

ENHANCING YOUR OBSERVING OUTINGS

Mike Hotka

Who Am I?



- ▣ Been an Amateur since 1965
- ▣ 1st Observation for AL Program
 - M57 on the night of 7/12/1986
- ▣ Since that first observation, I have:
 - Completed 64 AL Observing Programs
 - Received 108 AL Certificates
 - Second AL Platinum Master Observer
 - ▣ Sept 2017

How I Choose What to Observe?

- ▣ Set an Intention, then set Goals
- ▣ My Current Intention
 - To Observe New Celestial Objects/Events
- ▣ My Current Goal
 - To Observe 10,000 Unique Celestial Objects/Events
 - ▣ First goal was to observe 5,000 unique objects
 - ▣ 8491 observed so far
 - Complete Mitsky's Double Star List
 - Finish Observing Completed AL programs
 - Choose more AL Observing Programs to do

Database Programs You Can Use

- ▣ Sky Tools 4
- ▣ Skysafari 7 Pro
- ▣ Excel spreadsheet
- ▣ <http://astrotips.com>
 - 45 Observational Log Programs Found
 - Chart Printing Programs

Sky Tools 4 Versions

Skyhound

Innovative Astronomical Software

[Home](#)

[SkyTools 4 Imaging](#)

[SkyTools 4 Visual](#)

[Order](#)

[Support](#)

[Standard Edition](#)

[Real Time Observing](#)

[Pro Edition](#)

[New Features / Upgrade](#)

SkyTools 4 Visual

SkyTools is the premier software for observing. It is not a mere planetarium or a planner, but software designed to aid in every aspect of astronomical observing.

Skyhound

Innovative Astronomical Software

[Home](#)

[SkyTools 4 Imaging](#)

[SkyTools 4 Visual](#)

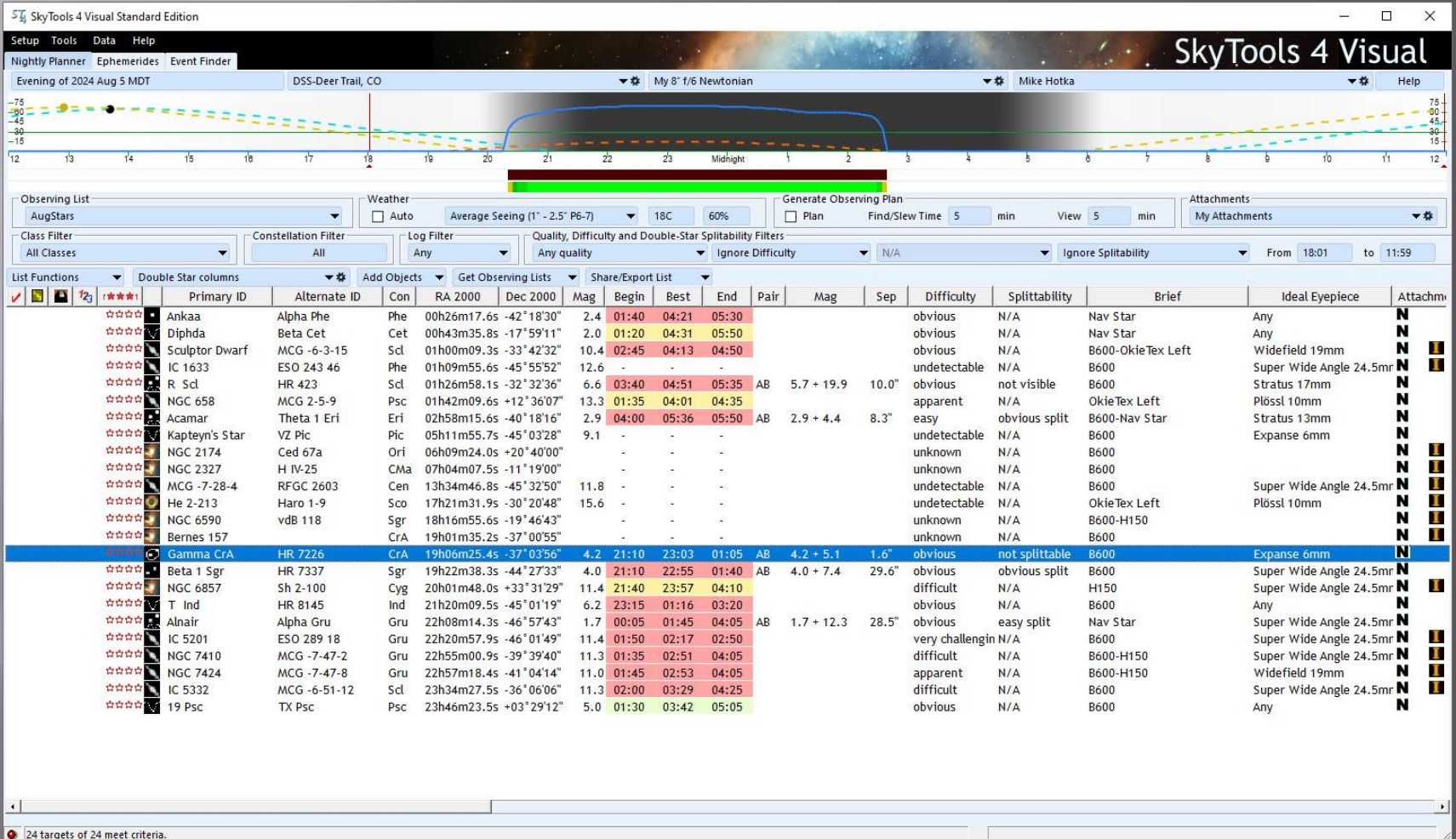
[Order](#)

[Support](#)

SkyTools 4 Imaging

SkyTools 4 will change the way you do imaging

ST4 Main Screen



ST4 Locations

SkyTools 4 Visual Standard Edition

Setup Tools Data Help

Nightly Planner Ephemerides Event Finder

Evening of 2024 Aug 5 MDT DSS-Deer Trail, CO My 8" f/6 Newtonian Mike Hotka Help

Observing Sites

Favorite Locations

- Aubrey, TX
- Keota, CO
- Pawnee Grasslands
- Brian Observatory
- WUTS-Fox Park, WY
- North Sterling Reservoir State
- Camp Happy Jack, WY
- Kim's Place
- Crow Valley Campground
- My Backyard - Broomfield, CO
- Raymer, CO
- Fox Park, WY
- RMNP
- OzSky - Coonabarabran
- Red Feather Lakes, CO
- McDonald Observatory
- Cosmic Campground
- DSS-Deer Trail, CO**

Location Data

Longitude 103°55'45" W

Latitude 39°38'38" N

Elevation 1569 meters

Time Zone MST -7

Standard Time Daylight Saving

Best naked-eye mag. limit 7.2

Set Weather

Obstructed horizon not defined Create

OK Cancel Help

Generate Observing Plan

Plan Find/Slew Time 5 min View 5 min Attachments My Attachments

Difficulty and Double-Star Splitability Filters

quality Ignore Difficulty N/A Ignore Splitability From 18:01 to 11:59

| Mag | Begin | Best | End | Pair | Mag | Sep | Difficulty | Splitability | Brief | Ideal Eyepiece | Attachm |
|------|-------|-------|-------|------|------------|-------|------------------|----------------|-------------------|-------------------------|---------|
| 2.4 | 01:40 | 04:21 | 05:30 | | | | obvious | N/A | Nav Star | Any | N |
| 2.0 | 01:20 | 04:31 | 05:50 | | | | obvious | N/A | Nav Star | Any | N |
| 10.4 | 02:45 | 04:13 | 04:50 | | | | obvious | N/A | B600-OkieTex Left | Widefield 19mm | N |
| 12.6 | - | - | - | | | | undetectable | N/A | B600 | Super Wide Angle 24.5mr | N |
| 6.6 | 03:40 | 04:51 | 05:35 | AB | 5.7 + 19.9 | 10.0" | obvious | not visible | B600 | Stratus 17mm | N |
| 13.3 | 01:35 | 04:01 | 04:35 | | | | apparent | N/A | OkieTex Left | Plössl 10mm | N |
| 2.9 | 04:00 | 05:36 | 05:50 | AB | 2.9 + 4.4 | 8.3" | easy | obvious split | B600-Nav Star | Stratus 13mm | N |
| 9.1 | - | - | - | | | | undetectable | N/A | B600 | Expanse 6mm | N |
| - | - | - | - | | | | unknown | N/A | B600 | | N |
| - | - | - | - | | | | unknown | N/A | B600 | | N |
| 11.8 | - | - | - | | | | undetectable | N/A | B600 | Super Wide Angle 24.5mr | N |
| 15.6 | - | - | - | | | | undetectable | N/A | OkieTex Left | Plössl 10mm | N |
| - | - | - | - | | | | unknown | N/A | B600-H150 | | N |
| - | - | - | - | | | | unknown | N/A | B600 | | N |
| 4.2 | 21:10 | 23:03 | 01:05 | AB | 4.2 + 5.1 | 1.6" | obvious | not splittable | B600 | Expanse 6mm | N |
| 4.0 | 21:10 | 22:55 | 01:40 | AB | 4.0 + 7.4 | 29.6" | obvious | obvious split | B600 | Super Wide Angle 24.5mr | N |
| 11.4 | 21:40 | 23:57 | 04:10 | | | | difficult | N/A | H150 | Super Wide Angle 24.5mr | N |
| 6.2 | 23:15 | 01:16 | 03:20 | | | | obvious | N/A | B600 | Any | N |
| 1.7 | 00:05 | 01:45 | 04:05 | AB | 1.7 + 12.3 | 28.5" | obvious | easy split | Nav Star | Super Wide Angle 24.5mr | N |
| 11.4 | 01:50 | 02:17 | 02:50 | | | | very challenging | N/A | B600 | Super Wide Angle 24.5mr | N |
| 11.3 | 01:35 | 02:51 | 04:05 | | | | difficult | N/A | B600-H150 | Super Wide Angle 24.5mr | N |
| 11.0 | 01:45 | 02:53 | 04:05 | | | | apparent | N/A | B600-H150 | Widefield 19mm | N |
| 11.3 | 02:00 | 03:29 | 04:25 | | | | difficult | N/A | B600 | Super Wide Angle 24.5mr | N |
| 5.0 | 01:30 | 03:42 | 05:05 | | | | obvious | N/A | B600 | Any | N |

ST4 Telescopes/Eyepieces

SkyTools 4 Visual Standard Edition

Setup Tools Data Help

Nightly Planner Ephemerides Event Finder

Evening of 2024 Aug 5 MDT DSS-Deer Trail, CO My 8" f/6 Newtonian Mike Hotka Help

75
60
45
30
15
-15

12 13 14 15 16 17 18 19 20 21 22 23 Midnight 1 2 3 4 5 6 7 8 9 10 11 12

Observing List

AugStars

Class Filter

All Classes

Constellation Filter

All

List Functions

Double Star columns

Add Objects

Primary ID Alternate ID Con

☆☆☆☆ Ankaa Alpha Phe Phe
☆☆☆☆ Diphda Beta Cet Cet
☆☆☆☆ Sculptor Dwarf MCG -6-3-15 Scl
☆☆☆☆ IC 1633 ESO 243 46 Phe
☆☆☆☆ R Scl HR 423 Scl
☆☆☆☆ NGC 658 MCG 2-5-9 Psc
☆☆☆☆ Acamar Theta 1 Eri Eri
☆☆☆☆ Kapteyn's Star VZ Pic Pic
☆☆☆☆ NGC 2174 Ced 67a Ori
☆☆☆☆ NGC 2327 H IV-25 CMa
☆☆☆☆ MCG -7-28-4 RFGC 2603 Cen
☆☆☆☆ He 2-213 Haro 1-9 Sco
☆☆☆☆ NGC 6590 vdB 118 Sgr
☆☆☆☆ Bernes 157 CRa
☆☆☆☆ Gamma CRa HR 7226 CRa
☆☆☆☆ Beta 1 Sgr HR 7337 Sgr
☆☆☆☆ NGC 6857 Sh 2-100 Cyg
☆☆☆☆ T Ind HR 8145 Ind
☆☆☆☆ Alnair Alpha Gru Gru
☆☆☆☆ IC 5201 ESO 289 18 Gru
☆☆☆☆ NGC 7410 MCG -7-47-2 Gru
☆☆☆☆ NGC 7424 MCG -7-47-8 Gru
☆☆☆☆ IC 5332 MCG -6-51-12 Scl
☆☆☆☆ 19 Psc TX Psc Psc

Add/Modify Telescopes

Select a Telescope

16 f/4.5 Newtonian
My 12.5" f/8 Newtonian
24" LTO Newtonian
Obsession 20" f/4
My 8" f/6 Newtonian
6 f/9 Refractor
C14 f/11 Cassegrain
16 f/9 RC
18 f/14.2 Cassegrain

New Delete Save Open Report

Finding Devices

Telrad

Red Dot / Laser
Cross hairs
Bullseye Rings: 4.0° 2.0° 0.5°

Magnifying Finder 1

Explore Scientific 8x50

Magnification x Aperture: 8.0 x 50.0 mm

Orientation Erecting Prism top

Field of View 6.0°

To edit a finder, set it to manual.
Your telescope must have at least one eyepiece assigned.

Select a telescope on the left. The telescope details and the attached finding devices can be edited at any time. Select the eyepieces used with each telescope below.

Telescope Details

My 8" f/6 Newtonian

Telescope Type Newtonian

Aperture (inches) 8.0

Focal Length (inches) 48.0

f/ratio 6.0

Built-in focal changer

Accs. Star Diagonal Erecting Prism
Enable/Disable these in the Eyepiece menu

Mount Dobsonian Alt-Az

Optics A little dirty

Central Obstruction (% diameter) 16

Dobson's Hole Radius (degrees)

Add/Edit Eyepieces Clone

Done Cancel Help

Attachments

My Attachments

Ignore Splittability From 18:01 to 11:59

| | Splittability | Brief | Ideal Eyepiece | Attachm |
|----------------|-------------------|-------------------------|----------------|---------|
| N/A | Nav Star | Any | | N |
| N/A | Nav Star | Any | | N |
| N/A | B600-OkieTex Left | Widefield 19mm | | N |
| ble | B600 | Super Wide Angle 24.5mr | | N |
| not visible | B600 | Stratus 17mm | | N |
| N/A | OkieTex Left | Plössl 10mm | | N |
| obvious split | B600-Nav Star | Stratus 13mm | | N |
| ble | B600 | Expanse 6mm | | N |
| N/A | B600 | | | N |
| N/A | B600 | | | N |
| ble | N/A | Super Wide Angle 24.5mr | | N |
| ble | N/A | OkieTex Left | | N |
| N/A | B600-H150 | Plössl 10mm | | N |
| N/A | B600 | | | N |
| not splittable | B600 | Expanse 6mm | | N |
| obvious split | B600 | Super Wide Angle 24.5mr | | N |
| N/A | H150 | Super Wide Angle 24.5mr | | N |
| N/A | B600 | Any | | N |
| easy split | Nav Star | Super Wide Angle 24.5mr | | N |
| ngin | N/A | B600 | | N |
| N/A | B600-H150 | Super Wide Angle 24.5mr | | N |
| N/A | B600-H150 | Widefield 19mm | | N |
| N/A | B600 | Super Wide Angle 24.5mr | | N |
| N/A | B600 | Any | | N |

ST4 Observing Lists

| Observing List | | Weather | | | | Generate Observing | | | | | |
|----------------------|------|-------------------------------|----------------|---------------------------------|---------------------|--|-------------------------------|-------------------|-------|-------|-------|
| OkieTexCombined_Left | | <input type="checkbox"/> Auto | | Average Seeing (1" - 2.5" P6-7) | 18C | 60% | <input type="checkbox"/> Plan | | | | |
| Class Filter | | Constellation Filter | | Log Filter | | Quality, Difficulty and Double-Star Splitability Filters | | | | | |
| All Classes | | All | | Any | | Any quality | | Ignore Difficulty | | | |
| List Functions | | Default columns | | Add Objects | Get Observing Lists | Share/Export List | | | | | |
| | | | | | | | | | | | |
| | | Primary ID | Alternate ID | Con | RA (Ap) | Dec (Ap) | Mag | Ang. Size | Begin | Best | End |
| | ☆☆☆☆ | NGC 2271 | MCG -4-16-17 | Cma | 06h43m52.7s | -23° 29'57" | 13.2 | 1.8' x 1.3' | 19:30 | 19:36 | 19:45 |
| | ☆☆☆☆ | NGC 2380 (NGC 2382) | NGC 2382 | Cma | 07h24m52.3s | -27° 34'35" | 12.3 | 2.5' x 2.4' | 19:25 | 19:39 | 20:10 |
| | ☆☆☆☆ | NGC 3118 | MCG 6-22-74 | LMi | 10h08m36.1s | +32° 54'40" | 14.3 | 2.1' x 0.5' | 19:35 | 19:42 | 20:00 |
| | ☆☆☆☆ | Palomar 3 | | Sex | 10h06m45.4s | -00° 02'48" | 13.9 | 1.6' | 19:35 | 19:48 | 20:35 |
| | ☆☆☆☆ | Palomar 4 | | Uma | 11h30m33.5s | +28° 50'30" | 14.2 | 1.3' | 19:35 | 19:49 | 20:30 |
| | ☆☆☆☆ | Palomar 5 | | Ser | 15h17m21.1s | -00° 12'08" | 11.8 | 3.2' | 19:35 | 21:56 | 00:10 |
| | ☆☆☆☆ | White Eyed Pea | IC 4593 | Her | 16h12m54.7s | +12° 00'31" | 11.0 | 12" | 19:20 | 22:51 | 02:35 |
| | ☆☆☆☆ | NGC 6166 | MCG 7-34-60 | Her | 16h29m30.3s | +39° 29'55" | 12.9 | 2.1' x 1.5' | 21:15 | 23:08 | 00:35 |
| | ☆☆☆☆ | M 12 | NGC 6218 | Oph | 16h48m31.4s | -01° 59'27" | 6.1 | 16.0' | 19:25 | 23:27 | 03:10 |
| | ☆☆☆☆ | Starfish Galaxy | NGC 6240 | Oph | 16h54m13.9s | +02° 21'37" | 13.8 | 2.2' x 1.0' | 20:35 | 23:33 | 00:25 |
| | ☆☆☆☆ | NGC 6255 | MCG 6-37-14 | Her | 16h55m41.2s | +36° 27'45" | 13.6 | 3.1' x 1.4' | 21:45 | 23:34 | 00:30 |
| | ☆☆☆☆ | He 2-213 | Haro 1-9 | Sco | 17h23m07.3s | -30° 22'19" | 15.6 | 10" | 20:00 | 23:45 | 00:45 |
| | ☆☆☆☆ | Terzan 5 | | Sgr | 17h49m36.6s | -24° 47'21" | 13.9 | 2.4' | 21:35 | 23:45 | 00:10 |
| | ☆☆☆☆ | NGC 6573 | | Sgr | 18h15m10.8s | -22° 06'43" | 10.4 | 1.0' | 23:15 | 23:51 | 00:10 |
| | ☆☆☆☆ | NGC 6760 | | Aql | 19h12m27.9s | +01° 04'18" | 9.0 | 9.6' | 22:15 | 23:52 | 00:45 |
| | ☆☆☆☆ | Abell 70 | PN G038.1-25.4 | Aql | 20h32m52.7s | -07° 00'21" | 14.3 | 44" | 23:00 | 23:53 | 00:25 |
| | ☆☆☆☆ | He 2-360 | PN G003.3-04.6 | Sgr | 18h13m09.4s | -28° 22'19" | 11.0 | 12" | 22:30 | 23:55 | 00:55 |
| | ☆☆☆☆ | Phantom Streak | NGC 6741 | Aql | 19h03m53.7s | -00° 24'52" | 12.0 | 9.0" | 21:25 | 23:59 | 05:45 |
| | ☆☆☆☆ | Red Spider | NGC 6537 | Sgr | 18h06m41.4s | -19° 50'30" | 12.0 | 5.0" | 22:30 | 00:04 | 01:10 |
| | ☆☆☆☆ | Blue Racquetball | NGC 6572 | Oph | 18h13m18.9s | +06° 51'33" | 8.0 | 15" | 20:35 | 00:10 | 05:10 |
| | ☆☆☆☆ | NGC 6764 | MCG 8-35-3 | Cyg | 19h08m54.9s | +50° 58'13" | 12.8 | 2.5' x 1.2' | 00:45 | 01:31 | 02:10 |
| | ☆☆☆☆ | Minkowski's Footprint | M 1-92 | Cyg | 19h37m18.5s | +29° 36'01" | 11.0 | 9.0" | 23:40 | 02:02 | 04:40 |
| | ☆☆☆☆ | Blinking Planetary | NGC 6826 | Cyg | 19h45m29.4s | +50° 34'55" | 8.8 | 27" | 00:30 | 02:21 | 04:05 |
| | ☆☆☆☆ | Saturn Nebula | NGC 7009 | Aqr | 21h05m31.5s | -11° 15'58" | 8.3 | 28" | 22:45 | 03:37 | 07:20 |
| | ☆☆☆☆ | NGC 7177 | MCG 3-56-3 | Peg | 22h01m51.9s | +17° 51'14" | 11.9 | 2.9' x 2.0' | 00:55 | 04:26 | 06:55 |
| | ☆☆☆☆ | NGC 7265 | MCG 6-49-6 | Lac | 22h23m33.2s | +36° 19'49" | 13.3 | 2.5' x 1.8' | 03:15 | 04:59 | 06:40 |
| | ☆☆☆☆ | Helix | NGC 7293 | Aqr | 22h30m59.1s | -20° 42'37" | 6.3 | 16.0' | 23:25 | 05:21 | 07:10 |
| | ☆☆☆☆ | Blue Snowball | NGC 7662 | And | 23h27m04.6s | +42° 39'57" | 8.6 | 17" | 03:55 | 06:05 | 07:15 |
| | ☆☆☆☆ | NGC 7814 | MCG 3-1-20 | Peg | 00h04m30.1s | +16° 16'49" | 11.6 | 4.4' x 1.9' | 03:25 | 06:28 | 07:00 |

Observing List

OkieTexCombined_Left

Weather

☐ Auto

Average Seeing (1" - 2.5" P6-7)

18C

60%

☐ Generate Observing

Plan

F

Class Filter

All Classes

Constellation Filter

All

Log Filter

Unlogged

Quality, Difficulty and Double-Star Splitability Filters

Any quality

Ignore Difficulty

List Functions

Default columns

Add Objects

Get Observing Lists

Share/Export List

✓

📄

📄

123

★★★★

Primary ID

Alternate ID

Con

RA (Ap)

Dec (Ap)

Mag

Ang. Size

Begin

Best

End

☆☆☆☆

📄

NGC 3118

MCG 6-22-74

LMi

10h08m36.1s

+32° 54'40"

14.3

2.1' x 0.5'

19:35

19:42

20:00

O

☆☆☆☆

📄

Palomar 4

UMa

11h30m33.5s

+28° 50'30"

14.2

1.3'

19:35

19:49

20:30

O

☆☆☆☆

📄

He 2-213

Haro 1-9

Sco

17h23m07.3s

-30° 22'19"

15.6

10"

20:00

23:45

00:45

O

☆☆☆☆

📄

Terzan 5

Sgr

17h49m36.6s

-24° 47'21"

13.9

2.4'

21:35

23:45

00:10

☆☆☆☆

📄

NGC 6573

Sgr

18h15m10.8s

-22° 06'43"

10.4

1.0'

23:15

23:51

00:10

☆☆☆☆

📄

Minkowski's Footprint

M 1-92

Cyg

19h37m18.5s

+29° 36'01"

11.0

9.0"

23:40

02:02

04:40

R

☆☆☆☆

📄

NGC 568

MCG -6-4-37

Scl

01h29m03.2s

-35° 35'15"

13.6

2.0' x 1.3'

03:05

06:30

06:55

O

☆☆☆☆

📄

MCG -6-8-2

ESO 357 12

For

03h17m49.9s

-35° 26'54"

14.0

1.7' x 1.4'

04:55

06:30

06:55

O

☆☆☆☆

📄

IC 1762

MCG -6-5-15

For

01h58m52.9s

-33° 07'02"

14.3

1.7' x 0.5'

04:05

06:30

06:55

O

☆☆☆☆

📄

IC 1876

MCG -5-8-13

For

03h05m34.4s

-27° 21'45"

14.4

1.1' x 1.1'

04:55

06:30

06:55

O

☆☆☆☆

📄

IC 1729

MCG -5-5-14

For

01h49m02.6s

-26° 46'03"

13.5

2.2' x 1.3'

03:45

06:30

06:55

O

☆☆☆☆

📄

IC 1728

MCG -6-5-2

For

01h48m49.6s

-33° 28'35"

14.1

1.3' x 0.8'

03:35

06:31

07:00

O

☆☆☆☆

📄

ESO 358 10

PGC 12990

For

03h30m39.9s

-33° 28'15"

14.6

1.7' x 0.9'

05:25

06:31

06:50

O

☆☆☆☆

📄

ESO 357 7

PGC 11856

For

03h11m22.8s

-33° 03'30"

14.7

1.3' x 0.5'

05:00

06:31

06:55

O

☆☆☆☆

📄

IC 1919

MCG -6-8-15

For

03h26m59.9s

-32° 48'21"

13.8

1.7' x 1.1'

05:00

06:31

06:55

O

☆☆☆☆

📄

NGC 1165

MCG -5-8-9

For

02h59m47.7s

-31° 59'55"

13.8

2.3' x 0.5'

04:45

06:31

06:55

O

☆☆☆☆

📄

IC 1898

MCG -4-8-36

Eri

03h11m23.6s

-22° 18'39"

13.6

3.6' x 0.6'

05:20

06:31

06:50

O

☆☆☆☆

📄

MCG -6-9-30

ESO 358 63

For

03h47m14.0s

-34° 51'53"

12.6

4.3' x 1.3'

05:10

06:32

06:55

O

☆☆☆☆

📄

IC 1783

MCG -6-5-37

For

02h11m09.5s

-32° 49'16"

13.2

2.0' x 0.8'

03:50

06:32

07:00

O

☆☆☆☆

📄

NGC 658

MCG 2-5-9

Psc

01h43m27.4s

+12° 43'29"

13.3

1.5' x 0.9'

04:50

06:32

06:55

O

☆☆☆☆

📄

NGC 1650

MCG -3-13-1

Eri

04h46m16.7s

-15° 49'25"

13.6

2.4' x 1.1'

06:15

06:34

06:50

O

☆☆☆☆

📄

Sculptor Dwarf

MCG -6-3-15

Scl

01h01m18.9s

-33° 34'26"

10.4

1.1' x 0.9'

02:35

06:37

07:15

O

☆☆☆☆

📄

IC 1722

MCG -6-4-67

Scl

01h44m08.2s

-34° 03'38"

14.8

1.5' x 0.4'

-

-

-

O

☆☆☆☆

📄

Abell 17

PK 221-4.1

Mon

06h49m46.5s

-09° 34'19"

14.8

54"

-

-

-

O

☆☆☆☆

📄

Einstein's Cross

Q2237+0305A

Peg

22h41m45.2s

+03° 29'08"

18.0

stellar

-

-

-

O

☆☆☆☆

📄

Cygnus A

MCG 7-41-3

Cyg

20h00m20.5s

+40° 47'55"

17.0

32" x 27"

-

-

-

O

ST4 Saved Observing Lists

SkyTools 4 Visual Standard Edition

Setup Tools Data Help

Nightly Planner Ephemerides Event Finder

Evening of 2024 Aug 5 MDT DSS-Deer Trail, CO My 8" f/6 Newtonian Mike Hotka

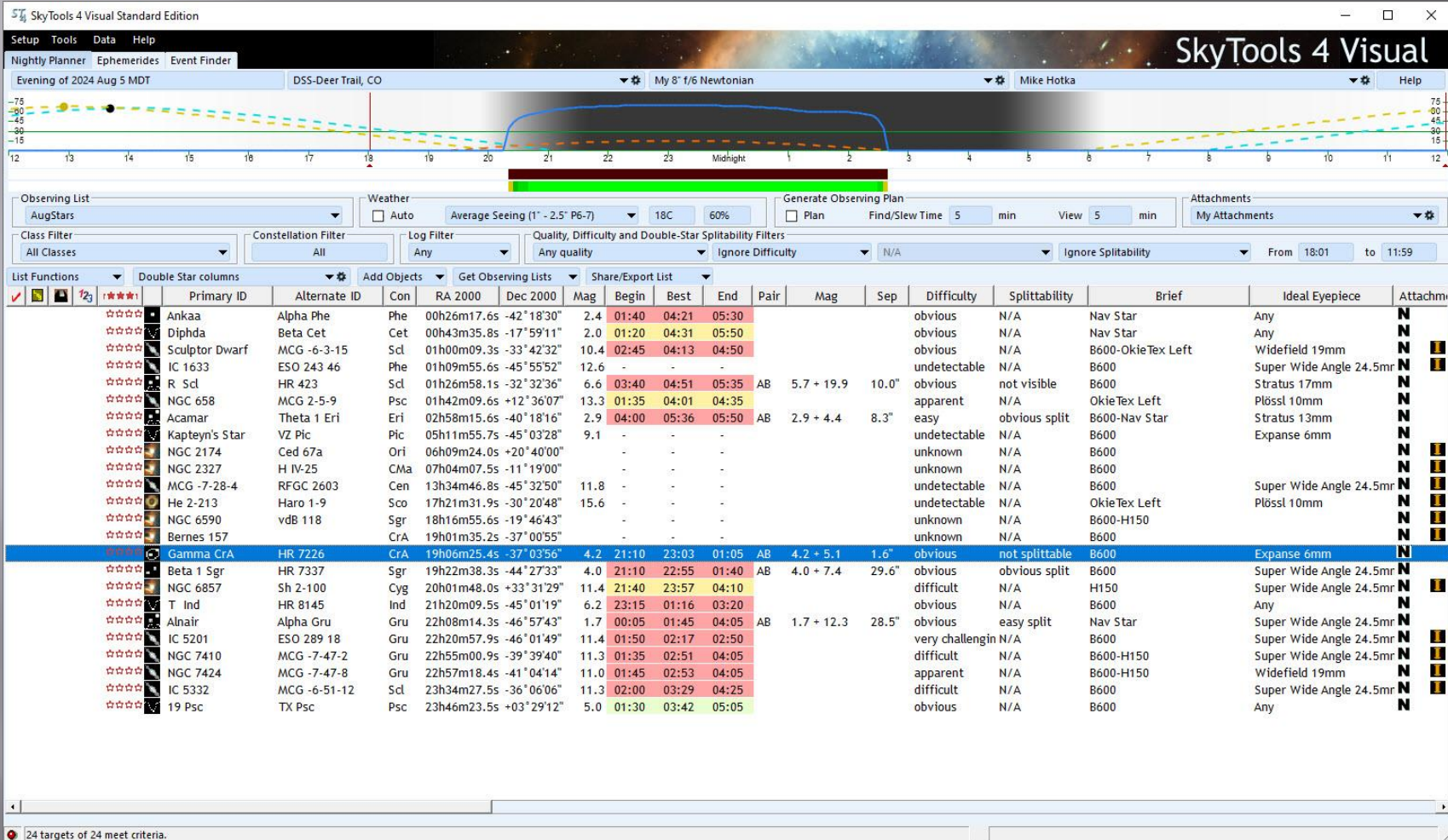
Weather: Auto Average Seeing (1" - 2.5" PG-7) 18C 60% Generate Observing Plan Plan Find/Slew Time 5 min View 5 min Attachments My Attachments

Log Filter Any Quality, Difficulty and Double-Star Splittability Filters Any quality Ignore Difficulty Ignore Splittability From 18:01 to 11:59

Add Objects Get Observing Lists Share/Export List

| Con | RA 2000 | Dec 2000 | Mag | Begin | Best | End | Pair | Mag | Sep | Difficulty | Splittability | Brief | Ideal Eyepiece | Attachm |
|-----|-------------|------------|------|-------|-------|-------|------|------------|-------|-----------------|----------------|-------------------|-------------------------|---------|
| Phe | 00h26m17.6s | -42°18'30" | 2.4 | 01:40 | 04:21 | 05:30 | | | | obvious | N/A | Nav Star | Any | N |
| Cet | 00h43m35.8s | -17°59'11" | 2.0 | 01:20 | 04:31 | 05:50 | | | | obvious | N/A | Nav Star | Any | N |
| Scl | 01h00m09.3s | -33°42'32" | 10.4 | 02:45 | 04:13 | 04:50 | | | | obvious | N/A | B600-OkieTex Left | Widefield 19mm | N |
| Phe | 01h09m55.6s | -45°55'52" | 12.6 | - | - | - | | | | undetectable | N/A | B600 | Super Wide Angle 24.5mr | N |
| Scl | 01h26m58.1s | -32°32'36" | 6.6 | 03:40 | 04:51 | 05:35 | AB | 5.7 + 19.9 | 10.0" | obvious | not visible | B600 | Stratus 17mm | N |
| Psc | 01h42m09.6s | +12°36'07" | 13.3 | 01:35 | 04:01 | 04:35 | | | | apparent | N/A | OkieTex Left | Plössl 10mm | N |
| Eri | 02h58m15.6s | -40°18'16" | 2.9 | 04:00 | 05:36 | 05:50 | AB | 2.9 + 4.4 | 8.3" | easy | obvious split | B600-Nav Star | Stratus 13mm | N |
| Pic | 05h11m55.7s | -45°03'28" | 9.1 | - | - | - | | | | undetectable | N/A | B600 | Expanse 6mm | N |
| Ori | 06h09m24.0s | +20°40'00" | - | - | - | - | | | | unknown | N/A | B600 | | N |
| Cma | 07h04m07.5s | -11°19'00" | - | - | - | - | | | | unknown | N/A | B600 | | N |
| Cen | 13h34m46.8s | -45°32'50" | 11.8 | - | - | - | | | | undetectable | N/A | B600 | Super Wide Angle 24.5mr | N |
| Sco | 17h21m31.9s | -30°20'48" | 15.6 | - | - | - | | | | undetectable | N/A | OkieTex Left | Plössl 10mm | N |
| Sgr | 18h16m55.6s | -19°46'43" | - | - | - | - | | | | unknown | N/A | B600-H150 | | N |
| CrA | 19h01m35.2s | -37°00'55" | - | - | - | - | | | | unknown | N/A | B600 | | N |
| CrA | 19h06m25.4s | -37°03'56" | 4.2 | 21:10 | 23:03 | 01:05 | AB | 4.2 + 5.1 | 1.6" | obvious | not splittable | B600 | Expanse 6mm | N |
| Sgr | 19h22m38.3s | -44°27'33" | 4.0 | 21:10 | 22:55 | 01:40 | AB | 4.0 + 7.4 | 29.6" | obvious | obvious split | B600 | Super Wide Angle 24.5mr | N |
| Cyg | 20h01m48.0s | +33°31'29" | 11.4 | 21:40 | 23:57 | 04:10 | | | | difficult | N/A | H150 | Super Wide Angle 24.5mr | N |
| Ind | 21h20m09.5s | -45°01'19" | 6.2 | 23:15 | 01:16 | 03:20 | | | | obvious | N/A | B600 | Any | N |
| Gru | 22h08m14.3s | -46°57'43" | 1.7 | 00:05 | 01:45 | 04:05 | AB | 1.7 + 12.3 | 28.5" | obvious | easy split | Nav Star | Super Wide Angle 24.5mr | N |
| Gru | 22h20m57.9s | -46°01'49" | 11.4 | 01:50 | 02:17 | 02:50 | | | | very challengin | N/A | B600 | Super Wide Angle 24.5mr | N |
| Gru | 22h55m00.9s | -39°39'40" | 11.3 | 01:35 | 02:51 | 04:05 | | | | difficult | N/A | B600-H150 | Super Wide Angle 24.5mr | N |
| Gru | 22h57m18.4s | -41°04'14" | 11.0 | 01:45 | 02:53 | 04:05 | | | | apparent | N/A | B600-H150 | Widefield 19mm | N |
| Scl | 23h34m27.5s | -36°06'06" | 11.3 | 02:00 | 03:29 | 04:25 | | | | difficult | N/A | B600 | Super Wide Angle 24.5mr | N |
| Psc | 23h46m23.5s | +03°29'12" | 5.0 | 01:30 | 03:42 | 05:05 | | | | obvious | N/A | B600 | Any | N |

24 targets of 24 meet criteria.



Skysafari 7 Pro




Search For An Object


Search


×


🔍 Enter Object Name


COMMON OBJECT LISTS


 History >


 Tonight's Best >


 Sun & Planets >


 Moons >


 Current Satellites >


 Brightest Asteroids >

 Brightest Comets >

 Brightest Stars >

 Nearest Stars >

 Named Stars >



 Best Double Stars >

III

□

<



Objects Found: 4  

Make Into Observing List



Needle Galaxy - NGC 4565
Mag 9.1 Spiral Galaxy in Coma
Rises 10:57:52 Sets 02:18:02



NGC 4565A
Mag 14.4 Spiral Galaxy in Coma
Rises 10:57:44 Sets 02:16:38



NGC 4565B
Mag 15.1 Spiral Galaxy in Coma
Rises 10:56:09 Sets 02:18:28



NGC 4565C
Mag 16.4 Spiral Galaxy in Coma
Rises 10:55:51 Sets 02:18:45



Sat Jul 06, 2024 20:47:35 Current Location

W 253° 22' 23.8" Alt +59° 10' 42.5" 1.2° x 2.6°

Needle Galaxy ⓘ

HD 109415

HD 109214

HD 109030

Menu Search Selectio Time Tonight Obs

Sat Jul 06, 2024 20:47:35 Current Location

W 254° 44' 29.0" Alt +58° 34' 05.2" 2.8° x 6.0°

HD 109012

HR 4750 16 Com
17 Com

HD 108486

13 Com

HD 108449 ⓘ

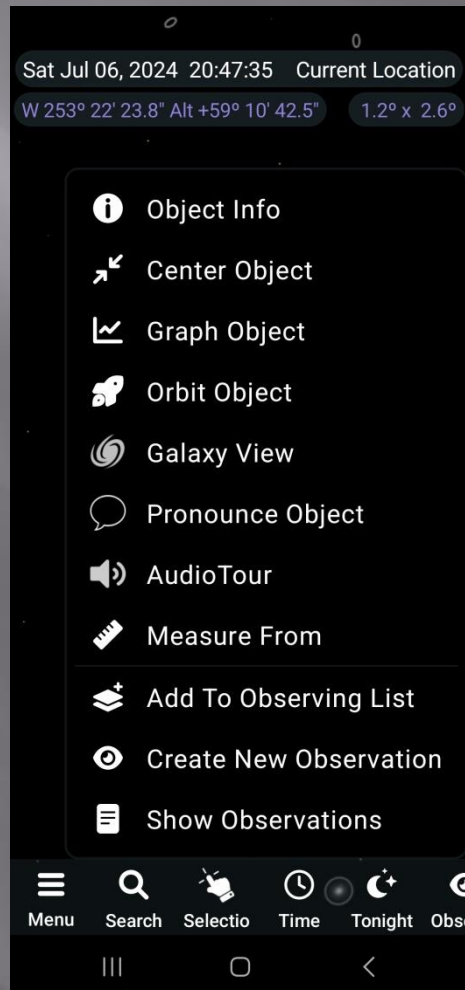
HR 4719
HD 107935

12 Com

Menu Search Selectio Time Tonight Obs

HD 107854
HR 4719
HD 107469 KU Com <

Create New Observation



NGC 4565 - Needle Galaxy X

COMMENTS

TIME, SESSION & LIST

Started At:

Sat Jul 06,
2024 20:47:35

Ended At:

Sat Jul 06,
2024 20:47:35

Session:

Untitled
Session



Observing List:

None



OBSERVING CONDITIONS

Seeing:

Undefined.



Excel Spreadsheet

| | | Con | RA | Dec | Name | Other Name | Mitsky Double | Bino DS | Adv DS | AL DS | Mul Stars | Her 500 | Description |
|------------|-------|-----|----------|------------|---------------|-----------------|---------------|---------|--------|-------|-----------|---------|---|
| Date | Time | | | | | | | | | | | | |
| | | Vul | 19:26:30 | +27d19m00s | STF 2525 | | | | | | | | "Mags 7.5/7.5 Sep 1.6 PA 294 Spect F9" |
| 11/9/2023 | 17:40 | Vul | 19:26:48 | +21d09m00s | STF 2523 | (H III 57) | Y | | | | | Y | "Mags 7.5/7.5 Sep 6.4 PA 149 Spect B8" |
| 8/23/2011 | 22:34 | Vul | 19:28:42 | +24d40m00s | α (6) & 8 Vul | | | Y | | | | | "Mags 4.6/5.9 Sep 427 PA 28" |
| 12/21/2023 | 17:19 | Vul | 19:33:18 | +20d24m00s | STF 2540 | Struve 2540 | Y | | | | | | "Mags 7.5/9 Sep 5.1 PA 147 Spect A3" |
| | | Vul | 19:36:30 | +24d59m00s | STF 2548 | | | | | | | | "Mags 8.5/9.5 Sep 9.2 PA 100 Spect B9" |
| | | Vul | 19:37:18 | +22d48m00s | STF 2551 | | | | | | | | "Mags 9.5/9.5 Sep 6.7 PA 42 Spect G0" |
| | | Vul | 19:40:36 | +23d43m00s | STF 2560 | | | | | | | | "Mags 6.5/8.5 Sep 15.3 PA 295 Spect B3 Carbon Star SAO 87555 close" |
| | | Vul | 19:48:24 | +22d11m00s | STF 2584 | | | | | | | | "Mags 8.5/8.5 Sep 1.9 PA 295 Spect F5 Very dim planetary Nebula PA 170" |
| 12/21/2023 | 17:29 | Vul | 19:48:36 | +24d57m00s | STF 2586 | Struve 2586 | Y | | | | | | "Mags 7.5/10 Sep 3.7 PA 227 Spect B9" |
| 12/21/2023 | 17:08 | Vul | 19:52:18 | +25d51m00s | STT 388 | Otto Struve 388 | Y | | | | | | "Mags 8/8 Sep 3.7 PA 139 Spect A0" |
| 11/6/2023 | 17:42 | Vul | 19:53:24 | +20d19m00s | SAO 87876 | | | | | | | | "Mags 7/7.5 Sep 42.2 PA 147 Spect A0" |
| 11/6/2023 | 17:42 | Vul | 19:53:24 | +24d04m00s | 13 VULPECULAE | | | | | | | | "Mags 5.5/6 Sep 0.8 PA 115 Spect F5" |
| | | Vul | 20:00:06 | +25d57m0s | | h1462 | Y | | | | | | Mag: 7.6,9.9 PA: 24 Sep: 37.2" |
| | | Vul | 20:13:36 | +24d14m00s | STF 2653 | Struve 2653 | Y | | | | | | "Mags 7/10 Sep 2.5 PA 270 Spect A" |
| 12/21/2023 | 17:12 | Vul | 20:14:06 | +22d13m00s | STF 2655 | Struve 2655 | Y | | | | | | "Mags 7.5/7.5 Sep 6.2 PA 3 Spect A0" |
| | | Vul | 20:14:30 | +24d50m00s | STT 402 | | | | | | | | "Mags 7/10.5 Sep 15.4 PA 33 Spect B9" |
| | | Vul | 20:15:18 | +25d35m00s | BU 983 | | | | | | | | "Mags 6/10 Sep 0.7 PA 166 Spect B3" |
| | | Vul | 20:17:30 | +29d08m00s | BU 441 | Burnham 441 | Y | | | | | | "COLOR Mags 7/11.5 Sep 5.9 PA 64 Spect K0 Carbon Star SAO 88492 in field" |
| | | Vul | 20:18:18 | +25d38m00s | BU 985 | | | | | | | | "Mags 7/9.5 Sep 21.6 PA 356 Spect B3" |
| | | Vul | 20:24:12 | +28d59m00s | BU 443 | | | | | | | | "Mags 7.5/11.5 Sep 14 PA 138 Spect A5" |
| | | Vul | 20:31:54 | +25d48m00s | STF 2695 | | | | | | | | "Mags 6.5/8.5 Sep 0.8 PA 87 Spect A2/G" |
| | | Vul | 20:33:48 | +28d07m00s | STF 2698 | | | | | | | | "Mags 8/9 Sep 4.4 PA 302 Spect A0 On the edge of NGC 6940" |
| | | Vul | 20:44:30 | +23d55m00s | STF 2724 | | | | | | | | "Mags 8/8 Sep 2.4 PA 329 Spect G0" |
| | | Vul | 21:07:24 | +24d29m00s | STF 2761 | | | | | | | | "Mags 8.5/9 Sep 5.6 PA 111 Spect A2" |
| 12/11/2014 | 18:57 | Vul | 21:10:36 | +22d27m00s | STF 2769 | Struve 2769 | Y | | Y | | | | "Mags 6.5/7.5 Sep 17.9 PA 300 Spect A0" |
| | | Vul | 21:11:54 | +24d09m00s | STT 430 | | | | | | | | "Mags 8/10 Sep 1.3 PA 205 Spect F8" |
| | | Vul | 21:24:06 | +25d18m00s | BU 447 | | | | | | | | "Mags 6.5/11 Sep 9.3 PA 320 Spect A2" |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

Bambury 600 Observing Program

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N |
|----|------|-------------|-------------|------------------------------|------|-----|------|------------|-------|-------------|---------------------|-----------|--------------|--|
| 1 | ID # | Target Name | Other Names | Common Name | Type | Con | Vmag | Date | Time | Location | Equipment | Seeing | Transparency | Observed Data |
| 2 | | | | | | | | | | | | | | Description |
| 3 | | | | | | | | | | | | | | |
| 4 | 1 | NGC 7814 | | Electric Arc Galaxy | Gal | PEG | 11.0 | 8/11/2002 | 0:56 | WUTS | 12.5" f/8 Newtonian | Good | Good | 134x - Elongated oval. Large, uniformly lit nucleus dims quickly into halo. |
| 5 | 2 | NGC 55 | D 507 | String of Pearls | Gal | SCL | 7.8 | 10/27/2008 | 22:40 | DAS Site | 12.5" f/8 Newtonian | Great | Good | 134x - Large, dim, tilted oval. Large, uniformly lit core area surrounded by very dim halo. Goes from 8:30 to 2:30 o'clock in FOV. Approx 1 FOV long. Nice. Very low in south. |
| 6 | 4 | NGC 104 | D 18 | 47 Tucanae | GC | TUC | 4.0 | 4/2/2016 | 20:12 | OzSky | 18" f/4.5 Newtonian | Very Good | Very Good | 187x - Nice. Fills FOV. Tight, bright core and rest of stars not so tight. Stars radiate out from core and circular in shape. Has become my favorite globular. 20 degrees high. |
| 7 | 5 | NGC 134 | | | Gal | HYA | 10.3 | 10/27/2008 | 22:29 | DAS Site | 12.5" f/8 Newtonian | Good | Good | 134x - Nice edge on. Nice central bulge that tapers into thin arms. Small. Looks like a dust lane bisects it just below center. Faint field star below it. Goes from 10 to 4 o'clock in FOV. |
| 8 | 6 | HR 126 | Lac 119 | Beta Tucanae | MS | TUC | 4.4 | 4/3/2016 | 18:55 | OzSky | 18" f/4.5 Newtonian | Fair | Fair | 137x - Left star brighter and yellow orange. Right star 1/2 as bright and bluish in color. Just above trees and very mucky there. They are a bit apart from each other. |
| 9 | 7 | NGC 157 | | | Gal | CET | 10.4 | 9/30/2002 | 23:38 | Okie-Tex SP | 12.5" f/8 Newtonian | OK | OK | 134x - Faint elongated oval w/bright field star on right side. Uniformly lit w/maybe a hair brighter nucleus. |
| 10 | 9 | M 110 | NGC 205 | Andromeda Galaxy Companion | Gal | AND | 8.2 | 12/21/1987 | 19:50 | TAS Site | 12.5" f/8 Newtonian | Good | Good | 127x - Bright little fuzzy elliptical. It is away from M31 but still near. |
| 11 | 11 | M 32 | NGC 221 | Andromeda Galaxy Companion | Gal | AND | 8.3 | 11/29/1986 | 18:35 | TAS Site | 12.5" f/8 Newtonian | Good | Good | 127x - Bright nucleus. Slamm surrounding nebulosity. |
| 12 | 10 | M 31 | NGC 224 | Andromeda Galaxy | Gal | AND | 3.6 | 11/29/1986 | 18:30 | TAS Site | 12.5" f/8 Newtonian | Good | Good | 127x - Very diffused. Fills approx. half the FOV. |
| 13 | 12 | NGC 246 | | Pac Man Nebula | PN | CET | 10.9 | 10/5/1999 | 22:50 | Okie-Tex SP | 12.5" f/8 Newtonian | Good | Good | 64x - Makes a right triangle, w/star at 90 degrees seems to be right in the middle of a diffused nebula-O3 filter makes it oval-w/AV can see oval shape. |
| 14 | 13 | NGC 247 | | Milkweed Seed Galaxy | Gal | CET | 8.9 | 10/27/2008 | 22:00 | DAS Site | 12.5" f/8 Newtonian | Great | Good | 134x - A long, slender, faint, uniformly lit glow that goes up and down in the FOV and approx 1 FOV long. Field star seen on halo glow. |
| 15 | 14 | NGC 253 | | Silver Coin Galaxy | Gal | SCL | 7.3 | 10/18/2009 | 0:36 | Keota, CO | 12.5" f/8 Newtonian | OK | OK | 134x - Nice. See dust lanes in center part of galaxy. Overwhelms 19mm FOV. Goes from 11 - 5 o'clock. |
| 16 | 16 | NGC 292 | | Small Magellanic Cloud (SMC) | Gal | TUC | 2.2 | 4/2/2016 | 20:23 | OzSky | 7x35 Binos | Very Good | Very Good | A dim basic oval with 3 brighter knots to right and dim patch above separated from main glow. |
| 17 | 15 | NGC 288 | | | GC | SCL | 8.1 | 10/27/2008 | 22:11 | DAS Site | 12.5" f/8 Newtonian | Great | Good | 134x - Nice. Large globular. Circular. Lots of member stars seen on glow of globular. |
| 18 | 17 | NGC 300 | D 530 | | Gal | SCL | 8.1 | 10/27/2008 | 22:44 | DAS Site | 12.5" f/8 Newtonian | Good | Good | 134x - Very dim, uniformly lit oval bounded by 4 dim field stars on each side. No central brightening. Just a glow. Very low in south. |
| 19 | 18 | NGC 330 | | | OC | TUC | 9.6 | 4/2/2016 | 20:36 | OzSky | 18" f/4.5 Newtonian | Very Good | Very Good | 187x - A very tight grouping of dim stars. Can't count but see mottling of stars. |
| 20 | 19 | NGC 346 | D 25 | | BN | TUC | 10.3 | 4/2/2016 | 20:56 | OzSky | 18" f/4.5 Newtonian | Very Good | Very Good | 187x - A small, dim, oval, uniformly lit glow. |
| 21 | 21 | NGC 362 | D 62 | | GC | TUC | 6.8 | 4/6/2016 | 19:45 | OzSky | 18" f/4.5 Newtonian | Very Good | Very Good | 187x - A medium size, round, bright glow. Larger, bright core dims slowly to edge. Tons of member stars seen. |
| | | | | | | | | | | | | | | 187x - A small, roundish, very faint OC. Member stars |

How I prepared for Okie-Tex?

Observing List

OkieTexCombined_Left

Weather

☐ Auto

Average Seeing (1" - 2.5" P6-7)

18C

60%

Generate Observing Plan

Plan

Class Filter

All Classes

Constellation Filter

All

Log Filter

Any

Quality, Difficulty and Double-Star Splitability Filters

Any quality

Ignore Difficulty

List Functions

Default columns

Add Objects

Get Observing Lists

Share/Export List

| ✓ | | 123 | 1★1★1★1★ | Primary ID | Alternate ID | Con | RA (Ap) | Dec (Ap) | Mag | Ang. Size | Begin | Best | End |
|---|--|-----|----------|-----------------------|----------------|-----|-------------|------------|------|-------------|-------|-------|-------|
| | | | ☆☆☆☆ | NGC 2271 | MCG -4-16-17 | CMA | 06h43m52.7s | -23°29'57" | 13.2 | 1.8' x 1.3' | 19:30 | 19:36 | 19:45 |
| | | | ☆☆☆☆ | NGC 2380 (NGC 2382) | NGC 2382 | CMA | 07h24m52.3s | -27°34'35" | 12.3 | 2.5' x 2.4' | 19:25 | 19:39 | 20:10 |
| | | | ☆☆☆☆ | NGC 3118 | MCG 6-22-74 | LMi | 10h08m36.1s | +32°54'40" | 14.3 | 2.1' x 0.5' | 19:35 | 19:42 | 20:00 |
| | | | ☆☆☆☆ | Palomar 3 | | Sex | 10h06m45.4s | -00°02'48" | 13.9 | 1.6' | 19:35 | 19:48 | 20:35 |
| | | | ☆☆☆☆ | Palomar 4 | | UMa | 11h30m33.5s | +28°50'30" | 14.2 | 1.3' | 19:35 | 19:49 | 20:30 |
| | | | ☆☆☆☆ | Palomar 5 | | Ser | 15h17m21.1s | -00°12'08" | 11.8 | 3.2' | 19:35 | 21:56 | 00:10 |
| | | | ☆☆☆☆ | White Eyed Pea | IC 4593 | Her | 16h12m54.7s | +12°00'31" | 11.0 | 12" | 19:20 | 22:51 | 02:35 |
| | | | ☆☆☆☆ | NGC 6166 | MCG 7-34-60 | Her | 16h29m30.3s | +39°29'55" | 12.9 | 2.1' x 1.5' | 21:15 | 23:08 | 00:35 |
| | | | ☆☆☆☆ | M 12 | NGC 6218 | Oph | 16h48m31.4s | -01°59'27" | 6.1 | 16.0' | 19:25 | 23:27 | 03:10 |
| | | | ☆☆☆☆ | Starfish Galaxy | NGC 6240 | Oph | 16h54m13.9s | +02°21'37" | 13.8 | 2.2' x 1.0' | 20:35 | 23:33 | 00:25 |
| | | | ☆☆☆☆ | NGC 6255 | MCG 6-37-14 | Her | 16h55m41.2s | +36°27'45" | 13.6 | 3.1' x 1.4' | 21:45 | 23:34 | 00:30 |
| | | | ☆☆☆☆ | He 2-213 | Haro 1-9 | Sco | 17h23m07.3s | -30°22'19" | 15.6 | 10" | 20:00 | 23:45 | 00:45 |
| | | | ☆☆☆☆ | Terzan 5 | | Sgr | 17h49m36.6s | -24°47'21" | 13.9 | 2.4' | 21:35 | 23:45 | 00:10 |
| | | | ☆☆☆☆ | NGC 6573 | | Sgr | 18h15m10.8s | -22°06'43" | 10.4 | 1.0' | 23:15 | 23:51 | 00:10 |
| | | | ☆☆☆☆ | NGC 6760 | | Aql | 19h12m27.9s | +01°04'18" | 9.0 | 9.6' | 22:15 | 23:52 | 00:45 |
| | | | ☆☆☆☆ | Abell 70 | PN G038.1-25.4 | Aql | 20h32m52.7s | -07°00'21" | 14.3 | 44" | 23:00 | 23:53 | 00:25 |
| | | | ☆☆☆☆ | He 2-360 | PN G003.3-04.6 | Sgr | 18h13m09.4s | -28°22'19" | 11.0 | 12" | 22:30 | 23:55 | 00:55 |
| | | | ☆☆☆☆ | Phantom Streak | NGC 6741 | Aql | 19h03m53.7s | -00°24'52" | 12.0 | 9.0" | 21:25 | 23:59 | 05:45 |
| | | | ☆☆☆☆ | Red Spider | NGC 6537 | Sgr | 18h06m41.4s | -19°50'30" | 12.0 | 5.0" | 22:30 | 00:04 | 01:10 |
| | | | ☆☆☆☆ | Blue Racquetball | NGC 6572 | Oph | 18h13m18.9s | +06°51'33" | 8.0 | 15" | 20:35 | 00:10 | 05:10 |
| | | | ☆☆☆☆ | NGC 6764 | MCG 8-35-3 | Cyg | 19h08m54.9s | +50°58'13" | 12.8 | 2.5' x 1.2' | 00:45 | 01:31 | 02:10 |
| | | | ☆☆☆☆ | Minkowski's Footprint | M 1-92 | Cyg | 19h37m18.5s | +29°36'01" | 11.0 | 9.0" | 23:40 | 02:02 | 04:40 |
| | | | ☆☆☆☆ | Blinking Planetary | NGC 6826 | Cyg | 19h45m29.4s | +50°34'55" | 8.8 | 27" | 00:30 | 02:21 | 04:05 |
| | | | ☆☆☆☆ | Saturn Nebula | NGC 7009 | Aqr | 21h05m31.5s | -11°15'58" | 8.3 | 28" | 22:45 | 03:37 | 07:20 |
| | | | ☆☆☆☆ | NGC 7177 | MCG 3-56-3 | Peg | 22h01m51.9s | +17°51'14" | 11.9 | 2.9' x 2.0' | 00:55 | 04:26 | 06:55 |
| | | | ☆☆☆☆ | NGC 7265 | MCG 6-49-6 | Lac | 22h23m33.2s | +36°19'49" | 13.3 | 2.5' x 1.8' | 03:15 | 04:59 | 06:40 |
| | | | ☆☆☆☆ | Helix | NGC 7293 | Aqr | 22h30m59.1s | -20°42'37" | 6.3 | 16.0' | 23:25 | 05:21 | 07:10 |
| | | | ☆☆☆☆ | Blue Snowball | NGC 7662 | And | 23h27m04.6s | +42°39'57" | 8.6 | 17" | 03:55 | 06:05 | 07:15 |
| | | | ☆☆☆☆ | NGC 7814 | MCG 3-1-20 | Peg | 00h04m30.1s | +16°16'49" | 11.6 | 4.4' x 1.9' | 03:25 | 06:28 | 07:00 |

Okie-Tex Observing Lists

Here are some of the observing lists from the last several years.

[Okie-Tex - New Observers Challenge List - Level Novice](#)

[Okie-Tex - 2021 Observing Lists](#)

[Okie-Tex - Alternate Constellation Observing Program](#)

[Okie-Tex - 2019 Observing Lists](#)

[Okie-Tex - 2018 Observing Lists](#)

[Okie-Tex - Panhandle Planetaries - Level 1](#)

[Okie-Tex - Panhandle Planetaries - Level 2](#)

[Okie-Tex - The Bright and The Beautiful - Level 1](#)

[Okie-Tex - Fornax and Friends - Level 2](#)

[Okie-Tex - Globulars and Galaxies - Level 1](#)

[Okie-Tex - Challenge Globulars - Level 2](#)

[Okie-Tex - Elliptical Galaxies Galore - Level 1](#)

[Okie-Tex - Elliptical and Irregular Galaxies - Level 2](#)

[Okie-Tex - Spiral Galaxies for All - Level 1](#)

[Okie-Tex - Spiral Galaxies for Bigger Scopes - Level 2](#)

[Okie-Tex - Deep Sky Sampler for Moderate Sized Scopes - Level 1](#)

[Okie-Tex - Treasures for Bigger Scopes - Level 2](#)

[Okie-Tex - One Per Constellation List for Moderate Sized Scopes - Level 1](#)

[Okie-Tex - Going Deep for Bigger Scopes - Level 2](#)

[Okie-Tex - A Smorgasboard for Moderate Sized Scopes - Level 1](#)

[Okie-Tex - Dim Fuzzies for Bigger Scopes - Level 2](#)

[Okie-Tex - DAILY DOZEN 1-4](#)

[Okie-Tex - A Photographic Messier Marathon Plus](#)

Okie-Tex
New Observers Challenge List

| ID | Nickname/Notes | RA | | Dec | | Type | Constellation | Magnitude | Size | Date | Time |
|-------------|----------------------------|----|----|-------|-----|------|---------------|--------------|-----------|--------------------|------|
| M 31 | Andromeda Galaxy | 00 | 42 | 44.3 | 41 | 06 | GX | Andromeda | 3.4 | 180'x63' | |
| NGC 253 | Silver Coin Galaxy | 00 | 47 | 33.1 | -25 | 17 | GX | Sculptor | 7.1 | 25' x 7.4' | |
| NGC 247 | | 00 | 47 | 8.4 | -20 | 45 | GX | Cetus | 9.1 | 20.0' x 7.4' | |
| M 33 | Triangulum Galaxy | 01 | 33 | 50.8 | 30 | 39 | GX | Triangulum | 5.7 | 70.8' | |
| NGC 869/884 | Double Cluster | 02 | 19 | 03.8 | 57 | 08 | OC | Perseus | 5.3 & 6.1 | 29' and 29' | |
| NGC 891 | | 02 | 22 | 33.5 | 42 | 21 | GX | Andromeda | 10.8 | 13' x 2.8' | |
| M 34 | | 02 | 42 | 07.4 | 42 | 44 | OC | Perseus | 5.2 | 35' | |
| M 77 | Cetus A | 02 | 42 | 40.7 | -00 | 00 | GX | Cetus | 8.8 | 6.9' x 5.9' | |
| M 42 | Orion Nebula | 05 | 35 | 16.5 | -05 | 23 | EN | Orion | 3.7 | 90' x 60' | |
| M 36 | | 05 | 36 | 17.7 | 34 | 08 | OC | Auriga | 6 | 12' | |
| M 35 | | 06 | 08 | 55.9 | 24 | 21 | OC | Gemini | 5.1 | 28' | |
| M 41 | | 06 | 46 | 00 | -20 | 45 | OC | Canis Major | 4.5 | 38' | |
| NGC 2403 | | 07 | 36 | 51.8 | 65 | 36 | GX | Camelopardis | 8.4 | 18' x 11' | |
| M 46 | Look for NGC 2438 in front | 07 | 41 | 46.8 | -14 | 48 | OC | Puppis | 6.1 | 27' | |
| M 81/ 82 | Bodes And Cigar Galaxies | 09 | 55 | 32.9 | 69 | 03 | GX | Ursa Major | 6.8 & 8.4 | 26'x14' & 11'x4.6' | |
| M 13 | Hercules Cluster | 16 | 41 | 41.4 | 36 | 27 | GC | Hercules | 5.7 | 17' | |
| M 20 | Trifid Nebula | 18 | 02 | 18.0 | -23 | 02 | EN | Sagittarius | 6.3 | 13' | |
| M 8 | Lagoon Nebula | 18 | 03 | 48.0 | -24 | 23 | EN | Sagittarius | 5 | 90' x 4.0' | |
| M 22 | | 18 | 36 | 24.0 | -23 | 54 | OC | Sagittarius | 5.1 | 24' | |
| M 11 | Wild Duck Cluster | 18 | 51 | 6.0 | -6 | 16 | OC | Scutum | 5.8 | 13' | |
| M 57 | Ring Nebula | 18 | 53 | 35.09 | 33 | 01 | PN | Lyra | 8.8 | 86" x 62" | |
| M 56 | | 19 | 16 | 36.0 | 30 | 11 | OC | Lyra | 8.3 | 7.1' | |
| NGC 6826 | Blinking Planetary | 19 | 44 | 48.17 | 50 | 31 | PN | Cygnus | 8.8 | 27" x 24" | |
| M 27 | Dumbell Nebula | 19 | 59 | 36.33 | 22 | 43 | PN | Vulpecula | 7.3 | 8.0 x 5.7' | |
| NGC 6960 | Veil Nebula - West half | 20 | 45 | 42.0 | 30 | 43 | EN | Cygnus | 7 | 70.0' | |
| NGC 7009 | Saturn Nebula | 21 | 04 | 10.7 | -11 | 21 | PN | Aquarius | 8 | 44" x 23" | |
| M 15 | | 21 | 29 | 58.4 | 12 | 10 | OC | Pegasus | 6 | 12' | |
| M 2 | | 21 | 33 | 29.3 | -00 | 49 | GC | Aquarius | 6.4 | 13' | |
| NGC 7662 | Blue Snowball | 23 | 25 | 53.93 | 42 | 32 | PN | Andromeda | 8.3 | 32" x 28" | |
| NGC 7789 | Magnificent Cluster | 23 | 57 | 00 | 56 | 44 | OC | Cassiopea | 6.7 | 15' | |

Rules:

- 1) For fun only, and NO pins or Certificates will be awarded.

1

| Target | Type | Constellation | RA | Dec | Mag |
|-------------------|------|---------------|------------|-----------|------|
| BASIC LIST | | | | | |
| NGC253 | Gal | Sculptor | 00 47 33 | -25 17 17 | 7.1 |
| NGC7009 | PN | Aquarius | 21 04 10.7 | -17 21 49 | 8 |
| M15 | GC | Pegasus | 21 29 58.4 | 12 10 00 | 6 |
| M72 | GC | Aquarius | 20 53 27.9 | -22 32 13 | 9.4 |
| NGC157 | Gal | Cetus | 0 34 | -8 23 | 10.4 |

2

| Target | Type | Constellation | RA | Dec | Mag |
|-------------------|------|---------------|------------|-----------|------|
| BASIC LIST | | | | | |
| NGC253 | Gal | Sculptor | 00 47 33 | -25 17 17 | 7.1 |
| NGC7009 | PN | Aquarius | 21 04 10.7 | -17 21 49 | 8 |
| M15 | GC | Pegasus | 21 29 58.4 | 12 10 00 | 6 |
| M72 | GC | Aquarius | 20 53 27.9 | -22 32 13 | 9.4 |
| NGC157 | Gal | Cetus | 0 34 | -8 23 | 10.4 |

3

| Target | Type | Constellation | RA | Dec | Mag |
|-------------------|------|---------------|------------|-----------|------|
| BASIC LIST | | | | | |
| NGC253 | Gal | Sculptor | 00 47 33 | -25 17 17 | 7.1 |
| NGC7009 | PN | Aquarius | 21 04 10.7 | -17 21 49 | 8 |
| M15 | GC | Pegasus | 21 29 58.4 | 12 10 00 | 6 |
| M72 | GC | Aquarius | 20 53 27.9 | -22 32 13 | 9.4 |
| NGC157 | Gal | Cetus | 0 34 | -8 23 | 10.4 |

Target Type Constellation RA Dec Mag

BASIC LIST

| | | | | | |
|---------|-----|----------|------------|-----------|------|
| NGC253 | Gal | Sculptor | 00 47 33 | -25 17 17 | 7.1 |
| NGC7009 | PN | Aquarius | 21 04 10.7 | -17 21 49 | 8 |
| M15 | GC | Pegasus | 21 29 58.4 | 12 10 00 | 6 |
| M72 | GC | Aquarius | 20 53 27.9 | -22 32 13 | 9.4 |
| NGC157 | Gal | Cetus | 0 34 | -8 23 | 10.4 |

Wild Card

ADVANCED LIST

| | | | | | |
|---------|------|----------|------------|----------|------|
| Triton | Moon | Aquarius | | | |
| NGC1045 | Gal | Cetus | 02 40.5 | -11 17 | 13 |
| Abell70 | PN | Aquarius | 20 31 35 | -7 5 12 | 14.7 |
| NGC7814 | Gal | Pegasus | 00 03 14.9 | 16 08 44 | 11.6 |
| NGC7177 | Gal | Pegasus | 22 0 | 14 44 | 11.2 |

Wild Card



| Observing List | | Weather | |
|--------------------------|--------------|---|-------------|
| OkieTexCombined_Left | | <input type="checkbox"/> Auto Average Seeing (1 | |
| Class Filter | | Constellation Filter | |
| All Classes | | All | |
| Log Filter | | Log Filter | |
| | | Any | |
| List Functions | | Default columns | |
| | | Add Objects | |
| Get Observing List | | | |
| Primary ID | Alternate ID | Con | RA (Ap) |
| ☆☆☆☆ IC 1722 | MCG -6-4-67 | Scl | 01h44m08.2s |
| ☆☆☆☆ IC 1728 | MCG -6-5-2 | For | 01h48m49.6s |
| ☆☆☆☆ IC 1729 | MCG -5-5-14 | For | 01h49m02.7s |
| ☆☆☆☆ IC 1762 | MCG -6-5-15 | For | 01h58m52.9s |
| ☆☆☆☆ IC 1783 | MCG -6-5-37 | For | 02h11m09.5s |
| ☆☆☆☆ IC 1876 | MCG -5-8-13 | For | 03h05m34.5s |
| ☆☆☆☆ IC 1898 | MCG -4-8-36 | Eri | 03h11m23.6s |
| ☆☆☆☆ IC 1919 | MCG -6-8-15 | For | 03h27m00.0s |
| ☆☆☆☆ MCG -6-8-2 | ESO 357 12 | For | 03h17m50.0s |
| ☆☆☆☆ MCG -6-9-30 | ESO 358 63 | For | 03h47m14.1s |
| ☆☆☆☆ NGC 157 | MCG -2-2-56 | Cet | 00h36m01.0s |
| ☆☆☆☆ NGC 568 | MCG -6-4-37 | Scl | 01h29m03.3s |
| ☆☆☆☆ NGC 658 | MCG 2-5-9 | Psc | 01h43m27.4s |
| ☆☆☆☆ NGC 1165 | MCG -5-8-9 | For | 02h59m47.7s |
| ☆☆☆☆ NGC 1412 | IC 1981 | For | 03h41m30.0s |
| ☆☆☆☆ NGC 1650 | MCG -3-13-1 | Eri | 04h46m16.7s |
| ☆☆☆☆ NGC 2207 | MCG -4-15-20 | CMA | 06h17m23.0s |
| ☆☆☆☆ NGC 2271 | MCG -4-16-17 | CMA | 06h43m52.7s |
| ☆☆☆☆ NGC 2380 (NGC 2382) | NGC 2382 | CMA | 07h24m52.3s |
| ☆☆☆☆ NGC 3118 | MCG 6-22-74 | LMi | 10h08m36.1s |
| ☆☆☆☆ NGC 6573 | | Sgr | 18h15m10.8s |
| ☆☆☆☆ NGC 6764 | MCG 8-35-3 | Cyg | 19h08m54.9s |
| ☆☆☆☆ NGC 7177 | MCG 3-56-3 | Peg | 22h01m51.9s |
| ☆☆☆☆ Palomar 3 | | Sex | 10h06m45.4s |
| ☆☆☆☆ Palomar 4 | | UMa | 11h30m33.4s |
| ☆☆☆☆ Saturn Nebula | NGC 7009 | Aqr | 21h05m31.6s |
| ☆☆☆☆ Sculptor Dwarf | MCG -6-3-15 | Scl | 01h01m18.9s |
| ☆☆☆☆ Starfish Galaxy | NGC 6240 | Oph | 16h54m13.9s |
| ☆☆☆☆ Terzan 5 | | Sgr | 17h49m36.6s |

Designation Search Tool -- Add Objects to Observing List

Search Browse

Quick Search (type all or part of any designation here)

ngc 7177

Search

Search Results

NGC 7177

NGC 1711

NGC 1971

NGC 2117

NGC 1718

NGC 1775

Narrow fuzzy search to:

All

Designation Help

Recent Targets

Help

Data For Currently Selected Target

NGC 7177

RA: 22h00m41s Dec: +17°44'17" J2000

Mag: 11.9 Size: 2.9' Con Peg

More Object Information

Observing List

OkieTexCombined_Left

Add to List

Done

Help

Observing List

OkieTexCombined_Left

Weather

☐ Auto

Average Seeing (1" - 2.5" P6-7)

18C

60%

Generate Observing

☐ Plan

Class Filter

All Classes

Constellation Filter

All

Log Filter

Unlogged

Quality, Difficulty and Double-Star Splitability Filters

Any quality

Ignore Difficulty

List Functions

Default columns

Add Objects

Get Observing Lists

Share/Export List

✓

📄

📄

📄

📄

Primary ID

Alternate ID

Con

RA (Ap)

Dec (Ap)

Mag

Ang. Size

Begin

Best

End

☆☆☆☆

📄

NGC 3118

MCG 6-22-74

LMi

10h08m36.1s

+32° 54'40"

14.3

2.1' x 0.5'

19:35

19:42

20:00

☆☆☆☆

📄

Palomar 4

UMa

11h30m33.5s

+28° 50'30"

14.2

1.3'

19:35

19:49

20:30

☆☆☆☆

📄

He 2-213

Haro 1-9

Sco

17h23m07.3s

-30° 22'19"

15.6

10"

20:00

23:45

00:45

☆☆☆☆

📄

Terzan 5

Sgr

17h49m36.6s

-24° 47'21"

13.9

2.4'

21:35

23:45

00:10

☆☆☆☆

📄

NGC 6573

Sgr

18h15m10.8s

-22° 06'43"

10.4

1.0'

23:15

23:51

00:10

☆☆☆☆

📄

Minkowski's Footprint

M 1-92

Cyg

19h37m18.5s

+29° 36'01"

11.0

9.0"

23:40

02:02

04:40

☆☆☆☆

📄

NGC 568

MCG -6-4-37

Scl

01h29m03.2s

-35° 35'15"

13.6

2.0' x 1.3'

03:05

06:30

06:55

☆☆☆☆

📄

MCG -6-8-2

ESO 357 12

For

03h17m49.9s

-35° 26'54"

14.0

1.7' x 1.4'

04:55

06:30

06:55

☆☆☆☆

📄

IC 1762

MCG -6-5-15

For

01h58m52.9s

-33° 07'02"

14.3

1.7' x 0.5'

04:05

06:30

06:55

☆☆☆☆

📄

IC 1876

MCG -5-8-13

For

03h05m34.4s

-27° 21'45"

14.4

1.1' x 1.1'

04:55

06:30

06:55

☆☆☆☆

📄

IC 1729

MCG -5-5-14

For

01h49m02.6s

-26° 46'03"

13.5

2.2' x 1.3'

03:45

06:30

06:55

☆☆☆☆

📄

IC 1728

MCG -6-5-2

For

01h48m49.6s

-33° 28'35"

14.1

1.3' x 0.8'

03:35

06:31

07:00

☆☆☆☆

📄

ESO 358 10

PGC 12990

For

03h30m39.9s

-33° 28'15"

14.6

1.7' x 0.9'

05:25

06:31

06:50

☆☆☆☆

📄

ESO 357 7

PGC 11856

For

03h11m22.8s

-33° 03'30"

14.7

1.3' x 0.5'

05:00

06:31

06:55

☆☆☆☆

📄

IC 1919

MCG -6-8-15

For

03h26m59.9s

-32° 48'21"

13.8

1.7' x 1.1'

05:00

06:31

06:55

☆☆☆☆

📄

NGC 1165

MCG -5-8-9

For

02h59m47.7s

-31° 59'55"

13.8

2.3' x 0.5'

04:45

06:31

06:55

☆☆☆☆

📄

IC 1898

MCG -4-8-36

Eri

03h11m23.6s

-22° 18'39"

13.6

3.6' x 0.6'

05:20

06:31

06:50

☆☆☆☆

📄

MCG -6-9-30

ESO 358 63

For

03h47m14.0s

-34° 51'53"

12.6

4.3' x 1.3'

05:10

06:32

06:55

☆☆☆☆

📄

IC 1783

MCG -6-5-37

For

02h11m09.5s

-32° 49'16"

13.2

2.0' x 0.8'

03:50

06:32

07:00

☆☆☆☆

📄

NGC 658

MCG 2-5-9

Psc

01h43m27.4s

+12° 43'29"

13.3

1.5' x 0.9'

04:50

06:32

06:55

☆☆☆☆

📄

NGC 1650

MCG -3-13-1

Eri

04h46m16.7s

-15° 49'25"

13.6

2.4' x 1.1'

06:15

06:34

06:50

☆☆☆☆

📄

Sculptor Dwarf

MCG -6-3-15

Scl

01h01m18.9s

-33° 34'26"

10.4

1.1' x 0.9'

02:35

06:37

07:15

☆☆☆☆

📄

IC 1722

MCG -6-4-67

Scl

01h44m08.2s

-34° 03'38"

14.8

1.5' x 0.4'

-

-

-

☆☆☆☆

📄

Abell 17

PK 221-4.1

Mon

06h49m46.5s

-09° 34'19"

14.8

54"

-

-

-

☆☆☆☆

📄

Einstein's Cross

Q2237+0305A

Peg

22h41m45.2s

+03° 29'08"

18.0

stellar

-

-

-

☆☆☆☆

📄

Cygnus A

MCG 7-41-3

Cyg

20h00m20.5s

+40° 47'55"

17.0

32" x 27"

-

-
















-

Overnight List of Items to Pack

| | | | | | | |
|---|--|--------------------|--|---------------|--|----------------------|
| 12.5" Base/Poles/Upper Cage/ Finder Platform | | Alieve | | Winter Boots | | Chart Box(es) |
| Little Giant ladder | | Tums | | Wool Socks | | Night Sky Guides |
| Black 12.5" Equipment Case | | Bug Spray | | Ski Pants | | Double Star Charts |
| 8" Scope/Base | | Hand Sanitizer | | Long Johns | | 2 Seasonal Notebooks |
| Telrad for 8" Scope | | Sun Screen | | Thermal Wools | | Pgm Notebook(s) |
| Sky Commander/Pedestal/Alt Arm | | Water | | Sweat Shirt | | Spiral Notes Book |
| Weights (2 small clamps) | | Snacks | | Gloves | | Double Star List |
| Rock Weights | | Dinner | | Ski Hat | | Pencils |
| Table | | Sleeping Bags/Foam | | Ear Muff Hat | | Blue Tape |
| Chair | | My Pillow | | Neck Gator | | Duct Tape |
| 8x50 Binoculars | | Camera/Tripod | | Jacket | | Needle Nose Pliers |
| 3 Eyepiece Cases | | 4 - AA Batteries | | Winter Coat | | Leveling Blocks |
| 20x80 Binoculars/Mount/Weights | | 1 - 9V Battery | | Coveralls | | Toilet Set/Enclosure |
| Multi-Band Radio | | | | Eye Shade | | Table Top Dew Guard |
| Scope Cover | | Hat | | Ear Plugs | | Back Brace |
| Ground Tarp | | Shovel | | Noise Maker | | |
| 12V Deep Cycle Battery | | Toilet Paper | | | | |
| Extension Cord/3 way connector | | Paper Towels | | | | |
| DC/AC Power Converter | | Fly Swatter | | | | |
| Window Net/Magnets | | Electric Fan | | | | |
| Phone Red Screen | | Electric Heater | | | | |
| Phone Charger | | Window Net/Magnets | | | | |
| PC/Red Screen/Box | | Observing Chair | | | | |

Week/Weekend List of Items to Pack

| | | | |
|---|--------------------|-------------------|----------------------|
| 12.5" Base/Poles/Upper Cage/ Finder Platform | Alieve | Winter Boots | Chart Box(es) |
| Little Giant ladder | Tums | Wool Socks | Night Sky Guides |
| Black 12.5" Equipment Case | Bug Spray | Ski Pants | Double Star Charts |
| 8" Scope/Base | Hand Sanitizer | Long Johns | 2 Seasonal Notebooks |
| Telrad for 8" Scope | Sun Screen | Thermal Wools | Pgm Notebook(s) |
| Sky Commander/Pedestal/Alt Arm | Water | Sweat Shirt | Spiral Notes Book |
| Weights (2 small clamps) | Snacks | Fingerless Gloves | Double Star List |
| Rock Weights | Dinner | Black Gloves | Pencils |
| Table | Sleeping Bags/Foam | Ski Hat | Noise Maker |
| Chair | My Pillow | Ear Muff Hat | Electric Fan |
| 8x50 Binoculars | Camera/Tripod | Neck Gator | Electric Heater |
| 3 Eyepiece Cases | 4 - AA Batteries | Jacket | DC Fan |
| 20x80 Binoculars/Mount/Weights | 1 - 9V Battery | Winter Coat | Blue Tape |
| Multi-Band Radio | | Coveralls | Duct Tape |
| Scope Cover | Hat | Eye Shade | Needle Nose Pliers |
| Ground Tarp | Shovel | Ear Plugs | Leveling Blocks |
| 12V Deep Cycle Battery | Toilet Paper | Cups/Bowls/Plates | Toilet Set/Enclosure |
| Solar Charger | Paper Towels | Spoon/Fork/Knife | Table Top Dew Guard |
| Phone Red Screen | Fly Swatter | Tooth brush/paste | Back Brace |
| PC/Red Screen/Box | Cot | Towel/Wash Cloth | Aluminum Tarp Poles |
| Power Cord/3 way connector | Camp Stove | Soap/Shampoo | Hammer, stakes, rope |
| Rheostat Cord | Propane | Shaver | Wire ties/Nippers |
| Phone Charger | Matches | Food | Spring Clamps |
| Red Lamp Pedestal Arm | Dish Soap | Coffee/Cup | Observing Chair |
| DC/AC Converter | Window Net/Magnets | Flavored Drinks | |

| This PC > Documents > EquipmentLists | | | | | |
|--------------------------------------|--|--------------------|----------------------|-------|--|
| | Name | Date modified | Type | Size | |
| |  Okie-Tex-2024 | 8/8/2024 2:32 PM | Microsoft Excel W... | 12 KB | |
| |  April-8-Eclipse-List | 3/28/2024 8:49 AM | Microsoft Excel W... | 12 KB | |
| |  3RF_Mar_2024 - w8 | 2/16/2024 3:06 AM | Microsoft Excel W... | 19 KB | |
| |  3RF_Mar_2024 - wo8 | 2/16/2024 3:06 AM | Microsoft Excel W... | 19 KB | |
| |  3RF_March_2024 | 1/29/2024 7:14 PM | Microsoft Excel W... | 19 KB | |
| |  TSP2023 | 4/5/2023 10:50 PM | Microsoft Excel W... | 19 KB | |
| |  3RF_April_2023 | 4/5/2023 6:50 PM | Microsoft Excel W... | 19 KB | |
| |  DSS_Oct_2022 | 10/18/2022 7:57 PM | Microsoft Excel W... | 16 KB | |
| |  LTO_Oct_2022 | 10/5/2022 4:10 PM | Microsoft Excel W... | 16 KB | |
| |  DSS_Sep_2022 | 9/25/2022 8:05 AM | Microsoft Excel W... | 16 KB | |
| |  3RF_July_2022 | 7/24/2022 8:27 AM | Microsoft Excel W... | 17 KB | |
| |  DSS_June_2022 | 6/15/2022 4:44 PM | Microsoft Excel W... | 16 KB | |
| |  3RF_April_2022 | 4/20/2022 8:44 PM | Microsoft Excel W... | 17 KB | |
| |  3RF_February_2022 | 2/13/2022 3:17 PM | Microsoft Excel W... | 17 KB | |
| |  11-11-2021 | 1/22/2024 5:37 PM | Microsoft Excel W... | 15 KB | |

Okie-Tex 2024

| | | | |
|--------------------------------|----------------------|-------------------|---------------------|
| 8" Scope/Base | Alieve | Winter Boots | |
| Telrad for 8" Scope | Tums | Wool Socks | |
| Sky Commander/Pedestal/Alt Arm | Bug Spray | Long Johns | Additional lists |
| Weights (2 small clamps) | Hand Sanitizer | Sweat Shirt | |
| Rock Weights | Sun Screen | Fingerless Gloves | |
| White Table | Bottle Water | Black Gloves | Spiral Notes Book |
| Chair | 3 boxes cookies | Ski Hat | Double Star List |
| 8x50 Binoculars | 5 Dinner | Jacket | Pencils |
| 3 Eyepiece Cases | 11 Lunches | | Noise Maker |
| Black Table | My Pillow | | Electric Fan |
| Multi-Band Radio | Potato Chips | | |
| Quadrant | Case of AA Batteries | | DC Fan |
| Ground Tarp | 1 - 9V Battery | | Blue Tape |
| Astrolabe | | | Duct Tape |
| Phone Red Screen | 2 Hats | Eye Shade | Needle Nose Pliers |
| PC/Red Screen/Box | Bread | Ear Plugs | Leveling Blocks |
| Power Cord/3 way connector | Peanut butter | Cups/Bowls/Plates | |
| Phone Charger | Grape jelly | Spoon/Fork/Knife | Table Top Dew Guard |
| Thumb drive with presentation | Coffee/Cup | Tooth brush/paste | Back Brace |
| All books to sell | Bottle Tea | Towel/Wash Cloth | |
| 2 wheel cart | 1 Box fruit snacks | Soap/Shampoo | |
| AB4T Clipboard | Mixed nuts | Shaver | Wire ties/Nippers |
| Dew Equipment/controller | | | Spring Clamps |
| AC to 12vDC converter | | | Observing Chair |
| Argo Navis/pedestal | | | |

While Observing

- ▣ How to take notes
- ▣ What to record
- ▣ Sketching what you see

Use ST4 At My Telescope



3/28/14

6:50P Clear. Brist breeze from NE. Put Blue Locktite on Threads of A2 Bolt of #749 (#737 doesn't have locktite). Will see how that works. Preliminary tests this afternoon didn't see missed counts. Blue tape down threads just didn't do it. Slipped Right after setup.

Sunset 7:54P. 61° Still breezy from NE. Clouds/fog low along western horizon.

9:05 SE windings. H42 ^{easy to see} ~~hues~~ 6 stars seen in top row.

G20551005 9:10 Cost. Thick filaments in a loop. w/03. on Bottom.

on top is a much dimmer

top arc that thickens at tip. 2 FOV of 17mm

with 3 FOV tall

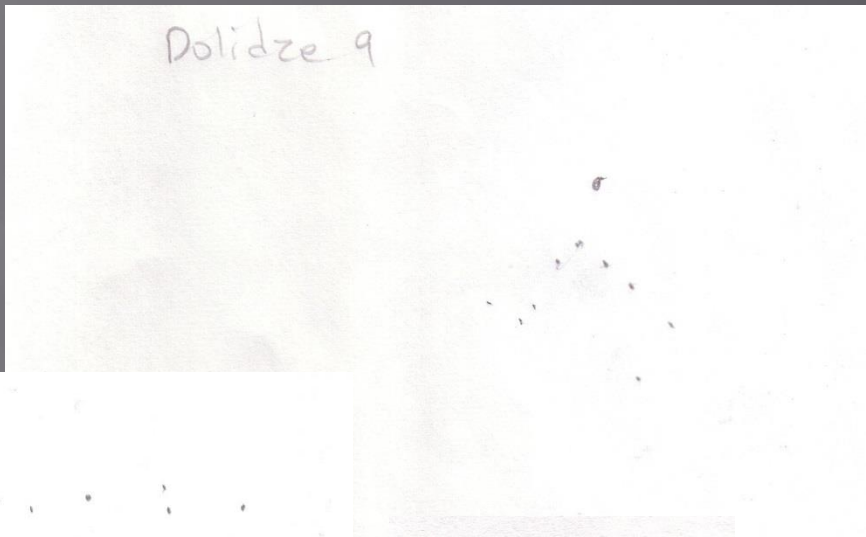
N2532 9:37 A small round dim glow. can see mottling of glow, maybe 2 ^{or 3} arcs. in center of glow is tiny hb core

N2649 9:42 A small round very dim v.l. glow. has brighter FS on upper part of halo glow

N2604 9:46 A very faint fat oval v.l. glow

N2577 9:49 A ^{very} small, tilted oval. dim. has larger brighter core. Then above & 2 left sheer & under a Bright FS is this smaller roundish v.l. very faint glow

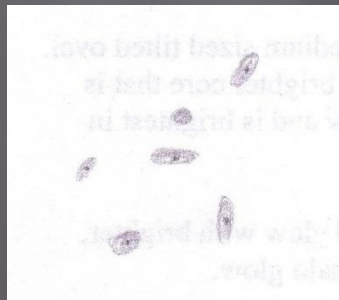
N274 9:54 A small, long thin glow w/ large, lower one that is brightest & small bright one in center. core faint but easy to see w/4x



Comet PanSTARRS
C/2011 L4

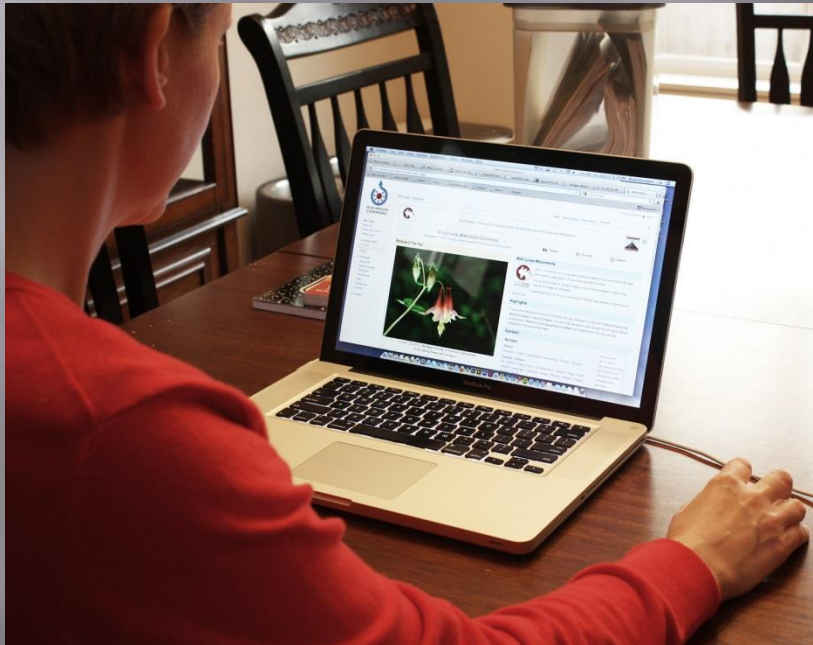
3/19/13
7:50 - 8:20 P

Watched it from 7:50 to 8:20 PM, when it set behind a house to west. Bright nucleus with a very long, extended tail. Best view I have had of it so far. Very nice. Enjoyed having Barbara finally seeing it. Noticed it more northerly than 2 nights ago based on fir tree to west. Watched it from my backyard in Broomfield, CO. It was between the neighbor's houses to west.



Post Observing Activities

- ▣ Hard copy
- ▣ Log observations in DB




Transposing Notes

3/28/14

6:50P Clear. Brisk breeze from NE. Put Blue Locktite on Threads of A2 bolt of #749 (#737 doesn't have locktite). Will see how that works. Preliminary tests this afternoon didn't see missed counts. Blue tape down threads just didn't do it. Slipped Right after setup.

Sunset 7:54P. 61° SH breeze from NE. Clouds/fog low along western horizon.

9:05 SC working. M42 awesome. 6 stars seen in trapezium. G205.5+00.5 A/D Cool. Thick filaments in a loop, w/O3. on Bottom.

on top is a much dimmer  that thickens at top. 2 FOV of 17mm wide. 3 FOV tall.

NGC 2532 9:37 A small round dim glow. can see mottling of glow, maybe 2 arms. in center of glow is tiny h/b core.

NGC 2649 9:42 A small round very dim v.b. glow has brighter FS on upper part of halo glow.

NGC 2604 9:46 A very faint fat oval v.b. glow.

NGC 2577 9:49 A ^{very} small, tilted oval. dim. has larger brighter core. Then above & left & near & under a bright FS is this smaller roundish v.b. very faint glow.

NGC 2764 9:54 A small, long thin glow w/ large linear core that is brightest & small bright one in center. Core faint but easy to see w/AV.

Friday, March 28, 2014

Cady Alverado brought Blue Locktite to lock the AZ bolt to the ground board of scope #749 (#737 doesn't have Locktite for the threads grabbed by themselves and there is no AZ slippage). Preliminary tests showed this solved the slippage issue (didn't see missed counts) and I used the Sky Commander the rest of the night. The blue masking tape down the threads from the night before just didn't do it. It slipped right after the setup steps.

6:50 PM. Clear, Brisk breeze from NE. Sunset at 7:54 PM. 61 degrees. Smoke low along western horizon.

9:05 PM. Sky Commander works. M42 awesome. 6 stars seen in trapezium. Slew between M41 and M42 twice and object in FOV both times.

G205.5+00.5

9:10 PM

17mm - Cool. This. Easy to see with O3. Thick filaments in a loop on bottom and arc that thickens at top. 2 FOV wide and 3 FOV tall.

NGC 2532

9:37 PM

17mm - A small, round, dim glow. Can see mottling of glow, maybe 2 CCW arms. In center of glow is a tiny, bare brighter core.

NGC 2649

9:42 PM

17mm - A small, round, very dim, uniformly lit glow. Has brighter field star on upper part of halo glow.

NGC 2604

9:46 PM

17mm - A very faint, fat oval, uniformly lit glow.

NGC 2577

9:49 PM

17mm - A very small, tilted oval. Dim. Has larger, brighter core. Then above and to right and near and under a bright field star is this smaller, roundish, uniformly lit, very faint glow of U4367.

U4367

NGC 2764

9:54 PM

17mm - A small, long thin, very dim glow with larger, linear core that is brighter with small, bright core in center. Core faint but easy to see w/AV.

TSP Summary

I also did some satellite observing for the TSP's 40 program. I wanted to get some practice but the early evening clouds prevented me from seeing more.

I finished and started the next pass here today. We spent the night and did some observing programs. I used my finder telescopes for stars. I also finished the 40 on the sky. I observed programs also.

I looked at some southern galaxies but didn't get a real good look at them for the day was very dark. The stars glimmers just about out there the sky glow. I will be back at home to check stars to see those things.

Wednesday, May 4, 2005

Attended the Texas Star Party. 1900. Arrived 10 minutes before the start. Monday night the Wednesday night, mostly cloudy with heavy rain. The clouds were very dark.

I sat in the lower field, where the star light from the east was a bit annoying. The other fields were mostly empty.

At 10:00, light wind from north. A few fluffy clouds drifting off to the east. 10° clear night at the TSP. After sunset, a high haze dominated the sky. It was dark to do some observing from through it.

10:21 PM 10:00. More light bright stars with large extended halos. Some. Almost like FOV with light stars. Some of the most stars seen. Large, extended halo. Class 6.

NGC 5102 11:28 PM Small, dim ring shaped galaxy with brighter nucleus.

It's in with. Looking OK. From VERY heavy. Long 45 degrees.

NGC 5400 12:11 AM Approx. 10 stars making this line, small OC. Approx. 3 groups of stars in this OC. All these stars are of the same magnitude.

NGC 5286 1:15 AM Small, yet bright. It's in the lower half of a brighter field star. Small, bright ring and dim halo around it. Another stars seen. More of a mottled texture through. Class 3.

IC 4466 1:24 AM Small, round uniformly in glow. Sometimes see central star with AV w/OH filter, central star easily seen. Glow easier to see though.

NGC 5486 1:35 AM Little larger than 5286 yet it's a small, round, fairly compact OC. Another stars easily seen. Most of what can be seen is uniformly lit nucleus with a hint of a halo around this. Class 2. There is a much brighter star at 4 o'clock at edge of halo that doesn't appear to belong.

The sky comes and goes from where its completely clear for about 45 minutes and then completely covered. It was like the sky was going through the dew point all night. It did this twice and by 2:00 AM, it was completely overcast for the rest of the night. By 3 AM, a misty fog was setting in on the observing area.

Update ST4 Database

SkyTools 4 Visual Standard Edition

Setup Tools Data Help

Nightly Planner Ephemerides Event Finder

Evening of 2024 Jul 8 MDT DSS-Deer Trail, CO My 8" f/6 Newtonian Mike Hotka

75
60
45
30
15
-15

12 13 14 15 16 17 18 19 20 21 22 23 24 Midnight 1 2 3 4 5 6 7 8 9 10 11 12

Observing List
Bambury600_Left

Class Filter
All Classes

Constellation Filter
All

Log Filter
Unlogged

Weather
☐ Auto Average Seeing (1" - 2.5" P6-7) 18C 60%

Generate Observing Plan
☐ Plan Find/Slew Time 5 min View 5 min

Attachments
New Log Defaults

This dialog serves two purposes. It is used to select the defaults that will be applied when you enter a new "quick" log entry, and it is very handy for entering more than one log entry at a time.

Object
NGC 6192

Night (Date of Evening)
2024 July 8

Local Time
22:47:00

Observing Location
DSS-Deer Trail, CO



























Observer
Mike Hotka

Instrument
16 f/4.5 Newtonian

Observing Conditions
Seeing presets Transparency presets

Create Log Entry Save Defaults ?

| List Functions | Double Star columns | Add Objects | Get Observing Lists | Share/Export List | Primary ID | Alternate ID | Con | RA 2000 | Dec 2000 | Mag | Begin | Best | End | Pair | Mag | Sep | Difficulty | Splittability | B600-Okie Tex |
|----------------|---------------------|-------------|---------------------|-------------------|--------------------------|---------------|-----|-------------|------------|------|-------|-------|-------|------|------------|-------|--------------|----------------|---------------|
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | Sculptor Dwarf | MCG -6-3-15 | Scl | 01h00m09.3s | -33°42'32" | 10.4 | 03:25 | 03:47 | 04:20 | | | | easy | N/A | B600-Okie Tex |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | IC 1633 | ESO 243 46 | Phe | 01h09m55.6s | -45°55'52" | 12.6 | - | - | - | | | | undetectable | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | R Scl | HR 423 | Scl | 01h26m58.1s | -32°32'36" | 6.6 | 04:35 | 04:55 | 05:15 | AB | 5.7 + 19.9 | 10.0" | easy | not visible | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | Acamar | Theta 1 Eri | Eri | 02h58m15.6s | -40°18'16" | 2.9 | - | - | - | AB | 2.9 + 4.4 | 8.3" | undetectable | not visible | B600-Nav Sta |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | Kapteyn's Star | VZ Pic | Pic | 05h11m55.7s | -45°03'27" | 9.1 | - | - | - | | | | undetectable | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | NGC 2174 | Ced 67a | Ori | 06h09m24.0s | +20°40'00" | - | - | - | - | | | | unknown | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | NGC 2327 | H IV-25 | CMa | 07h04m07.5s | -11°19'00" | - | - | - | - | | | | unknown | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | MCG -7-28-4 | RFGC 2603 | Cen | 13h34m46.8s | -45°32'50" | 11.8 | - | - | - | | | | undetectable | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | IC 4603 | vdB 105 | Oph | 16h25m24.0s | -24°28'00" | - | - | - | - | | | | unknown | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | NGC 6192 | Collinder 309 | Sco | 16h40m23.0s | -43°22'00" | 7.6 | 22:10 | 22:47 | 00:10 | | | | easy | N/A | B600-H150 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | NGC 6216 | NGC 6222 | Sco | 16h49m24.0s | -44°43'42" | 9.5 | 22:20 | 22:47 | 23:50 | | | | apparent | N/A | B600-H150 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | NGC 6318 | Collinder 325 | Sco | 17h16m11.0s | -39°25'30" | 9.4 | 22:10 | 23:04 | 00:35 | | | | apparent | N/A | B600-H150 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | NGC 6322 | Collinder 326 | Sco | 17h18m25.0s | -42°56'00" | 8.1 | 22:10 | 23:06 | 00:50 | | | | easy | N/A | B600-H150 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | HR 6693 | PPM 297085 | Sgr | 17h59m05.3s | -30°15'11" | 5.0 | 22:00 | 23:46 | 01:40 | AB | 5.0 + 7.1 | 5.8" | obvious | easy split | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | HN 40 | | Sgr | 18h02m36.0s | -23°02'00" | 7.0 | 21:30 | 23:49 | 02:35 | | | | unknown | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | Parrot's Head Nebul B 87 | | Sgr | 18h04m18.0s | -32°40'00" | 15.1 | - | - | - | | | | unknown | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | NGC 6590 | vdB 118 | Sgr | 18h16m55.6s | -19°46'43" | - | - | - | - | | | | unknown | N/A | N600-H150 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | Barnes 157 | | CrA | 19h01m35.2s | -37°00'55" | - | - | - | - | | | | unknown | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | Gamma CrA | HR 7226 | CrA | 19h06m25.4s | -37°03'56" | 4.2 | 22:55 | 00:53 | 02:55 | AB | 4.2 + 5.1 | 1.6" | obvious | not splittable | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | Beta 1 Sgr | HR 7337 | Sgr | 19h22m38.3s | -44°27'33" | 4.0 | 22:55 | 01:09 | 03:30 | AB | 4.0 + 7.4 | 29.6" | obvious | obvious split | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | T Ind | HR 8145 | Ind | 21h20m09.5s | -45°01'19" | 6.2 | 01:10 | 03:06 | 04:35 | | | | obvious | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | IC 5201 | ESO 289 18 | Gru | 22h20m57.9s | -46°01'49" | 11.4 | - | - | - | | | | undetectable | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | NGC 7410 | MCG -7-47-2 | Gru | 22h55m00.9s | -39°39'40" | 11.3 | 03:05 | 03:35 | 03:55 | | | | difficult | N/A | B600-H150 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | NGC 7424 | MCG -7-47-8 | Gru | 22h57m18.4s | -41°04'14" | 11.0 | 03:00 | 03:37 | 04:00 | | | | difficult | N/A | B600-H150 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | IC 5332 | MCG -6-51-12 | Scl | 23h34m27.5s | -36°06'06" | 11.3 | 03:10 | 03:36 | 03:55 | | | | challenging | N/A | B600 |
| ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | ☆☆☆☆ | 19 Psc | TX Psc | Psc | 23h46m23.5s | +03°29'12" | 5.0 | 03:20 | 04:10 | 04:40 | | | | obvious | N/A | B600 |

| | | | | | | | | | | | | | | | | |
|---|------|---|-------------------|-------------------------|-----|------------------------|------|-------|-------|-------|----|-----------|------|---------|----------------|---------------|
|  | ☆☆☆☆ |  | Antares | Alpha Sco | Sco | 16h29m24.4s -26°25'56" | 1.0 | 17:50 | 19:53 | 23:35 | AB | 0.9 + 5.4 | 1.9" | obvious | not splittable | Transit Star |
|  | ☆☆☆☆ |  | NGC 6153 | He 2-167 | Sco | 16h31m30.6s -40°15'13" | 11.5 | 18:40 | 19:55 | 23:10 | | | | easy | N/A | |
|  | ☆☆☆☆ |  | M 107 | NGC 6171 | Oph | 16h32m32.0s -13°03'12" | 7.8 | 19:10 | 19:56 | 20:50 | | | | easy | N/A | |
|  | ☆☆☆☆ |  | NGC 6152 | Collinder 304 | Nor | 16h32m45.0s -52°38'36" | 5.9 | 18:50 | 19:56 | 22:30 | | | | obvious | N/A | |
|  | ☆☆☆☆ |  | NGC 6164 | PK 336-0.1 | Nor | 16h33m52.9s -48°06'38" | - | - | - | - | | | | unknown | N/A | |
|  | ☆☆☆☆ |  | NGC 6167 | Harvard 11 | Nor | 16h34m34.0s -49°46'18" | 7.1 | 18:45 | 19:58 | 23:10 | | | | obvious | N/A | |
|  | ☆☆☆☆ |  | Rim Nebula | Fighting Dragons of Ara | Ara | 16h40m06.0s -48°40'00" | - | - | - | - | | | | unknown | N/A | H150-NGC 6188 |
|  | ☆☆☆☆ |  | NGC 6192 | Collinder 309 | Sco | 16h40m23.0s -43°22'00" | 7.6 | 18:45 | 20:04 | 22:50 | | | | obvious | N/A | B600-H150 |
|  | ☆☆☆☆ |  | NGC 6193 | Collinder 310 | Ara | 16h41m20.0s -48°45'48" | 4.9 | 18:40 | 20:05 | 23:35 | | | | obvious | N/A | |
|  | ☆☆☆☆ |  | Hercules Globular | Keystone Cluster | Her | 16h41m41.0s +36°27'36" | 5.8 | 18:55 | 20:04 | 21:40 | | | | easy | N/A | |
|  | ☆☆☆☆ |  | Turtle Nebula | NGC 6210 | Her | 16h44m29.5s +23°48'00" | 9.7 | 18:30 | 20:07 | 23:25 | | | | obvious | N/A | |
|  | ☆☆☆☆ |  | M 12 | NGC 6218 | Oph | 16h47m14.0s -01°56'48" | 6.1 | 19:00 | 20:10 | 21:45 | | | | obvious | N/A | |
|  | ☆☆☆☆ |  | NGC 6216 | NGC 6222 | Sco | 16h49m24.0s -44°43'42" | 9.5 | 18:50 | 20:13 | 22:45 | | | | easy | N/A | B600-H150 |

Submit This Spreadsheet To Program's Coordinator

| A | B | C | D | E | F | G | H | I | J | K | L | M | N |
|------|-------------|-------------|-------------|------|-----|------|---------------|-------|----------|------------------|--------|--------------|--|
| ID # | Target Name | Other Names | Common Name | Type | Con | Vmag | Observed Data | | | | | | |
| | | | | | | | Date | Time | Location | Equipment | Seeing | Transparency | Description |
| | | | | | | | | | | | | | subtle. |
| 429 | NGC 6192 | | | OC | SCO | 8.5 | 7/8/2024 | 21:49 | DAS Site | 8" f/6 Newtonian | Good | Good | 122x – Very low in south. A roundish open cluster. Fills center of FOV. 10-15 very faint stars, but it is easy to see these stars. 47x – Small, roundish glow speckled with stars. 203x – Very loose open cluster. 4 brighter and 3 very faint |

AL Observing Programs

- ▣ 86 Programs to choose from
 - <https://www.astroleague.org/alphabeticobserving/>
 - Most OPs have an imaging component
 - Observe cool objects off the beaten path
 - Gives structure to your Observing Sessions
 - ▣ List after list of *what* to observe

- ▣ Each program will teach you something new
 - Build a set of observing skills
- ▣ Classification/Sketching Requirements
 - Forces you to study object to see finer details
 - Trains your eye to see fainter and fainter objects

“Seeing is in some respect an art,
which must be learnt.”

William Herschel

Beginner Programs

- ▣ Asterisms
- ▣ Caldwell
- ▣ Carbon Star
- ▣ Constellation Hunter
- ▣ Double Star
- ▣ Galileo
- ▣ Globular Cluster
- ▣ Solar, Hydrogen-Alpha Solar
- ▣ Meteor
- ▣ Lunar, Lunar II
- ▣ Universe Sampler
- ▣ Multiple Star
- ▣ Sketching

This Presentation

<https://mikehotka.com>

DeepSkyMike's Homepage



My 12.5" f/8 Telescope

Michael Hotka
Amateur Astronomer
Platinum Master Observer
Deep Sky Marine
NPS Dark Sky Ranger
JPL Solar System Ambassador
Broomfield, Colorado USA



♥ Barbara, My Best Friend ♥

Purchase My Books

[Exploring Amateur Astronomy: Goal Oriented Observing](#)

[Globular Clusters: A Guide to the
Globular Cluster Observing Program](#)

| | | | | |
|-------------------------------------|---|---------------------------------------|--|---------------------------------------|
| My Blog | My Equipment | Observing Lists | Astronomical Accomplishments | Wine Down Memory Lane |
| Event Blogs | My Astro Buddies | Awards Page | Astronomy Biography | How I Do What I Do |
| | Our XMAS Light Displays | My Useful Astro Links | Observing Logbook | Publications |
| 2022 Iceland Cruise | My Software Patent | My Other AstroLinks | | Choosing an Eyepiece |

This Presentation

| | | | | |
|--|--|--|---|--|
| My Blog | My Equipment | Observing Lists | Astronomical Accomplishments | Walk Down Memory Lane |
| Event Blogs | My Astro Buddies | Awards Page | Astronomy Biography | How I Do What I Do |
| | Our XMAS Light Displays | My Useful Astro Links | Observing Logbook | Publications |
| 2023 Iceland Cruise | My Software Patent | My Other AstroLinks | | Choosing an Eyepiece |

How I Do What I Do

This is a series of articles, which documents my personal aspects, preferences and tastes I add to my hobby of astronomy.

[How I Choose Objects to Observe](#)

[Logging Your Observations](#)

[Pre-Planning your Observing Session](#)

[Concurrence of Observations](#)

[What Am I Going to Observe Tonight? \(Published Version\)](#)

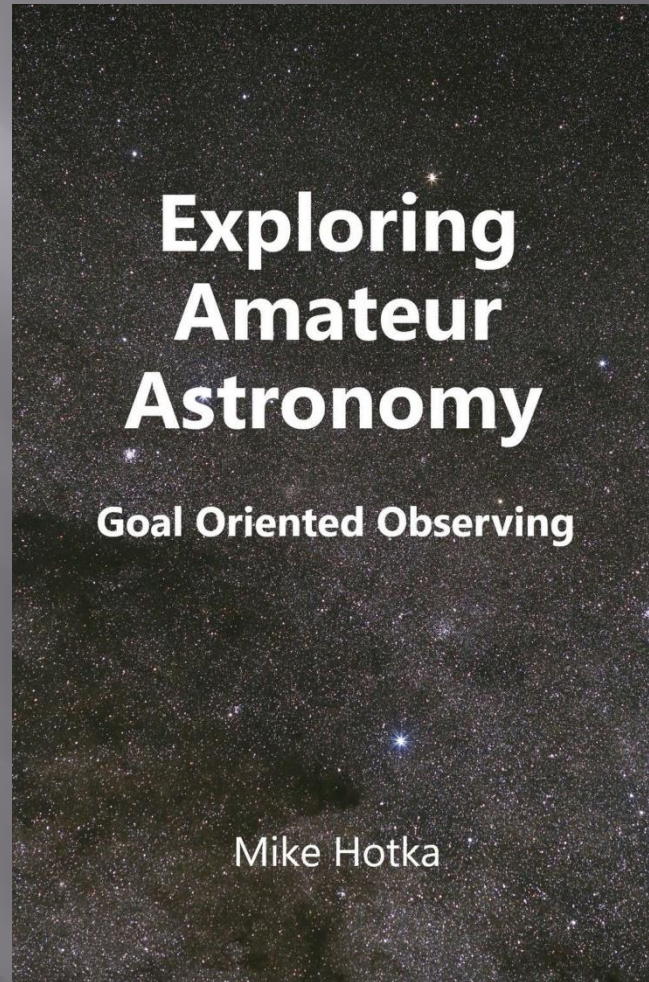
Tips and Tricks

[Doing the Lunar, LunarII and EOSOC AL Observing Clubs](#)

[Talk given to ALCON 2017](#)

[Talk given at Okie-Tex 2024](#)

My Book For Sale



\$5

Q & A

- ▣ Observing can be fun and rewarding
- ▣ My hope is that you can take something from my presentation and apply it to your own observing
- ▣ Thank you for listening to my presentation