

AMSR3 Data Viewer

FAQ

Issue	Date	Revision record	remarks
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1 Introduction

This document is the Frequently Asked Questions (FAQ) for the AMSR3 Data Viewer (referred to as the application hereinafter).

2 FAQ

① What is the main purpose of this application?

The main purpose of this application is to map and display the observation data of AMSR3 (Advanced Microwave Scanning Radiometer 3) installed on GOSAT-GW (Global Observing SATellite for Greenhouse gases and Water cycle) on a map.

② In what environment can this application be used?

This application can be used in the following environments: Windows 10/11, MacOS 14, and Linux (Red Hat 9, equivalent to Kernel 5.14).

③ What products are available in this application?

This application allows the use of observation data from AMSR3 installed on GOSAT-GW. The target products are shown in Table 2-1.

Table 2-1 List of Target Products

Processing Level	Display Products		Mapping Display Contents on the Map	Format Conversion	Video Output			
	Code	Description						
L1A	DNA	Count Value (1A)	RGB/Pseudocolor Image					
L1B	TBB	Brightness Temperature (1B)						
L1R	TBR	Resampled Brightness Temperature (1R)						
L1H	TBH	High-Resolution Brightness Temperature (1H)						
L1C	TBC	Center Position Corrected Brightness Temperature (1C)						
L2	TPW	Accumulated Water Vapor		Binary CSV Image NetCDF KML/KMZ	AVI			
	CLW	Accumulated Cloud Water						
	PRC	Precipitation						
	SST	Sea Surface Temperature						
	SSW	Sea Surface Wind Speed						
	ASW	All-Weather Sea Surface Wind Speed						
	SIC	Sea Ice Concentration						
	HSI	High-Resolution Sea Ice Concentration						
	SMC	Soil Moisture Content						
	SND	Snow Depth						
	HST	High-Resolution Sea Surface Temperature						
L3	Brightness Temperature	TL1	Brightness Temperature 6.925GHz	Pseudocolor Image				
		TL2	Brightness Temperature 7.3GHz					
		TL3	Brightness Temperature 10.25GHz					
		TL4	Brightness Temperature 10.65GHz					
		TL5	Brightness Temperature 18.7GHz					
		TL6	Brightness Temperature 23.8GHz					
		TL7	Brightness Temperature 36.42GHz					
		TH1	Brightness Temperature 89.0GHz					
		TH2	Brightness Temperature 165.5GHz					
		TH3	Brightness Temperature 183.31+/-3GHz					
		TH4	Brightness Temperature 183.31+/-7GHz					
		Atmosphere	TPW			Accumulated Water Vapor Amount	Binary CSV Image KML/KMZ ¹ (*1 excluding SIM)	AVI KML/KMZ ² (*2 EQR data only)
			CLW			Accumulated Cloud Water Amount		
			PRC			Precipitation Amount		
	Ocean Polar	SST	Sea Surface Temperature					
		SSW	Sea surface wind Speed					
		ASW	All-weather sea surface wind speed					
		HST	High-resolution sea surface temperature					
	Region	SIC	Sea ice concentration					
		HSI	High-resolution sea ice concentration					
		SIM	Sea ice displacement vector					
	Land	SMC	Soil moisture content					
		SND	Snow depth					

④ Can HDF5 format files be used?

No, HDF5 format files cannot be used in this application. Instead, NetCDF format files can be used.

- ⑤ Where can I obtain the products available in this application?
The products available in this application can be obtained from G-Portal. You can access G-Portal at the following URL: <https://gportal.jaxa.jp/gpr/?lang=ja>.
- ⑥ Can I use the converted products of AMSR/AMSR-E/AMSR2 in NetCDF format?
No, you cannot utilize the converted products of AMSR/AMSR-E/AMSR2 in NetCDF format in this application.
- ⑦ Is there a way to register multiple products to the library at once?
Yes, you can register multiple products at once by selecting them in the file explorer and dragging and dropping them into the application.
- ⑧ Can the dataset displayed on the map be changed?
Yes, you can change the displayed dataset on the map. For L1 products, you can modify the section indicated in Table 2-2 within the "mapColorSetting.ini" and "mapColorSettingDefault.ini" files located in the config folder.

For L2 and L3 products that contain multiple datasets, you can change the displayed dataset by selecting the dataset from the combo box in the "Dataset" field within the Product List Area.

Table 2-2 L1 Product Display Datasets

Section	Key	Description
L1_X (X:0~4)		Color Definition Section for L1 Products
	DatasetR	Dataset Name assigned to Red (R) for RGB composite display
	DatasetG	Dataset Name assigned to Green (G) for RGB composite display
	DatasetB	Dataset Name assigned to Blue (B) for RGB composite display
	DatasetS	Dataset Name for Pseudo-color display
	LatR	Dataset Name for Latitude corresponding to DatasetR
	LatG	Dataset Name for Latitude corresponding to DatasetG
	LatB	Dataset Name for Latitude corresponding to DatasetB
	LatS	Dataset Name for Latitude corresponding to DatasetS
	LonR	Dataset Name for Longitude corresponding to DatasetR
	LonG	Dataset Name for Longitude corresponding to DatasetG
	LonB	Dataset Name for Longitude corresponding to DatasetB
	LonS	Dataset Name for Longitude corresponding to DatasetS

⑨ Is there a limit to the number of products that can be displayed on the map?

Yes, there is a limit to the number of products that can be displayed on the map at once. The maximum number is 10. If you want to change the display limit, you can modify the section indicated in Table 2-3 within the “userApp.ini” file located in the config folder.

Table 2-3 Concurrent Display Product Number Setting

Section	Key	Description
Common		Common Definition Section
	viewProductNum	Number of Products Simultaneously Displayable

⑩ What is the purpose of the Region Selection mode?

The purpose of the Region Selection mode is to allow you to perform conversions to binary (raw data) files, CSV files, image files, and KML (KMZ) files within the selected area.

⑪ Is there a way to change the color table used for product map display?

Yes, you can change the color table used for product map display. Here's how:

1. Select "Color Settings" from the "Display Settings" menu to display the Color Settings Screen.
2. To change the color table display, select the processing level and the product code of the target product. For L1 products, you can choose between RGB display or pseudo-color display. For L2 and L3 products, pseudo-color display settings are available.

For RGB display, click the "Edit" button in the Display Band (RGB) Settings section to set the value range of the displayed product data. (Refer to Figure 2-1)

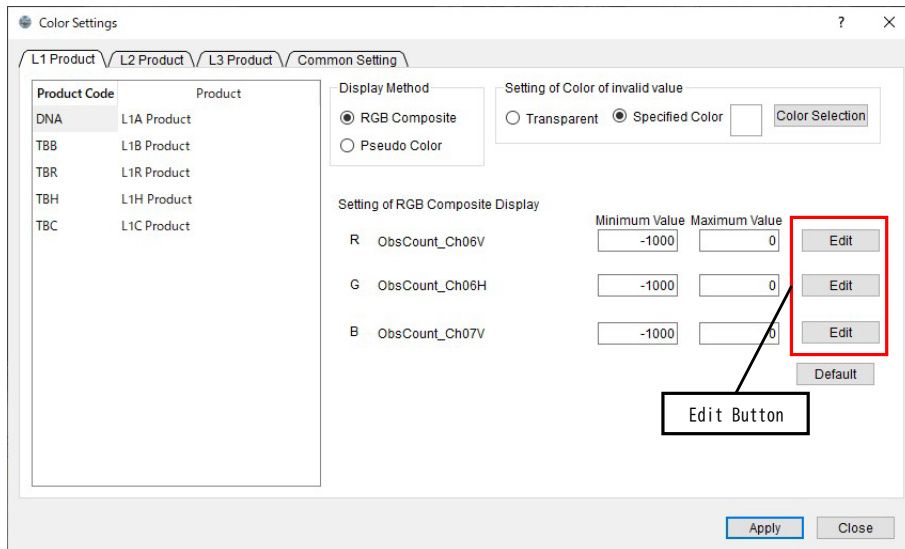


Figure 2-1 Color Settings Screen (RGB Composite Display Settings) Edit Button

For pseudo-color display, click the "Edit" button in the Pseudo-color Settings section to set the value range of the displayed product data. (Refer to Figure 2-2) Additionally, in the default color table of this application, you can change the color table display within the color assignment section. Furthermore, you can also load color palettes from cpt-city (URL: <http://soliton.vm.bytemark.co.uk/pub/cpt-city/views/totp-cpt.html>) by clicking the "Import" button. However, if an external color palette is loaded, the color palette cannot be changed.

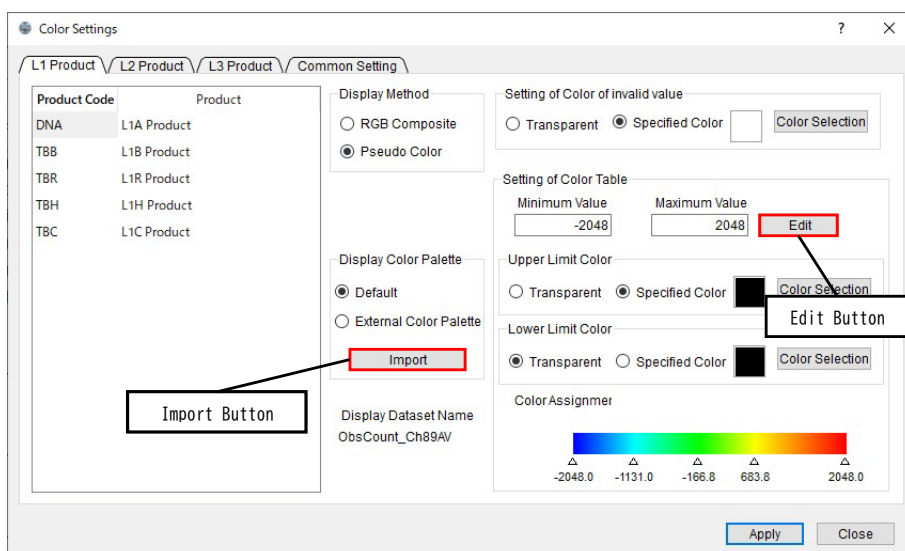


Figure 2-2 Color Settings Screen (Pseudo-color Display Settings) Edit Button

⑫ Is there a way to reset the color settings to default?

Yes, you can reset the color settings to default.

Select "Color Settings" from the "Display Settings" menu to display the Color Settings Screen.

For RGB display, click the "Default" button shown in Figure 2-3 to reset the truncation value range to the default state.

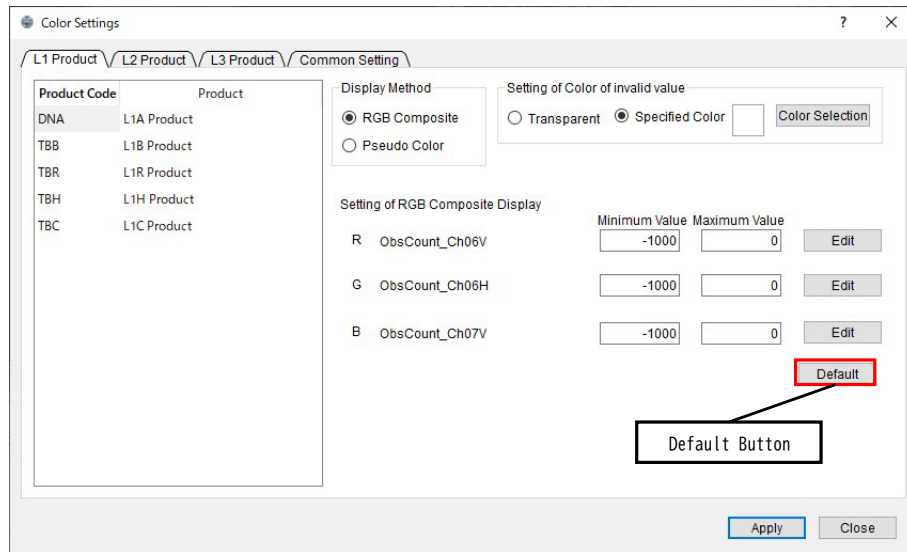


Figure 2-3 Color Settings Screen (RGB Composite Display Settings) Default Button

For pseudo-color display, select the "Default" radio button in the Display Color Palette section shown in Figure 2-4 to reset the color table settings to the default state.

Note that the color table settings before saving will not be retained, so please be careful.

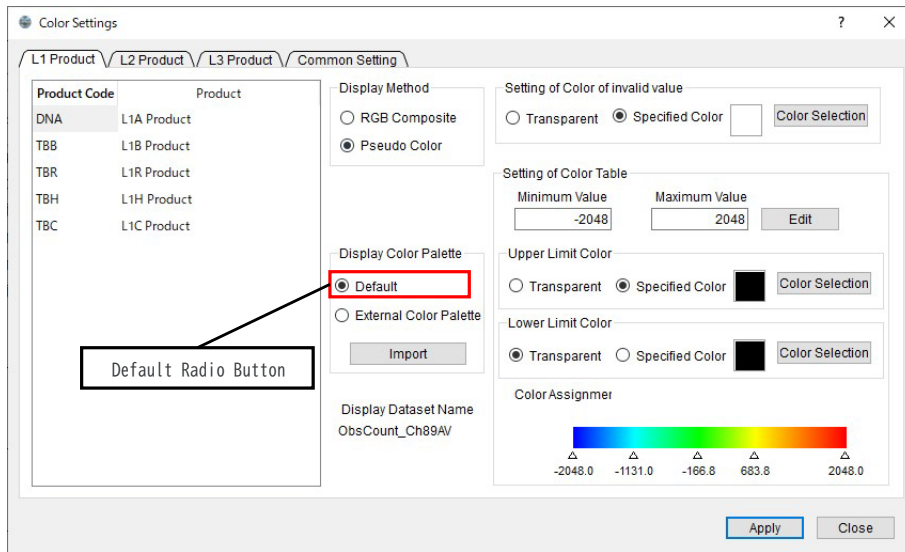


Figure 2-4 Color Settings Screen (Pseudo-color Display Settings) Default Button

⑬ Is it okay to launch this application multiple times simultaneously?

Yes, it is possible to launch this application multiple times simultaneously. However, please note that depending on the CPU and memory usage, the performance of the application may be slower.