

GMS Monthly Operations Report

August 2004

1. Events of Special Operation

1.1 Eclipse Operation

Autumn Eclipse Operation of GMS-5 began from August 22.

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 in this month.

2. Image Observations and Dissemination

2.1 S-VISSR type data disseminations

The Autumn Eclipse Operation of GOES-9 began from August 13. Therefore, the S-VISSR type data disseminations were changed as follows:

G14 and G15 were canceled from August 13 to 14.

G13, G14 and G15 were canceled from August 15 to 31.

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	689	
Performed	687	
Performance in %	99.7	

Summary of anomaly S-VISSR type data disseminations

Date	Product	Remarks
August 7	02UTC	The 0125UTC image was lost from 31N to 17N.
August 15	00UTC	The 2325UTC image was lost at 30N and southern latitude.

Summary of canceled S-VISSR type data disseminations

Date	Product	Reasons
August 23	19,20UTC	Ground equipment problems at SOCC/NOAA

2.2 WEFAX Dissemination

The Autumn Eclipse Operation of GOES-9 began from August 13. Therefore, the WEFAX disseminations were changed as follows:

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

H/J-13, H/J-14, H/J-15 and A/B/C/D-15 were canceled from August 15 to 31.

Expect for the scheduled cancellation, the data disseminations were performed 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	2418	
Performed	2414	
Performance in %	99.8	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
August 7	02UTC	The 0125UTC image was lost from 31N to 17N.
August 15	00UTC	The 2325UTC image was lost at 30N and southern latitude.

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
August 23	19,20UTC	Ground equipment problems at SOCC/NOAA

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	0	0	0	0
I10	3	0	0	0	0
I14	3	0	0	0	0
I15	7	171	0	0	171
I16	5	0	0	0	0
I18 (ASDAR)	8	322	41	0	281
I20	3	0	0	0	0
Total	65	493	41	0	452

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. 2004)

ch.	1	2	3	4	5	6	7	8	9	10	11
Aug.	S				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 longitude 140 degrees east and continued to provide its operational services.

4.2 Maneuver

Attitude control maneuver of GMS-5 was performed on August 3.

East-West Station keeping maneuver of GMS-5 was performed on August 19.

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 2004

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42162.61650
	Eccentricity (e)	-	0.00008109
	Inclination (I)	Degree	3.24704
	Right ascension of ascending node (Ω)	Degree	80.76909
	Argument of perigee (ω)	Degree	333.18118
	Mean anomaly (M)	Degree	112.77813
Attitude	Right ascension (α)	Degree	169.59907
	Declination (δ)	Degree	-87.00155

5. Ground System Status

The operation for the ground system was satisfactory.