## Sky this Month

February 2025

## MOON

## NEW MOON

## Moon

• The New Moon is on February 27<sup>th</sup> at 7:45 p.m.

The Moon is south of the sun. Saturn is east of the sun.

 Venus and Mercury are the furthest east of the sun. This month's New Moon is the New Worm Moon.

#### Moon

Type: moon Magnitude: 0.79

Absolute Magnitude: 45.41

RA/Dec (J2000.0): 22h43m29.98s/-10°11'08.8" RA/Dec (on date): 22h44m49.32s/-10°03'15.6" Hour angle/DE: 7h23m27.98s/-10°03'15.6"

Az/Alt: +277°25'52.1"/-21°53'49.4"

Ecliptic longitude/latitude (J2000.0): +338°30'19.5"/-1°56'49.7" Ecliptic longitude/latitude (on date): +338°51'24.1"/-1°56'56.5"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +56°06'58.8"/-55°26'55.3"

Mean Sidereal Time: 6h8m17.2s Apparent Sidereal Time: 6h8m17.3s Distance: 0.002453AU (367010.197 km) Apparent diameter: +0°32'32.9" Sidereal period: 27.32 days (0.075 a)

Sidereal day: 655h43m11.5s Mean solar day: 708h44m2.8s Phase Angle: +177°52'49" Elongation: +2°06'52"

Phase: 0.00 Illuminated: 0.0%





## FULL MOON

### Moon

• The full Moon is on February 12<sup>th</sup>, at 8:53 a.m.

Moonrise is at 5:50 p.m. on February 12<sup>th</sup>.

This month's Full Moon called the Cold Moon.

#### Moon

Type: moon

Magnitude: -12.23 (extincted to: -7.72)

Absolute Magnitude: 32.24

RA/Dec (J2000.0): 10h08m49.86s/+13°41'03.1" RA/Dec (on date): 10h10m10.90s/+13°33'42.0" Hour angle/DE: 17h05m25.98s/+13°55'58.0" (apparent)

Az/Alt: +70°35'50.3"/+0°14'54.6" (apparent)

Ecliptic longitude/latitude (J2000.0): +149°19'46.9"/+2°06'41.1" Ecliptic longitude/latitude (on date): +149°40'49.1"/+2°06'51.0"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: -135°50'46.2"/+49°48'41.1"

Mean Sidereal Time: 3h14m8.1s Apparent Sidereal Time: 3h14m8.2s Distance: 0.002633AU (393882.271 km)





# MERCURY

 On February 18th, Mercury slowly climbs out of the solar glare.

 Mercury is low on the western horizon. Mercury remains elusive at sunset.

Type: **planet** 

Magnitude: -0.51 (extincted to: 3.08)

Absolute Magnitude: 30.48

RA/Dec (J2000.0): 22h40m27.56s/-9°55'25.4"

RA/Dec (on date): 22h41m46.85s/-9°47'34.8"

Hour angle/DE: 5h17m28.21s/-9°29'46.8" (apparent)

AZ/AIT: +255°48'22.2"/+0°51'36.9" (apparent)

Ecliptic longitude/latitude (J2000.0): +337°54 34.8 /-1°25 24.5 Ecliptic longitude/latitude (on date): +338°15'38.3"/-1°25'31.5"

Ecliptic obliquity (on date): +23°26'10'

Galactic longitude/latitude: +55°46'18.6"/-54°40'50.3"

Mean Sidereal Time: 4h0m26.5s Apparent Sidereal Time: 4h0m26.6s Distance: 1.308AU (195.682 Mio km) Apparent diameter: +0°00'05.1" Sidereal period: 87.97 days (0.241 a) Sidereal day: 1407h30m33.8s Mean solar day: 4222h27m52.5s

Phase Angle: +22°17'0'

Phase: 0.96

Illuminated: 96.3%







• On February 24th, Mercury and Saturn Share a close conjunction in the western sky at sunset.

Both planets are low on the horizon and set quickly.





• On February 28th, Mercury and a baby Moon share at close conjunction at sunset in western twilight sky.

Both objects are low on the horizon and set quickly.

Type: **planet** 

Magnitude: -0.17 (extincted to: 0.86)

Absolute Magnitude: 31.16

RA/Dec (J2000.0): 23h44m39.64s/-1°24'51.3" RA/Dec (on date): 23h45m57.01s/-1°16'29.2" Hour angle/DE: 5h17m6.92s/-1°11'08.3" (apparent)

Ecliptic longitude/latitude (J2000.0): +355°55'09.6"/+0°13'35.0"
Ecliptic longitude/latitude (on date): +356°16'13.7"/+0°13'34.6"

Ecliptic obliquity (on date): +23°26'10

Galactic longitude/latitude: +88°13'38.2"/-59°42'30.6"

Mean Sidereal Time: 5h3m25.3s Apparent Sidereal Time: 5h3m25.4s Distance: 1.115AU (166.753 Mio km) Apparent diameter: +0°00'06.0" Sidereal period: 87.97 days (0.241 a) Sidereal day: 1407h30m33.8s Mean solar day: 4222h27m52.5s

Phase Angle: +58°59'32 Florgation: +15°38'05"

Phase: 0.76

Illuminated: 75.8%



Saturn



# VENUS

• On February 1<sup>st</sup>, Venus is well placed in the western sky at sunset.

• On the same evening Venus and a baby Moon share a close conjunction at sunset.

Type: **planet** 

Magnitude: -4.59 (extincted to: -4.33)

Absolute Magnitude: 28.42

RA/Dec (J2000.0): 23h48m49.16s/+1°03'28.4" RA/Dec (on date): 23h50m6.19s/+1°11'49.7" Hour angle/DE: 3h04m55.23s/+1°13'10.4" (appai

Az/Alt: +237°03'30.9"/+30°39'11.9" (apparent)

Ecliptic longitude/latitude (J2000.0): +357°51'20.9"/+2°04'56.0" Ecliptic longitude/latitude (on date): +358°12'20.6"/+2°04'56.3"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +92°17'22.5"/-58°02'20.9"

Mean Sidereal Time: 2h55m5.4s Apparent Sidereal Time: 2h55m5.5s Distance: 0.516AU (77.126 Mio km) Apparent diameter: +0°00'32.4" Sidereal period: 224.70 days (0.615 a)

Sidereal day: 5832h28m47.1s Mean solar day: 2802h0m52.2s Phase Angle: +104°43'15"

Elongation: +44°53'03"

Illuminated: 37 3º





• On February 1<sup>st</sup>, Venus and the young Moon set together at 9:15 p.m. in the western sky.

Type: planet

Magnitude: -4.59 (extincted to: -0.99)

Absolute Magnitude: 28.43

RA/Dec (J2000.0): 23h49m8.26s/+1°06'45.9" RA/Dec (on date): 23h50m25.29s/+1°15'07.3" Hour angle/DE: 6h01m15.04s/+1°32'39.2" (apparent)

Az/Alt: +271°19'24.9"/+0°51'17.0" (apparent)

Ecliptic longitude/latitude (J2000.0): +357°57'02.4"/+2°06'03.3" Ecliptic longitude/latitude (on date): +358°18'02.1"/+2°06'03.7"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +92°28'13.7"/-58°01'34.3"

Mean Sidereal Time: 5h52m52.1s Apparent Sidereal Time: 5h52m52.2s Distance: 0.515AU (76.997 Mio km) Apparent diameter: +0°00'32.4" Sidereal period: 224.70 days (0.615 a)

Sidereal day: 5832h28m47.1s Mean solar day: 2802h0m52.2s Phase Angle: +104°49'27"

Elongation: +44°51'15"

Phase: 0.37

Illuminated: 37.2%











 On February 28<sup>th</sup>, Venus, Mercury, Moon and Saturn form a straight line just above the western horizon at sunset.

The baby Moon and Saturn are close to the horizon at sunset.

Type: planet

Magnitude: -4.57 (extincted to: -4.22)

Absolute Magnitude: 29.33

RA/Dec (J2000.0): 0h27m46.44s/+10°17'57.1" RA/Dec (on date): 0h29m4.38s/+10°26'18.2"

Hour angle/DE: 4h38m15.95s/+10°28'00.4" (apparent)

Az/Alt: +263°12'26.9"/+21°52'30.1" (apparent)

Ecliptic longitude/latitude (J2000.0): +10°27'22.7"/+6°42'10.8"

Ecliptic longitude/latitude (on date): +10°48'24 4"/+6°42'15.8"

Ecliptic obliquity (on date): +23°26'10'

Galactic longitude/latitude: +113°25'19.7"/-52°08'06.2"

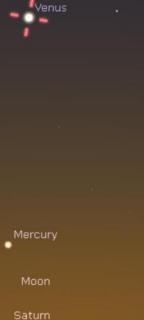
Mean Sidereal Time: 5h7m27.5s Apparent Sidereal Time: 5h7m27.6s Distance: 0.342AU (51.218 Mio km) Apparent diameter: +0°00'48.7" Sidereal period: 224.70 days (0.615

Sidereal day: 5832h28m47.1s Mean solar day: 2802h0m52.2s Phase Angle: +135°01'52"

Elongation: +30°50'04

Phase: 0.15

Illuminated: 14.69



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• On February 28th Venus sets at 8:44 p.m. in the western sky.

Type: planet

Magnitude: -4.56 (extincted to: -0.94)

Absolute Magnitude: 29.34

RA/Dec (J2000.0): 0h27m45.74s/+10°18'47.2" RA/Dec (on date): 0h29m3.68s/+10°27'08.3"

Hour angle/DE: 6h37m52.76s/+10°45'02.1" (apparent)

Az/Alt: +284°15'56.6"/+0°50'10.3" (apparent)

Ecliptic longitude/latitude (J2000.0): +10°27'33.2"/+6°43'00.9"
Ecliptic longitude/latitude (on date): +10°48'35.0"/+6°43'05.8"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +113°25'15.3"/-52°07'15.2"

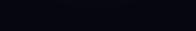
Mean Sidereal Time: 7h8m8.9s Apparent Sidereal Time: 7h8m9.0s Distance: 0.342AU (51.157 Mio km) Apparent diameter: +0°00'48.8" Sidereal period: 224.70 days (0.615 a)

Sidereal day: 5832h28m47.1s Mean solar day: 2802h0m52.2s

Phase Angle: +135°09'26" Elongation: +30°45'28"

Phase: 0.15

Illuminated: 14.5%







Venus









# MARS

• On February 1<sup>st</sup>, Mars is well place in the eastern sky at sunset.

Now visible until morning twilight.

Type: planet

Magnitude: -1.04 (extincted to: -0.78)

Absolute Magnitude: 31.35

RA/Dec (J2000.0): 7h28m35.61s/+26°09'54.4" RA/Dec (on date): 7h30m7.99s/+26°06'52.0"

Hour angle/DE: 19h11m47.90s/+26°07'54.6" (apparent)

Az/Alt: +81°52'19.1"/+30°22'22.5" (apparent)

Ecliptic longitude/latitude (J2000.0): +109°50'03.4"/+4°14'17.0" Ecliptic longitude/latitude (on date): +110°11'04.4"/+4°14'36.4"

Ecliptic obliquity (on date): +23°26'10

Galactic longitude/latitude: -167°17'46.5"/+19°16'08.5"

Mean Sidereal Time: 2h41m49.8s Apparent Sidereal Time: 2h41m49.9s Distance: 0.688AU (102.906 Mio km) Apparent diameter: +0°00'13.6" Sidereal period: 686.97 days (1.881 a)

Sidereal day: 24h37m22.7s Mean solar day: 24h39m35.2s Phase Angle: +13°53'11" Elongation: +156°28'13"

Phase: 0.99

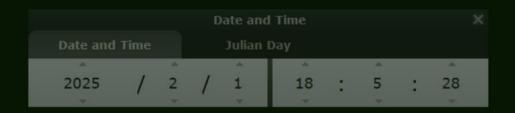
Illuminated: 98.5%



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Rigel

Sirius



• On February 1<sup>st</sup>, Mars sets in the western sky at daybreak.

Type: **planet** 

Magnitude: -1.05 (extincted to: 2.12)

Absolute Magnitude: 31.34

RA/Dec (J2000.0): 7h29m10.49s/+26°09'03.4" RA/Dec (on date): 7h30m42.84s/+26°05'59.8" Hour angle/DE: 7h47m4.97s/+26°23'06.2" (apparent)

Az/Alt: +306°52'12.9"/+1°14'14.9" (apparent)

Ecliptic longitude/latitude (J2000.0): +109°57'56.7"/+4°14'37.5" Ecliptic longitude/latitude (on date): +110°18'57.6"/+4°14'56.8"

Ecliptic obliquity (on date): +23°26'10

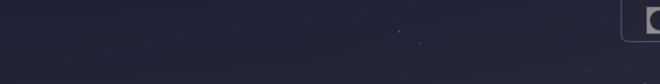
Galactic longitude/latitude: -167°13'53.9"/+19°23'07.0"

Mean Sidereal Time: 15h18m51.0s Apparent Sidereal Time: 15h18m51.1s Distance: 0.686AU (102.603 Mio km) Apparent diameter: +0°00'13.7" Sidereal period: 686.97 days (1.881 a)

Sidereal day: 24h37m22.7s Mean solar day: 24h39m35.2s Phase Angle: +13°32'56" Elongation: +157°04'01"

Phase: 0.99

Illuminated: 98.69



Capella



 On February 9th, Mars and the Moon appear together in a wide conjunction in the eastern sky at sunset.

Both objects are 5 degrees apart.

Type: planet

Magnitude: -0.82 (extincted to: -0.61)

Absolute Magnitude: 31.44

RA/Dec (J2000.0): 7h20m11.72s/+26°16'35.6" RA/Dec (on date): 7h21m44.45s/+26°13'50.3" Hour angle/DE: 20h02m17.46s/+26°14'34.2" (angle/DE): 20h02m17.46s/+26°14'34.2" (angle/DE): 20h02m17.46s/+26°14'34.2"

Az/Alt. +00000/36 0"/+30026/30 0" (apparent)

Ecliptic longitude/latitude (J2000.0): +107°56'57.8"/+4°04'40.7"
Ecliptic longitude/latitude (on date): +108°17'59.5"/+4°05'00.2"

Ecliptic obliquity (on date): +23°26'10'

Galactic longitude/latitude: -168°08'35.8"/+17°33'43.2"

Mean Sidereal Time: 3h23m57.5s Apparent Sidereal Time: 3h23m57.6s Distance: 0.729AU (108.998 Mio km) Apparent diameter: +0°00'12.9" Sidereal period: 686.97 days (1.881 a

Sidereal day: 24h37m22.7s Mean solar day: 24h39m35.2s Phase Angle: +19°16'39" Elongation: +146°36'47"

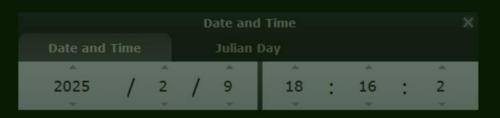
Phase: 0.97

Illuminated: 97.29



Rigel

Sirius



 On February 28th, Mars is well placed in the southeastern sky at sunset.

Type: planet

Magnitude: -0.29 (extincted to: -0.14)

Absolute Magnitude: 31.61

RA/Dec (J2000.0): 7h14m52.01s/+25°53'38.7" RA/Dec (on date): 7h16m24.81s/+25°51'04.6"

Hour angle/DE: 21h59m31.32s/+25°51'29.6" (apparent)

Az/Alt: +117908'27.6"/+59930'23.8" (apparent)

Ecliptic longitude/latitude (J2000.0): +106°48'41.5"/+3°32'26.0" Ecliptic longitude/latitude (on date): +107°09'46.1"/+3°32'46.2"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: -168°15'03.7"/+16°18'36.5"

Mean Sidereal Time: 5h15m54.2s Apparent Sidereal Time: 5h15m54.3s Distance: 0.862AU (128.967 Mio km) Apparent diameter: +0°00'10.9" Sidereal period: 686.97 days (1.881 a

Sidereal day: 24h37m22.7s Mean solar day: 24h39m35.2 Phase Angle: +28°47'27" Elongation: +126°26'08"

Phase: 0.94 Illuminated: 93.8% Jupiter Mars Betelgeuse Procyon Rigel Sirius

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Venus

Mercury

Mod

• On February 28th, Mars sets at 4:40 a.m. in the northwestern sky.

Visible most of the night.

Type: planet

Magnitude: -0.30 (extincted to: 2.65)

Absolute Magnitude: 31.60

RA/Dec (J2000.0): 7h14m43.14s/+25°54'53.7" RA/Dec (on date): 7h16m15.95s/+25°52'19.9" Hour angle/DE: 7h44m10.41s/+26°08'14.2" (apparent)

Az/Alt: +306°12'38.4"/+1°27'56.1" (apparent)

Ecliptic longitude/latitude (J2000.0): +106°46'33.0"/+3°33'25.1" Ecliptic longitude/latitude (on date): +107°07'37.5"/+3°33'45.3"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: -168°17'03.8"/+16°17'15.1"

Mean Sidereal Time: 15h1m25.6s Apparent Sidereal Time: 15h1m25.7s Distance: 0.857AU (128.261 Mio km) Apparent diameter: +0°00'10.9" Sidereal period: 686.97 days (1.881 a)

Sidereal day: 24h37m22.7s Mean solar day: 24h39m35.2s Phase Angle: +28°33'59" Elongation: +126°59'20"

Phase: 0.94

Illuminated: 93.9%







Capella



## JUPITER

• On February 1st, Jupiter is well placed in the southeastern sky at sunset.

Type: planet

Magnitude: -2.52 (extincted to: -2.36)

Absolute Magnitude: 25.76

RA/Dec (J2000.0): 4h37m44.84s/+21°35'48.6" RA/Dec (on date): 4h39m14.27s/+21°38'52.1" Hour angle/DE: 21h41m5.40s/+21°39'24.3" (apparent)

Az/Alt: +116°57'54.0"/+53°33'19.7" (apparent)

Ecliptic longitude/latitude (J2000.0): +70°56'16.2"/-0°29'31.1" Ecliptic longitude/latitude (on date): +71°17'16<sup>Mays</sup> 0°29'11.0"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +177°03'47.9"/-16°44'10.2"

Mean Sidereal Time: 2h20m17.4s Apparent Sidereal Time: 2h20m17.5s Distance: 4.556AU (681.609 Mio km) Apparent diameter: +0°00'43.3"

Sidereal period: 4331.87 days (11.860 a)

Sidereal day: 9h55m29.7s Mean solar day: 9h55m33.1s Phase Angle: +9°50'30" Elongation: +117°57'05"

Phase: 0.99 Illuminated: 99.3%









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• On February 1st, Jupiter sets at 3:30 a.m. in the western sky.

Type: planet

Magnitude: -2.53 (extincted to: 0.60)

Absolute Magnitude: 25.76

RA/Dec (J2000.0): 4h37m46.19s/+21°35'43.2" RA/Dec (on date): 4h39m15.61s/+21°38'46.6" Hour angle/DE: 7h24m9.62s/+21°55'06.6" (apparent)

Az/Alt: +299°59'8'''.029/P1°16'47.4" (apparent)
Ecliptic longitude/latitude (J2000.0): +70°56'34.1"/-0°29'39.1" Ecliptic longitude/latitude (on date): +71°17'34.4"/-0°29'19.0"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +177°04'04.7"/-16°43'59.0"

Mean Sidereal Time: 12h4m28.2s Apparent Sidereal Time: 12h4m28.3s Distance: 4.548AU (680.344 Mio km) Apparent diameter: +0°00'43.4" Sidereal period: 4331.87 days (11.860 a)

Sidereal day: 9h55m29.7s Mean solar day: 9h55m33.1s Phase Angle: +9°47'07" Elongation: +118°33'18"

Phase: 0.99

Illuminated: 99.3%

Japiter



Capella









 On February 6th, Jupiter and a Gibbous Moon appear together in wide conjunction at sunset high in the southeastern sky.

• Jupiter is also in a close conjunction with the Hyades and the Moon is level to M45.

Type: planet

Magnitude: -2.48 (extincted to: -2.34)

Absolute Magnitude: 25.76

RA/Dec (J2000.0): 4h37m44.50s/+21°36'53.3" RA/Dec (on date): 4h39m13.99s/+21°39'56.8"

Hour angle/DE: 22h49m40.00s/+21°40'23.6" (apparent)

Az/Alt: +141°36'57.6"/+63°07'12.0" (apparent)

Ecliptic longitude/latitude (J2000.0): +70°56'20.5"/-0°28'26.4" Ecliptic longitude/latitude (on date): +71°17'21.8"/-0°28'06.3"

Ecliptic obliquity (on date): +23°26'10" Alnath

Galactic longitude/latitude: +177°02'52.3"/-16°43'33.1"

Mean Sidereal Time: 3h28m52.9s Apparent Sidereal Time: 3h28m52.9s Distance: 4.630AU (692.662 Mio km) Apparent diameter: +0°00'42.6"

Sidereal period: 4331.87 days (11.860 a) Sidereal day: 9h55m29.7s

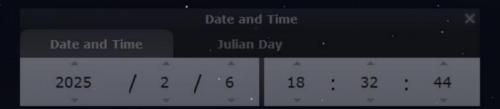
Mean solar day: 9h55m33.1s Phase Angle: +10°16'34" Elongation: +112°50'55"

Phase: 0.99

Illuminated: 99.2%



Aldeharan



Bellatrix

Betelgeuse

Earth, Peterborough, 188m

FOV 30.8°

38.6 FPS

2025-02-06 18:32:44 UTC-05:00







• On February 28th, Jupiter is near the zenith in the southwestern sky at sunset.

Type: planet

Magnitude: -2.32 (extincted to: -2.18)

Galactic longitude/latitude: +177°30'37.2", Sirius



3upiter

• On February 28th, Jupiter sets at 1:52 a.m. in the northwestern sky.

Type: planet

Magnitude: -2.33 (extincted to: 1.28)

Absolute Magnitude: 25.77

RA/Dec (J2000.0): 4h41m39.78s/+21°48'46.4" RA/Dec (on date): 4h43m9.68s/+21°51'42.7"

Hour angle/DE: 7h28m13.47s/+22°10'34.3" (apparent)

Az/Alt: +300°52'05.0"/+0°50'42.5" (apparent)

Ecliptic longitude/latitude (J2000.0): +71°52'06.1"/-0°24'07.6" Ecliptic longitude/latitude (on date): +72°13'10.1"/-0°23'46.9"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +177°28'59.3"/-15°53'33.5"

Mean Sidereal Time: 12h12m35.0s Apparent Sidereal Time: 12h12m35.1s Distance: 4.966AU (742.849 Mio km) Apparent diameter: +0°00'39.7" Sidereal period: 4331.87 days (11.860 a)

Sidereal day: 9h55m29.7s Mean solar day: 9h55m33.1s Phase Angle: +11°11'15" Elongation: +92°16'58"

Phase: 0.99

Illuminated: 99.0%





Capella







# SATURN

• On February 1<sup>st</sup>, Saturn is well placed in the southwestern sky at sunset.

Type: planet

Magnitude: 1.14 (extincted to: 1.50)

Absolute Magnitude: 27.62

RA/Dec (J2000.0): 23h15m51.56s/-6°50'00.3" RA/Dec (on date): 23h17m9.45s/-6°41'48.8" Hour angle/DE: 3h28m34.55s/-6°39'44.6" (apparent

Ecliptic longitude/latitude (J2000.0): +347°11'01.8"/-1°55'24.9"
Ecliptic longitude/latitude (on date): +347°32'03.0"/-1°55'28.5"

Ecliptic obliquity (on date): +23°26'10

Galactic longitude/latitude: +70°22'55.2"/-59°33'45.1"

Mean Sidereal Time: 2h45m50.2s Apparent Sidereal Time: 2h45m50.3s Distance: 10.420AU (1558.750 Mio km

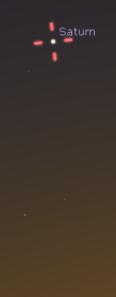
Apparent diameter: +0°00'16.0", with rings: +0°00'37.2"

idereal period: 10760.00 days (29.459 a

Sidereal day: 10h39m22.4s Mean solar day: 10h39m24.0s Phase Angle: +3°18'11" Flongation: +34°13'42"

Phase: 1.0

Illuminated: 99.99



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• On February 1st, Saturn sets at 8:15 p.m. in the western sky.

Type: planet

Magnitude: 1.14 (extincted to: 5.60)

Absolute Magnitude: 27.62

RA/Dec (J2000.0): 23h15m53.67s/-6°49'46.6" RA/Dec (on date): 23h17m11.56s/-6°41'35.0" Hour angle/DE: 5h33m35.86s/-6°19'59.2" (apparent)

Az/Alt: +260°51'58.4"/+0°16'14.4" (apparent)

Ecliptic longitude/latitude (J2000.0): +347°11'36.2"/-1°55'24.5" Ecliptic longitude/latitude (on date): +347°32'37.3"/-1°55'28.1"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +70°23'58.2"/-59°33'57.8"

Mean Sidereal Time: 4h52m15.3s Apparent Sidereal Time: 4h52m15.4s Distance: 10.420AU (1558.874 Mio km)

Apparent diameter: +0°00'16.0", with rings: +0°00'37.2"

Sidereal period: 10760.00 days (29.459 a)

Sidereal day: 10h39m22.4s Mean solar day: 10h39m24.0s Phase Angle: +3°17'48" Elongation: +34°08'56"

Phase: 1.00

Illuminated: 99.9%













• On February 24th, Saturn and Mercury share a close conjunction low in the west at sunset.

 Both planets are less than 10 degrees above the horizon at sunset.

Type: **planet** 

Magnitude: **1.14** (extincted to: **2.67**)

Absolute Magnitude: 27.59

RA/Dec (J2000.0): 23h25m43.32s/-5°46'28.5" RA/Dec (on date): 23h27m1.13s/-5°38'11.8" Hour angle/DE: 5h14m21.19s/-5°30'18.9" (appare

1001 angle/bc. 511141121.195/-5-50 10.9 (apparent)

Az/Alt: +258°03'59.2"/+4°14'26.8" (apparent)

Ecliptic longitude/latitude (J2000.0): +349°51°18.1°/-1°54°38.3° Ecliptic longitude/latitude (on date): +350°12'22.2"/-1°54'41.0"

Ecliptic obliquity (on date): +23°26'10'

Galactic longitude/latitude: +75°24'16.6"/-60°28'29.2"

Mean Sidereal Time: 4h41m53.6s Apparent Sidereal Time: 4h41m53.7s Distance: 10.573AU (1581.627 Mio km

Apparent diameter:  $+0^{\circ}00'15.7$ ", with rings:  $+0^{\circ}00'36.6$ "

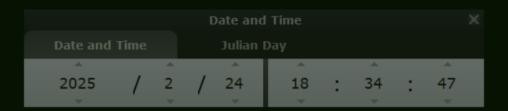
idereal period: 10760.00 days (29.459 a

Sidereal day: 10h39m22.4s Mean solar day: 10h39m24.0s Phase Angle: +1°23'59"

Phase: 1.00

Illuminated: 100.09



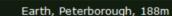


 On February 28th, Saturn, Mercury and a baby Moon form a short, curved line above the western horizon at sunset.

Saturn and the Moon are low in west.















• On February 28th, Saturn sets at 6:46 p.m. in the western sky.

rype: **pranet** Magnitudo: **1.1**4

ide: 1.14 (extincted to: 5.91)

Absolute Magnitude: 27.59

RA/Dec (J2000.0): 23h27m31.48s/-5°34'57.4" RA/Dec (on date): 23h28m49.28s/-5°26'39.8" Hour angle/DE: 5h39m34.57s/-5°03'47.8" (apparent)

AZ/AIC. +202-46 52.6 /+0-00 12.7 (appareiic) Eclintic longitude/latitude (12000 0): +350°20'35 :

Ecliptic longitude/latitude (on date): +350°41'40.0"/-1°54'41.2"

Ecliptic obliquity (on date): +23°26'10

Galactic longitude/latitude: +/6°20'58./"/-60°37'23./"

Mean Sidereal Time: 5h9m57.2s Apparent Sidereal Time: 5h9m57.3s Distance: 10.586AU (1583.647 Mio km

Apparent diameter: +0°00'15.7", with rings: +0°00'36.6"

idereal period: 10760.00 days (29.459 a)

Sidereal day: 10n39m22.4s Mean solar day: 10h39m24.0s Phase Angle: +1°02'56"

Phase: 1.00

Illuminated: 100.09





# URANUS

• On February 1<sup>st</sup>, Uranus is almost overhead the southern sky sunset.

Uranus sits just a few degrees west of M45

Type: planet

Magnitude: 5.70 (extincted to: 5.84)

Absolute Magnitude: 30.84

RA/Dec (J2000.0): 3h22m18.96s/+18°15'50.7" RA/Dec (on date): 3h23m44.48s/+18°21'15.5" Hour angle/DE: 0h05m57.37s/+18°21'44.8" (apparent)

Az/Alt: +183°13'43.8"/+64°01'56.3" (apparent)

Ecliptic longitude/latitude (J2000.0): +52°54'46.3"/-0°14'40.0" Ecliptic longitude/latitude (on date): +53°15'46.8"/-0°14'22.7"

Ecliptic obliquity (on date): +23°26 16"yon Galactic longitude/latitude: +166°00'16.2"/-31°42'37.1"

Mean Sidereal Time: 3h29m41.8s Apparent Sidereal Time: 3h29m41.9s Distance: 19.355AU (2895.418 Mio km)

Apparent diameter: +0°00'03.6", with rings: +0°00'13.9"

Sidereal period: 30685.00 days (84.011 a)

Sidereal day: 17h14m24.0s Mean solar day: 17h14m22.5s Phase Angle: +2°50'49" Elongation: +99°52'43"

Phase: 1.00

Illuminated: 99.9%



Sirius



Saturn





• On February 1<sup>st</sup>, Uranus sets at 2:05 a.m. in the western sky.

Type: planet

Magnitude: 5.70 (extincted to: 9.70)

Absolute Magnitude: 30.84 RA/Dec (J2000.0): 3h22m18.64s/+18°15'48.5" RA/Dec (on date): 3h23m44.15s/+18°21'13.3"

Hour angle/DE: 7h13m39.11s/+18°41'37.6" (apparent)

Az/Alt: +296°00'00.5"/+0°33'23.8" (apparent)

Ecliptic longitude/latitude (J2000.0): +52°54'41.4"/-0°14'41.0" Ecliptic longitude/latitude (on date): +53°15'41.7"/-0°14'23.7"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +166°00'13.8"/-31°42'41.7"

Mean Sidereal Time: 10h38m42.7s Apparent Sidereal Time: 10h38m42.7s Distance: 19.343AU (2893.664 Mio km)

Apparent diameter: +0°00'03.6", with rings: +0°00'13.9"

Sidereal period: 30685.00 days (84.011 a)

Sidereal day: 17h14m24.0s Mean solar day: 17h14m22.5s Phase Angle: +2°50'25" Elongation: +100°35'08"

Phase: 1.00

Illuminated: 99.9%











• On February 28th, Uranus is high in the western sky at sunset.

ollius

Uranus







Magnitude: 5.75 (extincted to: 5.91)

Absolute Magnitude: 30.84

RA/Dec (J2000.0): 3h23m49.86s/+18°22'02.4" RA/Dec (on date): 3h25m15.73s/+18°27'26.0" Hour angle/DE: 2h07m21.65s/+18°28'01.4" (apparent)

Az/Alt: +236°06'50.8"/+52°55'54.3" (apparent)

Ecliptic longitude/latitude (J2000.0): +53°17'12.7"/-0°14'05.9" Ecliptic longitude/latitude (on date): +53°38'16.9"/-0°13'48.1"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +166°15'01.4"/-31°24'01.3"

Apparent Sidereal Time: 5h32m39.4s Distance: 19.810AU (2963.582 Mio km)

Apparent diameter: +0°00'03.6", with rings: +0°00'13.6"

Sidereal period: 30685.00 days (84.011 a)

Sidereal day: 17h14m24.0s Mean solar day: 17h14m22.5s Phase Angle: +2°46'44" Elongation: +72°58'49"

Phase: 1.00

Illuminated: 99.9%

Mercury Megh

2025 28 40

• On February 28th, Uranus sets at 12:20 a.m. in the western sky.

Type: planet Aldebaran Magnitude: 5.75 (extincted to: 9.65)

Absolute Magnitude: 30.84

RA/Dec (J2000.0): 3h23m45.10s/+18°21'43.8" RA/Dec (on date): 3h25m10.95s/+18°27'07.5"

Hour angle/DE: 7h13m37.20s/+18°47'01.9" (apparent)

Az/Alt: +296°03'20.8"/+0°37'40.4" (apparent)

Ecliptic longitude/latitude (J2000.0): +53°16'02.3"/-0°14'06.9" Ecliptic longitude/latitude (on date): +53°37'06.3"/-0°13'49.1"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +166°14'14.6"/-31°24'59.2"

Mean Sidereal Time: 10h40m5.6s Apparent Sidereal Time: 10h40m5.7s Distance: 19.798AU (2961.669 Mio km)

Apparent diameter: +0°00'03.6", with rings: +0°00'13.6"

Sidereal period: 30685.00 days (84.011 a)

Sidereal day: 17h14m24.0s Mean solar day: 17h14m22.5s Phase Angle: +2°47'22" Elongation: +73°44'49"

Phase: 1.00

Illuminated: 99.9%



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# NEPTUNE

 On February 1st, Neptune is well placed in the western sky at evening twilight.

Neptune is next to a baby Moon and Venus.

Type: planet

Magnitude: 7.94 (extincted to: 8.23)

Absolute Magnitude: 32.08

RA/Dec (J2000.0): 23h53m23.85s/-2°05'56.2" RA/Dec (on date): 23h54m40.97s/-1°57'34.3" Hour angle/DE: 3h17m10.75s/-1°55'58.3" (apparent) Az/Alt: +237°40'41.8"/+26°17'27.2" (apparent)

Ecliptic longitude/latitude (J2000.0): +357°39'03.0"/-1°16'09.7" Ecliptic longitude/latitude (on date): +358°00'03.9"/-1°16'09.5"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +91°25'45.8"/-61°22'08.0"

Mean Sidereal Time: 3h11m56.5s Apparent Sidereal Time: 3h11m56.6s Distance: 30.587AU (4575.684 Mio km)

Apparent diameter: +0°00'02.2", with rings: +0°00'05.7"

Sidereal period: 60189.00 days (164.789 a)

Sidereal day: 16h6m36.0s Mean solar day: 16h6m36.6s Phase Angle: +1°19'39" Elongation: +44°38'37"

Phase: 1.00

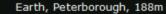
Illuminated: 100.0%



Saturn







• On February 1st, Neptune sets at 9:11 p.m. in the western sky.

Type: planet

Magnitude: 7.94 (extincted to: 12.35)

Absolute Magnitude: 32.08

RA/Dec (J2000.0): 23h53m24.54s/-2°05'51.6" RA/Dec (on date): 23h54m41.66s/-1°57'29.7" Hour angle/DE: 5h52m3.04s/-1°36'15.5" (apparent) Az/Alt: +267°27'50.1"/+0°18'04.2" (apparent)

Ecliptic longitude/latitude (J2000.0): +357°39'14.3"/-1°16'09.5" Ecliptic longitude/latitude (on date): +358°00'15.2"/-1°16'09.3"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +91°26'09.2"/-61°22'08.7"

Mean Sidereal Time: 5h48m11.6s Apparent Sidereal Time: 5h48m11.7s Distance: 30.588AU (4575.885 Mio km)

Apparent diameter: +0°00'02.2", with rings: +0°00'05.7"

Sidereal period: 60189.00 days (164.789 a)

Sidereal day: 16h6m36.0s Mean solar day: 16h6m36.6s Phase Angle: +1°19'30" Elongation: +44°32'11"

Phase: 1.00

Illuminated: 100.0%

















• On February 28<sup>th</sup>, Neptune low in the west at sunset.

• Neptune is visible for only 45 minutes after sunset.

Type: **planet** 

Magnitude: 7.95 (extincted to: 9.33)

Absolute Magnitude: 32.08

RA/Dec (J2000.0): 23h56m40.65s/-1°44'10.5" RA/Dec (on date): 23h57m57.98s/-1°35'46.9" Hour angle/DE: 5h27m10.56s/-1°28'42.7" (apparent)

Ecliptic longitude/latitude (J2000.0): +358°32'50.0"/-1°15'45.3" Ecliptic longitude/latitude (on date): +358°53'54.7"/-1°15'44.8"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +93°17'54.7"/-61°25'00.0"

Mean Sidereal Time: 5h25m37.0s Apparent Sidereal Time: 5h25m37.1s Distance: 30.832AU (4612.381 Mio km)

Apparent diameter: +0°00'02.2", with rings: +0°00'05.6"

Sidereal period: 60189.00 days (164.789 a)

Sidereal day: 16h6m36.0s Mean solar day: 16h6m36.6 Phase Angle: +0°35'45" Elongation: +18°17'15"

Phase: 1.00

Illuminated: 100.0%

Neptune

Mercury

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• On February 28<sup>th</sup>, Neptune sets at 7:30 p.m. in the western sky.

Type: planet

Magnitude: 7.95 (extincted to: 12.56)

Absolute Magnitude: 32.08

RA/Dec (J2000.0): 23h56m40.80s/-1°44'09.5" RA/Dec (on date): 23h57m58.13s/-1°35'45.9" Hour angle/DE: 5h54m8.74s/-1°13'40.3" (apparent) Az/Alt: +268°05'56.7"/+0°11'22.8" (apparent)

Ecliptic longitude/latitude (J2000.0): +358°32'52.6"/-1°15'45.3" Ecliptic longitude/latitude (on date): +358°53'57.2"/-1°15'44.8"

Ecliptic obliquity (on date): +23°26'10"

Galactic longitude/latitude: +93°18'00.0"/-61°25'00.1"

Mean Sidereal Time: 5h53m37.3s Apparent Sidereal Time: 5h53m37.4s Distance: 30.832AU (4612.398 Mio km)

Apparent diameter: +0°00'02.2", with rings: +0°00'05.6"

Sidereal period: 60189.00 days (164.789 a)

Sidereal day: 16h6m36.0s Mean solar day: 16h6m36.6s Phase Angle: +0°35'43" Elongation: +18°16'08"

Phase: 1.00

Illuminated: 100.0%











# That is the Sky this Month

By David Mills