

MTSAT Monthly Operations Report

March 2011

1. Special operation events

1.1 Eclipse operation

MTSAT-2 spring eclipse operation was performed from March 1 through March 31.

1.2 Solar-interference operation

Solar-interference operation of MTSAT-2 was performed from March 2 through March 11.

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 March 2011.

Performance of HRIT dissemination via MTSAT-1R

| | HRIT | Remarks |
|------------------|--------|---------|
| Scheduled | 1728 | |
| Performed | 1728 | |
| 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 March 2011.

Performance of LRIT dissemination via MTSAT-1R

| | LRIT | Remarks |
|------------------|--------|---------|
| Scheduled | 2954 | |
| Performed | 2954 | |
| 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 March 2011.

Performance of HRIT dissemination via landline

| | HRIT | Remarks |
|------------------|--------|---------|
| Scheduled | 12325 | |
| Performed | 12325 | |
| 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)} | Messages 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 | 683 | 683 | 0 |
| I16 | 4 | 0 | 0 | 0 |
| I18 | 0 | 0 | 0 | 0 |
| I20 | 2 | 0 | 0 | 0 |
| Total | 11 | 683 | 683 | 0 |

a) IDCP numbers are those registered in MTSAT-DCS as of March 1, 2011.

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 March 2011.

Interference on MTSAT IDCS Channels (March 2011)

| | | | | | | | | | | | |
|--------------|----|----|----|----|----|----|----|----|----|----|----|
| Channel | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Interference | | W | | | W | | | | W | | |
| 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 is performing the observation operation, and MTSAT-1R located at longitude 140 east is 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 09:16 UTC on March 2, 2011.
- 2) A north-south station-keeping maneuver of MTSAT-2 was carried out from 21:02 UTC on March 9, 2011.
- 3) An east-west station-keeping maneuver of MTSAT-2 was carried out from 09:16 UTC on March 23, 2011.

4.3 Orbit elements of MTSAT-1R/2

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

Epoch 20:30:0.00 UTC on April 6, 2011 – MTSAT-2

| | Element | Unit | Value |
|-------|--|--------|--------------|
| Orbit | Semi-major axis (a) | Km | 42165.214400 |
| | Eccentricity (e) | - | 0.000265063 |
| | Inclination (I) | Degree | 0.024942 |
| | Right ascension of ascending node (Ω) | Degree | 217.004549 |
| | Argument of perigee (ω) | Degree | 155.123540 |
| | Mean anomaly (M) | Degree | 275.229645 |