Accessing Jupyter Notebook via Quakeworx Gateway

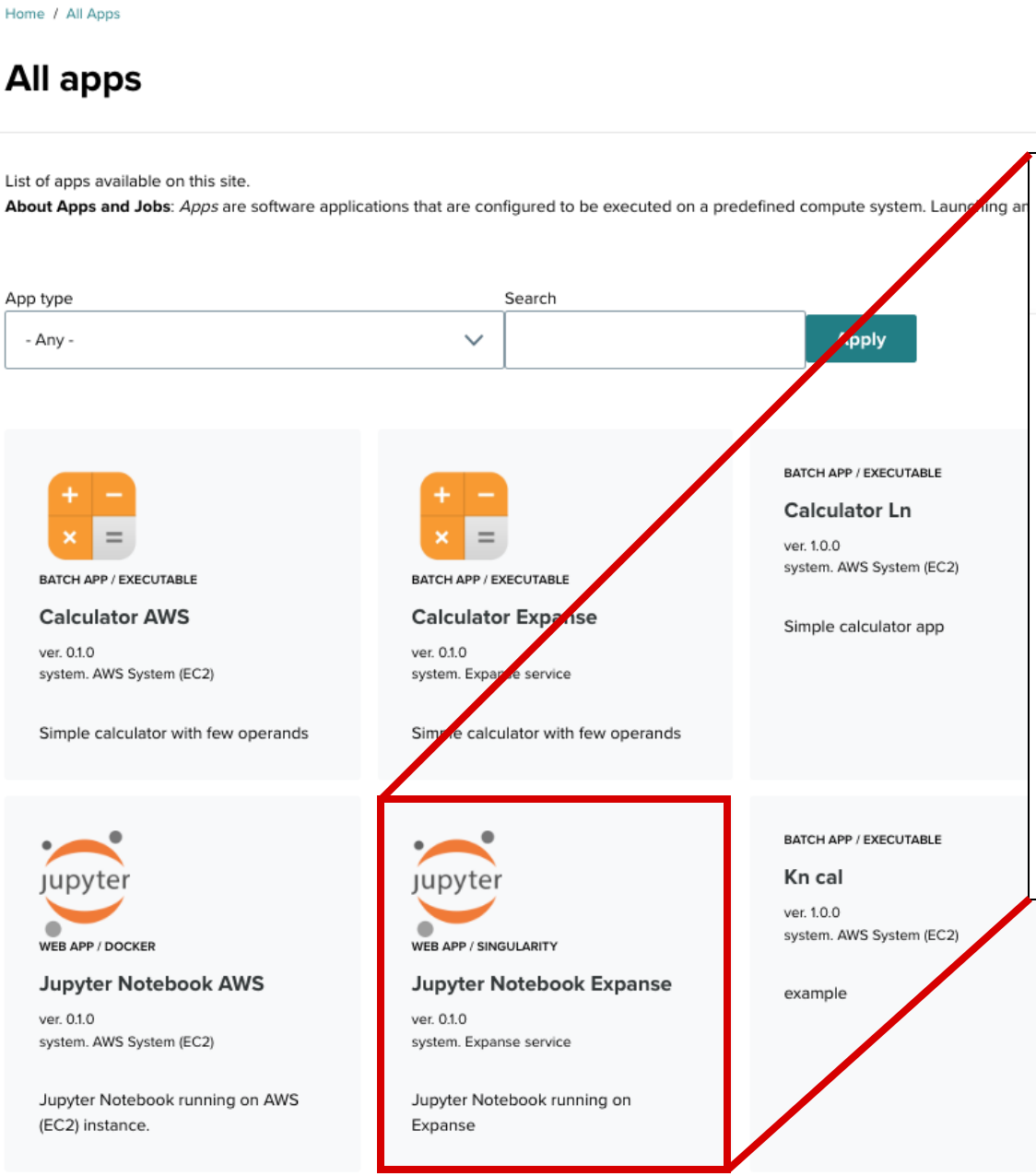
and

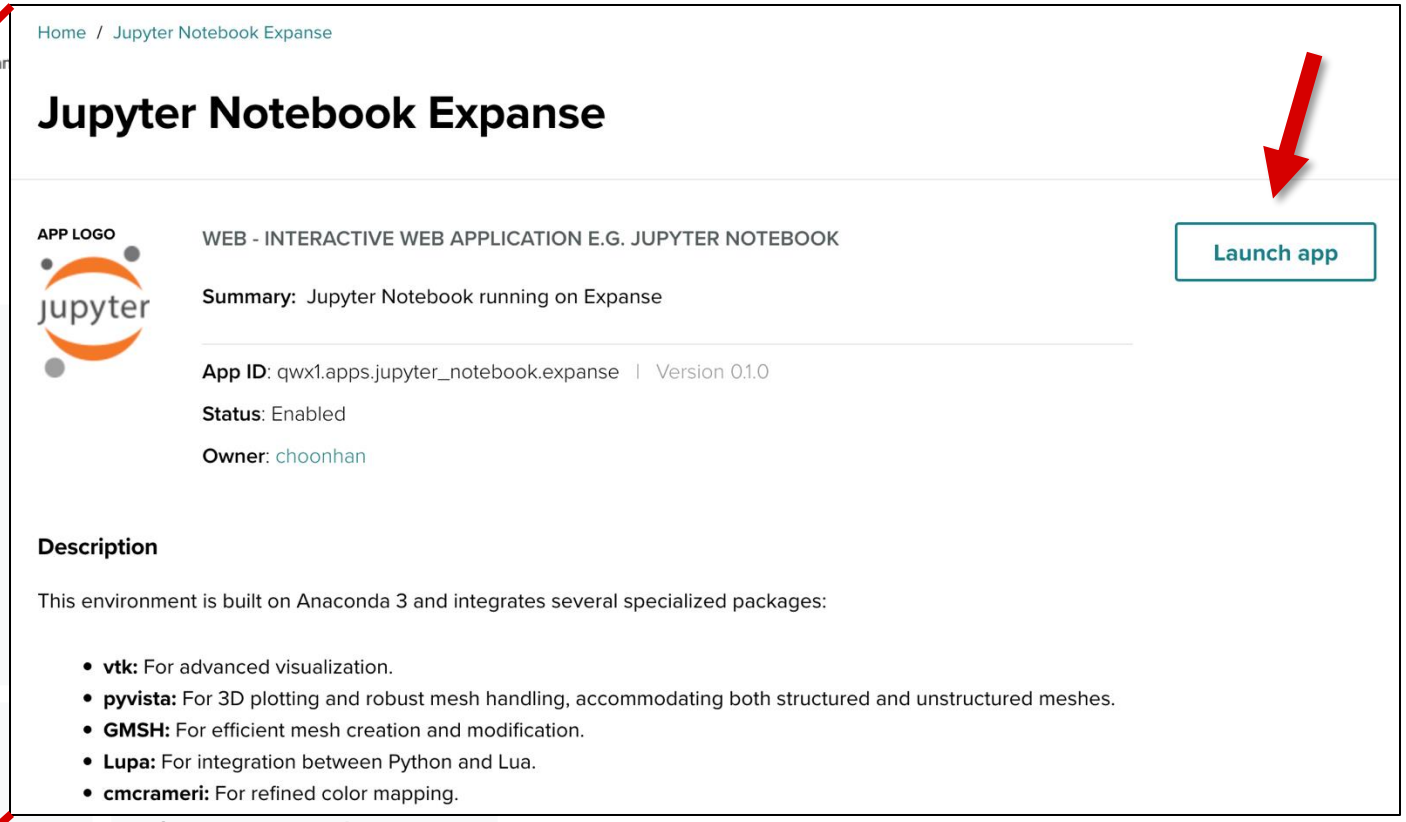
Plotting Tandem outputs

By Jeena Yun

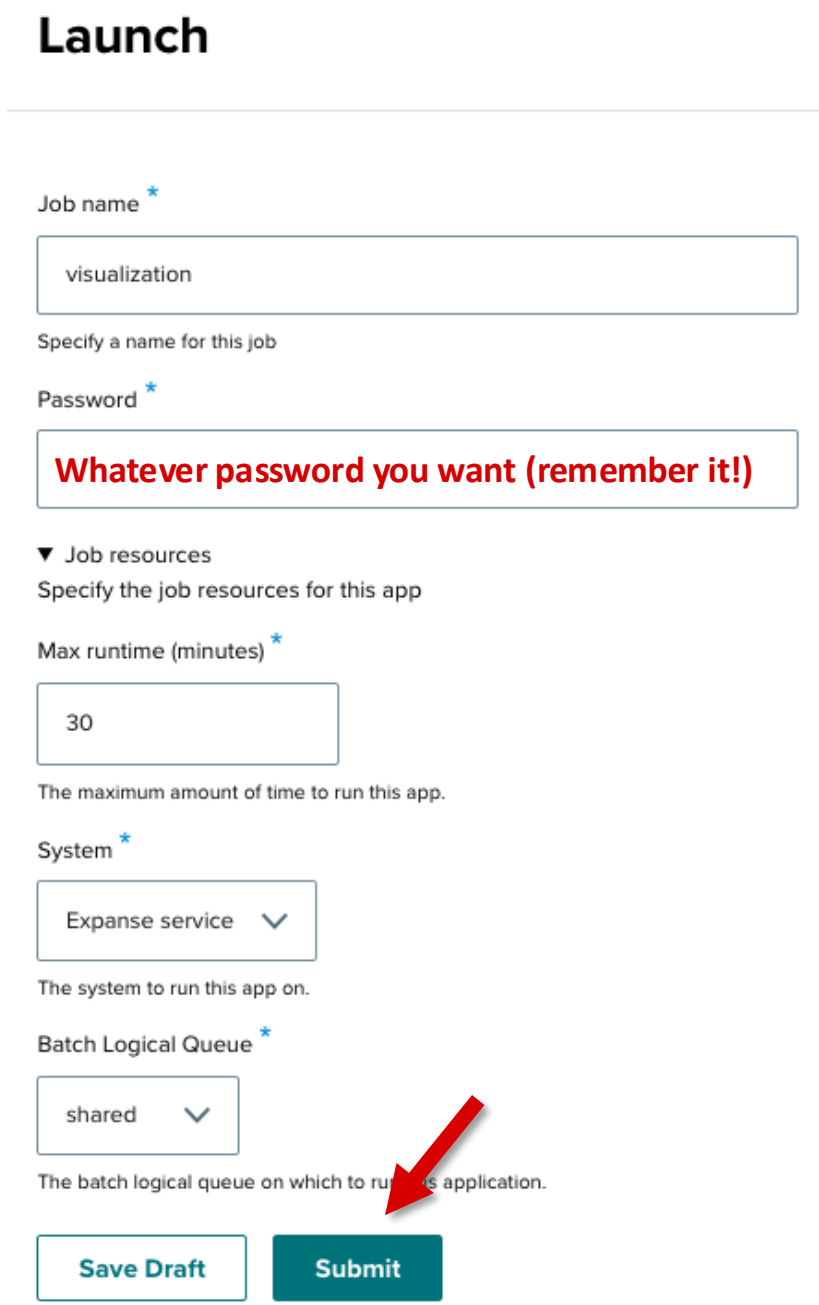
1. Launch Jupyter Notebook Expanse App

Apps → All apps → Jupyter Notebook Expanse → Launch app

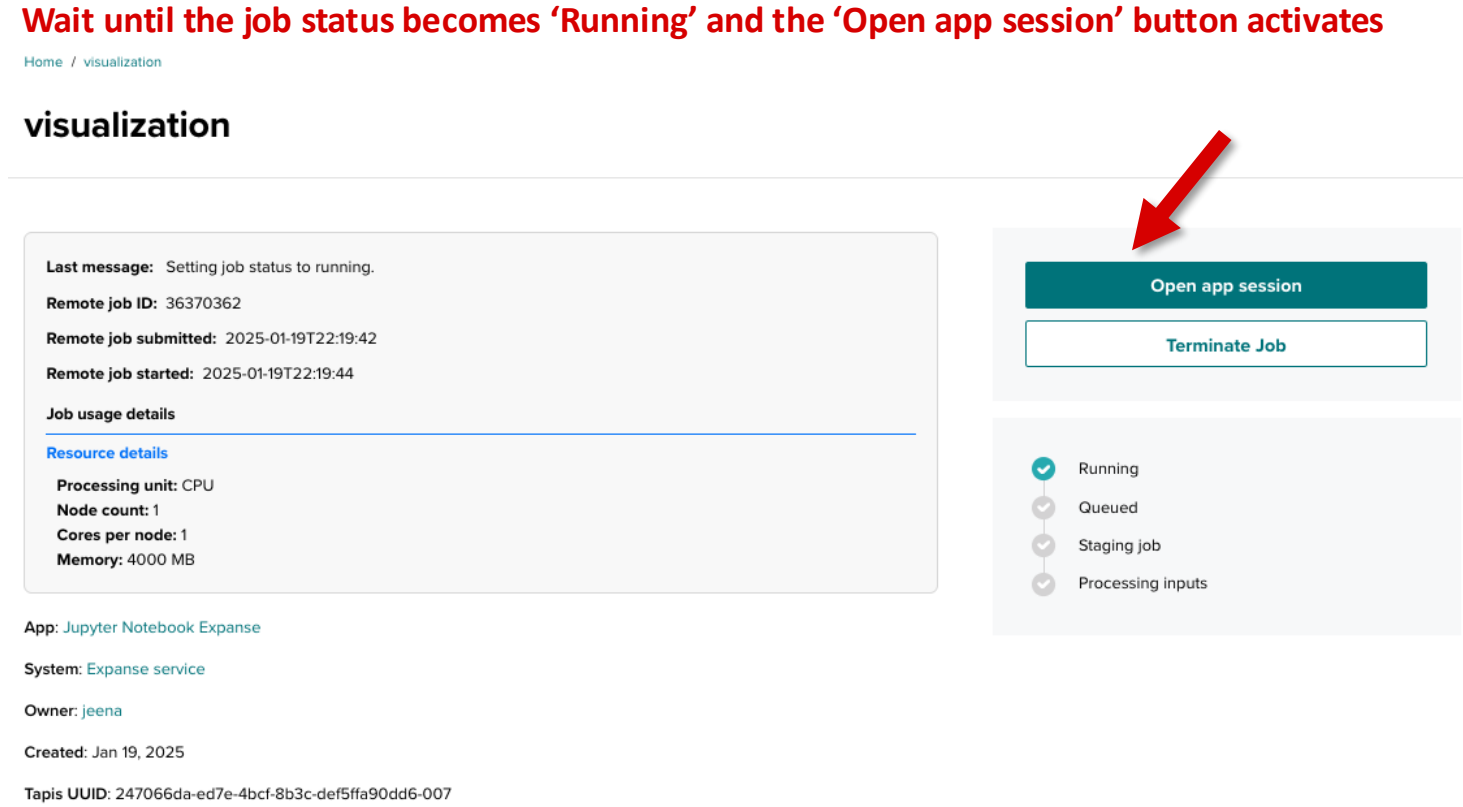




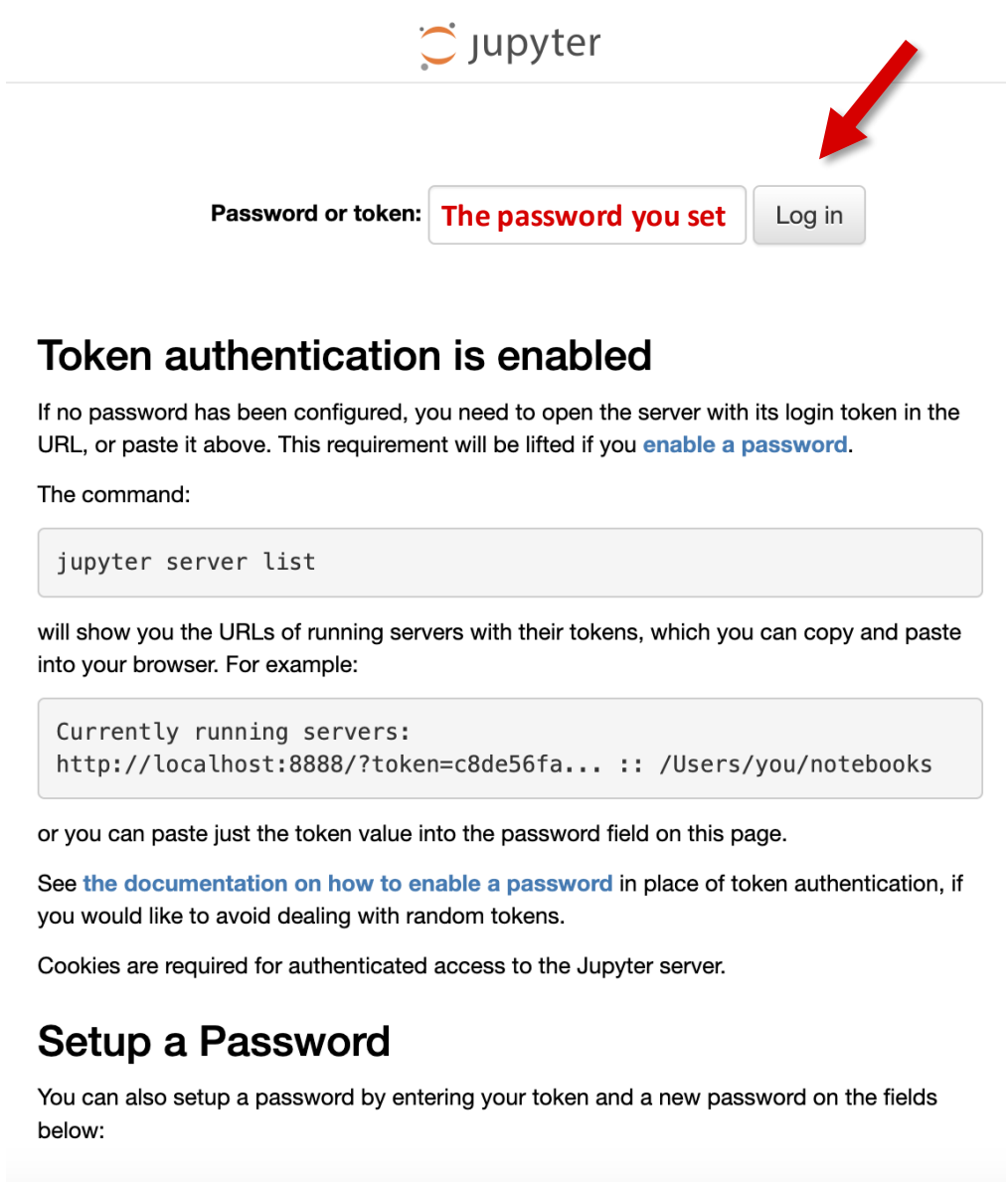
1. Launch Jupyter Notebook Expanse App

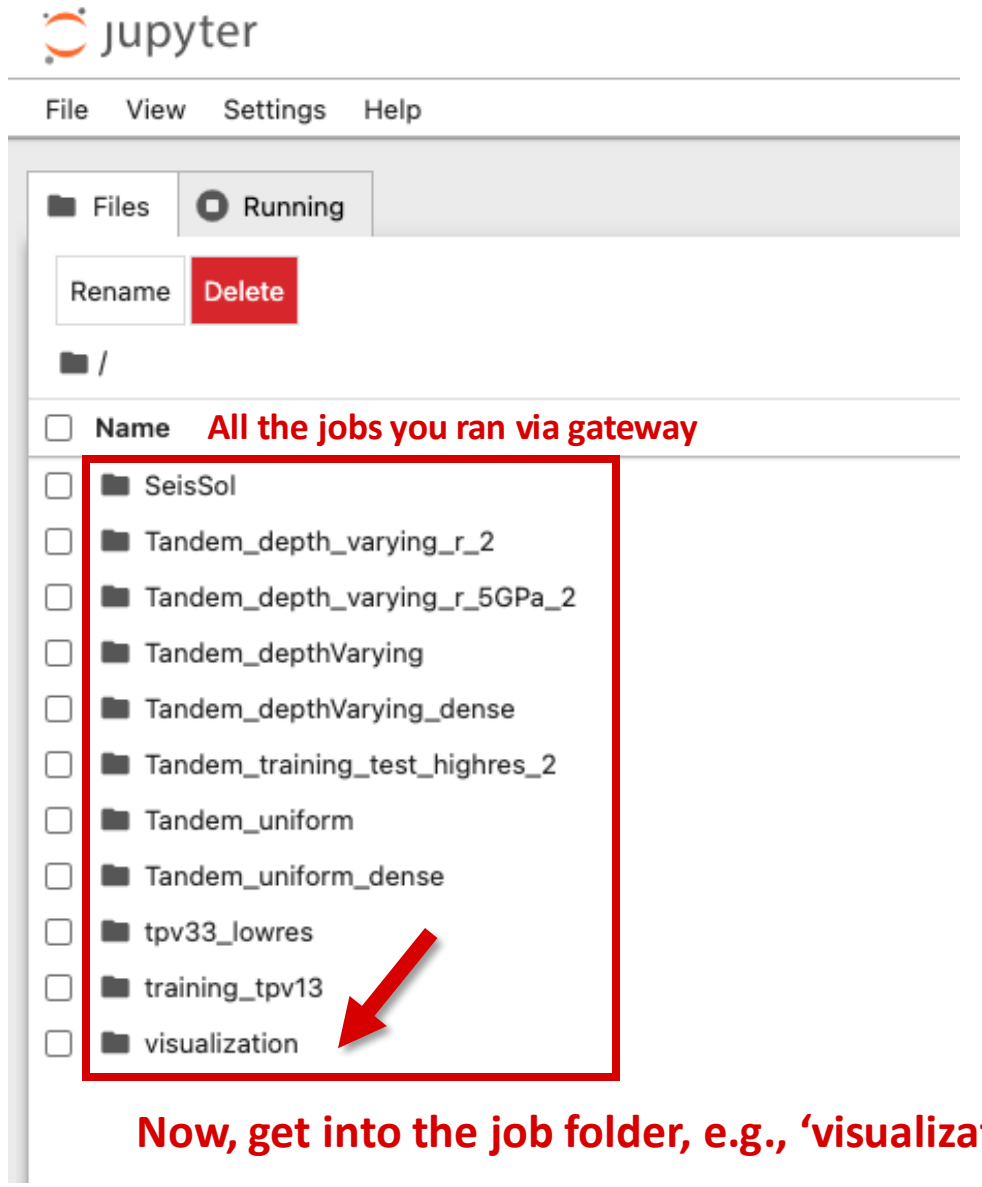


Wait until the job status becomes 'Running' and the 'Open app session' button activates



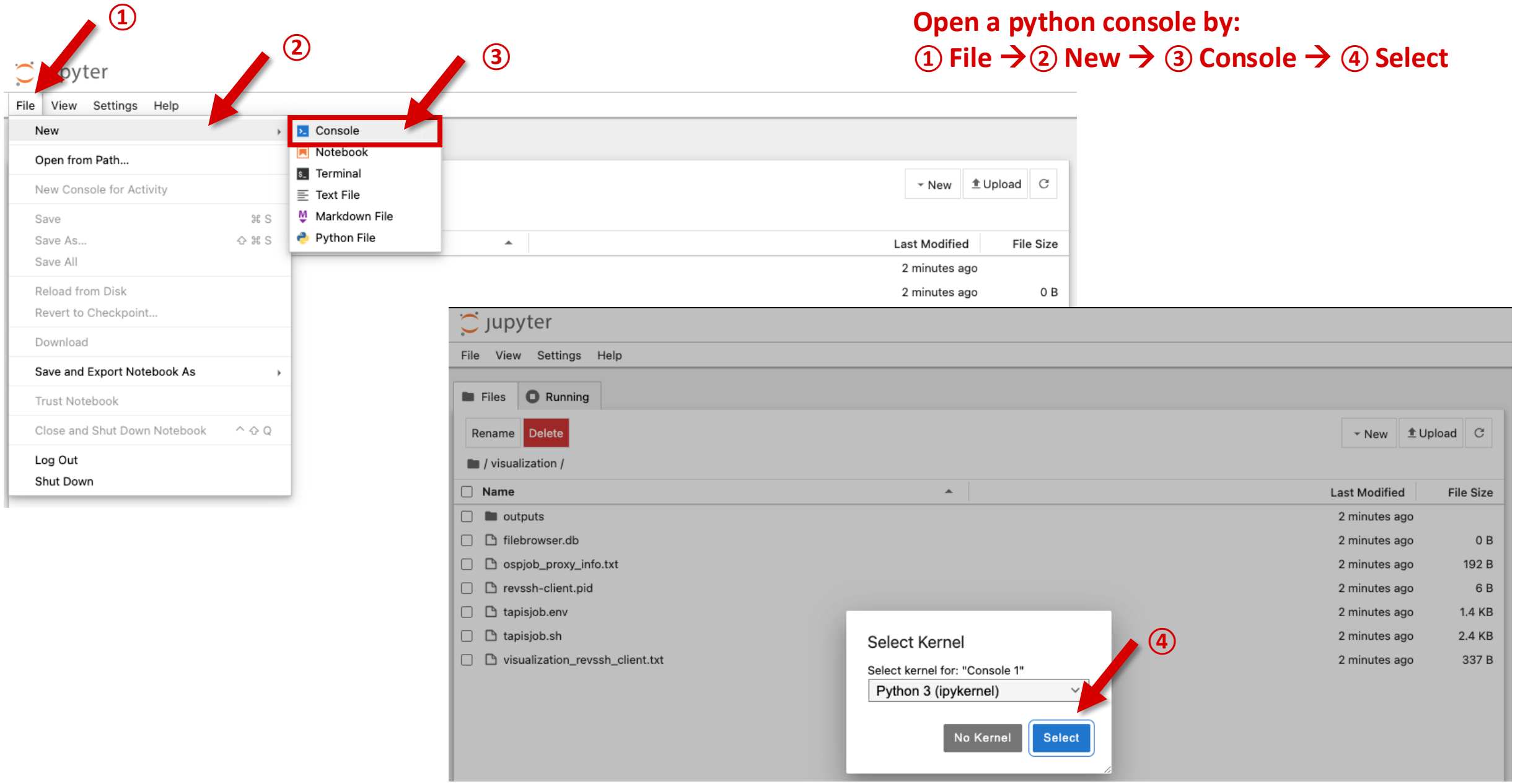
2. Open Jupyter Notebook App Session





3. Clone the git repository containing plotting scripts

Open a python console by:
① File → ② New → ③ Console → ④ Select



3. Clone the git repository containing plotting scripts

jupyter

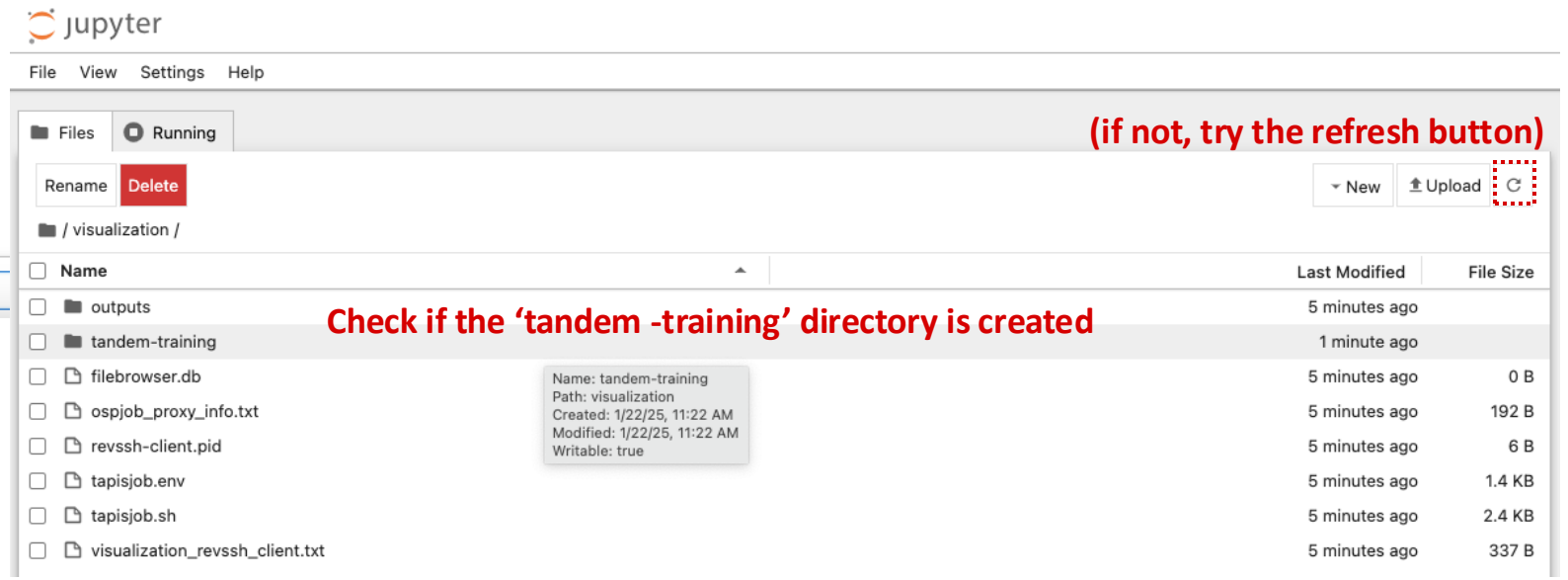
File View Settings Help

```
Python 3.12.2 | packaged by conda-forge | (main, Feb 16 2024, 20:50:58) [GCC 12.3.0]
Type 'copyright', 'credits' or 'license' for more information
IPython 8.27.0 -- An enhanced Interactive Python. Type '?' for help.

[1]: !ls

     filebrowser.db         revssh-client.pid  visualization_revssh_client.txt
     ospjob_proxy_info.txt  tapisjob.env
     outputs                tapisjob.sh

[2]: !git clone https://github.com/TEAR-ERC/tandem-training.git

     Cloning into 'tandem-training'...
     remote: Enumerating objects: 61, done.
     remote: Counting objects: 100% (61/61), done.
     remote: Compressing objects: 100% (47/47), done.
     remote: Total 61 (delta 26), reused 42 (delta 10), pack-reused 0 (from 0)
     Receiving objects: 100% (61/61), 7.29 MiB | 23.33 MiB/s, done.
     Resolving deltas: 100% (26/26), done.

[3]: !ls

     filebrowser.db         revssh-client.pid  tapisjob.sh
     ospjob_proxy_info.txt  tandem-training    visualization_revssh_client.txt
     outputs                tapisjob.env

[ ]:
```

In the console, type (with the exclamation mark):

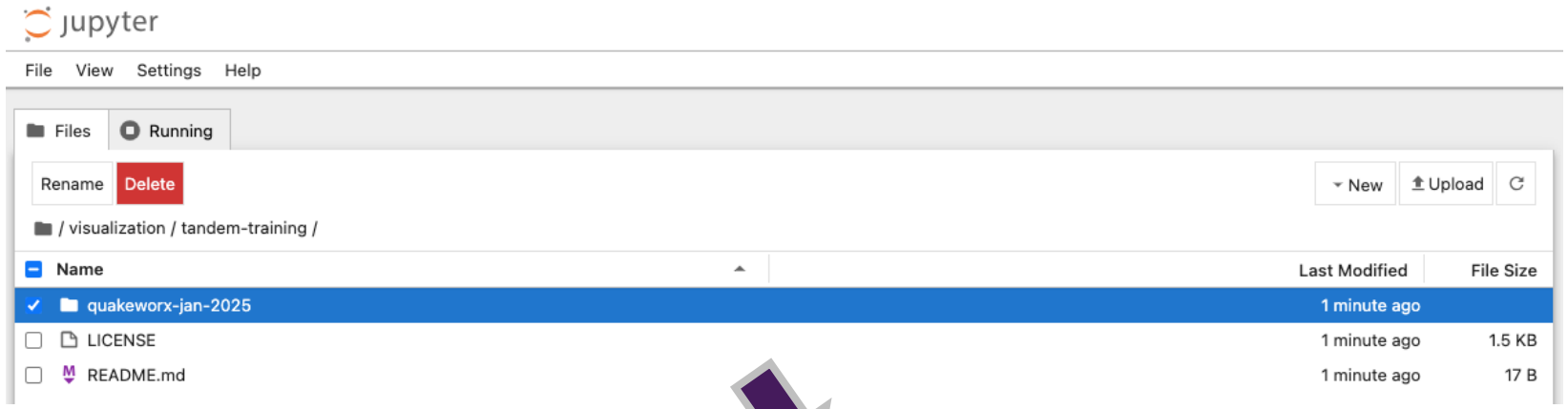
```
!git clone https://github.com/TEAR-ERC/tandem-training.git
```

** To run a command, use shift + enter

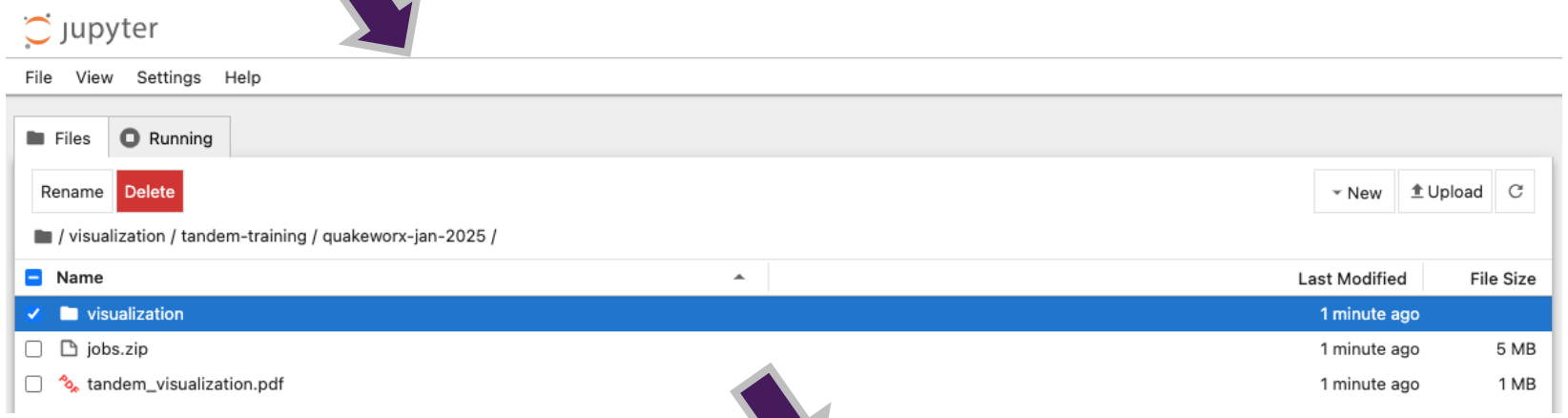


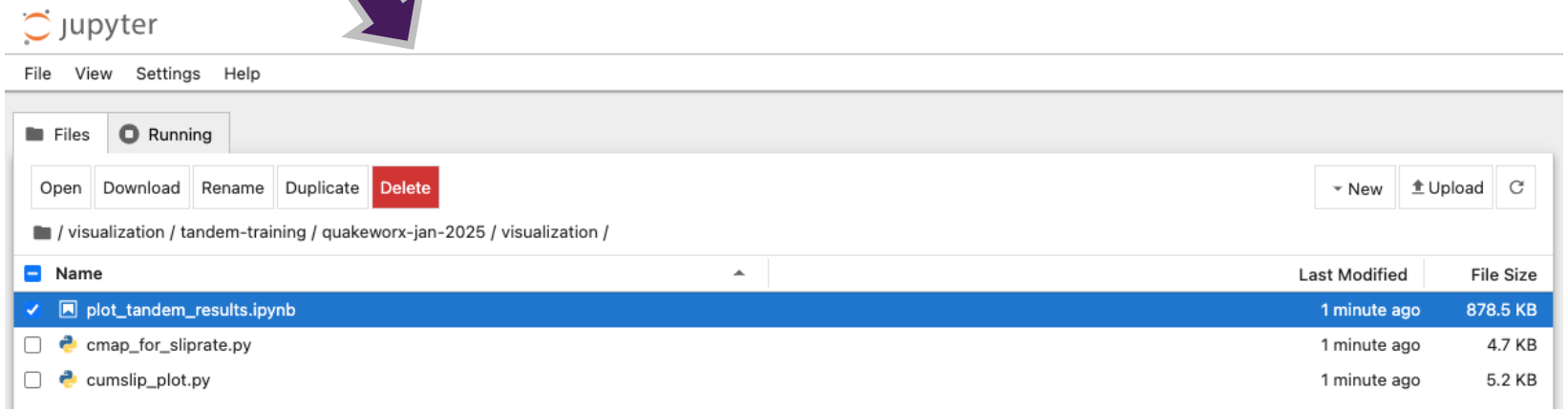
Check if the 'tandem -training' directory is created

4. Open the Jupyter Notebook for plotting scripts



Under the 'tandem-training' get into…
quakeworx-jan-2025/visualization





… and open
plot_tandem_results.ipynb

Now, let's make some cool plots!

jupyter plot_tandem_results Last Checkpoint: 2 minutes ago

File Edit View Run Kernel Settings Help Not Trusted

Markdown JupyterLab Python 3 (ipykernel)

Tandem visualization and post-processing

Author: Jeena Yun (j4yun@ucsd.edu)

Did you successfully run Tandem? Now, we will learn about how to process Tandem outputs such that we can produce useful plots showing different aspects of rupture history.

Learning objectives

- Learn about output formats of Tandem
- Learn about how to visualize outputs at different time and depth
- Learn about the effects of changing material properties on the rupture characteristics

Contents