

GMS Monthly Operations Report

June 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

The maintenance of the ground system was not performed in this month.

2. Image Observation and Dissemination

2.1 S-VISSR type data dissemination

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	720	
Performed	716	
Performance in %	99.4	

Summary of anomaly S-VISSR type data disseminations

Date	Product	Remarks
June 1	00-03 UTC	Some parts of full disk images were lost.
June 2	23 UTC	The 2213UTC image was lost from 27N to 16N.
June 9	18 UTC	The 1725UTC image was lost at 46S and southern latitude.
June 16	05 UTC	The 0413UTC image was noisy.

Summary of canceled S-VISSR type data disseminations

Date	Product	Reasons
June 1	04,19UTC	The 0325UTC and 1825UTC images were missing.
June 16	23UTC	The 2213UTC image was missing.

2.2 WEFAX Dissemination

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

Performance of WEFAX Disseminations

GMS-5	Disseminated	Remarks
Scheduled	2520	
Performed	2510	
Performance in %	99.6	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
June 1	00-02 UTC	Some parts of full disk images were lost.
June 2	23UTC	The 2213UTC image was lost from 27N to 16N.
June 10	02UTC (I-02)	The WEFAX (I-02), which is a WEFAX visible image at 02 UTC, on June 10 was accidentally broadcasted containing an image observed at 02 UTC on the preceding day (June 9) due to system problem.

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
June 1	04, 19UTC	The 0413UTC and 1825UTC images were missing.
June 4	06UTC (A,B,C,D-06)	The 0525UTC GVAR data was anomaly.
June 16	23UTC	The 2213UTC image was missing.

3. Data Collection System

3.1 International Data Collection System (IDCS)

The following table shows the number of IDCP messages 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	141	0	0	141
I16	5	0	0	0	0
I18 (ASDAR)	8	363	39	0	324
I20	3	0	0	0	0
Total	65	504	39	0	465

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 interference on the channels of the GMS International Data Collection System (IDCS).

Interference on GMS IDCS Channels (June 2004)

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

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

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

S: severe interference

W: weak interference

4. Satellite System Status

4.1 Satellite Status

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

4.2 Maneuver

Attitude control maneuver and Spin Rate control maneuver was performed on June 24.

4.3 Orbit and Attitude Elements of GMS-5

The orbit and attitude elements of GMS-5 are shown in the table below.

Epoch 00:00:00 UTC, 26 August 2004

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42164.44702
	Eccentricity (e)	-	0.00014627
	Inclination (I)	Degree	3.15008
	Right ascension of ascending node (Ω)	Degree	81.36853
	Argument of perigee (ω)	Degree	353.23996
	Mean anomaly (M)	Degree	39.96755
Attitude	Right ascension (α)	Degree	170.88128
	Declination (δ)	Degree	-86.92025

5. Ground System Status

The operation for the ground system was satisfactory.