

## GMS Monthly Operations Report

### June 2002

#### 1. Events of Special Operation

##### 1.1 Eclipse Operation

No Eclipse Operation.

##### 1.2 Solar-interference Operation

No Solar-interference Operation.

##### 1.3 Typhoon Special Observation

From 9 to 11 June and 30 June, the fifteen minutes interval observations were performed for the extraction of Atmospheric Motion Vector around typhoons.

##### 1.4 System Maintenance

System maintenance, which affects GMS operation, was performed on 18, 19 and 26 June.

##### 1.5 VISSR Expanded Frame Operation

VISSR Expanded Frame Operation was performed on 4,11,18 and 25 June in order to prevent the lubricant buildup of VISSR. This operation has no influence on the GMS operation schedule.

#### 2. Image Observations and Dissemination

##### 2.1 Image Observations and Stretched VISSR (S-VISSR) Dissemination

VISSR image observations and S-VISSR dissemination were satisfactory as scheduled except for the cancelled observations during this month. The following table shows performance and summary of image observation and S-VISSR dissemination.

Performance of Image Observations and S-VISSR Dissemination

GMS-5	Observations	Remarks
Scheduled	840	
Performed	839	
Performance in %	99.9	

Summary of Cancelled Observations and S-VISSR Dissemination

Date	Cancelled	Reasons
11 June	V11	Lunar eclipse

##### 2.2 WEFAX Dissemination

WEFAX dissemination was satisfactory except for the cancelled observations during this month. The following table shows performance and summary of WEFAX dissemination.

WEFAX Dissemination Performance

GMS-5	Disseminated	Remarks
Scheduled	2516	
Performed	2492	
Performance in %	99.0	

Summary of Cancelled WEFAX Dissemination

Date	Cancelled	Reasons
6 and 27 June	H/I-07	Attitude maneuver
11 June	H-11	Lunar eclipse
17 June	H/I-07	East-West maneuver
18 and 19 June	H/I-02	Maintenance of ground subsystem
26 June	K/L/M/N-00 A/B/C/D-03 H/I-01,02,03,04 H-05	Maintenance of ground subsystem

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	Registered <sup>a)</sup>	Received messages	Format errors <sup>b)</sup>	Non WMO code	Disseminated messages to the GTS
SHIP including ASAP	I06	78	188	3	0	185
	I07	85	147	2	0	145
	I14	32	206	0	0	206
	I15	39	0	0	0	0
	I16	68	0	0	0	0
ASDAR	I18	22	277	45	0	232
Total		324	818	50	0	768

a) Number of IDCPs registered on GMS-5 IDCS as of 30 April 2002

b) 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 (June 2002)

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

ch.	12	13	14	15	16	17	18	19	20	21	22
						S					

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

S: severe interference

W: weak interference

## 4. Satellite System Status

### 4.1 Satellite Status

GMS-5 was located at 140 degree East and continued to provide its operational services.

### 4.2 Maneuver

Attitude control maneuver was performed on 6 and 27 June. East-West station keeping maneuver was performed on 17 June.

### 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, 1 July 2002

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42163.37461
	Eccentricity (e)	-	0.00010133
	Inclination (I)	Degree	1.22743
	Right ascension of ascending node ( $\Omega$ )	Degree	81.35516
	Argument of perigee ( $\omega$ )	Degree	351.54270
	Mean anomaly (M)	Degree	346.09854
Attitude	Right ascension ( $\alpha$ )	Degree	172.14620
	Declination ( $\delta$ )	Degree	- 88.72604

## 5. Ground System Status

### 5.1 Ground System Status

On 26 June, the maintenance of the computer system at DPC/MSC was performed. WEFAX-(between H/I-01 and H05) and DCP communications (from 0040-0440 UTC) were canceled.

On 18 June, the maintenance of the computer system at DPC/MSC was performed. System Maintenance Operation Schedule was executed on 18 and 19 June for the computer switching. The operation for the ground system was satisfactory except for above maintenance.

## 6. Others

On 11 June, the Lunar Eclipse occurred from 1014UTC to 1058UTC. V11 observation was cancelled.