Prospective Imaging Objects – February 09 2024

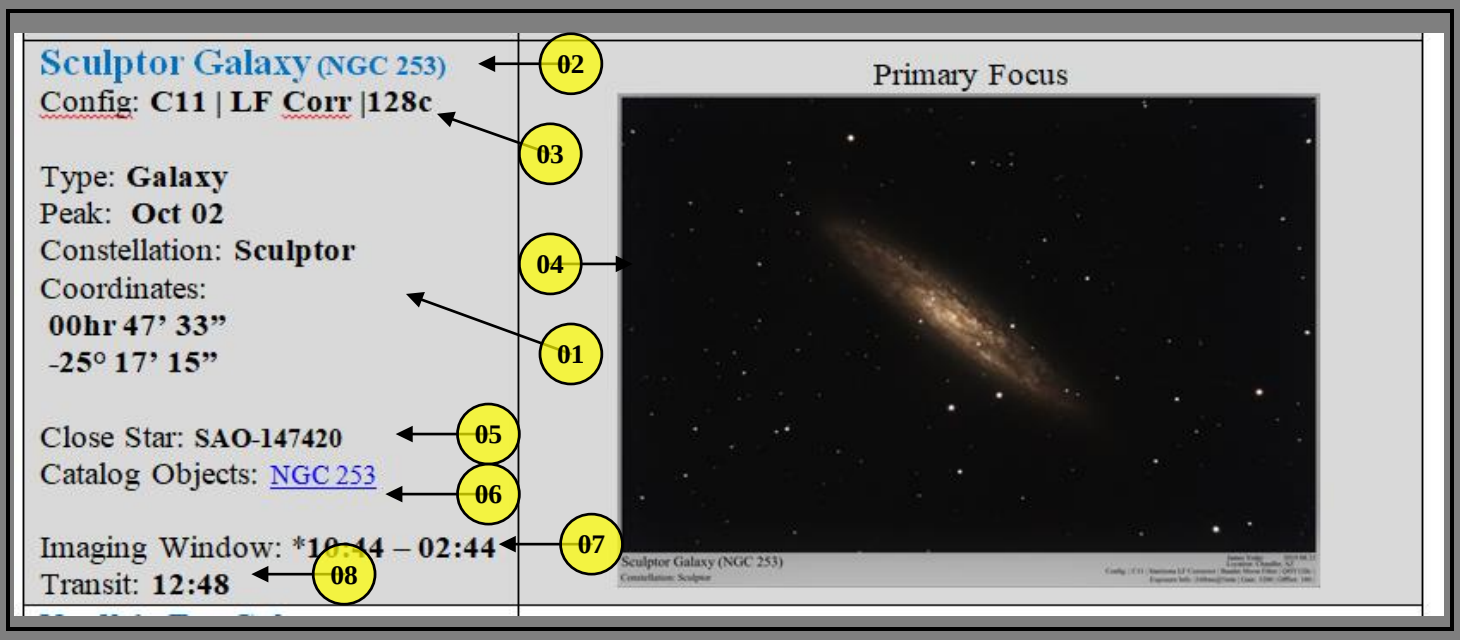
Astronomical Data

Sunrise	Sunset	Astronomical Dusk	Astronomical Dawn	Imaging	New Moon
07:17am	06:06 pm	07:30 pm	05:53 am	09:23	February 09

Hardware Info

Configuration	FL	FOV	FOV°	Image Scale (1 – 1.5) ideal
C11HD | ZWO ASI-6200 mono Pro	2800mm	45'x 30'	0.75° x 0.5°	0.280"/pix (Oversampled)
C11HD | 0.7xReducer | ZWO6200MCc	1960mm	60' x 45'	1.0° x 0.75°	0.393"/pix (Oversampled)
|C11HD|HS-v4|ZWO6200MCc|	540mm	228' x 150'	3.8° x 2.5°	1.4"/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.

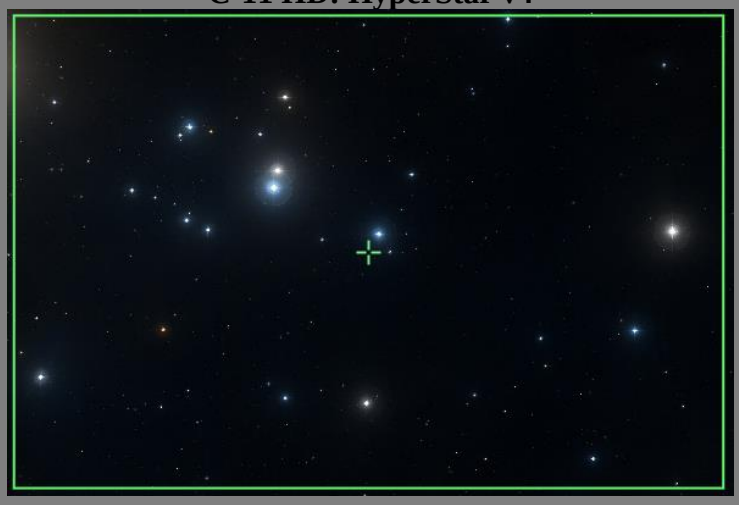
05: Close Star – A fairly bright star close to the target that can be used to check focus and sync the telescope before the imaging session begins.

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 – February 09 2024

Hyades (C 41,Mel 25) Config: **C11-HD | HS | ZWO6200MC** Type: **Open Cluster** Constellation: **Taurus** Coordinates: **04hr 26’ 34”** **15° 31’ 39”** Close Star: SAO-56840 Catalog Objects: Mel 25 Imaging Window: **07:30 – 10:45** Transit: **07:36 | 73°**	**C-11 HD: HyperStar v4** 
Trifid of the North (NGC 1579) Config: |C11HD|ZWO6200MC| Type: **Bright Nebula** Peak: Constellation: **Perseus** Coordinates: **04hr 30’ 12”** **35° 16’ 60”** Close Star: **SAO-56799** Catalog Objects: NGC-1579 Imaging Window: **07:30 – 11:19** Transit: **07:36 | 88°**	**C-11 HD: Primary Focus** 
Witch Head Nebula (IC 2118) Config: **C11-HD | HS | ZWO6200MC** Type: **Bright Nebula** Peak: Constellation: **Eridanus** Coordinates: **05hr 05’ 19.872”** **-06° 56’ 00.365”** Close Star: SAO-131794 Catalog Objects: IC 2118 Imaging Window: ***07:30 – 10:42** Transit: **08:08 | 49°**	**C-11 HD: HyperStar v4** 

Prospective Imaging Objects – February 09 2024

Witch Head Nebula (IC 2118)
Config: |C11HD|ZWO6200MC|

Type: **Bright Nebula**
Peak:
Constellation: **Eridanus**
Coordinates:
05hr 07’ 07”
-06° 20’ 07”

Close Star: SAO-131794
Catalog Objects: IC 2118

Imaging Window: ***07:30 – 10:42**
Transit: **08:08 | 49°**

C-11 HD: Primary Focus

Foxface Nebula (NGC 1788)

Config: |C11|HS|ZWO6200MCc|
Type: **Bright Nebula**
Peak:
Constellation: **Orion**
Coordinates:
05hr 06’ 10”
-04° 04’ 26”

Close Star: SAO-131794
Catalog Objects: NGC 1788

Imaging Window: **07:30 – 10:06**
Transit: **08:13 | 53°**

Hyperstar

Foxface Nebula (NGC 1788)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Bright Nebula**
Peak:
Constellation: **Orion**
Coordinates:
05hr 05’ 52”
-03° 22’ 22”

Close Star: SAO-131794
Catalog Objects: NGC 1788

Imaging Window: **07:30 – 10:06**
Transit: **08:13 | 53°**

C-11 HD: Focal Reducer

Prospective Imaging Objects – February 09 2024

Foxface Nebula (NGC 1788)
Config: |C11HD|ZWO6200MC|

Type: **Bright Nebula**
Peak:
Constellation: **Orion**
Coordinates:
05hr 06’ 26”
-03° 20’ 13”

Close Star: SAO-131794
Catalog Objects: NGC 1788

Imaging Window: **07:30 – 10:06**
Transit: **08:13 | 53°**

C-11 HD: Primary Focus

Flaming Star Nebula (IC-405)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Bright Nebula**
Peak:
Constellation: **Auriga**
Coordinates:
05hr 19’ 38”
33° 49’ 10”

Close Star: SAO-77168 (Elnath)
Catalog Objects: IC 405, IC 410

Imaging Window: **07:30 – 12:05**
Transit: **08:23 | 89°**

C-11 HD: HyperStar v4

Flaming Star Nebula (IC 405)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Bright Nebula**
Peak:
Constellation: **Auriga**
Coordinates:
05hr 15’ 55”
34° 29’ 08”

Close Star: SAO-77168 (Elnath)
Catalog Objects: IC 405

Imaging Window: **07:30 – 12:05**
Transit: **08:23 | 89°**

C-11 HD: Focal Reducer

Prospective Imaging Objects – February 09 2024

Flaming Star Nebula (IC 405)
Config: |C11-HD|ZWO6200MC|

Type: **Bright Nebula**
Peak:
Constellation: **Auriga**
Coordinates:
05hr 16’ 37”
34° 23’ 47”

Close Star: SAO-77168 (Elnath)
Catalog Objects: IC 405

Imaging Window: **07:30 – 12:05**
Transit: **08:23 | 89°**

C-11 HD: Primary Focus

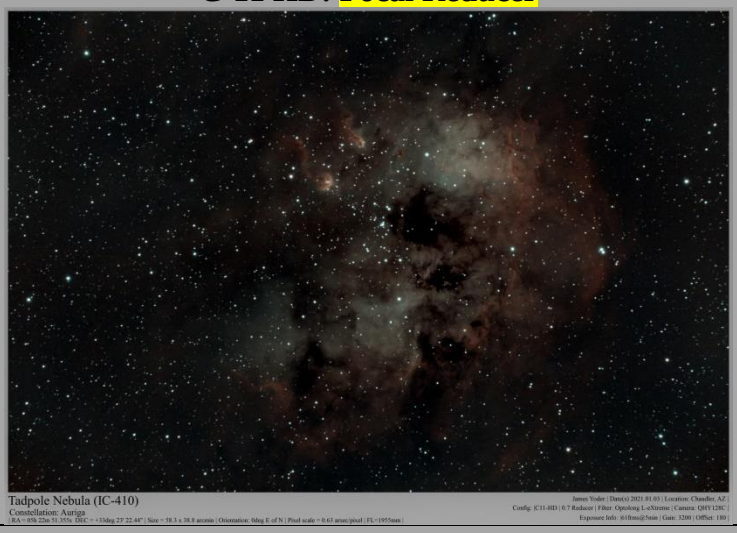
Tadpoles (IC 410)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Auriga**
Coordinates:
05hr 22’ 54”
33° 23’ 31”

Close Star: SAO-77168 (Elnath)
Catalog Objects: IC 410

Imaging Window: **07:30 – 12:08**
Transit: **08:28 | 90°**

C-11 HD: Focal Reducer



Tadpoles (IC 410)
Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Auriga**
Coordinates:
05hr 22’ 37”
33° 23’ 03”

Close Star: SAO-77168 (Elnath)
Catalog Objects: IC 410

Imaging Window: **07:30 – 12:08**
Transit: **08:28 | 90°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

M-79 (NGC-1904)
Config: |C11HD|Barlow x2|ZWO6200MC|

Type: **Globular Cluster**
Peak:
Constellation: **Lepus**
Coordinates:
05hr 24’ 11”
-24° 31’ 25”

Close Star: SAO-170457
Catalog Objects: M 79

Imaging Window: ***07:30 – 09:47**
Transit: **08:30 | 32°**

C-11 HD: Primary Focus *x2

Spirograph Nebula (IC 418)
Config: |C11HD|Barlow x2|ZWO6200MC|

Type: **Planetary Nebula**
Constellation: **Lepus**
Coordinates:
05hr 27’ 28”
-12° 41’ 48”

Close Star: SAO-132542 (Saiph)
Catalog Objects: IC 418

Imaging Window: ***07:30 – 11:15**
Transit: **08:34 | 44°**

C-11 HD: Primary Focus *x2

The Spider and the Fly
(M-77, NGC-1055, NGC-1931)
Config: |C11-HD|FR|ZWO6200MC|
Type: **Diffuse Nebula**
Peak:
Constellation: **Auriga**

Camera Rotation - 90°
Frame 01
RA: **05hr 30’ 44”**DEC: **34° 20’ 41”**
Frame 02
RA: **05hr 27’ 55”**DEC: **34° 20’ 41”**

Close Star: SAO-77168 (Elnath)
Catalog Objects: IC-417, NGC-1931

Imaging Window: **07:30 – 12:19**
Transit: **08:37 | 89°**

C-11 HD: Focal Reducer
Composite!

Prospective Imaging Objects – February 09 2024

The Spider (IC 417) Config: |C11HD|ZWO6200MC| Type: **Diffuse Nebula** Peak: Constellation: **Auriga** Coordinates: **05hr 28’ 03”** **34° 22’ 58”** Close Star: SAO-77168 (Elnath) Catalog Objects: IC 417 Imaging Window: **07:30 – 12:16** Transit: **08:34 | 89°**	**C-11 HD: Primary Focus** 
Starfish Cluster (M-38) Config: |C11HD|ZWO6200MC| Type: **Open Cluster** Constellation: **Auriga** Coordinates: **05hr 28’ 43”** **35° 51’ 18”** Close Star: **SAO-77168** (Elnath) Catalog Objects: M-38 Imaging Window: **07:30 – 12:18** Transit: **08:35 | 88°**	**C-11 HD: Primary Focus** 
The Fly (NGC 1931) Config: |C11HD|ZWO6200MC| Type: **Diffuse Nebula** Peak: Constellation: **Auriga** Coordinates: **05hr 31’ 24”** **34° 15’ 00”** Close Star: SAO-77168 (Elnath) Catalog Objects: NGC 1931 Imaging Window: **07:30 – 12:19** Transit: **08:37 | 89°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – February 09 2024

Crab Nebula (M 1)

Config: |C1|LF|ZWO6200MC|

Type: **Planetary Nebula**
Peak:
Constellation: **Taurus**
Coordinates:
05hr 34’ 30”
22° 00’ 59.9”

Close Star: SAO-77336
Catalog Objects: M 1

Imaging Window: **07:30 – 12:01**
Transit: **08:41 | 79°**

Primary Focus

The Orion Complex

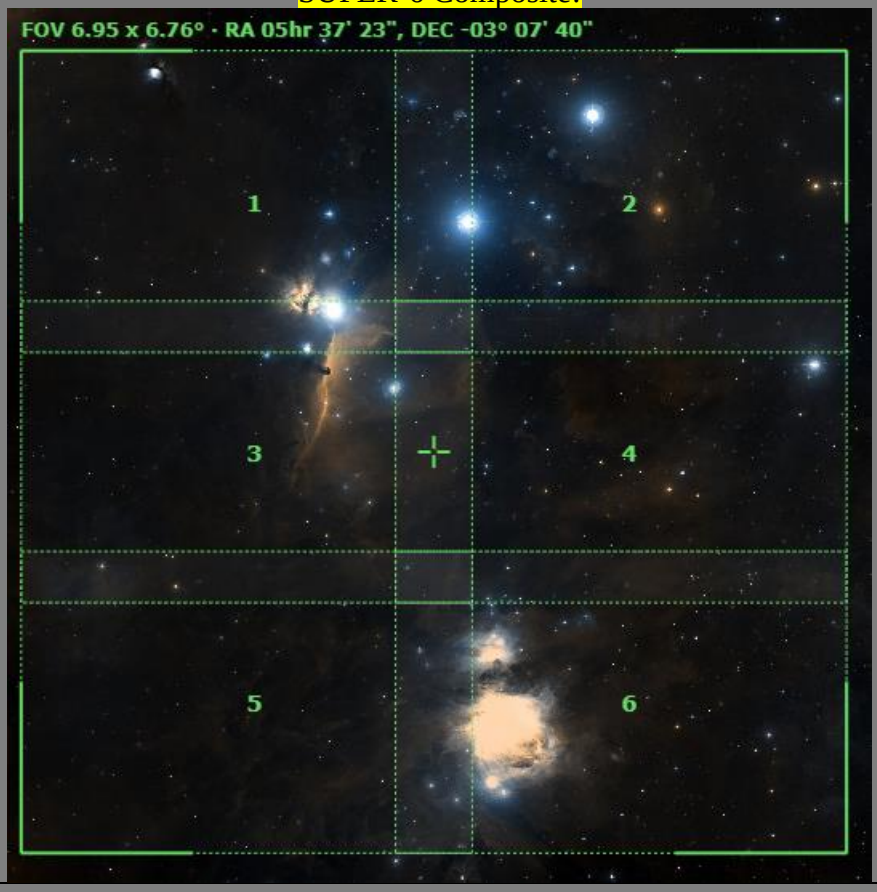
Config: **C11 | HS | ZWO6200MC**

Type: **Diffuse Nebula**
Peak:
Constellation: **Orion**
Coordinates:
Frame 01
RA: **05hr 43' 42"** DEC: **-01° 01' 06"**
Frame 02
RA: **05hr 31’ 05”** DEC: **-01° 01' 06"**
Frame 03
RA: **05hr 43’ 42”** DEC: **-03° 07’ 35”**
Frame 04
RA: **05hr 31’ 04”** DEC: **-03° 07’ 35”**
Frame 05
RA: **05hr 43’ 43”** DEC: **-05° 14’ 05”**
Frame 06
RA: **05hr 31’ 04”** DEC: **-05° 14’ 05”**

Close Star: SAO-132542 (Saiph)
Catalog Objects: M-42

Imaging Window: **07:30 – 10:21**
Transit: **08:41 | 52°**

C-11 HD: HyperStar v4
SUPER-6 Composite!



Prospective Imaging Objects – February 09 2024

The Orion Nebula (M 42) Config: **C11-HD | HS | ZWO6200MC** Type: **Diffuse Nebula** Peak: Constellation: **Orion** Coordinates: **05hr 35' 46"** **-05° 15' 34"** Close Star: SAO-132542 (Saiph) Catalog Objects: M 42 Imaging Window: **07:30 – 10:21** Transit: **08:41 | 52°**	**C-11 HD: HyperStar v4** 
The Orion Nebula (M 42) Config: |C1|LF|ZWO6200MC| Type: **Diffuse Nebula** Peak: Constellation: **Orion** Coordinates: **05hr 35' 09"** **-05° 24' 32"** Close Star: SAO-132542 (Saiph) Catalog Objects: M 42 Imaging Window: **07:30 – 10:21** Transit: **08:41 | 52°**	Primary Focus 
Running Man Nebula (NGC 1977) Config: |C11-HD|FR|ZWO6200MC| Type: **Bright Nebula** Peak: Constellation: **Orion** Coordinates: **05hr 35' 16"** **-04° 41' 47"** Close Star: SAO-132542 (Saiph) Catalog Objects: NGC 1977 Imaging Window: **07:30 – 10:25** Transit: **08:41 | 52°**	**C-11 HD: Focal Reducer** 

Prospective Imaging Objects – February 09 2024

Pinwheel Cluster (M-36)
Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**
Constellation: **Auriga**
Coordinates:
05hr 36’ 18”
34° 08’ 27”

Close Star: **SAO-77168** (Elnath)
Catalog Objects: M-36/NGC-1960

Imaging Window: **07:30 – 12:24**
Transit: **08:42 | 89°**

C-11 HD: Primary Focus

Simeis 147 (SH2-240)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Diffuse Nebula**
Constellation: **Taurus**

Camera Rotation - 90°
Coordinates:
Frame 01
RA: **05hr 45' 38"** DEC: **27º 56' 31"**
Frame 02
RA: **05hr 36’ 28”** DEC: **27º 56' 31"**

Close Star: **SAO-77168** (Elnath)
Catalog Objects:SH2-240

Imaging Window: **07:30 – 12:19**
Transit: **08:47 | 85°**

C-11 HD: HyperStar v4
Composite-2

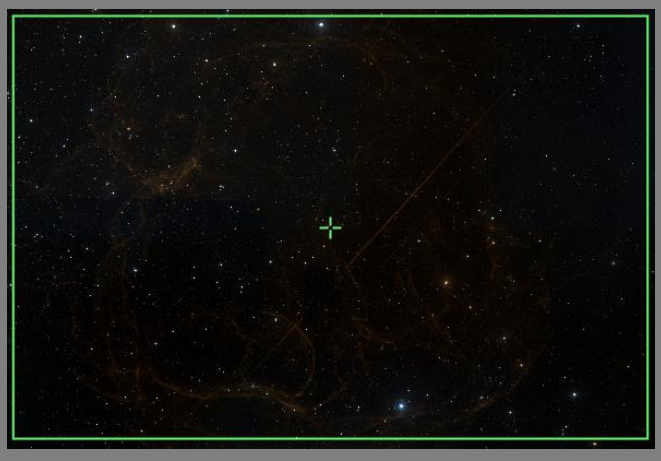
Simeis 147 (SH2-240)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Diffuse Nebula**
Constellation: **Taurus**
Coordinates:
05hr 39’ 04”
28° 00’ 00”

Close Star: **SAO-77168** (Elnath)
Catalog Objects:SH2-240

Imaging Window: **07:30 – 12:19**
Transit: **08:47 | 85°**

C-11 HD: HyperStar v4



Prospective Imaging Objects – February 09 2024

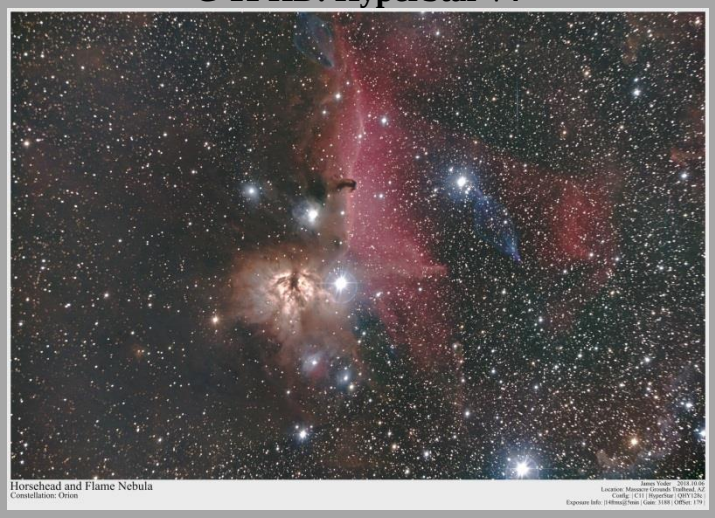
Flame and Horsehead Nebula
(NGC 2024, B 33)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Diffuse/Dark Nebula**
Peak:
Constellation: **Orion**
Coordinates:
05hr 40’ 04”
-02° 28’ 13”

Close Star: SAO-132542 (Saiph)
Catalog Objects: NGC 2024, B 33

Imaging Window: **07:30 – 10:49**
Transit: **08:48 | 54°**

C-11 HD: HyperStar v4



Flame Nebula (NGC 2024)
Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Orion**
Coordinates:
05hr 41’ 45.843”
-01° 49’ 31.401”

Close Star: SAO-132542 (Saiph)
Catalog Objects: NGC 2024

Imaging Window: **07:30 – 10:49**
Transit: **08:48 | 54°**

C-11 HD: Primary Focus

Horsehead Nebula (B 33)
Config: |C1|LF|ZWO6200MC|

Type: **Dark Nebula**
Peak:
Constellation: **Orion**
Coordinates:
05hr 40’ 59”
-02° 31’ 47”

Close Star: SAO-132542 (Saiph)
Catalog Objects: B 33

Imaging Window: **07:30 – 10:45**
Transit: **08:47 | 54°**

Primary Focus

Prospective Imaging Objects – February 09 2024

NGC 2022
Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**
Peak:
Constellation: **Orion**
Coordinates:
05hr 42’ 07”
09° 04’ 55”

Close Star: SAO-112740 (Bellatrix)
Catalog Objects: NGC 2022

Imaging Window: **07:30 – 11:35**
Transit: **08:48 | 66°**

C-11 HD: Primary Focus

NGC 1961
Config: |C11HD|ZWO6200MC|

Type: **Spiral Galaxy**
Peak:
Constellation: **Camelopardalis**
Coordinates:
05hr 43’ 27”
69° 20’ 48”

Close Star: SAO-40750 (Menkalinan)
Catalog Objects: NGC 1961

Imaging Window: **07:30 – 12:06**
Transit: **08:48 | 54°**

C-11 HD: Primary Focus

M-78
Config: |C11-HD|FR|ZWO6200MC|

Type: **Dark Nebula**
Peak:
Constellation: **Orion**

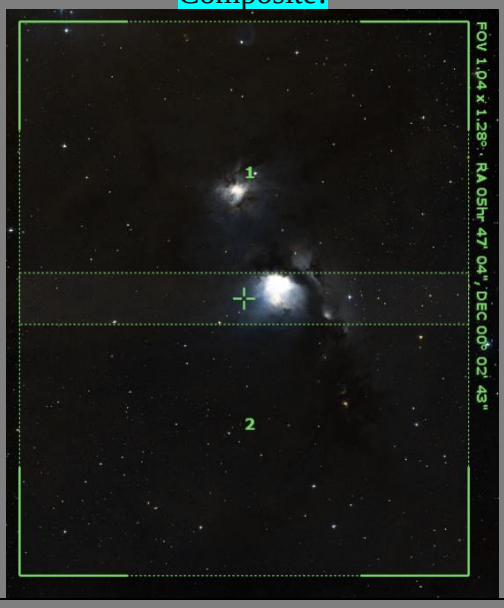
Frame 01
RA: **05hr 47’ 05”**DEC: **00° 20’ 09”**

Frame 02
RA: **05hr 47’ 05”**DEC: **-00° 14’ 43”**

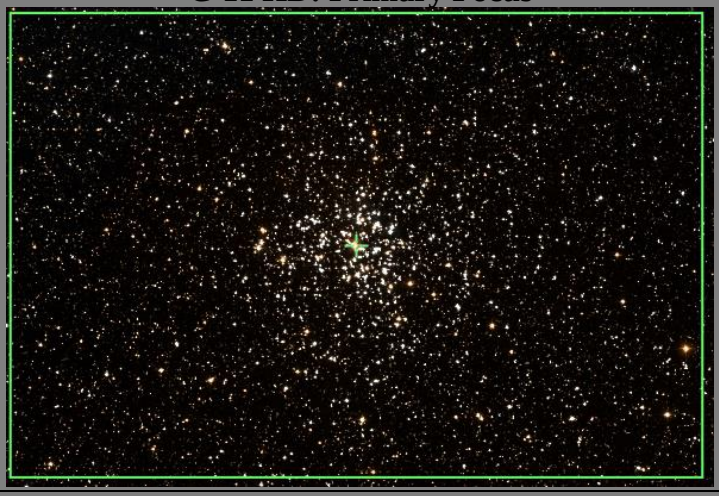
Close Star: SAO-132346 (Alnilam)
Catalog Objects: M 78

Imaging Window: **07:30 – 11:04**
Transit: **08:53 | 57°**

C-11 HD: Focal Reducer
Composite!



Prospective Imaging Objects – February 09 2024

M-78 Config: |C11-HD|FR|ZWO6200MC| Type: **Bright and Dark Nebula** Peak: Constellation: **Orion** Coordinates: **05hr 46’ 59”** **00° 08’ 59”** Close Star: SAO-132346 (Alnilam) Catalog Objects: M 78 Imaging Window: **07:30 – 11:04** Transit: **08:53 | 57°**	**C-11 HD: Focal Reducer** 
M-78 Config: |C11HD|ZWO6200MC| Type: **Bright and Dark Nebula** Peak: Constellation: **Orion** Coordinates: **05hr 47’ 03”** **00° 09’ 46”** Close Star: SAO-132346 (Alnilam) Catalog Objects: M 78 Imaging Window: **07:30 – 11:04** Transit: **08:53 | 57°**	**C-11 HD: Primary Focus** 
Salt and Pepper Cluster(M-37) Config: |C11HD|ZWO6200MC| Type: **Open Cluster** Constellation: **Auriga** Coordinates: **05hr 52’ 18”** **32° 33’ 11”** Close Star: **SAO-77168** (Elnath) Catalog Objects: M-37/NGC-2099 Imaging Window: **07:30 – 12:37** Transit: **08:58 | 89°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – February 09 2024

LDN-1622 Complex
Config: |C11HD|ZWO6200MC|

Type: **Dark Nebula & Nebula**
Peak:
Constellation: **Orion**

Coordinates:
Pane 1: **05hr 50' 40", 01° 46' 30"**
Pane 2, **05hr 50' 40", 00° 14' 57**

Close Star: SAO-132346 (Alnilam)
Catalog Objects: LDN 1622
Imaging Window: **07:36 – 11:20**
Transit: **09:04 | 59°**

C-11 HD: HyperStar v4
Composite!

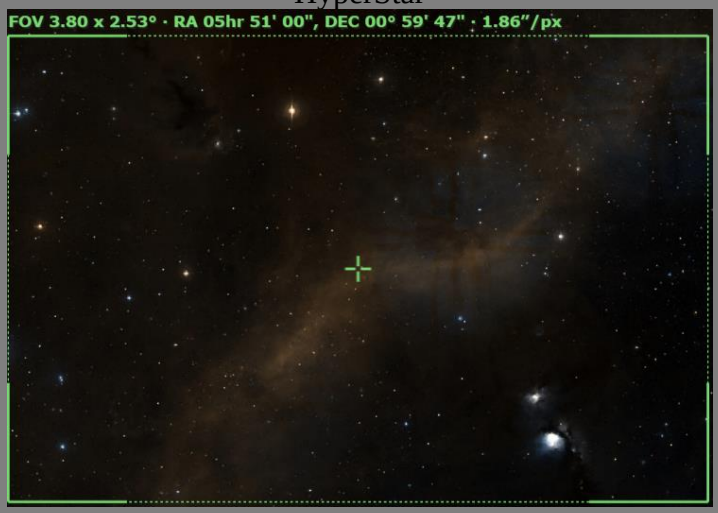
LDN-1622 (Region 01)
Config: |C11HD|ZWO6200MC|

Type: **Dark Nebula & Nebula**
Peak:
Constellation: **Orion**

Coordinates:
05hr 51' 00"
00° 59' 47"

Close Star: SAO-132346 (Alnilam)
Catalog Objects: LDN 1622
Imaging Window: **07:36 – 11:20**
Transit: **09:04 | 59°**

HyperStar



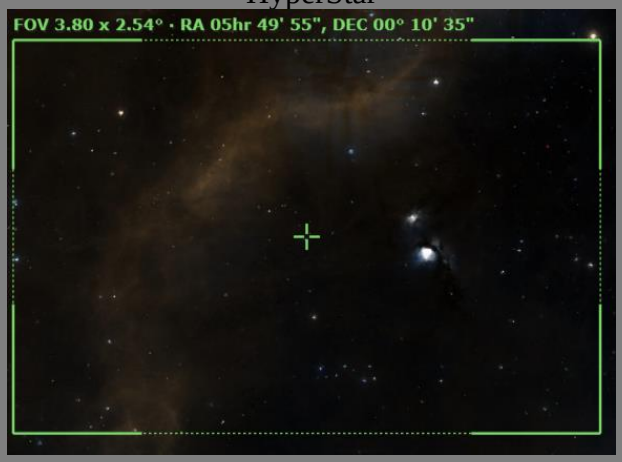
LDN-1622 (Region 02)
Config: |C11HD|ZWO6200MC|

Type: **Dark Nebula & Nebula**
Peak:
Constellation: **Orion**

Coordinates:
05hr 49' 55"
00° 10' 35"

Close Star: SAO-132346 (Alnilam)
Catalog Objects: LDN 1622
Imaging Window: **07:36 – 11:20**
Transit: **09:04 | 59°**

HyperStar



Prospective Imaging Objects – February 09 2024

LDN-1622 (Region 03) Config: **C11-HD | HS | ZWO6200MC** Type: **Bright and Dark Nebula** Peak: Coordinates: **05hr 54’ 51”** **01° 47’ 10”** Close Star: SAO-112740(Bellatrix) Catalog Objects: LDN-1622 Imaging Window: **07:36 – 11:20** Transit: **09:04 | 59°**	**C-11 HD: HyperStar v4** 
LDN 1622 Config: |C11HD|ZWO6200MC| Type: **Dark Nebula** Peak: Constellation: **Orion** Camera Rotation - 90° Frame 01 RA: **05hr 56’ 28”**DEC: **01° 58’ 32”** Frame 02 RA: **05hr 54’ 08”**DEC: **01° 58’ 35”** Close Star: SAO-132346 (Alnilam) Catalog Objects: LDN 1622 Imaging Window: **07:36 – 11:20** Transit: **09:04 | 59°**	**C-11 HD: Focal Reducer** Composite! 
LDN-1622 Config: |C11HD|FR|ZWO6200MC| Type: **Bright and Dark Nebula** Peak: Constellation: **Orion** Coordinates: **05hr 54’ 52”** **01° 49’ 51”** Close Star: SAO-112740(Bellatrix) Catalog Objects: LDN-1622 Imaging Window: **07:36 – 11:20** Transit: **09:04 | 59°**	**C-11 HD: Focal Reducer** 

Prospective Imaging Objects – February 09 2024

LDN 1622
Config: |C11HD|ZWO6200MC|

Type: **Dark Nebula**
Peak:
Constellation: **Orion**
Coordinates:
05hr 54’ 55”
01° 49’ 49”

Close Star: SAO-132346 (Alnilam)
Catalog Objects: LDN 1622

Imaging Window: **07:36 – 11:20**
Transit: **09:04 | 59°**

C-11 HD: Primary Focus

Angel Nebula (NGC 2170)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Bright and Dark Nebula**
Peak:
Constellation: **Monoceros**
Coordinates:
06hr 08’ 26”
-06° 25’ 24”

Close Star: SAO-132542 (Saiph)
Catalog Objects: NGC 2170

Imaging Window: **07:30 – 10:46**
Transit: **09:14 | 50°**

C-11 HD: Focal Reducer

Angel Nebula (NGC 2170)
Config: |C11HD|ZWO6200MC|

Type: **Bright and Dark Nebula**
Peak:
Constellation: **Monoceros**
Coordinates:
06hr 08’ 23”
-06° 19’ 23”

Close Star: SAO-132542 (Saiph)
Catalog Objects: NGC 2170

Imaging Window: **07:30 – 10:46**
Transit: **09:14 | 50°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

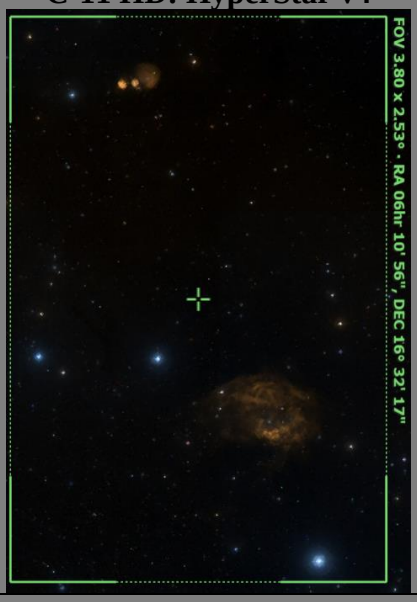
IC-2162 & SH 2-261
Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Orion**
Coordinates:
06hr 10’ 56”
16° 32’ 17”
Angle: **90° East**

Close Star: SAO-78297 (Calix)
Catalog Objects: IC-2162 Sh 2-261

Imaging Window: **07:30 – 12:21**
Transit: **09:15 | 72°**

C-11 HD: HyperStar v4



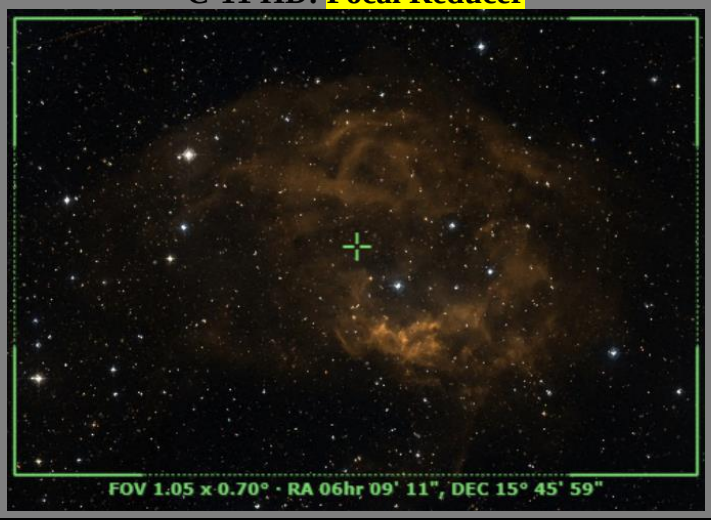
Lower’s Nebula (Sh 2-261)
Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Orion**
Coordinates:
06hr 09’ 11”
15° 45’ 59”

Close Star: **SAO-78297** (Calix)
Catalog Objects: Sh 2-261

Imaging Window: **07:30 – 12:21**
Transit: **09:15 | 72°**

C-11 HD: Focal Reducer



Lower’s Nebula (Sh 2-261)
Config: |C11HD|ZWO6200MC|

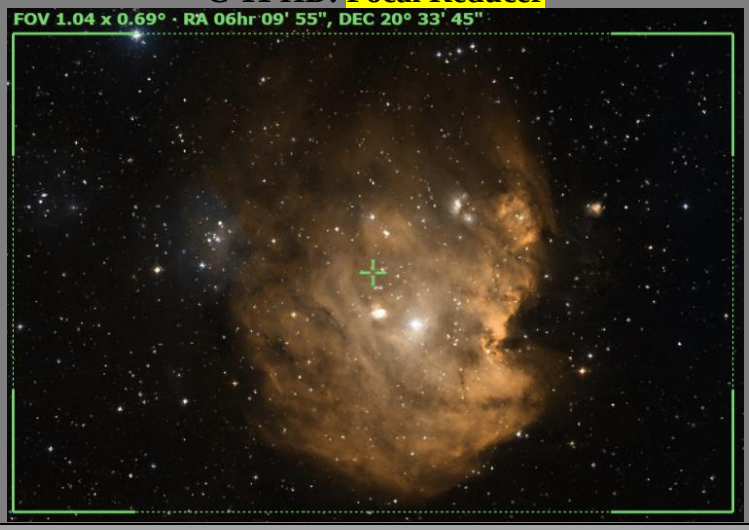
Type: **Diffuse Nebula**
Peak:
Constellation: **Orion**
Coordinates:
06hr 08’ 59”
15° 46’ 39”

Close Star: **SAO-78297** (Calix)
Catalog Objects: Sh 2-261

Imaging Window: **07:30 – 12:21**
Transit: **09:15 | 72°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

M-35, NGC-2158 Config: |C11-HD|FR|ZWO6200MC| Type: **Open Cluster Pair** Constellation: **Gemini** Coordinates: **06hr 08' 39"** **24° 14' 48"** Close Star: **SAO-95912** (Alhena) Catalog Objects: M-35/NGC-2168, NGC-2158 Imaging Window: **07:30 – 12:41** Transit: **09:15 | 81°**	**C-11 HD: Focal Reducer** 
Monkey Head (NGC-2174) Config: |C11-HD|FR|ZWO6200MC| Type: **Diffuse Nebula** Peak: Constellation: **Orion** Coordinates: **06hr 09' 50"** **20° 29' 50"** Close Star: SAO-78297 (Calix) Catalog Objects: NGC 2174/Sh 2-252 Imaging Window: **07:30 – 12:33** Transit: **09:16 | 77°**	**C-11 HD: Focal Reducer** 
Monkey Head (NGC 2174) Config: |C11HD|ZWO6200MC| Type: **Diffuse Nebula** Peak: Constellation: **Orion** Coordinates: **06hr 09' 50"** **20° 29' 50"** Close Star: SAO-78297 (Calix) Catalog Objects: NGC 2174/Sh 2-252 Imaging Window: **07:30 – 12:33** Transit: **09:16 | 77°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – February 09 2024

IC 2162
Config: |C11HD|ZWO6200MC|

Type: **Bright Nebula**
Peak:
Constellation: **Orion**
Coordinates:
06hr 12’ 25”
17° 59’ 26”

Close Star: SAO-78297 (Calix)
Catalog Objects: IC 2162

Imaging Window: **07:30 – 12:31**
Transit: **09:19 | 75°**

C-11 HD: Primary Focus

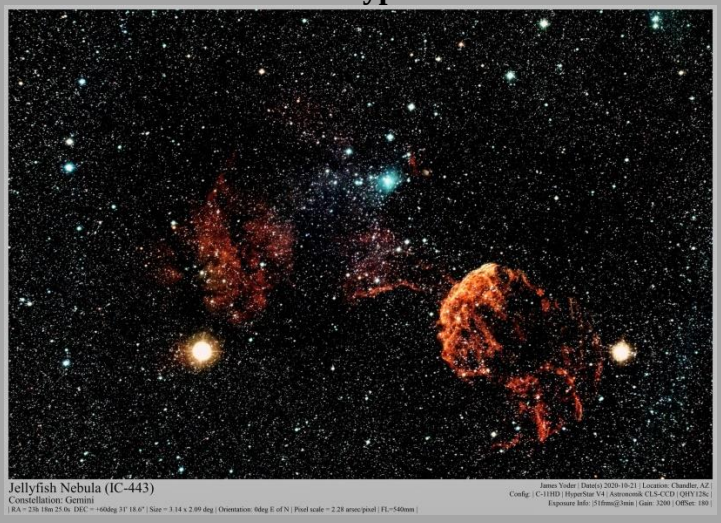
Jellyfish Nebula (IC 443)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Supernova Remnant**
Peak:
Constellation: **Gemini**
Coordinates:
06hr 19’ 56”
23° 06’ 17”

Close Star: SAO-78297 (Calix)
Catalog Objects: IC 443

Imaging Window: **07:30 – 12:45**
Transit: **09:23 | 79°**

C-11 HD: HyperStar v4



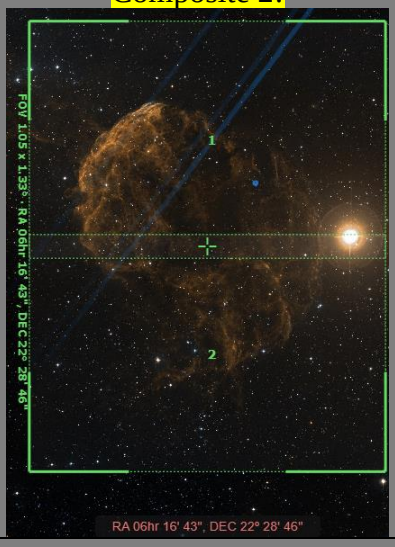
Jellyfish Nebula (IC 443)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Supernova Remnant**
Peak:
Constellation: **Gemini**
Coordinates:
F1 | RA=06:16:43 DEC=22:47:40
F2 | RA=06:16:43 DEC=22:09:52

Close Star: SAO-78297 (Calix)
Catalog Objects: IC 443

Imaging Window: **07:30 – 12:45**
Transit: **09:23 | 79°**

C11-HD: Focal Reducer
Composite 2!



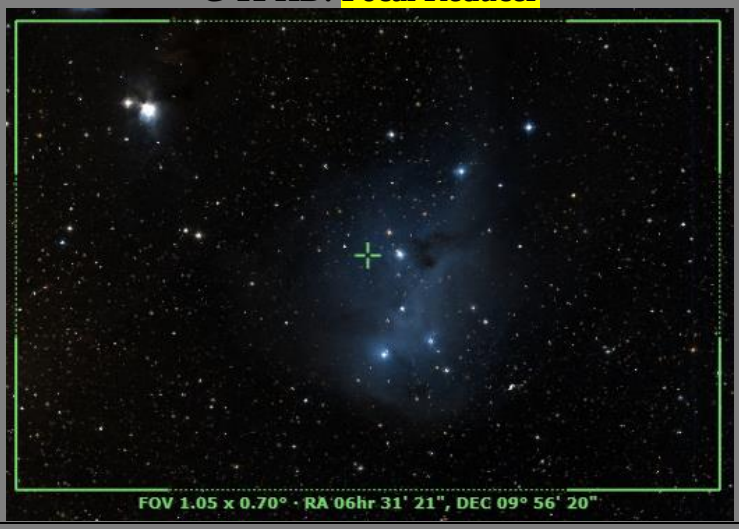
Prospective Imaging Objects – February 09 2024

Jellyfish Nebula (IC 443) Config: |C11|LF|ZWO6200MC| Type: **Supernova Remnant** Peak: Constellation: **Gemini** Coordinates: **06hr 16’ 51”** **22° 36’ 34”** Close Star: SAO-78297 (Calix) Catalog Objects: IC 443 Imaging Window: **07:30 – 12:45** Transit: **09:23 | 79°**	Primary Focus 
Sh 2-249 (IC-444) Config: |C11HD|ZWO6200MC| Type: **Diffuse Nebula** Peak: Constellation: **Gemini** Coordinates: **06hr 19’ 15”** **23° 24’ 58”** Close Star: SAO-78297 (Calix) Catalog Objects: Sh 2-249 Imaging Window: **07:30 – 12:48** Transit: **09:25 | 80°**	**C-11 HD: Primary Focus** 
IC-2165 Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Peak: Constellation: **Canis Major** Coordinates: **06hr 21’ 43”** **-12° 59’ 12”** Close Star: Catalog Objects: IC-2165 Imaging Window: ***07:30 – 11:37** Transit: **09:28 | 44°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – February 09 2024

Rosette Nebula (NGC 2237) Config: **C11-HD | HS | ZWO6200MC** Type: **Diffuse Nebula** Constellation: **Monoceros** Coordinates: **06hr 31’ 53.37”** **04° 50’ 45.29”** Close Star: SAO-95912 (Alhena) Catalog Objects: NGC 2237 ,NGC-2244 Imaging Window: **07:30 – 12:09** Transit: **09:37 | 62°**	**C-11 HD: HyperStar v4** 
Rosette Nebula (NGC 2237) Config: |C11-HD|FR|ZWO6200MC| Type: **Diffuse Nebula** Peak: Constellation: **Monoceros** Coordinates: **06hr 32’ 01”** **04° 59’ 28”** Close Star: SAO-95912 (Alhena) Catalog Objects: NGC 2237 Imaging Window: **07:30 – 12:09** Transit: **09:37 | 62°**	**C-11 HD: Focal Reducer** 
Rosette Nebula (NGC 2237) Config: |C11HD|ZWO6200MC| Type: **Diffuse Nebula** Peak: Constellation: **Monoceros** Coordinates: **06hr 32’ 02”** **04° 58’ 14”** Close Star: SAO-95912 (Alhena) Catalog Objects: NGC 2237 Imaging Window: **07:30 – 12:09** Transit: **09:37 | 62°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – February 09 2024

IC-2169 Config: **C11 | HS | ZWO6200MC** Type: **Bright Nebula** Peak: Constellation: **Monoceros** Coordinates: **06hr 36’ 00”** **10° 16’ 17”** Close Star: SAO-95912 (Alhena) Catalog Objects: IC 2169 Imaging Window: **07:30 – 12:27** Transit: **09:37 | 67°**	**C-11 HD: HyperStar v4** 
IC 2169 Config: |C11-HD|FR|ZWO6200MC| Type: **Bright Nebula** Peak: Constellation: **Monoceros** Coordinates: **06hr 31’ 21”** **09° 56’ 20”** Close Star: SAO-95912 (Alhena) Catalog Objects: IC 2169 Imaging Window: **07:30 – 12:27** Transit: **09:37 | 67°**	**C-11 HD: Focal Reducer** 
IC 2169 Config: |C11HD|ZWO6200MC| Type: **Bright Nebula** Peak: Constellation: **Monoceros** Coordinates: **06hr 31’ 36”** **09° 58’ 16”** Close Star: SAO-95912 (Alhena) Catalog Objects: IC 2169 Imaging Window: **07:30 – 12:27** Transit: **09:37 | 67°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – February 09 2024

Hubble's Variable Nebula (NGC 2261)
Config: |C11HD| ZWO6200MC|

Type: **Reflection Nebula**
Constellation: **Monoceros**
Coordinates:
06hr 39' 12"
08° 45' 00"

Close Star: SAO-95912 (Alhena)
Catalog Objects: NGC 2261

Imaging Window: **07:30 – 12:31**
Transit: **09:45 | 65°**

C-11 HD: Primary Focus

Christmas Tree & Cone
Config: |C11-HD|FR|ZWO6200MC|

Type: **Diffuse Nebula**

Coordinates:
Pane 1: **06hr 40' 53", 10° 07' 47"**
Pane 2, **06hr 40' 53", 09° 34' 40**

Close Star: SAO-95912 (Alhena)
Catalog Objects: NGC 2264/Sh 2-273

Imaging Window: **07:30 – 12:37**
Transit: **09:47 | 67°**

C-11 HD: Focal Reducer
Composite!

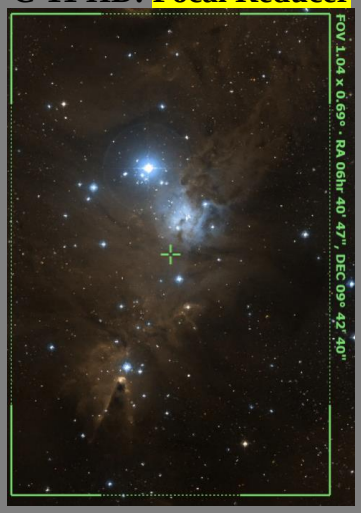
Christmas Tree & Cone
Config: |C11-HD|FR|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Monoceros**
Coordinates:
06hr 40' 47"
09° 42' 40"
Angle: **90° East**

Close Star: SAO-95912 (Alhena)
Catalog Objects: NGC 2264/Sh 2-273

Imaging Window: **07:30 – 12:37**
Transit: **09:47 | 67°**

C-11 HD: Focal Reducer



Prospective Imaging Objects – February 09 2024

Christmas Tree Cluster (NGC 2264)
Config: |C1|LF|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Monoceros**
Coordinates:
06hr 40’ 58.74”
09° 53’ 32.69”

Close Star: SAO-95912 (Alhena)
Catalog Objects: NGC 2264/Sh 2-273

Imaging Window: **07:30 – 12:37**
Transit: **09:47 | 67°**

Primary Focus

Cone Nebula-1 (NGC 2264)
Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Monoceros**
Coordinates:
06hr 41’ 07”
09° 27’ 52”

Close Star: SAO-95912 (Alhena)
Catalog Objects: NGC 2264

Imaging Window: **07:30 – 12:37**
Transit: **09:47 | 67°**

C-11 HD: Primary Focus

M-41 (NGC 2287)
Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**
Constellation: **Canis Major**
Coordinates:
06hr 46’ 09”
20° 47’ 35”

Close Star: **SAO-151881** (Sirius)
Catalog Objects: M-41/NGC 2287

Imaging Window: ***08:07 – 11:48**
Transit: **09:52 | 36°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

M-50 (NGC 2323)
Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**
Constellation: **Monoceros**
Coordinates:
07hr 02’ 48”
-08° 22’ 33”

Close Star: **SAO-151881** (Sirius)
Catalog Objects: M-50/NGC 2323

Imaging Window: ***07:39 – 12:44**
Transit: **10:09 | 48°**

C-11 HD: Primary Focus

Seagull Nebula (IC-2177)
Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Monoceros**
Coordinates:
07hr 06’ 20”
-11° 06’ 56”

Close Star: SAO-151881 (Sirius)
Catalog Objects: IC-2177

Imaging Window: ***07:30 – 01:06**
Transit: **10:10 | 46°**

C-11 HD: HyperStar v4 - 90° Rotation

Seagull Nebula (IC 2177)
Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**
Peak:
Constellation: **Monoceros**
Coordinates:
07hr 04’ 47”
-10° 27’ 49”

Close Star: SAO-151881 (Sirius)
Catalog Objects: IC 2177

Imaging Window: ***07:30 – 01:06**
Transit: **10:10 | 46°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Hourglass Nebula (NGC-2346)
Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**
Peak:
Constellation: **Monoceros**
Coordinates:
07hr 09’ 23”
00° 48’ 22”

Close Star: SAO-115756 (Procyon)
Catalog Objects: NGC-2346

Imaging Window: ***07:30 – 01:23**
Transit: **10:15 | 56°**

C-11 HD: Primary Focus x2

Integral Sign Galaxy (UGC 3697)
Config: |C11HD|FR|ZWO6200MC|

Type: **Galaxy Group**
Constellation: **Camelopardalis**
Coordinates:
07hr 11’ 40”
71° 56’ 04”

Close Star: **SAO-40186** (Capella)
Catalog Objects: UGC-3697, UGC-3714, UGC-3701

Imaging Window: **07:30 – 01:18**
Transit: **10:17 | 51°**

C-11 HD: Focal Reducer

Integral Sign Galaxy (UGC 3697)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**
Constellation: **Camelopardalis**
Coordinates:
07hr 11’ 50”
71° 48’ 14”

Close Star: **SAO-40186** (Capella)
Catalog Objects: UGC-3697, UGC-3714

Imaging Window: **07:30 – 01:18**
Transit: **10:17 | 51°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Thor's Helmet (NGC-2359)
Config: |C11HD|ZWO6200MC|

Type: **Diffuse Nebula**
Constellation: **Canis Major**
Coordinates:
07h 18' 26.223"
-13° 15' 29.563"

Close Star: SAO-151881 (Sirius)
Catalog Objects: NGC-2359/
Sh2-298/ LBN1041

Imaging Window: ***07:50 – 01:06**
Transit: **10:24 | 43°**

C-11 HD: Primary Focus

Candy Wrapper (NGC-2371)
Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**
Constellation: **Gemini**
Coordinates:
07° 25' 34"
29° 29' 18"

Close Star: SAO-151881 (Sirius)
Catalog Objects: NGC-2371

Imaging Window: **07:30 – 02:06**
Transit: **10:31 | 86°**

C-11 HD: Primary Focus x2

Medusa Nebula (Abell 21)
Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Gemini**
Coordinates:
07h 29' 00"
13° 15' 00"

Close Star: **SAO-115756** (Procyon)
Catalog Objects: Abell 21

Imaging Window: **07:30 – 01:35**
Transit: **10:35 | 70°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Eskimo Nebula (NGC-2392)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Gemini**
Coordinates:
07h 29’ 11”
20° 54’ 45”

Close Star: **SAO-79666** (Pollux)
Catalog Objects: NGC-2392

Imaging Window: **07:30 – 01:54**
Transit: **10:35 | 70°**

C-11 HD: Primary Focus

M-47 (NGC-2422)

Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Puppis**
Coordinates:
07h 36’ 36”
-14° 32’ 19”

Close Star: **SAO-79666** (Pollux)
Catalog Objects: M-47/NGC-2422

Imaging Window: ***08:12 – 01:17**
Transit: **10:42 | 42°**

C-11 HD: Primary Focus

NGC-2403

Config: |C11HD|ZWO6200MC|

Type: **Barred Spiral Galaxy**

Constellation: **Camelopardalis**
Coordinates:
07h 36’ 51”
65° 36’ 06”

Close Star: **SAO-79666** (Pollux)
Catalog Objects: NGC-2403

Imaging Window: **07:30 – 02:18**
Transit: **10:43 | 58°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Intergalactic Wanderer (NGC-2419)
Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Lynx**
Coordinates:
07h 38’ 09”
38° 52’ 57”

Close Star: **SAO-79666** (Pollux)
Catalog Objects: NGC-2419

Imaging Window: **07:30 – 02:31**
Transit: **10:44 | 84°**

C-11 HD: Primary Focus

M-46 (NGC-2437)
Config: |C11HD|ZWO6200MC|

Type: **Open Cluster with PN**

Constellation: **Puppis**
Coordinates:
07h 41’ 45”
-14° 46’ 43”

Close Star: **SAO-151881** (Sirius)
Catalog Objects: M-46/NGC-2437, NGC-2438

Imaging Window: ***08:18 – 01:23**
Transit: **10:48 | 42°**

C-11 HD: Primary Focus

Bow-Tie Nebula (NGC-2440)
Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Puppis**
Coordinates:
07° 41’ 55”
-18° 12’ 29”

Close Star: **SAO-151881** (Sirius)
Catalog Objects: NGC-2440

Imaging Window: ***08:40 – 01:00**
Transit: **10:48 | 38°**

C-11 HD: Primary Focus x2

Prospective Imaging Objects – February 09 2024

Butterfly Cluster (M-93, NGC-2447)
Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Puppis**
Coordinates:
07h 44’ 46”
-23° 51’ 52”

Close Star: **SAO-151881** (Sirius)
Catalog Objects: M-93/NGC-2447

Imaging Window: ***09:36 – 12:05**
Transit: **10:50 | 33°**

C-11 HD: Primary Focus

M-48 (NGC-2548)
Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Hydra**
Coordinates:
08h 13’ 46”
-05° 46’ 05”

Close Star: **SAO-115756** (Procyon)
Catalog Objects: M-48/NGC-2548

Imaging Window: ***08:40 – 02:07**
Transit: **11:19 | 51°**

C-11 HD: Primary Focus

NGC-2610
Config: **C11-HD | HS | ZWO6200MC**

Type: **Planetary Nebula**

Constellation: **Hydra**
Coordinates:
08h 33’ 23”
-16° 08’ 55”

Close Star: **SAO-151881** (Sirius)
Catalog Objects: NGC-2610
Imaging Window: ***09:19 – 01:23**
Transit: **11:39 | 41°**

C-11 HD: Primary Focus x2

Prospective Imaging Objects – February 09 2024

Beehive Cluster (NGC-2632)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Open Cluster**

Constellation: **Cancer**
Coordinates:
08h 39’ 59”
19° 39’ 01”

Close Star: **SAO-115756** (Procyon)
Catalog Objects: M-44/NGC-2632

Imaging Window: **08:36 – 03:02**
Transit: **11:46 | 76°**

C-11 HD: HyperStar v4

M-67 (NGC-2682)
Config: |C11HD|ZWO6200MC|

Type: **Open Cluster**

Constellation: **Cancer**
Coordinates:
08h 51’ 18”
11° 48’ 60”

Close Star: **SAO-115756** (Procyon)
Catalog Objects: M-67/NGC-2682

Imaging Window: **09:03 – 02:53**
Transit: **11:57 | 68°**

C-11 HD: Primary Focus

Helix Galaxy (NGC-2685)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Ursa Major**
Coordinates:
08h 55’ 14”
58° 42’ 24”

Close Star: **SAO-27876** (Merak)
Catalog Objects: NGC-2685

Imaging Window: **08:18 – 03:51**
Transit: **12:01 | 65°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

NGC-2903 Config: |C11HD|ZWO6200MC| Type: **Galaxy** Constellation: **Leo** Coordinates: **09h 32’ 08.949”** **21° 30’ 37.772”** Close Star: **SAO-98967** (Regulus) Catalog Objects: NGC-2903 Imaging Window: **09:24 – 03:58** Transit: **12:38 | 78°**	**C-11 HD: Primary Focus** 
Bode’s Cigar (M81 & M82) Config: **C11-HD | HS | ZWO6200MC** Type: **Galaxy Pair** Peak: Constellation: **Ursa Major** Coordinates: **09hr 54’ 02”** **68° 53’ 32”** Close Star: **SAO-15384** Catalog Objects: M-81 & M-82 Imaging Window: **09:51 – 04:18** Transit: **01:01 | 54°**	**C-11 HD: HyperStar v4** 
Bode’s Cigar (M81 & M82) Config: **C11-HD | HS | ZWO6200MC** Type: **Galaxy Pair** Constellation: **Ursa Major** Coordinates: RA: **09hr 55’ 40”**DEC: **69° 18’ 39”** 90° Rotation Close Star: **SAO-15384** Catalog Objects: M-81 & M-82 Imaging Window: **09:51 – 04:18** Transit: **01:01 | 54°**	**C-11 HD: Focal Reducer** 

Prospective Imaging Objects – February 09 2024

Bode's Nebula (M-81)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**
Constellation: **Ursa Major**
Coordinates:
09h 55' 24.184"
69° 05' 18.969"

Close Star: **SAO-15384**
Catalog Objects: M-81/NGC-3031

Imaging Window: **09:47 – 04:22**
Transit: **01:01 | 54°**

C-11 HD: Primary Focus

Cigar Galaxy (M-82)
Config: |C11HD|ZWO6200MC|

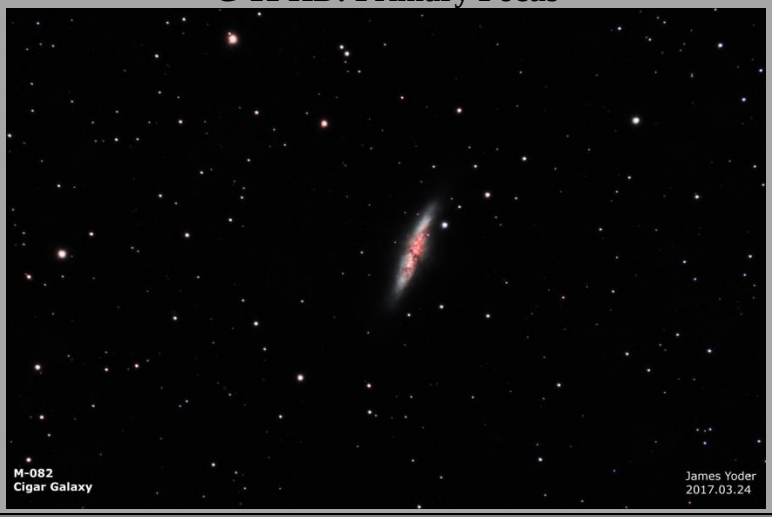
Type: **Galaxy**

Constellation: **Ursa Major**
Coordinates:
09h 55' 57.451"
69° 42' 37.646"

Close Star: **SAO-15384**
Catalog Objects: M-82/NGC-3034

Imaging Window: **09:51 – 04:18**
Transit: **01:01 | 54°**

C-11 HD: Primary Focus



Spindle Galaxy (NGC-3115)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Sextans**
Coordinates:
10h 05' 21"
-07° 47' 09"

Close Star: **SAO-98967** (Regulus)
Catalog Objects: NGC-3115

Imaging Window: ***10:42 – 03:47**
Transit: **01:11 | 49°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Powder keg Galaxy (UGC-5470)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Leo**
Coordinates:
10h 08’ 27”
12° 19’ 49”

Close Star: **SAO-98967** (Regulus)
Catalog Objects: UGC-5470

Imaging Window: **10:23 – 04:12**
Transit: **01:14 | 69°**

C-11 HD: Primary Focus

NGC-3166 & NGC-3169

Config: |C11HD|ZWO6200MC|

Type: **Galaxy pair**

Constellation: **Sextans**
Coordinates:
10h 14’ 01”
03° 25’ 51”

Close Star: **SAO-98967** (Regulus)
Catalog Objects: NGC-3166, NGC-3169

Imaging Window: **10:59 – 03:46**
Transit: **01:19 | 60°**

C-11 HD: Primary Focus

Hickson 44 (NGC-3190, 3189,)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy Group**

Constellation: **Leo**
Coordinates:
10h 17’ 57”
21° 49’ 11”

Close Star: **SAO-98967** (Regulus)
Catalog Objects: NGC-3189, 3190, 3185, 3193, 3187, PGC-2806871

Imaging Window:**10:09 – 04:45**
Transit: **01:23 | 79°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

NGC-3184

Config: |C11HD|ZWO6200MC|

Type: **Face-on Spiral Galaxy**

Constellation: **Ursa Major**
Coordinates:
10h 18’ 17”
41° 25’ 24”

Close Star: **SAO-98967** (Regulus)
Catalog Objects: NGC-3184

Imaging Window: **09:41 – 05:13**
Transit: **01:24 | 82°**

C-11 HD: Primary Focus

NGC-3227 & NGC-3226

Config: |C11HD|ZWO6200MC|

Type: **Interacting Galaxies**

Constellation: **Leo**
Coordinates:
10h 23’ 29”
19° 53’ 07”

Close Star: **SAO-60178** (Castor)
Catalog Objects: NGC-3227, NGC-3226

Imaging Window: **10:19 – 04:46**
Transit: **01:29 | 77°**

C-11 HD: Primary Focus

Ghost of Jupiter (NGC-3242)

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Hydra**
Coordinates:
10h 24’ 46”
-18° 38’ 31”

Close Star: **SAO-98967** (Regulus)
Catalog Objects: NGC-3242

Imaging Window: ***11:26 – 03:36**
Transit: **01:30 | 38°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Galaxy Group 2574
Config: **C11-HD | HS | ZWO6200MC**

Type: **Galaxy Group**

Constellation: **Leo**
Coordinates:
10h 28’ 40”
68° 26’ 14”

Close Star: **SAO-27876** (Merak)
Catalog Objects: IC-2574

Imaging Window: **10:16 – 04:58**
Transit: **01:34 | 55°**

C-11 HD: HyperStar v4

Coddington’s Nebula (IC-2574)
Config: |C11HD|ZWO6200MC|

Type: **Barred Spiral Galaxy**

Constellation: **Leo**
Coordinates:
10h 28’ 40”
68° 26’ 14”

Close Star: **SAO-27876** (Merak)
Catalog Objects: IC-2574

Imaging Window: **10:16 – 04:58**
Transit: **01:34 | 55°**

C-11 HD: Primary Focus

Leo Galaxy Group (M-96, M95 et el.)
Config: **C11-HD | HS | ZWO6200MC**

Type: **Galaxy Grouping**

Constellation: **Leo**
Coordinates:
10h 47’ 23”
12° 23’ 59”

Close Star: **SAO-98967** (Regulus)
Catalog Objects: M-96,M95, NGC3389, NGC3384, M105

Imaging Window: **11:02 – 04:48**
Transit: **01:52 | 69°**

C-11 HD: HyperStar v4

Prospective Imaging Objects – February 09 2024

M-95, M-96 (NGC-3351, 3368)

Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy Pair**

Constellation: **Leo**
Coordinates:
10h 45’ 20”
11° 44’ 30”

Close Star: **SAO-98967** (Regulus)
Catalog Objects: M-95, M-96

Imaging Window: **11:00 – 04:45**
Transit: **01:49 | 68°**

C-11 HD: Focal Reducer

Leo Trio 2 (NGC-3379, 3384, 3389)

Config: |C11HD|ZWO6200MC|

Type: **Trio of Galaxies**

Constellation: **Leo**
Coordinates:
10h 48’ 07.227”
12° 33’ 52.943”

Close Star: **SAO-98967** (Regulus)
Catalog Objects: M-105/NGC3379, NGC-3384, NGC-3389

Imaging Window: **11:01 – 04:52**
Transit: **01:53 | 69°**

C-11 HD: Primary Focus

Ambartsumian’s Knot et el.

(NGC-3561, 3558, 3553, 3550, etc.)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy Cluster**

Constellation: **Ursa Major**
Coordinates:
11h 10’ 43”
28° 41’ 41”

Close Star: **SAO-81727** (Zosma)
Catalog Objects: NGC-3561

Imaging Window: **10:49 – 05:50**
Transit: **02:16 | 85°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

M-108 & NGC-3587

Config: |C11HD|ZWO6200MC|

Type: **Irregular Galaxy & Planetary Nebula**

Constellation: **Ursa Major**
Coordinates:
11h 12’ 49”
55° 20’ 57”

Close Star: **SAO-27876** (Merak)
Catalog Objects: M-108/NGC-3555

Imaging Window: **10:31 – 05:53**
Transit: **02:17 | 68°**

C-11 HD: HyperStar v4

M-108 (NGC-3556)

Config: |C11HD|ZWO6200MC|

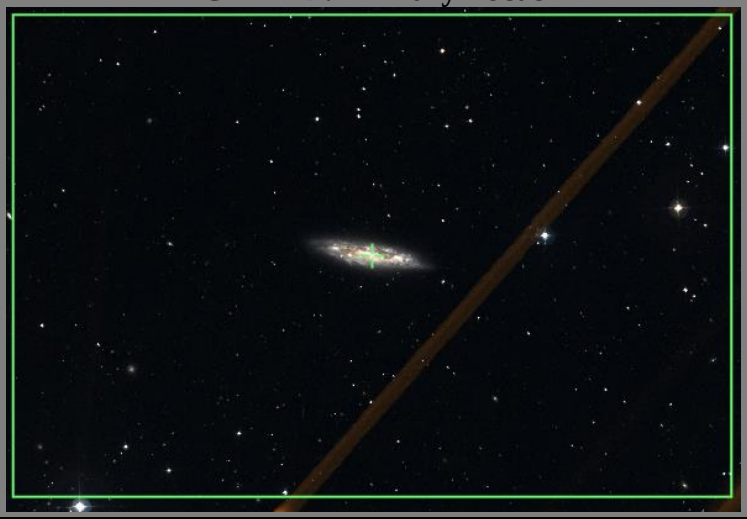
Type: **Irregular Galaxy**

Constellation: **Ursa Major**
Coordinates:
11h 11’ 29”
55° 40’ 22”

Close Star: **SAO-27876** (Merak)
Catalog Objects: M-108/NGC-3555

Imaging Window: **10:31 – 05:53**
Transit: **02:17 | 68°**

C-11 HD: Primary Focus



Owl Nebula (NGC-3587)

Config: |C11HD|ZWO6200MC|
Type: **Planetary Nebula**

Constellation: **Ursa Major**
Coordinates:
11h 14’ 48”
55° 01’ 10”

Close Star: **SAO-27876**
Catalog Objects: M-97/NGC-3587

Imaging Window: **10:34 – 05:53**
Transit: **02:20 | 68°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Owl Nebula (NGC-3587)
Config: |C11HD|Barlow x2|ZWO6200MC|

Type: **Planetary Nebula**
Constellation: **Ursa Major**
Coordinates:
11h 14’ 48”
55° 01’ 10”

Close Star: **SAO-27876**
Catalog Objects: M-97/NGC-3587

Imaging Window: **10:34 – 05:53**
Transit: **02:20 | 68°**

C-11 HD: Primary Focus *x2

Lio Trio of Galaxies
Config: **C11-HD | HS | ZWO6200MC**

Type: **Galaxies**
Constellation: **Leo**
Coordinates:
Frame 01
RA: **11hr 19’ 57”**DEC: **13° 32’ 15”**
Frame 02
RA: **11hr 19’ 57”**DEC: **13° 04’ 57”**

Close Star: **SAO-15384**
Catalog Objects: NGC-3628, 3623, M-65

Imaging Window: **11:33 – 05:25**
Transit: **02:25 | 70°**

C-11 HD: Focal Reducer
Composite!

Lio Trio of Galaxies
Config: |C11HD|ZWO6200MC|
Type: **Spiral Galaxy**

Constellation: **Leo**
Coordinates:
See Targets Below

NOTE: M-65/ M-66 & NGC-3628 combined to create mosaic

Close Star: **SAO-98967** (Regulus)
Catalog Objects: NGC-3628, M-65

Imaging Window: **11:33 – 05:25**
Transit: **02:25 | 70°**

C-11 HD: Primary Focus Mosaic

Prospective Imaging Objects – February 09 2024

NGC-3628

Config: |C11HD|ZWO6200MC|
Type: **Spiral Galaxy**

Constellation: **Leo**
Coordinates:
11h 19’ 44”
13° 28’ 28”

NOTE: M-65/ M-66 & NGC-3628 can be combined to create mosaic

Close Star: **SAO-98967** (Regulus)
Catalog Objects: NGC-3628,

Imaging Window: **11:31 – 05:27**
Transit: **02:5 | 70°**

C-11 HD: Primary Focus

M-65, M-66

Config: |C11HD|ZWO6200MC|
Type: **Spiral Galaxy**

Constellation: **Leo**
Coordinates:
11h 19’ 44”
13° 04’ 06”
NOTE: M-65/ M-66 & NGC-3628 can be combined to create mosaic

Close Star: **SAO-98967** (Regulus)
Catalog Objects: M-65/NGC-3623, M-66/NGC-3627

Imaging Window: **11:33 – 05:25**
Transit: **02:25 | 70°**

C-11 HD: Primary Focus

Arp-214 (NGC-3718, NGC-3729)

Config: |C11HD|ZWO6200MC|
Type: **Galaxy Pair**

Constellation: **Ursa Major**
Coordinates:
11h 33’ 09”
53° 05’ 02”

Close Star: **SAO-28179** (Phecda)
Catalog Objects: NGC-3718

Imaging Window: **10:51 – 05:53**
Transit: **02:38 | 70°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Copeland's Septet (NGC-3746, 3748, 3750, 3751, 3753, 3754)
Config: |C11HD|ZWO6200MC|
Type: **Galaxy Cluster**

Constellation: **Leo**
Coordinates:
11h 33' 09"
53° 05' 02"
Close Star: **SAO-99809** (Denebola)
Catalog Objects: NGC-3746, 3748, 3750, 3751, 3753, 3754/HCG-57

Imaging Window: **11:28 – 05:53**
Transit: **02:43 | 79°**

C-11 HD: Primary Focus

Abell 1367(NGC-3861, et el.)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy Cluster**

Constellation: **Leo**
Coordinates:
11h 44' 40"
19° 56' 32"

Close Star: **SAO-99809** (Denebola)
Catalog Objects: NGC-3861, 3842, dozens of others.

Imaging Window: **11:40 – 05:53**
Transit: **02:50 | 77°**

C-11 HD: Primary Focus

Wild's Triplet(Arp-248)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Ursa Major**
Coordinates:
11h 46' 41"
-03° 51' 46"

Close Star: **SAO-28179** (Phecda)
Catalog Objects: Arp-248, PGC-36742, 36733, 36723

Imaging Window: ***12:27 – 05:15**
Transit: **02:52 | 53°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

M-109 (NGC-3992)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Ursa Major**
Coordinates:
11h 57’ 34”
53° 20’ 59”

Close Star: **SAO-28179** (Phecda)
Catalog Objects: NGC-3992

Imaging Window: **11:16 – 05:53**
Transit: **03:03 | 70°**

C-11 HD: Primary Focus

NGC-4027 (PGC-37773)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Corvus**
Coordinates:
11h 59’ 31”
-19° 15’ 57”

Close Star: **SAO-157923** (Spica)
Catalog Objects: NGC-4027

Imaging Window: ***01:11 – 05:04**
Transit: **03:05 | 37°**

C-11 HD: Primary Focus

Antennae Galaxies (Arp-244)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy Pair**

Constellation: **Corvus**
Coordinates:
12h 01’ 54”
-18° 53’ 08”

Close Star: **SAO-157923** (Spica)
Catalog Objects: Arp-244/
NGC-4038, NGC-4039

Imaging Window: ***01:11 – 05:15**
Transit: **03:07 | 38°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

M-98 (NGC-4192)

Config: |C11HD|ZWO6200MC|

Type: **Barred Spiral Galaxy**

Constellation: **Cooma Berenices**
Coordinates:
12h 13’ 48”
14° 53’ 58”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: M-98/NGC-4192

Imaging Window: **12:21 – 05:53**
Transit: **03:19 | 72°**

C-11 HD: Primary Focus

NGC-4236 (UGC 7306)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Draco**
Coordinates:
12h 16’ 42”
69° 28’ 00”

Close Star: **SAO-28553** (Alioth)
Catalog Objects: NGC-4236/UGC-7306

Imaging Window: **12:10 – 05:53**
Transit: **03:22 | 54°**

C-11 HD: Primary Focus

Silver Needle (NGC-4244)

Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Canes Venatici**
Coordinates:
12h 17’ 30”
37° 48’ 28”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: NGC-4244/UGC-7322
Imaging Window: **11:43 – 05:53**
Transit: **03:22 | 86°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

St. Katherines Wheel
(M99/NGC4254)
Config: |C11HD|ZWO6200MC|

Type: **Spiral Galaxy**

Constellation: **Coma Berenices**
Coordinates:
12h 18’ 49”
14° 25’ 03”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: M-99/NGC-4254
Imaging Window: **12:27 – 05:53**
Transit: **03:24 | 71°**

C-11 HD: Primary Focus

Galaxy Group 106
Config: **C11-HD | HS | ZWO6200MC**

Type: **Galaxy Group**

Constellation: **Canes Venatici**
Coordinates:
12h 17’ 12”
47° 13’ 33”

Close Star: **SAO-28179** (Phecda)
Catalog Objects: M-106, NGC 4248, 4217, 4232, 4331
Imaging Window: **11:38 – 05:53**
Transit: **03:24 | 76°**

C-11 HD: HyperStar v4

M-106(NGC-4258)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy Group**

Constellation: **Canes Venatici**
Coordinates:
12h 17’ 12”
47° 13’ 33”

Close Star: **SAO-28179** (Phecda)
Catalog Objects: M-106, NGC 4248, 4217, 4232, 4331
Imaging Window: **11:38 – 05:53**
Transit: **03:24 | 76°**

C-11 HD: Focal Reducer

Prospective Imaging Objects – February 09 2024

HII Galaxy (M61/NGC4303)

Config: |C11HD|ZWO6200MC|

Type: **Face-On Spiral Galaxy**

Constellation: **Virgo**
Coordinates:
12h 21’ 55”
04° 31’ 28”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: M-61/NGC-4303, NGC-4292, NGC-4301
Imaging Window: **01:03 – 05:53**
Transit: **03:27 | 61°**

C-11 HD: Primary Focus

Winnecke 4(M-40)

Config: |C11HD|ZWO6200MC|

Type: **Star Pair**

Constellation: **Ursa Major**
Coordinates:
12h 21’ 22”
58° 03’ 05”

Close Star: **SAO-28179** (Phecda)
Catalog Objects: M-40, NGC-4290, NGC-4284
Imaging Window: **11:44 – 05:53**
Transit: **03:27 | 65°**

C-11 HD: Primary Focus

M-100(NGC-4303)

Config: |C11HD|ZWO6200MC|

Type: **Face-On Spiral Galaxy**

Constellation: **Coma Berenices**
Coordinates:
12h 22’ 28”
15° 42’ 40”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: M-100/NGC-4321, NGC-4312, 4328, 4322, UGC-7425, IC-783A,
Imaging Window: **12:28 – 05:53**
Transit: **03:28 | 73°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

NGC-4361

Config: |C11HD|ZWO6200MC|

Type: **Planetary Nebula**

Constellation: **Corvus**
Coordinates:
12h 24’ 31”
-18° 47’ 03”

Close Star: **SAO-157176** (Gienah Corvi)
Catalog Objects: NGC-4361
Imaging Window: **01:28 – 05:37**
Transit: **03:29 | 38°**

C-11 HD: Primary Focus

Markarian Chain(M-84 Et. El.)

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

Type: **Galaxy cluster**

Constellation: **Virgo**
Coordinates:
12h 26’ 29”
12° 52’ 22”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: M-84/NGC-4374, NGC-4388, 4425, 4402, M-86/NGC4406, 4438, 4435, and more
Imaging Window: **12:38 – 05:53**
Transit: **03:30 | 70°**

C-11 HD: HyperStar v4

Prospective Imaging Objects – February 09 2024

Markarian Chain 2
Config: **C11-HD | HS | ZWO6200MC**

Type: **Galaxy cluster**

Constellation: **Virgo**
Coordinates:
12h 35’ 40”
12° 33’ 22”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: M-84/NGC-4374, NGC-4388, 4425, 4402, M-86/NGC4406, 4438, 4435, and more

Imaging Window: **12:38 – 05:53**
Transit: **03:30 | 70°**

C-11 HD: HyperStar v4

Markarian’s Chain (M-84)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy cluster**

Constellation: **Virgo**
Coordinates:
12h 26’ 29”
12° 52’ 22”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: M-84/NGC-4374, NGC-4388, 4425, 4402, M-86/NGC4406, 4438, 4435
Imaging Window: **12:38 – 05:53**
Transit: **03:30 | 70°**

C-11 HD: Focal Reducer

NGC-4449 (UGC-7592)
Config: |C11HD|ZWO6200MC|

Type: **Irregular Galaxy**

Constellation: **Canes Venatici**
Coordinates:
12h 28’ 11”
44° 05’ 42”

Close Star: **SAO-28553** (Alioth)
Catalog Objects: NGC-4449/UGC-7592
Imaging Window: **11:49 – 05:53**
Transit: **03:33 | 79°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

M-49(NGC-4472) Config: |C11HD|ZWO6200MC| Type: **Elliptical Galaxy** Constellation: **Virgo** Coordinates: **12h 29’ 58”** **07° 59’ 51”** Close Star: **SAO-100944** (Arcturus) Catalog Objects: M-49/NGC-4472 Imaging Window: **12:58 – 05:53** Transit: **03:35 | 65°**	**C-11 HD: Primary Focus** 
Virgo A(M-87) Config: |C11HD|ZWO6200MC| Type: **Elliptical Galaxy** Constellation: **Virgo** Coordinates: **12h 30’ 49”** **12° 23’ 26”** Close Star: **SAO-100944** (Arcturus) Catalog Objects: M-87/NGC-4486 Imaging Window: **12:45 – 05:53** Transit: **03:36 | 69°**	**C-11 HD: Primary Focus** 
Cocoon Galaxy(NGC-4490) Config: |C11HD|ZWO6200MC| Type: **Interacting Galaxy Pair** Constellation: **Canes Venatici** Coordinates: **12h 30’ 36”** **41° 38’ 34”** Close Star: **SAO-28179** (Phecda) Catalog Objects: NGC-4490, NGC-4485 Imaging Window: **11:53 – 05:53** Transit: **03:36 | 82°**	**C-11 HD: Primary Focus**  Cocoon Galaxy (NGC-4490 & NGC-4485) Constellation: Canes Venatici

Prospective Imaging Objects – February 09 2024

Lemon Slice Nebula (IC-3568) Config: |C11HD|ZWO6200MC| Type: **Planetary Nebula** Constellation: **Camelopardalis** Coordinates: **12h 33' 14"** **82° 33' 22"** Close Star: **SAO-8102** (Kochab) Catalog Objects: IC-3568/UGC-7731 Imaging Window: ***10:53 – 05:53** Transit: **03:38 | 41°**	**C-11 HD: Primary Focus** 
M-91(NGC-4548) Config: |C11-HD|FR|ZWO6200MC| Type: **Barred Spiral Galaxy** Constellation: **Coma Berenices** Coordinates: **12h 36' 11"** **14° 20' 51"** Close Star: **SAO-100944** (Arcturus) Catalog Objects: M-91/NGC4548, NGC-4571 Imaging Window: **12:44 – 05:53** Transit: **03:40 | 71°**	**C-11 HD: Focal Reducer** 
M-91(NGC-4548) Config: |C11HD|ZWO6200MC| Type: **Barred Spiral Galaxy** Constellation: **Coma Berenices** Coordinates: **12h 36' 04"** **14° 23' 37"** Close Star: **SAO-100944** (Arcturus) Catalog Objects: M-91/NGC4548, NGC-4571 Imaging Window: **12:44 – 05:53** Transit: **03:40 | 71°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – February 09 2024

M-89(NGC-4552) Config: |C11HD|ZWO6200MC| Type: **Elliptical Galaxy** Constellation: **Virgo** Coordinates: **12h 35’ 43”** **12° 24’ 24”** Close Star: **SAO-100944** (Arcturus) Catalog Objects: M-89/NGC4552, NGC-4551, NGC-4550, IC-3574, IC-3586 Imaging Window: **12:49 – 05:53** Transit: **03:41 | 69°**	**C-11 HD: Primary Focus** 
NGC-4559 (UGC-7766) Config: |C11HD|ZWO6200MC| Type: **Barred Spiral Galaxy** Constellation: **Coma Berenices** Coordinates: **12h 35’ 58”** **27° 57’ 35”** Close Star: **SAO-44752** (Alkaid) Catalog Objects: NGC-4559/UGC-7766 Imaging Window: **12:15 – 05:53** Transit: **03:41 | 85°**	**C-11 HD: Primary Focus** 
Siamese Twins(NGC-4567) Config: |C11HD|ZWO6200MC| Type: **Elliptical Galaxy** Constellation: **Virgo** Coordinates: **12h 36’ 26”** **11° 19’ 59”** Close Star: **SAO-100944** (Arcturus) Catalog Objects: NGC-4567, NGC-4568, NGC-4564 Imaging Window: **12:54 – 05:53** Transit: **03:41 | 68°**	**C-11 HD: Primary Focus** 

Prospective Imaging Objects – February 09 2024

Needle Galaxy (NGC-4565)

Config: |C11HD|ZWO6200MC|

Type: **Edge-on Galaxy**

Constellation: **Coma Berenices**
Coordinates:
12h 36’ 02”
25° 56’ 51”

Close Star: **SAO-44752** (Alkaid)
Catalog Objects: NGC-4565, NGC-4562
Imaging Window: **12:19 – 05:53**
Transit: **03:41 | 83°**

C-11 HD: Primary Focus

M-90 (NGC-4569)

Config: |C11HD|ZWO6200MC|

Type: **Spiral Galaxy**

Constellation: **Virgo**
Coordinates:
12h 37’ 11”
13° 09’ 19”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: M-90/NGC-4569 IC-3583, NGC-4584
Imaging Window: **12:49 – 05:53**
Transit: **03:42 | 70°**

C-11 HD: Primary Focus

Galaxy Group 58

Config: | C-11HD | HyperStar |

Type: **Galaxy Group**

Constellation: **Virgo**
Coordinates:
12h 37’ 35”
12° 18’ 56”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: M-58/NGC-4579
Imaging Window: **12:53 – 05:53**
Transit: **03:43 | 69°**

C-11 HD: HyperStar v4

Prospective Imaging Objects – February 09 2024

M-58 (NGC-4579)
Config: |C11HD|ZWO6200MC|

Type: **Barred Spiral Galaxy**

Constellation: **Virgo**
Coordinates:
12h 37’ 44”
11° 49’ 06”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: M-58/NGC-4579
Imaging Window: **12:53 – 05:53**
Transit: **03:43 | 69°**

C-11 HD: Primary Focus

M-68 (NGC-4590)
Config: |C11HD||ZWO6200MC|

Type: **Globular Cluster**
Constellation: **Hydra**
Coordinates:
12h 39’ 28”
-26° 44’ 32”

Close Star: **SAO-180915** (Kraz)
Catalog Objects: M-68/NGC-4590

Imaging Window: ***02:01 – 05:37**
Transit: **03:44 | 30°**

C-11 HD: Primary Focus

Sombrero Galaxy (M-104)
Config: |C11HD|ZWO6200MC|

Type: **Edge-on Spiral Galaxy**

Constellation: **Virgo**
Coordinates:
12h 39’ 44”
-11° 37’ 52”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: M-104/NGC-4594
Imaging Window: ***01:34 – 05:53**
Transit: **03:45 | 45°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Whale and Hockey Stick
(NGC-4631, NGC-4656)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxies**

Constellation: **Canes Venatici**
Coordinates:
12h 42’ 50”
32° 20’ 54”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: NGC-4631, NGC-4656
Imaging Window: **12:14 – 05:53**
Transit: **03:47 | 89°**

C-11 HD: Focal Reducer

M-59, M-60 group
Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy Group**

Constellation: **Virgo**
Coordinates:
12h 42’ 42”
11° 40’ 33”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: M-59/NGC-4621, M-60/NGC-4649, NGC-4656, 4647, 4638, 4607, 4606
Imaging Window: **12:58 – 05:53**
Transit: **03:47 | 68°**

C-11 HD: Focal Reducer

TheMice (NGC-4676 A &B)
Config: |C11HD|ZWO6200MC|

Type: **Interacting Galaxies**

Constellation: **Coma Berenices**
Coordinates:
12h 46’ 07”
30° 43’ 43”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: NGC-4676A & B
Imaging Window: **12:21 – 05:53**
Transit: **03:51 | 87°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

NGC-4725 (PGC-43451)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy group**

Constellation: **Coma Berenices**
Coordinates:
12h 50’ 55”
25° 35’ 59”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: NGC-4725, NGC-4712, NGC-4747
Imaging Window: **12:34 – 05:53**
Transit: **03:55 | 82°**

C-11 HD: Focal Reducer

NGC-4725 (PGC-43451)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy group**

Constellation: **Coma Berenices**
Coordinates:
12h 50’ 50”
25° 35’ 23”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: NGC-4725, NGC-4712, NGC-4747
Imaging Window: **12:34 – 05:53**
Transit: **03:55 | 82°**

C-11 HD: Primary Focus

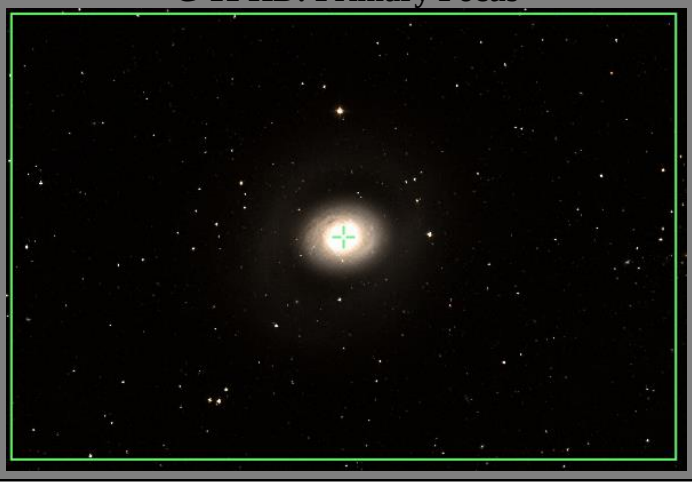
M-94 (NGC-4736)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Canes Venatici**
Coordinates:
12h 50’ 53”
41° 07’ 17”

Close Star: **SAO-28553** (Alioth)
Catalog Objects: M-94/NGC-4736
Imaging Window: **12:13 – 05:53**
Transit: **03:56 | 82°**

C-11 HD: Primary Focus



Prospective Imaging Objects – February 09 2024

NGC-4731 (PGC-43507)
Config: |C11HD|ZWO6200MC|

Type: **Barred Spiral Galaxy**

Constellation: **Virgo**
Coordinates:
12h 51’ 01”
-06° 21’ 49”

Close Star: **SAO-157923** (Spica)
Catalog Objects: NGC-4731
Imaging Window: ***01:17 – 05:53**
Transit: **05:50 | 50°**

C-11 HD: Primary Focus

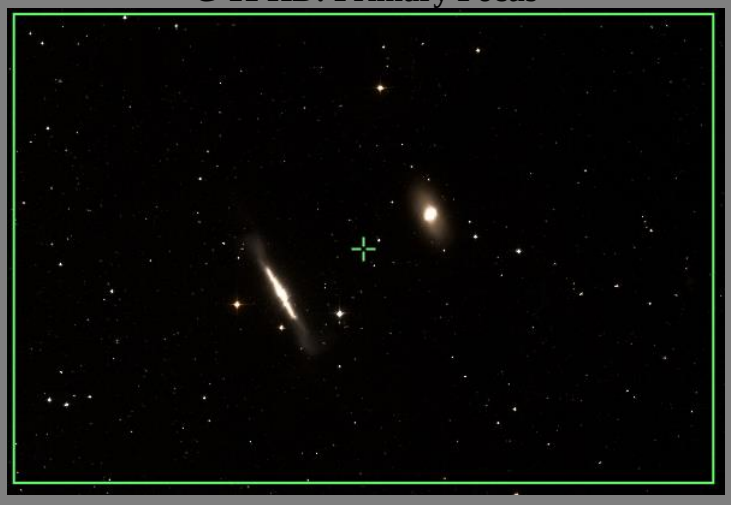
NGC-4762. 4754 (PGC-43733)
Config: |C11HD|ZWO6200MC|

Type: **Edge on Galaxy**

Constellation: **Virgo**
Coordinates:
12h 52’ 35”
11° 16’ 42”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: NGC-4762, NGC-4754
Imaging Window: **01:10 – 05:53**
Transit: **03:58 | 68°**

C-11 HD: Primary Focus



Black Eye Galaxy (M-64)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy**

Constellation: **Coma Berenices**
Coordinates:
12h 56’ 44”
21° 40’ 59”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: M-64/NGC-4826
Imaging Window: **12:48 – 05:53**
Transit: **04:02 | 78°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

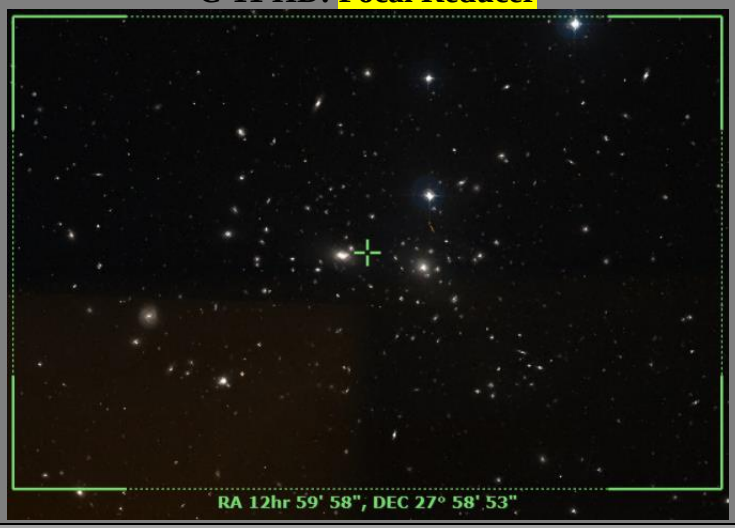
Coma Galaxy Cluster
(Abell-1656)
Config: |C11-HD|FR|ZWO6200MC|

Type: **Galaxy Cluster**

Constellation: **Coma Berenices**
Coordinates:
12h 59’ 58”
27° 58’ 53”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: Abell-1656
Imaging Window: **12:39 – 05:53**
Transit: **04:05 | 85°**

C-11 HD: Focal Reducer



Coma Galaxy Cluster
(Abell-1656)
Config: |C11HD|ZWO6200MC|

Type: **Galaxy Cluster**

Constellation: **Coma Berenices**
Coordinates:
13h 00’ 06”
28° 00’ 31”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: Abell-1656
Imaging Window: **12:39 – 05:53**
Transit: **04:05 | 85°**

C-11 HD: Primary Focus

M-53 (NGC-5024)
Config: |C11HD | ZWO6200MC|

Type: **Globular Cluster**
Constellation: **Coma Berenices**
Coordinates:
13h 12’ 55”
18° 10’ 11”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: M-53/NGC-5024

Imaging Window: **01:12 – 05:53**
Transit: **04:18 | 75°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

NGC-5033 (PGC-45948)

Config: |C11HD|ZWO6200MC|

Type: **Spiral Galaxy**

Constellation: **Canes Venatici**
Coordinates:
13h 13’ 28”
36° 35’ 36”

Close Star: **SAO-28553** (Alioth)
Catalog Objects: NGC-5033/PGC-45948
Imaging Window: **12:41 – 05:53**
Transit: **04:18 | 87°**

C-11 HD: Primary Focus

Sunflower Galaxy (M-63)

Config: |C11HD|ZWO6200MC|

Type: **Spiral Galaxy**

Constellation: **Canes Venatici**
Coordinates:
13h 15’ 15”
42° 04’ 41”

Close Star: **SAO-28553** (Alioth)
Catalog Objects: M-63/NGC-5055, UGC-8313
Imaging Window: **12:38 – 05:53**
Transit: **04:21 | 81°**

C-11 HD: Primary Focus

NGC-5053

Config: |C11HD|ZWO6200MC|

Type: **Globular Cluster**

Constellation: **Coma Berenices**
Coordinates:
13h 16’ 27”
17° 41’ 55”

Close Star: **SAO-99809** (Denebola)
Catalog Objects: NGC-5053
Imaging Window: **01:17 – 05:53**
Transit: **04:21 | 74°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Whirlpool Galaxy (M-51)

Config: |C11HD|ZWO6200MC|

Type: **Interacting Galaxies**

Constellation: **Canes Venatici**
Coordinates:
13h 29’ 53”
47° 11’ 44”

Close Star: **SAO-28553** (Alioth)
Catalog Objects: M-51/NGC-5194, NGC-5195
Imaging Window: **12:49 – 05:53**
Transit: **04:35 | 76°**

C-11 HD: Primary Focus

M-3 (NGC-5272)

Config: |C11HD|Barlow x2|ZWO6200MC|

Type: **Globular Cluster**
Constellation: **Canes Venatici**
Coordinates:
13h 42’ 11”
28° 22’ 34”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: M-3/NGC-5272

Imaging Window: **01:21 – 05:53**
Transit: **04:47 | 85°**

C-11 HD: Primary Focus *x2

Heron Galaxy (NGC-5395) et el.

Config: |C11HD|ZWO6200MC|

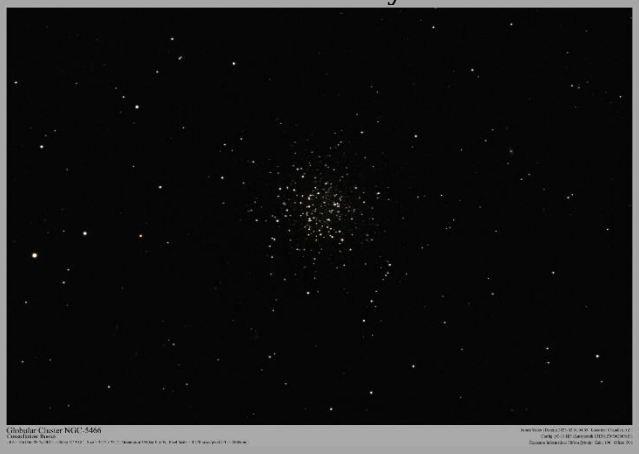
Type: **Galaxies**

Constellation: **Canes Venatici**
Coordinates:
13h 57’ 46”
37° 35’ 31”

Close Star: **SAO-100944** (Arcturus)
Catalog Objects: NGC-5395, NGC-5394, NGC-5380, NGC-5378
Imaging Window: **01:25 – 05:53**
Transit: **05:03 | 86°**

C-11 HD: Primary Focus

Prospective Imaging Objects – February 09 2024

Pinwheel Galaxy (M-101) Config: |C11HD|ZWO6200MC| Type: **Face-on Spiral Galaxy** Constellation: **Ursa Major** Coordinates: **14h 03' 54"** **54° 22' 44"** Close Star: **SAO-28553** (Alioth) Catalog Objects: M-101/NGC-5457, NGC-5477 Imaging Window: **01:22 – 05:53** Transit: **05:08 | 69°**	**C-11 HD: Primary Focus** 
NGC-5466 Config: |C11HD|Barlow x2|ZWO6200MC| Type: **Globular Cluster** Constellation: **Bootes** Coordinates: **14h 05' 27"** **28° 32' 06"** Close Star: **SAO-100944** (Arcturus) Catalog Objects: NGC-5466 Imaging Window: **01:44 – 05:53** Transit: **05:10 | 85°**	**C-11 HD: Primary Focus** 

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Prospective Imaging Objects – February 09 2024

Imaging Summary February 09, 2024

Astronomical Dusk = 07:30 Astronomical Dawn = 05:53

HyperStar: Nebula

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
HyperStar	Nebula	Nebula	IC-405	07:30 – 12:05	08:23	04	Auriga: Flaming Star Nebula
HyperStar	Nebula	Nebula	M-42	07:30 – 10:21	08:41	08	Orion: Comp6! Orion Complex
HyperStar	Nebula	Nebula	M-42	07:30 – 10:21	08:41	09	Orion: Orion Nebula
HyperStar	Nebula	Nebula	SH2-240	07:30 – 12:19	08:47	10	Orion: Comp2! & Rotation90 Simeis-147
HyperStar	Nebula	Nebula	SH2-240	07:30 – 12:19	08:47	10	Orion: Simeis-147
HyperStar	Nebula	Nebula	NGC-2024, B33	07:30 – 10:49	08:48	11	Orion: Flame and Horsehead Nebula
HyperStar	Nebula	Nebula	LDN-1622	07:36 – 11:20	09:04	14	Orion: Comp2! LDN-1622 Complex
HyperStar	Nebula	Nebula	LDN-1622 R1	07:36 – 11:20	09:04	14	Orion: LDN-1622 Region 01
HyperStar	Nebula	Nebula	LDN-1622 R2	07:36 – 11:20	09:04	14	Orion: LDN-1622 Region 02
HyperStar	Nebula	Nebula	LDN-1622 R3	07:36 – 11:20	09:04	15	Orion: LDN-1622 Region 03
HyperStar	Nebula	Nebula	IC-2162, SH2-261	07:30 – 12:21	09:15	17	Orion: Rot90 Orion: Nebula
HyperStar	Nebula	Nebula	IC-443	07:30 – 12:45	09:23	19	Gemini: Jellyfish Nebula
HyperStar	Nebula	Nebula	NGC-2237	07:30 – 12:09	09:37	21	Monoceros: Rosette Nebula
HyperStar	Nebula	Nebula	IC-2169	07:30 – 12:27	09:37	22	Monoceros: Nebula Complex
HyperStar	Nebula	Nebula	IC-2177	*07:30-01:06	10:10	25	Rot90 Monoceros: Seagull Nebula

Prospective Imaging Objects – February 09 2024

Imaging Summary February 09, 2024

Astronomical Dusk = 07:30 Astronomical Dawn = 05:53

HyperStar: Broad Spectrum

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
HyperStar	Broad Spectrum	DN	IC-2118	*07:30-10:42	08:08	02	Eridanus: Witch Head Nebula
HyperStar	Broad Spectrum	BN	NGC-1788	07:30 – 10:06	08:13	03	Orion: Foxface Nebula
HyperStar	Broad Spectrum	OC	NGC-2632	08:36 – 03:02	11:46	31	Cancer: Beehive Cluster
HyperStar	Broad Spectrum	Galaxies	M-81 & M-82	09:51 – 04:18	01:01	32	Ursa Major: Galaxy Pair M-81 & M-82
HyperStar	Broad Spectrum	Galaxies	IC-2574	10:16 – 04:58	01:34	36	Leo: Galaxy Group 2574
HyperStar	Broad Spectrum	Galaxies	M-96, 95 Et El	11:02 – 04:48	01:52	36	Leo: Leo Galaxy Group
HyperStar	Broad Spectrum	Gal, PN	M180 & NGC3587	10:31 – 05:53	02:17	38	Ursa Major: M104 and Owl Nebula
HyperStar	Broad Spectrum	Galaxies	Galaxy Group 106	11:38 – 05:53	03:24	44	Canes Venatici: Galaxy Group M-106
HyperStar	Broad Spectrum	Galaxies	Markarian Chain	12:38 – 05:53	03:30	46	Virgo: Galaxy Chain
HyperStar	Broad Spectrum	Galaxies	Markarian Chain2	12:38 – 05:53	03:30	47	Virgo: Galaxy Chain2
HyperStar	Broad Spectrum	Galaxies	Galaxy Group 58	12:53 – 05:53	03:43	51	Virgo Galaxy Group M-58

Prospective Imaging Objects – February 09 2024

Imaging Summary February 09, 2024

Astronomical Dusk = 07:30 Astronomical Dawn = 05:53

Focal Reducer: Nebula

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Focal Reducer	Nebula	Nebula	IC-405	07:30 – 12:05	08:23	04	Auriga: Flaming Star Nebula
Focal Reducer	Nebula	Nebula	IC-410	07:30 – 12:08	08:28	05	Auriga: Tadpoles
Focal Reducer	Nebula	Nebula	NGC1055,1931	07:30 – 12:19	08:37	06	Comp2! Rot90° Auriga: The Spider and The Fly
Focal Reducer	Nebula	Nebula	NGC-1977	07:30 – 10:25	08:41	09	Orion: Running Man Nebula
Focal Reducer	Nebula	Nebula	NGC-2170	07:30 – 10:46	09:14	16	Monoceros: Angle Nebula
Focal Reducer	Nebula	Nebula	**SH 2-261**	07:30 – 12:21	09:15	17	Orion: Lower's Nebula
Focal Reducer	Nebula	Nebula	NGC-2174	07:30 – 12:33	09:16	18	Orion: Monkey Head Nebula
Focal Reducer	Nebula	Nebula	IC-443	07:30 – 12:45	09:23	19	Compsite2! Gemini: Jellyfish Nebula
Focal Reducer	Nebula	Nebula	NGC-2237	07:30 – 12:09	09:37	21	Monoceros: Rosette Nebula ROI
Focal Reducer	Nebula	Nebula	IC-2169	07:30 – 12:27	09:37	22	Monoceros: Blue Nebula IC-2169
Focal Reducer	Nebula	Nebula	NGC-2264	07:30 – 12:37	09:47	23	Composite2! Monoceros: Xmas tree & Cone Neb
Focal Reducer	Nebula	Nebula	NGC-2264	07:30 – 12:37	09:47	23	Rot90° Monoceros: Xmas tree & Cone Neb

Prospective Imaging Objects – February 09 2024

Imaging Summary February 09, 2024

Astronomical Dusk = 07:30 Astronomical Dawn = 05:53

Focal Reducer: Broad Spectrum

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Focal Reducer	Broad Spectrum	DN/RN	NGC-1788	07:30 – 10:06	08:13	03	Orion: Foxface Nebula
Focal Reducer	Nebula	Nebula	M-78	07:30 – 11:04	08:53	12	Comp2! Orion: Dark Nebula Region
Focal Reducer	Nebula	Nebula	M-78	07:30 – 11:04	08:53	13	Orion: Dark Nebula Region
Focal Reducer	Broad Spectrum	DN	LDN-1622	07:36 – 11:20	09:04	15	Comp2! Rot90° Orion: Dark Nebula Region
Focal Reducer	Broad Spectrum	DN	LDN-1622	07:36 – 11:20	09:04	15	Orion: Dark Nebula Region
Focal Reducer	Broad Spectrum	OC	M-35, NGC-2158	07:30 – 12:41	09:15	18	Gemini: Open Cluster Pair
Focal Reducer	Broad Spectrum	Galaxies	UGC-3697	07:30 – 01:18	10:17	26	Camelopardalis: Integral Sign Galaxy
Focal Reducer	Broad Spectrum	Galaxies	M-81 & M-82	09:51 – 04:18	01:01	32	Rot90° Ursa Major: Galaxy Pair Bode's Cigar
Focal Reducer	Broad Spectrum	Galaxies	M-95 & M-96	11:00 – 04:45	01:49	37	Leo: Galaxy Pair
Focal Reducer	Broad Spectrum	Galaxies	M65, et. El.	11:33 – 05:25	02:25	39	Leo Trio of galaxies (M65, M66, NGC3628)
Focal Reducer	Broad Spectrum	Galaxies	M-106, NGC4248	11:38 – 05:53	03:24	44	Canes Venatici: Galaxies
Focal Reducer	Broad Spectrum	Galaxies	M-84 et. El.	12:38 – 05:53	03:30	47	Virgo: Markarians Chain
Focal Reducer	Broad Spectrum	Galaxies	M-91, NGC4548	12:44 – 05:53	03:40	49	Coma Berenices: Galaxy Pair
Focal Reducer	Broad Spectrum	Galaxies	NGC4631, 4656	12:14 – 05:53	03:47	53	Canes Venatici: Whale and Hockey Stick
Focal Reducer	Broad Spectrum	Galaxies	M-59, M-60	12:58 – 05:53	03:47	53	Virgo: Galaxy Group
Focal Reducer	Broad Spectrum	Galaxies	NGC-4725 et. El.	12:34 – 05:53	03:55	54	Coma Berenices Galaxy Group
Focal Reducer	Broad Spectrum	Galaxies	Abell-1656	12:39 – 05:53	04:05	56	Coma Berenices: Coma Galaxy Cluster

Prospective Imaging Objects – February 09 2024

Imaging Summary February 09, 2024

Astronomical Dusk = 07:30 Astronomical Dawn = 05:53

Primary Focus: Nebula

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Nebula	Nebula	NGC-1579	07:30 – 11:19	07:36	02	Perseus: Trifid of the North
Primary Focus	Nebula	Nebula	IC-405	07:30 – 12:05	08:23	05	Auriga: Flaming Star Nebula Core
Primary Focus	Nebula	Nebula	IC-410	07:30 – 12:08	08:28	05	Auriga: Tadpoles
Primary Focus	Nebula	PN	IC-418	*07:30-11:15	08:34	06	Lepus: Spirograph Nebula
Primary Focus	Nebula	Nebula	IC-417	07:30 – 12:16	08:34	07	Auriga: The Spider
Primary Focus	Nebula	Nebula	NGC-1931	07:30 – 12:19	08:37	07	Auriga: The Fly
Primary Focus	Nebula	Nebula	M-1	07:30 – 12:01	08:41	08	Taurus: Crab Nebula
Primary Focus	Nebula	Nebula	M-42	07:30 – 10:21	08:41	09	Orion: The Orion Nebula
Primary Focus	Nebula	Nebula	NGC-2024	07:30 – 10:49	08:48	11	Orion: Flame Nebula
Primary Focus	Nebula	Nebula	B-33	07:30 – 10:45	08:47	11	Orion: Horsehead Nebula B-33
Primary Focus	Nebula	Nebula	NGC-2022	07:30 – 11:35	08:48	12	Orion: Small Planetary Nebula
Primary Focus	Nebula	Nebula	NGC-2170	07:30 – 10:46	09:14	16	Monoceros: Angle Nebula
Primary Focus	Nebula	Nebula	SH 2-261	07:30 – 12:21	09:15	17	Orion: Lower's Nebula Core
Primary Focus	Nebula	Nebula	NGC-2174	07:30 – 12:33	09:16	18	Orion: Monkey Head Nebula Core
Primary Focus	Nebula	Nebula	IC-2162	07:30 – 12:31	09:19	19	Orion: Bright Nebula blots
Primary Focus	Nebula	Nebula	IC-443	07:30 – 12:45	09:23	20	Gemini: Jellyfish Nebula Core
Primary Focus	Nebula	Nebula	SH 2-249	07:30 – 12:48	09:25	20	Gemini: Diffuse Nebula IC-444
Primary Focus	Nebula	PN	IC-2165	*07:30-11:37	09:28	20	Canis Major: Small Planetary
Primary Focus	Nebula	DN	NGC-2237	07:30 – 12:09	09:37	21	Monoceros: Rosette Nebula Core
Primary Focus	Nebula	BN	IC-2169	07:30 – 12:27	09:37	22	Monoceros: Blue Nebula IC-2169
Primary Focus	Nebula	RN	NGC-2261	07:30 – 12:31	09:45	23	Monoceros: Hubble's Variable Nebula
Primary Focus	Nebula	Nebula	NGC-2264	07:30 – 12:37	09:47	24	Monoceros: Christmas Tree Cluster
Primary Focus	Nebula	Nebula	NGC-2264 R1	07:30 - 12:37	09:47	24	Monoceros: Cone Nebula
Primary Focus	Nebula	Nebula	IC-2177	*07:30-01:06	10:10	25	Monoceros: Seagull Nebula Head

Prospective Imaging Objects – February 09 2024

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Nebula	Nebula	NGC-2346	*07:30-01:23	10:15	26	Monoceros: Hourglass Nebula
Primary Focus	Nebula	Nebula	NGC-2359	*07:50-01:06	10:24	27	Canis Major: Thor's Helmet
Primary Focus	Nebula	Nebula	NGC-2371	07:30 – 02:06	10:31	27	Gemini: Candy Wrapper Nebula
Primary Focus	Nebula	Nebula	Abell-21	07:30 – 01:35	10:35	27	Gemini: Medusa Nebula
Primary Focus	Nebula	Nebula	NGC-2392	07:30 – 01:54	10:35	28	Gemini: Eskimo Nebula
Primary Focus	Nebula	PN	M-46	*08:18-01:23	10:48	29	Puppis: Open Cluster with PN
Primary Focus	Nebula	Nebula	NGC-2440	*08:40-01:00	10:48	29	Puppis: Bow-Tie Nebula
Primary Focus	Nebula	PN	NGC-2610	*09:19-01:23	11:39	30	Hydra: Small PN
Primary Focus	Nebula	PN	NGC-3242	*11:26-03:36	01:30	35	Hydra: Ghost of Jupiter
Primary Focus	Nebula	PN	NGC-3587	10:34 – 05:53	02:20	38	Ursa Major: Owl Nebula
Primary Focus	Nebula	PN	NGC-4361	01:28 – 05:37	03:29	46	Corvus: Small Planetary Nebula
Primary Focus	Nebula	PN	IC-3568	*10:53-05:53	03:38	49	Camelopardalis: Lemon Slice Nebula

Prospective Imaging Objects – February 09 2024

Imaging Summary February 09, 2024

Astronomical Dusk = 07:30 Astronomical Dawn = 05:53

Primary Focus: Broad Spectrum

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Broad Spectrum	DN	IC-2118	*07:30-10:42	08:08	03	Eridanus: Witch Head Nebula ROI
Primary Focus	Broad Spectrum	DN	NGC-1788	07:30 – 10:06	08:13	04	Orion: Foxface Nebula ROI
Primary Focus	Broad Spectrum	GC	M-79	*07:30-09:47	08:30	06	Lepus: Med Globular Cluster NGC-1904
Primary Focus	Broad Spectrum	OC	M-38	07:30 – 12:18	08:35	07	Auriga: starfish Cluster
Primary Focus	Broad Spectrum	OC	M-36	07:30 – 12:24	08:42	10	Auriga: Pinwheel Cluster NGC-1960
Primary Focus	Broad Spectrum	Galaxy	NGC-1961	07:30 – 12:06	08:48	12	Camelopardalis: Small Galaxy
Primary Focus	Broad Spectrum	DN, BN	M-78	07:30 – 11:04	08:53	13	Orion: Bright and Dark Nebula
Primary Focus	Broad Spectrum	OC	M-37	07:30 – 12:37	08:58	13	Auriga: Sale and Pepper Cluster
Primary Focus	Broad Spectrum	DN	LDN-1622	07:36 – 11:20	09:04	16	Orion: Dark Nebula & Bright Nebula
Primary Focus	Broad Spectrum	OC	M-41	*08:07-11:48	09:52	24	Canis Major: Open Cluster NGC-2287
Primary Focus	Broad Spectrum	OC	M-50	*07:39-12:44	10:09	25	Monoceros: Open Cluster NGC-2323
Primary Focus	Broad Spectrum	Galaxies	UGC-3697	07:30 – 01:18	10:17	26	Camelopardalis: Integral Sign Galaxy UGC-3697
Primary Focus	Broad Spectrum	OC	M-47	*08:12-01:17	10:42	28	Puppis: Open Cluster NGC-2422
Primary Focus	Broad Spectrum	Galaxy	NGC-2403	07:30 – 02:18	10:43	28	Camelopardalis: Barred Spiral Face on Galaxy
Primary Focus	Broad Spectrum	GC	NGC-2419	07:30 – 02:31	10:44	29	Lynx: Intergalactic Wanderer
Primary Focus	Broad Spectrum	OC	M-93	*09:36-12:05	10:50	30	Puppis: Butterfly Cluster NGC-2447
Primary Focus	Broad Spectrum	OC	M-48	*08:40-02:07	11:19	30	Hydra: Open Cluster NGC-2548
Primary Focus	Broad Spectrum	OC	M-67	09:03 – 02:53	11:57	31	Cancer: Open Cluster NGC-2682
Primary Focus	Broad Spectrum	Galaxy	NGC-2685	08:18 – 03:51	12:01	31	Ursa Major: Helix Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-2903	09:24 – 03:58	12:38	32	Leo: Med Face On Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-81	09:47 – 04:22	01:01	33	Ursa Major: Bode's Nebula
Primary Focus	Broad Spectrum	Galaxy	M-82	09:51 – 04:18	01:01	33	Ursa Major: Cigar Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-3115	*10:42-03:47	01:11	33	Sextans: Spindle Galaxy

Prospective Imaging Objects – February 09 2024

Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Broad Spectrum	Galaxy	UGC-5470	10:23 – 04:12	01:14	34	Leo: Powder keg Galaxy UGC-5470
Primary Focus	Broad Spectrum	Galaxies	NGC-3166, 3169	10:59 – 03:46	01:19	34	Sextans: Galaxy Pair
Primary Focus	Broad Spectrum	Galaxies	Hickson 44	10:09 – 04:45	01:23	34	Leo: Galsxy Group NGC-3190, 3189
Primary Focus	Broad Spectrum	Galaxy	NGC-3184	09:41 – 05:13	01:24	35	Ursa Major: Med Face On Galaxy
Primary Focus	Broad Spectrum	Galaxies	NGC-3227, 3226	10:19 – 04:46	01:29	35	Leo: Interacting Galaxies
Primary Focus	Broad Spectrum	Galaxy	IC-2574	10:16 – 04:58	01:34	36	Leo: Coddington's Nebula
Primary Focus	Broad Spectrum	Galxies	NGC-3379 et. El.	11:01 – 04:52	01:53	37	Leo: Leo Trio 2 of galaxies
Primary Focus	Broad Spectrum	Galaxies	NGC-3561 et. El	10:49 – 05:50	02:16	37	Ursa Major: Abartsumian's Knote et. El.
Primary Focus	Broad Spectrum	Galaxy	M-108	10:31 – 05:53	02:17	38	Ursa Major: Irregular Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-3628 et. el	11:33 – 05:25	02:25	39	Composite2! Leo: Edge on Galalaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-3628	11:33 – 05:25	02:25	40	Leo: Edge on Galalaxy
Primary Focus	Broad Spectrum	Galaxies	M-65, M-66	11:33 – 05:25	02:25	40	Leo: Galaxy Pair
Primary Focus	Broad Spectrum	Galaxies	Arp-214	10:51 – 05:53	02:38	40	Ursa Major: Galaxy Pair
Primary Focus	Broad Spectrum	Galaxies	NGC-3745 et. El	11:28 – 05:53	02:43	41	Leo: Copeland's Septet
Primary Focus	Broad Spectrum	Galaxies	Abell-1367	11:40 – 05:53	02:50	41	Leo: Galaxy Cluster
Primary Focus	Broad Spectrum	Galaxies	Arp-248	*12:27-05:15	02:52	41	Ursa Major: Wild's Triplet
Primary Focus	Broad Spectrum	Galaxy	M-109	11:16 – 05:53	03:03	42	Ursa Major: Face on med spiral galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-4027	*01:11-05:04	03:05	42	Corvus: Irregular galaxy
Primary Focus	Broad Spectrum	Galaxies	Arp-244	*01:11-05:15	03:07	42	Corvus: Antennae Galaxies
Primary Focus	Broad Spectrum	Galaxy	M-98	12:21 – 05:53	03:19	43	Cooma Beerenices: Barred Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-4236	12:10 – 05:53	03:22	43	Draco: Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-4244	11:43 – 05:53	03:22	43	Canes Venatici: Silver Needle
Primary Focus	Broad Spectrum	Galaxy	M-99	12:27 – 05:53	03:24	44	Coma Berenices: St. Katherines Wheel
Primary Focus	Broad Spectrum	Galaxy	M-61	01:03 – 05:53	03:27	45	Virgo: Face on Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxies	M-40	11:44 – 05:53	03:27	45	Ursa Major: Galaxy Pair
Primary Focus	Broad Spectrum	Galaxies	M-100	12:28 – 05:53	03:28	45	Coma Berenices: Set of Galaxies
Primary Focus	Broad Spectrum	Galaxy	NGC-4449	11:49 – 05:53	03:33	47	Canes Venatici: Interesting Irregular Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-49	12:58 – 05:53	03:35	48	Virgo: Elliptical Galaxy

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Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
Primary Focus	Broad Spectrum	Galaxy	M-87	12:45 – 05:53	03:36	48	Virgo: Virgo A Elliptical Galaxy
Primary Focus	Broad Spectrum	Galaxies	NGC-4490	11:53 – 05:53	03:36	48	Canes Venatici: Interacting Galaxy Pair
Primary Focus	Broad Spectrum	Galaxies	M-91	12:44 – 05:53	03:40	49	Coma Berenices: Galaxy Pair
Primary Focus	Broad Spectrum	Galaxies	M-89 et. El	12:49 -05:53	03:41	50	Virgo: Galaxy Group
Primary Focus	Broad Spectrum	Galaxy	NGC-4559	12:15 – 05:53	03:41	50	Coma Berenices: Barred Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxies	NGC-4567	12:54 – 05:53	03:41	50	Virgo: Siamese Twins et. El.
Primary Focus	Broad Spectrum	Galaxy	NGC-4565	12:19 – 05:53	03:41	51	Coma Berenices: Needle Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-90	12:49 – 05:53	03:42	51	Virgo: Med Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-58	12:53 – 05:53	03:43	52	Virgo: Barred Spiral Galaxy
Primary Focus	Broad Spectrum	Globular	M-68	*02:01-05:37	03:44	52	Hydra: Med Globular
Primary Focus	Broad Spectrum	Galaxy	M-104	*01:34-05:53	03:45	52	Virgo: Sombrero Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-4676 A&B	12:21 – 05:53	03:51	53	Coma Berenices: The Mice
Primary Focus	Broad Spectrum	Galaxies	NGC-4725	2:34 – 05:53	03:55	54	Coma Berenices: Galaxy Group
Primary Focus	Broad Spectrum	Galaxy	M-94	12:13 – 05:53	03:56	54	Canes Venatici: Med Galaxy
Primary Focus	Broad Spectrum	Galaxy	NGC-4731	*01:17-05:53	05:50	55	Virgo: Barred Spiral Galaxy
Primary Focus	Broad Spectrum	Galaxies	NGC-4762, 4754	01:10 – 05:53	03:58	55	Virgo: Edge on and other Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-64	12:48 – 05:53	04:02	55	Coma Berenices: Black Eye Galaxy
Primary Focus	Broad Spectrum	Galaxies	Abell-1656	12:39 – 05:53	04:05	56	Coma Berenices: Coma Galaxy Cluster
Primary Focus	Broad Spectrum	Globular	M-53	01:12 – 05:53	04:18	56	Coma Berenices: Med Globular
Primary Focus	Broad Spectrum	Galaxy	NGC-5033	12:41 – 05:53	04:18	57	Canes Venatici: Med Face on Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-63	12:38 – 05:53	04:21	57	Canes Venatici: Med Face on Galaxy
Primary Focus	Broad Spectrum	Globular	NGC-5053	01:17 – 05:53	04:21	57	Coma Berenices Large open Globular
Primary Focus	Broad Spectrum	Galaxy	M-51	12:49 – 05:53	04:35	58	Canes Venatici: Whirlpool Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-3	01:21 – 05:53	04:47	58	Canes Venatici: Large Globular
Primary Focus	Broad Spectrum	Galaxy	NGC-5395	01:25 – 05:53	05:03	58	Canes Venatici: Heron Galaxy
Primary Focus	Broad Spectrum	Galaxy	M-101	01:22 – 05:53	05:08	59	Ursa Major: Pinwheel Galaxy
Primary Focus	Broad Spectrum	Globular	NGC-5466	01:44 – 05:53	05:10	59	Bootes: Large open globular

Prospective Imaging Objects – February 09 2024

Imaging Summary February 09, 2024

Astronomical Dusk = 07:30 Astronomical Dawn = 05:53

Primary Prospects

Plan	Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
	HyperStar	Nebula	Nebula	M-42	07:30 – 10:21	08:41	09	Orion: The Orion Nebula
	HyperStar	Nebula	Nebula	SH2-240	07:30 – 12:19	08:47	10	Rot-Comp2 Taurus: Simeis 147
	HyperStar	Nebula	Nebula	LDN-1622	07:36 – 11:20	09:04	14	Comp2! LDN 1622 Complex
	HyperStar	Nebula	Nebula	IC-2162, SH2-261	07:30 – 12:21	09:15	17	Rotation Orion: Nebula Pair
	HyperStar	Nebula	Nebula	IC-2169	07:30 – 12:27	09:37	22	Monoceros: IC-2169 Nebula
	HyperStar	Broadband	Galaxies	M-106 et. El	11:38 – 05:53	03:24	44	Canes Venatici: Galaxy Group 106
	HyperStar	Broadband	Galaxies	M-84 Et. El	12:38 – 05:53	03:30	47	Virgo: Markarian Chain 2
	HyperStar	Broadband	Galaxies	M-58 Et. El	12:53 – 05:53	03:43	51	Virgo: Galaxy Group M-58
	Focal Reducer	Nebula	Nebula	NGC-1788	07:30 – 10:06	08:13	03	Orion: Foxface Nebula
	Focal Reducer	Nebula	Nebula	NGC-1977	07:30 – 10:25	08:41	09	Orion: Running Man Nebula
	Focal Reducer	Nebula	Nebula	M-78	07:30 – 11:04	08:53	12	Comp2! Orion: Dark & Bright Nebula
	Focal Reducer	Nebula	Nebula	LDN-1622	07:36 – 11:20	09:04	15	Rot-Comp2 Orion: Dark Nebula
	Focal Reducer	Nebula	Nebula	SH 2-261	07:30 – 12:21	09:15	17	Orion: Lower's Nebula
	Focal Reducer	Nebula	Nebula	NGC-2174	07:30 – 12:33	09:16	18	Orion: Monkey Head Nebula
	Focal Reducer	Nebula	Nebula	IC-443	07:30 – 12:45	09:23	19	Comp2! Gemini: Jellyfish Nebula
	Focal Reducer	Nebula	Nebula	NGC-2237	07:30 – 12:09	09:37	21	Monoceros: Rosette Nebula Core
	Focal Reducer	Nebula	Nebula	IC-2169	07:30 – 12:27	09:37	22	Monoceros: Blue Nebula
	Focal Reducer	Nebula	Nebula	NGC-2264	07:30 – 12:37	09:47	23	Rot Monoceros: Xmas Tree & Cone
	Focal Reducer	Broadband	Galaxies	M-81, M-82	09:51 – 04:18	01:01	32	Rot Ursa Major: Bode's Cigar
	Focal Reducer	Broadband	Galaxies	M-84 et. El.	12:38 – 05:53	03:30	47	Virgo: Markarian's Chain
	Focal Reducer	Broadband	Galaxies	Abell-1656	12:39 – 05:53	04:05	56	Coma Berenices: Coma Galaxy Cluster

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Plan	Configuration	Class	Type	Object	Imaging Window	Transit	Page Ref	Comments
	Primary Focus	Nebula	Nebula	NGC-1579	07:30 – 11:19	07:36	02	Perseus: Trifid of the north
	Primary Focus	Nebula	Nebula	IC-405	07:30 – 12:05	08:23	05	Auriga: Flaming Star Nebula
	Primary Focus	Broadband	GC	M-79	*07:30 - 09:47	08:30	06	Lepus: Med Globular NGC-1904
	Primary Focus	Nebula	PN	IC-418	*07:30 – 11:15	08:34	06	Lepus: Spirograph Nebula (Sm)
	Primary Focus	Nebula	Nebula	IC-417	07:30 – 12:16	08:34	07	Auriga: The Spider
	Primary Focus	Nebula	Nebula	NGC-1931	07:30 – 12:19	08:37	07	Auriga: The Fly
	Primary Focus	Nebula	PN	NGC-2261	07:30 – 12:31	09:45	23	Monoceros: Hubble's Variable Nebula
	Primary Focus	Nebula	Nebula	NGC-2264	07:30 – 12:37	09:47	24	Monoceros: Cone Nebula-1
	Primary Focus	Nebula	Nebula	IC-2177	*07:30 – 01:06	10:10	25	Monoceros: Seagull Nebula head
	Primary Focus	Nebula	Nebula	NGC-2359	*07:50 – 01:06	10:24	27	Canis Major: Thor's Helmet
	Primary Focus	Nebula	PN	NGC-2440	*08:40-01:00	10:48	29	Puppis: Bow-tie Nebula
	Primary Focus	Nebula	PN	NGC-2610	*09:19 – 01:23	11:39	30	Hydra: Sm/Med Planetary
	Primary Focus	Broadband	Galaxy	UGC-5470	10:23 – 04:12	01:14	34	Leo: Powder Keg Galscy
	Primary Focus	Broadband	Galaxies	NGC-3166, 3169	10:59 – 03:46	01:19	34	Sextans: Galaxy Pair
	Primary Focus	Broadband	Galaxies	NGC-3227, 3226	10:19 – 04:46	01:29	35	Leo: Interacting Galaxy Pair
	Primary Focus	Broadband	Galaxies	Arp-248	*12:27 – 05:15	02:52	41	Ursa Major: Wild's Triplet
	Primary Focus	Broadband	Galaxy	M-109	11:16 – 05:53	03:03	42	Ursa Major: Face on Spiral
	Primary Focus	Broadband	Galaxies	Arp-244	*01:11 – 05:15	03:07	42	Corvus: Antennae Galaxies
	Primary Focus	Broadband	Galaxy	NGC-4244	11:43 – 05:53	03:22	42	Canes Venatici: Sliver Needle Galaxy
	Primary Focus	Broadband	Galaxy	M-99	12:27 – 05:53	03:24	44	Coma Berenices: St. Katherines Wheel
	Primary Focus	Broadband	Galaxies	M-100 et. El.	12:28 – 05:53	03:28	45	Coma Berenices: Galaxy Group 100
	Primary Focus	Broadband	Galaxy	NGC-4449	11:49 – 05:53	03:33	47	Canes Venatici: Irregular Galaxy
	Primary Focus	Broadband	Galaxies	NGC-4567 et. El.	12:54 – 05:53	03:41	50	Virgo: Siamese Twins
	Primary Focus	Broadband	Globular	M-68	*02:01 – 05:37	03:44	52	Hydra: Med Globular
	Primary Focus	Broadband	Galaxies	NGC-4731	*01:17 – 05:53	05:50	55	Virgo: Face on Barred Spiral

Prospective Imaging Objects – February 09 2024

Imaging Summary February 09, 2024

Astronomical Dusk = 07:30 Astronomical Dawn = 05:53

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					