

How to use JASMES Image Analyzer

Ver.1 : 2024/11/13

Ver.2 : 2025/02/25

Ver.3 : 2025/07/02

Ver.4 : 2025/10/03

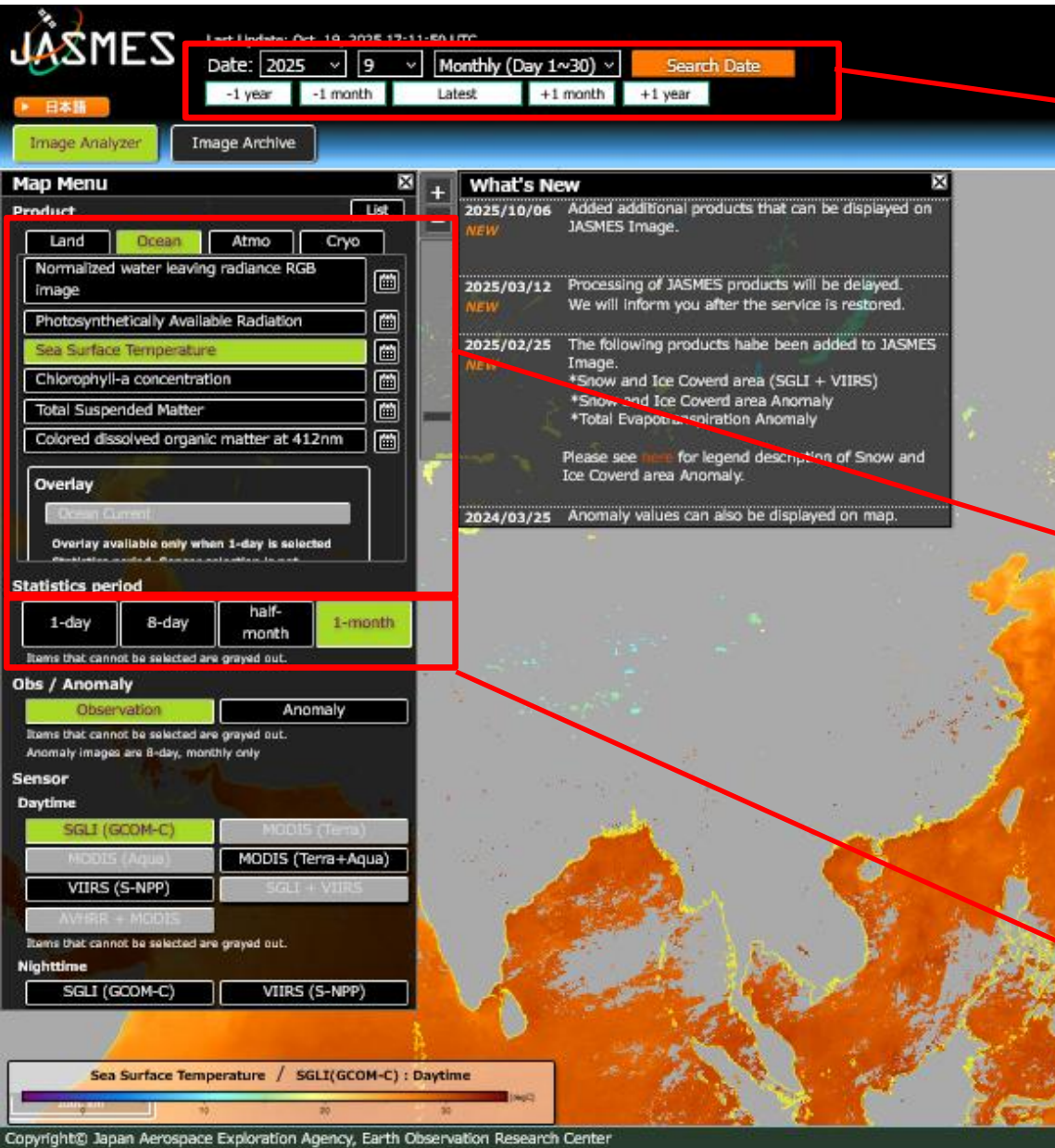
Ver.5 : 2025/10/31

JASMES Image Analyzer Usage



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JASMES Image Analyzer Usage ①



Date: 2025 9 Monthly (Day 1~30) Search Date
-1 year -1 month Latest +1 month +1 year

Product
Land Ocean Atmo Cryo
Normalized water leaving radiance RGB Image
Photosynthetically Available Radiation
Sea Surface Temperature
Chlorophyll-a concentration
Total Suspended Matter
Colored dissolved organic matter at 412nm

Overlay
Ocean Current
Overlay available only when 1-day is selected

Statistics period
1-day 8-day half-month 1-month
Items that cannot be selected are grayed out.

Obs / Anomaly
Observation Anomaly
Items that cannot be selected are grayed out.
Anomaly images are 8-day, monthly only

Sensor
Daytime
SGLI (GCOM-C) MODIS (Terra)
MODIS (Aqua) MODIS (Terra+Aqua)
VIIRS (S-NPP) SGLI + VIIRS
AVHRR + MODIS
Items that cannot be selected are grayed out.

Nighttime
SGLI (GCOM-C) VIIRS (S-NPP)

Sea Surface Temperature / SGLI(GCOM-C) : Daytime

① Date

The method for specifying the date is as follows.

- After specifying the year, month, and day from the pull-down menu, Press the "Display image" button.
- Press the "± month", "Latest" button.

② Product

After selecting a category(Land, Ocean, Atmosphere, or Cryosphere), click the button to switch the product.

Ocean current in the categorical ocean can be overlaid with other products. In the case of a statistical period of 1 day, The image for the Japan region is displayed. calculated by SGLI+OLCI, and the sensor buttons below are not reflected. The range of the color bar can be changed.

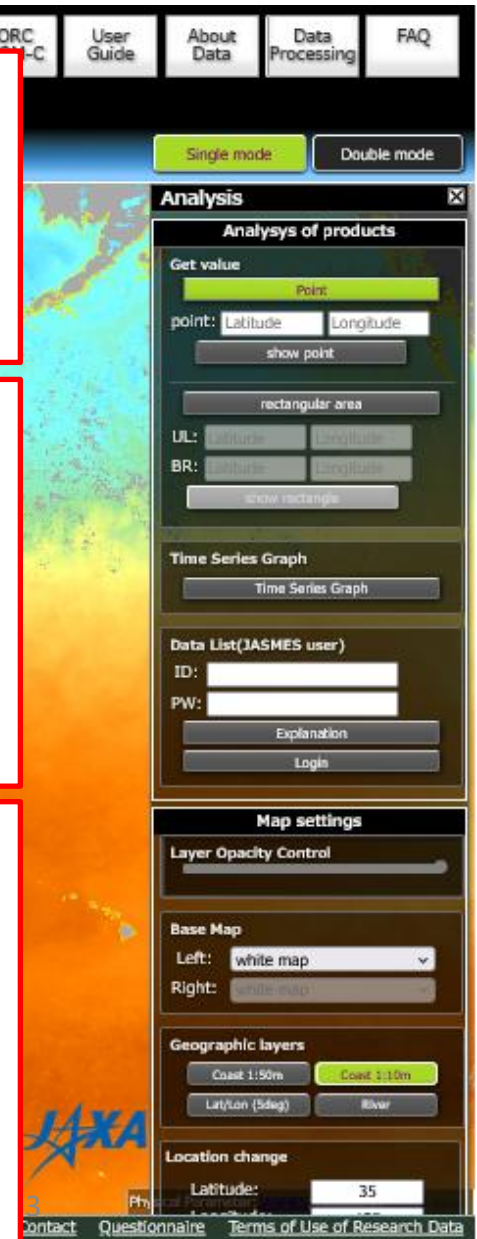
③ Statistics period(Term)

Switch between daily/8-day/half-month(HM)/monthly(1M) average.

The displayable period varies depending on the product.

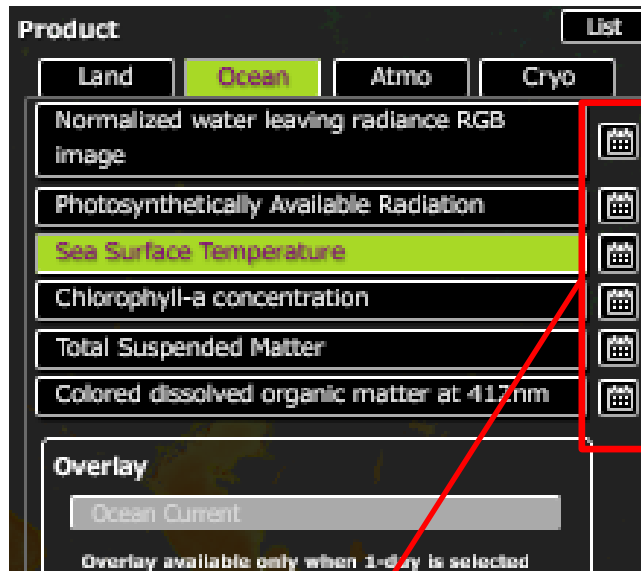
If it cannot be displayed, the button will be grayed out.

If the button cannot be displayed due to a combination of ③ to ⑤, the button will be deselected, so please press the button that can be displayed again.



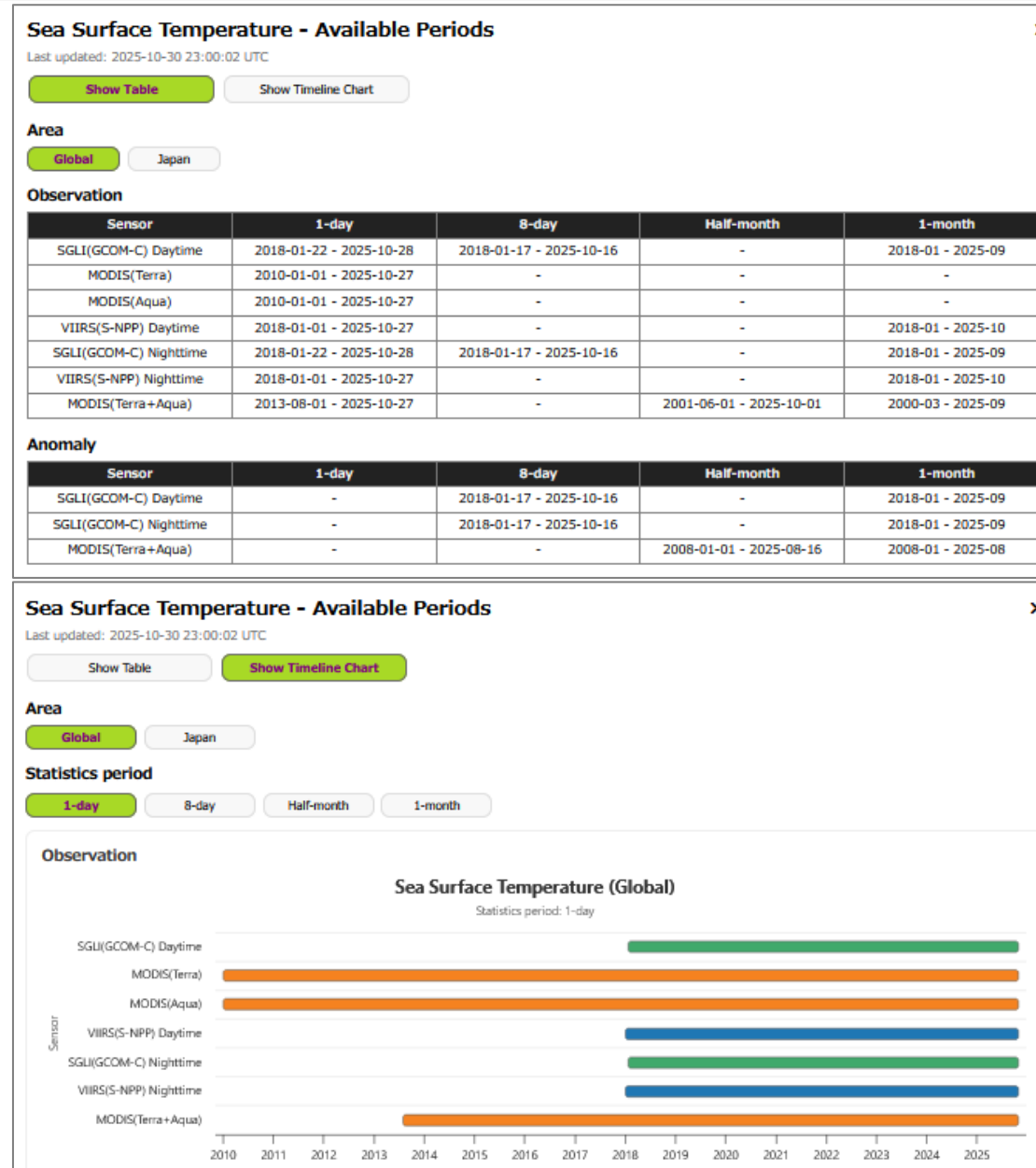
Analysis
Single mode Double mode
Analysis of products
Get value
Point
point: Latitude Longitude
show point
rectangular area
UL: Longitude Latitude
BR: Longitude Latitude
show rectangle
Time Series Graph
Time Series Graph
Data List(JASMES user)
ID:
PW:
Explanation
Login
Map settings
Layer Opacity Control
Base Map
Left: white map
Right: white map
Geographic layers
Coast 1:50m Coast 1:10m
Lat/Lon (5deg) River
Location change
Latitude: 35

JASMES Image Analyzer Usage ②

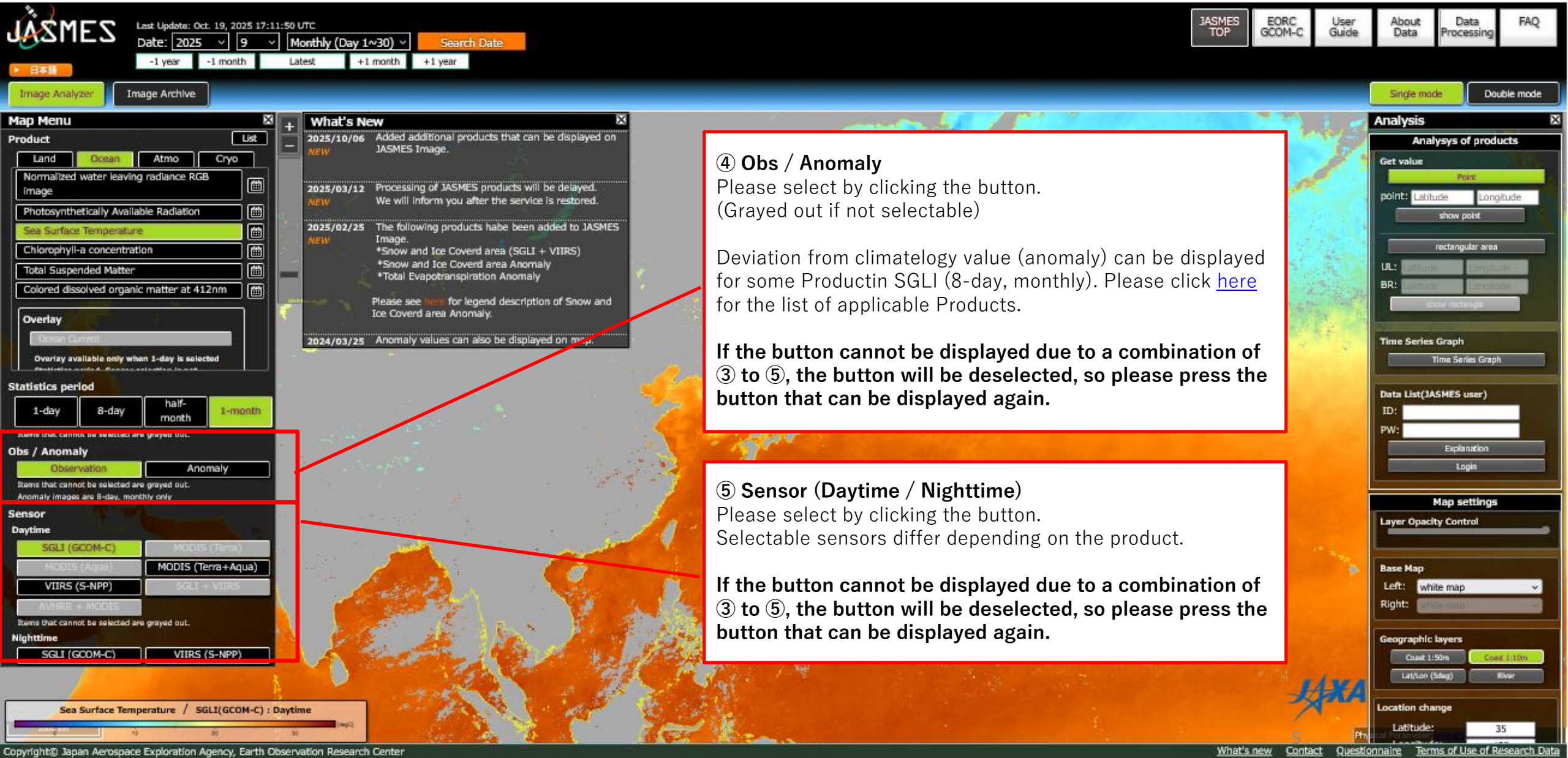


By clicking the calendar button next to the product button, you can view the data provision periods by region for each product.

If necessary, switch between the table view and the timeline chart view at the top to check the information.



JASMES Image Analyzer Usage ③



The screenshot shows the JASMES Image Analyzer web interface. The top navigation bar includes links for JASMES TOP, EORC GCOM-C, User Guide, About Data, Data Processing, and FAQ. The main interface is divided into several panels:

- Map Menu:** Contains a list of products (Land, Ocean, Atmo, Cryo) and a list of specific products like Normalized water leaving radiance RGB image, Photosynthetically Available Radiation, Sea Surface Temperature, Chlorophyll-a concentration, Total Suspended Matter, and Colored dissolved organic matter at 412nm. It also has an Overlay section and a Statistics period selector (1-day, 8-day, half-month, 1-month).
- Obs / Anomaly:** A section with buttons for Observation and Anomaly. Below it, there are buttons for Sensor (Daytime and Nighttime) and a list of sensors (SGLI (GCOM-C), MODIS (Terra), MODIS (Aqua), MODIS (Terra+Aqua), VIIRS (S-NPP), SGLI + VIIRS, AVHRR + MODIS).
- What's New:** A section with a list of updates, including a new product added on 2025/10/06, a processing delay on 2025/03/12, and new products added on 2025/02/25.
- Analysis:** A section with a list of analysis products, a Time Series Graph, and a Data List (JASMES user) with fields for ID and PW.
- Map settings:** A section with a Layer Opacity Control, Base Map (Left: white map, Right: side map), Geographic layers (Coast 1:50m, Coast 1:10m, Lat/Lon (5deg), River), and Location change (Latitude: 35).

Annotations are provided for the Obs / Anomaly and Sensor sections:

- ④ Obs / Anomaly:** Please select by clicking the button. (Grayed out if not selectable). Deviation from climatology value (anomaly) can be displayed for some Productin SGLI (8-day, monthly). Please click [here](#) for the list of applicable Products. If the button cannot be displayed due to a combination of ③ to ⑤, the button will be deselected, so please press the button that can be displayed again.
- ⑤ Sensor (Daytime / Nighttime):** Please select by clicking the button. Selectable sensors differ depending on the product. If the button cannot be displayed due to a combination of ③ to ⑤, the button will be deselected, so please press the button that can be displayed again.

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JASMES Image Analyzer Usage ④



The screenshot shows the JASMES Image Analyzer web application. The interface includes a top navigation bar with links like 'JASMES TOP', 'EORC GCOM-C', 'User Guide', 'About Data', 'Data Processing', and 'FAQ'. The main area displays a map of the Pacific Ocean with a color-coded overlay representing Sea Surface Temperature (SST). On the left, there are several panels: 'Map Menu' with product selection (Land, Ocean, Atmo, Cryo), 'Statistics period' (1-day, 8-day, half-month, 1-month), 'Obs / Anomaly' (Observation, Anomaly), 'Sensor' (SGLI, MODIS, VIIRS, AVHRR), and 'Nighttime' (SGLI, VIIRS). A 'What's New' panel is also present. On the right, there are panels for 'Analysis' (rectangular area, UL, BR, Time Series Graph, Data List), 'Map settings' (Layer Opacity Control, Base Map, Geographic layers), and 'Location change' (Latitude, Longitude, Zoom, Move Center, Save Location to Cookie). The bottom of the interface shows a color scale for SST and a copyright notice for JAXA.

⑥ Layer Opacity Control
You can change the Layer Opacity displayed on the map by sliding the bar.

⑦ Base Map
You can change the base map.
• White map
• GSI map
• NASA BlueMarble
• SGLI-SWI Observation map(Ascending)
(Only if Wildfire is selected)

⑧ Geographic layers
Display geographic information on a map.
You can switch display/non-display by clicking.
Multiple selection is possible.

⑨ Location change
The current center position and zoom level are automatically entered.
After entering the center position and zoom level manually, move the position of the map with the "Move Center" button.

JASMES Image Analyzer Usage ⑤



The screenshot displays the JASMES Image Analyzer web interface. At the top, there's a header with the JASMES logo, a last update timestamp, and navigation links like JASMES TOP, EORC GCOM-C, User Guide, About Data, Data Processing, and FAQ. Below the header, there are date selection controls (Date: 2024, 10, Monthly (Day 1~31)) and a Search Date button. A language selector (日本語) and buttons for Image Analyzer and Image Archive are also present.

On the left side, there's a Map Menu panel with options for Phytoplankton abundance (Chlorophyll-a) and Overlay (Ocean Current). Below this is a Statistics period section with buttons for 1-day, 8-day, half-month, and 1-month. Further down are Obs / Anomaly (Observation, Anomaly) and Sensor (Daytime, Nighttime) sections with various sensor options like SGLI (GCOM-C), MODIS (Terra), MODIS (Aqua), MODIS (Terra+Aqua), VIIRS (S-NPP), and SGLI + VIIRS.

In the center, there's a 'What's New' section with a list of updates. Below it, a map of Japan is displayed with a color scale for Sea Surface Temperature / SGLI(GCOM-C) : Daytime. A red box highlights the 'Link Map' and 'Unlink Map' buttons at the top of the map area.

On the right side, there's an Analysis panel with options for show rectangle, Time Series Graph, Data List(JASMES user), and Map settings. The Map settings section includes Layer Opacity Control, Base Map (Left: white map, Right: white map), Geographic layers (Coast 1:50m, Coast 1:10m, Lat/Lon (5deg), River), and Location change (Latitude: 35, Longitude: 135, Zoom: 4). A red box highlights the 'Single mode' and 'Double mode' buttons at the top of the Analysis panel.

At the bottom, there's a footer with copyright information and a row of links: What's new, Contact, Questionnaire, Terms of Use of Research Data.

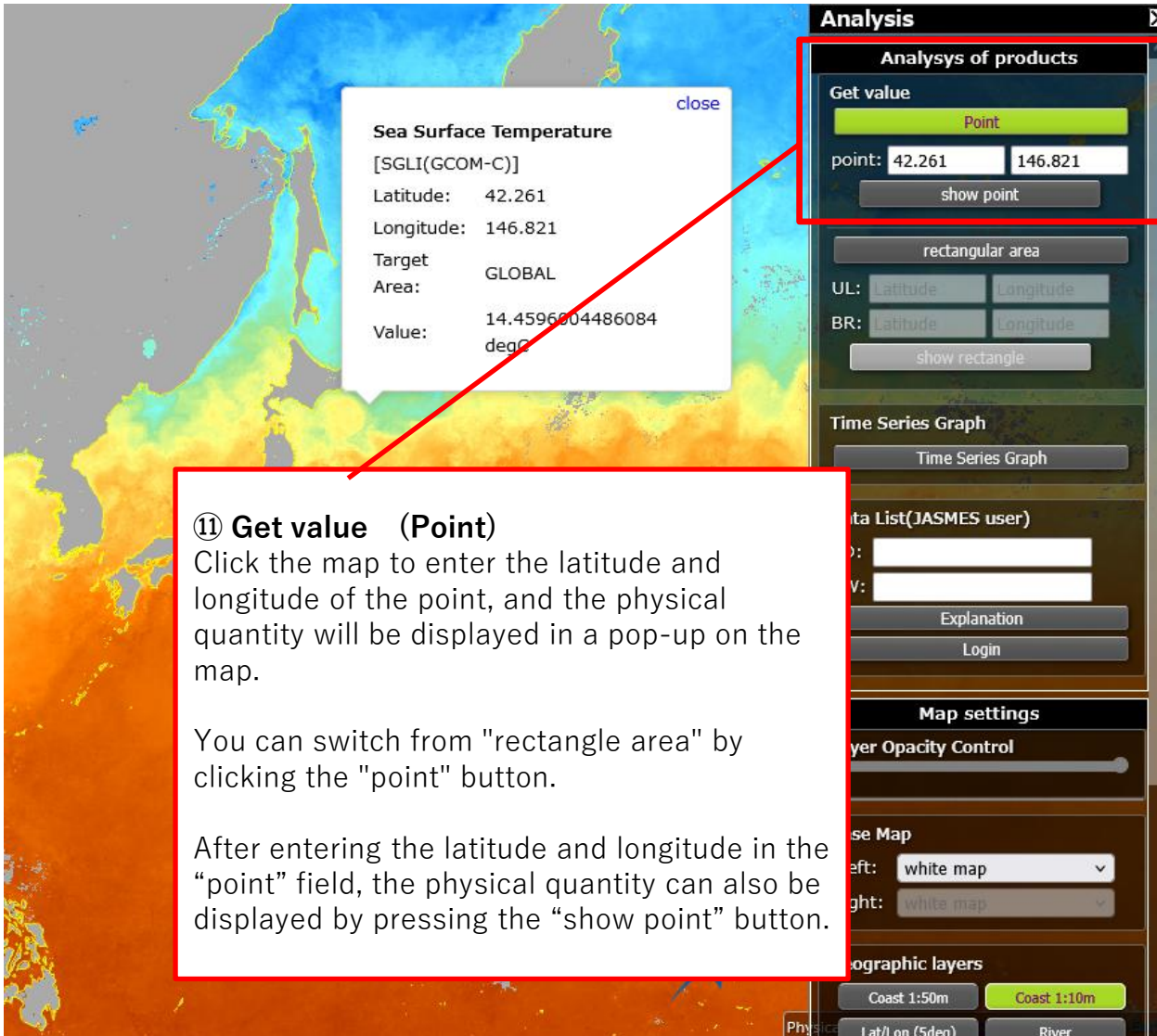
⑩ Single mode/Double mode
The map display can be switched between single mode(1-screen) and Double mode(2-screen).
The default is "Single mode".

The display setting when using Double mode is

- The date and period are the same,
- Specify physical quantities, sensors, and background maps individually

You can switch the left and right maps between link / unlink.
The default is "link Map".

JASMES Image Analyzer Usage ⑥

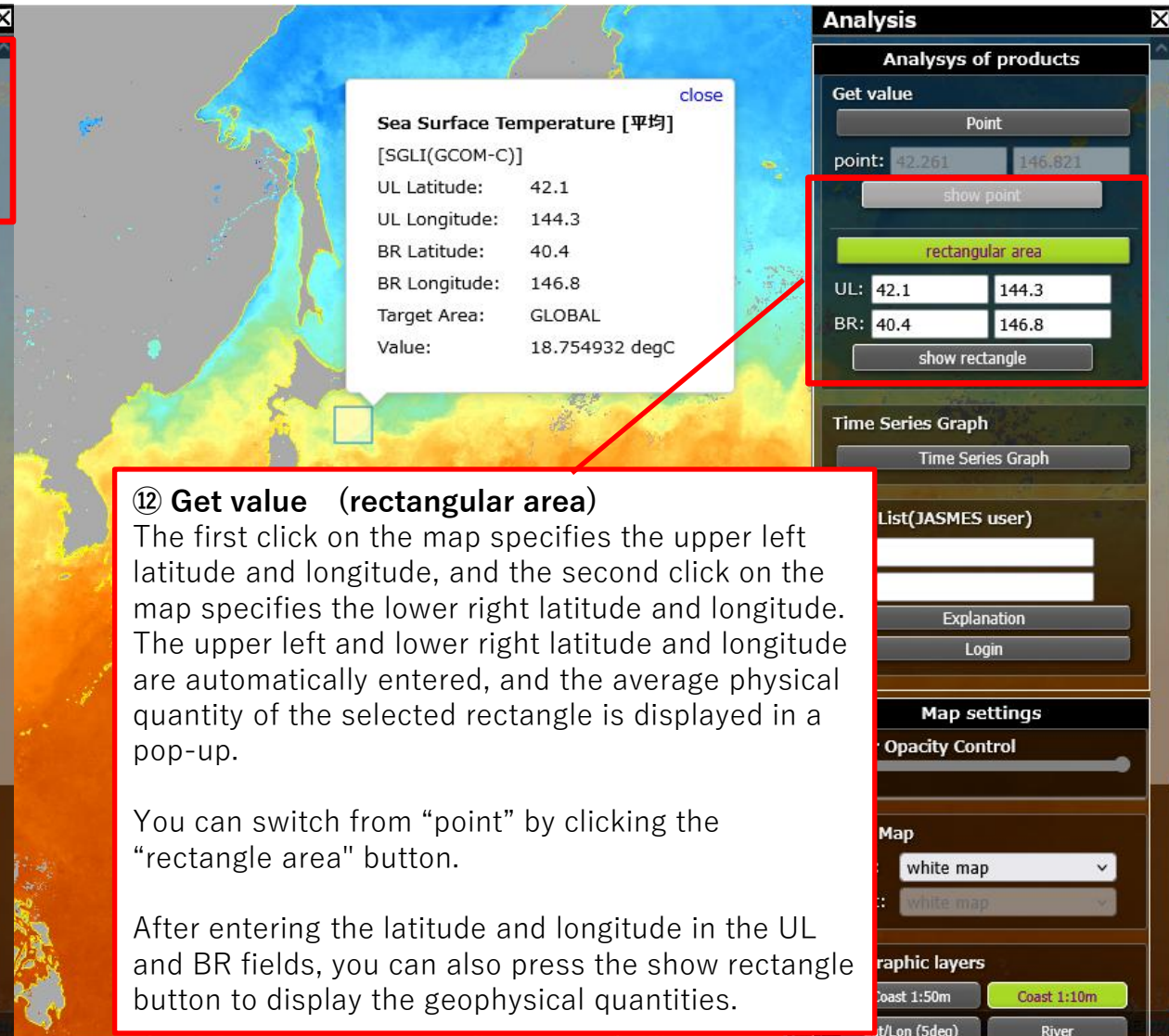


The screenshot shows the JASMES Image Analyzer interface. A map of the Western Pacific is displayed. A pop-up window titled "Sea Surface Temperature [SGLI(GCOM-C)]" shows the following data: Latitude: 42.261, Longitude: 146.821, Target: GLOBAL, Area: GLOBAL, Value: 14.4596004486084 degC. The "Analysis" panel on the right has the "Point" button highlighted in green. Below it, the "Get value" section shows the coordinates 42.261 and 146.821 entered in the "point:" fields, with a "show point" button. The "rectangular area" button is also visible. The "Time Series Graph" section is at the bottom.

⑪ Get value (Point)
Click the map to enter the latitude and longitude of the point, and the physical quantity will be displayed in a pop-up on the map.

You can switch from "rectangle area" by clicking the "point" button.

After entering the latitude and longitude in the "point" field, the physical quantity can also be displayed by pressing the "show point" button.



The screenshot shows the JASMES Image Analyzer interface. A map of the Western Pacific is displayed. A pop-up window titled "Sea Surface Temperature [平均] [SGLI(GCOM-C)]" shows the following data: UL Latitude: 42.1, UL Longitude: 144.3, BR Latitude: 40.4, BR Longitude: 146.8, Target Area: GLOBAL, Value: 18.754932 degC. The "Analysis" panel on the right has the "rectangular area" button highlighted in green. Below it, the "Get value" section shows the coordinates 42.1 and 144.3 entered in the "UL:" fields, and 40.4 and 146.8 entered in the "BR:" fields, with a "show rectangle" button. The "Time Series Graph" section is at the bottom.

⑫ Get value (rectangular area)
The first click on the map specifies the upper left latitude and longitude, and the second click on the map specifies the lower right latitude and longitude. The upper left and lower right latitude and longitude are automatically entered, and the average physical quantity of the selected rectangle is displayed in a pop-up.

You can switch from "point" by clicking the "rectangle area" button.

After entering the latitude and longitude in the UL and BR fields, you can also press the show rectangle button to display the geophysical quantities.

JASMES Image Analyzer Usage ⑦

⑬ Time Series Graph

With the latitude and longitude entered by specifying a point or rectangular area in "Get Value", press the "Time Series Graph/Data" button to display the Time Series Graph menu.

BR Longitude: 145.5
Target Area: GLOBAL
Value: 26.035202 degC

Time Series Graph ☒

Displays a time-series graph of the point or rectangular area specified in 'Get value'.
Select the period and press the show button.

Note: The longer the period, the longer it will take to display.

Start: yyyy/mm/dd (UTC)
End: yyyy/mm/dd (UTC)

Show Time Series Graph

Analysis

Analysis of products

Get value

Point

point: 38.857 145.239

rectangular area

UL: 38.6 142.2

BR: 36.2 145.5

Time Series Graph

Time Series Graph

Data List(JASMES user)

ID:

PW:

Explanation

Login

Map settings

Layer Opacity Control

Base Map

Left: white map

Right: white map

Geographic layers

Coast 1:50m

Coast 1:10m

Lat/Lon (5deg)

River

Location change

Time

January - 2022 -

Display or rectangular value. Select button.

Note: Time will take

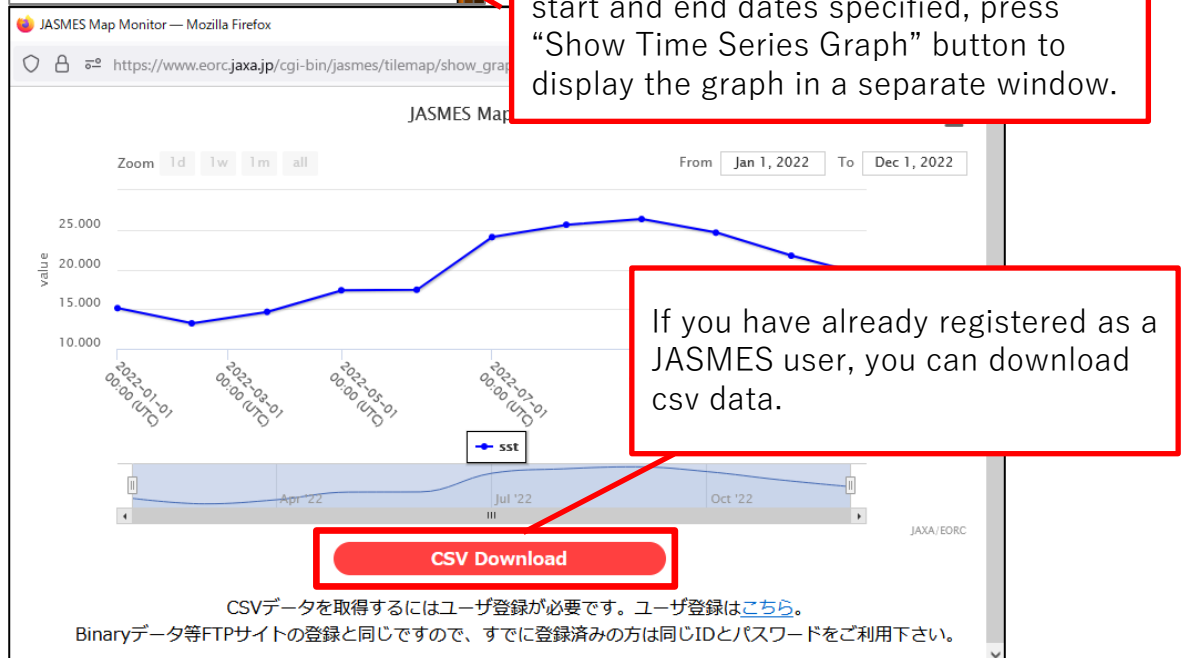
Start: 2022/01/01 (UTC)

End: 2023/02/01 (UTC)

Show Time Series Graph

The start and end dates can be entered in the calendar or entered as values.
When entering a value, enter it in "yyyy/mm/dd" format.

With the latitude and longitude and the start and end dates specified, press "Show Time Series Graph" button to display the graph in a separate window.

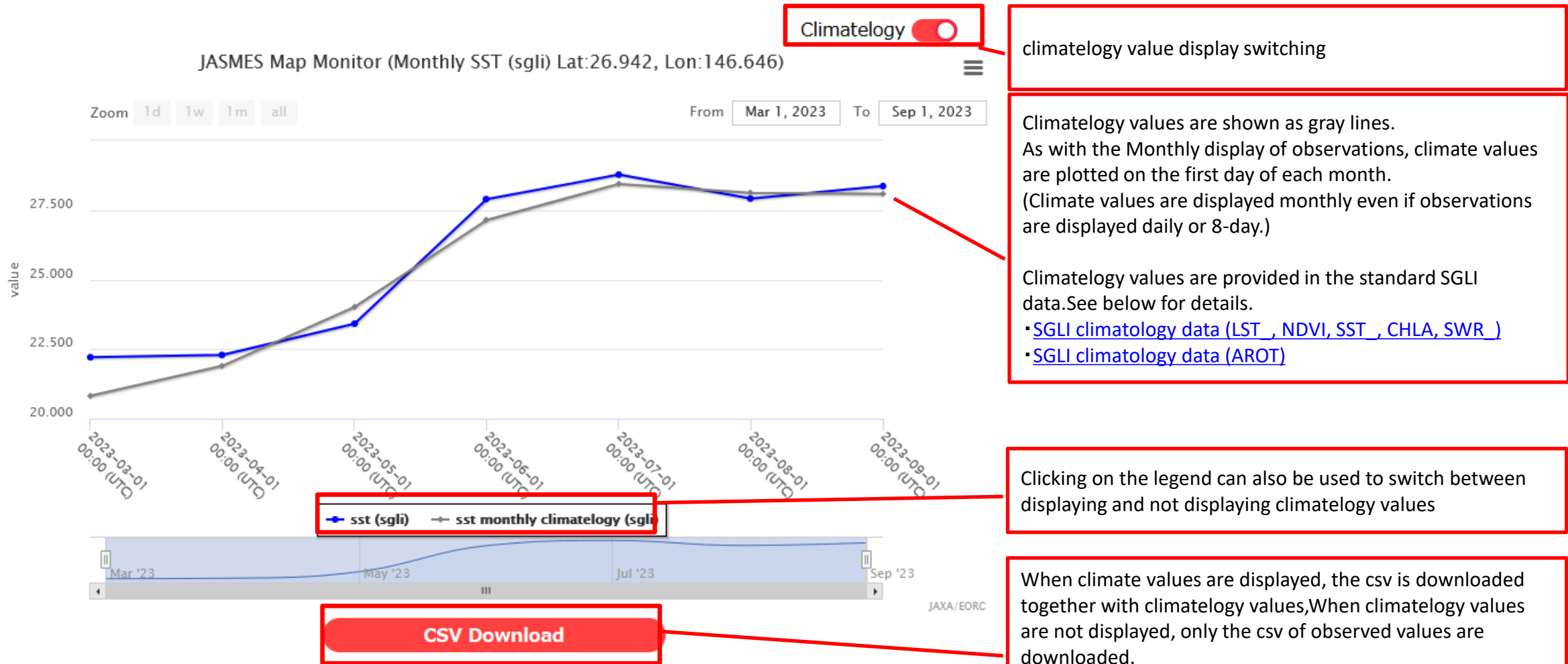


If you have already registered as a JASMES user, you can download csv data.

JASMES Image Analyzer Usage ⑧



For GCOM-C/SGLI LST, NDVI, SST, AROT, and SWR, climatology values can also be displayed in a time series graph.



You need to register from [here](#) for downloading the CSV data.

If the e-mail address at the time of JASMES user registration is "aaaaa@bbbb", ID:aaaaa, PW:aaaaa.

JASMES Image Analyzer Usage ⑨

⑭ Data List

If the e-mail address at the time of JASMES user registration is "aaaaa@bbbbb"

ID: aaaaa_bbbbb, PW: aaaaa@bbbbb

If you have not registered as a user, please register from the "Data Access" on the upper right of the page.

Data List(JASMES user)

ID:
PW:

Explanation

Login

Map settings

Layer Opacity Control

Base Map

Left: white map

Right: white map

Geographic layers

Coast 1:50m

Coast 1:10m

Lat/Lon (5deg)

River

Location change

When you login, the name of the product to be obtained and the date will be displayed.
The list is downloaded by pressing "get Datalist" button.

Time Series Graph

Time Series Graph

Data List(JASMES user)

JASMES Login

Product :
sst(sgli), rgb(all_modis),

Date :
2024/Monthly (Day 1~31)
(monthly)

Get Datalist

Map settings

Layer Opacity Control

Base Map

Left: white map

Right: white map

Geographic layers

Coast 1:50m

Coast 1:10m

Lat/Lon (5deg)

River

JASMES Image Analyzer Data List



		ID	sensor	Temporal Statistics						Available data period	Note
				daily	8-day	half monthly	monthly	8-day anomaly	monthly anomaly		
Land	Land Surface Temperature	LST	Terra/MODIS	○	-	-	-	-	-	2011/1/1~	
			Aqua/MODIS	○	-	-	-	-	-	2011/1/1~	
			GCOM/SGLI	○	○	-	○	○	○	2018/1/1~	
	Activity of Vegetation (NDVI)	NDVI	Terra and Aqua/MODIS	○	-	○	○	-	○	2000/3~	
			GCOM/SGLI	○	○	-	○	○	○	2018/1/1~	
	Leaf Area Index	LAI	GCOM/SGLI	○	○	-	○	-	-	2018/1/1~	
	Above Ground Biomass	AGB	GCOM/SGLI	○	○	-	○	-	-	2018/1/1~	
	Fraction of Absorbed Photosynthetically Active Radiation	FPAR	GCOM/SGLI	○	○	-	○	-	-	2018/1/1~	
	Rayleigh corrected reflectance RGB	RSRF	Terra and Aqua/MODIS	○	-	○	○	-	-	Daily:2011/1/1~	
	Plant Water Stress Trend (WST)	WST	Terra and Aqua/MODIS	○	-	○	○	-	-	Daily:2002/10/1~、Monthly:2002/2~	
	Wild Fire Daytime	WF_D	Terra and Aqua/MODIS	○	-	○	○	-	-		
			GCOM/SGLI	○	-	-	-	-	-	2018/1/1~	
	Wild Fire(FRP) Nighttime	WF_N	GCOM/SGLI	○	-	-	-	-	-	2018/1/1~	
	Total Evapotranspiration	ET	GCOM/SGLI	-	○	○	○	○	○	2018/1/1~	
			Terra and Aqua/MODIS	-	○	○	○	○	○		
Ocean	Photosynthetically Available Radiation	PAR	Terra and Aqua/MODIS	○	-	○	○	-	○	Daily:2013/10/1~、Monthly:2000/3~	
			VIIRS	○	-	-	○	-	-	2017~	
	Sea Surface Temperature	SST	Terra/MODIS	○	-	-	-	-	-	2010/1/1~	
			Aqua/MODIS	○	-	-	-	-	-	2010/1/1~	
			VIIRS	○	-	-	○	-	-	2017~	
			GCOM/SGLI	○	○	-	○	○	○	2018/1/1~	
	Ocean and Land Surface Temperature	OLST	Terra and Aqua/MODIS	○	-	○	○	-	-	Daily:2011/1/1~、Monthly:2000/3~	
	Phytoplankton abundance (Chlorophyll-a)	CHLA	Terra and Aqua/MODIS	-	-	○	○	-	○	2000/3~	
			VIIRS	○	-	-	○	-	-	2017~	
			GCOM/SGLI	○	○	-	○	○	○	2018/1/1~	
	Total suspended matter	TSM	GCOM/SGLI	○	○	-	○	-	-	2018/1/1~	
	Colored dissolved organic matter	CDOM	GCOM/SGLI	○	○	-	○	-	-	2018/1/1~	
	Normalized water leaving radiance RGB image	NWLR	GCOM/SGLI	○	○	-	○	-	-	2018/1/1~	
	Ocean Current	-	SGLI + OLCI	○	-	-	-	-	-	2018/1~	

JASMES Image Analyzer Data List

		ID	sensor	Temporal Statistics						Available data period	Note
				daily	8-day	half monthly	monthly	8-day anomaly	monthly anomaly		
Atmosphere	Aerosol Optical thickness	TAUA	Terra and Aqua/MODIS	○	-	○	○	-	○	Daily:2011/10/1～、Monthly:2000/3～	
			VIIRS	○	-	-	○	-	-	2017～	
		AROT	GCOM/SGLI	○	○	-	○	○	○	2018/1/1～	
	Aerosol_Angstrom_Exponent over Land	ARAE	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Single_Scattering_Albedo over Land and Ocean	ASSA	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Shortwave Radiation	SWR	Terra/MODIS	○	-	○	-	-	-	Daily:2002/1/1～、Monthly:2000/3～	
			Aqua/MODIS	○	-	○	-	-	-	Daily:2002/1/1～、Monthly:2002/7～	
			VIIRS	○	-	-	○	-	-	2017～	
			GCOM/SGLI	○	○	-	○	○	○	2018/1/1～	
	Temperature of CCloud Top layer	CLTT	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Optical Thickness of water cloud droplets	COTW	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Cloud type composite	CFRG	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Cirrus)	CFR1	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Cirro-stratus)	CFR2	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Deep convection)	CFR3	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Alto-cumulus)	CFR4	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Alto-stratus)	CFR5	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Nimbo-stratus)	CFR6	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Cumulus)	CFR7	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Strato-cumulus)	CFR8	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Stratus)	CFR9	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (ALL)	CFRA	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (High)	CFRH	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Middle)	CFRM	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Ratio of the number of cloud pixels (Low)	CFRL	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	Cloud flag	CLFG	GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
	UV-B	UVB	Terra/MODIS	○	-	○	-	-	-	Daily:2002/1/1～、Monthly:2000/3～	
			Aqua/MODIS	○	-	○	-	-	-	Daily:2002/1/1～、Monthly:2002/7～	
			VIIRS	○	-	-	○	-	-	2017～	
	Cloud Cover Rate	CFR	Terra and Aqua/MODIS	-	-	-	○	-	-	2000/2～	
Cryosphere	Snow Cover Extent	CSF	Terra and Aqua/MODIS	-	-	-	○	-	○	2000/2～	
			GCOM/SGLI	○	○	-	○	-	-	2018/1/1～	
			SGLI + VIIRS	○	-	○	○	-	○	2018/2/1～	
	Snow and Ice Surface Temperature	SIST	GCOM/SGLI	○	-	○	○	-	-	2018/1/1～	

JASMES Image Analyzer data resolution

- The resolution of the data displayed on the map is as shown in the table.
- Display Global data first. If you move near Japan and zoom(Zoom level 5 or higher), the data of Japan will be displayed.

Sensor	Area	resolution
GCOM-C / SGLI	Global	5km
	Japan	250m
Terra • Aqua / MODIS	Global	5km
	Japan	1km
S-NPP / VIIRS	Global	5km
	Japan	750m

Please see below for details on data.

SGLI: https://www.eorc.jaxa.jp/JASMES/SGLI_STD/about_sglistd_j.html

MODIS: https://kuroshio.eorc.jaxa.jp/JASMES/datalist_j.html