Skyguide

2015 - II

created by:

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FACHGRUPPE DEEP-SKY

Vereinigung der Sternfreunde e.V.

www.deepsky.vdsastro.de

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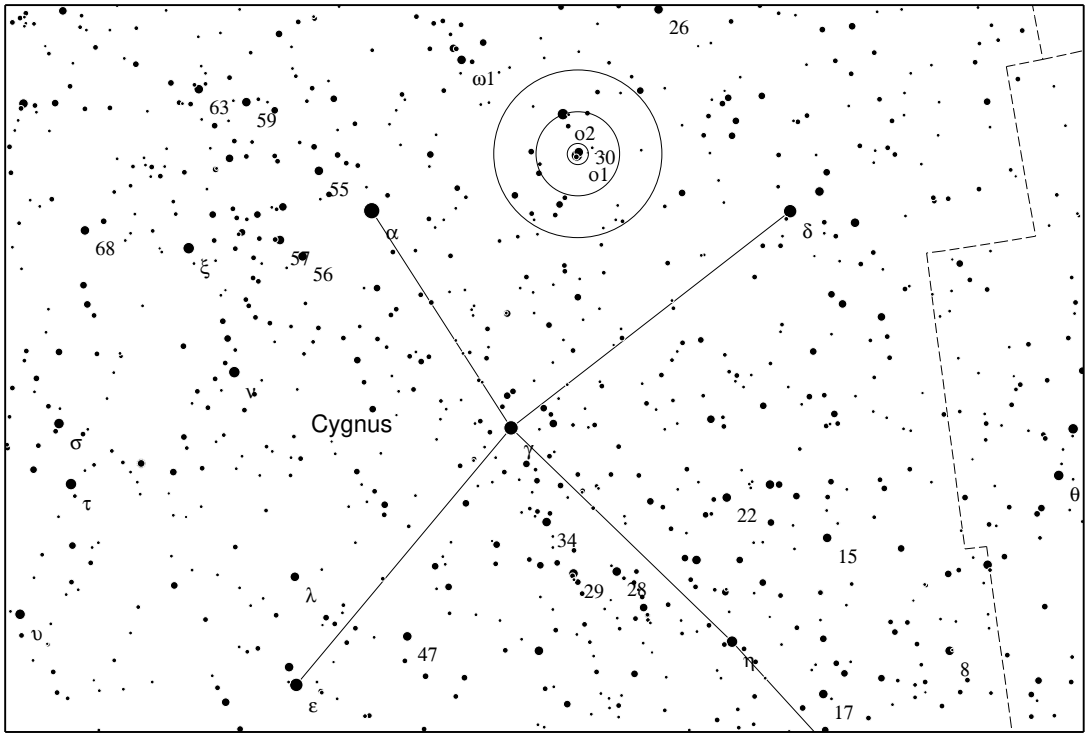
Skyguide - A Short Introduction

The Skyguide should mainly give you some suggestions for own observations and will briefly describe 5 objects annually for every season. It contains easy as well as difficult objects, which are sorted by ascending difficulty. How difficult an object is, depends on several factors, especially quality of sky, aperture of the used telescope and the experience of the observer.

For each object the most important information are given and if applicable a DSS image (Digitized Sky Survey). In addition you will find a chart, created by the free software Cartes du Ciel (Skychart), to get an overview of where the object is located. This chart shows stars down to a magnitude of about 8.0 mag. Telrad rings (0.5°, 2°, 4°) on the chart mark the position of the object. But basically I recommend creating your own finder charts. The visual descriptions are mainly based on own observations and only serve as a reference point.

STFA 50 AD **

Constellation	Cyg
Coordinates	20h13m37.90s / +46°44'28.80''
Brightness	3.93 mag / 4.83 mag
Angular Distance	333.8''
Position Angle	325°
Epoch	2008



STFA 50 (AD) consists of the fairly bright stars 30 and 31 Cyg (omicron 1 Cyg), which are separable by the naked eye. Especially binoculars give a really nice view of this double star with good color contrast. The brighter component (31 Cyg) appears slightly orange, the fainter one (30 Cyg) more bluish. This pair is an visual double star without any gravitationally interacting. Also visible in binoculars is the component C (HD 192579, 7.0 mag), that is a physical companion of 31 Cyg and appears also bluish in a telescope. An overall nice, easy to find double star, that doesn't need to hide behind the well known Albireo (beta Cyg).

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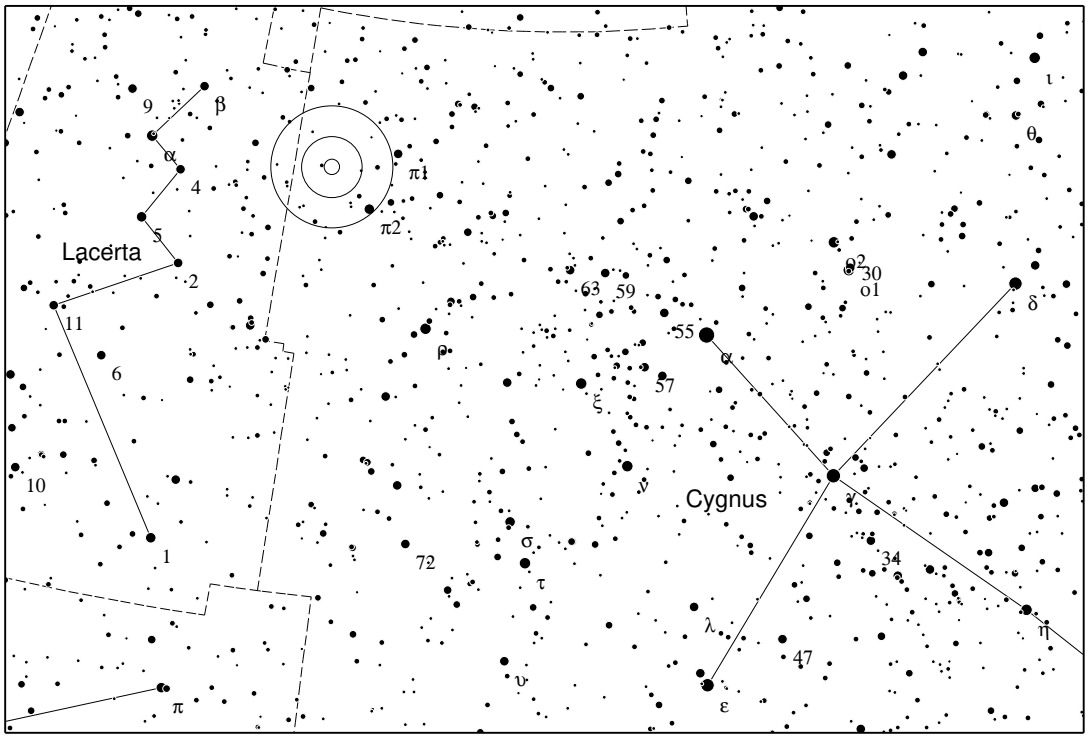
LW Cyg C*

Constellation Cyg
Coordinates 21h55m13.77s / +50°29'49.70''
Brightness b12.3-14.5 mag



LW Cyg is another representative of carbon stars in the star rich constellation Cygnus. The data of brightness are rather unsure. In another source I read about a visual brightness of about 8.5 to 8.8 mag, which seem to vary slowly. So you could try this evident star also with small aperture or under less good conditions. To me this star was obvious due its intensive red coloring and is worth a look.

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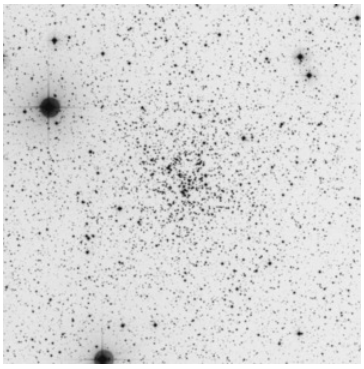
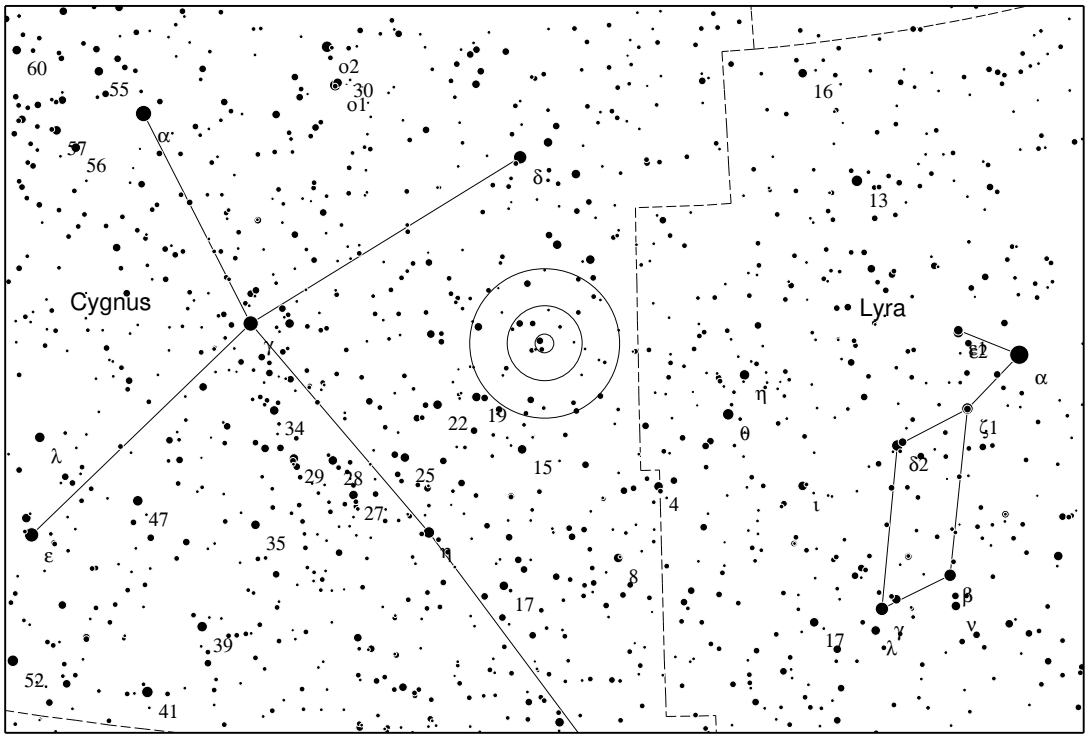
NGC 6819 (Fox Head Cluster) OC



DSS II (blue) - 20.0×20.0'

Constellation	Cyg
Coordinates	19h41m18.00s / +40°11'12.00''
Brightness	7.3 mag
Size	5.0×5.0'



NGC 6819 was discovered in 1784 by Caroline Herschel, sister of William Herschel, and lies approximately 7200 light years away. Directly besides some brighter stars this cluster is visible under rural skies with 8x40 binoculars. It appeared as a faint, diffuse, round brightening. With an 8 inch Dobsonian the cluster appeared at first glance also diffuse, but after a while I saw many faint members. Shape was irregular. The cluster forms together with three stars located southeastern the fox head, where the 3 stars are the snout.

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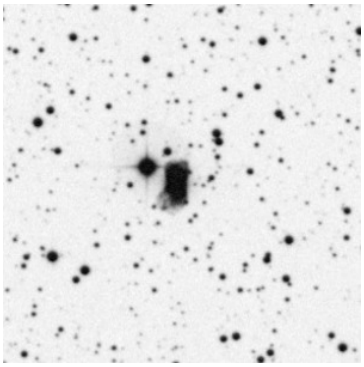
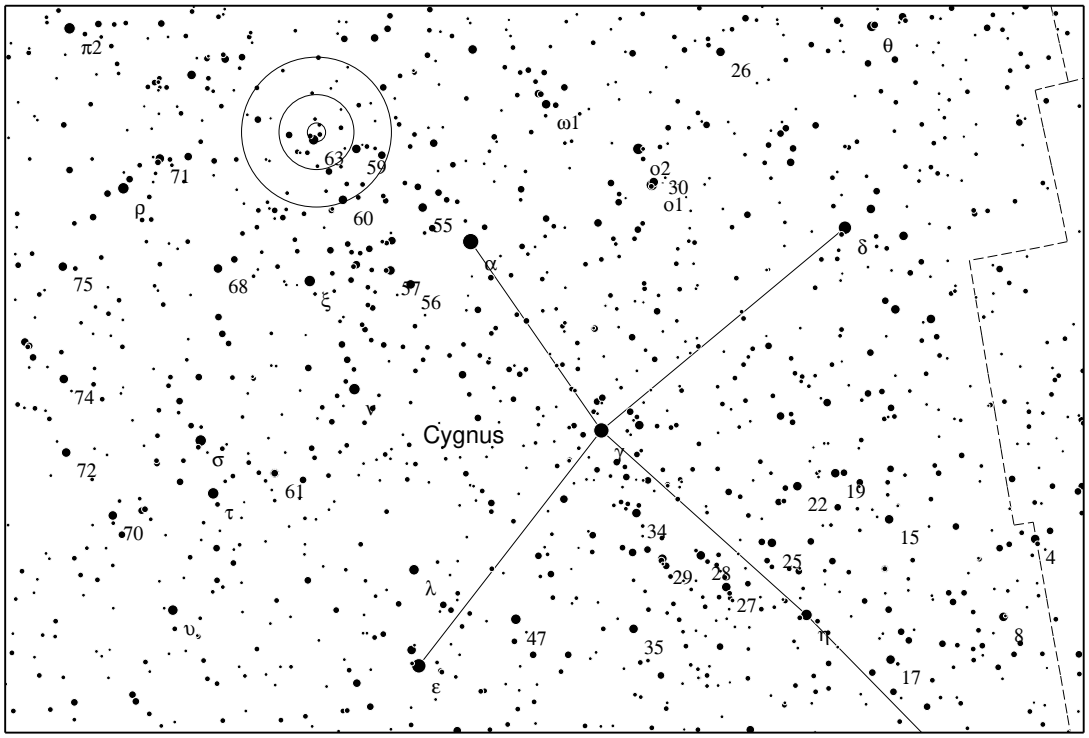
NGC 7026 (Cheeseburger Nebula) PN



DSS II (blue) - 5.0×5.0'

Constellation	Cyg
Coordinates	21h06m18.24s / +47°51'07.20''
Brightness	10.9 mag
Size	0.42×0.15'



Expansion and expansion speed of NGC 7026 (PK 89+0.1) indicates, that the nebula is rather young with an age of about 1000 years. The complex, bipolar structures are probably only visible on photographs. The dark lane, that separates the two brightest parts of the nebula, was visible to some extent with an 8 inch Dobsonian under dark skies (Bortle 3). Otherwise the nebula is easy to find and could also be seen with 4 inch aperture under urban conditions (Bortle 7, NELM 5.0 mag), where it appeares as roundish brightening with averted vision.

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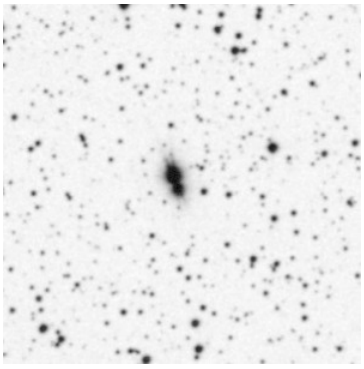
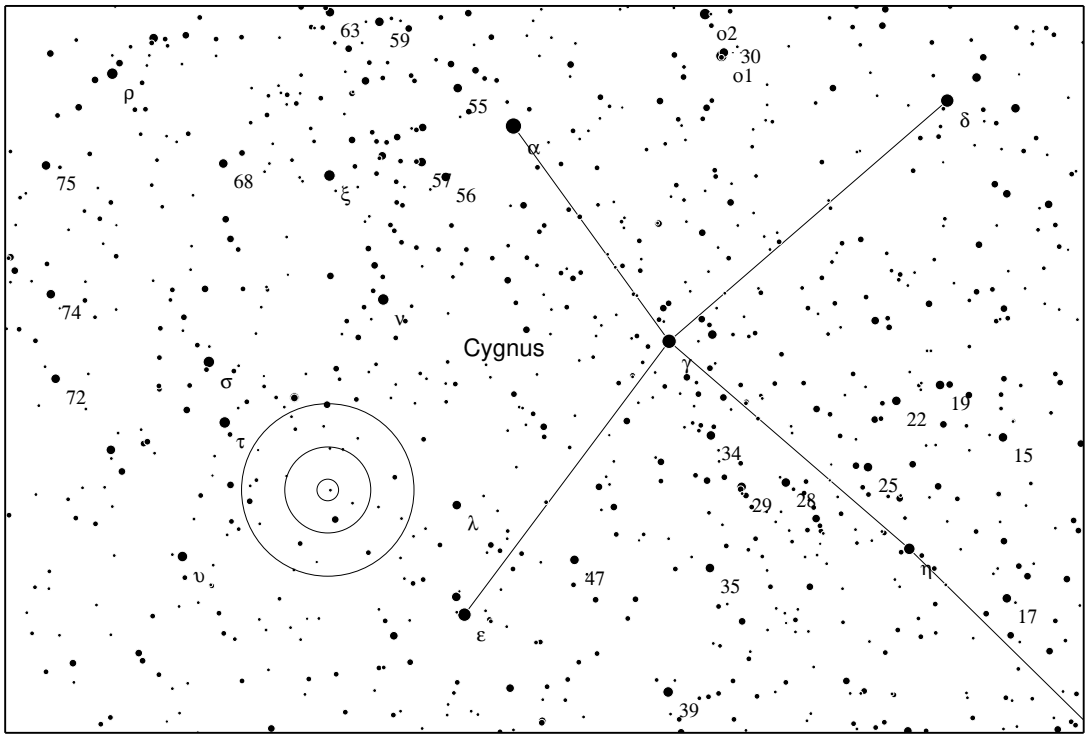
PK 80-6.1 (Egg Nebula) PN



DSS II (blue) - 5.0×5.0'

Constellation	Cyg
Coordinates	21h02m18.27s / +36°41'37.00''
Brightness	13.5 mag
Size	1.0×0.5'



The Egg Nebula is one of the most studied bipolar protoplanetary nebulas with a distance of about 3000 light years. Around the central star are many circular structures. Visually the nebula is a thankful object also for smaller telescopes or brightened skies due to its fairly high surface brightness. At first glance the nebula appeares stellar. I could already see with 4.5 inch aperture an elongation of the nebula with averted vision. To see the bifurcation of the bright extensions you will need large aperture and good conditions. Reiner Vogel was able to see one of the bifurcations to some extent with 22 inch.

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