

## GMS Monthly Operations Report

### February 2004

#### 1. Events of Special Operation

##### 1.1 Eclipse Operation

Spring Eclipse Operation of GMS-5 began from February 19.

##### 1.2 Solar-interference Operation

Solar-interference Operation of GMS-5 was performed from February 19 to 29.

##### 1.3 System Maintenance

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

#### 2. Image Observations and Dissemination

##### 2.1 S-VISSR type data disseminations

Spring Eclipse Operation of GOES-9 began from February 10. S-VISSR type data disseminations were changed due to Spring Eclipse Operation and Solar-interference Operation of GOES-9 as follows.

G02 on February 29 was canceled due to Solar-interference Operation.

G13 from February 18 to February 29 were northern hemisphere data.

G14 and G15 from February 10 to February 25 were northern hemisphere data.

G14 and G15 from February 26 to February 29 were canceled.

S-VISSR type data Disseminations were satisfactory as scheduled except for the canceled observations during this month. The following table shows performance and summary of S-VISSR type data disseminations.

Performance of S-VISSR type data disseminations

	S-VISSR type data Disseminations	Remarks
Scheduled	687	
Performed	684	
Performance in %	99.6	

Summary of anomaly S-VISSR type data disseminations

Date	Obs. Time	Remarks
		None

Summary of canceled S-VISSR type data disseminations

Date	Obs. Time	Reasons
February 8	16UTC	GOES-9 schedule suspended due to a PCM telemetry interruption.
February 25	02UTC 03UTC	GOES-9 East-West Station keeping maneuver.

## 2.2 WEFAX Dissemination

Spring Eclipse Operation of GOES-9 began from February 10. WEFAX disseminations were changed due to Spring Eclipse Operation and Solar-interference Operation of GOES-9 as follows.

H/I-02 on February 29 was canceled due to Solar-interference Operation.

H/J-14, H/J-15 and A/B/C/D-15 from February 19 to February 29 were canceled.

C/D-15 from February 10 to February 18 were canceled.

WEFAX broadcasting service was satisfactory except for the canceled observations during this month. The following table shows performance and summary of WEFAX broadcasting service.

Performance of WEFAX Disseminations

GMS-5	Disseminated	Remarks
Scheduled	2328	
Performed	2317	
Performance in %	99.5	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
		None

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
February 1	J-20	Trouble of a GVAR receiving system at MSC.
February 8	H/J-16	GOES-9 schedule suspended due to a PCM telemetry interruption.
February 25	H/I-02,H/I-03	GOES-9 East-West Station keeping maneuver.

### 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 <sup>a)</sup>	Received messages	Format errors <sup>b)</sup>	Non WMO code <sup>c)</sup>	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	175	0	0	175
I16	5	0	0	0	0
I18 (ASDAR)	8	245	47	0	198
I20	3	0	0	0	0
Total	65	420	47	0	373

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 (Feb 2004)

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

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

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

Spin rate control maneuver of GMS-5 was performed on February 17.

#### 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, 25 March 2004

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42162.09585
	Eccentricity (e)	-	0.00009645
	Inclination (I)	Degree	2.74308
	Right ascension of ascending node ( $\Omega$ )	Degree	82.54727
	Argument of perigee ( $\omega$ )	Degree	271.40278
	Mean anomaly (M)	Degree	328.61004
Attitude	Right ascension ( $\alpha$ )	Degree	168.75423
	Declination ( $\delta$ )	Degree	-87.22489

#### 5. Ground System Status

The operation for the ground system was satisfactory.