

GMS Monthly Operations Report

March 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

Solar-interference Operation was performed from 1 to 7 March.

1.3 Typhoon Special Observation

No Typhoon Special Observation.

1.4 System Maintenance

System maintenance which affects GMS operation was performed on 22 March.

1.5 VISSR Expanded Frame Operation

VISSR Expanded Frame Operation was performed on 6 and 27 March 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	799	
Performed	799	
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	2342	
Performed	2340	
Performance in %	99.9	

Summary of Cancelled WEFAX Dissemination

Date	Cancelled	Reasons
26 March	H/I-07	East-west 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 ^{a)}	Registered ^{b)}	Received messages	Format errors ^{b)}	Non WMO code ^{c)}	Disseminated messages to the GTS
SHIP including ASAP	I06	78	205	0	0	205
	I07	85	417	4	137	276
	I14	32	188	0	0	188
	I15	39	239	6	203	30
	I16	68	1280	38	0	1242
ASDAR	I18	22	609	88	0	521
Total		324	2938	136	340	2462

a) Number of IDCPs registered on GMS-5 IDCS as of 31 March 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 (March 2001)

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

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			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

East-west maneuver was performed on 26 March.

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, 4 April 2001

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42164.60050
	Eccentricity (e)	-	0.00019596
	Inclination (I)	degree	0.70989
	Right ascension of ascending node (Ω)	degree	76.08781
	Argument of perigee (ω)	degree	244.03081
	Mean anomaly (M)	degree	13.23687
Attitude	Right ascension (α)	degree	170.10731
	Declination (δ)	degree	- 89.29398

5. Ground System Status

5.1 Ground System Status

On 22 March, the maintenance of computer system at DPC/MSK was performed and the Data Collection System of GMS-5 was cancelled from 0520UTC to 0550UTC. The operation for the ground system was satisfactory except for above maintenance.