

Processing PACE OCI data using NASA's SeaDAS

Emil A. Cherrington, Ph.D.
Lab for Applied Research / Earth System Science Center
University of Alabama in Huntsville

Overview

- Data access options on the PACE website
- Installing SeaDAS + Docker
- Getting L2 PACE OCI data from NASA EarthData
- Processing that L2 data to L3 using SeaDAS



The PACE logo features the acronym "PACE" in a stylized font with a starburst effect above the letter "A". To the right of the logo is the text "Plankton, Aerosol, Cloud, ocean Ecosystem" in a bold, sans-serif font.

Navigation menu items include: HOME, ABOUT ▾, MISSION ▾, SCIENCE ▾, APPLICATIONS ▾, DATA ▾ (selected), LEARN MORE ▾, NEWS, EVENTS, GALLERY ▾, and DOCUMENTS ▾.

Get Ready to Work with PACE Data

[Understanding Data](#) | [Accessing Data](#) | [Analyzing Data](#)

PACE's cutting-edge technology will reveal new insights into our ocean, atmosphere and climate. To help you engage with PACE data, we have created a list of key resources. Icons indicate the *resource type* and *time commitment* to fully engage with that resource.



+ Understanding Data

- Accessing Data

Downloading or Visualizing Data from OB.DAAC

- [NASA EarthData Login](#)  
- [NASA EarthData: Cloud Evolution](#)  
- [NASA EarthData: Openscapes Cloud Cookbook](#)  
- [NASA EarthData: Cloud Primer for Amazon Web Services](#)  
- [Discover Earth Science Data Resources at NASA Earthdata](#)  
- [NASA EarthData: earthaccess Python library overview](#)  
- [NASA EarthData: Search PACE Data Portal](#)   
- [Access PACE Data](#)  
- [Ocean Biology Distributed Archive Archive Center \(OB.DAAC\): Ocean Color Web](#)  
- [OB.DAAC: Get Started](#)  
- [OB.DAAC: Find Data](#)  
- [OB.DAAC: Search and Download Methods](#)  
- [OB.DAAC: Use Data](#)  
- [OB.DAAC: Ocean Data File Search](#)  
- [OB.DAAC: Browse Data \(click "Help" button at upper right, if needed\)](#)   
- [OB.DAAC Gridded Maps: Level 3 & 4 Browser](#)   
- [OB.DAAC: Direct Data Access](#)  
- [OB.DAAC: Tutorials & Data Recipes](#)    
- [OB.DAAC: Access Data from the Ocean Color Instrument \(OCI\)](#)   
- [NASA EarthData: Introduction to PACE Mission, Products, and Data Discovery \(video\)](#)    
- [NASA EarthData: Introduction to PACE Mission, Products, and Data Discovery \(slides\)](#)  
- [Official NASA/OB.DAAC Data Analysis Software: SeaDAS](#)    

User Checklist

✓ Understanding Data

- Know why PACE data are collected and what it measures
- Get a sense of the uncertainties and limitations in the data
- Recognize the value of PACE data for research and application

✓ Accessing Data

- Get NASA EarthData login for data access
- Use OB.DAAC and PACE websites for data and updates
- Learn tools like Worldview, EarthData Search, and other for data retrieval
- Have the right hardware or cloud space for data storage
- Know how the data are organized and its format

✓ Analyzing Data

- Have software tools to visualize and analyze data
- Understand how to manipulate PACE data
- Apply skills to research and applications using PACE
- Share results, products, and analysis-ready data with users

Like Training? Try ARSET

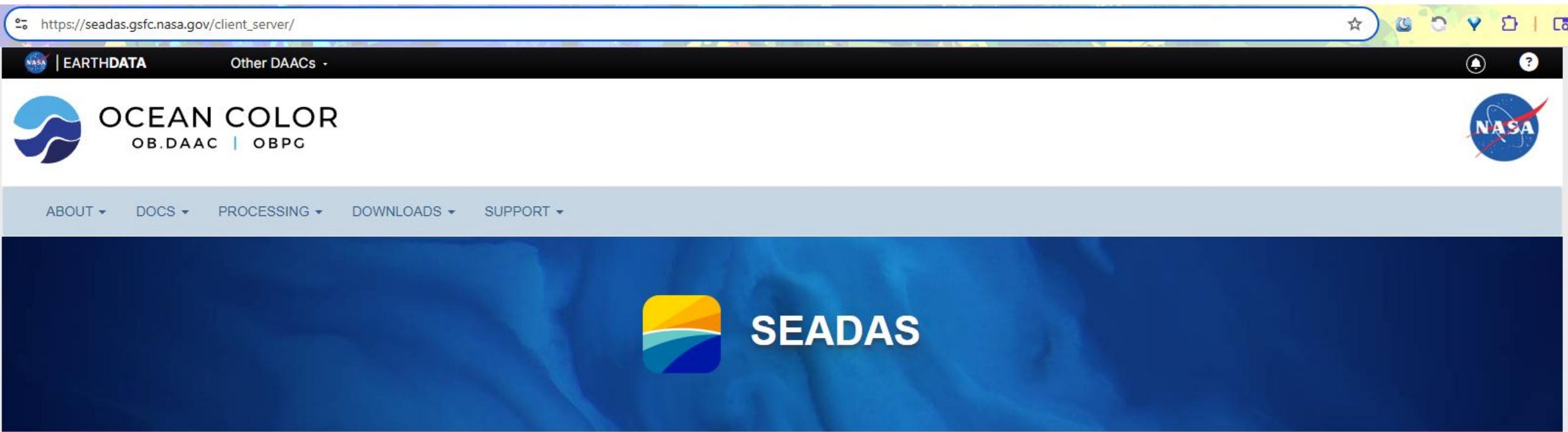
+ Water Quality

+ Coastal Ecosystems

+ Hyperspectral Data

+ Air Quality

https://pace.oceansciences.org/work_with_pace_data.htm



The screenshot shows a web browser window with the URL https://seadas.gsfc.nasa.gov/client_server/ in the address bar. The page header includes the NASA Earthdata logo, the Ocean Color OB.DAAC | OBPG logo, and the NASA logo. The main navigation menu has links for ABOUT, DOCS, PROCESSING, DOWNLOADS, and SUPPORT. The page features a large blue background image with a stylized sun icon and the word "SEADAS".

SeaDAS-OCSSW Client Server Configuration

Introduction

The SeaDAS processing components (OCSSW) can be installed only on Linux or macOS (Intel) systems. For this reason, it has been difficult for Windows users to use the OCSSW programs in an efficient way. SeaDAS 8.1.0 and future releases use a client/server model, which enables the physical decoupling of the SeaDAS GUI application and the OCSSW package. (Note SeaDAS 8.0.0 was a Beta version and did not support client/server model. SeaDAS 7.5 also supports client/server model)

Since the SeaDAS client and the OCSSW server reside on two separate machines, they need a way to share files. They can either transmit the files over the network or use a shared folder. For virtual machines, we can use a shared folder and eliminate the transmission of files over the network.

https://seadas.gsfc.nasa.gov/client_server/

Click for instructions:

Docker

Virtual Machine

Windows Subsystem for Linux

Remote Machine

1. Follow these instructions to install [Docker Desktop](#).
2. Please make sure that you have created a valid `.netrc` file in your home directory (`$HOME`) and also copy it into the `$HOME/seadasClientServerShared/` directory..
3. Under your

`$HOME`

directory, create the

`"ocssw"`

and

`"seadasClientServerShared"`

directories if they don't already exist. (NOTE: You can create these directories anywhere that you have full permission to operate. You have to provide the full path later)

For example,

`> cd`

`> mkdir ocssw`

`> mkdir seadasClientServerShared`

4. Make sure Docker Desktop is running before running the following command in Windows Power Shell's command line:

```
docker run -v $HOME/ocssw:/root/ocssw -v $HOME/seadasClientServerShared:/root/seadasClientServerShared -p 6400:6400 -p 6402:6402 -p 6403:6403 -t seadas/ocssw-run:2.0
```

[Skip to Section 4: SeaDAS Client Configuration.](#)

Section 4: SeaDAS Client Configuration

To configure the client to communicate with the server, the SeaDAS config file needs to be edited.

`${user.dir}\.seadas9\etc\seadas.properties`

◀ Click an environment to see which lines to edit in the `seadas.properties` file:

Docker

Virtual Machine

Windows Subsystem for Linux

Remote Machine

```
seadas.ocssw.location=docker
seadas.ocssw.port=6400
seadas.ocssw.sharedDir=C:\\\\Users\\\\${user.name}\\\\seadasClientServerShared
seadas.client.id=${user.name}
seadas.ocssw.keepFilesOnServer=false
seadas.ocssw.processInputStreamPort=6402
seadas.ocssw.processErrorStreamPort=6403
```

Ask Gordon BETA

Containers

Images

Volumes

Builds

Models BETAMCP Toolkit BETA

Docker Hub

Docker Scout

Extensions

Containers Give feedback ↗

View all your running containers and applications. [Learn more ↗](#)

Container CPU usage ⓘ

0.09% / 2000% (20 CPUs available)

Container memory usage ⓘ

317.2MB / 30.46GB

[Show charts](#)

Search



Only show running containers

Delete



<input checked="" type="checkbox"/>	Name	Container ID	Image	Port(s)	Actions
<input checked="" type="checkbox"/>	optimistic_kirch	ae2827915f41	seadas/oci	6400:6400 ↗ Show all ports (3)	

Selected 1 of 1

Walkthroughs



Multi-container applications

Containerize your application

\$ docker init

https://search.earthdata.nasa.gov/search?fi=OCI&as[instrument][0]=OCI

EARTHDATA SEARCH Find a DAAC ·

Type to search for data Search

Temporal Spatial ⌂ ⌂ ⌂ ⌂

INST. OCI X

Filter Collections

Features

- Available in Earthdata Cloud
- Customizable
- Map Imagery

Keywords

Platforms

Instruments 1 Selected

Organizations

Projects

Processing Levels

Data Format

Tiling System

Horizontal Data Resolution

Latency

Additional Filters

- Include collections without granules
- Include only EOSDIS collections

68 Matching Collections

Showing 20 of 68 matching collections Sort: Usage View: List

PACE OCI Level-1B Science Data, version 3
67,142 Granules 2024-03-05 to Present

The primary sensor aboard the PACE spacecraft is the Ocean Color Instrument (OCI). It is a highly advanced optical spectrometer that will be used to meas...

GEOSS • PACE_OCI_L1B_SCI v3 - NASA/GSFC/SED/ESD/GCDC/OB.DAAC

PACE OCI Level-2 Regional Apparent Optical Properties Data, version 3.0
56,872 Granules 2024-03-05 to Present

The primary sensor aboard the PACE spacecraft is the Ocean Color Instrument (OCI). It is a highly advanced optical spectrometer that will be used to meas...

GEOSS • PACE_OCI_L2_AOP v3.0 - NASA/GSFC/SED/ESD/GCDC/OB.DAAC

PACE OCI Level-2 Regional Ocean Biogeochemical Properties, Near Real-time (NRT) Data, version 3.0
27,291 Granules 2024-03-05 to Present

The Ocean Biology DAAC produces near real-time (quicklook) products using the best-available combination of ancillary data from meteorological and...

GEOSS • PACE_OCI_L2_BGC_NRT v3.0 - NASA/GSFC/SED/ESD/GCDC/OB.DAAC

PACE OCI Level-2 Regional Surface Reflectance Data, version 3.0
56,872 Granules 2024-03-05 to Present

The primary sensor aboard the PACE spacecraft is the Ocean Color Instrument (OCI). It is a highly advanced optical spectrometer that will be used to meas...

GEOSS • PACE_OCI_L2_SFREFL v3.0 - NASA/GSFC/SED/ESD/GCDC/OB.DAAC

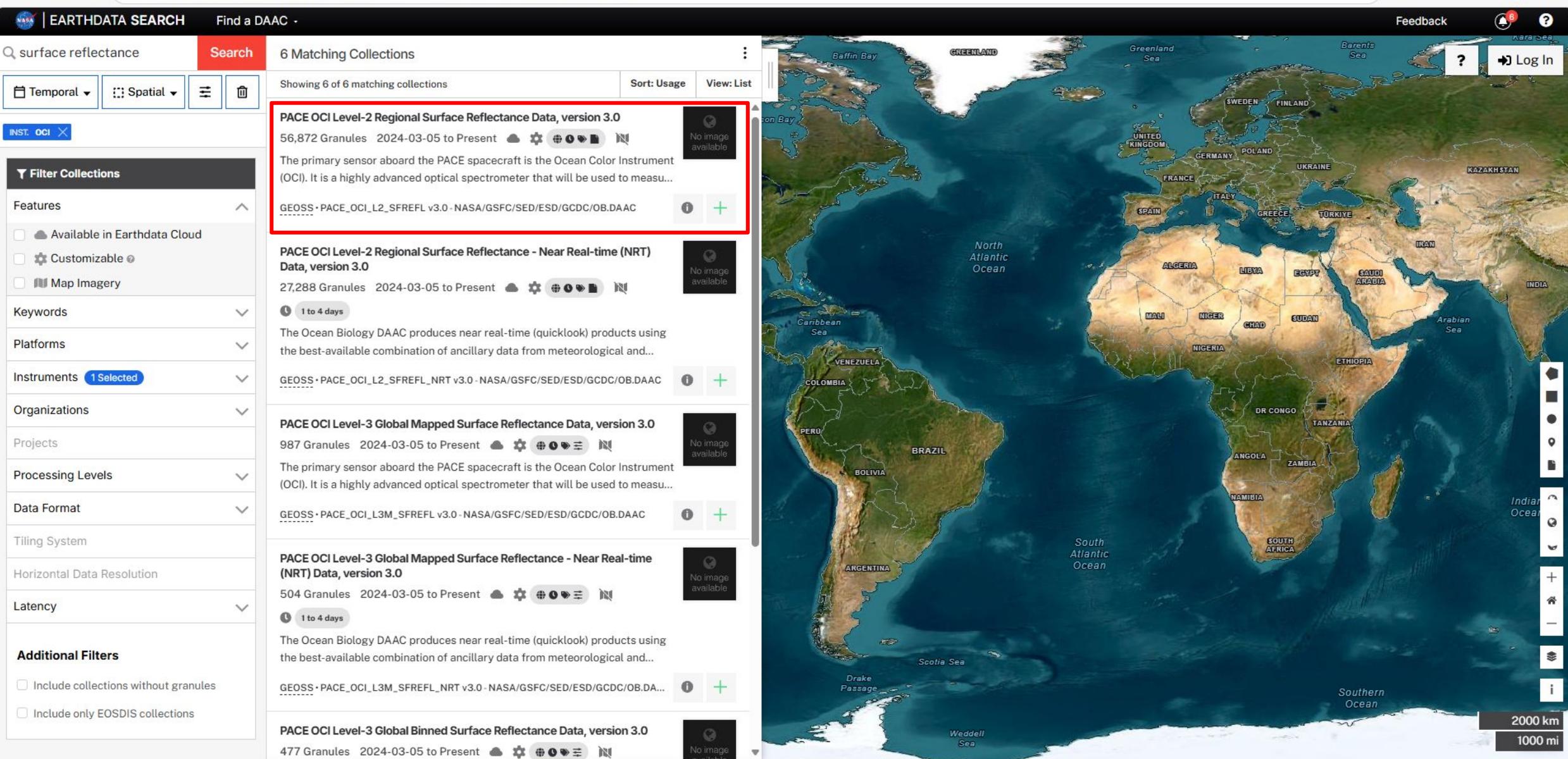
PACE OCI Level-2 Regional Apparent Optical Properties - Near Real-time (NRT) Data, version 3.0
27,292 Granules 2024-03-05 to Present

The Ocean Biology DAAC produces near real-time (quicklook) products using the best-available combination of ancillary data from meteorological and...

GEOSS • PACE_OCI_L2_AOP v3.0 - NASA/GSFC/SED/ESD/GCDC/OB.DAAC

Feedback Log In ?

2000 km
1000 mi



https://search.earthdata.nasa.gov/search/granules?p=C3385050059-OB_CLOUD&pg[0][v]=f&pg[0][gsk]=-start_date&q=surface%20reflectance&sb[0]=-92.98828%2C9.05273%2C-80.85937%2C20.47852&fi=OCI&as[instrument...]

EARTHDATA SEARCH Find a DAAC · Feedback

Search Results (6 Collections)

PACE OCI Level-2 Regional Surface Reflectance Data, version 3.0

Showing 20 of 985 matching granules

Sort: Start Date (Newest) View: List

INST. OCI X

Spatial Rectangle

SW: 9.05273,-92.98828
 NE: 20.47852,-80.85937

Filter Granules Clear Filters

Granule Search
 Granule ID(s)
 Example: *_20240101_*_*_20240102_*

Temporal
Start
 Type or click to select a date
 YYYY-MM-DD HH:mm:ss

End
 Type or click to select a date
 YYYY-MM-DD HH:mm:ss

Use a recurring date range

Day/Night
 Find granules captured during the day, night or anytime.

PACE OCI Level-2 Regional Surface Reflect...

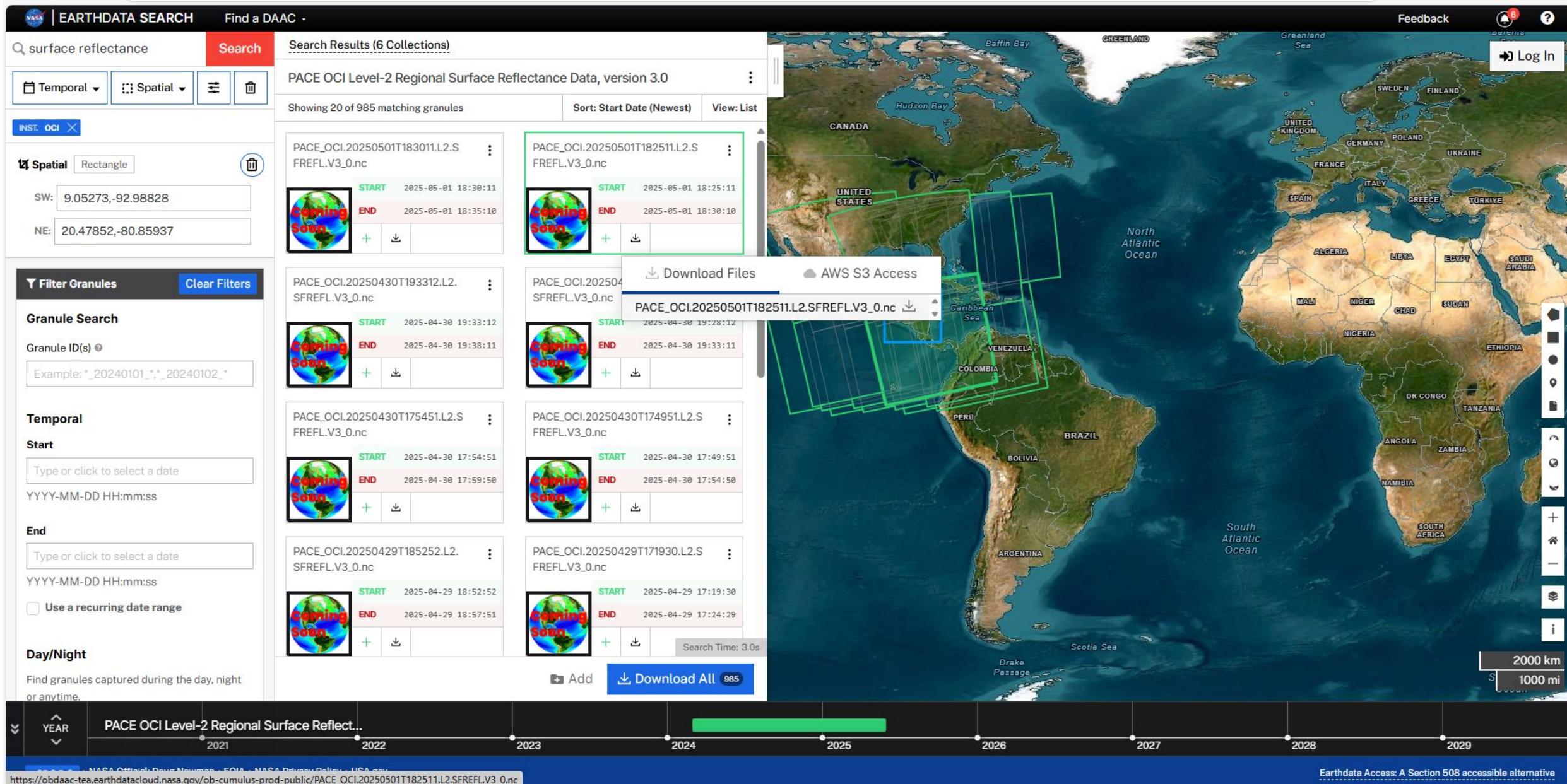
2021 2022 2023 2024 2025 2026 2027 2028 2029

+ Add Download All 985

Search Time: 3.0s

Greenland, Baffin Bay, Hudson Bay, Canada, United States, Mexico, Caribbean Sea, Venezuela, Colombia, Brazil, Argentina, South Africa, Australia, New Zealand, South Pacific, North Atlantic Ocean, South Atlantic Ocean, Drake Passage, Scotia Sea, Africa, Europe, Asia, Australia, Oceania

2000 km S 1000 mi



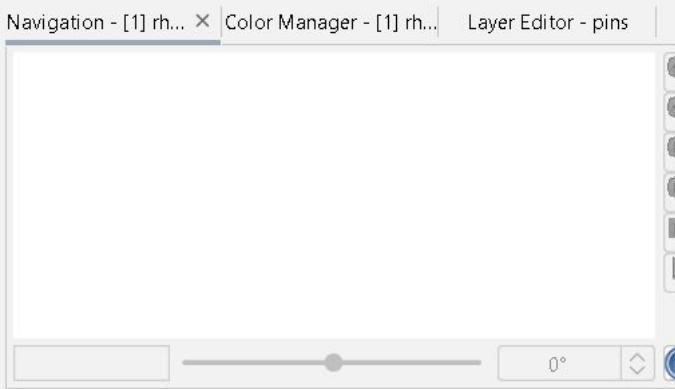
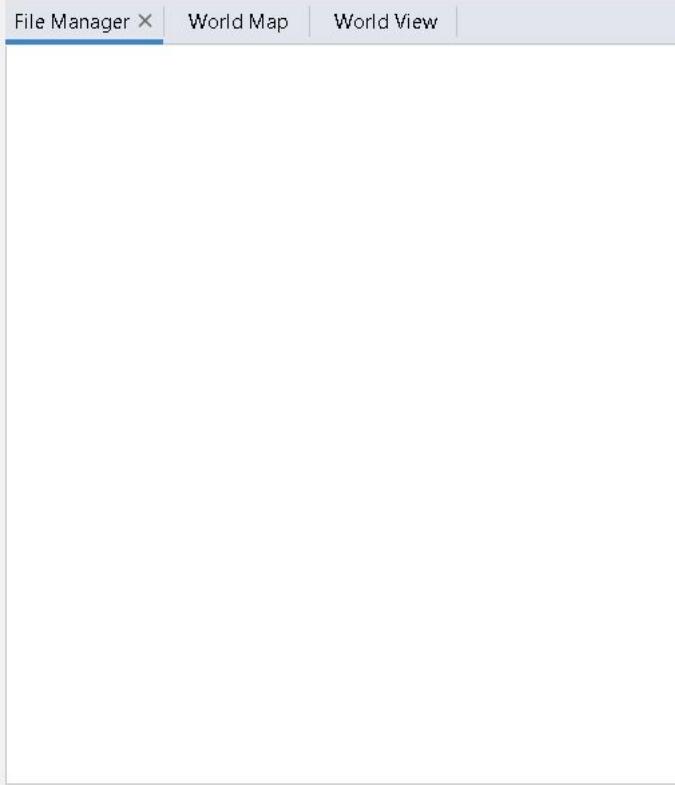
SeaDAS

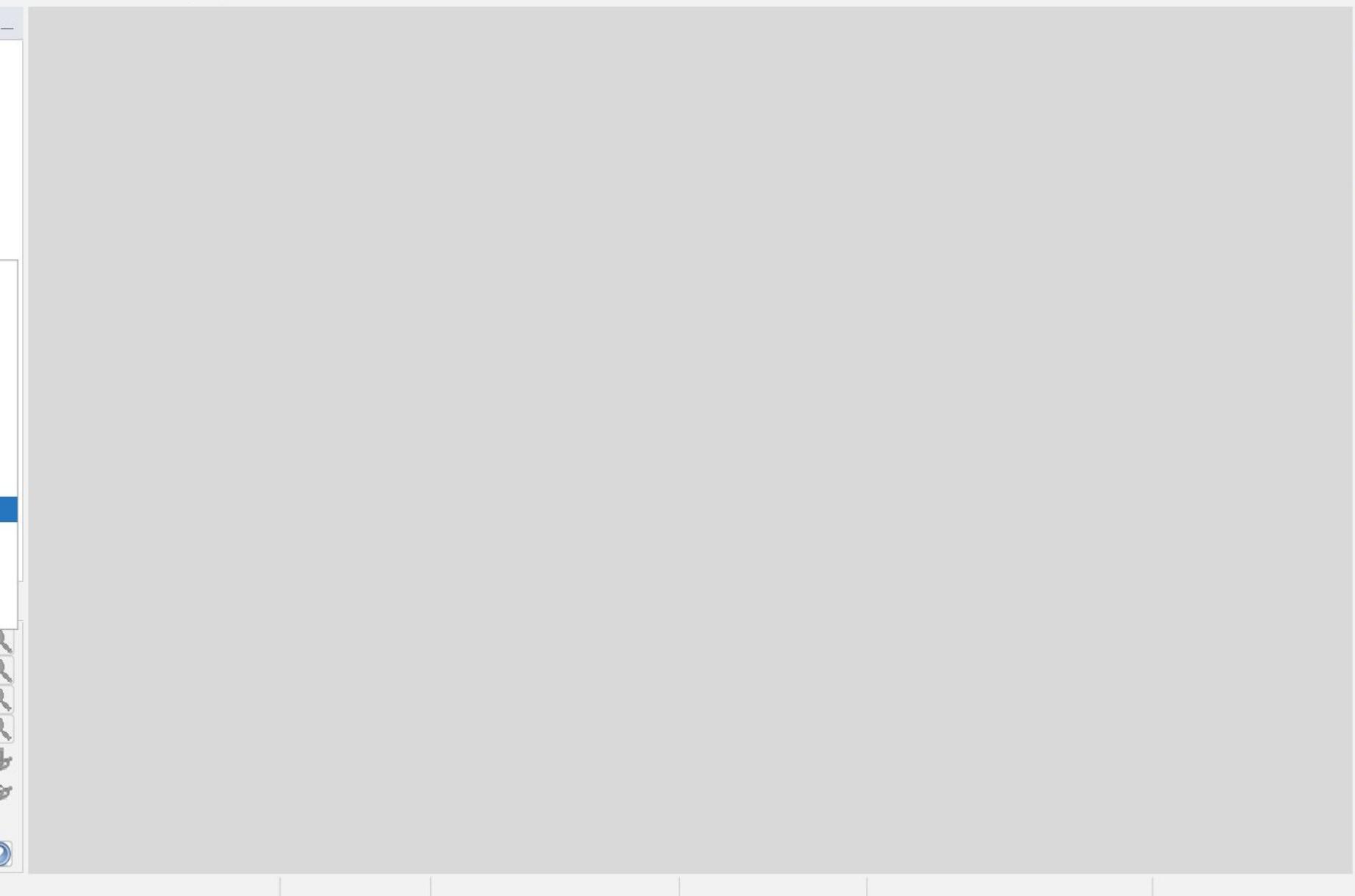
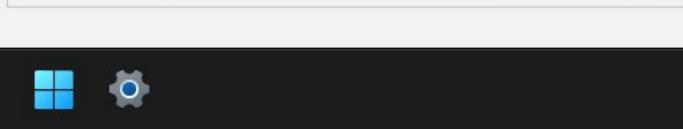
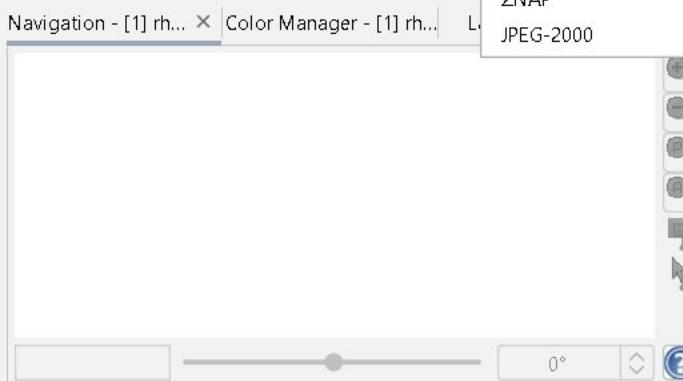
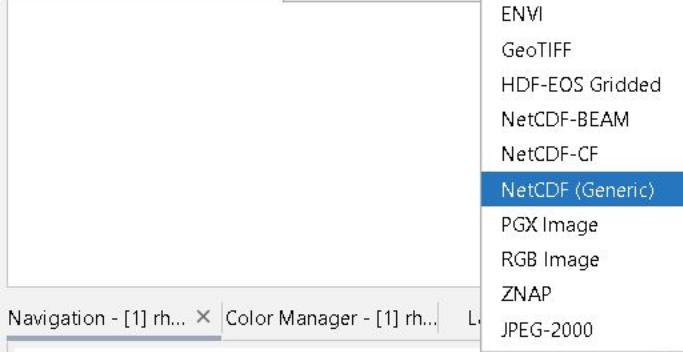
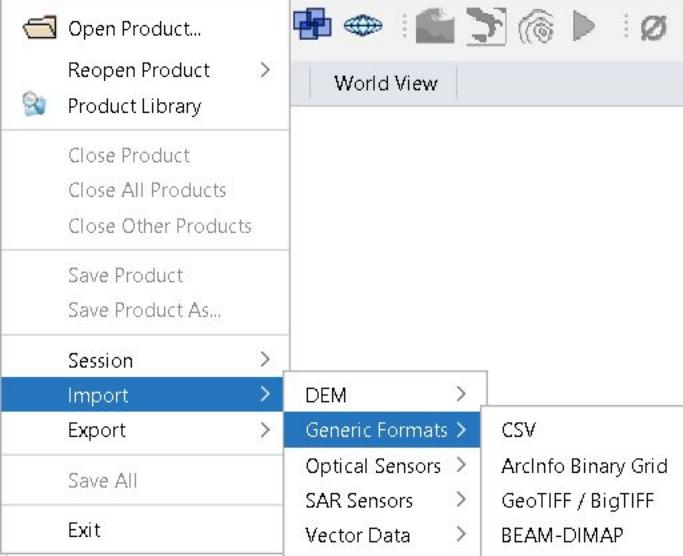
Done loading modules.



Sea, earth & atmosphere Data Analysis System

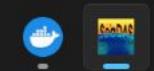
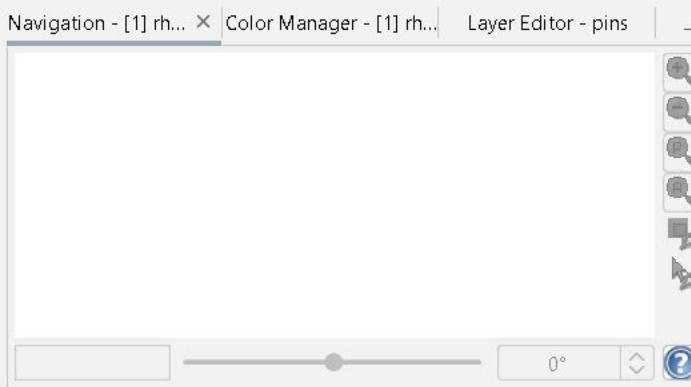
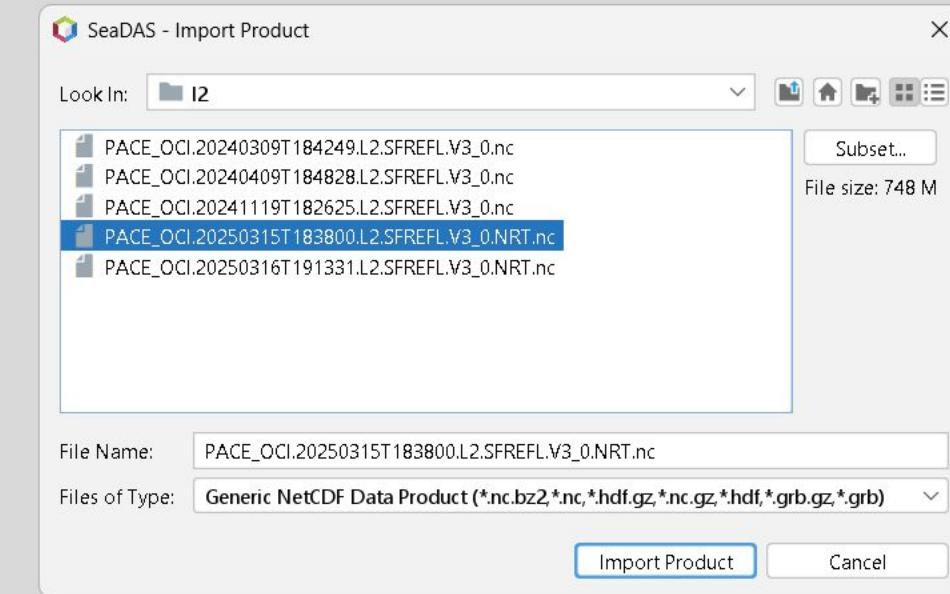








File Manager X World Map | World View



Layer Manager Mask Manager Pixel Info



File Manager X World Map World View

- ▼ [1] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT
 - > Metadata
 - > Flag Codings
 - > Vector Data
 - ▼ Bands
 - I2_flags
 - longitude
 - latitude

Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins



0°

Layer Manager Mask Manager Pixel Info





File Manager X

SeaDAS Processor... Install/Update SeaDAS processors and supported missions

- [1] PACE_OI
- > Metadata...
- > Flag Code...
- > Vector...
- ▼ Bands
 - I2_flags
 - longitude
 - latitude

Layer Manager Mask Manager Pixel Info

Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins

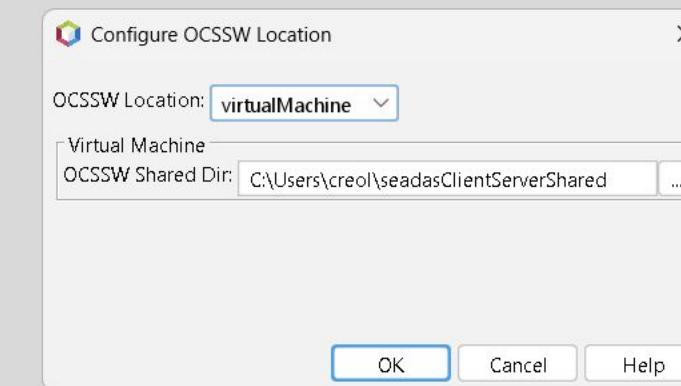
A vertical panel containing a navigation bar, a color manager, and a layer editor. It includes a color bar, zoom controls, and a status bar indicating a 0° angle.





File Manager X World Map World View

- ▼ [1] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT
 - > Metadata
 - > Flag Codings
 - > Vector Data
 - ▼ Bands
 - I2_flags
 - longitude
 - latitude



Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins



0°

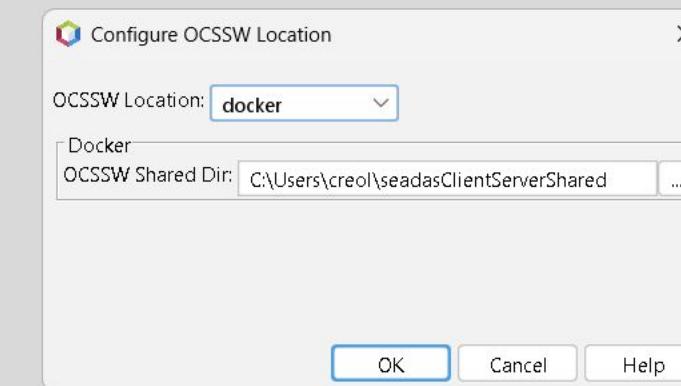
Layer Manager Mask Manager Pixel Info





File Manager X World Map World View

- ▼ [1] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT
 - > Metadata
 - > Flag Codings
 - > Vector Data
 - ▼ Bands
 - I2_flags
 - longitude
 - latitude



Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins



0°

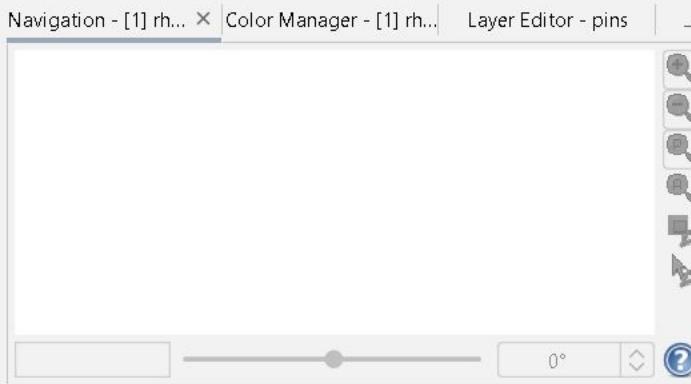
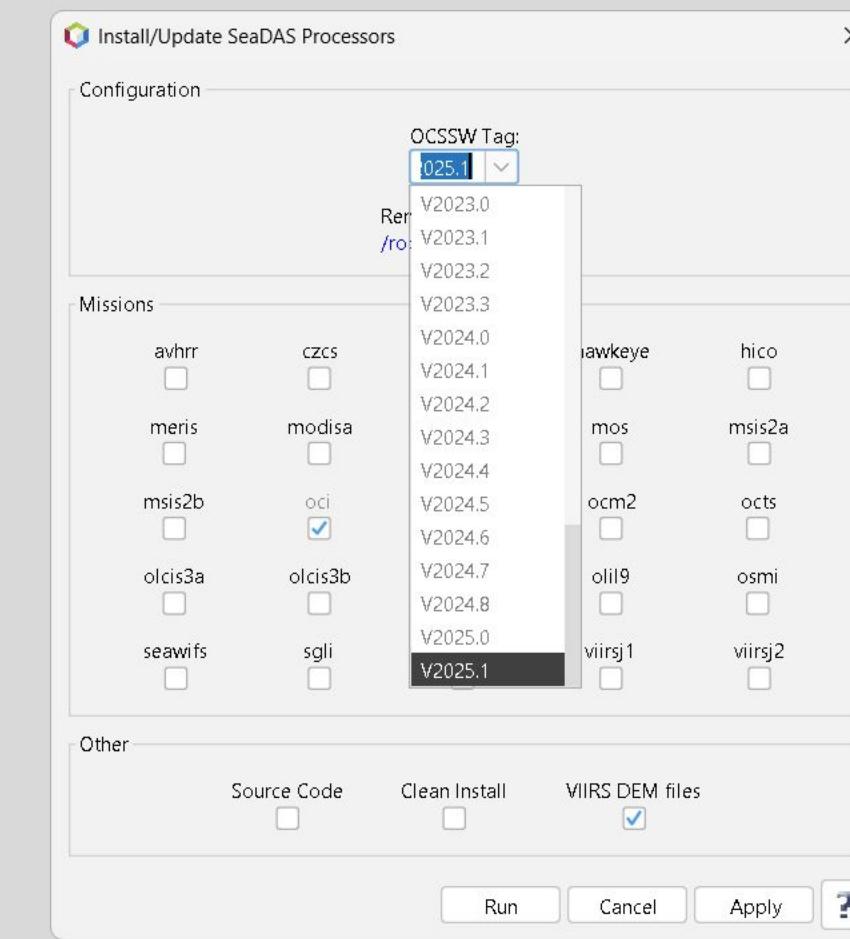
Layer Manager Mask Manager Pixel Info





File Manager X World Map World View

- ▶ [1] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT
 - > Metadata
 - > Flag Codings
 - > Vector Data
 - ▶ Bands
 - I2_flags
 - longitude
 - latitude



Layer Manager Mask Manager Pixel Info



File Manager X World Map World View

- ▶ [1] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT
 - > Metadata
 - > Flag Codings
 - > Vector Data
 - ▶ Bands
 - I2_flags
 - longitude
 - latitude

Install/Update SeaDAS Processors

X

Configuration

OCSSW Tag:
!025.1

Remote install_dir:
`/root/ocssw`

Missions

avhrr	czcs	goci	hawkeye	hico
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
meris	modisa	modist	mos	msis2a
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
msis2b	oci	ocm1	ocm2	octs
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
olcis3a	olcis3b	olil8	olil9	osmi
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
seawifs	sgli	viirsn	viirsj1	viirsj2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other

Source Code Clean Install VIIRS DEM files

Run Cancel Apply ?

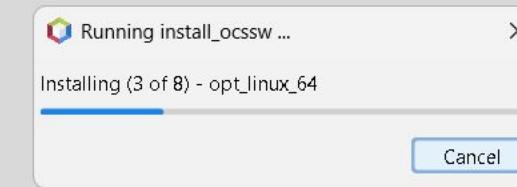


Layer Manager Mask Manager Pixel Info



File Manager X World Map World View

- ▼ [1] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT
 - > Metadata
 - > Flag Codings
 - > Vector Data
 - ▼ Bands
 - I2_flags
 - longitude
 - latitude



Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins



Layer Manager Mask Manager Pixel Info



File Manager X World Map World View

- ▼ [1] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT
 - > Metadata
 - > Flag Codings
 - > Vector Data
 - ▼ Bands
 - I2_flags
 - longitude
 - latitude



Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins



0°

Layer Manager Mask Manager Pixel Info





File Manager X

- > [1] PACE_OI
- > Metadata
- > Flag Code
- > Vector Data
- > Bands
 - I2_flags
 - longitude
 - latitude

- SeaDAS Processors >
 - Tools >
 - extractors...
 - HawkEye >
 - MODIS >
 - VIIRS >
 - I1bgen_generic...
 - I2gen...
 - I2bin... Creates a L3 bin file from input L2 file(s)
 - I3bin...
 - I3gen...
 - mapgen...
 - I3mapgen...
 - multilevel_processor...

Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins



0°

Layer Manager Mask Manager Pixel Info





File Manager X World Map World View

- ▼ [1] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT
 - > Metadata
 - > Flag Codings
 - > Vector Data
 - ▼ Bands
 - I2_flags
 - longitude
 - latitude

multilevel_processor

Main Processor Chain

Processor	Parameters	Odir
modis_L1A		
modis_GEO		
geolocate_hawkeye		
geolocate_viirs		
I1aextract		
modis_L1B		
calibrate_viirs		
I1bgen_generic		
I1brsgen		
I2gen	<input checked="" type="checkbox"/>	
I2extract	<input checked="" type="checkbox"/>	
I2brsgen	<input checked="" type="checkbox"/>	
I2bin	<input checked="" type="checkbox"/>	
I3mapgen	<input checked="" type="checkbox"/>	

Run Cancel Apply ?

Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins





File Manager X World Map | World View

[3] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc

- > Metadata
- > Flag Codings
- > Vector Data
- > Bands
 - rhos
 - rhos_346 (346.017 nm)
 - rhos_351 (350.912 nm)
 - rhos_356 (355.782 nm)
 - rhos_361 (360.695 nm)
 - rhos_366 (365.61 nm)
 - rhos_371 (370.534 nm)
 - rhos_375 (375.482 nm)
 - rhos_380 (380.419 nm)
 - rhos_385 (385.359 nm)
 - rhos_390 (390.297 nm)
 - rhos_395 (395.238 nm)
 - rhos_400 (400.178 nm)
 - rhos_405 (405.127 nm)
 - rhos_410 (410.074 nm)
 - rhos_415 (415.025 nm)
 - rhos_420 (419.988 nm)
 - rhos_425 (424.94 nm)
 - rhos_430 (429.885 nm)
 - rhos_435 (434.860 nm)

Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins



0°

Layer Manager Mask Manager Pixel Info



[3] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc - [C:\gis\workspace\temp_2025\nasa_pace_oci_sr\l2\PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc] - SeaDAS

File Edit View SeaDAS-Toolbox Analysis Layer Vector Raster Optical Tools Window Earthdata-Cloud Video-Tutorials Help

Search (Ctrl+I)

File Manager X World Map World View

- rhos_724 (724.303 nm)
- rhos_729 (729.299 nm)
- rhos_734 (734.281 nm)
- rhos_739 (739.287 nm)
- rhos_742 (741.785 nm)
- rhos_744 (744.286 nm)
- rhos_747 (746.789 nm)
- rhos_749 (749.279 nm)
- rhos_752 (751.792 nm)
- rhos_754 (754.294 nm)
- rhos_772 (771.823 nm)
- rhos_774 (774.338 nm)
- rhos_779 (779.336 nm)
- rhos_784 (784.35 nm)
- rhos_789 (789.367 nm)
- rhos_794 (794.382 nm)
- rhos_799 (799.394 nm)
- rhos_804 (804.409 nm)
- rhos_809 (809.428 nm)
- rhos_814 (814.44 nm)
- rhos_819 (819.456 nm)
- rhos_824 (824.462 nm)
- rhos_829 (829.489 nm)
- rhos_835 (834.507 nm)

Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins

Open Image Window
Open RGB Image Window
Open HSV Image Window
Open Metadata Window
Open Placemark Window
Open Quicklook Window

Tile Horizontally
Tile Horizontally
Tile Vertically
Tile Vertically
Tile Evenly
Tile Evenly
Tile Single
Tile Single

New Workspace... Ctrl-W

Configure Window >
Reset Windows
Go to Previous Window

Close Document
Close All Documents
Close Other Documents

Layer Manager
Mask Manager
Pixel Info

0°

Windows Taskbar icons: File Explorer, Edge, File Manager, SeaDAS, Start button, Settings.



File Manager X World Map | World View

- rhos_724 (724.303 nm)
- rhos_729 (729.299 nm)
- rhos_734 (734.281 nm)
- rhos_739 (739.287 nm)
- rhos_742 (741.785 nm)
- rhos_744 (744.286 nm)
- rhos_747 (746.789 nm)
- rhos_749 (749.279 nm)
- rhos_752 (751.792 nm)
- rhos_754 (754.294 nm)
- rhos_772 (771.823 nm)
- rhos_774 (774.338 nm)
- rhos_779 (779.336 nm)
- rhos_784 (784.35 nm)
- rhos_789 (789.367 nm)
- rhos_794 (794.382 nm)
- rhos_799 (799.394 nm)
- rhos_804 (804.409 nm)
- rhos_809 (809.428 nm)
- rhos_814 (814.44 nm)
- rhos_819 (819.456 nm)
- rhos_824 (824.462 nm)
- rhos_829 (829.489 nm)
- rhos_835 (834.507 nm)

Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins

Select RGB-Image Channels

Profile:

GOCI TrueColor Log(660,555,490) (modified)

Red: rhos_1618

 fixed range min max

Green: rhos_835

 fixed range min max

Blue: rhos_662

 fixed range min max

Valid Pixel Expression

Expressions are valid

 Store RGB channels as virtual bands in current product

OK

Cancel

Help



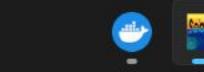
File Manager X World Map | World View

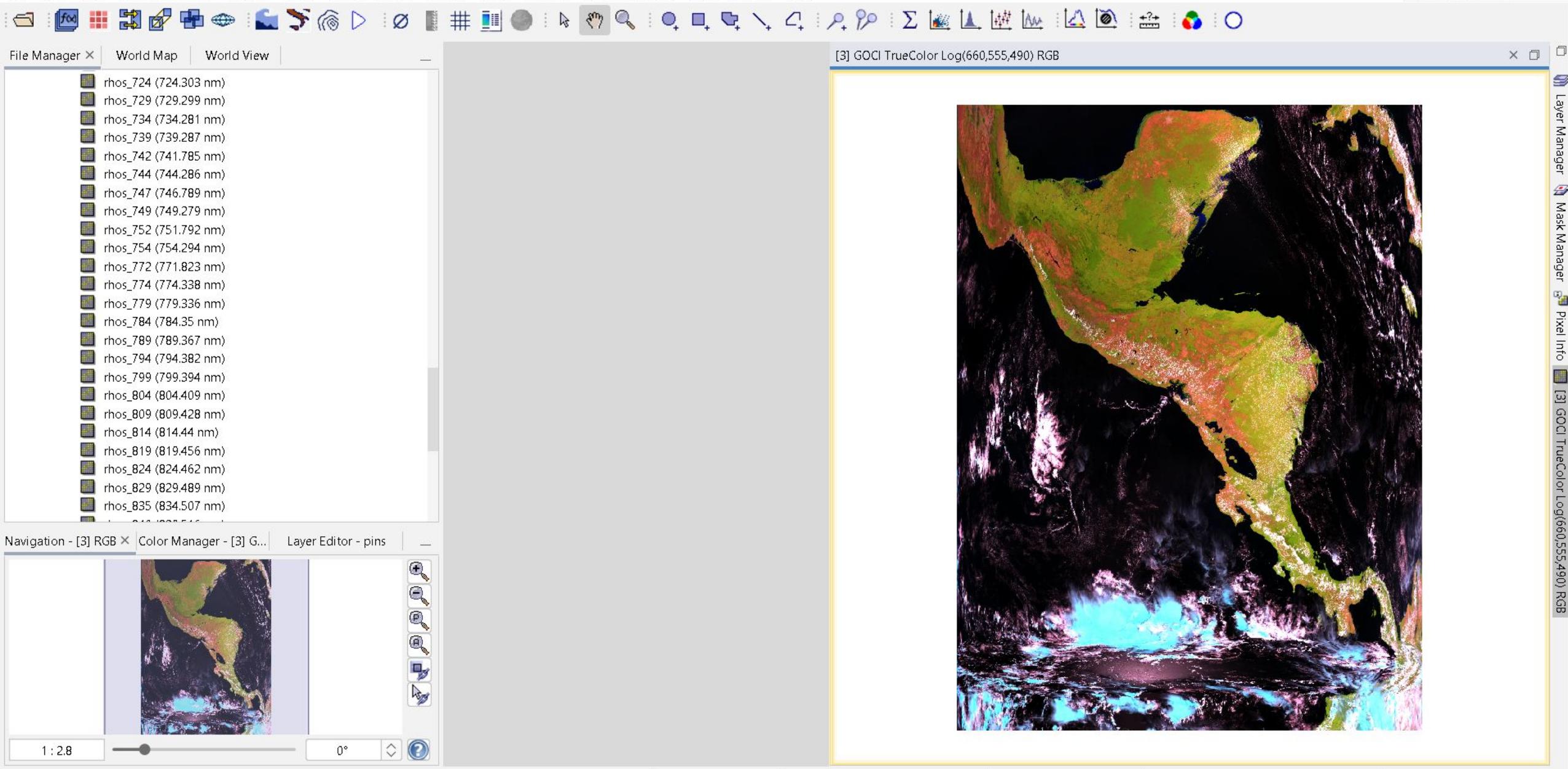
- [] rhos_724 (724.303 nm)
- [] rhos_729 (729.299 nm)
- [] rhos_734 (734.281 nm)
- [] rhos_739 (739.287 nm)
- [] rhos_742 (741.785 nm)
- [] rhos_744 (744.286 nm)
- [] rhos_747 (746.789 nm)
- [] rhos_749 (749.279 nm)
- [] rhos_752 (751.792 nm)
- [] rhos_754 (754.294 nm)
- [] rhos_772 (771.823 nm)
- [] rhos_774 (774.338 nm)
- [] rhos_779 (779.336 nm)
- [] rhos_784 (784.35 nm)
- [] rhos_789 (789.367 nm)
- [] rhos_794 (794.382 nm)
- [] rhos_799 (799.394 nm)
- [] rhos_804 (804.409 nm)
- [] rhos_809 (809.428 nm)
- [] rhos_814 (814.44 nm)
- [] rhos_819 (819.456 nm)
- [] rhos_824 (824.462 nm)
- [] rhos_829 (829.489 nm)
- [] rhos_835 (834.507 nm)

Navigation - [1] rh... X Color Manager - [1] rh... Layer Editor - pins



0°



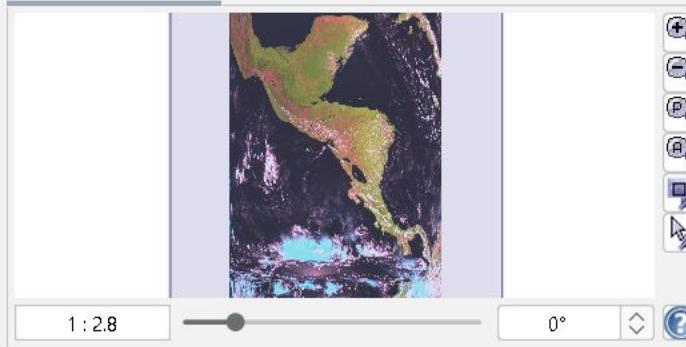




File Manager X World Map | World View

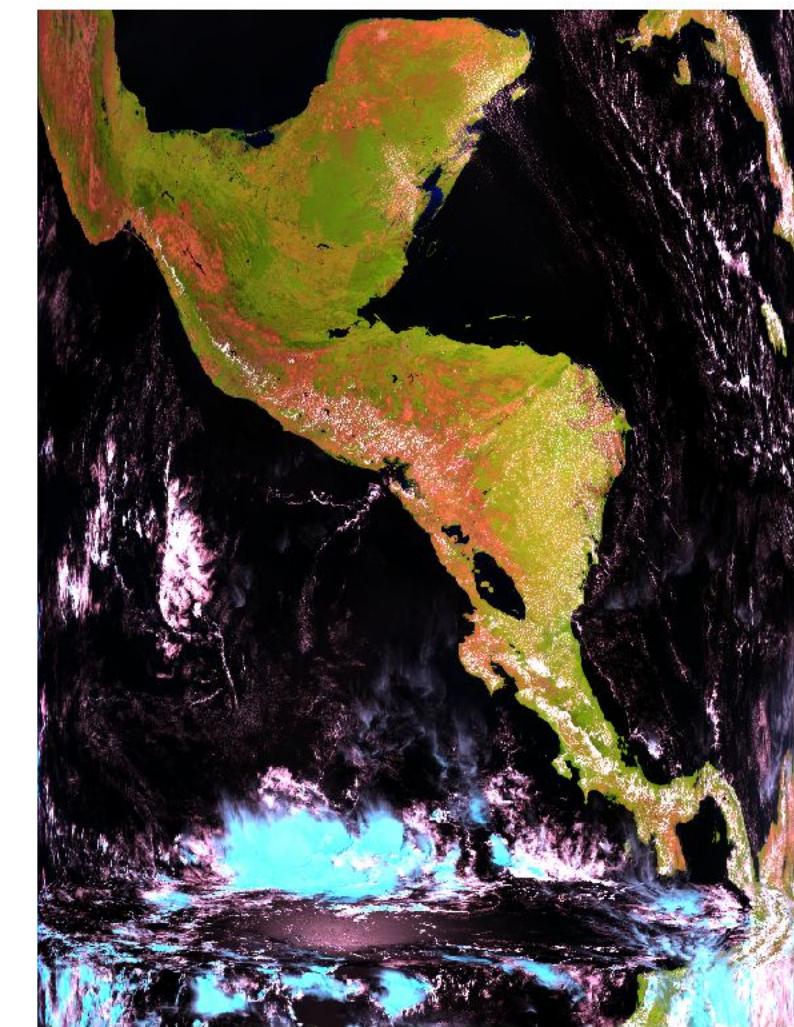
- [] rhos_724 (724.303 nm)
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Navigation - [3] RGB X Color Manager - [3] G... | Layer Editor - pins



- Raster > Time Series
- [] Math Band...
- [] Filter Band...
- Convert Band
- Propagate Uncertainty...
- Geo-Coding Displacement Bands...
- [] Subset...
- DEM Tools >
- Geometric >
 - Resampling
 - Multi-size Mosaic
 - Level-3 Binning
 - GeFolk Co-registration
 - [] Collocation...
 - [] Mosaicking...
 - Reprojection... Creates a reprojection of a file
- Masks
- Data Conversion
- Image Analysis
- Classification
- Segmentation
- Change Detection
- Export
- Bands extractor

[3] GOCI TrueColor Log(660,555,490) RGB



X -- Y -- Lat -- Lon -- Zoom -- Level -- Pixel Spacing: -- m -- m



File Edit View SeaDAS-Toolbox Analysis Layer Vector Raster Optical Tools Window Earthdata-Cloud Video-Tutorials Help

Search (Ctrl + I)

File Manager X World Map | World View

- rhos_724 (724.303 nm)
- rhos_729 (729.299 nm)
- rhos_734 (734.281 nm)
- rhos_739 (739.287 nm)
- rhos_742 (741.785 nm)
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- rhos_819 (819.456 nm)
- rhos_824 (824.462 nm)
- rhos_829 (829.489 nm)
- rhos_835 (834.507 nm)

Reprojection X

File Help

I/O Parameters Reprojection Parameters

Source Product

Name: [3] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc

Target Product

Name: PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc_reprojected

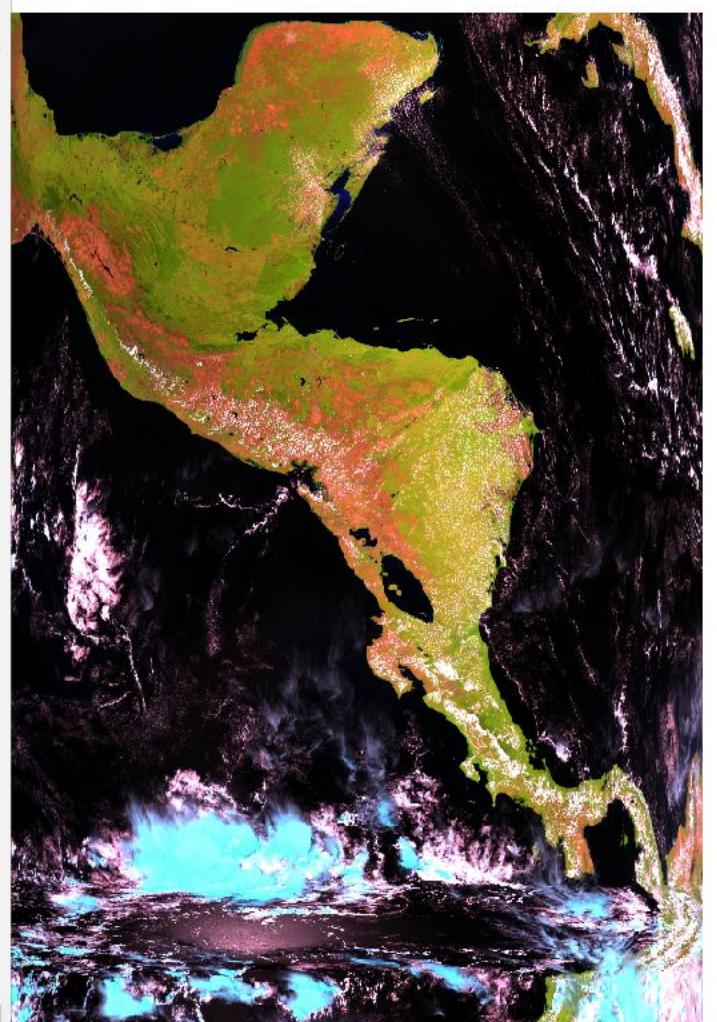
Save as: BEAM-DIMAP

Directory: C:\gis\workspace\temp_2025\nasa_pace_oci_sr\l3b_reproj_gcs

Open in SeaDAS

Run Close

Navigation - [3] RGB X Color Manager - [3] G... Layer Editor - pins



Pixel Spacing: -- m -- m



[3] GOCI TrueColor Log(660,555,490) RGB - PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc - C:\gis\workspace\temp_2025\nasa_pace_oci_sr\l2\PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc - SeaDAS

File Edit View SeaDAS-Toolbox Analysis Layer Vector Raster Optical Tools Window Earthdata-Cloud Video-Tutorials Help

Search (Ctrl + I)

File Manager X World Map | World View

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- rhos_829 (829.489 nm)
- rhos_835 (834.507 nm)

Reprojection

I/O Parameters Reprojection Parameters

Coordinate Reference System (CRS)

Custom CRS

Geodetic datum: World Geodetic System 1984

Projection: Geographic Lat/Lon (WGS 84)

Predefined CRS

Use CRS of

Masking

Expression:

Apply source valid pixel expression

Output Settings

Resolution

Preserve resolution

Output Parameters...

Resampling method: Nearest

No-data value: NaN

Retain valid pixel expression

Reproject tie-point grids

Add delta lat/lon bands

Output Information

Scene width: 1784 pixel

Scene height: 1711 pixel

Center longitude: 87°03'45" W

Center latitude: 12°26'08" N

CRS: WGS84(DD)

Show WKT

Run Close

Navigation - [3] RGB X Color Manager - [3] G... Layer Editor - pins

1:2.8 0° ?

X -- Y -- Lat -- Lon -- Zoom -- Level -- Pixel Spacing: -- m -- m

Layer Manager Mask Manager Pixel Info [3] GOCI TrueColor Log(660,555,490) RGB

[3] GOCI TrueColor Log(660,555,490) RGB - PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc - C:\gis\workspace\temp_2025\nasa_pace_oci_sr\l2\PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc - SeaDAS

File Edit View SeaDAS-Toolbox Analysis Layer Vector Raster Optical Tools Window Earthdata-Cloud Video-Tutorials Help

Search (Ctrl + I)

File Manager X World Map | World View

- rhos_724 (724.303 nm)
- rhos_729 (729.299 nm)
- rhos_734 (734.281 nm)
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Navigation - [3] RGB X Color Manager - [3] G... Layer Editor - pins

Reprojection

I/O Parameters Reprojection Parameters

Coordinate Reference System (CRS)

Custom CRS

Geodetic datum: World Geodetic System 1984

Projection: Geographic Lat/Lon (WGS 84)

Predefined CRS

Use CRS of

Masking

Expression

Apply source valid pixel expression

Edit Expression

Output Settings

Resolution

Preserve resolution

Output Parameters...

Resampling method: Nearest

No-data value: NaN

Retain valid pixel expression

Reproject tie-point grids

Add delta lat/lon bands

Output Information

Scene width: 1784 pixel

Scene height: 1711 pixel

Center longitude: 87°03'45" W

Center latitude: 12°26'08" N

CRS: WGS84(DD)

Show WKT

Run Close

Writing Target Product

Writing...

Cancel

Pixel Spacing: -- m -- m

Layer Manager

Mask Manager

Pixel Info

[3] GOCI TrueColor Log(660,555,490) RGB

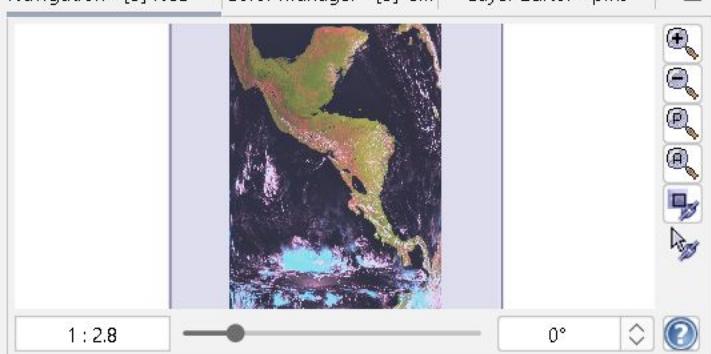
The screenshot shows the SeaDAS software interface with several windows open. The main window displays a satellite map of Central America with various land cover types. A 'Reprojection' dialog box is open, showing settings for coordinate reference systems and output parameters. A separate 'Writing Target Product' dialog box is also visible, indicating a process is underway. The bottom navigation bar includes tools for zooming, panning, and layer management.



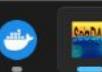
File Manager X World Map World View

- > [3] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc
- > [4] PACE_OCI.20250315T183800.L2.SFREFL.V3_0.NRT.nc_reprojected
 - > Metadata
 - > Flag Codings
 - > Vector Data
 - > Bands
 - > rhos
 - rhos_346 (346.017 nm)
 - rhos_351 (350.912 nm)
 - rhos_356 (355.782 nm)
 - rhos_361 (360.695 nm)
 - rhos_366 (365.61 nm)
 - rhos_371 (370.534 nm)
 - rhos_375 (375.482 nm)
 - rhos_380 (380.419 nm)
 - rhos_385 (385.359 nm)
 - rhos_390 (390.297 nm)
 - rhos_395 (395.238 nm)
 - rhos_400 (400.178 nm)
 - rhos_405 (405.127 nm)
 - rhos_410 (410.074 nm)
 - rhos_415 (415.025 nm)
 - rhos_420 (419.988 nm)
 - rhos_425 (424.94 nm)
 - rhos_430 (430.885 nm)

Navigation - [3] RGB X Color Manager - [3] G... Layer Editor - pins



X -- Y -- Lat -- Lon -- Zoom -- Level -- Pixel Spacing: -- m -- m



Layer Manager Mask Manager Pixel Info [3] GOCTrueColorLog(660,555,490) RGB [3] GOCTrueColorLoc

The screenshot displays the SeaDAS software interface with the following components:

- File Manager:** Shows two datasets: [3] PACE_OCI.20250315T183800.L2.SFREFLV3_0.NRT.nc and [4] PACE_OCI.20250315T183800.L2.SFREFLV3_0.NRT.nc_reprojected. The [4] dataset is expanded to show its structure, including Metadata, Flag Codings, Vector Data, Bands, and rhos subfolders. The rhos folder contains numerous sub-bands ranging from 346.017 nm to 424.94 nm.
- Navigation - [4] RGB:** A small preview window showing a portion of the satellite image. It includes a zoom slider set to 21.45 : 1, a rotation control set to 0°, and a help icon.
- Layer Manager:** Located on the far right, it lists three layers: [4] GOCI TrueColor Log(660,555,490) RGB, [3] GOCI TrueColor Log(660,555,490) RGB, and [3] GOCI TrueColor Log(660,555,490) RGB.
- Main Map View:** The central panel shows a TrueColor RGB composite of the Andaman Sea and surrounding landmasses. The image is color-coded to represent different water depths or chlorophyll concentrations, with green and blue tones indicating shallower waters and darker blues indicating deeper waters.

- Open Product...
- Reopen Product >
- Product Library

- Close Product
- Close All Products
- Close Other Products

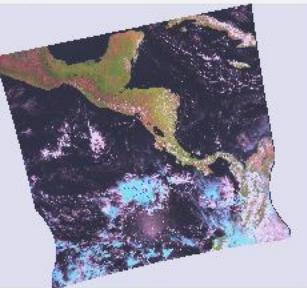
- Save Product
- Save Product As...

- Session > .017 nm)
- Session > .912 nm)
- Session > .782 nm)

- Export > Other >
- Time Series as Google Earth KMZ
- JPEG-2000
- CSV

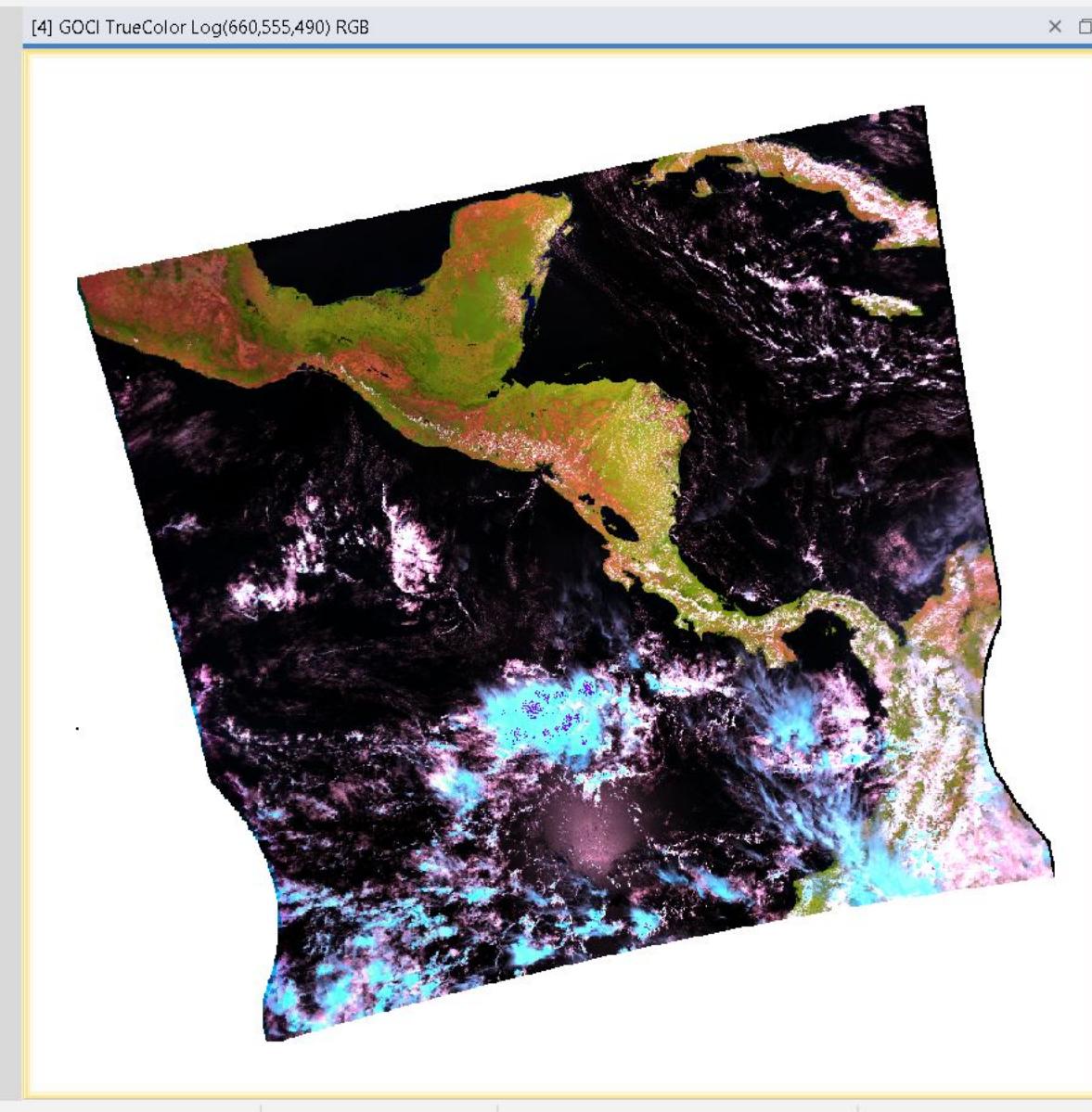
- GeoTIFF / BigTIFF
- BEAM-DIMAP
- ENVI
- GeoTIFF
- HDF5
- NetCDF4-BEAM
- NetCDF4-CF
- ZNAP

Navigation - [4] RGB X | Color Manager - [4] G... | Layer Editor - pins



-
-
-
-
-

21.45 : 1 0°



Layer Manager Mask Manager Pixel Info [3] GOCI TrueColor Log(660,555,490) RGB [3] GOCI TrueColor Log(660,555,490) RGB