G-Portal

User's manual

Revision H

February 14, 2025

Japan Aerospace Exploration Agency

Contents

Revision History

Revision	Date	Description
1.0	March 9, 2018	First Edition
A	September 2, 2019	8.1 Add the recommended OS and browsers that have been checked for operation.
B	March 31,2021	2.3.3 Change account unlock time 3.2 Added that it is necessary to use passive mode when connecting via FTP. 4.4.2 Added that batch download is performed by selecting multiple products for which the "Download" button is displayed. 8.1 Added the result of checking the operation with the recommended OS and browser. Appendix 7-1 An example was added to the table of search condition parameters.
C	October 29, 2021	4.4 Added ALOS-2 product to the production target. 4.4.2 Added the individual production of ALOS-2 products. 4.4.4 Added about production at once of ALOS-2 products.
D	March 31, 2022	4.4.2 Added the individual production of ALOS-2 ScanSAR products. 4.4.5 Added about production at once of ALOS-2 ScanSAR products. 4.4.3～4.4.6 Chapter numbers since 4.4.3 have been shifted according to the above additions.

E	June 9, 2022	8.1 Excluded Internet Explorer from recommended browsers.
F	April 27, 2023	4.4.2, 4.4.3, 4.4.5, 4.4.6 Change production and download procedure.
G	March 25, 2024	4.4.2, 4.4.5 Added the daily order limit.
H	February 14, 2025	1, 3 Due to discontinue of FTP, the FTP-related descriptions have been deleted. 3.3.4 Added annotation for SFTP public key cryptography

1. What is the G-Portal

Globe Portal System (G-Portal) is online dissemination service of valuable products acquired from sensors on Earth Observation Satellites of Japan Aerospace Exploration Agency (hereafter, JAXA).

All you can use the service to cross-search products from JAXA's many earth observation satellites and sensors, and registered users can acquire products.

1.1. Data Policy

Precautions when using G-Portal data are as follows.

- Data is provided via the internet/an online environment.
- The offer target is a free distribution product. (Products with paid distribution are not handled)
- Costs for providing the data are free of charge provided that no additional costs are incurred by JAXA.
- Anybody is free to use the system, including those interested in the global environment, or those interested in making a positive contribution to society through the use of earth observation data.

Privacy policy when you register a user is handled in the following manner.

Your registered personal information is used to identify how the service is being used, and to implement improvements to the service into the future. This information may also be used to notify or contact users when JAXA conducts survey (questionnaires) regarding improvements to system functionality.

Please refer to the Term of Use for furter information of usage. And also please refer to the JAXA site policy (http://www.jaxa.jp/policy_j.html) for further details on the data policy and handling of privacy policy.

1.2. G-Portal user types

User types for G-Portal is outlined in Table 1.2-1. You are recommended to complete user registration first in order to acquire products without restrictions (See "2. Register User").

Table 1.2-1 User Type

User Type	Definition	Services Available
Guest User	Users who have not completed user registration	Search and browse data online. Note that guest users are unable to order or acquire products.
Registered User	Users who have completed user registration	Search, browse, produce, process and acquire standard products online. Acquire standard products and near real-time products directly from the SFTP server.
Specified User	Register users, collaborator specially permitted by JAXA	Search, browse, produce, process and acquire standard products online. In addition to the products that registered users can download, acquire special products being available to those who are JAXA-approved directly from the SFTP server.

1.3. User types and service content

The service content of G-Portal is outlined in Table 1.3-1 below. The type of service content differs depending on user types.

Table 1.3-1 Product Services for Each Type of User

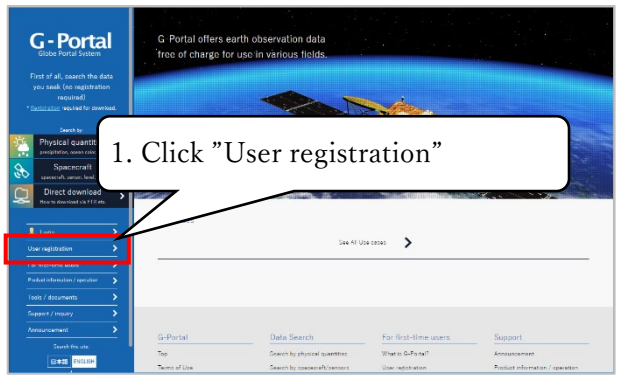
Provided Service	Chapter, Section	Applicable Users		
		Guest Users	Registered Users	Specified Users
User Authentication	2.2	–	○	○
User Registration	2.1	○	–	–
Change user information	5.2	–	○	○
Delete user information	5.3	–	○	○
Change password	5.4	–	○	○
Reissue password	2.3.2	–	○	○
Public key registration	3.3.1	–	–	○
Browse notifications (system maintenance information, release information, Web page update information)	6.5	○	○	○
Search and browse products	4.1	○	○	○
Download products（WEB）	4.3	–	○	○
Download products(SFTP) (*2)	3	–	○	○(*1)
Produce the product	4.4	–	○	○
Process a product	4.5 4.6	–	○	○
Browse and acquire spacecraft sensor operating information (such as quality information, data missing information, TLE information, orbit information)	6.2.1	○	○	○
Browse and acquire product documentation (such as user's manual, format definitions)	6.3	○	○	○
Browse and acquire tools related to products	6.4	○	○	○
Send inquiries to the support desk	7	○	○	○

*1 In addition to the products that all registered users can download, there are other products that are available for download through JAXA approval.
*2 FTP downloads have been discontinued since April 2025.

2. Register User

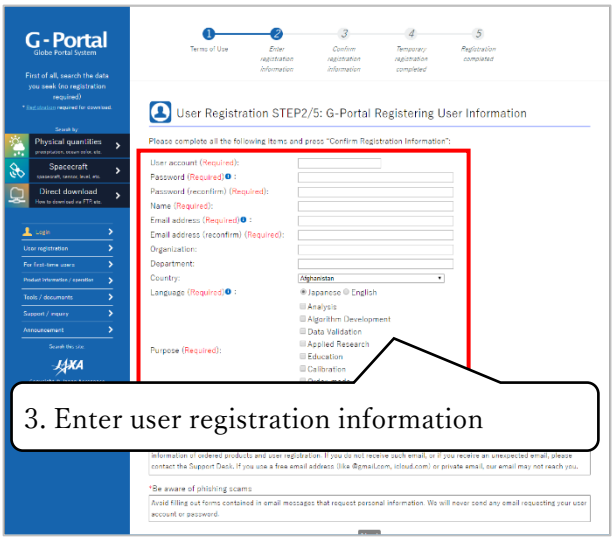
2.1. User registration

You must complete user registration to order and download products using this service. The following outlines the procedures required for user registration.

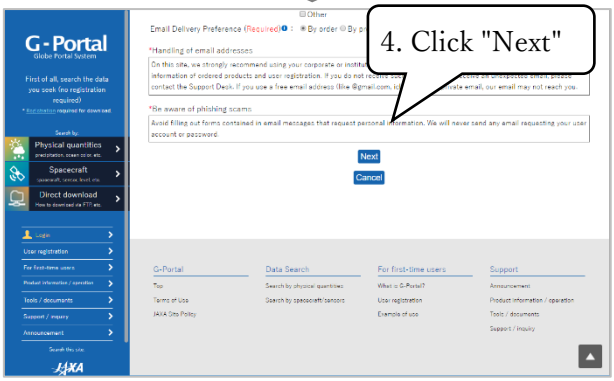


1) Click "User registration" from the menu.

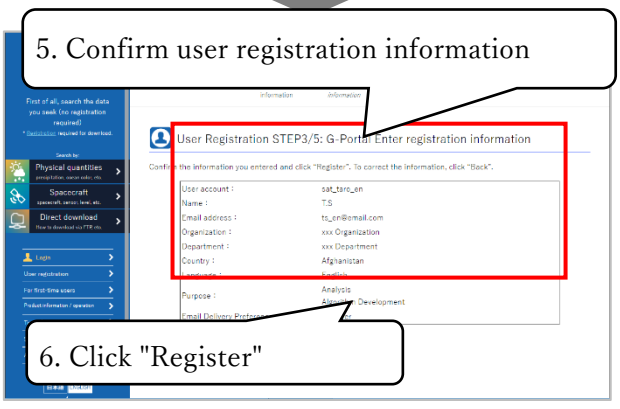
2) To register a user, you must agree to the terms of use. Read through the terms and click the "I Agree - Continue" button. The page will move to the "User Registration window".
User registration is not possible if you do not agree to these terms, and use the service as a guest user.
*If you check "I agree to the above terms of service" for all terms of use, you will be able to click the "I Agree - Continue" button.



3) Enter all user information to be registered (user account, password, name, email address, organization, department, country, language, purpose of use, email delivery preference).

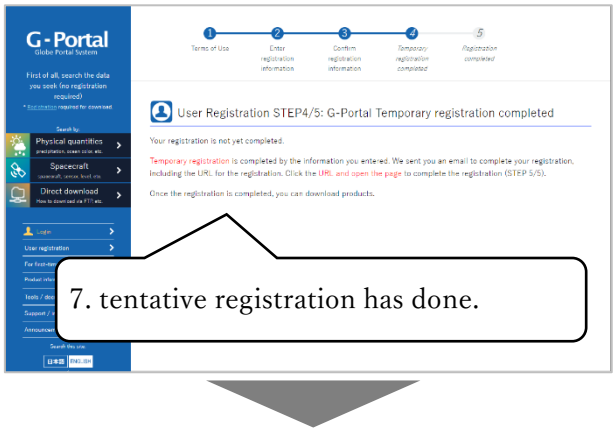


4) Click the "Next" button to move to the window to check the information you've entered. If you want to cancel the input contents, please click "Cancel" button.
*The "Register Confirmation Screen" button can be clicked by entering all the items labeled (Required).

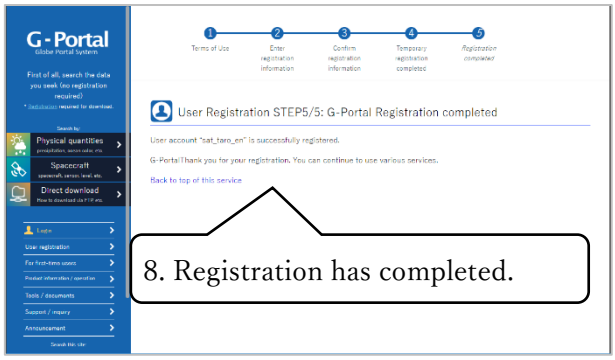


5) The entered user information will be displayed, so check if there is any mistake in the contents. To correct, please click the "return" button. You will return to the screen for entering user information.

6) Click the "Register" button to perform the provisional registration procedure.



7) The temporary registration procedure is completed. "Temporary registration notification mail" will be sent to the email address you entered. Registration is completed by accessing the URL described in the mail.
At the time of provisional registration, you can not log in because user registration has not been completed yet.



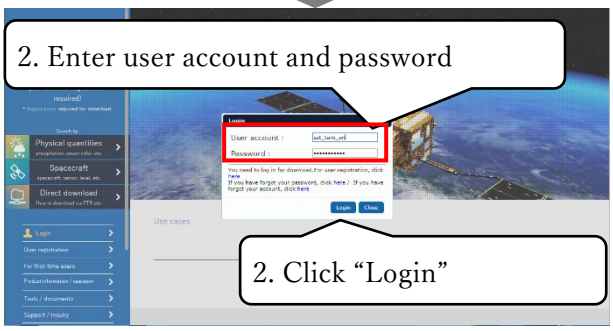
8) Access the URL included in the "Temporary registration notification mail". The final Registration window will be displayed.
Your user account is sent to the email address you registered ("User Registration Complete Email".
User registration is complete and you can now login to the G-Portal.

2.2. Login to the system

You can login to the system using a user account that has been registered in advance (see "2.1 User registration" for the registration method) to order and download products using G-Portal. See "1.2 G-Portal user types" for user type and usage restrictions.

2.2.1. Login on the top window

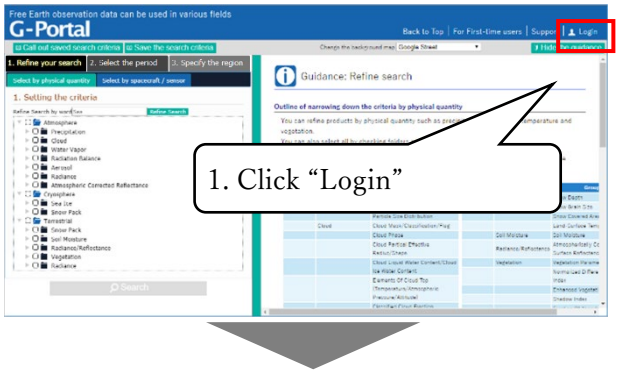
1) Click "login" at menu on a left pane of the top window. Appear the window for the login.



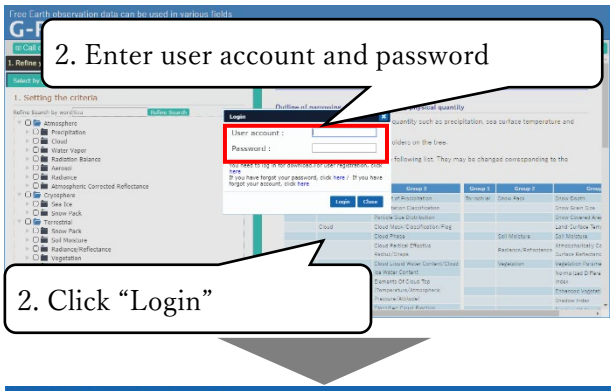
2) Input your user accounts and password as the login window is displayed. Click "login" button.

3) After login successfully, The "login" button at menu on left pane of the top window switches "logoff: 【account name】"button.

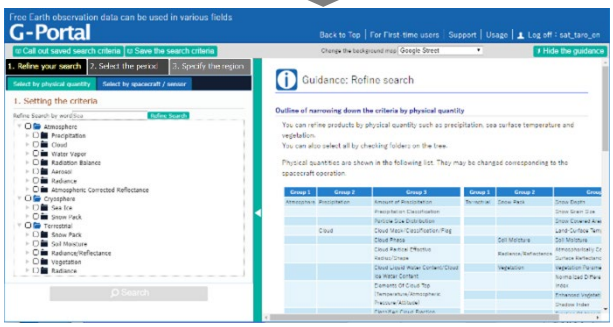
2.2.2. Login on the search window



1) Click the login button on the search header and appears the pop-up login dialog.

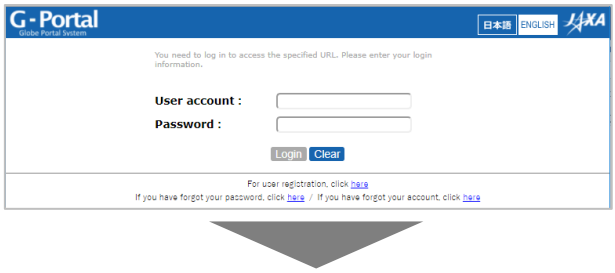


2) Input your user account and password while login dialog is appeared.



3) "Login" button on the header of the search window switches after login successfully.

2.2.3. Login on a pop-up window



1) The pop-up "login"window appears through https://gportal.jaxa.jp/gpr/auth

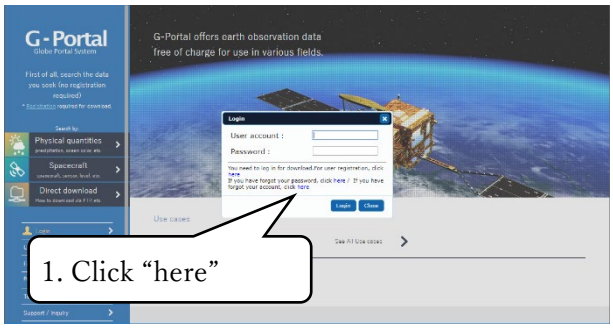
2) Input your user account and password and click the login button.

3) With login successfully, move to the top window.

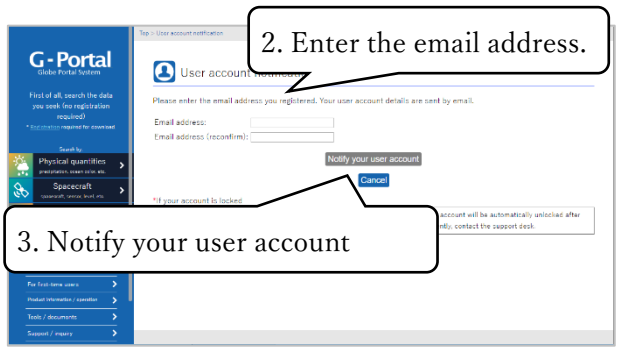
2.3. Troubleshoot for login

2.3.1. If you have forgotten your user account

The G-Portal can automatically resend User Account Notification Email if you have forgotten your user account.



1) Click "login　dialog"or "Here, you lose your user account information."link and appear the window for informing your account information again.



2) Input the registered e-mail address on the G-Portal application.
3) Click the button "notify the user account and the notification to the e-mail address sent.

2.3.2. If you have forgotten your password

The system can reissue a password if you have forgotten your password.

1) Click "login　dialog"or "Here, you lose your password."link and appears the window for informing your account information again.

2) Input your user account and the registered e-mail address.
3) Click the button "Reissue your password", a notification for the reissued password is sent to your e-mail address.

2.3.3. If your account has become locked

Your user account will be locked if you have entered an incorrect password five times. You will not be able to login to the system when your account is locked.

Your user account is locked when you entered an incorrect password. The system will unlock accounts automatically once 10 minutes. Try login the system after a while.

3. How to download products directly

It describes the procedure to download the product directly using SFTP protocols. Using SFTP is permitted only for specific users.

3.1. Products that can be downloaded by SFTP

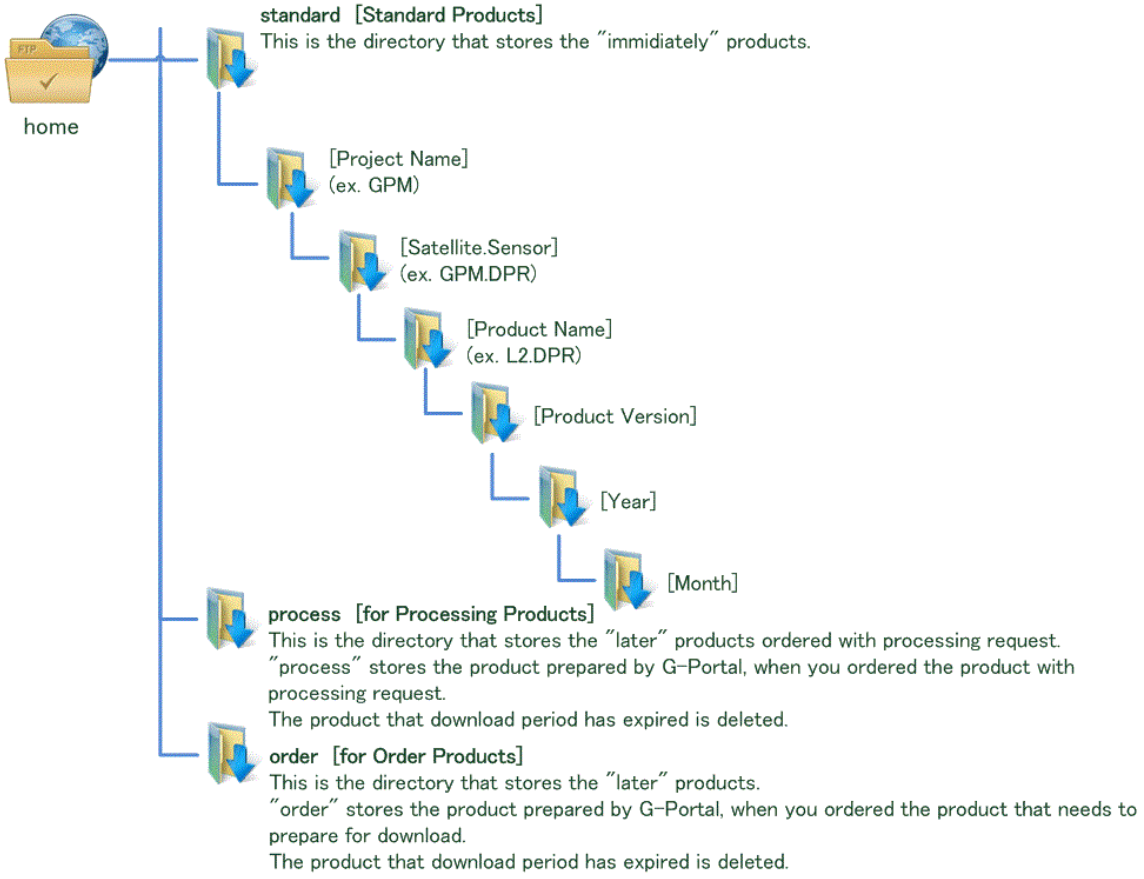
For SFTP, products to be downloaded are "standard product" and "near real time product". Regarding "standard product" and "Near real time products", the range that can be referred to differs depending on the belonging group.

All registered users can connect using the account authentication, but only specific users can connect using the public key cryptography.

3.1.1. Directory structure

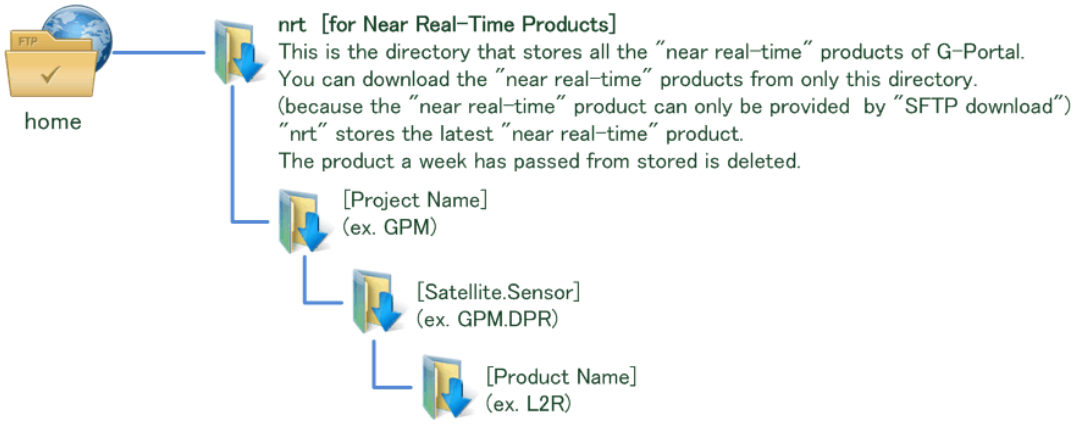
◆ Directory structure of standard product

The directory structure of the standard product is as follows.



◆ Directory structure of quasi real-time products

The directory structure of the near real time product is as follows.



3.2. Downloading FTP-based products

Direct downloading via FTP will no longer be available from April 2025. Direct downloading via SFTP will continue to be available, so please refer to "3.3. Downloading products using SFTP".

3.3. Downloading products using SFTP

For direct acquisition using SFTP, account authentication or user authentication by public key cryptography is performed. Account authentication is available to all registered users, but public key cryptography is available to specific users only.

When performing user authentication by public key cryptosystem, it is necessary to create private key / public key beforehand and register its public key in G - Portal. Please refer to "Create your private key · Public key yourself", "Register public key" or "Download private key created with G-Portal" for creating and registering private key · public key.

For the directories that can be accessed, please refer to "Products that can be downloaded via SFTP" "Directory configuration", for downloading methods using SFTP, please refer to "How to download using SFTP".

Depending on the organization to which the user belongs, access to the outside by SFTP may be prohibited by policy. In that case, please consult with your network administrator of your organization. G-Portal uses 2051 instead of normal 22 for the TCP port used for SFTP in consideration of safety.

3.3.1. How to create private key and public key by yourself (Specific use only)

This procedure is unnecessary when you take means of "Download private key created by G-Portal" to be described later. This procedure is for UNIX(including Mac OS X), Linux, Cygwin users to create private key and public key using commands.

(1) Open the terminal and execute the following command. (If it can not be executed, check whether ssh is installed.)

```
$ ssh-keygen
```

(2) The following message for requesting the save directory and save name of the public key / private key is displayed.

```
Enter file in which to save the key (/Users/[UserName]/.ssh/id_rsa):
```

To specify the save directory and save name, enter the directory name and save name.

If you press enter without entering anything, id_rsa (private key) and id_rsa.pub (public key) will be stored in the default directory / Users / username /.ssh.

(3) The following message will be returned requesting the passphrase for decrypting the private key.

```
Enter passphrase (empty for no passphrase):
```

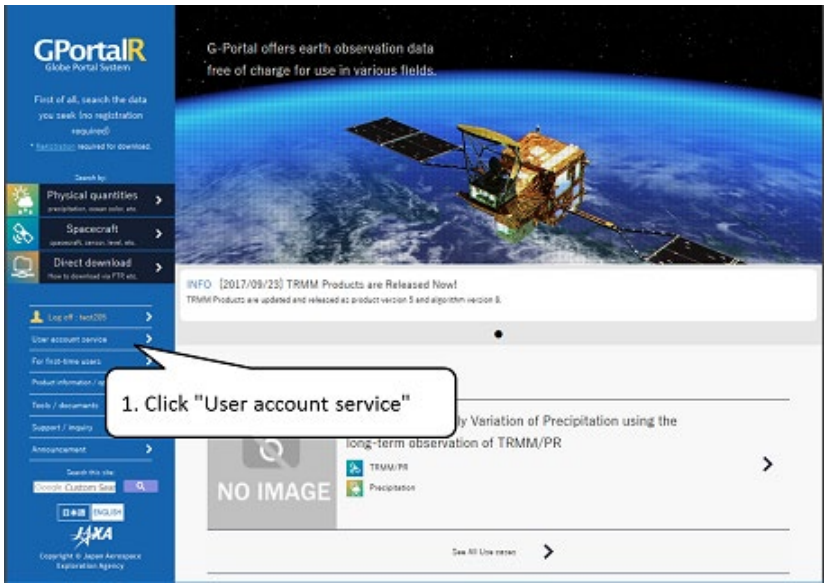
To set the password to be entered when connecting SFTP, enter the password.

This completes the creation of the public key / private key in the set directory.

3.3.2. Register public key (Specific use only)

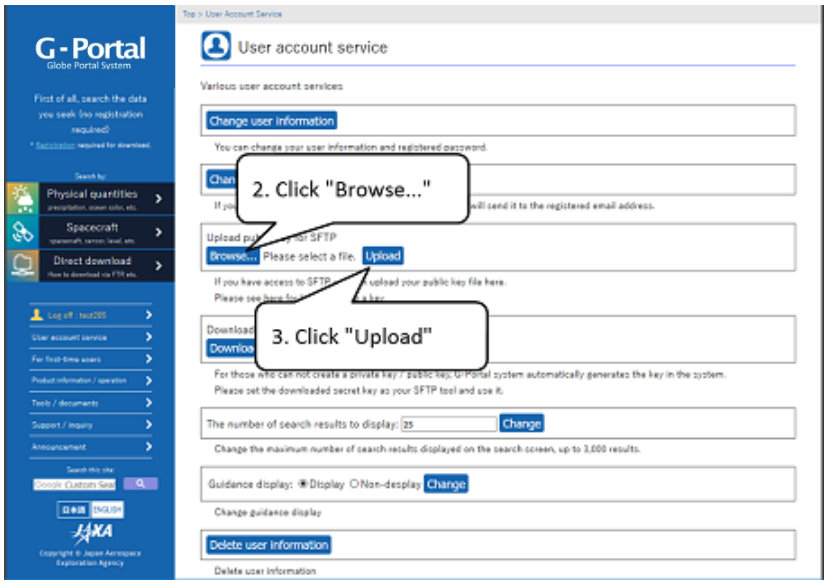
In order to do a direct acquisition using SFTP, register the created public key in G - Portal. (Please do not register private key.The private key is used to access SFTP server.)

(1) After logging in to the system, click "Account service" on the menu to display the user account service screen.



(2) Specify the public key file from the "Browse" button.
If the public key has already been registered, it will be updated to the specified public key.

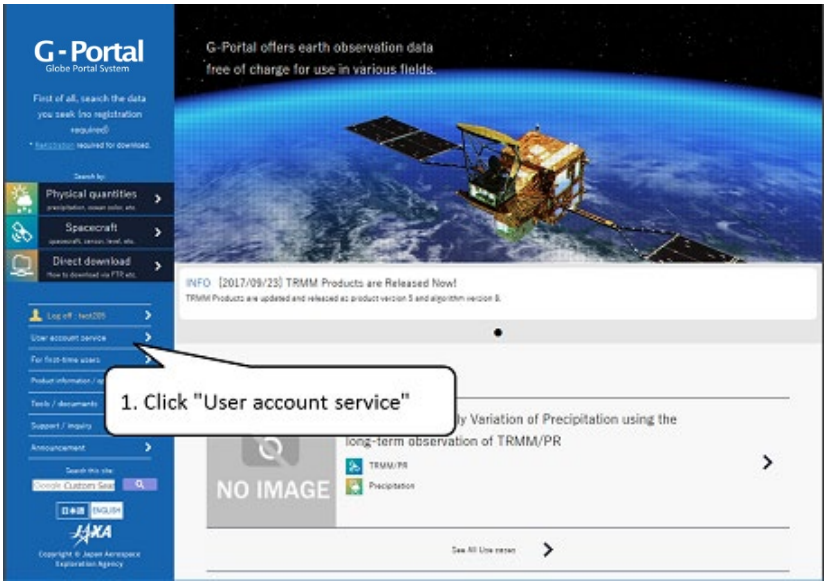
(3) With the "Upload" button, the specified public key is registered in this system.



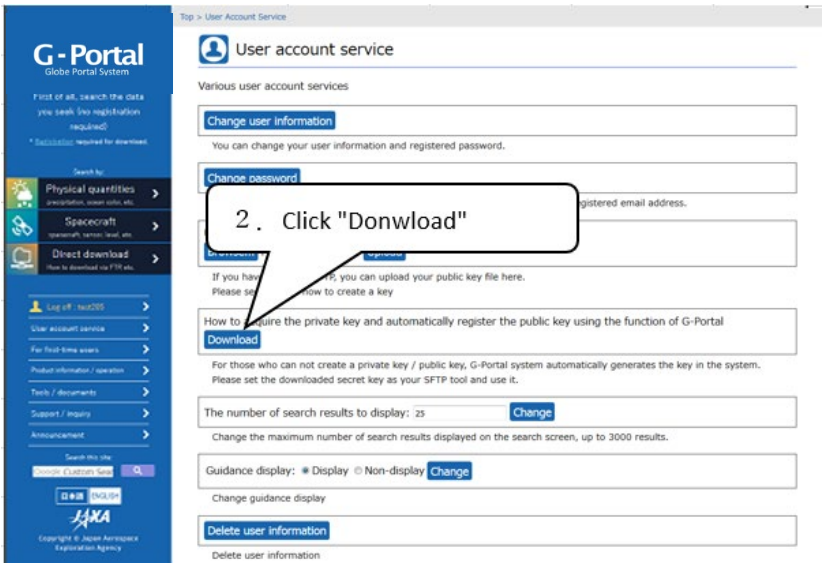
3.3.3. How to acquire the private key and automatically register the public key using the function of G-Portal (Specific use only)

This chapter explains how to acquire the private key and register the public key automatically using the function of G-Portal. If you take this means, your public key will be automatically register to G-Portal. Therefore, you should not register your public key by yourself. And if you take means "How to create private key and public key by yourself" and "Register public key" to be described later, you don't need to this procedure.

(1) After logging in to the system, click "Account service" on the menu to display the user account service screen.



(2) Click the "Download" button to generate the private key and download the private key to your computer. Also, generate a corresponding public key and register it on the GPortal.


G-Portal
Globe Portal System
Physical quantities
Spacecraft
Direct download
Top > User Account Service
User account service
Various user account services
Change user information
You can change your user information and registered password.
Change password
2. Click "Donwload"
Download
For those who can not create a private key / public key, G-Portal system automatically generates the key in the system.
Please set the downloaded secret key as your SFTP tool and use it.
The number of search results to display: 25
Change
Change the maximum number of search results displayed on the search screen, up to 3000 results.
Guidance display: Display Non-display Change
Change guidance display
Delete user information
Delete user information

3.3.4. How to download using SFTP

This section shows how to download in UNIX (including Mac OS X) and Windows.

◆ Basic information

host	ftp.gportal.jaxa.jp
port	2051
protocol	SFTP
user name	User account registered in G-Portal
password	Password registered with G-Portal (Used for account authentication)
Private key * Specific user only	A private key corresponding to the public key registered in G-Portal (Used in case of public key cryptographic authentication)

(1) UNIX (including Mac OSX)

◆ Connect SFTP(Account authentication)

Enter the following command into the command line to enable access using SFTP.

```
$ sftp -oPort=2051 [account]@ftp.gportal.jaxa.jp
```

"Password:" will be displayed in the command line if a proper connection to the system has been established, so enter your password.

The following will be displayed if you have logged in successfully:

```
sftp >
```

is displayed

◆ Connect SFTP(Public key cryptographic authentication * Specific user only)

By entering the following command on the command line, you can access SFTP using public key cryptographic authentication.

```
$ sftp -oPort=2051 -oIdentityFile=[public key path] [account]@ftp.gportal.jaxa.jp
```

The following will be displayed if you have logged in successfully:

```
sftp >
```

is displayed

◆ List

Enter:

sftp > ls

to display a list of files and directories.

◆ Change directory

Enter:

sftp> cd [directory name]

to move to a specific directory.

* Note: Due to access restrictions, you might not be able to move to a directory even if it is displayed in the list.

◆ Download a file

Enter:

sftp> get [file name]

to get a file. The specified file will be downloaded and saved in a directory on your computer.

◆ Exit SFTP

Enter:

sftp > bye

to close SFTP.

(2) Windows

The following outline is an example using the "WinSCP" software application to download via SFTP.

◆ Installation WinSCP

(1) Download WinSCP Installer from the following site.
WinSCP download site: http://winscp.net/eng/download.php

(2) Start WinSCP Installer.

(3) Select "English" (Image 3.3-4(1)), and click [OK]. (Image 3.3-4(2))

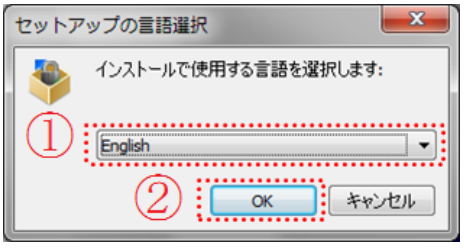


Image 3.3-4

(4) Click [Next]. (Image 3.3-5(3))

Image 3.3-5

(5) Select "I accept the agreement" (Image 3.3-6(4)), and click [Next]. (Image 3.3-6(5))

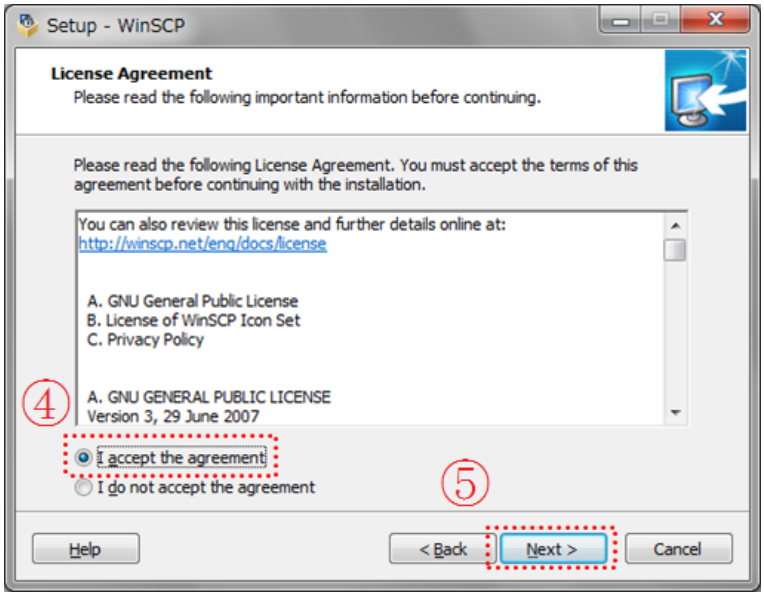


Image 3.3-6

(6) Select "Typical installation (recommended)" (Image 3.3-7(6)), and click [Next]. (Image 3.3-7(7))

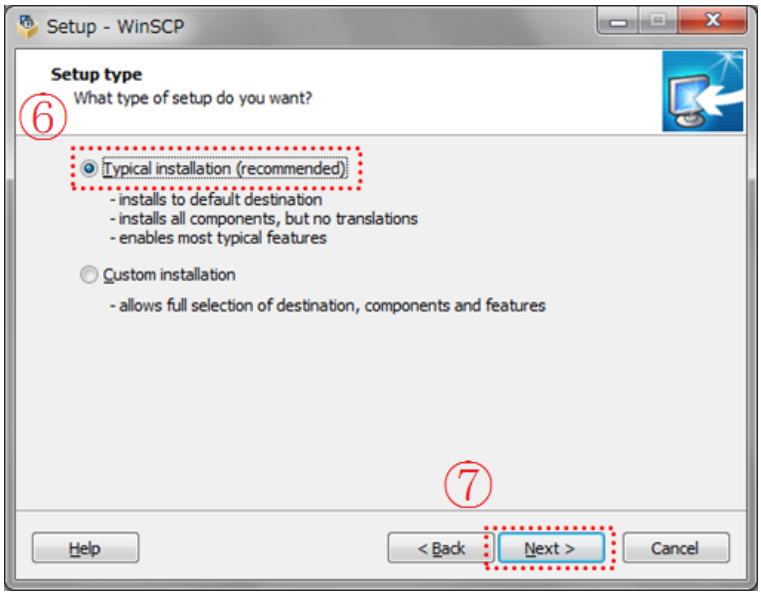


Image 3.3-7

(7) Select "Commander" (Image 3.3-8(8)), and click [Next]. (Image 3.3-8(9))

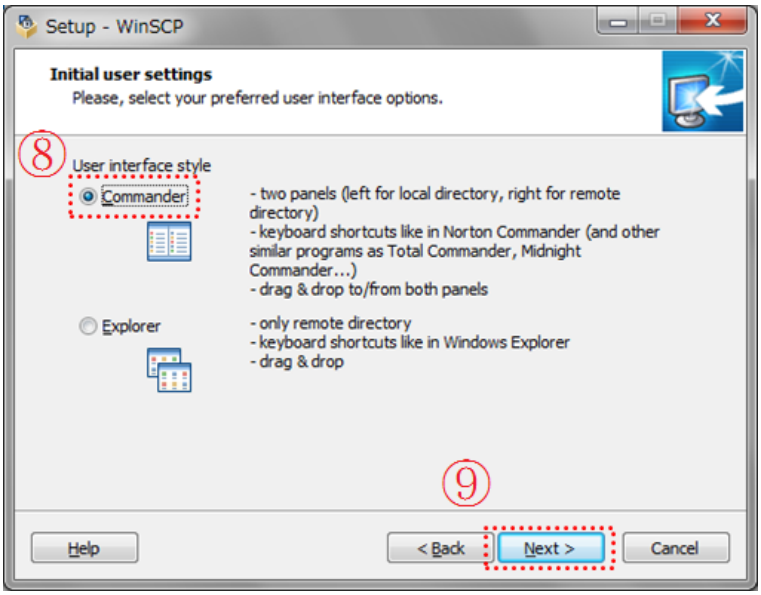


Image 3.3-8

(8) Click [Install]. (Image 3.3-9(10))

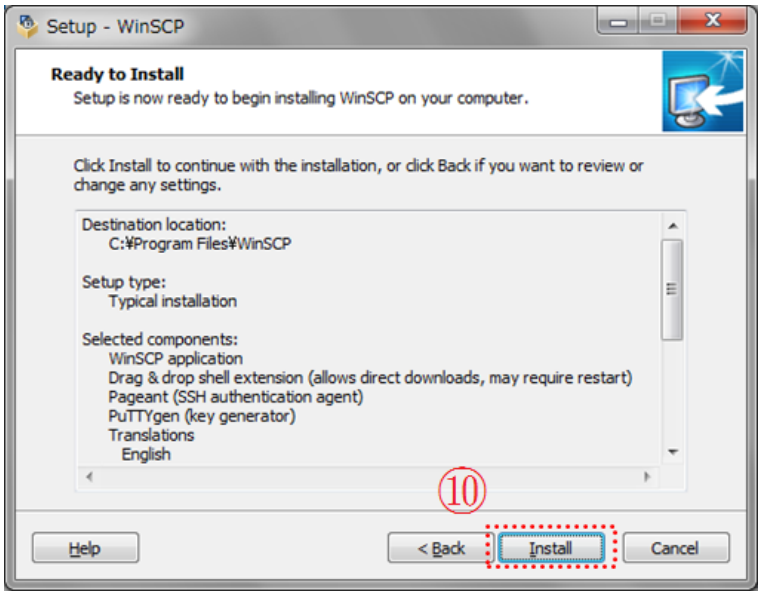


Image 3.3-9

(9) image below will be displayed if you have logged in successfully. Click [Finish]. (Image 3.3-10(11))

Image 3.3-10

◆ Connect SFTP(Account authentication)

(1) Start WinSCP.

(2) Select "SFTP" for the File protocol. (Image 3.3-11(1))

(3) Please enter "ftp.gportal.jaxa.jp" as the host name . (Image 3.3-11(2))

(4) Enter "2051" for port number. (Image 3.3-11(3))

(5) Please enter the user account registered in G - Portal as user name . (Image 3.3-11(4))

(6) Press [Login] to access SFTP. (Image 3.3-11(5))

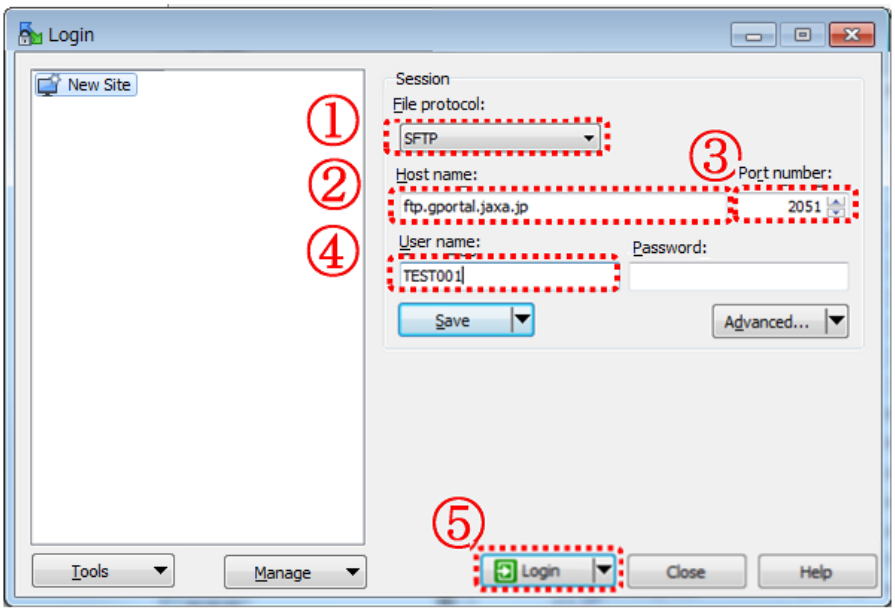


Image 3.3-11

(7) Enter the password corresponding to the account registered on the web screen for the password and click [OK]. (Image 3.3-12(6))

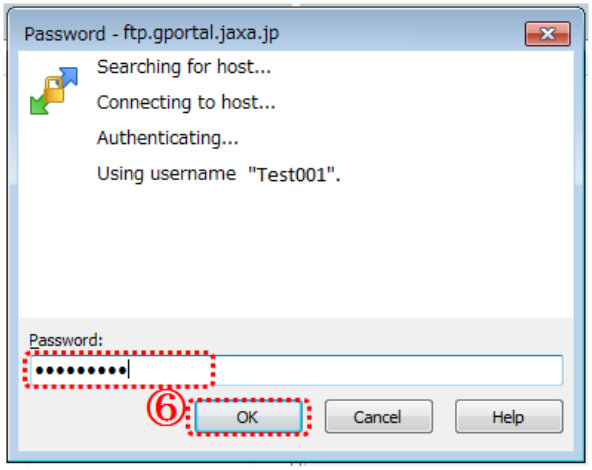


Image 3.3-12

(8) When login is successful, the following screen will be displayed.

The left pane is your computer and the right pane is the G-Portal directory.

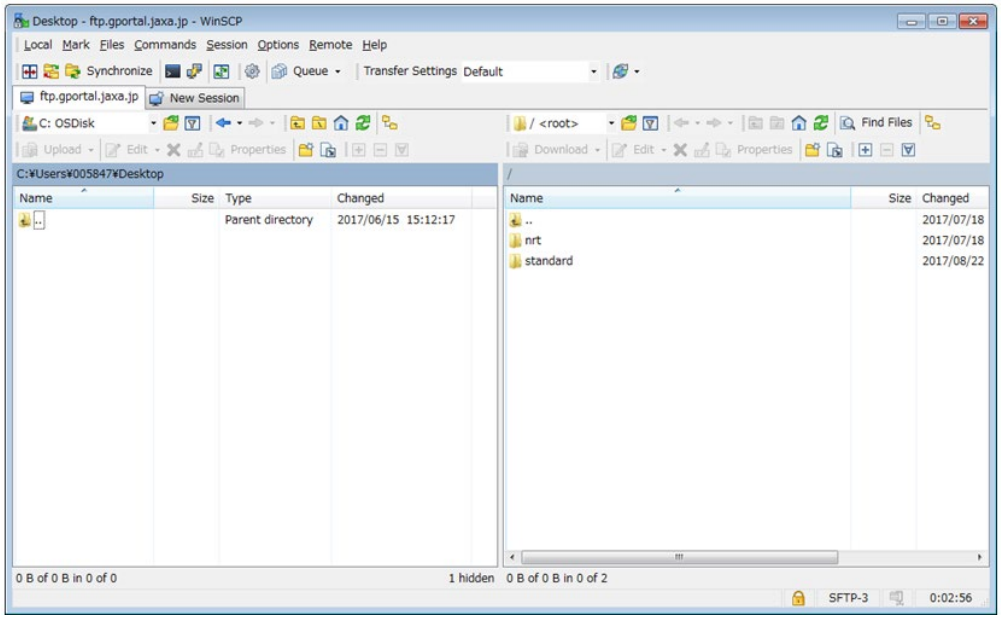


Image 3.3-13

◆ Connect SFTP(Public key cryptographic authentication * Specific user only)

(1) Start WinSCP.

(2) Enter "ftp.gportal.jaxa.jp" into "Host name". (Image 3.3-14(1))

(3) Enter "2051" into "Port number". (Image 3.3-14(2))

(4) Enter the user account registered in G-Portal into "User name". (Image 3.3-14(3))

(5) Click [Advcanced...] (Image 3.3-14(4)) to set private Key File.

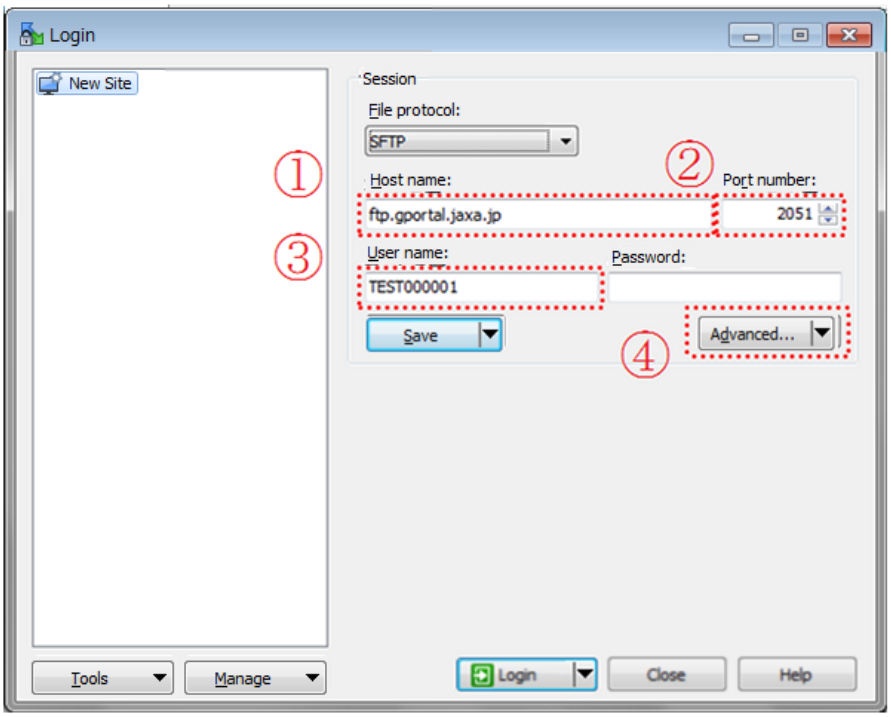


Image 3.3-14

(6) Select "Authentication".(Image 3.3-15(5))

(7) Select private key file that you created into "Private key file". (Image 3.3-15(6))

(8) Click [OK]. (Image 3.3-15(7))

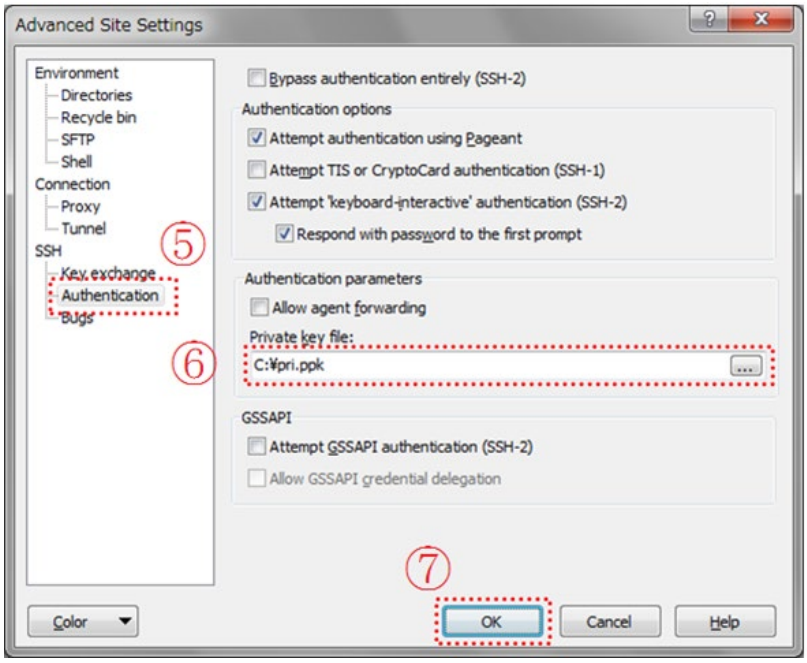


Image 3.3-15

(9) Click [Login] (Image 3.3-16(8)) to SFTP login.

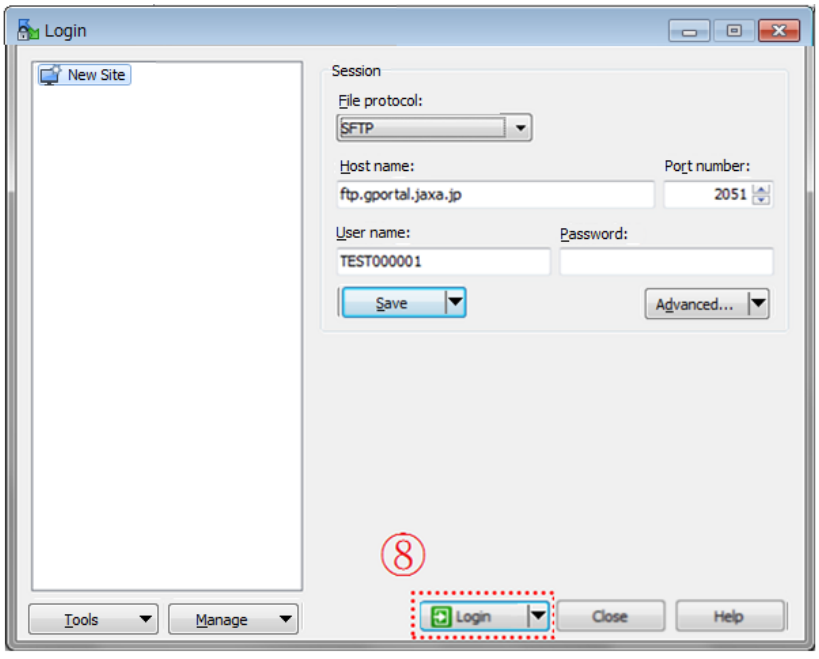


Image 3.3-16

(10) If you have set a password to decrypt the private key (Image 3.3-17(9)), click [OK] (Image 3.3-17(10)) button to enter the password that you set.

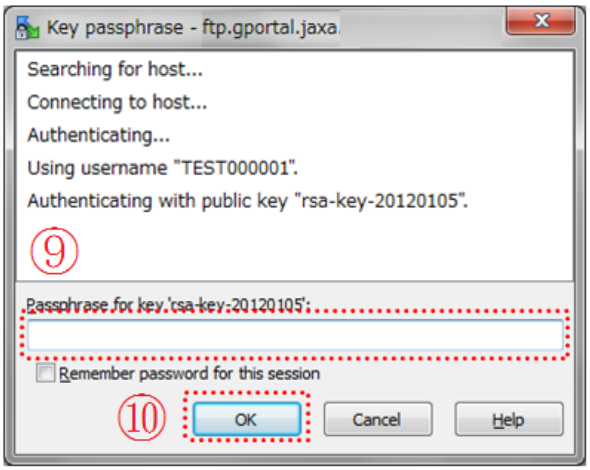


Image 3.3-17

(11) image below will be displayed if you have logged in successfully.
The left pane is your computer folder, the right is the G-Portal directory.

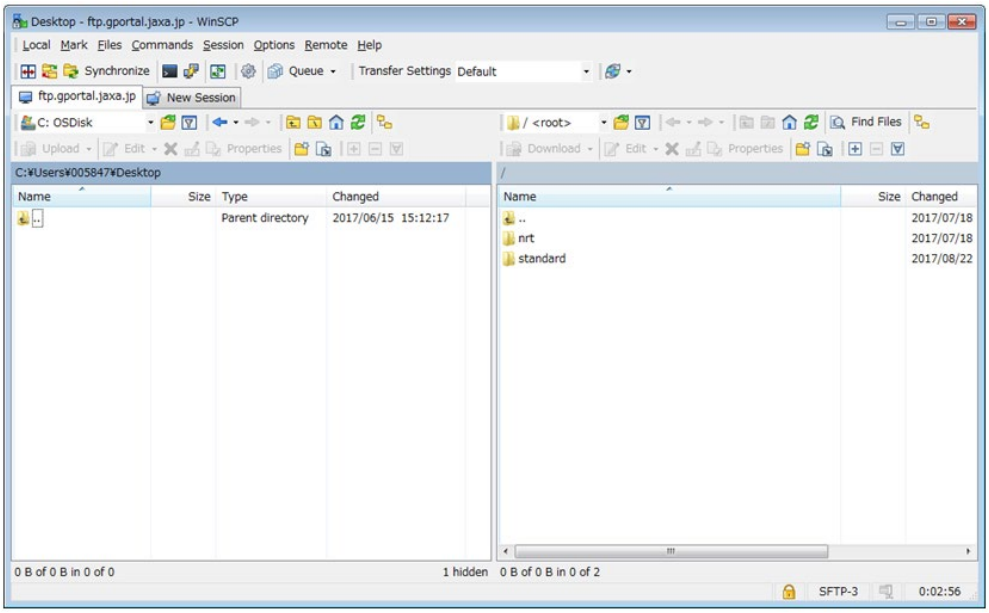


Image 3.3-18

◆ Change directories

Change directories from the pull-down menu and navigation buttons. (Image 3.3-19(11))

Note: Due to access restrictions, you might not be able to move to a directory even if it is displayed in the list.

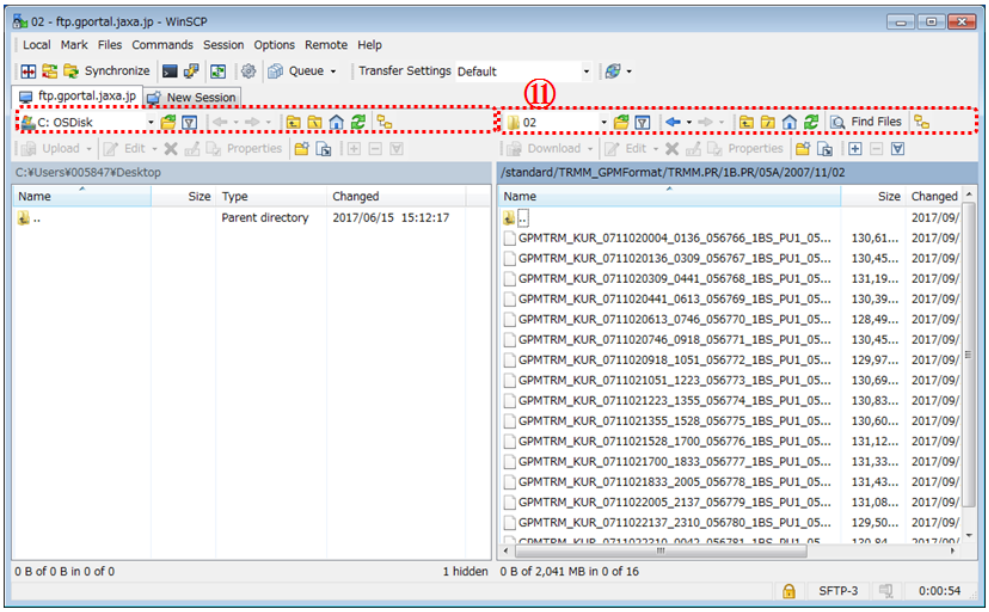


Image 3.3-19

◆ Download a file

Drag and drop the products you want to download. (Image 3.3-20(12))

Note: When you drag and drop to select multiple files, you will be able to bulk download.

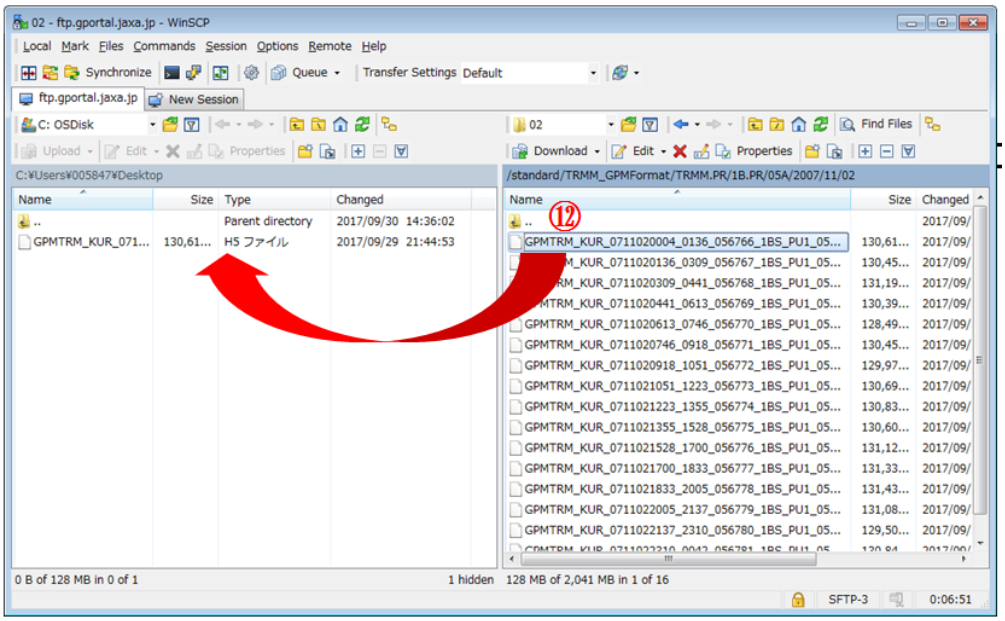


Image 3.3-20

◆ Exit SFTP

Click [Commands]-[Quit] to close WinSCP.

4. Product Search and Download

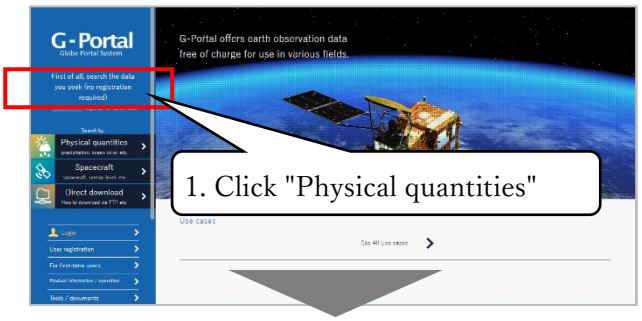
4.1. Product Search

The following are three ways to search for products.

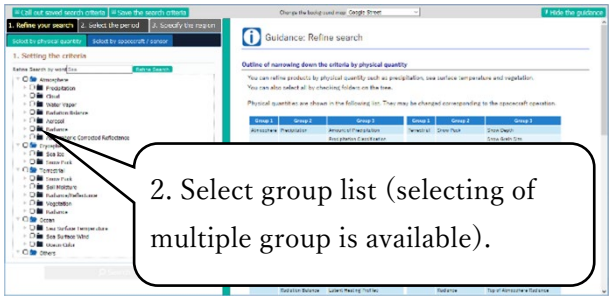
- Search by physical quantities
- Search by spacecrafts/sensors
- Search using saved search conditions(only available to registered users)

4.1.1. Search by physical quantities

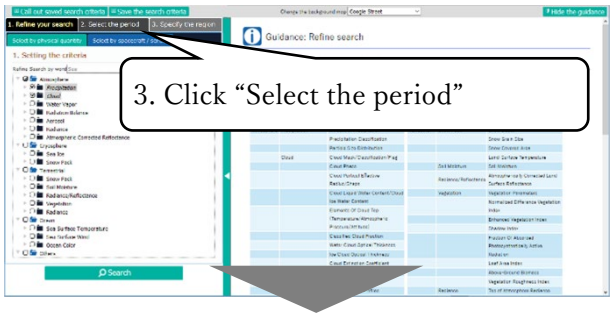
Search for products by physical quantities, and the period and region. See "6.1 Checking the provided spacecrafts/sensors and physical quantities" for further details.



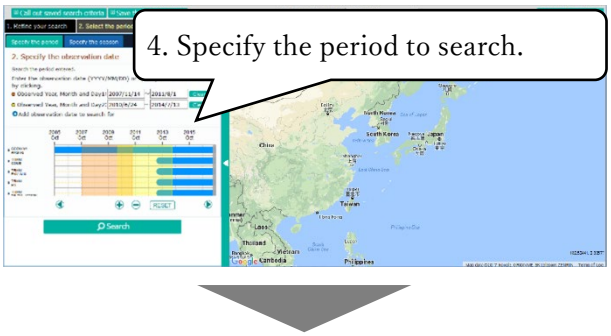
1) Click "search from physical quantities" left pane on the top menu and move to the search window shown the physical quantities tree.



2) Each category shows the group list to physical quantities to a tree format on the search window.Refer to"Checking a provided spacecrafts sensors/physical quantities"the physical quantities is included in the physical quantities'group.
※Click ▶ on physical quantitites group, and physical quantities in the qroup are shown.

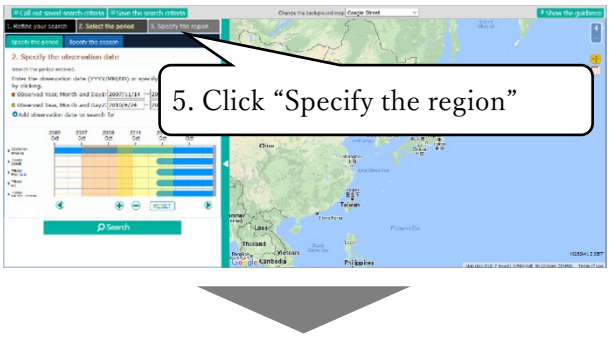


3) Click "2. Specify date " on the top of the window with checking physical quantities.



4) The left pane displaying "data range" appears. The selections are " Period" and "Season". (Please refer "Appendix 3 Specify Observation Period"). There are three ways on "Data Range"as follow. (Please refer "Appendix 3 Specify Observation Period")

・Input by text
・Input from the calendar UI
・Input by bar-chart to observation period

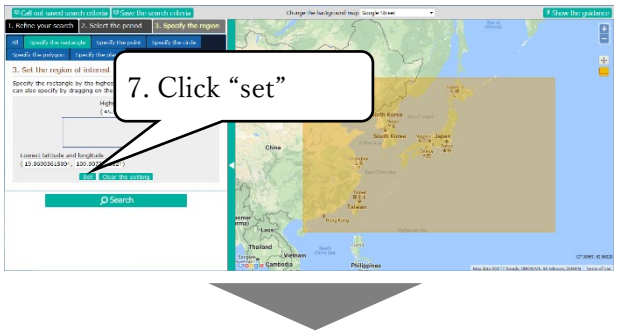


5) Click "3. Specify Area"on the top of a window.

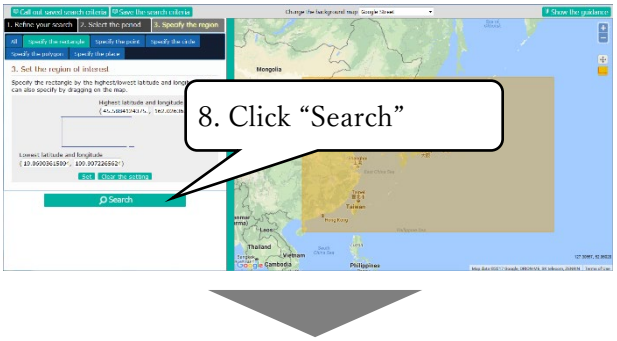
6) Appear a window specifying search field. The selections of observation area are six applications(functions?). Refer to " Appendix 2 Specify observation region".

・specify a globe
・specify a rectangle
・specify a point
・specify a circle
・specify a polygon
・specify a place (name)

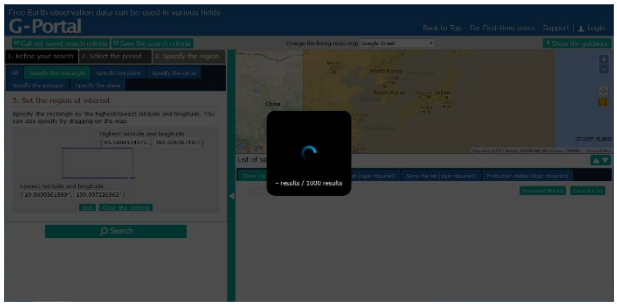
Choose a function from "text input" and " drag and drop on the map".



7) Click “Submit” when input the searching area by text. (unnecessary on drug on the map)



8) Start search by clicking “search”button on the lower part window. “Search”button can click under setting a spacecraft sensor, physical quantities and observation data.

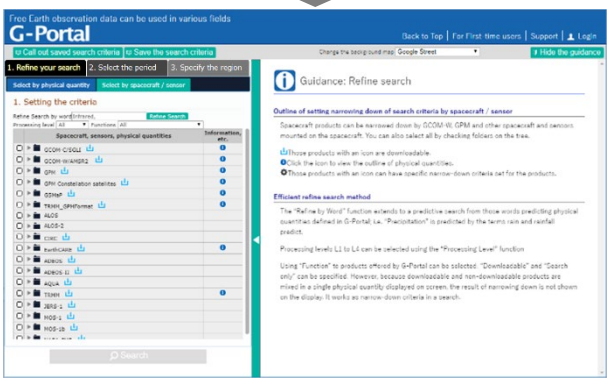


9) Loading icon and searching status are displayed during searching. “Hit number”/”Visible number“

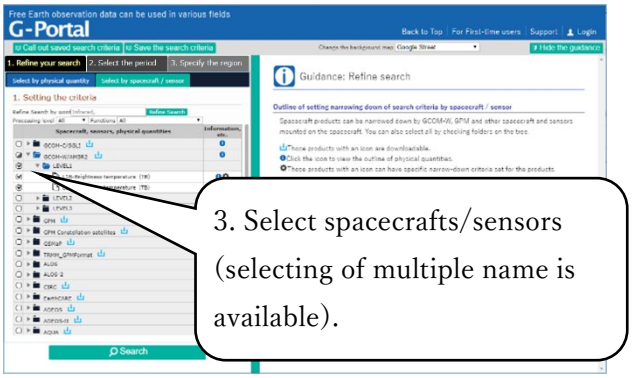
4.1.2. Search by spacecrafts/sensors

Search for products by spacecraft/sensors and products , and specifying the period and range.

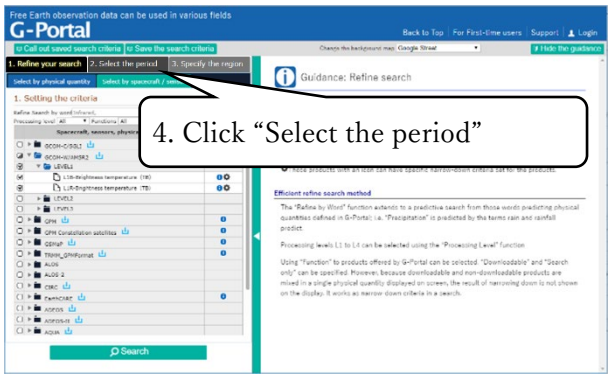
1) Click "Search by spacecraft sensors"on the top window menu and move to search window shown spacecraft seinsors tree.



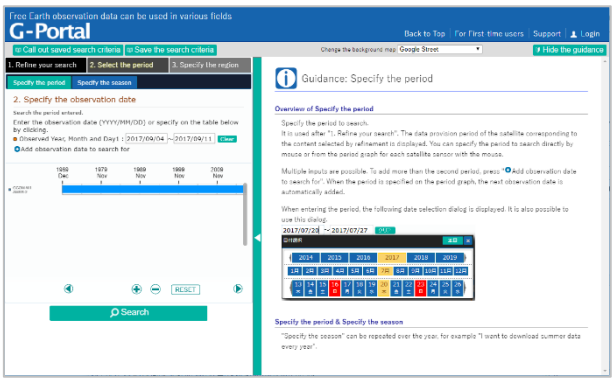
2) To "1. Refine search > aircraft, choose a sensor"on search window, spacecraft sensors provided on G-Portal is shown.
※The explanation of spacecrafts is shown with clicking "I"icon to aircraft sensors.



3) Check a searching satellite sensor.※ Click ▶ on spacecraft sensors bar and the products chosen by spacecraft sensor. The detail search status show about the setting avairable product on the setting icon. Click the setting icon, The detail search condition input dialog is s hown.



4) Check a searching spacecraft sensor and click"2 specify date" on the top of a window.

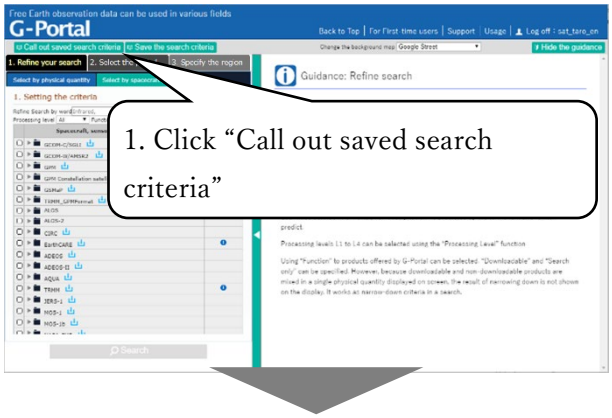


5) The product including a chosen spacecraft sensor in (4) is shown "Specify date" window on the bar-chart.

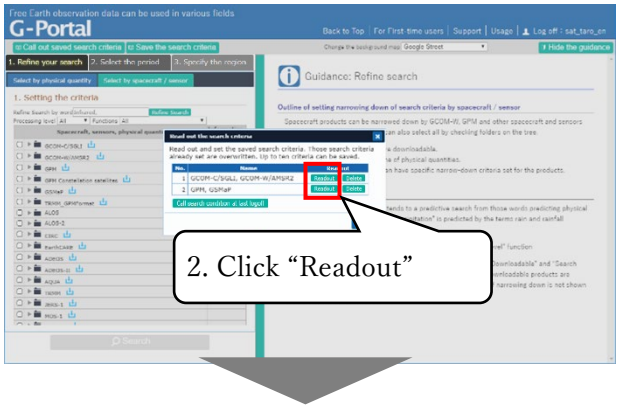
The operation is as well as "4.1.1 Search by pysical quantities". Refer to "4.1.1 Search by pysical quantities"(6).

4.1.3. Search by saved condition

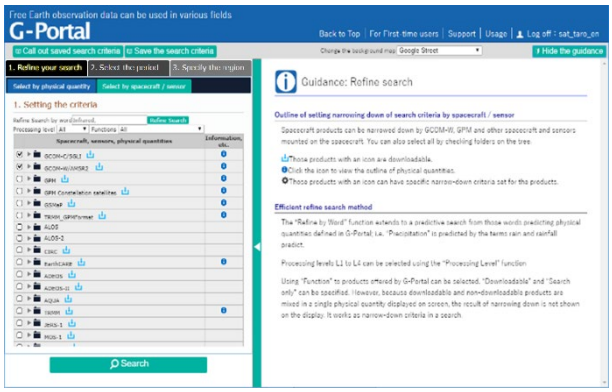
The system allows you to save search conditions, and you can load them for easy operation. However this option needs your login as registered user. (see "2.2 Login to the system")



1) Click "Call out saved search criteria"and display a save criteria selection dialog window.



2) Click "Readout" on the chosen search criteria.



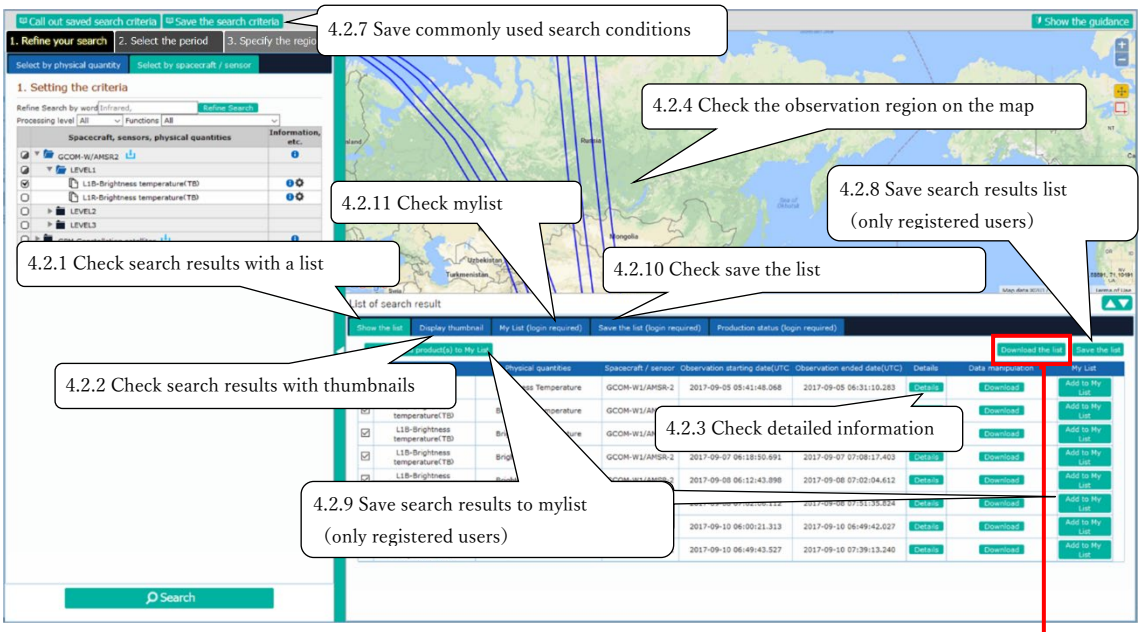
3) The Search criteria is inputed on the search criteria window. Confirm the search criteria, Click "Search" button on the lowest window and start a search.

4.2. Display search results

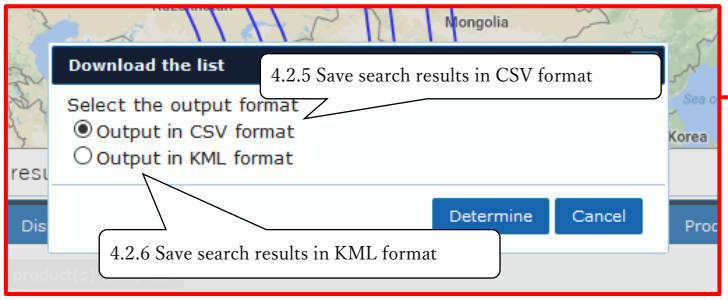
This section outlines the procedures that are available from the search results window. Note that "Save search conditions" is only available to registered users.

Products that have stopped delivering are not displayed as search results.

[Search results window]

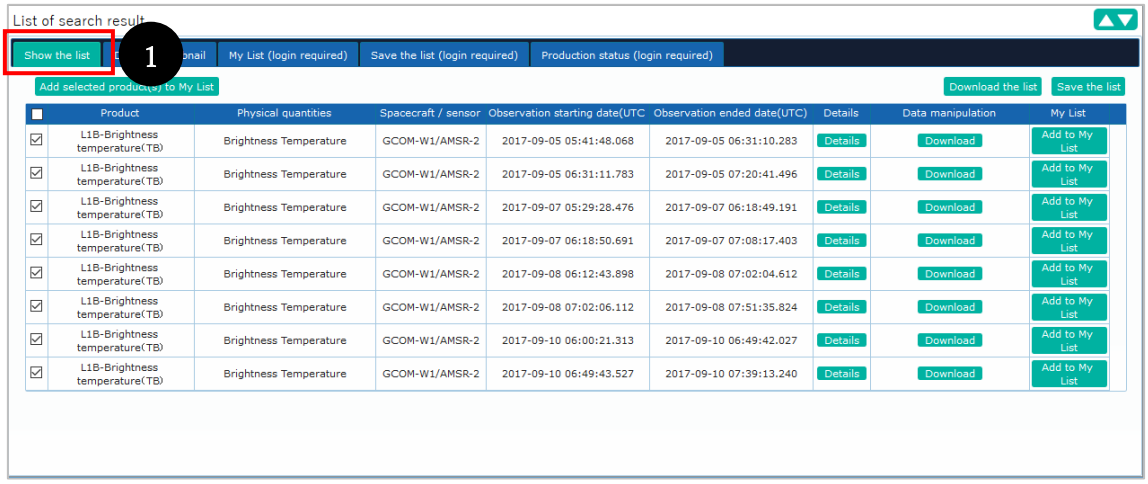


[Download the list dialog]



4.2.1. Check search results with a list

[List display]



1) Click the "Show the list" tab on the search results window. The search results will be displayed as a list.

4.2.2. Check search results with thumbnails

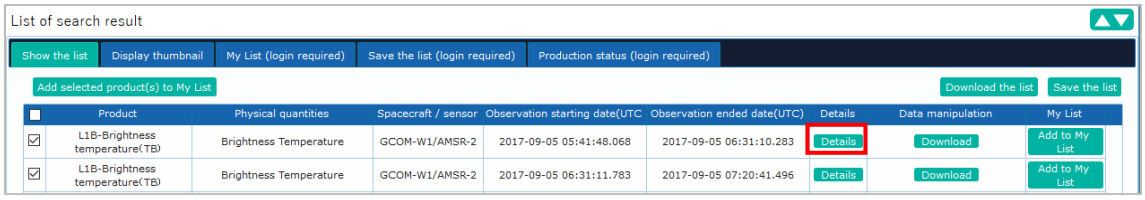
[Thumbnail display]

1) Click the "Display thumbnail" tab on the search results window. The search results will be displayed as thumbnails.

4.2.3. Check detailed information

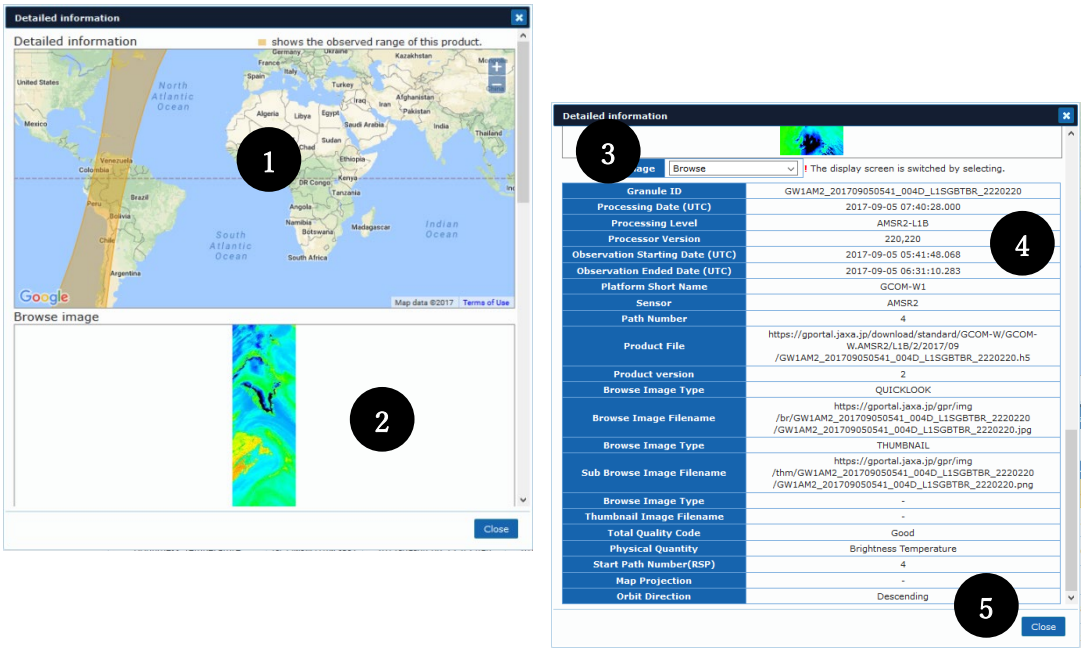
You can check detailed information of searched products. Click the "Show detail" button in the list display or thumbnail display. Detailed information will be displayed in a separate window.

[List display]



[Thumbnail display]

[Detailed information(separate window)]



1) The observation region is displayed on the map.

2) 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.

3) To products on the browse images, the image pulldown appears. Browse(Browse or sub-browse) image switches.

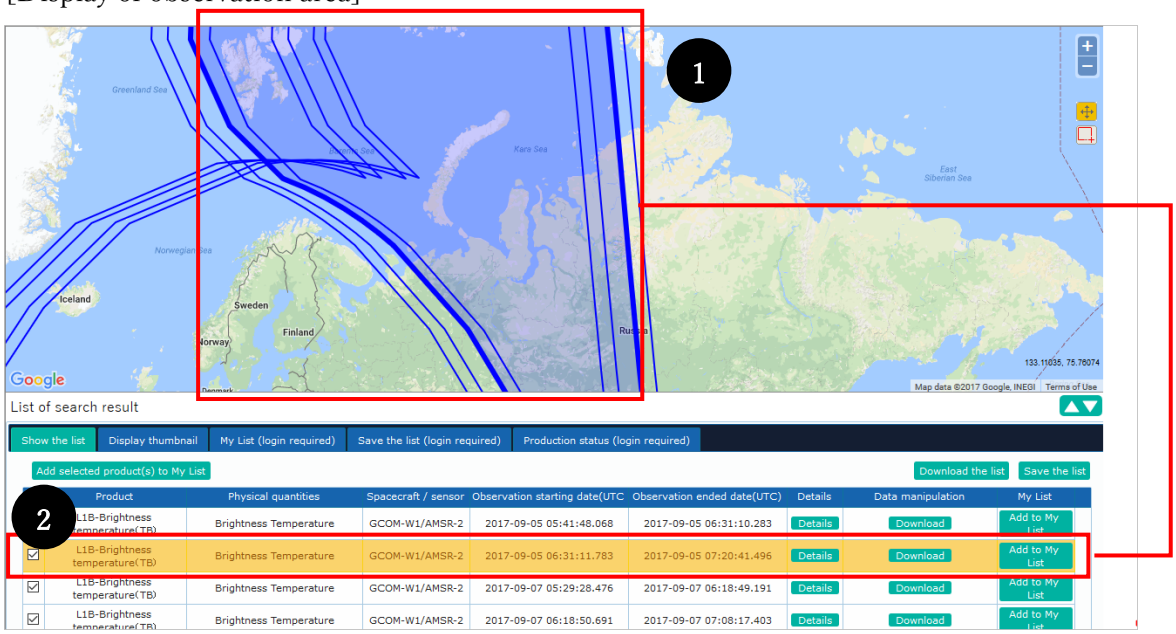
4) Detailed information of the product will be displayed.

5) Click the "Close" button to close the detailed information window.

4.2.4. Check the observation region on the map

You can check the observation region of searched products on the map. Click the "Show on map" button in the list display or thumbnail display. A map will be displayed at the top right of the search results window.

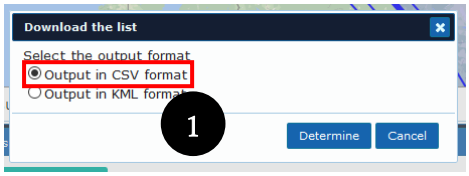
[Display of observation area]



1) The observation area of the selected product is highlighted.

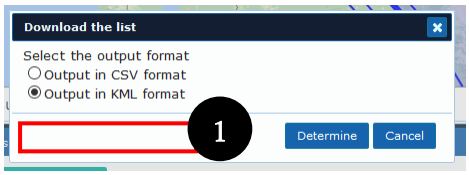
2) The line of the selected product is highlighted.

4.2.5. Save search results in CSV format



1) Check "Output CSV"on a list of download dialog window and Click "Decision". Save CSV format of the search result on your computer.

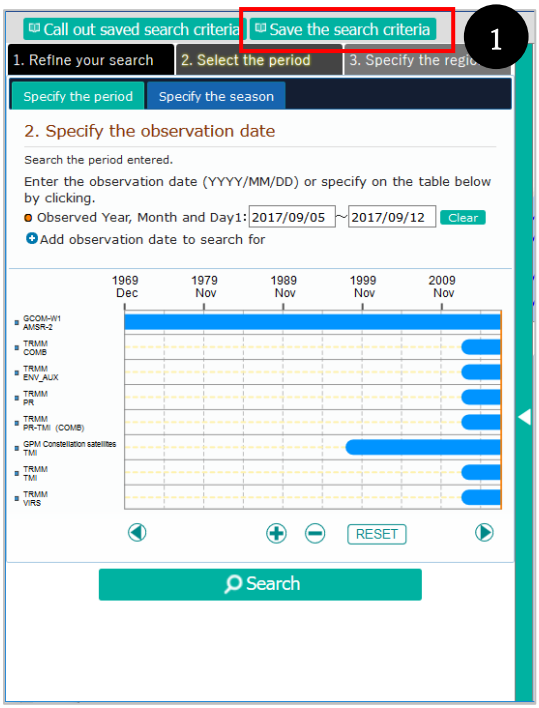
4.2.6. Save search results in KML format



1) Check "Output KML"on a list of download dialog window and Click on "decision". Save KML format of the search result on your computer.

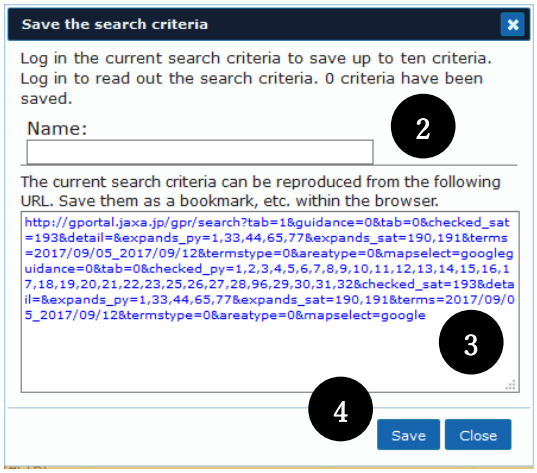
4.2.7. Save commonly used search conditions

You can save search conditions that you have configured.



1) Click the "Save the search criteria" button. A dialog box allowing you to save search conditions will be displayed.

[Save the search criteria dialog box]



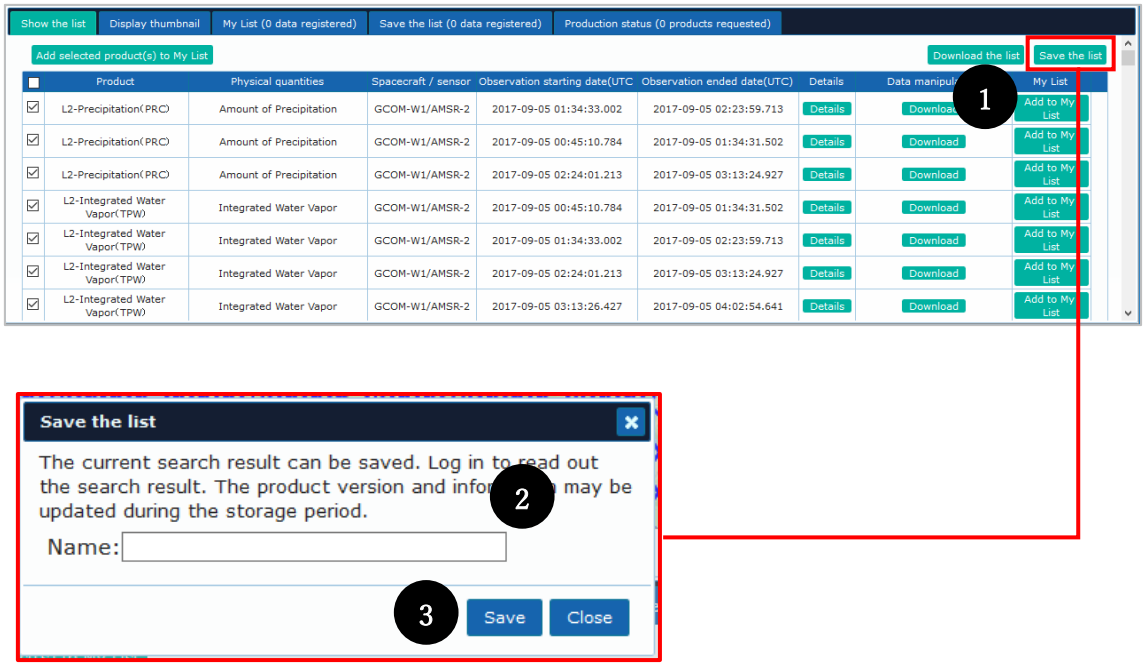
2) Enter a save name.

3) The URL to reproduce the search condition is displayed.

4) Click the "Save" button to complete saving the conditions and close the dialog box.
* only available to registered users

4.2.8. Save search results list

You can save search results list.



1) On the above"List","Thumbnail" and "My List"tub, Click "Save the list", appears "Save the list"dialog.(only registered users)

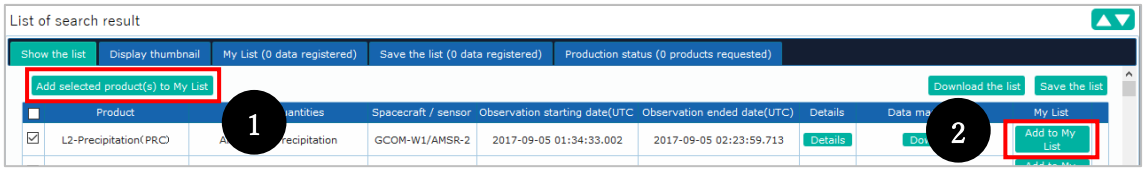
2) Enter a save name.

3) Click the "Save" button to complete saving the conditions and close the dialog box.

4.2.9. Save search results to mylist

You can register the product shown to"List"and "Thumbnail" on"My List".

[List display]



[Thumbnail]

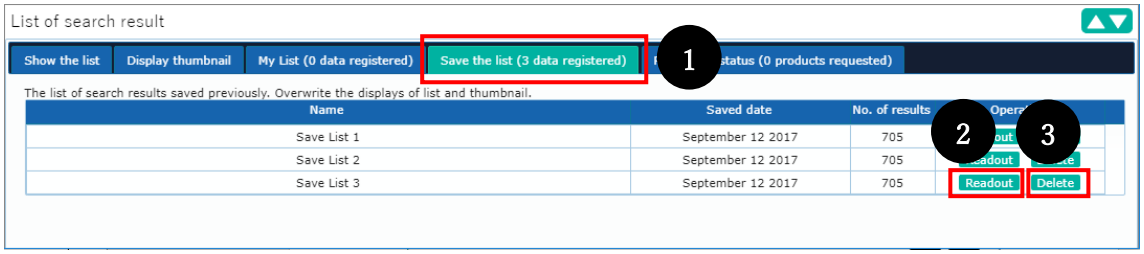
1) With clicking"Add selected product to My list", register the product on"Add to My List".

2) With clicking "Add to My list", add your products to "My List".

4.2.10. Check save the list

You can call / delete the search result list saved in the past.

[Save the list]



1) With clicking "save a list", appears a saved data list in a saved search result list.

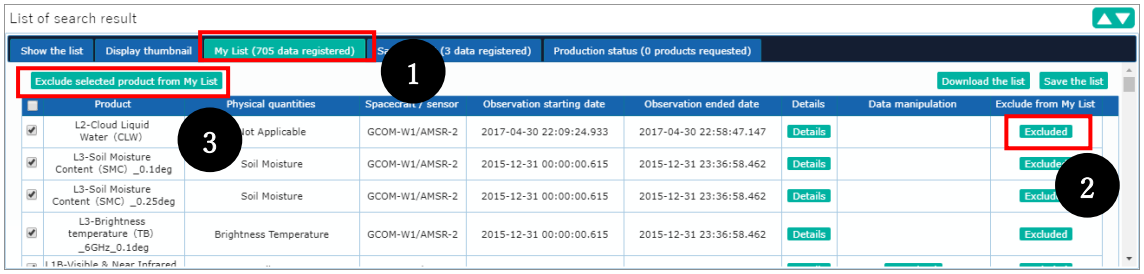
2) Click "Call" button and display "List", "Thumbnail"and "List of search results"

3) Click "delete" button then delete the saved list.

4.2.11. Check mylist

You can check products saved to My List in the past.

[My List]



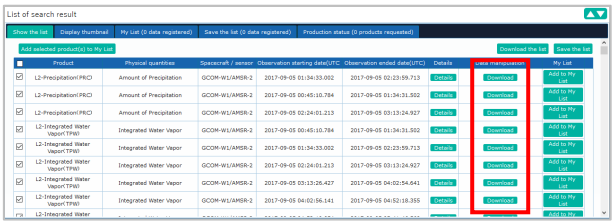
1) Click "My list", display a products list saved on "My List".

2) Click"Remove a selected product on"My List"" and delete the checked product on "My List".

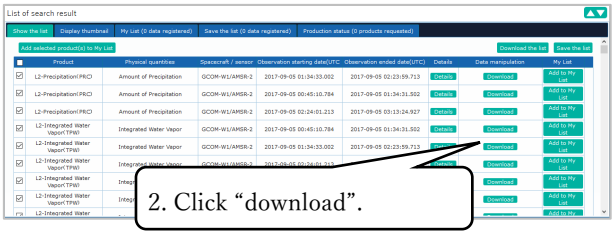
3) Click "Remove" button and delete an closed product on"My List".

4.3. Order and download products

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



1) "Download " button displays to products that direct download is avairable on the list of search result and thumnail of search results.

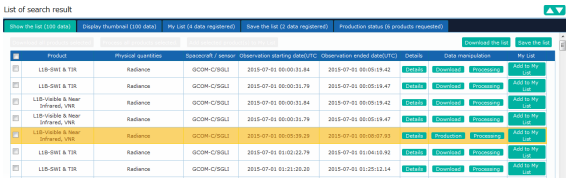


2) Click"download"button and start download.

4.4. Produce the product

For products that are compatible with production(Products transmitted via GCOM-C,GPM,ALOS-2), you can request production.

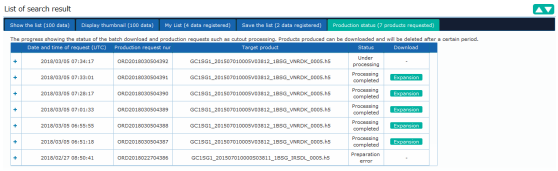
4.4.1. To produce individually(GCOM-C,GPM)



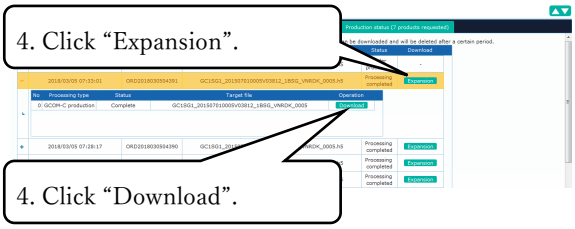
1) "Production" button is displayed if the images(scenes) can produce in display in List of the search result or thumbnail

2) You can make production request by clicking "Production" button.
※ You will receive an e-mail, when you make a production requestnotification of product acceptance. Also, even when

production of the product is complete, a notification e-mail will be sent.



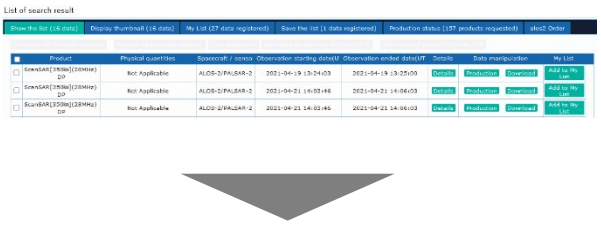
3) In the status of the production result list, you can check the progress status to each sent request.



4) When the status field to the production status is "Processing Completed", you display a list of products that have been produced by clicking the "Expansion" button. You can download the product by clicking the "download" button of the produced product list.

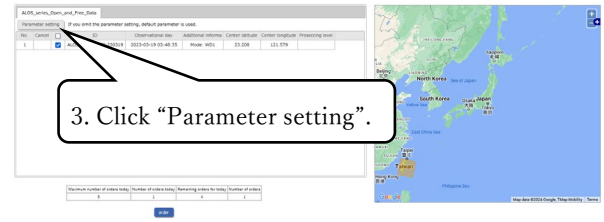
5) If the status field of the production status has expired, you can request the production again with clicking the "Reproduction request" button.

4.4.2. To produce individually(ALOS-2 ScanSAR)



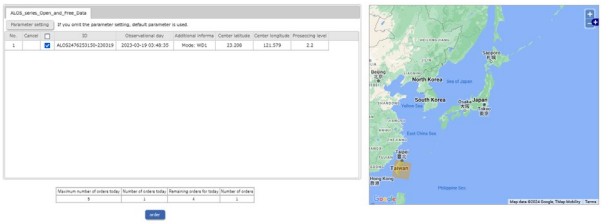
1) "Download" button is displayed if the images(scenes) can produce in display in List of the search result or thumbnail. The "Download" button is displayed at login for all user accounts.

2) Click the "Download" button to display the parameter setting screen.

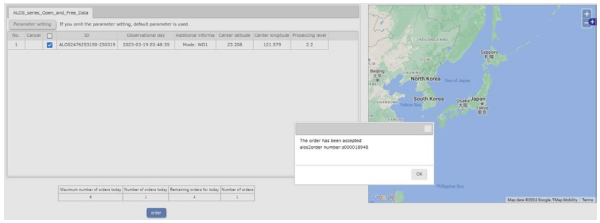


3) On the parameter setting screen, you can set the parameters when ordering. Check the product to be set and click the "Parameter setting" button to display the parameter setting dialog.

4) You can set the parameters in the displayed parameter setting dialog. After completing the settings, click the "OK" button.



5) Click the "order" button.
* The daily order limit is five.



6) When the order is completed, the message that the order was accepted and the order number will be displayed.
(Order for each scene)
When the production of the product is completed, you will receive a notification email of the completion of production.

2023/04/24 (月) 20:28
G-portal System <NOREPLY-GPORTAL@ml.jaxa.jp>
[G-Portal] Notice of completion of product offer

****
This message was transmitted automatically.
You cannot reply to this mail directly to ask anything.
****

Dear x,

We would like to inform you that the following products are ready to be provided.

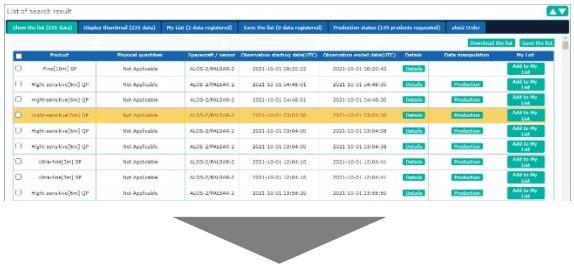
order number
s000003336

ALOS-2 order scene ID
ALOS2082583800-151203[2.2]

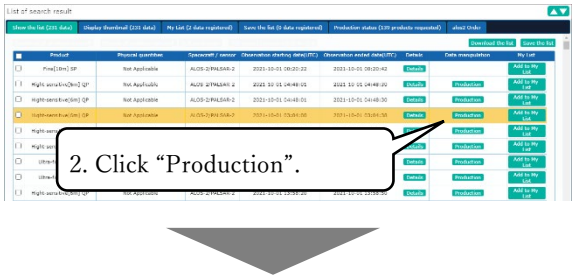
SFTP download
Connection protocol: SFTP
Destination: ftp.gportal.jaxa.jp
Connection port: 2051
Connection account: x
Product path (directory): /process/scandl2/EUzYAhVKvjGm7wW9eDPgRa4u

7) Use the SFTP download information in the received email to make an SFTP connection from an SFTP client and download the product.
*The password is the same as the login password for the G-Portal website.

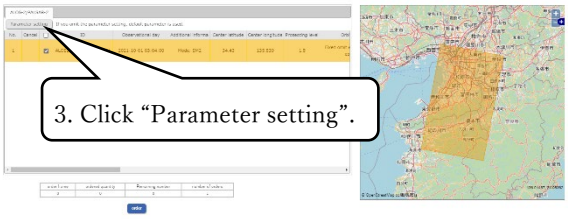
4.4.3. To produce individually(ALOS-2)



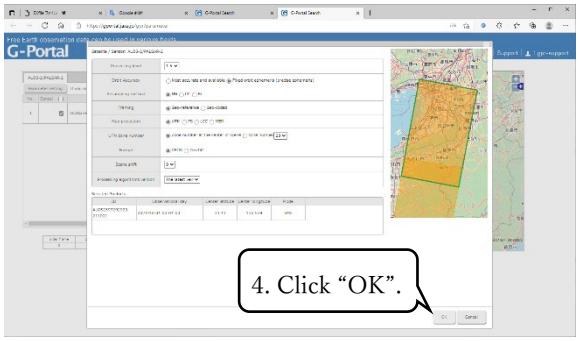
1) "Production" button is displayed if the images(scenes) can produce in display in List of the search result or thumbnail. The "Production" button is displayed only when you log in with a user account that is allowed to use ALOS-2 data.



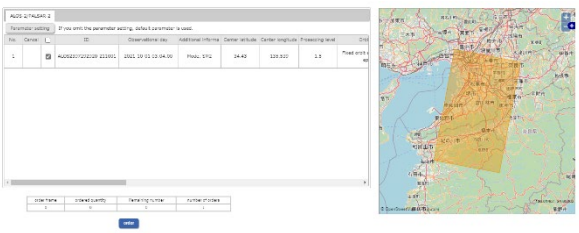
2) Click the "Production" button to display the parameter setting screen.



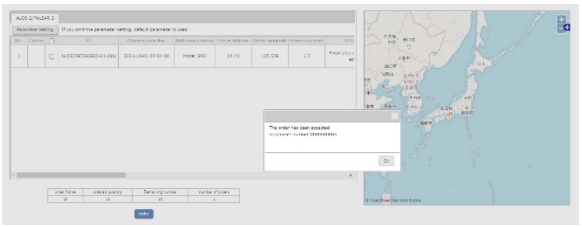
3) On the parameter setting screen, you can set the parameters when ordering. Check the product to be set and click the "Parameter setting" button to display the parameter setting dialog.



4) You can set the parameters in the displayed parameter setting dialog. After completing the settings, click the "OK" button.



5) Click the "order" button.



6) When the order is completed, the message that the order was accepted and the order number will be displayed.
(Order for each scene)
When the production of the product is completed, you will receive a notification email of the completion of production.

G-portal System <NOREPLY-GPORTAL@ml.jaxa.jp>
[G-Portal] Notice of completion of ALOS-2 product production

****
This message was transmitted automatically.
You cannot reply to this mail directly to ask anything.
****

Dear x,

Production of the product ordered was completed.

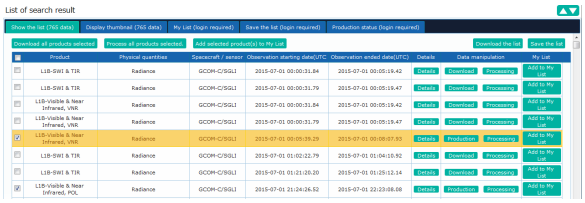
ALOS-2 order number
0000011516

ALOS-2 order scene ID
ALOS2041712820-150302

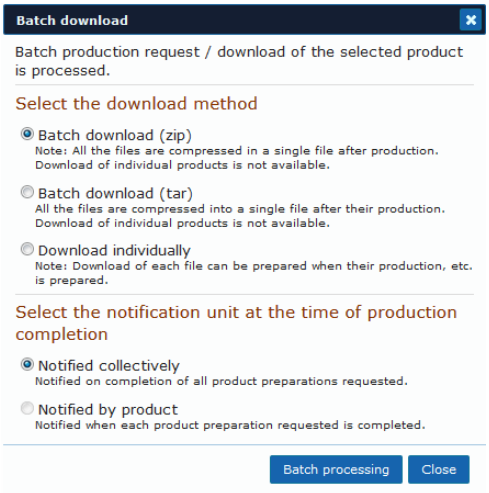
SFTP download
Connection protocol: SFTP
Destination: ftp.gportal.jaxa.jp
Connection port: 2051
Connection account: x
Product path (directory): /process/alosdl2/f20xu59ml5xszkn17prvqjwtg8iczm

7) Use the SFTP download information in the received email to make an SFTP connection from an SFTP client and download the product.
*The password is the same as the login password for the G-Portal website.

4.4.4 Download/Produce at once(GCOM-C,GPM)



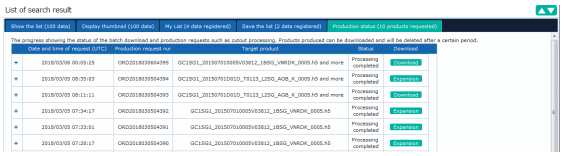
1) In the display to the search results list or thumbnail the "Download" or "Production" button check boxes of the project name and and click the "Download products selected" button.



2) Since the dialog on the left appears, select the download method and the notification unit at the product completion . A summary of each item is shown in the table.

Table 4.4-1 Batch download dialog

Item	Summary
Batch download (zip)	Compress all files into zip files after production.
Batch download (tar)	Compress all files into a tar file after production.
Download individually	Each file can be downloaded individually from ready files for production etc.
Notified collectively	Receive notifications when all requested products are ready.
Notified by product	Receive a notification whenever preparations for each requested product are complete. ※This item can't select while you choose 'Batch download (zip)'on Batch download dialog.



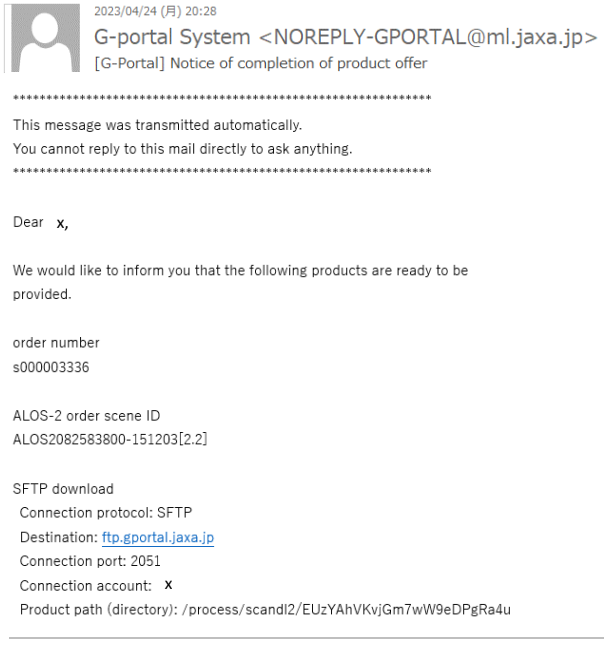
3) In the status of the production result list, you can check the progress status of each sent production request.

4) With clicking the "Download" button you can download compressed files when "status" filed has been "processing completed".

4.4.5 Produce at once(ALOS-2 ScanSAR)

1) Select the check box with the "Download" button displayed in the search results list or thumbnail list, and click the "Download all products ALOS/ALOS-2" button.

2) Since multiple selected products are displayed on the parameter setting screen, you can check the products to be set and click the "Parameter setting" button. At this time, if you check multiple products, you can set them all at once.
* The daily order limit is five.



2023/04/24 (月) 20:28
G-portal System <NOREPLY-GPORTAL@ml.jaxa.jp>
[G-Portal] Notice of completion of product offer

****
This message was transmitted automatically.
You cannot reply to this mail directly to ask anything.
****

Dear x,

We would like to inform you that the following products are ready to be provided.

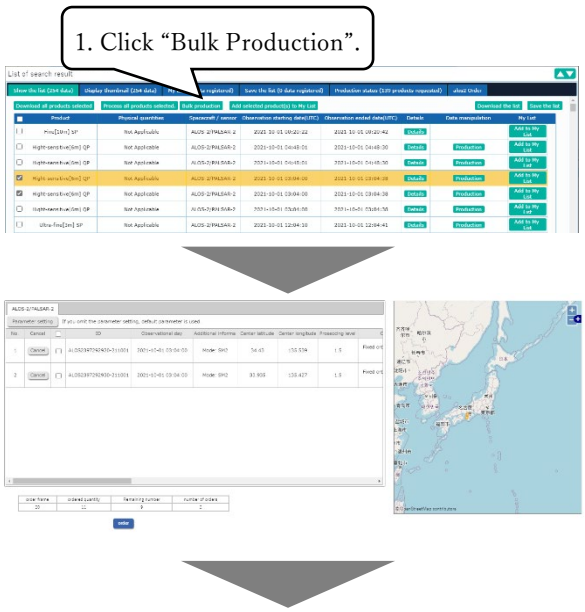
order number
s000003336

ALOS-2 order scene ID
ALOS2082583800-151203[2.2]

SFTP download
Connection protocol: SFTP
Destination: ftp.gportal.jaxa.jp
Connection port: 2051
Connection account: x
Product path (directory): /process/scandl2/EUzYAhVKvjGm7wW9eDPgRa4u

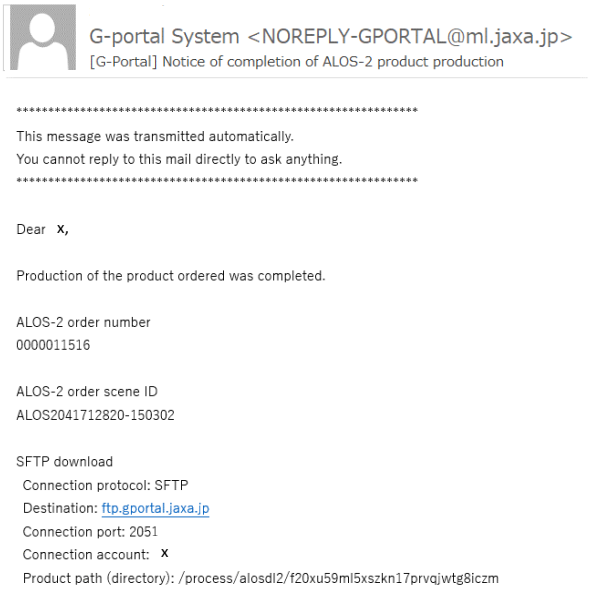
3) Use the SFTP download information in the received email to make an SFTP connection from an SFTP client and download the product.
*The password is the same as the login password for the G-Portal website.

4.4.6 Produce at once(ALOS-2)



1) In the display to the search results list or thumbnail the “Production” button check boxes of the project name and click the “Bulk production” button.

2) Since multiple selected products are displayed on the parameter setting screen, you can check the products to be set and click the "Parameter setting" button. At this time, if you check multiple products, you can set them all at once.



G-portal System <NOREPLY-GPORTAL@ml.jaxa.jp>
[G-Portal] Notice of completion of ALOS-2 product production

****
This message was transmitted automatically.
You cannot reply to this mail directly to ask anything.
****

Dear x,

Production of the product ordered was completed.

ALOS-2 order number
0000011516

ALOS-2 order scene ID
ALOS2041712820-150302

SFTP download
Connection protocol: SFTP
Destination: ftp.gportal.jaxa.jp
Connection port: 2051
Connection account: x
Product path (directory): /process/alosdl2/f20xu59ml5xszkn17prvqjwtg8iczm

3) Use the SFTP download information in the received email to make an SFTP connection from an SFTP client and download the product.
*The password is the same as the login password for the G-Portal website.

4.5 Process a product

You can make processing request for cutout/shift and format conversion for products being compatible with Table 4.5-1.

Table 4.5-1 Processed Product

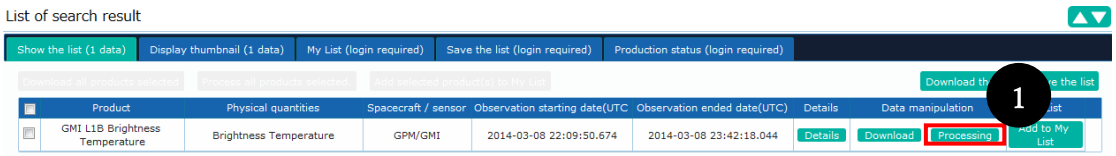
Target satellite	Target product(HDF5 only)	Target processing
GPM * V05 or later	GPM Ku L1B	・Cut out ・Format conversion (ASCII, NetCDF)
	GPM Ka L1B	
	GPM Ku L2	
	GPM Ka L2	
	GPM DPR L2	
	GPM DPR L3 daily	
	GPM DPR L3 monthly	
	GPM GMI L1B	
	GPM GMI L2	
	GPM GMI L3 monthly	
	GPM COMB L2	
	GPM COMB L3 monthly	
GSMAP	GSMaP hourly	
	GSMaP monthly	
AQUA * AMSR-2 Format	Aqua AMSR-E L1B	
	Aqua AMSR-E L2 WV	
	Aqua AMSR-E L2 CLW	
	Aqua AMSR-E L2 AP	
	Aqua AMSR-E L2 SSW	
	Aqua AMSR-E L2 SST	
	Aqua AMSR-E L2 IC	
	Aqua AMSR-E L2 SM	
	Aqua AMSR-E L2 SWE	
	Aqua AMSR-E L3 daily TB 6GHz-V	
	Aqua AMSR-E L3 daily TB 6GHz-H	
	Aqua AMSR-E L3 daily TB 10.65GHz-V	
	Aqua AMSR-E L3 daily TB 10.65GHz-H	

Target satellite	Target product(HDF5 only)	Target processing
	Aqua AMSR-E L3 daily TB 18.7GHz-V	
	Aqua AMSR-E L3 daily TB 18.7GHz-H	
	Aqua AMSR-E L3 daily TB 23.8GHz-V	
	Aqua AMSR-E L3 daily TB 23.8GHz-H	
	Aqua AMSR-E L3 daily TB 36.5GHz-V	
	Aqua AMSR-E L3 daily TB 36.5GHz-H	
	Aqua AMSR-E L3 daily TB 89.0GHz-V	
	Aqua AMSR-E L3 daily TB 89.0GHz-H	
	Aqua AMSR-E L3 daily WV	
	Aqua AMSR-E L3 daily CLW	
	Aqua AMSR-E L3 daily AP	
	Aqua AMSR-E L3 daily SSW	
	Aqua AMSR-E L3 daily SST	
	Aqua AMSR-E L3 daily SWE(EQR only)	
	Aqua AMSR-E L3 daily SM	
	Aqua AMSR-E L3 monthly TB 6GHz-V	
	Aqua AMSR-E L3 monthly TB 6GHz-H	
	Aqua AMSR-E L3 monthly TB 10.65GHz-V	
	Aqua AMSR-E L3 monthly TB 10.65GHz-H	
	Aqua AMSR-E L3 monthly TB 18.7GHz-V	
	Aqua AMSR-E L3 monthly TB 18.7GHz-H	
	Aqua AMSR-E L3 monthly TB 23.8GHz-V	
	Aqua AMSR-E L3 monthly TB 23.8GHz-H	
	Aqua AMSR-E L3 monthly TB 36.5GHz-V	
	Aqua AMSR-E L3 monthly TB 36.5GHz-H	
	Aqua AMSR-E L3 monthly TB 89.0GHz-V	
	Aqua AMSR-E L3 monthly TB 89.0GHz-H	
	Aqua AMSR-E L3 monthly WV	
	Aqua AMSR-E L3 monthly CLW	
	Aqua AMSR-E L3 monthly AP	
	Aqua AMSR-E L3 monthly SSW	
	Aqua AMSR-E L3 monthly SST	
	Aqua AMSR-E L3 monthly SWE(EQR only)	
	Aqua AMSR-E L3 monthly SM	

Target satellite	Target product(HDF5 only)	Target processing
GCOM-W	GCOM-W AMSR-2 L1B	
	GCOM-W AMSR-2 L1R	
	GCOM-W AMSR-2 L2 TPW Low	
	GCOM-W AMSR-2 L2 CLW Low	
	GCOM-W AMSR-2 L2 SSW Low	
	GCOM-W AMSR-2 L2 SST Low	
	GCOM-W AMSR-2 L2 SND Low	
	GCOM-W AMSR-2 L2 SMC Low	
	GCOM-W AMSR-2 L2 SIC Low	
	GCOM-W AMSR-2 L2 TPW High	
	GCOM-W AMSR-2 L2 CLW High	
	GCOM-W AMSR-2 L2 SSW High	
	GCOM-W AMSR-2 L2 SST High	
	GCOM-W AMSR-2 L2 SND High	
	GCOM-W AMSR-2 L2 SMC High	
	GCOM-W AMSR-2 L2 SIC High	
	GCOM-W AMSR-2 L3 daily TB Low(EQR only)	
	GCOM-W AMSR-2 L3 daily TPW Low	
	GCOM-W AMSR-2 L3 daily CLW Low	
	GCOM-W AMSR-2 L3 daily PRC Low	
	GCOM-W AMSR-2 L3 daily SSW Low	
	GCOM-W AMSR-2 L3 daily SST Low	
	GCOM-W AMSR-2 L3 daily SND Low(EQR only)	
	GCOM-W AMSR-2 L3 daily SMC Low	
	GCOM-W AMSR-2 L3 daily TB High(EQR only)	
	GCOM-W AMSR-2 L3 daily TPW High	
	GCOM-W AMSR-2 L3 daily CLW High	
	GCOM-W AMSR-2 L3 daily PRC High	
	GCOM-W AMSR-2 L3 daily SSW High	
	GCOM-W AMSR-2 L3 daily SST High	
	GCOM-W AMSR-2 L3 daily SND High(EQR only)	
	GCOM-W AMSR-2 L3 daily SMC High	
	GCOM-W AMSR-2 L3 monthly TB Low(EQR only)	
	GCOM-W AMSR-2 L3 monthly TPW Low	

Target satellite	Target product(HDF5 only)	Target processing
	GCOM-W AMSR-2 L3 monthly CLW Low	
	GCOM-W AMSR-2 L3 monthly PRC Low	
	GCOM-W AMSR-2 L3 monthly SSW Low	
	GCOM-W AMSR-2 L3 monthly SST Low	
	GCOM-W AMSR-2 L3 monthly SND Low(EQR only)	
	GCOM-W AMSR-2 L3 monthly SMC Low	
	GCOM-W AMSR-2 L3 monthly TB High(EQR only)	
	GCOM-W AMSR-2 L3 monthly TPW High	
	GCOM-W AMSR-2 L3 monthly CLW High	
	GCOM-W AMSR-2 L3 monthly PRC High	
	GCOM-W AMSR-2 L3 monthly SSW High	
	GCOM-W AMSR-2 L3 monthly SST High	
	GCOM-W AMSR-2 L3 monthly SND High(EQR only)	
	GCOM-W AMSR-2 L3 monthly SMC High	
GCOM-C	GCOM-C product	・Cut out /Shift ・Format conversion (GeoTIFF)

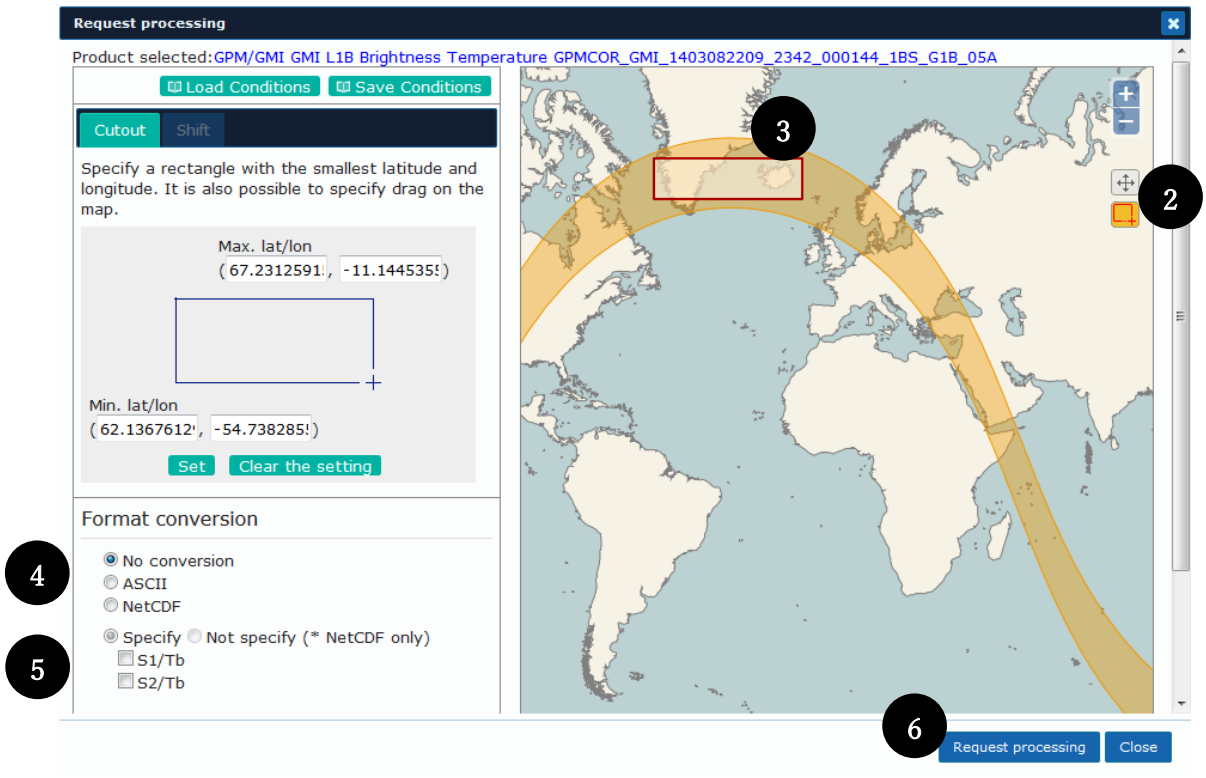
[List of search result]



1) The processing request dialog diaplays from the "Processing" button to the search result list(Show the list tab, Display thumbnail tub and My list tab).

[Request processing dialog]

For GPM, GSMAP, AQUA, GCOM-W products



2) To extract the area, press the "Select Rectangle" button.

3) Select the rectangle of the region to cut out when you trim the region.(※1)

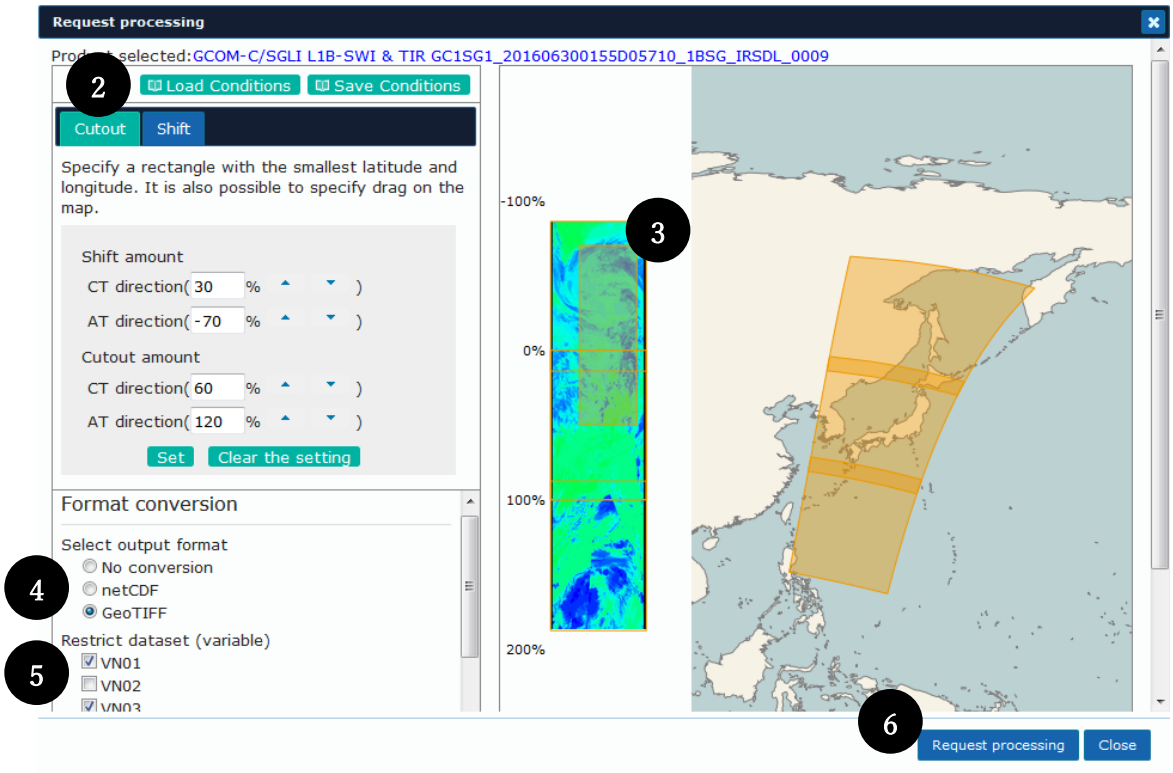
4) Select the output format from the radio box when you convert the format.

5) Select the check box for the data set variable to make output file. . While the output format is NetCDF, the dataset variable "Not specify" can be selected, in which case all dataset variables of the original structure will be output.

6) Click"Request processing" button and process the request according to 3) to 5) condition .

※1…Please refer to Appendix 6 for the rectangle selected on the screen in the area extraction and the range of products actually cut out.

In case of GCOM-C scene product extraction / shift request.



2) Select the cutout tab.

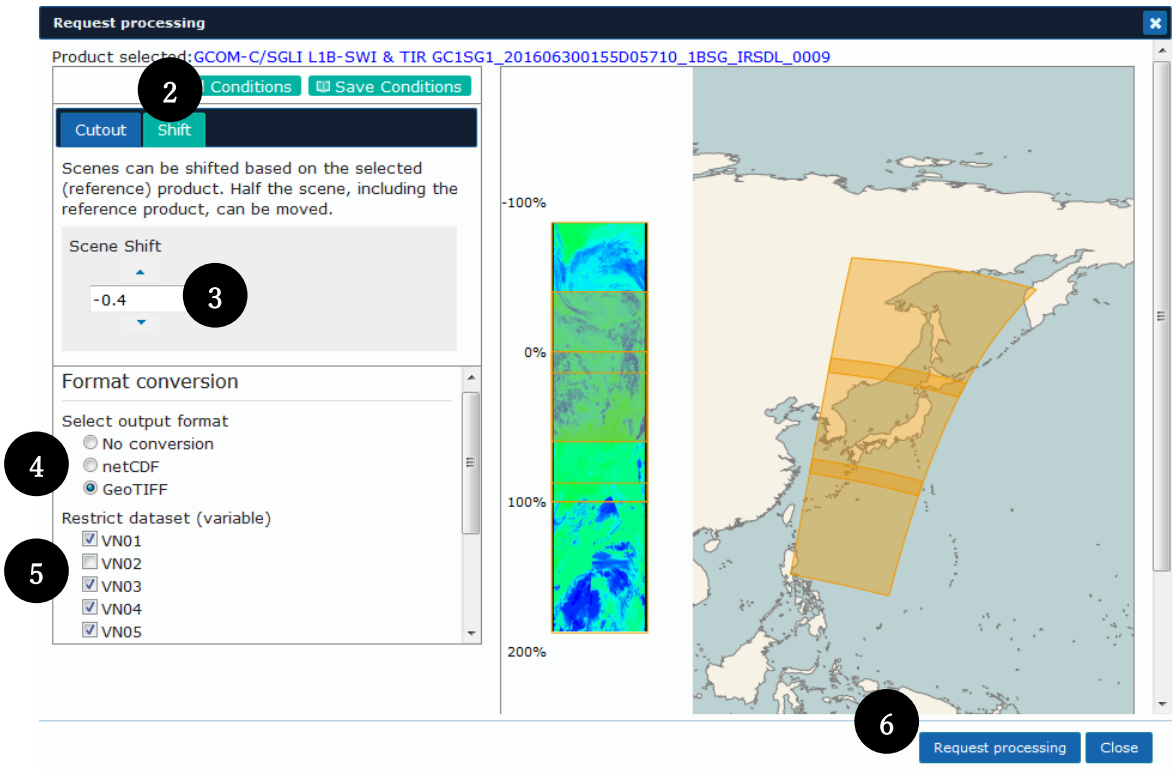
3) If you trim the region, select the rectangle of the region to cut out.

4) If you convert the format, select the output format from those radio boxes.

5) Select the output target channel from those check boxes.

6) Click "Request processing" button and processa request according to 3) to 5)condition.

Case of shift request of GCOM-C scene product



2) Select Shift tab.

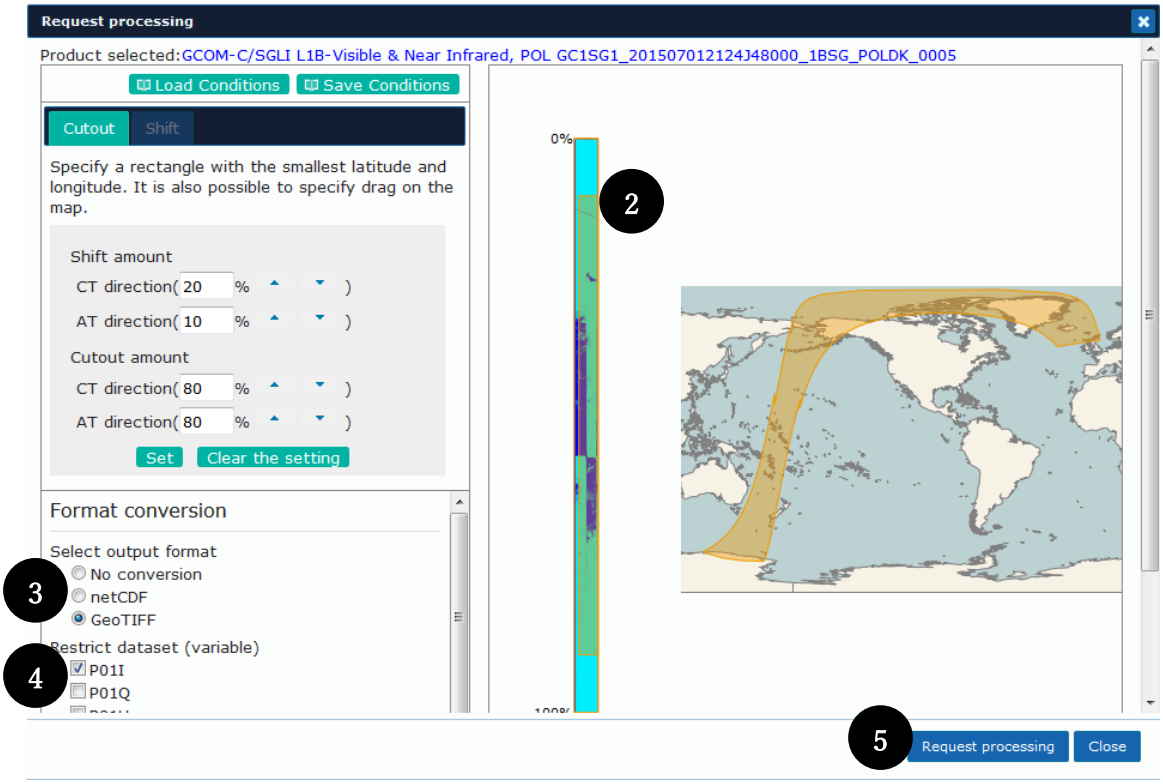
3) With the ▲▼button, select the rectangular area you want to shiftin the scene.

4) If you convert the format, select the output format from the radio boxes.

5) Select the output target channel from these check boxes.

6) Click "Request processing" button, process the request according to 3) to 5) condition.

In the case of GCOM-C one-turn product extraction/shift request.



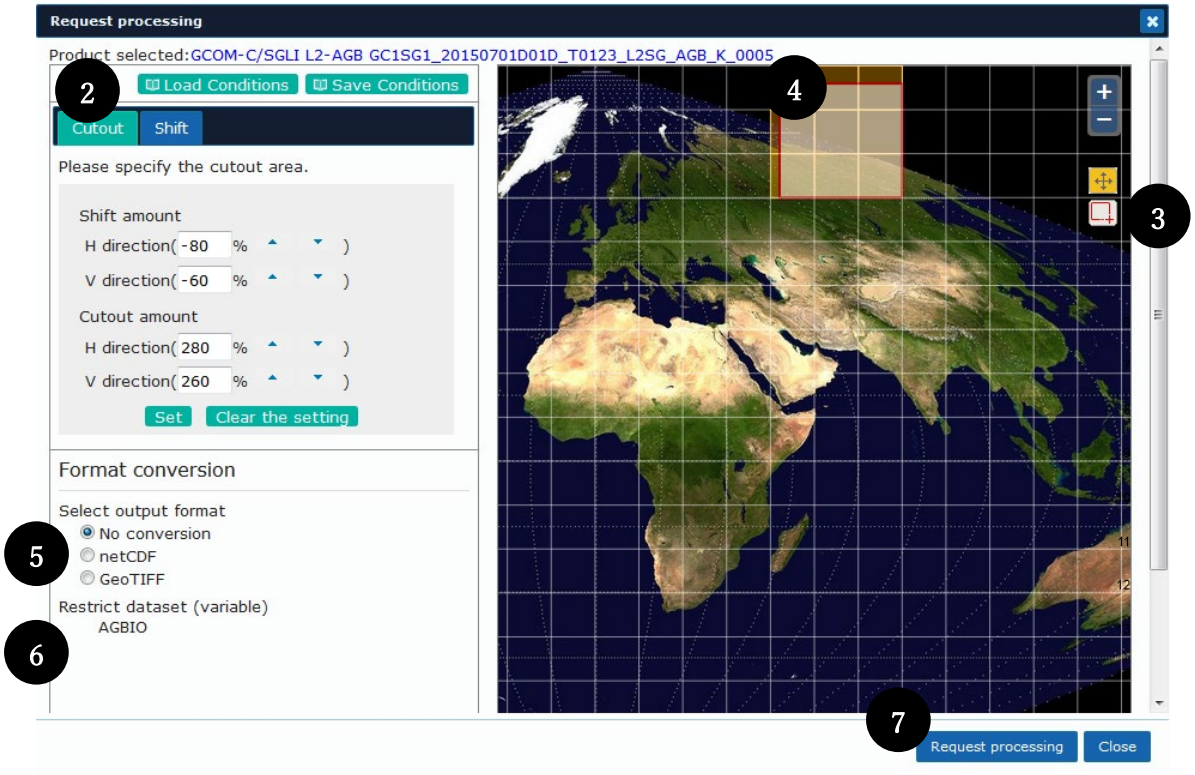
2) If you trim the region, select the rectangle of the region to cut out.

3) If you convert the format, select the output format from those radio boxes.

4) Select the output target channel from those check boxes.

5) Click"Request processing" button, process the request according to 2) to 4) condition.

In the case of GCOM-C tile product extraction/shift request.



2) Select the "Cutout" tab.

3) To extract the area, press the "Select Rectangle" button.

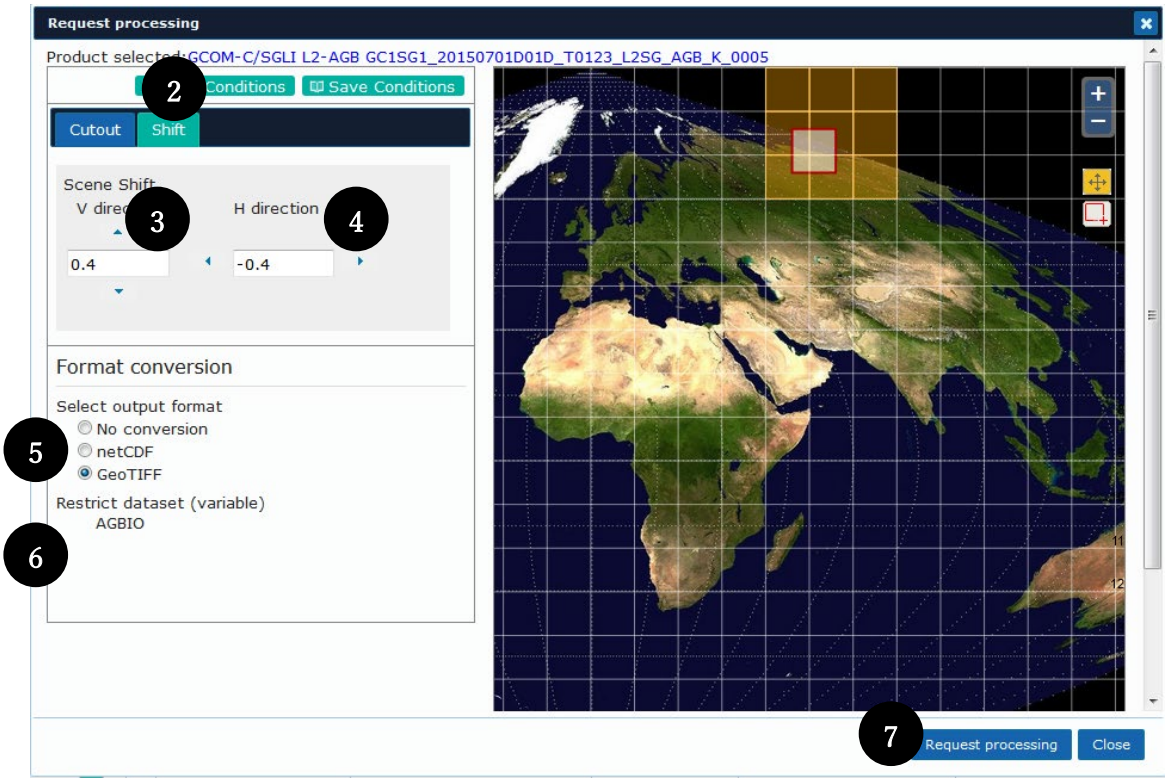
4) If you trim the region, select the rectangle of the region to cut out.

5) If you convert the format, select the output format from the radio boxes.

6) Select the output target channel from the check boxes.

7) Click"Request processing" button, process the request according to 4) to 6) condition.

Case of shift request of GCOM-C tile product



2) Select Shift tab.

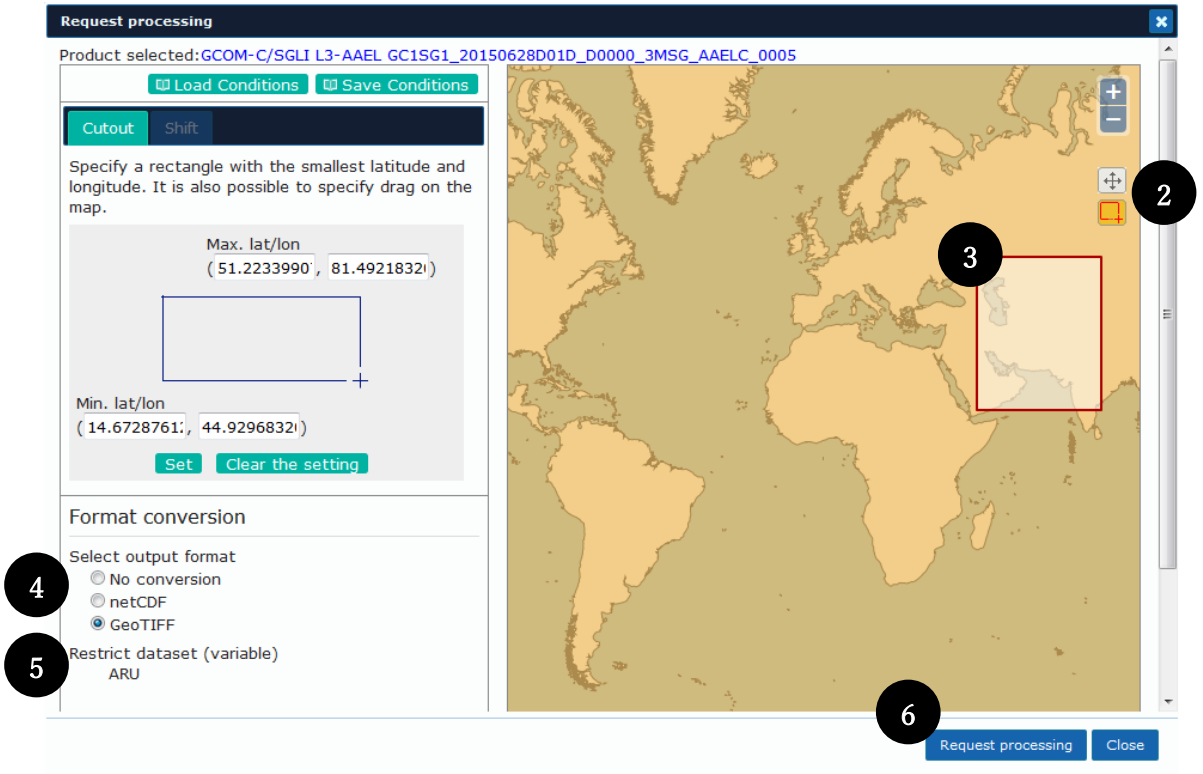
3) 4) With the ▲▼、◀▶button, select the rectangular area you want to shift in the scene.

5) If you convert the format, select the output format from those radio boxes.

6) Select the output target channel from those check boxes.

7) Click"Request processing" button and process request according to 3) to 6) condition.

In the case of GCOM-C global product extraction/shift request.



2) To extract the area, press the "Select Rectangle" button.

3) If you trim the region, select the rectangle of the region to cut out.

4) If you convert the format, select the output format from the radio boxes.

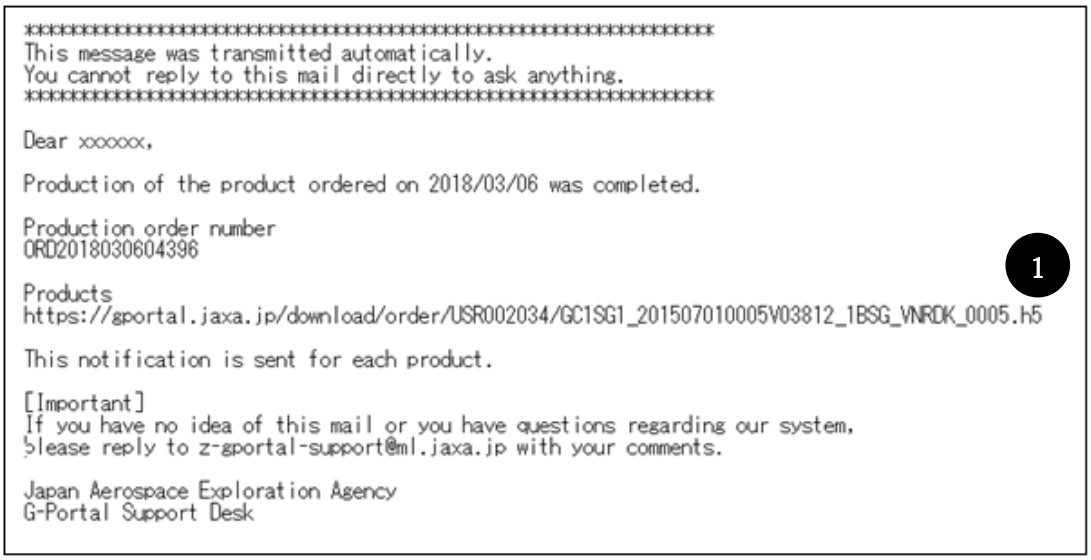
5) Select the data set variable to be output from those check boxes.

6) Click"Request processing" button, process the request according to 3) to 5) condition.

4.6. Download production and processed products

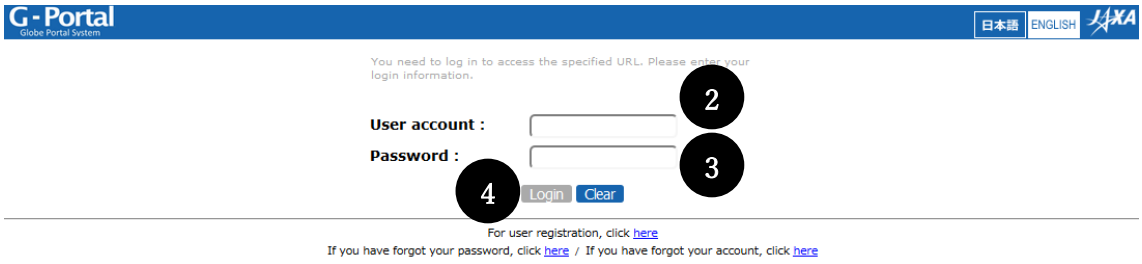
Production request and processing request are made at 4.4 and 4.5, and whenthe product is complet, the product completion is notified by e–mail. You can download the production and processed products from the product link of the e-mail. In addition, you can also download products produced and processed from the search result list and production status tab.

[Product production completion e-mail]



1) Access the product URL of the product production completion e-mail from the browser.

[Authentication screen]



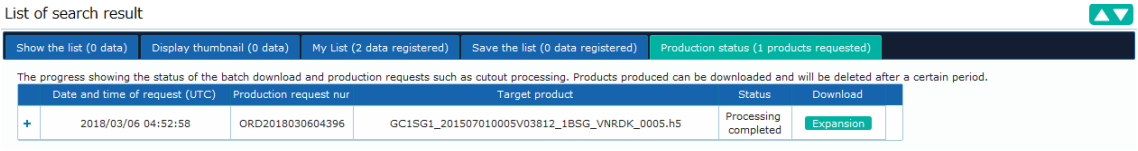
2) Enter the user account.

3) Enter the password.

4) Click the "Login" button.

※, This screen is not displayed and you are able to download directly, if you have already been authenticated.

[List of search result Production status tab]



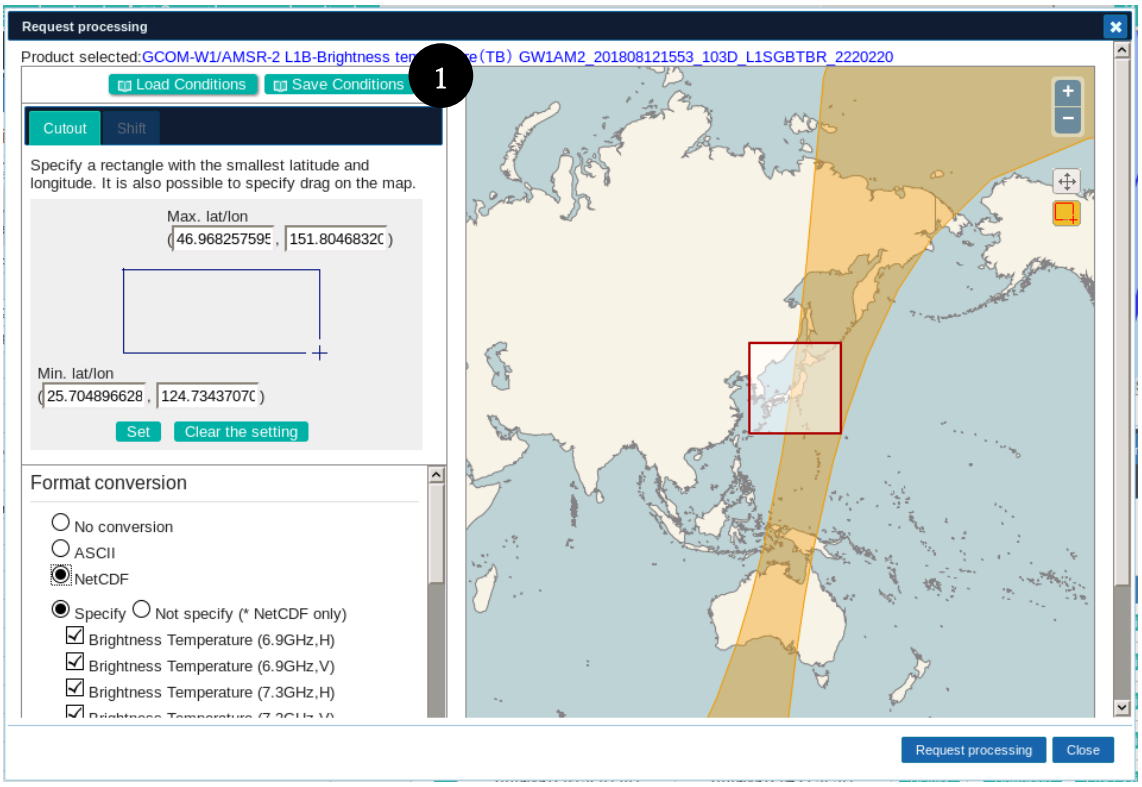
1) You can download production and processing products with the "Download" button on the Production Status tab.

4.7. Saving, calling, and deleting processing conditions

You can save, recall, and delete processing conditions for each product name.

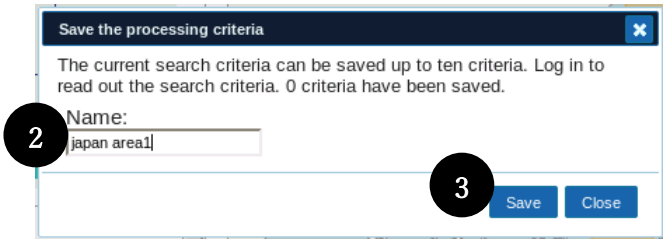
Preservation of processing conditions

[Request processing dialog]



1) After setting the processing conditions, click "Save Conditions" button.

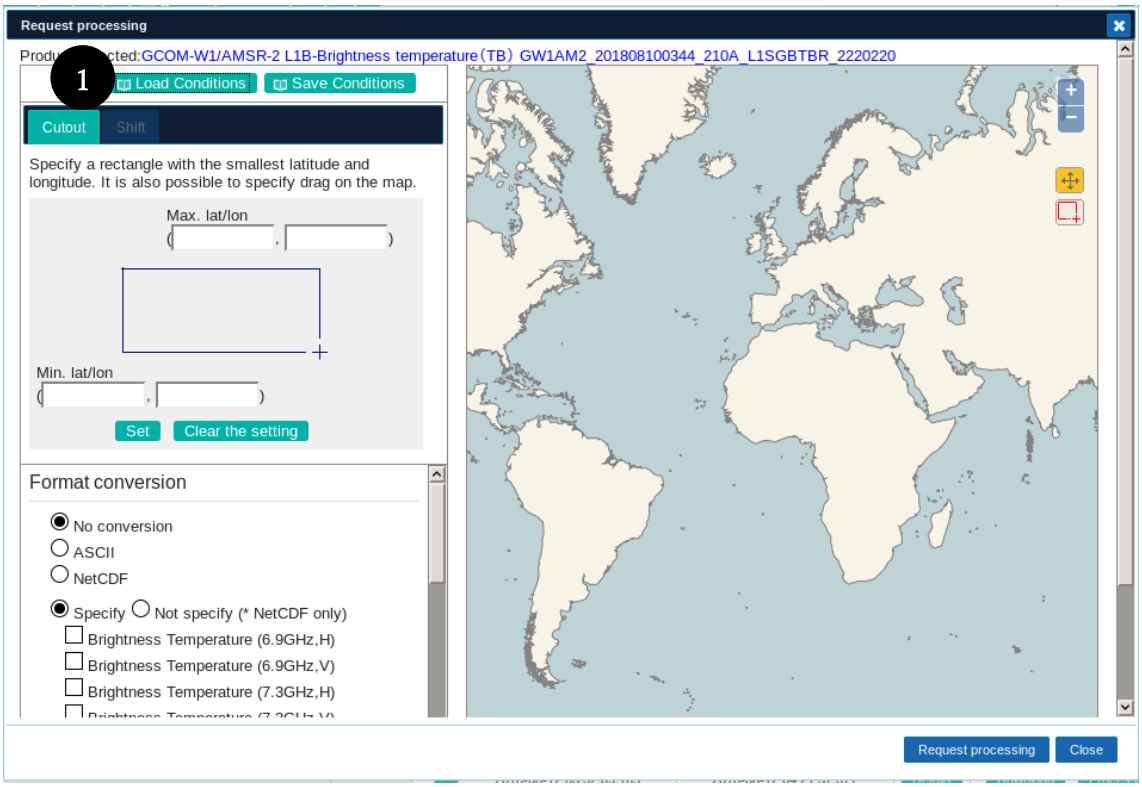
[Save the processing criteria dialog]



2) Input the name of the processing condition.

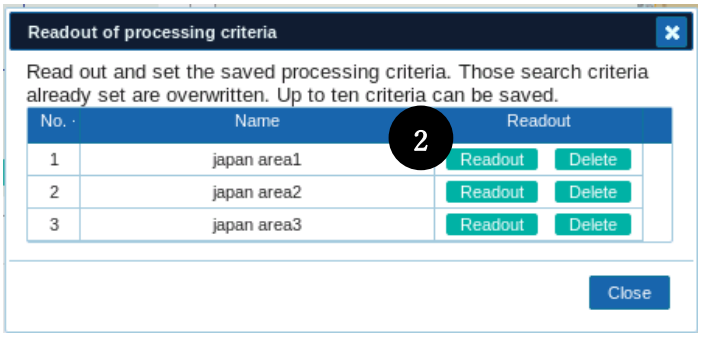
3) Click the "Save" button to save the processing conditions.

[Request processing dialog]



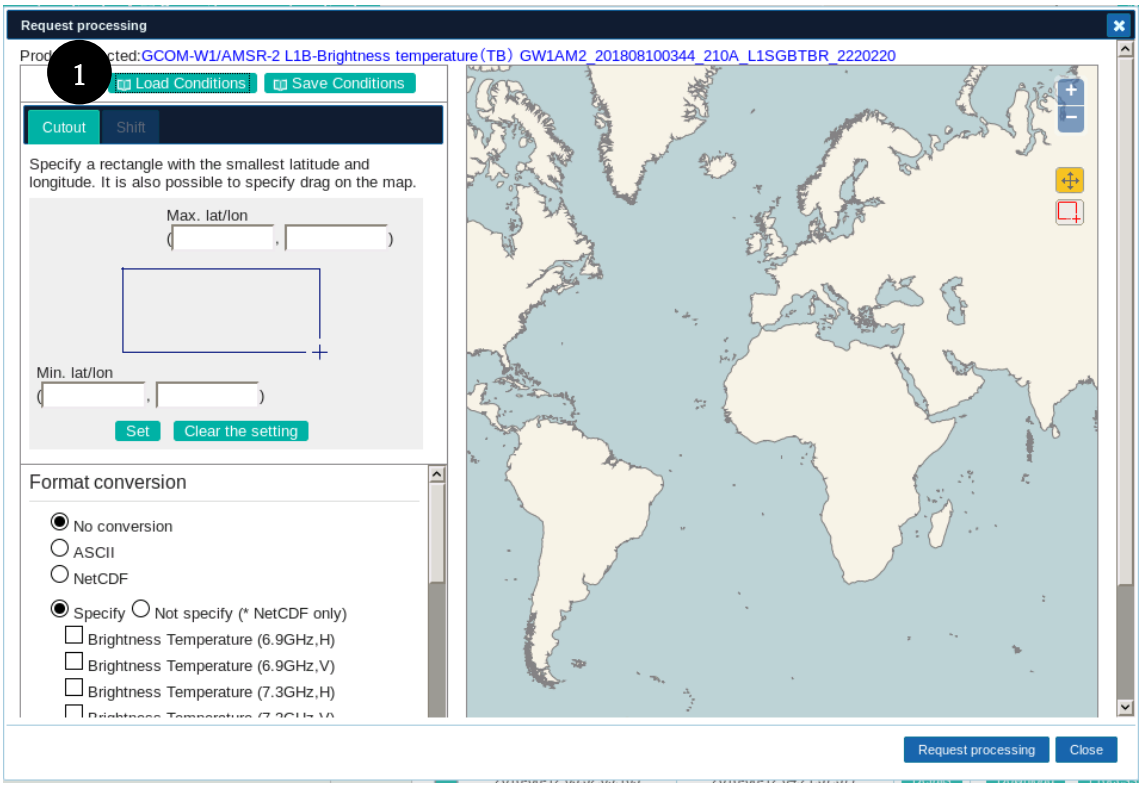
1) Click "Load Conditions" button.

[Readout of processing criteria dialog]



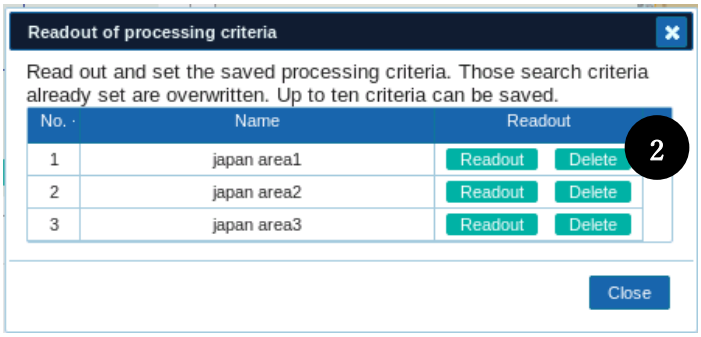
2) Click the "Readout" button of the processing condition you want to load.

[Request processing dialog]



1) Click "Load Conditions" button.

[Readout of processing criteria dialog]



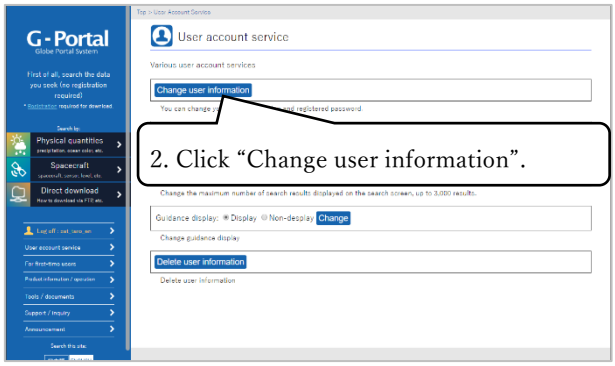
2) Click the "Delete" button of the processing condition you want to delete.

5. Change User Property/To Change Password

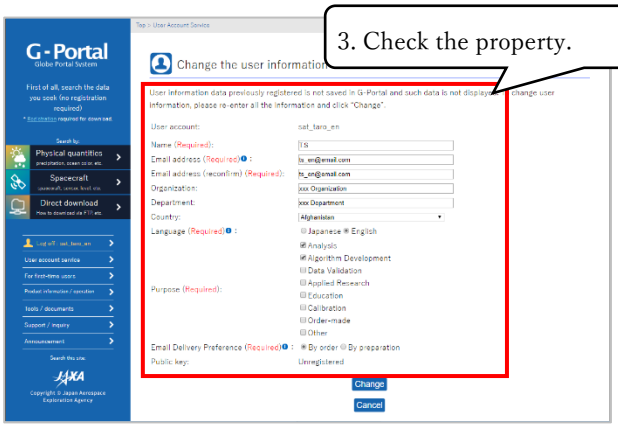
5.1. Check registered user property

Check the properties of registered users.

1) Click "Account service"on the home window and "Account service window"appear.



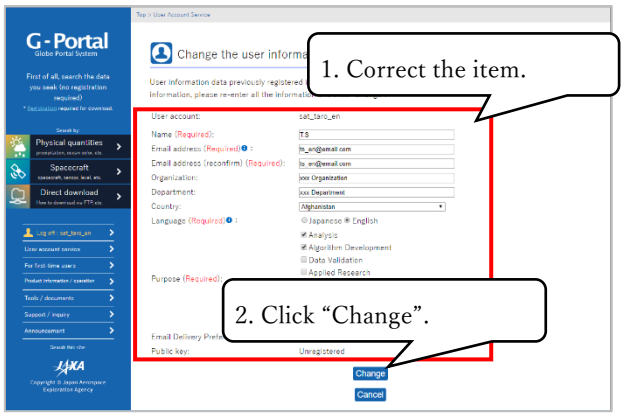
2) Click "Change User information" on the account service window. The change of User information displays.



3) Check the registered user property.

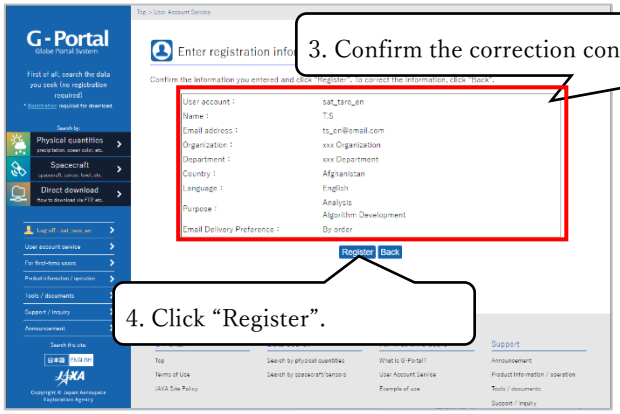
5.2. Change user property

Change the properties of registered users.



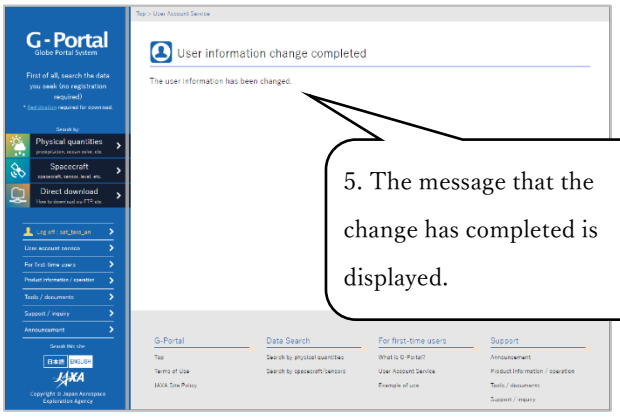
1) Correct the items you want to change via the View/Change User Property window. Items that can be changed are the name, email address, organization/department, country name, language used for email, purpose of use, Notification Email for ready.

2) Click the "Change" button to change the user information.



3) Confirm the change for User

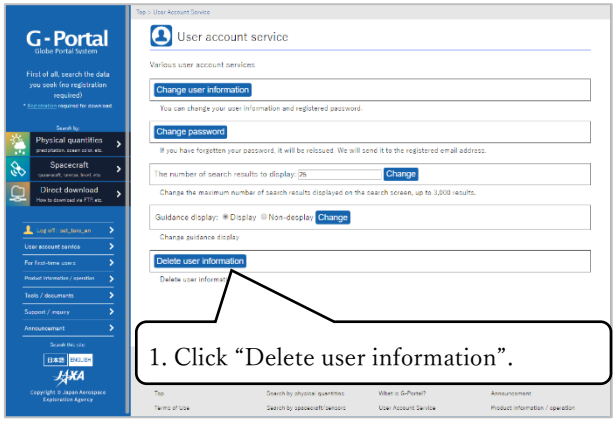
4) Click "Register" button under checking User property.



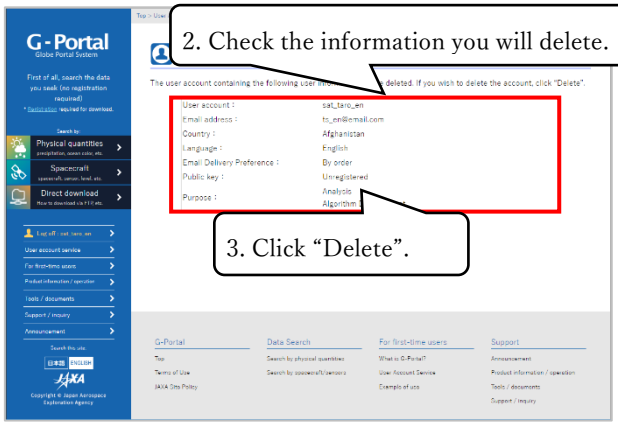
5) The User Property Change Completed window will be displayed.

5.3. Delete user property

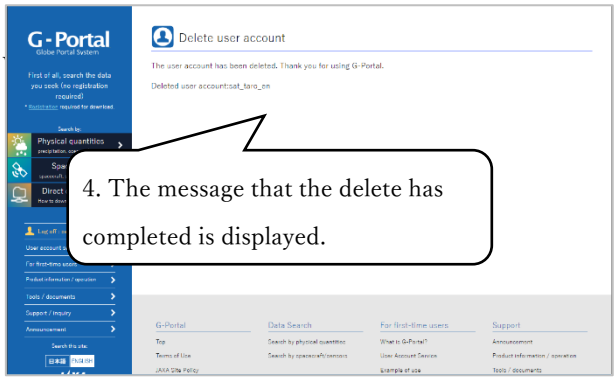
Delete the property of registered users.



1) Click to "Erase User Information"on the account service window. Appears the confirmation window to erase User Information.



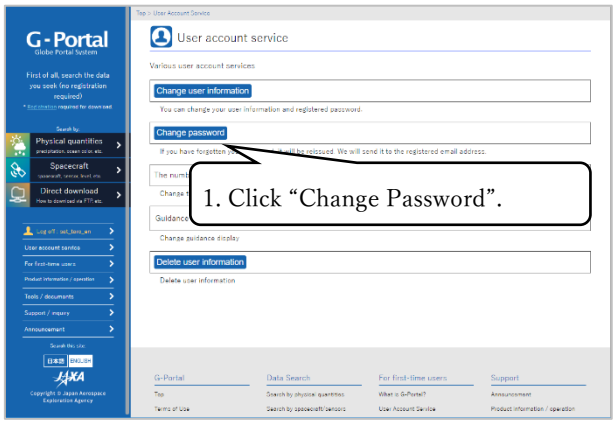
2) Check the user property to be deleted.
3) Click "Delete" to delete the user. The Deletion Complete window will be displayed, and the user account will be deleted. If you do not want to delete the user account, click the "Cancel" button. The window will return to the user account service window.



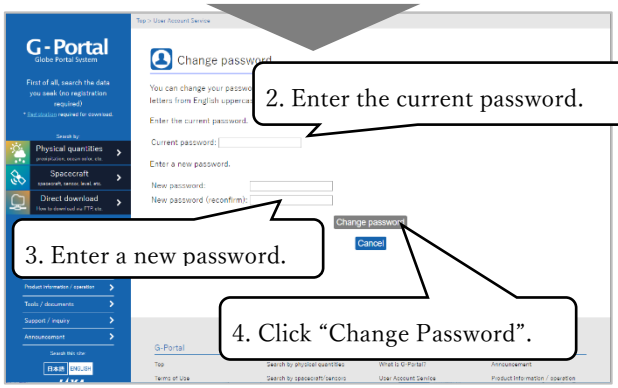
4) The User Property Deletion Complete

5.4. Change passwords

Change the password of registered users.

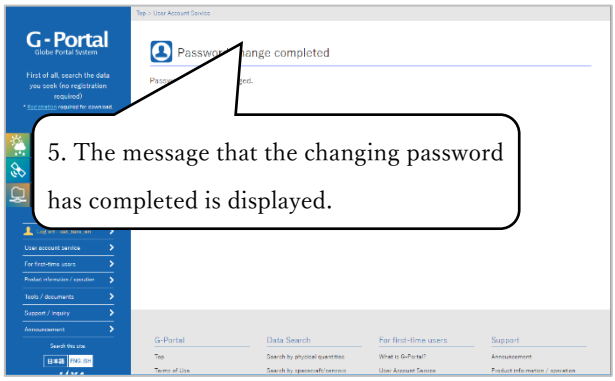


1) Click "Change Password" in the User account service window. A window where you can change the password will be displayed.



2) Enter your current password.
3) Enter a new password.

4) To change the password, click the "Change Password" button. The Change Complete window will be displayed, and the system will be updated with the new password.
If you do not want to change the password, click the "Cancel" button. The window will return to the User account service window.
5) The Password Change Complete window will be displayed.



6. Obtain Information on Products

6.1. Checking the provided spacecrafts/sensors and physical quantities

The satellite sensors provided on the G-Portal can make sure (confirm) "the product information・mission control information"and " Tool and Document"windows and physical quantities displayed for"Beginners"or the guidance on the research window.

(1) Check spacecrafts/sensors

The satellite sensors Provided on"Product information・mission controll information" and " Tool・Document"were shown.

(2) Check physical quantities

The pysical quantities provided by"Beginners"or the guidance on research display was shown.

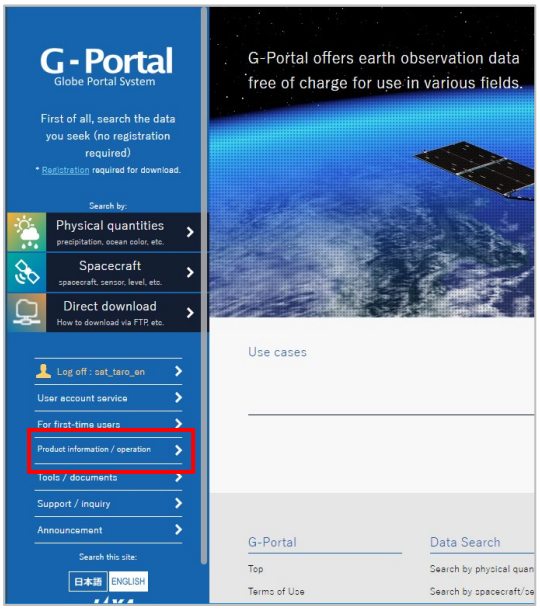
6.2. Spacecrafts/sensors operational information

Information that JAXA requires to operate its spacecrafts/sensors is available as data called Operational Information that may be valuable to users that are using products. Feel free to check this information when using products.

The provided Operational Information is as follows.

- Orbit information
- Quality information
- Missing information
- Orbit control information
- 2Line orbit element (TLE)
- Operational mode transition history
- Maneuver information

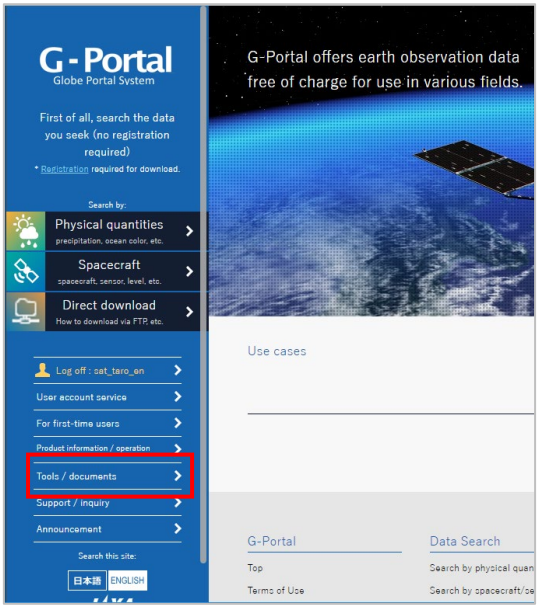
etc.



Click to"Product information/operation"on the top window. Confirm mission information relate to spacecraft sensors.

6.3. Download documents

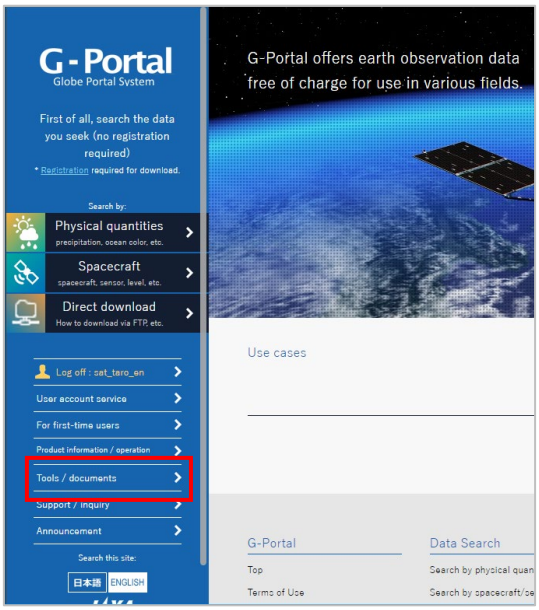
Product format descriptions, algorithm descriptions and other generation documentation is provided for each mission.



Click to"Tool/documents"on the top window. Appears the window for downloading/a list of document.

6.4. Download the tool kit

A range of tools are available to help utilize the available products. Please forward any enquiries such as usage methods or operating environment directly to the tool developer.

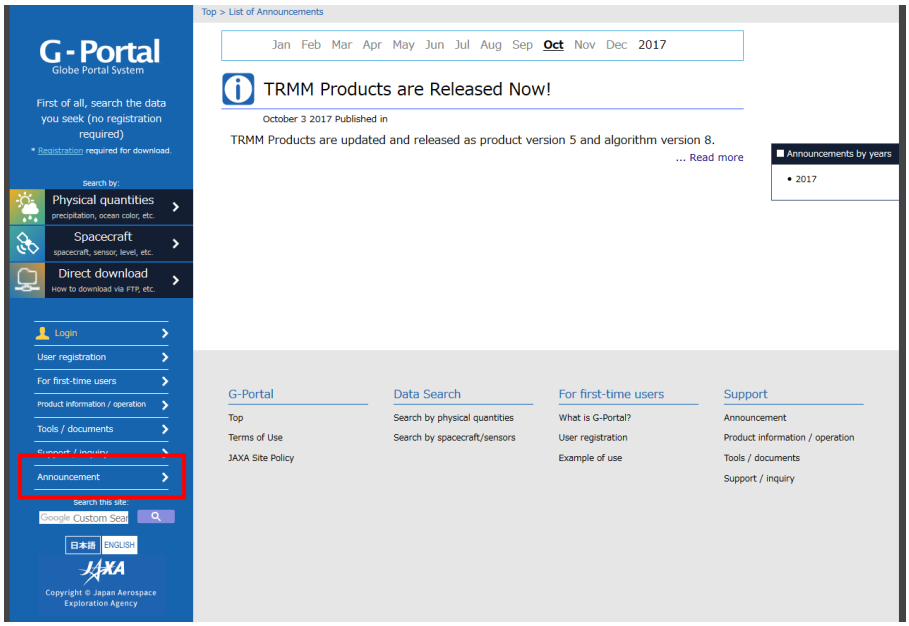


Click to"Tool/documents"at the menu on the homr window. Display the window for downloading "Tool kit".

6.5. Check announcements

You can confirm the announced information"Oshirase(notice)" from G-Portal with clicking "Oshirase(notice)" on the top menu.

Click "Oshirase(Announcement)"on the home window, The announcement information from G-Portal can confirm.



The latest notice on the announcement window is displayed on the top of the window.

7. Help and Contact

Click "Support / inquiry" from the menu. Information on submitted inquiries about the system will be displayed.

8. Other References

8.1. Recommended browsers

The following browsers are recommended to ensure that G-Portal functions smoothly and properly. Recommended browsers are those that have already been checked as functioning properly. Some windows may not be displayed properly when using the system on browsers other than those that are recommended.

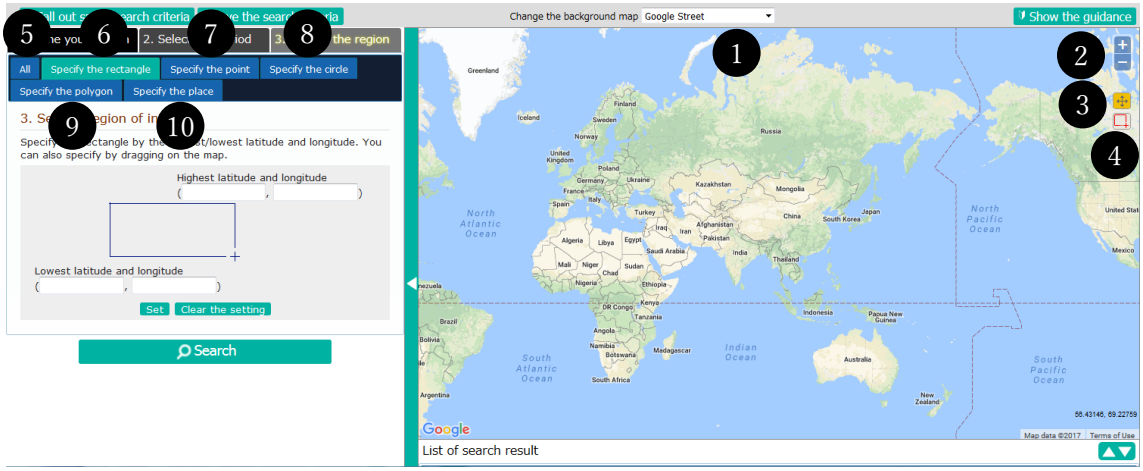
JavaSctipt	This site uses content that operates on JavaScript. To use this service, Javascript must be enabled in your browser.
Compatibility View Settings	When "jaxa.jp" is set in the Compatibility View Settings, it is necessary to delete it.

OS version	Browser	Browser version
Windows10	Microsoft Edge	89.0.774.45
Windows10	Firefox	86.01
Windows10	Chrome	80.0.3987.100
macOS Catalina 10.15.7	Chrome	89.0.4389.90
macOS Catalina 10.15.7	Safari	14.0.3

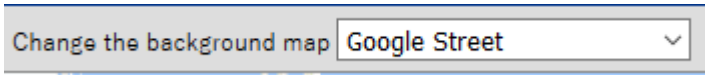
※As of June 9, 2022

Appendix 1 Map Operations

This section outlines the map operations that can be used in the enter search conditions window.



1) Switch map view/satellite view



The view can be changed from map view to satellite view.

2) Change scale

Click the "+" symbol to zoom into and display the map at one larger scale. Click the "-" symbol to zoom out and display the map at one smaller scale.

Move the slider up and down to display the map at a scale of your own choice. If you have a mouse with a mouse wheel, you can also use the mouse wheel to change the zoom scale.

3) Move

Click this icon to you can move the display region of the map.

4) Specify search region

Click this icon to you can specify search region

specify format depends on the currently selected tab.

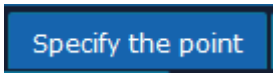
5) All

Click the left tub,"All", specify the area of search.

6) Specify the rectangle

Click to the left tub" Specify the rectangle", select" Specify the rectangle" on the map.

7) Specify the point



Click the left tub"Specify the point", select "Specify the point".

8) Specify the circle

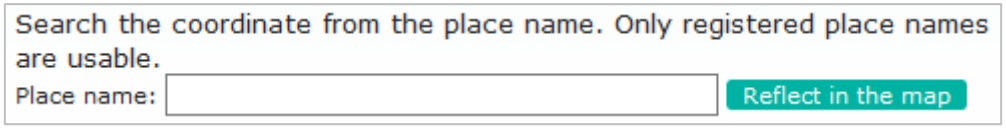
Click the left tub"Specify the circle", select to "Specify the circle".

9) Specify the point

Click to the left tub "Specify the point", select to "Specify the point".

10) Specify the place

Click to the left tub "Specify the place"as below the text field and the button, specify area name by text on a search map.



※Under input the area, click to the button "reflect on the map"and reflect to the coordinate of area on the map.

Appendix 2 Specify Observation Region

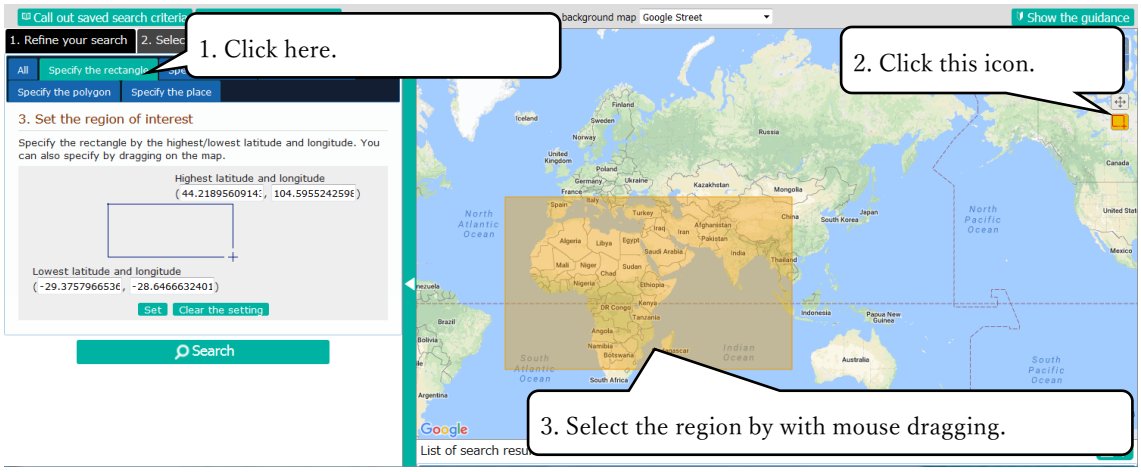
There are three selection methods for the observation range as follows:

- Specify observation range with a rectangle Appendix 2-1
- Specify observation range with a point Appendix 2-2
- Specify observation range with a circle Appendix 2-3
- Specify observation range with a polygon Appendix 2-4

Each of these methods allows a range to be specified from the map or by entering values. After a region has been specified on the map, the values can be changed to correct the search region.

Appendix 2-1 Specify observation range with a rectangle

(1) Specify from the map



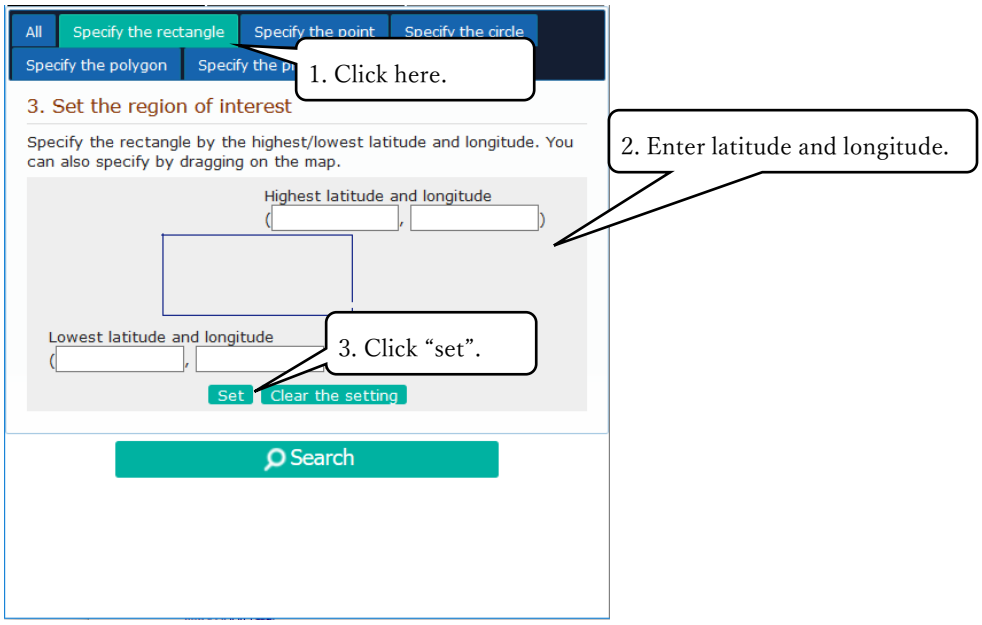
1) Click "Specify the rectangle", Text field input minimum and maximum of latitude and longitude is displayed.

2) Click "the icon searching area (copy the picture for the orange rectangle)"on the map, operate the orange rectange by drug on the map.

3) Select the rectangle by drag. Choose the rectangle and appears minimum and maximum values of latitude and longitude to the text field.

*A click of "Clear" will clear the value inputted into the text box and selection on the map. (About "Clear", it is the same subsequent Appendix 2-2, Appendix 2-3, Appendix 2-4.)

(2) Specify with values



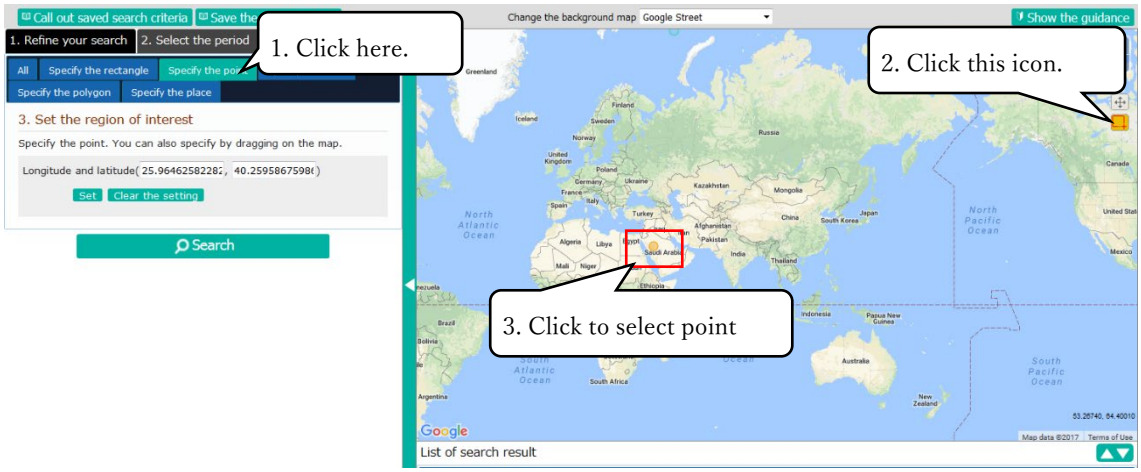
1) Click "specify the rectangle"tub, and the field inputting minimum and maximum values for the lattitude and the longitude appears.

2) Enter minimum and maximum values for the latitude and the longitude.

3) Click to"Setting"button. The specified area is shown by the rectangle.

Appendix 2-2 Specify observation range with a Point

(1) Specify from the map

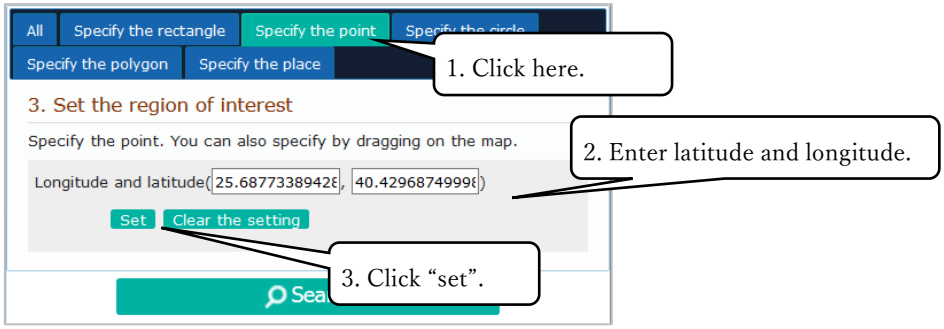


1) Click to"Specify points"tub, appears the text field input latitude and longitude.

2) Click"icon specifying seaching area", appears lattitude and longtitude on the map.

3) Specify latitude and longitude by a mouse click, display latitude and longitude of the point in the text field.

(2) Specifying with values



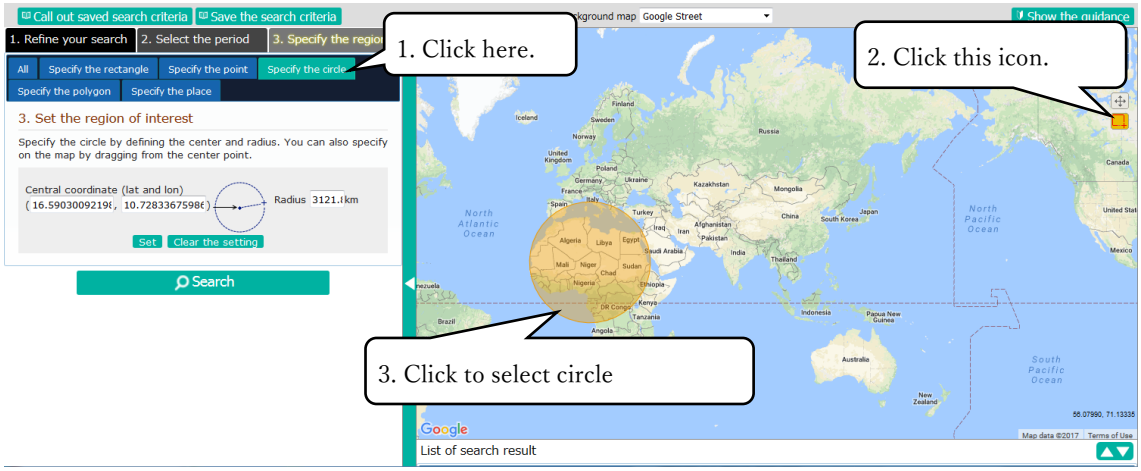
1) Click "specify the point"tub, displays the text field input latitude and longitude.

2) Enter latitude and longitude.

3) Click"Setting", and a value input on the text field is reflected on the map.

Appendix 2-3 Specify observation range with a Circle

(1) Specify from the map

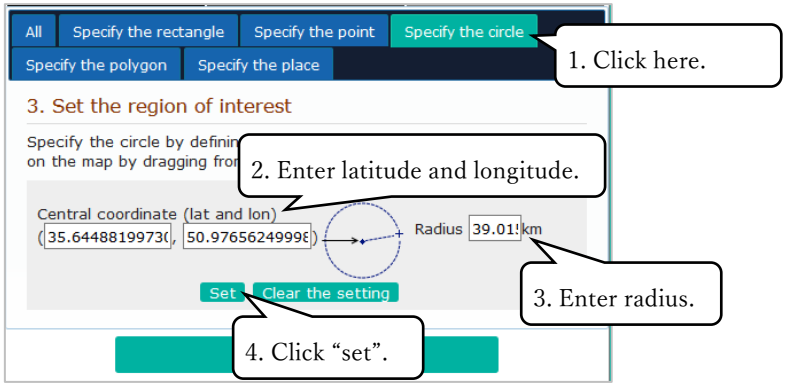


1) Click"Specify a circle"tub, the text field specifying the circle is displayed.

2) Click "icon specifying a searching area"on the map, drug lattitude and longitude on the map.

3) To specify latitude and longitude by drag and drop, Center coordination of circle and radius is displayed in the tect field.

(2) Specifying with values



1) Click "Specify the circle", display the text field to write down Center coordinate and radius for the circle.

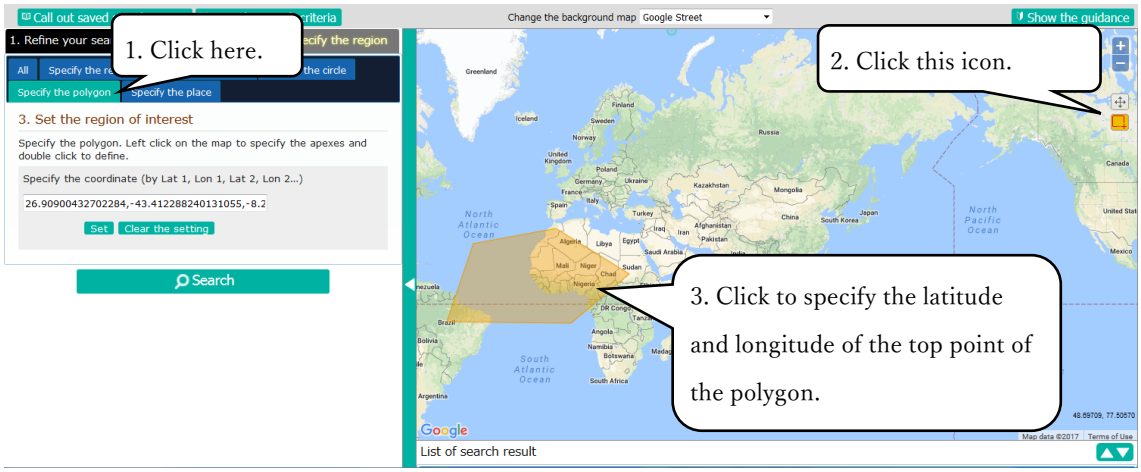
2) Enter latitude and longitude of center coordinate in the Circle.

3) Enter The radius of the circle.

4) Click"Setting"and the values input on the text field is reflected on the map.

Appendix 2-4 Specify observation range with a Polygon

(1) Specify from the map

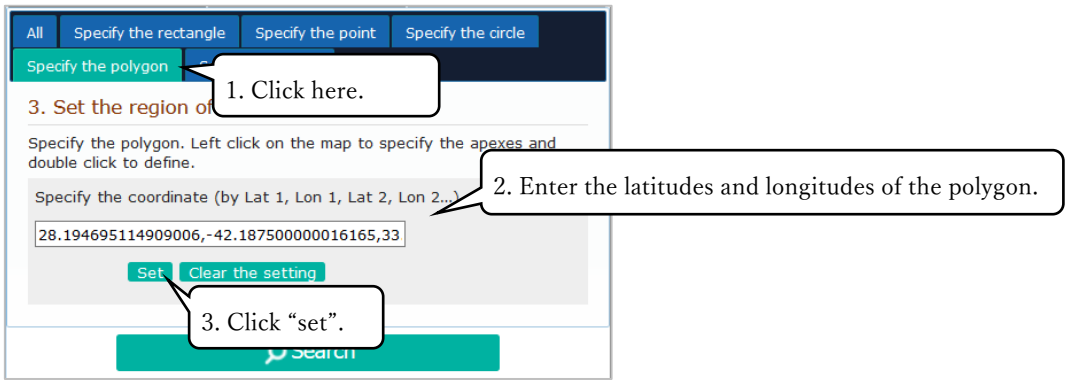


1) Click "Specify the polygon", display latitude and longitude inputing on the text field.

2) Click "the icon of searching area"on the map, specify latitude and longitude to every corner of the polygon on drug and drop.

3) Specify polygon-corners of latitude and longitude. Close last corner coordinate specifying the polygon on the map. Under specifying polygon on the map and displays every corners'coordinate on the text field.

(2) Specify with values



1) Click "Specify the polygon", display the latitude and longitude of polygon input into text fields.

2) Enter latitude and longitude to the rectangular.

3) Click "Setting", The values input in the text field is reflected on the map.

Appendix 3 Specify Observation Period

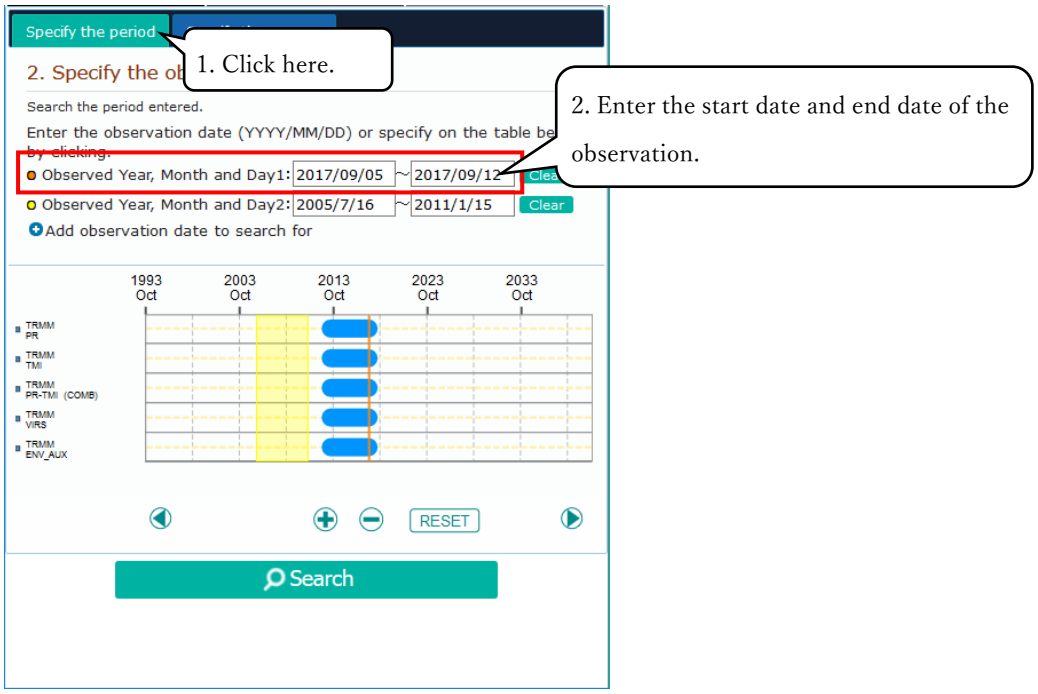
Specify the period to search. There are two selection methods for the period as follows:

- Specify period
- Specify season

Each of these methods allows the period range to be specified by (1) Entering text, (2) Entering values from the calendar icon, of (3) Entering values from the observation period bar chart.

Appendix 3-1 Specify period

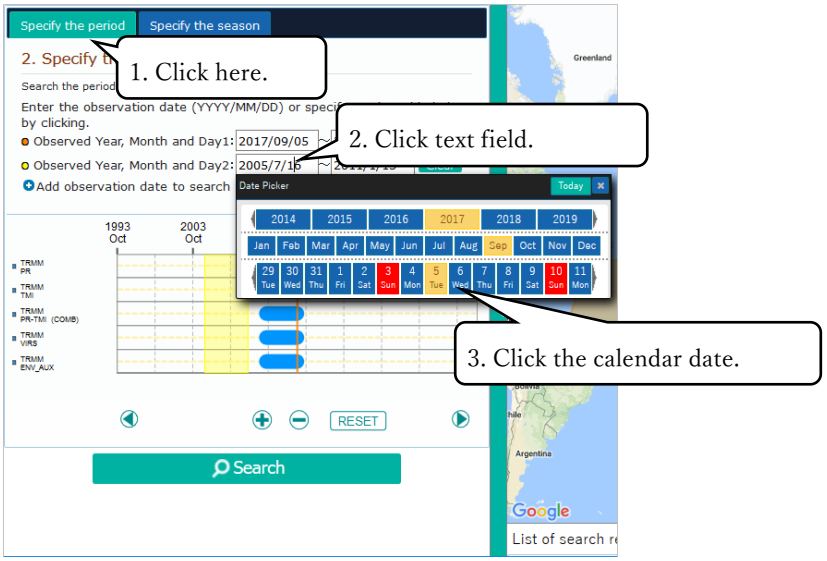
(1) Enter text



1) Click "Specify the period", display text fields specifying between the beginning of observation date and the end of observation date. The maximum 4"Specify the period"can select. First observation dates, The beginning day of the observation from one week of the past as initial value is set.

2) Enter the beginning and the end of the observation in text field and the input period is reflected on the bar-chart.

(2) Enter values from calendar

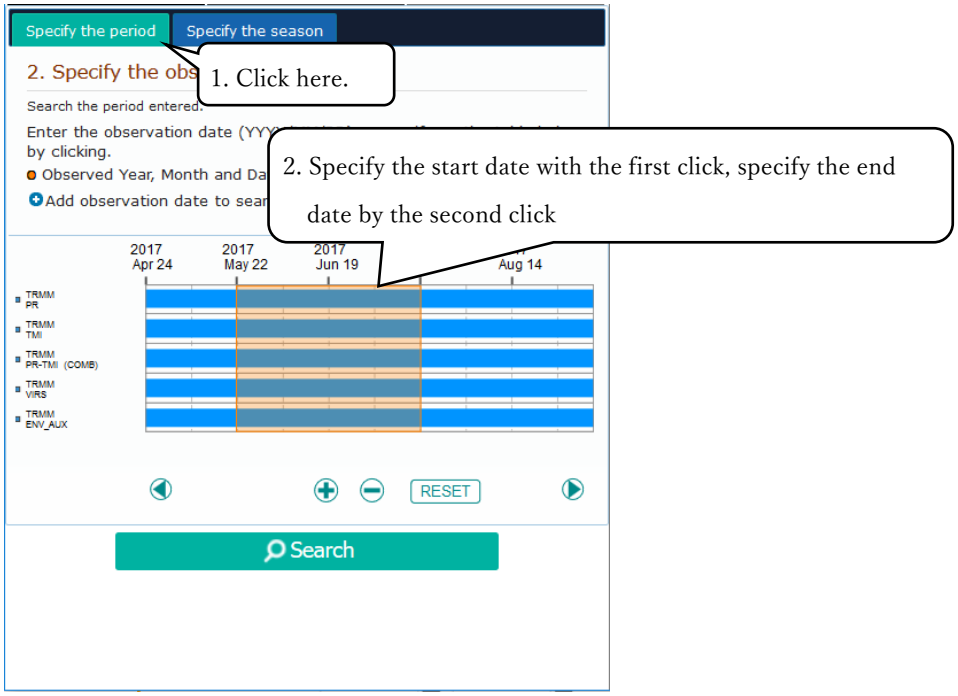


1) "Specify the period", display the period between the beginning and the end observation. They can select four periods.

2) Click the observations date in text fields and appear the calendar.

3) Click the date from calendar, and set as the searching dates.

(3) Enter values from the observation period bar chart



1) Click"Specify the period", display the specifying period between the beginning and the end. They can select four periods.

2) Click an observation period shown on bar-chart. First, select the begignning day of observation. Secondly, select the end of observation. The selected days in text field displays.

※ Click the icon below the bar-chart. You can expand and shrink the bar-chart and change the observation periods on the bar-chart.

[Move icon]

Click the bar-chart and you can change the periods to move the bar-chart to right and left.

[Scaling icon]

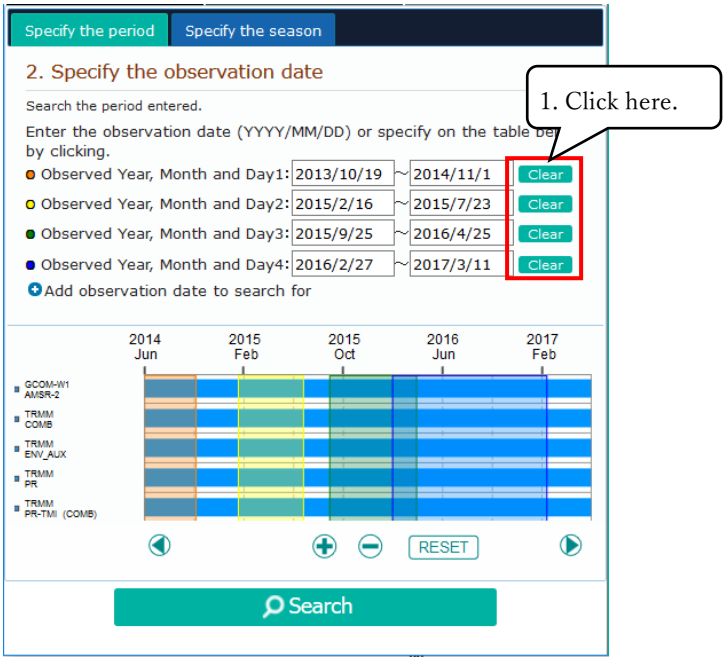
Click the bar-chart and you can expand and shrink the bar-chart.

[Reset icon]

RESET

Click"Reset" and clear values of periods of the observation in text field. Return the initial status in text field.

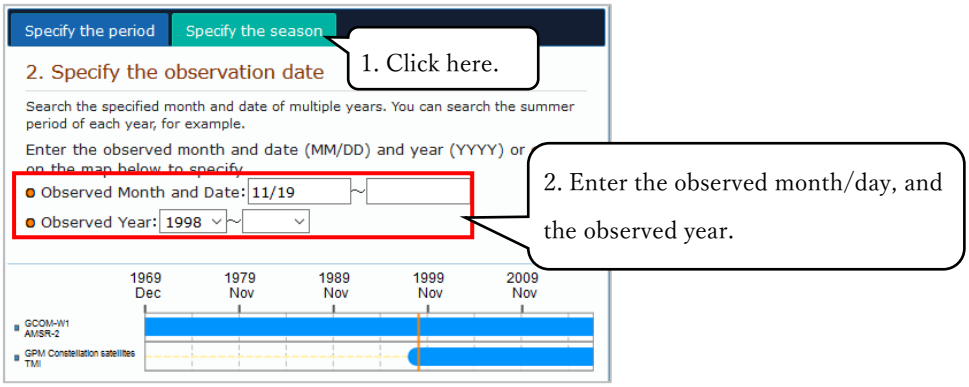
(4) Clear input observation period



1) Click the "Clear" button. Clear the inputed observation start date and end date.

Appendix 3-2 Specify season

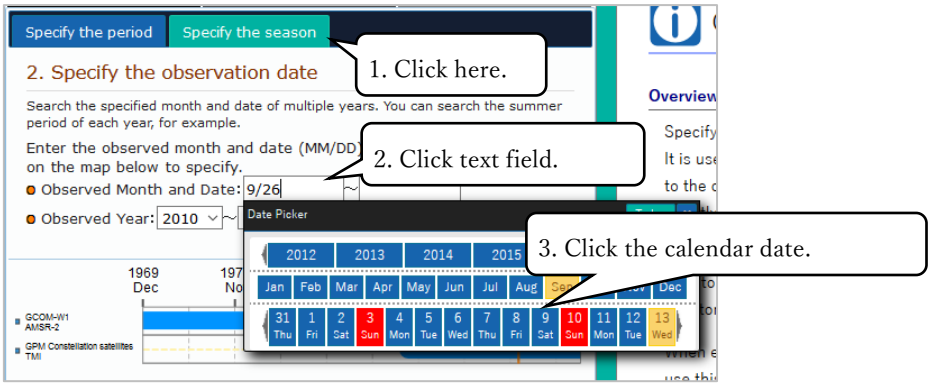
(1) Enter text



1) Click "Specify the season", displays dates and years the beginning and the end selecting in text field and pulldown.

2) Enter observation dates and years of the beginning and the end in text fields.

(2) Enter value from the calendar

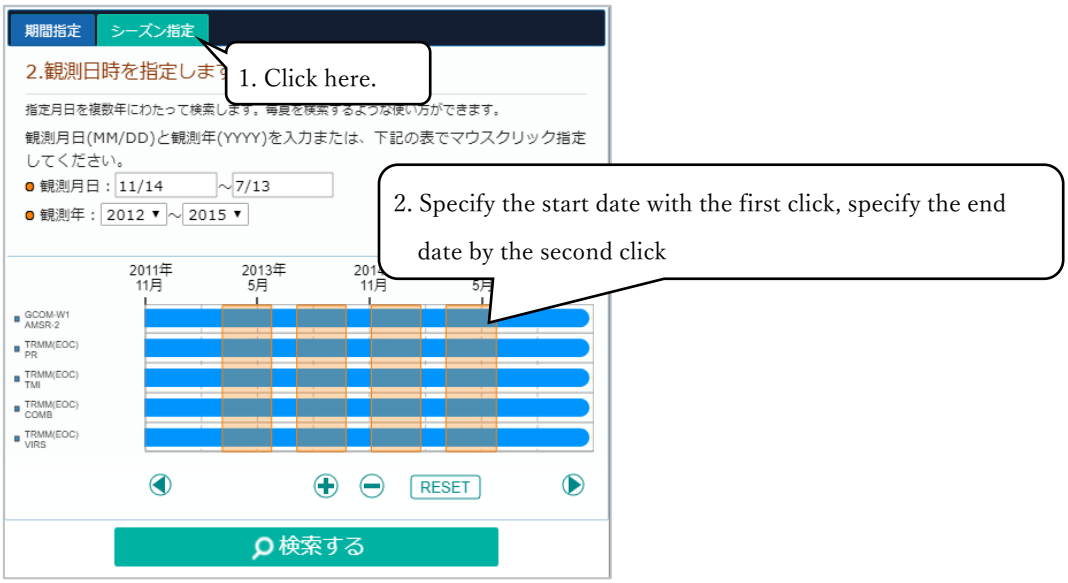


1) Click "Specify the season"and thetext field and pulldown specifying season from dates and years of the beginning and the end observation is displayed.

2) Click the text field of the observation dates, a calendar displays.

3) Click the dates from acalendar, and the dates clicked in text field and pulldown is input. Set as the searching condition.

(3) Enter values from the observation period var chart



1) Click "Specify the season", display the text field and pulldown specifying dates and years of beginning and end observation.

2) With click on bar-chart specifyed the observation period, select beginning of observation day. Display the selected dayon text field and pulldown.

※Click the icon below to bar-chart, change the dates with expansion and shrink bar-chart. (Refer to"Appendix 3-1 Specify the period"about functions of each icon.)

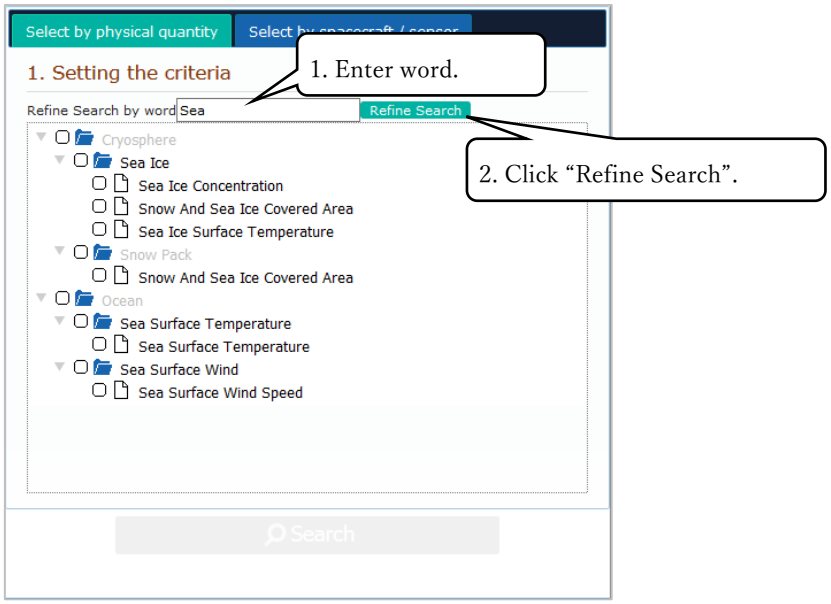
Appendix 4 Filter Search Conditions

The displayed items can be filtered by a variety of methods. There are four methods to filter searches as follows:

- Filter the physical quantity by words Appendix 4-1
- Filter the spacecrafts/sensors by words Appendix 4-2
- Filter the spacecrafts/sensors by processing level Appendix 4-3
- Filter the spacecrafts/sensors by functions Appendix 4-4

Appendix 4-1 Filter the physical quantity by words

On window selecting pysical quantities as search condition, you can "refine search by" words relate to pysical quantities.

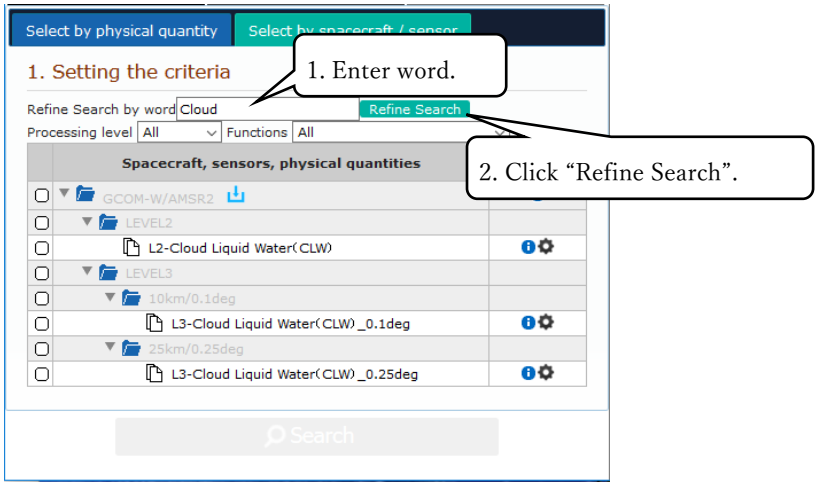


1) Enter the refining words on text field of "refine search" by window selecting pysical quantities.

2) Enter a word and click"Refine search". Display only a pysical quantities relate to a word input by 1).

Appendix 4-2 Filter the spacecrafts/sensors by words

On window selecting spacecrft sensor under"search terms", you can refine a word or words relate to spacecraft sensors.

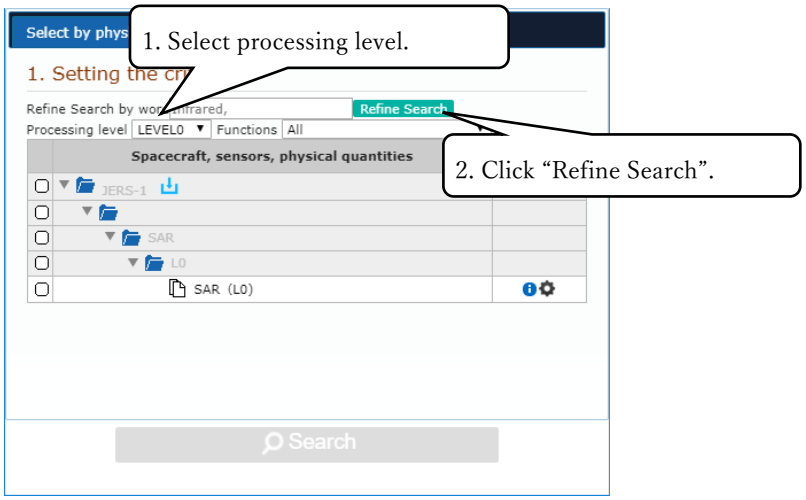


1) Enter a word or words in"Refine search by word"text field on window selecting spacecraft sensor.

2) Click to "Refine search by word"under input words. Display only spacecraft sensor relate to word (or words) input by 1).

Appendix 4-3 Filter the spacecrafts/sensors by processing level

On window selecting spacecraft sensor as search term, and you can refine-search spacecraft sensor by process level.

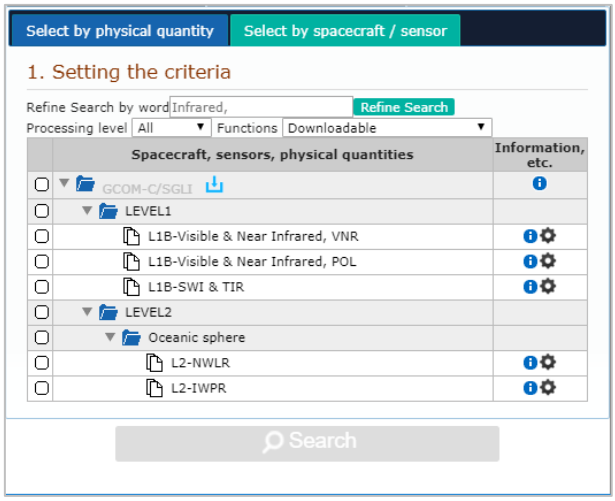


1) Select process level from"process level"pulldown on window selecting aircraft sensor.

2) Under selecting process level and click "Refine search", display only spacecraft sensor with processing level selected by 1).

Appendix 4-4 Filter the spacecrafts/sensors by processing level

In window selecting spacecraft sensor on search term, you can refine-search by a displaying satellite sensor function(Yes/No for Download) .

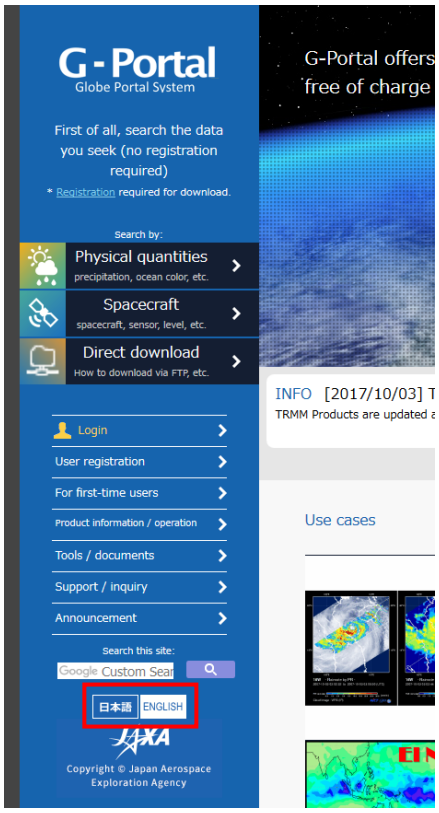


1) Select"processing level"from ulldown function(Yes/No for Download) on window selecting spacecraft sensor.

2) Under selecting processing level, click "Refine search by word". Only spacecraft sensor with processing level selected by 1)is displayed.

Appendix 5 Select the interface Language (Japanese/English)

Switch between Japanese and English displays from the Top page. The initial language display will be English if the OS of the computer you are using is in English or language other than Japanese, and Japanese if it is in Japanese.



Click the option at the menu of the Top page to select languages.

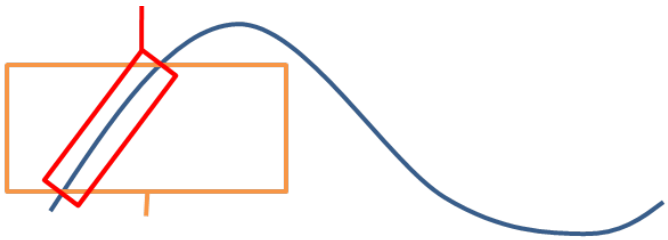
Appendix 6 【Supplement】About processing function in G-Portal

In the processing function described in "4.5 Process a product", the notes on using AMSR / GPM processing function are described.

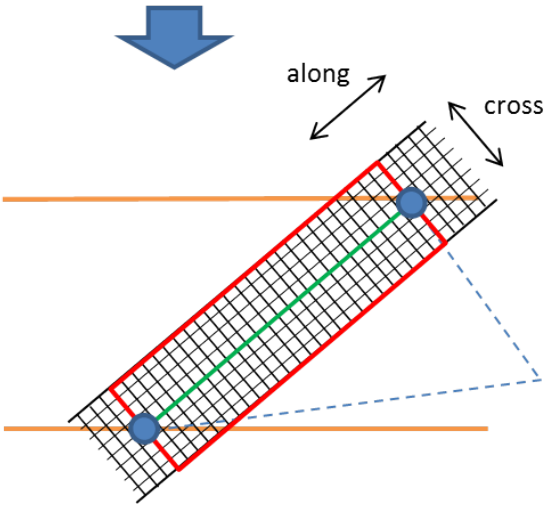
Appendix 6-1 Scope of region extraction

In the case of a product having an array along * cross with the direction of travel of the satellite, a rectangle selection is made on the map on the processing request screen, but the actual cut out product is only in the range existing in the original product It is based on whether the center is within the rectangular specified range or not.
In the case shown below, in order to determine the line (or column) of the cutout start / end, the center coordinates (the number of elements in the cross direction ÷ 2) of the data set having the coordinate information in the original product are specified It judges whether it is a coordinate included in the extraction range.

Cut out product

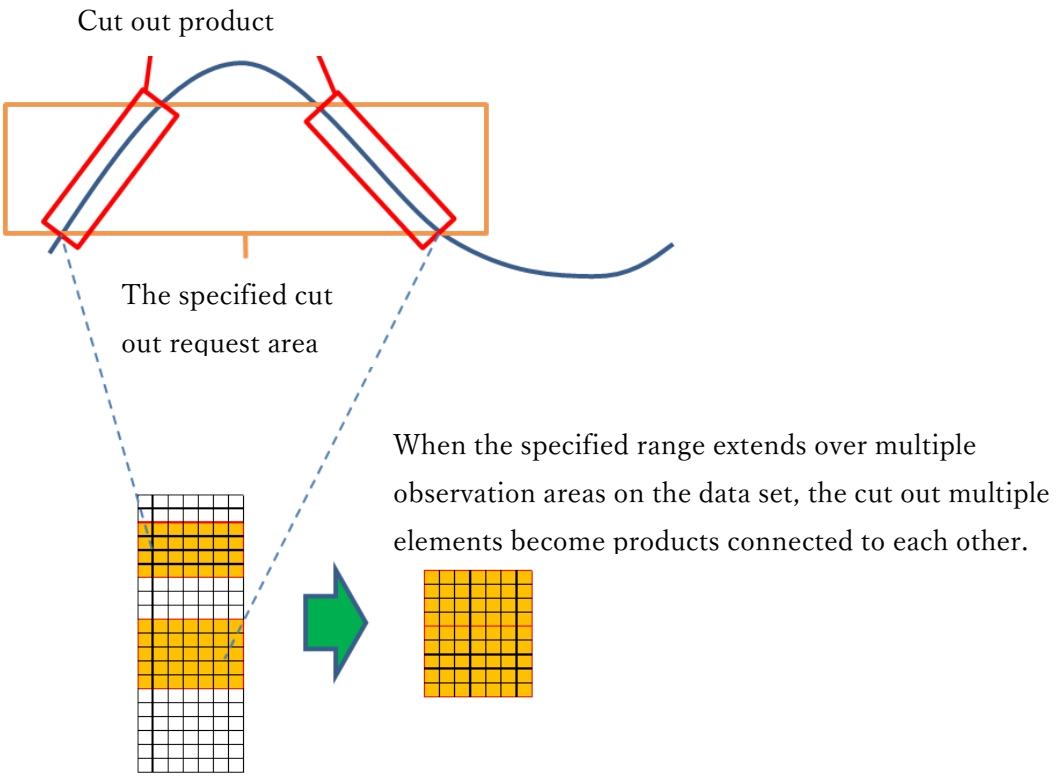


The specified cut out request area



If each row of the array in the along direction contains an element at the center of the cross direction in the cut out range, adopt that row.

As a result of the judgment, extract the row (or column) of the adopted coordinate data set. Cut out elements in the same row (or column) as the elements of the extracted coordinate information in the data set to be cut out. The same applies when multiple observation areas are included in the cutout area.



Appendix 6-2 Specification of output format

AMSR · GPM processing function supports output in HDF5, NetCDF and text (ASCII) format. The definition of each format is described below.

Adding header information

When performing area extraction processing, the following information is added to the header information of the target data set. As for the cutout area, it is output in MULTIPOLYGON format of WKT (Well-known text) because it is cut out across multiple observation areas (see Appendix 6-1). This is common to all formats.

表　6-2-1　Information to add to the header

No.	Header element name	Output contents	Remarks
1	selected area	POLYGON((X1 Y1, X2, Y2, ...))	Map selection area
2	subset area	MULTIPOLYGON(((X1 Y1, X2 Y2, ...)), ((Xa Ya, Xb Yb, ...)), ...)	Cutout area

HDF5

file name　…　「ORDAAAAAAAAAAAAA_BBB.h5」

AAAAAAAAAAAAA：Production order number issued at processing request
BBB：Reference number (number assigned in the system.Not used)

When "Do not convert" is selected in the format conversion field, it is output in HDF 5 format. When variable extraction is specified, only the data set containing the target variable and the data set indicating the time (ScanTime etc.) and the data set showing the coordinates (lon, lat etc) are output, and the data set not selected and other Data set will not be output.

NetCDF

file name　…　「ORDAAAAAAAAAAAAA_BBB.nc」

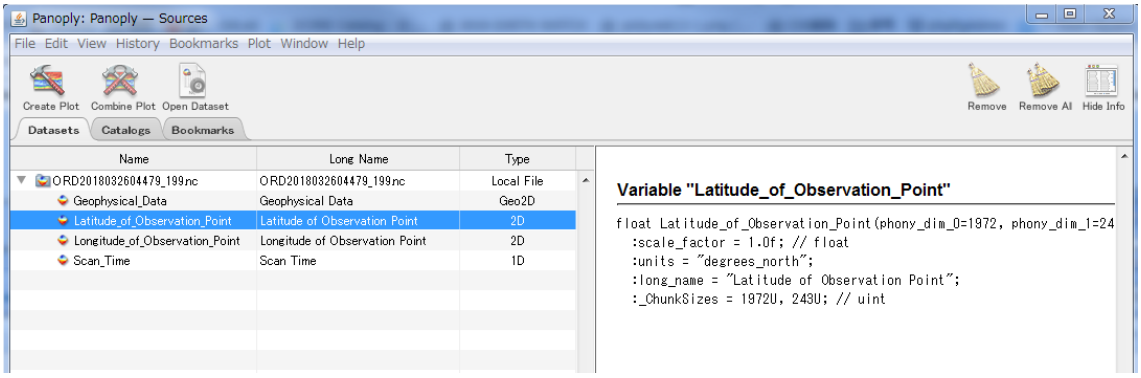
AAAAAAAAAAAAA：Production order number issued at processing request

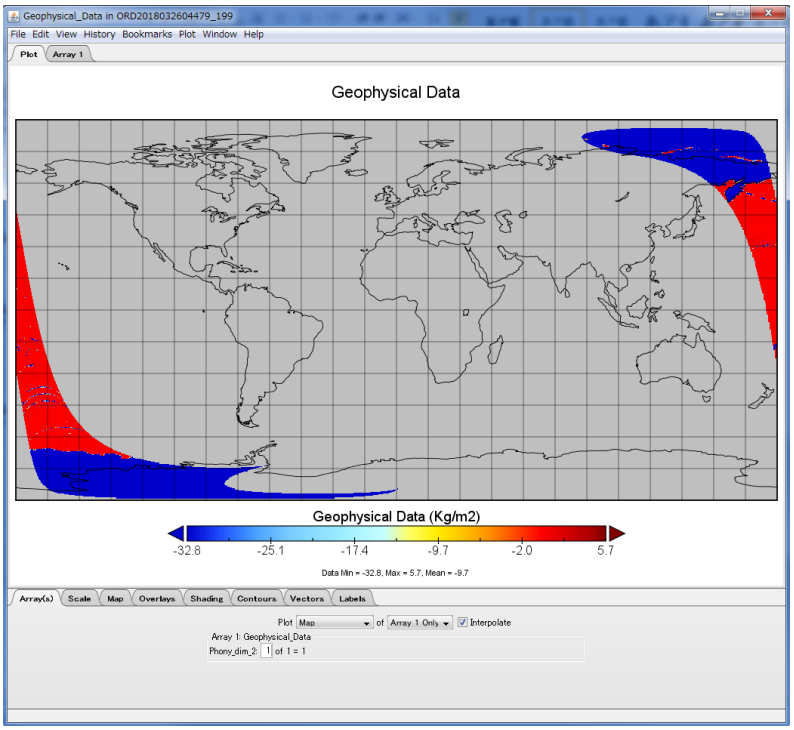
BBB：Reference number (number assigned in the system.Not used)

NetCDF format has the same structure as HDF 5 format, so if variable extraction is specified, it will be outputted in the same way as HDF 5 format (If only format conversion is specified, the data set structure will be output as it is). It conforms to CF Convention (http://cfconventions.org/) and can be displayed with software such as Panoply (※).

※NetCDF format, HDF format and other Grid data viewable software distributed at NASA GISS (https://www.giss.nasa.gov/tools/panoply/download/). In G-Portal, the operation is checked in version 4.8.10 to 4.9.0.

(Example display with PanoplyWin)





ASCII(csv)

file name　　…　　「ORDAAAAAAAAAAAAA_BBB(_C).h5」

AAAAAAAAAAAAA：Production order number issued at processing request
BBB：Reference number (number assigned in the system.Not used)
C　：Branch number

When you decompressed the downloaded data in the zip compression format, the text file of the configuration shown below is stored. All the record contents of the header part are enclosed in "(double quote).
The unit of the file to be output is one file for each element other than the target data set x coordinate, and when multiple files are output from the same data set, a branch number is added to the end of the file name for each element other than the coordinate. Please refer to Table 6-2-4 for the definition of branch number.

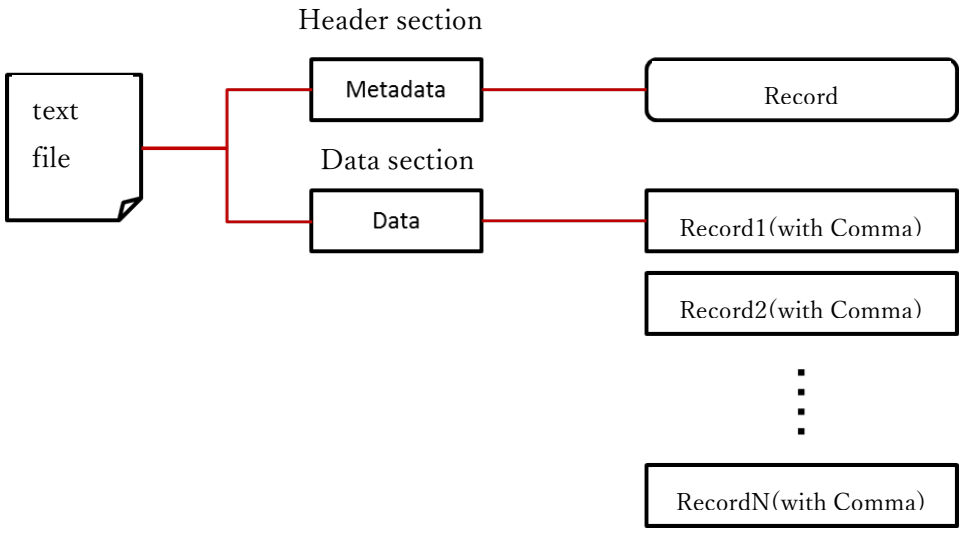


表 6-2-2 Header part output contents

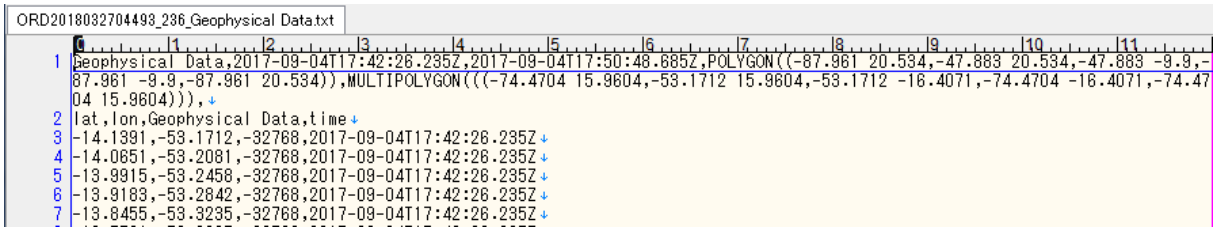
No.	element	Output contents
1	Cut out variable	The physical quantity of the data set or product name specified on the screen
2	Start time	L1/L2：In the content extracted from the time information data set, the first observation time

No.	element	Output contents
		L3：Observation start time stored in header information
3	End time	L1/L2：In the content extracted from the time information data set, the last observation time L3：Observation end time stored in header information
4	Map selection area	Contents of selected area　※Set only for region extraction
5	Cutout area	Contents of subset area　※Set only for region extraction
6	Resolution	Grid information of the target data set Or contents of Resolution stored in the header information

表　6-2-3　Data section (1 line) Output contents

No.	element	title	Output contents
1	latitude	lat	Latitude of the grid of the target data set or latitude extracted from the coordinate information data set
2	longitude	lon	Longitude of the grid of the target data set or longitude extracted from the coordinate information data set
3	value	{Dataset name}	Value of the element of the target data set × Scale Factor
4	Times of Day	time	L1/L2：Observation time cut out from time information data set L3：None

(Text format output example)



(How to assign branch number of text file)

Depending on the product, some of the elements in the dataset have three or more dimensions. If the data contains an array other than the observation area, set a branch number in the file name. The correspondence between each data set and branch number is as follows.

表 6-2-4 Correspondence between branch number and each data

data set	Variable name	Branch number
GPM Ku L1B	NS/Receiver/noiseCount NS/Receiver/noisePower	-
GPM Ka L1B	HS/Receiver/noiseCount HS/Receiver/noisePower	-
GPM Ku L2A	NS/SLV/zFactorCorrectedESurface NS/SLV/precipRateESurface NS/SLV/zFactorCorrectedNearSurface NS/SLV/precipRateNearSurface NS/CSF/typePrecip	-
GPM Ka L2A	HS/SLV/zFactorCorrectedESurface HS/SLV/precipRateESurface HS/SLV/zFactorCorrectedNearSurface HS/SLV/precipRateNearSurface HS/CSF/typePrecip	-
GPM DPR L2A	NS/SLV/zFactorCorrectedESurface NS/SLV/precipRateESurface NS/SLV/zFactorCorrectedNearSurface NS/SLV/precipRateNearSurface NS/CSF/typePrecip	-
GPM DPR L3 Daily	GRID/precipRateESurfMean GRID/precipPixESurf GRID/totalPix	1: KuNS, ASCENDING 2: DPRMS, ASCENDING 3: KuNS, DESCENDING 4: DPRMS DESCENDING
GPM DPR L3 Monthly	Grids/G2/precipRateNearSurfaceUnconditional	1: KuNS 2: KaMS 3: KaHS 4: DPRMS 5: KuMS
GPM GMI L1B	S1/Tb	channel in swath1
	S2/Tb	channel in swath2
GPM GMI L2	S1/surfacePrecipitation	-
GPM GMI L3 Monthly	Grid/surfacePrecipitation	-
GPM COMB L2	NS/surfPrecipTotRate	-
GPM COMB L3 Monthly	Grids/G1/precipTotRate/mean	(rt=all,hgt=0,only NS) 1:st=ocean 2:st=land 3:st=all
	Grids/G2/precipTotRate/mean	1: rt=all,hgt=0,NS
GSMaP hourly	Grid/hourlyPrecipRate Grid/hourlyPrecipRateGC	-
GSMaP monthly	Grid/monthlyPrecipRate Grid/monthlyPrecipRateGC	-
AMSR-E/2 L1B	Brightness Temperature (6.9GHz,H) Brightness Temperature (6.9GHz,V) Brightness Temperature (7.3GHz,H) Brightness Temperature (7.3GHz,V) Brightness Temperature (10.7GHz,H) Brightness Temperature (10.7GHz,V) Brightness Temperature (18.7GHz,H) Brightness Temperature (18.7GHz,V) Brightness Temperature (23.8GHz,H) Brightness Temperature (23.8GHz,V) Brightness Temperature (36.5GHz,H) Brightness Temperature (36.5GHz,V) Brightness Temperature (89.0GHz-A,H) Brightness Temperature (89.0GHz-A,V) Brightness Temperature (89.0GHz-B,H) Brightness Temperature (89.0GHz-B,V)	-

data set	Variable name	Branch number
AMSR-E/2 L1R	Brightness Temperature (original,89GHz-A,H) Brightness Temperature (original,89GHz-A,V) Brightness Temperature (original,89GHz-B,H) Brightness Temperature (original,89GHz-B,V) Brightness Temperature (res06,10.7GHz,H) Brightness Temperature (res06,10.7GHz,V) Brightness Temperature (res06,18.7GHz,H) Brightness Temperature (res06,18.7GHz,V) Brightness Temperature (res06,23.8GHz,H) Brightness Temperature (res06,23.8GHz,V) Brightness Temperature (res06,36.5GHz,H) Brightness Temperature (res06,36.5GHz,V) Brightness Temperature (res06,6.9GHz,H) Brightness Temperature (res06,6.9GHz,V) Brightness Temperature (res06,7.3GHz,H) Brightness Temperature (res06,7.3GHz,V) Brightness Temperature (res06,89.0GHz,H) Brightness Temperature (res06,89.0GHz,V) Brightness Temperature (res10,10.7GHz,H) Brightness Temperature (res10,10.7GHz,V) Brightness Temperature (res10,18.7GHz,H) Brightness Temperature (res10,18.7GHz,V) Brightness Temperature (res10,23.8GHz,H) Brightness Temperature (res10,23.8GHz,V) Brightness Temperature (res10,36.5GHz,H) Brightness Temperature (res10,36.5GHz,V) Brightness Temperature (res10,89.0GHz,H) Brightness Temperature (res10,89.0GHz,V) Brightness Temperature (res23,18.7GHz,H) Brightness Temperature (res23,18.7GHz,V) Brightness Temperature (res23,23.8GHz,H) Brightness Temperature (res23,23.8GHz,V) Brightness Temperature (res23,36.5GHz,H) Brightness Temperature (res23,36.5GHz,V) Brightness Temperature (res23,89.0GHz,H) Brightness Temperature (res23,89.0GHz,V) Brightness Temperature (res36,36.5GHz,H) Brightness Temperature (res36,36.5GHz,V) Brightness Temperature (res36,89.0GHz,H) Brightness Temperature (res36,89.0GHz,V)	-
AMSR-E/2 SST L2 Low	Geophysical Data	1: SST(6GHz) 2: SST(10GHz)
AMSR-E/2 SND L2 Low	Geophysical Data	1: SND 2: SWE
AMSR-E/2 L2 Low (SST, Data other than SND)	Geophysical Data	-
AMSR-E/2 L2 High	Geophysical Data for 89A Geophysical Data for 89B	-
AMSR-E/2 L3 Daily TB	Brightness Temperature (V) Brightness Temperature (H)	-
AMSR-E/2 L3 Daily SST	Geophysical Data	1: SST(6GHz) 2: SST(10GHz)
AMSR-E/2 L3 Daily SND	Geophysical Data	1: SND 2: SWE
AMSR-E/2 L3 Daily (TB, SST, Data other than SND)	Geophysical Data	-

Appendix 7 Search using G-Portal CSW server

Appendix 7-1 Search by OpenSearch (HTTP-Get)

・Search result format

GeoJSON,HTML,ISO19115,ebRIM,atom,DublinCore

・Search all

・URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords

・実行例

```
$ curl -o result1.xml 'https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&
  request=GetRecords'
```

・Specifying the result format

Specify the search result format following outputFormat. The following format can be specified. When specifying xml format other than atom for output, specify outputSchema as well. If not specified, DublinCore is selected.

Output format	outputFormat	outputSchema
GeoJSON	application/json	-
HTML	text/html	-
ISO19115	application/xml	http://www.isotc211.org/2005/gmd
ebRIM	application/xml	urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0
atom	application/atom%2bxml	-
DublinCore	application/xml	http://www.isotc211.org/2005/gmd

・GeoJSON

・URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/json

・HTML

・URL
https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=text/html

・ISO19115
・URL
https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/xml&outputSchema=http://www.isotc211.org/2005/gmd

・ebRIM
・URL
https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/xml&outputSchema=urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0

・atom
・URL
https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/atom%2bxml

・DublinCore
・URL
https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/xml&outputSchema=http://www.isotc211.org/2005/gmd

・Specify the number of results
After the count, specify the number of search results. The default is 20 and the maximum is 3000.

・URL
https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/json&count=3

In addition, you can specify the start location of the search result following startIndex.

・URL
https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/json&count=3&startIndex=4

・Specify dataset ID

The GPortal CSW server generates a table on a satellite basis, and decides the table that holds the catalog data using the data set ID as a key.
The data set ID is shown in the table below for the satellite unit.

Satellite name	Dataset ID
GCOM-C	10001000-10999999
GCOM-W1	11001000-11999999
GPM	12001000-12999999
GPM Constellation	13001000-13999999
GSMaP	14003000-14999999
TRMM	15001000-15999999
EarthCARE	16001000-16999999
JERS-1	17002000-17999999
TRMM(EOC)	18001000-18999999
MOS-1	19000000-19999999
MOS-1b	20000000-20999999
CIRC	21001000-21999999
ADEOS	22001000-22999999
ADEOS-II	23001000-23999999
AQUA	24001000-24999999
AQUA AMSR-E	25001000-25999999
ALOS	26004000-26999999
ALOS-2	27004000-27999999
AQUA(NASA-CMR)	28001000-28999999
TERRA(NASA-CMR)	29000000-29999999

When searching by OpenSearch, specify dataset ID after designating datasetId.
You can specify multiple ranges with "+", multiple designations with ",".

・Data set ID specification
  ・URL
    https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/json&datasetId=11001000
・Data set ID specification (range specification)

・URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/json&datasetId=11000000+11999999

・Data set ID specification (multiple specifications)

・URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/json&datasetId=11001000,11001002

・Specify search conditions

The following parameters can be specified as search conditions.

Search entry	String specified as parameter	Type	Example
Dataset ID	datasetId	Integer	27004001
identifier	id	String	ALOS2146782480-170209
Coordinate information	bbox	Coordinate	130,30,140,40
updateTime	updateTime	Date and time	2021-04-28T17:00:00
polar stereo	Pseq	String	EQ
acquisitionType	aqtype	String	NOMINAL
imageQualityDegradation	deg	Real number	0
processingDate	psdate	Date and time	2021-04-28T17:30:00
processingLevel	pslv	String	L1A
beginPosition	startTime	Date and time	2021-04-28T18:00:00
endPosition	endTime	Date and time	2021-04-28T18:30:00
satelliteName	sat	String	GCOM-C
sensorName	sen	String	SGLI
operationalMode	operationalMode	String	NOMINAL
wrsLongitudeGrid	pathno	Integer	240
wrsLatitudeGrid	rowno	Integer	253
orbitNumber	orbitno	Integer	3044
lastOrbitNumber	lastorbitno	Integer	679
acrossTrackIncidenceAngle	pointingAngle	Real number	0
polarisationChannels	polarisation	String	HH

Search entry	String specified as parameter	Type	Example
daynight	daynight	String	Night
version	prdver	String	05A
cloudCoverPercentage	cloud	Real number	0
totalQualityCode	quality	String	Good
physicalQuantity	physicalQuantity	String	AGB
Resolution	resolution	String	1km
numberMissingData	numberMissingData	Integer	0
sceneNumber	sceneNumber	String	17
orbitDirection	orbitDirection	String	Descending
tileHNo	tileHNo	Integer	19
tileVNo	tileVNo	Integer	10
tiltSegmentNumber	tiltSegmentNumber	Integer	1
RSPPathNumber	RSPPathNumber	Integer	232
sensorNumber	sensorNumber	Integer	1
offNadirAngle	offNadir	Real number	32.4
orbitStatus	orbitStatus	String	H
ProcessTimeUnit	ProcessTimeUnit	String	01D

・Search by granule ID
  ・URL
    https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/json&id=GW1AM2_20151200_01M_EQMA_L3SGCLWHD2210210
・Search by satellite, sensor name
  ・URL
    https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/json&sat=ALOS&sen=PRISM
・Search by observation date and time
  ・URL
    https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/json&startTime=2016-11-01T00:00:00Z&endTime=2016-11-01T23:59:59Z
・Search by coordinate information

・URL
https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&outputFormat=application/json&bbox=130,30,140,40

Appendix 7-2 Search by ebRIM (HTTP-POST)

・Search result format
ebRIM

・Search all
・URL
https://gportal.jaxa.jp/csw/csw
・Data to POST (request1.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<csw:GetRecords
    service="CSW"
    version="2.0.2"
    outputSchema="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    resultType="results"
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
    <csw:Query typeNames="rim:RegistryPackage rim:ExtrinsicObject">
        <csw:ElementSetName
typeNames="rim:RegistryPackage">full</csw:ElementSetName>
    </csw:Query>
</csw:GetRecords>
```

・Example of execution
$ curl --header 'Content-Type: application/xml; charset=utf-8;' --data-binary @request1.xml -o result1.xml https://gportal.jaxa.jp/csw/csw
All items are searched and the results are output in ebRIM format.

・Specify the number of results

csw: Specify the number of search results in attribute maxRecords of GetRecords tag. The default is 10 and the maximum is 3000.

You can specify the start location of the search result in the attribute startIndex.

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request2.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<csw:GetRecords
    service="CSW"
    version="2.0.2"
    outputSchema="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    resultType="results"
    startPosition="4"
    maxRecords="3"
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
    <csw:Query typeNames="rim:RegistryPackage rim:ExtrinsicObject">
        <csw:ElementSetName
typeNames="rim:RegistryPackage">full</csw:ElementSetName>
    </csw:Query>
</csw:GetRecords>
```

・Specify search conditions

csw: GetRecords / csw: Query / csw: Constraint / ogc: Filter Specify the search condition in the tag. Items that can be specified as search criteria are as follows.

Search entry	String specified in request xml
identifier	/rim:ExternalIdentifier/@value
parentIdentifier	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::parentIdentifier"]/rim:ValueList/rim:Value[1]
Coordinate information(*)	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::multiExtentOf"]/wrs:ValueList/wrs:AnyValue[1]
beginPosition	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::beginPosition"]/rim:ValueList/rim:Value[1]

Search entry	String specified in request xml
lastOrbitNumber	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::lastOrbitNumber"]/rim:ValueList/rim:Value[1]
acrossTrackIncidenceAngle	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::acrossTrackIncidenceAngle"]/rim:ValueList/rim:Value[1]
satelliteName	/rim:ExtrinsicObject/rim:Name/rim:LocalizedString/@value
instrumentShortName	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::instrumentShortName"]/rim:ValueList/rim:Value[1]
sensorType	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::sensorType"]/rim:ValueList/rim:Value[1]
sensorOperationalMode	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::sensorOperationalMode"]/rim:ValueList/rim:Value[1]
polarisationMode	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::polarisationMode"]/rim:ValueList/rim:Value[1]
polarisationChannels	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::polarisationChannels"]/rim:ValueList/rim:Value[1]
antennaLookDirection	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::antennaLookDirection"]/rim:ValueList/rim:Value[1]
minimumIncidenceAngle	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::minimumIncidenceAngle"]/rim:ValueList/rim:Value[1]
maximumIncidenceAngle	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::maximumIncidenceAngle"]/rim:ValueList/rim:Value[1]
dopplerFrequency	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::dopplerFrequency"]/rim:ValueList/rim:Value[1]
incidenceAngleVariation	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::incidenceAngleVariation"]/rim:ValueList/rim:Value[1]
illuminationAzimuthAngle	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::illuminationAzimuthAngle"]/rim:ValueList/rim:Value[1]

Search entry	String specified in request xml
illuminationElevationAngle	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::illuminationElevationAngle"]/rim:ValueList/rim:Value[1]
snowCoverPercentage	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::snowCoverPercentage"]/rim:ValueList/rim:Value[1]
highestLocation	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::highestLocation"]/rim:ValueList/rim:Value[1]
lowestLocation	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::lowestLocation"]/rim:ValueList/rim:Value[1]

・Search by identifier (granule ID)

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request3.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<csw:GetRecords
    service="CSW"
    version="2.0.2"
    outputSchema="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    resultType="results"
    startPosition="1"
    maxRecords="10"
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:ogc="http://www.opengis.net/ogc"
    xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
    <csw:Query typeNames="rim:RegistryPackage rim:ExtrinsicObject">
        <csw:ElementSetName
typeNames="rim:RegistryPackage">full</csw:ElementSetName>
        <csw:Constraint version="1.1.0">
            <ogc:Filter>
                <ogc:PropertyIsEqualTo>
```

```
    <ogc:PropertyName>/rim:ExternalIdentifier/@value</ogc:PropertyName>

    <ogc:Literal>GW1AM2_20151200_01M_EQMA_L3SGCLWHD2210210</ogc:Literal
    >
                        </ogc:PropertyIsEqualTo>
                    </ogc:Filter>
                </csw:Constraint>
            </csw:Query>
    </csw:GetRecords>
```

・Search by satellite, sensor name

Combine search conditions for satellite name and sensor name with and.

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request4.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<csw:GetRecords
        service="CSW"
        version="2.0.2"
        outputSchema="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
        resultType="results"
        startPosition="1"
        maxRecords="10"
        xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
        xmlns:ogc="http://www.opengis.net/ogc"
        xmlns:gml="http://www.opengis.net/gml"
        xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
    http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
        <csw:Query typeNames="rim:RegistryPackage rim:ExtrinsicObject">
            <csw:ElementSetName
    typeNames="rim:RegistryPackage">full</csw:ElementSetName>
            <csw:Constraint version="1.1.0">
                <ogc:Filter>
```

```
                    <ogc:And>
                        <ogc:PropertyIsEqualTo>

<ogc:PropertyName>/rim:ExtrinsicObject/rim:Name/rim:LocalizedString/@value</ogc:PropertyName>
                            <ogc:Literal>ALOS</ogc:Literal>
                        </ogc:PropertyIsEqualTo>
                        <ogc:PropertyIsEqualTo>

<ogc:PropertyName>/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CSW-ebRIM-EO::instrumentShortName"]/rim:ValueList/rim:Value[1]</ogc:PropertyName>
                            <ogc:Literal>PRISM</ogc:Literal>
                        </ogc:PropertyIsEqualTo>
                    </ogc:And>
                </ogc:Filter>
            </csw:Constraint>
        </csw:Query>
</csw:GetRecords>
```

・Search by observation date and time (1)

Use ogc: PropertyIsBetween

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request5.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<csw:GetRecords
    service="CSW"
    version="2.0.2"
    outputSchema="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    resultType="results"
    startPosition="1"
    maxRecords="10"
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:ogc="http://www.opengis.net/ogc"
    xmlns:gml="http://www.opengis.net/gml"
```

```
        xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
    http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
        <csw:Query typeNames="rim:RegistryPackage rim:ExtrinsicObject">
            <csw:ElementSetName
    typeNames="rim:RegistryPackage">full</csw:ElementSetName>
            <csw:Constraint version="1.1.0">
                <ogc:Filter>
                    <ogc:PropertyIsBetween>

    <ogc:PropertyName>/rim:ExtrinsicObject/rim:Slot[@name='urn:ogc:def:slot:OGC-CS
    W-ebRIM-EO::beginPosition']/rim:ValueList/rim:Value[1]</ogc:PropertyName>
                        <ogc:LowerBoundary>
                            <ogc:Literal>2016-11-01T00:00:00Z</ogc:Literal>
                        </ogc:LowerBoundary>
                        <ogc:UpperBoundary>
                            <ogc:Literal>2016-11-01T23:59:59Z</ogc:Literal>
                        </ogc:UpperBoundary>
                    </ogc:PropertyIsBetween>
                </ogc:Filter>
            </csw:Constraint>
        </csw:Query>
    </csw:GetRecords>
```

・Search by observation date and time (2)

Use ogc: PropertyIsGreaterThan, ogc: PropertyIsLessThan

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request6.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<csw:GetRecords
    service="CSW"
    version="2.0.2"
    outputSchema="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    resultType="results"
```

```
        startPosition="1"
        maxRecords="10"
        xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
        xmlns:ogc="http://www.opengis.net/ogc"
        xmlns:gml="http://www.opengis.net/gml"
        xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
    http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
        <csw:Query typeNames="rim:RegistryPackage rim:ExtrinsicObject">
            <csw:ElementSetName
    typeNames="rim:RegistryPackage">full</csw:ElementSetName>
            <csw:Constraint version="1.1.0">
                <ogc:Filter>
                    <ogc:And>
                        <ogc:PropertyIsGreaterThan>

    <ogc:PropertyName>/rim:ExtrinsicObject/rim:Slot[@name='urn:ogc:def:slot:OGC-C
    SW-ebRIM-EO::beginPosition']/rim:ValueList/rim:Value[1]
                                </ogc:PropertyName>
                                <ogc:Literal>2016-11-01T00:00:00Z</ogc:Literal>
                            </ogc:PropertyIsGreaterThan>
                            <ogc:PropertyIsLessThan>

    <ogc:PropertyName>/rim:ExtrinsicObject/rim:Slot[@name='urn:ogc:def:slot:OGC-C
    SW-ebRIM-EO::beginPosition']/rim:ValueList/rim:Value[1]
                                </ogc:PropertyName>
                                <ogc:Literal>2016-11-01T23:59:59Z</ogc:Literal>
                            </ogc:PropertyIsLessThan>
                        </ogc:And>
                </ogc:Filter>
            </csw:Constraint>
        </csw:Query>
    </csw:GetRecords>
```

・Search by observation date and time (3)

Use ogc: PropertyIsGreaterThanOrEqualTo, ogc: PropertyIsLessThanOrEqualTo

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request7.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<csw:GetRecords
    service="CSW"
    version="2.0.2"
    outputSchema="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    resultType="results"
    startPosition="1"
    maxRecords="10"
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:ogc="http://www.opengis.net/ogc"
    xmlns:gml="http://www.opengis.net/gml"
    xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
    <csw:Query typeNames="rim:RegistryPackage rim:ExtrinsicObject">
        <csw:ElementSetName
typeNames="rim:RegistryPackage">full</csw:ElementSetName>
        <csw:Constraint version="1.1.0">
            <ogc:Filter>
                <ogc:And>
                    <ogc:PropertyIsGreaterThanOrEqualTo>

<ogc:PropertyName>/rim:ExtrinsicObject/rim:Slot[@name='urn:ogc:def:slot:OGC-C
SW-ebRIM-EO::beginPosition']/rim:ValueList/rim:Value[1]
                        </ogc:PropertyName>
                        <ogc:Literal>2016-11-01T00:00:00Z</ogc:Literal>
                    </ogc:PropertyIsGreaterThanOrEqualTo>
                    <ogc:PropertyIsLessThanOrEqualTo>

<ogc:PropertyName>/rim:ExtrinsicObject/rim:Slot[@name='urn:ogc:def:slot:OGC-C
SW-ebRIM-EO::beginPosition']/rim:ValueList/rim:Value[1]
```

```
                                </ogc:PropertyName>
                                <ogc:Literal>2016-11-01T23:59:59Z</ogc:Literal>
                            </ogc:PropertyIsLessThanOrEqualTo>
                        </ogc:And>
                    </ogc:Filter>
                </csw:Constraint>
            </csw:Query>
        </csw:GetRecords>
```

・Search by coordinate information

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request8.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<csw:GetRecords
    service="CSW"
    version="2.0.2"
    outputSchema="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    resultType="results"
    startPosition="1"
    maxRecords="10"
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:wrs="http://www.opengis.net/cat/wrs/1.0"
    xmlns:ogc="http://www.opengis.net/ogc"
    xmlns:gml="http://www.opengis.net/gml"
    xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
    <csw:Query typeNames="rim:RegistryPackage rim:ExtrinsicObject">
        <csw:ElementSetName
typeNames="rim:RegistryPackage">full</csw:ElementSetName>
        <csw:Constraint version="1.1.0">
            <ogc:Filter>
                <ogc:Intersects>
```

```
<ogc:PropertyName>/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS
W-ebRIM-EO::multiExtentOf"]/wrs:ValueList/wrs:AnyValue[1]</ogc:PropertyName>
                        <gml:Envelope srsName="EPSG:4326">
                            <gml:lowerCorner>140 40</gml:lowerCorner>
                            <gml:upperCorner>130 30</gml:upperCorner>
                        </gml:Envelope>
                    </ogc:Intersects>
                </ogc:Filter>
            </csw:Constraint>
        </csw:Query>
</csw:GetRecords>
```

Appendix 7-3 Search according to ISO 19115 (HTTP-POST)

・Search result format

ISO19115

・Search all

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request1.xml)

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="no"?>
<csw:GetRecords
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:ogc="http://www.opengis.net/ogc"
    service="CSW"
    version="2.0.2"
    resultType="results"
    outputFormat="application/xml"
    outputSchema="http://www.isotc211.org/2005/gmd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
    <csw:Query typeNames="gmd:MD_Metadata">
        <csw:ElementSetName>full</csw:ElementSetName>
```

```
        </csw:Query>
    </csw:GetRecords>
```

・Example of execution

```
$ curl --header 'Content-Type: application/xml; charset=utf-8;' --data-binary
@request1.xml -o result1.xml https://gportal.jaxa.jp/csw/csw
```

Search all items and output the results in ISO 19115 format.

・Specify the number of results

csw: Specify the number of search results in attribute maxRecords of GetRecords tag. The default is 10 and the maximum is 3000.

You can also specify the start location of the search result in the attribute startIndex.

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request2.xml)

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="no"?>
<csw:GetRecords
        xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
        xmlns:ogc="http://www.opengis.net/ogc"
        service="CSW"
        version="2.0.2"
        resultType="results"
        startPosition="4"
        maxRecords="3"
        outputFormat="application/xml"
        outputSchema="http://www.isotc211.org/2005/gmd"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
    http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
        <csw:Query typeNames="gmd:MD_Metadata">
            <csw:ElementSetName>full</csw:ElementSetName>
        </csw:Query>
    </csw:GetRecords>
```

・Specify search conditions

csw: GetRecords / csw: Query / csw: Constraint / ogc: Filter Specify the search condition in the tag. Items that can be specified as search criteria are as follows.

Search entry	String specified in request xml
Identifier	Identifier
Title	Title
Abstract	Abstract
Modified	Modified
Coordinate information(*)	BoundingBox
ParentIdentifier	ParentIdentifier
TopicCategory	TopicCategory
TemporalExtent	TemporalExtent
AnyText	AnyText

・Search by identifier (granule ID)

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request3.xml)

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="no"?>
<csw:GetRecords
      xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
      xmlns:ogc="http://www.opengis.net/ogc"
      service="CSW"
      version="2.0.2"
      resultType="results"
      startPosition="1"
      maxRecords="10"
      outputFormat="application/xml"
      outputSchema="http://www.isotc211.org/2005/gmd"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
      <csw:Query typeNames="gmd:MD_Metadata">
            <csw:ElementSetName>full</csw:ElementSetName>
            <csw:Constraint version="1.1.0">
                  <ogc:Filter>
                        <ogc:PropertyIsEqualTo>
                              <ogc:PropertyName>Identifier</ogc:PropertyName>

<ogc:Literal>GW1AM2_20151200_01M_EQMA_L3SGCLWHD2210210</ogc:Literal
>
                        </ogc:PropertyIsEqualTo>
                  </ogc:Filter>
            </csw:Constraint>
      </csw:Query>
</csw:GetRecords>
```

・Search by observation date and time (1)

Use ogc: PropertyIsBetween

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request4.xml)

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="no"?>
<csw:GetRecords
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:ogc="http://www.opengis.net/ogc"
    service="CSW"
    version="2.0.2"
    resultType="results"
    startPosition="1"
    maxRecords="10"
    outputFormat="application/xml"
    outputSchema="http://www.isotc211.org/2005/gmd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
    <csw:Query typeNames="gmd:MD_Metadata">
        <csw:ElementSetName>full</csw:ElementSetName>
        <csw:Constraint version="1.1.0">
            <ogc:Filter>
                <ogc:PropertyIsBetween>
                    <ogc:PropertyName>TemporalExtent</ogc:PropertyName>
                    <ogc:LowerBoundary>
                        <ogc:Literal>2016-11-01T00:00:00Z</ogc:Literal>
                    </ogc:LowerBoundary>
                    <ogc:UpperBoundary>
                        <ogc:Literal>2016-11-01T23:59:59Z</ogc:Literal>
                    </ogc:UpperBoundary>
                </ogc:PropertyIsBetween>
            </ogc:Filter>
        </csw:Constraint>
    </csw:Query>
</csw:GetRecords>
```

・Search by observation date and time (2)

Use ogc: PropertyIsGreaterThan, ogc: PropertyIsLessThan

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request5.xml)

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="no"?>
<csw:GetRecords
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:ogc="http://www.opengis.net/ogc"
    service="CSW"
    version="2.0.2"
    resultType="results"
    startPosition="1"
    maxRecords="10"
    outputFormat="application/xml"
    outputSchema="http://www.isotc211.org/2005/gmd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
    <csw:Query typeNames="gmd:MD_Metadata">
        <csw:ElementSetName>full</csw:ElementSetName>
        <csw:Constraint version="1.1.0">
            <ogc:Filter>
                <ogc:And>
                    <ogc:PropertyIsGreaterThan>

<ogc:PropertyName>TemporalExtent</ogc:PropertyName>
                        <ogc:Literal>2016-11-01T00:00:00Z</ogc:Literal>
                    </ogc:PropertyIsGreaterThan>
                    <ogc:PropertyIsLessThan>

<ogc:PropertyName>TemporalExtent</ogc:PropertyName>
                        <ogc:Literal>2016-11-01T23:59:59Z</ogc:Literal>
                    </ogc:PropertyIsLessThan>
                </ogc:And>
            </ogc:Filter>
```

```
            </csw:Constraint>
        </csw:Query>
    </csw:GetRecords>
```

・Search by observation date and time (3)

Use ogc: PropertyIsGreaterThanOrEqualTo, ogc: PropertyIsLessThanOrEqualTo

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request6.xml)

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="no"?>
<csw:GetRecords
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:ogc="http://www.opengis.net/ogc"
    service="CSW"
    version="2.0.2"
    resultType="results"
    startPosition="1"
    maxRecords="10"
    outputFormat="application/xml"
    outputSchema="http://www.isotc211.org/2005/gmd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
    <csw:Query typeNames="gmd:MD_Metadata">
        <csw:ElementSetName>full</csw:ElementSetName>
        <csw:Constraint version="1.1.0">
            <ogc:Filter>
                <ogc:And>
                    <ogc:PropertyIsGreaterThanOrEqualTo>

<ogc:PropertyName>TemporalExtent</ogc:PropertyName>
                            <ogc:Literal>2016-11-01T00:00:00Z</ogc:Literal>
                    </ogc:PropertyIsGreaterThanOrEqualTo>
                    <ogc:PropertyIsLessThanOrEqualTo>

<ogc:PropertyName>TemporalExtent</ogc:PropertyName>
```

```
                        <ogc:Literal>2016-11-01T23:59:59Z</ogc:Literal>
                    </ogc:PropertyIsLessThanOrEqualTo>
                </ogc:And>
            </ogc:Filter>
        </csw:Constraint>
    </csw:Query>
</csw:GetRecords>
```

・Search by coordinate information

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request7.xml)

```
<?xml version="1.0" encoding="ISO-8859-1" standalone="no"?>
<csw:GetRecords
    xmlns:csw="http://www.opengis.net/cat/csw/2.0.2"
    xmlns:ogc="http://www.opengis.net/ogc"
    xmlns:gml="http://www.opengis.net/gml"
    service="CSW"
    version="2.0.2"
    resultType="results"
    startPosition="1"
    maxRecords="10"
    outputFormat="application/xml"
    outputSchema="http://www.isotc211.org/2005/gmd"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.opengis.net/cat/csw/2.0.2
http://schemas.opengis.net/csw/2.0.2/CSW-discovery.xsd">
    <csw:Query typeNames="gmd:MD_Metadata">
        <csw:ElementSetName>full</csw:ElementSetName>
        <csw:Constraint version="1.1.0">
            <ogc:Filter>
                <ogc:Intersects>
                    <ogc:PropertyName>BoundingBox</ogc:PropertyName>
                    <gml:Envelope srsName="EPSG:4326">
                        <gml:lowerCorner>140 40</gml:lowerCorner>
                        <gml:upperCorner>130 30</gml:upperCorner>
```

```
                    </gml:Envelope>
                </ogc:Intersects>
            </ogc:Filter>
        </csw:Constraint>
    </csw:Query>
</csw:GetRecords>
```

Appendix 7-4 Search by CSW 3.0 (HTTP-POST)

・Search result format

GeoJSON,ISO19115,ebRIM,DublinCore

・Search all

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request1.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <Query typeNames="Record">
        <ElementSetName>full</ElementSetName>
    </Query>
</GetRecords>
```

・Example of execution

```
$ curl --header 'Content-Type: application/xml; charset=utf-8;' --data-binary
@request1.xml -o result1.xml https://gportal.jaxa.jp/csw/csw
```

Search all items and the results are output in DublinCore format (OGC CSW default).

・Specifying the result format

Specify the search result format with the attribute outputFormat of the GetRecords tag. The following format can be specified. When specifying xml format as output, also specify outputSchema. If not specified, DublinCore is selected.

Output format	outputFormat	outputSchema
GeoJSON	application/json	-
ISO19115	application/xml	http://www.isotc211.org/2005/gmd
ebRIM	application/xml	urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0
DublinCore	application/xml	http://www.opengis.net/cat/csw/3.0

・GeoJSON
  ・URL
    https://gportal.jaxa.jp/csw/csw
  ・Data to POST (request2.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
outputFormat="application/json"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<Query typeNames="Record">
    <ElementSetName>full</ElementSetName>
</Query>
</GetRecords>
```

・ISO19115
  ・URL
    https://gportal.jaxa.jp/csw/csw
  ・Data to POST (request3.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
outputFormat="application/xml"
outputSchema="http://www.isotc211.org/2005/gmd"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<Query typeNames="Record">
    <ElementSetName>full</ElementSetName>
</Query>
</GetRecords>
```

・ebRIM
  ・URL
    https://gportal.jaxa.jp/csw/csw

・Data to POST (request4.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
outputFormat="application/xml"
outputSchema="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<Query typeNames="Record">
    <ElementSetName>full</ElementSetName>
</Query>
</GetRecords>
```

・DublinCore

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request5.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
outputFormat="application/xml"
outputSchema="http://www.opengis.net/cat/csw/3.0"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<Query typeNames="Record">
    <ElementSetName>full</ElementSetName>
</Query>
</GetRecords>
```

・Specify the number of results

csw: Specify the number of search results in attribute maxRecords of GetRecords tag. The default is 10 and the maximum is 3000.

You can also specify the start location of the search result in the attribute startIndex.

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request6.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
outputFormat="application/json"
startPosition="4"
maxRecords="3"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <Query typeNames="Record">
        <ElementSetName>full</ElementSetName>
    </Query>
</GetRecords>
```

・Specify search conditions

GetRecords / Query / Constraint / fes: Specify search conditions in the Filter tag. Items that can be specified as search criteria are as follows.

Search entry	String specified in request xml
Dataset ID	datasetId
identifier	identifier
Coordinate information	footprint
updateTime	updateTime
polar stereo	pseq
acquisitionType	acquisitionType
imageQualityDegradation	imageQualityDegradation
processingDate	processingDate
processingLevel	processingLevel
beginPosition	beginPosition
endPosition	endPosition
satelliteName	satelliteName
sensorName	sensorName

Search entry	String specified in request xml
operationalMode	operationalMode
wrsLongitudeGrid	wrsLongitudeGrid
wrsLatitudeGrid	wrsLatitudeGrid
orbitNumber	orbitNumber
lastOrbitNumber	lastOrbitNumber
acrossTrackIncidenceAngle	acrossTrackIncidenceAngle
polarisationChannels	polarisationChannels
daynight	daynight
version	version
cloudCoverPercentage	cloudCoverPercentage
totalQualityCode	totalQualityCode
physicalQuantity	physicalQuantity
Resolution	Resolution
numberMissingData	numberMissingData
sceneNumber	sceneNumber
orbitDirection	orbitDirection
tileHNo	tileHNo
tileVNo	tileVNo
tiltSegmentNumber	tiltSegmentNumber
EC_FrameID	EC_FrameID
RSPPathNumber	RSPPathNumber
sensorNumber	sensorNumber
offNadirAngle	offNadirAngle
orbitStatus	orbitStatus
SensorRollAngle	SensorRollAngle
FireCounts	FireCounts
SunZenithAngle	SunZenithAngle
observationIdentifier	observationIdentifier
ProcessTimeUnit	ProcessTimeUnit
parentIdentifier	parentIdentifier
Title	Title
Abstract	Abstract

Search entry	String specified in request xml
TopicCategory	TopicCategory
AnyText	AnyText

・Search by identifier (granule ID)

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request7.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
outputFormat="application/json"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:fes="http://www.opengis.net/fes/2.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <Query typeNames="Record">
        <ElementSetName>full</ElementSetName>
        <Constraint version="1.1.0">
            <fes:Filter>
                <fes:PropertyIsEqualTo>
                    <fes:ValueReference>identifier</fes:ValueReference>

<fes:Literal>GW1AM2_20151200_01M_EQMA_L3SGCLWHD2210210</fes:Literal>
                </fes:PropertyIsEqualTo>
            </fes:Filter>
        </Constraint>
    </Query>
</GetRecords>
```

・Search by satellite, sensor name

The search condition for the satellite name and sensor name is combined with and.

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request8.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
outputFormat="application/json"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:fes="http://www.opengis.net/fes/2.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <Query typeNames="Record">
        <ElementSetName>full</ElementSetName>
        <Constraint version="1.1.0">
            <fes:Filter>
                <fes:And>
                    <fes:PropertyIsEqualTo>
                        <fes:ValueReference>satelliteName</fes:ValueReference>
                        <fes:Literal>ALOS</fes:Literal>
                    </fes:PropertyIsEqualTo>
                    <fes:PropertyIsEqualTo>
                        <fes:ValueReference>sensorName</fes:ValueReference>
                        <fes:Literal>PRISM</fes:Literal>
                    </fes:PropertyIsEqualTo>
                </fes:And>
            </fes:Filter>
        </Constraint>
    </Query>
</GetRecords>
```

・Search by observation date and time (1)

Use fes: PropertyIsBetween

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request9.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
```

```
outputFormat="application/json"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:fes="http://www.opengis.net/fes/2.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <Query typeNames="Record">
        <ElementSetName>full</ElementSetName>
        <Constraint version="1.1.0">
            <fes:Filter>
                <fes:PropertyIsBetween>
                    <fes:ValueReference>beginPosition</fes:ValueReference>
                    <fes:LowerBoundary>
                        <fes:Literal>2016-11-01T00:00:00Z</fes:Literal>
                    </fes:LowerBoundary>
                    <fes:UpperBoundary>
                        <fes:Literal>2016-11-01T23:59:59Z</fes:Literal>
                    </fes:UpperBoundary>
                </fes:PropertyIsBetween>
            </fes:Filter>
        </Constraint>
    </Query>
</GetRecords>
```

・Search by observation date and time (2)

Use fes: PropertyIsGreaterThan, fes: PropertyIsLessThan

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request10.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
outputFormat="application/json"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:fes="http://www.opengis.net/fes/2.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <Query typeNames="Record">
```

```
        <ElementSetName>full</ElementSetName>
        <Constraint version="1.1.0">
            <fes:Filter>
                <fes:And>
                    <fes:PropertyIsGreaterThan>
                        <fes:ValueReference>beginPosition</fes:ValueReference>
                        <fes:Literal>2016-11-01T00:00:00Z</fes:Literal>
                    </fes:PropertyIsGreaterThan>
                    <fes:PropertyIsLessThan>
                        <fes:ValueReference>beginPosition</fes:ValueReference>
                        <fes:Literal>2016-11-01T23:59:59Z</fes:Literal>
                    </fes:PropertyIsLessThan>
                </fes:And>
            </fes:Filter>
        </Constraint>
    </Query>
</GetRecords>
```

・Search by observation date and time (3)

Use ogc: PropertyIsGreaterThanOrEqualTo, ogc: PropertyIsLessThanOrEqualTo

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request11.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
outputFormat="application/json"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:fes="http://www.opengis.net/fes/2.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <Query typeNames="Record">
        <ElementSetName>full</ElementSetName>
        <Constraint version="1.1.0">
            <fes:Filter>
                <fes:And>
```

```
                    <fes:PropertyIsGreaterThanOrEqualTo>
                        <fes:ValueReference>beginPosition</fes:ValueReference>
                        <fes:Literal>2016-11-01T00:00:00Z</fes:Literal>
                    </fes:PropertyIsGreaterThanOrEqualTo>
                    <fes:PropertyIsLessThanOrEqualTo>
                        <fes:ValueReference>beginPosition</fes:ValueReference>
                        <fes:Literal>2016-11-01T23:59:59Z</fes:Literal>
                    </fes:PropertyIsLessThanOrEqualTo>
                </fes:And>
            </fes:Filter>
        </Constraint>
    </Query>
</GetRecords>
```

・Search by coordinate information

・URL

https://gportal.jaxa.jp/csw/csw

・Data to POST (request12.xml)

```
<?xml version="1.0" encoding="UTF-8"?>
<GetRecords
service="CSW"
version="3.0.0"
outputFormat="application/json"
xmlns="http://www.opengis.net/cat/csw/3.0"
xmlns:fes="http://www.opengis.net/fes/2.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <Query typeNames="Record">
        <ElementSetName>full</ElementSetName>
        <Constraint version="1.1.0">
            <fes:Filter>
                <fes:Intersects>
                    <fes:ValueReference>footprint</fes:ValueReference>
                    <fes:Literal>POLYGON((130 30,140 30,140 40,130 40,130
30))</fes:Literal>
                </fes:Intersects>
            </fes:Filter>
```

```
            </Constraint>
        </Query>
    </GetRecords>
```