

MTSAT Monthly Operations Report

February 2014

1. Special operation events

1.1 Equinox operation

MTSAT-2 spring equinox operation was performed from February 14 to 28 February.

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 2014.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1565	
Performed	1559	Observed by MTSAT-2
Performance in %	99.6	

Summary of canceled HRIT dissemination via MTSAT-1R

Date	HRIT	Reasons
14 February	N19, F20, N20, F22, N22, F23	Failures of MTSAT-2 data reception from satellite due to heavy snowfall on ground station antenna.

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 2014.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2683	
Performed	2671	Observed by MTSAT-2
Performance in %	99.6	

Summary of canceled LRIT dissemination via MTSAT-1R

Date	LRIT	Reasons
14 February	N19, F20, N20, F22, N22, F23	Failures of MTSAT-2 data reception from satellite due to heavy snowfall on ground station antenna.

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 2014.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	11180	
Performed	11135	Observed by MTSAT-2
Performance in %	99.6	

Summary of canceled HRIT dissemination via landline

Date	HRIT	Reasons
14 February	N19, F20, N20, F22, N22, F23	Failures of MTSAT-2 data reception from satellite due to heavy snowfall on ground station antenna.

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 February, 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 February 2014.

Interference on MTSAT IDCS Channels (February 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 was performing the observation operation, and MTSAT-1R located at longitude 140 east was operating telecommunication services such as data dissemination and DCP data relay.

4.2 Maneuver

- 1) An east-west station-keeping maneuver of MTSAT-2 was carried out from 07:16 UTC on 5 February, 2014.
- 2) A north-south station-keeping maneuver of MTSAT-2 was carried out from 22:02 UTC on 12 February, 2014.
- 3) An east-west station-keeping maneuver of MTSAT-2 was carried out from 07:16 UTC on 19 February, 2014.
- 4) A north-south station-keeping maneuver of MTSAT-2 was carried out from 22:02 UTC on 26 February, 2014.

4.3 Orbit elements of MTSAT-1R/2

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

Epoch 20:00:0.00 UTC on 5 March, 2014 – MTSAT-2

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42164.964600
	Eccentricity (e)	-	0.000370778
	Inclination (I)	Degree	0.070416
	Right ascension of ascending node (Ω)	Degree	253.260783
	Argument of perigee (ω)	Degree	81.375083
	Mean anomaly (M)	Degree	273.829235