

Sky Watch Objects

These are (mostly) the specific types mentioned in lecture. You are not restricted to these, but need to relate anything you observe to the topics of the course.

Lyra - Ring Nebula, planetary nebula in Lyra
Cat's Eye Nebula, planetary nebula in constellation Draco
Sirius - massive blue main sequence star with white dwarf companion
Algol - binary system in Perseus
Vega - massive blue main sequence star in Lyra
Antares - red giant in Scorpius
Betelgeuse - Orion, Red Supergiant due to explode "soon" 15 solar masses
Rigel - Orion, Blue Supergiant due to explode later, 17 solar masses
Aldebaran - Bright Red Supergiant in Taurus, 2.5 solar masses (WD not SN)
Castor, Rigel - massive blue main sequence stars
Capella, Procyon - on their way to becoming red giants
SN 1006 - Lupus/Centaurus (difficult this time of year)
SN 1054 Crab Nebula - Taurus
SN 1572 Tycho - Cassiopeia
SN 1604 Kepler - Ophiuchus
Cassiopeia A - Cassiopeia
Vela supernova - Vela
SS Cygni - brightest dwarf novae in the sky, Cygnus,
U Geminorum - dwarf nova in Gemini
CP Pup, classical nova toward constellation Puppis in 1942
Pup 91, classical nova toward Puppis in 1991
QU Vul, classical nova toward constellation Vulpecula,
GK Per - Perseus, both a classical nova eruption and dwarf nova.
U Sco - Scorpius, recurrent nova
RS Ophiuchi - Ophiuchus, recurrent nova
T Cor Bor - Corona Borealis, recurrent nova
Single neutron stars Geminga in Gemini
Gravitational radiation from pulsar in binary system - Aquila
X-ray pulsars, Her X-1 in Hercules, Cen X-4 in Centaurus
Soft gamma-ray repeaters and anomalous X-ray pulsars, SGR 1900+14, AXP AXJ
1844-0258, in Aquila, SGR1806-20, SGR 1801-23, 2010, SGR 1833-0832, AXP XTE
J1810-197 in Sagittarius, AXP 1E 2259+586, AXP 4U0142+61, in Cassiopeia, AXP
1XRS J170849-400910 in Scorpius, AXP IE1841-045 in Scutum
Cygnus X-1, binary black hole candidate in Cygnus
A0620-00 = Nova Mon 1975 = V616 Monocerotis, Monoceros, binary black hole
candidate
V404 Cygni, Cygnus, binary black hole candidate
Center of our Galaxy, 4 million solar mass black hole, Sagittarius
M87, giant elliptical galaxy with billion solar mass black hole, Virgo
Gamma-ray bursts