

ECLIPSECON

AN ECLIPSE MEGAMOVIE MEETING

Detailed Program

Optional Pre-Conference Adventures

1:30 p.m. — *Exploratorium Tour* (San Francisco)

Join **Robyn Higdon**, Director of Museum Experience, for a behind-the-scenes visit to the Exploratorium. Robyn has led the Exploratorium's live streaming of solar eclipses over the years—see the [New York Times](#) article for more background.

5:30 p.m. — *Gathering & Welcome* (Sonoma County)

WaterHawk Lake Club. <https://www.thewaterhawk.com/> 5000 Roberts Lake Road, Rohnert Park, CA 94928.

Kick off EclipseCon with good company, light refreshments, beverages, and a warm welcome. Steps away from the Doubletree hotel.

Monday Morning, March 23, 2026

Sonoma State University (SSU) Student Center
1801 East Cotati Ave, Rohnert Park, 94928

8:45 a.m. to 9:00 a.m. — Coffee and Tea

9:00 a.m. to 9:45 a.m. — Welcome and Panel Discussion

Welcome - Ballroom B

Eclipse Megamovie Science Results and Machine Learning Efforts

Subject Matter Experts: Dr. Oliveros Martinez (UCB), Prof. Gill (SSU), and Dr. Peticolas (SSU)

- ❖ What scientific outcomes, datasets, and methodological advances were produced through the Eclipse Megamovie project, and how do they contribute to understanding the solar corona?

10:00 a.m. to noon — Presentations and Facilitated Learning

Research Findings from Eclipse Citizen Science Programs - Ballroom B

Discussion focused on the questions below

Subject Matter Experts: Dr. Oliveros Martinez (UCB), Dr. Kovac (UCAR), Professor Emslie (WKU), Dr. Attie (NASA/GMU), Professor Farid (Alabama A&M University) and Dr. Salem (UCB)

Facilitator: Dr. Peticolas (SSU)

- ❖ How can the results, data products, and analytical approaches developed through Eclipse Megamovie, Citizen Cate, and Sunsketcher inform future eclipse-based solar research efforts?
- ❖ What practices were implemented across event preparation, data collection, data processing, analysis, and collaboration that can be documented as best practices and sustained in future research and education programs?

Machine Learning and Data Analysis Techniques - Sonoma Valley

Facilitated learning using the questions below

Subject Matter Experts: Prof. Gill

Eclipse Megamovie Team Experts: Troy Wilson, Daniel Downey, Jesus Longares, Jennifer Ortiz, Owen Wilson

Facilitator: Dr. Raquell Holmes (SSU)

- ❖ What Machine Learning (ML) techniques were successfully utilized, and how did they differ from those that were unsuccessful?
- ❖ What data analysis algorithms were used to produce scientifically valuable High-Dynamic Range (HDR) images, and how did they differ from those used to create artistic HDR images?
- ❖ How did student, citizen, and community scientists contribute to the data analysis process?
- ❖ What algorithms or other machine learning techniques support eclipse image data analysis?
- ❖ What practices implemented in machine learning and data analysis can be documented as best practices and sustained in research and education programs?

12:00 p.m. to 1:00 p.m — Lunch **Ballroom B**
Lunch provided.

1:00 -2:00 p.m — Share-a-thon **Ballroom B**

One minute pitch (virtual and in-person)

Then sharing at tables (in-person) and breakout sessions (virtual), as well as Google Drive folder resources (asynchronous)

- ❖ Additional sessions TBA. Sign up by March 18

In Person Tables

- ❖ Custom automation software for eclipse photography with Canon cameras–The Saxtons
- ❖ Eclipse Photographs–Jennifer Wright
- ❖ Astronomical Society of the Pacific Offerings and Memberships–Vivian White
- ❖ Eclipse Megamovie Data Analysis Poster–Troy Wilson, Daniel Downey, Jesus Longares, Jennifer Ortiz, Owen Wilson
- ❖ Can a DIY tracking mount be a viable low-cost option?–Jeffery Reedy
- ❖ Eclipse Resources collected since 2016–Laura Peticolas

Virtual Breakouts

- ❖ Scientific data form the 2024 eclipse–Gordon Telpun
- ❖ Eclipse Experiences–Hy Trans

Asynchronous Resources

- ❖ National Informal STEM Education Network ([NISE Network](#)) [resources about solar eclipses](#) are available online at no charge–Catherine McCarthy

2:00 p.m. to 5:00 p.m — Presentations and Facilitated Learning

Eclipse Preparations, Education and Outreach - Sonoma Valley

Facilitated learning using the questions below

Subject Matter Experts: Vivian White (ASP), Rob Semper (Exploratorium), and Dr. Raquell Holmes (SSU)

Eclipse Megamovie Team Experts: Darlene Yan and Hannah Hellman (SSU)

Facilitator: Laura Peticolas (SSU)

- ❖ What tools, skills, practices, and knowledge ensure a successful eclipse event for small and/or large audiences?
- ❖ What impacts and outcomes were used to define success for eclipse education and outreach events?
- ❖ What practices implemented across event preparation, activity implementation, and collaboration can be documented as best practices and sustained in future research and education programs?

Photography for Solar Corona Research - Sonoma Valley

Facilitated learning using the questions below

Subject Matter Experts: Cathy and Tom Saxton (Idle Loop Software Design)

Eclipse Megamovie Team Experts: Dr. Oliveros Martinez (UCB)

Facilitator: Drs. Raquell Holmes and Laura Peticolas (SSU)

- ❖ What photography tools, skills, or knowledge would have been helpful for successfully photographing the solar corona for scientific purposes?
- ❖ What did you learn from participating in the Eclipse Megamovie or other eclipse citizen science or educational activities that will inform future decisions?
- ❖ What main takeaways can we document when reflecting on the past 10 years of eclipse citizen science efforts using photography and telescopes?
- ❖ How might future citizen science photography efforts mitigate potential risks associated with capturing scientifically relevant images of solar eclipses?

5:00 p.m. — Dinner on your own

8:00 p.m. — *Astrophotography & Amateur Astronomy Night*

Sonoma County Amateur Astronomer's presentation on astrophotography.

Night sky viewing with the three Robert Ferguson Observatory (RFO)

telescopes. Bring your curiosity—and your camera, computer, and tripod. Have a guest to bring with you? Register & pay for additional guest at the [Box Office](#) with promo code "RFO25"

Location: [Robert Ferguson Observatory](#)

2605 Adobe Canyon Rd

Kenwood, CA 95452.

Tuesday Morning, March 24, 2026
Sonoma State University (SSU) Student Center
1801 East Cotati Ave, Rohnert Park, 94928

9:00 a.m. to noon — Facilitated Planning for Future Work

9am - 9:30am - Synthesis of Monday discoveries

9:30am Marc J Kuchner NASA Citizen Science

9:45am **Future Eclipse Citizen Science, Photography, or Outreach**

Facilitated group discussions to draft concrete plans.

Facilitator: Drs. Peticolas and Raquell Holmes (SSU)

- ❖ We will synthesize and summarize activities, research, lessons learned, and resources documented over the past 10 years and shared during this meeting.
- ❖ We will organize ideas on how to shape the future of eclipse photography and citizen science efforts based on these findings.
- ❖ We will plan next steps for future eclipses (international and national) or other natural events in the sky that can be used to inspire, educate, or support scientific research with families, friends, and/or communities.

11:30 a.m. to noon — Closing Remarks and Next Steps

12:00 p.m. *Lunch on your own*

2:30 p.m. — Dr. Michael Kirk, Solar Scientist, NASA Goddard Space

Imaging the Invisible: How PUNCH and Eclipses Reveal the Solar Wind in 3D - Darwin 103

During a total solar eclipse, the hidden solar corona becomes visible, but only for a few fleeting minutes. NASA's PUNCH mission builds on this natural experiment, using polarized imaging to reconstruct the 3D structure of the solar wind as it expands from the Sun to Earth and beyond. Join us to see how we are learning to "image the invisible" and better understand the space environment that surrounds our planet.