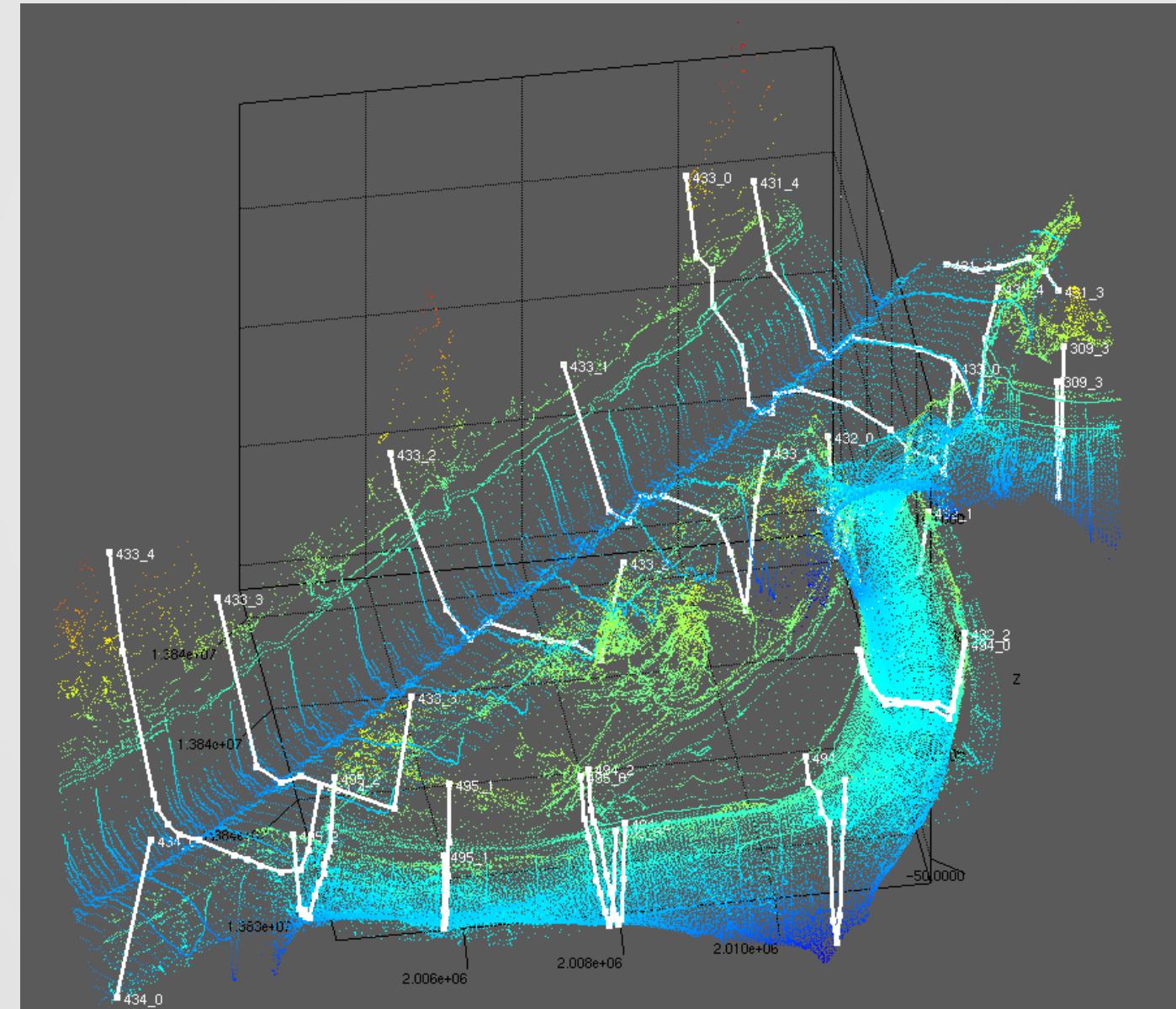


CALIFORNIA DEPARTMENT OF WATER RESOURCES

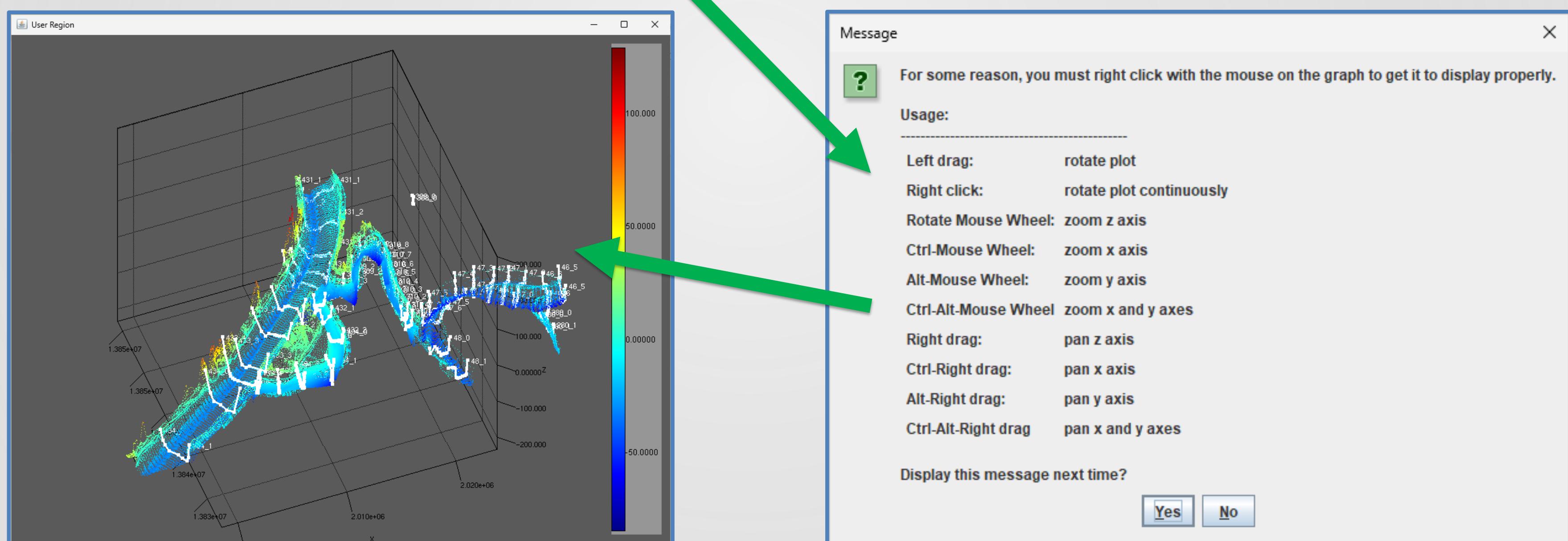
DSM2 CSDP Quick Start: Technical Setup

November 19, 2025



Prerequisites

- Recommended: experience modifying DSM2 input files and running DSM2, and/or “DSM2 Quick Start Training, Technical Setup, Introduction, and Sessions 1-3: <https://www.youtube.com/playlist?list=PL33EJkVWqEIXUihYnGzA9E5BocWu-Deij>
- Laptop with Windows
- Mouse with a wheel recommended



Software download links

Data and software for the workshop

- CSDP:
 - <https://data.cnra.ca.gov/dataset/dsm2-cross-section-development-program-csdp>
- DSM2 Input 2025-07-03 historical update
 - <https://data.cnra.ca.gov/dataset/dsm2-input-2025-07-03-historical-update>
- DSM2 v8.4.1
 - <https://data.cnra.ca.gov/dataset/dsm2-input-2025-07-03-historical-update>
- CSDP data files
 - https://github.com/CADWRDeltaModeling/DSM2LearningSeries/tree/main/csdp_quick_start
- Text editor, such as Visual Studio Code, Notepad, Notepad++



Older versions
of DSM2 will
work

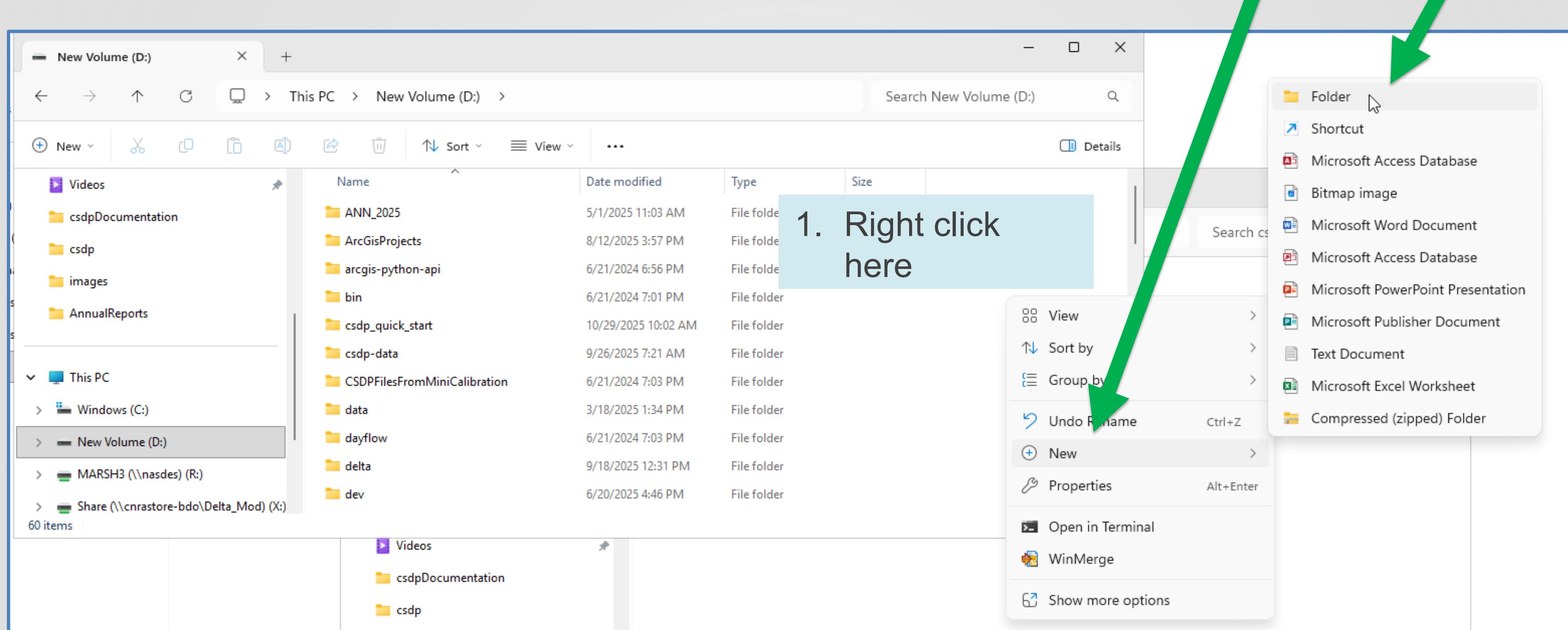
Optional data/software

- CSDP bathymetry files for DSM2 input 2025-07-03 historical update:
 - <https://data.cnra.ca.gov/dataset/dsm2-input-2025-07-03-historical-update>
- File/Folder comparison tool: WinMerge or a similar tool
 - <https://winmerge.org/>
- HEC DSSVue
 - <https://www.hec.usace.army.mil/software/hec-dssvue/downloads.aspx>

Create a folder for workshop files

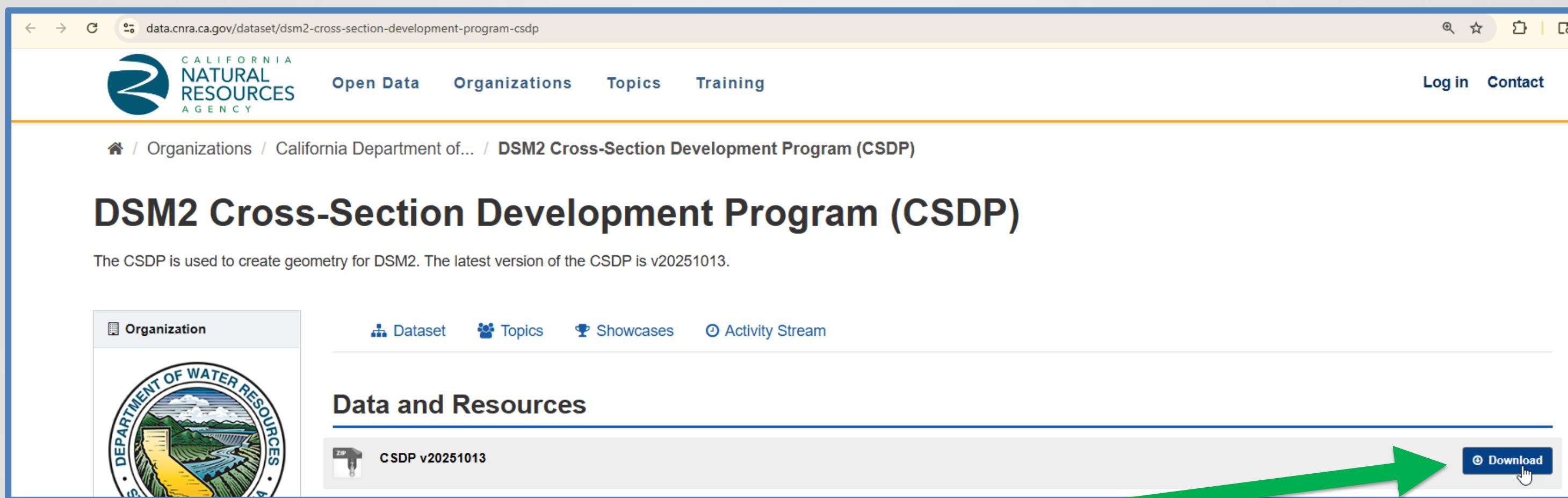
1. In Windows Explorer, create a new folder (right click on window, enter a name)

2. Select New-Folder



Download CSDP

1. Go to: <https://data.cnra.ca.gov/dataset/dsm2-cross-section-development-program-csdp>



2. Click the “Download” button

Download DSM2

1. Go to: <https://data.cnra.ca.gov/dataset/dsm2-input-2025-07-03-historical-update>

The screenshot shows the California Department of Water Resources Data and Resources page. On the left is the department's logo featuring a circular emblem with "DEPARTMENT OF WATER RESOURCES" at the top and "STATE OF CALIFORNIA" at the bottom, depicting a landscape with mountains, water, and a bridge. To the right of the logo are navigation links: "Organization", "Dataset" (selected), "Topics", "Showcases", and "Activity Stream". The main content area is titled "Data and Resources". It lists two items:

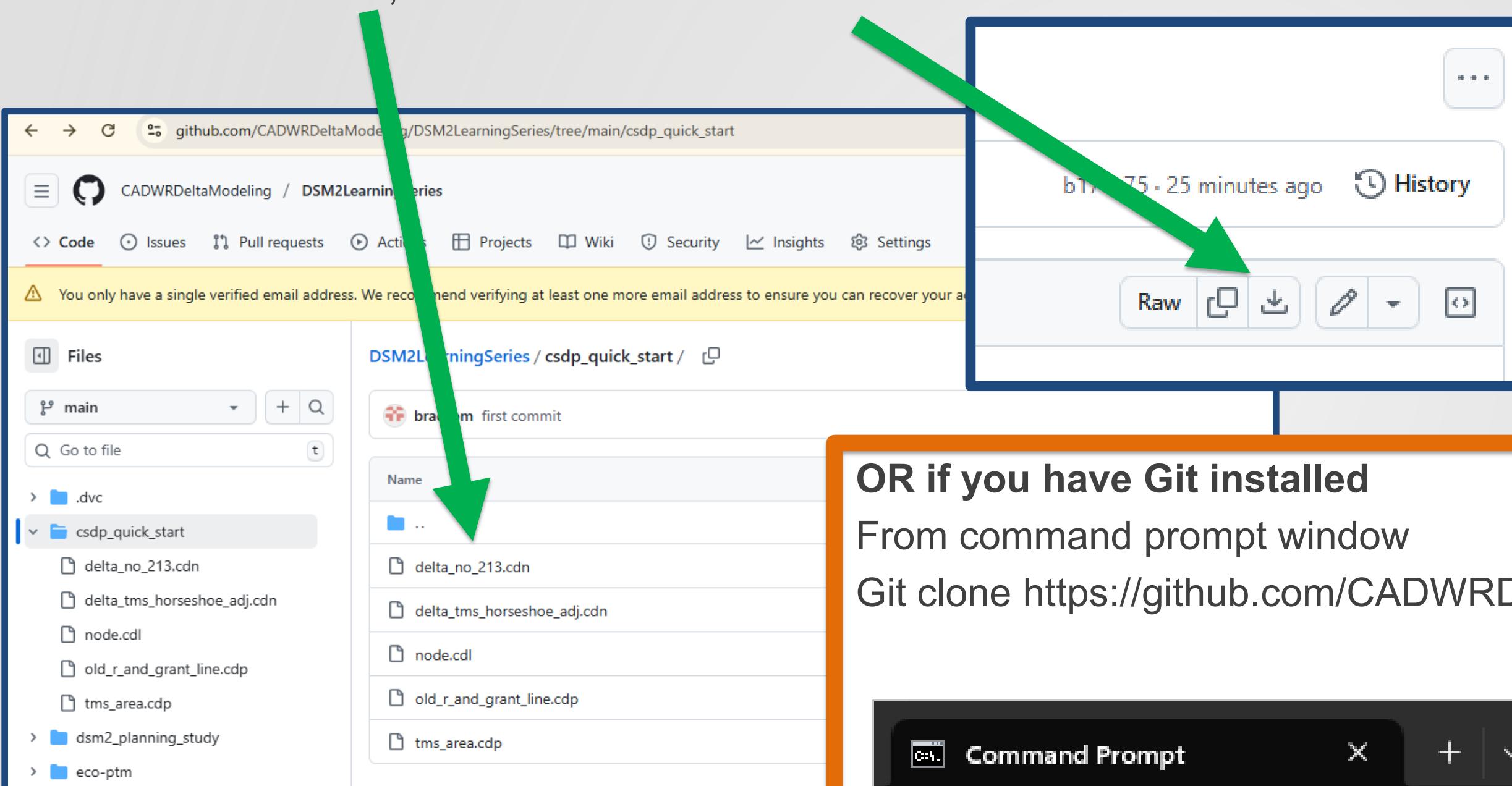
- DSM2 Input 2025-07-03 historical update** (with a small orange flame icon) - A ZIP file based on DSM2. It has a "Download" button and a "Go to resource" button.
- DSM2 v8.4.1** (with a small orange flame icon) - A ZIP file. It also has a "Download" button and a "Go to resource" button.

Two large green arrows originate from the bottom left of the image and point diagonally upwards towards the "Download" buttons for both items.

1. Click the “Download” buttons to download DSM2 input and executables

Download CSDP data files

1. Go to: <https://github.com/CADWRDeltaModeling/DSM2LearningSeries/tree/main>
2. Click on the **csdp_quick_start** folder
3. Click on each file, then click the **download icon** to download



OR if you have Git installed
From command prompt window
Git clone <https://github.com/CADWRDeltaModeling/DSM2LearningSeries>

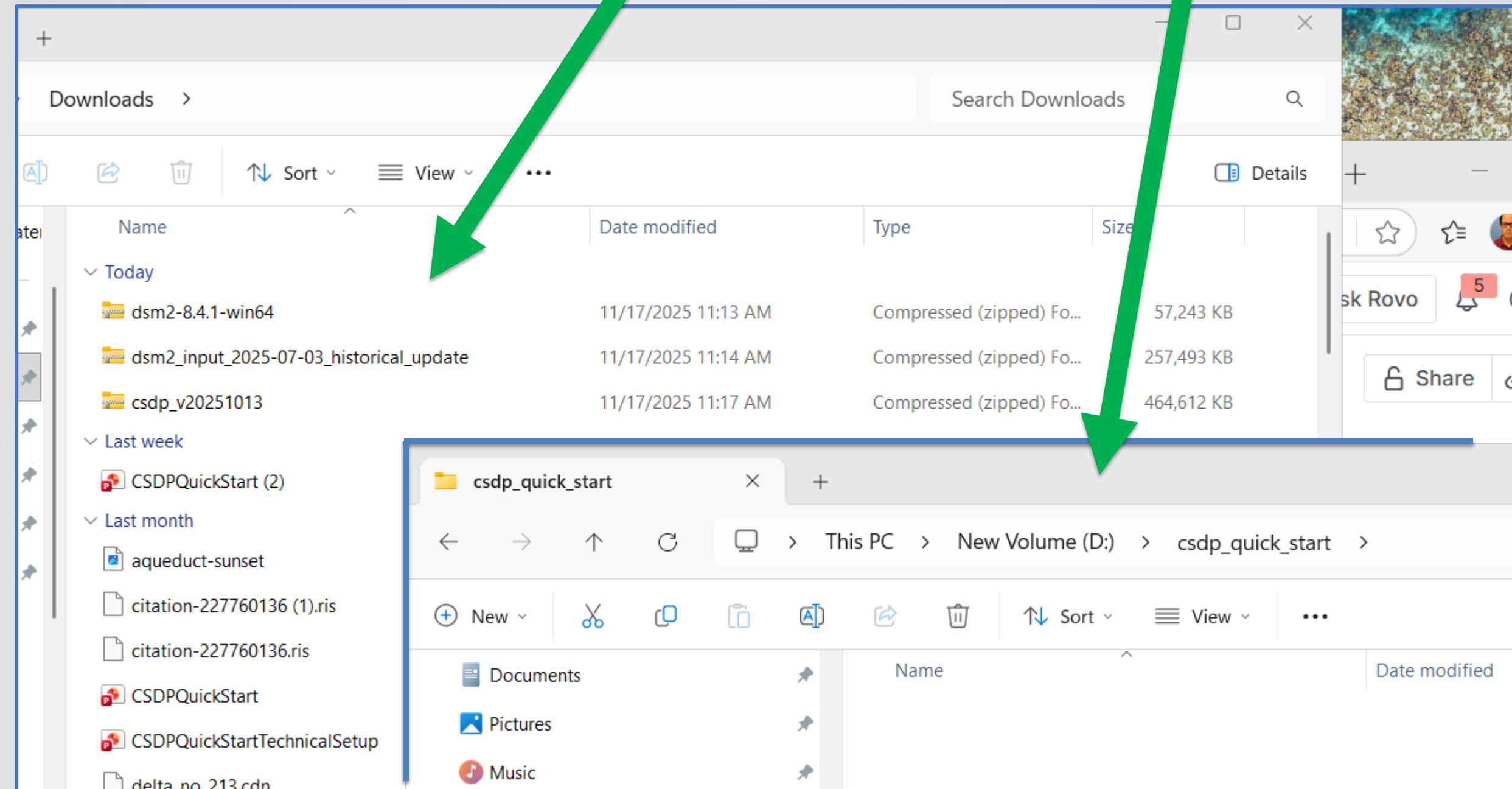
```
D:\temp>
D:\temp>
D:\temp>git clone https://github.com/CADWRDeltaModeling/DSM2LearningSeries
Cloning into 'DSM2LearningSeries'...
remote: Enumerating objects: 52781, done.
```

Unzip files – open windows explorers

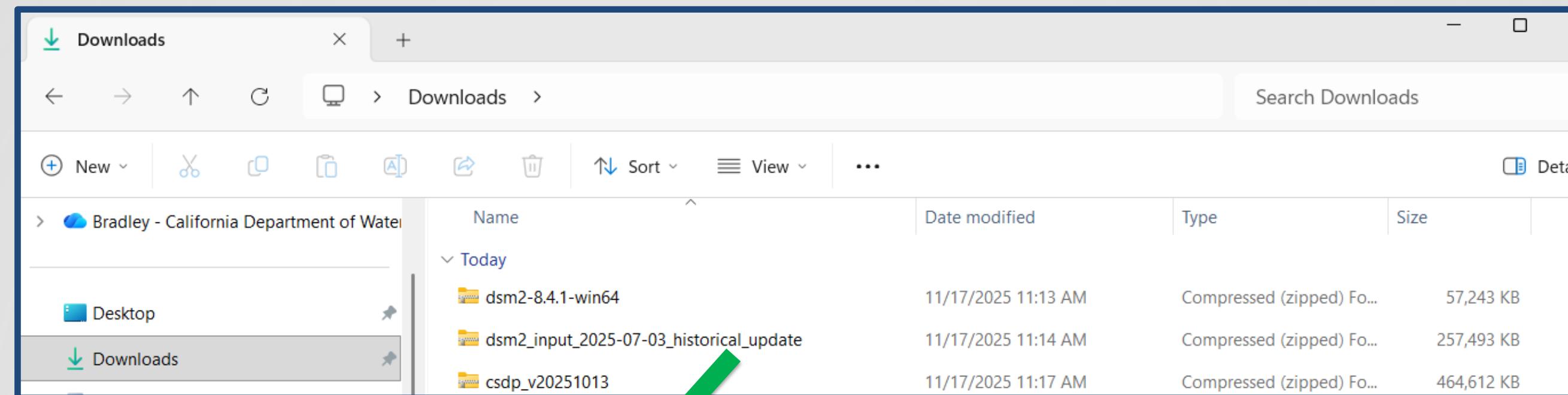
1. Open two Windows Explorers

1. In the first, navigate to your “Downloads Folder”

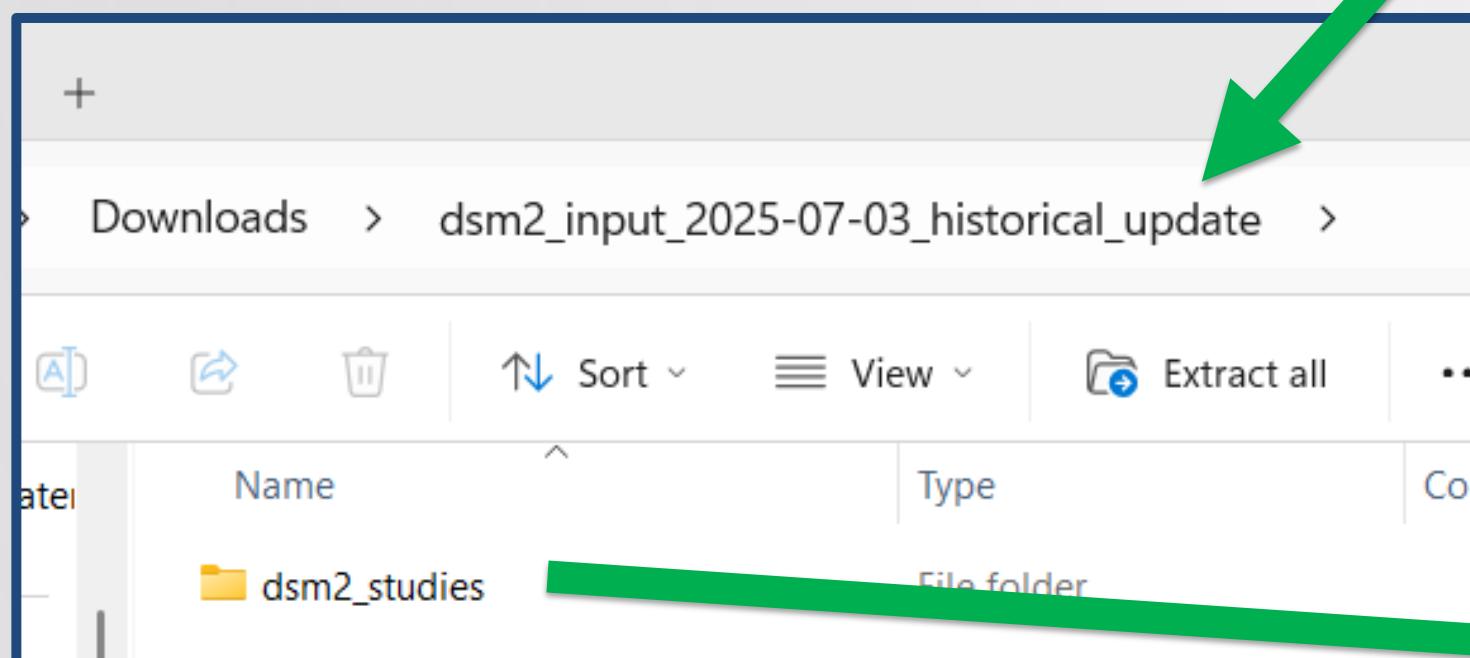
2. In the second, navigate your new folder



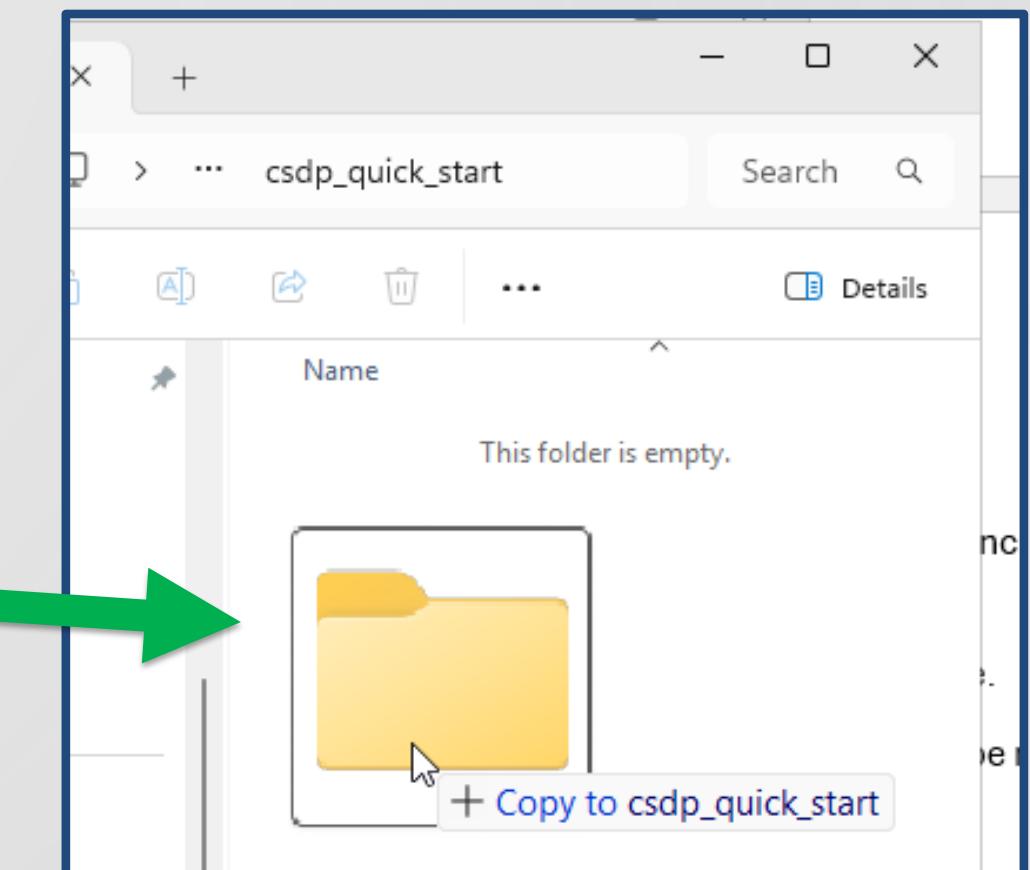
Unzip files



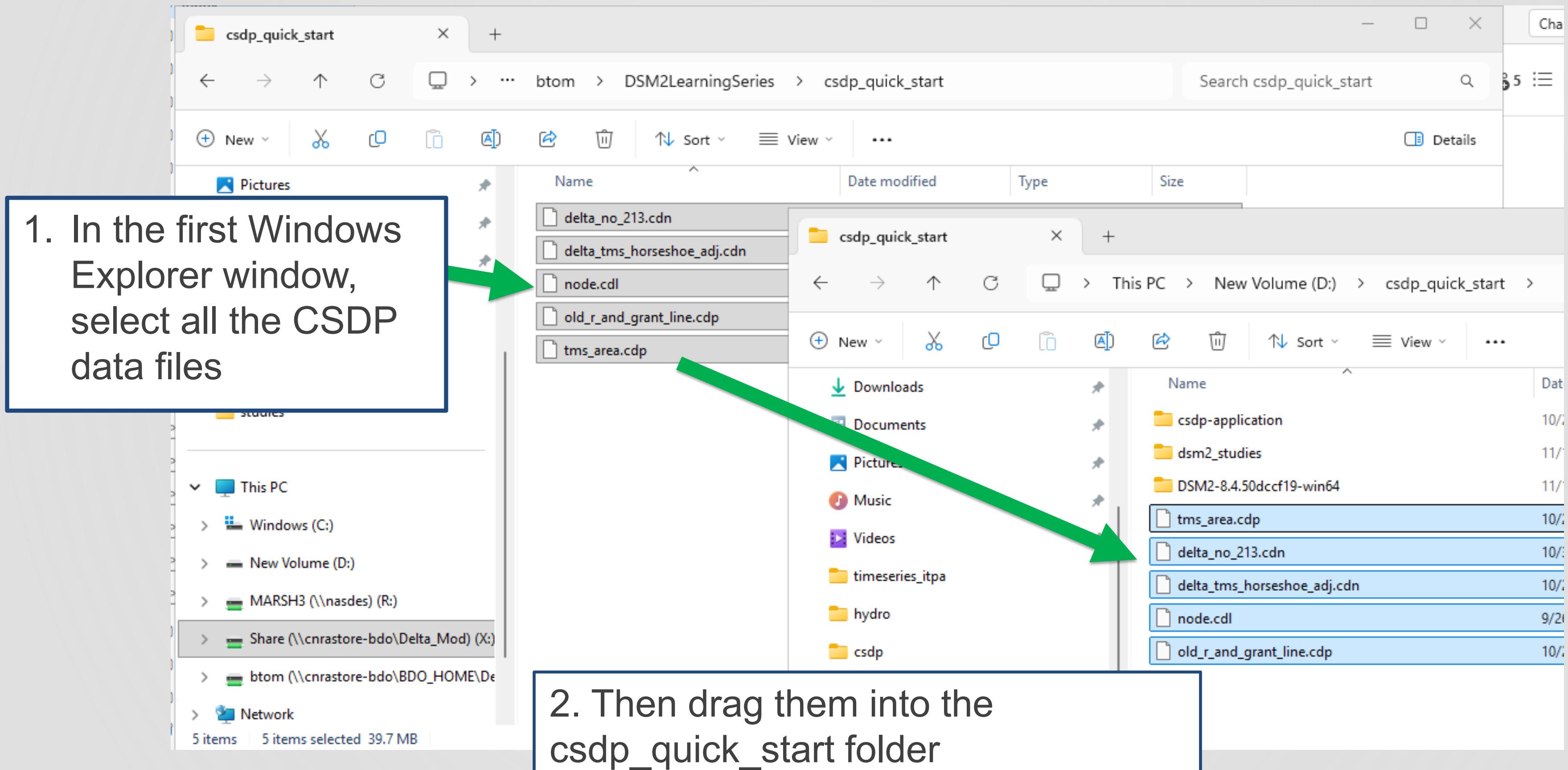
1. In the first Windows Explorer window,
double click on each zip file,



2. Then drag the contents into the
second Windows Explorer window

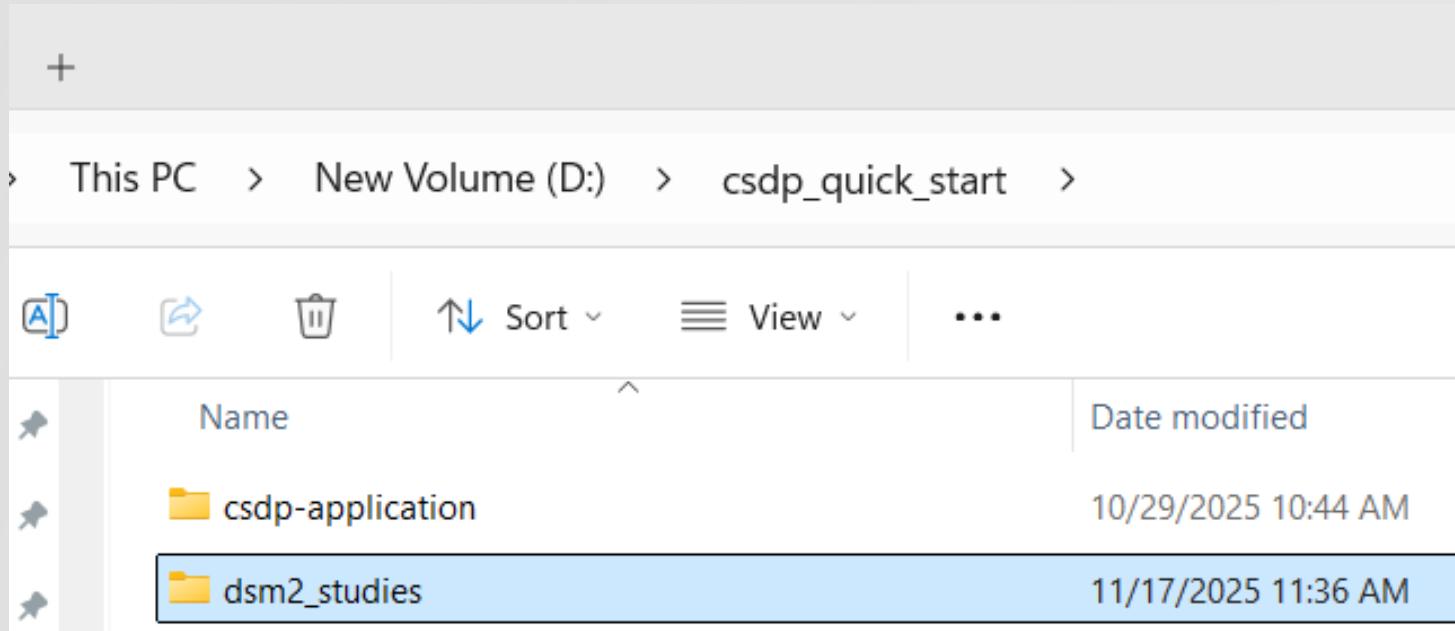


Move CSDP data files into new folder

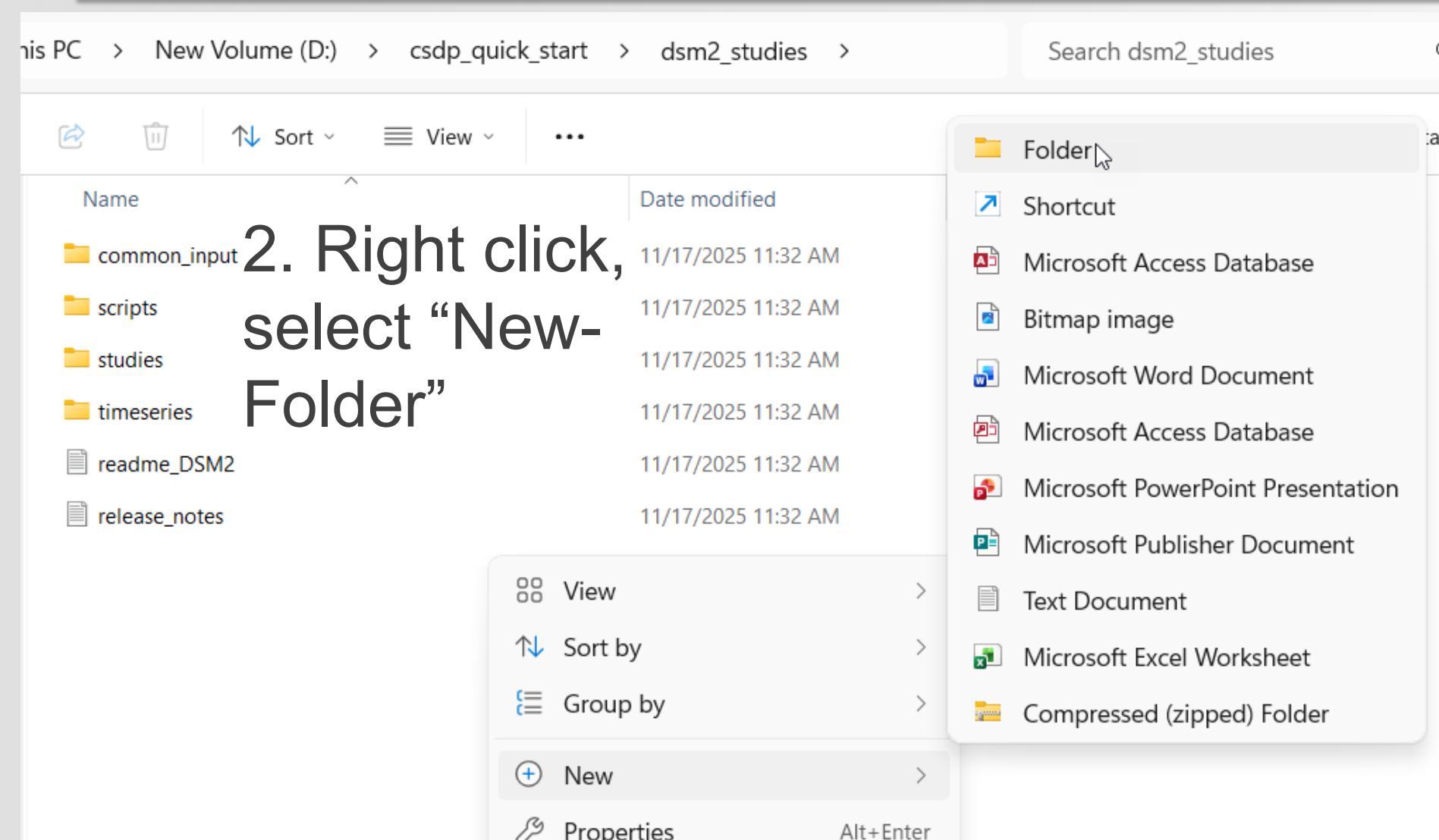


Set up DSM2 folder

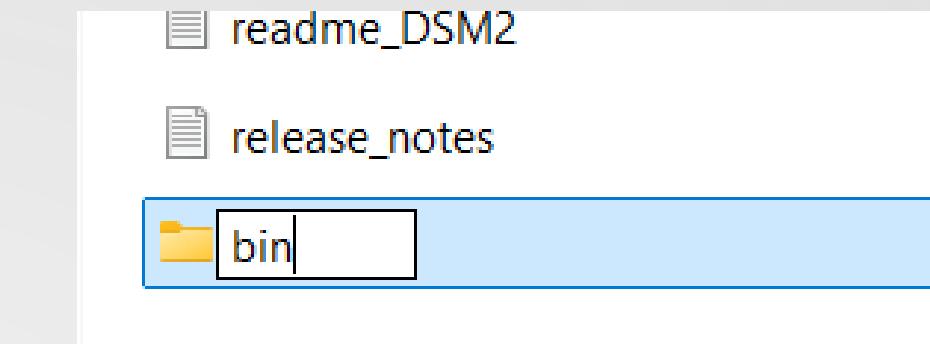
1. Double click on the **dsm2_studies** folder



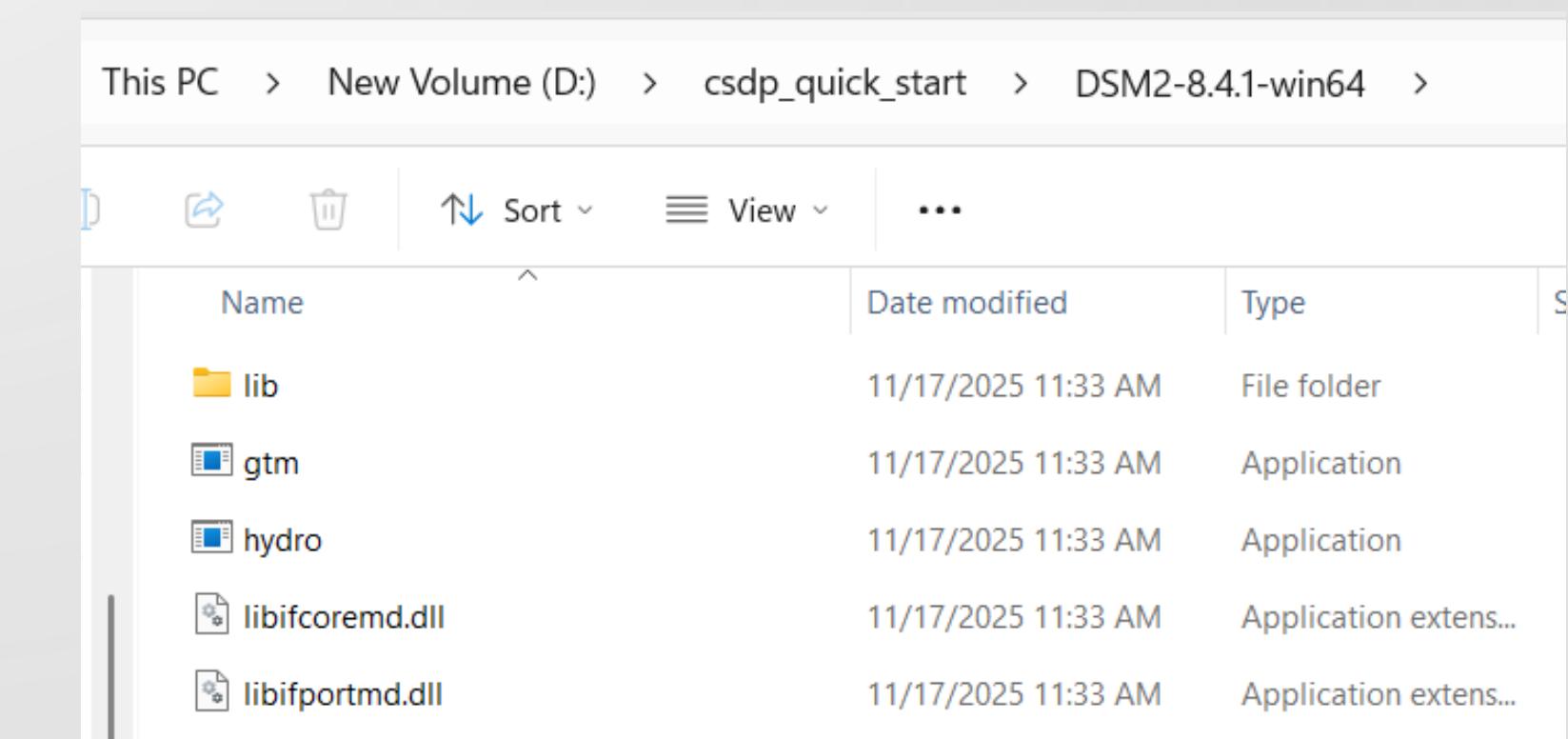
2. Right click,
select “New-
Folder”



3. Name the folder “bin”

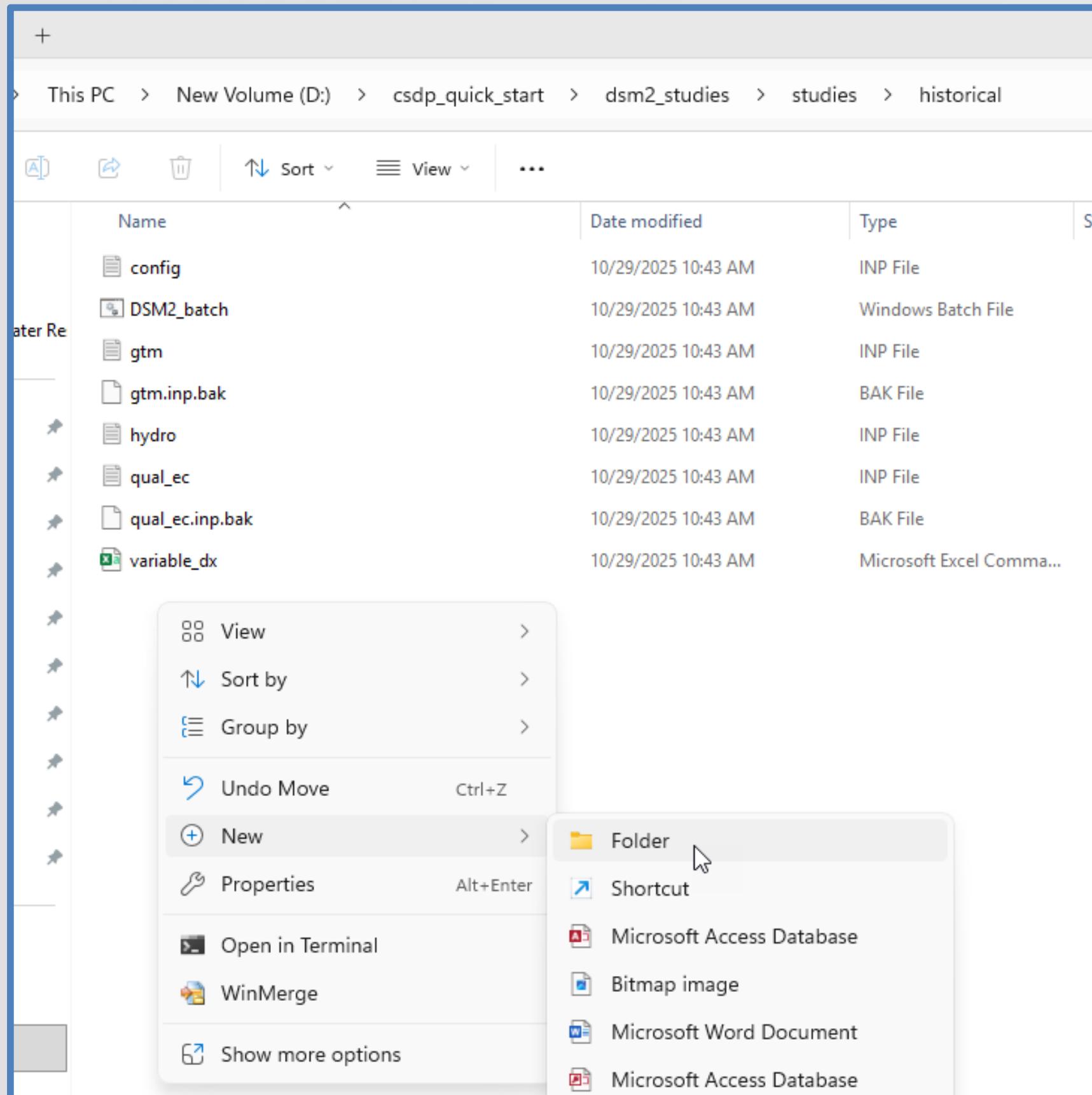


4. Copy the contents of DSM2-8.4.1-win64
into the bin folder

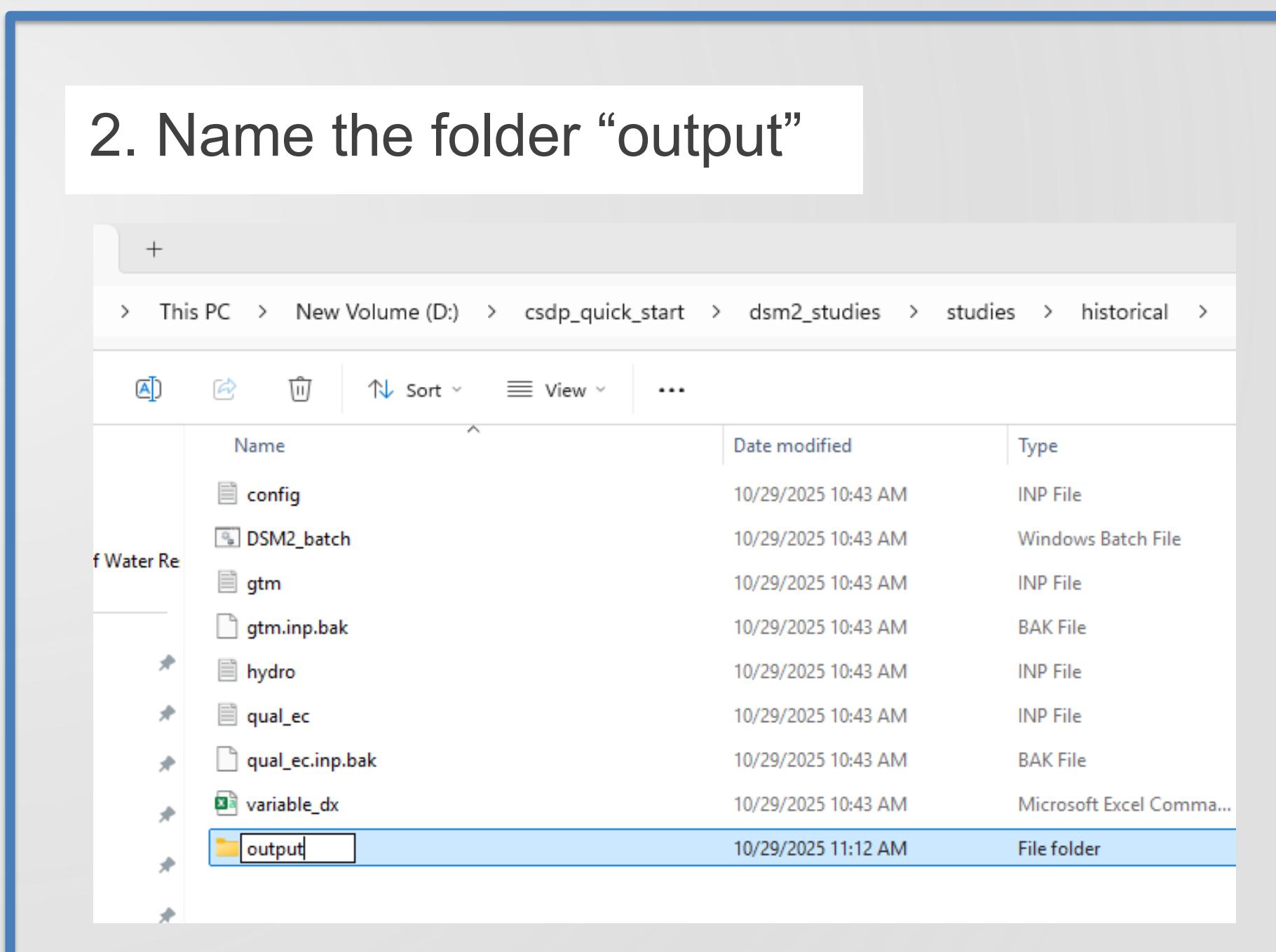


Set up DSM2 historical study folder

1. Navigate to dsm2_studies\studies\historical folder



2. Name the folder “output”



Verify that DSM2 runs

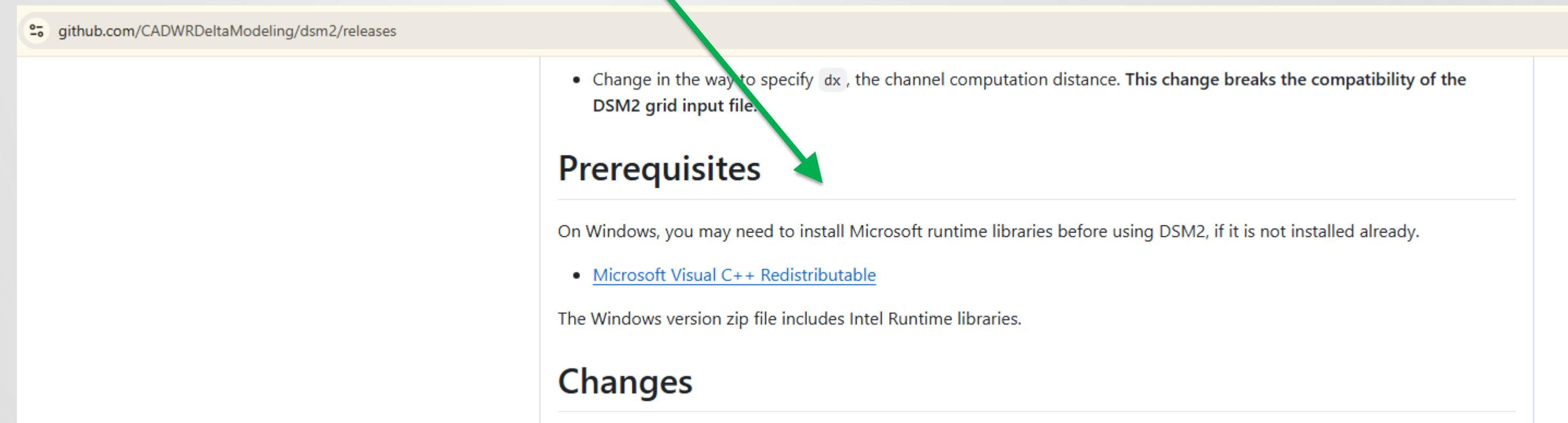
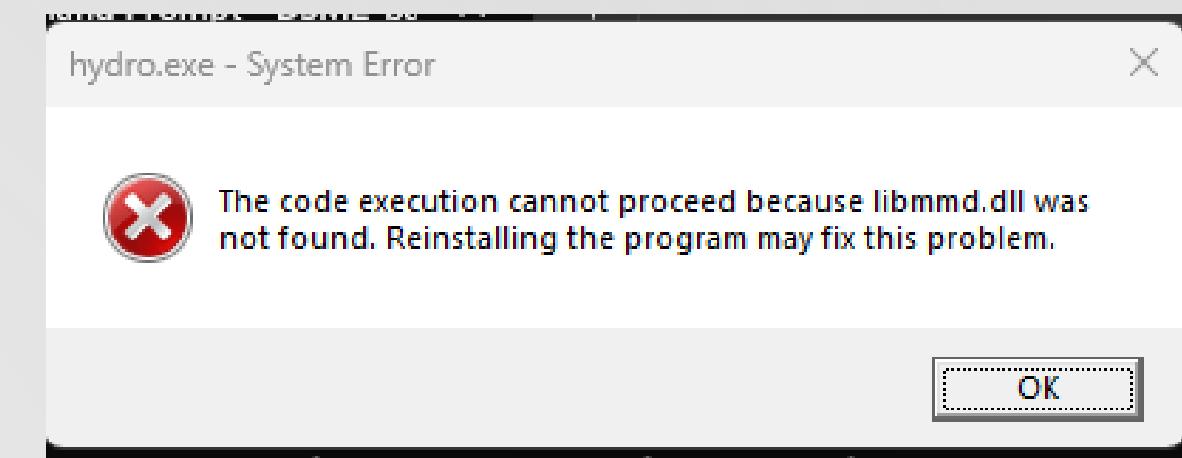
1. Open a command prompt window
2. cd to your dsm2_studies\studies\historical\ folder
3. Execute **DSM2_batch.bat**
4. Ctrl-C ctrl-c if you want to stop the run

```
Delta Simulation Model 2: A river and estuary simulation model
Copyright (C) 1996-2009 State of California,
Department of Water Resources.
Licensed under the GNU Public License.

DSM2-Hydro Version v8.4.2
Number of operating rule expressions processed: 5
Number of operating rules processed: 87
Starting DSM2-Hydro at time: 31AUG2014 2400
Note: at 01SEP2014 0215 network iterations at maximum ( 20).
Starting Hydro computations for time: 01SEP2014 2400
Starting Hydro computations for time: 02SEP2014 2400
Starting Hydro computations for time: 03SEP2014 2400
Starting Hydro computations for time: 04SEP2014 2400
Starting Hydro computations for time: 05SEP2014 2400
Starting Hydro computations for time: 06SEP2014 2400
Starting Hydro computations for time: 07SEP2014 2400
Starting Hydro computations for time: 08SEP2014 2400
Starting Hydro computations for time: 09SEP2014 2400
Starting Hydro computations for time: 10SEP2014 2400
forrtl: error (200): program aborting due to control-C event
Image          PC            Routine         Line      Source
KERNELBASE.dll    00007FFDE930C1BD Unknown           Unknown  Unknown
KERNEL32.DLL      00007FFDEB08E8D7 Unknown           Unknown  Unknown
ntdll.dll        00007FFDEBEAC53C Unknown           Unknown  Unknown
Terminate batch job (Y/N)? y
(base) PS D:\csdp_quick_start\dsm2_studies\studies\historical> |
```

Verify that DSM2 runs

1. If you get dll not found error messages, go to <https://github.com/CADWRDeltaModeling/dsm2/releases> and download and install the **Microsoft Visual C++ Redistributable**.
2. You may also need the **Intel Fortran Compiler Runtime for Windows**.



github.com/CADWRDeltaModeling/dsm2/releases

• Change in the way to specify `dx`, the channel computation distance. This change breaks the compatibility of the DSM2 grid input file.

Prerequisites

On Windows, you may need to install Microsoft runtime libraries before using DSM2, if it is not installed already.

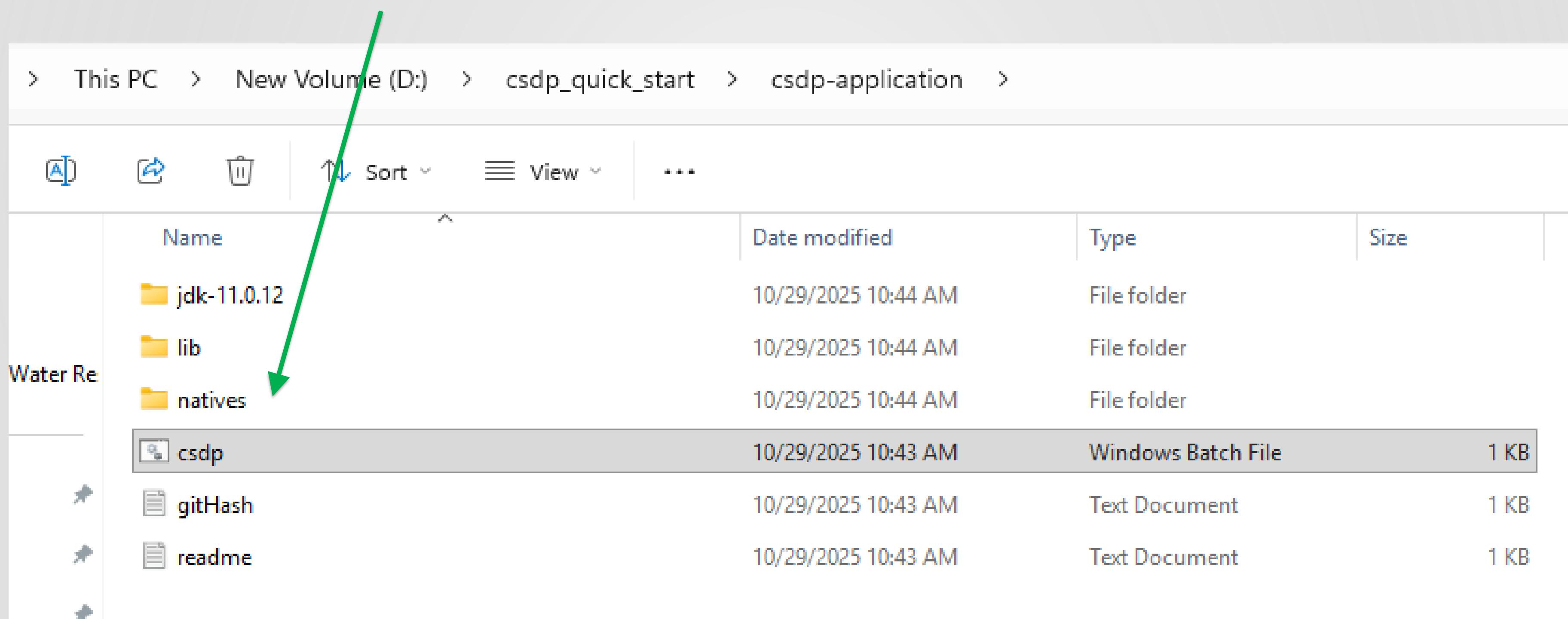
- [Microsoft Visual C++ Redistributable](#)

The Windows version zip file includes Intel Runtime libraries.

Changes

Start CSDP

Double click on “csdp” file



Test CSDP loading data files

The screenshot illustrates the process of loading data files into the CSDP software. It is divided into two main sections:

Top Section: Shows the main CSDP interface with a toolbar at the top. The "bath" button is highlighted with a yellow box and a green arrow pointing to it. A tooltip "open bathymetry file" is visible near the "bath" button. Below the toolbar, there are three boxes containing instructions:

- 1. Load bathymetry file
tms_area.cdp
- 2. Load landmark file
node.cdl
- 3. Load network file
delta_tms_horseshoe_adj.cdn

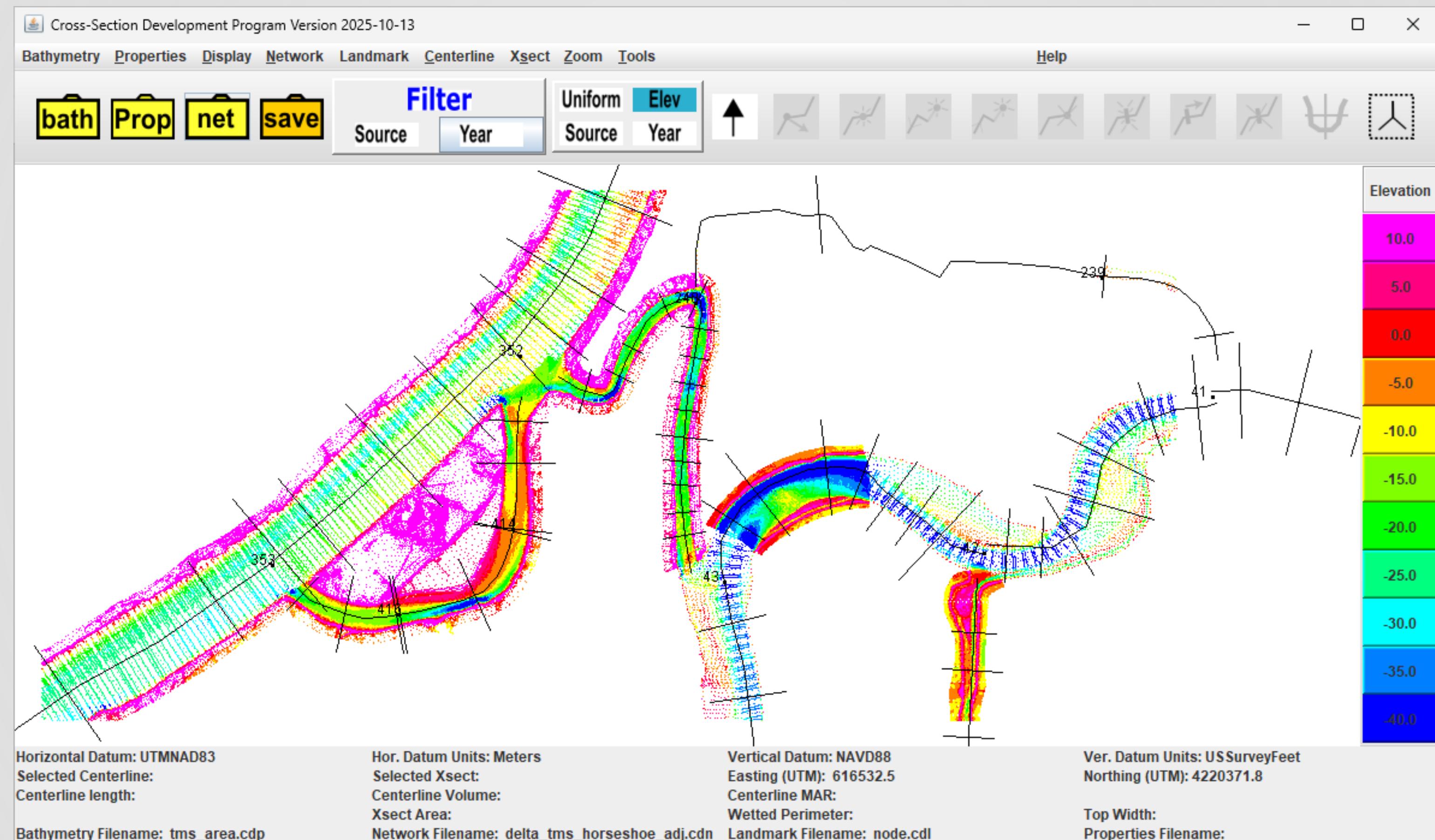
Bottom Section: Shows a second instance of the CSDP interface. The "Landmark" tab is selected in the toolbar. The "bath" button is again highlighted with a yellow box and a green arrow pointing to it. A tooltip "Open Landmark File" is visible near the "bath" button. Below the toolbar, there are three boxes containing instructions:

- 1. Load bathymetry file
tms_area.cdp
- 2. Load landmark file
node.cdl
- 3. Load network file
delta_tms_horseshoe_adj.cdn

Right Side: A large green arrow points from the bottom section towards a file selector dialog window titled "Select bathymetry(.prn, .cdp, .cdp.gz) file". The dialog shows a file list and a "File Name:" field set to "tms_area.cdp".

Central Callout: A green callout box contains the instruction: "Choose each file using the file selector dialog".

Test CSDP loading data files



Questions?



Bradley.Tom@water.ca.gov