



# The Binocular Sky

January  
2012

# Newsletter

## Introduction

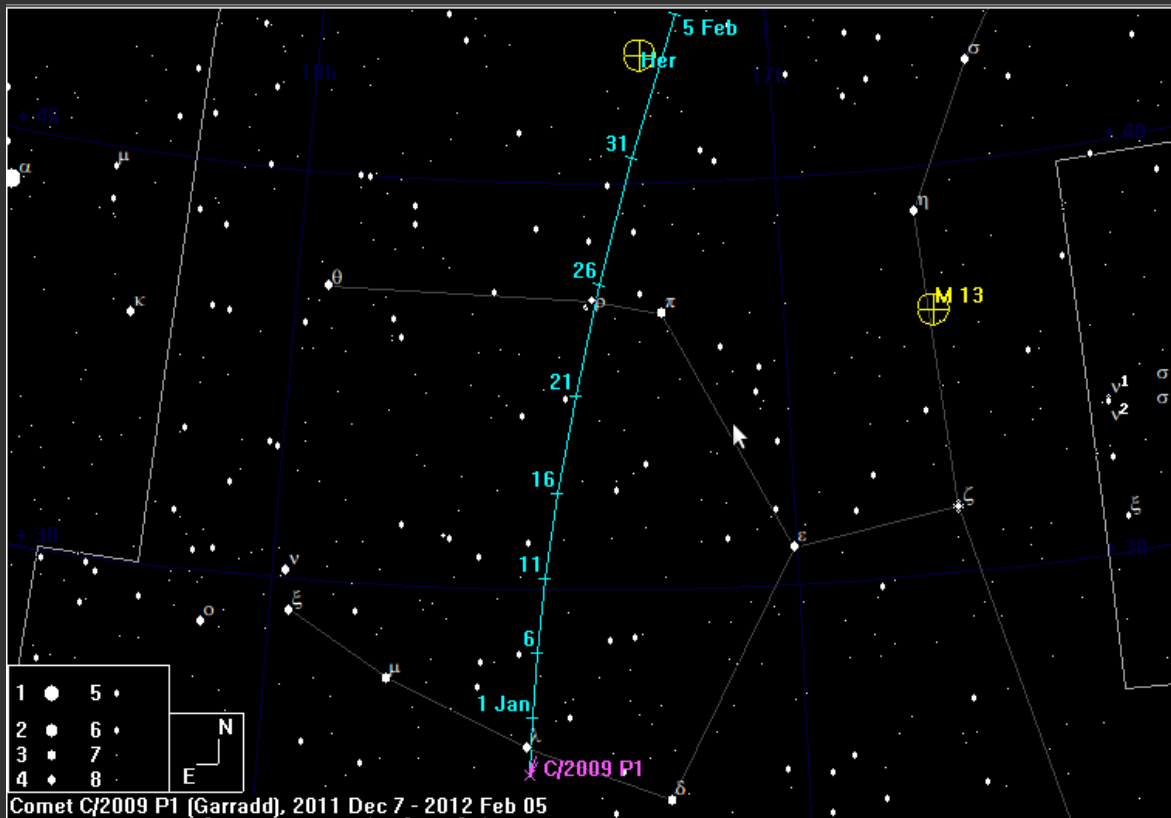
Welcome to the first *Binocular Sky* Newsletter of 2012. The intention of this monthly offering is to highlight some of the binocular targets for the coming month. It is primarily targeted at observers in the UK, but should have some usefulness for observers anywhere north of Latitude 30°N. For this Newsletter to be a useful tool, it needs to have the information that YOU want in it; therefore please do not be shy about making requests – if I can accommodate your wishes, I shall do so.

## Transient Objects

The only transient object of note this month is Comet C/2009 P1 (Garradd), which is making its way through Hercules. It is best observed in the morning. During the month it rises from about 30° to 60° as astronomical twilight ends.

Date	RA	Declination	Magnitude
2011 Dec 27	17h30m19.43s	+25 25' 51.7"	9.2
2012 Jan 01	17h30m06.84s	+26 50' 06.7"	9.2
2012 Jan 06	17h29m39.36s	+28 26' 36.1"	9.1
2012 Jan 11	17h28m50.52s	+30 16' 55.7"	9.1
2012 Jan 16	17h27m32.16s	+32 22' 58.1"	9.0
2012 Jan 21	17h25m33.10s	+34 46' 52.4"	9.0
2012 Jan 26	17h22m37.57s	+37 30' 54.4"	8.9
2012 Jan 31	17h18m23.43s	+40 37' 12.5"	8.9
2012 Feb 05	17h12m18.93s	+44 07' 29.8"	8.9

## Comet Garradd Finder Chart



The other comet, P/2006 T1 (Levy), that several sources say will become visible in January, was recovered on 2011 Dec 17 at magnitude 19.8, and given a new designation: 2011 Y1. It is now not expected to exceed magnitude 17 at its brightest, unless it has an outburst (which is unlikely).

### The Deep Sky (Yellow text is hyperlinked to charts and more information.)

The *Pleiades* (M45) and the *Great Orion Nebula* (M42) culminate in the early evening, as do the *trio of open clusters* in Auriga and M35 in Gemini. While you are looking at M35, also see if you can identify two smaller open clusters, NGC 2158, which is half a degree to the SE, and the slightly more difficult IC 2157, which is a degree to the ESE. Making a return are M44 (*Praesepe*) and M67, two fine open clusters in Cancer. Lower in the southern sky are more open clusters [M46 & M47](#) and, near Sirius, M41.

## The Deep Sky (contd)

Open (also called 'Galactic') Clusters are loosely packed groups of stars that are gravitationally bound together; they may contain from a few dozen to a few thousand stars which recently formed in the galactic disk.

The rather indistinct open cluster, NGC1502, is brought to prominence by an asterism, that is named **Kemble's Cascade**, in honour of Fr. Lucian Kemble, a Canadian amateur astronomer and Franciscan friar, who discovered it with a 7x35 binocular. He described as "*a beautiful cascade of faint stars tumbling from the northwest down to the open cluster NGC 1502.*" It is one of the most pleasing objects in small and medium binoculars.

While you are observing in the region, take the time to study **R Leporis (Hind's Crimson Star)**, which is a candidate for the reddest star in the heavens. To the north of that, just to the SE of Alnitak ( $\zeta$ Ori) is the multiple star  **$\sigma$ Orionis**.

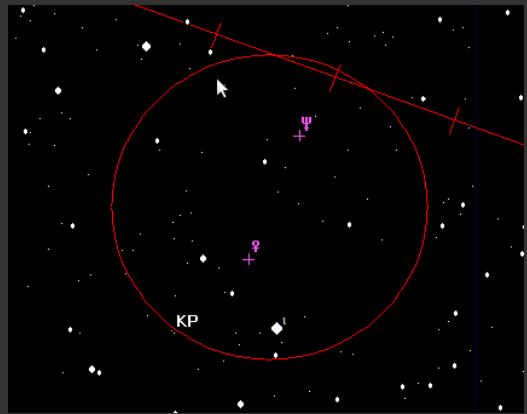
For an interactive maps of Deep Sky Objects visible from 51 °N, please visit:  
[http://binocularsky.com/map\\_select.php](http://binocularsky.com/map_select.php)

## The Solar System

### Planets

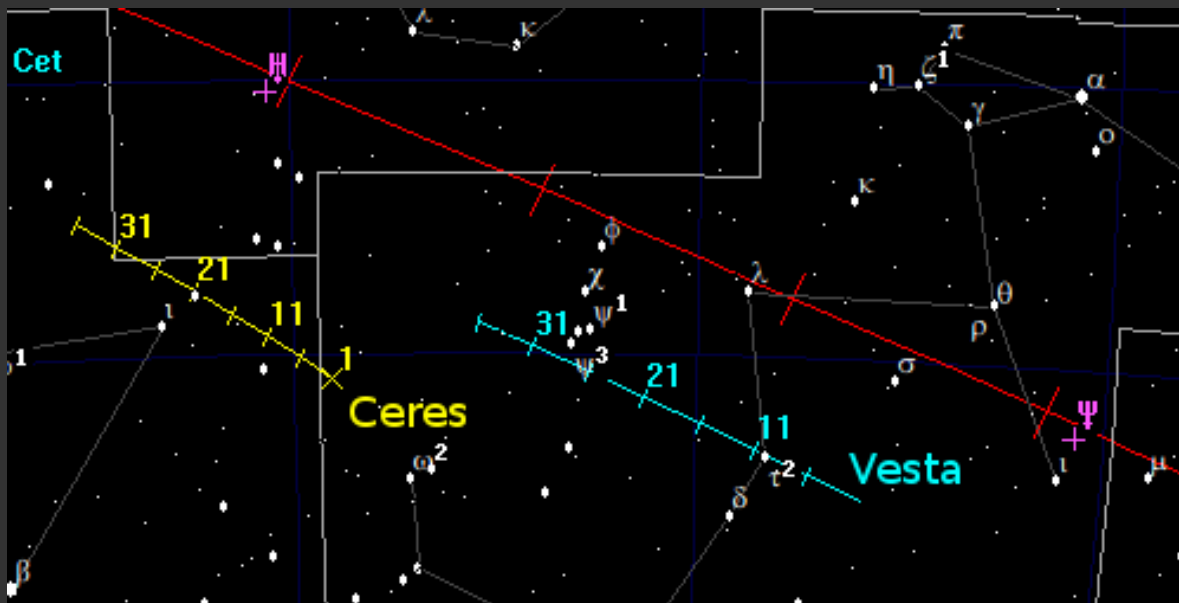
**Uranus** is slightly brighter than 6<sup>th</sup> magnitude and is theoretically a naked eye object, but will be low in the sky after dusk, so binoculars will be essential. It is in *Pisces* and moves about 1.1° during the month.

**Neptune** is 8<sup>th</sup> magnitude, on the border of *Aquarius* and *Capricornus*. It moves about 1.2° during the month. It is in conjunction with Venus on the 17<sup>th</sup>, making it easy to locate.



**Venus** itself is low in the west at dusk. It is difficult, owing to its brightness, to make observations of it in a dark sky but, if you observe it in bright twilight, with good optics and magnification of x20 or (preferably) more, you may be able to detect a slight change in its gibbous phase as it slowly grows throughout the month.

Asteroids **Ceres** and **Vesta** are even lower in the south-west at magnitudes 9 and 8 respectively.



## Meteor Showers

The Quadrantids are active from the 1<sup>st</sup> to the 5<sup>th</sup> and peak on the night of the 3<sup>rd</sup>/4<sup>th</sup>. The Moon will have set by 03:45, so the best time to watch will be in the

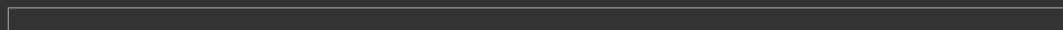
early morning. The shower is named for the ancient constellation, Quadrans Muralis, which is now part of Boötes. You can use binoculars to examine the persistence of any ionisation trails.

## The Moon

Jan 01	1 <sup>st</sup> Quarter
Jan 09	Full Moon
Jan 16	3 <sup>rd</sup> Quarter
Jan 23	New Moon

Wishing you Clear Dark Skies,

Steve Tonkin for *The Binocular Sky*



### Acknowledgments:

The charts in this newsletter were prepared with Guide v8.0 from <http://projectpluto.com>

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