

GMS Monthly Operations Report

September 2003

1. Events of Special Operation

1.1 Eclipse Operation

Autumn Eclipse Operation began from 25 August and will be finished on 10 October.

1.2 Solar-interference Operation

Solar-interference Operation was performed from 28 to 30 September.

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 S-VISSR type data of G13, G14 and G15 is not disseminated in this month.

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	630	
Performed	628	
Performance in %	99.7	

Summary of anomaly S-VISSR type data disseminations

Date	Obs. Time	Remarks
1 September	G07	Lacked a data at south of lat. 20N
	G10	Lacked a data at south of lat. 15S
4 September	G00	Lacked a data from lat. 8N to lat. 43N
8 September	G00	Lacked a data at lat. 13N and lat. 27N
11 September	G16	Lacked a data from lat. 4N to lat. 12N
24 September	G22	Lacked a data from lat. 46N to lat. 56N

Summary of cancelled S-VISSR type data disseminations

Date	Obs. Time	Reasons
7 September	G07, G08	Trouble of data server

2.2 WEFAX Dissemination

Autumn Eclipse Operation of GOES-9 began from 13 August and will be finished on 1 November; WEFAX H/J-13, H/J-14, H/J-15 and A/B/C/D-15 is not broadcasted in this month.

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	2220	
Performed	2219	
Performance in %	99.9	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
1 September	H/I-07	Lacked a data at south of lat. 20N
4 September	H/I-00, A/B-00, K/L-00	Lacked a data from lat. 8N to lat. 43N
8 September	H/I-00, A/B-00, K/L-00	Lacked a data at lat. 13N and lat. 27N
11 September	H/J-16	Lacked a data from lat. 4N to lat. 12N
24 September	H/I-22	Lacked a data from lat. 46N to lat. 56N

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
16 September	I-00	Image data processing error at MSC

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	71	0	0	71
I10	3	0	0	0	0
I14	3	0	0	0	0
I15	7	167	0	0	167
I16	5	0	0	0	0
I18 (ASDAR)	9	237	41	0	196
I20	3	0	0	0	0
Total	66	475	41	0	434

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 (Sep 2003)

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

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

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

East-West Station keeping maneuver was performed on 25 September.

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, 16 October 2003

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42164.05520
	Eccentricity (e)	-	0.00005817
	Inclination (I)	Degree	2.33232
	Right ascension of ascending node (Ω)	Degree	83.24891
	Argument of perigee (ω)	Degree	317.24086
	Mean anomaly (M)	Degree	123.90025
Attitude	Right ascension (α)	Degree	168.25286
	Declination (δ)	Degree	-87.91728

5. Ground System Status

The operation for the ground system was satisfactory.