

GMS Monthly Operations Report

July 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 1 to 27 July, 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 not performed this month.

1.5 VISSR Expanded Frame Operation

VISSR Expanded Frame Operation was performed on 2,9,16,23 and 30 July 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	868	
Performed	867	
Performance in %	99.9	

Summary of Cancelled Observations and S-VISSR Dissemination

Date	Cancelled	Reasons
10 July	V14	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	2577	
Performed	2569	
Performance in %	99.7	

Summary of Cancelled WEFAX Dissemination

Date	Cancelled	Reasons
10 July	H/J-14 K/L/M/N-12	Lunar eclipse
18 July	H/I-07	Attitude 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 ^{a)}	Received messages	Format errors ^{b)}	Non WMO code ^{c)}	Disseminated messages to the GTS
I06	78	87	8	0	79
I07	86	323	1	0	319
I10	3	0	0	0	0
I12	20	0	0	0	0
I14	26	201	0	0	189
I15	40	0	0	0	0
I16	5	0	0	0	0
I18 (ASDAR)	10	228	39	0	189
I20	3	0	0	0	0
Total	271	839	48	0	776

a) Number of DCPs registered on GMS-5 IDCS as of 30 June 2002.

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 (July 2002)

ch.	1	2	3	4	5	6	7	8	9	10	11
	W					W	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				W		W	W	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 18 July.

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 August 2002

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42166.84737
	Eccentricity (e)	-	0.00006681
	Inclination (I)	Degree	1.30398
	Right ascension of ascending node (Ω)	Degree	82.51050
	Argument of perigee (ω)	Degree	36.22958
	Mean anomaly (M)	Degree	330.87691
Attitude	Right ascension (α)	Degree	171.21675
	Declination (δ)	Degree	- 88.73864

5. Ground System Status

5.1 Ground System Status

The operation for the ground system was satisfactory.

6. Others

On 10 July, the Lunar Eclipse occurred from 1318UTC to 1345UTC. V14 observation was cancelled.