

Prepare for the Eclipses! With Host Phil Plait, "The Bad Astronomer"
Zoom Chat from September 19th, 4pm ET / 7pm ET

01:28:59 Caroline Nickerson, SciStarter: Hey everybody!!!! We're so happy you're here! Say hi in the chat! tell us where you're calling from! Tell us what you're excited to learn about!

01:29:04 Patti Kreh: Hello from McCormick SC

01:29:13 Talisa Jones: hello from California

01:29:14 Kumod Shirkande: Hello

01:29:16 Jim Rienhardt: Finger lakes in NY. in the path

01:29:18 Amanda VanGorder: hello from Florida!

01:29:20 Patty Laker: Hello from Cincinnati!

01:29:35 Michael Satterfield: Hello from Clemson, South Carolina.

01:29:38 Trevor Bartone: Welcome everyone! Great to see all the locations. I see a few fellow Ohioans!!

01:29:48 Reese M: Hello from Northern California!

01:29:52 Amanda VanGorder: oo, I've never heard of Cincinnati, where's that?

01:29:53 Ken Brandt: Hello from NC!

01:29:55 annette de havilland: Columbus OH here

01:29:57 Alfonso Navarro Carvallo: Greetings from Perú and Chile

01:30:00 Kumod Shirkande: Hello, This is Kumod, from India, studying at IIT, Madras!

01:30:04 Stephanie Nelson: Also Columbus OH!

01:30:04 Caroline Nickerson, SciStarter: I love all this geographic diversity!!! Hey everybody!!!! We're so happy you're here! Say hi in the chat! Tell us where you're calling from! Tell us what you're excited to learn about!

01:30:05 Alfonso Navarro Carvallo: Greetings for all

01:30:05 catherine barretta: Hi from Long Island, New York

01:30:13 Jeannie Stewart: Hello from Jeannie @ Telluride Public Library in SW CO!

01:30:15 tanishqua Tiwari: I'm very fond of astronomy

01:30:22 Angela Wolff: Hello from the big skies of Wyoming!!

01:30:25 MUHAMMAD PARVAIZ ALAM: Hello...from Pakistan

01:30:34 Thomas Kenney: Nice Lamp

01:30:35 Ahmed Metawee: Hi from Egypt

01:30:42 Darlene Cavalier: Yes YOU can!!! Science we can do, together!

01:30:44 Jamie Welfley: Canton, OH

01:30:45 Erika Rivera: Hello from Las Vegas

01:30:47 Shruti Tupe Patil: hello from India

01:30:53 Melissa Wells: Hello from a Kentucky Public Library

01:30:59 Angelica Chakraborty: hi

01:31:04 George Holub: Hello from Volo, IL (suburb of Chicago)

01:31:08 Kim Whittemore: Hello from New York

01:31:09 Nels Tooker: 5th and 6th grade teacher from New Hampshire. Excited to share this with my students.

01:31:09 Michael Shapiro: Hello from Arlington VA

01:31:09 Beth Gallego: Hello from Los Angeles

01:31:18 JP Keenan: Hope that the local park system has something going on for the eclipse. They do sky/astronomy stuff there
<https://www.geaugaparkdistrict.org/park/observatory-park/>

01:31:27 tanishqua Tiwari: I really love astronomy and I want to become an astronomer

01:31:30 annette de havilland: Saw last total eclipse in Marysville NE, will see next in Marysville OH

01:32:43 Kristyn Sessions: Hello from PA 😊

01:32:45 David Joiner: Hello from Aurora, Ontario, Canada.

01:32:47 Claire Giles: Hello from Prescott AZ

01:33:02 Chris Guppy: We were in Fort Collins, CO, not in the path of totality

01:33:09 Joe Lack: Chased it through Nebraska, dodged clouds at the last minute.

01:33:09 Trevor Bartone: Second year of college! It was breath taking and I only saw it partially

01:33:10 Cindy Taylor: Yup, was my first total solar eclipse. Was also in WY

01:33:11 Mary Peters: My mom in El Paso, only partial

01:33:12 Hugh Osborne: Saw the 2017 eclipse in Denver

01:33:15 Angela Wolff: I got to see totality in Wyoming, where I live!!!

01:33:18 Sue Zimmer: We were at the McAuliffe Shephard discovery center in Concord, NH

01:33:20 Dorian Janney: Salem, Oregon- minor league baseball game, totally awesome!

01:33:24 Erin Keuter: North Idaho with friends in 2017

01:33:25 Valerie Krenicky: saw the eclipse in 2017 in Augusta, GA.

01:33:25 caitlin shaw: Fort Laramie historical site in WY

01:33:28 Jeannie Stewart: In SW Colorado at our library hosting a eclipse prgm.

01:33:29 Diane Hardgrave: I was in Nevada, and blew off a faculty meeting to watch it.

01:33:30 tanishqua Tiwari: that was wonderful

01:33:30 Gina Waldon: Watched it near Casper, Wyoming

01:33:31 Nels Tooker: Watched from NH through my neighbor's welding mask.

01:33:33 Hy Tran: Went to Idaho in 2017, and was one of the Megamovie participants! ;-)

01:33:35 Liam Finn: A group of SSA's and myself went to Casper Wyoming and took images as part of the Eclipse Meganovie

01:33:40 annette de havilland: Still have my eclipse glasses from 2017

01:33:40 Erika Rivera: I saw the total solar eclipse in Nashville, TN. I cried when I saw it it was too beautiful!! I was alone unfortunately 😞

01:33:40 Barbara Milewski: Watched it in Oregon with family!

01:33:41 Melissa Wells: I watched the eclipse in 2017 with family

01:33:45 Shawn Johnson: We were in the path of totality in South Carolina. It was really cool to see it get darker and animals start to behave differently. We even had an owl fly over us!

01:33:47 Linda Plevak: I was at the Planetarium in San Antonio. Was fun!

01:33:52 Beth Gallego: Library eclipse program. We gave so many people eclipse glasses.

01:33:55 Darlene Cavalier: I saw the 2017 eclipse in Pittsburgh while I was dropping my son off at college. The Carnegie library offered eclipse glasses and showed my family how to safely view it. It was amazing to be part of a group of strangers who came together to share a single experience like that.

01:33:57 Adriana Dominik: Adriana Dominik - Brazil

01:33:58 Jenette Scott: I was at home in Salt Lake City, Utah and I was with my kids and my parents. We saw a partial.

01:33:58 David Simmons: 2017 near Rexburg Idaho. Wonderful!

01:33:59 Brittnee Lydy: Saw a partial eclipse from my school. We had a school-wide event with my students. It was awesome!

01:34:00 Angela Wolff: Guernsey State Park, Wyoming - heard the cbirds go into dusk mode and some crickets!

01:34:04 tanishqua Tiwari: I was in india

01:34:04 Ted Leon Guerrero: Athens OH, just off the center

01:34:07 Jamie Welfley:partial Eclipse in Twinsburg Ohio

01:34:09 April Eden: In Missouri, with my sister, was not in totality but still fun to share

01:34:10 Reese M: I saw it from home - we were not in the path of totality. But I saw it on NASA TV on my Apple TV

01:34:11 Ted Leon Guerrero: Visiting with friends

01:34:11 Jeffrey Pearce: Wyoming

01:34:12 Melissa West: Saw it partially near San Antonio

01:34:14 Kim Whittemore: Rochester NY 70% covered

01:34:14 William Licopoli: didn't see it...planning to see the one in april....any tips??

01:34:23 Chris Guppy: in Fort Collins, everything was shadowed, very cool with a 7 year old!

01:34:23 Logan Willinger: I saw the eclipse from the elementary school I went to 6 years ago in Dayton, Ohio.

01:34:23 Elizabeth McVeety: Austin Texas with neighbors in the driveway :)

01:34:25 Daniel Fischer: My 2017 Pictures from Oregon:
<https://bonnstern.wordpress.com/2017/08/21/das-war-die-great-american-eclipse-von-2017/>

01:34:25 Jim Rienhardt:in Tennessee during eclipse 2017

01:34:27 Rebekah Kreitner: Virginia Beach - really close to full!

01:34:28 Patrice Tanti: Total eclipse Oregon

01:34:28 Liam Finn: 2024 will be my 4th eclipse

01:34:29 Michael Satterfield: I saw it from my backyard.

01:34:30 Tonya Coleman: Falmouth, KY at the Library

01:34:31 Sherry Brecheen: I was outside our library in Onalaska, Texas with the children here. It was a fun day with lots of smiles!

01:34:34 Mary Allen: I took off work to go see it where the weather was better and tried up a mountain, but it was fog shrouded, I was alone, and had planned to go to Sonoma, but it was rainy. I missed it but it turned out that Sonoma's rain cleared up and they did see it.

01:34:34 Kat Nygaard: I was at home and I was in payson,az

01:34:35 Patti Kreh: In Detroit, 80% sitting in my car, felt the temperature drop outside

01:34:49 Sonia Bartholomew: Totality in Sweet Idaho. Watched all the chickens head in to roost.

01:34:50 Jim Rienhardt: planning an event locally for April

01:34:50 Emily Bean: Good evening from England

01:34:54 Jo Sutter: My family, friends and I experienced our first total solar eclipse in 2017. We rented a pontoon boat and were out in the middle of Redfish Lake near Stanley, Idaho. Magnificent!!!!

01:34:59 Kumod Shirkande: The solar eclipse of August 21, 2017, dubbed the "Great American Eclipse" by some media, was a total solar eclipse visible within a band that spanned the contiguous United States from the Pacific to the Atlantic coasts.

01:35:01 Sweth Chandramouli: missed 2017 but will be in mazatlan for totality in 2024

01:35:02 Elizabeth MacDonald: It was my first one, in North Carolina at the Pisgah Astronomical Research Institute... it was cloudy but still awesome.

01:35:06 Trevor Bartone: So much passion here! Was 2017 your first eclipse?

01:35:09 Michael Shapiro: Saw partial eclipse Pittsburgh. Wet my appetite for a full eclipse!

01:35:10 Leslie O: Casper, Wyoming, with adult kids -- AMAZING!

01:35:39 Valerie Connors: I went to near Columbia, SC with my sons, my mother, my sister, and her grandson. Amazing experience!

01:35:45 Vanessa Thomas: I was in Tennessee for 2017's total eclipse. It was my fifth total eclipse.

01:35:48 Leslie O: first total eclipse, going to Waco 2024

01:35:50 Mary Allen: Going to my hometown for my 65th birthday 2 days beyond 4/8, to see eclipse in totality path!

01:35:53 Hy Tran: October 14, 2023

01:35:58 Linda Plevak: October 14

01:36:00 Trevor Bartone: Learn more about Eclipses on NASA's Eclipse Homepage: <https://solarsystem.nasa.gov/eclipses/home/>

01:36:01 Marc Kuchner: Thanks, Hy!

01:36:02 Kumod Shirkande: Oct 14

01:36:02 Liam Finn: Oct 14 and April 8

01:36:03 Amanda VanGorder: two hellos, one from a human and one from a cat as Floridians!!!

01:36:05 Amie Gallagher: Is that eclipse animation available for planetariums?

01:36:13 Hy Tran: Annular eclipse, goes over Albuquerque NM

01:36:21 Beth Gallego: Los Angeles is very far from the 2024 path.

01:36:30 Linda Plevak: We are right in the center for both!!!!

01:36:34 Elizabeth MacDonald: The NASA map is here: <https://svs.gsfc.nasa.gov/5073>

01:36:47 Laura Peticolas, Eclipse Megamovie 2024: Total Eclipses change lives. Partial eclipses are cool.

01:36:49 Trevor Bartone: Compiled by the American Astronomical Society: <https://eclipse.aas.org/resources/solar-filters>

01:36:59 Sam Polonetzky, P.E.: Western Missouri. It Clouded over just as it started then at totality it rained

01:37:20 Reese M: Thanks for the handy links, y'all!

01:37:20 Liam Finn: it involves the alignment of the Sidereal, Synodic and Anomalistic periods of the moon which make up the Saros Cycles

01:37:29 annette de havilland: It had just finished raining in NE when I saw it 2017

01:37:31 Roland Moundalak (SciStarter): <https://eclipse.aas.org/resources/solar-filters>

01:37:41 Michael Kosowsky: I'll logroll: my eclipse site <https://www.heywhatsthat.com/eclipse> It's a bit long in the tooth but still runs on most browsers

01:37:53 Holly Smythe: Saw 2017 eclipse near Nashville, TN. Awesome experience in a park with lots of related activities.

01:37:53 Trevor Bartone: Reese - you are welcome!

01:38:05 Erika Diaz Ramirez: Eclipsemegamovie.org

01:38:25 Trevor Bartone: Learn more about the Helio Big Year: <https://go.nasa.gov/heliobigyear>

01:38:34 Darlene Cavalier: Sun Science!

01:38:36 Mary Allen: I was a Girls in Space Team Leader at NASA Goddard in 2009!

01:38:42 Liam Finn: Solar Max is coming

01:38:52 Trevor Bartone: Learn about the Heliophysics Big Year on SciStarter's most recent podcast: <https://citscipod.podbean.com/e/sun-drenched-citizen-science/>

01:39:12 Sweth Chandramouli: 🎵🎵the sun is a mass of incandescent gas, a gigantic nuclear furnace🎵🎵

01:39:20 Melissa West: It is my dream to work for your heliophysics division :)

01:39:23 Chris Guppy: Haha, Sweth

01:39:30 Phil Plait, Moderator (he/him): The Sun's a miasma of incandescent plasma

01:39:42 Liam Finn: perihelion

01:39:43 Sue Zimmer: my birthday is dec 24th!

01:40:10 Chris Guppy: Happy birthday, Sue!

01:40:38 Sweth Chandramouli: phil shouting out the sequel song

01:40:49 Trevor Bartone: Learn about the Heliophysics Big Year: <https://www.youtube.com/watch?v=sfXIC6OW978>

01:40:51 Amanda VanGorder: cool our bdays are close, sue!

01:40:51 Shawn Johnson: \o/

01:40:52 Phil Plait, Moderator (he/him): Sweth! Hi!

01:40:56 Amanda VanGorder: mine's on dec 6th

01:41:04 Ha-Hoa Hamano: Aurora in Virginia yesterday!

01:41:06 tanishqua Tiwari: solar winds

01:41:22 Shruti Tupe Patil: solar jet

01:41:34 Trevor Bartone: Ha-Hoa - we had Auroras in northern ohio yesterday as well!

01:41:47 Chris Guppy: Wow!

01:41:47 tanishqua Tiwari: but sun's Magne field also protect our solar system from cosmic radiation

01:42:03 annette de havilland: ring of fire
01:42:08 William Licopoli: perihelion
01:42:14 Brittnee Lydy: aphelion
01:42:16 Barbara Milewski: apogee
01:42:16 John Wenskovitch: Apogee
01:42:16 William Licopoli: aphelion
01:42:29 Darlene Cavalier: Nice!
01:42:44 Jeffrey Pearce: testing
01:42:50 Hy Tran: Annular is not safe to view without eye protection.
01:43:03 caitlin shaw: 🐱
01:43:21 annette de havilland: cool
01:43:29 Shruti Tupe Patil: we did this Citizen project to spot an exoplanet
01:43:32 Trevor Bartone: So cool indeed Annette!
01:43:33 Reese M: That Mars solar eclipse is so cool
01:43:34 Jeffrey Pearce: go Amelia Earhart!
01:43:53 Laura Peticolas, Eclipse Megamovie 2024: @Hy - yes! Please everyone wear their eclipse glasses during the entire annular eclipse experience on Oct 14th.
01:43:57 Shruti Tupe Patil: edge on position
01:44:09 Trevor Bartone: Find out what NASA Citizen Science is all about:
<https://science.nasa.gov/citizenscience>
01:44:50 Darlene Cavalier: incredible!
01:45:23 Chris Guppy: I'll be in Buffalo, NY, in April!
01:45:42 Marc Kuchner: Marc.Kuchner@nasa.gov
01:45:49 cathi morrison: my question is- during the total eclipse and one is watching from their backyard,, no scientists around, how can you be sure when it's total and safe to view without glasses?
01:45:52 Bonnie Thurber: I just need to figure how how to get there. 😊
01:46:15 Mary Allen: I'll be in my hometown of Fredonia! Just south of Buffalo!
01:46:21 Hy Tran: In the 2012 annular eclipse in Albuquerque, leaves made a bunch of pinhole cameras, made great shadows!
01:46:22 William Licopoli: tips for using telescope during eclipse?
01:46:26 Rob Sparks: There are eclipse timer apps which will use your phone's GPS and time to tell you when to take your glasses off.
01:46:26 Darlene Cavalier: @Phil , Cathy asks: my question is- during the total eclipse and one is watching from their backyard,, no scientists around, how can you be sure when it's total and safe to view without glasses?
01:46:30 Laura Peticolas, Eclipse Megamovie 2024: @cathi - during totality you can see stars. Then it is safe to look at the Sun
01:46:31 Michael Kosowsky: OR try <https://www.heywhatsthat.com/eclipse> !!
01:46:59 Mary Allen: I'm worried about weather in Western NY Lake Effect Storms
01:47:22 Joe Lack: telescope during eclipse not recommended unless you REALLY know what you are doing I.e. big filter on end of the scope
01:47:44 tanishqua Tiwari: what are myths and are they true about eclipses

01:47:53 Trevor Bartone: Zoey check here: Compiled by the American Astronomical Society: <https://eclipse.aas.org/resources/solar-filters>

01:48:05 Angelica Chakraborty: wow

01:48:08 annette de havilland: before/after total the sun was amazing bright

01:48:09 William Licopoli: yes, what filter for telescope...camera as well? amateur telescope user. :)

01:48:31 Jeffrey Pearce: car ready and mobile for clouds

01:48:38 Jean Myers: If you are not in the total pathway, will you see a partial eclipse?

01:48:39 Hy Tran: You will want a properly rated solar filter for telescope and/or camera.

01:48:43 Michael Shapiro: 😊

01:48:49 Ted Leon Guerrero: Best way to take pictures/video? Can we do it with iPhone?

01:48:52 Bonnie Thurber: Read the book for Middle schoolers 'Every Soul a Star'

01:48:53 Logan Willinger: I have an AstroZap filter for my 70mm refractor. It works well with it and I do recommend it.

01:49:01 Cindy Taylor: William Licopoli - you can buy special filters for your camera. There are some good filters for smartphones

01:49:05 Hy Tran: I would use a visual rated filter both for photography and telescope use.

01:49:12 Jennifer Muniz: you will get pregnant!!!!

01:49:17 tanishqua Tiwari: yeah solar radiation can be harmful for earth

01:49:21 JP Keenan: glass from a welding helmet/face shield is supposed to work too?

01:49:22 Sue Zimmer: We will be in northern VT in April

01:49:27 annette de havilland: double shadows a neat feature too

01:49:29 Angelica Chakraborty: very nice

01:49:30 Shelley Rosenbaum Lipman: every soul a star is FANTASTIC

01:49:32 tanishqua Tiwari: thanks phil

01:49:38 jacquelyn vialle: Did anybody apply for the free glasses? I never heard anything about it after applying.

01:49:39 Liam Finn: be sure to include the SSA's in the research

01:49:46 Laura Peticolas, Eclipse Megamovie 2024: Make sure to go into the path of totality - even 99% covered isn't enough for the complete experience.

01:49:50 cathi morrison: good info- but I will still be very leery on timing!

01:50:22 E Gilliam: Gordon's screen went into eclipse

01:50:29 Hannah Pearson: Yay, Kentucky!

01:50:36 annette de havilland: LOL

01:50:37 Sweth Chandramouli: so many fellow kentuckians

01:50:50 E Gilliam: bluegrass represent, even if it's western

01:51:16 Jeffrey Pearce: Louisville KY

01:51:31 Sweth Chandramouli: also louisville :)

01:51:44 Jeffrey Pearce: HI!

01:51:50 Bonnie Thurber: I saw the last eclipse from Bowling Green

01:51:55 Angelica Chakraborty: How this baily beads get formed?

01:51:58 Trevor Bartone: Add SunSketcher to your SciStarter Dashboard to get updated when the app is ready: <https://scistarter.org/SunSketcher>

01:52:00 Hy Tran: There are various types of welding glasses. Most welding glasses are not good enough. You want something that will only pass 10 part per million of the light.

01:52:27 Michael Kosowsky: Another thing you can do with your phone: start a voice recorder to capture your own description and everyone's reactions. (My phone died before I could grab my recording of the 2017 eclipse :- ()

01:52:53 David Joiner: Any concern with sun harming smartphone camera?

01:52:59 Michael Andreas: Wouldn't the cell phone need to have a magnification lens?

01:53:02 Bonnie Thurber: This is GREAT!

01:53:23 Jeffrey Pearce: Yes it is Bonnie!

01:53:23 Mary Peters: Will we be able to see the photos our cameras take?

01:53:27 Liam Finn: will you accept images from telescopes

01:53:38 Hy Tran: You need to have a solar filter in front of your equipment to protect the equipment (camera, etc)

01:53:49 George Holub: App for iPhone and/or Android

01:54:31 Angelica Chakraborty: How baily's beads are formed?

01:54:48 Richard Patching: To protect your eyes at the end of totality, note that the edge of the moon will begin to brighten just before the second diamond ring. At the 2nd diamond, get your eclipse glasses back on!

01:54:49 Rob Sparks: For total eclipses, I take the filter off about 30 seconds before totality to capture Bailey's Beads and that is with a MUCH bigger lens than a cellphone@!

01:54:57 Rob Sparks: Hi Phil!

01:55:33 Mary Allen: My Astronomy lab instructor was a Sparks.

01:55:44 Jeffrey Pearce: Many images of eclipse on ground via tree branches

01:56:25 Jeffrey Pearce: via tree branches

01:56:54 Erika Diaz Ramirez: YAY LAURA

01:57:04 Nina Tanti: My SISTA!!!

01:57:09 Gina Waldon: My alma mater

01:57:16 Sue Zimmer: my daughter is very happy to see a female presenter

01:57:18 Susan Wandling: Dr. Laura!!

01:57:37 Shelley Rosenbaum Lipman: I have megamovie from 2017, has the app been updated?

01:57:38 tanishqua Tiwari: I'm gonna take part in this

01:58:08 Liam Finn: I have signed up already

01:58:13 Shelley Rosenbaum Lipman: And can megamovie run at the same time as sunsketcher?

01:58:26 Mary Allen: Laura, my daughter Kathryn graduated from Sonoma State with first ever issued BS in Physics with Concentration in Astrophysics in 2021. She's in Grad School at SFSU in Physics-Astronomy now!

01:58:30 Erika Diaz Ramirez: eclipsemegamovie.org

01:58:43 Darlene Cavalier: This is so cool, too!

01:58:44 Michael Andreas: QUESTION: Participated in 2017 Megamovie. But workflow seems to be changing. For example camera now tethered to PC, requirement for wide

zoom range lens. (Which if manufactured is expensive and/or lower quality). If you can't explain, will there be other meetings to explain?

01:58:54 Trevor Bartone: Save Eclipse Megamovie 2024 to your dashboard:
<https://scistarter.org/eclipse-megamovie>

01:59:02 Rob Sparks: Already signed up for the Megamovie project...just waiting for the details to start working on camera control scripts!

01:59:19 Erika Diaz Ramirez: Take our survey to find out how you can participate!!

01:59:46 Reese M: <https://eclipsemegamovie.org>

01:59:53 Hy Tran: I can help develop procedures for those who have not used equatorial mounts before.

01:59:58 David Joiner: Please repeat required lens size.

02:00:21 Erika Diaz Ramirez: @David, all information is available in our survey and on our website :)

02:00:56 Erika Diaz Ramirez:
https://sonoma.az1.qualtrics.com/jfe/form/SV_eG132P4MWUIV9pc here is a link to the survey

02:01:06 Hy Tran: You don't need the arc-second accuracy tracking for solar photography ;-)

02:01:31 Jeffrey Pearce: Thank you to the presenters!

02:01:41 Patti Kreh: Will the list of the 100 people receiving the mount be available. I'd like to have one of them come to our yard and take the pictures, so we can gain experience.

02:01:46 Nina Tanti: The totality will be 4 minutes long??? Wow, that's longer than the last one, if I remember. How wonderful! We'll be there (in Texas).

02:02:03 Darlene Cavalier: To all librarians and staff- see SciStarter.org/library and CitizenScienceMonth.org for resources to plan events in April leading up to the eclipse. Soundscapes is a project we will feature in April .

02:02:27 Erika Diaz Ramirez: Lens info: 18mm-300mm for APS-C sensor or at least 27mm-400mm for full frame sensors

02:02:28 tanishqua Tiwari: IS THERE ANY EFFECT ON MOON DURING SOLAR ECLIPSE

02:02:31 Rob Sparks: Up to about four and a half minutes...my site will have 4 min 26 secs to totality.

02:02:35 Nina Tanti: Thank you Laura!!

02:02:56 Shelley Rosenbaum Lipman: Nina, the length of totality varies based on location. it's longest in Mexico, and shortest in the northeast.

02:03:49 Darlene Cavalier: Everyone who registered for this event will receive an email with links to each featured project and every link we posted in chat.

02:03:51 Jeffrey Pearce: We just don't know what the wildlife/animals know

02:04:01 Darlene Cavalier: Along with a recording of the event and links to the slides.

02:04:18 Trevor Bartone: "Be an observer:
<https://scistarter.org/eclipse-soundscapes>"

"Be a data collector: <https://scistarter.org/eclipse-soundscapes-project-data-collector>"

02:04:18 Roland Moundalak (SciStarter): Julie Taylor asked on YouTube:
Is there any moment during an annular eclipse that is safe to take your glasses off?

02:04:25 Darlene Cavalier: Remember to bookmark scistarter.org/NASA-live
02:04:39 Caroline Nickerson, SciStarter: <https://scistarter.org/NASA-live>
02:04:48 Phillip Peticolas: Yes thank you Laura...from bro-phil & Connie!
02:04:48 Rob Sparks: Light is weird just before and after totality.
02:04:57 Diane Hardgrave: This is an excellent project! I was in Kenya during an eclipse years ago and noticed the animals and insects when silent during the totality.
02:05:05 Darlene Cavalier: And to join the SciStarter family at <http://SciStarter.org/login> so we can send you updates on these and other projects.
02:05:11 Shelley Rosenbaum Lipman: will the soundscape project be open to those outside the path of totality?
02:05:13 tanishqua Tiwari: IS THERE ANY EFFECT ON MOON DURING SOLAR ECLIPSE
02:05:13 Cori Brevik - DEB Initiative: During an annular eclipse you should have your eclipse glasses on any time you are looking toward the Sun.
02:05:32 Darlene Cavalier: @shelley - yes
02:05:49 Rob Sparks: I was on a farm by a small pond in 2017 and the ducks went to nest for the evening as totality approached.
02:06:07 Ha-Hoa Hamano: @Roland - for Julie Taylor https://solarsystem.nasa.gov/eclipses/safety/#otp_eye_safety_for_partial_&_annular_eclipses
02:06:30 Jeffrey Pearce: that grasshopper reminds me of the space shuttle
02:06:30 Elizabeth MacDonald: I totally want to be near a Texas bat cave. 😊
02:06:33 Darlene Cavalier: Such a great point...just experience the eclipse!
02:06:58 Chris Guppy: @Elizabeth! Yes! So cool.
02:07:09 Rob Sparks: That's why I automate cameras...I want to experience it AND take pictures. I don't worry about the camera during totality...if there is a malfunction, I probably won't be able to fix it in time so you have to be ready to let it go.
02:07:15 Trevor Bartone: "Be an observer: <https://scistarter.org/eclipse-soundscapes>"

"Be a data collector: <https://scistarter.org/eclipse-soundscapes-project-data-collector>"

02:07:52 Darlene Cavalier: @rob great point
02:07:54 cathi morrison: and everyone pray for clear skies! Bummer to travel and only get to look at clouds....
02:08:06 Elizabeth MacDonald: Citizen science has so much discovery potential with the eclipse soundscapes!
02:08:09 Bonnie Thurber: true
02:08:18 annette de havilland: So true, April tends to be cloudy
02:08:43 Trevor Bartone: @Elizabeth I could not agree more :)
02:09:07 Trevor Bartone: SciStarter: <https://scistarter.org>
02:09:11 Sarah Kovac: From NASA (<https://eclipse2017.nasa.gov/safety>) Experts suggests that one widely available filter for safe solar viewing is welders glass of sufficiently high number. The only ones that are safe for direct viewing of the Sun with your eyes are those of Shade 12 or higher.

02:09:31 Richard Patching: To record sound, be sure to use an uncompressed format, like WAV format. mp3 files compress according to psychoacoustic methods, but don't give a complete instrument-grade record

02:09:35 Jeffrey Pearce: a Salukie!

02:09:45 Rob Sparks: These are great, but you know there is only so much time during a solar eclipse that I can't participate in ALL of them!

02:09:49 Bonnie Thurber: Cori, where will you be on Oct 10

02:10:02 Phil Plait, Moderator (he/him): Rob: clones

02:10:03 Bonnie Thurber: ?

02:10:27 Darlene Cavalier: True @Rob! And there are MORE projects coming. Different strokes for different folks. Something for everyone!

02:10:32 Laura Peticolas, Eclipse Megamovie 2024: @Rob—want to join all of the projects? Bring in family members!

02:10:48 Darlene Cavalier: SciStarter.org/NASA-LIVE for updates

02:10:56 Trevor Bartone: Save the DEB Initiative to your dashboard:
<https://scistarter.org/dynamic-eclipse-broadcast-initiative>

02:10:57 Caroline Nickerson, SciStarter: <https://scistarter.org/NASA-LIVE>

02:11:05 Sweth Chandramouli: what was the email to contact?

02:11:08 Rob Sparks: @Laura- limited family members but my partner might be interested in doing something!

02:11:45 Laura Peticolas, Eclipse Megamovie 2024: @Rob - I can share some of my family members! ;)

02:12:00 Kerry Burnham: Needed in Central Utah?

02:12:01 Richard Patching: Having seen 16 totals, I have to wonder why anyone would want to be out of the path. I realize of course that there is more science to be done outside the path.

02:12:03 Laura Peticolas, Eclipse Megamovie 2024: Right, Nina and Phil?

02:12:55 Trevor Bartone: Save the DEB Initiative to your dashboard:
<https://scistarter.org/dynamic-eclipse-broadcast-initiative>

02:12:57 Theresa Gratton: how do we sign up for the DEB?

02:13:04 Ellen Prager: Show that camera/telescope again please

02:13:14 Phillip Peticolas: sure to whatever you say lol..

02:13:26 Darlene Cavalier: How sweet! My mom thought she needed to wear eclipse glasses to watch this zoom event! 😊 Clearly, I need to sharpen my communications skills.

02:13:26 Elizabeth MacDonald: Great job Cori! 😊

02:14:08 Chris Guppy: @Amir, I'm in Fort Collins.

02:15:21 Kajan Lakhan: interesting

02:15:50 Laura Peticolas, Eclipse Megamovie 2024: @Shelley Rosenbaum Lipman: The app is now SunSketcher! Follow them. Yes, you can do the mobile app and the Eclipse Megamovie project. 😊

02:16:12 tanishqua Tiwari: solar winds protects our solar system from cosmic radiation

02:16:17 Darlene Cavalier: That IS cool!

02:16:18 Trevor Bartone: Save Citizen CATE 2024 to your dashboard to get updates on when to apply: <https://scistarter.org/citizen-cate-the-citizen-continental-america-teles>

02:16:24 Elizabeth MacDonald: DEB.INITIATIVE@GMAIL.COM

02:17:02 Sarah Kovac: Join us! cate@boulder.swri.edu

02:17:37 David Joiner: Is Citizen Cate 2024 restricted to observers in USA or can team be anywhere along path of totality?

02:18:10 Jeffrey Pearce: Amelia Earhart performed science experiments while flying her Electra

02:18:32 tanishqua Tiwari: so polarisation also give us any ideas about magnetic bubbles

02:18:38 Sarah Kovac: David - We are looking for folks who live along the path of totality in the US! If you live off the path and want to participate, you can reach out to us!

02:18:50 Trevor Bartone: Save Citizen CATE 2024 to your dashboard to get updates on when to apply: <https://scistarter.org/citizen-cate-the-citizen-continental-america-teles>

02:18:53 Joe Lack: that article about neutrinos maybe interacting with photons and heating up the corona was interesting.

02:19:18 Dorian Janney: So many amazing opportunities!!! Thank you all!

02:19:37 Melissa West: This is truly incredible!

02:19:46 tanishqua Tiwari: I love astrophysics so much

02:19:47 William Licopoli: thank you Phil!

02:19:56 Sherry Brecheen: Can't wait to see all the results of all this data put together from all the projects next summer!

02:19:57 Chris Guppy: I'm overwhelmed, but I want to do something.

02:19:58 tanishqua Tiwari: Phil thank you

02:20:02 Darlene Cavalier: Find info on all the projects at SciStarter.org/NASA-LIVE

02:20:04 Bonnie Thurber: Read "every soul a star". An award winning book about an eclipse

02:20:15 Reese M: All this is so awesome - thanks for hosting, Phil!

02:20:17 Chris Guppy: Thank you!

02:20:20 Bonnie Thurber: Fiction.. with lots of science.

02:20:22 Mary Allen: Me, too, I want to do it all! Thank you for all this information! This webinar was wonderful!

02:20:22 Beth Gallego: I'm glad to see ways to participate for those of us outside the path of totality. Thanks!

02:20:29 Jenette Scott: During the annular eclipse, are there any features of the moon we might be able to view during annularity through a filtered telescope? And, can we learn anything about the moon from annular solar eclipses?

02:20:54 Jeffrey Pearce: Thank you to the great presenters!

02:20:57 Trevor Bartone: Don't forget to put your questions in the Q&A section!

02:21:12 Rob Sparks: I have never done it but I am going to try and photograph Bailey's Beads during the annular eclipse...it's programmed into my camera scripts so I will see what I get.

02:21:14 Michael Andreas: Eclipse MegaMovie: when will technical meetings be scheduled?

02:21:41 Sherry Brecheen: Thank you to all the presenters!

02:22:01 Rebekah Kreitner: In 2017 I was amazed that the shadows of leaves on the tree next to me were in the shape of the crescent NOT in the shape of the leaves as you would expect. 🤩

02:22:14 Chris Guppy: Thanks, everyone!

02:22:17 tanishqua Tiwari: DOES SUN'S MAGNETIC BUBBLE GIVE US ANY IDEA ABOUT POLARISATION

02:22:18 Rebecca Thedford: will the links be emailed to everyone who attended this meeting?

02:22:20 Hy Tran: Shape of the sun is more dynamic, as it is a plasma phase rather than solid phase...

02:22:22 Liam Finn: I and a group of ssa and amateurs will be in Gatesville Texas in April

02:22:31 Caroline Nickerson, SciStarter: Stay tuned for a follow-up email with all relevant links!

02:22:50 Elizabeth MacDonald: More about the Lunar Reconnaissance Orbiter and eclipses: https://lunar.gsfc.nasa.gov/images/lithosupdated2023/LRO_Eclipse_Litho.pdf

02:22:58 Jeannie Stewart: Thank you for all your enthusiastic presenters! Appreciate it.

02:23:37 Amir Caspi, Citizen CATE 2024: CATE isn't restricted to people in the U.S. but right now our funding only allows equipment procurement for U.S.-based teams. But if you're planning to be in Mexico or Canada, please do reach out -- we'd love to find a way to involve you!

02:23:59 Amir Caspi, Citizen CATE 2024: cate@boulder.swri.edu, or <https://eclipse.boulder.swri.edu>, or @citizenCATE2024 on Twitter

02:24:06 Trevor Bartone: You can visit SciStarter.org/nasa-live to stay updated on the series.

Please take a moment to join the SciStarter community by creating a free SciStarter account at SciStarter.org/login

02:24:07 Jenette Scott: As the moon moves further away from the earth, what will happen to solar eclipses? Will they disappear?

02:24:35 Darlene Cavalier: SciStarter.org/NASA-Live two years of awesome events like this one coming at you!

02:24:37 Amir Caspi, Citizen CATE 2024: Jenette -- sadly, yes! In a few hundred thousand years, no more total eclipses!

02:24:47 Shelby Reidle: Thank you to all of the panelists! Looking forward to sharing these projects and learning in heliophysics with our library patrons!

02:25:02 Jenette Scott: What a bummer! Thank you Amir! :)

02:25:03 Mary Allen: Yes, all the Presenters were Fantastic along with Phil!

02:25:15 Trevor Bartone: Training homepage: <https://scistarter.org/training>

02:25:17 Darlene Cavalier: This is an awesome audience! Thank you all so much!!!

02:25:22 Trevor Bartone: Contact us: info@scistarter.org

02:25:24 Bonnie Thurber: Will this video be posted some where? Like on Scistarter?

02:25:37 Laura Peticolas, Eclipse Megamovie 2024: Eclipse Megamovie technical trainings will start in a couple weeks. Make sure to fill out the survey on our website.

02:25:40 William Licopoli: thank you to all presenters. Will share with all my high school astronomy students!

02:25:46 Darlene Cavalier: Yes, the recording will be shared with more than 900 people who signed up for this event.

02:25:48 Trevor Bartone: The recording of the event will be sent to all that registered in a follow-up email!

02:25:54 Dana Rsosen-Perez: Thank you!

02:25:58 Laura Peticolas, Eclipse Megamovie 2024: Heliophysics!! Whoo hoo!!

02:26:02 Trevor Bartone: For more information, you can visit the CSA website: CitizenScience.org

02:26:04 Phillip Peticolas: can I watch the October Eclipse totality without special glasses?

02:26:05 Elizabeth MacDonald: Great job everyone! Thank you for being part of the Heliophysics Big Year!

02:26:12 Trevor Bartone: Check out the NASA Science Now Virtual Exhibit out anytime at go.nasa.gov/NASAScienceNow.

02:26:22 Darlene Cavalier: Go Dr. Phil! Oh, wait.. not that one! Go Bad Astronomer!

02:26:23 Caroline Nickerson, SciStarter: <https://go.nasa.gov/NASAScienceNow>

02:26:26 Elizabeth McVeety: So exciting-many thanks!

02:26:41 Darlene Cavalier: Amazing speakers! Great work.

02:26:45 Joe Lack: 👍

02:26:47 Bonnie Thurber: Good night.

02:26:49 Darlene Cavalier: Over to Emma!

02:26:49 Nina Tanti: Thank you!

02:26:51 Jenette Scott: Thank you!!

02:26:51 David Joiner: Thank you!

02:26:52 Bonnie Thurber: Thank you all!

02:26:58 Reese M: Thank you!

02:27:00 Holly Smythe: Thank you everyone!

02:27:04 Melissa West: Thank you!!!!

02:27:06 Logan Willinger: Thank you!

02:27:07 MUHAMMAD PARVAIZ ALAM: thank u all

02:27:08 Debbie Tropiano: I'm excited about the upcoming eclipses as I'm in central Texas so very close to where they cross! Thanks for the info!

02:27:08 tanishqua Tiwari: thank you

02:27:10 Mary Allen: Thank you!

02:27:12 William Licopoli: thanks Phil! Loved your Curiosity episodes!

02:27:17 Melissa Wells: Thank you

02:27:19 Candace Blake: Thank you so much!!

02:27:19 Kajan Lakhan: 🌞 Thank you

02:27:32 Trevor Bartone: Take our short survey: <https://forms.gle/VKGLY1T9nhJsidVy5>

02:27:35 Lynn Cominsky: And read his new book - Under Alien Skies !!

02:27:40 Bonnie Thurber: You can find him on YouTube in many videos.

02:27:40 Darlene Cavalier: I'm going to experience the April eclipse in western PA/NY.
Can't wait. I feel so prepared now.

02:27:41 David Simmons: Thanks to Phil and all the presenters. Well done and so exciting!

02:28:09 Darlene Cavalier: Pls do take the survey :-)

02:28:27 Rebekah Kreitner: The best SciStarter presentation yet! Thank you :)

02:28:30 Trevor Bartone: Thank you for joining us today everyone!! So great Talking to you!

02:28:30 Darlene Cavalier: Thanks, @Lynn ! And read his new book - Under Alien Skies !!

02:28:33 Alexander Smith: Thanks to all of the presenters.

02:28:46 Trevor Bartone: Check out the NASA Science Now Virtual Exhibit out anytime at go.nasa.gov/NASAScienceNow

02:28:46 Darlene Cavalier: And thanks @Rebekah! We think so, too!

02:28:54 Laura Peticolas, Eclipse Megamovie 2024:
https://eclipse2024.org/eclipse_cities/statemap.html

02:28:57 Mary Savage: I'd like to join a team...outside the totality zone...I'm in Virginia Beach

02:29:10 Trevor Bartone:
<https://nasa.6connex.com/event/NASAScience/NASAScienceNow/login>

02:29:12 Michael Kosowsky: <https://www.heywhatsthat.com/eclipse>

02:29:36 Darlene Cavalier: Thanks, Emma!

02:29:40 MaryKay Severino, Eclipse Soundscapes Project: Eclipse Resources including maps: <https://eclipsesoundscapes.org/resources/>

02:29:40 Phil Plait, Moderator (he/him): Here's an interactive map of the 2024 eclipse: https://eclipse2024.org/eclipse_cities/statemap.html

02:30:02 Cori Brevik - DEB Initiative: To determine if you are in or out of the path of totality, when totality starts/ends at your location/ percentage of eclipse you can see, etc. visit: http://xjubier.free.fr/en/site_pages/Solar_Eclipses.html

02:30:04 Darlene Cavalier: @David- I bet NASA is interested in that! Contact info@SciStarer.org

02:30:08 MaryKay Severino, Eclipse Soundscapes Project: Accessible tool to find eclipse time/% info: <https://eclipsesoundscapes.org/resources/>

02:30:13 Darlene Cavalier: Thanks @Cori !

02:30:21 Joe Lack: Great job, thanks!

02:30:24 Darlene Cavalier: Bye everyone!

02:30:28 Darlene Cavalier: Thank you