

# starry nights



April, May, June 2002

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## New Web Site Domain

[www.wehrastro.org](http://www.wehrastro.org)

Our web site has moved to a new location. The new URL (web address) is [www.wehrastro.org](http://www.wehrastro.org). One of the advantages of moving the web site is an easier to remember URL. This will make it easier to tell friends, relatives and others about our web site.

The other advantage to moving the site is that it is completely on a different server. It is no longer hosted on Tim Grunewald's web space on Exec-PC. It now resides on a Linux server that is located at a data center in New Jersey that belongs to a friend of Tim's.

This friend mentioned a while ago that if we wanted, his server could host our site for free. All we would have to do is pay the yearly fee to register the domain "wehrastro.org" for \$13.50 a year. So Tim brought this idea to the board of directors and it was approved just recently.

This is a big advantage for us, because some of the capabilities that we wanted to have on the web site, including just having the domain name, would have cost us at Exec-PC. Now we have the capability for a more dynamic web site with the ability to write web-based applications in PHP and access to a MySQL database.

One of the first things that Tim has on his plate of things to do is a contact page to direct requests for information to the appropriate people. Tim also wants to redo the astronomy links page to be easier to maintain and to look a little like Yahoo's category listings and not all on one page. So stay tuned as Tim finds time to upgrade the web site.



# W.A.S. News and Information

## At the Observatory – 2001

Overall, it was a busy year. We had guests from Martin Luther High School and Grace Lutheran Grade School, as well as scout troops at several sessions. We had employees from American Science and Surplus, including the manager, looking through telescopes and we welcome them as a new member. We even got a TV promotion from Vince Condella at Fox 6 after several members talked with him at the State Fair. We thank Vince Condella for supporting our organization.

In the summer, Adam Machajewski and his family, with the Observatory Director's approval, fixed up the observatory by giving it a fresh coat of

paint, repairing some of the damaged wood and fixing up the electrical. We started using the observatory again shortly after the repairs. A big thank you goes out to Adam and his family!

We had some vandalism occur to the observatory this past year. Once was in the spring and another time was in the fall. Both attempts broke off the padlock and its latch. After the second occurrence, a U-bolt was installed on the door to make it much harder to knock off the padlock. The second attempt appeared to use a crowbar to get in. This year we will be looking at reinforcing the doorframe.

- Tim Grunewald  
Observatory Director



### Below are our attendance records for the year 2001:

Date	Temperature	Skies	Attendance
1/5/01	26°	Clear	25
1/19/01	20°	Partly Cloudy	7
2/2/01	9°	Hazy	14
2/16/01	20°	Clear	13
3/16/01	31°	Overcast	0
3/30/01	35°	Hazy	6
4/6/01	42°	Overcast	0
4/20/01	48°	Hazy/Overcast	10
5/4/01	46°	Overcast	0
5/18/01	57°	Hazy	15
6/1/01	57°	Rain	0
6/15/01	70°	Clear	25
6/29/01	77°	Humid and Hazy	25
7/13/01	76°	Clear and Dry	30
7/27/01	65°	Overcast	0
8/10/01	68°	Clear and Dewy	85
8/24/01	69°	Overcast	0
9/7/01	79°	Clear with a thunderstorm approaching	13
9/21/01	61°	Overcast, then Clear	30
10/5/01	46°	Overcast, then Clear	30
10/19/01	59°	Overcast, then Clear	30
11/2/01	56°	Clear	40
11/16/01	44°	Clear	31
12/7/01	37°	Overcast	0
12/21/01	32°	Overcast, then Clear	24

## W.A.S at the Museum

With the encouragement of Nikki Epsi, a former Wehr Nature Center employee, the Milwaukee Public Museum asked the Wehr Astronomical Society to set up an astronomy display and solar viewing for their two "Star Spangled Winter Weekends" the last two weekends of December.

Gene and Charlotte DuPree and Adam Machajewski manned the first floor lobby display of the solar system, telescopes and photographs of the W.A.S. activities. Our part of the program was titled "All About Telescopes." Kendra Johncock was also there doing her educator program, with stories and activities on the Big Dipper, making star finders and star clocks.

We found that many people had heard of our club, and just as many were surprised to find an astronomy club in Milwaukee. One family came to the museum just because they had read that there was going to be a program all about telescopes. We handed out many of our public viewing schedules. Karen Kerens' *Starlab* program received a big plug from us also.

The weather wasn't with us for solar viewing for the first four days. On day five you never saw two astronomers run so fast as Adam, who saw the sun shining on the floor through the butterfly garden, and Gene who was running up the stairs from lunch. By the time they were ready to observe Adam estimated he had about a minute of the Sun between the clouds. The sixth day started out great! We had clear skies all day, between the tall buildings of downtown Milwau-

kee. So, we set up the displays and our scopes in a glass overflow room, on the ground floor, across from the ticket booths. We chose set up inside because it was the coldest day of the year so far, which worked out OK for the solar viewing. Mondays are free for Milwaukee county residents and



Gene DuPree

### The Arrangement of the display

since it was Christmas Eve, there were large families. We started early around 9:00 and around 1:00 it started getting busy. By 3:00 as we were packing up people still were asking about us. Our contact, Vivian Corres, informed us that the museum would be making a \$200 donation to the club for our efforts. She was very happy to see that the organization can follow through with enough personnel to staff a full six day activity. The event turned out to be a great public outreach for the club. We hope it opened children's as well as adults eyes and minds to astronomy.

-Charlotte and Gene DuPree



## W.A.S. News and Information

### 2002 W.A.S Volunteer Positions

#### Board of Directors

- ★ **President:** Joe Carlone
- ★ **Vice President:** Kendra Johncock
- ★ **Secretary:** Jackie Mau/ Dave Stublaski
- ★ **Treasurer:** Sandy Dombeck
- ★ **Observatory Director:** Tim Grunewald

#### Milwaukee Country Parks Liason:

Karen Kerans

#### Public Program Planning Committee Chairperson:

Kendra Johncock

#### Froemming Park Observing Helpers:

Joe Carlone  
Sandy Dombeck  
Gene & Chorlotte DuPree  
Adam Machajewski  
Todd Weiler

#### Membership Coordinator: Greg Zuchowski

#### Merchandise Administrator:

Greg Gonia, Jackie Mau

#### Magazine Subscription Coordinator:

Greg Zuchowski

#### Webmaster: Tim Grunewald

#### Newletter Editor: Adam Machajewski

#### Assitant Editor: \*\*Open\*\*

#### Newsletter Proofreader: Donna Grunewald

#### Newsletter Duplicator: Greg Zuchowski

#### Newsletter Mailer: Gene & Charlotte DuPree

#### Newsletter Article Writers:

Tim Grunewald  
Adam Machajewski

(Any members are welcome and encouraged to send in articles for the Newsletter. Edited and published at the discretion of the editor.)

#### Librarian: Adele Roy

#### Historian: Greg Gonia

#### Public Outreach Coordinator: Keran Kerans

#### Public Outreach Volunteers:

(lecturers & observing in the field) Observing helpers and anyone who helped at the meetings.

#### Book/Magazine/Slide Loanout Administrator:

Karen Kerans

#### Telescope Loanout Administrator:

(Observatory Director) Tim Grunewald

#### Auditors: (by appointment of the Board of Directors)

#### Picnic Coorinator: \*\*Open\*\*

#### 5 Year banquet coordinator: \*\*Open\*\*

### From the Board of Directors

Any person interested in any of the position marked to the left as **\*\*Open\*\*** can contact any member of the Board of Directors and they will happily inform you of any duties a position consists of. Don't hesitate to take an active role.

#### Position opening June 2002

The position of Vice President will be open as of June 2002. The bylaws state under section 3 that "The duties of the Vice President shall be to assume the duties of the President in the absence of the President." If you are interested in this position see one of the board members.

#### Telescope Making Supplies

A member of the club, Robert Clark, had put a flyer out at our March regular meeting stating that he has over 30,000 items for telescope making. For more information stop by one of our upcoming regular meetings. (see page 10)



### Astronomy Day 2002

Astronomy Day is a unofficial world wide holiday set up to promote amateur astronomy to everyone. The Wehr Astronomical Society is planning to participate again. Our luck in the past has been rather poor, where we fought with strong winds and overcast conditions. The observatory director has the date set for Sunday, April 21. We will have some presentations, and sunspot viewing from 1:00 to 4:00 p.m. We will be sharing time with the Wehr Nature Center's Earth Day activities. Tim is in need of club members to volunteer for the presentations and to man telescopes. For more information about Astronomy Day check out the Astronomical Leagues website at <http://www.astroleague.org/al/astroday/astroday.html>



**Wehr Astronomical Society**  
9701 W. College Ave.  
Franklin, WI 53132  
Phone: (414) 425-8550

## Corrections

In the cover story of the last issue, "New President," Joe Carlone mentions that he and Dave Beine were the only charter members. Joe received an e-mail soon after the January-March newsletter was sent out from Frank Roldan, a charter member. Mr. Roldan went on to say that Joe missed two others Sandy Winkler, who he believes set up the first meeting and Karen Kerans, who is still an active member. Sorry we missed you. Thank you for the e-mail Mr. Roldan.

-Adam Machajewski



contact our Observatory Director, Tim Grunewald, if you are interested. (Tim needs confirmations, so they know how many people we have showing up with telescopes).



## More New Merchandise

Beside our club's buttons, coffee cups, and the new line of T-shirts, polo shirts, and sweatshirts, we now have new embroidered caps for sale. They come in two colors of fabric, each embroidered with "WEHR / Astronomical / Society" (3 lines) across the front. They are being offered **at cost** for only \$12.25, tax included. Check out all the merchandise at our monthly Wehr Nature Center meetings, or contact Greg Gonia directly if you can't make it to the meetings.

-Greg Gonia

## Education Request

We have been requested to attend a solar system exposition at Bruce Guadalupe Community School, 1028 South 9th Street, Milwaukee, WI 53204. The date and time is May 15th from 5:30 to 7:30 in the evening. They are expecting a minimum of 150 people! The sun sets at 8:08, so this means we will be doing solar observing and possibly the bright planets if you have the capability to pick them out in the daytime. Please

## Star-Party Etiquette

Star parties are meant to be enjoyed by everyone. Whether you're a star-party veteran or neophyte, Winter Star Party regular Tom Clark offers the following reminders:

- ★ Bring your own instrument, if you can.
- ★ Come prepared for down pours, wind, dust, high humidity, bugs, heat, cold.
- ★ Follow all star-party rules and regulations.
- ★ No driving or white lights after dusk.
- ★ No flash photography at night.
- ★ Before using any telescope, ask the owner first.
- ★ Smokers should be considerate of nonsmokers.
- ★ If you listen to music, use headphones.
- ★ Avoid loud talking or making noises, especially in the morning, so you don't disturb sleeping astronomers.
- ★ Pick up your trash.
- ★ Most important, relax, and have fun!

## Upcoming Starparties

★ <b>NCRA</b> <a href="http://www.wisc.edu/ncra/">www.wisc.edu/ncra/</a>	May 3-4
★ <b>Marshfest</b> <a href="http://www.wehroastro.org">www.wehroastro.org</a>	May 10-12
★ <b>Wisconsin Observers Weekend</b> <a href="http://www.new-star.org/wow.html">www.new-star.org/wow.html</a>	June 7-9
★ <b>Nebraska Starparty</b> <a href="http://www.nebraskastarparty.org/">www.nebraskastarparty.org/</a>	August 4-9
★ <b>Northwoods Starparty</b> <a href="http://www.cvastro.org/Default.htm">www.cvastro.org/Default.htm</a>	August 9-11
★ <b>Astrofest</b> <a href="http://www.chicagoastro.org/aindex.html">www.chicagoastro.org/aindex.html</a>	September 12-15

Note: Some starparties have advanced registration deadlines, check the web sites for these dates.

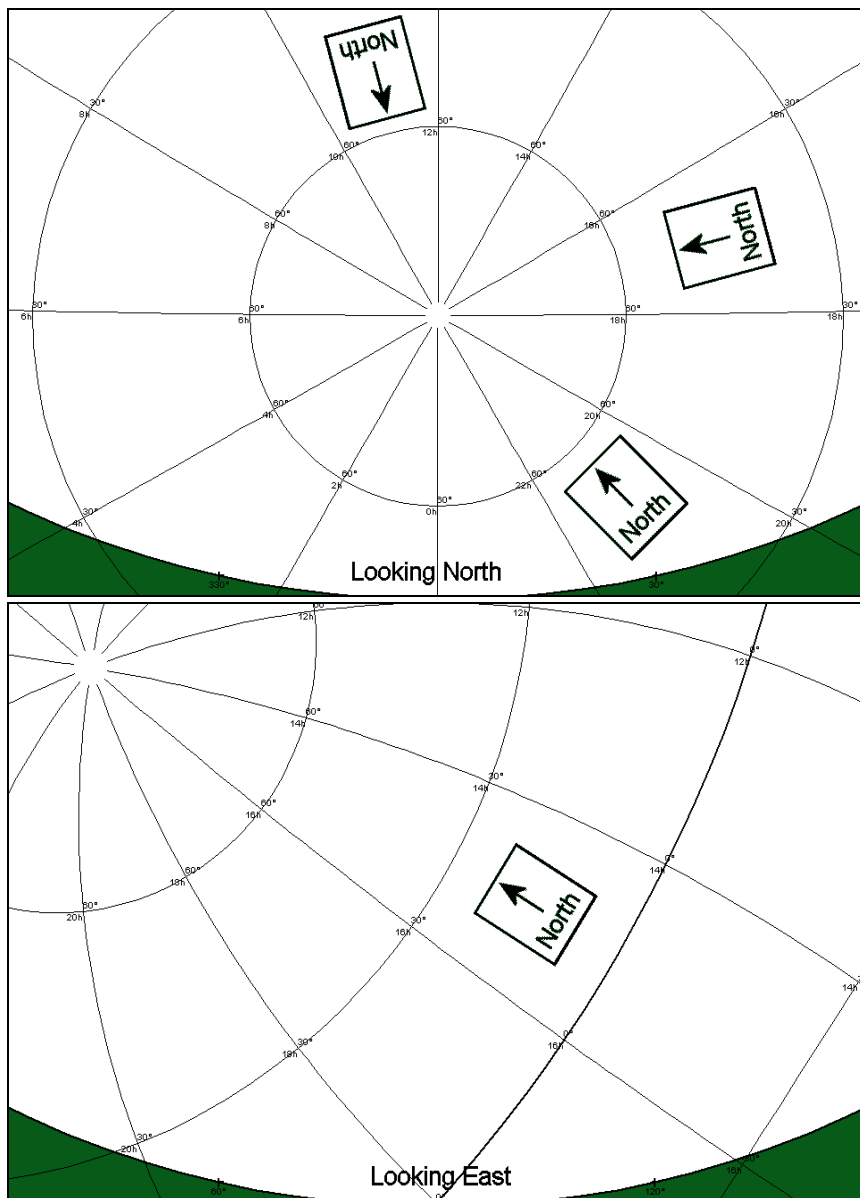
## Starhopping 101: Aligning your map

One of the most frustrating experiences for a newcomer in astronomy is lining up your star map to the sky. When you start out, you are really not familiar with the sky and may not be able to pick out a constellation and align your map to it.

I'll start with a simple planisphere. These are the type of maps that you see in *Astronomy* or *Sky & Telescope* magazines or [www.skymaps.com](http://www.skymaps.com) that give you a view of the entire sky at a specific time. If you look at the map, you will see the four cardinal points – North, South, East and West. One of the first things that you will notice is that east and west “appear” to be backwards. Actually, the directions are correct, because instead of holding the map down, you are supposed to hold it up at the sky. If you do this, you will notice that the directions are correct.

Now, the next confusing item is that you put the direction that you are looking at the bottom. For example, in the astronomy magazines the map is facing south if you are holding the magazine in its normal orientation. If you flip the magazine upside down, then you are looking north. You only look at the lower half of the map for the direction that you are looking. The center of the map is the part of the sky if you are looking straight up, but make sure to orient the map to the direction that you are facing.

Next, I will discuss the star atlas. These are more detailed maps of the sky and don't show all of it at once. Depending on which star atlas you get, you may need a planisphere to orient yourself first. Some atlases, such as the *Cambridge Star Atlas*, come with monthly planisphere style maps. Once you know which constellation

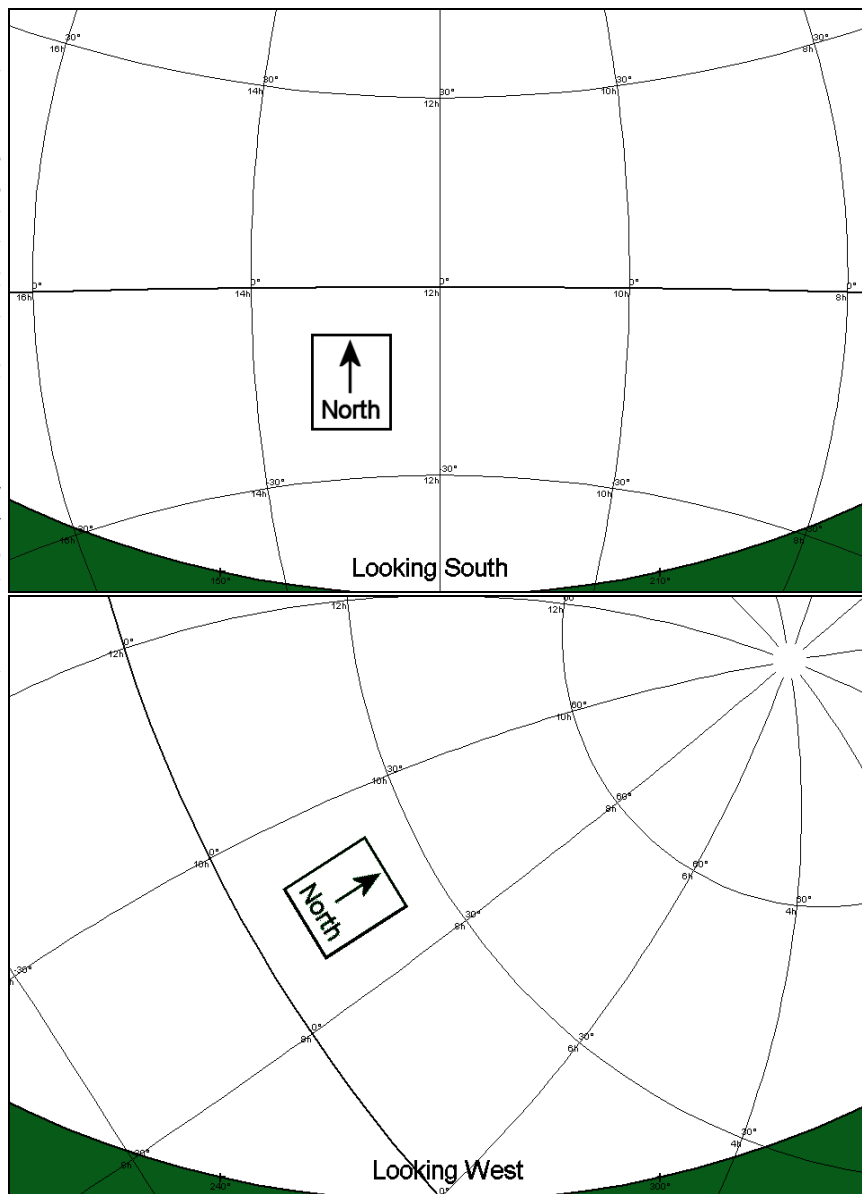


you are looking at, you can consult the star atlas to get a more detailed map.

Star atlases have their pages printed so that north is up. This may sound like it makes it easy to align your map, but it may surprise you that north is not always up in the sky. Take a look at the diagrams and you will see that north is only up if you are looking directly south or are looking directly north and are below Polaris, the North Star. If we are looking east or west, we have to angle our star atlas. The easy rule of thumb to align your star atlas properly is to point the north direction of the atlas toward Polaris and your map will be properly aligned.



-- Tim Grunewald



### Observer's Corner: M104 – The Sombrero Galaxy

**T**his quarter we are going to look at an interesting galaxy that is near the southern end of the Virgo/Corvus border – M104, the Sombrero Galaxy. This galaxy is seen almost edge on, with its equatorial plane tilted at just 6 degrees. It is a magnitude 8 galaxy, which is fairly bright as galaxies go, and can be seen in small telescopes, but you may need to use your averted

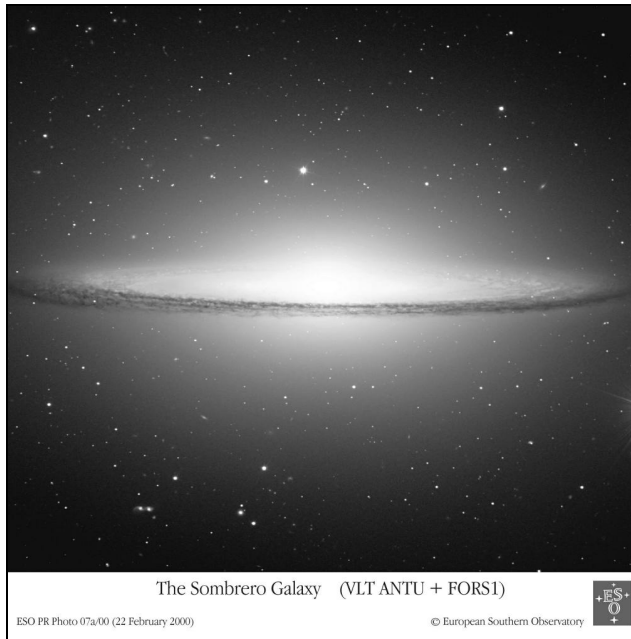
vision. Its size is about 9 by 4 arcminutes, so visually it is fairly small, even though it is about the same size as our own galaxy. It is about 50 million light years away from us.

We start in the constellation Corvus, which looks like a quadrilateral (a funny shaped rectangle) to the south. Start at its upper left side. In the finderscope, you will see three bright stars (the two brighter stars are  $\eta$  Corvi and  $\delta$  Corvi). The method here works best when Corvus is facing close to direct south. If we put these three stars

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in the upper center of our finderscope, assuming a standard inverted image, we should see a triangle of stars in the lower right quadrant. Follow the triangle to the lower right, but not too far, to another star of the same brightness. If you look closely, you may notice that this star is two stars or maybe even three. This group of stars has been called the Stargate asterism. Take a look at it through the eyepiece and you will see a pattern of stars (a triangle within a triangle) that resembles the stargate from *Buck Rogers in the 25<sup>th</sup> Century* TV show. Keep going in the same direction as before and you will see another fainter star at about the same distance from the Stargate asterism as it was from the triangle.

Center the finderscope on that second star from the triangle.



The Sombrero Galaxy (VLT ANTU + FORS1)

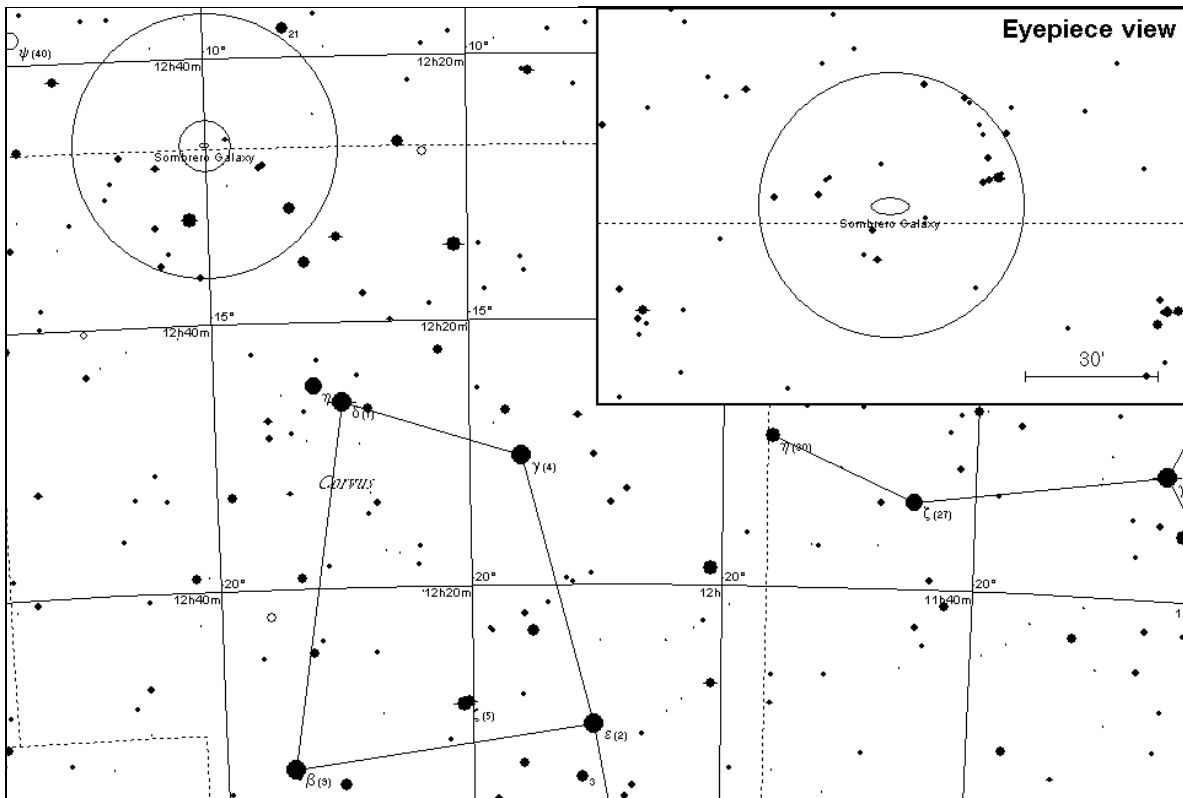
ESO PR Photo 07a/00 (22 February 2000)

© European Southern Observatory



In the eyepiece, you should see a small asterism that looks like the constellation Scorpius. Put that asterism so that it curves near the edge of your eyepiece's field of view. M104 should be in the center of your field of view. If you have problems seeing it, follow the line of three bright stars at the head of the Scorpius asterism. Just before you get to a small right triangle of stars, you should see a small fuzzy patch of light. If you have dark skies or a large telescope, try looking for the dust band, which is the

brim of the sombrero hat.





# SCHEDULED ACTIVITIES

FOR

## The Wehr Astronomical Society

<http://www.wehrastro.org>

### Regular Meetings

(Free and Open to the Public)



**Tuesday, April 9, 2002, at 7:00 p.m.**

At the Wehr Nature Center

Jay Wichmann will give a talk on Meteors and his recent visit to Winslow Arizona



**Tuesday, May 14, 2002, at 7:00 p.m.**

At the Wehr Nature Center

Karen Kerans and Kendra Johncock will do dueling portable planetariums. Each give different programs that highlight Native American Mythology, African Mythology, and current the evening skies.



**Tuesday, June 11, 2002, at 7:00 p.m.**

At the Wehr Nature Center

Kevin Cole from Triton College will give a talk on the Geology of the Planets.

### Observatory Activities

(Free and Open to the Public)

<b>April 5</b>	<b>7:30</b>	Deep sky observing. Locate Leo the Lion. See Mars, Jupiter (GRS transit 9:35pm) and Saturn.
<b>April 19</b>	<b>9:00</b>	Observing the moon and deep sky objects. See a 1st quarter moon and the brighter deep sky objects. See Jupiter and Saturn.
<b>May 3</b>	<b>8:00*</b>	Deep sky observing. See a string of planets: Mercury, Venus, Mars, Jupiter and Saturn.
<b>May 17</b>	<b>9:30*</b>	Observing the moon and deep sky objects. See a crescent moon and the brighter deep sky objects. See Jupiter.
<b>June 7</b>	<b>9:30*</b>	Deep sky observing. Virgo and the cluster of galaxies.
<b>June 14</b>	<b>9:30*</b>	Observing the moon and deep sky objects. See a crescent moon and the brighter deep sky objects.

Note: All observatory dates fall on a Friday, and are held at Froemming Park.  
GRS transit: When Jupiter's Great Red Spot is in the middle of the planet.

\* Come early (after 7:00) to see the sunspots.