

How to visualize Sea Surface Temperature products

February, 2020

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How to visualize Sea Surface Temperature products

This document describes how to search and download products using G-Portal. In addition, this document will also introduce how to use the “GCOM-W1 User Tool” to image and cut out products as an example of using the various tools provided by G-Portal. In this explanation, the product of sea surface temperature observed by GCOM-W on February 17, 2020 is used as an example.

1. Search and download products using G-Portal

- (1) Click “Physical quantities” left pane on the top menu (Refer to Fig.1-1) and move to the search window shown the physical quantities tree (Refer to Fig.1-2).

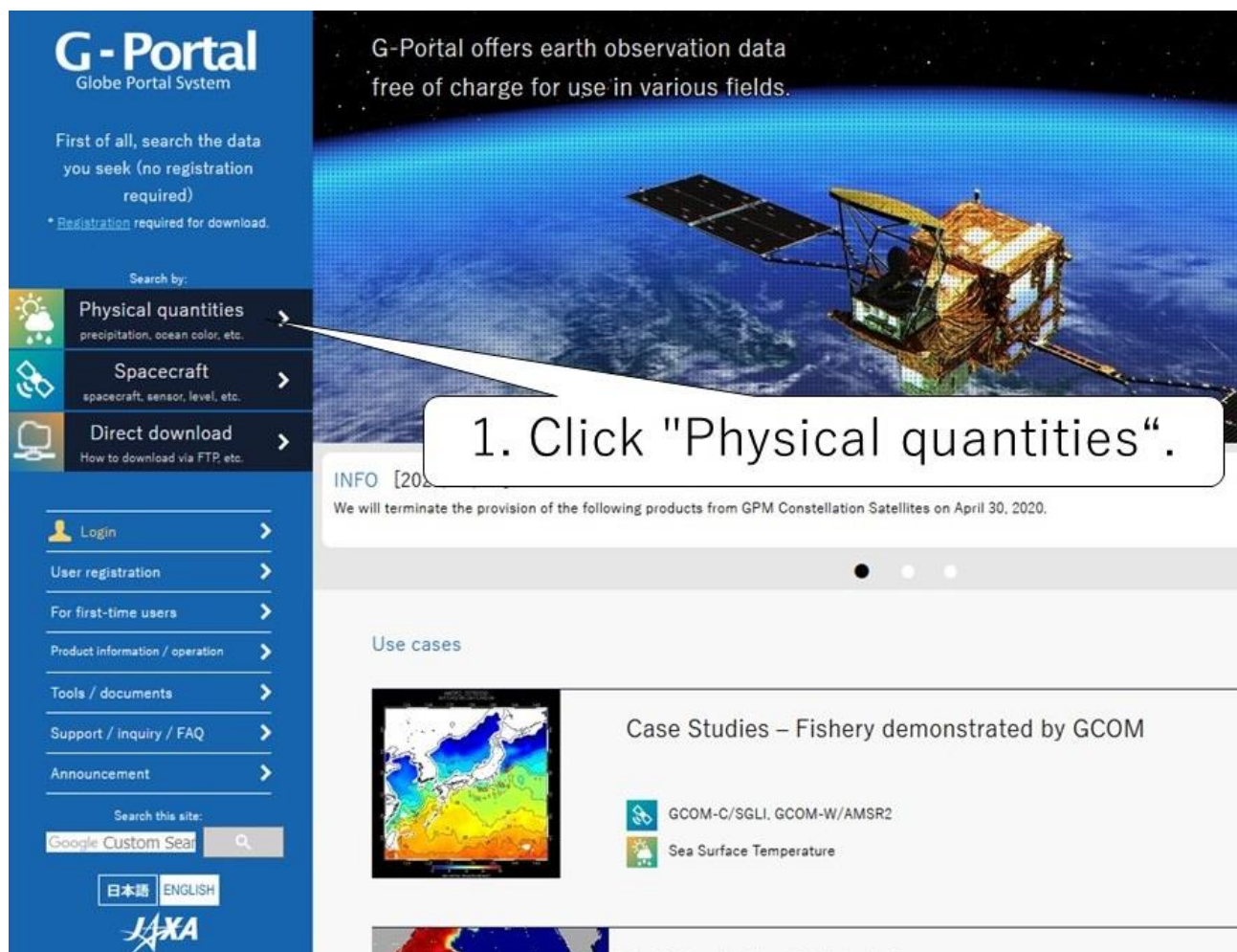


Fig.1-1. G-Portal top window

- (2) Each category shows the group list to physical quantities to a tree format on the search window.
- Click "►" on physical quantities group, and physical quantities in the group are shown.

As an example, we will explain how to narrow down by the physical quantity of "Sea Surface Temperature" (Refer to Fig.1-2).

1. Refine your search 2. Select the period 3. Specify the region

Select by physical quantity Select by spacecraft / sensor

1. Setting the criteria

Refine Search by word: Sea Refine Search

- ▼ ☐ Atmosphere
 - ▶ ☐ Precipitation
 - ▶ ☐ Cloud
- ▼ ☐ Terrestrial
 - ▶ ☐ Snow Pack
 - ▶ ☐ Soil Moisture
 - ▶ ☐ Radiance/Reflectance
 - ▶ ☐ Vegetation
 - ▶ ☐ Radiance
- ▼ ☒ Ocean
 - ▼ ☒ Sea Surface Temperature
 - ▼ ☒ Sea Surface Temperature
 - ▶ ☐ Sea Surface Wind
 - ▶ ☐ Ocean Color
- ▼ ☐ Others
 - ▶ ☐ Radiation/Reflectance

Search

Guidance: Refine search

Outline of narrowing down the criteria by physical quantity

You can refine products by physical quantity such as precipitation. You can also select all by checking folders on the tree.

Physical quantities are shown in the following list. They may be used to narrow down the search results.

Group 1	Group 2	Group 3
Atmosphere	Precipitation	Amount of Precipitation
		Precipitation Classification
		Particle Size Distribution
	Cloud	Cloud Mask/Classification/Flag
		Cloud Phase
		Cloud Particle Effective Radius/Shape
		Cloud Liquid Water Content/Cloud Ice Water Content
		Elements Of Cloud Top (Temperature/Atmospheric Pressure/Altitude)
		Classified Cloud Fraction
		Water Cloud Optical Thickness
		Ice Cloud Optical Thickness
		Cloud Extinction Coefficient
		Doppler Velocity
	Aerosol	Aerosol Type
		Aerosol Optical Thickness
		Aerosol Particle Radius
		Aerosol Extinction Coefficient
		Single Scattering Albedo

Refer here for the list of physical quantities.

2. Check "Sea Surface Temperature".

Fig.1-2 Example of the search by physical quantities

- (3) Click “2. Select the period” on the top of the window with checking "Sea Surface Temperature" (Refer to Fig.1-3).

1. Refine your search
2. Select the period
3. Specify the region

Select by physical quantity
Select spacecraft / sensor

1. Setting the criteria

Refine Search by word

- ☐ Atmosphere
 - ☐ Precipitation
 - ☐ Cloud
 - ☐ Water Vapor
 - ☐ Radiation Balance
 - ☐ Aerosol
- ☐ Terrestrial
 - ☐ Snow Pack
 - ☐ Soil Moisture
 - ☐ Radiance/Reflectance
 - ☐ Vegetation
 - ☐ Radiance
- ☒ Ocean
 - ☒ Sea Surface Temperature
 - ☒ Sea Surface Temperature
 - ☐ Sea Surface Wind
 - ☐ Ocean Color
- ☐ Others
 - ☐ Radiance/Brightness Temperature
 - ☐ Radar/Lider
 - ☐ Geometric Information
 - ☐ Environment Auxiliary
 - ☐ Not Applicable

i
Guidance: Refine search

Outline of narrowing down the criteria by physical quantity

You can refine products by physical quantity such as precipi
You can also select all by checking folders on the tree.

Physical quantities are shown in the following list. They ma

Group 1	Group 2	Group 3
		Cloud Partical Effective Radius/Shape
		Cloud Liquid Water Content/Cloud Ice Water Content
		Elements Of Cloud Top (Temperature/Atmospheric Pressure/Attitude)
		Classified Cloud Fraction
		Water Cloud Optical Thickness
		Ice Cloud Optical Thickness
		Cloud Extinction Coefficient
		Doppler Velocity
	Water Vapor	Integrated Water Vapor
	Radiation Balance	Latent Heating Profiles
		Heating Ratio (Short Wave/Long Wave)
		Radiation Flux
	Aerosol	Aerosol Type
		Aerosol Optical Thickness
		Aerosol Particle Radius
		Aerosol Extinction Coefficient
		Single Scattering Albedo

3. Click “Select the period”.

Fig.1-3 Move to “2. Select the period” screen

3

(4) The left pane specifying “observation period” appears

As an example, specify the observation start date and end date to February 17, 2020 (Refer to Fig.1-4).

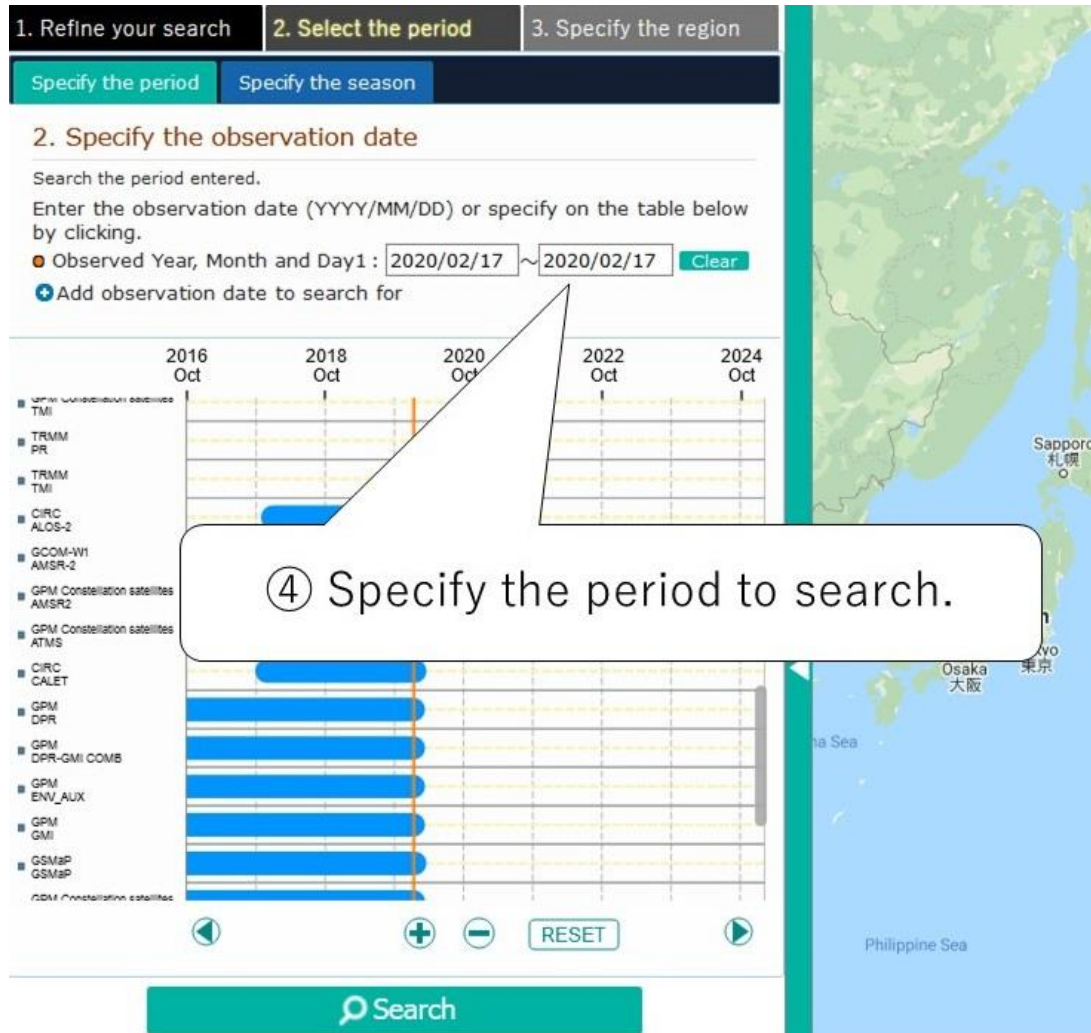


Fig.1-4 Screen of “Select the period” (1)

- Specify the period to search. There are two selection methods for the period as follows:
 - Specify period: Enter the start date and end date of the observation.
 - Specify season: Search the specified month and date of multiple years. You can search the summer period of each year, for example.
- There are three ways on “Specify Observation Period” as follow.
 - Input by text
 - Input from the calendar UI
 - Input by bar-chart to observation period

(5) Click “3. Specify the region” on the top of a window (Refer to Fig.1-5).

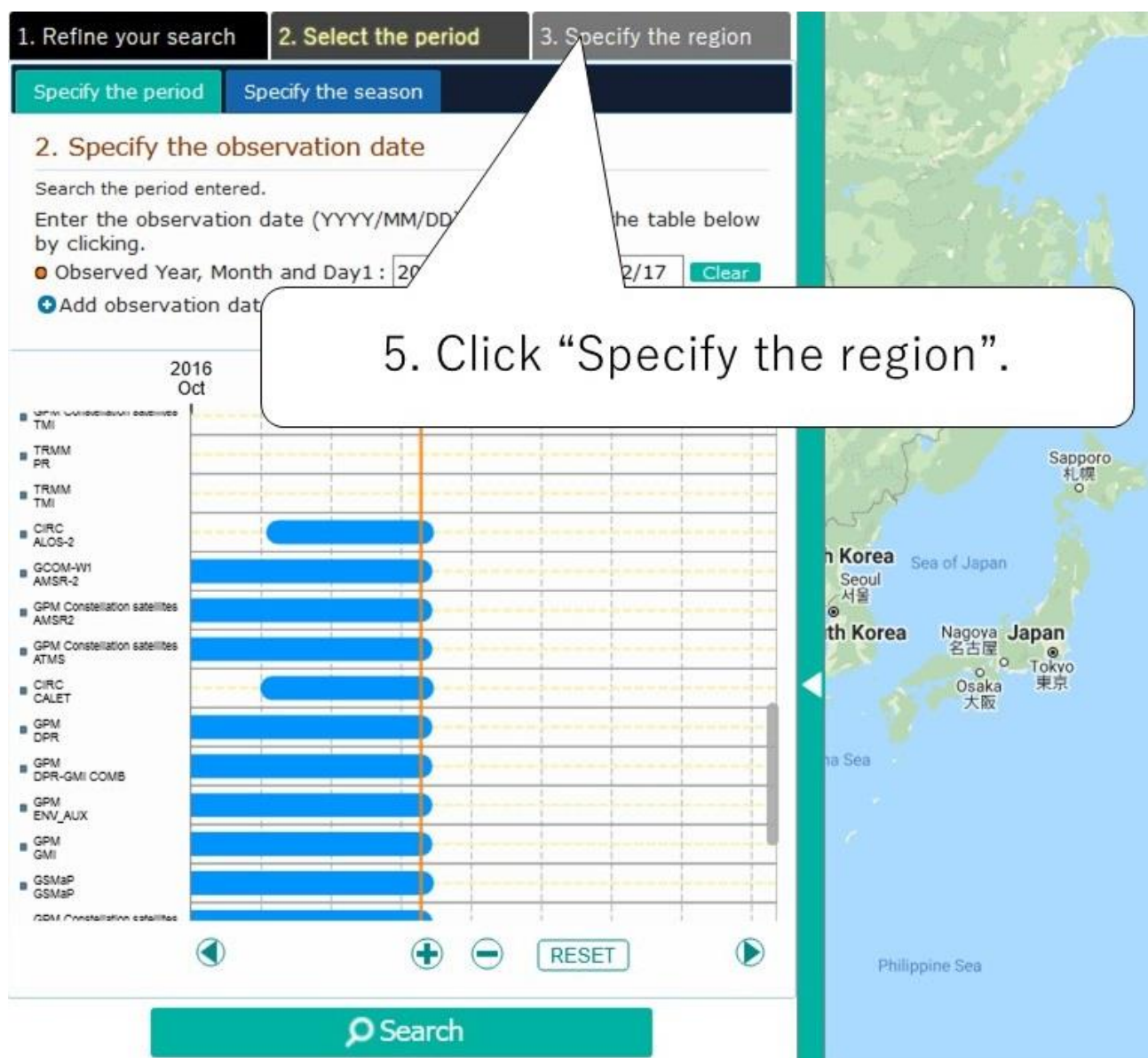


Fig.1-5 Screen of “Select the period” (2)

(6) Click "Specify the rectangle", when appear a window specifying search region (Refer to Fig.1-6).

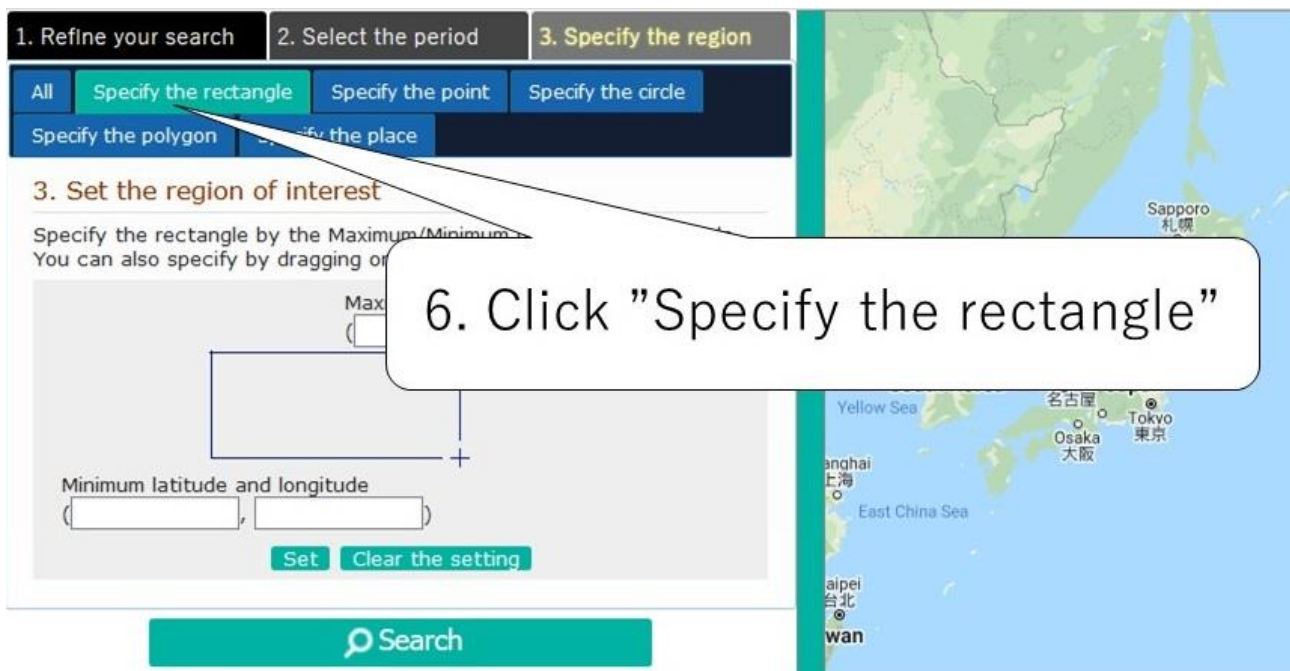


Fig.1-6 Screen of "Specify the rectangle" (1)

- (7) The “Specification by the rectangle” has a “method of specifying from a map” and a “method of specifying with a value”.

As an example, specify the observation region from the map. After specifying the observation region, click the "Search" button to start the search (Refer to Fig.1-7-1).

- A click of "Clear" will clear the value inputted into the text box and selection on the map.

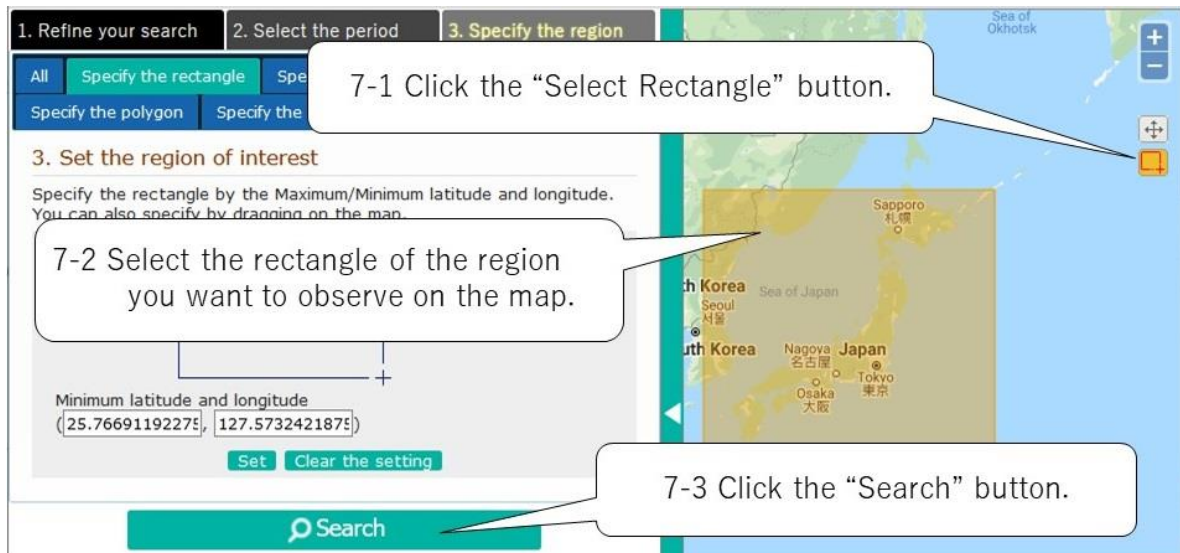


Fig.1-7-1 Screen of “Specify the rectangle” (2)

[Additional Explanation]

As an additional explanation, the following describes how to respond when the message shown in Fig.1-7-2 is displayed.

Message shown in Fig.1-7-2: "Too many search results. Please narrow down the search criteria such as period and range and try again."

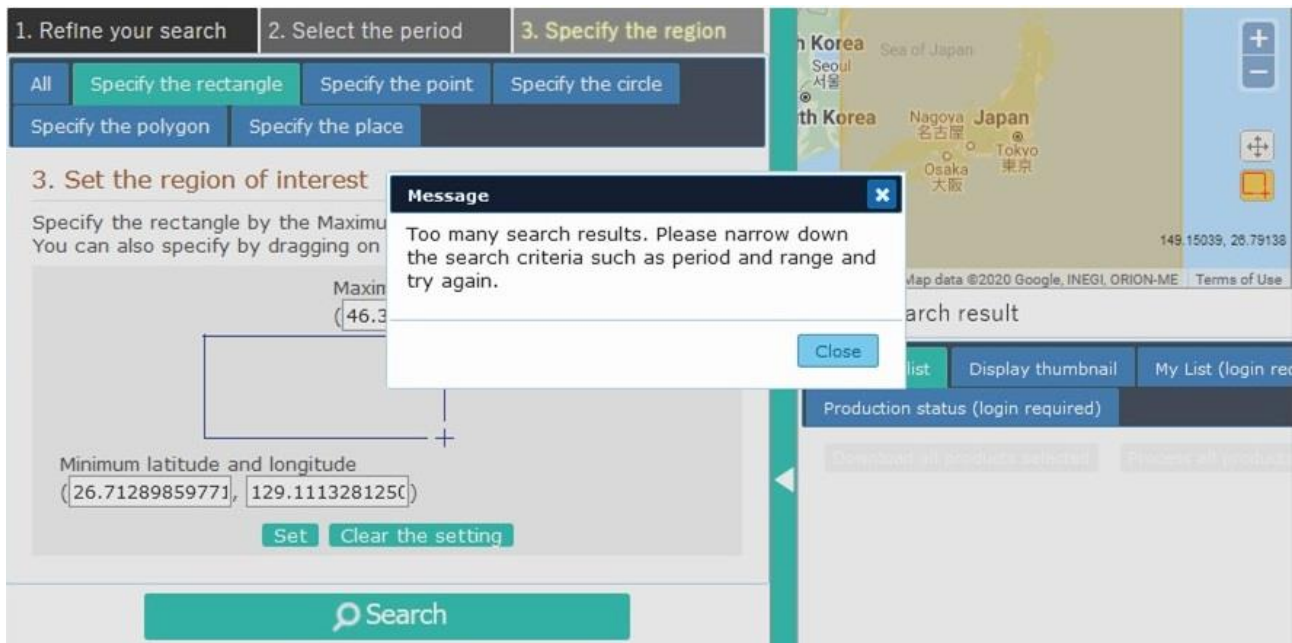


Fig. 1-7-2 Search failed message

■ Cause and avoidance method

- Due to the long observation period set, the search limit was exceeded.
 - ✧ Avoidance 1: Shorten the observation period on the "2. Select the period" screen.
 - ✧ Avoidance 2: Increase the number of search results that can be displayed.(Refer to Fig.1-7-3)
- The observation region was too large and the search limit was exceeded.
 - ✧ Avoidance 1: Narrow the observation region specification on the "3. Specify the region" screen.
 - ✧ Avoidance 2: Increase the number of search results that can be displayed.(Refer to Fig.1-7-3)
- Unnecessary products were included in the satellite/sensor products to be searched.
 - ✧ Avoidance 1: Set conditions for narrowing down satellite products. (Refer to Fig.1-7-4)
 - ✧ Avoidance 2: Increase the number of search results that can be displayed.(Refer to Fig.1-7-3)

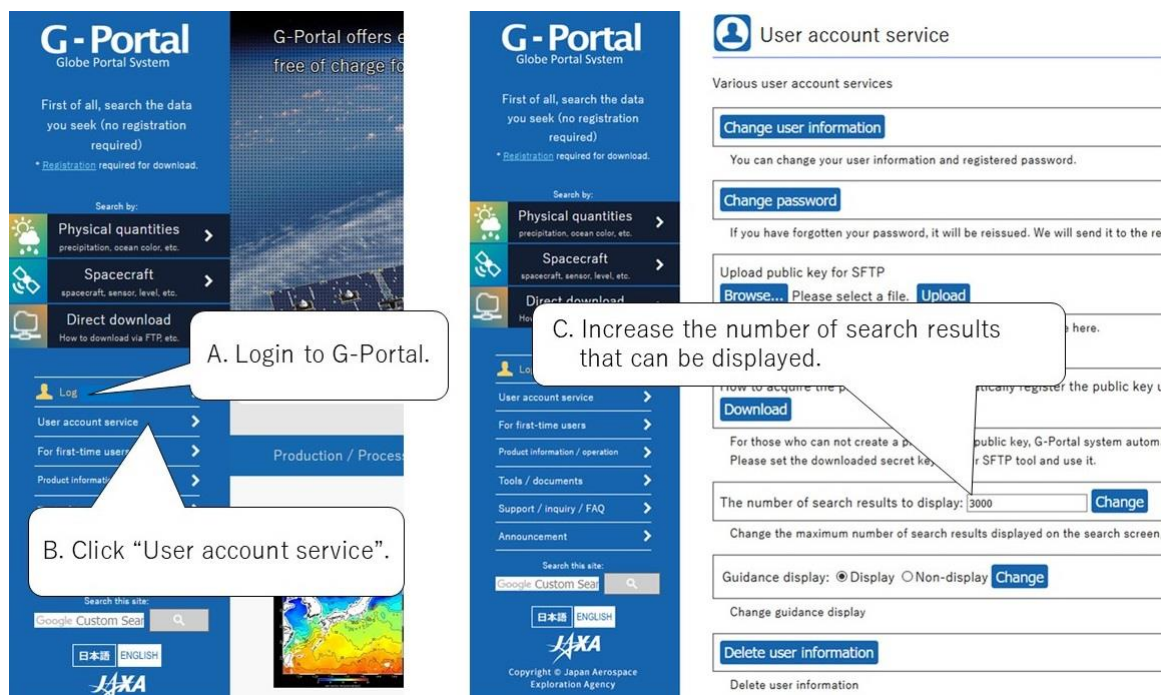


Fig.1-7-3 The number of search results to display

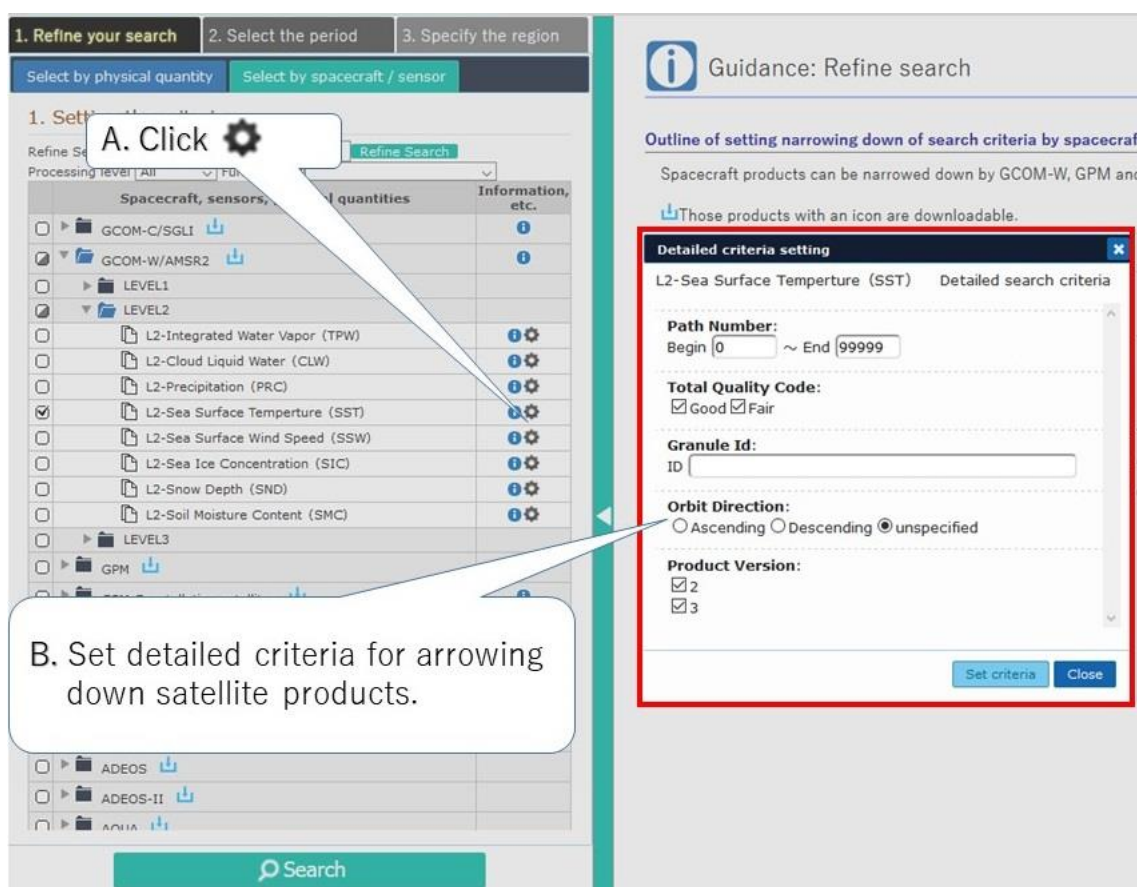


Fig.1-7-4 Detailed criteria setting

(8) When the search is performed, the search result screen as shown in Fig. 1-8-1 is displayed.

- If the same physical quantity has been calculated from observation data from multiple satellite sensors, all applicable products are displayed on the search result screen. (Refer to Fig.1-8-1-A)
- Click the “Details” button in the list of search result. (Refer to Fig.1-8-1-B)
Detailed information will be displayed in a separate window. (Refer to Fig.1-8-2)

The screenshot shows a web interface for searching satellite data. On the left, there are three steps: 1. Refine your search, 2. Select the period, and 3. Specify the region. Under step 3, there are options to specify a rectangle, point, circle, polygon, or place. A search box contains coordinates: Maximum latitude and longitude (45.8645095536, 149.018554687) and Minimum latitude and longitude (25.8460371699, 127.133789062). A 'Search' button is at the bottom. On the right, a map shows the Indian Ocean region with search results overlaid. Below the map, a table lists search results with columns: Product, Physical quantities, Spacecraft / sensor, Observation starting date(UTC), Observation ended date(UTC), Details, Data manipulation, and My List. The table contains several rows of data, including precipitation and sea surface temperature products from various satellites like GPM, GMI, and GCOM.



List of search result

Show the list (43 data)Display thumbnail (43 data)My List (4 data registered)Save the list (0 data registered)Production status (27 products requested)

	Product	Physical quantities	Spacecraft / sensor	Observation starting date(UTC)	Observation ended date(UTC)	Details	Data manipulation	My List
<input type="checkbox"/>	COMB L2 Precipitation	Precipitation Classification/Particle Size Distribution/Sea Surface Temperature/Amount of Precipitation	GPM/DPR-GMI COMB	2020-02-17 20:24:52.483	2020-02-17 21:57:27.785	Details	DownloadProcessing	Add to My List
<input type="checkbox"/>	GMI L2 Precipitation	Integrated Water Vapor/Sea Surface Temperature/Amount of Precipitation	GPM/GMI	2020-02-17 20:24:52.000	2020-02-17 21:57:26.000	Details	DownloadProcessing	Add to My List
<input type="checkbox"/>	GMI L2 Precipitation	Integrated Water Vapor/Sea Surface Temperature/Amount of Precipitation	GPM/GMI	2020-02-17 18:52:17.320	2020-02-17 20:24:50.000	Details	DownloadProcessing	Add to My List
<input type="checkbox"/>	COMB L2 Precipitation	Precipitation Classification/Particle Size Distribution/Sea Surface Temperature/Amount of Precipitation	GPM/DPR-GMI COMB	2020-02-17 18:52:17.320	2020-02-17 20:24:52.483	Details	DownloadProcessing	Add to My List
<input type="checkbox"/>	L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-02-17 16:32:42.370	2020-02-17 17:22:03.088	Details	DownloadProcessing	Add to My List
<input type="checkbox"/>	L2-SST	Sea Surface Temperature	GCOM-C/SGLI	2020-02-17 13:53:13.71	2020-02-17 13:58:01.25	Details	DownloadProcessing	Add to My List
<input type="checkbox"/>	L2-SST	Sea Surface Temperature	GCOM-C/SGLI	2020-02-17 13:53:13.65	2020-02-17 13:58:01.34	Details	DownloadProcessing	Add to My List
<input type="checkbox"/>	L2-SST	Sea Surface Temperature	GCOM-C/SGLI	2020-02-17 13:53:48.88	2020-02-17 13:58:01.34	Details	DownloadProcessing	Add to My List
<input type="checkbox"/>	L2-SST	Sea Surface Temperature	GCOM-C/SGLI	2020-02-17 13:53:48.94	2020-02-17 13:58:01.34	Details	DownloadProcessing	Add to My List
<input type="checkbox"/>	L2-SST	Sea Surface Temperature	GCOM-C/SGLI	2020-02-17 13:53:36.63	2020-02-17 13:58:01.34	Details	DownloadProcessing	Add to My List
<input type="checkbox"/>	L2-SST	Sea Surface Temperature	GCOM-C/SGLI	2020-02-17 13:53:36.68	2020-02-17 13:58:01.34	Details	DownloadProcessing	Add to My List

A. Searching by physical quantities will search for various satellite sensor products.


B. Click "Details" to display the detailed information of the product.

Fig.1-8-1 Example of the list of search result

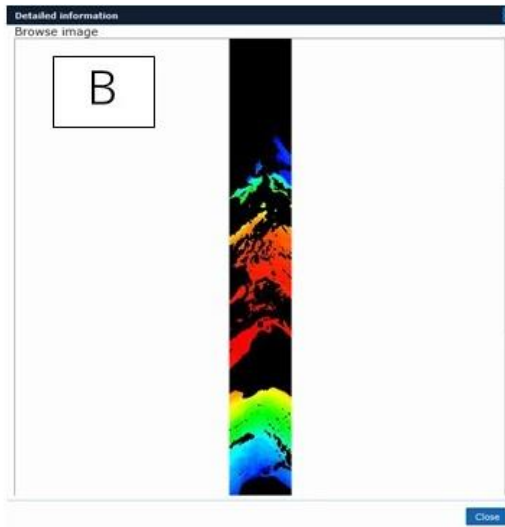
- An example of the detailed information screen is shown in Fig.1-8-2.

- The observation region is displayed on the map.
- A browse image will be displayed for products with browse images available. An image with "No Image" will be displayed if no browse images are available for that product.
- To products on the browse images, the image pulldown appears. Browse (Browse or sub-browse) image switches.
- Detailed information of the product will be displayed.

A



B



C

Image Browse ! The display screen is switched by selecting.

Granule ID	GW1AM2_202002171632_109D_L2SGSSTLB3300300
Processing Date (UTC)	2020-02-18 03:23:32.000
Processing Level	AMSR2-L2
Processor Version	300,300
Observation Starting Date (UTC)	2020-02-17 16:32:42.370
Observation Ended Date (UTC)	2020-02-17 17:22:03.088
Platform Short Name	GCOM-W1
Sensor	AMSR2
Path Number	109
Product File	https://gportal.jaxa.jp/download/standard/GCOM-W/GCOM-W.AMSR2/L2.SST/3/2020/02/GW1AM2_202002171632_109D_L2SGSSTLB3300300.h5
Product version	3
Browse Image Type	QUICKLOOK
Browse Image Filename	https://gportal.jaxa.jp/gpr/img/br/GW1AM2_202002171632_109D_L2SGSSTLB3300300/GW1AM2_202002171632_109D_L2SGSSTLB3300300.jpg
Browse Image Type	THUMBNAIL
Sub Browse Image Filename	https://gportal.jaxa.jp/gpr/img/thm/GW1AM2_202002171632_109D_L2SGSSTLB3300300/GW1AM2_202002171632_109D_L2SGSSTLB3300300.png
Total Quality Code	Good
Physical Quantity	Sea Surface Temperature
Start Path Number(RSP)	109
Map Projection	-
Orbit Direction	Descending

Close

D

Fig.1-8-2 Example of the detailed information screen

(9) You can directly download the products on a list of researching result.

As an example, download the product of sea surface temperature observed by GCOM-W / AMSR2.
(Refer to Figure 1-9-1)

- A. Click the "Download" button for the product.
- B. A window appears asking you to "open a file" or "save a file". Select "Save" and click "OK" button to save the downloaded file to your computer.

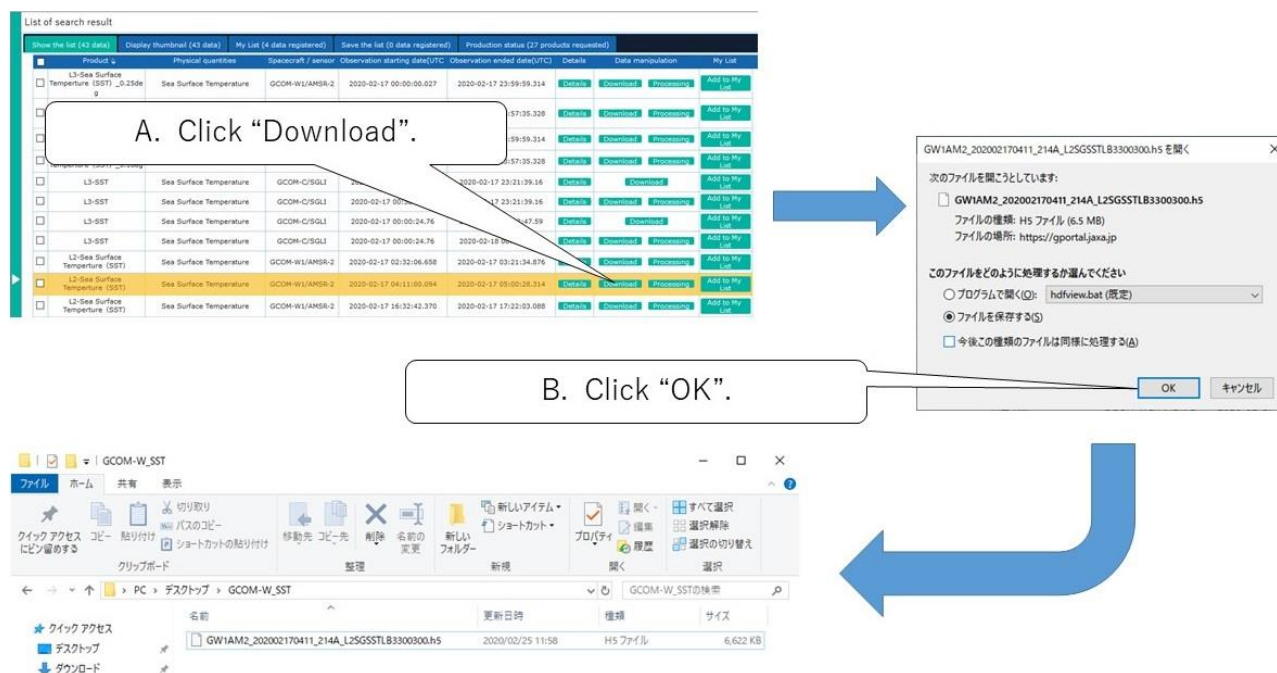


Fig.1-9-1 Product download procedure

[Additional Explanation]

This section explains how to use the "Download all products selected" button in the List of search result.

- If you check the check box at the left end of the list of search result about multiple products, you can press the button "Download all products selected". However, this button is a function that can be used only when the product that includes the "Production" button is displayed in the "Data manipulation" column.
- "Fig. 1-9-2 How to use the 'Download all products selected' button (1)" describes the case that Product with "Production" button is not selected".
- "Fig. 1-9-3 How to use the 'Download all products selected' button (2)" describes the case that Product with "Production" button is selected".

List of search result

Show the list (15 data) Display thumbnail (15 data) My List (login required)

B. Click "Download all products selected".

C. If the product with the "Production" button is not selected, "Download all products selected" cannot be performed.

A. Select products you want to download.

List of search result

Show the list (15 data) Display thumbnail (15 data) My List (login required) Save the list (login required) Production status (login required)

Download all products selected Process all products selected Add selected product(s) to My List

Message: Production of the selected product is unnecessary. You can download from search results.

Product	Physical quantities	Spacecraft / sensor	Observation starting date(UTC)	Observation ended date(UTC)	Details	Data manipulation	My List
<input checked="" type="checkbox"/> L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-01-25 02:25:55.966	2020-01-25 03:15:27.184	Details	Download	Processing Add to My List
<input checked="" type="checkbox"/> L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-01-25 16:26:30.186	2020-01-25 17:15:50.904	Details	Download	Processing Add to My List
<input checked="" type="checkbox"/> L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-01-26 03:09:11.519	2020-01-26 03:58:39.738	Details	Download	Processing Add to My List
<input checked="" type="checkbox"/> L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-01-26 15:30:53.801	2020-01-26 16:20:13.019	Details	Download	Processing Add to My List
<input checked="" type="checkbox"/> L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-01-26 17:09:45.737	2020-01-26 17:59:06.455	Details	Download	Processing Add to My List
<input type="checkbox"/> L2-OKID	Snow And Sea Ice Covered Area	GCOM-C/SGLI	2020-01-25 00:56:54.35	2020-01-25 01:00:31.69	Details	Production	Processing Add to My List
<input type="checkbox"/> L2-OKID	Snow And Sea Ice Covered Area	GCOM-C/SGLI	2020-01-25 00:59:56.26	2020-01-25 01:04:43.94	Details	Production	Processing Add to My List
<input type="checkbox"/> L2-OKID	Snow And Sea Ice Covered Area	GCOM-C/SGLI	2020-01-25 12:17:07.76	2020-01-25 12:21:55.45	Details	Production	Processing Add to My List
<input type="checkbox"/> L2-OKID	Snow And Sea Ice Covered Area	GCOM-C/SGLI	2020-01-25 12:21:20.16	2020-01-25 12:26:07.85	Details	Production	Processing Add to My List

Fig. 1-9-2 How to use the "Download all products selected" button (1)

List of search result

Show the list (15 data) Display thumbnail (15 data) My List (login required)

B. Click "Download all products selected".

C. If a product with the "Production" button is selected, the "Batch download" window will be displayed.

A. Select products you want to download.

Batch download

Select the download method

Batch download (zip)

Batch download (tar)

Download individually

Select the notification unit at the time of production completion

Notified collectively

Notified by product

Batch processing Close

Product	Physical quantities	Spacecraft / sensor	Observation starting date(UTC)	Observation ended date(UTC)	Details	Data manipulation	My List
<input checked="" type="checkbox"/> L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-01-25 02:25:55.966	2020-01-25 03:15:27.184	Details	Download	Processing Add to My List
<input checked="" type="checkbox"/> L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-01-25 16:26:30.186	2020-01-25 17:15:50.904	Details	Download	Processing Add to My List
<input checked="" type="checkbox"/> L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-01-26 03:09:11.519	2020-01-26 03:58:39.738	Details	Download	Processing Add to My List
<input checked="" type="checkbox"/> L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-01-26 15:30:53.801	2020-01-26 16:20:13.019	Details	Download	Processing Add to My List
<input checked="" type="checkbox"/> L2-Sea Surface Temperature (SST)	Sea Surface Temperature	GCOM-W1/AMSR-2	2020-01-26 17:09:45.737	2020-01-26 17:59:06.455	Details	Download	Processing Add to My List
<input type="checkbox"/> L2-OKID	Snow And Sea Ice Covered Area	GCOM-C/SGLI	2020-01-25 00:56:54.35	2020-01-25 01:00:31.69	Details	Production	Processing Add to My List
<input type="checkbox"/> L2-OKID	Snow And Sea Ice Covered Area	GCOM-C/SGLI	2020-01-25 00:59:56.26	2020-01-25 01:04:43.94	Details	Production	Processing Add to My List
<input type="checkbox"/> L2-OKID	Snow And Sea Ice Covered Area	GCOM-C/SGLI	2020-01-25 12:17:07.76	2020-01-25 12:21:55.45	Details	Production	Processing Add to My List
<input type="checkbox"/> L2-OKID	Snow And Sea Ice Covered Area	GCOM-C/SGLI	2020-01-25 12:21:20.16	2020-01-25 12:26:07.85	Details	Production	Processing Add to My List

Fig. 1-9-3 How to use the "Download all products selected" button (2)

This concludes the explanation of data search and download.

2. Imaging the acquired product

This chapter introduces how to display, process and image the GCOM-W / AMSR2 sea surface temperature products downloaded in Chapter 1 using the GCOM-W1 User Tool.

GCOM-W1 User Tool provides users with various functions to use earth observation data of GCOM-W1/AMSR2, ADEOS-II/AMSR and Aqua/AMSR-E. You can display, edit, clip and project them on a map.

2.1. Installation of GCOM-W1 User Tool

- (1) Click “Tools / documents” left pane on the top menu (Refer to Fig.2-1).

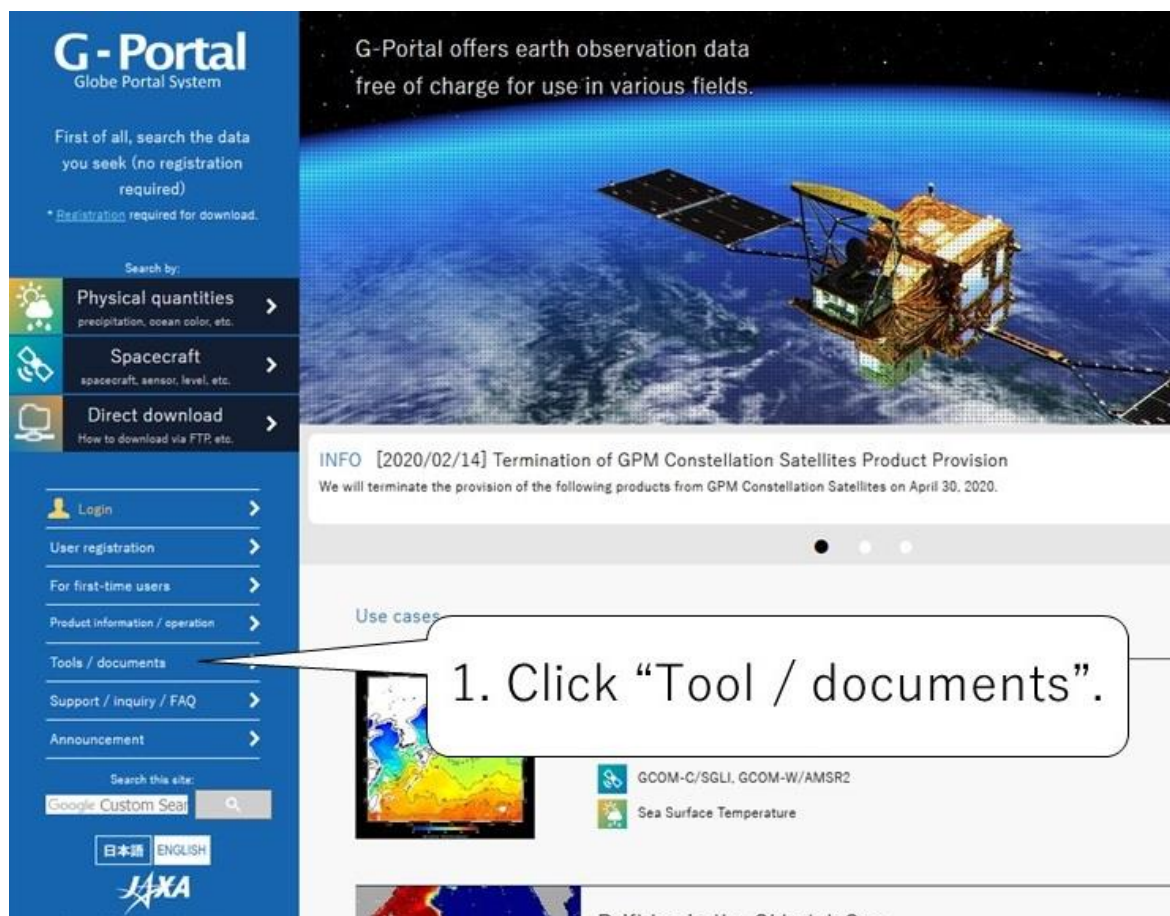


Fig.2.1-1. G-Portal top window

- (2) When the "Tools / Documents" screen is displayed, click "GCOM-W1" (Refer to Fig.1-2).

- Tools for using satellite products and documents related to product format and other information are available from the "Tools / Documents" window.

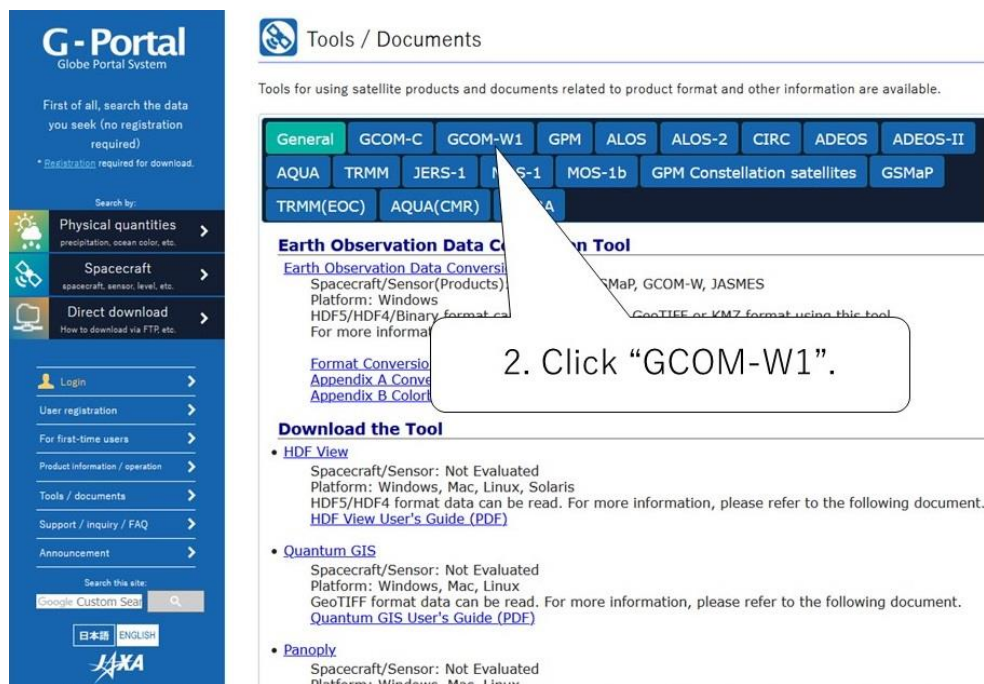


Fig.2.1-2. G-Portal Tools / Document Page (General)

- (3) Click “Download” of GCOM-W1 User Tool to download the GCOM-W1 User Tool installer (GCOM-W1UserToolInstaller.msi).

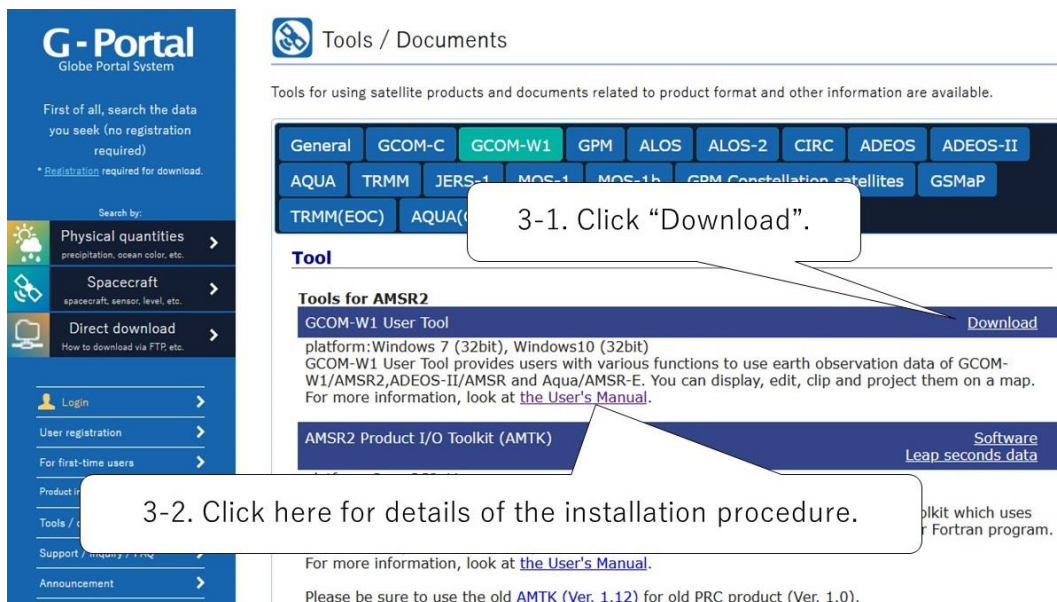


Fig.2.1-3. G-Portal Tools / Document Page (GCOM-W1)

- (4) Execute the downloaded GCOM-W1 User Tool installer (GCOM-W1UserToolInstaller.msi) to start installing the GCOM-W1 User Tool.

For details on the installation procedure, refer to [the GCOM-W1 User Tool User Manual "1.5 Installation"](#).

2.2. Display products using GCOM-W1 User Tool

- (1) When GCOM-W1 User Tool is started, the screen shown in Figure 2.2-1 will appear. Click the “Open (AMSR2)” icon.

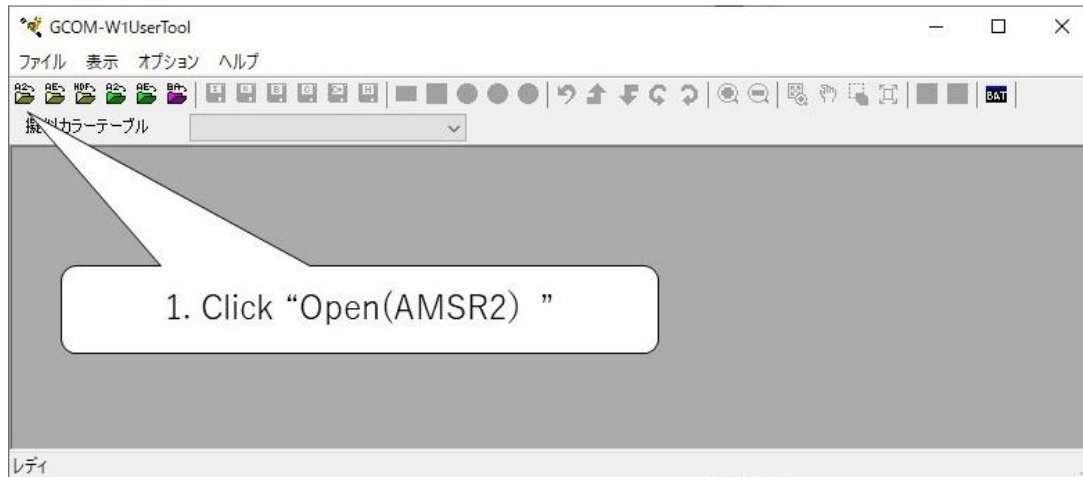


Fig. 2.2-1 Initial screen of GCOM-W1User Tool

- (2) Click “Add” button on the “File Open Dialog (AMSR-2)” (Refer to Fig.2.2-2).

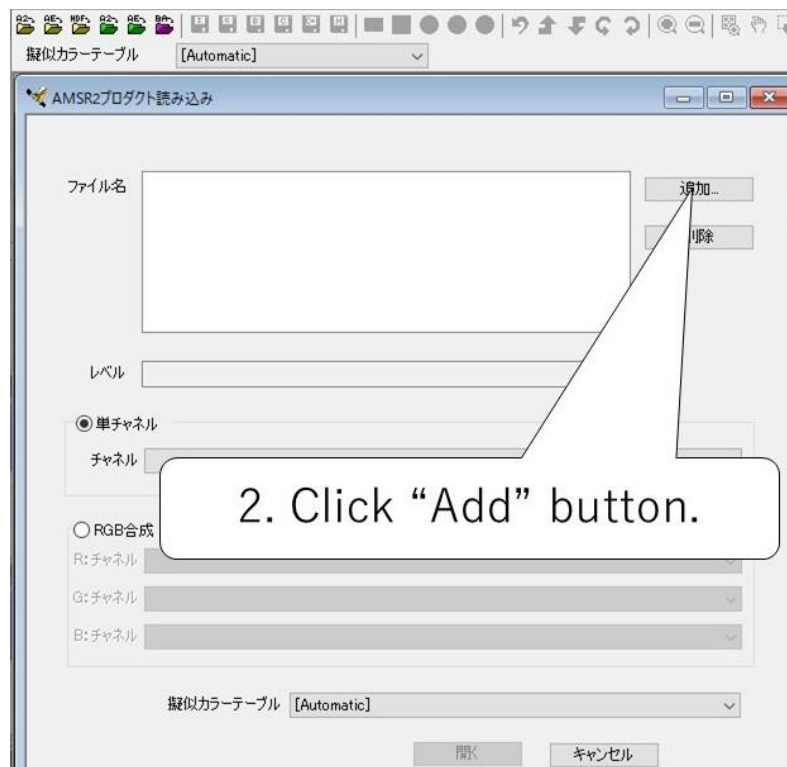


Fig.2.2-2 File Open Dialog (AMSR2) (1)

(3) “File select dialog” that Windows offers is displayed. Specify the file name you want to display.

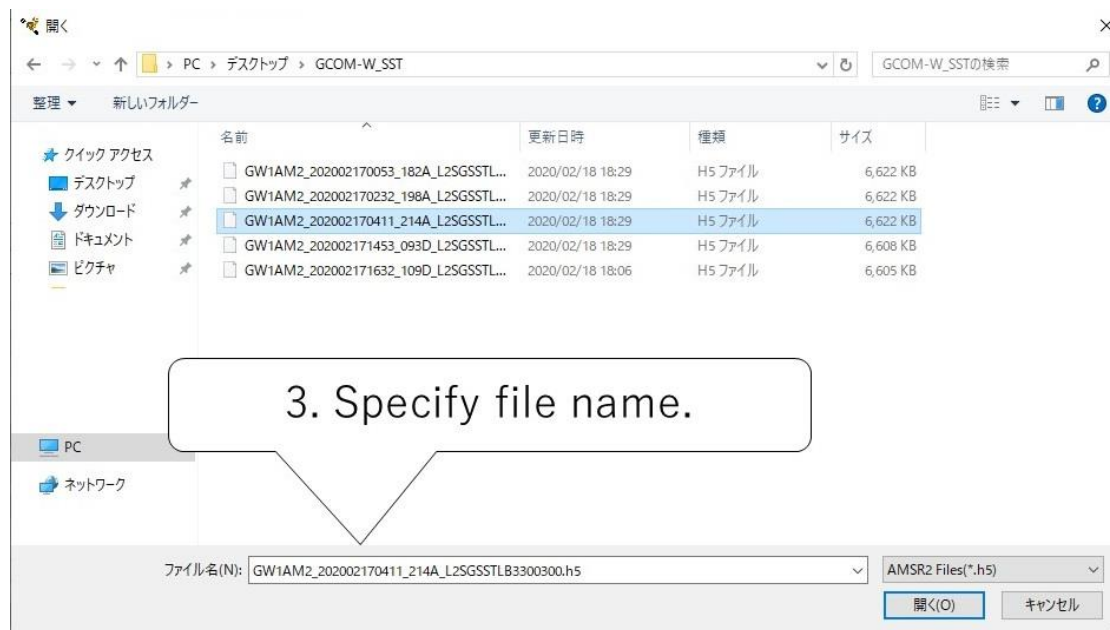


Fig.2.2-3 File Select Dialog

(4) Click “Open” button.

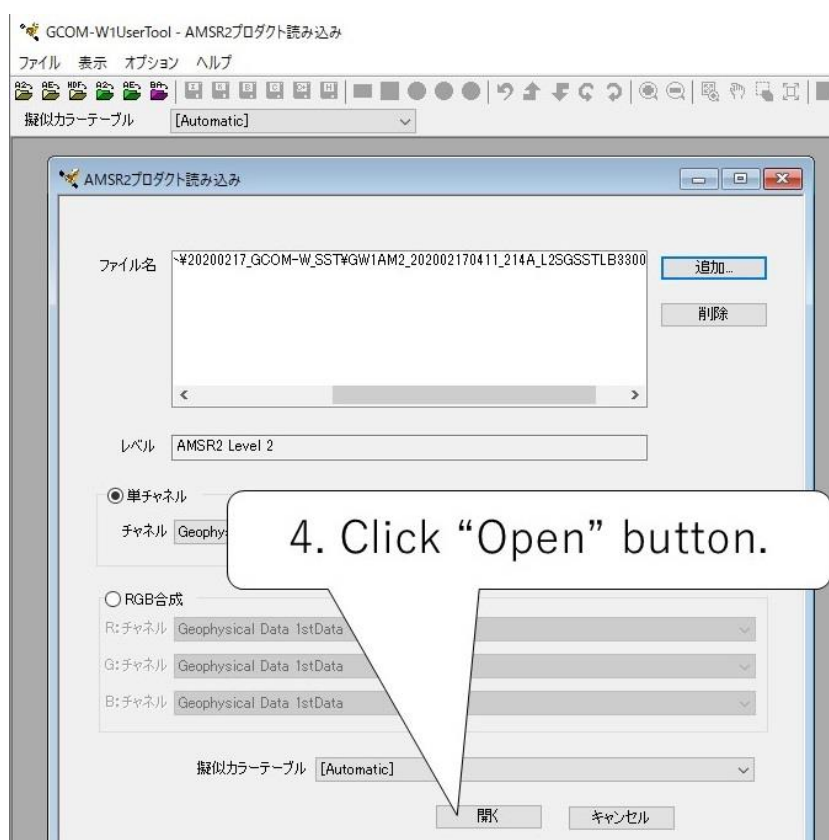


Fig.2.2-4 File Open Dialog (AMSR2) (2)

(5) The specified product is displayed on the map.

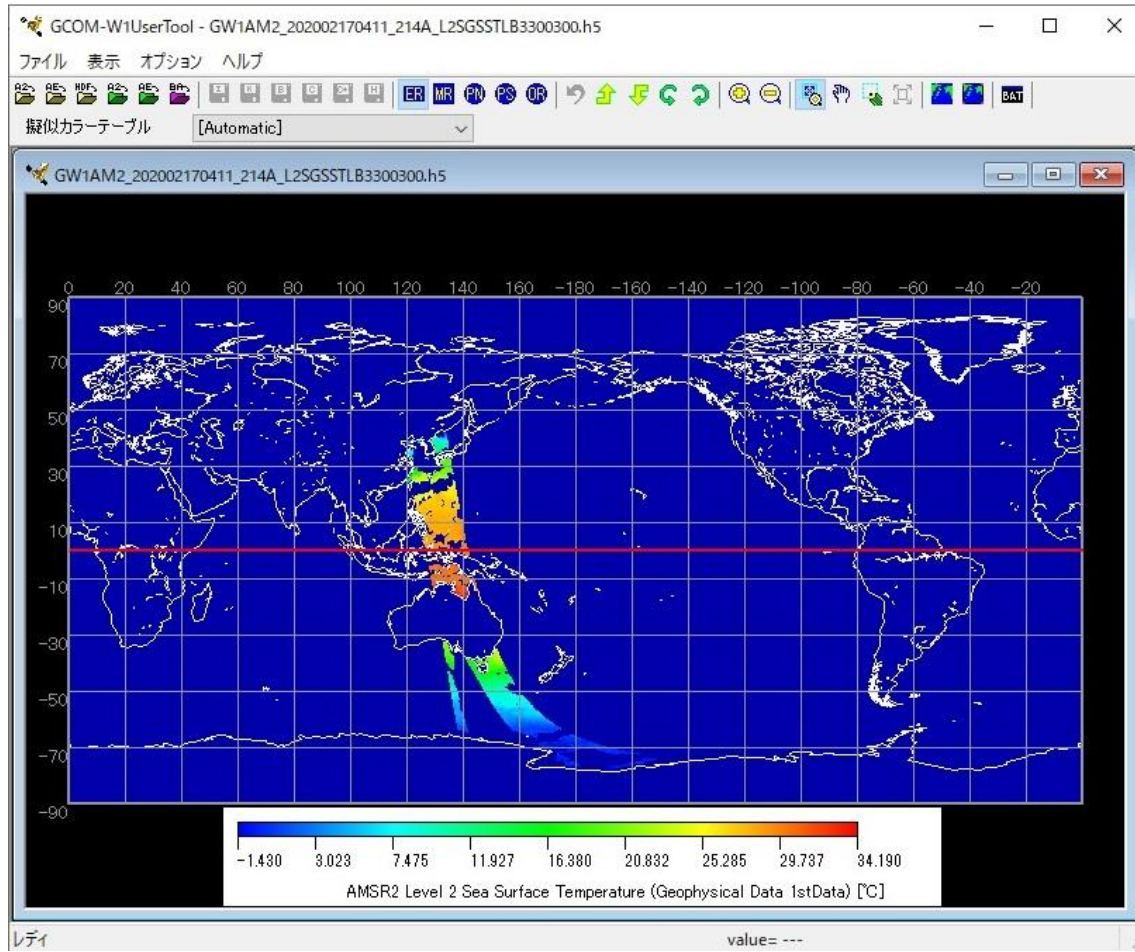


Fig. 2.2-5 Image Window

2.3. Cut out and save the product and convert the format

Using the GCOM-W1 User Tool, you can cut out any observation area from the observation product image displayed on the map and save it in HDF5 format, image format, KML format, binary format, CSV format, etc. You can also copy it to the clipboard.

We will explain how to save the cut file in HDF5 format, save the cut data in image format, and copy it to the clipboard.

2.3.1. Cut out an image and save it in HDF5 format

- (1) To cut out the product image in HDF5 format, click the “Open (HDF)” icon (Refer to Fig.2.3.1-1), specify the target product file, and open the image. (Refer to Fig.2.2-2 to Fig.2.2-5 for the operation procedure.)



Fig.2.3.1-1 Initial screen of GCOM-W1User Too

- (2) Due to select the region you want to cut out, use the icons such as "Enlarge", "Reduce", "Enlarge Mode (Mouse)", "Move Mode (Mouse)", and "Area Select Mode (Mouse)" on the toolbar of GCOM-W1 User Tool . (Refer to Fig.2.3.1-1)

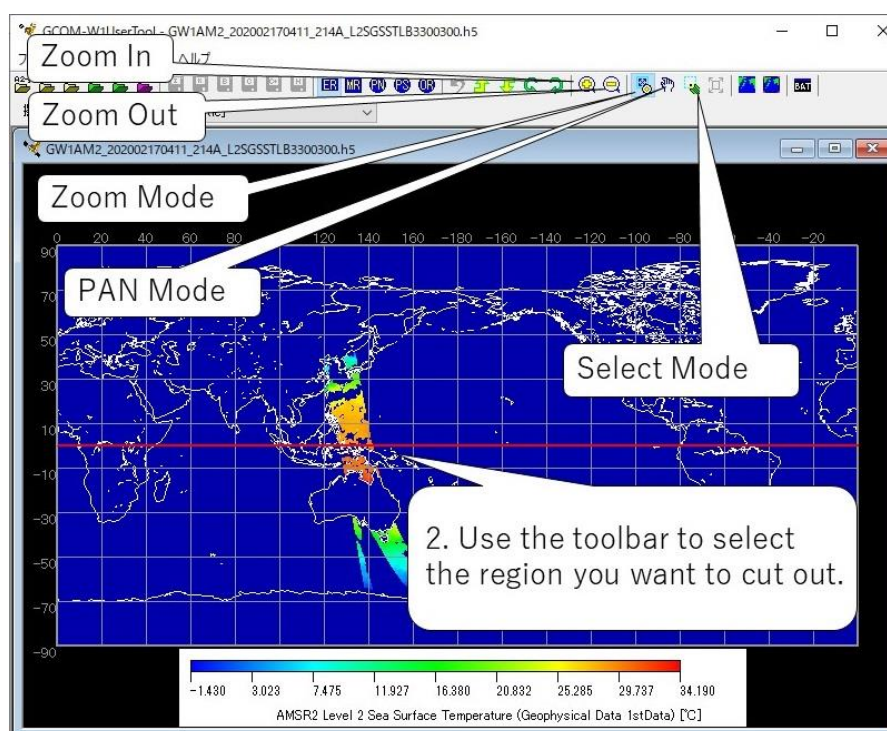


Fig.2.3.1-2 Operation of GCOM-W1 User Tool (1)

[Reference Information]

- The functions of each button on the toolbar of the GCOM-W1 User Tool are as shown in Figure 2.3.1-2-1.

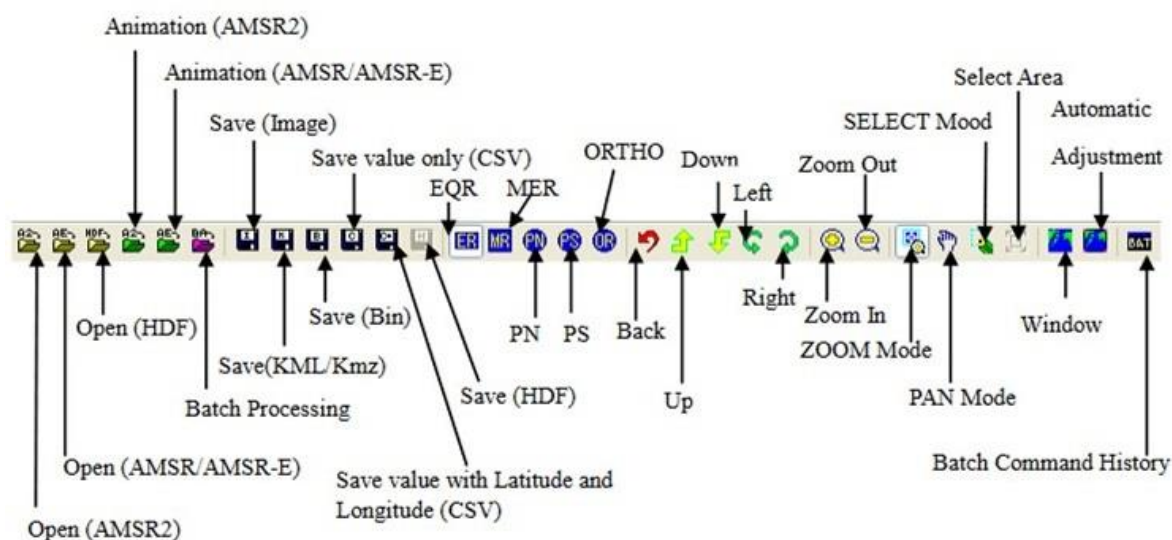


Fig. 2.3.1-2-1 Tool Bar

- (3) After specifying the region you want to cut out, click the "HDF" button on the toolbar and save the cut out part in HDF format. (Refer to Fig.2.3.1-3)

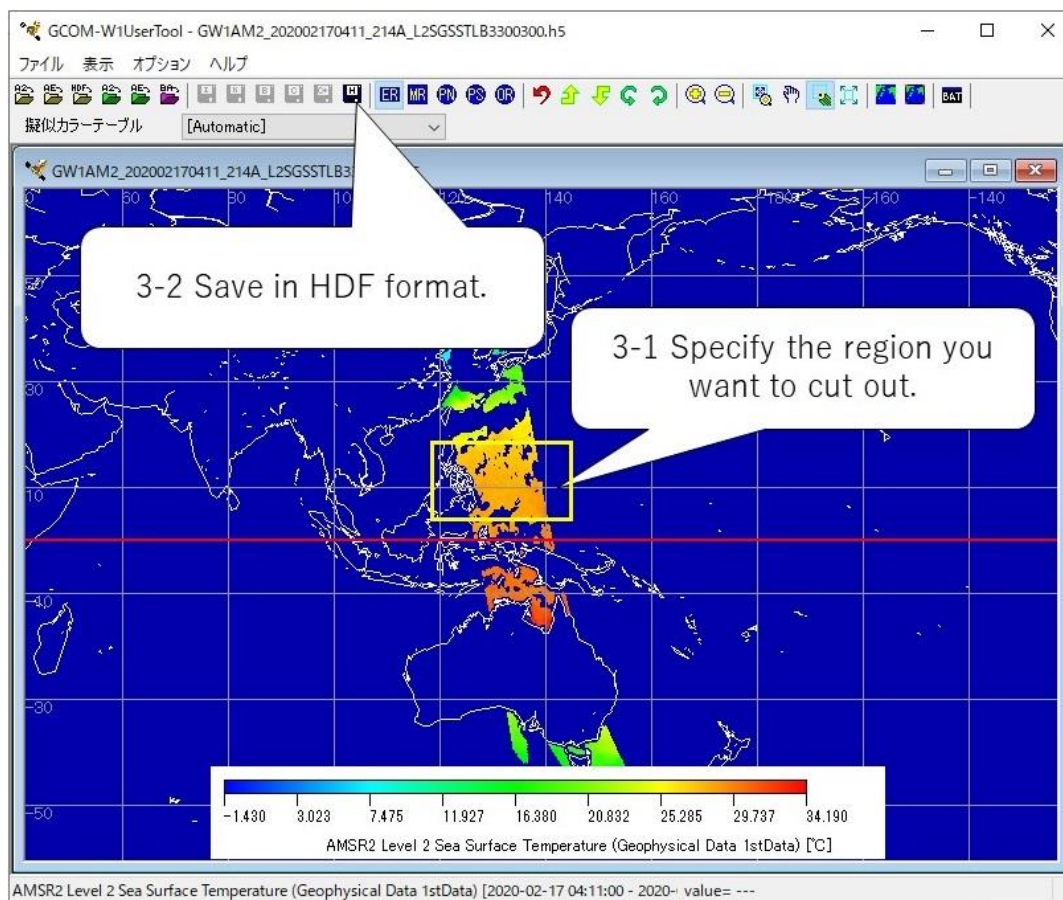


Fig.2.3.1-3 Operation of GCOM-W1 User Tool (2)

- (4) Save a file with a new name.

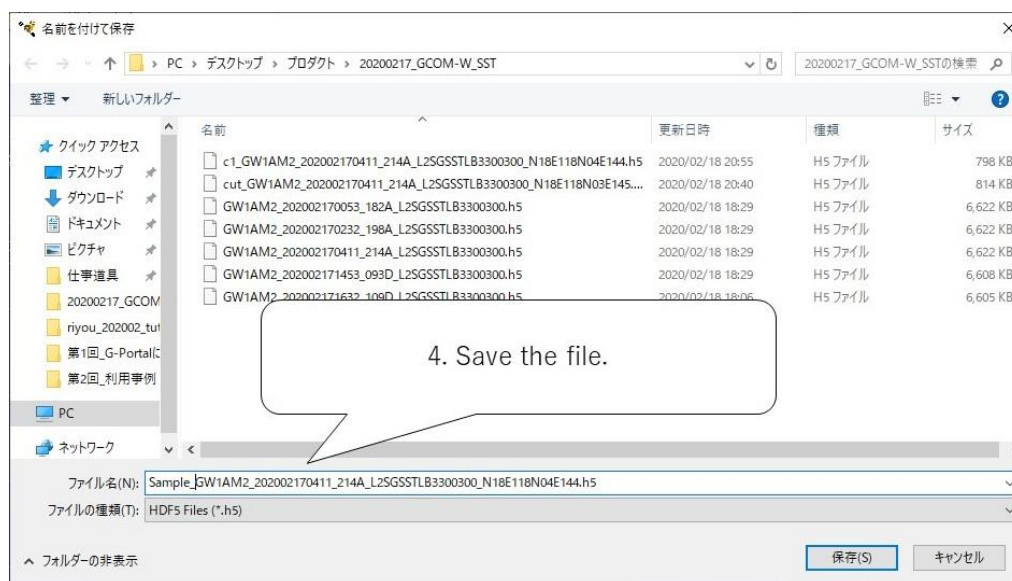


Fig.2.3.1-4 File Save Dialog

When you open the saved file with GCOM-W1 User Tool, you can confirm that the cut out part of the product has been created. (Refer to Fig.2.3.1-4-1)

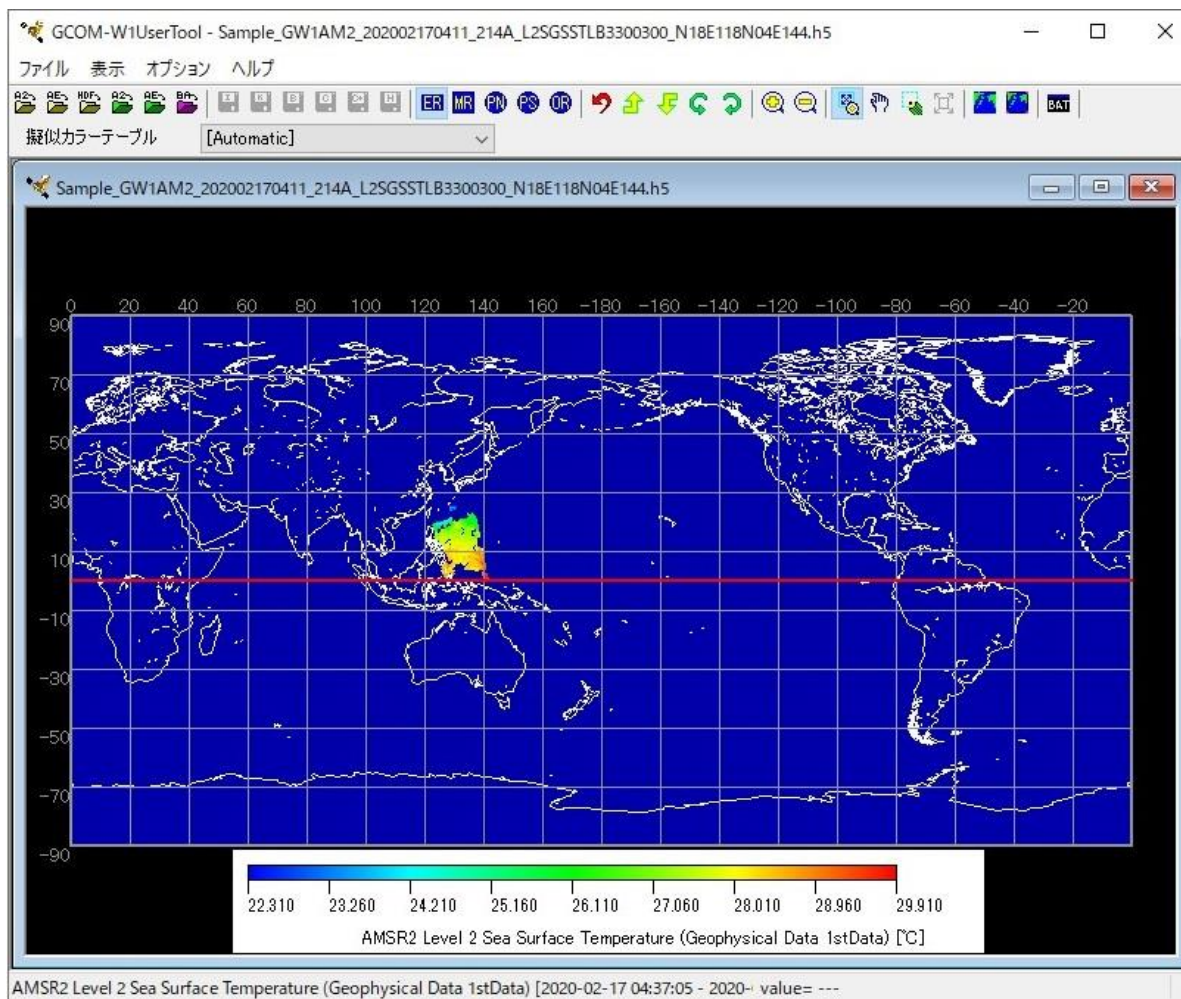


Fig.2.3.1-4-1 Cut out product (HDF5 format)

- (5) To customize the color bar on the display screen, click "Options" in the menu and select "Edit Color Bar Table". (Refer to Fig.2.3.1-5)

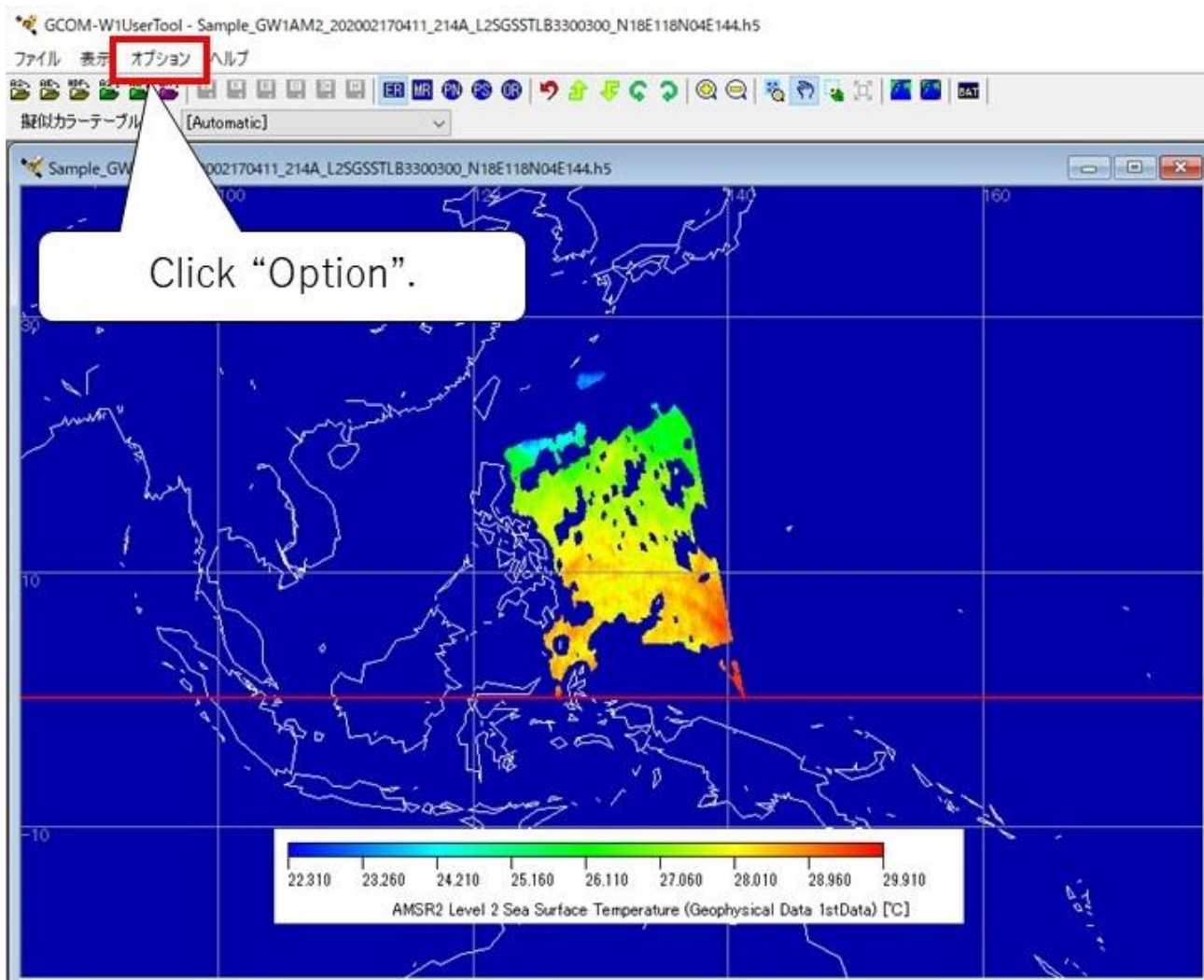


Fig.2.3.1-5 Edit Color Bar Table (1)

- (6) By changing the settings in the "Edit Color Bar Table" screen, you can change the display of the "Color Bar Table".

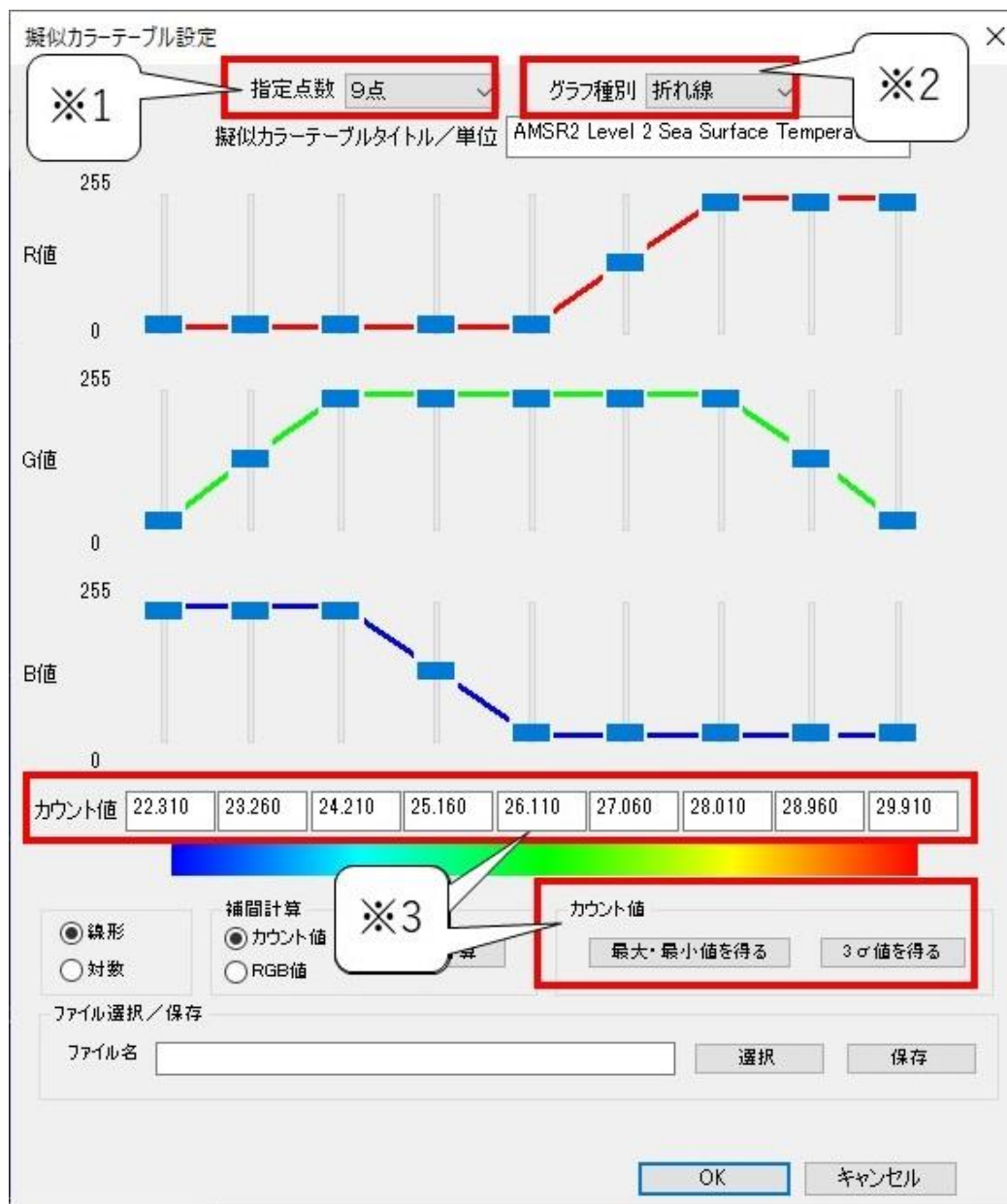


Fig.2.3.1-6-1 Edit Color Bar Table (2)

Fig.2.3.1-6-1 ※1 [No. of Points] pull down:

- The number of reference points for count value and color pallet is selected.
- There is the following four kinds of points of this pulldown menus.
 - 2 points
 - 3 points
 - 5 points
 - 9 points

Fig.2.3.1-6-1 ※2 [Graph Type] pull down:

- The graph type of the edit color bar table is selected from this pull-down menu.
- There is the following two kinds of graph type of this pulldown menus.
 - Line Graph
 - Bar Graph

Fig.2.3.1-6-1 ※3 [Count] (Data value input fields)

- The counter value for each reference point is input.
Please specify the count value for both edge fields at least.
- [Get Max/Min] and [Get 3-sigma] button will help you to get the range of the image data into the fields
- When the [Get Max / Min] button was clicked on the sample shown in Fig.2.3.1-6-1, the maximum and minimum values of sea surface temperature were as follows.
 - Minimum Temperature: 22.310°C
 - Maximum Temperature: 29.910°C
- Based on these, enter a value from 22 °C to 30°C in increments of 1 °C in the [Count] (Data value input fields) . When you click the “OK” button, the color bar will be modified as shown in Fig. 2.3.1-6-2.

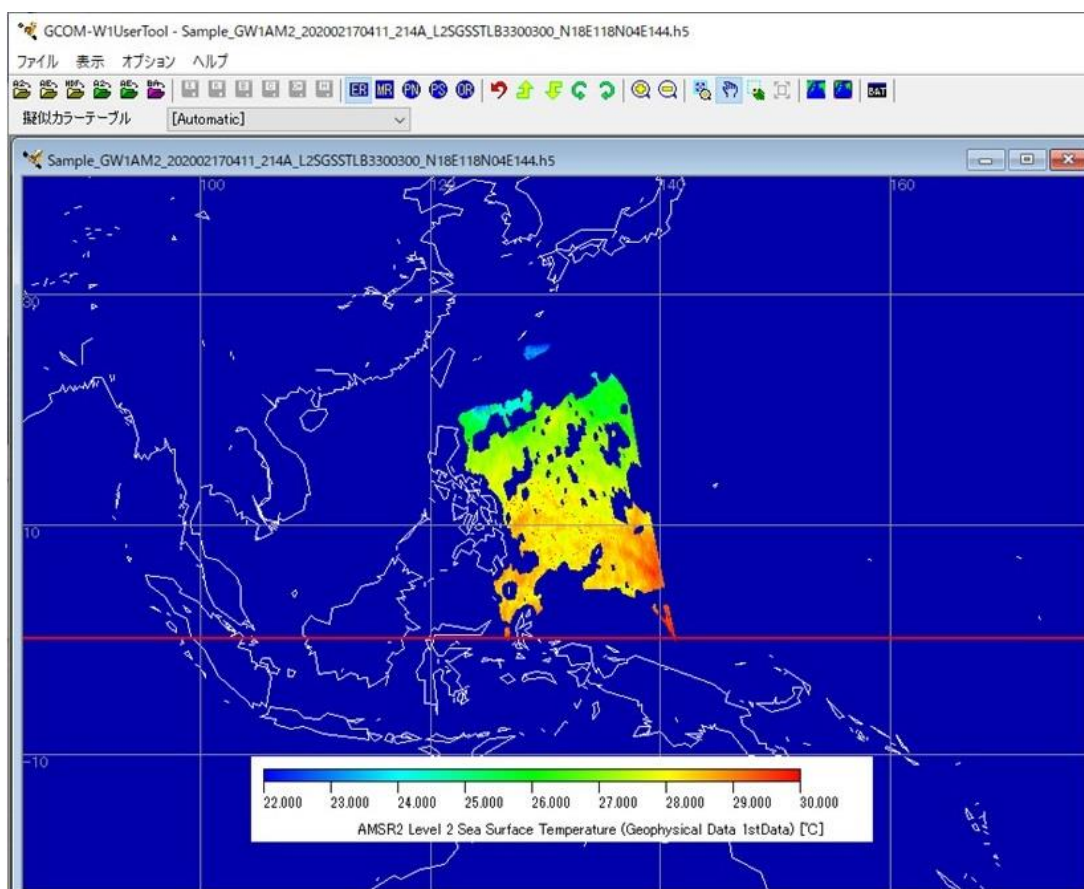


Fig2.3.1-6-2 Edit Color Bar Table (3)

2.3.2. Save the image cut out from the product in image format

- (1) From the initial screen of the GCOM-W1 User Tool, display the file saved in 2.3.1. (Refer to 2.2 (1) to (5) for the operation procedure.)
- (2) Adjust the size and position of the displayed image using the icon of the user tool. (Refer to 2.3.1(2) for operation procedure.)
- (3) Click the "Save (Image)" icon to save the map display in jpg format. (Refer to Fig. 2.3.2-(1))

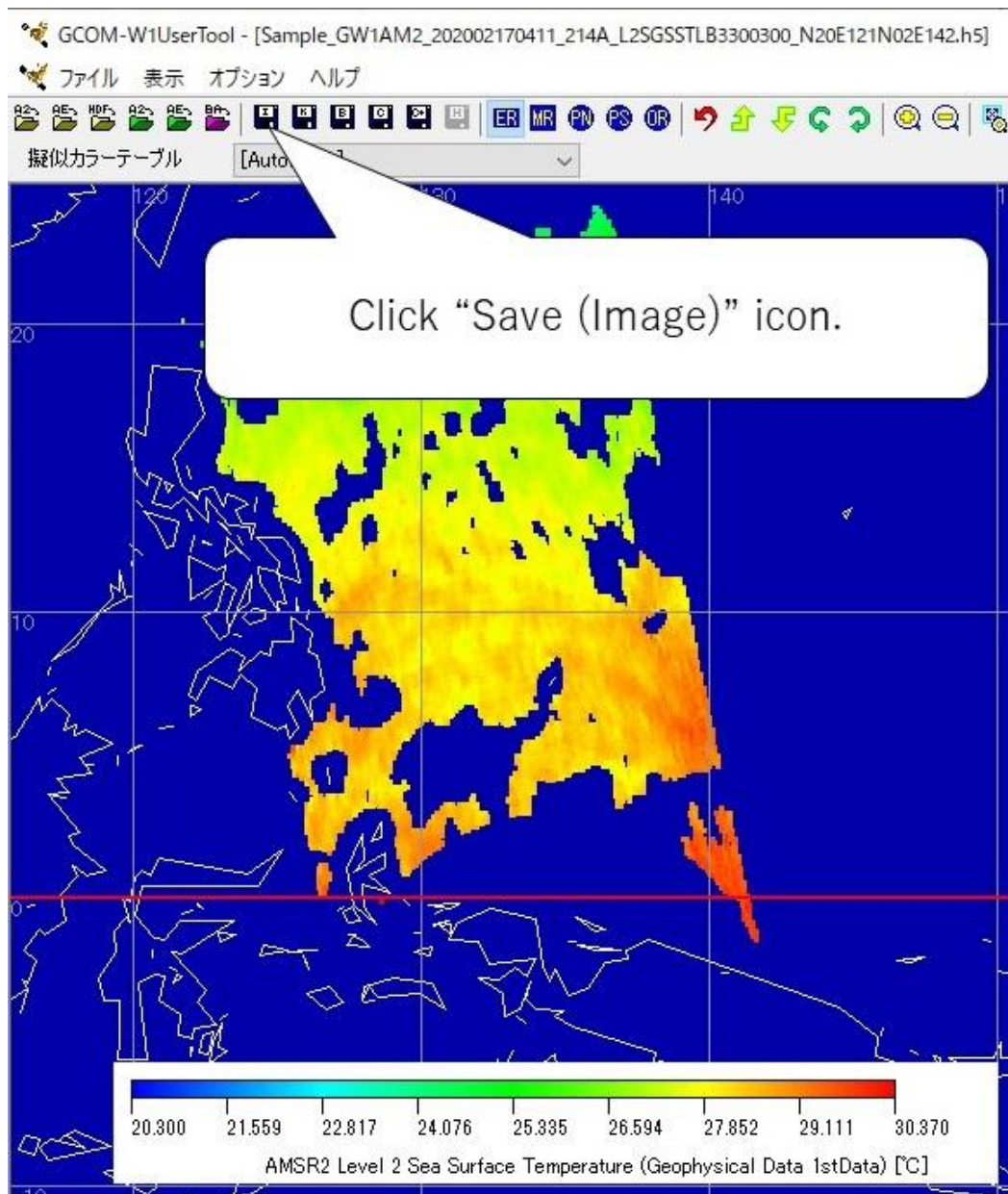


Fig.2.3.2-1 Save the image cut out from the product in image format

2.3.3. Copy the image cut out from the product to the clipboard

- (1) From the initial screen of the GCOM-W1 User Tool, display the file saved in 2.3.1. (Refer to 2.2 (1) to (5) for the operation procedure.)
- (2) Adjust the size and position of the displayed image using the icon of the user tool. (Refer to 2.3.1(2) for operation procedure.)
- (3) Click "File" and select "Copy to Clipboard" from the displayed pull-down menu. A pull-down menu will appear, allowing you to select "Copy (Window)" or "Copy (Selected Area)".
 - This function is to copy a displayed image to Windows clipboard. You can copy the displayed image to another application easily. This menu has the following two kind of sub function.
 - "Copy (Window)": Copy an image on the window.
 - "Copy (Selected Area)": Copy the selected area on image window. 「