

The Fremont Peak

# Observer

Bringing Astronomy to the Public

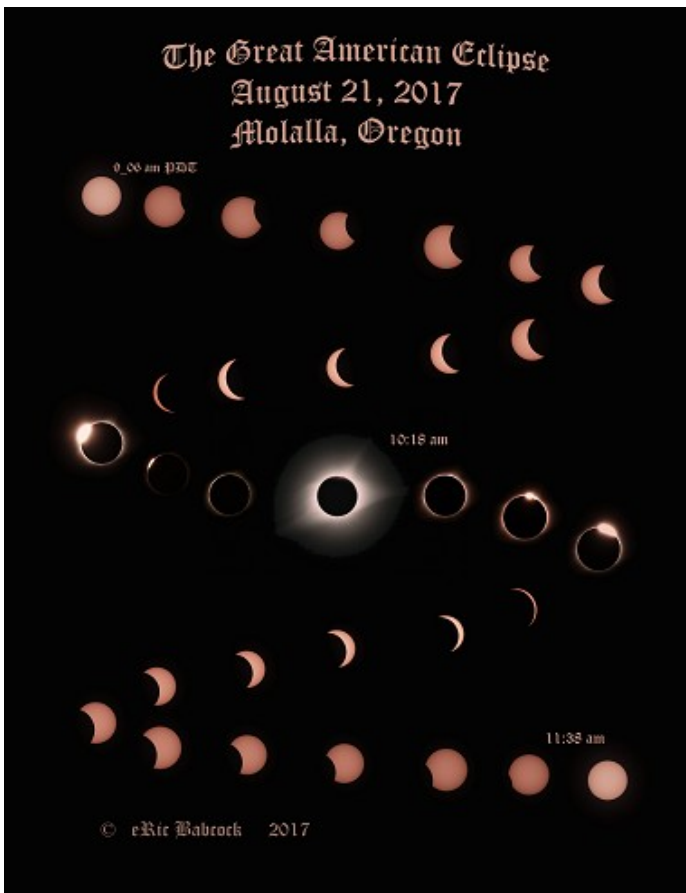
Vol 34 No. 3

Fall 2017

*Renew now for 2018. Don't let your membership expire. See page 7 for details.*

## Great American Eclipse

*By Ric Babcock*



For the Great American Eclipse, I drove from Salinas, Ca to Molalla, Oregon, a 10 hour drive if I were to have driven straight through but the trip actually took me eleven and a half hours. Molalla is situated 32 miles east-northeast of Salem and 34 miles south of Portland which placed me in the northern quarter of the Moon's shadow that would pass over on Monday August 21<sup>st</sup> 2017 and give me one minute and 9 seconds of totality.

*Continued Page 6*

## 2018 FPOA Program Dates

### Saturday Evening Programs

Apr 7, 14, 21    May 5, 12, 19  
Jun 9, 16, 23    Jul 7, 14, 21  
Aug 4, 11, 18    Sept 1, 8, 15  
Oct 6, 13

### Solar Programs

Mar 24   Apr 7   May 5   Jun 9  
Jul 7   Aug 4   Sept 1   Oct 6

### Board Meetings

Jan 13   Feb 17   Mar 24   Apr 14  
May 12   Jun 16   Jul 14   Aug 11  
Sept 8   Oct 6   Nov 10

### Special Events

**Annual Meeting / BBQ            Sept 8**

Please check <http://www.fpoa.net/schedule.html> for changes or updates to this schedule.

## Solar Eclipse Experience

*By Becky Snow*

This past August I had but one goal: to see my first total solar eclipse.

Like the best things in life, little effort was required in obtaining an invitation to a prime location to stay and view the eclipse. We camped up on a small hill in Madras, OR, which was frequently touted as having the highest chances of being clear. This translated

*Continued Page 2*

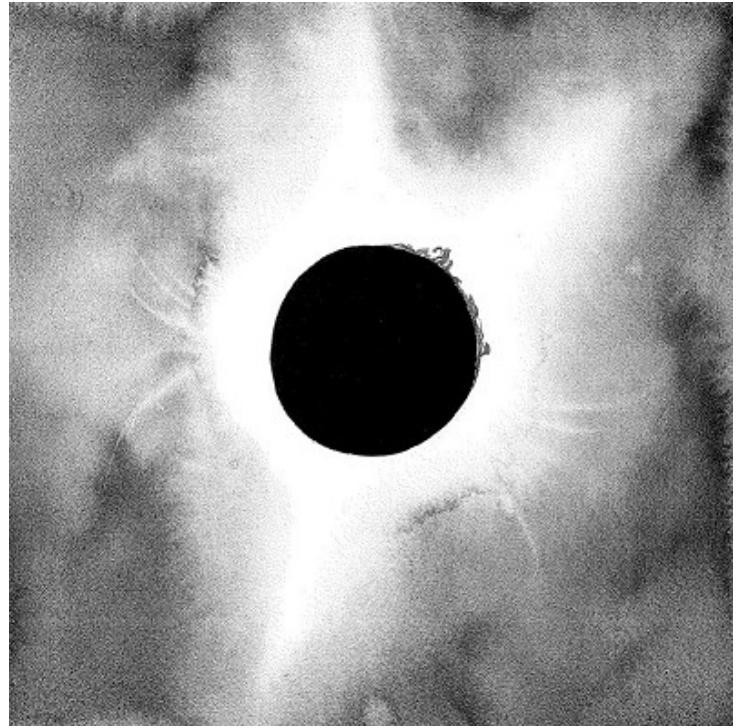
## **Eclipse Experience** *from Page 1*

into fear of traffic being backed up for hours and hours, and it was for this reason that I decided to leave a few days in advance – because all I cared about was getting there. Turns out it wasn't near the apocalyptic scenario that we were all led to believe, it was just heavier than normal (at least for me). After we arrived all that was left was to enjoy the building anticipation of the upcoming event, as well as looking down with binoculars at the odd display of packed cars and tents surrounded by empty fields.

Eventually the morning of the 21<sup>st</sup> did arrive (with clear skies too), and we all gathered at the main house as the partial phases began. As this progressed it continued to get noticeably darker and colder. From this viewing location there was a full view of Mount Jefferson to the west, which made for an excellent indicator of the moment when totality would begin. As the last few glimmers of sunlight could be seen through the solar glasses I turned my attention to the mountain, which faded into darkness by the approaching curtain of shadow. Within a few moments it had completely disappeared, and I knew it was time to turn and look up – at which time I involuntarily shouted some unintelligible gibberish into the sky because the sight before me was beyond immediate comprehension! The corona bloomed outward from behind the moon with a smooth transition into its full radiance. Venus was perched high overhead and the star Regulus could be seen to the lower left of the moon and sun. Glowing red prominences could be seen protruding out at the moment of third contact. And then, with the final display of the infamous 'diamond ring,' it was over. Finished. Gone. Two minutes sounded like a long time before it began, but in the end it felt more like two seconds; maybe less even.

Images and descriptions from others (such as my own account) can never come close to preparing oneself to witnessing the event in person. It was so beautiful, I really felt like crying when I first saw it. However much I don't want to admit that part I think it accurately describes the feeling and therefore should be said.

With the next closest encounter to this amazing celestial event coming in 2024, you can be sure I'll make the effort to be there again, catching the fleeting moment of overwhelming joy that is so rare. If you haven't had the experience of seeing a total solar eclipse in person, I encourage you to make that journey; it is absolutely worth it.



August 21, 2017 Solar Eclipse Painting by Becky Snow

---

## **Partial Eclipse Activities from Morgan Hill**

*By Patrick Donnelly*

Due to a bad case of procrastination, I missed the total eclipse on August 21. Monday morning found me looking at the sun from my back yard, wishing I was somewhere else. When the local first contact arrived, I decided to stop being depressed and instead make the most of the day.

I dragged out my two (2) 100 foot extension cords and set up my C-8 with a solar filter in the middle of cul-de-sac, where I live. My wife went around and invited our neighbors to view the eclipse. In a short while there were 10-15 people peering through the telescope or through eclipse glasses at the partial phases. Many of my neighbors indicated that they had not seen a partial solar eclipse before now. A man with a trailer, who had arrived to pick up a car, was particularly excited. When he saw the Sun with a large chunk taken out he was astonished. He said that he was unaware that these events happened, and I really made his day.

As maximum coverage in Morgan Hill approached, I showed our friends the little crescent Suns on the ground and on the walls nearby. A was also asked several times about the dark spots on the Sun. I explained to them that they were basically cooler regions on the face of the Sun caused by lack of heat from the solar interior.

*Continued Page 3*

## Partial Eclipse Activities from Morgan Hill

*from Page 2*

When it was time for totality in Oregon, we all went inside at watched the eclipse on the Weather Channel. I know it was much less exciting than seeing totality live, but many people got to see totality for the first time in their lives and would have missed it, if I had not asked them to take a look. After totality ended I was quite surprised how emotional the broadcaster from the Weather Channel was. Apparently she not experienced totality before in her life. We also watched totality from Idaho & Wyoming. Nebraska was rather cloudy, which gave me a chance to retrieve the telescope from outside and put it away. After that a couple of die-hards and I spent the next two (2) hours watching totality six (6) more times. Again, I know that there is no amount of remote watching that comes anywhere close to experiencing totality and standing in the shadow of the moon, but I did make several people very happy that day.

---

## Eclipse Report

---

By Chris Angelos

To view the 2017 total solar eclipse I went to Oregon with a TravelQuest tour. A group effort has a lot of advantages over going it alone and the shared experience has more impact. All our travel arrangements and locations were in most cases setup more than a year in advance. That allowed the group to concentrate almost solely on being ready for eclipse day. Planning is critical for those interested recording totality photographically.

On eclipse day at 4am we traveled north on Route 97 past the fields of eclipse chasers camped out on the way to our observing site. We arrived while it was still dark. We got special permission to use the Jefferson County Middle School's sports field in the city of Madras. Activity ramped up as the Sun rose. Telescopes were trained on the Sun and eventually I heard someone calling 5 minutes to first contact and so on. As totality approached the excitement increased waiting for the next two and one half minutes of totality. "Bailey's beads" was shouted. Then "filters off" was heard and everyone stopped everything to watch as the last bits of the Sun's edge became covered. During totality I worked to remember all the things I wanted to look for. I did not want miss any part of the experience, the increasing contrast of shadows on the ground before they faded away, the prodigious drop in temperature, and all that.

---

## Eclipse Report

---

*continued*

At our location the orange glow I expected to see all the way around the horizon was not apparent. Perhaps the Moon's shadow just covered too large an area for that. However, the sky got dark very fast. It did not get as dark as night. Only bright stars and planets became visible. The solar corona was glorious and quite a bit more irregular than I expected. There is no way photographs show all that you can see in the corona particularly while viewing through binoculars. As quickly as totality started the process reversed itself. I heard "Bailey's beads" again and then "filters on". I did see all the stages of the eclipse and was lucky to get some reasonable good photographs also. Totality was over all too soon. Then you start thinking what it is going to take to get to the next total solar eclipse.

---

## Eclipse in Oregon

---

*By Rob Hawley*

Over the last 20 years I have had the opportunity to travel to many eclipses. Since the moon's shadow can fall almost anywhere most of these have been in far off places. The August eclipse was only the second one I viewed in the US. The previous one being in 1970. Pat will point out that an eclipse also occurred in 1979. In February 1979 I was on the wrong coast and focusing on transitioning out of military service. Travelling to Washington was not an option.

I decided for this piece that I would focus on the eclipse experience. I have many pictures on my website ([robhawley.net](http://robhawley.net)) of the August eclipse and past eclipses. For those wanting pictures of the sun I suggest you go there. This will focus on getting there.

### Group Travel

Travel on my own was something I considered since this eclipse was in the US. I went on my own to the August 2012 Annular in Nevada. I thought this worked out well. I also had a thought that I could base myself in Salt Lake and then either go north to Idaho or east to Wyoming. As the date to make arrangements approached I became concerned about traffic and being able to get a hotel. Thus group travel was back on the table.

*Continued Page 4*

## Eclipse in Oregon

from page 3

I have been traveling with [TravelQuest International](#) (TQ) since 2003. They were planning trips to Madras, Oregon and the Grand Tetons – both good locations. Ultimately it came down to “stuff”. I will talk about this below.

Group Travel is a compromise. Some trips have been over 200 people either in a boat or multiple hotels. In some cases you are divided into a smaller bus sized group that you will be spending 12 hours a day with for two weeks. You have a fixed and rather rigid schedule. While there is some time on your own, most of the time will be with the group. One needs to be able to cope with that.

The advantage of group travel is all of the logistics are taken care of. Get to the destination airport and TQ will take care of you from there on.

Another consideration is that an excellent site is picked and reserved years in advance. This is usually an irrevocable decision; however, in China the TQ folks moved the site due to weather. When on a boat you *may* be able to adjust your intercept point. TQ has done this twice. The TQ owner and either or both of their meteorologist and lead astronomer visit potential sites on the day the eclipse will occur to get a feel for the sun location and any local weather conditions that might make success more or less likely. In Svalbard he arranged to use land from the coal company that was about another kilometer further from town instead of using the site the other groups used. The site we used had a better valley so the sun was higher in the sky. In 2017 he made an arrangement with a local school to rent the soccer field. This put us far from the [mosh pit along the highway](#) where the general public was camping.

### Carrying “Stuff”

As an imager I carry a lot of stuff with me. How much depends on the location. I have learned on ships to just take a [camera and monopole](#). On land I have taken a small equatorial mount as in [2006](#) or [2010](#). Sometimes going with a group means compromises on weight as in [2015](#) where I had to design a custom setup to meet the weight limits.

I ended up making the decision for this eclipse in 2015 after talking with TravelQuest’s owner in Svalbard earlier in the year. He satisfied me that the plan for the trip included lots of space for luggage. I could take a heavy mount, a table, and a computer. So I ended up going with the group on an itinerary to visit many of the west coast parks that I had not visited in a number of years.

### Eclipse Day

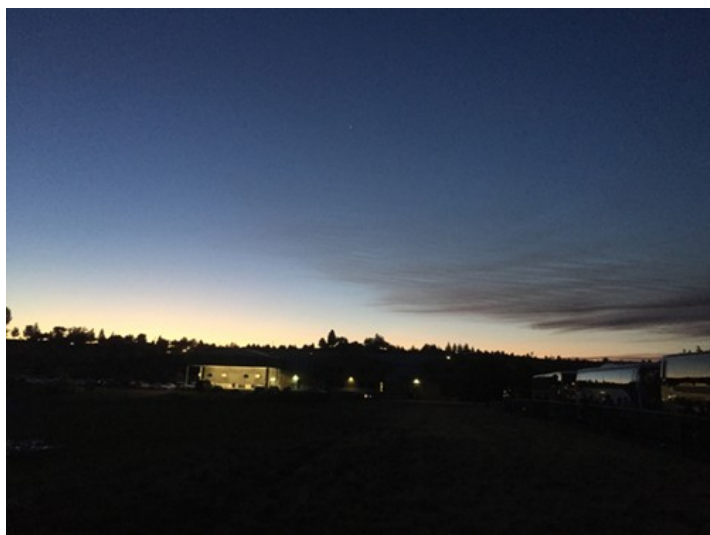
So eclipse day has arrived. Most of the time we stay near the eclipse site. Getting to the site is sometimes an interesting experience itself. A couple of times we stayed in the path of totality where we could observe from [outside of the hotel room](#) (or with a trivial bus ride). In 2008 we had a police escort through the busy streets of Novosibirsk. In 2009 we left our hotel in a pouring rain hoping the weather would break before we got to the site (it did a bit). This was going to be the most interesting yet.

Everyone was anticipating massive traffic jams the morning of the eclipse. The Madras site had an advantage in that it was relatively remote except from Portland (which was the opposite direction). In addition the local leaders had a plan to set up an observing community to encourage visitors to arrive early. Many did.



There is a two lane road from Bend (where we stayed) to Madras. We left our hotel a 4 AM. Normally the trip takes an hour. An advance group reported little traffic so we were hopeful. There were only a couple of cars travelling with us.

Several fires were burning in the area. On Sunday the Reservation just north of Madras reeked of smoke (inside the casino it reeked of smoke from a different source). As we got into Bend a cloud of smoke was above us.



### Fun in the Shadow

Eclipses are the classic “hurry up and wait”. We arrived at the site about 5 AM and were asked not to go onto the soccer field for another 45 minutes to avoid tripping. Even then it was 3 hours to C1.



# Eclipse in Oregon

from page 4

Here comes the advantage of being in a group. By now you know many people. So as everyone set up their equipment we had a party.



There were the pinhole signs and silly pictures.



Rob Hawley and Chris Angelos

And equipment being set up across the field. People conversed and shared their experiences from past eclipses. In the meantime the imagers were stressing out about their equipment.

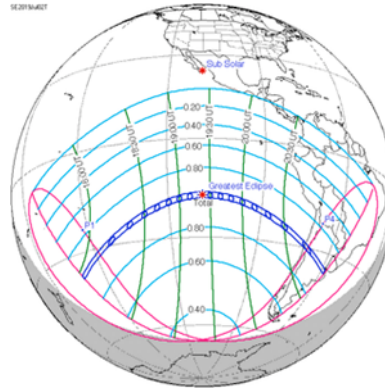


It was then just a matter of the moon doing its thing. The crowd reaction from [my movie](#) showed our reaction to the event.

## More in the future

There were many first timers in our group this time. And many of them were interested in doing this again.

The next eclipse is in 2019 will mostly be in the South Pacific, but will end in Chile. TQ has a [boat trip](#) that includes Pitcairn Island. They also have a [land trip](#) to Peru and Chile.



After that the [2020](#) will be similar but further east so you can view it in Argentina. 2021 is [Union Glacier](#) Antarctica. [2023](#) is in Australia.

The party will not return to the states until 2024. Texas to Ohio. I look forward to reading Jay Anderson's [forecasts](#) and see where TQ is planning.

Images below from Rob's website : [www.robhawley.net](http://www.robhawley.net)



2nd Contact



Inner Corona

## Great American Eclipse *from page 1*

Images from Ric Babcock

By arriving on Friday night I was able to visit friends in the Portland area on Saturday and prepare myself for a final practice run of the eclipse on Sunday morning at exactly 24 hours prior to the main event. During this practice run I met the neighbors and thus they were aware that I'd be in the same location the next day and the need to get to know everyone would not be necessary.

That Sunday night I had trouble falling asleep, with people arriving in adjacent rooms of the motel I was at, but more to the point, that this event which was hours away and three years in planning, was actually here now, I didn't want to miss it. So, at 3:00am in the morning I got up and placed my mount and polar aligned while I had stars to look at. By 6am, my TV-76 telescope was mounted and my battery packs were placed. As the Sun rose, I anticipated once the Sun cleared the horizon, I'd begin starting up my equipment.

Of course as the morning progressed, many of the neighbors would come out and offer me an egg and ham sandwich. As 9:06 am approached I was ready and the first contact of the moon eclipsing the Sun began. My big thrill moment came at the first Diamond Ring as I hear my Eclipse Orchestrator program announce "Filters off, filters off". From this point and the next 5 minutes, my practicing and preparations with having redundant pieces of equipment would pay off as I concentrated on the naked eye experience of Totality taking place.

When the second Diamond Ring appeared and shortly thereafter hearing my program's warning of "Filters on, filters on", I place my solar filter back onto my scope and awaited to hear the camera click of the first 5% uncovering of the Sun by the Moon. Then I sat down to my computer and checked to insure that my imaging was centered. It would be another hour and thirty minutes before I could shut-down operations and download what my camera had taken and I was not disappointed.

This was an experience I'm happy to have not missed and I must confess, a bit of the "bug" of "eclipse chasing" has entered into me. Suppose I'll see how my fortunes provide me the opportunity to view more total solar eclipses in the future. This I will say;

"There is Nothing, in this World, like being in the Shadow of the Moon"

Ric Babcock





### 2017 Membership Renewal

Renewals are easy. You can use the forms on the membership page <http://www.fpoa.net/membership.html> to pay with either PayPal or via a credit card. For those preferring paper you can just send a check (that has your current correct address) to : FPOA Membership, c/o Rob Hawley, 1233 Hillcrest Dr., San Jose CA 95120

If your email has changed, then please be sure to include that in either the PayPal payment as a comment or a note with your check.

#### FPOA on the Internet

**Phone Number:** 831-623-2465  
**Email Address:** info at fpoa.net  
**Website:** www.fpoa.net  
**Members Only Page:** members.fpoa.net  
**Facebook:** [www.facebook.com/fpoa.observatory/](http://www.facebook.com/fpoa.observatory/)  
**Twitter:** [twitter.com/fpoa\\_info](https://twitter.com/fpoa_info).

#### EMAIL DELIVERY OF THE OBSERVER

Dear FPOA Members,  
 We have been delivering the Observer via email for the past several years. This obviously saves the Association postal expenses, and assures the quickest delivery to you. However, several of you no longer have valid email addresses, due to ISP changes, moves, etc. If you would like to continue to receive, or begin to receive, notification of the Observer via email, please send your current email address to membership at fpoa.net

**Fremont Peak Observatory Association**  
 PO Box 1376, San Juan Bautista, Ca. 95045  
 Observatory 831-623-2465

#### Officers and Directors—2017

**President** John Parker  
*parker.johnj at gmail.com*

**Vice President** Pat Donnelly 408 778-2741  
*kungfugina at aol.com*

**Secretary** Ric Babcock 831 262-2223  
*gentlehart at gmail.com*

**Treasurer** Rob Hawley 408 997-6526  
*treasurer at fpoa.net*

**Directors** Chris Angelos 831 688-3562  
*chris.angelos at plantronics.com*

Ron Dammann 408 255-1863  
*schedule at fpoa.net*

Daniel Dynneson 831 269-3544  
*Dynnesond at gmail.com*

Loren Dynneson 831 443-8631

Becky Snow  
*puffmuffin25 at yahoo.com*

**Director of Instruments** Ron Dammann 408 255-1863  
*schedule at fpoa.net*

**Membership and Newsletter Distribution:**  
 Rob Hawley *treasurer at fpoa.net*

**Website** John Parker

**Directors Emeritus** Kevin Medlock  
 Denni Medlock  
*epoch at majornet.com*

The *Fremont Peak Observer* is published four times a year (Winter, Spring, Summer, Fall). Articles from members are encouraged and should be emailed to <schedule at fpoa.net > Articles should be in plain text or MS Word format. Deadlines are Feb. 1, May 1, Aug. 1 and Nov 1, respectively.