



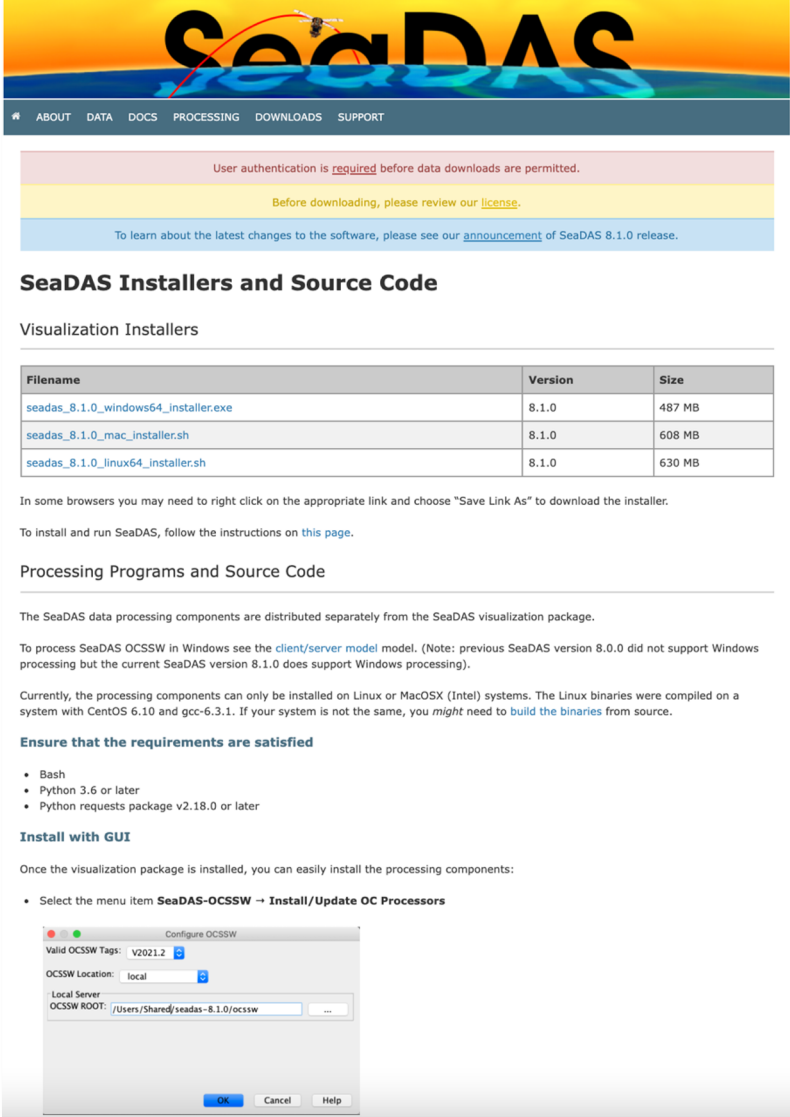
Monitoring Coastal and Estuarine Water Quality Using Remote Sensing and In Situ Data **Installing the OCSSW Package for SeaDAS (Mac OS)**

OceanColor Science Software (OCSSW)

<https://oceandata.sci.gsfc.nasa.gov/>

- Once the SeaDAS visualization package is **successfully installed** on your machine, visit the OCSSW page for details about installing the OCSSW processing components for SeaDAS:

<https://seadas.gsfc.nasa.gov/downloads/#seadas-processing-programs-and-source-code>



SeaDAS

ABOUT DATA DOCS PROCESSING DOWNLOADS SUPPORT

User authentication is **required** before data downloads are permitted.

Before downloading, please review our [license](#).

To learn about the latest changes to the software, please see our [announcement](#) of SeaDAS 8.1.0 release.

SeaDAS Installers and Source Code

Visualization Installers

Filename	Version	Size
seadas_8.1.0_windows64_installer.exe	8.1.0	487 MB
seadas_8.1.0_mac_installer.sh	8.1.0	608 MB
seadas_8.1.0_linux64_installer.sh	8.1.0	630 MB

In some browsers you may need to right click on the appropriate link and choose "Save Link As" to download the installer.

To install and run SeaDAS, follow the instructions on [this page](#).

Processing Programs and Source Code

The SeaDAS data processing components are distributed separately from the SeaDAS visualization package.

To process SeaDAS OCSSW in Windows see the [client/server model](#) model. (Note: previous SeaDAS version 8.0.0 did not support Windows processing but the current SeaDAS version 8.1.0 does support Windows processing).

Currently, the processing components can only be installed on Linux or MacOSX (Intel) systems. The Linux binaries were compiled on a system with CentOS 6.10 and gcc-6.3.1. If your system is not the same, you *might* need to [build the binaries](#) from source.

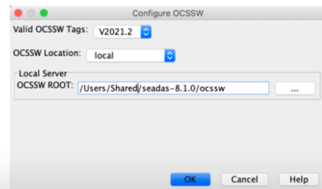
Ensure that the requirements are satisfied

- Bash
- Python 3.6 or later
- Python requests package v2.18.0 or later

Install with GUI

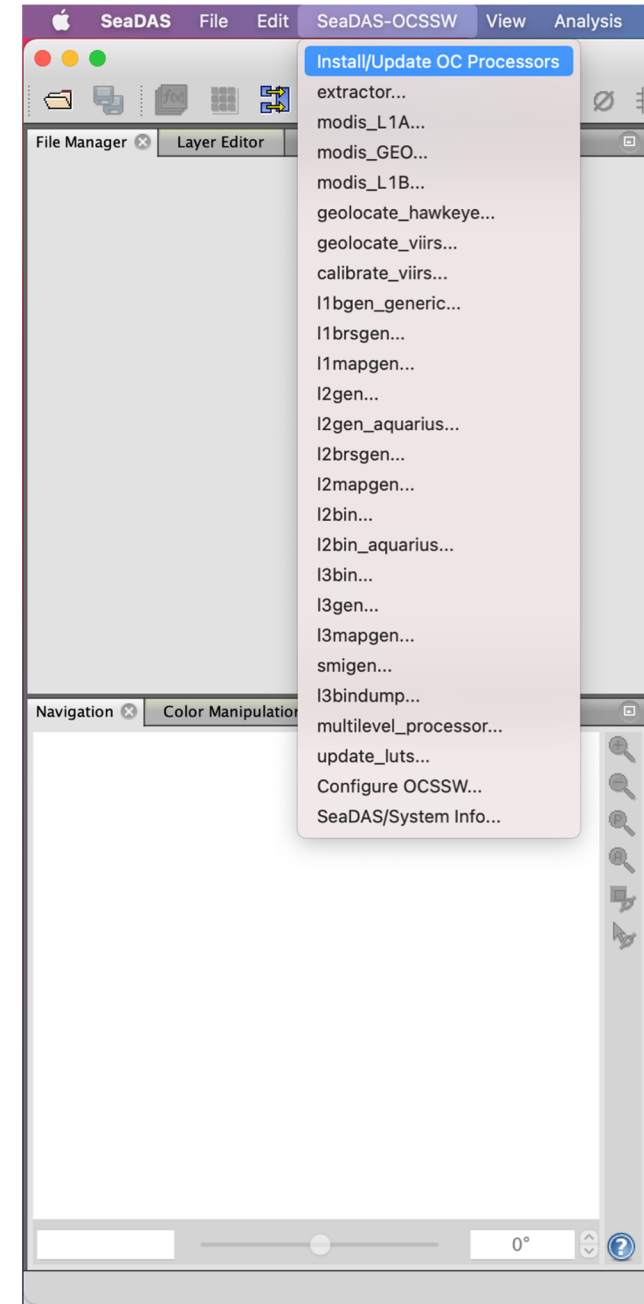
Once the visualization package is installed, you can easily install the processing components:

- Select the menu item **SeaDAS-OCSSW** → **Install/Update OC Processors**

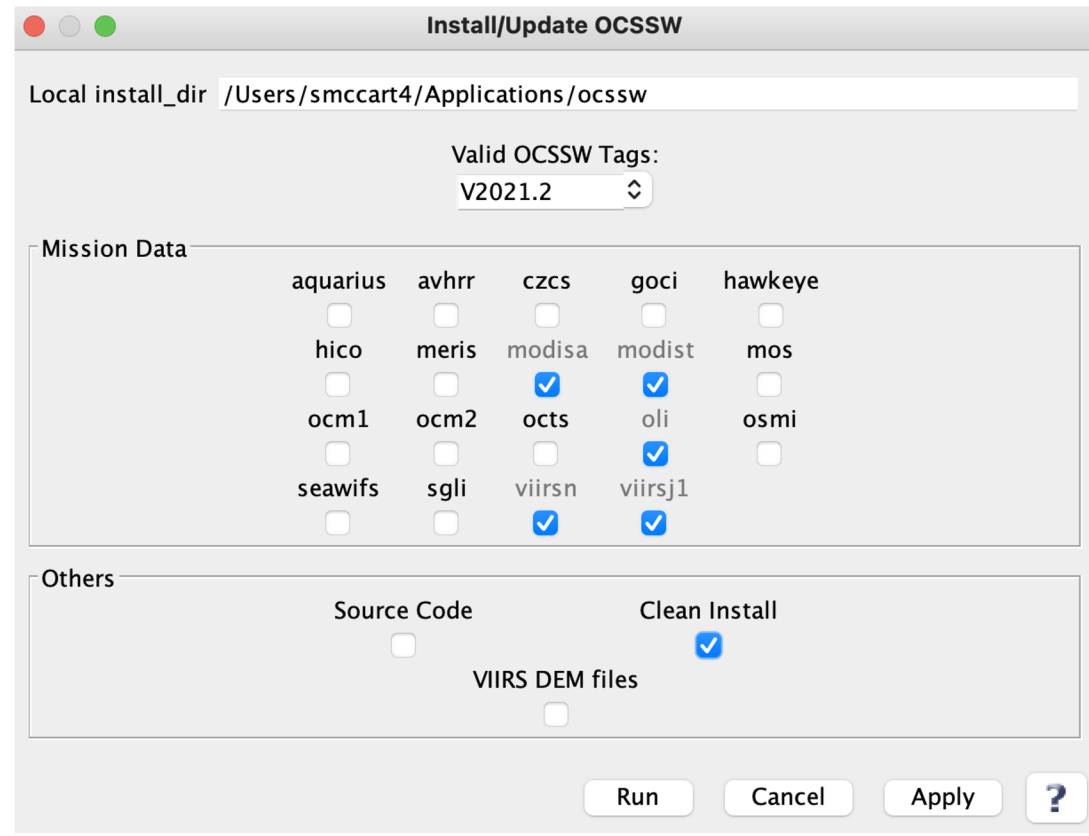


System Requirements for SeaDAS-OCSSW

- After launching the SeaDAS application, go to the menu bar and select:
SeaDAS-OCSSW > Install/Update OC Processors



- The Install/Update OCSSW GUI initially displays a default window, as shown in the image on the right.
- Select the local installation directory (same directory where SeaDAS is installed) and Mission Data files to be included in the installation.
- If the data files of a mission already exist in the system, the checkbox for that mission will be selected in the initial screen. Users can leave missions selected for an update or deselect to skip its installation.
- Check the **Clean Install** option.
- Once finished click Run.



*Make sure modisa, modist, viirsn, and viirsj1 are selected

Troubleshooting OCSSW Installation

- A common error message received on a Mac OS when installing/updating the OCSSW processing components is: ***ModuleNotFoundError: No module named 'requests'***.
- [Requests library](#) (2.18.0 or greater) must be installed with Python v3.x

```
install_ocssw
execution exception: java.io.IOException: install_ocssw failed with exit code 1.
Check log for more details.
Traceback (most recent call last):
  File "/var/folders/fs/1dlt86yn5t3fgflgxn8f9sh0000gp/T/install_ocssw", line 18, in <module>
    import manifest as mf
  File "/private/var/folders/fs/1dlt86yn5t3fgflgxn8f9sh0000gp/T/manifest.py", line 16, in <module>
    import requests
ModuleNotFoundError: No module named 'requests'
```



Troubleshooting OCSSW Installation

- To verify the requirements are met for installation, run the following commands in your Terminal shell.
- **which python3** (*command displays the file path to your Python directory*)

```
(base) smccart4@GSSLA17081917 ~ % which python3
```

- **python3 --version** (*command displays the version of Python*)

```
(base) smccart4@GSSLA17081917 ~ % python3 --version
```

- **pip3 show requests** (*command displays the version of 'requests' library installed along with other information such as location of install*)

```
(base) smccart4@GSSLA17081917 ~ % pip3 show requests
```

Troubleshooting OCSSW Installation

- If the 'requests' library is not installed, run the following commands to install the library:

- **python3 -m pip install --upgrade pip setuptools wheel**

```
(base) smccart4@GSSLA17081917 ~ % python3 -m pip install --upgrade pip setuptools wheel
```

- **python3 -m pip install requests**

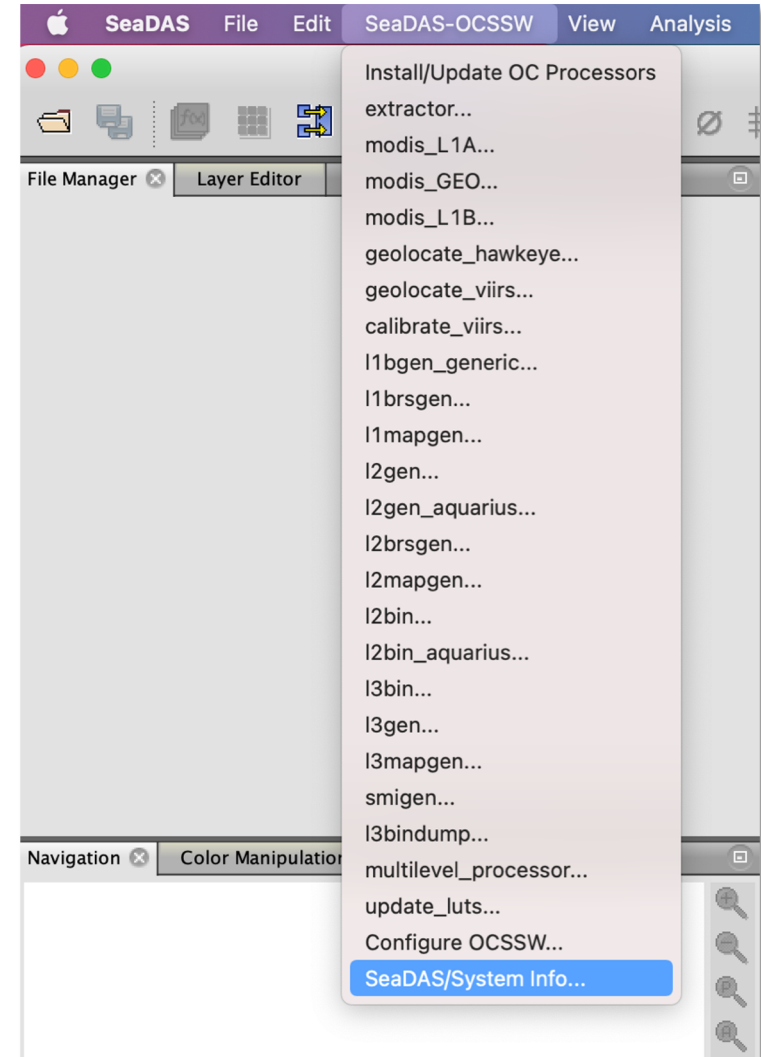
```
(base) smccart4@GSSLA17081917 ~ % python3 -m pip install requests
```

- Return to slides 3 & 4 and repeat the steps to install the OC Processors.



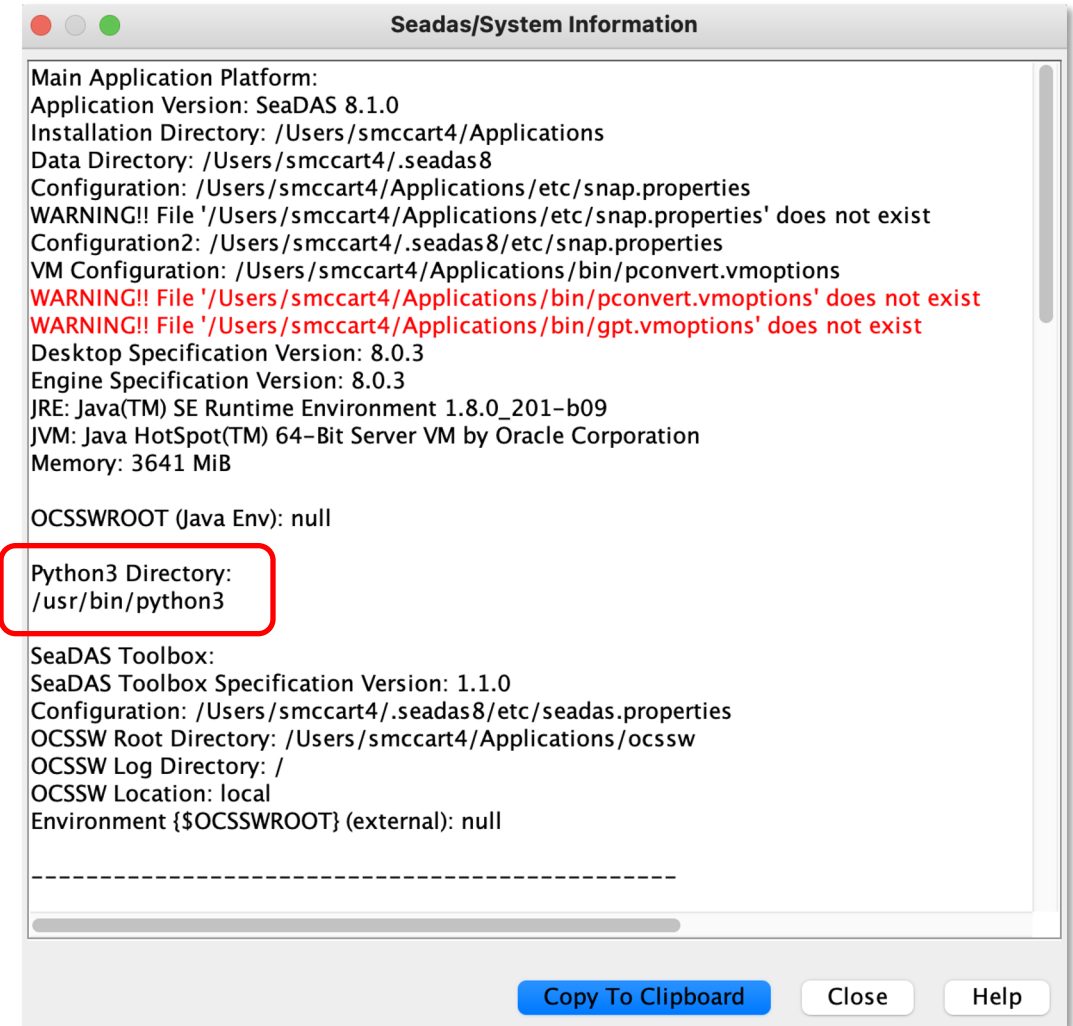
Troubleshooting OCSSW Installation

- If you are still receiving the error message ***ModuleNotFoundError: No module named 'requests'***, this could have to do with SeaDAS pointing to a different Python3 installed on your machine.
- To confirm this, launch the SeaDAS application and under **SeaDAS-OCSSW** in the menu bar, select **SeaDAS/System Info...**



Troubleshooting OCSSW Installation

- Scroll through the SeaDAS system information and find the directory path to Python3 SeaDAS is pointing to.
- If the directory path to Python3 in SeaDAS is different than the directory path provided when running the Terminal command **which python**, this could explain why the 'requests' library is not being found and you are receiving an error message.



```
Seadas/System Information

Main Application Platform:
Application Version: SeaDAS 8.1.0
Installation Directory: /Users/smccart4/Applications
Data Directory: /Users/smccart4/.seadas8
Configuration: /Users/smccart4/Applications/etc/snap.properties
WARNING!! File '/Users/smccart4/Applications/etc/snap.properties' does not exist
Configuration2: /Users/smccart4/.seadas8/etc/snap.properties
VM Configuration: /Users/smccart4/Applications/bin/pconvert.vmoptions
WARNING!! File '/Users/smccart4/Applications/bin/pconvert.vmoptions' does not exist
WARNING!! File '/Users/smccart4/Applications/bin/gpt.vmoptions' does not exist
Desktop Specification Version: 8.0.3
Engine Specification Version: 8.0.3
JRE: Java(TM) SE Runtime Environment 1.8.0_201-b09
JVM: Java HotSpot(TM) 64-Bit Server VM by Oracle Corporation
Memory: 3641 MiB

OCSSWROOT (Java Env): null

Python3 Directory:
/usr/bin/python3

SeaDAS Toolbox:
SeaDAS Toolbox Specification Version: 1.1.0
Configuration: /Users/smccart4/.seadas8/etc/seadas.properties
OCSSW Root Directory: /Users/smccart4/Applications/ocssw
OCSSW Log Directory: /
OCSSW Location: local
Environment {OCSSWROOT} (external): null

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Copy To Clipboard Close Help
```



Troubleshooting OCSSW Installation

- To resolve the issue, try running the following command in your Terminal shell (e.g., from the previous slide, SeaDAS is pointing to the Python3 directory, /usr/bin/python3, therefore, run the command):
/usr/bin/python3 -m pip install requests

```
(base) smccart4@GSSLA17081917 ~ % /usr/bin/python3 -m pip install requests
```

- Return to slides 3 & 4 and repeat the steps to install the OC Processors.

