# MTSAT Monthly Operations Report

# September 2009

# 1. Special operation events

1.1 Eclipse operation

MTSAT-1R autumn eclipse and sun avoidance operation were performed from September 1 through September 30.

1.2 Solar-interference operation There was no MTSAT-1R solar-interference operation during September 2009.

### 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 September 2009.

renormance of fixer dissemination via witsAi-ik						
	HRIT	Remarks				
Scheduled	1677					
Performed	1677					
Performance in % 100.00						

#### Performance of HRIT dissemination via MTSAT-1R

#### 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 September 2009.

	LRIT	Remarks
Scheduled	2156	
Performed	2156	
Performance in %	100.00	

#### Performance of LRIT dissemination via MTSAT-1R

# 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 September 2009.

#### Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	11975	
Performed	11975	
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.

IDCP channels	Numbers of IDCPs <sup>a)</sup>	Received messages	Error messages <sup>b)</sup>	Massages 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

#### Reception and dissemination of IDCP messages

a) IDCP numbers are those registered in MTSAT-DCS as of September 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 September 2009.

	interference on MTS/M iDeb channels (September 2007)										
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											
Channel	23	24	25	26	27	28	29	30	31	32	33
Interference											Н

Interference on MTSAT IDCS Channels (September 2009)

Note - W: weak interference / H: harmful interference

### 4. Satellite system status

# 4.1 Satellite status

MTSAT-1R is located at 140 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 September 2, 2009.
- 2) An east-west station-keeping maneuver of MTSAT-1R was carried out from 08:14 UTC on September 19, 2009.

# 4.3 Orbit elements of MTSAT -1R

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

	Element	Unit	Value
	Semi-major axis (a)	km	42165.119952
	Eccentricity (e)	-	0.000276386
Orbit	Inclination (I)	Degree	0.060662
Orbit	Right ascension of ascending node ( $\Omega$ )	Degree	159.043000
	Argument of perigee (ω)	Degree	44.397081
	Mean anomaly (M)	Degree	73.727923

#### Epoch 08:00:0.00 UTC on October 8, 2009