

GMS Monthly Operations Report

November 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 4 to 6 November, from 21 to 24 November, 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 21 and 22 November.

1.5 VISSR Expanded Frame Operation

VISSR Expanded Frame Operation was performed on 5, 12, 19 and 25 November 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	840	
Performance in %	100	

Summary of Cancelled Observations and S-VISSR Dissemination

Date	Cancelled	Reasons
	None	

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	2513	
Performed	2509	
Performance in %	99.8	

Summary of Cancelled WEFAX Dissemination

Date	Cancelled	Reasons
21 and 22 November	H/I-02	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	Number of IDCPs ^{a)}	Received messages	Format errors ^{b)}	Non WMO code ^{c)}	Disseminated messages to the GTS
I06	78	0	0	0	0
I07	86	198	1	0	197
I10	3	0	0	0	0
I12	20	0	0	0	0
I14	26	159	1	0	158
I15	40	102	0	0	102
I16	5	0	0	0	0
I18 (ASDAR)	10	426	111	0	197
I20	3	0	0	0	0
Total	271	885	113	0	654

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 (November 2002)

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

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

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

Maneuver was not performed this month.

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, 05 December 2002

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42168.11084
	Eccentricity (e)	-	0.00002509
	Inclination (I)	Degree	1.57624
	Right ascension of ascending node (Ω)	Degree	82.44059
	Argument of perigee (ω)	Degree	343.04190
	Mean anomaly (M)	Degree	148.10115
Attitude	Right ascension (α)	Degree	167.79195
	Declination (δ)	Degree	-88.43836

5. Ground System Status

On 21 November, the maintenance of the computer system at DPC/MSC was performed. System Maintenance Operation Schedule was executed on 21 and 22 November for the computer switching. The operation for the ground system was satisfactory except for above maintenance.