

GOSAT Data Archive Service Operation Manual

<https://data2.gosat.nies.go.jp/>

March 2024

(Version 1.6)

Change History

Version	Date	Page	Change
Ver.1.1	2017.6.22	25-75	6 Procedures for Browsing GOSAT Product Images is modified. <ul style="list-style-type: none"> • The list of Gallery images is modified. • L4 Animation is deleted from Gallery images.
Ver.1.1	2017.8.28	60	6.13 Global Gas Concentration Animations Screen is modified. <ul style="list-style-type: none"> • The screen of Gallery images is modified.
Ver.1.1	2018.3.19	29	6.2 Monthly Global Map of L2 CO2 Column-Averaged Volume Mixing Ratios Screen is modified. <ul style="list-style-type: none"> • Scroll function is added.
Ver.1.1	2018.3.19	32	6.3 Monthly Global Map of the CH4 Column-Averaged Volume Mixing Ratios Screen is modified. <ul style="list-style-type: none"> • Scroll function is added.
Ver.1.1	2018.3.19	35	6.4 Monthly Global Map of L2 H2O Column-Averaged Volume Mixing Ratios Screen is modified. <ul style="list-style-type: none"> • Scroll function is added.
Ver.1.1	2018.3.19	38	6.5 FTS SWIR L3 XCO2 Screen is modified. <ul style="list-style-type: none"> • Scroll function is added.
Ver.1.1	2018.3.19	41	6.6 FTS SWIR L3 XCH4 Screen is modified. <ul style="list-style-type: none"> • Scroll function is added.
Ver.1.1	2018.3.19	71	6.16 Global NDVI Map Screen is modified. <ul style="list-style-type: none"> • Scroll function is added.
Ver.1.1	2018.3.19	10	3.1 Screen Configuration is modified. <ul style="list-style-type: none"> • The GDAS Top Screen is modified.
Ver.1.1	2018.3.19	13	4.1 GDAS Top Screen is modified. <ul style="list-style-type: none"> • The GDAS Top Screen is modified.
Ver.1.1	2018.3.19	19	5.3 Technical Information Screen is modified. <ul style="list-style-type: none"> • The Technical Information Screen is modified.
Ver.1.2	2018.07.18	191	Table 13.3 GOSAT Product Provision Format is modified. <ul style="list-style-type: none"> • TIR input dataset is added

Version	Date	Page	Change
Ver.1.2	2018.07.18	193	Table 13.5 Product Identification Character Strings is modified. • TIR input dataset is added.
Ver.1.2	2019.03.25	117-118	9.1.2 Downloading Products Archived in Daily Units is modified. • Downloading Products Archived in Path Unit for FTSL1B is added.
Ver.1.2	2019.03.25	190	Table 13.3 GOSAT Product Provision Format is modified. • It has been added the FTS L1B data archived in Path unit.
Ver.1.3	2020.03.25	9	2.2.2 Required Software is modified. • Required version of WGET Command is added.
Ver.1.3	2020.03.25	74-76	6.17 Browse Images of the Global Radiance Distribution Screen is modified. • The Browse Images of the Global Radiance Distribution Screen is modified.
Ver.1.3	2020.03.25	92-95	8.1 Login is modified. • The Download Screen is modified.
Ver.1.3	2020.03.25	96-97	8.2 Logout is modified. • The Logout images are modified.
Ver.1.3	2020.03.25	104-166	9 Procedure for Downloading Products is modified. • Documents are removed. • Product Download Screens are modified.
Ver.1.3	2020.03.25	187-188	12.4 Tools Screen is modified. • The Tools Screen is modified.
Ver.1.4	2020.08.24	7	2.2.1 Recommended Browsers • Recommended version of OS is added for Internet Explorer.
Ver.1.4	2021.01.13	77	7.2 Procedure Through to the Completion of Registering General User Accounts is modified. • The User Registration Screen is modified.
Ver.1.4	2021.01.13	86	7.3 Procedure Through to Applying for Authorized User Applications is modified. • The User Registration Screen is modified.

Version	Date	Page	Change
Ver.1.4	2021.03.23	30	6.2 Monthly Global Map of L2 CO2 Column-Averaged Volume Mixing Ratios Screen <ul style="list-style-type: none"> • “LastYear” and “NextYear” Buttons are added.
Ver.1.4	2021.03.23	33	6.3 Monthly Global Map of the CH4 Column-Averaged Volume Mixing Ratios Screen is modified. <ul style="list-style-type: none"> • “LastYear” and “NextYear” Buttons are added.
Ver.1.4	2021.03.23	36	6.4 Monthly Global Map of L2 H2O Column-Averaged Volume Mixing Ratios Screen is modified. <ul style="list-style-type: none"> • “LastYear” and “NextYear” Buttons are added.
Ver.1.4	2021.03.23	39	6.5 FTS SWIR L3 XCO2 Screen is modified. <ul style="list-style-type: none"> • “LastYear” and “NextYear” Buttons are added.
Ver.1.4	2021.03.23	42	6.6 FTS SWIR L3 XCH4 Screen is modified. <ul style="list-style-type: none"> • “LastYear” and “NextYear” Buttons are added.
Ver.1.4	2021.03.23	72	6.16 Global NDVI Map Screen is modified. <ul style="list-style-type: none"> • “LastYear” and “NextYear” Buttons are added.
Ver.1.4	2021.03.23	166-167	10.1 Documents & Information Screen is modified. <ul style="list-style-type: none"> • The screen image is modified.
Ver.1.4	2021.03.23	169	10.3 The period when there is no observational data is modified. <ul style="list-style-type: none"> • The screen is modified.
Ver.1.5	2021.04.28	186-187	12.4 Tools Screen is modified. <ul style="list-style-type: none"> • The screen is modified. • “GOSAT FTS SWIR L2 Drawing Tool” is added.
Ver.1.5	2021.08.25	189-190	Table 13.3 GOSAT Product Provision Format is modified. <ul style="list-style-type: none"> • FTS estimated geolocation data is deleted. • L2 H2O column amount (TIR) is added.
Ver.1.5	2021.08.25	192-193	Table 13.5 Product Identification Character Strings is modified. <ul style="list-style-type: none"> • FTS estimated geolocation data is deleted. • L2 H2O column amount (TIR) is added.

Version	Date	Page	Change
Ver.1.6	2024.03.12	7-9	2.2.1 Recommended Browsers is modified. <ul style="list-style-type: none"> • Internet Explorer 11 is deleted. • Each browser version is modified. • The JavaScript enabling procedure is modified.
Ver.1.6	2024.03.12	11	3.1 Screen Configuration is modified. <ul style="list-style-type: none"> • Second information is modified.
Ver.1.6	2024.03.12	76-91	7.2 Procedure Through to the Completion of Registering General User Accounts is modified. <ul style="list-style-type: none"> • The Terms of Service Screen for general users and the Privacy Policy Screen are modified. • The GDPR Privacy Policy Screen and the Cookie Policy Screen are added. • Screen images are modified. • Description text is modified.
Ver.1.6	2024.03.12	92-95	7.3 Procedure Through to Applying for Authorized User Applications is modified. <ul style="list-style-type: none"> • The Terms of Service Screen for authorized users is modified. • Screen images are modified. • Description text is modified.
Ver.1.6	2024.03.12	96-103	8.1 Login is modified. <ul style="list-style-type: none"> • The Privacy Policy Screen, the Privacy Policy of the National Institute for Environmental Studies Screen, and the Confirmation of service use suspension Screen are added. • Description text is modified.
Ver.1.6	2024.03.12	197-198	12.5 Site Policy Screen is added. <ul style="list-style-type: none"> • The section is added.
Ver.1.6	2024.03.12	199	12.6 Cookie Policy Screen is added. <ul style="list-style-type: none"> • The section is added.
Ver.1.6	2024.03.12	200-201	12.7 GOSAT Privacy Policy Screen is added. <ul style="list-style-type: none"> • The section is added.
Ver.1.6	2024.03.12	202-205	12.8 GDPR Privacy Policy Screen is added. <ul style="list-style-type: none"> • The section is added.

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1 GOSAT Data Archive Service (GDAS) Overview

1.1 GDAS Overview

GDAS is a service that archives and provides GOSAT products in packs of providable units. The functions provided with this service are listed below.

GOSAT Information Browsing Function	: Enables documents related to GOSAT products, contact numbers for GOSAT products and other such information to be browsed and downloaded.
GOSAT Image Browsing Function	: Enables images generated by GOSAT products to be browsed.
Product Downloading Function	: Enables GOSAT products to be downloaded.
Account Registration Function	: Enables accounts for downloading GOSAT products to be registered.
User Information Editing Function	: Enables user information to be updated and passwords to be reset.

This manual explains how to operate GDAS.

1.2 Concerns

If the clock of your machine is proceeded or delayed more than 5 minutes, there is possibility that the products cannot be downloaded, successfully. Please adjust the clock of your machine to the correct time.

1.3 Using the Manual

The manual uses the following formats for screen descriptions.

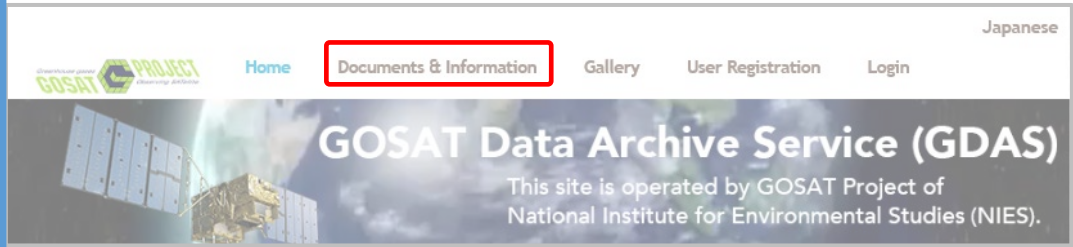
The procedure for moving between screens is explained first of all, and the screen descriptions are provided afterward.

(1) Moving Between Screens

Contains details on the operations required for moving between Screens

Click on [Documents & Information] on the [GDAS Top] Screen (see section 4.1) to move to the [Documents & Information] Screen.

Displays the image prior to moving between screens



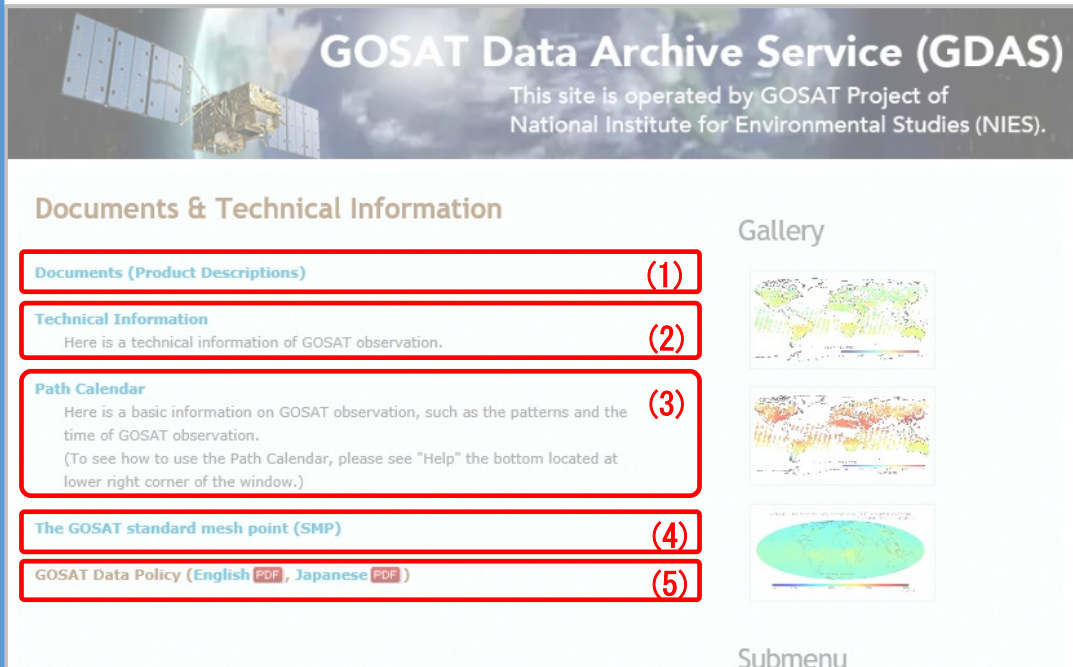
The screenshot shows the top navigation bar of the GDAS website. The 'Documents & Information' link is highlighted with a red rectangular box. Other navigation links include 'Home', 'Gallery', 'User Registration', and 'Login'. The language is set to 'Japanese'. Below the navigation bar is a banner for 'GOSAT Data Archive Service (GDAS)' with the text 'This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES)'. The banner features an image of a satellite.

(2) Screen Name

Contains details on the operations available within the screen

Displays the documents and technical information related to GOSAT. Click on any of the documents to move to the relevant document screen.

Displays the screen images



The screenshot shows the 'Documents & Technical Information' screen. The page title is 'GOSAT Data Archive Service (GDAS)' with the subtitle 'This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES)'. Below the title is a 'Documents & Technical Information' section with five items highlighted by red boxes and numbered (1) through (5):

- (1) Documents (Product Descriptions)
- (2) Technical Information (Here is a technical information of GOSAT observation.)
- (3) Path Calendar (Here is a basic information on GOSAT observation, such as the patterns and the time of GOSAT observation. (To see how to use the Path Calendar, please see "Help" the bottom located at lower right corner of the window.)
- (4) The GOSAT standard mesh point (SMP)
- (5) GOSAT Data Policy (English PDF, Japanese PDF)

To the right of these items is a 'Gallery' section with three satellite imagery thumbnails. At the bottom right, there is a 'Submenu' link.

Contains details on the contents provided within the screen

(1) Documents (Product Descriptions) Link	: The link to the [Documents (Product Descriptions)] Screen from which product information can be downloaded.
(2) Technical Information Link	: The link to the [Technical Information] Screen from which technical sensor information can be downloaded.
(3) Path Calendar Link	: The link to the [Path Calendar] Screen from which path calendars can be downloaded.
(4) The GOSAT standard mesh point (SMP) Link	: The link to the [GOSAT Standard Mesh Point] Screen from which GOSAT standard mesh point information can be downloaded.
(5) GOSAT Data Policy	: The link to the GOSAT Data Policy.

Contains details on important points, supplementary information, and precautions in accordance with necessity

Important: Lists important details.

Information: Lists supplementary information.

Note: Lists points to note.

2 Using GDAS

The following users are assumed as GDAS users.

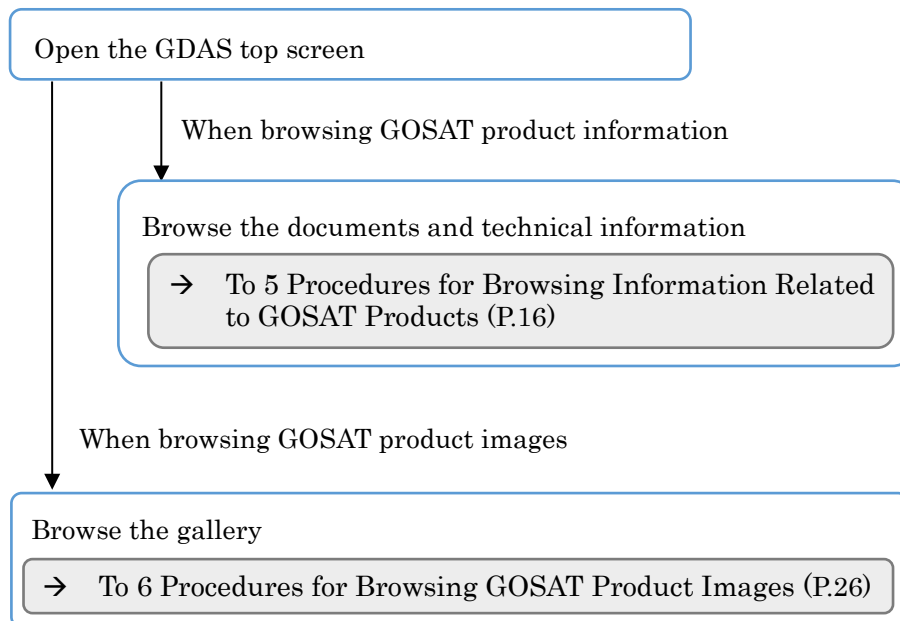
- Guest users, who browse GOSAT product images and information without logging in
- Registered users, who register accounts and downloading GOSAT products after logging in

2.1 Flowchart for GDAS Usage

A summary of procedures for using GDAS is provided below.

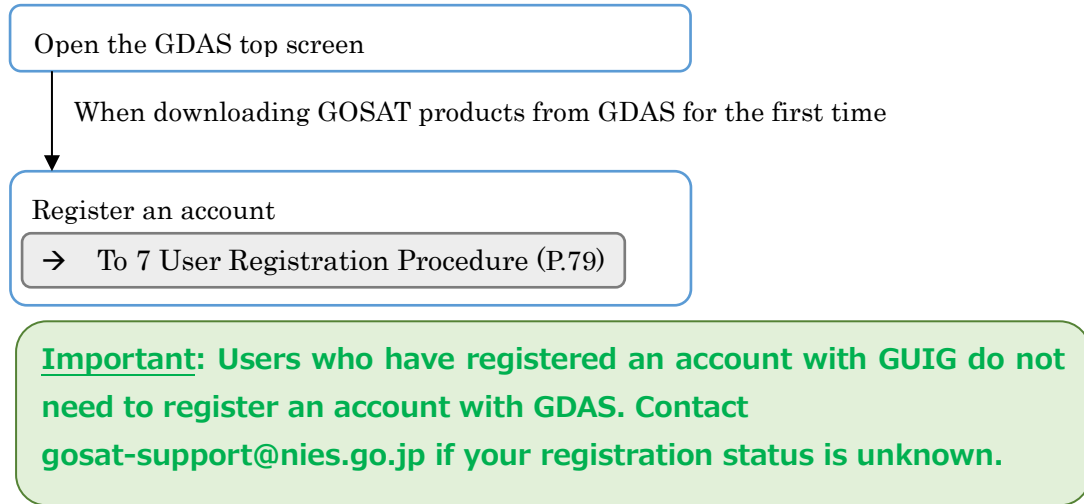
(1) Browsing GOSAT product images and information without logging in

A summary of the procedure to browse GOSAT product images and information as a guest user is shown below.



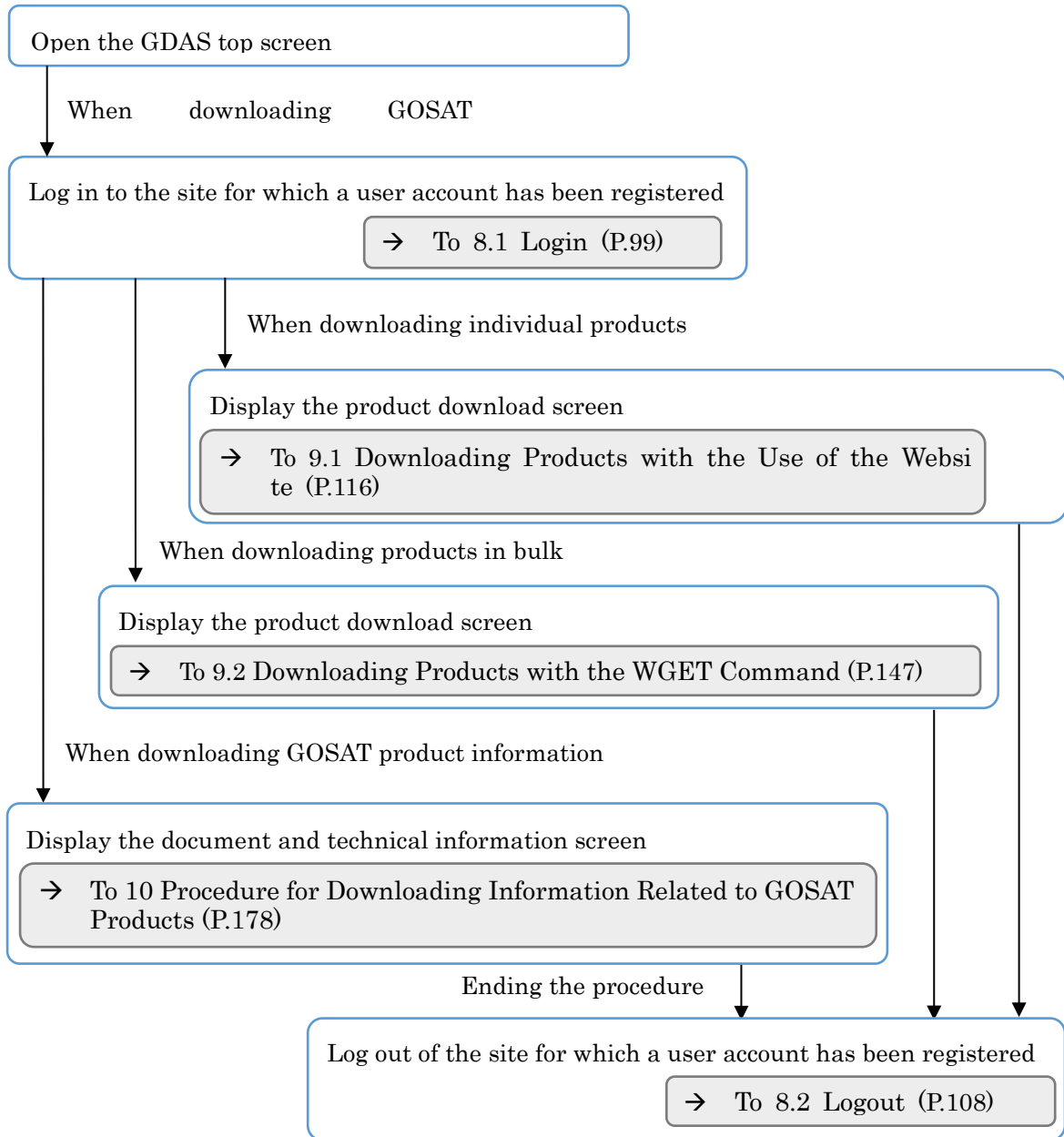
(2) Registering an account

A summary of the procedure required to register an account in order to download GOSAT products is shown below.



(3) Registering an account and downloading GOSAT products after logging in

A summary of the procedure required for registered users to download GOSAT products is shown below.



2.2 GDAS Usage Conditions

The conditions for using GDAS are listed below.

2.2.1 Recommended Browsers

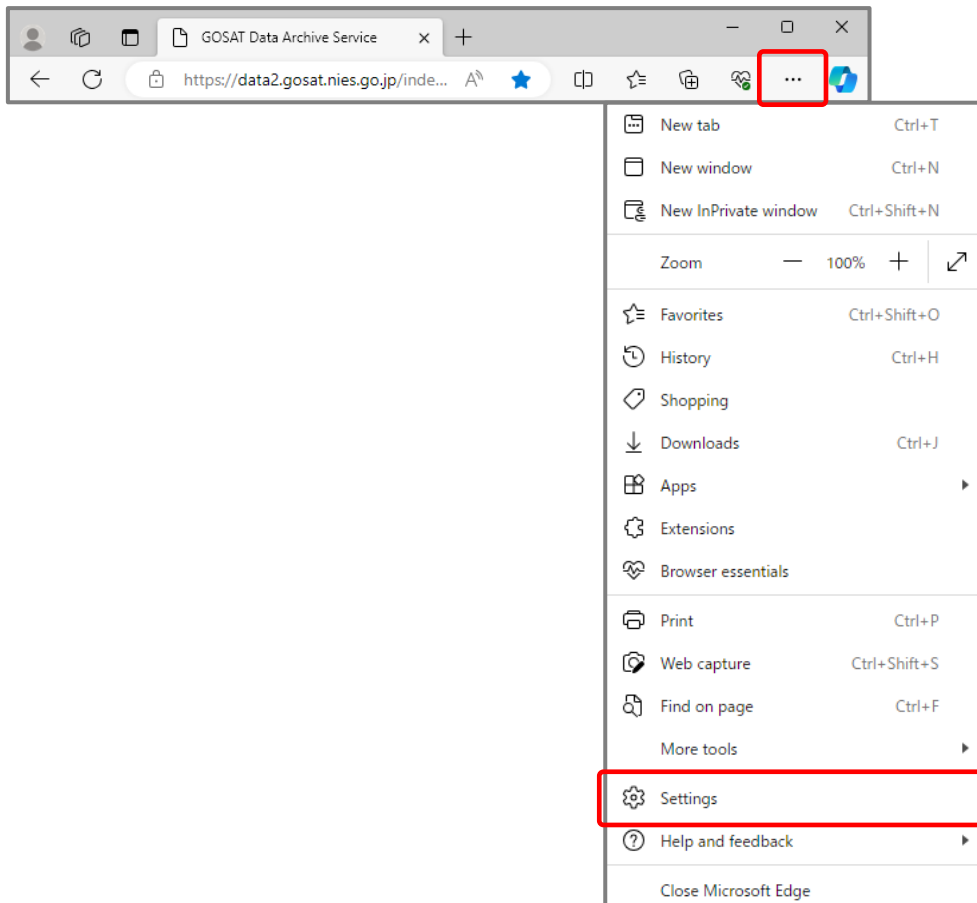
The recommended browsers for using GDAS are listed below. Please note that the numbers in parentheses indicate the versions in which operation has been confirmed.

- ✓ Mozilla Firefox (118)
- ✓ Safari (17)
- ✓ Google Chrome (118)
- ✓ Microsoft Edge (118)

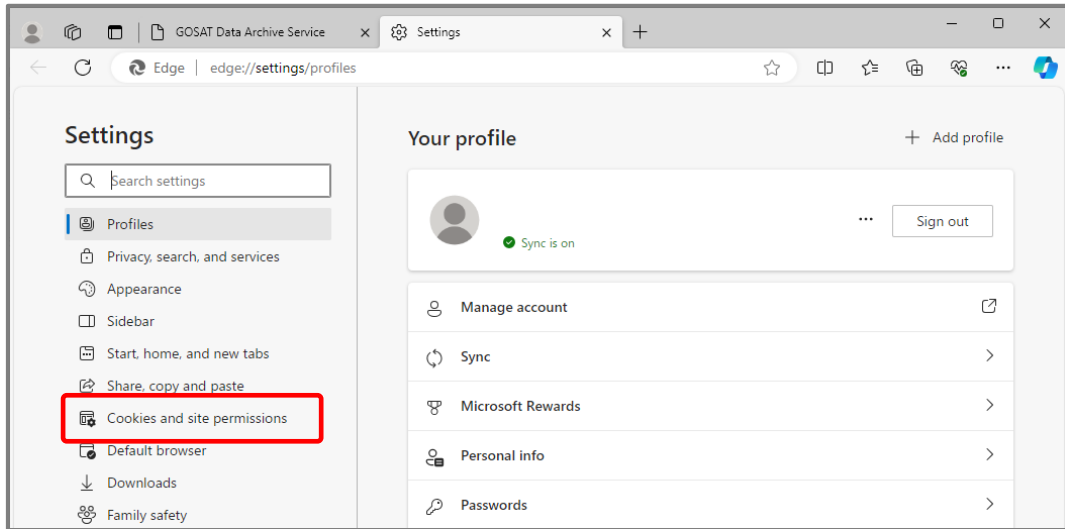
* It is necessary to enable JavaScript on the browser settings.

A sample of the method of setting the required parameters on Microsoft Edge is explained below.

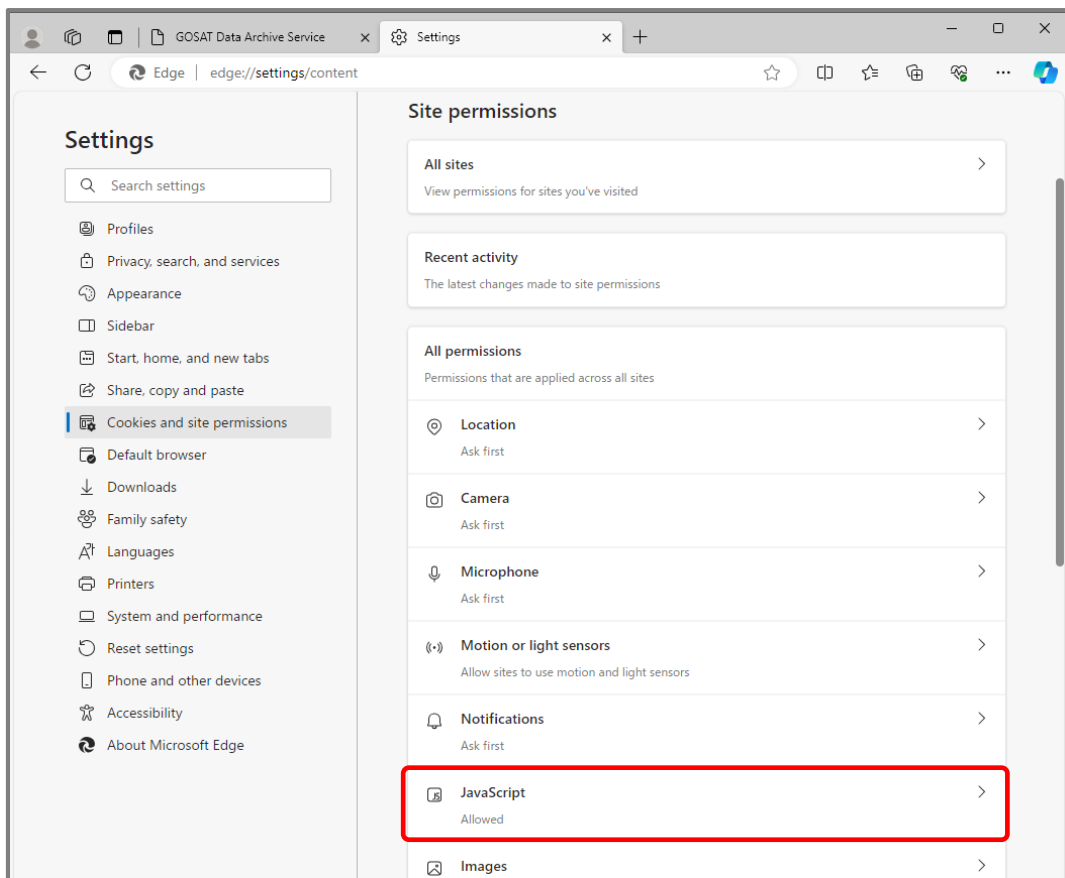
- (1) Click on the [...] icon displayed on the web browser menu, and then click on [Settings]. (The screen will move to the Settings tab.)



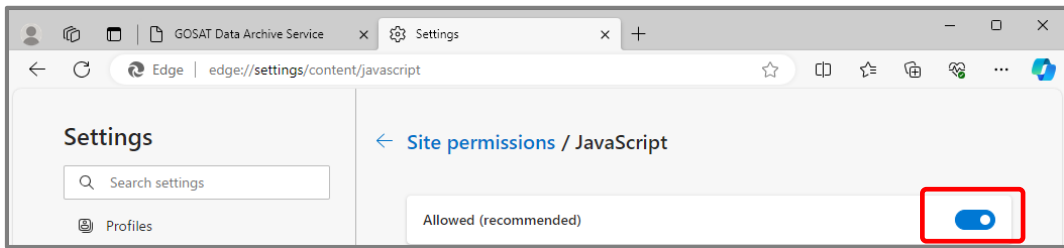
(2) Then click on the [Cookies and site permissions] shown on the [Settings] tab.



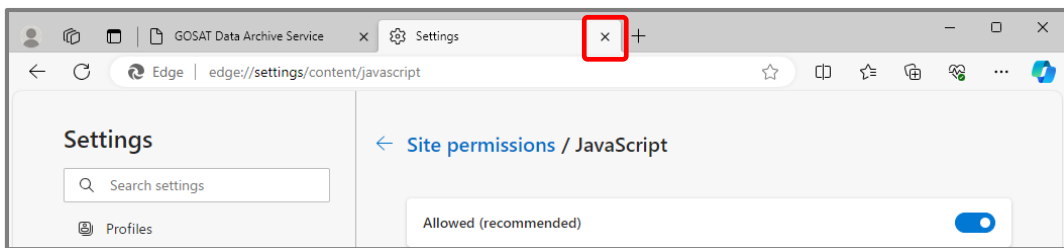
(3) Click on [JavaScript] displayed on the Site permissions.



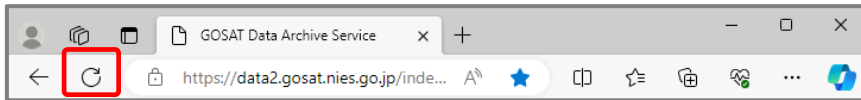
(4) If the [Allowed (recommended)] parameter is disabled, enable it.



(5) Click on the close button on the [Settings] tab to close it.



(6) Click on the [Refresh] icon on the web browser menu to reload the web page. This will enable JavaScript.



2.2.2 Required Software

Products are archived and provided on GDAS in the tar format and tar.gz format. It is therefore necessary to be in possession of a tool capable of compressing and decompressing the tar and tar.gz formats.

When downloading Products with the WGET Command, use wget version 1.6.1 or later. See [12.4 Tools Screen] for details on the software required to check products.

3 Screen Configuration

3.1 Screen Configuration

The screens displayed on GDAS are configured in the following way.

The screenshot shows the GOSAT Data Archive Service (GDAS) website. At the top right, there is a language selector for 'Japanese'. A horizontal navigation menu (1) includes links for 'Home', 'Documents & Information', 'Gallery', 'User Registration', and 'Login'. The main header features a satellite image and the text 'GOSAT Data Archive Service (GDAS)' and 'This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES)'. On the left side, a 'News & Topics' section (3) contains two news items with dates '2017/12/27' and '2017/12/21'. Below this is a section titled 'How to obtain GOSAT data products from GDAS'. On the right side, a 'Gallery' section (2) displays three satellite data maps. Below the gallery is a 'Submenu' with links for 'How to use this website', 'Data Users Handbook', 'Point of Contact / FAQ', 'Tools', and 'Site Policy'. At the bottom right, there is a 'Links' section with a link to 'GOSAT Project (NIES)'. A vertical scrollbar is visible between the news and gallery sections.

- (1) Menu : The area displaying links to each screen (account registration, login, etc.). Login information will also be displayed after login.
- (2) Side menu : The area displaying links to GOSAT product information (inquiries, tools, etc.) and to web screens related to GOSAT. Links to products other than those displayed in the main screen will also be displayed on the download screen after login.
- (3) Main Screens : The areas that display various types of information targeting GDAS users.

Information: Documents, technical information and the user information editing screen will not be displayed on the side menu after login.

Information: If [PDF], [Zip], [Excel], etc., are displayed on the right-hand side of the links, the links provide files saved in the listed formats.

FAQ is here (English , Japanese .

Example: Clicking on the English or Japanese links shown above will download the file in the PDF format.

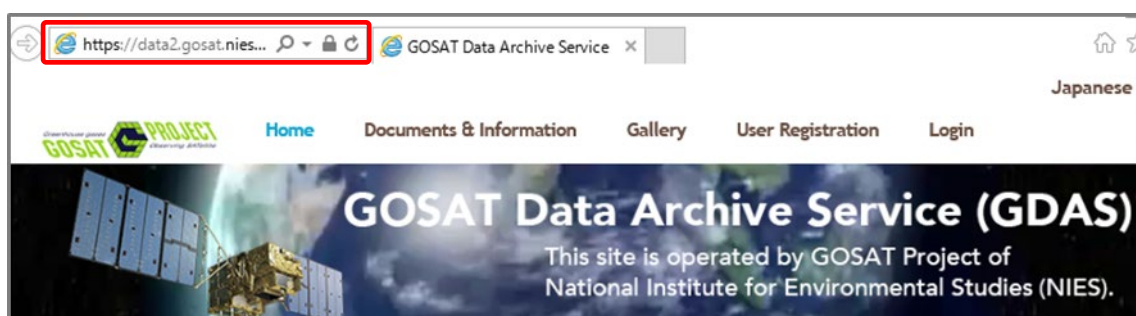
4 Procedures for Browsing the GDAS Top Screen

This section explains the procedures for browsing the [GDAS top] Screen.

4.1 GDAS Top Screen

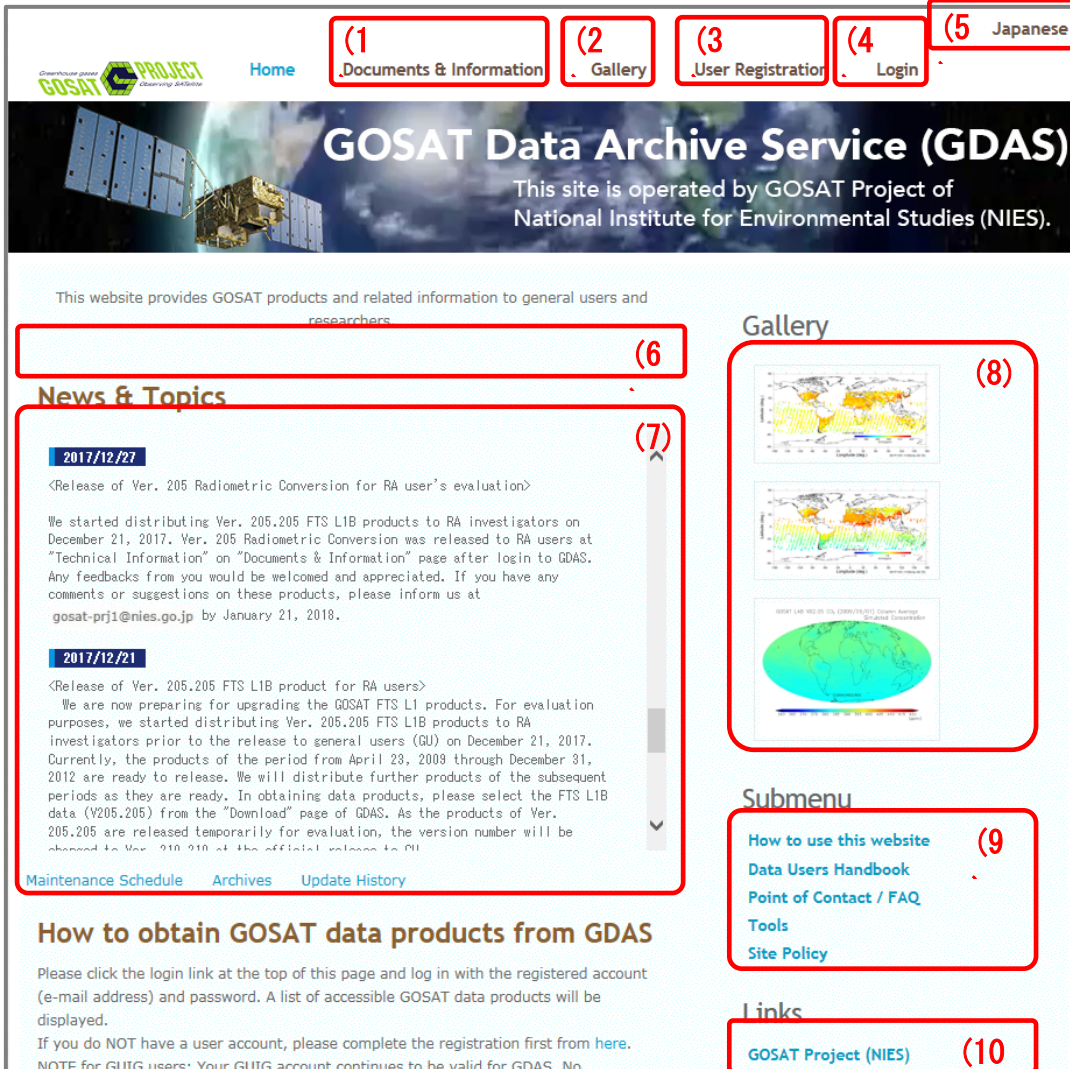
(1) Moving to the [GDAS Top] Screen

Start up the browser and access [<https://data2.gosat.nies.go.jp>] to display the [GDAS Top] Screen.



(2) [GDAS Top] Screen

Displays the most up-to-date information pertaining to the GDAS site. Click on the relevant links to move between the various screens available on the GDAS site.



(1)	Documents & Information Link	:	The link to the [Documents & Information] Screen that displays a list of available documents and technical information, etc.
(2)	Gallery Link	:	The link to the [Gallery] Screen that displays a list of galleries by GOSAT products.
(3)	User Registration Link	:	The link to the [User Registration] Screen on which new accounts are registered.
(4)	Login Link	:	The link to the [Login] Screen on which registered users log into GDAS.

(5)	Japanese Link	:	The link for displaying the top screen in Japanese.
(6)	Maintenance Schedule	:	The area displaying information related to maintenance scheduled to be carried out in the near future.
(7)	News & Topics	:	The area display information from GDAS.
(8)	Gallery	:	The link to the GOSAT product gallery.
(9)	Submenu	:	<p>Links to information required for using GDAS.</p> <ul style="list-style-type: none"> •How to use this website •Data Users Handbook •Point of Contact / FAQ •Operating Environment •Tools •Site Policy
(10)	Links	:	Links to projects and research institutes related to GOSAT.

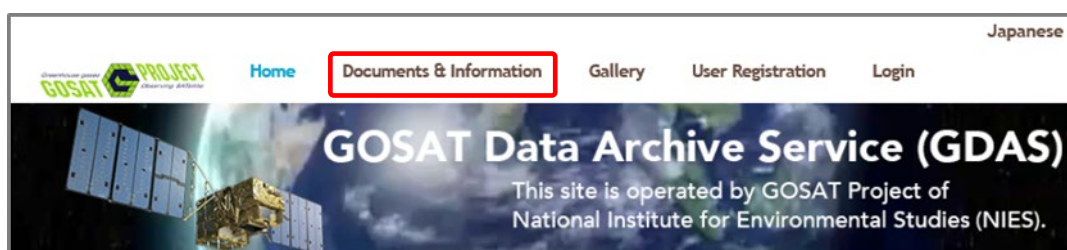
5 Procedures for Browsing Information Related to GOSAT Products

This section explains the procedures for browsing and downloading information related to GOSAT products.

5.1 Documents & Information Screen

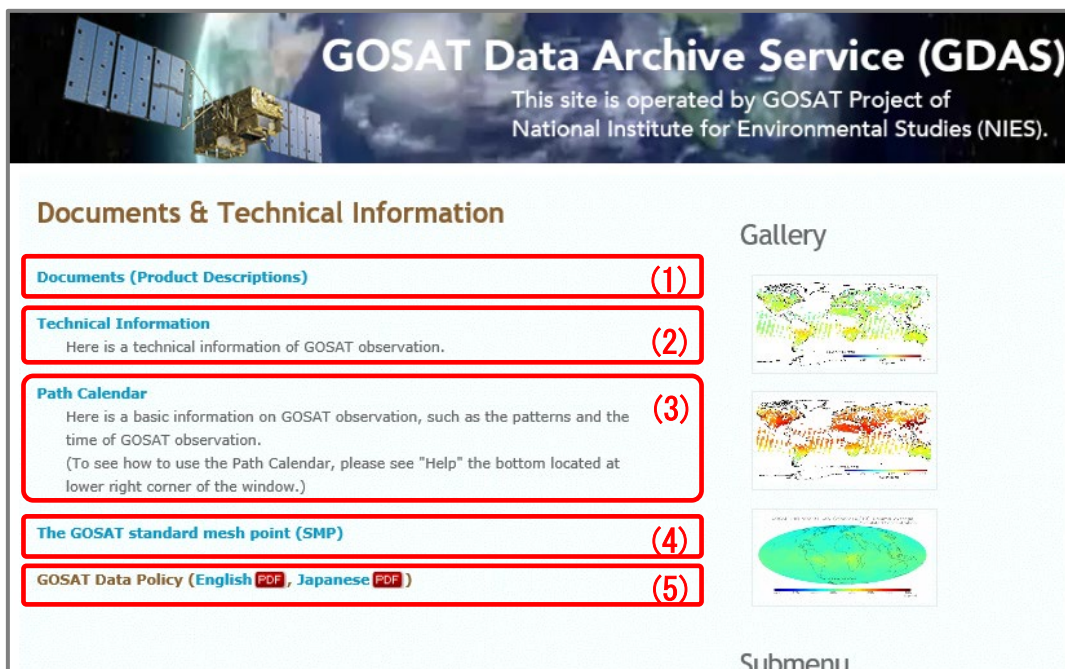
(1) Moving to the [Documents & Information] Screen

Click on [Documents & Information] on the [GDAS Top] Screen (see section 4.1) to move to the [Documents & Information] Screen.



(2) [Documents & Information] Screen

Displays the documents and technical information related to GOSAT. Click on any of the documents to move to the relevant document screen.

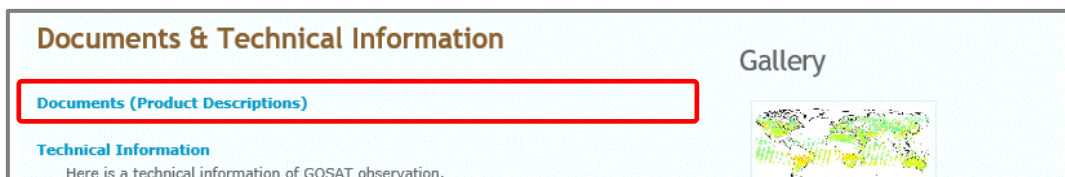


- | | |
|--|--|
| (1) Documents (Product Descriptions) Link | : The link to the [Documents (Product Descriptions)] Screen from which product information can be downloaded. |
| (2) Technical Information Link | : The link to the [Technical Information] Screen from which technical sensor information can be downloaded. |
| (3) Path Calendar Link | : The link to the [Path Calendar] Screen from which path calendars can be downloaded. |
| (4) The GOSAT standard mesh point (SMP) Link | : The link to the [GOSAT Standard Mesh Point] Screen from which GOSAT standard mesh point information can be downloaded. |
| (5) GOSAT Data Policy | : The link to the GOSAT Data Policy. |

5.2 Documents (Product Descriptions) Screen

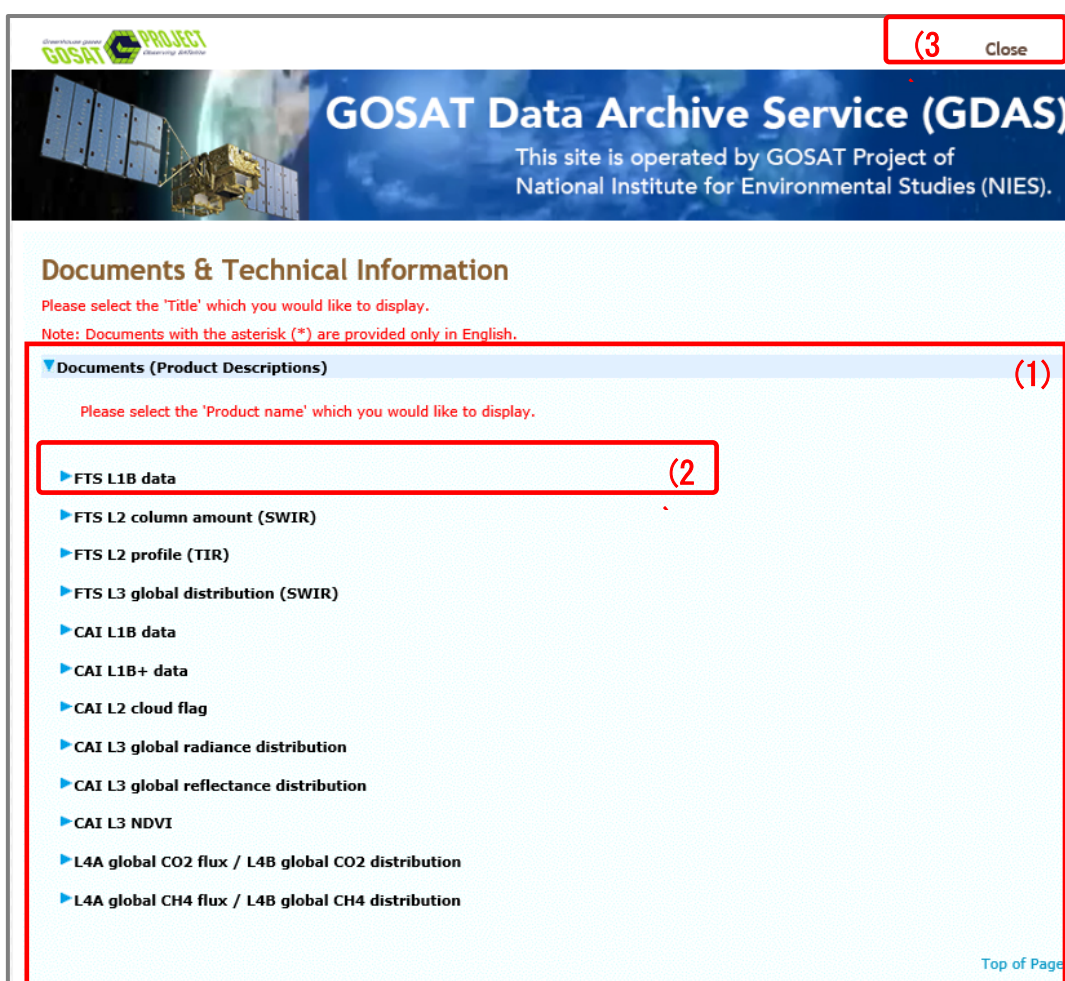
(1) Moving to the [Documents (Product Description)] Screen

Click on [Documents] on the [Documents & Information] Screen (see section 5.1) to move to the [Documents] Screen (new screen).



(2) [Documents (Product Description)] Screen

Displays information related to GOSAT (ATBD, Product Format Description, Important Note at Releasing) ((1) below). Click on any of the links to download the relevant file.



- (1) Documents (Product Descriptions) : Displays a list of products from which documents can be downloaded.
- (2) Product Name (FTS L1B data, etc.) : Displays a list of documents for each product.
- (3) [Close] Link : The link for closing the [Document] Screen.

Important: The following will be displayed when the product name is clicked.

▼ FTS L1B data

*Geolocation Error in FTS L1B and its countermeasure (English PDF)

Important Caveats for FTS Level 1B Product Band 4 (This was corrected at the version-up of V160160.) (English PDF, Japanese PDF)

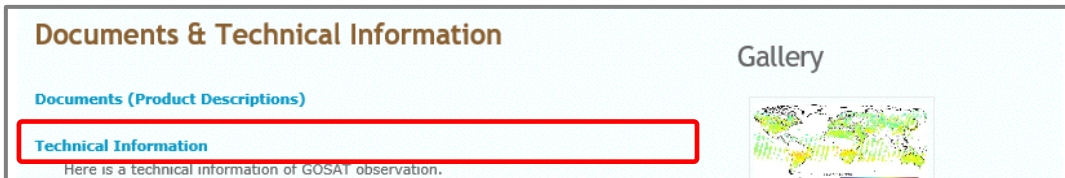
Version	Obs. Periods (YYYY/MM/DD)	ATBD	Product Format Descriptions	Important Notes at Releasing
V201.202	2016/03/26-present	N/A	*V201.20x (English PDF)	V201.202 (Release Notes for Product) (English PDF, Japanese PDF)
V161.161	2015/02/01-present		V161.160-V161.161 (English PDF, Japanese PDF)	V161.161 (Release Notes for Product) (English PDF, Japanese PDF)
V161.160	2009/04/23-2014/12/14			V161.160 (Release Notes for Product) (English PDF, Japanese PDF)

Information: It is also possible to display the [Technical Information], [Path Calendar] and [GOSAT Standard Mesh Point] displayed in the list of [Documents & Technical Information] from this screen.

5.3 Technical Information Screen

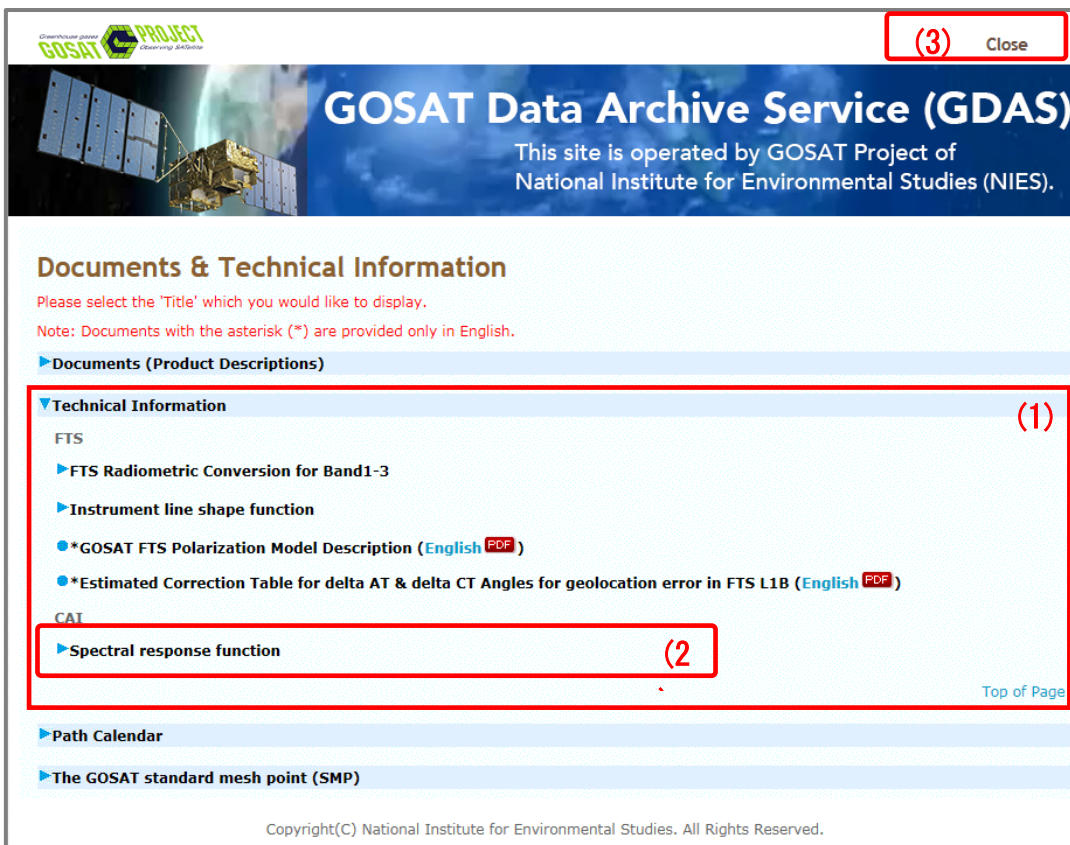
(1) Moving to the [Technical Information] Screen

Click on [Technical Information] on the [Documents & Information] Screen (see section 5.1) to move to the [Technical Information] Screen (new screen).



(2) [Technical Information] Screen

Displays information related to the GOSAT FTS sensors and CAI sensors ((1) below). Click on any of the links to download the relevant file.



- | | | |
|-----|-----------------------|--|
| (1) | Technical Information | : Displays a list of technical information for each sensor. |
| (2) | Technical Information | : Displays individual technical information for the for the Sensors sensors. |

(3) [Close] Link : The link for closing the [Technical Information] Screen.

Important: The following details will be displayed when the title of the technical information is clicked.

▼ **Spectral response function**

Definitions:

WL = Wavelength [nm]

SRF = Normalized spectral response function [a.u.]

SRF file format ex. SRF(B1):

WL(B1), SRF(B1)

Caveats:

April 23, 2009 (Algorithm Version: 006, Parameter Version: 006, Date: 090423)

(1) SRF is evaluated by multiplying of filter optics transmittance and detector response.

(2) Si CCDs are used for B1, B2 and B3, while InGaAs for B4.

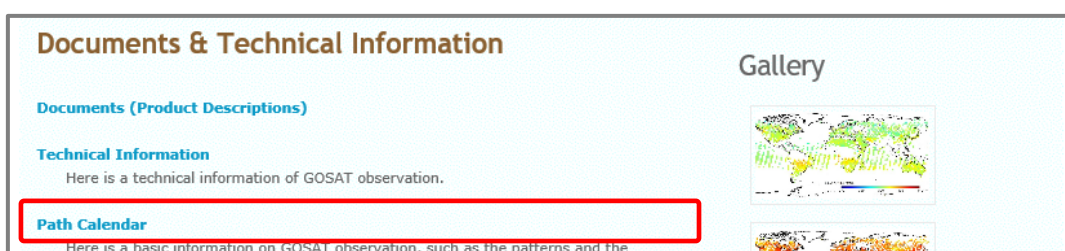
For SRF file download : [Click here](#) 

Information: It is also possible to display the [Technical Information], [Path Calendar] and [GOSAT Standard Mesh Point] displayed in the list of [Documents & Technical Information] from this screen.

5.4 Path Calendar Screen

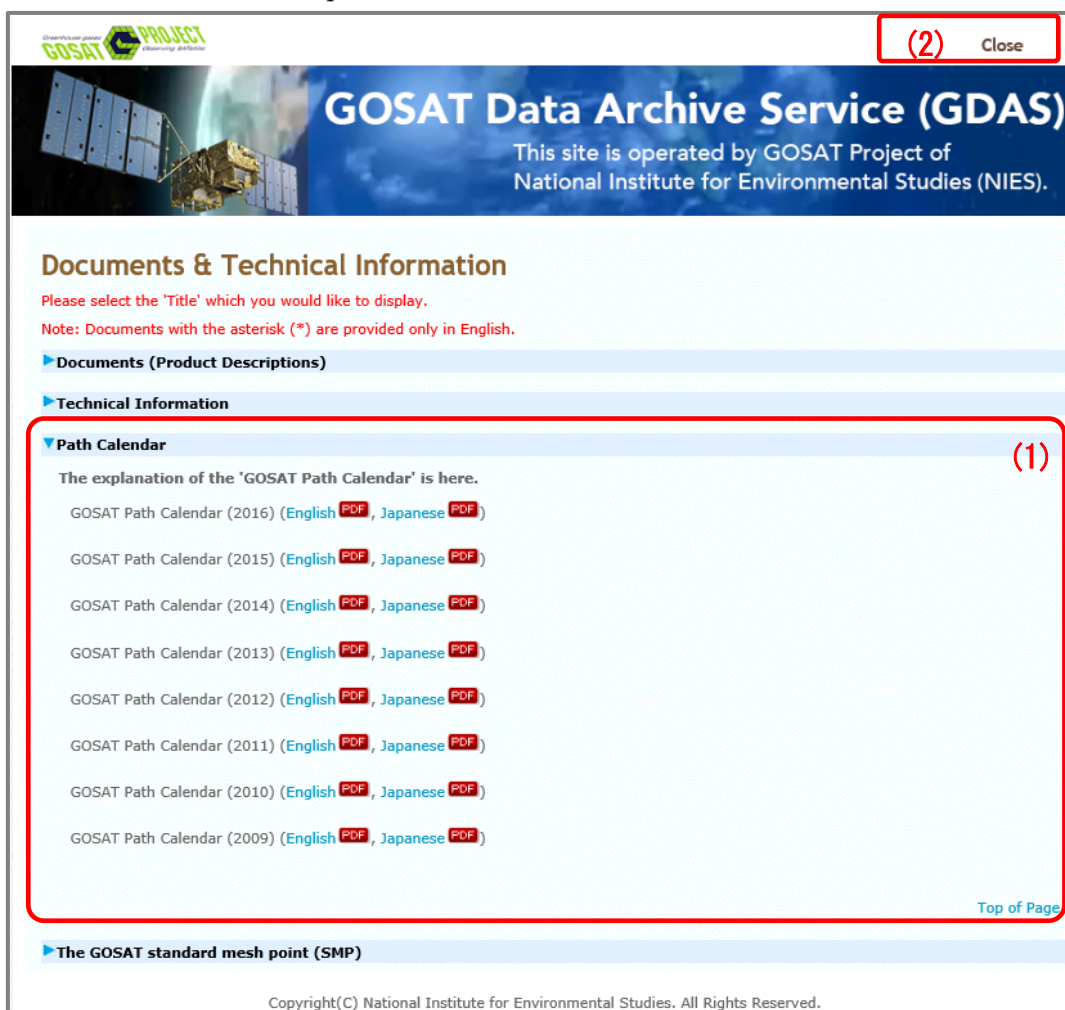
(1) Moving to the [Path Calendar] Screen

Click on [Path Calendar] on the [Documents & Information] Screen (see section 5.1) to move to the [Path Calendar] Screen (new screen).



(2) [Path Calendar] Screen

Displays the observation paths for GOSAT products ((1) below). Click on any of the links to download the GOSAT path calendar.



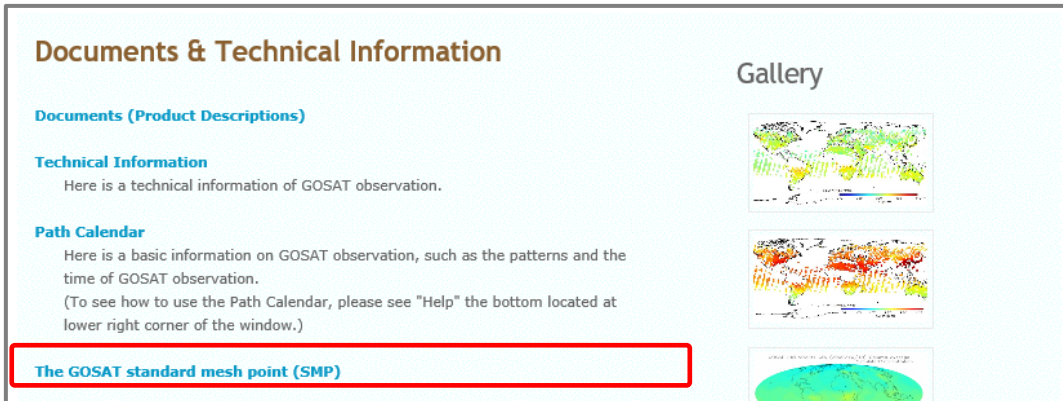
- (1) GOSAT Path calendar : The link to the GOSAT path calendars (PDF files).
- (2) [Close] Link : The link for closing the [Path Calendar] Screen.

Information: It is also possible to display the [Technical Information], [Path Calendar] and [GOSAT Standard Mesh Point] displayed in the list of [Documents & Technical Information] from this screen.

5.5 GOSAT Standard Mesh Point Information Screen

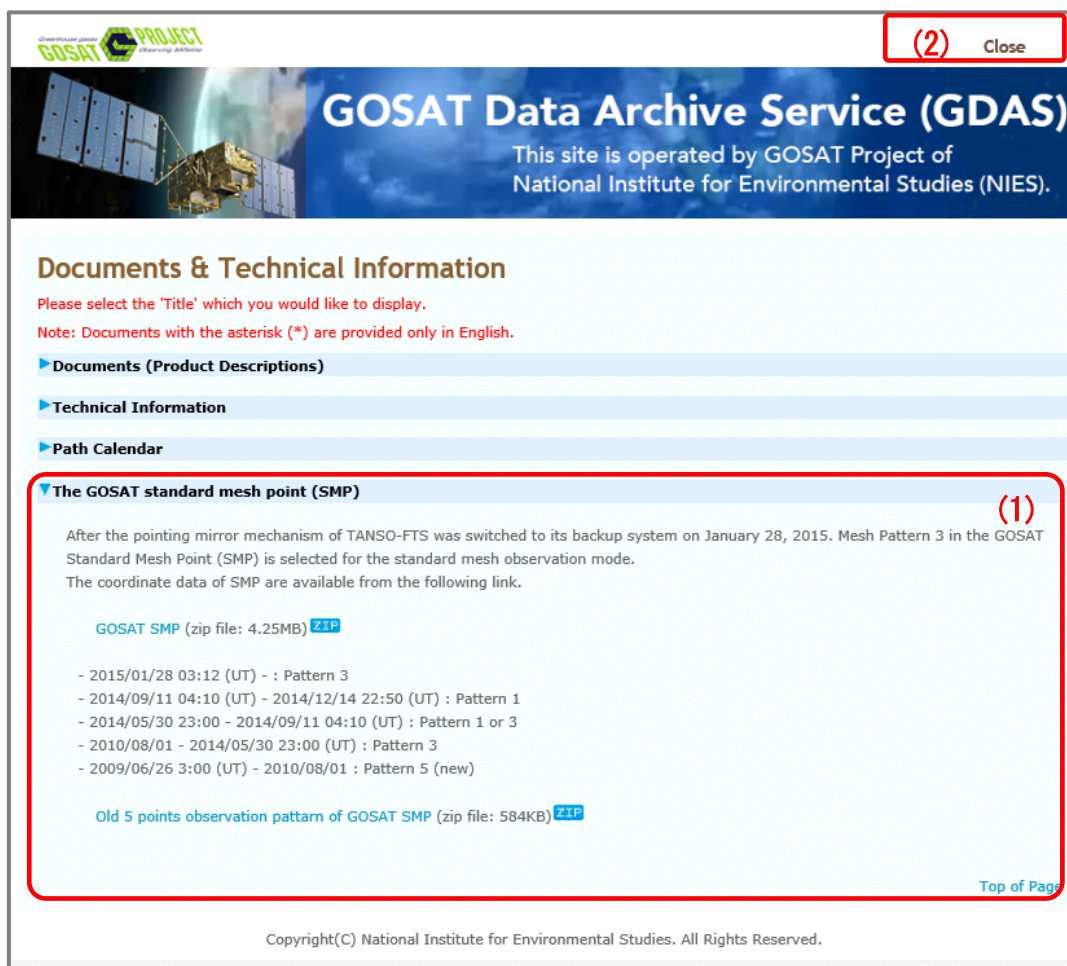
(1) Moving to the [GOSAT Standard Mesh Point Information] Screen

Click on [The GOSAT standard mesh point (SMP)] on the [Documents & Information] Screen (see section 5.1) to move to the [GOSAT Standard Mesh Point Information] Screen (new screen).



(2) [GOSAT Standard Mesh Point Information] Screen

Displays information related to the GOSAT standard mesh points ((1) below). Click on any of the links to download the relevant file.



(1) GOSAT Standard Mesh Point : Displays GOSAT standard mesh point information.

(2) [Close] Link : The link for closing the [GOSAT Standard Mesh Point] Screen.

Information: It is also possible to display the [Technical Information], [Path Calendar] and [GOSAT Standard Mesh Point] displayed in the list of [Documents & Technical Information] from this screen.

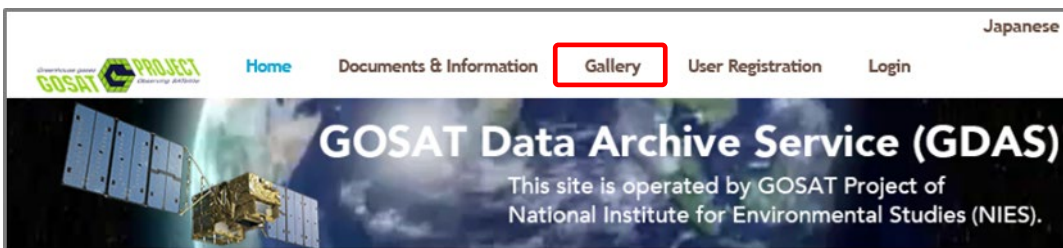
6 Procedures for Browsing GOSAT Product Images

This section explains the procedure for browsing GOSAT product image data.

6.1 Gallery Screen

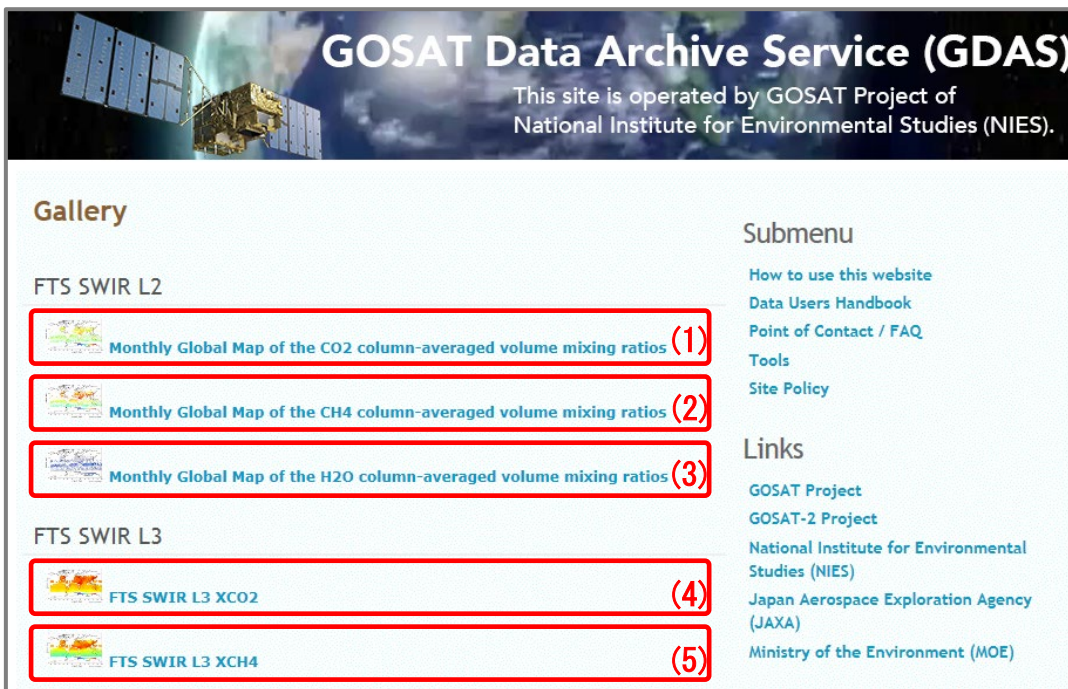
(1) Moving to the [Gallery] Screen

Click on [Gallery] on the [GDAS Top] Screen (see section 4.1) to move to the [Gallery] Screen.



(2) [Gallery] Screen

Displays a list of the GOSAT product gallery. Click on any of the products to move to the relevant gallery screen.



L4A	
 Global Gas Flux Maps (L4A)	(6)
 Global Gas Flux Maps (View Format) (L4A)	(7)
 Gas Flux Time Series (L4A)	(8)
L4B	
 Global Gas Concentration Maps (L4B)	(9)
 Global Gas Concentration Maps (View Format) (L4B)	(10)
 Gas Concentration Time Series (L4B)	(11)
 Global Gas Concentration Animations (L4B)	(12)
CAI L1B+	
 CAI L1B+ Browse Image	(13)
 Images of the Earth captured by "IBUKI"	(14)
CAI L3	
 Global NDVI Map	(15)
 Browse images of the global radiance distribution	(16)




(1)	Monthly Global Map of the CO ₂ column-averaged volume mixing ratios Link	: The link to the [Monthly Global Map of the CO ₂ column-averaged volume mixing ratios] Screen.
(2)	Monthly Global Map of the CH ₄ column-averaged volume mixing ratios Link	: The link to the [Monthly Global Map of the CH ₄ column-averaged volume mixing ratios] Screen.
(3)	Monthly Global Map of the H ₂ O column-averaged volume mixing ratios Link	: The link to the [Monthly Global Map of the H ₂ O column-averaged volume mixing ratios] Screen.
(4)	FTS SWIR L3 XCO ₂ Link	: The link to the [FTS SWIR L3 XCO ₂] Screen.
(5)	FTS SWIR L3 XCH ₄ Link	: The link to the [FTS SWIR L3 XCH ₄] Screen.
(6)	Global Gas Flux Maps Link	: The link to the [Global Gas Flux Maps] Screen.
(7)	Global Gas Flux Maps (View Format) Link	: The link to the [Global Gas Flux Maps (View Format)] Screen.
(8)	Gas Flux Time Series Link	: The link to the [Gas Flux Time Series] Screen.

(9)	Global Gas Concentration Maps Link	:	The link to the [Global Gas Concentration Maps] Screen.
(10)	Global Gas Concentration Maps (View Format) Link	:	The link to the [Global Gas Concentration Maps (View Format)] Screen.
(11)	Gas Concentration Time Series Link	:	The link to the [Gas Concentration Time Series] Screen.
(12)	Global Gas Concentration Animations Link	:	The link to the [Global Gas Concentration Animations] Screen.
(13)	CAI L1B+ Browse Image Link	:	The link to the [CAI L1B+ Browse Image Calendar] Screen.
(14)	Images of the Earth captured by "IBUKI" Link	:	The link to the [Images of the Earth captured by "IBUKI"] Screen.
(15)	Global NDVI Map Link	:	The link to the [Global NDVI Map] Screen.
(16)	Browse images of the global radiance distribution Link	:	The link to the [Browse images of the global radiance distribution] Screen.

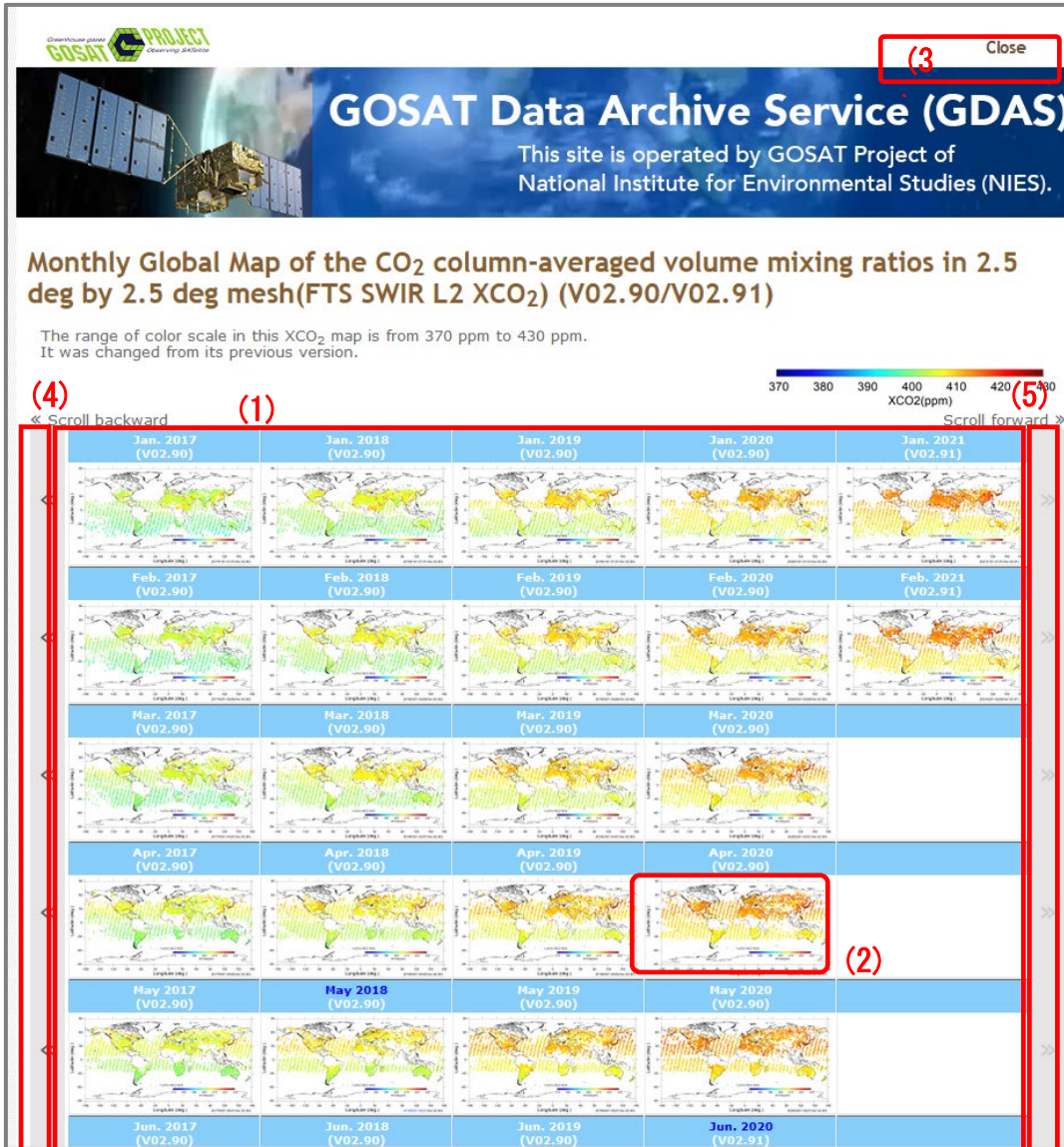
6.2 Monthly Global Map of L2 CO2 Column-Averaged Volume Mixing Ratios Screen

(1) Moving to the [Monthly Global Map of the CO2 column-averaged volume mixing ratios] Screen

Click on [Monthly Global Map of the CO2 column-averaged volume mixing ratios] on the [Gallery] Screen (see section 6.1) to move to the [Monthly Global Map of the CO2 column-averaged volume mixing ratios] Screen (new screen).

FTS SWIR L2	Links
 Monthly Global Map of the CO2 column-averaged volume mixing ratios	GOSAT Project GOSAT-2 Project National Institute for Environmental Studies (NIES) Japan Aerospace Exploration Agency (JAXA) Ministry of the Environment (MOE)
 Monthly Global Map of the CH4 column-averaged volume mixing ratios	
 Monthly Global Map of the H2O column-averaged volume mixing ratios	

(2) [Monthly Global Map of the CO₂ column-averaged volume mixing ratios] Screen Displays a list of thumbnail images for monthly global maps of L2 CO₂ column-averaged volume mixing ratios ((1) below). Click on each individual image ((2) below) to display them on an enlarged [Monthly Global Map of L2 CO₂ Column-Averaged Volume Mixing Ratio] Screen (new screen).



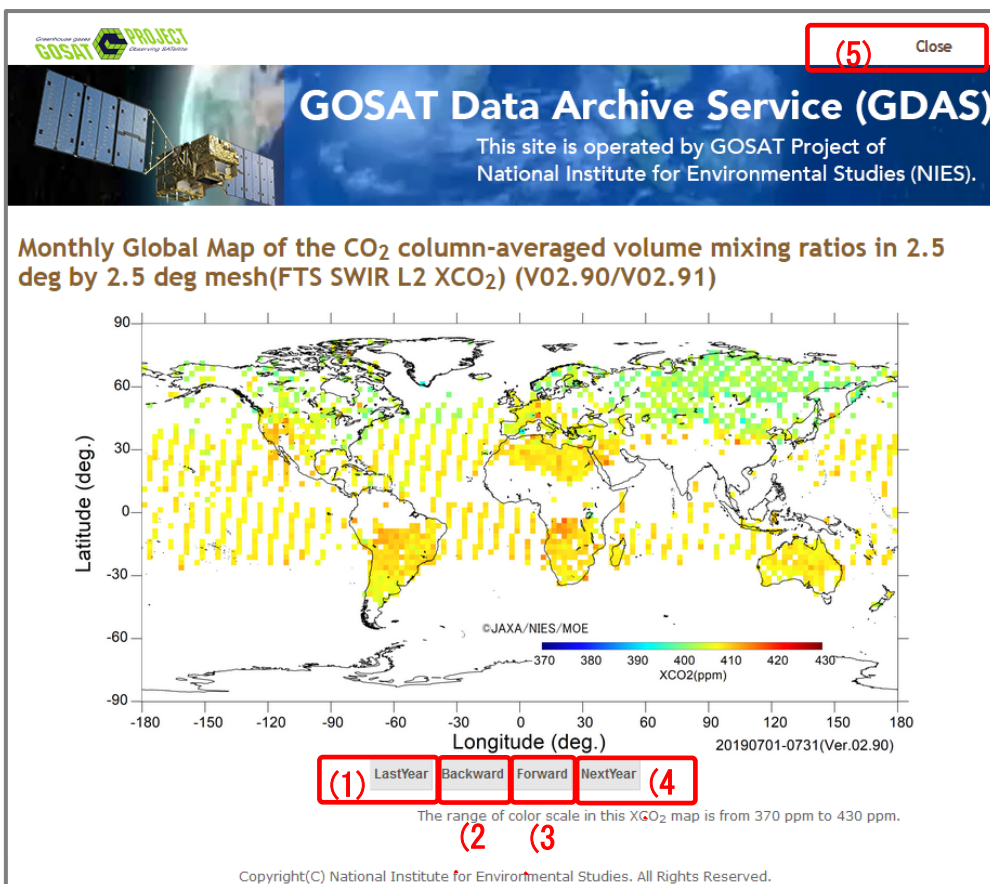
- (1) List of Average Monthly Volume Mixing Ratios : Displays a list of average monthly volume mixing ratios.
- (2) Thumbnail Images : Link to the enlarged [Monthly Global Map of L2 CO₂ Column-Averaged Volume Mixing Ratio] Screen for the relevant year/month.

- (3) [Close] Link : The link for closing the [Monthly Global Map of the CO₂ column-averaged volume mixing ratios] Screen.
- (4) [<<] Button : Button for scrolling to previous year's list.
- (5) [>>] Button : Button for scrolling to subsequent year's list.

Information: Dates highlighted in blue indicate that data for a full month is not available.

(3) Enlarged [Monthly Global Map of L2 CO₂ Column-Averaged Volume Mixing Ratio] Screen

Displays an enlarged image of the monthly global map of L2 CO₂ column-averaged volume mixing ratios. Click on [Backward] ((2) below) or [Forward] ((3) below) to display the previous or subsequent image.



- (1) [LastYear] Button : Button for displaying the previous year's image.
- (2) [Backward] Button : Button for displaying the previous month's image.

- (3) [Forward] Button : Button for displaying the subsequent month's image.
- (4) [NextYear] Button : Button for displaying the subsequent year's image.
- (5) [Close] Link : The link for closing the Enlarged [Monthly Global Map of L2 CO2 Column-Averaged Volume Mixing Ratio] Screen.

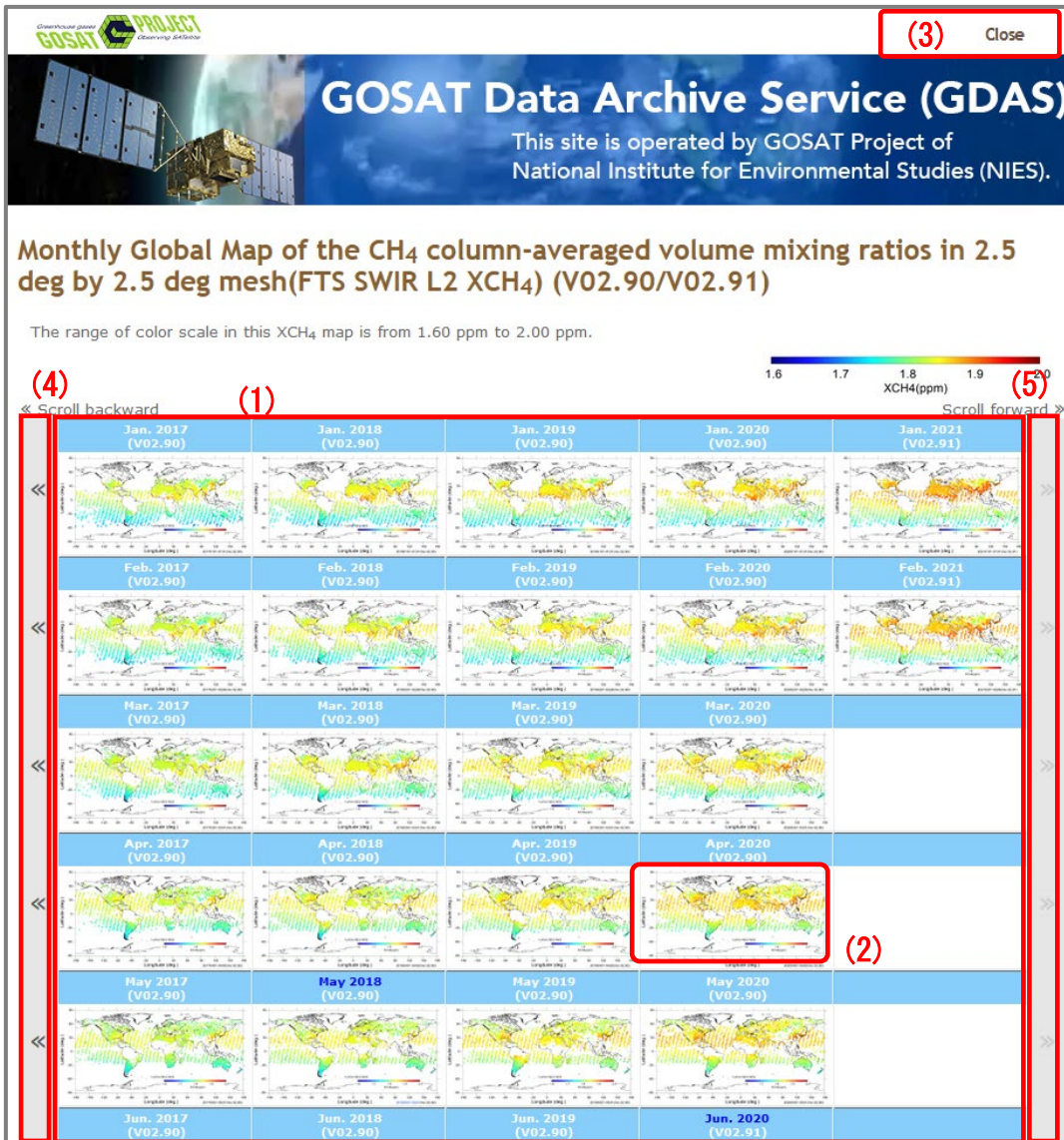
6.3 Monthly Global Map of L2 CH4 Column-Averaged Volume Mixing Ratios Screen

(1) Moving to the [Monthly Global Map of the CH4 column-averaged volume mixing ratios] Screen

Click on [Monthly Global Map of the CH4 column-averaged volume mixing ratios] on the [Gallery] Screen (see section 6.1) to move to the [Monthly Global Map of the CH4 column-averaged volume mixing ratios] Screen (new screen).



(2) [Monthly Global Map of the CH₄ column-averaged volume mixing ratios] Screen Displays a list of thumbnail images for monthly global maps of L2 CH₄ column-averaged volume mixing ratios ((1) below). Click on each individual image ((2) below) to display them on an enlarged [Monthly Global Map of L2 CH₄ Column-Averaged Volume Mixing Ratio] Screen (new screen).



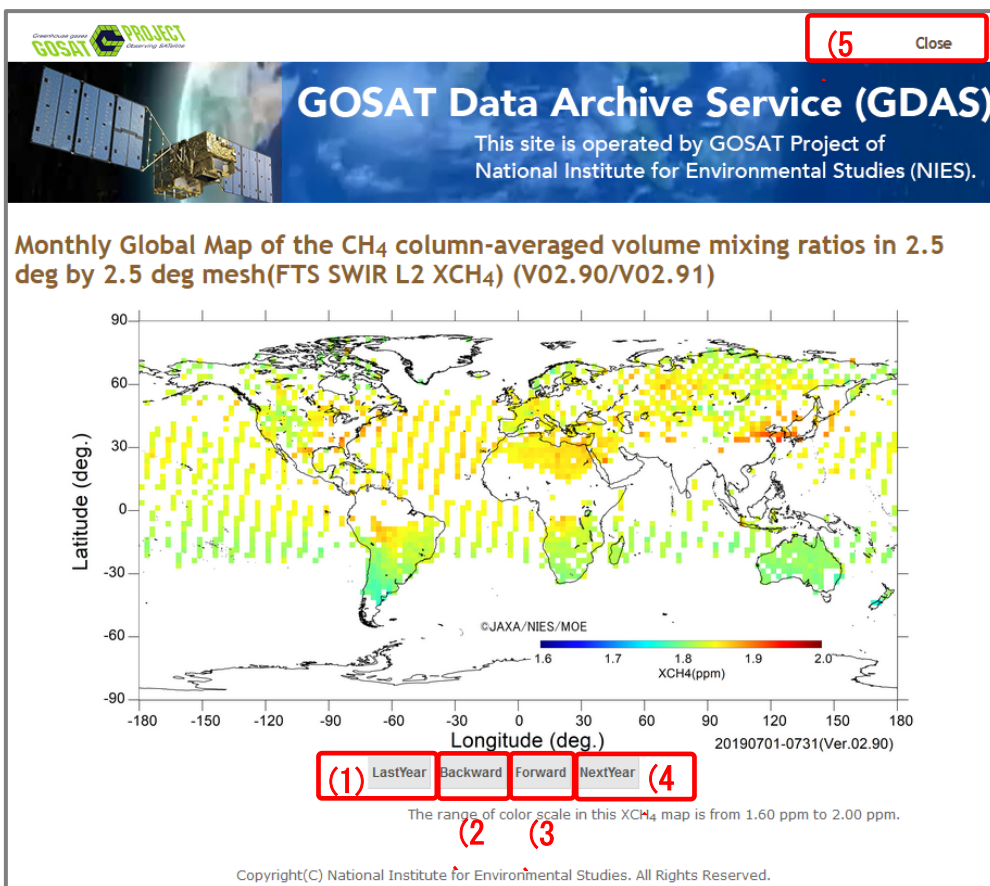
(1) List of Average Monthly Volume Mixing Ratios : Displays a list of average monthly volume mixing ratios.

- (2) Thumbnail Images : Link to the enlarged [Monthly Global Map of L2 CH₄ Column-Averaged Volume Mixing Ratio] Screen for the relevant year/month.
- (3) [Close] Link : The link for closing the [Monthly Global Map of the CH₄ column-averaged volume mixing ratios] Screen.
- (4) [<<] Button : Button for scrolling to previous year's list.
- (5) [>>] Button : Button for scrolling to subsequent year's list.

Information: Dates highlighted in blue indicate that data for a full month is not available.

(3) Enlarged [Monthly Global Map of L2 CH₄ Column-Averaged Volume Mixing Ratio] Screen

Displays an enlarged image of the monthly global map of L2 CH₄ column-averaged volume mixing ratios. Click on [Backward] ((2) below) or [Forward] ((3) below) to display the previous or subsequent image.



- (1) [LastYear] Button : Button for displaying the previous year's image.
- (2) [Backward] Button : Button for displaying the previous month's image.
- (3) [Forward] Button : Button for displaying the subsequent month's image.
- (4) [NextYear] Button : Button for displaying the subsequent year's image.
- (5) [Close] Link : The link for closing the Enlarged [Monthly Global Map of the CH₄ column-averaged volume mixing ratios] Screen.

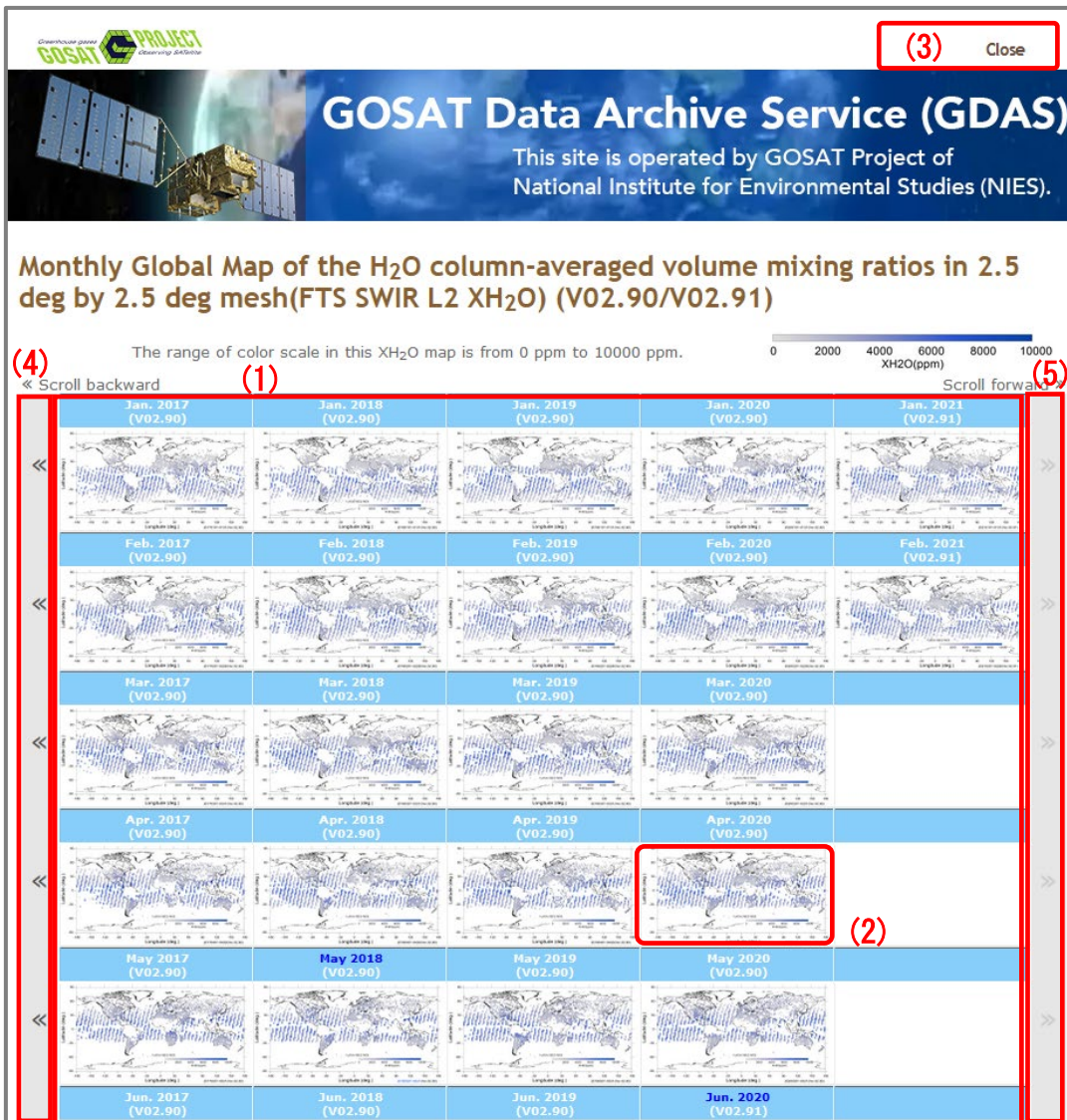
6.4 Monthly Global Map of L2 H2O Column-Averaged Volume Mixing Ratios Screen

(1) Moving to the [Monthly Global Map of the H2O column-averaged volume mixing ratios] Screen

Click on [Monthly Global Map of the H2O column-averaged volume mixing ratios] on the [Gallery] Screen (see section 6.1) to move to the [Monthly Global Map of the H2O column-averaged volume mixing ratios] Screen (new screen).

FTS SWIR L2	Links
 Monthly Global Map of the CO2 column-averaged volume mixing ratios	GOSAT Project GOSAT-2 Project National Institute for Environmental Studies (NIES)
 Monthly Global Map of the CH4 column-averaged volume mixing ratios	Japan Aerospace Exploration Agency (JAXA) Ministry of the Environment (MOE)
 Monthly Global Map of the H2O column-averaged volume mixing ratios	

(2) [Monthly Global Map of the H₂O column-averaged volume mixing ratios] Screen Displays a list of thumbnail images for monthly global maps of L2 H₂O column-averaged volume mixing ratios ((1) below). Click on each individual image ((2) below) to display them on an enlarged [Monthly Global Map of L2 H₂O Column-Averaged Volume Mixing Ratio] Screen (new screen).



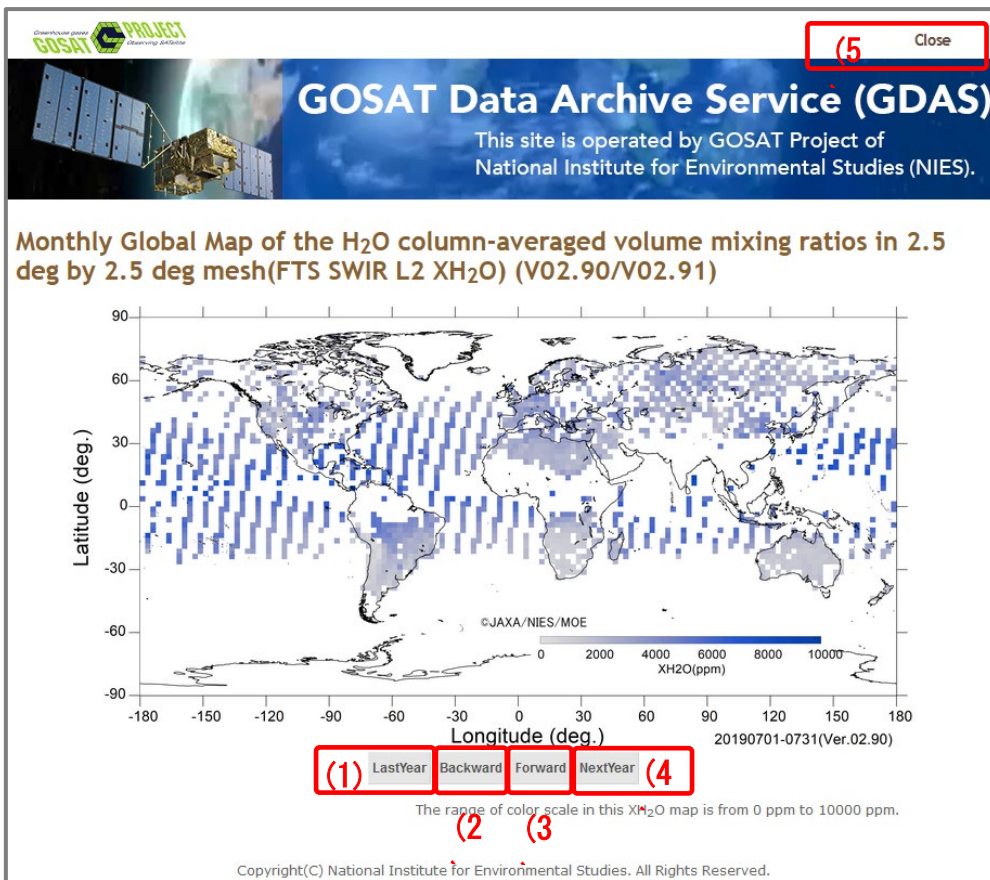
(1) List of Average Monthly Volume Mixing Ratios : Displays a list of average monthly volume mixing ratios.

- (2) Thumbnail Images : Link to the enlarged [Monthly Global Map of L2 H2O Column-Averaged Volume Mixing Ratio] Screen for the relevant year/month.
- (3) [Close] Link : The link for closing the [Monthly Global Map of the H2O column-averaged volume mixing ratios] Screen.
- (4) [<<] Button : Button for scrolling to previous year's list.
- (5) [>>] Button : Button for scrolling to subsequent year's list.

Information: Dates highlighted in blue indicate that data for a full month is not available.

(3) Enlarged [Monthly Global Map of L2 H2O Column-Averaged Volume Mixing Ratio] Screen

Displays an enlarged image of the monthly global map of L2 H2O column-averaged volume mixing ratios. Click on [Backward] ((2) below) or [Forward] ((3) below) to display the previous or subsequent image.

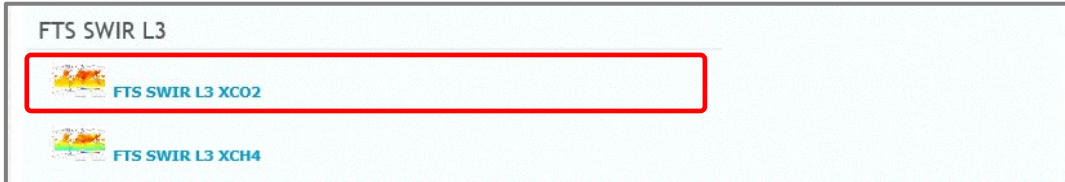


- (1) [LastYear] Button : Button for displaying the previous year's image.
- (2) [Backward] Button : Button for displaying the previous month's image.
- (3) [Forward] Button : Button for displaying the subsequent month's image.
- (4) [NextYear] Button : Button for displaying the subsequent year's image.
- (5) [Close] Link : The link for closing the Enlarged [Monthly Global Map of the H₂O column-averaged volume mixing ratios] Screen.

6.5 FTS SWIR L3 XCO2 Screen

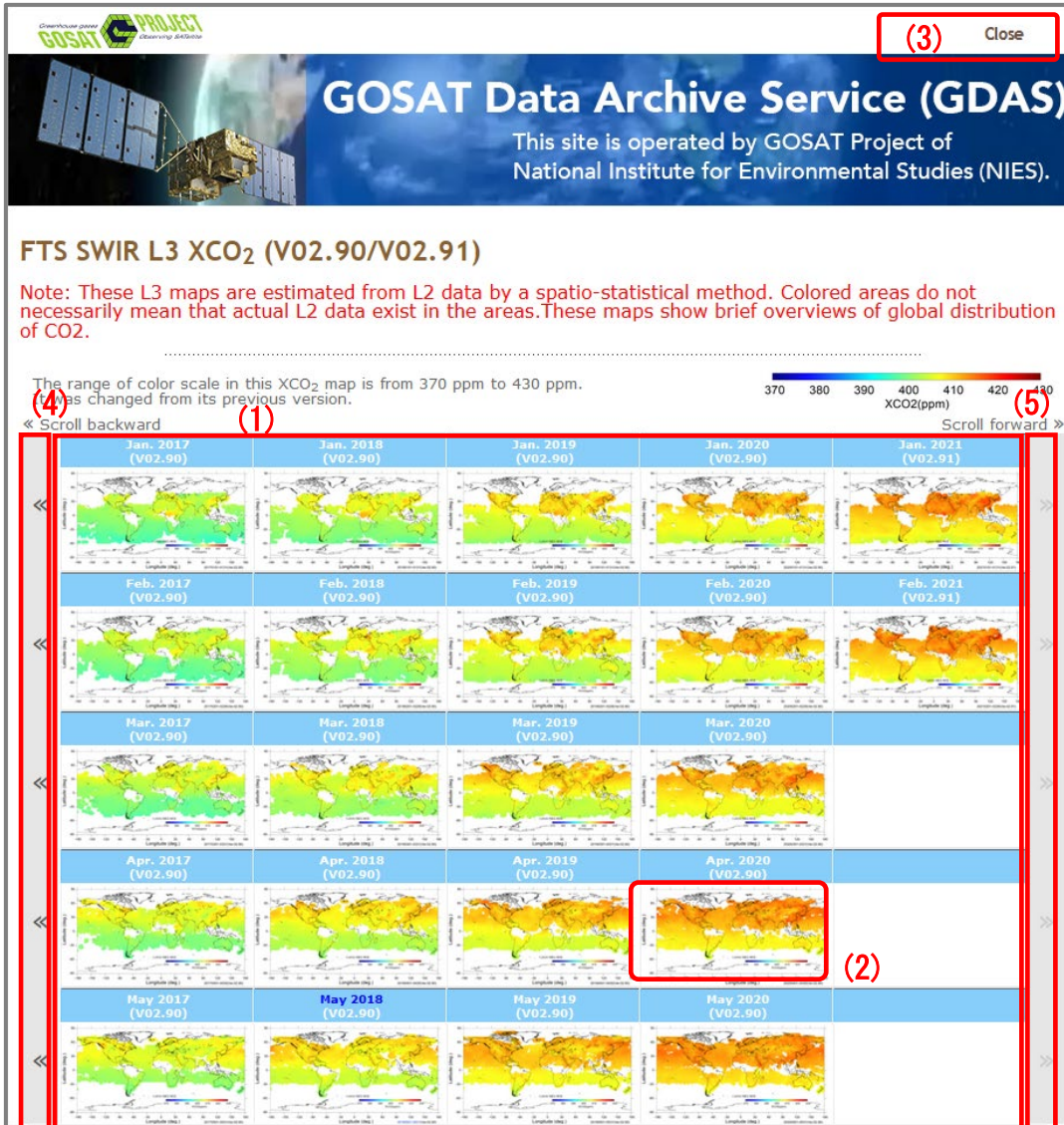
(1) Moving to the [FTS SWIR L3 XCO2] Screen

Click on [FTS SWIR L3 XCO2] on the [Gallery] Screen (see section 6.1) to move to the [FTS SWIR L3 XCO2] Screen (new screen).



(2) [FTS SWIR L3 XCO₂] Screen

Displays a list of thumbnail images for global maps of FTS SWIR L3 CO₂ column-averaged volume mixing ratios ((1) below). Click on each individual image ((2) below) to display them on an enlarged [FTS SWIR L3 XCO₂] Screen (new screen).



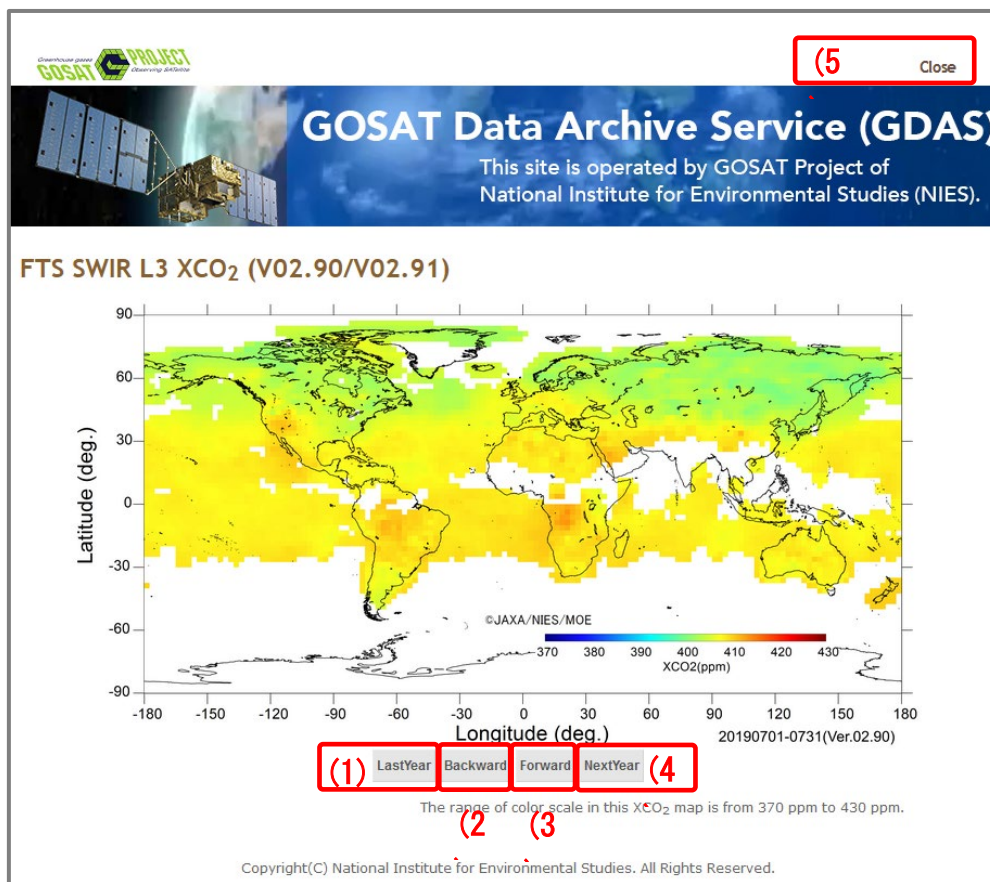
- (1) List of Global Column-Averaged Volume Mixing Ratios : Displays a list of global column-averaged volume mixing ratios.
- (2) Thumbnail Images : Link to the enlarged [FTS SWIR L3 XCO₂] Screen for the relevant year/month.
- (3) [Close] Link : The link for closing the [FTS SWIR L3 XCO₂] Screen.
- (4) [<<] Button : Button for scrolling to previous year's list.

- (5) [>>] Button : Button for scrolling to subsequent year's list.

Information: Dates highlighted in blue indicate that data for a full month is not available.

- (3) Enlarged [FTS SWIR L3 XCO₂] Screen

Displays an enlarged image of FTS SWIR L3 XCO₂. Click on [Backward] ((2) below) or [Forward] ((3) below) to display the previous or subsequent image.

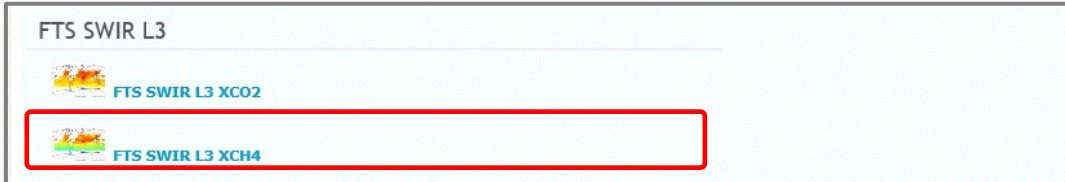


- (1) [LastYear] Button : Button for displaying the previous year's image.
 (2) [Backward] Button : Button for displaying the previous month's image.
 (3) [Forward] Button : Button for displaying the subsequent month's image.
 (4) [NextYear] Button : Button for displaying the subsequent year's image.
 (5) [Close] Link : The link for closing the Enlarged [FTS SWIR L3 XCO₂] Screen.

6.6 FTS SWIR L3 XCH4 Screen

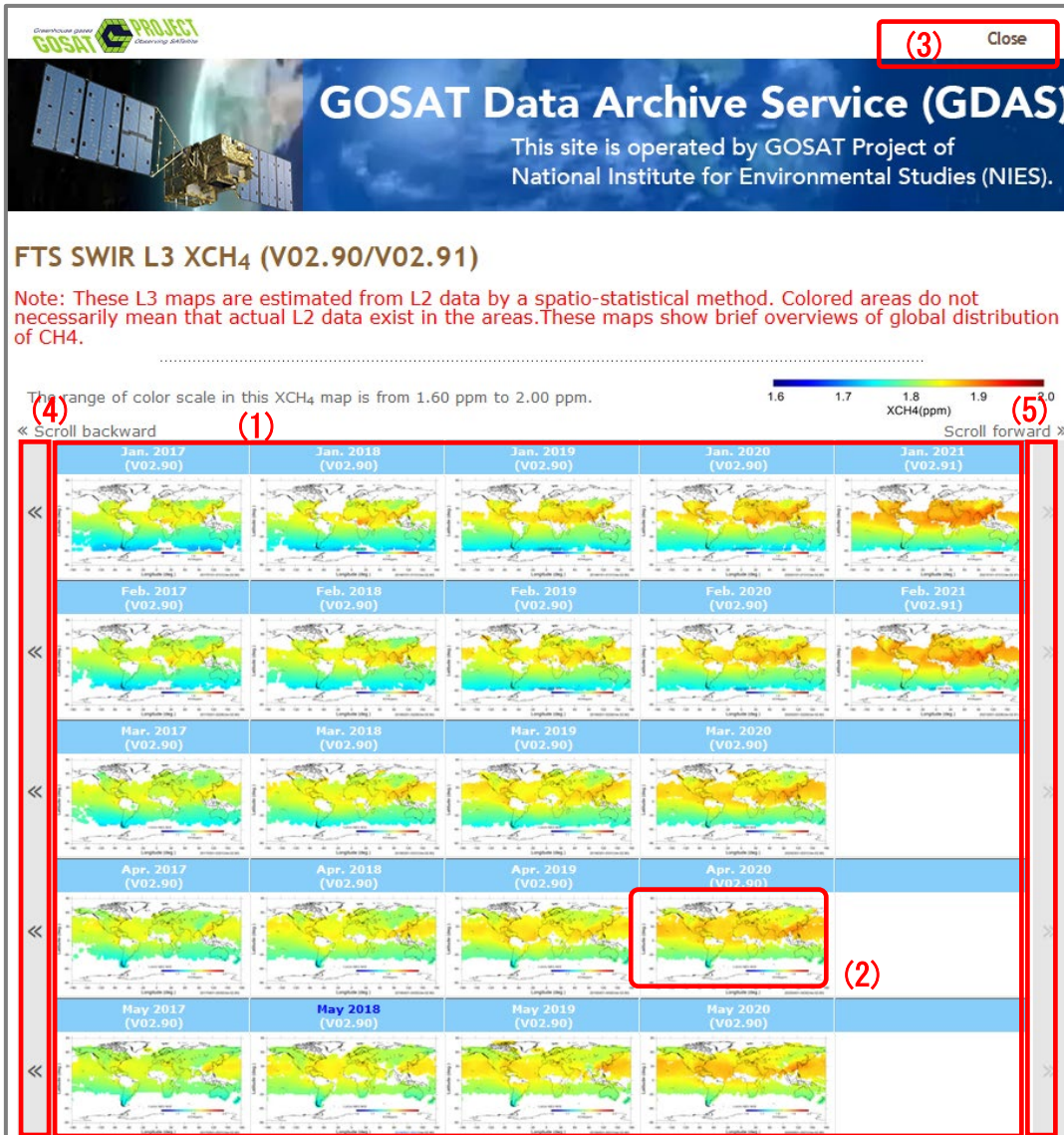
(1) Moving to the [FTS SWIR L3 XCH4] Screen

Click on [FTS SWIR L3 XCH4] on the [Gallery] Screen (see section 6.1) to move to the [FTS SWIR L3 XCH4] Screen (new screen).



(2) [FTS SWIR L3 XCH4] Screen

Displays a list of thumbnail images for global maps of FTS SWIR L3 CH4 column-averaged volume mixing ratios ((1) below). Click on each individual image ((2) below) to display them on an enlarged [FTS SWIR L3 XCH4] Screen (new screen).



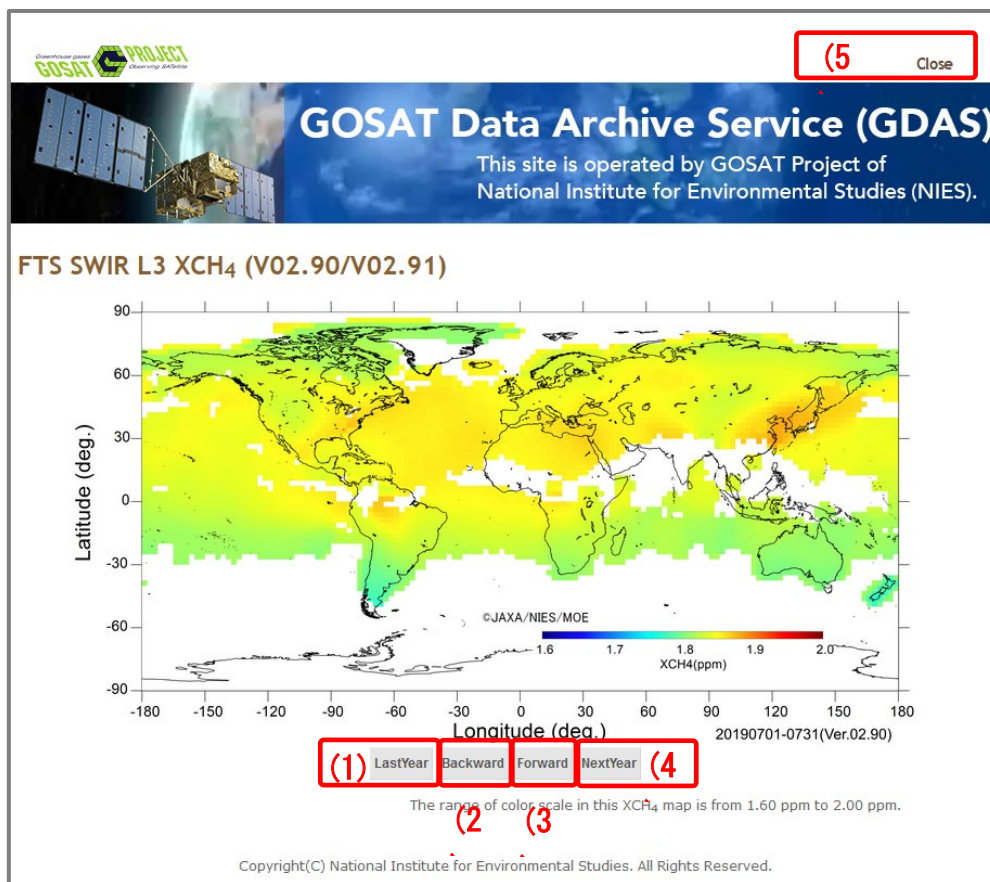
- (1) List of Global Column : Displays a list of global column-averaged volume Averaged Volume Mixing Ratios
- (2) Thumbnail Images : Link to the enlarged [FTS SWIR L3 XCH4] Screen for the relevant year/month.
- (3) [Close] Link : The link for closing the [FTS SWIR L3 XCH4] Screen.

- (4) [[<<](#)] Button : Button for scrolling to previous year's list.
- (5) [[>>](#)] Button : Button for scrolling to subsequent year's list.

Information: Dates highlighted in blue indicate that data for a full month is not available.

(3) Enlarged [FTS SWIR L3 XCH4] Screen

Displays an enlarged image of FTS SWIR L3 XCH4. Click on [Backward] ((2) below) or [Forward] ((3) below) to display the previous or subsequent image.



- (1) [LastYear] Button : Button for displaying the previous year's image.
- (2) [Backward] Button : Button for displaying the previous month's image.
- (3) [Forward] Button : Button for displaying the subsequent month's image.
- (4) [NextYear] Button : Button for displaying the subsequent year's image.
- (5) [Close] Link : The link for closing the Enlarged [FTS SWIR L3 XCH4] Screen.

6.7 Global Gas Flux Maps Screen

(1) Moving to the [Global Gas Flux Maps (L4A)] Screen

Click on [Global Gas Flux Maps (L4A)] on the [Gallery] Screen (see section 6.1) to move to the [Global Gas Flux Maps (L4A)] Screen (new screen).



(2) [Global Gas Flux Maps (L4A)] Screen

Select the required values from the [Gas], [Version], [Time Step], [Date], [Horizontal Distribution] and [Central Longitude] pull-down menus ((1) to (6) below) to display a global gas flux map created in accordance with the selected conditions. Click on [Backward] ((8) below) or [Forward] ((9) below) to display the previous or subsequent image.

GOSAT PROJECT

GOSAT Data Archive Service (GDAS)
This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

Global Gas Flux Maps

(1) Gas: CO2 (2) Version: V02.03 (3) Time step: Monthly (4) Date: 2012/10 (5) Horizontal distribution: Region (6) Central longitude: 0 degrees

(7) GOSAT L4A V02.03 CO₂ Fluxes (2012/10)

(8) GOSAT L4A V02.03 CO₂ Flux Uncertainties (2012/10)

Time variation: (8) Backward (9) Forward

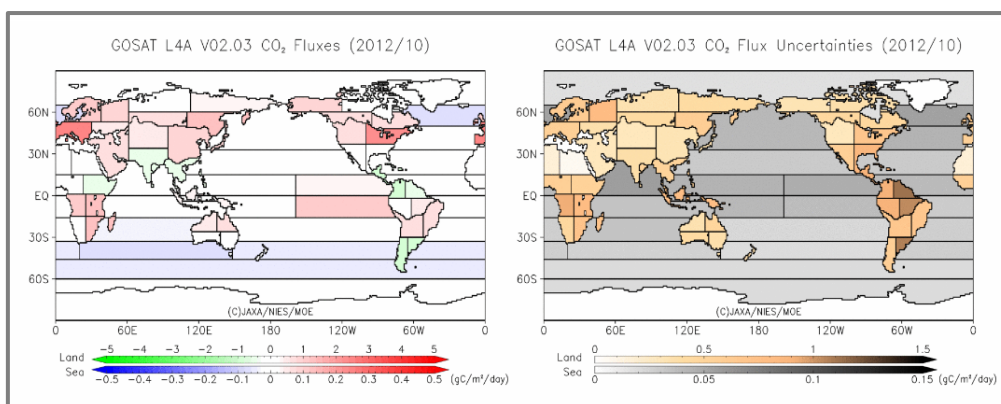
Animation: (10) Start (11) Stop

(12) Close

[Click to enlarge]

- (1) [Gas] Pull-down Menu : Pull-down menu for selecting the [Gas].
- (2) [Version] Pull-down Menu : Pull-down menu for selecting the [Version].
- (3) [Time step] Pull-down Menu : Pull-down menu for selecting the [Time Step]. (Fixed at [monthly])
- (4) [Date] Pull-down Menu : Pull-down menu for selecting the year/month.
- (5) [Horizontal distribution] Pull-down Menu : Pull-down menu for selecting the [Horizontal Distribution]. (Fixed at [region])
- (6) [Central longitude] Pull-down Menu : Pull-down menu for selecting the [Central longitude].
- (7) Main Screen : Displays the images selected with conditions (1) through (6). Click on the images to display them on enlarged screens (*).
- (8) [Backward] Button : Button for displaying the previous month's image.
- (9) [Forward] Button : Button for displaying the subsequent month's image.
- (10) [Start] Button : Button for starting automatic playback of the image.
- (11) [Stop] Button : Button for halting automatic playback of the image.
- (12) [Close] Link : The link for closing the [Global Gas Flux Maps (L4A)] Screen.

* Examples of enlarged images



6.8 Global Gas Flux Maps (View Format) Screen

(1) Moving to the [Global Gas Flux Maps (View Format) (L4A)] Screen

Click on [Global Gas Flux Maps (View Format) (L4A)] on the [Gallery] Screen (see section 6.1) to move to the [Global Gas Flux Maps (View Format) (L4A)] Screen (new screen).



(2) [Global Gas Flux Maps (View Format) (L4A)] Screen

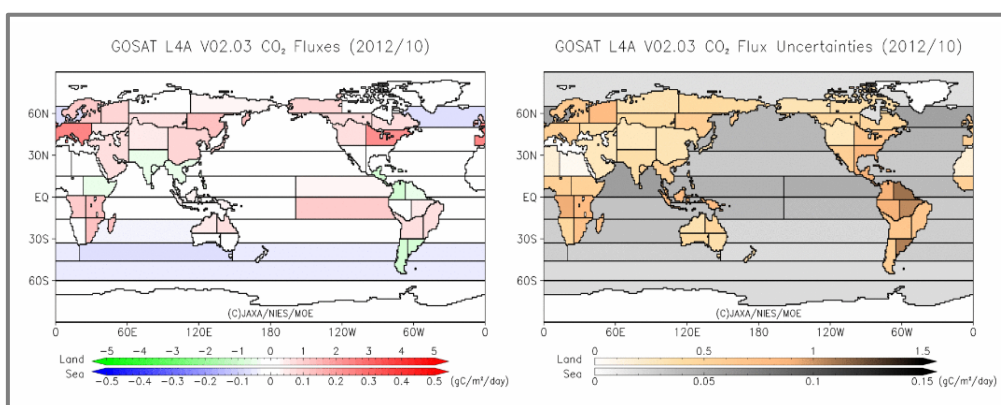
Select the required values from the [Gas], [Version], [Time Step], [Horizontal Distribution] and [Central Longitude] pull-down menus ((1) to (5) below) to display a list of global gas flux maps created in accordance with the selected conditions. Click on each individual image ((6) below) to display them on an enlarged [Global Gas Flux Map] Screen (new screen).

The screenshot shows the GOSAT Data Archive Service (GDAS) interface. At the top, there is a header with the GOSAT Project logo and the text "GOSAT Data Archive Service (GDAS)". Below the header, there are five pull-down menus: Gas (CO2), Version (V02.03), Time step (Monthly), Horizontal distribution (Region), and Central longitude (0 degrees). These menus are numbered (1) through (5). Below the menus is a grid of 12 global gas flux maps for CO2, arranged in a 3x4 grid. The maps are labeled with dates from 2009/06 to 2010/09. The map for 2010/04 is highlighted with a red box and labeled (6). A "Close" button is located in the top right corner, labeled (7).

- (1) [Gas] Pull-down Menu : Pull-down menu for selecting the [Gas].
- (2) [Version] Pull-down Menu : Pull-down menu for selecting the [Version].
- (3) [Time step] Pull-down Menu : Pull-down menu for selecting the [Time Step]. (Fixed at [monthly])
- (4) [Horizontal distribution] Pull-down Menu : Pull-down menu for selecting the [Horizontal Distribution]. (Fixed at [region])

- (5) [Central longitude] Pull-down Menu : Pull-down menu for selecting the [Central longitude].
- (6) List of Images : Displays the images selected with conditions (1) through (5). Click on the images to display them on enlarged screens (*).
- (7) [Close] Link : The link for closing the [Global Gas Flux Maps (View Format) (L4A)] Screen.

* Examples of enlarged images



6.9 Gas Flux Time Series Screen

(1) Moving to the [Gas Flux Time Series (L4A)] Screen

Click on [Gas Flux Time Series (L4A)] on the [Gallery] Screen (see section 6.1) to move to the [Gas Flux Time Series (L4A)] Screen (new screen).



(2) [Gas Flux Time Series (L4A)] Screen

Select the required values from the [Gas], [Version], [Area] and [Region] pull-down menus ((1) to (4) below) to display a gas flux time series plot created in accordance with the selected conditions ((5) below).

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GOSAT Data Archive Service

GOSAT Data Archive Service (GDAS)
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Gas Flux Time Series

(1) Gas: CO2
(2) Version: V02.03
(3) Area: Region
(4) Region: 32 Temperate Asia NE

(5)

GOSAT L4A V02.03 CO₂ Region:32 Temperate Asia NE

Flux (gC/m²/day)

JUL 2009 JAN 2010 JUL 2010 JAN 2011 JUL 2011 JAN 2012 JUL 2012

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- (1) [Gas] Pull-down Menu : Pull-down menu for selecting the [Gas].
- (2) [Version] Pull-down Menu : Pull-down menu for selecting the [Version].
- (3) [Area] Pull-down Menu : Pull-down menu for selecting the [Area]. (Fixed at [region]).
- (4) [Region] Pull-down Menu : The pull-down menu for selecting the [Region].
- (5) Main Screen : Displays the images selected with conditions (1) through (4).
- (6) [Close] Link : The link for closing the [Gas Flux Time Series (L4A)] Screen.

Information: Consists of 64 carbon dioxide regions and 43 methane gas regions.

6.10 Global Gas Concentration Maps Screen

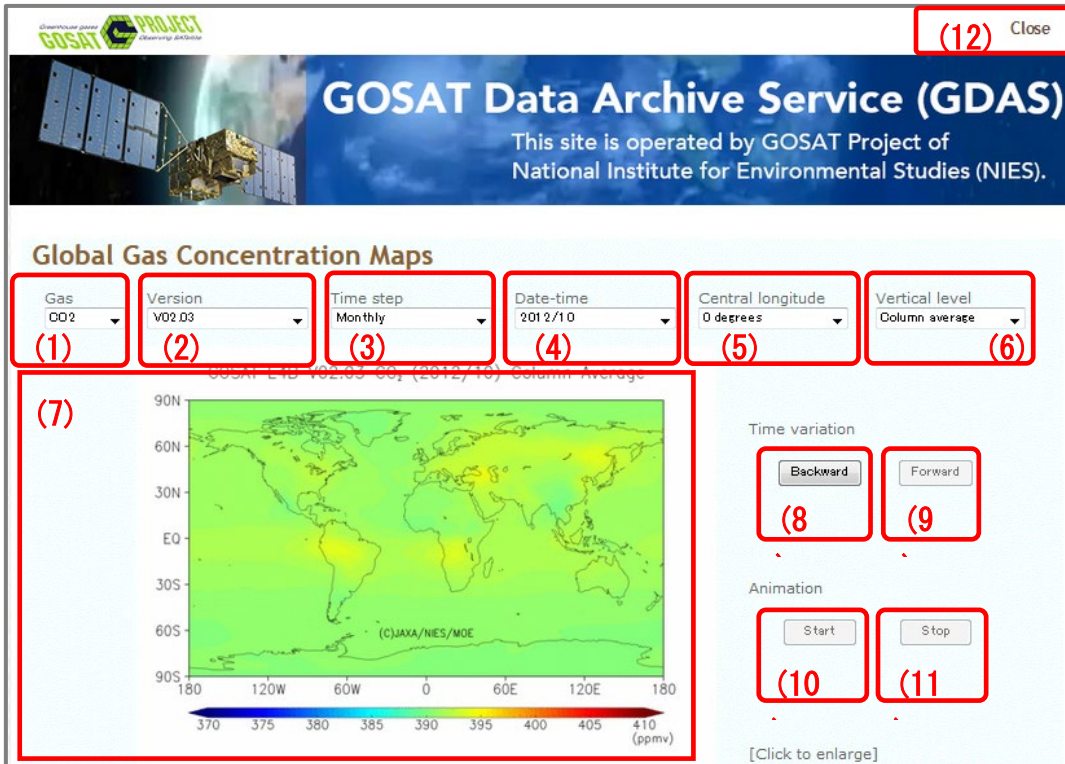
(1) Moving to the [Global Gas Concentration Maps (L4B)] Screen

Click on [Global Gas Concentration Maps (L4B)] on the [Gallery] Screen (see section 6.1) to move to the [Global Gas Concentration Maps (L4B)] Screen (new screen).



(2) [Global Gas Concentration Maps (L4B)] Screen

Select the required values from the [Gas], [Version], [Time Step], [Date-time], [Central Longitude] and [Vertical level] pull-down menus ((1) to (6) below) to display a global gas concentration map created in accordance with the selected conditions. Click on [Backward] ((8) below) or [Forward] ((9) below) to display the previous or subsequent image. Click on an image to display it on an enlarged [Global Gas Concentration Map] Screen (new screen).

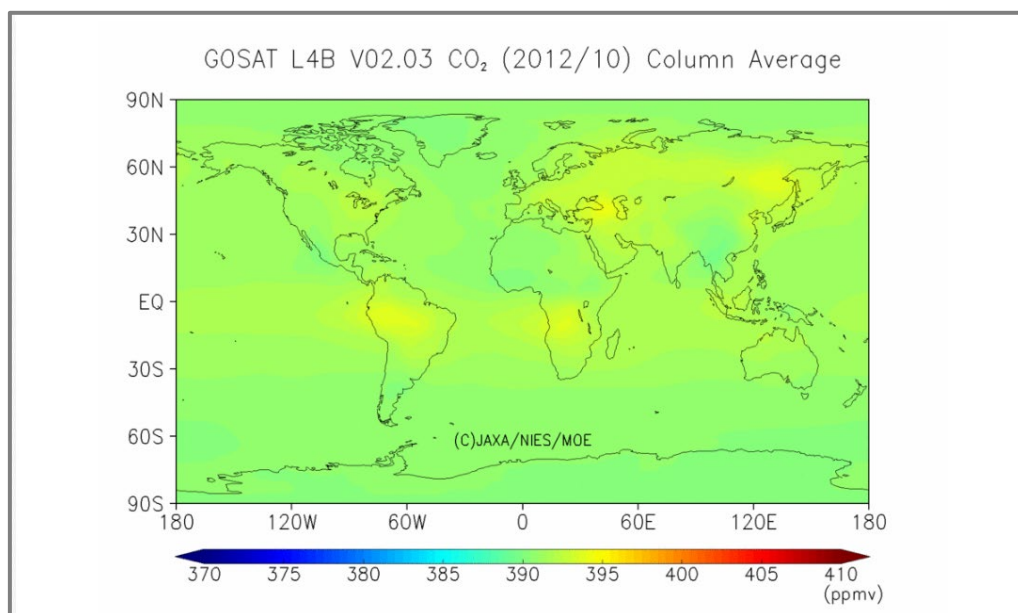


(1)	[Gas] Pull-down Menu	:	Pull-down menu for selecting the [Gas].
(2)	[Version] Pull-down Menu	:	Pull-down menu for selecting the [Version].
(3)	[Time step] Pull-down Menu	:	Pull-down menu for selecting the [Time Step].
(4)	[Date-time] Pull-down Menu	:	Pull-down menu for selecting the [Date-time].
(5)	[Central longitude] Pull-down Menu	:	Pull-down menu for selecting the [Central longitude].
(6)	[Vertical level] Pull-down Menu	:	Pull-down menu for selecting the [Vertical level].

(7)	Main Screen	:	Displays the images selected with conditions (1) through (6). Click on the images to display them on enlarged screens (*).
(8)	[Backward] Button	:	Button for displaying the previous month's image.
(9)	[Forward] Button	:	Button for displaying the subsequent month's image.
(10)	[Start] Button	:	Button for starting automatic playback of the image.
(11)	[Stop] Button	:	Button for halting automatic playback of the image.
(12)	[Close] Link	:	The link for closing the [Global Gas Concentration Maps (L4B)] Screen.

Information: Consists of three types of time step (6-hours/Daily Average/Monthly Average).

* Example of an enlarged image



6.11 Global Gas Concentration Maps (View Format) Screen

(1) Moving to the [Global Gas Concentration Maps (View Format) (L4B)] Screen

Click on [Global Gas Concentration Maps (View Format) (L4B)] on the [Gallery] Screen (see section 6.1) to move to the [Global Gas Concentration Maps (View Format) (L4B)] Screen (new screen).



(2) [Global Gas Concentration Maps (View Format) (L4B)] Screen

Select the required values from the [Gas], [Version], [Time Step], [Vertical Level] and [Central Longitude] pull-down menus ((1) to (5) below) to display a list of global gas concentration maps created in accordance with the selected conditions. Click on each individual image ((6) below) to display them on an enlarged [Global Gas Concentration Map] Screen (new screen).

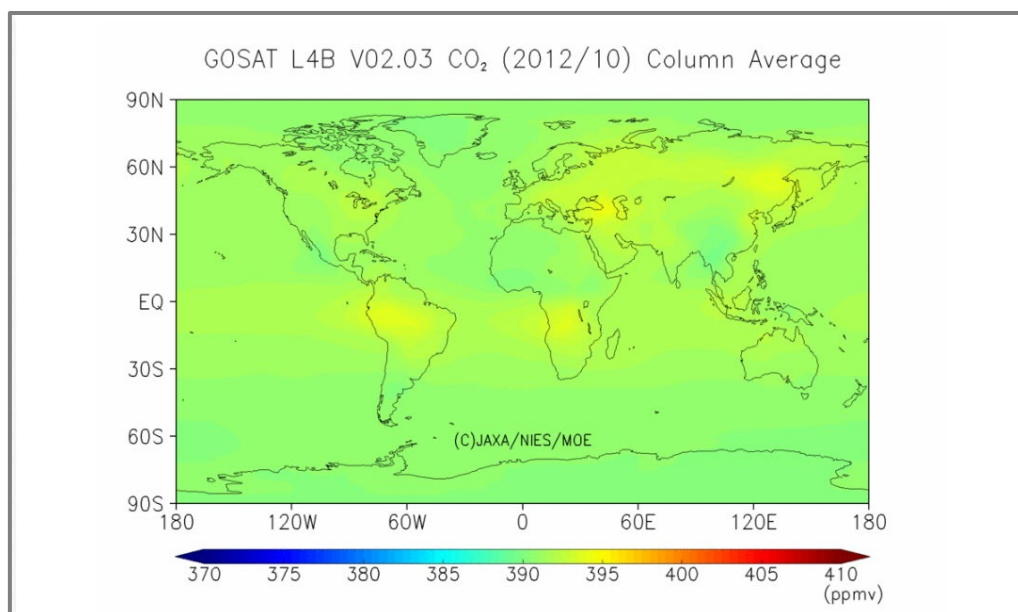
The screenshot shows the GOSAT Data Archive Service (GDAS) interface. At the top, there is a header with the GOSAT logo and a 'Close' button (7). Below the header, the title 'Global Gas Concentration Maps (View Format)' is displayed. The interface features several pull-down menus: Gas (CO2) (1), Version (V02.03) (2), Time step (Monthly) (3), Date, Vertical level (Column average) (4), and Central longitude (0 degrees) (5). Below these menus, a grid of 12 global gas concentration maps is displayed, with the map for 2010/03 highlighted by a red box (6).

(1)	[Gas] Pull-down Menu	:	Pull-down menu for selecting the [Gas].
(2)	[Version] Pull-down Menu	:	Pull-down menu for selecting the [Version].
(3)	[Time step] Pull-down Menu	:	Pull-down menu for selecting the [Time Step].
(4)	[Vertical level] Pull-down Menu	:	Pull-down menu for selecting the [Vertical level].
(5)	[Central longitude] Pull-down Menu	:	Pull-down menu for selecting the [Central longitude].

(6)	List of Images	: Displays the images selected with conditions (1) through (5). Click on the images to display them on enlarged screens (*).
(7)	[Close] Link	: The link for closing the [Global Gas Concentration Maps (View Format) (L4B)] Screen.

Information: Consists of three types of time step (6-hours/Daily Average/Monthly Average).

* Example of an enlarged image



6.12 Gas Concentration Time Series Screen

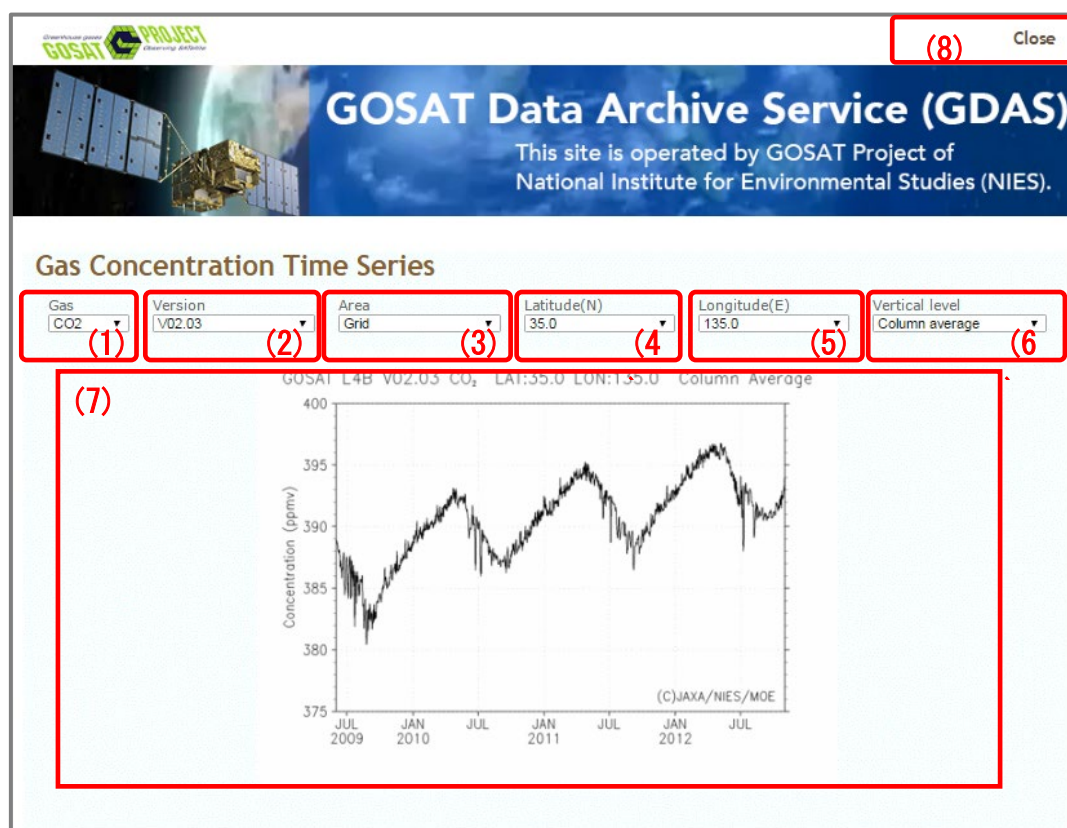
(1) Moving to the [Gas Concentration Time Series (L4B)] Screen

Click on [Gas Concentration Time Series (L4B)] on the [Gallery] Screen (see section 6.1) to move to the [Gas Concentration Time Series (L4B)] Screen (new screen).



(2) [Gas Concentration Time Series (L4B)] Screen

Select the required values from the [Gas], [Version], [Area], [Latitude (N)], [Longitude (E)], and [Vertical level] pull-down menus ((1) to (6) below) to display a gas concentration time series plot created in accordance with the selected conditions ((7) below).



- (1) [Gas] Pull-down Menu : Pull-down menu for selecting the [Gas].
- (2) [Version] Pull-down Menu : Pull-down menu for selecting the [Version].
- (3) [Area] Pull-down Menu : Pull-down menu for selecting the [Area].
- (4) [Latitude] Pull-down Menu : Pull-down menu for selecting the [Latitude (N)] (per 2.5 degrees).
- (5) [Longitude] Pull-down Menu : Pull-down menu for selecting the [Longitude (E)] (per 2.5 degrees).
- (6) [Vertical level] Pull-down Menu : Pull-down menu for selecting the [Vertical level].
- (7) Main Screen : Displays the images selected with conditions (1) through (6).
- (8) [Close] Link : The link for closing the [Gas Concentration Time Series (L4B)] Screen.

**Information: Consist of two locations (lattice point/global average).
The [North Latitude] and [East Latitude] cannot be selected if global average has been selected.**

6.13 Global Gas Concentration Animations Screen

(1) Moving to the [Global Gas Concentration Animations (L4B)] Screen

Click on [Global Gas Concentration Animations (L4B)] on the [Gallery] Screen (see section 6.1) to move to the [Global Gas Concentration Animations (L4B)] Screen (new screen).



(2) [Global Gas Concentration Animations (L4B)] Screen

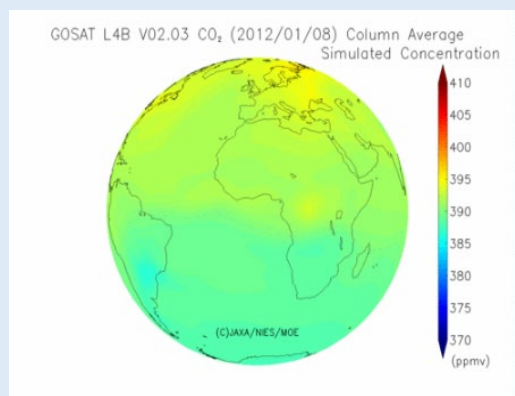
Select the value for [Gas], [Version], [Year], [Time Step], [Projection], [Center Location], and [Vertical level] ((1) to (7) below) from the pull-down menu and then click on [View] to display the global gas concentration animation created in accordance with the selected conditions ((8) below).

- (1) [Gas] Pull-down Menu : Pull-down menu for selecting the [Gas].
- (2) [Version] Pull-down Menu : Pull-down menu for selecting the [Version].
- (3) [Year] Pull-down Menu : Pull-down menu for selecting the [Year].
- (4) [Time step] Pull-down Menu : Pull-down menu for selecting the [Time Step].
- (5) [Projection] Pull-down Menu : Pull-down menu for selecting the [Projection].
- (6) [Center Location] Pull-down Menu : Pull-down menu for selecting the [Center Location].
- (7) [Vertical level] Pull-down Menu : Pull-down menu for selecting the [Vertical level].

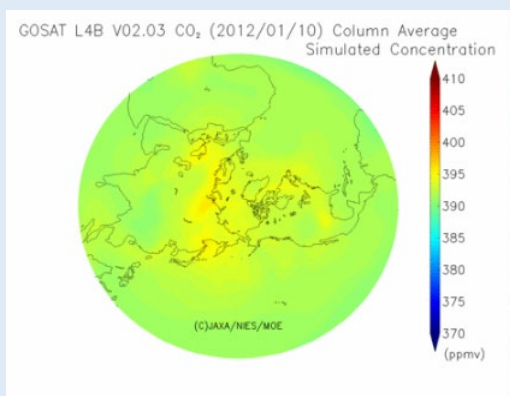
- (8) [View] Button : Displays the animation selected with conditions (1) through (7).
- (9) [Close] Link : The link for closing the [Global Gas Concentration Animations (L4B)] Screen.

Information: The projection method consists of three types (Mollweide/Equatorial/Polar).

Equatorial



Polar



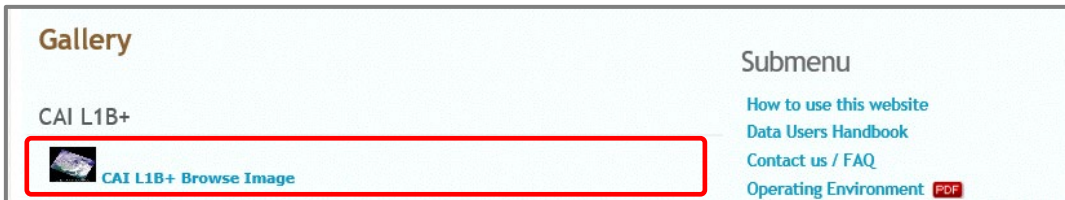
[Central Locations] differ in accordance with the projection method. Consists of two types of central location for the [Mollweide] projection method (0. longitude/180. longitude). Consists of four types of central location for the [Equatorial] projection method (0. longitude/180. longitude / 90. east longitude / 90. west longitude). Consists of two types of central location for the [Polar] projection method (north pole/south pole).

Information: Consists of two types of time step (6-hours/Daily Average).

6.14 CAI L1B+ Browse Image Screen


(1) Moving to the [CAI L1B+ Browse Image Calendar] Screen

Click on [CAI L1B+ Browse Image] on the [Gallery] Screen (see section 6.1) to move to the [CAI L1B+ Browse Image Calendar] Screen (new screen).



(2) [CAI L1B+ Browse Image Calendar] Screen

Select the [Observational Year] ((1) below) from the pull-down menu on the [CAI L1B+ Browse Image Calendar] Screen, and then click on the [Date] ((2) below) to display the [CAI L1B+ Browse Image] Screen for the selected observational date.



(3) Close

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CAI L1B+ Browse Image Calendar

Observational year: 2016 (1)

Month	Day																														
Jan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Feb	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	-	-
Mar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Apr	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	-
May	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Jun	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	-
Jul	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Aug	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Sep	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	-
Oct	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Nov	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	-
Dec	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Color scheme of the calendar is as follows.

	Path : 1,4,7,10,13,16,19,22,25,28,31,34,37,40
	Path : 43,2,5,8,11,14,17,20,23,26,29,32,35,38,41
	Path : 44,3,6,9,12,15,18,21,24,27,30,33,36,39,42
	no data

(2)

- (1) **Observational Year** : Selects the observation year to be displayed (most recent year displayed as the default).
- (2) **Date** : The link to the [CAI L1B+ Browse Image] Screen for each observational date.
- (3) **[Close] Link** : The link for closing the [CAI L1B+ Browse Image Calendar] Screen.

Information: The background colors on the calendar are color-coded into three groups of path numbers in alignment with the three-day rotation cycle of GOSAT observations.

(3) [CAI L1B+ Browse Image] Screen

Displays a list of the CAI L1B+ browse images in units of observational date paths. Click on the [Detail] Button ((2) below) to move to the Enlarged [CAI L1B+ Browse Image] Screen (new screen) if necessary.



(5) Close

GOSAT Data Archive Service (GDAS)

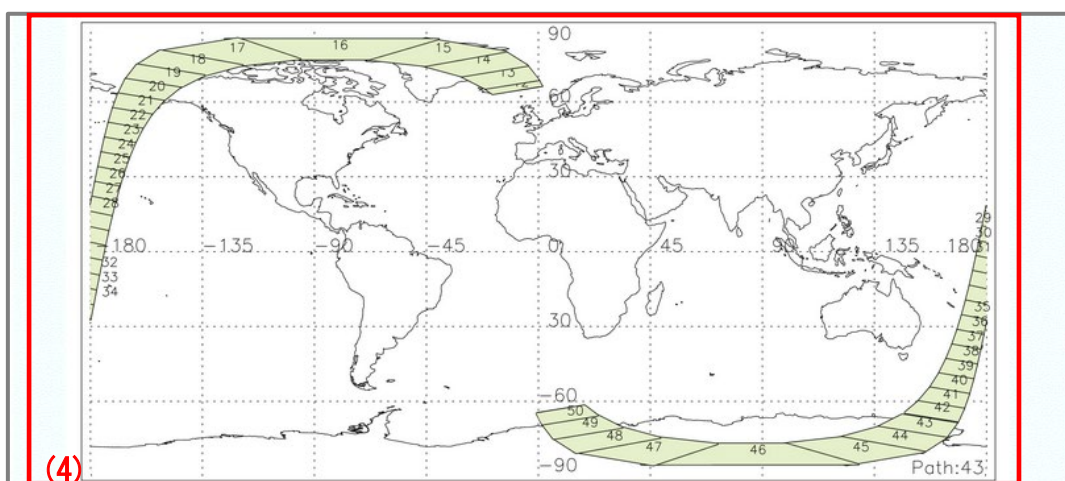
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CAI L1B+ Browse Image Table

Path

(3) Back to 'Select Calend

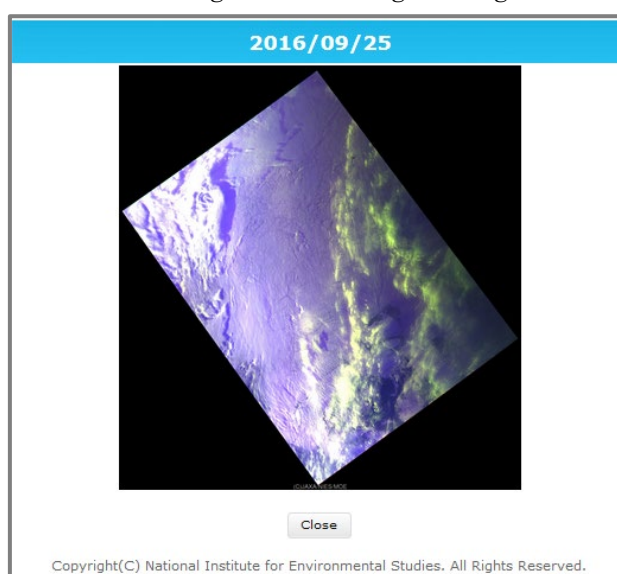
1	2	3	4	5	6	7	8
2016/09/25 00:23 Path : 43 Frame : 16	2016/09/25 00:25 Path : 43 Frame : 17	2016/09/25 00:26 Path : 43 Frame : 18	2016/09/25 00:28 Path : 43 Frame : 19	2016/09/25 00:30 Path : 43 Frame : 20	2016/09/25 00:31 Path : 43 Frame : 21	2016/09/25 00:33 Path : 43 Frame : 22	2016/09/25 00:35 Path : 43 Frame : 23
							
Detail	Detail (2)	Detail	Detail	Detail	Detail	Detail	Detail
9	10	11	12	13	14	15	16
2016/09/25 00:36 Path : 43 Frame : 24	2016/09/25 00:38 Path : 43 Frame : 25	2016/09/25 00:40 Path : 43 Frame : 26	2016/09/25 00:41 Path : 43 Frame : 27	2016/09/25 00:43 Path : 43 Frame : 28	2016/09/25 00:44 Path : 43 Frame : 29	2016/09/25 00:46 Path : 43 Frame : 30	2016/09/25 00:48 Path : 43 Frame : 31
							
Detail	Detail	Detail	Detail	Detail	Detail	Detail	Detail
17	18	19	20	21	22	23	24
2016/09/25 00:49 Path : 43 Frame : 32	2016/09/25 00:51 Path : 43 Frame : 33	2016/09/25 00:53 Path : 43 Frame : 34	2016/09/25 00:54 Path : 43 Frame : 35	2016/09/25 00:56 Path : 43 Frame : 36	2016/09/25 00:58 Path : 43 Frame : 37	2016/09/25 00:59 Path : 43 Frame : 38	2016/09/25 01:01 Path : 43 Frame : 39
							
Detail	Detail	Detail	Detail	Detail	Detail	Detail	Detail
25	26	27	28	29	30	31	32
2016/09/25 01:02 Path : 43 Frame : 40	2016/09/25 01:04 Path : 43 Frame : 41	2016/09/25 01:06 Path : 43 Frame : 42	2016/09/25 01:07 Path : 43 Frame : 43	2016/09/25 01:09 Path : 43 Frame : 44	2016/09/25 01:11 Path : 43 Frame : 45	2016/09/25 01:12 Path : 43 Frame : 46	2016/09/25 01:14 Path : 43 Frame : 47
							
Detail	Detail	Detail	Detail	Detail	Detail	Detail	Detail



- (1) Path : The path number for displaying a list of thumbnail images. (The first path number for the observational date will be displayed as the default.)
- (2) [Detail] Button : Displays the relevant frame on an enlarged screen.
- (3) [Back to 'Select Calendar'] Link : Link for returning to the [CAI L1B+ Browse Image] Screen.
- (4) CAI Observation Range : A chart indicating the maximum CAI observational range for the path displayed.
- (5) [Close] Link : The link for closing the [CAI L1B+ Browse Image] Screen.

(4) Enlarged [CAI L1B+ Browse Image] Screen

Displays the CAI L1B+ browse image as an enlarged image.



6.15 Images of the Earth Captured by “IBUKI” Screen

(1) Moving to the [Images of the Earth Captured by “IBUKI”] Screen

Click on [Images of the Earth captured by "IBUKI"] on the [Gallery] Screen (see section 6.1) to move to the [Images of the Earth Captured by “IBUKI”] Screen (new screen).



(2) [Images of the Earth Captured by “IBUKI”] Screen

Displays the most recent images of the earth captured by the “IBUKI” as thumbnail images ((1) below). Click on [Images of the Earth captured in YYYY] (YYYY represents the year) ((2) below) to move to the [Images of the Earth captured in YYYY] Screen (new screen).



May 12, 2016 (JST)
Wildfire in Alberta, Canada
[captured May 06, 2016 (UT)]

Apr. 20, 2016 (JST)
Rangeland Fires in Kansas
[captured Apr. 12, 2016 (UT)]

Apr. 5, 2016 (JST)
Eruption of Pavlof volcano
[captured Mar. 29, 2016 (UT)]

Mar. 15, 2016 (JST)
Thailand Wildfires
[captured Mar. 03, 2016 (UT)]

Feb. 2, 2016 (JST)
Eruption of Popocatepetl volcano
[captured Jan. 25, 2016 (UT)]

Mar. 4, 2016 (JST)
Flooded Mississippi & shrinking lakes
[captured Jan. 06, 2016 (UT)]

Jan. 13, 2016 (JST)
Oil tank fires in Libya
[captured Jan. 05, 2016 (UT)]

Dec. 11, 2015 (JST)
Air pollution over India
[acquired Dec. 04, 2015 (UTC)]

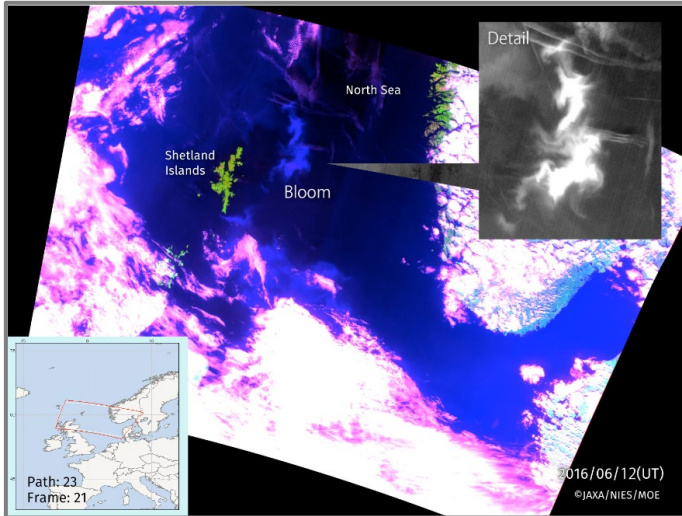
Note: Dates with gray fonts denote the release dates.

Images of the Earth captured in 2016 (2)
[Images of the Earth captured in 2015](#)
[Images of the Earth captured in 2014](#)
[Images of the Earth captured in 2013](#)
[Images of the Earth captured in 2011](#)
[Images of the Earth captured in 2010](#)
[Images of the Earth captured in 2009](#)

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- (1) Images of the Earth : Displays the most recent 10 images of the earth Captured by “IBUKI” captured by the “IBUKI.” Click on the image to move the enlarged image (*).
- (2) Images of the Earth : The link to the [Images of the Earth captured in captured in YYYY Link YYYY] Screen (YYYY represents the year).
- (3) [Close] Link : The link for closing the [Images of the Earth Captured by “IBUKI”] Screen.

* Examples of enlarged images



(3) Images of the Earth Captured by “IBUKI” Screen for the relevant observational year

Click on the observational year to display a list of [Images of the Earth Captured by “IBUKI”] thumbnail images. Click on each individual image ((1) below) to display them on an enlarged screen.



(2) Close

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Images of the Earth captured (2009)

(1)



©JAXA NIES MOE
Jun. 25, 2009 (JST)
The plume of erupting Sarychev volcano on Matua island in the Kuril islands
[acquired Jun. 12, 2009 (UTC)]

[Please click image to enlarge]

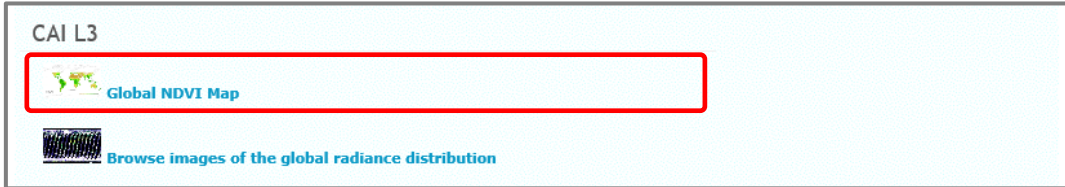
Note: Dates with gray fonts denote the release dates.

- (1) “IBUKI” Image : Displays images of the earth captured by “IBUKI” for the relevant observational year. Click on the image to move the enlarged image.
- (2) [Close] Link : The link for closing the [Images of the Earth captured in YYYY] Screen.

6.16 Global NDVI Map Screen

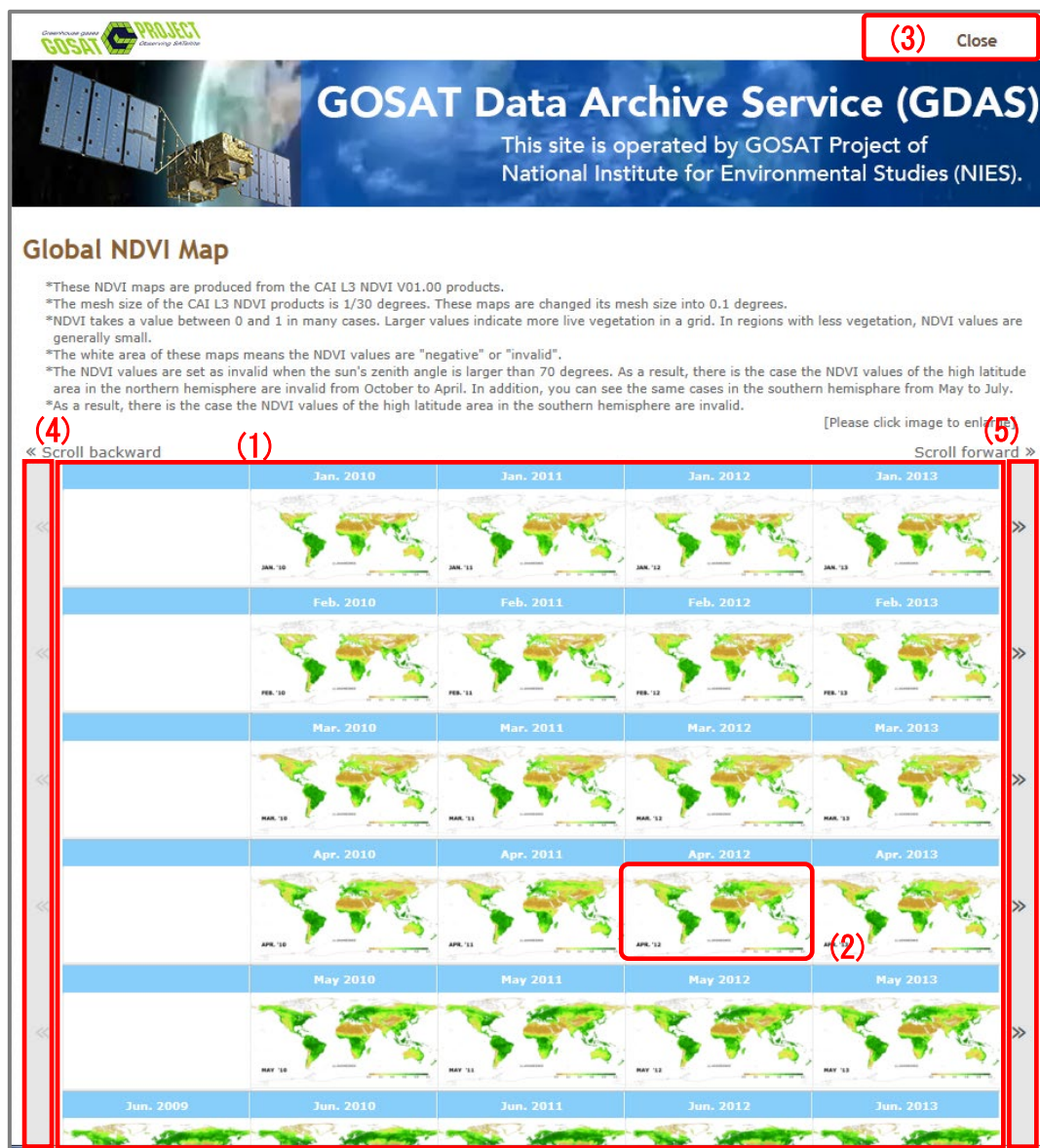
(1) Moving to the [Global NDVI Map] Screen

Click on [Global NDVI Map] on the [Gallery] Screen (see section 6.1) to move to the [Global NDVI Map] Screen (new screen).



(2) [Global NDVI Map] Screen

Displays a list of thumbnail images for global NDVI maps ((1) below). Click on each individual image ((2) below) to display them on an enlarged [Global NDVI Map] Screen (new screen).

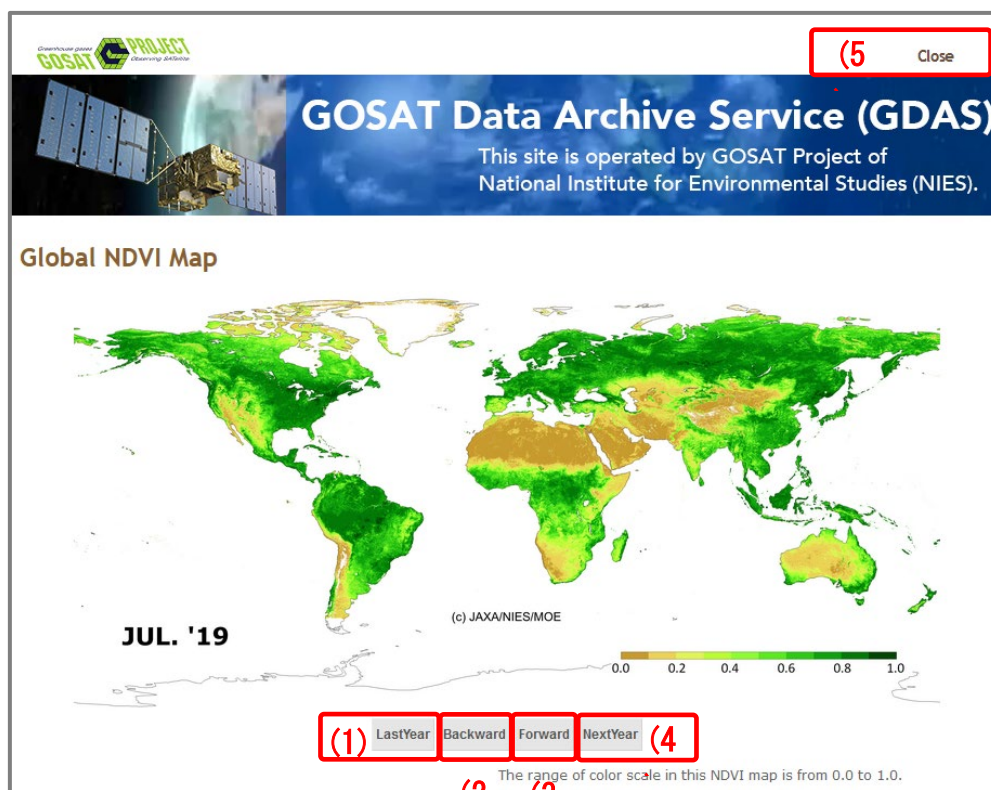


- (1) List of Global NDVI Maps : Displays a list of global NDVI maps.
- (2) Thumbnail Images : Link to the enlarged [Global NDVI Map] Screen for the relevant year/month.
- (3) [Close] Link : The link for closing the [Global NDVI Map] Screen.

- (4) [<<] Button : Button for scrolling to previous year's list.
- (5) [>>] Button : Button for scrolling to subsequent year's list.

(3) Enlarged [Global NDVI Map] Screen

Displays an enlarged image of the Global NDVI Map. Click on [Backward] ((2) below) or [Forward] ((3) below) to display the previous or subsequent image.



- (1) [LastYear] Button : Button for displaying the previous year's image.
- (2) [Backward] Button : Button for displaying the previous month's image.
- (3) [Forward] Button : Button for displaying the subsequent month's image.
- (4) [NextYear] Button : Button for displaying the subsequent year's image.
- (5) [Close] Link : The link for closing the Enlarged [Global NDVI Map] Screen.

6.17 Browse Images of the Global Radiance Distribution Screen

(1) Moving to the [Browse images of the global radiance distribution] Screen

Click on [Browse images of the global radiance distribution] on the [Gallery] Screen (see section 6.1) to move to the [Browse images of the global radiance distribution] Screen (new screen).



(2) [Browse images of the global radiance distribution] Screen

Select the [Observational Year] ((1) below) from the pull-down menu on the [Global Radiance Browse Image] Screen, and then click on the [Date] ((2) below) to display the [Global Radiance Browse Image Display] Screen for the selected observational date.

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Browse images of the global radiance distribution (CAI L3 global radiance distribution (daily) data)

* These browse images of the global radiance distribution are produced by using the CAI L3 global radiance distribution (daily) data.

* CAI is an imager to observe cloud and aerosols with 4 bands, whose central wave length are 1600nm, 870nm, 674nm, 380nm respectively. These color components are created with 870nm data*¹⁾ for green channel, 674nm for red, 380nm for blue.

*1) These data are the reflectance data derived from the CAI L3 global radiance distribution (daily) data.

Observational Year: 2020 (1)

Month	Day																														
Jan	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Feb	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	-	-
Mar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Apr	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	-
May	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Jun	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	-
Jul	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Aug	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Sep	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	-
Oct	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Nov	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	-
Dec	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

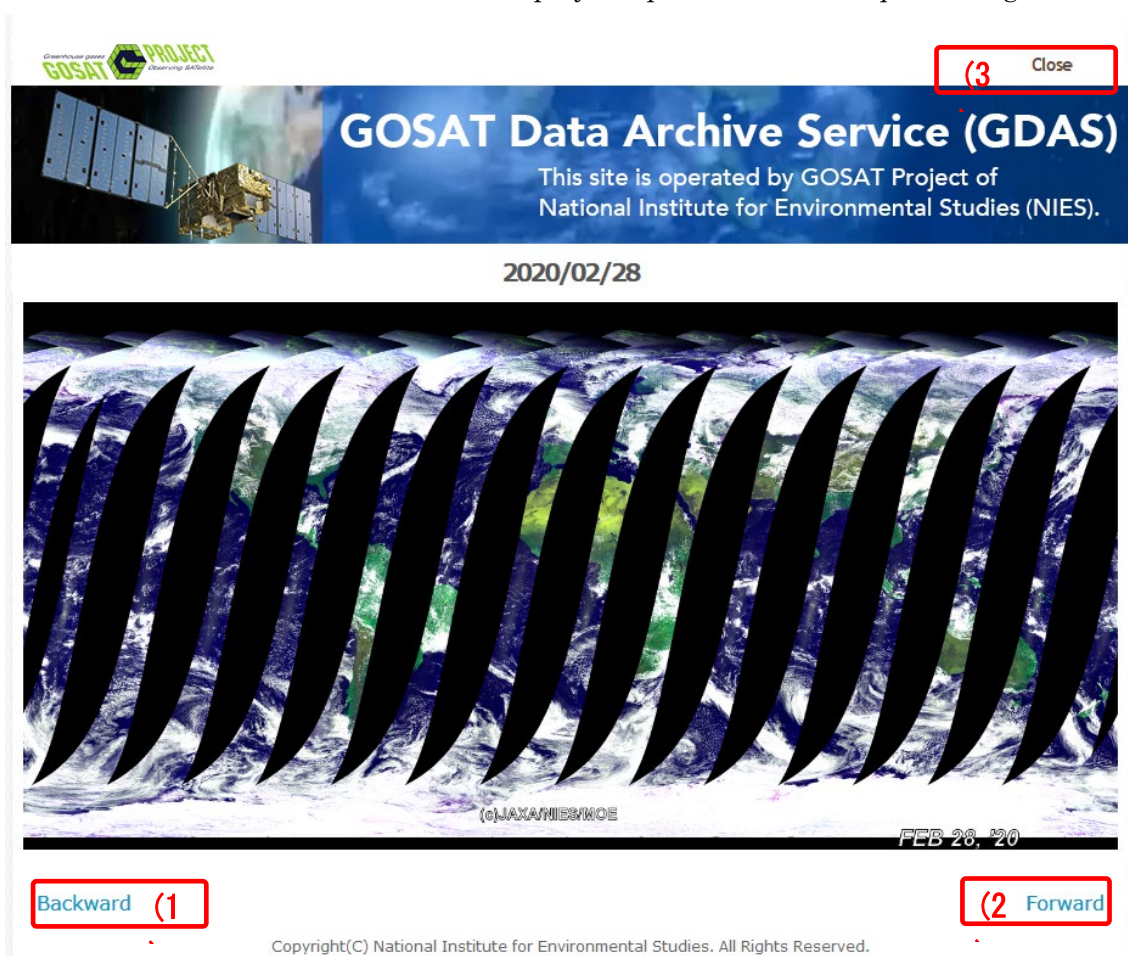
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- (1) Observational year : Selects the observation year to be displayed (most recent year displayed as the default).
- (2) Date : The link to the [Global Radiance Browse Image Display] Screen for each observational date.
- (3) [Close] Link : The link for closing the [Browse images of the global radiance distribution] Screen.

Information: The background colors on the calendar are color-coded into three groups of path numbers in alignment with the three-day rotation cycle of GOSAT observations.

(3) [Global Radiance Browse Image Display] Screen

Displays the global radiance browse image on an enlarged screen. Click on [Backward] ((1) below) or [Forward] ((2) below) to display the previous or subsequent image.



- (1) [Backward] Link : Link for displaying the previous month's image.
- (2) [Forward] Link : Link for displaying the subsequent month's image.
- (3) [Close] Link : The link for closing the [Global Radiance Browse Image Display] Screen.

7 User Registration Procedure

To download GOSAT products, it is necessary to register for GDAS and create a user account first. This section explains the user registration procedure.

7.1 User Registration Types

There are two types of user registration: general user registration and authorized user registration.

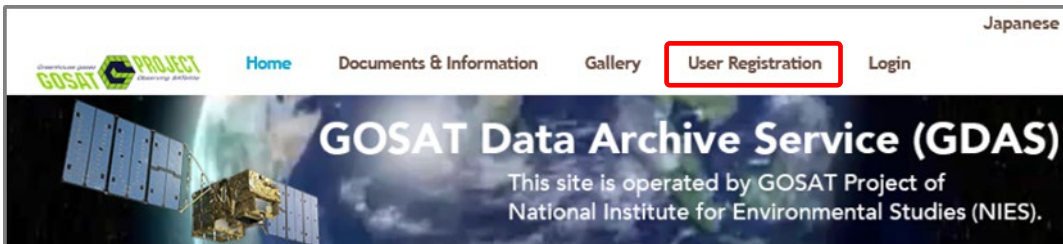
Authorized users here refer to users specifically authorized by the GOSAT project, which include researchers affiliated with research institutes conducting collaborative research adopted through the GOSAT Series Research Announcement (RA), as well as GOSAT science team, and organizations cooperating with the project. General users on the other hand, refer to general data users excluding authorized users and NIES internal users. See [13.1 User Categories] for details on user categories. Note that users who have a GUIG account do not need to newly register for GDAS.

7.2 Procedure for General User Registration

This section explains the procedure for registering for GDAS as a general user.

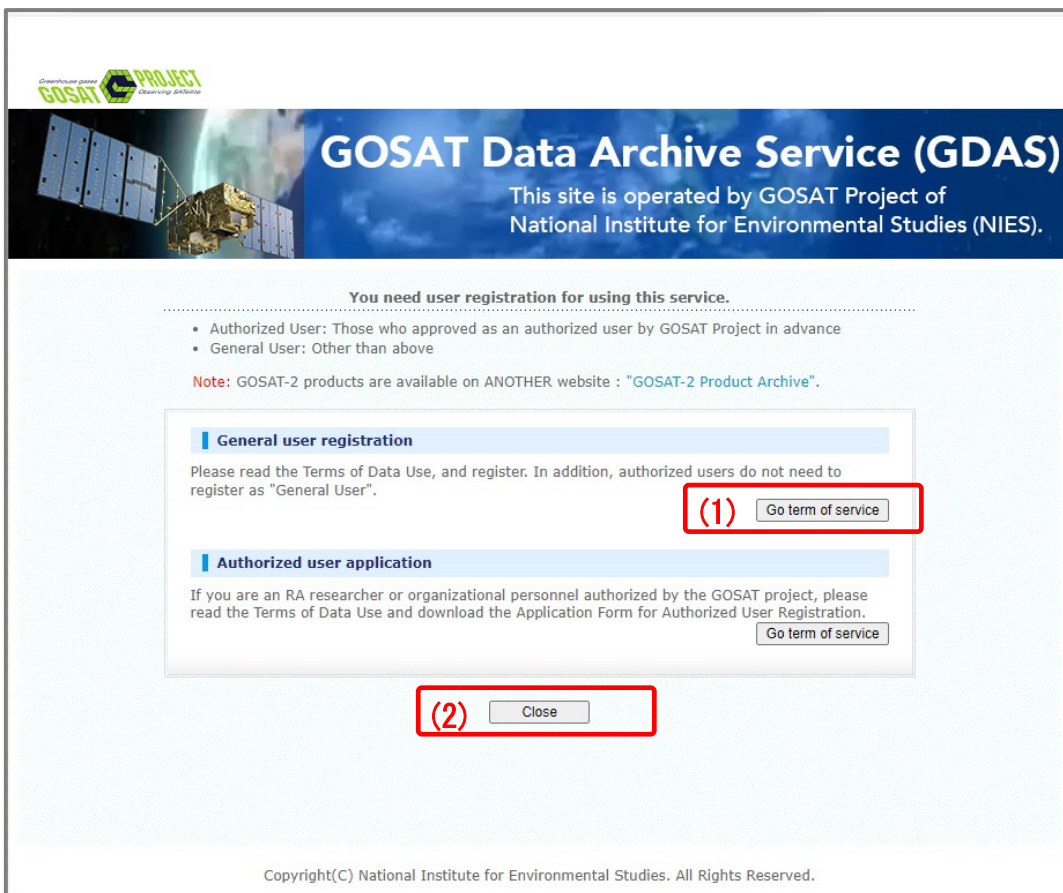
(1) Clicking on [User Registration] on the GDAS top screen

Click on [User Registration] on the GDAS top screen (see section 4.1) to move to the [User Registration] Screen (new screen).



(2) Clicking on the [Go term of service] Button under the General user registration

On the [User Registration] Screen, click on the [Go term of service] Button under the General user registration ((1) below) to move to the [Terms of Service] Screen for general users.



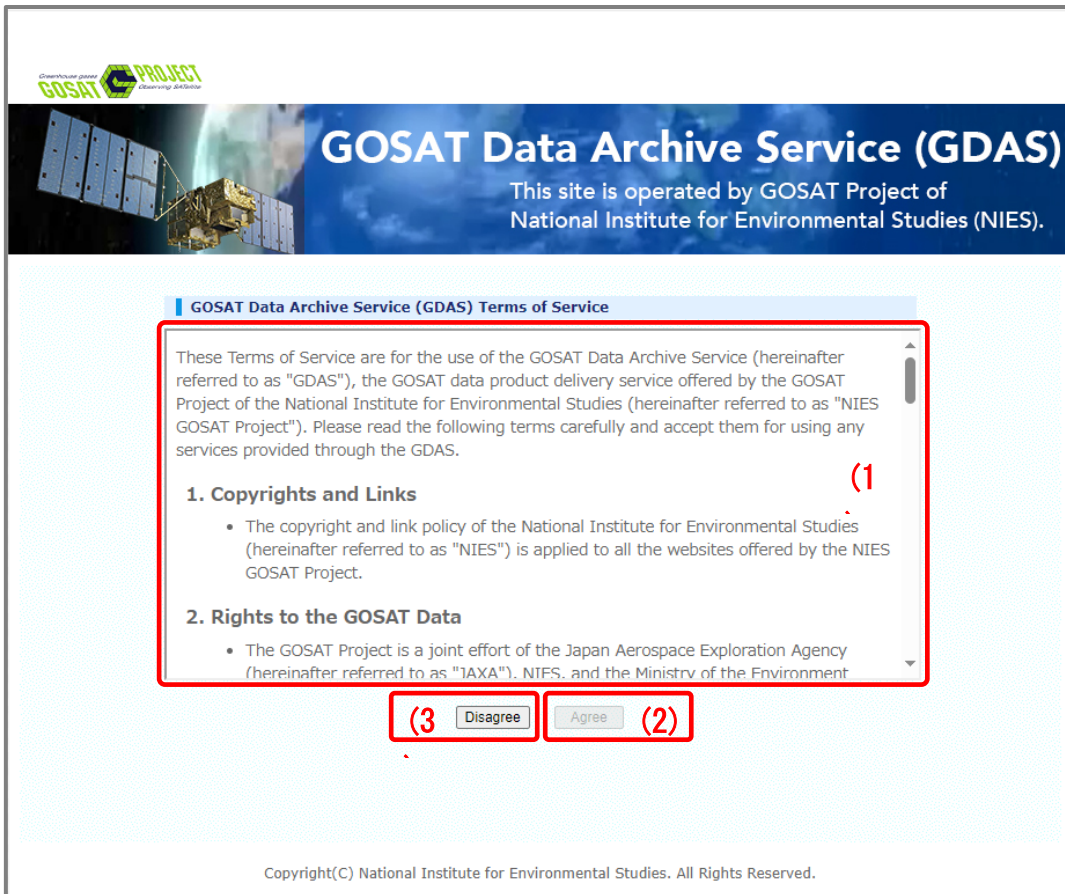
- (1) [Go term of service] Button : The button for moving to the [Terms of Service] Screen for general users.
- (2) [Close] Button : The button for closing the [User Registration] Screen.

(3) Agreeing to the GDAS Terms of Service for general users

On the [Terms of Service] Screen, the GDAS Terms of Service for general users ((1) below) is displayed. Read the terms of service and scroll to the bottom to enable the [Agree] Button ((2) below).

If you agree to the terms of service, click on the [Agree] Button ((2) below) to move to the [Privacy Policy] Screen (proceed to procedure (4)).

If you do not agree to the terms of service, click on the [Disagree] Button ((3) below) to move to the [User Registration] Screen (proceed to procedure (2)).



- (1) Terms of Service : Displays the GDAS Terms of Service.

- (2) [Agree] Button : The button for indicating your agreement to the GDAS Terms of Service. Scroll to the bottom of the Terms of Service to enable this button and click on it to move to the [Privacy Policy] Screen.
- (3) [Disagree] Button : The button for indicating your disagreement to the GDAS Terms of Service.

(4) Agreeing to the Personal Information Handling Policy

On the [Personal Information Handling Policy] Screen, the Personal Information Handling Policy (GOSAT Privacy Policy) ((1) below) is displayed.

If you agree to the Personal Information Handling Policy, check the [Confirmation of consent to Personal Information Handling Policy] Checkbox ((2) below) to enable the [Next] Button ((3) below) and click on it to move to the [General User Registration] Screen (proceed to procedure (8)).

To further review the GDPR privacy policy, click on [the GDPR Privacy Policy] Link ((6) below) to move to the [GDPR Privacy Policy] Screen (new screen) (proceed to procedure (5)). To review the NIES privacy policy, click on the [Privacy Policy of the National Institute for Environmental Studies] Link ((7) below) to move to the [Privacy Policy of the National Institute for Environmental Studies] Screen (new screen) (proceed to procedure (7)).

Personal Information Handling Policy (GOSAT Privacy Policy)

correct, or delete his/her personal information, please contact us by e-mail at [the contact for the Site \("Point of Contact"—"General Questions"\)](#). (5)

7. Consent for provision of personal information (1)

Depending on the law of the user's place of residence, the guardian's consent may be required when providing personal information of children. Please check the law of the user's place of residence, and if the age of the user is old enough to require a guardian's consent, please obtain a guardian's consent. (If you do not understand the law, please show this screen to your guardian(s) for consultation.)

If you reside within the EEA (European Economic Area), please see [the GDPR Privacy Policy](#). (6)

If you have any comments or questions regarding the handling of personal information, please contact us by e-mail at [the contact for the Site \("Point of Contact"—"General Questions"\)](#). (5)

[Privacy policy of National Institute for Environmental Studies](#) (7)

Please enter the following items.

Confirmation of consent to Personal Information Handling Policy

(2) I understand the "Personal Information Handling Policy" and agree to provide my personal information.
If the age of the applicant is old enough to require a guardian's consent, it has been obtained.
If residing within the EEA (European Economic Area), I understand and agree to the "GDPR Privacy Policy" linked in Section 7.

(4) (3)

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- (1) Privacy Policy : Displays the Personal Information Handling Policy (GOSAT Privacy Policy).
- (2) [Confirmation of consent to Personal Information Handling Policy] Checkbox : The checkbox for indicating your agreement to the GOSAT Privacy Policy.
- (3) [Next] Button : Check the [Confirmation of consent to Personal Information Handling Policy] Checkbox to enable this button and click on it to move to the [General User Registration] Screen.
- (4) [Back] Button : The button for returning to the [Terms of Service] Screen for general users.
- (5) [the contact for the Site (“Point of Contact”—“General Questions”)] Link : The link to the [Point of Contact/FAQ] Screen (new screen).
- (6) [the GDPR Privacy Policy] Link : The link to the [GDPR Privacy Policy] Screen (new screen).
- (7) [Privacy policy of the National Institute for Environmental Studies] Link : The link to the [Privacy Policy of the National Institute for Environmental Studies] Screen (new screen).

(5) Reviewing the GDPR Privacy Policy

On the [GDPR Privacy Policy] Screen, review the GDPR Privacy Policy ((1) below). Click on [Close] ((5) below) to close the screen after reviewing.

To review the cookie policy, click on the [cookie policy] Link ((2) below) to move to the [Cookie Policy] Screen (new screen) (proceed to procedure (6)).

GOSAT Data Archive Service (GDAS)
This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

GDPR Privacy Policy

1. Protection and control of personal data (1)
National Research and Development Agency/National Institute for Environmental Studies (hereinafter referred to as “the Institute”) provides services, such as information dissemination and inquiry reception, on the GOSAT Data Archive Service (hereinafter referred to as “the Site”). We collect the personal data described below within the necessary scope for the smooth operation of the services provided on the Site. The collected personal data will be processed appropriately within the scope of the purpose of use.

2. Definition of terms
The definitions of terms in the GDPR Privacy Policy (hereinafter referred to as “the Policy”) are as follows:

- **GDPR Privacy Policy:** The privacy policy provided on the Site based on the EU General Data Protection Regulation and the relevant privacy laws and regulations including the enforcement laws and regulations of each country.
- **Personal data:** Information about an identified or identifiable natural person (“data subject”). On the Site, information about individuals such as e-mail addresses that is necessary for the operation of the Site.
- **Processing:** Operations performed on personal data (data collection, recording, editing, storage, modification/amendment, recovery, reference, use, disclosure/provision, alignment, restriction, deletion, etc.).

3. Scope of application
The Policy applies to users of the Site who live or reside within the EEA (European Economic Area).

4. Personal data to be collected
The Institute collects the following personal data about users of the Site and users who have registered as users on the Site (hereinafter referred to as “the registered users”).

(1) Users of the Site

- Information about inquiry (e-mail address, etc.) only when there is an inquiry from a user of the Site
- IP address (IP address included in access log)

(2) Registered users

- E-mail address
- Country or region
- Job
- IP address (IP address included in access log)

(1)

* When applying for an Authorized User (RA investigator and organizational personnel approved by the GOSAT Project, etc.), in addition to the personal data of the registered user, the name, organization, department, etc. are required.

5. Purpose and legal basis of personal data processing and usage

When processing and using personal data, the purpose of use should be clarified in accordance with Article 6.1 (a) of the GDPR, and personal data will be processed if the consent of the user himself/herself is obtained in advance and in accordance with the legal basis stipulated in Article 6.1 (b) to (f) of the GDPR. However, with regard to Article 6.1 (f) of the GDPR, personal data shall be used within the scope of the following legitimate interests.

- (1) Depending on the response to inquiries to the Site and the content of the inquiries, transfer to relevant departments in the Institute, and relevant ministries and agencies (information on inquiries)
- (2) Security measures for the server that operates the Site (IP address)
- (3) User authentication when using the services of the Site
- (4) Notification by e-mail from the electronic service of the Site
- (5) Necessary communications with the registered users (e-mail address)
- (6) Implementation of reports, etc. based on requests from public institutions (e-mail address, country or region)

6. Impact on users refusing to provide personal data

In order to obtain the data provided on the Site, you must register as a user. If you refuse to provide your personal data and do not register as a user, we will not be able to provide some of the services.

7. Disclosure, provision, and sharing of personal data

Personal data provided on the Site may be disclosed, provided, or shared outside the Site for the following purposes.

- (1) In order to achieve the purposes described in the Policy, we may disclose, provide, or share the personal data of users with relevant ministries and agencies, etc. When sharing personal data with relevant ministries and agencies, etc., we will take the measures prescribed in Article 26 of the GDPR and disclose the data to the user himself/herself.
- (2) In complying with EU law or the laws of EU/EEA member countries, we will disclose and provide the personal data of users to the authorities and the other disclosure and provision parties stipulated by the law.

8. Site security (SSL description)

The Site uses SSL (Secure Sockets Layer), an encryption technology, on all pages, and data input flows over the network from your terminal to the server in an encrypted state.

9. About cookies (purpose of use)

The Site uses cookies to switch between Japanese and English notation on the Site and to maintain the processing status across multiple pages. Please see our [cookie policy](#) for more information.

(2)

10. Transfer of personal data outside the EU

The Institute will not transfer the personal data it holds to other countries.

11. Retention period of personal data

Personal data registered on the Site will be stored for up to 6 months after the end of the services of the Site in order to respond to inquiries from users.

12. Rights of users of the Site, etc.

- (1) The user has the following rights regarding the personal data held by the Institute.
 - A) Right to obtain all necessary information regarding data processing (GDPR Article 13, GDPR Article 14)
 - B) Right to inquire about information (GDPR Article 15)
 - C) Right to correct information (GDPR Article 16)
 - D) Right to erase information "Right to be forgotten" (GDPR Article 17)
 - E) Right to restrict information processing (GDPR Article 18)
 - F) Right to object to information processing (GDPR Article 21)
 - G) Right to data portability (GDPR Article 20)
- (2) As long as the personal data of the user is processed with the consent of the user, the user has the right to withdraw this consent at any time. The withdrawal of consent shall not affect the lawfulness of processing based on consent before its withdrawal. (GDPR Article 7, Paragraph 3)

(3) When a minor becomes a user, the consent by the holder of parental responsibility over the minor is required. (GDPR Article 8) (1)

(4) The user has the right to lodge a complaint with an information protection supervisory authority regarding the processing of personal data on the Site. (GDPR Article 77)

(5) If you wish to confirm, correct, or delete, etc. your personal data, please contact us by e-mail at [the contact for the Site \(“Point of Contact”—“General Questions”\)](#). We will respond promptly after confirming your identity. (3)

(6) If you wish to stop using the services of the Site, please let us know by e-mail at [the contact for the Site \(“Point of Contact”—“GOSAT Product and Service”\)](#). (4)

13. Disclaimer

For informational purposes, the Site may post links to websites other than the Institute. Since linked sites have their own policies, when accessing a linked website please check the policies of the linked website. The Institute is not responsible for the content of any linked website outside the Institute, the use of the site, and the processing of personal data.

14. Acceptance to the GDPR Privacy Policy

From any of the following actions by the user, the Institute assumes that the user has accepted to the Policy of the Site and the processing methods of personal data described herein. Please do not provide your personal data unless you accept it.

- When you have agreed to the Personal Information Handling Policy on the Site
- When you have filled in the date of consent to the Personal Information Handling Policy in documents such as the application form for Authorized User registration, etc.

15. Revision of the GDPR Privacy Policy

We will comply with laws and regulations, and other norms related to personal data, and continuously improve our system for protecting personal data. When we revise the Policy, we will announce the revision and clearly state the revision date on the Site.

16. Data protection officer

Director, Earth System Division, National Institute for Environmental Studies

17. Contact

GOSAT Project, Satellite Observation Center, National Institute for Environmental Studies

Address : 16-2 Onogawa, Tsukuba, Ibaraki, 305-8506, Japan

TEL : +81-29-850-2035

E-mail : [Contact for the Site \(“Point of Contact”—“General Questions”\)](#) (3)

Revised on March 12, 2024

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(1)	GDPR Privacy Policy	:	Displays the GDPR Privacy Policy.
(2)	[cookie policy] Link	:	The link to the [Cookie Policy] Screen (new screen).
(3)	[the contact for the Site (“Point of Contact”—“General Questions”)] Link	:	The link to the [Point of Contact/FAQ] Screen (new screen).
(4)	[the contact for the Site (“Point of Contact”—“GOSAT Product and Service”)] Link	:	The link to the [Point of Contact/FAQ] Screen (new screen).

(5)	[Close] Link	:	The link for closing the [GDPR Privacy Policy] Screen.
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(6) Reviewing the Cookie Policy.

On the [Cookie Policy] Screen, review the cookie policy ((1) below). Click on [Close] ((2) below) to close the screen after reviewing.

Cookie Policy

1. About cookies (purpose of use)

The GOSAT Data Archive Service (hereinafter referred to as “the Site”) uses the following cookies. Cookies are only used to switch between Japanese and English notation on the Site and to maintain the processing states across multiple pages. Personal information and data will not be obtained through the use of cookies.

Required cookies

- 1 Web page language switching (Japanese, English)
- 2 Session management

2. About required cookies

Users can stop the function of cookies by changing the browser settings at their own risk. If you stop the function of cookies, the services provided on the Site will not function properly.

Revised on March 12, 2024

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(1)	Cookie Policy	:	Displays the Cookie Policy.
(2)	[Close] Link	:	The link for closing the [Cookie Policy] Screen.


(7) Reviewing the Privacy Policy of the National Institute for Environmental Studies

On the [Privacy Policy of the National Institute for Environmental Studies] Screen, review the Privacy Policy of the National Institute for Environmental Studies.

[Home](#) > [About](#) > Privacy Policy of the National Institute for Environmental Studies

日本語

Privacy Policy of the National Institute for Environmental Studies



The National Institute for Environmental Studies (hereinafter "NIES") may collect personally identifiable information from the users of this site, including names, addresses, postal codes, e-mail addresses, telephone numbers, and fax numbers (hereinafter "Personal Information"). When collecting Personal Information, we will inform you of the purpose during the collection process, and provide you with the contact information of the department responsible for the collection. If we decide to share Personal Information with third parties, we will identify the party with whom we intend to share such information.

1. Use of Personal Information

NIES will retain, use, and/or analyze Personal Information within the limits of the informed purpose.

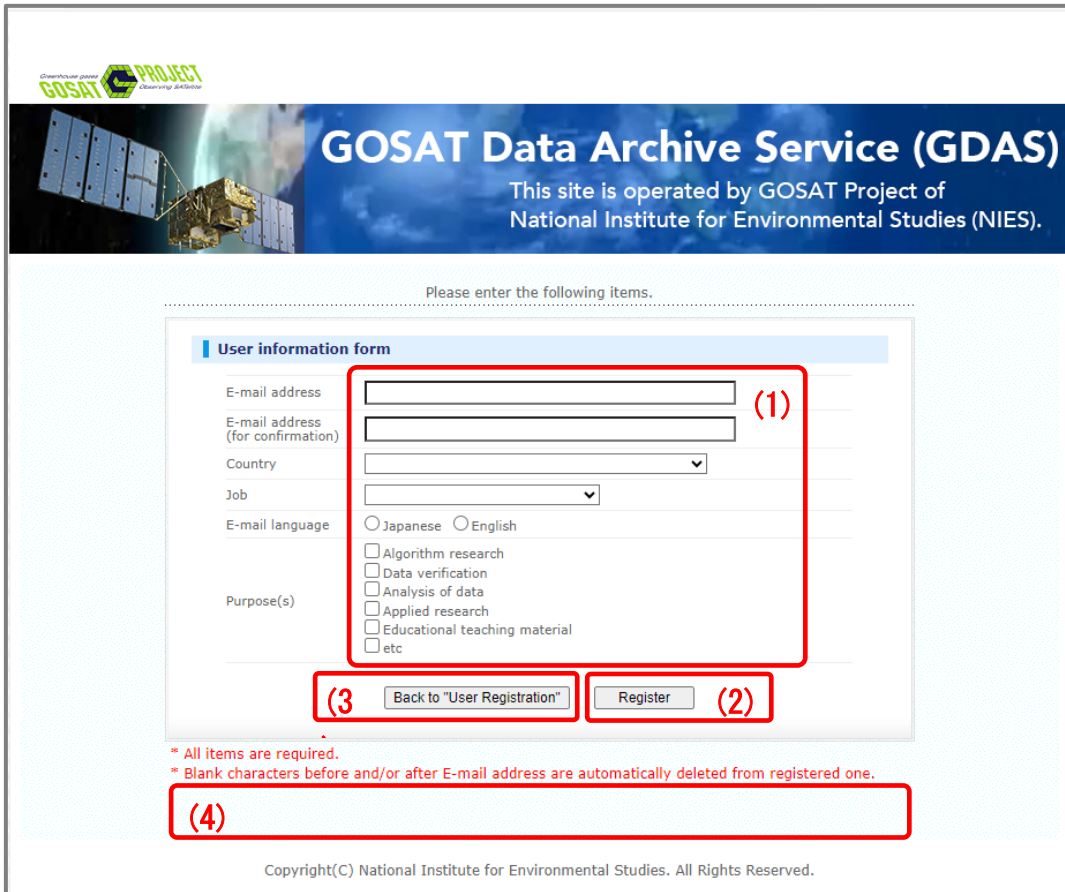
2. Sharing Information

NIES will not share Personal Information with a third party unless we have stated our intention to do so during the collection process, except under the following three cases:

- When the law requires us to provide the Personal Information to the third party;
- When users agree to allow us to share their Personal Information with the third party; or
- When we outsource the handling of the Personal Information, and then only within the limits of the informed purpose of use of such information.

(8) Filling in the User information form and clicking on the [Register] Button

On the [General User Registration] Screen, fill in the registration information in the [User information] Form ((1) below) and click on the [Register] Button ((2) below) to move to the [New General User Registration Confirmation] Screen.



Please enter the following items.

User information form

E-mail address (1)

E-mail address (for confirmation)

Country

Job

E-mail language Japanese English

Purpose(s) Algorithm research
 Data verification
 Analysis of data
 Applied research
 Educational teaching material
 etc

(3) (2)

* All items are required.
 * Blank characters before and/or after E-mail address are automatically deleted from registered one.

(4)

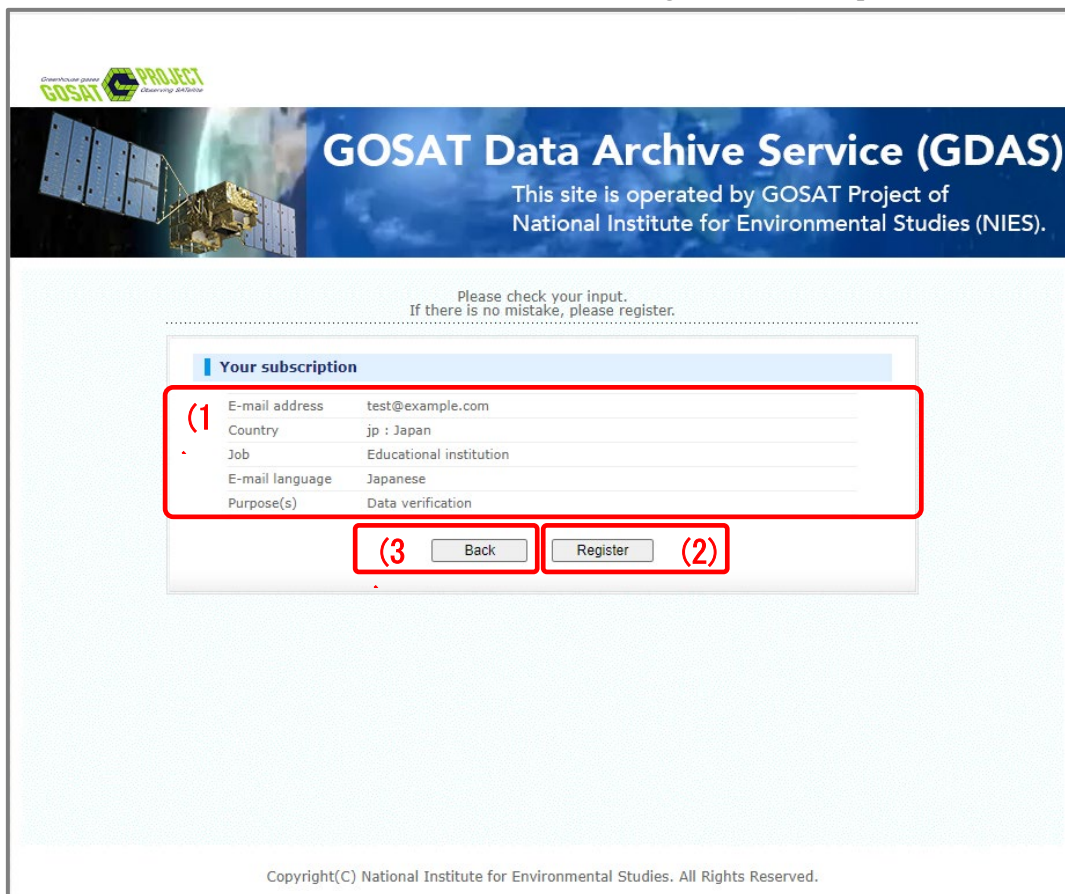
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- (1) [User Information] Form : The form for filling in the information required for the general user registration.
- (2) [Register] Button : The button for registering the user information.
- (3) [Back to “User Registration”] Button : The button for returning to the [User Registration] Screen.
- (4) Error Message : The area for displaying details of errors in the information entered.

Important: All fields must be completed when newly registering as a general user.

(9) Confirming the information and clicking on the [Register] Button

On the [New General User Registration Confirmation] Screen, the information you have filled in is displayed ((1) below). After confirming the information, click on the [Register] Button ((2) below) to move to the [General User Registration Complete] Screen.

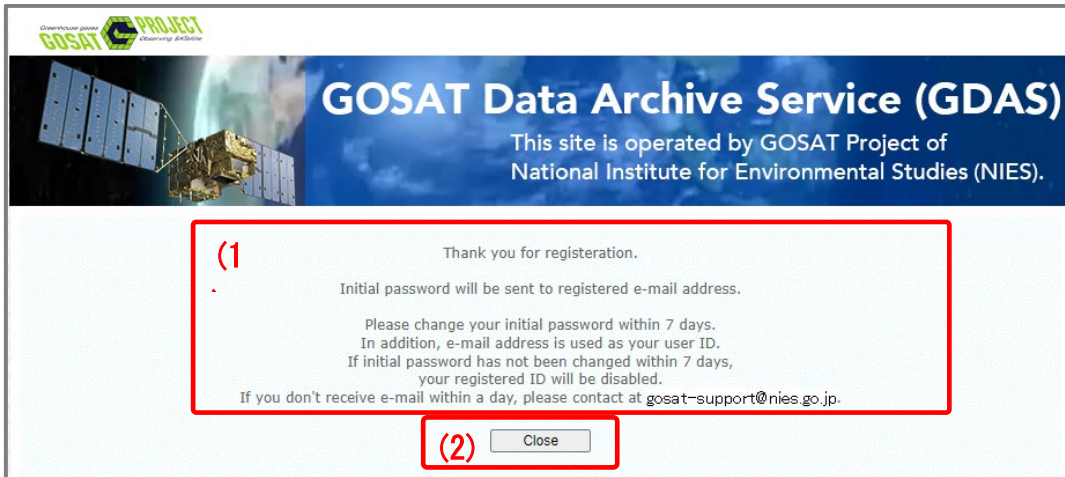


- (1) Your Subscription : Displays the user registration details.
- (2) [Register] Button : The button for registering the user account.
- (3) [Back] Button : The button for returning to the [User Registration] Screen.

Information: If there are any errors in the information entered, return to the [User Registration] Screen by clicking the [Back] Button shown in (3) above and correct the information.

(10) Confirming that an e-mail with a temporary password has been sent to the registered e-mail address

On the [General User Registration Complete] Screen, confirm that the new general user registration has been completed ((1) below). Also, confirm that an e-mail titled “GDAS: Notification of completion of user registration (general user)” containing a temporary password has arrived at the registered e-mail address.



- (1) Completion of Registration : Indicates that the new general user registration has been completed.
- (2) [Close] Button : The button for closing the [General User Registration Complete] Screen.

Important : The following e-mail containing a temporary password will be sent after user registration has been completed.

```

Thank you for your registration as a general user to the GOSAT Data Archive Service (GDAS).
Shown below are your user ID and a temporal password to access GDAS.
Through the link listed, please change your password within the next seven days.
Please note that the password below is temporal and will expire
if your initial entry to GDAS was not made during the seven-day period.
Login Page      :
User ID         :
Temporal Password :
*****
This e-mail was generated automatically. Please do not reply to this address.
*****
Should you have any questions or require further assistance in using GDAS,
please e-mail us at
GOSAT Support
    
```

After receiving a temporary password, access the [Initial Password Change] screen to change the password (proceed to procedure (11)).

(11) Accessing the URL (Login Page) provided in the e-mail

Access the URL (Login Page) provided in the e-mail titled “GDAS: Notification of completion of user registration (general user)” to open the [Login] Screen. Fill in the user ID and temporary password in the [User Authentication] Form ((1) below) and click on the [Login] Button to move to the [Initial Password Change] Screen.

- (1) [User Authentication] Form : The form for entering the user ID of the registered account user and the temporary password received.
- (2) [Login] Button : The button for login.

Information: If there are any input errors, the error fields will be displayed in red.

(12) Registering a new password

On the [Initial Password Change] Screen, fill in the new password you want to register ((1) below). Click on the [Update] Button ((2) below) after filling in the form to move to the [Download] Screen.

- (1) [Initial Password Change] Form : The form for entering the new password.
- (2) [Update] Button : The button for updating the password.
- (3) [Logout] Button : The button for ending the [Initial Password Change] Screen, but not for the button for executing the password change.

Important: The password needs to include more than two kinds of characters written below.

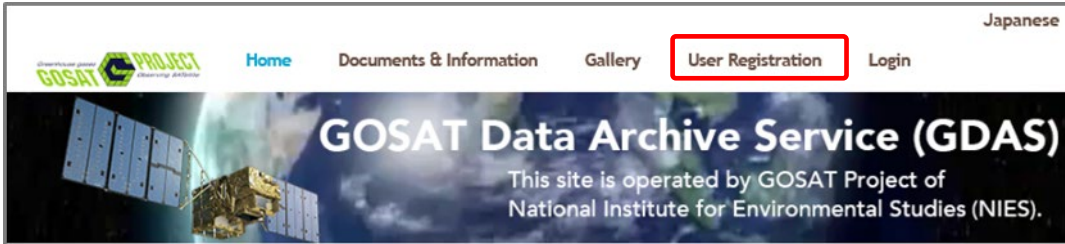
- (1) Capital letter (A to Z)
 - (2) Lower case letter (a to z)
 - (3) Numeral (0 to 9)
 - (4) Special character (!\"#\$%&'()*+,-./:;<=>@[¥]^_`{|}~)
- *Space is not allowed.

7.3 Procedure for Authorized User Application

This section explains the procedure for applying for an authorized user account.

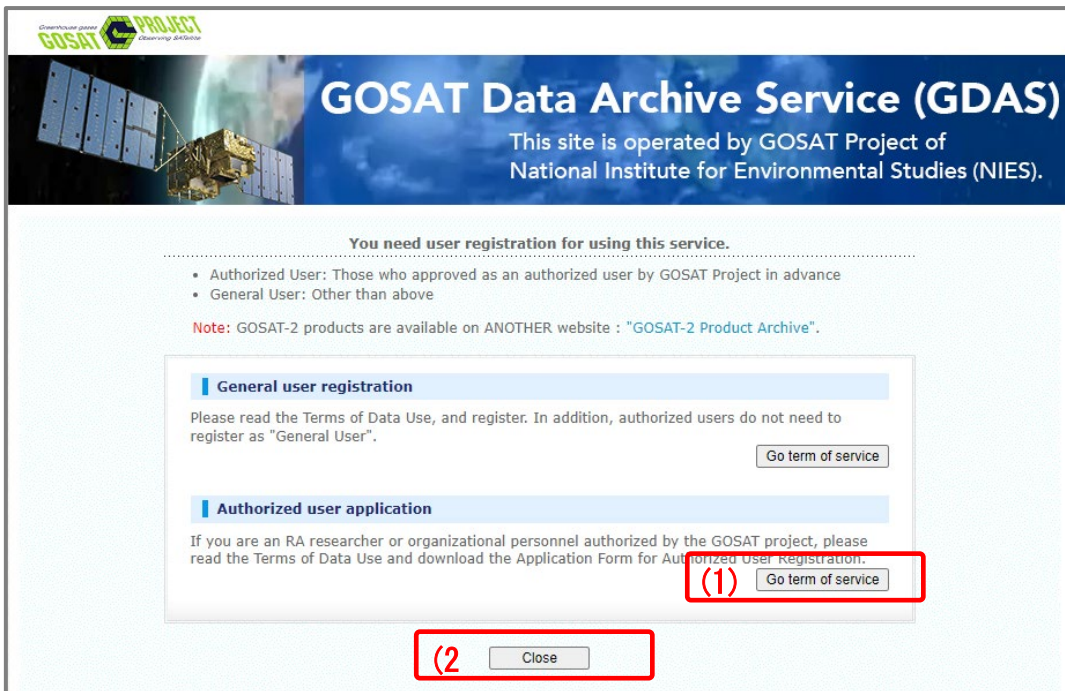
(1) Clicking on the [User Registration] on the GDAS top screen

Click on the [User Registration] on the GDAS top screen (see section 4.1) to move to the [User Registration] Screen (new screen).



(2) Clicking on the [Go term of service] Button under the Authorized user application

Click on the [Go term of service] Button under the Authorized user application ((1) below) to move to the [Terms of Service] Screen for authorized users.



(1) [Go term of service] Button : The button for moving to the [Terms of Service] Screen for authorized users.

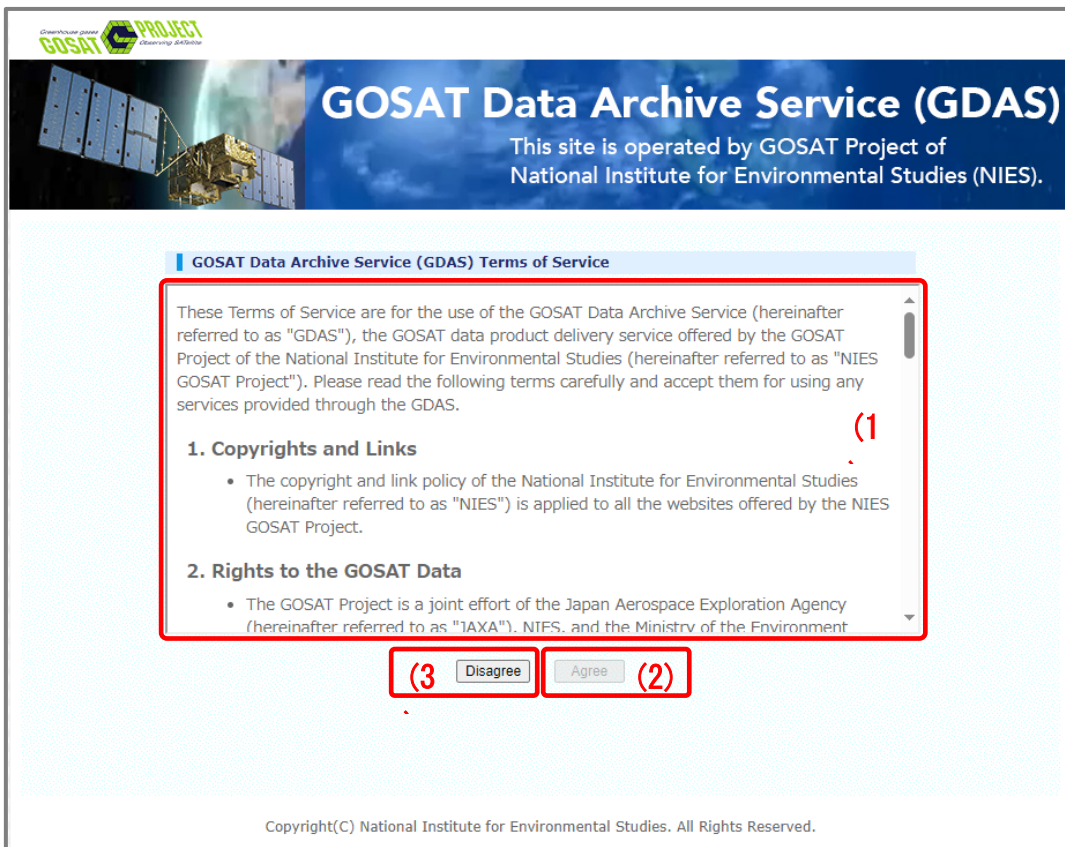
(2) [Close] Button : The button for closing the [User Registration] Screen.

(3) Agreeing to the GDAS Terms of Service for authorized users

On the [Terms of Service] Screen, the GDAS Terms of Service for authorized users ((1) below) is displayed. Read the Terms of Service and scroll to the bottom to enable the [Agree] Button ((2) below).

If you agree to the terms of service, click on the [Agree] Button ((2) below) to move to the [Authorized User Application] Screen (proceed to procedure (4)).

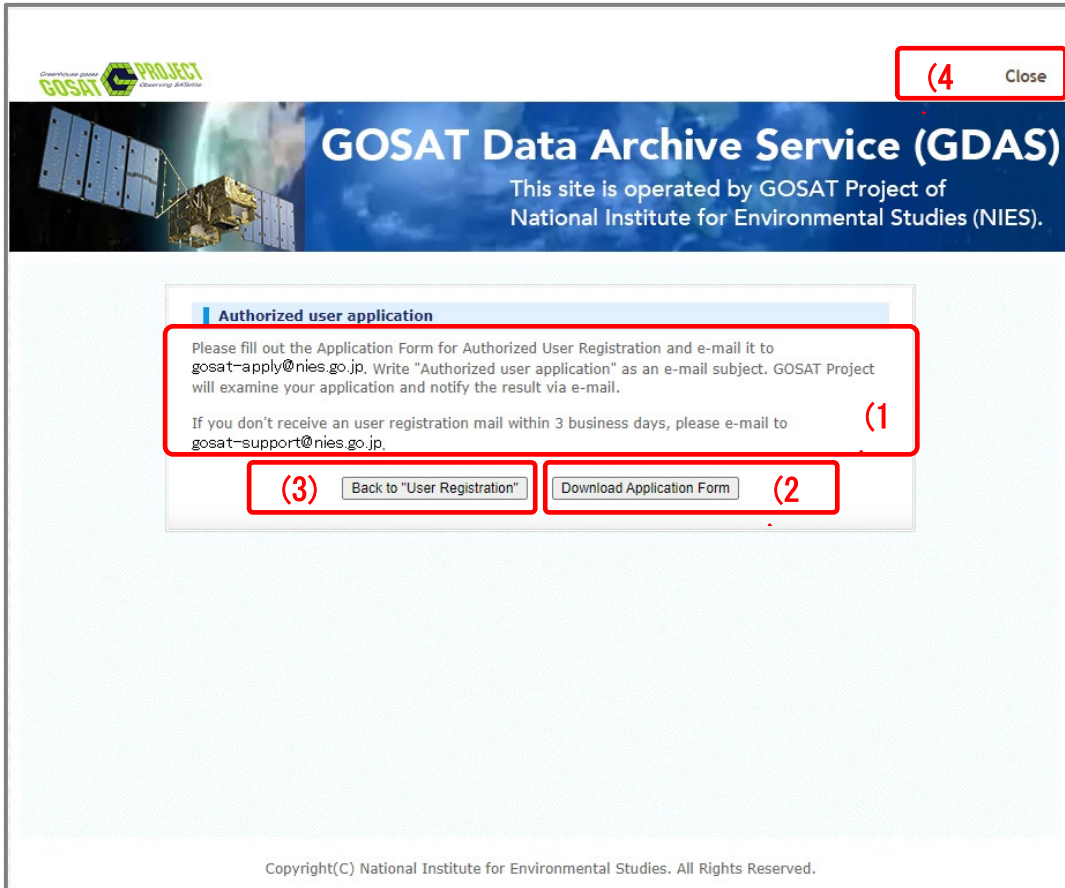
If you do not agree to the terms of service, click on the [Disagree] Button ((3) below) to move to the [User Registration] Screen (proceed to procedure (2)).



- (1) Terms of Service : Displays the GDAS Terms of Service.
- (2) [Agree] Button : The button for indicating your agreement to the GDAS Terms of Service. Scroll to the bottom of the terms of service to enable this button and click on it to move to the [Authorized User Application] Screen.
- (3) [Disagree] Button : The button for indicating your disagreement to the GDAS Terms of Service.

(4) Checking the application method for authorized user registration and downloading the Application Form for Authorized User Registration

On the [Authorized User Application] Screen, check the application method for authorized user registration ((1) below). Click on the [Download Application Form] Button ((2) below) to download the Application Form for Authorized User Registration.



- (1) Explanation of the Application Method : Explains the application method of authorized user registration.
- (2) [Download Application Form] Button : The button for downloading the Application Form for Authorized User Registration.
- (3) [Back to “User Registration”] Button : The button for returning to the [User Registration] Screen.
- (4) [Close] Link : The link for closing the [Authorized User Application] Screen.

Fill in all required information in the downloaded Application Form for Authorized User Registration, and send the application form to [gosat-apply@nies. go. jp] by e-mail.

Your eligibility as an authorized user will be reviewed by the GOSAT project, and you will be notified of the result later.

8 Procedures for Login and Logout

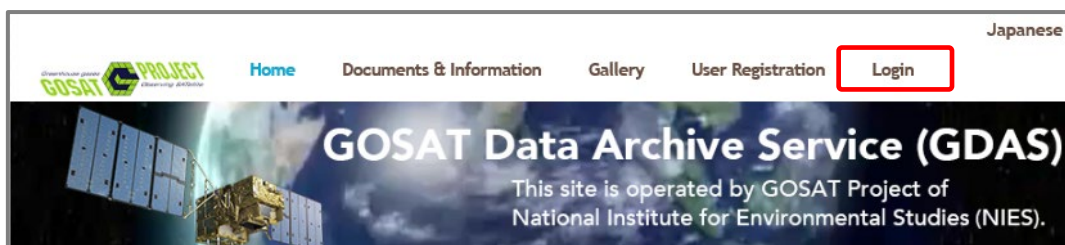
This section explains the procedures for logging into and out of the GDAS website, and resetting the GDAS login password, for registered users.

8.1 Login

This section explains the procedure for logging into the GDAS website for registered users.

(1) Moving to the [Login] Screen

Click on [Login] on the GDAS top screen menu (see section 4.1) to move to the [Login] Screen (new screen).



(2) Entering the userID and password in the [User Authentication] Form

Enter the login information in the [User Authentication] Form ((1) below) and click on the [Login] Button to move to the [Download] Screen (proceed to procedure (6)). However, if the logged-in user has not agreed to the latest privacy policy, the [Privacy Policy] Screen will be displayed (proceed to procedure (3)).

- (1) [User Authentication] : The form for entering the user ID and password of the registered account user.
- (2) [Login] Button : The button for logging in.
- (3) [here] Link : The link to the [Reset Password] Screen
- (4) [Close] Link : The link for closing the [Login] Screen.

Information: If there are any input errors, the error fields will be displayed in red.

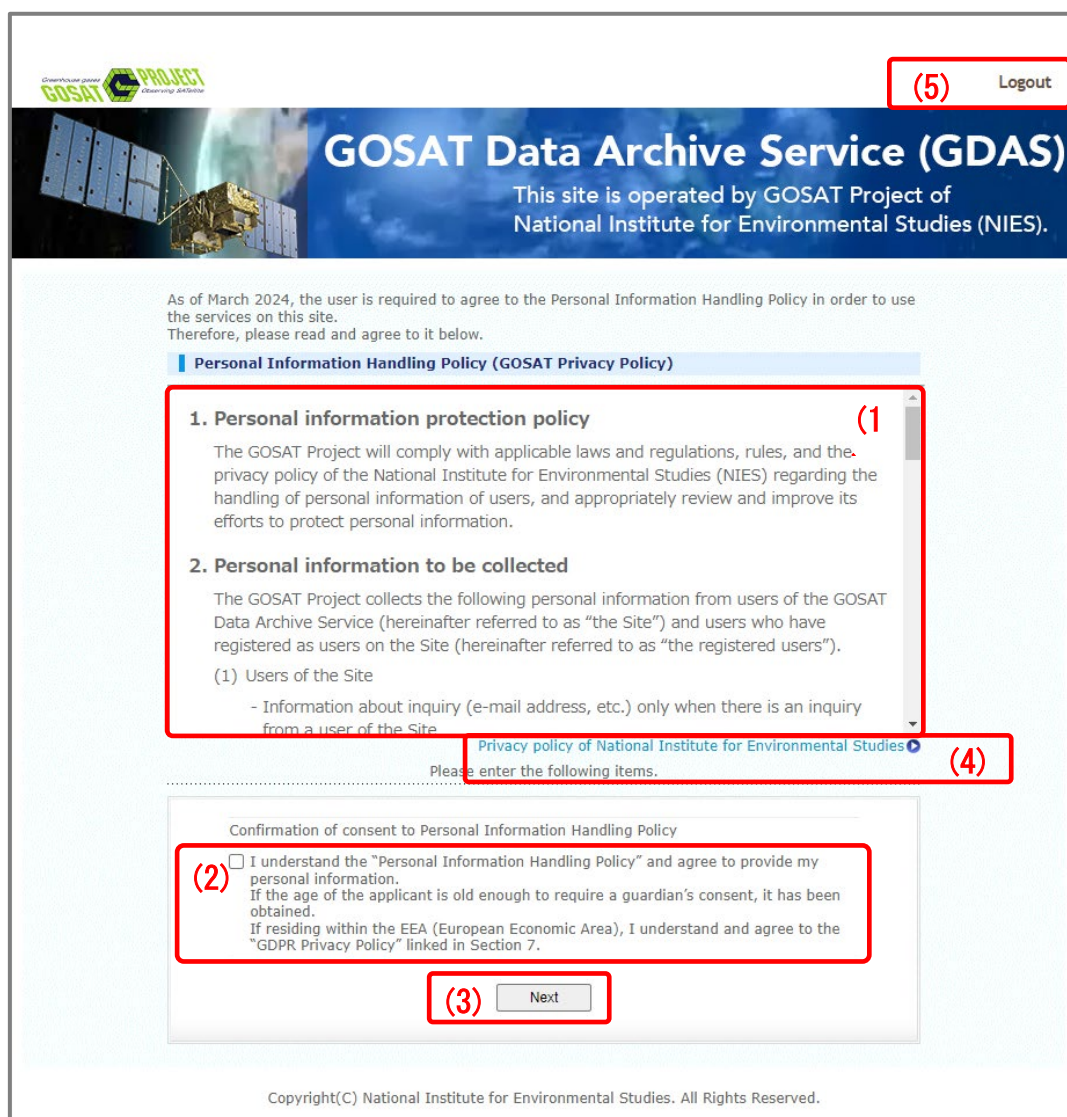
(3) Agreeing to the Personal Information Handling Policy (GOSAT Privacy Policy)

On the [Personal Information Handling Policy] Screen, the Personal Information Handling Policy (GOSAT Privacy Policy) ((1) below) is displayed.

If you agree to the GOSAT Privacy Policy, check the [Confirmation of consent to Personal Information Handling Policy] Checkbox ((2) below) and click on the [Next] Button ((3) below) to move to the [Download] Screen (proceed to procedure (6)).

If you do not agree to the GOSAT Privacy Policy, uncheck the [Confirmation of consent to Personal Information Handling Policy] Checkbox ((2) below) and click on the [Next] Button ((3) below) to move to the [Confirmation of service use suspension] Screen (proceed to procedure (5)).

To further review the NIES privacy policy, click on the [Privacy Policy of the National Institute for Environmental Studies] Link ((4) below) to move to the [Privacy Policy of the National Institute for Environmental Studies] Screen (new screen) (proceed to procedure (4)).



- (1) GOSAT Privacy Policy : Displays GOSAT project’s policy on the handling of personal information.
- (2) [Confirmation of consent to Personal Information Handling Policy] Checkbox : The checkbox for indicating your agreement to the Personal Information Handling Policy (GOSAT Privacy Policy).


- (3) [Next] Button : The button for moving to the [Download] Screen or the [Confirmation of service use suspension] Screen
If the [Confirmation of consent to Personal Information Handling Policy] Checkbox is checked, the screen will move to the [Download] Screen, otherwise the screen will move to the [Confirmation of service use suspension] Screen.
- (4) [Privacy policy of the National Institute for Environmental Studies] Link : Link to the [Privacy Policy of the National Institute for Environmental Studies] Screen.
- (5) [Logout] Link : The link to a pop-up screen for logout.

- (4) Reviewing the Privacy Policy of the National Institute for Environmental Studies
On the [Privacy Policy of the National Institute for Environmental Studies] Screen, review the Privacy Policy of the National Institute for Environmental Studies.

[Home](#) > [About](#) > Privacy Policy of the National Institute for Environmental Studies

日本語

Privacy Policy of the National Institute for Environmental Studies



The National Institute for Environmental Studies (hereinafter "NIES") may collect personally identifiable information from the users of this site, including names, addresses, postal codes, e-mail addresses, telephone numbers, and fax numbers (hereinafter "Personal Information"). When collecting Personal Information, we will inform you of the purpose during the collection process, and provide you with the contact information of the department responsible for the collection. If we decide to share Personal Information with third parties, we will identify the party with whom we intend to share such information.

1. Use of Personal Information

NIES will retain, use, and/or analyze Personal Information within the limits of the informed purpose.

2. Sharing Information

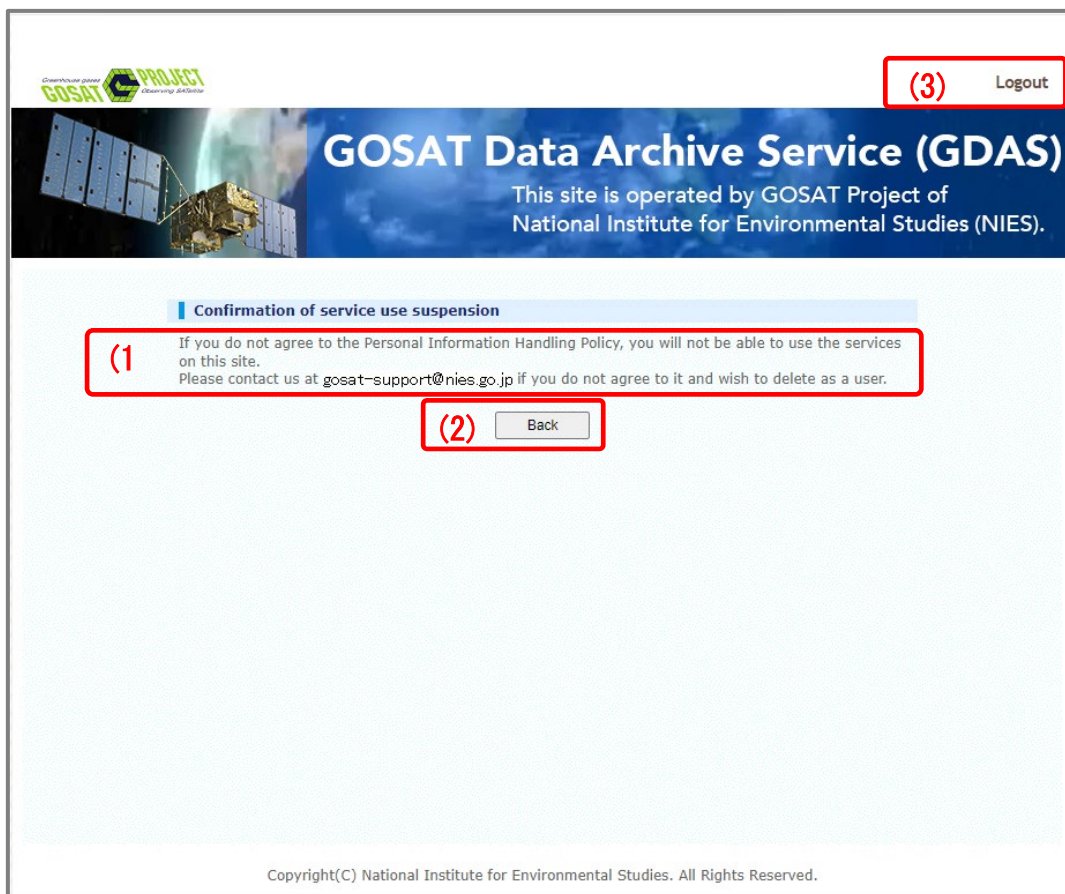
NIES will not share Personal Information with a third party unless we have stated our intention to do so during the collection process, except under the following three cases:

- When the law requires us to provide the Personal Information to the third party;
- When users agree to allow us to share their Personal Information with the third party; or
- When we outsource the handling of the Personal Information, and then only within the limits of the informed purpose of use of such information.

(5) How to delete a registered user

If you do not agree to the Personal Information Handling Policy (GOSAT Privacy Policy) and wish to unregister as a user, please contact us at the e-mail address listed on this screen ((1) below).

Click on the [Back] Button ((2) below) to return to the [Privacy Policy] Screen (proceed to procedure (3)).



- (1) Explanation of how : Displays instructions on how to suspend use of GDAS to suspend use of and delete the user information from GDAS GDAS
- (2) [Back] Button : The button for returning to the [Privacy Policy] Screen
- (3) [Logout] Link : The link to a pop-up screen for logout.

(6) Moving to the download screen of the product.

A list of downloadable products will be displayed for users who have logged in ((4) below). Click on any of the products to move to the download screen (see section 9.1 for further details).

GU :

(1) Documents & Information (2) User Information Logout (3)

GOSAT Data Archive Service (GDAS)

This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

GOSAT Data Download Page

Please select the 'Product name' which you would like to download.

Sensor	Level	Product Name	Unit	
FTS	L1B	FTS L1B data	Daily Path	
	L1B support	FTS FOV image	Daily	
	L2	L2 CO2 column amount (SWIR)		Monthly
		L2 CH4 column amount (SWIR)		Monthly
		L2 H2O column amount (SWIR)		Monthly
		L2 CO2 profile (TIR)		Monthly
		L2 CH4 profile (TIR)		Monthly
		L2 global CO2 distribution (SWIR)		Monthly
	L3	L3 global CH4 distribution (SWIR)		Monthly

Sensor	Level	Product Name	Unit	
CAI	L1B	CAI L1B data	Path	
	L1B+	CAI L1B+ data	Path	
	L2	L2 cloud flag	Path	
	L3	L3 global radiance distribution		Monthly
		L3 global reflectance distribution		Monthly
		L3 NDVI		Monthly

Sensor	Level	Product Name	Unit
-	L4A	L4A global CO2 flux	Annual
		L4A global CH4 flux	Annual
	L4B	L4B global CO2 distribution	Annual
		L4B global CH4 distribution	Annual

(4)

- (1) [Documents & Information] Link : Link to the [Document and Information] Screen on which a list of documents and technical information, etc., will be displayed in alignment with the category of the logged-in user.
- (2) [User Information] Link : Link to the [User Information] Screen on which information for logged-in users can be changed.
- (3) [Logout] Link : The Link to a pop-up screen for logout.
- (4) Main Screen : Displays a list of downloadable products in alignment with the category of the logged-in user.

Important: The downloadable products will differ in alignment with the category of the logged-in user. See [13.2 Product Provision Formats] for further details.

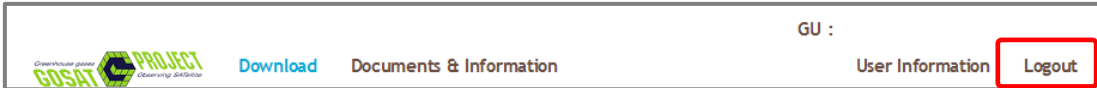
Information: The Unit field displays the unit in which products are provided.

8.2 Logout

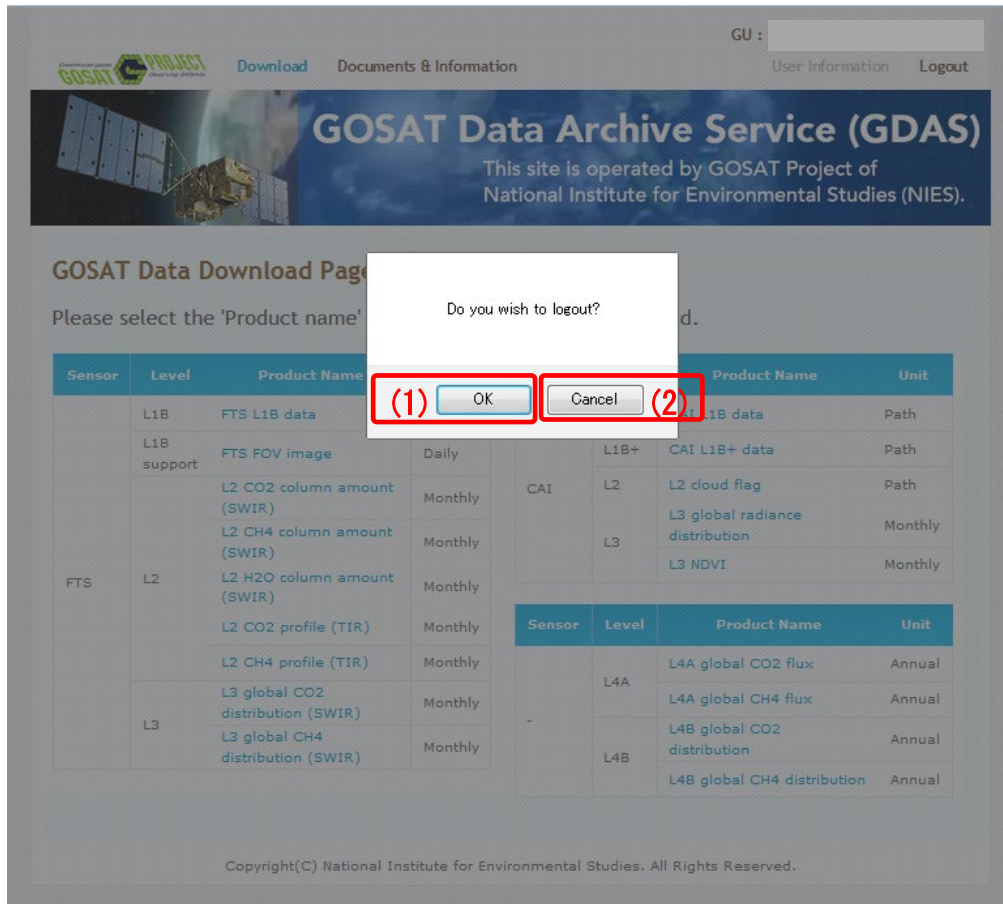
This section explains the procedure for logging out of the GDAS website for registered users.

(1) [Logout] Operations

Click on [Logout] on the [Download] Screen menu (see section 8.1 (3)) to display a popup screen.



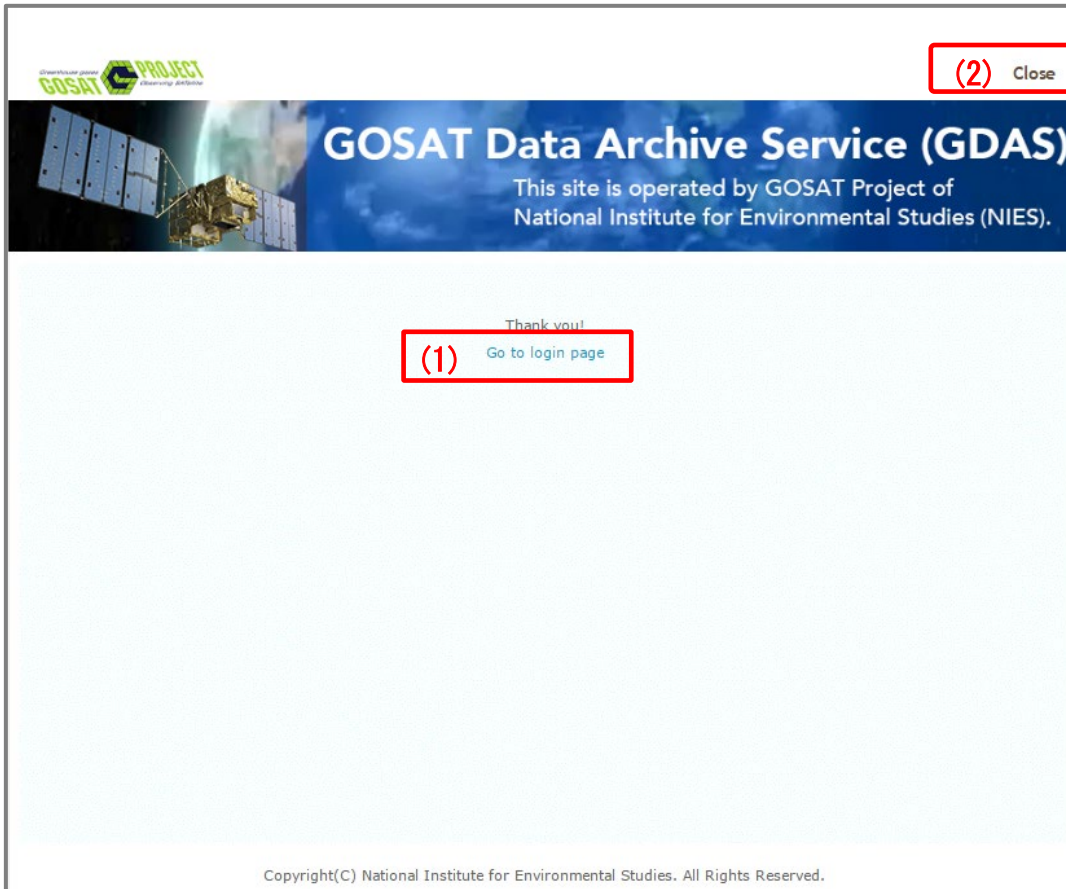
Click on the [OK] Button ((1) below) to log out (the screen will move to the [Logout] Screen once the button has been clicked).



- (1) [OK] Button : The button for logging out.
- (2) [Cancel] Button : The button for cancelling logout.

(2) [Logout] Screen

The following screen will be displayed after logging out.



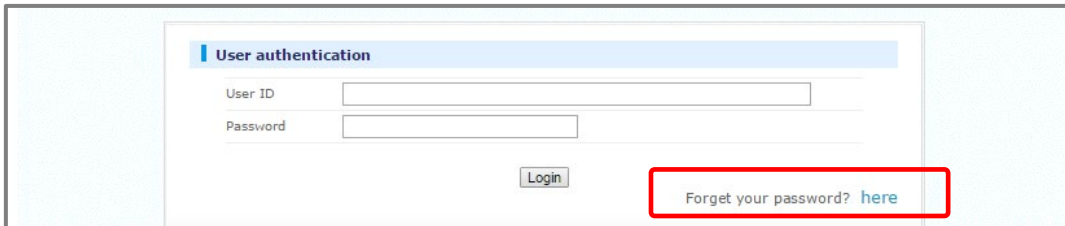
- (1) [Go to login page] Link : The link for moving to the [Login] Screen.
- (2) [Close] Link : The link for closing the [Logout] Screen.

8.3 Procedure for Resetting Passwords

This section explains the procedure for resetting the GDAS login password when the original password has been forgotten, etc.

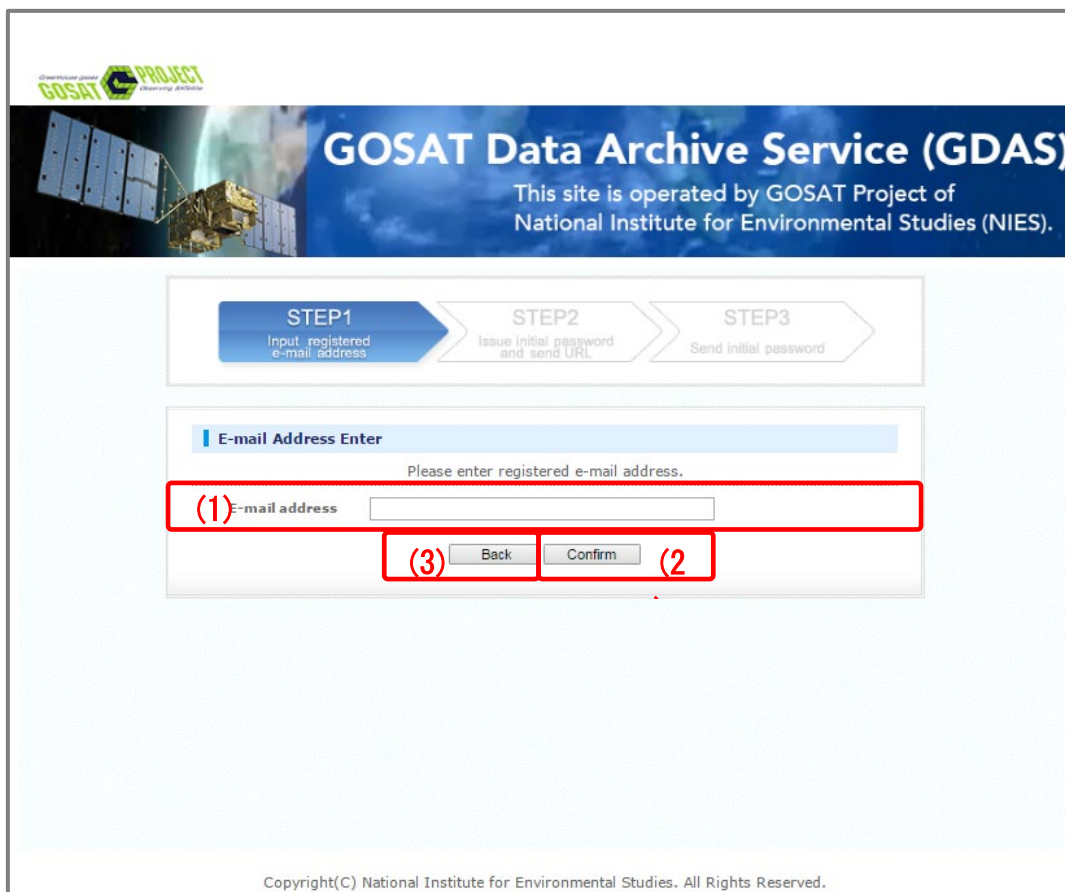
(1) Moving to the [Reset Password] Screen

Click on [here] on the [Login] Screen (see section 8.1 (2)) to move to the [Reset Password] Screen.



(2) [Reset Password] Screen

Enter your e-mail address in the entry form ((1) below) to reset your password. Click on the [Confirm] Button ((2) below) after entering the details to move to the [Password Reset Application] Screen.



STEP1
Input registered e-mail address

STEP2
Issue initial password and send URL

STEP3
Send initial password

E-mail Address Enter

Please enter registered e-mail address.

(1) E-mail address

(3) Back (2) Confirm

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- (1) E-mail address : The field for entering the e-mail address for which the password is to be reset.
- (2) [Confirm] Button : The button for moving to the [Password Reset Application] Screen.
- (3) [Back] Button : The button for returning to the [Login] Screen.

(3) [Password Reset Application] Screen

Displays the e-mail address entered. Check that it is correct and then click on the [Apply] Button ((2) below) to move to the [Password Reset Application Received] Screen.

- (1) Registration Details : Displays the e-mail address.
- (2) [Apply] Button : The button for applying for the password to be reset.
- (3) [Back] Button : The button for returning to the [Reset Password] Screen.

Information: If there is an error in the e-mail address, return to the [Reset Password] entry screen by pressing the [Back] button shown in (3) above and correct the error.

(4) [Password Reset Application Received] Screen

Displays the fact that the application for the password to be reset has been sent and that a password reset confirmation e-mail will be sent.



- (1) Application : Displays a message indicating that the application for the Received Message password to be reset has been received.
- (2) [Close] Button : The button for closing to the [Password Reset Application Received] Screen.

Important: A confirmation message will be sent to the entered e-mail address when the application for password reset is received.

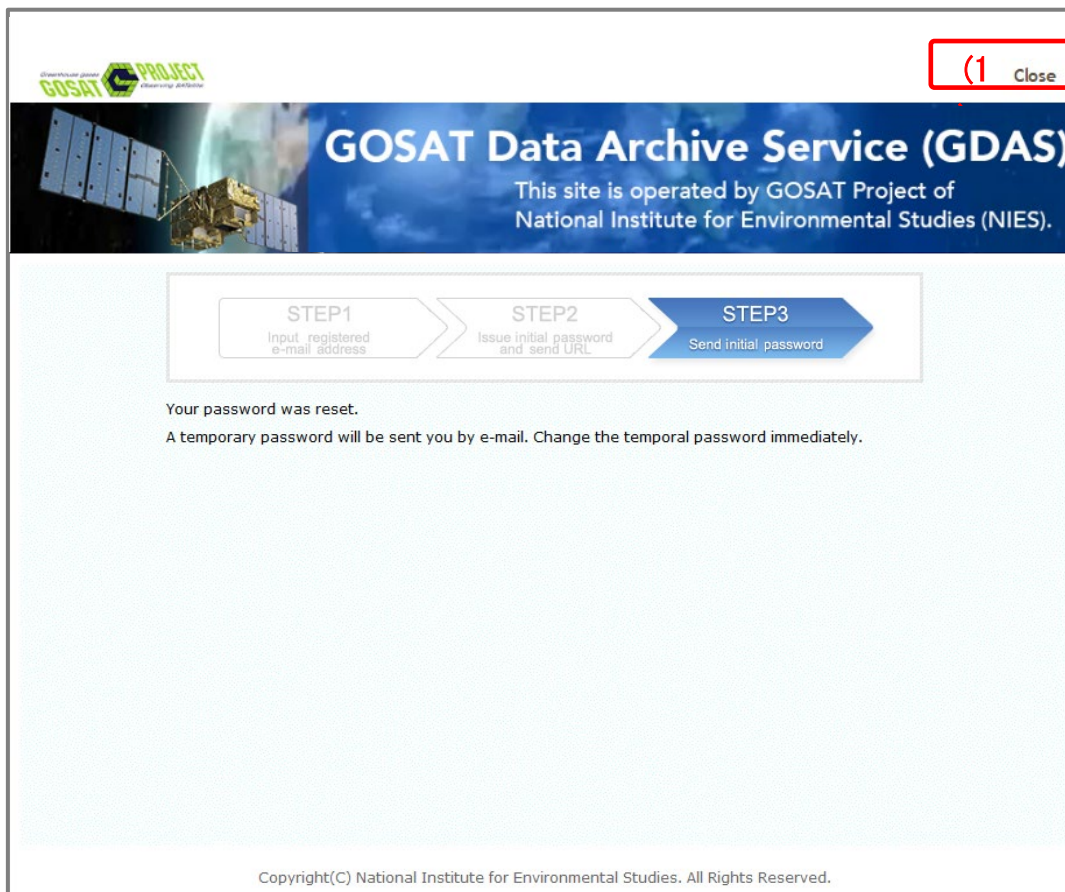
(5) Password Reset Confirmation e-mail

Click on the URL listed in the confirmation message. The following [Password Reset Completed] Screen will be displayed.

```
GDAS: URL for reissuing a password↵
Thank you for using the GOSAT Data Archive Service (GDAS).↵
This mail is to inform you about the URL for reissuing a password.↵
↵
Please click the URL below to make a temporal password issued.↵
↵
URL : https://data.gosat.nies.go.jp/usr/loginpasswordreset/PasswordResetPage/open.do?
id=862&key=c1mQ4z7xr0↵
*Please note that this URL will expire in 7days from the delivery of this mail, so you are
expected to access the URL and get a temporal password within 7 days.)↵
↵
*****↵
This message was automatically transmitted. Please do not reply to this address.↵
*****↵
↵
[Important]↵
If you received this mail in error, or if you have any inquiries about the system,↵
please mail to the address below.↵
gosat-support@nies.go.jp↵
↵
```

(6) [Password Reset Completed] Screen

A message indicating that the password reset procedure has been completed and that the reset password has been sent to the listed e-mail address will be displayed.



(1) [Close] Link : The link for closing the [Password Reset Completed] Screen.

Important: An e-mail listing the reset password will be sent. Access the [Change Password] Screen and change the password to the one listed in the e-mail.

9 Procedure for Downloading Products

There are two methods available for downloading GOSAT products, as shown below. Both of these methods are explained in this section.

- Downloading products with the use of the website
- Downloading products with the WGET command

9.1 Downloading Products with the Use of the Website

This section explains the procedure for downloading GOSAT products with the use of the website in the units in which they are provided.

9.1.1 Downloading Products Archived in Path Units

This section explains the procedure for downloading products archived in path units. The procedure for downloading the L2 cloud flag product is used here for explanatory purposes. (Other products archived in path units can be downloaded in the same way.)

(1) Moving to the [Download] Screen

Move to the [Download] Screen by logging into the system, as explained in section 8.1. If you are already logged in, click [Download] on the menu to move to the [Download] Screen.



(2) [Download] Screen

Displays a list of products that the logged-in user is able to download. Click on the path unit product (L2 cloud flag used here as an example) to move to the [Product Download (Path Unit)] Screen.

GOSAT Data Download Page

Please select the 'Product name' which you would like to download.

Sensor	Level	Product Name	Unit
FTS	L1B	FTS L1B data	Daily Path
	L1B support	FTS FOV image	Daily
	L2	L2 CO2 column amount (SWIR)	Monthly
		L2 CH4 column amount (SWIR)	Monthly
		L2 H2O column amount (SWIR)	Monthly
		L2 CO2 profile (TIR)	Monthly
		L2 CH4 profile (TIR)	Monthly
		L3 global CO2 distribution (SWIR)	Monthly
	L3	L3 global CH4 distribution (SWIR)	Monthly

Sensor	Level	Product Name	Unit
CAI	L1B	CAI L1B data	Path
	L1B+	CAI L1B+ data	Path
	L2	L2 cloud flag	Path
	L3	L3 global radiance distribution	Monthly
		L3 global reflectance distribution	Monthly
		L3 NDVI	Monthly

Sensor	Level	Product Name	Unit
-	L4A	L4A global CO2 flux	Annual
		L4A global CH4 flux	Annual
	L4B	L4B global CO2 distribution	Annual
		L4B global CH4 distribution	Annual

(1)

(1) List of Products : Displays a list of products that the user can download.

Important: The downloadable products will differ in alignment with the category of the logged-in user. See [13.2 Product Provision Formats] for further details.

Information: The Unit field displays the unit in which products are provided.

(3) [Product Download (Path Unit)] Screen

Displays details of the selected products (file unit, product format, version) ((1) below), a calendar listing the dates of observation ((2) below), and WGET list information ((5) below). Then click on any of the versions displayed in the observation date calendar ((3) below) to move across to the [Product Download Details (Path Unit)] Screen.

L2 cloud flag Download Page (1)

File unit: **Path** (The one path's data are archived with tar command.)
 Product format: **HDF**
 Product unit: **CAI frame**

Version:
 Please select the 'Version number' which you would like to download.
V02.00 (Mar. 31, 2009 - Mar. 08, 2020)

Download (for Each Path, V02.00): (2)

<< Year < Month 2020/03 Go Month > Year >>
 (YYYY/MM)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 V02.00	2 V02.00	3 V02.00	4 V02.00	5 V02.00	6 V02.00	7 V02.00
8 V02.00	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

Product List (FTS) (4)

- FTS L1B data
- FTS FOV image
- L2 CO2 column amount (SWIR)
- L2 CH4 column amount (SWIR)
- L2 H2O column amount (SWIR)
- L2 CO2 profile (TIR)
- L2 CH4 profile (TIR)
- L3 global CO2 distribution (SWIR)
- L3 global CH4 distribution (SWIR)

Product List (CAI)

- CAI L1B data
- CAI L1B+ data
- L2 cloud flag
- L3 global radiance distribution
- L3 global reflectance distribution
- L3 NDVI

Product List (L4)

- L4A global CO2 flux
- L4A global CH4 flux
- L4B global CO2 distribution
- L4B global CH4 distribution

Color scheme of the calendar is as follows.

	Path	: 42(*1),1,4,7,10,13,16,19,22,25,28,31,34,37,40
	Path	: 43,2,5,8,11,14,17,20,23,26,29,32,35,38,41
	Path	: 44,3,6,9,12,15,18,21,24,27,30,33,36,39,42(*1)
	No color	: No data

*1 The CAI observation over Path 42 is made across the two consecutive days from the scheduled date of Blue Path Group to that of Pink Path Group. However, during the period shown below, due to the deviation from the nominal orbit, the observation over Path 42 has been made only on the scheduled date of Pink Path Group.

For the period shown below, the products for Path 42 archived in path unit are provided as the daily products of Blue Path Group, even though the actual observation dates are on the next days, namely on the scheduled dates of Pink Path Group.

< CAI observation period for Path42 observed only on the date of Pink Path Group >
 September 30, 2017 - April 11, 2019,
 September 29, 2019 - February 23, 2020

Download via WGET (for Each Month, V02.00): (5)

You can download multiple files at a time using the following WGET list.

WGET list (V02.00)

Command line: wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]

Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget list.

Note: Please use wget version 1.6.1 or later.

Back to select product (6)

- (1) Product Information : Displays information on the selected product.
- (2) Observation Date Calendar : Displays product observation dates in a calendar format.
- (3) [Version No.] Link : The link to the [Product Download Details (Path Unit)] Screen.
- (4) List of Products : The link to the [Product Download] Screen from which users can download products.
- (5) [WGET list] Link : The link to the WGET list file (one month's worth).
- (6) [Back to select Product] Link : The link for returning to the [Download] Screen.

Information: The background colors on the calendar are color-coded into three groups of path numbers in alignment with the three-day rotation cycle of GOSAT observations.

Information: Displaying products with multiple versions as a different version

[New Version] ((1) below) is shown on the initial screen.

Click on the [Different Version] ((2) below) that needs to be displayed to display that version ((3) below).

[Initial Screen]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020) (1) — **New Version**

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (2) — **Different Version**

Download (for Each Path, V02.00):

Download via WGET (for Each Month, V02.00):

After clicking on [Different Version]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020)

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (3) — **Different Version**

Download (for Each Path, V01.00):

Download via WGET (for Each Month, V01.00):

Information: Using the Calendar

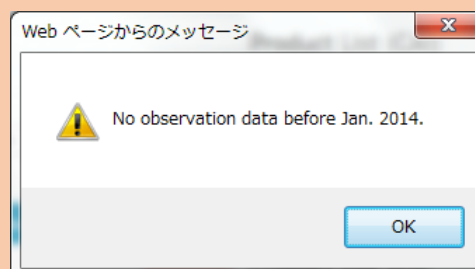
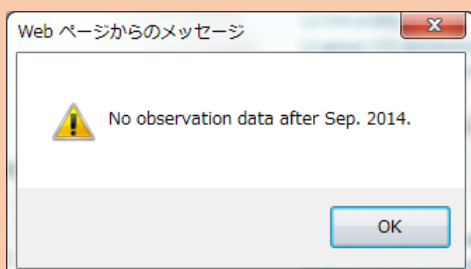
There are several methods available for updating the observation dates displayed on the calendar.

- (1) [Go] : Moves to the year/month entered.
- (2) [<< Year] : Moves to one year before the month displayed
- (3) [< Month] : Moves to one month before the month displayed
- (4) [Month >] : Moves to one month after the month displayed
- (5) [Year >>] : Moves to one year after the month displayed

Note: The user is notified with pop-up screens if there is no observation data available for the year/month specified.

(1) When a period after dates of availability is selected

(2) When a period prior to dates of availability is selected



(4) [Product Download Details (Path Units)] Screen

Displays details of the selected products (file unit, product format, version) ((1) below), a list of observation date paths ((2) below), and WGET list information ((5) below). Then click on any of the path No. links ((3) below) to download the products.

L2 cloud flag Download Page (1)

File unit: **Path** (The one path's data are archived with tar command.)

Product format: **HDF**

Product unit: **CAI frame**

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Mar. 31, 2009 - Mar. 09, 2020)

Product List (FTS) (4)

- [FTS L1B data](#)
- [FTS FOV image](#)
- [L2 CO2 column amount \(SWIR\)](#)
- [L2 CH4 column amount \(SWIR\)](#)
- [L2 H2O column amount \(SWIR\)](#)
- [L2 CO2 profile \(TIR\)](#)
- [L2 CH4 profile \(TIR\)](#)
- [L3 global CO2 distribution \(SWIR\)](#)
- [L3 global CH4 distribution \(SWIR\)](#)

Download (for Each Path, V02.00): (2)

(YYYY/MM/DD)

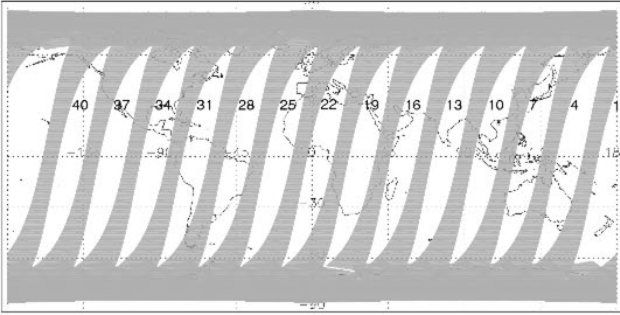
Path	File Number	File Size (GiB)	Path	File Number	File Size (GiB)
(3) 01	31	0.57	25	31	0.61
04	31	0.60	28	31	0.62
07	31	0.62	31	31	0.61
10	31	0.62	34	31	0.61
13	31	0.62	37	31	0.60
16	31	0.64	40	31	0.58
19	31	0.64			
22	31	0.62			

Product List (CAI)

- [CAI L1B data](#)
- [CAI L1B+ data](#)
- [L2 cloud flag](#)
- [L3 global radiance distribution](#)
- [L3 global reflectance distribution](#)
- [L3 NDVI](#)

Product List (L4)

- [L4A global CO2 flux](#)
- [L4A global CH4 flux](#)
- [L4B global CO2 distribution](#)
- [L4B global CH4 distribution](#)



Note: Shades areas in the figure above indicate maximum observation areas* of CAI in each satellite path. The archived file of each path contains CAI frames of sunlit regions in these areas.
*: Areas with one or more sunlit days in a year

Download via WGET (for Each Day, V02.00): (5)

You can download multiple files at a time using the following WGET list.

WGET list (V02.00)

Command line: `wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]`

Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget list.

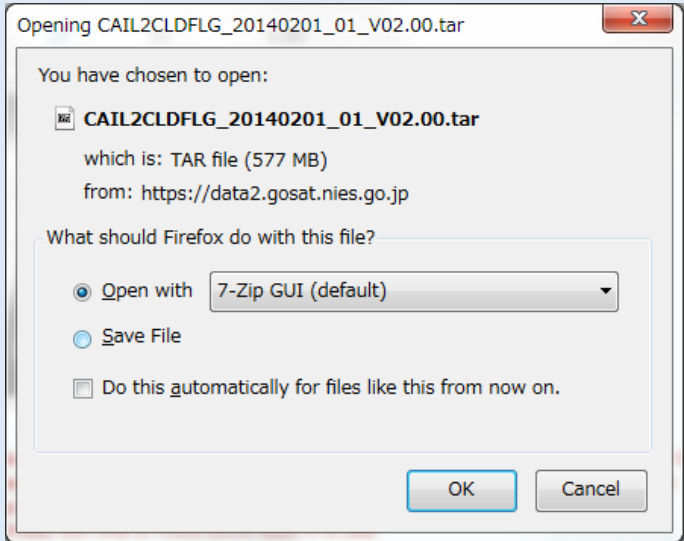
Note: Please use wget version 1.6.1 or later.

Back to select date (6)

- (1) Product Information : Displays information on the selected product.
- (2) Path List : Displays a list of the observation date paths selected.
- (3) [Path No.] Link : The link to the files archived in path units.
- (4) List of Products : The link to the [Product Download] Screen from which users can download products.
- (5) [WGET list] Link : The link to the WGET list file (one day's worth).
- (6) [Back to select date] Link : The link for returning to the [Product Download (Path Unit)] Screen.

Important: Use a file compression tool to extract and decompress downloaded products.

Information: An example of downloading a product file archived in path units (Firefox) is shown below.



The screenshot shows a file dialog window titled "Opening CAIL2CLDFLG_20140201_01_V02.00.tar". It displays the file name "CAIL2CLDFLG_20140201_01_V02.00.tar" with a file icon, indicating it is a TAR file (577 MB) from the URL "https://data2.gosat.nies.go.jp". Below this, it asks "What should Firefox do with this file?" and provides three options: "Open with" (selected, with a dropdown menu showing "7-Zip GUI (default)"), "Save File", and "Do this automatically for files like this from now on." (unchecked). "OK" and "Cancel" buttons are at the bottom.

Information: Displaying products with multiple versions as a different version

[New Version] ((1) below) is shown on the initial screen.

Click on the [Different Version] ((2) below) that needs to be displayed to display that version ((3) below).

[Initial Screen]

Version:
Please select the 'Version number' which you would like to download.

V201.202 (Apr. 23, 2009 - Present) (1) — **New Version**

V16x.16x (Apr. 23, 2009 - Mar. 31, 2016) (2)

Documents:

Show documents

Download (for Each Day, V201.202)
(About 7 GiB/file):

Download via WGET (for Each Month, V201.202)

After clicking on [Different Version]

Version:
Please select the 'Version number' which you would like to download.

V201.202 (Apr. 23, 2009 - Present)

V16x.16x (Apr. 23, 2009 - Mar. 31, 2016) (3) — **Different Version**

V161.161 (Feb. 01, 2015 - Mar. 31, 2016)

V161.160 (Apr. 23, 2009 - Dec. 14, 2014)

Documents:

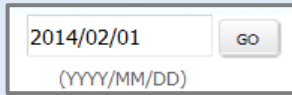
Show documents

Download (for Each Day, V16x.16x)
(About 7 GiB/file):

Download via WGET (for Each Month, V16x.16x)

Information: The list of observation date paths can be amended as shown below:

(1) 「Go」 : Moves to the date entered.

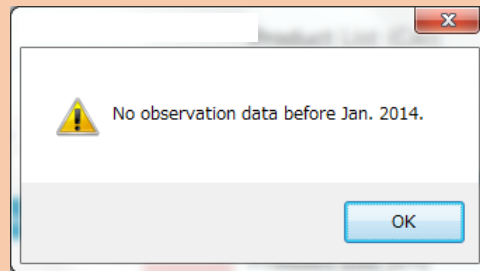
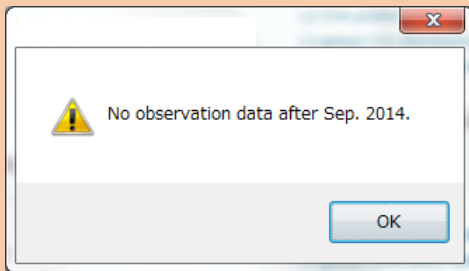


A screenshot of a date input field. The text '2014/02/01' is entered in the field, with '(YYYY/MM/DD)' written below it. To the right of the field is a button labeled 'GO'.

Note: The user is notified with pop-up screens if there is no observation data available for the date specified.

(1) When a period after dates of availability is selected

(2) When a period prior to dates of availability is selected



9.1.2 Downloading Products Archived in Daily Units

This section explains the procedure for downloading products archived in daily units. The procedure for downloading the FTS L1B data product is used here for explanatory purposes. (Other products archived in daily units can be downloaded in the same way.)

(1) Moving to the [Download] Screen

Move to the [Download] Screen by logging into the system, as explained in section 8.1. If you are already logged in, click [Download] on the menu to move to the [Download] Screen.



(2) [Download] Screen

Displays a list of products that the logged-in user is able to download. Click on the daily unit product (FTS L1B data used here as an example) to move to the [Product Download (Daily Unit)] Screen.

GOSAT Data Download Page

Please select the 'Product name' which you would like to download.

Sensor	Level	Product Name	Unit	
FTS	L1B	FTS L1B data	Daily Path	
	L1B support	FTS FOV image	Daily	
	L2	L2 CO2 column amount (SWIR)		Monthly
		L2 CH4 column amount (SWIR)		Monthly
		L2 H2O column amount (SWIR)		Monthly
		L2 CO2 profile (TIR)		Monthly
		L2 CH4 profile (TIR)		Monthly
		L3 global CO2 distribution (SWIR)		Monthly
	L3	L3 global CH4 distribution (SWIR)		Monthly

(1)

Sensor	Level	Product Name	Unit	
CAI	L1B	CAI L1B data	Path	
	L1B+	CAI L1B+ data	Path	
	L2	L2 cloud flag	Path	
	L3	L3 global radiance distribution		Monthly
		L3 global reflectance distribution		Monthly
		L3 NDVI	Monthly	

Sensor	Level	Product Name	Unit
-	L4A	L4A global CO2 flux	Annual
		L4A global CH4 flux	Annual
	L4B	L4B global CO2 distribution	Annual
		L4B global CH4 distribution	Annual

- (1) List of Products : Displays a list of products that the user can download.

Important: The downloadable products will differ in alignment with the category of the logged-in user. See [13.2 Product Provision Formats] for further details.

Information: The Unit field displays the unit in which products are provided.

(3) [Product Download (Daily Unit)] Screen

Displays details of the selected products (file unit, product format, version) ((1) below), a calendar listing the dates of observation ((2) below), and WGET list information ((5) below). Then click on any of the versions displayed in the observation date calendar ((3) below) to download products.

The screenshot shows the GOSAT Data Archive Service (GDAS) interface. At the top, there is a navigation bar with 'Download' and 'Documents & Information' links, and a user information section with 'User Information' and 'Logout' links. The main header features the GOSAT logo and the text 'GOSAT Data Archive Service (GDAS) This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES)'. Below the header, the page is divided into several sections:

- FTS L1B data Download Page (1):** This section provides details for downloading FTS L1B data. It specifies the file unit as 'Daily' (one-day data archived with tar command) and the path unit as 'Path' (one-path data archived with tar command). The product format is 'HDF' and the product unit is 'FTS scene'. Under the 'Version:' section, it asks the user to select a version number. Two versions are listed: 'V220.220 (Apr. 23, 2009 - Mar. 05, 2020)' and 'V210.210 (Apr. 23, 2009 - Mar. 05, 2020)'.
- Download (for Each Day, V220.220) (2):** This section provides a calendar for downloading daily data for version V220.220. It shows the date '2020/03' and a calendar grid for the month of March 2020. The calendar grid has columns for Sun, Mon, Tue, Wed, Thu, Fri, and Sat. The date '2020.220' is highlighted in a red box on Monday, March 2nd, with a red circle and the number '(3)' next to it.
- Product List (FTS) (4):** This section lists the available products for FTS L1B data: FTS FOV image, L2 CO2 column amount (SWIR), L2 CH4 column amount (SWIR), L2 H2O column amount (SWIR), L2 CO2 profile (TIR), L2 CH4 profile (TIR), L3 global CO2 distribution (SWIR), and L3 global CH4 distribution (SWIR).
- Product List (CAI):** This section lists the available products for CAI L1B data: CAI L1B data, CAI L1B+ data, L2 cloud flag, L3 global radiance distribution, L3 global reflectance distribution, and L3 NDVI.
- Product List (L4):** This section lists the available products for L4 data: L4A global CO2 flux, L4A global CH4 flux, L4B global CO2 distribution, and L4B global CH4 distribution.

Color scheme of the calendar is as follows.

	Path	: 42(*1),1,4,7,10,13,16,19,22,25,28,31,34,37,40(*2),43(*3)
	Path	: 40(*2),43(*3),2,5,8,11,14,17,20,23,26,29,32,35,38,41
	Path	: 41,44,3,6,9,12,15,18,21,24,27,30,33,36,39,42(*1)
	No color	: No data

*1 (path 42) : The FTS daily data over Path 42 have been made across the two consecutive days from the scheduled date of Blue Path Group to that of Pink Path Group.

Due to the deviation from the nominal orbit, the calendar color scheme of the FTS daily data over Path 40 and 43 are as below.

*2 (path 40) Apr. 23, 2009 - Feb. 6, 2017 : Pink Path Group
Feb. 7, 2017 - present : Pink and Green Path Groups

*3 (path 43) Apr. 23, 2009 - Nov. 7, 2016 : Pink and Green Path Groups
Nov. 8, 2016 - present : Green Path Group

Download via WGET (for Each Month): (5)

You can download multiple files at a time using the following WGET list.

WGET list

Command line: `wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]`

Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget list.

Note: Please use wget version 1.6.1 or later.

Back to select product (6)

Download via WGET (for Each Month, V210.210): (5')

You can download multiple files at a time using the following WGET list.

WGET list (V210.210) (List of one-day data archived with tar command)

WGET list (V210.210) (List of one-path data archived with tar command)

- (1) Product Information : Displays information on the selected product.
- (2) Observation Date Calendar : Displays product observation dates in a calendar format.
- (3) [Version No.] Link : The link to the files archived in daily units. For FTS L1B data product, the link to the dialog box to download products archived in path units.
- (4) List of Products : The link to the [Product Download] Screen from which users can download products.
- (5) [WGET list] Link : The link to the WGET list file (one month's worth).
(5') : For FTS L1B data product, there are two links to get WGET lists. The first one contains one-day data files, and the second one does one-path data files.

- (6) [Back to select Product] Link : The link for returning to the [Download] Screen.

Important: Use a file compression tool to extract and decompress downloaded products.

Important: For FTS L1B data product, the following dialog box will be displayed when (3) [Version No.] Link is clicked. Select a radio button, All (one-day data) or the other (one-path data), and click [Download] button then downloading will be started.

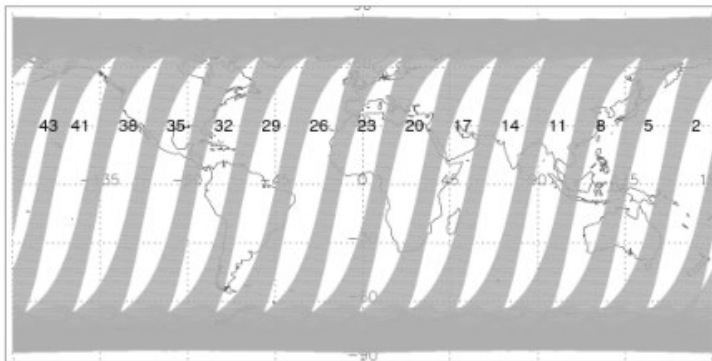
Select a path or All daily paths : Mar. 11, 2019
(About 7 GiB/file for daily data)
(About 450 MiB/file for path data)

The specified path data may not be downloadable for reasons such as data-missing and/or across-date path.

- All (Daily Data)
- Path40 Path8 Path20 Path32
- Path43 Path11 Path23 Path35
- Path2 Path14 Path26 Path38
- Path5 Path17 Path29 Path41

Back

Download



The specified path data may not be downloadable for reasons such as data-missing and/or across-date path.

Information: Displaying products with multiple versions as a different version

[New Version] ((1) below) is shown on the initial screen.

Click on the [Different Version] ((2) below) that needs to be displayed to display that version ((3) below).

[Initial Screen]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020) (1) — **New Version**

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (2)

Download (for Each Path, V02.00):

Download via WGET (for Each Month, V02.00):

After clicking on [Different Version]

Version:
Please select the 'Version number' which you would like to download.

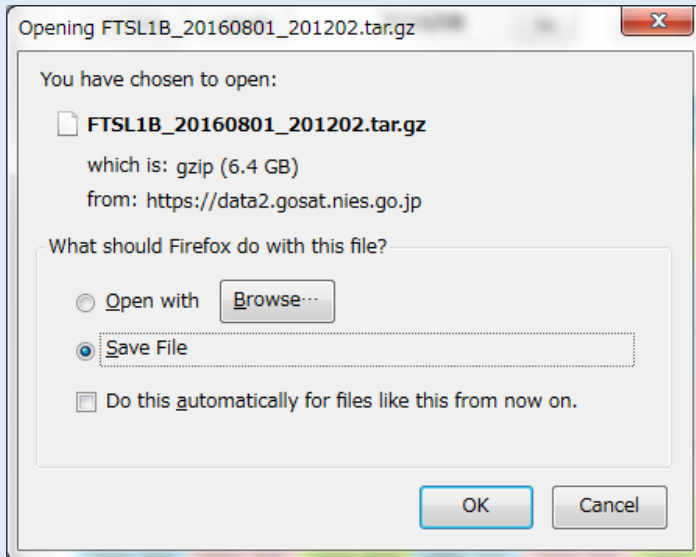
V02.00 (Dec. 01, 2016 - Mar. 08, 2020)

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (3) — **Different Version**

Download (for Each Path, V01.00):

Download via WGET (for Each Month, V01.00):

Information: An example of downloading a product file archived in daily units (Firefox) is shown below.

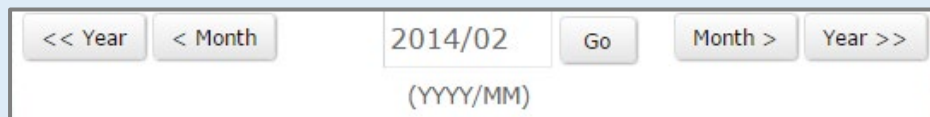


Information: The background colors on the calendar are color-coded into three groups of path numbers in alignment with the three-day rotation cycle of GOSAT observations.

Information: Using the Calendar

There are several methods available for updating the observation dates displayed on the calendar.

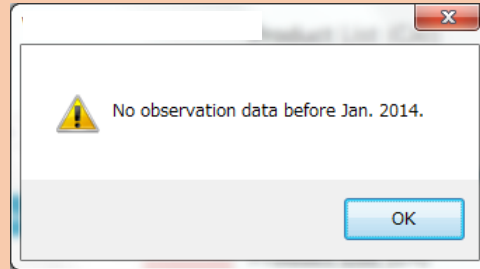
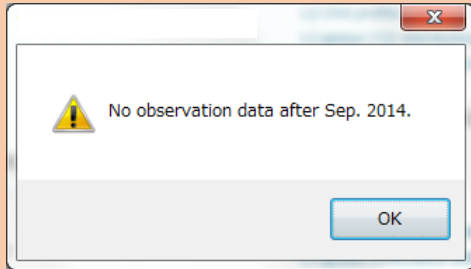
- (1) [Go] : Moves to the year/month entered.
- (2) [<< Year] : Moves to one year before the month displayed
- (3) [< Month] : Moves to one month before the month displayed
- (4) [Month >] : Moves to one month after the month displayed
- (5) [Year >>] : Moves to one year after the month displayed



Note: The user is notified with pop-up screens if there is no observation data available for the year/month specified.

(1) When a period after dates of availability is selected

(2) When a period prior to dates of availability is selected



9.1.3 Downloading Products Archived in Monthly Units

This section explains the procedure for downloading products archived in monthly units. The procedure for downloading the L2 CO₂ column amount (SWIR) product is used here for explanatory purposes (Other products archived in monthly units can be downloaded in the same way.).

(1) Moving to the [Download] Screen

Move to the [Download] Screen by logging into the system, as explained in section 8.1.

If you are already logged in, click [Download] on the menu to move to the [Download] Screen.



(2) [Download] Screen

Displays a list of products that the logged-in user is able to download. Click on the monthly unit product (L2 CO2 column amount (SWIR) used here as an example) to move to the [Product Download (Monthly Unit)] Screen.

The screenshot shows the GOSAT Data Archive Service (GDAS) interface. At the top, there is a navigation bar with 'Download', 'Documents & Information', 'User Information', and 'Logout'. Below this is a banner for 'GOSAT Data Archive Service (GDAS)' with the text 'This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES)'. The main heading is 'GOSAT Data Download Page' with a sub-heading 'Please select the 'Product name' which you would like to download.' Below this are two tables of products. The first table is for the 'FTS' sensor, and the second is for the 'CAI' sensor. The 'L2 CO2 column amount (SWIR)' product in the FTS table is highlighted with a red box. A red circle with the number '(1)' is also present in the bottom left corner of the screenshot.

Sensor	Level	Product Name	Unit
FTS	L1B	FTS L1B data	Daily Path
	L1B support	FTS FOV image	Daily
		L2 CO2 column amount (SWIR)	Monthly
	L2	L2 CH4 column amount (SWIR)	Monthly
		L2 H2O column amount (SWIR)	Monthly
		L2 CO2 profile (TIR)	Monthly
		L2 CH4 profile (TIR)	Monthly
		L3 global CO2 distribution (SWIR)	Monthly
	L3	L3 global CH4 distribution (SWIR)	Monthly

Sensor	Level	Product Name	Unit
CAI	L1B	CAI L1B data	Path
	L1B+	CAI L1B+ data	Path
	L2	L2 cloud flag	Path
	L3	L3 global radiance distribution	Monthly
		L3 global reflectance distribution	Monthly
		L3 NDVI	Monthly

Sensor	Level	Product Name	Unit
-	L4A	L4A global CO2 flux	Annual
		L4A global CH4 flux	Annual
	L4B	L4B global CO2 distribution	Annual
		L4B global CH4 distribution	Annual

(1) List of Products : Displays a list of products that the user can download.

Important: The downloadable products will differ in alignment with the category of the logged-in user. See [13.2 Product Provision Formats] for further details.

Information: The Unit field displays the unit in which products are provided.

(3) [Download Product (Monthly Unit)] Screen

Displays details of the selected products (file unit, product format, version) ((1) below), the table of products ((2) below), and WGET list information ((4) below). Click on the product list [Version] to display a list of products.

Download Documents & Information

GU :
[User Information](#) [Logout](#)

GOSAT Data Archive Service (GDAS)

This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

L2 CO2 column amount (SWIR) Download Page (1)

File unit: **Monthly** (The one month's data are archived with tar command.)

Product format: **HDF**

Product unit: **Daily**

Version:
Version relationship between "Bias uncorrected" and "Bias corrected" products is as follows.

Observation period	Input FTS L1B	Bias uncorrected FTS SWIR L2 CO2	Bias corrected FTS SWIR L2 CO2
Apr. 23, 2009 - Feb. 29, 2020	V210.210	V02.81	-
Apr. 23, 2009 - Aug. 31, 2019	V210.210	V02.80	-
Apr. 23, 2009 - Nov. 24, 2018	V201.202	V02.72	V02.75

Please select the product type "V02.xx (Bias uncorrected)" or "V02.xx (Bias corrected)" which you would like to download.

Note: Product type shown in shade is selected as your download target.

V02.xx (Bias uncorrected) (Apr. 23, 2009 - Feb. 29, 2020)

V02.xx (Bias corrected) (Apr. 23, 2009 - Nov. 24, 2018)

Product List (FTS) (3)

- [FTS L1B data](#)
- [FTS FOV image](#)
- [L2 CO2 column amount \(SWIR\)](#)
- [L2 CH4 column amount \(SWIR\)](#)
- [L2 H2O column amount \(SWIR\)](#)
- [L2 CO2 profile \(TIR\)](#)
- [L2 CH4 profile \(TIR\)](#)
- [L3 global CO2 distribution \(SWIR\)](#)
- [L3 global CH4 distribution \(SWIR\)](#)

Product List (CAI)

- [CAI L1B data](#)
- [CAI L1B+ data](#)
- [L2 cloud flag](#)
- [L3 global radiance distribution](#)
- [L3 global reflectance distribution](#)
- [L3 NDVI](#)

Product List (L4)

- [L4A global CO2 flux](#)
- [L4A global CH4 flux](#)
- [L4B global CO2 distribution](#)
- [L4B global CH4 distribution](#)

Download (for Each Month, V02.xx (Bias uncorrected)):

Available products depend on the user group. Please click on the following title with the intended user group, and then a list of monthly data is displayed in a calendar style.
Please click on the 'Year', and then a list of monthly data is displayed in a calendar style.

(2)

[product \(About 15 MiB/file\)](#)

Download via WGET (for All Data, V02.xx (Bias uncorrected)): (4)

You can download multiple files at a time using the following WGET list.

[WGET list \(V02.81\)](#)
[WGET list \(V02.80\)](#)
[WGET list \(V02.72\)](#)

Command line: wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]

Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget file list.

Note: Please use wget version 1.6.1 or later.

[Back to select product](#) (5)

- (1) Product Information : Displays information on the selected product.
- (2) [Product] Link : Displays a list of files archived in monthly units.
- (3) List of Products : The link to the [Product Download] Screen from which users can download products.
- (4) [WGET list] Link : The link to the WGET list file (all periods).
- (5) [Back to select Product] Link : The link for returning to the [Download] Screen.

(4) [Download Product (Monthly Unit)] Screen (Product List Display)
 Click on the product list [Version] ((3) below) to download the product.

GU : User Information Logout

GOSAT Data Archive Service (GDAS)
 This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

L2 CO2 column amount (SWIR) Download Page (1)

File unit: **Monthly** (The one month's data are archived with tar command.)
 Product format: **HDF**
 Product unit: **Daily**

Version:
 Version relationship between "Bias uncorrected" and "Bias corrected" products is as follows.

Observation period	Input FTS L1B	Bias uncorrected FTS SWIR L2 CO2	Bias corrected FTS SWIR L2 CO2
Apr. 23, 2009 - Feb. 29, 2020	V210.210	V02.81	-
Apr. 23, 2009 - Aug. 31, 2019	V210.210	V02.80	-
Apr. 23, 2009 - Nov. 24, 2018	V201.202	V02.72	V02.75

Please select the product type "V02.xx (Bias uncorrected)" or "V02.xx (Bias corrected)" which you would like to download.
Note: Product type shown in shade is selected as your download target.

V02.xx (Bias uncorrected) (Apr. 23, 2009 - Feb. 29, 2020)
V02.xx (Bias corrected) (Apr. 23, 2009 - Nov. 24, 2018)

Product List (FTS) (4)

- FTS L1B data
- FTS FOV image
- L2 CO2 column amount (SWIR)**
- L2 CH4 column amount (SWIR)
- L2 H2O column amount (SWIR)
- L2 CO2 profile (TIR)
- L2 CH4 profile (TIR)
- L3 global CO2 distribution (SWIR)
- L3 global CH4 distribution (SWIR)

Product List (CAI)

- CAI L1B data
- CAI L1B+ data
- L2 cloud flag
- L3 global radiance distribution
- L3 global reflectance distribution
- L3 NDVI

Product List (L4)

- L4A global CO2 flux
- L4A global CH4 flux

Download (for Each Month, V02.xx (Bias uncorrected)):

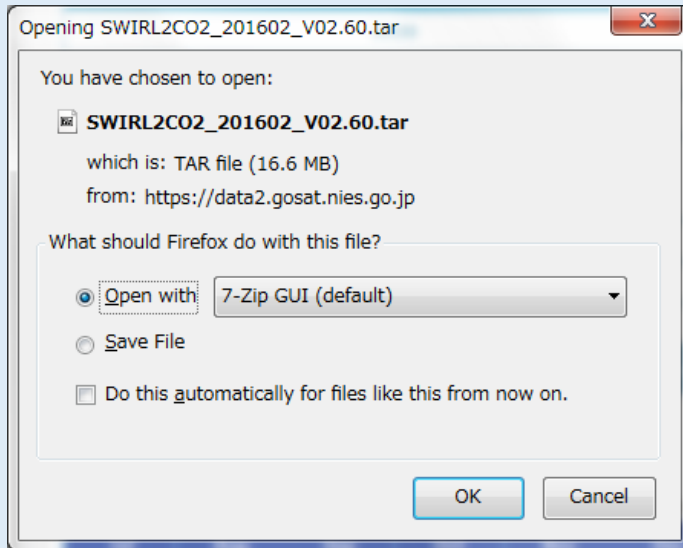
Available products depend on the user group. Please click on the following title with the intended user group, and then a list of monthly data is displayed in a calendar style.
 Please click on the "Year", and then a list of monthly data is displayed in a calendar style. (2)

product (About 15 MiB/file)						L4B global CO2 distribution L4B global CH4 distribution
Year						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
Jan	Feb (3)	Mar	Apr	May	Jun	
V02.81	V02.81					
Jul	Aug	Sep	Oct	Nov	Dec	
Download via WGET (for All Data, V02.xx (Bias uncorrected)): (5)						
<p>You can download multiple files at a time using the following WGET list.</p> <p>WGET list (V02.81) WGET list (V02.80) WGET list (V02.72)</p> <p>Command line: <code>wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]</code> <i>Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget file list.</i> <i>Note: Please use wget version 1.6.1 or later.</i></p>						
Back to select product (6)						

- (1) Product Information : Displays information on the selected product.
- (2) [Product] Link : Displays a list of files archived in monthly units.
- (3) [Version] Link : Link to files archived in monthly units.
- (4) List of Products : The link to the [Product Download] Screen from which users can download products.
- (5) [WGET list] Link : The link to the WGET list file (whole period).
- (6) [Back to select Product] Link : The link for returning to the [Download] Screen.

Important: Use a file compression tool to extract and decompress downloaded products.

Information: An example of downloading a product file archived in monthly units (Firefox) is shown below.



Information: Displaying products with multiple versions as a different version

[New Version] ((1) below) is shown on the initial screen.

Click on the [Different Version] ((2) below) that needs to be displayed to display that version ((3) below).

[Initial Screen]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020) (1) — **New Version**

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (2)

Download (for Each Path, V02.00):

Download via WGET (for Each Month, V02.00):

After clicking on [Different Version]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020)

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (3) — **Different Version**

Download (for Each Path, V01.00):

Download via WGET (for Each Month, V01.00):

9.1.4 Downloading Products Archived in Annual Units

This section explains the procedure for downloading products archived in annual units. The procedure for downloading the L4A global CO2 flux product is used here for explanatory purposes (Other products archived in annual units can be downloaded in the same way.).

(1) Moving to the [Download] Screen

Move to the [Download] Screen by logging into the system, as explained in section 8.1.

If you are already logged in, click [Download] on the menu to move to the [Download] Screen.



(2) [Download] Screen

Displays a list of products that the logged-in user is able to download. Click on the annual unit product (L4A global CO2 flux used here as an example) to move to the [Product Download (Annual Unit)] Screen.

GOSAT Data Archive Service (GDAS)
This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

GOSAT Data Download Page
Please select the 'Product name' which you would like to download.

Sensor	Level	Product Name	Unit	
FTS	L1B	FTS L1B data	Daily Path	
	L1B support	FTS FOV image	Daily	
	L2	L2 CO2 column amount (SWIR)		Monthly
		L2 CH4 column amount (SWIR)		Monthly
		L2 H2O column amount (SWIR)		Monthly
		L2 CO2 profile (TIR)		Monthly
		L2 CH4 profile (TIR)		Monthly
		L3 global CO2 distribution (SWIR)		Monthly
	L3	L3 global CH4 distribution (SWIR)		Monthly

(1)

Sensor	Level	Product Name	Unit	
CAI	L1B	CAI L1B data	Path	
	L1B+	CAI L1B+ data	Path	
	L2	L2 cloud flag	Path	
	L3	L3 global radiance distribution		Monthly
		L3 global reflectance distribution		Monthly
		L3 NDVI		Monthly

Sensor	Level	Product Name	Unit
-	L4A	L4A global CO2 flux	Annual
		L4A global CH4 flux	Annual
	L4B	L4B global CO2 distribution	Annual
		L4B global CH4 distribution	Annual


(1) List of Products : Displays a list of products that the user can download.

Important: The downloadable products will differ in alignment with the category of the logged-in user. See [13.2 Product Provision Formats] for further details.

Information: The Unit field displays the unit in which products are provided.

(3) [Download Product (Annual Unit)] Screen

Displays details of the selected products (file unit, product format, version) ((1) below), the table of products ((2) below), and WGET list information ((5) below). Then click on the product's [Observation Year] ((3) below) to download the product.



GOSAT PROJECT
Observance since 2009
Clearing the Air

[Download](#) Documents & Information

GU : _____

[User Information](#) [Logout](#)

GOSAT Data Archive Service (GDAS)

This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

L4A global CO2 flux Download Page (1)

File unit: **Annual** (The one year's data are archived with tar command.)

Product format: **NetCDF / Text**

Product unit: **Annual**

Version:
Please select the 'Version number' which you would like to download.

V02.06 (Jun. 01, 2009 - Oct. 31, 2017)

V02.05 (Jun. 01, 2009 - Oct. 31, 2015)

Product List (FTS) (4)

- [FTS L1B data](#)
- [FTS FOV image](#)
- [L2 CO2 column amount \(SWIR\)](#)
- [L2 CH4 column amount \(SWIR\)](#)
- [L2 H2O column amount \(SWIR\)](#)
- [L2 CO2 profile \(TIR\)](#)
- [L2 CH4 profile \(TIR\)](#)
- [L3 global CO2 distribution \(SWIR\)](#)
- [L3 global CH4 distribution \(SWIR\)](#)

Download (for Each Year, V02.06): (2)

Observational Year	Start Date (MM/DD)	End Date (MM/DD)	File Size (MiB)
(3) 2009	06/01	12/31	4
2010	01/01	12/31	7
2011	01/01	12/31	7
2012	01/01	12/31	7
2013	01/01	12/31	7
2014	01/01	12/31	7
2015	01/01	12/31	7
2016	01/01	12/31	7
2017	01/01	10/31	6

Download via WGET (for All Data, V02.06): (5)

You can download multiple files at a time using the following WGET list.

WGET list (V02.06)

Command line: `wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]`

Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget list.

Note: Please use wget version 1.6.1 or later.

[Back to select product](#) (6)

Product List (CAI)

- [CAI L1B data](#)
- [CAI L1B+ data](#)
- [L2 cloud flag](#)
- [L3 global radiance distribution](#)
- [L3 global reflectance distribution](#)
- [L3 NDVI](#)

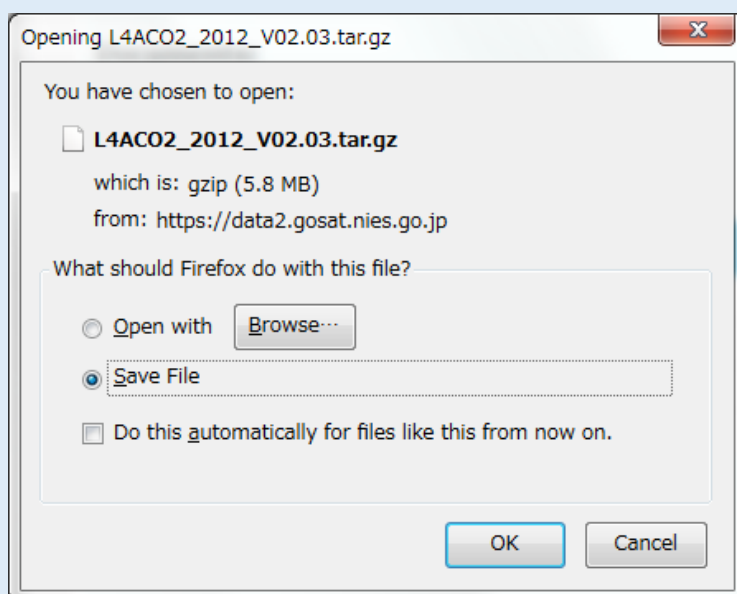
Product List (L4)

- [L4A global CO2 flux](#)
- [L4A global CH4 flux](#)
- [L4B global CO2 distribution](#)
- [L4B global CH4 distribution](#)

- (1) Product Information : Displays information on the selected product.
- (2) [Product] Link : Displays a list of files archived in annual units.
- (3) [Observation Year] Link : Link to files archived in annual units.
- (4) List of Products : The link to the [Product Download] Screen from which users can download products.
- (5) [WGET list] Link : The link to the WGET list file (whole period).
- (6) [Back to select Product] Link : The link for returning to the [Download] Screen.

Important: Use a file compression tool to extract and decompress downloaded products.

Information: An example of downloading a product file archived in annual units (Firefox) is shown below.



Information: Switching Between Product Formats

[netCDF] ((1) below) is displayed on the initial screen.

Click on the [Text] ((2) below) link to display the product in the text format.

[Initial Screen]



L4A global CO2 flux Download Page

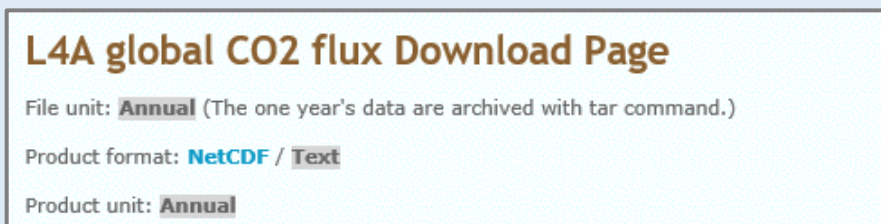
File unit: **Annual** (The one year's data are archived with tar command.)

Product format: **NetCDF** / **Text**

Product unit: **Annual**

The screenshot shows the initial screen with the product format set to NetCDF. The 'NetCDF' and 'Text' options are highlighted with red boxes and labeled (1) and (2) respectively.

After [Text] has been clicked



L4A global CO2 flux Download Page

File unit: **Annual** (The one year's data are archived with tar command.)

Product format: **NetCDF** / **Text**

Product unit: **Annual**

The screenshot shows the page after clicking the 'Text' format. The 'Text' option is now highlighted in blue, and 'NetCDF' is in grey.

Information: Displaying products with multiple versions as a different version

[New Version] ((1) below) is shown on the initial screen.

Click on the [Different Version] ((2) below) that needs to be displayed to display that version ((3) below).

[Initial Screen]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020) (1) — **New Version**

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (2) — **Different Version**

Download (for Each Path, V02.00):

Download via WGET (for Each Month, V02.00):

After clicking on [Different Version]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020)

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (3) — **Different Version**

Download (for Each Path, V01.00):

Download via WGET (for Each Month, V01.00):

9.2 Downloading Products with the WGET Command

This section explains the procedure for downloading GOSAT products with the use of the WGET command in the units in which they are provided.

9.2.1 Downloading Products Archived in Path Units

This section explains the procedure for downloading products archived in path units with the use of the WGET command. The procedure for downloading the L2 cloud flag product is used here for explanatory purposes. (Other products archived in path units can be downloaded in the same way.)

(1) Moving to the [Download] Screen

Move to the [Download] Screen by logging into the system, as explained in section 8.1.

If you are already logged in, click [Download] on the menu to move to the [Download] Screen.



(2) [Download] Screen

Displays a list of products that the logged-in user is able to download. Click on the path unit product (L2 cloud flag used here as an example) to move to the [Product Download (Path Unit)] Screen.

The screenshot shows the GOSAT Data Archive Service (GDAS) interface. At the top, there is a navigation bar with 'Download', 'Documents & Information', 'User Information', and 'Logout'. Below this is a banner for 'GOSAT Data Archive Service (GDAS)' with the text 'This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES)'. The main heading is 'GOSAT Data Download Page' with a prompt: 'Please select the 'Product name' which you would like to download.' Below this are two tables of products. The first table is for the 'FTS' sensor, and the second is for the 'CAI' sensor. The 'L2 cloud flag' product under the 'CAI' sensor is highlighted with a red box. A red circle with the number '1' is located at the bottom left of the screenshot.

Sensor	Level	Product Name	Unit	
FTS	L1B	FTS L1B data	Daily Path	
	L1B support	FTS FOV image	Daily	
	L2	L2	L2 CO2 column amount (SWIR)	Monthly
			L2 CH4 column amount (SWIR)	Monthly
			L2 H2O column amount (SWIR)	Monthly
			L2 CO2 profile (TIR)	Monthly
			L2 CH4 profile (TIR)	Monthly
			L3 global CO2 distribution (SWIR)	Monthly
	L3	L3	L3 global CH4 distribution (SWIR)	Monthly

Sensor	Level	Product Name	Unit	
CAI	L1B	CAI L1B data	Path	
	L1B+	CAI L1B+ data	Path	
	L2	L2 cloud flag	Path	
	L3	L3	L3 global radiance distribution	Monthly
			L3 global reflectance distribution	Monthly
			L3 NDVI	Monthly

Sensor	Level	Product Name	Unit
-	L4A	L4A global CO2 flux	Annual
		L4A global CH4 flux	Annual
	L4B	L4B global CO2 distribution	Annual
		L4B global CH4 distribution	Annual

(1) List of Products : Displays a list of products that the user can download.

Important: The downloadable products will differ in alignment with the category of the logged-in user. See [13.2 Product Provision Formats] for further details.

Information: The Unit field displays the unit in which products are provided.

(3) [Product Download (Path Unit)] Screen

Displays details of the selected products (file unit, product format, version) ((1) below), a calendar listing the dates of observation, and WGET list information ((7) below). Click on the link to the WGET list ((7) below) in order to download the WGET list in monthly units. Change the observation year/month displayed on the calendar to download the WGET list for the subsequent month or year. To download WGET lists in daily units, click on the version name displayed on the observation date calendar ((3) below) to move to the [Product Download Details (Path Unit)] Screen.

GOSAT Data Archive Service (GDAS)
 This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

L2 cloud flag Download Page (1)

File unit: **Path** (The one path's data are archived with tar command.)
 Product format: **HDF**
 Product unit: **CAI frame**

Version:
 Please select the 'Version number' which you would like to download.
V02.00 (Mar. 31, 2009 - Mar. 08, 2020)

Download (for Each Path, V02.00): (2)

<< Year < Month 2020/03 Go Month > Year >>
 (YYYY/MM)

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
V02.00	V02.00	V02.00	V02.00	V02.00	V02.00 (3)	V02.00
8	9	10	11	12	13	14
V02.00						
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

Product List (FTS) (4)

- FTS L1B data
- FTS FOV image
- L2 CO2 column amount (SWIR)
- L2 CH4 column amount (SWIR)
- L2 H2O column amount (SWIR)
- L2 CO2 profile (TIR)
- L2 CH4 profile (TIR)
- L3 global CO2 distribution (SWIR)
- L3 global CH4 distribution (SWIR)

Product List (CAI)

- CAI L1B data
- CAI L1B+ data
- L2 cloud flag
- L3 global radiance distribution
- L3 global reflectance distribution
- L3 NDVI

Product List (L4)

- L4A global CO2 flux
- L4A global CH4 flux
- L4B global CO2 distribution
- L4B global CH4 distribution

Color scheme of the calendar is as follows.

	Path	: 42(*1),1,4,7,10,13,16,19,22,25,28,31,34,37,40
	Path	: 43,2,5,8,11,14,17,20,23,26,29,32,35,38,41
	Path	: 44,3,6,9,12,15,18,21,24,27,30,33,36,39,42(*1)
	No color	: No data

*1 The CAI observation over Path 42 is made across the two consecutive days from the scheduled date of Blue Path Group to that of Pink Path Group. However, during the period shown below, due to the deviation from the nominal orbit, the observation over Path 42 has been made only on the scheduled date of Pink Path Group.
For the period shown below, the products for Path 42 archived in path unit are provided as the daily products of Blue Path Group, even though the actual observation dates are on the next days, namely on the scheduled dates of Pink Path Group.

< CAI observation period for Path42 observed only on the date of Pink Path Group >
September 30, 2017 - April 11, 2019,
September 29, 2019 - February 23, 2020

Download via WGET (for Each Month, V02.00): (5)

You can download multiple files at a time using the following WGET list.

WGET list (V02.00) (7)

Command line: wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]
 Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget list.
 Note: Please use wget version 1.6.1 or later.

Back to select product (6)

- (1) Product Information : Displays information on the selected product.
- (2) Observation Date Calendar : Displays product observation dates in a calendar format.
- (3) [Version No.] Link : The link to the [Product Download Details (Path Unit)] Screen.
- (4) List of Products : The link to the [Product Download] Screen from which users can download products.
- (5) WGET Download Method : Displays how to download products that use the WGET list file.
- (6) [Back to select Product] Link : The link for returning to the [Download] Screen.
- (7) [WGET list] Link : The link to the WGET list file (one month's worth).

Information: The background colors on the calendar are color-coded into three groups of path numbers in alignment with the three-day rotation cycle of GOSAT observations.

Information: Displaying products with multiple versions as a different version

[New Version] ((1) below) is shown on the initial screen.

Click on the [Different Version] ((2) below) that needs to be displayed to display that version ((3) below).

[Initial Screen]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020) (1) — **New Version**

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (2)

Download (for Each Path, V02.00):

Download via WGET (for Each Month, V02.00):

After clicking on [Different Version]

Version:
Please select the 'Version number' which you would like to download.

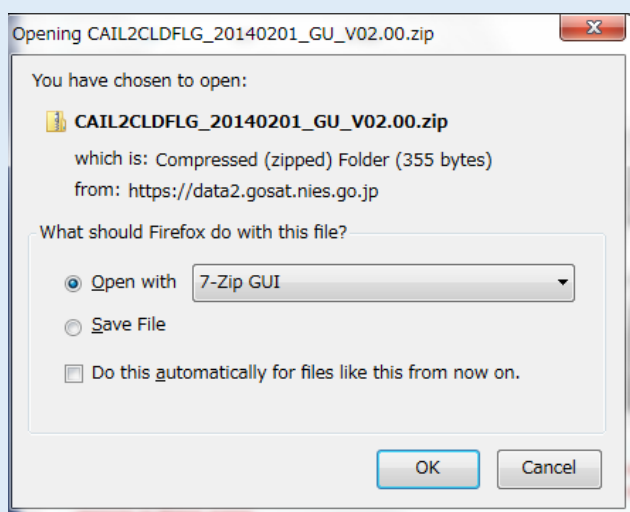
V02.00 (Dec. 01, 2016 - Mar. 08, 2020)

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (3) — **Different Version**

Download (for Each Path, V01.00):

Download via WGET (for Each Month, V01.00):

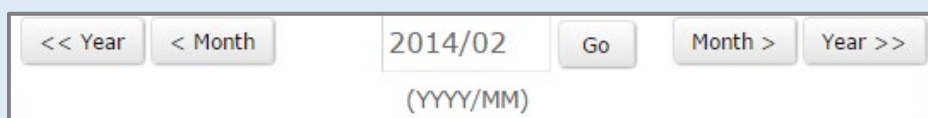
Information: An example of downloading a WGET list file (Firefox) is shown below.



Information: Using the Calendar

There are several methods available for updating the observation dates displayed on the calendar.

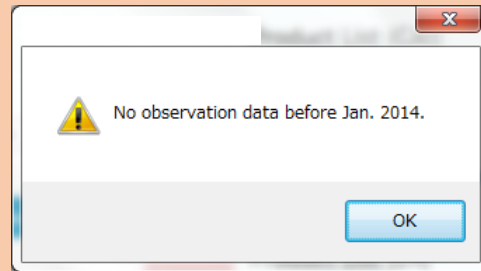
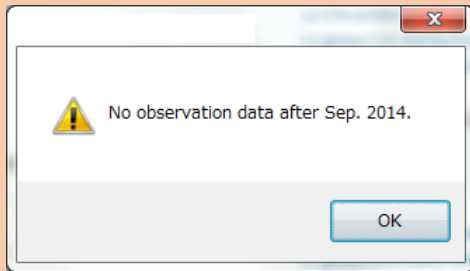
- (1) [Go] : Moves to the year/month entered.
- (2) [<< Year] : Moves to one year before the month displayed
- (3) [< Month] : Moves to one month before the month displayed
- (4) [Month >] : Moves to one month after the month displayed
- (5) [Year >>] : Moves to one year after the month displayed



Note: The user is notified with pop-up screens if there is no observation data available for the year/month specified.

(1) When a period after dates of availability is selected

(2) When a period prior to dates of availability is selected



(4) [Product Download Details (Path Units)] Screen

Displays details of the selected products (file unit, product format, version) ((1) below), a list of observation date paths, and WGET list information ((4) below). Then click on the link to the WGET list ((6) below) in order to download the WGET list.

L2 cloud flag Download Page (1)

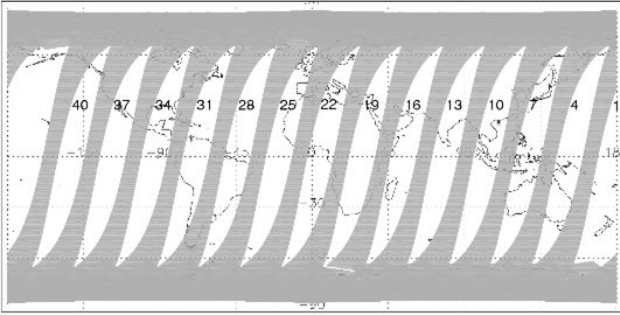
File unit: **Path** (The one path's data are archived with tar command.)
 Product format: **HDF**
 Product unit: **CAI frame**

Version:
 Please select the 'Version number' which you would like to download.
V02.00 (Mar. 31, 2009 - Mar. 09, 2020)

Download (for Each Path, V02.00): (2)

(YYYY/MM/DD)

Path	File Number	File Size (GiB)	Path	File Number	File Size (GiB)
01	31	0.57	25	31	0.61
04	31	0.60	28	31	0.62
07	31	0.62	31	31	0.61
10	31	0.62	34	31	0.61
13	31	0.62	37	31	0.60
16	31	0.64	40	31	0.58
19	31	0.64			
22	31	0.62			



Note: Shades areas in the figure above indicate maximum observation areas* of CAI in each satellite path. The archived file of each path contains CAI frames of sunlit regions in these areas.
 *: Areas with one or more sunlit days in a year

Product List (FTS) (3)

- [FTS L1B data](#)
- [FTS FOV image](#)
- [L2 CO2 column amount \(SWIR\)](#)
- [L2 CH4 column amount \(SWIR\)](#)
- [L2 H2O column amount \(SWIR\)](#)
- [L2 CO2 profile \(TIR\)](#)
- [L2 CH4 profile \(TIR\)](#)
- [L3 global CO2 distribution \(SWIR\)](#)
- [L3 global CH4 distribution \(SWIR\)](#)

Product List (CAI)

- [CAI L1B data](#)
- [CAI L1B+ data](#)
- [L2 cloud flag](#)
- [L3 global radiance distribution](#)
- [L3 global reflectance distribution](#)
- [L3 NDVI](#)

Product List (L4)

- [L4A global CO2 flux](#)
- [L4A global CH4 flux](#)
- [L4B global CO2 distribution](#)
- [L4B global CH4 distribution](#)

Download via WGET (for Each Day, V02.00): (4)

You can download multiple files at a time using the following WGET list.

WGET list (V02.00) (6)

Command line: `wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]`

Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget list.

Note: Please use wget version 1.6.1 or later.

Back to select date (5)

- (1) Product Information : Displays information on the selected product.
- (2) Path List : Displays a list of the observation date paths selected.
- (3) List of Products : The link to the [Product Download] Screen from which users can download products.
- (4) WGET Download Method : Displays how to download products that use the WGET list file.
- (5) [Back to select date] Link : The link for returning to the [Product Download (Path Unit)] Screen.
- (6) [WGET list] Link : The link to the WGET list file (one day's worth).

Information: An example of downloading a WGET list file (Firefox) is shown below.

The screenshot shows a file dialog window titled "Opening CAIL2CLDFLG_20140201_GU_V02.00.zip". The main text says "You have chosen to open:" followed by a file icon and the name "CAIL2CLDFLG_20140201_GU_V02.00.zip". Below this, it says "which is: Compressed (zipped) Folder (355 bytes)" and "from: https://data2.gosat.nies.go.jp". The question "What should Firefox do with this file?" is followed by three radio button options: "Open with" (selected) with a dropdown menu showing "7-Zip GUI", "Save File", and "Do this automatically for files like this from now on." (unchecked). At the bottom are "OK" and "Cancel" buttons.

Information: Displaying products with multiple versions as a different version

[New Version] ((1) below) is shown on the initial screen.

Click on the [Different Version] ((2) below) that needs to be displayed to display that version ((3) below).

[Initial Screen]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020) (1) — **New Version**

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (2)

Download (for Each Path, V02.00):

Download via WGET (for Each Month, V02.00):

After clicking on [Different Version]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020)

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (3) — **Different Version**

Download (for Each Path, V01.00):

Download via WGET (for Each Month, V01.00):

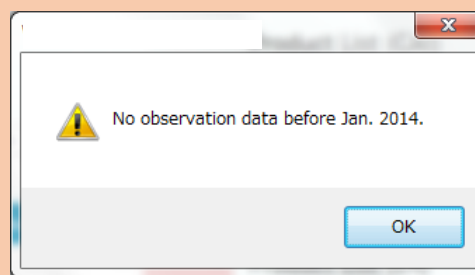
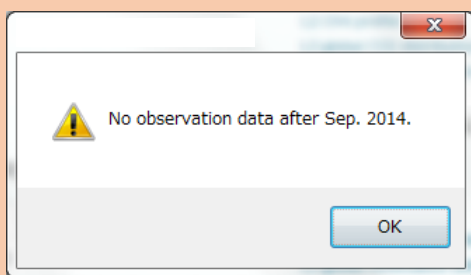
Information: The list of observation date paths can be amended as shown below:

(1) 「Go」 : Moves to the year/month entered.

Note: The user is notified with pop-up screens if there is no observation data available for the year/month specified.

(1) When a period after dates of availability is selected

(2) When a period prior to dates of availability is selected



(5) Decompressing WGET List Files

Decompress the WGET list file (Zip format) downloaded in procedures (3) and (4).

Important: Use a file compression tool to extract and decompress downloaded products.

(6) Executing the WGET Command

Execute the following WGET command to download multiple files in bulk.

```
$wget -i [wget list file decompressed in procedure (5)]
--http-user=[e-mail address used to log in]
--http-passwd=[password used to log in]
```

(7) Decompressing Compressed Files

Decompress the product archive files (tar or tar.gz format) downloaded in procedure (6).

9.2.2 Downloading Products Archived in Daily Units

This section explains the procedure for downloading products archived in daily units. The procedure for downloading the FTS L1B data product is used here for explanatory purposes. (Other products archived in daily units can be downloaded in the same way.)

(1) Moving to the [Download] Screen

Move to the [Download] Screen by logging into the system, as explained in section 8.1.

If you are already logged in, click [Download] on the menu to move to the [Download] Screen.



(2) [Download] Screen

Displays a list of products that the logged-in user is able to download. Click on the daily unit product (FTS L1B data used here as an example) to move to the [Product Download (Daily Unit)] Screen.

The screenshot shows the GOSAT Data Archive Service (GDAS) interface. At the top, there is a navigation bar with 'Download', 'Documents & Information', 'User Information', and 'Logout'. The main header features the GOSAT logo and the text 'GOSAT Data Archive Service (GDAS) This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES)'. Below the header, the page is titled 'GOSAT Data Download Page' and includes the instruction: 'Please select the 'Product name' which you would like to download.' Two tables are displayed, each with columns for 'Sensor', 'Level', 'Product Name', and 'Unit'. The first table lists products for the 'FTS' sensor, with 'FTS L1B data' highlighted in a red box. The second table lists products for the 'CAI' sensor. A red box labeled '(1)' is positioned at the bottom left of the first table.

Sensor	Level	Product Name	Unit	
FTS	L1B	FTS L1B data	Daily Path	
	L1B support	FTS FOV image	Daily	
	L2	L2 CO2 column amount (SWIR)		Monthly
		L2 CH4 column amount (SWIR)		Monthly
		L2 H2O column amount (SWIR)		Monthly
		L2 CO2 profile (TIR)		Monthly
		L2 CH4 profile (TIR)		Monthly
		L3 global CO2 distribution (SWIR)		Monthly
	L3	L3 global CH4 distribution (SWIR)		Monthly

(1)

Sensor	Level	Product Name	Unit	
CAI	L1B	CAI L1B data	Path	
	L1B+	CAI L1B+ data	Path	
	L2	L2 cloud flag	Path	
	L3	L3 global radiance distribution		Monthly
		L3 global reflectance distribution		Monthly
		L3 NDVI		Monthly

Sensor	Level	Product Name	Unit
-	L4A	L4A global CO2 flux	Annual
		L4A global CH4 flux	Annual
	L4B	L4B global CO2 distribution	Annual
		L4B global CH4 distribution	Annual

(1) List of Products : Displays a list of products that the user can download.

Important: The downloadable products will differ in alignment with the category of the logged-in user. See [13.2 Product Provision Formats] for further details.

Information: The Unit field displays the unit in which products are provided.

(3) [Product Download (Daily Unit)] Screen

Displays details of the selected products (file unit, product format, version) ((1) below), a calendar listing the dates of observation, and WGET list information ((4) below). Then click on the link to the WGET list ((6) below) in order to download the WGET list. Change the observation year/month displayed on the calendar to download the WGET list for the subsequent month or year.



GOSAT PROJECT
Observing satellite

[Download](#) [Documents & Information](#)

GU : [User Information](#) [Logout](#)



GOSAT Data Archive Service (GDAS)

This site is operated by GOSAT Project of
National Institute for Environmental Studies (NIES).

FTS L1B data Download Page (1)

File unit: **Daily** (One-day data are archived with tar command.)
File unit: **Path** (One-path data are archived with tar command.)

Product format: **HDF**

Product unit: **FTS scene**

Version:
Please select the 'Version number' which you would like to download.

V220.220 (Apr. 23, 2009 - Mar. 05, 2020)

V210.210 (Apr. 23, 2009 - Mar. 05, 2020)

Product List (FTS) (3)

FTS L1B data

- [FTS FOV image](#)
- [L2 CO2 column amount \(SWIR\)](#)
- [L2 CH4 column amount \(SWIR\)](#)
- [L2 H2O column amount \(SWIR\)](#)
- [L2 CO2 profile \(TIR\)](#)
- [L2 CH4 profile \(TIR\)](#)
- [L3 global CO2 distribution \(SWIR\)](#)
- [L3 global CH4 distribution \(SWIR\)](#)

Download (for Each Day, V220.220) (2)

(About 7 GiB/file for daily data)
(About 450 MiB/file for path data):

<< Year
< Month
2020/03
Go
Month >
Year >>

(YYYY/MM)





Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
V220.220	V220.220	V220.220	V220.220	V220.220		
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

Product List (CAI)

- [CAI L1B data](#)
- [CAI L1B+ data](#)
- [L2 cloud flag](#)
- [L3 global radiance distribution](#)
- [L3 global reflectance distribution](#)
- [L3 NDVI](#)

Product List (L4)

- [L4A global CO2 flux](#)
- [L4A global CH4 flux](#)
- [L4B global CO2 distribution](#)
- [L4B global CH4 distribution](#)

Color scheme of the calendar is as follows.	
	Path : 42(*1),1,4,7,10,13,16,19,22,25,28,31,34,37,40(*2),43(*3)
	Path : 40(*2),43(*3),2,5,8,11,14,17,20,23,26,29,32,35,38,41
	Path : 41,44,3,6,9,12,15,18,21,24,27,30,33,36,39,42(*1)
	No color : No data

*1 (path 42) : The FTS daily data over Path 42 have been made across the two consecutive days from the scheduled date of Blue Path Group to that of Pink Path Group.

Due to the deviation from the nominal orbit, the calendar color scheme of the FTS daily data over Path 40 and 43 are as below.

*2 (path 40) Apr. 23, 2009 - Feb. 6, 2017 : Pink Path Group
Feb. 7, 2017 - present : Pink and Green Path Groups

*3 (path 43) Apr. 23, 2009 - Nov. 7, 2016 : Pink and Green Path Groups
Nov. 8, 2016 - present : Green Path Group

Download via WGET (for Each Month): (4)

You can download multiple files at a time using the following WGET list.

WGET list (6)

Command line: wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]
 Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget list.
 Note: Please use wget version 1.6.1 or later.

Back to select product (5)

- (1) Product Information : Displays information on the selected product.
- (2) Observation Date Calendar : Displays product observation dates in a calendar format.
- (3) List of Products : The link to the [Product Download] Screen from which users can download products.
- (4) WGET Download Method : Displays how to download products that use the WGET list file.
- (5) [Back to select Product] Link : The link for returning to the [Download] Screen.
- (6) [WGET list] Link : The link to the WGET list file (one month's worth).

Information: The background colors on the calendar are color-coded into three groups of path numbers in alignment with the three-day rotation cycle of GOSAT observations.

Information: Displaying products with multiple versions as a different version

[New Version] ((1) below) is shown on the initial screen.

Click on the [Different Version] ((2) below) that needs to be displayed to display that version ((3) below).

[Initial Screen]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020) (1) — **New Version**

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (2)

Download (for Each Path, V02.00):

Download via WGET (for Each Month, V02.00):

After clicking on [Different Version]

Version:
Please select the 'Version number' which you would like to download.

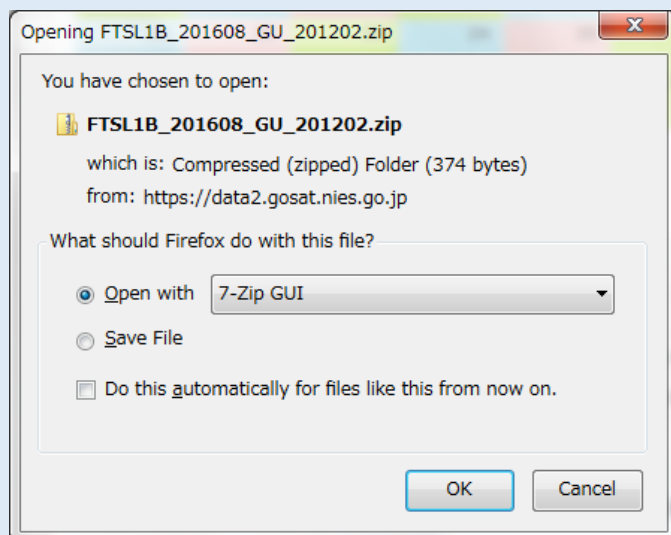
V02.00 (Dec. 01, 2016 - Mar. 08, 2020)

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (3) — **Different Version**

Download (for Each Path, V01.00):

Download via WGET (for Each Month, V01.00):

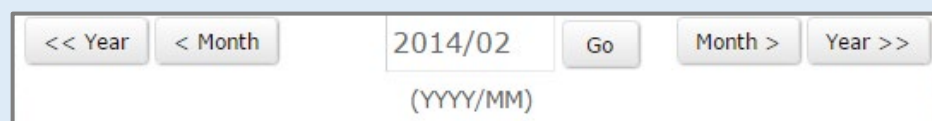
Information: An example of downloading a WGET list file (Firefox) is shown below.



Information: Using the Calendar

There are several methods available for updating the observation dates displayed on the calendar.

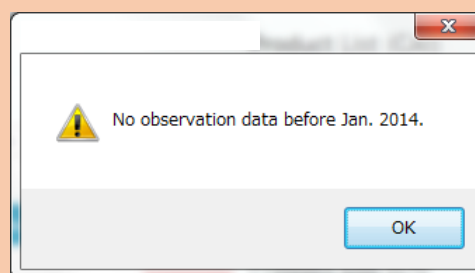
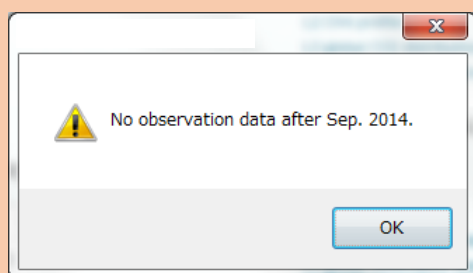
- (1) [Go] : Moves to the year/month entered.
- (2) [<< Year] : Moves to one year before the month displayed
- (3) [< Month] : Moves to one month before the month displayed
- (4) [Month >] : Moves to one month after the month displayed
- (5) [Year >>] : Moves to one year after the month displayed



Note: The user is notified with pop-up screens if there is no observation data available for the year/month specified.

(1) When a period after dates of availability is selected

(2) When a period prior to dates of availability is selected



(4) Decompressing WGET List Files

Decompress the WGET list file (Zip format) downloaded in procedures (3).

Important: Use a file compression tool to extract and decompress downloaded products.

(5) Executing the WGET Command

Execute the following WGET command to download multiple files in bulk.

```
$wget -i [wget list file decompressed in procedure (4)]  
--http-user=[e-mail address used to log in]  
--http-passwd=[password used to log in]
```

(6) Decompressing Compressed Files

Decompress the product archive files (tar or tar.gz format) downloaded in procedure (5).

9.2.3 Downloading Products Archived in Monthly Units

This section explains the procedure for downloading products archived in monthly units. The procedure for downloading the L2 CO2 column amount (SWIR) product is used here for explanatory purposes (Other products archived in monthly units can be downloaded in the same way.).

(1) Moving to the [Download] Screen

Move to the [Download] Screen by logging into the system, as explained in section 8.1.

If you are already logged in, click [Download] on the menu to move to the [Download] Screen.



(2) [Download] Screen

Displays a list of products that the logged-in user is able to download. Click on the monthly unit product (L2 CO2 column amount (SWIR) used here as an example) to move to the [Product Download (Monthly Unit)] Screen.

The screenshot shows the GOSAT Data Archive Service (GDAS) interface. At the top, there is a navigation bar with 'Download', 'Documents & Information', 'User Information', and 'Logout'. Below the navigation bar is a banner for 'GOSAT Data Archive Service (GDAS)' with the text 'This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES)'. The main content area is titled 'GOSAT Data Download Page' and includes the instruction 'Please select the 'Product name' which you would like to download.' Below this instruction are two tables of products. The first table lists products for the 'FTS' sensor, and the second table lists products for the 'CAI' sensor. The product 'L2 CO2 column amount (SWIR)' is highlighted with a red box in the first table. A red circle with the number (1) is located in the bottom left corner of the screenshot.

Sensor	Level	Product Name	Unit
FTS	L1B	FTS L1B data	Daily Path
	L1B support	FTS FOV image	Daily
		L2 CO2 column amount (SWIR)	Monthly
	L2	L2 CH4 column amount (SWIR)	Monthly
		L2 H2O column amount (SWIR)	Monthly
		L2 CO2 profile (TIR)	Monthly
		L2 CH4 profile (TIR)	Monthly
		L3 global CO2 distribution (SWIR)	Monthly
	L3	L3 global CH4 distribution (SWIR)	Monthly

Sensor	Level	Product Name	Unit
CAI	L1B	CAI L1B data	Path
	L1B+	CAI L1B+ data	Path
	L2	L2 cloud flag	Path
	L3	L3 global radiance distribution	Monthly
		L3 global reflectance distribution	Monthly
		L3 NDVI	Monthly

Sensor	Level	Product Name	Unit
-	L4A	L4A global CO2 flux	Annual
		L4A global CH4 flux	Annual
	L4B	L4B global CO2 distribution	Annual
		L4B global CH4 distribution	Annual

(1) List of Products : Displays a list of products that the user can download.

Important: The downloadable products will differ in alignment with the category of the logged-in user. See [13.2 Product Provision Formats] for further details.

Information: The Unit field displays the unit in which products are provided.

(3) [Download Product (Monthly Unit)] Screen

Displays details of the selected products (file unit, product format, version) ((1) below), the table of products ((2) below), and WGET list information ((4) below). Then click on the link to the WGET list ((6) below) in order to download the WGET list.

GU : [Download](#) [Documents & Information](#) [User Information](#) [Logout](#)

GOSAT Data Archive Service (GDAS)

This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

L2 CO2 column amount (SWIR) Download Page (1)

File unit: **Monthly** (The one month's data are archived with tar command.)

Product format: **HDF**

Product unit: **Daily**

Version:
Version relationship between "Bias uncorrected" and "Bias corrected" products is as follows.

Observation period	Input FTS L1B	Bias uncorrected FTS SWIR L2 CO2	Bias corrected FTS SWIR L2 CO2
Apr. 23, 2009 - Feb. 29, 2020	V210.210	V02.81	-
Apr. 23, 2009 - Aug. 31, 2019	V210.210	V02.80	-
Apr. 23, 2009 - Nov. 24, 2018	V201.202	V02.72	V02.75

Please select the product type "V02.xx (Bias uncorrected)" or "V02.xx (Bias corrected)" which you would like to download.

Note: Product type shown in shade is selected as your download target.

V02.xx (Bias uncorrected) (Apr. 23, 2009 - Feb. 29, 2020)

V02.xx (Bias corrected) (Apr. 23, 2009 - Nov. 24, 2018)

Product List (FTS) (3)

- [FTS L1B data](#)
- [FTS FOV image](#)
- [L2 CO2 column amount \(SWIR\)](#)
- [L2 CH4 column amount \(SWIR\)](#)
- [L2 H2O column amount \(SWIR\)](#)
- [L2 CO2 profile \(TIR\)](#)
- [L2 CH4 profile \(TIR\)](#)
- [L3 global CO2 distribution \(SWIR\)](#)
- [L3 global CH4 distribution \(SWIR\)](#)

Product List (CAI)

- [CAI L1B data](#)
- [CAI L1B+ data](#)
- [L2 cloud flag](#)
- [L3 global radiance distribution](#)
- [L3 global reflectance distribution](#)
- [L3 NDVI](#)

Product List (L4)

- [L4A global CO2 flux](#)
- [L4A global CH4 flux](#)
- [L4B global CO2 distribution](#)
- [L4B global CH4 distribution](#)

Download (for Each Month, V02.xx (Bias uncorrected)):

Available products depend on the user group. Please click on the following title with the intended user group, and then a list of monthly data is displayed in a calendar style.
Please click on the "Year", and then a list of monthly data is displayed in a calendar style.

[product \(About 15 MiB/file\)](#) (2)

Download via WGET (for All Data, V02.xx (Bias uncorrected)): (4)

You can download multiple files at a time using the following WGET list.

[WGET list \(V02.81\)](#) (6)

[WGET list \(V02.80\)](#)

[WGET list \(V02.72\)](#)

Command line: `wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]`

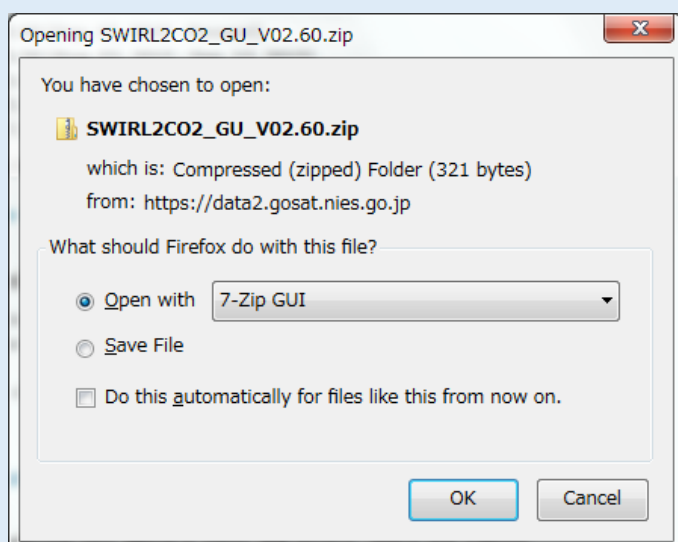
Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget file list.

Note: Please use wget version 1.6.1 or later.

[Back to select product](#) (5)

- (1) Product Information : Displays information on the selected product.
- (2) [Product] Link : Displays a list of files archived in monthly units.
- (3) List of Products : The link to the [Product Download] Screen from which users can download products.
- (4) WGET Download Method : Displays how to download products that use the WGET list file.
- (5) [Back to select Product] Link : The link for returning to the [Download] Screen.
- (6) [WGET list] Link : The link to the WGET list file (all periods).

Information: An example of downloading a WGET list file (Firefox) is shown below.



Information: Displaying products with multiple versions as a different version

[New Version] ((1) below) is shown on the initial screen.

Click on the [Different Version] ((2) below) that needs to be displayed to display that version ((3) below).

[Initial Screen]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020) (1) — **New Version**

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (2)

Download (for Each Path, V02.00):

Download via WGET (for Each Month, V02.00):

After clicking on [Different Version]

Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020)

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (3) — **Different Version**

Download (for Each Path, V01.00):

Download via WGET (for Each Month, V01.00):

(4) Decompressing WGET List Files

Decompress the WGET list file (Zip format) downloaded in procedures (3).

Important: Use a file compression tool to extract and decompress downloaded products.

(5) Executing the WGET Command

Execute the following WGET command to download multiple files in bulk.

```
$wget -i [wget list file decompressed in procedure (4)]  
--http-user=[e-mail address used to log in]  
--http-passwd=[password used to log in]
```

(6) Decompressing Compressed Files

Decompress the product archive files (tar or tar.gz format) downloaded in procedure (5).

9.2.4 Downloading Products Archived in Annual Units

This section explains the procedure for downloading products archived in annual units. The procedure for downloading the L4A global CO₂ flux product is used here for explanatory purposes (Other products archived in annual units can be downloaded in the same way.).

(1) Moving to the [Download] Screen

Move to the [Download] Screen by logging into the system, as explained in section 8.1.

If you are already logged in, click [Download] on the menu to move to the [Download] Screen.



(2) [Download] Screen

Displays a list of products that the logged-in user is able to download. Click on the annual unit product (L4A global CO2 flux used here as an example) to move to the [Product Download (Annual Unit)] Screen.

GOSAT Data Download Page

Please select the 'Product name' which you would like to download.

Sensor	Level	Product Name	Unit	
FTS	L1B	FTS L1B data	Daily Path	
	L1B support	FTS FOV image	Daily	
	L2	L2	L2 CO2 column amount (SWIR)	Monthly
			L2 CH4 column amount (SWIR)	Monthly
			L2 H2O column amount (SWIR)	Monthly
			L2 CO2 profile (TIR)	Monthly
			L2 CH4 profile (TIR)	Monthly
	L3	L3	L3 global CO2 distribution (SWIR)	Monthly
			L3 global CH4 distribution (SWIR)	Monthly

Sensor	Level	Product Name	Unit	
CAI	L1B	CAI L1B data	Path	
	L1B+	CAI L1B+ data	Path	
	L2	L2 cloud flag	Path	
	L3	L3	L3 global radiance distribution	Monthly
			L3 global reflectance distribution	Monthly
			L3 NDVI	Monthly

Sensor	Level	Product Name	Unit
-	L4A	L4A global CO2 flux	Annual
		L4A global CH4 flux	Annual
	L4B	L4B global CO2 distribution	Annual
		L4B global CH4 distribution	Annual

(1)


(1) List of Products : Displays a list of products that the user can download.

Important: The downloadable products will differ in alignment with the category of the logged-in user. See [13.2 Product Provision Formats] for further details.

Information: The Unit field displays the unit in which products are provided.

(3) [Download Product (Annual Unit)] Screen

Displays details of the selected products (file unit, product format, version) ((1) below), the table of products, and WGET list information ((4) below). Then click on the link to the WGET list ((6) below) in order to download the WGET list.



GOSAT PROJECT
Observance since 2009
Clearing the Air

[Download](#) Documents & Information

GU :

[User Information](#) [Logout](#)

GOSAT Data Archive Service (GDAS)

This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

L4A global CO2 flux Download Page (1)

File unit: **Annual** (The one year's data are archived with tar command.)

Product format: **NetCDF / Text**

Product unit: **Annual**

Version:
Please select the 'Version number' which you would like to download.

V02.06 (Jun. 01, 2009 - Oct. 31, 2017)

V02.05 (Jun. 01, 2009 - Oct. 31, 2015)

Product List (FTS) (3)

- [FTS L1B data](#)
- [FTS FOV image](#)
- [L2 CO2 column amount \(SWIR\)](#)
- [L2 CH4 column amount \(SWIR\)](#)
- [L2 H2O column amount \(SWIR\)](#)
- [L2 CO2 profile \(TIR\)](#)
- [L2 CH4 profile \(TIR\)](#)
- [L3 global CO2 distribution \(SWIR\)](#)
- [L3 global CH4 distribution \(SWIR\)](#)

Download (for Each Year, V02.06): (2)

Observational Year	Start Date (MM/DD)	End Date (MM/DD)	File Size (MiB)
2009	06/01	12/31	4
2010	01/01	12/31	7
2011	01/01	12/31	7
2012	01/01	12/31	7
2013	01/01	12/31	7
2014	01/01	12/31	7
2015	01/01	12/31	7
2016	01/01	12/31	7
2017	01/01	10/31	6

Download via WGET (for All Data, V02.06): (4)

You can download multiple files at a time using the following WGET list.

WGET list (V02.06) (6)

Command line: `wget -i [PATH_TO_FILE_LIST] --http-user=[userID] --http-passwd=[password]`

Note: Wget list will be expired one week after its issue. After the expiration date successful download is not guaranteed. If an error occurs after the expiration date, please obtain a new wget list.

Note: Please use wget version 1.6.1 or later.

Product List (CAI)

- [CAI L1B data](#)
- [CAI L1B+ data](#)
- [L2 cloud flag](#)
- [L3 global radiance distribution](#)
- [L3 global reflectance distribution](#)
- [L3 NDVI](#)

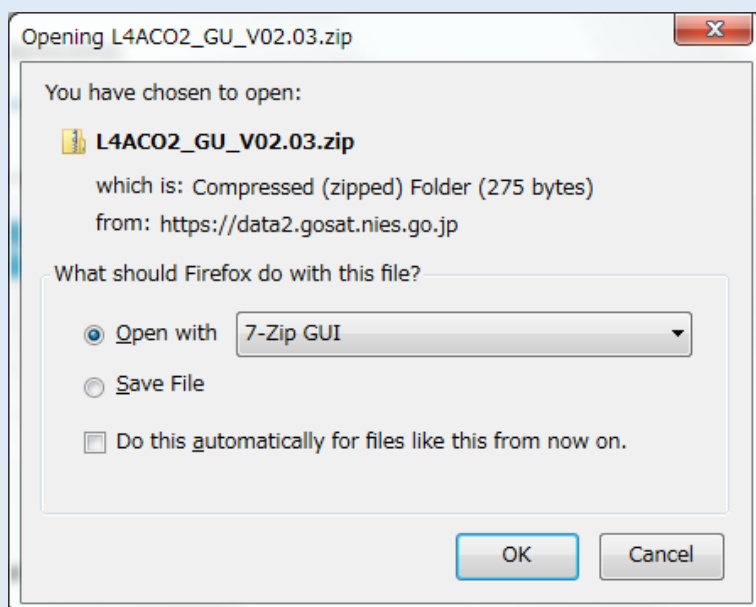
Product List (L4)

- [L4A global CO2 flux](#)
- [L4A global CH4 flux](#)
- [L4B global CO2 distribution](#)
- [L4B global CH4 distribution](#)

Back to select product (5)

- (1) Product Information : Displays information on the selected product.
- (2) [Product] Link : Displays a list of files archived in annual units.
- (3) List of Products : The link to the [Product Download] Screen from which users can download products.
- (4) WGET Download Method : Displays how to download products that use the WGET list file.
- (5) [Back to select Product] Link : The link for returning to the [Download] Screen.
- (6) [WGET list] Link : The link to the WGET list file (whole period).

Information: An example of downloading a WGET list file (Firefox) is shown below.



Information: Switching Between Product Formats

[netCDF] ((1) below) is displayed on the initial screen.

Click on the [Text] ((2) below) link to display the product in the text format.

[Initial Screen]

L4A global CO2 flux Download Page

File unit: **Annual** (The one year's data are archived with tar command.)

Product format: **NetCDF** / **Text**

Product unit: **Annual**

After [Text] has been clicked

L4A global CO2 flux Download Page

File unit: **Annual** (The one year's data are archived with tar command.)

Product format: **NetCDF** / **Text**

Product unit: **Annual**

Information: Displaying products with multiple versions as a different version

[New Version] ((1) below) is shown on the initial screen.

Click on the [Different Version] ((2) below) that needs to be displayed to display that version ((3) below).

[Initial Screen]

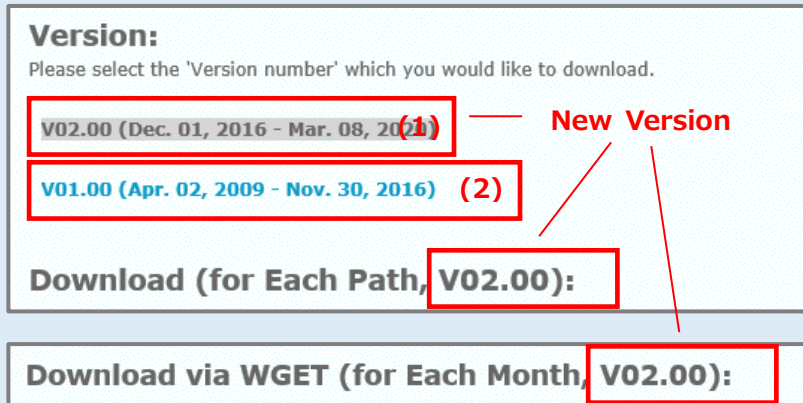
Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020) (1) — **New Version**

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (2)

Download (for Each Path, V02.00):

Download via WGET (for Each Month, V02.00):



After clicking on [Different Version]

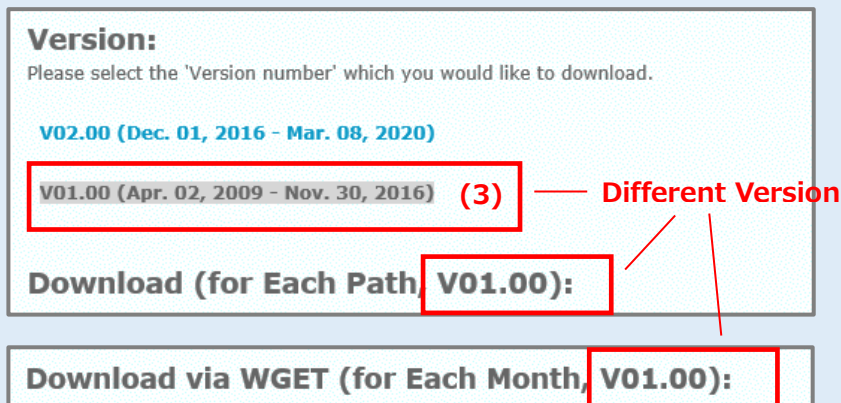
Version:
Please select the 'Version number' which you would like to download.

V02.00 (Dec. 01, 2016 - Mar. 08, 2020)

V01.00 (Apr. 02, 2009 - Nov. 30, 2016) (3) — **Different Version**

Download (for Each Path, V01.00):

Download via WGET (for Each Month, V01.00):



(4) Decompressing WGET List Files

Decompress the WGET list file (Zip format) downloaded in procedure (3).

Important: Use a file compression tool to extract and decompress downloaded products.

(5) Executing the WGET Command

Execute the following WGET command to download multiple files in bulk.

```
$wget -i [wget list file decompressed in procedure (4)]  
      --http-user=[e-mail address used to log in]  
      --http-passwd=[password used to log in]
```

(6) Decompressing Compressed Files

Decompress the product archive files (tar or tar.gz format) downloaded in procedure (5).

10 Procedure for Downloading Information Related to GOSAT Products

This chapter explains the procedure for downloading information related to GOSAT products. The types of information provided is different for general users and authorized users. This chapter uses information provided to authorized users [authorized users only] for explanatory purposes.

10.1 Documents & Information Screen

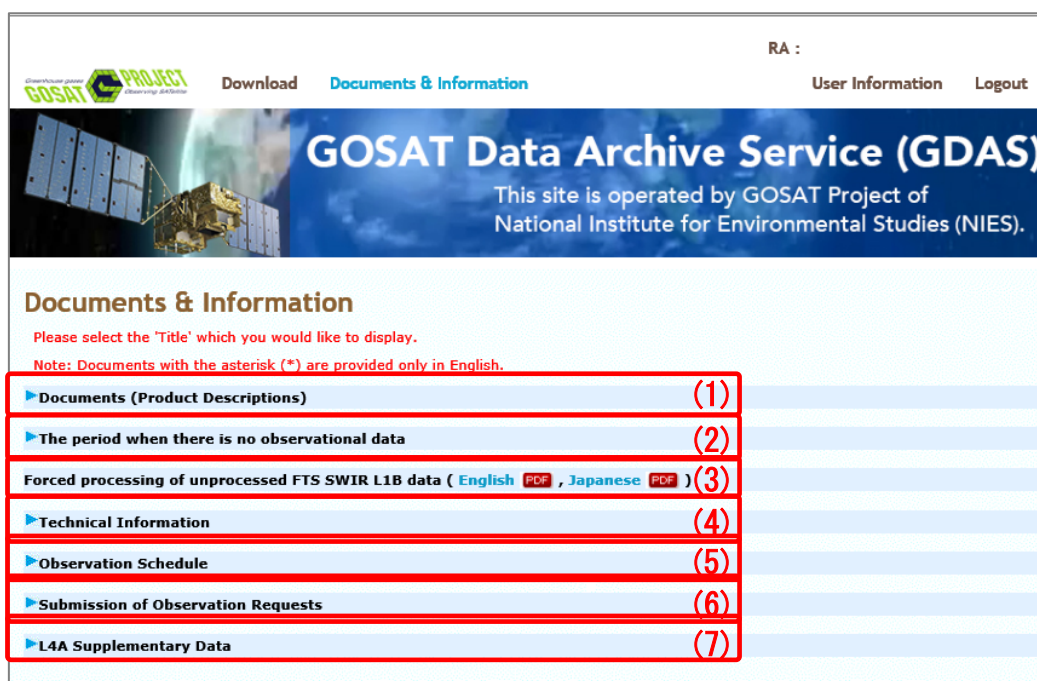
(1) Moving to the [Documents & Information] Screen

Click on [Documents & Information] on the [Download] Screen menu (see section 8.1(3)) to move to the [Documents & Information] Screen.



(2) [Documents & Information] Screen

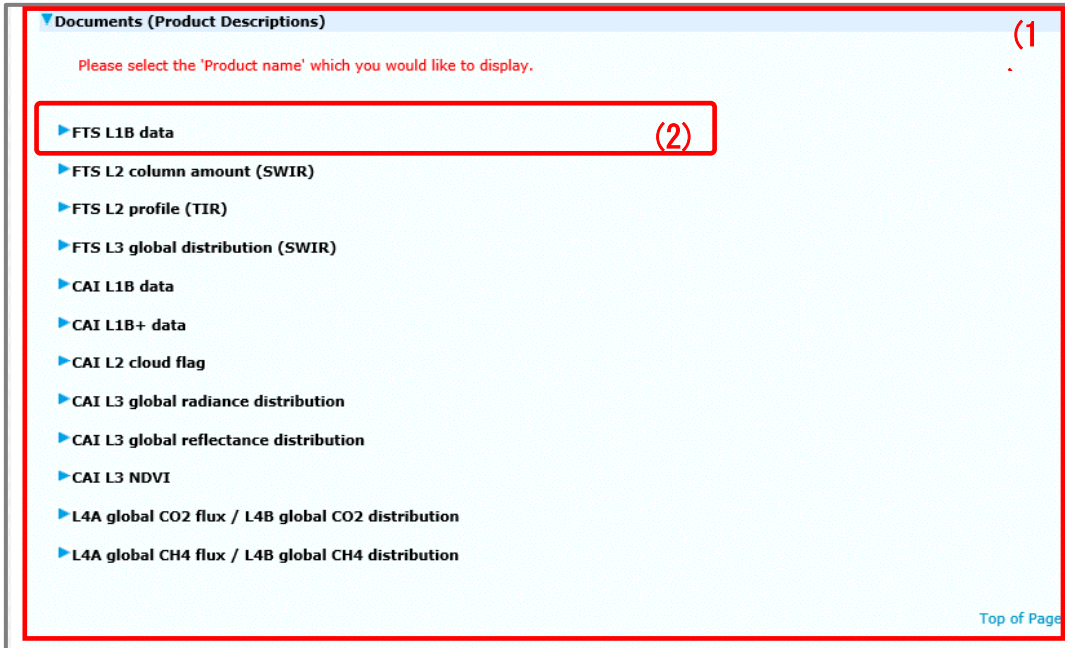
Displays information related to GOSAT documents and products. Click on any of the available items to display the relevant information.



- (1) **【Documents】** : Displays [Product Descriptions].
- (2) **【The period when there is no observational data】** : Displays [The period when there is no observational data].
- (3) **【Forced processing of unprocessed FTS SWIR L1B data】** : Displays [Forced Processing of Unprocessed FTS SWIR L1B Data] (authorized users only).
- (4) **【Technical Information】** : Displays [Technical Information].
- (5) **【Observational Schedule】** : Displays [Observational Schedule].
- (6) **【Observational Request Submission】** : Displays [Observational Request Submission] (authorized users only).
- (7) **【L4A Supplementary Data】** : Displays [L4A Supplementary Data] (authorized users only).

10.2 Documents (Product Descriptions)

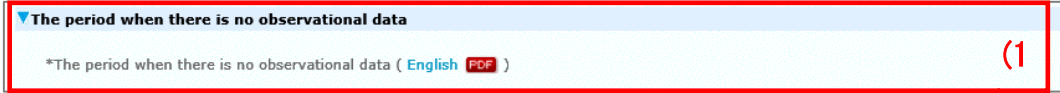
Displays a list of products for which documents are provided ((1) below). Click on any product name ((2) below) to display the relevant product information. Or, click on any of the links to the product information ((3) below) to download the relevant files.



- | | |
|---------------------------------------|--|
| (1) Documents (Product Descriptions) | : Displays a list of products for which documents can be downloaded. |
| (2) Product Name (FTS L1B Data, Etc.) | : The link for displaying a list of product documents. |
| (3) Product Information | : Displays a list of product documents. |

10.3 The period when there is no observational data

Displays the period when there is no observational data. Or, click on the link to download the relevant file.



(1) The period : Displays the period when there is no observational data.

10.4 Technical Information

Displays technical information on sensors ((1) below). Click on the title of any technical information ((2) below) to display the relevant information ((3) below) in detail. Or, click on any of the links to download the relevant files.

- (1) Technical Information : Displays a list of technical information for each sensor.
- (2) Technical Information : The link for displaying the technical information on (Title) sensors.
- (3) Technical Information : Displays the technical information on sensors.

10.5 Observational Schedule

Displays a list of observational operations. Or, click on any of the links to download the relevant files.

Observational Schedule

The observational schedule below shows observation dates, satellite's flight paths, and the sampling modes under which the satellite operates/operated (standard raster sampling mode, glint observation mode, or other modes) during the period indicated. Information on the FTS: Change in the Observational Operation ([English PDF](#), [Japanese PDF](#))

Period	Observational Schedule
2016/01 - 2016/06	English PDF Japanese PDF
2015/07 - 2015/12	English PDF Japanese PDF
2015/01 - 2015/06	English PDF Japanese PDF
2014/07 - 2014/12	English PDF Japanese PDF
2014/01 - 2014/06	English PDF Japanese PDF
2013/07 - 2013/12	English PDF Japanese PDF
2013/01 - 2013/06	English PDF Japanese PDF
2012/07 - 2012/12	English PDF Japanese PDF
2012/01 - 2012/06	English PDF Japanese PDF
2011/07 - 2011/12	English PDF Japanese PDF
2011/01 - 2011/06	English PDF Japanese PDF
2010/07 - 2010/12	English PDF Japanese PDF
2010/01 - 2010/06	English PDF Japanese PDF
2009/07 - 2009/12	English PDF Japanese PDF
2009/04 - 2009/06	English PDF Japanese PDF

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(1) Observational Schedule : Displays the observational schedules.

10.6 Submission of Observational Requests (Authorized Users Only)

Displays the method of requesting observations ((1) below). Click on the title for each user category ((2) below) to display the relevant information ((3) below) in detail. Or, click on any of the links to download the relevant files.

Submission of Observation Requests (1)

Due dates for RA researchers to submit observation requests to NIES are listed in the table below.

Table 1 Observation Periods and Windows to submit Observation Requests

Observation Period of your target area	Windows to submit your Observation Requests
Start and End Date (YYYY/MM/DD)	Start and End Date (YYYY/MM/DD)
2017/03/06 - 2017/04/02	2016/12/29 - 2017/01/18
2017/04/03 - 2017/04/30	2017/01/26 - 2017/02/15
2017/05/01 - 2017/06/04	2017/02/23 - 2017/03/15
2017/06/05 - 2017/07/02	2017/03/30 - 2017/04/19
2017/07/03 - 2017/08/06	2017/04/27 - 2017/05/17
2017/08/07 - 2017/09/03	2017/06/01 - 2017/06/21

▶ For experienced RA users

▶ For NOT experienced RA users

(2)

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For NOT experienced RA users (3)

If you have no experience to submit FTS observation requests via GUI, please send an e-mail to GOSAT support (gosat-support@nies.go.jp) with a [template csv file](#) attached. Please follow the instructions below to prepare the template csv file for your observation requests.

- 1) Title: FTS observation request(s)
- 2) Please fill out the following information in the template csv file:
 - a) Start date of the observation: yyyy/mm/dd
 - b) End date of the observation: yyyy/mm/dd
 - c) Target latitude in decimal degrees: The value range is [-90.0, 90.0].
 - d) Target longitude in decimal degrees: The value range is [-180.0, 180.0].
 - e) Path direction (D or A): "D" stands for descending and "A" for ascending; "D" will be set for SWIR, and "D" or "A" for TIR.
 - f) Gain choice (H or M): "H" stands for high (default) and "M" for medium; "M" will be set only for desert area.
 - g) Minimum and maximum tolerance for AT angles in integer degrees: Setting these values is optional. If you want to set limits of AT angles to observe your target, please specify these values between -20 and 20. A positive value means forward-looking and a negative means backward-looking. The range of these values must be bigger than 5.

We will arrange your observation requests and inform you the possible coordinates of target points and time frame via e-mail. If you agree with the arranged observation requests, we will handle them as your requests. We will inform you the observation plan results via e-mail after JAXA fixes the operation plan of GOSAT.

Example of the [template csv file](#)

	A	B	C	D	E	F	G	H	I
1	Obs. start date	Obs. end date	Latitude	Longitude	Direction	Gain	Min. AT	Max. AT	
2	2016/1/1	2016/1/31	35.8	140.2	D	H	-20	20	
3	2016/1/1	2016/1/31	35.8	130	D	H	15	20	
4									

(1) Submission of Observation Requests : Displays the method of requesting observations.

- (2) Method of the requests for : The link for displaying the method of requesting
users with each category observations for users with each category.
(Title)
- (3) Method of the requests for : Displays the method of requesting observations
users with each category for users with each category.

10.7 L4A Supplementary Data (Authorized Users Only)

Displays a list of L4A product supplementary data. Or, click on any of the links to download the relevant files.



(1) L4A Supplementary Data : Displays a list of L4A supplementary data.

11 Procedure for Changing User Information

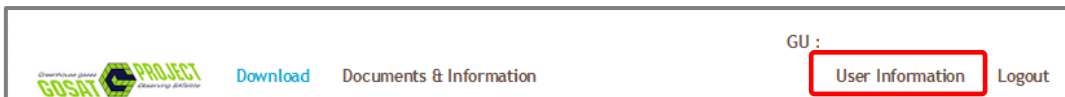
This chapter explains the procedure for changing user e-mail addresses (user ID), passwords, notification e-mail languages and other user information.

11.1 Changing E-Mail Addresses (User IDs)

This section explains the procedure for changing e-mail addresses (user IDs).

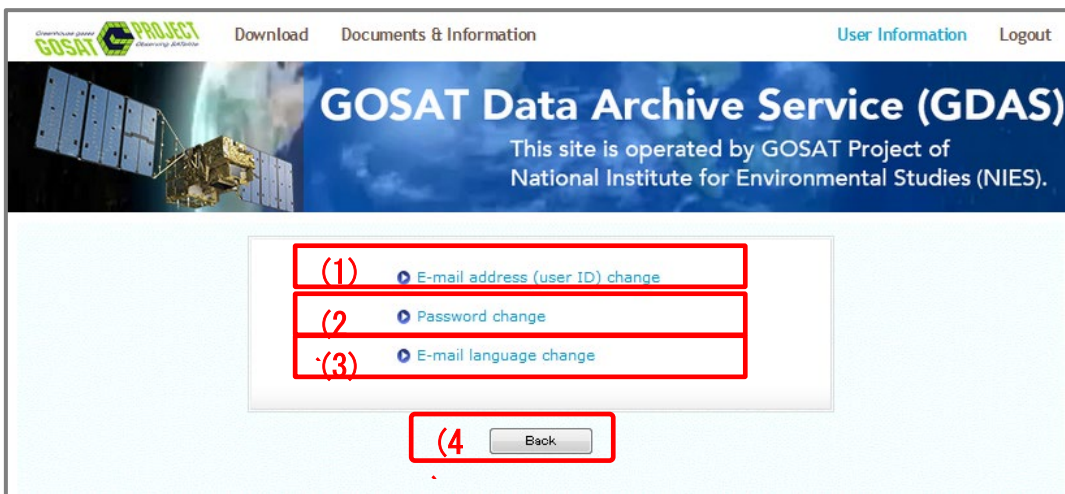
(1) Moving to the [User Information] Screen

Click on [User Information] from the menu on the [Download] Screen (see section 8.1(3)) to move to the [User Information] Screen.



(2) [User Information] Screen

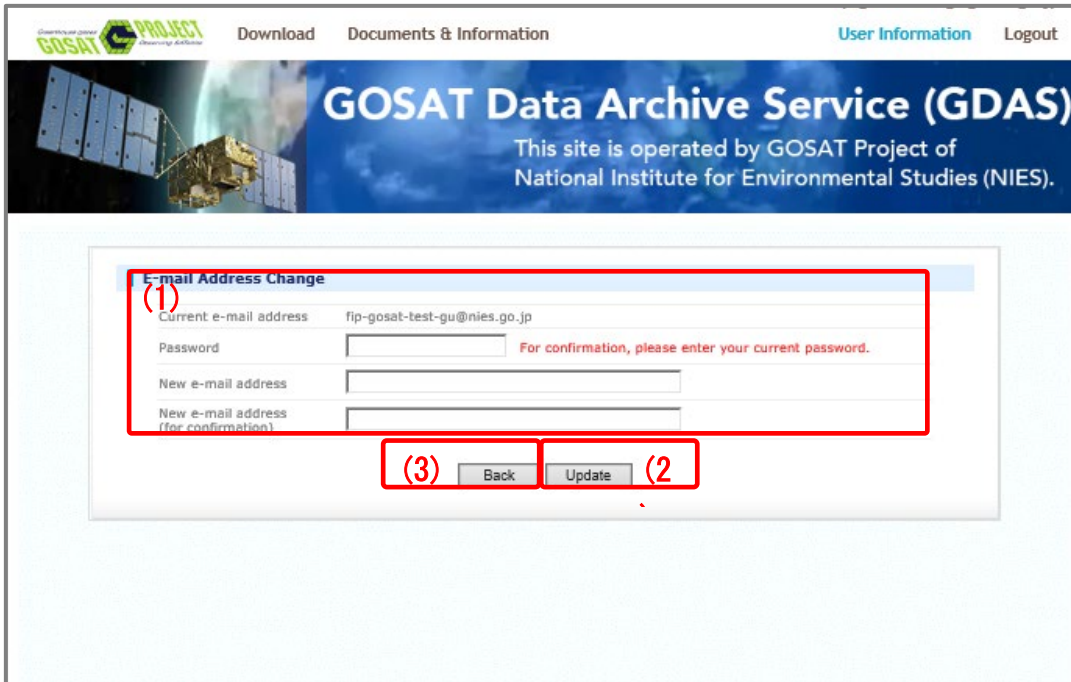
Displays the user information items that can be changed. Click on [E-mail address (user ID) change] ((1) below) to move to the [E-Mail Address Change] Screen.



- (1) [E-mail Address (user ID) Change] Link : The link for moving to the [E-mail Address (user ID) Change] Screen.
- (2) [Password Change] Link : The link for moving to the [Password Change] Screen.
- (3) [E-mail Language Change] Link : The link for moving to the [E-mail Language Change] Screen.
- (4) [Back] Button : The button for returning to the [Download] Screen.

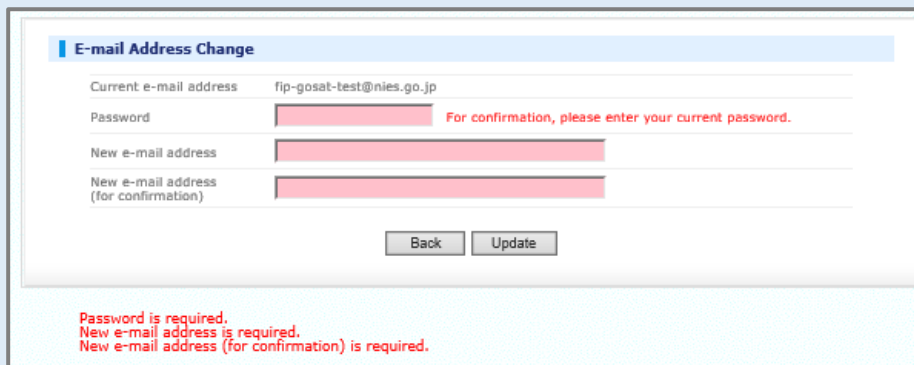
(3) [E-mail address (user ID) change] Screen

Enter the password and the new e-mail address to the form ((1) below) in order to change the e-mail address. Having entered the details, click on the [Update] Button ((2) below) to move to the [E-Mail Address Changed] Screen.



- (1) E-mail Address Change Form : The form for entering the password and the new e-mail address.
- (2) [Update] Button : The button for changing the e-mail address.
- (3) [Back] Button : The button for returning to the [User Information] Screen.

Information: Errors will be highlighted in red.



(4) [E-Mail Address Changed] Screen

This completes the procedure for changing the e-mail address, and an e-mail notifying the user of this will be sent to the old and new e-mail addresses ((1) below).



- (1) E-mail Address : Displays the fact that the e-mail address has been changed.
Changed
- (2) [Logout] Link : Displays the fact that the e-mail address has been changed.
- (3) [Logout] Link : Displays the fact that the e-mail address has been changed.

Important: An e-mail notifying the user of the e-mail address being changed will be sent to both the previous e-mail address and the new e-mail address when the change is executed.

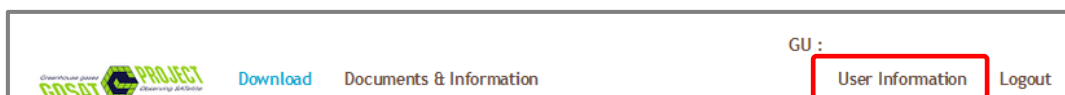
Note: Logout without fail after changing the e-mail address. There are cases in which errors will occur if the user remains logged in with the original user ID.

11.2 Changing Passwords

This section explains the procedure for changing passwords.

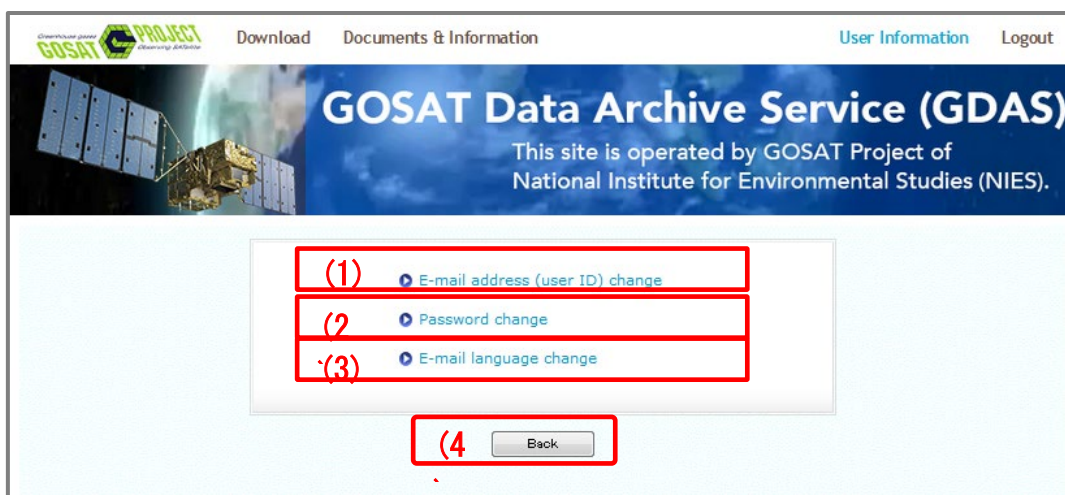
(1) Moving to the [User Information] Screen

Click on [User Information] from the menu on the [Download] Screen (see section 8.1(3)) to move to the [User Information] Screen.



(2) [User Information] Screen

Displays the user information items that can be changed. Click on [Password change] ((2) below) to move to the [Password Change] Screen.



- (1) [E-mail Address (user ID) Change] Link : The link for moving to the [E-mail Address (user ID) Change] Screen.
- (2) [Password Change] Link : The link for moving to the [Password Change] Screen.
- (3) [E-mail Language Change] Link : The link for moving to the [E-mail Language Change] Screen.
- (4) [Back] Button : The button for returning to the [Download] Screen.

(3) [Password Change] Screen

Enter the old password and the new password to the form ((1) below) in order to change the password. Having entered the details, click on the [Update] Button ((2) below) to move to the [Password Changed] Screen.



- (1) Password Change Form : The form for entering the old password and new password.
- (2) [Update] Button : The button for changing the password.
- (3) [Back] Button : The button for returning to the [User Information] Screen.

Information: Errors will be highlighted in red.

Password Change

E-mail address	ftp-gosat-test-gu@nies.go.jp
Current password	<input type="password"/> For confirmation, please enter your current password.
New password	<input type="password"/>
New password (for confirmation)	<input type="password"/>

Passwords must be between eight and twenty characters and contain at least two of the following types of characters:

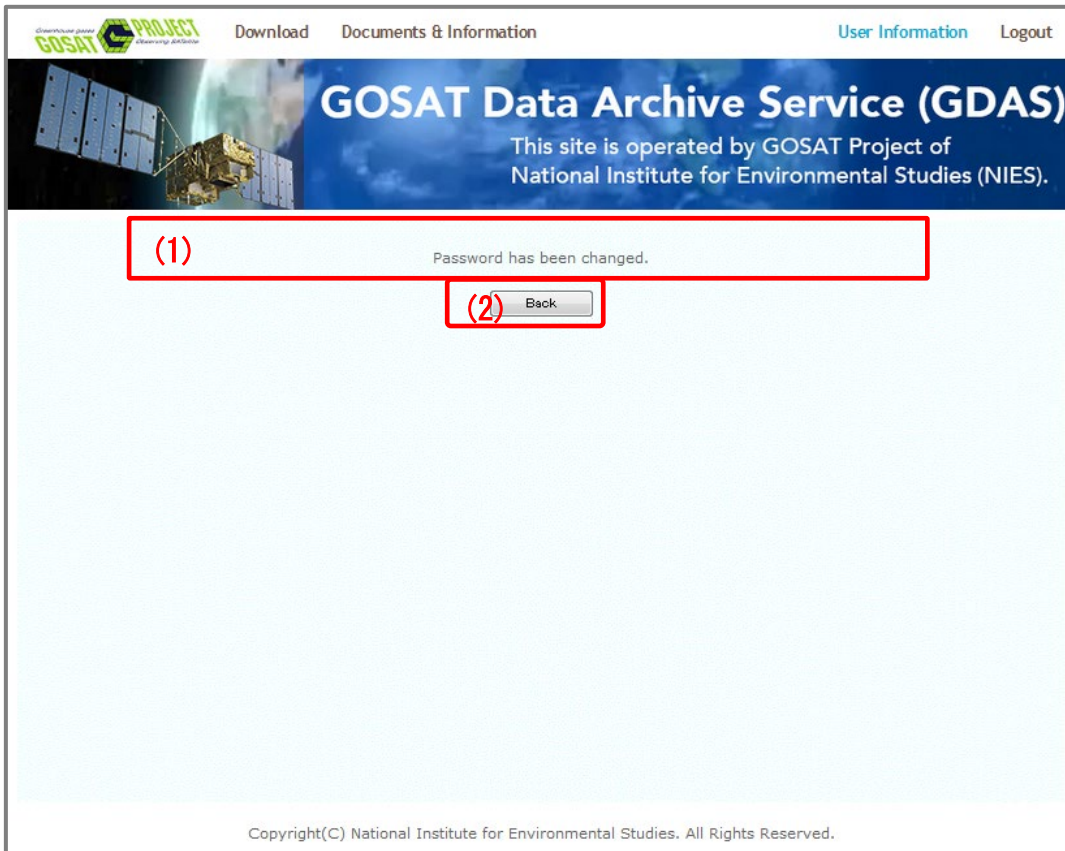
1. Upper case letters: A through Z
2. Lower case letters: a through z
3. Numerals: 0 through 9
4. Special characters: (! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { | } ~)

Note) Space characters are not allowed.

Current password is required.
New password is required.
New password (for confirmation) is required.

(4) [Password Changed] Screen

This completes the procedure for changing the password ((1) below).



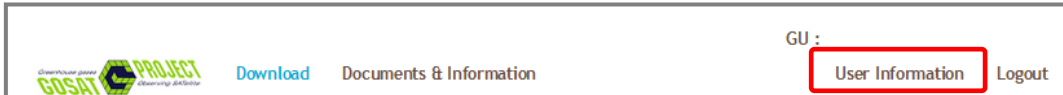
- (1) Password Changed : Displays the fact that the password has been changed.
- (2) [Back] Button : The button for returning to the [User Information] Screen.

11.3 [E-mail Language Change] Screen

This section explains the procedure for changing the e-mail notification language.

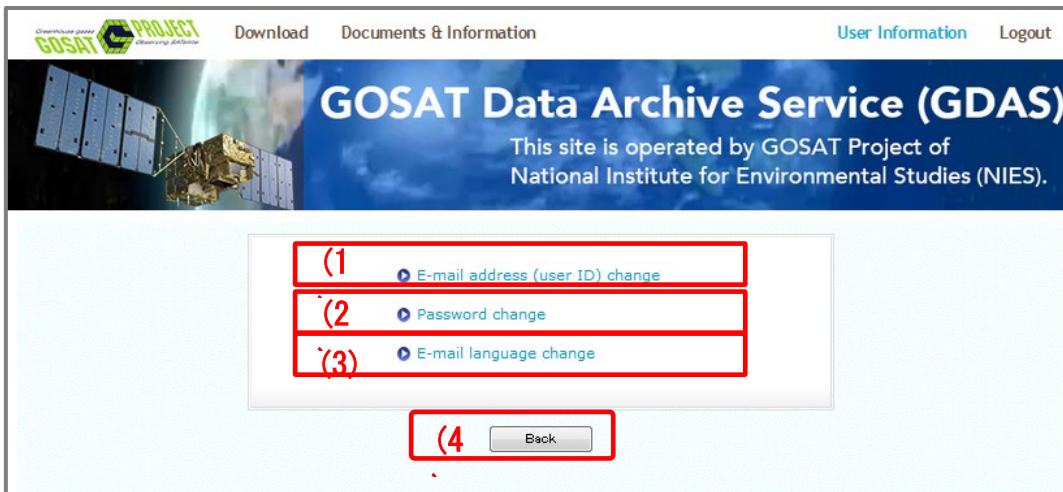
(1) Moving to the [User Information] Screen

Click on [User Information] from the menu on the [Download] Screen (see section 8.1(3)) to move to the [User Information] Screen.



(2) [User Information] Screen

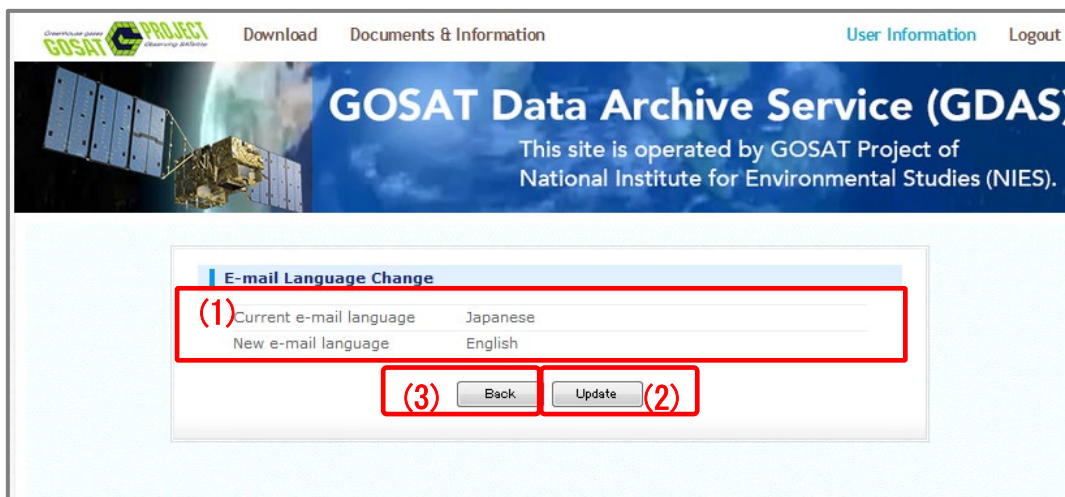
Displays the user information items that can be changed. Click on [E-mail language change] ((3) below) to move to the [E-mail language change] Screen.



- (1) [E-mail Address (user ID) Change] Link : The link for moving to the [E-mail Address (user ID) Change] Screen.
- (2) [Password Change] Link : The link for moving to the [Password Change] Screen.
- (3) [E-mail Language Change] Link : The link for moving to the [E-mail Language Change] Screen.
- (4) [Back] Button : The button for returning to the [Download] Screen.

(3) [E-mail language change] Screen

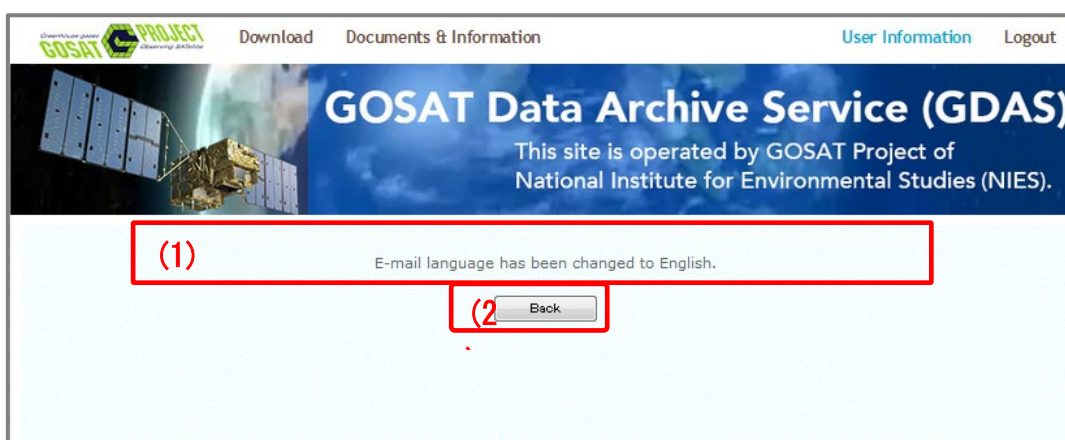
Displays the e-mail notification language eligible for changing. Check the details and then click on the [Update] Button ((2) below) to move to the [E-mail Language Changed] Screen.



- (1) E-mail Language Change : Displays the e-mail notification language eligible for changing.
- (2) [Update] Button : The button for changing the e-mail notification language.
- (3) [Back] Button : The button for returning to the [User Information] Screen.

(4) [E-mail Language Changed] Screen

This completes the procedure for changing the e-mail notification language ((1) below).



- (1) E-mail Language Changed : Displays the fact that the e-mail notification language has been changed.
- (2) [Back] Button : The button for returning to the [User Information] Screen.

12 Procedure for Browsing Other Information

This chapter explains the procedure for browsing other information provided on the GDAS website.

12.1 [How to Use This Website] Screen

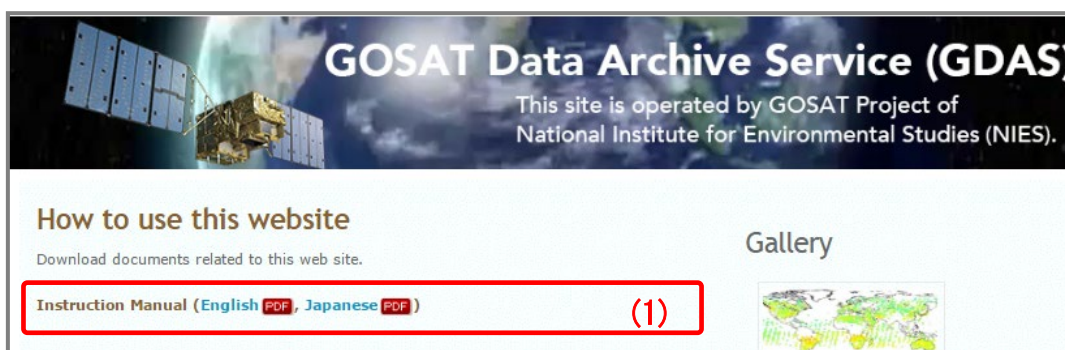
(1) Moving to the [How to Use This Website] Screen

Click on [How to Use This Website] from the submenu on the GDAS top Screen (see section 4.1) to move across to the [How to Use This Website] Screen.



(2) [How to Use This Website] Screen

Click on the link with the PDF file icon to download the operation manual.

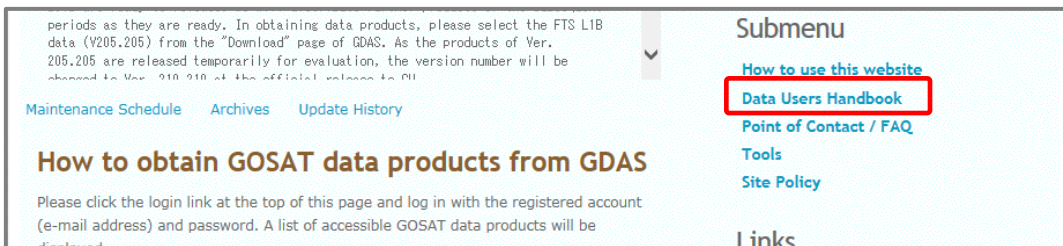


- (1) [Instruction Manual] : The link to the instruction manual (PDF file).
Link

12.2 [Data Users Handbook] Screen

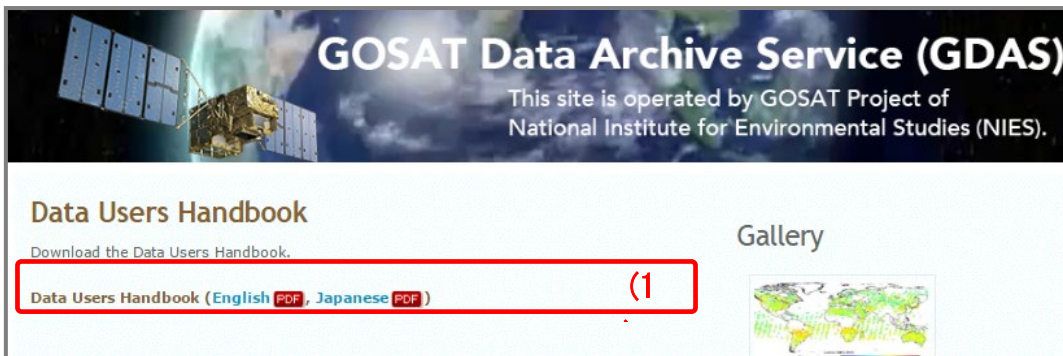
(1) Moving to the [Data Users Handbook] Screen

Click on [Data Users Handbook] from the submenu on the GDAS top Screen (see section 4.1) to move across to the [Data Users Handbook] Screen.



(2) [Data Users Handbook] Screen

Click on the link with the PDF file icon to download the Data Users Handbook.

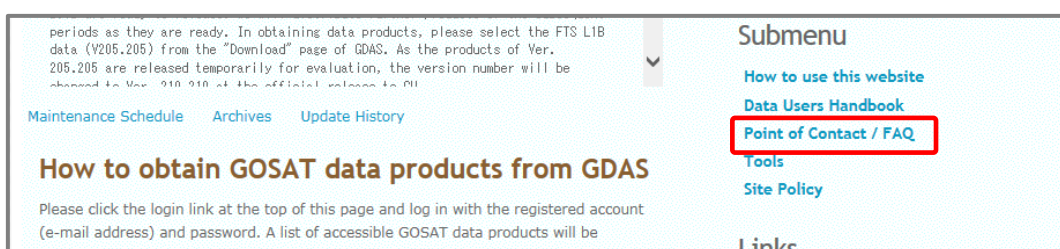


- (1) [Data Users Handbook] : The link to the Data Users Handbook (PDF file).
Link

12.3 Point of Contact/FAQ Screen

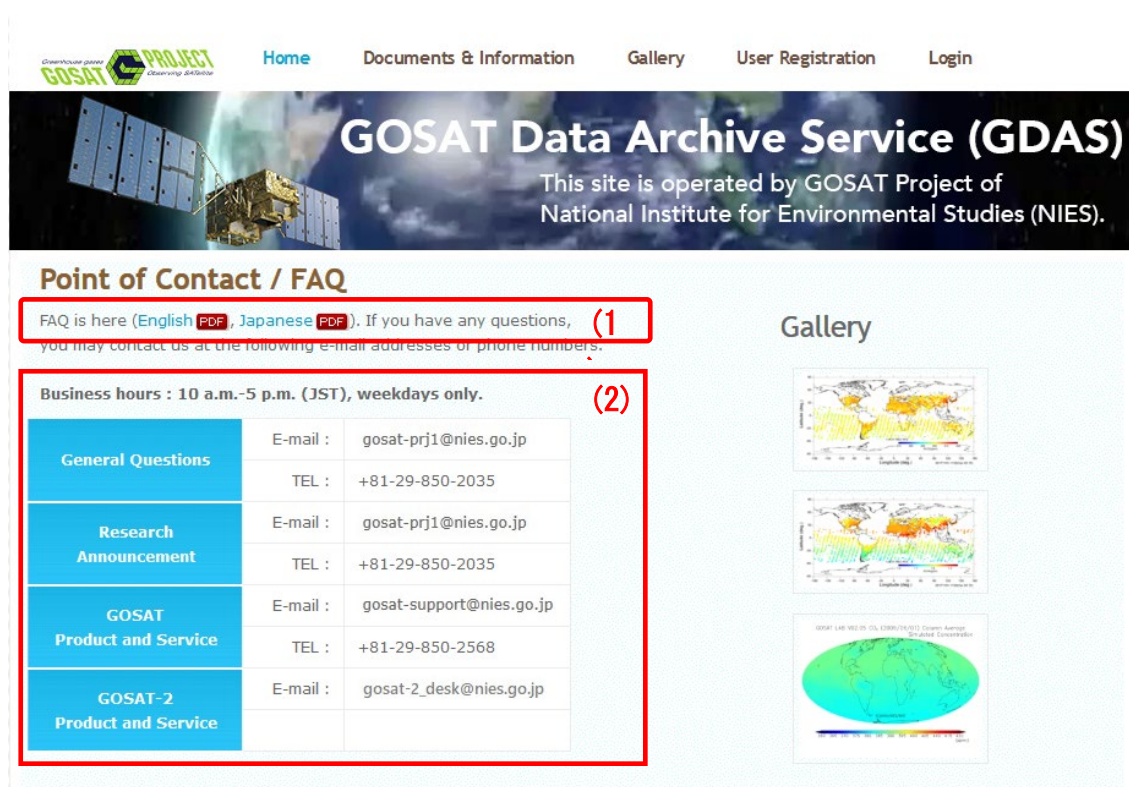
(1) Moving to the [Point of Contact/FAQ] Screen

Click on [Point of Contact/FAQ] from the submenu on the GDAS top Screen (see section 4.1) to move across to the [Point of Contact/FAQ] Screen.



(2) [Point of Contact/FAQ] Screen

Click on the link with the PDF file icon to download the FAQ file. Points of contact for inquiry purposes will also be displayed on the screen.

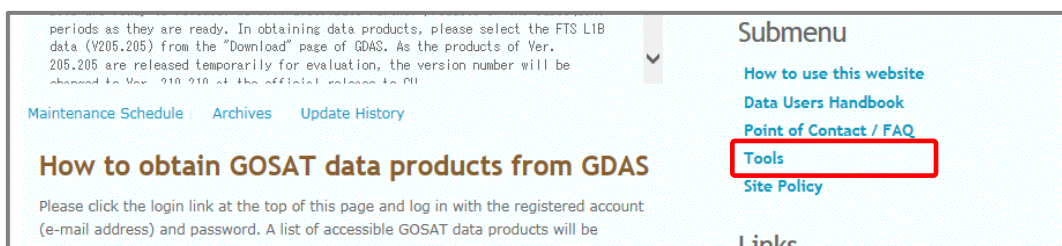


- (1) [FAQ] Link : Link to the FAQ file.
- (2) Point of Contact : Displays point of contact in accordance with the details of the inquiry.

12.4 Tools Screen

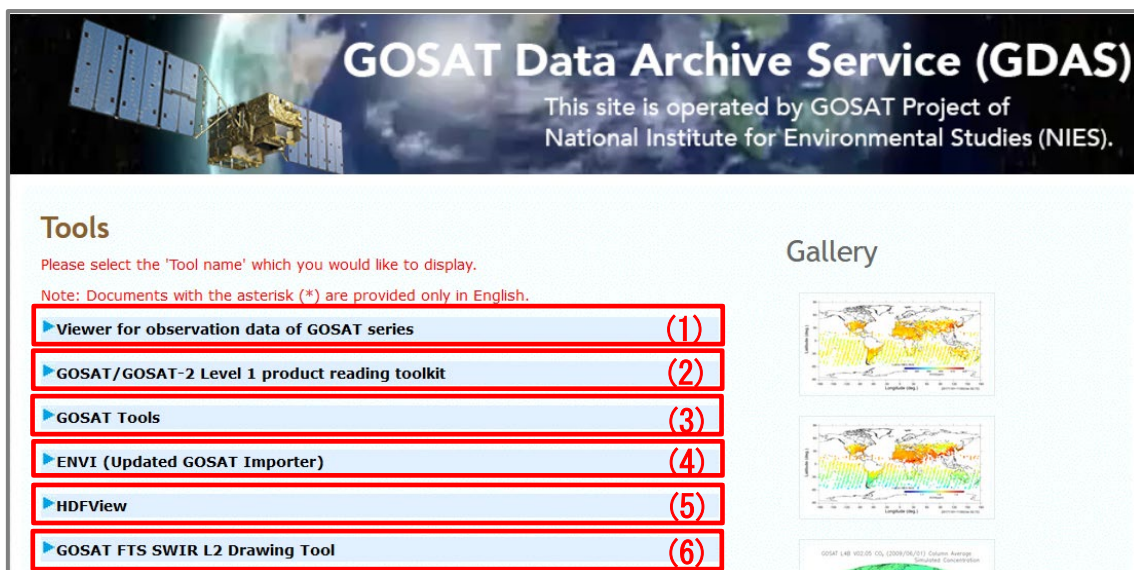
(1) Moving to the [Tools] Screen

Click on [Tools] from the submenu on the GDAS top Screen (see section 4.1) to move across to the [Tools] Screen.



(2) [Tools] Screen

Displays explanations relation to the tools that are available for using GOSAT products. Click on any of the available items to display the relevant information.



(1)	GOSAT FTS Level 1B Product Support Tool	:	This application enables users to display simply or to draw observation data on map for the products of the GOSAT and the GOSAT-2.
(2)	GOSAT/GOSAT-2 Level 1 product reading toolkit	:	GOSAT/GOSAT-2 Level 1 product reading toolkit is a programming library to read GOSAT/GOSAT-2 Level 1 product.

(3)	GOSAT Tools	:	The GOSAT Tools are designed for GOSAT data users to select CAI products and to extract datasets from FTS products already downloaded to each user's computer.
(4)	ENVI	:	The ENVI software enables the information displayed for GOSAT products to be browsed.
(5)	HDFView	:	Displays the site from which the tools for displaying GOSAT products can be downloaded.
(6)	GOSAT FTS SWIR L2 Drawing Tool	:	GOSAT FTS SWIR L2 Drawing Tool is a tool which draws plots for the GOSAT FTS SWIR L2 products with IDL Virtual Machine.

12.5 Site Policy Screen

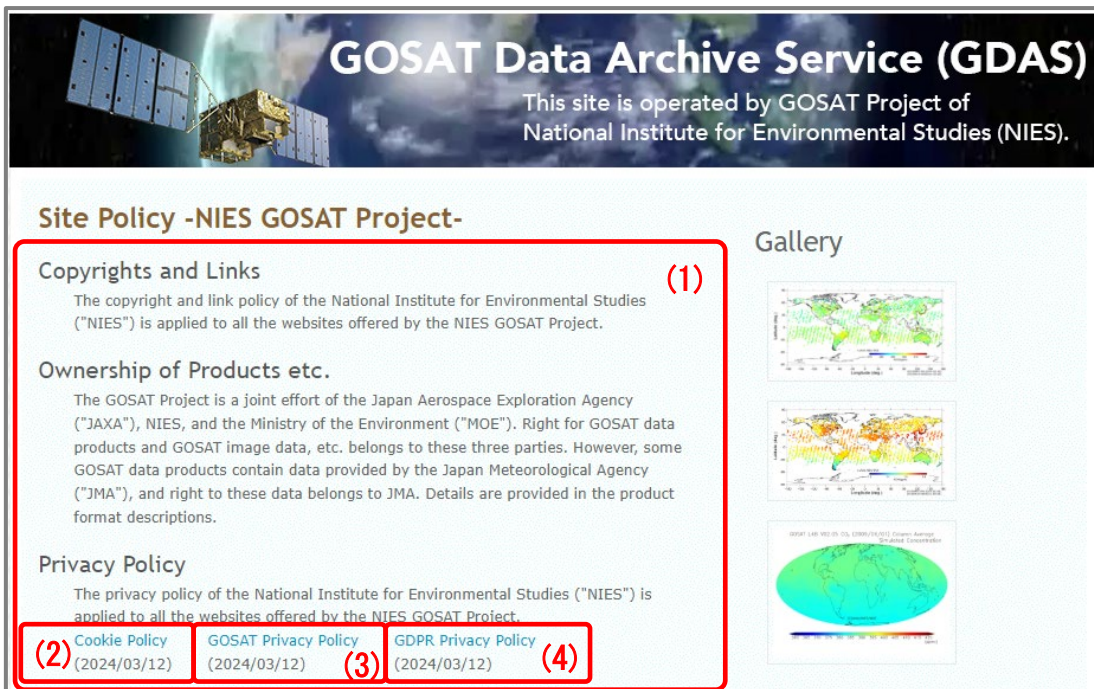
(1) Moving to the [Site Policy] Screen

From the submenu on the GDAS top screen (see section 4.1), click on the [Site Policy] Link to move to the [Site Policy] Screen.



(2) Reviewing the Site Policy

On the [Site Policy] Screen, review the site policy ((1) below). Also, click on each link in the Privacy Policy section to move to the respective policy screen (new screen) ((2)-(4) below). After reviewing, close the screen with the close button on the web browser.



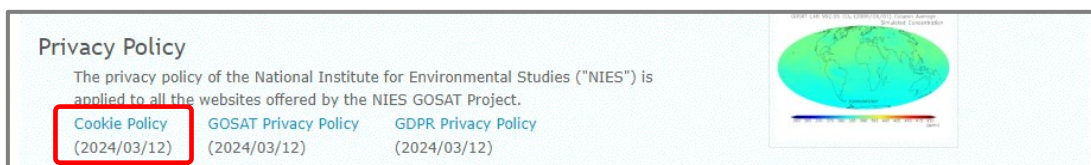
(1)	Site Policy	:	Displays the Site Policy.
(2)	[Cookie Policy] Link	:	The link to the [Cookie Policy] Screen (new screen).

(3)	[GOSAT Privacy Policy] Link	:	The link to the [GOSAT Privacy Policy] Screen (new screen).
(4)	[GDPR Privacy Policy] Link	:	The link to the [GDPR Privacy Policy] Screen (new screen).

12.6 Cookie Policy Screen

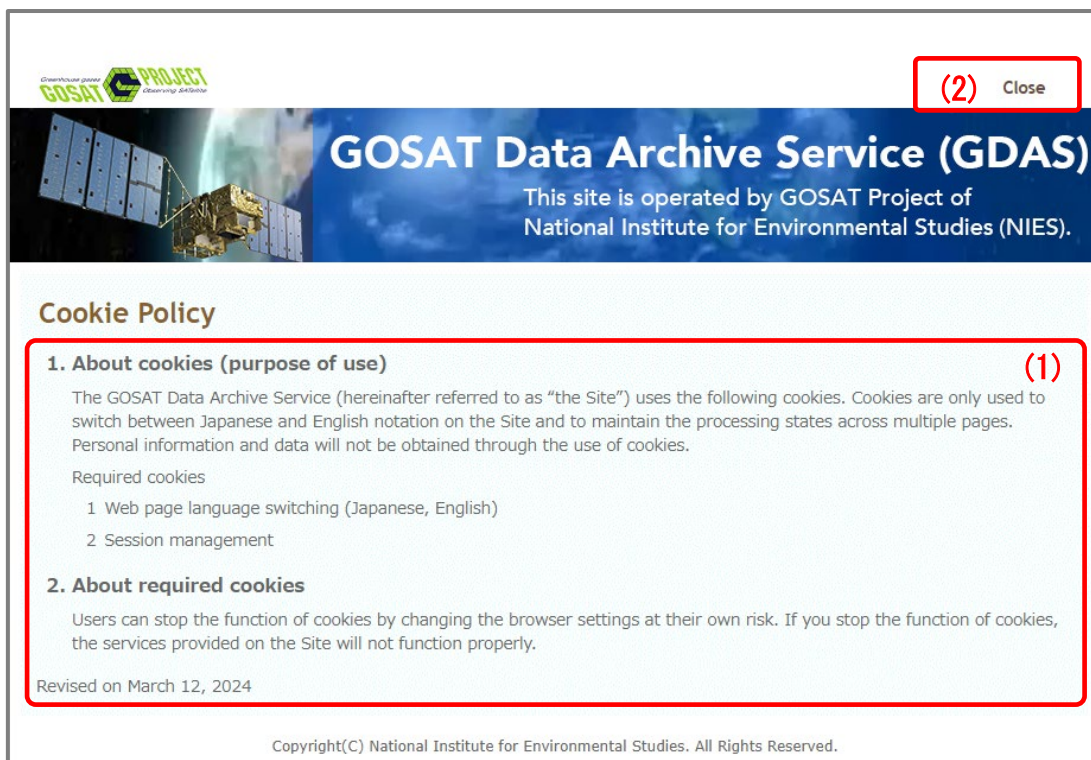
(1) Moving to the [Cookie Policy] Screen

On the [Site Policy] Screen, click on the [Cookie Policy] Link in the Privacy Policy section (see section 12.5) to move to the [Cookie Policy] Screen (new screen).



(2) Reviewing the Cookie Policy

On the [Cookie Policy] Screen, review the cookie policy ((1) below). Click on [Close] ((2) below) to close the screen after reviewing.



(1)	Cookie Policy	:	Displays the cookie policy.
(2)	[Close] Link	:	The link for closing the [Cookie Policy] Screen

12.7 GOSAT Privacy Policy Screen


(1) Moving to the [GOSAT Privacy Policy] Screen

On the [Site Policy] Screen, click on the [GOSAT Privacy Policy] Link in the Privacy Policy section (see section 12.5) to move to the [GOSAT Privacy Policy] Screen (new screen).

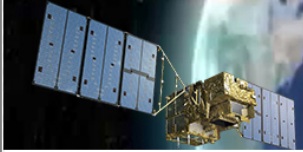


(2) Reviewing the GOSAT Privacy Policy

On the [GOSAT Privacy Policy] Screen, review the GOSAT Privacy Policy ((1) below). Click on [Close] ((4) below) to close the screen after reviewing.



(4) Close



GOSAT Data Archive Service (GDAS)

This site is operated by GOSAT Project of National Institute for Environmental Studies (NIES).

Personal Information Handling Policy (GOSAT Privacy Policy)

1. Personal information protection policy (1)

The GOSAT Project will comply with applicable laws and regulations, rules, and the privacy policy of the National Institute for Environmental Studies (NIES) regarding the handling of personal information of users, and appropriately review and improve its efforts to protect personal information.

2. Personal information to be collected

The GOSAT Project collects the following personal information from users of the GOSAT Data Archive Service (hereinafter referred to as "the Site") and users who have registered as users on the Site (hereinafter referred to as "the registered users").

(1) Users of the Site

- Information about inquiry (e-mail address, etc.) only when there is an inquiry from a user of the Site
- IP address (IP address included in access log)

(2) Registered users

- E-mail address
- Country or region
- Job
- IP address (IP address included in access log)

* When applying for an Authorized User (RA investigator and organizational personnel approved by the GOSAT Project, etc.), in addition to the personal information of the registered user, the name, organization, department, etc. are required.

3. Purpose of personal information usage

Personal information provided on the Site will be used only for the following purposes.

- To identify of Authorized Users in user registration
- To keep track of usage status of the Site
- To send information from the NIES GOSAT Project

4. Use of personal information (1)

Personal information provided on the Site will not be disclosed, provided, sold, or shared with third parties without the prior consent of the user himself/herself, except in the following cases. We will not disclose or provide it to third parties beyond the necessary scope.

- When it is necessary to provide personal information to third parties in accordance with laws and regulations
- When the consent of the user himself/herself has been obtained to provide personal information to third parties
- When outsourcing work related to the processing of personal information collected in each procedure to contractors, etc. within the scope of the purpose of use

5. Rights of users

The user has the following rights.

- The user has the right to withdraw his/her consent to this Personal Information Handling Policy at any time.
- The user has the right to lodge a complaint with an information protection supervisory authority regarding the handling of personal information on the Site.
- Personal information provided can be corrected or deleted at the user's will.

6. Management of personal information

If the user wishes to confirm, correct, or delete his/her personal information, we will respond promptly after confirming the identity of the user. If the user wishes to confirm, correct, or delete his/her personal information, please contact us by e-mail at [the contact for the Site \("Point of Contact"—"General Questions"\)](#). (2)

7. Consent for provision of personal information

Depending on the law of the user's place of residence, the guardian's consent may be required when providing personal information of children. Please check the law of the user's place of residence, and if the age of the user is old enough to require a guardian's consent, please obtain a guardian's consent. (If you do not understand the law, please show this screen to your guardian(s) for consultation.)

If you reside within the EEA (European Economic Area), please see [the GDPR Privacy Policy](#). (3)

If you have any comments or questions regarding the handling of personal information, please contact us by e-mail at [the contact for the Site \("Point of Contact"—"General Questions"\)](#). (2)

Please read the above Personal Information Handling Policy and use the Site only if you agree to provide your personal information.

8. Revision of the Personal Information Handling Policy

When we revise the Personal Information Handling Policy, we will announce the revision and clearly state the revision date on the Site.

Revised on March 12, 2024

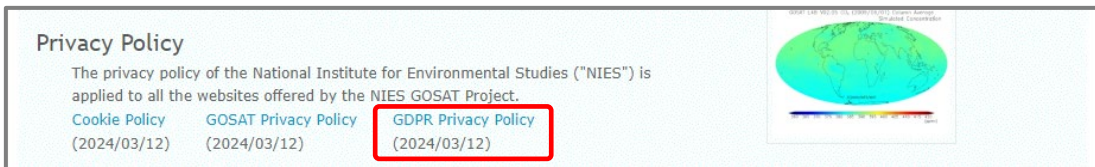
Copyright(C) National Institute for Environmental Studies. All Rights Reserved.

(1)	GOSAT Privacy Policy	:	Displays the GOSAT Privacy Policy.
(2)	[the contact for the Site ("Point of Contact"—"General Questions")] Link	:	The link to the [Point of Contact/FAQ] Screen (new screen)
(3)	[the GDPR Privacy Policy] Link	:	The link to the [GDPR Privacy Policy] Screen (new screen).
(4)	[Close] Link	:	The link for closing the [GOSAT Privacy Policy] Screen.

12.8 GDPR Privacy Policy Screen

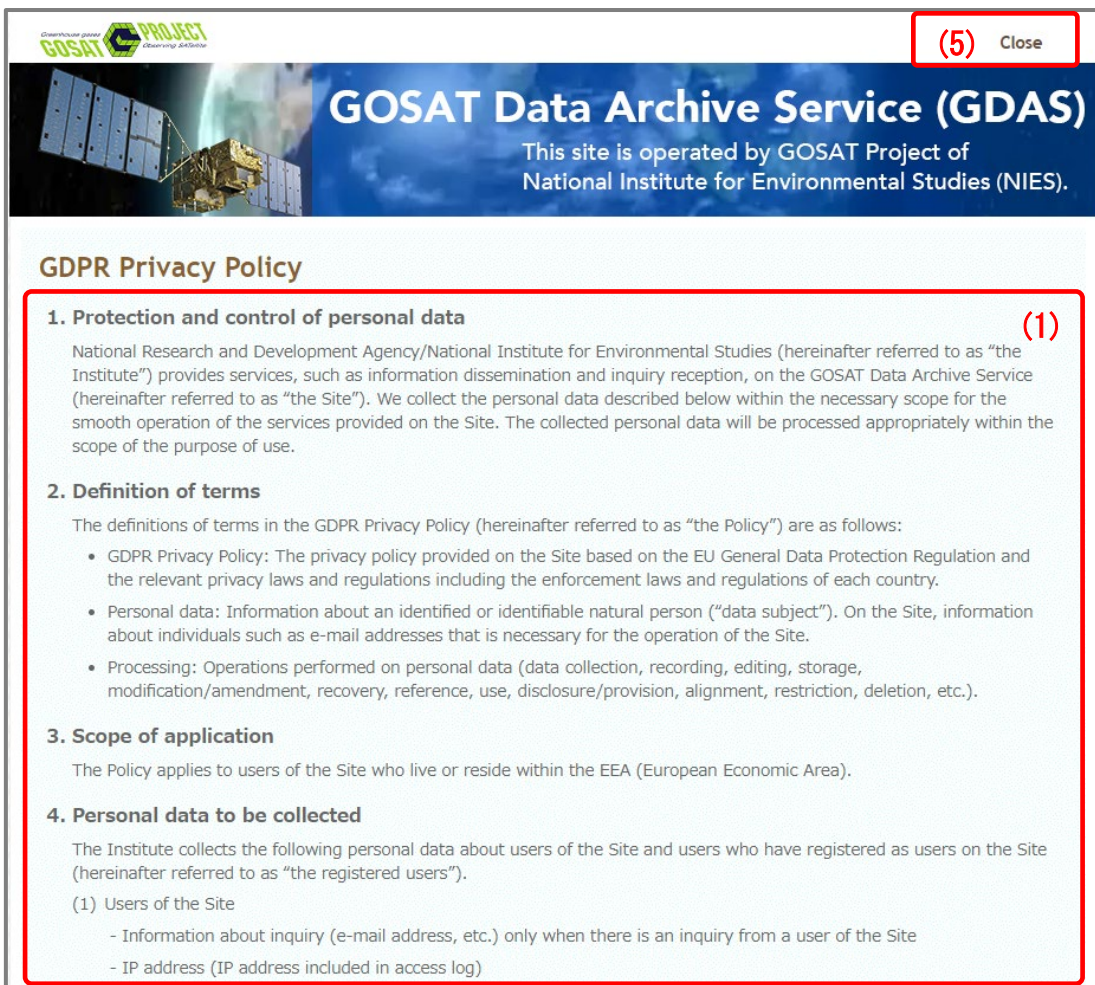
(1) Moving to the [GDPR Privacy Policy] Screen

On the [Site Policy] Screen (see section 12.5), click on the [GDPR Privacy Policy] Link in the Privacy Policy section to move to the [GDPR Privacy Policy] Screen (new screen).



(2) Reviewing the GDPR Privacy Policy

On the [GDPR Privacy Policy] Screen, review the GDPR Privacy Policy ((1) below). Click on [Close] ((5) below) to close the screen after reviewing.



(2) Registered users

- E-mail address
- Country or region
- Job
- IP address (IP address included in access log)

(1)

* When applying for an Authorized User (RA investigator and organizational personnel approved by the GOSAT Project, etc.), in addition to the personal data of the registered user, the name, organization, department, etc. are required.

5. Purpose and legal basis of personal data processing and usage

When processing and using personal data, the purpose of use should be clarified in accordance with Article 6.1 (a) of the GDPR, and personal data will be processed if the consent of the user himself/herself is obtained in advance and in accordance with the legal basis stipulated in Article 6.1 (b) to (f) of the GDPR. However, with regard to Article 6.1 (f) of the GDPR, personal data shall be used within the scope of the following legitimate interests.

- (1) Depending on the response to inquiries to the Site and the content of the inquiries, transfer to relevant departments in the Institute, and relevant ministries and agencies (information on inquiries)
- (2) Security measures for the server that operates the Site (IP address)
- (3) User authentication when using the services of the Site
- (4) Notification by e-mail from the electronic service of the Site
- (5) Necessary communications with the registered users (e-mail address)
- (6) Implementation of reports, etc. based on requests from public institutions (e-mail address, country or region)

6. Impact on users refusing to provide personal data

In order to obtain the data provided on the Site, you must register as a user. If you refuse to provide your personal data and do not register as a user, we will not be able to provide some of the services.

7. Disclosure, provision, and sharing of personal data

Personal data provided on the Site may be disclosed, provided, or shared outside the Site for the following purposes.

- (1) In order to achieve the purposes described in the Policy, we may disclose, provide, or share the personal data of users with relevant ministries and agencies, etc. When sharing personal data with relevant ministries and agencies, etc., we will take the measures prescribed in Article 26 of the GDPR and disclose the data to the user himself/herself.
- (2) In complying with EU law or the laws of EU/EEA member countries, we will disclose and provide the personal data of users to the authorities and the other disclosure and provision parties stipulated by the law.

8. Site security (SSL description)

The Site uses SSL (Secure Sockets Layer), an encryption technology, on all pages, and data input flows over the network from your terminal to the server in an encrypted state.

9. About cookies (purpose of use)

The Site uses cookies to switch between Japanese and English notation on the Site and to maintain the processing status across multiple pages. Please see our [cookie policy](#) for more information. (2)

10. Transfer of personal data outside the EU

The Institute will not transfer the personal data it holds to other countries.

11. Retention period of personal data

Personal data registered on the Site will be stored for up to 6 months after the end of the services of the Site in order to respond to inquiries from users.

12. Rights of users of the Site, etc.

- (1) The user has the following rights regarding the personal data held by the Institute.
 - A) Right to obtain all necessary information regarding data processing (GDPR Article 13, GDPR Article 14)
 - B) Right to inquire about information (GDPR Article 15)
 - C) Right to correct information (GDPR Article 16)
 - D) Right to erase information "Right to be forgotten" (GDPR Article 17)
 - E) Right to restrict information processing (GDPR Article 18)
 - F) Right to object to information processing (GDPR Article 21)
 - G) Right to data portability (GDPR Article 20)
- (2) As long as the personal data of the user is processed with the consent of the user, the user has the right to withdraw this consent at any time. The withdrawal of consent shall not affect the lawfulness of processing based on consent before its withdrawal. (GDPR Article 7, Paragraph 3)

(3) When a minor becomes a user, the consent by the holder of parental responsibility over the minor is required. (GDPR Article 8) (1)

(4) The user has the right to lodge a complaint with an information protection supervisory authority regarding the processing of personal data on the Site. (GDPR Article 77)

(5) If you wish to confirm, correct, or delete, etc. your personal data, please contact us by e-mail at [the contact for the Site \(“Point of Contact”—“General Questions”\)](#). We will respond promptly after confirming your identity. (3)

(6) If you wish to stop using the services of the Site, please let us know by e-mail at [the contact for the Site \(“Point of Contact”—“GOSAT Product and Service”\)](#). (4)

13. Disclaimer

For informational purposes, the Site may post links to websites other than the Institute. Since linked sites have their own policies, when accessing a linked website please check the policies of the linked website. The Institute is not responsible for the content of any linked website outside the Institute, the use of the site, and the processing of personal data.

14. Acceptance to the GDPR Privacy Policy

From any of the following actions by the user, the Institute assumes that the user has accepted to the Policy of the Site and the processing methods of personal data described herein. Please do not provide your personal data unless you accept it.

- When you have agreed to the Personal Information Handling Policy on the Site
- When you have filled in the date of consent to the Personal Information Handling Policy in documents such as the application form for Authorized User registration, etc.

15. Revision of the GDPR Privacy Policy

We will comply with laws and regulations, and other norms related to personal data, and continuously improve our system for protecting personal data. When we revise the Policy, we will announce the revision and clearly state the revision date on the Site.

16. Data protection officer

Director, Earth System Division, National Institute for Environmental Studies

17. Contact

GOSAT Project, Satellite Observation Center, National Institute for Environmental Studies

Address : 16-2 Onogawa, Tsukuba, Ibaraki, 305-8506, Japan

TEL : +81-29-850-2035

E-mail : [Contact for the Site \(“Point of Contact”—“General Questions”\)](#) (3)

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(1)	GDPR Privacy Policy	:	Displays the GDPR Privacy Policy.
(2)	[cookie policy] Link	:	The link to the [Cookie Policy] Screen (new screen).
(3)	[Contact for the Site (“Point of Contact”—“General Questions”)] Link	:	The link to the [Point of Contact/FAQ] Screen (new screen).
(4)	[the contact for the Site (“Point of Contact”—“GOSAT Product and Service”)] Link	:	The link to the [Point of Contact/FAQ] Screen (new screen).

(5)	[Close] Link	:	The link for closing the [GDPR Privacy Policy] Screen.
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13 Miscellaneous Precautions

13.1 User Categories

The GDAS user categories are shown in Table 13.1.

Table 13.1 GDAS User Categories

No.	User Category	User Registration Type	Description
1	PRJ	Authorized User	NIES employees involved with the GOSAT Project
2	RACal		Registered researchers authorized to download FTS L1B calibration data
3	RA		Registered researchers, researchers in affiliated organizations
4	GU	General User	All other general users

The GDAS user categories are interactive with the GUIG user categories. The GDAS user category and GUIG user category interaction levels are shown in Table 13.2.

Table 13.2 GDAS User Category and GUIG User Category Interaction

No.	GDAS User Category	GUIG User Category	Remarks
1	PRJ	OPE, PSN	
2	RACal	CalData	
3	RA	RAMo, RAplus, RAplusCoI, RAstar, RAstarCoI, AO1, AO1star, AO1starCoI, ST, PS	All provision groups except OPE, PSN, CalData, GU.
4	GU	GU	

The highest level of authority (PRJ > RACal > RA > GU) is valid for users with multiple accounts on GUIG.

This means that the latest user category for the final date of update is validated if the highest level of authority for the GDAS user category has acquired multiple GUIG accounts including RA and RA is the highest level of authority for the GDAS user category.

Also, if the GUIG account with the highest level of GDAS user category authority has been frozen, the next user category with the highest level of authority is validated.

13.2 Product Provision Formats

The GOSAT products provided by GDAS differ in accordance with the user category. The archive format and product format also differ for the products provided. The unit, user category, product format and archive format for each product provided are shown in Table 13.3.

Table 13.3 GOSAT Product Provision Format

No.	Product Provided	Unit	User Category	Product Format	Archive Format
1	FTS L1A data	Daily	PRJ	HDF5 (non-compressed)	tar.gz
2	FTS L1B data	Daily, Path	All user categories	HDF5 (non-compressed)	tar.gz
3	FTS L1B calibration data	Daily	PRJ, RACal	HDF5 (non-compressed)	tar.gz
4	FTS FOV image	Daily	All user categories	png	tar.gz
5	L2 CO2 column amount (SWIR)	Monthly	All user categories	HDF5 (Compressed)	tar
6	L2 CH4 column amount (SWIR)	Monthly	All user categories	HDF5 (Compressed)	tar
7	L2 H2O column amount (SWIR)	Monthly	All user categories	HDF5 (Compressed)	tar
8	PPDF-S CO2 data	Monthly	PRJ, RACal, RA	HDF5 (Compressed)	tar
9	PPDF-S CH4 data	Monthly	PRJ, RACal, RA	HDF5 (Compressed)	tar
10	L2 CO2 profile (TIR)	Monthly	All user categories	HDF5 (Compressed)	tar
11	L2 CH4 profile (TIR)	Monthly	All user categories	HDF5 (Compressed)	tar
12	L2 H2O column amount (TIR)	Monthly	PRJ, RACal, RA	HDF5 (Compressed)	tar
13	TIR input dataset	Daily	PRJ	binary	tar.gz

No.	Product Provided	Unit	User Category	Product Format	Archive Format
14	L3 global CO2 distribution (SWIR)	Monthly	All user categories	HDF5 (Compressed)	tar
15	L3 global CH4 distribution (SWIR)	Monthly	All user categories	HDF5 (Compressed)	tar
16	CAI L1A data	Daily	PRJ	HDF5 (Non-Compressed)	tar.gz
17	CAI L1B data	Path	All user categories	HDF5 (Compressed)	tar
18	CAI L1B+ data	Path	All user categories	HDF5 (Compressed)	tar
19	CAI L2 cloud flag	Path	All user categories	HDF5 (Compressed)	tar
20	CAI L2 cloud property	Path	PRJ, RACal, RA	HDF5 (Compressed)	tar
21	CAI L2 aerosol property	Path	PRJ, RACal, RA	HDF5 (Compressed)	tar
22	CAI L3 global radiance distribution	Monthly	All user categories	HDF5 (Compressed)	tar
23	CAI L3 global reflectance distribution	Monthly	All user categories	HDF5 (Compressed)	tar
24	CAI L3 NDVI	Monthly	All user categories	HDF5 (Compressed)	tar
25	CAI L3 global radiance distribution (1 day)	Monthly	PRJ	HDF5 (Compressed)	tar
26	L4A global CO2 flux (netCDF)	Annual	All user categories	netCDF	tar.gz
27	L4A global CO2 flux (text)	Annual	All user categories	text	tar.gz
28	L4A global CH4 flux (netCDF)	Annual	All user categories	netCDF	tar.gz
29	L4A global CH4 flux (text)	Annual	All user categories	text	tar.gz
30	L4B global CO2 distribution	Annual	All user categories	netCDF	tar.gz

No.	Product Provided	Unit	User Category	Product Format	Archive Format
31	L4B global CH4 distribution	Annual	All user categories	netCDF	tar.gz

*1 The L2 CO2 column-averaged volumes, the L2 CH4 column-averaged volumes and the L2 H2O column-averaged volumes differ for the products that can be downloaded in accordance with the user category. See section 13.3 for details.

13.3 SWIR Product Provision for Each User Category

The SWIR products that can be obtained by each user category are different. The SWIR products that are interactive with user categories are shown in Table 13.4. The [For GU users (with sub-data set)] represents a product for GU users to which additional information has been added.

Table 13.4 SWIR Products that Can Be Obtained by for Each User Category

User Category	Product Category
PRJ	For PRJ users
	For RA users
	For GU users (with sub-data set)
RACal, RA	For RA users
	For GU users (with sub-data set)
GU	For GU users

13.4 Product File Naming Conventions

The product file naming conventions are listed below. The product identification character strings are also listed in table 13.5.

- In the case of the archive format in Table 13.3 being tar.gz
 - ✓ Products provided in daily units
[Product Identification Character Strings]_[Observational Date (YYYYMMDD)]
_[Version].tar.gz
 - ✓ Products provided in annual units
[Product Identification Character Strings]_[Observational Year (YYYY)]
_[Version].tar.gz

- In the case of the archive format in Table 13.3 being tar
 - ✓ L2 CO2 column amount (SWIR), L2 CH4 column amount (SWIR), L2 H2O column amount (SWIR)
[Product Identification Character Strings]_[Observational Date (YYYYMMDD)]
[Path Number (NN)][Version]_[User Category].tar
 - ✓ Products provided in path units
[Product Identification Character Strings]_[Observational Date (YYYYMMDD)]
[Path Number (NN)][Version].tar
 - ✓ Products provided in daily units
[Product Identification Character Strings]_[Observational Date (YYYYMMDD)]
_[Version].tar
 - ✓ Products provided in monthly units (except for the L2 column-averaged volumes (SWIR)).
[Product Identification Character Strings]_[Observational Month (YYYYMM)]
_[Version].tar
 - ✓ Products provided in annual units
[Product Identification Character Strings]_[Observational Year (YYYY)]
_[Version].tar

Table 13.5 Product Identification Character Strings

No.	Product Provided	Product Identification Character Strings
1	FTS L1A data	FTSL1A
2	FTS L1B data	FTSL1B

No.	Product Provided	Product Identification Character Strings
3	FTS L1B calibration data	FTSL1BCAL
4	FTS FOV image	BROWSE
5	L2 CO2 column amount (SWIR)	SWIRL2CO2
6	L2 CH4 column amount (SWIR)	SWIRL2CH4
7	L2 H2O column amount (SWIR)	SWIRL2H2O
8	PPDF-S CO2 data	PPDFSCO2
9	PPDF-S CH4 data	PPDFSCH4
10	L2 CO2 profile (TIR)	TIRL2CO2
11	L2 CH4 profile (TIR)	TIRL2CH4
12	L2 H2O column amount (TIR)	TIRL2H2O
13	TIR input dataset	TIRIDS
14	L3 global CO2 distribution (SWIR)	SWIRL3CO2
15	L3 global CH4 distribution (SWIR)	SWIRL3CH4
16	CAI L1A data	CAIL1A
17	CAI L1B data	CAIL1B
18	CAI L1B+ data	CAIL1BP
19	CAI L2 cloud flag	CAIL2CLDFLG
20	CAI L2 cloud property	CAIL2CLDPRO
21	CAI L2 aerosol property	CAIL2AERPRO
22	CAI L3 global radiance distribution	CAIL3RAD
23	CAI L3 global reflectance distribution	CAIL3REF
24	CAI L3 NDVI	CAIL3NDVI
25	CAI L3 global radiance distribution (1 day)	CAIL3TRCD
26	L4A global CO2 flux (netCDF)	L4ACO2
27	L4A global CO2 flux (text)	L4ACO2TXT
28	L4A global CH4 flux (netCDF)	L4ACH4
29	L4A global CH4 flux (text)	L4ACH4TXT
30	L4B global CO2 distribution	L4BCO2
31	L4B global CH4 distribution	L4BCH4