

THE OBSERVER



The Owl and the Galaxy (M108)
 APOD April 2, 2017 Image Credit & Copyright Christoph Kaltseis

UPCOMING EVENTS:

- EVAC Star Party - June 5*
- Public Star Party - June 11*
- EVAC Star Party - June 12*
- EVAC Monthly Meeting - June 18*
- Check out all of the upcoming club events in the Calendars on page 9.*

From the Desk of the President

by Tom Mozdzen

We will be having a normal Club meeting this June and not a BBQ social as previously advertised. The intent is to have normal Club meetings every month from January through November with a Christmas party taking the place of our December meeting. If there is an exceptional event where most of our members will not be able to make the monthly meeting, like last year's Solar Eclipse, then we may choose to do something different for that meeting.

Adopting the revised Bylaws will be voted upon in the June meeting. Please send us any questions you

may have. As expected, this is not a topic that has excited the masses but that is OK.

The Grand Canyon Star Party is coming up soon - June 9th -16th at both the north and south rims. You can find more information here: [GCSP](#).

A reminder that Robert Buchheim, Tom Polakis, Woody Sims, and Wayne Thomas will present the scientific data they collect with their telescopes at the June (14-16th) Symposium on Telescope Science sponsored by the Society for Astronomical Sciences (SAS). Congratulations to all of you!

INSIDE THIS ISSUE:

<i>From the Desk of the President</i>	1
<i>May EVAC Meeting Minutes</i>	2
<i>Consider a Checklist</i>	3
<i>Let's Party for June</i>	4
<i>Announcements</i>	5
<i>Classified Ads</i>	6
<i>Meeting Maps</i>	8
<i>Calendar</i>	9
<i>Membership Form</i>	10

From the Desk of the President

Continued from page 1

Jim Bell's talk about the Voyager 1 and 2 spacecraft was amazing and was very much enjoyed by all. Many thanks to Jim for a great talk.

Rob Baldwin has agreed to be our coordinator with the Astronomical League (AL). So, if you are an EVAC member in good standing (dues paid up), you may join the AL for \$7.50, but the deadline is by the June Meeting (15th of June). Send your home address and email address to

Lana Young (treasurer) and Rob Baldwin (Vice President and AL coordinator), get \$7.50 to Lana either by a check in the mail, a check at next meeting, or by PayPal, and you will be all set. We have more information about the AL on our webpage: [Astro League](#)

Until next month,

Tom Mozdzen

EVAC General Meeting Notes for May 2018

by Kenneth Rowe

Tom Mozdzen started the meeting inviting visitors to stand. We had 7 or 8 visitors and very good membership turnout for this meeting. Tom gave a brief report from our Treasurer, and currently for the year, we are in the positive ~\$100 against our planned budget not including any donations or auction proceeds. We had a very successful auction and raised \$10,850. More importantly, we moved many pieces of astronomical equipment from the storage room into the hands of stargazers. Once again, a big thanks to everyone who participated in the auction.

Our GRCO observatory needs volunteers, please consider helping out, you don't need to be an expert astronomer!

We still have some sale items available from the auction, please see Claude if you are interested.

We discussed our Astronomical League membership benefit. Our members get a discounted annual rate of \$7.50 and this includes the Reflector magazine, observing programs, 17,000+ members and numerous other benefits.

There was a brief Q and A on the bylaws update, and a brief discussion on the need to reapply for our non-profit status.

Woody Sims gave an excellent presentation on his "Adventures in Spectroscopy". It was a very informative talk and was very well put together. Kudos to Woody, he has already been published in journals discussing spectroscopy.

The main presenter of the night was Dr. Jim Bell, ASU School of Earth and Space Exploration. Topic: "The Interstellar Age – Inside the Forty Year Voyager Mission". Jim gave an excellent presentation on the history of the Voyager mission and the major accomplishments this mission has achieved and will continue to do so for the next 20 years or so.

The next EVAC meeting is on Friday, June 15th. We look forward to seeing everyone!

LAST QUARTER MOON ON JUNE 6 AT 14:32

NEW MOON ON JUNE 13 AT 15:43

FIRST QUARTER MOON ON JUNE 20 AT 06:51

FULL MOON ON JUNE 28 AT 12:53

Consider a Checklist

A stargazer arrived to cheers. But fearing being late, he forgot his counterweight. On different occasions I have forgotten my eyepiece case, semi-pier of my Losmandy G-11 mount, dew cap, red light and star diagonal. I began using a checklist years ago, but the blunders above happened when I was in a hurry and thought I could get away with not using it. So, for star parties away from home I recommend a checklist – by the way, this tip only works if you use it!

My checklist is in order of importance:

- (1) OTA (Optical Tube Assembly). The telescope itself.
- (2) Mount. Be it an equatorial or alt-az.
- (3) Tripod for same.
- (4) Eyepiece case (Eyepieces, Barlows, color filters for planets, nebulae filters).
- (5) Accessory case (finder, diagonal, batteries, small tools, level, battery cable, etc.)
- (6) Battery for scope if not using my Evolution 8 with its internal battery.
- (7) Star Atlas and observing "To do" list.
- (8) Red light
- (9) Dew cap. Mostly for contrast enhancement and corrector plate defense from kids' inquiring fingers.
- (10) 7x50 binoculars. A little back up to help find things and general slumming around the night sky.
- (11) Stool for sitting while observing.
- (12) Table for eyepiece case, atlas and writing in my gazing log.

- (13) For cool evenings, a coat and warm cap or hoodie.
- (14) Wallet (For obvious reasons). I have forgotten mine a couple of times!
- (15) Telescope repair kit. Basic tools, hex wrenches, tape, AA/AAA batteries, EP cleaning kit, first-aid kit, common small accessories forgotten by fellow gazers (or even me!) -- visual back, diagonal, 2" to 1.25" adapter, 2" SCT diagonal adapter, power cable. All this in a 17" tool box. At this point I need to add a few more items if the outing is going to be open to the public.
- (16) Step ladder for kids – a must!
- (17) Shoulder bag with astronomy handbook, laser, moon map, and quick reference cheat sheets for questions that catch me off guard. And there's always one, right?
- (18) A clicker counter to record the number of people who looked through my telescope.
- (19) A dim diffused red light on the ground under my scope to indicate my location. Many stargazers additionally use tiny red lights or glow-in-the-dark tape on the end of their tripod legs so visitors don't bump or trip over the tripod – don't overdo it, the lights should be just bright enough to do the job and not "blind" the visitor as they peer into your telescope.

Somehow, I get all this stuff into my Honda CRV. Hmmm, those rear tires look a little under inflated.

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

Let's Party for June

Astronomical objects for public (and private) star parties, arranged by type.

by *Fulton Wright, Jr. Prescott Astronomy Club*

Flashy, deep-sky objects, visible in the middle of the month, at the end of astronomical twilight, 7:10 PM this month, (when it really gets dark). This list customized for Prescott, Arizona, should work well anywhere in the state, and be usable anywhere in the old 48 states.

Double Stars (2 or 3 stars, close together)

*name: Gamma Leonis
--alt name: Algiba, SAO 81298
--magnitudes: 2.2 & 3.6
--separation: 5 arc-seconds
--R.A.: 10hr 20min
--Dec.: +19deg 51'

*name: Beta Cygni
--alt name: Albireo, SAO 87301
--magnitudes 3.4 (yellow) & 4.7 (blue)
--separation: 35 arc-seconds
--R.A.: 19hr 31min
--dec.: +27deg 58'

*name: Zeta Ursae Majoris
--alt name: Mizar, SAO 28738
--magnitudes: 2.2 & 3.9
--separation: 14 arc-seconds
--R.A.: 13hr 24min
--dec.: +54deg 56'

*name: Epsilon Lyrae
--alt name: Double-Double, SAO 67310 & 67315
--magnitudes: 5.0 & 6.1, 5.3 & 5.4
--separation: 2 arc-seconds, 2.5 arc-seconds
--R.A.: 18hr 44min
--dec.: +39deg 40'

Open Clusters (about 50 bright stars)

*name: Collinder 399
--alt name: Coat-hanger
--magnitude: 3.6
--size: 90 arc-minutes
--R.A.: 19hr 25min
--dec.: +20deg 11'

*name: IC 4665
--alt name: ---
--magnitude: 4.2
--size: 70 arc-minutes
--R.A.: 17hr 46min
--dec.: +05deg 43'

*name: NGC 6633 (use wide field)
--alt name: ---
--magnitude: 4.6
--size: 30 arc-minutes
--R.A.: 18hr 27min
--dec.: +06deg 30'

Globular Clusters (about 200,000 dim stars)

*name: M 5
--alt name: NGC 5904
--magnitude: 5.6
--size: 3.5 arc-minutes
--R.A.: 15hr 19mmin
--dec.: +02deg 05'

*name: M 13
--alt name: Hercules Cluster, NGC 6205
--magnitude: 5.8
--size: 20 arc-minutes
--R.A.: 16hrs 42min
--Dec.: +36deg 28'

*name: M 4
--alt name: NGC 6121
--magnitude: 5.6
--size: 8.7 arc-minutes
--R.A.: 16hr 24mmin
--dec.: -26deg 32'

Galaxies (about 200,000,000 very dim and distant stars)

*name: M 82 and M 81
--alt name: Bode's nebula, NGC 3031 and NGC 3034
--magnitudes: 6.8 and 8.1
--size: 21 x 11, 11 x 5 arc-minutes, 37 arc-minutes apart
--R.A.: 9hrs 55min
--Dec.: +69deg 23'

Let's Party for June

Continued from page 4

Galaxies (about 200,000,000 very dim and distant stars)

*name: M 51
--alt name: Whirlpool Galaxy, NGC 5194
--magnitude: 8.0
--size: 14 x 12 arc-minutes
--R.A.: 13hr 30min
--Dec.: +47deg 12'

*name: M 83
--alt name: NGC 5236
--magnitude: 7.5
--size: 13x12 arc-minutes
--R.A.: 13hr37min
--dec.: -29deg 52'

*name: M 104
--alt name: NGC 4594
--magnitude: 8.2
--size: 8 arc-minutes
--R.A.: 12hrs 40min
--Dec.: -11deg 37'

*Bright Nebulae:
(It is a very bad season for bright nebulae.)

none available

***Planetary Nebulae:

*name: M 57
--alt name: NGC 6720, Ring Nebula
--magnitude: 8.8
--size 1.4 x 1.1 arc-minutes
--R.A.: 18hr 54min
--dec.: +33deg 02'

*name: NGC 6543
--alt name: Cat's Eye Nebula, Caldwell 6
--magnitude: 8.1
--size: 0.4 arc-minutes
--R.A.: 17hrs 59min
--Dec.: +66deg 38'

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. Another list that may be of interest is AZ-Observing. To subscribe click <http://www.freelists.org/list/az-observing> .



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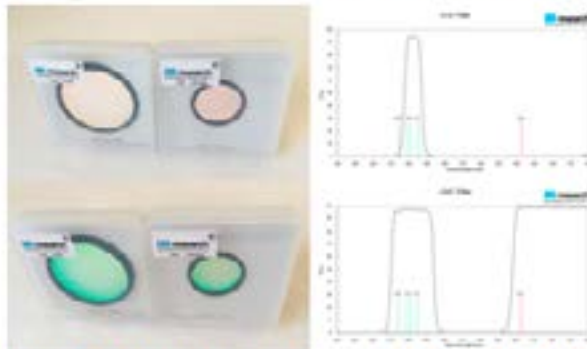
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Upcoming Meeting

June 15

July 20

August 17

September 21

October 19

November 16

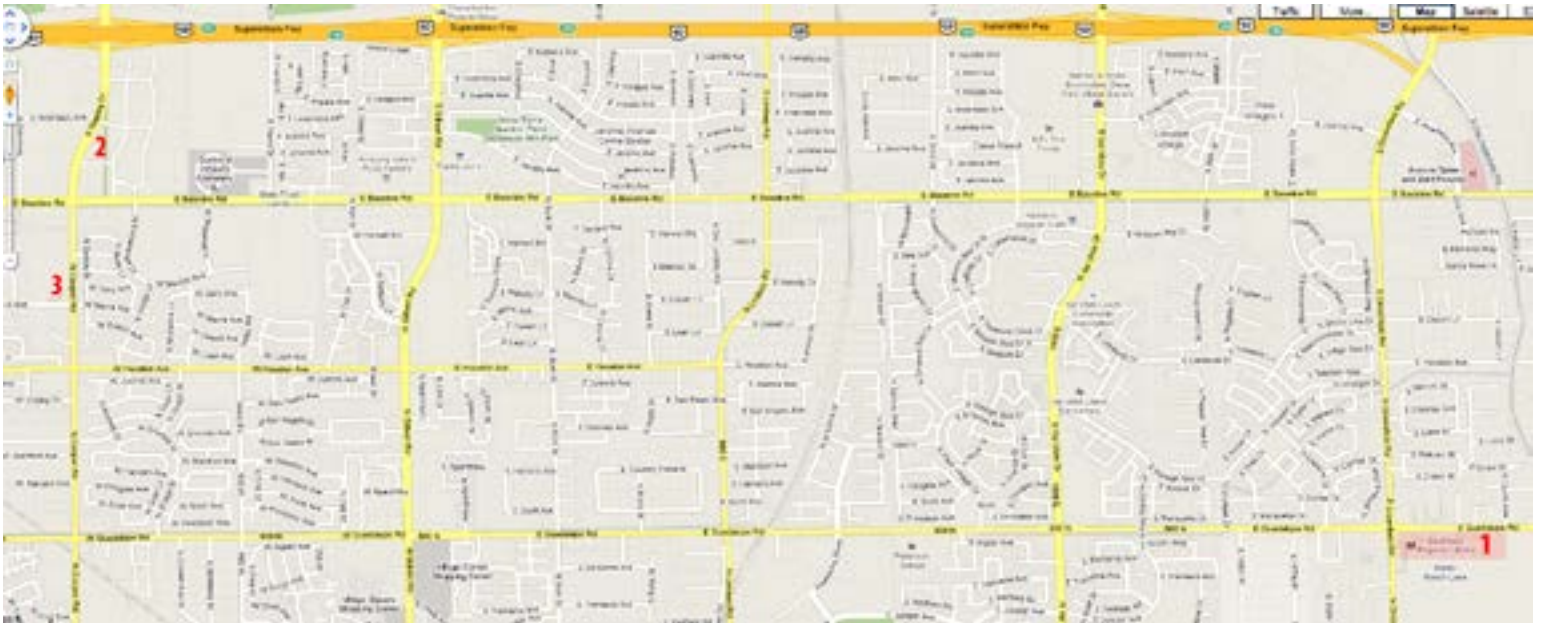
December 21

January 18

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



JUNE 2018

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

June 8 - Public Star Party

June 15 - EVAC Monthly Meeting

June 9 - EVAC Star Party

June 16 - EVAC Star Party

JULY 2018

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

July 7 - EVAC Star Party

July 14 - EVAC Star Party

July 13 - Public Star Party

July 20 - EVAC Monthly Meeting

East Valley Astronomy Club -- 2018 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:

- New Member
 Renewal
 Change of Address

New Member Dues (dues are prorated, select according to the month you are joining the club):

- | | |
|--|---|
| <input type="checkbox"/> \$30.00 Individual January through March
<input type="checkbox"/> \$35.00 Family January through March

<input type="checkbox"/> \$15.00 Individual July through September
<input type="checkbox"/> \$17.50 Family July through September | <input type="checkbox"/> \$22.50 Individual April through June
<input type="checkbox"/> \$26.25 Family April through June
<input type="checkbox"/> \$37.50 Individual October through December
<input type="checkbox"/> \$43.75 Family October through December
<p style="text-align: right;"><i>Includes dues for the following year</i></p> |
|--|---|

Renewal (current members only):

- \$30.00 Individual**
 \$35.00 Family

Name Badges:

- \$10.00** 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:

Phone:

Address:

Email:

City, State, Zip:

Publish email address on website
 URL:

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

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

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