

GMS Monthly Operations Report

December 2004

1. Events of Special Operation

1.1 Eclipse Operation

There was no Eclipse Operation of GMS-5.

1.2 Solar-interference Operation

There was no Solar-interference Operation of GMS-5.

1.3 System Maintenance

System maintenance, which affects GMS operation, was not performed in this month.

2. Image Observations and Dissemination

2.1 S-VISSR type data disseminations

Except for the scheduled cancellation, the data disseminations were performed in satisfactory. The following table shows the performance and summary of the S-VISSR type data disseminations in this month.

Performance of S-VISSR type data disseminations

	S-VISSR type data Disseminations	Remarks
Scheduled	744	
Performed	744	
Performance in %	100.0	

Summary of anomaly S-VISSR type data disseminations

Date	Product	Remarks
December 14	22UTC	The 2125UTC image was lost from 31S to 46S.
December 23	02UTC	The 0125UTC image was lost from 18N to 31N.

Summary of canceled S-VISSR type data disseminations

Date	Product	Reasons
None		

2.2 WEFAX Dissemination

Due to the maintenance of Microwave-Link between CDAS/MSC and DPC/MSC, on December 7, WEFAX(H/I-02, MANAM, H/I-03, A/B/C/D-03, H/I-04, H-05) broadcasting services were canceled.

Expect for the scheduled cancellation, the data disseminations were performed in satisfactory. The following table shows the performance and summary of WEFAX disseminations in this month.

Performance of WEFAX Disseminations

GMS-5	Disseminated	Remarks
Scheduled	2593	
Performed	2593	
Performance in %	100.0	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
December 23	02UTC	The 0125UTC image was lost from 18N to 31N.

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
None		

3. Data Collection System

3.1 International Data Collection System (IDCS)

The following table shows the IDCP messages are received at MSC and disseminated through the GTS.

Reception and Dissemination of Messages

IDCP channel	Number of IDCPs ^{a)}	Received messages	Format errors ^{b)}	Non WMO code ^{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)	8	473	56	0	417
I20	3	0	0	0	0
Total	65	473	56	0	417

a) Number of DCPs registered on GMS-5 IDCS as of 1 May 2003.

b) Format error was caused by the radio telecommunication interference.

c) The messages were none or unsuited to the WMO codes and "DATA BUFFER EMPTY" or "NO MESSAGE was detected by the DCP data processing software at MSC

3.2 Interference on IDCP Channels

The following table shows the interference on GMS International Data Collection System(IDCS) channels.

Interference on GMS IDCS Channels (Dec 2004)

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

S: severe interference

W: weak interference

4. Satellite System Status

4.1 Satellite Status

GMS-5 was located at longitude 140 degrees east and continued to provide its operational services.

4.2 Maneuver

East-West Station keeping maneuver of GMS-5 was performed on December 7.

4.3 Orbit and Attitude Elements of GMS-5

The orbit and attitude elements of GMS-5 are shown following table.

Epoch 00:00:00 UTC, 7 April 2005

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42166.63165
	Eccentricity (e)	-	0.00012401
	Inclination (I)	Degree	3.68657
	Right ascension of ascending node (Ω)	Degree	79.48742
	Argument of perigee (ω)	Degree	317.67782
	Mean anomaly (M)	Degree	298.46360
Attitude	Right ascension (α)	Degree	170.02288
	Declination (δ)	Degree	-86.33064

5. Ground System Status

The operation for the ground system was satisfactory.