

GMS Monthly Operations Report

February 2001

1. Events of Special Operation

1.1 Eclipse Operation

Eclipse Operation began from 24 February and will be finished on 10 April.

1.2 Solar-interference Operation

No Solar-interference Operation.

1.3 Typhoon Special Observation

No Typhoon Special Observation.

1.4 System Maintenance

System maintenance which affects GMS operation were performed on 20 and 21 February.

1.5 VISSR Expanded Frame Operation

VISSR Expanded Frame Operation was performed on 6,13 and 20 February 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	774	
Performed	774	
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	2312	
Performed	2308	
Performance in %	99.8	

Summary of Cancelled WEFAX Dissemination

Date	Cancelled	Reasons
20 February	H/I-02	Maintenance of ground subsystem
21 February	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 ^{a)}	Registered ^{b)}	Received messages	Format errors ^{b)}	Non WMO code ^{c)}	Disseminated messages to the GTS
SHIP including ASAP	I06	78	169	0	0	169
	I07	85	470	8	22	440
	I14	32	114	0	0	114
	I15	39	128	2	111	15
	I16	68	1149	35	0	1114
ASDAR	I18	22	629	76	0	553
Total		324	2659	121	133	2405

a) Number of IDCPs registered on GMS-5 IDCS as of 28 February 2001

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.

c) Format error was caused by the radio telecommunication interference

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 (February 2001)

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

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

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

S: severe interference

W: week 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

No Maneuver.

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 March 2001

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42165.54727
	Eccentricity (e)	-	0.00010112
	Inclination (I)	degree	0.65070
	Right ascension of ascending node (Ω)	degree	74.16195
	Argument of perigee (ω)	degree	248.02790
	Mean anomaly (M)	degree	336.96895
Attitude	Right ascension (α)	degree	171.26226
	Declination (δ)	degree	- 89.31281

5. Ground System Status

5.1 Ground System Status

On 20 February, the maintenance of computer system at DPC/MSC was performed and System Maintenance Operation Schedule was executed on 20 and 21 February for the computer switching.

The operation for the ground system was satisfactory except for above maintenance.