



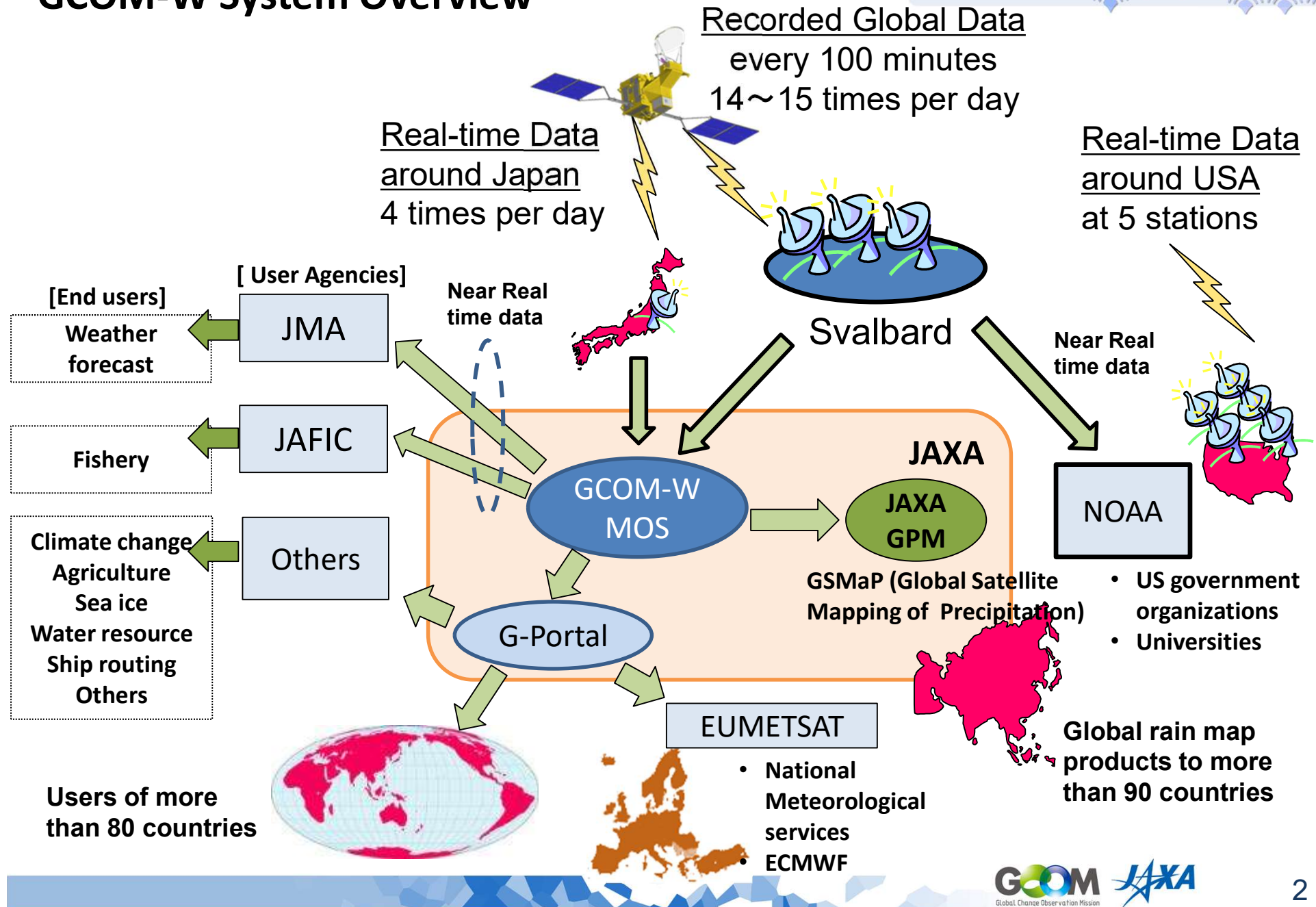
# Status of GCOM-W Satellite, Mission Operation & User Services

January 17, 2022

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# GCOM-W System Overview



# GCOM-W Satellite System Status



All subsystems are operated normally with primary hardware except AMSR2 SPC.

Sub-system	Status	Notes
System	Normal	Maintaining the A-train orbit.
TT&C Subsystem	Normal	Data recorder temporarily stopped on Dec. 4, 2015, Sep. 27, 2017, Dec.16 2018 and Mar. 17, 2020 due to Single Event Upset.
Solar Array Paddle & Electric Power Subsystems	Normal	Solar array paddles generates 4000W. 400W lost on Nov. 15, 2015 probably due to debris. Then 130W lost on Mar. 18, 2018. NO IMPACT on observation operation.
Attitude and Orbit Control Subsystem	Normal	
Reaction Control Subsystem	Normal	Rise the threshold of propellant valve heater due to disconnect of catalyst bed heater. There is no restriction to keep the A-train orbit.
Thermal Control Subsystem	Normal	The Heater Control Electronics A (HCE-A) has been switched off, but operation is continuing with the secondary system (HCE-B). No effect on mission continuation.
Mission Data Handling Subsystem	Normal	
AMSR2	Normal	SPC (Signal Processor of Control unit) had automatically switched three times between the primary unit (SPC-A) and the redundant unit (SPC-B), on May 10, 2013, on April 15, 2016 and on November 25, 2017. Currently, SPC-B is working.

# GCOM-W Mission Summary



Date		Event
2012	May. 17	Launch (5-Year Design Life)
	Jun. 28	Injection into A-Train
	Aug. 10	Completion of initial checkout
2013	Jan. 25	AMSR2 Level 1 (Brightness Temperature) products release
	May. 17	AMSR2 Level 2 (Geophysical) products release
2015	Mar. 26	AMSR2 Level 1-3 Version2 release
	Oct.6	Research product (all-weather sea surface wind speed) release
2016	Aug. 23	AMSR2 Level 1 minor version update
2017	Mar. 1	AMSR2 Level 2 Version 3 release
	May. 26	GCOM-W nominal mission completion review
	Oct. 11	GCOM-W & GPM/DPR external review for science
	Dec. 1	Transition to extended mission period
2018	Jan. 11	All-weather sea surface wind speed Version 3 release
	Feb. 5	Research product (Land surface temperature) release
2019	Jan. 31	Research products (Thin sea ice detection & Total precipitable water over land) release
2020	Oct.13	AMSR2 Level 2 (SST, SSW) Version4 release
2021	Jun. 16	AMSR2 Level 2(TPW, CLW) Version 2.2 release (minor version update)

# Data Processing Status

- **99.7 %** mission data were acquired from Aug. 10, 2012 to Dec. 31, 2021.

AMSR2 Missing Data List: [https://gportal.jaxa.jp/gpr/assets/mng\\_upload/GCOM-W/AMSR2\\_MissingLIST.pdf](https://gportal.jaxa.jp/gpr/assets/mng_upload/GCOM-W/AMSR2_MissingLIST.pdf)

From (UT)		To (UT)		Missing Time (min)	Remarks
Date	Time	Date	Time		
2021/11/15	22:02:59	2021/11/15	22:05:59	4	
2021/04/07	00:59:08	2021/04/07	01:40:46	42	Inclination Adjust Maneuver
2021/03/17	02:20:27	2021/03/17	03:06:06	46	Retrograde Maneuver
2021/02/17	01:54:40	2021/02/17	02:37:15	43	Inclination Adjust Maneuver
2021/02/04	18:55:47	2021/02/04	19:45:14	50	

# Data Processing Status

- GCOM-W/AMSR2

- ① 2 products (TPW, CLW) were released in Jun 2021.(V2.220.220)
- ② New PRC[Ver.4.400.400]and SST[Ver4.410.410] products will be release in next March.

No.	Product Name	Latest Version	Ver.1				Ver.2			Ver.3	Ver.4
			1.100.100	1.110.110	1.110.100	1.100.110	2.200.200	2.210.210	2.220.220	3.300.300	4.400.400
1	Brightness Temperature (TB)	2.220.220	2013/01/25	2013/03/01	—	—	2015/03/26	2015/04/03	2016/08/23	—	—
① 2	Total Precipitable Water (TPW)	2.220.220	2013/05/17	—	Minor update	—	2015/03/26	2015/04/03 <sup>(*)</sup>	2021/06/16 <sup>(*)</sup>	—	—
3	Cloud Liquid Water (CLW)	2.220.220	2013/05/17	—	Minor update	—	2015/03/26	2015/04/03 <sup>(*)</sup>	2021/06/16 <sup>(*)</sup>	—	—
② 4	Precipitation (PRC)	2.210.210	2013/05/17	2013/12/05	Major update	—	2015/03/26	2015/04/03	—	—	—
5	Sea Surface Temperature (SST)	4.400.400	2013/05/17	—	Minor update	—	2015/03/26	2015/04/03	—	2017/03/01	2020/10/13
6	Sea Surface Wind speed (SSW)	4.400.400	2013/05/17	—	—	—	2015/03/26	2015/04/03	—	2017/03/01	2020/10/13
7	Sea Ice Concentration (SIC)	3.300.300	2013/05/17	—	—	2013/09/25	2015/03/26	2015/04/03	2015/07/14	2017/03/01	—
8	Snow Depth (SND)	2.210.210	2013/05/17	—	—	—	2015/03/26	2015/04/03	—	—	—
9	Soil Moisture Content (SMC)	3.300.300	2013/05/17	—	2013/09/25	—	2015/03/26	2015/04/03	—	2017/03/01	—

latest version <available from DPSS>  
previous version <available from DPSS>  
old version <Not available>  
released in Mar.2017



# Data Processing Status



The revision history of GCOM-W/AMSR2 products has been available since Sep, 2019.

[https://gportal.jaxa.jp/gpr/assets/mng\\_upload/GCOM-W/AMSR2\\_RevisedProducts.pdf](https://gportal.jaxa.jp/gpr/assets/mng_upload/GCOM-W/AMSR2_RevisedProducts.pdf)

Products which were reprocessed for the correction of satellite/sensor anomaly or wrong processing parameters are listed on the revision history.

● AMSR2 products revision history

as of 2020/03/16

• Summary list of revised products

Observation Startdatetime [Path]	Products [Level]	Remarks
2012/07/23 06:18 [002A]	TB [L1] TPW,CLW,PRC,SND,SIC [L2,L3]	*4 Correction of positional deviation
2012/07/18 04:20 [216A]		
2012/07/17 03:37 [209A]		
2012/07/02 23:18 [175D]		
2018/12/16 06:13 [009D]	All Products [L1,L2,L3]	*3 Recovery of lost data due to AMSR2 temporal anomaly
2018/11/15 22:35 [160A]	All Products [L1,L2,L3]	*2 Recovery of lost data due to AMSR2 temporal anomaly
2016/08/10 17:09 [115D]	TB [L1]	*1 Recovery of lost data due to AMSR2 temporal anomaly

• Detailed list of revised products

The products on the following list were reprocessed for the reason described in the "Remarks" and are now available.

Please re-download the latest products as necessary.

Granule ID	Production date [time] (UT)	Remarks
GW1AM2_20120700_01M_PSMA_L3SGSICH3300300	2020/02/13	*4 Correction of positional deviation
GW1AM2_20120700_01M_PNMA_L3SGSICLC3300300	2020/02/13	*4 Correction of positional deviation
GW1AM2_20120700_01M_PSMA_L3SGSICLC3300300	2020/02/13	*4 Correction of positional deviation
GW1AM2_20120700_01M_PNMA_L3SGSICH3300300	2020/02/13	*4 Correction of positional deviation
GW1AM2_20120700_01M_PNMD_L3SGSICH3300300	2020/02/13	*4 Correction of positional deviation
GW1AM2_20120700_01M_PSMO_L3SGSICLC3300300	2020/02/13	*4 Correction of positional deviation
GW1AM2_20120700_01M_PSMO_L3SGSICH3300300	2020/02/13	*4 Correction of positional deviation
GW1AM2_20120700_01M_PNMD_L3SGSICLC3300300	2020/02/13	*4 Correction of positional deviation
GW1AM2_20120730_01D_PSMA_L3SGSICLC3300300	2020/02/13	*4 Correction of positional deviation
GW1AM2_20120730_01D_PSMA_L3SGSICH3300300	2020/02/13	*4 Correction of positional deviation

# Data Distribution Service

GCOM-W standard/NRT products have been provided on G-Portal since Jul., 2018.

<https://gportal.jaxa.jp/gpr/index/index>

The screenshot displays the G-Portal website interface. The header includes the G-Portal logo and the text "Globe Portal System". A main banner features a satellite image and the text: "G-Portal offers earth observation data free of charge for use in various fields." Below the banner, there is a section for "INFO [2019/11/27] (Resumed) Temporary suspension of some GCOM-C/SGLI products distributing". The left sidebar contains a search bar, a list of categories (Physical quantities, Spacecraft, Direct download), and a navigation menu with links like Login, User registration, and Product information. The main content area shows "Use cases" with a "Case Studies – Fishery demonstrated by GCOM" section, which includes a map and a list of products: GCOM-C/SGLI, GCOM-W/AMSR2, and Sea Surface Temperature.



# Data Distribution Service

G-Portal is the dissemination system of JAXA's satellite data.

1. Web-based Search & Download

Data search for multi-satellite data.

- a. Search by product categories or physical parameters
- b. Search by spacecraft or instrument/sensor

2. Direct access to products

FTP/SFTP/GridFTP interfaces are provided.

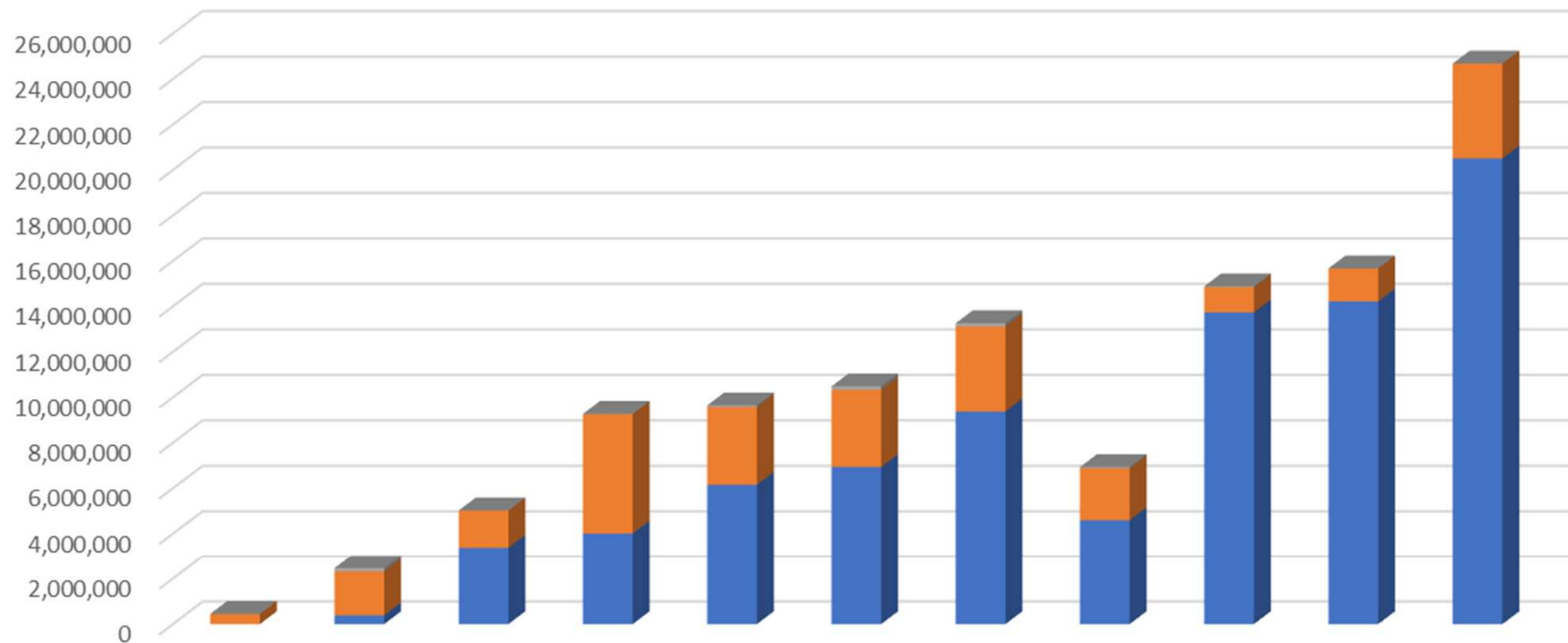
3. Catalog service (CSW) compliant with OGC 3.0.

4. Information of satellite/product, related documents and tools are available on G-Portal.

# Data Distribution Result

**Total Distribution : 112million files**

**August 22, 2011 – November 30, 2021 (123months)**



■ AMSR2 ■ AMSRE ■ AMSR

# Helpdesk/User Support

- PI support
  - EORC Orderdesk  
[Z-orderdesk@ml.jaxa.jp](mailto:Z-orderdesk@ml.jaxa.jp)
- GCOM-W data users
  - G-Portal support-desk.  
[z-gportal-support@ml.jaxa.jp](mailto:z-gportal-support@ml.jaxa.jp)