

MTSAT Monthly Operations Report

December 2009

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 December 2009.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1735	
Performed	1735	
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 December 2009.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2232	
Performed	2232	
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 December 2009.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	12395	
Performed	12395	
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	685	685	0
I16	4	90	90	0
I18	0	0	0	0
I20	2	0	0	0
Total	11	775	775	0

a) IDCP numbers are those registered in MTSAT-DCS as of December 1, 2009.

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 December 2009.

Interference on MTSAT IDCS Channels (December 2009)

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-1R is located at 140 degrees of east longitude and continues to provide operational services.

4.2 Maneuver

- 1) An east-west station-keeping maneuver of MTSAT-1R was carried out from 08:14 UTC on December 5, 2009.
- 2) A north-south station-keeping maneuver of MTSAT-2 was carried out from 01:56 UTC on December 15, 2009.
- 3) An east-west station-keeping maneuver of MTSAT-1R was carried out from 20:14 UTC on December 19, 2009.

4.3 Orbit elements of MTSAT-1R

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

Epoch 08:00:00.00 UTC on January 13, 2010

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42165.118744
	Eccentricity (e)	-	0.000222908
	Inclination (I)	Degree	0.060435
	Right ascension of ascending node (Ω)	Degree	155.983298
	Argument of perigee (ω)	Degree	156.274399
	Mean anomaly (M)	Degree	60.522295