1989

Astronomy Bulletin - The 1990 Spring Sky

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ASTRONOMY BULLETIN

THE 1990 SPRING SKY
March through June 1990

Figure 1: This is the view of the sky on March 4 at about 8 p.m. looking high in the south. Four bright constellations are drawn in: Aur=Auriga, Gem=Gemini, Ori=Orion and Tau=Taurus. The Moon is in a waxing gibbous phase and is about 61 percent illuminated. The bright object below and to the left of the Moon is *Jupiter*, the largest planet of the solar system. To the right of the Moon about 3.5° and 1.25° to the left of the bottom left-hand star of Auriga is the asteroid or minor planet, Ceres. It is visible only with good binoculars or a telescope. Ceres looks like a star, but over several days it will change its position among the background stars.
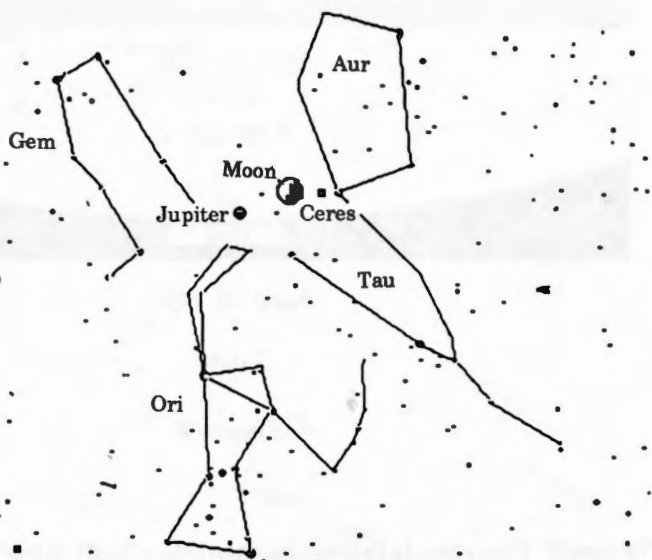
March 4, 1990

8 p.m.

Figure 1

Figure 2: This is the view of the sky on April 13 at about 7 p.m. facing west shortly after sunset. A number of constellations are shown; the bright ones are Ori=Orion, Tau=Taurus, Per=Perseus and Ari=Aries. *Mercury* can be seen low above the western horizon.


April 13, 1990

7 p.m.

Figure 2

Figure 3: This view is facing south on May 15 at about 3 a.m. The two bright constellations shown are Sagittarius and Scorpius. *Saturn* can be seen 2° north of a waning gibbous Moon. *Uranus* is just below naked-eye brightness. Through binoculars, *Uranus* can be seen about 3.5° north-east of the top star in the "teapot" of Sagittarius.

Figure 4: This view is facing west on May 26 at about 9 p.m. The constellations shown are Cnc=Cancer, Gem=Gemini, Cmi=Canis Minor and Aur=Auriga. The waxing crescent Moon is only 3 days old and is illuminated 10 percent. Jupiter is only 1.5° away.
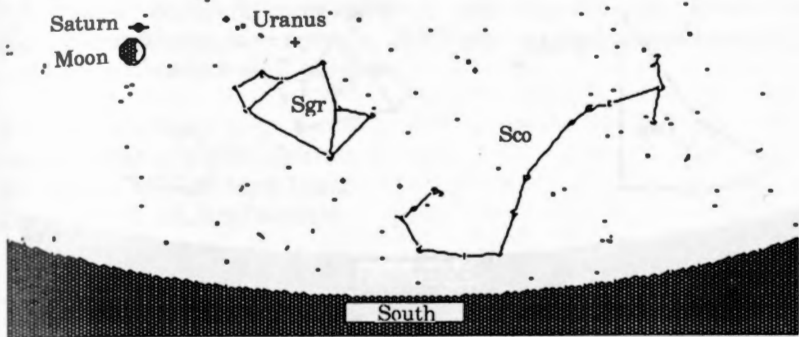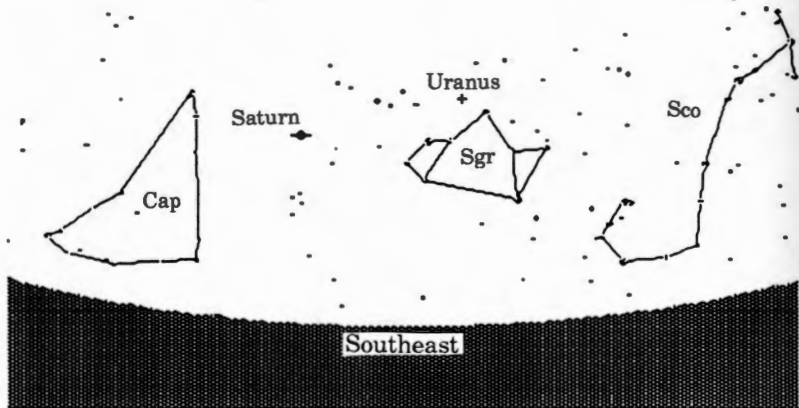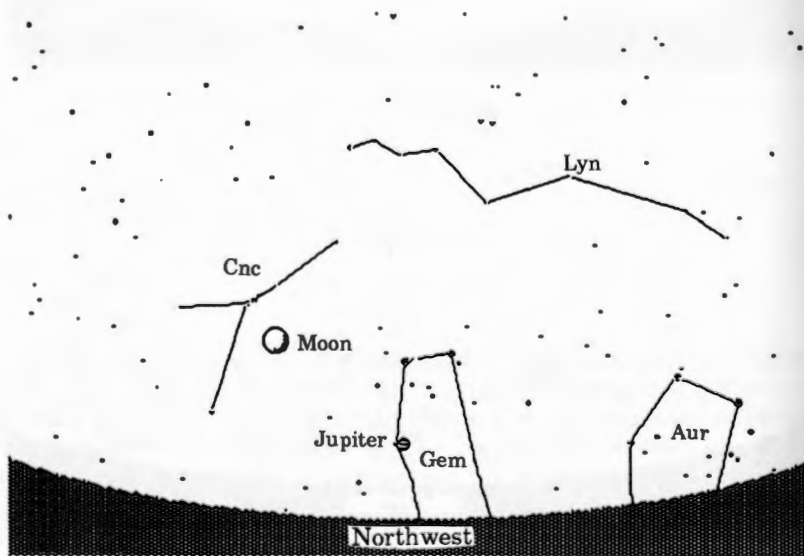
May 15, 1990
3 a.m
Figure 3.
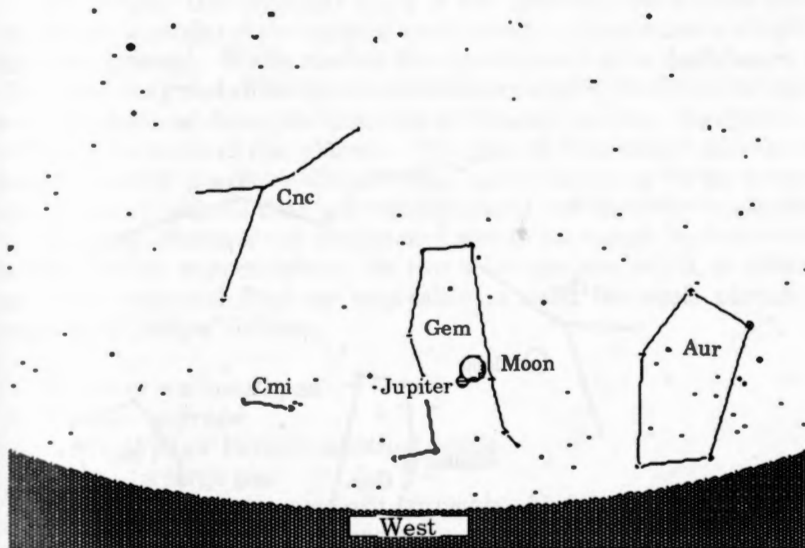
May 26, 1990
9 p.m.
Figure 4

June 15, 1990
Midnight
Figure 5

June 24, 1990
8 p.m.
Figure 6

Figure 5: This is the sky facing southeast on June 15 at midnight. The constellations shown are Cap=Capricornus, Sgr=Sagittarius and Sco=Scorpius. *Uranus* is just below naked-eye brightness. Through binoculars, *Uranus* can be seen about 2.5° northeast of the top star in the "teapot" of Sagittarius.

Figure 6: This is the sky facing northwest on June 24 at about 8 p.m. The four constellations shown are Lyn=Lynx, Cnc=Cancer, Gem=Gemini and Aur=Auriga. The Moon is a thin crescent only 3 days old and is illuminated 7 percent.

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Astronomy Resources

The scale of the solar system is often demonstrated by having students stand at appropriate distances away from one another in order to represent the planets' average distances from the Sun. At any practical representative scale, however, the physical diameters of the planets cannot be shown at the same time.

To portray the physical sizes of the planets, the author uses a second scale model of the solar system in which the distances from the Sun are ignored. While circles drawn on paper or a chalkboard can illustrate the great difference in diameters among the planets, such a two-dimensional depiction does not sufficiently convey the drastically different *volumes* of the planets. The goal of this model was to show proportionally the three-dimensional space taken up by each planet using actual spheres that are readily found and familiar to students.

The key elements of this model are to be found in the produce section of the supermarket. In the solar system salad, a different common spherical fruit or vegetable is used for each planet. A suggested "recipe" follows:

Mercury -- a small pea
Venus -- a grape
Earth (*Venus'* twin) -- another grape
Mars -- a large pea
Jupiter -- a large grapefruit (suitably oblate)
Saturn -- a large navel orange
Uranus and *Neptune* -- two limes
Pluto -- another small pea

On this scale, the author asks students to think of the Sun as the largest Jack-o-lantern pumpkin they have ever seen.