

UNA Planetarium Newsletter

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2011

The past month has been a busy one for those who study planets. NASA's Kepler mission is following up on nearly a thousand planet candidates that have been found so far by its satellite. One planet is bizarre and appears to be almost as hard as diamonds. Another is orbiting two stars simultaneously in a binary system. Most people find out about astronomy events from the news and internet websites. People read about these things and often ask me questions at our public your events.

Planetarium public nights are often the public's only chance to ask questions about space and astronomy first hand. It is not often most people get to meet a scientist, let alone ask them questions about things which they are curious about. Scientists enjoy talking about their science and tend to be more passionate about it than even the most rabid sports fan. Everyone has a great time at these encounters and they are important in completing the cycle of public funding for science. If people are paying for research then they have a right to be told the results.

This month will be a busy one for us at UNA Planetarium, with Observe the Moon Night, Earth Science Day and a steady public tour schedule. We also have school visits and programs for campus groups and Girl Scouts. We hope that these programs will bring visitors with lots of questions. The essence of science is to inquire and seek answers. We hope you will join use and tell us what you are wondering about. Whether it is why we have phases of the moon or about some strange diamond planet, we look forward to your questions.

Image of the Month



This star forming region was imaged by NASA's Spitzer Space telescope and the Chandra X-ray observatory. Spitzer observes the universe in infrared light, which is less energetic than visible light that you and I can see. Infrared light essentially measures the heat from objects, just as a night vision camera can pick up the heat from a person in the dark. X-rays are used to study the hottest stars and gas and appears purple in the image. This image is of the new star cluster NGC281 and is false color because we cannot see X-rays and infrared light with our eyes. The young stars have cleared away the gas cloud from which they have formed. NGC281 is 9500 light years away in the constellation of Cassiopeia. **Image courtesy NASA.**

Astro Quote: "Man must rise above the Earth—to the top of the atmosphere and beyond—for only thus will he fully understand the world in which he lives." Socrates

Observing Highlights

Some experts are predicting a possible meteor storm from the Draconid meteor shower on the night of Oct 7 and 8th.

Look for Jupiter in the southeast sky at around 8 - 9PM this month. It will be the very bright object blazing away.

Events for Oct 2011

Oct 4th. Planetarium public Night

Oct 7. Planetarium public night

Oct 7/8. Draconic Meteor Storm?

Oct 8th. Observe the Moon Night

Oct 11. Planetarium public night

Oct 14. Planetarium public Night

Oct 18 . Planetarium public night

Oct 21 . Planetarium public night

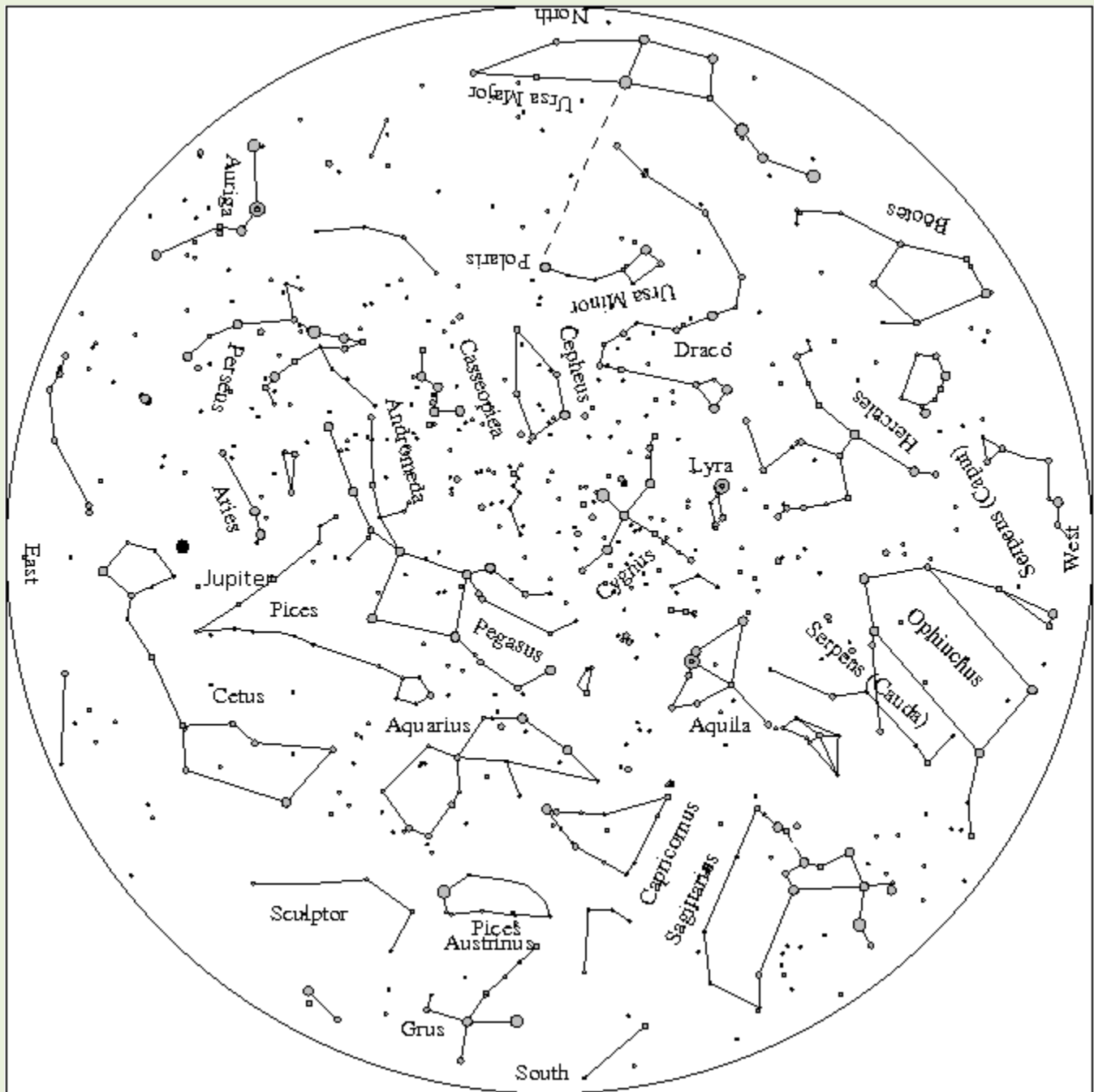
Oct 22th. Earth Science Day.

Oct 25th. Planetarium public night

Oct 28th. Planetarium public night

October tours start at 7:30PM on Tuesday and Friday evenings. Tours consist of a "Stars Tonight" constellation discussion and a multimedia presentation. If weather allows we then observe using the UNA observatory's telescope. Tours are intended for a general audience. \$3/person.

The October 2011 Sky for North Alabama



How to use this Chart: The sky is shown for 8:00PM, October 15th 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/>.

October Events

International Observe the Moon Night 2011

UNA Planetarium and Observatory will be participating in International Observe the Moon Night on October 8th. Groups from around the world will all be attempting to allow the public to see the lunar surface which is one of the most impressive sights in astronomy. Even a small telescope will reveal the mountains and craters on the Moon, rayed craters and the shadows cast by mountains on the surface. UNA Planetarium invites the public to join us in learning about impact craters. We will start at 7PM with an interactive program about the Earth's impact craters and an opportunity to make your own craters. This will be followed by observing through the UNA telescope as well as those of members of the Shoals astronomy Club and student volunteers. The public is invited to bring their own telescopes for a star party. If you have a telescope and have never found anything with it because you didn't know how, this is your chance!



Draconid Meteors

Some meteor experts are predicting the Draconid meteors may produce more than 1000 meteors per hour on the nights of Oct 7 and 8th. The meteors will be competing with the moon on that night and some faint meteors may be lost, but with 1000 meteors possible even the ones you can see will number in the hundreds. We emphasize here that meteor showers are difficult to predict and the whole thing may be a bust with few meteors seen. If you do go out, get out of the city and find a safe dark location where you can look towards the north east. The peak will best be viewed from Europe, so North American will miss it since it occurs in the afternoon for us.

Orionid Meteors

The Orionid meteors are a weak shower lasting about ten days with a peak around October 20 – 22. The shower typically produces about 20 meteors per hour. The nearly full moon will interfere with the shower this year, but if you are up on the mornings of the peak they should produce extra meteors. Look to the southeast sky before dawn.

Earth Science Day at the Planetarium

A big part of Earth Science is the study of the interactions with the Sun, Moon and Earth. We will celebrate Earth Science Month with Earth Science Day at the planetarium. We will start at 1:30PM, Saturday, Oct 22. We will first show a video about the Solar Dynamics Observatory supplied by NASA. This will be followed by an interactive program about magnets, the Earth's magnetic field, sunspots and the Aurora Borealis. We will then observe the Sun using our solar telescope to view the effects of magnetic fields on the Sun. We will have limited numbers of posters and handouts from NASA's solar and Heliospheric Division.

