

# MTSAT Monthly Operations Report

## September 2005

### 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.

#### 1.3 System maintenance

There was no system maintenance that affects MTSAT-1R operation.

### 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. For this reason, the following MTSAT-1R observation and image dissemination were cancelled:

F14, N14, F15, N15 and F16 from September 1 through September 17.

F14, N14, F15 and N15 from September 18 through September 30.

Except for the scheduled cancellation, data dissemination was performed according to the schedule. The following table shows the performance and summary of the HiRID and HRIT image dissemination.

Performance of HiRID and HRIT image dissemination

	HiRID	HRIT	Remarks
Scheduled	1543	1543	
Performed	1526	1526	
Performance in %	98.9	98.9	

Summary of canceled HiRID and HRIT image dissemination

Date	HiRID	HRIT	Reasons
September 21	F04	F04	Ground system trouble at MSC.
September 23	N19-F20 N21-N23W	N19 - F20 N21 - N23W	Problem with JAMI. (Japanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)
September 24	F00-F03	F00 - F03	Problem with JAMI. (Japanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)

2.2 LRIT image dissemination

By the same reason of the cancellation of the HiRID and HRIT image dissemination, following LRIT image dissemination was cancelled:

PS-F14, N14, F15, N15, F16 and D1-F14, F15, F16 from September 1 through September 17.

PS-F14, N14, F15, N15 and D1- F14, F15 from September 18 through September 30.

Except for the scheduled cancellation, data dissemination was performed according to the schedule. The following table shows the performance and summary of the LRIT image dissemination.

Performance of LRIT image dissemination

	LRIT	Remarks
Scheduled	1946	
Performed	1920	
Performance in %	98.7	

Summary of canceled LRIT image dissemination

Date	LRIT	Reasons
September 18	D1-F02 D1-F03	Ground system trouble at MSC.
September 21	PS-F04 D1-F04	Ground system trouble at MSC.
September 23	PS-N19 - D1-F20 D1-F21 - PS-N23	Problem with JAMI. (Japanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)
September 24	PS-F00 - D1-F03	Problem with JAMI. (Japanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)

### 2.3 WEFAX image dissemination

By the same reason of the cancellation of the HiRID and HRIT image dissemination, following WEFAX image dissemination was cancelled:

H/J-14, 15, 16 and A/B/C/D-15 from September 1 through September 17.

H/J-14, 15 and A/B/C/D-15 from September 18 through September 30.

Except for the scheduled cancellation, data dissemination was performed according to the schedule. The following table shows the performance and summary of the WEFAX image dissemination.

Performance of WEFAX image dissemination

	WEFAX	Remarks
Scheduled	2366	
Performed	2353	
Performance in %	99.5	

Summary of canceled WEFAX image dissemination

Date	WEFAX	Reasons
September 6	I-03	Ground system trouble at MSC.
September 21	H/I-04	Ground system trouble at MSC.
September 23	H/J-20, H/I-22, 23 A/B/C/D-21	Problem with JAMI. (Japanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)
September 24	H/I-00, 01, 02, 03 A/B/C/D-00, 03 K/L/M/N-00	Problem with JAMI. (Japanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)  These WEFAX were distributed by the image obtained with GOES-9.

### 2.4 HRIT image dissemination via landline

By the same reason of the cancellation of the HiRID and HRIT image dissemination, following HRIT image dissemination via landline was cancelled:

F14, F15 and F16 from September 1 through September 17.

F14 and F15 from September 18 through September 30.

Except for the scheduled cancellation, data dissemination was performed according to the schedule. The following table shows the performance and summary of the HRIT image dissemination via landline.

Performance of HRIT image dissemination via landline

	HRIT	Remarks
Scheduled	5144	
Performed	5076	
Performance in %	98.7	

Summary of canceled HRIT image dissemination via landline

Date	HRIT	Reasons
September 21	F04	Ground system trouble at MSC.
September 23	F20, F22, F23	Problem with JAMI. (Japanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)
September 24	F00 - F03	Problem with JAMI. (Japanese <u>A</u> dvanced <u>M</u> eteorological <u>I</u> mager)

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	671	0	671	0
I16	5	0	0	0	0
I18 (ASDAR)	7	354	46	0	308
I20	3	0	0	0	0
Total	64	1025	46	671	308

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

b) Edit processing error occurred due to the origin of the report being out of the area of responsibility for acquisition 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

The following table shows the interference on MTSAT-1R International Data Collection System(IDCS) channels.

Interference on MTSAT-1R IDCS channels (Sep. 2005)

Ch.	1	2	3	4	5	6	7	8	9	10	11
Sep.	W	S			W						

Ch.	12	13	14	15	16	17	18	19	20	21	22
Sep.											

Ch.	23	24	25	26	27	28	29	30	31	32	33
Sep.			W								S

S: severe interference

W: weak 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 was performed at 0814 UTC on September 8.

### 4.3 Orbit elements of MTSAT-1R

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

Epoch 23:35:18.88 UTC October 2, 2005

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42167.1485
	Eccentricity (e)	-	0.00019967
	Inclination (I)	Degree	0.02397861
	Right ascension of ascending node ( $\Omega$ )	Degree	130.711471
	Argument of perigee ( $\omega$ )	Degree	75.517319
	Mean anomaly (M)	Degree	299.621084

## 5. Ground system status

Ground system operations were performed successfully.