GMS Monthly Operations Report

January 2004

1. Events of Special Operation

1.1 Eclipse Operation

There was no Eclipse Operation of GMS-5.

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 on this month.

2. Image Observations and Dissemination

2.1 S-VISSR type data disseminations

S-VISSR type data Disseminations were satisfactory as scheduled except for the canceled 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	744	
Performed	742	
Performance in %	99.7	

Summary of anomaly S-VISSR type data disseminations

Date	Obs. Time	Remarks
January 17	18UTC	Northern hemisphere images

Summary of canceled S-VISSR type data disseminations

Date	Obs. Time	Reasons
January 15	03UTC	GVAR data frame break attributed unknown RFI
January 27	03UTC	Image data processing error at MSC

2.2 WEFAX Dissemination

WEFAX broadcasting service was satisfactory except for the canceled observations during this month. The following table shows performance and summary of WEFAX broadcasting service.

Performance of WEFAX Disseminations

GMS-5	Disseminated	Remarks
Scheduled	2604	
Performed	2592	
Performance in %	99.5	

Summary of anomaly WEFAX disseminations

Date	Product	Remarks
January 17	C/D-18	Lacked a data at south of lat. 42S

Summary of Cancelled WEFAX Dissemination

Date	Product	Reasons
January 15	H/I-03 A/B/C/D-03	GVAR data frame break attributed unknown RFI
January 27	H/I-03 A/B/C/D-03	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	147	0	0	147
I10	3	0	0	0	0
I14	3	0	0	0	0
I15	7	21	0	0	21
I16	5	0	0	0	0
I18 (ASDAR)	8	174	55	0	119
I20	3	0	0	0	0
Total	65	342	55	0	287

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 (Jan 2004)

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

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

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

East-West Station Keeping maneuver of GMS-5 was performed on January 22.

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, 12 February 2004

	Element	Unit	Value
Orbit	Semi-major axis (a)	Km	42163.87507
	Eccentricity (e)	-	0.00012703
	Inclination (I)	Degree	2.66290
	Right ascension of ascending node (Ω)	Degree	82.68019
	Argument of perigee (ω)	Degree	308.99480
	Mean anomaly (M)	Degree	249.95734
Attitude	Right ascension (α)	Degree	170.11947
	Declination (δ)	Degree	-87.26975

5. Ground System Status

The operation for the ground system was satisfactory.