# G-Portal

# User's manual

Revision H

February 14, 2025 Japan Aerospace Exploration Agency

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Revision History

Revision	Date	Description				
1.0	March 9, 2018	First Edition				
А	September 2,	8.1				
	2019	Add the recommended OS and browsers that have been				
		checked for operation.				
В	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,	4.4				
	2021	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.				

Е	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.		
Н	February 14,	1, 3		
	2025	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").

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.		

Table	1.2-1	User	Type
I UDIC	<b>T</b> • • • • •	0001	1,00

## 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.

	Chapter	Applicable Users			
Provided Service	Section	Guest	Registered	Specified	
User Authentication	2.2	-	03013	03013	
User Registration	2.1	0	_	_	
Change user information	5.2	_	0	0	
Delete user information	5.3	_	0	0	
Change password	5.4	_	0	0	
Reissue password	2.3.2		0	0	
Public key registration	3.3.1			0	
Browse notifications (system	6.5				
maintenance information, release		0	0	$\circ$	
information, Web page update		0	0	0	
information)					
Search and browse products	4.1	0	0	0	
Download products(WEB)	4.3	_	0	0	
Download products(SFTP) (*2)	3	—	0	O(*1)	
Produce the product	4.4		0	0	
Process a product	4.5	_	0	0	
	4.6		0	0	
Browse and acquire spacecraft	6.2.1				
sensor operating information (such					
as quality information, data missing		0	0	0	
information, TLE information, orbit					
information)					
Browse and acquire product	6.3				
documentation (such as user's		0	0	0	
manual, format definitions)					
Browse and acquire tools related to	6.4	0	0	0	
products		0	0	0	
Send inquiries to the support desk	7	0	0	0	

Table 1.3-1 Product Services for Each Type of User

\*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.

Control of the second sec	espend B. Please check "I agree with the bove terms of service" If agree the above terms of service GMAP EDLA 10 UN	
Annual Control of Cont	. Click "I Agree - Continue" If agree to the above thema of service LAgree & Continue (Do that Agree	

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.



<b>G - Portal</b> Glaber Partal System First of all, search the data	Terms of Use	2 Enter registration information	Confirm registration information	Temporary registration completed	<b>S</b> Registration completed	
ny seak for registration and server and ser	User Registra Loer account 'tat_tore.or' G-PortaiThank you tor your Back to top of thits service 8. Regist	is successfully representations. You of the successfully representation of the success	/5: G-Portal	Registration various services.	completed	
Iddis / decumints         >           Support / inquiry         >           Announcement         >           Search Hild star         >						

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.

 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.







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



 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.

G-Portal		Back to Top	For First-time users   Sup	oport   U	sago 🛛 💶 Log off	: sat_taro_cr
c Call out saved search criteria to Save the search criteria		Change the bac	kground map Google Street	•	J His	de the guidanc
Refine your search 2. Select the period 3. Specify the region	Gi Gu	idance: Re	fino soarch			
select by physical quantity Select by spacecraft / sensor	0.0	dunce. no	into sourch			
. Setting the criteria						
where Scouth has workfloor	Outline of m	moning down	the criteria by physical quantit	y		
	You can ret	ine products by	physical quantity such as preci-	citation or	a surface temperati	ure and
E D Pracinitation	sected allow					
► D Cead	You can als	in talent all here	backing folders on the loss.			
> O Water Vapor						
b D im Radiation Balance	Physical supathies are these in the following list. They may be changed coverses/ing to the					
	1 112 21 221	register destruction				to the
ED Aarosol	spacecraft	operation	with it are retreating the time? Its	ay us shart	get corresponding t	to the
<ul> <li>D ▲ Aerosol</li> <li>D ■ Redence</li> </ul>	spacecraft	operation.	and an encoding out may re-	ay us chart	The constraints a	to the
Aerosol     Aerosol     O ar Aerosol     O ar Aerosol     O ar Advance     O ar Aerosopheric Corrected Reflectance	spacecraft	operation.	Grave 3	Group 1	gee corresponding t	Gro
Comparison particle     Comparison     Compari	cpacecraft Croup 1	operation Group 2 Precisitation	Group 3 Amount of Presidentian	Group 1	Group 2	Critica Critica
	spacecraft Group 1 Atmosphere	operation. Group 2 Presiptation	Group 3 Amount of Procidentian Percentation	Group 1 Tomotrial	Group 2 Cross Park	Critica Story Destri
Construction Instruction     Construction     Constr	cpacecraft Croup 1 Atmecphysic	operation. Group 2 Precipitation	Group 3 Known et Pasisteton Pasipation Casultanter Norse 2: 4: Distribution	Group 1 Tomoch ini	Group 2 Group 2 Group Pask	Critica Show Englin Show Englin Show Engline Show Coverned A
I )    I	cpacecraft Croup 1 Attracohom	operation. Group 2 Procipitation	Creep 3 Known of Pescipiteton Presipitetion Cescification Portice Size Datification Court Mean Cescification Face	Group 1 Tomotrial	Group 2 Group 2	Cr Story Desth Story Desth Story Draw Sin Story Covered / Land-Covered /
13 Annual     14 Annual     15 Annual     16 Annual	cpacecraft Croup 1 Attracohore	operation. Group 2 Presignation Cloud	Creep 3 Answer of Peopletann Proceeding Description Particle Scie Distribution Diod Mack Cossification Flag Diod Mack	Group 1 Tomoth at	Group 2 Crow Pask Cell Molthurs	Critical Show Destri Show Share Show Show Covered A Land-Surface To Soll Mataure
Diff America     Diff America     Diff America     Diff America     Diff America     Diff Contractor	spaceeraft Croup 1 Atmeestern	operation. Group 2 Procipitation Cloud	Croup 3 Known of Pacipletion Pacipletin Casufaction Particle Sue Outroution Cloud Read Casufaction, Farg Cloud Reads Cloud Reads	Group 1	Group 2 Crow Pack Cell Moleture	Con Snow Destri Snow Snorth Snow Covered A Land-Covifice To Sold Molthure Atmospherically
1 Dia Annoni     1 Dia Annoni     1 Dia Annonine     1 Dia Annonine     1 Dia Annonine     1 Dia Annonine     1 Dia Senie     1 Dia Senie	cpacceraft Croup 1 Amendation	operation. Group 2 Procipitation Cloud	Crow 3 Annuer of Brackmenn Perspherics Cestification Perspherics Cestification Doed Press Cloud Press Cloud Press Cloud Press Cloud Press Cloud Press Cloud Press Cloud Press	Group 1	Group 2 Crow Park Cell Methans Rediance, Reflectores	Critica Show Dooth Show Dooth Show Dooth Show To Show Covered A Land-Sourbox To Soil Matchine Shreesharitesky Surface Kerlech
O B Annex     O B Annex	Croup 1 Atmosphere	Operation Group 2 Prospitation Cloud	Crew 3 Known of Exconetion Prophetics Descharter Proceed Section Section Cover Massi Costofication Fag Cover Prastic Charter Result Charter Environment Charter Result Charter Environment Activities Result Charter Environment Activities Result Charter	Group 1 Tomachia	Group 2 Cnow Park Cell Moletare Regioner, Xelfactore Vegetation	Crow Depth Snow Depth Snow Depth Snow Covered A Land-Corfees To Coll Matchine Atmospharically Surface Reflect Verpharper The
1 - DB Annex	cpaceeraft Croup 1 Athreation	Operation. Group 2 Presipter on Cloud	Croup 3 Annuer of Rescitement Personianis Constitution Personianis Constitutions Device See Distribution Could Person Could Person Could Person Charter Chestro Annual Chestro Could Person Chestro Person Could Person Chestro Person Chestro Person Chestro Chestro Person Chestro C	Group 1	Crowp 2 Crow Pata Cell Moltare Restance, Reflectore Vegetation	Crist Crists Destri Shave Gean Sile Shave Counted A Shave Counted A Sal Malature Atmospherically Surface Reflects Vegetation Pro- Norma Laid D Ph
	Episcocraft Croup I Attractions	operation. Group 2 Postpheten Cloud	Crear 3 Ansate of Residences Parameters Constraints Parameters Constraints Parameters Constraints Constraints Constraints Constraints Charter Result Data Constraints Constraints Result Data Constraints Constraints Constraints Parameters Constraints Constraints Parameters Constraint	Group 1 Torrecti al	Group 2 Crice Para Cell Moltare Radiance Radianteros Vegetation	Crew Destri Snow Destri Snow Destri Snow Covered A Land-Surface 7 Soll Motours Atmospharisally Surface Rarlaco Vegetation Para Norma Izad D Ph Index
10 Anno      10 Anno     10 Anno      1	cpacecraft Croup L Attectorium	Operation. Group 2 Prospitation Could	Crow 3 Annuer of Resolution Providence of Resolution Providence Galactication Provide Galactication Cloud Record Cristian Cloud Record Cloud Record	Group 1	Group 2 Crew Data Crew Data Cell Mothan Raillenes, Rafresteren Vegelation	Critical Distance Critical Distance Vegetation Plana
Clin Average     Constant Reference	cpacecrapt Crosp1 Attraction	operation. Group 2 Periptar on Cloud	Cone 3 Answer Pauloting Control (1997) Prophetic Constitution Proceeding Control (1997) Cone Annuel Christian Resource Christian Resource Christian Resource Christian Resource Christian Cone Annuel Christian Resource Christian Christian Christian Christian Christian Christian Christian Resource Christian Resource Christian	Group 1	Group 2 Group 2 Znow Para Cell Molthare Radianes Reference Vegetation	Construction Show Goots Show Goots Site Show Covered A Land-Curfee To Sat Mateurs Annosharisally Sathos Raflects Vegetation Para Norma Laid D Pu Index Enhances Unglit Dealtree Index

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

## 2.2.3. Login on a pop-up window

G - Portal Globe Portal System		日本語 ENGLISH 人名
	You need to log in to access the specified URL. Please enter your login information.	1
	User account : Password :	
	Login Clear	
	For user registration, click <u>here</u> If you have forgot your password, click <u>here</u> / If you have forgot your accou	nt, click <u>here</u>

1) The pop-up "login" window appears through

https://gportal.jaxa.jp/gpr/auth



 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.



## 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.

	G-Portal offers earth observation data free of charge for use in various fields.	
First of all, search the data you seak for registration required * income for constant. Search by Theories a constitution		11/
Projektar operative set of the set of t	INFO [2017/08/29] TRMM Products are Released Now!	The second se
Log of Herbits	TRMM Products are updeted and whese dias product vectors 5 and algorithm vectors 8.	
Tech / Assumates Bageont / Ingalog Announcement Scored market Scored market	It Wariation of Precipitation using the It was a service y Variation of TRMM/PR TRMM/PR TRMM/PR TRMM/PR → TRMM/PR	
Dem Dation Dem Dation Dem Annenouse Exponention Agency	See All Use rates	

- (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.

	Top > User Account Service
G - Portal Globe Portal System	User account service
First of all, search the data you seek (no registration required)	Various user account services Change user information
* <u>Exclusion</u> separat for developed. Generic by:	You can change your user information and registered outprend outprend.
Physical quantities	2. Click "Browse"
Direct download	Uplead pup 155 SFTP Browsen, Please select a file. Upload
Log of : text205	If you have access to SFID and used your public key file have. Prevent and the second provided your public key file have. Download S. Click "Upload"
For first-time users  Product information / spectrum Tech / documents	Per those while care not create a private key / subtic key. O Period system automatically generates the key in the system. Piezoe set the downloaded secret key as your SFTP tool and use it.
Support / Insulty	The number of search results to display: 25 Change
Announcement >	Change the maximum number of cearch results displayed on the search screen, up to 3,000 results.
Sough Custom Sea	Guidence display: @Display ONon-desplay Change
	Change guidance display
Convigit & Japan Aerospace Exploration Agency	Delete user information
	Mente Man Internation

## 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.

G - Portal Globe Portal System	G-Portal offers earth observation data free of charge for use in various fields.
First of all, search the data you seek ino resistration	
+ea.ived	
<ul> <li><u>Earling to consider</u>, sound for consided.</li> </ul>	
Deed by Physical quartities	
grangeladiest, maaari pales, atta	
Spacecraft >	
Direct download	
	INFO (2017/09/23) TRMM Products are Released Now! TRMM Products are updated and released at product vector 5 and algorithm vector 5.
Logot hol25	
Low account service	-
Polut chondes / a	
Tests / decements 1. Clic	k "User account service"
Support / Imaxing	ly Variation of Precipitation using the
Amouncement.	
Scoole Custom Sea	
DAB (MUR	
JAKA	
Copyright & Japan Avrenzeux Explored ion Agency	See All USE PERSON

(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.

	Top > User Account Service
G-Portal	User account service
First of all, search the data	Various user account services
you seek two registration	Change user information
· Exclusion required for download.	You can change your user information and registered password.
Search har	Chappe parquord
Physical quartities > avestites, severates, etc.	2. Click "Donwload"
Direct download	If you have P, you can upload your public key file here.
L Log of Houses	Please so now to create a key
User account service 🔹 🕨	How to Juire the private key and automatically register the public key using the function of G-Portal
Far feet time asses 🔰	Lowinidad
Poduct information / speciation	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.
Tech / documents	
Support/Houry	The number of search results to display: 2s Change
Amourcament 🔰	Change the maximum number of search results displayed on the search screen, up to 3000 results.
Sound the star	Guidance display:
	Change guidance display
-JARA Logerari e Jose Arrester	Delete user information
Exponentian Agency	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	A private key corresponding to the public
* Specific user only	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

- 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))

Setup - WinSCP	
	Welcome to the WinSCP Setup Wizard
	This will install WinSCP 5.5.6 on your computer.
	It is recommended that you close all other applications before continuing.
G'	Click Next to continue, or Cancel to exit Setup.
Help	3 Next > Cancel

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))

🦻 Setup - WinSCP	×
Setup type What type of setup do you want?	<b>R</b>
Typical installation (recommended)     Installs to default destination     installs all components, but no translations     enables most typical features	
Qustom installation - allows full selection of destination, components and features	
Help     < Back	Cancel

Image 3.3-7

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

Setup - WinSCP		x
Initial user settings Please, select your pre	ferred user interface options.	
8 User interface style © Commander	- two panels (left for local directory, right for remote directory) - keyboard shortcuts like in Norton Commander (and other similar programs as Total Commander, Midnight Commander) - drag & drop to/from both panels	
C Explorer	- only remote directory - keyboard shortcuts like in Windows Explorer - drag & drop	
	9	
Help	<back next=""> Cancel</back>	

Image 3.3-8

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

🦻 Setup - WinSCP	• ×
Ready to Install Setup is now ready to begin installing WinSCP on your computer.	<b>R</b>
Click Install to continue with the installation, or click Back if you want to review or change any settings.	
Destination location: C:¥Program Files¥WinSCP Setup type: Typical installation Selected components: WinSCP application Drag & drop shell extension (allows direct downloads, may require restart) Pageant (SSH authentication agent) PuTTYgen (key generator)	E
Translations English	•
Help < Back Install	Cancel

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))

🌆 Login	
I New Site 2 4	Session File protocol: SFTP Host name: ftp.gportal.jaxa.jp User name: Password: TEST001 Save V Advanced V
<u>Iools</u>	5 Login V Close Help

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))

Passwo	rd - ftp.gportal.jaxa.jp		
-	Searching for host		
	Connecting to host		
	Authenticating		
	Using username "Test001".		
Passwor			
·			
	OK Cancel Help		

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.

🌆 Login	
(1) (3)	Session File protocol: FTP Host name: ftp.gportal.jaxa.jp User name: Eassword: TEST000001 Save Advanced
<u>T</u> ools ▼ <u>M</u> anage ▼	Close Help

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))

Advanced Site Settings	? <mark>×</mark>	
Environment Directories Recycle bin SFTP Shell Connection Proxy Tunnel SSH Key, exchange Authentication Budge	Bypass authentication entirely (SSH-2) Authentication options     Attempt authentication using Pageant     Attempt TIS or CryptoCard authentication (SSH-1)     Attempt 'keyboard-interactive' authentication (SSH-2)     @ Respond with password to the first prompt  Authentication parameters     Allow agent forwarding     Private key file:     C:\pri.ppk	
Color V	GSSAPI  Attempt QSSAPI authentication (SSH-2)  Allow GSSAPI gredential delegation  OK Cancel Help	

Image 3.3-15

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

💑 Login		- • -
Vew Site	Session File protocol: SFTP Host name:	Port number:
	TEST00001	d:
	8 Degin V Co	se Help

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.

Sa Key passphrase - ftp.gportal.jaxa	
Searching for host	
Connecting to host	
Authenticating	
Using username "TEST000001".	
Authenticating with public key "rsa-key-20120105".	
9	
"Rassphrase for key.'tsa-key:20120105':	
Remember password for this session	
10 OK Cancel Help	

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.

🌆 02 - ftp.gportal.jaxa.jp	- WinSCP				
Local Mark Files Con	mmands Se	ession Options Rer	note Help		
🖶 🚟 😂 Synchronize	I 🗖 🧈 🛛	🛐   🎲 🎒 Queue	- Transfer Settings Defa	sult - 🥵 -	
ftp.gportal.jaxa.jp	New Ses	sion			
C: OSDiek	. 🛋 🖂 🗌		A 2 3	🔁 0.2 🛤 🔽 🦛 😂 😂 🥠 🕮 🗅 Find Files	9_
					·····
I 🔄 Opioad 👻 🖉 Edit	* 🛪 🖆 4	2 Properties		I i Download - A Edit - 🗙 📸 Lig Properties 📑 🕞 I 🛨 🖃 💟	
C:¥Users¥005847¥Deskto	ор			/standard/TRMM_GPMFormat/TRMM.PR/1B.PR/05A/2007/11/02	_
Name	Size	Туре	Changed	Name Size	Changed _
🔒		Parent directory	2017/06/15 15:12:17	🔒 <u></u>	2017/09/
				GPMTRM_KUR_0711020004_0136_056766_1BS_PU1_05 130,61	2017/09/
				GPMTRM_KUR_0711020136_0309_056767_1BS_PU1_05 130,45	2017/09/
				GPMTRM_KUR_0711020309_0441_056768_1BS_PU1_05 131,19	2017/09/
				GPMTRM_KUR_0711020441_0613_056769_1BS_PU1_05 130,39	2017/09/
				GPMTRM_KUR_0711020613_0746_056770_1BS_PU1_05 128,49	2017/09/
				GPMTRM_KUR_0711020746_0918_056771_1BS_PU1_05 130,45	2017/09/
				GPMTRM_KUR_0711020918_1051_056772_1BS_PU1_05 129,97	2017/09/
				GPMTRM_KUR_0711021051_1223_056773_1BS_PU1_05 130,69	2017/09/
				GPMTRM_KUR_0711021223_1355_056774_1BS_PU1_05 130,83	2017/09/
				GPMTRM_KUR_0711021355_1528_056775_1BS_PU1_05 130,60	2017/09/
				GPMTRM_KUR_0711021528_1700_056776_1BS_PU1_05 131,12	2017/09/
				GPMTRM_KUR_0711021700_1833_056777_1BS_PU1_05 131,33	2017/09/
				GPMTRM_KUR_0711021833_2005_056778_1BS_PU1_05 131,43	2017/09/
				GPMTRM_KUR_0711022005_2137_056779_1BS_PU1_05 131,08	2017/09/
				GPMTRM_KUR_0711022137_2310_056780_1BS_PU1_05 129,50	2017/09/
				COMTOM VID 0711022210 0042 056701 10C 0111 05 120 04	2017/00/ *
0 B of 0 B in 0 of 0			1 hidde	n 0 B of 2,041 MB in 0 of 16	
				🔒 SFTP-3 🗐	0:00:54

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.



 Intervention
 Description
 Description

 Contraction
 Contraction
 Outdance: Refine search

 Contraction
 Contraction
 Non-Contraction
 Non-Contraction

 Contraction
 Contraction
 Non-Contraction
 Non-Contraction

 Contraction
 Contraction
 Non-Contraction
 Non-C

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.

 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
- $\boldsymbol{\cdot}$  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 partwindow. "Search"button can clickunder setting a spacecraft sensor,physical quantities and observationdata.



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 chosenspacecraft 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).

So The second secon

## 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")



 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.

Select by physical quark? Select by represent / remove 1. Setting the criteria Refers Search by word[informed] Seccerative sensore, physical quarkities Information, Seccerative sensore, physical quarkities Information, Conversional Conversional Conversiona Conversional Conversional Conversional Con	E.
	HI C
4.2.11 Check mylist (only registered users)	
4.2.1 Check search results with a list	00 10 10091, 71, 10191 14 14 14 14 14 14 14 14 14 14 14 14 14
Show the last Consists Automatical     Ny Last (hyper researce)     Show the last (hyper researce)     Production status (hyper re	e the list
4.2.2 Check search results with thumbnails	Hy Hy
	Ny . Ny
4.2.9 Save search results to mylist	Hy .
(only registered users) 2017-09-10 06-09-42.037 Cetato Countered 2017-09-10 06-09-42.037 Cetato	Hy
[Download the list dialog]	
Download the list       4.2.5 Save search results in CSV format         Select the output format       Search         Image: Output in CSV format       Search         Coutput in KML format       Determine         Cancel       Proc	

[Search results window]

# 4.2.1. Check search results with a list

[List display]

			0	a		0.1.1	8 J	
	Product	Physical quantities	Spacecraft / sensor	Observation starting date(UTC	Observation ended date(UIC)	Details	Data manipulation	My List
2	L1B-Brightness temperature(TB)	Brightness Temperature	GCOM-W1/AMSR-2	2017-09-05 05:41:48.068	2017-09-05 06:31:10.283	Details	Download	Add to My List
3	L1B-Brightness temperature(TB)	Brightness Temperature	GCOM-W1/AMSR-2	2017-09-05 06:31:11.783	2017-09-05 07:20:41.496	Details	Download	Add to My List
3	L1B-Brightness temperature(TB)	Brightness Temperature	GCOM-W1/AMSR-2	2017-09-07 05:29:28.476	2017-09-07 06:18:49.191	Details	Download	Add to My List
3	L1B-Brightness temperature(TB)	Brightness Temperature	GCOM-W1/AMSR-2	2017-09-07 06:18:50.691	2017-09-07 07:08:17.403	Details	Download	Add to My List
3	L1B-Brightness temperature(TB)	Brightness Temperature	GCOM-W1/AMSR-2	2017-09-08 06:12:43.898	2017-09-08 07:02:04.612	Details	Download	Add to My List
3	L1B-Brightness temperature(TB)	Brightness Temperature	GCOM-W1/AMSR-2	2017-09-08 07:02:06.112	2017-09-08 07:51:35.824	Details	Download	Add to My List
3	L1B-Brightness temperature(TB)	Brightness Temperature	GCOM-W1/AMSR-2	2017-09-10 06:00:21.313	2017-09-10 06:49:42.027	Details	Download	Add to My List
3	L1B-Brightness temperature(TB)	Brightness Temperature	GCOM-W1/AMSR-2	2017-09-10 06:49:43.527	2017-09-10 07:39:13.240	Details	Download	Add to My List

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]

st of search r	esult						
ihow the list	Display thumbnail My Lie	(login required) Save the	list (login required) Prod	luction status (login required)			
Add selected p	product(s) to My List					Download the list	Save the
Product	L1B-Brightness temperature(TB)	L1B-Brightness temperature(TB)	L1B-Brightness temperature(TB)	L1B-Brightness temperature(TB)	L1B-Brightness temperature(TB)	L1B-Brightness temperature(TB)	
Thumbnail							
Earth physical quantity	Brightness Temperature						
Spacecraft / sensor	GCOM-W1/AMSR-2	GCOM-W1/AMSR-2	GCOM-W1/AMSR-2	GCOM-W1/AMSR-2	GCOM-W1/AMSR-2	GCOM-W1/AMSR-2	
Observation starting date and time	2017-09-05 05:41:48.068	2017-09-05 06:31:11.783	2017-09-07 05:29:28.476	2017-09-07 06:18:50.691	2017-09-08 06:12:43.898	2017-09-08 07:02:06.112	
Observation ended date and time	2017-09-05 06:31:10.283	2017-09-05 07:20:41.496	2017-09-07 06:18:49.191	2017-09-07 07:08:17.403	2017-09-08 07:02:04.612	2017-09-08 07:51:35.824	
Details	Details	Details	Details	Details	Details	Details	
Operation	Download	Download	Download	Download	Download	Download	
My List	Add to My List	Add to My List	Add to My List	Add to My List	Add to My List	Add to My List	
				1			1

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]

List of	search result							
Show	the list Display thumbn	ail My List (login required)	Save the list (login red	quired) Production status (	ogin required)			
Ad	I selected product(s) to My	List					Download the	list Save the list
	Product	Physical quantities	Spacecraft / sensor	Observation starting date(UT	C Observation ended date(UTC	Details	Data manipulation	My List
	L1B-Brightness temperature(TB)	Brightness Temperature	GCOM-W1/AMSR-2	2017-09-05 05:41:48.068	2017-09-05 06:31:10.283	Details	Download	Add to My List
	L1B-Brightness temperature(TB)	Brightness Temperature	GCOM-W1/AMSR-2	2017-09-05 06:31:11.783	2017-09-05 07:20:41.496	Details	Download	Add to My List



#### [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.

	aveu sea	i ch chteria	- Save the	Search crite	
. Refine your	search	2. Select t	he period	3. Specify	/ the regio
Specify the pe	riod S	pecify the sea	ison		
2. Specify	the obs	ervation d	ate		
Search the peri	iod entered				
Enter the obs	servation	date (YYYY/	MM/DD) or s	pecify on the	table belov
by clicking.	aar Mont	h and Davit	2017/00/05	~ 2017/00/	12
	eal, Mont	n anu Dayr.	2017/09/05	2017/09/	
Add observ	auon uau	e to search			
	1969	1979	1989	1999	2009
	Dec	Nov	Nov	Nov	Nov
GCOM-W1 AMSR-2					
COMB					
TRMM ENV_AUX					
PR					
PR-TMI (COMB)					
GPM Constellation satellit	es				
TRMM TMI		+			
TRMM VIRS					
					6
	V			KLOLI	v.
		-	e 1		
		<u>ر</u>	Search		

 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.

Shov	the list Display thumbr	ail My List (0 data registered)	Save the list (0 dat	ta registered)	Production sta	tus (0 products requested)				
A	ld selected product(s) to My	List						Download the	list Save the I	st
	Product	Physical quantities	Spacecraft / sensor	Observation st	arting date(UTC	Observation ended date(UTC)	Details	Data manipul	My List	
	L2-Precipitation(PRC)	Amount of Precipitation	GCOM-W1/AMSR-2	2017-09-05	01:34:33.002	2017-09-05 02:23:59.713	Details	Download	Add to My List	
	L2-Precipitation(PRC)	Amount of Precipitation	GCOM-W1/AMSR-2	2017-09-05	00:45:10.784	2017-09-05 01:34:31.502	Details	Download	Add to My List	
	L2-Precipitation(PRC)	Amount of Precipitation	GCOM-W1/AMSR-2	2017-09-05	02:24:01.213	2017-09-05 03:13:24.927	Details	Download	Add to My List	
	L2-Integrated Water Vapor(TPW)	Integrated Water Vapor	GCOM-W1/AMSR-2	2017-09-05	00:45:10.784	2017-09-05 01:34:31.502	Details	Download	Add to My List	
	L2-Integrated Water Vapor(TPW)	Integrated Water Vapor	GCOM-W1/AMSR-2	2017-09-05	01:34:33.002	2017-09-05 02:23:59.713	Details	Download	Add to My List	
	L2-Integrated Water Vapor(TPW)	Integrated Water Vapor	GCOM-W1/AMSR-2	2017-09-05	02:24:01.213	2017-09-05 03:13:24.927	Details	Download	Add to My List	
	L2-Integrated Water Vapor(TPW)	Integrated Water Vapor	GCOM-W1/AMSR-2	2017-09-05	03:13:26.427	2017-09-05 04:02:54.641	Details	Download	Add to My List	Ų
2 7 t	Fave the list The current sea he search resu updated during Name:	arch result can be s It. The product ver the storage period.	aved. Log i sion and inf	n to read	d out may be	]				
			3	Save	Close					

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]

L	ist of	f search result								Į	
Γ	Show	the list Display thumbnail	My List (0 data registered)	Save the list (0 dat	a registered)	Production sta	tus (0 products requested)				
	Ad	Id selected product(s) to My Lis							Downloa	d the list Save the lis	t î
		Product	antities	Spacecraft / sensor	Observation st	arting date(UTC	Observation ended date(UTC)	Details	Data ma	My List	
		L2-Precipitation(PRC)	A	GCOM-W1/AMSR-2	2017-09-05	01:34:33.002	2017-09-05 02:23:59.713	Details	<b>Dov</b> 2	Add to My List	
L										Add to Mu	

#### [Thumbnail]

List of search r	result						
Show the list	Disolay thumbnail My List	: (0 data registered) Save	the list (0 data registered)	Production status (0 product	s requested)		
Add selected	product(s) to My List					Download the li	st Save the list
		1					
Product	L2-Precipitation(PRC)	Precipitation(PRC)	L2-Precipitation(PRC)	L2-Integrated Water Vapor(TPW)	L2-Integrated Water Vapor(TPW)	L2-Integrated Water Vapor(TPW)	
Thumbnail			е Р С				
Earth physical quantity	Amount of Precipitation	Amount of Precipitation	Amount of Precipitation	Integrated Water Vapor	Integrated Water Vapor	Integrated Water Vapor	
Spacecraft / sensor	GCOM-W1/AMSR-2	GCOM-W1/AMSR-2	GCOM-W1/AMSR-2	GCOM-W1/AMSR-2	GCOM-W1/AMSR-2	GCOM-W1/AMSR-2	
Observation starting date and time	2017-09-05 01:34:33.002	2017-09-05 00:45:10.784	2017-09-05 02:24:01.213	2017-09-05 00:45:10.784	2017-09-05 01:34:33.002	2017-09-05 02:24:01.213	
Observation ended date and time	2017-09-05 02:23:59.713	2017-09-05 01:34:31.502	2017-09-05 03:13:24.927	2017-09-05 01:34:31.502	2017-09-05 02:23:59.713	2017-09-05 03:13:24.927	
Details	Details	Details	2 Details	Details	Details	Details	
Operation	Download	Download	Download	Download	Download	Download	
My List	Add to My List	Add to My List	Add to My List	Add to My List	Add to My List	Add to My List	

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]

ist of search	result					Ľ
Show the list	Display thumbnail	My List (0 data registered)	Save the list (3 data registered)	F 1 status (0 produ	cts requested)	
The list of sear	ch results saved previo	ously. Overwrite the displays of Name	list and thumbnail.	Saved date	No. of results	Operz
		Save List 1		September 12 2017	705	2 🚾 3 🗾
		Save List 2		September 12 2017	705	adout
		Save List 3		September 12 2017	705	Readout Delete

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]

Listo	of search result								
Sho	w the list Display thumbna	ail My List (705 data registered)	S7 (3 da	ta registered) Production st	atus (0 products requested)				
	xclude selected product from	My List					Downlo	ad the list Save the list	Â
	Product	Physical quantities	Spacecrait / sensor	Observation starting date	Observation ended date	Details	Data manipulation	Exclude from My List	
V	L2-Cloud Liquid Water (CLW)	Iot Applicable	GCOM-W1/AMSR-2	2017-04-30 22:09:24.933	2017-04-30 22:58:47.147	Details		Excluded	
V	L3-Soil Moisture Content (SMC) _0.1deg	Soil Moisture	GCOM-W1/AMSR-2	2015-12-31 00:00:00.615	2015-12-31 23:36:58.462	Details		Exclude	
V	L3-Soil Moisture Content (SMC) _0.25deg	Soil Moisture	GCOM-W1/AMSR-2	2015-12-31 00:00:00.615	2015-12-31 23:36:58.462	Details		Exclude 2	]
	L3-Brightness temperature (TB) _6GHz_0.1deg	Brightness Temperature	GCOM-W1/AMSR-2	2015-12-31 00:00:00.615	2015-12-31 23:36:58.462	Details		Excluded	
-	I 1B-Visible & Near Infrared								

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.

	the lat Display thumbro	el Hy List (0 data registered)	Save the list (0 da	ta registered)	Production sta	tus (0 products requested)			
Add	selected product(s) to My	Link						Download th	e list Save the
	Product	Physical quantities	Spacecraft / sensor	Observation at	arting date(UTC	Observation anded date(UTC)	Details	stete metropoletion	My List
2	L2-Precipitation(PRC)	Amount of Precipitation	GCOM-W1/AMSR-2	2017-09-05	01:34:33.002	2017-09-05 02:23:59.713	Details	Download	Add to Ny List
Z	L2-Precipitation(PRC)	Amount of Precipitation	GCOM-W1/AMSR-2	2017-09-05	00:45:10.784	2017-09-05 01:34:31.502	Details	Download	Add to Ny List
2	L2-Precipitation(PRC)	Amount of Precipitation	GCOM-W1/AMSR-2	2017-09-05	02:24:01.213	2017-09-05 03:13:24.927	Details	Download	Add to Ny List
2	L2-Integrated Water Vapor(TPW)	Integrated Water Vapor	GCOM-W1/AMSR-2	2017-09-05	00:45:10.784	2017-09-05 01:34:31.502	Details	Download	Add to My List
2	L2-Integrated Water Vapor(TPW)	Integrated Water Vapor	GCOM-W1/AMSR-2	2017-09-05	01:34:33.002	2017-09-05 02:23:59.713	Details	Download	Add to Ny List
Ø	L2-Integrated Water Vapor(TPW)	Integrated Water Vapor	GCOM-W1/AMSR-2	2017-09-05	02/24/01-213	2017-09-05 03:13:24.927	Details	Download	Add to My List
2	L2-Integrated Water Vapor(TPW)	Integrated Water Vapor	GCOM-W1/AMSR-2	2017-09-05	03:13:26.427	2017-09-05 04:02:54.641	Details	Download	Add to Ny List
Ø	L2-Integrated Water Vapor(TPW)	Integrated Water Vapor	GCOM-W1/AMSR-2	2017-09-05	04:02:56.141	2017-09-05 04:52:18.355	Details	Download	Add to My List
2	L2-Integrated Water								Add to Ny

 "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

2. Click "download".

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)



 "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.

 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)



 "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.



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: <u>ftp.gportal.jaxa.jp</u> Connection port: 2051 Connection account: **X** Product path (directory): /process/scandl2/EUzYAhVKvjGm7wW9eDPgRa4u 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.

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)



 "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.



4. Click "OK".

5) Click the "order" button.



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: <u>ftp.gportal.jaxa.jp</u> Connection port: 2051 Connection account: **X** Product path (directory): /process/alosdl2/f20xu59ml5xszkn17prvqjwtg8iczm 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.

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)

Charles the Bit (200 deal) Condex Humbers) (200 deal) Mr. Litt (Inde pervised) Cave the Litt Dools required) Emduction ethnic Dools required)								
-	load all products selected	Process all products selected.	Add selected prod	uct(s) to Ny List			Download the list	Save the
	Product	Physical quantities	Spececreft / sensor	Observation starting date(UTC	Observation ended date(UTC)	Deteks	Data manipulation	My List
5	L18-SWI & TIR	Rediance	GCOM-C/SGLI	2015-07-01 00:00:31.84	2015-07-01 00:05:19.42	Details	Download Processing	Add to My List
1	L10-SWI & TIR	Rediance	GCOM-C/SGL1	2015-07-01 00:00:31.79	2015-07-01 00:05:19.47	Details	Download Processing	Add to My List
	L10-Visible & Near Infrared, VNR	Redience	GCOM-C/SGL1	2015-07-01 00:00:31.84	2015-07-01 00:05:19.42	Details	Download Processing	Add to My List
	L1D-Visible & Near Infrared, VNR	Redience	GCOM-C/SGLI	2015-07-01 00:00:31.79	2015-07-01 00:05:19.47	Details	Download Processing	Add to My List
	L15-Visible & Near Infrared, VNR	Radiance	GCOM-C/SGLI	2015-07-01 00:05:39.29	2015-07-01 00:08:07.93	Deteils	Production Processing	Add to My List
3	L18-SWI & TIR	Radiance	GCOM-C/SGLI	2015-07-01 01:02:22.79	2015-07-01 01:04:10.92	Details	Download Processing	Add to My List
1	L18-SWI & TIR	Radiance	GCOM-C/9GLI	2015-07-01 01/21/20.20	2015-07-01 01:25:12.14	Details	Download Processing	Add to My List
9	L18-Visible & Near Infrared, POL	Radiance	GCOM-C/9GLI	2015-07-01 21:24:26.52	2015-07-01 22:23:08.08	Details	Production Processing	Add to My List

Batch download 🛛 🗶
Batch production request / download of the selected product is processed.
Select the download method
Batch download (zip) Note: All the files are compressed in a single file after production. Download of individual products is not available.
$\ensuremath{\mathbb{O}}$ Batch download (tar) All the files are compressed into a single file after their production. Download of individual products is not available.
$\ensuremath{\mathbb{O}}$ Download individually Note: Download of each file can be prepared when their production, etc. is prepared.
Select the notification unit at the time of production completion
Notified collectively Notified on completion of all product preparations requested.
<ul> <li>Notified by product</li> <li>Notified when each product preparation requested is completed.</li> </ul>

 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.

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.
	XThis item can't select while you choose
	'Batch download (zip)'on Batch
	download dialog.

#### Table 4.4-1 Batch download dialog

Batch processing Close

List of search result									
		e list (100 data) Display th	umbrail (100 data) N			Produc	tion status (tr	) products requested	
The progress showing the status of the batch download and production requests such as cutout processing. Products produced can be downloaded and will be deleted after a cert									
F		2018/03/06 00:05:25	ORD2018030604395	6C1801_20150701000	1V03812_1880_VMRDK_0005.h5 av	d more	Processing completed	Download	
•		2018/03/05 08:35:03	ORD2018030504394	GC15G1_20150701D01	0_70123_L250_A08_K_0005.h5 en	d more	Processing completed	Expension	
ŀ		2018/03/05 08:11:11	ORD2018030504393	GC15G1_20150701D01	D_T0123_L25G_AG8_K_0005.h5 en	d more	Processing completed	Download	
•		2018/03/05 07:34:17	ORD2018030504392	GC15G1_2015070	10005V03812_185G_VNRDK_0005.8	hS	Processing completed	Expension	
1		2018/03/05 07:33:01	ORD2018030504391	GC15G1_2015070	10005V03012_105G_VNR0K_0005.1	hS	Processing completed	Expension	
		2018/03/05 07:28:17	ORD2018030504390	GC15G1_2015070	10005V03012_185G_VWRDK_0005.0	hS	Processing completed	Expandion	

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)



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.

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)



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: <u>ftp.gportal.jaxa.jp</u> Connection port: 2051 Connection account: **X** Product path (directory): /process/alosdl2/f20xu59ml5xszkn17prvqjwtg8iczm 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.

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.

Target satellite	Target product(HDF5 only)	Target processing
GPM	GPM Ku L1B	• Cut out
* V05 or later	GPM Ka L1B	Format conversion
	GPM Ku L2	(ASCII, NetCDF)
	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	Aqua AMSR-E L1B	
* AMSR-2	Aqua AMSR-E L2 WV	
Format	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	

Table 4.5-1 Processed Product

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	COM-C GCOM-C product	
		<ul> <li>Format conversion</li> </ul>
		(GeoTIFF)

[List of search result]

Lis	ist of search result											
s	how the list (1 data)	Display	y thumbnail (1 data)	My List (lo	gin required) S	ave the list (login required)	Pro	duction status (login required)				
Download all products										Download th		e the list
	Product		Physical quan	tities	Spacecraft / sen	or Observation starting date	UTC	Observation ended date(UTC)	Details	Data manipulation	1	st
[	GMI L1B Bright Temperatur	ness re	Brightness Temp	erature	GPM/GMI	2014-03-08 22:09:50.	574	2014-03-08 23:42:18.044	Details	Download Processing	Add to List	My

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.( $\times1$ )

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  $\blacktriangle$  button, select the rectangular area you want to shift in 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  $\blacktriangle \nabla$ ,  $\blacklozenge b$  with a 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.





- 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 when the 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.



2) Enter the user account.

- 3) Enter the password.
- 4) Click the "Login" button.

X, 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]

List of search result												
Sh	ow the list (0 data)	Display thumb	onail (0 data)	My List (	(2 data registered)	Save the list (0 data registered)	Production	status (1 prod	ucts requested)			
Th	e progress showing t	he status of the I	oatch download	and produ	uction requests such	as cutout processing. Products produ	iced can be d	ownloaded and	l will be deleted a	fter a	certain period.	
	Date and time of	request (UTC)	Production re	quest nur		Target product		Status	Download			
+	+ 2018/03/06 04:52:58 ORD2018030604396		GC1SG1_201	507010005V03812_1BSG_VNRDK_00	005.h5	Processing completed	Expansion					

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]

Product selected: GCM-WIAMSR-2 LIB-Brightness ter (c) Load Conditions (c) Save Conditions	Request processing	
Cuoul Conditions C Save Conditions	Product selected:GCOM-W1/AMSR-2 L1B-Brightness ter	e(TB) GW1AM2_201808121553_103D_L1SGBTBR_2220220
Max. lat/lon (46.96825759E, 151.8046832C)         Min. lat/lon (25.704896628, 124.7343707C)         Sel       Clear the setting         Format conversion O No conversion O AsCII (S NetCDF         Specify O Not specify (* NetCDF only)         Brightness Temperature (6.9GHz, H)         Brightness Temperature (7.3GHz, H)         Brightness Temperature (7.3GHz, H)         Brightness Temperature (7.3GHz, H)	Cutout         Shift           Specify a rectangle with the smallest latitude and longitude. It is also possible to specify drag on the map.	And And And And And And And And And
Format conversion         O No conversion         O ASCII         Image: NetCDF         Image: Specify O Not specify (* NetCDF only)         Image: MetCDF         Image: Specify O Not specify (* NetCDF only)         Image: MetCDF         Image: Specify O Not specify (* NetCDF only)         Image: MetCDF         Image: Specify O Not specify (* NetCDF only)         Image: MetCDF         Image: Specify O Not specify (* NetCDF only)         Image: MetCDF         Image: Specify O Not specify (* NetCDF only)         Image: MetCDF         Image: Specify O Not specify (* NetCDF only)         Image: MetCDF         Image: Specify O Not specify (* NetCDF only)         Image: MetCDF         Image: Specify O Not specify (* NetCDF only)         Image: Specify O	Max. lat/lon (46.96825759£, 151.8046832C) Min. lat/lon (25.704896628, 124.7343707C) Set Clear the setting	
	Format conversion       ▲         ○ No conversion       ▲         ○ ASCII       ●         ● NetCDF       ●         ● Specify ○ Not specify (* NetCDF only)       ■         ■ Brightness Temperature (6.9GHz,H)       ■         ■ Brightness Temperature (6.9GHz,V)       ■         ■ Brightness Temperature (7.3GHz,H)       ■         ■ Brightness Temperature (7.3GHz,H)       ■	

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]

Reado	ut of processing criteria		18 a	×				
Read out and set the saved processing criteria. Those search criteria already set are overwritten. Up to ten criteria can be saved.								
No. ·	Name 2	Read	lout					
1	japan area1	Readout	Delete					
2	japan area2	Readout	Delete					
3	japan area3	Readout	Delete					
			Close	:				

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]

Name	Readout
japan area1	Readout Delete 2
japan area2	Readout Delete
japan area3	Readout Delete
	japan area1 japan area2 japan area3

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.



## 5.2. Change user property

Change the properties of registered users.



## 5.3. Delete user property

Delete the property of registered users.



### 5.4. Change passwords

Change the password of registered users.



# 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  $\cdot$  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.

G - Portal Globe Portal System	G-Portal offers ear free of charge for u	th observation data use in various fields.
First of all, search the data you seek (no registration required) * <u>Registration</u> required for download.		-
Physical quantities		
precipitation, ocean color, etc.		
Spacecraft >		
Direct download		
Log off : sat_taro_en > User account service >	Use cases	
For first-time users		
Product information / operation		
Tools / documents >		
Support / inquiry		
Announcement >	G-Portal	Data Search
Search this site:	Top	Search by physical guan
日本語ENGLISH	Terms of Use	Search by spacecraft/se

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	When "jaxa.jp" is set in the Compatibility View Settings, it is necessary
View Settings	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

XAs 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

Change the background map Google Street

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

Specify the rectangle

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

### 7) Specify the point

Specify the point

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

8) Specify the circle

Specify the circle

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

9) Specify the point

Specify the polygon

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

### 10) Specify the place

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.

Search the	coordinate	from the	e place	name.	Only	registered	place	names
are usable.								
Place name:						Reflect	t in the	map

XUnder 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.

Specify the period Specif	y the season		
2. Specify the obs 1.	Click here.		
<ul> <li>Search the period entered.</li> <li>Enter the observation date by clicking.</li> <li>Observed Year, Month ar</li> <li>Add observation date to</li> </ul>	a (YYY ad Da sear date by the second	date with the first click, specify the end	
2017 2 Apr 24 I	2017 2017 May 22 Jun 19	Aug 14	
a TRMM pr a TRMM TM			
I TRMM PR-TMI (COMB) I TRMM VIRS			
B TRMM ENV_AUX			
٢			
	<b>O</b> Search		

### (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.

X 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]

 $\bigcirc$ 

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]



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

Specify the perio	d Specify the s	eason				
2. Specify th	e observation	date 1.	Click he	re.		
Search the specific period of each yea	ed month and date o ar, for example.	f multiple years	. You can sea	rch the summ	ner	
Enter the obser	ved month and da	ate (MM/DD) a	and year (Y)	(YY) or	Б.	
Observed Mor	th and Date: 11/	19 ~		Z	. Ent	er the observed month/day, and
Observed Yea	r: 1998 ~~	$\sim$		tł	ne ob	oserved year.
				L		
19 D	69 1979 ec Nov	1989 Nov	1999 Nov	2009 Nov		
GCOM-W1 AMSR-2						
GPM Constellation satellites						

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 the text 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
  Filter the spacecrafts/sensors by words
  Appendix 4-1
- 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.

Select by phys 1. Setting Refine Search b Processing level	1. Select processing level. the cry y word mirared, Refine Sea	rch		
O ▼ 庙 jer	Spacecraft, sensors, physical quantities	2. 0	lick "Ref	ine Search".
	▼ SAR ▼ /= L0 I SAR (L0)		0¢	
				_

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) .

Select by physical quantity	Select by spacecraft / sensor	
1. Setting the criteria		
Refine Search by word Infrared,	Refine Search	
Processing level All 🔻 Fu	unctions Downloadable	۲
Spacecraft, se	ensors, physical quantities	Information, etc.
🖸 🔻 🗁 GCOM-C/SGLI 💾		0
🔘 🔻 🚈 LEVEL1		
C L1B-Visible 8	k Near Infrared, VNR	<b>0</b> ¢
C L1B-Visible 8	k Near Infrared, POL	<b>0</b> 🗘
O 🕒 L1B-SWI & T	IR	60
🔘 🔻 👉 LEVEL2		
🔘 🔍 🔚 Oceanic sphe	ere	
O L2-NWLR		<b>0</b> 🗘
O L2-IWPR		00

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  $\div$  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.



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

 $AMSR \cdot GPM$  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.

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,)),	Cutout area
		((Xa Ya, Xb Yb,)),)	

表	6-2-1	Information to a	idd to i	the header
衣	6-2-1	Information to a	idd to 1	the head

## HDF5

file name

...

#### 「ORDAAAAAAAAAAAAAAAA」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

「ORDAAAAAAAAAAAAAAAA

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 (<u>https://www.giss.nasa.gov/tools/panoply/download/</u>). In G-Portal, the operation is checked in version 4.8.10 to 4.9.0.

(Example display with PanoplyWin)





## ASCII(csv)

file name

AAAAAAAAAAAAAA : 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.



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	

表 6-2-2 Header part output contents

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		
5	Cutout area	Contents of subset area		
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	Value of the element of the target data act × Seels Fester	
		name}	value of the element of the target data set × Scale Factor	
4	Times of	time	L1/L2: Observation time cut out from time information	
	Day		data set	
			L3 : None	

(Text format output example)

ORD2018032704493\_236\_Geophysical Data.txt

	011
1	Geophysical Data,2017-09-04T17:42:26.235Z,2017-09-04T17:50:48.685Z,POLYGON((-87.961 20.534,-47.883 20.534,-47.883 -9.9,-
	87.961 -9.9,-87.961 20.534)), MULTIPOLYGON(((-74.4704 15.9604,-53.1712 15.9604,-53.1712 -16.4071,-74.4704 -16.4071,-74.470
	04 15.9604))),*
2	lat,lon,Geophysical Data,time↓
3	-14.1391,-53.1712,-32768,2017-09-04T17:42:26.235Z↓
4	-14.0851,-53.2081,-32768,2017-09-04T17:42:26.2352↓
5	-13.9915,-53.2458,-32768,2017-09-04T17:42:26.2352↓
6	-13.9183,-53.2842,-32768,2017-09-04T17:42:26.2352↓
7	-13.8455,-53.3235,-32768,2017-09-04T17:42:26.235Z↓

(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.

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	1: KuNS, ASCENDING
	GRID/precipPixESurf	2: DPRMS, ASCENDING
	GRID/totalPix	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
1		NS)
		1:st=ocean
		2:st=land
		3:st=all
	Grids/G2/precipTotRate/mean	1: rt=all,hgt=0,NS
GSMaP hourly	Grid/hourlyPrecipRate	-
1	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)	

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

### G-Portal (General) User's manual Appendix 7 Search using G-Portal CSW server

data set	Variable name	Branch number
AMSR-E/2 L1R	Variable name 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, V) Brightness Temperature (res06, 18.7GHz, V) Brightness Temperature (res06, 18.7GHz, V) Brightness Temperature (res06, 23.8GHz, V) Brightness Temperature (res06, 36.5GHz, V) Brightness Temperature (res06, 36.5GHz, V) Brightness Temperature (res06, 6.9GHz, V) Brightness Temperature (res06, 7.3GHz, V) Brightness Temperature (res06, 7.3GHz, V) Brightness Temperature (res06, 7.3GHz, V) Brightness Temperature (res06, 89.0GHz, V) Brightness Temperature (res10, 10.7GHz, V) Brightness Temperature (res10, 10.7GHz, V) Brightness Temperature (res10, 18.7GHz, V) Brightness Temperature (res10, 18.7GHz, V) Brightness Temperature (res10, 23.8GHz, V) Brightness Temperature (res10, 23.8GHz, V) Brightness Temperature (res10, 23.8GHz, V) Brightness Temperature (res10, 36.5GHz, H) Brightness Temperature (res10, 36.5GHz, V) Brightness Temperature (res10, 36.5GHz, V) Brightness Temperature (res10, 36.5GHz, V) Brightness Temperature (res10, 36.5GHz, V) Brightness Temperature (res23, 18.7GHz, V) Brightness Temperature (res23, 18.7GHz, V) Brightness Temperature (res23, 18.7GHz, H) Brightness Temperature (res23, 18.7GHz, H) Brightness Temperature (res23, 23.8GHz, V) Brightness Temperature (res23, 36.5GHz, V)	Branch number
AMSR-E/2 SST L2 Low	Brightness Temperature (res23,89.0GHz,W) Brightness Temperature (res36,36.5GHz,W) Brightness Temperature (res36,36.5GHz,V) Brightness Temperature (res36,89.0GHz,W) Brightness Temperature (res36,89.0GHz,W) Geophysical Data	1: SST(6GHz) 2: SST(10CHz)
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=GetRecor ds&outputFormat=application/json

• HTML

• URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecor ds&outputFormat=text/html

- ISO19115
  - URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecor ds&outputFormat=application/xml&outputSchema=http://www.isotc211.org/200 5/gmd

- ebRIM
  - URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecor ds&outputFormat=application/xml&outputSchema=urn:oasis:names:tc:ebxml-reg rep:xsd:rim:3.0

• atom

• URL

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

- DublinCore
  - URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecor ds&outputFormat=application/xml&outputSchema=http://www.isotc211.org/200 5/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	1900000-19999999
MOS-1b	2000000-20999999
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)	2900000-29999999

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

 $\cdot$  Data set ID specification

• URL

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

• Specify search conditions

Search entry	String specified as	Туре	Example
	parameter		
Dataset ID	datasetId	Integer	27004001
identifier	id	String	ALOS2146782480-170209
Coordinate	bbox	Coordinate	130,30,140,40
information			
updateTime	updateTime	Date and time	2021-04-28T17:00:00
polar stereo	Pseq	String	EQ
acquisitionType	aqtype	String	NOMINAL
imageQualityDegrad	deg	Real number	0
ation			
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
acrossTrackIncidenc	pointingAngle	Real number	0
eAngle			
polarisationChannels	polarisation	String	HH

The following parameters can be specified as search conditions.

### G-Portal (General) User's manual Appendix 7 Search using G-Portal CSW server

Search entry	String specified as	Туре	Example
douricht	darmiaht	Sturing of	Nicht
daynight	daynıght		Migni
version	prdver	String	05A
cloudCoverPercentag	cloud	Real number	0
e			
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 orbitStatus		Н
ProcessTimeUnit	ProcessTimeUnit	String	01D

- Search by granule ID
  - URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&o utputFormat=application/json&id=GW1AM2\_20151200\_01M\_EQMA\_L3SGCLWHD 2210210

- Search by satellite, sensor name
  - URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&o utputFormat=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&o utputFormat=application/json&startTime=2016-11-01T00:00:00Z&endTime=2016-1 1-01T23:59:59Z

 $\boldsymbol{\cdot}$  Search by coordinate information

#### • URL

https://gportal.jaxa.jp/csw/csw?service=CSW&version=3.0.0&request=GetRecords&o utputFormat=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-CS	
	W-ebRIM-EO::parentIdentifier"]/rim:ValueList/rim:Value[1]	
Coordinate	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
information(*)	W-ebRIM-EO::multiExtentOf"]/wrs:ValueList/wrs:AnyValue[1]	
beginPosition	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
	W-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-CS	
	W-ebRIM-EO::lastOrbitNumber"]/rim:ValueList/rim:Value[1]	
acrossTrackIncidenc	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
eAngle	W-ebRIM-EO::acrossTrackIncidenceAngle"]/rim:ValueList/rim:Val	
	ue[1]	
satelliteName	/rim:ExtrinsicObject/rim:Name/rim:LocalizedString/@value	
instrumentShortNa	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
me	W-ebRIM-EO::instrumentShortName"]/rim:ValueList/rim:Value[1	
	]	
sensorType	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
	W-ebRIM-EO::sensorType"]/rim:ValueList/rim:Value[1]	
sensorOperationalM	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
ode	W-ebRIM-EO::sensorOperationalMode"]/rim:ValueList/rim:Value[	
	1]	
polarisationMode	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
	W-ebRIM-EO::polarisationMode"]/rim:ValueList/rim:Value[1]	
polarisationChannels	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
	W-ebRIM-EO::polarisationChannels"]/rim:ValueList/rim:Value[1]	
antennaLookDirecti	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
on	W-ebRIM-EO::antennaLookDirection"]/rim:ValueList/rim:Value[1	
	]	
minimumIncidenceA	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
ngle	W-ebRIM-EO::minimumIncidenceAngle"]/rim:ValueList/rim:Valu	
	e[1]	
maximumIncidenceA	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
ngle	W-ebRIM-EO::maximumIncidenceAngle"]/rim:ValueList/rim:Valu	
	e[1]	
dopplerFrequency	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
	W-ebRIM-EO::dopplerFrequency"]/rim:ValueList/rim:Value[1]	
incidenceAngleVaria	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
tion	W-ebRIM-EO::incidenceAngleVariation"]/rim:ValueList/rim:Value	
	[1]	
illuminationAzimuth	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
Angle	W-ebRIM-EO::illuminationAzimuthAngle"]/rim:ValueList/rim:Val	
	ue[1]	

Search entry	String specified in request xml	
illuminationElevatio	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
nAngle	W-ebRIM-EO::illuminationElevationAngle"]/rim:ValueList/rim:Val	
	ue[1]	
snowCoverPercentag	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
e	W-ebRIM-EO::snowCoverPercentage"]/rim:ValueList/rim:Value[1	
	]	
highestLocation	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
	W-ebRIM-EO::highestLocation"]/rim:ValueList/rim:Value[1]	
lowestLocation	/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS	
	W-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</og c:PropertyName>

> <ogc:Literal>ALOS</ogc:Literal> </ogc:PropertyIsEqualTo> <ogc:PropertyIsEqualTo>

<ogc:PropertyName>/rim:ExtrinsicObject/rim:Slot[@name="urn:ogc:def:slot:OGC-CS W-ebRIM-EO::instrumentShortName"]/rim:ValueList/rim:Value[1]</ogc:PropertyNa me>

<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="nim:Regist.net/csw/2.0.2/CSW-discovery.xsd">
<csw:Query typeNames="rim:Regist.net/csw/2.0.2/CSW-discovery.xsd">
<csw:Constraint version="1.1.0">
<csw:Constraint version="1.1.0">
<csw:Constraint version="1.1.0">
<csw:Constraint version="1.1.0">
<csw:Constraint version="1.1.0"></ssite version="1.1.0"</ssite version"</ssite version="1.1.0"></ssite version="1.1.0"</ssite version="1.1.0"></ssite version="1.1.0"</ssite version="1.1.0"></ssite version="1.1.0"</ssite version="1.1.0"></ssite version="1.1.0"</ssite version="1.1.0"</ssite version="1.1.0"></ssite version="1.1.0"</ssite version="1.1.0"</ssite version="1.1.0"></ssite version="1.1.0"</ssite version="1.1.0"</ssite version="1.1.0"></ssite version="1.1.0"</ssite version="1.1.0"</ssite version="1.1.0"</ssite version="1.1.0"</ssite version="1.1.0"</ssite version="1.1.0"</ssite version="1.1.0"</ssit
```

```
<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>2016-11-01T00:002</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>

```
<or>
    <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>

 $\cdot$  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>

```
<or>
    <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.

### G-Portal (General) User's manual Appendix 7 Search using G-Portal CSW server

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>
```

```
<or><or</li><or</li>GW1AM2_20151200_01M_EQMA_L3SGCLWHD2210210</or></or>
```

```
</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>2016-11-01T00:002</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>2016-11-01T00:002</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>2016-11-01T00:002</ogc:Literal> </ogc:PropertyIsGreaterThanOrEqualTo>

<ogc:PropertyIsLessThanOrEqualTo>

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

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

- $\boldsymbol{\cdot}$  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
```

- $\cdot$  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

## G-Portal (General) User's manual

Appendix 7 Search using G-Portal CSW server

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)
```

 $Use \ ogc: Property Is Greater Than Or Equal To, \ ogc: Property Is Less Than Or Equal To$ 

• 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>