

UNA Planetarium Newsletter

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2009

July 20th, 1968. It was the day that nearly everyone capable of it was watching an event that will be marked in history as the day we first set foot on the Moon. Apollo astronauts Neil Armstrong and Buzz Aldrin stepped on the Moon for the first time, collected rock samples and showed the world the surface of the Moon. It was the culmination of a national mobilization not seen for peacetime activities before or since. When people now suggest a national mobilization for the good of all, they say " ... it could be like the Moon landing."

The moon landing is also an event that has become controversial, with spurious claims of fraud appearing on websites and magazine articles. The accusations are backed by half-baked suggestions such as "there are no stars on the picture" or "the flag stand up like there's wind" and on it goes. The problem is that critical thinking skills have eroded to the point where such claims are taken seriously by otherwise intelligent people. One can tear down these arguments one by one, but in the end the conspiracy theorist will simply say "there's no way they didn't fake it."

Part of the reason is the sheer difficulty of the feat. Getting a person to the Moon and back safely is really, really hard! But we have shown it can be done, and students in elementary, middle and high schools right now will return there and to Mars and onward.

Welcome to Rocket Month!

Mel Blake.

UNA Planetarium and Observatory, is operated by the Dept. of Physics and Earth Science

Image of the Month



This iconic image was taken of the first footprint on the moon by Apollo 11 astronauts. The adventure to place the first person on the lunar surface is considered by some to be the greatest technological feat ever done by the human race. July 20th, 1968 saw the first time anyone had accomplished the historical dream of reaching the surface of another world. NASA and the Chinese space agency are planning to return to the Moon and possibly Mars in the coming decade. **Image courtesy NASA.**

Astro Quote: *"The important achievement of Apollo was demonstrating that humanity is not forever chained to this planet and our visions go rather further than that and our opportunities are unlimited. "*
Neil Armstrong

Calendar for July, 2009

July 7th. Planetarium Public Night.


July 11th. Rocket Day at Florence Library. Shuttle Endeavor launches

7:39PM. 

June 12th. Rocket Day at Florence Library. 

July 14th. Planetarium Public Night.

July 18th. Rocket Day at the Children's Museum of the Shoals 

July 20th. Moon Landing Anniversary Bash! 

July. 21st. Planetarium Public Night

July 27th. Shuttle Endeavour Landing.

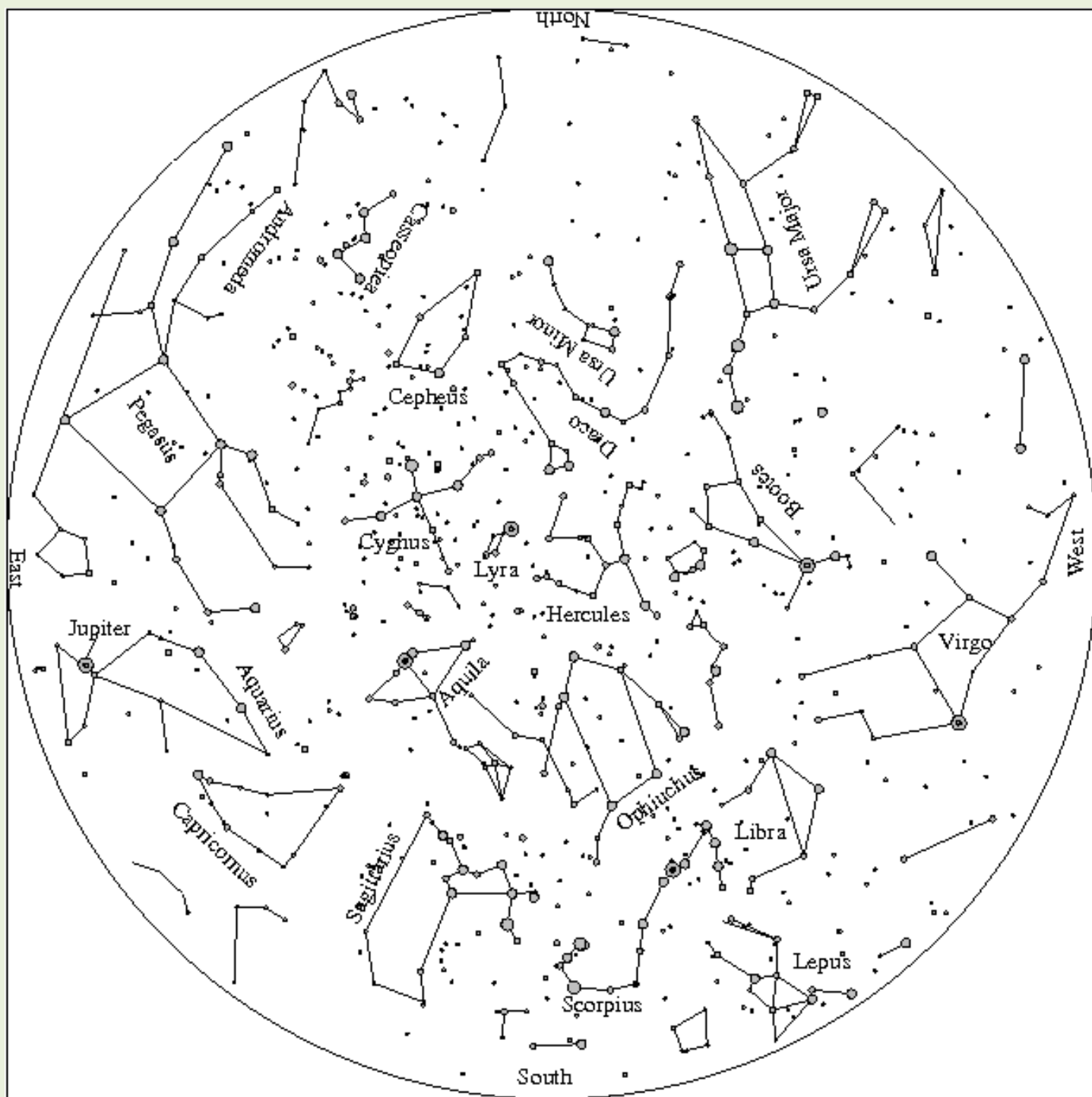
June 28th. Planetarium Public Night

Observing Highlights

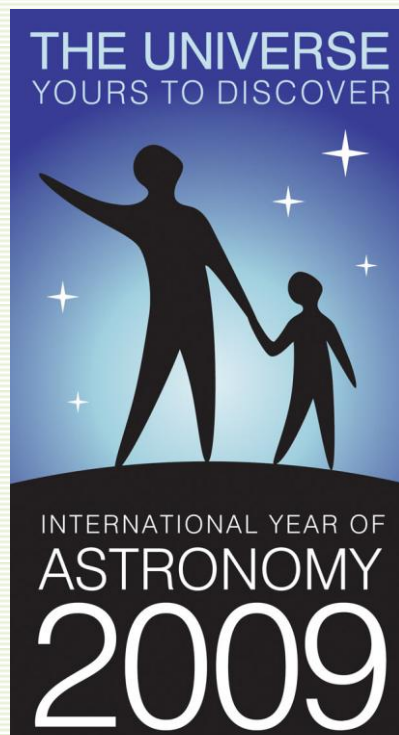
Saturn lies in the southwestern sky at sunset in Leo.

Jupiter moves into the evening sky, rising around 10:30PM.

The July 2009 Sky for North Alabama



How to use this Chart: The sky is shown for 10:00PM, July 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/>.



Rocket Day the Children's Museum



On Saturday, July 18th, the UNA planetarium and the Children's museum will collaborate on a rocket day. From 10:30AM to 2:00PM, kids visiting the museum will have the opportunity to learn about rockets and space exploration with interactive activities. Materials from the Ares Rocket development team will be available at these events as materials last.

<http://www.shoalschildrensmuseum.org/>

Welcome to Rocket Month!

UNA Planetarium is celebrating the 40th anniversary of the Moon landing by declaring Rocket month. All month long we will be doing events to celebrate the historic achievement. We are grateful for our great partners for these events.



Florence Library Rocket Day

In collaboration with the Florence Public Library, the Shoals Astronomy Club and Dr. T. Pace of UNA we will be having a space and rocket weekend at the library.

July 11th. We will present the movie "October Skies" at 5:00PM as part of the ongoing film series at the library. This will be followed by a family event where kids will make a balloon powered rocket car supervised by planetarium staff. This will be followed by Sidewalk Astronomy with the Shoals astronomy Club. The club members will bring telescopes and allow observations of the night sky, weather permitting.

July 12th. Starting at 1:00PM the UNA Planetarium will have a solar telescope available at the library for safely observing solar activity. At 2:00PM author Roger Reid perform a reading at the library of his new book.

Materials from the Ares Rocket development team will be available at these events as materials last.

<http://flpl.lib.al.us/>



Apollo 11 Anniversary Bash

Join us for the July 11th 40th anniversary celebrate of Apollo 11 as part of the year of astronomy. We will start off our event at 4:00PM by having an afternoon family program where kids will make their own rocket car, followed by a planetarium show. At 6:00PM we will show the documentary "The Apollo Moon Landing: Out of this World". At 7:30PM we will show a planetarium show and observe through our telescope if weather permits. Materials from the Ares Rocket development team will be available as they last.

<http://www.una.edu/planetarium>

NASA Education Programs for Schools

Send your name to Mars

NASA invites you to submit your name to be included on a microchip that will be sent to Mars as part of NASA's Mars Science Laboratory mission, scheduled to launch in 2011. Mars Science Laboratory is a rover that will assess whether Mars ever was, or still is, an environment able to support microbial life.

The "Send Your Name to Mars" Web page enables anyone to take part in the mission by sending his or her name to the Red Planet. Participants can print a certificate of participation and view a map showing where other contributors are from. To submit names, visit <http://marsprogram.jpl.nasa.gov/msl/participate/sendyourname/>.
<<http://marsprogram.jpl.nasa.gov/msl/participate/sendyourname/>>

To learn more about the Mars Science Laboratory mission, visit <http://marsprogram.jpl.nasa.gov/msl/>.
<<http://marsprogram.jpl.nasa.gov/msl/>> .

Have Your Students Talk to the International Space Station

Would You Like An Opportunity to Receive a Live Call From Space With International Space Station Astronauts?

NASA Education's Teaching From Space announces an in-flight education downlink call for proposals. Additional information and proposal deadline information for Expedition 21 and 22 in-flight events are included below. These events are carried live on NASA-TV and streamed on the NASA portal website. If you are interested, we have a planning guide available that provides detailed host planning information and technical requirements. Rene Flores serves as your point of contact. Contact information is listed below.

NASA seeks proposals from formal and informal education institutions and organizations, individually or working together, to host live in-flight education downlinks during Expedition 21 and 22 (tentative dates are October 2009 through March 2010).

Proposals should be part of a well-planned education experience. Proposals are evaluated and ranked according to their educational merit and proposed plan for integration into student curricula. The deadline to submit a proposal is September 01, 2009.

Downlinks are approximately 20 minutes in length and allow students and educators an opportunity to interact with crewmembers on-board the space station through a question and answer session. Education downlinks afford education audiences the opportunity to learn first-hand from space explorers what it is like to live and work in space. An education downlink is essentially a modified videoconference in which participants hear and see the crewmembers live from space. The crew does not see the audience. Students pose questions related to classroom studies and watch from their school or science center as crewmembers discuss and demonstrate science, technology, engineering, and mathematical (STEM) concepts in ways that are unique to the environment of space. These events are broadcast live on NASA TV.

Members of the U.S. informal and formal education communities and ISS international partners are eligible to host Education downlinks. Examples include museums and science centers, local school districts, national and regional education organizations, and local, state and government agencies. NASA provides this opportunity at no cost to the host organization.

These unique educational opportunities are made available through NASA Education's Teaching From Space office. Additional information may be found at the Teaching From Space website at

http://www.nasa.gov/audience/foreducators/teachingfromspace/home/stu_main_tfs.html.

To request a planning guide and a proposal form, please contact Rene Flores at JSC-Teaching-From-Space@mail.nasa.gov
<BLOCKED::mailto:JSC-Teaching-From-Space@mail.nasa.gov> or by phone at 281-483-0493.

Space Station Takes Center Stage

July is a great chance to try to spot the International Space Station as it makes several prime-time early evening passes over the Shoals this month. Here are the best opportunities all between 8PM and 11PM CDT. Look for the ISS while doing BBQ and lemonade!

Endeavour is going to the International Space Station. Here's when you can watch the ISS fly over Florence in July

Date	Magnitude	Start			Maximum Altitude			End		
		Time	Altitude	Direction	Time	Altitude	Direction	Time	Altitude	Direction
July 6	-3.3	21:40:39	10	SW	21:43:35	82	NW	21:46:30	10	NE
July 7	-2.1	20:30:39	10	S	20:33:02	23	SE	20:35:26	10	ENE
July 7	-0.6	22:05:48	10	W	22:08:11	22	NW	22:10:34	10	NNE
July 8	-3.2	20:54:29	10	SW	20:57:24	77	NW	21:00:19	10	NE
July 9	-0.4	21:19:16	10	W	21:21:37	21	NW	21:23:58	10	NNE
July 11	-0.3	20:32:53	10	W	20:35:12	21	NW	20:37:31	10	NNE
July 22	-1.5	21:52:58	10	NNW	21:55:12	24	NNE	21:55:12	24	NNE
July 24	-1.7	21:05:51	10	NNW	21:08:21	25	NNW	21:09:41	18	ENE
July 25	-3.5	21:29:30	10	NW	21:32:24	84	SW	21:32:42	69	SSE
July 26	-1.8	20:18:38	10	NNW	20:21:09	25	NE	20:23:40	10	E
July 26	-1.0	21:54:04	10	W	21:55:46	18	WSW	21:55:46	18	WSW
July 27	-3.3	20:42:15	10	NW	20:45:10	81	SW	20:47:26	15	SE
July 28	-1.0	21:06:47	10	W	21:08:54	18	SW	21:10:38	12	S

Key: Directions are abbreviated. E.G. North-north-east = NNE and so on. The altitudes are given in degrees. Your fist held at arm's length is about 10 degrees. See the star chart for a description of magnitudes. Data from the website <http://www.heavens-above.com/main.asp>



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