Meteorological Satellite Center
Japan Meteorological Agency

GMS Monthly Operations Report

June 2003

1. Events of Special Operation

1.1 Eclipse Operation

No Eclipse Operation.

1.2 Solar-interference Operation

No Solar-interference Operation.

1.3 System Maintenance

System maintenance, which affects GMS operation, was performed on 24 June.

2. Image Observations and Dissemination

2.1 S-VISSR type data disseminations

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	720	
Performed	714	
Performance in %	99.2	

Summary of anomaly S-VISSR type data disseminations

Date	Obs. Time	Remarks
1 June	G12	Lacked a data of Southern Hemisphere
13 June	G01	Trouble of receiving system at MSC Lacked a data at south of lat. 16S
16 June	G02	Only IR1 data was distributed Lacked a data of Southern Hemisphere

Summary of cancelled S-VISSR type data disseminations

Date	Obs. Time	Reasons
8 June	G09	Trouble of receiving system at MSC
11 June	G12	Missing GVAR data
13 June	G10	Bit error of GVAR data
16 June	G02	Lacked a GVAR data of Southern Hemisphere
19 June	G22	Missing GVAR data
22 June	G21	Missing GVAR data
25 June	G22	Missing GVAR data

2.2 WEFAX Dissemination

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	2520	
Performed	2485	
Performance in %	98.6	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
1 June	A/B-12	Lacked a data at south of equator
3 June	A/B-09	Lacked a data at south of equator

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
1 June	C/D-12	Lacked a data at south of lat. 50S
2 June	H-11	Trouble of receiving system at MSC
3 June	C/D-09	Trouble of receiving system at MSC
8 June	H/I-09 A/B/C/D-09	Trouble of receiving program at MSC
11 June	I-02	Trouble of receiving system at MSC
	H/J-12 A/B/C/D-12 K/L/M/N-12	Missing GVAR data
16 June	H-02	Lacked a GVAR data of Southern Hemisphere
19 June	H/I-22	Missing GVAR data
22 June	H/I-21	Missing GVAR data
24 June	H/I-02	The maintenance of the computer system and ground subsystem at DPC/MSC
25 June	H/I-22	Missing 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	132	0	0	132
I10	3	0	0	0	0
I14	3	0	0	0	0
I15	7	0	0	0	0
I16	5	0	0	0	0
I18 (ASDAR)	9	155	38	0	117
I20	3	0	0	0	0
Total	66	287	38	0	249

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) cannels.

Interference on GMS IDCS Channels (Jun 2003)

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

ch.	12	13	14	15	16	17	18	19	20	21	22
Jun.											

ch.	23	24	25	26	27	28	29	30	31	32	33
Jun.						W			W	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 maneuver was performed on 5 June.

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, 23 July 2003

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42168.44081
	Eccentricity (e)	-	0.00007229
	Inclination (I)	Degree	2.16150
	Right ascension of ascending node (Ω)	Degree	83.15994
	Argument of perigee (ω)	Degree	29.64979
	Mean anomaly (M)	Degree	327.39815
Attitude	Right ascension (α)	Degree	171.98794
	Declination (δ)	Degree	-87.82755

5. Ground System Status

On 24 June, the maintenance of the computer system and ground subsystem at DPC/MSC was performed. WEFAX (H/I-02) and DCP communications (from 01:30UTC to 01:50UTC) were canceled. The operation for the ground system was satisfactory except for above maintenance.