



THE OBSERVER

East Valley Astronomy Club



Messier 65
APOD June 1, 2007 Volker Wendel

UPCOMING EVENTS:

- Public Star Party - March 13*
- Local Star Party - March 14*
- EVAC Monthly Meeting- March 20*
- 2015 Messier Marathon - March 21*
- Check out all of the upcoming club events in the Calendars on page 9*

EVAC This Month *by Claude Haynes*

It was an age of lists. Antoine Lavoisier was cataloging chemical elements. Carl Linnaeus was building his taxonomy of plants and animals. Charles Messier was making a list of faint fuzzies that weren't comets, and William Herschel was making a list of everything he could see. Their lists led to the Victorian obsession with collecting samples of plants, animals, minerals and fossils; a noble way for a wealthy gentleman to occupy his time. The lists of Messier, Herschel, Arp, Caldwell, Barnard and others form a basis for us to compare and codify the

skies. The EVAC website lists 22 observing programs. Some of the lists are large and challenging, but there are some with a manageable list of targets based upon a single theme. The Quasar Program, the Planetary Nebula Program and the Palomar Globular Cluster Program are all short lists. At the bottom of the web page is the "EVAC Observing Program Page of Fame". Perhaps your name will appear there soon.

Our best chance to knock off an observing list is the Messier Marathon. How many EVAC

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Evac This Month

members can get them all? The Marathon is on Saturday March 21, and is at the Hovatter Road airfield site. A dinner is being held at 5pm. Tickets are \$5 for a delicious sandwich, drink and desert. Raffle tickets are also available at \$2 each, or 3 for \$5. Email Lori Prause at loriprause@gmail.com. if you want to make a reservation for dinner. See the announcement later in The Observer for more details.

Our speaker for this month's meeting is Don Wrigley. He is our resident expert on the moon's craters, and it

If It's Clear...

by Fulton Wright, Jr. Prescott Astronomy Club

March 2015

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.

The night of Monday, March 2, you might enjoy watching some events with Jupiter's moons. Here is the schedule:

- 06:04 PM Ganymede's shadow falls on Jupiter.
- 06:27 PM Sunset.
- 07:21 PM Ganymede emerges from in front of Jupiter.
- 09:05 PM Ganymede starts to cover Io.
- 09:07 PM Io is completely covered.
- 09:10 PM Io is completely uncovered.
- 09:40 PM Ganymede's shadow leaves Jupiter.
- 10:16 PM Io goes behind Jupiter.
- 01:11 AM (Tuesday) Io emerges from Jupiter's shadow.

On Wednesday, March 4, at about 7:45 PM, you can test your observing skills. Can you see Uranus half a degree below Venus low in the West? Uranus is 10(!) magnitudes dimmer than Venus. This should be a challenge even with optical aid. If you are still up about 2:42 AM (Thursday), you can watch the double star, 35 Sextantis be occulted by the Moon. The star has 2 components, magnitudes 6.1 and 7.1, separated by 6.4 arc-seconds. The Moon occults the dimmer one first, then, 15 seconds later, occults the brighter one. They emerge about 3:59 AM, only 6 time-seconds apart. This observation will not be made easier by the fact that the Moon is at full phase, spoiling any chance of hunting for faint fuzzies for the night.

On Thursday, March 5, you can watch some events with

should be a great informative talk.

I often end this column with an oft used phrase of "Clear Skies" or "Keep Looking Up". I am writing this on yet another cloudy weekend night that seems to occur with irritating frequency, so...

Look for any clear spot you can find! (but do keep looking up).

Claude

Jupiter's moons. Here is the schedule:

- 06:29 PM Sunset.
- 06:48 PM Europa goes behind Jupiter.
- 09:53 PM Io goes completely in front of Ganymede.
- 10:48 PM Io passes within 3 arc-seconds of Callisto.
- 10:54 PM Europa emerges from Jupiter's shadow.
- 11:40 PM Io's shadow falls on Ganymede (which dims by 1 magnitude).

On Sunday, March 8, at 2:00 AM, the rest of the United States sets their clocks to 3:00 AM (daylight savings time starts, spring forward and all that). Arizona remains aloof from such silliness. On Friday, March 13 (the second Friday the 13th in a row), the Moon is at last quarter phase and rises at 2:02 AM (Saturday).

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

On Friday, March 20, it is the first day of Spring. Also, if you are flying or cruising south-east of Iceland today, look out your window. You might see a total eclipse of the Sun.

On Saturday, March 21, about 7:30 PM, look for the very thin crescent Moon near Mars low in the West. Tomorrow, look for the Moon near Venus. In two more days, look for the Moon in the Hyades cluster (Taurus). This is a good time to observe the northern part of the terminator, which is tipped toward us by libration.

On Thursday, March 26, the Moon is at first quarter phase, and sets at 1:32 AM (Friday).

The Backyard Astronomer

by Bill Dellinges (March 2015)

Observing Run to Organ Pipe Cactus National Monument

This is a short report on two nights of observing at Organ Pipe Cactus National Monument. The drive from Apache Junction was 160 miles, though the long straight roads made it feel like twice that. That's the desert for you. My wife and I stayed at the Guest House Inn, a Bed and Breakfast establishment in Ajo, 14 miles north of the monument entrance. We had stayed there 23 years ago while on a strange mission to seek out Windowpane Observatory. Back then I had read about a unique observatory just outside of Ajo that offered stargazing through what was claimed to be an optical window that didn't degrade images, thus keeping patrons warm. The arranged session was clouded out. But I digress.

After a day hike in the monument I decided to simply set up my Televue 85mm refractor in front of the Inn where I found a dark area devoid of lights. I suspected that the wonderful dark sky overhead was good enough for me and far superior to what I was used to at home. The winter Milky Way, running from Monoceros through Auriga, Gemini, Perseus and Cassiopeia, was clearly visible. The 85mm cleanly split the Trapezium into four stars at 29x. Iota Orionis' two faint companions were evident in the 85mm. The little scope split Rigel at 75x though 100x gave a more satisfying view. The fine triple star Beta Monocerotis was split cleanly at 100x. M44, the Beehive Cluster in Cancer, was glorious and filled the 2.2 degree field of the 85mm at 29x. I was surprised by how dark the night sky was in this town of 3,416. This was, of course, if you could find a place protecting you from being directly hit by lights.

The next day we did a little homework to determine where we could find a place in the monument to do a modest hike and stargaze at night. As an alternative to roadside pullouts and the main Twin Peaks campground near the southern edge of the monument, we decided to try the Alamo Canyon Primitive Campground. It's reached by turning east off Highway 85, the main road through the monument, and driving three miles on a dirt road to the Alamo Canyon Trailhead (elevation 2,380'). At this terminus you will find four camping sites and a single "Vault" or pit toilet. No other services are available and campfires are not allowed.

These sites are limited to tent and car camping only – no RV's or trailers are allowed. Like the main campground, sites are first come, first served. The road is passable in a regular passenger car. As we were not camping, we simply parked in one of the two trailhead parking places. Only two of the camp sites were taken.

This site worked great for us with one exception. You are close to a high ridge of mountains to the east rising perhaps forty degrees, blocking the view of the sky in that direction. If you can live with that you are in nirvana. A camper in a van had an interior light on which was slightly annoying but we just kept our backs to it. It was interesting to note it was 26 miles from our Ajo inn to this campground and took only 54 minutes to drive. We took the two mile round trip hike into Alamo Canyon and then settled in to await sunset amongst the copious organ pipe cactus.

Having already observed with a telescope the previous night, I decided to just enjoy what would likely be one of the darkest skies I'd ever see. Armed only with 7x50 binoculars, I sat back in a comfortable chair and assessed the firmament as darkness fell. Funny note: as the stars came out, one bright one puzzled me. It didn't belong there. Then I noticed it was moving slowly and dimming. Ah-ha, an Iridium Flare! Once dark, I could detect minor light domes from light pollution to the north and southwest. M31, the Double Cluster, M46/47, M44 were naked eye objects. Ursa Minor is a good test for dark skies. I could see six of its seven stars while Eta, the dimmest of the bowl stars required averted vision. The winter Milky Way was the brightest I've seen since one February at McDonald Observatory. It rose in the southeast through Monoceros, up through Gemini, Auriga, Perseus, and Cassiopeia in the west. As I studied it plunging into the west, I realized I was becoming confused with another band of light adjacent to it, a little to the left. Then it dawned on me – the Zodiacal Light! Suffering succotash, I had forgotten that February is an ideal time to look for this long triangular shaped spear of light generated by light reflected off dust particles in the plane of the solar system. And there were Venus and Mars buried at its base. What a fascinating sight. I had seen the Zodiacal Light before but here it seemed brighter than I've ever seen it before. I did however, come away with the feeling that the background sky was not as dark as the 8,000' North Rim site at the Grand Canyon Star Parties.

The Backyard Astronomer

Continued from page 3

As we left the monument that night we could see numerous flares near the western horizon. My binoculars revealed the bright orange lights were descending and had vapor trails above them. Driving through the border patrol inspection station we saw more in the north-west and northeast. Something was going on. Did it have

something to do with the Goldwater Bombing range in the area? Border patrol activities? The infamous Phoenix Lights?! Who cares? We had gotten our dose of starlight in one of the darkest places in the country with zero lights around us except for that darned camper.

2015 All Arizona Messier Marathon

by Lori Prause

Please join us for a dinner and raffle just before the All Arizona Messier Marathon kicks off on Saturday, March 21, 2015 at the Hovatter Road Airstrip Site. Dinner Tickets will be sold for \$5.00. Raffle tickets will be sold at the dinner, \$2 ea, or 3 for \$5. Order Dinner Tickets in advance from Lori via email: mail to: loriprause@gmail.com "With the understanding you must pay for it even if you don't end up going," says Lori. Tickets will also be sold at the March 6th SAC meeting at Grand Canyon University.

The dinner menu is a sub sandwich along with a soft drink and desert.

Thanks to Lori Prause and Jennifer Polakis for leading and coordinating the 2nd Annual All Arizona Messier Marathon Dinner and Raffle.

Dinner will probably start at 5:00 PM, enough time to eat and enjoy the raffle before the Sunset Talk, by Marathon Coordinator, Rick Tejera, to prepare for the Messier Marathon. Arrive early to set up your telescope.

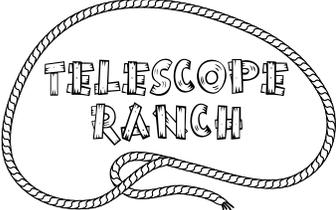
The Midnight Cafe will again serve hot cocoa, coffee, snacks and lots of encouragement. Please consider donating a snack such as some cookies, cupcakes, a pie or other treats to stock up the cafe.

***FULL MOON ON MARCH 5 AT 13:05**

LAST QUARTER MOON ON MARCH 13 AT 13:48

NEW MOON ON MARCH 20 AT 05:36

FIRST QUARTER MOON ON MARCH 27 AT 03:43



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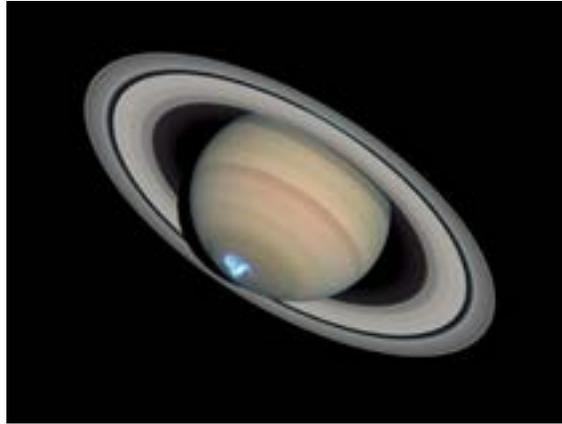
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Selling my 14.5" f5.2 Dobsonian with 2" diagonal, asking \$2200, need to sell because it has become too much for me to handle. I am the original owner and built it from an AstroSystems TeleKit in 2000. The mirror is by the late Pierre Schwaar. Scope has been well maintained and comes with equatorial platform and XP4 Sky Commander.

This sale includes Telrad, filter slide with UHC and OIII filters, transport box for mirror, shroud, scope coat and other goodies too numerous to mention.

This sale DOES NOT include eyepieces so supply your own. Will NOT ship but willing to meet approximately half-way.

I plan on having it at the 2015 All Arizona Messer Marathon for those interested.

For more information e-mail me at acrayon@cox.net

Upcoming Meetings

March 20

April 17

May 15

June 19

July 17

August 21

September 16

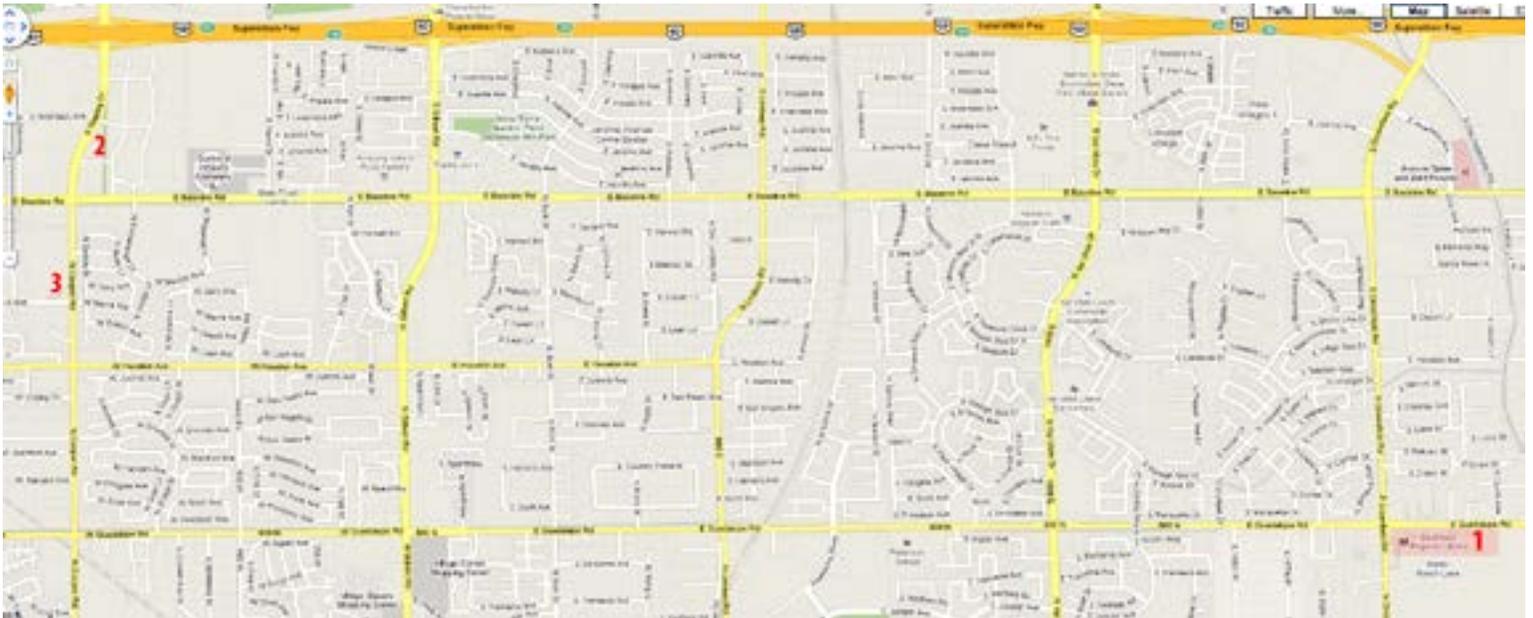
October 16

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.

All are welcome to attend the pre-meeting dinner at 5:30 pm. We meet at Old Country Buffet, located at 1855 S. Stapley Drive in Mesa. The restaurant is in the plaza on the northeast corner of Stapley and Baseline Roads, just south of US60.

Visitors are always welcome!



2

Old Country Buffet
1855 S. Stapley Drive
Mesa, Az. 85204

1

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



MARCH 2015

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				

Mar 5 - Redbird Elementary

Mar 6 - Salt River Tribal Library

Mar 11 - Sequoia STRIVE

Mar 13 - Public Star Party

Mar 14 - Local Star Party/Phoenix Zoo

Mar 18 - Celestial Sleuth: Using Astronomy to Date Monet's Etretat, Sunset

Mar 20 - EVAC Monthly Meeting

Mar 21 - Messier Marathon/Phoenix Zoo

Mar 24 - Settler's Point Elementary

APRIL 2015

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		

Apr 1 - San Tan Elementary

Apr 10 - Public Star Party

Apr 11 - Local Star Party

Apr 17 - EVAC Monthly Meeting

Apr 18 - Deep Sky Party

Apr 22 - Taylor Junior High

Apr 23 - Queen Creek Middle School

Apr 24 - Circle Cross Ranch

East Valley Astronomy Club -- 2013 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:

How would you like to receive your monthly newsletter? (choose one option):

- Electronic delivery (PDF) *Included with membership*
 US Mail **Please add \$10 to the total payment**

Areas of Interest (check all that apply):

- | | |
|--|---|
| <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 |

Please describe your astronomy equipment:

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.

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. Printed copies are available at the monthly meeting. Mailed copies are available to members for a slight surcharge to offset printing and mailing expenses.

Please send your contributions, tips, suggestions and comments to the Editor at: news@evaonline.org Contributions may be edited. The views and opinions expressed in this newsletter do not necessarily represent those of the East Valley Astronomy Club, the publisher or editor.

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www.evaonline.org

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