

## GMS Monthly Operations Report

### August 2003

#### 1. Events of Special Operation

##### 1.1 Eclipse Operation

Autumn Eclipse Operation began from 25 August and will be finished on 12 October.

##### 1.2 Solar-interference Operation

No Solar-interference Operation.

##### 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 13 August and will be finished on 1 November; the following S-VISSR type data is not disseminated.

G14, G15 - from 13 August to 15 August

G13, G14, G15 - from 16 August to 25 October

G13, G14 - from 26 October to 1 November

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	690	
Performed	686	
Performance in %	99.4	

Summary of anomaly S-VISSR type data disseminations

Date	Obs. Time	Remarks
14 August	G01	Lacked a data of Southern Hemisphere
26 August	G12	Lacked a data from lat. 53N to lat. 36N
27 August	G12	Lacked a data from lat. 25N to lat. 16N

Summary of cancelled S-VISSR type data disseminations

Date	Obs. Time	Reasons
1 August	G19, G20	Missing GVAR data
4 August	G02	Image data processing error at MSC
25 August	G19	Missing GVAR data

## 2.2 WEFAX Dissemination

Autumn Eclipse Operation of GOES-9 began from 13 August and will be finished on 1 November; the following WEFAX is not broadcasted.

H/J-14, H/J-15, A/B/C/D-15 - from 13 August to 15 August  
H/J-13, H/J-14, H/J-15, A/B/C/D-15 - from 16 August to 25 October  
H/J-13, H/J-14 - from 26 October to 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	2420	
Performed	2414	
Performance in %	99.8	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
4 August	H/I-02	Lacked a data about equator
26 August	H/J-12, A/B-12, K/L-12	Lacked a data from lat. 53N to lat. 36N
27 August	H/J-12, A/B-12, K/L-12	Lacked a data from lat. 25N to lat. 16N

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
1 August	H/J-19, H/J-20	Missing GVAR data
25 August	H/J-19	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	3	0	0	3
I10	3	0	0	0	0
I14	3	0	0	0	0
I15	7	93	0	0	93
I16	5	0	0	0	0
I18 (ASDAR)	9	253	37	0	216
I20	3	0	0	0	0
Total	66	349	37	0	312

- 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 (Aug 2003)

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

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

Ch.	23	24	25	26	27	28	29	30	31	32	33
Aug.									W	W	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, 18 October 2003

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42167.69585
	Eccentricity (e)	-	0.00002739
	Inclination (I)	Degree	2.28037
	Right ascension of ascending node ( $\Omega$ )	Degree	83.64326
	Argument of perigee ( $\omega$ )	Degree	195.35309
	Mean anomaly (M)	Degree	217.47818
Attitude	Right ascension ( $\alpha$ )	Degree	169.66454
	Declination ( $\delta$ )	Degree	-87.85551

## 5. Ground System Status

The operation for the ground system was satisfactory.