

Waxing Gibbous Moon Visual Magnitude \approx -12.5

LHA = 314 deg. 35.96 min.

GHA = 78 deg. 1.96 min.

Dec = 18 deg. 26.42 min. S

Hc = 12 deg. 3.42 min.

Zn = 136.3 deg. SHA = 92.87 deg.

HP = 58.02 min. PA = 56.61 min.

Geocentric SD = 15.81 min Topocentric SD = 15.86

Refraction (R_0) = 4.54 min. SD = 15.80

Age of Moon \approx 15.0 Days illumination \approx 99 %

Altitude Correction for UL = 36.26 min.

OB = -0.13 min.

Altitude Correction for LL = 67.87 min.

Distance from Earth to Moon = 377930 km

Jupiter Visual Magnitude \approx -1.8

LHA = 77 deg. 28.14 min.

GHA = 200 deg. 54.14 min.

Dec = 15 deg. 6.99 min. N

Hc = 19 deg. 30.71 min.

Zn = 271.1 deg. SHA = 215.74 deg.

Refraction (R_0) = 2.81 min.

Distance from Earth to Jupiter = 6.08 AU

Venus Visual Magnitude \approx -4.4

LHA = 77 deg. 38.91 min.

GHA = 201 deg. 4.91 min.

Dec = 14 deg. 49.79 min. N

Hc = 19 deg. 11.09 min.

Zn = 271.0 deg. SHA = 215.92 deg.

HP = 0.28 min. PA = 0.27 min.

Refraction (R_0) = 2.86 min.

Distance from Earth to Venus = 0.51 AU

Mars Visual Magnitude \approx 1.5

LHA = 126 deg. 51.30 min.

GHA = 250 deg. 17.30 min.

Dec = 24 deg. 6.60 min. N

Hc = -3 deg. 30.10 min.

Zn = 313.0 deg. SHA = 265.12 deg.

HP = 0.06 min. PA = NA min.

Refraction (R_0) = NA min.

Distance from Earth to Mars = 2.58 AU

Saturn Visual Magnitude \approx 1.2

LHA = 344 deg. 23.17 min.

GHA = 107 deg. 49.17 min.