

GMS Monthly Operations Report

October 2003

1. Events of Special Operation

1.1 Eclipse Operation

Autumn Eclipse Operation was performed from August 25 to October 10.

1.2 Solar-interference Operation

Solar-interference Operation was performed from September 28 to October 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 will be finished on November 1. From October 2 to October 17, a G02 S-VISSR type data at 02UTC dissemination was canceled due to the solar interference operation of GOES-9.

A S-VISSR type data at 13UTC, 14UTC and 15UTC dissemination was changed by Autumn Eclipse Operation of GOES-9 as follows.

From October 1 to October 15, G13, G14, and G15 was canceled.

From October 16 to October 25, G13, G14, and G15 were northern hemisphere data.

From October 26 to October 31, G13 and G14 were northern hemisphere data.

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	683	
Performed	681	
Performance in %	99.7	

Summary of anomaly S-VISSR type data disseminations

Date	Obs. Time	Remarks
October 6	G00	Lacked a Southern Hemisphere data
October 31	G12	Lacked a Southern Hemisphere data

Summary of cancelled S-VISSR type data disseminations

Date	Obs. Time	Reasons
October 16	G03, G04	East-West Station keeping maneuver of GOES-9

2.2 WEFAX Dissemination

Autumn Eclipse Operation of GOES-9 began from 13 August and will be finished on 1 November. From October 2 to October 17, WEFAX H/I-02 Dissemination at 02UTC was canceled due to the solar interference operation of GOES-9.

WEFAX dissemination at 13UTC, 14UTC, and 15UTC was changed by Autumn Eclipse Operation of GOES-9 as follows.

From October 1 to October 15, H/J-13, 14, 15 and A/B/C/D-15 was canceled.

From October 16 to October 25, C/D- 15 was canceled.

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	2402	
Performed	2382	
Performance in %	99.2	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
	None	

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
October 6	C/D-00,MN-00	Scan-count error of GVAR data
October 16	H/I-03,04 A/B/C/D-03 C/D-06,C/D-09	East-West Station keeping maneuver of GOES-9
October 31	C/D-12,M/N-12	Scan-count error of 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 ^{a)}	Received messages	Format errors ^{b)}	Non WMO code ^{c)}	Disseminated messages to the GTS
I06	14	0	0	0	0
I07	22	133	0	0	133
I10	3	0	0	0	0
I14	3	0	0	0	0
I15	7	119	0	0	119

I16	5	0	0	0	0
I18 (ASDAR)	9	264	49	0	215
I20	3	0	0	0	0
Total	66	516	49	0	467

- 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 (Oct 2003)

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

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

Ch.	23	24	25	26	27	28	29	30	31	32	33
Oct.			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

Spin rate control maneuver of GMS-5 was performed on 21 October.

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, 13 November 2003

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42166.88473
	Eccentricity (e)	-	0.00009167
	Inclination (I)	Degree	2.40129
	Right ascension of ascending node (Ω)	Degree	82.59830
	Argument of perigee (ω)	Degree	258.22370
	Mean anomaly (M)	Degree	211.07009
Attitude	Right ascension (α)	Degree	165.69833
	Declination (δ)	Degree	-87.81472

5. Ground System Status

The operation for the ground system was satisfactory.