

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° x 4.58°	2.0	2.59"/pix (Undersampled)

How to use this document


Sculptor Galaxy (NGC 253)
Config: C11 | LF Corr | 128c

Type: **Galaxy**
 Peak: **Oct 02**
 Constellation: **Sculptor**
 Coordinates:
00hr 47' 33"
-25° 17' 15"

Close Star: SAO-147420
 Catalog Objects: [NGC 253](#)

Imaging Window: *10:44 – 02:44
 Transit: **12:48**

Primary Focus



Sculptor Galaxy (NGC 253)
Constellation: Sculptor

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>.


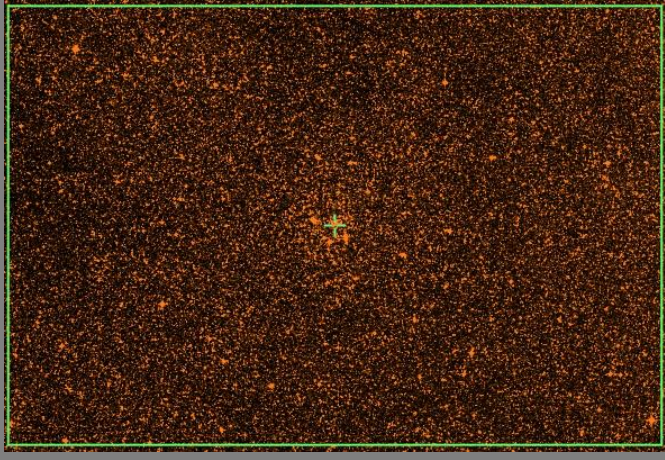

05: Close Star – A fairly bright star close to the target that can be used to check focus and sync the telescope before the imaging session begins.

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.

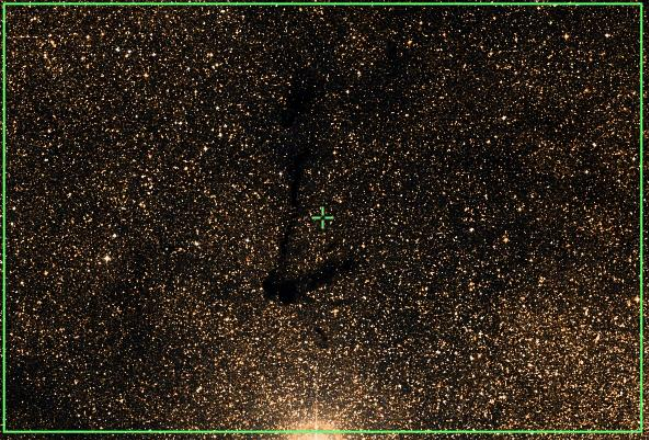


07: Imaging Window – Ideally the time the object is 45° above the horizon. Southern objects with negative DEC that do not peak above 45° are indicated with a *. Imaging window for these objects may be based on 30° or even 25° above horizon for the imaging window.

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.



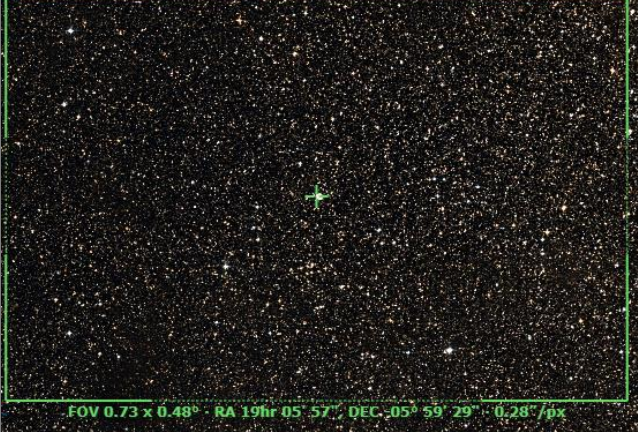
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<p>M-70(NGC-6681) Config: C11HD ZWO6200MC </p> <p>Type: Globular Cluster</p> <p>Constellation: Sagittarius Coordinates: 18h 43' 13" -32° 17' 29"</p> <p>Close Star: SAO-186841 (Kaus Borealis) Catalog Objects: M-70/NGC-6681 Imaging Window: *08:14 – 10:03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

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

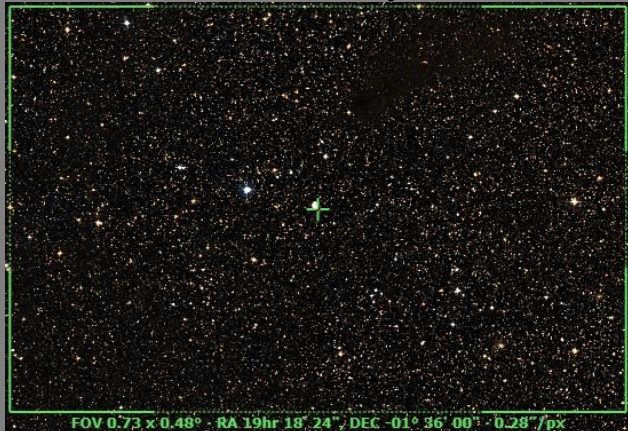

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<p>M-54 (NGC-6715) Config: C11HD ZWO6200MC </p> <p>Type: Globular Cluster</p> <p>Constellation: Sagittarius Coordinates: 18h 55' 03" -30° 28' 39"</p> <p>Close Star: SAO-187448 (Nunki) Catalog Objects: M-54/NGC-6715 Imaging Window: *08:14 – 09:30 Transit: 08:26 26°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small; text-align: center;"> Globular Cluster M-54 (NGC-6715) Sagittarius SAO-187448 (Nunki) (RA = 18h 55m 03.0s, DEC = -30° 28' 39.0") James Webb (Dec. 2023.07.21) Location: Chandra, CA Config: C-11 HD (Newer) Filter: Clear (12h) Exposure: 120 (Total) Gain: 200 (Gain: 100) </p>
<p>Abell 50 (NGC-6742) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Draco Coordinates: 21h 00' 33" 54° 32' 38"</p> <p>Close Star: SAO-046872 (Iota Her) Catalog Objects: NGC-6742 Imaging Window: 08:14 – 12:23 Transit: 08:30 87°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small; text-align: center;"> FOV 0.73 x 0.48° · RA 21hr 00' 33", DEC 54° 32' 38" · 0.28"/px </p>
<p>Dandelion Puffball Nebula (NGC-6751) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Aquila Coordinates: 19h 05' 57" -05° 59' 29"</p> <p>Close Star: SAO-142931 (i Aquilae) Catalog Objects: NGC-6751 Imaging Window: *08:14 – 11:48 Transit: 08:36 51°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small; text-align: center;"> FOV 0.73 x 0.48° · RA 19hr 05' 57", DEC -05° 59' 29" · 0.28"/px </p>


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




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<p>NGC-6778 (PK 34-6.1) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Aquila Coordinates: 19h 18' 24" -01° 36' 00"</p> <p>Close Star: SAO-124068 (Alya) Catalog Objects: NGC-6778/PK 34-6.1 Imaging Window: 08:14 – 10:52 Transit: 08:49 55°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="text-align: center;">FOV 0.73 x 0.48° · RA 19h 18' 24" · DEC -01° 36' 00" · 0.28"/px</p>
<p>NGC-6781 Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Aquila Coordinates: 19h 18' 28" 06° 32' 25"</p> <p>Close Star: SAO-125122 (Altair) Catalog Objects: NGC-6781/PK 41-2.1 Imaging Window: 08:14 – 11:28 Transit: 08:49 63°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>LDN-673 Config: C11-HD HS ZWO6200MC</p> <p>Type: Dark Nebula</p> <p>Constellation: Aquila Coordinates: 19h 18' 14" 11° 15' 40"</p> <p>Close Star: SAO-125122 (Altair) Catalog Objects: LDN-673 Imaging Window: 08:14 – 11:45 Transit: 08:51 68°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p> 



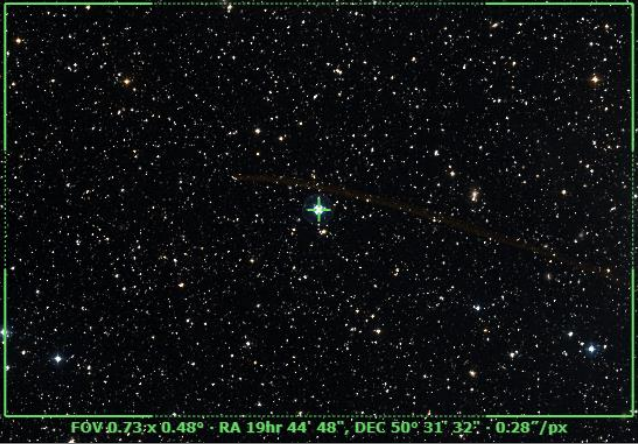
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<p>Lot Ness Monster (LDN-772) Config: C11-HD HS ZWO6200MC</p> <p>Type: Dark Nebula</p> <p>Constellation: Vulpecula Coordinates: 19h 26' 46" 23° 08' 59"</p> <p>Close Star: SAO-125122 (Altair) Catalog Objects: LDN-772 Imaging Window: 08:14 – 12:19 Transit: 08:56 80°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="font-size: small;">Lot Ness Monster (LDN-772) Constellation: Vulpecula RA = 19h 26m 46s, DEC = 23deg 08' 59", Size = 1.52 x 2.14 deg (Distortion: 90deg E of N, Pixel scale = 2.28 arcsecond/px) (1) - Altair</p>
<p>NGC6804 Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Aquila Coordinates: 19h 31' 35" 09° 13' 33"</p> <p>Close Star: SAO-104728 (Omega Aq) Catalog Objects: NGC-6804 Imaging Window: 08:14 – 11:50 Transit: 09:02 66°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small; text-align: center;">FOV 0.73 x 0.48" - RA 19hr 31' 35", DEC 09° 13' 33" - 0.28"/px</p>
<p>M-55 Config: C11HD ZWO6200MC </p> <p>Type: Globular Cluster</p> <p>Constellation: Sagittarius Coordinates: 19h 39' 59" -30° 57' 42"</p> <p>Close Star: SAO-191524 (Formalhaut) Catalog Objects: M-55/NGC-6809 Imaging Window: *08:15 – 10:03 Transit: 09:10 26°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 

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

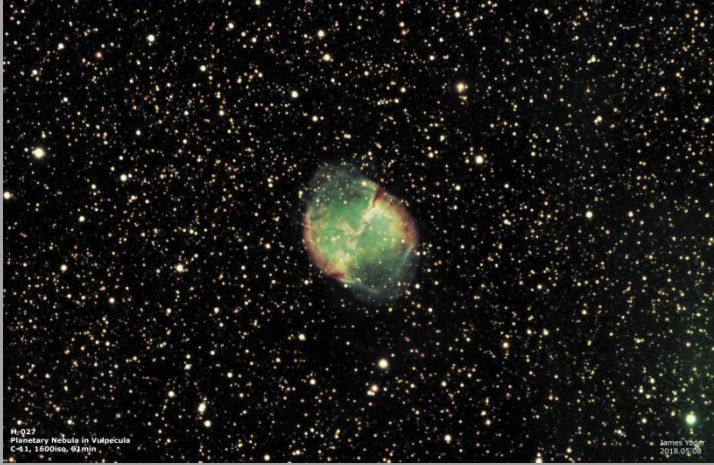


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<p>The Finger (NGC-6820) Config: C11HD ZWO6200MC </p> <p>Type: Open Cluster & Nebula</p> <p>Constellation: Vulpecula Coordinates: 19h 43' 01" 23° 17' 12"</p> <p>Close Star: SAO-125122 (Altair) Catalog Objects: NGC-6820 Imaging Window: 08:14 – 12:36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




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<p>Barnard's Galaxy (NGC 6822) Config: C11HD ZWO6200MC </p> <p>Type: Galaxy</p> <p>Constellation: Sagittarius Coordinates: 19h 44' 57" -14° 48' 23"</p> <p>Close Star: SAO-191524 (Formalhaut) Catalog Objects: NGC-6822 Imaging Window: *08:14 – 12:17 Transit: 09:15 42°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>M-71 (NGC-6838) Config: C11HD ZWO6200MC </p> <p>Type: Globular Cluster</p> <p>Constellation: Sagitta Coordinates: 19h 53' 46" 18° 46' 43"</p> <p>Close Star: SAO-125122 (Altair) Catalog Objects: M-71/NGC-6838 Imaging Window: 08:14 – 12:38 Transit: 09:24 75°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>NGC 6842 (PK 65+0.1) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Vulpecula Coordinates: 19h 55' 00" 29° 17' 00"</p> <p>Close Star: SAO-68637 (12 Cyg) Catalog Objects: NGC-6842/PK 65+0.1 Imaging Window: 08:14 – 01:00 Transit: 09:25 86°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 



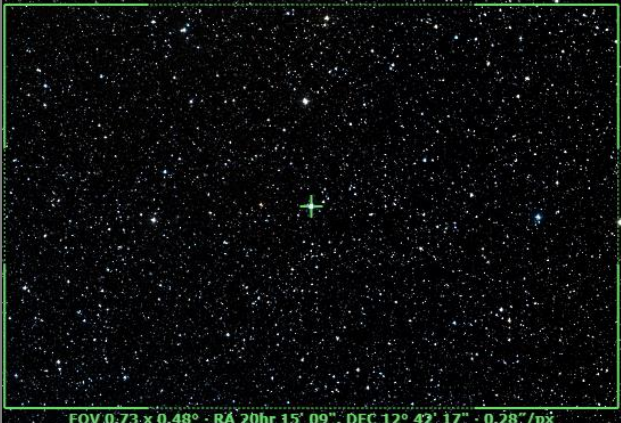
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<p>Dumbbell Nebula (M-27, NGC-6853) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Vulpecula Coordinates: 19h 59' 36" 22° 43' 17"</p> <p>Close Star: SAO-125122 (Altair) Catalog Objects: M-27/NGC-6853 Imaging Window: 08:14 – 12:52 Transit: 09:30 79°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small;">M-27 Planetary Nebula in Vulpecula C-11 HD Obs. 9/3/24 James Webb 2024.09.03</p>
<p>Fish on the Platter (B-144) Config: C11-HD HS ZWO6200MC</p> <p>Type: Dark Nebula</p> <p>Constellation: Cygnus Coordinates: 20h 02' 28" 34° 57' 42"</p> <p>Close Star: SAO-125122 (Altair) Catalog Objects: B-144, SH2-101 Imaging Window: 08:14 – 01:11 Transit: 09:28 89°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="font-size: small;">Fish On Platter (B-144, LDN-857) Luminous Dark Nebula C-11 HD Obs. 9/3/24 James Webb 2024.09.03</p>
<p>Tulip Nebula (SH2-101) Config: C11-HD FR ZWO6200MC </p> <p>Type: Diffuse Nebula</p> <p>Constellation: Cygnus Coordinates: 20h 00' 58" 35° 16' 30"</p> <p>Close Star: SAO-125122 (Altair) Catalog Objects: SH2-101 Imaging Window: 08:14 – 01:11 Transit: 09:28 89°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p> 




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


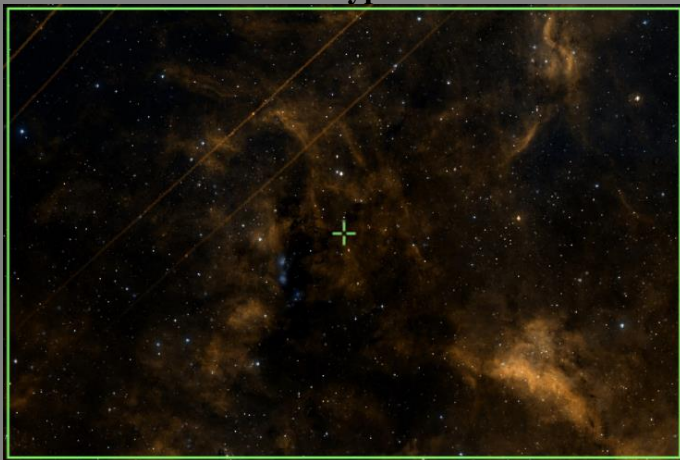
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<p>Crescent Nebula (NGC-6888) Config: C11HD ZWO6200MC </p> <p>Type: Diffuse Nebula</p> <p>Constellation: Cygnus Coordinates: 20h 12' 06" 38° 21' 00"</p> <p>Close Star: SAO-125122 (Altair) Catalog Objects: NGC-6888/Sh2-105 Imaging Window: 08:14 – 01:29 Transit: 09:42 85°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>Propeller Nebula (DWB-111) Config: C11HD ZWO6200MC </p> <p>Type: Diffuse Nebula</p> <p>Constellation: Cygnus Coordinates: 20h 16' 09" 43° 41' 47"</p> <p>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°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small;">Propeller Nebula (DWB 111) Constellation: Cygnus the Swan</p> <p style="font-size: x-small; text-align: right;">Image Date: 2024.06.22 Location: Chandler AZ Config: C11 Starizona LF Camera Astrovision C-11 C11 08:14:34 Exposure Info: 2.00sec/Star Gain: 3200 Offset: 1.00</p>
<p>NGC 6891 (PK 54-12.1) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Delphinus Coordinates: 20h 15' 09" 12° 42' 17"</p> <p>Close Star: SAO-106230 (2 Del) Catalog Objects: NGC-6991 Imaging Window: 08:14 – 12:44 Transit: 09:45 77°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: x-small; text-align: center;">FOV 0.73 x 0.48° - RA 20hr 15' 09", DEC 12° 42' 17" - 0.28"/px</p>



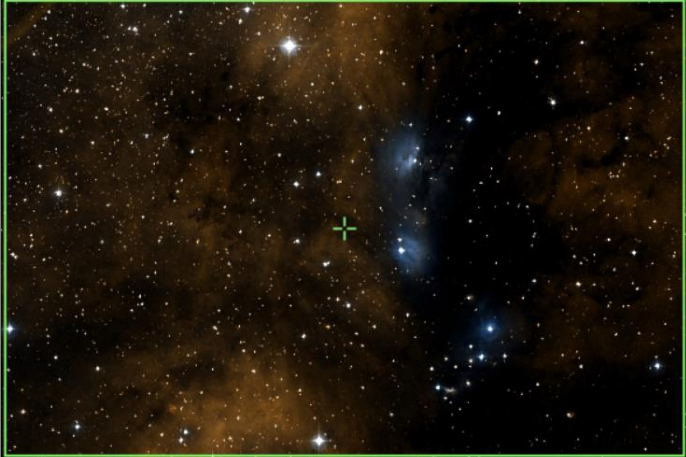
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<p>Little Ring Nebula (NGC-6894) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Cygnus Coordinates: 20h 16' 24" 30° 33' 57"</p> <p>Close Star: SAO-71070 (64 Cyg) Catalog Objects: NGC-6894 Imaging Window: 08:14 – 01:23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

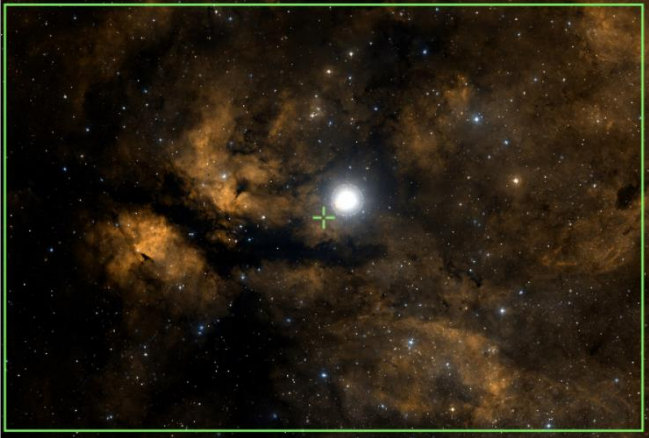
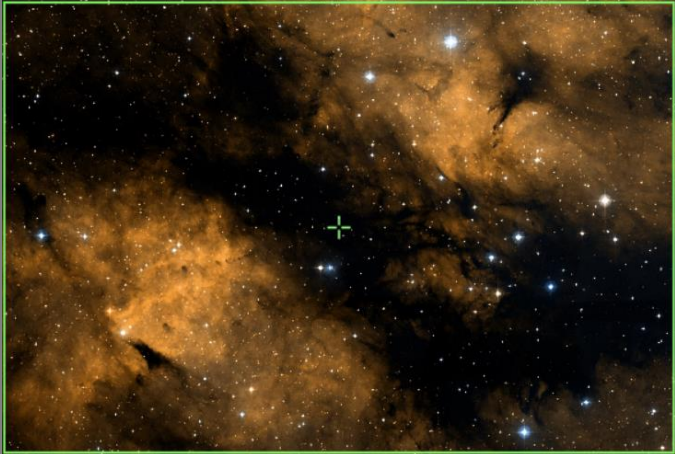

Prospective Imaging Objects – September 03 2024

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

Prospective Imaging Objects – September 03 2024

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

Prospective Imaging Objects – September 03 2024

<p>IC-1318B Config: C11-HD HS ZWO6200MC</p> <p>Type: Bright Nebula</p> <p>Constellation: Cygnus Coordinates: 20h 22' 57" 40° 09' 33"</p> <p>Close Star: SAO-67174 (Vega) Catalog Objects: IC-1318B Imaging Window: 08:14 – 01:46 Transit: 09:58 80°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p> 
<p>IC-1318B Config: C11-HD FR ZWO6200MC </p> <p>Type: Bright Nebula</p> <p>Constellation: Cygnus Coordinates: 20h 26' 59" 40° 06' 52"</p> <p>Close Star: SAO-67174 (Vega) Catalog Objects: IC-1318B Imaging Window: 08:14 – 01:46 Transit: 09:58 80°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p> 
<p>IC-1318B Config: C11HD ZWO6200MC </p> <p>Type: Bright Nebula</p> <p>Constellation: Cygnus Coordinates: 20h 25' 40" 40° 17' 34"</p> <p>Close Star: SAO-67174 (Vega) Catalog Objects: IC-1318B Imaging Window: 08:14 – 01:46 Transit: 09:58 80°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p><small>Butterfly Nebula (IC-1318) Constellation: Cygnus (The Swans) RA = 20h 25m 39.57s DEC = +40deg 17' 41.47" Size = 43 x 28.5 arcmin Orientation: 0.153deg E of N (Pixel scale = 0.441 arcsec/pixel (11x29mic))</small></p> <p><small>Meta-Data: (Date): 2024-08-11 Location: Canada, NJ Config: C-11 HD+ZWO6200MC+FR+QHY12M Exposure: 60s 200000000 Gain: 1000 (4096e: 100)</small></p>

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)

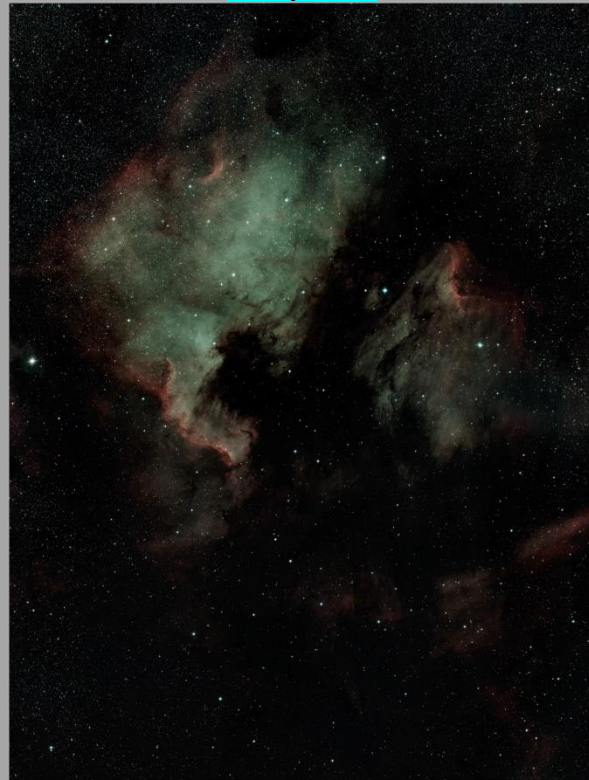
Catalog Objects: [IC5070](#)

Imaging Window: **08:14 – 02:13**

Transit: **10:21 | 79°**


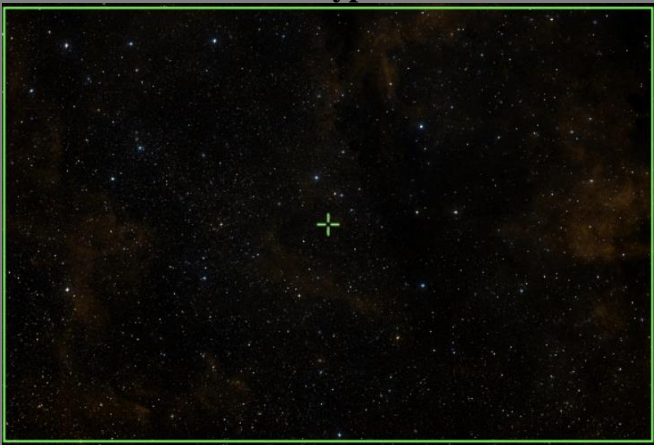
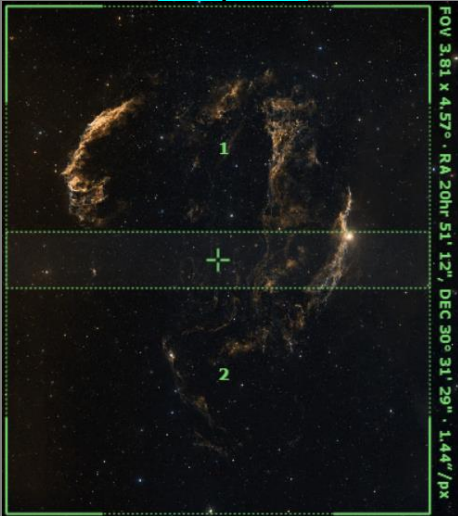
C-11 HD: HyperStar v4

Composite!

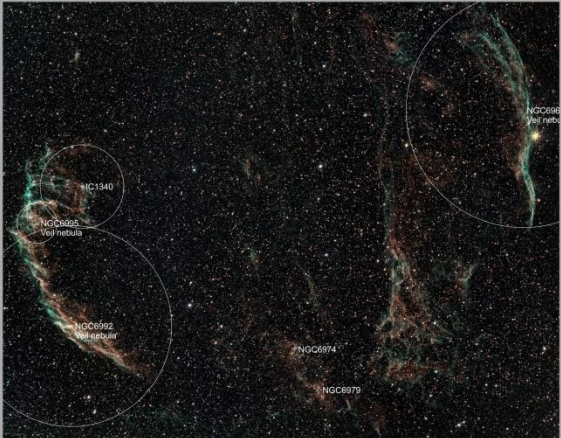

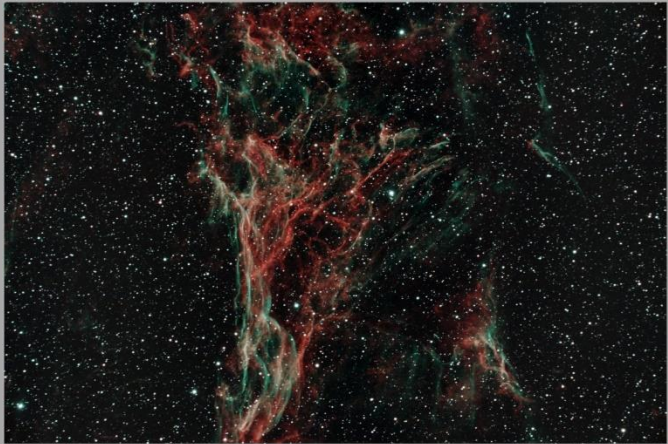


North America (NGC-7600) and Pelican (IC-5070) Nebula
Constellation: Cygnus the Swan
RA=20hr56'10" DEC=44°55'07" Size= 200 x 270 arcmin (Orientation: Right Ascension) Field width= 1.431 arcmin (PA=150deg)
James Yeiler / Data: 2022-08-28-2022-09-06 | Location: Chandler, AZ
Config: |C-11HD|HyperStar V4|OPT Radian Triad Ultra|ZWO6200MC|
Exposure Info: Mount: 101 & 121 (Imag/Sort) Gain: 100 | Offset: 50


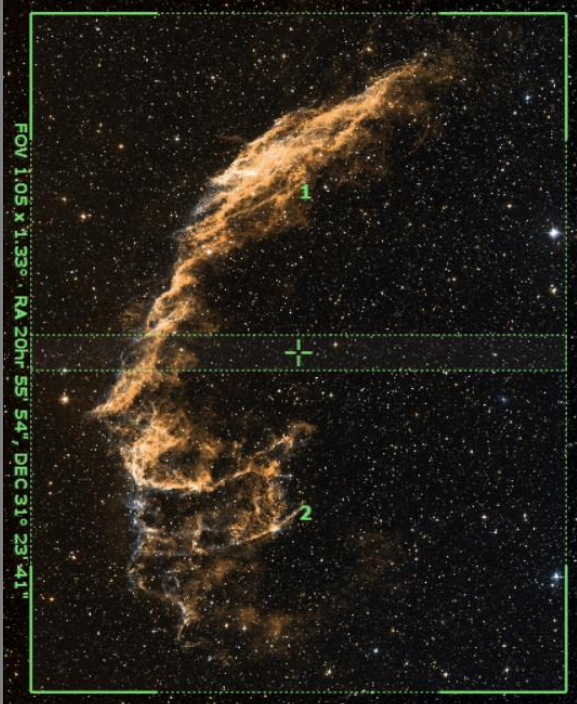
Prospective Imaging Objects – September 03 2024

<p>Pelican & N. America Nebula (IC-5070) Config: C11-HD HS ZWO6200MC</p> <p>Type: Bright Nebula</p> <p>Constellation: Cygnus Coordinates: 20h 57' 29" 44° 10' 10"</p> <p>Close Star: SAO-50180 (57 Cygni) Catalog Objects: IC5070 Imaging Window: 08:14 – 02:13 Transit: 10:21 79°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="font-size: small;">North American Nebula (NGC 7000) Pelican Nebula (IC 5070) and Open Star Cluster (NGC 6997) Constellation: Cygnus the Swan James Yoder 2019.02.20 Config: C11 HyperStar Astronomik C15-CCD O8II-T56 Exposure Info: 35frames/sum. Gain: 3200 Offset: 100</p>
<p>Northern Coal Sack (LDN-904) Config: C11-HD HS ZWO6200MC</p> <p>Type: Dark Nebula</p> <p>Constellation: Cygnus Coordinates: 20h 51' 52" 39° 13' 34"</p> <p>Close Star: SAO-49941 (Deneb) Catalog Objects: LDN-904 Imaging Window: 08:14 – 02:10 Transit: 10:23 84°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p> 
<p>Veil Nebula (NGC-6960) Config: C11-HD HS ZWO6200MC</p> <p>Type: Bright Nebula</p> <p>Constellation: Cygnus Coordinates: P1: RA: 20h51'12" DEC: 31°32'26" P2: RA: 20h51'12" DEC: 29°30'31"</p> <p>Close Star: SAO-70467 (52 Cygni) Catalog Objects: NGC-6960, 6992, 6995 Imaging Window: 08:14 – 02:01 Transit: 10:23 80°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4 Composite!</p>  <p style="font-size: x-small; text-align: right;">FOV 3.81 x 4.57° RA 20h 51' 12" DEC 30° 31' 29" 1.44"/px</p>

Prospective Imaging Objects – September 03 2024

<p>Veil Nebula (NGC-6960) Config: C11-HD HS ZWO6200MC</p> <p>Type: Supernova Remnant</p> <p>Constellation: Cygnus Coordinates: 20h 51' 15" 31° 03' 60"</p> <p>Close Star: SAO-70467 (52 Cygni) Catalog Objects: NGC-6960, 6992, 6995 Imaging Window: 08:14 – 02:01 Transit: 10:23 80°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="text-align: center;">Veil Nebula Complex Constellation: Cygnus the Swan</p> <p style="text-align: right; font-size: small;">Image credit: James Staudt Copyright © Staudt, J.P. 2013, 2016 Config: C11 HyperStar (AuroraTech LLC) QHY126C Exposure: 1000 x 15 (through filter) Gain: 1200 (Offset: 180)</p>
<p>Witch's Broom (NGC-6960) Config: C11-HD FR ZWO6200MC </p> <p>Type: Bright Nebula</p> <p>Constellation: Cygnus Coordinates: P1: RA=20hr 46' 20" DEC=30° 54' 54" P2: RA=20hr 46' 20" DEC=30° 17' 06"</p> <p>Close Star: SAO-70467 (52 Cygni) Catalog Objects: NGC-6960</p> <p>Imaging Window: 08:14 – 02:01 Transit: 10:23 80°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer Composite!</p>  <p style="text-align: center; font-size: small;">Witch's Broom (NGC-6960) Copyright © James Staudt, J.P. 2013, 2016 Config: C11 HyperStar (AuroraTech LLC) QHY126C Exposure: 1000 x 15 (through filter) Gain: 1200 (Offset: 180)</p>
<p>Pickering's Triangular Wisp (NGC-4990) Config: C11-HD FR ZWO6200MC </p> <p>Type: Supernova Remnant</p> <p>Constellation: Cygnus Coordinates: 20h 48' 16" 31° 37' 17"</p> <p>Close Star: SAO-70467 (52 Cygni) Catalog Objects: NGC-6960 Imaging Window: 08:14 – 02:01 Transit: 10:23 80°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="text-align: center; font-size: small;">Pickering's Triangular Wisp (NGC-4990) Copyright © James Staudt, J.P. 2013, 2016 Config: C11 HyperStar (AuroraTech LLC) QHY126C Exposure: 1000 x 15 (through filter) Gain: 1200 (Offset: 180)</p>

Prospective Imaging Objects – September 03 2024

<p>M-72 (NGC-6981) Config: C11HD ZWO6200MC </p> <p>Type: Globular Cluster</p> <p>Constellation: Aquarius Coordinates: 20h 53' 28" -12° 32' 11"</p> <p>Close Star: SAO-108378 (Markab) Catalog Objects: M-72/NGC-6981 Imaging Window: *08:19 – 12:34 Transit: 10:24 44°</p>	<p>C-11 HD: Primary Focus</p> 
<p>Network Nebula (NGC-6992) Config: C11-HD FR ZWO6200MC </p> <p>Type: Supernova Remnant</p> <p>Constellation: Cygnus Coordinates: P1: RA= 20hr 55' 54" DEC= 31° 42' 35" P2: RA= 20hr 55' 54" DEC= 31° 04' 47"</p> <p>Close Star: SAO-70474 (Gienah) Catalog Objects: NGC-6992 Imaging Window: 08:14 – 02:05 Transit: 10:26 88°</p>	<p>C-11 HD: Focal Reducer Composite!</p> 

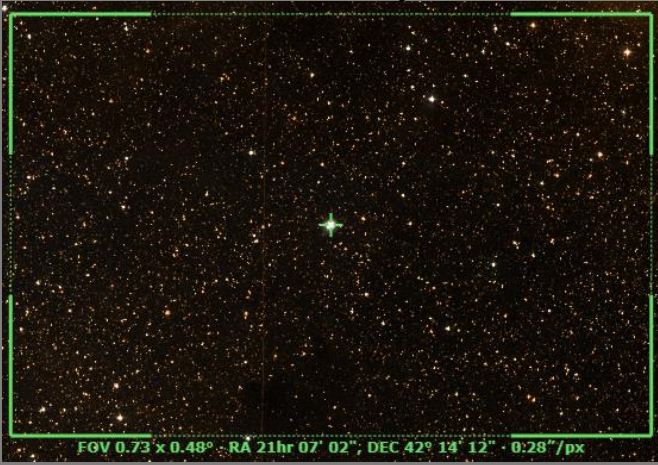

Prospective Imaging Objects – September 03 2024

<p>M-73 (NGC-6994) Config: C11HD ZWO6200MC </p> <p>Type: Open Cluster</p> <p>Constellation: Aquarius Coordinates: 20h 59' 00" -12° 37' 60"</p> <p>Close Star: SAO-108378 (Markab) Catalog Objects: M-73/NGC-6994 Imaging Window: *08:23 – 12:34 Transit: 10:29 44°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>Fetus Nebula (NGC-7008) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Cygnus Coordinates: 21h 00' 33" 54° 32' 38"</p> <p>Close Star: SAO-49941 (Deneb) Catalog Objects: NGC-7008 Imaging Window: 08:14 – 02:23 Transit: 10:31 69°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small;">Planetary Nebula NGC-7008 Constellation: Cygnus RA = 21h 00m 33.00s DEC = +54° 32' 38.00" Size = 75.0 x 17.0 arcsec Orientation: 3.3deg PA = 91.71 (Pos. Ang. = 93.77) (Info: PA) (X: 0.000000)</p> <p style="font-size: x-small; text-align: right;">Image: Video - Object: 2024-09-27-2017-000000 - Channel: 02 Config: C-11 HD - Remote Focus ZWO6200MC Exposure: 00:00:30 (Integration: 00:00:30)</p>
<p>Iris Nebula (NGC 7023) Config: C11-HD FR ZWO6200MC </p> <p>Type: Bright Nebula</p> <p>Constellation: Cepheus Coordinates: 21h 01' 36" 68° 10' 00"</p> <p>Close Star: SAO-19302 (Alderamin) Catalog Objects: NGC-7023 Imaging Window: 08:14 – 01:57 Transit: 10:32 55°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p> 


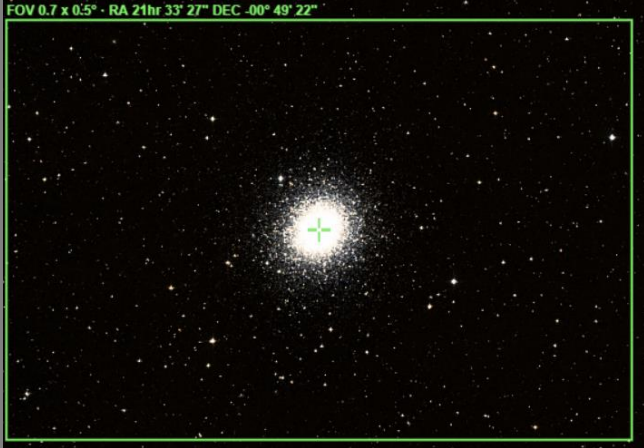

Prospective Imaging Objects – September 03 2024

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


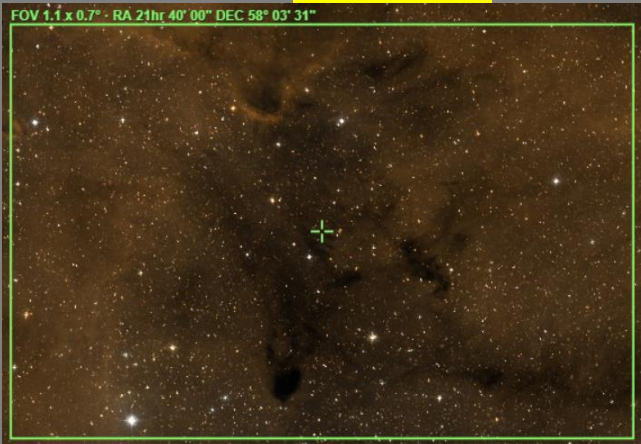

Prospective Imaging Objects – September 03 2024

<p>NGC-7027 Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Cygnus Coordinates: 21h 07' 02" 42° 14' 12"</p> <p>Close Star: SAO-50456 Catalog Objects: NGC-7027 Imaging Window: 08:14 – 02:27 Transit: 10:37 45°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="text-align: center;">FGV 0.73 x 0.48° - RA 21hr 07' 02\", DEC 42° 14' 12\" - 0:28\"/px</p>
<p>NGC-7048 (PK 88-1.1) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Cygnus Coordinates: 21h 14' 15" 46° 17' 21"</p> <p>Close Star: SAO-49941 (Deneb) Catalog Objects: NGC-7048 Imaging Window: 08:14 – 02:37 Transit: 10:44 77°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="text-align: center;">FOV 0.7 x 0.5° - RA 21hr 14' 15\", DEC 46° 17' 21\"</p>
<p>Pegasus Cluster (M-15) Config: C11HD ZWO6200MC </p> <p>Type: Globular Cluster</p> <p>Constellation: Pegasus Coordinates: 21h 29' 58" 12° 10' 03"</p> <p>Close Star: SAO-127029 (Enif) Catalog Objects: M-15/NGC-7078 Imaging Window: 08:14 – 01:57 Transit: 11:00 69°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> <p style="text-align: center;">M-015 Globular Cluster in Pegasus</p> <p style="text-align: right;">James Yoder 2016.06.10</p>




Prospective Imaging Objects – September 03 2024

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


Prospective Imaging Objects – September 03 2024

<p>Elephant Trunk (IC-1396) Config: C11-HD HS ZWO6200MC</p> <p>Type: Bright Nebula</p> <p>Constellation: Cepheus Coordinates: 21h 39' 58" 57° 33' 34"</p> <p>Close Star: SAO-19302 (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: 08:14 – 03:00 Transit: 11:09 66°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="font-size: small;">Elephant Trunk Nebula (IC-1396) Constellation: Cepheus</p> <p style="font-size: x-small; text-align: right;">Image Name: 2024_09_03 Filter: Channel_42 Config: C11-HyperStar v4 (09/03/24) Exposure Info: 240sec@5sec Gain: 3300 Offset: 100</p>
<p>Elephant Trunk (IC-1396) Config: C11-HD FR ZWO6200MC </p> <p>Type: Bright & Dark Nebula</p> <p>Constellation: Cepheus Coordinates: 21h 40' 00" 58° 03' 31"</p> <p>Close Star: SAO-19302 (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: 08:14 – 03:00 Transit: 11:09 66°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="font-size: x-small; text-align: center;">FOV 1.1 x 0.7° - RA 21hr 40' 00" DEC 58° 03' 31"</p>
<p>Elephant Trunk (IC-1396) Config: C11-HD FR ZWO6200MC </p> <p>Type: Bright Nebula</p> <p>Constellation: Cepheus Coordinates: 21h 34' 39" 57° 29' 02"</p> <p>Close Star: SAO-19302 (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: 08:14 – 03:00 Transit: 11:09 66°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="font-size: x-small; text-align: center;">FOV 1.1 x 0.7° - RA 21hr 34' 39" DEC 57° 29' 02"</p>

Prospective Imaging Objects – September 03 2024

<p>Elephant Trunk (IC-1396) Config: C11HD ZWO6200MC </p> <p>Type: Bright & Dark Nebula</p> <p>Constellation: Cepheus Coordinates: 21h 41' 50" 56° 43' 48"</p> <p>Close Star: SAO-19302 (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: 08:14 – 03:00 Transit: 11:09 66°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>Elephant Trunk (IC-1396) Config: C11HD ZWO6200MC </p> <p>Type: Bright & Dark Nebula</p> <p>Constellation: Cepheus Coordinates: 21h 34' 44" 57° 28' 44"</p> <p>Close Star: SAO-19302 (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: 08:14 – 03:00 Transit: 11:09 66°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>Elephant Trunk (IC-1396) Config: C11HD ZWO6200MC </p> <p>Type: Bright & Dark Nebula</p> <p>Constellation: Cepheus Coordinates: 21h 40' 40" 58° 25' 34"</p> <p>Close Star: SAO-19302 (Alderamin) Catalog Objects: IC-1396/Sh2-131 Imaging Window: 08:14 – 03:00 Transit: 11:09 66°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 




Prospective Imaging Objects – September 03 2024

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

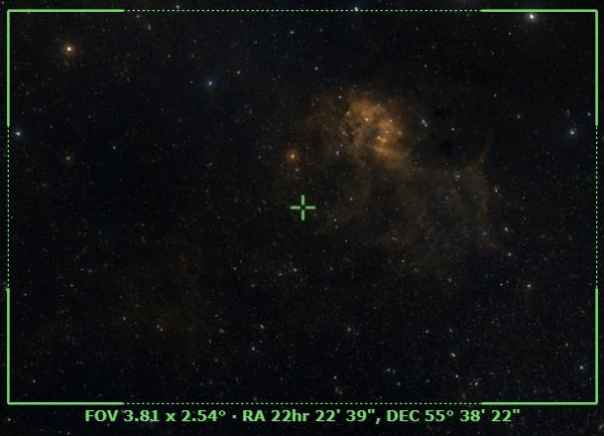
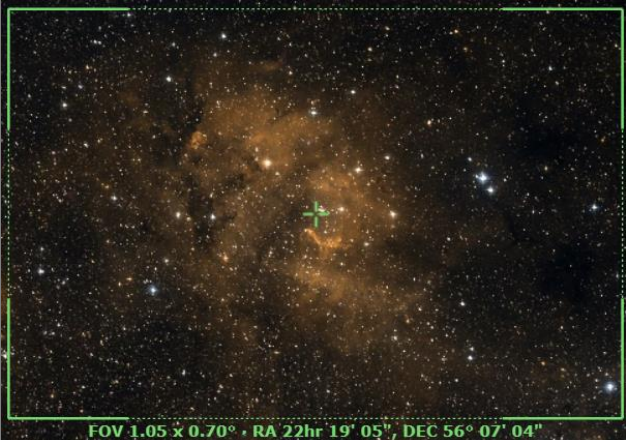
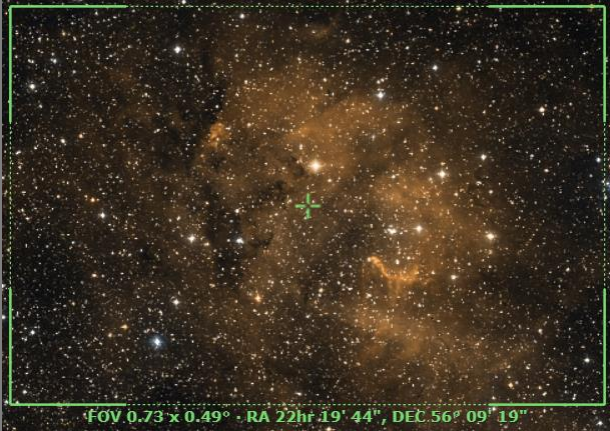
Prospective Imaging Objects – September 03 2024

<p>Cocoon Nebula (IC-5146) Config: C11-HD FR ZWO6200MC </p> <p>Type: Bright Nebula</p> <p>Constellation: Cygnus Coordinates: 21h 52' 00" 47° 22' 37"</p> <p>Close Star: SAO-5105 (Rho Cygni) Catalog Objects: IC-5146 Imaging Window: 08:14 – 03:16 Transit: 11:23 76°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="text-align: center;">FOV 1.05 x 0.70° · RA 21hr 52' 00", DEC 47° 22' 37"</p>
<p>Cocoon Nebula (IC-5146) Config: C11HD ZWO6200MC </p> <p>Type: Bright Nebula</p> <p>Constellation: Cygnus Coordinates: 21h 53' 24" 47° 16' 00"</p> <p>Close Star: SAO-5105 (Rho Cygni) Catalog Objects: IC-5146 Imaging Window: 08:14 – 03:16 Transit: 11:23 76°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="text-align: center;">IC-5146, Cocoon Nebula</p>
<p>Dark Shark (LDN 1235) Config: C11-HD FR ZWO6200MC </p> <p>Type: Bright & Dark Nebula</p> <p>Constellation: Cepheus Coordinates: 22h 11' 49" 73° 12' 16"</p> <p>Close Star: SAO-20268 (Iota Cephei) Catalog Objects: LDN-1235 Imaging Window: 09:05 – 02:31 Transit: 11:45 50°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="text-align: center;">FOV 1.05 x 0.70° · RA 22hr 11' 49", DEC 73° 12' 16"</p>




Prospective Imaging Objects – September 03 2024

<p>Helix Nebula (NGC-7293) Config: C11HD ZWO6200MC </p> <p>Type: Planetary nebula</p> <p>Constellation: Aquarius Coordinates: 22h 29' 39" -20° 48' 36"</p> <p>Close Star: SAO-164644 (Delta Cap) Catalog Objects: NGC-7293 Imaging Window: *09:33 – 02:33 Transit: 12:00 36°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small;">James Yoder 2019-09-21 Location: Chandler, AZ Config: C11 LF Corrector AstroMatic CLS-CCD (QHY128) Exposure Info: (11fms)/5min Gain: 3200 Offset: 180 </p> <p style="font-size: x-small;">Helix Nebula (NGC-7293) Constellation: Aquarius</p>
<p>Wolf's Cave (VdB-152) Config: C11-HD HS ZWO6200MC</p> <p>Type: Bright & Dark Nebula</p> <p>Constellation: Cepheus Coordinates: 22h 17' 03" 70° 21' 54"</p> <p>Close Star: SAO-20268 (Iota Cephei) Catalog Objects: B-168, IC-5146 Imaging Window: 08:14 – 03:16 Transit: 11:23 76°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="font-size: x-small;">James Yoder 2019-09-21 Location: Chandler, AZ Config: C11 HyperStar AstroMatic CLS-CCD (QHY128) Exposure Info: (11fms)/5min Gain: 3200 Offset: 180 </p> <p style="font-size: x-small;">Wolf's Cave (VdB 152, LBN 531) Constellation: Cepheus RA = 22h 17m 03.59s DEC = -70deg 21' 54.69" Size = 3.24 x 2.18 deg Pixel scale = 2.27 arc/pixel </p>
<p>Wolf's Cave (VdB-152) Config: C11-HD FR ZWO6200MC </p> <p>Type: Bright & Dark Nebula</p> <p>Constellation: Cepheus Coordinates: 22h 13' 42" 70° 30' 32" 90° Rotation</p> <p>Close Star: SAO-20268 (Iota Cephei) Catalog Objects: B-168, IC-5146 Imaging Window: 08:14 – 03:16 Transit: 11:23 76°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="font-size: x-small;">James Yoder 2019-09-21 Location: Chandler, AZ Config: C11 HyperStar AstroMatic CLS-CCD (QHY128) Exposure Info: (11fms)/5min Gain: 3200 Offset: 180 </p> <p style="font-size: x-small;">FOV 1.05 x 0.70° RA 22h 13' 42" DEC 70° 30' 32"</p>

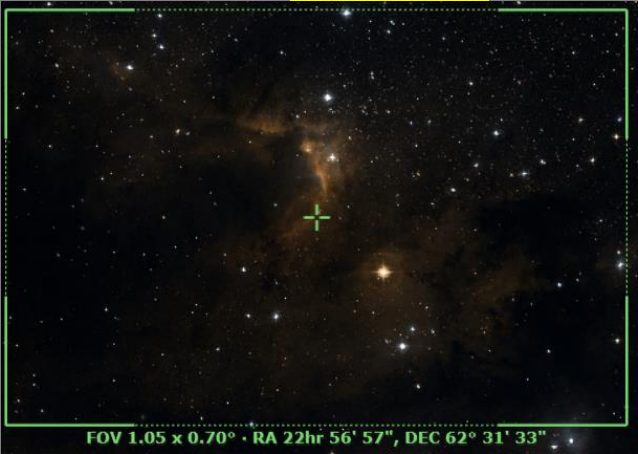


Prospective Imaging Objects – September 03 2024

<p>SH2-132 Config: C11-HD HS ZWO6200MC</p> <p>Type: Bright Nebula</p> <p>Constellation: Cepheus Coordinates: 22h 22' 39" 55° 38' 22"</p> <p>Close Star: SAO-20268 (Iota Cephei) Catalog Objects: SH2-132 Imaging Window: 08:14 – 03:41 Transit: 11:49 67°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="text-align: center;">FOV 3.81 x 2.54° · RA 22hr 22' 39", DEC 55° 38' 22"</p>
<p>SH2-132 Config: C11-HD FR ZWO6200MC </p> <p>Type: Bright Nebula</p> <p>Constellation: Cepheus Coordinates: 22h 19' 05" 56° 07' 04"</p> <p>Close Star: SAO-20268 (Iota Cephei) Catalog Objects: SH2-132 Imaging Window: 08:14 – 03:41 Transit: 11:49 67°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="text-align: center;">FOV 1.05 x 0.70° · RA 22hr 19' 05", DEC 56° 07' 04"</p>
<p>SH2-132 Config: C11HD ZWO6200MC </p> <p>Type: Bright Nebula</p> <p>Constellation: Cepheus Coordinates: 22h 19' 44" 56° 09' 19"</p> <p>Close Star: SAO-20268 (Iota Cephei) Catalog Objects: SH2-132 Imaging Window: 08:14 – 03:41 Transit: 11:49 67°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="text-align: center;">FOV 0.73 x 0.49° · RA 22hr 19' 44", DEC 56° 09' 19"</p>


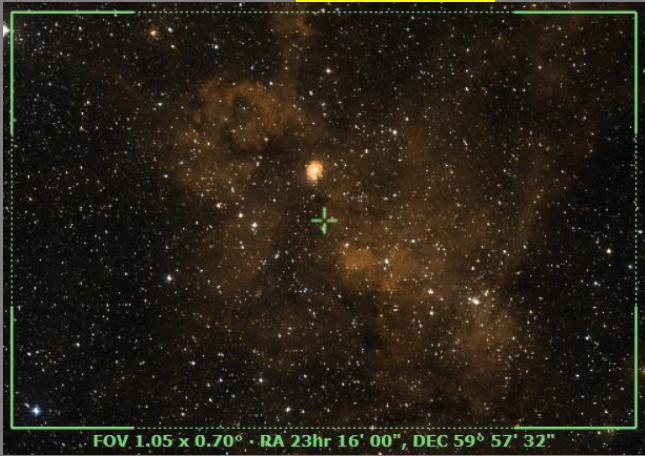

Prospective Imaging Objects – September 03 2024

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



Prospective Imaging Objects – September 03 2024

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

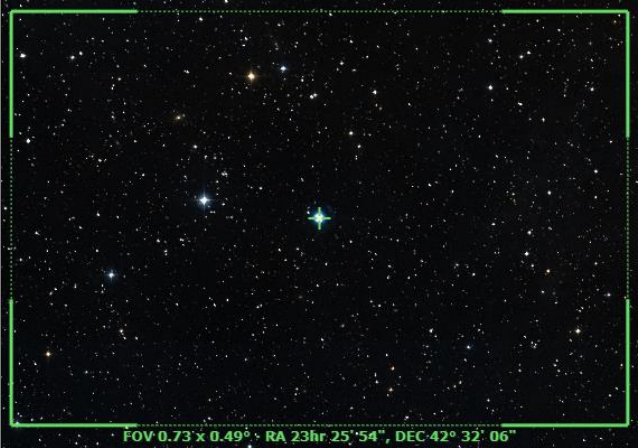


Prospective Imaging Objects – September 03 2024

<p>Lobster Claw and Bubble Nebula (SH2-157) Config: C11-HD HS ZWO6200MC</p> <p>Type: Diffuse Nebula</p> <p>Constellation: Cassiopeia Coordinates: 23h 18' 25.8" 60° 31' 17.8"</p> <p>Close Star: SAO-21133 (Caph) Catalog Objects: SH2-157, NGC-7635 Imaging Window: 09:04 – 04:34 Transit: 12:46 63°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="font-size: small;">Lobster Claw and Bubble Nebula(NGC-7635) Constellation: Cassiopeia RA = 23h 18m 25.8s DEC = +60deg 31' 17.8" Size = 2.68 x 1.79 deg Orientation: 0deg E of N Pixel scale = 2.28 arcsecond FL=540mm</p> <p style="font-size: x-small; text-align: right;">James Yoder Date(s) 2020-10-21 Location: Chandler, AZ Config: C-11HD HyperStar V4 Astromomik CLS-CCD QHY128c Exposure Info: 360ms@3min Gain: 3200 OIBSet: 180</p>
<p>Lobster Claw (SH2-157) Config: C11-HD FR ZWO6200MC </p> <p>Type: Diffuse Nebula</p> <p>Constellation: Cassiopeia Coordinates: 23h 16' 00" 59° 57' 32"</p> <p>Close Star: SAO-21133 (Caph) Catalog Objects: SH2-157 Imaging Window: 09:04 – 04:34 Transit: 12:46 63°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="font-size: small; text-align: center;">FOV 1.05 x 0.70° - RA 23hr 16' 00", DEC 59° 57' 32"</p>
<p>Bubble Nebula (NGC-7635) Config: C11HD ZWO6200MC </p> <p>Type: Bright & Dark Nebula</p> <p>Constellation: Cepheus Coordinates: 23h 20' 12" 61° 11' 00"</p> <p>Close Star: SAO-21133 (Caph) Catalog Objects: NGC-7635, SH2-162 Imaging Window: 09:11 – 04:37 Transit: 12:51 62°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: x-small;">Bubble Nebula (NGC-7635) Constellation: Cassiopeia</p> <p style="font-size: x-small; text-align: right;">James Yoder 2018-09-12 Location: Chandler, AZ Config: C-11 Hasekita L3 Reducer Dual Filter QHY128c Exposure Info: 300ms@3min Gain: 1100 OIBSet: 170</p>


Prospective Imaging Objects – September 03 2024

<p>Pegasus Cluster (NGC-7619) Config: C11-HD FR ZWO6200MC </p> <p>Type: Cluster of Galaxies</p> <p>Constellation: Pegasus Coordinates: 23h 20' 13" 08° 11' 08"</p> <p>Close Star: SAO-128085 (g Piscium) Catalog Objects: NGC-7619 Imaging Window: 10:12 – 03:35 Transit: 12:50 65°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="text-align: center;">FOV 1.05 x 0.70° · RA 23hr 20' 13", DEC 08° 11' 08"</p>
<p>Pegasus Cluster (NGC-7619) Config: C11HD ZWO6200MC </p> <p>Type: Cluster of Galaxies</p> <p>Constellation: Pegasus Coordinates: 23h 20' 13" 08° 10' 57"</p> <p>Close Star: SAO-128085 (g Piscium) Catalog Objects: NGC-7619 Imaging Window: 10:12 – 03:35 Transit: 12:50 65°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="text-align: center;">FOV 0.73 x 0.49° · RA 23hr 20' 13", DEC 08° 10' 57"</p>
<p>M-52 (NGC-7654) Config: C11HD ZWO6200MC </p> <p>Type: Open Cluster</p> <p>Constellation: Cassiopeia Coordinates: 23h 24' 48" 61° 36' 00"</p> <p>Close Star: SAO-21133 (Caph) Catalog Objects: M-52 Imaging Window: 09:16 – 04:38 Transit: 12:55 62°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="text-align: center;">FOV 0.73 x 0.49° · RA 23hr 24' 48", DEC 61° 36' 00"</p>

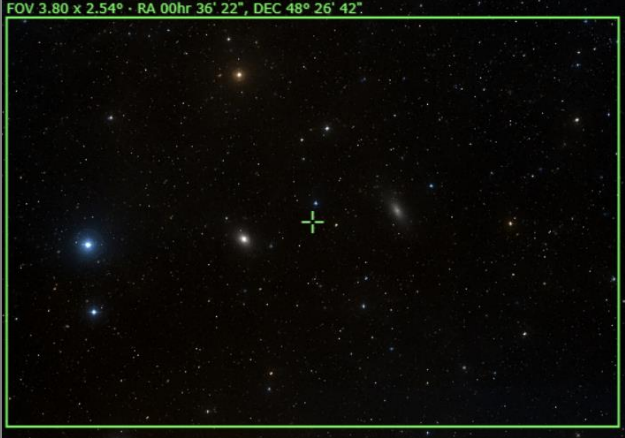


Prospective Imaging Objects – September 03 2024

<p>Blue Snowball (NGC-7662) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Andromeda Coordinates: 23h 25' 54" 42° 32' 06"</p> <p>Close Star: SAO-53216 (Iota And) Catalog Objects: NGC-7662 Imaging Window: 09:12 – 04:38 Transit: 12:56 81°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>Blue Match Nebula (SH2-155) Config: C11-HD HS ZWO6200MC</p> <p>Type: Reflection Nebula</p> <p>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°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p> 
<p>Caroline's Rose (NGC-7789) Config: C11HD ZWO6200MC </p> <p>Type: Open Cluster</p> <p>Constellation: Cassiopeia Coordinates: 23h 57' 37" 56° 42' 21"</p> <p>Close Star: SAO-21607 (Shedar) Catalog Objects: NGC-7789 Imaging Window: 09:42 – 04:38 Transit: 01:27 65°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 

Prospective Imaging Objects – September 03 2024

<p>NGC-7822 (CED-214) Config: C11HD ZWO6200MC </p> <p>Type: Emission Nebula Constellation: Cepheus Coordinates: 00h 01' 56" 67° 23' 05"</p> <p>Close Star: SAO-10818 Catalog Objects: Ced 214, NGC 7822, SH2-171 Imaging Window: 10:09 – 04:38 Transit: 01:31 56°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small;">Bright Nebula NGC-7822 (Ced 214) Constellation: Cepheus RA = 00h 01m 56.30s, DEC = +67° 23' 05.00" (J2000.0) (Photo: 0.44" pixel)</p>
<p>Bow-Tie Nebula (NGC-40) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula</p> <p>Constellation: Cepheus Coordinates: 00h 13' 01" 72° 31' 21"</p> <p>Close Star: SAO-20268 Catalog Objects: NGC-40 Imaging Window: 10:54 – 04:38 Transit: 01:43 51°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small;">FOV 0.73 x 0.49° - RA 00hr 13'01", DEC 72° 31' 21"</p>
<p>Andromeda Galaxy Group Config: C11HD ZWO6200MC </p> <p>Type: Cluster of dim galaxies Peak:</p> <p>Constellation: Andromeda Coordinates: 00h 17' 58" 30° 03' 03"</p> <p>Close Star: SAO-73765 (Alpheratz) Catalog Objects: NGC 67-72 et. El.</p> <p>Imaging Window: 10:19 – 04:38 Transit: 01:48 87°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 

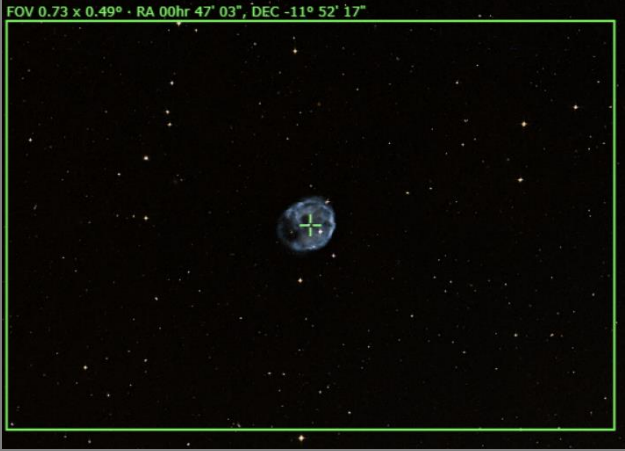


Prospective Imaging Objects – September 03 2024

<p>NGC-147 & NGC-185 Config: C11-HD HS ZWO6200MC</p> <p>Type: Galaxy Pair</p> <p>Constellation: Cassiopeia Coordinates: 00h 36' 22" 48° 26' 42"</p> <p>Close Star: SAO-21609 (Shedar) Catalog Objects: NGC-147, NGC-185 Imaging Window: 10:16 – 04:38 Transit: 02:03 75°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p> <p style="text-align: center; font-size: small;">FOV 3.80 x 2.54" - RA 00hr 36' 22", DEC 48° 26' 42"</p> 
<p>NGC-147 & NGC-185 Config: C11-HD FR ZWO6200MC</p> <p>Type: Galaxy Pair</p> <p>Constellation: Cassiopeia Coordinates: Frame 01 RA: 00hr 38' 33" DEC: 48° 25' 44" Frame 02 RA: 00hr 33' 21" DEC: 48° 25' 44"</p> <p>Close Star: SAO-21609 (Shedar) Catalog Objects: NGC-147, NGC-185 Imaging Window: 10:16 – 04:38 Transit: 02:03 75°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer Composite!</p> 
<p>NGC-147 Config: ZWO6200MC </p> <p>Type: Galaxy Peak:</p> <p>Constellation: Cassiopeia Coordinates: 00h 33' 07.245" 48° 30' 18.030"</p> <p>Close Star: SAO-37375 Catalog Objects: NGC-147</p> <p>Imaging Window: 10:16 – 04:38 Transit: 02:03 75°</p>	<p style="text-align: center;">Primary Focus</p> 


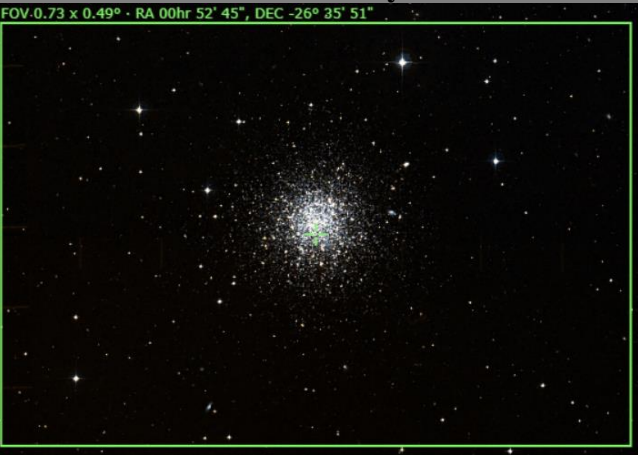

Prospective Imaging Objects – September 03 2024

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




Prospective Imaging Objects – September 03 2024

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

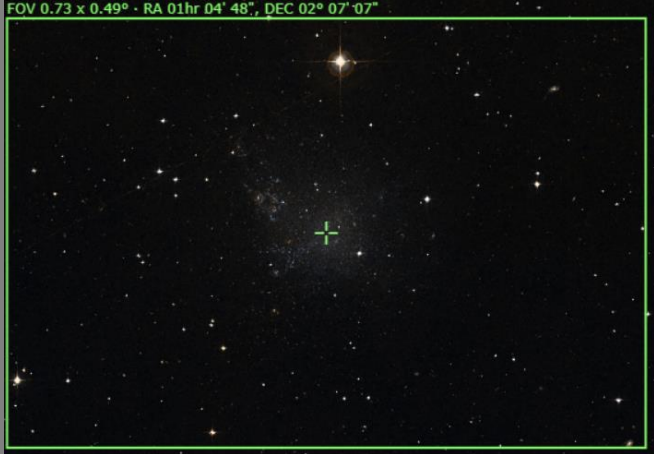
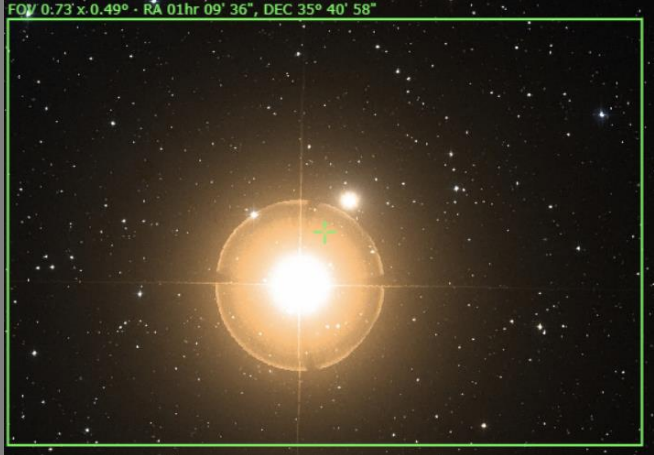

Prospective Imaging Objects – September 03 2024

<p>Sculptor Galaxy (NGC-253) Config: C11-HD ZWO6200MC</p> <p>Type: Spiral Galaxy</p> <p>Constellation: Sculptor Coordinates: 00h 47' 33" -25° 17' 15"</p> <p>Close Star: SAO-147420 (Diphda) Catalog Objects: NGC-253 Imaging Window: *12:19 – 04:16 Transit: 02:17 31°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: small;">Sculptor Galaxy (NGC 253) Constellation: Sculptor</p> <p style="font-size: x-small; text-align: right;"> Filter: None 2024-08-21 Exposure: 300s Gain: 100 Config: C11 Mount: EQ-G Camera: ZWO6200MC Filter: None Gain: 100 Exposure Info: 100frames/Star Gain: 100 Offset: 100 </p>
<p>NGC-288 Config: C11-HD ZWO6200MC</p> <p>Type: Globular Cluster</p> <p>Constellation: Sculptor Coordinates: 00h 52' 45" -26° 35' 51"</p> <p>Close Star: SAO-147420 (Diphda) Catalog Objects: NGC-288 Imaging Window: *12:34 – 04:12 Transit: 02:22 31°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: x-small; color: green;">FOV: 0.73 x 0.49° - RA 00hr 52' 45", DEC -26° 35' 51"</p>
<p>NGC-188 Config: C11-HD FR ZWO6200MC</p> <p>Type: Open Cluster</p> <p>Constellation: Cepheus Coordinates: 00h 47' 30" 85° 15' 30"</p> <p>Close Star: SAO-308 (Polaris) Catalog Objects: NGC-188 Imaging Window: *8:14 – 04:38 Transit: 02:22 38°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="font-size: x-small; color: green;">FOV 1.04 x 0.70° - RA 00hr 47' 30", DEC 85° 15' 30"</p>




Prospective Imaging Objects – September 03 2024

<p>NGC-281 Config: C11-HD FR ZWO6200MC</p> <p>Type: Diffuse Nebula</p> <p>Constellation: Cassiopeia Coordinates: 00h 53' 00" 56° 37' 00"</p> <p>Close Star: SAO-11482 (Navi) Catalog Objects: NGC-281 Imaging Window: 10:37 – 04:38 Transit: 02:22 67°</p>	<p style="text-align: center;">C-11 HD: Focal Reducer</p>  <p style="font-size: small; text-align: center;">Pacman Nebula (NGC-281) <small>© 2024 Starizona Optics. All rights reserved. This image is for personal use only. No part of this image may be reproduced without the written permission of Starizona Optics.</small></p>
<p>Gamma Cassiopeiae Nebula (SH2-185) Config: C11-HD HS ZWO6200MC</p> <p>Type: Bright Nebula</p> <p>Constellation: Cassiopeia Coordinates: 01h 03' 11" 60° 42' 24"</p> <p>Close Star: SAO-11482 (Navi) Catalog Objects: SH2-185 Imaging Window: 10:50 – 04:38 Transit: 02:29 62°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="font-size: small; text-align: center;">Gamma Cassiopeiae Nebula (SH2-185, IRI-620, IC-59 & IC-163) <small>© 2024 Starizona Optics. All rights reserved. This image is for personal use only. No part of this image may be reproduced without the written permission of Starizona Optics.</small></p>
<p>Gamma Cassiopeiae Nebula (SH2-185) Config: C11-HD HS ZWO6200MC</p> <p>Type: Bright Nebula</p> <p>Constellation: Cassiopeia Coordinates: 00h 58' 48" 61° 04' 02"</p> <p>Close Star: SAO-11482 (Navi) Catalog Objects: SH2-185 Imaging Window: 10:50 – 04:38 Transit: 02:29 62°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> <p style="font-size: x-small; text-align: center;">FOV 0.73 x 0.49° • RA, 00hr 58' 48", DEC 61° 04' 02"</p>  <p style="font-size: x-small; text-align: center;">© 2024 Starizona Optics. All rights reserved. This image is for personal use only. No part of this image may be reproduced without the written permission of Starizona Optics.</p>


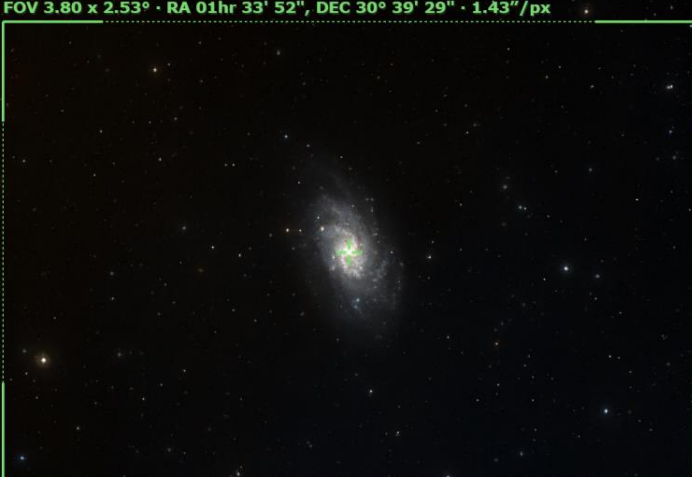
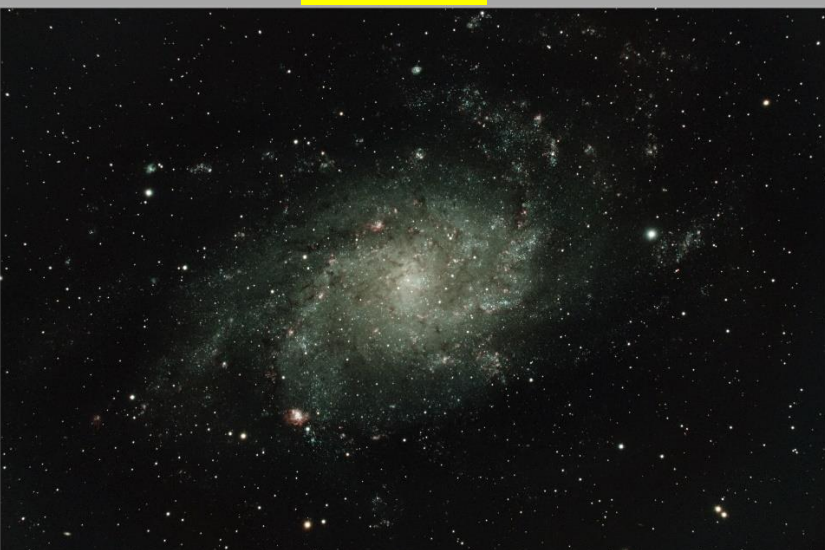
Prospective Imaging Objects – September 03 2024

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




Prospective Imaging Objects – September 03 2024

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


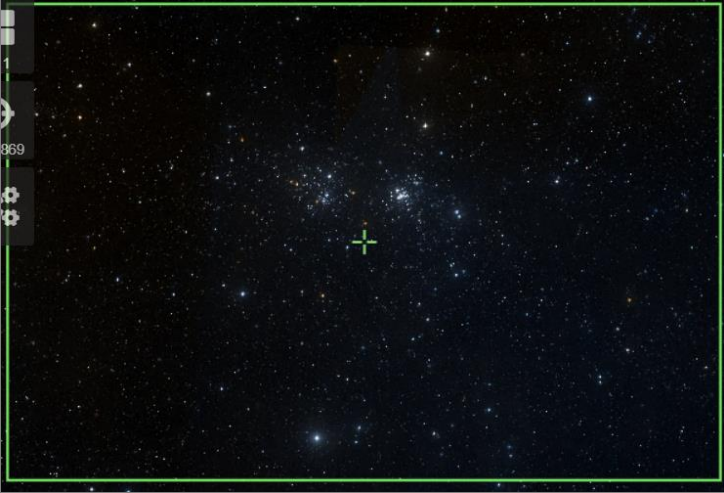

Prospective Imaging Objects – September 03 2024

<p>M-103 (NGC-581) Config: C11HD ZWO6200MC </p> <p>Type: Open Cluster Constellation: Cassiopeia Coordinates: 01h 33' 31" 60° 39' 44"</p> <p>Close Star: ISO-22268 (Ruchbah) Catalog Objects: M-103/NGC-581</p> <p>Imaging Window: 11:23 – 04:38 Transit: 03:03 63°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>Triangulum Galaxy (M-33) Config: C11 HS ZWO6200MC</p> <p>Type: Galaxy Constellation: Triangulum Coordinates: 01h 33' 52" 30° 39' 29"</p> <p>Close Star: SAO-74996 Catalog Objects: M33, NGC598</p> <p>Imaging Window: 11:33 – 04:38 Transit: 03:03 87°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p> <p style="text-align: center; font-size: small;">FOV 3.80 x 2.53° · RA 01hr 33' 52", DEC 30° 39' 29" · 1.43"/px</p> 
<p>Triangulum Galaxy (M-33) Config: C11-HD FR ZWO6200MC </p> <p>Type: Galaxy Peak: Oct 14 Constellation: Triangulum</p> <p>Camera Rotation - 90°</p> <p>Coordinates: 01h 33' 52" 30° 39' 29"</p> <p>Close Star: SAO-74996 Catalog Objects: M33, NGC598</p> <p>Imaging Window: 11:33 – 04:38 Transit: 03:03 87°</p>	<p style="text-align: center;">CH11-HD Focal Reducer 90° Rotation</p>  <p style="font-size: x-small;">Triangulum Galaxy (M-33) Constellation: Triangulum RA: 01h 33m 52s · DEC: 30° 39' 29" · FOV: 3.80 x 2.53° · RA 01hr 33' 52", DEC 30° 39' 29" · 1.43"/px</p>



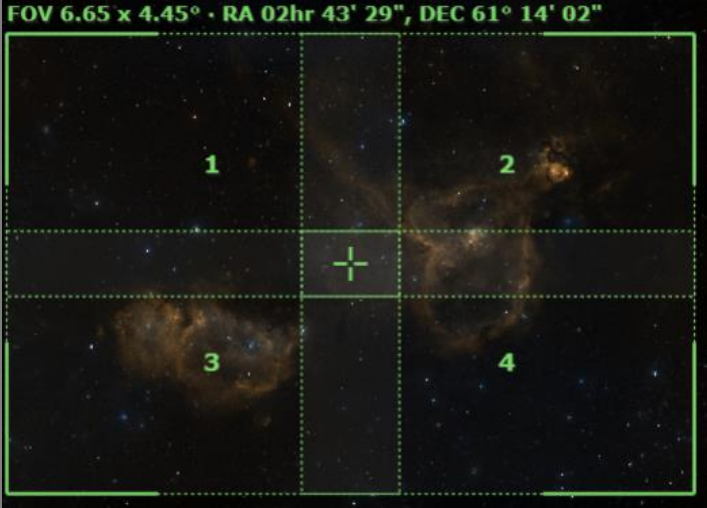
Prospective Imaging Objects – September 03 2024

<p>Triangulum Galaxy (M-33) Config: ZWO6200MC </p> <p>Type: Galaxy Peak: Oct 14 Constellation: Triangulum Coordinates: 01° 34' 53.37" 30° 45' 11.2"</p> <p>Close Star: SAO-74996 Catalog Objects: M33, NGC598</p> <p>Imaging Window: 11:33 – 04:38 Transit: 03:03 87°</p>	<p style="text-align: center;">Primary Focus</p>  <p style="font-size: small;">M33: Pinwheel Galaxy James Yoder 2014</p>
<p>M-74 Config: C11HD ZWO6200MC </p> <p>Type: Spiral Galaxy Peak: Constellation: Pisces Coordinates: 01h 36' 42" 15° 46' 60"</p> <p>Close Star: ISO-91781 (Algenib) Catalog Objects: M-74</p> <p>Imaging Window: 12:06 – 04:38 Transit: 03:06 72°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: x-small;">Spiral Galaxy M-74 (NGC-628) Constellation: Pisces RA = 01h 36m 42.52s DEC = +15deg 46' 58.03" Size = 42.2 x 28.5 arcmin. Pixel scale = 0.861 arcsec/pixel James Yoder Location: Messier grounds, Toluca, MX Config: C-11 HD / ZWO6200 / QHY134C Exposure Info: 200img/Star Gain: 3200 (QHY6L 180)</p>
<p>Little Dumbbell Nebula (M-76) Config: C11HD ZWO6200MC </p> <p>Type: Planetary Nebula Peak: Constellation: Perseus Coordinates: 01h 42' 18" 51° 34' 17"</p> <p>Close Star: ISO-37375 Catalog Objects: M-76/ NGC-650 Imaging Window: 11:25 – 04:38 Transit: 03:12 72°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p>  <p style="font-size: x-small;">Little Dumbbell Nebula (M-76, NGC-650) Constellation: Perseus RA = 01h 42m 18.34s DEC = +51deg 34' 48.5" Size = 36.8 x 24.4 arcmin Orientation: 0 deg E of N Pixel scale = 0.846 arcsec/pixel FL = 2000mm James Yoder Location(s): Messier grounds, 2020 10 14, Chandler, 2020 10 19, AZ Config: C-11 HD / ZWO6200 / QHY134C Exposure Info: 446img/Star Gain: 3200 (QHY6L 180)</p>



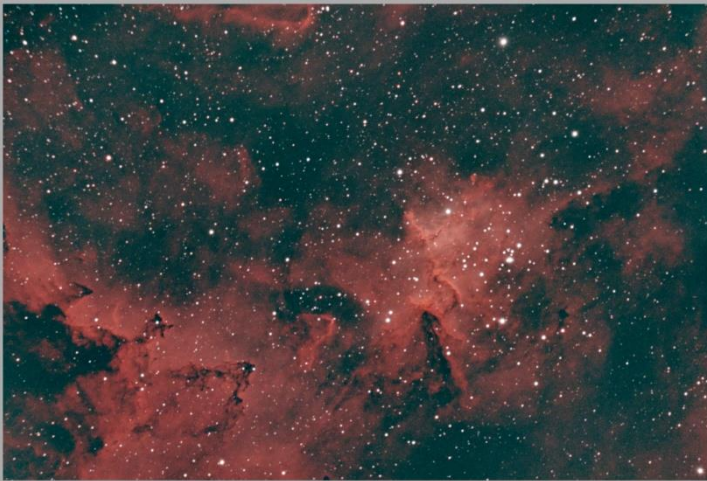
Prospective Imaging Objects – September 03 2024

<p>Nautilus Galaxy (NGC-772) Config: C11HD ZWO6200MC </p> <p>Type: Galaxy Peak: Constellation: Aries Coordinates: 01h 59' 19" 19° 00' 27"</p> <p>Close Star: ISO-75012 (Sheratan) Catalog Objects: NGC-772</p> <p>Imaging Window: 12:21 – 04:38 Transit: 03:29 76°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>Hand chi Persei (NGC 869, 884) Config: C11-HD HS ZWO6200MC</p> <p>Type: Double Open Cluster Peak: October 28 Constellation: Perseus Coordinates: 02hr 20' 31" 56° 54' 05"</p> <p>Close Star: SAO-22258 (Ruchbah) Catalog Objects: NGC 869, 884</p> <p>Imaging Window: 12:07 – 04:38 Transit: 03:52 66°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p> 
<p>Edge On Galaxy (NGC 891) Config: C1 LF ZWO6200MC </p> <p>Type: Galaxy Peak: Oct 27 Constellation: Andromeda Coordinates: 02h 23' 43.29" 42° 25' 46.4"</p> <p>Close Star: SAO-37734 Catalog Objects: NGC891</p> <p>Imaging Window: 12:09 – 04:38 Transit: 03:52 81°</p>	<p style="text-align: center;">Primary Focus</p>  <p style="font-size: small;">Edge On Spiral Galaxy NGC 891 Janis Yoder 2014.11.23</p>

Prospective Imaging Objects – September 03 2024

<p>NGC-925 (PGC 9332) Config: C11-HD ZWO6200MC </p> <p>Type: Galaxy Constellation: Triangulum Coordinates: 02h 27' 17" 33° 34' 44"</p> <p>Close Star: SAO-55306 (Beta Trianguli) Catalog Objects: NGC925/PGC9332</p> <p>Imaging Window: 12:23 – 04:38 Transit: 03:57 90°</p>	<p>Primary Focus</p> 
<p>Fish Head Nebula (IC-1795) Config: C11-HD FR ZWO6200MC </p> <p>Type: Bright Nebula Constellation: Cassiopeia</p> <p>Coordinates: 02h 27' 03" 62° 02' 31"</p> <p>Close Star: SAO-38787 (Mirfak) Catalog Objects: IC-1795</p> <p>Imaging Window: 12:18 – 04:38 Transit: 03:55 87°</p>	<p>CH11-HD Focal Reducer</p> 
<p>Heart and Soul Nebulas Config: C11 HS ZWO6200MC</p> <p>Type: Diffuse Nebula</p> <p>Constellation: Cassiopeia Coordinates (RA, DEC): Pane 1: 02hr 55' 41", 62° 09' 11" Pane 2: 02hr 31' 16", 62° 09' 11" Pane 3: 02hr 54' 58", 60° 15' 00" Pane 4: 02hr 31' 59", 60° 15' 00"</p> <p>Close Star: SAO-38787 (Mirfak) Catalog Objects: IC-1848</p> <p>Imaging Window: 12:40 – 04:38 Transit: 04:21 63°</p>	<p>C-11 HD: HyperStar v4 SUPER-4 Composite!</p> <p>FOV 6.65 x 4.45° · RA 02hr 43' 29", DEC 61° 14' 02"</p> 




Prospective Imaging Objects – September 03 2024

<p>Heart Nebula (IC 1805) Config: C11-HD HS ZWO6200MC</p> <p>Type: Diffuse Nebula Peak: October 31 Constellation: Cassiopeia Coordinates: 02hr 31' 16" 61° 21' 36"</p> <p>Close Star: SAO-12031 Catalog Objects: IC 1805</p> <p>Imaging Window: 12:23 – 04:38 Transit: 04:02 62°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="font-size: small;">Heart Nebula (IC 1805) Constellation: Cassiopeia</p> <p style="font-size: x-small; text-align: right;">James Yoder - 2019.09.20 Location: Chandler, AZ Config: C11 HyperStar Astronomik CLS-C-CD QHY128E Exposure Info: 20frames/Stream Gain: 3000 Offset: 1801</p>
<p>Heart Nebula (IC 1805) Config: C11-HD FR ZWO6200MC </p> <p>Type: Diffuse Nebula Constellation: Cassiopeia Coordinates: 02hr 26' 36" 62° 06' 53"</p> <p>Close Star: SAO-12031 Catalog Objects: IC 1805</p> <p>Imaging Window: 12:23 – 04:38 Transit: 04:02 62°</p>	<p style="text-align: center;">CH11-HD Focal Reducer</p>  <p style="font-size: small;">Heart Nebula core (IC-1805) Constellation: Cassiopeia</p> <p style="font-size: x-small; text-align: right;">James Yoder - 2019.09.20 Location: Chandler, AZ Config: C11-HD Focal Reducer Astronomik CLS-C-CD QHY128E Exposure Info: 20frames/Stream Gain: 3000 Offset: 1801</p>
<p>Heart Nebula (IC-1805) Config: C1 LF ZWO6200MC </p> <p>Type: Diffuse Nebula Peak: October 31 Constellation: Cassiopeia Coordinates: 02hr 32' 42" 61° 27' 00"</p> <p>Close Star: SAO-12031 Catalog Objects: IC 1805</p> <p>Imaging Window: 12:23 – 04:38 Transit: 04:02 62°</p>	<p style="text-align: center;">Primary Focus</p>  <p style="font-size: small;">Heart Nebula Core (IC-1805) Constellation: Cassiopeia</p> <p style="font-size: x-small; text-align: right;">James Yoder - 2019.09.14 Location: Chandler, AZ Config: C11 Orionian LP Reducer QHY128E Exposure Info: 20frames/Stream Gain: 1100 Offset: 179</p>

Prospective Imaging Objects – September 03 2024

<p>M-77, NGC 1055 Config: C11-HD FR ZWO6200MC </p> <p>Type: Galaxy Peak: Constellation: Cetus Coordinates: 02hr 42' 14" 00° 14' 28" Angle: 90°</p> <p>Close Star: SAO-110665 Catalog Objects: M-77, NGC-1055, NGC-1068</p> <p>Imaging Window: 02:04 – 04:38 Transit: 04:11 57°</p>	<p style="text-align: center;">CH11-HD Focal Reducer</p>  <p style="font-size: small;">Galaxies NGC-1055, M-77, NGC-1072 Constellation: Cetus RA = 02h 42m 14s, DEC = +00deg 14' 28.5", Size = 55.2 x 39.3 arcmin, Orientation = 90, Mag. E of N, Pixel scale = 0.579 arcseconds/px, FL = 1956mm Config: C11-HD 0.7 Reducer Filter: Baader-Singlet, C11-CCD, DM3-LPS-02 Camera: QHY120C James Yoder Duxbury 2020 12 20, 21, 22 Location: Chandler, AZ Exposure Info: 411mm@5um Gain: 3200 Offset: 180 </p>
<p>NGC-1055 Config: C11HD ZWO6200MC </p> <p>Type: Galaxy Peak: Constellation: Cetus Coordinates: 02hr 41' 50" 00° 29' 48"</p> <p>Close Star: SAO-110665 Catalog Objects: NGC-1055</p> <p>Imaging Window: 02:04 – 04:38 Transit: 04:11 57°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>M-34 (NGC-1039) Config: C11-HD ZWO6200MC </p> <p>Type: Open Cluster Constellation: Perseus Coordinates: 02h 42' 05" 42° 45' 42"</p> <p>Close Star: SAO-38592 (Algol) Catalog Objects: M-34/NGC-1039</p> <p>Imaging Window: 12:28 – 04:38 Transit: 04:11 81°</p>	<p style="text-align: center;">Primary Focus</p> 

Prospective Imaging Objects – September 03 2024

<p>M 77 (NGC 1068) Config: C11HD ZWO6200MC </p> <p>Type: Galaxy Peak: Constellation: Cetus Coordinates: 02hr 42' 34" 00° 02' 07"</p> <p>Close Star: SAO-110665 Catalog Objects: M 77, NGC-1068</p> <p>Imaging Window: 02:07 – 04:38 Transit: 04:12 57°</p>	<p style="text-align: center;">C-11 HD: Primary Focus</p> 
<p>Soul Nebula (IC-1848) Config: C11-HD HS ZWO6200MC</p> <p>Type: Diffuse Nebula Peak: Constellation: Cassiopeia Coordinates: 02hr 57' 16" 60° 37' 37"</p> <p>Close Star: SAO-38787 (Mirfak) Catalog Objects: IC 1848</p> <p>Imaging Window: 12:40 – 04:38 Transit: 04:21 63°</p>	<p style="text-align: center;">C-11 HD: HyperStar v4</p>  <p style="font-size: small;">Soul Nebula (IC-1848) Constellation: Cassiopeia</p> <p style="font-size: x-small; text-align: right;"> James Yoder - 2018.08.20 Location: Chandler, AZ Config: C11 HyperStar Astronomik L13C QHY128C Exposure Info: 26frames@5min Gain: 3200 Offset: 180 </p>
<p>Soul Nebula (IC-1848) Config: C1 LF ZWO6200MC </p> <p>Type: Diffuse Nebula Peak: Constellation: Cassiopeia Coordinates: 02hr 57' 16" 60° 37' 37"</p> <p>Close Star: SAO-38787 (Mirfak) Catalog Objects: IC 1848</p> <p>Imaging Window: 12:40 – 04:38 Transit: 04:21 63°</p>	<p style="text-align: center;">Primary Focus</p>  <p style="font-size: small;">Soul Nebula (IC-1848) Constellation: Cassiopeia</p> <p style="font-size: x-small; text-align: right;"> James Yoder - 2018.12.08 Location: Chandler, AZ Config: C11 Optolong L13 Filter L13C QHY128C Exposure Info: 25frames@5min Gain: 3200 Offset: 180 </p>

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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	08:14 – 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	Broad 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					