

GMS Monthly Operations Report

March 2002

1. Events of Special Operation

1.1 Eclipse Operation

Eclipse Operation began from 23 February and will be finished on 9 April.

1.2 Solar-interference Operation

Solar-interference Operation was performed from 28 February to 7 March.

1.3 Typhoon Special Observation

From 1 to 8 March, 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 5,12,18 and 26 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	2334	
Performed	2334	
Performance in %	100.0	

Summary of Cancelled WEFAX Dissemination

Date	Cancelled	Reasons
	None	

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 ^{c)}	Disseminated messages to the GTS
SHIP including ASAP	I06	78	72	0	0	72
	I07	85	199	6	0	193
	I14	32	0	0	0	0
	I15	39	101	1	0	100
	I16	68	0	0	0	0
ASDAR	I18	22	315	69	0	246
Total		324	687	76	0	611

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

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 2002)

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: 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

East-west 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, 11 April 2002

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42168.41234
	Eccentricity (e)	-	0.00019570
	Inclination (I)	Degree	1.01048
	Right ascension of ascending node (Ω)	Degree	81.51460
	Argument of perigee (ω)	Degree	336.83410
	Mean anomaly (M)	Degree	280.70269
Attitude	Right ascension (α)	Degree	173.93382
	Declination (δ)	Degree	- 88.96867

5. Ground System Status

5.1 Ground System Status

The operation for the ground system was satisfactory.