

Newsletter of the Baton Rouge Astronomical Society

February 2010

**The Next Meeting of the
Baton Rouge Astronomical Society
will be February 8, 2010
at 7 PM.**

We will be meeting at the Highland Road Observatory. The meeting starts at 7 PM. Please arrive a few minutes earlier.

PROGRAM NOTES: ***FOCUSING ON ASTROPHOTOGRAPHY***

This month's meeting is going to focus on Astrophotography. We have a wonderful speaker, Mr. Lon Shelton, who is going to be demonstrating his equipment and software he uses in his own pursuits of astrophotography. Mr. Shelton lives in the Lafayette area and has been into astrophotography for a number of years. He used to teach an "Astronomy for Kids" class at the local library and has a roll off roof observatory in his back yard which he regularly opens up to the neighborhood for some viewing on clear nights. Mr. Shelton is also a contributing photographer for the St. George Observatory in Shriever, LA.

I have posted more information on Lon and the software he will be demonstrating on our BRAS Forum. (www.braastro.org and click on Forum.) This should be a great evening. Fun and informative for anyone interested in astrophotography whether you are a beginner (like me!) or more advanced. And, as always, we will keep our fingers crossed for a clear sky so we can do a little viewing afterwards. We have to get a clear night one of these Mondays!

Thanks, Ben VP



The Flaming Star Nebula.
Lon Shelton

Let us do our best to welcome Lon. After his talk we will have a reception for him, coffee and some finger food. If you would like to bring something to add to the table, please feel free to do so! Remember - we will have several nice items for our monthly raffle. Keep looking up - Craig Editor

HRPO FRIDAY NIGHT LECTURE SERIES

***5 FEBRUARY "NASA Spinoff Technology"**

HRPO Center Supervisor and BRAS member Tom Northrop gives the audience an overview of the fascinating objects and technology that developed as a direct result of NASA's exploration of space. Some of these devices and materials might even be in your home!

***12 FEBRUARY: "The Constellation Orion:**

Bellatrix with its faint nebulosity. Bluish-white Rigel. Orange-red giant Betelgeuse. And of course, the Trapezium set within the luxurious Great Nebula. Can any other constellation compare? After this presentation from Baton Rouge Astronomical Society member Marvin E. Owen on this amazing patch of winter sky, audience members can make up their own minds!

***19 FEBRUARY: "Radio Astronomy"**

In the early 1930s, Karl Jansky discovered with a radio antenna a "static of unknown origin". After careful study he came to the stunning conclusion that this radio source lay outside the Earth. Radio astronomy was born! Join Greg Stacy of LSU's Department of Physics and Astronomy as he illustrates the excitement and usefulness of "viewing" the universe in radio waves.

***26 FEBRUARY: "Globe at Night 2010"**

It's for students. It's for families. It's for anyone interested in reclaiming the beauty of the night sky in his or her hometown. We'll outline for you exactly how to take part in this amazing campaign which runs from 3 March to 16 March.

LSU PHYSICS COLLOQUIA

All in Nicholson 109 at 3:40pm

18 February: {TBA}

Jayanth Banaver, Pennsylvania State University

25 February:

"Quantum Computers and Decoherence"

Daniel Lidar, University of Southern California

Jan 28, 2010

subject - U Scorpii Erupts

Brad,

On behalf of BRAS, we are proud to have one of our members make such an outstanding predication re: U Scorpii as you did and then to have it come true. In addition, we are proud that one our own from Baton Rouge has again made news in a national publication (Sky & Telescope).

Congratulations from all of BRAS for a job well done.

Now for the hard part, when will you want to give a talk to a monthly BRAS meeting on this achievement and on other thinks in your quiver?

MEO

Marvin E Owen, President

Thar She Blows! U Scorpii Erupts As Predicted

January 28, 2010

One year ago, Bradley Schaefer predicted that the recurrent nova U Scorpii was due to explode again. Now it's just happened.

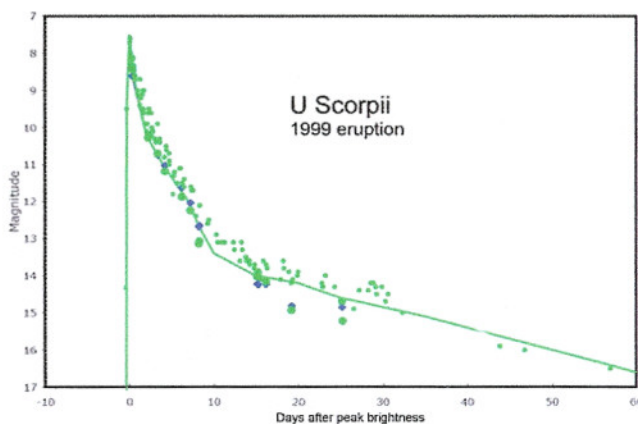
On Thursday morning, January 28th, amateur variable-star observers Barbara Harris and Shawn Dvorak in Florida notified the American Association of Variable Star Observers (AAVSO) that U Sco had leapt to about magnitude 8.0. Less than 24 hours later it was still in its quiescent state at magnitude 18.8, where it has been since its last eruption in 1999.

Schaefer made his prediction based on a thorough search through old photographic sky-patrol plates since 1900. He found three eruptions that had not been known previously and felt confident that he had a good handle on them all. They come on an average of every 10 ± 2 years. So another seemed due.

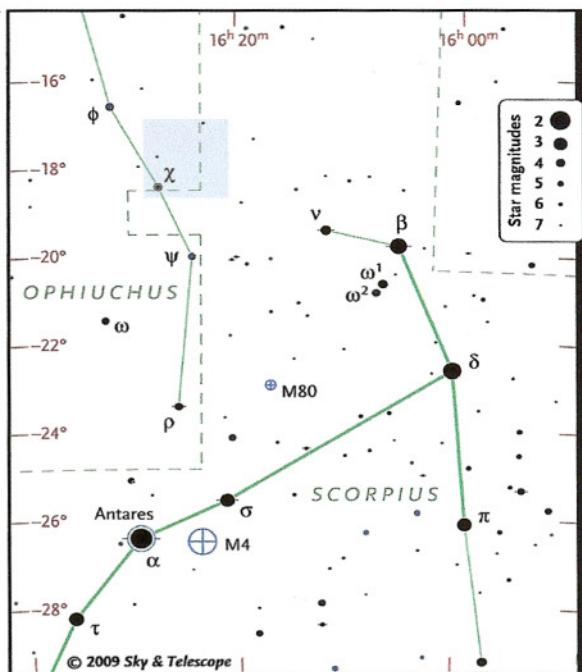
A lot of astronomers, professional and amateur, have been waiting. Observatory schedules are being preempted, and astronomy satellites are being repointed. Schaefer has been hoping that with his advance warning, this will be the more thoroughly studied nova explosion ever.

Where to look

U Sco is located about 9° north of Antares, currently up in the southeastern sky before the first light of dawn. The farther south you are the better, but even from as far north as latitude 45° U Sco is at least 20° above your horizon before morning twilight begins. U Sco both rises and fades fast. In previous outbursts, it has dropped by 2 magnitude in the first day and a half. (S&T)



At its last eruption in 1999, U Sco briefly reached 8th magnitude and faded rapidly within the following days. Green dots are visual magnitudes, blue dots are blue magnitudes. Bradley Schaefer



MESSAGE FROM HRPO

The Mars' Closest Approach event was an enormous success, with over 375 patrons attending. The last close approach event drew about 85! HRPO gathered \$85 in donations, which was really nice. The puzzle which took kids around the main floor seemed to be a hit. *All* the refreshments were consumed. Thanks to Briar Richard for operating for three hours upstairs; Forrest and Diane Smith, Trevor McGuire, Mike Carambat, Marvin Owen and Ben Toman. Thanks to NASA Docents Rachel, Brad and Jessica.

CALL FOR VOLUNTEERS

solar Viewing: Saturday, 13 February from 12pm to 1pm

One volunteer needed.

Christopher

MINUTES FOR 1-11-10

Started at 7:05 pm

Old Business

Monitor (HD) search has been narrowed to size/type.

Someone mentioned idea to Award "Light Pollution Fighting Certificate" to Businesses around town is in works.

We were reminded that the outing to Rockafeller W.R. is to be next weekend (1-16,17-09)

Treasury Summary

\$2546.19 Checking 131.68 on hand 2710.06 Savings Total 4387.96

Current membership 73

Program

Ben intro'ed Chris to start NASA's revue of "The Year of the Astronomy". Chris was cut off by a tech glitch in computer.

Changed program to "Christmas Show & Tell"

1st up - GPS Electric SkyMap (Scout-Celestron)

2nd – Craig's 3D SkyPhoto Book

3rd- Merrell's Barlow - nice

4th- John's Iphone App from SpaceWeather

5th- Ben 2 nice books Galilao's Daughter, Apollo 13 & a Celestron

"FirstScope"

Chris fixed the glitch. We presented "The Year of the Astronomy"

New Business

Our Information Officer is working on a News release.

We were asked for program suggestions/speakers. Raffle.

Close 8:40pm

Minutes for Jan-10

Dave Thomas

Doctor's Office Hit By Meteorite

By JOHN HENREHAN/myfoxdc

When Lawrence Reese was cleaning up his sub shop in Lorton, Virginia, late Monday afternoon, he heard a tremendous impact outside.

"Loud. Loud enough [that] you could hear it, maybe, a block or two away," recalls Reese. "I'm surprised it didn't break our glass. That's how loud it was."

Something had come hurtling out of the sky, and crashed through the roof of a nearby doctor's office, landing in an empty examination room.

"I thought something fell in Dr. Gallini's office," explained his partner, Dr. Frank Ciampi. "I thought a bookshelf fell on him, so I ran out and saw that he was okay. And then I looked to the left and saw the debris in the hallway."

The debris was smoldering and metallic. The two physicians puzzled over the items. Whatever had come through the roof had broken into several pieces. The two doctors speculated that part of an airliner had come off and fallen through their roof. A nearly circular hole was punched through the building's roof.

An acquaintance suggested the possibility of a meteorite, so the debris was sent to the Smithsonian's Natural History Museum in nearby Washington, D.C.

"It's definitely a meteorite," concluded Linda Welzenbach, who oversees the museum's collection of natural space objects. "It has a black fusion crust which tells us that it's passed through the atmosphere."

Most meteorites are small -- about the size of a pea. The one that landed in Lorton was bigger than a human fist, before it broke into pieces inside the doctors' office.



The Evening Sky Map

FREE* EACH MONTH FOR YOU TO EXPLORE, LEARN & ENJOY THE NIGHT SKY

Sky Calendar – February 2010

- 4 **Moon near Spica** (morning sky) at 5h UT.
- 4 **Mars 3.2° NNE of Beehive cluster (M44)** at 20h UT (midnight sky).
A nice sight in binoculars or a telescope. Mag. -1.2.
- 5 **Last Quarter Moon** at 23:48 UT.
- 7 **Moon near Antares** (morning sky) at 21h UT.
- 8 **Alpha Centaurids meteor shower** peaks at 5h UT.
Favorable year for a sometimes major southern shower.
About 6 meteors/hour but can peak at up to 25/hour.
Produces bright, fast meteors. Active Jan 28 to Feb 21.
Best observed in the pre-dawn hours.
- 13 **Moon at apogee** (farthest from Earth) at 2h UT
(distance 406,540 km; angular size 29.4').
- 14 **New Moon** at 2:51 UT. Start of lunation 1078.
- 14 **Venus, Jupiter and Moon** within a 5° diameter circle at 22h UT (Caution: only 9° East of Sun).
- 17 **Venus 0.54° SSE of Jupiter** at 2h UT (Caution: only 9° East of Sun). Mags. -3.9 and -2.0.
- 21 **Moon near the Pleiades** (evening sky) at 21h UT.
- 22 **First Quarter Moon** at 0:42 UT.
- 25 **Moon near Pollux** (evening sky) at 14h UT.
- 26 **Moon near Mars** (evening sky) at 2h UT. Mag. -0.7.
- 26 **Moon near Beehive cluster (M44)** (evening sky) at 13h UT.
- 27 **Moon at perigee** (closest to Earth) at 22h UT
(357,829 km; 33.4').
- 28 **Moon near Regulus** (midnight sky) at 0h UT.
- 28 **Jupiter at conjunction** with the Sun at 11h UT. Passes into the morning sky (not visible).
- 28 **Full Moon** at 16:38 UT.

The Zodiacal Light is caused by sunlight reflected off meteoric dust in the plane of the solar system. Choose a clear, moonless night, about 1–2 hours after sunset, and look for a large triangular-shaped glow extending up from the horizon (along the ecliptic). The best months to view the Zodiacal Light is when the ecliptic is almost vertical at the horizon: March and April (evening) and October–November (morning); times reversed for the southern hemisphere.

More sky events and links at <http://Skymaps.com/skycalendar/>

All times in Universal Time (UT). (USA Eastern Standard Time = UT - 5 hours.)



SAVE ON RECOMMENDED PRODUCTS • <http://Skymaps.com/store>

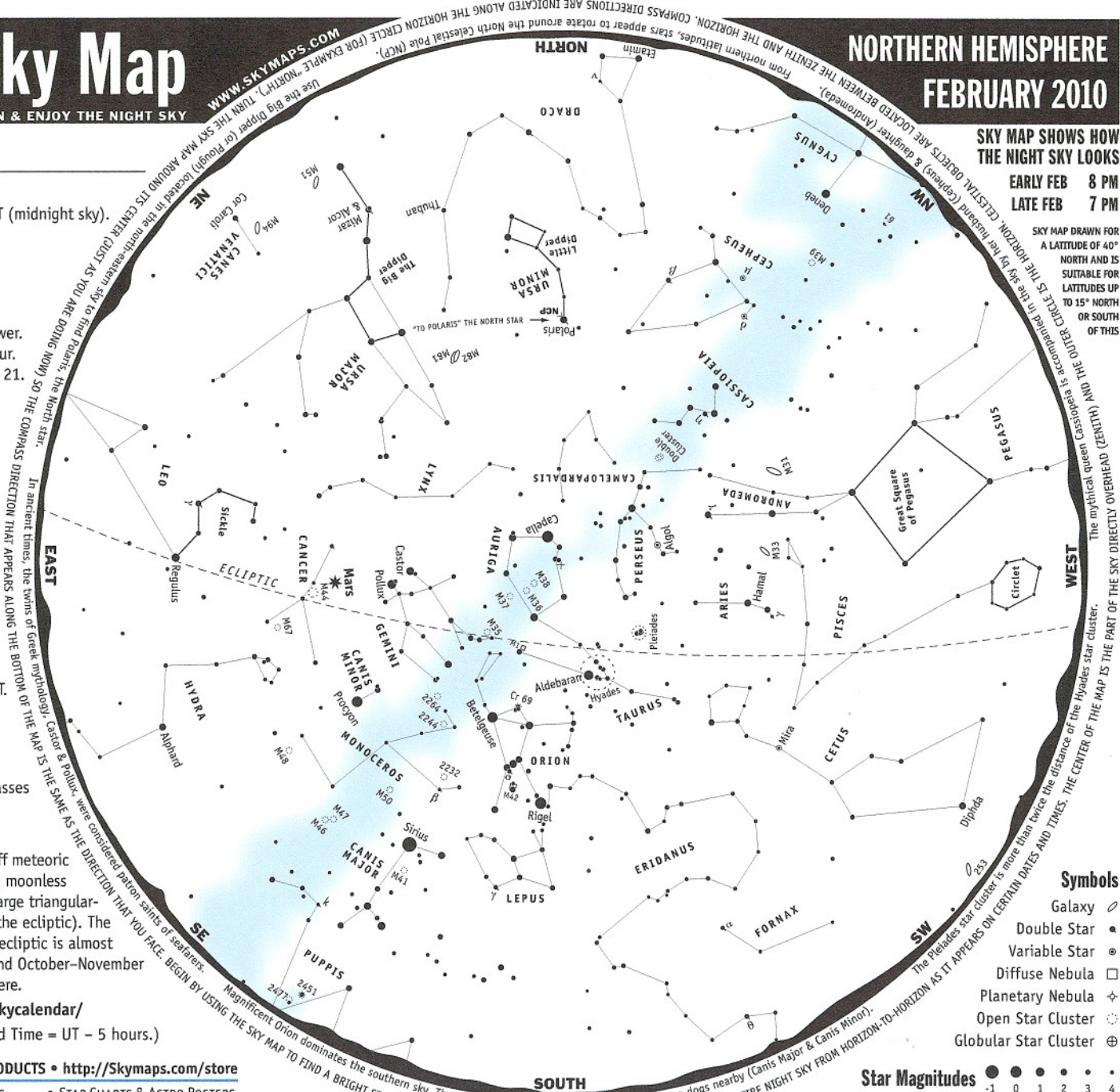
- STAR ATLASES & PLANISPHERES
 - STAR CHARTS & ASTRO POSTERS
 - BOOKS FOR SKY WATCHERS
 - TELESCOPES & BINOCULARS
- Help support the production and free distribution of The Evening Sky Map

NORTHERN HEMISPHERE
FEBRUARY 2010

SKY MAP SHOWS HOW THE NIGHT SKY LOOKS

EARLY FEB 8 PM
LATE FEB 7 PM

SKY MAP DRAWN FOR A LATITUDE OF 40° NORTH AND IS SUITABLE FOR LATITUDES UP TO 15° NORTH OR SOUTH OF THIS



Symbols

- Galaxy ☾
- Double Star ●
- Variable Star ⊙
- Diffuse Nebula ☐
- Planetary Nebula ◇
- Open Star Cluster ○
- Globular Star Cluster ⊕

Star Magnitudes -1 0 1 2 3 4

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INSTRUCTIONS: THE SKY MAP SHOWS THE ENTIRE NIGHT SKY FROM HORIZON-TO-HORIZON AS IT APPEARS ON CERTAIN DATES AND TIMES. THE CENTER OF THE MAP IS THE PART OF THE SKY DIRECTLY OVERHEAD (ZENITH) AND THE OUTER CIRCLE IS THE HORIZON. COMPASS DIRECTIONS ARE LOCATED BETWEEN THE ZENITH AND THE HORIZON. STARS APPEAR TO ROTATE AROUND THE NORTH CELESTIAL POLE (NCP). FROM NORTHERN LATITUDES, STARS APPEAR TO ROTATE AROUND THE HORIZON CIRCLE (FOR EXAMPLE, NORTH). TURN THE SKY MAP AROUND ITS CENTER (JUST AS YOU ARE DOING NOW) SO THE COMPASS DIRECTION THAT APPEARS ALONG THE BOTTOM OF THE MAP IS THE SAME AS THE DIRECTION THAT YOU FACE. BEGIN BY USING THE SKY MAP TO FIND A BRIGHT STAR PATTERN IN THE SKY.

BATON ROUGE ASTRONOMICAL SOCIETY

You can pay your Membership Dues at our next Meeting or
Send your Dues to:

*Baton Rouge Astronomical Society, inc.
c/o Bob Sinitiere, Treasure,
14558 Cottinham Ct.,
Baton Rouge, LA 70817-3543*

If you have questions about dues or receiving your News Letter call Bob
at 755-2079

◆ Regular Membership \$20.00 \$ _____

◆ Each Additional Family Membership \$ 5.00 \$ _____

◆ Student Membership \$10.00 \$ _____
(through age 17)

◆ Donation* toward club building fund or
(_____) \$ _____
Specify

TOTAL ENCLOSED \$ _____

Date _____

Name _____

Mailling Address _____

Zip _____

Phone

(H) _____

(C) _____

(W) _____

E-Mail _____

How do you wish to recieve the Society's Newsletter *Night Visions*-

_____ By Mail or by _____ E-Mail

(Please Check one)

PLEASE CHECK THAT YOUR ADDRESS AND E-MAIL ARE CURRENT AND CURRENT.

*Meetings are usually held the second Monday of each month at 7pm, except for June and July.
Most meetings are held at the Highland Road Observatory.*

*All donations to the Baton Rouge Astronomical Society, Inc. are tax-deductible under IRS Section 501(c)(3) & (a)(1) and also 170(b)(1)(A)(vi).

The Baton Rouge Astronomical Society, Inc. is a nonprofit corporation chartered under the laws of the State of Louisiana.