

Abrams Planetarium SKYWATCHER'S DIARY: May 2000

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May Sky Calendar
Abrams Planetarium
Michigan State University
East Lansing, MI 48824

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<http://www.pa.msu.edu/abrams/diary.html>

Current and back issues of the Skywatcher's Diary are available in our archives at:
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Skywatcher's Diary: May 2000

Monday, May 1

The thin old Moon provides incentive to go outside early this morning. The crescent rises just to the south of east an hour before the Sun. It's the last morning to easily see the Moon before New. Observers in southern states who want a challenge can try twenty minutes before sunrise tomorrow. Look due east with binoculars.

Tuesday, May 2

Orion bids adieu. The familiar winter constellation now stands low in the west at dusk. The bright star Rigel, the “left foot of Orion,” sets an hour after sunset. It is the first of Orion’s primary stars to disappear. As an observing project, record the last dates you are able to see Rigel and Betelgeuse, the “right shoulder.” Try to better your record next year.

Wednesday, May 3

New Moon occurs at twelve minutes past midnight EDT tonight (technically, tomorrow morning). For several nights either side of this date moonlight will not interfere with serious observing at any time. The sky will remain dark from dusk to dawn. Professional and dedicated amateur astronomers cherish these nights. Take advantage of the opportunity and head to the country to skywatch.

Thursday, May 4

Southern and southwestern U.S. skywatchers will have a chance to see a very young Moon—scarcely 24 hours old. Use binoculars thirty minutes after sunset in the WNW. Most of us will need to wait until Friday night when the thin crescent appears four moon diameters to the upper left of Aldebaran, the eye of Taurus the Bull, in the WNW. Look an hour after sunset.

Friday, May 5

The much-discussed “alignment” of planets occurs today. The Sun, Moon, Mercury, Venus, Mars, Jupiter, and Saturn fit within a span of 26° —equivalent to the length of the Big Dipper. Astronomical interest in the gathering is mere statistical curiosity. The grouping is relatively rare, but it is unobservable. The Sun’s glare hides all but two of the bodies from view. The publicized notion that natural calamities will result from the event has no scientific basis.

Saturday, May 6

The three-day-old Moon is picture-perfect this evening. Scan the bright crescent with binoculars and telescope to see wonderfully defined craters. The Sun is shining on the lighted portion of the Moon at a low angle, creating long shadows that exaggerate terrain details. Examine the dark part of the Moon with binoculars. The subtle features you glimpse are illuminated by earthshine.

Sunday, May 7

The Moon sits among the stars of the lower extremities of Gemini tonight. The second-magnitude star Gamma Geminorum, marking a foot of one of the twins, appears 5° (ten Moon diameters) to the Moon’s lower left an hour after sunset.

Monday, May 8

The Moon creates a pleasing arrangement tonight with the Gemini twins, the bright stars Pollux and Castor. Pollux is the first-magnitude star about 8° to the Moon’s upper right. Castor, the fainter brother, is 5° to the right of Pollux. Procyon, the bright star in Canis Minor, the Little Dog, is 15° to the Moon’s lower left.

Tuesday, May 9

The Big Dipper lies high in the north these early evenings. Follow the arc of the handle, about one “dipper length” beyond the end of the handle, to the east to locate the brilliant star Arcturus, the brightest star in the northern sky. Arcturus resides in the constellation of Bootes, the Herdsman, whose purpose in life is to endlessly chase the Bear (Ursa Major) around the pole.

Wednesday, May 10

The Moon is First Quarter today, so it follows the Sun across the sky by roughly a quarter of a day. In other words, when the Sun is in the south (midday—around 1 p.m. local daylight time) the Moon is rising. When the Sun sets the Moon stands high in the south, and when the Sun is on the other side of the Earth, in the middle of the night for us, the Moon sets.

Thursday, May 11

The gibbous Moon lies under the midsection of Leo the Lion. To the Moon’s right and slightly lower, about a fist’s width away (8°), stands Regulus, the heart of the lion. Regulus is technically a first magnitude star but resides at the bottom of the list as the faintest in that category. The star is located seventy-seven light-years from Earth, so the view of Regulus you see tonight has been nearly eight decades in the making.

Friday, May 12

The Moon is positioned under Leo the Lion’s tail this evening. Denebola, the second-magnitude star marking the tail, is 9° above the Moon. Two fainter stars to Denebola’s right form a right triangle with the tail to outline the beast’s hindquarters.

Saturday, May 13

Vega, the brightest star of the Summer Triangle, is seen in the NE just after sunset. Its presence is a celestial reminder that the season is changing. Before long Vega and its companions will dominate the warm evenings ahead, just as Orion and company held sway all winter.

Sunday, May 14

An hour after sunset the gibbous Moon stands directly over Spica, the brightest star in Virgo. The two are separated by 9° which is approximately the width of your fist extended at arm’s length. “Calibrate” your fist by holding it so that the Moon sits on top. Is Spica at the bottom? Once calibrated your fist becomes a handy scale for measuring angles in the sky.

Monday, May 15

Tonight the Moon is 9° due left of Spica, the star marking the shaft of wheat in Virgo's hand. Alternately Spica can be located by following the Big Dipper's handle about two "dipper lengths" beyond its end. You first pass through the brilliant star Arcturus before arriving at Spica.

Tuesday, May 16

Mercury is just returning to the evening sky. It will become an easy target later this month, but if you want a challenge try to find it low in the WNW thirty-five minutes after sunset. Use binoculars. For bonus points locate fainter Mars only seven moon diameters (3.5°) to the upper left of Mercury.

Wednesday, May 17

On May 5th the Sun, Moon, and five naked-eye planets fit within a span of 26° . The Moon has since moved out of the picture, but the remaining five planets and Sun form a grouping only $19\frac{1}{2}^\circ$ across today. The obstacle in observing this event is the same as for the May 5th gathering—the Sun is in the midst of the planet cluster. Sadly, Sun's glare also hides the closest conjunction of Jupiter and Venus since 1892. Today Venus passes only 0.7 arcminutes north of Jupiter.

Thursday, May 18

The Moon is Full at 3:34 a.m. EDT today. The fifth Full Moon of the year was called the Milk Moon by American colonists. The Algonquin Indians knew it as the Flower Moon. The Moon rises just after sunset this evening. Two hours after sunset see if you can spot Antares, the bright reddish star marking the heart of the Scorpion, to the lower right of the Moon (about 8° away).

Friday, May 19

Tonight the Moon rises in the ESE about $1\frac{1}{2}$ hours after sunset. As the Moon climbs higher, use binoculars to try to spot the bright crater Tycho near the lower right (south) limb of the Moon early in the evening and at the bottom of the Moon in the middle of the night. Look for the rays or "splash marks" leading away from the crater. The streaks show Tycho to be the youngest of the prominent craters, only a few tens of millions of years old.

Saturday, May 20

Fifty minutes after sunset tonight Mercury sits just above the WNW horizon. Directly below Mercury (2°) is Mars, much fainter and a real challenge. You'll need binoculars. Mercury continues to climb each evening, becoming easier to spot, while Mars is all but lost in twilight.

Sunday, May 21

Two-thirds of the Summer Triangle is now visible in the NE an hour and a half after sundown. Vega, the brightest and highest, is near the ENE and one-quarter to one-third of the way up. Deneb is just to the left of NE and only 10° up. Altair, the last corner of the triangle, rises slightly more than two hours after sunset. By morning the Summer Triangle stands high in the sky with Vega nearly overhead for mid-latitudes. Vega marks the approximate direction the solar system is traveling as we orbit the center of the Milky Way galaxy.

Monday, May 22

An hour before sunrise this morning the waning gibbous Moon is in the south. Just below the Moon the handle of the “Teapot” can be found. That nickname is given to the most easily recognized stars of the constellation Sagittarius. Astronomers refer to such unofficial patterns as “asterisms.”

Tuesday, May 23

As dusk ends, the band of the Milky Way encircles the horizon, making evening a poor time to observe our home galaxy. By dawn the Milky Way stands high overhead, giving early risers the prime view.

Wednesday, May 24

Mercury is fading daily, but the loss in brightness is compensated by the increasing altitude of the planet at the same time relative to sunset each night. Tonight look for the planet low in the WNW an hour after the Sun sets.

Thursday, May 25

Before dawn the Moon passes just south of the fourth-magnitude star Gamma in Capricorn. Once the Moon moves out of the way Uranus can be found 2.1° NW of the star through mid-June. Uranus is two magnitudes fainter than the star, so binoculars and a detailed finder chart will be helpful. Such a chart is found at <http://www.skypub.com/sights/moonplanets/urnepplu.html>.

Friday, May 26

The Moon reaches Last Quarter at 7:55 a.m. this morning. The half-illuminated orb should be easy to spot in the S and SW long after sunrise. When you look at the Last Quarter Moon you gaze out the “windshield” of spaceship Earth. This Moon marks the direction we are traveling as our planet orbits the Sun.

Saturday, May 27

The bright star that becomes visible in the NW as evening darkness falls is Capella, the Mother Goat. The star is similar in temperature to the Sun and therefore also yellow in color. The three fainter stars that form a small triangle just below Capella are the Kids. All four stars belong to the constellation Auriga, the Charioteer or wagon driver.

Sunday, May 28

The crescent Moon makes a wonderful target for binoculars. Find it low in the ESE an hour before sunrise. By 11 a.m. local daylight time the Moon is due south. The Moon sets in the west in late afternoon.

Monday, May 29

Over the next three mornings early risers will be rewarded with attractive views of the crescent Moon. Each day at the same time it will be farther east and lower. By Wednesday morning the Moon appears just above the horizon, due east an hour before sunrise. New Moon occurs June 2.

Tuesday, May 30

Jupiter and Saturn are beginning to emerge into the morning sky. They stand a degree apart in the ENE as day breaks. Unfortunately they are also within 16° of the Sun and still difficult to see, particularly from northern states. Use binoculars to scan just above the horizon thirty-five minutes before sunrise. Tomorrow morning the Moon is 12° to the right and slightly above the planets.

Wednesday, May 31

The bright star shining low in the west before dawn is Arcturus in the constellation of Bootes, the Herdsman. "Follow the arc to Arcturus" is an old saying that refers to a curved line drawn from the Big Dipper's handle and ending at Arcturus. The Big Dipper is to the right of Arcturus this time of year in the early hours.

***** end of *Skywatcher's Diary* for May 2000 *****