

MTSAT Monthly Operations Report

August 2006

1. Events of special operation

1.1 Eclipse Operation

Autumn Eclipse and Sun Avoidance (SA) Operation of MTSAT-1R was performed from August 16 to August 31.

1.2 Solar-interference Operation

There was no Solar-interference Operation of MTSAT-1R.

2. Image observations and dissemination

2.1 HiRID and HRIT image dissemination

Autumn Eclipse and Sun Avoidance (SA) Operation of MTSAT-1R was performed from August 16 to August 31. On account of this, the following MTSAT-1R image dissemination was canceled:

F15 and N15 from August 18 through August 31.

The following tables show the performance of HiRID and HRIT image dissemination and the summary of its canceled dissemination. Data dissemination was performed according to the schedule except the cancellation shown below.

Performance of HiRID and HRIT image dissemination

| | HiRID | HRIT | Remarks |
|------------------|-------|-------|---------|
| Scheduled | 1700 | 1700 | |
| Performed | 1700 | 1700 | |
| Performance in % | 100.0 | 100.0 | |

Summary of canceled HiRID and HRIT image dissemination

| Date | HiRID | HRIT | Reasons |
|------|-------|------|---------|
| | None | None | |

2.2 LRIT image dissemination

Because of the operation described in 2.1, following LRIT image dissemination was cancelled:

PS-F15, N15 and D1-F15 from August 18 through August 31.

The following tables show the performance of LRIT image dissemination and the summary of its canceled dissemination. Data dissemination was performed according to the schedule except the cancellation shown below.

Performance of LRIT image dissemination

| | LRIT | Remarks |
|------------------|-------|---------|
| Scheduled | 2187 | |
| Performed | 2187 | |
| Performance in % | 100.0 | |

Summary of canceled LRIT image dissemination

| Date | LRIT | Reasons |
|------|------|---------|
| | None | |

2.3 WEFAX image dissemination

Because of the operation described in 2.1, following WEFAX image dissemination was cancelled:

H/J-15 and A/B/C/D-15 from August 18 through August 31.

The following tables show the performance of WEFAX image dissemination and the summary of its canceled dissemination. Data dissemination was performed according to the schedule.

Performance of WEFAX image dissemination

| | WEFAX | Remarks |
|------------------|-------|---------|
| Scheduled | 2642 | |
| Performed | 2641 | |
| Performance in % | 99.96 | |

Summary of canceled WEFAX image dissemination

| Date | WEFAX | Reasons |
|----------|-------|-----------------------|
| August 3 | C-00 | Ground system trouble |

2.4 HRIT image dissemination via landline

The following tables show the performance of HRIT image dissemination via landline and the summary of its canceled dissemination. Data dissemination was performed according to the schedule.

Performance of HRIT image dissemination via landline

| | HRIT | Remarks |
|------------------|-------|---------|
| Scheduled | 5840 | |
| Performed | 5840 | |
| Performance in % | 100.0 | |

Summary of canceled HRIT image 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 messages.

Reception and dissemination of messages

| IDCP channel | Number of IDCPs ^{a)} | Received messages | Format errors ^{b)} | Non WMO codes ^{c)} | Disseminated messages to the GTS |
|--------------|-------------------------------|-------------------|-----------------------------|-----------------------------|----------------------------------|
| I06 | 14 | 0 | 0 | 0 | 0 |
| I07 | 22 | 0 | 0 | 0 | 0 |
| I10 | 3 | 0 | 0 | 0 | 0 |
| I14 | 3 | 0 | 0 | 0 | 0 |
| I15 | 7 | 384 | 0 | 384 | 0 |
| I16 | 5 | 0 | 0 | 0 | 0 |
| I18 (ASDAR) | 7 | 268 | 28 | 0 | 240 |
| I20 | 3 | 0 | 0 | 0 | 0 |
| Total | 64 | 652 | 28 | 384 | 240 |

a) Number of DCPs registered to MTSAT-1R IDCS as of March 1, 2005.

b) DCS system did not process reports because the reporting DCPs were out of the responsible area of MTSAT-1R.

c) There was no message or the message was unsuited to the WMO codes.

The DCP data processing software at MSC detected "DATA BUFFER EMPTY" or "NO MESSAGE."

3.2 Interference on IDCP channels

Table 1 shows the interference on MTSAT International Data Collection System (IDCS) channels experienced the period August 2006.

Table 1 Interference on MTSAT IDCS Channels (Aug. 2006)

| | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|----|----|
| Channel | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Interference | 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 |

W: weak interference

H : harmful interference

4. Satellite system status

4.1 Satellite status

MTSAT-1R was located at 140 degrees east and continued to provide its operational services.

4.2 Maneuver

East- west station-keeping maneuver of MTSAT-1R

13:14 UTC August 4

09:14 UTC August 30

4.3 Orbit elements of MTSAT-1R

The orbit elements of MTSAT-1R are shown in the following table.

Epoch 03:00:0.00 UTC September 13, 2006

| | Element | Unit | Value |
|-------|--|--------|--------------|
| Orbit | Semi-major axis (a) | km | 42166.224391 |
| | Eccentricity (e) | - | 0.000185712 |
| | Inclination (I) | Degree | 0.010138 |
| | Right ascension of ascending node (Ω) | Degree | 54.745993 |
| | Argument of perigee (ω) | Degree | 141.145124 |
| | Mean anomaly (M) | Degree | 341.299938 |