

ESMD/E3SM Meeting

Sessions, Logistics & Etiquette

ESMD/E3SM Meeting Steering Committee

Main Website

- <https://www.ornl.gov/esmd-e3sm>

Log in
using your confirmation number from your registration

The screenshot shows a registration form with fields for 'Email Address' and 'Confirmation Number'. A red circle highlights the 'Log in' button at the bottom of the form. A red arrow points from the 'Log in' button in the screenshot to the 'Log in' button in the main website screenshot on the right.

Request to resend
confirmation number

The screenshot shows the website for the 2020 ESMD-E3SM PI Meeting. The header includes the title '2020 ESMD-E3SM PI Meeting' and a 'Home' link. A banner image of a globe with blue and green patterns is at the top. Below the banner, there are three buttons: 'Register Now', 'Agenda', and 'Add to Calendar'. A red circle highlights the 'Register Now' button, with a red arrow pointing to the 'Log in' button in the registration form screenshot on the left. The main content area is divided into sections: 'When', 'Where', 'Why', 'Registration', 'Presentation/Poster Submission', and 'Agenda'. The 'Registration' section states that registration is required and will open on September 14th. The 'Presentation/Poster Submission' section provides details on how to submit presentations and posters. The 'Agenda' section states that the agenda is available on the website.

2020 ESMD-E3SM PI Meeting

Home

The Earth System Model Development (ESMD) program area Principle Investigator (PI) and E3SM Annual All-Hands meeting will be held October 26-29, 2020.

It is the joint meeting of all projects supported by ESMD including DOE lab led SFAs (e.g., E3SM, SciDAC projects, University led projects as well as the projects jointly funded by ESMD and other program areas.

Register Now | Agenda | Add to Calendar

Already registered?

When
The meeting will take place Monday, October 26th to Thursday, October 29, 2020, starting around 11 am ET (8 am PT) and ending around 5:30 pm ET (2:30 pm PT).

Where
This will be a virtual meeting using Zoom with plenary and breakout rooms.

Why
The purpose of the meeting is to review progress, share knowledge and best practices, identify opportunities and challenges, facilitate discussion and foster collaboration so that we can best work together to advance the development of DOE's Energy Exascale Earth System Model (E3SM).

Registration
Registration is required to participate, it will open the week of September 14th. Use the REGISTER NOW button to submit your registration.

Presentation/Poster Submission
Both oral presentations and posters will be done virtually and will be delivered through Zoom's video conferencing system. Most of the plenary presentations will be in 15 minutes time slots with 10 minute presentations and the rest of the time for questions and transition, however, please refer to the agenda for the allocated time for your specific presentations. For the poster session, contributors will have the option to upload a poster or a slide presentation, and optionally to accompany it with a short (up to 5 minute) audio/video recording. Posters in the form of a slide deck, should not exceed 10 slides. The presenter will be asked to virtually attend to his/her poster and engage in discussions and Q&A either through chats or email communication.

All abstracts that were selected for an oral presentation are listed on the agenda. If your abstract is not listed on the agenda, we welcome it as a poster since we received many more high quality, interesting abstract submissions than we can fit in the schedule as oral presentations. We will have a poster award competition and will share the details a little later.

Poster files should be uploaded to the most appropriate topical folder (e.g. P51-BGC, see below) no later than **Wednesday, October 21, 2020, at 12:00 p.m. (noon) Eastern Daylight Time.**

Oral presentation files should be uploaded to the Google folder for your session (e.g. D153 for Day 1, Session 3) no later than **5:00 pm Eastern Daylight Time on the day before your presentation.**

The link for the Google Folder is located on the Poster page of the website; you will need to log in to the website to access.

Please refer to the [detailed instructions](#) for uploading your files.

Agenda
The agenda is available [here](#).

U.S. DEPARTMENT OF ENERGY | Office of Science

Contact Us

OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION
Shaping the Future of Science

ORAU/ORISE Privacy Policy | Contract Acknowledgement

Once Logged In - ZOOM links

Home **Zoom Weblinks** Abstract Submission Slack Channels Posters Post Registration Information Log Out

2020 ESMD-E3SM PI Meeting

Plenary Session (10/26-29/20)
<https://www.zoomgov.com/j/1615759405?pwd=MU5HWW1VcXBNDDBDNi9FaThMWXBEdz09>

D3S2-BR#1 (10/28/2020)
Join ZoomGov Meeting
<https://www.zoomgov.com/j/1600640567?pwd=NmZVMW9wSHR3eUp4azFKNUZkejFZdz09>
Meeting ID: 160 064 0567
Passcode: 156416
One tap mobile
+16692545252,,1600640567#,,,,,0#,156416# US (San Jose)
+16468287666,,1600640567#,,,,,0#,156416# US (New York)
Dial by your location
+1 669 254 5252 US (San Jose)
+1 646 828 7666 US (New York)
833 568 8864 US Toll-free
Meeting ID: 160 064 0567
Passcode: 156416
Find your local number: <https://www.zoomgov.com/u/acr5OfMWI2>

D3S2-BR#2 (10/28/2020)
Topic: D3S2-BR#2
Time: Oct 28, 2020 03:00 PM Eastern Time (US and Canada)
Join ZoomGov Meeting
<https://www.zoomgov.com/j/1610841158?pwd=VHdVeHNjcmMwODRkaFJZa29LMW5OZz09>
Meeting ID: 161 084 1158
Passcode: 296777

All plenary sessions
(everything except breakouts)

Each breakout has its own zoom meeting
(refer to Agenda for Breakout Numbers)

Naming Convention:

D1S1 – means Day 1, Session 1

D3S2-BR#1 – means Day 3, Session 2, Breakout Room #1

Plenary Zoom Session and Etiquette

- **Plenary Sessions** will be run in “Webinar” format, with stricter rules on who can talk or turn on their camera
 - **Generally**, if you are not a speaker or a panelist, you will have **NO Audio** and **NO Camera**
 - A panelist can enable those options for you, if needed
 - If you have **questions**, please type them in the **Q/A window**, or use the ‘**Raise hand**’ function
 - **Slack channel discussions are encouraged before and after the session, but NOT during the session** to keep distractions to a minimum
 - **If you are a speaker**, you should have received your personal zoom link, which classifies you as a panelist. You will be able to share your screen and mute or enable cameras
 - **If you cannot find the information on how to join the meeting**, please let us know and Tracey can help you (**email esmd-e3smpimeeting@lnl.gov**)

Breakout Zoom Session and Etiquette

- **Breakouts Sessions** will be run in a “Meeting” format
 - **Everyone** will be able to **Mute** themselves and turn on their **Camera**
 - **Please mute yourself** on entrance and keep your mike muted if not talking
 - **Slack channel discussions are encouraged before and after the session, but NOT during the session** to keep distractions to a minimum
 - However, the purpose of the breakout session is for broad discussion. If one thread of conversation becomes too long on Zoom, then the discussion should be moved to Slack channels so others have a chance to chime in. Co-chairs of the sessions can moderate accordingly.

Agenda

Click "Home" then
Click on "Agenda"

Home Zoom Weblinks Abstract Submission Slack Channels Posters Post Registration Information Log Out

2020 ESMD-E3SM PI Meeting

The Earth System Model Development (ESMD) program area Principle Investigator (PI) and E3SM Annual All-Hands meeting will be held October 26-29, 2020.

It is the joint meeting of all projects supported by ESMD including DOE lab led SFAs (e.g., E3SM), SciDAC projects, University led projects as well as the projects jointly funded by ESMD and other program areas.

Register Now Agenda Add to Calendar

When
The meeting will take place Monday, October 26th to Thursday, October 29, 2020, starting around 11 am ET (9 am PT) and ending around 5:20

ES3M Confluence Home Spaces Apps Create

ES3M Conferences and Meetings / DOE ESMD/E3SM Annual All-Hands Meeting, October 26-29, 2020

ESMD/E3SM Meeting Agenda

Created by Renata McCoy
Last updated yesterday at 8:36 PM • 13 min read

PI Meeting Steering Committee (*co-chairs):

*Xujing Davis (DOE)	Program Manager, ESMD
Cristiana Stan (DOE)	IPA, EESM
*Renata McCoy (LLNL)	E3SM Chief Operating Officer/Project Engineer
Dave Bader (LLNL)	E3SM Council Chair
Ruby Leung (PNNL)	E3SM Chief Scientist
Mark Taylor (SNL)	E3SM Chief Computational Scientist
Guang Zhang (SCRIPPS, UCSD)	University PI Representative

Logistics Support: Oak Ridge Institute for Science and Education (ORISE), Holy Davis

Questions regarding the meeting: Please send email to esmd-e3smmeeting@llnl.gov

Slack Channel for meeting discussions: Please log in on the [Meeting Home page](#) to access the link to the Slack workspace.

Session chairs: 2 co-chairs of each session should discuss and coordinate on the responsibilities of their sessions and back each other up in case of connectivity or technical issues.

	Time	Duration	Plenary
1	Day1: Monday, 10/26/2020		
2	11:00 am ET		D1S1 - Session Chair: Xujing Davis, Renata McCoy
3	11:00 am		Welcome
4	11:00 am - 11:10 am	10 min	Gary Geernaert, Director of BER Earth and Environmental Systems Science Division (EESSD)
5	11:10 am - 11:25 am	15 min	Xujing Davis, Program Manager of the Earth System Model Development (ESMD)
6	11:25 am - 11:35 am	10 min	Renata McCoy, E3SM Chief Operating Officer
7	11:35 am - 12:05 pm	25 min +5 min	Keynote A baseline for global weather and climate simulations at 1 km resolution, Nils Wedi, ECMWF, WEDI_Nils_D1S1_2020-1026.pptx
8	12:05 pm - 12:15 pm	10 min	Sharlene Weatherwax, Associate Director of Science for Biological and Environmental Research
9	12:15 pm - 1 2:25 pm	10 min	E3SM Awards Announcement (Sharlene Weatherwax)
10	12:25 pm		D1S2 - Session Chairs: Dave Bader, Cristiana Stan
11	12:25 pm	60 min	E3SM Overview

Slack Channels

- 2 ways of finding slack channels

- **Plenary Sessions:**

- One slack channel per day

- **Breakout Sessions:**

- One slack channel per Breakout

- **Poster Sessions:**

- One slack channel per category

- You should have received an email with the link to the esmd-e3smpimeeting slack

- (can't find it - email esmd-e3smpimeeting@llnl.gov)

The screenshot shows the top navigation bar of the 2020 ESMD-E3SM PI Meeting website. The 'Slack Channels' link is circled in red. Below the navigation bar, the page title is '2020 ESMD-E3SM PI Meeting' and the main heading is 'Slack Channels'. A table lists the following Slack channels:

Description	Slack Channel
Day 1 - All Plenary Sessions	#day1
Day 2 - All Plenary Sessions	#day2
Poster Session 1 (PS1) - Biogeochemical Cycles (BGC)	#ps1-bgc
Poster Session 1 (PS1) - Cryosphere	#ps1-cryosphere

The screenshot shows the E3SM Confluence page for 'Slack Channels'. The page title is 'Slack Channels' and it was created by Holly Davis. The page content includes a table listing Slack channels in the order they will be needed based on the agenda. On Slack, the channels are listed alphabetically.

Description	Slack Channel
Day 1: Monday, 10/26/2020	
Day 1 - All Plenary Sessions	#day1
Day 2: Tuesday, 10/27/2020	
Day 2 - All Plenary Sessions	#day2
Poster Session 1 (PS1) - Biogeochemical Cycles (BGC)	#ps1-bgc
Poster Session 1 (PS1) - Cryosphere	#ps1-cryosphere
Poster Session 1 (PS1) - Diagnostics and Infrastructure	#ps1-diagnostics_and_infrastructure
Poster Session 1 (PS1) - Ocean/Coastal	#ps1-ocean_coastal
Poster Session 1 (PS1) - Ocean/Coastal	#ps1-water_cycle
Day 3: Wednesday, 10/28/2020	
Day 3 - All Plenary Sessions	#day3
Day 3 - Session 2 - Breakout Room 1 (D3S2-BR#1)	#day3-session2-breakout1
Day 3 - Session 2 - Breakout Room 2 (D3S2-BR#2)	#day3-session2-breakout2

Breakout Sessions

- Day 3 (Wed) @ 3:15 pm ET
 - D3S2-BR#1 Atmosphere
 - D3S2-BR#2 Land
 - D3S2-BR#3 Ocean
 - D3S2-BR#4 Computational Science
 - D3S2-BR#5 ML/AI
- Day 4 (Thu) @ 11:05 am ET
 - D4S1-BR#1 Water Cycle
 - D4S1-BR#2 Cryosphere
 - D4S1-BR#3 Infrastructure + NGD Software and Algorithms
 - D4S1-BR#4 Aerosols
- Day 4 (Thu) @ 1:05 pm ET
 - D4S2-BR#1 NGD Nonhydrostatic Atmosphere + Performance/Exascale Readiness
 - D4S2-BR#2 BGC + NGD Land
 - D4S2-BR#3 Ocean + Coastal Modeling
 - D4S2-BR#4 NGD Atmosphere
- All Breakouts – **Report Back** on Day 4 @ 4 pm ET

Please check the overarching questions for the Day 3 breakout session (link in Agenda)

The screenshot shows the E3SM Confluence interface. The main content area displays 'Suggested Questions for Breakout #1' created by Renata McCoy on Oct 22, 2020. The page lists questions under three categories: Atmosphere, Ocean and Land; Computation; and ML/AI. A sidebar on the left shows a navigation menu with 'Suggested Question...' highlighted in a red circle. A red arrow points from the text 'Please check the overarching questions for the Day 3 breakout session (link in Agenda)' to this highlighted link.

E3SM Confluence | Home Spaces Apps Create

E3SM Conferences and Meetings / DOE ESM/D/E3SM Annual All-Hands Meeting, October 26-29, 2020

Suggested Questions for Breakout #1

Created by Renata McCoy
Oct 22, 2020 • 2 min read

Atmosphere, Ocean and Land breakout sessions:

1. What are the grand challenges in atmosphere, ocean/ice, and land modeling? For example:
 - a. What are the key missing or more uncertain processes that should be prioritized for model development?
 - b. What processes require more improvements in scale awareness?
 - c. Is there a game-changing scale for modeling processes in each component?
2. How can we overcome these challenges and accelerate progress?
3. What opportunities/recent advances can E3SM leverage?
4. How can we improve E3SM's development and evaluation process? For example:
 - a. How could development better target known biases?
 - b. How can we ensure good coupled model behavior while developing component models?
 - c. How can development and evaluation be made more efficient?

Computation breakout session:

1. What are the grand challenges in earth system modeling from a computational perspective?
2. What strategies can be implemented to accelerate progress?
3. What are the opportunities/recent advances in algorithms, performance optimization, programming models and software engineering can E3SM leverage?
4. What 5-year goals should be prioritized for computational science effort?
 - a. Can we achieve universal convergence with time step and vertical levels?
 - b. Can we make verification more expected and uniform?
 - c. Are any improvements needed to DevOps (git workflow, build system, test coverage, test frequency, non-BFB, dealing with test failures), or incremental maintenance is sufficient?
 - d. What are opportunities for new algorithmic efforts?
 - e. How can computational science experts contribute to large ensemble modeling, infrastructure, algorithms, diagnostics?

ML/AI breakout session:

1. What are the challenges in using ML/AI for parameterization development? What are some opportunities to address these challenges?
2. What areas of human-earth interactions may make use of ML/AI for significant advancement?
3. How may ML/AI be used to address or quantify uncertainty in model simulations and projections?
4. How may ML/AI and physically-based models be used in combination to improve model fidelity or design modeling experiments?
5. What other areas can E3SM development, simulation and analysis, computational performance and infrastructure benefit from ML/AI?
6. What strategies are needed to make good use of ML/AI in E3SM development?

Posters

Google Drive

- All posters

- Check posters in Google Drive
 - Arranged into topic areas
- Use Slack channel for discussion
 - One slack channel per poster topic
 - Discuss before, during and after a poster session
- You can also email the Author
 - The name is linked to their email

Home Zoom Weblinks Abstract Submission Slack Channels **Posters** Registration Information Log Out

2020 ESMD-E3SM PI Meeting

Posters

Please use the following Google Drive folder for uploading posters and oral presentations:
https://drive.google.com/drive/folders/1xPOLh2wgK0qH0PdaT0sqkFK_7jEd6snD

Please refer to the [detailed instructions](#) for uploading your files.

Poster Session 1

Asay-Davis, Xylar 1	Designing Regionally Refined Ocean and Sea-ice Meshes for the E3SM v2 Cryosphere Science Campaign	Google Drive Slack channel: #ps1-cryosphere
Asay-Davis, Xylar 2	E3SM Ocean and Sea-ice Diagnostics with MPAS-Analysis	Google Drive Slack channel: #ps1-diagnostics_and_infrastructure
Balaguru, Karthik	Analysis of Eastern Subtropical North Pacific SST Bias in the E3SM	Google Drive Slack channel: #ps1-water_cycle
Brunke, Michael	Attribution of E3SMv1's Snowpack Biases and Errors in Trends to Temperature and Precipitation over the Contiguous U.S.	Google Drive Slack channel: #ps1-water_cycle

Link to email

Link to Google Drive
and Slack channel
for each poster


Posters and Slack

- **Find your poster topic channels,**
 - for example #PS1-BGC - Poster Session 1 – Biogeochemical Cycles.
- **Each poster author should start a thread on his/her poster** by sending a message to the channel that lists the poster title.
- The author's message will start the thread on that poster.
- **To ask a question about that poster, just reply to the author's message** and your question will become part of the thread.
- To switch to a different poster within that topic area (e.g. PS1-BGC), look at the other messages in the channel.
- To switch to a different topic area such as PS1-Water_Cycle, find that channel and click on it to see the threads that other poster authors have started.
- For additional help with Slack see the [How To Resources](#) page
- Also, see [Guide to Slack Notifications](#) page and the **#slack-tips** channel

The image shows a screenshot of a Slack workspace. On the left is a dark sidebar with a list of channels. The channel '# ps1-bgc' is highlighted with a red circle. On the right is the main content area for the '#ps1-bgc' channel. At the top, it says '#ps1-bgc' with a star icon and 'Add a topic'. Below that, it shows 'All DMs', 'Mentions & reactions', and 'More'. The channel list includes: # announcements, # day1, # day2, # day3, # day3-session2-br..., # day3-session2-br..., # day3-session2-br..., # day3-session2-br..., # day3-session2-br..., # day4, # day4-session1-br..., # day4-session1-br..., # day4-session1-br..., # day4-session1-br..., # day4-session2-br..., # day4-session2-br..., # day4-session2-br..., # day4-session2-br..., # day4-session2-br..., # organizers-private, # ps1-bgc (highlighted), # ps1-cryosphere, # ps1-diagnostics_a..., # ps1-ocean_coastal, # ps1-water_cycle, # ps2-algorithms_p..., # ps2-atmosphere, # ps2-land_ice, # ps2-land_river_an..., # ps2-sea_ice, and # random. Below the channel list, the details for '#ps1-bgc' are shown: '@Holly Davis created this channel on October 21st. This is the very beginning of the #ps1-bgc channel. Description: Poster Session 1 (PS1) - BGC Posters (edit)'. At the bottom, there are links for 'Add an app', 'Add people', and 'Send emails to channel'.

Posters and Voting

- Check the Poster Page for the voting link
 - It will be provided before the first poster session
- It will consist of the list of poster authors and a check box next to each poster author. If an author has 2 posters, a 1 or 2 will appear by their name.
- You will be able to vote for 5 posters
- Best Poster Awards will be given based on the votes with input from the steering committee
- **Poster Awards** will be given on the last day, Thursday, @ 3 pm ET.



Home Zoom Weblinks Abstract Submission Slack channels **Posters** Post Registration Information Log Out





2020 ESMD-E3SM PI Meeting

Posters

Please use the following Google Drive folder for uploading posters and oral presentations:
https://drive.google.com/drive/folders/1xDOIh2wgK0pH0PdaTQsgkFK_7JE6snQ

Please refer to the [detailed instructions](#) for uploading your files.

Poster Session 1

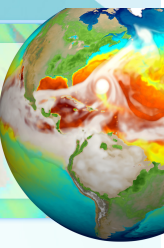
Asay-Davis, Xylar 1	Designing Regionally Refined Ocean and Sea-ice Meshes for the E3SM v2 Cryosphere Science Campaign	 Slack channel: #ps1-cryosphere
Asay-Davis, Xylar 2	E3SM Ocean and Sea-ice Diagnostics with MPAS-Analysis	 Slack channel: #ps1-diagnostics_and_infrastructure
Balaguru, Karthik	Analysis of Eastern Subtropical North Pacific SST Bias in the E3SM	 Slack channel: #ps1-water_cycle
Brunke, Michael	Attribution of E3SMv1's Snowpack Biases and Errors in Trends to Temperature and Precipitation over the Contiguous U.S.	 Slack channel: #ps1-water_cycle

Tools Session, Pictures and Entertainment

- If you are working with E3SM data, make sure to check out the **E3SM Tools Session on Thursday @ 2:35 pm ET** to learn all about post-processing, diagnostics, and performance analysis tools
- **Pictures** will be taken in the **first 5 minutes of Thursday's Breakout sessions**
- Please be ready to turn on your camera if you would like to be included in the mosaic of attendees' portraits
- Our home-grown **“Deep Dive” group** will be performing in the **Entertainment** session on **Thursday at 3:15 pm ET** after the Poster Awards

Meeting Summary Report

- The Steering Committee together with Co-chairs will produce the Summary Meeting Report
- Co-Chairs will lead the writing of their session chapter
- Co-Chairs may work with the presenters in their session
- The lead PI of ESMD projects will cover the main achievements from the posters from their projects in their written overview
- Each poster abstract will be included in the Appendix in the Summary Report



Problems / questions, email
esmd-e3smpimeeting@lnl.gov
or Tracey Vieser (Tracey.Vieser@orau.org)