

# Eridanus Optics CC

March 2006

## Crosses in the Southern Sky

Three crosses can be found within 35° of the Celestial South pole. These are the Southern Cross, False cross and the Diamond cross. Associated with each of these crosses are a variety of spectacular sights for binoculars and small telescopes. Refer to the first map for the locations of these objects.

The Southern Cross has been dealt with in the February newsletter (<http://www.eridanusoptics.com/NL0602a.pdf>), and it may be worth your while to have another look at the Jewel box. The Southern Cross can be seen without optical aid, even from light polluted areas.

The Diamond cross can be found as follows:

- Extend a line from Mimosa (Beta Crux) halfway between Acrux and Epsilon Crux about 15°. Binoculars will reveal about twelve stars of the open cluster IC2602. This cluster is also called the Southern Pleiades and is worth viewing. It is one of the open clusters nearest to earth.

The other three stars that make up the Diamond cross are towards the west of IC2602. All four stars of the Diamond cross can be seen from light polluted areas with the naked eye. NGC2808 is a globular cluster that can be seen unaided from dark sites. This is a difficult object to find from light polluted sites. The following should guide you NGC2808 (see map 2):

- Maplacidus, opposite to IC2602 in the Diamond cross, is surrounded by the four stars marked 'a' to 'd'.
- You will find Alpha Volantis if you extend a line from Maplacidus Northward, halfway through stars 'a' and 'b'.
- NGC2808 is further north and slightly east of Alpha Volantis.

About 5° North of IC2602 is Eta Carinae. This is one of the most impressive nebulas. From dark sites it is visible to the naked eye as a brighter area in the Milky Way, but can be a challenge from light polluted sites. Binoculars will show nebulosity/haziness and a telescope will reveal dust clouds. Eta Carinae can also be found if you extend a line from Mimosa about 15° through Epsilon Crux.

East of Eta Carinae, the open cluster NGC3532 can be found. This should be in the same binocular field of view as Eta Carinae and contains over 60 stars in a 1° field.

The False Cross can be found further West. West of the long axis is the NGC2516 open cluster that looks like a hazy patch to the naked eye from light

polluted areas. Binoculars will show about 30 stars and a telescope may show over 70. North of the False Cross is IC2391. This is easily seen with the naked eye while about 20 stars are visible in binoculars.

This area falls in the Milky Way and is virtually littered with deep sky objects. It is worth exploring further. You can look for the following open and globular clusters:

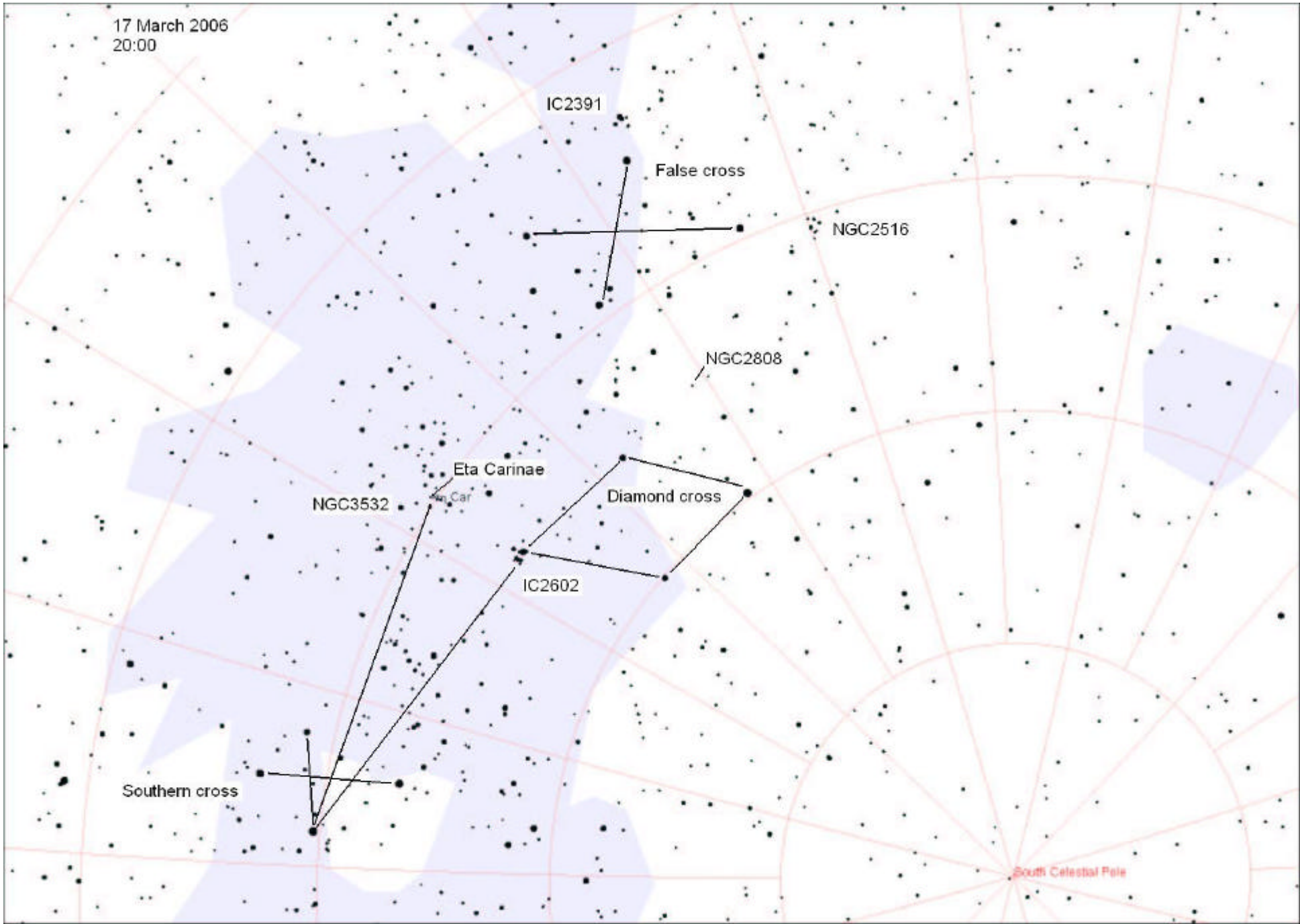
NGC No	Visual mag	Type	Size	Distance (LY)	Age
3766	5.0	Open	17'	5500	
2547	4.0	Open	36'	2000	
2451	3.5	Open	1.7°	850	40 Ma
2477	5.0	Open	28'	4200	700 Ma
3114	4.0	Open	7'	3000	80Ma
3293	4.0	Open	12'	8400	20Ma
3201	6.8	Glob	14'	15000	
4833	6.9	Glob	12'	19000	

Maps extracted from 'Starry Night – Bundle Edition'

Information from:

- Sky Guide – Africa South (published by Astronomical Society of Southern Africa) and
- 'Starry Night – Orion Special Edition'

17 March 2006  
20:00



South Celestial Pole

