Astronomy Bulletin - The 1991 Summer Sky

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Figure 1: The night of July 15 presents an interesting arrangement of planets. The Moon is in a waxing crescent phase and is illuminated approximately 24 percent. The Moon sets at 11 p.m. that night. Venus is 20° to the right of the Moon. When viewing Venus through a small telescope, one will find it to be illuminated about 28 percent and to appear as a thin crescent. Mars is only about 4° to the right of Venus. Mars is also just above the bright star Regulus in the constellation Leo. Seen through a small telescope, Mars appears to be the larger of the pair and reddish in color. Regulus will appear to be whitish. Mercury and Jupiter are low in the western sky (5° above the horizon). However, at 9 p.m., it may be possible to see Jupiter and Mercury in the bright twilight 11° above the horizon. Using a pair of binoculars will make it easy to find Mercury as it is the object just 1° from Jupiter.

Figure 2: This view is facing southeast on July 28 at about 12 a.m. On this night, it may be possible to see meteors of the Aquarid meteor shower. The meteors will appear to originate (or radiate) from the constellation Aquarius. This meteor shower usually produces up to 20 visible meteors per hour. Unfortunately, a full moon close to the radiant will make it nearly impossible to see all but the brightest meteors. Saturn is about 18° to the right of the Moon.
Figure 3: On the night of August 12 it will be possible to see one of the best meteor showers of the year: the Perseid meteors. The meteors will appear to originate from the constellation Perseus. This annual shower produces up to approximately 50 visible meteors per hour. The Moon is not a factor this year as it sets at 9:26 p.m., hence the sky should be very dark.
**Figure 4:** This view of the sky is facing south at about 9 p.m. on September 18. The Moon and Saturn are in the constellation Capricornus. The Moon is in the waxing gibbous phase, being illuminated approximately 78 percent. Saturn is about 1° to the left of the Moon. Through a small telescope, one can easily see the rings around this planet.

**Figure 5:** This view of the sky is facing southwest at about 9 p.m. on October 15. The Moon and Saturn are in the constellation Capricornus. The Moon is in the first quarter phase and is illuminated approximately 53 percent. Saturn is about 5° to the left of the Moon.

**Figure 6:** On the night of October 21, the Orionid meteor shower may be seen. Figure 6 indicates the eastern sky at about 12 a.m. The meteors will appear to originate from the constellation Orion. This annual shower produces up to approximately 25 visible meteors per hour. Unfortunately a full Moon high in the south will make it difficult to see all but the brightest meteors.
Figure 5
October 15, 1991
9:00 PM

Figure 6
October 21, 1991
12:00 AM
Figure 7: This diagram shows the western sky at approximately 5 a.m. on October 31. Two planets and the Moon are in nearly a straight line. The Moon is a waning crescent and is illuminated 37 percent. Jupiter is 17" to the lower left of the Moon. Venus is lower at an altitude of 13°. Venus, as seen through a small telescope, will appear to be illuminated only 49 percent.

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