Busy Moon
The Moon is becoming a busy place again. This December will mark the thirty-fifth anniversary of our leaving the Moon. However, there is a new initiative to return humans to the Moon -- not just for a couple of days at a time, but to setup a permanent base. But that is many years in the future.

More recent examples of our return to the Moon is the Kaguya lunar orbiter launched into space by Japan on 12 September 2007. The 3-ton spacecraft is the largest craft sent to the Moon since the Apollo missions of the late 60’s and early 70’s. It has 14 primary instruments to study the Moon. Included on the craft is a high-definition camera to capture stunning pictures of the Moon -- including Earth rising over the lunar horizon. One of its missions is to study the gravitational field of the far-side of the Moon (see image at right).

Future space probes include China’s Chang’e-1, set to launch later this year, as well as NASA’s Lunar Reconnaissance Orbiter, and India’s Chandrayaan-1 -- both set to launch in 2008 (www.space.com).

The future manned lunar voyages (sometime around 2020) could also be a wonderful opportunity for science missions. In the October 2007 issue of Sky & Telescope, there is an article about possible scientific experiments for a mission to return to the Moon. The Moon affords us a platform for observing space that is quite unique, and may allow these missions to study some fundamental topics in astronomy such as the nature of gravity, dark energy, and how the universe formed.

What’s Up in the Sky?
Unfortunately, there are no lunar eclipses happening this month. The next lunar eclipse is 20 February 2008 beginning at 7:02 pm. However, Jupiter is very high in the Southern-western sky during the early evening. It is the brightest “star” -- and it does not “twinkle”. Take a telescope (or even binoculars) and you can see the four Galilean satellites (four Moon of Jupiter first observed by Galileo in 1610).

If you really want to plan ahead, there is a solar eclipse coming up that will be visible in the US. However, it will take place 21 August 2017 -- and will not be visible in California. It will start in Oregon and move diagonally to South Carolina.


Stuff on TV and in the Movies
This Wednesday, 19 September at 8 pm, KCET will broadcast Seeing in the Dark. This program explores amateur astronomers and the contributions they make to the science of astronomy. I first learned about this program from our good friends at the Orange County Astronomers (www.ocastronomers.org) who have helped us out with past star parties. Additional information is available at http://www.pbs.org/seeinginthedark/.

In addition, Ron Howard has a new film entitled In the Shadow of the Moon that recounts the Apollo missions of the 60’s and 70’s in the words of the astronauts who flew those missions. The movie opens Friday, 21 September at the AMC Orange 30 (and other theaters). For more information, visit http://www.intheshadowofthemoon.com/.

This notice was published by the Astronomy program. Please feel free to send your comments or suggestions to Morrie Barembaum (barembaum_morrie@sccollege.edu) or Danielle Martino (martino_danielle@sccollege.edu).

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