

MTSAT Monthly Operations Report

January 2013

1. Special operation events

1.1 Eclipse operation

There was no eclipse operation of MTSAT-2.

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 January 2013.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1733	
Performed	1733	Observed by 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 January 2013.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2971	
Performed	2968	Observed by MTSAT-2
Performance in %	99.90	

Summary of canceled LRIT dissemination via MTSAT-1R

Date	LRIT	Reasons
January 5	D0-F14 PS-N14 PS-F15	Failure of MTSAT-2 ground system

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 January 2013.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	12380	
Performed	12380	Observed by 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 January 1, 2013.

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 January 2013.

Interference on MTSAT IDCS Channels (January 2013)

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-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) A north-south station-keeping maneuver of MTSAT-2 was carried out from 01:02 UTC on January 2, 2013.
- 2) A north-south station-keeping maneuver of MTSAT-2 was carried out from 01:02 UTC on January 10, 2013.
- 3) An east-west station-keeping maneuver of MTSAT-2 was carried out from 10:16 UTC on January 23, 2013.

4.3 Orbit elements of MTSAT-1R/2

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

Epoch 11:00:0.00 UTC on February 6, 2013 – MTSAT-2

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42165.972400
	Eccentricity (e)	-	0.000339473
	Inclination (I)	Degree	0.024834
	Right ascension of ascending node (Ω)	Degree	60.182624
	Argument of perigee (ω)	Degree	283.757068
	Mean anomaly (M)	Degree	102.787748