

**Sky this Month**

**November 2024**

By David Mills

**MOON**

**NEW MOON**

# Moon

- The New Moon is on November 1<sup>st</sup>, at 8:47 a.m.
- The Moon is south of the sun. Mercury is southeast of the sun.



on  
 : -0.62  
 Magnitude: 43.80  
 2000.0): 14h26m26.67s/-18°02'20.4"  
 on date): 14h27m49.59s/-18°09'05.5"  
 a/DE: 20h08m29.99s/-18°09'05.5"  
 25°35'14.6"/+8°16'59.0"  
 ngitude/latitude (J2000.0): +220°07'56.6"/-3°21'22.8"  
 ngitude/latitude (on date): +220°28'47.9"/-3°21'37.0"  
 liquity (on date): +23°26'10"  
 ngitude/latitude: -27°24'19.5"/+39°17'55.3"  
 eal Time: 10h36m19.8s  
 Sidereal Time: 10h36m19.6s  
 0.002693AU (402842.303 km)  
 diameter: +0°29'39.2"  
 eriod: 27.32 days (0.075 a)  
 ay: 655h43m11.5s  
 r day: 708h44m2.8s  
 gle: +176°31'22"  
 : +3°28'04"  
 00  
 d: 0.1%

E

Sun

Moon

Mercury

Antares

Venus

Date and Time ✕

Date and Time	Julian Day
2024 / 11 / 1	9 : 4 : 20

**FULL MOON**

# Moon

- The full Moon is on November 15<sup>th</sup>, at 4:28 p.m.
- Moonrise starts at 4:19 p.m. the Moon will be at its peak when rising.
- This month's Full Moon called the Beaver Moon.
- This is the last supermoon of 2024.



# Moon

Type: **moon**  
 Magnitude: **-12.41** (extincted to: **-7.46**)  
 Absolute Magnitude: 32.24  
 RA/Dec (J2000.0): 3h23m34.51s/+21°37'07.0"  
 RA/Dec (on date): 3h25m1.33s/+21°42'27.8"  
 Hour angle/DE: 16h26m33.28s/+22°07'53.0" (apparent)  
 Az/Alt: +58°15'12.7"/+0°00'47.9" (apparent)  
 Ecliptic longitude/latitude (J2000.0): +54°02'40.2"/+2°55'38.8"  
 Ecliptic longitude/latitude (on date): +54°23'33.5"/+2°55'56.0"  
 Ecliptic obliquity (on date): +23°26'10"  
 Galactic longitude/latitude: +163°48'32.5"/-28°55'35.0"  
 Mean Sidereal Time: -4h10m0.5s  
 Apparent Sidereal Time: -4h10m0.7s  
 Distance: 0.002419AU (361866.605 km)  
 Apparent diameter: +0°33'00.6"  
 Sidereal period: 27.32 days (0.075 a)  
 Sidereal day: 655h43m11.5s  
 Mean solar day: 708h44m2.8s  
 Phase Angle: +2°56'43"  
 Elongation: +177°02'51"  
 Phase: 1.00  
 Illuminated: 99.9%



Date and Time ✕

Date and Time				Julian Day					
2024	/	11	/	15	16	:	21	:	27

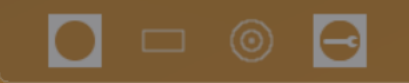


**MERCURY**

# Mercury

- From our latitude it remains barely above the western horizon at sunset.
- Mercury reaches its greatest elongation east on
- November 17<sup>th</sup>.
- Mercury stays only 2 degrees above the western horizon all month.

# Mercury



Type: **planet**  
Magnitude: **0.55** (extincted to: **3.34**)  
Absolute Magnitude: 31.62  
RA/Dec (J2000.0): 15h42m51.97s/-21°50'11.8"  
RA/Dec (on date): 15h44m19.47s/-21°54'59.2"  
Hour angle/DE: 4h17m50.15s/-21°39'59.8" (apparent)  
Az/Alt: +237°01'19.2"/+1°39'25.0" (apparent)  
Ecliptic longitude/latitude (J2000.0): +238°27'07.0"/-2°04'24.8"  
Ecliptic longitude/latitude (on date): +238°47'58.9"/-2°04'43.1"  
Ecliptic obliquity (on date): +23°26'10"  
Galactic longitude/latitude: -12°30'57.6"/+25°50'53.7"  
Mean Sidereal Time: -3h56m55.5s  
Apparent Sidereal Time: -3h56m55.7s  
Distance: 1.260AU (188.521 Mio km)  
Apparent diameter: +0°00'05.3"  
Sidereal period: 87.97 days (0.241 a)  
Sidereal day: 1407h30m33.8s  
Mean solar day: 4222h27m52.5s  
Phase Angle: +45°00'55"  
Elongation: +18°54'33"  
Phase: 0.85  
Illuminated: 85.3%



Date and Time ✕

Date and Time			Julian Day		
2024	/	11	/	1	18 : 29 : 32

**VENUS**

# Venus

- On November 1<sup>st</sup>, Venus is in retrograde rotation and getting higher above the western horizon as the month progresses.
- Venus is 15 degrees above the western horizon at sunset.
- Venus remains well-placed in the early evening twilight sky.



**4.03** (extincted to: **-3.42**)  
 nitude: 27.20  
 0.0): 17h06m34.57s/-24°41'18.7"  
 ate): 17h08m5.99s/-24°43'21.3"  
 E: 2h38m46.73s/-24°39'22.7" (apparent)  
 24'43.7"/+12°04'15.9" (apparent)  
 ude/latitude (J2000.0): +257°52'41.7"/-1°48'34.3"  
 ude/latitude (on date): +258°13'34.0"/-1°48'54.8"  
 ility (on date): +23°26'10"  
 tude/latitude: -1°18'21.5"/+9°35'57.2"  
 l Time: -4h12m57.8s  
 ereal Time: -4h12m58.0s  
 70AU (174.957 Mio km)  
 neter: +0°00'14.3"  
 d: 224.70 days (0.615 a)  
 5832h28m47.1s  
 ay: 2802h0m52.2s  
 +57°34'26"  
 38°16'22"

6.8%

Mercury

Date and Time ✕

Date and Time				Julian Day					
2024	/	11	/	1	18	:	13	:	32

# Venus

- On November 1<sup>st</sup>, Venus now sets at 7:49 p.m. in the western sky.



planet

magnitude: -4.03 (extincted to: 0.45)  
 absolute Magnitude: 27.20  
 J2000.0: 17h06m55.47s/-24°41'54.0"  
 on date: 17h08m26.89s/-24°43'55.8"  
 RA/DE: 4h13m26.35s/-24°20'15.8" (apparent)  
 apparent RA/DE: +234°31'46.3"/+0°15'40.7" (apparent)  
 J2000.0 longitude/latitude: +257°57'28.6"/-1°48'43.3"  
 on date longitude/latitude: +258°18'20.9"/-1°49'03.8"  
 on date obliquity: +23°26'10"  
 J2000.0 longitude/latitude: -1°16'01.1"/+9°31'45.9"  
 Sidereal Time: -2h36m39.7s  
 apparent Sidereal Time: -2h36m39.9s  
 distance: 1.169AU (174.894 Mio km)  
 apparent diameter: +0°00'14.3"  
 orbital period: 224.70 days (0.615 a)  
 orbital day: 5832h28m47.1s  
 solar day: 2802h0m52.2s  
 inclination angle: +57°35'59"  
 orbital eccentricity: +38°17'09"  
 albedo: 0.77  
 illuminated: 76.8%



Date and Time ✕

Date and Time			Julian Day		
2024	/	11	/	1	19 : 49 : 35



# Venus

- On November 4th, Venus and a very young new Moon share a close conjunction at sunset.
- Venus is 5 degrees directly above the Moon low in the western sky.

-4.04 (extincted to: -3.30)  
 magnitude: 27.23  
 (J2000.0): 17h22m25.79s/-25°05'17.5"  
 (on date): 17h23m57.72s/-25°06'46.2"  
 RA: 2h56m13.55s/-25°02'03.0" (apparent)  
 Dec: 9°44'49.7"/+9°48'55.6" (apparent)  
 longitude/latitude (J2000.0): +261°29'44.3"/-1°55'32.8"  
 longitude/latitude (on date): +261°50'36.8"/-1°55'53.3"  
 ecliptic longitude (on date): +23°26'10"  
 ecliptic latitude: +0°26'38.6"/+6°25'26.0"  
 sidereal Time: -3h39m36.4s  
 sidereal Time: -3h39m36.5s  
 distance: 0.150AU (172.043 Mio km)  
 diameter: +0°00'14.5"  
 period: 224.70 days (0.615 a)  
 length of day: 5832h28m47.1s  
 length of day: 2802h0m52.2s  
 ecliptic longitude: +58°43'12"  
 ecliptic latitude: +38°52'24"  
 phase: 76.0%



Mercury

Date and Time ✕

Date and Time	Julian Day
2024 / 11 / 4	17 : 35 : 1

# Venus

- On November 30th, Venus continues to move east and gain elevation in western twilight sky.

# Venus



Type: **planet**  
Magnitude: **-4.16** (extincted to: **-3.72**)  
Absolute Magnitude: 27.47  
RA/Dec (J2000.0): 19h38m2.28s/-24°00'23.3"  
RA/Dec (on date): 19h39m32.62s/-23°57'02.1"  
Hour angle/DE: 1h56m19.44s/-23°54'00.5" (apparent)  
Az/Alt: +207°39'20.4"/+16°47'26.3" (apparent)  
Ecliptic longitude/latitude (J2000.0): +292°17'26.2"/-2°26'38.1"  
Ecliptic longitude/latitude (on date): +292°38'21.9"/-2°26'56.4"  
Ecliptic obliquity (on date): +23°26'10"  
Galactic longitude/latitude: +15°40'20.5"/-20°28'04.8"  
Mean Sidereal Time: -2h24m2.6s  
Apparent Sidereal Time: -2h24m2.8s  
Distance: 0.975AU (145.806 Mio km)  
Apparent diameter: +0°00'17.1"  
Sidereal period: 224.70 days (0.615 a)  
Sidereal day: 5832h28m47.1s  
Mean solar day: 2802h0m52.2s  
Phase Angle: +69°05'48"  
Elongation: +43°29'15"  
Phase: 0.68  
Illuminated: 67.8%



Mercury

S

Date and Time ✕

Date and Time			Julian Day						
2024	/	11	/	30	17	:	8	:	8

# Venus

- On November 30<sup>th</sup>, Venus now sets at 7:28 p.m. in the western sky.

4.16 (extincted to: -0.19)  
magnitude: 27.47  
00.0): 19h38m31.53s/-23°59'14.1"  
date): 19h40m1.84s/-23°55'51.9"  
E: 4h15m14.54s/-23°34'45.8" (apparent)  
°19'54.5"/+0°34'45.5" (apparent)  
tude/latitude (J2000.0): +292°24'13.3"/-2°26'36.2"  
tude/latitude (on date): +292°45'09.0"/-2°26'54.5"  
uity (on date): +23°26'10"  
titude/latitude: +15°44'06.1"/-20°33'52.4"  
al Time: 0h3m26.0s  
ereal Time: 0h3m26.2s  
974AU (145.707,Mio km)  
meter: +0°00'17.1"  
od: 224.70 days (0.615 a)  
5832h28m47.1s  
ay: 2802h0m52.2s  
+69°08'19"  
-43°30'07"

57.8%

Venus

Date and Time [X]

Date and Time			Julian Day		
2024	/	11	/	30	19 : 28 : 22

**MARS**

# Mars

- On November 1<sup>st</sup>, Mars rises at 11:03 p.m. in the northeastern midnight sky.
- Mars is now in a near stationary orbit from our line of sight.
- Mars is visible for the remainder of the night.



7 (extincted to: 3.73)  
tude: 31.62  
0): 8h05m34.95s/+21°46'01.4"  
e): 8h07m2.95s/+21°41'47.9"  
16h32m20.64s/+22°00'51.4" (apparent)  
'16.4"/+0°48'40.9" (apparent)  
de/latitude (J2000.0): +118°56'37.4"/+1°25'37.4"  
de/latitude (on date): +119°17'30.1"/+1°25'55.1"  
y (on date): +23°26'10"  
de/latitude: -159°34'51.6"/+25°35'06.2"  
Time: 0h38m11.0s  
eal Time: 0h38m10.8s  
1AU (151.198 Mio km)  
eter: +0°00'09.3"  
: 686.97 days (1.881 a)  
4h37m22.7s  
: 24h39m35.2s  
39°07'02"  
00°53'50"  
8%

Pollux

Mars

Date and Time

Date and Time		Julian Day	
2024	/ 11 / 1	23	: 3 : 54

# Mars

- On November 1<sup>st</sup>, Mars remains high in western sky at dawn.



0.08 (extincted to: 0.23)  
 magnitude: 31.62  
 (J2000.0): 8h04m33.25s/+21°47'44.0"  
 (date): 8h06m1.29s/+21°43'32.5"  
 (E): 0h36m20.49s/+21°43'58.0" (apparent)  
 (M): 19'49.6"/+66°13'05.8" (apparent)  
 longitude/latitude (J2000.0): +118°42'15.2"/+1°24'20.3"  
 longitude/latitude (on date): +119°03'07.7"/+1°24'38.1"  
 declination (on date): +23°26'10"  
 longitude/latitude: -159°42'14.5"/+25°22'18.6"  
 Mean Time: 8h42m22.5s  
 Sidereal Time: 8h42m22.3s  
 Distance: 16AU (151.920 Mio km)  
 Inclination: +0°00'09.2"  
 Period: 686.97 days (1.881 a)  
 Longitude: 24h37m22.7s  
 Latitude: 24h39m35.2s  
 Longitude: +39°12'50"  
 Latitude: 100°28'36"  
 8.7%

Mars

Capella

Jupiter

Sirius

S

W

N

Date and Time ✕

Date and Time			Julian Day		
2024	/	11	/	1	
				7	: 10 : 42

# Mars

- On November 20th, Mars and a half Moon rise together in close conjunction at 9:30 p.m. in the eastern sky.
- Both Mars and the Moon are separated by less than 3 degrees.



18 (extincted to: 1.62)  
 ude: 31.59  
 ): 8h28m26.95s/+21°15'48.8"  
 e): 8h29m54.05s/+21°10'53.0"  
 16h50m30.81s/+21°20'50.0" (apparent)  
 24.6"/+3°09'54.6" (apparent)  
 e/latitude (J2000.0): +124°14'31.3"/+2°07'38.0"  
 e/latitude (on date): +124°35'25.7"/+2°07'54.3"  
 (on date): +23°26'10"  
 e/latitude: -156°57'46.2"/+30°24'04.7"  
 ime: 1h19m45.0s  
 al Time: 1h19m44.8s  
 AU (130.641 Mio km)  
 ter: +0°00'10.7"  
 686.97 days (1.881 a)  
 h37m22.7s  
 24h39m35.2s  
 4°55'45"  
 4°39'51"

Pollux

Mars

Moon

E

**Date and Time** ✕

Date and Time			Julian Day						
2024	/	11	/	20	21	:	30	:	38

Date and Time in Gregorian calendar

# Mars

- On November 30th, Mars rises at 8:38 p.m. in the eastern sky.
- The planet remains high in the sky until dawn.



(extincted to: 3.70)  
 le: 31.55  
 : 8h34m31.72s/+21°20'37.6"  
 : 8h35m58.75s/+21°15'30.8"  
 h31m48.74s/+21°37'13.3" (apparent)  
 .5"/+0°26'05.5" (apparent)  
 latitude (J2000.0): +125°35'47.8"/+2°33'03.9"  
 latitude (on date): +125°56'43.7"/+2°33'19.7"  
 on date): +23°26'10"  
 /latitude: -156°29'41.4"/+31°45'42.4"  
 e: 1h6m25.1s  
 Time: 1h6m25.0s  
 J (120.522 Mio km)  
 r: +0°00'11.6"  
 86.97 days (1.881 a)  
 37m22.7s  
 4h39m35.2s  
 25'14"  
 22'19"

Mars

Date and Time ✕

Date and Time			Julian Day		
2024	/	11	/	30	20 : 38 : 2

# Mars

- On November 30th, Mars is well placed in the western sky at sunrise.





**0.48** (extincted to: **-0.31**)  
 nitude: 31.55  
 0.0): 8h34m17.68s/+21°19'53.4"  
 ate): 8h35m44.71s/+21°14'46.9"  
 E: 2h38m46.48s/+21°15'22.3" (apparent)  
 55'33.5"/+50°02'07.5" (apparent)  
 ude/latitude (J2000.0): +125°32'48.6"/+2°31'32.3"  
 ude/latitude (on date): +125°53'44.5"/+2°31'48.2"  
 ity (on date): +23°26'10"  
 ude/latitude: -156°30'09.4"/+31°42'22.7"  
 l Time: 11h14m33.9s  
 ereal Time: 11h14m33.7s  
 09AU (121.079 Mio km)  
 neter: +0°00'11.6"  
 d: 686.97 days (1.881 a)  
 24h37m22.7s  
 ay: 24h39m35.2s  
 +31°38'59"  
 122°50'32"  
 2.6%

Mars

Capella

Jupiter

Sirius

W

**Date and Time** ✕

Date and Time			Julian Day		
2024	/	11	/	30	6
					:
					:
					48
					:
					27

**JUPITER**

# Jupiter

- On November 1st, Jupiter rises at 8:15 p.m. in the eastern sky.
- Jupiter remains high in the sky until dawn.



9 (extincted to: **0.44**) Capella  
 25.73  
 ): 5h16m58.47s/+22°20'54.7"  
 ): 5h18m28.45s/+22°22'35.3"  
 6h32m14.52s/+22°39'02.6" (apparent)  
 1.2"/+1°16'17.8" (apparent)  
 e/latitude (J2000.0): +80°03'33.5"/-0°43'13.2"  
 e/latitude (on date): +80°24'25.9"/-0°42'52.5"  
 (on date): +23°26'10"  
 e/latitude: -177°58'37.4"/-8°59'46.3"  
 me: -2h10m20.0s  
 al Time: -2h10m20.2s  
 AU (638.195 Mio km)  
 er: +0°00'46.2"  
 4331.87 days (11.860 a)  
 55m29.7s  
 9h55m33.1s  
 °17'17"  
 °39'43"

Uranus

Jupiter

E

Date and Time [X]

Date and Time				Julian Day					
2024	/	11	/	1	20	:	15	:	50

# Jupiter

- On November 1st, Jupiter is high in the western sky at sunrise.



1.69 (extincted to: -2.49)  
 altitude: 25.73  
 (0.0): 5h17m8.96s/+22°21'05.5"  
 (date): 5h18m38.94s/+22°22'45.7"  
 : 3h31m18.05s/+22°23'29.0" (apparent)  
 55'58.5"/+41°45'04.7" (apparent)  
 (date/latitude: (2000.0): +80°05'59.5"/-0°43'13.2"  
 (date/latitude (on date): +80°26'51.7"/-0°42'52.6"  
 (on date): +23°26'10"  
 (date/latitude: -177°57'23.2"/-8°57'40.0"  
 Time: 8h50m0.9s  
 real Time: 8h50m0.7s  
 71AU (638.982 Mio km)  
 eter: +0°00'46.2"  
 d: 4331.87 days (11.860 a)  
 9h55m29.7s  
 y: 9h55m33.1s  
 +7°22'33"  
 139°05'04"

9.6%

Jupiter

Sirius

W

Date and Time ✕

Date and Time				Julian Day					
2024	/	11	/	1	7	:	18	:	19

# Jupiter

- On November 17th, Jupiter and the Gibbous Moon rise together in wide conjunction.
- Both objects are visible at 6:00 p.m. in the early evening eastern sky. Jupiter is west of the Moon.



Capella

2.77 (extincted to: 1.02)  
 magnitude: 25.72  
 (J2000.0): 5h10m12.87s/+22°14'08.2"  
 (on date): 5h11m42.81s/+22°16'02.9"  
 RA: 16h28m47.83s/+22°35'53.5" (apparent)  
 Dec: 20°11.1"/+0°42'21.8" (apparent)  
 longitude/latitude (J2000.0): +78°29'29.3"/-0°42'28.1"  
 longitude/latitude (on date): +78°50'23.2"/-0°42'07.9"  
 longitude/latitude (on date): +23°26'10"  
 longitude/latitude: -178°47'12.4"/-10°20'43.9"  
 Local Time: -2h20m44.5s  
 Universal Time: -2h20m44.6s  
 42AU (619.687 Mio km)  
 Altitude: +0°00'47.6"  
 Period: 4331.87 days (11.860 a)  
 Time: 9h55m29.7s  
 Day: 9h55m33.1s  
 Longitude: +4°19'32"  
 Latitude: 157°14'58"  
 99.9%

Uranus

Moon

Jupiter

Date and Time [X]

Date and Time			Julian Day		
2024	/	11	/	17	18 : 2 : 33



# Jupiter

- On November 30<sup>th</sup>, Jupiter rises at dusk in the early evening twilight eastern sky.
- Jupiter is now visible all night



Capella

**2.81** (extincted to: **0.73**)  
 nitude: 25.71  
 0.0): 5h03m8.53s/+22°06'17.0"  
 ate): 5h04m38.38s/+22°08'26.5"  
 E: 16h30m49.45s/+22°26'57.9" (apparent)  
 7'09.6"/+0°54'13.8" (apparent)  
 ude/latitude (J2000.0): +76°50'56.0"/-0°41'16.7"  
 ude/latitude (on date): +77°11'51.4"/-0°40'56.7"  
 ivity (on date): +23°26'10"  
 ude/latitude: -179°38'53.0"/-11°45'14.2"  
 l Time: -2h25m42.7s  
 ereal Time: -2h25m42.8s  
 94AU (612.477 Mio km)  
 neter: +0°00'48.2"  
 d: 4331.87 days (11.860 a)  
 9h55m29.7s  
 ay: 9h55m33.1s  
 +1°33'16"  
 171°58'43"  
 00.0%

Uranus

Jupiter

**Date and Time** ✕

Date and Time			Julian Day		
2024	/	11	/	30	17 : 6 : 29

Date and Time in Gregorian calendar

# Jupiter

- On November 30th, Jupiter is 15 degrees above the western horizon at sunrise.



**1.80** (extincted to: **-2.06**)  
 altitude: 25.71  
 (J2000.0): 5h03m22.60s/+22°06'33.7"  
 (on date): 5h04m52.46s/+22°08'42.8"  
 (apparent) 5h03m11.47s/+22°12'33.8"  
 (apparent) 5h39'39.0"/+9°41'35.5"  
 (J2000.0): +76°54'12.2"/-0°41'19.1"  
 (on date): +77°15'07.6"/-0°40'59.1"  
 (on date): +23°26'10"  
 (on date): -179°37'09.6"/-11°42'26.1"  
 Time: 11h38m21.2s  
 Real Time: 11h38m21.1s  
 5AU (612.587 Mio km)  
 Elevation: +0°00'48.1"  
 Altitude: 4331.87 days (11.860 a)  
 Time: 9h55m29.7s  
 Time: 9h55m33.1s  
 Altitude: -1°38'41"  
 Altitude: 71°30'39"  
 0.0%

Date and Time ✕

Date and Time			Julian Day						
2024	/	11	/	30	7	:	12	:	10

**SATURN**

# Saturn

- On November 1<sup>st</sup>, Saturn is well placed in the evening twilight southeastern sky at sunset.

**2.80** (extincted to: **-2.06**)  
mplitude: 25.71  
(0.0): 5h03m22.60s/+22°06'33.7"  
ate): 5h04m52.46s/+22°08'42.8"  
E: 6h33m11.47s/+22°12'33.8" (apparent)  
39'39.0"/+9°41'35.5" (apparent)  
ude/latitude (J2000.0): +76°54'12.2"/-0°41'19.1"  
ude/latitude (on date): +77°15'07.6"/-0°40'59.1"  
ity (on date): +23°26'10"  
tude/latitude: -179°37'09.6"/-11°42'26.1"  
l Time: 11h38m21.2s  
ereal Time: 11h38m21.1s  
95AU (612.587 Mio km)  
meter: +0°00'48.1"  
d: 4331.87 days (11.860 a)  
9h55m29.7s  
ay: 9h55m33.1s  
+1°38'41"  
171°30'39"  
00.0%



Date and Time ✕

Date and Time			Julian Day						
2024	/	11	/	30	7	:	12	:	10

# Saturn

- On November 1<sup>st</sup>, Saturn now sets at 2:48 a.m. in the western sky.





32 (extincted to: 3.74)  
 itude: 27.60  
 .0): 22h58m51.43s/-8°50'07.7"  
 te): 23h00m9.43s/-8°42'08.4"  
 : 5h18m5.14s/-8°27'30.6" (apparent)  
 88'40.8"/+1°29'26.2" (apparent)  
 de/latitude (J2000.0): +342°31'24.6"/-2°08'15.6"  
 de/latitude (on date): +342°52'17.5"/-2°08'20.8"  
 y (on date): +23°26'10"  
 ude/latitude: +62°08'26.8"/-57°43'23.2"  
 Time: 4h19m13.5s  
 eal Time: 4h19m13.3s  
 5AU (1356.163 Mio km)  
 eter: +0°00'18.3", with rings: +0°00'42.7"  
 : 10760.00 days (29.459 a)  
 .0h39m22.4s  
 y: 10h39m24.0s  
 -4°55'16"  
 23°29'47"

Saturn

W

0.8%

Date and Time ✕

Date and Time				Julian Day					
2024	/	11	/	1	2	:	48	:	16

# Saturn

- On November 10th, Saturn and a Gibbous Moon share a close conjunction as appear together in the eastern sky at sunset.

-

# Saturn



Type: **planet**  
Magnitude: **0.87** (extincted to: **1.15**)  
Absolute Magnitude: 27.62  
RA/Dec (J2000.0): 22h58m13.56s/-8°52'24.8"  
RA/Dec (on date): 22h59m31.63s/-8°44'25.6"  
Hour angle/DE: 21h28m34.51s/-8°42'43.4" (apparent)  
Az/Alt: +137°07'50.0"/+26°55'17.1" (apparent)  
Ecliptic longitude/latitude (J2000.0): +342°21'53.3"/-2°06'46.8"  
Ecliptic longitude/latitude (on date): +342°42'47.0"/-2°06'52.0"  
Ecliptic obliquity (on date): +23°26'10"  
Galactic longitude/latitude: +61°54'17.5"/-57°37'25.9"  
Mean Sidereal Time: -3h31m57.6s  
Apparent Sidereal Time: -3h31m57.8s  
Distance: 9.206AU (1377.135 Mio km)  
Apparent diameter: +0°00'18.1", with rings: +0°00'42.1"  
Sidereal period: 10760.00 days (29.459 a)  
Sidereal day: 10h39m22.4s  
Mean solar day: 10h39m24.0s  
Phase Angle: +5°23'39"  
Elongation: +113°40'22"  
Phase: 1.00  
Illuminated: 99.8%



S

Date and Time ✕

Date and Time	Julian Day
2024 / 11 / 10	17 : 19 : 3

# Saturn

- On November 10th, Saturn and a Gibbous Moon move closer together at 9:20 p.m.
- Saturn is less than 30 minutes of arc north of the Moon.
- The pair remain close all night.

n



net

e: **0.87** (extincted to: **1.10**)  
 Magnitude: 27.62  
 (J2000.0): 22h58m13.17s/-8°52'25.2"  
 (on date): 22h59m31.24s/-8°44'25.9"  
 RA/DE: 1h31m38.47s/-8°42'59.3" (apparent)  
 (J2000.0): 207°20'12.2"/+33°04'40.5" (apparent)  
 longitude/latitude (J2000.0): +342°21'47.8"/-2°06'44.9"  
 longitude/latitude (on date): +342°42'41.6"/-2°06'50.1"  
 obliquity (on date): +23°26'10"  
 longitude/latitude: +61°54'10.3"/-57°37'21.6"  
 Sidereal Time: 0h31m11.9s  
 Sidereal Time: 0h31m11.8s  
 9.208AU (1377.517 Mio km)  
 diameter: +0°00'18.1", with rings: +0°00'42.0"  
 period: 10760.00 days (29.459 a)  
 day: 10h39m22.4s  
 year day: 10h39m24.0s  
 angle: +5°24'04"  
 longitude: +113°30'06"  
 00  
 d: 99.8%



S

Date and Time ✕

Date and Time	Julian Day
<div style="display: flex; justify-content: space-between;"> <span>2024</span> <span>/</span> <span>11</span> <span>/</span> <span>10</span> </div>	<div style="display: flex; justify-content: space-between;"> <span>21</span> <span>:</span> <span>21</span> <span>:</span> <span>32</span> </div>

# Saturn

- On November 30th, Saturn is high in southern sky at sunset.

1.97 (extincted to: 1.19)  
Magnitude: 27.64  
(J2000.0): 22h58m50.65s/-8°44'58.9"  
(on date): 23h00m8.82s/-8°36'58.2"  
RA: 22h58m4.56s/-8°35'36.0" (apparent)  
Dec: 08°11.4"/+35°17'01.2" (apparent)  
Longitude/latitude (J2000.0): +342°33'12.6"/-2°03'26.0"  
Longitude/latitude (on date): +342°54'08.6"/-2°03'31.0"  
Altitude (on date): +23°26'10"  
Longitude/latitude: +62°15'47.4"/-57°40'03.0"  
Local Time: -2h1m47.8s  
Universal Time: -2h1m48.0s  
Distance: 526AU (1425.099 Mio km)  
Angular diameter: +0°00'17.5", with rings: +0°00'40.6"  
Orbital period: 10760.00 days (29.459 a)  
Sidereal period: 10h39m22.4s  
Synodic period: 10h39m24.0s  
Longitude: +5°51'34"  
Latitude: -93°40'39"  
Phase: 99.7%

Saturn

Venus

S

Date and Time [X]

Date and Time			Julian Day		
2024	/	11 / 30	17	:	30 : 20

# Saturn

- On November 30th, Saturn now sets at 11:56 p.m. in the western sky.



Planet  
 Distance: **0.97** (extincted to: **4.91**)  
 Magnitude: 27.64  
 (J2000.0): 22h58m52.16s/-8°44'46.2"  
 (on date): 23h00m10.33s/-8°36'45.5"  
 RA/DE: 5h23m52.69s/-8°17'24.5" (apparent)  
 RA/DE: +257°46'44.6"/+0°35'57.4" (apparent)  
 Longitude/Latitude (J2000.0): +342°33'38.2"/-2°03'22.9"  
 Longitude/Latitude (on date): +342°54'34.2"/-2°03'27.9"  
 Obliquity (on date): +23°26'10"  
 Longitude/Latitude: +62°16'32.0"/-57°40'12.7"  
 Sidereal Time: 4h25m21.4s  
 True Sidereal Time: 4h25m21.3s  
 Distance: 9.531AU (1425.766 Mio km)  
 Equatorial diameter: +0°00'17.4", with rings: +0°00'40.6"  
 Orbital period: 10760.00 days (29.459 a)  
 Day: 10h39m22.4s  
 Solar day: 10h39m24.0s  
 Axial tilt: +5°51'40"  
 Longitude: +93°24'41"  
 Eccentricity: 0.00  
 Albedo: 99.7%

Saturn

W

Date and Time ✕

Date and Time				Julian Day					
2024	/	11	/	30	23	:	56	:	25

**URANUS**

# Uranus

- On November 1<sup>st</sup>, Uranus rises around 6:17 p.m. in the evening twilight eastern sky.

52 (extincted to: 8.80)  
itude: 30.84  
.0): 3h32m58.50s/+18°52'43.0"  
te): 3h34m24.10s/+18°57'47.7"  
: 16h48m0.72s/+19°14'09.7" (apparent)  
'10.5"/+1°13'18.1" (apparent)  
de/latitude (J2000.0): +55°30'44.6"/-0°16'06.6"  
de/latitude (on date): +55°51'37.0"/-0°15'48.9"  
y (on date): +23°26'10"  
ude/latitude: +167°45'58.2"/-29°35'52.7"  
Time: -3h38m39.3s  
real Time: -3h38m39.5s  
07AU (2783.555 Mio km)  
eter: +0°00'03.8", with rings: +0°00'14.5"  
: 30685.00 days (84.011 a)  
.7h14m24.0s  
y: 17h14m22.5s  
-0°47'37"  
64°09'03"

0.0%

Uranus

E

Date and Time

Date and Time	Julian Day
2024 / 11 / 1	18 : 47 : 45

# Uranus

- On November 1<sup>st</sup>, Uranus is well placed in the western sky at sunrise.

# Uranus

Type: planet  
Magnitude: 5.62 (extincted to: 5.97)  
Absolute Magnitude: 30.84  
RA/Dec (J2000.0): 3h33m3.15s/+18°52'59.2"  
RA/Dec (on date): 3h34m28.75s/+18°58'03.8"  
Azimuth/Angle/DE: 5h12m30.43s/+18°59'42.9" (apparent)  
Az/Alt: +275°59'21.1"/+21°30'13.1" (apparent)  
Ecliptic longitude/latitude (J2000.0): +55°31'52.6"/-0°16'06.6"  
Ecliptic longitude/latitude (on date): +55°52'44.9"/-0°15'48.8"  
Ecliptic obliquity (on date): +23°26'10"  
Galactic longitude/latitude: +167°46'42.6"/-29°34'56.8"  
Mean Sidereal Time: 8h47m7.4s  
Apparent Sidereal Time: 8h47m7.2s  
Distance: 18.609AU (2783.889 Mio km)  
Apparent diameter: +0°00'03.8", with rings: +0°00'14.5"  
Orbital period: 30685.00 days (84.011 a)  
Orbital day: 17h14m24.0s  
Mean solar day: 17h14m22.5s  
Phase Angle: +0°49'05"  
Longitude: +163°39'15"  
Phase: 1.00  
Illuminated: 100.0%



W

Date and Time

Date and Time			Julian Day					
2024	/	11	/	1	:	15	:	26

# Uranus

- On November 30th, Uranus is well placed above the eastern horizon at sunset.

et  
5.61 (extincted to: 6.07)  
agnitude: 30.84  
00.0): 3h28m5.17s/+18°35'42.8"  
date): 3h29m30.70s/+18°40'56.2"  
DE: 18h19m21.28s/+18°43'10.3" (apparent)  
233'34.2"/+16°20'20.9" (apparent)  
itude/latitude (J2000.0): +54°19'14.9"/-0°15'50.6"  
itude/latitude (on date): +54°40'10.3"/-0°15'33.6"  
quity (on date): +23°26'10"  
itude/latitude: +166°58'27.8"/-30°34'22.6"  
al Time: -2h11m18.4s  
dereal Time: -2h11m18.5s  
3.602AU (2782.888 Mio km)  
iameter: +0°00'03.8", with rings: +0°00'14.5"  
iod: 30685.00 days (84.011 a)  
: 17h14m24.0s  
day: 17h14m22.5s  
: +0°43'32"  
+165°27'05"  
Jupiter  
100.0%

Uranus

Jupiter

E

Date and Time

Date and Time			Julian Day		
2024	/	11 / 30	17	:	20 : 51



# Uranus

- **On November 30th, Uranus sets at 6:10 a.m. in the western sky.**

Jupiter  
16.61 (extincted to: 8.10)  
Longitude: 30.84  
RA (J2000.0): 3h28m9.72s/+18°35'58.9"  
Dec (J2000.0): 3h29m35.25s/+18°41'12.2"  
RA (apparent): 7h05m15.79s/+18°54'00.2" (apparent)  
Dec (apparent): 41°27.6"/+2°03'49.3" (apparent)  
RA (J2000.0): +54°20'21.5"/-0°15'50.9"  
Dec (J2000.0): +54°41'16.8"/-0°15'33.8"  
RA (on date): +23°26'10"  
Dec (on date): +166°59'12.4"/-30°33'38.2"  
Local Time: 10h35m42.3s  
Universal Time: 10h35m42.1s  
Distance: 600AU (2782.593 Mio km)  
Longitude: +0°00'03.8", with rings: +0°00'14.5"  
Longitude: 30685.00 days (84.011 a)  
Longitude: 17h14m24.0s  
Longitude: 17h14m22.5s  
Longitude: +0°42'07"  
Longitude: 165°56'20"  
100.0%

Uranus

Date and Time

Date and Time			Julian Day		
2024	/	11	/	30	6 : 9 : 42

**NEPTUNE**

# Neptune

- On November 1st, Neptune is well placed in the southeastern sky at evening twilight.



.83 (extincted to: 8.15)  
 nitude: 32.08  
 0.0): 23h51m34.91s/-2°21'01.4"  
 ate): 23h52m51.55s/-2°12'42.9"  
 E: 20h30m29.70s/-2°10'59.2" (apparent)  
 48'08.7"/+24°12'14.8" (apparent)  
 ude/latitude (J2000.0): +357°08'04.3"/-1°19'10.9"  
 ude/latitude (on date): +357°28'57.1"/-1°19'10.8"  
 ivity (on date): +23°26'10"  
 ude/latitude: +90°20'49.3"/+61°22'34.1"  
 l Time: -3h36m44.1s  
 ereal Time: -3h36m44.2s  
 157AU (4361.859 Mio km)  
 neter: +0°00'02.3", with rings: +0°00'06.0"  
 d: 60189.00 days (164.789 a)  
 16h6m36.0s  
 ay: 16h6m36.6s  
 +1°17'10"  
 137°27'04"  
 00.0%



Saturn

E

Date and Time ✕

Date and Time

Julian Day

2024 / 11 / 1

18 : 49 : 40

# Neptune

- On November 1st, Neptune sets at 4:13 a.m. in the western sky.

# ptune

: planet

agnitude: **7.83** (extincted to: **12.11**)

bsolute Magnitude: 32.08

ec (J2000.0): 23h51m37.41s/-2°20'45.9"

ec (on date): 23h52m54.04s/-2°12'27.5"

angle/DE: 5h50m36.26s/-1°51'47.7" (apparent)

lt: +267°01'34.1"/+0°22'43.2" (apparent)

ctic longitude/latitude (J2000.0): +357°08'44.9"/-1°19'11.6"

ctic longitude/latitude (on date): +357°29'37.6"/-1°19'11.5"

ctic obliquity (on date): +23°26'10"

ctic longitude/latitude: +90°22'13.4"/-61°22'38.5"

n Sidereal Time: 5h44m55.1s

arent Sidereal Time: 5h44m54.9s

ance: 29.150AU (4360.793 Mio km)

arent diameter: +0°00'02.3", with rings: +0°00'06.0"

real period: 60189.00 days (164.789 a)

real day: 16h6m36.0s

n solar day: 16h6m36.6s

e Angle: +1°16'16"

gation: +138°04'06"

e: 1.00

inated: 100.0%

Neptune

W

Date and Time ×

Date and Time			Julian Day		
2024	/	11	/	1	
				4	:
				13	:
					43

# Neptune

- On November 30th, Neptune is high in the southeastern sky at evening twilight.



7.86 (extincted to: 8.09)  
gnitude: 32.08  
00.0): 23h50m19.16s/-2°28'14.3"  
ate): 23h51m35.99s/-2°19'54.8"  
E: 21h53m51.76s/-2°18'40.3" (apparent)  
°02'20.9"/+35°32'41.8" (apparent)  
tude/latitude (J2000.0): +356°47'50.2"/-1°18'16.7"  
tude/latitude (on date): +357°08'46.0"/-1°18'16.8"  
uity (on date): +23°26'10"  
itude/latitude: +89°39'00.3"/-61°19'43.1"  
al Time: -2h14m34.7s  
ereal Time: -2h14m34.8s  
.577AU (4424.622 Mio km)  
meter: +0°00'02.3", with rings: +0°00'05.9"  
od: 60189.00 days (164.789 a)  
16h6m36.0s  
ay: 16h6m36.6s  
+1°47'55"  
+107°55'40"  
100.0%



Saturn

S

Date and Time [X]

Date and Time			Julian Day						
2024	/	11	/	30	17	:	17	:	35

# Neptune

- On November 30th, Neptune sets at 1:12 a.m. in the western sky.



6 (extincted to: 11.02)  
 tude: 32.08  
 D): 23h50m19.79s/-2°28'11.6"  
 e): 23h51m36.63s/-2°19'52.1"  
 5h44m57.13s/-2°04'20.3" (apparent)  
 }'20.0"/+1°14'30.5" (apparent)  
 e/latitude (J2000.0): +356°48'00.0"/-1°18'18.1"  
 e/latitude (on date): +357°08'55.8"/-1°18'18.1"  
 r (on date): +23°26'10"  
 de/latitude: +89°39'20.3"/-61°19'45.4"  
 ime: 5h37m37.4s  
 al Time: 5h37m37.2s  
 6AU (4422.972 Mio km)  
 ter: +0°00'02.3", with rings: +0°00'05.9"  
 60189.00 days (164.789 a)  
 5h6m36.0s  
 16h6m36.6s  
 1°47'30"  
 8°36'28"  
 0.0%

Neptune  
 W

Date and Time ✕

Date and Time			Julian Day		
2024	/	11	/	30	1 : 12 : 25

# That is the Sky this Month

By David Mills