

MTSAT Monthly Operations Report

October 2006

1. Events of special operation

1.1 Eclipse Operation

Autumn Eclipse and Sun Avoidance Operation of MTSAT-1R was performed from October 1 to October 22.

1.2 Solar-interference Operation

Solar-interference Operation was performed from October 5 through October 11.

2. Image observations and dissemination

2.1 HiRID and HRIT image dissemination

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	1730	1730	
Performed	1729	1729	
Performance in %	99.94	99.94	

Summary of canceled HiRID and HRIT image dissemination

Date	HiRID	HRIT	Reasons
October 6	F03	F03	Solar-interference

2.2 LRIT image dissemination

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	2232	
Performed	2226	
Performance in %	99.73	

Summary of canceled LRIT image dissemination

Date	LRIT	Reasons
October 6	PS-F03, D1-F03	Solar-interference
October 25	PS-F04, D1-F04	Ground system trouble
October 28	PS-N05, PS-F06	Ground system trouble

2.3 WEFAX image dissemination

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	2728	
Performed	2718	
Performance in %	99.63	

Summary of canceled WEFAX image dissemination

Date	WEFAX	Reasons
October 6	H/I-03, A/B/C/D-03	Solar-interference
October 25	H/I-04	Ground system trouble
October 28	H/I-05	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	5952	
Performed	5936	
Performance in %	99.73	

Summary of canceled HRIT image dissemination via landline

Date	HRIT	Reasons
October 6	F03	Solar-interference
October 25	F04	Ground system trouble

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	192	0	192	0
I16	5	0	0	0	0
I18 (ASDAR)	7	430	44	0	386
I20	3	0	0	0	0
Total	64	622	44	192	386

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 October 2006.

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

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

08:14 UTC October 11

08:14 UTC October 25

North- south station-keeping maneuver of MTSAT-1R

06:56 UTC October 22

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 November 8, 2006

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42166.901596
	Eccentricity (e)	-	0.000326971
	Inclination (I)	Degree	0.048201
	Right ascension of ascending node (Ω)	Degree	23.662975
	Argument of perigee (ω)	Degree	223.792434
	Mean anomaly (M)	Degree	344.999283