July 6, 2026

2026 CESM Tutorial

Welcome, Introduction, and Logistics

Sophia Macarewich & Elizabeth Faircloth
CGD NSF NCAR

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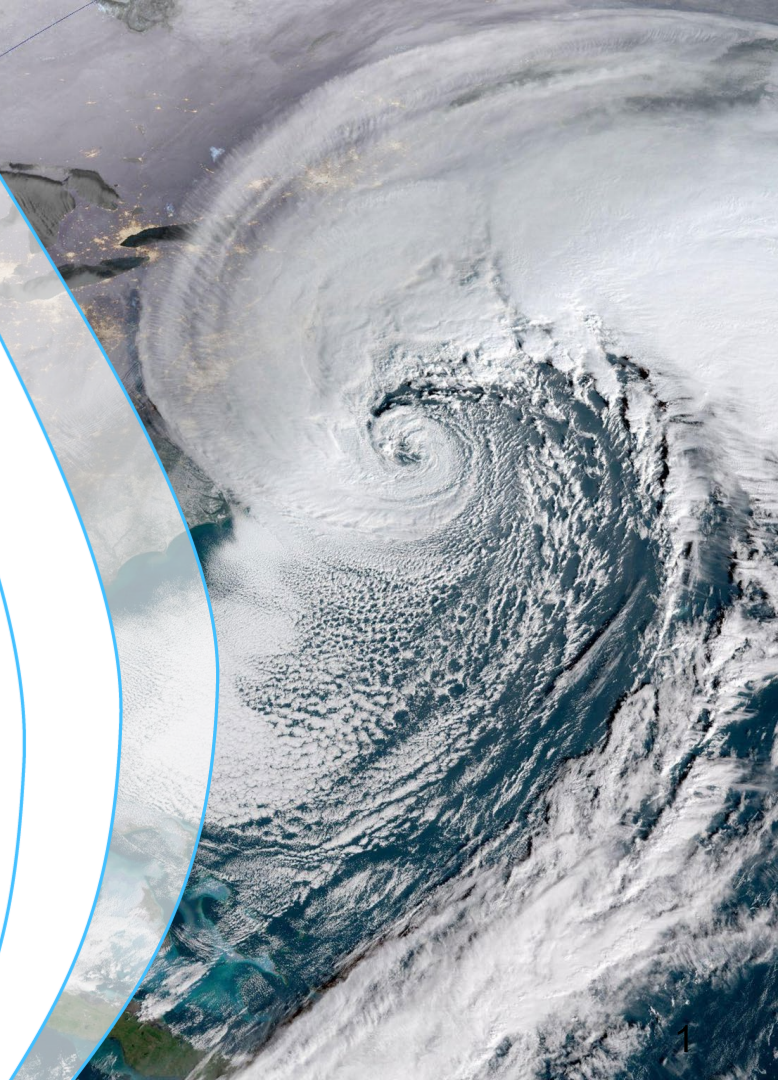

Welcome to the Mesa Laboratory

Land Acknowledgement

We recognize the many contributions of Indigenous peoples in Colorado and acknowledge that the Mesa Laboratory is located on the traditional territories and ancestral homelands of the Cheyenne, Arapaho, Ute and many other Native American nations. It is important to recognize the history of the state, however difficult, and the histories and experiences of the Indigenous peoples who have lived in these territories for millennia. Their forced removal from these territories has caused devastating and lasting impacts. While we can never undo or rectify the devastation wrought on Indigenous peoples, we commit to improving and enhancing engagement with Indigenous peoples and issues locally and globally.

Reminder on UCAR Code of Conduct

If you have questions or issues, please contact: fair@ucar.edu or hannay@ucar.edu

Primary Contacts

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CESM Tutorial Coordinator
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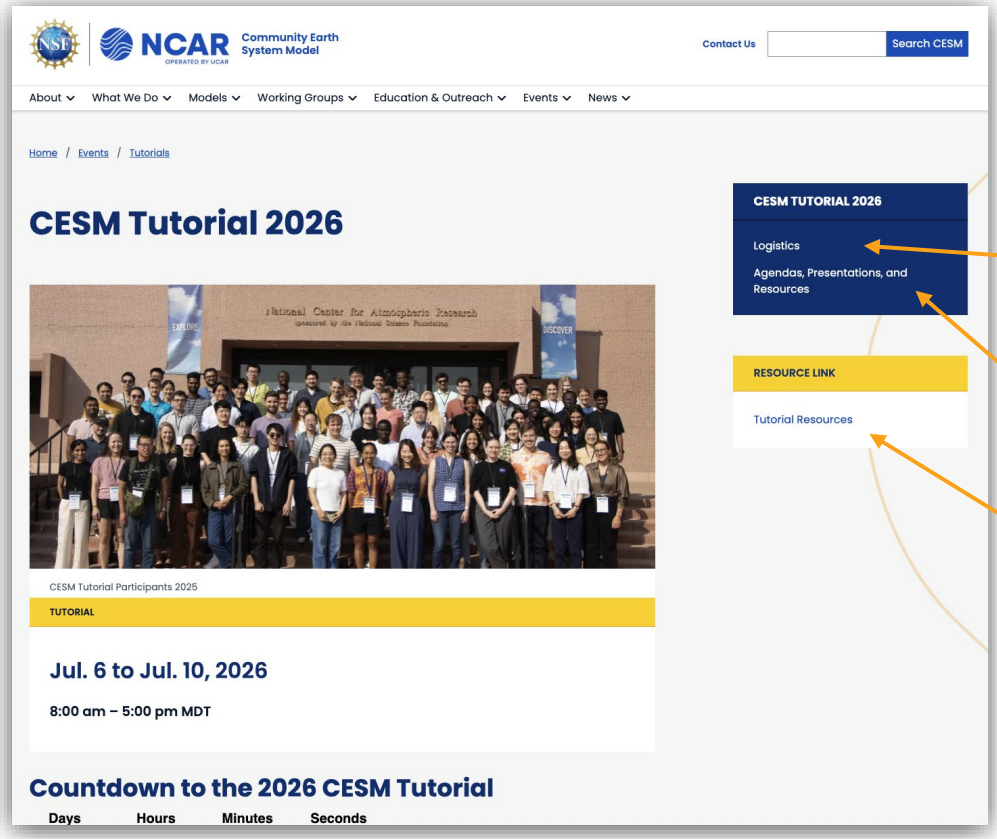
Tutorial Goals

As a result of attending the CESM Tutorial, attendees will:

- Gain a foundational scientific understanding of the core CESM components and CESM features.
- Be able to run and modify the model and use the output.
- Have opportunities to network with peers and CESM scientists.
- Attain an understanding of High Performance Computing (HPC) needed for CESM.
- Perceive the tutorials to be an inclusive learning environment.

CESM Tutorial Website



https://www.cesm.ucar.edu/events/tutorials/cesm

OR Search "cesm tutorial 2026 ncar"

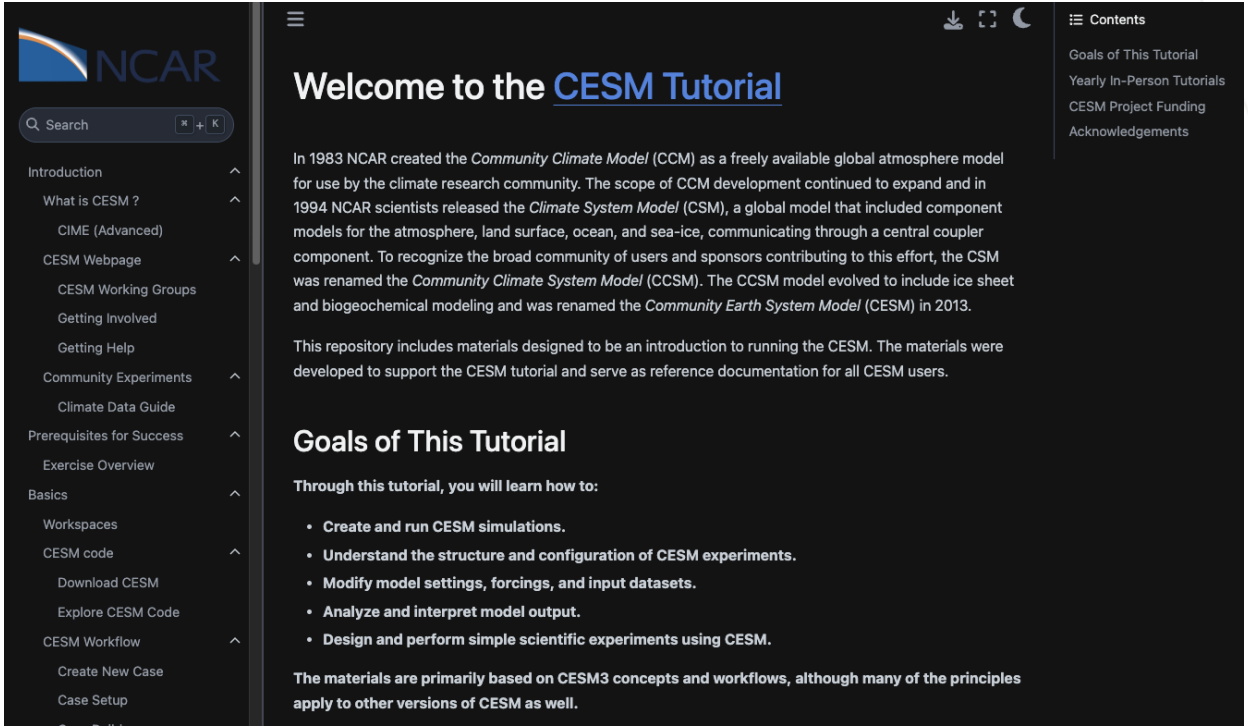
Additional info about logistics. photos, etc

agenda (including slides of lectures)

lab materials

Lab Materials

https://ncar.github.io/CESM - Tutorial/



Tutorial Agenda

- **Lectures (Main Seminar Room)**
  - Component Lectures (CL) → information about how the core model components work
  - Specialized Lectures (SL) → Earth System Prediction, Paleoclimate, Atmosphere chemistry, variable resolution, etc.

- **Lab activities (Library)**
  - Days 1-3 → all participants complete same exercises
  - Day 4 → example plotting and diagnostics for your chosen component(s)
  - Day 5 → challenge exercises focused on your area(s) of interest

Welcome to the Mesa Laboratory

- Lunch (Mesa Lab cafeteria)
  - Food is available in the Mesa Lab cafeteria. Vegetarian and Gluten free options are available.
  - You are responsible for paying for your own lunch.
  - Stagger lunchtime if possible, beginning at 11:30 am
  - Lunch is limited on **Friday soup/salad/pre - ordered bagged lunch; please complete the order form by 3pm today**

- Meet an expert (optional) (breakout areas)
  - Lunch on Tuesday/Wednesday/Thursday
  - Casual conversation with a scientist with no fixed agenda
  - You need to fill the form (with your 1st/2nd/3rd choice)
  - We will **assign you to one scientist** to ensure reasonably sized groups

- Mesa Lab Exhibit Tours (optional)
  - Public tours on Monday, Wednesday, and Friday. We can have a private tour with Leanne on Tuesday (sign-up sheet at the registration table). Meet at 12:00pm at the front entrance. You can also explore the exhibits on your own.

Typical Day

Morning (starts at 8:25am)

- Lectures (Seminar Room)
- Lab (Library)
- Light snacks and coffee/tea (in front of the Main Seminar Room and the Outer Damon in the afternoon)
  - *Only cups with lids allowed in the Main Seminar Room*
  - *Reduce waste and recycle cans/bottles*

Lunch (12:00 - 1:15 pm)

- Eat/Socialize (Cafeteria)
- Meet an expert (Various locations)
- Mesa Lab exhibit tours (Hallway)

Afternoon (ends at 4:35pm)

- Lectures (Seminar Room)
- Lab (Library)
- Light snacks (Damon Room)
- Daily check-in (Seminar Room)

Daily Check - in

At the end of each day, we will reconvene in the main seminar room for the daily check - in:

- we will discuss what went well and what didn't
- you will complete the daily survey

For each lecture:

- How relevant was the content of the class to your interests or needs?
- Was the difficulty level of the class appropriate for your skill level?
- Any additional comments or suggestions?

On the last day, there will be a general survey.

These surveys are important for us to improve the content of the tutorial. Please fill out the survey. Thanks in advance.

If you complete every survey, you will be entered into a raffle & could win cool prizes!

Ask Freely! There are no stupid questions

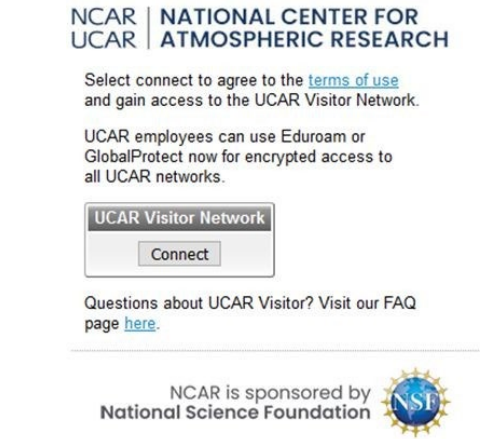
We all come from different backgrounds and are here to learn. There are no stupid questions! Please do not leave still confused and with your questions unanswered.

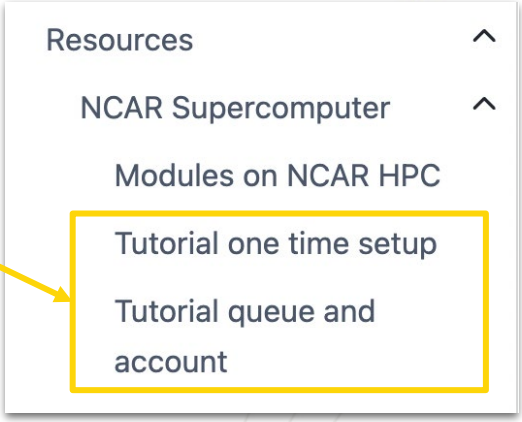
- Ask presenters during the Q&A after their lectures or at a break
- Ask helpers during lab sessions
- Ask clarification questions at daily check - in
- Ask questions during the meet - an - expert lunch session
- Ask your peers
- If you are not sure who to ask, let Elizabeth know and she will connect you with someone on the team

Computer Information

- **Wireless access**
  - Use the UCAR Visitor wifi. It is an open, unencrypted network (require registration for access).
  - Use the Eduroam wireless only if you have it already installed on your computer / set up with your home institution

- **Project account & Reservation Queues**
  - We have set the **project account (UESM0016)** as a default in the .profile or .tschrc files we instruct you to use.
  - To use the **reservation queue** , you need to follow instructions in Lab Materials
  - If you have problems using these or conflicts with other, existing project codes please let us know ASAP



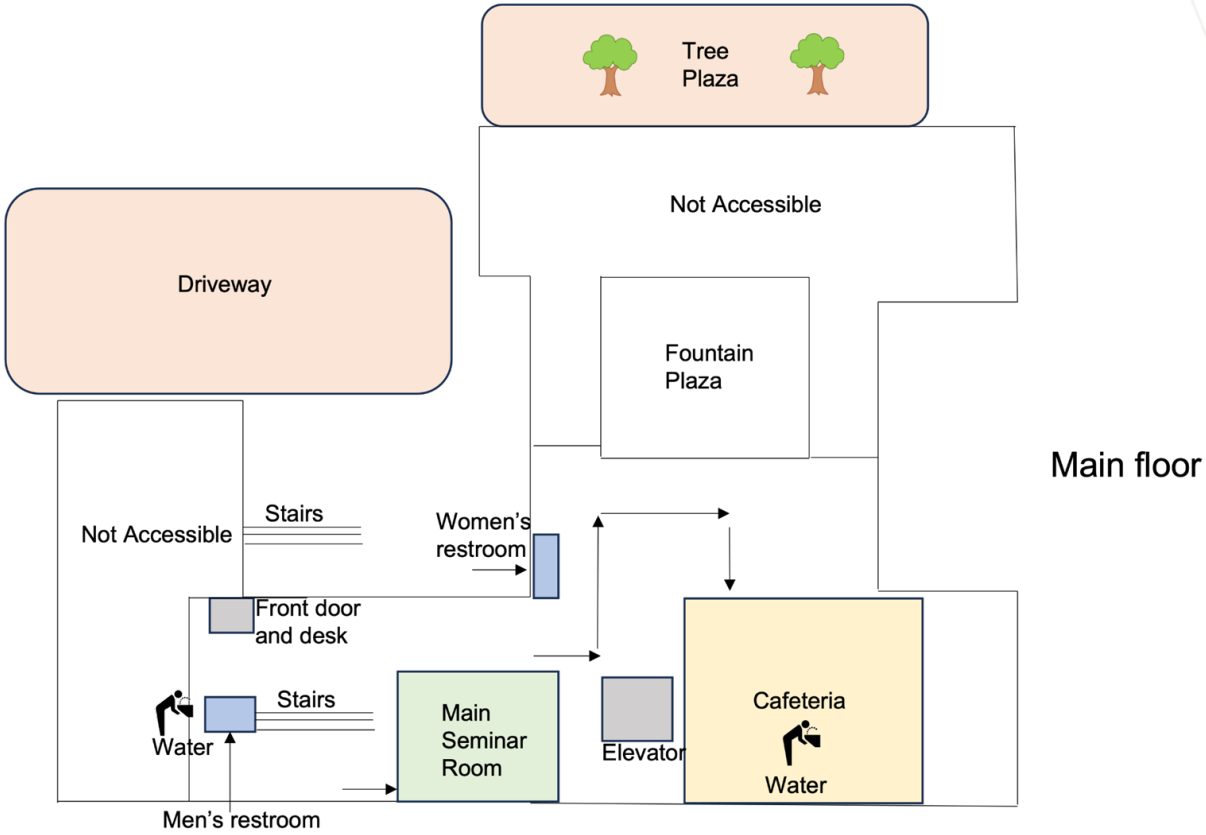


Welcome to the Mesa Laboratory

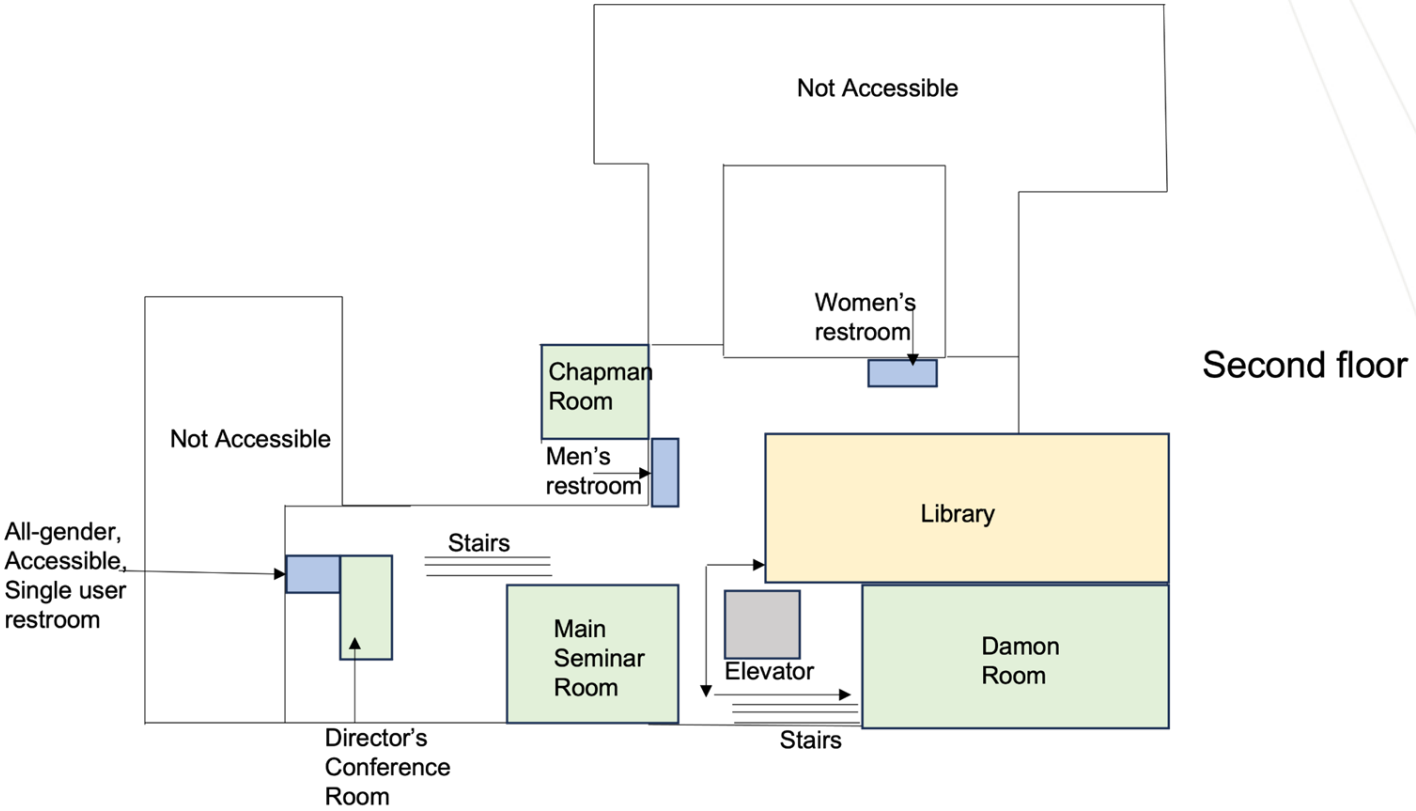
- Google Group: **cesm - tutorial - participants@gmail.com**
  We have created a Google group for the 2026 CESM tutorial participants. Participants have been introducing themselves here. Once here you can start coordinating with other participants to socialize and network. (Auditors are welcome to join as well)

- Special CESM Cafe
  On Thursday, from 9:45am - 10:15 am, CGD staff, visitors, and guests from across NCAR will join us for a special CESM Cafe. Use this opportunity to meet with other staff members, ask questions, network etc.

Maps


Tree
Plaza
Not Accessible
Driveway
Fountain
Plaza
Main floor
Not Accessible
Stairs
Women's
restroom
Front door
and desk
Stairs
Water
Main
Seminar
Room
Elevator
Cafeteria
Water
Men's restroom

Maps


Not Accessible
Women's restroom
Second floor
Chapman Room
Not Accessible
Men's restroom
Library
All-gender, Accessible, Single user restroom
Stairs
Main Seminar Room
Elevator
Damon Room
Director's Conference Room
Stairs

Need a break? Quiet spaces

Outdoor Seating

Walking Path

Check with our admin team for available rooms.

Questions?