Meteorological Satellite Center
Japan Meteorological Agency

MTSAT Monthly Operations Report

July 2010

1. Special operation events

1.1 Switchover of Meteorological Observing Function

MTSAT-2 took over the meteorological observation operation from MTSAT-1R as from 0230 UTC (F03) on July 1, 2010. Regarding image dissemination and DCP data relay operation, MTSAT-1R continuously performed them at 140 E as ever.

1.2 Eclipse operation

There was no Eclipse Operation of MTSAT-2 during July 2010.

1.3 Solar-interference operation

There was no MTSAT-2 solar-interference operation during July 2010.

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 July 2010.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	1734	
Performed	1732	
Performance in %	99.88	

Summary of canceled HRIT dissemination via MTSAT-1R

Date	HRIT	Reasons
July 2	F07, N07	Ground equipment failure

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 July 2010.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	2970	D0-Fnn* began to provide as of F03 on July 1.
Performed	2966	
Performance in %	99.86	

* nn - indicates the hour of observation time

Summary of canceled LRIT dissemination via MTSAT-1R

Date	LRIT	Reasons
July 2	PS-F07, D0-F07, D1-F07, PS-N07	Ground equipment failure

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 July 2010.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	12390	
Performed	12375	
Performance in %	99.88	

Summary of canceled HRIT dissemination via landline

Date	HRIT	Reasons
July 2	F07, N07	Ground equipment failure

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	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 July 1, 2010.
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 July 2010.

Interference on MTSAT IDCS Channels (July 2010)

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-2 located at longitude 145 east began to perform the observation operation from July 1, 2010. MTSAT-1R located at longitude 140 east is 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 15:02 UTC on July 7, 2010.
2) A north-south station-keeping maneuver of MTSAT-2 was carried out from 13:02 UTC on July 14, 2010.
3) An east-west station-keeping maneuver of MTSAT-2 was carried out from 14:16 UTC on July 21, 2010.

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 August 11, 2010

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42164.769089
	Eccentricity (e)	-	0.000223248
	Inclination (I)	Degree	0.055425
	Right ascension of ascending node (Ω)	Degree	182.754120
	Argument of perigee (ω)	Degree	307.941719
	Mean anomaly (M)	Degree	89.070491