Sky this Month

April 2026

By David Mills

MOON

FULL MOON

Moon

- The full Moon is on April 1St, at 10:12 p.m.
- This month's full moon is called the Pink Moon
- Moonrise on April 1st, is at 7:34 p.m. in the eastern twilight sky.

Moon

Type: **moon**
Magnitude: **-12.82** (reduced to **-8.36** by **35.07** Airmasses)
Absolute Magnitude: 0.21
Mean Opposition Magnitude: -12.74
RA/Dec (J2000.0): 12h37m25.35s/-7°25'09.8"
RA/Dec (on date): 12h38m47.12s/-7°33'52.4"
HA/Dec: 18h29m54.27s/-7°12'16.1" (apparent)
Az./Alt.: +100°21'52.9"/+0°16'29.4" (apparent)
Gal. long./lat.: +296°49'22.5"/+55°17'09.7"
Supergal. long./lat.: +122°26'19.9"/-6°12'35.9"
Ecl. long./lat. (J2000.0): +191°30'40.2"/-3°06'56.7"
Ecl. long./lat. (on date): +191°52'45.2"/-3°07'02.1"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 7h07m13.2s
Apparent Sidereal Time: 7h07m13.6s
Rise: 19h36m
Transit: 0h35m
Set: 6h31m
Parallactic Angle: -45°12'13.1"
IAU Constellation: Vir
Zodiac: ♎ 9°41'
Hourly motion: +0°31'14" towards 120.5°
Hourly motion: dα=+0°27'06" dδ=-0°15'56"
Elongation: 176°51'36.5"
Elong. in Ecl.Long.: E179°37'40"
Phase angle: +3°07'53.8"
Illuminated: 99.9%
Distance from Sun: 1.002 AU (149.896 M km)
Distance: 0.002628 AU (393206.898 km)
Light time: 0h00m01.3s
Orbital velocity: 1.005 km/s
Heliocentric velocity: 30.804 km/s
Sidereal period: 27.32 days (0.075 a)
Synodic period: 29.53 days (0.081 a)
Apparent diameter: +0°30'22.77"
Diameter: 3474.8 km
Sidereal day: 655h43m11.6s
Mean solar day: 708h44m02.9s
Equatorial rotation velocity: 4.624 m/s
Moon age: 14.7 days old (Waxing Gibbous)
Position angle of bright limb: -150°04'06"
Position Angle of axis: +21°52'21"
Libration: +5°29'12" towards +131°54'38" (NW!)
Libration: +4°04'60"/+3°39'54"
Subsolar point: +5°22'51"/+0°55'23"
Colongitude: +84°37'09"
Albedo: 0.12
Solar Az./Alt.: +277°19'45"/-0°00'08"

Date and Time

Date and Time | Julian Day

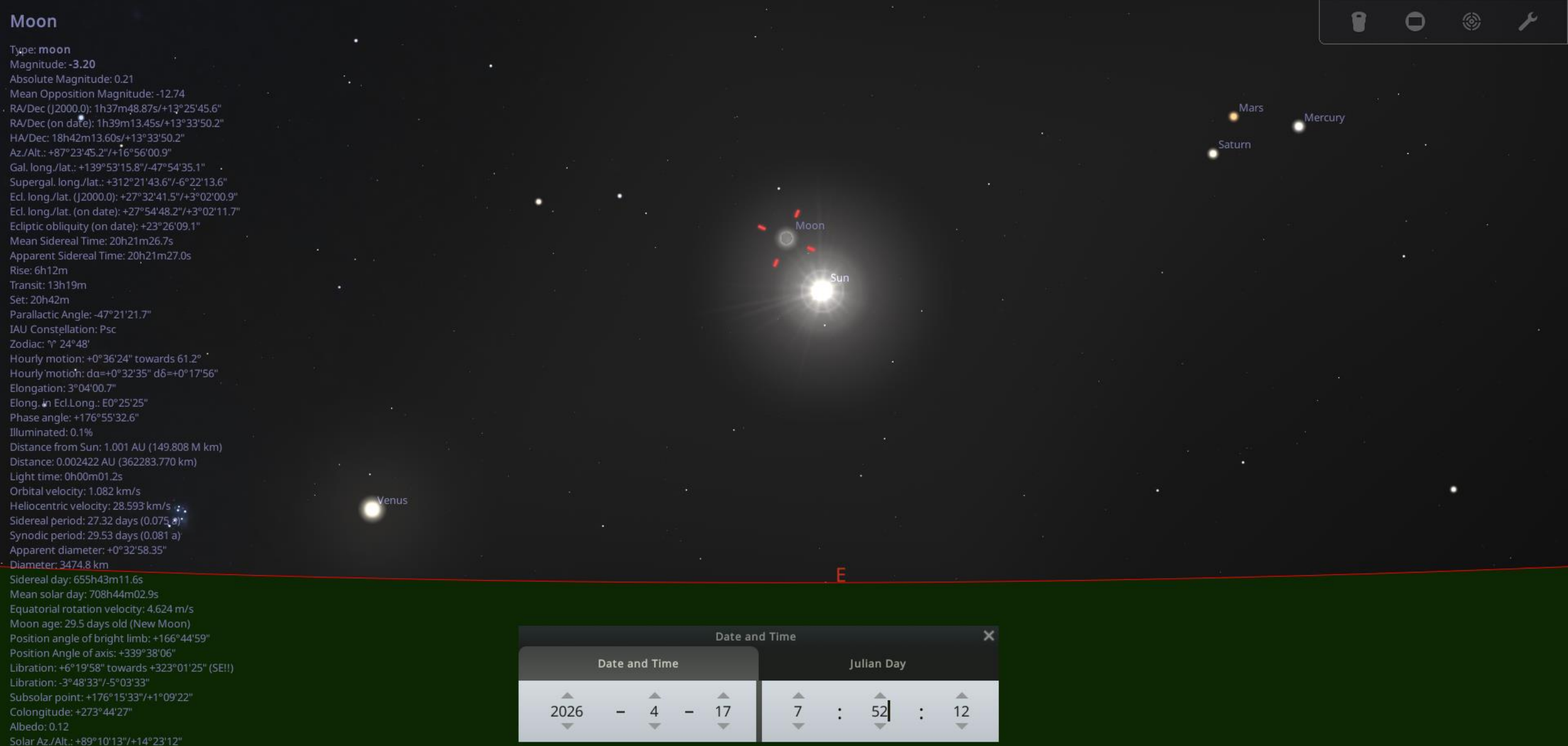
2026 – 4 – 1 | 19 : 39 : 7

Earth, Peterborough, 188 m | FOV 2.53° | 36.17 FPS | 2026-04-01 19:39:07 UTC-04:00

NEW MOON

Moon

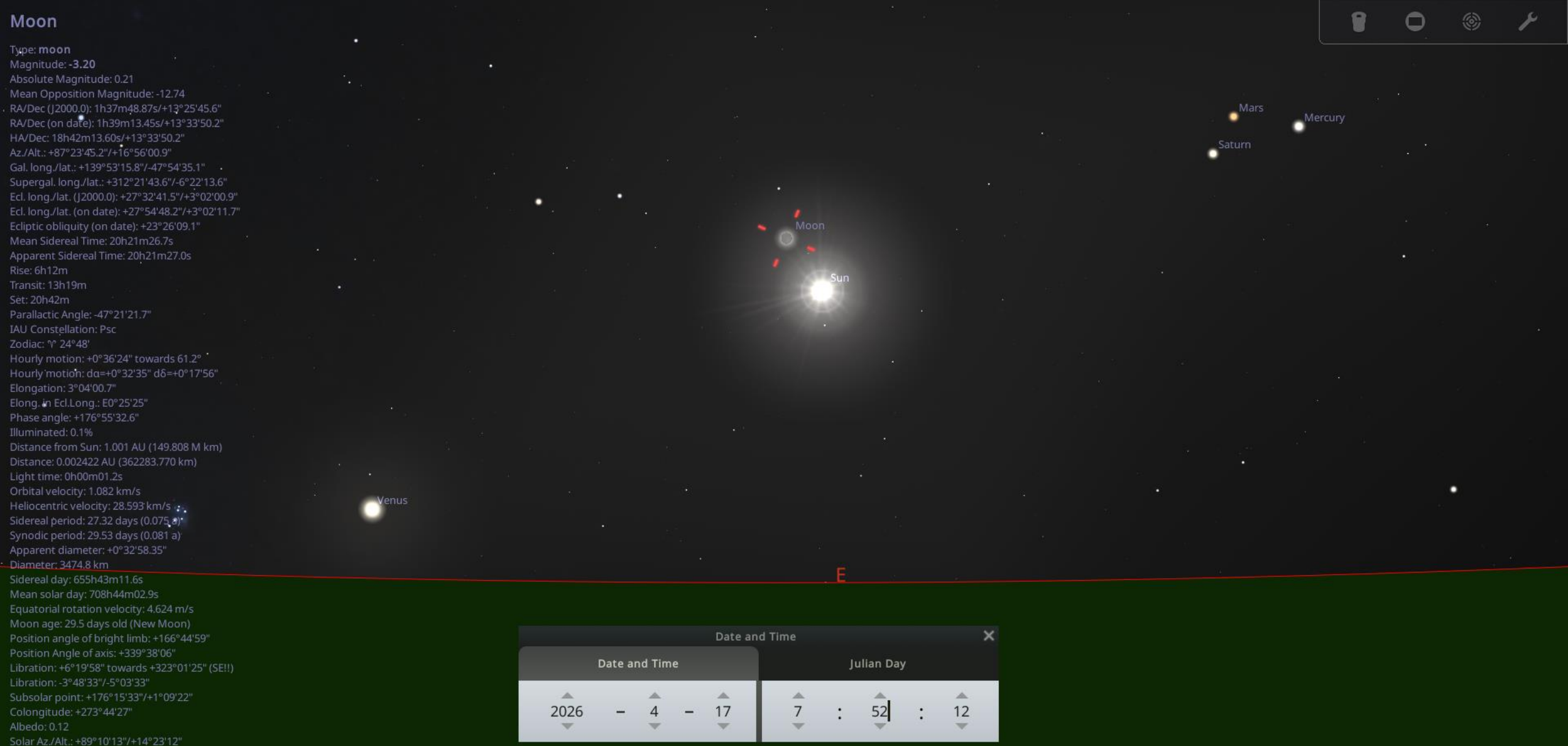
- The New Moon is on April 17th, at 7:52 a.m. EDT.
- The Moon is north of the sun.
- This month's moon is the New Flower Moon.


Moon
Type: moon
Magnitude: -3.20
Absolute Magnitude: 0.21
Mean Opposition Magnitude: -12.74
RA/Dec (J2000.0): 1h37m48.87s/+13°25'45.6"
RA/Dec (on date): 1h39m13.45s/+13°33'50.2"
HA/Dec: 18h42m13.60s/+13°33'50.2"
Az./Alt.: +87°23'45.2"/+16°56'00.9"
Gal. long./lat.: +139°53'15.8"/-47°54'35.1"
Supergal. long./lat.: +312°21'43.6"/-6°22'13.6"
Ecl. long./lat. (J2000.0): +27°32'41.5"/+3°02'00.9"
Ecl. long./lat. (on date): +27°54'48.2"/+3°02'11.7"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 20h21m26.7s
Apparent Sidereal Time: 20h21m27.0s
Rise: 6h12m
Transit: 13h19m
Set: 20h42m
Parallactic Angle: -47°21'21.7"
IAU Constellation: Psc
Zodiac: ♈ 24°48'
Hourly motion: +0°36'24" towards 61.2°
Hourly motion: dα=+0°32'35" dδ=+0°17'56"
Elongation: 3°04'00.7"
Elong. in Ecl.Long.: E0°25'25"
Phase angle: +176°55'32.6"
Illuminated: 0.1%
Distance from Sun: 1.001 AU (149.808 M km)
Distance: 0.002422 AU (362283.770 km)
Light time: 0h00m01.2s
Orbital velocity: 1.082 km/s
Heliocentric velocity: 28.593 km/s
Sidereal period: 27.32 days (0.075 a)
Synodic period: 29.53 days (0.081 a)
Apparent diameter: +0°32'58.35"
Diameter: 3474.8 km
Sidereal day: 655h43m11.6s
Mean solar day: 708h44m02.9s
Equatorial rotation velocity: 4.624 m/s
Moon age: 29.5 days old (New Moon)
Position angle of bright limb: +166°44'59"
Position Angle of axis: +339°38'06"
Libration: +6°19'58" towards +323°01'25" (SE!!)
Libration: -3°48'33"/-5°03'33"
Subsolar point: +176°15'33"/+1°09'22"
Colongitude: +273°44'27"
Albedo: 0.12
Solar Az./Alt.: +89°10'13"/+14°23'12"
Mars
Mercury
Saturn
Moon
Sun
Venus
E
Date and Time
Date and Time
Julian Day
2026 – 4 – 17
7 : 52 : 12
Earth, Peterborough, 188 m
FOV 43°
17.86 FPS
2026-04-17 07:52:12 UTC-04:00

Moon

- The planets Mercury, Mars and Saturn form a triple conjunction just west of the sun.

- Venus is East of the and climbing in the western sky at sunset.


Moon
Type: moon
Magnitude: -3.20
Absolute Magnitude: 0.21
Mean Opposition Magnitude: -12.74
RA/Dec (J2000.0): 1h37m48.87s/+13°25'45.6"
RA/Dec (on date): 1h39m13.45s/+13°33'50.2"
HA/Dec: 18h42m13.60s/+13°33'50.2"
Az./Alt.: +87°23'45.2"/+16°56'00.9"
Gal. long./lat.: +139°53'15.8"/-47°54'35.1"
Supergal. long./lat.: +312°21'43.6"/-6°22'13.6"
Ecl. long./lat. (J2000.0): +27°32'41.5"/+3°02'00.9"
Ecl. long./lat. (on date): +27°54'48.2"/+3°02'11.7"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 20h21m26.7s
Apparent Sidereal Time: 20h21m27.0s
Rise: 6h12m
Transit: 13h19m
Set: 20h42m
Parallactic Angle: -47°21'21.7"
IAU Constellation: Psc
Zodiac: ♈ 24°48'
Hourly motion: +0°36'24" towards 61.2°
Hourly motion: dα=+0°32'35" dδ=+0°17'56"
Elongation: 3°04'00.7"
Elong. in Ecl.Long.: E0°25'25"
Phase angle: +176°55'32.6"
Illuminated: 0.1%
Distance from Sun: 1.001 AU (149.808 M km)
Distance: 0.002422 AU (362283.770 km)
Light time: 0h00m01.2s
Orbital velocity: 1.082 km/s
Heliocentric velocity: 28.593 km/s
Sidereal period: 27.32 days (0.075 a)
Synodic period: 29.53 days (0.081 a)
Apparent diameter: +0°32'58.35"
Diameter: 3474.8 km
Sidereal day: 655h43m11.6s
Mean solar day: 708h44m02.9s
Equatorial rotation velocity: 4.624 m/s
Moon age: 29.5 days old (New Moon)
Position angle of bright limb: +166°44'59"
Position Angle of axis: +339°38'06"
Libration: +6°19'58" towards +323°01'25" (SE!!)
Libration: -3°48'33"/-5°03'33"
Subsolar point: +176°15'33"/+1°09'22"
Colongitude: +273°44'27"
Albedo: 0.12
Solar Az./Alt.: +89°10'13"/+14°23'12"
Mars
Mercury
Saturn
Moon
Sun
Venus
E
Date and Time
Date and Time
Julian Day
2026 – 4 – 17
7 : 52 : 12
Earth, Peterborough, 188 m
FOV 43°
17.86 FPS
2026-04-17 07:52:12 UTC-04:00

MERCURY

Mercury

- On April 1st, Mercury is deep in the solar glare as the days get longer. Mercury rises at 6:08 a.m. on April 1st.

- Mercury moves eastward towards the sun by mid-month. Not visible for the remainder of the month.

Mercury

Type: **planet**
Magnitude: **0.40** (reduced to **4.19** by **29.28** Airmasses)
Absolute Magnitude: -0.60
RA/Dec (J2000.0): 23h02m02.44s/-7°40'40.7"
RA/Dec (on date): 23h03m24.77s/-7°32'10.9"
HA/Dec: 18h32m26.47s/-7°13'34.1" (apparent)
Az./Alt.: +100°49'25.2"/+0°42'20.4" (apparent)
Gal. long./lat.: +64°44'54.5"/-57°36'05.3"
Supergal. long./lat.: +280°07'56.6"/+24°32'16.0"
Ecl. long./lat. (J2000.0): +343°41'46.7"/-1°22'19.6"
Ecl. long./lat. (on date): +344°03'53.3"/-1°22'24.5"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 17h34m35.4s
Apparent Sidereal Time: 17h34m35.8s
Rise: 6h04m
Transit: 11h37m
Set: 17h11m
Parallactic Angle: -45°07'12.2"
IAU Constellation: Aqr
Zodiac: ♒ 15°51'
Hourly motion: +0°02'12" towards 77.4°
Hourly motion: dα=+0°02'10" dδ=+0°00'29"
Elongation: 27°39'57.9"
Elong. in Ecl.Long.: W27°38'05"

Phase angle: +94°34'32.8"
Illuminated: 46.0%
Distance from Sun: 0.465 AU (69.628 M km)
Distance: 0.848 AU (126.835 M km)
Light time: 0h07m03.1s
Orbital velocity: 38.991 km/s
Sidereal period: 87.97 days (0.241 a)
Synodic period: 115.88 days (0.317 a)
Apparent diameter: +0°00'07.94"
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: +334°16'25"
Center point: L_e=+345°08'49" ϕ_e: -4°58'48"
Subsolar point: L_s=+79°44'28" ϕ_s: -0°01'20"
Albedo: 0.06
Solar Az./Alt.: +74°35'39"/-8°50'00"
Lunar Az./Alt.: +261°07'17"/+3°13'46"

Date and Time

Date and Time | Julian Day

2026 – 4 – 1 6 : 8 : 42

VENUS

Venus

- On April 1st, Venus is only 15 degrees above the western horizon at sunset.

Venus - Evening Star

Type: **planet**
Magnitude: **-3.90** (reduced to **-3.32** by **4.48** Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): **0.91**
RA/Dec (J2000.0): 2h01m52.83s/+11°58'09.4"
RA/Dec (on date): 2h03m17.63s/+12°05'48.7"
HA/Dec: 5h35m44.03s/+12°08'43.6" (apparent)
Az./Alt.: +274°36'42.5"/+12°45'40.0" (apparent)
Gal. long./lat.: +148°49'26.6"/-47°19'48.3"
Supergal. long./lat.: +312°51'16.0"/-12°23'55.8"
Ecl. long./lat. (J2000.0): +32°31'22.6"/-0°24'13.9"
Ecl. long./lat. (on date): +32°53'28.9"/-0°24'01.5"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 7h39m14.0s
Apparent Sidereal Time: 7h39m14.4s
Rise: 7h44m
Transit: 14h35m
Set: 21h27m
Parallactic Angle: +46°51'42.7"
IAU Constellation: Ari
Zodiac: ♈ 0°49'
Hourly motion: +0°03'04" towards 68.6°
Hourly motion: dα=+0°02'55" dδ=+0°01'09"
Elongation: 20°37'17.7"
Elong. in Ecl.Long.: E20°37'04"
Phase angle: +29°11'38.1"
Illuminated: 93.6%
Distance from Sun: 0.722 AU (107.951 M km)
Distance: 1.565 AU (234.164 M km)
Light time: 0h13m01.1s
Orbital velocity: 35.104 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'10.66"
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: +339°58'37"
Center point: L_e=+212°25'21" ϕ_e: -0°50'05"
Subsolar point: L_s=+241°36'32" ϕ_s: -0°10'58"
Albedo: 0.77
Solar Az./Alt.: +282°58'30"/-6°10'57"
Lunar Az./Alt.: +105°56'56"/+5°14'01"

W

Date and Time

Date and Time | Julian Day

2026 – 4 – 1 20 : 11 : 2

Venus

- On April 1st, Venus sets at 9:25 p.m. in the western sky.

Venus - Evening Star

Type: **planet**
Magnitude: **-3.90** (reduced to **0.74** by **36.74** Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): **0.91**
RA/Dec (J2000.0): 2h02m07.34s/+11°59'35.0"
RA/Dec (on date): 2h03m32.16s/+12°07'14.0"
HA/Dec: 6h48m57.23s/+12°29'58.5" (apparent)
Az./Alt.: +287°25'26.7"/+0°10'27.8" (apparent)
Gal. long./lat.: +148°53'24.5"/-47°17'05.1"
Supergal. long./lat.: +312°53'50.8"/-12°26'48.5"
Ecl. long./lat. (J2000.0): +32°35'12.0"/-0°24'06.5"
Ecl. long./lat. (on date): +32°57'18.2"/-0°23'54.0"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 8h54m00.0s
Apparent Sidereal Time: 8h54m00.4s
Rise: 7h44m
Transit: 14h35m
Set: 21h27m
Parallactic Angle: +44°22'52.5"
IAU Constellation: Ari
Zodiac: ♉ 0°53'
Hourly motion: +0°03'05" towards 68.6°
Hourly motion: dα=+0°02'55" dδ=+0°01'09"
Elongation: 20°38'02.4"
Elong. in Ecl.Long.: E20°37'49"
Phase angle: +29°12'48.3"
Illuminated: 93.6%
Distance from Sun: 0.722 AU (107.950 M km)
Distance: 1.565 AU (234.138 M km)
Light time: 0h13m01.0s
Orbital velocity: 35.105 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'10.66"
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: +339°59'20"
Center point: L_e=+212°33'46" ϕ_e: -0°50'12"
Subsolar point: L_s=+241°46'08" ϕ_s: -0°11'12"
Albedo: 0.77
Solar Az./Alt.: +297°04'44"/-18°41'04"
Lunar Az./Alt.: +119°54'56"/+16°51'31"

Date and Time

Date and Time | Julian Day

2026 – 4 – 1 | 21 : 25 : 36

Venus

- On April 18th, Venus shares a quadruple conjunction with a 1-day old Moon 5 degrees to the northwest of Venus.

- At the same time, the Hyades is 5 degrees to the northeast of Venus. M45 is directly above Venus.

- All 4 objects are visible low in the western sky at sunset.


Venus - Evening Star
Type: planet
Magnitude: -3.90 (reduced to -3.34 by 4.36 Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): 0.91
RA/Dec (J2000.0): 3h23m36.91s/+18°57'42.3"
RA/Dec (on date): 3h25m07.43s/+19°03'21.4"
HA/Dec: 6h00m26.04s/+19°06'10.1" (apparent)
Az./Alt.: +283°59'33.7"/+13°08'14.5" (apparent)
Gal. long./lat.: +165°45'31.6"/-30°58'37.9"
Supergal. long./lat.: +328°15'11.6"/-27°30'16.7"
Ecl. long./lat. (J2000.0): +53°23'11.0"/+0°21'11.8"
Ecl. long./lat. (on date): +53°45'18.8"/+0°21'29.3"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 9h25m46.0s
Apparent Sidereal Time: 9h25m46.4s
Rise: 7h28m
Transit: 14h50m
Set: 22h12m
Parallactic Angle: +47°18'03.0"
IAU Constellation: Ari
Zodiac: ♉ 21°16'
Hourly motion: +0°03'03" towards 74.4°
Hourly motion: dα=+0°03'06" dδ=+0°00'52"
Elongation: 24°45'52.1"
Elong. in Ecl.Long.: E24°45'43"
Phase angle: +35°46'11.0"
Illuminated: 90.6%
Distance from Sun: 0.720 AU (107.663 M km)
Distance: 1.496 AU (223.775 M km)
Light time: 0h12m26.4s
Orbital velocity: 35.198 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'11.16"
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: +345°06'22"
Center point: L_e=+258°31'02" ϕ_e: -1°29'34"
Subsolar point: L_s=+294°17'49" ϕ_s: -1°22'37"
Albedo: 0.77
Solar Az./Alt.: +295°17'59"/-9°00'14"
Lunar Az./Alt.: +289°41'59"/+11°16'23"
Aldebaran
Uranus
Rigel
Venus
Moon
W
NW
Date and Time
Date and Time
Julian Day
2026 – 4 – 18
20 : 50 : 27
Earth, Peterborough, 188 m
FOV 50.8°
57.88 FPS
2026-04-18 20:50:27 UTC-04:00

Venus

- On April 19th, Venus shares a quadruple conjunction with the Moon, M45, the Hyades.

- Venus, a 2-day old Moon and M45 form a short straight line with Venus. The Hyades from a small triangle with all 4 objects close together at sunset low on the western horizon.


Venus - Evening Star
Type: planet
Magnitude: -3.90 (reduced to -3.32 by 4.52 Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): 0.91
RA/Dec (J2000.0): 3h28m35.25s/+19°18'33.7"
RA/Dec (on date): 3h30m06.15s/+19°24'03.8"
HA/Dec: 6h04m34.77s/+19°26'59.3" (apparent)
Az./Alt.: +284°56'07.6"/+12°39'17.1" (apparent)
Gal. long./lat.: +166°32'23.1"/-29°57'14.3"
Supergal. long./lat.: +329°16'03.4"/-28°20'21.7"
Ecl. long./lat. (J2000.0): +54°36'37.1"/+0°23'57.9"
Ecl. long./lat. (on date): +54°58'45.2"/+0°24'15.6"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 9h34m54.0s
Apparent Sidereal Time: 9h34m54.3s
Rise: 7h27m
Transit: 14h51m
Set: 22h15m
Parallactic Angle: +47°10'08.8"
IAU Constellation: Tau
Zodiac: ♉ 22°31'
Hourly motion: +0°03'03" towards 74.8°
Hourly motion: dα=+0°03'06" dδ=+0°00'51"
Elongation: 25°00'29.7"
Elong. in Ecl.Long.: E25°00'18"
Phase angle: +36°10'03.6"
Illuminated: 90.4%
Distance from Sun: 0.720 AU (107.650 M km)
Distance: 1.491 AU (223.093 M km)
Light time: 0h12m24.2s
Orbital velocity: 35.202 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'11.19"
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: +345°29'01"
Center point: L_e=+261°13'43" φ_e: -1°31'42"
Subsolar point: L_s=+297°24'27" φ_s: -1°26'24"
Albedo: 0.77
Solar Az./Alt.: +296°32'25"/-9°36'36"
Lunar Az./Alt.: +284°00'23"/+23°02'43"
Aldebaran
Moon
Uranus
Rigel
Venus
W
NW
Date and Time
Date and Time
Julian Day
2026 – 4 – 19
20 : 56 : 37
Earth, Peterborough, 188 m
FOV 50.8°
45.73 FPS
2026-04-19 20:55:37 UTC-04:00

Venus

- On April 26th, Venus shares a triple conjunction with M45 and the Hyades.

- Venus sits in a straight line almost equal distance between both M45 and the Hyades in the western sky at sunset.

Venus - Evening Star

Type: **planet**
Magnitude: **-3.91** (reduced to **-3.31** by **4.62** Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): **0.91**
RA/Dec (J2000.0): 4h03m48.93s/+21°29'27.8"
RA/Dec (on date): 4h05m22.31s/+21°33'50.9"
HA/Dec: 6h14m56.37s/+21°36'51.1" (apparent)
Az./Alt.: +288°15'02.2"/+12°21'08.6" (apparent)
Gal. long./lat.: +171°34'57.9"/-22°42'31.7"
Supergal. long./lat.: +336°49'20.6"/-33°55'09.3"
Ecl. long./lat. (J2000.0): +63°08'28.2"/+0°43'09.5"
Ecl. long./lat. (on date): +63°30'37.6"/+0°43'28.7"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 10h20m32.2s
Apparent Sidereal Time: 10h20m32.5s
Rise: 7h24m
Transit: 14h58m
Set: 22h33m
Parallactic Angle: +46°58'42.0"
IAU Constellation: Tau
Zodiac: ♊ 1°20'
Hourly motion: +0°03'02" towards 77.9°
Hourly motion: dα=+0°03'11" dδ=+0°00'41"
Elongation: 26°42'31.9"
Elong. in Ecl.Long.: E26°41'59"
Phase angle: +38°58'53.5"
Illuminated: 88.9%
Distance from Sun: 0.719 AU (107.567 M km)
Distance: 1.458 AU (218.107 M km)
Light time: 0h12m07.5s
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°00'11.45"
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: +348°19'46"
Center point: L_e=+280°09'13" ϕ_e: -1°45'35"
Subsolar point: L_s=+319°09'13" ϕ_s: -1°50'51"
Albedo: 0.77
Solar Az./Alt.: +301°43'26"/-10°50'12"
Lunar Az./Alt.: +165°31'47"/+50°27'49"

Aldebaran
Venus
Uranus

Date and Time

Date and Time | Julian Day

2026 – 4 – 26 | 21 : 13 : 36

Earth, Peterborough, 188 m | FOV 26.1° | 16.54 FPS | 2026-04-26 21:13:36 UTC-04:00

Venus

- On April 30th, Venus shares a triple conjunction with M45 and the Hyades.
- Venus reaches closest approach to the Hyades at sunset.
- From April 19th to the end of the month Venus remains in close conjunction with both objects.


Venus - Evening Star
Type: planet
Magnitude: -3.91 (reduced to -3.35 by 4.36 Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): 0.91
RA/Dec (J2000.0): 4h24m16.82s/+22°31'36.6"
RA/Dec (on date): 4h25m51.45s/+22°35'17.6"
HA/Dec: 6h14m27.12s/+22°38'06.8" (apparent)
Az./Alt.: +288°56'18.0"/+13°07'49.4" (apparent)
Gal. long./lat.: +174°12'18.3"/-18°31'10.8"
Supergal. long./lat.: +341°33'17.5"/-36°52'06.0"
Ecl. long./lat. (J2000.0): +67°59'35.6"/+0°53'0.0"
Ecl. long./lat. (on date): +68°21'45.1"/+0°54'09.7"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 10h40m31.4s
Apparent Sidereal Time: 10h40m31.8s
Rise: 7h24m
Transit: 15h03m
Set: 22h43m
Parallactic Angle: +47°10'33.3"
IAU Constellation: Tau
Zodiac: ♉ 6°27'
Hourly motion: +0°03'02" towards 79.8°
Hourly motion: dα=+0°03'13" dδ=+0°00'35"
Elongation: 27°40'32.8"
Elong. in Ecl.Long.: E27°39'44"
Phase angle: +40°36'50.0"
Illuminated: 88.0%
Distance from Sun: 0.719 AU (107.531 M km)
Distance: 1.438 AU (215.092 M km)
Light time: 0h11m57.5s
Orbital velocity: 35.241 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'11.61"
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: +350°06'03"
Center point: L_e=+290°56'21" φ_e: -1°52'37"
Subsolar point: L_s=+331°34'34" φ_s: -2°02'55"
Albedo: 0.77
Solar Az./Alt.: +303°25'57"/-10°34'53"
Lunar Az./Alt.: +131°19'35"/+13°34'04"
Betelgeuse
Venus
Aldebaran
Uranus
W
NW
Date and Time
Date and Time
Julian Day
2026 – 4 – 30
21 : 17 : 49
Earth, Peterborough, 188 m
FOV 43°
47.29 FPS
2026-04-30 21:17:49 UTC-04:00

Venus

- On April 30th, Venus sets at 10:38 p.m. in the northwestern sky.

Venus - Evening Star

Type: **planet**
Magnitude: **-3.91** (reduced to **0.06** by **30.76** Airmasses)
Absolute Magnitude: -5.18
Color Index (B-V): **0.91**
RA/Dec (J2000.0): 4h24m34.08s/+22°32'24.0"
RA/Dec (on date): 4h26m08.74s/+22°36'04.3"
HA/Dec: 7h33m45.43s/+22°56'51.5" (apparent)
Az./Alt.: +302°20'12.9"/+0°34'53.5" (apparent)
Gal. long./lat.: +174°14'27.1"/-18°27'39.7"
Supergal. long./lat.: +341°37'23.8"/-36°54'29.8"
Ecl. long./lat. (J2000.0): +68°03'39.3"/+0°53'58.2"
Ecl. long./lat. (on date): +68°25'48.8"/+0°54'17.9"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 12h01m12.2s
Apparent Sidereal Time: 12h01m12.5s
Rise: 7h24m
Transit: 15h03m
Set: 22h43m
Parallactic Angle: +41°02'46.4"
IAU Constellation: Tau
Zodiac: ♉ 6°32'
Hourly motion: +0°03'02" towards 79.8°
Hourly motion: dα=+0°03'14" dδ=+0°00'35"
Elongation: 27°41'20.3"
Elong. in Ecl.Long.: E27°40'31"
Phase angle: +40°38'12.2"
Illuminated: 87.9%
Distance from Sun: 0.719 AU (107.530 M km)
Distance: 1.438 AU (215.051 M km)
Light time: 0h11m57.3s
Orbital velocity: 35.241 km/s
Sidereal period: 224.70 days (0.615 a)
Synodic period: 583.92 days (1.599 a)
Apparent diameter: +0°00'11.61"
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: +350°07'35"
Center point: L_e=+291°05'23" ϕ_e: -1°52'42"
Subsolar point: L_s=+331°44'59" ϕ_s: -2°03'04"
Albedo: 0.77
Solar Az./Alt.: +320°19'02"/-21°17'18"
Lunar Az./Alt.: +148°48'25"/+22°19'27"

NW

Date and Time

Date and Time | Julian Day

2026 – 4 – 30 | 22 : 38 : 16

Earth, Peterborough, 188 m | FOV 18.7° | 17.86 FPS | 2026-04-30 22:38:16 UTC-04:00

MARS

Mars

- Mars is not visible this month.
- Mars remains deep in the solar glare as the days get longer.
- Mars rises just before sunrise in the eastern morning sky. Mars remains close the sun all month.

Mars

Type: **planet**
Magnitude: **1.20** (reduced to **5.89** by **37.25** Airmasses)
Absolute Magnitude: -1.52
Mean Opposition Magnitude: -2.01
Color Index (B-V): **1.45**
RA/Dec (J2000.0): 0h07m41.59s/-0°15'12.1"
RA/Dec (on date): 0h09m02.76s/-0°06'23.2"
HA/Dec: 17h59m45.89s/+0°16'03.5" (apparent)
Az./Alt.: +89°46'02.6"/+0°08'41.5" (apparent)
Gal. long./lat.: +99°47'04.8"/-61°08'37.4"
Supergal. long./lat.: +292°57'21.5"/+11°18'46.1"
Ecl. long./lat. (J2000.0): +1°39'50.2"/-0°59'50.7"
Ecl. long./lat. (on date): +2°01'58.1"/-0°59'48.9"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 18h07m16.3s
Apparent Sidereal Time: 18h07m16.7s
Rise: 5h57m
Transit: 12h00m
Set: 18h03m
Parallactic Angle: -45°42'00.1"
IAU Constellation: Psc
Zodiac: ♈ 2°15'
Hourly motion: +0°01'57" towards 66.2°
Hourly motion: dα=+0°01'47" dδ=+0°00'47"
Elongation: 20°30'13.1"
Elong. in Ecl.Long.: W20°28'49"
Phase angle: +14°42'10.0"
Illuminated: 98.4%
Distance from Sun: 1.383 AU (206.950 M km)
Distance: 2.277 AU (340.630 M km)
Light time: 0h18m56.2s
Orbital velocity: 26.464 km/s
Sidereal period: 686.97 days (1.881 a)
Synodic period: 779.95 days (2.135 a)
Apparent diameter: +0°00'04.11"
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: +332°12'25"
Center point: L_e=+67°50'59" ϕ_e: -25°23'11"
Subsolar point: L_s=+84°05'43" ϕ_s: -24°55'51"
Albedo: 0.15
Solar Az./Alt.: +70°20'48"/-7°07'17"
Lunar Az./Alt.: +132°07'55"/+13°11'00"

Mercury

Mars

Date and Time

Date and Time | Julian Day

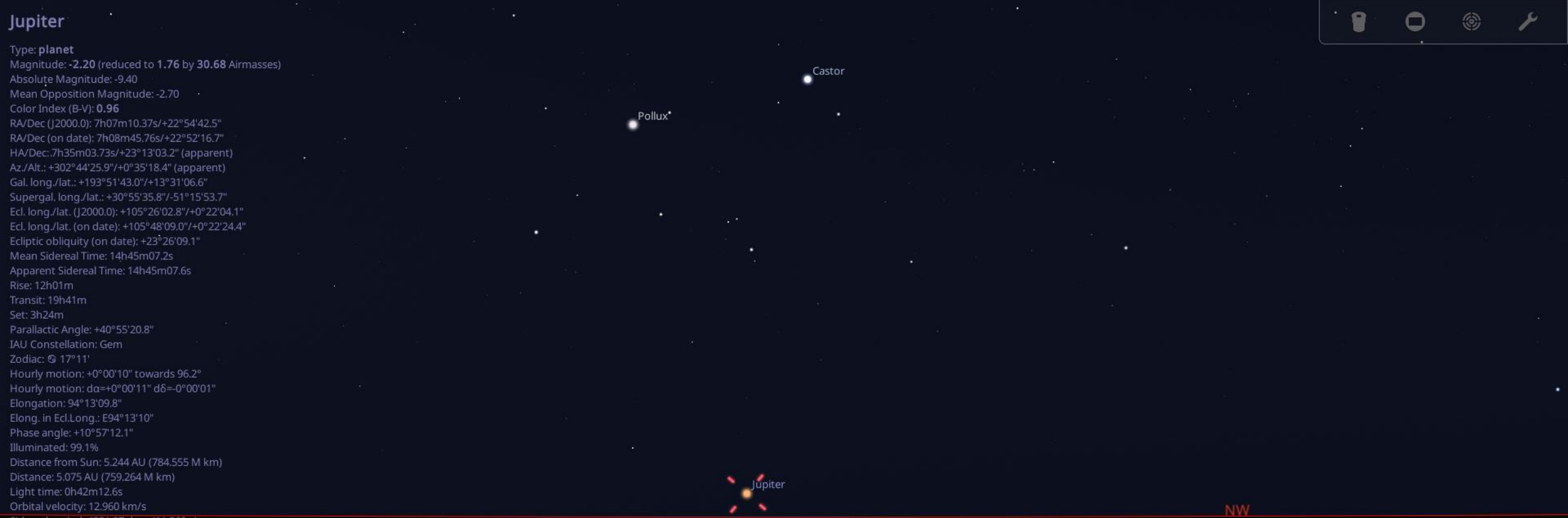
2026 – 4 – 12 5 : 53 : 3

Earth, Peterborough, 188 m FOV 6.87° 23.93 FPS 2026-04-12 05:58:03 UTC-04:00

JUPITER

Jupiter

- On April 1st, Jupiter sets at 3:19 a.m. in the northwestern sky.



Jupiter

Type: **planet**
Magnitude: **-2.20** (reduced to **1.76** by **30.68** Airmasses)
Absolute Magnitude: -9.40
Mean Opposition Magnitude: -2.70
Color Index (B-V): **0.96**
RA/Dec (J2000.0): 7h07m10.37s/+22°54'42.5"
RA/Dec (on date): 7h08m45.76s/+22°52'16.7"
HA/Dec:.7h35m03.73s/+23°13'03.2" (apparent)
Az./Alt.: +302°44'25.9"/+0°35'18.4" (apparent)
Gal. long./lat.: +193°51'43.0"/+13°31'06.6"
Supergal. long./lat.: +30°55'35.8"/-51°15'53.7"
Ecl. long./lat. (J2000.0): +105°26'02.8"/+0°22'04.1"
Ecl. long./lat. (on date): +105°48'09.0"/+0°22'24.4"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 14h45m07.2s
Apparent Sidereal Time: 14h45m07.6s
Rise: 12h01m
Transit: 19h41m
Set: 3h24m
Parallactic Angle: +40°55'20.8"
IAU Constellation: Gem
Zodiac: ♋ 17°11'
Hourly motion: +0°00'10" towards 96.2°
Hourly motion: dα=+0°00'11" dδ=-0°00'01"
Elongation: 94°13'09.8"
Elong. in Ecl.Long.: E94°13'10"
Phase angle: +10°57'12.1"
Illuminated: 99.1%
Distance from Sun: 5.244 AU (784.555 M km)
Distance: 5.075 AU (759.264 M km)
Light time: 0h42m12.6s
Orbital velocity: 12.960 km/s
Sidereal period: 4331.87 days (11.860 a)
Synodic period: 398.89 days (1.092 a)
Apparent diameter: +0°00'38.84"
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: +8°06'13"
Center point: L_{IIe}=+200°21'18" ϕ_e: +1°23'32"
Subsolar point: L_{IIs}=+189°24'10" ϕ_s: +1°06'50"
Albedo: 0.51
Solar Az./Alt.: +37°44'22"/-33°55'30"
Lunar Az./Alt.: +228°19'16"/+30°06'19"

Date and Time

Date and Time | Julian Day

2026 – 4 – 1 | 3 : 19 : 42

Earth, Peterborough, 188 m | FOV 22.1° | 17.86 FPS | 2026-04-01 03:19:42 UTC-04:00

Jupiter

- On April 1st, Jupiter is high in the southeastern sky at sunset.

Jupiter

Type: **planet**
Magnitude: **-2.19** (reduced to **-2.05** by **1.09** Airmasses)
Absolute Magnitude: -9.40
Mean Opposition Magnitude: -2.70
Color Index (B-V): **0.96**
RA/Dec (J2000.0): 7h07m22.79s/+22°54'25.2"
RA/Dec (on date): 7h08m58.17s/+22°51'58.9"
HA/Dec: 0h41m28.86s/+22°52'23.1" (apparent)
Az./Alt.: +205°03'13.6"/+66°56'32.9" (apparent)
Gal. long./lat.: +193°53'11.2"/+13°33'36.3"
Supergal. long./lat.: +31°00'11.3"/-51°15'56.9"
Ecl. long./lat. (J2000.0): +105°28'55.2"/+0°22'06.6"
Ecl. long./lat. (on date): +105°51'01.4"/+0°22'26.9"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 7h50m27.3s
Apparent Sidereal Time: 7h50m27.6s
Rise: 12h01m
Transit: 19h41m
Set: 3h24m
Parallactic Angle: +19°12'15.5"
IAU Constellation: Gem
Zodiac: ♋ 17°14'
Hourly motion: +0°00'10" towards 96.0°
Hourly motion: dα=+0°00'11" dδ=-0°00'01"
Elongation: 93°34'09.0"
Elong. in Ecl.Long.: E93°34'09"
Phase angle: +10°57'48.4"
Illuminated: 99.1%
Distance from Sun: 5.245 AU (784.593 M km)
Distance: 5.087 AU (760.966 M km)
Light time: 0h42m18.3s
Orbital velocity: 12.959 km/s
Sidereal period: 4331.87 days (11.860 a)
Synodic period: 398.89 days (1.092 a)
Apparent diameter: +0°00'38.76"
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: +8°07'29"
Center point: L_{IIe}=+98°13'22" ϕ_e: +1°23'26"
Subsolar point: L_{IIs}=+87°15'37" ϕ_s: +1°06'39"
Albedo: 0.51
Solar Az./Alt.: +284°59'32"/-8°07'25"
Lunar Az./Alt.: +107°56'50"/+7°01'48"

Date and Time

Date and Time | Julian Day

2026 – 4 – 1 | 20 : 22 : 14

Earth, Peterborough, 188 m | FOV 193° | 17.86 FPS | 2026-04-01 20:22:14 UTC-04:00

Jupiter

- On April 22nd, Jupiter and a 1st quarter Moon share a close conjunction at sunset.


Jupiter
Type: planet
Magnitude: -2.06 (reduced to -1.90 by 1.19 Airmasses)
Absolute Magnitude: -9.40
Mean Opposition Magnitude: -2.70
Color Index (B-V): 0.96
RA/Dec (J2000.0): 7h16m05.51s/+22°40'22.6"
RA/Dec (on date): 7h17m40.76s/+22°37'36.2"
HA/Dec: 1h58m35.29s/+22°38'05.2" (apparent)
Az./Alt.: +238°02'39.5"/+57°26'44.1" (apparent)
Gal. long./lat.: +194°56'32.9"/+15°18'13.9"
Supergal. long./lat.: +34°14'04.0"/-51°16'23.2"
Ecl. long./lat. (J2000.0): +107°30'12.7"/+0°22'55.8"
Ecl. long./lat. (on date): +107°52'21.7"/+0°23'15.3"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 9h16m17.5s
Apparent Sidereal Time: 9h16m17.9s
Rise: 10h48m
Transit: 18h27m
Set: 2h09m
Parallactic Angle: +41°08'25.8"
IAU Constellation: Gem
Zodiac: ♋ 19°25'
Hourly motion: +0°00'18" towards 97.0°
Hourly motion: dα=+0°00'19" dδ=-0°00'02"
Elongation: 74°59'28.2"
Elong. in Ecl.Long.: E74°59'26"
Phase angle: +10°39'15.7"
Illuminated: 99.1%
Distance from Sun: 5.252 AU (785.708 M km)
Distance: 5.422 AU (811.110 M km)
Light time: 0h45m05.6s
Orbital velocity: 12.941 km/s
Sidereal period: 4331.87 days (11.860 a)
Synodic period: 398.89 days (1.092 a)
Apparent diameter: +0°00'36.36"
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: +9°00'52"
Center point: L_{IIIe}=+12°01'15" ϕ_e: +1°19'40"
Subsolar point: L_{IIIs}=+1°22'07" ϕ_s: +1°01'22"
Albedo: 0.51
Solar Az./Alt.: +291°45'32"/-3°47'01"
Lunar Az./Alt.: +240°24'39"/+60°18'37"
Moon
Jupiter
Venus
S
SW
W
Date and Time
Date and Time
Julian Day
2026 – 4 – 22
20 : 25 : 16
Earth, Peterborough, 188 m
FOV 98.9°
54.13 FPS
2026-04-22 20:25:16 UTC-04:00

Jupiter

- On April 30th, Jupiter sets at 1:33 a.m. in the northwestern sky.


Jupiter
Type: planet
Magnitude: -2.02 (reduced to 1.46 by 26.65 Airmasses)
Absolute Magnitude: -9.40
Mean Opposition Magnitude: -2.70
Color Index (B-V): 0.96
RA/Dec (J2000.0): 7h20m07.71s/+22°33'08.5"
RA/Dec (on date): 7h21m42.84s/+22°30'13.2"
HA/Dec: 7h30m34.74s/+22°48'27.2" (apparent)
Az./Alt.: +301°41'37.6"/+0°57'29.8" (apparent)
Gal. long./lat.: +195°26'26.5"/+16°06'41.6"
Supergal. long./lat.: +35°44'06.2"/-51°14'53.0"
Ecl. long./lat. (J2000.0): +108°26'34.5"/+0°23'11.4"
Ecl. long./lat. (on date): +108°48'44.1"/+0°23'30.8"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 14h53m26.7s
Apparent Sidereal Time: 14h53m27.0s
Rise: 10h22m
Transit: 18h00m
Set: 1h41m
Parallactic Angle: +41°20'47.3"
IAU Constellation: Gem
Zodiac: ♋ 20°25'
Hourly motion: +0°00'21" towards 97.4°
Hourly motion: dα=+0°00'22" dδ=-0°00'03"
Elongation: 68°54'32.8"
Elong. in Ecl.Long.: E68°54'30"
Phase angle: +10°18'07.7"
Illuminated: 99.2%
Distance from Sun: 5.255 AU (786.089 M km)
Distance: 5.532 AU (827.637 M km)
Light time: 0h46m00.7s
Orbital velocity: 12.934 km/s
Sidereal period: 4331.87 days (11.860 a)
Synodic period: 398.89 days (1.092 a)
Apparent diameter: +0°00'35.63"
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: +9°25'23"
Center point: L_{IIe}=+168°59'10" ϕ_e: +1°17'59"
Subsolar point: L_{IIs}=+158°41'12" ϕ_s: +0°59'33"
Albedo: 0.51
Solar Az./Alt.: +6°35'48"/-30°40'38"
Lunar Az./Alt.: +206°25'15"/+28°43'15"
Pollux
Capella
Jupiter
W
NW
Date and Time
Date and Time
Julian Day
2026 – 4 – 30
1 : 33 : 58
Earth, Peterborough, 188 m
FOV 43°
17.86 FPS
2026-04-30 01:33:59 UTC-04:00

Jupiter

- On April 30th, Jupiter is well placed in the western sky at sunset.

Jupiter

Type: **planet**
Magnitude: **-2.01** (reduced to **-1.83** by **1.37** Airmasses)
Absolute Magnitude: -9.40
Mean Opposition Magnitude: -2.70
Color Index (B-V): **0.96**
RA/Dec (J2000.0): 7h20m36.72s/+22°32'15.4"
RA/Dec (on date): 7h22m11.83s/+22°29'19.1"
HA/Dec: 3h03m10.11s/+22°29'56.5" (apparent)
Az./Alt.: +255°06'49.4"/+46°44'40.0" (apparent)
Gal. long./lat.: +195°30'02.0"/+16°12'30.1"
Supergal. long./lat.: +35°54'53.2"/-51°14'37.1"
Ecl. long./lat. (J2000.0): +108°33'19.8"/+0°23'13.8"
Ecl. long./lat. (on date): +108°55'29.5"/+0°23'33.1"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 10h25m24.7s
Apparent Sidereal Time: 10h25m25.0s
Rise: 10h22m
Transit: 18h00m
Set: 1h41m
Parallactic Angle: +48°28'26.1"
IAU Constellation: Gem
Zodiac: ♋ 20°32'
Hourly motion: +0°00'21" towards 97.5°
Hourly motion: dα=+0°00'22" dδ=-0°00'03"
Elongation: 68°14'07.0"
Elong. in Ecl.Long.: E68°14'05"
Phase angle: +10°15'20.1"
Illuminated: 99.2%
Distance from Sun: 5.255 AU (786.132 M km)
Distance: 5.545 AU (829.453 M km)
Light time: 0h46m06.8s
Orbital velocity: 12.934 km/s
Sidereal period: 4331.87 days (11.860 a)
Synodic period: 398.89 days (1.092 a)
Apparent diameter: +0°00'35.56"
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: +9°28'18"
Center point: L_{IIe}=+155°09'41" ϕ_e: +1°17'47"
Subsolar point: L_{IIs}=+144°54'30" ϕ_s: +0°59'21"
Albedo: 0.51
Solar Az./Alt.: +300°33'38"/-8°17'48"
Lunar Az./Alt.: +128°20'37"/+11°36'13"

Date and Time

Date and Time | Julian Day

2026 – 4 – 30 | 21 : 2 : 44

Earth, Peterborough, 188 m | FOV 98.9° | 57.6 FPS | 2026-04-30 21:02:45 UTC-04:00

SATURN

Saturn

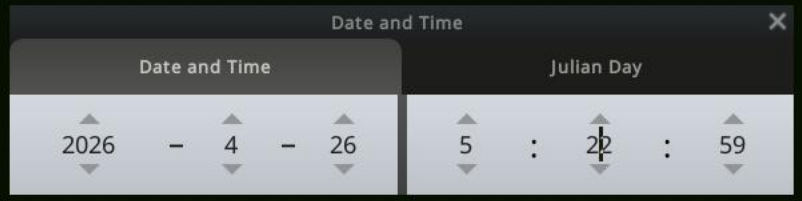
- On April 26th, Saturn reappears in the morning eastern sky just before sunrise.

- Saturn rises at 5:23 a.m. in the eastern sky.

Saturn

Type: **planet**
Magnitude: **0.93** (reduced to **5.63** by **37.29** Airmasses)
Absolute Magnitude: -8.88
Mean Opposition Magnitude: 0.67
Color Index (B-V): **1.22**
RA/Dec (J2000.0): 0h33m45.04s/+1°17'12.5"
RA/Dec (on date): 0h35m06.44s/+1°25'57.6"
HA/Dec: 17h53m44.55s/+1°48'25.8" (apparent)
Az./Alt.: +87°36'51.2"/+0°08'34.9" (apparent)
Gal. long./lat.: +113°42'18.6"/-61°16'03.6"
Supergal. long./lat.: +296°15'03.8"/+5°27'57.2"
Ecl. long./lat. (J2000.0): +8°15'27.9"/-2°09'48.0"
Ecl. long./lat. (on date): +8°37'38.1"/-2°09'43.9"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 18h27m18.6s
Apparent Sidereal Time: 18h27m18.9s
Rise: 5h22m
Transit: 11h30m
Set: 17h38m
Parallactic Angle: -45°40'41.5"

IAU Constellation: Cet
Zodiac: ♈ 8°46'
Hourly motion: +0°00'17" towards 67.8°
Hourly motion: dα=+0°00'16" dδ=+0°00'07"
Elongation: 27°37'19.4"
Elong. in Ecl.Long.: W27°32'38"
Phase angle: +2°49'11.4"
Illuminated: 99.9%
Distance from Sun: 9.483 AU (1418.629 M km)
Distance: 10.363 AU (1550.283 M km)
Light time: 1h26m11.2s
Orbital velocity: 9.704 km/s
Sidereal period: 10760.00 days (29.459 a)
Synodic period: 378.09 days (1.035 a)
Apparent diameter: +0°00'16.04", with rings: +0°00'37.36"
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°28'53"
Center point: L_{IIIe}=+324°30'41" ϕ_e: -6°49'10"
Subsolar point: L_{IIIs}=+326°56'38" ϕ_s: -5°21'26"
Albedo: 0.50
Solar Az./Alt.: +61°10'42"/-8°45'11"
Lunar Az./Alt.: +299°05'03"/-14°25'47"



Saturn

- On April 30th, Saturn rises at 5:08 a.m. in the eastern morning twilight sky.

- The planet is slow low in the twilight glare at sunrise.

Saturn

Type: **planet**
Magnitude: **0.93** (reduced to **5.43** by **35.46** Airmasses)
Absolute Magnitude: -8.88
Mean Opposition Magnitude: 0.67
Color Index (B-V): **1.22**
RA/Dec (J2000.0): 0h35m26.41s/+1°27'31.0"
RA/Dec (on date): 0h36m47.84s/+1°36'15.6"
HA/Dec: 17h53m43.75s/+1°57'52.9" (apparent)
Az./Alt.: +87°29'57.1"/+0°15'02.5" (apparent)
Gal. long./lat.: +114°37'20.2"/-61°09'17.1"
Supergal. long./lat.: +296°31'53.8"/+5°06'20.4"
Ecl. long./lat. (J2000.0): +8°42'49.9"/-2°10'17.6"
Ecl. long./lat. (on date): +9°05'00.2"/-2°10'13.3"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 18h29m02.7s
Apparent Sidereal Time: 18h29m03.0s
Rise: 5h07m
Transit: 11h16m
Set: 17h24m
Parallactic Angle: -45°40'42.5"

E

IAU Constellation: Cet
Zodiac: ♈ 9°11'
Hourly motion: +0°00'17" towards 68.0°
Hourly motion: dα=+0°00'16" dδ=+0°00'06"
Elongation: 31°02'05.8"
Elong. in Ecl.Long.: W30°58'00"
Phase angle: +3°08'22.3"
Illuminated: 99.9%
Distance from Sun: 9.482 AU (1418.445 M km)
Distance: 10.331 AU (1545.428 M km)
Light time: 1h25m55.0s
Orbital velocity: 9.705 km/s
Sidereal period: 10760.00 days (29.459 a)
Synodic period: 378.09 days (1.035 a)
Apparent diameter: +0°00'16.09", with rings: +0°00'37.48"
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°26'35"
Center point: L_{IIIe}=+319°23'30" ϕ_e: -7°01'05"
Subsolar point: L_{IIIs}=+322°07'01" ϕ_s: -5°25'02"
Albedo: 0.50
Solar Az./Alt.: +57°49'46"/-9°51'18"
Lunar Az./Alt.: +250°35'07"/+0°25'45"

Date and Time

Date and Time | Julian Day

2026 – 4 – 30 | 5 : 8 : 59

URANUS

Uranus

- On April 1st, Uranus is high in the western sky at sunset.


Uranus
Type: planet
Magnitude: 5.81 (reduced to 6.06 by 1.90 Airmasses)
Absolute Magnitude: -7.19
Mean Opposition Magnitude: 5.52
Color Index (B-V): 0.74
RA/Dec (J2000.0): 3h44m57.85s/+19°38'36.5"
RA/Dec (on date): 3h46m29.31s/+19°43'36.3"
HA/Dec: 4h17m35.82s/+19°44'39.0" (apparent)
Az./Alt.: +267°08'57.4"/+31°48'12.5" (apparent)
Gal. long./lat.: +169°33'05.6"/-27°07'24.4"
Supergal. long./lat.: +331°58'29.0"/-31°25'19.3"
Ecl. long./lat. (J2000.0): +58°26'30.9"/-0°10'25.4"
Ecl. long./lat. (on date): +58°48'37.1"/-0°10'06.6"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 8h04m10.0s
Apparent Sidereal Time: 8h04m10.3s
Rise: 8h55m
Transit: 16h19m
Set: 23h43m
Parallactic Angle: +49°24'57.8"
IAU Constellation: Tau
Zodiac: ♉ 26°37'
Hourly motion: +0°00'07" towards 77.9°
Hourly motion: dα=+0°00'07" dδ=+0°00'01"
Elongation: 46°31'12.0"
Elong. in Ecl.Long.: E46°31'11"
Phase angle: +2°08'02.6"
Illuminated: 100.0%
Distance from Sun: 19.474 AU (2913.270 M km)
Distance: 20.148 AU (3014.125 M km)
Light time: 2h47m34.0s
Orbital velocity: 6.715 km/s
Sidereal period: 30685.00 days (84.011 a)
Synodic period: 369.66 days (1.012 a)
Apparent diameter: +0°00'03.50", with rings: +0°00'13.37"
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: +279°20'05"
Center point: L_s=+317°03'09" ϕ_s: +69°25'52"
Subsolar point: L_s=+319°32'12" ϕ_s: +71°23'43"
Albedo: 0.66
Discovered: 17 March 1781 (W. Herschel)
Solar Az./Alt.: +287°29'43"/-10°28'13"
Lunar Az./Alt.: +110°25'41"/+9°12'46"
Aldebaran
Rigel
Venus
SW
W
NW
Date and Time
Date and Time
Julian Day
2026 – 4 – 1
20 : 35 : 54
Earth, Peterborough, 188 m
FOV 70.9°
21.91 FPS
2026-04-01 20:35:54 UTC-04:00

Uranus

- On April 1st, Uranus sets at 11:41 p.m. in the northwestern sky.

Uranus

Type: **planet**
Magnitude: **5.81** (reduced to **10.45** by **36.71** Airmasses)
Absolute Magnitude: -7.19
Mean Opposition Magnitude: 5.52
Color Index (B-V): **0.74**
RA/Dec (J2000.0): 3h44m59.26s/+19°38'41.1"
RA/Dec (on date): 3h46m30.73s/+19°43'40.8"
HA/Dec: 7h22m40.45s/+20°07'18.3" (apparent)
Az./Alt.: +298°32'02.2"/+0°10'34.1" (apparent)
Gal. long./lat.: +169°33'18.4"/-27°07'07.3"
Supergal. long./lat.: +331°58'46.4"/-31°25'33.4"
Ecl. long./lat. (J2000.0): +58°26'51.4"/-0°10'25.4"
Ecl. long./lat. (on date): +58°48'57.5"/-0°10'06.6"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 11h10m41.2s
Apparent Sidereal Time: 11h10m41.6s
Rise: 8h55m
Transit: 16h19m
Set: 23h43m
Parallactic Angle: +42°02'19.0"
IAU Constellation: Tau
Zodiac: ♉ 26°37'
Hourly motion: +0°00'07" towards 78.0°
Hourly motion: dα=+0°00'07" dδ=+0°00'01"
Elongation: 46°23'50.8"
Elong. in Ecl.Long.: E46°23'49"
Phase angle: +2°07'47.5"
Illuminated: 100.0%
Distance from Sun: 19.474 AU (2913.267 M km)
Distance: 20.150 AU (3014.367 M km)
Light time: 2h47m34.8s
Orbital velocity: 6.715 km/s
Sidereal period: 30685.00 days (84.011 a)
Synodic period: 369.66 days (1.012 a)
Apparent diameter: +0°00'03.50", with rings: +0°00'13.37"
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: +279°20'33"
Center point: L_s=+21°47'45" ϕ_s: +69°26'11"
Subsolar point: L_s=+24°16'33" ϕ_s: +71°23'48"
Albedo: 0.66
Discovered: 17 March 1781 (W. Herschel)
Solar Az./Alt.: +330°06'41"/-36°22'02"
Lunar Az./Alt.: +151°56'14"/+32°59'09"

Date and Time

Date and Time | Julian Day

2026 – 4 – 1 | 23 : 41 : 55

Uranus

- On April 30th, Uranus is low on the northwestern horizon at sunset.

Distance: 20.415 AU (3054.044 M km)
Light time: 2h49m47.2s
Orbital velocity: 6.716 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: +281°26'35"
Center point: L_s=+106°06'07" ϕ_s: +70°47'05"
Subsolar point: L_s=+107°20'33" ϕ_s: +71°41'40"
Albedo: 0.66
Discovered: 17 March 1781 (W. Herschel)
Solar Az./Alt.: +302°57'07"/-10°12'30"
Lunar Az./Alt.: +130°49'37"/+13°14'55"

Date and Time

Date and Time | Julian Day

2026 – 4 – 30 | 21 : 15 : 19

Earth, Peterborough, 188 m | FOV 36.4° | 17.86 FPS | 2026-04-30 21:15:19 UTC-04:00

Uranus

- On April 30th, Uranus sets at 9:56 p.m. in the northwestern sky.

Uranus

Type: **planet**
Magnitude: **5.83** (reduced to **10.64** by **38.32** Airmasses)
Absolute Magnitude: -7.19
Mean Opposition Magnitude: 5.52
Color Index (B-V): **0.74**
RA/Dec (J2000.0): 3h51m04.26s/+19°58'07.4"
RA/Dec (on date): 3h52m36.36s/+20°02'55.7"
HA/Dec: 7h24m50.09s/+20°27'23.7" (apparent)
Az./Alt.: +299°08'04.5"/+0°05'11.4" (apparent)
Gal. long./lat.: +170°27'27.4"/-25°53'38.0"
Supergal. long./lat.: +333°14'42.0"/-32°25'31.4"
Ecl. long./lat. (J2000.0): +59°54'52.9"/-0°10'02.5"
Ecl. long./lat. (on date): +60°17'02.6"/-0°09'43.9"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 11h18m59.3s
Apparent Sidereal Time: 11h18m59.7s
Rise: 7h05m
Transit: 14h31m
Set: 21h57m
Parallactic Angle: +41°51'09.6"
IAU Constellation: Tau
Zodiac: ♉ 28°9'
Hourly motion: +0°00'08" towards 78.6°
Hourly motion: dα=+0°00'09" dδ=+0°00'02"
Elongation: 19°33'30.2"
Elong. in Ecl.Long.: E19°33'27"
Phase angle: +0°59'33.2"
Illuminated: 100.0%
Distance from Sun: 19.469 AU (2912.494 M km)
Distance: 20.415 AU (3054.069 M km)
Light time: 2h49m47.3s
Orbital velocity: 6.716 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: +281°26'44"
Center point: L_s=+120°19'20" ϕ_s: +70°47'10"
Subsolar point: L_s=+121°33'41" ϕ_s: +71°41'41"
Albedo: 0.66
Discovered: 17 March 1781 (W. Herschel)
Solar Az./Alt.: +311°07'40"/-16°02'09"
Lunar Az./Alt.: +139°19'17"/+18°08'42"

Alcyone

Uranus

Date and Time

Date and Time | Julian Day

2026 – 4 – 30 | 21 : 56 : 10

Earth, Peterborough, 188 m | FOV 4.93° | 21.78 FPS | 2026-04-30 21:56:10 UTC-04:00

NEPTUNE

Neptune

- On April 25th, Neptune reappears in the eastern morning sky just before sunrise.

- Neptune rises at 5:10 a.m. in the eastern morning twilight sky.

Neptune

Type: **planet**
Magnitude: **7.82** (reduced to **12.47** by **36.81** Airmasses)
Absolute Magnitude: -6.87
Mean Opposition Magnitude: 7.84
RA/Dec (J2000.0): 0h12m03.25s/-0°07'46.1"
RA/Dec (on date): 0h13m24.53s/+0°01'03.3"
HA/Dec: 17h59m26.16s/+0°23'17.8" (apparent)
Az./Alt.: +89°37'25.0"/+0°10'12.9" (apparent)
Gal. long./lat.: +102°00'30.9"/-61°23'27.5"
Supergal. long./lat.: +293°23'01.9"/+10°17'57.2"
Ecl. long./lat. (J2000.0): +2°42'49.8"/-1°19'01.4"
Ecl. long./lat. (on date): +3°04'59.6"/-1°18'59.3"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 18h11m19.2s
Apparent Sidereal Time: 18h11m19.5s
Rise: 5h10m
Transit: 11h12m
Set: 17h14m
Parallactic Angle: -45°41'59.9"
IAU Constellation: Psc
Zodiac: ♈ 3°21'
Hourly motion: +0°00'05" towards 67.5°
Hourly motion: dα=+0°00'05" dδ=+0°00'02"
Elongation: 32°07'49.6"
Elong. in Ecl.Long.: W32°06'23"
Phase angle: +1°01'33.2"
Illuminated: 100.0%
Distance from Sun: 29.882 AU (4470.263 M km)
Distance: 30.729 AU (4596.986 M km)
Light time: 4h15m33.9s
Orbital velocity: 5.468 km/s
Sidereal period: 60189.00 days (164.789 a)
Synodic period: 367.49 days (1.006 a)
Apparent diameter: +0°00'02.22", with rings: +0°00'05.65"
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: +316°10'33"
Center point: L_e=+52°12'06" ϕ_e: -18°57'43"
Subsolar point: L_s=+53°14'00" ϕ_s: -19°16'54"
Albedo: 0.62
Discovered: 23 September 1846 (J.G. Galle)
Solar Az./Alt.: +59°04'26"/-10°53'39"
Lunar Az./Alt.: +309°20'09"/-14°53'12"

Date and Time

Date and Time | Julian Day

2026 – 4 – 25 5 : 10 : 58

Earth, Peterborough, 188 m FOV 4.17° 37.48 FPS 2026-04-25 05:10:58 UTC-04:00

Neptune

- On April 30th, Neptune rises at 4:50 a.m. in the morning eastern twilight sky.

Neptune

Type: **planet**
Magnitude: **7.82** (reduced to **12.64** by **38.42** Airmasses)
Absolute Magnitude: -6.87
Mean Opposition Magnitude: 7.84
RA/Dec (J2000.0): 0h12m39.12s/-0°04'03.3"
RA/Dec (on date): 0h14m00.42s/+0°04'46.1"
HA/Dec: 17h58m38.92s/+0°27'43.9" (apparent)
Az./Alt.: +89°25'59.8"/+0°04'51.7" (apparent)
Gal. long./lat.: +102°20'43.8"/-61°22'45.9"
Supergal. long./lat.: +293°29'10.1"/+10°10'21.3"
Ecl. long./lat. (J2000.0): +2°52'32.2"/-1°19'10.8"
Ecl. long./lat. (on date): +3°14'42.3"/-1°19'08.6"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 18h11m04.9s
Apparent Sidereal Time: 18h11m05.2s
Rise: 4h51m
Transit: 10h53m
Set: 16h56m
Parallactic Angle: -45°41'56.1"
IAU Constellation: Psc
Zodiac: ♈ 3°30'
Hourly motion: +0°00'05" towards 67.6°
Hourly motion: dα=+0°00'04" dδ=+0°00'02"
Elongation: 36°48'46.8"
Elong. in Ecl.Long.: W36°47'34"
Phase angle: +1°09'26.3"
Illuminated: 100.0%
Distance from Sun: 29.882 AU (4470.244 M km)
Distance: 30.682 AU (4589.966 M km)
Light time: 4h15m10.5s
Orbital velocity: 5.468 km/s
Sidereal period: 60189.00 days (164.789 a)
Synodic period: 367.49 days (1.006 a)
Apparent diameter: +0°00'02.23", with rings: +0°00'05.66"
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: +316°07'28"
Center point: L_e=+206°11'48" ϕ_e: -18°54'11"
Subsolar point: L_s=+207°21'28" ϕ_s: -19°16'15"
Albedo: 0.62
Discovered: 23 September 1846 (J.G. Galle)
Solar Az./Alt.: +54°20'58"/-12°31'05"
Lunar Az./Alt.: +247°32'48"/+3°07'45"

Date and Time

Date and Time | Julian Day

2026 – 4 – 30 | 4 : 51 : 4

Earth, Peterborough, 188 m | FOV 2.53° | 35.4 FPS | 2026-04-30 04:51:04 UTC-04:00

DEEP SKY

GALAXY SEASON

MESSIER 83

THE SOUTHERN PINWHEEL GALAXY

Southern Pinwheel Galaxy (Thousand Rubies Galaxy - Seashell Galaxy)
M 83 - NGC 5236 - PGC 48082 - ESO 444-81

Type: **galaxy** (SAB(s)c)
Magnitude: **7.50** (reduced to **8.25** by **5.79** Airmasses)
Color Index (B-V): **0.72**
Surface brightness: **12.67** mag/arc-min^2 (after extinction: **13.41** mag/arc-min^2)
Contrast index: -0.04
RA/Dec (J2000.0): 13h37m02.37s/-29°52'02.5"
RA/Dec (on date): 13h38m31.59s/-30°00'07.5"
HA/Dec: 21h45m49.51s/-29°55'03.9" (apparent)
Az./Alt.: +150°55'42.6"/+9°42'38.8" (apparent)
Gal. long./lat.: +314°35'21.1"/+31°58'12.2"
Supergal. long./lat.: +147°56'09.0"/+0°59'44.9"
Ecl. long./lat. (J2000.0): +213°35'09.1"/-18°22'16.1"
Ecl. long./lat. (on date): +213°57'10.2"/-18°22'28.7"
Ecliptic obliquity (on date): +23°26'09.1"
Mean Sidereal Time: 11h24m10.5s
Apparent Sidereal Time: 11h24m10.9s
Rise: 21h59m
Transit: 1h50m
Set: 5h36m
Parallactic Angle: -23°39'16.2"
IAU Constellation: Hya
Zodiac: ♎ 24°37'
Size: +0°2'54.00" x +0°11'30.00"
Orientation angle: 45°
Distance: 4.610 Mpc (15.038 M ly)
Redshift: 0.001733
Discoverer: Nicholas Louis de Lacaille (23 February 1752)
Solar Az./Alt.: +328°45'10"/-33°29'04"
Lunar Az./Alt.: +108°31'59"/-22°58'08"

Maiden
Serpent
Cup
Crow
Water Snake
Scales
Air Pump
Blue Horsehead Nebula
SE
S

Date and Time

Date and Time | Julian Day

2026 – 4 – 7 | 23 : 31 : 47

Earth, Peterborough, 188 m | FOV 70.9° | 17.87 FPS | 2026-04-07 23:31:47 UTC-04:00

M83 – Southern Pinwheel Galaxy

- Other Designations: ESO 444-G 081, IRAS 13341-2936, NGC 5236, UGCA 366, MCG -05-32-050, PGC 48082, Grand Barred Spiral
- Type: Galaxy – Class – SAB – Type A Barred Spiral SAB(s),c
- Constellation: Hydra
- Diameter: 55,000 Light years across Stars: 40 billion
- Distance: 14 million light years from Earth
- Magnitude: +7.6
- Size: 12.9 x 11.9 arc minutes across
- Age: Estimates range from 13 to 15 billion years old
- Photo taken by HST

M83 – Southern Pinwheel Galaxy

- The 1,000 rubies galaxy. M83 is a starburst galaxy, with enhanced star formation, particularly along the leading edges of its spiral arms.
- Observations from Hubble reveal thousands of star clusters and nearly 300 supernova remnants. Six supernovae have been recorded in M83, including SN 1950B and SN 1968L. This highlights the galaxy's dynamic stellar activity.
- Recent observations from the JWST (MIRI instrument), suggest the presence of a supermassive black hole at M83's core.
- Highly ionized neon gas detected in the central region may indicate an active galactic nucleus (AGN), providing new insights into the galaxy's central dynamics.

M83 – Southern Pinwheel Galaxy

- Below is photo from Webb Space telescope.

- Close up of the core of M83 of the AGN – Active Galactic Necleus.

- Possible Super Massive Black hole.

M83 – Southern Pinwheel Galaxy

- Scientific Significance
- M83 is a key target for studying star formation, galactic evolution, and supernova activity. Its proximity allows astronomers to examine stellar nurseries, interstellar bubbles, and chemical enrichment in detail.
- Interactions with nearby dwarf galaxies, such as NGC 5253, may have triggered central starburst activity within the last billion years.
- M83 offers a vivid example of a grand design barred spiral galaxy with ongoing stellar evolution and dynamic galactic processes.

That is the Sky this Month

By David Mills