

MTSAT Monthly Operations Report

December 2005

1. Events of special operation

1.1 Eclipse Operation

There was no Eclipse Operation of MTSAT-1R.

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

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	1736	1736	
Performed	1736	1735	
Performance in %	100.0	99.9	

Summary of canceled HiRID and HRIT image dissemination

Date	HiRID	HRIT	Reasons
December 25		S06W	Ground system trouble at MSC

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	2229	
Performance in %	99.9	

Summary of canceled LRIT image dissemination

Date	LRIT	Reasons
December 1	PS-N02	North-South station-keeping maneuver
December 13	PS-N04	Ground system maintenance at MSC
December 25	PS-N04	North-South station-keeping maneuver

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	2728	
Performance in %	100.0	

Summary of canceled WEFAX image dissemination

Date	WEFAX	Reasons
	None	

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	5952	
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	0	0	0	0
I16	5	0	0	0	0
I18 (ASDAR)	7	396	53	0	343
I20	3	0	0	0	0
Total	64	396	53	0	343

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

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

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

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

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

Ch.	23	24	25	26	27	28	29	30	31	32	33
Dec.											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

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

0156 UTC December 1

0356 UTC December 25

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

0814 UTC December 5

0414 UTC December 28

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 January 25, 2006

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42165.123998
	Eccentricity (e)	-	0.000206347
	Inclination (I)	Degree	0.017355
	Right ascension of ascending node (Ω)	Degree	356.319036
	Argument of perigee (ω)	Degree	317.729178
	Mean anomaly (M)	Degree	355.519458