

## GMS Monthly Operations Report

### November 2003

#### 1. Events of Special Operation

##### 1.1 Eclipse Operation

There was no Eclipse Operation of GMS-5.

##### 1.2 Solar-interference Operation

There was no Solar-interference Operation of GMS-5.

##### 1.3 System Maintenance

System maintenance, which affects GMS operation, was not performed this month.

#### 2. Image Observations and Dissemination

##### 2.1 S-VISSR type data disseminations

Autumn Eclipse Operation of GOES-9 began from August 13 and finished on November 1. On November 1, S-VISSR type data at 13UTC and 14UTC dissemination was changed northern hemisphere data by Autumn Eclipse Operation of GOES-9.

S-VISSR type data Disseminations were satisfactory as scheduled except for the cancelled observations during this month. The following table shows performance and summary of S-VISSR type data disseminations.

Performance of S-VISSR type data disseminations

	S-VISSR type data Disseminations	Remarks
Scheduled	720	
Performed	719	
Performance in %	99.9	

Summary of anomaly S-VISSR type data disseminations

Date	Obs. Time	Remarks
November 1	06UTC	Lacked a Southern Hemisphere data
November 17	21UTC	Lacked a data from lat. 10N to lat. 18N

Summary of cancelled S-VISSR type data disseminations

Date	Obs. Time	Reasons
November 9	20UTC	Missing GVAR data

## 2.2 WEFAX Dissemination

Autumn Eclipse Operation of GOES-9 began from 13 August and finished on 1 November.

WEFAX broadcasting service was satisfactory except for the cancelled observations during this month. The following table shows performance and summary of WEFAX broadcasting service.

Performance of WEFAX Disseminations

GMS-5	Disseminated	Remarks
Scheduled	2520	
Performed	2518	
Performance in %	99.9	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
November 17	H/J-21, A/B-21	Lacked a data from lat. 10N to lat. 18N

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
November 9	H/J-20	Missing GVAR data

## 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 <sup>a)</sup>	Received messages	Format errors <sup>b)</sup>	Non WMO code <sup>c)</sup>	Disseminated messages to the GTS
I06	14	0	0	0	0
I07	22	23	0	0	23
I10	3	0	0	0	0
I14	3	0	0	0	0
I15	7	122	0	0	122
I16	5	0	0	0	0
I18 (ASDAR)	9	230	39	0	191
I20	3	0	0	0	0
Total	66	375	39	0	336

a) Number of DCPs registered on GMS-5 IDCS as of 1 May 2003.

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 (Nov 2003)

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

Ch.	12	13	14	15	16	17	18	19	20	21	22
Nov.											

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

S: severe interference

W: weak interference

## 4. Satellite System Status

### 4.1 Satellite Status

GMS-5 was located at longitude 140 degrees east and continued to provide its operational services.

### 4.2 Maneuver

East-West Station Keeping maneuver of GMS-5 was performed on 27 November.

### 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 December 2003

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42163.98892
	Eccentricity (e)	-	0.00005660
	Inclination (I)	Degree	2.48803
	Right ascension of ascending node ( $\Omega$ )	Degree	82.15736
	Argument of perigee ( $\omega$ )	Degree	302.87782
	Mean anomaly (M)	Degree	194.39207
Attitude	Right ascension ( $\alpha$ )	Degree	164.58514
	Declination ( $\delta$ )	Degree	-87.64165

## 5. Ground System Status

The operation for the ground system was satisfactory.