

The Urban Program - Double and Multiple Stars

Object Name	Right Ascension	Declination	Magnitudes	Separation
Eta Cassiopeia	00 ^h 49.1 ^m	+57° 49'	3.4, 7.5	12"
Gamma Aries	01 ^h 53.5 ^m	+19° 18'	4.8, 4.8	7.8"
Gamma Andromeda	02 ^h 03.9 ^m	+42° 20'	2.3, 5.5	9.8"
Trapezium	05 ^h 35.3 ^m	-05° 23'	6.7, 7.9, 5.1, 6.7	8.8", 13", 21.5"
Beta Monoceros	06 ^h 28.8 ^m	-07° 02'	4.7, 5.2	7.3"
Gamma Leo	10 ^h 20.0 ^m	+19° 51'	2.2, 3.5	4.4"
Zeta Ursa Major	13 ^h 23.9 ^m	+54° 56'	2.3, 4.0, 4.0	14.4, 709"
Beta Scorpius	16 ^h 05.4 ^m	-19° 48'	2.6, 4.9	13.6"
Epsilon Lyra	18 ^h 44.3 ^m	+39° 40'	5.0, 6.1, 5.2, 5.5	208", 2.6", 2.3"
Beta Cygnus	19 ^h 30.7 ^m	+27° 58'	3.1, 5.1	34.4"
Gamma Delphinus	20 ^h 46.7 ^m	+16° 07'	4.5, 5.5	9.6"
Delta Cepheus	22 ^h 29.2 ^m	+58° 25'	3.9, 6.3	41"

The Urban Program - Variable Star

Object Name	Right Ascension	Declination	Magnitude Range	Period
Beta Perseus (Algol)	03 ^h 08.2 ^m	+40° 57'	2.1 - 3.4	2.9 days

1. Determine the dates and times of upcoming Algol minima.
2. Observe naked-eye and estimate the star's brightness during a minimum by comparing it to nearby stars.
3. Repeat the observation and estimate Algol's brightness on any non-minima night.

Use the site recommended by the AAVSO to produce minima lists for your local time zone:

www.as.up.krakow.pl/ephem

A finder chart can be printed here: http://www.aavso.org/sites/default/files/finder_charts/PER.GIF

Use any convenient star chart or planetarium program to determine the magnitudes of neighboring stars, or use:

α Persei 1.8 (alpha Persei)
 ζ Persei 2.8 (zeta Persei)
 $\omicron$ Persei 3.8 (omicron Persei)

More information about variable star observing can be found at:

<http://www.astroleague.org/al/obsclubs/variablestar/VSOIntroduction.html>