Meteorological Satellite Center
Japan Meteorological Agency

# MTSAT Monthly Operations Report

# November 2008

## 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 November 2008.

Performance of HRIT dissemination via MTSAT-1R

| | HRIT | Remarks |
|---|---|---|
| Scheduled | 1679 | |
| Performed | 1678 | |
| Performance in % | 99.94 | |

Summary of canceled HRIT dissemination via MTSAT-1R

| Date | HRIT | Reasons |
|---|---|---|
| November 17 | F02 | Ground system trouble |

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 November 2008.

Performance of LRIT dissemination via MTSAT-1R

| | LRIT | Remarks |
|---|---|---|
| Scheduled | 2160 | |
| Performed | 2158 | |
| Performance in % | 99.91 | |

Summary of canceled LRIT dissemination via MTSAT-1R

| Date | LRIT | Reasons |
|---|---|---|
| November 17 | F02 | Ground system trouble |

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 November 2008.

Performance of HRIT dissemination via landline

| | HRIT | Remarks |
|---|---|---|
| Scheduled | 11995 | |
| Performed | 11985 | |
| Performance in % | 99.92 | |

Summary of canceled HRIT dissemination via landline

| Date | HRIT | Reasons |
|---|---|---|
| November 17 | F02 | Ground system trouble |

## 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 | 176 | 176 | 0 |
| I16 | 4 | 0 | 0 | 0 |
| I18 | 0 | 0 | 0 | 0 |
| I20 | 2 | 0 | 0 | 0 |
| Total | 11 | 176 | 176 | 0 |

a) IDCP numbers are those registered in MTSAT-DCS as of November 1, 2008.
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 November 2008.

Interference on MTSAT IDCS Channels (November, 2008)

| 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 03:56 UTC on November 3, 2008.
2) An east-west station-keeping maneuver of MTSAT-1R was carried out from 07:14 UTC on November 7, 2008.
3) An east-west station-keeping maneuver of MTSAT-1R was carried out from 08:14 UTC on November 24, 2008.
4) A north-south station-keeping maneuver of MTSAT-1R was carried out from 02:56 UTC on November 30, 2008.

## 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 December 13, 2008

| | Element | Unit | Value |
|---|---|---|---|
| Orbit | Semi-major axis (a) | Km | 42164.190595 |
| | Eccentricity (e) | - | 0.000305740 |
| | Inclination (I) | Degrees | 0.057557 |
| | Right ascension of ascending node (Ω) | Degrees | 216.770778 |
| | Argument of perigee (ω) | Degrees | 36.476802 |
| | Mean anomaly (M) | Degrees | 89.214476 |