

Sky this Month

June 2026

By David Mills

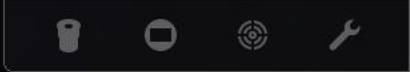
MOON

NEW MOON

New Moon

- The New Moon is on June 14th, at 10:54 p.m.
- This month's moon is the New Strawberry Moon
- The Moon is north of the sun.

Moon



Type: moon
 Magnitude: -3.33
 Absolute Magnitude: 0.21
 Mean Opposition Magnitude: -12.74
 RA/Dec (J2000.0): 5h29m43.67s/+27°02'55.1"
 RA/Dec (on date): 5h31m23.42s/+27°04'10.8"
 HA/Dec: 9h45m19.54s/+27°04'10.8"
 Az./Alt.: +329°39'18.9"/-12°16'20.4"
 Gal. long./lat.: +179°43'02.2"/-3°58'24.1"
 Supergal. long./lat.: +0°23'47.7"/-42°29'48.0"
 Ecl. long./lat. (J2000.0): +83°14'56.4"/+3°47'11.6"
 Ecl. long./lat. (on date): +83°37'13.9"/+3°47'31.4"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 15h16m42.5s
 Apparent Sidereal Time: 15h16m43.0s
 Rise: 4h28m
 Transit: 12h45m
 Set: 21h07m
 Parallaxic Angle: +23°57'24.9"
 IAU Constellation: Tau
 Zodiac: ♐ 23°37'
 Hourly motion: +0°47'35" towards 92.4°
 Hourly motion: $da=+0^{\circ}53'23"$ $d\delta=-0^{\circ}02'16"$
 Elongation: 3°49'00.5"
 Elong. in EckLong.: W0°26'08"
 Phase angle: +176°10'27.0"
 Illuminated: 0.1%
 Distance from Sun: 1.013 AU (151.593 M km)
 Distance: 0.002397 AU (358536.237 km)
 Light time: 0h00m01.2s
 Orbital velocity: 1.102 km/s
 Heliocentric velocity: 28.220 km/s
 Sidereal period: 27.32 days (0.075 a)
 Synodic period: 29.53 days (0.081 a)
 Apparent diameter: +0°33'19.03"
 Diameter: 3474.8 km
 Sidereal day: 655h43m11.6s
 Mean solar day: 708h44m02.9s
 Equatorial rotation velocity: 4.624 m/s
 Moon age: 0.0 days old (New Moon)
 Position angle of bright limb: +170°35'49"
 Position Angle of axis: +356°47'50"
 Libration: +6°06'31" towards +3°53'18" (S!!)
 Libration: +0°24'51"/-6°05'40"
 Subsolar point: -179°38'45"/+1°24'16"
 Colongitude: +269°38'45"
 Albedo: 0.12
 Solar Az./Alt.: +327°28'44"/-15°27'04"



Date and Time ✕

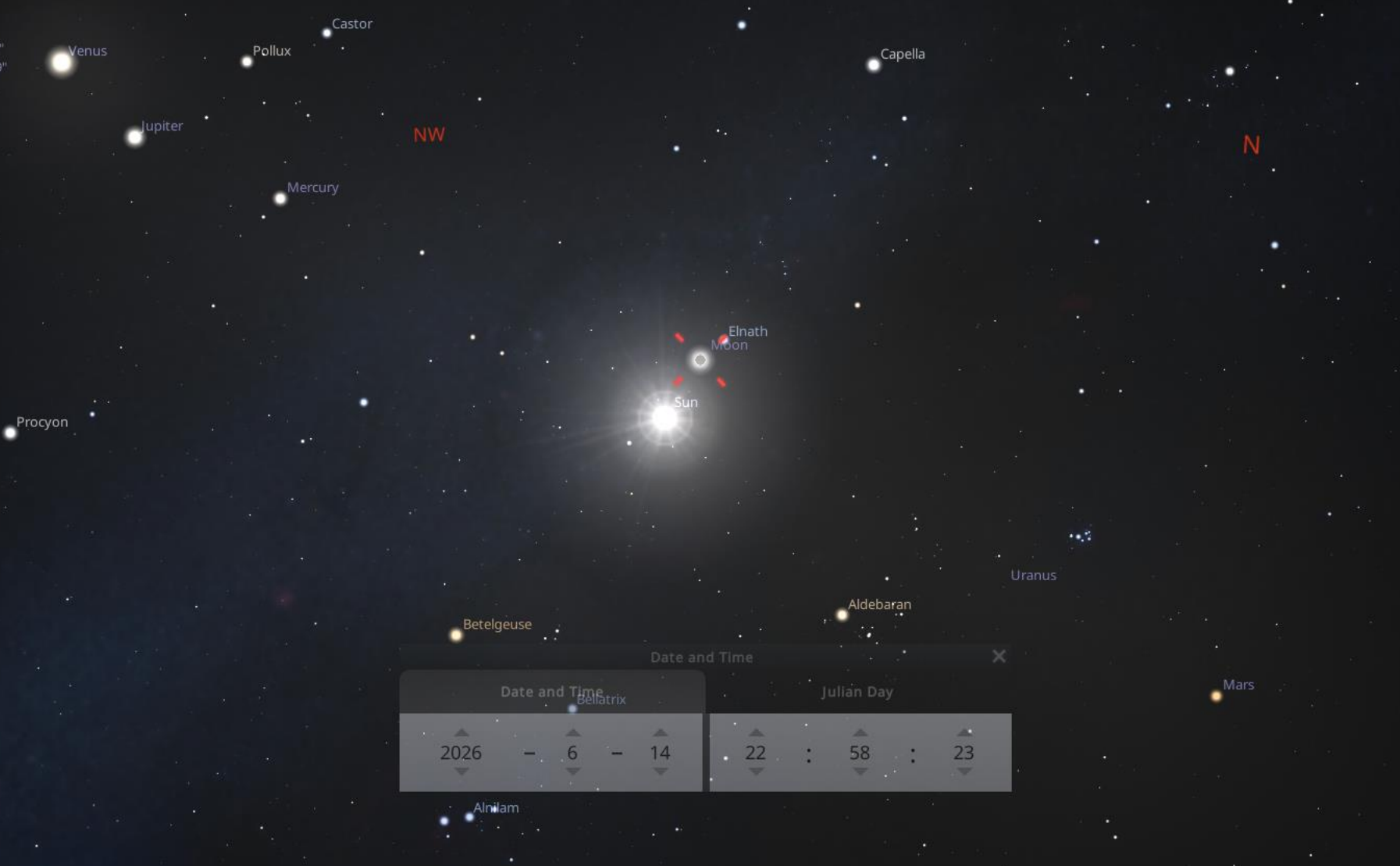
Date and Time			Julian Day		
2026	-	6	-	14	22 : 56 : 19

Moon

- The planets Mercury, Venus and Jupiter are northeast of the sun.
- All 3 planets are in a short straight line close together.

Moon

Type: moon
 Magnitude: -3.33
 Absolute Magnitude: 0.21
 Mean Opposition Magnitude: -12.74
 RA/Dec (J2000.0): 5h29m51.05s/+27°02'50.8"
 RA/Dec (on date): 5h31m30.81s/+27°04'06.2"
 HA/Dec: 9h47m16.79s/+27°04'06.2"
 Az./Alt.: +330°03'43.9"/-12°26'56.7"
 Gal. long./lat.: +179°44'00.1"/-3°57'04.0"
 Supergal. long./lat.: +0°25'42.8"/-12°30'38.7"
 Ecl. long./lat. (J2000.0): +83°16'35.0"/+3°47'02.1"
 Ecl. long./lat. (on date): +83°38'52.4"/+3°47'21.9"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 15h18m47.2s
 Apparent Sidereal Time: 15h18m47.6s
 Rise: 4h28m
 Transit: 12h45m
 Set: 21h07m
 Parallax Angle: +23°38'51.0"
 IAU Constellation: Tau
 Zodiac: ♉ 23°38'
 Hourly motion: +0°47'38" towards 92.4°
 Hourly motion: $d\alpha=+0^{\circ}53'26"$ $d\delta=-0^{\circ}02'15"$
 Elongation: 3°48'40.7"
 Elong. in Ecl. Long.: $W0^{\circ}24'34"$
 Phase angle: +176°10'46.8"
 Illuminated: 0.1%
 Distance from Sun: 1.013 AU (151,593 M km)
 Distance: 0.002397 AU (358556.044 km)
 Light time: 0h00m01.2s
 Orbital velocity: 1.102 km/s
 Heliocentric velocity: 28.220 km/s
 Sidereal period: 27.32 days (0.075 a)
 Synodic period: 29.53 days (0.081 a)
 Apparent diameter: +0°33'18.92"
 Diameter: 3474.8 km
 Sidereal day: 655h43m11.6s
 Mean solar day: 708h44m02.9s
 Equatorial rotation velocity: 4.624 m/s
 Moon age: 0.0 days old (New Moon)
 Position angle of bright limb: +170°59'34"
 Position Angle of axis: +356°48'24"
 Libration: +6°06'28" towards +3°55'05" (S!!)
 Libration: +0°25'02"/-6°05'37"
 Subsolar point: -179°39'49"/+1°24'16"
 Colongitude: +269°39'49"
 Albedo: 0.12
 Solar Az./Alt.: +327°55'40"/-15°38'57"



Date and Time

Date and Time: 2026 - 6 - 14
 Julian Day: 22 : 58 : 23

Moon

- Saturn and Mars are both southwest of the sun.
- Both rise just before dawn in the southeast morning sky.

Moon



Type: moon
 Magnitude: -3.33
 Absolute Magnitude: 0.21
 Mean Opposition Magnitude: -12.74
 RA/Dec (J2000.0): 5h30m15.55s/+27°02'36.8"
 RA/Dec (on date): 5h31m55.30s/+27°03'51.3"
 HA/Dec: 9h53m44.66s/+27°03'51.3"
 Az./Alt.: +331°25'02.4"/-13°01'05.7"
 Gal. long./lat.: +179°47'11.6"/-3°52'37.9"
 Supergal. long./lat.: +0°32'05.0"/-42°33'25.8"
 Ecl. long./lat. (J2000.0): +83°22'01.7"/+3°46'31.1"
 Ecl. long./lat. (on date): +83°44'19.2"/+3°46'51.0"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 15h25m39.5s
 Apparent Sidereal Time: 15h25m40.0s
 Rise: 4h28m
 Transit: 12h45m
 Set: 21h07m
 Parallaxic Angle: +22°36'48.1"
 IAU Constellation: Tau
 Zodiac: ♉ 23°44'
 Hourly motion: +0°47'48" towards 92.3°
 Hourly motion: $da=+0^{\circ}53'37''$ $d\delta=-0^{\circ}02'10''$
 Elongation: 3°47'40.1"
 Elong. in Ecl.Long.: $W0^{\circ}19'24''$
 Phase angle: +176°11'47.6"
 Illuminated: 0.1%
 Distance from Sun: 1.013 AU (151,593 M km)
 Distance: 0.002397 AU (358619,786 km)
 Light time: 0h00m01.2s
 Orbital velocity: 1.102 km/s
 Heliocentric velocity: 28.220 km/s
 Sidereal period: 27.32 days (0.075 a)
 Synodic period: 29.53 days (0.081 a)
 Apparent diameter: +0°33'18.56"
 Diameter: 3474.8 km
 Sidereal day: 655h43m11.6s
 Mean solar day: 708h44m02.9s
 Equatorial rotation velocity: 4.624 m/s
 Moon age: 0.0 days old (New Moon)
 Position angle of bright limb: +172°18'51"
 Position Angle of axis: +356°50'15"
 Libration: +6°06'20" towards +4°01'00" (S!!)
 Libration: +0°25'40"/-6°05'26"
 Subsolar point: -179°43'19"/+1°24'16"
 Colongitude: +269°43'19"
 Albedo: 0.12
 Solar Az./Alt.: +329°25'27"/-16°17'11"



Date and Time ✕

Date and Time			Julian Day		
2026	-	6	-	14	
				23	:
				5	:
				14	

FULL MOON

Full Moon

- The full Moon is on June 29th, at 7:56 p.m.
- This month's full moon is called the Strawberry Moon
- The Moon rises at 9:20 p.m.

Moon



Type: **moon**
 Magnitude: **-12.64** (reduced to **-8.41** by **33.03** Airmasses)
 Absolute Magnitude: 0.21
 Mean Opposition Magnitude: -12.74
 RA/Dec (J2000.0): 18h41m11.97s/-27°52'29.2"
 RA/Dec (on date): 18h42m52.50s/-27°50'59.1"
 HA/Dec: 20h04m56.16s/-27°27'53.6" (apparent)
 Az./Alt.: +130°38'59.1"/+0°24'39.1" (apparent)
 Gal. long./lat.: +6°45'15.3"/-10°15'23.8"
 Supergal. long./lat.: +202°01'48.1"/+46°17'16.6"
 Ecl. long./lat. (J2000.0): +279°07'32.7"/-4°45'40.3"
 Ecl. long./lat. (on date): +279°29'53.6"/-4°45'59.8"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 14h46m27.2s
 Apparent Sidereal Time: 14h46m27.7s
 Rise: 21h22m
 Transit: 0h38m
 Set: 4h42m
 Parallax Angle: -37°43'56.1"
 IAU Constellation: Sgr
 Zodiac: ♏ 9°29'
 Hourly motion: +0°24'24" towards 90.6°
 Hourly motion: $d\alpha=+0^{\circ}27'36"$ $d\delta=-0^{\circ}00'17"$
 Elongation: 175°05'17.5"
 Elong. in Ecl.Long.: W178°48'47"
 Phase angle: +4°53'55.6"
 Illuminated: 99.8%
 Distance from Sun: 1.019 AU (152.479 M km)
 Distance: 0.002708 AU (405124.782 km)
 Light time: 0h00m01.4s
 Orbital velocity: 0.974 km/s
 Heliocentric velocity: 30.268 km/s
 Sidereal period: 27.32 days (0.075 a)
 Synodic period: 29.53 days (0.081 a)
 Apparent diameter: +0°29'29.15"
 Diameter: 3474.8 km
 Sidereal day: 655h43m11.6s
 Mean solar day: 708h44m02.9s
 Equatorial rotation velocity: 4.624 m/s
 Moon age: 14.8 days old (Waning Gibbous)
 Position angle of bright limb: +161°44'44"
 Position Angle of axis: +356°54'48"
 Libration: +5°29'40" towards +195°28'31" (NNE!!)
 Libration: -1°27'58"/+5°17'43"
 Subsolar point: -2°12'44"/+1°18'05"
 Colongitude: +92°12'44"
 Albedo: 0.12
 Solar Az./Alt.: +308°59'45"/-4°27'05"



SE

Date and Time ✕

Date and Time			Julian Day		
2026	-	6	-	29	21
					:
					:
					10

MERCURY

Mercury

- On June 1st, Mercury is low on the western horizon at sunset.
- Mercury shares a close triple conjunction with Venus and Jupiter.
- All 3 planets are moving closer together over the next 7 days.

Mercury



Type: planet
 Magnitude: -0.44 (reduced to 0.40 by 6.58 Airmasses)
 Absolute Magnitude: -0.60
 RA/Dec (J2000.0): 6h02m37.19s/+25°35'56.5"
 RA/Dec (on date): 6h04m15.82s/+25°35'56.2"
 HA/Dec: 6h55m49.35s/+25°40'24.0" (apparent)
 Az./Alt.: +297°50'11.1"/+8°27'14.9" (apparent)
 Gal. long./lat.: +184°47'26.2"/+1°34'00.0"
 Supergal. long./lat.: +9°05'20.1"/-46°46'03.7"
 Ecl. long./lat. (J2000.0): +90°35'27.9"/+2°09'39.9"
 Ecl. long./lat. (on date): +90°57'43.0"/+2°10'00.0"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 13h00m24.3s
 Apparent Sidereal Time: 13h00m24.7s
 Rise: 6h38m
 Transit: 14h34m
 Set: 22h31m
 Parallactic Angle: +44°36'12.5"
 IAU Constellation: Gem
 Zodiac: ♊ 0°57'
 Hourly motion: +0°04'10" towards 90.4°
 Hourly motion: dα=+0°04'38" dδ=-0°00'02"
 Elongation: 19°30'59.8"
 Elong. in Ecl.Long.: E19°24'02"
 Phase angle: +69°39'33.9"
 Illuminated: 67.4%
 Distance from Sun: 0.361 AU (54.050 M km)
 Distance: 1.081 AU (161.772 M km)
 Light time: 0h08m59.6s
 Orbital velocity: 51.176 km/s
 Sidereal period: 87.97 days (0.241 a)
 Synodic period: 115.88 days (0.317 a)
 Apparent diameter: +0°00'06.22"
 Equatorial diameter: 4881.1 km
 Sidereal day: 1407h30m27.0s
 Mean solar day: 4222h26m51.1s
 Equatorial rotation velocity: 3.026 m/s
 Position Angle of axis: +355°13'47"
 Center point: L_s=+256°45'10" φ_s: +2°34'58"
 Subsolar point: L_s=+187°06'56" φ_s: +0°01'31"
 Albedo: 0.06
 Solar Az./Alt.: +310°15'10"/-6°44'19"
 Lunar Az./Alt.: +120°05'06"/-10°16'59"

W

NW

Jupiter

Venus

Mercury

Date and Time ✕

Date and Time				Julian Day					
2026	-	6	-	1	21	:	β1	:	30

Mercury

- On June 1st, Mercury sets at 10:28 p.m. in the western sky.

Mercury

Type: **pplanet**
Magnitude: **-0.44** (reduced to **4.03** by **35.18** Airmasses)
Absolute Magnitude: -0.60
RA/Dec (J2000.0): 6h02m54.84s/+25°35'55.2"
RA/Dec (on date): 6h04m33.47s/+25°35'54.2"
HA/Dec: 7h51m46.30s/+25°59'45.1" (apparent)
Az./Alt.: +307°26'05.6"/+0°16'06.1" (apparent)
Gal. long./lat.: +184°49'25.0"/+1°37'27.2"
Supergal. long./lat.: +9°10'50.2"/-46°47'20.8"
Ecl. long./lat. (J2000.0): +90°39'26.8"/+2°09'39.8"
Ecl. long./lat. (on date): +91°01'42.0"/+2°09'59.8"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 13h57m45.6s
Apparent Sidereal Time: 13h57m46.0s
Rise: 6h38m
Transit: 14h34m
Set: 22h31m
Parallactic Angle: +39°13'01.2"
IAU Constellation: Gem
Zodiac: ♊ 1°1'
Hourly motion: +0°04'11" towards 90.4°
Hourly motion: $d\alpha=+0^{\circ}04'38''$ $d\delta=-0^{\circ}00'02''$
Elongation: 19°32'40.2"
Elong. in Ecl.Long.: E19°25'43"
Phase angle: +69°46'32.7"
Illuminated: 67.3%
Distance from Sun: 0.362 AU (54.085 M km)
Distance: 1.081 AU (161.658 M km)
Light time: 0h08m59.2s
Orbital velocity: 51.145 km/s
Sidereal period: 87.97 days (0.241 a)
Synodic period: 115.88 days (0.317 a)
Apparent diameter: +0°00'06.23"
Equatorial diameter: 4881.1 km
Sidereal day: 1407h30m27.0s
Mean solar day: 4222h26m51.1s
Equatorial rotation velocity: 3.026 m/s
Position Angle of axis: +355°15'52"
Center point: $L_s=+256^{\circ}55'50''$ $\phi_s=+2^{\circ}35'19''$
Subsolar point: $L_s=+187^{\circ}10'37''$ $\phi_s=+0^{\circ}01'31''$
Albedo: 0.06
Solar Az./Alt.: +321°36'20"/-13°51'10"
Lunar Az./Alt.: +129°12'52"/-1°26'06"



NW

Date and Time ✕

Date and Time			Julian Day						
2026	-	6	-	1	22	:	28	:	42

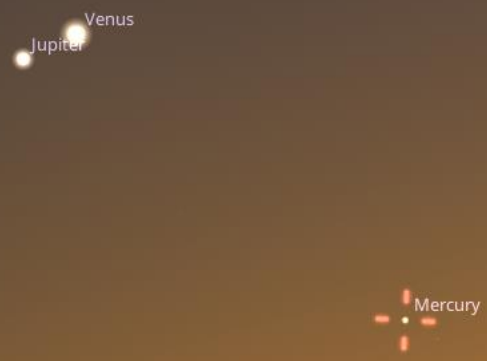
Mercury

- On June 8th, Mercury, Venus and Jupiter reach closest approach to each other at sunset.
- Venus and Jupiter pass each other in close binary conjunction.
- All 3 planets are low on the western horizon at sunset.

Mercury



Type: **planet**
 Magnitude: **0.09** (reduced to **0.78** by **5.36** Airmasses)
 Absolute Magnitude: -0.60
 RA/Dec (J2000.0): 6h48m55.03s/+24°50'07.5"
 RA/Dec (on date): 6h50m32.83s/+24°48'20.5"
 HA/Dec: 6h39m07.69s/+24°51'54.0" (apparent)
 Az./Alt.: +294°33'35.2"/+10°33'53.2" (apparent)
 Gal. long./lat.: +190°17'55.3"/+10°31'24.0"
 Supergal. long./lat.: +24°19'21.0"/-49°25'42.2"
 Ecl. long./lat. (J2000.0): +101°05'21.0"/+1°51'56.4"
 Ecl. long./lat. (on date): +101°27'37.5"/+1°52'16.0"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 13h29m56.2s
 Apparent Sidereal Time: 13h29m56.7s
 Rise: 7h01m
 Transit: 14h54m
 Set: 22h45m
 Parallaxic Angle: +45°50'39.0"
 IAU Constellation: Gem
 Zodiac: ♊ 11°27'
 Hourly motion: +0°03'20" towards 98.1°
 Hourly motion: $da=+0^{\circ}03'37''$ $d\delta=-0^{\circ}00'31''$
 Elongation: 23°16'05.4"
 Elong. in Ecl.Long.: E23°11'49"
 Phase angle: +88°08'52.8"
 Illuminated: 51.6%
 Distance from Sun: 0.401 AU (60.017 M km)
 Distance: 0.945 AU (141.437 M km)
 Light time: 0h07m51.8s
 Orbital velocity: 46.160 km/s
 Sidereal period: 87.97 days (0.241 a)
 Synodic period: 115.88 days (0.317 a)
 Apparent diameter: +0°00'07.12"
 Equatorial diameter: 4881.1 km
 Sidereal day: 1407h30m27.0s
 Mean solar day: 4222h26m51.1s
 Equatorial rotation velocity: 3.026 m/s
 Position Angle of axis: +0°44'54"
 Center point: $L_s=+289^{\circ}17'07''$ $\phi_s: +3^{\circ}44'34''$
 Subsolar point: $L_s=+201^{\circ}08'33''$ $\phi_s: +0^{\circ}00'40''$
 Albedo: 0.06
 Solar Az./Alt.: +310°49'37"/-6°13'30"
 Lunar Az./Alt.: +35°45'32"/-40°09'14"



W

NW

Date and Time ✕

Date and Time			Julian Day						
2026	-	6	-	8	21	:	33	:	25

Mercury

- On June 16th, Mercury, a baby Moon, Jupiter and Venus, share quadruple conjunction in the western sky at sunset.
- Mercury, Jupiter and the Moon are close together low on the western horizon. Venus is higher up.

Mercury

Type: planet
Magnitude: 0.60 (reduced to 1.94 by 10.31 Airmasses)
Absolute Magnitude: -0.60
RA/Dec (J2000.0): 7h27m08.11s/+22°43'18.2"
RA/Dec (on date): 7h28m43.81s/+22°40'05.5"
HA/Dec: 7h04m25.75s/+22°47'09.0" (apparent)
Az./Alt.: +297°13'50.7"/+5°00'55.8" (apparent)
Gal. long./lat.: +195°56'10.1"/+17°39'59.2"
Supergal. long./lat.: +38°12'23.2"/-50°46'25.7"
Ecl. long./lat. (J2000.0): +110°01'09.5"/+0°47'01.2"
Ecl. long./lat. (on date): +110°23'27.8"/+0°47'19.5"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 14h33m38.3s
Apparent Sidereal Time: 14h33m38.7s
Rise: 7h20m
Transit: 15h01m
Set: 22h41m
Parallactic Angle: +43°38'56.5"
IAU Constellation: Gem
Zodiac: ♊ 20°23'
Hourly motion: +0°02'17" towards 108.9°
Hourly motion: $da=+0^{\circ}02'19"$ $db=-0^{\circ}00'48"$
Elongation: 24°28'10.7"
Elong. in Ecl.Long.: E24°27'27"
Phase angle: +106°25'15.6"
Illuminated: 35.9%
Distance from Sun: 0.439 AU (65.627 M km)
Distance: 0.801 AU (119.774 M km)
Light time: 0h06m39.5s
Orbital velocity: 41.865 km/s
Sidereal period: 87.97 days (0.241 a)
Synodic period: 115.88 days (0.317 a)
Apparent diameter: +0°00'08.41"
Equatorial diameter: 4881.1 km
Sidereal day: 1407h30m27.0s
Mean solar day: 4222h26m51.1s
Equatorial rotation velocity: 3.026 m/s
Position Angle of axis: +5°18'29"
Center point: $L_s=+329^{\circ}39'52"$ $\phi_s=+5^{\circ}24'47"$
Subsolar point: $L_s=+223^{\circ}10'12"$ $\phi_s=-0^{\circ}00'17"$
Albedo: 0.06
Solar Az./Alt.: +316°55'30"/-9°46'02"
Lunar Az./Alt.: +295°44'30"/+7°51'22"

Date and Time

Date and Time			Julian Day		
2026	-	6 - 16	22	:	5 : 30

Mercury

- On June 25th, Mercury sets at sunset and is moving towards solar conjunction.
- No longer visible this month.

Mercury

Type: planet
Magnitude: 1.40 (reduced to 5.91 by 35.59 Airmasses)
Absolute Magnitude: -0.60
RA/Dec (J2000.0): 7h48m23.89s/+19°51'46.5"
RA/Dec (on date): 7h49m57.28s/+19°47'48.4"
HA/Dec: 7h22m31.82s/+20°10'52.3" (apparent)
Az./Alt.: +298°32'55.3"/+0°14'34.3" (apparent)
Gal. long./lat.: +200°44'37.6"/+21°09'04.2"
Supergal. long./lat.: +47°08'21.4"/-52°05'10.9"
Ecl. long./lat. (J2000.0): +115°22'28.5"/-1°13'15.3"
Ecl. long./lat. (on date): +115°44'47.8"/-1°12'57.8"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 15h13m57.0s
Apparent Sidereal Time: 15h13m57.5s
Rise: 7h21m
Transit: 14h47m
Set: 22h12m
Parallactic Angle: +42°03'03.7"
IAU Constellation: Gem
Zodiac: ♊ 25°44'
Hourly motion: +0°00'58" towards 141.3°
Hourly motion: $d\alpha=+0^{\circ}00'37''$ $d\delta=-0^{\circ}00'46''$
Elongation: 21°15'12.1"
Elong. in Ecl.Long.: E21°13'12"
Phase angle: +127°13'59.5"
Illuminated: 19.7%
Distance from Sun: 0.463 AU (69.230 M km)
Distance: 0.667 AU (99.826 M km)
Light time: 0h05m33.0s
Orbital velocity: 39.271 km/s
Sidereal period: 87.97 days (0.241 a)
Synodic period: 115.88 days (0.317 a)
Apparent diameter: +0°00'10.09"
Equatorial diameter: 4881.1 km
Sidereal day: 1407h30m27.0s
Mean solar day: 4222h26m51.1s
Equatorial rotation velocity: 3.026 m/s
Position Angle of axis: +7°50'04"
Center point: $L_s=+19^{\circ}38'60''$ $\phi_s=+7^{\circ}41'54''$
Subsolar point: $L_s=+252^{\circ}01'29''$ $\phi_s=-0^{\circ}01'10''$
Albedo: 0.06
Solar Az./Alt.: +317°28'57"/-10°07'41"
Lunar Az./Alt.: +180°30'44"/+21°51'44"

Jupiter

Mercury

Date and Time ✕

Date and Time	Julian Day
2026 - 6 - 25	22 : 10 : 19

VENUS

Venus

- On June 1st, Venus is well placed on the western horizon at sunset.
- Venus shares a triple conjunction with Mercury and Jupiter at sunset.
- Venus and Jupiter are moving closer together. They reach a binary conjunction on June 8th.

Venus - Evening Star



Type: planet
Magnitude: -3.96 (reduced to -3.54 by 3.27 Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): 0.91
RA/Dec (J2000.0): 7h11m42.54s/+24°22'09.8"
RA/Dec (on date): 7h13m19.50s/+24°19'31.5"
HA/Dec: 5h54m02.82s/+24°21'33.0" (apparent)
Az./Alt.: +287°00'51.0"/+17°45'29.2" (apparent)
Gal. long./lat.: +192°54'56.9"/+15°03'20.6"
Supergal. long./lat.: +32°20'04.4"/-49°42'54.8"
Ecl. long./lat. (J2000.0): +106°17'33.8"/+1°56'18.2"
Ecl. long./lat. (on date): +106°39'49.2"/+1°56'37.1"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 13h07m32.0s
Apparent Sidereal Time: 13h07m32.4s
Rise: 7h55m
Transit: 15h44m
Set: 23h33m
Parallactic Angle: +48°41'53.9"
IAU Constellation: Gem
Zodiac: ♊ 16°39'
Hourly motion: +0°02'57" towards 96.0°
Hourly motion: $da=+0^{\circ}03'13"$ $d\delta=-0^{\circ}00'20"$
Elongation: 35°08'40.1"
Elong. in Ecl.Long.: E35°05'51"
Phase angle: +54°16'29.2"
Illuminated: 79.2%
Distance from Sun: 0.719 AU (107.566 M km)
Distance: 1.249 AU (186.853 M km)
Light time: 0h10m23.3s
Orbital velocity: 35.229 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'13.36"
Equatorial diameter: 12103.6 km
Sidereal day: 5832h26m37.0s
Mean solar day: 2802h00m22.2s
Equatorial rotation velocity: 1.811 m/s
Position Angle of axis: +5°59'15"
Center point: $L_s=+16^{\circ}41'21"$ $\phi_s: -2^{\circ}14'12"$
Subsolar point: $L_s=+71^{\circ}00'49"$ $\phi_s: -2^{\circ}34'19"$
Albedo: 0.77
Solar Az./Alt.: +311°36'00"/-7°41'57"
Lunar Az./Alt.: +121°11'04"/-9°13'39"



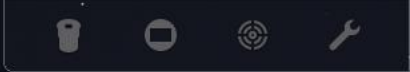
Date and Time

Date and Time			Julian Day		
2026	-	6	-	1	21
					:
					38
					:
					36

Venus

- On June 1st, Venus sets at 11:29 p.m. in the northwestern sky.

Venus - Evening Star



Type: planet
Magnitude: -3.96 (reduced to 0.26 by 32.98 Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): 0.91
RA/Dec (J2000.0): 7h12m06.38s/+24°21'33.1"
RA/Dec (on date): 7h13m43.32s/+24°18'53.9"
HA/Dec: 7h43m46.20s/+24°41'15.8" (apparent)
Az./Alt.: +305°12'29.3"/+0°24'52.2" (apparent)
Gal. long./lat.: +192°57'45.6"/+15°08'05.2"
Supergal. long./lat.: +32°28'31.4"/-49°42'55.6"
Ecl. long./lat. (J2000.0): +106°23'01.8"/+1°56'21.8"
Ecl. long./lat. (on date): +106°45'17.2"/+1°56'40.6"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 14h58m51.6s
Apparent Sidereal Time: 14h58m52.0s
Rise: 7h55m
Transit: 15h44m
Set: 23h33m
Parallactic Angle: +40°03'36.3"
IAU Constellation: Gem
Zodiac: ♊ 16°45'
Hourly motion: +0°02'57" towards 96.0°
Hourly motion: $d\alpha=+0^{\circ}03'13"$ $d\delta=-0^{\circ}00'20"$
Elongation: 35°09'40.2"
Elong. in Ecl.Long.: E35°06'51"
Phase angle: +54°18'31.6"
Illuminated: 79.2%
Distance from Sun: 0.719 AU (107.567 M km)
Distance: 1.249 AU (186.779 M km)
Light time: 0h10m23.0s
Orbital velocity: 35.229 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'13.37"
Equatorial diameter: 12103.6 km
Sidereal day: 5832h26m37.0s
Mean solar day: 2802h00m22.2s
Equatorial rotation velocity: 1.811 m/s
Position Angle of axis: +6°01'30"
Center point: $L_s=+16^{\circ}53'40"$ $\phi_s: -2^{\circ}14'10"$
Subsolar point: $L_s=+71^{\circ}15'10"$ $\phi_s: -2^{\circ}34'14"$
Albedo: 0.77
Solar Az./Alt.: +335°04'06"/-19°34'33"
Lunar Az./Alt.: +139°49'35"/+5°31'22"



Date and Time ✕

Date and Time					Julian Day				
2026	-	6	-	1	23	:	29	:	37

Venus

- On June 8th, Venus and Jupiter converge in a close conjunction.
- Both planets have less than 1 degree of separation.
- Best seen just after sunset on the western horizon.

Venus - Evening Star



Type: planet
Magnitude: -3.98 (reduced to -3.57 by 3.21 Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): 0.91
RA/Dec (J2000.0): 7h47m17.87s/+23°12'11.2"
RA/Dec (on date): 7h48m53.22s/+23°08'16.2"
HA/Dec: 5h47m31.34s/+23°10'15.2" (apparent)
Az./Alt.: +285°02'25.9"/+18°05'46.4" (apparent)
Gal. long./lat.: +197°18'14.0"/+22°09'06.3"
Supergal. long./lat.: +44°56'14.8"/-49°02'30.8"
Ecl. long./lat. (J2000.0): +114°31'13.1"/+2°01'06.0"
Ecl. long./lat. (on date): +114°53'29.8"/+2°01'23.9"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 13h36m34.0s
Apparent Sidereal Time: 13h36m34.4s
Rise: 8h09m
Transit: 15h52m
Set: 23h35m
Parallactic Angle: +48°44'53.4"
IAU Constellation: Gem
Zodiac: ♊ 24°53'
Hourly motion: +0°02'56" towards 99.5°
Hourly motion: $da=+0^{\circ}03'08"$ $d\delta=-0^{\circ}00'32"$
Elongation: 36°40'18.4"
Elong. in Ecl.Long.: E36°37'25"
Phase angle: +57°24'00.7"
Illuminated: 76.9%
Distance from Sun: 0.720 AU (107.648 M km)
Distance: 1.202 AU (179.790 M km)
Light time: 0h09m59.7s
Orbital velocity: 35.203 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'13.89"
Equatorial diameter: 12103.6 km
Sidereal day: 5832h26m37.0s
Mean solar day: 2802h00m22.2s
Equatorial rotation velocity: 1.811 m/s
Position Angle of axis: +9°15'24"
Center point: $L_s=+35^{\circ}17'20"$ $\phi_s: -2^{\circ}08'30"$
Subsolar point: $L_s=+92^{\circ}44'12"$ $\phi_s: -2^{\circ}24'21"$
Albedo: 0.77
Solar Az./Alt.: +312°04'22"/-7°06'40"
Lunar Az./Alt.: +37°36'36"/-39°26'60"



Date and Time ✕

Date and Time				Julian Day					
2026	-	6	-	8	21	:	40	:	2

Venus

- On June 17th, Venus shares a close conjunction with a 2-day old Moon at sunset.
- Both objects are just 2 degrees from each other in west at evening twilight.
- On the same evening Venus, Moon, Jupiter and Mercury form a short straight line in a quadruple conjunction at sunset.

Venus - Evening Star



Type: **planet**
Magnitude: **-4.01** (reduced to **-3.54** by **3.65** Airmasses)
Absolute Magnitude: **-5.18**
Color Index (B-V): **0.91**
RA/Dec (J2000.0): 8h31m32.06s/+20°58'02.1"
RA/Dec (on date): 8h33m04.73s/+20°52'39.1"
HA/Dec: 5h51m52.78s/+20°54'57.3" (apparent)
Az./Alt.: +283°58'44.5"/+15°50'37.6" (apparent)
Gal. long./lat.: +203°38'42.5"/+30°58'39.6"
Supergal. long./lat.: +60°01'14.0"/-46°20'33.4"
Ecl. long./lat. (J2000.0): +125°00'44.7"/+2°00'50.7"
Ecl. long./lat. (on date): +125°23'03.6"/+2°01'06.4"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 14h25m08.0s
Apparent Sidereal Time: 14h25m08.5s
Rise: 8h29m
Transit: 16h01m
Set: 23h32m
Parallactic Angle: +48°01'45.6"
IAU Constellation: Cnc
Zodiac: ♋ 5°23'
Hourly motion: +0°02'54" towards 103.9°
Hourly motion: $d\alpha=+0^{\circ}02'60"$ $d\delta=-0^{\circ}00'44"$
Elongation: 38°32'55.1"
Elong. in Ecl.Long.: E38°30'14"
Phase angle: +61°29'31.3"
Illuminated: 73.9%
Distance from Sun: 0.720 AU (107.785 M km)
Distance: 1.138 AU (170.310 M km)
Light time: 0h09m28.1s
Orbital velocity: 35.158 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'14.66"
Equatorial diameter: 12103.6 km
Sidereal day: 5832h26m37.0s
Mean solar day: 2802h00m22.2s
Equatorial rotation velocity: 1.811 m/s
Position Angle of axis: +13°02'11"
Center point: $L_s=+59^{\circ}07'27"$ $\phi_s: -1^{\circ}54'40"$
Subsolar point: $L_s=+120^{\circ}39'20"$ $\phi_s: -2^{\circ}03'20"$
Albedo: 0.77
Solar Az./Alt.: +314°28'42"/-8°10'02"
Lunar Az./Alt.: +281°22'08"/+16°33'06"

W



Date and Time ✕

Date and Time			Julian Day		
2026	-	6	-	17	21
		:		:	53
				:	5

Venus

- On June 30th, Venus is lower on the western horizon at sunset.

Venus - Evening Star



Type: **planet**
Magnitude: **-4.07** (reduced to **-3.50** by **4.43** Airmasses)
Absolute Magnitude: **-5.18**
Color Index (B-V): **0.91**
RA/Dec (J2000.0): 9h31m39.31s/+16°31'11.2"
RA/Dec (on date): 9h33m07.73s/+16°24'08.5"
HA/Dec: 5h51m20.07s/+16°27'00.2" (apparent)
Az./Alt.: +280°29'02.4"/+12°55'40.2" (apparent)
Gal. long./lat.: +215°08'12.7"/+42°44'41.8"
Supergal. long./lat.: +78°20'00.3"/-39°41'22.9"
Ecl. long./lat. (J2000.0): +139°55'18.4"/+1°46'18.3"
Ecl. long./lat. (on date): +140°17'39.6"/+1°46'30.3"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 15h24m40.2s
Apparent Sidereal Time: 15h24m40.7s
Rise: 8h58m
Transit: 16h10m
Set: 23h20m
Parallactic Angle: +47°12'15.0"
IAU Constellation: Leo
Zodiac: ♌ 20°17'
Hourly motion: +0°02'50" towards 109.5°
Hourly motion: $da=+0^{\circ}02'46''$ $d\delta=-0^{\circ}00'59''$
Elongation: 41°02'18.1"
Elong. in Ecl.Long.: E41°00'24"
Phase angle: +67°33'52.6"
Illuminated: 69.1%
Distance from Sun: 0.722 AU (108.026 M km)
Distance: 1.042 AU (155.936 M km)
Light time: 0h08m40.1s
Orbital velocity: 35.080 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'16.01"
Equatorial diameter: 12103.6 km
Sidereal day: 5832h26m37.0s
Mean solar day: 2802h00m22.2s
Equatorial rotation velocity: 1.811 m/s
Position Angle of axis: +17°26'09"
Center point: $L_s=+93^{\circ}17'21''$ $\phi_s: -1^{\circ}21'18''$
Subsolar point: $L_s=+160^{\circ}52'25''$ $\phi_s: -1^{\circ}19'41''$
Albedo: 0.77
Solar Az./Alt.: +315°23'10"/-9°06'24"
Lunar Az./Alt.: +126°35'53"/+0°00'54"



Jupiter

W

Date and Time

Date and Time			Julian Day		
2026	-	6 - 30	22	:	11 : 20

Venus

- On June 30th, Venus sets at 11:17 p.m. in the western sky.

Venus - Evening Star



Type: planet
Magnitude: -4.07 (reduced to 0.37 by 34.87 Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): 0.91
RA/Dec (J2000.0): 9h31m53.49s/+16°29'56.4"
RA/Dec (on date): 9h33m21.90s/+16°22'53.3"
HA/Dec: 7h06m34.52s/+16°45'08.1" (apparent)
Az./Alt.: +293°26'36.3"/+0°17'15.0" (apparent)
Gal. long./lat.: +215°11'31.0"/+42°47'23.0"
Supergal. long./lat.: +78°23'59.4"/-39°39'27.6"
Ecl. long./lat. (J2000.0): +139°58'55.6"/+1°46'12.2"
Ecl. long./lat. (on date): +140°21'16.9"/+1°46'24.1"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 16h41m23.2s
Apparent Sidereal Time: 16h41m23.7s
Rise: 8h58m
Transit: 16h10m
Set: 23h20m
Parallactic Angle: +43°17'30.7"
IAU Constellation: Leo
Zodiac: ♌ 20°21'
Hourly motion: +0°02'51" towards 109.5°
Hourly motion: $d\alpha=+0^{\circ}02'47"$ $d\delta=-0^{\circ}00'59"$
Elongation: 41°02'51.2"
Elong. in Ecl.Long.: E41°00'57"
Phase angle: +67°35'23.2"
Illuminated: 69.1%
Distance from Sun: 0.722 AU (108.027 M km)
Distance: 1.042 AU (155.877 M km)
Light time: 0h08m40.0s
Orbital velocity: 35.079 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'16.02"
Equatorial diameter: 12103.6 km
Sidereal day: 5832h26m37.0s
Mean solar day: 2802h00m22.2s
Equatorial rotation velocity: 1.811 m/s
Position Angle of axis: +17°27'04"
Center point: $L_s=+93^{\circ}25'41"$ $\phi_s: -1^{\circ}21'08"$
Subsolar point: $L_s=+161^{\circ}02'16"$ $\phi_s: -1^{\circ}19'29"$
Albedo: 0.77
Solar Az./Alt.: +331°23'12"/-17°16'53"
Lunar Az./Alt.: +140°19'25"/+9°17'21"

W

Venus

Date and Time ✕

Date and Time			Julian Day		
2026	-	6	-	30	23
↑		↑		↑	:
↓		↓		↓	:
		30		17	51
		↓		↓	↓

MARS

Mars

- On June 1st, Mars rises at 4:05 a.m. in the eastern morning twilight sky.
- Mars rises at the beginning of astronomical twilight.

Mars



Type: **planet**
 Magnitude: **1.39** (reduced to **5.78** by **34.46** Airmasses)
 Absolute Magnitude: -1.52
 Mean Opposition Magnitude: -2.01
 Color Index (B-V): **1.45**
 RA/Dec (J2000.0): 2h29m48.33s/+14°06'34.3"
 RA/Dec (on date): 2h31m15.32s/+14°13'40.3"
 HA/Dec: 17h03m00.55s/+14°35'28.5" (apparent)
 Az./Alt.: +69°43'02.9"/+0°18'51.4" (apparent)
 Gal. long./lat.: +156°02'01.6"/-42°21'08.9"
 Supergal. long./lat.: +317°24'41.7"/-18°00'43.7"
 Ecl. long./lat. (J2000.0): +39°38'57.1"/-0°37'33.6"
 Ecl. long./lat. (on date): +40°01'12.2"/-0°37'20.0"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 19h32m48.9s
 Apparent Sidereal Time: 19h32m49.3s
 Rise: 4h05m
 Transit: 11h05m
 Set: 18h06m
 Parallaxic Angle: -43°55'21.8"
 IAU Constellation: Ari
 Zodiac: ♈ 10°1'
 Hourly motion: +0°01'51" towards 71.4°
 Hourly motion: dα=+0°01'49" dδ=+0°00'36"
 Elongation: 30°51'15.6"
 Elong. in Ecl.Long.: W30°50'55"
 Phase angle: +21°36'25.0"
 Illuminated: 96.5%



Distance from Sun: 1.412 AU (211.256 M km)
 Distance: 2.183 AU (326.628 M km)
 Light time: 0h18m09.5s
 Orbital velocity: 25.965 km/s
 Sidereal period: 686.97 days (1.881 a)
 Synodic period: 779.95 days (2.135 a)
 Apparent diameter: +0°00'04.29"
 Equatorial diameter: 6792.4 km
 Sidereal day: 24h37m22.7s
 Mean solar day: 24h39m35.2s
 Equatorial rotation velocity: 240.729 m/s
 Position Angle of axis: +321°36'17"
 Center point: L_s=+265°18'39" φ_s:-17°20'28"
 Subsolar point: L_s=+287°32'27" φ_s:-23°03'57"
 Albedo: 0.15
 Solar Az./Alt.: +41°09'51"/-12°26'08"
 Lunar Az./Alt.: +209°17'20"/+11°00'40"

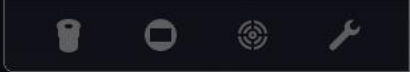
Date and Time ✕

Date and Time			Julian Day						
2026	-	6	-	1	4	:	6	:	46

Mars

- On June 12th, Mars and an old Moon share a wide conjunction at 4:14 a.m. in the early morning eastern pre-dawn sky.

Mars



Type: **planet**
 Magnitude: **1.26** (reduced to **2.62** by **10.47** Airmasses)
 Absolute Magnitude: -1.52
 Mean Opposition Magnitude: -2.01
 Color Index (B-V): **1.45**
 RA/Dec (J2000.0): 3h01m43.90s/+16°37'47.2"
 RA/Dec (on date): 3h03m13.13s/+16°44'05.2"
 HA/Dec: 17h20m46.43s/+16°51'04.7" (apparent)
 Az./Alt.: +71°11'07.1"/+4°55'19.2" (apparent)
 Gal. long./lat.: +162°33'45.6"/-36°01'27.7"
 Supergal. long./lat.: +323°14'29.5"/-24°00'39.7"
 Ecl. long./lat. (J2000.0): +47°44'45.2"/-0°30'49.0"
 Ecl. long./lat. (on date): +48°07'02.0"/-0°30'33.5"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 20h23m29.9s
 Apparent Sidereal Time: 20h23m30.3s
 Rise: 3h42m
 Transit: 10h53m
 Set: 18h05m
 Parallaxic Angle: -45°03'35.2"
 IAU Constellation: Ari
 Zodiac: ♈ 18°7'
 Hourly motion: +0°01'50" towards 73.7°
 Hourly motion: $d\alpha=+0^{\circ}01'50''$ $d\delta=+0^{\circ}00'32''$
 Elongation: 33°17'15.1"
 Elong. in Ecl.Long.: W33°17'02"
 Phase angle: +23°04'04.0"

Moon



Mars

Illuminated: 96.0%
 Distance from Sun: 1.422 AU (212.784 M km)
 Distance: 2.157 AU (322.754 M km)
 Light time: 0h17m56.6s
 Orbital velocity: 25.790 km/s
 Sidereal period: 686.97 days (1.881 a)
 Synodic period: 779.95 days (2.135 a)
 Apparent diameter: +0°00'04.34"
 Equatorial diameter: 6792.4 km
 Sidereal day: 24h37m22.7s
 Mean solar day: 24h39m35.2s
 Equatorial rotation velocity: 240.729 m/s
 Position Angle of axis: +321°34'19"
 Center point: $L_s=+159^{\circ}00'32''$ $\phi_s=-14^{\circ}30'45''$
 Subsolar point: $L_s=+182^{\circ}06'09''$ $\phi_s=-21^{\circ}42'37''$
 Albedo: 0.15
 Solar Az./Alt.: +41°39'45"/-10°52'43"
 Lunar Az./Alt.: +74°03'06"/+11°22'27"

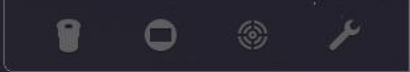
Date and Time ✕

Date and Time				Julian Day					
2026	-	6	-	12	4	:	14	:	4

Mars

- On June 13th, Mars, an old Moon and M45, share a wide conjunction at 4:10 a.m. in the early morning eastern pre-dawn sky.

Mars



Type: **planet**
 Magnitude: **1.25** (reduced to **2.54** by **9.88** Airmasses)
 Absolute Magnitude: -1.52
 Mean Opposition Magnitude: -2.01
 Color Index (B-V): **1.45**
 RA/Dec (J2000.0): 3h04m38.98s/+16°50'33.0"
 RA/Dec (on date): 3h06m08.42s/+16°56'46.2"
 HA/Dec: 17h22m03.54s/+17°03'22.2" (apparent)
 Az./Alt.: +71°15'26.7"/+5°17'03.5" (apparent)
 Gal. long./lat.: +163°05'50.7"/-35°26'13.6"
 Supergal. long./lat.: +323°47'31.4"/-24°32'29.5"
 Ecl. long./lat. (J2000.0): +48°28'34.0"/-0°30'10.7"
 Ecl. long./lat. (on date): +48°50'51.1"/-0°29'55.0"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 20h27m43.8s
 Apparent Sidereal Time: 20h27m44.2s
 Rise: 3h40m
 Transit: 10h52m
 Set: 18h05m
 Parallaxic Angle: -45°08'49.4"
 IAU Constellation: Ari
 Zodiac: ♈ 18°50'
 Hourly motion: +0°01'50" towards 73.9°
 Hourly motion: dα=+0°01'50" dδ=+0°00'32"
 Elongation: 33°30'48.2"
 Elong. in Ecl.Long.: W33°30'36"
 Phase angle: +23°11'59.1"
 Illuminated: 96.0%

Distance from Sun: 1.423 AU (212.932 M km)
 Distance: 2.155 AU (322.381 M km)
 Light time: 0h17m55.3s
 Orbital velocity: 25.773 km/s
 Sidereal period: 686.97 days (1.881 a)
 Synodic period: 779.95 days (2.135 a)
 Apparent diameter: +0°00'04.35"
 Equatorial diameter: 6792.4 km
 Sidereal day: 24h37m22.7s
 Mean solar day: 24h39m35.2s
 Equatorial rotation velocity: 240.729 m/s
 Position Angle of axis: +321°36'34"
 Center point: L_z=+149°16'13" φ_z:-14°14'38"
 Subsolar point: L_s=+172°26'17" φ_s:-21°34'24"
 Albedo: 0.15
 Solar Az./Alt.: +41°38'51"/-10°49'09"
 Lunar Az./Alt.: +61°27'40"/+5°04'44"



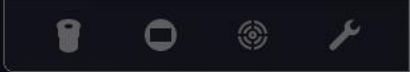
Date and Time ✕

Date and Time			Julian Day						
2026	-	6	-	13	4	:	14	:	21

Mars

- On June 24th, Mars and M45, share a close conjunction at 3:40 a.m. in the early morning eastern pre-dawn sky.
- Both objects rise together at 3:25 a.m.

Mars



Type: **planet**
 Magnitude: **1.35** (reduced to **3.30** by **14.88** Airmasses)
 Absolute Magnitude: -1.52
 Mean Opposition Magnitude: -2.01
 Color Index (B-V): **1.45**
 RA/Dec (J2000.0): 3h36m49.51s/+18°58'57.0"
 RA/Dec (on date): 3h38m21.27s/+19°04'13.9"
 HA/Dec: 16h59m18.87s/+19°14'18.9" (apparent)
 Az./Alt.: +65°51'34.0"/+3°03'16.7" (apparent)
 Gal. long./lat.: +168°27'49.7"/-28°54'46.4"
 Supergal. long./lat.: +330°06'52.8"/-30°10'06.5"
 Ecl. long./lat. (J2000.0): +56°25'18.5"/-0°22'54.5"
 Ecl. long./lat. (on date): +56°47'37.7"/-0°22'37.2"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 20h36m58.8s
 Apparent Sidereal Time: 20h36m59.3s
 Rise: 3h19m
 Transit: 10h41m
 Set: 18h04m
 Parallaxic Angle: -43°46'02.1"
 IAU Constellation: Tau
 Zodiac: ♉ 26°47'
 Hourly motion: +0°01'48" towards 76.4°
 Hourly motion: dα=+0°01'51" dδ=+0°00'27"
 Elongation: 36°02'51.5"
 Elong. in Ecl.Long.: W36°02'45"
 Phase angle: +24°38'11.9"
 Illuminated: 95.4%
 Distance from Sun: 1.435 AU (214.633 M km)
 Distance: 2.126 AU (318.028 M km)
 Light time: 0h17m40.8s
 Orbital velocity: 25.581 km/s
 Sidereal period: 686.97 days (1.881 a)
 Synodic period: 779.95 days (2.135 a)
 Apparent diameter: +0°00'04.41"
 Equatorial diameter: 6792.4 km
 Sidereal day: 24h37m22.7s
 Mean solar day: 24h39m35.2s
 Equatorial rotation velocity: 240.729 m/s
 Position Angle of axis: +322°26'36"
 Center point: L_s=+33°15'55" φ_s: -11°11'54"
 Subsolar point: L_s=+57°13'06" φ_s: -19°56'14"
 Albedo: 0.15
 Solar Az./Alt.: +34°01'38"/-14°38'57"
 Lunar Az./Alt.: +267°02'09"/-20°35'10"



E

Date and Time ✕

Date and Time			Julian Day		
2026	-	6	-	24	3
:	:	:	:	:	:
40	:	19	:	19	19

Mars

- On June 30th, Mars rises at 3:10 a.m. in the early morning eastern sky.

Mars



Type: **planet**
 Magnitude: **1.39** (reduced to **5.96** by **36.10** Airmasses)
 Absolute Magnitude: -1.52
 Mean Opposition Magnitude: -2.01
 Color Index (B-V): **1.45**
 RA/Dec (J2000.0): 3h54m27.23s/+19°59'26.8"
 RA/Dec (on date): 3h56m00.21s/+20°04'09.8"
 HA/Dec: 16h35m57.37s/+20°27'31.9" (apparent)
 Az./Alt.: +61°00'06.6"/+0°12'42.9" (apparent)
 Gal. long./lat.: +171°04'05.6"/-25°19'13.3"
 Supergal. long./lat.: +333°48'39.6"/-33°03'43.9"
 Ecl. long./lat. (J2000.0): +60°41'47.2"/-0°18'44.8"
 Ecl. long./lat. (on date): +61°04'07.8"/-0°18'26.9"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 20h30m27.8s
 Apparent Sidereal Time: 20h30m28.3s
 Rise: 3h09m
 Transit: 10h35m
 Set: 18h03m
 Parallaxic Angle: -41°55'17.2"
 IAU Constellation: Tau
 Zodiac: ♉, 1°4'
 Hourly motion: +0°01'47" towards 77.9°
 Hourly motion: $d\alpha=+0^{\circ}01'51''$ $d\delta=+0^{\circ}00'24''$
 Elongation: 37°28'23.4"
 Elong. in Ecl.Long.: W37°28'19"
 Phase angle: +25°24'38.0"
 Illuminated: 95.2%
 Distance from Sun: 1.441 AU (215.619 M km)
 Distance: 2.109 AU (315.454 M km)
 Light time: 0h17m32.2s
 Orbital velocity: 25.470 km/s
 Sidereal period: 686.97 days (1.881 a)
 Synodic period: 779.95 days (2.135 a)
 Apparent diameter: +0°00'04.44"
 Equatorial diameter: 6792.4 km
 Sidereal day: 24h37m22.7s
 Mean solar day: 24h39m35.2s
 Equatorial rotation velocity: 240.729 m/s
 Position Angle of axis: +323°12'25"
 Center point: $L_s=+327^{\circ}18'19''$ $\phi_s=-9^{\circ}28'52''$
 Subsolar point: $L_s=+351^{\circ}40'25''$ $\phi_s=-18^{\circ}57'09''$
 Albedo: 0.15
 Solar Az./Alt.: +27°15'17"/-17°43'52"
 Lunar Az./Alt.: +202°29'04"/+14°43'24"



Date and Time ✕

Date and Time			Julian Day						
2026	-	6	-	30	3	:	10	:	14

JUPITER

Jupiter

- On June 1st, Jupiter is well placed in the western sky at sunset.

Jupiter



Type: **planet**
Magnitude: **-1.88** (reduced to **-1.56** by **2.48** Airmasses)
Absolute Magnitude: -9.40
Mean Opposition Magnitude: -2.70
Color Index (B-V): **0.96**
RA/Dec (J2000.0): 7h43m26.51s/+21°43'42.2"
RA/Dec (on date): 7h45m00.91s/+21°39'55.4"
HA/Dec: 5h09m33.44s/+21°41'22.5" (apparent)
Az./Alt.: +277°42'48.2"/+23°47'07.0" (apparent)
Gal. long./lat.: +198°25'33.0"/+20°46'52.6"
Supergal. long./lat.: +44°22'30.7"/-50°43'34.6"
Ecl. long./lat. (J2000.0): +113°54'13.3"/+0°24'34.2"
Ecl. long./lat. (on date): +114°16'28.4"/+0°24'52.1"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 12h54m41.3s
Apparent Sidereal Time: 12h54m41.7s
Rise: 8h43m
Transit: 16h17m
Set: 23h51m
Parallactic Angle: +49°45'06.9"
IAU Constellation: Gem
Zodiac: ♊ 24°16'
Hourly motion: +0°00'28" towards 99.4°
Hourly motion: $d\alpha=+0^{\circ}00'30"$ $d\delta=-0^{\circ}00'05"$
Elongation: 42°43'07.3"
Elong. in Ecl.Long.: E42°43'01"
Phase angle: +7°30'22.0"
Illuminated: 99.6%
Distance from Sun: 5.266 AU (787.810 M km)
Distance: 5.966 AU (892.512 M km)
Light time: 0h49m37.1s
Orbital velocity: 12.906 km/s
Sidereal period: 4331.87 days (11.860 a)
Synodic period: 398.89 days (1.092 a)
Apparent diameter: +0°00'33.04"
Equatorial diameter: 142984.0 km
Sidereal day: 9h55m40.6s
Mean solar day: 9h55m44.0s
Equatorial rotation velocity: 12.568 km/s
Position Angle of axis: +11°43'48"
Center point: $L_{11a}=+290^{\circ}16'04"$ $\phi_a: +1^{\circ}07'52"$
Subsolar point: $L_{11a}=+282^{\circ}45'57"$ $\phi_s: +0^{\circ}51'12"$
Albedo: 0.51
Solar Az./Alt.: +309°11'06"/-5°57'17"
Lunar Az./Alt.: +119°12'35"/-11°08'16"



Date and Time ✕

Date and Time			Julian Day		
2026	-	6	-	1	
			21	:	25
				:	48

Jupiter

- On June 1st, Jupiter sets at 11:48 p.m. in the northwestern sky.

Jupiter



Type: **planet**
 Magnitude: **-1.88** (reduced to 2.49 by 34.29 Airmasses)
 Absolute Magnitude: -9.40
 Mean Opposition Magnitude: -2.70
 Color Index (B-V): **0.96**
 RA/Dec (J2000.0): 7h43m31.30s/+21°43'30.5"
 RA/Dec (on date): 7h45m05.70s/+21°39'43.5"
 HA/Dec: 7h30m56.82s/+22°02'22.8" (apparent)
 Az./Alt.: +301°15'01.9"/+0°19'31.6" (apparent)
 Gal. long./lat.: +198°26'11.3"/+20°47'50.1"
 Supergal. long./lat.: +44°24'16.5"/-50°43'24.4"
 Ecl. long./lat. (J2000.0): +113°55'21.0"/+0°24'34.3"
 Ecl. long./lat. (on date): +114°17'36.2"/+0°24'52.1"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 15h17m27.7s
 Apparent Sidereal Time: 15h17m28.1s
 Rise: 8h43m
 Transit: 16h17m
 Set: 23h51m
 Parallaxic Angle: +41°18'23.1"
 IAU Constellation: Gem
 Zodiac: ♊ 24°17'
 Hourly motion: +0°00'29" towards 99.4°
 Hourly motion: $d\alpha=+0^{\circ}00'30''$ $d\delta=-0^{\circ}00'05''$
 Elongation: 42°38'31.3"
 Elong. in Ecl.Long.: E42°38'25"
 Phase angle: +7°29'43.1"
 Illuminated: 99.6%
 Distance from Sun: 5.266 AU (787.815 M km)
 Distance: 5.967 AU (892.677 M km)
 Light time: 0h49m37.6s
 Orbital velocity: 12.906 km/s
 Sidereal period: 4331.87 days (11.860 a)
 Synodic period: 398.89 days (1.092 a)
 Apparent diameter: +0°00'33.04"
 Equatorial diameter: 142984.0 km
 Sidereal day: 9h55m40.6s
 Mean solar day: 9h55m44.0s
 Equatorial rotation velocity: 12.568 km/s
 Position Angle of axis: +11°44'16"
 Center point: $L_{11a}=+16^{\circ}17'37''$ $\phi_c: +1^{\circ}07'50''$
 Subsolar point: $L_{11a}=+8^{\circ}48'09''$ $\phi_s: +0^{\circ}51'10''$
 Albedo: 0.51
 Solar Az./Alt.: +339°26'10"/-20°51'29"
 Lunar Az./Alt.: +143°16'17"/+7°29'30"



Date and Time ✕

Date and Time			Julian Day						
2026	-	6	-	1	23	:	48	:	11

Jupiter

- On June 8th, Jupiter and Venus have a close conjunction in the western sky at sunset.
- Jupiter and Venus are less than 1 degree from each other.
- Mercury lower on the horizon makes up the triple conjunction.

Jupiter



Type: **planet**
 Magnitude: **-1.86** (reduced to **-1.35** by **3.89** Airmasses)
 Absolute Magnitude: -9.40
 Mean Opposition Magnitude: -2.70
 Color Index (B-V): **0.96**
 RA/Dec (J2000.0): 7h49m12.42s/+21°29'30.6"
 RA/Dec (on date): 7h50m46.60s/+21°25'31.7"
 HA/Dec: 6h00m05.69s/+21°28'00.5" (apparent)
 Az./Alt.: +285°44'02.6"/+14°47'32.9" (apparent)
 Gal. long./lat.: +199°11'47.4"/+21°56'14.3"
 Supergal. long./lat.: +46°29'20.6"/-50°29'51.6"
 Ecl. long./lat. (J2000.0): +115°15'51.8"/+0°24'54.9"
 Ecl. long./lat. (on date): +115°38'08.2"/+0°25'12.7"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 13h51m03.6s
 Apparent Sidereal Time: 13h51m04.0s
 Rise: 8h22m
 Transit: 15h55m
 Set: 23h28m
 Parallaxic Angle: +47°45'01.9"
 IAU Constellation: Gem
 Zodiac: ♊ 25°38'
 Hourly motion: +0°00'30" towards 99.9°
 Hourly motion: dα=+0°00'31" dδ=-0°00'05"
 Elongation: 37°21'36.5"
 Elong. in Ecl.Long.: E37°21'29"
 Phase angle: +6°42'49.7"
 Illuminated: 99.7%
 Distance from Sun: 5.269 AU (788.174 M km)
 Distance: 6.039 AU (903.465 M km)
 Light time: 0h50m13.6s
 Orbital velocity: 12.900 km/s
 Sidereal period: 4331.87 days (11.860 a)
 Synodic period: 398.89 days (1.092 a)
 Apparent diameter: +0°00'32.64"
 Equatorial diameter: 142984.0 km
 Sidereal day: 9h55m40.6s
 Mean solar day: 9h55m44.0s
 Equatorial rotation velocity: 12.568 km/s
 Position Angle of axis: +12°17'07"
 Center point: L_{IIIa}=+277°46'16" φ_a: +1°05'13"
 Subsolar point: L_{IIIa}=+271°03'42" φ_s: +0°49'24"
 Albedo: 0.51
 Solar Az./Alt.: +314°50'55"/-8°59'14"
 Lunar Az./Alt.: +41°31'40"/-37°48'47"



Date and Time ✕

Date and Time			Julian Day						
2026	-	6	-	8	21	:	54	:	29

Jupiter

- On June 16th, Jupiter, Venus a new baby Moon and Mercury all share a wide quadruple conjunction

Jupiter

Type: **planet**
 Magnitude: **-1.84** (reduced to **-1.04** by **6.16** Airmasses)
 Absolute Magnitude: -9.40
 Mean Opposition Magnitude: -2.70
 Color Index (B-V): **0.96**
 RA/Dec (J2000.0): 7h56m00.73s/+21°11'46.3"
 RA/Dec (on date): 7h57m34.67s/+21°07'32.7"
 HA/Dec: 6h32m34.09s/+21°11'38.1" (apparent)
 Az./Alt.: +290°49'11.1"/+9°05'24.9" (apparent)
 Gal. long./lat.: +200°07'31.3"/+23°18'08.4"
 Supergal. long./lat.: +48°57'51.7"/-50°10'38.6"
 Ecl. long./lat. (J2000.0): +116°52'35.0"/+0°25'20.1"
 Ecl. long./lat. (on date): +117°14'53.3"/+0°25'37.4"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 14h30m26.3s
 Apparent Sidereal Time: 14h30m26.8s
 Rise: 7h59m
 Transit: 15h30m
 Set: 23h02m
 Parallaxic Angle: +45°50'51.0"
 IAU Constellation: Gem
 Zodiac: ♊ 27°14'
 Hourly motion: +0°00'31" towards 100.4°
 Hourly motion: d α =+0°00'32" d δ =-0°00'06"
 Elongation: 31°19'10.3"
 Elong. in Ecl. Long.: E31°19'00"
 Phase angle: +5°44'57.8"
 Illuminated: 99.7%
 Distance from Sun: 5.271 AU (788.589 M km)
 Distance: 6.113 AU (914.453 M km)
 Light time: 0h50m50.3s
 Orbital velocity: 12.893 km/s
 Sidereal period: 4331.87 days (11.860 a)
 Synodic period: 398.89 days (1.092 a)
 Apparent diameter: +0°00'32.25"
 Equatorial diameter: 142984.0 km
 Sidereal day: 9h55m40.6s
 Mean solar day: 9h55m44.0s
 Equatorial rotation velocity: 12.568 km/s
 Position Angle of axis: +12°55'54"
 Center point: L_{11a}=+42°40'29" ϕ_a : +1°01'60"
 Subsolar point: L_{11a}=+36°55'48" ϕ_s : +0°47'21"
 Albedo: 0.51
 Solar Az./Alt.: +316°17'53"/-9°22'30"
 Lunar Az./Alt.: +295°15'02"/+8°21'04"

Venus

Castor

Pollux

Jupiter

Moon

Mercury

NW

Date and Time ✕

Date and Time			Julian Day						
2026	-	6	-	16	22	:	2	:	18

Jupiter

- On June 30th, Jupiter is low in western sky at sunset.

Jupiter

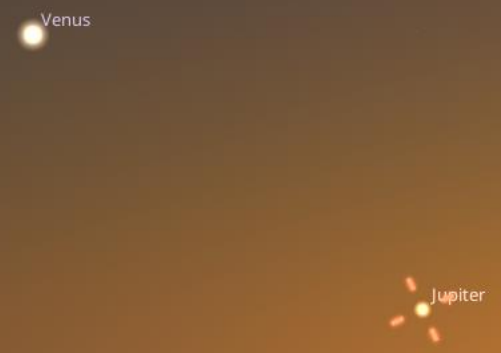


Type: **planet**
 Magnitude: **-1.81** (reduced to **-0.28** by **11.71** Airmasses)
 Absolute Magnitude: **-9.40**
 Mean Opposition Magnitude: **-2.70**
 Color Index (B-V): **0.96**
 RA/Dec (J2000.0): 8h08m20.21s/+20°36'57.8"
 RA/Dec (on date): 8h09m53.60s/+20°32'18.8"
 HA/Dec: 6h59m36.67s/+20°40'16.6" (apparent)
 Az./Alt.: +294°57'08.7"/+4°15'46.5" (apparent)
 Gal. long./lat.: +201°51'58.2"/+25°46'29.8"
 Supergal. long./lat.: +53°22'40.6"/-49°27'36.3"
 Ecl. long./lat. (J2000.0): +119°48'45.2"/+0°26'09.3"
 Ecl. long./lat. (on date): +120°11'06.1"/+0°26'26.0"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 15h10m02.5s
 Apparent Sidereal Time: 15h10m03.0s
 Rise: 7h19m
 Transit: 14h47m
 Set: 22h16m
 Parallaxic Angle: +43°54'38.6"
 IAU Constellation: Cnc
 Zodiac: δ 0°11'
 Hourly motion: +0°00'32" towards 101.4°
 Hourly motion: dα=+0°00'34" dδ=-0°00'07"
 Elongation: 20°54'41.7"
 Elong. in Ecl.Long.: E20°54'25"
 Phase angle: +3°56'36.1"
 Illuminated: 99.9%

Distance from Sun: 5.276 AU (789.310 M km)
 Distance: 6.213 AU (929.503 M km)
 Light time: 0h51m40.5s
 Orbital velocity: 12.881 km/s
 Sidereal period: 4331.87 days (11.860 a)
 Synodic period: 398.89 days (1.092 a)
 Apparent diameter: +0°00'31.73"
 Equatorial diameter: 142984.0 km
 Sidereal day: 9h55m40.6s
 Mean solar day: 9h55m44.0s
 Equatorial rotation velocity: 12.568 km/s
 Position Angle of axis: +14°04'37"
 Center point: $L_{IIa}=+333^{\circ}36'57''$ $\phi_a: +0^{\circ}55'53''$
 Subsolar point: $L_{IIa}=+329^{\circ}40'39''$ $\phi_s: +0^{\circ}43'46''$
 Albedo: 0.51
 Solar Az./Alt.: +312°34'45"/-7°13'41"
 Lunar Az./Alt.: +124°10'11"/-1°59'30"

W

NW



Date and Time ✕

Date and Time			Julian Day						
2026	-	6	-	30	21	:	46	:	45

Jupiter

- On June 30th, Jupiter sets at 10:14 p.m. in the northwestern sky.

Jupiter

Type: **planet**
Magnitude: **-1.81** (reduced to **2.81** by **36.53** Airmasses)
Absolute Magnitude: -9.40
Mean Opposition Magnitude: -2.70
Color Index (B-V): **0.96**
RA/Dec (J2000.0): 8h08m21.25s/+20°36'54.7"
RA/Dec (on date): 8h09m54.64s/+20°32'15.7"
HA/Dec: 7h26m28.03s/+20°55'55.2" (apparent)
Az./Alt.: +299°44'09.7"/+0°11'12.0" (apparent)
Gal. long./lat.: +201°52'07.2"/+25°46'42.3"
Supergal. long./lat.: +53°23'02.7"/-49°27'32.3"
Ecl. long./lat. (J2000.0): +119°49'00.1"/+0°26'09.3"
Ecl. long./lat. (on date): +120°11'21.0"/+0°26'26.0"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 15h37m52.1s
Apparent Sidereal Time: 15h37m52.6s
Rise: 7h19m
Transit: 14h47m
Set: 22h16m
Parallactic Angle: +41°42'35.6"
IAU Constellation: Cnc
Zodiac: ♄ 0°11'
Hourly motion: +0°00'32" towards 101.4°
Hourly motion: $d\alpha=+0^{\circ}00'34"$ $d\delta=-0^{\circ}00'07"$
Elongation: 20°53'50.0"
Elong. in Ecl.Long.: E20°53'34"
Phase angle: +3°56'26.8"
Illuminated: 99.9%
Distance from Sun: 5.276 AU (789.311 M km)
Distance: 6.213 AU (929.520 M km)
Light time: 0h51m40.5s
Orbital velocity: 12.881 km/s
Sidereal period: 4331.87 days (11.860 a)
Synodic period: 398.89 days (1.092 a)
Apparent diameter: +0°00'31.73"
Equatorial diameter: 142984.0 km
Sidereal day: 9h55m40.6s
Mean solar day: 9h55m44.0s
Equatorial rotation velocity: 12.568 km/s
Position Angle of axis: +14°04'43"
Center point: $L_{11a}=+350^{\circ}22'59"$ $\phi_s: +0^{\circ}55'53"$
Subsolar point: $L_{11a}=+346^{\circ}26'50"$ $\phi_s: +0^{\circ}43'45"$
Albedo: 0.51
Solar Az./Alt.: +317°59'01"/-10°43'21"
Lunar Az./Alt.: +128°50'10"/+1°36'26"

Jupiter

NW

Date and Time

Date and Time			Julian Day		
2026	-	6 - 30	22	:	14 : 30

SATURN

Saturn

- On June 1st, Saturn rises at 3:10 a.m. in the eastern late morning sky.
- Saturn rises just 2 hours before sunrise.

Saturn



Type: **planet**
 Magnitude: **0.87** (reduced to **5.26** by **34.45** Airmasses)
 Absolute Magnitude: -8.88
 Mean Opposition Magnitude: 0.67
 Color Index (B-V): **1.22**
 RA/Dec (J2000.0): 0h47m19.42s/+2°37'20.0"
 RA/Dec (on date): 0h48m41.37s/+2°46'01.9"
 HA/Dec: 17h49m34.18s/+3°07'10.8" (apparent)
 Az./Alt.: +85°56'49.5"/+0°18'53.7" (apparent)
 Gal. long./lat.: +120°51'43.3"/-60°13'58.7"
 Supergal. long./lat.: +298°27'21.9"/+2°33'34.7"
 Ecl. long./lat. (J2000.0): +11°54'13.6"/-2°15'48.2"
 Ecl. long./lat. (on date): +12°16'29.2"/-2°15'42.9"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 18h36m48.6s
 Apparent Sidereal Time: 18h36m49.0s
 Rise: 3h09m
 Transit: 9h22m
 Set: 15h35m
 Parallaxic Angle: -45°38'24.0"
 IAU Constellation: Cet
 Zodiac: ♒ 12°16'
 Hourly motion: +0°00'13" towards 69.5°
 Hourly motion: $d\alpha=+0^{\circ}00'12''$ $d\delta=+0^{\circ}00'04''$
 Elongation: 58°35'01.3"
 Elong. in Ecl.Long.: W58°33'23"
 Phase angle: +5°14'29.6"
 Illuminated: 99.8%
 Distance from Sun: 9.472 AU (1416.976 M km)
 Distance: 9.961 AU (1490.117 M km)
 Light time: 1h22m50.5s
 Orbital velocity: 9.714 km/s
 Sidereal period: 10760.00 days (29.459 a)
 Synodic period: 378.09 days (1.035 a)
 Apparent diameter: +0°00'16.68", with rings: +0°00'38.87"
 Equatorial diameter: 120536.0 km
 Sidereal day: 10h39m22.4s
 Mean solar day: 10h39m24.0s
 Equatorial rotation velocity: 9.871 km/s
 Position Angle of axis: +3°10'07"
 Center point: $L_{IIIe}=+275^{\circ}23'27''$ $\phi_e: -8^{\circ}21'44''$
 Subsolar point: $L_{IIIe}=+280^{\circ}03'55''$ $\phi_s: -5^{\circ}53'55''$
 Albedo: 0.50
 Solar Az./Alt.: +29°09'03"/-18°11'52"
 Lunar Az./Alt.: +197°41'19"/+14°52'20"



Saturn

E

Neptune

Date and Time ✕

Date and Time					Julian Day				
2026	-	6	-	1	3	:	10	:	55

Saturn

- On June 10th, Saturn and the last quarter moon share a wide conjunction in the early morning eastern sky.

Saturn



Type: **planet**
Magnitude: **0.85** (reduced to **1.93** by **8.37** Airmasses)
Absolute Magnitude: -8.88
Mean Opposition Magnitude: 0.67
Color Index (B-V): **1.22**
RA/Dec (J2000.0): 0h49m58.85s/+2°51'58.1"
RA/Dec (on date): 0h51m20.94s/+3°00'39.3"
HA/Dec: 18h23m53.73s/+3°06'12.1" (apparent)
Az./Alt.: +91°57'04.8"/+6°26'29.0" (apparent)
Gal. long./lat.: +122°12'15.0"/-60°00'12.8"
Supergal. long./lat.: +298°52'12.1"/+1°59'10.8"
Ecl. long./lat. (J2000.0): +12°36'37.6"/-2°17'48.9"
Ecl. long./lat. (on date): +12°58'54.8"/-2°17'43.4"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 19h14m51.5s
Apparent Sidereal Time: 19h14m51.9s
Rise: 2h35m
Transit: 8h49m
Set: 15h03m
Parallactic Angle: -45°45'07.3"
IAU Constellation: Psc
Zodiac: ♋ 12°58'
Hourly motion: +0°00'11" towards 70.2°
Hourly motion: $d\alpha=+0^{\circ}00'10''$ $d\delta=+0^{\circ}00'04''$
Elongation: 66°29'10.3"
Elong. in Ecl.Long.: W66°27'58"
Phase angle: +5°38'30.6"
Illuminated: 99.8%
Distance from Sun: 9.469 AU (1416.563 M km)
Distance: 9.828 AU (1470.293 M km)
Light time: 1h21m44.4s
Orbital velocity: 9.717 km/s
Sidereal period: 10760.00 days (29.459 a)
Synodic period: 378.09 days (1.035 a)
Apparent diameter: +0°00'16.91", with rings: +0°00'39.39"
Equatorial diameter: 120536.0 km
Sidereal day: 10h39m22.4s
Mean solar day: 10h39m24.0s
Equatorial rotation velocity: 9.871 km/s
Position Angle of axis: +3°06'22"
Center point: $L_{IIIe}=+13^{\circ}19'12''$ $\phi_s: -8^{\circ}38'39''$
Subsolar point: $L_{IIIe}=+18^{\circ}22'31''$ $\phi_s: -6^{\circ}02'03''$
Albedo: 0.50
Solar Az./Alt.: +28°59'18"/-17°14'03"
Lunar Az./Alt.: +89°53'52"/+10°35'47"



Date and Time ✕

Date and Time				Julian Day					
2026	-	6	-	10	3	:	13	:	28

Saturn

- On June 30th, Saturn rises at 1:21 a.m. in early morning eastern sky.

Saturn



Type: **planet**
 Magnitude: **0.78** (reduced to **5.19** by **34.62** Airmasses)
 Absolute Magnitude: -8.88
 Mean Opposition Magnitude: 0.67
 Color Index (B-V): **1.22**
 RA/Dec (J2000.0): 0h54m26.17s/+3°14'35.7"
 RA/Dec (on date): 0h55m48.60s/+3°23'16.3"
 HA/Dec: 17h47m03.96s/+3°44'31.0" (apparent)
 Az./Alt.: +85°03'55.2"/+0°18'12.8" (apparent)
 Gal. long./lat.: +124°24'42.4"/-59°37'11.6"
 Supergal. long./lat.: +299°32'00.7"/+1°01'01.6"
 Ecl. long./lat. (J2000.0): +13°46'58.4"/-2°22'50.4"
 Ecl. long./lat. (on date): +14°09'19.7"/-2°22'44.6"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 18h41m25.1s
 Apparent Sidereal Time: 18h41m25.6s
 Rise: 1h19m
 Transit: 7h35m
 Set: 13h50m
 Parallaxic Angle: -45°36'26.3"
 IAU Constellation: Psc
 Zodiac: ♓ 14°9'
 Hourly motion: +0°00'07" towards 73.0°
 Hourly motion: dα=+0°00'06" dδ=+0°00'02"
 Elongation: 84°19'03.3"
 Elong. in Ecl.Long.: W84°18'45"
 Phase angle: +6°08'11.6"
 Illuminated: 99.7%
 Distance from Sun: 9.463 AU (1415.648 M km)
 Distance: 9.509 AU (1422.594 M km)
 Light time: 1h19m05.3s
 Orbital velocity: 9.723 km/s
 Sidereal period: 10760.00 days (29.459 a)
 Synodic period: 378.09 days (1.035 a)
 Apparent diameter: +0°00'17.48", with rings: +0°00'40.71"
 Equatorial diameter: 120536.0 km
 Sidereal day: 10h39m22.4s
 Mean solar day: 10h39m24.0s
 Equatorial rotation velocity: 9.871 km/s
 Position Angle of axis: +2°59'59"
 Center point: L_{IIIe}=+325°02'29" φ_a: -9°05'00"
 Subsolar point: L_{IIIe}=+330°35'24" φ_s: -6°20'02"
 Albedo: 0.50
 Solar Az./Alt.: +1°08'04"/-22°31'36"
 Lunar Az./Alt.: +178°12'53"/+17°59'29"



Neptune

Date and Time ✕

Date and Time			Julian Day		
2026	-	6	-	30	1
		:		21	:
				:	29

URANUS

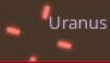
Uranus

- On June 1st, Uranus is still below the horizon at sunrise.
- The planet climbs slowly out of the solar glare by mid-month.
- On June 13th, Uranus rises at 4:21 a.m. just an hour before sunrise.

Uranus



Type: **planet**
 Magnitude: **5.83** (reduced to **10.58** by **37.77** Airmasses)
 Absolute Magnitude: -7.19
 Mean Opposition Magnitude: 5.52
 Color Index (B-V): **0.74**
 RA/Dec (J2000.0): 4h01m26.98s/+20°29'01.0"
 RA/Dec (on date): 4h03m00.22s/+20°33'29.4"
 HA/Dec: 16h32m55.81s/+20°57'46.5" (apparent)
 Az./Alt.: +60°08'17.9"/+0°06'58.2" (apparent)
 Gal. long./lat.: +171°57'03.8"/-23°48'24.1"
 Supergal. long./lat.: +335°27'09.7"/-34°05'39.6"
 Ecl. long./lat. (J2000.0): +62°24'11.4"/-0°09'40.2"
 Ecl. long./lat. (on date): +62°46'28.4"/-0°09'22.0"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 20h34m23.4s
 Apparent Sidereal Time: 20h34m23.8s
 Rise: 4h20m
 Transit: 11h48m
 Set: 19h17m
 Parallaxic Angle: -41°39'22.8"
 IAU Constellation: Tau
 Zodiac: ♅ 2°46'
 Hourly motion: +0°00'08" towards 79.3°
 Hourly motion: dα=+0°00'09" dδ=+0°00'02"
 Elongation: 19°35'17.2"
 Elong. in Ecl.Long.: W19°35'15"
 Phase angle: +1°00'08.8"
 Illuminated: 100.0%
 Distance from Sun: 19.461 AU (2911.335 M km)
 Distance: 20.415 AU (3054.020 M km)
 Light time: 2h49m47.1s
 Orbital velocity: 6.718 km/s
 Sidereal period: 30685.00 days (84.011 a)
 Synodic period: 369.66 days (1.012 a)
 Apparent diameter: +0°00'03.45", with rings: +0°00'13.20"
 Equatorial diameter: 51118.0 km
 Sidereal day: 17h14m24.0s
 Mean solar day: 17h14m22.5s
 Equatorial rotation velocity: 2587.521 m/s
 Position Angle of axis: +285°36'20"
 Center point: L_s=+207°33'37" φ_s: +73°02'07"
 Subsolar point: L_s=+206°03'51" φ_s: +72°08'20"
 Albedo: 0.66
 Discovered: 17 March 1781 (W. Herschel)
 Solar Az./Alt.: +42°58'07"/-10°01'09"
 Lunar Az./Alt.: +62°30'01"/+6°04'35"



Date and Time ✕

Date and Time			Julian Day		
2026	-	6	-	13	4 : 20 : 59

Uranus

- On June 30th, Uranus rises at 3:18 a.m. in the late morning eastern sky.
- Uranus shares a wide conjunction with Mars. Both planets rise together. They reach close binary conjunction on July 3rd.

Uranus

Type: **planet**
Magnitude: **5.82** (reduced to **10.19** by **34.29** Airmasses)
Absolute Magnitude: -7.19
Mean Opposition Magnitude: 5.52
Color Index (B-V): **0.74**
RA/Dec (J2000.0): 4h05m13.92s/+20°39'35.9"
RA/Dec (on date): 4h06m47.62s/+20°43'57.3"
HA/Dec: 16h33m34.72s/+21°06'28.3" (apparent)
Az./Alt.: +60°09'17.8"/+0°19'30.1" (apparent)
Gal. long./lat.: +172°28'53.7"/-23°02'47.5"
Supergal. long./lat.: +336°16'26.8"/-34°41'25.6"
Ecl. long./lat. (J2000.0): +63°18'21.0"/-0°09'35.1"
Ecl. long./lat. (on date): +63°40'41.6"/-0°09'16.8"
Ecliptic obliquity (on date): +23°26'09.0"
Mean Sidereal Time: 20h38m56.1s
Apparent Sidereal Time: 20h38m56.6s
Rise: 3h16m
Transit: 10h45m
Set: 18h15m
Parallactic Angle: -41°42'52.1"
IAU Constellation: Tau
Zodiac: ♐ 3°40'
Hourly motion: +0°00'08" towards 79.6°
Hourly motion: $d\alpha$ =+0°00'08" $d\delta$ =+0°00'01"
Elongation: 34°52'07.0"
Elong. in Ecl.Long.: W34°52'05"
Phase angle: +1°42'41.6"
Illuminated: 100.0%
Distance from Sun: 19.458 AU (2910.879 M km)
Distance: 20.283 AU (3034.354 M km)
Light time: 2h48m41.5s
Orbital velocity: 6.719 km/s
Sidereal period: 30685.00 days (84.011 a)
Synodic period: 369.66 days (1.012 a)
Apparent diameter: +0°00'03.47", with rings: +0°00'13.28"
Equatorial diameter: 51118.0 km
Sidereal day: 17h14m24.0s
Mean solar day: 17h14m22.5s
Equatorial rotation velocity: 2587.521 m/s
Position Angle of axis: +287°20'42"
Center point: L_s =+67°03'47" ϕ_s : +73°50'06"
Subsolar point: L_s =+64°22'53" ϕ_s : +72°18'45"
Albedo: 0.66
Discovered: 17 March 1781 (W. Herschel)
Solar Az./Alt.: +29°08'48"/-17°01'02"
Lunar Az./Alt.: +204°16'42"/+14°09'14"



Date and Time ✕

Date and Time			Julian Day		
2026	-	6	-	30	3
↑		↑		↑	↑
↓		↓		↓	↓
:			:		
18			41		

Date and Time in Gregorian calendar

NEPTUNE

Neptune

- On June 1st, Neptune rises at 2:47 a.m. in the eastern morning sky.

Neptune



Type: **planet**
 Magnitude: **7.80** (reduced to **12.55** by **37.84** Airmasses)
 Absolute Magnitude: -6.87
 Mean Opposition Magnitude: 7.84
 RA/Dec (J2000.0): 0h15m42.48s/+0°14'20.9"
 RA/Dec (on date): 0h17m04.12s/+0°23'12.0"
 HA/Dec: 17h57m38.47s/+0°45'54.5" (apparent)
 Az./Alt.: +89°02'25.9"/+0°06'44.5" (apparent)
 Gal. long./lat.: +104°03'27.0"/-61°18'59.0"
 Supergal. long./lat.: +293°59'54.1"/+9°31'19.7"
 Ecl. long./lat. (J2000.0): +3°41'55.8"/-1°20'29.6"
 Ecl. long./lat. (on date): +4°04'11.1"/-1°20'27.2"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 18h13m09.1s
 Apparent Sidereal Time: 18h13m09.5s
 Rise: 2h47m
 Transit: 8h50m
 Set: 14h54m
 Parallaxic Angle: -45°41'48.8"
 IAU Constellation: Psc
 Zodiac: ♑ 4°4'
 Hourly motion: +0°00'03" towards 69.1°
 Hourly motion: $da=+0^{\circ}00'03"$ $d\delta=+0^{\circ}00'01"$
 Elongation: 66°45'08.4"
 Elong. in Ecl.Long.: W66°44'44"
 Phase angle: +1°47'11.9"
 Illuminated: 100.0%
 Distance from Sun: 29.881 AU (4470.126 M km)
 Distance: 30.267 AU (4527.823 M km)
 Light time: 4h11m43.2s
 Orbital velocity: 5.467 km/s
 Sidereal period: 60189.00 days (164.789 a)
 Synodic period: 367.49 days (1.006 a)
 Apparent diameter: +0°00'02.26", with rings: +0°00'05.73"
 Equatorial diameter: 49528.0 km
 Sidereal day: 16h06m36.0s
 Mean solar day: 16h06m36.6s
 Equatorial rotation velocity: 2.683 km/s
 Position Angle of axis: +315°52'08"
 Center point: $L_s=+41^{\circ}18'42"$ $\phi_s: -18^{\circ}35'35"$
 Subsolar point: $L_s=+43^{\circ}05'15"$ $\phi_s: -19^{\circ}12'04"$
 Albedo: 0.62
 Discovered: 23 September 1846 (J.G. Galle)
 Solar Az./Alt.: +23°43'08"/-20°04'46"
 Lunar Az./Alt.: +192°33'59"/+15°56'42"



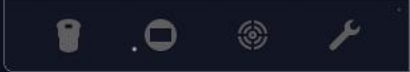
Date and Time ✕

Date and Time			Julian Day						
2026	-	6	-	1	2	:	47	:	19

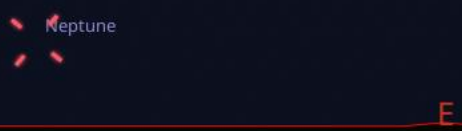
Neptune

- On June 30, Neptune rises at 12:54 a.m. in the eastern midnight sky.

Neptune



Type: **planet**
 Magnitude: **7.76** (reduced to **12.33** by **36.12** Airmasses)
 Absolute Magnitude: -6.87
 Mean Opposition Magnitude: 7.84
 RA/Dec (J2000.0): 0h16m58.28s/+0°20'55.0"
 RA/Dec (on date): 0h18m20.27s/+0°29'48.2"
 HA/Dec: 17h57m48.81s/+0°51'43.5" (apparent)
 Az./Alt.: +89°00'04.5"/+0°12'39.3" (apparent)
 Gal. long./lat.: +104°45'10.7"/-61°18'02.5"
 Supergal. long./lat.: +294°11'33.7"/+9°14'54.0"
 Ecl. long./lat. (J2000.0): +4°01'56.1"/-1°21'59.1"
 Ecl. long./lat. (on date): +4°24'17.2"/-1°21'56.6"
 Ecliptic obliquity (on date): +23°26'09.0"
 Mean Sidereal Time: 18h14m38.7s
 Apparent Sidereal Time: 18h14m39.2s
 Rise: 0h53m
 Transit: 6h57m
 Set: 13h02m
 Parallaxic Angle: -45°41'51.4"
 IAU Constellation: Psc
 Zodiac: ♏ 4°24'
 Hourly motion: +0°00'01" towards 79.7°
 Hourly motion: $d\alpha=+0^{\circ}00'01"$ $d\delta=+0^{\circ}00'00"$
 Elongation: 94°02'39.6"
 Elong. in Ecl.Long.: W94°02'43"
 Phase angle: +1°56'41.3"
 Illuminated: 100.0%
 Distance from Sun: 29.880 AU (4470.019 M km)
 Distance: 29.791 AU (4456.719 M km)
 Light time: 4h07m46.0s
 Orbital velocity: 5.467 km/s
 Sidereal period: 60189.00 days (164.789 a)
 Synodic period: 367.49 days (1.006 a)
 Apparent diameter: +0°00'02.29", with rings: +0°00'05.83"
 Equatorial diameter: 49528.0 km
 Sidereal day: 16h06m36.0s
 Mean solar day: 16h06m36.6s
 Equatorial rotation velocity: 2.683 km/s
 Position Angle of axis: +315°46'12"
 Center point: $L_s=+72^{\circ}09'12"$ $\phi_s: -18^{\circ}27'06"$
 Subsolar point: $L_s=+74^{\circ}04'32"$ $\phi_s: -19^{\circ}08'16"$
 Albedo: 0.62
 Discovered: 23 September 1846 (J.G. Galle)
 Solar Az./Alt.: +354°29'58"/-22°20'37"
 Lunar Az./Alt.: +172°09'50"/+17°34'21"



Date and Time ✕

Date and Time				Julian Day					
2026	-	6	-	30	0	:	54	:	47

Neptune

- On June 30, Neptune is high in the southeastern sky at sunrise.

Neptune

Type: planet
 Magnitude: 7.76 (reduced to 7.97 by 1.60 Airmasses)
 Absolute Magnitude: -6.87
 Mean Opposition Magnitude: 7.84
 RA/Dec (J2000.0): 0h16m58.43s/+0°20'55.4"
 RA/Dec (on date): 0h18m20.42s/+0°29'48.6"
 HA/Dec: 21h59m52.40s/+0°30'55.0" (apparent)
 Az./Alt.: +140°05'00.8"/+38°44'44.5" (apparent)
 Gal long./lat.: +104°45'15.4"/-61°18'02.7"
 Supergal long./lat.: +294°11'34.7"/+9°14'51.9"
 Equ long./lat. (J2000.0): +4°01'58.3"/-1°21'58.6"
 Equ long./lat. (on date): +4°24'19.4"/-1°21'57.1"
 Program name (by km date): +23°26'09.0"
 Name: Saturn (J2000.0); Mars (on date)
 Apparent diameter (km): 20116m0.5s
 Rise: 0h53m
 Transit: 0h57m
 Set: 13h02m
 Parallax: Angle: -27°20'20.0"
 IAU Constellation: Psc
 Zodiac: ♓ 4°24'
 Hourly motion: +0°00'01" towards ♏.1"
 Hourly motion: da=+0°00'01" dδ=+0°00'00"
 Elongation: 94°12'21.7"
 Elong. in Ed.Long.: W94°12'26"
 Phase angle: +1°56'39.9"
 Illuminated: 100.0%
 Distance from Sun: 29.880 AU (4470.019 M km)
 Distance: 29.788 AU (4456.291 M km)
 Light time: 4h07m44.6s
 Orbital velocity: 5.467 km/s
 Sidereal period: 60189.00 days (164.789 a)
 Synodic period: 367.49 days (1.006 a)
 Apparent diameter: +0°00'02.29", with rings: +0°00'05.83"
 Equatorial diameter: 49528.0 km
 Sidereal day: 16h06m36.0s
 Mean solar day: 16h06m36.6s
 Equatorial rotation velocity: 2.683 km/s
 Position Angle of axis: +315°46'11"
 Center point: $L_s=+162^{\circ}36'08''$ $\phi_s: -18^{\circ}27'05''$
 Subsolar point: $L_s=+164^{\circ}31'26''$ $\phi_s: -19^{\circ}08'15''$
 Albedo: 0.62
 Discovered: 23 September 1846 (J.G. Galle)
 Solar Az./Alt.: +49°20'32"/-5°48'27"
 Lunar Az./Alt.: +223°43'25"/+4°45'53"

Mars

Saturn



Date and Time ✕

Date and Time				Julian Day					
2026	-	6	-	30	4	:	57	:	39

DEEP SKY

SCORPIUS

OPEN GLOBULAR CLUSTERS

MESSIER 4

THE SPIDER GLOBULAR CLUSTER

M4 – SPIDER GLOBULAR CLUSTER

- **Other Designations:** NGC 6121, Crab Globular Cluster, Mel 144
- **Constellation:** Scorpius the Scorpion
- **Type:** Globular Star Cluster. Loose Association of outer stars.
- **Diameter:** 75 light years across.
- **Stars:** 30,000 to 100,000
- **Distance:** 6,033 light years from Earth – Closest Globular Cluster
- **Magnitude:** +5.6
- **Stellar Core:** black hole of 800 solar masses. Neutron Stars, Pulsars.
- **Size:** 26 x 26 arc minutes across – Size of a Micro Full Moon.
- **Age:** Approximately 12.2 to 13 Billion years old.

M4 – The SPIDER GLOBULAR CLUSTER

- Photo below taken by 2.20-meter telescope at the ESO La Silla Observatory.



M4 – SPIDER GLOBULAR CLUSTER

- Characteristics of M4, NGC 6121.
- Core measures 8 light years across. 9.50% of the total diameter.
- The cluster contains the oldest white dwarf stars that are 13 billion years old. Discovered by Hubble in 1995.
- CX-1 a Pulsar star that has a millisecond period and orbits its companion star in just 6.51 hours.
- Central black hole of 800 solar masses. This classifies it as a small intermediate black hole. Neutron stars and stellar mass black holes are also possible sources of the total mass measurements.

M4 – THE SPIDER GLOBULAR CLUSTER

- The second photo was taken by the Hubble Space Telescope
- A close-up of the inner structure of M4 showing larger core stars.
- The black hole at the globular cluster's center remains unseen.



That is the Sky this Month

By David Mills