

MTSAT Monthly Operations Report

August 2011

1. Special operation events

1.1 Eclipse operation

MTSAT-2 autumn eclipse operation was performed from August 17 through August 31.

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 August 2011.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1714	
Performed	1709	Observed by MTSAT-2 and MTSAT-1R
Performance in %	99.71	

Summary of canceled HRIT dissemination via MTSAT-1R

Date	HRIT	Reasons
August 3	N01,F02	Failure of MTSAT-2 ground system

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 August 2011.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2925	
Performed	2911	Observed by MTSAT-2 and MTSAT-1R
Performance in %	99.52	

Summary of canceled LRIT dissemination via MTSAT-1R

Date	LRIT	Reasons
August 3	N01,F02	Failure of MTSAT-2 ground system
August 5	F17,N17,F18	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 August 2011.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	12235	
Performed	12205	Observed by MTSAT-2 and MTSAT-1R
Performance in %	99.75	

Summary of canceled HRIT dissemination via landline

Date	HRIT	Reasons
August 3	N01,F02	Failure of MTSAT-2 ground system

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 August 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 August 2011.

Interference on MTSAT IDCS Channels (August 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								H			
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. Meanwhile, MTSAT-1R at longitude 140 east was operating telecommunication services such as data dissemination and DCP data relay.

MTSAT-1R took over the observation operation from MTSAT-2 due to its ground system failure from August 3 through August 16. MTSAT-2 stood by the operation in this period.

4.2 Maneuver

- 1) An east-west station-keeping maneuver of MTSAT-2 was carried out from 14:16 UTC on August 3, 2011.
- 2) A north-south station-keeping maneuver of MTSAT-2 was carried out from 13:02 UTC on August 10, 2011.
- 3) A north-south station-keeping maneuver of MTSAT-2 was carried out from 10:02 UTC on August 24, 2011.
- 4) An east-west station-keeping maneuver of MTSAT-2 was carried out from 16:16 UTC on August 31, 2011.

4.3 Orbit elements of MTSAT-1R/2

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

Epoch 00:00:0.00 UTC on September 8, 2011 – MTSAT-2

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42166.223200
	Eccentricity (e)	-	0.000373464
	Inclination (I)	Degree	0.053347
	Right ascension of ascending node (Ω)	Degree	33.537671
	Argument of perigee (ω)	Degree	85.119311
	Mean anomaly (M)	Degree	13.105907