Meteorological Satellite Center
Japan Meteorological Agency

MTSAT Monthly Operations Report

April 2009

1. Special operation events

1.1 Eclipse operation

MTSAT-1R spring eclipse and sun avoidance operation were performed from April 1 through April 21.

1.2 Solar-interference operation

There was no MTSAT-1R solar-interference operation during April 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 April 2009.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1660	
Performed	1660	
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 April 2009.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2129	
Performed	2129	
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 April 2009.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	11845	
Performed	11845	
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)]	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	42	42	0
I16	4	0	0	0
I18	0	0	0	0
I20	2	0	0	0
Total	11	42	42	0

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

Interference on MTSAT IDCS Channels (April 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											
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 east longitude and continues to provide operational services.

4.2 Maneuver

1) A north-south station-keeping maneuver of MTSAT-1R was carried out from 18:56 UTC on April 11, 2009.
2) An east-west station-keeping maneuver of MTSAT-1R was carried out from 04:14 UTC on April 16, 2009.

4.3 Orbit elements of MTSAT-1R

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

Epoch 08:00:0.00 UTC on May 3, 2009

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42165.287182
	Eccentricity (e)	-	0.000210702
	Inclination (I)	Degree	0.061100
	Right ascension of ascending node (Ω)	Degree	163.883665
	Argument of perigee (ω)	Degree	245.153893
	Mean anomaly (M)	Degree	72.395140