

# Astroschool: Star Hopping and Star Charts

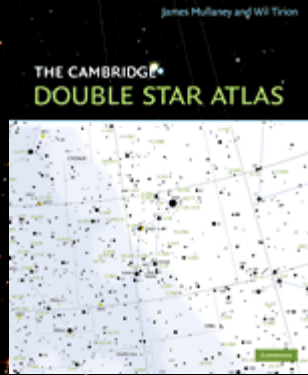


April 17<sup>th</sup>, 2014

# Star hopping and star charts

How do you find stuff in the sky?

Use a map – a star chart



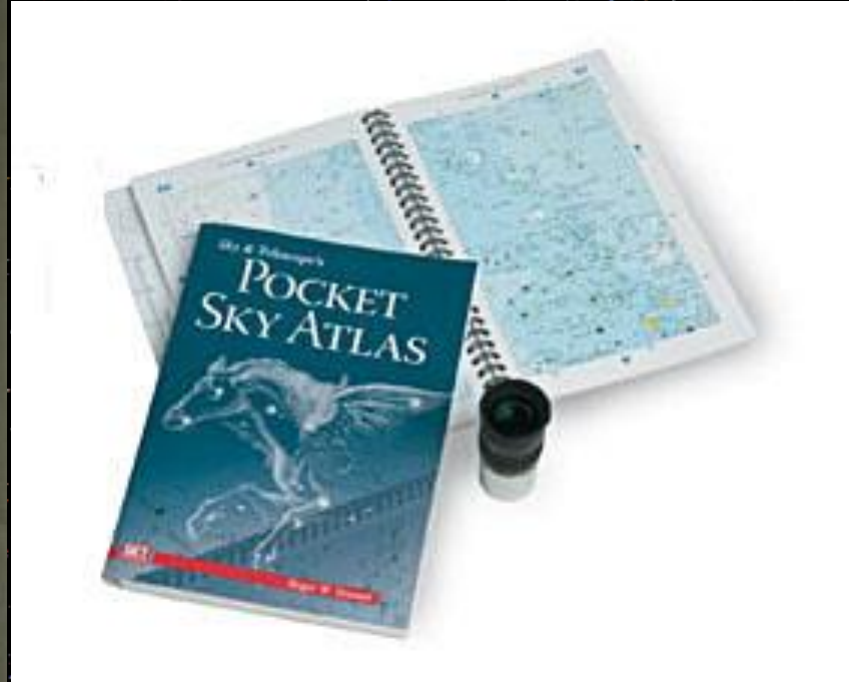
# Star hopping and star charts

Planisphere – the simplest star chart



# Star hopping and star charts

## Paper star charts



# Electronic star charts – planetarium programs

BrightSpringtimeGalaxies [496 Objects, 104 Observed, 149 Highlighted]

**AstroPlanner** © 2002-13 iLanga, Inc. Latitude: 39°18'59" N Longitude: 77°03'14" W GMT Offset: 4 hr (DST) Local Date: 4/17/14 Local Time: 16:22:14 Local Sidereal: 04:57:33 Julian Date: 2,456,765.34877 GMT/UTC: 20:22:14 GMST: 10:05:46

Telescope: 18" dob  
 Telescope not controllable  
Telescope not connected

**SUN & TWILIGHT** Alt: 38.4°  
Set: 7:48 PM Rise: 6:24 AM  
Civil: 8:15 PM Naut: 8:48 PM Astr: 9:22 PM  
Civil: 5:59 AM Naut: 5:25 AM Astr: 4:49 AM

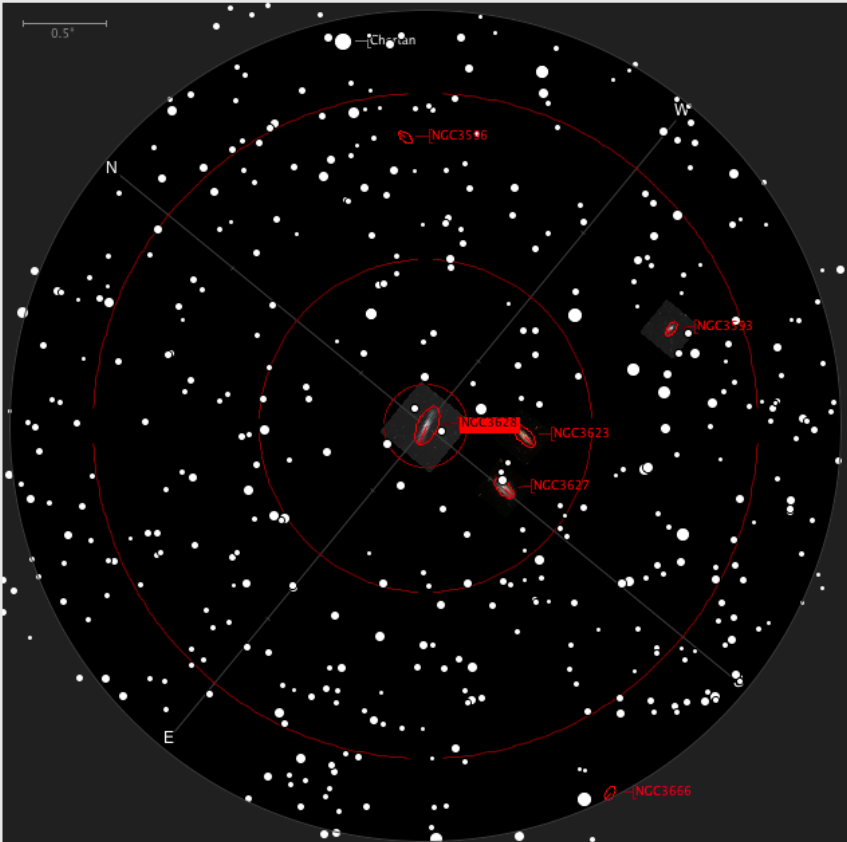
**MOON** Waning  
Next Rise: 10:27 PM  
Next Set: 8:51 AM  
Age: 17.4 d  
Phase: Gibbous  
Illum: 92.6%  
Alt: -64.5°

Site: Carrs Mill  
Date/Time: 4/17/14 Julian: 2456765.3488  
4:22:14 PM  UT  Fix date

Highlight: Custom Default

Objects | Observations | Field of View | Sky

ID: NGC3628 Name: Leo Triplet [3] FoV: 5° RA/Dec: 11h 20m 17s / +13°35'19" Alt/Az: 4.4° / 75.9° Chart/s: 13 Eyepiece FoV: 1.01° Exit Pupil: 4.6 mm



Field Diameter: Fixed 5° Telescope: 18" dob  
Eyepiece/Imager: Televue Ethos 2... Optical Aid: Paracorr  
Spiral Scan... Images Get Scope Auto

Magnitude Limits  
Stars 14.6 DSOs 14.6  
Star labels 5.0 DSO labels 15.0

FoV Rotation 0° Reticle Rotation 0°

Display Options  
 Flip horizontal  
 Flip vertical  
 Other  
 Ignore imager guide sensor  
 Legend  
 Show object notes  
 Reticles/FoVs  
 All binocular FoVs  
 All eyepiece FoVs  
 Binocular FoV  
 Custom reticles  
 Eyepiece FoV  
 Fit imager to FoV aperture  
 Hide eyepiece reticle  
 Imager FoV  
 Rigel QuickFinder  
 Telrad  
 Solar System  
 Show Comets  
 Show Minor Planets  
 Show Moon  
 Show Planets  
 Show Sun

By:  Name  Type  ID  Selected

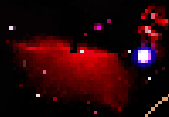
Catalogue Label

- 3rd Cambridge Radio Source
- AAVSO Variable Star Index (VSX)
- Abell Galaxy Cluster
- Abell Planetary Nebulae
- All-Sky Compiled
- Arp Peculiar Galaxy
- Barnard Dark Nebulae
- Bright Star Yes
- Burnham Double Star
- Caldwell
- Carbon Star
- Cederblad Diffuse Nebula
- Collinder
- Extrasolar Planets
- Gum
- Henry Draper
- Herschel 400-II
- Herschel
- Hickson's Compact Galaxy Groups
- Hipparcos Stellar
- IC
- Lynds Bright Nebulae
- Lynds Dark Nebulae
- M31 Globular Cluster
- Melotte Open Cluster
- Messier
- NGC
- Palomar Globular Cluster
- SAC Double Star 4.0
- SAC DSO 8.1
- Sharpless HII Region
- Sky 2000 Stellar
- Stock

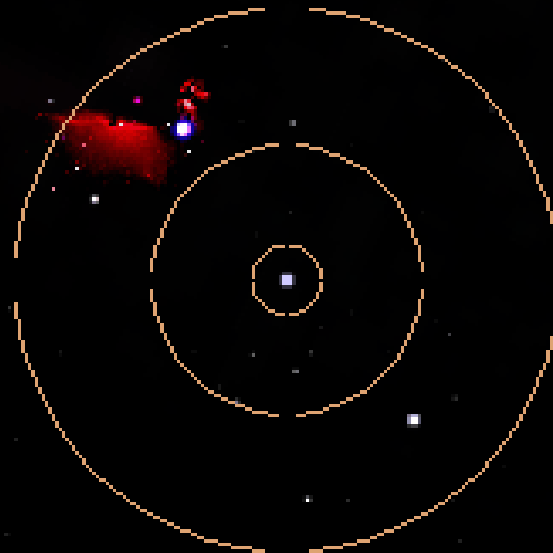
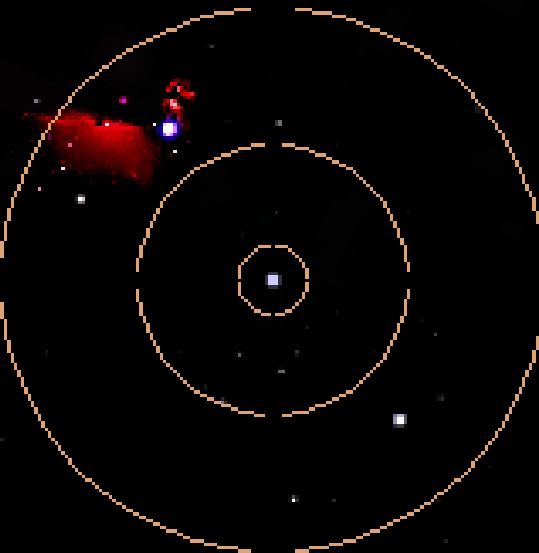
# Unit power finders



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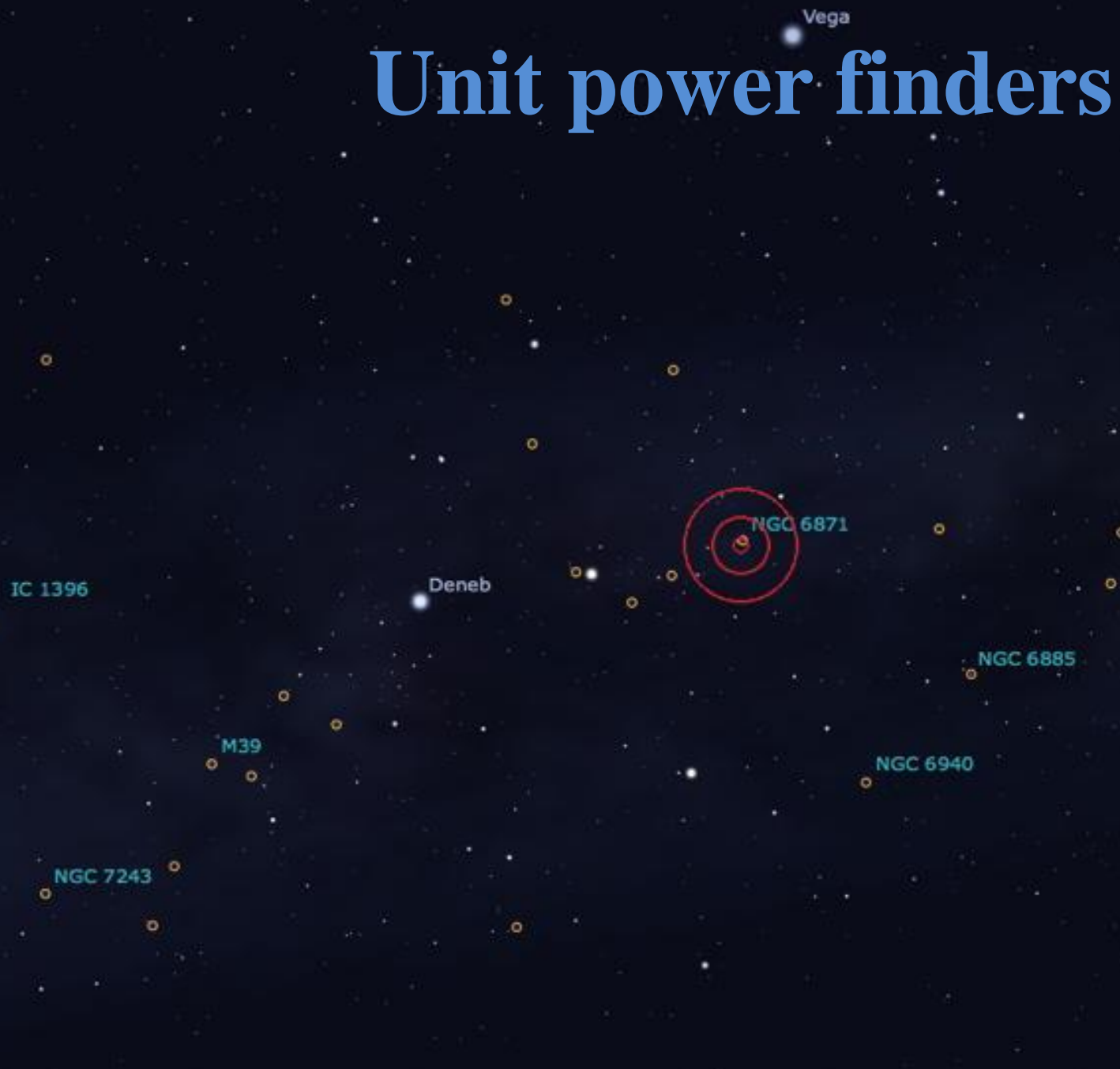


Quikfinder

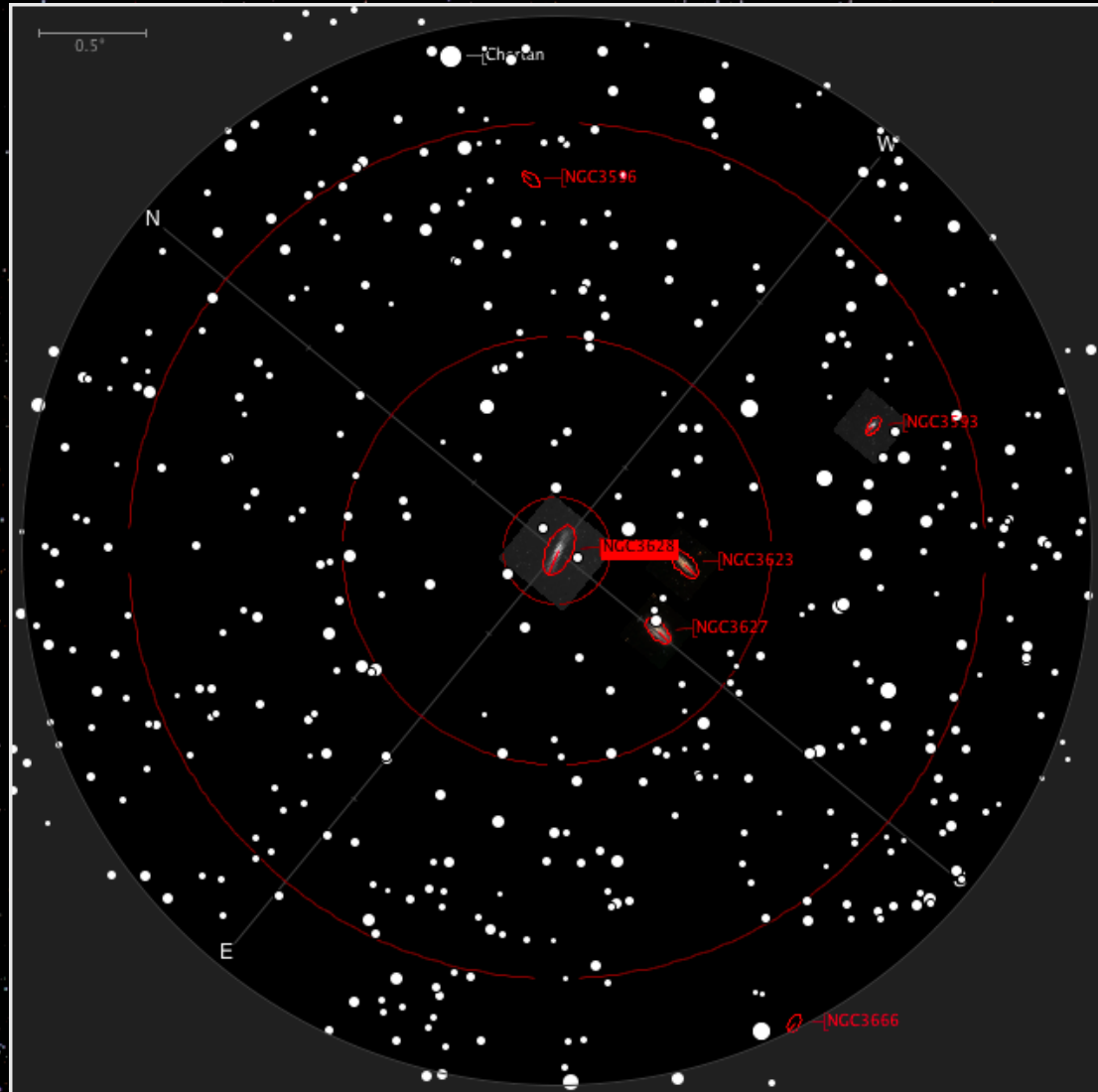


Telrad

# Unit power finders



# Field of view – your distance scale



# Star hopping methods

