

February is an interesting month for a lot of reasons. For those of us in the northern hemisphere it usually marks the coldest month on average for the whole year. We shiver through the month and can't wait for warmer weather. The cycle of the seasons reminds us that while it is cold outside now, warmer times will come. These changes are brought about by the Earth moving around the Sun each year as it always has and creates an ever-changing backdrop for the denizens of the Earth.

February is also has Valentine's Day, which is a celebration of love, both for family and more commonly romantic love. The attraction of two people for one another has always held a special place in most cultures. We celebrate the idea of people being together forever, while knowing that given the fleeting time we are on Earth this is not really true. It is the attempt and the belief that makes it special. The cycle of life will eventually separate all "lovers" making their time together even more precious.

I am reminded that when we look up in the sky, more than half of all stars are binary stars, which consist of two stars held together by mutual attraction. The stars evolve and die and while doing so interact in complex and fascinating ways. Like human couples, most times one star outlasts the other. But this is not tragic. Like humans in love, each star is affected by the other and neither is the same as it would be if the other were not there. It is the interaction not the outcome that has meaning to us.

Mel Blake

Director, UNA Planetarium and Observatory

Image of the Month



This image was taken by the Galaxy Evolution Explorer (GALEX) mission of the Ghost of Jupiter nebula. GALEX observes in the ultraviolet region which is radiation slightly more energetic than the most violet light you can see. UV light from the Sun is responsible for sunburns. UV light from space tends to come from hot objects and so is good at finding out information about stars hotter than the Sun. This nebula is a planetary nebula which occurs when an old star starts ejecting its gas into interstellar space. The core of the star becomes a dense white dwarf about the size of the Earth, but more massive than the Sun. The hot core emits lots of UV light that causes the gas to glow. The Ghost of Jupiter nebula is about 1500 light years away in the constellation Hydra. **Image courtesy NASA.**

### Observing Highlights

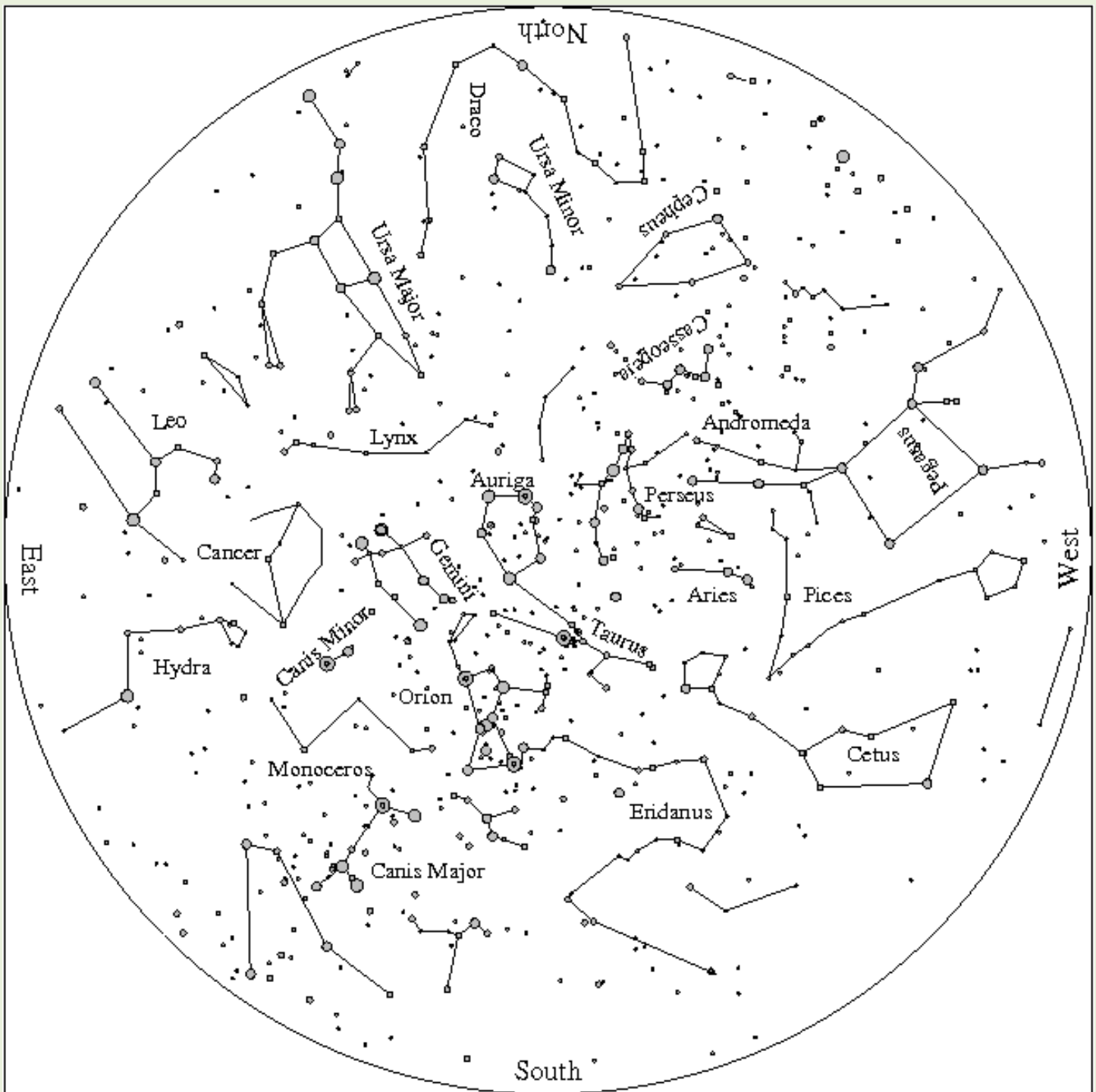
Feb 24 the sparse Delta Leonid meteor shower peaks. Look for two or three extra meteors per hour early in the morning.

### Calendar for February, 2011

-  **Feb 1st ..... Planetarium Public Night**
-  **Feb 4th..... Planetarium Public Night**
-  **Feb 8th..... Planetarium Public Night**
-  **Feb. 11th-19th..... Laser Shows** 
-  **Feb. 22nd.... Planetarium Public Night**
-  **Feb. 25th.....Planetarium Public Night**
-  **Feb 26th..... Planetarium Afternoon Program**

Astro Quote: "Love is the condition where the happiness of another is essential to your own." Robert Heinlein, "Stranger in a Strange Land".

## The February 2011 Sky for North Alabama



**How to use this Chart:** The sky is shown for 9:00PM, February 15<sup>th</sup> for Florence, Alabama. It will appear this way one hour earlier for each week difference in time. The stars' brightness's are represented by different sized dots. The faintest stars you can see are the small dots; the brightest ones are large dots. Hold the chart with the direction you are facing down. So if you are facing north, hold the chart with north down. The circle represents the horizon and the center of the chart the point directly over your head. So an object half-way between the center and edge of the chart is half-way up in the sky. This chart was prepared using the SkyNow software of R. M. Blake. This chart may be reproduced for non-commercial purposes with the following acknowledgement included: Courtesy UNA Planetarium and Observatory. <http://www.una.edu/planetarium/>.

# UNA Planetarium News and Programs

## Saturday Planetarium Programs

UNA Planetarium and Observatory gets frequent requests for weekend programs. We will experiment with having a weekend program one weekend each month at 1PM. The programs will include a "Sky Tonight" planetarium program and weather permitting, solar observing through our new solar telescope. In the case of poor weather the solar observing will be replaced with a digital planetarium show.



## Spring Laser Shows

Due to the positive response from our fall laser shows, UNA Planetarium is bringing the laser shows back for Valentine's Day. Running from February 11<sup>th</sup> through the 19<sup>th</sup> we will be doing daily laser shows. This time we will mix it up a bit and provide family shows about Orion, and the story of Perseus and Andromeda. Perseus rescues Andromeda from the sea monster and they live happily ever after. We will run three shows each night featuring the music of the Beatles and Pink Floyd. The Beatles show runs about 30 minutes, while the Pink Floyd show runs about 45 minutes so the music shows are about 1.25 hours in length. Shows are \$7/person, UNA students and children under 15 years of age are \$5. The show schedule is given below. Tickets may be purchased in advance at the planetarium.

## Music Shows

**February 11<sup>th</sup> to 19<sup>th</sup>**, 7:00PM, 8:30PM, 10:00PM Laser Beatles, Pink Floyd, Dark Side of the Moon

💖 **A great Valentine's Day date** 💖

## Family Programs

**February 12<sup>th</sup> and 13<sup>th</sup>**, 1:30PM, 3:00PM, Perseus and Andromeda, the Story of Orion

**February 19<sup>th</sup>**, 1:30PM, 3PM, Perseus and Andromeda, the Story of Orion



## Shoals Astronomy Club Members Recognized by NASA

The Shoals Astronomy Club (SAC) meets at the UNA planetarium the last Thursday of each month. It is the local quad-cities amateur astronomy club and always welcomes new members. The club is very active in observing and public education. The SAC is the local affiliate for the NASA Night Sky Network, a national organization that collaborates with NASA to promote astronomy and space research. Due to their efforts in 2010, the Night Sky Network sent six club members certificates of appreciation for their efforts in public education. The citation is in appreciation "For sharing the wonders of the night sky and the inspiration of NASA missions with students, families and your community". Congratulations to Matthew Sherrill, Scott Aldridge, David Davis, Jon Cesar and Roy Long.



From left to right, Scott Aldridge, Dave Dais and Jon Cesar receive certificates of appreciation from SAC VP Matthew Sherrill (at right in each image).



At left Roy Long receives his certificate from Matthew Sherrill, while at right Matthew Sherrill receives his certificate from SAC President Mel Blake, who also received a certificate. Photos by Mel Blake and Scott Aldridge.



Physics and Earth Science Department undergraduate Daniel Johnson, attended the American Astronomical Society meeting in Seattle Washington in January. He presented summer research on Rotating Radio Astronomical Transients done under the supervision of Dr Mel Blake. Here Daniel stands in front of his poster paper. Daniel's travel to the meeting was supported by the Student Activity Fund of UNA. Photo by Mel Blake.

