

Astronomy targets: June 2019

Unless stated otherwise, all times are for mid-month, for Birmingham UK and are BST. Rise & set times are for 20 degrees above horizon. Dark & light times are nautical twilight times (Sun 12 degrees below horizon) and astronomical darkness (Sun 18 degrees below horizon).

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Sun & Moon times

Monday date	Sunset	Naut Dark	Astro Dark	Astro Light	Naut Light	Sunrise	Moon
03/06/19	2122	2325			0246	0449	0%
10/06/19	2129	2338			0236	0445	59%
17/06/19	2133	2346			0232	0444	100%
24/06/19	2135	2347			0233	0446	54%

Calendar

2 Jun New Moon

16 Jun Full Moon

Planets

Jupiter: Low all night (at opposition)

Saturn: Low at Sunrise

Boötes Sunset-0220

Multiple star: ξ -Boo (xi-Boo) yellow & orange

Camelopardalis all night

Galaxy: NGC2403 (C7)

Asterism: Kemble's Cascade & NGC1502 cluster

Canes Venatici all night

Globular cluster: M3

Galaxies:

M51 Whirlpool Galaxy

M63 Sunflower Galaxy

M94

M106

NGC4631 Whale Galaxy

Coloured star: La Superba Y-CVn carbon star

Multiple star: Cor Caroli α -CVn (alpha-CVn) yellow & orange

Cassiopeia all night

Emission nebulae:

NGC281 Pacman Nebula

NGC7635 (C11) Bubble Nebula

IC1805 Heart Nebula

IC1848 Soul Nebula

Open clusters:

M52

M103

NGC457 (C13) Owl cluster

NGC654

NGC659

NGC663 (C10)

NGC7789

NGC7790

Multiple star: η -Cas (eta-Cas) gold & red

Cepheus all night

Reflection nebula: NGC7023 (C4) Iris Nebula

Open clusters:

NGC188 (C1)

NGC7160

Coloured star: Garnet Star μ -Cep (mu-Cep)

Multiple stars:

δ -Cep (delta-Cep) yellow & purple

Σ 2816 yellow & two white

Coma Berenices Sunset-0150

Globular cluster: M53

Open clusters: Melotte 111

Galaxies:

M64 Black Eye Galaxy

M85

M88

M91

M98

M99

M100

NGC4565 Needle Galaxy

Cygnus all night

Emission nebulae:

NGC6888 Crescent Nebula

NGC6960 Veil Nebula

IC5070 Pelican Nebula

IC7000 (C20) North American Nebula

Planetary nebulae:

IC5146 (C19) Cocoon Nebula

NGC6826 Blinking Nebula

NGC7008 Fetus Nebula

Open clusters:

M29

M39

NGC6871

NGC6883

NGC6910 Rocking Horse Cluster

Galaxy: NGC6946 (C12) Fireworks Galaxy

Multiple stars:

Albireo β -Cyg (beta-Cyg) gold & blue

61-Cyg orange & red

Delphinus all night

Globular clusters:

NGC6934 (C47)

NGC7006 (C42)

Draco all night, best 2350

Planetary nebula: NGC6543 Cats Eye Nebula

Galaxy: M102

Hercules all night, best 0020

Globular clusters:

M13 Hercules Globular Cluster

M92

Lacerta all night

Open cluster: NGC7243 (C16)

Lyra all night, best 0200

Planetary nebula: M57 Ring Nebula

Globular cluster: M56

Multiple stars:

Double-Double ϵ -Lyr (epsilon-Lyr) four white

Other Double-Double Σ 2470 & Σ 2474 four white

Ophiuchus Sunset-0150, best 2350

Globular clusters:

M9

M10

M12

M14

M19

M62

M107

Open cluster: IC4665

Sagitta all night

Globular cluster: M71

Sagittarius partly visible, best 0120

Emission nebulae:

- M8 Lagoon Nebula
- M17 Swan Nebula
- M20 Triffid Nebula

Globular clusters:

- M28
- M54
- M55
- M69
- M70
- M75

Open clusters:

- M18
- M21
- M22
- M23
- M24
- M25
- NGC6530

Scutum 0110-Sunrise, best 0200

Open clusters:

- M11 Wild Duck Cluster
- M26

Serpens 2350-0230, best 0040

Emission nebula: M16 Eagle Nebula

Globular cluster: M5

Ursa Major all night

Planetary nebula: M97 Owl Nebula

Galaxies:

- M81 Bode's Galaxy & M82 Cigar Galaxy
- M101 Pinwheel Galaxy
- M108
- M109

Multiple star: Mizar & Alcor ζ -UMa (zeta-UMa) 3 white

Ursa Minor all night

Multiple star: Polaris α -UMi (alpha-UMi) yellow & white

Vulpecula all night

Planetary nebula: M27 Dumbell Nebula

Open cluster: NGC6885 (C37)

Asterism: Coathanger