period.

#### 4.2 Maneuver

- 1) A north-south station-keeping maneuver of MTSAT-1R was carried out from 03:56 UTC on November 2, 2013.
- 2) An east-west station-keeping maneuver of MTSAT-1R was carried out from 04:14 UTC on November 13, 2013.
- 3) An east-west station-keeping maneuver of MTSAT-1R was carried out from 10:14 UTC on November 25, 2013.

#### 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 December 2, 2013 – MTSAT-1R

	Element	Unit	Value
	Semi-major axis (a)	km	42164.014767
	Eccentricity (e)	-	0.000193585
Orbit	Inclination (I)	Degree	0.016913
Orbit	Right ascension of ascending node $(\Omega)$	Degree	39.933105
	Argument of perigee (ω)	Degree	257.745723
	Mean anomaly (M)	Degree	33.618025