

GMS Monthly Operations Report

May 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 17 to 20 May, 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, 23 and 24 May.

1.5 VISSR Expanded Frame Operation

VISSR Expanded Frame Operation was performed on 7,14,21 and 28 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	868	
Performance in %	100.0	

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	2604	
Performed	2582	
Performance in %	99.2	

Summary of Cancelled WEFAX Dissemination

Date	Cancelled	Reasons
16 May	H/I-07	Attitude maneuver
21 May	K/L/M/N-00 A/B/C/D-03 H/I-01,02,03,04	Maintenance of ground subsystem
23 May	H/I-02	Maintenance of ground subsystem
24 May	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	Registered ^{a)}	Received messages	Format errors ^{b)}	Non WMO code	Disseminated messages to the GTS
SHIP including ASAP	I06	78	307	5	0	302
	I07	85	240	2	0	186
	I14	32	205	0	0	205
	I15	39	0	0	0	0
	I16	68	0	0	0	0
ASDAR	I18	22	251	71	0	180
Total		324	1003	78	0	873

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 (May 2002)

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

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

ch.	23	24	25	26	27	28	29	30	31	32	33
			S				S		S	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 maneuver was performed on 16 May.

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, 30 May 2002

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42166.32792
	Eccentricity (e)	-	0.00017905
	Inclination (I)	Degree	1.13497
	Right ascension of ascending node (Ω)	Degree	80.45711
	Argument of perigee (ω)	Degree	20.70574
	Mean anomaly (M)	Degree	286.38429
Attitude	Right ascension (α)	Degree	171.90466
	Declination (δ)	Degree	- 88.92688

5. Ground System Status

5.1 Ground System Status

On 21 May, the maintenance of the computer system at DPC/MSC was performed. WEFAX-(during V01-V04) and DCP communications (from 0040-0410 UTC) were canceled.

On 23 May, the maintenance of the computer system at DPC/MSC was performed. System Maintenance Operation Schedule was executed on 23 and 24 May for the computer switching. The operation for the ground system was satisfactory except for above maintenance.