

# THE Eyepiece



October 2005  
Volume 17 Issue 10



Monthly Publication of the Neville Public Museum Astronomical Society



Photo by Tom Jorgenson  
MARS: Sept. 17,  
2005/09:00 UTC; Phillips  
ToUCam 740/12' LX200;  
no filters; AmCap &  
RegiStax3

## Mars

by Gerry Kocken, *President, NPMAS*

The local Neville Public Museum Astronomical Society of Green Bay will host a public viewing of Mars on Friday, October 21 and Saturday, October 22 at the Neville Public Museum, from 8 to 11 PM.

Scopes will be set up on the museum premises for viewing.

A speaker will be on hand Friday night only for three 45-minute long presentations on Mars starting at 6, 7 and 8 PM. The presentations are open to the public.

Mars approach 2005:

In late August of 2003, Mars made its closest approach to Earth in recorded history (50,000 years). At the 2005 closest approach, on the night of October 29/30, the red planet will be approximately 25% farther away from earth than it was in 2003. (This year Mars will be approximately 42.8 million miles from earth according to NASA, September 22, 2005).

The 2003 opposition of Mars was good as it gets for telescopic observers-in theory. Mars reached 25.1" in apparent diameter, the maximum possible, compared to a maximum apparent diameter of 20.2" this year at closest approach. But as in other things, size isn't everything. Two other factors come into play. The first and most important is atmospheric turbulence on Earth, which is heavily dependent on the altitude above the horizon of the object being observed. An altitude of 30 degrees above the horizon is usually required for moderate viewing as such as it was in 2003. However this year, Mars will be at an altitude of 60 degrees to 61 degrees above the horizon for the mid northern latitudes such as in Wisconsin. From late September through early December, the prime observing window, an observer at 45N degree latitude should have a vastly superior observing experience than the 2003 close approach. Mars will be 30 degrees higher in the night sky than it was in 2003, minimizing the amount of earth's atmosphere to view through.

The second factor that heavily affects the observing outcome of Mars is the atmosphere on Mars itself. An example is the opposition of June 2001, which turned out to be a large disappointment due a dust storm that spread to envelop 80% of the Martian globe for several months. It was the dust storm that has not been seen on Mars in decades. Regardless of from where on Earth the red planet is observed this year is still a favorable close approach since November 1958.

*Information is from the Observers Handbook, 2005 by The Royal Astronomical Society of Canada.*

Mars should rise above the downtown buildings between 8 and 8:30 in the evening. Viewing will start then. The moon will be in its third quarter and will also be viewed.

Dress warm and come out and join the fun.

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### NPMAS Club Loaner Telescopes

NPMAS members may use, free of charge, for a one month, one of the two club telescopes available. For more details, please contact Gerry Kocken, *Properties Chair*, at 920-336-8594.



NPMAS is a proud member of the

### Night Sky Network

"Astronomy clubs bringing the wonders of the universe to the public"

### Member Society



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## Meetings, Events & Star Parties

### **October 1**

**NEWSTAR Public Observing,  
Mosquito Hill**

### **October 4**

**DPAS Monthly Meeting,  
'Fibonacci'**

### **October 8**

**Draconid Meteor Shower**

### **October 11**

**DPAS Board Meeting**

### **October 12**

**NPMAS Monthly Meeting,  
Club Elections, 'The Moon'**

### **October 17**

**Partial Lunar Eclipse**

### **October 19**

**NEWSTAR Monthly Meeting,  
'Buying your First Telescope'**

### **October 21**

**Orionid Meteor Shower**

### **October 21-22**

**Public Mars Viewing, Neville  
Museum**

### **October 28-29**

**Kroes Observing Weekend**

### **October 29**

**Mars Closest Approach until 2018**

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### **Looking Ahead:**

### **November 4-5**

**Kroes Observing Weekend**

# Prairie Skies Star Party

by Joseph Celmer

I just returned from Prairie Skies Star Party, here is a very brief overview. Later this week I will be adding a page to my web site with some pictures and other details, I will e-mail the link when ready.

Tom and Renee Riederer, Tom Jorgenson, and I comprised the NPMAS-Newstar attendees. Tom and I arrived early Thursday, the Riederer's the next day.

Unofficially, we guess about 225-250 people. Everyday was sunny, daytime temps low-high 70's. We had three wonderful nights, a little haze early, but clearing nicely by 11 PM-midnight. Thursday night was cold, but comfortable if properly dressed. The other two nights very mild. On each night by 4 AM, most agreed that the skies were unusually good for that location. By then the sky glow often receded to the tree top level.

They addressed the concern about the nearby yard light (and traffic) by suspending a 10' tall span of thick black opaque plastic tarp across the entire length of the west edge of the observing field. The field itself was darker than ever.

There were two main vendors, Starlight Instruments (feathertouch) and Hutech (Borg), plus a few junk parts & old books. Breakfast was served on Saturday and Sunday, dinner on Saturday night. Food was quite good. Free donuts for all on Saturday. Had the traditional all night free coffee, hot chocolate and tea, and of course the movies. There was plenty of very hot water and no waiting for showers.

Had lots of nice prizes (a pair of Denkmeyer bino's, some naglers, eyepiece sets, DSI etc.) but we did not win.

In short, it was a wonderful time, as it was last year, but with about 100 more people. Based on everyone's positive comments, I think it will continue to grow.

Clear Skies!

## **NPMAS Elections** by Anthony Kroes

Club members - don't forget about the NPMAS Board of Directors elections being held this month at the club meeting! The votes will be counted immediately so all attendees will know the results before leaving. The new board will then attend to club business among themselves, namely deciding on club officers and which board members will be filling which posts and duties for the next two years.

For those not able to attend the meeting in person this month we encourage you to participate in the elections anyway. Please print and fill out the Absentee Ballot provided on the club web page at <http://www.npmas.com/resources/AbsenteeBallot.pdf>. If you don't have Internet access, fill out the ballot found on page 3 of this newsletter.

Either way, please choose nine club members from the choices provided. Don't choose any more than nine or your ballot will be invalid and will not be counted. Also, make sure your ballot is addressed to George McCourt (the address is on the ballot) and is postmarked no later than Monday, October 10. Tune in to the web site or our next issue for the election results!

# Planet Watch For October

by Wayne E. Kuhn



**Mercury** will not be visible this month.

**Venus** sets about 2 hours after the Sun and can be observed very low in the southwest. It is at magnitude  $-4.1$  and is  $19.7''$  in apparent size.

**Earth's Moon:** New Moon is at 4:28 AM CDT on the 3rd. First Quarter Moon is on the 10th at 1:01 PM CDT. Moon reaches perigee (227,080 miles from Earth), on the 14th at 8 AM CDT. Full Moon (the Hunter's Moon) is on the 17th at 11 AM CDT. Last Quarter Moon is on the 24th at 9:17 PM CDT. Moon reaches apogee (251,341 miles from Earth) on the 26th at 4 AM CDT.

**Mars** moves back to Aries from Taurus early this month and is up all night. On October 1 it will be stationary and will then begin retrograde motion. It will be closest to Earth on October 30, at which time it will shine at magnitude  $-2.1$  and be  $19.9''$  in apparent size.

**Jupiter** is in conjunction with the sun on October 22 and is not observable this month.

**Saturn** is in Cancer and rises in the east-northeast before midnight. It stands about 50 degrees high in the east-southeast as morning twilight begins. It shines at magnitude 0.4 and is  $17.6''$  in apparent size. During the first quarter of 2005, the tilt of the rings had increased slightly from 22.5 degrees to 24 degrees. It will then decrease to 17.4 degrees by mid-October.

**Uranus** is in the constellation Aquarius this month. It shines at magnitude 5.8 and is  $3.6''$  in apparent size.

**Neptune** is in the constellation Capricorn. It dimly shines at magnitude 7.9 and is  $2.3''$  in apparent size.

**Pluto** is in the constellation Serpens Cauda and was at opposition on June 14. It shines at magnitude 13.8 and is  $0.1''$  in size.

## NPMA Board Of Directors Absentee Ballot Form

Vote for Nine only

If you vote for more than nine, the ballot will be discarded

- Gerry Kocken
- Dick Francini
- Amy Hannon Drew
- Julie Mofle
- Ray Nancoz
- Tom Cashman
- Ed Smith
- Al Lawrence
- Joe Celmer
- Bob Lundt
- Bill Hennessy

Mail ballot to:

George McCourt  
548 Cornelius Dr.  
Green Bay, WI 54311

Mail no later than October 10.

# Astronomy Photo of the Month

Photo by Tom Jorgenson

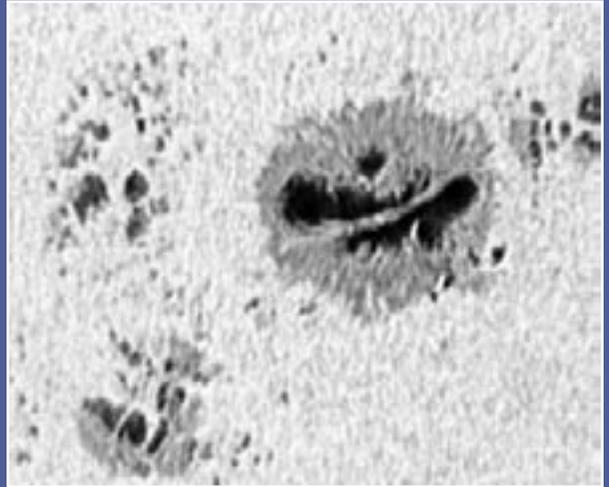
Sunspot AR10798

Sept. 14, 2005/17:00 UTC

Philips ToUCam on a 740/C5 telescope

Baader solar film and contrast filter

Software: AmCap & RegiStax3



## Kroes Observing Weekend 2005 (KOW)

by Anthony J. Kroes

The Kroes Observing Weekend has a special event lined up this year – a nice close approach to Mars! KOW 2005 is scheduled for October 29-30, the nights nearest the close approach of Mars. That's the weekend after the public Mars observing at the museum (see the write-up on page 1 in this issue). It is a club members and personal guests party only, so you won't have to stand in line to look through your own telescope or binocs!

KOW is held on the property of Tara & Tony Kroes, and all club members and their guests are welcome to attend. As this is a two-day event, sleep-overs in your tent, car, or camper are encouraged – we have plenty of room! Facilities include the wide open spaces of a 10-acre farm with grassy fields for observing and tents, a large concrete pad, and a partially landscaped observing area around the 10' x 12' roll-off roof observatory (housing a 12" Meade SCT.) The neighbor's farm light is out while the house is being renovated, so there is only one visible from the observing area now.

Show up anytime after 6 PM on Friday night to enjoy dark skies and a great view of Mars. Kitchen and bathroom facilities are available at the house, including coffee pot, fridge, and microwave. What do you need to bring? Your telescope or binocs, of course, as well as chairs, charts, a red flashlight, and beverages and snacks of your choice. Space inside is limited, but we can handle a dozen or more at a time to warm up and chow down. In case of clouds, there will be Mars movies all night long on the DVD player! Directions are available on the web site at: <http://www.cdo-astro.com/Directions> (case-sensitive address!). Call or e-mail (920-822-4959, [akroes@cdo-astro.com](mailto:akroes@cdo-astro.com)) for up to the minute weather and status reports on the days of the event.

For even more Mars viewing, or if you are busy this weekend, keep the evenings of the very next weekend in mind (November 4-5) as we are hosting another KOW those nights also! Mars will still be big and bright – opposition isn't until November 7. The observing season wraps up with another KOW on the first weekend in December (hey, how come we get all the cold ones!?) Mars will be quite a bit smaller and dimmer by then, but there are other things to look at up there!

We hope to see you all there!

Tony and Tara.



# The Flip Side

by Peg Zenko

A couple of months ago Tony included a photo he took of a rainbow in The Eyepiece that coincided with an article that I had just begun writing for the Packerland Chapter Of The American Meteorological Society newsletter called The Weather Observers Guide To Rainbows. It got me thinking about how day and night sky observations overlap.

*The Weather Observers Guide To Rainbows* is too lengthy to include here, but you can read it at the PCAMS web site. Go to <http://www.ametsoc.org/chapters/packerland/> and click on the link for Feature Articles.

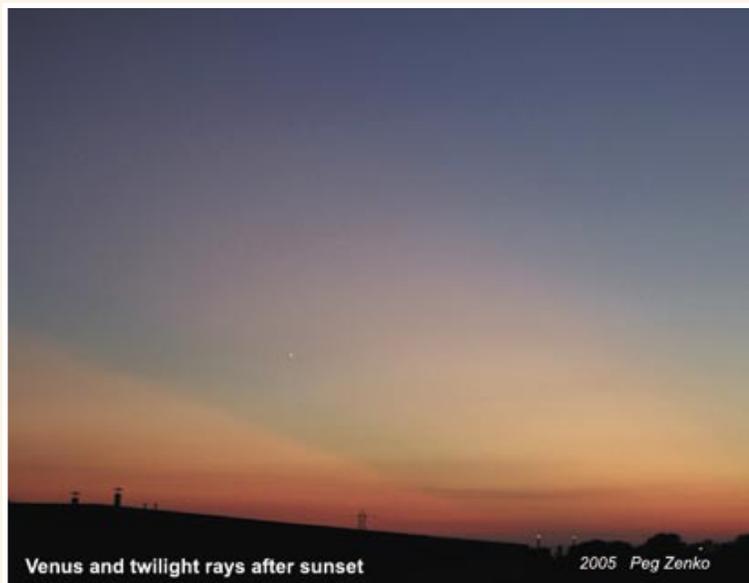
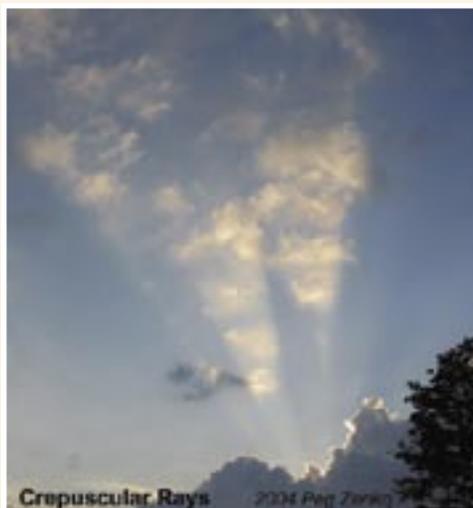
My focal point (pun intended!) of interest is in solar optics and weather photography. I haven't owned a telescope in years, but am fascinated by the

lenses and mechanics, and enjoy the NPMAS for its information sharing of naked eye night viewing of planets and aurora. You could safely say that my main hobby is actually the flip side of night viewing.

Like any other subjects, there is no line of demarcation from one to the other, and while you're setting up your telescope at twilight some of the best solar optics will occur. One is, of course, the sunset color itself! We've all seen rays and shadows called crepuscular rays streaming from the setting sun, but did you ever look behind you when you see them? Crepuscular rays can literally span the sky, following the "bowl" of the atmosphere and produce rays on the opposite side, called anticrepusculars. In the photo example to the right, the shadow of crepuscular rays shows in another sunset phenomena called the Belt of Venus. The pink band is the sunset color extending to the west, and the blue lower part is the shadow of the Earth, which advances as the sun sinks below the horizon. A rare phenomena to look for after the sun is completely below the horizon are twilight rays, and they can extend well past the zenith. In the accompanying photo from 2005/07/31, it was dark enough to see Venus emerging and shining through.

The sky is a busy place, with pillars of light extending far above the horizon, halos in cirrus clouds and rainbows. This list only touches the surface of the scope of solar optics. Dozens of sky photos and links to informational sites can be found at my web site <http://www.tangentphotos.com>.

Keep looking up, even when it's not dark and clear! You never know what amazing things are going on right over your head if you're not watching.



# Astrofest 2005

by Gerry Kocken

There were nine of us that made the trek to Astrofest this year. There were Don, Katrina and Jacob DeWitt, George McCourt, Steve Mofle, Mike and Fran Monfils, Jim Vareka, and myself. We left my office at 8:45 AM and picked up Jim Vareka in Cleveland, just south of Manitowoc. We proceeded to Kenosha and had breakfast. The trip through Milwaukee and Chicago was uneventful. We did not stop for any construction work. The tolls were expensive

however. Pulling a trailer, it cost \$13.25 one way. We arrived at Vana's about 2:30 in the afternoon where Astrofest was to be held again this year. It was hot, about 95 degrees with no wind and no shade. After we set up camp, we felt a little dehydrated and took it easy for a while. It clouded up that night, so we set up our scopes and covered them up. It did clear up after everyone went to bed. I think Mike



CAS Observatory



Don DeWitt and Steve Mofle search the hazy sky.

Monfils did a little viewing. It was hard to sleep due to the temperature. The next day was slightly better, still 95 degrees but with a little wind. Don DeWitt had developed heat exhaustion. He ended up sitting most of the day under a screened tent. The day seemed to drag on due to a lack of activity and the heat. We had a perch fry that night which seemed to be the highlight. Again, Friday night hazed over. Viewing was limited to double stars and the brighter objects. Mars viewing was not the best. I went to bed about 3 AM. Saturday was about the same. Hot, humid and very little wind. Viewing again that night was hazed over. It did finally get cooler that evening which made sleeping a little easier. The overall Astrofest experience was not good this year. The Chicago group that put it on was very disorganized, not much for door prizes, food was very expensive (we brought our own) and it was hot with no shade. Placement of the port-a potties made most people walk a great distant to use them. The night skies were terrible with lights from a quarry just to the south, which lit the sky to about 80 degrees, Kankakee to the east and Chicago to the north made the viewing experience terrible. The haze didn't help either, although it may have been light pollution. I believe our group along with the Newstar group may be looking for a better place to attend next year.



Vendor booths.

# NPMAS New Members

New memberships to NPMAS  
in September:

Bob Lundt  
3015 W Lawrence St.  
Appleton, WI 54914  
920-731-0809  
rlundt@core.com

Brian Hulse  
3072 Crusade Lane  
Green Bay, WI 54313  
920-740-6766  
brainhulse@unforgettable.com

Brian Schilt  
1147 Livingston St.  
Green Bay, WI 54311  
920-469-5584  
brianschilt@new.rr.com  
N11GPS in Sirius Observatory,  
N8GPS, Zenithstar 80, N80GT,  
Coronado PST, binoviewers  
(Denk II, WO, Burgess), Meade DSI

## New Member Info from Brian Schilt

**How did you find out about the club?** I knew since moving to Green Bay that there was an astronomy club associated with the Neville Museum. I did a search on the internet, and found the Neville web site, and located the Astronomical society from there.

**Do you own a telescope or binoculars?** I own both. I haven't really used the binoculars, but would enjoy using them with others at a star party. I use my telescope most the time.

**How long have you been interested in Astronomy?** I've been interested in Astronomy since a young lad, 9 or 10ish I suppose. A neighbor in my hometown had a big observatory in his back yard. I always liked looking at it, checking to see if the hatch was open whenever I went by it. My dad took me to see the guy because he knew him, and he helped me pick out a telescope. That was my first telescope. I took a college course also in Astronomy, and that was the last I did anything in it until recently. I always wanted a telescope with a motor drive, and tried one out before the Mars opposition a couple of years ago. I loved it, and I went nuts with getting a bunch of new gear since then. My dream was always to have an observatory. I was going to wait until I retired, but went ahead with it now instead. I'm 47 years old now.

**Do you have a favorite area in Astronomy (deep sky observing, planets, cosmology, etc)?** My interest is in Deep Sky and planet observing, and recently Ha solar observing. Also interested in CCD imaging and Astronomical Spectroscopy. I'm very much a newbie in it all, but those are subjects I enjoy.

**What can you tell us about yourself? Who are the other members of your family?** I've lived in Green Bay since 1990. I'm originally from Monroe Wisconsin. I'm married, and recently have a daughter. She was born Jan. 2 this year. I'm hoping she takes an interest in Astronomy also.

**What would you like to get out of your membership?** I'd enjoy meeting others with the similar interest in astronomy, and I'd like to attend some star parties.

## NPMAS Board

Gerry Kocken, *President*  
gerryk@kockenwi.com  
(920-336-8594)  
Ray Nancoz, *Vice President*  
alcor@doorastronomy.org  
(920-746-0428)  
Dick Francini, *Treasurer*  
dfrancini@polycello.com  
(920-338-8504)  
Amy Hannon-Drew, *Secretary*  
momran2@yahoo.com  
(920-499-0395)

### Board Members:

Tom Cashman tcash99930@aol.com  
Don DeWitt ddewitt@tds.net  
Steve and Julie Mofle  
moflephoto@gbonline.com  
Jim Vareka jbk@lakefield.net

## 2005 Committee Chairs

### NPMAS Staff:

#### AL Awards Coordinator

Tom Cashman  
ALCor Ron Parmentier  
Website Don DeWitt  
Night Sky Network Katrina DeWitt  
Gerry Kocken  
Steve Mofle

### Committee Chairs:

Program George McCourt  
Membership Wayne Kuhn  
Properties Gerry Kocken  
Observatory Gerry Kocken  
Public Outreach Katrina DeWitt  
Messier Marathon Mike Monfils  
Astronomy Day Amy Hannon-Drew  
Lynn Ward  
Club Picnic Katrina DeWitt  
October Field Trip Katrina DeWitt  
Ty Westbrook

## NPMAS Observing Sites

NPMAS members have access to three observing sites located on private land and belonging to members of our club.

**Parmentier Observatory** — largest private observatory in WI housing a 30" classical Cassegrain. Members may view through the 30" or bring their own scopes and set up in the field below.

Observatory Number: 920-845-5626  
Ron Parmentier Home: 920-336-5878

**Crivitz Observing** — private residence of Dave & Carol Jorgenson. Located in the Northwoods of Wisconsin on 100 acres of land, this site offers some of the darkest skies around. The field is equipped with electricity and a cabin is available for use. Call ahead to make arrangements.  
Dave & Carol Jorgenson Home: 715-757-3296

**Cedar Drive Observatory** — private residence of Tony Kroes and Tara Adsit. Located in Pulaski on 10 acres of land. Call ahead to make arrangements.  
Tony Kroes Home: 920-822-4959

# October NPMAS Meeting

October 12, 2005

*Steve Mofle*

## The Moon

Telescope of the Month:  
Ron Parmentier  
Solar Scope



**The Eyepiece**  
W2175 Cedar Dr.  
Pulaski, WI 54162

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## October 2005

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>2</b> Zodiacal Light well placed – next 2 weeks	<b>3</b> New Moon	<b>4</b> DPAS Monthly Meeting	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b> DRACONID Meteor Shower
<b>9</b>	<b>10</b> First Quarter Moon	<b>11</b> DPAS Board Meeting	 <b>12</b> Meeting Club Elections	<b>13</b>	<b>14</b> NEWSTAR Public Observing	<b>15</b>
<b>16</b>	<b>17</b> Full Moon Partial Lunar Eclipse	<b>18</b>	<b>19</b> NEWSTAR Monthly Meeting	<b>20</b>	<b>21</b> ORIONID Meteor Shower	<b>22</b>
<b>23</b>	<b>24</b>	<b>25</b> Venera 9 & 10 land on Venus, 30 years ago	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b> Mars Closest Approach until 2018
<b>30</b> Daylight Savings Time Ends	<b>31</b>					