Prospective Imaging Objects – September 03 2024

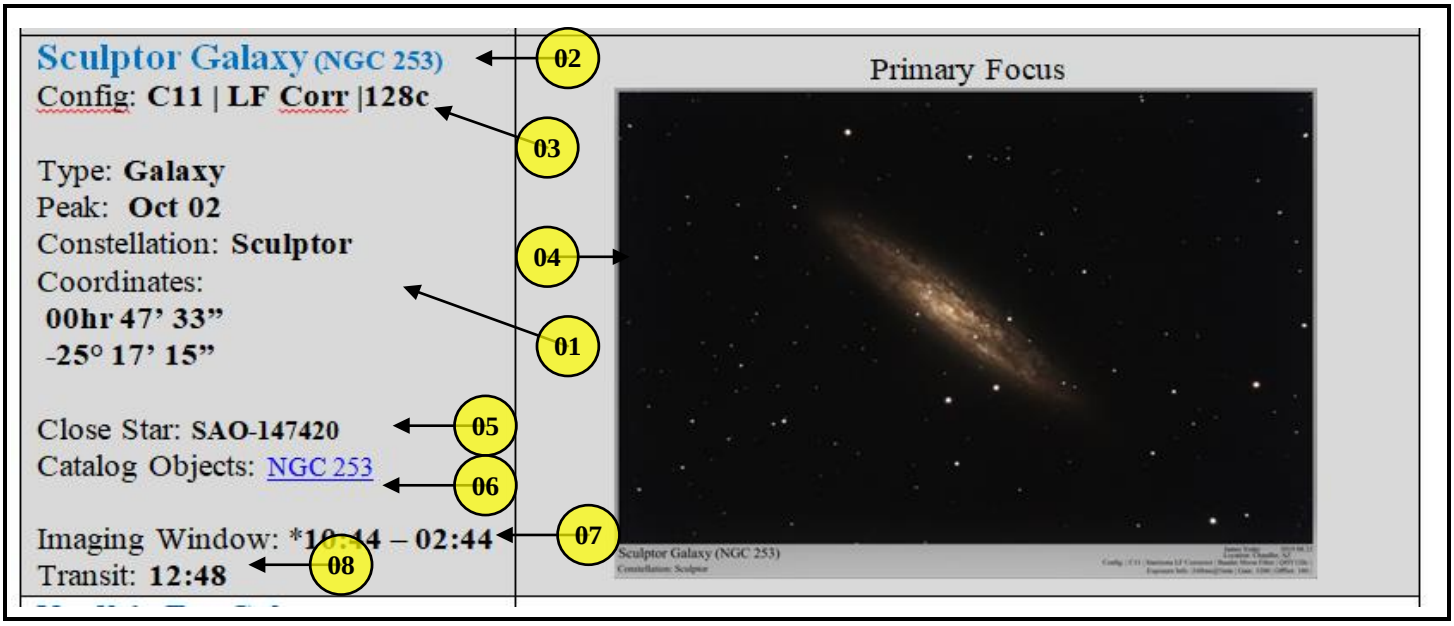
Astronomical Data

Sunrise	Sunset	Astronomical Dusk	Astronomical Dawn	Imaging	New Moon
06:03am	06:49 pm	08:14 pm	04:38 am	08:24	September 03

Hardware Info

Configuration	FL	FOV	FOV°	FR	Image Scale (1 – 1.5) ideal
C11HD | ZWO ASI-6200MC |	2800 mm	45'x 30'	0.75° x 0.5°	10	0.280"/pix (Oversampled)
C11HD | 0.7xReducer | ASI-6200MC |	1960 mm	60' x 45'	1.0° x 0.75°	7	0.393"/pix (Oversampled)
C11HD | HS-v4 | ZWO ASI-6200MC |	540 mm	228' x 150'	3.8° x 2.5°	1.9	1.4"/pix (Undersampled)
C6 | ZWO ASI-6200MC |	1500 mm	83' x 55'	1.38° x 0.92°	10	0.52"/pix (Oversampled)
C6 | 0.63 Corrector | ZWO ASI-6200MC |	1220 mm	131' x 88'	2.18° x 1.46°	6.3	0.82"/pix (Oversampled)
C6 | HS-v4 | ZWO6200MC	300mm	412' x 275'	6.87° x4.58°	2.0	2.59"/pix (Undersampled)

How to use this document



01: Background Fill Color - Items that I have previously images will have a fill color of grey, Images not yet imaged will have a white background color.

02: Object Name and catalog number – Common name long with one of the reference catalog numbers associated with this object.

03: Config – The optimal configuration to image this object, and the configuration the provided image is based on based on what hardware I own. Configuration will either be the Celestron C-11 Primary focus (with focal reducer) or C-11 with HyperStar.

04: Object Image – If this is an object I have already imaged, the thumbnail is my photo. It is hyperlinked to my website, so selecting the image should open a larger image in your browser. If the object has not yet been imaged by me the image displayed is for the identified configuration as obtained from http://www.telescopious.com.

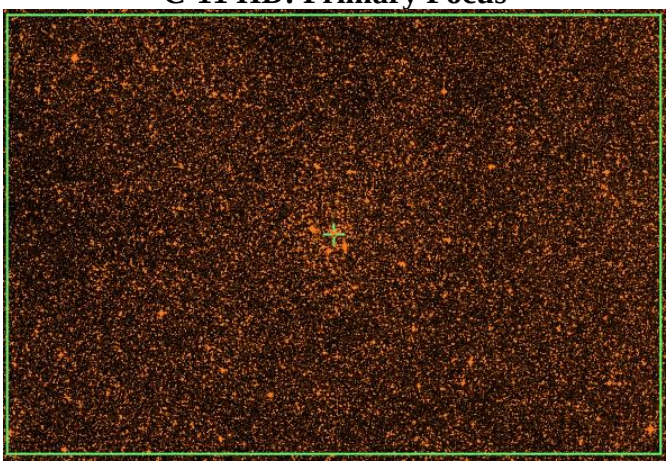
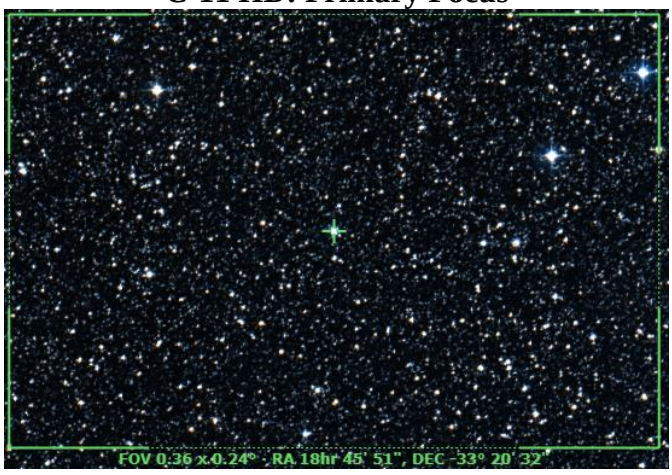
05: Close Star – A fairly bright star close to the target that can be used to check focus and sync the telescope before the imaging session begins.

06: Catalog Objects – List of objects that should appear in the field of view. When possible they are hyperlinked to http://www.telescopious.com where more information can be obtained.

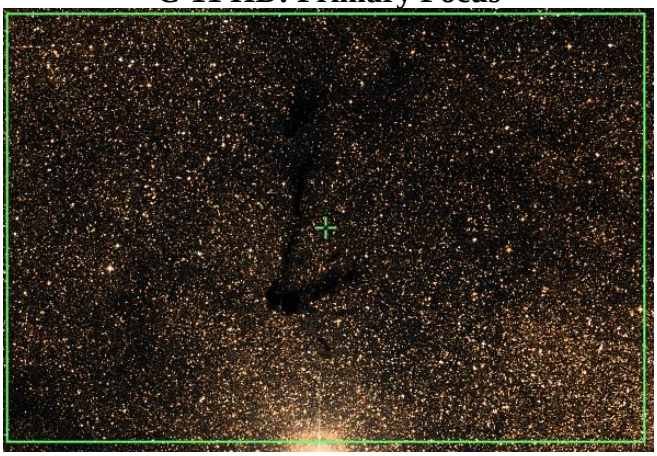
07: Imaging Window – Ideally the time the object is 45° above the horizon. Southern objects with negative DEC that do not peak above 45° are indicated with a *. Imaging window for these objects may be based on 30° or even 25° above horizon for the imaging window.

08: Transit – When the object is at the highest point in the sky for the night. For equatorial mounts this is when the meridian flip will occur.

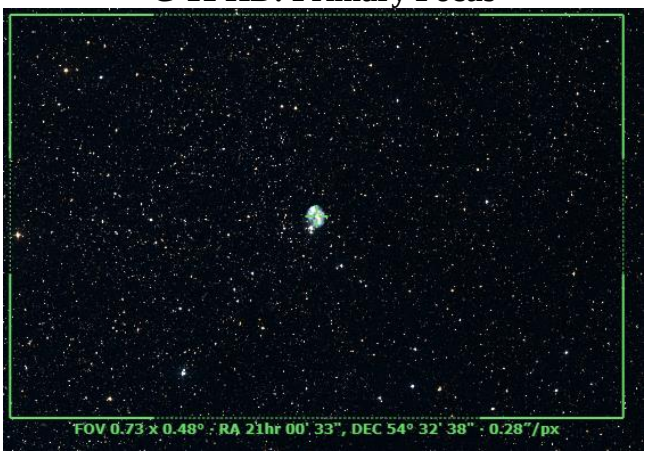
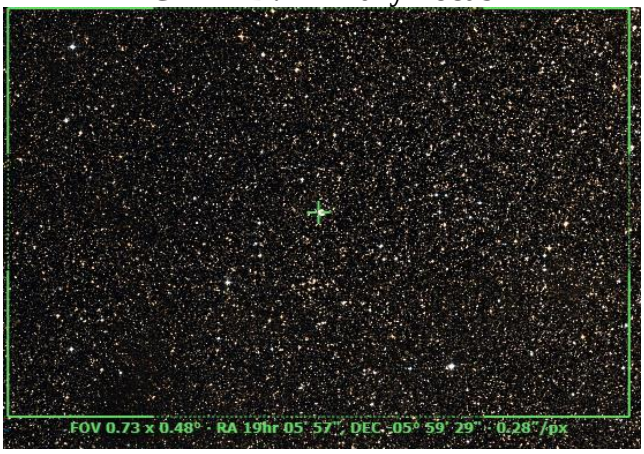
Prospective Imaging Objects – September 03 2024

M-70(NGC-6681) Config: |C11HD|ZWO6200MC| Type: **Globular Cluster** Constellation: **Sagittarius** Coordinates: **18h 43' 13"** **-32° 17' 29"** Close Star: **SAO-186841** (Kaus Borealis) Catalog Objects: M-70/NGC-6681 Imaging Window: ***08:14 – 10:03** Transit: **08:14 | 24°**	**C-11 HD: Primary Focus** 
M-26(NGC-6694) Config: |C11HD|ZWO6200MC| Type: **Open Cluster** Constellation: **Sagittarius** Coordinates: **18h 45' 15"** **-09° 23' 06"** Close Star: **SAO-125122** (Altair) Catalog Objects: M-26/NGC-6694 Imaging Window: ***08:14 – 11:14** Transit: **08:16 | 47°**	**C-11 HD: Primary Focus** 
IC-4776 Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Sagittarius** Coordinates: **18h 45' 51"** **-33° 20' 32"** Close Star: **SAO-186841** (Kaus Borealis) Catalog Objects: IC-4776 Imaging Window: ***08:14 – 09:52** Transit: **08:16 | 23°**	**C-11 HD: Primary Focus** 

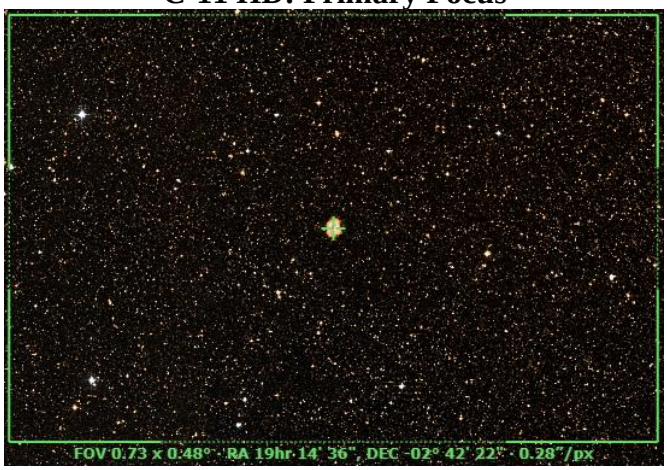
Prospective Imaging Objects – September 03 2024

B-104(LDN-532) Config: |C11HD|ZWO6200MC| Type: **Dark Nebula** Constellation: **Scutum** Coordinates: **18h 47' 09"** **-04° 28' 45"** Close Star: **SAO-125122** (Altair) Catalog Objects: B-104/LDN-532 Imaging Window: ***08:14 – 11:36** Transit: **08:18 | 52°**	**C-11 HD: Primary Focus** 
Wild Duck Cluster(M-11/NGC-6705) Config: |C11HD|ZWO6200MC| Type: **Open Cluster** Constellation: **Scutum** Coordinates: **18h 51' 05"** **-06° 16' 12"** Close Star: **SAO-125122** (Altair) Catalog Objects: M-11/NGC-6705 Imaging Window: ***08:14 – 11:59** Transit: **08:22 | 50°**	**C-11 HD: Primary Focus** 
Ring Nebula(M-57/NGC-6720) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Lyra** Coordinates: **18h 53' 35"** **33° 01' 46"** Close Star: **SAO-67174** (Vega) Catalog Objects: M-57/NGC-6720 Imaging Window: **08:14 – 12:04** Transit: **08:24 | 90°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

M-54 (NGC-6715) Config: |C11HD|ZWO6200MC| Type: **Globular Cluster** Constellation: **Sagittarius** Coordinates: **18h 55’ 03”** **-30° 28’ 39”** Close Star: **SAO-187448** (Nunki) Catalog Objects: M-54/NGC-6715 Imaging Window: ***08:14 – 09:30** Transit: **08:26 | 26°**	**C-11 HD: Primary Focus** 
Abell 50 (NGC-6742) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Draco** Coordinates: **21h 00’ 33”** **54° 32’ 38”** Close Star: **SAO-046872** (Iota Her) Catalog Objects: NGC-6742 Imaging Window: **08:14 – 12:23** Transit: **08:30 | 87°**	**C-11 HD: Primary Focus** 
Dandelion Puffball Nebula (NGC-6751) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Aquila** Coordinates: **19h 05’ 57”** **-05° 59’ 29”** Close Star: **SAO-142931** (i Aquilae) Catalog Objects: NGC-6751 Imaging Window: ***08:14 – 11:48** Transit: **08:36 | 51°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

NGC-6772 (PK 33-6.1) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Aquila** Coordinates: **19h 14’ 36”** **-02° 42’ 22”** Close Star: **SAO-142931** (i Aquilae) Catalog Objects: NGC-6772 Imaging Window: ***08:14 – 12:36** Transit: **08:45 | 54°**	**C-11 HD: Primary Focus** 
Barnard’s Black Lizard (B-138) Config: **C11-HD | HS | ZWO6200MC** Type: **Dark Nebula** Constellation: **Aquila** Coordinates: **19h 15’ 59”** **00° 13’ 00”** Close Star: **SAO-125122** (Altair) Catalog Objects: B-138 Imaging Window: **08:14 – 11:00** Transit: **08:44 | 58°**	**C-11 HD: HyperStar v4** 
M-56 (NGC-6779) Config: |C11HD|ZWO6200MC| Type: **Globular Cluster** Constellation: **Lyra** Coordinates: **19h 16’ 35”** **30° 11’ 07”** Close Star: **SAO-67663** (Sulafat) Catalog Objects: M-56/NGC-6779 Imaging Window: **08:14 – 12:23** Transit: **08:47 | 87°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

NGC-6778 (PK 34-6.1)

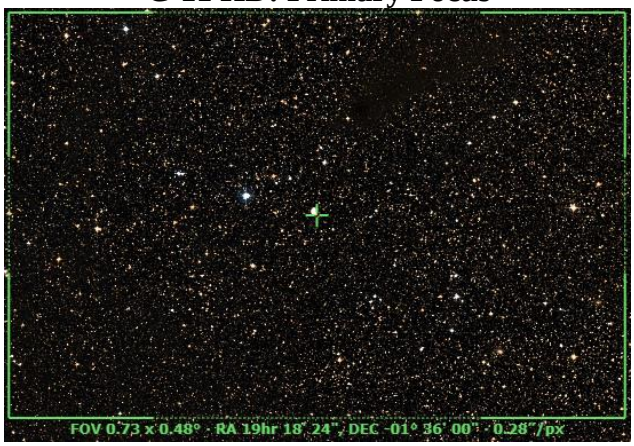
Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Aquila**
Coordinates:
19h 18’ 24”
-01° 36’ 00”

Close Star: **SAO-124068** (Alya)
Catalog Objects: NGC-6778/PK 34-6.1
Imaging Window: **08:14 – 10:52**
Transit: **08:49 | 55°**

C-11 HD: Primary Focus



NGC-6781

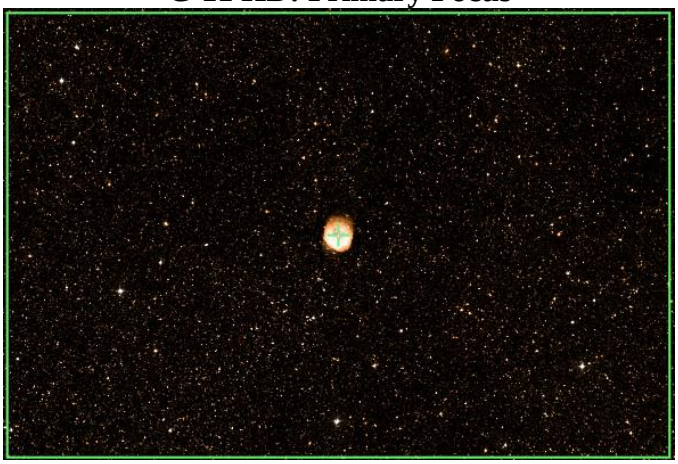
Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Aquila**
Coordinates:
19h 18’ 28”
06° 32’ 25”

Close Star: **SAO-125122** (Altar)
Catalog Objects: NGC-6781/PK 41-2.1
Imaging Window: **08:14 – 11:28**
Transit: **08:49 | 63°**

C-11 HD: Primary Focus



LDN-673

Config: **C11-HD | HS | ZWO6200MC**

Type: **Dark Nebula**

Constellation: **Aquila**
Coordinates:
19h 18’ 14”
11° 15’ 40”

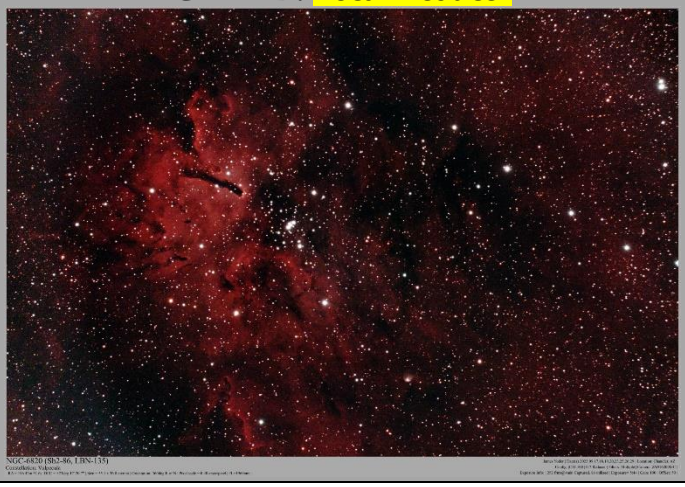
Close Star: **SAO-125122** (Altair)
Catalog Objects: LDN-673
Imaging Window: **08:14 – 11:45**
Transit: **08:51 | 68°**

C-11 HD: HyperStar v4

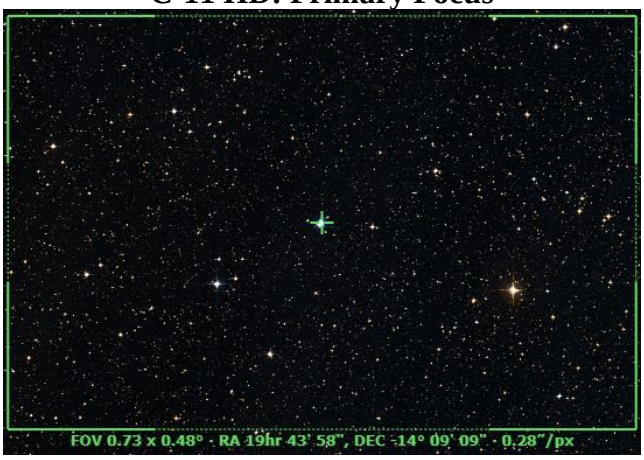
Prospective Imaging Objects – September 03 2024

Lot Ness Monster (LDN-772) Config: **C11-HD | HS | ZWO6200MC** Type: **Dark Nebula** Constellation: **Vulpecula** Coordinates: **19h 26' 46"** **23° 08' 59"** Close Star: **SAO-125122** (Altair) Catalog Objects: LDN-772 Imaging Window: **08:14 – 12:19** Transit: **08:56 | 80°**	**C-11 HD: HyperStar v4** 
NGC6804 Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Aquila** Coordinates: **19h 31' 35"** **09° 13' 33"** Close Star: **SAO-104728** (Omega Aq) Catalog Objects: NGC-6804 Imaging Window: **08:14 – 11:50** Transit: **09:02 | 66°**	**C-11 HD: Primary Focus** 
M-55 Config: |C11HD|ZWO6200MC| Type: **Globular Cluster** Constellation: **Sagittarius** Coordinates: **19h 39' 59"** **-30° 57' 42"** Close Star: **SAO-191524** (Formalhaut) Catalog Objects: M-55/NGC-6809 Imaging Window: ***08:15 – 10:03** Transit: **09:10 | 26°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

Barnard's E (B-143) Config: |C11-HD|FR|ZWO6200MC| Type: **Dark Nebula** Constellation: **Aquila** Coordinates: **19h 40' 47"** **11° 01' 12"** Close Star: **SAO-125122** (Altair) Catalog Objects: B-143/LDN-694 Imaging Window: **08:14 – 12:04** Transit: **09:11 | 67°**	**C-11 HD: Focal Reducer** 
NGC-6820 (LDN-772) Config: **C11-HD | HS | ZWO6200MC** Type: **Open Cluster & Nebula** Constellation: **Vulpecula** Coordinates: **19h 43' 37"** **23° 19' 29"** Close Star: **SAO-125122** (Altair) Catalog Objects: NGC-6820 Imaging Window: **08:14 – 12:36** Transit: **09:13 | 80°**	**C-11 HD: HyperStar v4** 
The Finger (NGC-6820) Config: |C11-HD|FR|ZWO6200MC| Type: **Open Cluster & Nebula** Constellation: **Vulpecula** Coordinates: **19h 42' 56"** **23° 18' 43"** Close Star: **SAO-125122** (Altair) Catalog Objects: NGC-6820 Imaging Window: **08:14 – 12:36** Transit: **09:13 | 80°**	**C-11 HD: Focal Reducer** 

Prospective Imaging Objects – September 03 2024

The Finger (NGC-6820) Config: |C11HD|ZWO6200MC| Type: **Open Cluster & Nebula** Constellation: **Vulpecula** Coordinates: **19h 43' 01"** **23° 17' 12"** Close Star: **SAO-125122** (Altair) Catalog Objects: NGC-6820 Imaging Window: **08:14 – 12:36** Transit: **09:13 | 80°**	**C-11 HD: Primary Focus** 
Little Gem (NGC-6818) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Sagittarius** Coordinates: **19h 43' 58"** **-14° 09' 09"** Close Star: **SAO-143021** (16 Aql) Catalog Objects: NGC-6818/PK 25-17.1 Imaging Window: ***08:14 – 12:21** Transit: **09:14 | 43°**	**C-11 HD: Primary Focus** 
Blinking Planetary (NGC-6826) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Cygnus** Coordinates: **19h 44' 48"** **50° 31' 32"** Close Star: **SAO-31815** (13 Cyg) Catalog Objects: NGC-6826/NGC-6826 Imaging Window: **08:14 – 01:08** Transit: **09:15 | 73°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

Barnard's Galaxy (NGC 6822)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Sagittarius**
Coordinates:
19h 44' 57"
-14° 48' 23"

Close Star: **SAO-191524** (Formalhaut)
Catalog Objects: NGC-6822
Imaging Window: ***08:14 – 12:17**
Transit: **09:15 | 42°**

C-11 HD: Primary Focus

M-71 (NGC-6838)
Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Sagitta**
Coordinates:
19h 53' 46"
18° 46' 43"

Close Star: **SAO-125122** (Altair)
Catalog Objects: M-71/NGC-6838
Imaging Window: **08:14 – 12:38**
Transit: **09:24 | 75°**

C-11 HD: Primary Focus

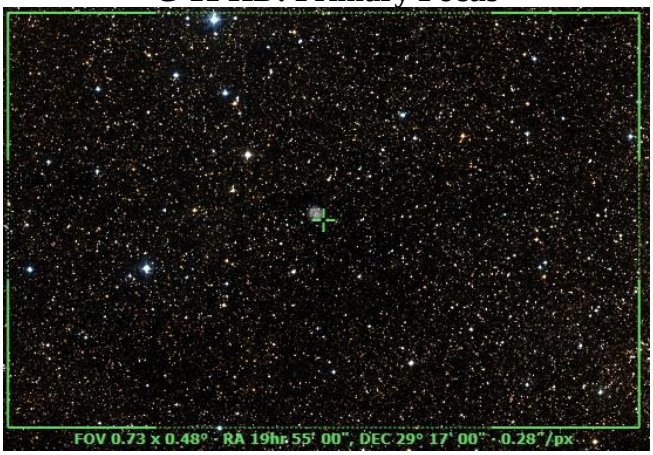
NGC 6842 (PK 65+0.1)
Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

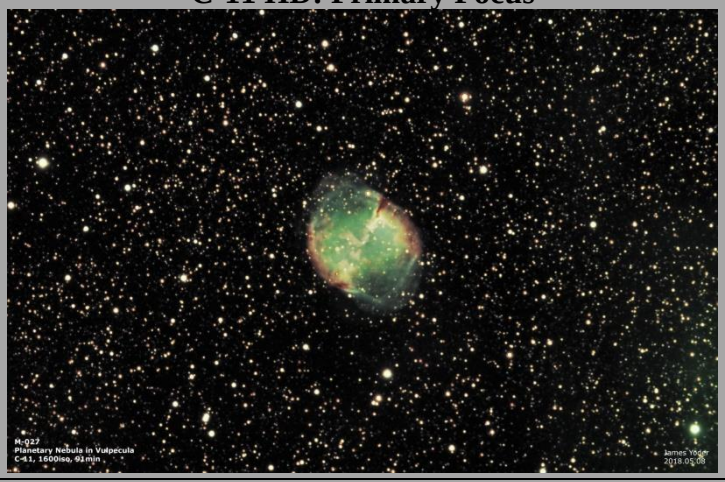
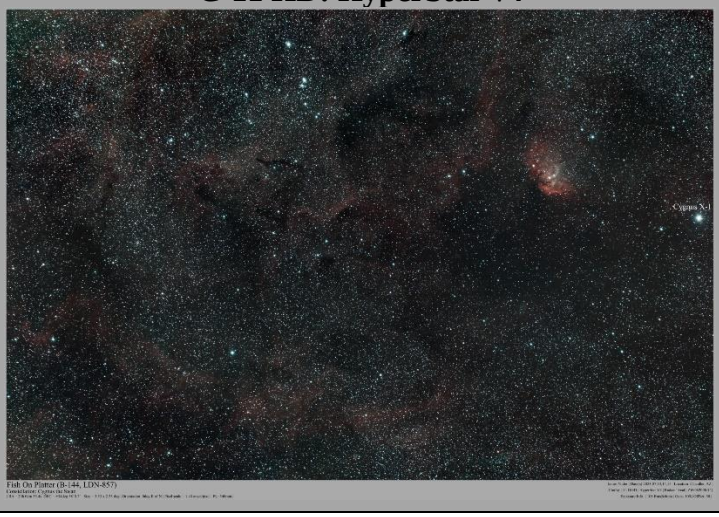
Constellation: **Vulpecula**
Coordinates:
19h 55' 00"
29° 17' 00"

Close Star: **SAO-68637** (12 Cyg)
Catalog Objects: NGC-6842/PK 65+0.1
Imaging Window: **08:14 – 01:00**
Transit: **09:25 | 86°**

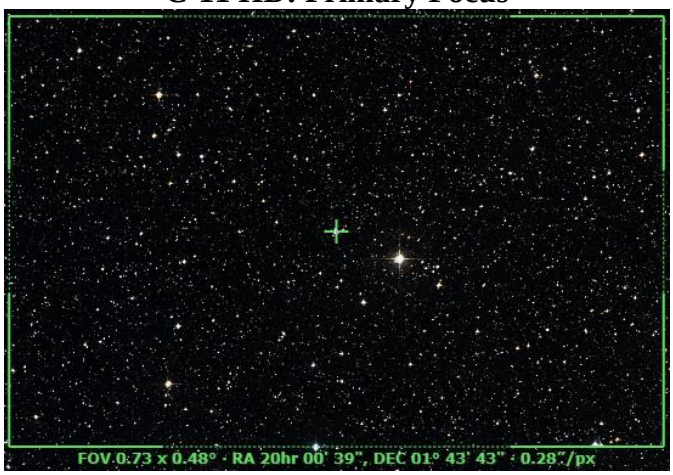
C-11 HD: Primary Focus



Prospective Imaging Objects – September 03 2024

Dumbbell Nebula (M-27, NGC-6853) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Vulpecula** Coordinates: **19h 59' 36"** **22° 43' 17"** Close Star: **SAO-125122** (Altair) Catalog Objects: M-27/NGC-6853 Imaging Window: **08:14 – 12:52** Transit: **09:30 | 79°**	**C-11 HD: Primary Focus** 
Fish on the Platter (B-144) Config: **C11-HD | HS | ZWO6200MC** Type: **Dark Nebula** Constellation: **Cygnus** Coordinates: **20h 02' 28"** **34° 57' 42"** Close Star: **SAO-125122** (Altair) Catalog Objects: B-144, SH2-101 Imaging Window: **08:14 – 01:11** Transit: **09:28 | 89°**	**C-11 HD: HyperStar v4** 
Tulip Nebula (SH2-101) Config: |C11-HD|FR|ZWO6200MC| Type: **Diffuse Nebula** Constellation: **Cygnus** Coordinates: **20h 00' 58"** **35° 16' 30"** Close Star: **SAO-125122** (Altair) Catalog Objects: SH2-101 Imaging Window: **08:14 – 01:11** Transit: **09:28 | 89°**	**C-11 HD: Focal Reducer** 

Prospective Imaging Objects – September 03 2024

Tulip Nebula (SH2-101) Config: |C11HD|ZWO6200MC| Type: **Diffuse Nebula** Constellation: **Cygnus** Coordinates: **20h 00’ 57”** **35° 20’ 11”** Close Star: **SAO-125122** (Altair) Catalog Objects: B-144 Imaging Window: **08:14 – 01:11** Transit: **09:28 | 89°**	**C-11 HD: Primary Focus** 
NGC-6852 (PK 42-14.1) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Aquila** Coordinates: **20h 00’ 39”** **01° 43’ 43”** Close Star: **SAO-144150** (65 Aql) Catalog Objects: NGC-6852/PK 42-14.1 Imaging Window: **08:14 – 11:50** Transit: **09:31 | 58°**	**C-11 HD: Primary Focus** 
M-75 (NGC-6864) Config: |C11HD|ZWO6200MC| Type: **Globular Cluster** Constellation: **Sagittarius** Coordinates: **20h 06’ 05”** **-21° 55’ 15”** Close Star: **SAO-191524** (Formalhaut) Catalog Objects: M-75/NGC-6864 Imaging Window: ***08:14 – 11:59** Transit: **09:36 | 35°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

Crescent Nebula (NGC-6888)
Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**

Constellation: **Cygnus**
Coordinates:
20h 12’ 06”
38° 21’ 00”

Close Star: **SAO-125122** (Altair)
Catalog Objects: NGC-6888/Sh2-105
Imaging Window: **08:14 – 01:29**
Transit: **09:42 | 85°**

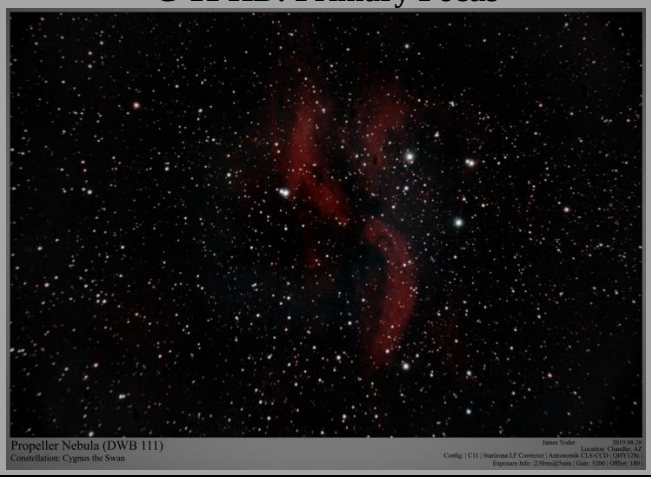
C-11 HD: Primary Focus

Propeller Nebula (DWB-111)
Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**

Constellation: **Cygnus**
Coordinates:
20h 16’ 09”
43° 41’ 47”
Close Ref Object: LDN 891
Close Star: **SAO-048796** (Al Fawaris)
Catalog Objects: Simeis-57/DWB-111
Imaging Window: **08:14 – 01:34**
Transit: **09:44 | 79°**

C-11 HD: Primary Focus



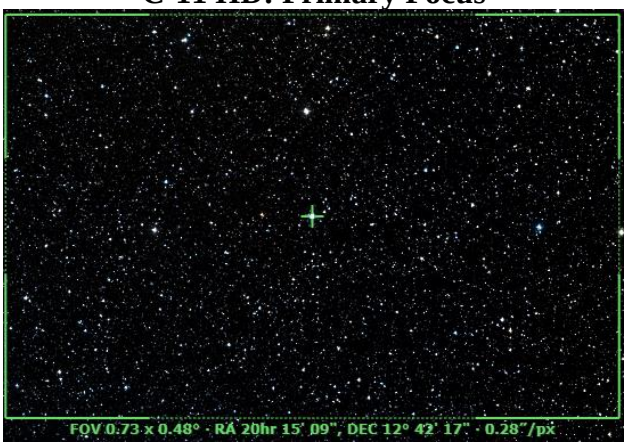
NGC 6891 (PK 54-12.1)
Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

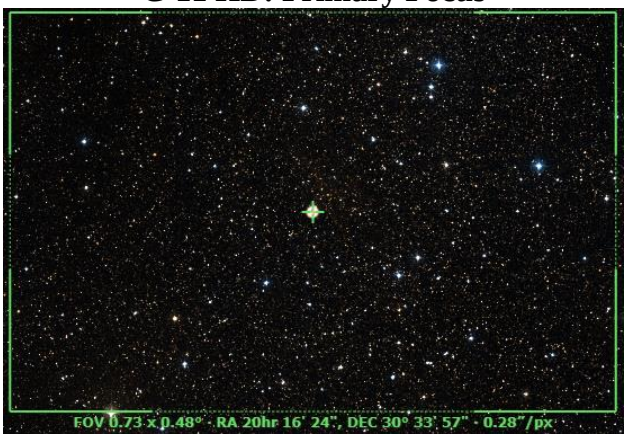
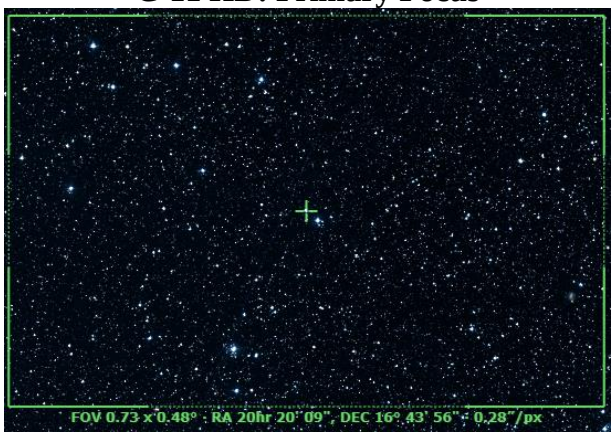
Constellation: **Delphinus**
Coordinates:
20h 15’ 09”
12° 42’ 17”

Close Star: **SAO-106230** (2 Del)
Catalog Objects: NGC-6991
Imaging Window: **08:14 – 12:44**
Transit: **09:45 | 77°**

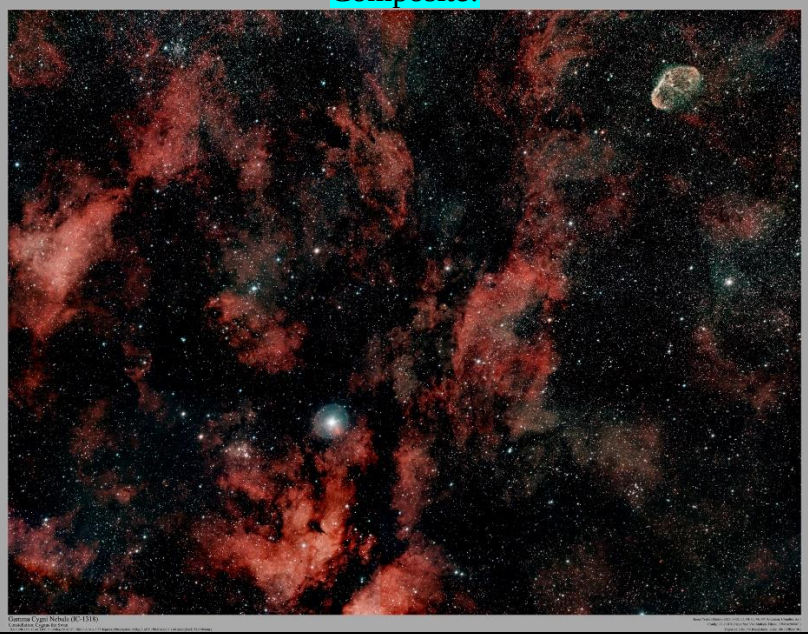
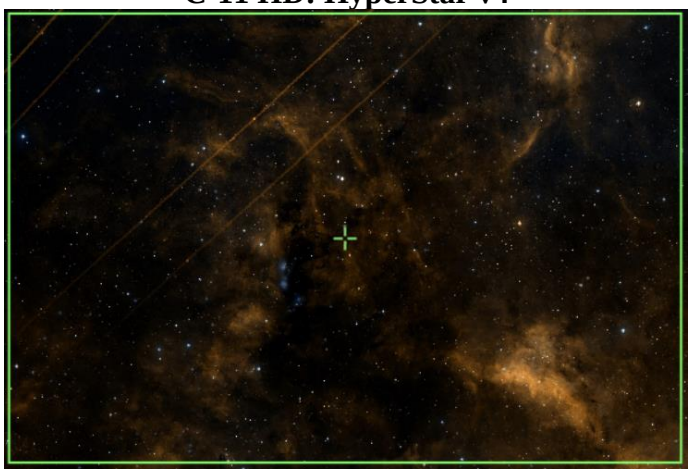
C-11 HD: Primary Focus



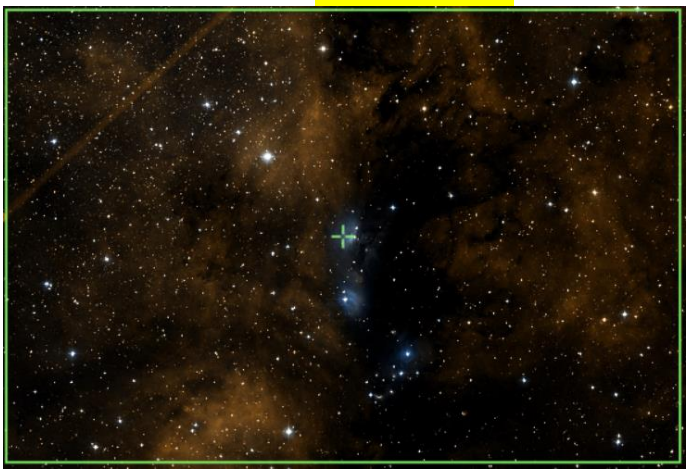
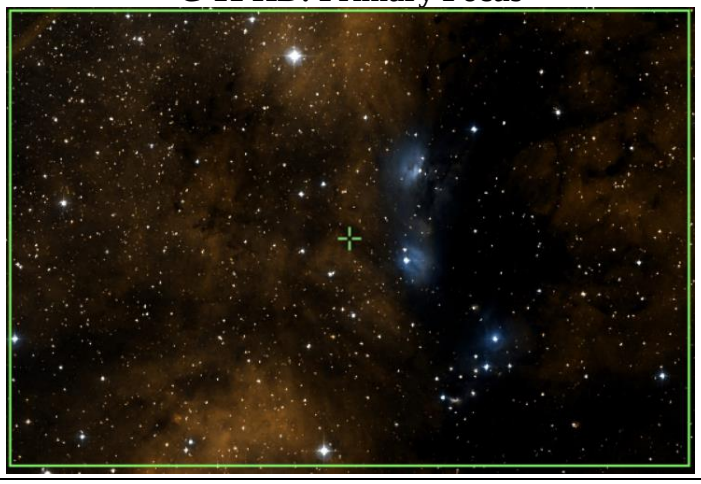
Prospective Imaging Objects – September 03 2024

Little Ring Nebula (NGC-6894) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Cygnus** Coordinates: **20h 16’ 24”** **30° 33’ 57”** Close Star: **SAO-71070** (64 Cyg) Catalog Objects: NGC-6894 Imaging Window: **08:14 – 01:23** Transit: **09:47 | 87°**	**C-11 HD: Primary Focus** 
IC-4997 (PK 58-10.1) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Sagitta** Coordinates: **20h 20’ 09”** **16° 43’ 56”** Close Star: **SAO-106316** (Rotanev) Catalog Objects: IC-4997 Imaging Window: **08:14 – 12:59** Transit: **09:50 | 87°**	**C-11 HD: Primary Focus** 
Blue Flash Nebula (NGC-6905) Config: |C11HD|ZWO6200MC| Type: **Bright Nebula** Constellation: **Delphinus** Coordinates: **20h 22’ 24”** **20° 06’ 18”** Close Star: **SAO-108378** (Markab) Catalog Objects: NGC-6905 Imaging Window: **08:14 – 01:10** Transit: **09:53 | 77°**	**C-11 HD: Primary Focus** 

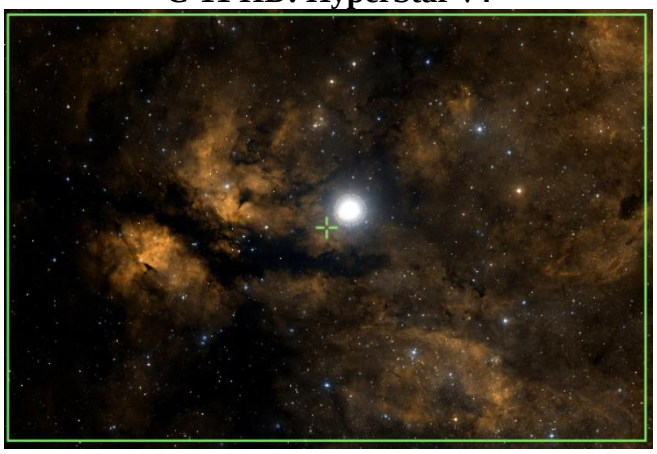
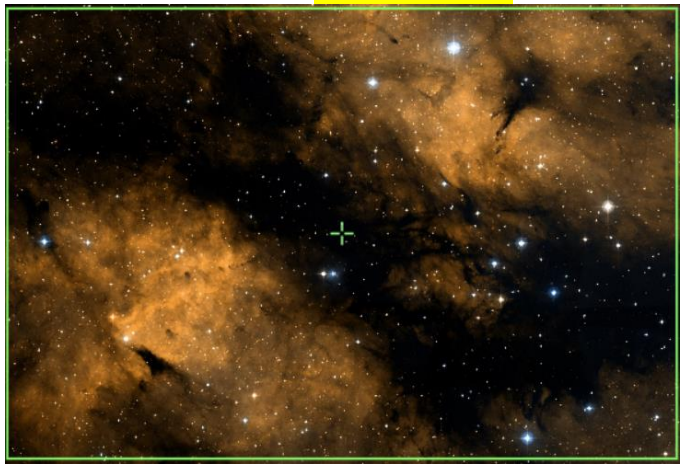
Prospective Imaging Objects – September 03 2024

Gamma Cygni Nebula (IC-1318 A&B) Config: **C11-HD | HS | ZWO6200MC** Type: **Bright Nebula** Constellation: **Cygnus** Coordinates: Frame 1: RA=20hr 18’ 27” DEC=41°12’10” Frame 2: RA=20hr 18’ 38” DEC=38°55’33” Close Star: **SAO-49941** (Deneb) Catalog Objects: IC-1318 Imaging Window: **08:14 – 01:37** Transit: **09:47 | 81°**	**C-11 HD: HyperStar v4** Composite! 
IC-1318A Config: **C11-HD | HS | ZWO6200MC** Type: **Bright Nebula** Constellation: **Cygnus** Coordinates: **20h 22’ 52”** **42° 38’ 53”** Close Star: **SAO-49941** (Deneb) Catalog Objects: IC-1318A Imaging Window: **08:14 – 01:37** Transit: **09:47 | 81°**	**C-11 HD: HyperStar v4** 

Prospective Imaging Objects – September 03 2024

M-29 (NGC-6913) Config: |C11HD|ZWO6200MC| Type: **Open Cluster** Constellation: **Cygnus** Coordinates: **20h 24' 06"** **38° 29' 36"** Close Star: **SAO-90981** (Scheat) Catalog Objects: M-29/NGC-6913 Imaging Window: **08:14 – 01:40** Transit: **09:54 | 85°**	**C-11 HD: Primary Focus** 
IC-1318 Region-1 Config: |C11-HD|FR|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cygnus** Coordinates: **20h 24' 48"** **42° 29' 00"** Close Star: **SAO-49941** (Deneb) Catalog Objects: NGC-6914 Imaging Window: **08:14 – 01:45** Transit: **09:55 | 81°**	**C-11 HD: Focal Reducer** 
IC-1318 Region-1 Config: |C11HD|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cygnus** Coordinates: **20h 25' 07"** **42° 24' 34"** Close Star: **SAO-49941** (Deneb) Catalog Objects: NGC-6914 Imaging Window: **08:14 – 01:45** Transit: **09:55 | 81°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

IC-1318B Config: **C11-HD | HS | ZWO6200MC** Type: **Bright Nebula** Constellation: **Cygnus** Coordinates: **20h 22’ 57”** **40° 09’ 33”** Close Star: **SAO-67174** (Vega) Catalog Objects: IC-1318B Imaging Window: **08:14 – 01:46** Transit: **09:58 | 80°**	**C-11 HD: HyperStar v4** 
IC-1318B Config: |C11-HD|FR|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cygnus** Coordinates: **20h 26’ 59”** **40° 06’ 52”** Close Star: **SAO-67174** (Vega) Catalog Objects: IC-1318B Imaging Window: **08:14 – 01:46** Transit: **09:58 | 80°**	**C-11 HD: Focal Reducer** 
IC-1318B Config: |C11HD|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cygnus** Coordinates: **20h 25’ 40”** **40° 17’ 34”** Close Star: **SAO-67174** (Vega) Catalog Objects: IC-1318B Imaging Window: **08:14 – 01:46** Transit: **09:58 | 80°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

Fireworks Galaxy(NGC-6946)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Cepheus**
Coordinates:
20° 34’ 54”
60° 08’ 60”

Close Star: **SAO-19302** (Alderamin)
Catalog Objects: NGC-6946
Imaging Window: **08:14 – 01:53**
Transit: **10:05 | 63°**

C-11 HD: Primary Focus

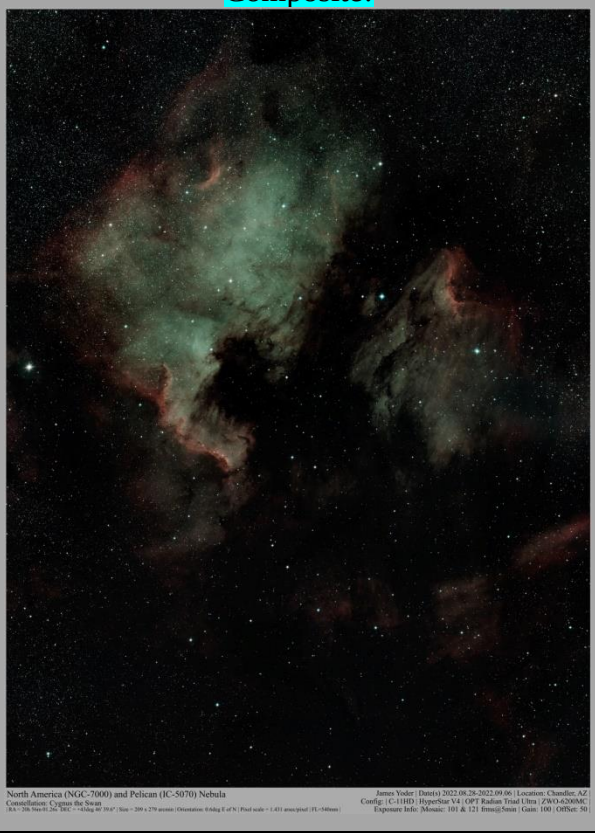
Pelican & N. America Nebula (IC-5070)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Bright Nebula**

Constellation: **Cygnus**
Coordinates:
Frame 1:
RA=20hr56’10” DEC=44°55’07”
Frame 2:
RA=20hr56’10” DEC=42°37’57”

Close Star: **SAO-50180** (57 Cygni)
Catalog Objects: IC5070
Imaging Window: **08:14 – 02:13**
Transit: **10:21 | 79°**

C-11 HD: HyperStar v4
Composite!



Prospective Imaging Objects – September 03 2024

Pelican & N. America Nebula (IC-5070)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Bright Nebula**

Constellation: **Cygnus**
Coordinates:
20h 57’ 29”
44° 10’ 10”

Close Star: **SAO-50180** (57 Cygni)
Catalog Objects: IC5070
Imaging Window: **08:14 – 02:13**
Transit: **10:21 | 79°**

C-11 HD: HyperStar v4

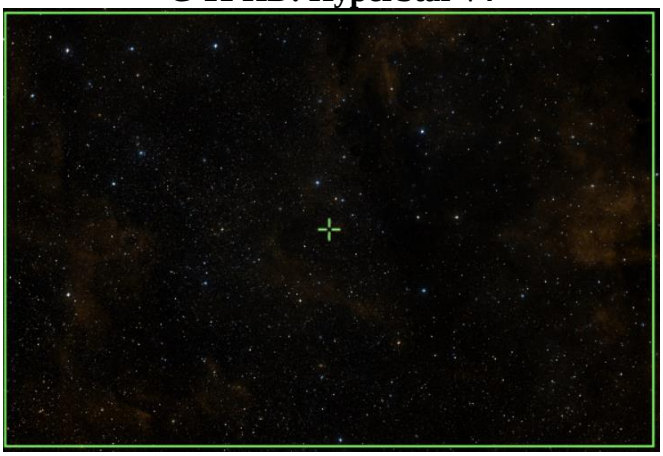
Northern Coal Sack (LDN-904)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Dark Nebula**

Constellation: **Cygnus**
Coordinates:
20h 51’ 52”
39° 13’ 34”

Close Star: **SAO-49941** (Deneb)
Catalog Objects: LDN-904
Imaging Window: **08:14 – 02:10**
Transit: **10:23 | 84°**

C-11 HD: HyperStar v4



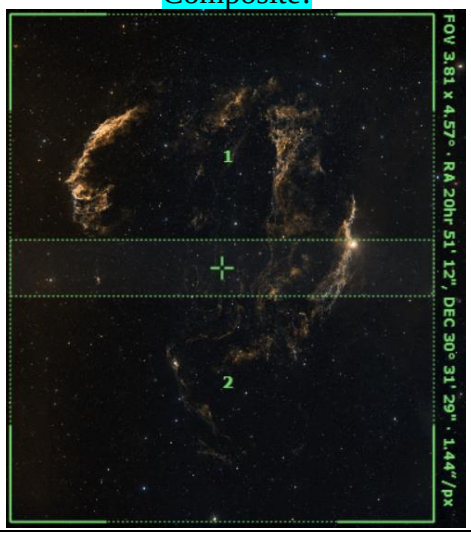
Veil Nebula (NGC-6960)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Bright Nebula**

Constellation: **Cygnus**
Coordinates:
P1: RA: 20h51’12” DEC: 31°32’26”
P2: RA: 20h51’12” DEC: 29°30’31”

Close Star: **SAO-70467** (52 Cygni)
Catalog Objects: NGC-6960, 6992, 6995
Imaging Window: **08:14 – 02:01**
Transit: **10:23 | 80°**

C-11 HD: HyperStar v4
Composite!



Prospective Imaging Objects – September 03 2024

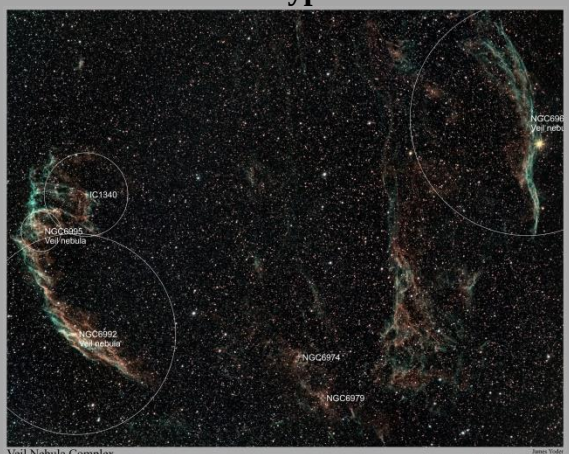
Veil Nebula (NGC-6960)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Supernova Remnant**

Constellation: **Cygnus**
Coordinates:
20h 51’ 15”
31° 03’ 60”

Close Star: **SAO-70467** (52 Cygni)
Catalog Objects: NGC-6960, 6992, 6995
Imaging Window: **08:14 – 02:01**
Transit: **10:23 | 80°**

C-11 HD: HyperStar v4



Witch’s Broom (NGC-6960)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Bright Nebula**

Constellation: **Cygnus**
Coordinates:
P1: RA=20hr 46’ 20” DEC=30° 54’ 54”
P2: RA=20hr 46’ 20” DEC=30° 17’ 06”

Close Star: **SAO-70467** (52 Cygni)
Catalog Objects: NGC-6960

Imaging Window: **08:14 – 02:01**
Transit: **10:23 | 80°**

C-11 HD: Focal Reducer
Composite!

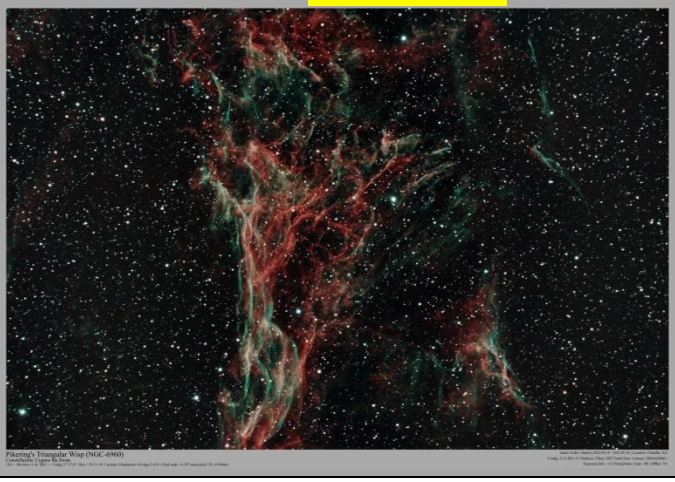
Pickering’s Triangular Wisp
Config: |C11-HD|FR|ZWO6200MC|

Type: **Supernova Remnant**

Constellation: **Cygnus**
Coordinates:
20h 48’ 16”
31° 37’ 17”

Close Star: **SAO-70467** (52 Cygni)
Catalog Objects: NGC-6960
Imaging Window: **08:14 – 02:01**
Transit: **10:23 | 80°**

C-11 HD: Focal Reducer



Prospective Imaging Objects – September 03 2024

M-72 (NGC-6981)
Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Aquarius**
Coordinates:
20h 53’ 28”
-12° 32’ 11”

Close Star: **SAO-108378** (Markab)
Catalog Objects: M-72/NGC-6981
Imaging Window: ***08:19 – 12:34**
Transit: **10:24 | 44°**

C-11 HD: Primary Focus

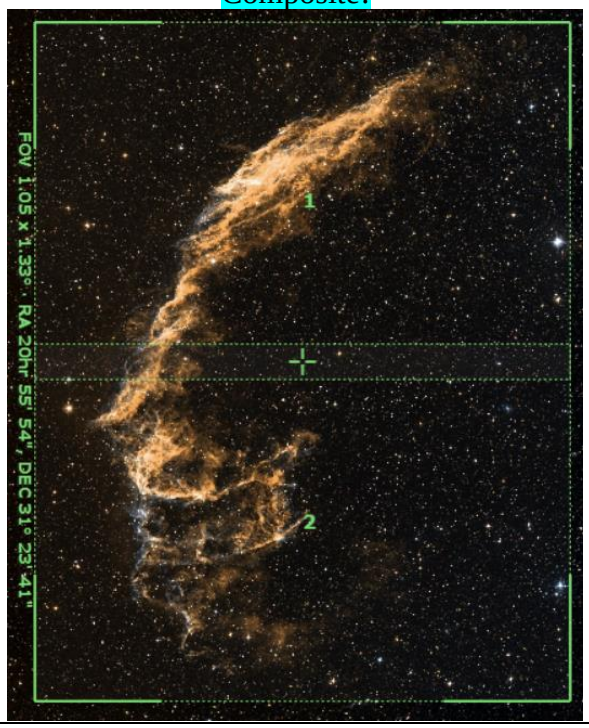
Network Nebula (NGC-6992)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Supernova Remnant**

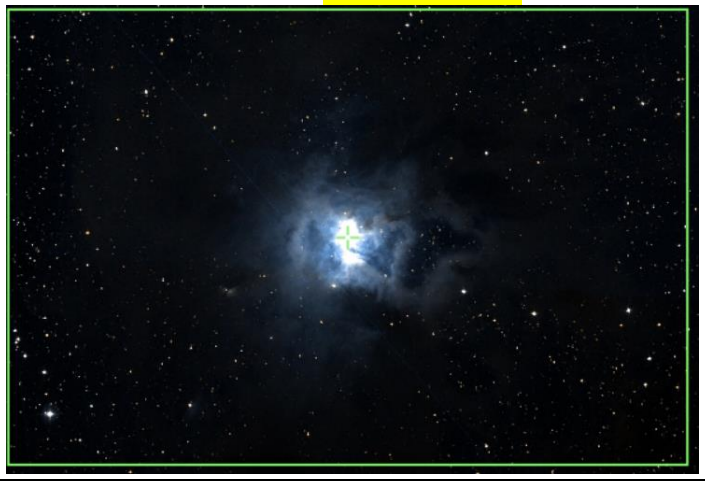
Constellation: **Cygnus**
Coordinates:
P1: RA= 20hr 55’ 54” DEC= 31° 42’ 35”
P2: RA= 20hr 55’ 54” DEC= 31° 04’ 47”

Close Star: **SAO-70474** (Gienah)
Catalog Objects: NGC-6992
Imaging Window: **08:14 – 02:05**
Transit: **10:26 | 88°**

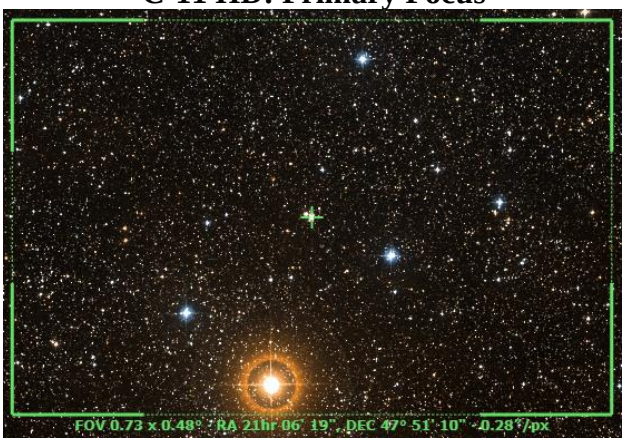
C-11 HD: Focal Reducer
Composite!



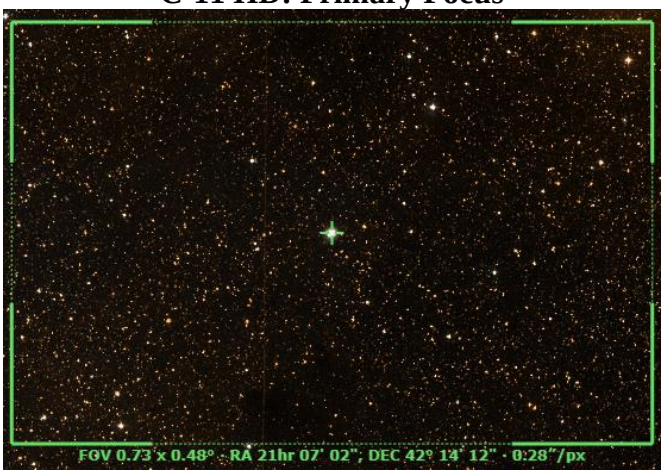
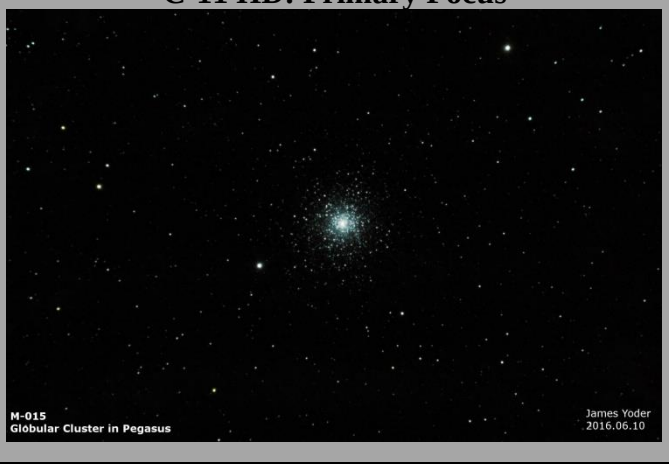
Prospective Imaging Objects – September 03 2024

M-73 (NGC-6994) Config: |C11HD|ZWO6200MC| Type: **Open Cluster** Constellation: **Aquarius** Coordinates: **20h 59' 00"** **-12° 37' 60"** Close Star: **SAO-108378** (Markab) Catalog Objects: M-73/NGC-6994 Imaging Window: ***08:23 – 12:34** Transit: **10:29 | 44°**	**C-11 HD: Primary Focus** 
Fetus Nebula (NGC-7008) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Cygnus** Coordinates: **21h 00' 33"** **54° 32' 38"** Close Star: **SAO-49941** (Deneb) Catalog Objects: NGC-7008 Imaging Window: **08:14 – 02:23** Transit: **10:31 | 69°**	**C-11 HD: Primary Focus** 
Iris Nebula (NGC 7023) Config: |C11-HD|FR|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cepheus** Coordinates: **21h 01' 36"** **68° 10' 00"** Close Star: **SAO-19302** (Alderamin) Catalog Objects: NGC-7023 Imaging Window: **08:14 – 01:57** Transit: **10:32 | 55°**	**C-11 HD: Focal Reducer** 

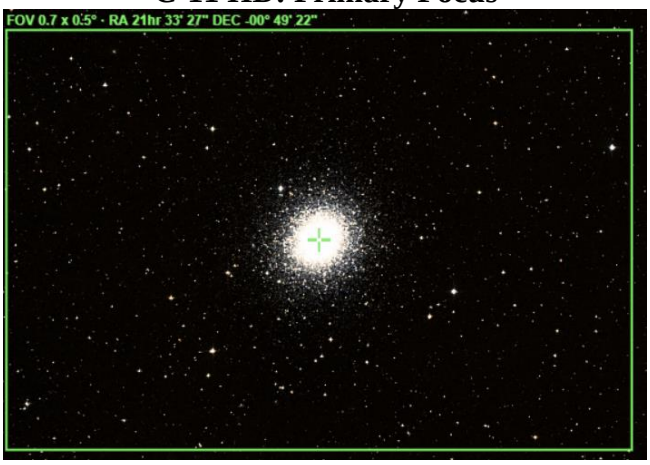
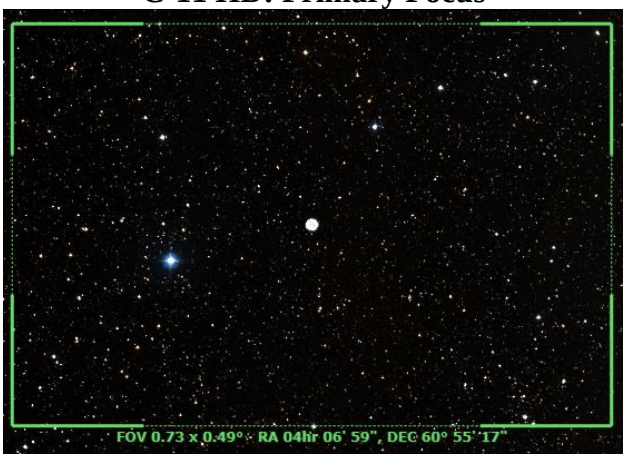
Prospective Imaging Objects – September 03 2024

Iris Nebula (NGC 7023) Config: |C11HD|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cepheus** Coordinates: **21h 01' 36"** **68° 10' 00"** Close Star: **SAO-19302** (Alderamin) Catalog Objects: NGC-7023 Imaging Window: **08:14 – 01:57** Transit: **10:32 | 55°**	**C-11 HD: Primary Focus** 
Saturn Nebula (NGC-7009) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Aquarius** Coordinates: **21h 04' 11"** **-11° 21' 47"** Close Star: **SAO-191524** (Fomalhaut) Catalog Objects: NGC-7009 Imaging Window: ***08:23 – 01:15** Transit: **10:34 | 45°**	**C-11 HD: Primary Focus** 
NGC-7026 Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Cygnus** Coordinates: **21h 06' 19"** **47° 51' 10"** Close Star: **SAO-50456** Catalog Objects: NGC-7026 Imaging Window: **08:14 – 02:29** Transit: **10:36 | 45°**	**C-11 HD: Primary Focus** 

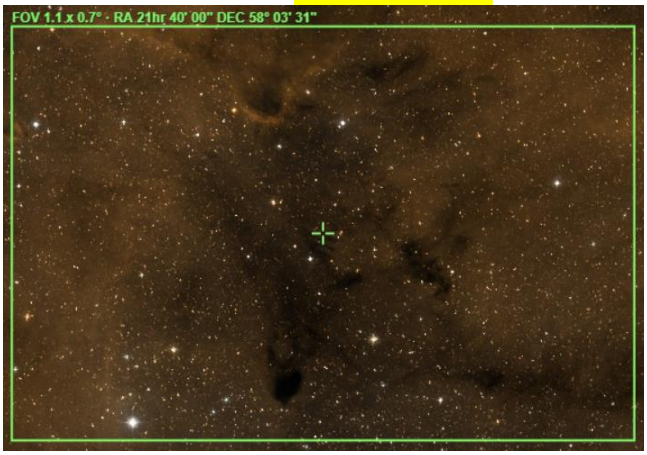
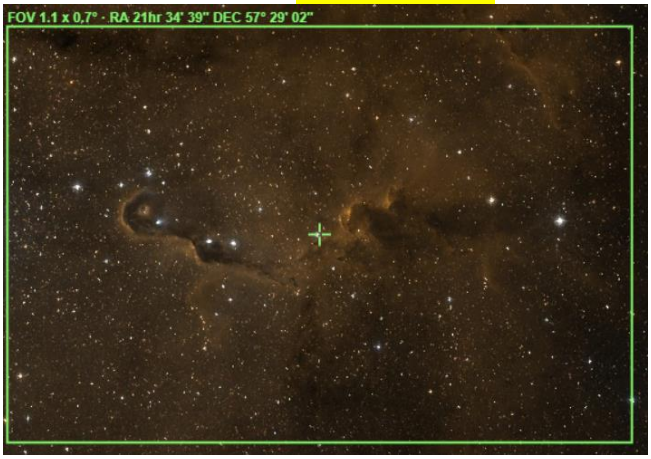
Prospective Imaging Objects – September 03 2024

NGC-7027 Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Cygnus** Coordinates: **21h 07' 02"** **42° 14' 12"** Close Star: **SAO-50456** Catalog Objects: NGC-7027 Imaging Window: **08:14 – 02:27** Transit: **10:37 | 45°**	**C-11 HD: Primary Focus** 
NGC-7048 (PK 88-1.1) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Cygnus** Coordinates: **21h 14' 15"** **46° 17' 21"** Close Star: **SAO-49941** (Deneb) Catalog Objects: NGC-7048 Imaging Window: **08:14 – 02:37** Transit: **10:44 | 77°**	**C-11 HD: Primary Focus** 
Pegasus Cluster (M-15) Config: |C11HD|ZWO6200MC| Type: **Globular Cluster** Constellation: **Pegasus** Coordinates: **21h 29' 58"** **12° 10' 03"** Close Star: **SAO-127029** (Enif) Catalog Objects: M-15/NGC-7078 Imaging Window: **08:14 – 01:57** Transit: **11:00 | 69°**	**C-11 HD: Primary Focus** 

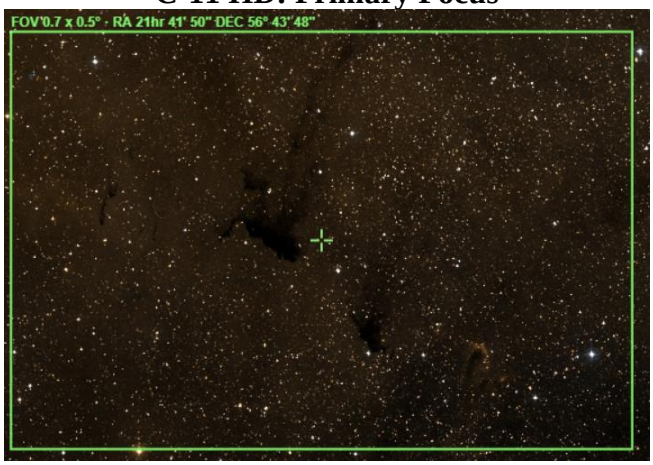
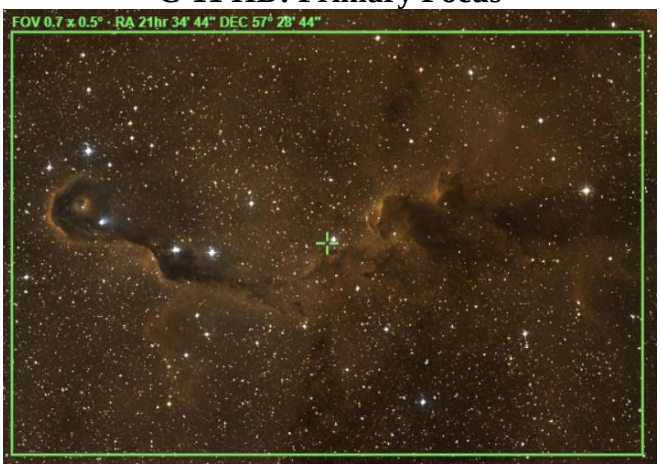
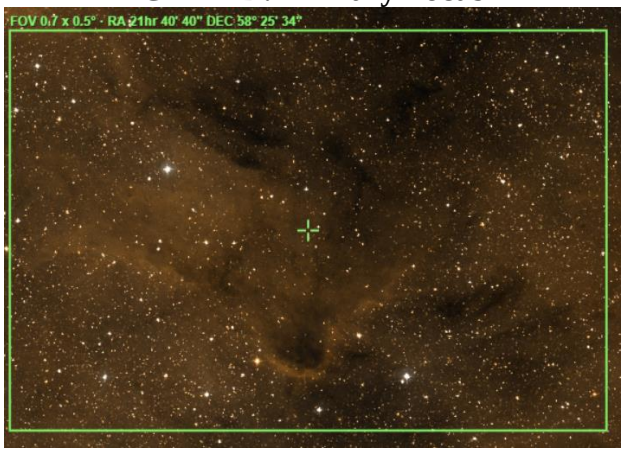
Prospective Imaging Objects – September 03 2024

M-39 (NGC-7092) Config: |C11-HD|FR|ZWO6200MC| Type: **Open Cluster** Constellation: **Cygnus** Coordinates: **21h 31' 56"** **48° 26' 46"** Close Star: **SAO-49941** (Deneb) Catalog Objects: M-39/NGC-7092 Imaging Window: **08:14 – 02:55** Transit: **11:02 | 75°**	**C-11 HD: Focal Reducer** 
M-2 (NGC-7089) Config: |C11HD|ZWO6200MC| Type: **Globular Cluster** Constellation: **Aquarius** Coordinates: **21h 33' 27"** **00° 49' 22"** Close Star: **SAO-127029** (Enif) Catalog Objects: M-2/NGC-7089 Imaging Window: **09:02 – 01:11** Transit: **11:04 | 56°**	**C-11 HD: Primary Focus** 
NGC-7094 Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Pegasus** Coordinates: **21h 36' 53"** **12° 47' 22"** Close Star: **SAO-127029** (Enif) Catalog Objects: NGC-7094 Imaging Window: **08:14 – 02:06** Transit: **11:07 | 69°**	**C-11 HD: Primary Focus** 

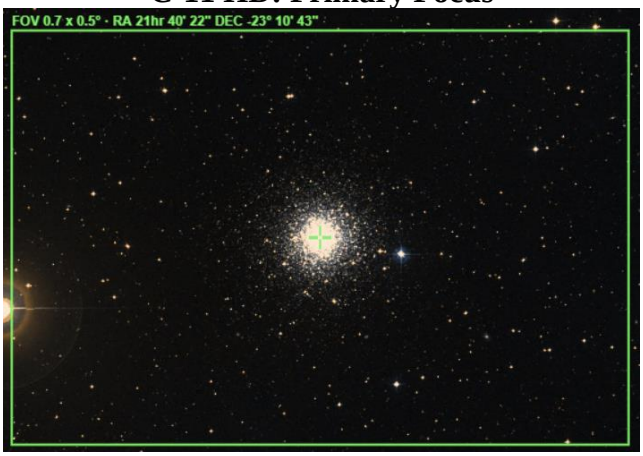
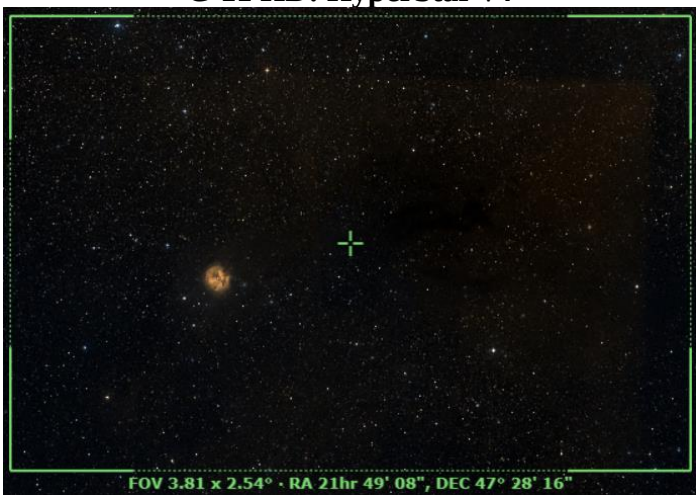
Prospective Imaging Objects – September 03 2024

Elephant Trunk (IC-1396) Config: **C11-HD | HS | ZWO6200MC** Type: **Bright Nebula** Constellation: **Cepheus** Coordinates: **21h 39' 58"** **57° 33' 34"** Close Star: **SAO-19302** (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: **08:14 – 03:00** Transit: **11:09 | 66°**	**C-11 HD: HyperStar v4** 
Elephant Trunk (IC-1396) Config: |C11-HD|FR|ZWO6200MC| Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **21h 40' 00"** **58° 03' 31"** Close Star: **SAO-19302** (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: **08:14 – 03:00** Transit: **11:09 | 66°**	**C-11 HD: Focal Reducer** 
Elephant Trunk (IC-1396) Config: |C11-HD|FR|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cepheus** Coordinates: **21h 34' 39"** **57° 29' 02"** Close Star: **SAO-19302** (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: **08:14 – 03:00** Transit: **11:09 | 66°**	**C-11 HD: Focal Reducer** 

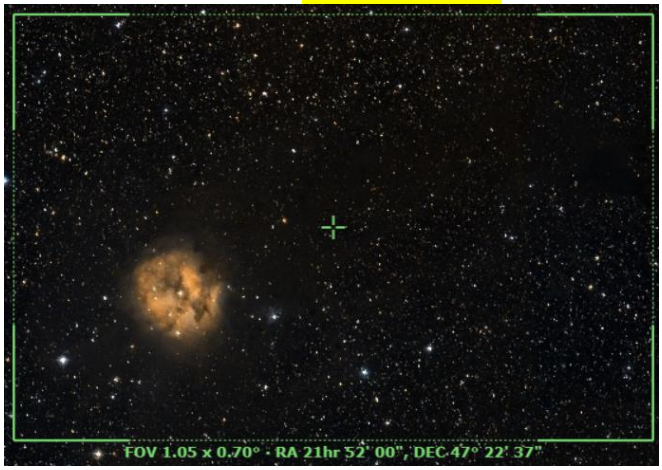
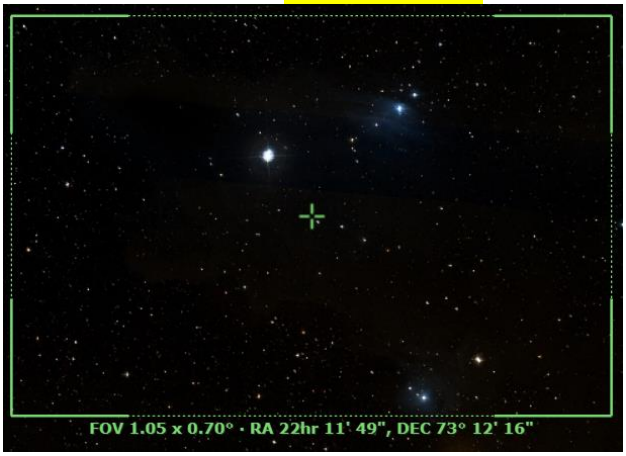
Prospective Imaging Objects – September 03 2024

Elephant Trunk (IC-1396) Config: |C11HD|ZWO6200MC| Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **21h 41’ 50”** **56° 43’ 48”** Close Star: **SAO-19302** (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: **08:14 – 03:00** Transit: **11:09 | 66°**	**C-11 HD: Primary Focus** 
Elephant Trunk (IC-1396) Config: |C11HD|ZWO6200MC| Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **21h 34’ 44”** **57° 28’ 44”** Close Star: **SAO-19302** (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: **08:14 – 03:00** Transit: **11:09 | 66°**	**C-11 HD: Primary Focus** 
Elephant Trunk (IC-1396) Config: |C11HD|ZWO6200MC| Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **21h 40’ 40”** **58° 25’ 34”** Close Star: **SAO-19302** (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: **08:14 – 03:00** Transit: **11:09 | 66°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

M-30 (NGC-7099) Config: |C11HD|ZWO6200MC| Type: **Globular Cluster** Constellation: **Capricornus** Coordinates: **21h 40’ 22”** **-23° 10’ 43”** Close Star: **SAO-164644** (Scheddi) Catalog Objects: M-30/NGC-7099 Imaging Window: ***08:56 – 01:26** Transit: **11:10 | 34°**	**C-11 HD: Primary Focus** 
NGC 7139 Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Cepheus** Coordinates: **21h 46’ 07”** **+63° 47’ 54”** Close Star: **SAO-019302** (Alderamin) Catalog Objects: NGC-7139 Imaging Window: **08:14 – 02:57** Transit: **11:16 | 60°**	**C-11 HD: Primary Focus** 
Dark Cocoon (B-168, IC 5146) Config: **C11-HD | HS | ZWO6200MC** Type: **Bright & Dark Nebula** Constellation: **Cygnus** Coordinates: **21h 49’ 08”** **47° 28’ 16”** Close Star: **SAO-5105** (Rho Cygni) Catalog Objects: B-168, IC-5146 Imaging Window: **08:14 – 03:16** Transit: **11:23 | 76°**	**C-11 HD: HyperStar v4** 

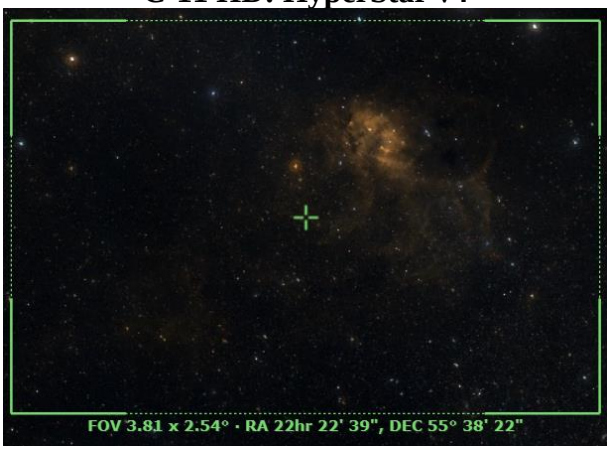
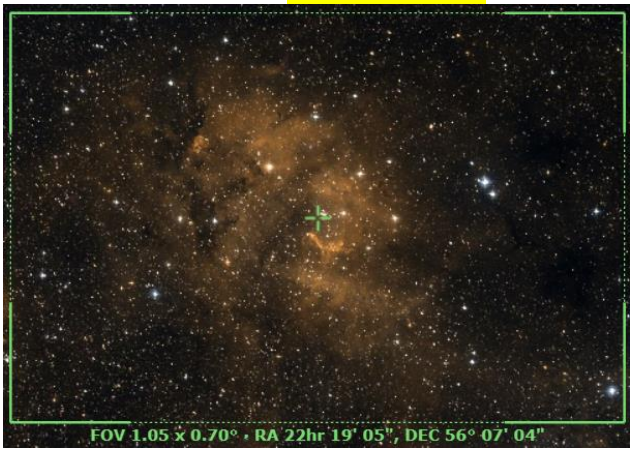
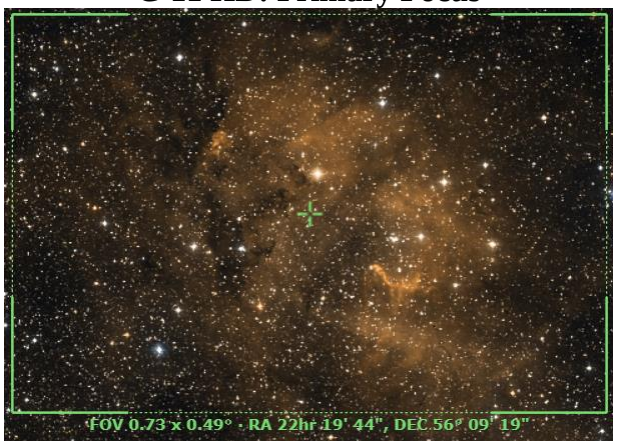
Prospective Imaging Objects – September 03 2024

Cocoon Nebula (IC-5146) Config: |C11-HD|FR|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cygnus** Coordinates: **21h 52’ 00”** **47° 22’ 37”** Close Star: **SAO-5105** (Rho Cygni) Catalog Objects: IC-5146 Imaging Window: **08:14 – 03:16** Transit: **11:23 | 76°**	**C-11 HD: Focal Reducer** 
Cocoon Nebula (IC-5146) Config: |C11HD|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cygnus** Coordinates: **21h 53’ 24”** **47° 16’ 00”** Close Star: **SAO-5105** (Rho Cygni) Catalog Objects: IC-5146 Imaging Window: **08:14 – 03:16** Transit: **11:23 | 76°**	**C-11 HD: Primary Focus** 
Dark Shark (LDN 1235) Config: |C11-HD|FR|ZWO6200MC| Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **22h 11’ 49”** **73° 12’ 16”** Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: LDN-1235 Imaging Window: **09:05 – 02:31** Transit: **11:45 | 50°**	**C-11 HD: Focal Reducer** 

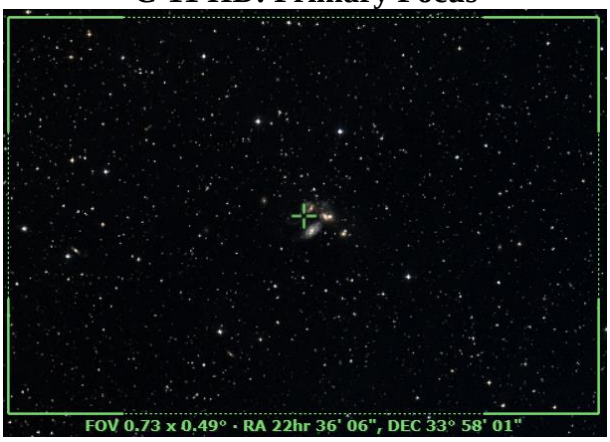
Prospective Imaging Objects – September 03 2024

Helix Nebula (NGC-7293) Config: |C11HD|ZWO6200MC| Type: **Planetary nebula** Constellation: **Aquarius** Coordinates: **22h 29’ 39”** **-20° 48’ 36”** Close Star: **SAO-164644** (Delta Cap) Catalog Objects: NGC-7293 Imaging Window: ***09:33 – 02:33** Transit: **12:00 | 36°**	**C-11 HD: Primary Focus** 
Wolf’s Cave (VdB-152) Config: **C11-HD | HS | ZWO6200MC** Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **22h 17’ 03”** **70° 21’ 54”** Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: B-168, IC-5146 Imaging Window: **08:14 – 03:16** Transit: **11:23 | 76°**	**C-11 HD: HyperStar v4** 
Wolf’s Cave (VdB-152) Config: |C11-HD|FR|ZWO6200MC| Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **22h 13’ 42”** **70° 30’ 32”** 90° Rotation Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: B-168, IC-5146 Imaging Window: **08:14 – 03:16** Transit: **11:23 | 76°**	**C-11 HD: Focal Reducer** 

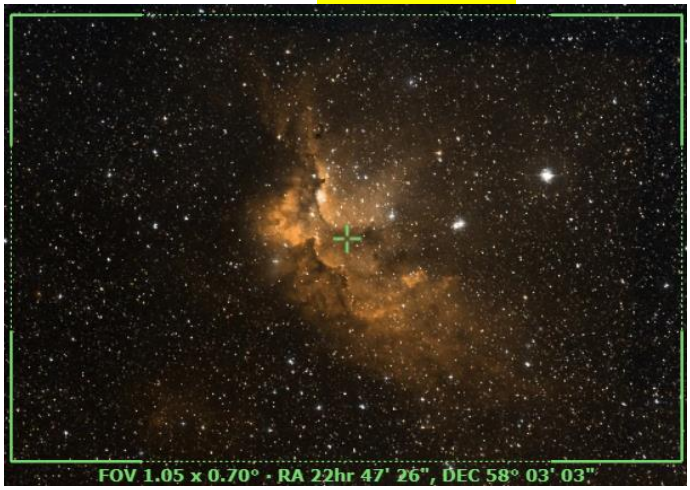
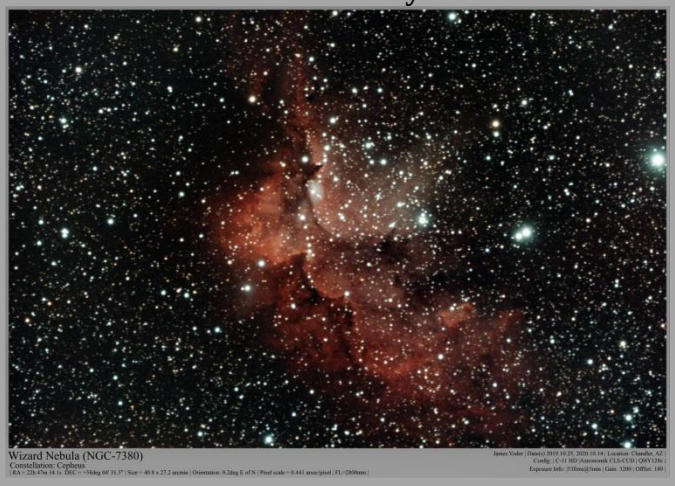
Prospective Imaging Objects – September 03 2024

SH2-132 Config: **C11-HD	HS	ZWO6200MC** Type: **Bright Nebula** Constellation: **Cepheus** Coordinates: **22h 22’ 39”** **55° 38’ 22”** Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: SH2-132 Imaging Window: **08:14 – 03:41** Transit: **11:49	67°**	**C-11 HD: HyperStar v4** 
SH2-132 Config: |C11-HD|FR|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cepheus** Coordinates: **22h 19’ 05”** **56° 07’ 04”** Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: SH2-132 Imaging Window: **08:14 – 03:41** Transit: **11:49	67°**	**C-11 HD: Focal Reducer** 
SH2-132 Config: |C11HD|ZWO6200MC| Type: **Bright Nebula** Constellation: **Cepheus** Coordinates: **22h 19’ 44”** **56° 09’ 19”** Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: SH2-132 Imaging Window: **08:14 – 03:41** Transit: **11:49	67°**	**C-11 HD: Primary Focus** 

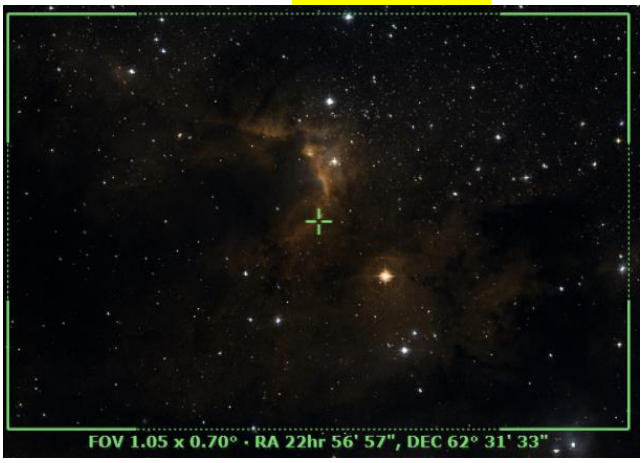
Prospective Imaging Objects – September 03 2024

Stephan's Quintet & NGC 7331 (NGC 7317, 7331) Config: |C11-HD|FR|ZWO6200MC| Type: **Bright Nebula** Constellation: **Pegasus** Coordinates: **22h 36' 40"** **34° 13' 25"** Camera Rotation = 115° East (-245) Close Star: **SAO-72191** (1 Lacertae) Catalog Objects: NGC7317, NGC7331 Imaging Window: **08:31 – 03:47** Transit: **12:06 | 89°**	**C-11 HD: Focal Reducer** 
Stephan's Quintet Config: |C11HD|ZWO6200MC| Type: **Bright Nebula** Constellation: **Pegasus** Coordinates: **22h 36' 06"** **33° 58' 01"** Close Star: **SAO-72191** (1 Lacertae) Catalog Objects: NGC7317 Imaging Window: **08:31 – 03:47** Transit: **12:06 | 89°**	**C-11 HD: Primary Focus** 
NGC-7331 Group (NGC-7331) Config: |C11HD|ZWO6200MC| Type: **Galaxy Cluster** Constellation: **Pegasus** Coordinates: **22h 37' 15"** **34° 24' 51"** Close Star: **SAO-72191** (1 Lacertae) Catalog Objects: NGC-7331 Imaging Window: **08:32 – 03:49** Transit: **12:07 | 89°**	**C-11 HD: Primary Focus** 

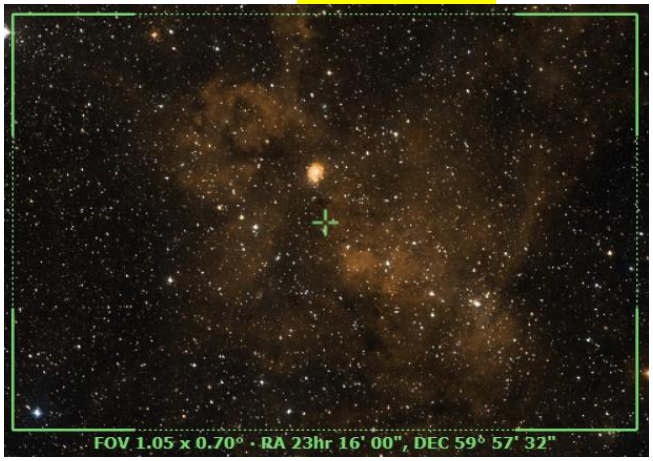
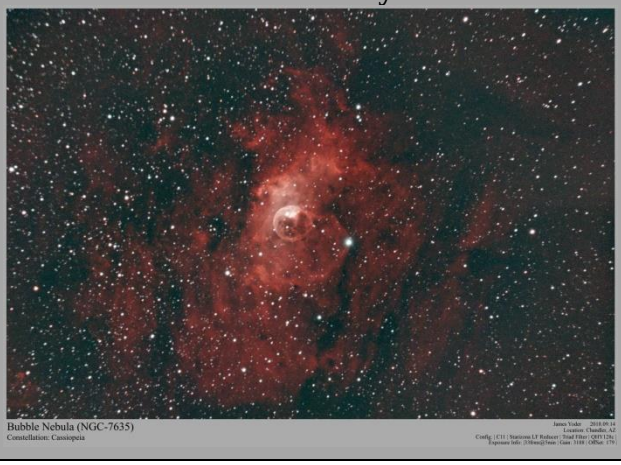
Prospective Imaging Objects – September 03 2024

Wizard Nebula (SH 2-142) Config: |C11-HD|FR|ZWO6200MC| Type: **Diffuse Nebula** Constellation: **Cepheus** Coordinates: **22h 47' 26"** **58° 03' 03"** Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: SH2-142 Imaging Window: **08:34 – 04:08** Transit: **12:17 | 89°**	**C-11 HD: Focal Reducer** 
Wizard Nebula (SH 2-142) Config: |C11HD|ZWO6200MC| Type: **Diffuse Nebula** Constellation: **Cepheus** Coordinates: **22h 47' 26"** **58° 03' 03"** Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: SH2-142 Imaging Window: **08:34 – 04:08** Transit: **12:17 | 89°**	**C-11 HD: Primary Focus** 
Cave Nebula (SH2-155) Config: **C11-HD | HS | ZWO6200MC** Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **23h 00' 57"** **62° 04' 09"** Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: SH2-155 Imaging Window: **08:50 – 04:10** Transit: **12:27 | 61°**	**C-11 HD: HyperStar v4** 

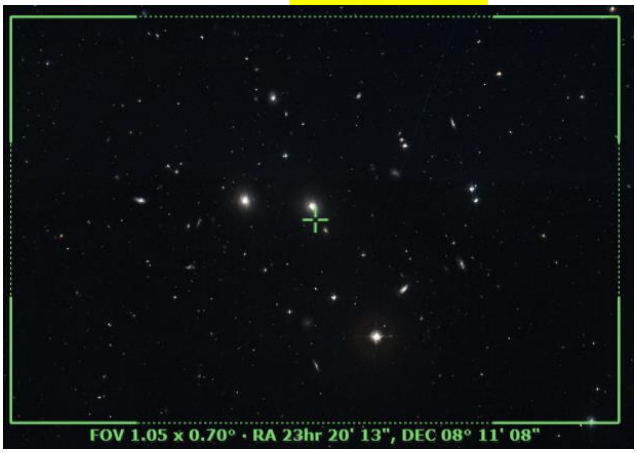
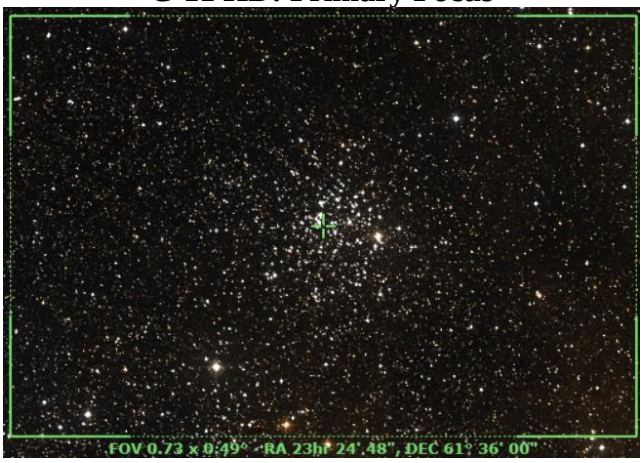
Prospective Imaging Objects – September 03 2024

Cave Nebula (SH2-155) Config: |C11-HD|FR|ZWO6200MC| Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **22h 56' 57"** **62° 31' 33"** Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: SH2-155 Imaging Window: **08:50 – 04:10** Transit: **12:27 | 61°**	**C-11 HD: Focal Reducer** 
Cave Nebula (SH2-155) Config: |C11HD|ZWO6200MC| Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **22h 56' 57"** **62° 31' 33"** Close Star: **SAO-20268** (Iota Cephei) Catalog Objects: SH2-155 Imaging Window: **08:50 – 04:10** Transit: **12:27 | 61°**	**C-11 HD: Primary Focus** 
NGC-7479 (PGC-70419) Config: |C11HD|ZWO6200MC| Type: **Barred Spiral Galaxy** Constellation: **Pegasus** Coordinates: **23h 04' 58"** **12° 18' 37"** Close Star: **SAO-127340** (Baham) Catalog Objects: NGC-7479 Imaging Window: **09:44 – 03:32** Transit: **12:35 | 62°**	**C-11 HD: Primary Focus** 

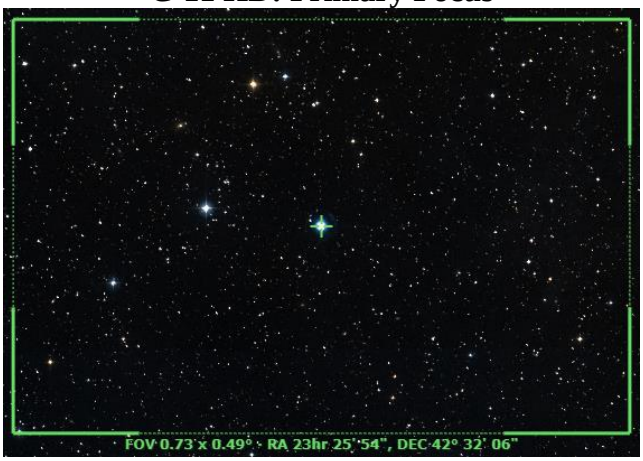
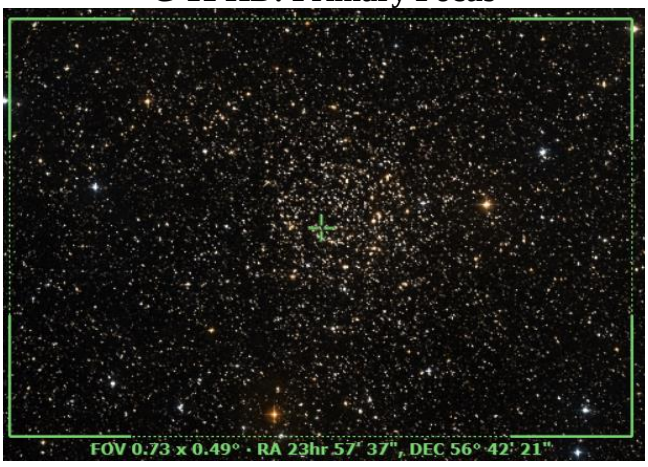
Prospective Imaging Objects – September 03 2024

Lobster Claw and Bubble Nebula (SH2-157) Config: **C11-HD | HS | ZWO6200MC** Type: **Diffuse Nebula** Constellation: **Cassiopeia** Coordinates: **23h 18' 25.8"** **60° 31' 17.8"** Close Star: **SAO-21133** (Caph) Catalog Objects: SH2-157, NGC-7635 Imaging Window: **09:04 – 04:34** Transit: **12:46 | 63°**	**C-11 HD: HyperStar v4**  Lobster Claw and Bubble Nebula(NGC-7635) Constellation: Cassiopeia
Lobster Claw (SH2-157) Config: |C11-HD|FR|ZWO6200MC| Type: **Diffuse Nebula** Constellation: **Cassiopeia** Coordinates: **23h 16' 00"** **59° 57' 32"** Close Star: **SAO-21133** (Caph) Catalog Objects: SH2-157 Imaging Window: **09:04 – 04:34** Transit: **12:46 | 63°**	**C-11 HD: Focal Reducer** 
Bubble Nebula (NGC-7635) Config: |C11HD|ZWO6200MC| Type: **Bright & Dark Nebula** Constellation: **Cepheus** Coordinates: **23h 20' 12"** **61° 11' 00"** Close Star: **SAO-21133** (Caph) Catalog Objects: NGC-7635, SH2-162 Imaging Window: **09:11 – 04:37** Transit: **12:51 | 62°**	**C-11 HD: Primary Focus**  Bubble Nebula (NGC-7635) Constellation: Cassiopeia

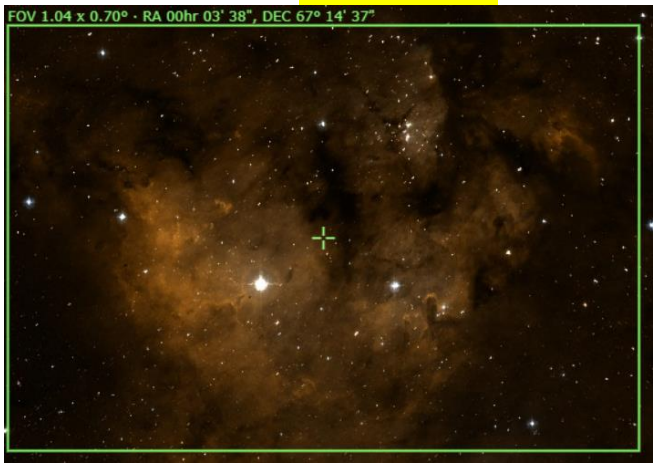
Prospective Imaging Objects – September 03 2024

Pegasus Cluster (NGC-7619) Config: |C11-HD|FR|ZWO6200MC| Type: **Cluster of Galaxies** Constellation: **Pegasus** Coordinates: **23h 20' 13"** **08° 11' 08"** Close Star: **SAO-128085** (g Piscium) Catalog Objects: NGC-7619 Imaging Window: **10:12 – 03:35** Transit: **12:50 | 65°**	**C-11 HD: Focal Reducer** 
Pegasus Cluster (NGC-7619) Config: |C11HD|ZWO6200MC| Type: **Cluster of Galaxies** Constellation: **Pegasus** Coordinates: **23h 20' 13"** **08° 10' 57"** Close Star: **SAO-128085** (g Piscium) Catalog Objects: NGC-7619 Imaging Window: **10:12 – 03:35** Transit: **12:50 | 65°**	**C-11 HD: Primary Focus** 
M-52 (NGC-7654) Config: |C11HD|ZWO6200MC| Type: **Open Cluster** Constellation: **Cassiopeia** Coordinates: **23h 24' 48"** **61° 36' 00"** Close Star: **SAO-21133** (Caph) Catalog Objects: M-52 Imaging Window: **09:16 – 04:38** Transit: **12:55 | 62°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

Blue Snowball (NGC-7662) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Andromeda** Coordinates: **23h 25' 54"** **42° 32' 06"** Close Star: **SAO-53216** (Iota And) Catalog Objects: NGC-7662 Imaging Window: **09:12 – 04:38** Transit: **12:56 | 81°**	**C-11 HD: Primary Focus** 
Blue Match Nebula (SH2-155) Config: **C11-HD | HS | ZWO6200MC** Type: **Reflection Nebula** Constellation: **Andromeda** Coordinates: **23h 39' 24"** **48° 51' 37"** Nearby: NGC-7686 Close Star: **SAO-73765** (Alpheratz) Catalog Objects: VdB 158/ LBN 534 Imaging Window: **09:12 – 04:38** Transit: **12:59 | 81°**	**C-11 HD: HyperStar v4** 
Caroline's Rose (NGC-7789) Config: |C11HD|ZWO6200MC| Type: **Open Cluster** Constellation: **Cassiopeia** Coordinates: **23h 57' 37"** **56° 42' 21"** Close Star: **SAO-21607** (Shedar) Catalog Objects: NGC-7789 Imaging Window: **09:42 – 04:38** Transit: **01:27 | 65°**	**C-11 HD: Primary Focus** 

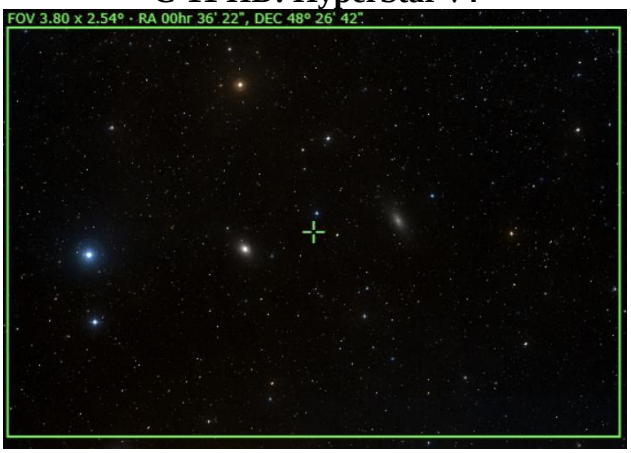
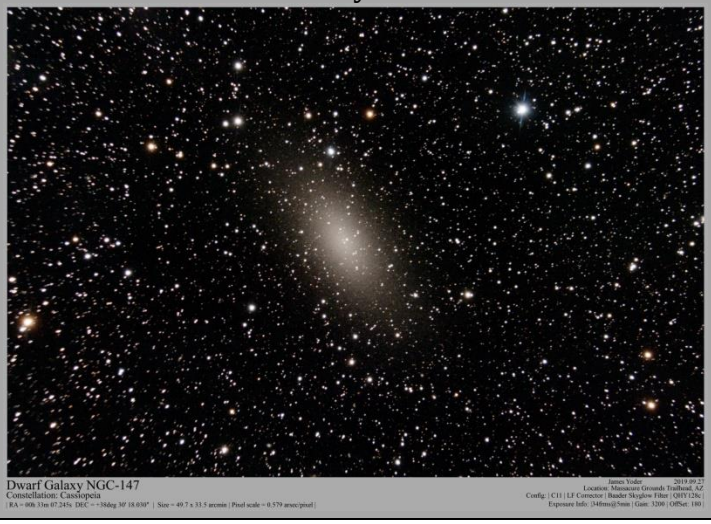
Prospective Imaging Objects – September 03 2024

NGC-7822 (Ced-214) Config: **C11-HD | HS | ZWO6200MC** Type: **Emission Nebula** Constellation: **Cepheus** Coordinates: Frame 01 RA: **00hr 03' 42"** DEC: **67° 41' 45"** Frame 02 RA: **00hr 03' 42"** DEC: **65° 35' 15"** Close Star: **SAO-10818** Catalog Objects: Ced 214, NGC 7822, SH2-171 Imaging Window: **10:09 – 04:38** Transit: **01:31 | 56°**	**C-11 HD: HyperStar v4** Composite! 
NGC-7822 (CED-214) Config: **C11-HD | HS | ZWO6200MC** Type: **Diffuse Nebula** Constellation: **Cepheus** Coordinates: **00h 01' 27"** **67° 28' 37"** Close Star: **SAO-20268** Catalog Objects: NGC-7822/CED-214 Imaging Window: **10:09 – 04:38** Transit: **01:31 | 56°**	**C-11 HD: HyperStar v4** 
NGC-7822 (CED-214) Config: |C11-HD|FR|ZWO6200MC| Type: **Diffuse Nebula** Constellation: **Cepheus** Coordinates: **00h 03' 38"** **67° 14' 37"** Close Star: **SAO-20268** Catalog Objects: NGC-7822/CED-214 Imaging Window: **10:09 – 04:38** Transit: **01:31 | 56°**	**C-11 HD: Focal Reducer** 

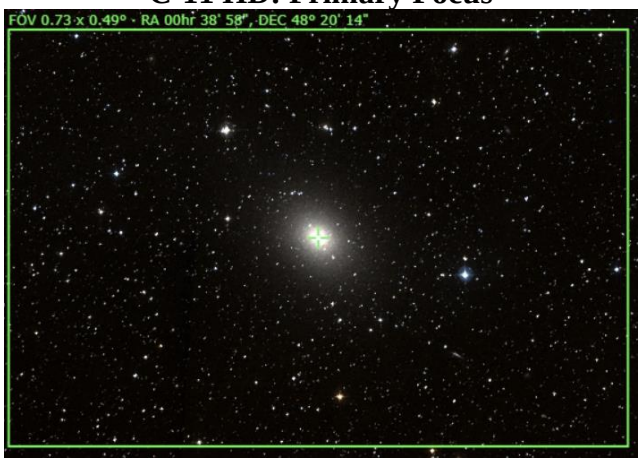
Prospective Imaging Objects – September 03 2024

NGC-7822 (CED-214) Config: |C11HD|ZWO6200MC| Type: **Emission Nebula** Constellation: **Cepheus** Coordinates: **00h 01’ 56”** **67° 23’ 05”** Close Star: **SAO-10818** Catalog Objects: Ced 214, NGC 7822, SH2-171 Imaging Window: **10:09 – 04:38** Transit: **01:31 | 56°**	**C-11 HD: Primary Focus** 
Bow-Tie Nebula (NGC-40) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Cepheus** Coordinates: **00h 13’ 01”** **72° 31’ 21”** Close Star: **SAO-20268** Catalog Objects: NGC-40 Imaging Window: **10:54 – 04:38** Transit: **01:43 | 51°**	**C-11 HD: Primary Focus** 
Andromeda Galaxy Group Config: |C11HD|ZWO6200MC| Type: **Cluster of dim galaxies** Peak: Constellation: **Andromeda** Coordinates: **00h 17’ 58”** **30° 03’ 03”** Close Star: **SAO-73765** (Alpheratz) Catalog Objects: NGC 67-72 et. El. Imaging Window: **10:19 – 04:38** Transit: **01:48 | 87°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

NGC-147 & NGC-185 Config: **C11-HD | HS | ZWO6200MC** Type: **Galaxy Pair** Constellation: **Cassiopeia** Coordinates: **00h 36’ 22”** **48° 26’ 42”** Close Star: **SAO-21609 (Shedar)** Catalog Objects: NGC-147, NGC-185 Imaging Window: **10:16 – 04:38** Transit: **02:03 | 75°**	**C-11 HD: HyperStar v4** 
NGC-147 & NGC-185 Config: **C11-HD | FR | ZWO6200MC** Type: **Galaxy Pair** Constellation: **Cassiopeia** Coordinates: Frame 01 RA: **00hr 38’ 33”** DEC: **48° 25’ 44”** Frame 02 RA: **00hr 33’ 21”** DEC: **48° 25’ 44”** Close Star: **SAO-21609 (Shedar)** Catalog Objects: NGC-147, NGC-185 Imaging Window: **10:16 – 04:38** Transit: **02:03 | 75°**	**C-11 HD: Focal Reducer** Composite! 
NGC-147 Config: |ZWO6200MC| Type: **Galaxy** Peak: Constellation: **Cassiopeia** Coordinates: **00h 33’ 07.245”** **48° 30’ 18.030”** Close Star: **SAO-37375** Catalog Objects: NGC-147 Imaging Window: **10:16 – 04:38** Transit: **02:03 | 75°**	**Primary Focus** 

Prospective Imaging Objects – September 03 2024

NGC-185 Config: **C11-HD | ZWO6200MC** Type: **Dwarf Spheroidal Galaxy** Constellation: **Cassiopeia** Coordinates: **00h 38’ 58”** **48° 20’ 14”** Close Star: **SAO-21609 (Shedar)** Catalog Objects: NGC-185 Imaging Window: **10:22 – 04:38** Transit: **02:09 | 75°**	**C-11 HD: Primary Focus** 
M-110 Config: **C11-HD | ZWO6200MC** Type: **Elliptical Galaxy** Constellation: **Andromeda** Coordinates: **00h 40’ 22”** **41° 41’ 07”** Close Star: **SAO-73765 (Sirrah)** Catalog Objects: M-110 Imaging Window: **10:27 – 04:38** Transit: **02:10 | 82°**	**C-11 HD: Primary Focus** 
M-32 Config: **C11-HD | ZWO6200MC** Type: **Elliptical Galaxy** Constellation: **Andromeda** Coordinates: **00h 42’ 42”** **40° 51’ 57”** Close Star: **SAO-73765 (Sirrah)** Catalog Objects: M-32 Imaging Window: **10:30 – 04:38** Transit: **02:12 | 83°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

Andromeda Galaxy (M 31)

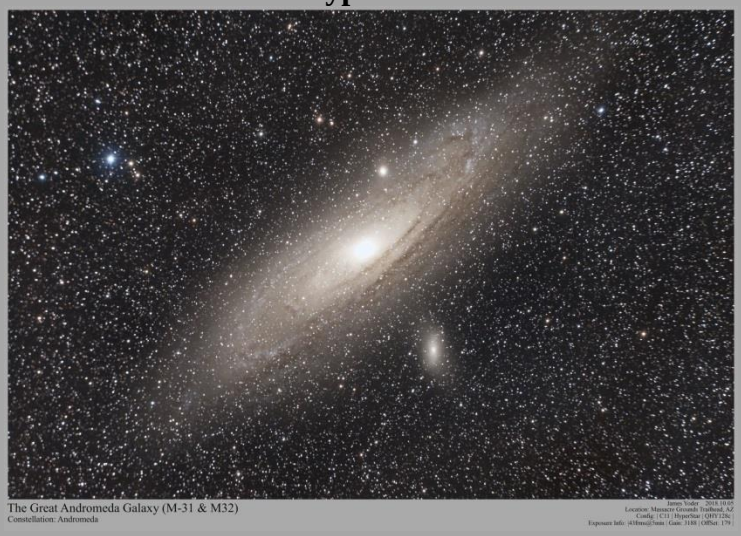
Config: |C11|HS|ZWO6200MCc|

Type: **Galaxy**
Peak: **Oct 1**
Constellation: **Andromeda**
Coordinates:
00h 43’ 03.089”
41° 18’ 37.05”

Close Star: **SAO-54281**
Catalog Objects: M-31, M-32, M-110, NGC-224, NGC-206

Imaging Window: **10:30 – 04:38**
Transit: **02:12 | 82°**

Hyperstar



M-31, M-32

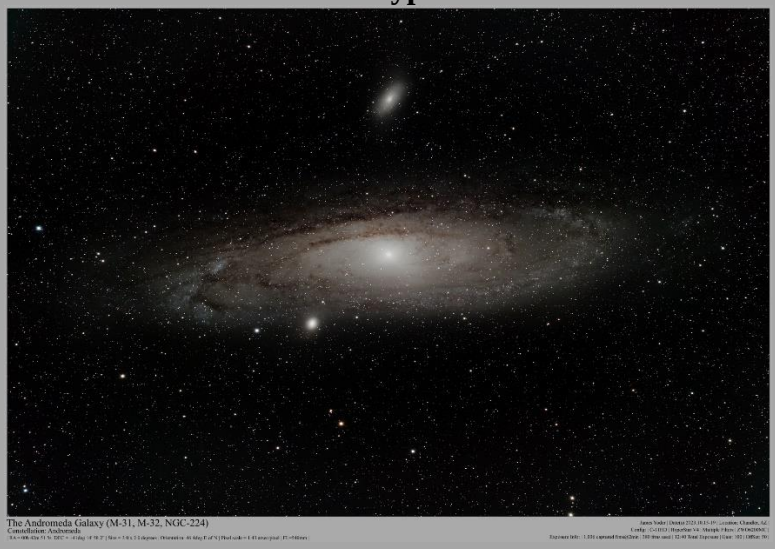
Config: **C11-HD | HS | ZWO6200MC**

Type: **Andromeda Galaxy**

Constellation: **Andromeda**
Coordinates:
00h 42’ 44”
41° 16’ 08”
Angle: **133° East**

Close Star: **SAO-73765 (Sirrah)**
Catalog Objects: M-31, M-32
Imaging Window: **10:30 – 04:38**
Transit: **02:12 | 82°**

C-11 HD: HyperStar v4



NGC246, NGC255, PGC 2689

Config: **C11-HD | HS | ZWO6200MC**

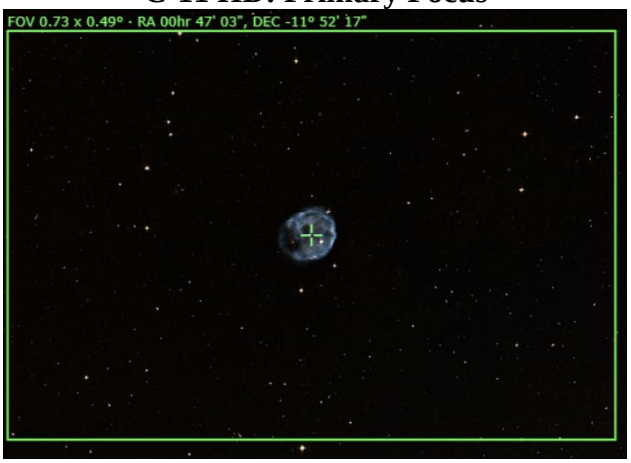
Type: **Planetary Nebula, 2 Galaies**

Constellation: **Cetus**
Coordinates:
00h 47’ 00”
-11° 40’ 40”

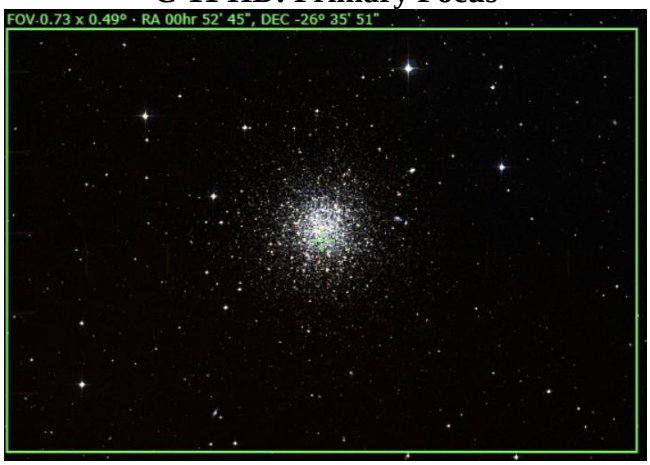
Close Star: **SAO-147420 (Diphda)**
Catalog Objects: NGC-246
Imaging Window: ***11:23 – 04:38**
Transit: **02:17 | 45°**

C-11 HD: Focal Reducer

Prospective Imaging Objects – September 03 2024

Skull Nebula (NGC-246) Config: **C11-HD | ZWO6200MC** Type: **Planetary Nebula** Constellation: **Cetus** Coordinates: **00h 47’ 03”** **-11° 52’ 17”** Close Star: **SAO-147420 (Diphda)** Catalog Objects: NGC-246 Imaging Window: ***11:23 – 04:38** Transit: **02:17 | 45°**	**C-11 HD: Primary Focus** 
Needle’s Eye Galaxy (NGC 247) Config: |C11HD|ZWO6200MC| Type: **Galaxy** Peak: Constellation: **Cetus** Coordinates: **00hr 47’ 12”** **-20° 44’ 38”** Close Star: **SAO-147420** Catalog Objects: NGC 247 Imaging Window: ***11:46 – 04:38** Transit: **02:17 | 36°**	**C-11 HD: Primary Focus** 
NGC-288, NGC-253 Config: **C11-HD | HS | ZWO6200MC** Type: **Globular and Galaxy** Constellation: **Sculptor** Coordinates: **00h 50’ 03”** **-25° 54’ 37”** Close Star: **SAO-147420 (Diphda)** Catalog Objects: NGC-288, NGC-253 Imaging Window: ***12:37 – 04:05** Transit: **02:22 | 30°**	**C-11 HD: HyperStar v4** 

Prospective Imaging Objects – September 03 2024

Sculptor Galaxy (NGC-253) Config: **C11-HD | ZWO6200MC** Type: **Spiral Galaxy** Constellation: **Sculptor** Coordinates: **00h 47' 33"** **-25° 17' 15"** Close Star: **SAO-147420 (Diphda)** Catalog Objects: NGC-253 Imaging Window: ***12:19 – 04:16** Transit: **02:17 | 31°**	**C-11 HD: Primary Focus** 
NGC-288 Config: **C11-HD | ZWO6200MC** Type: **Globular Cluster** Constellation: **Sculptor** Coordinates: **00h 52' 45"** **-26° 35' 51"** Close Star: **SAO-147420 (Diphda)** Catalog Objects: NGC-288 Imaging Window: ***12:34 – 04:12** Transit: **02:22 | 31°**	**C-11 HD: Primary Focus** 
NGC-188 Config: **C11-HD | FR | ZWO6200MC** Type: **Open Cluster** Constellation: **Cepheus** Coordinates: **00h 47' 30"** **85° 15' 30"** Close Star: **SAO-308 (Polaris)** Catalog Objects: NGC-188 Imaging Window: ***8:14 – 04:38** Transit: **02:22 | 38°**	**C-11 HD: Focal Reducer** 

Prospective Imaging Objects – September 03 2024

NGC-281
Config: **C11-HD | FR | ZWO6200MC**

Type: **Diffuse Nebula**

Constellation: **Cassiopeia**
Coordinates:
00h 53’ 00”
56° 37’ 00”

Close Star: **SAO-11482 (Navi)**
Catalog Objects: NGC-281
Imaging Window: **10:37 – 04:38**
Transit: **02:22 | 67°**

C-11 HD: Focal Reducer

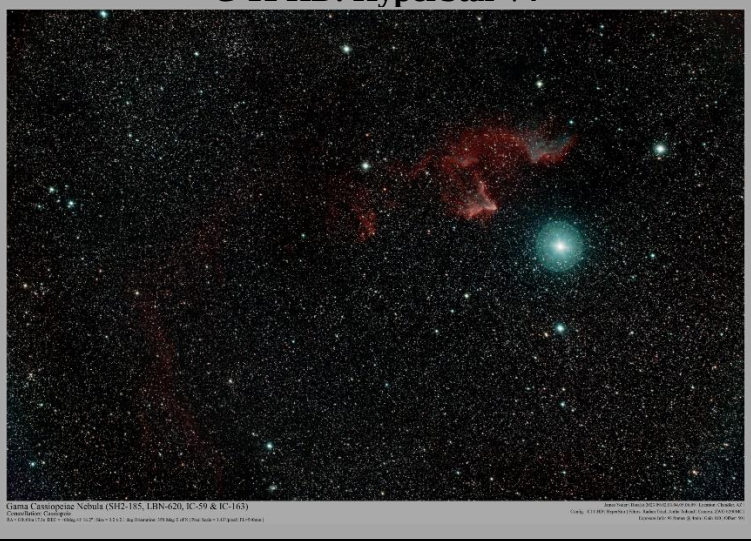
Gamma Cassiopeiae Nebula
(SH2-185)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Bright Nebula**

Constellation: **Cassiopeia**
Coordinates:
01h 03’ 11”
60° 42’ 24”

Close Star: **SAO-11482 (Navi)**
Catalog Objects: SH2-185
Imaging Window: **10:50 – 04:38**
Transit: **02:29 | 62°**

C-11 HD: HyperStar v4



Gamma Cassiopeiae Nebula
(SH2-185)
Config: **C11-HD | HS | ZWO6200MC**

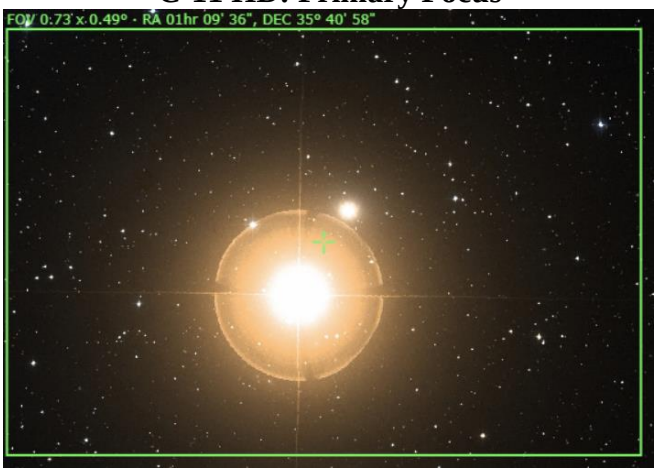
Type: **Bright Nebula**

Constellation: **Cassiopeia**
Coordinates:
00h 58’ 48”
61° 04’ 02”

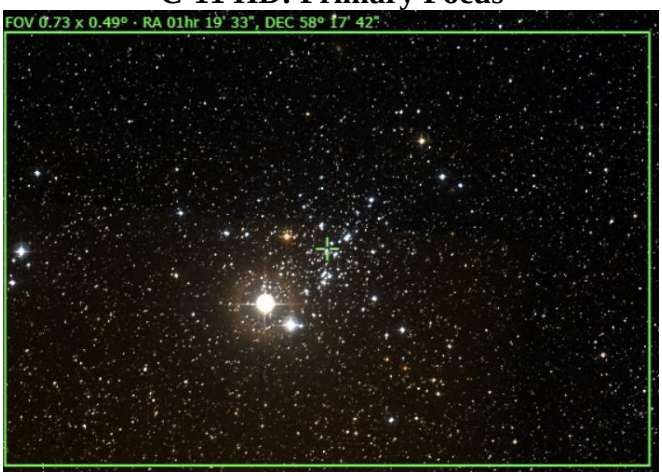
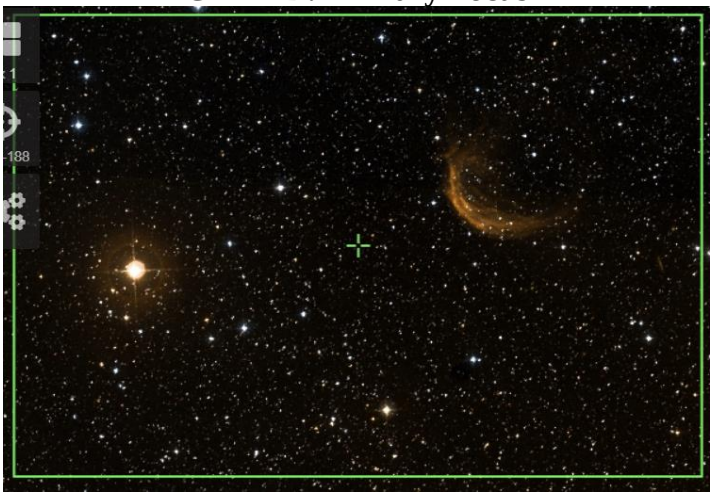
Close Star: **SAO-11482 (Navi)**
Catalog Objects: SH2-185
Imaging Window: **10:50 – 04:38**
Transit: **02:29 | 62°**

C-11 HD: Primary Focus

Prospective Imaging Objects – September 03 2024

IC-1613 Config: **C11-HD | ZWO6200MC** Type: **Irregular Dwarf Galaxy** Constellation: **Cetus** Coordinates: **01h 04’ 48”** **02° 07’ 07”** Close Star: **SAO-75151 (Hamal)** Catalog Objects: IC-1613 Imaging Window: **12:20 – 04:38** Transit: **02:34 | 59°**	**C-11 HD: Primary Focus** 
Mirachs Ghost (NGC-404) Config: **C11-HD | ZWO6200MC** Type: **Elliptical Galaxy** Constellation: **Andromeda** Coordinates: **01h 09’ 36”** **35° 40’ 58”** Close Star: **SAO-544471 (Mirach)** Catalog Objects: NGC-404 Imaging Window: **11:02 – 04:38** Transit: **02:39 | 88°**	**C-11 HD: Primary Focus** 
NGC-457 & Dolphin Nebula Config: **C11-HD | HS | ZWO6200MC** Type: **Open Cluster & Nebula** Constellation: **Cassiopeia** Coordinates: **01° 23’ 38”** **58° 12’ 54”** Close Star: **SAO-22268 (Ruchbah)** Catalog Objects: NGC-457 Imaging Window: **11:06 – 04:38** Transit: **02:49 | 65°**	**C-11 HD: HyperStar v4** 

Prospective Imaging Objects – September 03 2024

Owl Cluster (NGC-457) Config: **C11-HD | ZWO6200MC** Type: **Open Cluster & Nebula** Constellation: **Cassiopeia** Coordinates: **01h 23' 38"** **58° 12' 54"** Close Star: **SAO-22268 (Ruchbah)** Catalog Objects: NGC-457 Imaging Window: **11:06 – 04:38** Transit: **02:49 | 65°**	**C-11 HD: Primary Focus** 
Minkowski's Object (Arp-133) Config: **C11-HD | HS | ZWO6200MC** Type: **Galaxy Cluster** Constellation: **Cetus** Coordinates: **01h 25' 27"** **-01° 29' 03"** Close Star: **SAO-75151 (Hamal)** Catalog Objects: ARP-133 Imaging Window: **12:57 – 04:38** Transit: **02:55 | 55°**	**C-11 HD: Primary Focus** 
Firefox Nebula (Sh 2-188) Config: |C11HD|ZWO6200MC| Type: **Diffuse Nebula** Peak: Constellation: **Cassiopeia** Coordinates: **01h 31' 37"** **58° 21' 22"** Close Star: **SAO-22268 (Ruchbah)** Catalog Objects: Sh 2-188 Imaging Window: **11:17 – 04:38** Transit: **03:00 | 65°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – September 03 2024

M-103 (NGC-581)

Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**
Constellation: **Cassiopeia**
Coordinates:
01h 33’ 31”
60° 39’ 44”

Close Star: ISO-22268 (Ruchbah)
Catalog Objects: M-103/NGC-581

Imaging Window: **11:23 – 04:38**
Transit: **03:03 | 63°**

C-11 HD: Primary Focus

Triangulum Galaxy (M-33)

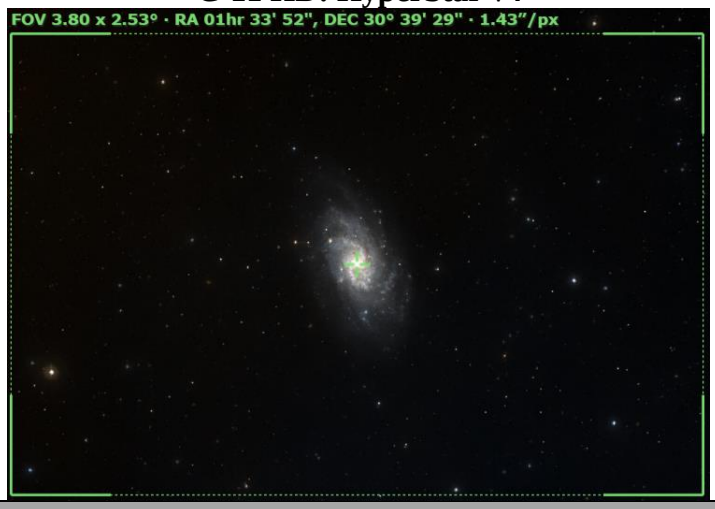
Config: **C11 | HS | ZWO6200MC**

Type: **Galaxy**
Constellation: **Triangulum**
Coordinates:
01h 33’ 52”
30° 39’ 29”

Close Star: **SAO-74996**
Catalog Objects: M33, NGC598

Imaging Window: **11:33 – 04:38**
Transit: **03:03 | 87°**

C-11 HD: HyperStar v4



Triangulum Galaxy (M-33)

Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy**
Peak: **Oct 14**
Constellation: **Triangulum**

Camera Rotation - 90°
Coordinates:
01h 33’ 52”
30° 39’ 29”

Close Star: **SAO-74996**
Catalog Objects: M33, NGC598

Imaging Window: **11:33 – 04:38**
Transit: **03:03 | 87°**

CH11-HD Focal Reducer **90° Rotation**

Prospective Imaging Objects – September 03 2024

Triangulum Galaxy (M-33)

Config: |ZWO6200MC|

Type: **Galaxy**
Peak: **Oct 14**
Constellation: **Triangulum**
Coordinates:
01° 34’ 53.37”
30° 45’ 11.2”

Close Star: **SAO-74996**
Catalog Objects: M33, NGC598

Imaging Window: **11:33 – 04:38**
Transit: **03:03 | 87°**

Primary Focus

M-74

Config: |C11HD|ZWO6200MC|

Type: **Spiral Galaxy**
Peak:
Constellation: **Pisces**
Coordinates:
01h 36’ 42”
15° 46’ 60”

Close Star: ISO-91781 (Algenib)
Catalog Objects: M-74

Imaging Window: **12:06 – 04:38**
Transit: **03:06 | 72°**

C-11 HD: Primary Focus

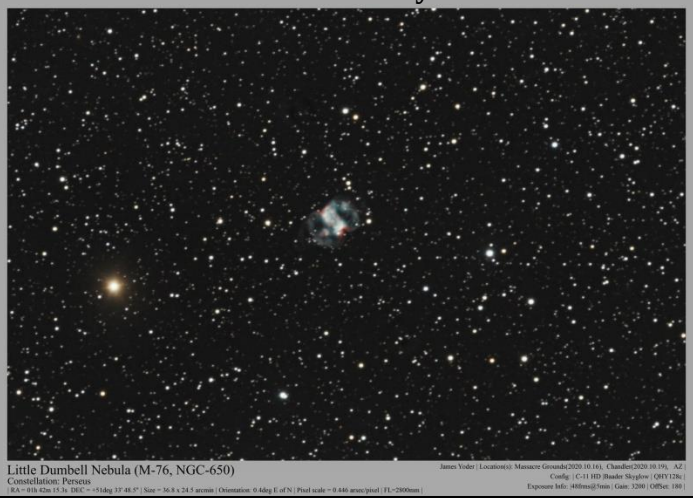
Little Dumbbell Nebula (M-76)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**
Peak:
Constellation: **Perseus**
Coordinates:
01h 42’ 18”
51° 34’ 17”

Close Star: ISO-37375
Catalog Objects: M-76/ NGC-650
Imaging Window: **11:25 – 04:38**
Transit: **03:12 | 72°**

C-11 HD: Primary Focus



Prospective Imaging Objects – September 03 2024

Nautilus Galaxy (NGC-772)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**
Peak:
Constellation: **Aries**
Coordinates:
01h 59’ 19”
19° 00’ 27”

Close Star: ISO-75012 (Sheratan)
Catalog Objects: NGC-772

Imaging Window: **12:21 – 04:38**
Transit: **03:29 | 76°**

C-11 HD: Primary Focus

Hand chi Persei (NGC 869, 884)

Config: **C11-HD | HS | ZWO6200MC**

Type: **Double Open Cluster**
Peak: **October 28**
Constellation: **Perseus**
Coordinates:
02hr 20’ 31”
56° 54’ 05”

Close Star: SAO-22258 (Ruchbah)
Catalog Objects: NGC 869, 884

Imaging Window: **12:07 – 04:38**
Transit: **03:52 | 66°**

C-11 HD: HyperStar v4

Edge On Galaxy (NGC 891)

Config: |C1|LF|ZWO6200MC|

Type: **Galaxy**
Peak: **Oct 27**
Constellation: **Andromeda**
Coordinates:
02h 23’ 43.29”
42° 25’ 46.4”

Close Star: **SAO-37734**
Catalog Objects: NGC891

Imaging Window: **12:09 – 04:38**
Transit: **03:52 | 81°**

Primary Focus

Prospective Imaging Objects – September 03 2024

NGC-925 (PGC 9332)
Config: |C11-HD|ZWO6200MC|

Type: **Galaxy**
Constellation: **Triangulum**
Coordinates:
02h 27’ 17”
33° 34’ 44”

Close Star: **SAO-55306** (Beta Trianguli)
Catalog Objects: NGC925/PGC9332

Imaging Window: **12:23 – 04:38**
Transit: **03:57 | 90°**

Primary Focus

Fish Head Nebula (IC-1795)
Config: |C11-HD|FR|ZWO6200MC|

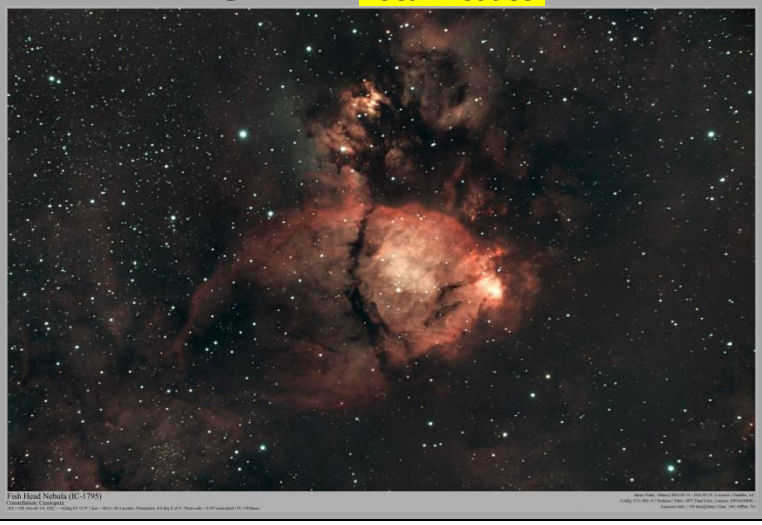
Type: **Bright Nebula**
Constellation: **Cassiopeia**

Coordinates:
02h 27’ 03”
62° 02’ 31”

Close Star: **SAO-38787** (Mirfak)
Catalog Objects: IC-1795

Imaging Window: **12:18 – 04:38**
Transit: **03:55 | 87°**

CH11-HD Focal Reducer



Heart and Soul Nebulas
Config: **C11 | HS | ZWO6200MC**

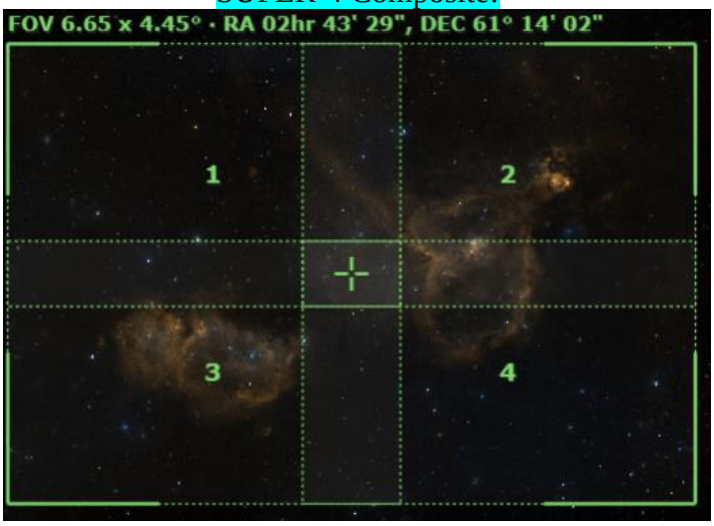
Type: **Diffuse Nebula**

Constellation: **Cassiopeia**
Coordinates (RA, DEC):
Pane 1: **02hr 55' 41"**, **62º 09' 11"**
Pane 2, **02hr 31' 16"**, **62º 09' 11**
Pane 3, **02hr 54' 58"**, **60º 15' 00"**
Pane 4, **02hr 31' 59"**, **60º 15' 00"**

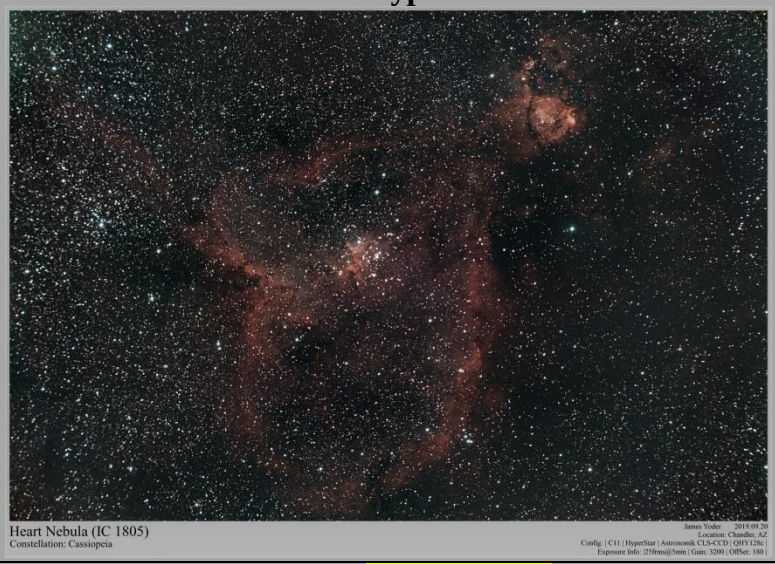
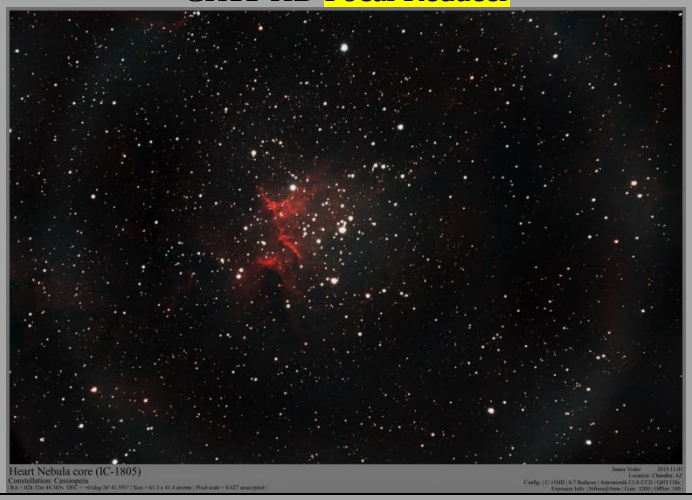
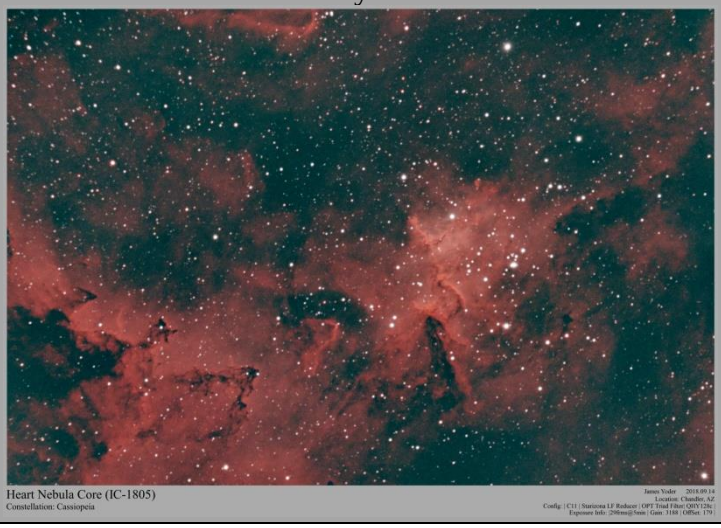
Close Star: **SAO-38787 (Mirfak)**
Catalog Objects: IC-1848

Imaging Window: **12:40 – 04:38**
Transit: **04:21 | 63°**

C-11 HD: HyperStar v4
SUPER-4 Composite!



Prospective Imaging Objects – September 03 2024

Heart Nebula (IC 1805) Config: **C11-HD | HS | ZWO6200MC** Type: **Diffuse Nebula** Peak: **October 31** Constellation: **Cassiopeia** Coordinates: **02hr 31’ 16”** **61° 21’ 36”** Close Star: SAO-12031 Catalog Objects: IC 1805 Imaging Window: **12:23 – 04:38** Transit: **04:02 | 62°**	**C-11 HD: HyperStar v4** 
Heart Nebula (IC 1805) Config: |C11-HD|FR|ZWO6200MC| Type: **Diffuse Nebula** Constellation: **Cassiopeia** Coordinates: **02hr 26’ 36”** **62° 06’ 53”** Close Star: SAO-12031 Catalog Objects: IC 1805 Imaging Window: **12:23 – 04:38** Transit: **04:02 | 62°**	CH11-HD Focal Reducer 
Heart Nebula (IC-1805) Config: |C1|LF|ZWO6200MC| Type: **Diffuse Nebula** Peak: **October 31** Constellation: **Cassiopeia** Coordinates: **02hr 32’ 42”** **61° 27’ 00”** Close Star: SAO-12031 Catalog Objects: IC 1805 Imaging Window: **12:23 – 04:38** Transit: **04:02 | 62°**	Primary Focus 

Prospective Imaging Objects – September 03 2024

M-77, NGC 1055

Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy**
Peak:
Constellation: **Cetus**
Coordinates:
02hr 42’ 14”
00° 14’ 28”
Angle: 90°

Close Star: **SAO-110665**
Catalog Objects: M-77, NGC-1055, NGC-1068

Imaging Window: **02:04 – 04:38**
Transit: **04:11 | 57°**

CH11-HD Focal Reducer

NGC-1055

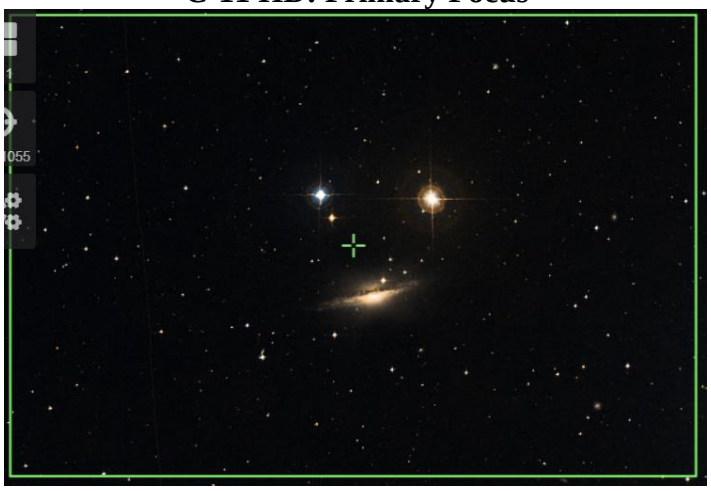
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**
Peak:
Constellation: **Cetus**
Coordinates:
02hr 41’ 50”
00° 29’ 48”

Close Star: **SAO-110665**
Catalog Objects: NGC-1055

Imaging Window: **02:04 – 04:38**
Transit: **04:11 | 57°**

C-11 HD: Primary Focus



M-34 (NGC-1039)

Config: |C11-HD|ZWO6200MC|

Type: **Open Cluster**
Constellation: **Perseus**
Coordinates:
02h 42’ 05”
42° 45’ 42”

Close Star: **SAO-38592** (Algol)
Catalog Objects: M-34/NGC-1039

Imaging Window: **12:28 – 04:38**
Transit: **04:11 | 81°**

Primary Focus

Prospective Imaging Objects – September 03 2024

M 77 (NGC 1068)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**
Peak:
Constellation: **Cetus**
Coordinates:
02hr 42’ 34”
00° 02’ 07”

Close Star: **SAO-110665**
Catalog Objects: M 77, NGC-1068

Imaging Window: **02:07 – 04:38**
Transit: **04:12 | 57°**

C-11 HD: Primary Focus

Soul Nebula (IC-1848)

Config: **C11-HD | HS | ZWO6200MC**

Type: **Diffuse Nebula**
Peak:
Constellation: **Cassiopeia**
Coordinates:
02hr 57’ 16”
60° 37’ 37”

Close Star: **SAO-38787 (Mirfak)**
Catalog Objects: IC 1848

Imaging Window: **12:40 – 04:38**
Transit: **04:21 | 63°**

C-11 HD: HyperStar v4

Soul Nebula (IC-1848)

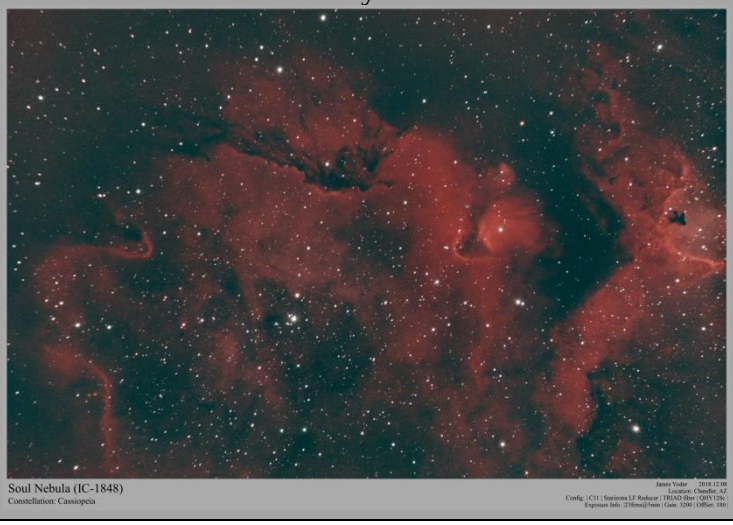
Config: |C1|LF|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Cassiopeia**
Coordinates:
02hr 57’ 16”
60° 37’ 37”

Close Star: **SAO-38787 (Mirfak)**
Catalog Objects: IC 1848

Imaging Window: **12:40 – 04:38**
Transit: **04:21 | 63°**

Primary Focus



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Prospective Imaging Objects – September 03 2024

Imaging Summary September 03, 2024

Astronomical Dusk = 08:14 Astronomical Dawn = 04:38

HyperStar: Nebula

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
HyperStar	Nebula	Nebula	NGC-6820	08:14 – 12:36	09:13	08	Vulpecula: Open Cluster & Nebula
HyperStar	Nebula	Nebula	B-144	08:14 – 01:11	09:28	11	Cygnus: Fish on the Platter Region
HyperStar	Nebula	Nebula	IC-1318 A & B	08:14 – 01:37	09:47	15	Comp2! Cygnus: Gama Cygni Nebula
HyperStar	Nebula	Nebula	IC-1318A	08:14 – 01:37	09:47	15	Cygnus: Bright Nebula Region of Interest
HyperStar	Nebula	Nebula	IC-1318B	08:14 – 01:46	09:58	17	Cygnus: Bright Nebula Region of Interest
HyperStar	Nebula	Nebula	IC-5070	08:14 – 02:13	10:21	18	Comp2!Cygnus: Pelican & N. American Nebula
HyperStar	Nebula	Nebula	IC-5070	08:14 – 02:13	10:21	19	Cygnus: Pelican & N. American Nebula
HyperStar	Nebula	DN	LDN-904	08:14 – 02:10	10:23	19	Cygnus: Northern Coal Sack
HyperStar	Nebula	Nebula	NGC-6960	08:14 – 02:01	10:23	19	Comp2! Cygnus: Veil Nebula
HyperStar	Nebula	Nebula	NGC-6960	08:14 – 02:01	10:23	20	Cygnus: Veil Nebula
HyperStar	Nebula	Nebula	IC-1396	08:14 – 03:00	11:09	26	Cepheus: Elephant Trunk
HyperStar	Nebula	DN, BN	B-168	08:14 – 03:16	11:23	28	Cygnus: Dark Cocoon
HyperStar	Nebula	Nebula	SH2-132	08:14 – 03:41	11:49	31	Cepheus: SH2-132
HyperStar	Nebula	Nebula	SH2-155	08:50 – 04:10	12:27	33	Cepheus: Cave Nebula
HyperStar	Nebula	Nebula	SH2-157	09:04 – 04:34	12:46	35	Cassiopeia: Lobster Claw and Bubble Nebula
HyperStar	Nebula	Nebula	LBN 534	09:12 – 04:38	12:59	37	Andromeda: Blue Match Nebula
HyperStar	Nebula	Nebula	NGC-7822	10:09 – 04:38	01:31	38	Comp2! Cepheus: NGC-7822 region
HyperStar	Nebula	Nebula	NGC-7822	10:09 – 04:38	01:31	38	Cepheus CED-214
HyperStar	Nebula	Nebula	SH2-185	10:50 – 04:38	02:29	45	Cassiopeia: Gamma Cassiopeiae Nebula
HyperStar	Nebula	Neb, OC	NGC-457	11:06 – 04:38	02:49	46	Cassiopeia: Open Cluster and Nebula
HyperStar	Nebula	Nebula	IC-1848	12:40 – 04:38	04:21	51	Comp4! Cassiopeia: Heart & Soul Nebula
HyperStar	Nebula	Nebula	IC-1805	12:23 – 04:38	04:02	52	Cassiopeia: Heart Nebula
HyperStar	Nebula	Nebula	IC-1848	12:40 – 04:38	04:21	54	Cassiopeia: Soul Nebula

Prospective Imaging Objects – September 03 2024

HyperStar: Broad Spectrum

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
HyperStar	Broad Spectrum	DN	B-138	08:14 – 11:00	08:44	05	Aquila: Barnard's Black Lizard
HyperStar	Broad Spectrum	DN	LDN-673	08:14 – 11:45	08:51	06	Aquila: Dark Nebula Area
HyperStar	Broad Spectrum	DN	LDN-772	08:14 – 12:19	08:56	07	Vulpecula: Lot Ness Monster
HyperStar	Broad Spectrum	DN	B-168	08:14 – 03:16	11:23	30	Cepheus: Wolf Cave
HyperStar	Broad Spectrum	Galaxies	NGC-147	10:16 – 04:38	02:03	40	Cassiopeia: Galaxy Pair
HyperStar	Broad Spectrum	Galaxy	M-31	10:30 – 04:38	02:12	42	Andromeda: Andromeda Galaxy
HyperStar	Broad Spectrum	Gal, GC	NGC-288	*12:37–04:05	02:22	43	Sculptor: NGC-288 & NGC-253
HyperStar	Broad Spectrum	Galaxy	M-33	11:33 – 04:38	03:03	48	Triangulum: Triangulum Galaxy
HyperStar	Broad Spectrum	OC	NGC-869	12:07 – 04:38	03:52	50	Perseus: Hand chi Persei

Prospective Imaging Objects – September 03 2024

Imaging Summary September 03, 2024

Astronomical Dusk = 08:14 Astronomical Dawn = 04:38

Focal Reducer: Nebula

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Focal Reducer	Nebula	Nebula	NGC-6820	08:14 – 12:36	09:13	08	Vulpecula: The Finger
Focal Reducer	Nebula	Nebula	SH2-101	08:14 – 01:11	09:28	11	Cygnus: Tulip Nebula
Focal Reducer	Nebula	Nebula	IC-1318 R1	08:14 – 01:45	09:55	16	Cygnus: IC-1318 Region of Interest
Focal Reducer	Nebula	Nebula	IC-1318B	08:14 – 01:46	09:58	17	Cygnus: IC-1318B Region of Interest
Focal Reducer	Nebula	Nebula	NGC-6960	08:14 – 02:01	10:23	20	Comp2! Cygnus: Witch's Broom
Focal Reducer	Nebula	Nebula	NGC-6960B	08:14 – 02:01	10:23	20	Cygnus: Pickering's Triangular Wisp
Focal Reducer	Nebula	Nebula	NGC-6992	08:14 – 02:05	10:26	21	Comp2! Cygnus: Network Nebula
Focal Reducer	Nebula	Nebula	IC-1396-1	08:14 – 03:00	11:09	26	Cepheus: Elephant Trunk ROI
Focal Reducer	Nebula	Nebula	IC-1396-2	08:14 – 03:00	11:09	26	Cepheus: Elephant Trunk ROI
Focal Reducer	Nebula	Nebula	IC-5146	08:14 – 03:16	11:23	29	Cygnus: Cocoon Nebula
Focal Reducer	Nebula	Nebula	SH2-132	08:14 – 03:41	11:49	31	Cepheus: Bright Nebula
Focal Reducer	Nebula	Nebula	SH2-142	08:34 – 04:08	12:17	33	Cepheus: Wizard Nebula
Focal Reducer	Nebula	Nebula	SH2-155	08:50 – 04:10	12:27	34	Cepheus: Cave Nebula
Focal Reducer	Nebula	Nebula	SH2-157	09:04 – 04:34	12:46	35	Cassiopeia: Lobster Claw
Focal Reducer	Nebula	Nebula	NGC-7822	10:09 – 04:38	01:31	38	Cepheus: NGC 7822 (CED-214)
Focal Reducer	Nebula	Neb, Gx	NGC-246	*11:23–04:38	02:17	42	Cetus: Planetary and two Galaxies
Focal Reducer	Nebula	Nebula	NGC-281	10:37 – 04:38	02:22	45	Cassiopeia: Pack Man Nebula
Focal Reducer	Nebula	Nebula	IC-1795	12:18 – 04:38	03:55	51	Cassiopeia: Fish Head Nebula
Focal Reducer	Nebula	Nebula	IC-1805	12:23 – 04:38	04:02	52	Cassiopeia: Heart Nebula

Focal Reducer: Broad Spectrum

Prospective Imaging Objects – September 03 2024

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Focal Reducer	Broad Spectrum	DN	B-143	08:14 – 12:04	09:11	08	Aquila: Barnard's E
Focal Reducer	Broad Spectrum	RN	NGC-7023	08:14 – 01:57	10:32	22	Cepheus: Iris Nebula
Focal Reducer	Broad Spectrum	OC	M-39	08:14 – 02:55	11:02	25	Cygnus: Open Cluster NGC-7092
Focal Reducer	Broad Spectrum	DN	LDN-1235	09:05 – 02:31	11:45	29	Cepheus: Dark Shark
Focal Reducer	Broad Spectrum	DN	B-168	084 – 03:16	11:23	30	Rot90 Cepheus: Wolf's Cave
Focal Reducer	Broad Spectrum	Galaxies	NGC7317	08:31 – 03:47	12:06	32	Rot 115 Pegasus: Stephan's Quintent & NGC-7331
Focal Reducer	Borad Spectrum	Galaxies	NGC-7619	10:12 – 03:35	12:50	36	Pegasus: Pegasus Cluster
Focal Reducer	Broad Spectrum	Galaxies	NGC-147	10:16 – 04:38	02:03	40	Cassiopeia: Galaxy Pair NGC-147 & NGC 185
Focal Reducer	Broad Spectrum	OC	NGC-188	*08:14-04:38	02:22	44	Cepheus: Open Cluster NGC-188
Focal Reducer	Broad Spectrum	Galaxy	M-33	11:33 – 04:38	03:03	48	Rot90 Triangulum: Triangulum Galaxy
Focal Reducer	Broad Spectrum	Galaxies	M-77	02:04 – 04:38	04:11	53	Cetus: Galaxies M-77 & NGC-1055

Prospective Imaging Objects – September 03 2024

Imaging Summary September 03, 2024

Astronomical Dusk = 08:14 Astronomical Dawn = 04:38

Primary Focus: Nebula

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Nebula	PN	IC-4776	*08:14-09:52	08:16	02	Sagittarius: Sm Planetary Nebula
Primary Focus	Nebula	PN	M-57	08:14 – 12:04	08:24	03	Lyra: Ring Nebula
Primary Focus	Nebula	PN	Abell-50	08:14 – 12:23	08:30	04	Draco: Med Planetary Nebula
Primary Focus	Nebula	PN	NGC-6751	*08:14-11:48	8:36	04	Aquila: Dandelion Puffball Nebula (Sm)
Primary Focus	Nebula	PN	NGC-6772	*08:14-12:36	08:45	05	Aquila: Med Planetary Nebula
Primary Focus	Nebula	PN	NGC-6778	08:14 – 10:52	08:49	06	Aquila: Small Planetary Nebula
Primary Focus	Nebula	PN	NGC-6781	08:14 – 11:28	08:49	06	Aquila: Med Planetary Nebula
Primary Focus	Nebula	PN	NGC-6804	08:14 – 11:50	09:02	07	Aquila: Small Planetary Nebula
Primary Focus	Nebula	Nebula	NGCC-6820	08:14 – 12:36	09:13	09	Vulpecula: The Finger
Primary Focus	Nebula	PN	NGC-6818	*08:14-12:21	09:14	09	Sagittarius: Little Gem
Primary Focus	Nebula	PN	NGC-6826	08:13 – 01:08	09:15	09	Cygnus: Blinking Planetary
Primary Focus	Nebula	PN	NGC-6842	08:14 – 01:00	09:25	10	Vulpecula: Sm-Med Planetary Nebula
Primary Focus	Nebula	PN	M-27	08:14 – 12:52	09:30	11	Vulpecula: Dumbbell Nebula
Primary Focus	Nebula	Nebula	SH2-101	08:14 – 01:11	09:28	12	Cygnus: Tulip Nebula
Primary Focus	Nebula	PN	NGC-6852	08:14 – 11:50	09:31	12	Aquila: Small Planetary Nebula
Primary Focus	Nebula	Nebula	NGC-6888	08:14 – 01:29	09:42	13	Cygnus: Crescent Nebula
Primary Focus	Nebula	Nebula	DWB-111	08:12 – 01:34	09:44	13	Cygnus: Propeller Nebula
Primary Focus	Nebula	PN	NGC-6891	08:14 – 12:44	09:45	13	Delphinus: Small Planetary Nebula
Primary Focus	Nebula	PN	NGC-6894	08:14 – 01:23	09:47	14	Cygnus: Little Ring Nebula (Sm-Med)
Primary Focus	Nebula	PN	IC-4997	08:14 – 12:59	09:50	14	Sagitta: Small PN
Primary Focus	Nebula	PN	NGC-6905	08:14 – 01:10	09:53	14	Delphinus: Blue Flash Nebula
Primary Focus	Nebula	BN	IC-1318-1	08:14 – 01:45	09:55	16	Cygnus: Region of interest in IC-1318
Primary Focus	Nebula	BN	IC-1318B	08:14 – 01:46	09:58	17	Cygnus: Region of interest in IC-1318B
Primary Focus	Nebula	PN	NGC-7008	08:14 – 02:23	10:31	22	Cygnus: Fetus Nebula

Prospective Imaging Objects – September 03 2024

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Nebula	PN	NGC-7009	*08:23-01:15	10:34	23	Aquarius: Saturn Nebula
Primary Focus	Nebula	PN	NGC-7026	08:14 – 02:29	10:36	23	Cygnus: Small PN
Primary Focus	Nebula	PN	NGC-7027	08:14 – 02:27	10:37	24	Cygnus: Small PN
Primary Focus	Nebula	PN	NGC-7048	08:14 – 02:37	10:44	24	Cygnus: Med PN
Primary Focus	Nebula	PN	NGC-7094	08:14 – 02:06	11:07	25	Pegasus: Med PN
Primary Focus	Nebula	DN	IC-1396-1	08:14 – 03:00	11:09	27	Cepheus: Elephant Trunk ROI
Primary Focus	Nebula	BN	IC-1396-2	08:14 – 03:00	11:09	27	Cepheus: Elephant Trunk RIO
Primary Focus	Nebula	BN	IC-1396-3	08:14 – 03:00	11:09	27	Cepheus: Elephant Trunk RIO
Primary Focus	Nebula	PN	NGC-7139	08:14 – 02:57	11:16	28	Cepheus: Med/Lrg Planetary
Primary Focus	Nebula	BN	IC-5146	08:14 – 03:16	11:23	29	Cygnus: Cocoon Nebula
Primary Focus	Nebula	PN	NGC-7293	*09:33-02:33	12:00	30	Aquarius: Helix Nebula
Primary Focus	Nebula	Nebula	SH2-132	08:14 – 03:41	11:49	31	Cepheus: Bright Nebula
Primary Focus	Nebula	Nebula	SH2-142	08:34 – 04:08	12:17	33	Cepheus: Wizard Nebula
Primary Focus	Nebula	Nebula	SH2-155	08:50 – 04:10	12:27	34	Cepheus: Cave Nebula
Primary Focus	Nebula	Nebula	NGC-7635	09:11 – 04:37	12:51	35	Cepheus: Bubble Nebula
Primary Focus	Nebula	Nebula	NGC-7662	09:12 – 04:38	12:56	37	Andromeda: Blue Snowball
Primary Focus	Nebula	Nebula	NGC-7822	10:09 – 04:38	01:31	39	Cepheus: Emission Nebula Ced 214
Primary Focus	Nebula	PN	NGC-40	10:54 – 04:38	01:43	39	Cepheus: Bow-Tie Nebula
Primary Focus	Nebula	PN	NGC-246	*11:23-04:38	02:17	43	Cetus: Skull Nebula
Primary Focus	Nebula	Nebula	SH2-185	10:50 – 04:38	02:29	45	Cassiopeia: Gamma Cassiopeiae Nebula
Primary Focus	Nebula	Nebula	SH2-188	11:17 – 04:38	03:00	47	Cassiopeia: Firefox Nebula
Primary Focus	Nebula	PN	M-76	11:25 – 04:38	03:12	49	Perseus: Little Dumbbell Nebula
Primary Focus	Nebula	Nebula	IC-1805	12:23 – 04:38	04:02	52	Cassiopeia: Heart Nebula Core
Primary Focus	Nebula	Nebula	IC-1848	12:40 – 04:38	04:21	54	Cassiopeia: Soul Nebula Core
Primary Focus	Nebula						

Prospective Imaging Objects – September 03 2024

Imaging Summary September 03, 2024

Astronomical Dusk = 08:14 Astronomical Dawn = 04:38

Primary Focus: Broad Spectrum

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Broad Spectrum	GC	M-70	*08:14-10:03	08:14	02	Sagittarius: Sm Globular NGC-6681
Primary Focus	Broad Spectrum	OC	M-26	*08:14-11:14	08:16	02	Sagittarius: Open Cluster NGC-6694
Primary Focus	Broad Spectrum	DN	B-104	*08:15-11:36	08:18	03	Scutum: Check mark
Primary Focus	Broad Spectrum	OC	M-11	*08:14-11:59	08:22	03	Scutum: Wild Duck Cluster
Primary Focus	Broad Spectrum	GC	M-54	*08:14-09:30	08:26	04	Sagittarius: Med Globular
Primary Focus	Broad Spectrum	GC	M-56	08:14 – 12:23	08:47	05	Lyra: Med Globular
Primary Focus	Broad Spectrum	GC	M-55	*08:15-10:03	09:10	07	Sagittarius: Large Globular
Primary Focus	Broad Spectrum	Galaxy	NGC-6822	*08:14-12:17	09:15	10	Sagittarius: Barnard's Galaxy (Large Galaxy)
Primary Focus	Broad Spectrum	GC	M-71	08:14 – 12:38	09:24	10	Sagitta: Med Globular
Primary Focus	Broad Spectrum	GC	M-75	*08:14-11:59	09:36	12	Sagittarius: Med Globular
Primary Focus	Broad Spectrum	OC	M-29	08:14 – 01:40	09:54	16	Cygnus: Open Cluster in Cygnus
Primary Focus	Broad Spectrum	Galaxy	NGC-6946	08:14 – 01:53	10:05	18	Cepheus: Fireworks Galaxy (Large Face On)
Primary Focus	Broad Spectrum	GC	M-72	*08:19-12:34	10:24	21	Aquarius: Medium Globular
Primary Focus	Broad Spectrum	OC	M-73	*08:23-12:34	10:29	22	Aquarius: Open Cluster NGC-6994
Primary Focus	Broad Spectrum	RN	NGC-7023	08:14 – 01:57	10:32	23	Cepheus: Iris Nebula
Primary Focus	Broad Spectrum	GC	M-15	08:14 – 01:57	11:00	24	Pegasus: Pegasus Cluster
Primary Focus	Broad Spectrum	GC	M-2	09:02 – 01:11	11:04	25	Aquarius: Large Globular
Primary Focus	Broad Spectrum	GC	M-30	*08:56-01:26	11:10	28	Capricornus: Med Globular
Primary Focus	Broad Spectrum	Galaxies	NGC-7317	08:31 – 03:47	12:06	32	Pegasus: Stephan's Quintet
Primary Focus	Broad Spectrum	Galaxies	NGC-7331	08:32 – 03:49	12:07	32	Pegasus: Galaxy Group
Primary Focus	Broad Spectrum	Galaxy	NGC-7479	09:44 – 03:32	12:35	34	Pegasus: Face on Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxies	NGC-7619	10:12 – 03:35	12:50	36	Pegasus: Pegasus Cluster
Primary Focus	Broad Spectrum	OC	M-52	09:16 – 04:38	12:55	36	Cassiopeia: Open Cluster NGC-7654
Primary Focus	Broad Spectrum	OC	NGC-7789	09:42 – 04:38	01:27	37	Cassiopeia: Caroline's Rose

Prospective Imaging Objects – September 03 2024

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Broad Spectrum	Galaxies	NGC 67-72	10:19 – 04:38	01:48	39	Andromeda: Andromeda Galaxy Group
Primary Focus	Broad Spectrum	Galaxy	NGC-147	10:16 – 04:38	02:03	40	Cassiopeia: Dwarf Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-185	10:22 – 04:38	02:09	41	Cassiopeia: Dwarf Spheroidal Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-110	10:27 – 04:38	02:10	41	Andromeda: Elliptical Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-32	10:30 – 04:38	02:12	41	Andromeda: Companion to M-31
Primary Focus	Broad Spectrum	Galaxy	NGC-247	*11:46-04:38	02:17	43	Cetus: Needle's Eye Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-253	*12:19-04:16	02:17	44	Sculptor: Sculptor Galaxy
Primary Focus	Broad Spectrum	Globular	NGC-288	*12:34-04:12	02:22	44	Sculptor: Med Globular Cluster
Primary Focus	Broad Spectrum	Galaxy	IC-1613	12:20 – 04:38	02:34	46	Cetus: Irregular Dwarf Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-404	11:02 – 04:38	02:39	46	Andromeda: Mirachs Ghost
Primary Focus	Broad Spectrum	OC	NGC-457	11:06 – 04:38	02:49	47	Cassiopeia: Owl Cluster
Primary Focus	Broad Spectrum	Galaxies	Arp-133	12:57 -04:38	02:55	47	Cetus: Minkowski's Object
Primary Focus	Broad Spectrum	OC	M-103	11:23 – 04:38	03:03	48	Cassiopeia: Open Cluster NGC-581
Primary Focus	Broad Spectrum	Galaxy	M-33	11:33 – 04:38	03:03	49	Triangulum: Triangulum Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-74	12:06 – 04:38	03:06	49	Pisces: Med Face On Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-772	12:21 – 04:38	03:29	50	Aries: Nautilus Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-891	12:09 – 04:38	03:52	50	Andromeda: Edge On Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-925	12:23 – 04:38	03:57	51	Triangulum: Face on Galaxy PGC-9332
Primary Focus	Broad Spectrum	Galaxy	NGC-1055	02:04 – 04:38	04:11	53	Cetus: Edge On galaxy
Primary Focus	Broad Spectrum	OC	M-34	12:28 – 04:38	04:11	53	Perseus: Open Cluster NGC-1039
Primary Focus	Broad Spectrum	Galaxy	M-77	02:07 – 04:38	04:12	54	Cetus: Galaxy NGC-1068

Prospective Imaging Objects – September 03 2024

Imaging Summary September 03, 2024

Astronomical Dusk = 08:14 Astronomical Dawn = 04:38

Primary Prospects

Plan	Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
	HyperStar	Broadband	DN	B-138	08:14 – 11:00	08:44	05	Aquila: Barnard's Black Lizard
	HyperStar	Broadband	DN	LDN-673	08:14 – 11:45	08:51	06	Aquila: Dark Nebula
	HyperStar	Nebula	Nebula	NGC-6820	08:14 – 012:36	09:13	08	Vulpecula: Nebula Region
	HyperStar	Nebula	Nebula	IC-1318A	08:14 – 01:37	09:47	15	Cygnus: Cygnus ROI
	HyperStar	Nebula	Nebula	IC-1318B	08:14 – 01:46	09:58	17	Cygnus: Cygnus ROI
	HyperStar	Nebula	DN	LDN-904	08:14 – 02:10	10:23	19	Cygnus: Northern Coal Sack
	HyperStar	Nebula	Nebula	NGC-5960	08:14 – 02:01	10:23	19	Comp2! Cygnus: Veil Nebula
	HyperStar	Nebula	BN & DN	B-168	08:14 – 03:16	11:23	28	Cygnus: Dark Cocoon
	HyperStar	Nebula	Nebula	SH2-132	08:14 – 03:41	11:49	31	Cepheus: Bright Nebula
	HyperStar	Nebula	Nebula	SH2-155	09:12 – 04:38	12:59	37	Andromeda: Blue Match Nebula
	HyperStar	Broadband	OC	NGC-7789	09:42 – 04:38	01:27	37	Cassiopeia: Caroline's Rose
	HyperStar	Broadband	Galaxies	NGC-147 & NGC-185	10:16 – 04:38	02:03	40	Cassiopeia: Galaxy Pair
	HyperStar	Broadband	Galaxy	M-33	11:33 – 04:38	03:03	48	Triangulum: Triangulum Galaxy
	HyperStar	Broadband	OC	NGC-869, 884	12:07 – 04:38	03:52	50	Perseus: Hand Chi Persei
	HyperStar	Nebula	Nebula	IC-1848	12:40 – 04:38	04:21	51	Comp4! Cassiopeia: Heart and Soul Nebula
	HyperStar	Nebula						
	Focal Reducer	Broadband	DN	B-143	08:44 – 12:04	09:11	08	Aquila: Barnard's E
	Focal Reducer	Nebula	Nebula	SH2-101	08:14 – 01:11	09:28	11	Cygnus: Tulip Nebula
	Focal Reducer	Nebula	Nebula	IC-1318 R1	08:14 – 01:45	09:55	16	Cygnus: ROI
	Focal Reducer	Nebula	Nebula	IC-1318B	08:14 – 01:46	09:58	17	Cygnus: IC-1318B
	Focal Reducer	Nebula	Nebula	NGC-6992	08:14 – 02:05	10:26	21	Comp2! Cygnus: Network Nebula
	Focal Reducer	Nebula	RN	NGC-7023	08:14 – 01:57	10:32	22	Cepheus: Iris Nebula
	Focal Reducer	Nebula	Nebula	IC-1396	08:14 – 03:00	11:09	26	Cepheus: Elephant Trunk RIO1
	Focal Reducer	Nebula	Nebula	IC-1396	08:14 – 03:00	11:09	26	Cepheus: Elephant Trunk RIO2

Prospective Imaging Objects – September 03 2024

Plan	Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
	Focal Reducer	Nebula	BN & DN	IC-5146	08:14 – 03:16	11:23	29	Cygnus: Cocoon Nebula
	Focal Reducer	Nebula	Nebula	SH2-132	08:14 – 03:41	11:49	31	Cepheus: Bright Nebula
	Focal Reducer	Broadband	Galaxies	NGC7331 et. El.	08:31 – 03:47	12:06	32	Rot! Peg: Stephan's Quintet & NGC7331
	Focal Reducer	Nebula	Nebula	SH2-142	08:34 -0 04:08	12:17	33	Cepheus: Wizard Nebula
	Focal Reducer	Nebula	Nebula	SH2-155	08:50 – 04:10	12:27	34	Cepheus: Cave Nebula
	Focal Reducer	Nebula	Nebula	SH2-157	09:04 – 04:34	12:46	35	Cassiopeia: Lobster Claw ROI
	Focal Reducer	Broadband	Galaxies	NGC-7619	10:12 – 03:35	12:50	36	Pegasus: Pegasus Cluster
	Focal Reducer	Nebula	Nebula	NGC-7822	10:09 – 04:38	01:31	38	Cepheus: CED-214
	Focal Reducer	Broadband	OC	NGC-188	*08:14 – 04:38	02:22	44	Cepheus: Open Cluster
	Primary Focus	Broadband	GC	M-70	*08:14 – 10:03	08:14	02	Sagittarius: Sm/Med Globular NGC-6681
	Primary Focus	Nebula	PN	IC-4776	*08:14 – 09:52	08:16	02	Sagittarius: Small PN
	Primary Focus	Broadband	DN	B-104	*08:14 – 11:36	08:18	03	Scutum: Checkmark DN
	Primary Focus	Nebula	PN	Abell-50	08:14 – 12:23	08:30	04	Draco: Med Planetary Nebula
	Primary Focus	Nebula	PN	NGC-6751	*08:14-11:48	08:36	04	Aquila: Small Planetary Nebula
	Primary Focus	Nebula	PN	NGC-6772	*08:14-12:36	08:45	05	Aquila: Med Planetary Nebula
	Primary Focus	Broadband	GC	M-56	08:14 – 12:23	08:47	05	Lyra: Med Globular
	Primary Focus	Nebula	PN	NGC-6781	08:14 – 11:28	08:49	06	Aquila: Med Planetary Nebula
	Primary Focus	Nebula	PN	NGC-6804	08:14 – 11:50	09:02	07	Aquila: Small Planetary Nebula
	Primary Focus	Broadband	GC	M-55	*08:15-10:03	09:10	07	Sagittarius: Large Globular
	Primary Focus	Nebula	Nebula	NGC-6820	08:14 – 12:36	09:13	09	Vulpecula: The Finger
	Primary Focus	Nebula	PN	NGC-6826	08:14 – 01:08	09:15	09	Cygnus: Blinking Planetary
	Primary Focus	Broadband	Galaxy	NGC-6822	*08:14-12:17	09:15	10	Sagittarius: Barnard's Galaxy
	Primary Focus	Broadband	GC	M-71	08:14 – 12:38	09:24	10	Sagitta: Med Globular
	Primary Focus	Nebula	PN	NGC-6842	08:14 – 01:00	09:25	10	Vulpecula: Sm/Med Planetary Nebula
	Primary Focus	Nebula	Nebula	Sh2-101	08:14 – 01:11	09:28	12	Cygnus: Tulip Nebula

Prospective Imaging Objects – September 03 2024

Plan	Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
	Primary Focus	Broadband	GC	M-75	*08:14-11:59	09:36	12	Sagittarius: Med Globular
	Primary Focus	Nebula	Nebula	NGC-6888	08:14 – 01:29	09:42	13	Cygnus: Crescent Nebula
	Primary Focus	Nebula	Nebula	NGC-6894	08:14 – 01:23	09:47	14	Cygnus: Sm/Med Planetary Nebula
	Primary Focus	Broadband	Galaxy	NGC-6946	08:14 – 01:53	10:05	18	Cepheus: Fireworks Galaxy
	Primary Focus	Broadband	Globular	M-72	*08:19-12:34	10:24	21	Aquarius: Med Globular NGC-6981
	Primary Focus	Nebula	PN	NGC-7009	*08:23-01:15	10:34	23	Aquarius: Saturn Nebula
	Primary Focus	Nebula	PN	NGC-7027	08:14 – 02:27	10:37	24	Cygnus: Small PN
	Primary Focus	Nebula	PN	NGC-7048	08:14 – 02:37	10:44	24	Cygnus: Sm/med PN
	Primary Focus	Broadband	Globular	M-2	09:02 – 01:11	11:04	25	Aquarius: Large GC NGC-7089
	Primary Focus	Nebula	PN	NGC-7094	08:14 – 02:06	11:07	25	Pegasus: sm/med PN
	Primary Focus	Nebula	DN	IC-1396	08:14 – 03:00	11:09	27	Cepheus: Dark Nebula
	Primary Focus	Nebula	Nebula	IC-1396	08:14 -0 03:00	11:09	27	Cepheus: Elephant Trunk RIO 1
	Primary Focus	Nebula	Nebula	IC-1396	08:14 -0 03:00	11:09	27	Cepheus: Elephant Trunk RIO 2
	Primary Focus	Broadband	Globular	M-30	*08:56-01:26	11:10	28	Capricornus: Med Globular NGC-7099
	Primary Focus	Nebula	Nebula	SH2-132	08:14 – 03:41	11:49	31	Cepheus: Bright Nebula
	Primary Focus	Broadband	Galaxies	NGC-7317	08:31 – 03:47	12:06	32	Pegasus: Stephan's Quintet
	Primary Focus	Broadband	Galaxies	NGC-7619	10:12 – 03:35	12:50	36	Pegasus: Pegasus Cluster
	Primary Focus	Nebula	PN	NGC-7662	09:12 – 04:38	12:56	37	Andromeda: Blue Snowball
	Primary Focus	Nebula	PN	NGC-40	10:54 – 04:38	01:43	39	Cepheus: Bow-Tie Nebula
	Primary Focus	Broadband	Galaxies	NGC 67-72	10:19 – 04:38	01:48	39	Andromeda: Andromeda Galaxy Group
	Primary Focus	Broadband	Galaxy	M-32	10:30 – 04:38	02:12	41	Andromeda: Elliptical Galaxy
	Primary Focus	Nebula	PN	NGC-246	*11:23-04:38	02:17	43	Cetus: Skull Nebula
	Primary Focus	Broadband	Globular	NGC-288	*12:34-04:12	02:22	44	Sculptor: Med Globular Cluster
	Primary Focus	Nebula	Nebula	SH2-185	10:50 – 04:38	02:29	45	Cassiopeia: Gamma Cassiopeiae Nebula
	Primary Focus	Broadband	Galaxy	IC-1613	12:20 – 04:38	02:34	46	Cetus: Irregular Dwarf Galaxy
	Primary Focus	Broadband	Galaxy	NGC-404	11:02 – 04:38	02:39	46	Andromeda: Mirachs Ghost
	Primary Focus	Broadband	Galaxies	Arp-133	12:57 – 04:38	02:55	47	Cetus: Minkowski's Object
	Primary Focus	Nebula	Nebula	SH2-188	11:17 – 04:38	03:00	47	Cassiopeia: Firefox Nebula

Prospective Imaging Objects – September 03 2024

Plan	Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
	Primary Focus	Broadband	OC	M-103	11:23 - 04:38	03:03	48	Cassiopeia: Open Cluster
	Primary Focus	Broadband	Galaxy	NGC-772	12:21 – 04:38	03:29	50	Aries: Nautilus Galaxy
	Primary Focus	Broadband	Galaxy	NGC-1055	02:04 – 04:38	04:11	53	Cetus: Edge On Galaxy
	Primary Focus	Broadband	OC	M-34	12:28 – 04:38	04:11	53	Perseus: Open Cluster NGC-1039
	Primary Focus	Broadband	Galaxy	M-77	02:07 – 04:38	04:12	54	Cetus: Galaxy
	Primary Focus							

Prospective Imaging Objects – September 03 2024

Imaging Summary August 04, 2024

Astronomical Dusk = 08:56 Astronomical Dawn = 04:10

Imaging Plans

Plan	Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Imaging Schedule
	HyperStar	Nebula	Nebula	**SH2-240**				
	HyperStar	Nebula	Nebula	IC-2162				
	HyperStar	Nebula	Nebula	NGC-1499				
	HyperStar	Broadband	Galaxies	M-106 et. El.				
	Focal Reducer	Nebula	Nebula	IC-443				
	Focal Reducer	Broadband	Galaxies	M-84 et. El.				
	Focal Reducer	Nebula	Nebula	IC-1805				
	Focal Reducer	Nebula	Nebula	NGC-2174				
	Focal Reducer	Broadband	Galaxies					
	Primary Focus	Nebula	PN	NGC-1360				
	Primary Focus	Nebula	PN	NGC-2440				
	Primary Focus	Nebula	PN	NGC-2610				
	Primary Focus	Broad Spectrum	Globular	M-68				
	Primary Focus	Nebula	Nebula					
	Primary Focus	Nebula	Nebula					
	Primary Focus	Broad Spectrum	Galaxy					
	Primary Focus	Broad Spectrum	Galaxy					
	Primary Focus	Broad Spectrum	Galaxy					