

# Implementation Guideline for AMSR3 Data Provision

June 2026

Japan Aerospace Exploration Agency (JAXA)

## 1. AMSR3 Data Utilization Policy

### (1) Purpose

The purpose of AMSR3 mission is to respond to new users' needs by maintaining and continuing the achievements of previous microwave radiometers (AMSR, AMSR-E, AMSR2), which have become widely utilized worldwide, while leveraging its advantages such as high-frequent global observations and high spatial resolution.

### (2) Policy

To achieve the above purpose, the Globe Portal System (G-Portal), which is JAXA's online data provision system, is used to provide AMSR3 data rapidly and continuously to users, while considering utilization continuity from existing GCOM-W/AMSR2 data.

Moreover, we expect to expand area of data utilization through proactive collaboration with other organizations, and to create new products and new data utilization by providing data to the wider users. Followings are categories of data distribution.

#### 1) Provision of data under collaboration with research organizations

AMSR3 observation data (including data prior to product release) and characteristic information of the observation sensor is provided to research organizations, etc., to jointly conduct:

- Calibration and validation of AMSR3 data
- Generation of standard products and combined products using other satellite data
- Improvement of product quality
- Generation of new products
- Research on processes of climate change mechanisms
- Research related to improvement of prediction accuracy for long-term climate change

#### 2) Provision of data under collaboration with organizations carrying out demonstrations of data utilization

AMSR3 processed data is provided in accordance with the utilization forms required by organizations carrying out demonstrations of data utilization, such as operational and research organizations conducting weather forecasts and/or climate research/projection, organizations providing fishery, oceanographic condition information, and/or maritime route information management. Such organizations are expected to conduct demonstrations including operational utilization in numerical weather prediction, validation of climate models and applications such as fisheries resource management.

### 3) Provision of data to general users

AMSR3 observation data (standard products) is provided free of charge to general users other than those mentioned in 1) and 2) above through an online data provision system, with the aim of expanding research and application areas such as climate change prediction in fields different from those described above and creating new utilization fields for satellite observation data.

## 2. Basic Policy for AMSR3 Data Provision

### (1) Scope of this Guideline: Data, Schedule and Systems for Providing Data

The AMSR3 data to be provided are listed in Table 1 below.

Table 1 AMSR3 Data Products

Data name	Standard Product	Details of data
<b>Level 1A Product</b>	No	Stored observation count values for each AMSR3 frequency.
<b>Level 1B Product</b>	Yes	Stored brightness temperature for each AMSR3 frequency.
<b>Level 1R Product</b>	Yes	Resampled product generated from the Level 1B Product by adjusting differences in spatial resolution (Field of View (FOV)) among frequencies.
<b>Near-real-time Level 1B Product</b>	No	A Level 1B Product (brightness temperature) for Japan (local) and global coverage, provided on a near-real-time basis.
<b>Near-real-time Level 1R Product</b>	No	A global Level 1R Product provided on a near-real-time basis.
<b>Level 2 Product</b>	Yes	Geophysical parameter product generated from the Level 1 Product (brightness temperature) by retrieving water-related geophysical parameters, such as integrated water vapor content, integrated cloud water content, precipitation, sea surface temperature, sea surface wind speed, all-weather sea surface wind speed, sea ice concentration, high-resolution sea ice concentration, soil moisture content, snow depth, and sea ice motion vector.
<b>Near-real-time Level 2 Product</b>	No	A Level 2 Product (geophysical parameters) for Japan (local) and global coverage, provided on a near-real-time basis.
<b>Level 3 Product</b>	Yes	Temporal and spatial averaged gridded product created from each Level 1B or Level 2 product in daily and monthly basis with map projection of global, the Arctic, or Antarctic region.

Note: The near-real-time Level 2 Product is processed immediately after Level 1B data reception by using global forecast values, etc. prioritizing “the faster latency”, while the Level 2 Standard Product is processed using global objective analysis values, etc. prioritizing “the better accuracy”.

The schedule for data provision is as follows:

- Start of provision of brightness temperature products: 1 year after launch (June 30, 2026)
- Start of provision of geophysical parameter products: 1 year after launch (June 30, 2026)

Data provision systems are the AMSR3 Mission Operation System and the Earth Observation Data Provision System (G-Portal).

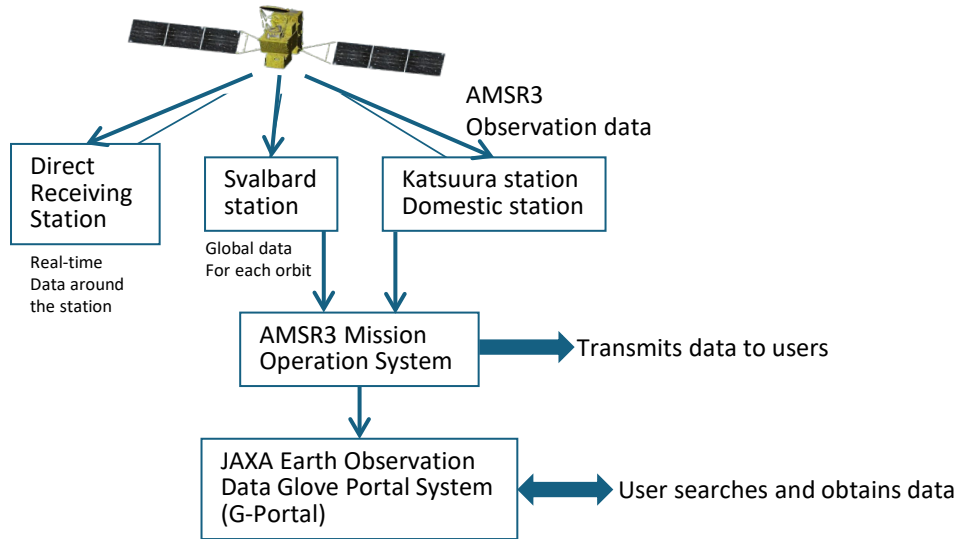


Fig.1 System concerning provision of GOSAT-GW/AMSR3 data.

### [AMSR3 Mission Operation System]

This system provides standard products and near-real-time products to other systems of JAXA and to users outside JAXA. Once preparations for data provision are completed, the data are transmitted to a user. The types of data to be transmitted can be configured for each user.

### [G-Portal]

This system provides AMSR3 standard products, near-real-time products, and Level 1A products to users over the internet. Users can also search for and obtain multiple JAXA Earth observation satellite products across missions.

To download publicly available AMSR3 products, an user must register at the G-Portal system (<https://gportal.jaxa.jp/gpr>) via internet. In addition, to access to non-public AMSR3 products, such as near-real-time and Level 1A products, “AMSR3 Special User” request is needed to apply. To become “AMSR3 Special User”, an user must submit a form to JAXA by using “Application Form for becoming a G-Portal “AMSR3 Special User”” in appendix. Upon receiving the application form, JAXA will review it and make decision of authorization.

## (2) Overview of Provision Methods

### a) For research & development and demonstration of data utilization

Depending on the purpose of utilization, data are provided according to the following two categories:

### *I. Provision of data to users for R&D and demonstration of data utilization (“Research purposes”)*

**Target users:** R&D organizations and organizations conducting demonstrations of data utilization as described in 1) and 2) above. Their utilization outcomes are expected to contribute to the objectives of the AMSR3 Project. Principal Investigator (PI) selected through the JAXA’s Research Announcement on the Earth Observations (EORA) is also included in this category during the approved research period.

**Agreement:** Depending on the purpose, an agreement, Memorandum of Understanding (MoU), or joint research agreement, etc., shall be concluded for each applicant.

**Commencement of provision of data:** From the initial calibration and validation operation period.

**Data to be provided:** AMSR3 observation data (including processed data according to the utilization form of the receiving party). All data described in Table 1 can be provided. In addition, relevant data and information (e.g., satellite system and sensor information) required by the receiving party can be provided as well.

**Method for provision:** AMSR3 observation data shall be provided via the G-Portal system, in principle. However, depending on necessity, data may be provided as recording medium or through a dedicated line via the AMSR3 Mission Operation System.

**Expenses for provision:** In case of online provision, data are provided free of charge. Any new or extra expenses to JAXA such as the cost of media or a dedicated line shall be borne by the receiving party.

### *II. Provision of data to unspecified users other than I above (“General purposes”)*

**Target users:** General users as defined in Section 1. (2) 3).

**Agreement:** No individual agreement (users apply and register online by agreeing with the data utilization terms and conditions, which describe the rights and terms of use set forth below).

**Registration information:** Name, affiliation, and purpose of utilization are mandatory for registration.

**Commencement of provision of data:** After product release carried out subsequent to the initial calibration and validation operation period.

**Data to be provided:** Publicly available AMSR3 observation data (standard products only). If a user requires near-real-time products from the G-Portal system for research purposes, submission of an application form for becoming an “AMSR3 Special User” is needed. JAXA will review the application and make decision of authorization.

**Method for provision:** Data shall be provided via the G-Portal system.

**Expenses for provision:** Free of charge.

The overview of provision methods is illustrated in the figure below.

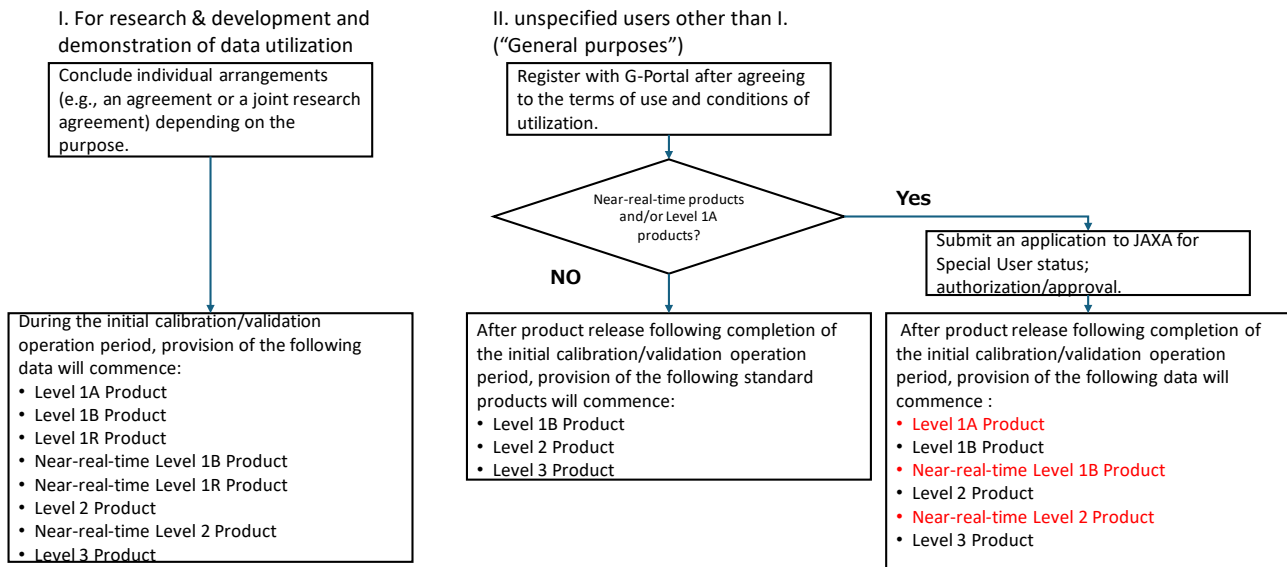


Fig.2 Data provision flow for users for research and development and demonstration of data utilization.

### b) Commercial purposes

Any user can utilize AMSR3 data for commercial purposes without concluding an intellectual property licensing agreement with JAXA and without royalties. Data shall be provided through G-Portal or the AMSR3 Mission Operation System.

## 3. Rights Associated with AMSR3 Data

JAXA shall own all intellectual property rights, including but not limited to copyrights of all AMSR3 data JAXA provides.

If a user generates a value-added data product, the user will retain the intellectual property rights of said product. JAXA shall not exercise its copyrights and any other intellectual property rights in relation to such value-added products generated by the user, and the user is entitled to use the products.

Value-added data products are modified products that have been irreversibly modified by applying high-level data processing (e.g., data analyses, combination with satellite data acquired by different missions, image processing based on external information other than the original data, or conversion of physical quantities) for which a user’s copyright is acknowledged.

## 4. Conditions Concerning the Use of AMSR3 Data

Researchers, research organizations, and third parties are required to comply with the terms of use as follows:

### **(i) Credit must be indicated when publishing data and outcomes**

When publishing outcomes obtained from using AMSR3 data identified in Table 1, such AMSR3 data must be accompanied by JAXA credit as follows (any one of the following):

- ©JAXA
- ©Japan Aerospace Exploration Agency
- Copyright: JAXA
- Copyright: Japan Aerospace Exploration Agency
- ©JAXA [Year] ALL RIGHTS RESERVED

If a user generates a value-added product and provides it (including publications) to a third party, the user shall indicate that JAXA is the provider of the original data as follows:

“Original Data: Provided by JAXA”.

### **(ii) Users shall not use the AMSR3 data for any purpose in opposition to public order and morals**

#### **(iii) Disclaimer**

JAXA shall not be liable for any missing data, degradation of data quality, delay in data delivery, or any other situation in which the data cannot be provided as a result of problems that occur in the spacecraft or ground facilities, or other reasons.

#### **(iv) Redistribution of AMSR3 data**

- Redistribution of Level 1A products to any third party is prohibited.
- An “AMSR3 Special User” can redistribute near-real-time products within the scope of the purpose of utilization. If near-real-time products are redistributed to a third party, the Special User shall report the recipient, its purpose of utilization and outcomes to JAXA approximately once a year.
- Redistribution of any standard product to a third party is allowed.

### **Policy for Direct Reception of AMSR3 Data**

Any organization that desires the direct reception of AMSR3 data shall coordinate the matter individually with JAXA.