

Mountaineer Skies

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<http://www.as.wvu.edu/~planet/index.html>

Oct - Dec, 2007

From the Editor's Desk

This year the **Autumnal Equinox** or the first day of autumn will begin on Sunday, September 23. The first day of winter or the **Winter Solstice** will occur three days before Christmas on December 22. This is called the shortest day of the year because on this day we have the shortest period of daylight as compared with the period of darkness. On the first day of summer also called the **Summer Solstice**, this is reversed. On this day we have the longest period of day light (longest day of the year) as compared with the period of darkness.

The **dates of the 2008 seasons** are

| | |
|---------------------|--------------|
| First Day of Spring | March 20 |
| First Day of Summer | June 20 |
| First Day of Autumn | September 22 |
| First Day of Winter | December 21 |

Our most popular show, **'tis the Season**, will be shown on December 7, 14, and 21 at 7:00, 8:00, and 9:00 P.M. It is a good way to learn something about the night sky and get in the holiday spirit.

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In The Sky This Month

Visible Planets in the Night Sky

Beginning of October, 2007

| | Const | Rise | Transit | Set | Mag |
|---------|-------|-------|---------|-------|-------|
| Sun | | 07:15 | 13:09 | 19:05 | -26.8 |
| Mercury | Vir | 09:31 | 14:42 | 19:53 | 0.1 |
| Venus | Leo | 03:46 | 10:24 | 17:04 | -4.5 |
| Mars | Gem | 23:14 | 06:43 | 14:15 | -0.1 |
| Jupiter | Oph | 12:45 | 17:31 | 22:17 | -2.0 |
| Saturn | Leo | 04:17 | 11:00 | 17:46 | 1.5 |

Beginning of November, 2007

| | Const | Rise | Transit | Set | Mag |
|---------|-------|-------|---------|-------|-------|
| Sun | | 07:47 | 13:03 | 18:20 | -26.8 |
| Mercury | Vir | 06:24 | 12:06 | 17:45 | 0.4 |
| Venus | Leo | 03:55 | 10:11 | 16:27 | -4.4 |
| Mars | Gem | 21:53 | 05:24 | 12:59 | -0.7 |
| Jupiter | Oph | 11:06 | 15:52 | 20:06 | -1.9 |
| Saturn | Leo | 02:30 | 09:10 | 15:53 | 1.4 |

Beginning of December, 2007

| | Const | Rise | Transit | Set | Mag |
|---------|-------|-------|---------|-------|-------|
| Sun | | 07:19 | 12:08 | 16:58 | -26.8 |
| Mercury | Lib | 06:39 | 11:34 | 16:27 | -0.8 |
| Venus | Vir | 03:39 | 09:17 | 14:55 | -4.2 |
| Mars | Gem | 18:45 | 02:22 | 10:00 | -1.3 |
| Jupiter | Oph | 08:36 | 13:22 | 18:04 | -1.8 |
| Saturn | Leo | 23:40 | 06:18 | 12:59 | 0.7 |

| | |
|-----|-------------------------------|
| Vir | Virgo, The Maiden |
| Leo | Leo, The Lion |
| Gem | Gemini, The Twins |
| Oph | Ophiuchus, The Serpent Bearer |
| Lib | Libra, The Scales |

About: **Some Myths about Mars**

It seems that annually about this time of year, some people get an e-mail that suggests that Mars will soon be so close to Earth that it will be brighter (and/or larger) than the Moon. This, of course, is untrue and impossible. This urban legend may have started in 2003 when Mars was as close to Earth as it has ever been in recorded history, 55.76 million kilometers (34.65 million miles), but still it was so far away that it looked like a reddish star.

Mars has for a long time been the subject of myths and mistakes. Here are just a couple.

Percival Lowell, founder of the Lowell Observatory in Flagstaff, Arizona, and a true Renaissance man, graduated with honors in mathematics from Harvard University 1876. Soon thereafter he traveled extensively in the Orient, especially Japan. While in the Land of the Rising Sun, he observed and later wrote several books about Japanese culture, language, and religion. But what he is most remembered for is searching for Planet X and his study of Mars. Planet X was the name given to an unknown planet beyond Neptune. In 1930, approximately fifteen years after Lowell's death, Clyde Tombaugh discovered the recently demoted planet Pluto. However, it Lowell's observations of Mars that he is best remembered.

In 1877 an Italian astronomer Giovanni Schiaparelli saw what he thought were linear features on the surface of Mars. These features he called canali, which in Italian means "channels." Unfortunately, canali was incorrectly translated into English as "canals". This misunderstanding caused quite a stir when Schiaparelli published *Mars* in 1895, *Mars and Its Canals* in 1906, and finally in 1908 *Mars As the Abode of Life*. We know now that there is no evidence of intelligent life on Mars and that there are certainly no canals.

Another myth involves the so-called Face on Mars. In 1976, while looking for a future landing site for Viking Lander 2 in the Cydonia area of Mars, Viking Orbiter 1 took the now famous picture of the Face on Mars.



When this was shown to the public, some people who had more imagination than reason saw this as a clear indication that there had been intelligent life on Mars in the past and maybe even in the present. Later pictures taken with higher resolution cameras showed this feature to be a naturally occurring feature on the surface of the Red Planet, not a man made (or Martian made) monument.



This was used as a major plot device in a mediocre 2000 movie called "Mission To Mars"

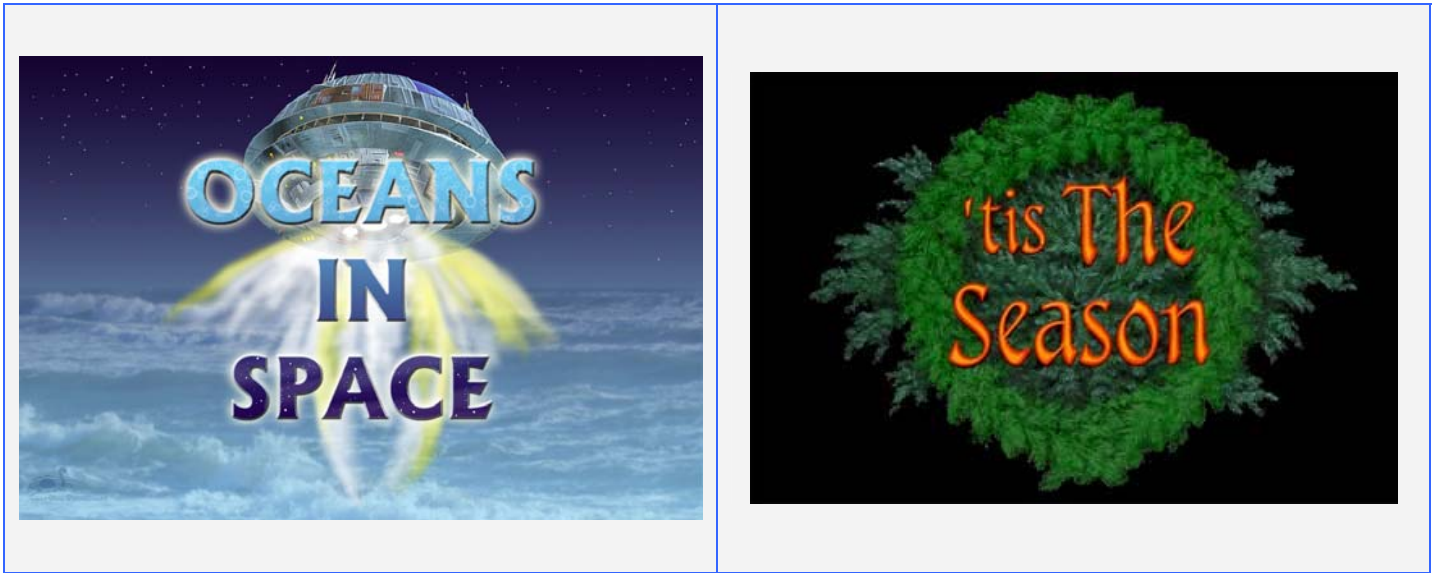
Smiley Face on Mars

If you look hard enough, you can see anything on Mars, including this Smiley Face. If you are interested in looking this up to verify that it is real, look for the crater Galle which is about 200 km (about 124 miles) in diameter and located on the eastern edge of the Argyre basin.



Of all the fictional stories about Mars, probably the most famous is H. G. Well's novel *War of the Worlds*. This novel is available free on line both in written form at <http://www.gutenberg.org/etext/36> or if you like to be read to, there is also an online audio version at <http://www.gutenberg.org/etext/8976> that can be downloaded into an MP3 player or your computer. It is really a good read for those interested in first rate science fiction.

2007 – 2008 Planetarium Shows



| | | |
|---|---|---|
| October 12 & 26, 2007 <i>Oceans in Space</i> | November 9 & 16, 2007 <i>Oceans in Space</i> | Dec 7, 14, & 21, 2007 <i>'tis the Season</i> |
| January 11 & 25, 2008 <i>Oceans in Space</i> | February 8 & 22, 2008 <i>Oceans in Space</i> | March 14 & 28, 2008 <i>Oceans in Space</i> |
| April 11 & 25, 2008 <i>Oceans in Space</i> | May 9 & 23, 2008 <i>Oceans in Space</i> | June 13, 2008 <i>Oceans in Space</i> |
| | July 2008 Closed | |

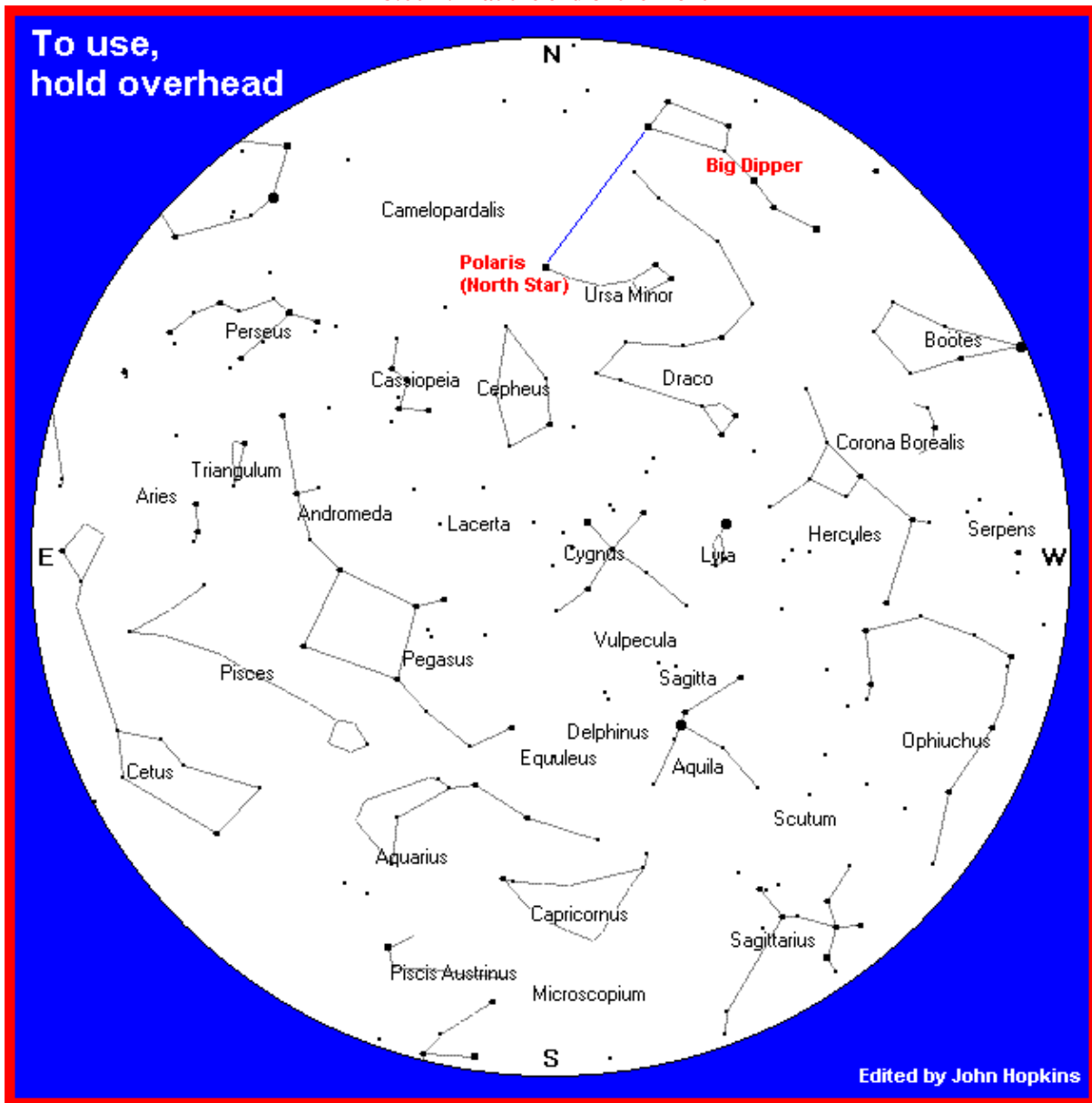
For those who are interested in bringing a group, such as schools or scouts, during the day, please call for more information. These shows are usually given on Tuesday or Thursday mornings.

For further information or reservations, please call John Hopkins at (304)293-3422, extension 1443 or by email at: jhopkins@mail.wvu.edu

Selected Sunrise/Sunset and Moon Rise/Moon Set Times

| Date | Sunrise | Sunset | Moon Rise | Moon Set | Moon Phase |
|-------------|-----------|-----------|------------|------------|------------|
| October 3 | 7:16 A.M. | 7:00 P.M. | NA | 3:15 P.M. | Last Qtr |
| October 11 | 7:24 A.M. | 6:48 P.M. | 7:52 A.M. | 6:43 P.M. | New Moon |
| October 19 | 7:33 A.M. | 6:36 P.M. | 3:07 P.M. | NA | First Qtr |
| October 25 | 7:39 A.M. | 6:28 P.M. | 5:53 P.M. | 6:55 A.M. | Full Moon |
| November 1 | 7:47 A.M. | 6:19 P.M. | NA | 2:32 P.M. | Last Qtr |
| November 9 | 6:56 A.M. | 5:10 P.M. | 6:46 A.M. | 4:39 P.M. | New Moon |
| November 17 | 7:05 A.M. | 5:03 P.M. | 1:06 P.M. | 11:54 P.M. | First Qtr |
| November 24 | 7:12 A.M. | 4:59 P.M. | 4:45 P.M. | 7:26 A.M. | Full Moon |
| December 1 | 7:20 A.M. | 4:56 P.M. | NA | 12:51 P.M. | Last Qtr |
| December 9 | 7:27 A.M. | 4:55 P.M. | 7:41 A.M. | 4:34 P.M. | New Moon |
| December 17 | 7:33 A.M. | 4:56 P.M. | 12:23 P.M. | 12:01 A.M. | First Qtr |
| December 23 | 7:37 A.M. | 4:59 P.M. | 4:26 P.M. | 7:28 A.M. | Full Moon |
| December 31 | 7:40 A.M. | 5:04 P.M. | 12:28 A.M. | 11:56 A.M. | Last Qtr |

October 2007 Sky Chart* for:
 10:00 P.M at the beginning of the month
 9:00 P.M in the middle of the month
 8:00 P.M at the end of the month



*Sky Chart used with the kind permission of **Heavens-Above** at <http://www.heavens-above.com/>

The TOMCHIN PLANETARIUM is named in honor of the late Harold Tomchin, of Princeton, W.Va., who made a generous donation to ensure its continuing operation, and whose family continues to support the planetarium for the educational benefit of WVU students, staff, and faculty members, as well as the local community. Contributions can be made in support of the planetarium through the WVU Planetarium Project at the WVU Foundation, Inc., phone (304)284-4000. Thank You.



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