

GMS Monthly Operations Report

September 2002

1. Events of Special Operation

1.1 Eclipse Operation

Eclipse Operation began from 27 August and will be finished on 12 October.

1.2 Solar-interference Operation

Solar-interference Operation was performed on 30 September.

1.3 Typhoon Special Observation

From 1 to 9 September, On 11 and 22 September, from 26 to 30 September, 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 3, 10, 12, 17 and 24 September 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	779	
Performed	779	
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	2262	
Performed	2261	
Performance in %	99.9	

Summary of Cancelled WEFAX Dissemination

Date	Cancelled	Reasons
19 September	H -01	Trouble 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	82	0	0	82
I07	86	148	1	0	147
I10	3	0	0	0	0
I12	20	0	0	0	0
I14	26	198	0	0	198
I15	40	124	0	0	124
I16	5	0	0	0	0
I18 (ASDAR)	10	425	65	0	360
I20	3	0	0	0	0
Total	271	977	66	0	911

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 (September 2002)

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

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	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

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, 3 October 2002

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42169.38545
	Eccentricity (e)	-	0.00005296
	Inclination (I)	Degree	1.42625
	Right ascension of ascending node (Ω)	Degree	83.87685
	Argument of perigee (ω)	Degree	59.30277
	Mean anomaly (M)	Degree	8.26487
Attitude	Right ascension (α)	Degree	174.69557
	Declination (δ)	Degree	-88.67040

5. Ground System Status

The operation for the ground system was satisfactory.

6. Others

On 19 September, WEFAX-(H-01) was canceled due to the trouble of ground subsystem at CDAS/MSC.