

Astronomy targets: June 2017

Unless stated otherwise, all times are for mid-month, for Birmingham UK and are GMT+1. 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 times

Date	S.Set	Dark	Astro dark	Light	S.Rise	Moon
03/06/17	2123	2326		0246	0449))
10/06/17	2129	2338		0236	0445))
17/06/17	2133	2346		0231	0444)
24/06/17	2135	2347		0233	0446	

Moon phases

Full Moon 9 Jun; New Moon 23 Jun

Planets

- Jupiter: to 2335
- Neptune: from 0335

Transient objects

- Comets visible this month: 41P/Tuttle-Giacobini-Kresak & C/2015 V2 (Johnson). See <http://cometchasing.skyhound.com>

Boötes (Sunset-0220)

DS ξ (xi): yellow & orange

Camelopardalis (all night)

- GA** NGC2403 (C7) galaxy
- AS** Kemble's Cascade & NGC1502 cluster

Canes Venatici (all night)

- GA** M51 Whirlpool Galaxy
- GA** M63 Sunflower Galaxy
- GA** M94 galaxy
- GA** M106 galaxy
- GA** NGC4631 Whale Galaxy
- GC** M3 globular cluster
- DS** Cor Caroli α (alpha): yellow & orange
- ST** La Superba Y carbon star

Cassiopeia (all night)

- EN** NGC281 Pacman Nebula
- EN** NGC7635 (C11) Bubble Nebula
- EN** IC1805 Heart Nebula
- EN** IC1848 Soul Nebula
- OC** M52 open cluster
- OC** M103 open cluster
- OC** NGC457 (C13) Owl cluster
- OC** NGC654 open cluster
- OC** NGC659 open cluster
- OC** NGC663 (C10) open cluster
- OC** NGC7789 open cluster
- OC** NGC7790 open cluster
- DS** η (eta): gold & red

Cepheus (all night)

- RN** NGC7023 (C4) Iris Nebula
- OC** NGC188 (C1) open cluster
- OC** NGC7160 open cluster
- DS** δ (delta): yellow & purple
- DS** Σ 2816: yellow & two white
- ST** The Garnet Star: μ (mu)

Coma Berenices (Sunset-0150)

- GA** M64 Black Eye Galaxy
- GA** M85 galaxy
- GA** M88 galaxy
- GA** M91 galaxy
- GA** M98 galaxy
- GA** M99 galaxy
- GA** M100 galaxy
- GA** NGC4565 Needle Galaxy
- GC** M53 globular cluster
- OC** Melotte 111 open cluster

Cygnus (all night)

- GA** NGC6946 (C12) Fireworks Galaxy
- EN** NGC6888 Crescent nebula
- EN** NGC6960 Veil nebula
- EN** IC5070 Pelican Nebula
- EN** IC5146 (C19) Cocoon Nebula
- EN** IC7000 (C20) North American Nebula
- PN** NGC6826 Blinking Nebula
- PN** NGC7008 Fetus Nebula
- OC** M29 open cluster
- OC** M39 open cluster
- OC** NGC6871 open cluster
- OC** NGC6883 open cluster
- OC** NGC6910 Rocking Horse Cluster
- DS** Albireo β (beta): gold & blue
- DS** 61: orange & red

Delphinus (all night)

- GC** NGC7006 (C42) globular cluster
- GC** NGC6934 (C47) globular cluster
- DS** γ (gamma): yellow & blue

Draco (all night, best 2350)

- GA** M102 galaxy
- PN** NGC6543 Cats Eye Nebula

Hercules (all night, best 0020)

- GC** M13 Hercules Globular Cluster
- GC** M92 globular cluster

Lacerta (all night)

- OC** NGC7243 (C16) open cluster

Lyra (all night, best 0200)

- PN** M57 Ring Nebula
- GC** M56 globular cluster
- DS** Double-Double ϵ (epsilon): four white
- DS** Other Double-Double Σ 2470 & Σ 2474: four white

Ophiuchus (Sunset-0150, best 2350)

- GC M9 globular cluster
- GC M10 globular cluster
- GC M12 globular cluster
- GC M14 globular cluster
- GC M19 globular cluster
- GC M62 globular cluster
- GC M107 globular cluster
- OC ic4665 open cluster

Sagitta (all night)

- GC M71 globular cluster

Sagittarius (partly visible, best 0120)

- EN M8 Lagoon Nebula
- EN M17 Swan Nebula
- EN M20 Triffid Nebula
- GC M28 globular cluster
- GC M54 globular cluster
- GC M55 globular cluster
- GC M69 globular cluster
- GC M70 globular cluster
- GC M75 globular cluster
- OC M18 open cluster
- OC M21 open cluster
- OC M22 open cluster
- OC M23 open cluster
- OC M24 open cluster
- OC M25 open cluster
- OC NGC6530 open cluster

Scorpius (partly visible, best 0100)

- GC M4 globular cluster
- GC M80 globular cluster
- OC M6 Butterfly Cluster
- OC M7 Ptolomy Cluster

Scutum (0110-Sunrise, best 0200)

- OC M11 Wild Duck Cluster
- OC M26 open cluster

Serpens (2350-0230, best 0040)

- EN M16 Eagle Nebula
- GC M5 globular cluster

Ursa Major (all night)

- GA M81 Bode's Galaxy & M82 Cigar Galaxy
- GA M101 Pinwheel Galaxy
- GA M108 galaxy
- GA M109 galaxy
- PN M97 Owl Nebula
- DS Mizar & Alcor ζ (zeta): 3 white

Ursa Minor (all night)

- DS Polaris α (alpha): yellow & white

Vulpecula (all night)

- PN M27 Dumbell Nebula
- OC NGC6885 (C37) open cluster
- AS Coathanger

Key

- GA Galaxy
- EN Emmission nebula
- RN Reflection nebula
- PN Planetary nebula
- GC Globular cluster
- OC Open cluster
- AS Asterism
- DS Double star
- ST Star