FIELD TRIP: I Chase the 2024 Eclipse with Umbraphiles Ologies Podcast April 10, 2024

Ohhh hi, it's the lady that's last to board the plane on her way to see an eclipse, here we go. So, if you listened to last week's Heliology episode – highly recommended, it's on the Sun and solar eclipses – you may know that I missed the 2017 eclipse because I stayed home to work on and launch the podcast *Ologies*. I had some friends who went, people cried, it's been nearly seven years of regret. Then, in March, I had this big surgery, and I wasn't sure if the results would yield me a big bummer diagnosis. When it came back clear, I told myself, "Perhaps Ward, we should go on a few adventures."

But before this adventure, huge thank you to everyone on Patreon who supports the making of this show, at Patreon.com/Ologies. You too can join for one dollar a month and perhaps hear your name and your questions on the show. Also, thank you to everyone supporting *Ologies* by wearing merch from OlogiesMerch.com. You can also always support the show for zero dollars just by leaving a review, such as this nice one from Nishabeth who wrote:

I would love to hear an offshoot of Ologies. Alie's adventures with some of the peeps you have interviewed that have invited you to the field. Bears, pelicans, bugs... Adventure Alie!

Nishabeth, you have no idea how timely that is because you're about to come with me to a lot of different places right now. Thanks for writing that, thank you to everyone who has ever written a review, I've read it.

So, if you listened to Heliology from last week, you'll have a lot of the context and lead-up to why this Field Trip: Eclipse episode was so important for me to make. And of course, that episode is linked in the show notes as well as my Field Trip: Mystery Surgery episode. If you listened to that, you'll understand why as soon as I got a green light, I decided to maybe have a little more fun after a rough couple of years.

So, I booked a ticket to see the eclipse. It did not go according to plan. Did I make it? Was it fun? Did I see the corona, the penumbra, the Baily's beads, the inside of a cop car? What happened? Come along with me and several million others, as we chase the Moon chasing the Sun for a glimpse at our own insignificance. This one gets a little wild, lot of ups and downs, also, airport sandwiches. In this Field Trip, I head to the solar eclipse like an umbraphile... An umbraphile is someone who likes eclipses.

Aside: How about a little background? Okay. So, in 2024, a band of totality, stretching across Central and North America on a diagonal, like a beauty pageant sash. Millions of people going to see the Moon covering up the Sun, which would also boost the US economy by 6 billion dollars. Where should you spend your money if you're going to see it?

Well, the best option to see it was at lower latitudes where the weather has a lower chance of some meteorological sabotage, because no, clouds, we're not here to look at you. And this thing would be going from Maine to Mazatlán, so you have a lot of options. My friend Derek, of Veritasium, he had a place with his family in Kerrville, Texas so I asked them if they thought that was a good spot and they said they actually couldn't make it and I could have their Airbnb. And then I found out, one of my best friends I've known since we were 12, Sara, was also headed to Kerrville, Texas. Hot damn. Things are working out. I got a free Airbnb my friends aren't going to use, my other friend is going

to be there. But rental cars were scarce. We asked friends and family and ologites somehow one on Turo popped up. My friend Simone and I were both headed to DC after this eclipse, so she got a ticket to join Jarrett and I in Texas.

However, Jarrett's jiu-jitsu gym was having a belt promotion ceremony that they'd like him to be at and they hinted that he might want to be present for it. So, we moved the trip back a few days to fly into Austin the day before the eclipse. I'm nervous, we have really early flights, I hear the drive from Austin to Southwest Kerrville, usually a two-hour trip may take up to 12 hours. My friend Kathryn sends a video from her mom in Austin, empty shelves at the grocery store! It's like a quarantine flashback. The Texas Department of Transportation is putting porta-potties along, like, a 90-mile route and the mayor of Kerrville declares the event an emergency ahead of time in case they need immediate assistance from FEMA during the influx of people. By the way, we have a Disasterology episode with Dr. Sam Montano, highly recommend it.

Either way, I've waited seven years for this, Texas is the place to see it, they're not going to have clouds. I've been on helicopters, a tiny bush plane, a military centrifuge for TV shoots. I've driven through a tornado and an ice storm to get to work. I can handle eating protein bars for a few days and using a porta-potty for fun.

And then the weather reports came. Texas is expecting thunderstorms right at the time of totality. So, the day before we left this past Saturday, I talked to Jarrett.

Alie: Okay, here's the deal. So, right now, we've got clouds in Texas, big, big clouds. Vermont and Maine are supposed to be clear, right? If... we change our flights to go—Instead of going to Austin to go to Kerrville, which has declared a state of emergency and might have clouds, if we change the flights to Portland, Maine the day before we leave... I'm just saying, is it bonkers to go... As long as we're going to spend money and time to just be like, "Whoop! Hiccup."

Jarrett: You tell me. Are there places to stay in... there? Is that going to... That's going to be in the path we're saying? I don't even know where fucking Portland, Maine is.

Alie: I just can't believe that it's flipped. Teagan has family in Buffalo, so she was going to go up there. She's up there to see it in upstate New York. I don't know, I don't know, I don't know. Let's go sleep in a car somewhere, you know?

Jarrett: Buffalo is right in the middle of it.

Alie: I know!

Jarrett: Do we have places to stay if we go there?

Alie: I could... [chuckles nervously] I mean, I could ask Teagan. We could camp in her yard.

Jarrett: How would we get there?

Alie: I don't know. [laughs] [typing]

Aside: I texted Simone that it might change.

Jarrett: I know you really want to see this thing.

Alie: Simone says, "Oh shit, I'm down either way." [laughs]

Jarrett: That's good.

Alie: I just figure like, an adventure's an adventure. The sunk cost fallacy prevents a lot of people from going forward.

Jarrett: I agree, I agree. And I'm not looking forward to the idea of, like, driving like fucking crazy. You know?

Alie: To see clouds?

Jarrett: Well, yeah. A little bit.

Alie: Teagan says, if we pivot, she says "If you can get to Buffalo or Rochester we have couches, floors, et

cetera."

Jarrett: I think we should maybe do this.

Alie: Okay. [laughs]

Jarrett: You know?

Alie: [still laughing] Well then, let's fucking try that.

Jarrett: Hold on, let's figure this out... [softly] It's fun.

Alie: I think it's fun too. [laughs] Ahhh!

Aside: So, we started to mobilize.

Alie: There are flights out of Burbank at 7:15, 8:10, 9:25, and 10:25. They all get in at 8:10. So, they all

change planes in Las Vegas. It says one left on each of these.

Jarrett: Oh, there's only one...

Alie: Seat left on each of them but whatever. From Vegas, it looks like we'd all be on the same plane. I

say, fuck it. Let's go. [typing] Amazing, okay. One ticket down, babe!

Aside: I got us flights! There were four left. I had my confirmation number already up, so I

switched mine first.

Alie: Oh no... Huh.

Aside: Oh no, no, no, no, no. Jarret, meanwhile, was in the bathroom.

Jarrett: [shouts from the bathroom] ... stupid video on Instagram but it sent three times!

Alie: There's been a complication and I will tell you when you're out of the bathroom.

Jarrett: Okay... [door closes] What's the complication? So sorry.

Alie: Okay. So, it looked like there was one flight available for each of those times, so I booked mine and

now there's no flights available. That one flight was showing up for all the departure times. Do you

know what I'm saying?

Jarrett: Hmm.

Alie: So, it looked like there were four flights available...

Jarrett: And now there's none. We should call... Shit. Can we call?

Alie: Yeah, let's call. I booked myself but...

Jarrett: Well, I'm glad you're going to see it, babe, because I know it's really...

Alie: [grunts] No-o-o! That's not what's happening.

Jarrett: It's important.

Alie: That's not what's happening. I couldn't. [phone rings]

Jessica: Thank you for calling Southwest Airlines, this is Jessica. Who do I have the pleasure of speaking with?

Jarrett: Hi Jessica, my name is Jarrett Sleeper.

Aside: TLDR, no dice. Couldn't help us at all.

Jessica: Wow, I wonder if everybody is flying out for this because we're completely sold out of [inaudible] board too.

Jarrett: Yeah, I think they are. I think they are. Shit.

Aside: We FaceTimed Simone.

Alie: I don't want to feel like I'm ditching you because I booked my ticket first being like, "Okay, I have mine." Does it seem like I'm like, "Okay, well I'm set you guys so good luck!" You know? [laughs nervously]

Simone: Alie, there is not a single cell in my body that feels that way.

Alie: Jarrett, do you?

Jarrett: No.

Simone: And thank you for checking, thanks for fact-checking your feelings. [*Alie laughs*] The two sources here, Jarrett and I, do not feel that way at all. It's quite the opposite— It would be a bummer that you would miss out. You got a flight! It's fucking awesome. And also, if I could choose for one of us to go, obviously it would be you.

Alie: Right, right. So, this is a peer-reviewed study, double peer-reviewed.

Simone: Mm-hm, I think it's a great idea for you to go.

Aside: So, Jarrett checks for flights into Syracuse, Albany, Rochester, but coming up *empty*. Goose egg. Decides... just not to go. There's no flights. He's going to catch the next eclipse maybe in 2026 if we decide to.

But then later that night he goes, "Mmm..." and he finds a flight into Toronto, a few hours over the border, it's in Canada, there's one seat, it lands at 11:00 PM the night before the eclipse. So, he'd land and then drive two hours in the middle of the night, across the Canadian border into New York to reach us in Buffalo where there are clear skies. He goes for it. He gets a ticket, he finds a rental car, we're both just going to do this.

Alie: 4:53, the day before we leave, we went back and forth, decided I'm going to fly into Buffalo, I got those tickets for Buffalo... I got tickets, singular. Simone's out, she's going to stay in LA a few more days, and Jarrett is flying into Toronto late at night and then we're going to watch it between Rochester and Buffalo and then the next day I head to DC. All right.

Aside: Okay, so I'm going straight to Washington DC after the eclipse as a STEMbassador for the National STEM Festival. It's put on by the US Department of Education and EXPLR, which is cool. It's highlighting student solutions to global challenges in areas like the environment and food, and energy and space. Very cool. That's right after the eclipse.

So, the morning of my departure this past Sunday, I just grabbed my stuff in chaos, I'm packing haphazardly, I'm wondering if I'm going to regret this in case they invite us to the White House and I have the wrong clothes. Underwear is literally falling out of my backpack as I arrive at Burbank airport.

Alie: I'm just going to get in there and do some repacking.

Jarrett: Okay, okay, are you sure?

Alie: Yes. Yes.

Jarrett: Okay. I love you.

Alie: I love you!

Jarrett: I'll see you in a little bit.

Alie: Ahh! See you in Buffalo. I'll get the address from Teagan because I don't know where we're going.

Jarrett: Stay in touch.

Aside: If you've ever flown Southwest, where there are no seat assignments and only boarding order, you may understand that my place in line at C55 sucks shit. I'm the last to board the plane and I stand before this achingly full flight but I'm happy. I'm happy to be there. Then I see a middle seat in Row 2 and the flight attendant whispers to me, "Those ladies know each other," and sure enough, when I asked to scoot in the middle one, the aisle passenger sighs as if I caught her in a lie and says, "I'll just take the middle." And I have a blessed aisle seat at the front of the plane and these two ladies who are friends have to sit next to each other. So, the flight attendant kind of sneaks me a look as if to say, "See, don't let anyone bamboozle you." And I say, "Thanks, lady."

Now, on the flight, the attendant asks for a show of hands of who is Buffalo-bound for the eclipse, and maybe a dozen of us on this full flight raise our hands. She's like, "How many people are just coming home?" And I craned my neck back to see 80% of the hands raised. [flight attendant: "We wish you a beautiful clear skies day tomorrow."] De-planing are mostly tired families returning from what must have been spring break because there are flip flops, beach braids, there's tanned 9-year-olds, there's very little patience. One older couple is wrangling luggage through a crosswalk, and they drop a bag, so I go to help them. The woman stares me right in the face and says, "My daughter lives a life of chaos, and this is the result." But they must also be eclipse chasers and I relate heavily to her daughter who, a moment later, pulls a rental car around and parks crookedly on the crosswalk, I get her.

So, in the crisp Buffalo night, I see Teagan smiling through the windshield of a rented minivan. Her brother Geoff pops out of the shotgun seat and loads my luggage in the back. While I've been flying... Clouds have rolled into Buffalo. [flight attendant: "... wonderful view and come back and see us soon."]

Alie: Oh my god! Hi! How are you?!

Geoff: Good how are you?

Alie: Oh my god. [sings] Dr. Waaaaall! Thank you for coming to get me.

Teagan: I'm so glad you're here. There's a good chance we're going to get up tomorrow and we're going to

be driving.

Alie: That's all right!

Teagan: Based on... We are going to find a fucking hole in those clouds.

Alie: [laughs] Yes.

Teagan: We are going to Target first because all of the air mattresses that everyone has are flat.

Alie: No. We honestly can sleep anywhere.

Teagan: No, no. We're going to get you guys an air mattress.

Alie: No, no, no, no. We can sleep in the *car*.

Teagan: No, no, no. We're going to get you guys an air mattress.

Alie: Honestly. Okay, I get to get it.

Teagan: Fine. [all laugh] I don't care. You can pay for it.

Alie: Okay, deal. [laughs] It's way cheaper than a hotel and I don't even know if we could have found one.

Teagan: I don't think you could have.

Alie: I know!

Teagan: Buffalo is not that big and there's literally something like 2 million people coming into town for

this.

Alie: Fuck! That's exciting.

Aside: We hit Target; air mattress acquired. We walk into Teagan's Aunt Char's house to a chorus of dogs heralding the arrival of a sweaty, gross stranger who is me. Now, this house, it has that blissful feeling of coming home to families; like there's kids asleep upstairs, baby monitors droning at the end of the dining room table. All the adults are still awake, there are bowls of jellybeans and M&Ms, and her family is laughing, playing a dice game.

Spk 1: 7s! Yes! Okay... Double!

Spk 2: 9. Now it goes to doubles. Come on Carrie.

Aside: Everyone is instantly welcoming and warm including that barking dog Sadie who quickly learns that I am a reliable source of pets and hugs and that I consent easily to have my face licked by dogs I've just met.

Spk 1: 4, 5... 9. 7! [*group cheers*]

Spk 2: That was the fourth roll. Game's over.

Aside: Game over? Maybe. Because after pivoting from Texas thunderstorms at the last minute for those clear skies of Buffalo, the Buffalo clouds are gathering. First just a few and then...

Geoff: Whether you want to get in front of it or try and get behind it, I don't know. Now that it's getting closer, I'm looking at forecasts in different weather modeling, let's see. There's Toronto... Let's go...

Teagan: So right now, at 2:00 PM, Buffalo is scheduled to have 83% of the sky covered with clouds.

Geoff: At 2:00 PM?

Teagan: At 2:00 PM. But if we wanted to go all the way up to Watertown it's like, 55%.

Geoff: Chance. See, I'm kind of watching that weather. This is cloud cover as of right now...

Aside: Like a military operation, we gather around to weigh our odds and plot the course.

Geoff: Here's Erie, Detroit, Cleveland, Pittsburgh, Rochester, Toronto. So, we're sitting right in there.

Teagan: So, we might be able to look at it if we go down to Erie.

Aside: There's really not much we can do now but just get some rest on the air mattress, which is now inflating in the living room.

Teagan: [hum of air mattress filling] We'll check again in the morning.

Geoff: 5 or 6. I thought it was really cool, so we'll see. It's just like... Roll the dice. Do you go in front of that band of clouds, or do you try and travel behind the band of clouds?

Aside: Oh, a roll of the dice game, indeed.

Alie: We'll see, we're in it for the adventure. This is what umbraphiles deal with.

[quietly, to self] Okay, so Teagan's brother Geoff just said, "No matter what tomorrow, we will see something obscuring the Sun." Nice! Will it be the Moon? Or the clouds covering the Moon covering the Sun? We're at 83% chance of the sky being covered at 3:00 PM during the eclipse in Buffalo. So, we're going to wake up, we're going to see what the weather report says, and then we're going to see if we're going to head to Cleveland or Watertown, which might be really long traffic but that's what we're here for! Umbraphilia, not for the weak of constitution. We'll see what we see.

Aside: So, it's 11:00 PM, Jarrett has just landed in Canada, and he has customs and a 2-hour drive ahead. I, meanwhile, nod off in my airplane clothes, which is disgusting, on this fresh new air mattress, and at 2:30 in the morning, Char's front door clicks open, and Sadie erupts in a barking that we are sure will wake the four babies and toddlers upstairs. But we wince, we bribe Sadie with biscuits and pets and pets and snuggles and then we slip under a quilt on the air mattress to sleep like the dead.

Now, the next morning, still on Pacific time, us Californians sleep in until 9:00 or 10:00 and then jump out of bed, still in yesterday's clothes, to look at the weather. It's the day of the eclipse.

Alie: Okay, let's see, it's 10:17 AM Buffalo local time there is not a not-cloud in the sky. It's all clouds. I cannot see a patch of sky so we're going to see what happens! But right now, it is 100% clouded over.

Aside: Over some of the best donuts I've ever had in my life from Paula's in Buffalo, hit 'em up, we decide we're going to drive and we gotta go *now*. So, we trip over our own legs putting on shoes, we grab the eclipse glasses and recording equipment, and race to the rental cars. I don't even bother with a bra, seven years I've waited for this.

Alie: It's 11:36, we've got four hours, three and a half hours until the eclipse... Clouds, we got a lot of clouds, it's all clouds. But over the lake, which is I believe Lake Erie because we're close to Erie, Pennsylvania, I need to look at a map... Pennsylvania, don't email me. I think that we're going to try to keep heading that way and we'll hope that the clouds don't blow our way...We're chasing eclipses.

Aside: So, on the drive, we pass miles and miles of still bare-branched trees and hawks perched on telephone poles. I see smatterings of these yellow daffodils poking through the dead winter grasses. At one point, I look over and see a flash of this classic car, in the woods, that's rusting into pieces. All of this scenery under a still-cloudy sky as we head West, braced for a bummer, let's be honest.

Now, from California, my friends are checking in and good buddy, McKenzie sends an eclipse playlist with songs like "Eclipse" by Pink Floyd, "Total Eclipse of the Heart," "Ain't No Sunshine," it's a banger. We're still under the clouds driving and Teagan has come down with the stomach bug that her and her husband's children have. But despite her nausea and fatigue, she's meticulously watching the weather and navigating us toward the best odds for a clear sky, between bouts of barf bags in the back of their minivan. So, we proceed southwest along I-90, crossing from New York into Pennsylvania, still under the cover of clouds and mounting anxiety about disappointment.

Alie: What did you think it was going to be like?

Jarrett: Shady.
Alie: Shady.

Jarrett: You're saying it becomes nighttime.

Alie: Apparently, pretty much. Like, the stars come out, the birds get confused because they think it's nice then they think it's morning again. Someone was telling me it's almost like a sunset, 360, but I don't know about that.

Aside: And then... Y'all we see a break in the clouds, like the tiniest slice of hope.

Jarrett: Now that we're going to see it, I'm excited. If we're going to see it. I think we're going to see. We've got to be able to get over there before it happens.

Alie: Yeah. Blue skies!

Jarrett: It's a patch of blue sky.

Alie: That's a big patch of sky. The blue sky is very promising... We're crossing into Ohio which is apparently the heart of it all.

Jarrett: Some of us crossed international borders to be here actually. [Alie laughs]

Aside: It's true, some of us did. So, after the flights and the changes and the midnight drives and wearing no bra and a dirty shirt, it's starting to look good. Could this happen?

Alie: All right, so we're about 30 miles away from where we're going. I think we're going to stop and grab a little... perhaps a burger for lunch? And then we're 30 minutes out, it's two hours until the eclipse. Right?

I'm feeling much better seeing some blue sky. I think all of us are feeling less despondent. I think that's good. I keep replaying in my mind, if I had a time machine would I do this over again if it were cloudy? If it were cloudy, I feel like it's a no, I would have stayed home. So, this is good. Stay tuned.

Yeah, I'm feeling very good about the skies overhead. We're going from a tiny patch of blue sky to smaller patches of clouds, so this is good.

Jarrett: Cirrus?

Alie: I don't know, I gotta look it up.

Jarrett: I think they're cirrus. Chem trails looking beautiful.

Alie: Chem trails, gotta love those chem- They're seeding the clouds for us, baby! All right.

Jarrett: They're seeding the clouds because they're trying to prevent us from absorbing the eclipse energies you know? They don't want us to charge our crystals, so clearly, they're spraying some stuff up there to cover up the helio-lunar energies because it's going to break us free from all this 5G. The helio-lunar energies are going to cure my vaccine.

Alie: [through laughter] They're going to cure your vaccine.

Aside: This aspect of the discussion is amusing to me because it is employing a comedic technique called verbal irony whereby his comments become funny because they don't represent his genuine thoughts. This is distinct from situational irony, such as for example when we decided to fly into Texas to avoid clouds, but Texas got shit weather, so we flew into Buffalo for cloudless skies which then became cloudy but then became clear due to relocation which, at this moment, I don't know if I find any of that funny, but I am happy. Also, because we could all use a potty break, we stop at a Steak 'n Shake, which is populated with people in booths wearing various commemorative black eclipse shirts which gives things a very thrash metal aesthetic.

Alie: Look at all the people in the parking lot.

Aside: Next door, a Walmart parking lot is filling up with cars and RVs and people with camping chairs and coolers and eclipse glasses at the ready. I see an older man in the Steak 'n Shake parking lot, it's about 90 minutes to totality but he sits alone next to his sedan and a folding chair, and I ask if he's waiting for the eclipse, and says he drove in from Pittsburgh just to see it. He says he's 76 and knows that this is his only chance. We give him an extra pair of eclipse glasses in case he needs 'em, and I tell him that I hope that the clouds part for him. Then we get in the car, we soldier on another 10 miles to Walnut Beach Park, Ohio and we pull up to a spot along a residential street and grab our coats and our now-cold lunch. Perfectly timed, we run into the rest of our crew.

Jarrett: Oh! You guys look familiar. What the heck? Oh my god.

Geoff: Fancy meeting you guys here.

Alie: [laughs] I'm so excited you guys!

Aside: It's looking very, very good folks. Stay put for the eclipse but first, a quick pitstop to donate to a charity this week. It'll go to Functional Magic which is a nonprofit design studio making optimistic pop artworks, merch, and media inspired by solutions to climate change with all proceeds benefiting various climate charities. The art they produce is gorgeous, the causes are well-vetted, and they are linked in the show notes. Functional Magic.org.

And one sponsor of the show, even though they don't realize it is Veritasium. Derek Muller, thank you so much for giving us an Airbnb in Texas that we did not use. But if you're not familiar, Veritasium is an impeccably produced and hosted channel of science and engineering videos. So, you can find Veritasium on YouTube, and thank you to Derek and all of the "Tasiums" for your generous accommodations in Texas that we did not use. And thank you to other sponsors of the show.

[Ad Break]

Okay, so we're parked, we drove three states to a small waterfront town in Ohio and the skies overhead are mostly blue and I've pulled out the real audio equipment.

Alie: I'm so excited. I really have been prepared to be disappointed.

Jarrett: Me too.

Alie: I've been like, you know, it's fine.

Jarrett: You know me, I don't really do hope so...

Alie: That's true, you don't do hope well. [*laughs*]

Jarrett: So, this is cool.

Alie: I think you don't do disappointment well, so you do hope in accordance with how much...

Iarrett: That's correct.

Alie: ... you can handle disappointment.

Jarrett: That's right. You know what's funny about disappointment? You'd think, like most things, you'd get better with practice, but it actually gets worse with disappointment.

Alie: Because every time you're disappointed it's...

Jarrett: Just takes a little more outta ya.

Alie: Mm-hm... I feel that. Do you want to bring your hat?

Jarrett: Yeah.

Aside: It's less than one hour to totality and the light looks dimmer already. So, we check through our paper eclipse glasses to see that the first stage has started. The Moon has taken its first nibble of light and we're already onto the second stage where the Moon is covering the Sun more and more. We hustle toward this big, gathered crowd on the sand and an adjacent lawn.

Alie: All right, first stage has started. We're in a place called Asha-boola. [phonetic]

Aside: Ashtabula, sorry.

Alie: Ohio, we're near the waterfront. So, the Moon is starting to take a bite out of the Sun. We're walking down to the beach. I thought we had a little more time. Can I steal one of those glasses? I just want to see where we're at with it... Ah! Oh my god, it has started! Oh, that's amazing, okay. Jar, did you look?

Jarrett: Oh my god. Oh shit.

Alie: I know, it started! Here, can we stop for one second to recombobulate myself?

Aside: So, I gather my items and nerves and I wonder if I should interview strangers and I don't know why I even hesitate, that's what I do for a job. There's a group of like six folks sitting on patio furniture in their yard. I'm guessing because of their kind of jovial nature, I'm going to assume they're retired, or they may have just started the morning with mimosas, lots of them.

Alie: You guys have a good spot!

Spk 3: Yeah!

Alie: Is this your house?

Spk 3: Yeah!

Alie: We traveled from California! [group laughs and exclaims] You guys went to your patio?

Spk 3: If you don't find a place, there are places down on the beach.

Alie: Nice! I have some new friends. Enjoy!

Aside: We post up, the clouds are just wisps and a few airplane contrails grid the sky. Also...

Alie: I'm seeing vape clouds coming from the lawn, people getting spooky. Oh, there's a bunch of people at the beach.

Jarrett: I'd rather be on a lawn than sand, to be honest.

Alie: Yeah, yeah, I hear you there.

Aside: As the stage two Moon eases its way onto the Sun and the light around us is turning cooler grey and blue, I run off to talk to strangers.

Alie: Hey, I have a question. I have a science podcast, I'm just wondering how far you guys traveled.

Spk 4: Maryland.

Alie: Maryland! How long of a drive is that?

Spk 4: About 8 hours.

Alie: Eight hours.

Spk 4: Yup.

Alie: I came from California.

Spk 4: You did?

Alie: Yeah.

Spk 4: Was that more than 8 hours?

Alie: A little bit. I hitchhiked so it took me 6 months. Okay, Maryland, I hope you guys enjoy it! [*squeals*] I'm excited.

Oh hi, I was just asking people how far you traveled to be here.

Spk 5: Pittsburgh.

Alie: Pittsburgh, okay! That's not that far, right?

Spk 5: No, a couple hours.

Spk 6: About three. We're south of Pittsburgh.

Spk 7: We came from Virginia.

Alie: From Virginia, how long is that?

Spk 7: I think 6 hours.

Alie: 6 hours? Pretty good!

Spk 7: We were first aiming to go toward the Pennsylvania side but then we came here.

Alie: Have you seen an eclipse before?

Spk 7: No, this is the first time.

Alie: Yeah, me too. Everyone I know who has seen one cries. [*group laughs*] So, get your tissues ready, apparently. Well, enjoy!

Spk 7: Thank you, you too.

Alie: Virginia!

Spk 8: Pennsylvania.

Alie: Pennsylvania.

Spk 8: Central Pennsylvania so we're about three and a half to four hours.

Spk 9: We're from Delaware.

Alie: Delaware.

Spk 10: So, like seven hours. And that's my husband over there.

Alie: That's quite a telescope.

Spk 10: Yeah, it's pretty cool, he's getting good pictures so.

Alie: Putting good use to it.

Spk 10: Yeah!

Alie: Have you seen a solar eclipse yet?

Spk 10: Yeah, we were in Columbia in 2017.

Alie: Did you cry?

Spk 10: No, but what was really cool, I thought, these guys laugh at me but it's just a weird moment, you're standing in awe and then you don't know what to do because you're in awe and then somebody starts clapping. And next thing you know, everybody is clapping. Who claps at the sky? But we did. [laughs]

Alie: Oh, that's so exciting. That's good to know, now I know the protocol. I've never seen one before.

Spk 10: Well, I don't know that that's a protocol.

Spk 9: It's really cool. We would not have known how cool it was without us just having been in an area where it was happening and now it's like, I'll travel in 2040 or whenever the next one is. I'll go chase them.

Alie: You know that there's a word for that? It's called 'umbraphiles,' and 'umbra' means shadow so umbraphiles and eclipse chapers, shapers...

Spk 9: We're umbraphile guys!

Alie: Umbraphiles! Eclipse chasers.

Spk 11: Better than...

Alie: A lot of other philes.

Spk 11: A lot of other philes, thank you very much.

Alie: Yes, understood. Well, enjoy! I hope you like it. I'll be clapping along with you. How far did you come?

Spk 12: We came in from Washington DC.

Alie: Oh okay!

Spk 12: I think it's about 6 hours, maybe about 380 miles.

Alie: Did you see the 2017?

Spk 12: Partial.

Alie: Oh, so this is your first total?

Spk 12: I think so!

Alie: Mine too. I'm hoping to have an epiphany that changes my whole life. We'll see what happens.

Spk 12: Well, I'm hoping to feel my sense of scale in the universe, especially in light of the tantrums that I survived this morning, that's my 3- and 5-year-old over there [*Alie laughs*] who are not feeling the magnificence of the moment, they just want M&Ms and fruit snacks so...

Alie: We're all in it for our own game, aren't we?

Spk 12: Whatever we need. My husband made us drive here. I would have watched this on the internet, [*Alie laughs*] but we spent 7 hours in the car with a 3- and 5-year-old so this better be magnificent.

Alie: [laughs] I'm hoping for only the best.

Spk 12: Thank you.

Spk 13: We came from Dover, Delaware.

Alie: Oh, okay! That's a ways! Did you guys see the 2017?

Spk 13: Well, in Delaware it was a partial eclipse, but it was cool. Still, it's not something you see every day. But we did bring our son because obviously, I don't think we're going to be around in 2044 when the next one is.

Alie: You'll be here.

Spk 14: I'll be here.

Spk 13: Who knows, I probably will.

Alie: Given that we stopped at Shake 'n Steak on the way, we're probably not going to be here for the next one.

Spk 14: Oh god.

Aside: I walked up to this guy with a long lens camera on a tripod who was also setting up a GoPro, I think. He was prepared.

Alie: You look like you've got a good rig for this.

Spk 14: Yeah. It's pretty decent... it's all Sony equipment. I drove just over 300 miles up from Virginia to come to the path of totality.

Alie: Did you check the weather and check the weather? That's what we did.

Spk 14: Yup, every hour seemed like. [*laughs*]

Alie: I barely slept last night. [laughs]

Spk 15: And plenty of YouTube videos, forecasters all saying different things. I wasn't sure until really last night.

Alie: Yeah, we flew into Buffalo from LA, Buffalo was clouded over so then we drove here and our friends in the other car were just, minute-by-minute doppler being like, "Where is it going to be clear?" But it looks like it's going to be clear enough to see...

Spk 15: Yeah. Totality.

Alie: Have you seen totality before?

Spk 15: This is my first.

Alie: Me too. Ohhh, I'm excited.

Spk 15: Me too. [*chuckles*] I'm trying to contain myself. [*laughs*]

Alie: I know me too, me too. we were trying to contain our potential disappointment when we saw the clouds we were like, "Okay, it might not happen, might not happen." So, when we saw clear skies, we were just elated.

Spk 15: I almost made the trip to Texas.

Alie: Oh! We had tickets to go to Texas.

Spk 15: Really?

Alie: And then we changed them two days ago because of the storms.

Spk 15: Oh. Well, I didn't have tickets, but I was going to drive down there just make a road trip out of it, and then at the last minute, I saw the forecast and thought, no I think I'll take a gamble and come in this direction. Good gamble.

Alie: Yeah, good gamble, we made the right choice. [*laughs*] Well enjoy, it'll be my first totality too so cool! Nice to see you.

Spk 15: Enjoy! Thank you.

Aside: Remember the woman whose kids were just in it for the M&Ms who was fine with just watching it on the internet? Well, I walked past her again and it turns out that she'd been gently coerced by more than just her husband.

Spk 12: Excuse me, are you Alie?

Alie: I am!

Spk 12: [laughs] Nice to meet you, I love your podcast.

Alie: Oh no! Are you serious? Hi!

Spk 12: I was like, "I think that might be Alie Ward, let me google a picture." Oh, I think it is.

Alie: Nooo. Oh my god! Well, thanks for listening.

Spk 12: I actually listened to the Heliology, I threatened not to come I was like, "Well, they made it sound pretty cool so I guess I will come," [kids shouting nearby] because I was having a tantrum, I was like, I'm not riding in the car with these two. [laughs]

Alie: Stop it 1 We were supposed to be in Texas.

Spk 12: Yeah, I heard that.

Alie: And then we wound up in this park.

Spk 12: This is my husband, I told him. I was like, "I'm going to be so mad," but then I listened to a podcast, so I went.

Alie: That's amazing. And then here we are, finding ourselves here.

Spk 12: Here we are, and you were supposed to be in Texas so I was like, that can't be right.

Alie: I'm so glad y'all made it. I'll be up on that hill crying.

Spk 12: Well, enjoy! I will be, this is what my life looks like. [husband laughs, children scream]

Alie: Covered in children. [laughs]

Spk 12: Enjoy, have fun.

Alie: Enjoy! Thanks for saying hi.

Jarrett: That's pretty cool, that's cute.

Alie: [laughs] That's really cute.

Aside: After seven years of regret, a really rough few years, two interviews with heliologists, and a long episode about it, two countries, four states, it looks like we're going to see this thing. Teagan is the only one who has seen a solar eclipse and she gives me the lowdown of what to expect and why she was willing to stifle her stomach bug and drive several hours today with her weird friends who crashed in her aunt's house, which is us, and her brother, and parents, and husband, and two tiny children.

Alie: Ah! That's looking so good. Y'all, this is nuts. We just made it. Hey Teagan, do you want to give us a primer on what to expect when the eclipse happens?

Teagan: I can give a little bit based on the last one.

Alie: Yeah. How did it- What did it seem like?

Teagan: So, it gets chilly, and all of the animals start to go home like it's the end of the day. The birds all go home to roost, you start to hear crickets and stuff. And then when you take your glasses off, you see like a sunset or a sunrise in every direction. It's like a 360-degree sunset and sunrise. And then when you realize that you can look directly at it, it looks like there's just a giant hole in the sky with the corona coming out behind it, it's really cool. What are you most excited about for the eclipse?

Child: The Moon.

Alie: The Moon! It's the Moon's big day.

Aside: I took my place on top of my jacket on the lawn.

Alie: Have you stared directly at the Sun yet on accident, Jar?

Jarrett: Of course.

Alie: Yeah, me too.

Jarrett: It wasn't on accident though.

Alie: No!

Jarrett: It was also on accident; I've done it both ways.

Alie: Are the birds starting to sing or is that just regular birds?

Teagan: I think that's just regular birds.

Aside: It gets darker, and a chill comes over us. I'm lying on the grass with one microphone on my chest and the other one pointed toward the crowd behind me.

Teagan: I will say, I'm noticing shadows are looking a lot sharper. If you look around, everything looks like it's got an Instagram filter on it.

Jarrett: Yeah, yeah. That's true.

Alie: Yeah, you're right. It's definitely dim. It's kind of like a grayish hull to everything. Like the saturation went down but the contrast went up.

Teagan: Yeah, yeah.

Jarrett: So strange.

Teagan: When you see the Baily's beads, that's when you know totality is like, moments away.

Jarrett: Oh cool. Wow, it's really getting crescenty.

Alie: It's happening much faster than I thought it would... People just lying down...

It's weird because it's kind of like dusk but instead of having warmth to it, it's kind of a cold light, you know? So, like, dusk has so much golden light.

Jarrett: It's nice to experience this with you.

Alie: I love that you're here and that I'm here too!

Did I just hear a rooster? Was that a rooster or a child?

Teagan: I think it's a child, but it could go either way. [all laugh]

Aside: The Moon kept creeping over the Sun through the eclipse glasses and the only light was this diminishing amber crescent of the Sun just getting smaller and smaller and smaller.

Alie: Oh my gosh, look at how skinny it's getting! It's like a little toenail up there.

Jarrett: So wild.

Alie: Through the glasses, it just looks like a Halloween crescent moon... Feeling emotional?

Jarrett: Not particularly to be honest, but it's cool.

Alie: Somehow my anxiety has found a way to even be anxious about this like, what am I going to feel like when it happens? But I think that's just excitement that I'm filing into the wrong folder. It's cool that there's just like, nothing left to do but lay down on this lawn and watch.

Jarrett: I know, it's the best.

Alie: I wonder what it's like in Texas and Buffalo right now. It's funny how eclipse chasing is really a lot about weather watching.

Jarrett: I feel like it suddenly got way colder, I don't know.

Alie: Yeah, it did get colder.

Jarrett: Wow. We really rely on that freaking Sun, huh? [all laugh] Sheesh.

Teagan: That's your cold open.

Jarrett: The *cold* open.

Alie: *Cold* open, oh my god.

Geoff: Booo!

Jarrett: Booo. I like it, I loved it. [*Alie laughs*] Oh my god. Dude, it is looking trippy out here. It's definitely getting a weird eclipse... Oh, it's so cool.

Alie: It feels like...

Teagan: A midnight sun?

Alie: It feels like a horror film.

Jarrett: Gosh, it's so weird how cold. It's definitely colder.

Spk 16: It's definitely darker too.

Jarrett: Yeah, it's so weird-looking out here.

Spk 16: But it's also a weird dark.

Jarrett: It's the weirdest dark, it's so cool. It's like a post-apocalypse where they desaturated everything. Very cool.

Alie: Yeah, the blueness and the grayness is really striking now.

Teagan: This is a weird dark.

Geoff: It kind of feels like I'm still wearing my sunglasses.

Teagan: It's so close! It's just a little upside-down smile!

Alie: I know!

Aside: At this point, we were just a few minutes away from totality and the clouds had pretty much drifted away from the Sun. We were so lucky. And with solar binoculars, you could see the shape of the Moon's texture and outline. And as it eclipses the Sun, that geography of the Moon

causes small leaks of light around the rim and those are called Baily's beads, or if there's just one of them, a diamond ring. The atmosphere around all of us was dimming to this deeper, dusky level.

Alie: Look at how dark it's getting.

Geoff: That is so weird!

Alie: It's really surreal. It's giving me kind of goosebumps. Like a little creepy crawly on your neck, you know?

Aside: So, just a minute or so away from totality and a few pinholes in a piece of paper resulted in a little handful of crescents.

Alie: Oh, look at that! It looks like a cheese grater. [rumble of airplane passing overhead] This is so weird.

Jarrett: It's so cool.

Alie: [giggles] It's so dark.

Jarrett: Definitely colder.

Alie: Isn't it amazing how much light there is considering how much of the Sun is blocked out?

Jarrett: I was thinking that too. I tried to peek again, and I was like, "Can I see it yet?" Like no. A little sliver is still going to blind you.

Teagan: Alie, sit up and look around a little bit.

Alie: [Alie gasps] Yeah, that's weird.

Teagan: Sunset in every direction.

Jarrett: Dude, what is going on?

Geoff: Oh! Shadow band!

Teagan: Yeah, you can see 'em!

Alie: [gasps] Oh my gosh!

Jarrett: What is it?

Alie: It's like, wavy.

Jarrett: Oh woah. So cool! Is that like [inaudible] shimmer or something? [*Alie gasps*]

Aside: So, in the Heliology episode last week, we talked about shadow bands, these racing, waving alternating light and shadow shimmers that become apparent on the ground or on light-colored surfaces and those things still mystify heliologists. They're not quite sure where they come from. After talking about them in last week's episode, shadow bands seemed like this mythical creature I've only read about. It was like catching a glimpse of a unicorn through the trees. And then, a circular rainbow appeared above us in the sky.

Jarrett: Look at this rainbow. Have you seen this rainbow?

Alie: Oh weird, yeah, yeah. Oh my god, it's all around the Sun!

Teagan: Moonbow, there's a moonbow!

Jarrett: Moonbow, it's a moonbow.

Alie: Oh my god! Oh, look at the sunset all around.

Jarrett: This is...

Teagan: I fucking told you guys.

Alie: Wow!

Jarrett: Is that a star?

Teagan: How close are we Geoff?

Geoff: 20 seconds. [ambient sounds of crowd growing louder]

Jarrett: Is that a star?

Geoff: That's a star.

Teagan: Give me a second...

Jarrett: Alie that's a star.

Alie: [gasps] Oh my god. [crowd starts exclaiming, cheering, laughing, shouting] Oh my god!

Jarrett: WOW!!!

Alie: [awestruck, shaky voice] Oh my god, it's so pretty. [laughs] That's so... Oh my god, look at the... [voice trembles] Look at that! [crowd continues to gasp and cheer, and react]

Jarrett: You can still see a bit of cloud. It's gone, get away cloud.

Alie: Oh my god.

Jarrett: Oh my god.

Geoff: ... look like the water. That's insane.

Aside: The level of surreality is difficult to comprehend unless you've been under this.

Geoff: The horizon is just...

Alie: I can almost see like that one Baily bead, the one diamond ring...

Jarrett: Yes, I do see it, I do see it.

Geoff: The one at the bottom.

Alie: Oh...

Jarrett: I cannot believe this.

Alie: Oh, wow. The sunset in every direction is really weird. [crowd continues to react, constant voices saying "Oh my god"] That's so beautiful. Look at the... How did... How did we not get any clouds right now?

Geoff: There was one and it just got out of the way.

Jarrett: Oh my god.

Geoff: 5, 4, 3, 2, 1.

Jarrett: That's it.

Alie: It's so surreal.. [hushed tone] Look at all the people.

Aside: I've never seen something so otherworldly so surreal and part of the awe is how transient it is, it's not something that you can take in for as long as you'd like or go back and revisit. You can't be anything but in a moment that is huge and communal and rare and fleeting and visually stunning. It's a void in the sky, rimmed in these sparkling rays and hundreds of people around you

are gasping and crying and cackling and making a memory that will last until death. And it was dark, still in totality, and we're staring up at this glowing golden ring of light in otherwise darkness.

Jarrett: Wow. [Alie laughs] Look at the streetlights, I mean it's like nighttime!

Alie: It's really chilly, isn't it?

Geoff: It got so cold.

Jarrett: It's so cold.

Geoff: The stars are wild.

Alie: In a way, I have such a lump in my throat about it.

Jarrett: Oh, I've cried a couple times. This is wild.

Alie: No, but it's like... My chest feels heavy, you know? It's so big... God, that's weird. I'm so glad we came out for this. [all laugh] It's so cool!

Jarrett: It's so cool. That's one of the coolest things I've ever seen in my life. Look at the corona! Look at that! Do you see that?

Alie: The one contrail is so funny.

Jarrett: Honestly that contrail is amazing. Look at that diffusion we're getting, it's beautiful. [bang of fireworks]

Alie: [laughs] I can't believe this.

Aside: Once, on a morning walk, my dog hopped through some grass like a bunny, and it was so cute it made me cry and this sensation was similar. It's like when you watch videos of someone finding out that they got into their dream college, or when you see a surprise reunion of loved ones. You watch that and you cry in empathy at how happy they must be and how life can just work out sometimes. And part of that weird crying and awe was just appreciation that so many people could see something so beautiful, lasting only a few minutes, and also some happiness and relief that we had made this happen for myself and Jarrett. Simone, Spain 2026?

So, as the Moon plods on, this glimmer re-emerges. It's now going into stage three where it's receding and it's now a partial eclipse. The light is still dim, and the air is still chilly, but we are on the other side, we're cruising downhill from that summit. Even with just a sliver of the Sun showing, already daylight is back.

Jarrett: Wow. Look at, look at, look at, look, look. It's going to come back!

Geoff: 3, 2, 1. [screams and cheers and applause from the crowd]

Jarrett: Oh my god! That's wild, oh my god! I gotta look at it, I can't stop looking at it!

Alie: I don't even know where my glasses are.

Teagan: It's smiling at us.

Jarrett: I burned my eyes. A little I couldn't help it.

Geoff: It just gets so much brighter.

Jarrett: Wow.

Alie: [laughs] There's some people being like, "Okay, that's enough. Let's get..." Someone's got to beat the crowds.

Jarrett: "We saw it, we saw it. Let's go."

Aside: In an instant, some folks are already hopping in their car to avoid, like, a 10-minute traffic out of the park, but we linger for a while still taking in these crisp shadows and I finally eat my soggy lunch, not realizing I'd been hungry.

Teagan: So, did I overhype it?

Alie: No, no. I cried the whole time. [laughs]

Jarrett: It's underhyped. You really can't hype that enough. That's some... Yeah, just primal stuff. That is insane.

Teagan: Last time I laughed, this time I should be crying.

Jarrett: I still feel like I could cry. It's so crazy.

Alie: Look at that. The rainbow, the moonbow is back you guys! Do you see it? Oh my god! Wow... [giggles] Oh my god, that's so cool. Wow.

Jarrett: Wow, what a treat. Didn't know that was going to happen.

Alie: I couldn't even eat my burger; I was too excited. The moonbow is gorgeous... We've become umbraphiles.

Teagan: Girl, get on my level. [all laugh]

Aside: So, the light is coming back in so it's getting brighter and brighter like daylight with warmer colors around us.

Alie: Gosh, I can't believe that was like five minutes ago. It feels like a different realm, you know what I mean?

Teagan: You feel changed?

Jarrett: Yes.

Alie: I no longer care about achievement or anyone else's opinions, just going to burp when I want.

Teagan: We should have done this in 2017!

Aside: The Sun is still emerging and that rainbow ring around it appears again. If you stand in exactly the right spot, it's an excellent photo op, perhaps to convince people that you are saintly or a mystical demigod. Maybe you would like to start a cult, great profile pic.

Geoff: These came out super good.

Jarrett: These? My little saint pictures? Yeah, start a little cult. That's so cool.

Aside: So, we gather the snacks and children and with swollen eyes walk to the car in kind of a daze. It's so odd that 20 minutes before we were just staring at the sky in shock. Now, on the road back to Buffalo, I put on that eclipse playlist and every song gives me the shivers like a little crushy heart swell from what we just got to see. There are still families gathered in front yards for some post-show barbecuing. I see one woman, probably in her sixties, just alone on a lawn chair with a TV tray table in front of her having lunch under the clear sky. We stop for coffee, and I wonder if the cashier at Circle K managed to lock up for a minute and go out to see it. I'm just really glad that I did.

Huge thanks to everyone who encouraged me to go. Thank you again, Dr. Teagan Wall and Christophe, Geoff, Scott, Mary, Char, Vin, Carrie, Mike, Sadie, and Socksie and pals Rogue and Skella and Tam, for the warm Buffalo welcome. Simone and my friend Sara who ventured to Texas, I hope to see the next one with you.

And again, to offset this travel and bring you a glimpse of the eclipse if you couldn't make it, a donation went to climate activism non-profit FunctionalMagic.Org, which is linked in the show notes, alongside Veritasium on YouTube, thank you to them. You heard Dr. Teagan Wall in the WGA Writers Strike episode, and we'll link her socials in the show notes too, in case you'd like to befriend a Hollywood screenwriter who works on great science scripts.

We are @Ologies on Twitter and Instagram. We have *Smologies* episodes which are kid-safe, classroom-friendly cut down of our classic episodes available for free at AlieWard.com/Smologies, linked in the show notes. Stay tuned for a cool *Ologies* announcement coming your way in the next few weeks.

Erin Talbert admins the *Ologies* Podcast Facebook group with assists from Boni Dutch and Shannon Feltus. Aveline Malek and The Wordary make our professional transcripts. Noel Dilworth is our scheduling producer who literally raced us to airports and helped gather things I forgot. Susan Hale rolled with the changes as our managing director. Kelly R Dwyer does our website. Mercedes Maitland of Maitland Audio is our *Ologies* lead editor. Again, thanks for going with last-minute episodes. And huge producorial and editing assistance provided by Jarrett Sleeper of Mindjam Media, which also produces the Nickelodeon podcast *Avatar the Last Airbender*, and the newly released Season 3 just got nominated for a Webby! So, congrats Jarrett Sleeper. After the bonkers travel and eclipse, we slept like, 12 hours and edited this in a Hampton Inn lobby, where they offered guests leftover eclipse snacks like Sun Chips and Moon Pies, which I found very clever.

Now, if you stick around until the end, I tell you a secret ad this week it's that yes, I did finally showered and changed, thanks so much. And I just got to DC, hopefully, to put this up tonight. Also, side note, remember how we stayed an extra day or two in LA for Jarrett's jiu-jitsu ceremony? I snuck in the back of the ceremony with some spectators and watched your PodMom get his black belt in jiu-jitsu, which is a giant feat, it's taken him 20 years to achieve. You can see the Genicular Traumatology episode about knee injuries to learn more on that. I'm so happy for him, I'm so happy. Without having gone to that ceremony also, we'd have been in Texas. So, we cried a lot this week, all for good reasons.

So, thanks for coming along, and we'll be back next week with a full episode per usual. Meanwhile, you tell the Sun it's doing a good job, do not look it in the eye. Okay, berbye.

Transcribed by Aveline Malek at TheWordary.com

Links to things we discussed:

2024 Total Solar Eclipse: Through the Eyes of NASA (video)

Austin airport's rental car agencies are '100% booked' for eclipse

Monday April 8, 2024 Total Solar Eclipse and Cloud Cover Forecast

16 cities & counties in Texas issue disaster declarations for Monday's total solar eclipse

Here's Why The Total Solar Eclipse Has Prompted States Of Emergency In Parts Of U.S.

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Anyone else got super emotional during the eclipse?

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