

Himawari Monthly Operations Report

July 2015

1. Special operation events

1.1 Switchover of Operational Satellite

Himawari-8 began formal observation operation and took over DCP data relay operation from MTSAT-1R, as from 02 UTC on July 7, 2015.

2. Earth observation

2.1 Full disk observation

The regular schedules of full disk observation are 142 times in a day. The following tables show the results of full disk observation and a summary of canceled full disk observation from 7 July to 31 July 2015.

Results of Himawari-8 full disk observation

	Full disk observation	Remarks
Scheduled	3531	
Performed	3531	
Performance in %	100.00	

Summary of canceled Himawari-8 full disk observation

Date	Full disk observation	Reasons
	None	

2.2 Japan area observation

The regular schedules of Japan area observation are 576 times in a day. The following tables show the results of Japan area observation and a summary of canceled Japan area observation from 7 July to 31 July 2015.

Results of Himawari-8 Japan area observation

	Japan area observation	Remarks
Scheduled	14352	
Performed	14352	
Performance in %	100.00	

Summary of canceled Himawari-8 Japan area observation

Date	Japan area observation	Reasons
	None	

2.3 Target area observation

The regular schedules of Target area observation are 576 times in a day. The area is flexibly selected to enable prompt reaction to meteorological conditions.

The regular schedules of Target area observation are 576 times in a day. The following tables show the results of target area observation and a summary of canceled target area observation from 7 July to 31 July 2015.

Results of Himawari-8 Target area observation

	Target area observation	Remarks
Scheduled	14352	
Performed	14352	
Performance in %	100.00	

Summary of canceled Himawari-8 Target area observation

Date	Target area observation	Reasons
	None	

3. Data Collection System

3.1 International Data Collection System (IDCS)

The following table shows the status of reception and dissemination of International Data Collection Platform (IDCP) messages that were received in Himawari-8 area of responsibility.

Reception and dissemination of IDCP messages

IDCP channels	Numbers of IDCPs ^{a)}	Received messages	Error messages ^{b)}	Messages disseminated to the GTS
I12	3	0	0	0
I15	2	0	0	0
I16	4	0	0	0
I20	2	0	0	0
Total	11	0	0	0

a) IDCP numbers are those registered in Himawari-DCS as of 7 July 2015.

b) No message, or message unsuitable for WMO codes.

3.2 Interference on IDCP channels

The following table shows interference on Himawari International Data Collection System (IDCS) channels that occurred from 7 July to 31 July 2015.

Interference on Himawari IDCS Channels (July 2015)

Channel	1	2	3	4	5	6	7	8	9	10	11
Interference											
Channel	12	13	14	15	16	17	18	19	20	21	22
Interference	H		H							W	
Channel	23	24	25	26	27	28	29	30	31	32	33
Interference											H

Note - W: weak interference / H: harmful interference

4. Satellite system status

4.1 Satellite status

Himawari-8

Location: 140.7 east longitude

Operational : Observation, DCP relay

4.2 Maneuver

- 1) An east-west station-keeping maneuver of Himawari-8
12:30 UTC on 9 July 2015.
- 2) An east-west station-keeping maneuver of Himawari-8
00:30 UTC on 10 July 2015.
- 3) A north-south station-keeping maneuver of Himawari-8
13:10 UTC on 20 July 2015.
- 4) An east-west station-keeping maneuver of Himawari-8
22:00 UTC on 23 July 2015.
- 5) An east-west station-keeping maneuver of Himawari-8
10:00 UTC on 24 July 2015.

4.3 Calibration of the visible channel

- 1) 20:50 UTC on 7 July 2015.
- 2) 20:50 UTC on 22 July 2015.

4.4 Orbit information

The following table shows the Two-Line Elements of Himawari-8's orbital elements.

Epoch 03:00:0.00 UTC on 8 July 2015

1	40267U	14060A	15246.12500000	.00000000	00000-0	00000-0	0	00097
2	40267	000.0136	112.4717	0001271	105.6599	309.4454	01.00270189	3347

MTSAT Monthly Operations Report

July 2015

1. Special operation events

1.1 Operation information

MTSAT-2 formal operation has finished at 02 UTC 7 July 2015.

1.2 Equinox operation

There was no equinox operation of MTSAT-2.

1.3 Solar-interference operation

There was no solar-interference operation of MTSAT-2.

2. Imagery dissemination

2.1 High Rate Information Transmission (HRIT) imagery via MTSAT-1R

HRIT dissemination via MTSAT-1R was performed according to the regular schedule.

The following tables show the performance of HRIT dissemination and a summary of canceled HRIT dissemination from 1 July to 7 July 2015.

Performance of HRIT dissemination via MTSAT-1R

	HRIT	Remarks
Scheduled	111	
Performed	111	Observed by MTSAT-2
Performance in %	100.00	

Summary of canceled HRIT dissemination via MTSAT-1R

Date	HRIT	Reasons
	None	

2.2 Low Rate Information transmission (LRIT) imagery via MTSAT-1R

LRIT dissemination via MTSAT-1R was performed according to the regular schedule. The following tables show the performance of LRIT dissemination and a summary of canceled LRIT dissemination from 1 July to 7 July 2015.

Performance of LRIT dissemination via MTSAT-1R

	LRIT	Remarks
Scheduled	191	
Performed	191	Observed by MTSAT-2
Performance in %	100.00	

Summary of canceled LRIT dissemination via MTSAT-1R

Date	LRIT	Reasons
	None	

2.3 HRIT imagery via landline

HRIT dissemination via landline was performed according to the regular schedule. The following tables show the performance of its dissemination and a summary of canceled HRIT dissemination from 1 July to 7 July 2015.

Performance of HRIT dissemination via landline

	HRIT	Remarks
Scheduled	795	
Performed	795	Observed by MTSAT-2
Performance in %	100.00	

Summary of canceled HRIT dissemination via landline

Date	HRIT	Reasons
	None	

3. Data Collection System

3.1 International Data Collection System (IDCS)

The following table shows the status of reception and dissemination of International Data Collection Platform (IDCP) messages that were received in MTSAT-1R's area of responsibility.

Reception and dissemination of IDCP messages

IDCP channels	Numbers of IDCPs ^{a)}	Received messages	Error messages ^{b)}	Messages disseminated to the GTS
I06	0	0	0	0
I07	0	0	0	0
I10	3	0	0	0
I14	0	0	0	0
I15	2	0	0	0
I16	4	0	0	0
I18	0	0	0	0
I20	2	0	0	0
Total	11	0	0	0

a) IDCP numbers are those registered in MTSAT-DCS as of 1 July 2015.

b) No message, or message unsuitable for WMO codes.

3.2 Interference on IDCP channels

The following table shows interference on MTSAT International Data Collection System (IDCS) channels that occurred from 1 July to 7 July 2015.

Interference on MTSAT IDCS Channels (July 2015)

Channel	1	2	3	4	5	6	7	8	9	10	11
Interference											
Channel	12	13	14	15	16	17	18	19	20	21	22
Interference	W					W					
Channel	23	24	25	26	27	28	29	30	31	32	33
Interference											H

Note - W: weak interference / H: harmful interference

4. Satellite system status

4.1 Satellite status

MTSAT-2 located at longitude 145 east was performing the observation operation, and MTSAT-1R located at longitude 140 east was operating telecommunication services such as data dissemination and DCP data relay.

4.2 Maneuver

- 1) A north-south station-keeping maneuver of MTSAT-2 was carried out from 13:02 UTC on 3 July 2015.
- 2) A north-south station-keeping maneuver of MTSAT-2 was carried out from 13:02 UTC on 17 July 2015.
- 3) An east-west station-keeping maneuver of MTSAT-2 was carried out from 19:16 UTC on 30 July 2015.

4.3 Orbit elements of MTSAT-2

The orbit elements of MTSAT-2 are shown in the following table.

Epoch 00:00:0.00 UTC on 9 August 2015 – MTSAT-2

	Element	Unit	Value
Orbit	Semi-major axis (a)	km	42165.820900
	Eccentricity (e)	-	0.0003540050
	Inclination (I)	Degree	0.0129070000
	Right ascension of ascending node (Ω)	Degree	280.672523
	Argument of perigee (ω)	Degree	206.035839
	Mean anomaly (M)	Degree	334.464998