

GMS Monthly Operations Report

April 2004

1. Events of Special Operation

1.1 Eclipse Operation

The Spring Eclipse Operation of GMS-5 was performed from April 1 to April 4.

1.2 Solar-interference Operation

The Solar-interference Operation was not performed in this month.

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

The GOES-9 images of G13, G14 and G15 were not observed from April 1 to April 29 due to the Spring Eclipse Operation of GOES-9. By these reasons, the disseminations of S-VISSR type data was cancelled at

G13 and G15 from April 1 to April 28 and
G14 from April 1 to April 29.

The GOES-9 images of G02, G03 were canceled at April 30, due to E-W station Keeping Manuver of GOES-9.

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	635	
Performed	632	
Performance in %	99.5	

Summary of anomaly S-VISSR type data disseminations

Date	Product	Remarks
April 7	02-06UTC	Some parts of full disk images were lost.
April 21	12UTC	The 1125UTC image was lost from 54N to 41N.

Summary of canceled S-VISSR type data disseminations

Date	Product	Reasons
None		

2.2 WEFAX Dissemination

By the same reason of the cancellation of the S-VISSR type data disseminations, the WEFAX disseminations were cancelled at

H/J-13, H/J-15 and A/B/C/D-15 from April 1 to April 28 and
H/J-14 from April 1 to April 29.

WEFAX disseminations were canceled at H/I-02 and H/I-03 April 30, due to E-W station Keeping Manuver

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	2238	
Performed	2230	
Performance in %	99.6	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
April 7	03-06UTC	Some parts of full disk images were lost.
April 21	12UTC	The 1125UTC image was lost from 54N to 41N.

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 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	13	0	0	13
I10	3	0	0	0	0
I14	3	0	0	0	0
I15	7	110	0	0	110
I16	5	0	0	0	0
I18 (ASDAR)	8	185	35	0	150
I20	3	0	0	0	0
Total	65	308	35	0	273

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 (Apr. 2004)

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

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

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

Maneuver was not performed in this month.

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, 17 June 2004

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42167.37334
	Eccentricity (e)	-	0.00010021
	Inclination (I)	Degree	2.96614
	Right ascension of ascending node (Ω)	Degree	81.09982
	Argument of perigee (ω)	Degree	4.42885
	Mean anomaly (M)	Degree	320.26449
Attitude	Right ascension (α)	Degree	171.92663
	Declination (δ)	Degree	-87.20391

5. Ground System Status

The operation for the ground system was satisfactory.