Using *wget* to download multiple files and directories from ECCO drive: https://ecco.jpl.nasa.gov/drive/files

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Adapted from the PO.DAAC discussion forum topic "Download Multiple Data Files from PODAAC Drive Using wget" https://go.nasa.gov/2XmGu6b

"wget is a free utility for non-interactive download of files from the Web. It supports http, https, and ftp protocols, as well as retrieval through http proxies. It is a Unix-based command-line tool, but is also available for other operating system, such as Windows, Mac OS X, etc."

Three illustrative examples using wget

Here the username and password are the WebDAV/Programmatic API credentials (login/password). Other *wget* flags are described later.

Example 1: Download all of the lat-lon ETAN files from ECCOv4 Release 4

>wget --user=ifenty --password=ABCD -r -nc -np -nH --cut-dirs=2 https://ecco.jpl.nasa.gov/drive/files/Version4/Release4/interp_monthly/ETAN/

After downloading you will have set of directories and files like this:

```
/Version4/Release4/interp_monthly/ETAN/1992/ETAN_1992_01.nc /Version4/Release4/interp_monthly/ETAN/1992/ETAN_1992_02.nc [...] /Version4/Release4/interp_monthly/ETAN/2017/ETAN 2017 12.nc
```

Example 2: Download the entire ECCOv4 Release 4 solution

>wget --user=ifenty --password=ABCD -r -nc -np -nH --cut-dirs=2 https://ecco.jpl.nasa.gov/drive/files/Version4/Release4/

After downloading you will have set of directories and files like this:

```
/Version4/Release4/input_init/
/Version4/Release4/interp monthly [...]
```

Example 3: Download all of the SALT files from the cube 92 solution

>wget --user=ifenty --password=ABCD -r -nc -np -nH --cut-dirs=2 https://ecco.jpl.nasa.gov/drive/files/ECCO2/cube92_latlon_guart_90S90N/SALT.nc

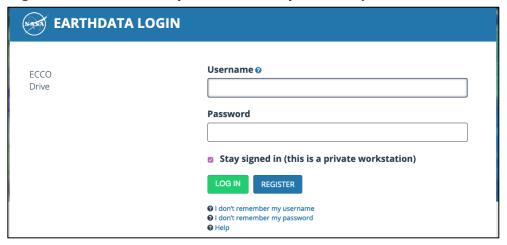
After downloading you will have set of directories and files like this:

```
/ECCO2/cube92_latlon_quart_90S90N/SALT.nc/SALT.1440x720x50.19920102.nc /ECCO2/cube92 latlon quart 90S90N/SALT.nc/SALT.1440x720x50.19920105.nc [...]
```

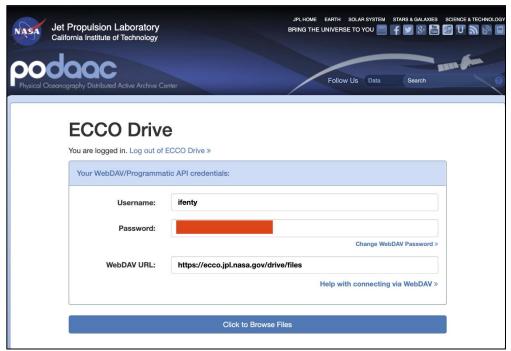
Remember the username and password that are used for *wget* are your NASA EOSDIS "WebDAV/Programmatic API" credentials (i.e., username and password). These are different than your NASA EOSDIS EARTHDATA credentials. Yes, this can be confusing.

How to find you WebDAV/Programmatic API credentials

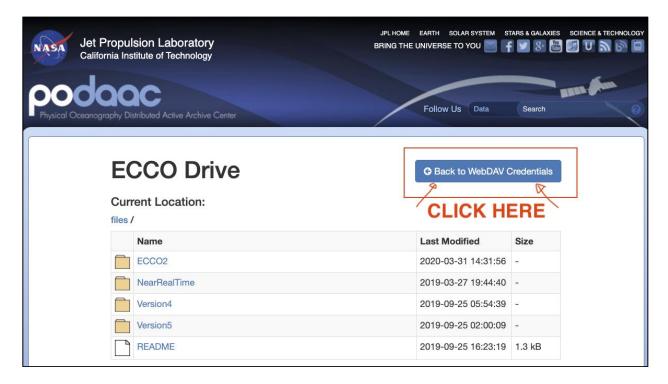
Navigate to https://ecco.jpl.nasa.gov/drive/. You will be redirected to the NASA EOSDIS "EARTHDATA" login page. Use your EARTHDATA credentials to log on (you will need to register a new account if you don't already have one).



After logging into the NASA EOSDIS EARTHDATA page you will be taken to an ECCO Drive page showing your "WebDAV/Programmatic API credentials". Where did the password come from? It was automatically generated (but you can change it later).



Alternatively, if you are taken to a page showing the ECCO Drive top-level directory (as below) then click on the big blue box called "Back to WebDAV Credentials":



After clicking on the blue "Back to WebDAV Credentials" button you will be taken to the "WebDAV/Programmatic API credentials" page where you can note your username and password.

wget flags

In the examples above we used several optional *wget* flags in addition to the required WebDAV/Programmatic API credentials. Their meaning is provided below:

- -r "recursive download", follow subdirectories when downloading
- -np "no parent", only download from subdirectories, not parent directories
- -nc "no clobber", overwrite files if they are present
- $\operatorname{-nH}$ "no host directories", do not create subdirectories starting with the ECCO drive URL
- --cut-dirs=2 "skip the first 2 subdirectories", without this option wget would make the top-level subdirectories /drive/files/Version4/etc. With the --cut-dirs=2, wget skips the first two subdirectories and makes the top-level subdirectory /Version4/ or /ECCO2/ (or whatever ECCO solution you are downloading).

Many more *wget* options are available which you can learn about here: https://www.gnu.org/software/wget/manual/wget.html