



# THE OBSERVER



2017 Total Solar Eclipse from Smith's Ferry Idaho.  
Tom Wolf Mesa Az.

## UPCOMING EVENTS:

- Public Party - September 8*
- EVAC Monthly Meeting - September 15*
- Local Star Party - September 16*
- Deep Sky Party - September 23*
- Check out all of the upcoming club events in the Calendars on page 13.*

## EVAC This Month

*by Don Wrigley*

This month's meeting is somewhat early in the month, due to the fact that Sept. 1st. lands on a Friday, so the third Friday is on the 15th. We will make up for this by holding the October meeting on the fourth Friday of the month. Actually, the real reason we are moving the October meeting back a week is to avoid conflict with the All Arizona Star Party, which is always held in October on the weekend nearest the new moon.

If you have never attended the AASP, this would be a good time to begin planning for that weekend. The first experience of viewing the heavens through a telescope

under truly dark skies is very much akin to one's first glimpse of a total eclipse, except that it lasts a lot longer than two minutes! If you are new to the hobby, it is a perfect way to become acquainted. Don't be concerned about being a beginner; there will be many in attendance who can show you the ropes. Even if you have only a modest sized telescope, or no telescope at all, come anyway. There will be many telescopes to look through, and members are always happy to share their views with all who wish to look. With such a variety of scopes to look through, it is a good way to learn about what sort of telescope best

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## EVAC This Month

by Don Wrigley

would suit your needs.

The September meeting will be devoted entirely (aside from the usual business) to the total eclipse experience. Several short presentations are already on the docket, and some time will be allotted for members to give accounts of their personal eclipse experiences. It should be very interesting, given the accounts that have been posted on the Az. observing mailing list.

I, unfortunately, will not be in attendance, as I will be in New Hampshire to attend my High School reunion.

## If It's Clear...

by Fulton Wright, Jr. Prescott Astronomy Club

September 2017

Celestial events (from Sky & Telescope magazine, Astronomy magazine, and anywhere else I can find information) customized for Prescott, Arizona. All times are Mountain Standard Time.

On Saturday, September 2, the Moon occults two double stars in Capricornus. The first, Pi, happens at 11:09 PM. Pi is listed as magnitudes 5.2 and 8.5, separated by 3 arc-seconds. The second, Rho, happens at 12:18 AM (Sunday). Rho is listed as magnitudes 4.8 and 6.9, separated by 2 arc-seconds. Pi emerges from the bright limb of the Moon at 12:09 AM (Sunday) and Rho at 1:33 AM (Sunday)

On Tuesday, September 5, at 6:46 PM, the full Moon rises spoiling any chance of seeing faint fuzzies for the night. As you would expect from last month's total solar eclipse, there is almost an eclipse of the Moon this month and you can expect very flat illumination of this full Moon.

On Tuesday, September 12, the Moon occults Aldebaran.

At 4:48 AM the bright limb of the Moon covers it, at 6:02

Twenty-five years sure does fly by!

The meeting will be run by our Vice-President, Claude Haynes. If you have eclipse pictures you would like to show, or an eclipse experience you would like to tell about, contact Claude ([vp@evaconline.org](mailto:vp@evaconline.org)) before the meeting date.

I hope to see you all at the AASP!

Don Wrigley

AM (during twilight) it reappears. Later that evening the Moon is at last quarter phase and rises at 11:29 PM.

On Wednesday, September 13, if you are out between 4:00 and 5:30 AM, you can see the northern part of the Moon at its best. In particular, now would be the time to hunt for those illusive craterlets in the floor of the crater Plato.

On Monday, September 18, about 5:30 AM, you can see a lot of objects lined up. Starting at the top, brilliant Venus, Regulus, the very thin crescent Moon, Mars, and Mercury form an almost vertical line. Mars and Mercury are close on September 16. Venus and Regulus are close on September 20.

On Tuesday, September 19, it is new Moon and you have all night to hunt for faint fuzzies.

On Wednesday, September 27, the Moon is at first quarter phase and sets at 11:34 PM.

# The Backyard Astronomer

by Bill Dellenges (September 2017)

## Weird Star Name Sampler

The star names we use today are the end product of mixing a few thousand years of time with myriad cultures. But the modern world's shrinking size, instant communications, and bureaucratic organizations (like the International Astronomical Union) have brought any further evolution of star names to a halt.

This is the situation we have today, at least in the western world: The majority of star names are derived from Arabic. Why is that? Because the former Greek and Latin star names were translated into Arabic during the Middle Ages (about 400 A.D. -1400 A.D.) when Europe "slept" and advances in science and art continued in the Middle East. The pendulum swung back to Europe during the Renaissance and most of those Arabic star names were retained, though some Greek and Latin names were reintroduced. Thus today we see names from Arabic like Deneb, Betelgeuse, Aldebaran and Greek or Latin names like Regulus, Castor and Capella. It should be noted that most of the dimmer visible stars don't have proper names, rather just a catalog number or Bayer Greek letter designation.

So let's take a look at a few unusual star names.

Zubenelgenubi (zu-be-nel-gen-nu-bi) Alpha Librae: It's just plain fun to pronounce it and share it with the public at star parties. It sounds ridiculous and usually gets a laugh every time. The name is from the Arabic description "Southern Claw of the Scorpion" when these stars formed the claws of Scorpius in Babylonian and Greek times. Though the Romans separated the stars to form Libra (the Scales), apparently the Arabs preferred to keep these stars as the Scorpion's Claws.

Gomesia (Beta Canis Minoris): From an indigenous Arabic surname translated into "The Little Bleary-eyed One with a filthy fluid in the corner of the eye." The meaning generates more laughter than Zubenelgenubi.

Asellus Borealis, Asellus Australis (Gamma and Delta Cancri): The northern and southern asses? Yes. It's the Latin translation for the two donkeys standing aside the Prae

sepe (L. – manger), aka M-44 or Beehive Cluster). Alula Borealis and Alula Australis (Nu and Xi Ursae Majoris). Tania Borealis and Tania Australis (Lambda and Mu Ursae Majoris). Iota (Talitha) and Kappa Ursae Majoris. These three pairs of stars represent three of the Great Bear's feet (there were no stars available for a second front leg). Collectively they are referred to as the "Three Leaps of the Gazelles" representing an asterism from an Arabic fable in which these three stellar pairs are tracks from gazelles fleeing Leo the Lion.

Sualocin (Alpha Delphini) and Rotanev (Beta Delphini): At first glance, all seems well. After all, they appeared in the Palermo Star Catalog published in 1814 by Italian astronomer Giuseppe Piazzi, discoverer of the first asteroid, Ceres, in 1801. His assistant was Niccolo Cacciatores. But where did these star names come from? They don't appear to be of Greek, Latin, or Arabic origin. The mystery was solved a few years later by renowned British astronomer Thomas William Webb. He amazingly noticed that the first and last names of the Latinized form of Niccolo Cacciatores, Nicolaus Venator, spelled backwards were Sualocin and Rotanev. It's not known for certain which astronomer at Palermo Observatory was responsible for this trickery. The star names still appear in some references, like Stars and Planets by Ridpath and Tirion.

Regor (Gamma Velorum). Dnoces (Iota Ursae Majoris). Navi (Gamma Cassiopeiae): The names of these stars are not especially weird, but the way they came about are. Astronaut Virgil Ivan (Gus) Grissom was assigned to supply a list of thirty-seven stars for navigating to the moon. It's thought he pulled a ruse on NASA by creating three names that were bogus. Regor was Roger Chaffee's first name spelled backwards, Dnoces was from Edward White II (the Second – spelled backwards) and Navi was Grissom's middle name, Ivan, spelled backwards. Perhaps Mr. Grissom borrowed a page from the Palermo Observatory chicanery.

Sadly, all three astronauts were killed in the Apollo 1 launch pad fire in 1967.

# Total Eclipse of the Sun

August 21, 2017

The following photos and links are from members and subscribers to evac-announce. Thanks to everyone that contributed.

John Kundrat - ISS passing over sun during the eclipse: <https://www.youtube.com/watch?v=lepQoU4oek4>



Tom Wolf - Smith's Ferry Idaho.



Forrest Sims - Caspar Wyoming

# Total Eclipse of the Sun

*August 21, 2017*



Richard McQueen 93% Solar Eclipse Billings Montana.



Gary Deatsman Ontario Oregon.



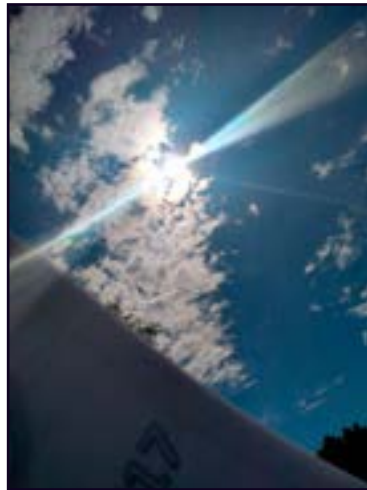
David Hatch - Phoenix AZ

# Total Eclipse of the Sun

August 21, 2017



David Kight - Salem Oregon.



Kimberley Baker - MCC Mesa Arizona.



Todd Yampol - Carbondale Illinois

Total Eclipse of the Sun  
August 21, 2017



Enron Lee - Lime Oregon



Richard Daggett - Phoenix Arizona.

Total Eclipse of the Sun  
*August 21, 2017*



John Evelan - Cookeville Tennessee



John Evelan - Cookeville Tennessee



## Find Out What's Happening – Join EVAC-Announce List

If you would like to receive email announcements about EVAC meetings and activities please join the EVAC–Announce mailing list. Click on the link below to subscribe. Enter your full email address in the box titled User Options and press OK. You will receive a confirmation email. Your privacy is respected by EVAC and we will never sell your email address, or use it for non-club relevant solicitations. This mailing list is designed for communication from EVAC, and does not enable users to respond to the message. If you wish to contact club officers, please use the list on the Contact-Us tab. To subscribe to the EVAC – Announce mail group click: <http://www.freelists.org/list/evac-announce> To unsubscribe use the same link, enter your email address and select Unsubscribe from the “Choose An Action” list.

***Looking for that perfect weekend activity?***

***Why not resolve to getting involved?***

***Contact Claude Haynes to join the staff at GRCO***

***Email: [grco@evaconline.org](mailto:grco@evaconline.org)***

**FULL MOON ON SEPTEMBER 6 AT 03:03**

**LAST QUARTER MOON ON SEPTEMBER 13 AT 02:25**

**NEW MOON ON SEPTEMBER 20 AT 01:30**

**FIRST QUARTER MOON ON SEPTEMBER 27 AT 22:54**



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# Upcoming Meetings

September 15

October 27

November 17

December 15

January 19

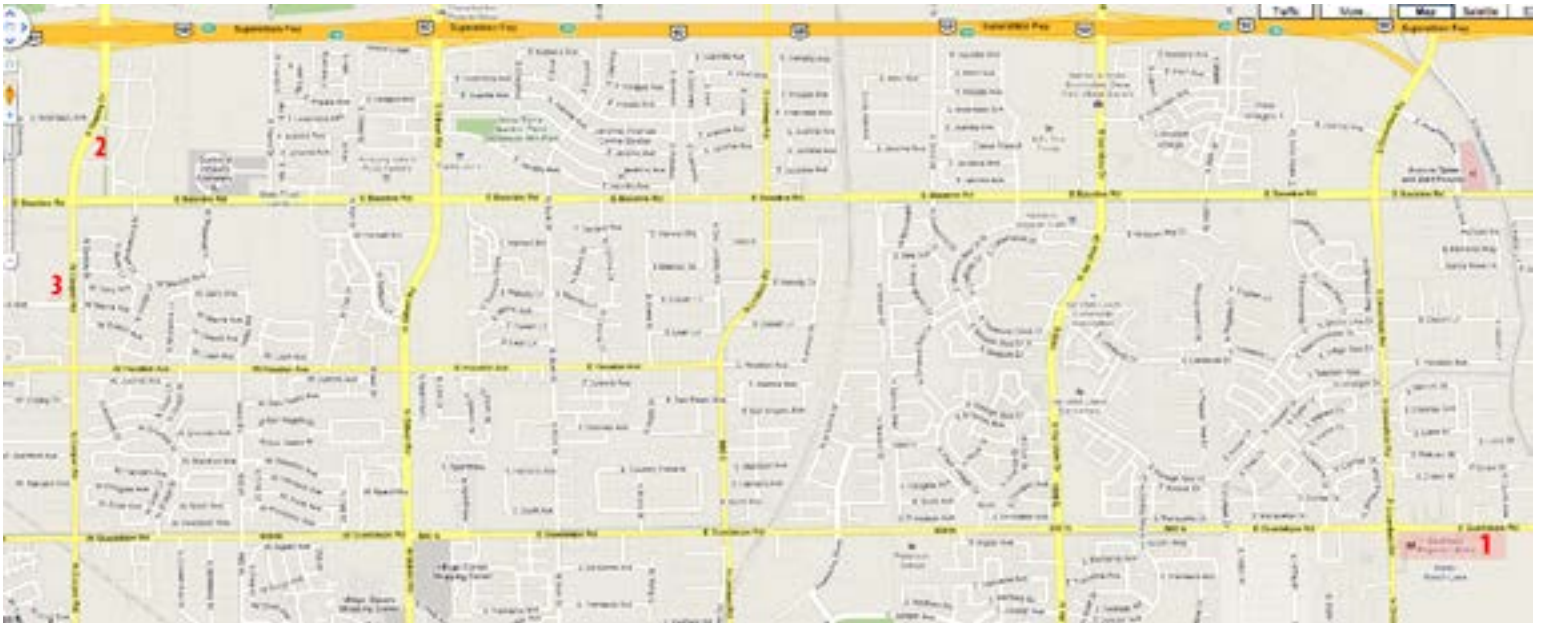
February 16

March 16

The monthly general meeting is your chance to find out what other club members are up to, learn about upcoming club events and listen to presentations by professional and well-known amateur astronomers.

Our meetings are held on the third Friday of each month at the Southeast Regional Library in Gilbert. The library is located at 775 N. Greenfield Road; on the southeast corner of Greenfield and Guadalupe Roads. Meetings begin at 7:30 pm.

***Visitors are always welcome!***



**1** Southeast Regional Library  
775 N. Greenfield Road  
Gilbert, Az. 85234



## SEPTEMBER 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	<b>8</b>	9
10	11	12	13	14	<b>15</b>	<b>16</b>
17	18	19	20	21	22	<b>23</b>
24	25	26	27	28	29	30

**September 8** - Public Star Party

**September 16** - Local Star Party

**September 15** - EVAC Monthly Meeting

**September 23** - Deep Sky Star Party

## OCTOBER 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	<b>13</b>	<b>14</b>
15	16	<b>17</b>	18	19	<b>20</b>	<b>21</b>
22	23	24	25	<b>26</b>	<b>27</b>	28
29	30	31				

**October 13** - Public Star Party

**October 21** - All Arizona Star Party

**October 14** - Local Star Party

**October 26** - Shepard Junior High

**October 17** - CGCC Star Party

**October 27** - EVAC Monthly Meeting

**October 20** - All Arizona Star Party

## East Valley Astronomy Club -- 2017 Membership Form

Please complete this form and return it to the club Treasurer at the next meeting or mail it to EVAC, PO Box 2202, Mesa, Az, 85214-2202. Please include a check or money order made payable to EVAC for the appropriate amount.

IMPORTANT: All memberships expire on December 31 of each year.

Select one of the following:		
<input type="checkbox"/> New Member	<input type="checkbox"/> Renewal	<input type="checkbox"/> Change of Address
<b>New Member Dues</b> (dues are prorated, select according to the month you are joining the club):		
<input type="checkbox"/> <b>\$30.00 Individual</b> January through March	<input type="checkbox"/> <b>\$22.50 Individual</b> April through June	
<input type="checkbox"/> <b>\$35.00 Family</b> January through March	<input type="checkbox"/> <b>\$26.25 Family</b> April through June	
<input type="checkbox"/> <b>\$15.00 Individual</b> July through September	<input type="checkbox"/> <b>\$37.50 Individual</b> October through December	
<input type="checkbox"/> <b>\$17.50 Family</b> July through September	<input type="checkbox"/> <b>\$43.75 Family</b> October through December	
<i>Includes dues for the following year</i>		

<b>Renewal</b> (current members only):
<input type="checkbox"/> <b>\$30.00 Individual</b> <input type="checkbox"/> <b>\$35.00 Family</b>

<b>Name Badges:</b>
<input type="checkbox"/> <b>\$10.00</b> Each (including postage)    Quantity: _____
Name to imprint: _____

**Total amount enclosed:**

*Please make check or money order payable to EVAC*

Payment was remitted separately using PayPal     Payment was remitted separately using my financial institution's online bill payment feature

Name: <input style="width: 95%;" type="text"/>	Phone: <input style="width: 95%;" type="text"/>
Address: <input style="width: 95%;" type="text"/>	Email: <input style="width: 95%;" type="text"/>
City, State, Zip: <input style="width: 95%;" type="text"/>	<input type="checkbox"/> Publish email address on website
	URL: <input style="width: 95%;" type="text"/>

The Observer is the official publication of the East Valley Astronomy Club. It is published monthly and made available electronically as an Adobe PDF document the first week of the month.

<input type="checkbox"/> General Observing <input type="checkbox"/> Cosmology <input type="checkbox"/> Lunar Observing <input type="checkbox"/> Telescope Making <input type="checkbox"/> Planetary Observing <input type="checkbox"/> Astrophotography <input type="checkbox"/> Deep Sky Observing <input type="checkbox"/> Other	
---	--

Would you be interested in attending a beginner's workshop?     Yes                       No

How did you discover East Valley Astronomy Club?

**PO Box 2202**  
**Mesa, AZ 85214-2202**  
[www.evaconline.org](http://www.evaconline.org)

All members are required to have a liability release form (waiver) on file. Please complete one and forward to the Treasurer with your membership application or renewal.

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[www.evaonline.org](http://www.evaonline.org)

East Valley Astronomy Club  
PO Box 2202  
Mesa, Az. 85214-2202

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