

MTSAT Monthly Operations Report

November 2014

1. Special operation events

1.1 Equinox operation

There was no equinox operation of both MTSAT-1R and MTSAT-2.

1.2 Solar-interference operation

There was no solar-interference operation of both MTSAT-1R and 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 November 2014.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1679	
Performed	1679	Observed by MTSAT-1R and MTSAT-2
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 2014.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2880	
Performed	2880	Observed by MTSAT-1R and MTSAT-2
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 2014.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	11995	
Performed	11995	Observed by MTSAT-1R and MTSAT-2
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)}	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	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 1 November, 2014.

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 November 2014.

Interference on MTSAT IDCS Channels (November 2014)

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 and MTSAT-1R located at longitude 140 east were performing the observation operation during periods shown in the following table. In addition, MTSAT-1R was operating telecommunication services such as data dissemination and DCP data relay.

Status of observation operation

Satellite	Period(s) of observation	Remarks
MTSAT-1R	Nov. 10 – Nov. 28	ground system maintenance (10 Nov. – 28 Nov.)
MTSAT-2	Nov. 1 – Nov. 10 Nov. 28 – Nov. 30	

4.2 Maneuver

- 1) A north-south station-keeping maneuver of MTSAT-1R was carried out from 02:56 UTC on 20 November, 2014.

4.3 Orbit elements of MTSAT-1R/2

The orbit elements of MTSAT-1R and MTSAT-2 are shown in the following table.

Epoch 08:00:0.00 UTC on 8 December, 2014 – MTSAT-1R

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42164.308257
	Eccentricity (e)	-	0.000315257
	Inclination (I)	Degree	0.026186
	Right ascension of ascending node (Ω)	Degree	93.155458
	Argument of perigee (ω)	Degree	196.855930
	Mean anomaly (M)	Degree	46.918830

Epoch 00:00:0.00 UTC on 4 December, 2014 – MTSAT-2

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42166.513100
	Eccentricity (e)	-	0.000447360
	Inclination (I)	Degree	0.018366
	Right ascension of ascending node (Ω)	Degree	47.963558
	Argument of perigee (ω)	Degree	203.173872
	Mean anomaly (M)	Degree	326.607029