

# MTSAT Monthly Operations Report

## September 2006

### 1. Events of special operation

#### 1.1 Eclipse Operation

Autumn Eclipse and Sun Avoidance (SA) Operation of MTSAT-1R was performed from September 1 to September 30.

#### 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 September 1 to September 30. On account of this, the following MTSAT-1R image dissemination was canceled:

F15 and N15 on September 1, and  
N14, F15 and N15 on September 2, and  
N14 and N15 from September 3 through September 6, and  
N14 from September 7 through September 9.

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	1656	1656	
Performed	1654	1654	
Performance in %	99.88	99.88	

Summary of canceled HiRID and HRIT image dissemination

Date	HiRID	HRIT	Reasons
September 23	N05, N05W	N05, N05W	Ground system trouble

## 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 on September 1, and  
PS-N14, F15, N15 and D1-F15 on September 2, and  
PS-N14 and PS-N15 from September 3 through September 6, and  
PS-N14 from September 7 through September 9.

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	2133	
Performed	2132	
Performance in %	99.95	

Summary of canceled LRIT image dissemination

Date	LRIT	Reasons
September 23	PS-N05	Ground system trouble

## 2.3 WEFAX image dissemination

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

H/J-F15 and A/B/C/D-15 from September 1 through September 2.

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	2622	
Performed	2621	
Performance in %	99.96	

Summary of canceled WEFAX image dissemination

Date	WEFAX	Reasons
September 4	H-07	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	5742	
Performed	5742	
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 <sup>a)</sup>	Received messages	Format errors <sup>b)</sup>	Non WMO codes <sup>c)</sup>	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	0	0	0	0
I16	5	0	0	0	0
I18 (ASDAR)	7	360	32	0	328
I20	3	0	0	0	0
Total	64	360	32	0	328

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 (Sep. 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

09:14 UTC September 17

### 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 October 18, 2006

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42165.522969
	Eccentricity (e)	-	0.000220066
	Inclination (I)	Degree	0.081787
	Right ascension of ascending node ( $\Omega$ )	Degree	84.030341
	Argument of perigee ( $\omega$ )	Degree	129.376323
	Mean anomaly (M)	Degree	358.328453