



THE OBSERVER

East Valley Astronomy Club



[NGC 4452 - An Extremely Thin Galaxy](#)
[APOD November 9, 2010 ESA, Hubble, NASA](#)

UPCOMING EVENTS:

- Public Party - November 11*
- EVAC Monthly Meeting - November 18*
- Local Star Party - November 19*
- Deep Sky Star Party - November 26*
- Check out all of the upcoming club events in the Calendars on page 9.*

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EVAC This Month

by Don Wrigley

Well, the year is winding down and we have only one business meeting left. Next month's meeting will be our annual Holiday Party, and there will be no business meeting, so that leaves this month to wrap things up. The main order of business will be the election of officers for next year. While the slate may seem to be full, we are in need of someone to take the post of secretary. We also have an opening on the board of directors which needs to be filled. The board of directors makes all the important decisions relating to club activities and we need to keep it current.

observing at the All Arizona Star Party this past weekend. Saturday night was very mild, with no wind and just a bit of high cloudiness now and then. It was fairly well attended by SAC members (the Saguaro Astronomy Club of Phoenix, for you newbies), with only a handful of EVACers present. EVAC hosts this annual event and I'm hoping we can improve on our attendance next year. Our speaker this month is Paul Knauth, a retired ASU Geology Professor and frequent EVAC speaker, and an actual observer through the eyepiece of a telescope!

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I managed to get in a few hours of

Don Wrigley

If It's Clear...

by *Fulton Wright, Jr. Prescott Astronomy Club*

November 2016

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 Wednesday, November 2, about 6:00 PM, you can see some solar system objects near each other. Look about 10 degrees above the southwest horizon for Venus (magnitude -4) on the left and Saturn (magnitude + 0.5) on the right. Then look above Saturn for the thin crescent Moon.

On Sunday, November 6, at 2:00 AM, daylight savings time ends for most of the country (Spring forward, Fall back). However, Arizona does not participate in such silliness and for us, time marches on.

On Monday, November 7, the Moon is at first quarter phase and sets at 12:17 AM (Tuesday).

On Monday, November 7, at 8:12 PM the Moon occults a double star. These stars are dim (magnitude 9.1 and 10.3)

so this observation will require a large telescope (12 inch) and even then might be impossible because of the bright Moon nearby. The dimmer of the two is actually a very close (and pretty equal) double, and it might disappear in two steps.

On Sunday, November 13, at 5:15 PM (12 minutes before sunset) the full Moon rises, spoiling any chance of seeing faint fuzzies for the night.

On Tuesday, November 15, after about 9:00 PM, you can see the northeast (IAU) part of the Moon at its best. Libration tips that part of the Moon toward us. In particular, look for the dark floored crater, Endymion, in the upper left part of the terminator as the Moon rises. On the upper right is the much bigger Mare Crisium.

On Monday, November 21, the Moon is at third quarter phase and rises at 12:56 AM (Tuesday).

On Monday, November 28, it is new Moon and you have all night to hunt for faint fuzzies.

FIRST QUARTER MOON ON NOVEMBER 7 AT 14:51

***FULL MOON ON NOVEMBER 14 AT 08:52**

LAST QUARTER MOON ON NOVEMBER 21 AT 03:33

NEW MOON ON NOVEMBER 29 AT 07:18

The Backyard Astronomer

by Bill Dellinges (November 2016)

Questar -- Sky-Watcher Maksutov Shootout

In 1990 I bought a 3.5" Questar after drooling over their ads in S&T magazine the previous 35 years. What amateur astronomer wouldn't want one of these beautiful instruments? Made in America, the instrument is the pinnacle of exquisite machining, innovative design and superb optics. I must confess the first week I had it, I would set it on my desk and just stare at it in wonder! I owned several telescopes at the time, so I didn't need this jewel. But I had to have it and used creative financing to get it. It cost a king's ransom, \$3,200 in 1990 with all the bells and whistles (6K today, with some models starting at 4K).

China has become a huge actor in the production of telescopes, even absorbing Celestron and Meade. While it's sad to see our old optical firms sail away, there is a silver lining in all this off-shoring business – low prices! Sky-Watcher (SW), a relatively new kid on the block, has been offering some interesting equipment at amazingly low prices. I recently saw an ad for their 5" Maksutov optical tube assembly for \$425. I ordered it - I'd figure out later what I'd do with it (That's how I think). I must say, outwardly, its build quality impressed me. A thought occurred to me – how would this Chinese Maksutov do in a shootout with the esteemed Questar? (Q henceforth).

I knew the SW had an aperture advantage - it has twice the light gathering power of the Q. One might say it's not a fair test, why not use a SW 3.5" Maksutov? Because I bought the 5" before I ever thought about a shootout. Still, there's no doubt in my mind that the Q would blow a SW 3.5" out of the water.

Both scopes have similar stats (other than aperture): The Q is F-14.4, focal length 1,300mm and the SW is F-12, focal length 1,524mm. Testing was done in my backyard five miles east of Apache Junction in moderate light pollution. I had to steer clear of the west which looks like dawn all night long (Whatever happened to power outages?). The sky was moonless except for the one night I needed to observe it.

Saturn: Though low in the SW, the planet can punch through light pollution. At 50x, both scopes showed a small disk with the ring and its largest moon Titan. At 93x:

larger with no additional detail. At 150x the Questar (Q) still had difficulty showing Cassini's Division. The SW also struggled to show Cassini's Division but gave a slightly better view of the ring gap. I give the nod to the SW mainly because its larger aperture gives a brighter image.

Moon: Both scopes perform equally well at 50x and 100x on a gibbous moon. Shadows in craters are similarly dark. Crater terraces and isolated illuminated peaks show similar definition. A draw here.

Gamma Delphini: 50x. AB mag 4.3, 5.1, sep 9." The Q split this double star and maintained separation well. The SW had a little trouble splitting it and never quite kept it split continuously. The Q wins here.

Albireo: 50x. AB mag 3.1, 5.1, sep 34.4". I see no difference in the image of this fine, wide double star with either scope. A draw here.

Double-Double: 150x. E1 AB mag 5.0, 6.0, sep 2.5". E2 AB 5.5, 5.4, sep 2.3". The Q splits both pairs cleanly, distinctly showing the small round airy disks. The SW splits the pairs but not cleanly. The airy disks were not as sharp as the Q displayed. The Q wins.

M-13, globular in Hercules: 50x. (Entering western light polluted skies of Phoenix metro). Both scopes show a small blob without resolution of stars. At 150x both scopes show a larger blob with averted vision bringing out some stars. But the SW, with its larger aperture shows a brighter image. The SW wins here.

M-27, Dumbbell planetary nebula in Vulpecula: 50x. Both scopes do a nice job on this object. The Q shows a darker background sky than the SW. The SW has a brighter image. I felt the SW, even with a brighter background sky gave the best overall view with its brighter image. SW wins here.

NGC 869, 884, the Double Cluster in Perseus: 50x. Both scopes can fit the clusters in their field of view and render a fabulous view of this beautiful object. The Q again shows a darker sky but overall I felt the SW's image was slightly more dramatic, no doubt because of its superior aperture. SW wins.

The Backyard Astronomer

Continued from page 3

M-31, the Andromeda Galaxy: 50x. Same story. Nice image. The Q has a darker sky, the SW the brighter image. Both picked out satellite galaxy M-32 but I was surprised they both could muster up Andromeda's other, fainter satellite galaxy, NGC 205 (aka M-110) – though more like a ghost than a galaxy. SW wins here.

Conclusions: Note the first five objects were bright in nature and included double stars. The last four targets were nebulous and remote. The Questar had a slight edge when it came to bright objects, especially tight double stars where its renown optics prevailed. I was surprised the Sky-Watcher edged out the Questar on Saturn. I'd like to try this comparison another time when the ringed planet is higher in the sky. The Sky Watcher beat the Questar on

the last four objects where it's larger aperture produced brighter images. Here, resolution wasn't so important due to the amorphous nature of those objects. All things considered, I see no need to spend \$4000 - \$6000 on a Questar if you're looking for a small telescope for general stargazing. Unless you require the splitting of tight double stars and insist on mechanical and optical excellence in a telescope, one of new inexpensive Maksutov's in the 5" to 6" range from China should do just fine. But I'm still keeping my Questar.

(The Questar is not without its drawbacks. See Backyard Astronomer, "Questar Fixes" February 2002 at the EVAC Newsletter Archive at www.eastvalleyastronomy.org)



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



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Upcoming Meetings

November 18

December 16

January 20

February 17

March 17

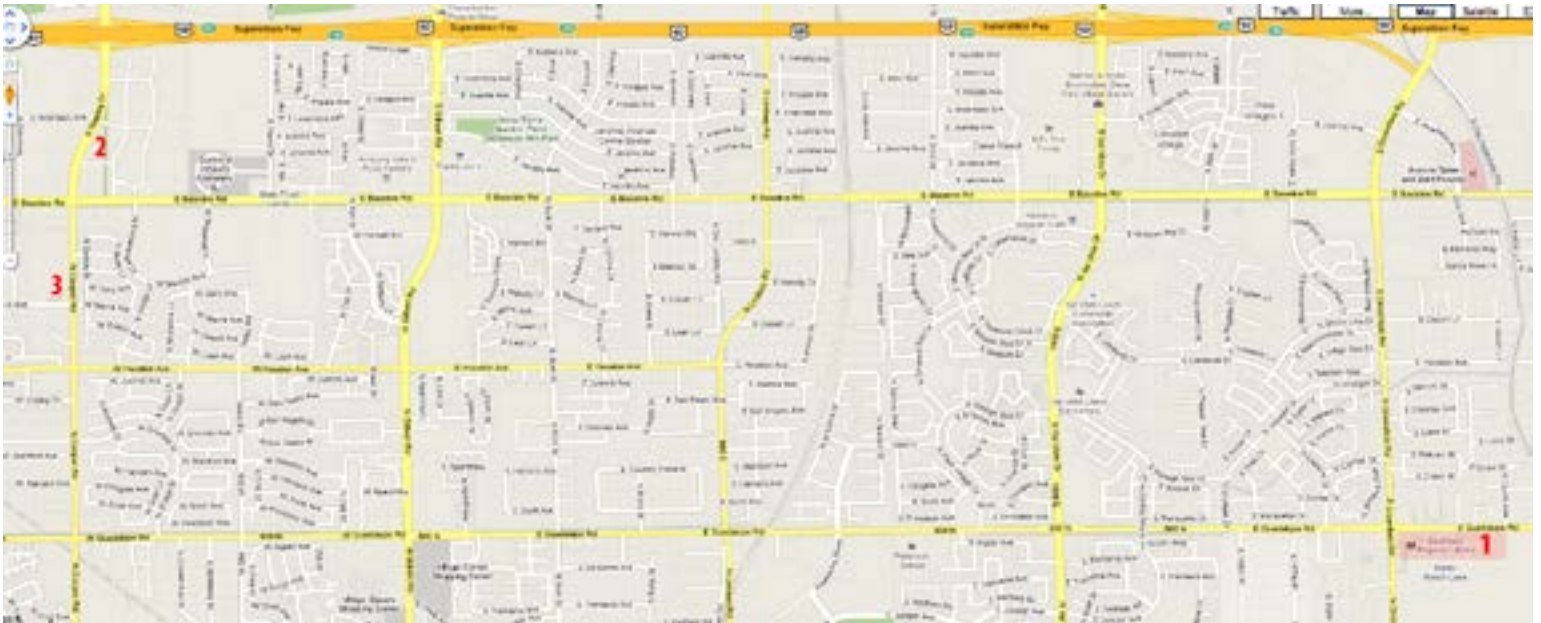
April 21

May 19

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!



Southeast Regional Library

1

775 N. Greenfield Road

Gilbert, Az. 85234



NOVEMBER 2016

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

Nov 3 - Porter Elementary School

Nov 7 - CGCC Star Party

Nov 10 - JO Combs Middle School

Nov 11 - Public Star Party

Nov 18 - EVAC Monthly Meeting

Nov 19 - Local Star Party

Nov 26 - Deep Sky Star Party

Nov 30 - Poston Jr High School

DECEMBER 2016

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

Dec 9 - Public Star Party

Dec 16 - EVAC Monthly Meeting

Dec 24 - Local Star Party

Dec 31 - Deep Sky Party

East Valley Astronomy Club -- 2016 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"/> \$22.50 Individual April through June |
| <input type="checkbox"/> \$35.00 Family January through March | <input type="checkbox"/> \$26.25 Family April through June |
| <input type="checkbox"/> \$15.00 Individual July through September | <input type="checkbox"/> \$37.50 Individual October through December |
| <input type="checkbox"/> \$17.50 Family July through September | <input type="checkbox"/> \$43.75 Family October through December |
- Includes dues for the following year*

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"/> 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.evaonline.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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Mesa, Az. 85214-2202

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