



2025 CESM Tutorial

Day 3 Daily Logistics

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Agenda

Wednesday, July 9

- 8:25-8:30 Daily logistics
- 8:30-9:15 Ocean Modeling I: basics and overview of models (*Gustavo Marques*)
- 9:15-9:30 Break (coffee + snack)
- 9:30-10:15 Ocean Modeling II: parameterizations/physics (*Peter Gent*)
- 10:15-10:30 Break (snacks)
- 10:30-10:45 Intro to Lab: Namelist and code changes (*Cécile Hannay*)
- 10:45-12:00 Lab exercises (**Library**)

- 12:00-1:15 Lunch on your own + activities
 - Meet a scientist (**Breakout rooms**: 12:15-1:00)
 - ML Public Tour (Meet at noon **front door**)

- 1:15-2:00 Ocean Modeling III: biogeochemistry (*Keith Lindsay*)
- 2:00-2:15 Break
- 2:15-2:25 Lab exercises check in
- 2:25-4:20 Lab exercises (**Library**)
- 4:20-4:33 Daily debrief
- 4:45 Shuttle Departs ML

<https://ncar.github.io/CESM-Tutorial/README.html>



Q Search

Welcome to the CESM Tutorial

Introduction

Prerequisites for Success

Basics

Simple XML Modifications

Namelist Modifications

Overview

Namelist Variables

Documentation

Customizing Output

Exercise Overview

Troubleshooting runtime errors

Source Modifications

Challenge Exercises

Diagnostics

Resources



Namelist Modifications

There are several ways in which the model can be modified using namelist settings. This is what we cover in this chapter:

- The section **Overview** describes the steps to modify the namelists and provides a visual representation of the directories and files that need to be modified.
- The section **Documentation** explains how to find information about the namelist variables on the CESM webpage.
- The section **Customizing output** describes how to customize the output history files, such as changing the output frequency or adding variables to a file.
- The section **Exercises** offers opportunities to practice the concepts learned in this chapter.

Previous

[Exercise 3: Change physics timestep](#)

Next

[Overview](#)



Rough guidelines for the lab

Day 1: Basics

Day 2: Simple xml modifications

Day 3: Namelist, Troubleshooting, Source Mods

Day 4: Diagnostics

Day 5: Challenge exercises

BUT

This is a **self-paced lab**.

We all come from different backgrounds. Some people will move faster, and some will move slower. It's completely okay.

- Susan Solomon: Solvable- How We Healed the Earth and How We Can Do It Again
 - Wednesday, July 9; 7 pm
 - **Live Stream:** <https://sundog.ucar.edu/public/page/soloman>

The poster is for a "Save the Date" event featuring Susan Solomon. It includes the NSF and NCAR logos at the top left. The main title "Save the Date" is in large blue letters, followed by the date "Wednesday, July 9th, 2025" in a blue rounded rectangle. Below this, a paragraph invites attendees to a thought-provoking evening. The central image is the book cover for "SOLVABLE: HOW WE HEALED THE EARTH, AND HOW WE CAN DO IT AGAIN" by Susan Solomon, which features a collage of Earth from space. To the right of the book cover, a clock icon indicates the time "7 PM - Author's Hybrid talk and Q+A". A location pin icon provides the address: "NSF NCAR Mesa Lab - Main Seminar Room, 1850 Table Mesa Dr. Boulder, CO 80305". A ticket icon states "In person space is limited so register early." and a video camera icon notes "Registration to watch online is also available." A QR code is located at the bottom right of the event details section. At the bottom of the poster, a circular portrait of Susan Solomon is shown next to her name and title: "Susan Solomon (MIT), Lee and Geraldine Martin Professor of Environmental Studies, Chair, Program in Atmospheres, Oceans & Climate, EAPS".

Save the Date
Wednesday, July 9th, 2025

Please join us for a thought-provoking evening with Susan Solomon, as we celebrate her recent book.

SOLVABLE
HOW WE HEALED THE EARTH,
AND HOW WE CAN DO IT AGAIN
SUSAN SOLOMON

7 PM - Author's Hybrid talk and Q+A

NSF NCAR Mesa Lab - Main Seminar Room
1850 Table Mesa Dr. Boulder, CO 80305

In person space is limited so register early.

Registration to watch online is also available.

Susan Solomon (MIT)
Lee and Geraldine Martin Professor of Environmental Studies
Chair, Program in Atmospheres, Oceans & Climate, EAPS

- Thanks to those who have added their information on the Slack #introductions
 - We have heard from past participants that networking and collaboration among tutorial participants has been beneficial
 - We will share a participants list on Friday - please let Elizabeth know if you do not want your information included. We ask that you keep the contact information among participants and not share it with others.