Meteorological Satellite Center
Japan Meteorological Agency

GMS Monthly Operations Report

March 2005

1. Events of Special Operation

1.1 Eclipse Operation

Spring Eclipse Operation of GMS-5 was performed every day.

1.2 Solar-interference Operation

There was no Solar-interference Operation of GMS-5.

1.3 System Maintenance

System maintenance that affects GMS operation was not performed.

3. Image Observations and Dissemination

3.1 S-VISSR type data disseminations

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

G13 was changed into northern hemisphere data on March 1.
G14 and G15 were canceled on March 1.
G13, G14 and G15 were canceled from 2 to 30 in March.

Solar-interference Operation of MSC - GOES-9 link was performed from 1 to 8 in March. Therefore, S-VISSR type data dissemination was changed as follows:

G02 was canceled from 1 to 8 in March.

Except for the scheduled cancellation, the data disseminations were performed according to the schedule. The following table shows the performance and summary of the S-VISSR type data disseminations.

Performance of S-VISSR type data disseminations

	S-VISSR type data Disseminations	Remarks
Scheduled	644	
Performed	643	
Performance in %	99.8	

Summary of anomaly S-VISSR type data disseminations

Date	Product	Remarks
March 9	02UTC	The 0125UTC image was lost at 3S and southern latitude.
March 10	02UTC	The 0125UTC image was lost from 10S to 35S.
March 16	09UTC	The 0825UTC image was lost at 8N and northern latitude.

Summary of canceled S-VISSR type data disseminations

Date	Product	Reasons
March 16	08UTC	Ground equipment problems at FCDAS/NOAA

3.2 WEFAX Dissemination

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

H/J-14, H/J-15 and A/B/C/D-15 were canceled on March 1.
H/J-13, H/J-14, H/J-15 and A/B/C/D-15 were canceled from 2 to 30 in March.

Solar-interference Operation of MSC - GOES-9 link was performed from 1 to 8 in March. Therefore, S-VISSR type data dissemination was changed as follows:

H/I-02 were canceled from 1 to 8 in March.

Except for the scheduled cancellation, data disseminations were performed according to the schedule. The following table shows the performance and summary of WEFAX disseminations.

Performance of WEFAX Disseminations

	WEFAX Disseminations	Remarks
Scheduled	2278	
Performed	2260	
Performance in %	99.2	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
March 16	08UTC (A/B-09)	The 0825UTC image was lost at 8N and northern latitude.

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
March 1	09UTC (B/C/D-09)	Ground system trouble in JMA
March 3	11UTC (H-11)	Ground system trouble in JMA
March 5	10UTC (H-10)	Ground system trouble in JMA
March 5	19UTC (H19)	Ground system trouble in JMA
March 12	19UTC (H19)	Ground system trouble in JMA
March 16	08UTC 09UTC	Ground equipment problems at FCDAS/NOAA
March 17	08UTC	Ground system trouble in JMA
March 18	02UTC (I-02)	Ground system trouble in JMA
March 21	04UTC (I-04)	Radio frequency interference
March 29	04UTC	Operational system test of WEFAX dissemination

4. Data Collection System

4.1 International Data Collection System (IDCS)

The following table shows the status of reception and dissemination of messages.

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	695	0	695	0
I16	5	0	0	0	0
I18 (ASDAR)	7	349	72	0	277
I20	3	0	0	0	0
Total	64	1044	72	695	277

a) Number of DCPs registered to GMS-5 IDCS as of March 1, 2005.

b) Format error was caused by the radio telecommunication interference.

c) The messages were none or unsuited to the WMO codes.
The DCP data processing software at MSC detected "DATA BUFFER EMPTY" or "NO MESSAGE".

4.2 Interference on IDCP Channels

The following table shows the interference on GMS International Data Collection System(IDCS) channels.

Interference on GMS IDCS Channels

Ch.	1	2	3	4	5	6	7	8	9	10	11
Mar.	S				W						

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

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

S: severe interference
W: weak interference

5. Satellite System Status

5.1 Satellite Status

GMS-5 was located at longitude 140 degrees east and continued to provide its operational services.

5.2 Maneuver

East-West Station keeping maneuver of GMS-5 was performed on March 24.

5.3 Orbit and Attitude Elements of GMS-5

The orbit and attitude elements of GMS-5 are shown in the following table.

Epoch 00:00:00 UTC, June 7, 2005

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42168.16573
	Eccentricity (e)	-	0.00000471
	Inclination (I)	Degree	3.83918
	Right ascension of ascending node (Ω)	Degree	78.24664
	Argument of perigee (ω)	Degree	342.55168
	Mean anomaly (M)	Degree	314.54197
Attitude	Right ascension (α)	Degree	169.17116
	Declination (δ)	Degree	-86.15511

6. Ground System Status

The Meteorological Satellite Center computer system was replaced on March 1, and operation of the new computer system was started from 03UTC.