



The Eyepiece

NEVILLE PUBLIC MUSEUM ASTRONOMICAL SOCIETY

Volume 21, Issue 5

May 2009

Parmentier Kickoff Weekend

By Don DeWitt

The long winter has finally finished and that means one thing, observing time begins at Parmentier Observatory. Our first weekend of the year is coming up fast and happens to be an extra long one, Friday May 22nd through Sunday May 24th of Memorial Day Weekend.

This past weekend, Gary Baier, Don DeWitt, Dick Francini, Steve, Julie and Judy Mofle went out to the observatory and cleaned the telescope mirrors, dusted and vacuumed the floors and basically got rid of a year and a half of grime. Next on the list, we plan to balance the telescope, collimate the mirrors and mow the lawn before the first official observing weekend.

For those members that are new to the club, Parmentier Observatory houses a 30" Classical Cassegrain telescope and a 6" Astrophysics Refractor. The observatory was built by founding club member Ron Parmentier. When Ron passed away in January of 2008, ownership of the observatory reverted back to the

farm owner's brother, Richard Schneider. We have spent the last year working out a new access agreement with the Schneiders and now have the telescope available for club use.

Along with the new access agreement, we are planning on doing some new things out there this year that we wanted to make everybody aware of. First, we will have a porta-pottie available from May through September. This is something that we have talked about doing for a long time to help encourage people to stay out and observe a little bit longer. Second, we will be keeping a couple of the club telescopes out there for people to use each night. This will give club members that do not have a telescope the opportunity to learn how to use an average, everyday telescope with the help of some of the more experienced mem-



May Meeting

Please join us for the May monthly meeting. We have had some rescheduling for this month's talk. This month, Dick Francini will be giving part 2 of the Astronomical League Observing Programs.

The meeting will be held from 7:00pm until 9:00pm, May 13th at the Neville Public Museum, 210 Museum Place, Green Bay, WI 54303. And as always, we will be heading to Happy Joe's for pizza after the meeting. Hope you can join us. □

bers. Also, if somebody wants to do some observing but doesn't feel like bringing a scope along, they can man one of the club scopes as well.

★ Gary Baier and Don DeWitt are the two people authorized to operate the 30" telescope and we want to observe the objects you want to see. That being said, we

(Continued on page 5)

Upcoming Events

NCRAL Convention

- May 1st through 3rd—Cedar Rapids, IA

May Meeting

- May 13th—AL Observing Programs, Part 2

Beginner Astronomy Class

- May 13th—Neville Public Museum

Parmentier Observing Weekend

- May 22nd—24th

Inside this issue:

EYE IN THE SKY	2
VENUS OCCULTATION	2-4
APRIL MEETING REVIEW	4
MEMBERSHIP SERVICES	6

Night Sky Network Member Society

Astronomy Clubs bringing the wonders of the universe to the public



Eye in the Sky

May 2009	
2	Venus is at Greatest Brilliancy, -4.7
2	Astronomy Day
5	Eta Aquarid Meteor Shower
9	Full Moon
24	New Moon
25	Jupiter passes 0.4° South of Neptune

June 2009	
5	Venus is at Greatest Western Elongation, 46°
7	Full Moon
13	Mercury is at Greatest Western Elongation, 23°
21	Summer Solstice, 12:46AM CDT
22	New Moon
23	Pluto is at Opposition

Venus and the Moon Play Hide and Seek

By Kevin Nasal

The morning of April 22nd came early for me – 3am to be precise. I awoke and drove to Cedar Drive Observatory at the residence of club member Tony Kroes to observe the occultation of Venus by the Moon in the hours to come. Club member Dick Francini agreed to come out as well but given he was using his 8" Dob scope, he didn't need the advance setup time we needed with our electronic scopes, so we expected him around 5:00am.

We'd been planning this event for some time. In a previous session a few years back, Tony and Dick attempted to observe a daytime occultation of Jupiter by the Moon. How hard was it to find a sliver of Moon and Jupiter in daylight? Much harder than either expected and they missed the event. So we decided this time to discuss it and in emails and phone calls and came up with a plan. It included Tony setting up the tracking in advance on his 12" LX200 and me doing the same on my 10" LX200 GPS. Tony also planned to connect a video camera to his scope for us to be able to record and see the occultation on a video monitor. Dick was going to manually track the event with his scope – a task that required discipline (and a good eye) over a 4 hour time period as the

Moon and Venus became increasingly faint against the sunlit morning sky.

I made it to Tony's by 4am and we started to setup our scopes. The skies were partly cloudy with a band of clouds on the eastern horizon. The event was going to occur in the southeast, so we were hoping those clouds would dissipate or move off. To our dismay as time went on, they seemed to rise higher but this could have been our imagination. Clouds always seem to increase when you're anticipating an astronomical event!

A little about an occultation and this one specifically. An occultation occurs when a celestial object is covered up by a larger one as seen from Earth. In this instance, the 8% crescent Moon was going to cover the 17% illuminated crescent of Venus as they rose the morning of April 22nd. *Sky & Telescope's* April edition detailed the timing of the event and Tony spent some time at a website to interpolate it's time for our exact location. We came up with the start of the occultation as 7:46:01am and reappearance of Venus at 8:31:49am. Using the astronomical charting pro-

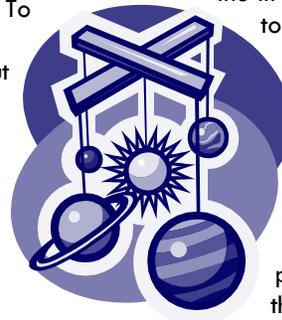
gram, Guide, Tony was able to simulate the event for us on his laptop.

We saw that the unlit portion of Venus would be covered by the lit crescent of the Moon first, then the tips of the lit crescent Venus would be covered by the moon. Reappearance was going to be more interesting: the white tip of

the lit crescent Venus was going to appear seemingly out of total darkness, like a growing ivory elephant tusk. The "darkness" was the unlit portion of the crescent moon. Eventually, the second tip would appear and the rest of the planet would appear out of the unlit portion of the Moon.

Back to events of the morning... I successfully conducted an alignment of my scope and now it was tracking well. I conducted a "go to" to Venus and found it solidly entrenched in the bank of clouds in the east. Tony told me his scope was also aligned and ready. And just then, an ominous bank of low clouds appeared on the northwest horizon moving southeast. In a matter of minutes, it looked like we were go-

(Continued on page 3)



(Continued from page 2)

ing to miss the event entirely. Time to wait – it was coming up on 5am. Dick had just called me on his cell phone and within a few minutes he arrived. It was about this time when we looked east and there, just above the cloud tops, the Moon and Venus were glowing brilliantly white against the faint pink-orange glow of dawn. We helped carry Dick's scope to the observatory and got him setup. Tony setup his binoculars next to my scope for the event.

Surprisingly, the next 2 hours went

quickly (without the nap we thought for sure we could grab!). We caught a break with the clouds. The ones in the east moved off to the south and dissipated. And the ones to the northwest filtered south and were dissipating with the heat of the day. Venus and Moon appeared in a wide swath of blue sky and it now looked like we were going to get this event after all.

We each spent time adjusting our scopes and figuring out what eyepiece combination would present the best view. Piggy-backed onto my scope is my Stellarvue finder – it provides 4.5

degree field of view at 22x. Venus and Moon fit perfectly in it and I attempted a few shots with my digital camera. Dick began the tedious task of manually tracking both objects with his scope. Tony experimented with camera combinations and found that his handheld video camera actually presented a better view. We were amazed to find out that if you knew exactly where to look, you could see (with effort) each object in the bright morning sky. It was also about this time that club

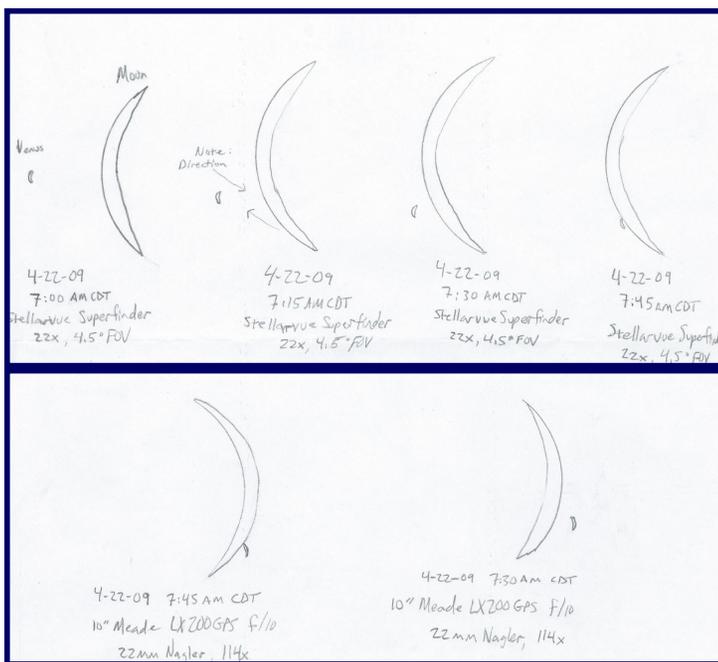
president Gerry Kocken began a series of check-calls with us and we communicated back and forth with him during the event to exchange information.

We were now fighting seeing in the heating atmosphere and in the heating scopes. They required frequent tweaking of focus to maintain a good sight of the unfolding event. A lesson learned from Tony and Dick's Jupiter occultation is that you must have focus set in the dark hours prior to the event (on a star or even better a planet) with the eyepiece you were going to use before you attempt to view it in your scope during the bright daylight. Venus was still pretty bright against the morning sky but the moon's crescent was almost ethereal.

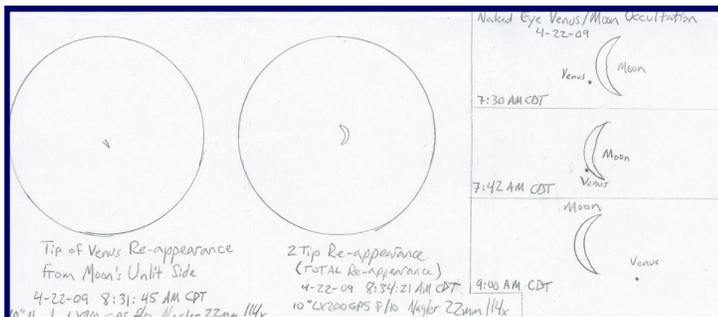
It was 7am and I began drawing what I saw in my Stellarvue finder in 15 minute intervals. I also made a couple of drawings of what I saw naked eye and through my scope eyepiece (a 22mm Nagler that provided 114x with a 1/2 degree field). It helped to block the sun with a clipboard as I looked through my scopes.

Now the countdown began in earnest. I made a last attempt to locate each object visually at 7:42am and I still could see the flickering Venus touching the Moon's limb. We were each at the eyepiece at 7:44am. At 7:45, I began calling out times in 10 second intervals (our watches and a clock in the observatory were set to atomic clock time – you can get this off the internet). I had the first contact of Venus by the Moon (figuratively speaking) at 7:44:50am. This was later confirmed visually by rewinding Tony's video camera and taking a look (combined with a lot of math by Tony and me). The first tip of the crescent of Venus was occulted at 7:45:26, the second at 7:46:41 and Venus was completely occulted at 7:47:25 am CDT. It took 2 minutes and 35 seconds for Venus to be cov-

(Continued on page 4)



Above are sketches of the Moon approaching and then occulting Venus along with times of the event. Sketches were made through a Stellarvue Superfinder and Meade LX 200 Telescope



Above and to the left are sketches of Venus's reappearance from behind the Moon. To the right are naked eye sketches of the occultation.

(Continued from page 3)

ered up – much longer than we expected. Our midpoint time of 7:46:07am was very close to Tony's interpolated event time of 7:46:01am.

How did we accurately record all these times? Well, another big lesson learned. Tony and I each had digital voice recorders with us but we came up with the bright idea to actually use them after all this was over! It was one of those, "how come we didn't think of that" moments. Luckily, I recorded the times of first contact and first Venus crescent contact. When we rewound the video, we could see that I recorded the actual times accurately. We needed to use the video to help reconstruct the other times. We were all so focused on watching or video recording, none of us accurately recorded all the contact times. Another lesson learned!

The next 45 minutes passed with us talking about what we saw, carefully doing the math, watching video and getting my digital voice recorder ready for the reappearance of Venus. Dick and I worked hard to keep the Moon in sight and in his scope. I was in Tony's observatory when he astutely called out, "Kevin – we gotta go now!" I'm glad somebody was watching the clock! With a minute to spare I was at my eyepiece. I started the voice recorder and at precisely 8:31:45am CDT, I called out, "Got it!" This was 4 seconds earlier than Tony's prediction.

It looked like an ivory white elephant tusk appeared out of thin air! That's a sight I won't forget – from pinpoint of light to a long horn-like tusk, the horns of the Venutian crescent appeared. Venus' second crescent tip appeared at 8:34:21am CDT. At this point, due to the track of the Moon, our orbit and Venus' orbit, the entire disk of Venus was cleared by the Moon. The three of us looked up and using my Telrad, we were able to see it all naked eye once again. Venus was quickly track-

ing southwest of the thin crescent Moon.

Tony commented at why an eclipse must be so exciting to see – this was pretty incredible to observe. There are always lessons learned in attempting an event like this and I've recounted ours in the article. It took a lot of careful planning and effort, but it definitely paid off. We were thankful

for a clear sky and the ability to see this event from our location. We packed it all up and got on with our day, a little tired but elated at what we saw. Tony, Dick and I look forward to hearing your stories or seeing your pictures of this event if you were able to observe it. □

Observations—By Dick Francini

Kevin's article really caught the full spectacle of this unusual astronomical event. If I had a top ten list of astronomical events I have observed, this would certainly be on it! Hopefully we can play the video of the occultation taken by Tony at an upcoming club meeting.

I did have two other observations about the event. First, I was quite surprised how much brighter Venus was when compared to the thin crescent Moon. Venus appeared many times brighter than the crescent Moon, in fact the thin 8% crescent Moon was somewhat difficult to see even in a telescope against the bright daytime sky. You think of the Moon as being the brightest object in the sky, but I guess that is in part because it is so much larger than Venus. Venus must reflect much more light off its clouds than the surface of the Moon over the same area. The Moon seemed dim because we only had an 8% crescent to look at. The occultation was also much more dramatic because both Venus and the Moon were in a similar small crescent phase with both were orientated in the same direction.

My other comment is in regard to trying to manually track these objects as the sky got brighter. Everything was going great, I picked them up in the twilight when both were easy to find. I would re-position my 8" dob every few minutes to keep the Moon and Venus in the field. I was using a 40 mm eyepiece to maximize the size of the field (about 2 1/3 degrees); the Moon and Venus were also visible in my finder with a somewhat larger field. Then they went behind a series of clouds for maybe 30 to 40 minutes and I lost them completely. If it were not for Kevin and Tony tracking Venus, I would never have gotten realigned again. Once the pair broke out of the clouds I was able to see in their telrads where to aim (in relation to the cloud formations in close proximity), and scanned that area to re-locate the pair. Fortunately they stayed out in the open for the rest of the event. Thank goodness for telescopes with tracking, or I would have missed the occultation completely!

I also had a few issues determining exactly where the re-emergence would take place, so I went back to the low power view to make sure I would not miss it. Once it started to peek out I jumped back to higher power and bumped the scope in the process. Again I was fortunate the bump was minor and the reemerging Venus was less than a field away and was easily reacquired in a matter of a few seconds. This is clearly an event where having a scope with tracking is a HUGE advantage. □

April Meeting Review

By Brian Chopp

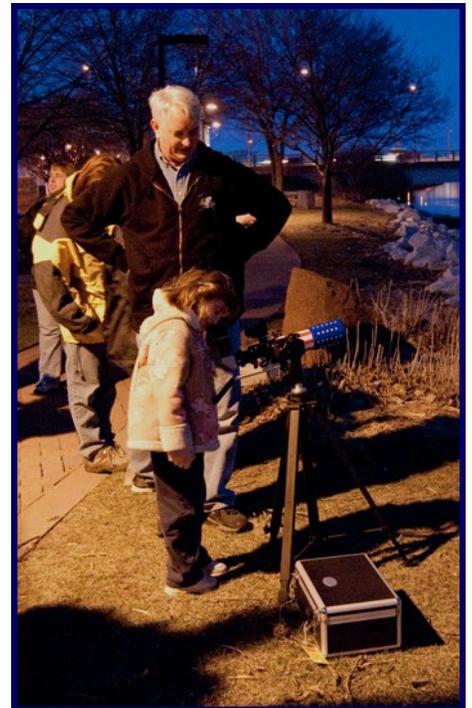
The April meeting was our first successful observing meeting of the year! The weather cooperated and the skies were clear. Several club members brought telescopes to share. The club's 13 inch f/4.5 Dobsonian telescope was also on hand for people to try.

Saturn and its razor thin rings were a favorite as well as the almost full Moon. Club members participating in the Beginning Observer's Class also took the opportunity to put to practice what they have learned. Several were identifying constellations and stars in the sky.

Members also tried out Jacob DeWitt's new gadget, Meade's MySky. This is a hand held devise that will direct you to any object you want see or if you point it at an object, it will tell you what you are looking at.

The next observing night is scheduled for the September meeting. Until then, clear skies. ☐

Photos by Jim Sentowski



(Continued from page 1)

will be sending out a mass email in the next few days soliciting your observing requests. All you need to do is reply with what you would like to see and what night(s) you plan on being there. Next month we may try something different as well such as having themed observing nights or perhaps work on a particular Astronomical League observing program. We are looking for ideas and suggestions so if

you have any, let us know.

Finally, Steve Mofle is organizing a pot-luck dinner/observing snack. He has already sent an email out to those that subscribe to the clubs Yahoo! group. Unfortunately, not every club member subscribes to the club Yahoo! group so we will be forwarding it to everybody as well. Please let him know what you can bring to contribute.

If you have any other ideas or sugges-

tions on things we can do to make this a fun weekend, please do not hesitate to let us know what they are. We really hope to see all of you, our club members, out there for our first official Parmentier Observatory Weekend of the year! ☐

Club Member Services

LOANER TELESCOPES

NPMAS members are welcome to use, free of charge for a one month period, one of the five club telescopes available. Please contact Gerry Kocken at 920-676-6363 or at gerryk@kockenwi.com to make arrangements. The five telescope available are:



- 10 inch Dobsonian Telescope
- 60 mm Bushnell Voyager
- 8 inch Triple Axis Newtonian Telescope
- 13 inch f/4.5 Dobsonian Telescope
- Meade ETX125 Cassegrain Telescope with Auto Star

Club Library

NPMAS has a collection of astronomy related books and videos covering a wide variety of topics including observing, the solar system, stars and more. Items can be checked out at monthly club meeting or by contacting Tom Cashman at 920-432-2261.



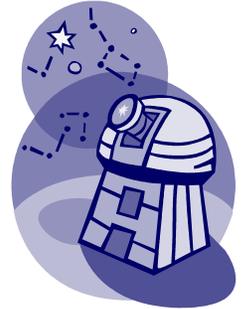
NPMAS OBSERVING SITES

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

Parmentier Observatory

Parmentier Observatory is home to a 30 inch classical Cassegrain telescope, the largest private observatory in Wisconsin. Members may view through the 30 inch or set up their own telescopes in the adjoining field.

Observatory Contact
Gary Baier—920-391-9654



Crivitz Observing

This is the private residence of Dave Jorgenson and Carol Eggleston. Located in the north woods of Wisconsin on 100 acres of land, this site offers some of the darkest skies around. The field is equipped with electricity and the far cabin is available for use. Please call ahead to make arrangements.

Dave Jorgenson and Carol Eggleston Home—715-757-3296

Cedar Drive Observing

This is the private residence of Tony and Tara Kroes, located Southwest of Pulaski on 10 acres of land. Members are welcome anytime but please call ahead to make arrangements.

Tony Kroes Home—920-822-4959.

NPMAS BOARD

Officers

President
Gerry Kocken
gerryk@kockenwi.com
920-338-9720
920-676-6363

Vice President
Don DeWitt
ddwitt@tds.net
920-405-8534

Treasurer
Dick Francini
dfrancini@garlockprinting.com
920-338-8504

Secretary
Amy Hannon-Drew
momran2@yahoo.com
920-499-0395

Board Members

Gary Baier
gbaier@netnet.net
920-391-9654

Brian Chopp
bchopp@new.rr.com
920-544-0708

Katrina DeWitt
gate-geek@tds.net
920-405-8534

George McCourt
geokat73@sbcglobal.net
920-468-9296

Chris Schroeder
chris@jsaonline.com
920-406-5277

2009 STAFF/COMMITTEE CHAIRS

ALCor Representative Brian Chopp
Awards Coordinator Chris Schroeder
Camp U-Nah-Li-Ya George McCourt
Historians George McCourt
Don DeWitt

Holiday Party Katrina DeWitt
Librarian Tom Cashman
Membership Dick Francini
Messier Marathon Mike Monfils
Night Sky Network Katrina DeWitt

Observatory Contact Gary Baier

George McCourt
Properties Gerry Kocken
Public Outreach Katrina DeWitt
Gerry Kocken

Website Don DeWitt
Yahoo! Coordinator Don DeWitt

The Eyepiece

Editors : Brian and Ann Chopp
Circulation : 80
Submissions can be emailed to
bchopp@new.rr.com
or mailed to
2832 Friendly Circle
Green Bay, WI 54313

The Eyepiece is a monthly publication of the Neville Public Museum Astronomical Society. Material in *The Eyepiece* may be reprinted for nonprofit use with proper credit and consent from both the editor and writer. The editor reserves the right to accept or refuse, edit for content, etc., any article or image submitted for publication.