# **GMS Monthly Operations Report**

## September 2004

- 1. Events of Special Operation
- 1.1 Eclipse Operation

The Autumn Eclipse Operation of GMS-5 was performed every day in this month.

1.2 Solar-interference Operation

The Solar-interference Operation of GMS-5 was performed from September 24 to 30.

1.3 System Maintenance

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

- 2. Image Observations and Dissemination
- 2.1 S-VISSR type data disseminations

The Autumn Eclipse Operation of GOES-9 was continued in this month. Therefore, the S-VISSR type data disseminations were changed as follows:

G13, G14 and G15 were canceled from September 1 to 30.

The Solar-interference Operation of MSC - GOES-9 link was performed on September 30. Therefore, S-VISSR type data dissemination was changed as follows:

G02 was canceled on September 30.

Except for the scheduled cancellation, the data disseminations were performed in satisfactory. The following table shows the performance and summary of the S-VISSR type data disseminations in this month.

Performance of S-VISSR type data disseminations

	S-VISSR type data Disseminations	Remarks
Scheduled	629	
Performed	629	
Performance in %	100.0	

Summary of anomaly S-VISSR type data disseminations

Date	Product	Remarks
None		

Summary of canceled S-VISSR type data disseminations

Date	Product	Reasons
None		

#### 2.2 WEFAX Dissemination

The Autumn Eclipse Operation of GOES-9 was continued in this month. Therefore, the WEFAX disseminations were changed as follows:

H/J-13, H/J-14, H/J-15 and A/B/C/D-15 were canceled from September 1 to 30.

The Solar-interference Operation of MSC - GOES-9 link was performed on September 30. Therefore, the WEFAX dissemination was changed as follows:

H/I-02 was canceled on September 30.

Expect for the scheduled cancellation, the data disseminations were preformed in satisfactory. The following table shows the performance and summary of WEFAX disseminations in this month.

#### Performance of WEFAX Disseminations

GMS-5	Disseminated	Remarks
Scheduled	2218	
Performed	2218	
Performance in %	100.0	

#### Summary of anomaly WEFAX disseminations

Date	Product	Remarks
None		

#### Summary of Cancelled WEFAX Dissemination

Date	Product	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	Number of IDCPs <sup>a)</sup>	Received messages	Format errors b)	Non WMO code <sup>c)</sup>	Disseminated messages to the GTS
I06	14	0	0	0	0
I07	22	0	0	0	0
I10	3	0	0	0	0
I14	3	0	0	0	0
I15	7	199	0	51	148
I16	5	0	0	0	0
I18 (ASDAR)	8	257	33	0	224
I20	3	0	0	0	0
Total	65	456	33	51	372

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

#### 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 (Sep. 2004)

1	2	3	4	5	6	7	8	9	10	11
W	S						W			
12	13	14	15	16	17	18	19	20	21	22
23	24	25	26	27	28	29	30	31	32	33
		W								S
	12	W S  12 13  23 24	W S 12 13 14 23 24 25 W	W     S       12     13     14     15       23     24     25     26       W     W	W     S       12     13     14     15     16       23     24     25     26     27       W     27	W     S       12     13     14     15     16     17       23     24     25     26     27     28       W     W	W     S       12     13     14     15     16     17     18       23     24     25     26     27     28     29       W     W     0 <td>W         S         W           12         13         14         15         16         17         18         19           23         24         25         26         27         28         29         30           W</td> <td>W         S         W           12         13         14         15         16         17         18         19         20           23         24         25         26         27         28         29         30         31           W</td> <td>W         S         W         W           12         13         14         15         16         17         18         19         20         21           23         24         25         26         27         28         29         30         31         32           W</td>	W         S         W           12         13         14         15         16         17         18         19           23         24         25         26         27         28         29         30           W	W         S         W           12         13         14         15         16         17         18         19         20           23         24         25         26         27         28         29         30         31           W	W         S         W         W           12         13         14         15         16         17         18         19         20         21           23         24         25         26         27         28         29         30         31         32           W

S: severe interference

W: weak interference

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

#### 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

Maneuver was not performed in 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, 10 December 2004

_	Element	Unit	Value	
	Semi-major axis (a)	Km	42164.31683	
	Eccentricity (e)	-	0.00001806	
Orbit	Inclination (I)	Degree	3.39525	
Oron	Right ascension of ascending node $(\Omega)$	Degree	79.82661	
	Argument of perigee (ω)	Degree	126.82009	
	Mean anomaly (M)	Degree	12.20900	
Attitude	Right ascension (α)	Degree	166.54217	
Attitude	Declination $(\delta)$	Degree	-86.71874	

#### 5. Ground System Status

The operation for the ground system was satisfactory.