## MTSAT Monthly Operations Report

## August 2013

1. Special operation events

### 1.1 Eclipse operation

MTSAT-2 autumn eclipse operation was performed from August 17 through August 31.

### 1.2 Solar-interference operation

There was no solar-interference operation of MTSAT-2.
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 August 2013.

Performance of HRIT dissemination via MTSAT-1R

|  | HRIT | Remarks |
| :--- | :---: | :---: |
| Scheduled | 1714 |  |
| Performed | 1714 | Observed by MTSAT-2 |
| 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 August 2013.

Performance of LRIT dissemination via MTSAT-1R

|  | LRIT | Remarks |
| :--- | :---: | :---: |
| Scheduled | 2932 |  |
| Performed | 2932 | Observed by MTSAT-2 |
| 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 August 2013.

Performance of HRIT dissemination via landline

|  | HRIT | Remarks |
| :--- | :---: | :---: |
| Scheduled | 12235 |  |
| Performed | 12235 | Observed by MTSAT-2 |
| 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 <br> channels | Numbers of <br> IDCPs ${ }^{\text {a }}$ | Received <br> messages | Error <br> messages ${ }^{\text {b }}$ | Massages <br> disseminated <br> 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 | 0 | 0 | 0 | 0 |
| I18 | 2 | 0 | 0 | 0 |
| I20 | 11 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 |  |

a) IDCP numbers are those registered in MTSAT-DCS as of August 1, 2013.
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 August 2013.

Interference on MTSAT IDCS Channels (August 2013)

| 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 | H |  |  |  |  |  |  |  |  | H |

Note - W: weak interference / H: harmful interference

## 4. Satellite system status

### 4.1 Satellite status

MTSAT-2 located at longitude 145 east was performing the observation operation, and MTSAT-1R located at longitude 140 east was operating telecommunication services such as data dissemination and DCP data relay.

### 4.2 Maneuver

1) An east-west station-keeping maneuver of MTSAT-2 was carried out from 19:16 UTC on August 16, 2013.
2) A north-south station-keeping maneuver of MTSAT-2 was carried out from 10:02 UTC on August 28, 2013.

### 4.3 Orbit elements of MTSAT-1R/2

The orbit elements of MTSAT-2 are shown in the following table.

Epoch 20:00:0.00 UTC on September 4, 2013 - MTSAT-2

|  | Element | Unit | Value |
| :--- | :--- | :---: | ---: |
| Orbit | Semi-major axis (a) | km | 42163.682800 |
|  | Eccentricity (e) | - | 0.000303513 |
|  | Inclination (I) | Degree | 0.030713 |
|  | Right ascension of ascending node $(\Omega)$ | Degree | 117.704005 |
|  | Argument of perigee $(\omega)$ | Degree | 40.648271 |
|  | Mean anomaly $(\mathrm{M})$ | Degree | 270.743117 |

