

MTSAT Monthly Operations Report

September 2010

1. Special operation events

1.1 Eclipse operation

MTSAT-2 autumn eclipse operation was performed from September 1 through September 30.

1.2 Solar-interference operation

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

Performance of HRIT dissemination via MTSAT-1R

| | HRIT | Remarks |
|------------------|--------|---------|
| Scheduled | 1664 | |
| Performed | 1664 | |
| 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 September 2010.

Performance of LRIT dissemination via MTSAT-1R

| | LRIT | Remarks |
|------------------|--------|---------|
| Scheduled | 2856 | |
| Performed | 2856 | |
| Performance in % | 100.00 | |

* nn - indicates the hour of observation time

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 September 2010.

Performance of HRIT dissemination via landline

| | HRIT | Remarks |
|------------------|--------|---------|
| Scheduled | 11905 | |
| Performed | 11905 | |
| 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 | 537 | 537 | 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 September 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 September 2010.

Interference on MTSAT IDCS Channels (September 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 is performing the observation operation. Meanwhile, MTSAT-1R is operating telecommunication services such as data dissemination and DCP data relay at longitude 140 east.

4.2 Maneuver

- 1) A north-south station-keeping maneuver of MTSAT-2 was carried out from 09:02 UTC on September 1, 2010.
- 2) A north-south station-keeping maneuver of MTSAT-2 was carried out from 09:02 UTC on September 8, 2010.
- 3) An east-west station-keeping maneuver of MTSAT-2 was carried out from 22:16 UTC on September 15, 2010.
- 4) A north-south station-keeping maneuver of MTSAT-2 was carried out from 08:02 UTC on September 29, 2010.

4.3 Orbit elements of MTSAT-2

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

Epoch 10:00:0.00 UTC on October 6, 2010

| | Element | Unit | Value |
|-------|--|--------|--------------|
| Orbit | Semi-major axis (a) | km | 42165.190500 |
| | Eccentricity (e) | - | 0.000138648 |
| | Inclination (I) | Degree | 0.007635 |
| | Right ascension of ascending node (Ω) | Degree | 209.184991 |
| | Argument of perigee (ω) | Degree | 314.671322 |
| | Mean anomaly (M) | Degree | 146.079284 |