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# Astronomy Bulletin - The 1992 Summer Sky

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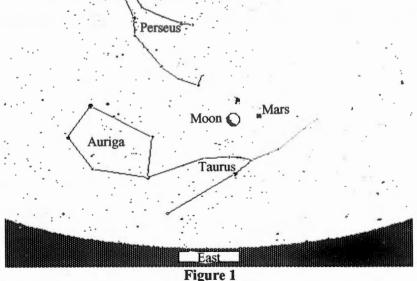
#### **ASTRONOMY BULLETIN**

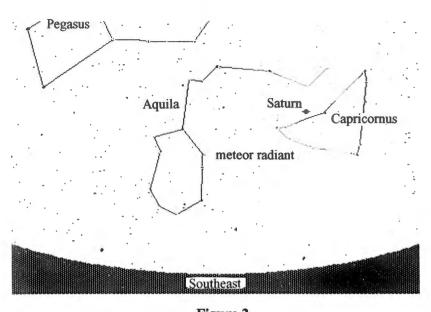
### The 1992 Summer Sky July through October

Figure 1: Early in the morning on July 25, skywatchers may see the Moon and Mars. The Moon is in the waning crescent phase and is illuminated 25 percent. It will set at 5:01 p.m. Mars is located 5° to the right of the Moon. A bright star cluster, the Pleiades, is located about 4° above the Moon.

Figure 2: On the morning of July 28, meteors of the Delta Aquarid meteor shower will appear to originate (or "radiate") from the constellation Aquarius. This shower usually produces approximately 20 meteors per hour. The Moon is new and will not interfere with the observation of meteors. Saturn can be seen 30° above the horizon in the constellation Capricornus.

Figure 3: On the morning of August 11, it will be possible to see one of the best meteor showers of the year: the Perseid meteor shower. This shower usually produces about 50 meteors per hour. The meteors will





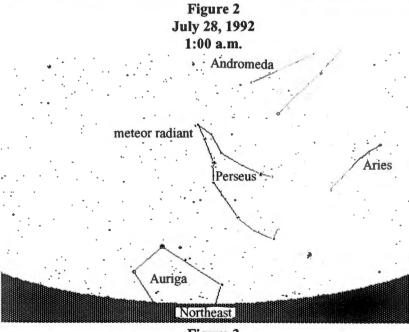


Figure 3 August 11, 1992 1:00 a.m.

#### (Figure 3 cont.)

appear to radiate from the constellation Perseus as indicated in the figure. Unfortunately, the Moon is full and the bright moonlight will prevent all but the brightest meteors from being seen. The meteors of the Perseid shower are produced by the left-over remnants (dust, sand and gravel) of the Swift-Tuttle comet falling into the Earth's atmosphere. Comet Swift-Tuttle was visible in 1862.

**Figure 4:** On the night of August 15, a nearly full Moon and the planet *Saturn* can be seen if one looks to the southeast at about 11 p.m. Saturn is located approximately 40° to the right of the Moon. The Moon will set at 8:38 a.m. August 16.

**Figure 5:** This figure shows the sky as seen by a person facing south on September 5. The Moon and *Saturn* are visible. The Moon is illuminated 71 percent and will set at 12:38 a.m. (September 6). Saturn is 28° above the horizon and 35° to the left of the Moon in the constellation Capricornus.

**Figure 6:** On the night of October 6, the Moon and *Saturn* will again be visible. The Moon is illuminated 81 percent and will set at 2:59 a.m. (October 7). Saturn is located 11° to the lower right of the Moon.

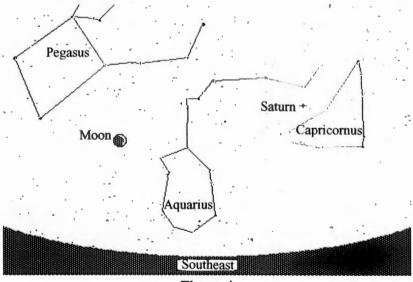


Figure 4 August 15, 1992 11:00 p.m.

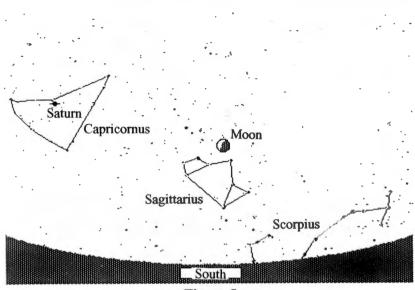
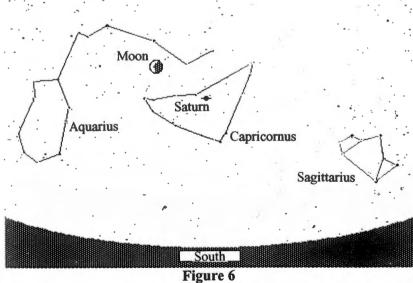


Figure 5 September 5, 1992 10:00 p.m.



October 6, 1992 8:30 p.m.

Figure 7: In the early morning of October 21, the Orionid meteor shower will appear to radiate from a point to the left of the constellation Orion and above the constellation Gemini. This shower usually produces approximately 25 meteors per hour. On this morning, the Moon will rise at 2:33 a.m. and is illuminated 27 percent. Although ideal meteor observing conditions require a very dark sky and no Moon, the Moon this morning should not cause a lot of difficulty to observers. The meteors of the Orionid shower are produced by the left-over remnants (dust, sand and gravel) of comet Halley falling into the Earth's atmosphere.

Figure 8: In the evening twilight on October 30, a viewer may see the Moon and two planets. The Moon is illuminated 28 percent and is in the constellation Sagittarius. The Moon will set at 9:11 p.m. Saturn is in the constellation Capricornus, 31° above and to the left of the Moon. Venus may be visible low on the horizon to the lower right of the Moon. Although Venus is very bright, it is low to the horizon and a pair of binoculars may be helpful when viewing it.

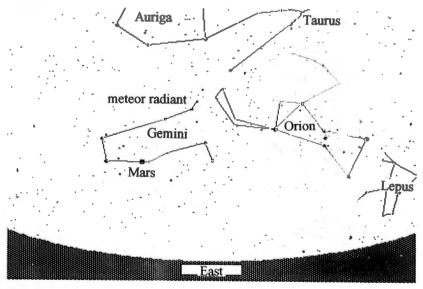


Figure 7 October 21, 1992 1:00 a.m.

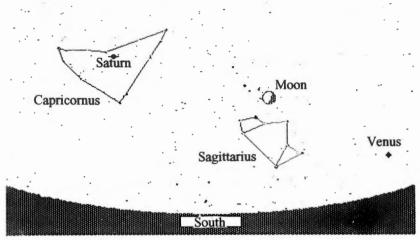


Figure 8 October 30, 1992 6:00 p.m.

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## ASTRONOMY RESOURCES Taking a Meteor Shower

The summer months are often the most popular for skygazing. Mild weather combined with a host of appealing astronomical events tends to attract both amateur and professional astronomers to look skyward.

One of the more brilliant and "flashy" events to observe is a meteor shower. As children, many of us remember watching a "falling" star shoot across the sky. Little did we know that what we were actually observing was a piece of space debris known as a "meteor." Meteors may appear at any time and from any direction, but most of the visible meteors viewed each year are parts of defined meteor showers.

Meteors are bits of "Solar System debris" falling towards Earth. They are small and disintegrate easily, burning up entirely as they pass through the upper layers of the earth's atmosphere (most meteors vaporize