

Night Sky Aids

- Planisphere
<https://skyandtelescope.org/astronomy-resources/make-a-star-wheel/>



Night Vision Illumination

- Red light
- Adjustable illumination
- Headlamp
- Dual spectrum



Rob Pettengill

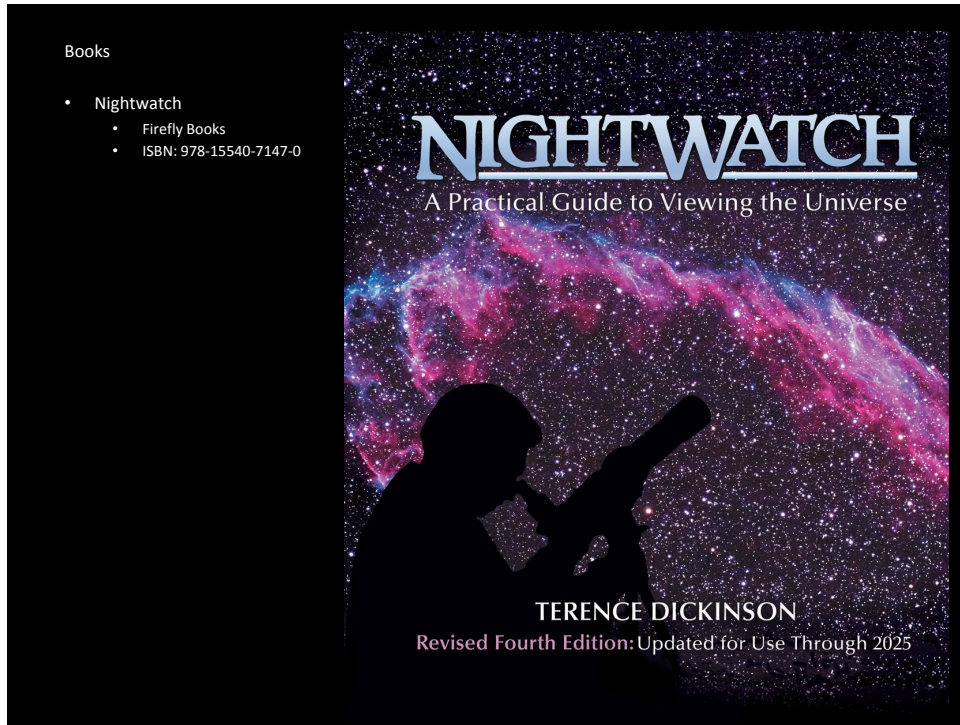
Mosquito Control

- ThermoCELL



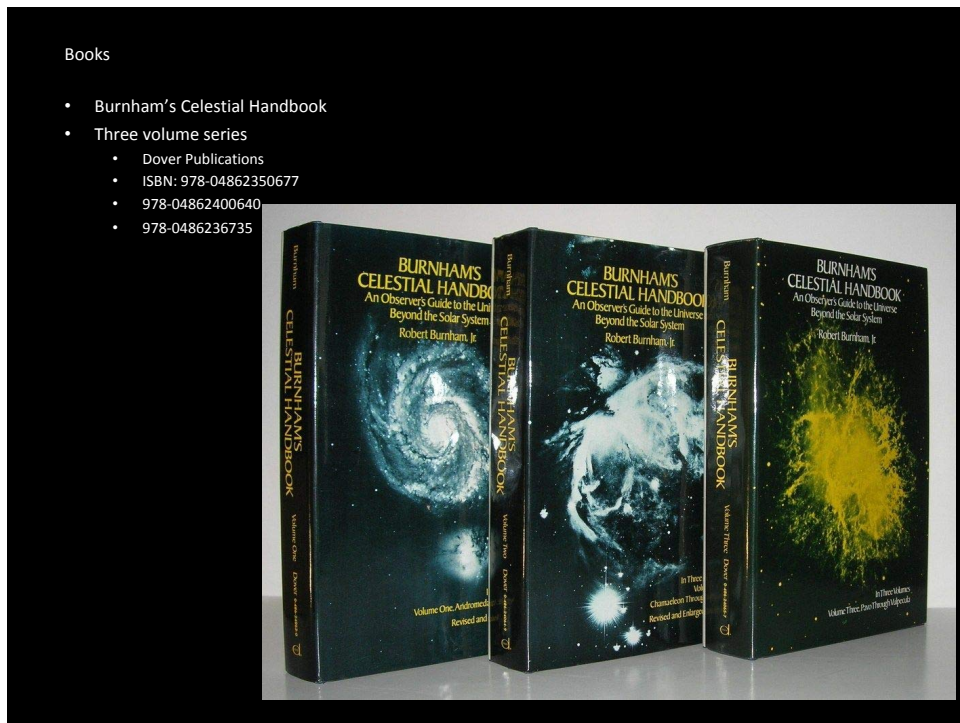
Books

- Nightwatch
 - Firefly Books
 - ISBN: 978-15540-7147-0



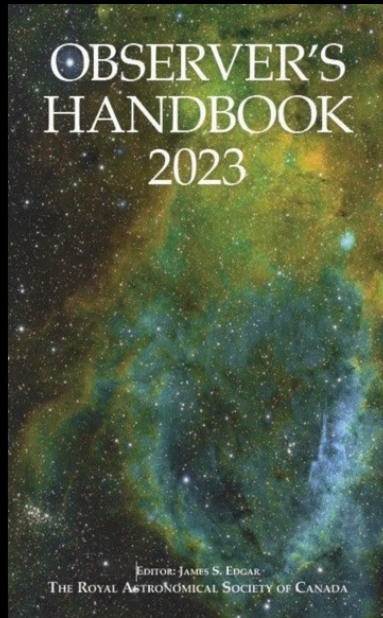
Books

- Burnham's Celestial Handbook
- Three volume series
 - Dover Publications
 - ISBN: 978-04862350677
 - 978-04862400640
 - 978-0486236735



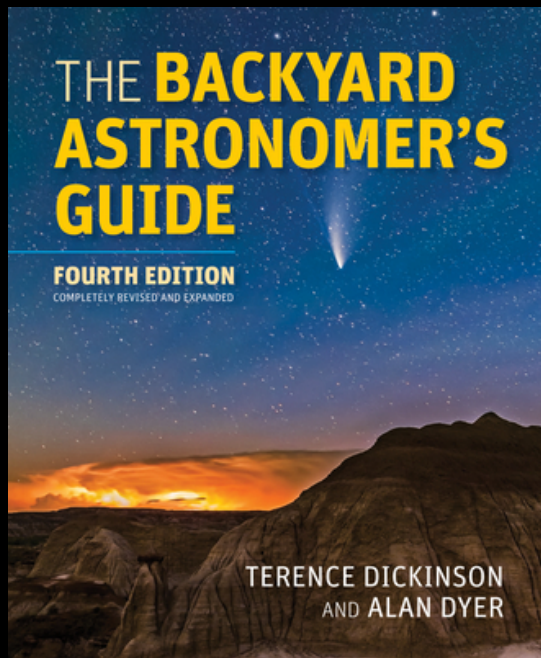
Books

- Royal Astronomical Society of Canada
Observer's Handbook



Books

- The Backyard Astronomer's Guide
 - Firefly Books
 - ISBN: 0-228-810327-4
- September 15, 2021



Books

- Deep Sky Companions
 - Cambridge University Press
- The Messier Objects
 - ISBN: 978-1-107-01837-2
- The Caldwell Objects
 - ISBN: 978-1-107-08397-4
- Hidden Treasures
 - ISBN: 978-0-521-83704-0
- Southern Gems
 - ISBN: 978-1-107-01501-2



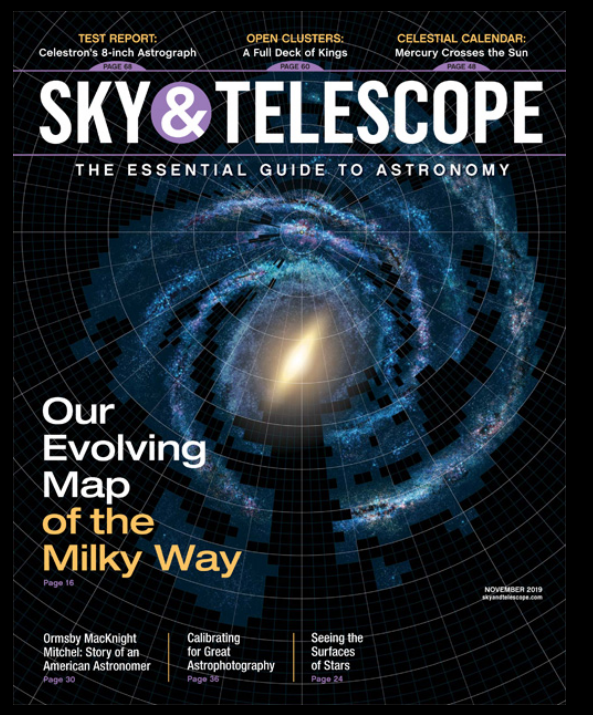
Books

- Turn Left at Orion
 - Cambridge University Press
 - ISBN: 978-0-521-15397-3



Magazines

- Sky & Telescope
- Astronomy
- Astronomy Now
- Sky at Night
- Discover
- Scientific American



Magazine Features

- In depth news stories
- The sky this month
- Centre fold sky map
- Equipment reviews
- Glossy advertisements

The Evening Sky

Your Guide to Star-Finding This Month

DIRECTIONS: Check the dates and times at far right. Go out within an hour or so of the indicated time and hold the map in front of you. Turn it so the edge marked with the direction you're facing (north, southeast, or whatever) is down. The stars above this horizon on the map match the stars you're facing. The map's center is straight overhead. So a star halfway from the edge to the center can be found roughly halfway up the sky.

For example: Turn the map so its northwest horizon is down. About two-thirds of the way from there to the center is the Big Dipper, hanging bowl down. Go outside and look northwest about two-thirds of the way from horizontal to straight up. There it is! (Phases are placed for mid-June.)

Binocular Highlight: The Giant's Keystone

AS ASTRONOMERS go, the Keystone of Hercules is famous all out of proportion to its dimness and unremarkable shape. Its four stars traditionally mark the astronomer's waist and hips; he appears upside down just east of the zenith (center) on our atlas sky map on the facing page. But the Keystone holds some sights not readily apparent to the naked eye. Each of its stars, for instance, takes on a special appearance through binoculars.

Brightest is 2.8-magnitude Zeta (ζ) Herculis forming the Keystone's southwest corner. Zeta is a type-G0 subgiant somewhat larger than the Sun. It appears ever so slightly yellowish to observers with keen color perceptions.

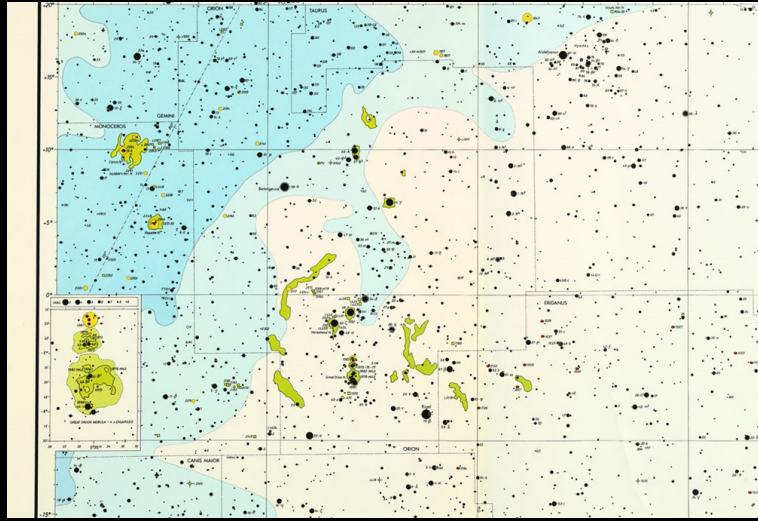
At the southeast corner is Epsilon (ϵ) Herculis, a white, 3.0-magnitude A star — the hottest and faintest of the four. The northeast and northwest corners are Pi (π) and Eta (η), respectively, magnitudes 3.4 and 3.6. Their relatively low temperatures give them type-A spectra and yellowish to golden colors.

As you move from Epsilon to Pi along the eastern side, look slightly in-

Finally, a third of the way from Eta to Zeta along the western edge lies the Keystone's real claim to fame: M13, a magnificent globular cluster. The smallest opera glass shows M13 as a 6th-magnitude patch of light with a brighter core. A 5-inch telescope begins to resolve some of the cluster's 100,000 stars. Larger instruments show it as a cosmic hive surrounded by countless bees, or as a pile of sugar

Sky Charts

- Sky Atlas 2000.0
 - Cambridge University Press
 - ISBN: 0-933346-33-6



Sky Charts

- Uranometria 2000.0
 - Willmann-Bell, Inc
 - ISBN: 0-943396-14-X
 - 0-943396-15-8
- The Deep Sky Field Guide to Uranometria 2000.0
 - ISBN: 0-943396-38-7



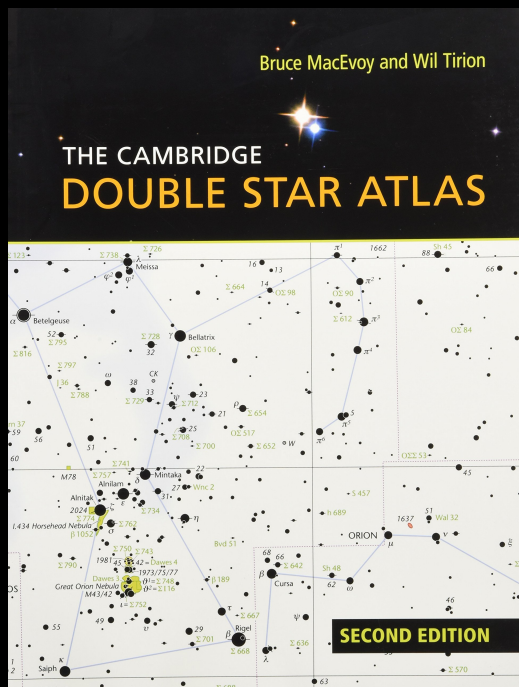
Sky Charts

- The Night Sky Observer's Guide
 - Willmann-Bell, Inc
 - ISBN: 0-943396-58-1
 - 0-943396-60-3



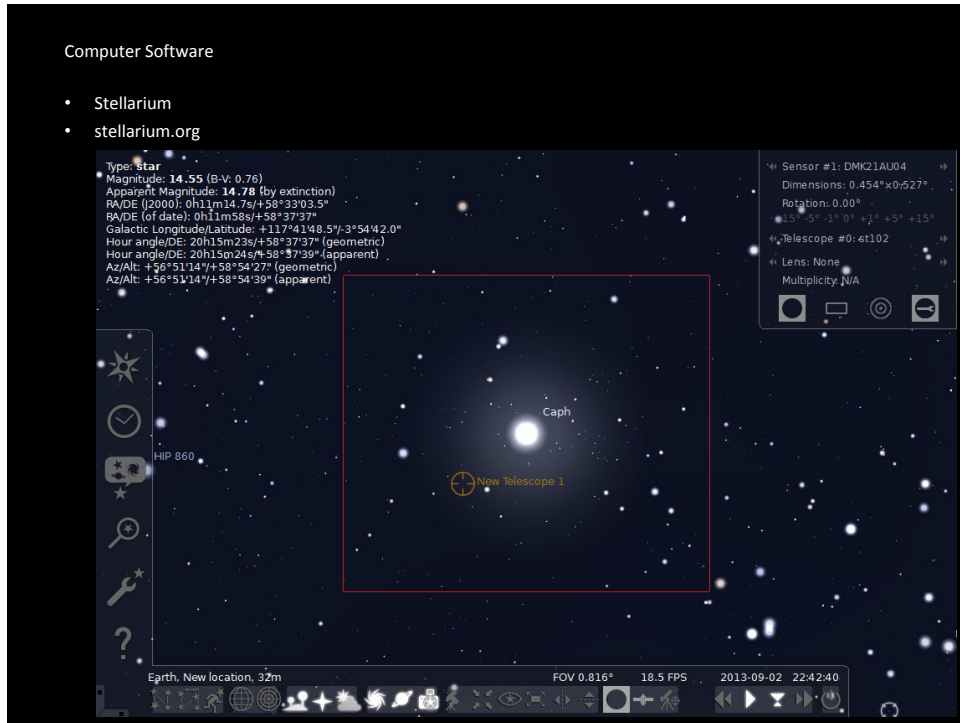
Sky Charts

- Cambridge Double Star Atlas
 - Cambridge University Press
 - ISBN: 978-0-521-49343-7



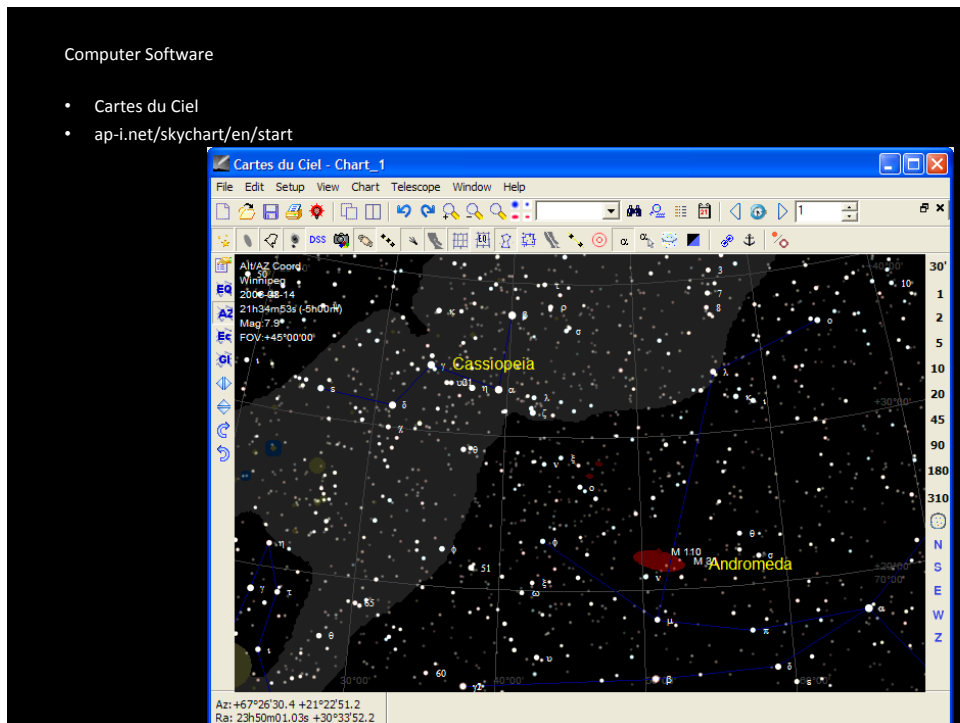
Computer Software

- Stellarium
- stellarium.org



Computer Software

- Cartes du Ciel
- ap-i.net/skychart/en/start



Computer Software

- Virtual Moon Atlas
- ap-i.net/avl/en/start

Information Notes Ephemeris Terminator Tools Setup

ATLAS Find Next

Outline

ATLAS

LUN: AA467404438E
 LUN: REDUCED: 467404438
 Name type: AA
 Type: Crater
 Geological period: Upper Imbrian (From ~3.8 billions years to ~3.2 billions years)

Size:
 Dimension: 88.0x77.0km / 53.0x53.0km
 Height: 3000.0' / 9100.0ft
 Height:Wide ratios 0.0345

Description:
 Forms a remarkable couple with Hercules. Circular formation. Very steep slopes supporting a craterlet to the South. Walls in terraces. Tormented floor. Central mountain. Contains Rima Atlas. Hills and craters.

Observation:
 Interest: Exceptional formation
 Observation period: 4 days after New Moon or 3 days after Full Moon
 Minimal instrument: 50 mm refractor

Position:
 Longitude: 44.10° East
 Latitude: 46.74° North
 Side: Near side
 Quadrant: North-East
 Area: Atlas crater South-East region

Atlas:
 Grid map: 15 Atlas
 Wincandy page: 365
 Hatfield map: 2a / 4 g6
 Revised Atlas: 310x 320x 320x 112x 115x 124x 131x 135x
 Charles Wood article: 18M72
 Lunar Craters: [U624-H2](#) [U624-H3](#) [U629-H2](#) [U629-H3](#) [U637-H1](#) [U637-H2](#)

Longitude: Latitude: Date: 2021-05-20 Time: 20:47:04 FieldOfView: Zoom: 1.0 Level: 1 WMC

Summer Recess
Novice Astronomy Class # 16
Trusted Astronomy Resources on the Net
September 1, 2023

Astronomy on the Web

American Museum of Natural History