



Astronomy Club of Tulsa

# OBSERVER

March 2007



<http://www.AstroTulsa.com>

ACT, Inc. has been meeting continuously since 1937 and was incorporated in 1986. It is a nonprofit, tax deductible organization dedicated to promoting, to the public, the art of viewing and the scientific aspect of astronomy.



## What

The Astronomy Club of Tulsa Star Party

## When

2 March 2007, 7:00 PM

## Where

Room M1 inside Keplinger Hall, the Science & Engineering Building at TU. Enter the parking lot on the East Side of Keplinger Hall from Harvard and 5th Street. This will take you directly toward the staircase to enter the building. Room M1 is the first room on the left.



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## President's Message

Tamara Green

Happy March to you all! Our guest speaker for our Friday, March 2 meeting is Tom Kovach from Astronomics, who will be on hand to present to you the latest and greatest astronomy equipment! Astronomics is a well-established and well-renowned shop whose advertisements regularly appear in magazines such as Sky and Telescope and Astronomy, and they offer a wide variety of equipment for all amateur astronomers of all different levels of experience and skill. Tom will be bringing some of the wonderful things they carry to show to the club and talk about, so this will be a presentation you will not want to miss, especially if you are new to astronomy and would like to know what the best equipment is for you, or even if you have been doing this for many years and would like to upgrade your equipment. So I strongly encourage you all to come and enjoy this presentation! The meeting will be on Friday, March 2, at 7:00 PM at Keplinger Hall, Room M1, at TU. A map and directions to our meeting will be posted on our website, [www.astrotulsa.com](http://www.astrotulsa.com).

We also have our public lunar eclipse event, called "Dark Shadows" on Saturday, March 3 at TASM (Tulsa Air and Space Museum) that will begin at 6:00 PM. Anyone interested in volunteering to help with this event is welcome to email me at [grumpyoldcow2005@yahoo.com](mailto:grumpyoldcow2005@yahoo.com). Several of us will have telescopes set up for people to look through. If you want to bring yours, the more the merrier! The moon will rise at about 6:18 PM, but totality will end as the moon is rising. However, we will be able to see the moon partially eclipsed and see it come back out from behind the shadow! We will still get to witness a good part of this rare and fascinating phenomenon. The planets Venus and Saturn will be up and viewable, plus there will be many other wonderful celestial objects to see, such as the Great Orion Nebula (M42), the Pleiades (M45), the Beehive (M44), to name a few. TASM will be running short planetarium shows for a small admission fee. The viewing of the moon and other objects is free. This is going to be a fun event, so I highly recommend that you all come and enjoy it!

Speaking of the “M’s” in my proceeding paragraph, we have an “M” marathon this month as well! Our annual Messier Marathon will be at TUVA on Saturday, March 17! This is always a fun event as well! So if you are up to the challenge, come on out with us and test your Messier-hunting skills! This will be an all-nighter, and some of us will be bringing covered dishes to share. If any of you want to bring one to add to the repast, you are more than welcome to do so! Be sure to bring some warm clothing too, as it has a tendency to get a little chilly! Our Vice-President Tom McDonough has put together some helpful charts for us to use for this marathon, they can be found at this following link, <http://astrotulsa.com/pub/MessierMarathon2007.pdf> Remember that Daylight Savings Time starts earlier this year, on Sunday, March 11 at 2:00 AM. Tom’s charts are made for this time change. I have no word as of yet on a caravan to TUVA, but surely either David Stine or someone might be putting one together and will announce when and where the caravan will meet.

Another exciting thing to see last month was a new nova that exploded in the constellation of Scorpius. Details on this can be seen on Sky and Telescope’s website, [www.skytonight.com](http://www.skytonight.com). From a reasonably dark sky, this is was a naked-eye object, but from my horribly light-polluted neighborhood, I could see it with binoculars. At it’s brightest, on February 16, it was at Mag. 3.9. As of February 18, it faded to Mag. 4.4. The nova is located at 9 degrees southeast of Antares and a couple of degrees northeast of Epsilon Scorpil.

We also have our monthly star party on Friday, March 16.

I want to thank everyone for coming to last month’s meeting and welcoming Dr. Yun Wang. We had an attendance of 94 people who really enjoyed her presentation! Thank you all for coming and for helping make this presentation a success!

Our star party for February took place on Saturday, February 17. Eight of us, including one new member, braved the freezing cold and were rewarded with a MAGNIFICENT clear sky and beautiful views of it! Despite the bone-chilling temperature, we were able to enjoy a sky that we have not seen for a very long time! For those of you who are not yet aware of the water leak at our observatory, the brutal winter temperatures and ice and snow caused a

pretty substantial leak somewhere that resulted in our losing about 100,000 gallons of water and temporarily losing our bathroom facility. Fortunately, Craig Davis was able to isolate the cause of the leak, which is nothing more than a cracked pipe under the toilet in the restroom. This is a very simple repair that he said would take about two hours, and the restroom should be fixed well before our next star party! The heat still works. So our observatory will be fully functional again! We hope to see you all at our fun-filled events this month!

Clear Skies to All!

Tamara Green



# Dark Shadows

**Saturday Mar 3rd 6:00 PM to 9:00 PM**  
**Telescopes – Lunar Eclipse & Planetarium shows**

Tulsa Air & Space Museum 3624 N. 74th, Tulsa, OK

Located just east of the Tulsa Zoo entrance on N 36th St.

On Mar 3rd the moon will slip through the Earth's shadow producing a lunar eclipse. The Astronomy Club of Tulsa and TASM Planetarium invite you to join us for viewing an eclipse of the moon. Telescopes will be set up to view the eclipse and enjoy other sights of the night sky. The eclipse portion runs from moonrise at 6:18 PM until about 7:00 PM. Afterwards the telescopes will be turned to Saturn, Venus and many other wonders of the night sky. The Bertelsmeyer Planetarium will also be running shortened versions of its popular planetarium shows\* for guests to enjoy. So pack up the kids and come enjoy the dark shadows of the evening and the shining lights of the night sky.



Driving Directions at <http://www.tulsaairandspacemuseum.com/visitor.asp>

### Addition links at

Astronomy Club of Tulsa - <http://www.astrotulsa.com/>

Tulsa Air & Space Museum - <http://www.tulsaairandspacemuseum.com>

## DAVIDS ASTRO CORNER

"Messier Marathon Time" "X Marks the Spot" "The Comet That Got Away" "Bright New Star in Scorpius"  
By David Stine

### MESSIER MARATHON TIME

How many people have seen all 110 Messier Deep Sky Objects in their life? How many people have even seen half of them in their life? Well if you said no to both questions, then coming up March 17th you will have a chance to see all of them from dusk to dawn. There are two times out of the year that this task can be accomplished, usually in the early spring and late fall. The TUVA Astronomy Club and the Astronomy Club of Tulsa will be hosting the annual Messier Marathon at the TUVA Observatory site near Council Hill, OK. Every year club members make the 45 minute trek just down south for one of the most enjoyable nights of the year. If you are new to the club, Messier objects are the many deep sky objects which include, galaxies, nebulas, star clusters, etc. that Charles Messier discovered by accident. He was an astronomer that looked for new comets. When he came across a fuzzy object that looked like a comet and didn't move he would log them and eventually they were given an M number for each object after the astronomer's name. It was kind of ironic at the time that Messier regarded these objects as pests that kept taking time away from his observing comets because he had to confirm that the objects weren't comets. Now those pests are considered some of the most famous deep sky objects in the heavens.

Messier Marathons began back in the 70's with Tom Hoffelder, Ed Flynn Tom Reiland and Don Machholz being the first to try all of the objects in one night. On March 24/25, 1977 Ed Flynn logged 98 objects and on the next night Tom Hoffelder logged 101 objects and on April 11/12 Tom Reiland logged 103 and the marathon was born. It wasn't until March 23/24, 1985 that all 110 objects were logged by Gerry Rattley of Arizona. In Oklahoma Ron and Maura Wood held one of the first Messier Marathons in the 90's and since then has held a marathon each year except for a few years. The early marathons were attended by observers from across the state and a story in Oklahoma Today was even written about Ron's. To make it more interesting Ron came up with presenting an award to the person who found the most objects. I was the original winner finding 98 and thus Ron called the award the David Stine Messier Marathon Award. I believe Rod Gallagher has won the last three years and still holds the title for finding the most at 105. Now its time for

someone to unseat him and maybe that person could be you. But even if you don't attempt the marathon, it's a great time to observe in a dark sky and talk to people about astronomy. In past marathons we have also seen comets, rare auroras, and other surprises we weren't expecting. Check out our website at [www.astrotulsa.com](http://www.astrotulsa.com) to view some of the past marathons. Go to the Gallery tab and click it. It will bring up the marathons from 2003-2006. This will give you an idea of the site. Everyone usually sets up their scopes around the TUVA classroom so that if it does get cold they can come inside and get warm or take a nap. Most people bring snacks or a covered dish for a small supper prior to observing. The last time I talked to Ron he was hopping to have Gerald Miller give a talk on his trip to New Zealand and show his Comet McNaught images he took while there, plus there may be some other talks from people and new images by Rod Gallagher. Let me know if you have anything you would like to contribute to the marathon and we will add it on the agenda. Many of us meet at 91st and Memorial at the old Homeland Parking lot and caravan to the site. If you would like to join us just let me know or show up by 3:15p.m. Sat. March 17th. If you go on your own here are the directions:

Go south on Memorial through Bixby and make the big curve back east which will send you through Leonard and on to Haskell. Stay on highway 72 south through Boynton and Council Hill. After coming out of Council Hill check your odometer and go 3.5 miles south and watch for "End 72" and Junction 266 sign. Exit left at junction. You can see a church steeple from 72 which is your landmark for turning left or East. You will be on a dirt/gravel road similar to our road to the observatory. Go East 2.25 miles to second stop sign and turn left back north at a two story white house with a black roof. Go north .5 mile and you will see an open field and a house to your left. Turn left back west into the field and come around the north side of the barn and you will see a white building which is the TUVA Observatory. A little bit farther west is another white building which is the classroom. Find you a spot and get ready for a great night of observing. The class room has many historic books and manuals, pictures, which you will want to look through. TUVA even has a meteorite to view. Tom McDonough has made a log and charts for everyone for the marathon. These charts and logs have been

divided up by groups of objects at specific times of the night to view them to help you on your task. They are very good and I appreciate Tom for taking the time to develop them for us. You can access and print these Messier Marathon logs and charts at <http://astrotulsa.com/pub/MessierMarathon2007.pdf> So mark your calendars for March 17/18th Messier Marathon 2007 at TUVVA Observatory.

### X MARKS THE SPOT

I am sure you have seen all the stories about the face on Mars, an anomaly that when shadows are just right it looks like there is a face on Mars which some say were carved by ancient space travelers. Of course we all know the real story that the face is formed from shadows from peaks and plateaus on Mars. There is another planetary object that reveals, not a face, but an X on its surface when shadows are at the right place. Our own moon. Just recently I was introduced to this anomaly by Dana Thompson from Hebron, Ohio. Dana sent me an image showing the X feature on the moon. Dana is doing research on the first quarter moon. As the terminator slowly moves over the crater Werner, the light of the lunar sunrise begins to illuminate some of the highest lunar topography in the region which stands between the craters, La Caille, Purbach and Blanchinus. This is the beginning phase of the illumination stages. The X feature forms in about two hours and last for about another two hours before totally surrounded by light from the lunar sunrise. The peak of the southeast wall of Purbach is illuminated first. Next is the peak of the northeast wall of Purbach and La Caille. Light strikes the peak of the southwest wall of Blanchinus, and then the peaks of northwest wall of Blanchinus and common topography between Blanchinus and La Caille. Dana first observed the event in 1978, but never really thought much about it until 2005. On September 10, 2005 Dana was able to observe and photograph the X in its later stages. Since then he has observed the event several times. His latest images are shown below which were taken January 25, 2007. At first I was skeptical since I had

never seen or heard anything about the X in Sky and Telescope or Astronomy magazines. You would think someone would have written an article about it. So I did a little research myself. There is actually a place on the internet if you Google to "Lunar X" there is quite a bit of information about the X and the people who have seen it. We are in a year that the suns angles on the moon are just right for viewing the X this year and the first chance is coming up this month on March 25/26. The best times will be at 02:23UT on that date. According to Dana other times possible to view the X are May 23/24 at 04:34UT, July 21/22 at 02:32UT, September 18/19 at 23:27UT and November 16/17 at 01:44UT. These are best guess estimates and



Jerry Mullinex is trying to pin down closer times for Tulsa. If the moon is up at those times then you can attempt to view the X. Dana is continuing his research so if any of you have ever seen this X or views it or images it in the near future please let him know at [danaandbecky@columbus.rr.com](mailto:danaandbecky@columbus.rr.com) Its amazing that there hasn't been any talk about this feature until now, so you can be a part of something not seen by many people if you view it. You can be a part of the "X Club".

### THE COMET THAT GOT AWAY

Comet C/2006 P1 (McNaught) turned out to be the most unfamous, if there is such a word, famous comet of all time. If you were one of the lucky few that were able to view the comet then you know what I am talking about. Even after it became naked eye there was nothing in the media. The only way anyone knew about it was from their friends that were into Astronomy. It was a shame that the Media never really got into it and most of the public never got to see this Great Comet when all they had to do was go outside after the Sun set and see it with binoculars. When it was first discovered by Robert McNaught on August 7, 2006 it was at a dim 17th Mg. Astronomers predicted that the comet might reach Mg. 2 by the middle of January of 2007. A decent bright naked eye comet but nothing to get real excited about. By September the comet had brightened to 13.5 Mg. two mg. brighter than expected. Now predictions were upgraded to 0 Mg. as a possible brightness in January. I began mentioning to club members that we might have a 0 Mg. comet by the end of the year. As January approached the comet continued to brighten even further. I still wasn't expecting a whole lot because the comet was so low on the western horizon and was going to be setting shortly after the SUN. As with most comets, a comet low to the horizon isn't usually much to look at. It wasn't until Dan Lameroux e-mailed me that people were starting to talk about the comet and it was now visible just after the Sun sets. Ok it was time to go check it out. This was around the last few days in December. I believe I put out an Astro Alert the next day about the comet. I started get-

ting e-mails about the comet already near the brightness of Venus by the first of January. I believe Brad Young was the first to see the comet from Tulsa. It was time to check it out. Around the first week of January I finally got my first look. I was on the south side the Creek Nation Turnpike between 75 and Sapulpa kind of on a hill looking west. I found Venus about 6p.m. then started panning north and west. So where was this comet, I kept panning and panning. Nothing. Then I got a phone call from a friend I work with at my office and he was yelling over the phone, can you see it, can you see it, its amazing, just like those comet pictures you showed me at work. Now how could someone find the comet that doesn't do this all the time like me, now that was frustrating? I said slow down where in the sky are you looking and as he described the location I panned even further north and lower then WOW!!!!!! there it was. I couldn't believe my eyes. He was right; it was a textbook comet with several degrees of tail shooting up. In binoculars it was amazing. It couldn't have been more than a cou-



ple of degrees from the horizon. I pulled my binoculars away from my eyes and there it was naked eye. I looked at Venus and then the comet. The comet was a little bit dimmer, must have been around -2 Mg. I started calling people. I got Craig Davis at his house and had him go outside his house and directed him right to it. It was amazingly bright even from the neighborhoods in Tulsa. This was just the beginning but also the last for most northern hemisphere viewers. The comet stayed visible for a few more days and was even visible in daylight by blocking the Sun, then sunk below the horizon and entered the Southern Hemisphere where as everyone knows turned out to be the 3rd brightest comet of all time. But the big surprise was still to come. The comets tail was so long and curved to where it could be seen by Northern Hemisphere observers as far north as the mid states sticking out of the western horizon. This feature was seen until about Jan. 21 right after the Sun set. I am sure everyone saw the many pictures that I sent out in alerts. This tail extended for about 60 degrees and the width was an enormous 20 degrees. There has never been anything like this since possibly the Great Comet of 1744. The coma showed interesting features too as from the nucleus emanated the tail under an angle of 60 degrees and the coma showed a bright sunward segment, which was at a very oblique angle with respect to the solar direction. In addition spiral jets were found and a bright sodium emission was seen within the anti-solar area of the coma, most likely indicating a sodium tail, which was first observed in Comet Hale-Bopp. The maximum brightness of McNaught was reached on January 14 at -5.5Mag. Even people in the Southern Hemisphere had trouble getting the Media interested because it never was in a completely dark sky even though it didn't need one. As recent as Valentines day the comet was still bright 4th Mg. and now was exhibiting an anti-tail feature. The latest image is below. For some of the best images of The Great Comet of 2007 visit [www.spaceweather.com](http://www.spaceweather.com) and click on Comet McNaught Gallery on the right side. There are 24 pages of unbelievable images.

The comet slipped past the Earth and Sun like a thief in the night, unknown to most people, but to those that saw it will always be remembered as the GREAT COMET OF 2007 and to those that missed it as the comet that got away.

### New Star Erupts In Scorpius

A few weeks ago a new star erupted known as a

"Nova". Nova Scorpii 2007 was discovered by two Japanese nova hunters at Mg. 9.2. Since then and as recent as Sunday Feb. 25th the star had brightened to Mg. 3.5. This is your chance to watch a new star develop. By the time you read this the star may have brightened even further or dimmed some. Members Brad Young and Steve Chapman have viewed the star and they both say it was very easy to see. If you want to see this new star, look for the constellation Scorpius between 4a.m.-6a.m. Find bright Jupiter. The star to the right is Antares. Follow the Scorpius body down to the 2.3Mg. star Epsilon Scorpii. Just NE of this star you should see a star not listed anywhere on charts. That's your nova. Check it out and watch its development. You are now seeing the light of a new star which very few people are privileged to see. Good luck.



*Jupiter, Antares, and the familiar constellation pattern of Scorpius guide the way to the newly erupted Nova Scorpii 2007. This is the view above the south-southeast horizon just before dawn at latitude 40° north. Stars are plotted to magnitude 5.5.*

*Sky & Telescope diagram.*

That's it from my Astro Corner this month, don't forget the Messier Marathon March 17th and to check out Lunar X and Nova Scorpii 2007. Until next month keep your eyes to the stars.

## Lands Tidbits

By John Land

**Welcome Recent New Members:** Collin McMillan, David Baggett, Stan Davis, Peggy Walker, Brian Turner, Mac Patten

**DON'T LET YOUR MEMBERSHIP or Subscriptions LAPSE !!** Check your MAILING LABEL for membership expiration date. Those receiving Email should get a reminder when your membership is up for renewal or you may contact John Land. You may also renew magazine subscriptions through the club for substantial discounts.

**Magazine subscriptions Renewals:** Several of you may be receiving renewal notices for you Astronomy or Sky & Telescope. If you renew through the club you get a substantial discount. Go to the website and fill out the renewal form then print it off and mail it in with your notice and envelope from the magazine. Or you may fill out and mail in the form below.

**GUEST SIGN IN SECTION** on the Website is already bringing the club new contacts for potential new members.

**Changing EMAIL** - When you change your email or mailing address be sure to send me the new information so I can update the club records. You can use the Join feature on the club web page to make changes.

### ON LINE Club Memberships and Renewals:

Adults - \$ 35 per year includes Astronomical League Membership

Sr. Adult discount \$25 per year for those over 65 includes Astronomical League Membership

Students \$ 15 without League membership.

Students \$ 20 with League membership.

We now have an automated on line registration form on the website for new AND renewal memberships plus magazine subscriptions. You simply type in your information and hit send to submit the information. <http://www.astrotulsa.com/Club/join.asp> You can then print a copy of the form and mail in your check.

**Astronomy Club of Tulsa**  
25209 E 62nd St  
Broken Arrow, OK 74014

**Magazine Subscriptions:** If your magazines are coming up for renewal, try to save the mailing label or

renewal form you get in the mail. Do NOT mail renewals back to the magazine! To get the club discount you must go through the club group rate.

*Astronomy* is \$ 34 for 1 year or \$ 60 for 2 years.  
[www.astronomy.com](http://www.astronomy.com)

*Sky & Telescope* is \$33 / yr  
[www.skyandtelescope.com](http://www.skyandtelescope.com)

*Sky and Telescope* also offers a 10% discount on their products.

### Address Corrections- Email changes - Questions:

You may forward questions to the club call our message line at 918-688-MARS ( 6277 ) Or go to the club website and Fill out an online form or just click on John Land and send an email. Please leave a clear subject line and message with your name, phone number, your question - along with address or email





### Astronomy Club of Tulsa

Membership Application/Renewal Form  
PLEASE PRINT

Name: \_\_\_\_\_ Phone: ( 918) \_\_\_\_\_ - \_\_\_\_\_

Address: \_\_\_\_\_

City / State / Zip \_\_\_\_\_ / \_\_\_ OK \_\_\_ / \_\_\_\_\_

E-mail address - print clearly \_\_\_\_\_

Check Lines below : For faster economical delivery you are notified by email when the Club newsletter is posted on the web. Email saves the club mailing expenses. Of course if you do not have email we can mail you a copy of the monthly newsletter.

New Membership  Renewal Membership

Adult Membership (\$35) includes Astronomical League membership.  
See <http://astroleague.org/> for benefits of being a League Member.

Student Member (\$20)\* includes Astronomical League membership.

Student Member only( \$15 )\* - without League membership.

\* Student - Persons 25 or younger actively taking courses at college, trade school, high school, or below.

\* Adult Student - Persons over 25 may join at the student rate for one year if enrolled in an astronomy course at an area college.

Check Lines below for YES

I would prefer to receive E-mail notification when club newsletter is posted to the web.  
Notice of club events and newsletters are usually sent by email.  
This helps assure you will be informed of late breaking news.  
I choose to receive my newsletter by E-mail ONLY instead of postal mail.

Check here if you also require a postal copy of the monthly newsletter.  
Note: Using email newsletter saves the club about \$5 per year

Magazine subscriptions: Magazine rates may change. Prices available with membership only.

Sky & Telescope Subscription (\$33) / year \_\_\_\_\_ Renewal Include Subscription Number. Also includes 10% discount on most Sky & Telescope products.

Astronomy Subscription (\$ 34) / year (\$ 60 ) / two years \_\_\_\_\_ Renewal Include Subscription Number.

Astronomy Club of Tulsa  
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Or go to the club website and fill out an online form or just click on John Land and send an email.

How did you hear of the Astronomy Club of Tulsa? \_\_\_\_\_

How long have you been interested or active in astronomy? \_\_\_\_\_

Do you have a telescope? \_\_\_\_\_ Type \_\_\_\_\_

What astronomy club activities would you like to participate in? \_\_\_\_\_

Have you been a member of other astronomy clubs? \_\_\_\_\_

Where / when \_\_\_\_\_

Astronomy Club of Tulsa membership (\$35/year) includes membership in the Astronomical League and subscription to ACT's "Observer" and AL's "Reflector". "Astronomy" (\$34/year) and "Sky and Telescope" (\$33/year) are also available through the club. For more information contact John Land at 918.357.1759. Permission is hereby granted to reprint from this publication provided credit is given to the original author and the Astronomy Club of Tulsa Observer is identified as the source.

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**Astronomy Club of Tulsa**

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<http://www.AstroTulsa.com>

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