

The How & Why of Electronically Assisted Astronomy

By Jim Thompson

What if...



Simulated eyepiece
view of M42

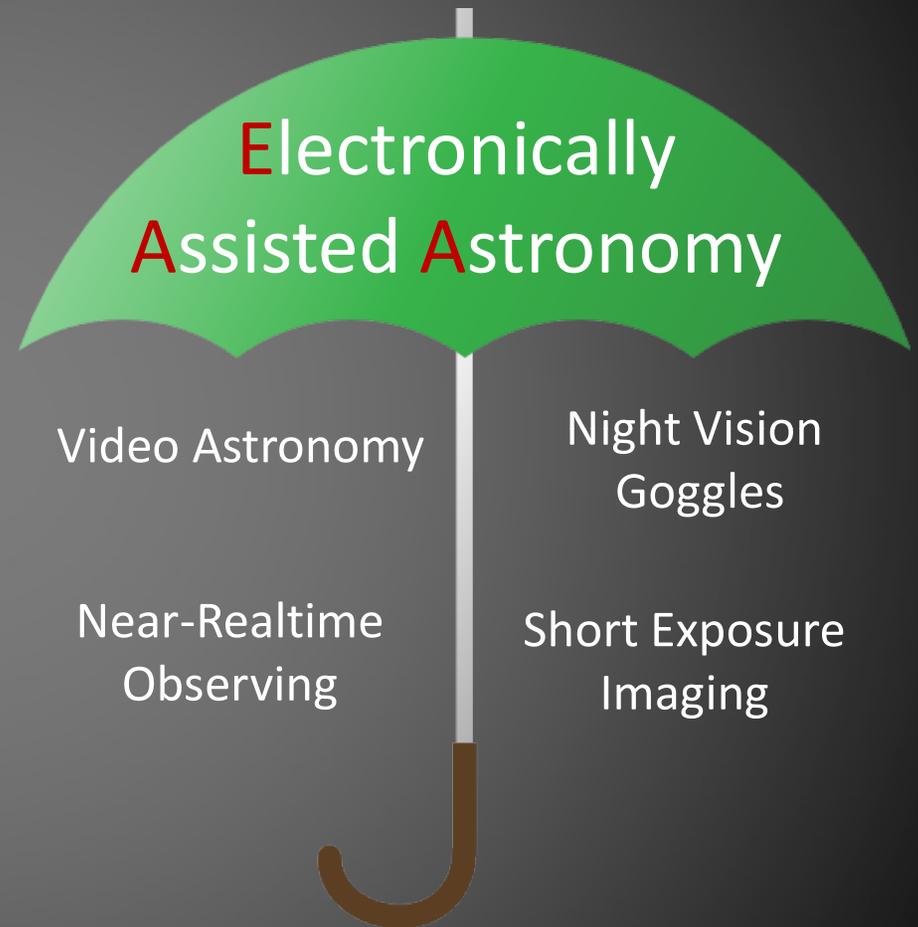
(dark sky, O-III filter)
Made possible using

EAA

Screen capture of live
video astronomy view
(urban sky, O-III/H α
filter)

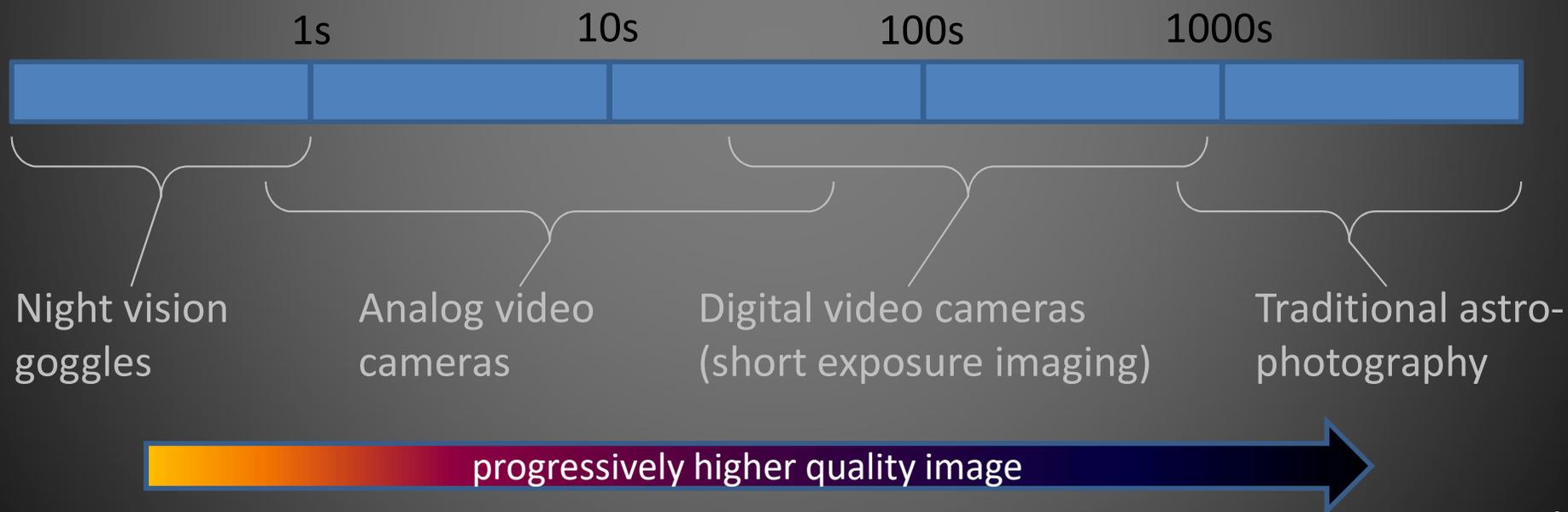
What is EAA?

- Opto-electronic device replaces eye as light gathering device
- Primary objective = observing
- Several technologies available

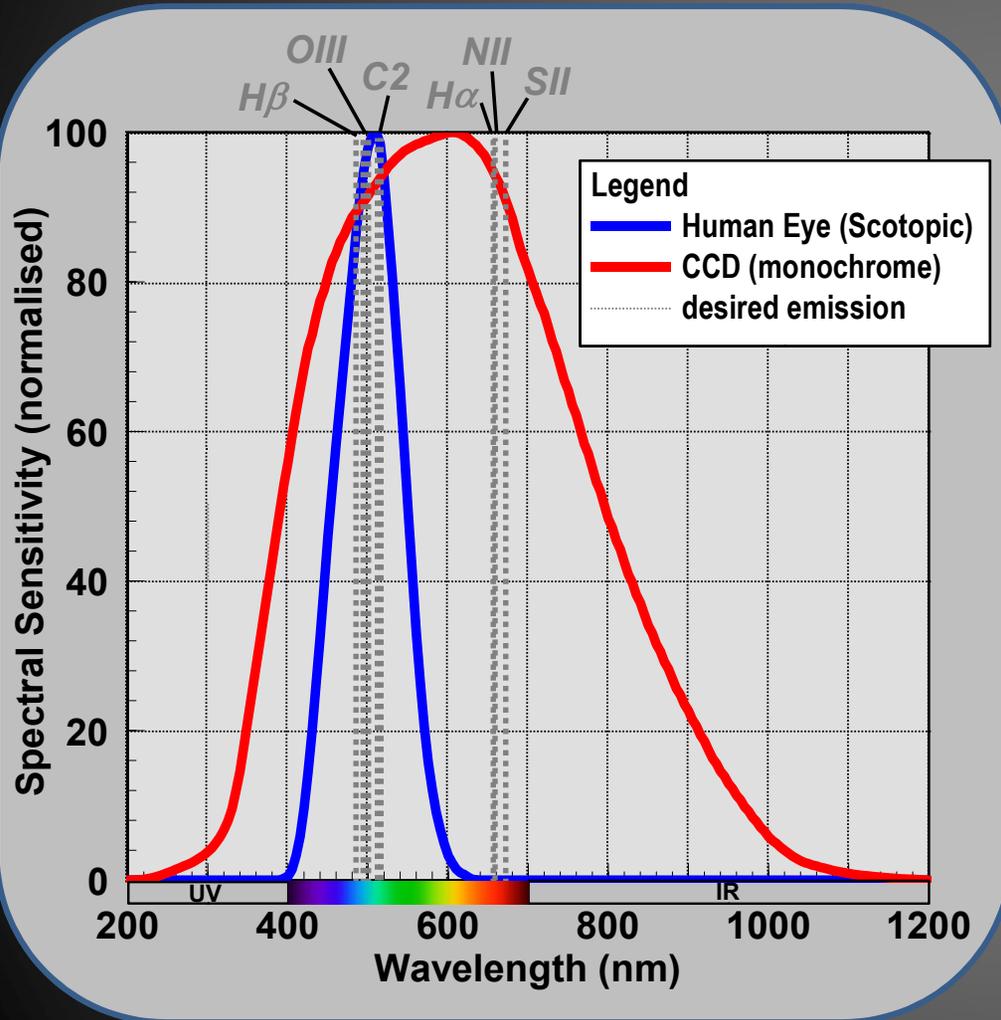


I want it...now

- Technology you use depends on how quickly you want to “see” your object

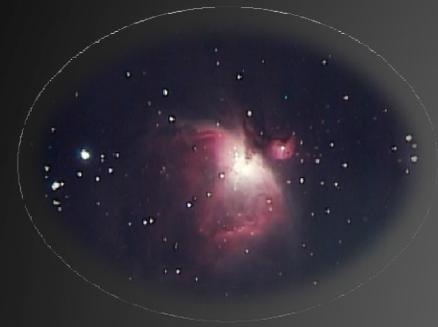


Benefits of EAA



- Wider spectral response
- More sensitive
- Observe in colour
- Filters much more effective
- Many tools available to process and enhance view
- Remote viewing
- Overcome vision problems
- Outreach

Typical EAA Setup



monitor
(analog
video only)



scope



tracking
mount

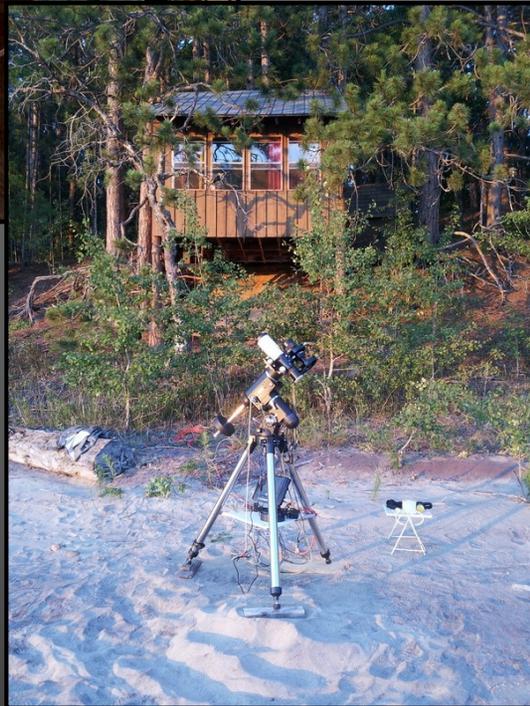
camera
(1.25" or 2"
just like eyepiece)

computer

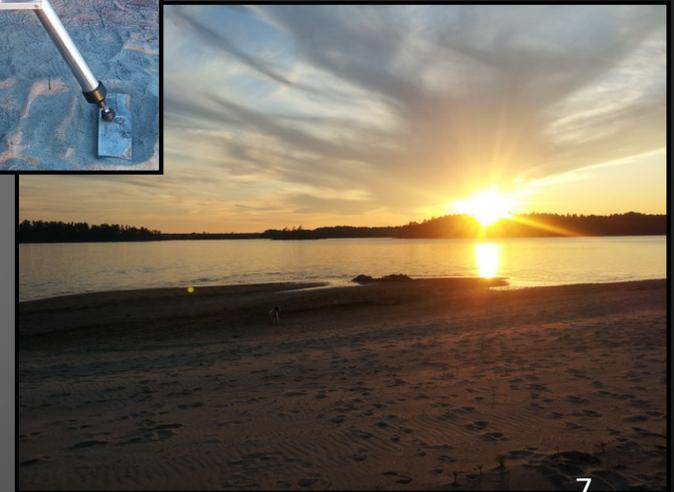


- view/control video
- control mount
- control camera
- mandatory for digital video cameras

Example Setup



July 11th, 2012



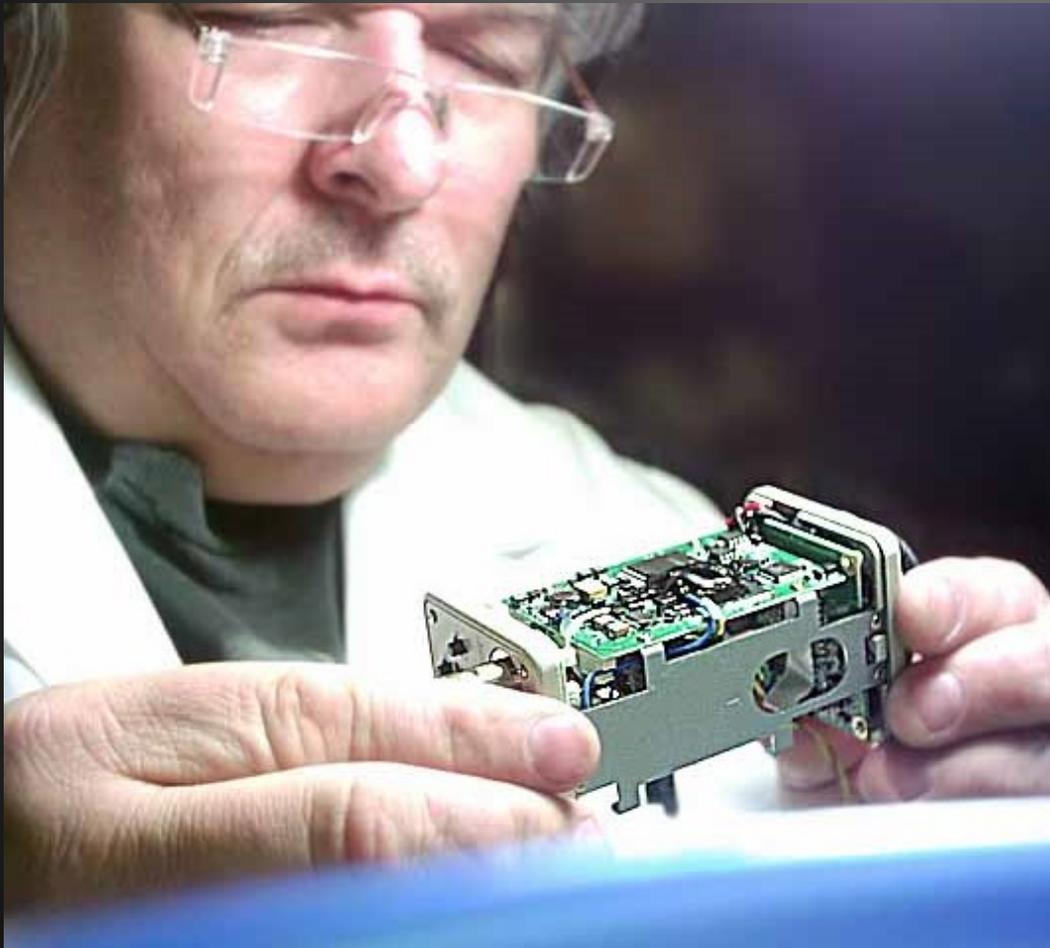
What you need to get started

- Scope
 - Your existing scope is probably OK
- Tracking mount
 - Equatorial best but Alt-AZ is OK too
 - GOTO is handy for remote viewing
- Camera
- Monitor or Computer



\$130 to \$1900

Home Grown Pioneer



- Local amateur astronomer Rock Mallin
 - One of the first to experiment with video astronomy
 - Promoting video astronomy & developing technology since 1995
 - Wide assortment of cameras available under Mallincam brand
- More information available at: www.mallincam.net
- or pay Rock a visit at: Unit 56, 5450 Canotek Road, Ottawa



B33

M3

M42

M46

M51

M63

M64

M65

M66

M78

M81

M82

M94

M95

M96

M97

Pics of objects observed in one 3hr session on March 25th, 2019 from my backyard in Alta-Vista area.

J. Thompson

M104

M105

M106

M108

NGC2244

NGC2359

NGC2392

NGC3412

NGC3489

NGC3628

NGC3718

NGC4038

NGC4449

NGC4490

NGC4618

NGC4631

International Astronomy Day

Saturday, May 11th, 2019

Public Stargazing @ CASM

Public Stargazing @ Chapters Silver City

Call For Volunteers

Come share your love of astronomy with the public!